A New Office Building for:

ALC CORPORATION

2830 American Drive
Neenah, Wisconsin 54956

GENERAL NOTES

1. ALL WORK OF ALL TRADES SHALL BE COMPLETED IN ACCORDANCE WITH ALL GOVERNING CODES AND ORDINANCES.
2. GENERAL CONTRACTOR IS TO OBTAIN AND PAY FOR PERMITS, LICENSES, FEES, ETC. AS MAY BE REQUIRED FOR COMPLETION OF THE PROJECT.
3. EACH CONTRACTOR SHALL COORDINATE HIS WORK WITH THE OWNER, OTHER CONTRACTORS, AND ALL OTHERS AT THE SITE.
4. EACH CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE SITE.
5. IF ANY CONTRACTOR OBSERVES THAT ANY OF THE CONTRACT DOCUMENTS ARE AT VARIANCE WITH APPLICABLE LAWS, STATUTES, BUILDING CODES, OR ORDINANCES, HE SHALL PROMPTLY NOTIFY THE OWNER.
6. DO NOT SCALE DRAWINGS.
7. CONTRACTOR TO VERIFY ALL ROUGH OPENING DIMENSIONS PRIOR TO CONSTRUCTION.
8. ALL DIMENSIONS ARE FROM FACE OF STUD TO FACE OF STUD, OR FROM FACE OF CONCRETE TO FACE OF STUD.
9. GENERAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING PORTA-JOHN AND DUMPSTERS ON SITE.
10. ALL STAIR RISERS ARE TO BE EQUAL IN SIZE AND ARE NOT TO EXCEED 7". ALL STAIR TREADS ARE TO BE 11".
11. ALL STAIR RAILS ARE TO BE 1½" DIA.- RAILS AND ARE TO BE 1½" FROM THE FACE OF THE WALL. MOUNT ALL STAIR RAILS @ 34" ABOVE NOSE OF ALL STAIR TREADS. ALL RAILS AND ANCHORS ARE TO BE DESIGNED TO RESIST A CONCENTRATED LOAD OF 200lb PER IBC 1607.8.1
12. ALL NEW DOOR HARDWARE IS TO BE HANDICAP ACCESSIBLE TYPE THAT COMPLIES W/ ANSI A117.1. (2009) ALL HARDWARE ON (REQUIRED) DOOR SERVING GREATER THAN 100 OCCUPANTS IS TO BE PANIC TYPE.
13. PROVIDE FIRE EXTINGUISHERS PER IFC 906 AND MAINTAIN THEM PER NFPA 10.
14. PROVIDE TOILET ROOMS WITH A SMOOTH, HARD, NONABSORBENT SURFACE EXTENDING UP THE WALL A MIN. OF 6" HIGH.
15. PROVIDE HANDICAP ACCESSIBLE DOOR HARDWARE THAT COMPLIES WITH ANSI A117.1 (2009) FOR ALL DOORS
16. ACCESSIBLE ROUTE TO BUILDING SHALL COMPLY WITH ICC/ANSI A117, CHAPTER 4. THE RUNNING SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:20. THE CROSS SLOPE OF A WALKING SURFACE SHALL NOT BE STEEPER THAN 1:48
17. PROVIDE PARKING LOT STRIPING AS SHOWN IN CONSTRUCTION DOCUMENTS
18. GRAB BARS SHALL BE LOCATED ON A SIDE WALL THAT IS 16" - 18" FROM THE CENTERLINE OF THE WATER CLOSET AND ON THE WALL BEHIND THE WATER CLOSET - SEE TYPICAL MOUNTING HEIGHT DETAILS.
19. PROVIDE EXIT, EXIT ACCESS DOORS WITH EXIT SIGNS AND DIRECTIONAL EXIT SIGNS AND PROVIDE 90 MINUTE CONTINUED ILLUMINATION IN CASE OF POWER LOSS.
20. THE FRONT OF THE LAVATORY OR SINK SHALL BE A MAX. 34" ABOVE THE FLOOR TO THE HIGHER OF THE FIXTURE RIM OR COUNTER TOP.
21. THE MAXIMUM HEIGHT OF THRESHOLDS AT DOORWAYS SHALL NOT EXCEED ¾" AND SHALL HAVE BEVELED EDGES ON BOTH SIDES.
22. PROVIDE HANDICAP ACCESSIBLE RESTROOM SIGNAGE FOR MEN AND WOMEN RESTROOMS PER ANSI A117.1 (2009)
23. EVERY ROOM OR SPACE THAT IS AN ASSEMBLY OCCUPANCY SHALL HAVE THE OCCUPANT LOAD OF THE ROOM OR SPACE POSTED IN A CONSPICUOUS PLACE, NEAR THE MAIN EXIT OR EXIT ACCESS DOORWAY FROM THE ROOM OR SPACE. POSTED SIGNS SHALL BE OF AN APPROVED LEGIBLE PERMANENT DESIGN AND SHALL BE MAINTAINED BY THE OWNER OR AUTHORIZED AGENT PER ICC 1004.3

SYMBOLS LEGEND

OFFICE 125 — ROOM NAME, ROOM NUMBER, OCCUPANT LOAD, OCCUPANCY GROUP

(100A) — DOOR NUMBERS- SEE DOOR SCHEDULE FOR SPECIFIC INFORMATION

(2) — WINDOW NUMBER

EL. 110'-0" TRUSS BRG. — ELEVATION REFERENCE TAG

(X / AX.X) — INTERIOR ELEVATION REFERENCE TAG- REFER TO INDICATED SHEET NUMBER

(X / AX.X) — DETAIL REFERENCE TAG- REFER TO INDICATED SHEET NUMBER

(X / AX.X) — WALL SECTION REFERENCE TAG- REFER TO INDICATED SHEET NUMBER

5/A4.1 — BUILDING SECTION REFERENCE TAG- REFER TO INDICATED SHEET NUMBER

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C500	EROSION CONTROL PLAN
C501	EROSION CONTROL DETAILS
C600	SITE & UTILITY DETAILS
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S2.1	FOUNDATION PLAN & DETAILS
S2.2	SECOND FLOOR FRAMING PLAN, FLOOR FRAMING DETAILS
S2.3	FIRST FLOOR ROOF FRAMING PLAN, ROOF FRAMING DETAILS
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P-5	SCHEDULES & DETAILS
P-6	SPECIFICATIONS

