

BALTIMORE CITY RECREATION & PARKS

MORRELL PARK FIELD HOUSE

2415 TOLLEY STREET

BALTIMORE, MARYLAND, 21230

CONTRACT NO. - RP21832

BID SET

CIVIL ENGINEER

MK CONSULTING ENGINEERS, LLC.

3300 CLIPPER MILL RD

SUITE 201

BALTIMORE, MARYLAND 21211

TEL. 667.309.6193

STRUCTURAL ENGINEER

RESTL DESIGNERS, INC.

7133 RUTHERFORD ROAD

SUITE 110

WINDSOR MILL, MARYLAND 21244

TEL. 410.346.5186

MEP ENGINEER

KES ENGINEERING, INC.

6325 WOODSIDE COURT

SUITE 220

COLUMBIA, MARYLAND 21046

TEL. 410.366.1801

ARCHITECT

MURPHY & DITTENHAFFER ARCHITECTS

805 NORTH CHARLES ST.

BALTIMORE, MARYLAND 21201

TEL. 410.625.4823

GEOTECHNICAL ENGINEER

NAVARRO + WRIGHT CONSULTING

ENGINEERS, INC.

1531 S EDGEWOOD STREET

SUITE C

BALTIMORE, MARYLAND 21227

TEL. 410.800.2320

ARCHITECT'S STAMP

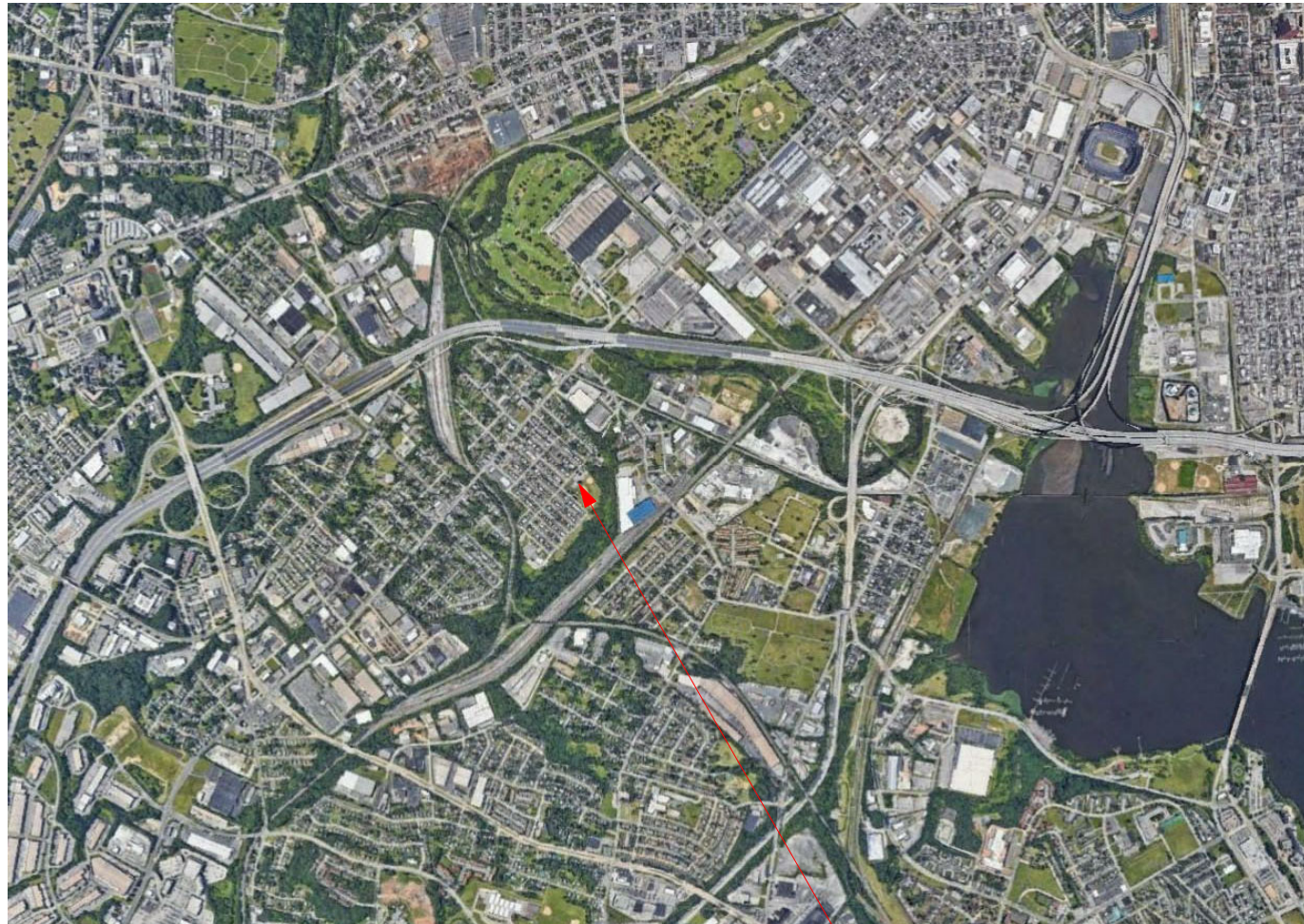
I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENCED ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NUMBER

EXPIRATION DATE

VICINITY MAP

NOT TO SCALE

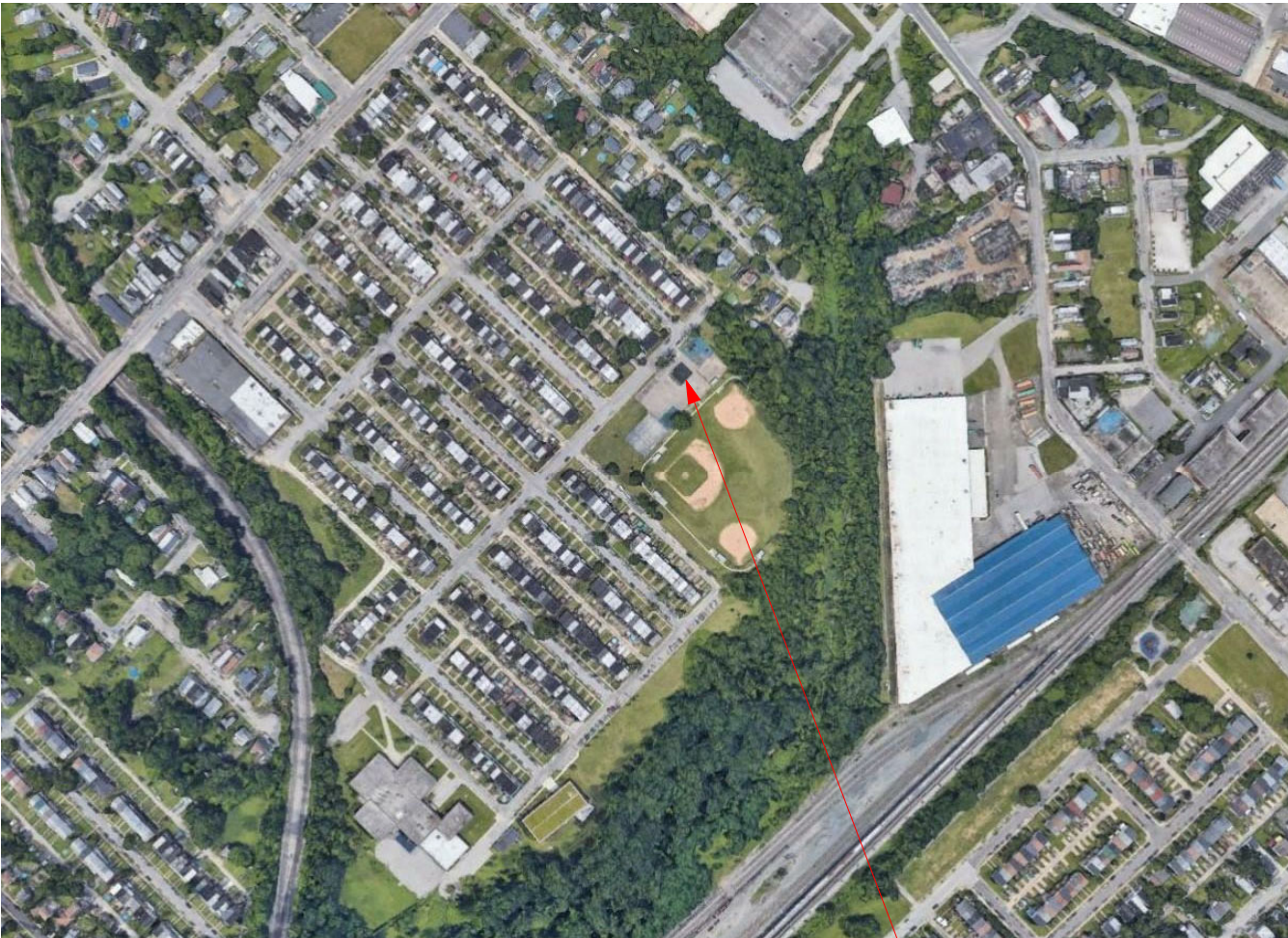


SITE LOCATION



LOCATION MAP

NOT TO SCALE



SITE LOCATION



BALTIMORE CITY RECREATION & PARKS

MORRELL PARK FIELD HOUSE

2415 TOLLEY ST., BALTIMORE, MD 21230

Murphy & Dittenhafer

A R C H I T E C T S

800 North Charles Street, Baltimore, Maryland 21201
410.625.4823 voice 410.625.4874 fax

228 West Market Street, York, Pennsylvania 17401
717.848.8827 voice 717.843.3449 fax

Description	
1	50% CONSTRUCTION DOCUMENTS
2	100% CONSTRUCTION DOCUMENTS
3	BID SET

PROJECT NO: 20120

DRAWN BY: KCG

CHECKED BY: RDT

COVER SHEET

SHEET

CS-1

BCRP - MORRELL PARK FIELD HOUSE

Municipal Enforcement: City of Baltimore

- 2018 International Building Code
- 2017 National Electrical Code
- 2018 International Fuel Gas Code
- 2018 International Mechanical Code
- 2018 International Plumbing Code
- 2018 International Fire Code
- 2018 International Energy Conservation Code
- 2018 International Green Construction Code
- COMAR

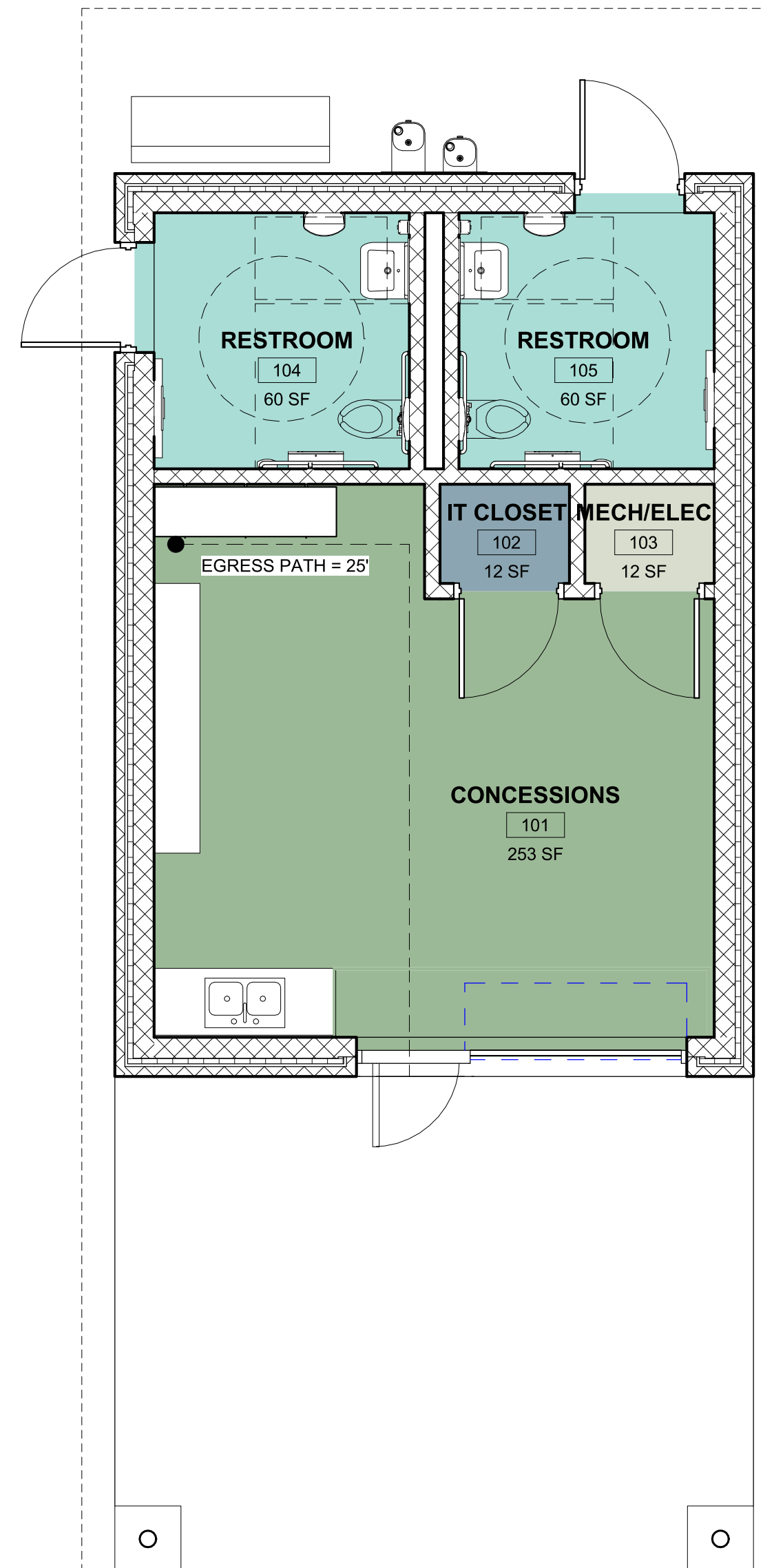
Building Occupant Load: 4 Occupants

International Building Code 2018 Summary:

- B. Building Areas by Floor:
 - A. First Floor = 530 GSF
- II. 2018 IBC CHAPTER 3: USE AND OCCUPANCY CLASSIFICATION
 - A. Per 304.1 Occupancy Classification = Business
- III. 2018 IBC CHAPTER 5: GENERAL BUILDING HEIGHTS AND AREAS
 - A. Per Table 504.3: Allowable Building Height in Feet Above Grade Plane Occupancy Classification B, Type IIB = 55 Feet (NS)
 - B. Per Table 504.4: Allowable Number of Stories Above Grade Plane Occupancy Classification B, Type IIB = 3 Stories (NS)
 - C. Per Table 506.2: Allowable Area Factor in Square Feet Occupancy Classification B, Type IIB = 23,000
- IV. 2018 IBC CHAPTER 6: TYPES OF CONSTRUCTION
 - A. Table 601 Fire - Resistance Rating Requirements for Building Elements
 - Primary Structural Frame = 0 Hours
 - Bearing Walls (Exterior) = 0 Hours
 - Bearing Wall (Interior) = 0 Hours
 - Nonbearing Walls (Exterior) = 0 Hours
 - Nonbearing Walls (Interior) = 0 Hours
 - Floor Construction = 0 Hours
 - Roof Construction = 0 Hours
 - B. Per Section 602.2 Type II: Type II construction are those types of construction in which the building elements listed in Table 601 are of noncombustible materials, except as permitted in Section 603 and elsewhere in this code.
- V. 2018 IBC CHAPTER 10: MEANS OF EGRESS
 - A. Building occupant Load:
 - First Floor: 4 Occupants
 - B. Required Means of Egress:
 - First Floor: 4 Occupants @ 0.2 = 0.8" required < 34" provided
- VI. 2018 IBC CHAPTER 29: PLUMBING SYSTEMS
 - A. Total Occupant Count: 4 Occupants
 - 2 Female
 - 2 Male
 - B. Per Table 2902.1 Minimum Number of Required Plumbing Fixtures
 - a. Water Closets:
 - 1 per 25 for the first 50 and 1 per 50 for the remainder exceeding 50 = 0.08 = 1 required
 - 2 Water Closets Provided
 - b. Lavatories:
 - 1 per 40 for the first 80 and 1 per 80 for the remainder exceeding 80 = 0.1 = 1 required
 - 2 Lavatories Provided
 - c. Drinking Fountains:
 - 1 per 100 = 0.04 = 1 required
 - 1 High / Low Drinking Fountain Provided
 - d. Service Sink
 - 1 Service Sink Required
 - Exception: For business and mercantile classifications with an occupant load of 15 or fewer, a service sink shall not be required.
 - 1 Service Sink Provided - to meet client needs

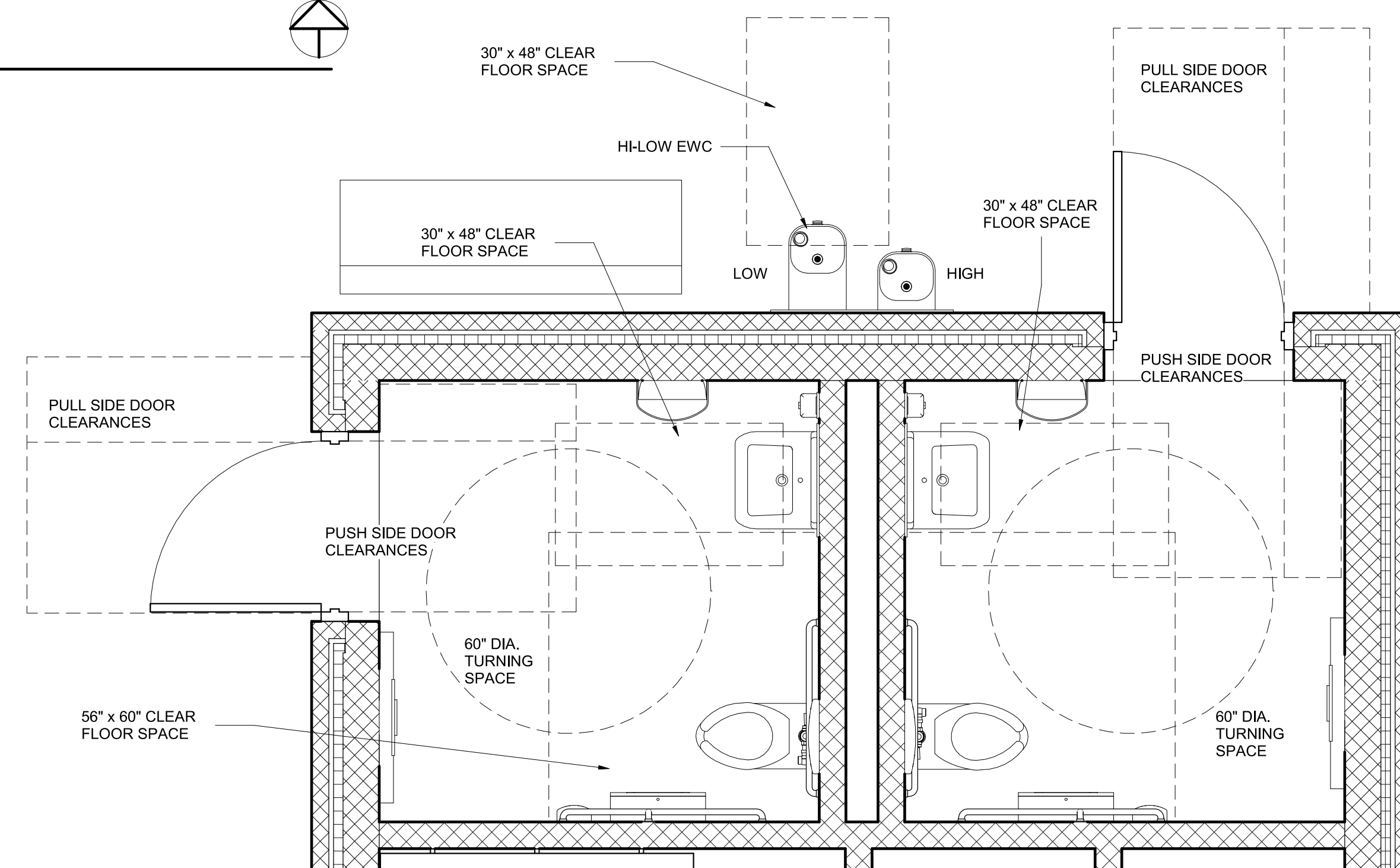
Room Legend

- BUSINESS
- MECHANICAL EQUIPMENT
- RESTROOM
- STORAGE



1 FIRST FLOOR - CODE PLAN
1/4" = 1'-0"

OCCUPANT LOAD					
ROOM NUMBER	ROOM NAME	TABLE 1004.5	ROOM AREA (NET SF)	S.F. Per Person	OCCUPANT LOAD
101	CONCESSIONS	BUSINESS	253 SF	150	2
102	IT CLOSET	MECHANICAL EQUIPMENT	12 SF	300	1
103	MECH/ELEC	STORAGE	12 SF	300	1



② CODE PLAN - RESTROOMS 104 & 105
1/2" = 1'-0"

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MORRELL PARK FIELD HOUSE
2415 TOLLEY ST., BALTIMORE, MD 21230

Murphy & Dittenhafer

Mark	Date	Description
1	8/31/2021	50% CONSTRUCTION DOCUMENTS
2	12/3/2021	100% CONSTRUCTION DOCUMENTS
3	8/8/2025	BID SET

PROJECT NO:	20120
DRAWN BY:	KCG
CHECKED BY:	RDT

CODE SUMMARY

SHEET
CS-2

DRAWING INDEX	
SHEET NUMBER	SHEET NAME
GENERAL	
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CS-2	CODE SUMMARY
CS-3	ABBREVIATIONS, SYMBOLS, & SHEET LIST
CIVIL	
C-1.00	GENERAL NOTES
C-2.00	EXISTING CONDITION & DEMOLITION PLAN
C-3.00	SITE & GRADING PLAN
C-4.00	PAVING PLAN
C-5.00	UTILITY PLAN & PROFILE
C-5.01	UTILITY PROFILES
C-6.00	EROSION & SEDIMENT CONTROL PLAN
C-6.01	ESC DRAINAGE AREA MAPS
C-6.02	EROSION & SEDIMENT CONTROL DETAILS
C-6.03	EROSION & SEDIMENT CONTROL NOTES
C-6.04	STABILIZATION NOTES
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AD-102	CEILING DEMOLITION PLAN
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AD-201	EXTERIOR ELEVATIONS - DEMOLITION
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A-201	EXTERIOR ELEVATIONS
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A-501	COLUMN PIER DETAILS
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S-202	ROOF FRAMING PLAN
S-301	TYPICAL DETAILS
S-302	TYPICAL DETAILS
S-401	SECTIONS AND DETAILS
S-402	SECTIONS AND DETAILS
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M-001	MECHANICAL LEGENDS AND GENERAL NOTES
M-101	MECHANICAL PLANS
M-102	MECHANICAL SCHEDULE AND DETAILS
ELECTRICAL	
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ME-101	SITE UTILITY PLAN
E-101	LIGHTING PLANS
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PLUMBING	
P-001	PLUMBING LEGEND AND GENERAL NOTES
P-101	PLUMBING PLANS
P-102	PLUMBING DETAILS AND RISER DIAGRAMS

AC	ACOUSTICAL CEILING TILE	RM	ROOM
ADJ	AIR CONDITIONING		
ADJ	ADJUSTABLE	SF	SQUARE FEET
AFF	ABOVE FINISHED FLOOR	S.G.T.	STRUCTURAL GLAZED TILE
A.B.E.	ABOVE BENCHMARK ELEVATION	SHT.	SHEET
A.H.U.	AIR HANDLING UNIT	SIM.	SIMILAR
ALUM	ALUMINUM	S.O.G.	SLAB ON GRADE
APPROX	APPROXIMATE	SNT.	SEALANT
ARCH	ARCHITECTURAL	SPEC.	SPECIFICATION
@	AT	STD.	STANDARD
		STL.	STEEL
B.C.	BASE CABINET	S.S.	STAINLESS STEEL
BD.	BOARD	STOR.	STORAGE
BITUM.	BITUMINOUS	STRUCT.	STRUCTURE
BLDG.	BUILDING	SQ.	SQUARE
BLK.	BLOCK	SUSP.	SUSPENDED
BLKD.	BULKHEAD		
BLKG.	BLOCKING	T & G	TONGUE & GROOVE
		TEMP	TEMPORARY
C	CENTER LINE	TH.	THICK
C.B.	CHALK BOARD	T.O.S.	TOP OF SLAB
CL.	CLOSET	T.O.J.	TOP OF JOIST
CLG.	CEILING	TLT.	TOILET
CMU	CONCRETE MASONRY UNIT	TYP.	TYPICAL
COL	COLUMN		
CONC.	CONCRETE	U.N.O.	UNLESS NOTED OTHERWISE
CONT.	CONTINUOUS		
C.C.J.	CONTROL JOINT	V.C.T.	VINYL COMPOSITION TILE
CPT.	CARPET	VERT.	VERTICAL
C.C.T.	CERAMIC TILE	V.I.F.	VERIFY IN FIELD
		V.I.F.W.A.	VERIFY IN FIELD WITH ARCHITECT
D.	DEEP		
DEMO	DEMOLITION		
D.F.	DRINKING FOUNTAIN	W/	WITH
DIM.	DIMENSION	W.	WIDTH
DN.	DOWN	W.B.	WALL BOARD
DTL	DETAIL	W.C.	WATER CLOSET
DIA	DIAMETER	WD.	WOOD
DS	DOWN SPOUT	W/O	WITHOUT
DWG.	DRAWING		
E.J.	EXPANSION JOINT		
EL.	ELEVATOR		
ELEC.	ELECTRICAL		
ELEV.	ELEVATION		
ETC	ETCETERA		
E.T.R.	EXISTING TO REMAIN		
EQUIP.	EQUIPMENT		
EXIST.	EXISTING		
EXT	EXTERIOR		
F.E.C.	FIRE EXTINGUISHER CABINET		
F.D.	FLOOR DRAIN		
F.F.E.	FINISH FLOOR ELEVATION		
FIN	FINISH		
FL. OR FLR.	FLOOR		
FOM	FACE OF MASONRY		
FT	FOOT, FEET		
F.V.W.A.	FIELD VERIFY WITH ARCHITECT		
GA	GAUGE		
GALV	GALVANIZED		
GYP. BD.	GYPSUM BOARD		
GSF	GROSS SQUARE FEET		
GWB	GYPSUM WALL BOARD		
GT	GLAZING TYPE		
H OR HT	HEIGHT		
HC	HANDICAPPED		
H.M.	HOLLOW METAL		
HORIZ.	HORIZONTAL		
HR	HOUR		
HVAC	HEATING/VENTILATION, AIR CONDITIONING		
IN	INCH		
INSUL.	INSULATION		
INT.	INTERIOR		
JAN.	JANITOR		
JT	JOINT		
L	LENGTH		
LAV.	LAVATORY		
L.H.	LEFT HAND		
MACH.	MACHINE		
MAT'L	MATERIAL		
MAX.	MAXIMUM		
M.E.	MATCH EXISTING		
MECH.	MECHANICAL		
MEP	MECHANICAL/ELECTRICAL/ PLUMBING		
MIN.	MINIMUM		
MISC.	MISCELLANEOUS		
M.O.	MASONRY OPENING		
MTD	MOUNTED		
MTL	METAL		
NO. OR #	NUMBER		
NOM.	NOMINAL		
N.I.C.	NOT IN CONTRACT		
NSF	NET SQUARE FEET		
N.T.S.	NET TO SCALE		
O.C.	ON CENTER		
OPNG.	OPENING		
P-LAM	PLASTIC LAMINATE		
PLYWD	PLYWOOD		
P.T.	PORCELAIN TILE		
PTD.	PAINTED		
REF.	REFRIDGERATOR		
REQ'D	REQUIRED		
R.H.	RIGHT HAND		

	DRAWING # _____ SHEET # _____	BUILDING SECTION		COMPACTED SUBGRADE
	DRAWING # _____ SHEET # _____	WALL SECTION		CONCRETE
	DRAWING # _____ SHEET # _____	BUILDING ELEVATION		C.M.U.
	DRAWING # _____ SHEET # _____	INTERIOR ELEVATIONS		ROUGH WOOD
_____ DRAWING # _____ _____ SHEET # _____	DETAIL		PLYWOOD	
	NEW SUSP. A.C.T. CEILING & GRID		FINISHED WOOD	
	EXISTING DOOR (TO BE REMOVED)		WINDOW TYPE (SEE WINDOW SCHEDULE)	
	EXISTING DOOR		DOOR NUMBER (SEE DOOR SCHEDULE)	
	NEW DOOR		PARTITION TYPE	
			RIGID INSULATION	
			BATT INSULATION	
			BRICK	
			EXISTING WALLS (TO BE REMOVED)	
			NEW PARTITION	

A R C H I T E C T S
Murphy & Pittenhafer
800 North Charles Street, Baltimore, Maryland 21201
410-526-4623 voice 410-525-4671 fax
228 West Market Street, York, Pennsylvania 17401
717-843-5460 fax

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PROJECT NO:	20120
DRAWN BY:	NFL
CHECKED BY:	KCG

ABBREVIATIONS, SYMBOLS, & SHEET LIST

SHEET
CS-3

GENERAL NOTES

- 5). THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" 1-800-257-7777 AT LEAST FIVE (5) WORKING DAYS PRIOR TO STARTING ANY WORK.
2. CONTRACTOR SHALL PROVIDE PRIVATE UTILITY LOCATOR TO LOCATE ALL EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING ANY CONSTRUCTION.
3. TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED ON A FIELD RUN SURVEY PERFORMED BY BALTIMORE CITY DPW (AUGUST 2020) AND AVAILABLE AS-BUILT PLANS PROVIDED BY BALTIMORE CITY DPW.
4. EXISTING UTILITY INFORMATION SHOWN HEREON IS BASED ON THE BEST AVAILABLE INFORMATION, WHICH INCLUDES A FIELD SURVEY CONDUCTED BY BALTIMORE CITY DPW DURING AUGUST 2020. AS-BUILT WATER, WASTEWATER AND STORM DRAIN PLANS FROM BALTIMORE CITY DEPARTMENT OF PUBLIC WORKS.
5. OBSTRUCTIONS SHOWN ON THIS DRAWING ARE FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. MK CONSULTING ENGINEERS, LLC, DOES NOT WARRANT OR GUARANTEE THE CORRECTNESS OR THE COMPLETENESS OF THE INFORMATION GIVEN. THE CONTRACTOR MUST VERIFY ALL SUCH INFORMATION TO HIS OWN SATISFACTION, IN THE EVENT THAT INFORMATION IS IN CONFLICT WITH INFORMATION OUTLINED, THE CONTRACTOR SHALL IMMEDIATELY BRING IT TO THE ATTENTION OF THE ENGINEER PRIOR TO STARTING ANY WORK.
6. CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF EXISTING UTILITIES SHOWN HEREON BEFORE STARTING ANY WORK ON THESE PLANS. CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR THE COST OF ANY AND ALL DAMAGES WHICH OCCUR AS A RESULT OF A FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL EXISTING UTILITIES INDICATED TO REMAIN.
7. ALL WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
8. CONTRACTOR SHALL ADJUST ALL FRAMES, GRATES AND COVERS OF ALL EXISTING UTILITIES WITHIN THE LIMITS OF THE CONTRACT TO THE PROPOSED GRADES AS REQUIRED.
9. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM STRUCTURES AT ALL TIMES.
10. CONTRACTOR SHALL COORDINATE ALL DISCONNECTIONS AND REMOVAL OF EXISTING GAS, ELECTRIC AND TELEPHONE SERVICES AND EQUIPMENT WITH BALTIMORE GAS & ELECTRIC AND VERIZON.
11. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING MECHANICAL AND ELECTRICAL EQUIPMENT AND ACCESSORIES NOT REMOVED BY LOCAL UTILITY COMPANIES, OR SPECIFIED TO BE REMOVED BY OWNER.
12. CONTRACTOR SHALL INSTALL SEDIMENT CONTROLS PRIOR TO BEGINNING ANY WORK, AND MAINTAIN SEDIMENT CONTROLS THROUGHOUT THE ENTIRE DURATION OF DEMOLITION AND CONSTRUCTION ACTIVITIES.
13. ALL EXCAVATION SHALL BE BACKFILLED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. PRIOR TO THAT A PORTION OF A UTILITY IS TO BE REMOVED THE CONTRACTOR SHALL TERMINATE AND CAP TO THE LIMITS INDICATED IN ACCORDANCE WITH ALL STATE AND LOCAL REQUIREMENTS.
14. IT SHALL BE DISTINCTLY UNDERSTOOD THAT FAILURE TO MENTION SPECIFICALLY ANY WORK WHICH WOULD NORMALLY BE REQUIRED TO COMPLETE THIS PROJECT SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO COMPLETE SUCH WORK.
15. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER OF ANY DEVIATION FROM THIS PLAN PRIOR TO ANY CHANGE BEING MADE. ANY DEVIATION FROM THIS PLAN WITHOUT WRITTEN AUTHORIZATION FROM THE ENGINEER WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
16. SHOULD THE CONTRACTOR DISCOVER DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS, THE ENGINEER IS TO BE NOTIFIED IMMEDIATELY TO RESOLVE THE SITUATION. SHOULD THE CONTRACTOR MAKE FIELD CORRECTIONS OR ADJUSTMENTS WITHOUT NOTIFYING THE ENGINEER, THEN THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR THOSE CHANGES.
17. CONTRACTOR SHALL SECURE THE CONSTRUCTION AREA AT THE END OF EACH WORKING DAY AND WILL INSPECT THE SECURITY FENCING TO INSURE ITS INTEGRITY.
18. ALL CONSTRUCTION DEBRIS WILL BE REMOVED FROM THE SITE AND TAKEN TO AN APPROVED, PERMITTED DISPOSAL FACILITY. NO RUBBLE IS TO BE LEFT ON SITE.
19. CONTRACTOR SHALL PROVIDE THE NECESSARY MEANS TO CONTROL DUST AND MAINTAIN BALTIMORE CITY AIR QUALITY STANDARDS DURING THE DEMOLITION AND REMOVAL OF SITE DEBRIS AND THE NEW CONSTRUCTION.
20. CONTRACTOR SHALL SAWCUT EXISTING PAVING TO MINIMIZE DAMAGE TO EXISTING PAVING REMAINING.
21. CONTRACTOR SHALL REMOVE EXISTING CURBS & CONCRETE WALKS TO THE NEAREST JOINT, NO PATCHING WILL BE PERMITTED.
22. EXISTING UTILITIES TO BE ABANDONED IN PLACE UNLESS ENCOUNTERED DURING CONSTRUCTION, AT WHICH TIME THEY SHALL BE REMOVED IN THEIR ENTIRETY, IF ABANDONED IN PLACE, UTILITIES SHALL BE BACKFILLED WITH FLOWABLE FILL.
23. THE DEMOLITION INFORMATION SHOWN ON THESE DRAWINGS IS FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE EXACT LIMITS OF DEMOLITION AND REMOVAL OF AFFECTED SITE ITEMS.
24. CONTRACTOR SHALL PROVIDE A HIGH TEMPORARY CONSTRUCTION FENCE AROUND THE LIMITS OF CONSTRUCTION. FINAL LOCATION OF THE FENCE SHALL BE COORDINATED WITH THE OWNER.
25. THE CONTRACTOR SHALL BE REQUIRED TO PREPARE A CONSTRUCTION MATERIAL AND WASTE MANAGEMENT PLAN IN ACCORDANCE WITH "SECTION 1006 DEMOLITION" OF THE "INTERNATIONAL GREEN CONSTRUCTION CODE".
26. REFER TO ARCHITECTURAL PLANS FOR CONCRETE PAD LOCATIONS AT EXTERIOR DOORS AND ADDITIONAL CONTROL JOINT LOCATIONS.
27. CONTRACTOR SHALL CONTACT THE OWNER 12 HOURS PRIOR TO COMMENCING ANY WORK.
28. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY DISTURBANCE OR DEMOLITION. ALL PROTECTIVE DEVICES SHALL BE INSTALLED PRIOR TO ANY DISTURBANCE OR DEMOLITION.
29. REFER TO THE GEOTECHNICAL REPORT FOR REMOVAL OF BUILDING SLAB, FOUNDATION & FOOTERS.
30. FOR BORING LOGS SEE SHEET CB.00.
31. ALL PAVEMENT & TRENCH REPAIR IN TOLLEY STREET SHALL BE PER BALTIMORE CITY STD DETAIL BC 576.19.
32. FOR DRIVEWAY APRONS REPAIRS REFER TO CITY STANDARD DETAILS BC 500.01.
33. FOR CURB AND GUTTER REPAIRS REFER TO CITY STANDARD DETAILS BC 620.06 & BC 620.11. EXISTING CURB AND GUTTER SHALL BE REPLACED IN KIND TO THE NEAREST EXISTING JOINT.
34. FOR CONCRETE SIDEWALK REPAIRS REFER TO CITY STANDARD DETAILS BC 655.01 & BC 655.05. EXISTING SIDEWALK SHALL BE REPLACED TO THE NEAREST EXISTING JOINT.
35. FOR SIDEWALK RAMP REPAIRS REFER TO CITY STANDARD DETAILS BC 655.11 - BC 655.13 & BC 655.40.
36. WHERE NEW SIDEWALK CROSSES THE DRIVEWAY, MAINTAIN A 2% CROSS SLOPE TO COMPLY WITH THE ADA STANDARDS.
37. FOR ALL ASPHALT, CONCRETE, AND GENERAL ROADWAY DETAILS, REFER TO THE LATEST VERSIONS.

UTILITY NOTES

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2. CONTRACTOR SHALL CALL "MISS UTILITY" (800-251-7777) AT LEAST FIVE (5) WORKING DAYS PRIOR TO STARTING WORK.
3. CONSTRUCTION OF THE PROPOSED UTILITIES WILL BE IN ACCORDANCE WITH THE BALTIMORE CITY PLUMBING CODE AND BY A QUALIFIED CONTRACTOR.
4. NO WORK IS TO COMMENCE UNTIL ALL PERMITS HAVE BEEN OBTAINED.
5. CONTRACTOR SHALL TEST PIT FOR LOCATION OF EXISTING UTILITIES TO VERIFY TIE-INS PRIOR TO STARTING CONSTRUCTION.
6. EXISTING CURB AND GUTTER & CONCRETE SIDEWALK SHALL BE REMOVED TO THE NEAREST JOINT. NO PATCHING SHALL BE FERMITTED.
7. SHOULD THE CONTRACTOR DISCOVER DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS THE ENGINEER IS TO BE NOTIFIED IMMEDIATELY TO RESOLVE THE SITUATION.
8. ALL CLEANOUTS LOCATED IN PAVED AREAS SHALL HAVE COUNTERSUNK LIDS.
9. CONTRACTOR SHALL COORDINATE THE LOCATION OF THE UNDERGROUND ELECTRIC SERVICE AND THE UNDERGROUND GAS SERVICE WITH THE BALTIMORE GAS, ELECTRIC COMPANY. SEE ELECTRICAL PLANS FOR DETAILS.
10. CONTRACTOR SHALL ADJUST TOP OF EXISTING UTILITIES, I.E. MANHOLE FRAME AND COVER, INLET GRATES, ETC. TO FINISHED GRADE.
11. SANITARY SEWER LINES OUTSIDE OF THE BUILDING WILL BE PVC CLASS SDR 35.
12. ALL WATER PIPING, TUBING, FITTINGS AND JOINING METHODS SHALL BE ACCORDING TO BALTIMORE CITY STANDARDS & SPECIFICATIONS.
13. SEE PLUMBING PLANS FOR CONTINUATION OF UTILITY CONNECTIONS TO THE BUILDING.
14. SEE ELECTRICAL PLANS FOR SITE LIGHTING AND CONDUIT LOCATIONS.
15. STORM DRAIN PIPE AND FITTINGS SHALL BE BLUE SEAL WATER-TIGHT CORRUGATED POLYETHYLENE PIPE (HDPE) OR APPROVED EQUIV (UNLESS NOTED OTHERWISE), AS MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS, INC.
16. ALL EXCAVATION SHALL BE BACKFILLED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. IN THE EVENT THAT A PORTION OF A UTILITY IS TO BE REMOVED, THE CONTRACTOR SHALL TERMINATE AND CAP TO THE LIMITS INDICATED IN ACCORDANCE WITH ALL STATE AND LOCAL REQUIREMENTS.
17. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING ALL WORK SHOWN ON THESE DRAWINGS UNLESS OTHERWISE NOTED.
18. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER IF ANY DEVIATION FROM THE PLANS PRIOR TO ANY CHANGE BEING MADE. ANY DEVIATION FROM THIS WITHOUT WRITTEN AUTHORIZATION FROM THE ENGINEER WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
19. PRIOR TO BEGINNING ANY UTILITY CONSTRUCTION THE CONTRACTOR SHALL VERIFY THAT ALL EXISTING UTILITIES WILL TIE IN WITH PROPOSED UTILITIES AS SHOWN.
20. SEE MECHANICAL / ELECTRICAL / PLUMBING PLANS FOR SITE ELECTRICAL AND BUILDING PLUMBING INFORMATION.
21. ALL VALVES SHALL BE IN STANDARD CONCRETE VAULTS IN ACCORDANCE WITH BALTIMORE CITY STANDARD DETAILS.
22. ALL CHANNELS IN MANHOLES SHALL BE CONSTRUCTED TO CONFORM AS CLOSE AS POSSIBLE TO THE STANDARD CHANNELS CALLED FOR IN THE UTILITY PROFILES.
23. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FOR WORKING WITHIN THE LIMITS OF EXISTING BALTIMORE CITY RIGHT-OF-WAYS.
24. GRAVEL CRADLE IS REQUIRED UNDER ALL PIPE. SEE BALTIMORE CITY STANDARD DETAILS CG 302.02 THRU 302.04.
25. ALL BACKFILL SHALL BE MECHANICALLY TAMPED.
26. CONTRACTOR SHALL PROVIDE PRIVATE UTILITY LOCATOR TO LOCATE ALL EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING ANY CONSTRUCTION.
27. THE CONTRACTOR WILL BE REQUIRED TO HAND DIG AT CERTAIN LOCATIONS TO AVOID DISTURBING AND/OR DAMAGING EXISTING UTILITIES. ALL COSTS ASSOCIATED WITH SUCH HAND DIGGING SHALL BE CONSIDERED INCIDENTAL TO ALL UTILITY BID ITEMS AND NO SEPARATE PAYMENT WILL BE MADE.
28. ALL DRAINAGE AND UTILITY STRUCTURES LOCATED WITHIN THE LIMITS OF CONSTRUCTION, IF FOUND DAMAGED OR IN NEED OF REPLACEMENT WILL BE REPORTED TO THE ONSITE CONSTRUCTION MANAGEMENT INSPECTOR FOR FURTHER INVESTIGATION AND CONSIDERATION.
29. WHEN IMPACTING OR CROSSING EXISTING UTILITIES, THE CONTRACTOR SHALL SUPPORT AND PROTECT SUCH UTILITIES DURING CONSTRUCTION. SUPPORT OF EXISTING CONDUITS AND DUCTBANKS SHALL CONFORM TO STANDARD DETAIL CG 891.01. COST FOR THIS WORK SHALL BE INCLUDED IN THE CONTRACT AND NO ADDITIONAL PAYMENT WILL BE MADE. THE CONTRACTOR IS ALSO ADVISED TO EXERCISE EXTREME CARE WHEN DIGGING ADJACENT TO OR CROSSING EXISTING UTILITIES. ANY DAMAGE TO THE EXISTING UTILITIES SHALL BE PROMPTLY REPAIRED BY THE CONTRACTOR AT NO COST TO THE CITY.
30. WHEN INSTALLING NEW WATER MAINS, THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF 18" VERTICAL AND 10" HORIZONTAL CLEARANCE BETWEEN THE WATER MAINS AND EXISTING SEWER MAINS OR STORM DRAINS. CONSIDERING EDGE TO EDGE DISTANCE, A CROSSINGS, ONE FULL LENGTH OF WATER PIPE SHALL BE LOCATED SUCH THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. FOR CLEARANCE LESS THAN SPECIFIED, WATER MAIN SHALL BE PROTECTED AS SHOWN ON PLANS. WATER MAIN SHALL HAVE A MINIMUM 12" VERTICAL CLEARANCE AT OTHER DRY UTILITY CROSSINGS.
31. THE CONTRACTOR SHOULD TAKE PRECAUTION WHEN WORKING WITHIN CLOSE PROXIMITY OF SANITARY SEWERS, SEWER HOUSE CONNECTIONS AND SANITARY MANHOLES. ANY DAMAGE TO THE SEWER LINES OR MANHOLES AS A RESULT OF THE CONTRACTOR'S ACTIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE AND PER THE CITY OF BALTIMORE STANDARDS. IN ADDITION, ALL SANITARY SEWER STRUCTURES LOCATED WITHIN THE LIMITS OF CONSTRUCTION, IF FOUND IN NEED OF REPAIR OR REPLACEMENT WILL BE REPORTED TO THE ONSITE CONSTRUCTION MANAGEMENT INSPECTOR FOR FURTHER INVESTIGATIONS AND CONSIDERATION.
32. ANY PROPOSED ADJUSTMENTS TO SANITARY SEWERS AND MANHOLES OR OTHER UTILITIES DURING CONSTRUCTION MUST BE APPROVED BY THE ENGINEER IN WRITING. A COPY OF AS-BUILTS FOR SUCH ADJUSTMENTS MUST BE PROVIDED TO THE ENGINEER AFTER CONSTRUCTION.

CONDUIT NOTES

1. THE CONTRACTOR SHALL EXERCISE CAUTION WHILE WORKING NEAR THE BALTIMORE CITY CONDUIT DUCT SYSTEM. CONTRACTOR SHALL SUBMIT A WRITTEN WORK PLAN WHEN WORKING ADJACENT TO OR AROUND BALTIMORE CITY CONDUIT DUCT SYSTEMS.
2. THE CONTRACTOR SHALL NOTIFY MR. ERNEST GEORGE, AT (410) 396-151, OF BALTIMORE CITY DEPARTMENT OF TRANSPORTATION'S CONDUIT DIVISION AT LEAST (2) WEEKS PRIOR TO STARTING ANY CONSTRUCTION WORK. CABLE INSTALLATION BY BGE WILL BE CARRIED OUT WITHOUT COMPLETION OF AN INSPECTION BY CONDUIT MAINTENANCE.
3. THE CONTRACTOR SHALL MAINTAIN 12 INCHES MINIMUM SEPARATION BETWEEN THE WATER MAINS AND ANY EXISTING CONDUIT INFRASTRUCTURE. WHERE WATER MAIN IS TO CROSS THE EXISTING CONDUIT INFRASTRUCTURE, CONTRACTOR SHALL PROVIDE THE FOLLOWING DETAIL: \$24,010 COST OF WHICH SHALL BE INCIDENTAL TO APPROPRIATE BID ITEMS.

SHEET INDEX

C1.00	GENERAL NOTES
C2.00	EXISTING CONDITIONS & DEMOLITION PLAN
C3.00	SITE & GRADING PLAN
C4.00	PAVING PLAN
C5.00	UTILITY PLAN & PROFILES
C6.00	UTILITY PROFILES
C7.00	EROSION & SEDIMENT CONTROL PLAN
C8.01	EROSION & SEDIMENT CONTROL DRAINAGE AREA MAPS
C8.02	EROSION & SEDIMENT CONTROL DETAILS
C8.03	EROSION & SEDIMENT CONTROL NOTES
C9.04	STABILIZATION NOTES
C9.05	STABILIZATION NOTES
C10.00	NATURAL RESOURCES PLAN
C9.00	BORING LOGS

EARTHWORK ANALYSIS

TOTAL LOT/SITE AREA:	6.84 AC.
TOTAL LIMIT OF DISTURBANCE:	4205 S.F. OR 0.10 AC.
TOTAL LIMIT OF WORK:	2560 S.F. OR 0.059 AC.
EARTHWORK:	CUT = 57 C.Y. FILL = 61 C.Y. TOTAL = 118 C.Y. CUT / FILL RATIO = 0.93 : 1

NOTE:

ESTIMATES OF EARTHWORK QUANTITIES ARE PROVIDED SOLELY FOR THE PURPOSE OF DETERMINING PERMITTING REQUIREMENTS. SINCE FINAL EARTHWORK QUANTITIES ARE BASED ON MANY UNRELIABLE CONDITIONS, OTHER THAN THE CONSULTING ENGINEERS, LLC, HAS NO CONTROL INCLUDING AIR QUALITY, UNDESIRABLE SURVEY AND CONSTRUCTION TOLERANCES AND COMPACTION RATIOS, MK CONSULTING ENGINEERS, LLC, DOES NOT WARRANT OR GUARANTEE THE QUANTITIES. THE ESTIMATES FOR A MAJOR CONSTRUCTION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THEIR OWN ESTIMATES OF THE EARTHWORK QUANTITIES.

WATER NOTES

1. THE CONTRACTOR SHALL NOTIFY THE WATER AND WASTEWATER MAINTENANCE DIVISION AT (410) 346-1870 AT LEAST TWO (2) WEEKS PRIOR TO START OF CONSTRUCTION.
2. ALL NEW WATER MAINS SHALL BE ZINC COATED DUCTILE IRON PIPE CLASS 54 WITH A BITUMINOUS TOPCOAT, AS SPECIFIED HEREIN, AND IN ACCORDANCE WITH THE LATEST REVISION ANSI/AWWA C150/A21.50, ANSI/AWWA C151/A21.51, AND MANUFACTURERS RECOMMENDATION. NEW DUCTILE IRON FITTINGS SHALL BE 350 PSI PRESSURE RATING IN ACCORDANCE WITH THE LATEST REVISION OF ANSI/AWWA C10/A21.10 OR ANSI/AWWA C153/A21.53 AND SHALL BE PROVIDED WITH A ZINC BASE COAT AND BITUMINOUS TOPCOAT, OR FUSION-BONDED EPOXY COATING INSIDE AND OUTSIDE PER ANSI/AWWA C10/A21.6. INTERIOR SURFACES OF ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE CLEANED AND LINED AT THE PIPE CASTING FACILITY WITH DOUBLE THICKNESS CEMENT MORTAR LINING APPLIED IN CONFORMANCE WITH THE ANSI/AWWA C10/A21.4. LATEST REVISIONS. MAXIMUM DEFLECTION OF THE PIPE JOINTS SHALL NOT EXCEED 80% OF THE MANUFACTURERS RECOMMENDATION.
3. ALL NEW WATER MAINS SHALL BE INSTALLED WITH MIN. 4 FEET OF COVER UNLESS OTHERWISE NOTED ON THE PLANS. AT CROSSING UTILITIES MIN. 3.5 FEET COVER SHALL BE MAINTAINED UNLESS SHOWN OTHERWISE OR DIRECTED BY THE ENGINEER.
4. THE CONTRACTOR SHALL IDENTIFY ALL VALVES NEEDED FOR SHUTDOWN OF THE MAIN OR FOR RESTRICTING THE FLOW OF WATER. THE CONTRACTOR SHALL SUBMIT THE BALTIMORE CITY & BALTIMORE COUNTY CONTRACTOR SHUTDOWN REQUEST FORM FOUND IN THE CONTRACT SPECIFICATIONS AT LEAST SEVEN (7) WORKING DAYS PRIOR TO THE REQUESTED SHUTDOWN DATE. ONLY BALTIMORE CITY PIPE SHALL OPERATE THE VALVES.
5. THE CONTRACTOR SHALL MAINTAIN UNINTERRUPTED SERVICE FOR ALL WATER SERVICE CONNECTIONS DISTURBED BY THESE CONSTRUCTION ACTIVITIES. SHOULD A SHORT DURATION SHUTDOWN BE NECESSARY, CONTRACTOR SHALL NOTIFY PROPERTIES AFFECTED BY A SHUTDOWN AT LEAST 48 HOURS PRIOR TO THE SHUTDOWN. COST SHALL BE INCIDENTAL TO THE APPROPRIATE UTILITY BID ITEMS IN THIS CONTRACT.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR BLOCKING AND RESTRAINING ALL EXISTING VALVES, FITTINGS, AND PIPE AGAINST MOVEMENT PRIOR TO CUTTING AND REMOVAL OF EXISTING PIPE AND OR VALVES.
7. THE CONTRACTOR SHALL INSTALL NEW THRUST BLOCK, BUTTRESSES, AND ANCHORS WHERE SPECIFIED ON THE DRAWINGS, IN ACCORDANCE WITH THE BALTIMORE CITY STANDARD SPECIFICATIONS 4 DETAILS. THE CONTRACTOR SHALL MAKE SURE THAT THE NEW BUTTRESS IS COMPLETELY CURED BEFORE PUTTING THE NEW MAIN CONNECTIONS IN SERVICE.
8. GENERALLY, CONNECTION OF NEW DUCTILE IRON PIPE TO THE EXISTING CAST IRON PIPE, AT LOCATIONS SHOWN ON THE CONTRACT DRAWINGS SHALL BE MADE USING TRANSITION COUPLINGS. CONTRACTOR SHALL ONLY INSTALL INSULATING COUPLINGS ONLY WHEN SPECIFIED AS PART OF CORROSION PROTECTION, AT LOCATIONS SHOWN ON THE CONTRACT DRAWINGS.
9. THE COMPLETED WATER MAINS MUST BE DISINFECTED AND TESTED IN ACCORDANCE WITH THE CITY STANDARDS AND THE LATEST VERSION OF AWWA STANDARD C651. RESULTS OF THE BACTERIOLOGICAL SAMPLES MUST BE SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL.
10. IN ACCORDANCE WITH CODE OF MARYLAND REGULATIONS (COMAR) 26.04.01.33, DIRECT AND INDIRECT ADDITIVES, SUPPLIERS OF WATER SHALL ONLY USE PRODUCTS (ANY MATERIALS) THAT COME IN CONTACT WITH WATER INTENDED FOR USE IN PUBLIC WATER SUPPLY) THAT MEET THE APPLICABLE AMERICAN NATIONAL STANDARDS INSTITUTE/ NSF INTERNATIONAL (ANSI/NSF) STANDARDS FOR DIRECT OR INDIRECT DRINKING WATER ADDITIVES. THE PRODUCTS CAN ALSO BE CERTIFIED BY AN ORGANIZATION ACCREDITED BY THE ANSI FOR SUCH TESTING (I.E. INTERNATIONAL ASSOCIATION OF DRINKING AND MECHANICAL OFFICIALS, LEAD AND TESTING ONTARIO CA, UNDERWITERS LABORATORY, NORTHBROOK IL, AND WATER QUALITY ASSOCIATION, LISLE IL).
11. IN COMPLIANCE WITH COMAR 49.20.01.03 AND THE SAFE DRINKING WATER ACT (SECTION 1417(A)(4)(B), MATERIALS THAT COME IN CONTACT WITH WATER INTENDED FOR USE IN PUBLIC WATER SUPPLY SHALL COMPLY WITH THE REDUCTION OF LEAD IN DRINKING WATER ACT, WHICH WENT INTO EFFECT IN MARYLAND IN JANUARY 2012.

BALTIMORE CITY RECREATION & PARKS
MORRELL PARK FIELD HOUSE
2415 TOLLEY ST., BALTIMORE, MD 21230

Murphy & Dittenhafer

226 West Market Street, York, Pennsylvania 17401
717-848-8627 voice 717-843-2449 fax

600 North Charles Street, Baltimore, Maryland 21201
410-625-4823 voice 410-625-4674 fax

Mark	Date	Description
1	08/08/2025	BID SET

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE STATE OF MARYLAND, LICENSE NO. 26568, EXPIRATION DATE: 11-17-2005.

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED AND APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE STATE

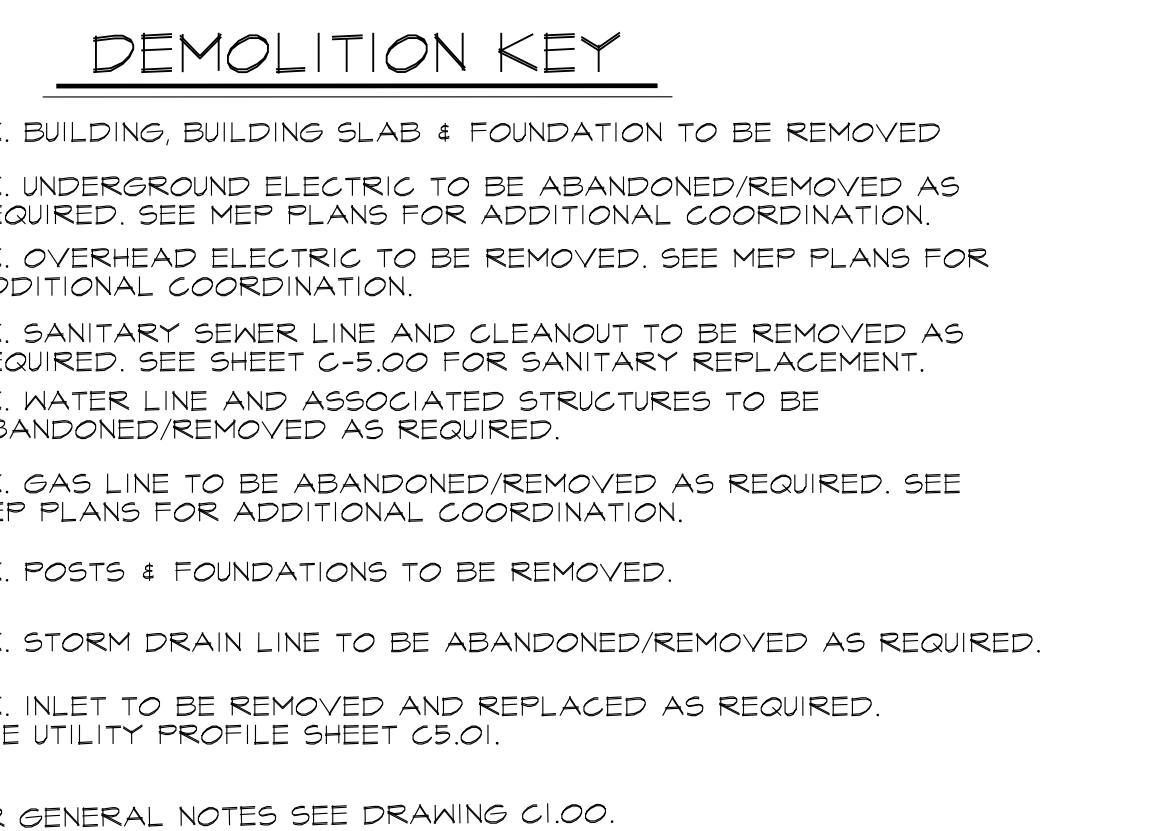
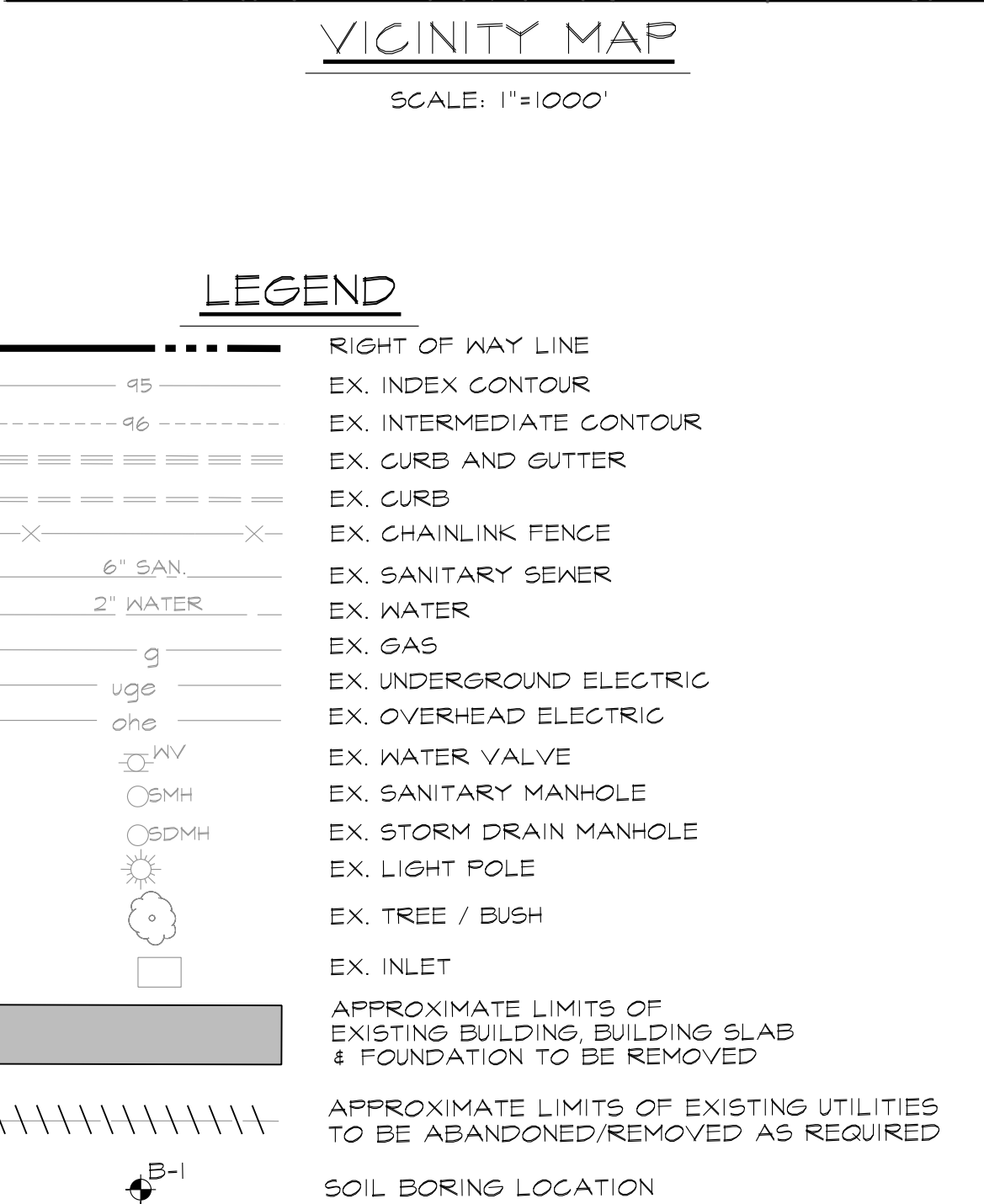
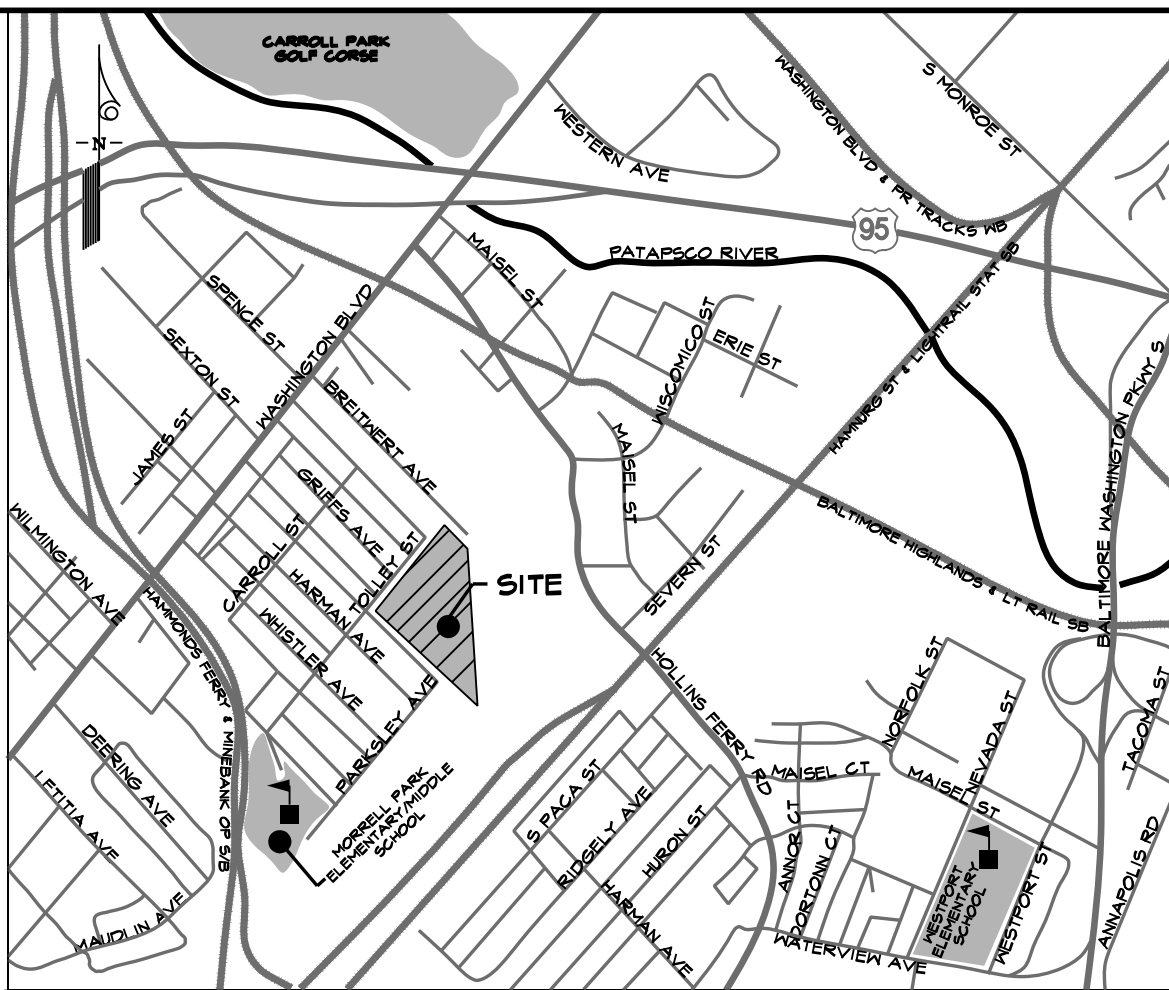
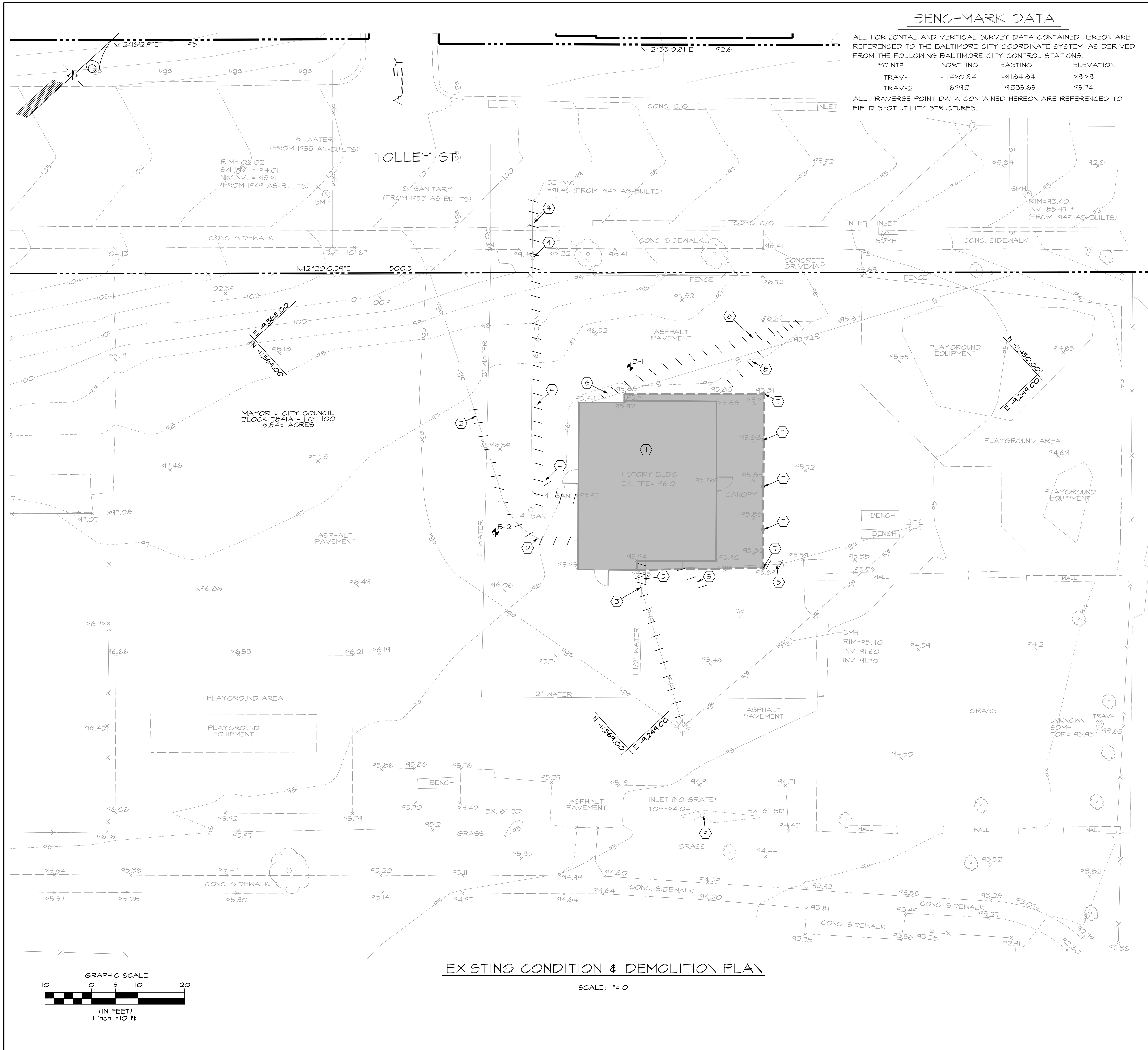
PROJECT NO:	2012
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DRAWN BY: VJ

GENERAL NOTES

SHEET

C-1.00



BALTIMORE CITY RECREATION & PARKS
MORRELL PARK FIELD HOUSE
2415 TOLLEY ST., BALTIMORE, MD 21230

Murphy & Dittenhafer
ARCHITECTS

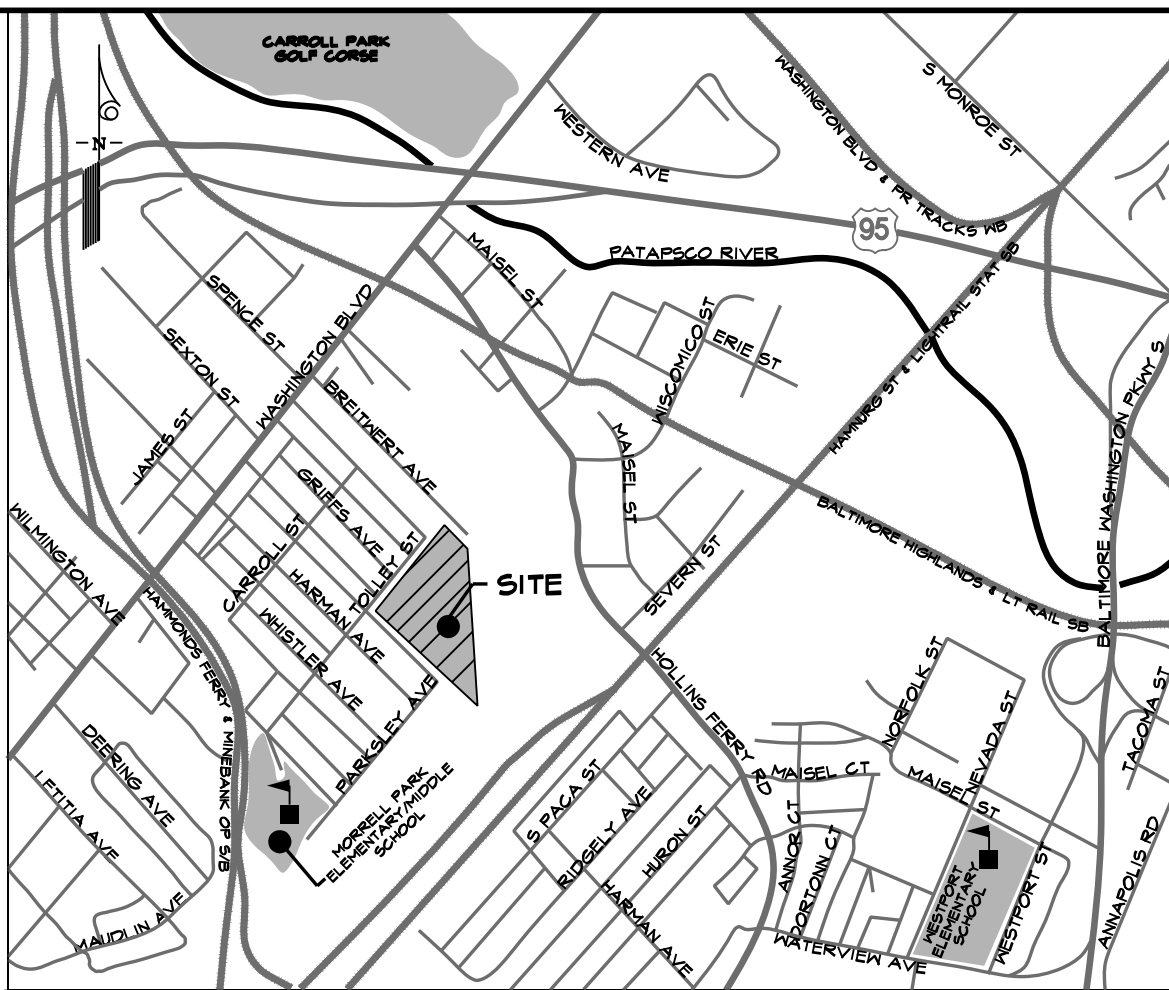
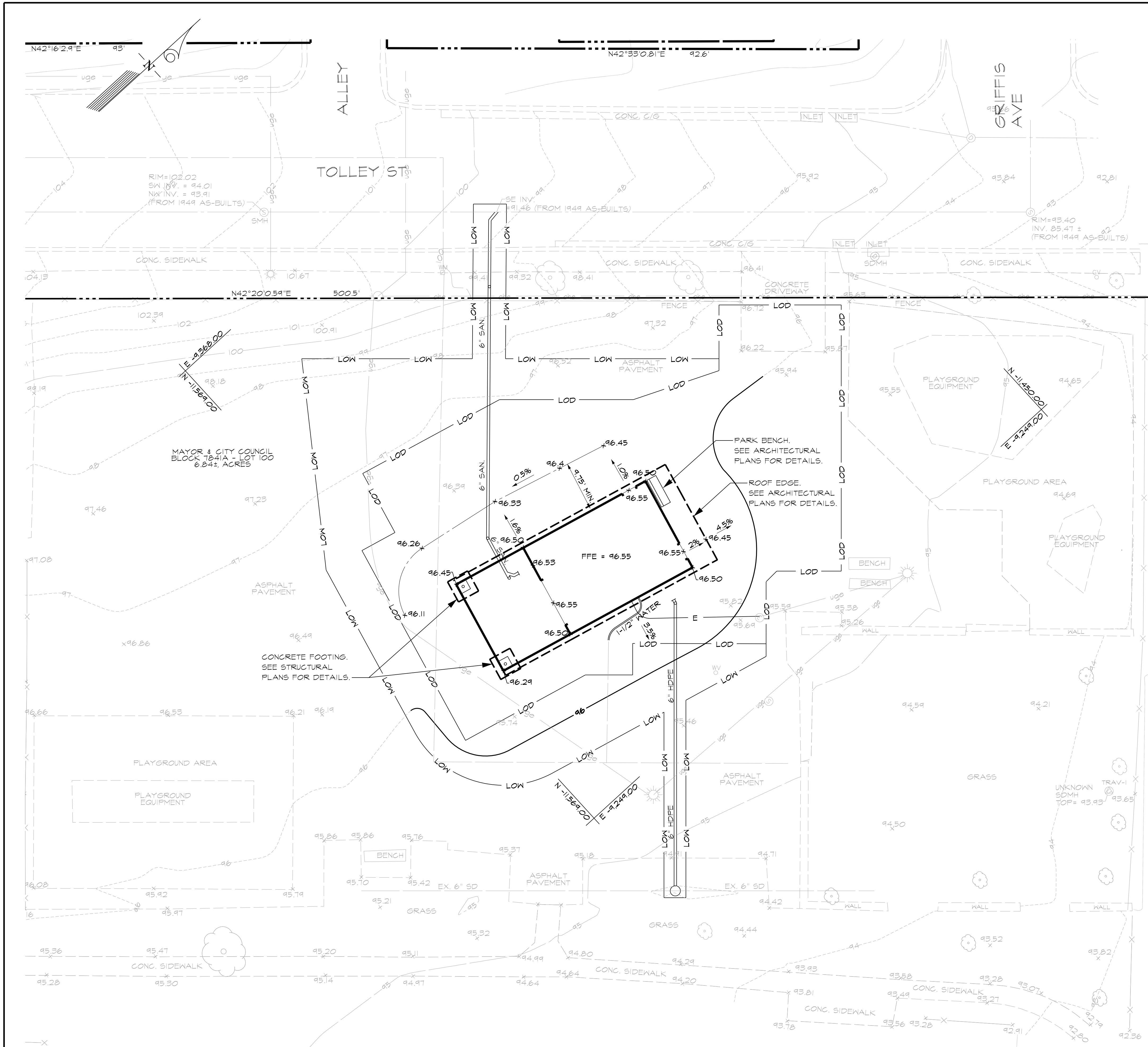
228 West Market Street, York, Pennsylvania 17401
410-625-4823 voice 410-625-4874 fax

Mark	Date	Description
1	09/08/2025	BID SET

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR SUPERVISED BY ME, AND THAT I AM A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF MARYLAND. I CERTIFY NO OTHER PROFESSIONAL ENGINEER HAS BEEN CONSULTED OR ADVISED IN THE PREPARATION OF THESE DOCUMENTS. I CERTIFY THAT I HAVE REVIEWED AND APPROVED THESE DOCUMENTS FOR THE PROJECT DESCRIBED HEREIN. I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE STATE OF MARYLAND. EXPIRATION DATE: 09/08/2028

PROJECT NO: 20120
DRAWN BY: VJ
CHECKED BY: AP

EXISTING CONDITION & DEMOLITION PLAN
SHEET
C-2.00



SITE DATA

SITE ADDRESS: 2415 TOLLEY ST
BALTIMORE, MD 21230

OWNER: MAYOR & CITY COUNCIL
2415 TOLLEY ST
BALTIMORE, MD 21230

PROPERTY REFERENCE: WARD 25
SECTION 03
BLOCK 18-41A
LOTS 100

COUNCILMANIC DISTRICT: 10TH DISTRICT

EXISTING / PROPOSED USE: RECREATION OUTDOOR / RECREATION OUTDOOR

ZONING: OS

SETBACKS: FRONT 20 FEET SIDE 25 FEET
REAR 25 FEET CORNER 20 FEET

PARKING REQUIRED: VEHICLE PARKING:
OS ZONING DISTRICT
2 PER 1,000 SQ. FT. OF PUBLIC
USE-AREA (NOT INCLUDING ACTUAL
PLAYING FIELD)

BICYCLE PARKING (PER ZONING)
1 PER 15,000 SQ. FT. OF PUBLIC-USE AREA

PARKING PROPOSED: NONE.

HYDROLOGIC SOIL GROUP: C

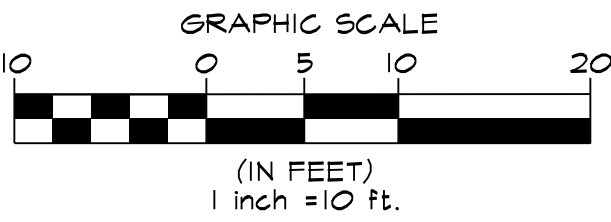
FLOODPLAIN INFORMATION: THE SITE IS NOT LOCATED WITHIN THE 100
YEAR FLOODPLAIN AND DELINEATED ON
FEMA FLOOD INSURANCE RATE MAP
24008T0024G. THE SITE IS LOCATED IN
ZONE X WHICH MEANS AN AREA DETERMINED
TO BE OUTSIDE THE 0.2% ANNUAL CHANCE
FLOODPLAIN. A REVIEW OF THE MARYLAND
DEPARTMENT OF NATURAL RESOURCES (DNR)
MAPPING INDICATED THAT NO ONSITE
WETLANDS OR STREAMS EXIST ON THE SITE.

LEGEND

- RIGHT OF WAY LINE
- EX. INDEX CONTOUR
- EX. INTERMEDIATE CONTOUR
- EX. CURB AND GUTTER
- EX. CURB
- EX. CHAINLINK FENCE
- EX. SANITARY SEWER
- EX. WATER
- EX. GAS
- EX. UNDERGROUND ELECTRIC
- EX. WATER VALVE
- EX. SANITARY MANHOLE
- EX. STORM DRAIN MANHOLE
- EX. LIGHT POLE
- EX. TREE / BUSH
- EX. INLET
- PROP. CONTOUR
- PROP. SPOT ELEVATION
- LIMIT OF DISTURBANCE (4911 S.F. OR 0.11 AC.)
- LIMIT OF WORK (2560 S.F. OR 0.059 AC.)
- PROP. SANITARY SEWER
- PROP. WATER SERVICE
- PROP. MANHOLE
- PROP. ELECTRIC SERVICE SEE ELECTRICAL SITE PLAN FOR ADDITIONAL INFORMATION
- PROP. SWALE CENTERLINE
- PROP. STORM DRAIN
- PROP. INLET

SITE & GRADING PLAN

SCALE: 1"=10'



NOTE
1. FOR GENERAL NOTES SEE DRAWING C1.00.
BCNR-10111 EPLANS #2022-54 ESD #8124

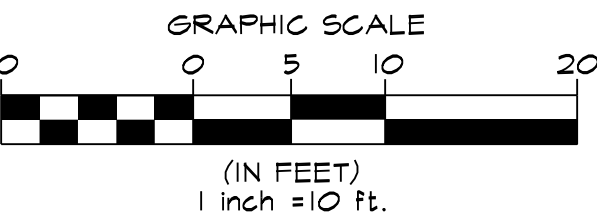
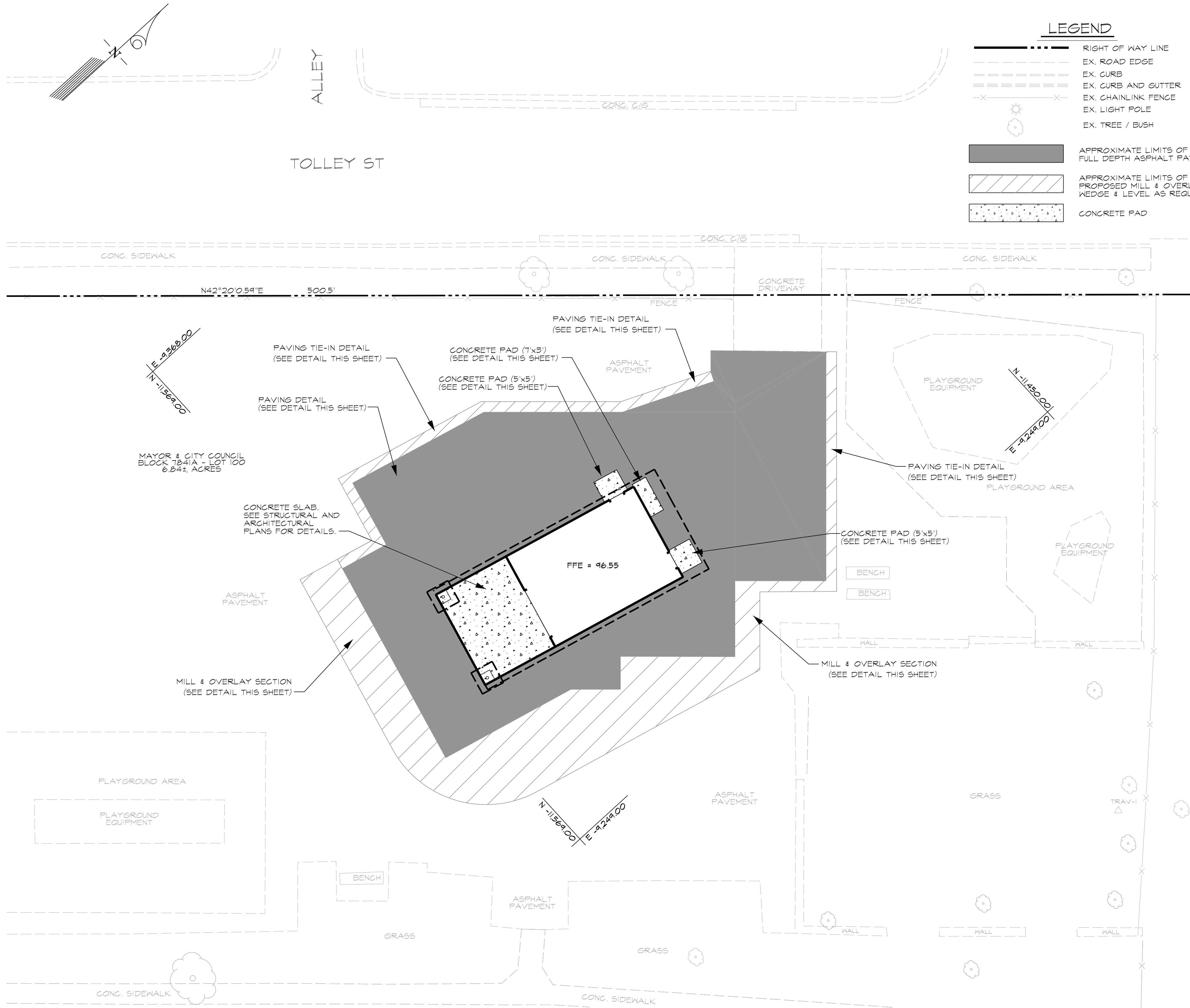
BALTIMORE CITY RECREATION & PARKS
MORRELL PARK FIELD HOUSE
2415 TOLLEY ST., BALTIMORE, MD 21230

Mark	Date	Description	
		BID SET	
1	08/08/2025		

PROJECT NO: 20120
DRAWN BY: VJ
CHECKED BY: AP

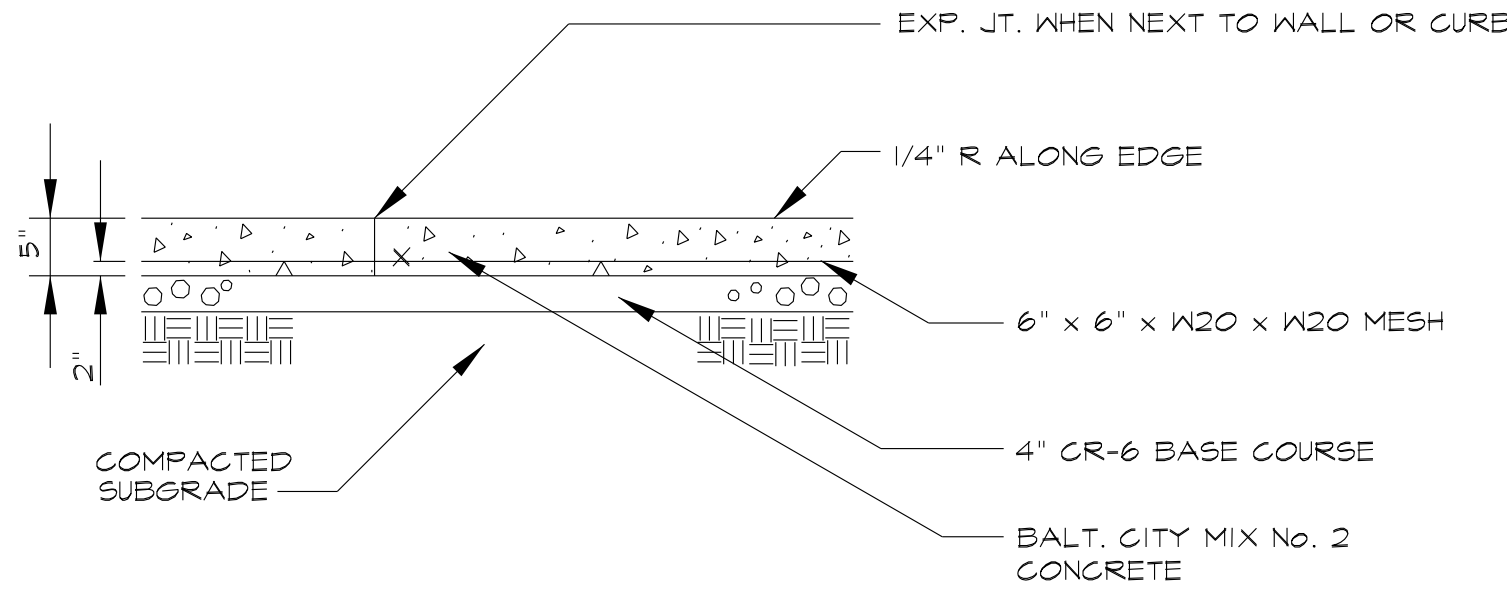
SITE & GRADING PLAN

SHEET
C-3.00



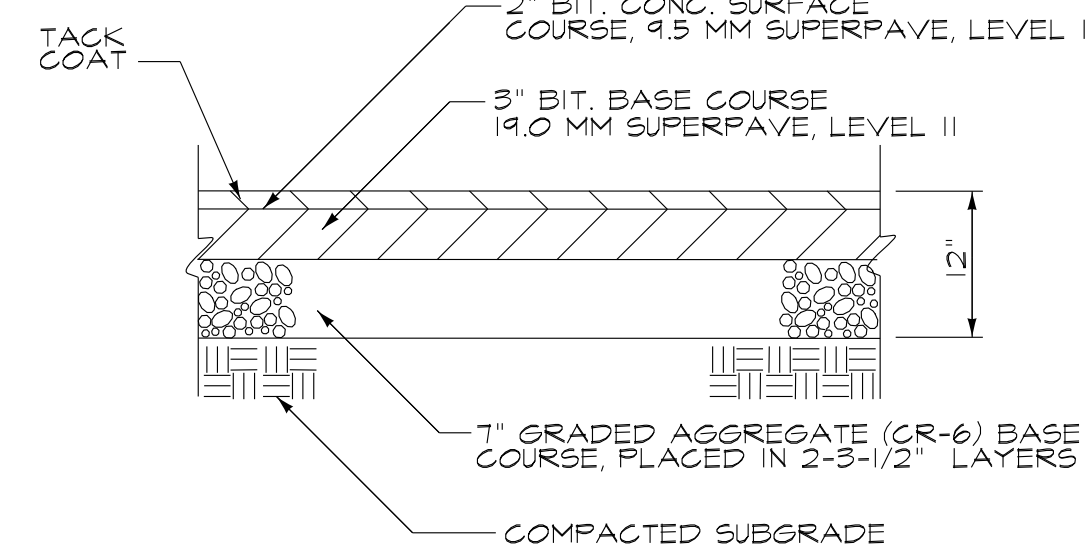
PAVING PLAN
SCALE: 1"=10'

- LEGEND**
- RIGHT OF WAY LINE
 - EX. ROAD EDGE
 - EX. CURB
 - EX. CURB AND GUTTER
 - EX. CHAINLINK FENCE
 - EX. LIGHT POLE
 - EX. TREE / BUSH
 - APPROXIMATE LIMITS OF PROPOSED FULL DEPTH ASPHALT PAVING
 - APPROXIMATE LIMITS OF PROPOSED MILL & OVERLAY, WEDGE & LEVEL AS REQUIRED.
 - CONCRETE PAD

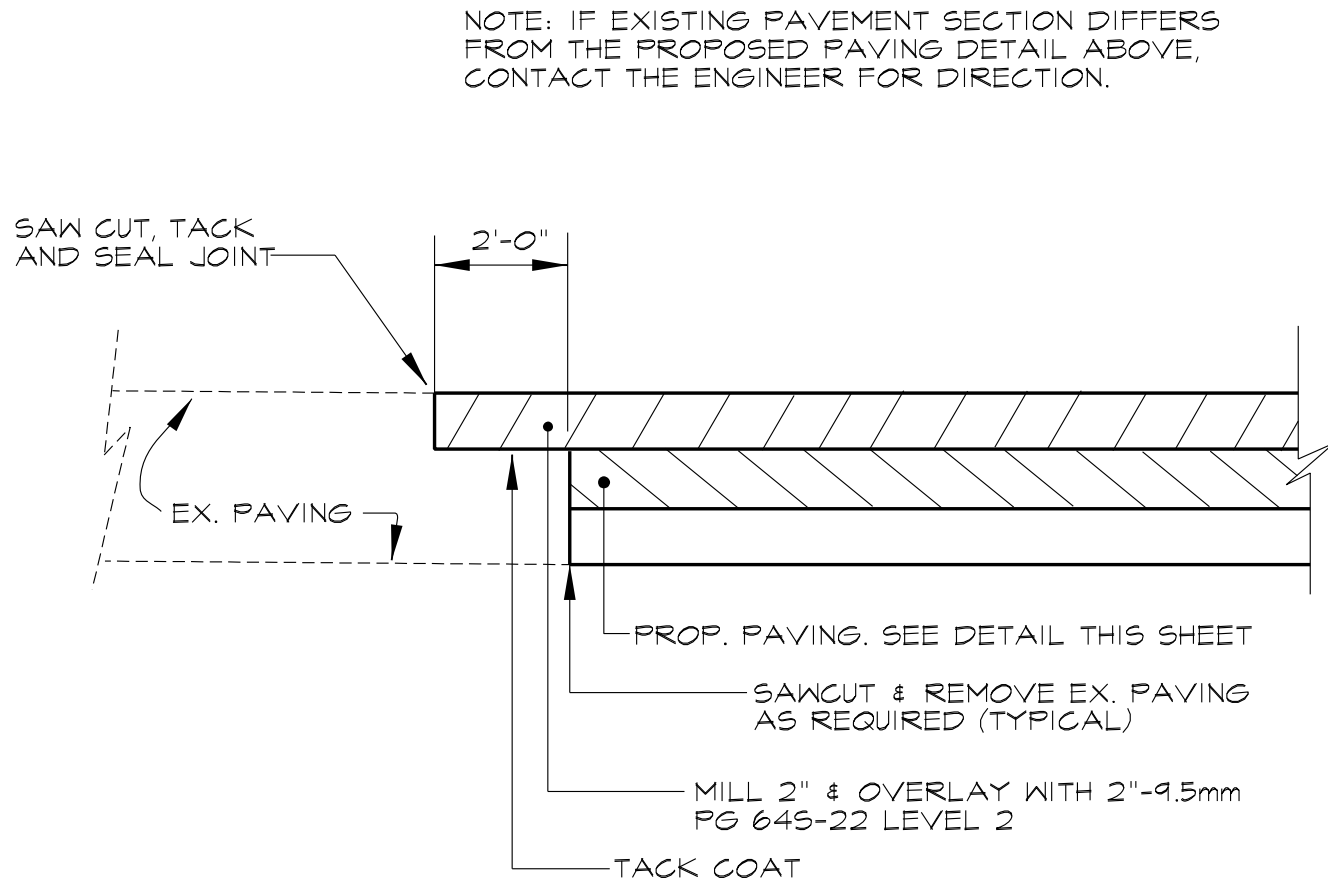


- NOTE: PROVIDE 2% CROSS-SLOPE FOR POSITIVE DRAINAGE AS REQUIRED
- SECTION**
- EXPANSION JOINTS SHALL BE 1/2" PREMOLDED BITUMINOUS JOINT MATERIAL IN ACCORDANCE WITH BALTIMORE CITY SPECIFICATION.
 - SEE BALTIMORE CITY STANDARD DETAIL BC 655.05 FOR ADDITIONAL INFORMATION.
 - EXPANSION JOINTS SHALL BE SEALED PER THE PROJECT SPECIFICATIONS.

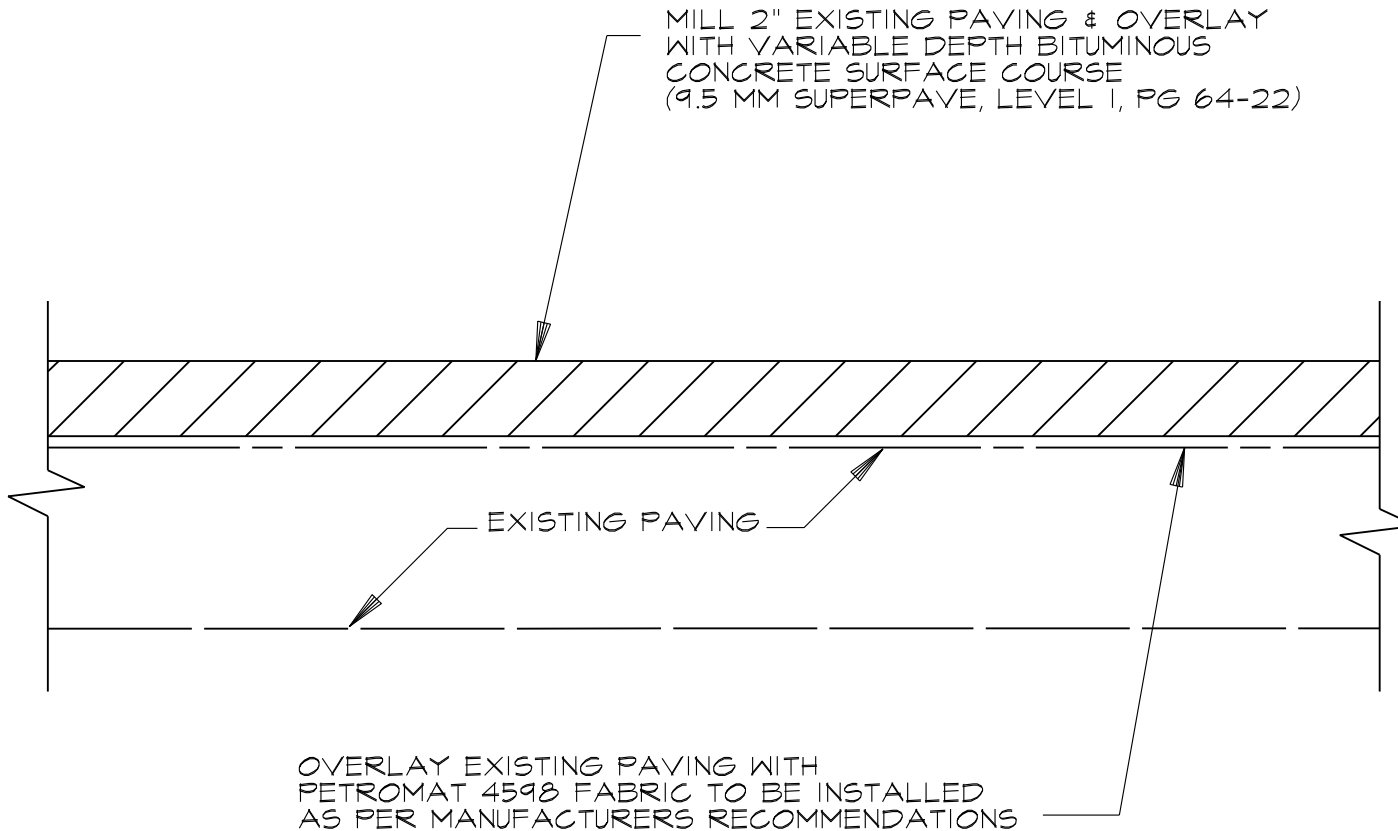
CONCRETE PAD DETAIL
SCALE: N.T.S.



PAVING DETAIL
SCALE: N.T.S.



PAVING TIE-IN DETAIL
SCALE: N.T.S.



MILL & OVERLAY SECTION
SCALE: N.T.S.

BALTIMORE CITY RECREATION & PARKS
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2415 TOLLEY ST., BALTIMORE, MD 21230

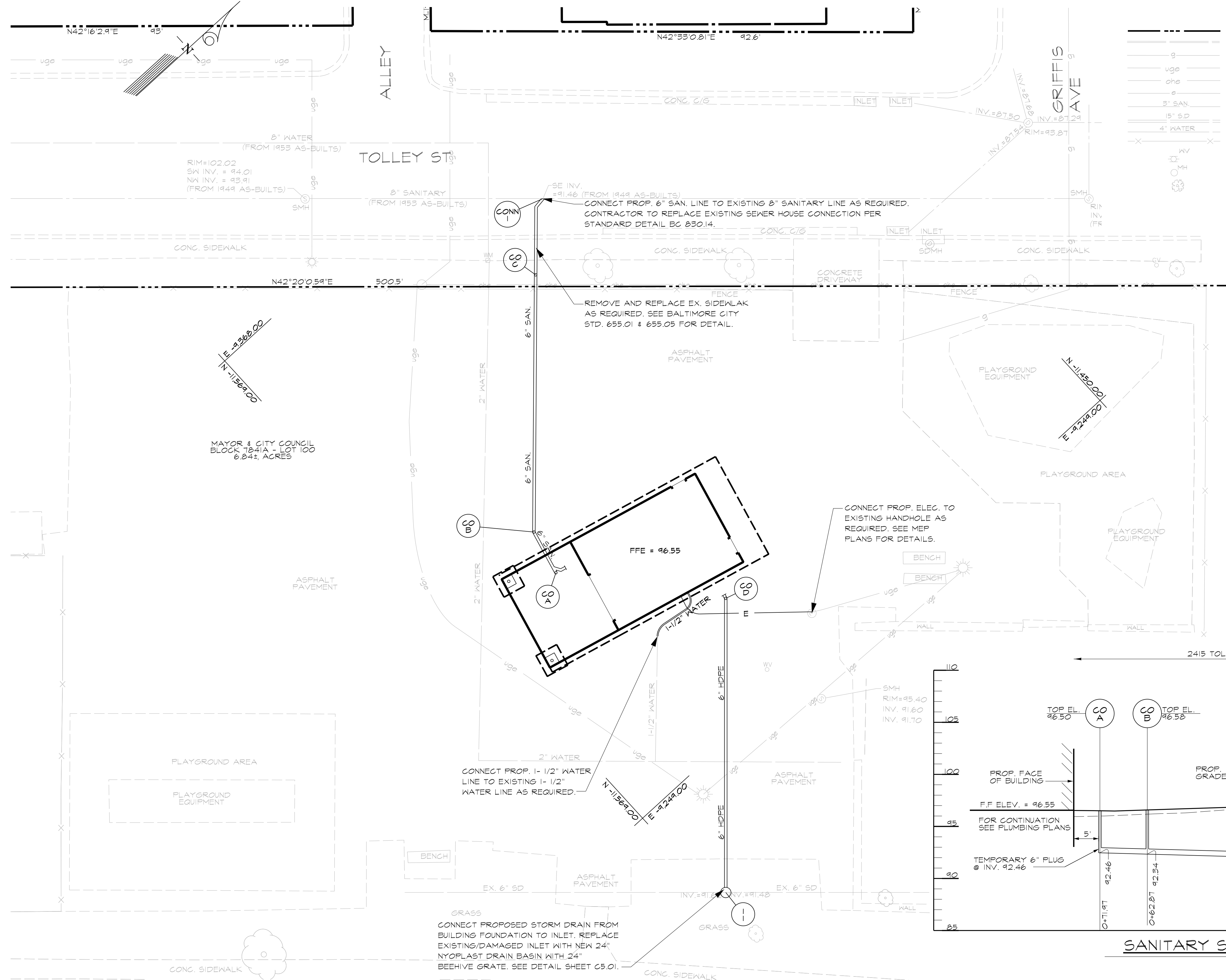
Murphy & Dittenhafer
A R C H I T E C T S
228 West Market Street, York, Pennsylvania 17401
410-625-4823 voice 410-625-4874 fax

Description	
BID SET	
Date	08/08/2025
Mark	1

PROJECT NO: 20120
DRAWN BY: VJ
CHECKED BY: AP

PAVING PLAN

SHEET
C-4.00



LEGEND

RIGHT OF WAY LINE
EX. CURB AND GUTTER
EX. GAS MAIN
EX. UNDERGROUND ELECTRIC
EX. OVERHEAD ELECTRIC
EX. ELECTRIC
EX. SANITARY SEWER
EX. STORM DRAIN
EX. WATER
EX. CHAINLINK FENCE
EX. WATER VALVE
EX. MANHOLE
EX. TREE / BUSH

6" SAN.

1-1/2" WATER

E

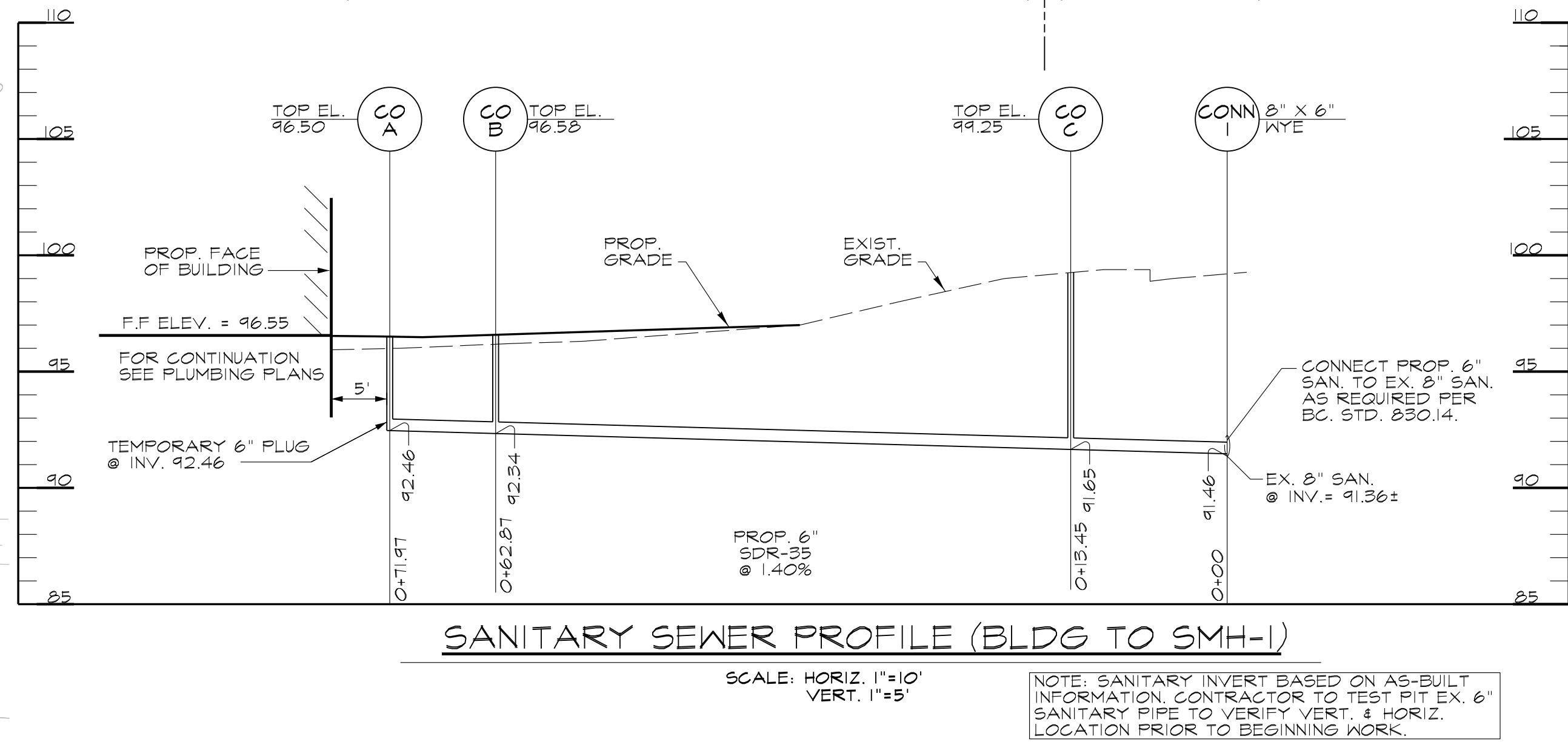
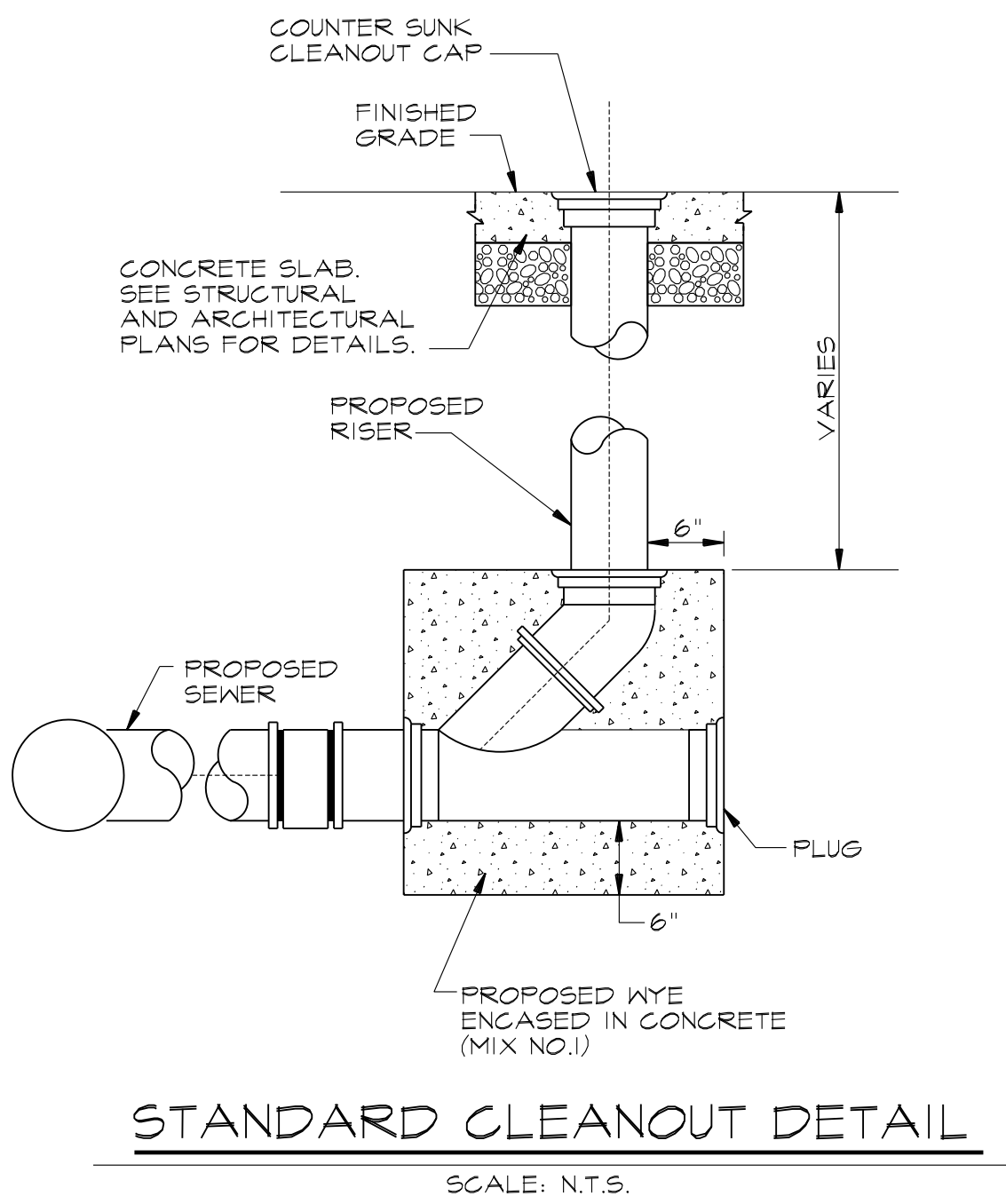
6" HDPE

PROP. SANITARY SEWER

PROP. WATER SERVICE

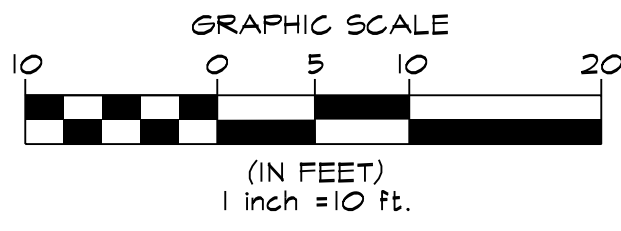
PROP. ELECTRIC SERVICE
SEE ELECTRICAL SITE PLAN FOR
ADDITIONAL INFORMATION

PROP. STORM DRAIN



SANITARY SEWER STRUCTURE SCHEDULE				
NO.	TYPE	NORTHING	EASTING	REMARKS
CO-A	STANDARD CLEANOUT	-11,549.47	-9,295.06	SEE DETAIL THIS SHEET
CO-B	STANDARD CLEANOUT	-11,547.33	-9,303.68	SEE DETAIL THIS SHEET
CO-C	STANDARD CLEANOUT	-11,513.76	-9,339.95	SEE DETAIL THIS SHEET
CO-D	STANDARD CLEANOUT	-11,528.70	-9,269.42	SEE DETAIL THIS SHEET
CONN-1	SANITARY HOUSE CONNECTION	-11,502.81	-9,349.81	SEE BC. STD. 830.14
I-1	24" NYOPLAST DRAIN BASIN W/ BEEHIVE GRATE	-11,566.83	-9,227.69	SEE DETAIL THIS SHEET

- NOTES:
- FOR GENERAL UTILITY NOTES SEE SHEET C1.01 "GENERAL NOTES".
 - SEE MECHANICAL, ELECTRICAL, AND PLUMBING PLANS FOR UTILITY CONNECTIONS TO BUILDING.
 - CONTRACTOR TO REPLACE EXISTING SEWER HOUSE CONNECTION PER STANDARD DETAIL BC 830.14. BEFORE COMMENCING ANY WORK, CONTRACTOR MUST OBTAIN A UTILITY PERMIT FROM DPW AND A TEMPORARY USE OF A RIGHT WAY PERMIT FROM BALTIMORE CITY DOT.
 - FOR CURB AND GUTTER REPAIRS REFER TO CITY STANDARD DETAILS BC 620.06 & BC 620.11. EXISTING CURB AND GUTTER SHALL BE REPLACED IN KIND TO THE NEAREST EXISTING JOINT.
 - FOR CONCRETE SIDEWALK REPAIRS REFER TO CITY STANDARD DETAILS BC 655.01 & BC 655.05. EXISTING SIDEWALK SHALL BE REPLACED TO THE NEAREST EXISTING JOINT.



BALTIMORE CITY RECREATION & PARKS

MORRELL PARK FIELD HOUSE

2415 TOLLEY ST., BALTIMORE, MD 21230

Murphy & Dittenhafer

A R C H I T E C T S

800 North Charles Street, Baltimore, Maryland 21201
410-625-4823 voice 410-625-4874 fax

Mark	Date	Description
1	08/08/2025	BID SET

PROJECT NO: 20120

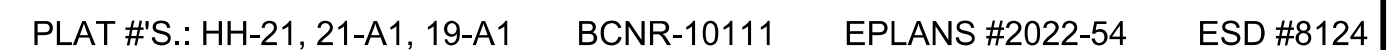
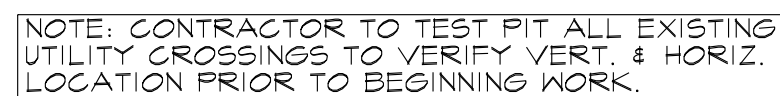
DRAWN BY: VJ

CHECKED BY: AP

UTILITY PLAN & PROFILE

SHEET

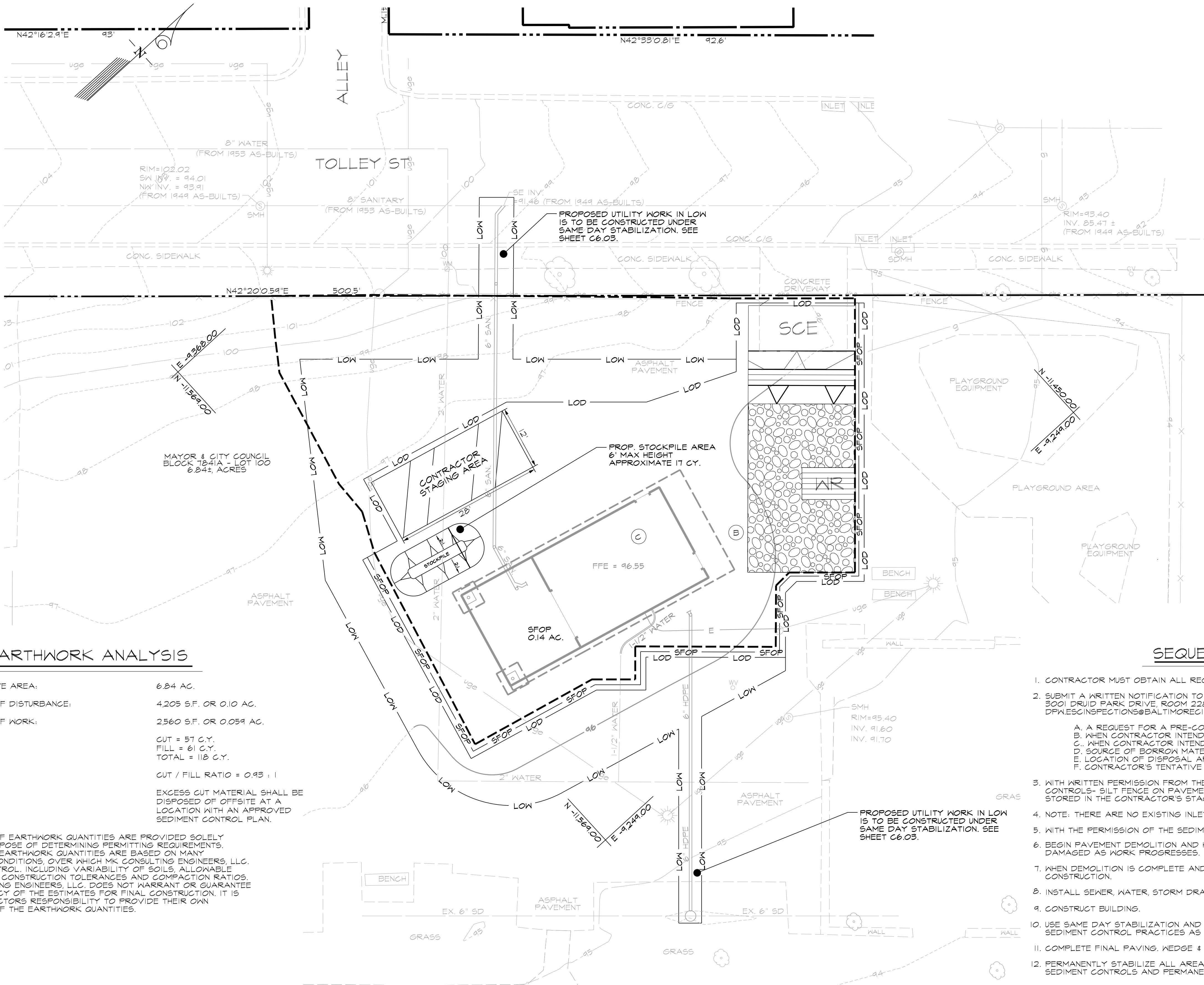
C-5.00



SHEET
C-5.01

8600 North Charles Street, Baltimore, Maryland 21201
410-625-4823 voice 410-625-4674 fax

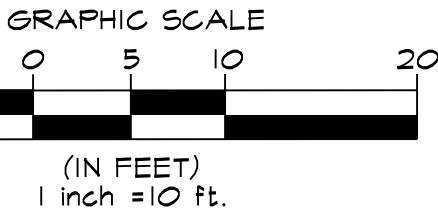
BALTIMORE CITY RECREATION & PARKS
MORRELL PARK FIELD HOUSE
2415 TOLLEY ST., BALTIMORE, MD 21230



EARTHWORK ANALYSIS

TOTAL LOT/SITE AREA: 6.84 AC.
TOTAL LIMIT OF DISTURBANCE: 4,205 S.F. OR 0.10 AC.
TOTAL LIMIT OF WORK: 2,560 S.F. OR 0.059 AC.
EARTHWORK:
CUT = 57 C.Y.
FILL = 61 C.Y.
TOTAL = 118 C.Y.
CUT / FILL RATIO = 0.93 : 1
EXCESS CUT MATERIAL SHALL BE DISPOSED OF OFFSITE AT A LOCATION WITH AN APPROVED SEDIMENT CONTROL PLAN.

NOTE:
ESTIMATES OF EARTHWORK QUANTITIES ARE PROVIDED SOLELY FOR THE PURPOSE OF DETERMINING PERMITTING REQUIREMENTS. SINCE FINAL EARTHWORK QUANTITIES ARE BASED ON MANY VARIABLE CONDITIONS, OVER WHICH MK CONSULTING ENGINEERS, LLC. HAS NO CONTROL, INCLUDING VARIABILITY OF SOILS, ALLOWABLE SURVEY AND CONSTRUCTION TOLERANCES AND COMPACTION RATIOS, MK CONSULTING ENGINEERS, LLC. DOES NOT WARRANT OR GUARANTEE THE ACCURACY OF THE ESTIMATES FOR FINAL CONSTRUCTION. IT IS THE CONTRACTORS RESPONSIBILITY TO PROVIDE THEIR OWN ESTIMATES OF THE EARTHWORK QUANTITIES.



NOTE TO CONTRACTOR:
EROSION AND SEDIMENT CONTROLS SHALL BE STRICTLY ENFORCED.

EROSION & SEDIMENT CONTROL PLAN

SCALE: 1"=10'

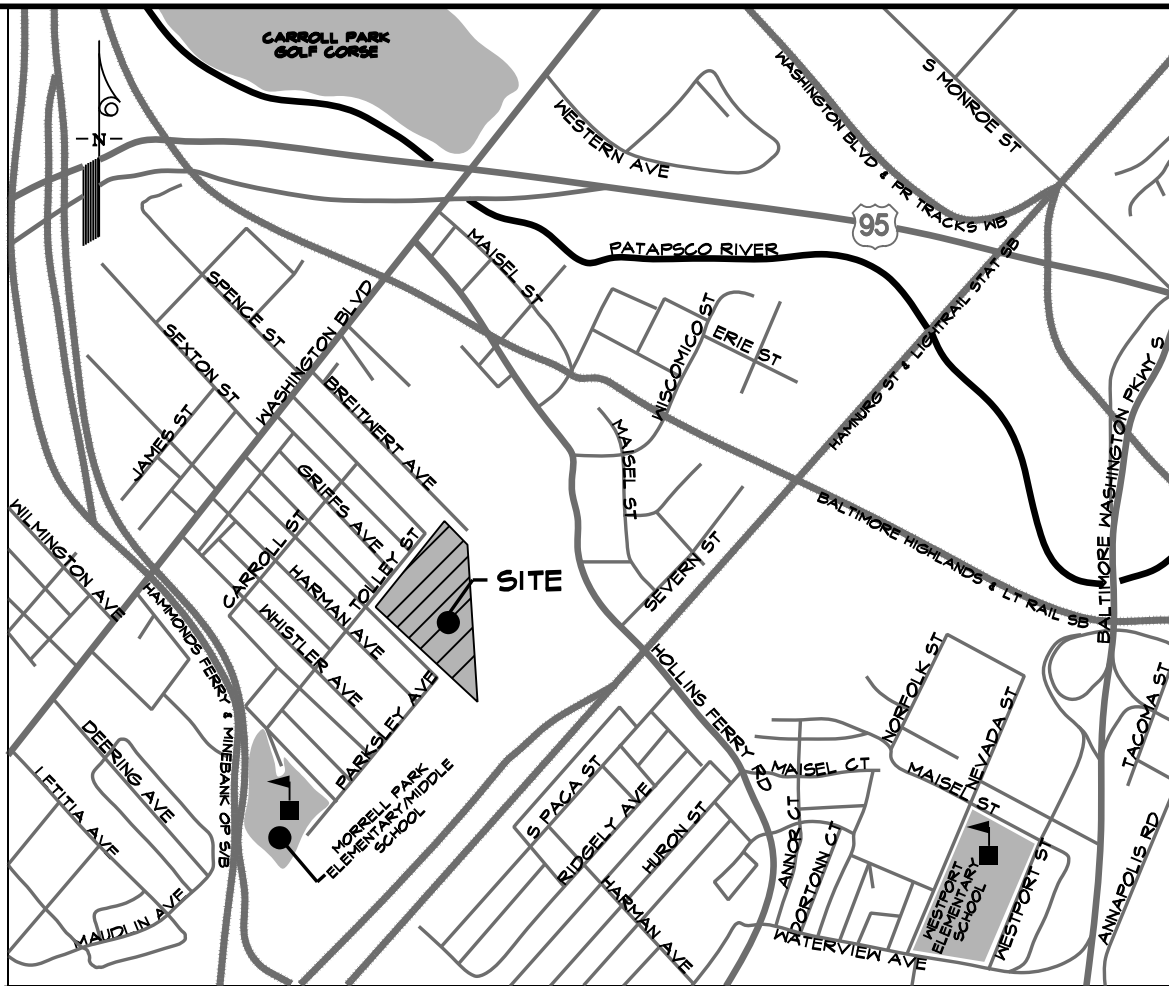
SEQUENCE OF CONSTRUCTION

1. CONTRACTOR MUST OBTAIN ALL REQUIRED PERMITS PRIOR TO BEGINNING ANY CONSTRUCTION.
2. SUBMIT A WRITTEN NOTIFICATION TO: THE DEPARTMENT OF PUBLIC WORKS, OFFICE OF COMPLIANCE AND RESEARCH, 3001 DRUID PARK DRIVE, ROOM 228, BALTIMORE, MD 21215, PHONE NUMBER, 410-396-0752, DPW.ESCI@BALTIMORECITY.GOV, AT LEAST 72 HOURS PRIOR TO START OF CONSTRUCTION STATING:
A. A REQUEST FOR A PRE-CONSTRUCTION MEETING
B. WHEN CONTRACTOR INTENDS TO BEGIN CONSTRUCTION
C. WHEN CONTRACTOR INTENDS TO INSTALL STORMWATER MANAGEMENT FACILITIES,
D. SOURCE OF BORROW MATERIAL,
E. LOCATION OF DISPOSAL AREA OF SITE MATERIAL,
F. CONTRACTOR'S TENTATIVE CLOSING DATE.
3. WITH WRITTEN PERMISSION FROM THE ESC INSPECTOR, CLEAR AND GRUB FOR INSTALLATION OF PERIMETER SEDIMENT CONTROLS- SILT FENCE ON PAVEMENT AND STABILIZED CONSTRUCTION ENTRANCE. NO EROSION MATERIAL MAY BE STORED IN THE CONTRACTOR'S STAGING AREA.
4. NOTE: THERE ARE NO EXISTING INLETS WITHIN THE LIMIT OF DISTURBANCE.
5. WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, CLEAR AND GRUB SITE AREA. BEGIN SITE GRADING.
6. BEGIN PAVEMENT DEMOLITION AND HAUL OFF. GRADE DEMO AREA AS NECESSARY AND REPAIR ANY SEDIMENT CONTROLS DAMAGED AS WORK PROGRESSES.
7. WHEN DEMOLITION IS COMPLETE AND WITH THE WRITTEN PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, BEGIN CONSTRUCTION.
8. INSTALL SEWER, WATER, STORM DRAIN, GAS AND ELECTRICAL UTILITY WORK.
9. CONSTRUCT BUILDING.
10. USE SAME DAY STABILIZATION AND WITH PERMISSION OF SEDIMENT CONTROL INSPECTOR TO REMOVE TEMPORARY SEDIMENT CONTROL PRACTICES AS INTERFERENCES OCCUR.
11. COMPLETE FINAL PAVING, WEDGE & LEVEL TO EXISTING GRADE.
12. PERMANENTLY STABILIZE ALL AREAS, AND WITH WRITTEN PERMISSION OF THE SEDIMENT CONTROL REMOVE ALL REMAINING SEDIMENT CONTROLS AND PERMANENTLY STABILIZE ANY AREAS DISTURBED BY THERE REMOVAL.

STABILIZATION SCHEDULE

AREA	SQ. FT.	STABILIZATION TYPE	SEQUENCE #
(A) PERVIOUS AREAS	0	SEEDING (TEMPORARY)	N/A
		SEEDING (PERMANENT)	N/A
(B) IMPERVIOUS AREAS	3,689	SEEDING/STONE BASE (TEMPORARY)	5
		CONCRETE/PAVEMENT (PERMANENT)	10
(C) BUILDING	516	PROPOSED BUILDING	9

* AREAS TO BE VEGETATIVELY STABILIZED TO SATISFY THE 3 / 7 DAY REQUIREMENTS AS PER THE BALTIMORE CITY STANDARD EROSION AND SEDIMENT CONTROL NOTES.



VICINITY MAP

SCALE: 1"=1000'

LEGEND

- RIGHT OF WAY LINE
- EX. INDEX CONTOUR
- EX. INTERMEDIATE CONTOUR
- EX. CURB AND GUTTER
- PROP. CONTOUR
- LOD LIMIT OF DISTURBANCE
- LOW LIMIT OF WORK
- SFOP SILT FENCE ON PAVEMENT
- STABILIZED CONSTRUCTION ENTRANCE
- WASH RACK
- CONTRACTOR'S STAGING AREA
- CONTRACTOR'S STOCKPILE AREA
- DRAINAGE AREA BOUNDARY

BALTIMORE CITY RECREATION & PARKS
MORRELL PARK FIELD HOUSE
2415 TOLLEY ST., BALTIMORE, MD 21230

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ARCHITECTS

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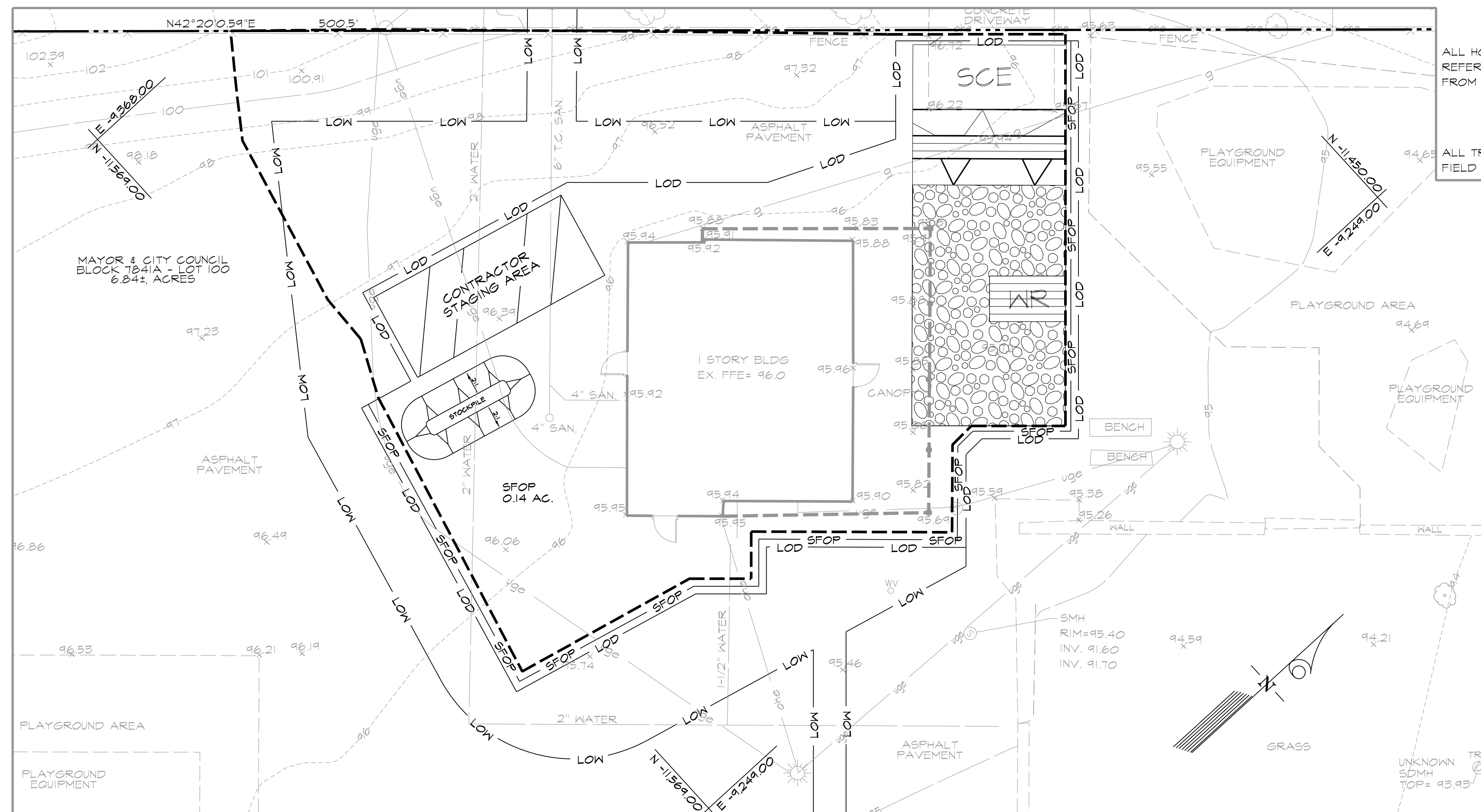
Mark	Date	Description
1	08/08/2025	BID SET

PROJECT NO: 20120
DRAWN BY: VJ
CHECKED BY: AP

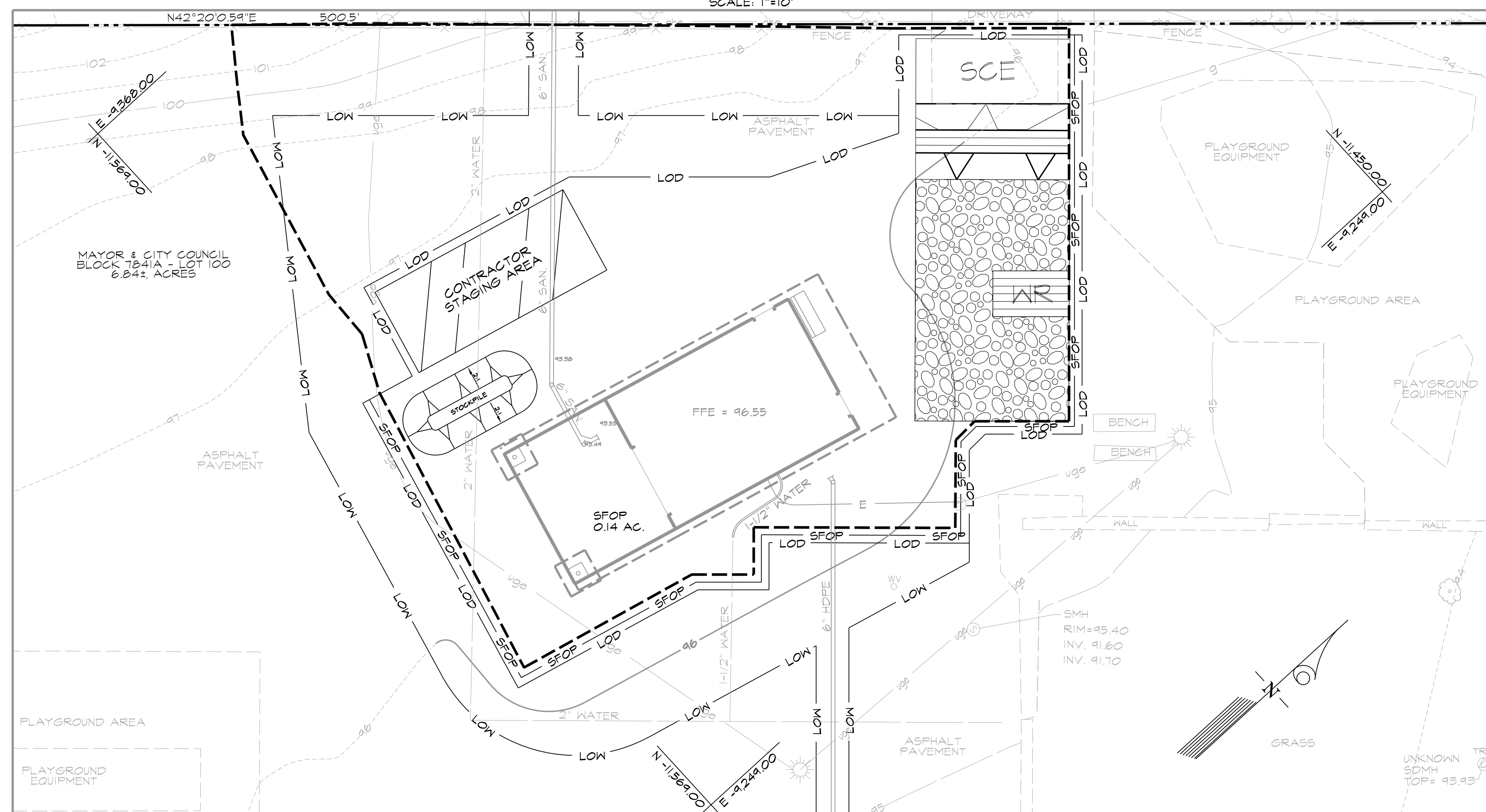
EROSION & SEDIMENT CONTROL PLAN

SHEET

C-6.00



EXISTING CONDITION DRAINAGE AREA MAP



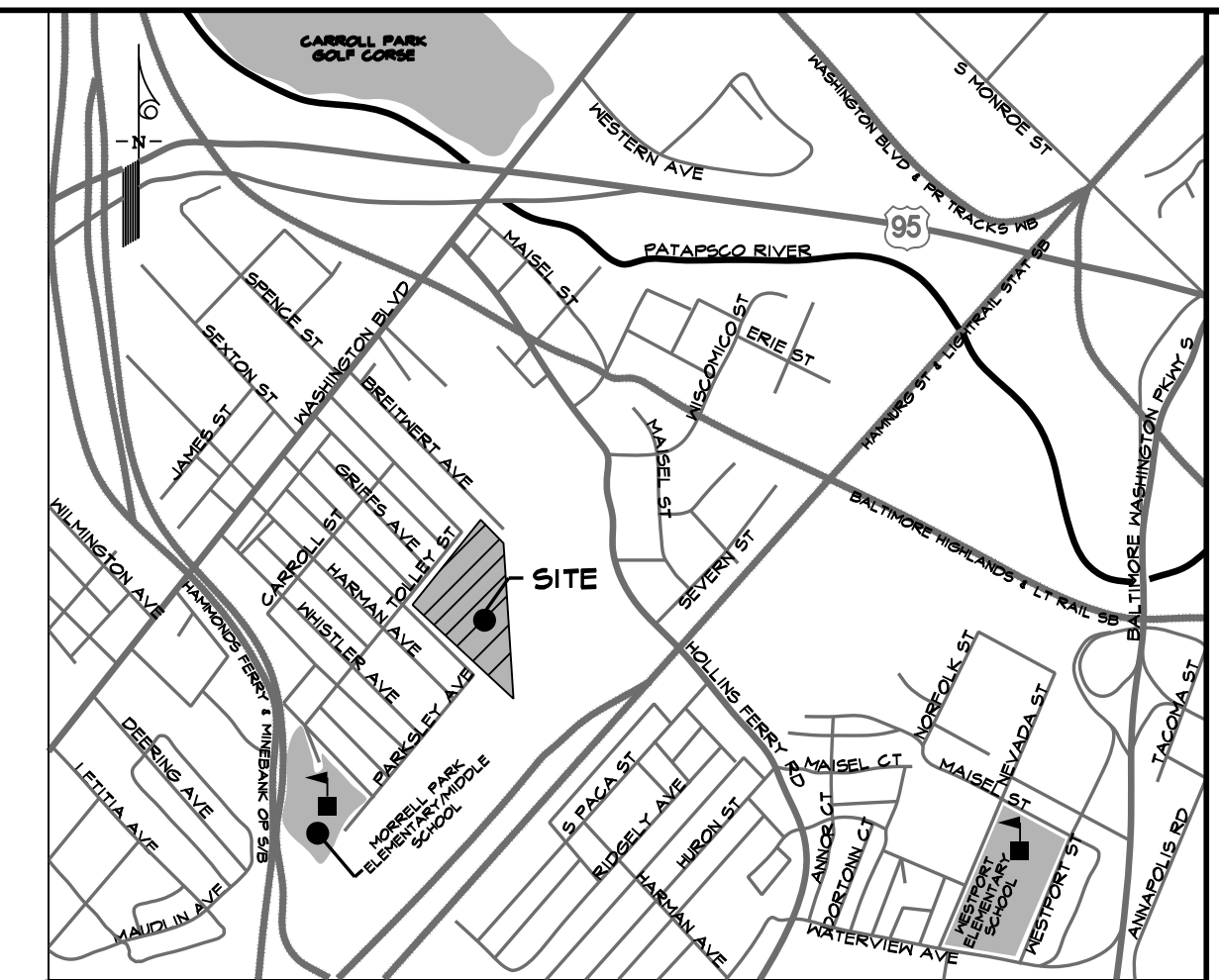
PROPOSED CONDITION DRAINAGE AREA MAP

BENCHMARK DATA

ALL HORIZONTAL AND VERTICAL SURVEY DATA CONTAINED HEREON ARE REFERENCED TO THE BALTIMORE CITY COORDINATE SYSTEM, AS DERIVED FROM THE FOLLOWING BALTIMORE CITY CONTROL STATIONS:

POINT#	NORTHING	EASTING	ELEVATION
TRAV-1	-11,490.84	-1,184.84	43.93
TRAV-2	-11,699.31	-1,355.65	45.74
























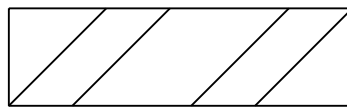
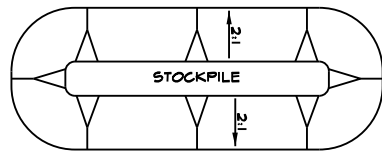

ALL TRAVERSE POINT DATA CONTAINED HEREON ARE REFERENCED TO FIELD SHOT UTILITY STRUCTURES.

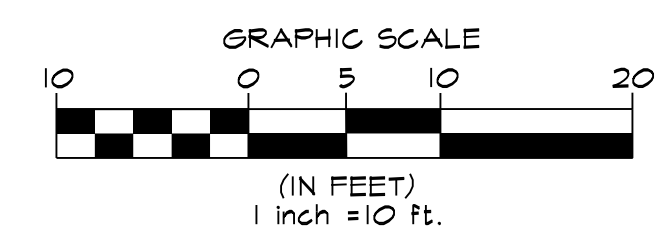


VICINITY MAP

SCALE: 1"=1000'

LEGEND

- | | |
|---|----------------------------------|
|  | RIGHT OF WAY LINE |
|  | EX. INDEX CONTOUR |
|  | EX. INTERMEDIATE CONTOUR |
|  | EX. CURB AND GUTTER |
|  | EX. CURB |
|  | EX. CHAINLINK FENCE |
|  | EX. SANITARY SEWER |
|  | EX. WATER |
|  | EX. GAS |
|  | EX. UNDERGROUND ELECTRIC |
|  | EX. OVERHEAD ELECTRIC |
|  | EX. WATER VALVE |
|  | EX. SANITARY MANHOLE |
|  | EX. STORM DRAIN MANHOLE |
|  | EX. LIGHT POLE |
|  | EX. TREE / BUSH |
|  | EX. INLET |
|  | PROP. CONTOUR |
|  | LIMIT OF DISTURBANCE |
|  | LIMIT OF WORK |
|  | SILT FENCE ON PAVEMENT |
|  | STABILIZED CONSTRUCTION ENTRANCE |
|  | WASH RACK |
|  | CONTRACTOR'S STAGING AREA |
|  | CONTRACTOR'S STOCKPILE AREA |
|  | DRAINAGE AREA BOUNDARY |



NOTE TO CONTRACTOR:
EROSION AND SEDIMENT CONTROLS SHALL
BE STRICTLY ENFORCED.

BCNR-10111 EPLANS #2022-54 ESD #8124

BALTIMORE CITY RECREATION & PARKS
MORRELL PARK FIELD HOUSE
2415 TOLLEY ST., BALTIMORE, MD 21230

A R C H I T E C T S
Murphy & Littenhafer

Mark	Date	Description
1	08/08/2025	BID SET

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE STATE OF MARYLAND, LICENSE NO. 25658, EXPIRATION DATE: 11-17-2005.

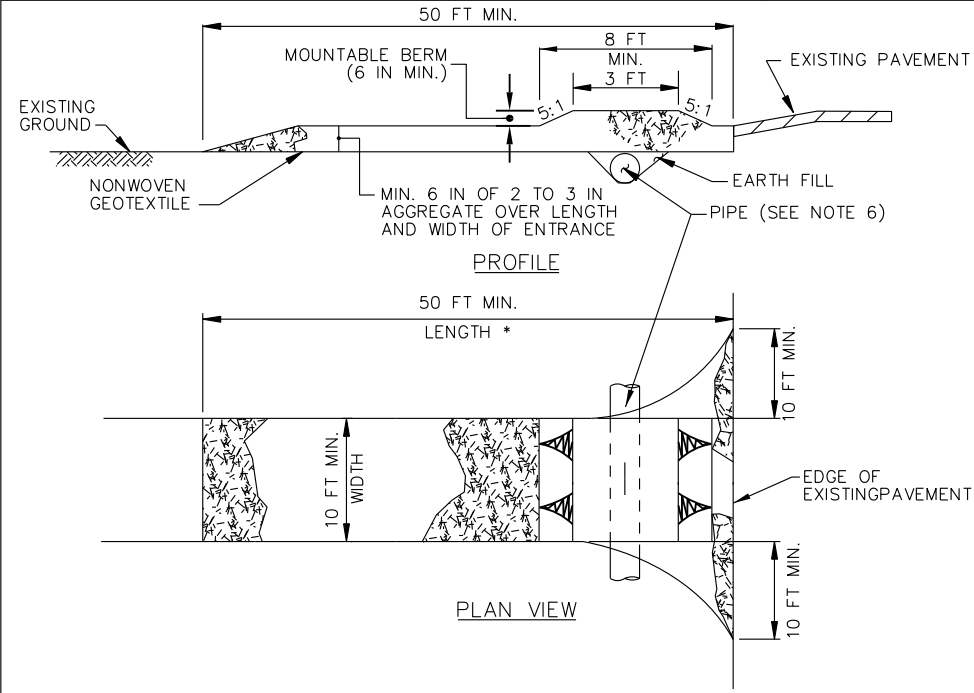
PROJECT NO: 20120

DRAWN BY:	VJ
CHECKED BY:	AP

ESC DRAINAGE
AREA MAPS

SHEET
C-6.01

DETAIL B-1 STABILIZED
CONSTRUCTION ENTRANCE

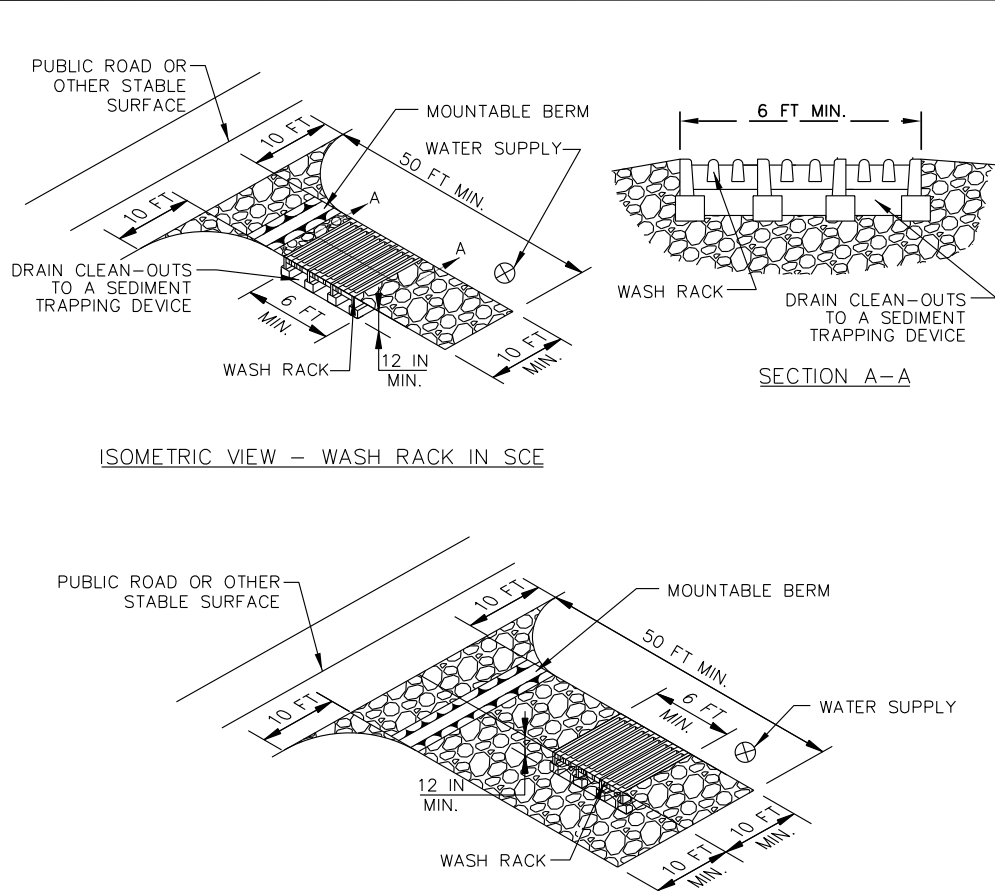


CONSTRUCTION SPECIFICATIONS

1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
2. PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE. MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.
3. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
4. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.
5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE. MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL		
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL B-2 WASH RACK
OPTION

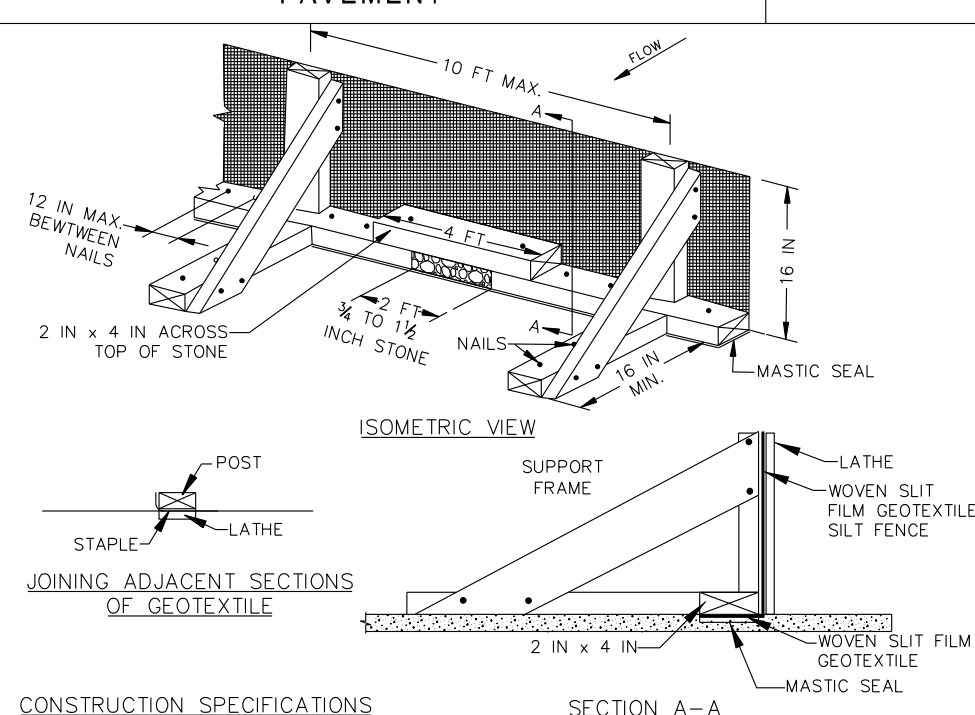


CONSTRUCTION SPECIFICATIONS

1. USE A WASH RACK DESIGNED AND CONSTRUCTED/MANUFACTURED FOR THE ANTICIPATED TRAFFIC LOADS. CONCRETE, STEEL, OR OTHER MATERIALS ARE ACCEPTABLE. PRE-FABRICATED UNITS SUCH AS CATTLE GUARDS ARE ACCEPTABLE. USE MINIMUM DIMENSION OF 6 FEET x 10 FEET. ORIENT DIRECTION OF RIBS AS SHOWN ON THE DETAIL.
2. INSTALL PRIOR TO, ALONG SIDE OF, OR AS PART OF THE SCE.
3. DIRECT WASH WATER TO AN APPROVED SEDIMENT TRAPPING DEVICE.
4. KEEP AREA UNDER WASH RACK FREE OF ACCUMULATED SEDIMENT. IF DAMAGED, REPAIR OR REPLACE WASH RACK.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL		
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL E-2 SILT FENCE ON
PAVEMENT



CONSTRUCTION SPECIFICATIONS

1. USE NOMINAL 2 INCH x 4 INCH LUMBER.
2. USE WOVEN SILT FILM GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
3. PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
4. SPACE UPRIGHT SUPPORTS NO MORE THAN 10 FEET APART.
5. PROVIDE A TWO FOOT OPENING BETWEEN EVERY SET OF SUPPORTS AND PLACE STONE IN THE OPENING OVER GEOTEXTILE.
6. KEEP SILT FENCE TAUT AND SECURELY STAPLE TO THE UPSLOPE SIDE OF UPRIGHT SUPPORTS. EXTEND GEOTEXTILE UNDER 2x4.
7. WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, FOLD, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL. ATTACH LATHE.
8. PROVIDE A MASTIC SEAL BETWEEN PAVEMENT, GEOTEXTILE, AND 2x4 TO PREVENT SEDIMENT-LADEN WATER FROM ESCAPING BENEATH SILT FENCE INSTALLATION.
9. SECURE BOARDS TO PAVEMENT WITH 400 5 INCH MINIMUM LENGTH NAILS.
10. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. MAINTAIN WATER TIGHT SEAL ALONG BOTTOM. REPLACE STONE IF DISPLACED.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL		
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

BALTIMORE CITY RECREATION & PARKS
MORRELL PARK FIELD HOUSE
2415 TOLLEY ST., BALTIMORE, MD 21230

Murphy & Dittenhafer
ARCHITECTS
228 West Market Street, York, Pennsylvania 17401
410-652-4823 voice 410-652-4874 fax
800 North Charles Street, Baltimore, Maryland 21201
410-652-4823 voice 410-652-4874 fax

Mark	Date	Description
1	08/08/2025	BID SET

PROFESSIONAL CERTIFICATION A MEMBER COMPANY THAT THESE DOCUMENTS HAVE BEEN PREPARED OR APPROVED BY ME, AND THAT I AM A QUALIFIED PROFESSIONAL ENGINEER UNDER THE STATE OF MARYLAND. LICENSE NO. 20251. EXPIRATION DATE 11/30/2026. PROFESSIONAL CERTIFICATION A MEMBER COMPANY THAT THESE DOCUMENTS HAVE BEEN PREPARED OR APPROVED BY ME, AND THAT I AM A QUALIFIED PROFESSIONAL ENGINEER UNDER THE STATE OF MARYLAND. LICENSE NO. 20251. EXPIRATION DATE 11/30/2026.

PROJECT NO: 20120
DRAWN BY: VJ
CHECKED BY: AP

EROSION &
SEDIMENT
CONTROL DETAILS

SHEET
C-6.02

B-4-8 STANDARDS AND SPECIFICATIONS FOR STOCKPILE AREA

DEFINITION

A MOUND OR PILE OF SOIL PROTECTED BY APPROPRIATELY DESIGNED EROSION AND SEDIMENT CONTROL MEASURES. PURPOSE TO PROVIDE A DESIGNATED LOCATION FOR THE TEMPORARY STORAGE OF SOIL THAT CONTROLS THE POTENTIAL FOR EROSION, SEDIMENTATION, AND CHANGES TO DRAINAGE PATTERNS.

CONDITIONS

WHERE PRACTICE APPLIES STOCKPILE AREAS ARE UTILIZED WHEN IT IS NECESSARY TO SALVAGE AND STORE SOIL FOR LATER USE.

CRITERIA

1. THE STOCKPILE LOCATION AND ALL RELATED SEDIMENT CONTROL PRACTICES MUST BE CLEARLY INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN.
2. THE FOOTPRINT OF THE STOCKPILE MUST BE SIZED TO ACCOMMODATE THE ANTICIPATED VOLUME OF MATERIAL AND BASED ON A SIDE SLOPE RATIO NO STEEPER THAN 2:1. BENCHING MUST BE PROVIDED IN ACCORDANCE WITH SECTION B-3 LAND GRADING.
3. RUNOFF FROM THE STOCKPILE AREA MUST DRAIN TO A SUITABLE SEDIMENT CONTROL PRACTICE.
4. ACCESS THE STOCKPILE AREA FROM THE UPGRADE SIDE.
5. CLEAR WATER RUNOFF INTO THE STOCKPILE AREA MUST BE MINIMIZED BY USE OF A DIVERSION DEVICE SUCH AS AN EARTH DIKE, TEMPORARY SWALE OR DIVERSION FENCE. PROVISIONS MUST BE MADE FOR DISCHARGING CONCENTRATED FLOW IN A NON-EROSIVE MANNER.
6. WHERE RUNOFF CONCENTRATES ALONG THE TOE OF THE STOCKPILE FILL, AN APPROPRIATE EROSION/SEDIMENT CONTROL PRACTICE MUST BE USED TO INTERCEPT THE DISCHARGES.
7. STOCKPILES MUST BE STABILIZED IN ACCORDANCE WITH THE 3/7 DAY STABILIZATION REQUIREMENT AS WELL AS STANDARD B-4-1 INCREMENTAL STABILIZATION AND STANDARD B-4-4 TEMPORARY STABILIZATION.
8. IF THE STOCKPILE IS LOCATED ON AN IMPERVIOUS SURFACE, A LINER SHOULD BE PROVIDED BELOW THE STOCKPILE TO FACILITATE CLEANUP. STOCKPILES CONTAINING CONTAMINATED MATERIAL MUST BE COVERED WITH IMPERMEABLE SHEETING.

MAINTENANCE

THE STOCKPILE AREA MUST CONTINUOUSLY MEET THE REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH THE SECTION B-4 VEGETATIVE STABILIZATION. SIDE SLOPES MUST BE MAINTAINED AT NO STEEPER THAN A 2:1 RATIO. THE STOCKPILE AREA MUST BE KEPT FREE OF EROSION. IF THE VERTICAL HEIGHT OF A STOCKPILE EXCEEDS 20 FEET FOR 2:1 SLOPES, 30 FEET FOR 3:1 SLOPES, OR 40 FEET FOR 4:1 SLOPES, BENCHING MUST BE PROVIDED IN ACCORDANCE WITH SECTION B-3 LAND GRADING.

H-5 STANDARDS & SPECIFICATIONS FOR DUST CONTROL

DEFINITION

CONTROLLING THE SUSPENSION OF DUST PARTICALS FROM CONSTRUCTION ACTIVITIES.

PURPOSE

TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES TO REDUCE ON AND OFF-SITE DAMAGE.

CONDITIONS WHERE PRACTICE APPLIED

AREAS SUBJECT TO DUST BLOWING AND MOVEMENT WHERE ON AND OFF-SITE DAMAGE IS LIKELY WITHOUT TREATMENT.

SPECIFICATIONS

1. MULCHES: SEE SECTION B-4-2 SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS, SECTION B-4-3 SEEDING AND MULCHING, AND SECTION B-4-4 TEMPORARY STABILIZATION. MULCH MUST BE ANCHORED TO PREVENT BLOWING.
2. VEGETATIVE COVER: SEE SECTION B-4-4 TEMPORARY STABILIZATION.
3. TILLAGE: TILL TO ROUGHEN SURFACE AND BRING CLODS TO SURFACE. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12" APART, SPRING-TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT THAT MAY PRODUCE THE DESIRED EFFECT.
4. IRRIGATION: SPRINKLE SITE WITH WATER UNTIL SURFACE IS MOIST. REPEAT AS NEEDED. THE SITE MUST NOT BE IRRIGATED TO THE POINT THAT RUNOFF OCCURS.
5. BARRIERS: SOLID BOARD FENCES, SILT FENCES, SNOW FENCES, BURLAP FENCES, STRAW BALES, AND SIMILAR MATERIALS CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING.
6. CHEMICAL TREATMENT: USE OF CHEMICAL TREATMENT REQUIRES APPROVAL BY THE APPROPRIATE PLAN REVIEW AUTHORITY.

STANDARD STABILIZATION NOTE

FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:

- A. THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND
- B. SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.

GENERAL NOTES

1. CONTRACTOR SHALL PLACE 4" MINIMUM TOPSOIL (AFTER COMPACTION), SEED AND MULCH ALL DISTURBED AREAS IN ACCORDANCE WITH THE SPECIFICATIONS ON SHEETS C6.03.
2. THE CONTRACTOR SHALL SUBMIT SEED MIXTURE CERTIFICATION TO THE OWNER PRIOR APPLICATION.
3. FOR EROSION AND SEDIMENT CONTROL DETAILS SEE SHEET C6.02.
4. FOR EROSION AND SEDIMENT CONTROL STAB. NOTES SEE SHTS. C6.04 & C6.05.

UTILITY NOTES

1. CONTRACTOR SHOULD OPEN ONLY THAT SECTION OF TRENCH THAT CAN BE BACKFILLED AND STABILIZED EACH DAY.
2. PLACE ALL EXCAVATED MATERIAL ON UPHILL SIDE OF THE TRENCH.
3. ANY SEDIMENT CONTROLS DISTURBED BY UTILITY CONSTRUCTION ARE TO BE REPAIRED IMMEDIATELY.
4. CONTRACTOR TO ENSURE PROPER SAFETY PRECAUTIONS FOR TRAFFIC ARE TAKEN WHEN IN AREAS OF AUTOMOBILE TRAVEL AREAS.
5. ANY EXCESS STOCKPILE MATERIAL MAY BE PLACED ON-SITE IN THE TEMPORARY STOCKPILE AREA.

NOTE TO CONTRACTOR:
EROSION AND SEDIMENT CONTROLS SHALL
BE STRICTLY ENFORCED.

EROSION AND SEDIMENT CONTROL NOTES

1. THE CONTRACTOR WILL COMPLY WITH ALL REQUIREMENTS OF SEDIMENT AND EROSION CONTROL AS SET FORTH IN THE MARYLAND SEDIMENT AND EROSION MANUAL AND BALTIMORE CITY CODE ARTICLE 7.
2. SUBMIT A WRITTEN NOTIFICATION TO: THE DEPARTMENT OF PUBLIC WORKS, OFFICE OF COMPLIANCE AND LABORATORIES, 3001 DRUID PARK DRIVE, ROOM 228, BALTIMORE, MD 21215, PHONE NUMBER, 410-396-0792, FAX 410-523-9047, DPW.ESC@BALTIMORECITY.GOV AT LEAST 72 HOURS PRIOR TO START OF CONSTRUCTION STATING:
 - A. A REQUEST FOR A PRECONSTRUCTION MEETING
 - B. WHEN CONTRACTOR INTENDS TO BEGIN CONSTRUCTION
 - C. WHEN CONTRACTOR INTENDS TO INSTALL STORMWATER MANAGEMENT FACILITIES.
 - D. SOURCE OF BORROW MATERIAL.
 - E. LOCATION OF DISPOSAL AREA OF SITE MATERIAL.
 - F. CONTRACTOR'S TENTATIVE CLOSING DATE.
3. INITIAL DISTURBANCE WILL BE LIMITED TO THAT NECESSARY TO GAIN ENTRANCE TO THE SITE AND INSTALL NECESSARY SEDIMENT CONTROLS AS PER THE APPROVED PLANS.
4. ALL SEDIMENT CONTROLS AND CRITICAL SLOPES MUST BE STABILIZED WITHIN THREE (3) CALENDAR DAYS. ALL OTHER INACTIVE DISTURBED AREAS ON HE PROJECT SITE MUST BE STABILIZED WITHIN SEVEN (7) CALENDAR DAYS.
5. ALL EXCAVATED MATERIAL SHALL BE PLACED ON THE HIGH SIDE WHENEVER POSSIBLE AND CONFINED TO AN AREA WHERE IT WILL NOT BE OBSTRUCT THE NORMAL COURSE OF DRAINAGE.
6. PUMPING OF SEDIMENT LADEN WATER WILL NOT BE ALLOWED UNLESS IT IS FILTERED BY WAY OF AN APPROVED SEDIMENT TRAPPING DEVICE.
7. CONTINUOUS INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL DEVICES IS MANDATORY.
8. ALL POINTS OF INGRESS AND EGRESS SHALL BE PROTECTED TO MINIMIZE TRACKING OF MUD ON TO PUBLIC RIGHT-OF-WAYS.
10. ANY EARTH, GRAVEL, AND/OR OTHER MATERIAL, TRACKED, SPILLED OR WASHED ON TO ADJACENT ROADS MUST BE IMMEDIATELY REMOVED AND DISPOSED OF IN A PROPER MANNER. NO FLUSHING WILL BE PERMITTED. ALL MATERIAL MUST BE REMOVED BY MEANS OF SHOVELING AND SWEEPING.
11. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 5,000 SQ. FT, THE CONTRACTOR SHALL HAVE A BALTIMORE CITY EROSION AND SEDIMENT CONTROL INSPECTOR INSPECT AND APPROVE THE WORK COMPLETED AT THE STAGES OF CONSTRUCTIONS SPECIFIED BELOW:
 - A. UPON COMPLETION OF THE INSTALLATION OF THE PERIMETER SEDIMENT CONTROLS;
 - B. DURING ALL GRADING AND BUILDING OPERATIONS;
 - C. UPON FIRST STABILIZATION OF THE ENTIRE SITE PRIOR TO REMOVAL OF THE SEDIMENT CONTROLS.
12. THE CONTRACTOR SHALL NOT DEVIATE FROM THE APPROVED SEDIMENT AND EROSION CONTROL PLAN WITHOUT FIRST RECEIVED APPROVAL FROM THE OFFICE OF COMPLIANCE AND LABORATORIES. VARIATIONS TO THE ORIGINAL PLAN MUST BE SUBMITTED IN WRITING WITH ALL PROPOSED MODIFICATIONS STILL BEING HIGHLIGHTED. SUBSTANTIAL CHANGES WILL NECESSITATE AMENDMENT OF THE GRADING/BUILDING PERMIT.

B-4-7 STANDARDS AND SPECIFICATIONS FOR HEAVY USE AREA PROTECTION

DEFINITION

THE STABILIZATION OF AREAS REQUENTLY AND INTESIVELY USED BY SRUFACING WITH SUITABLE MATRERIALS (E.G., MULCH AND AGGREGATE).

PURPOSE:

TO PROVIDE A STABLE, NON-ERODING SURFACE FOR AREAS FREQUENTLY USED AND TO IMPROVE WATER QUALITY FROM THE RUNOFF OF THESE AREAS.

CONDITIONS WHERE PRACTICE APPLIES

THIS PRACTICE APPLIES TO INTESIVELY USED AREAS (E.G., EQUIPMENT AND MATERIAL STORAGE, STAGING AREAS, HEAVILY USED TRAVEL LANES).

CRITERIA

1. A MINIMUM 4-INCH BASE COURSE OF CRUSHED STONE OR OTHER SUITABLE MATERIALS INCLUDING WOOD CHIPS OVER NONWOVEN GEOTEXTILE SHOULD BE PROVIDED AS SPECIFIED IN SECTION H-1 MATERIALS.
2. SELECT THE STABILIZING MATERIAL BASED ON THE INTENDED USE, DESIRED MAINTENANCE FREQUENCY AND RUNOFF CONTROL.
3. THE TRANSPORT OF SEDIMENTS, NUTRIENTS, OILS, CHEMICALS, PARTICULATE MATTER ASSOCIATED WITH VEHICULAR TRAFFIC AND EQUIPMENT, AND MATERIAL STORAGE NEEDS TO BE CONSIDERED IN THE SELECTION OF MATERIAL. ADDITIONAL CONTROL MEASURES MAY BE NECESSARY TO CONTROL SOME OF THESE POTENTIAL POLLUTANTS.
4. SURFACE EROSION CAN BE A PROBLEM ON LARGE HEAVY USE AREAS. IN THESE SITUATIONS, MEASURES TO REDUCE THE FLOW LENGTH OF RUNOFF OR EROSION VELOCITIES NEED TO BE CONSIDERED.

MAINTENANCE

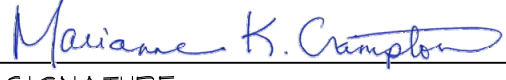
THE HEAVY USE AREAS MUST BE MAINTAINED IN A CONDITION THAT MINIMIZES EROSION. THIS MAY REQUIRE ADDING SUITABLE MATERIAL, AS SPECIFIED ON THE APPROVED PLANS, TO MAINTAIN A CLEAN SURFACE.

SUPPLEMENTAL EROSION AND
SEDIMENT CONTROL NOTES

1. FOR UTILITY TRENCHES OUTSIDE THE DRAINAGE AREA LIMITS OF EROSION & SEDIMENT CONTROL (ES) CONTROLS, THE CONTRACTOR SHALL OPEN ONLY A SECTION OF TRENCH THAT CAN BE BACKFILLED AND STABILIZED AT THE END OF EACH WORKDAY. NO DISTURBED AREA SHALL BE LEFT UNSTABILIZED OVERNIGHT. ANY EXCESS STOCKPILE MATERIAL SHALL BE REMOVED FROM THE SITE AT THE END OF EACH WORKDAY. FOR PERVIOUS SURFACES, THE USE OF ANY VEHICLE TRAFFIC IS PROHIBITED FOR THE FIRST 24 HOURS AFTER A RAIN EVENT.
2. ALL DISTURBED AREAS SHALL BE STABILIZED PER THE STABILIZATION SCHEDULE.
3. THE ESC INSPECTOR HAS AUTHORITY TO REQUIRE ADDITIONAL ESC CONTROLS BEYOND THOSE SHOWN ON THE APPROVED ESC PLAN. ANY ADDITIONAL CONTROLS REQUIRED BY THE INSPECTOR SHALL BE PROVIDED BY THE CONTRACTOR AT THE DIRECTION OF THE INSPECTOR WITH 24 HOURS OF VERBAL NOTIFICATIONS BY THE ESC INSPECTOR.
4. WHERE SAME DAY STABILIZATION IS SPECIFIED ON THE ESC PLAN, IT SHALL BE CONSIDERED THE PRIMARY ESC CONTROL. ANY CONTROLS PROVIDED DOWNSTREAM OF AREAS SPECIFIED FOR SAME DAY STABILIZATION SHALL BE CONSIDERED SECONDARY CONTROLS UNLESS SPECIFIED OTHERWISE. (SECONDARY CONTROLS ARE DEFINED AS CONTROLS PROVIDED AS BACKUP MEASURES TO A PRIMARY CONTROL).
5. SAME DAY STABILIZATION IS DEFINED AS THE COMPLETION OF PROPOSED WORK WITHIN A DEFINED AREA WITH THE STIPULATION OF A NON-ERODIBLE SURFACE AT THE END OF EACH WORK DAY. EXAMPLES OF ACCEPTABLE NON-ERODIBLE SURFACES INCLUDE PAVEMENT, STEEL PLATES, A 2" MINIMUM STONE LAYER, OR STABILIZATION MATTING OVER PERMANENT SEEDING. THIRTY (30) MIL PLASTIC SHEETING WITH ANCHORING MAY BE TEMPORARY SEEDING AND MULCH IS NOT CONSIDERED AN ACCEPTABLE SAME DAY STABILIZATION PRACTICE. CONSIDERED ACCEPTABLE IF EITHER SPECIFIED ON AN APPROVED PLAN, OR APPROVED BY THE ESC INSPECTOR.