WISCONSIN — DAVID D. KAMPE — E-28987 — OSHKOSH, WI — PROFESSIONAL ENGINEER
3-24-2026 (STRUCTURAL)

STEVEN J. AMHOZ — 31-8414 — HORTONVILLE, WIS. — ARCHITECT
3-25-2026 (ARCHITECTURAL)

Conditionally
APPROVED
DEPT. OF SAFETY AND PROFESSIONAL SERVICES
DIVISION OF INDUSTRY SERVICES

SEE CORRESPONDENCE

Building
New Construction
DIS-#032612289
CB-#052600469-PRB
Date 05/11/2026

blue design group, llc.
202 West Main, PO Box 357 Hortonville, WI 54944
(920) 572-BLUE www.bluedesigngroupllc.com

PROJECT CONSULTANTS

Civil Engineering:
Mach IV Engineering
2260 Salscheider Ct.
Green Bay, WI 54313
(920) 569-5765

Structural Engineering:
ddk Engineering
6311 Black Wolf Point
Oshkosh, WI 54902
(920) 688-5546

Plumbing Design:
LGD & Associates
10406 N. Baehr Road
Mequon, WI 53092
(262) 512-1501 (ph)

PROJECT # 24-011
MARCH 20, 2026

A0.0

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COVER SHEET

CIVIL LEGEND

	EXISTING	PROPOSED
CABLE PEDESTAL	C	
ELECTRIC METER		
ELECTRIC PEDESTAL	E	
GUY WIRE		
LIGHT POLE		
POWER POLE		
GAS METER		
GAS VALVE		
BOLLARD		
HANDICAP PARKING		
SANITARY CLEANOUT		CO
SANITARY MANHOLE	SA	SA
CATCH BASIN	CB	CB
CULVERT		
DOWNSPOUT		
INLET		
INLET 2' X 2'		
STORM CLEANOUT		D
STORM MANHOLE	ST	ST
FIBER OPTIC PEDESTAL	FO	
SIGN		
FIRE HYDRANT		
WATER SHUT OFF		
WATER VALVE		
SOIL BORING		

	EXISTING	PROPOSED
EVERGREEN SHRUB		
EVERGREEN TREE		
TREE		
TREE SHRUB		
BUILDING OVERHANG		
UNDERGROUND CABLE	C	
OVERHEAD WIRE	OHP	
UNDERGROUND ELECTRIC	E	
GAS	G	
LANDSCAPE		
FENCE		
CENTERLINE		
CURB		
PARKING STRIPE		
SANITARY SEWER	SAN	SAN
CULVERT	CLVRT	CLVRT
STORM SEWER	STM	STM
FIBER OPTIC	FO	
WOOD LINE		
RETAINING WALL		
WATERMAIN	WAT	WAT
CONTOUR MAJOR	600	600
CONTOUR MINOR	602	602

	EXISTING	PROPOSED
STANDARD DUTY ASPHALT		
HEAVY DUTY ASPHALT		
BUILDING		
ASPHALT		
CONCRETE		
GRAVEL		
LANDSCAPE WOOD MULCH		
LANDSCAPE STONE MULCH		

ABBREVIATIONS

Ø	DIAMETER
AC	ACRE
AEW	APRON END WALL
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
BM	BENCHMARK
C	CABLE
CB	CATCH BASIN
CI	CURB INLET
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
CSM	CERTIFIED SURVEY MAP
C.T.H	COUNTY TRUNK HIGHWAY
DIA	DIAMETER
DOT	DEPARTMENT OF TRANSPORTATION
E	EAST
E	ELECTRIC (BURIED)
EL	ELEVATION
FDM	FACILITIES DEVELOPMENT MANUAL
FFE	FIRST FLOOR ELEVATION
FL	FLOW LINE
FO	FIBER OPTIC
FT	FEET
G	GAS
G.F.E.	GROUND FLOOR ELEVATION
GR	GRADE
HDPE	HIGH DENSITY POLYETHYLENE
INL	INLET
INV	INVERT
M	METER
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
mm	MILLIMETER
N	NORTH
NE	NORTHEAST
OC	ON CENTER
OD	OUTSIDE DIAMETER
OHP	OVER HEAD POWER
OL	OUTLOT
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
R	RADIUS
RAD	RADIUS
RCP	REINFORCED CONCRETE PIPE
REQ	REQUIRED
S	SOUTH
SA	SANITARY
SAN	SANITARY
SCHD	SCHEDULE
S.D.	SUMP DEPTH
SQ	SQUARE
ST	STORM
S.T.H.	STATE TRUNK HIGHWAY
STM	STORM
T	TELEPHONE
T/C	TOP OF CURB
U.S.H.	UNITED STATES HIGHWAY
V	VARIES
W	WEST
WAT	WATER
WI	WISCONSIN
WisDOT	WISCONSIN DEPARTMENT OF TRANSPORTATION

CIVIL GENERAL NOTES:

1. SURVEY WAS PERFORMED BY MACH IV ENGINEERING & SURVEYING LLC MAY 20, 2025.
2. SURVEY VERTICAL DATUM IS NAVD88.
3. THIS SURVEY DOES NOT GUARANTEE THE EXISTENCE/ NON-EXISTENCE, SIZE, TYPE OR LOCATION OF UNDERGROUND UTILITIES. UTILITIES SHOWN ARE BASED ON ABOVEGROUND UTILITY STRUCTURES (I.E. VALVES, MANHOLES ETC.), AND AVAILABLE UTILITY MAPS AND PLANS.
4. UNLESS OTHERWISE INDICATED, ALL EXISTING STRUCTURES AND FACILITIES SHALL REMAIN.
5. PROVIDE TURF, AS SPECIFIED TO ALL DISTURBED AREAS NOT RECEIVING PAVEMENTS, CURBS, SIDEWALKS, BUILDINGS, OR LANDSCAPING, WITHIN THE LIMITS OF CONSTRUCTION.
6. NO LAND DISTURBING ACTIVITIES SHALL TAKE PLACE UNTIL ALL TEMPORARY SOIL EROSION DEVICES ARE INSTALLED.
7. ALL GRADE TRANSITIONS BETWEEN NEW AND EXISTING SHALL BE SMOOTH AND GRADUAL WITH NO SHARP OR ABRUPT CHANGES.
8. COORDINATE THE WORK OF ALL TRADES - VERIFY ALL FIELD CONDITIONS, QUANTITIES AND DIMENSIONS PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE PROMPTLY BROUGHT TO THE ATTENTION OF THE ARCHITECT.
9. EXECUTE ALL WORK WITH CARE AS TO PROTECT FROM DAMAGE ADJACENT EXISTING FEATURES TO REMAIN. ANY SUCH DAMAGE SHALL BE REPAIRED OR REPLACED TO MATCH THE ORIGINAL CONDITION AS APPROVED BY THE ARCHITECT.
10. UNLESS REFERRED TO, OR INDICATED AS "EXISTING", ALL WORK SHOWN ON THESE DRAWINGS SHALL BE CONSIDERED AS NEW AND PROVIDED UNDER THIS CONTRACT.
11. FINISHED GRADE OF TOPSOIL (AFTER COMPACTION) SHALL BE 1/2" TO 1" BELOW TOP OF ABUTTING PAVEMENTS, SIDEWALKS, AND CURBING.
12. NO DISTURBANCE SHALL OCCUR OUTSIDE OF SITE LIMITS.
13. GENERAL CONTRACTOR SHALL OBTAIN APPROVAL FROM OWNER AND MUNICIPALITY PRIOR TO ANY LAND DISTURBANCE OUTSIDE THE CONSTRUCTION LIMITS.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING WORK IN RIGHT OF WAY PERMITS.
15. NO HAZARDOUS MATERIALS WILL BE STORED ON-SITE.
16. FOR LEGEND AND ABBREVIATIONS SEE SHEET C001
17. FOR EROSION CONTROL PLAN AND NOTES SEE SHEET C501 AND C501.
18. FOR NOTES SHOWN THUS, "(1)", SEE SHEET KEY NOTES, ON SHEET THEY APPEAR.

CIVIL SHEETS INDEX

C001 COVER SHEET
C002 CIVIL SPECIFICATIONS
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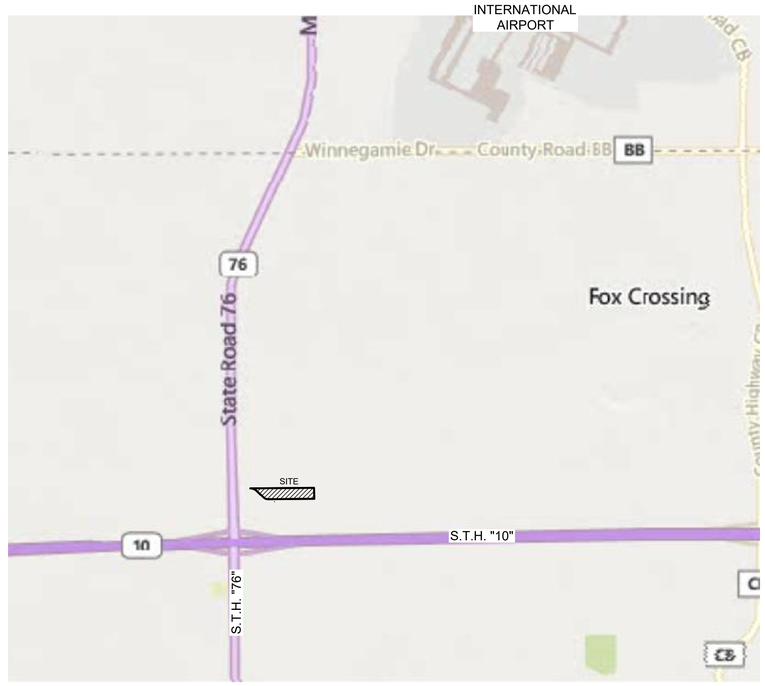
C400 GRADING PLAN
C500 EROSION CONTROL PLAN
C501 EROSION CONTROL DETAILS
C600 SITE & UTILITY DETAILS
L100 LANDSCAPE PLAN