ENGINEER'S CERTIFICATION

I DO HEREBY CERTIFY THAT THIS PLAN FOR EROSION SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED UPON PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE BALTIMORE CITY OFFICE OF COMPLIANCE AND LABORATORIES.

MARIANNE K. CRAMPTON	38369		8/08/2025
PRINT NAME	LIC. NO.	SIGNATURE	DATE
MK CONSULTING ENGINEERS, LLC 1801 PORTER STREET, SUITE 401 BALTIMORE, MD 21230		667-309-6193	
ADDRESS		TELEPHONE NUMBER	

OWNER'S/ DEVELOPER'S CERTIFICATION

I/WE DO HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED PLAN AND ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE CERTIFICATION OF ATTENDANCE AT AN APPROVED MARYLAND DEPARTMENT OF THE ENVIRONMENTAL SEDIMENT AND EROSION CONTROL TRAINING PROGRAM PRIOR TO THE BEGINNING OF WORK. THE CITY'S DPW AND DHCD AND MBE WILL BE ALLOWED RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION.

Adam Boarman	4/6/2022
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800 North Charles Street, Baltimore, Maryland 21201
410-625-4823 voice 410-625-4874 fax

Mark	Date	Description
1	08/08/2025	BID SET

PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE DOCUMENTS HAVE BEEN PREPARED OR APPROVED BY ME, AND THAT I AM A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF MARYLAND. I CERTIFY NO OTHER EMPLOYMENT DURING THE PREPARATION OF THESE DOCUMENTS. I CERTIFY NO OTHER EMPLOYMENT DURING THE PREPARATION OF THESE DOCUMENTS. I CERTIFY NO OTHER EMPLOYMENT DURING THE PREPARATION OF THESE DOCUMENTS.

PROJECT NO: 20120
DRAWN BY: VJ
CHECKED BY: AP

EROSION &
SEDIMENT
CONTROL NOTES

SHEET

C-6.03

DEFINITION
USING VEGETATION AS COVER TO PROTECT EXPOSED SOIL FROM EROSION.

PURPOSE
TO PROMOTE THE ESTABLISHMENT OF VEGETATION ON EXPOSED SOIL.

CONDITIONS WHERE PRACTICE APPLIES
ON ALL DISTURBED AREAS NOT STABILIZED BY OTHER METHODS. THIS SPECIFICATION IS DIVIDED INTO SECTIONS ON INCREMENTAL STABILIZATION; SOIL PREPARATION; SOIL AMENDMENTS AND TOPSOILING; SEEDING AND MULCHING; TEMPORARY STABILIZATION; AND PERMANENT STABILIZATION.

STABILIZATION PRACTICES ARE USED TO PROMOTE THE ESTABLISHMENT OF VEGETATION ON EXPOSED SOIL. WHEN SOIL IS STABILIZED WITH VEGETATION, THE SOIL IS LESS LIKELY TO ERODE AND MORE LIKELY TO ALLOW INFILTRATION OF RAINFALL, THEREBY REDUCING SEDIMENT LOADS AND RUNOFF TO DOWNSTREAM AREAS. PLANTING VEGETATION IN DISTURBED AREAS WILL HAVE AN EFFECT ON THE WATER BUDGET, ESPECIALLY ON VOLUMES AND RATES OF RUNOFF, INFILTRATION, EVAPORATION, TRANSPIRATION, PERCOLATION, AND GROUNDWATER RECHARGE. OVER TIME, VEGETATION WILL INCREASE ORGANIC MATTER CONTENT AND IMPROVE THE WATER HOLDING CAPACITY OF THE SOIL, AND SUBSEQUENT PLANT GROWTH. VEGETATION WILL HELP REDUCE THE MOVEMENT OF SEDIMENT, NUTRIENTS, AND OTHER CHEMICALS CARRIED BY RUNOFF TO RECEIVING WATERS. PLANTS WILL ALSO HELP PROTECT GROUNDWATER SUPPLIES BY ASSIMILATING THOSE SUBSTANCES PRESENT WITHIN THE ROOT ZONE. SEDIMENT CONTROL PRACTICES MUST REMAIN IN PLACE DURING GRADING, SEEDBED PREPARATION, SEEDING, MULCHING AND VEGETATIVE ESTABLISHMENT.

INSPECT SEEDED AREAS FOR VEGETATIVE ESTABLISHMENT AND MAKE NECESSARY REPAIRS, REPLACEMENTS, AND RESEEDINGS WITHIN THE PLANTING SEASON.

1. ADEQUATE VEGETATIVE STABILIZATION REQUIRES 95 PERCENT GROUND COVER.
2. IF AN AREA HAS LESS THAN 40 PERCENT GROUND COVER, RESTABILIZE FOLLOWING THE ORIGINAL RECOMMENDATIONS FOR LIME, FERTILIZER, SEEDBED PREPARATION, AND SEEDING.
3. IF AN AREA HAS BETWEEN 40 AND 94 PERCENT GROUND COVER, OVER-SEED AND FERTILIZE USING HALF OF THE RATES ORIGINALLY SPECIFIED.
4. MAINTENANCE FERTILIZER RATES FOR PERMANENT SEEDING ARE SHOWN IN TABLE B.6.

DEFINITION
ESTABLISHMENT OF VEGETATIVE COVER ON CUT AND FILL SLOPES.

PURPOSE
TO PROVIDE TIMELY VEGETATIVE COVER ON CUT AND FILL SLOPES AS WORK PROGRESSES.

CONDITIONS WHERE PRACTICE APPLIES
ANY CUT OR FILL SLOPE GREATER THAN 15 FEET IN HEIGHT. THIS PRACTICE ALSO APPLIES TO STOCKPILES.

A. INCREMENTAL STABILIZATION - CUT SLOPES

1. EXCAVATE AND STABILIZE CUT SLOPES IN INCREMENTS NOT TO EXCEED 15 FEET IN HEIGHT. PREPARE SEEDBED AND APPLY SEED AND MULCH ON ALL CUT SLOPES AS THE WORK PROGRESSES.
 2. CONSTRUCTION SEQUENCE EXAMPLE (REFER TO FIGURE B.1):
 - a. CONSTRUCT AND STABILIZE ALL TEMPORARY SNALES OR DIKES THAT WILL BE USED TO CONVEY RUNOFF AROUND THE EXCAVATION.
 - b. PERFORM PHASE 1 EXCAVATION, PREPARE SEEDBED, AND STABILIZE.
 - c. PERFORM PHASE 2 EXCAVATION, PREPARE SEEDBED, AND STABILIZE. OVERSEED PHASE 1 AREAS AS NECESSARY.
 - d. PERFORM FINAL PHASE EXCAVATION, PREPARE SEEDBED, AND STABILIZE. OVERSEED PREVIOUSLY SEEDED AREAS AS NECESSARY.
- NOTE: ONCE EXCAVATION HAS BEGUN THE OPERATION SHOULD BE CONTINUOUS FROM GRUBBING THROUGH THE COMPLETION OF GRADING AND PLACEMENT OF TOPSOIL (IF REQUIRED) AND PERMANENT SEED AND MULCH. ANY INTERRUPTIONS IN THE OPERATION OR COMPLETING THE OPERATION OUT OF THE SEEDING SEASON WILL NECESSITATE THE APPLICATION OF TEMPORARY STABILIZATION.



1. CONSTRUCT AND STABILIZE ALL SLOPES IN INCREMENTS NOT TO EXCEED 15 FEET IN HEIGHT. PREPARE SEEDBED AND APPLY SEED
APPLY SEED AND MULCH ON ALL SLOPES AS THE WORK PROGRESSES.
2. STABILIZE SLOPES IMMEDIATELY WHEN THE VERTICAL HEIGHT OF A LIFT REACHES 15 FEET, OR WHEN THE GRADING OPERATION CEASES
AS PRESCRIBED IN THE PLANS.
3. AT THE END OF EACH DAY, INSTALL TEMPORARY WATER CONVEYANCE PRACTICE(S), AS NECESSARY, TO INTERCEPT SURFACE RUNOFF AND
CONVEY IT DOWN THE SLOPE IN A NON-EROSIVE MANNER.
4. CONSTRUCTION SEQUENCE EXAMPLE (REFER TO FIGURE B.2):
 - a. CONSTRUCT AND STABILIZE ALL TEMPORARY SWALES OR DIKES THAT WILL BE USED TO DIVERT RUNOFF AROUND THE FILL. CONSTRUCT SILT
FENCE ON LOW SIDE OF FILL UNLESS OTHER METHODS SHOWN ON THE PLANS ADDRESS THIS AREA.
 - b. AT THE END OF EACH DAY, INSTALL TEMPORARY WATER CONVEYANCE PRACTICE(S), AS NECESSARY, TO INTERCEPT SURFACE RUNOFF
AND CONVEY IT DOWN THE SLOPE IN A NON-EROSIVE MANNER.
 - c. PLACE PHASE 1 FILL, PREPARE SEEDBED, AND STABILIZE.
 - d. PLACE PHASE 2 FILL, PREPARE SEEDBED, AND STABILIZE.
 - e. PLACE FINAL PHASE FILL, PREPARE SEEDBED, AND STABILIZE. OVERSEED PREVIOUSLY SEEDBED AREAS AS NECESSARY.

NOTE: ONCE THE PLACEMENT OF FILL HAS BEGUN THE OPERATION SHOULD BE CONTINUOUS FROM GRUBBING THROUGH THE COMPLETION OF
GRADING AND PLACEMENT OF TOPSOIL (IF REQUIRED) AND PERMANENT SEED AND MULCH. ANY INTERRUPTIONS IN THE OPERATION OR
COMPLETING THE OPERATION OUT OF THE SEEDING SEASON WILL NECESSITATE THE APPLICATION OF TEMPORARY STABILIZATION.



DEFINITION
THE PROCESS OF PREPARING THE SOILS TO SUSTAIN ADEQUATE VEGETATIVE STABILIZATION

TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH.

WHERE VEGETATIVE STABILIZATION IS TO BE ESTABLISHED.

A. SOIL PREPARATION

1. TEMPORARY STABILIZATION
 - a. SEEDBED PREPARATION CONSISTS OF LOOSENING SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT, SUCH AS DISC HARROWS OR CHISEL PLOWS OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT. AFTER THE SOIL IS LOOSENEED, IT MUST NOT BE ROLLED OR DRAGGED SMOOTH BUT LEFT IN THE ROUGHENED CONDITION. SLOPES OR FLATTER ARE TO BE TRACKED WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE.
 - b. APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS.
 - c. INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.
2. PERMANENT STABILIZATION
 - a. A SOIL TEST IS REQUIRED FOR ANY EARTH DISTURBANCE OF 5 ACRES OR MORE. THE MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT ARE:
 - i. SOIL PH BETWEEN 6.0 AND 7.0.
 - ii. SOLUBLE SALTS LESS THAN 500 PARTS PER MILLION (PPM).
 - iii. SOIL CONTAINS LESS THAN 40 PERCENT CLAY BUT ENOUGH FINE GRAINED MATERIAL (GREATER THAN 30 PERCENT SILT PLUS CLAY) TO PROVIDE THE CAPACITY TO HOLD A MODERATE AMOUNT OF MOISTURE. AN EXCEPTION: IF LOVEGRASS WILL BE PLANTED, THEN A SANDY SOIL (LESS THAN 30 PERCENT SILT PLUS CLAY) WOULD BE ACCEPTABLE.
 - iv. SOIL CONTAINS 15 PERCENT MINIMUM ORGANIC MATTER BY WEIGHT.
 - v. SOIL CONTAINS SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION.
 - b. APPLICATION OF AMENDMENTS OR TOPSOIL IS REQUIRED IF ON-SITE SOILS DO NOT MEET THE ABOVE CONDITIONS.
 - c. GRADED AREAS MUST BE MAINTAINED IN A TRUE AND EVEN GRADE AS SPECIFIED ON THE APPROVED PLAN, THEN SCARIFIED OR OTHERWISE LOOSENEED TO A DEPTH OF 3 TO 5 INCHES.
 - d. APPLY SOIL AMENDMENTS AS SPECIFIED ON THE APPROVED PLAN OR AS INDICATED BY THE RESULTS OF A SOIL TEST.
 - e. MIX SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. RAKE LAWN AREAS TO SMOOTH THE SMOOTH THE SURFACE, REMOVE LARGE OBJECTS LIKE STONES AND BRANCHES, AND READY THE AREA FOR SEED APPLICATION. LOOSEN SURFACE SOIL BY DRAGGING WITH A HEAVY CHAIN OR OTHER EQUIPMENT TO ROUGHEN THE SURFACE WHERE SITE CONDITIONS WILL NOT PERMIT NORMAL SEEDBED PREPARATION. TRACK SLOPES 3:1 OR FLATTER WITH TRACKED EQUIPMENT LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. LEAVE THE TOP 1 TO 3 INCHES OF SOIL LOOSE AND FRIABLE. SEEDBED LOOSENING MAY BE UNNECESSARY ON NEWLY DISTURBED AREAS.

1. TOPSOIL IS PLACED OVER PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION. THE PURPOSE IS TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.
2. TOPSOIL SALVAGED FROM AN EXISTING SITE MAY BE USED PROVIDED IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-NRCS.
3. TOPSOILING IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:
 - a. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH.
 - b. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS.
 - c. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.
 - d. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.
4. AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN.
5. TOPSOIL SPECIFICATIONS: SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING CRITERIA:

- a. TOPSOIL MUST BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, OR LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. TOPSOIL MUST NOT BE BE A MIXTURE CONTRASTING TEXTURED SUBSOILS AND MUST CONTAIN LESS THAN 5 PERCENT BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1. INCHES IN DIAMETER.
 - b. TOPSOIL MUST BE FREE OF NOXIOUS PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACK GRASS, JOHNSON GRASS, NUT SEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
 - c. TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL TOPSOIL.
- TOPSOIL APPLICATION
- a. EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED WHEN APPLYING TOPSOIL.
 - b. UNIFORMLY DISTRIBUTE TOPSOIL IN A 5 TO 8 INCH LAYER AND LIGHTLY COMPACT TO A MINIMUM THICKNESS OF 4 INCHES. SPREADING IS TO BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS MUST BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
 - c. TOPSOIL MUST NOT BE PLACED IF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDED PREPARATION.

1. SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATIOS AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER ON SITES HAVING DISTURBED AREAS OF 5 ACRES OR MORE. SOIL ANALYSIS MAY BE PERFORMED BY A RECOGNIZED PRIVATE OR COMMERCIAL LABORATORY. SOIL ENGINEERING PURPOSES MAY ALSO BE USED FOR CHEMICAL ANALYSES.
2. FERTILIZERS MUST BE UNIFORM IN COMPOSITION, FREE FLOWING AND SUITABLE FOR ACCURATE APPLICATION BY APPROPRIATE EQUIPMENT. MANURE MAY BE SUBSTITUTED FOR FERTILIZER WITH PRIOR APPROVAL FROM THE APPROPRIATE AUTHORITY. FERTILIZERS MUST ALL BE FULLY LABELED ACCORDING TO THE APPLICABLE LAWS AND MUST BEAR THE NAME, TRADE NAME OR TRADEMARK AND WARRANTY OF THE PRODUCER.
3. LIME MATERIALS MUST BE GROUND LIMESTONE (HYDRATED OR BURNT LIME MAY BE SUBSTITUTED EXCEPT WHEN HYDROSEEDING) WHICH CONTAINS AT LEAST 50 PERCENT TOTAL OXIDES (CALCIUM OXIDE PLUS MAGNESIUM OXIDE). LIMESTONE MUST BE GROUND TO SUCH FINENESS THAT AT LEAST 50 PERCENT WILL PASS THROUGH A #100 MESH SIEVE AND 98 TO 100 PERCENT WILL PASS THROUGH A #20 MESH SIEVE.
4. LIME AND FERTILIZER ARE TO BE EVENLY DISTRIBUTED AND INCORPORATED INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.
5. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, SPREAD GROUND LIMESTONE AT THE RATE OF 4 TO 8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL.

Mark	Date	Description
1	08/08/2025	BID SET

B-4-4 STANDARDS AND SPECIFICATIONS FOR TEMPORARY STABILIZATION

DEFINITION
TO STABILIZE DISTURBED SOILS WITH VEGETATION FOR UP TO 6 MONTHS.

PURPOSE
TO USE FAST GROWING VEGETATION THAT PROVIDES COVER ON DISTURBED SOILS.

CONDITIONS WHERE PRACTICE APPLIES
EXPPOSED SOILS WHERE GROUND COVER IS NEEDED FOR A PERIOD OF 6 MONTHS OR LESS. FOR LONGER DURATION OF TIME, PERMANENT STABILIZATION PRACTICES ARE REQUIRED.

CRITERIA

1.

SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE B.1 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE B.3), AND ENTER THEM IN THE TEMPORARY SEEDING SUMMARY BELOW ALONG WITH APPLICATION RATES, SEEDING DATES AND SEEDING DEPTHS. IF THIS SUMMARY IS NOT PUT ON THE PLAN AND COMPLETED, THEN TABLE B.1 PLUS FERTILIZER AND LIME RATES MUST BE PUT ON THE PLAN.

2.

FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING.

3.

WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING SEASON, APPLY SEED AND MULCH OR STRAW MULCH ALONE AS PRESCRIBED IN SECTION B-4-3.A.1.B AND MAINTAIN UNTIL THE NEXT SEEDING SEASON.

TEMPORARY SEEDING SUMMARY							
HARDINESS ZONE (from figure B.3); SEED MIXTURE (from table B.1).				7A		FERTILIZER RATE (10-20-20)	LIME RATE
NO.	SPECIES	APPLICATION RATE (lb/ac)	SEEDING DATES	SEEDING DEPTHS			
	ANNUAL RYEGRASS	40	FEB. 15-APR. 30 AUG. 15-NOV. 30	1/2 "		456 lb/ac (10 lb/1000 sf)	2 tons/ac (90 lb/1000 sf)
	FOXTAIL MILLET	30	MAY 1-AUG. 14	1/2 "			
	ANNUAL RYEGRASS	40	DEC. 1-FEB. 14	1/2 "			

B-4-5 STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION

DEFINITION
TO STABILIZE DISTURBED SOILS WITH PERMANENT VEGETATION.

PURPOSE
TO USE LONG-LIVED PERENNIAL GRASSES AND LEGUMES TO ESTABLISH PERMANENT GROUND COVER ON DISTURBED SOILS.

CONDITIONS WHERE PRACTICE APPLIES
EXPPOSED SOILS WHERE GROUND COVER IS NEEDED FOR 6 MONTHS OR MORE.

CRITERIA

A. SEED MIXTURES

I. GENERAL USE

a.

SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED IN TABLE B.3 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE B.3) AND BASED ON THE SITE CONDITION OR PURPOSE FOUND ON TABLE B.2. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.

b.

ADDITIONAL PLANTING SPECIFICATIONS FOR EXCEPTIONAL SITES SUCH AS SHORELINES, STREAM BANKS, OR DUNES OR FOR SPECIAL PURPOSES SUCH AS WILDLIFE OR AESTHETIC TREATMENT MAY BE FOUND IN USDA-NRCS TECHNICAL FIELD OFFICE GUIDE, SECTION 342 - CRITICAL AREA PLANTING.

c.

FOR SITES HAVING DISTURBED AREA OVER 5 ACRES, USE AND SHOW THE RATES RECOMMENDED BY THE SOIL TESTING AGENCY.

d.

FOR AREAS RECEIVING LOW MAINTENANCE, APPLY UREA FORM FERTILIZER (46-0-0) AT 3 . POUNDS PER 1000 SQUARE FEET (150 POUNDS PER ACRE) AT THE TIME OF SEEDING IN ADDITION TO THE SOIL AMENDMENTS SHOWN IN THE PERMANENT SEEDING SUMMARY.

2. TURFGRASS MIXTURES

a.

AREAS WHERE TURFGRASS MAY BE DESIRED INCLUDE LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE.

b.

SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED BELOW BASED ON THE SITE CONDITIONS OR PURPOSE. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.

i.

KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN AREAS THAT RECEIVE INTENSIVE MANAGEMENT. IRRIGATION REQUIRED IN THE AREAS OF CENTRAL MARYLAND AND EASTERN SHORE. RECOMMENDED CERTIFIED KENTUCKY BLUEGRASS CULTIVARS SEEDING RATE: 1.5 TO 2.0 POUNDS PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.

ii.

KENTUCKY BLUEGRASS/PERENNIAL RYE: FULL SUN MIXTURE: FOR USE IN FULL SUN AREAS WHERE RAPID ESTABLISHMENT IS NECESSARY AND WHEN TURF WILL RECEIVE MEDIUM TO INTENSIVE MANAGEMENT. CERTIFIED PERENNIAL RYEGRASS CULTIVARS/CERTIFIED KENTUCKY BLUEGRASS SEEDING RATE: 2 POUNDS MIXTURE PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.

iii.

TALL FESCUE/KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN DROUGHT PRONE AREAS AND/OR FOR AREAS RECEIVING LOW TO MEDIUM MANAGEMENT IN FULL SUN TO MEDIUM SHADE. RECOMMENDED MIXTURE INCLUDES: CERTIFIED TALL FESCUE CULTIVARS 95 TO 100 PERCENT, CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 0 TO 5 PERCENT. SEEDING RATE: 5 TO 8 POUNDS PER 1000 SQUARE FEET. ONE OR MORE CULTIVARS MAY BE BLENDED.

iv.

KENTUCKY BLUEGRASS/FINE FESCUE: SHADE MIXTURE: FOR USE IN AREAS WITH SHADE IN BLUEGRASS LAWNS. FOR ESTABLISHMENT IN HIGH QUALITY, INTENSIVELY MANAGED TURF AREA. MIXTURE INCLUDES: CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 30 TO 40 PERCENT AND CERTIFIED FINE FESCUE AND 60 TO 70 PERCENT. SEEDING RATE: 1. TO 3 POUNDS PER 1000 SQUARE FEET.

NOTES:

SELECT TURFGRASS VARIETIES FROM THOSE LISTED IN THE MOST CURRENT UNIVERSITY OF MARYLAND PUBLICATION, AGRONOMY MEMO #77, "TURFGRASS CULTIVAR CULTIVAR RECOMMENDATIONS FOR MARYLAND"

CHOOSE CERTIFIED MATERIAL. CERTIFIED MATERIAL IS THE BEST GUARANTEE OF CULTIVAR PURITY. THE CERTIFICATION PROGRAM OF THE MARYLAND DEPARTMENT OF AGRICULTURE, TURF AND SEED SECTION, PROVIDES A RELIABLE MEANS OF CONSUMER PROTECTION AND ASSURES A PURE GENETRIC LINE.

c.

IDEAL TIMES OF SEEDING FOR TURF GRASS MIXTURES
WESTERN MD: MARCH 15 TO JUNE 1, AUGUST 1 TO OCTOBER 1 (HARDINESS ZONES: 5B, 6A)
CENTRAL MD: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONE: 6B)
SOUTHERN MD, EASTERN SHORE: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONES: 7A, 7B)

d.

TILL AREAS TO RECEIVE SEED BY DISKING OR OTHER APPROVED METHODS TO A DEPTH OF 2 TO 4 INCHES, LEVEL AND RAKE THE AREAS TO PREPARE A PROPER SEEDBED. REMOVE STONES AND DEBRIS OVER 1. INCHES IN DIAMETER. THE RESULTING SEEDBED MUST BE IN SUCH CONDITION THAT FUTURE MOWING OF GRASSES WILL POSE NO DIFFICULTY.

e.

IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER FOR PLANT GROWTH (1/2 TO 1 INCH EVERY 3 TO 4 DAYS DEPENDING ON SOIL TEXTURE) UNTIL THEY ARE FIRMLY ESTABLISHED. THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE LATE IN THE PLANTING SEASON, IN ABNORMALLY DRY OR HOT SEASONS, OR ON ADVERSE SITES.

PERMANENT SEEDING SUMMARY									
HARDINESS ZONE (from figure B.3): SEED MIXTURE (from table B.1):					7A			FERTILIZER RATE (10-20-20)	LIME RATE
NO.	SPECIES	APPLICATION RATE (lb/ac)	SEEDING DATES	SEEDING DEPTHS	N	P ₂ O ₅	K ₂ O		
11	CREEPING RED FESCUE KENTUCKY BLUEGRASS CHEWING FESCUE	30 20 30	FEB. 15-APR. 30 AUG. 15-OCT. 31 NOV. 1 - NOV. 30	1/4 - 1/2 in.	45 POUNDS PER ACRE (10 lb/ 1000 sf)	90 lb/ac (2 lb/ 1000 sf)	90 lb/ac (2 lb/ 1000 sf)	2 tons/ac (90 lb/1000 sf)	
8	TALL FESCUE	100	FEB. 15-APR. 30 AUG. 15-OCT. 31 NOV. 1 - NOV. 30	1/4 - 1/2 in.					
9	TALL FESCUE KENTUCKY BLUEGRASS PERENNIAL RYEGRASS	60 40 20	FEB. 15-APR. 30 AUG. 15-OCT. 31 NOV. 1 - NOV. 30	1/4 - 1/2 in.					
3	DEERTONGUE CANADA WILD RYE COMMON LESPEDEZA	20 3 10	FEB. 15-APR. 30 MAY 1 - MAY 31	1/4 - 1/2 in.					

B. SOD: TO PROVIDE QUICK COVER ON DISTURBED AREAS (2:1 GRADE OR FLATTER).

I. GENERAL SPECIFICATIONS

a.

CLASS OF TURFGRASS SOD MUST BE MARYLAND STATE CERTIFIED. SOD LABELS MUST BE MADE AVAILABLE TO THE JOB FOREMAN AND INSPECTOR.

b.

SOD MUST BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF . INCH, PLUS OR MINUS . INCH, AT THE TIME OF CUTTING. MEASUREMENT FOR THICKNESS MUST EXCLUDE TOP GROWTH AND THATCH. BROKEN PADS AND TORN OR UNEVEN ENDS WILL NOT BE ACCEPTABLE.

c.

STANDARD SIZE SECTIONS OF SOD MUST BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP ON THE UPPER 10 PERCENT OF THE SECTION.

d.

SOD MUST NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTURE CONTENT (EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT ITS SURVIVAL.

e.

SOD MUST BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD NOT TRANSPLANTED WITHIN THIS PERIOD MUST BE APPROVED BY AN AGRONOMIST OR SOIL SCIENTIST PRIOR TO ITS INSTALLATION.

2. SOD INSTALLATION

a.

DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE OR IN AREAS HAVING DRY SUBSOIL, LIGHTLY IRRIGATE THE SUBSOIL IMMEDIATELY PRIOR TO LAYING THE SOD.

b.

LAY THE FIRST ROW OF SOD IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO IT AND TIGHTLY WEDGED AGAINST EACH OTHER. STAGGER LATERAL JOINTS TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. ENSURE THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE AIR DRYING OF THE ROOTS.

c.

WHEREVER POSSIBLE, LAY SOD WITH THE LONG EDGES PARALLEL TO THE CONTOUR AND WITH STAGGERING JOINTS. ROLL AND TAMP, PEG OR OTHERWISE SECURE THE SOD TO PREVENT SLIPPAGE ON SLOPES. ENSURE SOLID CONTACT EXISTS BETWEEN SOD ROOTS AND THE UNDERLYING SOIL SURFACE.

d.

WATER THE SOD IMMEDIATELY FOLLOWING ROLLING AND TAMPING UNTIL THE UNDERSIDE OF THE NEW SOD PAD AND SOIL SURFACE BELOW THE SOD ARE THOROUGHLY WET. COMPLETE THE OPERATIONS OF LAYING, TAMPING AND IRRIGATING FOR ANY PIECE OF SOD WITHIN EIGHT HOURS.

3. SOD MAINTENANCE

a.

IN THE ABSENCE OF ADEQUATE RAINFALL, WATER DAILY DURING THE FIRST WEEK OR AS OFTEN AND SUFFICIENTLY AS NECESSARY TO MAINTAIN MOIST SOIL TO A DEPTH OF 4 INCHES. WATER SOD DURING THE HEAT OF THE DAY TO PREVENT WILTING.

b.

AFTER THE FIRST WEEK, SOD WATERING IS REQUIRED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE CONTENT.

c.

DO NOT MOW UNTIL THE SOD IS FIRMLY ROOTED. NO MORE THAN . OF THE GRASS LEAF MUST BE REMOVED BY THE INITIAL CUTTING OR SUBSEQUENT CUTTINGS. MAINTAIN A GRASS HEIGHT OF AT LEAST 3 INCHES UNLESS OTHERWISE SPECIFIED.

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800 North Charles Street, Baltimore, Maryland 21201
410-625-4823 voice 410-625-4874 fax

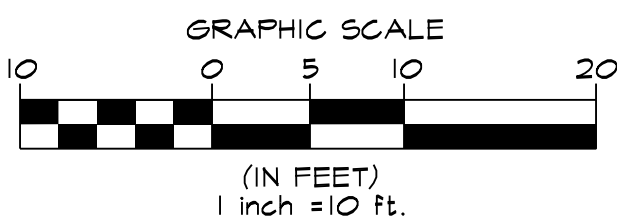
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1	09/08/2025	BID SET

PROFESSIONAL CERTIFICATION A MEMBER CERTIFY THAT THESE DOCUMENTS HAVE BEEN PREPARED OR APPROVED BY ME, AND THAT I AM A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF MARYLAND. LICENSE NO. 20251. EXPIRATION DATE: 11-15-2028. PROFESSIONAL CERTIFICATION A MEMBER CERTIFY THAT THESE DOCUMENTS HAVE BEEN PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ARCHITECT UNDER THE STATE OF MARYLAND. LICENSE NO. 20251. EXPIRATION DATE: 11-15-2028.

PROJECT NO: 20120
DRAWN BY: VJ
CHECKED BY: AP

STABILIZATION
NOTES

SHEET
C-6.05



C-7.00

ENGINEERS FIELD BORING LOG

PROJECT NAME **Morrell Park Field House** COUNTY **Baltimore**
LOCATION _____ NORTHING _____ EASTING _____
INSPECTOR (SIGNED) **J. Hu** DRILLERS NAME/COMPANY **S. Foster**
EQUIPMENT USED **CME-55**
DRILLING METHODS **2.0' Continuous Interval Sampling**
CASING: SIZE: **3.25" HSA** DEPTH: _____ WATER: _____ DEPTH: **2.0'** TIME: **0**
CHECKED BY: **E.N.** DATE: **8/20/2021** DEPTH: **3.5'** TIME: **2**

BORING NO. B-1
SHEET 1 OF 1
DATE: START 7/15/21
END 7/16/21
O.G. ELEV. 95.0
GWL ELEV. 91.5

NOT ENCOUNTERED ☐[illegible]

**Navarro & Wright
Consulting Engineers**

ENGINEERS FIELD BORING LOG

PROJECT NAME Marrell Park Field House COUNTY Baltimore
LOCATION _____ NORTHING _____ EASTING _____
INSPECTOR (SIGNED) J. Hu DRILLERS NAME/COMPANY S. Foster
EQUIPMENT USED CME-55
DRILLING METHODS 2.0' Continuous Interval Sampling
CASING: SIZE: 3.25" HSA DEPTH: _____ WATER: _____ DEPTH: Dry TIME: 0
CHECKED BY: E.N. DATE: 8/20/2021 DEPTH: 3.7" TIME: 2

BORING NO. B-2
SHEET 1 OF 1
DATE: START 7/15/21
END 7/16/21
O.G. ELEV. 95.0
GWL ELEV. 91.3

NOT ENCOUNTERED ☐[illegible]

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MORRELL PARK FIELD HOUSE
2415 TOLLEY ST., BALTIMORE, MD 21230

MURPHY & DITTENHAFFER
A R C H I T E C T S

Mark	Date	Description
1	08/08/2025	BID SET

PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE STATE OF MARYLAND, LICENSE NO. 25058, EXPIRATION DATE: 11-17-2005

PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE STATE OF MARYLAND, LICENSE NO. 38369, EXPIRATION DATE: 9-16-2005

PROJECT NO:	2012
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DRAWN BY: VJ

BORING LOGS

SHEET

C-8.00

HAZARDOUS MATERIALS ABATEMENT NOTES

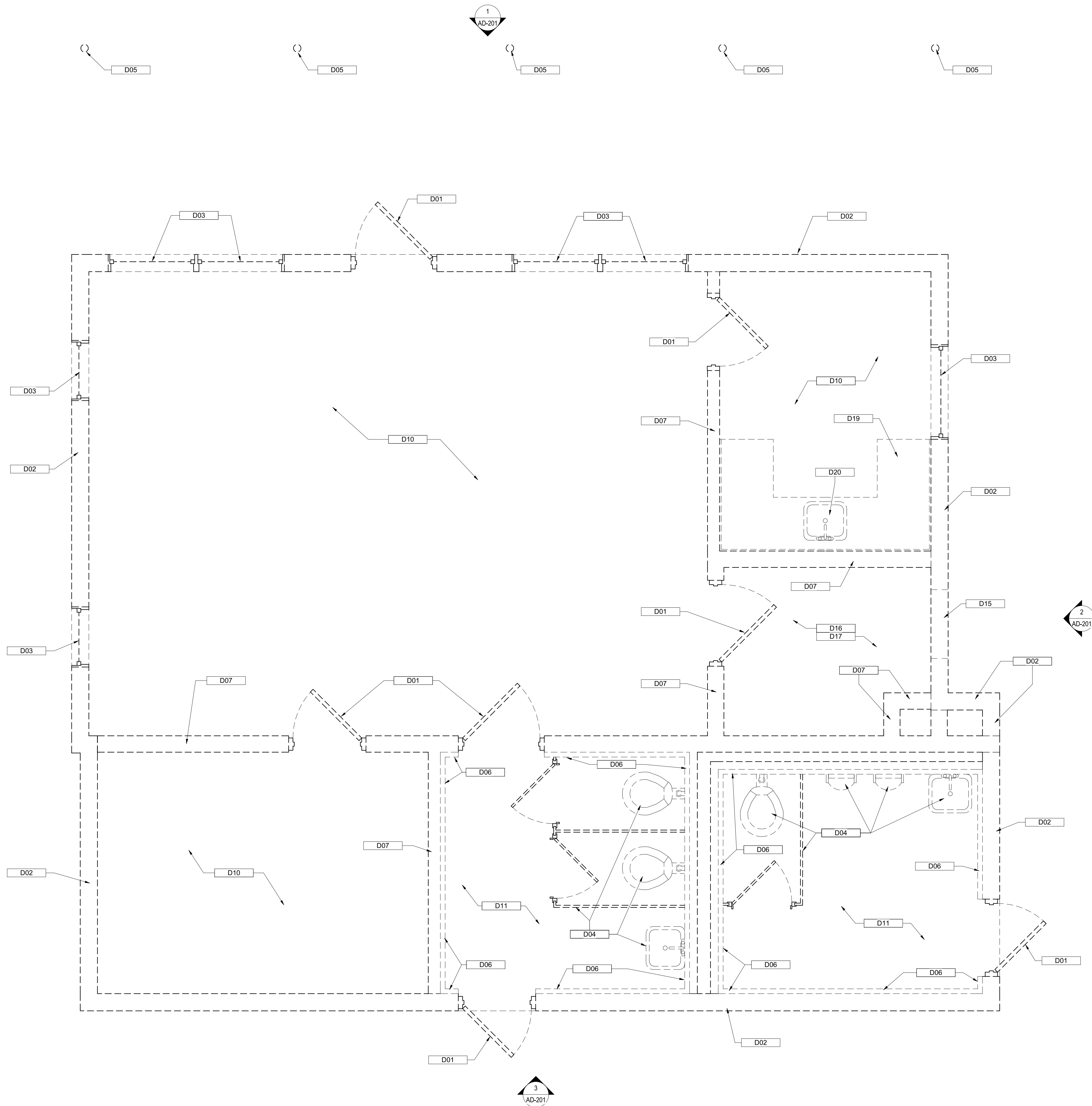
DEMOLITION GENERAL NOTES

PROJECT NO:	2012
DRAWN BY:	KC
CHECKED BY:	RD

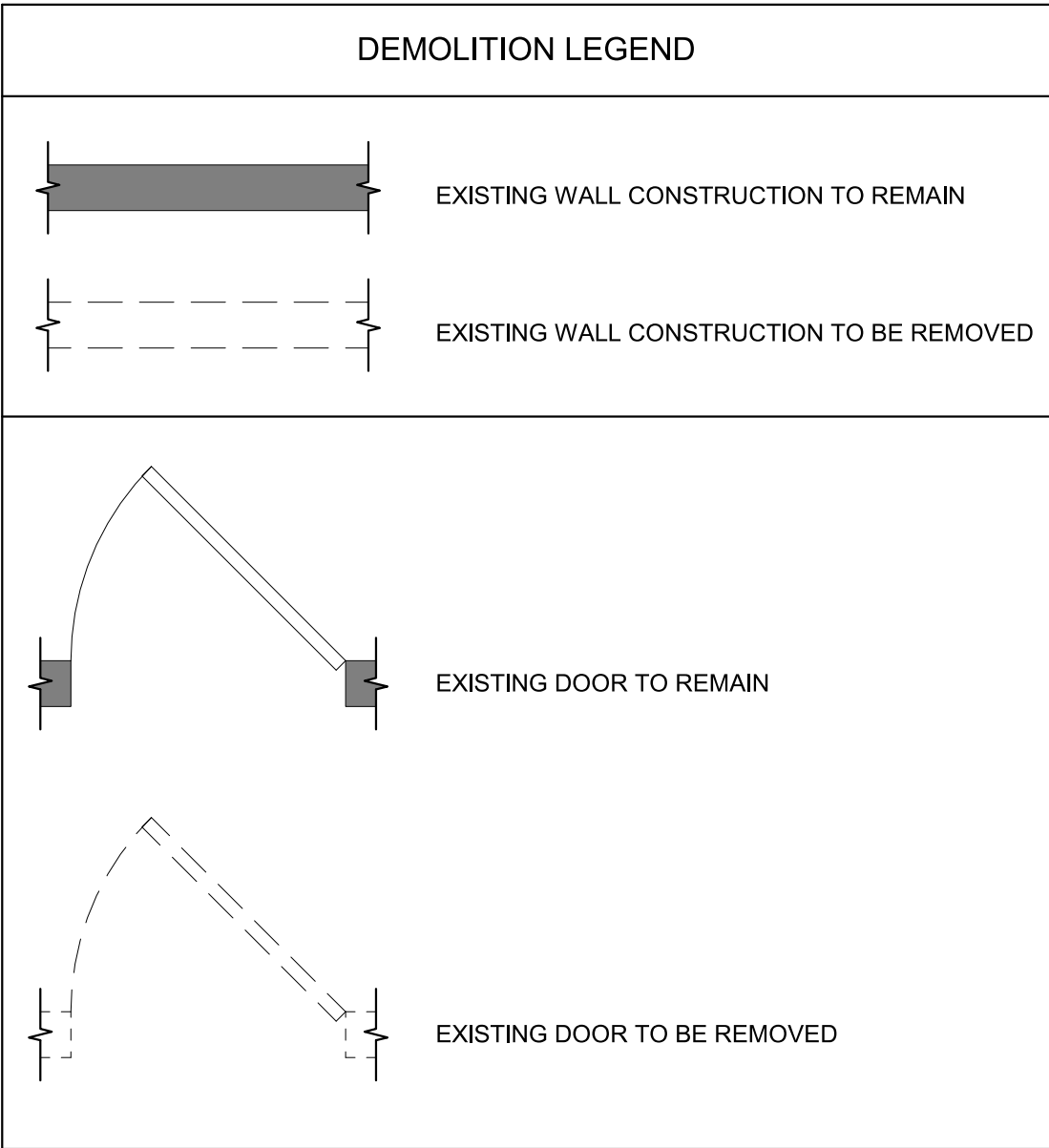
SHEET
AD-100

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1000 North Clark Street, Baltimore, Maryland 21201
410-525-4623 voice 410-525-4617 fax
233 West Market Street, York, Pennsylvania 17401
717-546-9827 voice 717-546-2449 fax

800 North Charles Street, Baltimore, Maryland 21201
410-625-4823 voice 410-625-4674 fax



1 FIRST FLOOR DEMOLITION PLAN
1/2" = 1'-0"



NOTE: REFER TO CIVIL, STRUCTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR ADDITIONAL DEMOLITION INFORMATION.

KEYNOTE LEGEND	
TAG	DESCRIPTION
D01	REMOVE EXISTING DOOR, FRAME, AND HARDWARE IN ITS ENTIRETY.
D02	REMOVE EXISTING CMU AND BRICK MASONRY WALL IN ITS ENTIRETY.
D03	REMOVE EXISTING WINDOW, FRAME, AND ACCESSORIES IN ITS ENTIRETY.
D04	REMOVE EXISTING PLUMBING FIXTURES, TOILET ACCESSORIES, AND TOILET PARTITIONS. COORDINATE WITH MEP.
D05	REMOVE EXISTING STEEL COLUMN IN ITS ENTIRETY.
D06	REMOVE EXISTING CMU PARTITION WITH CERAMIC TILE IN ITS ENTIRETY.
D07	REMOVE EXISTING CMU PARTITION IN ITS ENTIRETY.
D10	REMOVE EXISTING FLOOR FINISH IN ITS ENTIRETY.
D11	REMOVE EXISTING CERAMIC TILE FLOORING IN ITS ENTIRETY.
D15	REMOVE EXISTING LOUVER, FRAME, AND ACCESSORIES IN ITS ENTIRETY.
D16	REMOVE EXISTING ALL MECHANICAL EQUIPMENT. COORDINATE WITH MEP.
D17	REMOVE EXISTING ALL ELECTRICAL EQUIPMENT. COORDINATE WITH MEP.
D19	REMOVE EXISTING CASEWORK, COUNTERTOP, AND SHELVING IN ITS ENTIRETY.
D20	REMOVE EXISTING SINK. COORDINATE WITH MEP.

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Mark	Date	Description
1	8/31/2021	50% CONSTRUCTION DOCUMENTS
2	12/3/2021	100% CONSTRUCTION DOCUMENTS
3	8/8/2025	BID SET

PROJECT NO: 20120
DRAWN BY: KCG
CHECKED BY: RDT

FIRST FLOOR
DEMOLITION
PLAN

SHEET
AD-101



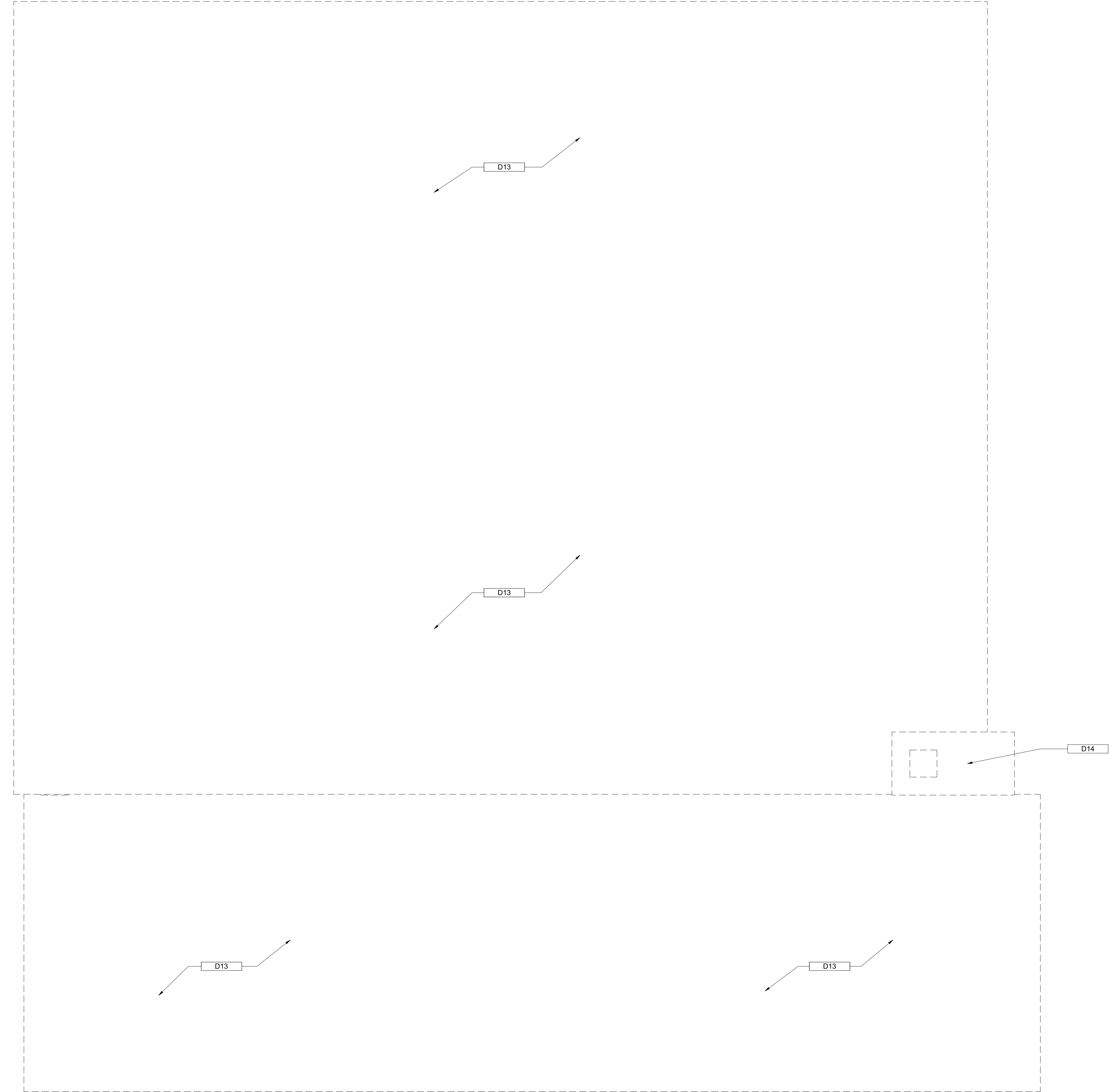
NOTE: SEE AD-100 FOR DEMOLITION GENERAL NOTES

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900 North Charles Street, Baltimore, Maryland 21201
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AD-102

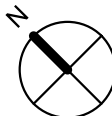


KEYNOTE LEGEND	
TAG	DESCRIPTION

D13	REMOVE EXISTING WOOD FRAMING, SHEATHING, AND BUILT-UP ROOF IN ITS ENTIRETY.
D14	REMOVE EXISTING MASONRY CHIMNEY AND CONCRETE CAP IN ITS ENTIRETY.

NOTE: SEE AD-100 FOR DEMOLITION GENERAL NOTES

1 ROOF - DEMOLITION
1/2" = 1'-0"



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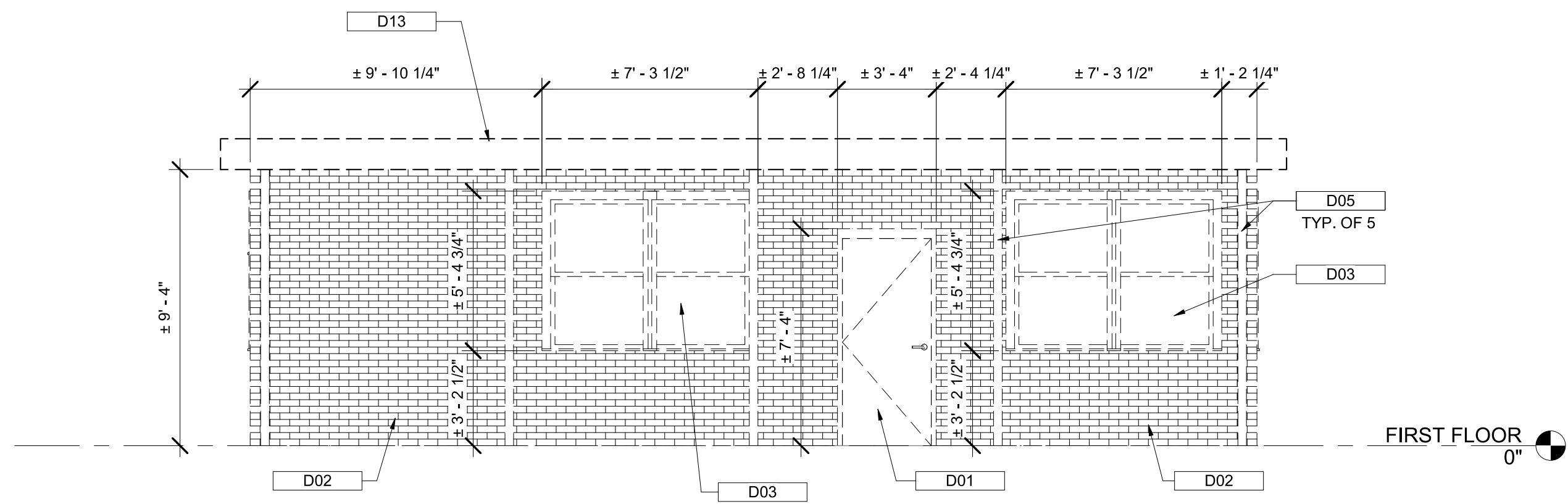
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410-625-4823 voice 410-625-4874 fax

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2	12/3/2021	100% CONSTRUCTION DOCUMENTS
3	8/8/2025	BID SET

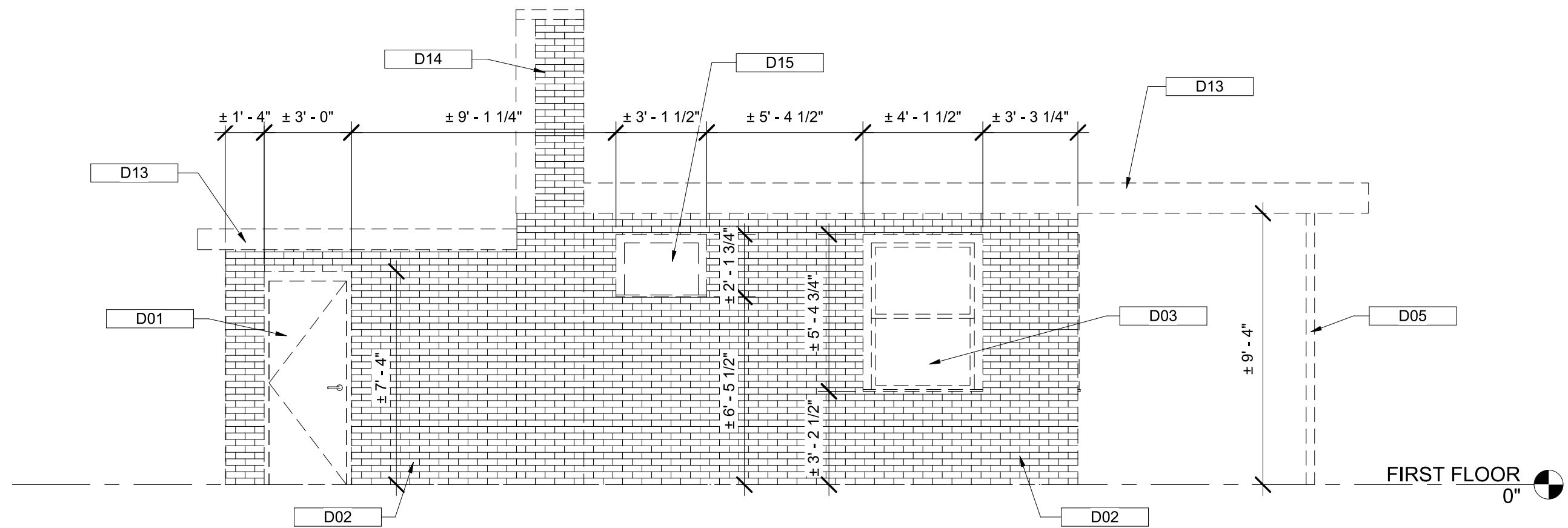
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DRAWN BY: KCG
CHECKED BY: RDT

ROOF
DEMOLITION
PLAN

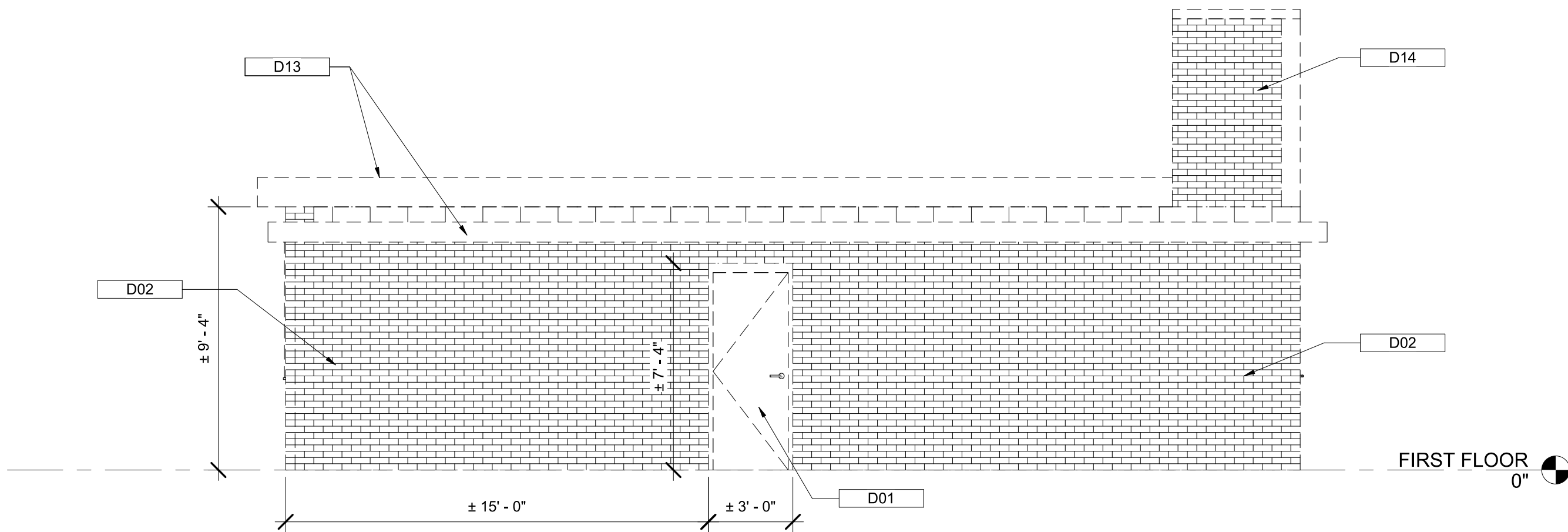
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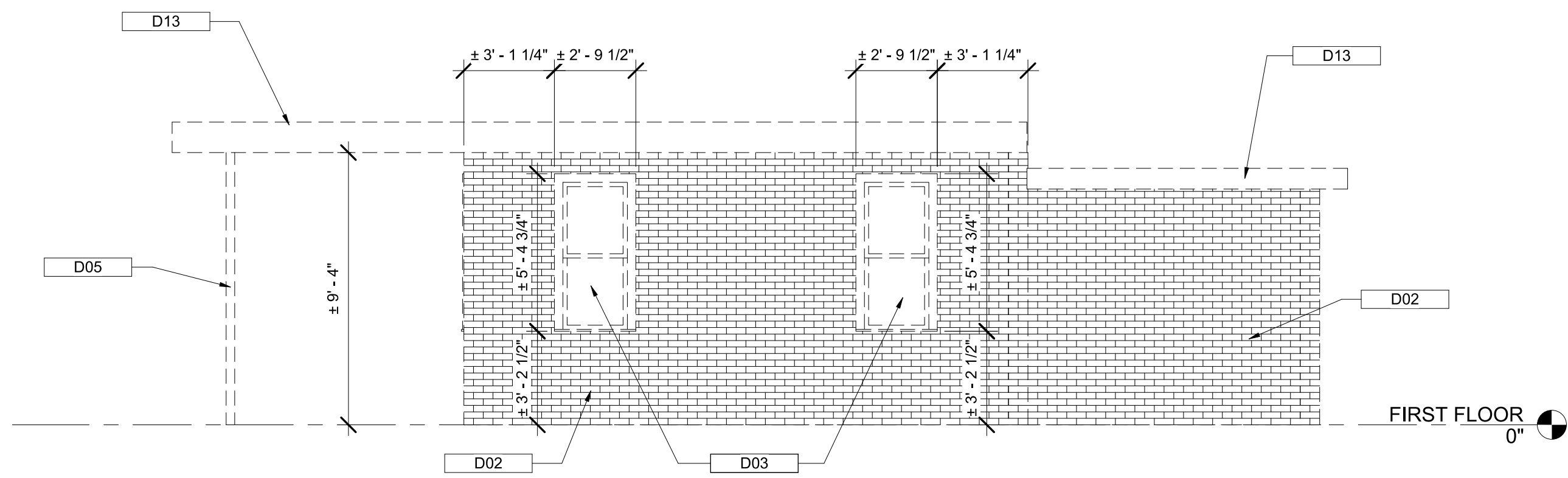
1 EXTERIOR DEMO ELEVATION - A
1/4" = 1'-0"



2 EXTERIOR DEMO ELEVATION - B
1/4" = 1'-0"



3 EXTERIOR DEMO ELEVATION - C
1/4" = 1'-0"



4 EXTERIOR DEMO ELEVATION - D
1/4" = 1'-0"

KEYNOTE LEGEND	
TAG	DESCRIPTION
D01	REMOVE EXISTING DOOR, FRAME, AND HARDWARE IN ITS ENTIRETY.
D02	REMOVE EXISTING CMU AND BRICK MASONRY WALL IN ITS ENTIRETY.
D03	REMOVE EXISTING WINDOW, FRAME, AND ACCESSORIES IN ITS ENTIRETY.
D05	REMOVE EXISTING STEEL COLUMN IN ITS ENTIRETY.
D13	REMOVE EXISTING WOOD FRAMING, SHEATHING, AND BUILT-UP ROOF IN ITS ENTIRETY.
D14	REMOVE EXISTING MASONRY CHIMNEY AND CONCRETE CAP IN ITS ENTIRETY.
D15	REMOVE EXISTING LOUVER, FRAME, AND ACCESSORIES IN ITS ENTIRETY.

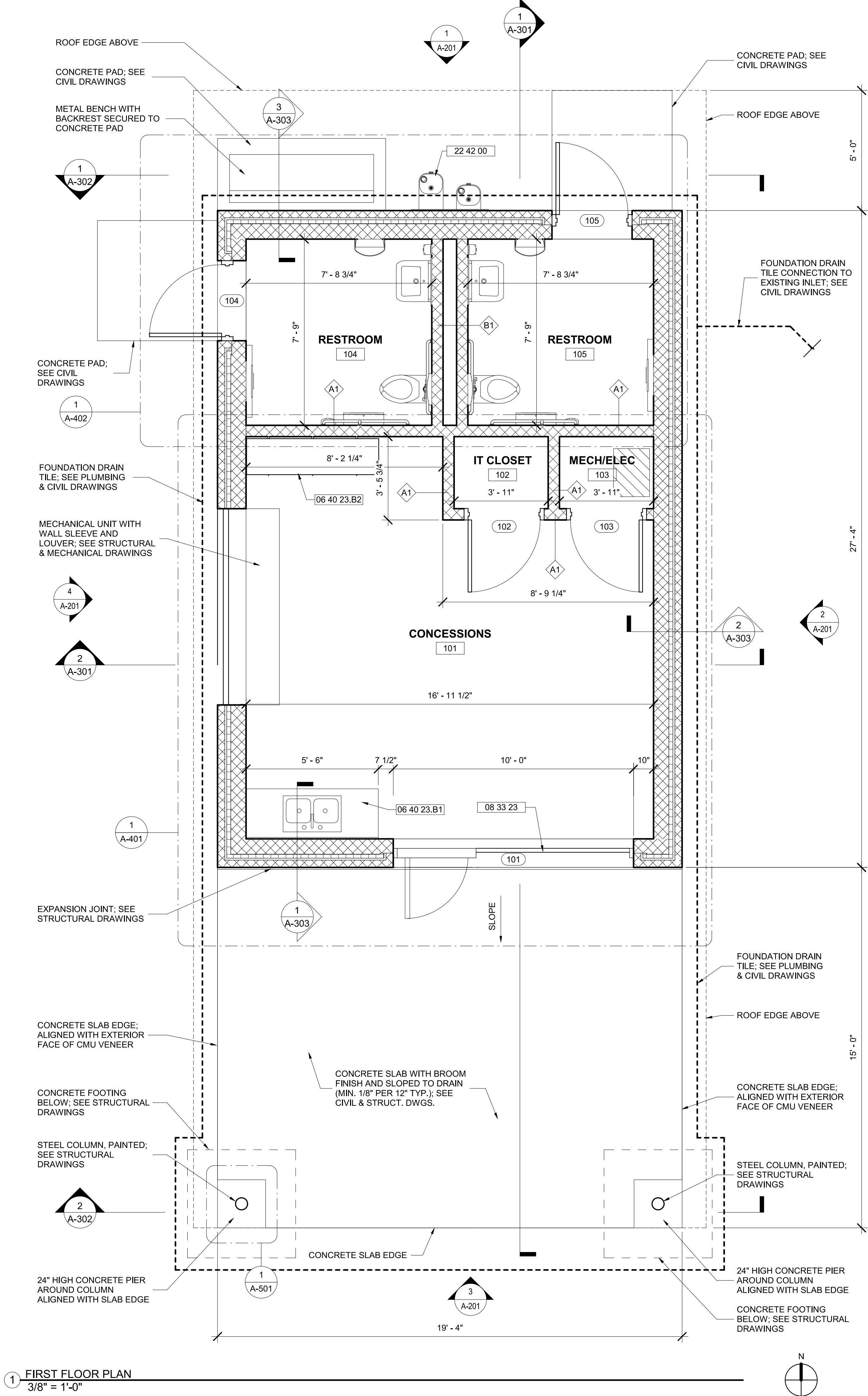
NOTE: SEE AD-100 FOR DEMOLITION GENERAL NOTES

Mark	Date	Description
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2	12/3/2021	100% CONSTRUCTION DOCUMENTS
3	8/8/2025	BID SET

PROJECT NO: 20120
DRAWN BY: KCG
CHECKED BY: RDT

EXTERIOR
ELEVATIONS -
DEMOLITION

SHEET
AD-201



KEYNOTE LEGEND	
TAG	DESCRIPTION
06 40 23.B1	Stainless Steel Countertop and Backsplash
06 40 23.B2	Metal Standard and Bracket Open Adjustable Shelving
08 33 23	Roll-Up Door with Insulated Panel and Pedestrian Door
22 42 00	Water Cooler - See Plumbing Drawings

NOTE: CONDUIT TO BE RUN IN BLOCK

GENERAL NOTES

- THE GENERAL CONTRACTOR SHALL COORDINATE ALL WORK FOR THIS PROJECT WITH ALL TRADES AND/OR WITH SUBCONTRACTORS AS TO ASSURE THE PROPER EXECUTION OF WORK.
- THE BUILDING OWNER SHALL APPLY AND PAY FOR THE BUILDING PERMIT. A COPY OF THE APPROVED PERMIT PLANS WILL REMAIN ON THE JOB SITE AT ALL TIMES. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR APPLYING FOR AND SECURING THE RAZING / DEMOLITION PERMIT FROM THE BALTIMORE CITY PERMIT OFFICE.
- THE GENERAL CONTRACTOR SHALL SCHEDULE ALL NECESSARY INSPECTIONS AND ACQUIRE FINAL CERTIFICATE OF OCCUPANCY.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL LABOR, MATERIALS U.N.O., AND ALL OTHER RESOURCES REQUIRED TO COMPLETE THE PROJECT.
- THE GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL EXAMINE THE DRAWINGS AND CHECK ALL MEASUREMENTS AND DETAILS. CONTRACTOR AND SUBCONTRACTOR SHALL ALSO COMPARE THE PLANS WITH THE SPECIFICATIONS, AS ANY ITEM REQUIRED IN ONE OR THE OTHER, IF NOT DUPLICATED, SHALL IN ANY EVENT BE CONSTRUED TO BE PART OF BOTH.
- THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL VERIFY ALL DIMENSIONS AT THE BUILDING AS SHOWN ON THE DRAWINGS, AND THEY SHALL REPORT ANY INCONSISTENCIES IN THE ABOVE TO THE ENGINEER BEFORE COMMENCING WORK. NO EXTRA CHARGE OR COMPENSATION WILL BE ALLOWED ON ACCOUNT OF DIFFERENCES BETWEEN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE DRAWINGS. ANY DIFFERENCES SHALL BE SUBMITTED TO THE ENGINEER FOR DISCUSSION BEFORE PROCEEDING WITH THE WORK.
- THE CONTRACTOR SHALL PROVIDE ALL SHORING, NEEDLING, BRACING AND SHEATHING AS REQUIRED FOR SAFETY AND FOR THE PROPER EXECUTION OF HIS WORK AND HAVE SAME REMOVED WHEN THE WORK IS COMPLETED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEAN-UP OF THE WORK AND DISPOSAL OF TRASH AND DEBRIS OFF THE PREMISES. ALL DEBRIS AND WASTE MATERIAL SHALL BE REMOVED FROM THE SITE AT THE END OF EACH WORKING DAY, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- THE GENERAL CONTRACTOR SHALL PERFORM A FINAL CLEANUP OF ALL NEW WORK PRIOR TO TURNING THE COMPLETED PROJECT OVER TO THE OWNER FOR OPERATIONAL USE, INCLUDING REMOVAL OF ALL MARKS, STAINS AND SOILS FROM SURFACES, REMOVAL OF ALL TEMPORARY PROTECTIONS, SCAFFOLDING, ETC., CLEAN ALL SURFACES TO INCLUDE GLASS, MIRRORS, TILE AND FLOORS.
- THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL SAFETY REGULATIONS GOVERNING DEMOLITION AND CONSTRUCTION OF THIS PROJECT.
- IT SHALL BE UNDERSTOOD THAT THE ENGINEER'S DRAWINGS ARE PARTIALLY DIAGRAMMATIC AND THE MECHANICAL AND ELECTRICAL SUBCONTRACTORS SHALL WORK IN COOPERATION WITH THE GENERAL CONTRACTOR IN DETERMINING THE RUNNING OF PIPE LINES AND LOCATING EQUIPMENT. ANY NECESSARY VARIATIONS SHALL BE MADE TO CONFORM TO THE INTENT OF THE DIAGRAMMATIC DRAWINGS WITHOUT ADDITIONAL COSTS. WHERE THERE ARE INTERSECTIONS INVOLVING VARIOUS DUCTS, PIPING AND EQUIPMENT, PARTICULAR CONSIDERATION SHALL BE GIVEN TO CLEARANCES.
- THE OWNER RESERVES THE RIGHT TO LET OTHER CONTRACTS AND TO INSTALL CERTAIN EQUIPMENT IN THE BUILDING AT ANY TIME DURING CONSTRUCTION. THIS RIGHT SHALL NOT INTERFERE IN ANY WAY WITH THE CONTINUITY OF BUILDING CONSTRUCTION OR COMPLETION. THE OWNER SHALL INFORM THE CONTRACTOR PRIOR TO ANY WORK AND/OR INSTALLATION OF EQUIPMENT.
- THE CONTRACTOR SHALL PROVIDE THE OWNER WITH ALL GUARANTEES, WARRANTIES, OPERATION AND MAINTENANCE INSTRUCTIONS AND OTHER LITERATURE PROVIDED WITH ALL EQUIPMENT USED IN THE PROJECT.

PAINTING

- PAINTE ALL NEWLY CREATED SURFACES (WALLS, DOORS, WINDOWS, TRIM, ETC.).
- ALL SURFACES TO BE PREPPED FOR NEW PAINT, INCLUDING SANDING AND PATCHING OF ALL CRACKS, HOLES, ETC.
- APPLY 2 COATS + PRIMER OF LATEX PAINT ON ALL WALLS.
- APPLY 2 COATS OF SEMI-GLOSS LATEX PAINT ON ALL DOOR FRAMES AND INTERIOR TRIM - ALL BARE MATERIAL TO BE PRIMED.
- PROVIDE ALL NECESSARY PROTECTION TO ENSURE THAT NO SURROUNDING MATERIALS ARE DAMAGED BY PAINT, (I.E. LIGHT FIXTURES, FURNITURE, FLOORING, ETC.).

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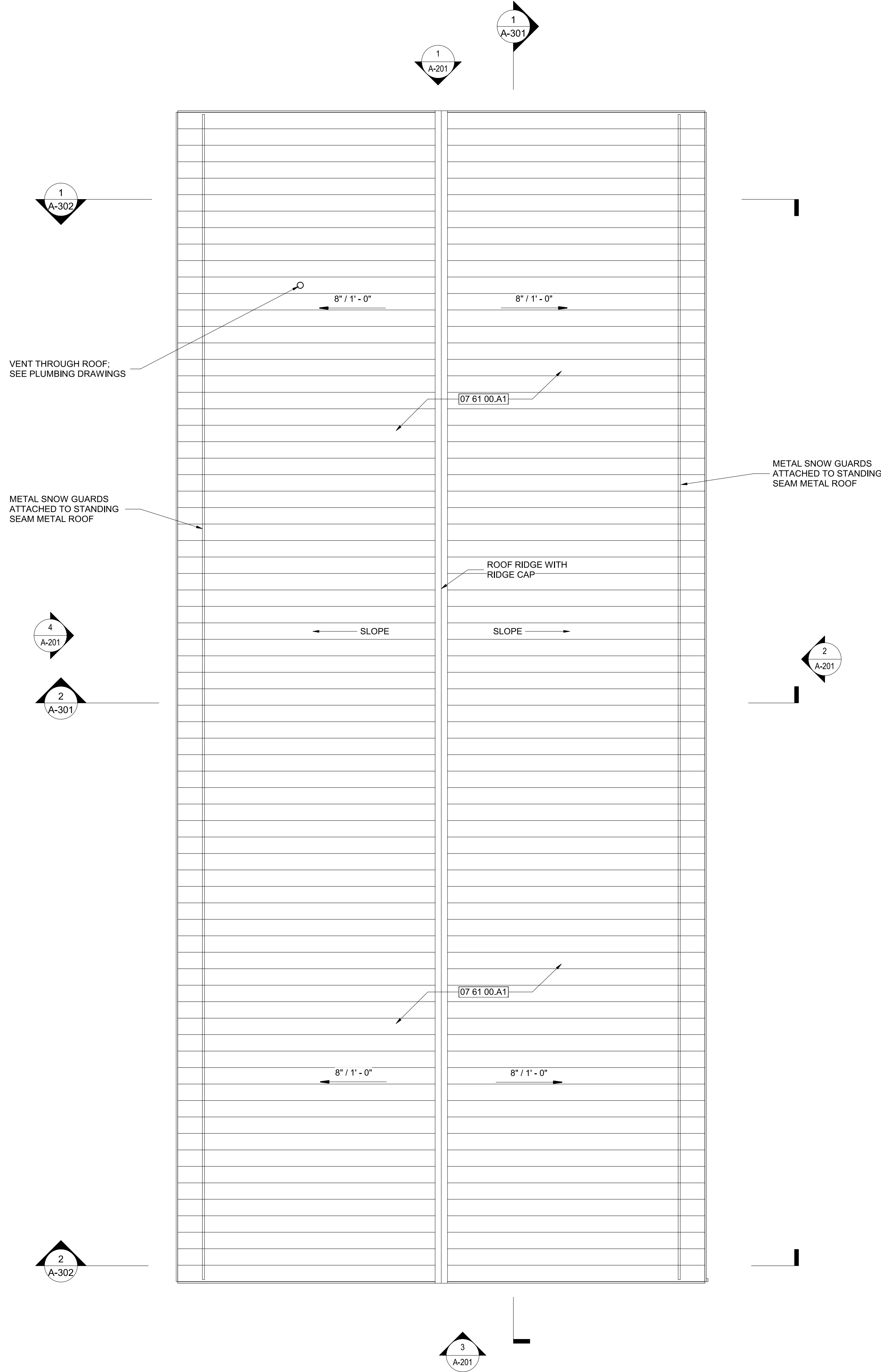
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2	12/3/2021	100% CONSTRUCTION DOCUMENTS
3	8/8/2025	BID SET

PROJECT NO: 20120
DRAWN BY: NFL/KCG
CHECKED BY: RDT

FIRST FLOOR
PLAN

SHEET

A-101

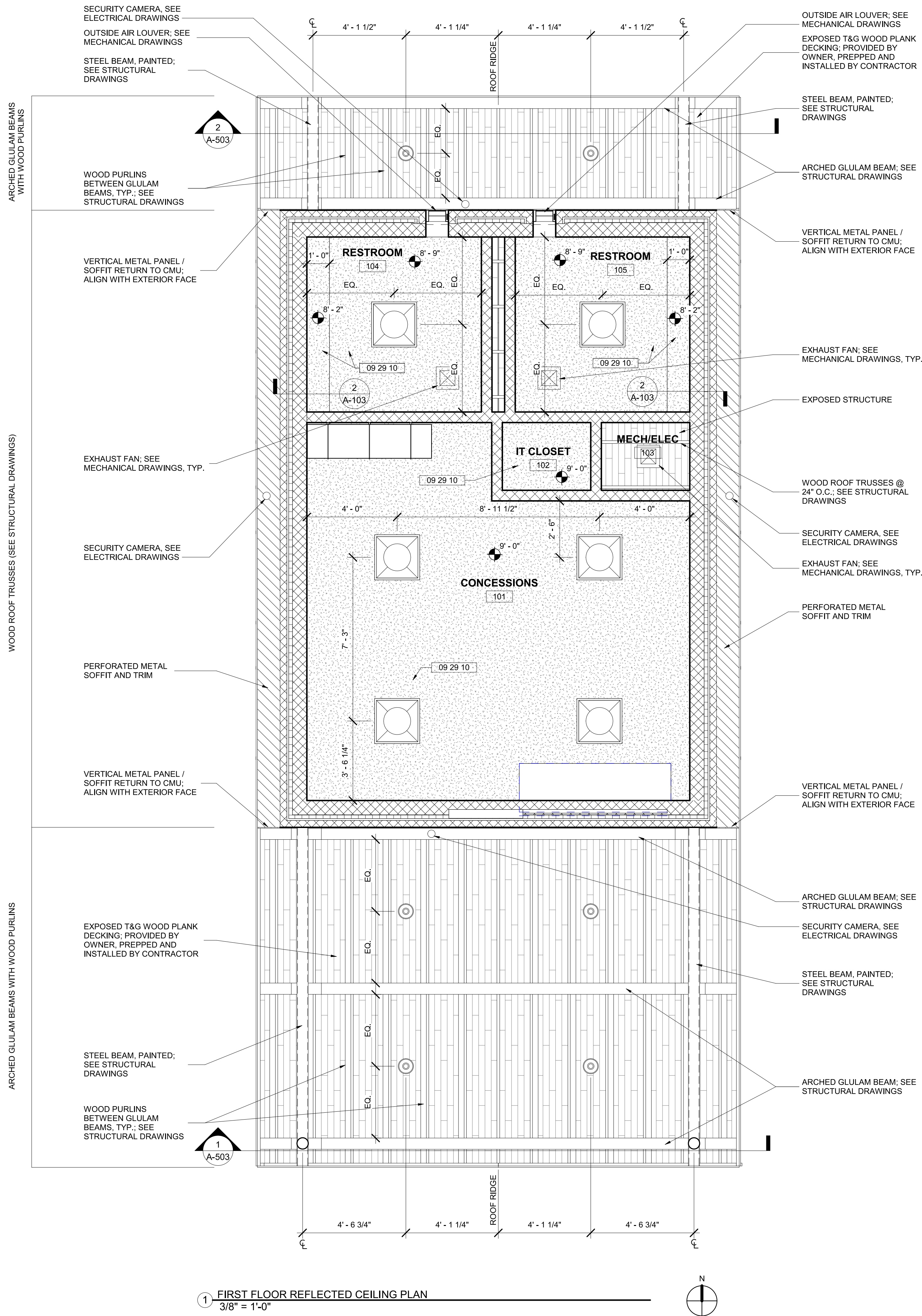


KEYNOTE LEGEND	
TAG	DESCRIPTION
07 61 00.A1	Standing Seam Metal Roof

Mark	Date	Description
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2	12/3/2021	100% CONSTRUCTION DOCUMENTS
3	8/8/2025	BID SET

PROJECT NO:	20120
DRAWN BY:	NFL/KCG
CHECKED BY:	RDT

ROOF PLAN



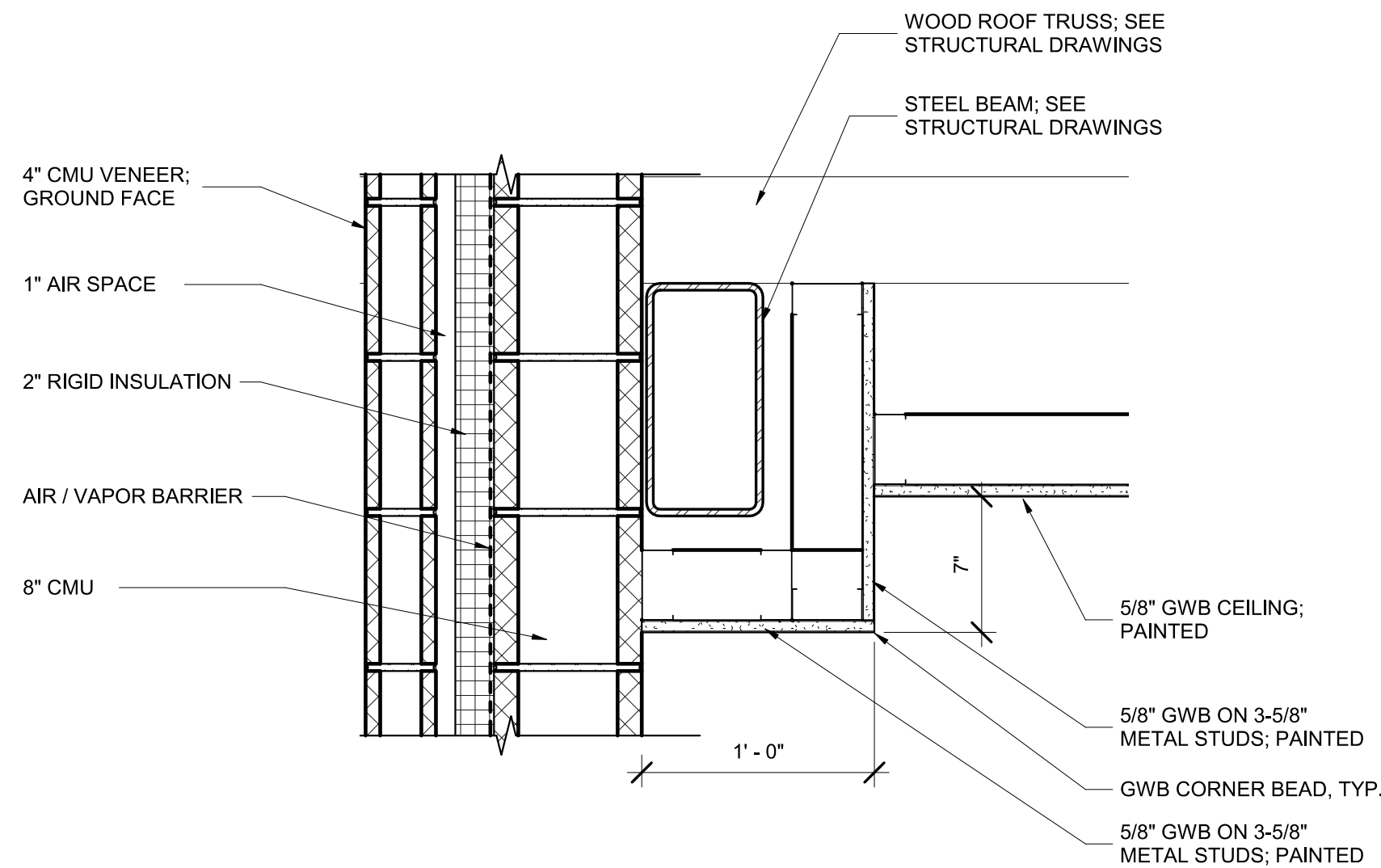
1 FIRST FLOOR REFLECTED CEILING PLAN
3/8" = 1'-0"

2 TYPICAL RESTROOM BULKHEAD DETAIL
1 1/2" = 1'-0"

KEYNOTE LEGEND	
TAG	DESCRIPTION
09 29 10	5/8" Gypsum Wallboard Ceiling

RCP LEGEND	
	GYPSUM CEILING (PAINTED)
	T&G WOOD PLANKS (ROOF DECK); OWNER PROVIDED, CONTRACTOR INSTALLED
	PERFORATED METAL SOFFIT
	EXHAUST FAN GRILLE
	2x2 LIGHT FIXTURE
	PENDANT LIGHT FIXTURE

NOTE: SEE ELECTRICAL DRAWINGS FOR LIGHT FIXTURE SPECIFICATIONS



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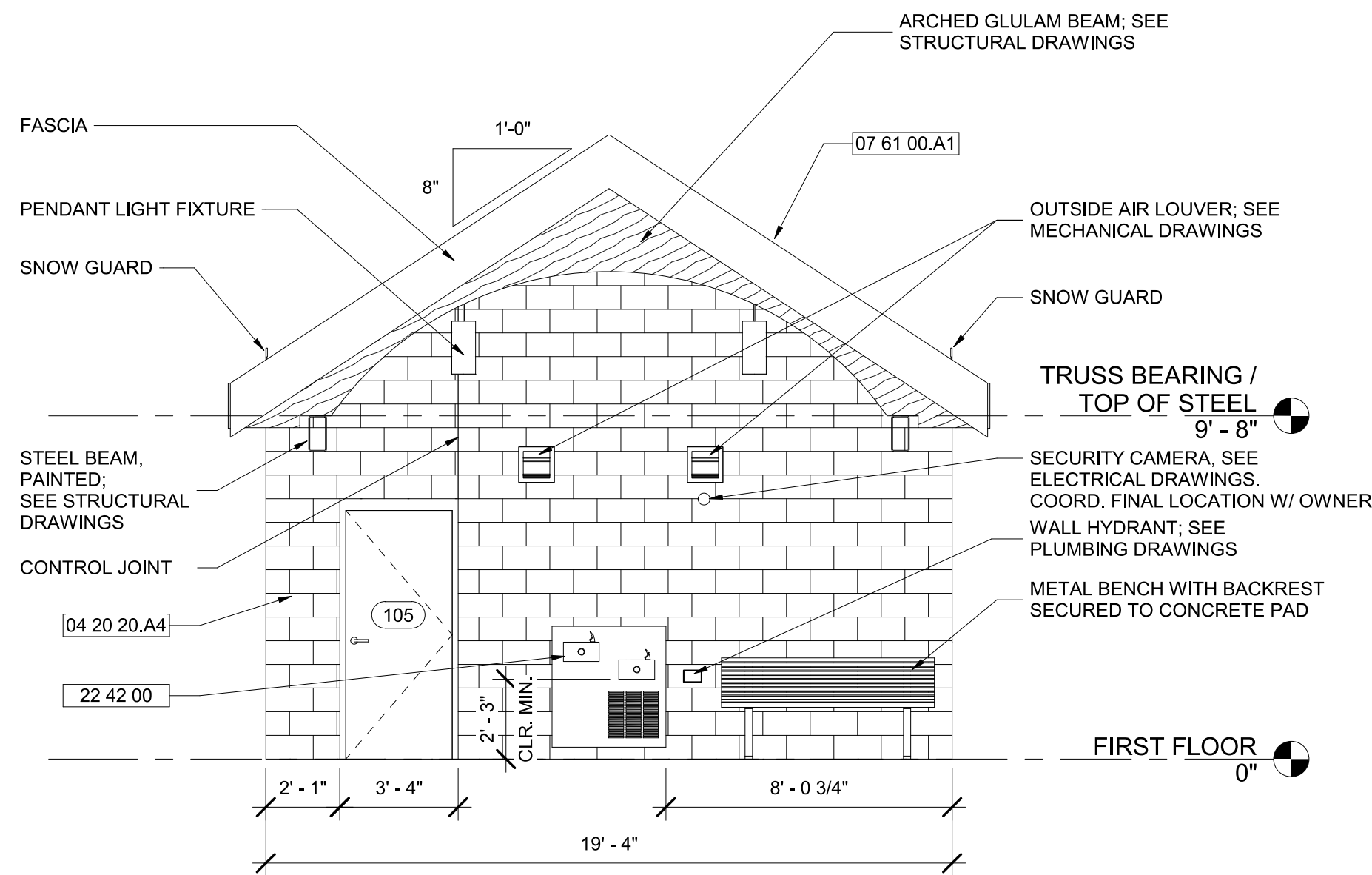
Murphy & Dittenhafer
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Mark	Date	Description
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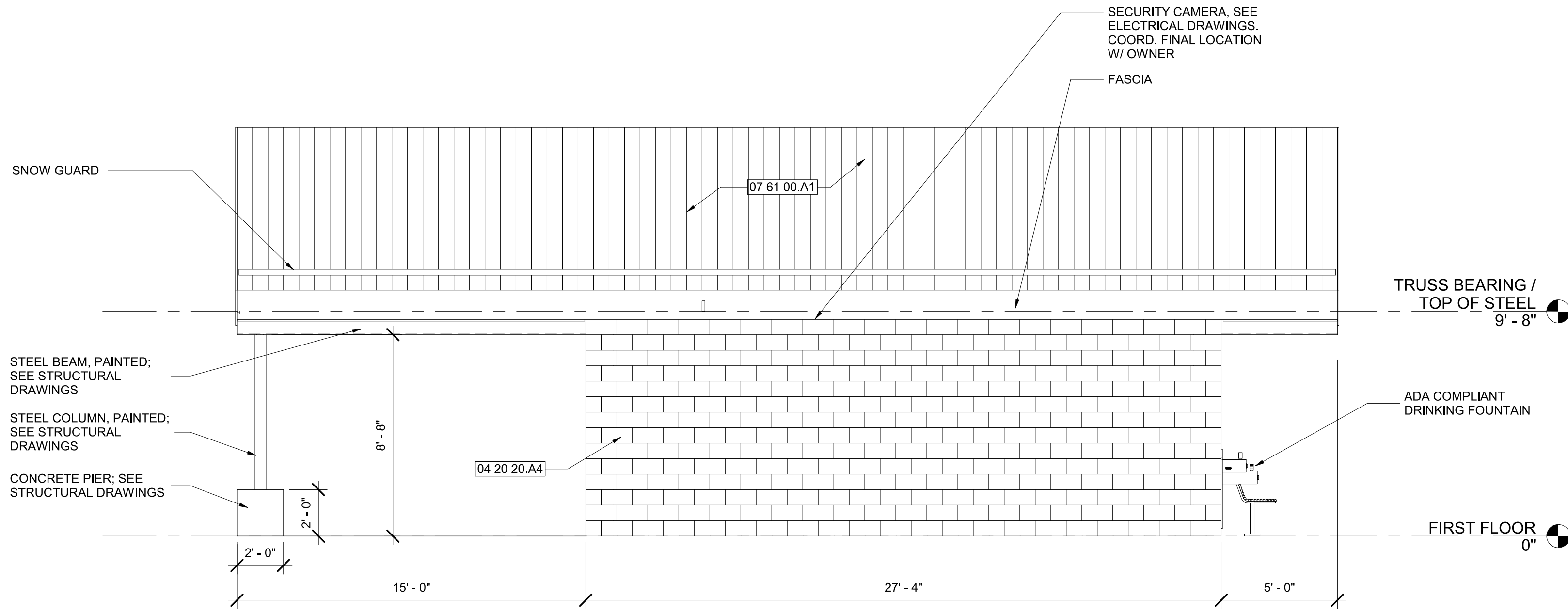
PROJECT NO: 20120
DRAWN BY: NFL/KCG
CHECKED BY: RDT

FIRST FLOOR
REFLECTED
CEILING PLAN

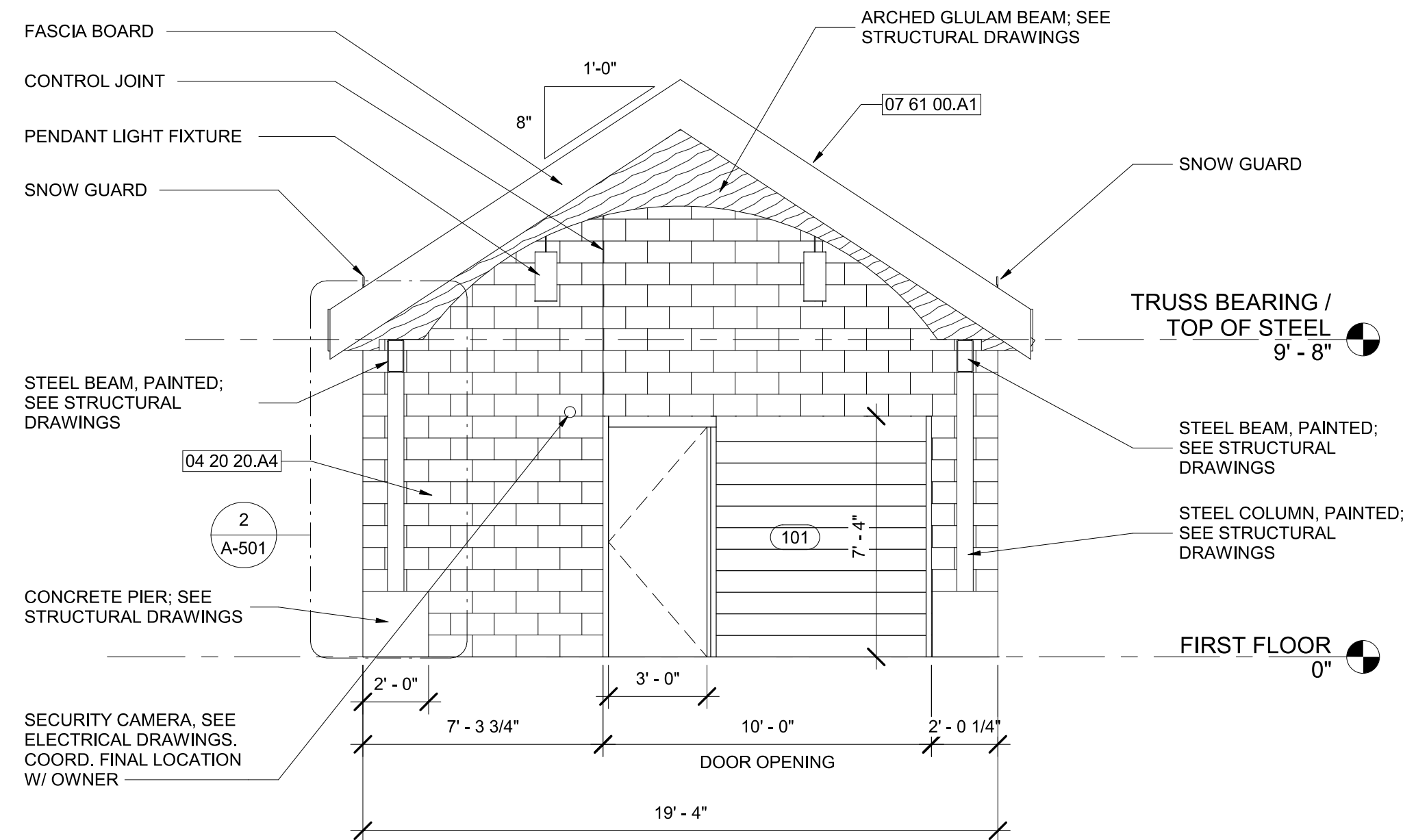
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A-103



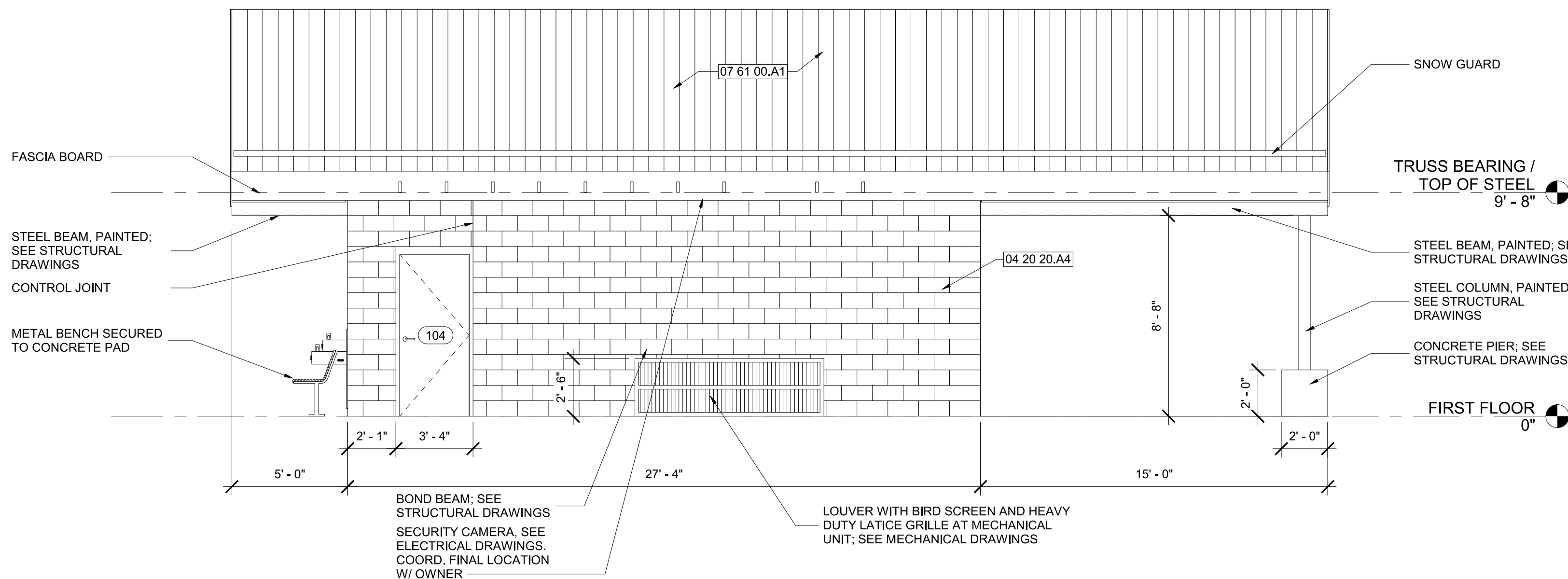
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1/4" = 1'-0"



2 EXTERIOR ELEVATION - EAST
1/4" = 1'-0"



3 EXTERIOR ELEVATION - SOUTH
1/4" = 1'-0"



4 EXTERIOR ELEVATION - WEST
1/4" = 1'-0"

KEYNOTE LEGEND	
TAG	DESCRIPTION
04 20 20.A4	CMU Cavity Wall System: 4" CMU Veneer Over 1" Air Cavity Over 2" Continous Rigid Insulation and Fluid Applied Air/Vapor Barrier Over 8" Structural CMU
07 61 00.A1	Standing Seam Metal Roof
22 42 00	Water Cooler - See Plumbing Drawings

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2415 TOLLEY ST., BALTIMORE, MD 21230

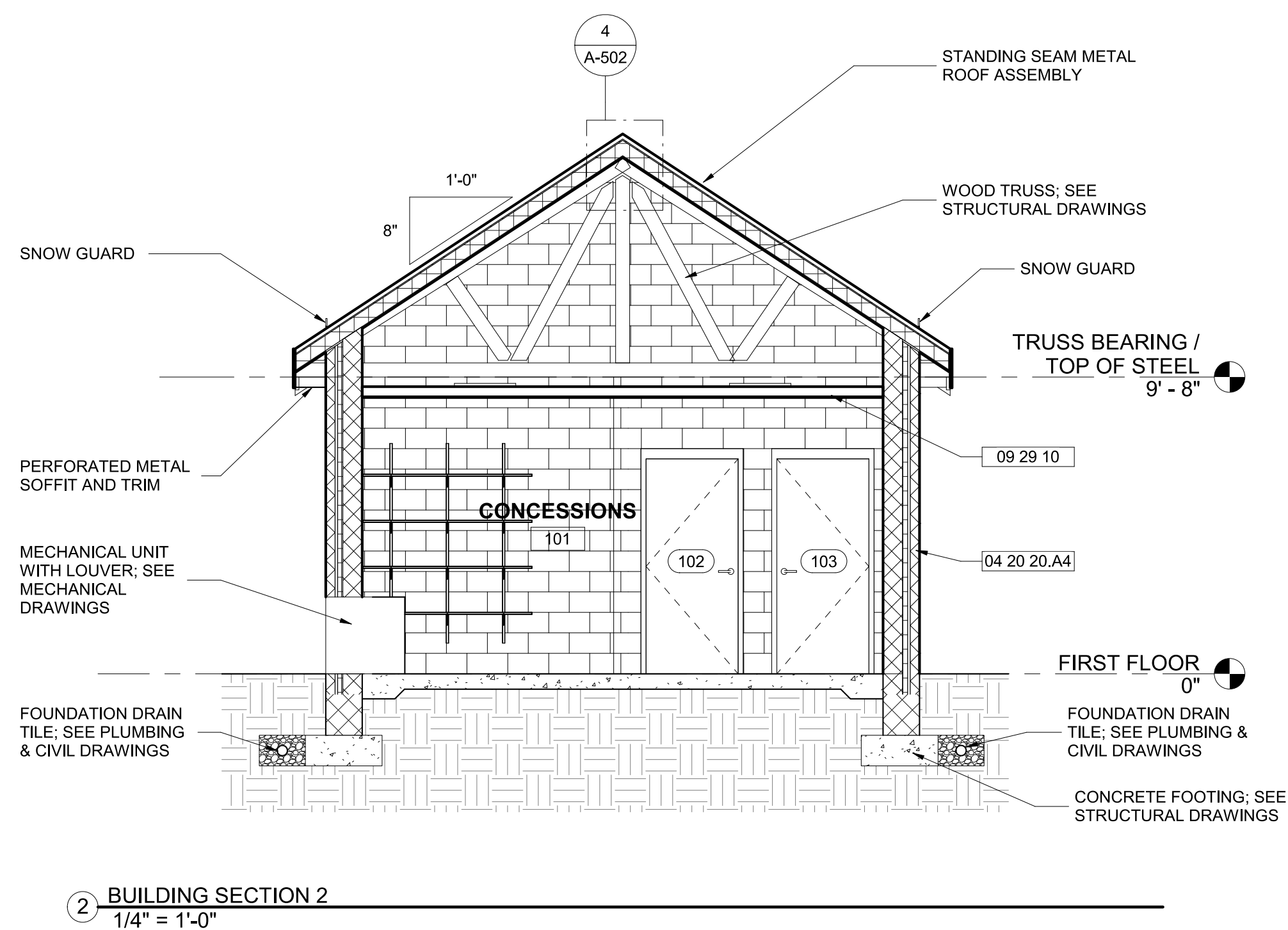
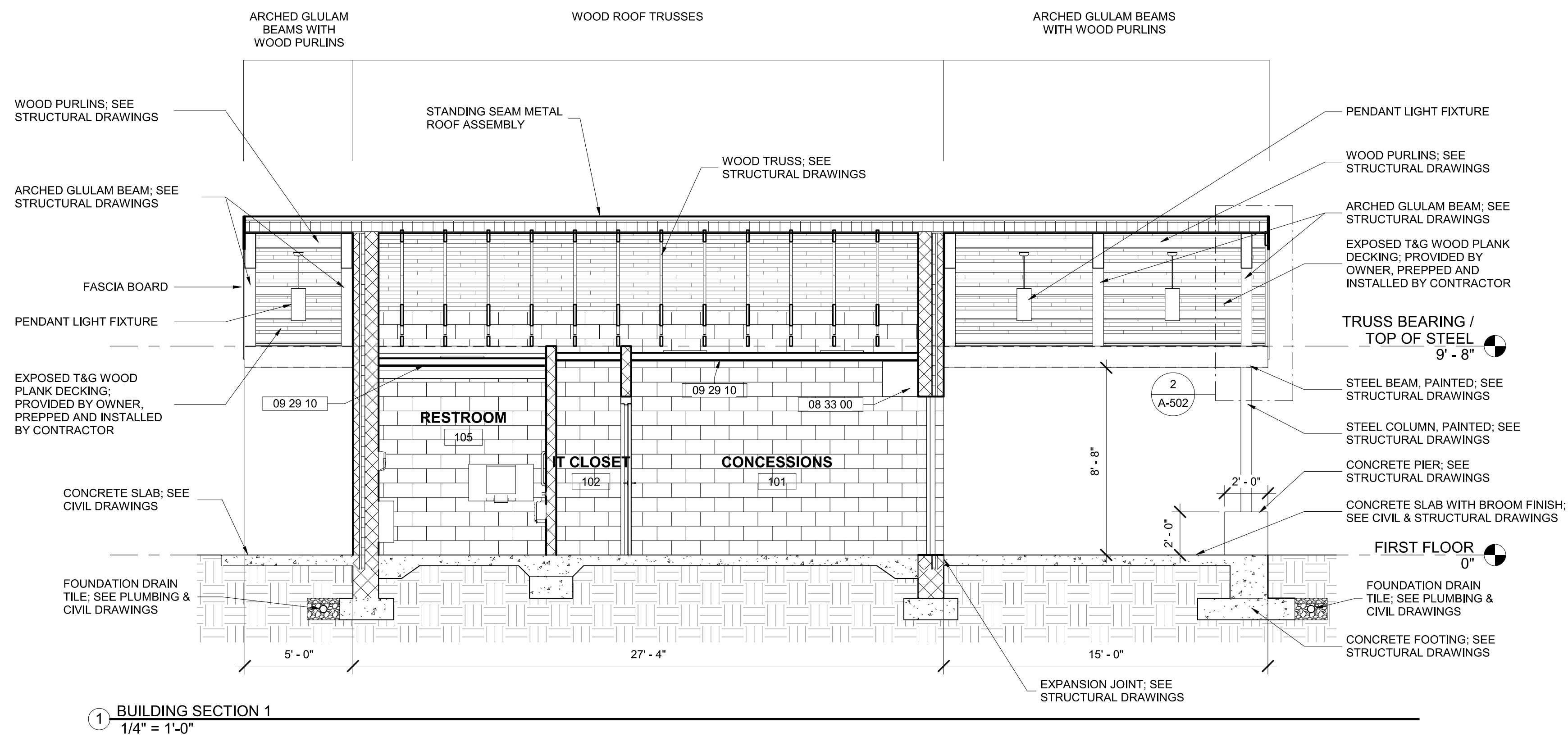
Murphy & Dittenhafer
ARCHITECTS
228 West Market Street, York, Pennsylvania 17401
410-625-4823 voice 410-625-4874 fax

Mark	Date	Description
1	8/31/2021	50% CONSTRUCTION DOCUMENTS
2	12/3/2021	100% CONSTRUCTION DOCUMENTS
3	8/8/2025	BID SET

PROJECT NO: 20120
DRAWN BY: NFL/KCG
CHECKED BY: RDT

EXTERIOR
ELEVATIONS

SHEET
A-201



KEYNOTE LEGEND	
TAG	DESCRIPTION
04 20 20.A4	CMU Cavity Wall System: 4" CMU Veneer Over 1" Air Cavity Over 2" Continuous Rigid Insulation and Fluid Applied Air/Vapor Barrier Over 8" Structural CMU
08 33 00	Coiling Doors and Grilles
09 29 10	5/8" Gypsum Wallboard Ceiling

BALTIMORE CITY RECREATION & PARKS
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Murphy & Dittenhafer
ARCHITECTS

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717-848-8827 voice 717-843-3449 fax

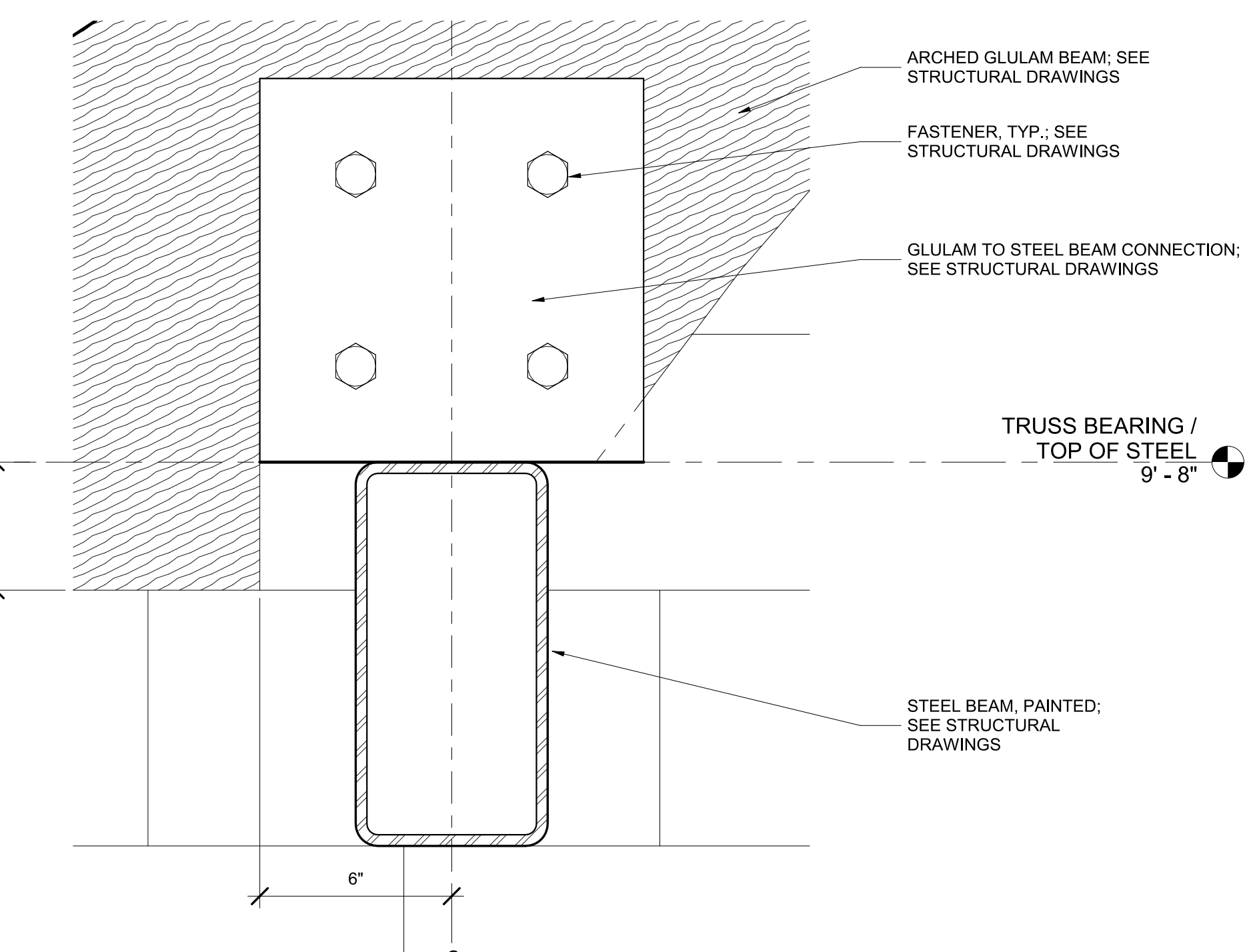
800 North Charles Street, Baltimore, Maryland 21201
410-625-4823 voice 410-625-4874 fax

Mark	Date	Description
1	8/31/2021	50% CONSTRUCTION DOCUMENTS
2	12/3/2021	100% CONSTRUCTION DOCUMENTS
3	8/8/2025	BID SET

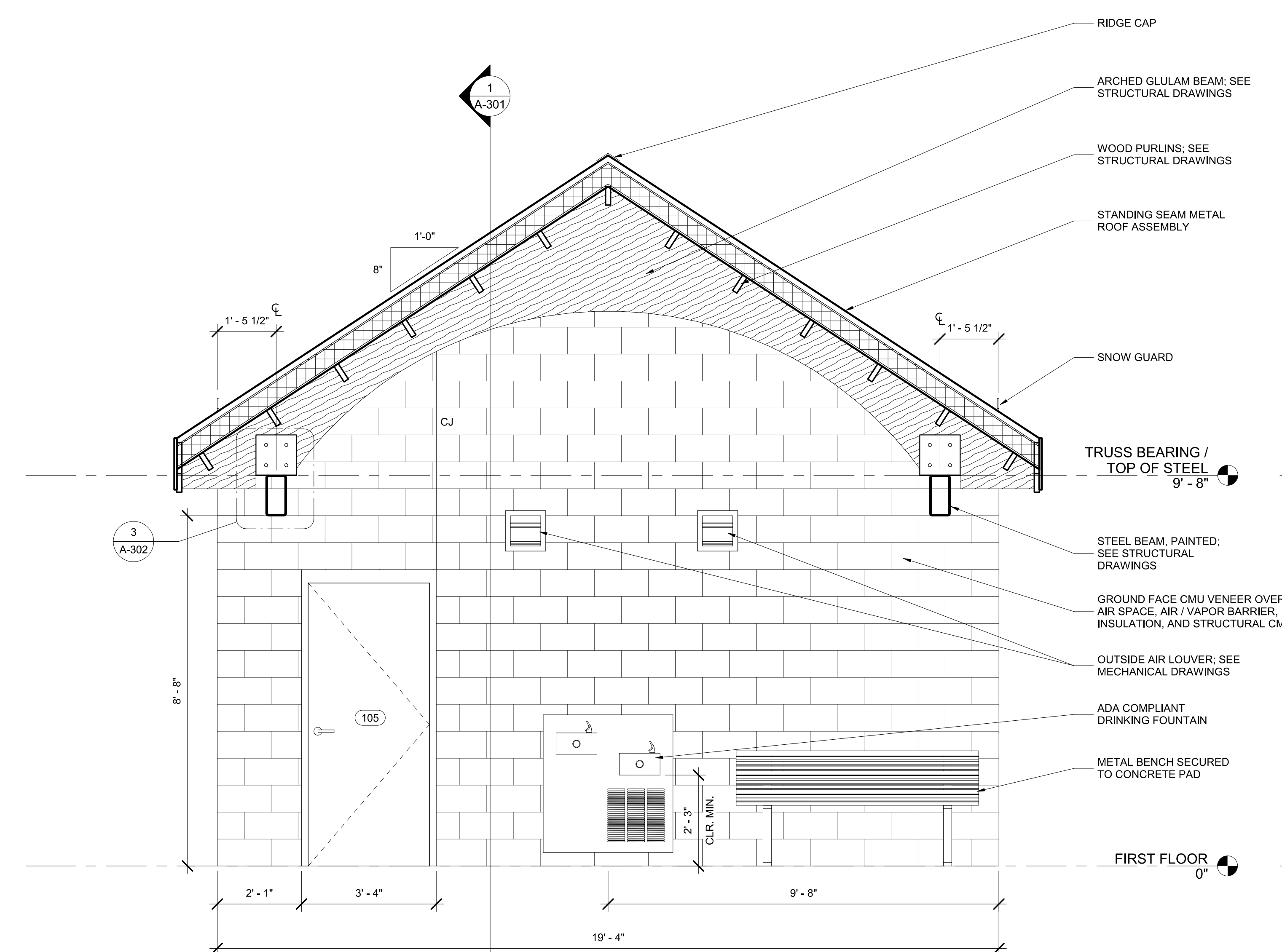
PROJECT NO: 20120
DRAWN BY: NFL/KCG
CHECKED BY: RDT

BUILDING
SECTIONS

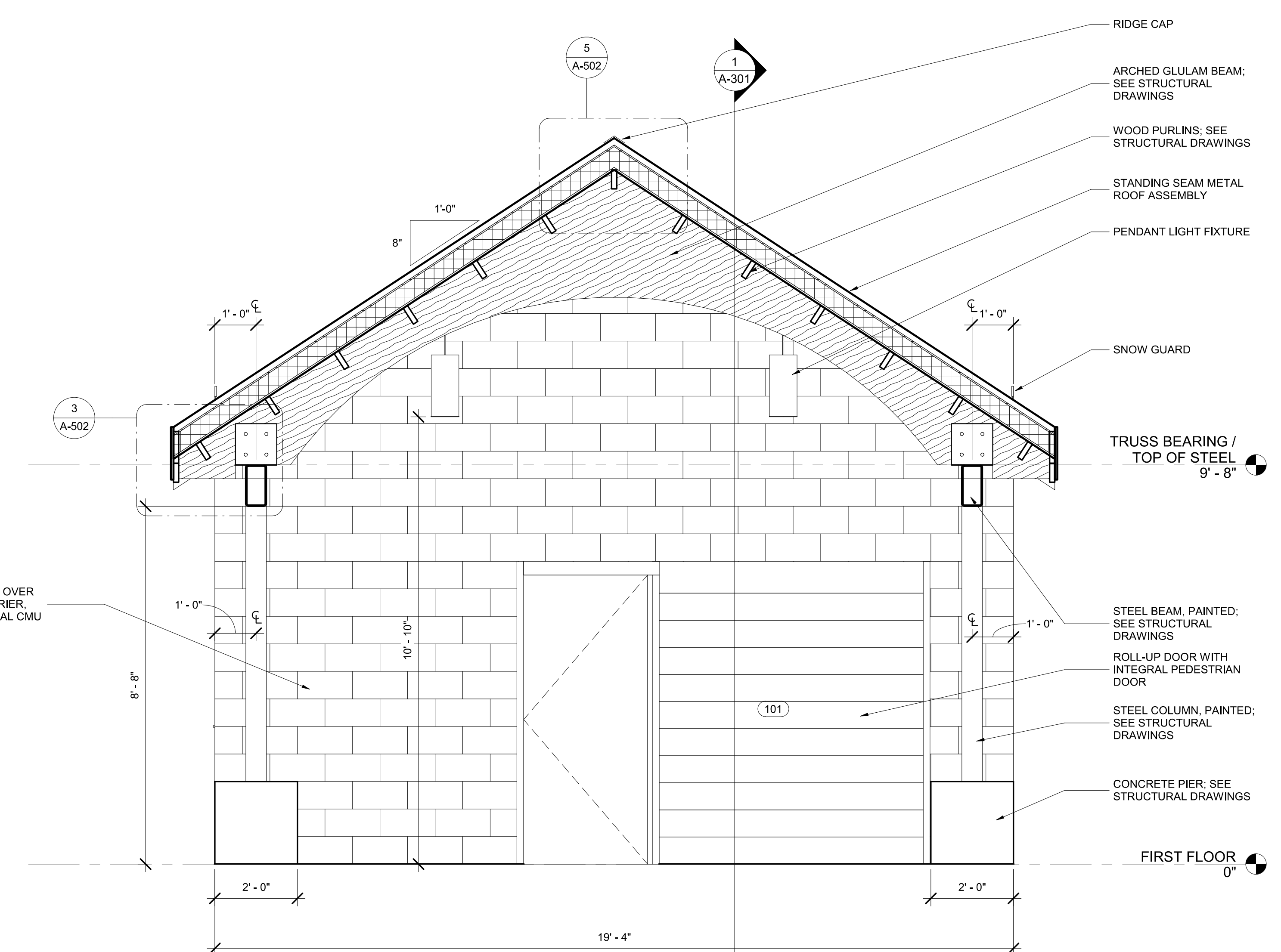
SHEET
A-301



3 GLULAM TO STEEL BEAM CONNECTION
3" = 1'-0"



1 SECTION AT NORTH COVERED AREA
1/2" = 1'-0"



2 SECTION AT SOUTH COVERED AREA
1/2" = 1'-0"

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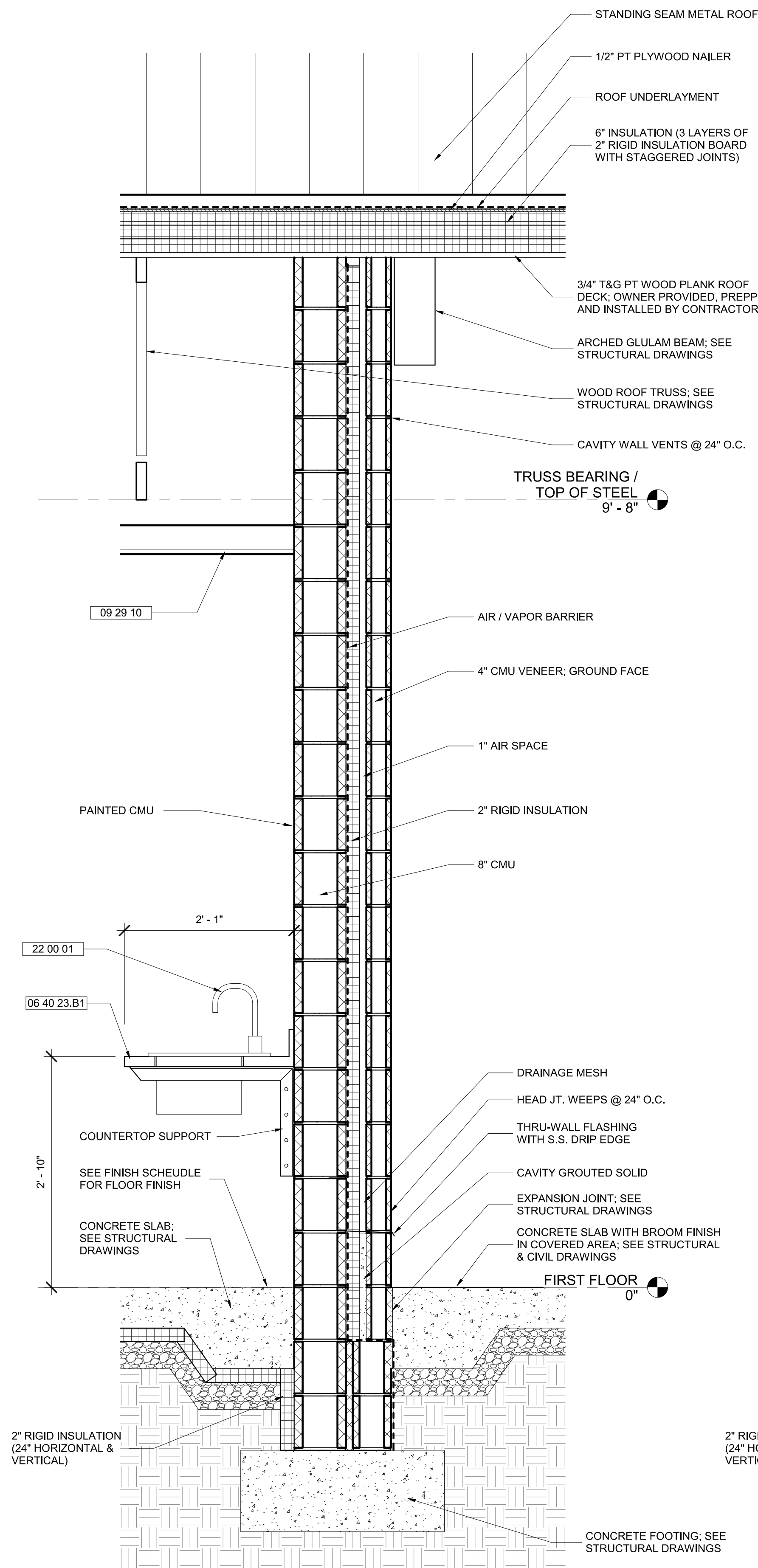
Murphy & Dittenhafer
ARCHITECTS
228 West Market Street, York, Pennsylvania 17401
410-625-4823 voice 717-543-3449 fax
800 North Charles Street, Baltimore, Maryland 21201
410-625-4823 voice 410-625-4874 fax

Description	
1	50% CONSTRUCTION DOCUMENTS
2	100% CONSTRUCTION DOCUMENTS
3	BID SET
Date	
1	8/31/2021
2	12/3/2021
3	8/8/2025
Mark	
1	
2	
3	

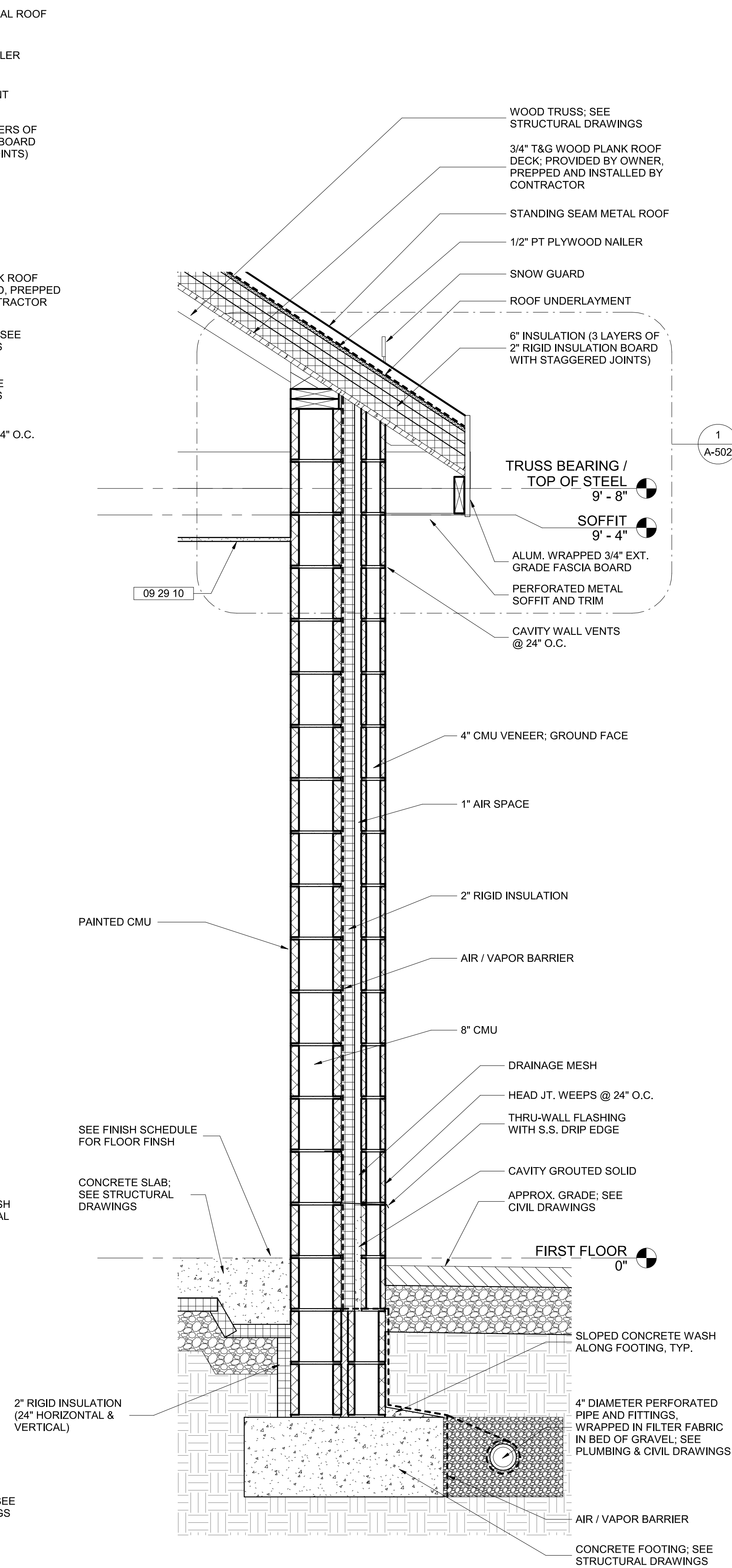
PROJECT NO: 20120
DRAWN BY: KCG
CHECKED BY: RDT

BUILDING
SECTIONS

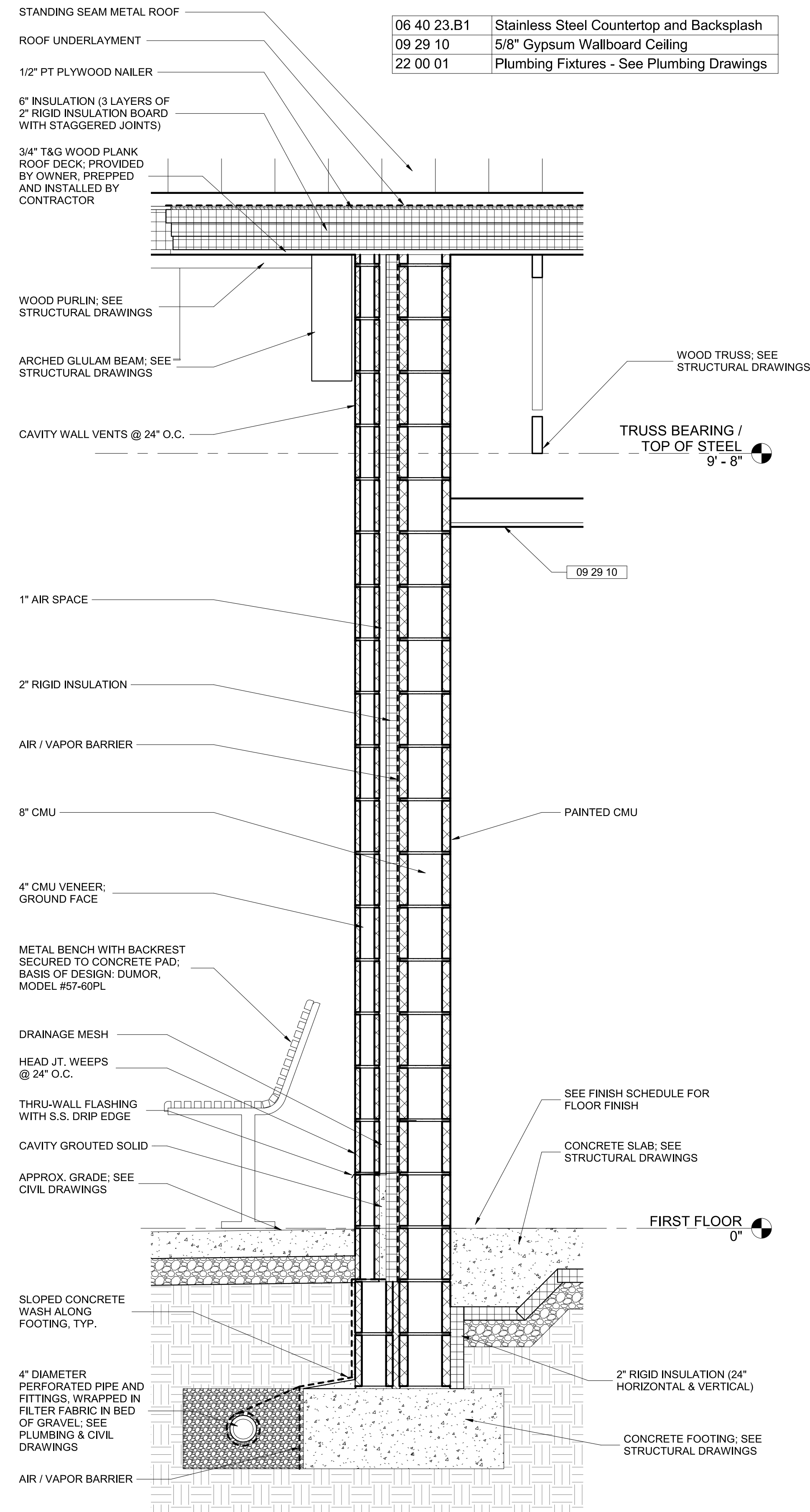
SHEET
A-302



1 TYPICAL WALL SECTION 1
1" = 1'-0"



2 TYPICAL WALL SECTION 2
1" = 1'-0"



3 TYPICAL WALL SECTION 3
1" = 1'-0"

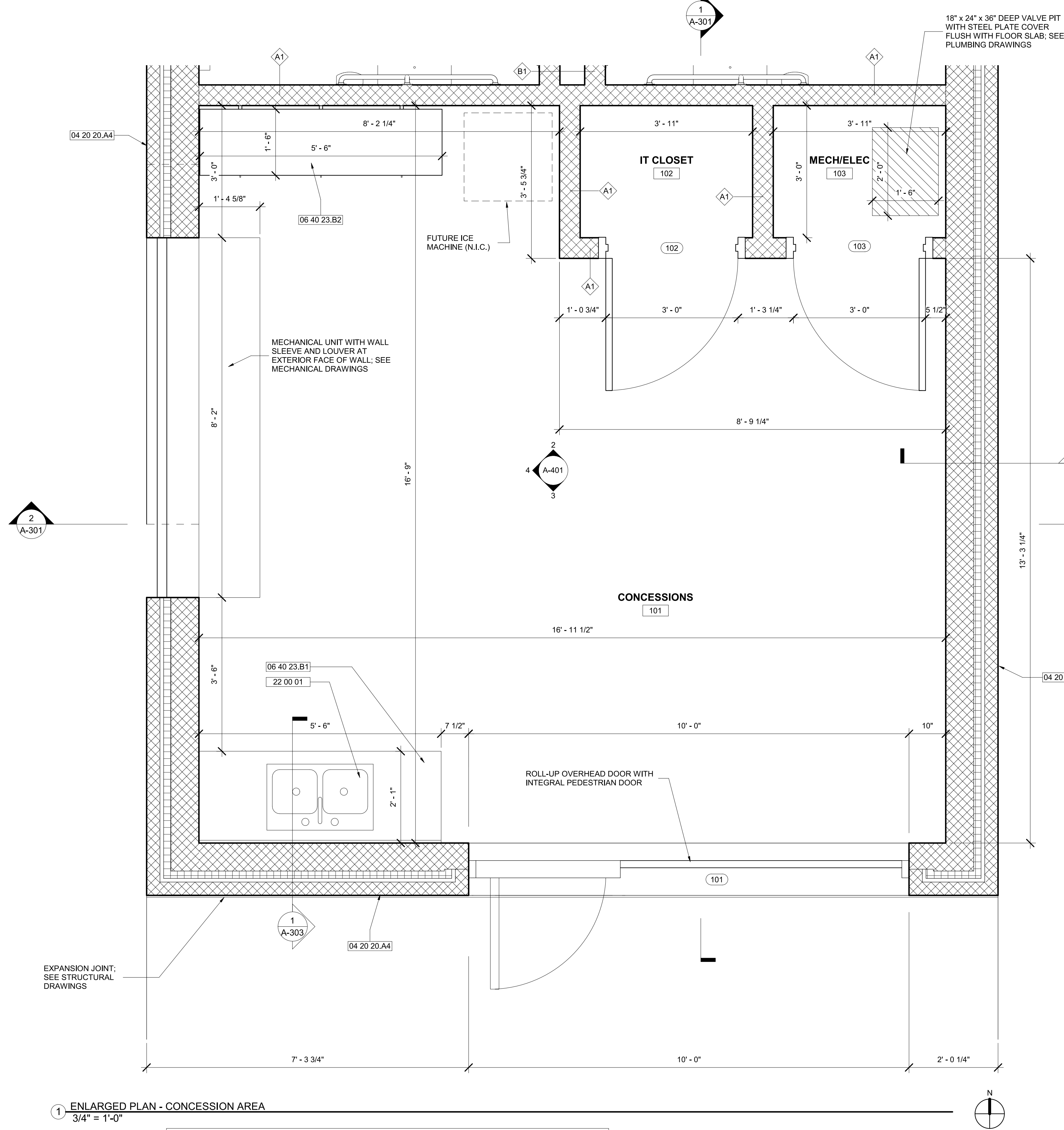
KEYNOTE LEGEND	
TAG	DESCRIPTION
06 40 23.B1	Stainless Steel Countertop and Backsplash
09 29 10	5/8" Gypsum Wallboard Ceiling
22 00 01	Plumbing Fixtures - See Plumbing Drawings

Description	
Mark	Date
1	8/31/2021
2	12/3/2021
3	8/8/2025

PROJECT NO: 20120
DRAWN BY: NFL/KCG
CHECKED BY: RDT

WALL
SECTIONS

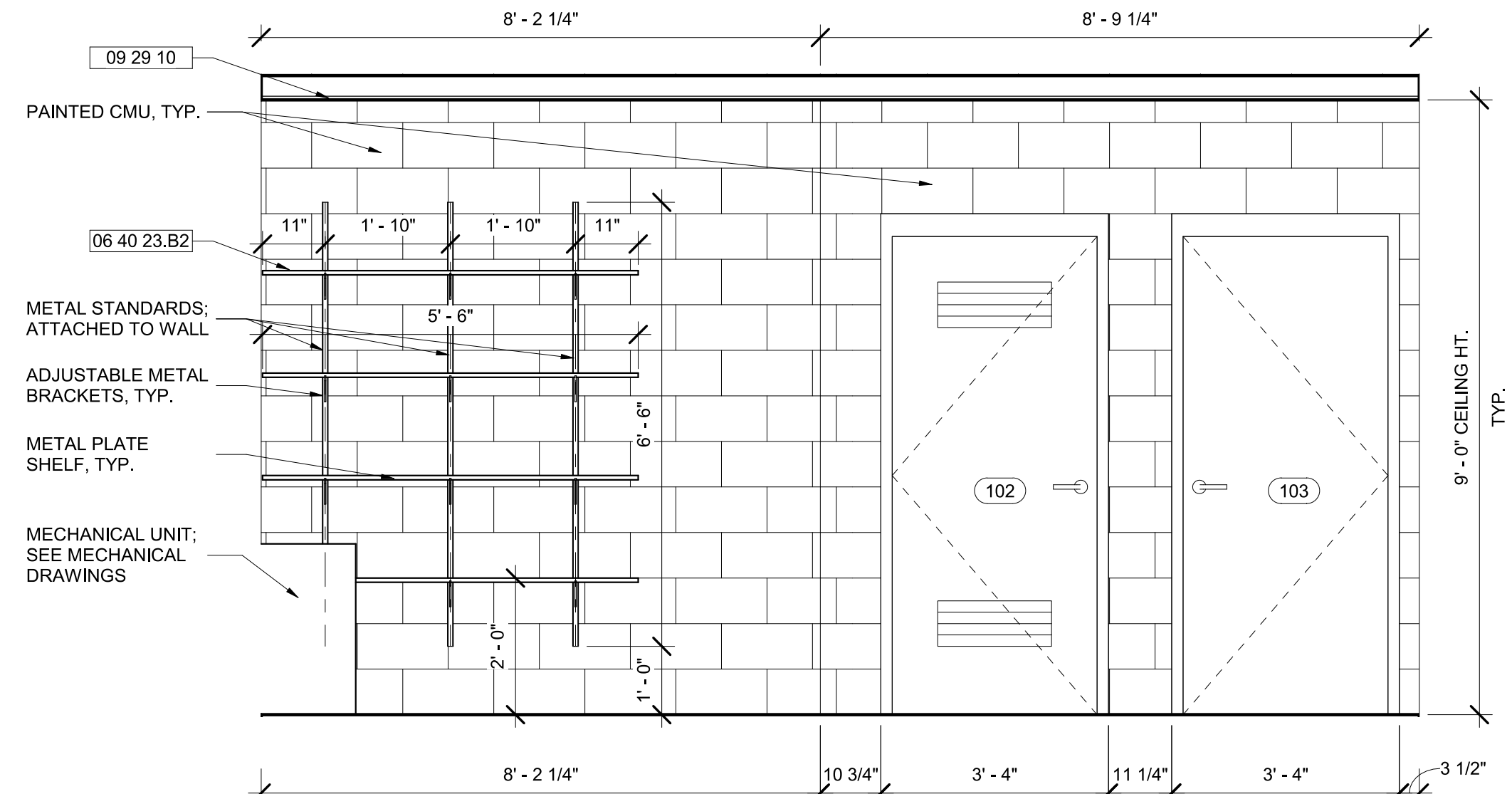
SHEET
A-303



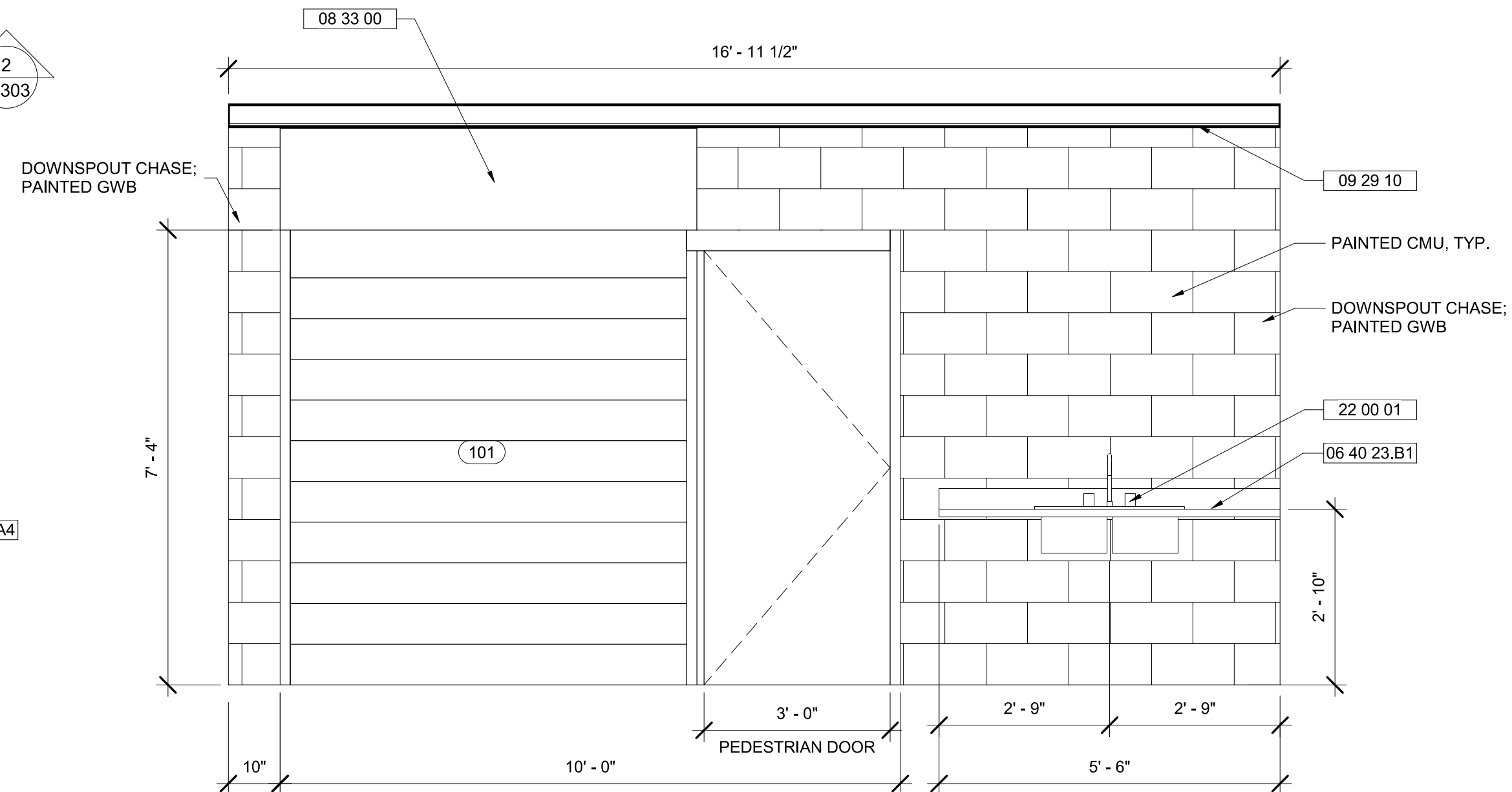
1 ENLARGED PLAN - CONCESSION AREA
3/4" = 1'-0"

KEYNOTE LEGEND	
TAG	DESCRIPTION
04 20 20.A4	CMU Cavity Wall System: 4" CMU Veneer Over 1" Air Cavity Over 2" Continous Rigid Insulation and Fluid Applied Air/Vapor Barrier Over 8" Structural CMU
06 40 23.B1	Stainless Steel Countertop and Backsplash
06 40 23.B2	Metal Standard and Bracket Open Adjustable Shelving
08 33 00	Coiling Doors and Grilles
09 29 10	5/8" Gypsum Wallboard Ceiling
22 00 01	Plumbing Fixtures - See Plumbing Drawings
26 51 00.D1	2' X 2' Recessed LED Fixture. See Electrical Drawings

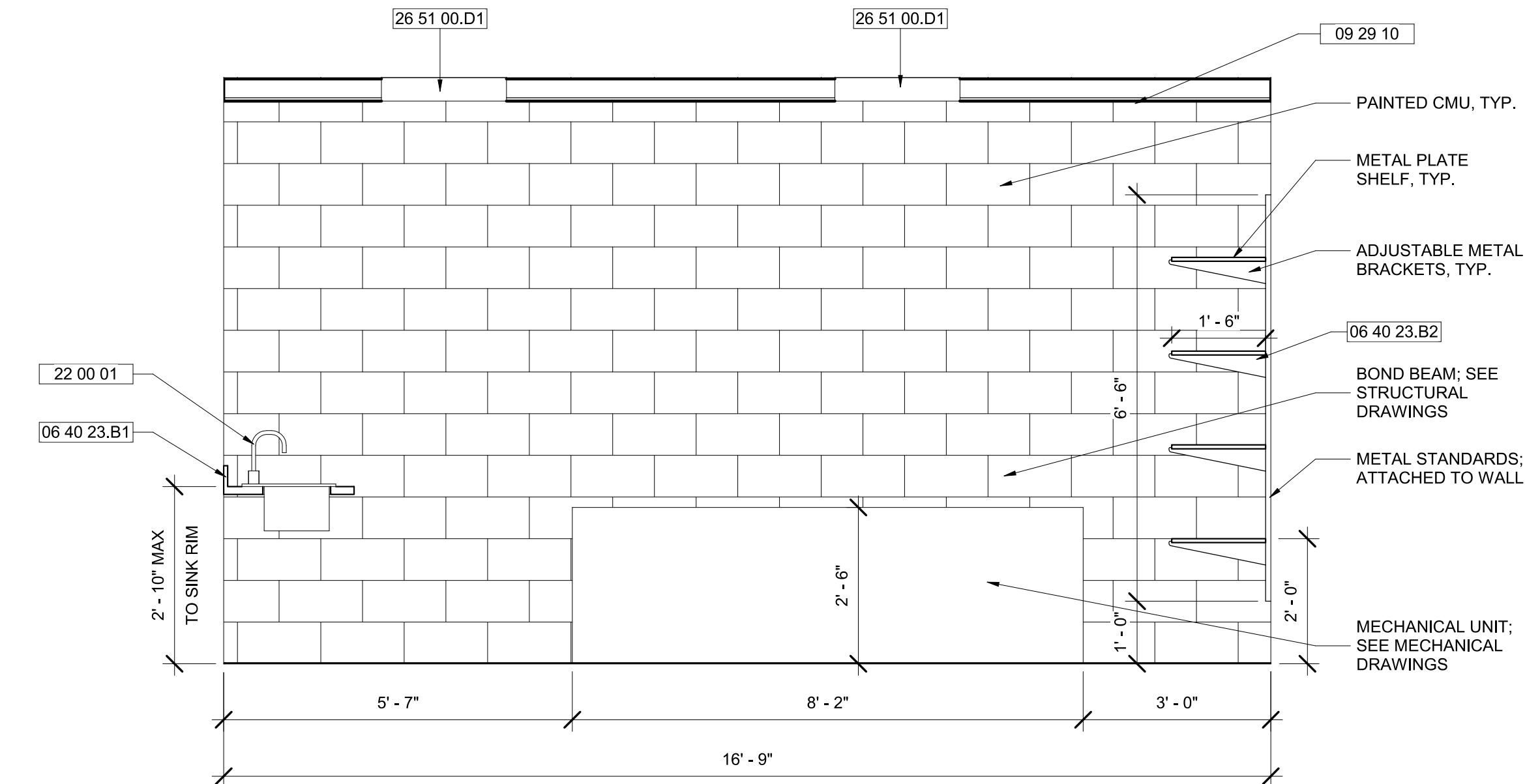
NOTE: CONDUIT TO BE RUN IN BLOCK



2 CONCESSIONS - INTERIOR ELEVATION - NORTH
1/2" = 1'-0"



3 CONCESSIONS - INTERIOR ELEVATION - SOUTH
1/2" = 1'-0"



4 CONCESSIONS - INTERIOR ELEVATION - WEST
1/2" = 1'-0"

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PROJECT NO: 20120
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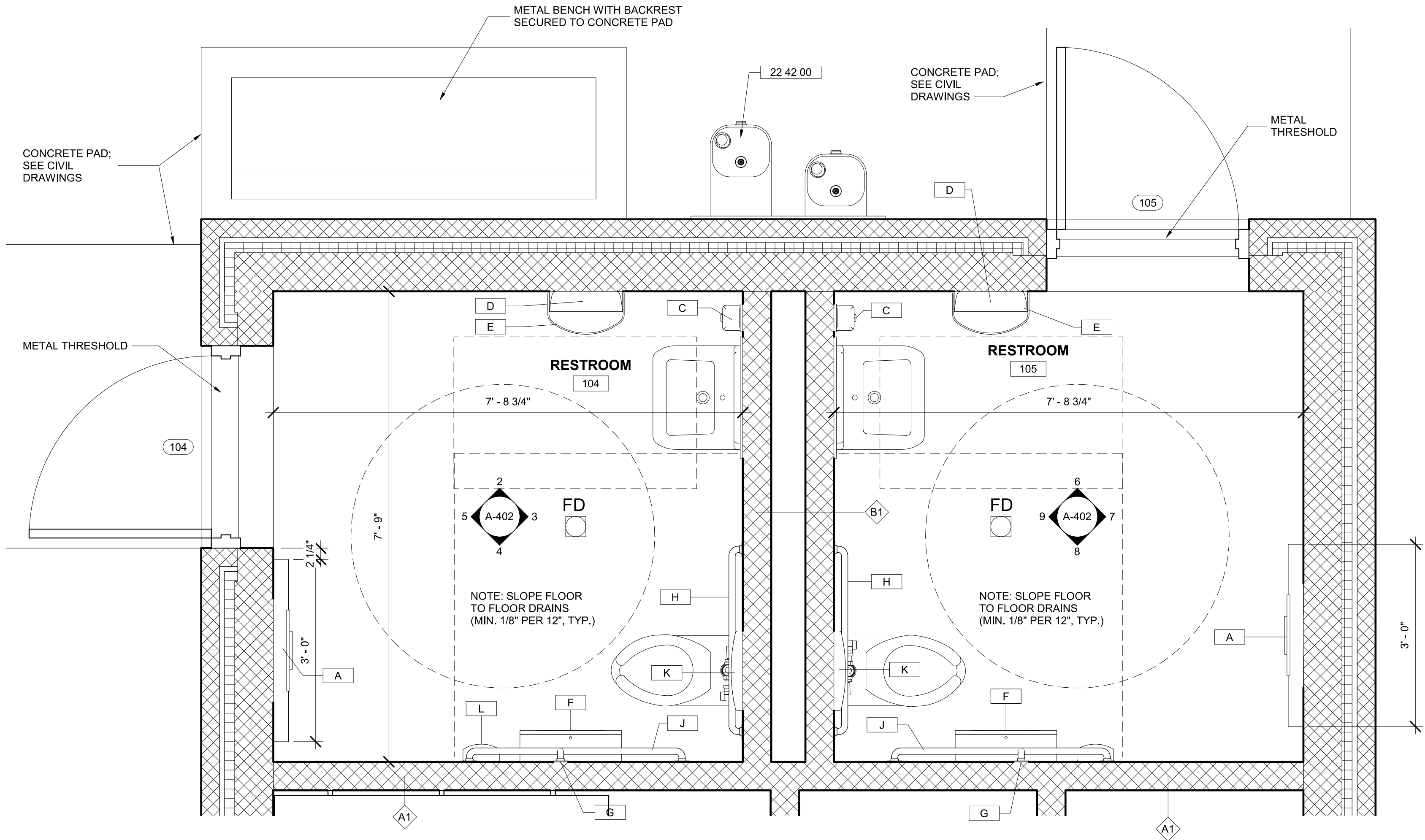
ENLARGED
PLAN -
CONCESSIONS

SHEET

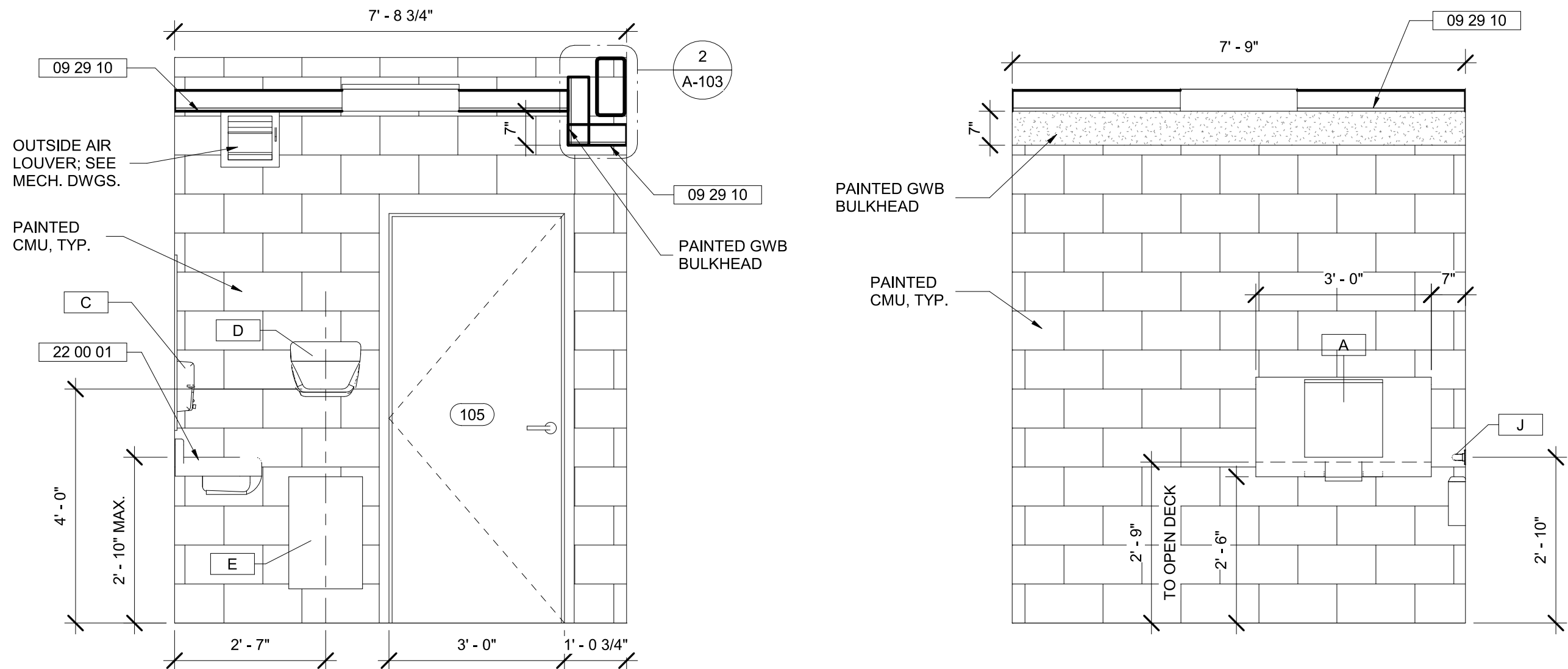
A-401

TOILET ACCESSORIES SCHEDULE					
MARK	QTY.	DESCRIPTION	MOUNTING	MOUNTING HEIGHT	MODEL NUMBER
A	2	DIAPER DECK-SURFACE	SURFACE	2'-9" TO OPEN DECK	9631
B	2	MIRROR-24"x36" FRAMED	SURFACE	3'-4" MAX TO BOTTOM OF GLASS	B-290
C	2	SOAP DISPENSER - MANUAL	SURFACE	3'-8" MAX TO BOTTOM OF OPERATING BUTTON	B-2111
D	2	HAND DRYER-HEAT (ELECTRIC)	RECESSED	4'-0" MAX TO BOTTOM	XL-SB-ECO
E	2	WASTE RECEPTACLE-WALL MOUNTED	SURFACE	2'-6" TO TOP	B-277
F	2	TOILET TISSUE DISPENSER-DOUBLE JUMBO	SURFACE	1'-6" TO BOTTOM	B-2892
G	2	VERTICAL GRAB BAR-18"	SURFACE	3'-5" MAX TO BOTTOM	B-5806
H	2	BACK WALL GRAB BAR-36"	SURFACE	3'-0" MAX TO TOP OF BAR	B-5806
J	2	SIDE WALL GRAB BAR-42"	SURFACE	3'-0" MAX TO TOP OF BAR	B-5806
K	2	TOILET SEAT COVER DISPENSER	SURFACE	2'-1" MAX TO TOP OF TOILET	B-221
L	2	SANITARY NAPKIN DISPOSAL	SURFACE	2'-6" TO TOP	B-254

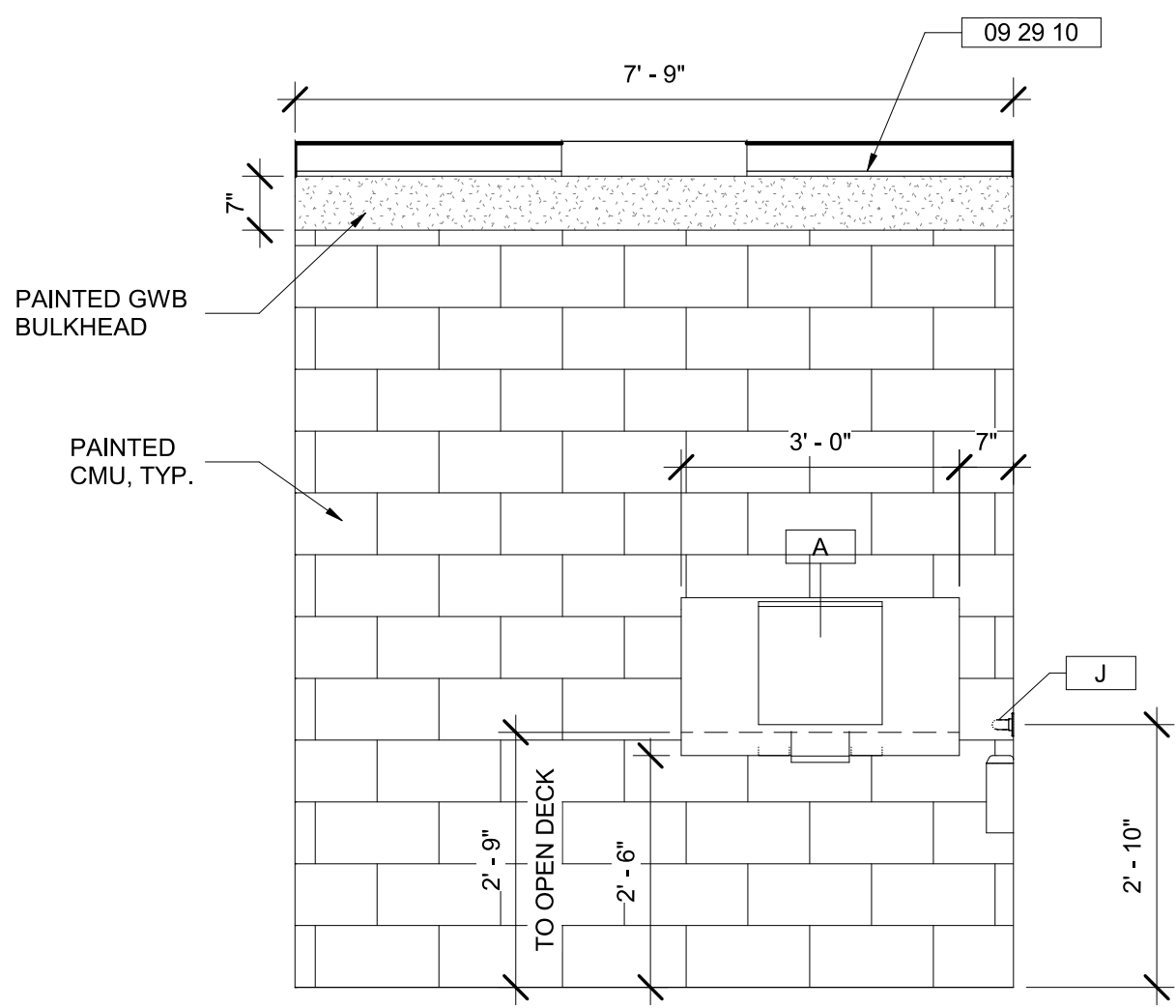
NOTES: 1. SEE SPEC FOR ADDITIONAL INFORMATION ON TOILET ACCESSORIES MANUFACTURER
2. CONDUIT TO BE RUN IN BLOCK



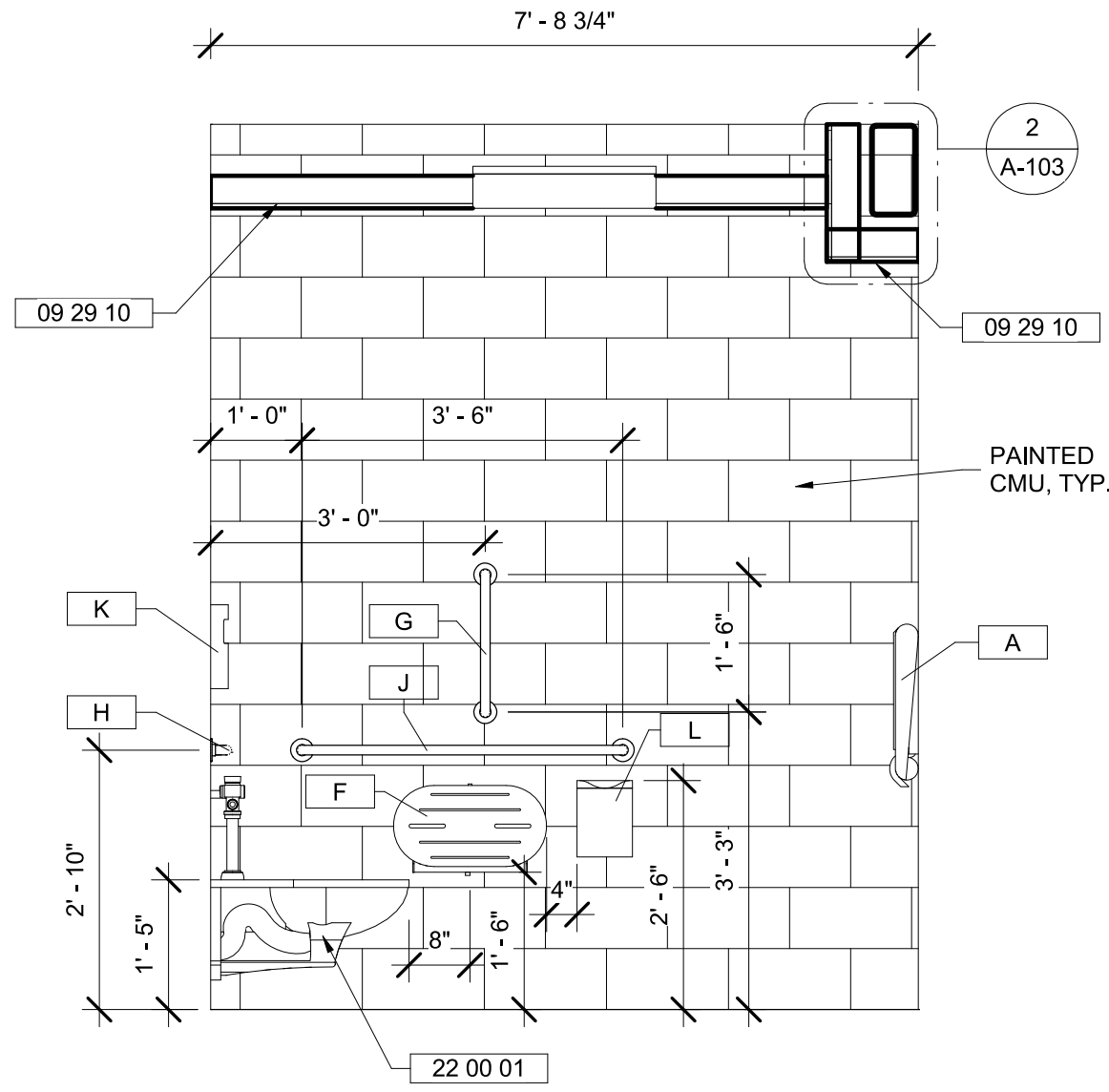
1 ENLARGED PLAN - RESTROOMS 104 & 105
3/4" = 1'-0"



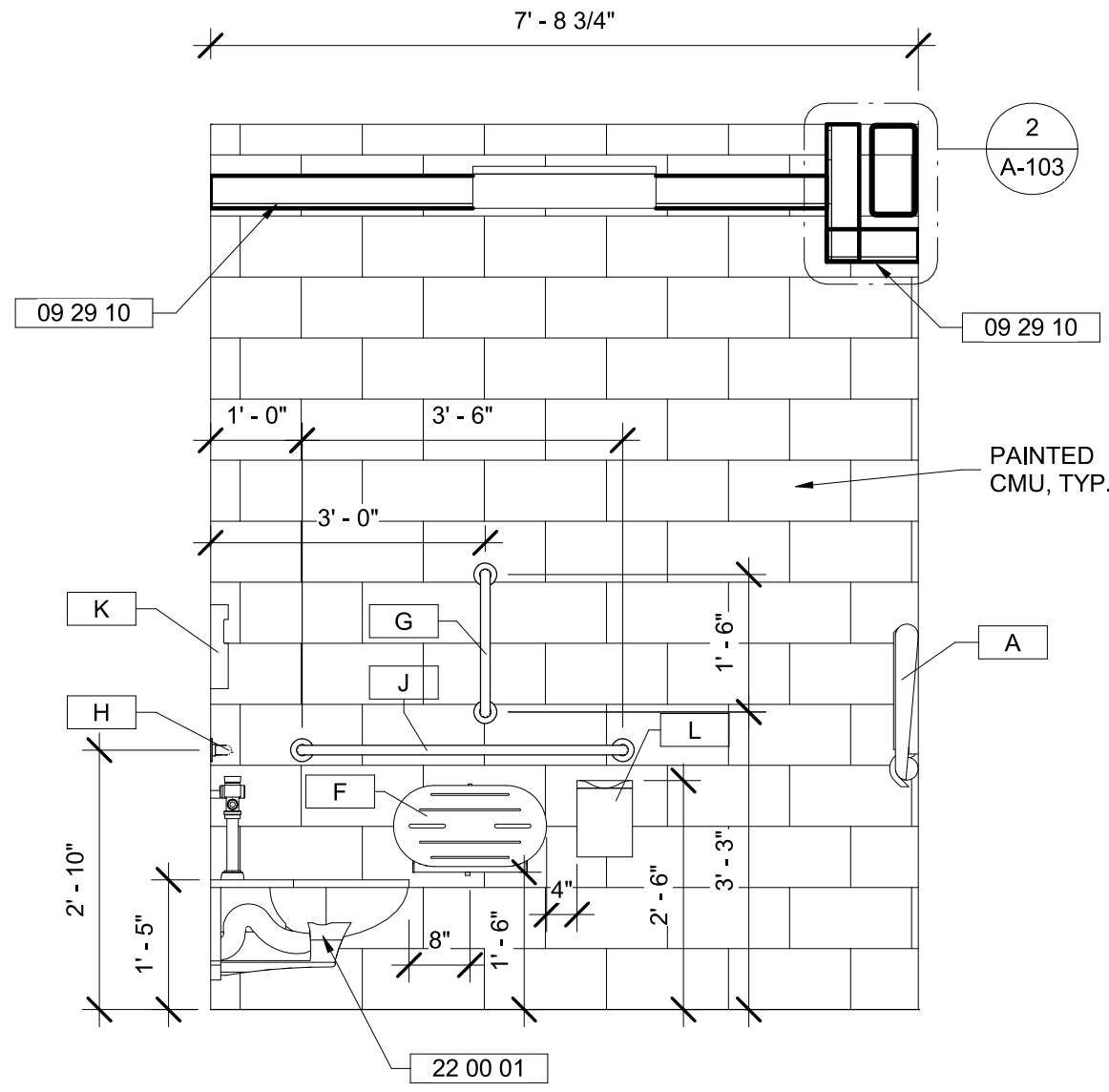
6 RESTROOM 105 - INTERIOR ELEVATION - NORTH
1/2" = 1'-0"



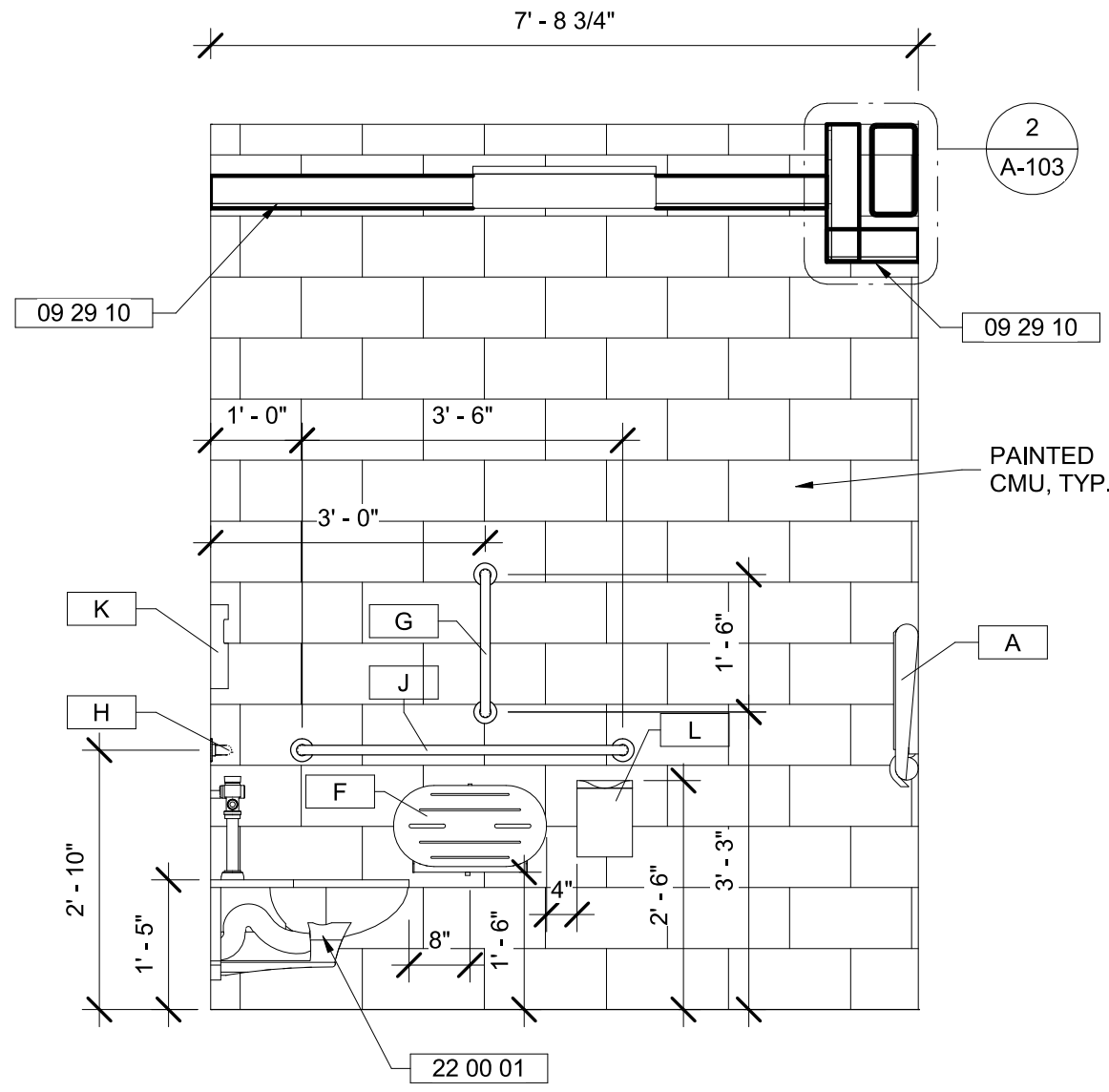
7 RESTROOM 105 - INTERIOR ELEVATION - EAST
1/2" = 1'-0"