WISCONSIN
SCOTT A. HARRIG
E-38596
GREEN BAY
WI
PROFESSIONAL ENGINEER
03-20-2026



LOCATION MAP

TBD WEST AMERICAN DRIVE
NEENAH, WI 54956

NOT TO SCALE

OWNER

924 HOLDINGS LLC
1599 SAGE CROSSING WAY
OSHKOSH, WI 54904

SITE STATISTICS

PARCEL ADDRESS:	TBD W. AMERICAN DRIVE
PARCEL NUMBER:	006033702
PARCEL SIZE:	357,537 SF (8.208 AC)
ZONING:	B-3: GENERAL BUSINESS DISTRICT AOD-3: OUTAGAMIE AIRPORT OVERLAY DISTRICT, ZONE 3
EXISTING SITE	
GREEN SPACE:	356,227 SF (99.6%)
IMPERVIOUS AREA	
BUILDING:	0.0 SF (0.0%)
PAVEMENT:	1,310 SF (0.4%)
TOTAL IMPERVIOUS:	1,310 SF (0.4%)
PROPOSED SITE	
TOTAL DISTURBED AREA:	107,794 SF (2.475 AC)
GREEN SPACE PROVIDED:	318,225 SF (89.0%)
IMPERVIOUS AREA	
BUILDING:	13,335 SF (3.7%)
PAVEMENT:	25,977 SF (7.3%)
TOTAL IMPERVIOUS:	29,312 SF (11.0%)
PARKING REQUIREMENTS	
PARKING AREA:	12,834 SF
INTERIOR GS REQUIRED:	15% (1,926 SF)
INTERIOR GS PROVIDED:	26% (2,960 SF)
PARKING SPACES REQ'D/CALCS:	OFFICE: 1 / 300 SF GFA; WAREHOUSE: 1 / WAREHOUSE EMPLOEE + 1 PER CO. VEHICLE OFFICE: 9,764 SF / 300 SF = 33 SPACES; WAREHOUSE: 2 EMPLOYEES + 3 CO. VEHICLES = 5 SPACES 38 TOTAL REQUIRED
PARKING SPACES PROVIDED:	33 OFFICE SPACES; 5 WAREHOUSE SPACES = 38 SPACES, INCLUDES 2 ADA HANDICAP SPACES

DIGGERS HOTLINE

CALL DIGGERS HOTLINE
1-800-242-8511
TOLL FREE

WISCONSIN STATUTE 182.0175 (1974) REQUIRES MIN. 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

THE LOCATIONS OF THE EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

blue design group, llc.
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www.mach4v.com
Project Number 2334-01-25

A New Office Building for:
ALC CORPORATION
2830 American Drive
Neenah, Wisconsin 54956

ALC

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PROJECT # 24-011

DATE 03-20-2026

REVISION	DATE

DRAWING # C001

\\Machserver\mach4v\Jobs\2334-01-25 ALC TOWN OF CLAYTON\DRAWINGS\2334-01-25 Eng.dwg 3/25/2026 8:51:30 AM

CIVIL SPECIFICATIONS

SPECIFICATION NOTES:

DEMOLITION AND SITE CLEARING

COMPLY WITH APPLICABLE CODES AND REGULATIONS FOR DEMOLITION OPERATIONS AND SAFETY OF ADJACENT STRUCTURES AND THE PUBLIC. OBTAIN REQUIRED PERMITS.

PROVIDE, ERECT, AND MAINTAIN TEMPORARY BARRIERS AND SECURITY DEVICES. CONDUCT OPERATIONS TO MINIMIZE EFFECTS ON AND INTERFERENCE WITH ADJACENT STRUCTURES AND OCCUPANTS. DO NOT CLOSE OR OBSTRUCT ROADWAYS OR SIDEWALKS WITHOUT APPROVAL. CONDUCT OPERATIONS TO MINIMIZE OBSTRUCTION OF ENTRANCES AND EXITS; DO NOT OBSTRUCT EXITS AT ANY TIME; PROTECT PERSONS USING ENTRANCES AND EXITS FROM REMOVAL OPERATIONS.

DO NOT BEGIN DEMOLITION UNTIL RECEIPT OF NOTIFICATION TO PROCEED FROM OWNER. PROTECT EXISTING STRUCTURES AND OTHER ELEMENTS THAT ARE NOT TO BE REMOVED. MINIMIZE PRODUCTION OF DUST DUE TO DEMOLITION OPERATIONS; DO NOT USE WATER IF IT WILL RESULT IN ICE, FLOODING, SEDIMENTATION OF PUBLIC WATERWAYS OR STORM SEWERS, OR OTHER POLLUTION.

COORDINATE WORK WITH UTILITY COMPANIES; NOTIFY BEFORE STARTING WORK AND COMPLY WITH THEIR REQUIREMENTS; OBTAIN REQUIRED PERMITS. PROTECT EXISTING UTILITIES TO REMAIN FROM DAMAGE. DO NOT DISRUPT PUBLIC UTILITIES WITHOUT PERMIT FROM AUTHORITY HAVING JURISDICTION. LOCATE AND MARK UTILITIES TO REMAIN; MARK USING HIGHLY VISIBLE TAGS OR FLAGS, WITH IDENTIFICATION OF UTILITY TYPE; PROTECT FROM DAMAGE DUE TO SUBSEQUENT CONSTRUCTION, USING SUBSTANTIAL BARRICADES IF NECESSARY.

REMOVE TREES, SHRUBS, BRUSH, AND STUMPS IN AREAS INDICATED. DO NOT REMOVE OR DAMAGE VEGETATION BEYOND THE LIMITS INDICATED ON DRAWINGS. CHIP, GRIND, CRUSH, OR SHRED VEGETATION FOR MULCHING, COMPOSTING, OR OTHER PURPOSES; PREFERENCE SHOULD BE GIVEN TO ON-SITE USES. REMOVE STUMPS AND ROOTS TO A DEPTH OF 24 INCHES BELOW PROPOSED FINISHED GRADE. IF VEGETATION OUTSIDE REMOVAL LIMITS OR WITHIN SPECIFIED PROTECTIVE FENCES IS DAMAGED OR DESTROYED DUE TO SUBSEQUENT CONSTRUCTION, CONTRACTOR SHALL REPAIR/ REPLACE AT THEIR EXPENSE.

REMOVE MATERIALS NOT TO BE REUSED ON SITE. LEAVE SITE IN CLEAN CONDITION, READY FOR SUBSEQUENT WORK. CLEAN UP SPILLAGE AND WIND-BLOWN DEBRIS FROM PUBLIC AND PRIVATE LANDS.