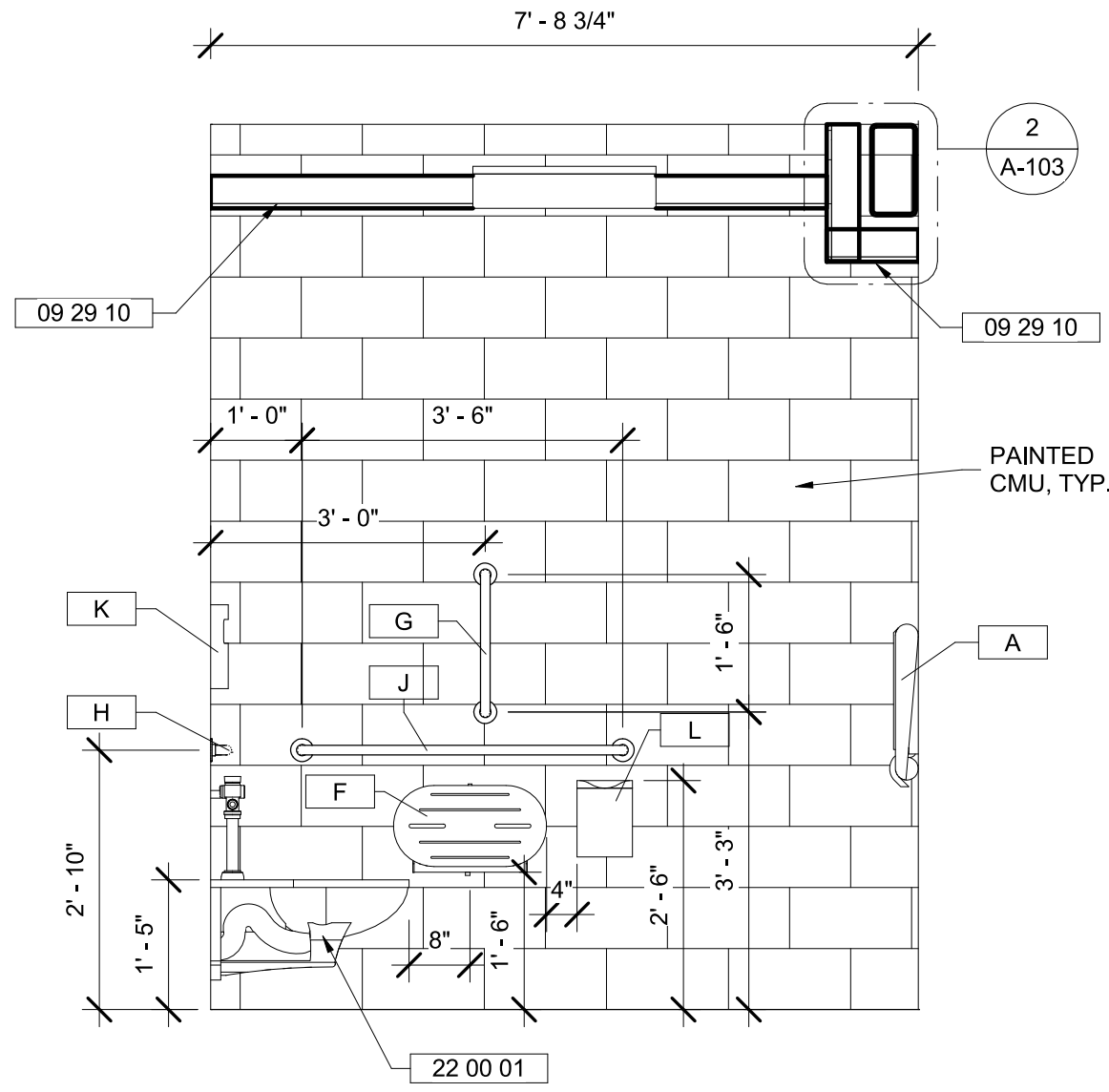
4 RESTROOM 104 - INTERIOR ELEVATION - SOUTH
1/2" = 1'-0"



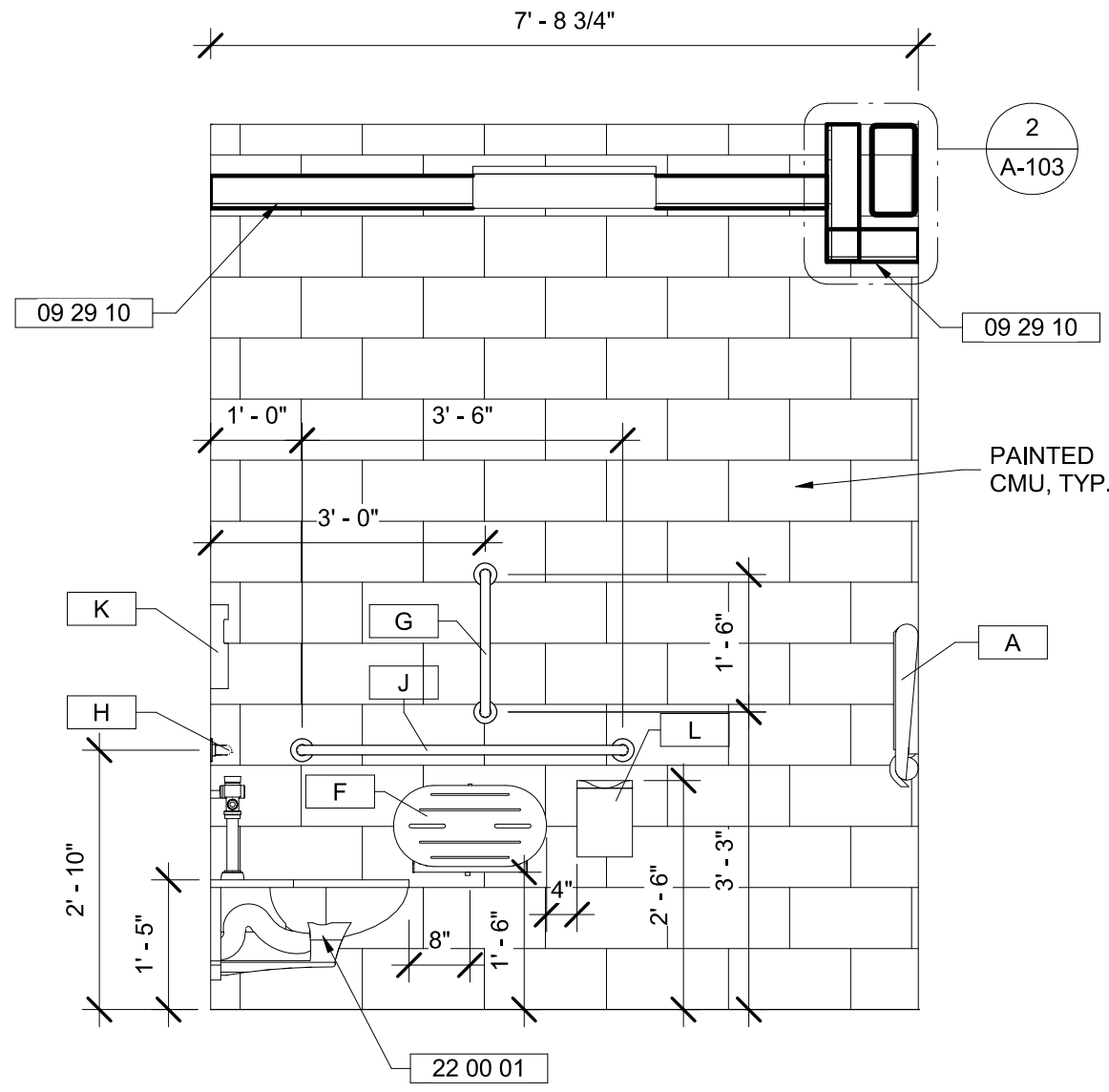
2 RESTROOM 104 - INTERIOR ELEVATION - NORTH
1/2" = 1'-0"



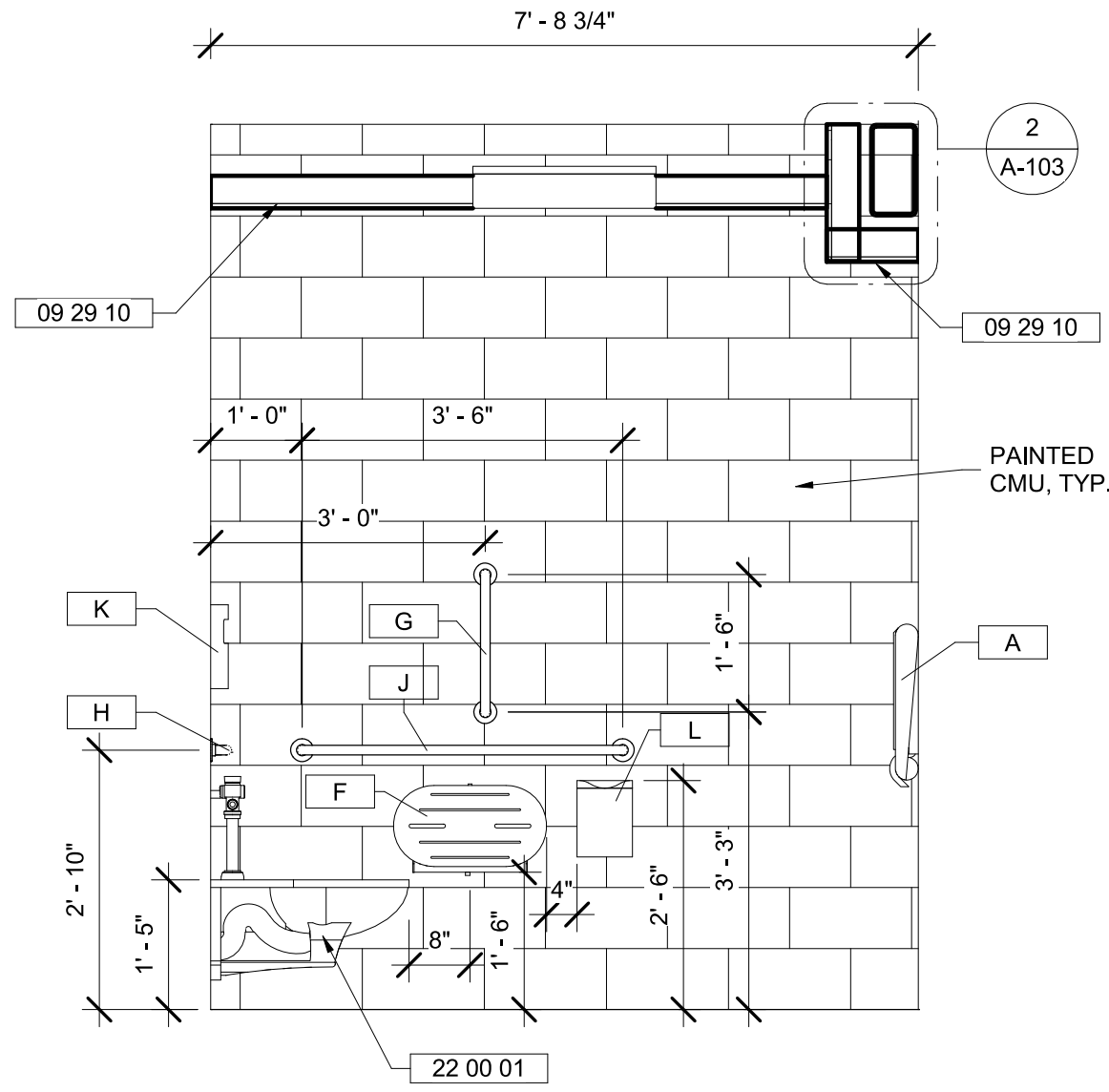
5 RESTROOM 104 - INTERIOR ELEVATION - WEST
1/2" = 1'-0"



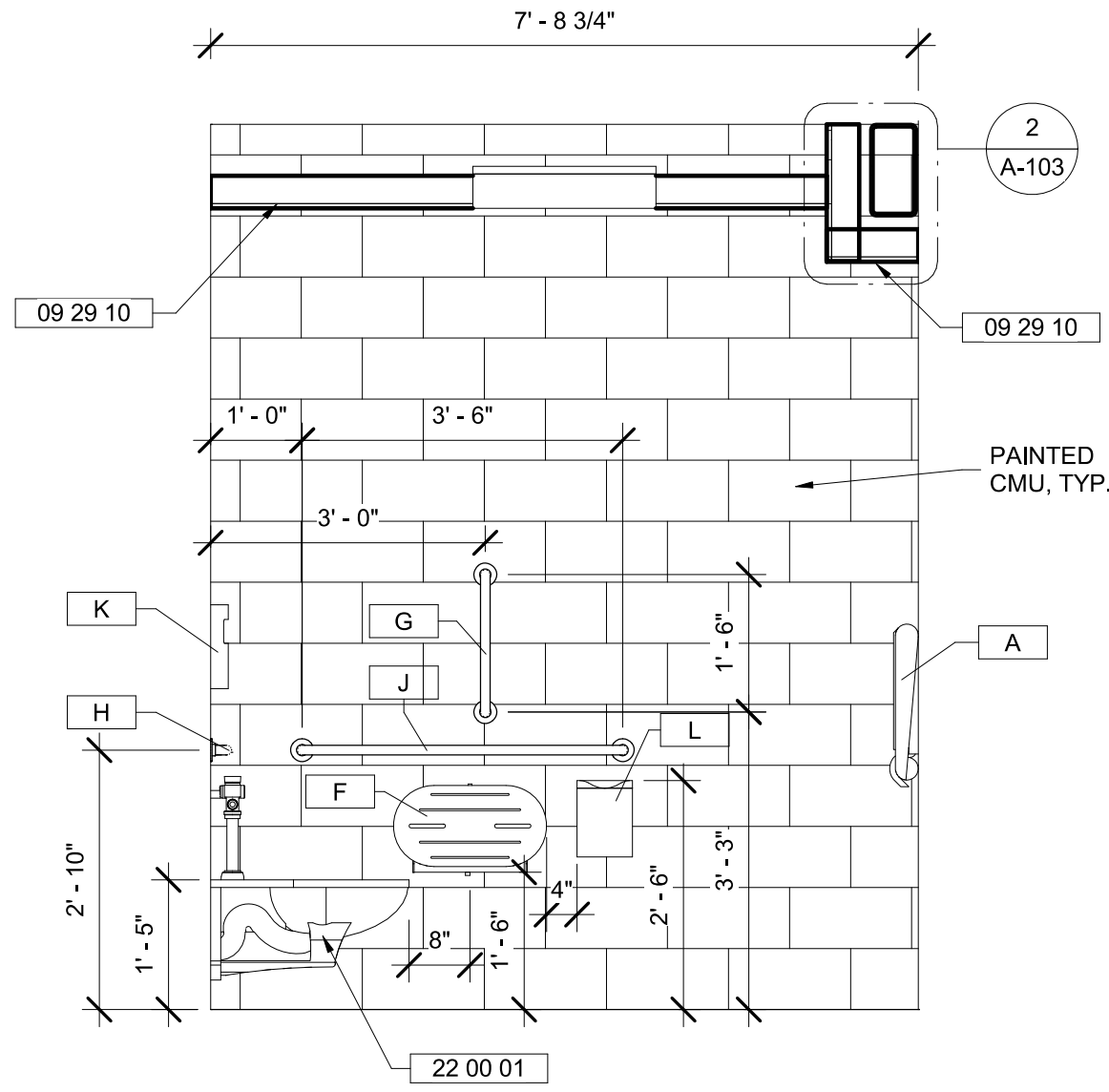
8 RESTROOM 105 - INTERIOR ELEVATION - SOUTH
1/2" = 1'-0"



3 RESTROOM 105 - INTERIOR ELEVATION - NORTH
1/2" = 1'-0"

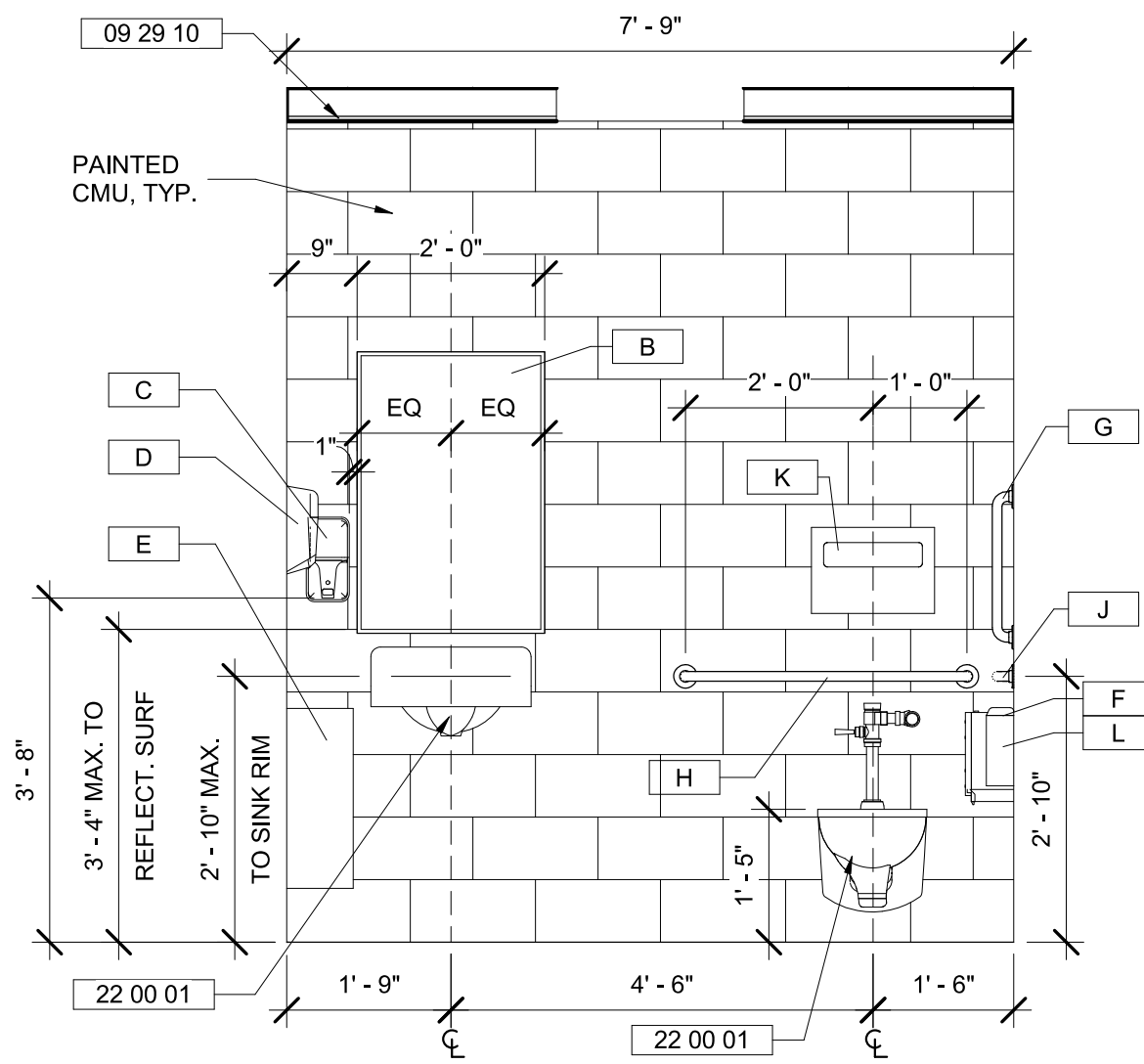


9 RESTROOM 105 - INTERIOR ELEVATION - EAST
1/2" = 1'-0"

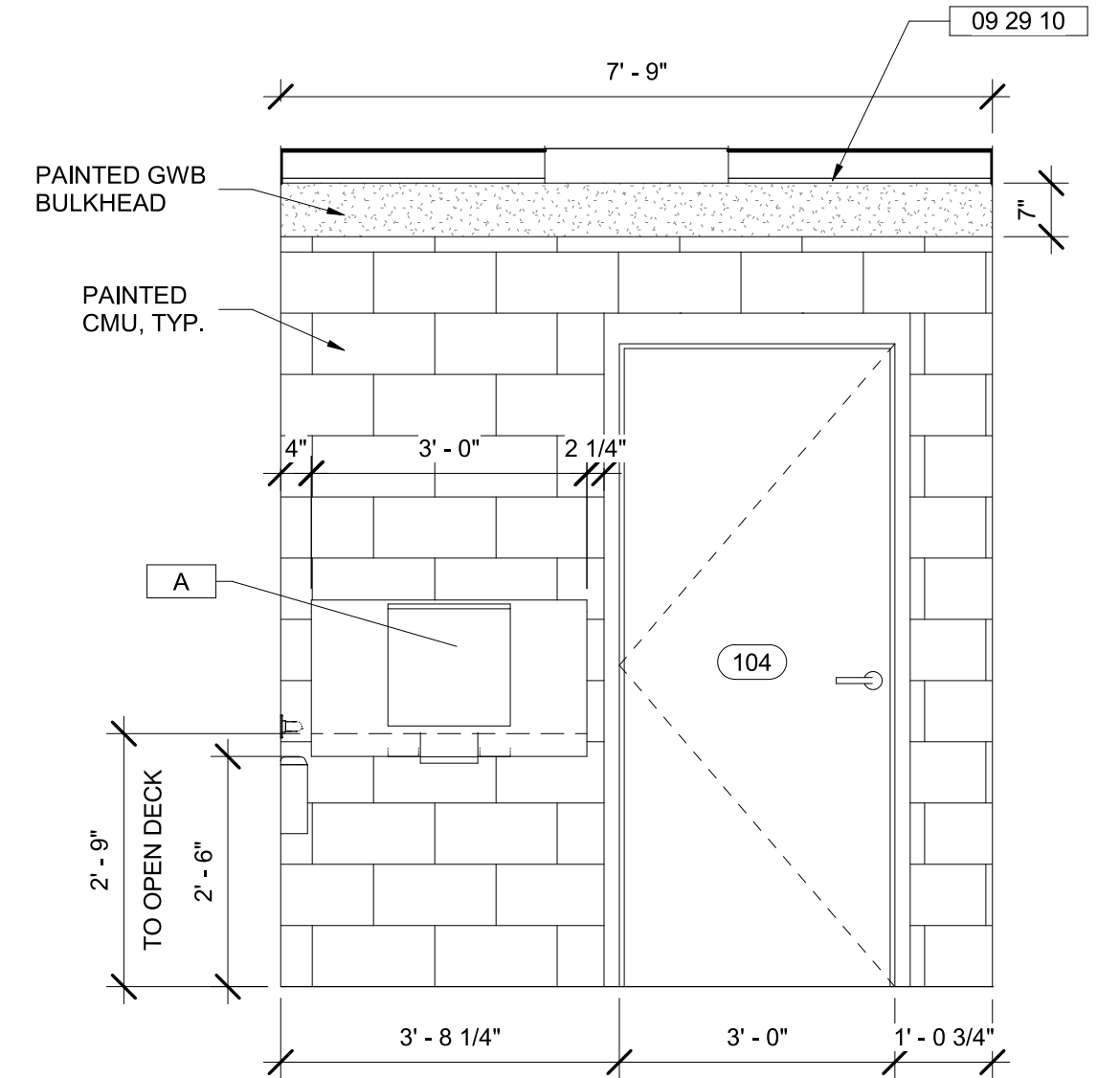


10 RESTROOM 105 - INTERIOR ELEVATION - WEST
1/2" = 1'-0"

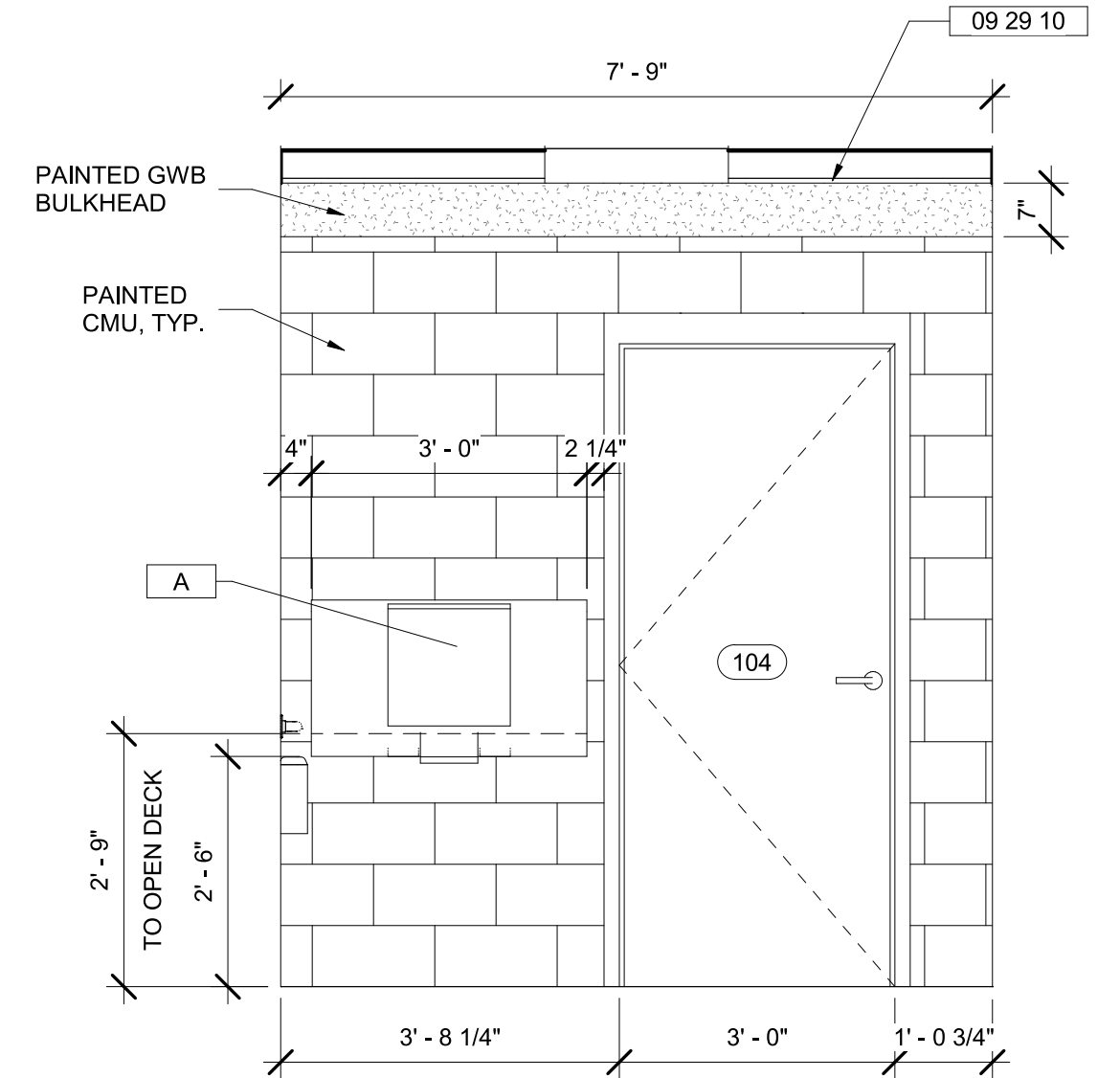
KEYNOTE LEGEND	
TAG	DESCRIPTION
09 29 10	5/8" Gypsum Wallboard Ceiling
22 00 01	Plumbing Fixtures - See Plumbing Drawings
22 42 00	Water Cooler - See Plumbing Drawings



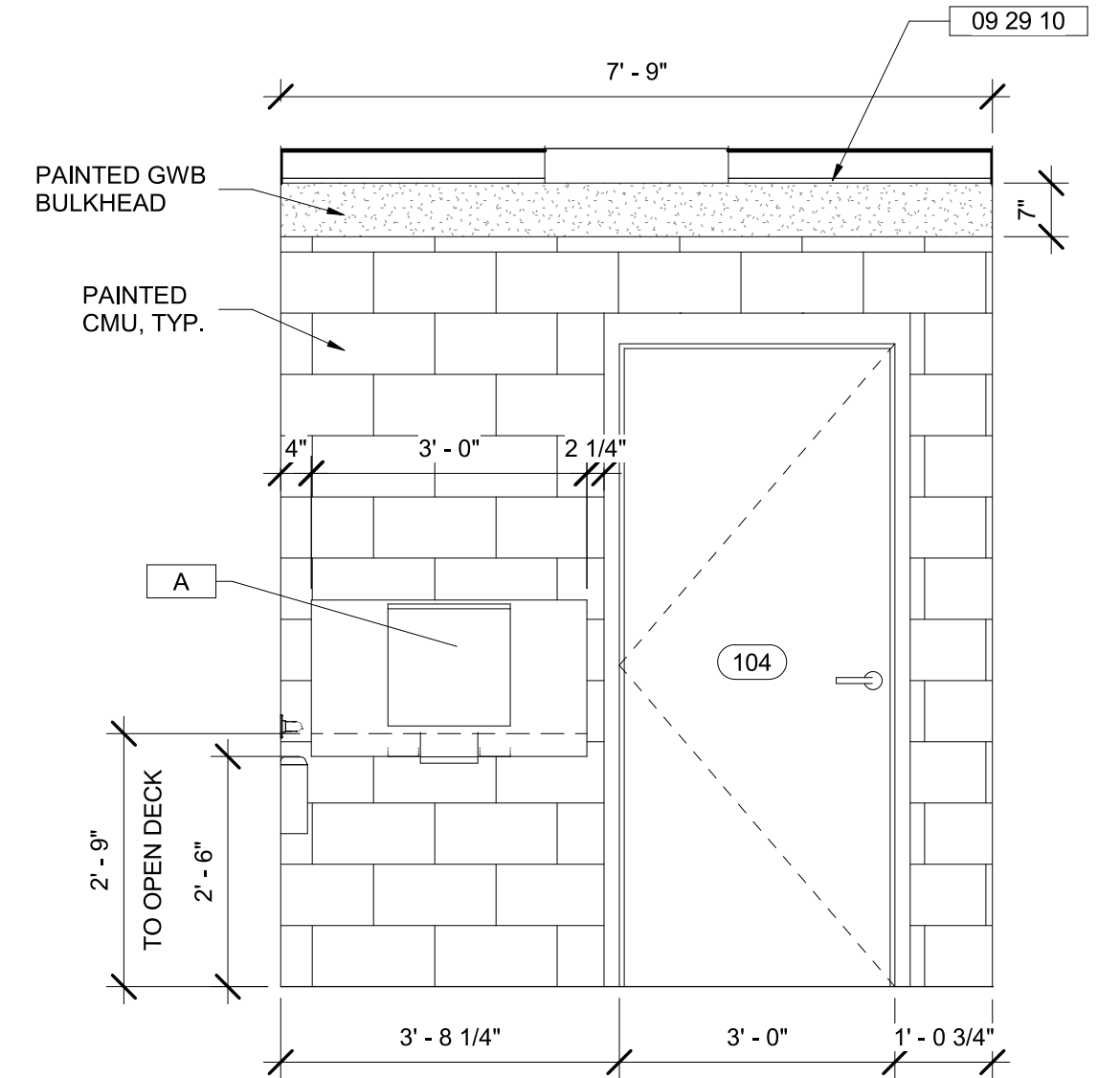
3 RESTROOM 104 - INTERIOR ELEVATION - EAST
1/2" = 1'-0"



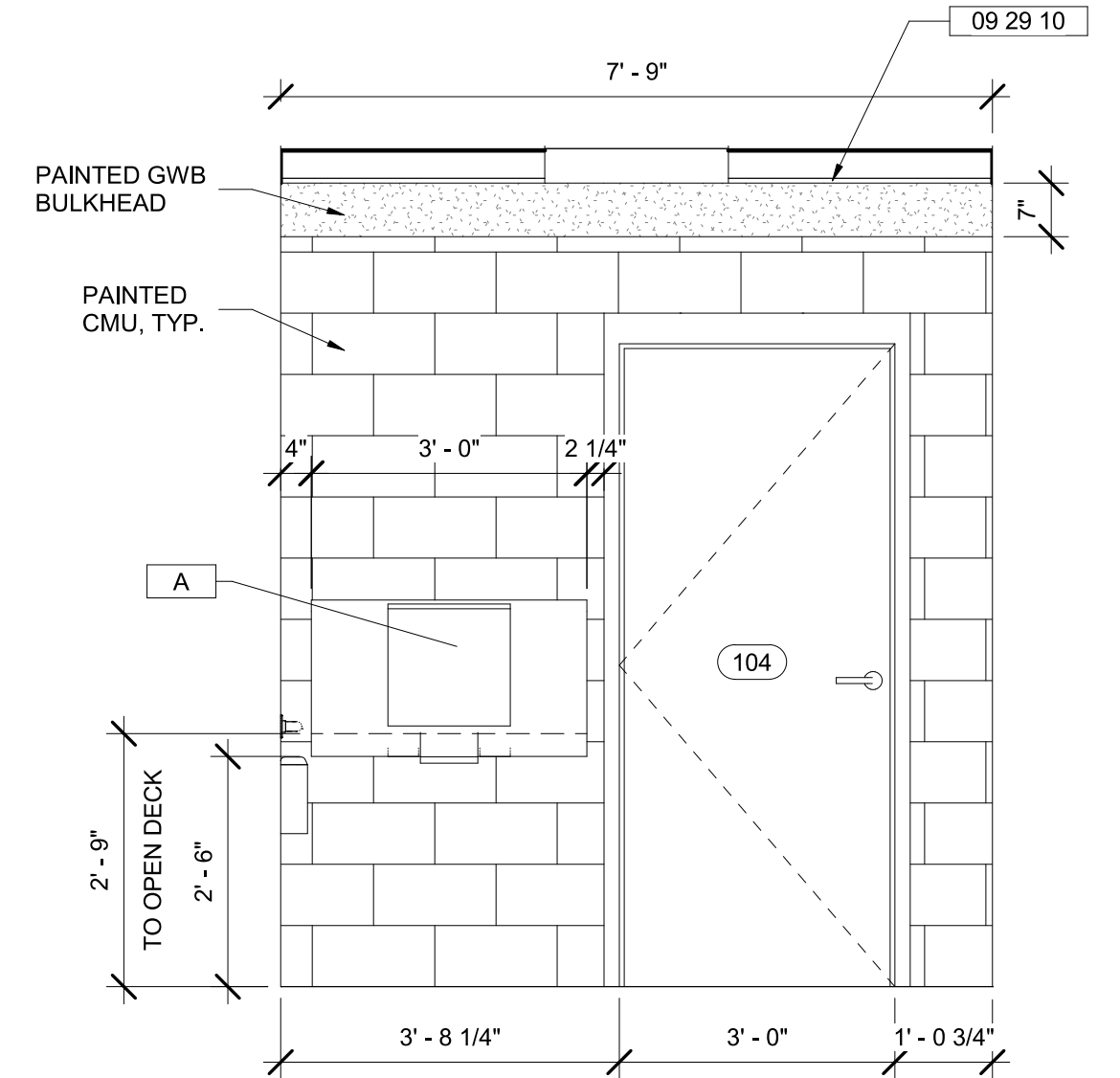
5 RESTROOM 104 - INTERIOR ELEVATION - WEST
1/2" = 1'-0"



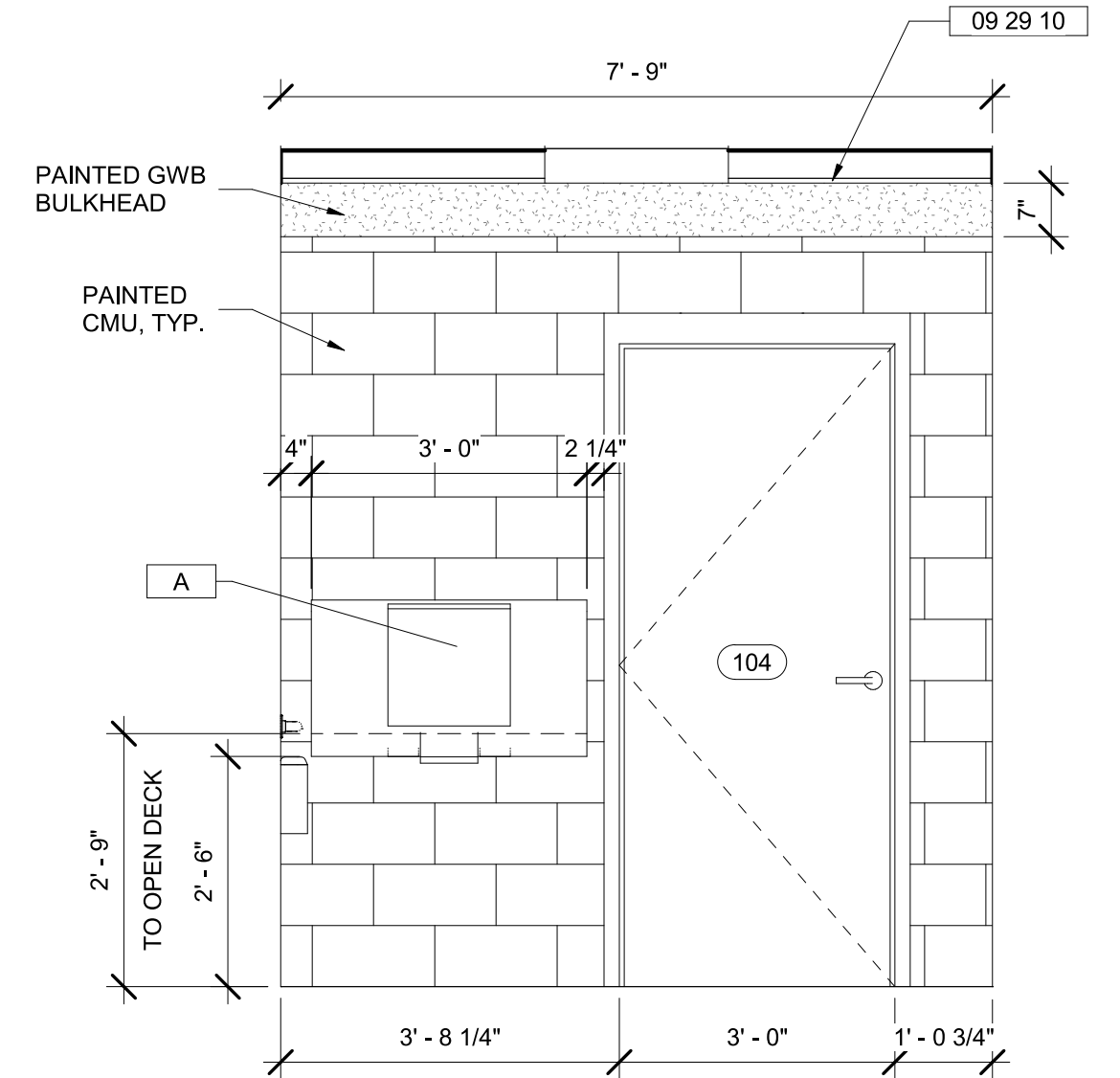
7 RESTROOM 105 - INTERIOR ELEVATION - EAST
1/2" = 1'-0"



9 RESTROOM 105 - INTERIOR ELEVATION - WEST
1/2" = 1'-0"



11 RESTROOM 105 - INTERIOR ELEVATION - NORTH
1/2" = 1'-0"



12 RESTROOM 105 - INTERIOR ELEVATION - SOUTH
1/2" = 1'-0"

BALTIMORE CITY RECREATION & PARKS
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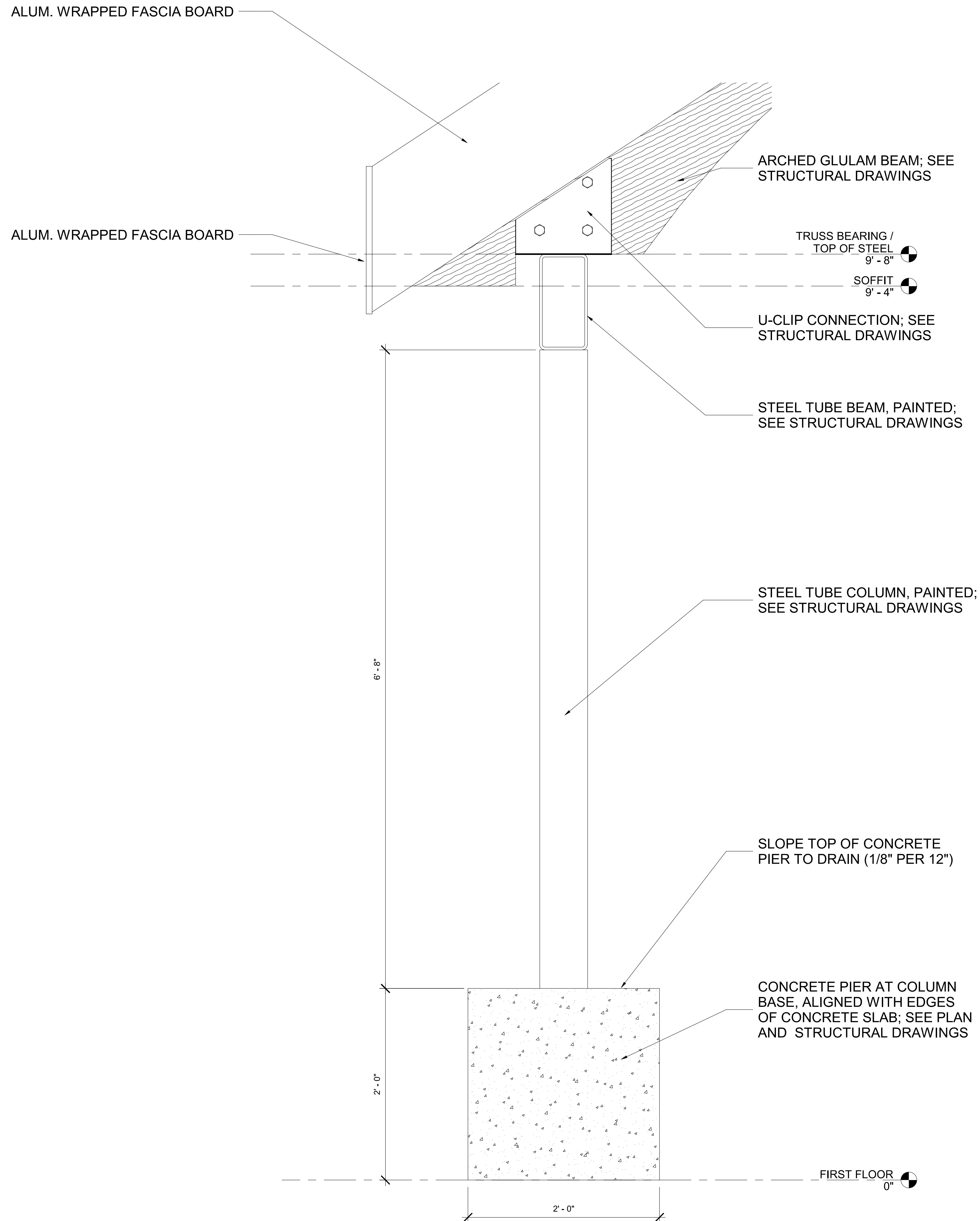
Murphy & Dittenhafer
ARCHITECTS
228 West Market Street, York, Pennsylvania 17401
800 North Charles Street, Baltimore, Maryland 21201
410-625-4823 voice 410-625-4874 fax 717-548-5827 voice

Description	
50% CONSTRUCTION DOCUMENTS	
100% CONSTRUCTION DOCUMENTS	
BID SET	
DATE	
1	8/31/2021
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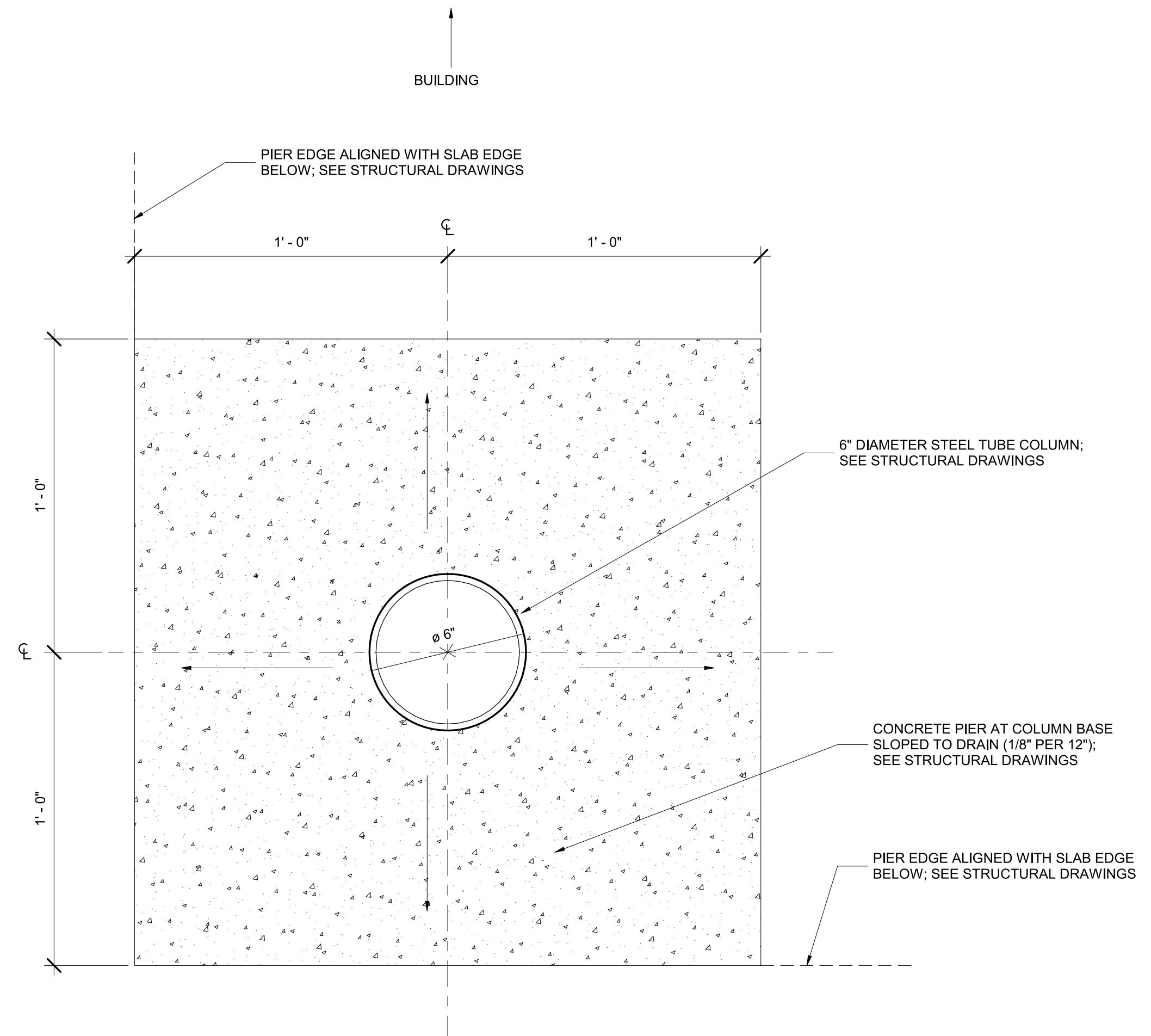
PROJECT NO: 20120
DRAWN BY: NFL/KCG
CHECKED BY: RDT

ENLARGED
PLAN -
RESTROOMS

SHEET
A-402



② ELEVATION - COLUMN
1 1/2" = 1'-0"

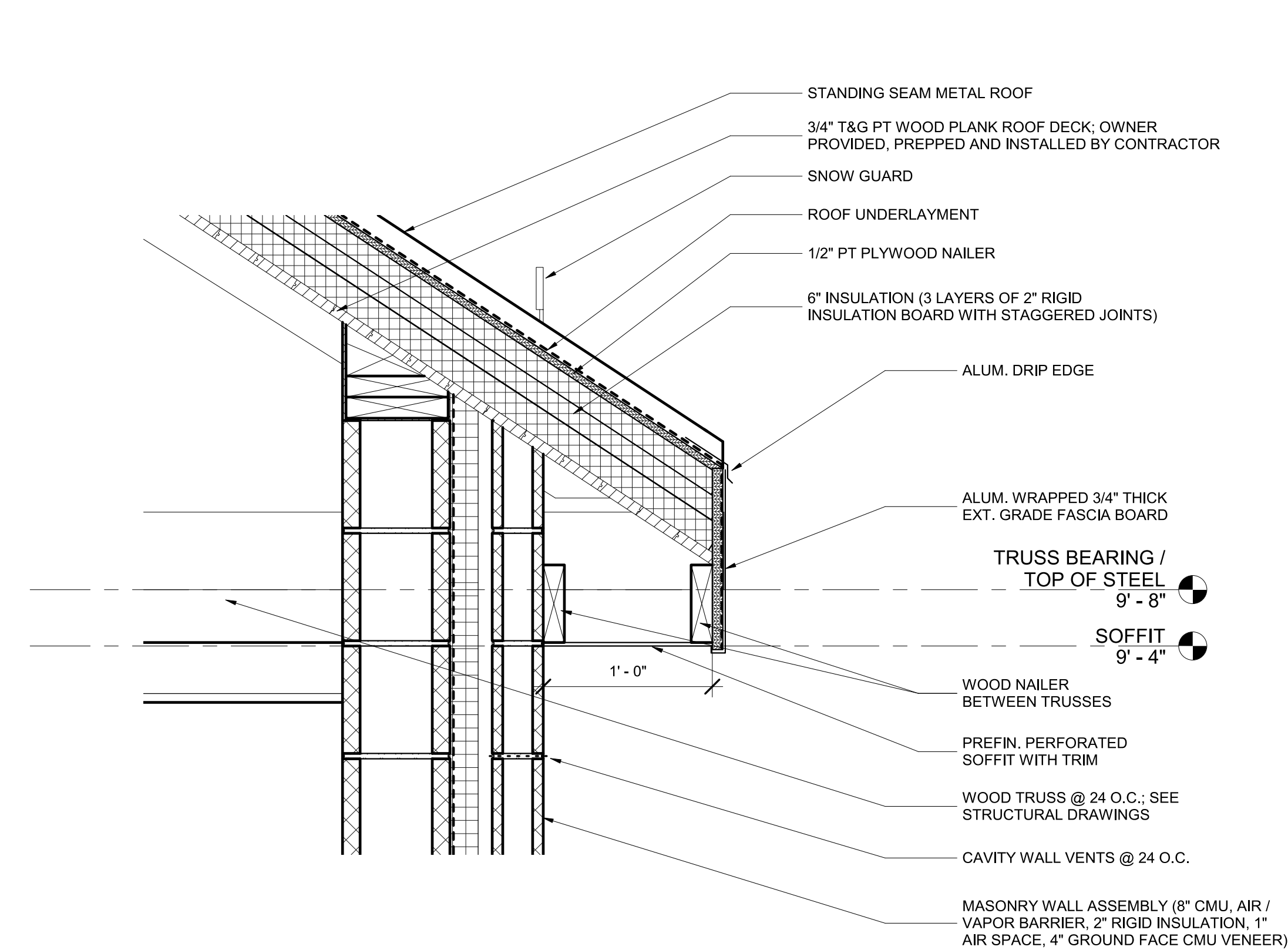


① PLAN DETAIL - COLUMN
3" = 1'-0"

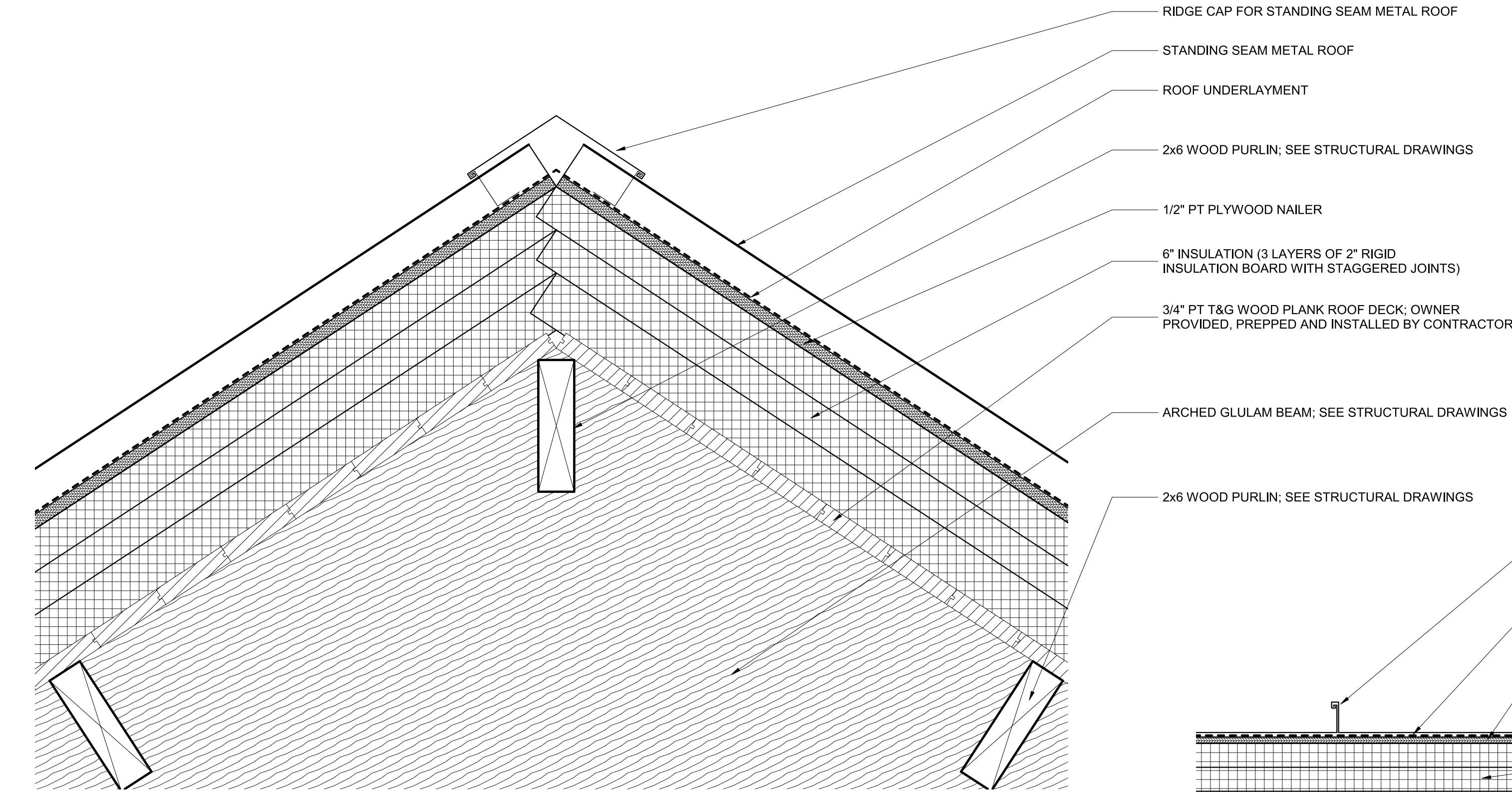
Description	
Mark	Date
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2	12/3/2021
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PROJECT NO:	20120
DRAWN BY:	KCG
CHECKED BY:	RDT

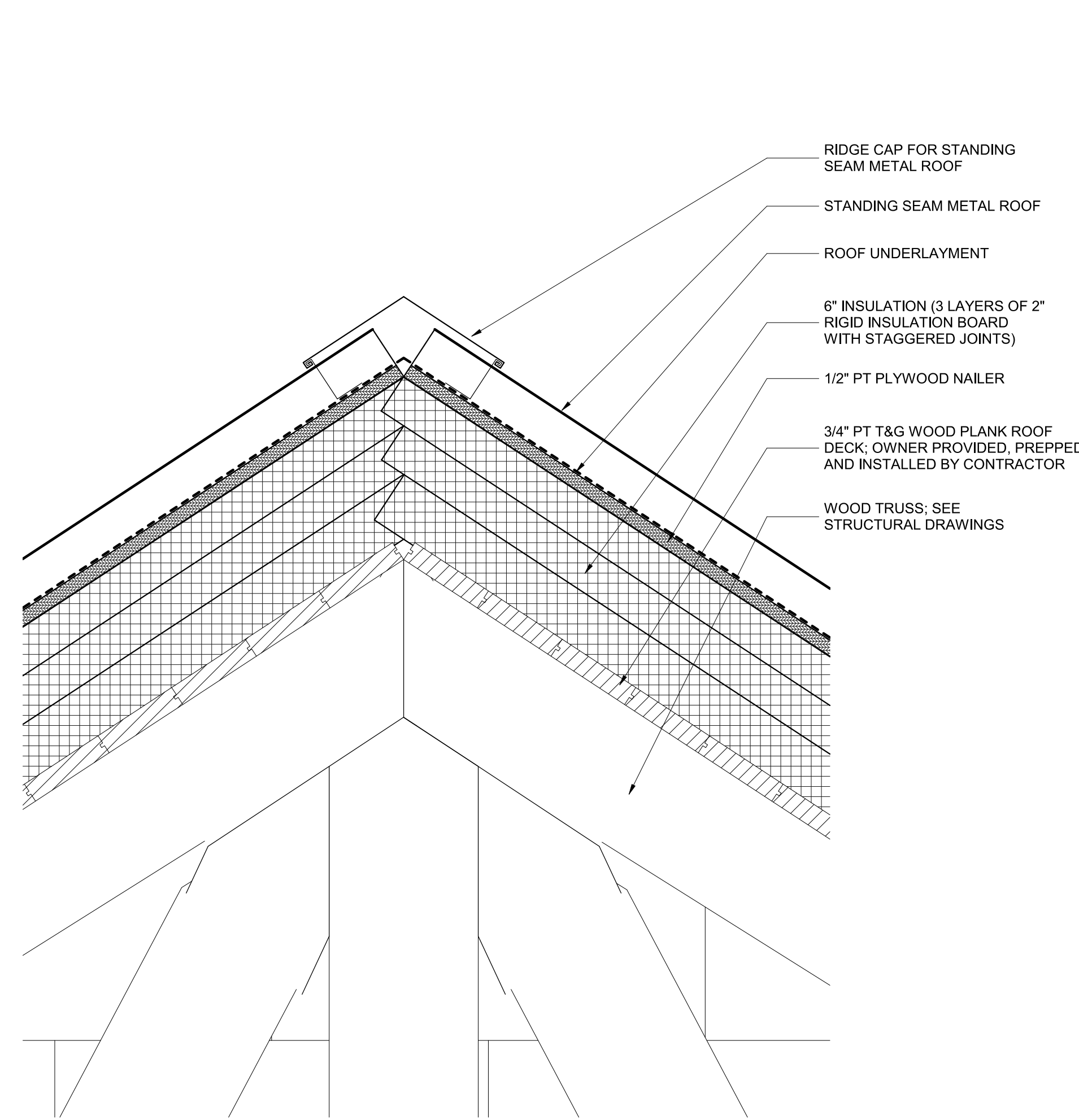
COLUMN PIER
 DETAILS



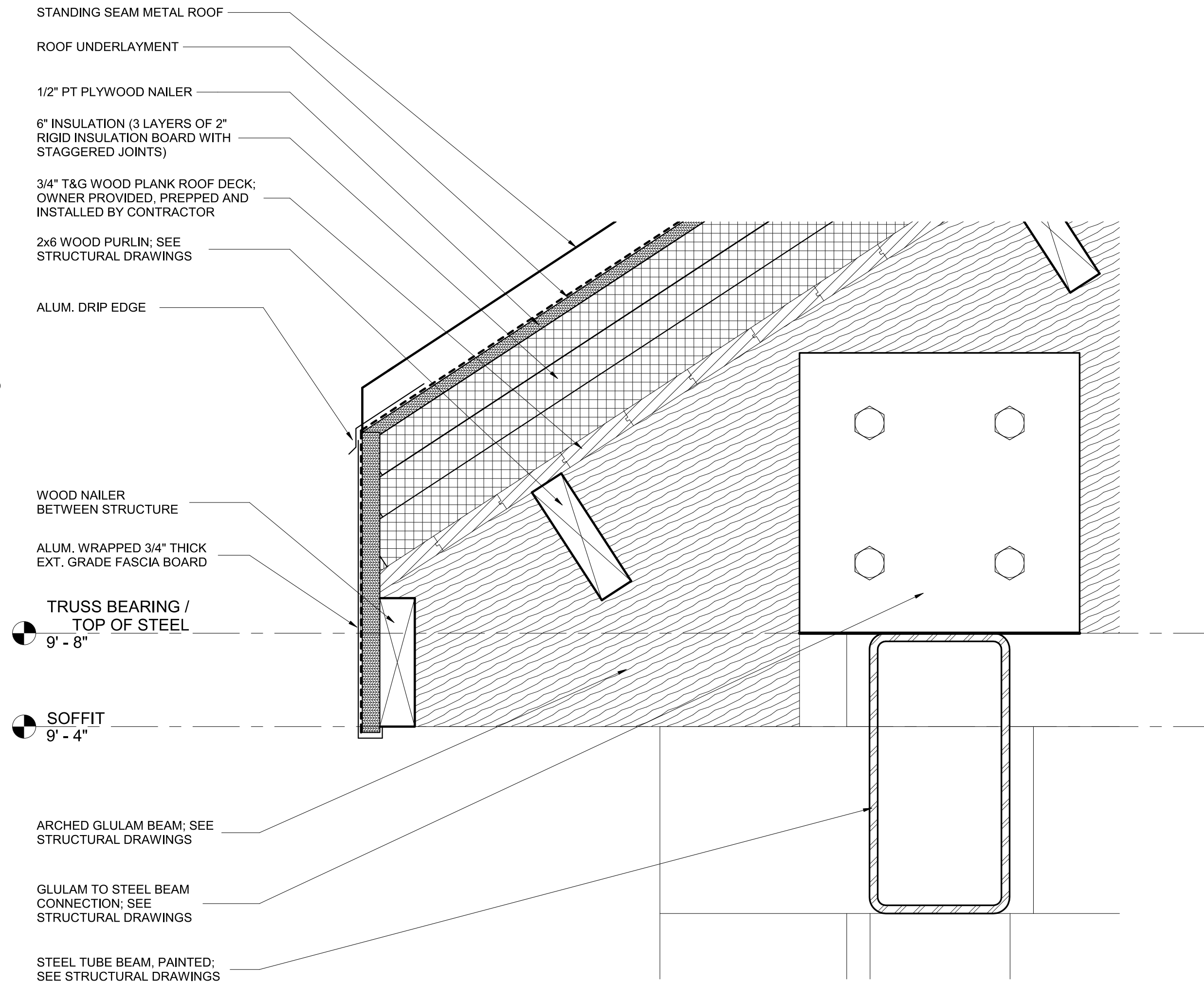
1 SOFFIT DETAIL AT ROOF TRUSSES
1 1/2" = 1'-0"



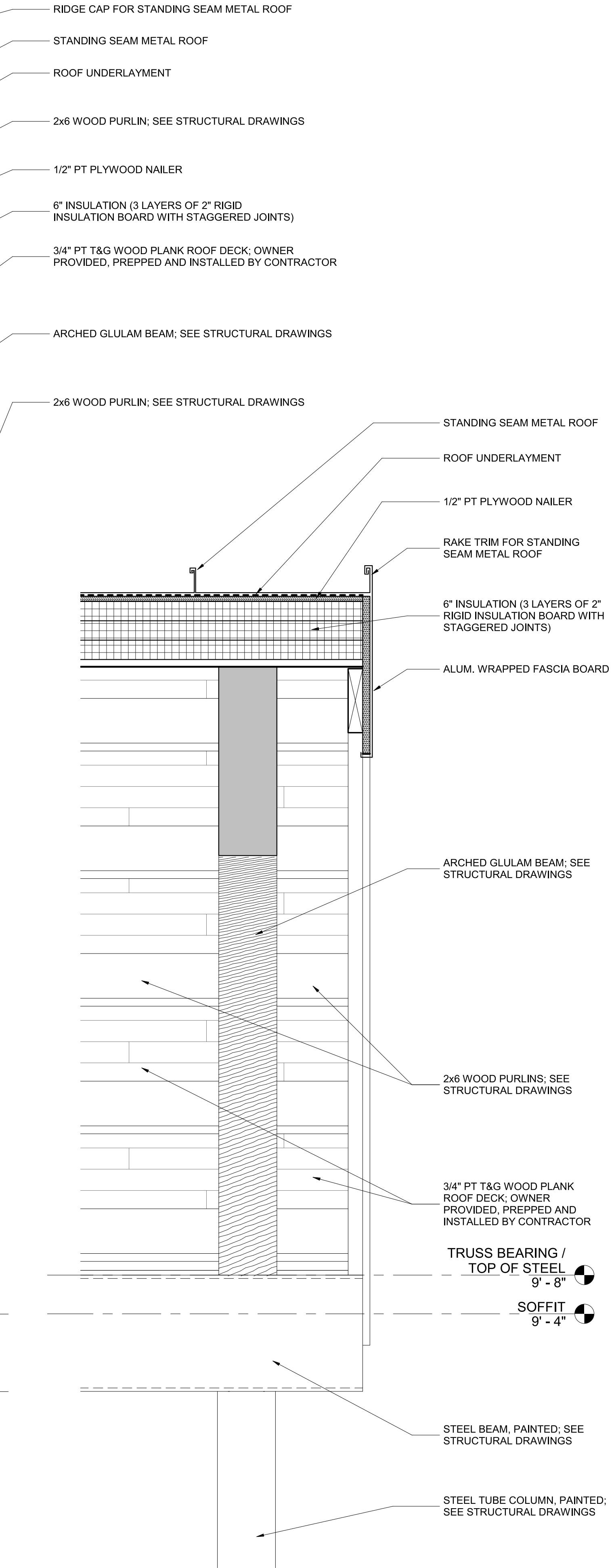
5 RIDGE DETAIL AT GLULAM BEAM
3" = 1'-0"



4 RIDGE DETAIL AT ROOF TRUSSES
3" = 1'-0"



3 ROOF EDGE DETAIL AT GLULAM BEAM
3" = 1'-0"



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

BALTIMORE CITY RECREATION & PARKS
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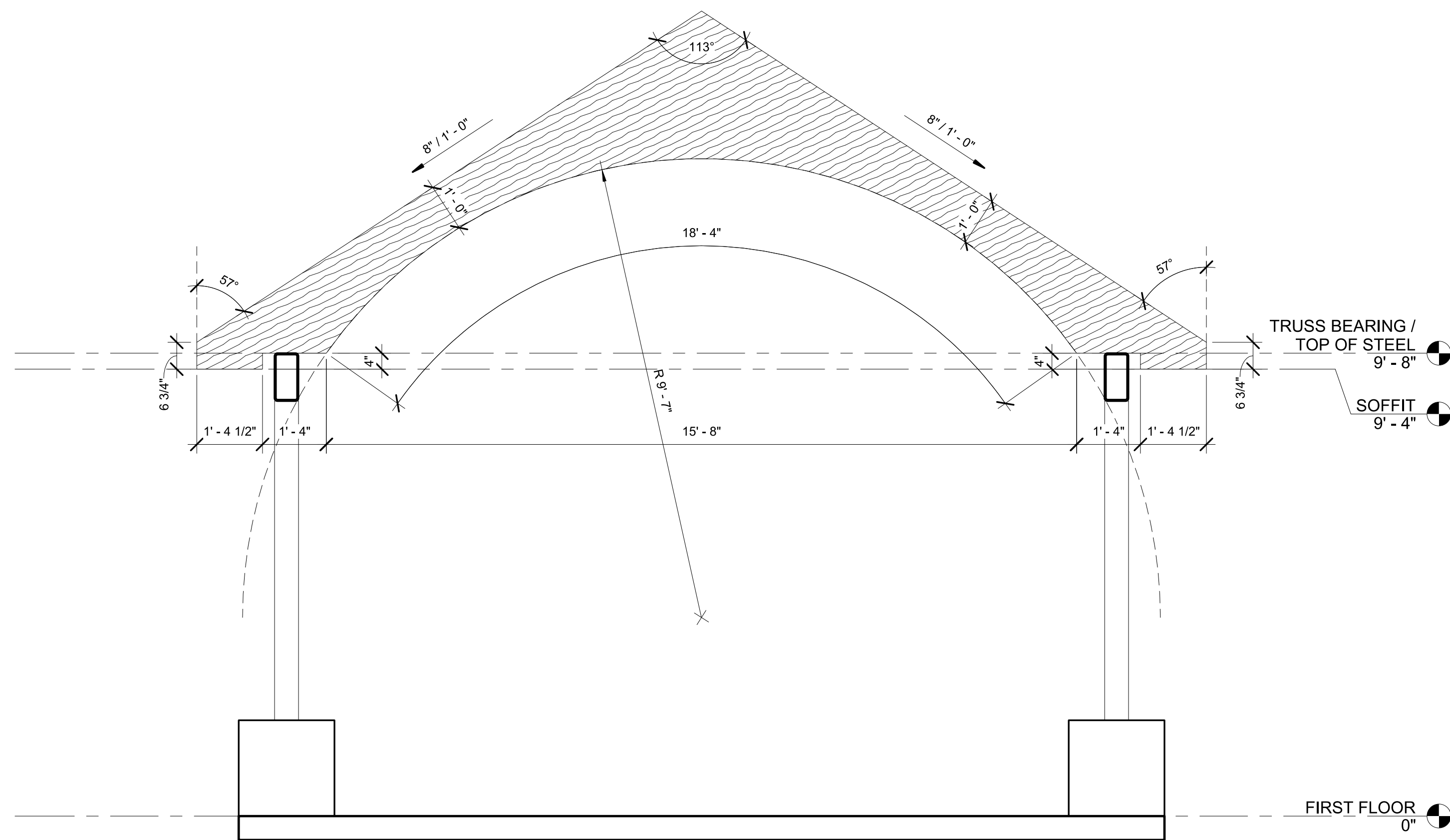
228 West Market Street, York, Pennsylvania 17401
410-625-4825 voice 410-625-4874 fax

Mark	Date	Description	
		50% CONSTRUCTION DOCUMENTS	100% CONSTRUCTION DOCUMENTS
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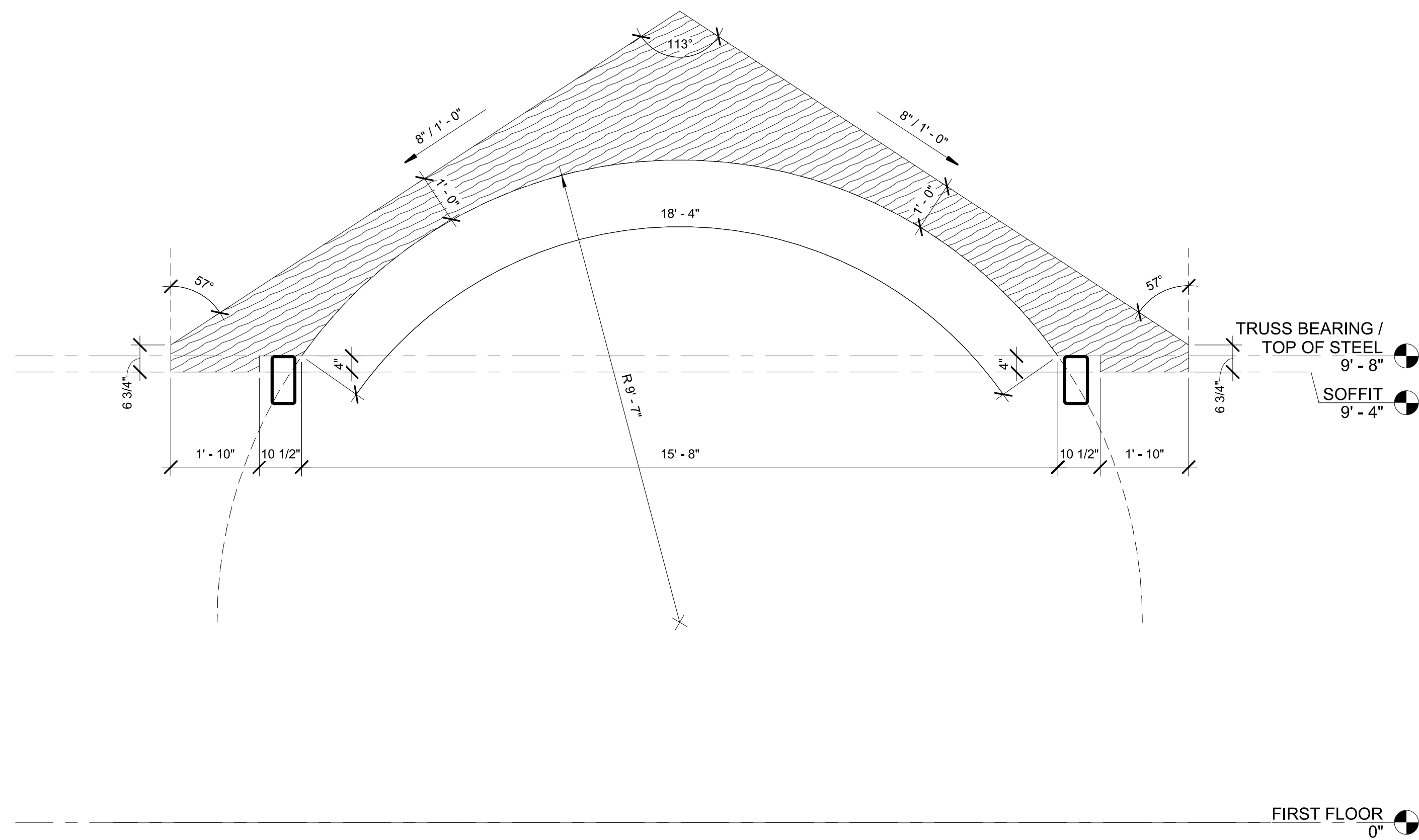
PROJECT NO: 20120
DRAWN BY: KCG
CHECKED BY: RDT

ROOF DETAILS

SHEET
A-502



① GLULAM PROFILE AT COLUMNS
1/2" = 1'-0"



② GLULAM PROFILE AT CANTILEVER
1/2" = 1'-0"

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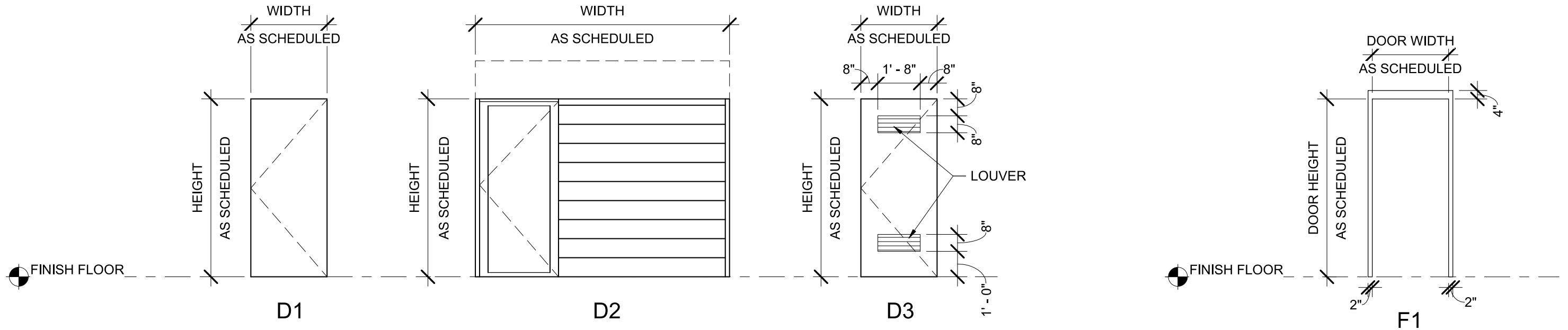
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GLULAM
PROFILES

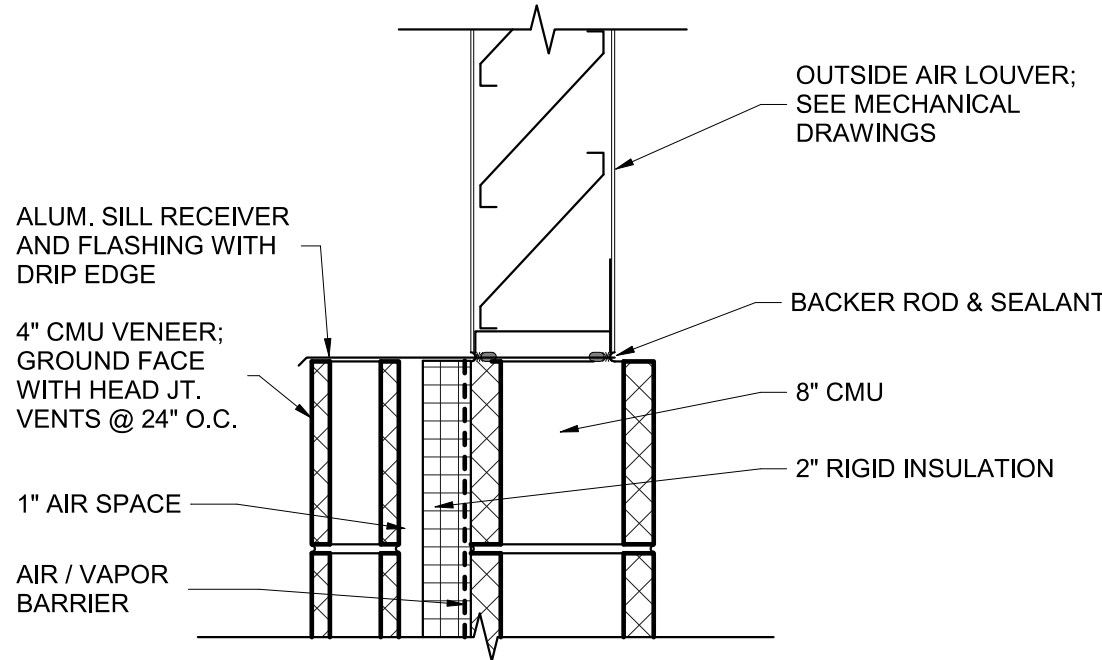
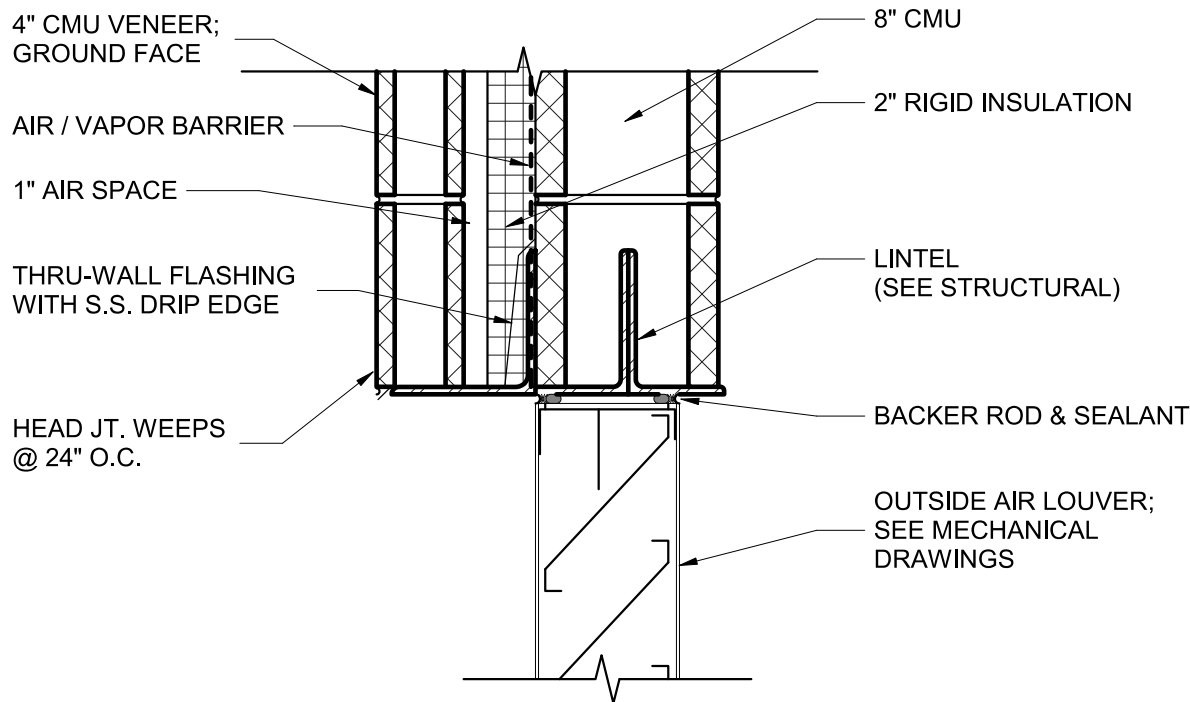
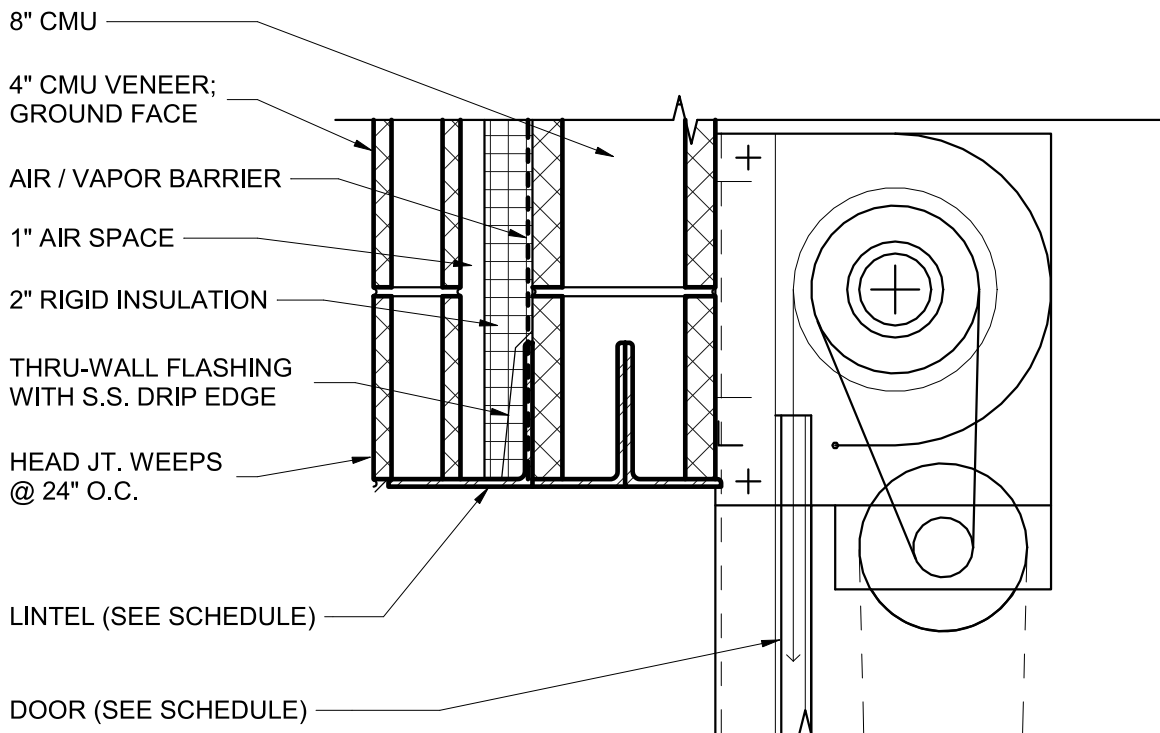
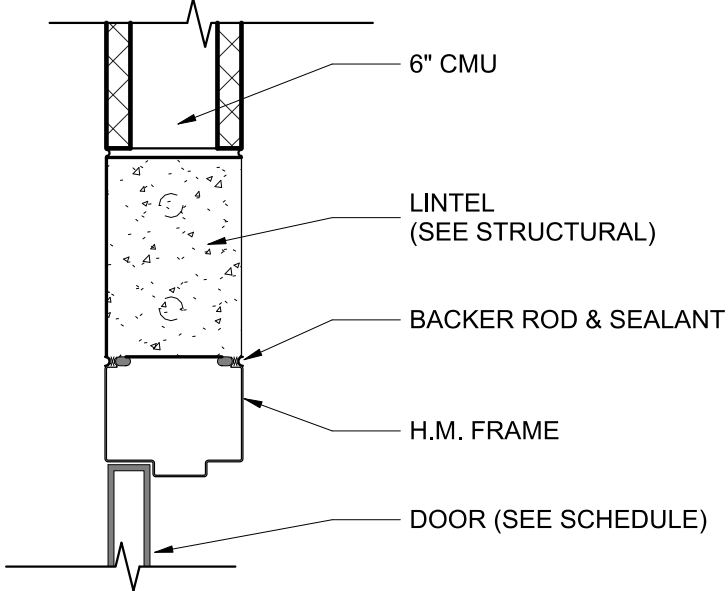
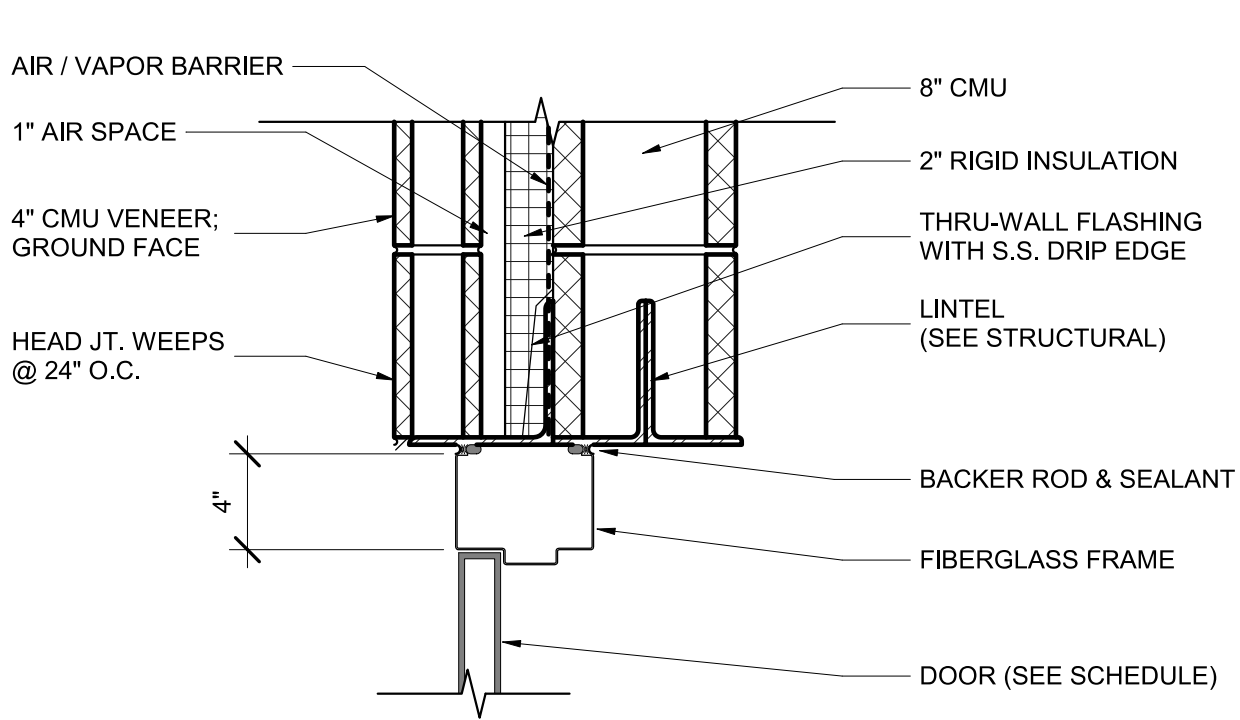
SHEET
A-503