GRADING

PREPARATION
PROTECT BENCH MARKS, SURVEY CONTROL POINTS, EXISTING STRUCTURES, FENCES, SIDEWALKS, PAVING, AND CURBS FROM GRADING EQUIPMENT AND VEHICULAR TRAFFIC. IDENTIFY REQUIRED LINES, LEVELS, CONTOURS, AND DATUM. STAKE AND FLAG LOCATIONS OF KNOWN UTILITIES. LOCATE, IDENTIFY, AND PROTECT FROM DAMAGE ABOVE - AND BELOW - GRADE UTILITIES TO REMAIN. NOTIFY UTILITY COMPANY TO REMOVE AND RELOCATE UTILITIES.

ROUGH GRADING
REMOVE TOPSOIL FROM AREAS TO BE FURTHER EXCAVATED, RE-LANDSCAPED, OR RE-GRADED, WITHOUT MIXING WITH FOREIGN MATERIALS. DO NOT REMOVE TOPSOIL WHEN WET. REMOVE SUBSOIL FROM AREAS TO BE FURTHER EXCAVATED, RE-LANDSCAPED, OR RE-GRADED. DO NOT REMOVE WET SUBSOIL, UNLESS IT IS SUBSEQUENTLY PROCESSED TO OBTAIN OPTIMUM MOISTURE CONTENT. STABILITY: REPLACE DAMAGED OR DISPLACED SUBSOIL TO SAME REQUIREMENTS AS FOR SPECIFIED FILL.

SOIL REMOVAL
STOCKPILE TOPSOIL TO BE RE-USED ON SITE WHERE INDICATED ON DRAWINGS. HAUL EXCESS TOPSOIL AS INDICATED ON DRAWINGS, PILE DEPTH NOT TO EXCEED 8 FEET, AND PROVIDE SEED AND MULCH. PROTECT FROM EROSION.

FINISH GRADING
VERIFY TRENCH BACKFILLING HAS BEEN ACCEPTED BY ENGINEER. VERIFY SUBGRADE HAS BEEN CONTOURED AND COMPACTED. MAINTAIN PROFILES AND CONTOUR OF SUBGRADE.

PLACE TOPSOIL DURING DRY WEATHER. REMOVE DEBRIS, ROOTS, BRANCHES, STONES, IN EXCESS OF 1/2 INCH IN SIZE. NEAR PLANTS SPREAD TOPSOIL MANUALLY TO PREVENT DAMAGE. FINE GRADE AND RAKE TOPSOIL TO ELIMINATE UNEVEN AREAS AND LOW SPOTS. LIGHTLY COMPACT PLACED TOPSOIL. WHERE TOPSOIL IS TO BE PLACED OR IN AREAS WHERE VEHICLES OR EQUIPMENT HAVE COMPACTED SOIL, SCARIFY SURFACE TO DEPTH OF 3 INCHES.

PLACE TOPSOIL IN THE AREAS LISTED BELOW TO THE LISTED **MINIMUM** COMPACTED THICKNESS OR THICKER WHERE REQUIRED TO LEVEL FINISH GRADE.:
- PERVIOUS AREAS TO BE SEEDED WITH GRASS: 4-INCHES.
- DRY DETENTION BASINS: 8-INCHES
- FLOWER BEDS: 12 -INCHES
- SHRUB BEDS: 18-INCHES

CLEANING AND PROTECTION
GRADE STOCKPILE AREA TO PREVENT STANDING WATER AND PROTECT FROM EROSION AS INDICATED ON THE EROSION CONTROL PLAN. LEAVE SITE CLEAN AND RAKED, READY TO RECEIVE FINAL SITE SURFACES.

EXCAVATION

PROTECT BENCH MARKS, SURVEY CONTROL POINTS, EXISTING STRUCTURES, FENCES, SIDEWALKS, PAVING, AND CURBS FROM EXCAVATING EQUIPMENT AND VEHICULAR TRAFFIC. EXCAVATE TO ACCOMMODATE NEW STRUCTURES AND CONSTRUCTION OPERATIONS. NOTIFY OWNER/ENGINEER OF UNEXPECTED SUBSURFACE CONDITIONS AND DISCONTINUE AFFECTED WORK IN AREA UNTIL NOTIFIED TO RESUME WORK. SLOPE BANKS OF EXCAVATIONS DEEPER THAN 4 FEET TO ANGLE OF REPOSE OR LESS UNTIL SHORED. CUT UTILITY TRENCHES WIDE ENOUGH TO ALLOW INSPECTION OF INSTALLED UTILITIES. HAND TRIM EXCAVATIONS. REMOVE LOOSE MATTER. GRADE TOP PERIMETER OF EXCAVATION TO PREVENT SURFACE WATER FROM DRAINING INTO EXCAVATION.

PREVENT DISPLACEMENT OF BANKS AND KEEP LOOSE SOIL FROM FALLING INTO EXCAVATION; MAINTAIN SOIL STABILITY. PROTECT BOTTOM OF EXCAVATIONS AND SOIL ADJACENT TO AND BENEATH FOUNDATION FROM FREEZING.

FILL AND BACKFILL

FILL MATERIALS
GENERAL FILL: NATIVE CLAY (OR IMPORT CLEAN LEAN CLAY OF MODERATE PLASTICITY) IN LARGE OPEN AREAS SUITABLE FOR OPTIMUM SORTING, COMPACTION, AND MOISTURE CONDITIONING.

STRUCTURAL FILL: CLEAN GRANULAR SOIL SUCH AS THOSE MATERIALS MEETING THE GRADATIONS OUTLINED IN SECTION 209 OR 305 OF THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

CONCRETE FILL: LEAN CONCRETE.

GRANULAR FILL: CLEAN GRANULAR FILL CONFORMING TO TABLE 37 OR 39 OF STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN OR DENSE GRADED BASE CONFORMING TO TO THE 1.75" DENSE GRADED BASE SECTION 305 OF WISDOT STANDARD SPECIFICATIONS.

PIPE BEDDING: CLEAN GRANULAR FILL CONFORMING TO TABLE 34 OF STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN. DENSE GRADED BASE CONFORMING TO TO THE 1.75" DENSE GRADED BASE SECTION 305 OF WISDOT STANDARD SPECIFICATIONS.

EXCAVATION BELOW SUBGRADE (EBS): DENSE GRADED BASE CONFORMING TO TO THE 1.75" DENSE GRADED BASE SECTION 305 OF WISDOT STANDARD SPECIFICATIONS.

TOPSOIL: TOPSOIL THAT IS FERTILE, FRIABLE, NATURALLY LOAMY, SURFACE SOIL; REASONABLY FREE OF SUBSOIL, CLAY LUMPS, BRUSH, WEEDS, AND OTHER LITTER AND FREE OF ROOTS, STUMPS, STONES LARGER THAN 2 INCHES IN ANY DIMENSION, AND OTHER EXTRANEOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH. ON-SITE SOIL MAY BE USED, IF SUITABLE. IF ON-SITE IS NOT SUITABLE, OBTAIN TOPSOIL FROM LOCAL SOURCES OR FROM AREAS HAVING SIMILAR SOIL CHARACTERISTICS TO THAT FOUND AT SITE OF WORK. OBTAIN TOPSOIL FROM NATURALLY WELL-DRAINED SITES WHERE TOPSOIL IS AT LEAST 4 INCHES DEEP.

FILLING
FILL TO CONTOURS, SUBGRADE, AND FINISH ELEVATIONS INDICATED USING UNFROZEN MATERIALS. EMPLOY A PLACEMENT METHOD THAT DOES NOT DISTURB OR DAMAGE OTHER WORK. SYSTEMATICALLY FILL TO ALLOW MAXIMUM TIME FOR NATURAL SETTLEMENT. DO NOT FILL OVER POROUS, WET, FROZEN OR SPONGY SUBGRADE SURFACES. MAINTAIN OPTIMUM MOISTURE CONTENT OF FILL MATERIALS TO ATTAIN REQUIRED COMPACTION DENSITY. CORRECT PAVE AREAS THAT ARE OVER-EXCAVATED WITH EBS FILL. OTHER AREAS USE GENERAL FILL, FLUSH TO REQUIRED ELEVATION, COMPACTED TO MINIMUM 95 PERCENT OF MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT. FILL MUST NOT BE PLACED IN LAYERS MORE THAN 9" IN THICKNESS. RESHAPE AND RE-COMPACT FILLS SUBJECTED TO VEHICULAR TRAFFIC.

PROOF ROLL BASE COURSE IN PAVED AREAS WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK OR EQUIVALENT VEHICLE PERFORMING OVERLAPPING PASSES IN A PERPENDICULAR GRID PATTERN. PROOF ROLLING SHALL BE PERFORMED IN CONSULTATION WITH THE GEOTECHNICAL ENGINEER AT THE TIME OF CONSTRUCTION. CONTRACTOR SHALL NOTIFY CIVIL ENGINEER A MINIMUM 3 DAYS PRIOR TO PROOF-ROLLING. NO OVER EXCAVATION SHALL BE PERFORMED WITHOUT PRIOR APPROVAL BY THE ENGINEER. EXCAVATE SOFT OR SPONGY AREAS, FILL AND COMPACT WITH EBS FILL.

FILL AT SPECIFIC LOCATIONS
USE GENERAL FILL PLACED IN 8" LIFTS (MAX) COMPACTED TO 90% MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT. UNLESS OTHERWISE SPECIFIED OR INDICATED.

AT FOUNDATION WALLS AND FOOTINGS: STRUCTURAL FILL PLACED IN 8" LIFTS (MAX) COMPACTED TO 95% MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT. DO NOT BACKFILL AGAINST UNSUPPORTED FOUNDATIONS WALLS.

BENEATH BUILDING FLOOR SLAB AND PAVEMENTS: GENERAL OR STRUCTURAL FILL PLACED IN 8" LIFTS (MAX) COMPACTED TO 95% MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT.

WITHIN EXCAVATIONS AND TRENCHES OF UTILITIES AND STRUCTURES REMOVED DURING CONSTRUCTION: GENERAL FILL UP TO TOPSOIL RE-SPREAD DEPTH BELOW FINISH GRADE ELEVATIONS PLACED IN 8" LIFTS (MAX) AND COMPACTED TO 90% MAXIMUM DRY DENSITY.
TOPSOIL TO FINISHED GRADE.

TRENCH ZONE (SEE DETAIL A THIS SHEET)
PIPE BEDDING ZONE: PIPE BEDDING PLACED IN 8" LIFTS AND COMPACTED TO 95% MAXIMUM DRY DENSITY.

TRENCH ZONE
PAVED AREAS: NATIVE OR GENERAL FILL TO BOTTOM OF PAVEMENT BASE PLACED IN 8" LIFTS AND COMPACTED TO 95% MAXIMUM DRY DENSITY.
NON-PAVED AREAS: NATIVE OR GENERAL FILL TO BOTTOM OF TOPSOIL PLACED IN 8" LIFTS AND COMPACTED TO 95% MAXIMUM DRY DENSITY.

STORM UTILITY DRAINAGE

PIPELINE MATERIALS
STORM SEWER MAIN
POLYVINYL CHLORIDE (PVC) SDR 35 (ASTM D3034)
REINFORCED CONCRETE PIPE, ASTM C76, CLASS III
HIGH DENSITY POLYETHYLENE (HDPE), AASHTO M252 & M294, ASTM D3212

STORM SERVICES
SCH 40 PVC, ASTM D1784, D1785

DRAIN TILE:
HIGH DENSITY POLYETHYLENE (HDPE) DRAIN TILE: ASTM-F-405-"C"

CATCH BASINS/INLETS
PRECAST CONCRETE: ASTM C 478.
PAVEMENT CASTING: NEENAH FOUNDRY R-1500 OR EQUAL WITH TYPE C GRATE, NON-ROCKING.
CURB CASTING: NEENAH FOUNDRY R-3067 OR EQUAL.