DOOR SCHEDULE													
MARK	Width	Height	Thickness	DOOR		FRAME		CONSTRUCTION DETAILS			HARDWARE SET	FIRE RATING	COMMENTS
				TYPE	MATERIAL	TYPE	MATERIAL	HEAD	JAMB	SILL			
101	10' - 0"	7' - 4"	2"	D2	ALUM	-	ALUM	H3	J3	S2	5	--	OVERHEAD DOOR WITH INTEGRATED MAN DOOR
102	3' - 0"	7' - 0"	1 3/4"	D3	HM	F1	HM	H2	J2	S3	2	--	LOUVER AT TOP AND BOTTOM OF DOOR
103	3' - 0"	7' - 0"	1 3/4"	D1	HM	F1	HM	H2	J2	S3	1	--	
104	3' - 0"	7' - 0"	1 3/4"	D1	FIBERGLASS	F1	FIBERGLASS	H1	J1	S1	4		THERMALLY BROKEN HM FRAME
105	3' - 0"	7' - 0"	1 3/4"	D1	FIBERGLASS	F1	FIBERGLASS	H1	J1	S1	4		THERMALLY BROKEN HM FRAME



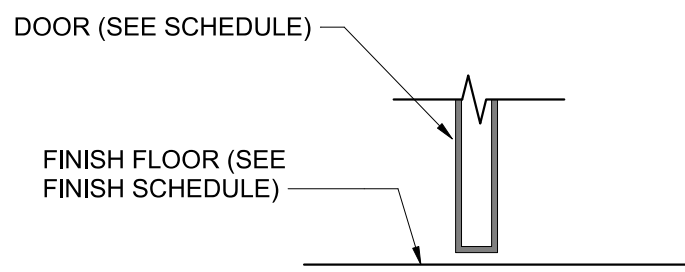
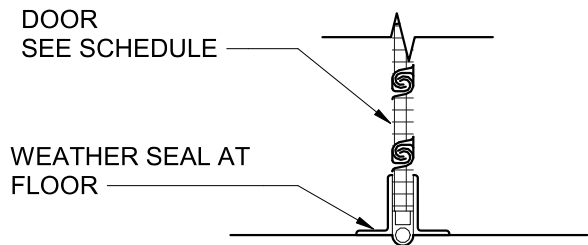
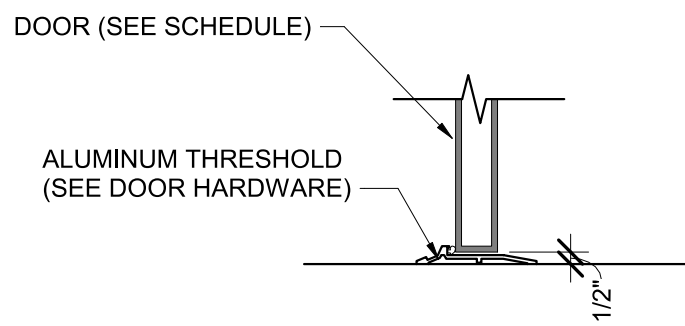
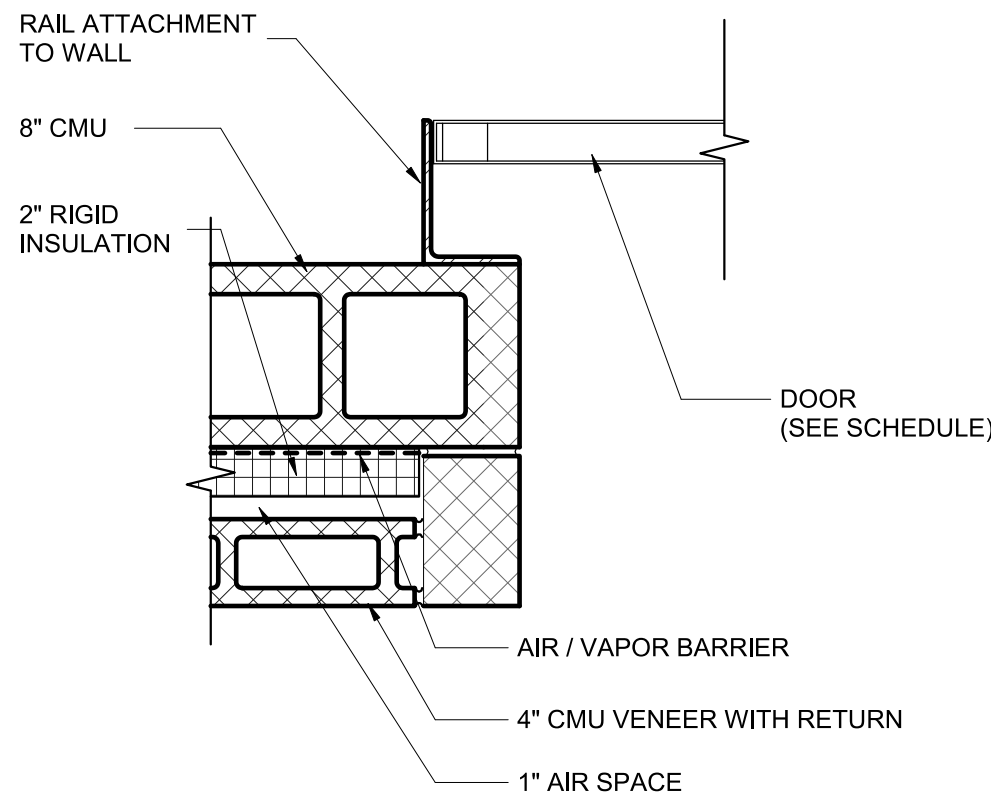
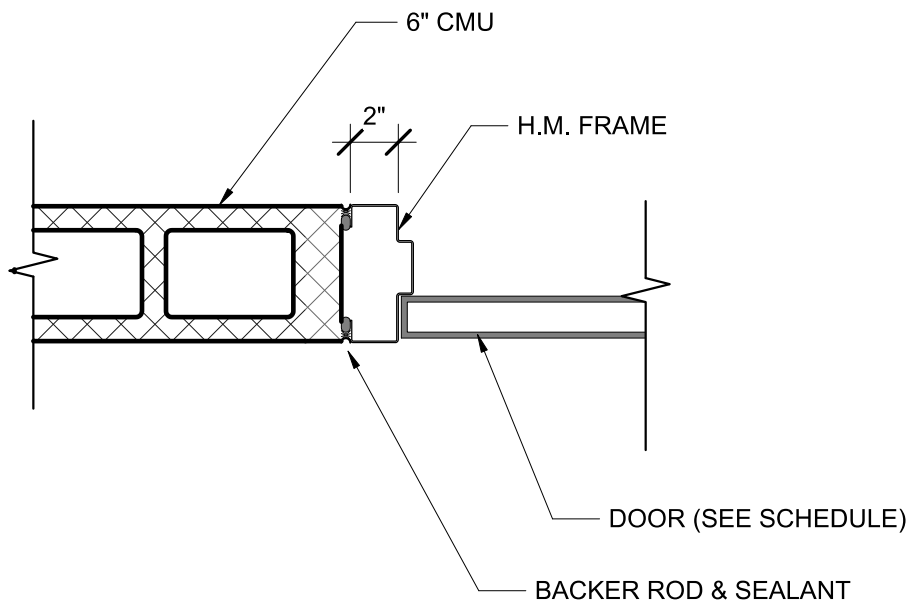
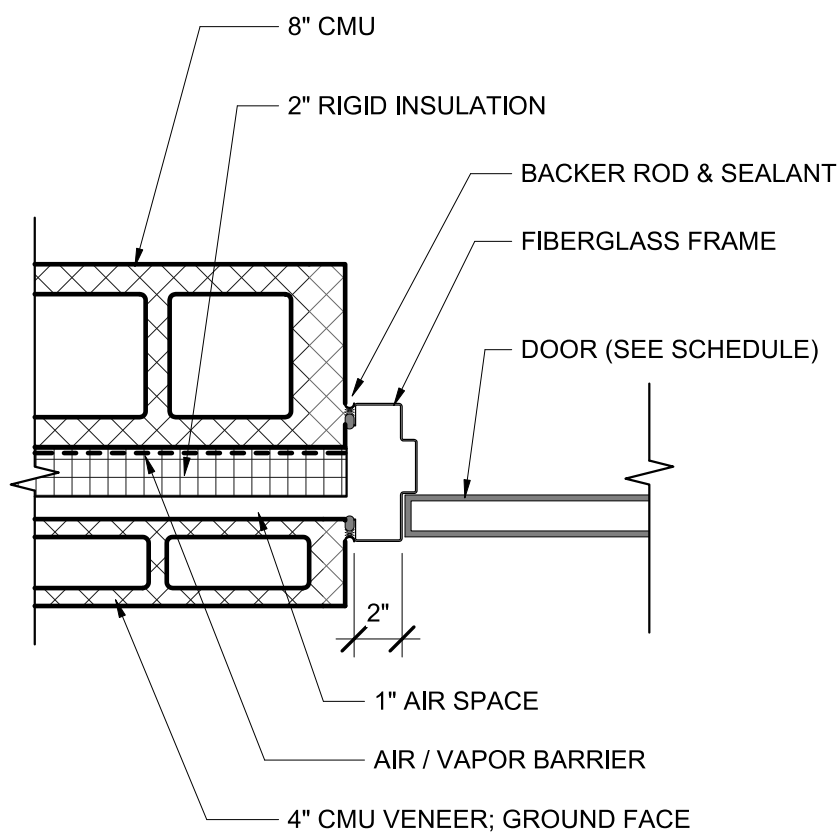
DOOR PANEL TYPES
1/4" = 1'-0"

DOOR FRAME TYPES
1/4" = 1'-0"



DOOR HEAD DETAILS
1 1/2" = 1'-0"

LOUVER DETAILS
1 1/2" = 1'-0"



DOOR JAMB DETAILS
1 1/2" = 1'-0"

DOOR SILL DETAILS
1 1/2" = 1'-0"

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3	8/8/2025	BID SET

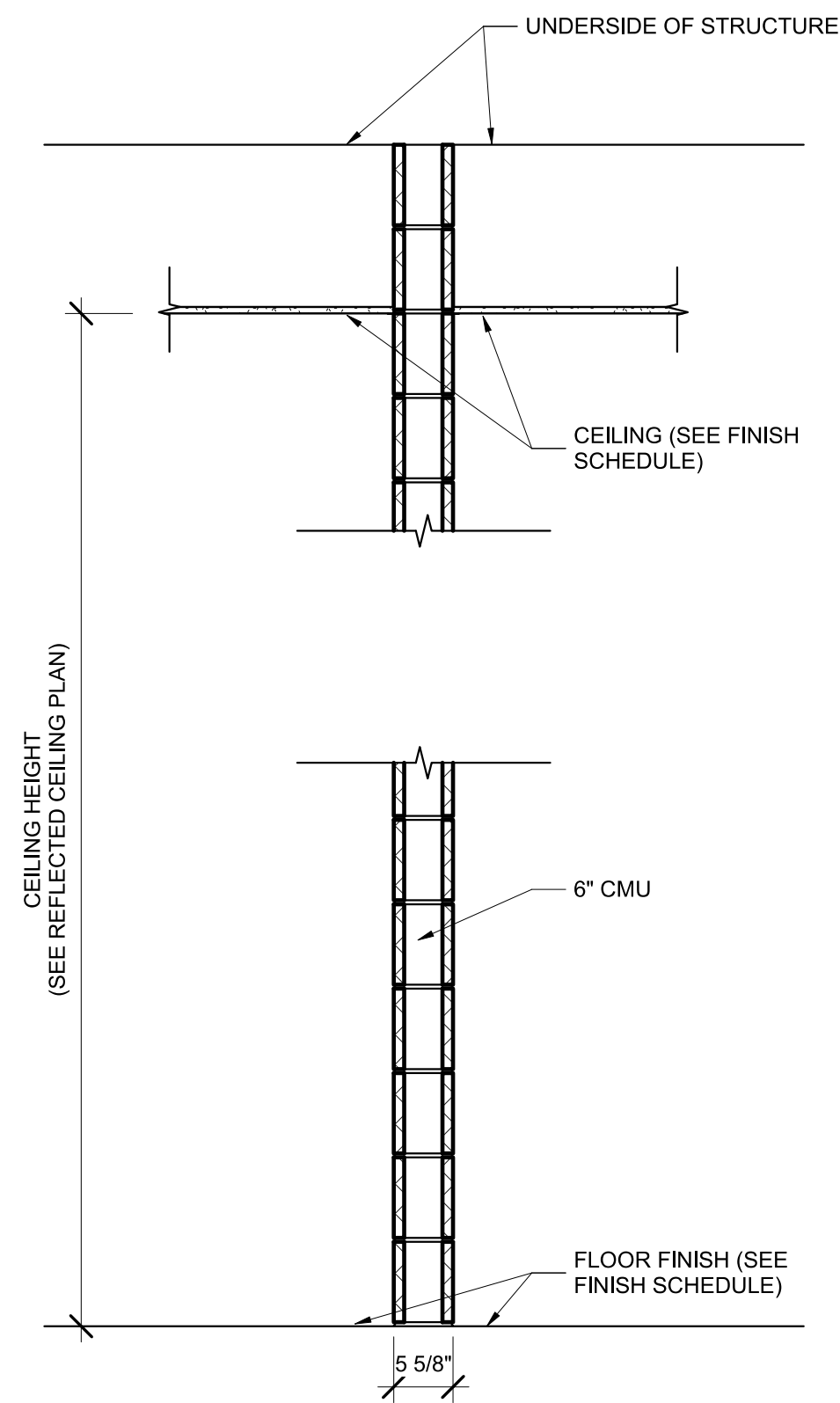
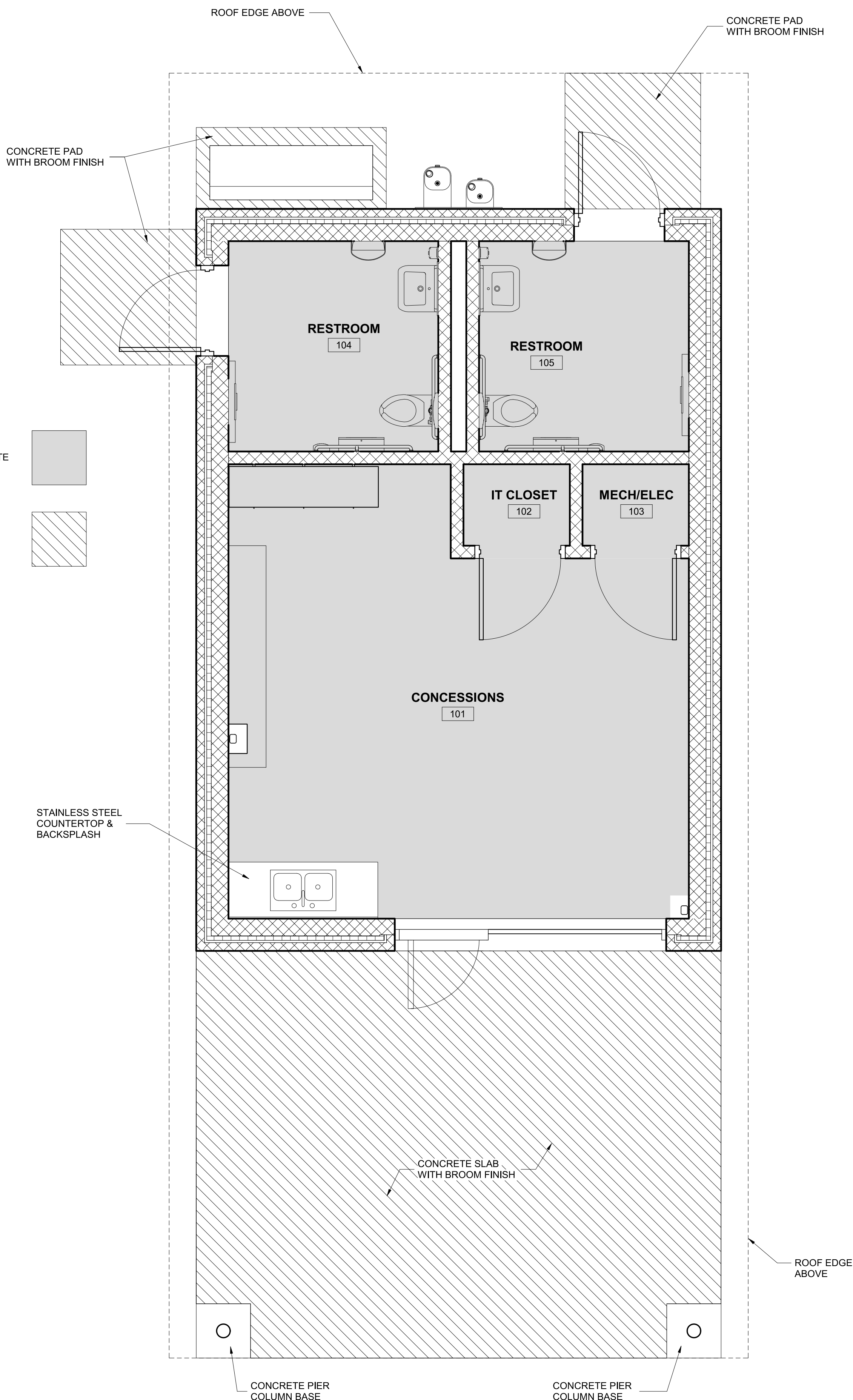
PROJECT NO: 20120
DRAWN BY: NFL/KCG
CHECKED BY: RDT

DOOR
SCHEDULE AND
DETAILS

SHEET
A-601

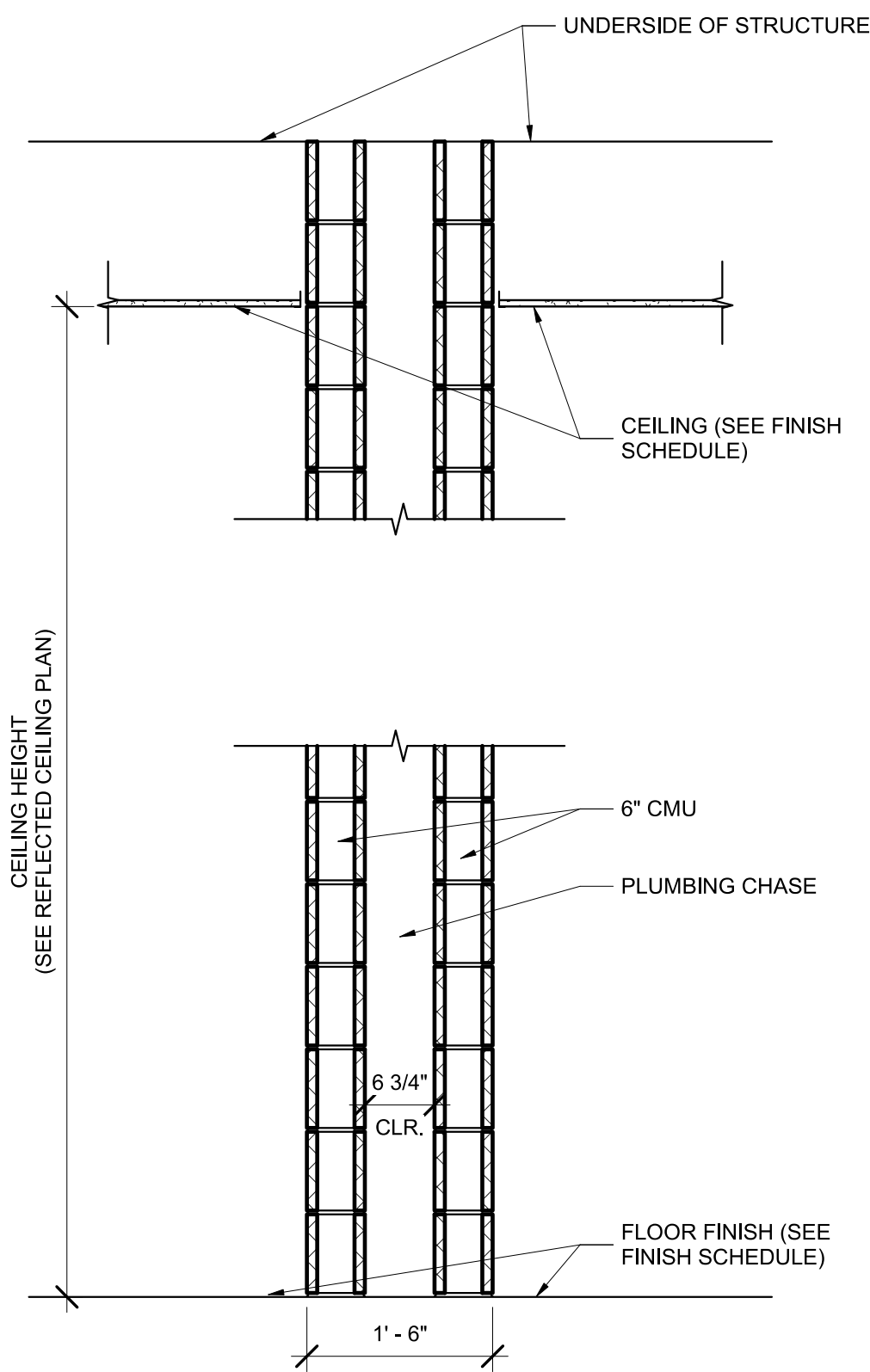
BALTIMORE CITY RECREATION & PARKS
MORRELL PARK FIELD HOUSE
2415 TOLLEY ST., BALTIMORE, MD 21230

ROOM FINISH SCHEDULE													
ROOM NUMBER	ROOM NAME	FLOOR		WALLS								CEILING FINISH	REMARKS
		FINISH	COLOR	NORTH		EAST		SOUTH		WEST			
				FINISH	COLOR	FINISH	COLOR	FINISH	COLOR	FINISH	COLOR		
101	CONCESSIONS	SEALED CONCRETE		PAINT		PAINT		PAINT		PAINT		GWB	5/8" MOLD RESISTANT GWB FOR CEILINGS; PAINT GWB CEILING
102	IT CLOSET	SEALED CONCRETE		PAINT		PAINT		PAINT		PAINT		GWB	5/8" MOLD RESISTANT GWB FOR CEILINGS; PAINT GWB CEILING
103	MECH/ELEC	SEALED CONCRETE		PAINT		PAINT		PAINT		PAINT		EXPOSED	
104	RESTROOM	SEALED CONCRETE		PAINT		PAINT		PAINT		PAINT		GWB	5/8" MOLD RESISTANT GWB FOR CEILINGS; PAINT GWB CEILING
105	RESTROOM	SEALED CONCRETE		PAINT		PAINT		PAINT		PAINT		GWB	5/8" MOLD RESISTANT GWB FOR CEILINGS; PAINT GWB CEILING



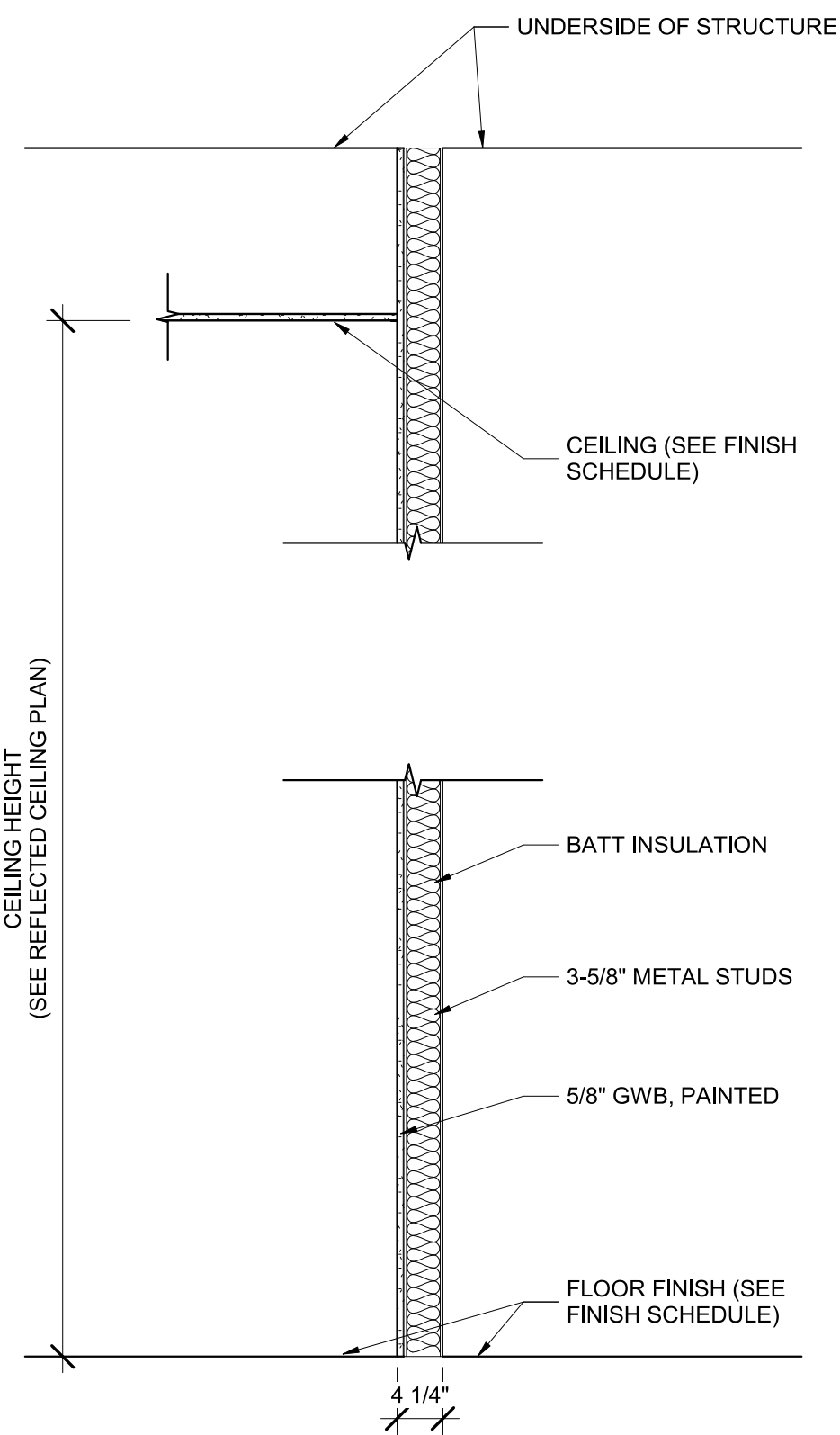
A1

TYPICAL INTERIOR PARTITION



B1

TYPICAL RESTROOM PLUMBING CHASE PARTITION



C1

TYPICAL CHASE PARTITION

2 PARTITION TYPES
3/4" = 1'-0"

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

Murphy & Dittenhafer
ARCHITECTS
228 West Market Street, York, Pennsylvania 17401
410-625-4823 voice 410-625-4874 fax

BALTIMORE CITY RECREATION & PARKS
MORRELL PARK FIELD HOUSE
2415 TOLLEY ST., BALTIMORE, MD 21230

Mark	Date	Description
1	8/31/2021	50% CONSTRUCTION DOCUMENTS
2	12/3/2021	100% CONSTRUCTION DOCUMENTS
3	8/8/2025	BID SET

PROJECT NO: 20120
DRAWN BY: NFL/KCG
CHECKED BY: RDT

PARTITION
TYPES & FINISH
SCHEDULE

SHEET
A-602



ROOM NAME/NUMBER FOR EXAMPLE
ONLY. SEE ROOM SCHEDULE FOR
TEXT

EXTERIOR MOUNTED SIGNS SHALL BE MOUNTED
WITH S.S. SCREWS



INSTALLATION NOTE PER ADA GUIDELINES:
HEIGHT ABOVE FINISH FLOOR OR GROUND -
TACTILE CHARACTERS ON SIGNS SHALL BE
LOCATED 48 INCHES MINIMUM ABOVE THE FINISH
FLOOR OR GROUND SURFACE, MEASURED FROM
THE BASELINE OF THE LOWEST TACTILE
CHARACTER AND 60 INCHES MAXIMUM ABOVE
THE FINISH FLOOR OR GROUND SURFACE,
MEASURED FROM THE BASELINE OF THE
HIGHEST TACTILE CHARACTER.

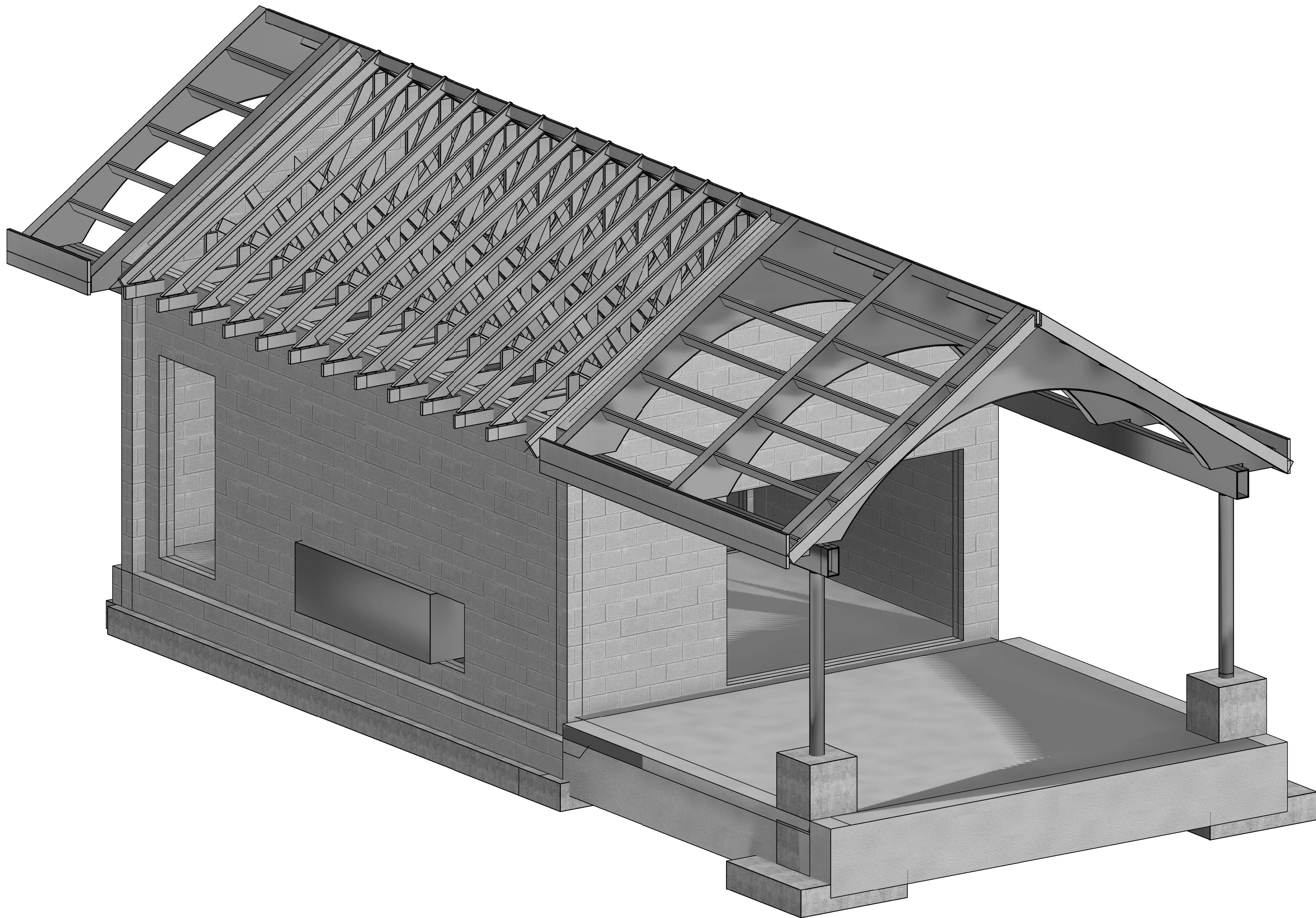


SHEET
A-603

BALTIMORE CITY RECREATION & PARKS
MORRELL PARK FIELD HOUSE
2415 TOLLEY ST., BALTIMORE, MD 21230

Murphy & Dittenhafer

800 North Charles Street, Baltimore, Maryland 21201
410-625-4823 voice 410-625-4674 fax



1 PERSPECTIVE VIEW



I CERTIFY THAT THESE DOCUMENTS WERE PREPARED
OR APPROVED BY ME, AND THAT I AM A DULY LICENSED
PROFESSIONAL ENGINEER UNDER THE LAWS OF THE
STATE OF MARYLAND
NAME: ALAA JABER LICENSE NUMBER: 25342
EXPIRATION DATE: 02.15.2025

Mark	Date	Description
1	08/31/21	50% CONSTRUCTION DOCUMENTS
2	12/03/21	100% CONSTRUCTION DOCUMENTS
3	09/08/25	BID SET

PROJECT NO: 16126
DRAWN BY: AL
CHECKED BY: AJ

PERSPECTIVE

SHEET
S-001

Murphy & Dittenhafer
ARCHITECTS

800 North Charles Street, Baltimore, Maryland 21201
410-625-4823 voice 410-625-4874 fax

BALTIMORE CITY RECREATION & PARKS
MORRELL PARK FIELD HOUSE
2415 TOLLEY ST., BALTIMORE, MD 21230

A. MAJOR CODES AND STANDARDS

1. INTERNATIONAL BUILDING CODE 2018	
2. ASCE 7-16 (Formerly ANSI A58.1)	
3. ACI 318-2014	
4. AISC	ASD/LRFD Current Edition
5. NDS	Current Edition
6. AWS	Current Edition
7. ASTM	Current Edition.

B. DESIGN LOADS

a. LIVE LOADS

GROUND FLOOR	100 psf
ROOF	30 psf Min. + Snow Drift

b. SNOW LOADS

Ground Snow Load	Pg = 30 psf
Snow Exposure Factor	Ce = 1.0
Snow Importance Factor	I = 1.0
Flat Roof Snow Load	Pf = 21 psf

c. LATERAL LOADS

i. Wind

Basic Wind Speed	115 MPH
Wind Exposure Category	C
	II

ii. Seismic

Spectral Response Acceleration at short period:	Ss = 0.139
Design Spectral Response at short period :	Sds = 0.149
Spectral Response Acceleration at 1-sec. period:	S1 = 0.043
Design Spectral Response at 1-Sec. period :	Sd1 = 0.069
Importance Factor I :	Ie = 1.0
Site Class :	D
Building Occupancy Category :	II
Seismic Design Category :	B

Basic Seismic Force Resisting System :	Ordinary Reinforced Masonry Shear Walls
Response Modification Factor :	R = 2.0 For ordinary Reinf. CMU Shear Wall
Deflection Amplification Factor :	Cd = 1.75
Design Base Shear Analysis procedure :	Equivalent Lateral Force Procedure

1. NO PART OF THE BUILDING SHALL BE USED AS A STAGING AREA RESULTING IN A LOAD (UNDER THE LIMITED LOADED AREA) THAT EXCEEDS 75% OF THE DESIGN LIVE LOAD.

C. GENERAL

1. ALL DETAILS, SECTIONS, AND NOTES SHOWN ON DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS ELSEWHERE UNLESS OTHERWISE SHOWN.

2. NO CHANGE IN SIZE, DIMENSIONS OR POSITION OF STRUCTURAL ELEMENTS SHALL BE MADE, NOR SHALL ANY OPENINGS OR SLEEVES BE PERMITTED THROUGH ANY STRUCTURAL ELEMENT, WITHOUT THE APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD, UNLESS THEY ARE DETAILED AND SPECIFICALLY NOTED ON THE STRUCTURAL SHOP DRAWINGS. PROVIDE SEPARATE SHOP DRAWINGS INDICATING ALL THE PENETRATIONS THROUGH STRUCTURAL ELEMENTS FOR APPROVAL, PRIOR TO THE SUBMISSION OF THE SHOP DRAWINGS FOR THE AFFECTED STRUCTURAL

3. REFER TO ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR LOCATIONS AND DIMENSIONS OF CHASES, OPENINGS, SLEEVES, DRIPS, REVEALS, FINISHES, DEPRESSIONS, DOORS, EXP. JOINT FILLER MATERIAL, AND OTHER SUCH PROJECT REQUIREMENTS NOT SHOWN ON STRUCTURAL DRAWINGS.

4. CONTRACTOR SHALL PROVIDE TEMPORARY SHORING AND BRACING AS REQUIRED TO PROPERLY CONSTRUCT THE BUILDING.

5. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS BEFORE STARTING CONSTRUCTION AND/OR SUBMITTING SHOP DRAWINGS FOR APPROVAL. ANY DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT DURING CONSTRUCTION.

6. CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PROTECT EXISTING AND NEW UTILITIES AND SHALL ASSUME FULL RESPONSIBILITY FOR ANY DAMAGE DURING CONSTRUCTION

7. PROVIDE MINIMUM 4" CONCRETE PADS REINFORCED WITH #4@12" E.W. AT ALL EQUIPMENT SUPPORTED ON SLABS ON GRADE OR ON FRAMED FLOORS. (U.O.N.) USE LIGHT WEIGHT CONCRETE FOR ALL THE PADS ON FRAMED FLOORS. PAD SHALL EXTEND MINIMUM 6" ON ALL SIDES OF THE EQUIPMENT.

8. DO NOT SCALE DRAWINGS.

D. EARTHWORK

1. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR SHORING AND BRACING (INCLUDING DETERMINING THE EXTENT AND NEED OF IT) OF THE BUILDING EXCAVATION EMBANKMENT INCLUDING THE EXCAVATION FOR UTILITIES AND FOUNDATIONS, AND IS ALSO FULLY RESPONSIBLE FOR THE DESIGN AND PERFORMANCE OF SHORING AND BRACING DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR DEWATERING CONSTRUCTION AS REQ'D.

2. CONTRACTOR SHALL COORDINATE THE EXTENT OF THE EXCAVATION, SHORING AND BRACING WITH CIVIL DRAWINGS. CONTRACTOR SHALL ALSO REFER TO CIVIL DRAWINGS AND SPECIFICATIONS FOR DEWATERING. FILL UNDER SLAB ON GRADE. STABILITY OF SLOPES AND RELATED INFORMATION NOT COVERED IN THE STRUCTURAL DRAWINGS.

3. IN ACCORDANCE WITH THE REQUIREMENTS OF SPECIFICATION SECTION 312000, CONTRACTORS QUALITY CONTROL, THE CONTRACTOR SHALL EMPLOY AN INDEPENDENT GEOTECHNICAL INSPECTION AGENCY TO INSPECT ALL EARTHWORK, BACKFILLING, COMPACTION REQUIREMENTS AND VERIFY SOIL BEARING CAPACITY AT EACH FOOTING PRIOR TO PLACEMENT OF CONCRETE.

E. FOUNDATION

1. GEO-TECHNICAL REPORT HAS BEEN PREPARED BY _____ DATED ON _____.
2. THE BUILDING FOUNDATION SYSTEM IS SPREAD FOOTING WITH 3 KSF ALLOWABLE BEARING CAPACITY ON NATURAL GROUND (SOIL).
3. MATERIAL MUST BE PROVIDED AS CALLED IN THE SOIL REPORT AND MUST BE CERTIFIED BY A SITE SOIL ENGINEER REGISTERED IN THE STATE OF MARYLAND.
4. LATERAL EARTH EQUIVALENT FLUID PRESSURE USED IS Po = 60 PCF PLUS 0.50 x SURCHARGE LOAD. BACKFILLING MATERIAL MUST BE PROVIDED AS CALLED IN THE SOIL REPORT AND MUST BE CERTIFIED BY THE ON SITE GEOTECHNICAL ENGINEER REGISTERED IN THE STATE OF MARYLAND.

5. FILLS UNDER SLABS ON GRADE SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT RECOMMENDATIONS AND NOTES ON THE DRAWINGS. FILLS UNDER SLABS ON GRADE SHALL BE PROOF ROLLED USING A 10 TON LOADED DUMP TRUCK OR EQUIVALENT PRIOR TO PLACING CONCRETE AND AFTER ANY EXCAVATION NO BACKFILLING IN THE VICINITY HAS BEEN COMPLETED. THEY SHALL BE COMPACTED IN LIFTS NOT EXCEEDING 8" IN LOOSE THICKNESS TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY PER VTM-1 (ASTM D-698). ALL COMPACTION SHALL BE APPROVED BY THE GEOTECH ENGINEER.
6. FOOTINGS MUST BE PLACED ONLY AFTER, AND WITHIN ONE DAY, OF THE APPROVAL OF THE SOIL OR ROCK BEARING CAPACITY BY THE CONTRACTOR'S ON SITE GEOTECHNICAL ENGINEER. ANY SOIL OR ROCK BEARING SURFACE DISTURBED AFTER INSPECTION OR NOT COVERED WITH MINIMUM OF 4" CONCRETE WITHIN THE ABOVE SPECIFIED PERIOD, MUST BE REINSPECTED BEFORE CONCRETE IS PLACED. IF LESSER BEARING CAPACITY VALUE IS ENCOUNTERED AT THE SPECIFIED ELEVATION, THE CONTRACTOR SHALL CONTACT THE EOR. FOR FURTHER DIRECTION PRIOR TO PLACING THE FOUNDATION.

F. CONCRETE

1. ALL CONCRETE SHALL BE CONTROLLED CONCRETE, NORMAL WEIGHT (UNLESS OTHERWISE NOTED) WITH COMPRESSIVE STRENGTH AS FOLLOWS:

SLAB ON GRADE	f'c= 3,500 psi
MUD SLAB	f'c= 2,000 psi
PIERS OR PEDESTALS	f'c= 4,000 psi

2. CONCRETE SHALL NOT BE DROPPED THROUGH REINFORCING STEEL SO AS TO CAUSE SEGREGATION OF AGGREGATES. HOPPERS, VERTICAL CHUTES, OR TRUNKS SHALL BE USED IN SUFFICIENT NUMBERS SO THAT THE FREE UNCONFINED FALL OF CONCRETE SHALL NOT EXCEED SIX FEET AND TO ENSURE THAT THE CONCRETE IS KEPT LEVEL AT ALL TIMES.

3. CLEAN SURFACE AND PROVIDE BONDING COMPOUND PRIOR TO PLACING CONCRETE AGAINST CONCRETE IN PLACE.

4. THE CONTRACTOR SHALL PROVIDE SHOP DWG. FOR SLAB ON GRADE CONTROL JOINTS FOR APPROVAL.

5. ALUMINUM CONDUITS, OR OTHER EMBEDDED ITEMS ARE NOT PERMITTED IN CONCRETE ELEMENTS.

6. CONCRETE MIX DESIGNS SHALL BE MADE BY AN APPROVED LABORATORY FOR ALL CONCRETE AND SHALL BE SUBMITTED TO THE ARCHITECT AND ENGINEER FOR APPROVAL BEFORE USE.

7. CALCIUM CHLORIDE SHALL NOT BE PERMITTED IN CONCRETE IN ANY FORM.

8. ALL KEYS SHALL BE 2"x4" (NORMAL) UNLESS OTHERWISE SHOWN ON THE DRAWINGS.

9. IF CONTROL JOINTS ARE CUT INTO SLAB ON GRADE, SOFT-CUT METHOD SHALL BE USED. JOINTS MUST BE CUT WITHIN 2 HOURS OF THE END OF FINISHING OPERATIONS.

10. CONCRETE CAST ON SLOPED SURFACES SHALL BEGIN AT THE LOWEST ELEVATION AND CONTINUE MONOLITHICALLY TOWARD THE HIGHER ELEVATION UNTIL THE INTENDED POUR IS COMPLETED.

11. PROVIDE 3/4" CHAMFER ON ALL EXPOSED CONCRETE EDGES UNLESS OTHERWISE NOTED ON ARCHITECTURAL PLANS AND SPECIFICATIONS.

G. REINFORCING STEEL

1. ALL REINFORCING STEEL, INCLUDING STIRRUPS AND TIES, SHALL BE HIGH STRENGTH, NEW BILLET STEEL CONFORM TO ASTM A-616GRADE 60 ALL REINFORCING TO BE WELDED SHALL CONFORM TO ASTM A-706 GRADE 60.

2. U.O.N. ON STRUCTURAL DRAWINGS, PROVIDE MINIMUM CONCRETE PROTECTION FOR REINFORCING, AS FOLLOWS:

CAST AGAINST EARTH	3"
EXPOSED TO EARTH OR WEATHER:	
#5 and smaller bars and W.W.F.	1-1/2"
#6 and larger bars	2"
NOT EXPOSED TO EARTH OR WEATHER:	
SLABS AND WALLS:	
#11 and smaller bars and W.W.F.	3/4"
BEAMS, PIERS AND COLUMNS:	1-1/2"

3. WHERE CONSTRUCTION JOINTS ARE PROVIDED, THE REINFORCEMENT SHALL PASS CONTINUOUSLY THROUGH THE JOINT AND ADEQUATE SHEAR TRANSFER REINFORCEMENT SHALL BE PROVIDED.

4. W.W.F. SHALL HAVE ENDS LAPPED ONE FULL PANEL +2" AND SHALL BE WIRED TIED.

5. ALL WELDING OF REINFORCING TO BE DONE WITH E90XX ELECTRODES IN ACCORDANCE WITH LATEST A.W.S. SPECIFICATIONS FOR REINFORCING STEEL.

H. STRUCTURAL STEEL

1. ALL STRUCTURAL W SHAPE STEEL SHALL CONFORM TO ASTM SPECIFICATIONS A-992 OR A-572 GRADE 50 (50G) FOR WHICH MILL TEST REPORT SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER.

2. TUBES SHALL CONFORM TO ASTM A-500 GRADE B. AND PILES SHALL CONFORM TO ASTM A53.

3. HIGH STRENGTH STEEL BOLTS SHALL CONFORM TO ASTM A-325 OR A-490. ANCHOR BOLTS SHALL CONFORM TO ASTM F1554.

4. STEEL CONNECTIONS:

a. ALL CONNECTIONS SHALL BE DESIGNED USING ALLOWABLE STRESS DESIGN, THE PLANS PLUS 10%.

b. THE CONNECTIONS SHALL BE DESIGNED FOR THE REACTIONS INDICATED ON THE PLANS PLUS 10%.

IN CASE WHERE REACTIONS ARE NOT INDICATED, THE REACTIONS SHALL BE CALCULATED AS FOLLOWS:

(a) FOR NON-COMPOSITE BEAMS/GIRDERS THE REACTIONS SHALL BE HALF THE TOTAL UNIFORM LOAD CAPACITY SHOWN ON AISC MANUAL "TABLES FOR ALLOWABLE LOADS ON BEAMS" FOR THE GIVEN STEEL SECTIONS AND SPAN.

c. NO CONNECTION SHALL BE DESIGNED FOR LESS THAN 10 KIPS OF REACTION.

d. BOLTS USED SHALL NOT BE SMALLER THAN 3/4" IN DIAMETER.

e. ANY "SLIP CRITICAL" CONNECTIONS REQUIRED SHALL BE MADE BY THE USE OF "TWIST OFF TENSION CONTROL TYPE BOLTS" CONFORMING TO ASTM F 1852.

f. THE MINIMUM NUMBER OF BOLT ROWS PER CONNECTION SHALL BE PER THE FOLLOWING TABLE:

NOMINAL BEAM DEPTH	MINIMUM # OF ROWS
6, 8, 10, 12	2
14, 16, 18	3

g. STIFFENED OR UN-STIFFENED SEATED CONNECTIONS ARE NOT ALLOWED.

h. SINGLE PLATE SHEAR CONNECTIONS, ARE PERMITTED ONLY IN ACCORDANCE WITH THE FOLLOWING RESTRICTIONS:

(a) FOR BEARING TYPE BOLTS ONLY STANDARD HOLES SHALL BE USED FOR THE CONNECTION TO THE BEAM. SHORT OR LONG SLOTTED HOLES ARE NOT PERMITTED. FOR SLIP CRITICAL TYPE BOLTS/CONNECTION ANY SLOTTED HOLES ARE PERMITTED.

(b) THE WELD SHALL BE CONSIDERED TO CARRY ONLY SHEAR ALL MOMENT RESULTING FROM THE ECCENTRICITY SHALL BE RESISTED BY THE BOLT GROUP.

(c) THE EFFECT OF THE WELDING ON BOTH SIDES OF A GIRDER OR COLUMN WEB MUST BE ENGINEERED.

j. SINGLE ANGLE CONNECTIONS ARE PERMITTED ONLY IN ACCORDANCE WITH THE FOLLOWING RESTRICTIONS:

(a) CONNECTION OF BOTH LEGS OF THE ANGLE SHALL BE BY BOLTS (SHOP & FIELD BOLTED). WELDING OF THE ANGLE TO THE SUPPORTING MEMBER IS NOT ALLOWED.

(b) THE SAME LENGTH, GAGE, NUMBER AND TYPE OF BOLTS MUST BE USED FOR BOTH LEGS OF THE ANGLE.

(c) FOR BEARING TYPE BOLTS ONLY STANDARD HOLES SHALL BE USED FOR THE CONNECTION. SHORT OR LONG SLOTTED HOLES ARE NOT PERMITTED. FOR SLIP CRITICAL TYPE BOLTS/CONNECTION SLOTTED HOLES ARE PERMITTED.

k. DOUBLE ANGLE CASE I TYPE CONNECTION (WELDED TO BEAM, BOLTED TO GIRDER/ COLUMN) ARE PERMITTED WITH NO RESTRICTION.

l. DOUBLE ANGLE CASE II TYPE CONNECTION (BOLTED TO BEAM, WELDED TO GIRDER/ COLUMN) ARE PERMITTED ONLY IN ACCORDANCE WITH THE FOLLOWING RESTRICTIONS:

(a) FOR BEARING TYPE BOLTS ONLY STANDARD HOLES SHALL BE USED FOR CONNECTION TO THE BEAM. SHORT OR LONG SLOTTED HOLES ARE NOT PERMITTED. FOR SLIP CRITICAL TYPE BOLTS/CONNECTION SLOTTED HOLES ARE PERMITTED.

(b) THE WELD SHALL BE CONSIDERED TO CARRY ONLY SHEAR AND MOMENT RESULTING FROM ECCENTRICITY SHALL BE RESISTED BY THE BOLT GROUP.

(c) THE EFFECT OF THE WELDING ON BOTH SIDES OF A GIRDER OR COLUMN WEB MUST BE ENGINEERED.

m. END PLATE SHEAR CONNECTIONS ARE PERMITTED WITH NO RESTRICTIONS.

n. MOMENT, TRUSS & BRACING CONNECTIONS SHALL UTILIZE SLIP CRITICAL BOLTS FOR ALL CONNECTIONS.

p. ALL TUBE TO W SHAPE COLUMNS SHALL BE MADE W/ END PLATE CONNECTION.

q. ALL CURVED BEAMS SHALL BE CONNECTED TO EACH END COLUMN W/ MOMENT CONNECTION AS REQUIRED.

5. SPlicing OF STRUCTURAL STEEL MEMBERS WHERE NOT DETAILED IS PROHIBITED.

6. WHEN BEAM FLANGES ARE COPEd MORE THAN DISTANCE K, SHEAR CAPACITY OF THE REMAINING WEB MUST BE CHECKED BY THE DETAILER, UNLESS CLIP ANGLES ARE EXTENDED 1" BEYOND THE COPE.

7. ANY BOLTED CONNECTION INDICATED ON DRAWINGS CAN BE SUBSTITUTED W/ WELDED ONE (SHOP OR FIELD) OF EQUAL CAPACITY, IF BOLTING CLEARANCES REQUIRE SO. SUBSTITUTION SHALL BE AT NO EXTRA COST TO THE AUTHORITY & ONLY AFTER THE APPROVAL OF EOR.

8. ALL CONTACT SURFACES WITH HIGH-STRENGTH BOLT CONNECTIONS SHALL BE FREE OF OIL, PAINT, LACQUER OR GALVANIZING.

9. WELDING ELECTRODES SHALL CONFORM TO ASTM SPECIFICATIONS E-70XX.

10. ALL BUTT WELDS SHALL BE FULL PENETRATION BUTT WELDS. SHOP PAINTED WITH A RUST INHIBITIVE GRAY PRIMER.

11. ALL STRUCTURAL STEEL NOT RECEIVING SPRAY-ON FIREPROOFING INCLUDING ALL MEMBERS AND CONNECTIONS SHOWN AND NOTED ON THE DRAWINGS SHALL BE SHOP PAINTED WITH A RUST INHIBITIVE GRAY PRIMER. NO ASPHALTIC PAINT IS PERMITTED

12. ALL STEEL EXPOSED TO WEATHER STEEL SHALL BE HOT DIP GALVANIZED.

13. BASE PLATES, BEAMS, COLUMNS, AND HARDWARE EXPOSED TO SOIL SHALL BE COVERED WITH A MINIMUM OF 3" OF CONCRETE PRIOR TO BACKFILL.

14. FABRICATE BEAMS WITH THE NATURAL CAMBER UP.

15. NO FINAL BOLTING OR WELDING SHALL BE DONE UNTIL AS MUCH OF THE STRUCTURAL FRAMING AS WILL BE STIFFENED THEREBY HAS BEEN PROPERLY ALIGNED.

16. THE MINIMUM PLATE THICKNESS SHALL BE 5/16" (U.O.N.).

THE MINIMUM BOLT DIAMETER SHALL BE 3/4" (U.O.N.).

THE MINIMUM WELD THROAT SHALL BE 3/16" (U.O.N.).

17. ALL TEMPORARY ERECTION BRACING SHALL REMAIN IN PLACE UNTIL ALL STRUCTURAL MEMBERS ARE PROPERLY ALIGNED AND CONNECTED AND SHALL NOT BE REMOVED WITHOUT WRITTEN APPROVAL OF ARCHITECT, ENGINEER AND OWNER.

18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF ALL ERECTION PROCEDURES AND SEQUENCES.

G. LINTELS

a. MASONRY BOND BEAM LINTELS:

1. PROVIDE MASONRY BOND BEAM UNIT WITH THICKNESS EQUAL TO MIN. WIDTH OF WALL.

2. PROVIDE THE FOLLOWING BOND BEAM LINTELS UNLESS OTHERWISE NOTED OR SHOWN ON CONTRACT DOCUMENTS:

MARK	SPAN	HEIGHT	REINF.		
			BOT.	TOP	STIRRUPS
L1	3'-1" TO 4'-0"	16"	2#5	2#4	2#3 @ 8"
L2	4'-1" TO 6'-0"	16"	2#5	2#4	2#3 @ 8"
L3	6'-1" TO 8'-0"	16"	2#6	2#4	3#3 @ 8"
L4	8'-1" TO 10'-0"	16"	2#7	2#5	4#3 @ 8"
L5	10'-1" TO 14'-4"	16"	2#8	2#5	6#3 @ 8"

3. MINIMUM BEARING AT EACH END SHALL BE 8" U.O.N. FOR BOND BEAM OR PRECAST LINTELS.

b. STEEL LINTELS :

1. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR TYPES OF LINTEL REQUIRED.

2. PROVIDE ONE STEEL ANGLE FOR EACH 4" OF WALL THICKNESS FOR THE FOLLOWING OPENINGS UNLESS OTHERWISE NOTED OR SHOWN ON CONTRACT DOCUMENTS:

OPENINGS UP TO 3'-4"	L3-1/2X3-1/2X5/16 (LLV)
OPENINGS 3'-5" TO 5'-0"	L4X3-1/2X5/16 (LLV)
OPENINGS 5'-1" TO 6'-0"	L5X3-1/2X5/16 (LLV)

3. FOR OPENINGS 6'-1" UP TO 8'-6", PROVIDE W8 X 15 WITH 5/16" SUSPENDED PLATE BY 5/16" PLATE HANGERS @ 16" O.C. UNLESS OTHERWISE NOTED.

FOR OPENINGS 8'-7" UP TO 11'-0", PROVIDE W8 X 24 WITH 5/16" SUSPENDED PLATE AND 5/16 " PLATE HANGERS @ 16" o.c. UNLESS OTHERWISE NOTED.

4. THE STEEL LINTEL SCHEDULES ABOVE SHALL APPLY TO ALL PENETRATIONS U.O.N. THROUGH RUNNING BOND MASONRY WALLS U.O.N.

5. PRECAST LINTELS, WHEN USED FOR MASONRY PARTITION WALL ONLY SHALL BE DESIGNED BY THE PRECAST MANUFACTURER.

6. MINIMUM BEARING AT EACH END SHALL BE 6" FOR STEEL AND 8" FOR BOND BEAMS. PRECAST AND C.I.P. LINTELS. PROVIDE 2-1/2" ø x 6" ANCHOR BOLTS WELDED TO PLATE AND PLACED ON GROUTED MASONRY CELLS AT EACH END OF STEEL BEAM LINTELS.

7. PROVIDE SHOP PRIMER FOR ALL INTERIOR STEEL LINTELS. AND PROVIDE HOT-DIPPED GALVANIZING FOR ALL STEEL EXTERIOR LINTELS.

H. MASONRY

1. HOLLOW MASONRY UNITS USED IN NON-LOAD BEARING WALLS AND PARTITIONS SHALL CONFORM TO ASTM C129. HOLLOW MASONRY UNITS USED ON ALL LOAD BEARING WALLS SHALL CONFORM TO ASTM C90.

2. ALL CONCRETE MASONRY UNITS TO BE HOLLOW NORMAL WEIGHT, WITH fm = 2000 PSI. MINIMUM STRENGTH UON. AND MORTAR TYPE 'M' OR 'S'. WEIGHT OF UNITS SHALL BE 30 PSF FOR 6" UNITS, 38 PSF FOR 8" UNITS, 47 PSF FOR 10" UNITS AND 55 PSF FOR 12" UNITS. TOLERANCE FOR MASONRY WEIGHTS SHALL BE 2 PSF HIGH OR LOW.

3. PROVIDE GALVANIZED HORIZONTAL JOINT REINFORCEMENT IN FIRST AND SECOND BED JOINTS ABOVE AND BELOW OPENINGS AND IN EVERY SECOND BED JOINT ELSEWHERE. IN REINFORCED MASONRY WALLS, PROVIDE GALVANIZED HORIZONTAL MASONRY REINFORCEMENT AT EVERY OTHER BLOCK COURSE UON.

4. FILL CMU VOIDS SOLID WITH GROUT AROUND ALL ANCHORS, VERT. REBARS AND BOND BEAMS.

5. ALL TOP CONNECTIONS OF NON BEARING MASONRY WALLS TO STRUCTURE MUST BE OF TYPE THAT PROVIDES A 1" SOFT JOINT FOR INDEPENDENT VERTICAL MOVEMENT OF THE STRUCT ABV UON.

6. ALL HOLLOW MASONRY UNITS BELOW GRADE SHALL BE FILLED SOLID W/ GROUT OR MORTAR.

7. PROVIDE 2 #6 VERTICAL REINFORCEMENT OR HALF OF INTERRUPTED REINF. (WHICHEVER IS HIGHER) FULL HEIGHT OF WALL AT ALL JAMB LOCATIONS. WELD DOWELS AT BEARING END OF LINTEL (T&B) AS REQUIRED

8. ALL BEARING AND EXTERIOR WALLS (U.O.N. ON SECTIONS) SHALL BE REINFORCED WITH #5@16" O.C. VERTICALS LOCATED IN THE CENTER OF THE CMU UON.

9. ALL CMU BEARING MASONRY WALL AND SHEAR WALL CONSTRUCTION SHALL HAVE FULLY BEDDED MORTAR JOINTS, INCLUDING FACE SHELLS, HEADS AND WEBS.

10. ALL CMU REINFORCING SPLICE MUST BE 48 BAR DIAMETERS LONG.

11. PROVIDE 24" WIDEX16" DEEP SOLID CMU (GROUTED SOLID) AT ALL BEARING BEAMS & LINTELS

I. WOOD :

1. ALL WOOD SHALL BE NO 2 SOUTHERN PINE (U.O.N.). ANY AND ALL WOOD EXPOSED TO THE WEATHER OR IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED. TYPICAL WOOD PROPERTIES FOR 2x SHALL BE Fb=1050 PSI Fv=175 PSI Fc (per) = 565 PSI & E=1,400,000 PSI SEE 'NDS' (TABLE 4B) FOR PROPERTIES. SPECIFIED MEMBER SIZE SHALL NOT BE MADE UP OF SMALLER SIZES CONNECTED TOGETHER.

2. 'LVL MICROLAM' SHALL BE WITH WOOD PROPERTIES AS: Fb=2600PSI Fv=285PSI Fc (per)= 750 PSI & E=1,900,000PSI SPECIFIED MEMBER SIZE SHALL NOT BE MADE UP OF SMALLER SIZES CONNECTED TOGETHER, WOOD THAT IS EXPOSED TO THE WEATHER OR IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED

3. NON-LOAD BEARING WALL WOOD CAN BE SPRUCE/PINE/FIR, STUD GRADE

4. PLYWOOD ROOF SHEATHING SHALL BE APA RATED SHEATHING 16/32, EXPOSURE-1. USE MINIMUM PLYWOOD THICKNESS AS SPECIFIED ON THE DRAWINGS.

5. ALL CONNECTORS SHALL BE GALVANIZED AND AS MANUFACTURED BY SIMPSON STRONG-TIE OR APPROVED EQUAL AND SHALL BE THE TYPE AS RECOMMENDED BY THE MANUFACTURER FOR THE INTENDED USAGE UNLESS OTHERWISE NOTED ON THE DRAWINGS.

6. BOLTS FOR WOOD SHALL BE SAE GRADE 2 PLATED BOLTS. PROVIDE A LARGE FLAT WASHER AT ALL WOOD SURFACES

7. MINIMUM FASTENING SHALL BE IN ACCORDANCE WITH NDS AND IBC2018. WOOD TREATED WITH WATER BORN PRESERVATIVES OR 2. FOR THE WIND DESIGN OF THE CLADDING SYSTEMS, THE HIGH PRESSURE CORNER ZONES DIMENSIONS MUST BE CALCULATED BASED ON THE OVERALL BUILDING DIMENSIONS BUT SHALL APPLY TO ALL THE CORNERS (OUTSIDE AND INTERMEDIATE) OF THE BUILDING.

8. HIGHER MOISTURE CONTENTS AT TIME OF DELIVERY ON SITE SHALL BE CAUSE FOR REJECTION.

9. NAILING OF ROOF PLYWOOD SHEATHING TO TRUSSES SHALL BE PER NDS AND IBC2018 REQUIREMENTS, BUT NOT MORE THAN 6" EDGE AND 12" FIELD.

ROOF TRUSS FABRICATION:

1. DESIGN ALL ROOF TRUSSES AND FRAMING MEMBERS WITH A 10 PSF DEAD LOAD APPLIED ALONG THE TOP CHORD AND A 10 PSF DEAD LOAD APPLIED ALONG THE BOTTOM CHORD. PROVIDE FOR CONCENTRATED LOADS.DESIGN TRUSSES FOR THE LIVE LOADS AND WIND LOADS SPECIFIED IN THE REFERENCED CODE.SUBMIT SHOP DRAWINGS SIGNED AND STAMPED BY A REGISTERED STRUCTURAL ENGINEER IN THE STATE OF MARYLAND. DESIGN ALL CONNECTIONS OF FRAMING MEMBERS TO EACH OTHER AND TO THE REST OF THE STRUCTURE FOR CODE LOADS.
2. ALL TRUSSES AND OTHER ROOF OF STRUCTURAL COMPONENTS SHALL BE FABRICATED IN A PROPERLY EQUIPPED MANUFACTURING FACILITY OF A PERMANENT NATURE.THEY SHALL BE MANUFACTURED BY EXPERIENCED WORKMEN USING PRECISION CUTTING AND TRUSS ASSEMBLY METHODS UNDER THE DIRECT SUPERVISION OF A QUALIFIED FOREMAN.ALL TRUSSES SHALL BE FABRICATED UNDER THE STRICT RULES OF THE TRUSS PLATE INSTITUTE (TPI).
3. THE QUALIFIED COMPONENT MANUFACTURER MUST BE A MEMBER OF THE TRUSS PLATE INSTITUTE AND PARTICIPATE IN THE QUALITY CONTROL TEST CRITERIA PROGRAM, OR DEMONSTRATE TO THE ARCHITECT OR HIS ENGINEER THE QUALITY ASSURANCE PROGRAM COMPARABLE TO THE TPI TESTING CRITERIA PROGRAM.THAT QUALITY ASSURANCE PROGRAM MUST INCLUDE, BUT IS NOT LIMITED TO,THE INSPECTION OF ALL PHASES OF PRESSES OR ROLLERS, FABRICATION PROCEDURES AND COMPUTER DESIGN PROGRAMS SPECIFICALLY RELATING TO THE SPECIFIC TRUSS BEING FABRICATED FOR THE PROJECT AS APPROVED IN THE TRUSS DESIGN CALCULATION OR PRINTOUT.
4. ALL TRUSS MEMBERS SHALL BE ACCURATELY CUT TO LENGTH AND ANGLE FROM STRAIGHT LUMBER TO ASSURE TIGHT JOINTS FOR FINISHED TRUSS.PROVIDE CONTINUOUS IN-PLANT INSPECTION OF PRE-FABRICATED TRUSSES
5. ALL TRUSS MEMBERS AND CONNECTOR PLATES SHALL BE PROPERLY PLACED IN JIGS AND MEMBERS TIGHTLY CLAMPED IN PLACE, REMAINING IN THE POSITION UNTIL A CONNECTOR PLATE HAS BEEN PRESSED OR ROLLED IN THE LUMBER SIMULTANEOUSLY ON BOTH SIDES OF THE JOINTS.
6. DEAD LOAD CHAMBER SHALL BE BUILT INTO THE TRUSSES, AS NOTED ON THE ENGINEERING TRUSS DESIGNS,BY PROPERLY POSITIONING THE MEMBERS IN THE FABRICATING JIG.
7. ALL LUMBER USED IN TRUSSES SHALL HAVE A MOISTURE CONTENT OF NOT LESS THAN 11.1 AND NOT MORE THAN 19.1 AT THE TIME OF FABRICATION


J. TESTING AND INSPECTION

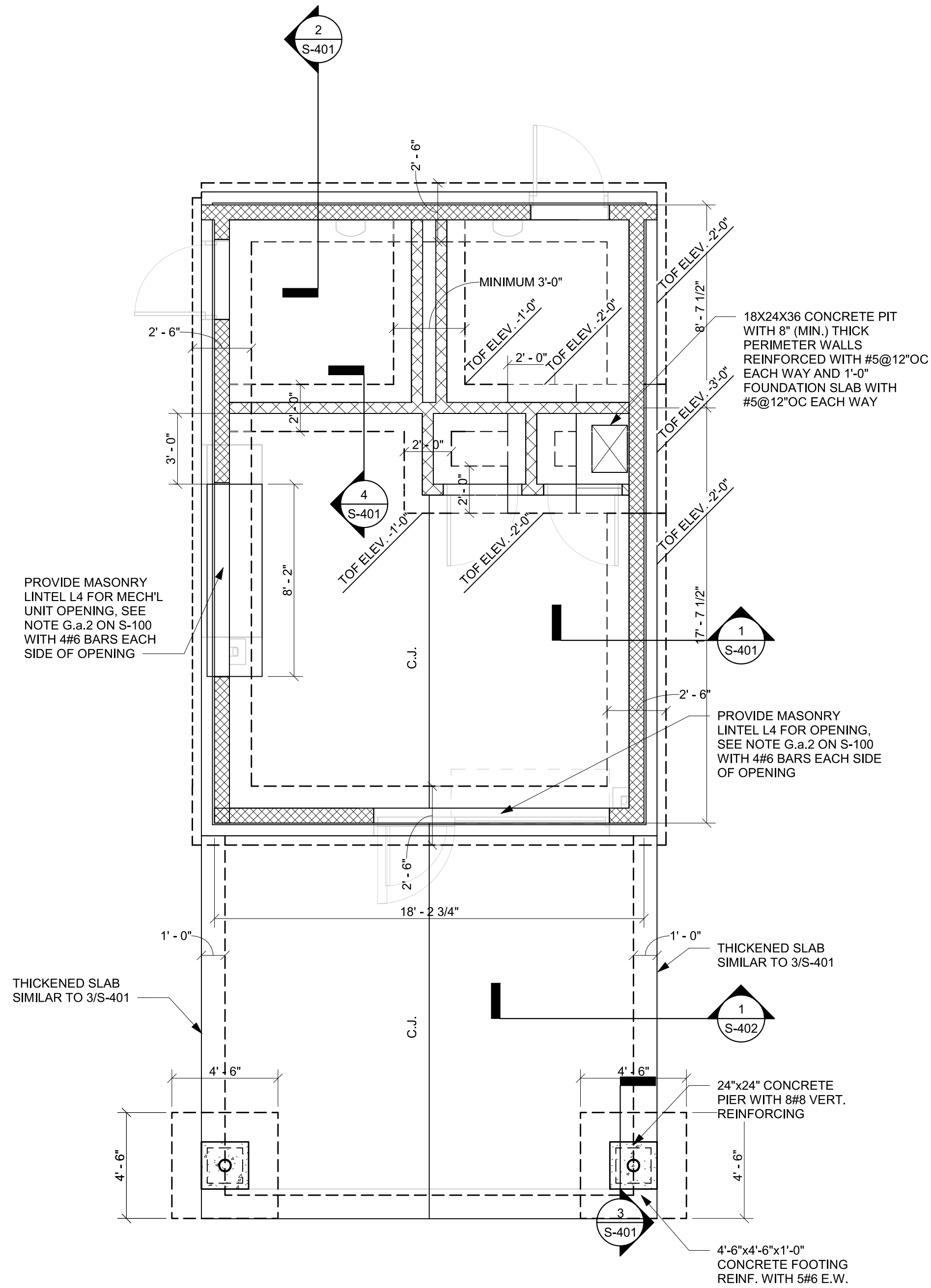
1. INSPECTION FOR ALL STRUCTURAL PORTIONS OF THE PROJECT SHALL BE PROVIDED AS REQUIRED BY THE APPLICABLE BUILDING CODE AND PROJECT SPECIFICATIONS.
2. THE ENGINEER MAY VISIT THE SITE TO PROVIDE CONST. ASSISTANCE OR TO GENERALLY OBSERVE THE PROGRESS OF CONSTRUCTION. SUCH VISITS ARE NOT TO BE CONSTRUED AS MEETING THE AFORESAID INSPECTION REQUIREMENTS UNLESS THE ENGINEER SPECIFICALLY STATES SO IN WRITING
3. ALL CONCRETE WORK SHOWN ON THESE DRAWINGS AND SPECIFIED IN THE SPECIFICATIONS SHALL BE INSPECTED IN ACCORDANCE WITH ACI-318 (LATEST EDITION), COPIES OF FIELD REPORTS, CONCRETE MIXES, CYLINDER TESTS AND OTHER DATA SHALL BE SENT TO THE ARCHITECT, ENGINEER, AND OWNER.
4. ALL WELDS SHALL BE MADE ONLY BY OPERATORS QUALIFIED BY THE AMERICAN WELDING SOCIETY. ACCEPTANCE TO BE SUBJECT TO THE INSPECTION AND REVIEW BY THE OWNER'S INSPECTION AGENCY.
5. THE CONTRACTOR'S TESTING AGENCY SHALL PERFORM ALL SHOP AND FIELD INSPECTION AND TESTING. HOWEVER, THE FABRICATOR(S) AND ERECTOR(S) SHALL PROVIDE, PRIOR TO COMMENCING WORK, COMPLETE QUALITY CONTROL PROGRAMS.
6. THE STRUCTURAL STEEL FABRICATOR(S) AND ERECTOR(S) SHALL SCHEDULE ALL WORK TO ALLOW THE TESTING REQUIREMENTS TO BE COMPLETED.
7. SHOP AND FIELD TESTING OF WELDS AND BOLTS SHALL CONFORM TO THE PROJECT SPECIFICATIONS.

K. SHOP DRAWINGS

1. SHOP DRAWINGS FOR ALL STRUCTURAL ELEMENTS SHOWN ON THE CONTRACT DOCUMENTS MUST BE SUBMITTED BY THE CONTRACTOR AND REVIEWED BY THE ENGINEER.
2. SHOP DRAWINGS ARE REVIEWED BY THE ENGINEER AS A CONVENIENCE TO THE CONTRACTOR AND ARE NOT A CONTRACT DOCUMENTS.
3. AT THE TIME OF SHOP DRAWING SUBMISSION, THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY DEVIATIONS OR OMISSIONS FROM THE CONTRACT DOCUMENTS.
4. REPRODUCTION OF STRUCTURAL DRAWINGS FOR USE AS SHOP DRAWINGS SHALL NOT BE PERMITTED.

L. SYMBOLS

 : INDICATES CMU WALL



FIRST FLOOR AND FOUNDATION PLAN NOTES

1. T.O. SLAB ON GRADE IS 0.00' TYP. (U.O.N.). CONCRETE SLAB ON GRADE SHALL BE 5" THICK CONCRETE SLAB REINFORCED W/ 6x6-W2.9xW2.9 W.W.F. ON 15 MIL VAPOR BARRIER, ON 4" LAYER OF CLEAN CRUSHED STONE OR GRAVEL, PLACED OVER WELL COMPACTED SOIL. (U.O.N.)
2. ALL BEARING & SHEAR WALLS SHALL BE REINFORCED WITH #5@16" O.C. VERT. AND ALL MASONRY BELOW GROUND SHALL BE SOLID GROUTED.
3. TOP ELEVATION OF EXTERIOR FOOTING 2'-0" MIN BELOW EXT SOG. OR FINISHED GRADE U.O.N. TOP ELEVATION OF INTERIOR FOOTING 1'-0" MIN BELOW FINISHED GRADE U.O.N.
4. C.J. INDICATES CONTROL JOINT OR CONSTRUCTION JOINTS
5. INDICATES CMU BEARING & SHEAR WALLS (U.O.N.)
6. REFER TO DRAWINGS: S101 FOR GENERAL NOTES
S301-302 FOR TYPICAL DETAILS
S401-402 FOR SECTIONS AND DETAILS

1 FIRST FLOOR AND FOUNDATION PLAN
1/4" = 1'-0"



I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND
NAME: ALAA JABER LICENSE NUMBER: 25342
EXPIRATION DATE: 02.15.2025

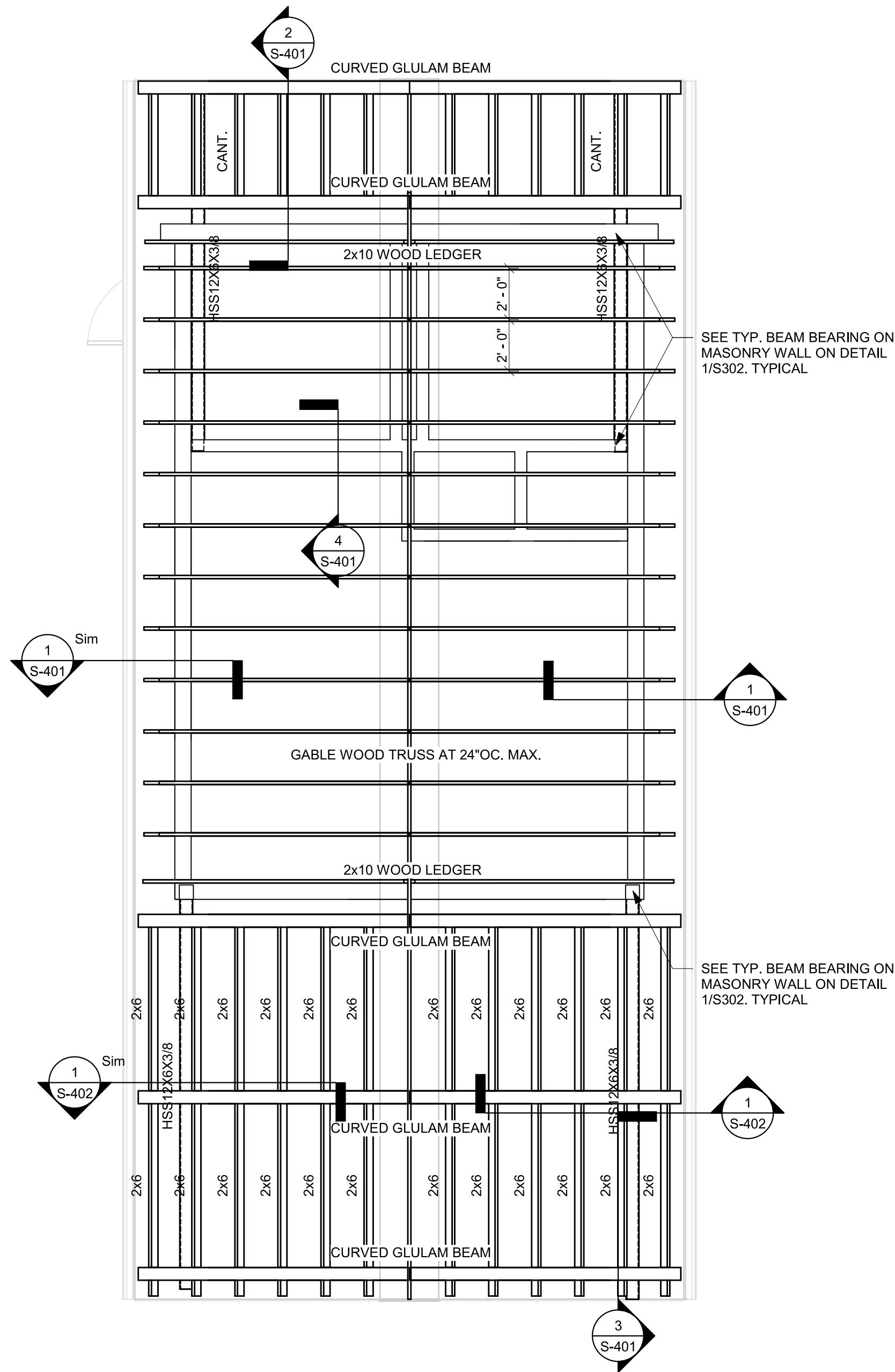
Murphy & Dittenhafer
ARCHITECTS
228 West Market Street, York, Pennsylvania 17401
717-548-8827 voice 717-543-3448 fax
800 North Charles Street, Baltimore, Maryland 21201
410-625-4823 voice 410-625-4874 fax

Mark	Date	Description
1	08/31/21	50% CONSTRUCTION DOCUMENTS
2	12/03/21	100% CONSTRUCTION DOCUMENTS
3	09/08/25	BID SET

PROJECT NO: 16126
DRAWN BY: AL
CHECKED BY: AJ

FIRST FLOOR & FOUNDATION PLAN

SHEET
S-201



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

- ROOF FRAMING PLAN NOTES
- BOTTOM OF DECK ELEVATION SHALL VARY TO ACCOMMODATE ROOF SLOPES.
 - ROOF CONSTRUCTION SHALL BE 3/4" MIN. T&G WOOD BOARDS OVER THE FRONT AND BACK PORCHES (GLULAM LOCATIONS) AND 3/4" PLYWOOD SHEATHING EVERYWHERE ELSE. MATERIAL FOR WOOD BOARDS SHALL BE CEDAR OR SOUTHERN PINE.
 - INDICATES CMU BEARING & SHEAR WALLS W/ #5@16" O.C. TYP.
 - SEE ARCH. AND MEP DRAWINGS FOR ELEVATIONS, SLOPES, E.O.S., DIMENSIONS, SLEEVES, OPENINGS AND OTHER REQUIREMENTS NOT SHOWN ON STRUCTURAL DRAWINGS.
 - WOOD LEDGER (IF REQ'D) SHALL BE ANCHORED TO MASONRY WALL WITH 5/8" DIA EPOXY ADHESIVE ANCHORS x 6" LONG, AT 16"OC TOP AND BOTTOM.
 - REFER TO DRAWINGS: S101 FOR STRUCTURAL NOTES
S301-302 FOR TYPICAL DETAILS
S401-402 FOR SECTIONS AND DETAILS
 - COORDINATE PLACEMENT OF OPENINGS SUCH THAT THEY WILL NOT INTERFERE WITH THE STRUCTURAL FRAMING SHOWN ON THE PLANS. CONTRACTOR IS TO PROVIDE FRAMING FOR ALL ROOF OPENINGS NOT SPECIFICALLY SHOWN ON THE STRUCTURAL DRAWINGS. FOR ROOF OPENING FRAMING, SEE TYP. DETAIL 8/S301.



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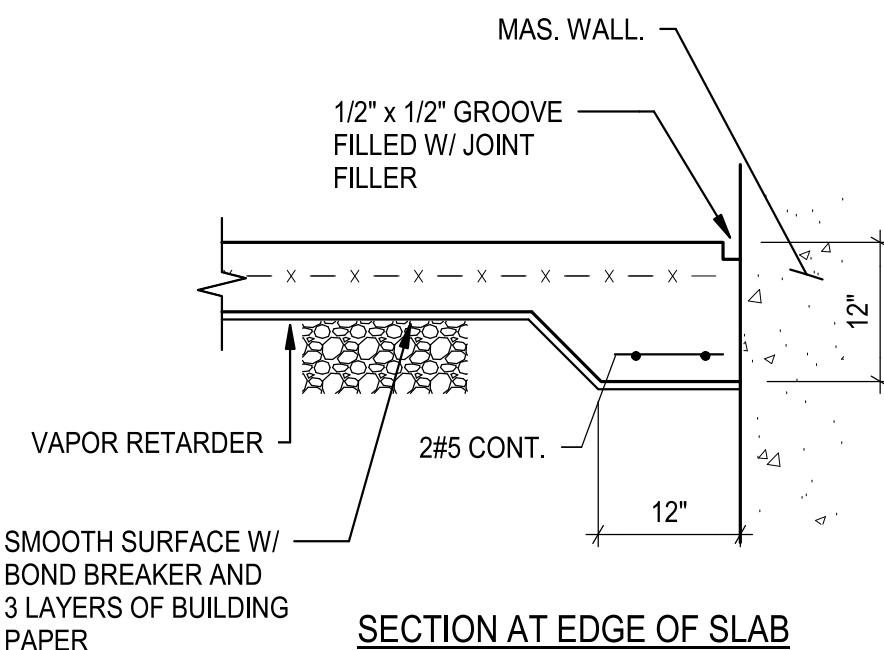
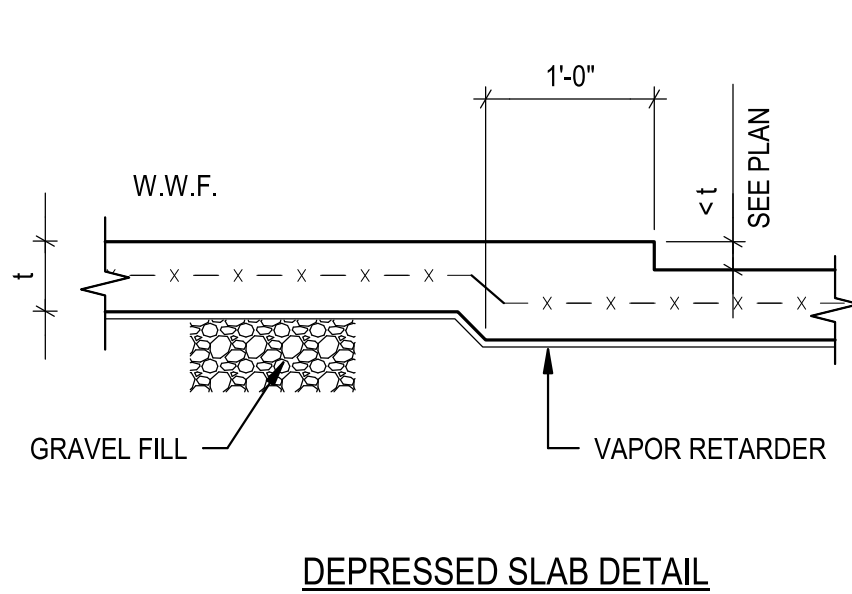
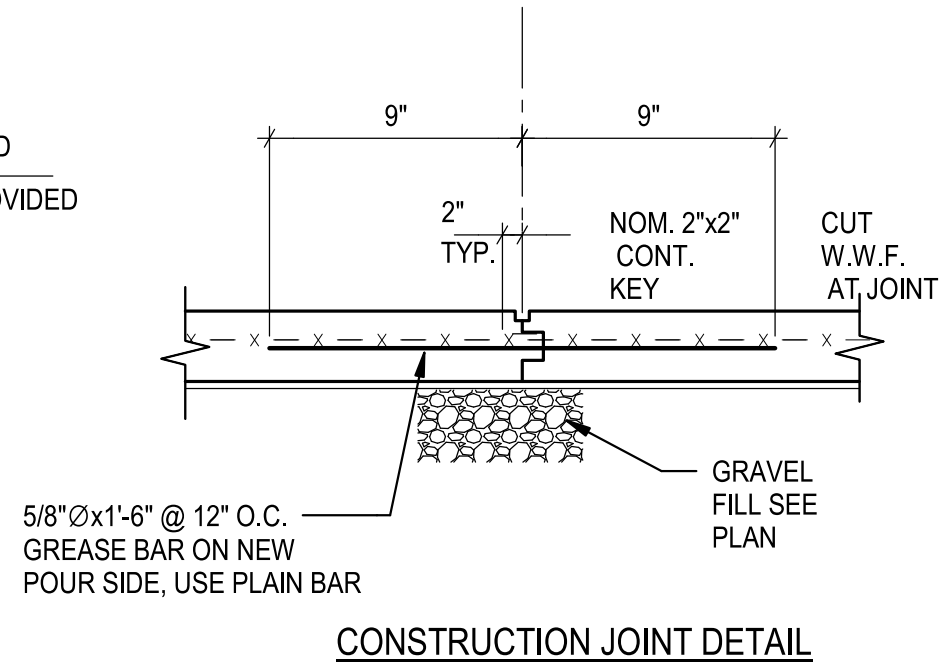
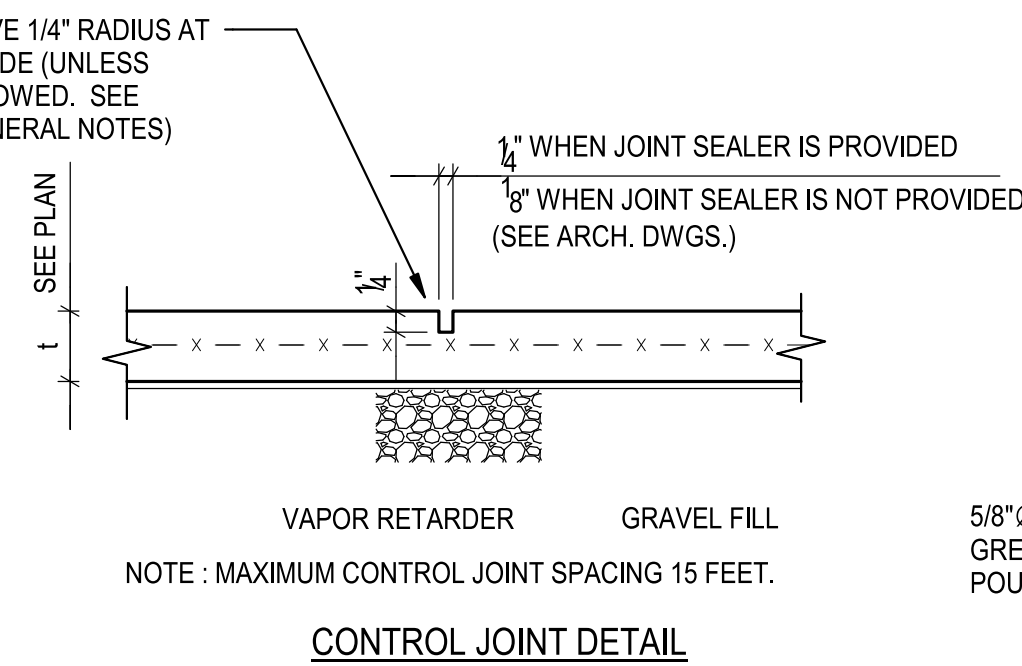
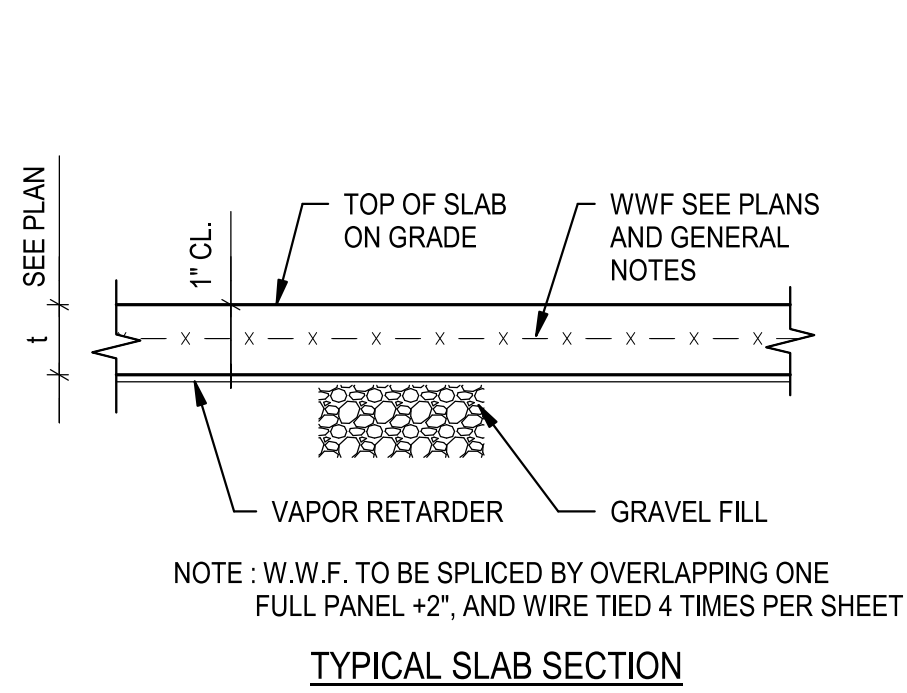
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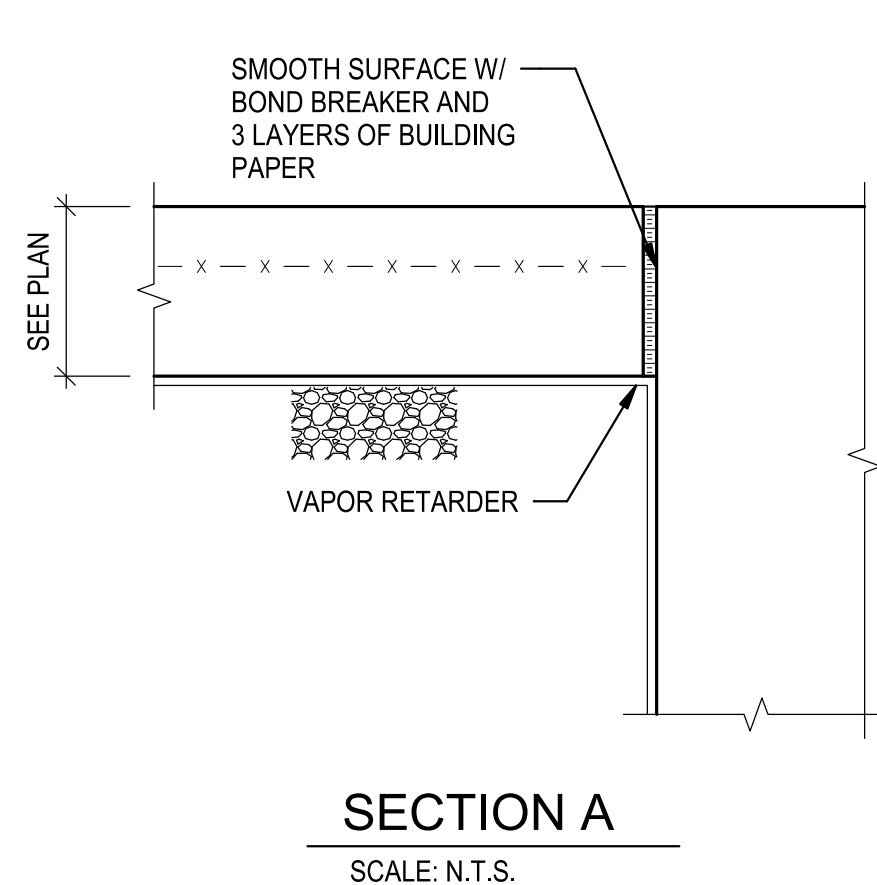
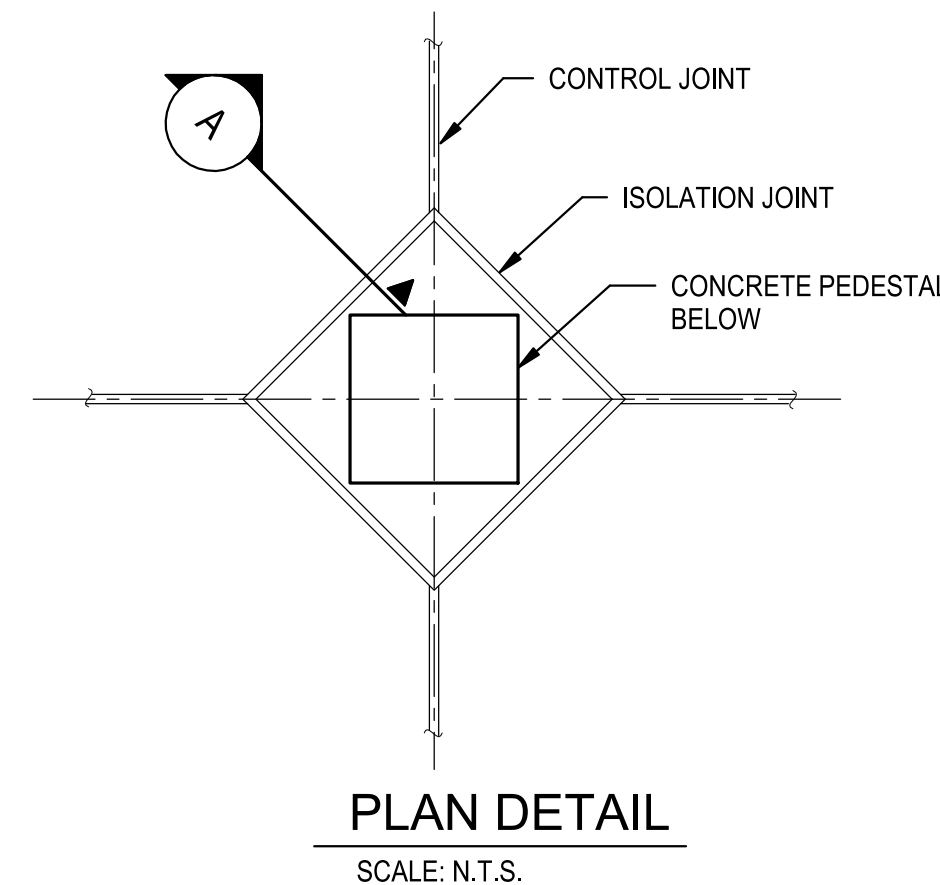
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ROOF FRAMING PLAN

SHEET
S-202



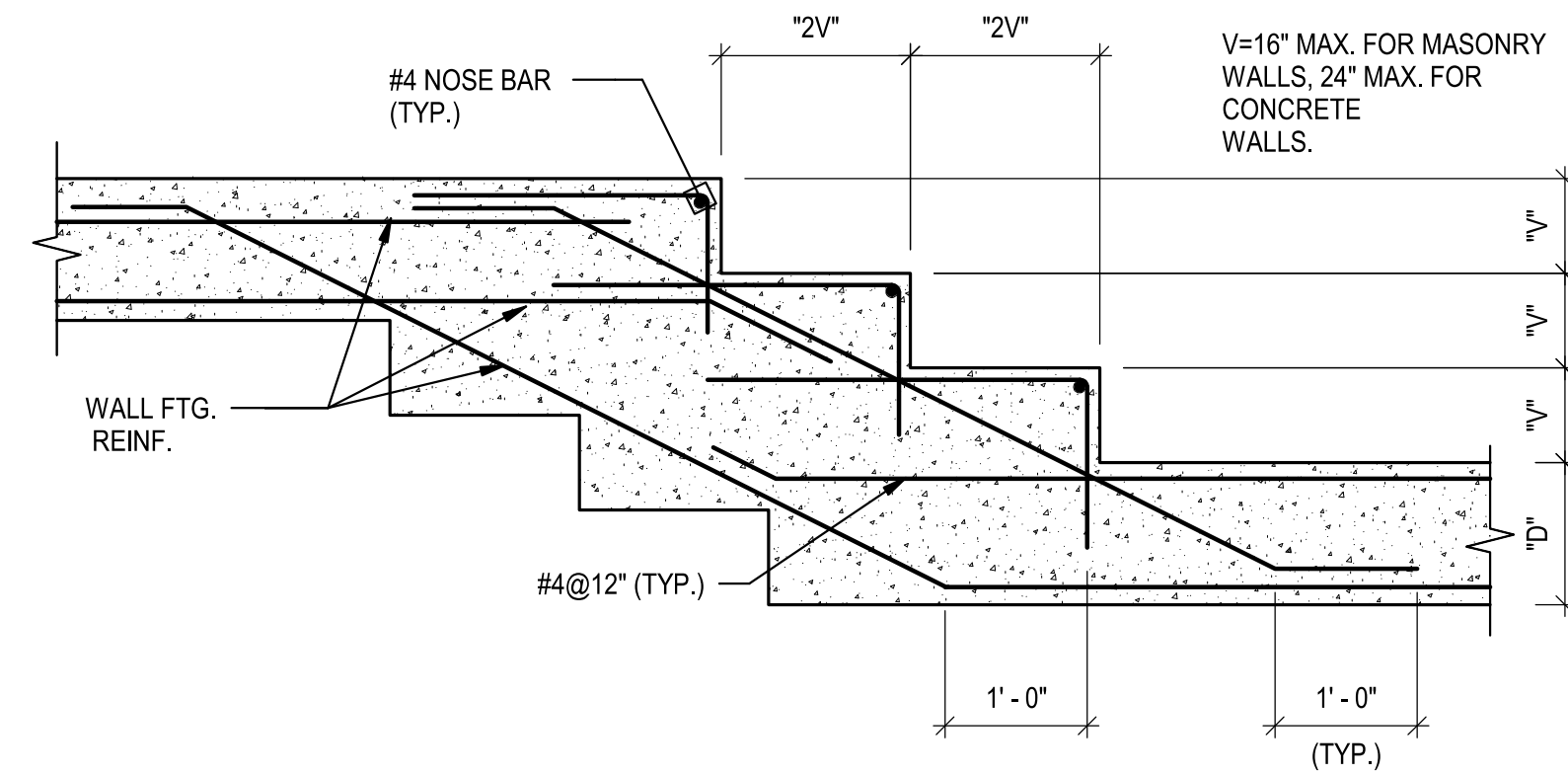
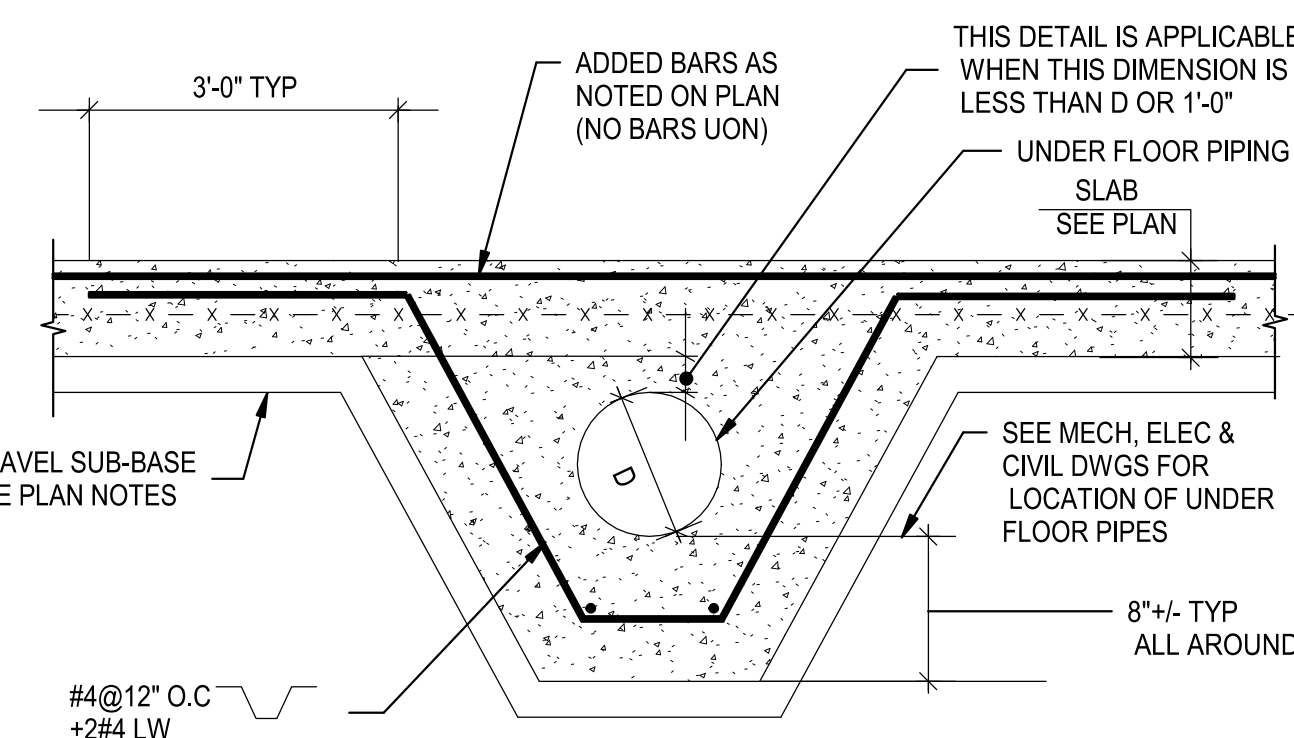
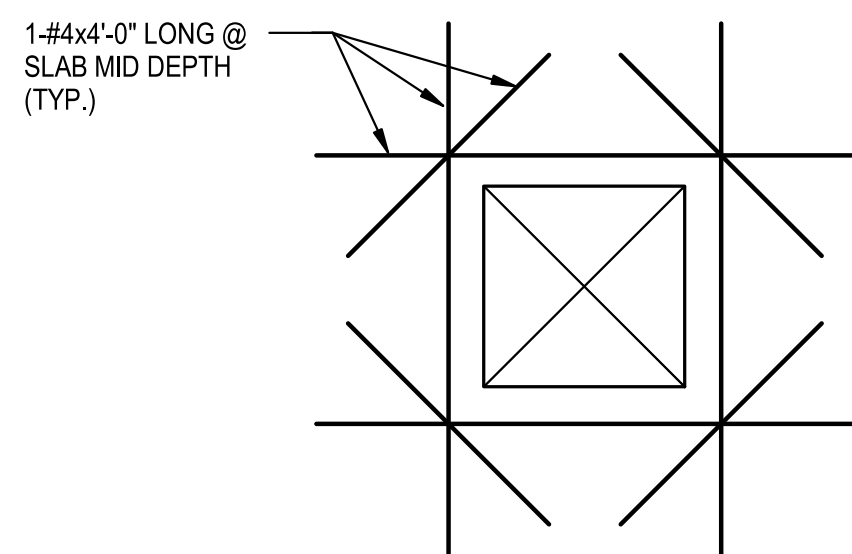
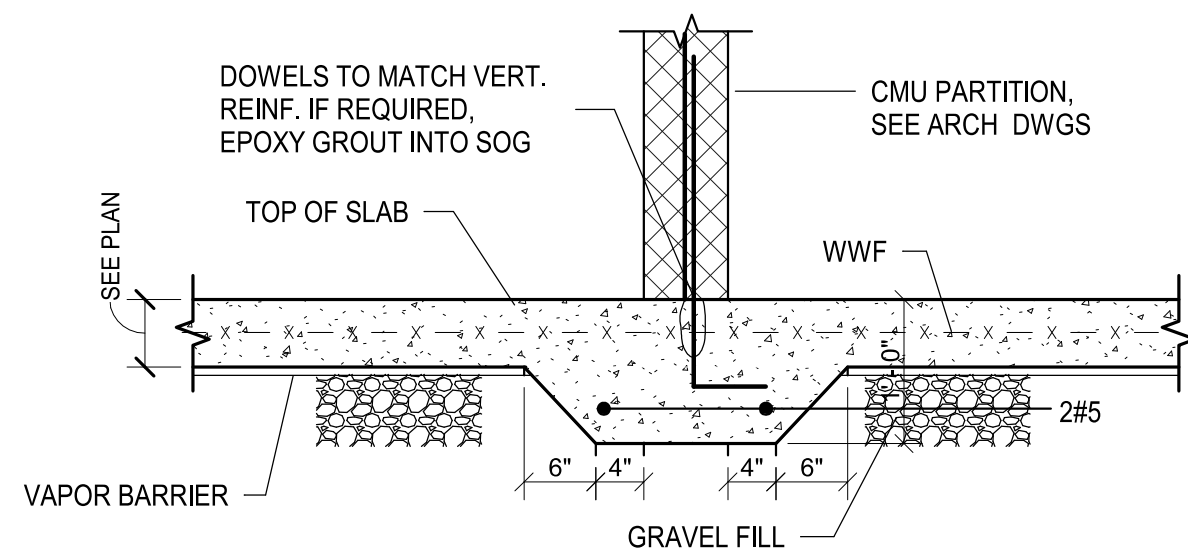
- NOTES:
1. CONSTRUCTION JOINTS SHALL BE LOCATED BY THE CONTRACTOR @ SPACING AS REQUIRED TO MEET SPECIFIED CRITERIA FOR MAXIMUM SLAB ON GRADE AREA BETWEEN CONSTRUCTION JOINTS.
 2. CONSTRUCTION JOINTS SHALL ALWAYS BE LOCATED @ CONTROL JOINT LOCATION.



1 TYPICAL SLAB ON GROUND DETAIL
3/4" = 1'-0"

2 TYP. ISOLATION JOINT AT CONCRETE PEDESTAL
3/4" = 1'-0"

NON-LOAD BEARING CMU PARTITIONS		
WALL THICKNESS	MAX UNBRACED HT. WITHOUT VERT. REINF	MAX UNBRACED HT. W/#4@48" O.C
6"	12'-8"	20'-0"
8"	14'-0"	24'-0"
10"	17'-4"	27'-0"
12"	22'-0"	30'-0"

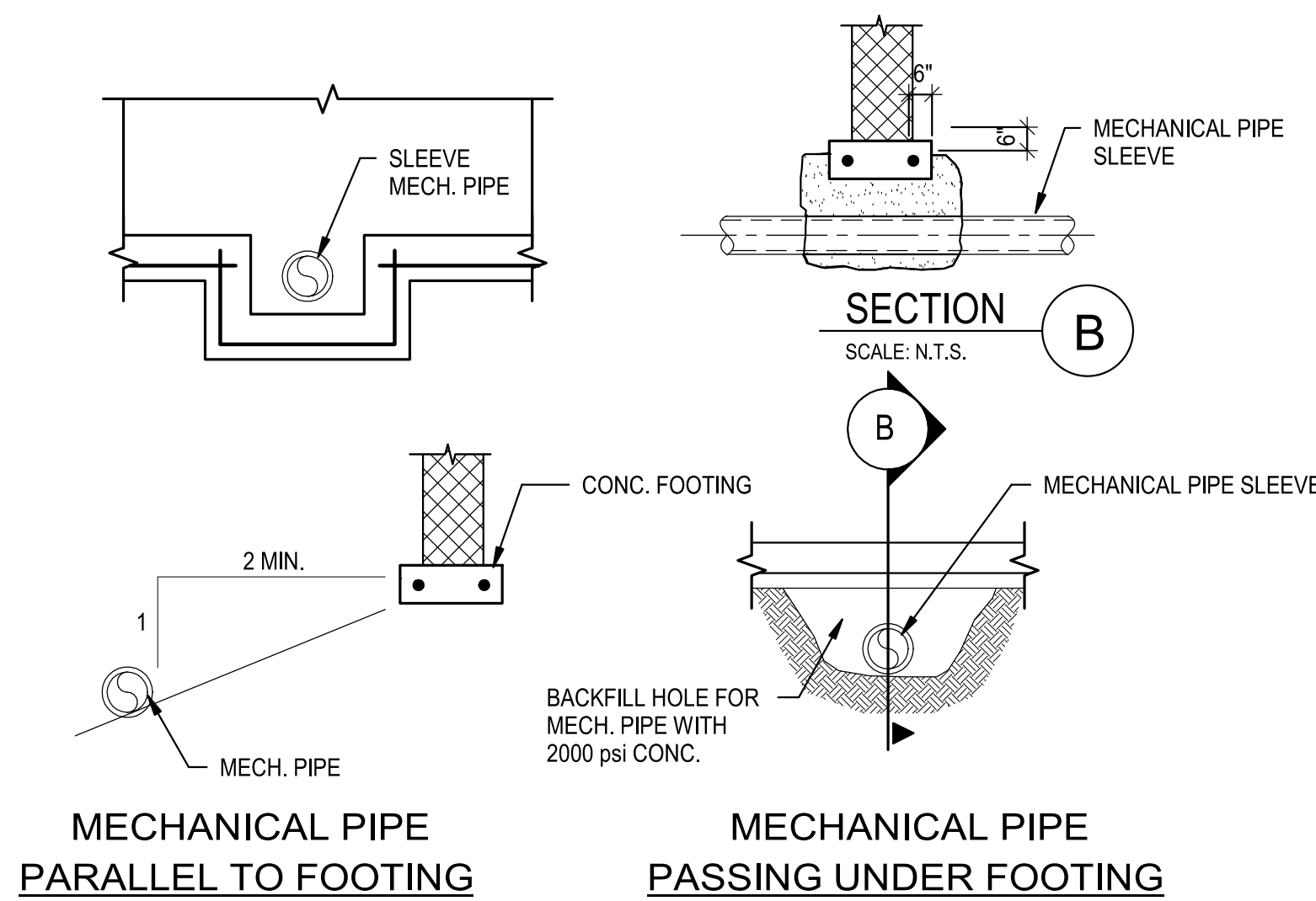


3 TYP. DETAIL FOR INTERIOR PARTITION CMU WALL
3/4" = 1'-0"

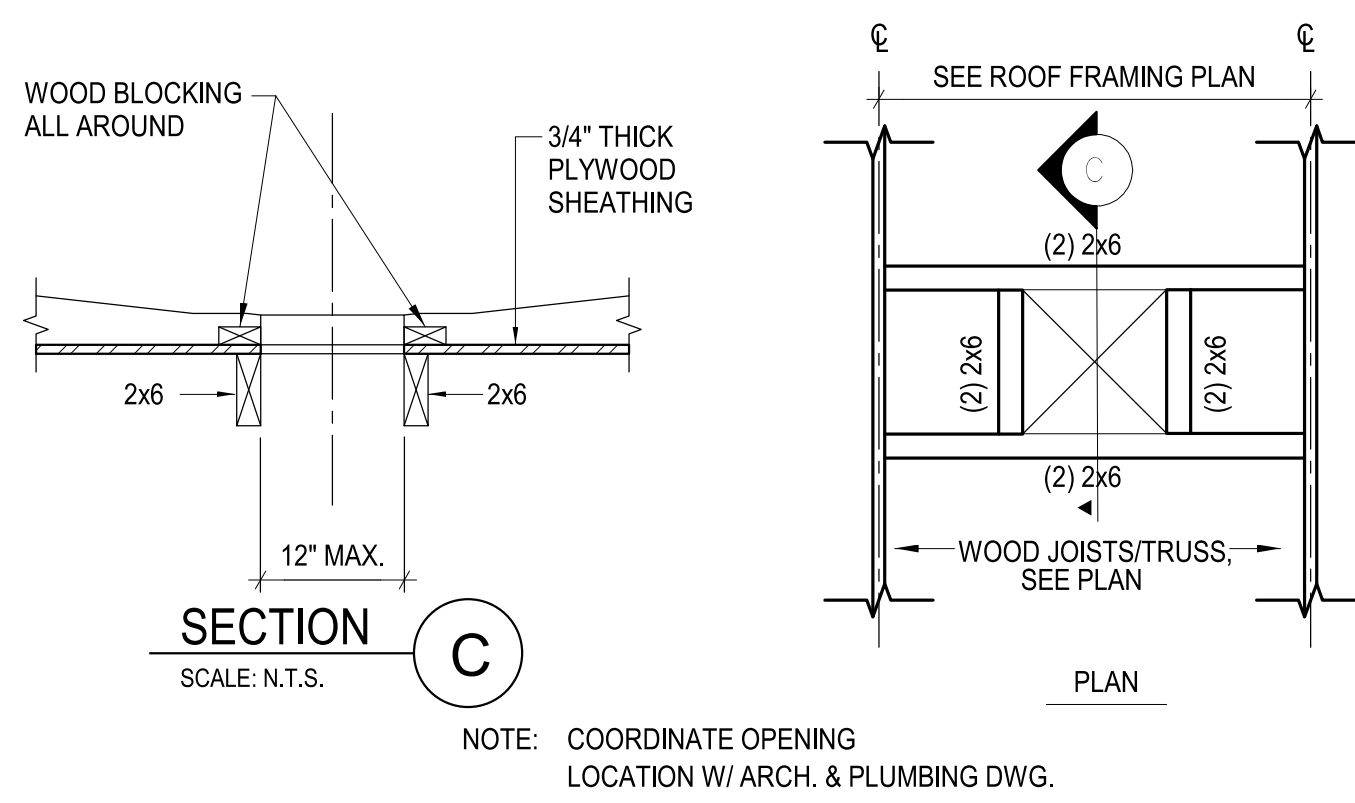
4 TYP. REINF. IN SLAB ON GRADE OPENING
3/4" = 1'-0"

5 TYP. UNDERSLAB PIPE/DUCT DETAIL
3/4" = 1'-0"

6 TYPICAL STEPPED FOOTING DETAIL(IF REQUIRED)
3/4" = 1'-0"



7 TYP. FOOTING AT MECHANICAL PIPE
3/4" = 1'-0"



8 TYPICAL ROOF OPENING DETAIL
3/4" = 1'-0"



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EXPIRATION DATE: 02.15.2025
LICENSE NUMBER: 25342

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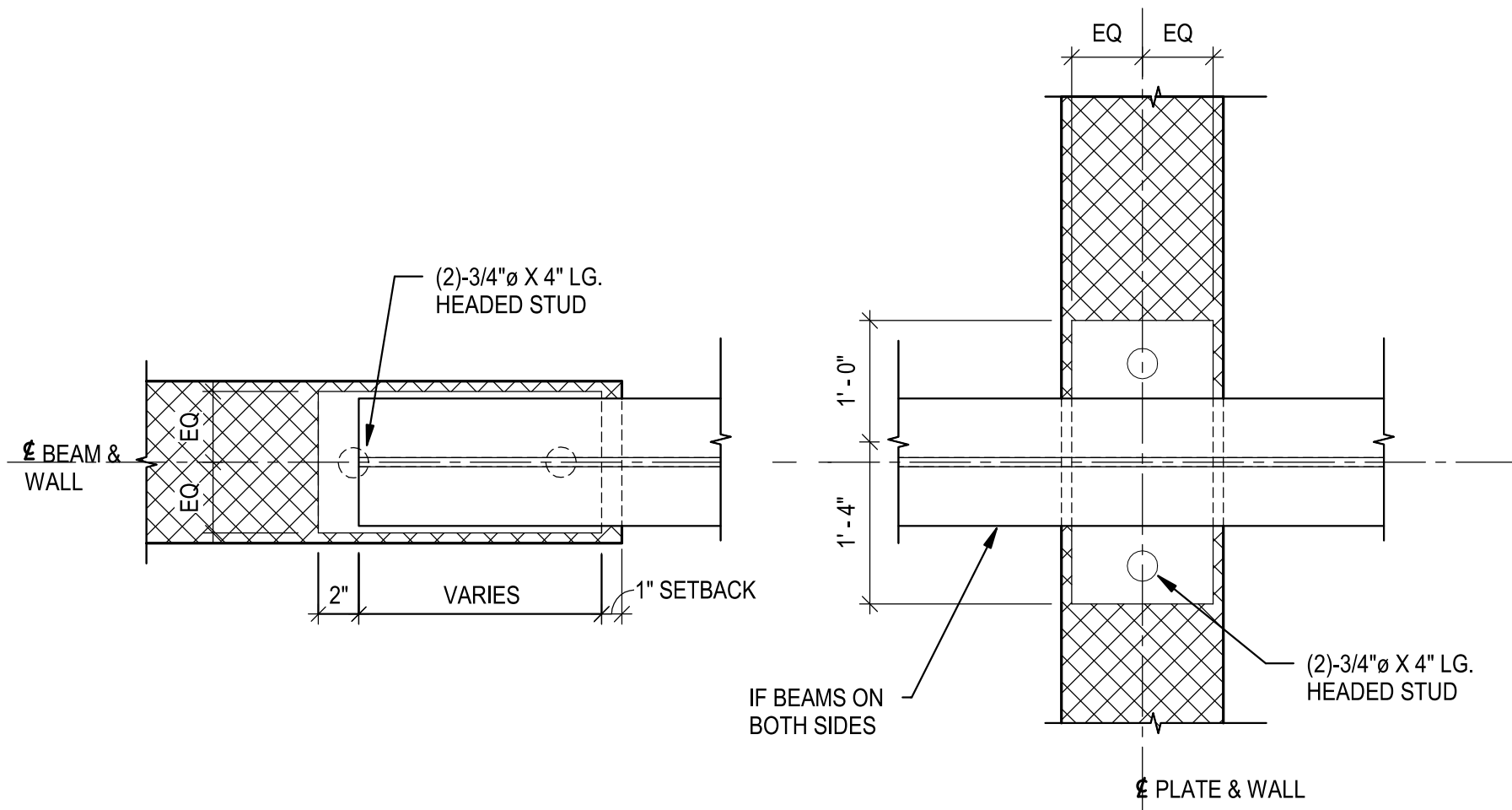
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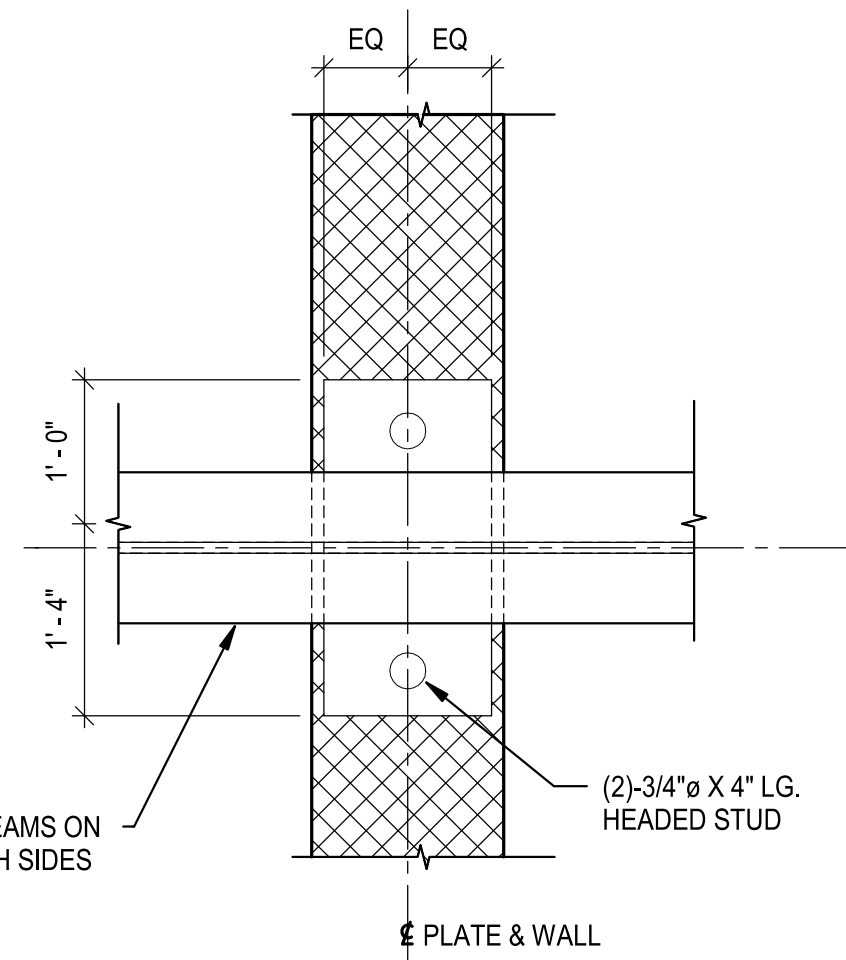
TYPICAL DETAILS

SHEET
S-301

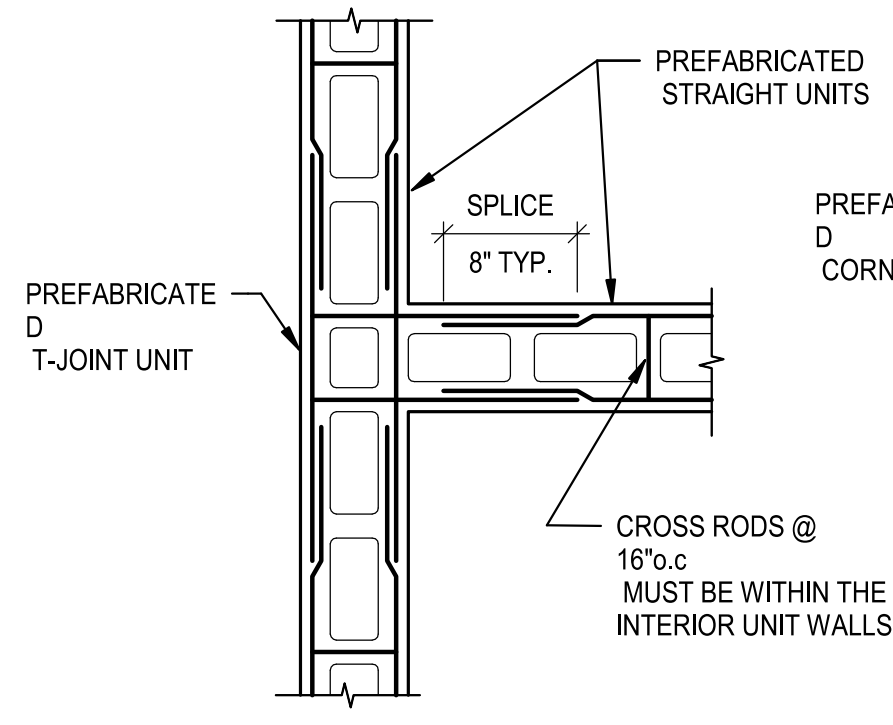


AT BEAM PARALLEL TO WALL,
GROUT WALL SOLID 16" BACK FROM
END & 24" BELOW BEAM BEARING
U.O.N.

NOTE: PLATES 6"x8"x5/8" U.O.N. ON PLAN

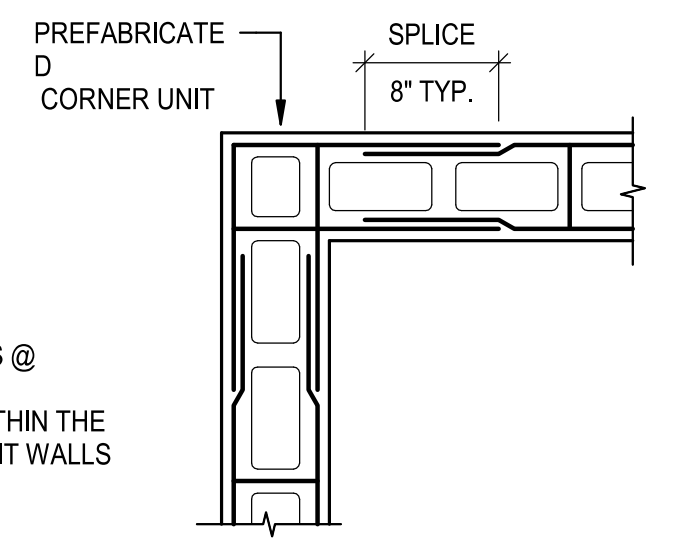


AT BEAM PERPENDICULAR TO
WALL, GROUT WALL SOLID ON 24"
WIDTH & 24" BELOW BEAM BEARING
U.O.N.

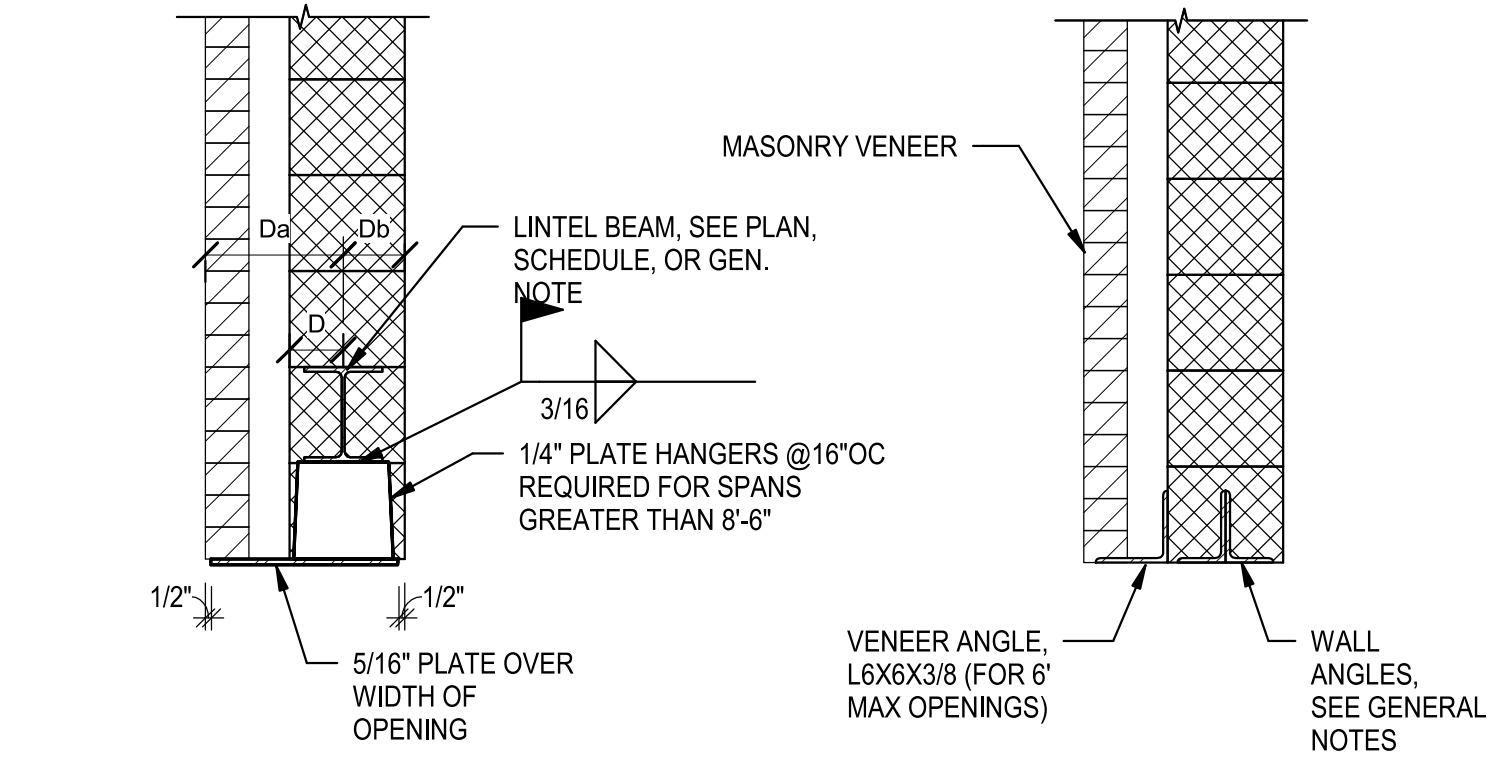


@ T-JOINT

NOTE: SEE SPECIFICATIONS FOR MORE INFORMATION.



@ CORNERS

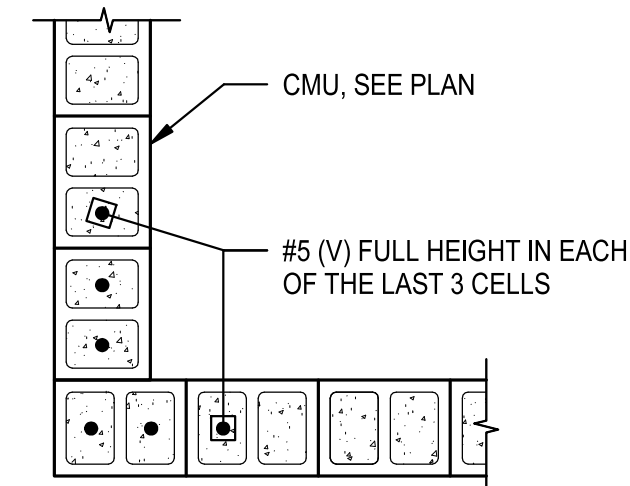


NONBEARING WALLS: D = 1/2 BEAM
FLANGE+ 1/2", SUBJECT TO LIMITATION
THAT Da MUST BE > Db

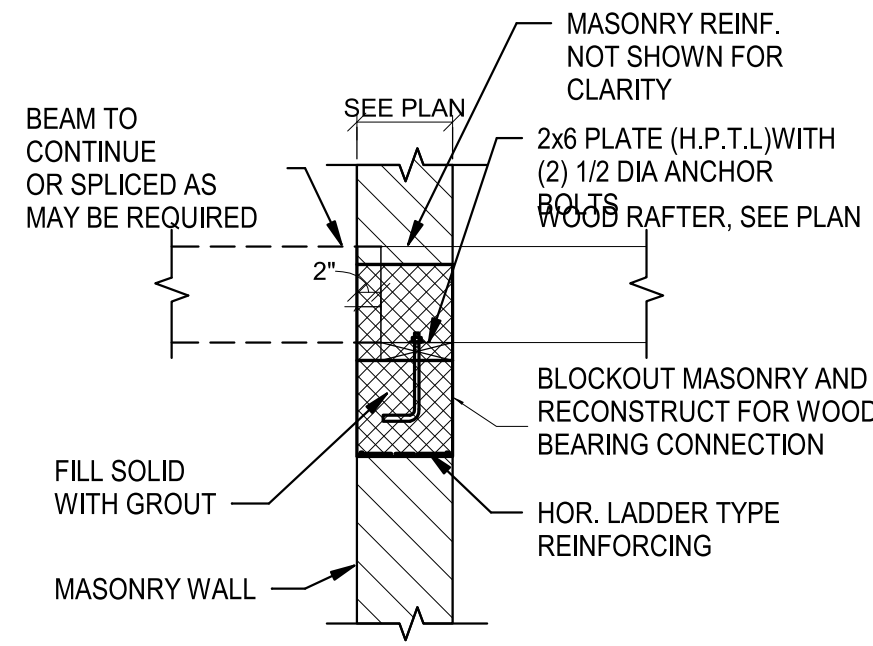
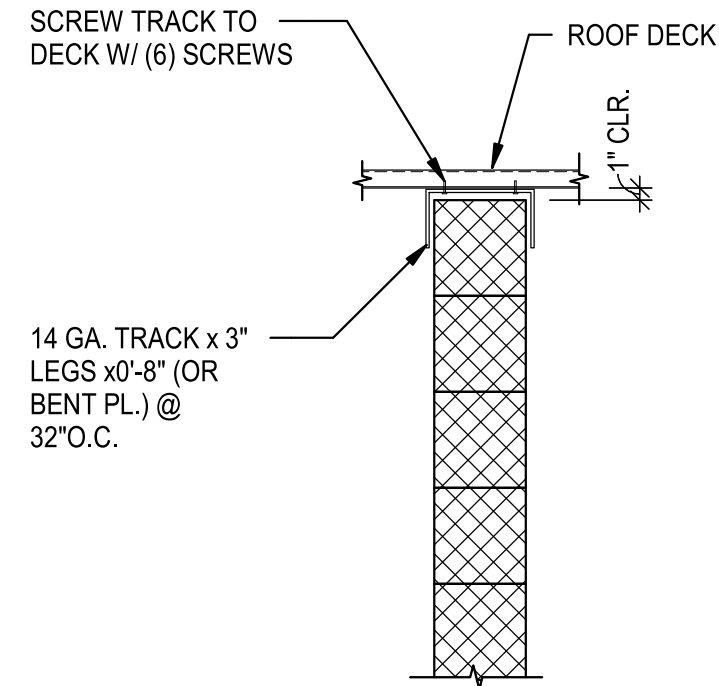
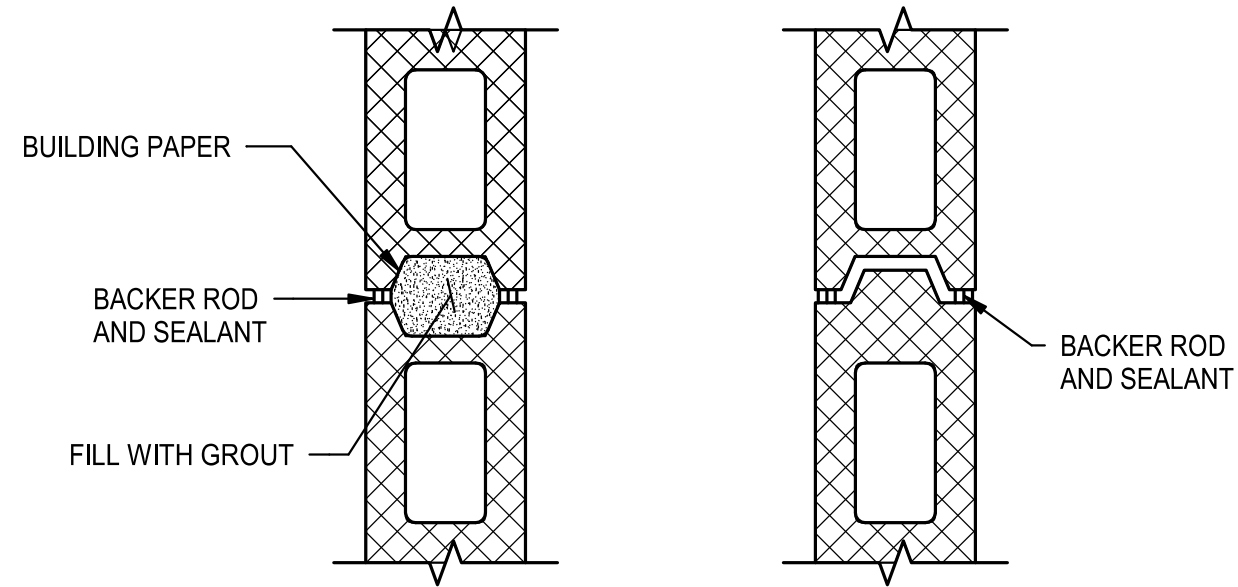
BEARING WALLS: D = Db, IF Da>9"
PROVIDE
4"x3/8" VERTICAL STIFF. @ INSIDE FACE
OF
VENEER.

AT STEEL BEAM

AT MULTIPLE ANGLES



PROVIDE HORIZONTAL MASONRY
REINFORCING AT 16" OC.



1 TYP. BEAM BEARING ON MASONRY WALL
3/4" = 1'-0"

2 TYP. HOR. JOINT REINFORCEMENT DETAIL
3/4" = 1'-0"

3 TYP. STEEL LINTEL DETAILS
3/4" = 1'-0"

4 TYP. CONTROL JOINTS FOR MASONRY
3/4" = 1'-0"

5 TYP. MASONRY WALL BRACING AT TOP
3/4" = 1'-0"

6 TYP. WOOD JOIST BEARING ON MASONRY
3/4" = 1'-0"

7 TYP. CMU SHEARWALL CORNER REINFORCING
3/4" = 1'-0"

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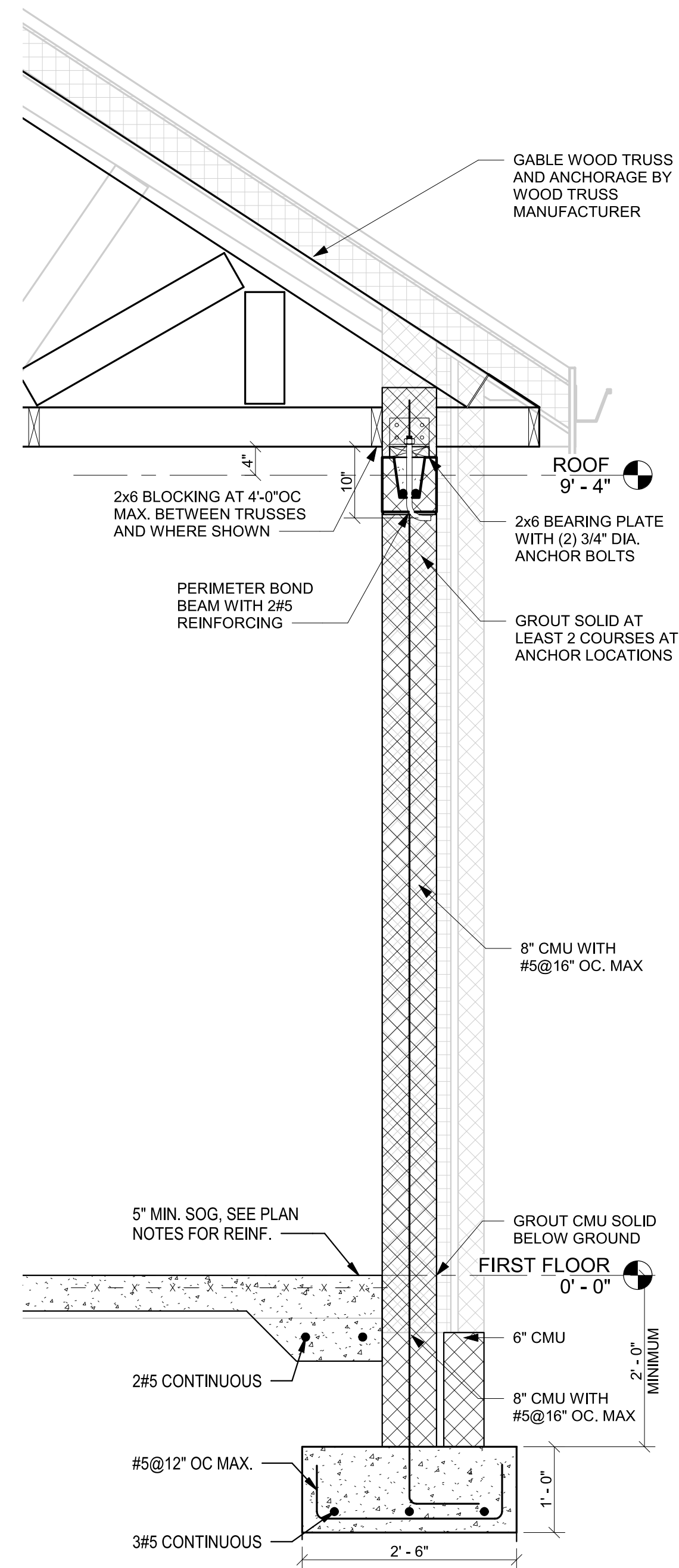
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CHECKED BY: AJ

TYPICAL
DETAILS

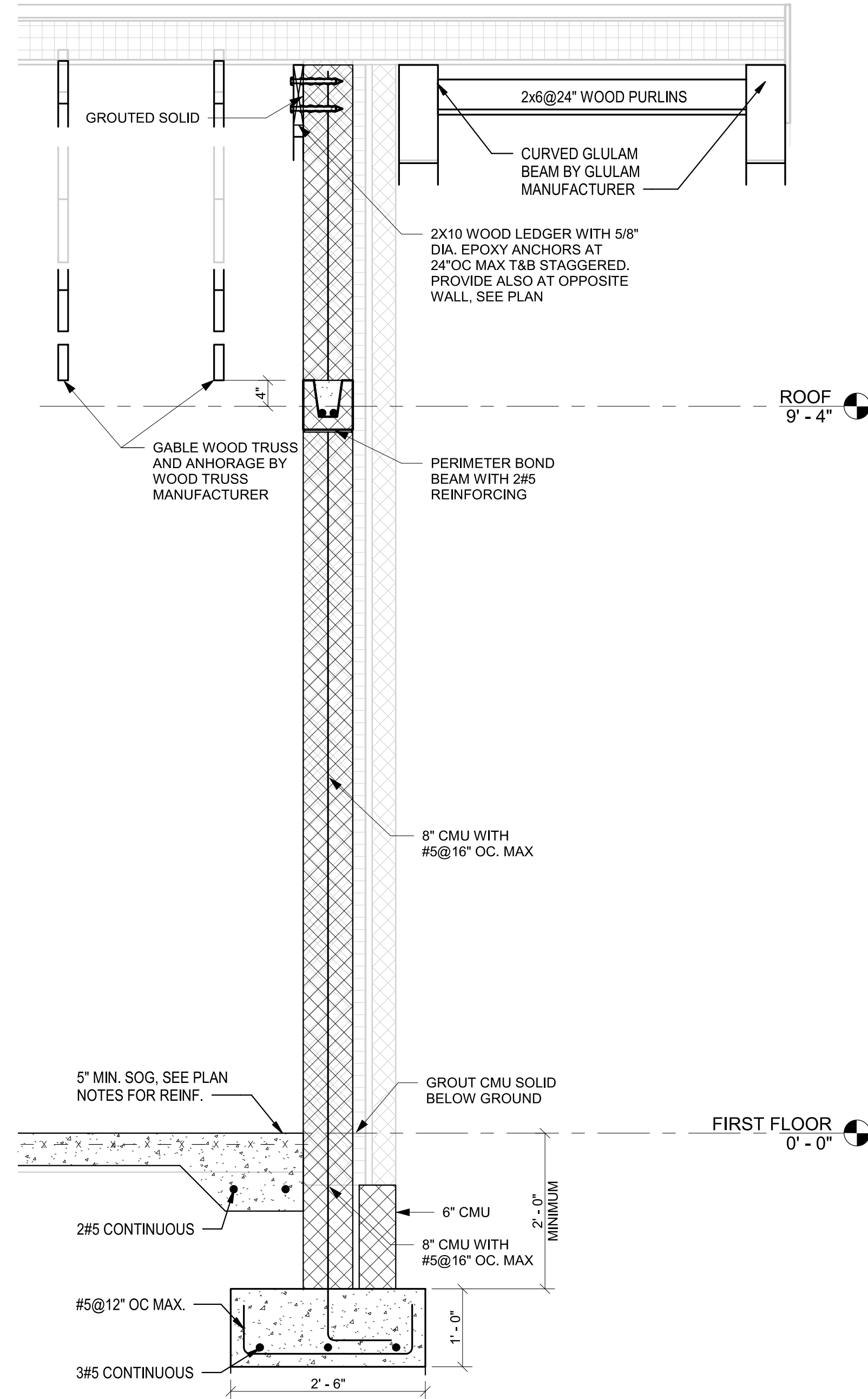
SHEET
S-302



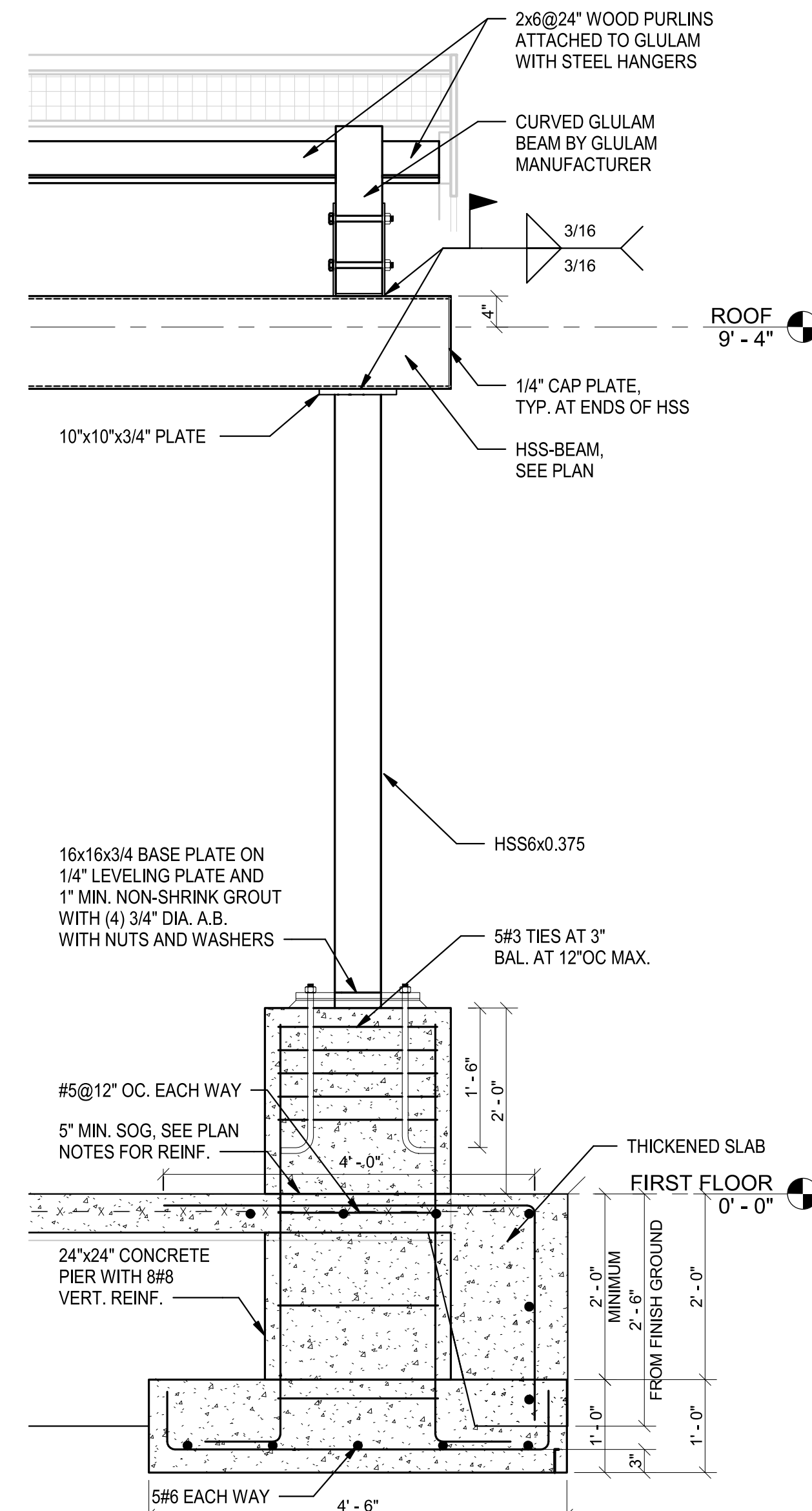
I CERTIFY THAT THESE DOCUMENTS WERE PREPARED
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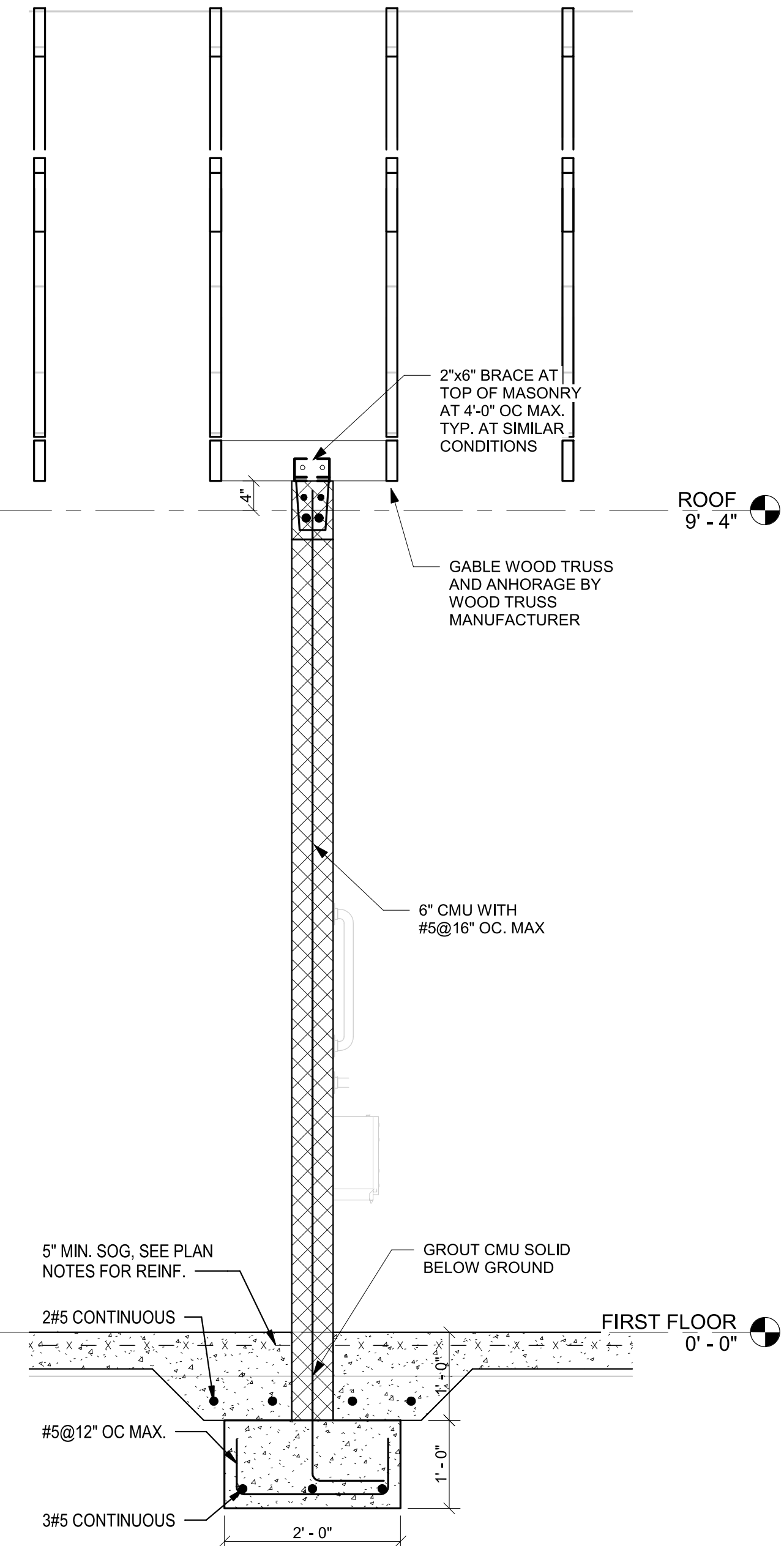
1 SECTION AT EXTERIOR WALL
SCALE: N.T.S.



2 SECTION AT ROOF CANTILEVER
SCALE: N.T.S.



3 SECTION AT CANOPY
SCALE: N.T.S.



4 SECTION AT INTERIOR MASONRY WALL
SCALE: N.T.S.



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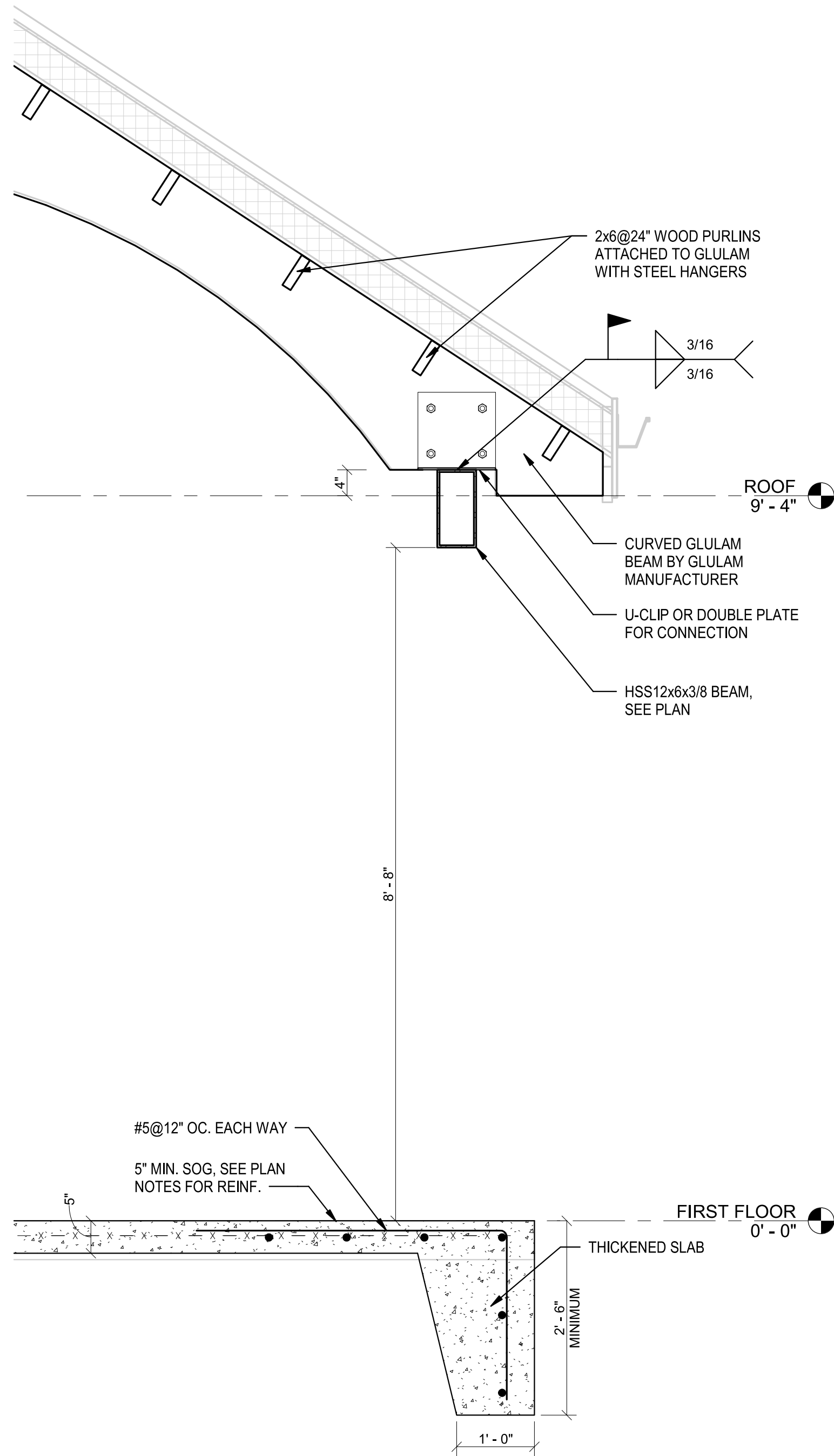
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SECTIONS AND DETAILS

SHEET
S-401



1 SECTION AT GLULAM BEAM
3/4" = 1'-0"



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Description	
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CHECKED BY: AJ

SECTIONS AND
DETAILS

SHEET
S-402

DUCTWORK SYMBOLS:

	SMOKE DETECTOR
	THERMOSTAT
	TEMPERATURE SENSOR
	SUPPLY DUCT GOING UP
	RETURN DUCT GOING UP
	SUPPLY DUCT GOING DOWN
	RETURN DUCT GOING DOWN
	FLEXIBLE DUCT
	DUCT WITH BOTTOM REGISTER
	DUCT WITH SIDE REGISTER
	ROUND NECK CEILING DIFFUSER WITH FLEXIBLE DUCT
	SQUARE NECK CEILING DIFFUSER
	DUCT WITH FLEXIBLE CONNECTION
	DUCT WITH FIRE DAMPER
	DUCT WITH MANUAL VOLUME DAMPER
	DUCT WITH DOUBLE THICKNESS TURNING VANES
	DUCT RUNOUT WITH VOLUME DAMPER
	DUCT WITH SPLITTER DAMPER
	DUCT WITH MOTORIZED DAMPER
	DUCT W/ ACOUSTIC LINING
	UNIT HEATER WITH INTEGRAL THERMOSTAT
	DIAMETER OF ROUND DUCT
	CENTER LINE OF DUCTWORK
	EXISTING DUCTWORK TO REMAIN
	EXISTING DUCTWORK OR PIPING TO BE REMOVED
	LOUVER IN DOOR


ABBREVIATIONS:

AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
BD	BACKDRAFT DAMPER
CD	CEILING DIFFUSER
CG	CEILING GRILLE
CLG.	CEILING
DB	DRY BULB
DL	DOOR LOUVER
DU	DOOR UNDERCUT
DN	DOWN
EA.	EACH
EAT	ENTERING AIR TEMPERATURE
EDB	ENTERING DRY BULB TEMPERATURE
EF	EXHAUST FAN
ER	EXHAUST REGISTER
ESP	EXTERNAL TO AHU STATIC PRESSURE
EWB	ENTERING WET BULB TEMPERATURE
EX	EXISTING
FLR	FLOOR
KW	KILOWATT
HVU	HEATING AND VENTILATING UNIT
LAT	LEAVING AIR TEMPERATURE
LDB	LEAVING DRY BULB TEMPERATURE
LWB	LEAVING WET BULB TEMPERATURE
MAU	MAKE-UP AIR UNIT
MER	MECHANICAL EQUIPMENT ROOM
MOCp	MAXIMUM OVERCURRENT PROTECTION
MOD	MOTORIZED DAMPER
NC	NOISE CRITERIA
N.I.C.	NOT IN CONTRACT
OA	OUTSIDE AIR
P.D.	PRESSURE DROP
RA	RETURN AIR
SA	SUPPLY AIR
SP	STATIC PRESSURE
TSP	TOTAL STATIC PRESSURE
TYP.	TYPICAL
UH	UNIT HEATER
VD	MANUAL VOLUME DAMPER

GENERAL NOTES

1. PROVIDE LABOR AND MATERIALS REQUIRED TO INSTALL, TEST AND PLACE INTO OPERATION ALL SYSTEMS INDICATED IN THE CONTRACT DOCUMENTS AND ACCORDING TO APPLICABLE CODES AND REGULATIONS, OWNER'S CRITERIA AND NORMAL INDUSTRY STANDARDS OF WORKMANSHIP AND QUALITY.
2. ALL INSTALLATION SHALL COMPLY WITH ALL APPLICABLE CODES OF BALTIMORE CITY.
3. FOLLOW MANUFACTURES' RECOMMENDATIONS AND INSTRUCTION FOR INSTALLING, CONNECTING, AND ADJUSTING EQUIPMENT. PROVIDE A COPY OF SUCH INSTRUCTIONS AT THE EQUIPMENT DURING INSTALLATION.
4. MAINTAIN A COMPLETE SET OF THE MOST CURRENT APPROVED SHOP DRAWINGS, PRODUCT DATA AND APPLICABLE REVISIONS ON SITE.
5. THE CONTRACT DOCUMENT ESTABLISH SCOPE, MATERIALS AND QUALITY BUT NOT DETAILED INSTALLATION INSTRUCTIONS. DRAWINGS ARE DIAGRAMMATIC.
6. THE CONTRACTOR SHALL CHECK SPACE REQUIREMENTS WITH OTHER TRADES TO ENSURE THAT THE EQUIPMENT CAN BE INSTALLED IN THE SPACE ALLOTTED WITHOUT ANY OBSTRUCTION TO THE OPERATIONAL ACTIVITIES IN THAT SPACE.
7. INSTALL MECHANICAL EQUIPMENT TO PERMIT REMOVAL OF COMPONENTS AND TO MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCES.
8. IN CASES OF DOUBT AS TO THE WORK INTENDED, OR IN THE EVENT OF THE NEED FOR EXPLANATION THEREOF, REQUEST SUPPLEMENTARY INSTRUCTIONS FROM THE ARCHITECT.
9. PROTECT THE WORK, EQUIPMENT AND MATERIALS OF OTHER TRADES FROM DAMAGE BY WORK OR WORKER OF THIS TRADE, AND CORRECT DAMAGE CAUSED WITHOUT ADDITIONAL COST TO THE OWNER.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK, MATERIAL AND EQUIPMENT UNTIL FINALLY INSPECTED, TESTED AND ACCEPTED.
11. ALL DUCT SIZES INDICATE CLEAR INSIDE DIMENSIONS.
12. UNLESS OTHERWISE INDICATED, ALL SUPPLY, RETURN, AND EXHAUST AIR DUCTWORK SHALL BE MADE OF LOW PRESSURE DUCT CONSTRUCTION IN ACCORDANCE WITH THE SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION (SMACNA) STANDARD.
13. ALL DUCT RUNOUTS SHALL BE PROVIDED WITH MANUAL DAMPER.
14. UNLESS OTHERWISE INDICATED, ALL SUPPLY AND RETURN AIR DUCTWORK SHALL BE INSULATED WITH 1-½" THICK DUCT IN ACCORDANCE WITH IECC-2018 EXCEPT FOR SOUND-LINED DUCTWORK.
15. BALANCE AIR DIFFUSERS AND REGISTERS TO PROVIDE THE CFM INDICATED.

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MURPHY & DITTENHAFFER

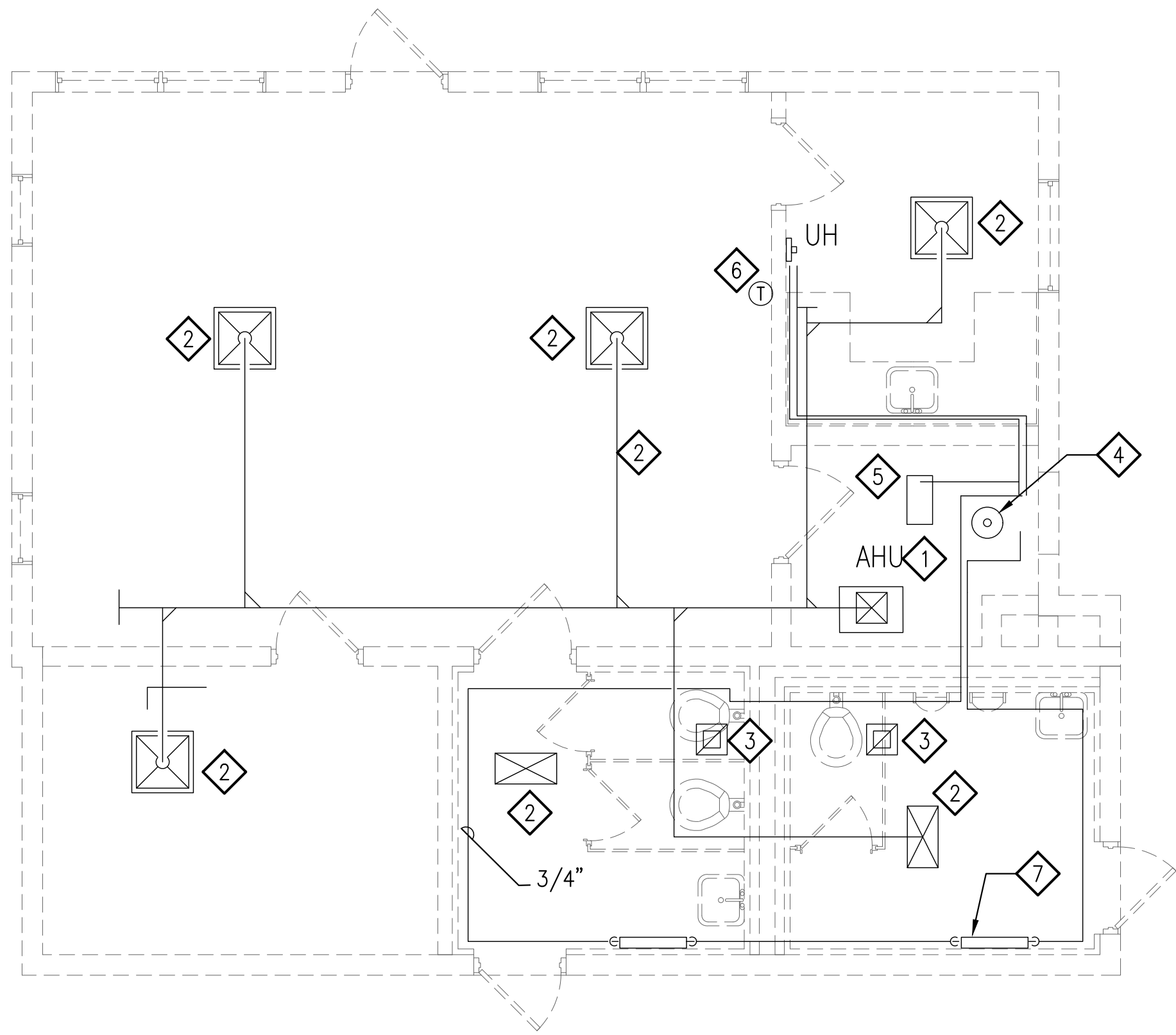
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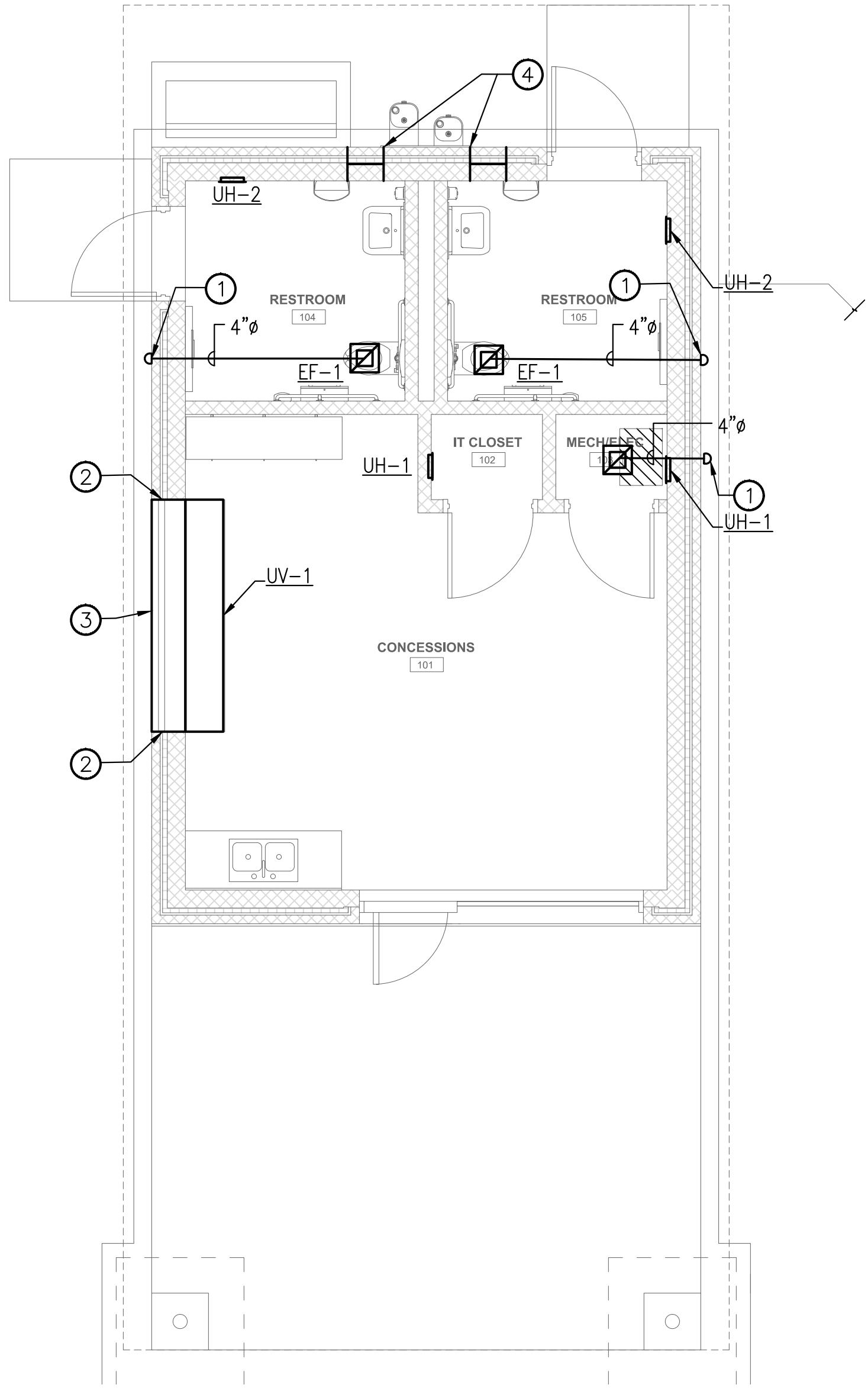
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MECHANICAL
LEGENDS AND
GENERAL NOTES

SHEET
M-001



1
MECHANICAL DEMOLITION PLAN
M-101 SCALE: 1/4" = 1'-0"



2
MECHANICAL NEW WORK PLAN
M-101 SCALE: 1/4" = 1'-0"

GENERAL NOTES

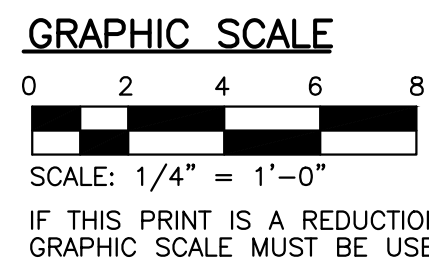
1. SEE MECHANICAL COVER SHEET FOR SYMBOLS, CONVENTIONS, ABBREVIATIONS, AND GENERAL NOTES.

MECHANICAL DEMOLITION NOTES

- 1 DISCONNECT AND REMOVE AIR HANDLING UNIT/GAS FURNACE AND FLUE PIPE.
- 2 DISCONNECT AND REMOVE ALL SUPPLY AND RETURN AIR DUCTWORK AND AIR DEVICES.
- 3 DISCONNECT AND REMOVE CEILING FAN.
- 4 DISCONNECT AND REMOVE GAS FIRED WATER HEATER AND ASSOCIATED PIPING.
- 5 DISCONNECT AND REMOVE EXPANSION TANK AND ASSOCIATED PIPING.
- 6 DISCONNECT AND REMOVE THERMOSTAT AND WIRING.
- 7 DISCONNECT AND REMOVE CONVECTOR AND ASSOCIATED PIPING.