CULVERTS
N-12 HDPE BY ADS OR APPROVED EQUAL

APRON END WALLS
PRECAST REINFORCED CONCRETE: ASTM C 478
GALVANIZED METAL: ASTM A929

MANHOLES
PRECAST CONCRETE MANHOLES: ASTM C 478.
MANHOLE STEPS: MANHOLES SHALL BE CONSTRUCTED WITH STEPS.
CASTINGS:
SANITARY: NEENAH FOUNDRY R-1500 OR EQUAL WITH TYPE B LID, NON-ROCKING, SELF-SEALING LID, CONCEALED PICKHOLES.
STORM: NEENAH FOUNDRY R-1500 OR EQUAL WITH TYPE B LID, NON-ROCKING, AND OPEN PICK HOLES.

MISCELLANEOUS
MORTAR: ASTM C 270, TYPE M.
WATER: WATER FOR MASONRY MORTAR SHALL BE FRESH, CLEAN AND POTABLE.
GROUT: ASTM C 476.

INSTALLATION
HAND TRIM EXCAVATIONS TO REQUIRED ELEVATIONS. REMOVE LARGE STONES OR OTHER HARD MATTER WHICH COULD DAMAGE PIPING OR IMPEDE CONSISTENT BACKFILLING OR COMPACTION. ALL STORM SEWER CONNECTIONS SHALL MEET SPRING LINE TO SPRING LINE WHERE PRACTICABLE. AT THE END OF EACH WORK DAY, CLOSE OPEN ENDS OF PIPE TEMPORARILY WITH WOOD BLOCKS OR BULKHEADS.

PIPELINE TESTING
CHECK EACH STRAIGHT RUN OF PIPELINE FOR GROSS DEFICIENCIES BY HOLDING A LIGHT IN A MANHOLE; IT SHALL SHOW A PRACTICALLY FULL CIRCLE OF LIGHT THROUGH THE PIPELINE WHEN VIEWED FROM THE ADJOINING END OF LINE.

PVC PIPE DEFLECTION TEST:
GENERAL:
TEST INSTALLED PIPELINE FOR DEFLECTION BY PULLING A MANDREL THROUGH SEWER WITHOUT AID OF MECHANICAL PULLING DEVICE. MANDREL SHALL ALLOW AN ULTIMATE DEFLECTION OF 5%. PERFORM TEST AT LEAST 30 DAYS AFTER TRENCH BACKFILL AND COMPACTION HAVE BEEN COMPLETED. NO PIPE SHALL EXCEED A DEFLECTION OF 5 PERCENT. TESTING SHALL BE PERFORMED BEFORE SURFACE COURSE OF ASPHALT IS PLACED.

CORRECTING DEFICIENCIES OR OBSTRUCTIONS:
EXCAVATE TO SPRING LINE OF PIPELINE AND REPLACE AND RE-COMPACT PIPE ZONE MATERIAL. INTERNAL PIPE RE-ROUNDING OR VIBRATION WILL NOT BE ALLOWED. IF PIPE DOES NOT PASS MANDREL TEST AFTER REPLACEMENT OF PIPE ZONE MATERIAL AND TRENCH BACKFILL, RE-EXCAVATE AND REPLACE PIPELINE.

BITUMINOUS (ASPHALT) CONCRETE PAVING

QUALITY ASSURANCE
PERFORM WORK IN ACCORDANCE WITH WisDOT STANDARDS. OBTAIN MATERIALS FROM SAME SOURCE THROUGHOUT THE PROJECT. DO NOT PLACE ASPHALT WHEN AMBIENT AIR OR BASE SURFACE TEMPERATURE IS LESS THAN 40 DEGREES F, OR SURFACE IS WET OR FROZEN. PLACE BITUMEN MIXTURE WHEN TEMPERATURE IS NOT MORE THAN 15 DEGREES F BELOW BITUMEN SUPPLIER'S BILL OF LADING AND NOT MORE THAN MAXIMUM SPECIFIED TEMPERATURE.

MATERIALS
ASPHALT CEMENT: ASTM D 946.
FINE AGGREGATE: WisDOT STANDARD.
MINERAL FILLER: FINELY GROUND PARTICLES OF LIMESTONE, HYDRATED LIME OR OTHER MINERAL DUST, FREE OF FOREIGN MATTER.
TACK COAT: HOMOGENOUS, MEDIUM CURING, LIQUID ASPHALT.

PREPARATION - TACK COAT
APPLY TACK COAT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
TACK COAT IS REQUIRED FOR THE FOLLOWING:
1. WHEN INSTALLING NEW ASPHALT PAVEMENT OVER EXISTING ASPHALT OR CONCRETE PAVEMENT.
2. WHEN WEARING SURFACE IS NOT INSTALLED WITHIN 24 HOURS OF PLACING BINDER COURSE.
3. IN HIGH TRAFFIC AREAS OR TURNING LANES WHERE INDICATED ON DRAWINGS.
4. WHEN SURFACE OF BINDER COURSE HAS BEEN CONTAMINATED FROM CONSTRUCTION DEBRIS AND/OR TRAFFIC WHICH WOULD AFFECT THE ATTACHMENT OF WEARING COURSE TO THE BINDER COURSE.
5. CONTACT SURFACES OF CURBS AND WALKS.
6. DON NOT TACK COAT SURFACES OF MANHOLE FRAMES WITH OIL TO PREVENT BOND WITH ASPHALT PAVEMENT.