MECHANICAL NEW WORK NOTES

- 1 PROVIDE WALL CAP W/BIRD SCREEN.
- 2 PROVIDE MANUFACTURER RECOMMENDED WALL SLEEVE.
- 3 PROVIDE MANUFACTURER RECOMMENDED WALL LOUVER.
- 4 PROVIDE 8"x8" METAL WALL LOUVER IN COORDINATION WITH ARCHITECTURAL PLANS AND ELEVATIONS. PROVIDE BIRD SCREEN ON LOUVERS.



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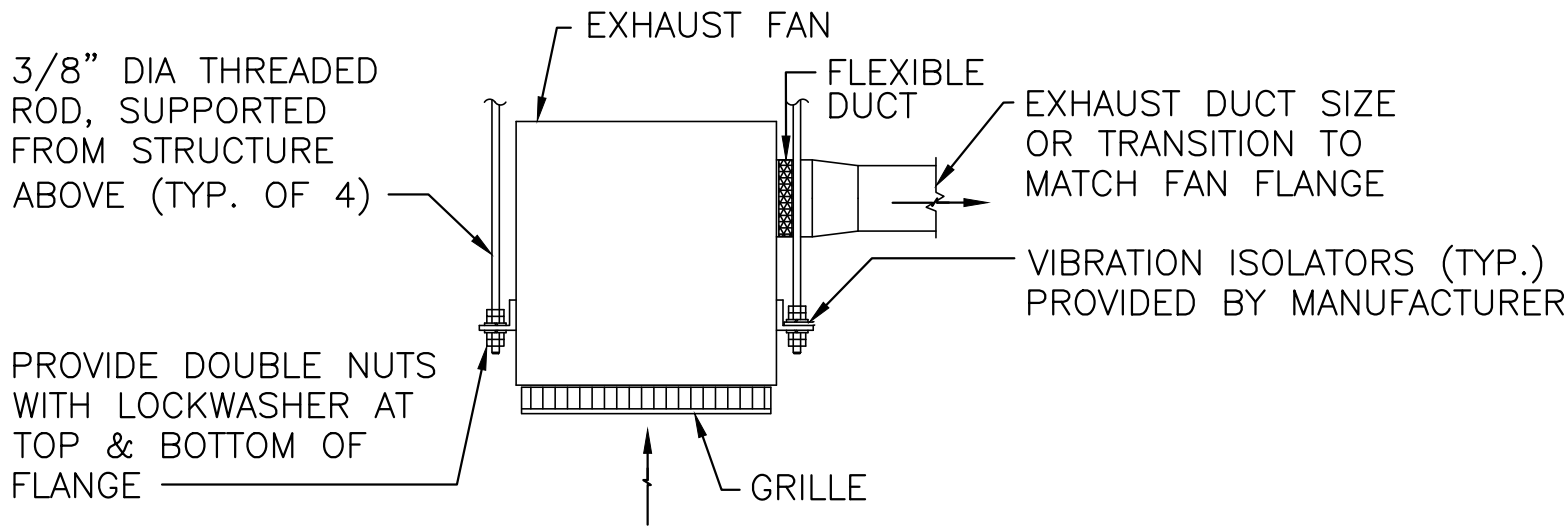
MECHANICAL
PLANS

SHEET
M-101

FAN SCHEDULE																	
FAN NO.	TYPE	LOCATION	SERVICE	CFM	E.S.P. IN. WG.	RPM	ELECTRICAL DATA				DRIVE	WEIGHT (LBS)	SONES (MAX.)	DIMENSIONS (IN.)			MANUFACTURER AND MODEL NUMBER
							HP	VOLTS	PHASE	CYCLE				LENGTH	HEIGHT	WIDTH	
EF-1	CEILING	CEILING	STORAGE/TOILET EXH.	50	0.25	900	1/20	120	1	60	DIRECT	10	3.5	14.0	8.0	12.0	GREENHECK MODEL SP

PACKAGED HEAT PUMP UNIT SCHEDULE																																					
UNIT NO.	SERVICE	LOCATION	SYSTEM EER	INLET/OUTLET FLOW TYPE	COOLING COIL DATA								EVAPORATOR FAN				COMPRESSOR DATA			CONDENSER FAN			ELECTRIC HEATING CAPACITY		ELECTRICAL DATA					WEIGHT (LBS)	DIMENSIONS (IN.)			RETURN/POWER EXHAUST MOTOR (HP)	BASIS OF DESIGN (OR APPROVED EQUAL)	REMARKS	
					CAPACITY			AIR DATA		EAT (°F)		LAT (°F)		TSP (IN WG.)	HP	FLA	RPM	NO.	RLA (EA.)	LRA (EA.)	NO.	HP (EA.)	FLA (EA.)	INPUT (KW)	OUTPUT (MBH)	VOLT	PHASE	HERTZ	MCA		MOP	LENGTH	HEIGHT				WIDTH
					NOM. TON	TOTAL MBH	SEN. MBH	SUPPLY CFM	MINIMUM O.A., CFM	EDB	EWB	LDB	LWB																								
UV-1	CONCESSIONS	WALL MTD SEMI-RECESSED	10.79	VERTICAL	3	40.9	26.4	1250	360	79.5	66.1	60.3	56.5	0.50	1/3	0.70	—	1	8.3	58.3	1	1/5	1.1	9.20	—	230	1	60	85.6	90	975	98	30	28	N/A	DAIKIN UAEQ9036	—

ELECTRIC CABINET/UNIT HEATER SCHEDULE													
UNIT No.	LOCATION	OUTPUT CAP.			DIMENSIONS			ELECTRICAL DATA			WEIGHT (LBS)	BASIS OF DESIGN	REMARKS
		CFM	MBH	KW	WIDTH (IN)	DEPTH (IN)	HEIGHT (IN)	VOLT	PHASE	HERTZ			
UH-1	MECH/STORAGE	65	1.706	0.50	10.0	4.0	12.5	120	1	60	20	QMARK CWH1101DS	WALL MOUNTED
UH-2	RESTROOMS	100	2.6	0.75	15.0	4.0	7.0	120	1	60	6	MARKEL E4002TA	SEMI-RECESSED IN WALL



1

M-102

EXHAUST FAN CEILING TYPE

NO SCALE

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MECHANICAL

SCHEDULE AND

DETAILS

ELECTRICAL SYMBOLS			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	DIAMOND WITH NUMBER – DEMOLITION NOTE.		ELECTRICAL HOME RUN. "PBX" INDICATES PANEL DESIGNATION. "XX" INDICATES CIRCUIT NUMBER.
	CIRCLE WITH NUMBER – NEW WORK NOTE.		SURFACE MOUNTED, FLUSH MOUNTED. MOTOR RATED DISCONNECT SWITCH.
	IN-WALL MANUAL-ON, TIMED OFF SWITCH (COUNTDOWN SWITCH). BOD: LUTRON MA-T51MN-BL		FUSED, UNFUSED. DISCONNECT. TOP NUMBER INDICATES DISCONNECT RATING. BOTTOM NUMBER INDICATES FUSE RATING.
	DUAL-CIRCUIT IN-WALL DUAL-TECHNOLOGY OCCUPANCY SENSOR-SWITCH FOR BI-LEVEL SWITCHING. "a" SET TO AUTO-ON/AUTO-OFF, "b" SET TO MANUAL-ON/AUTO-OFF. BOD: LUTRON MS-B202-BL		ENCLOSED CIRCUIT BREAKER. NUMBER INDICATES CIRCUIT BREAKER RATING.
	2'X2' CEILING SURFACE MOUNT LED FIXTURE: STAR CLEAN – SCS-22-HC/OC-L2401C-A-UN 3125 NOMINAL LUMENS, 80+ CRI, 4000K CCT.		ELECTRICAL SERVICE METER
	2' NARROW STRIP, CEILING/SLAB SURFACE MOUNTED: H.E. WILLIAMS – 75-2-L30/840. 3000 NOMINAL LUMENS, 80+ CRI, 4000K CCT.		120/208V PANEL. SIZED TO SCALE.
	EMERGENCY LIGHTING UNIT WITH INTEGRAL BATTERY, 7' AFF WALL MOUNTED: LIGHT ALARMS – LSCN-EM. PROVIDES 1FC AVERAGE. FIELD SELECTABLE – SET TO 'EMERGENCY LIGHTING'.		WALL, SURFACE LOCATED. – DIRECT CONNECTION TO EQUIPMENT. SEE OTHER DISCIPLINES FOR DETAILS.
	EXTERIOR WALL PACK WITH INTEGRAL BATTERY BATTERY AND PHOTOCELL, 8' AFF/AFG: LIGHT ALARMS – INF-ACSD-DB-CW		DUPLEX NEMA-5-20R RECEPTACLE. 18" AFF UON. BLACK.
	EXTERIOR WALL PACK WITH INTEGRAL PHOTOCELL, 8' AFF/AFG: LIGHT ALARMS INF-ACSD-DB-CW		DOUBLE DUPLEX (QUADRUPLEX) NEMA-5-20R RECEPTACLE. 18" AFF UON. BLACK.
	EXTERIOR PENDANT LIGHT FIXTURE. 10' AFG: RAB LIGHTING – CDLED6PS-20W-80D940-Z. 1,856 MONIMAL LUMENS, 90+ CRI, 4000K CCT. WIRED TO NORTH FACING DUSK-TO-DAWN PHOTOCELL.		DUPLEX NEMA-5-20R RECEPTACLE WITH GFCI PROTECTION. BLACK. 18" AFF UON.
	WET/OUTDOOR RATED DUSK-TO-DAWN EXTERIOR PHOTOCELL SENSOR SWITCH.		DUPLEX NEMA-5-20R RECEPTACLE WITH GFCI PROTECTION AND WEATHER PROOF WHILE IN USE TYPE. BLACK. 18" AFF UON.
	NEW SINGLE STATION INTERLINKED SMOKE ALARM – PHOTOELECTRIC.		SIMPLEX NEMA-5-20R RECEPTACLE. 18" AFF UON. BLACK.
	WALL MOUNTED DATA ROUGH-IN WITH 3/4" CONDUIT STUB-UP AND TURN-OUT ABOVE CEILING. PROVIDE INDICATED # OF CAT6 DROP HOME-RUNS BACK TO IT CLOSET.		SPECIAL USE RECEPTACLE. BLACK. REFER TO SYMBOL SUPERScript FOR NEMA TYPE (EXAMPLE: L6-15R).
	WALL MTD ROUGH-IN FOR FUTURE INDOOR POE/IP SECURITY CAMERA WITH 3/4" CONDUIT STUB-UP AND TURN-OUT ABOVE CEILING, ONE (1) CAT6 DATA HOME-RUN BACK TO IT CLOSET.		
	WALL MTD ROUGH-IN WEATHER PROOF J-BOX FOR FUTURE EXTERIOR POE/IP SECURITY CAMERA. PROVIDE 3/4" CONDUIT STUB-THROUGH WALL, ONE (1) CAT6 DATA HOME-RUN BACK TO IT CLOSET.		

ELECTRICAL ABBREVIATIONS			
A	AMPERES	G, GND	GROUND
AIC	AMPERE INTERRUPTING CAPACITY	GFCI,GFI	GROUND FAULT CIRCUIT INTERRUPTER
ATS	AUTOMATIC TRANSFER SWITCH	HP	HORSEPOWER
AWG	AMERICAN WIRE GAUGE	IBC	INTERNATIONAL BUILDING CODE
BLR	BELOW ROOF	JB	JUNCTION BOX
&	AND	KAIC	KILOAMPERE INTERRUPTING CAPACITY
C	CONDUIT	KVA	KILOVOLT-AMPERES
CB	CIRCUIT BREAKER	KW	KILOWATTS
CCT	CIRCUIT	L	LONG
CMU	CONCRETE MASONRY UNIT	LM	LUMENS
CTR	CENTER	LV	LOW VOLTAGE
CU	COPPER	MCA	MINIMUM CIRCUIT AMPERES
DIA	DIAMETER	MCB	MAIN CIRCUIT BREAKER
DISC	DISCONNECT	MHT	MOUNTING HEIGHT
DIST	DISTRIBUTION	MIN	MINIMUM
DWG(S)	DRAWING(S)	MLO	MAIN LUG ONLY
ECB	ENCLOSED CIRCUIT BREAKER	MOP	MINIMUM OVERCURRENT PROTECTION
EF	EXHAUST FAN	MTD	MOUNTED
ELEC	ELECTRICAL	N	NEUTRAL, NORMAL
EMT	ELECTRICAL METALLIC TUBING	NEC	NATIONAL ELECTRICAL CODE
EPA	ENVIRONMENTAL PROTECTION AGENCY	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
EX, ETR	EXISTING, EXISTING TO REMAIN	NO., #	NUMBER
FACP	FIRE ALARM CONTROL PANEL	OC	ON CENTER
FLA	FULL LOAD AMPERES	OCPD	OVERCURRENT PROTECTIVE DEVICE

ELECTRICAL CONVENTIONS	
EXAMPLE	DESCRIPTION
	ITEMS THAT ARE DASHED ARE BEING DEMOLISHED UNLESS OTHERWISE NOTED.
	ITEMS THAT ARE SOLID AND LIGHT ARE EXISTING TO REMAIN UNLESS OTHERWISE NOTED.
	ITEMS THAT ARE SOLID AND DARK ARE NEW TO BE INSTALLED UNLESS OTHERWISE NOTED
	RECEPTACLE WITH HORIZONTAL LINE THRU INDICATES 6-8" ABOVE COUNTER MOUNTING HEIGHT. COORDINATE WITH ARCHITECTURAL ELEVATIONS. 48" AFF IF THERE IS NO COUNTER.
	FLOATING RECEPTACLE WITH LINE LINE AT BOTTOM INDICATES RECEPTACLE DIRECTLY BELOW ANOTHER RECEPTACLE.
	+XX INDICATES MOUNTING HEIGHT ABOVE FINISHED FLOOR IN INCHES TO BOTTOM OF WALL MOUNTED DEVICE.
	UPPERCASE LETTERS INDICATE FIXTURE TYPE DESIGNATION. IF SHOWN, LOWERCASE LETTERS INDICATE ASSOCIATED SWITCHING/CONTROLS.
	EXIT SIGNS, EXTERIOR EGRESS, & ALL FIXTURES WITH A FILLED DOT SHALL ILLUMINATE DURING A POWER OUTAGE.

ELECTRICAL GENERAL DEMOLITION NOTES	
A.	INFORMATION SHOWN ON THESE DRAWINGS PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE ACTUAL EXISTING CONDITIONS IN DETAIL OR DIMENSION. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE ACTUAL EXISTING CONDITIONS PRIOR TO FABRICATION OR PERFORMANCE OF WORK. SHOULD CONDITIONS BE DISCOVERED THAT PREVENT EXECUTION OF THE WORK AS INDICATED, IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING AND AWAIT DIRECTION BEFORE PROCEEDING WITH THE WORK.
B.	WHERE EQUIPMENT IS NOTED "DISCONNECT" OR "REMOVE", REMOVE ASSOCIATED WIRE/CABLE AND CONDUIT BACK TO THE SOURCE UNLESS OTHERWISE NOTED.
C.	REMOVE EXISTING EQUIPMENT AND DEVICES INDICATED, INCLUDING ASSOCIATED WIIRE/CABLE AND CONDUIT BACK TO SOURCE UNLESS OTHERWISE NOTED.
D.	EXISTING CIRCUITS INTERRUPTED BY DEMOLITION, BUT ARE TO REMAIN, SHALL BE MADE CONTINUOUS. WIRING FOR CONTINUITY SHALL BE RUN CONCEALED.
F.	WHERE DEVICES ARE TO BE REMOVED AND RELOCATED/REINSTALLED, EXTEND EXISTING WIRE AND CONDUIT TO NEW LOCATIONS AS REQUIRED.
G.	FOR DEVICES REMOVED AND BOXES TO REMAIN IN BLOCK OR CONCRETE WALLS, PROVIDE STAINLESS STEEL BLANK OFF COVER PLATES.
I.	DEMOLITION SHALL INCLUDE REMOVAL AND OFF-SITE DISPOSAL OF MATERIALS. DO NOT ABANDON IN PLACE RELATED ELECTRICAL COMPONENTS UNLESS OTHERWISE NOTED ON DRAWINGS.
J.	UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN DASHED SHALL BE REMOVED AND ITEMS SHOWN LIGHT SOLID SHALL REMAIN.
K.	THE EXISTING FACILITY WILL REMAIN IN OPERATION DURING RENOVATION. ALL INTERRUPTION TO THE EXISTING BUILDING ELECTRIC SERVICE SHALL BE COORDINATED WITH THE PROJECT MANAGER TO MINIMIZE DISRUPTION.

ELECTRICAL GENERAL NOTES	
1.	ALL ELECTRICAL WORK IS NEW UNLESS OTHERWISE NOTED, AND SHALL BE INSTALLED IN ACCORDANCE W/ THE CURRENT BUILDING CODES (I.E., NEC, NFPA, OSHA, INTERNATIONAL BUILDING CODE) ADOPTED BY BALTIMORE CITY, THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ). ELECTRICAL INSTALLATION SHALL COMPLY WITH THE LOCAL COUNTY CODES IN EFFECT DURING THE TIME OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY ELECTRICAL EQUIPMENT AND CONNECTIONS INCLUDING CONTROL WIRING IN CONDUIT SYSTEM TO OTHER DISCIPLINES' EQUIPMENT AS INDICATED AND REQUIRED FOR A COMPLETE AND FUNCTIONAL ELECTRICAL SYSTEM.
2.	CONDUCTORS FOR POWER SHALL BE COPPER MINIMUM #12 THHN/THWN, INSTALLED IN CONDUITS, UON, (MINIMUM 3/4", UON). RUN ALL EMT CONDUITS CONCEALED IN WALL OR OTHER EXPOSED STRUCTURE UNLESS OTHERWISE NOTED FOR SURFACE MOUNTED DEVICES/EQUIPMENT. PROVIDE PULL WIRE FOR ALL EMPTY CONDUITS. CONDUIT FOR LOW ENERGY, CONTROL AND SIGNAL CIRCUITS SHALL BE MINIMUM 3/4".
3.	MANUFACTURER AND CATALOG NUMBERS ARE INDICATED AS "BASIS OF DESIGN" ONLY AND SHALL NOT PRECLUDE THE USE OF OTHER MANUFACTURER'S PRODUCTS PROVIDED THEY ARE APPROVED EQUIVALENT TO THOSE SPECIFIED.
4.	ALL BRANCH CIRCUITS SHALL CONTAIN WIRING INCLUDING AN INSULATED (GREEN) GROUNDING CONDUCTOR IN A CONDUIT, EACH SIZED PER NEC. ALL CONDUCTOR SIZES ARE BASED ON THE USE OF "THHN/THWN" INSULATION AND EQUIPMENT/MANUFACTURER SELECTED DURING THE DESIGN. IN THE EVENT A DIFFERENT INSULATION/WIRES SHOULD BE USED TO ACCOMMODATE MANUFACTURER'S REQUIREMENTS/DIFFERENT EQUIPMENT PROVIDED DURING THE CONSTRUCTION, OCPD AND CONDUCTOR/CONDUIT SIZES SHALL BE ADJUSTED ACCORDING TO NEC, AND PROVIDED AT NO ADDITIONAL COST.
5.	DRAWINGS ARE DIAGRAMMATIC ONLY AND DO NOT SHOW ALL OFFSETS, BENDS, ELBOWS, JB'S, WIRE TROUGHS, PULL BOXES OR OTHER REQUIRED ELEMENTS FOR PROPER INSTALLATION OF THE WORK. ALL NECESSARY MATERIALS NEED TO FULFILL THE PROJECT REQUIREMENTS SHALL BE PROVIDED AT NO ADDITIONAL COST.
6.	ALL CIRCUITRY SHOWN IN THE DRAWINGS ARE INTENDED FOR DESIGN PURPOSE ONLY. THE CONTRACTOR SHALL VERIFY IN THE FIELD THE MOST SUITABLE ROUTES AS REQUIRED.
7.	WORK SHALL BE CARRIED OUT IN PHASE W/ OTHER DISCIPLINES. COORDINATE WITH ARCHITECTURAL, MECHANICAL, AND PLUMBING CONTRACT DOCUMENTS IN TERMS OF EQUIPMENT COMPATIBILITY AND MOUNTING ARRANGEMENT PRIOR TO INSTALLATION.
8.	THE LOCATIONS OF SWITCHES, RECEPTACLES, LIGHTING FIXTURES, OUTLETS, AND OTHER EQUIPMENT ARE APPROXIMATE. COORDINATE AND INSTALL THESE ITEMS SO AS TO ELIMINATE INTERFERENCE W/ DUCTS, PIPES AND ALL OTHER EQUIPMENT. VERIFY DOOR SWINGS SO THAT LIGHT SWITCHES ARE PROPERLY LOCATED. ADJUST MHT's AND PROVIDE APPROPRIATE MOUNTING HARDWARE AS REQUIRED AT NO ADDITIONAL COST.
9.	PROVIDE EQUIPMENT GROUNDING AND/OR BONDING JUMPER TO ALL EQUIPMENT AND CIRCUITS, SIZED AS PER NEC, AND AS SHOWN ON DRAWINGS.
10.	COMPLY WITH NFPA's, OTHER APPLICABLE CODES, AND AUTHORITY HAVING JURISDICTION OR AS SHOWN ON DRAWINGS FOR MOUNTING HEIGHTS OF ALL ELECTRICAL EQUIPMENT AND DEVICES. MAINTAIN MINIMUM WORKING CLEARANCES REQUIRED BY NEC.
11.	WHERE NEW WALLS ARE BEING CONSTRUCTED, MOUNT NEW WIRING DEVICES RECESSED IN WALL AS APPLICABLE, UON. COORDINATE WITH THE ARCHITECTURAL PLANS FOR WALL SECTIONS AND DETAILS. WHERE EXISTING CMU BLOCK IS TO REMAIN, AND IN MECHANICAL ROOMS, MOUNT ALL NEW WIRING DEVICES SURFACE MOUNT, UON. COORDINATE WITH THE ARCHITECTURAL PLANS FOR WALL SECTIONS AND DETAILS. WHERE REPLACING AN EXISTING RECESSED WIRING DEVICES IN EXISTING WALL, REUSE THE EXISTING BOX AND CONDUIT AND MOUNT THE DEVICE THE SAME AS THE ONE BEING REPLACED. COORDINATE WITH THE ARCHITECTURAL PLANS FOR WALL SECTIONS AND DETAILS.
12.	SEAL ALL ELECTRICAL PENETRATIONS THROUGH FIRE RATED WALLS AND FLOORS W/ APPROVED UL LISTED FIRE STOPPING MATERIALS PER NFPA AND OTHER APPLICABLE CODES/REGULATIONS.
13.	CIRCUITS SUPPLYING RECEPTACLES, AS MINIMUM, SHALL BE #12 THHN CONDUCTORS IN 3/4" EMT OR MC CABLE RUN HORIZONTALLY ON UNDERSIDE OF STRUCTURE; AND #12 THHN CONDUCTORS IN EMT CONDUIT RUN VERTICALLY IN THE CMU BLOCK WALL OR DRY WALL PARTITION. EACH CIRCUIT SHALL HAVE A SEPARATE NEUTRAL. DAISY CHAIN CONNECTION BETWEEN RECEPTACLES IS NOT PERMITTED – WIRE THE OUTLET IN A MANNER THAT IF ONE OUTLET HAS BEEN REMOVED, THE REMAINING OUTLETS IN THE CIRCUIT WILL STILL BE ENERGIZED.
14.	PROVIDE TAMPER-RESISTANT RECEPTACLES WHERE IT REQUIRED PER NEC CODE 2011.
15.	PROVIDE A SINGLE FACE PLATE WHERE TWO OR MORE DEVICES APPEAR IN A SINGLE LOCATION ON THE DRAWINGS.
16.	COORDINATE WITH ARCHITECTURAL DRAWINGS FOR LOCATIONS, MOUNTING HEIGHT AND INSTALLATION OF ALL ELECTRICAL DEVICES NOTED ON ARCHITECTURAL DOCUMENTS. IF THERE ARE ANY DIFFERENCES BETWEEN THE ARCHITECTURAL AND ELECTRICAL DRAWINGS, THE ARCHITECTURAL DRAWINGS SHALL SUPERSEDE ELECTRICAL DRAWINGS, UON.
17.	WHERE CONDUCTORS SHALL BE CONCEALED BY GRID DROP CEILING TILES, ALL NEW CONDUCTORS SHALL BE RUN AS MC CABLE TYPE OF THE SAME RATING AND CONDUCTOR COUNT, IN PLACE OF INDIVIDUAL CONDUCTORS IN EMT CONDUIT, UON.

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ELECTRICAL

LEGENDS AND

GENERAL NOTES

SHEET

E-001

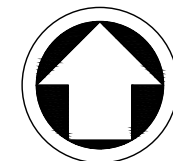


- GENERAL NOTES
1. SEE ELECTRICAL COVER SHEET FOR SYMBOLS, CONVENTIONS, ABBREVIATIONS, AND GENERAL NOTES.
- UTILITY PLAN NOTES
- 1

NEW SERVICE ENTRY RATED PANEL "A"
- 2

NEW METER AND SOCKET. PROVIDE METER SOCKET. METER PROVIDED BY BGE.
- 3

NEW INCOMING UNDERGROUND ELECTRICAL SERVICE.



NORTH

GRAPHIC SCALE

0

8

16

32

48 FT

SCALE: 1/16" = 1' - 0"

IF THIS PRINT IS A REDUCTION,
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A R C H I T E C T S

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410-625-4823 voice 410-625-4874 fax

Mark	Date	Description
1	8/8/25	BID SET

PROJECT NO: 20120

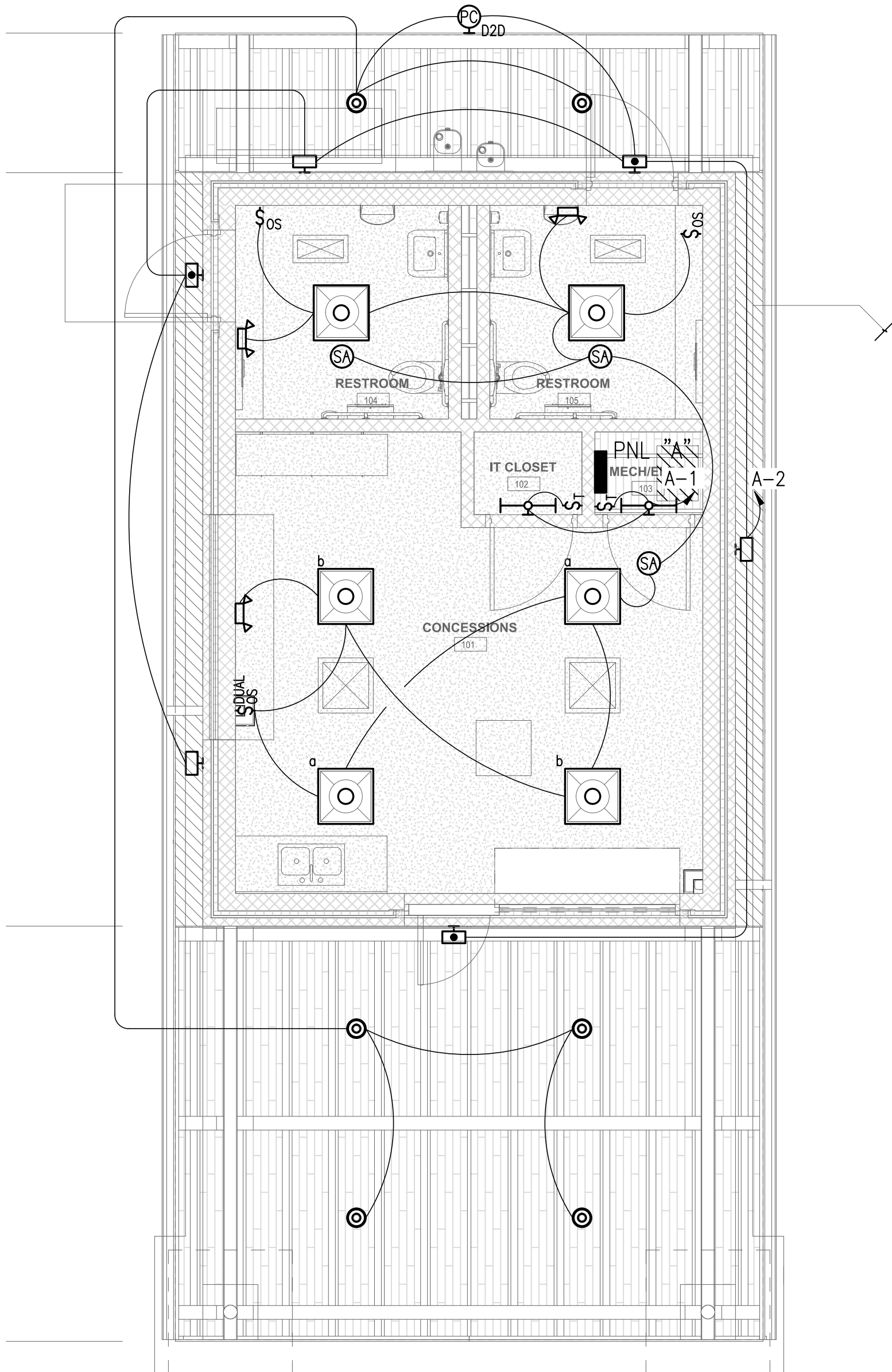
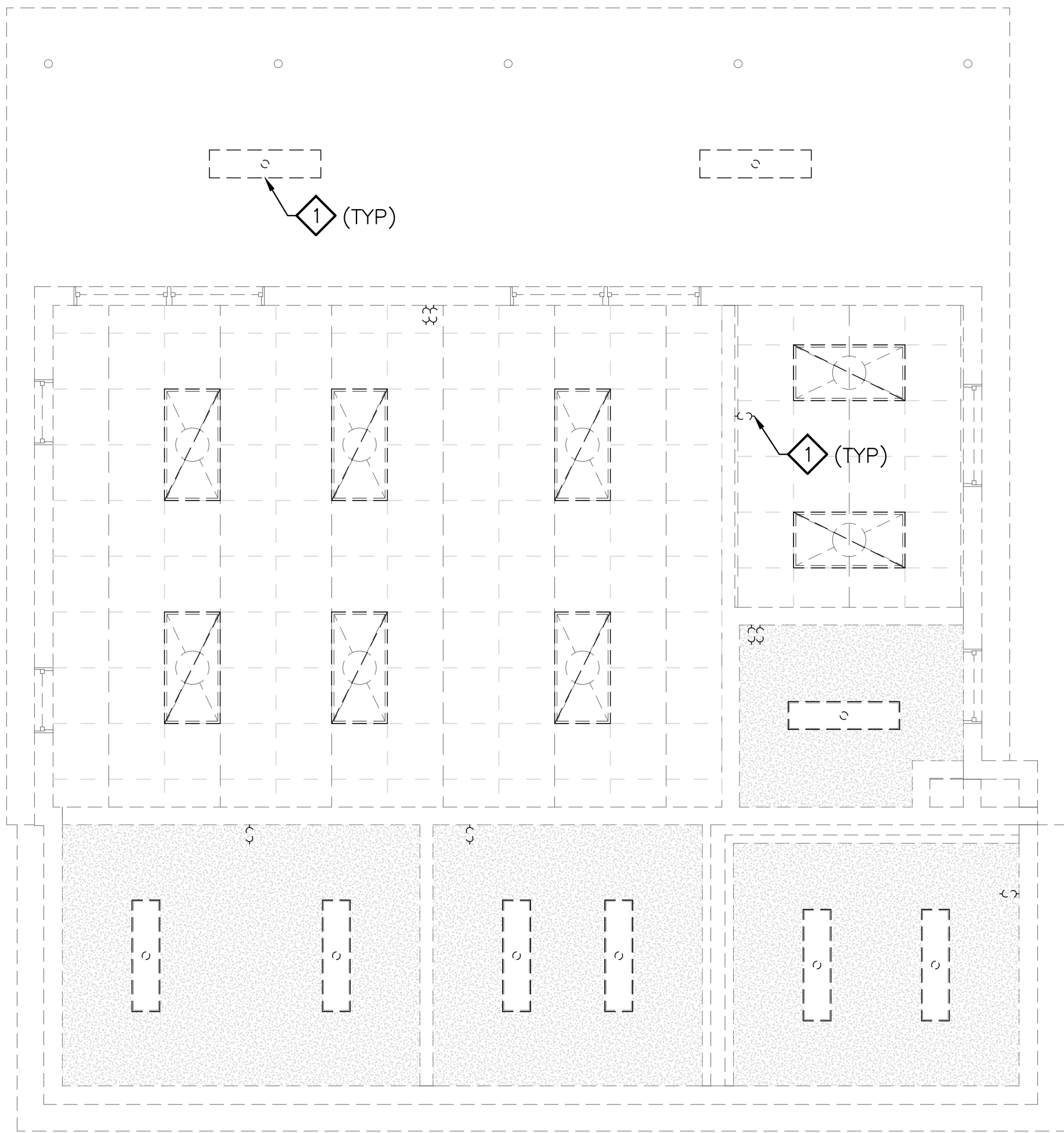
DRAWN BY: MH

CHECKED BY: KS

SITE UTILITY PLAN

SHEET

ME-101

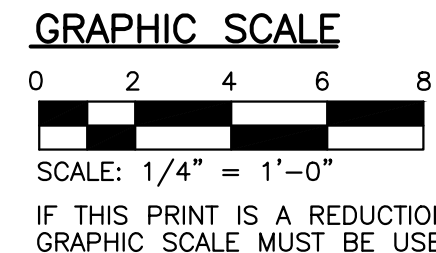


GENERAL NOTES

- SEE ELECTRICAL COVER SHEET FOR SYMBOLS, CONVENTIONS, ABBREVIATIONS, AND GENERAL NOTES.

LIGHTING DEMOLITION NOTES

- 1 REMOVE ALL LIGHT FIXTURES AND SWITCHES.



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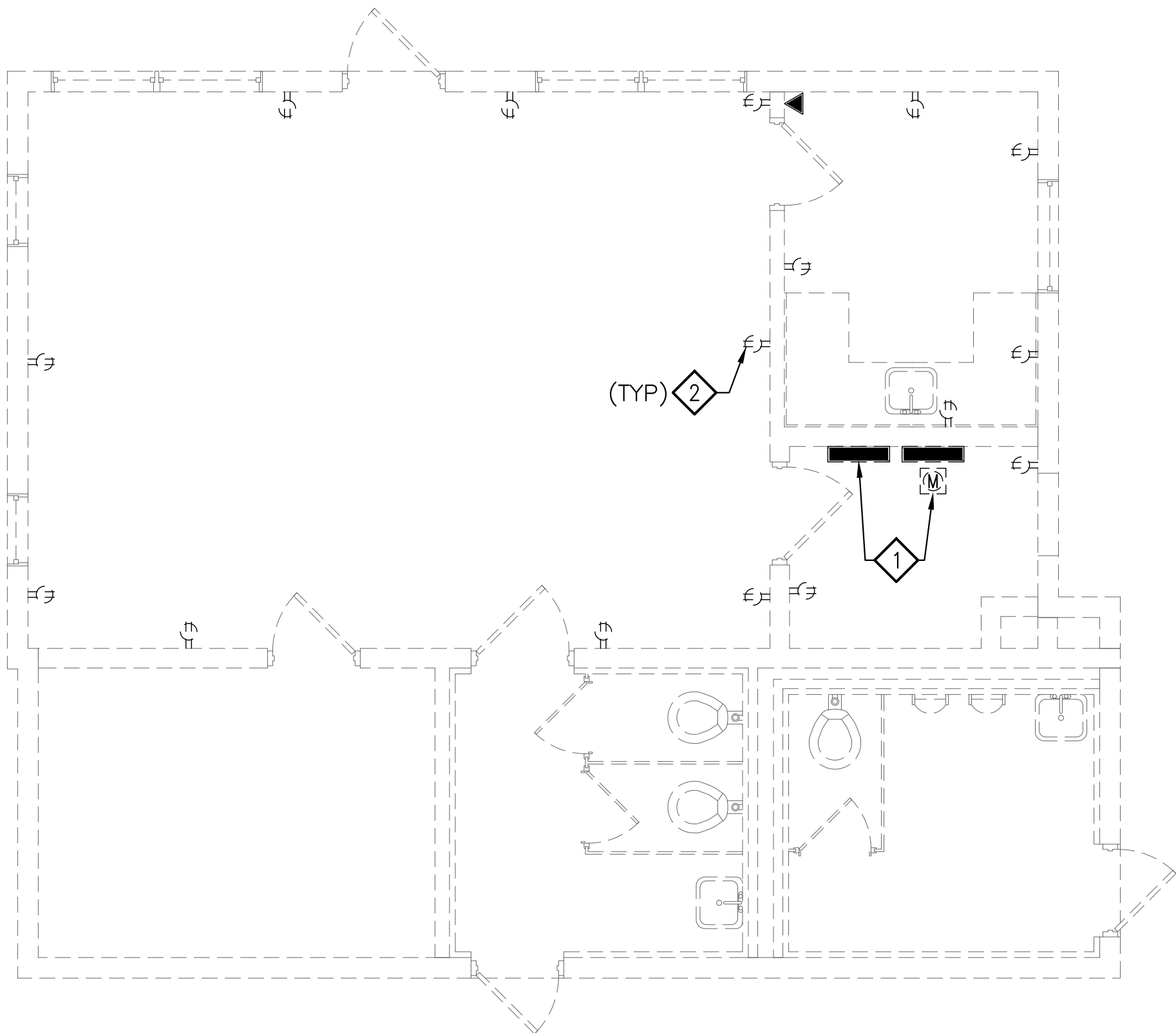
Murphy & Dittenhafer
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228 West Market Street, York, Pennsylvania 17401
717-648-8627 voice 717-643-3489 fax
800 North Charles Street, Baltimore, Maryland 21201
410-625-4823 voice 410-625-4874 fax

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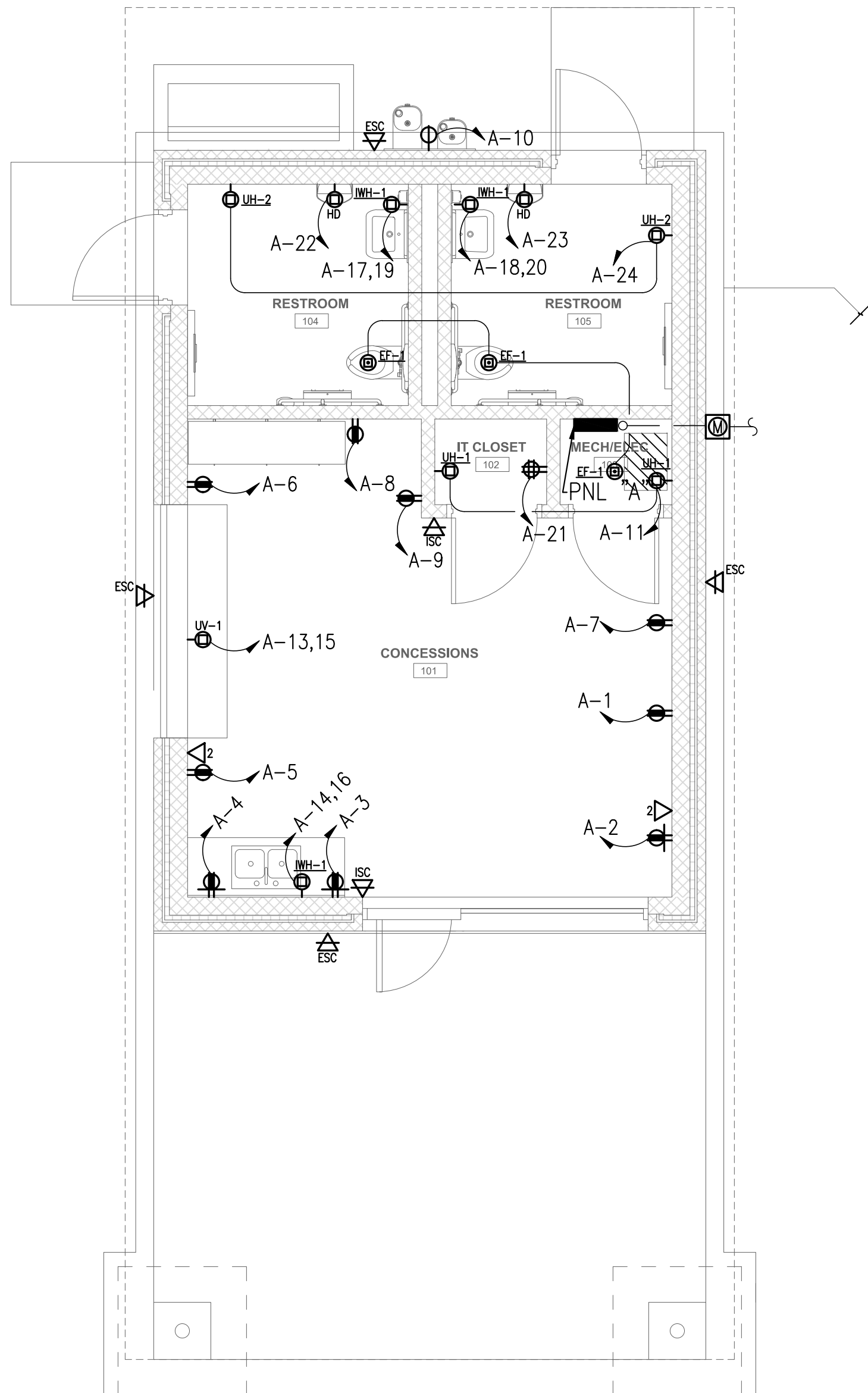
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LIGHTING
PLANS

SHEET
E-101



1 ELECTRICAL DEMOLITION PLAN
SCALE: 1/4" = 1'-0"



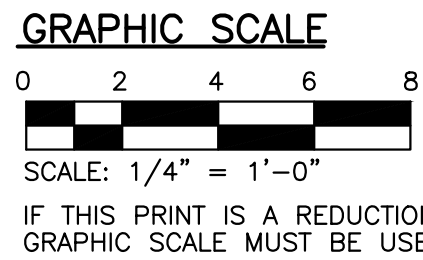
2 ELECTRICAL & DATA NEW WORK PLAN
SCALE: 1/4" = 1'-0"

GENERAL NOTES

1. SEE ELECTRICAL COVER SHEET FOR SYMBOLS, CONVENTIONS, ABBREVIATIONS, AND GENERAL NOTES.

ELECTRICAL DEMOLITION NOTES

- 1 DISCONNECT AND REMOVE SERVICE, METER, AND PANELBOARDS.
2 REMOVE ALL RECEPTACLES AND JACKS.



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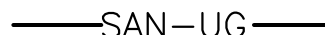
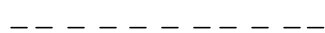
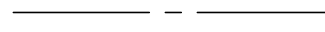
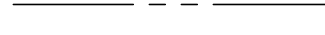






















Mark	Date	Description
1	8/8/25	BID SET

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ELECTRICAL
PLANS & PANEL
SCHEDULE

SHEET
E-201

PLUMBING SYMBOLS

	SAN	SANITARY OR WASTE PIPE
	SAN	UNDERGROUND SANITARY OR WASTE PIPE
	V	VENT
	CW	DOMESTIC COLD WATER PIPING
	HW	DOMESTIC HOT WATER PIPING
	HWR	DOMESTIC HOT WATER RETURN
		BALANCING VALVE
		PIPE TURNING DOWN
		PIPE TURNING UP
		UNION
		RISE OR DROP
		BRANCH-TOP CONNECTION
		BRANCH-BOTTOM CONNECTION
		FLOW IN DIRECTION OF ARROW
		CAPPED OUTLET
		CAPPED PIPE
		CHECK VALVE
		TRAP PRIMER PIPE
	SA	SHOCK ABSORBER
		BALL VALVE
		STRAINER W/HOSE END DRAIN VALVE
	CO	CLEANOUT
	FD	FLOOR DRAIN
		METER
		WALL HYDRANT (WH)
		EXISTING PIPING TO BE REMOVED
		EXISTING FIXTURE TO BE REMOVED

PLUMBING ABBREVIATIONS

ADA	AMERICANS WITH DISABILITIES ACT
BFP	BACK FLOW PREVENTER
DFU	DRAINAGE FIXTURE UNIT
DIA	DIAMETER
DN	DOWN
E,EX.	EXISTING
ETR	EXISTING TO REMAIN
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FLR	FLOOR
FS	FLOOR SINK
FV	FLUSH VALVE
GPM	GALLONS PER MINUTE
HP	HORSEPOWER
HZ	HERTZ
HW	HOT WATER
IN	INCHES
MAX	MAXIMUM
MIN	MINIMUM
SFU	SUPPLY FIXTURE UNIT
TP	TRAP PRIMER
TPP	TYPICAL
VTR	VENT THRU ROOF
WCO	WALL CLEANOUT
W/	WITH

PLUMBING GENERAL NOTES

1. THE CONTRACTOR SHALL VISIT THE SITE TO VERIFY EXISTING CONDITIONS OF EXISTING PLUMBING SYSTEMS PRIOR TO ORDERING AND FABRICATION.
2. ALL PIPING SHALL BE INSTALLED OVERHEAD, TIGHT TO UNDERSIDE OF STRUCTURE OR INSIDE PIPE CHASE UNLESS OTHERWISE INDICATED.
3. INSTALL PIPING SO THAT ALL VALVES ARE ACCESSIBLE FOR MAINTENANCE. PROVIDE ACCESS PANELS WHERE HARD CEILING IS INSTALLED.
4. ALL EQUIPMENT PHYSICAL DIMENSIONS SHOWN ON PLUMBING DRAWINGS ARE APPROXIMATE ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL EQUIPMENT DIMENSIONS IN ACCORDANCE WITH MANUFACTURER'S SHOP DRAWINGS AND COORDINATION WITH OTHER TRADES.
5. THE CONTRACTOR SHALL COORDINATE WITH ALL TRADES PRIOR TO AND DURING INSTALLATION OF PLUMBING PIPING.
6. THE CONTRACTOR SHALL PROVIDE AND COORDINATE ALL PIPE HANGERS AND SUPPORTS INSTALLATION WITH OTHER TRADES.
7. ALL PLUMBING INSTALLATION SHALL CONFORM TO THE 2018 EDITION OF THE INTERNATIONAL PLUMBING CODE AND THE BALTIMORE CITY REGULATIONS.
8. PRIOR TO CONNECTION TO EXISTING SANITARY PIPING SYSTEM, THE CONTRACTOR SHALL FLUSH THE EXISTING SANITARY PIPING WITHIN THE CONTRACT LIMITS AND VERIFY THAT NO OBSTRUCTIONS OR LEAKS EXIST. IF OBSTRUCTIONS OR LEAKS ARE NOTED, THE CONTRACTOR SHALL CONTACT THE OWNER; REPRESENTATIVE.

PLUMBING SCHEDULES

PLUMBING FIXTURE CONNECTION SCHEDULE									igCC DATA	
ITEM	DESCRIPTION	WASTE	VENT	CW	HW	TW	FLOW RATE	REMARKS	MFR.	MODEL NUMBER
WC-1	WATER CLOSET, ADA COMPLIANT	4"	2"	1"	-	-	1.28 GPF	FLOOR MOUNTED, FLUSH VALVE, 16 3/4" HIGH	ZURN	Z6000AV-HET
L-1	LAVATORY	1 1/2"	1 1/2"	1/2"	1/2"	-	0.35 GPM	WALL MOUNTED	ZURN	Z867R0-XL
EWC-1	ELECTRIC WATER COOLER	1 1/2"	1 1/2"	1/2"	-	-		ADA - ACCESSIBLE, BI-LEVEL. PROVIDE ASSE 1024 BFP.		
S-1	2-COMPARTMENT SINK - ADA COMPLIANT	2"	1 1/2"	1/2"	1/2"	-	0.5 GPM	COUNTER TOP, DROP-IN.	ZURN	Z831B1-XL-ICT

ELECTRIC WATER HEATER SCHEDULE												
UNIT NO	LOCATION	HEATING ELEMENT (KW)	HW HEATER RECOVERY RATE @ 90°F RISE (GPH)	ENTERING WATER TEMP.(°F)	LEAVING WATER TEMP.(°F)	STORAGE CAPACITY (GAL.)	ELECTRICAL DATA			APPROXIMATE OPERATING WEIGHT (LBS)	APPROXIMATE DIMENSIONS (IN.)	BASIS OF DESIGN
							VOLT	PHASE	CYCLE		HEIGHT x WIDTH x DEPTH	
IWH-1	BELOW SINK/LAV	4.8	-	45	109	N/A	240	1	60	4	10.75 x 5.25 x 2.875	EEMAX MODEL EX48T EE

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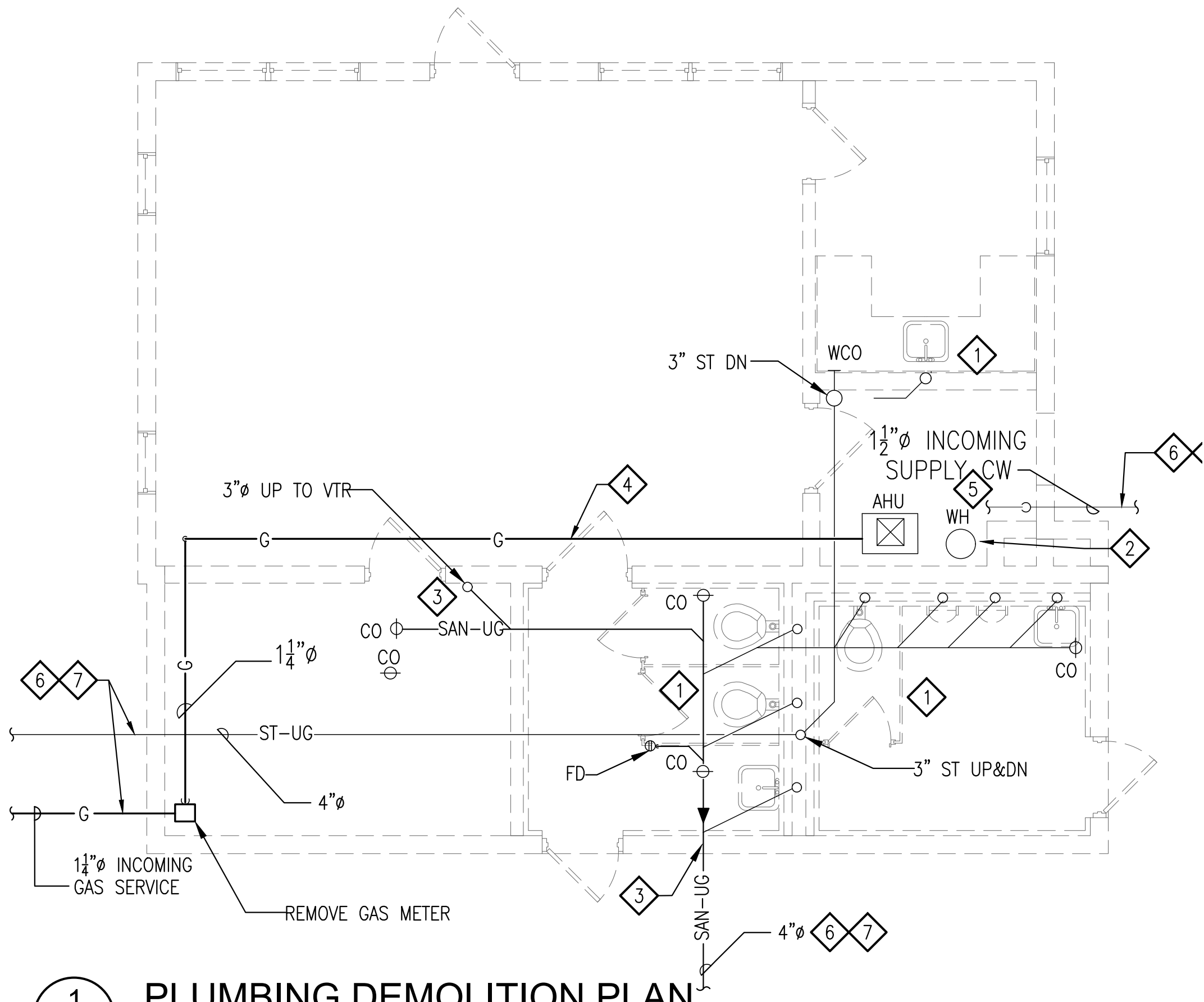
Murphy & Dittenhafer

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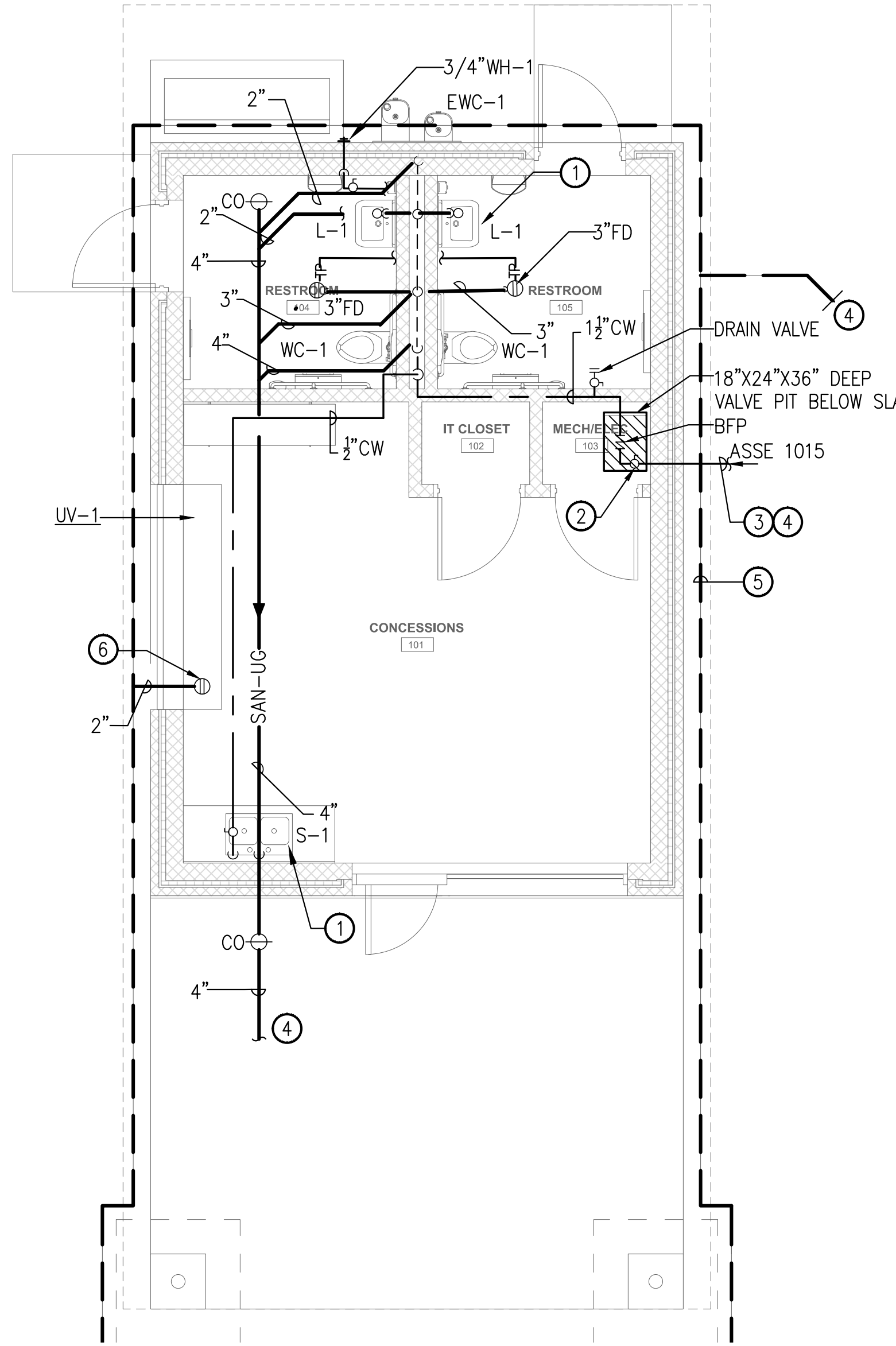
PROJECT NO:	20120
DRAWN BY:	MH
CHECKED BY:	KS

PLUMBING LEGEND AND GENERAL NOTES

SHEET
P-001



1 PLUMBING DEMOLITION PLAN
P-101 SCALE: 1/4" = 1'-0"



2 PLUMBING NEW WORK PLAN
P-101 SCALE: 1/4" = 1'-0"

GENERAL NOTES

- SEE PLUMBING COVER SHEET FOR SYMBOLS, CONVENTIONS, ABBREVIATIONS, AND GENERAL NOTES.

PLUMBING DEMOLITION NOTES

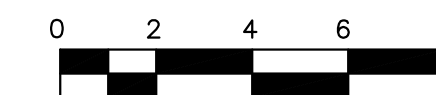
- EXISTING PLUMBING FIXTURES AND ASSOCIATED PIPING TO BE REMOVED.
- EXISTING WATER HEATER AND ASSOCIATED PIPING TO BE REMOVED.
- EXISTING SANITARY AND VENT PIPING TO BE REMOVED.
- REMOVE GAS PIPING.
- EXISTING COLD WATER AND HOT WATER PIPING TO BE REMOVED.
- FOR CONTINUATION SEE CIVIL DRAWINGS.
- COORDINATE WITH CIVIL FOR DISCONNECTION AND REMOVAL OF COLD WATER, STORM, SANITARY, AND GAS SERVICES.

PLUMBING NEW WORK NOTES

- PROVIDE INSTA HOT WATER HEATER UNDER THE SINK/LAVATORY.
- BFP AND SHUT-OFF VALVE IN PIT BELOW SLAB. SEE DETAIL 9 ON P-102.
- 1 1/2 INCOMING WATER SERVICE BELOW GRADE.
- FOR CONTINUATION REFER TO CIVIL DRAWING.
- 4" FOUNDATION DRAIN. COORDINATE WITH ARCHITECTURAL DETAILS FOR INSTALLATION.
- PROVIDE 2" FLOOR DRAIN BELOW MECHANICAL UNIT, UV=1, TO RECEIVE CONDENSATE DRAIN FROM UNIT. COORDINATE WITH MECHANICAL INSTALLER FOR EXACT LOCATION OF FLOOR DRAIN. COORDINATE WITH STRUCTURAL AND ARCHITECTURAL FOR CONNECTING 2" PIPE TO 4" PERFORATED FOUNDATION DRAIN PIPE.



GRAPHIC SCALE



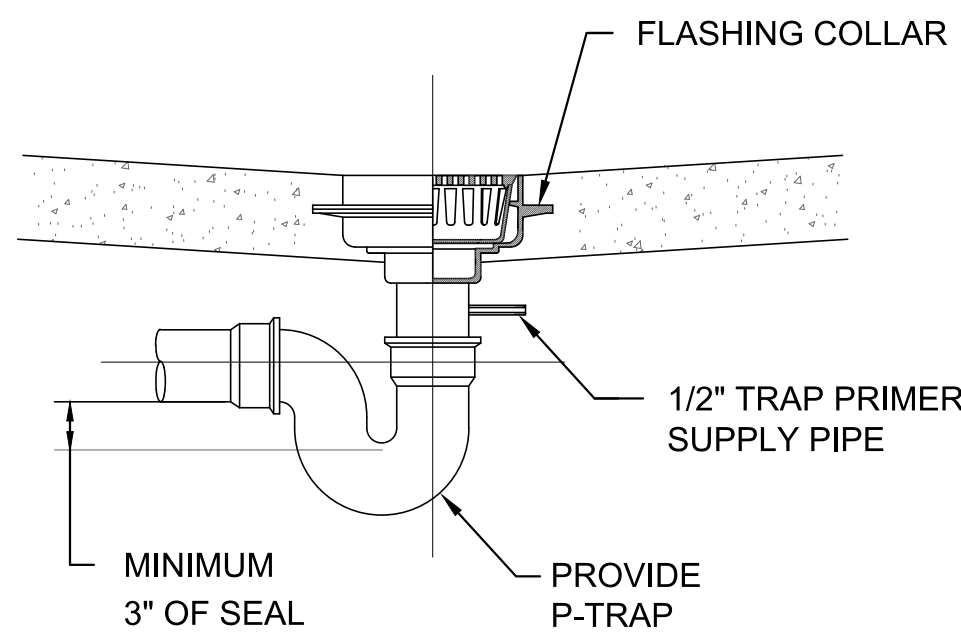
SCALE: 1/4" = 1'-0"
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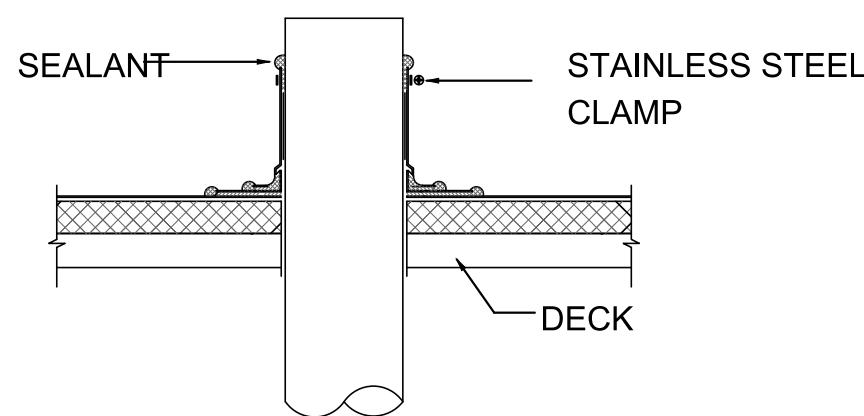
PROJECT NO:	20120
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PLUMBING PLANS

SHEET P-101

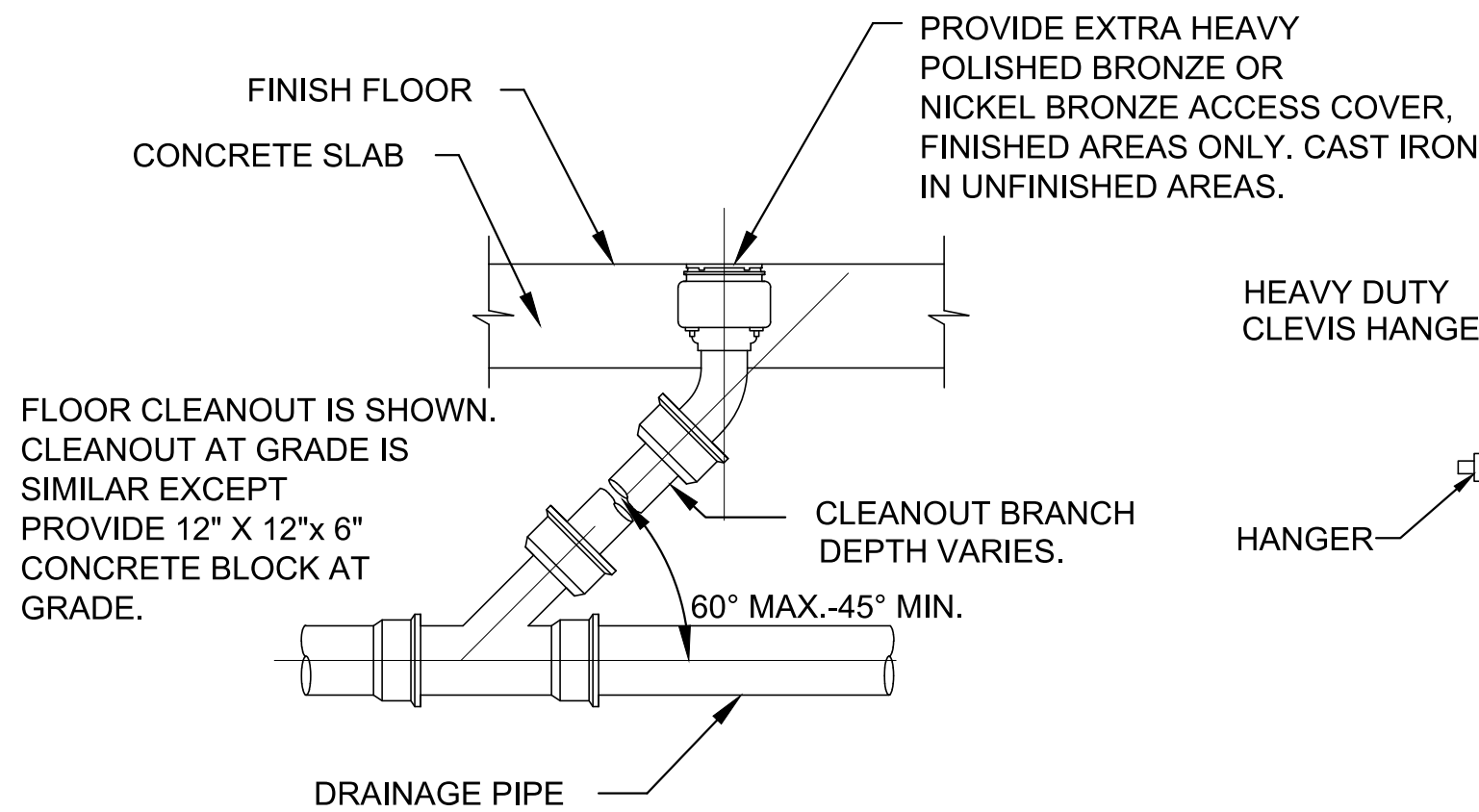


1 FLOOR DRAIN DETAIL
P-102 NO SCALE

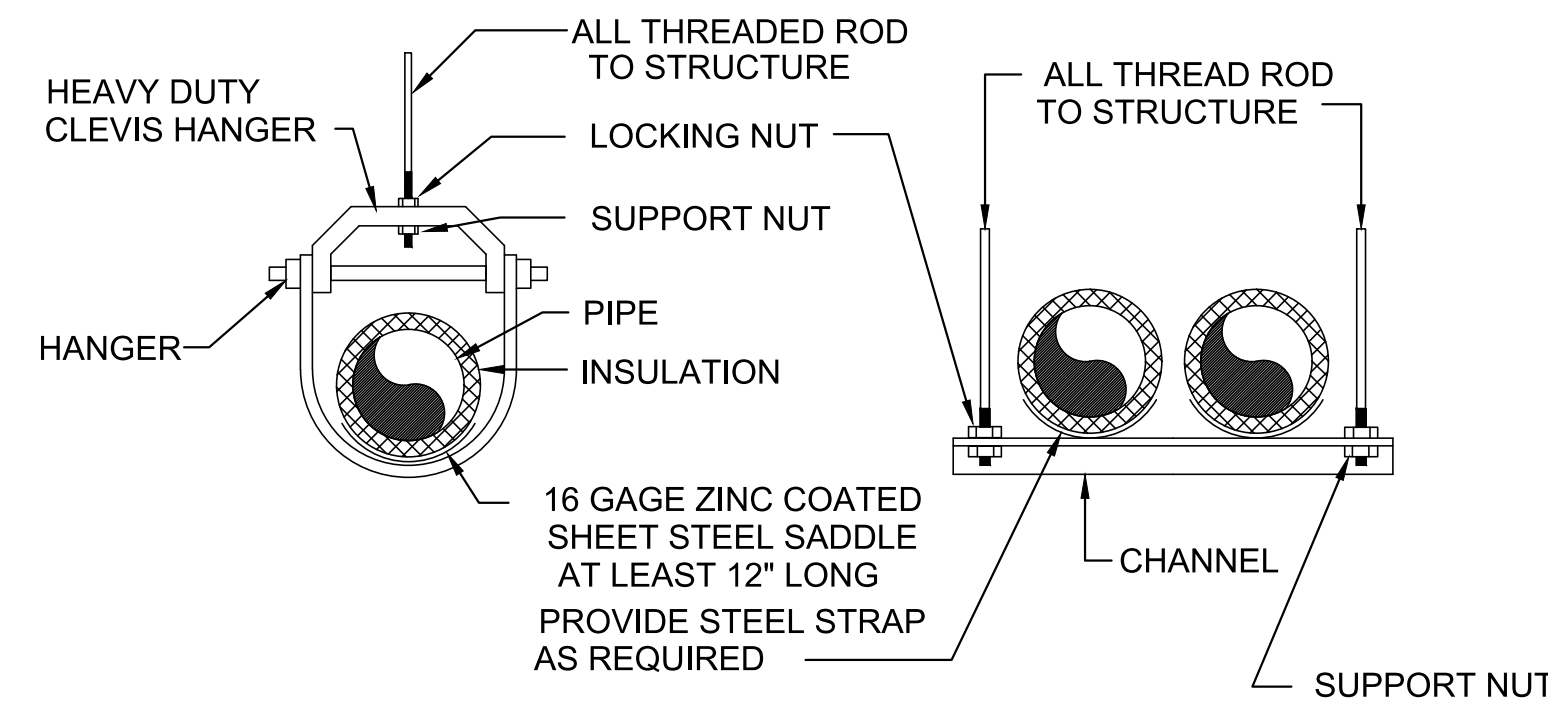


* FLASHING MINIMUM 6" HIGH WHENEVER POSSIBLE AND MUST BE ABOVE ROOF FLOOD LEVEL.
* REFER TO ARCH DRAWINGS FOR FLASHING DETAIL.

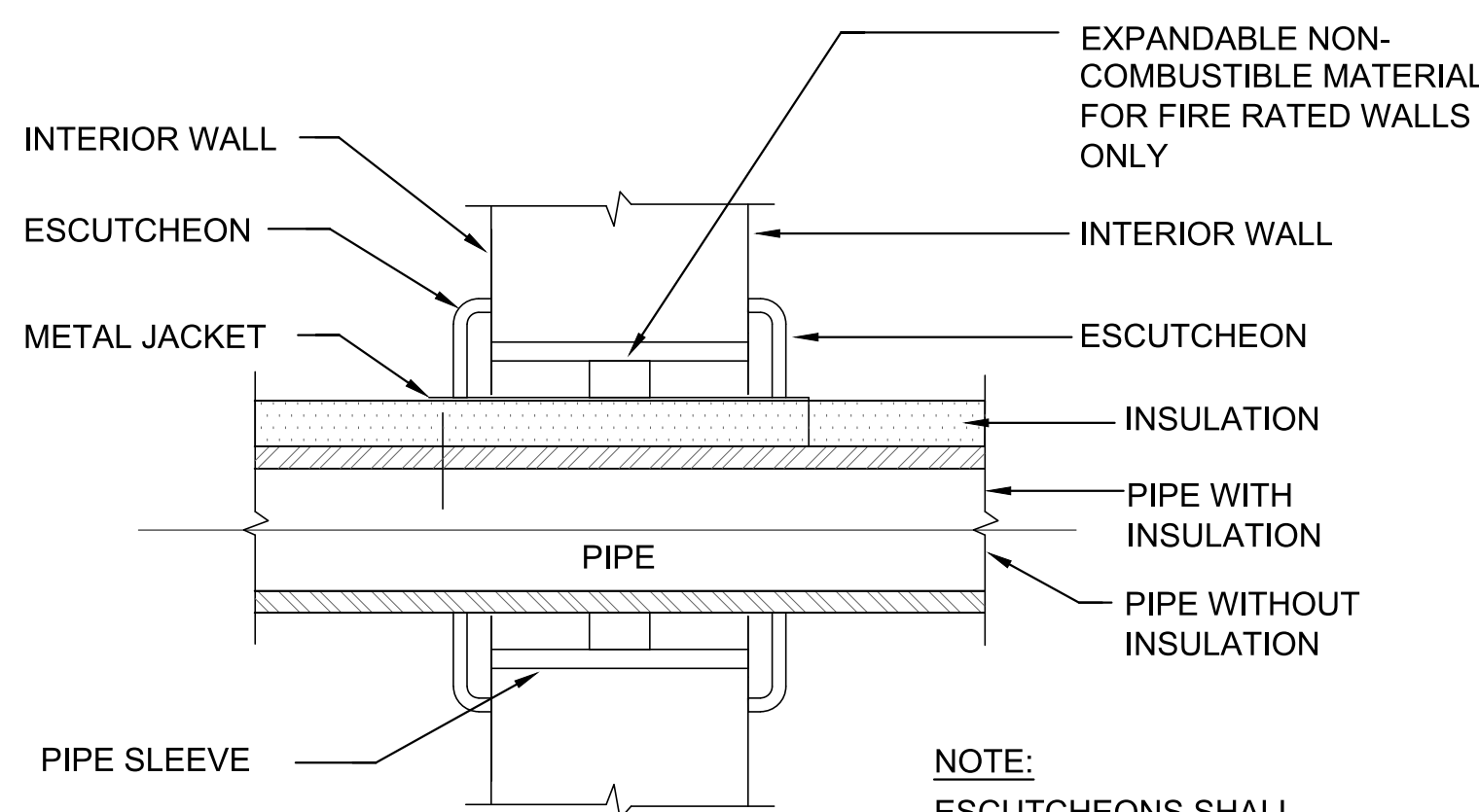
2 PENETRATION THROUGH ROOF
P-102 NO SCALE



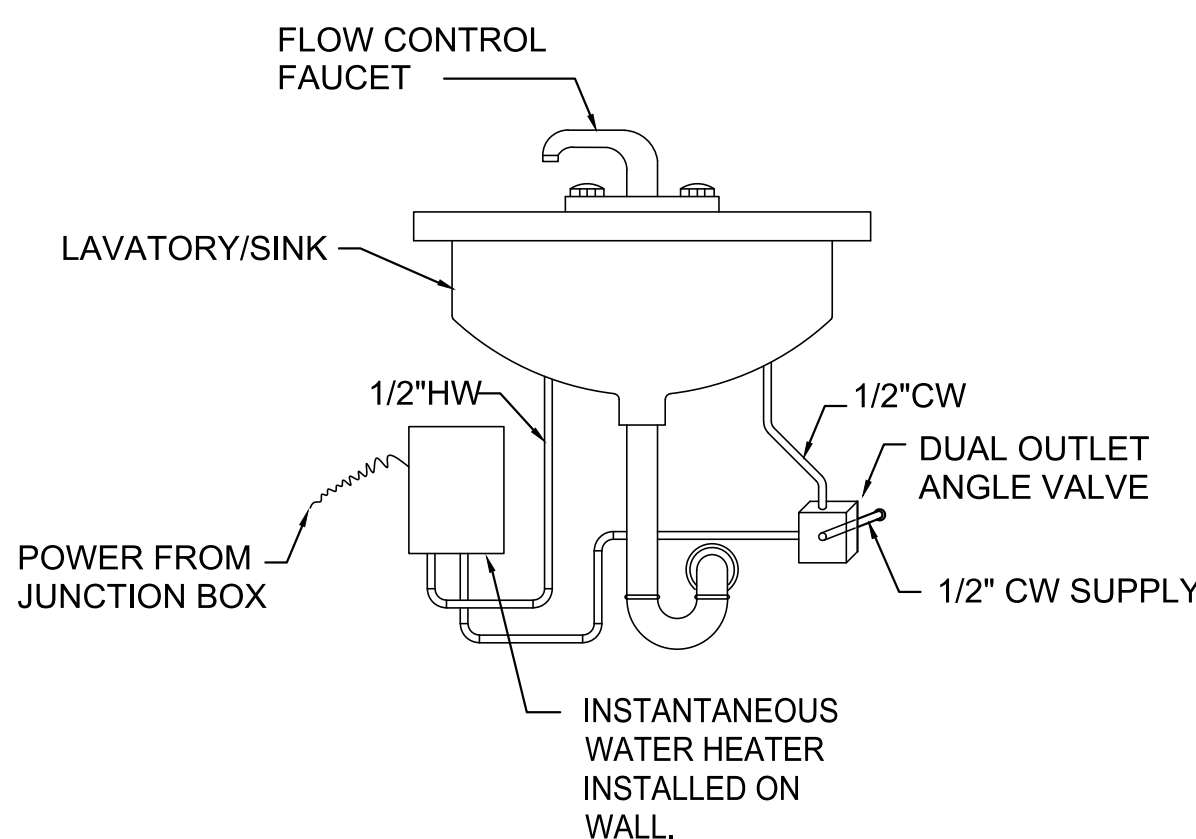
3 FLOOR CLEANOUT DETAIL
P-102 NO SCALE



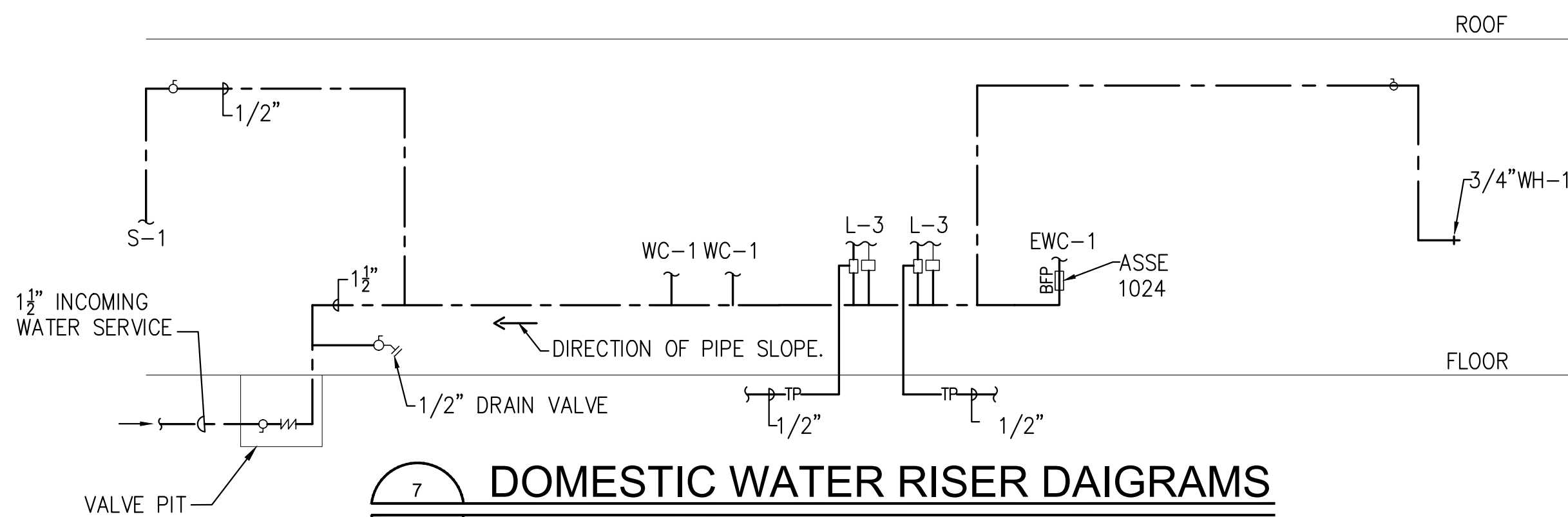
4 PIPE SUPPORT DETAIL
P-102 NO SCALE



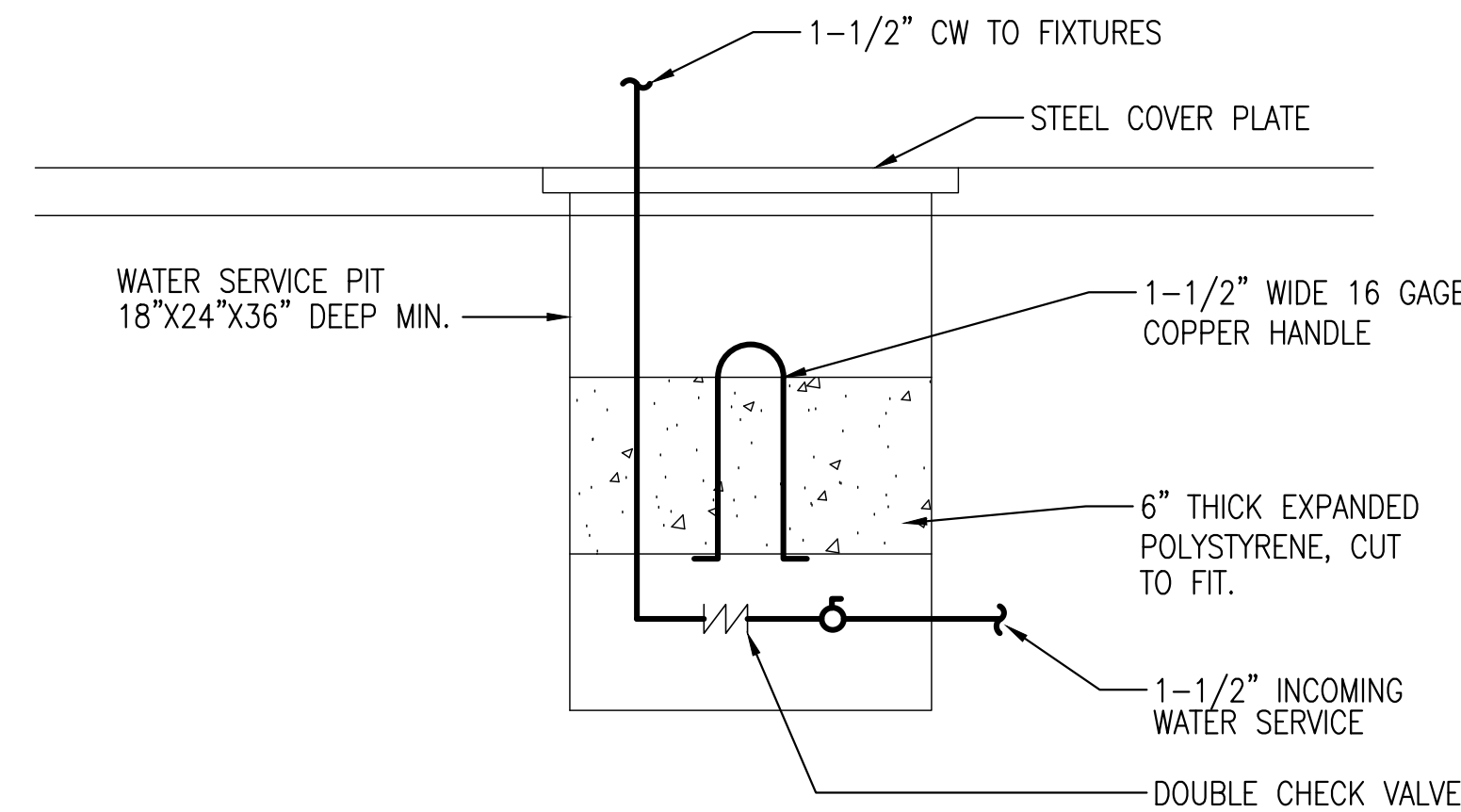
5 PIPE THRU INTERIOR WALL DETAIL
P-102 NO SCALE



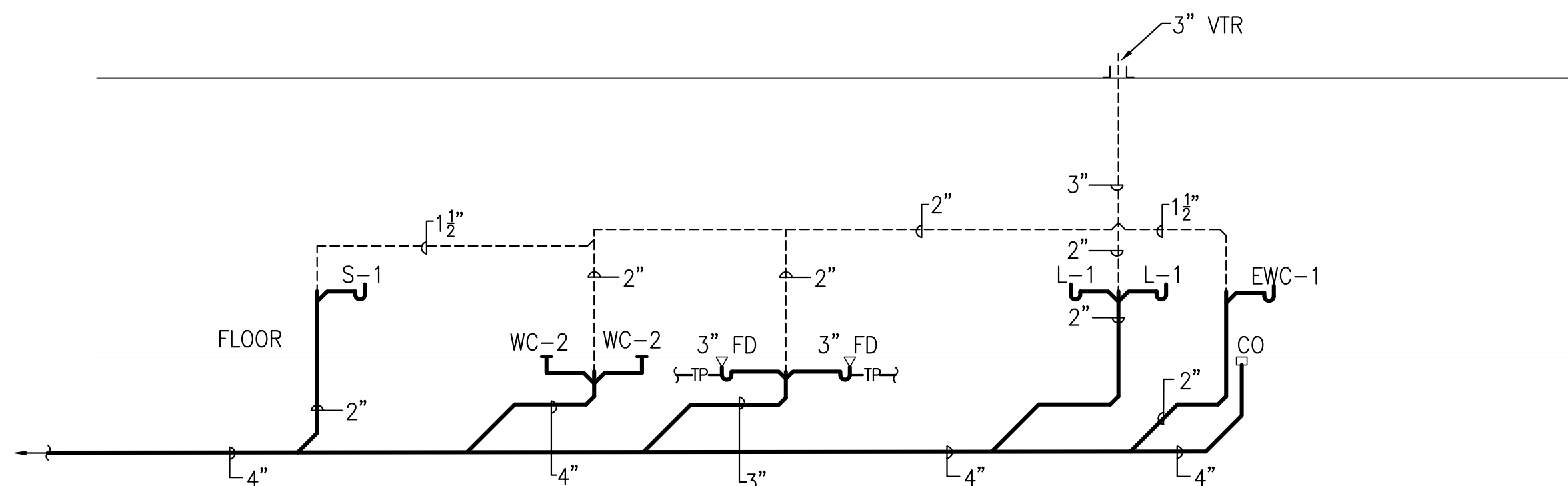
6 INSTANTANEOUS WATER HEATER DETAIL
P-102 NO SCALE



7 DOMESTIC WATER RISER DAIGRAMS
P-102 NOT TO SCALE



9 PIPING DETAIL AT VALVE PIT
P-102 NOT TO SCALE



8 SANITARY RISER DIAGRAMS
P-102 NOT TO SCALE

Mark	Date	Description
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PROJECT NO: 20120
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CHECKED BY: KS

PLUMBING
DETAILS AND
RISER DIAGRAMS

SHEET

P-102