PLACEMENT
PLACE ASPHALT BINDER COURSE WITHIN 24 HOURS OF APPLYING PRIMER OR TACK COAT. PLACE WEARING COURSE WITHIN TWO HOURS OF PLACING AND COMPACTING BINDER COURSE. COMPACT PAVEMENT BY ROLLING TO 95% SPECIFIED. DO NOT DISPLACE OR EXTRUDE PAVEMENT FROM POSITION. HAND COMPACT IN AREAS INACCESSIBLE TO ROLLING EQUIPMENT. PERFORM ROLLING WITH CONSECUTIVE PASSES TO ACHIEVE EVEN AND SMOOTH FINISH, WITHOUT ROLLER MARKS.

ASPHALT BINDER COURSE AND SURFACE COURSE SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 455, 460 AND 465 OF WisDOT STANDARD SPECIFICATIONS.

PRIOR TO PLACING THE SURFACE COURSE, THE PAVING CONTRACTOR SHALL REMOVE ALL FOREIGN MATTER FROM THE SURFACE OF THE BINDER COURSE AND REPAIR, BY SAW CUTTING, REMOVAL, AND REPLACEMENT, ANY DEPRESSION OR SIGNS OF FAILURE AND ALL SURFACE IRREGULARITIES AS DIRECTED BY THE ENGINEER. A TACK COAT SHALL BE APPLIED PRIOR TO PLACEMENT OF THE SURFACE COURSE.

PAVEMENT MARKINGS
PAVEMENT MARKINGS SHALL BE ACCORDANCE WITH WisDOT SPECIFICATION SECTION 646. CLEAN ASPHALT SURFACES TO RECEIVE PAVEMENT MARKINGS. LAYOUT AREA AND REVIEW WITH OWNER BEFORE PAINT APPLICATION. LAYOUT AND STRIPE INTERNATIONAL GRAPHICS SYMBOL FOR DEDICATED HANDICAP STALLS. STRIPE PEDESTRIAN WALKS AND DIRECTION ARROWS WHERE INDICATED ON PLANS.

TOLERANCES
MAXIMUM VARIATION OF 1/8 INCH MEASURED WITH 10 FOOT STRAIGHT EDGE. COMPACTED THICKNESS SHALL BE WITHIN 1/8 INCH OF INDICATED THICKNESS. VARIATION FROM TRUE ELEVATION SHALL BE WITHIN 1/2 INCH.

PROTECTION
IMMEDIATELY AFTER PLACEMENT, PROTECT PAVEMENT FROM MECHANICAL INJURY FOR 2 DAYS OR UNTIL SURFACE TEMPERATURE IS LESS THAN 140 DEGREES F.

PORTLAND CEMENT CONCRETE PAVING

PERFORM WORK IN ACCORDANCE WITH ACI 301. OBTAIN CEMENTITIOUS MATERIALS FROM SAME SOURCE THROUGHOUT. FOLLOW RECOMMENDATIONS OF ACI 305R AND ACI 306R WHEN CONCRETING DURING HOT OR COLD WEATHER. DO NOT PLACE CONCRETE WHEN BASE SURFACE TEMPERATURE IS LESS THAN 40 DEGREES F, OR SURFACE IS WET OR FROZEN.

MATERIALS
FORM MATERIALS SHALL CONFORM TO ACI 30. JOINT FILLER SHALL BE ½" PRE-FORMED; NON-EXTRUDING BITUMINOUS TYPE (ASTM D 1751) OR SPONGE RUBBER/CORK (ASTM D 1752).

UNLESS NOTED OTHERWISE. REINFORCING STEEL: ASTM A 615/A 615M GRADE 60 (410). STEEL WELDED WIRE REINFORCEMENT; PLAIN TYPE, ASTM A 185/A 185M; IN FLAT SHEETS; UNFINISHED. DOWELS: ASTM A 615/A 615M GRADE 60 (420);DEFORMED BILLET STEEL BARS; UNFINISHED FINISH.

CONCRETE MATERIALS
PORTLAND CEMENT; ASTM C150, TYPE I, GRAY

CONCRETE MIX DESIGN

THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE TESTING PROCEDURES WITH THE LABORATORY AND BE RESPONSIBLE FOR INCORPORATING INTO THE PAVING CONCRETE OF THE MINIMUM STRENGTHS SPECIFIED.
STRENGTH OF 4000 PSI AT 28 DAYS
SLUMP SHALL NOT EXCEED 4 INCHES.
ALL CONCRETE EXPOSED TO WEATHER SHALL BE AIR-ENTRAINED WITH 4-7% AIR CONTENT. NO OTHER ADMIXTURES SHALL BE USED WITHOUT THE APPROVAL OF THE ENGINEER. CALCIUM CHLORIDE SHALL NOT BE USED.
MAXIMUM AGGREGATE SIZE 3/4"
DESIGN AND CONSTRUCTION OF CAST-IN-PLACE CONCRETE SHALL CONFORM TO ACI 318 AND CRSI STANDARDS
CURING COMPOUND: ASTM C 309, TYPE 1, CLASS A.

REINFORCING STEEL
REINFORCING STEEL TO CONFORM TO ASTM-A615, GRADE 60. WELDED WIRE FABRIC SHALL CONFORM TO ASTM-A185. LAP ALL HORIZONTAL REINFORCING AT SPLICES AND AROUND CORNERS 30 BAR DIAMETERS. WELDED WIRE FABRIC IS TO BE LAPPED 6" AND PLACED IN THE CENTER OF THE SLAB UNLESS INDICATED OTHERWISE. REINFORCING SHALL BE PLACED IN CONFORMANCE WITH CRSI "RECOMMENDED PRACTICES FOR PLACING BARS" AND ACI 318. THE REINFORCEMENT SHALL NOT BE PAINTED AND MUST BE FREE OF GREASE, DIRT OR DEEP RUST WHEN PLACED. PROVIDE CONCRETE PROTECTION FOR REBARS PER ACI 318 SECTION 7.7.

PLACEMENT
VERIFY COMPACTED SUBGRADE IS ACCEPTABLE AND READY TO SUPPORT PAVING AND IMPOSED LOADS AND GRADES/ ELEVATIONS OF BASE ARE CORRECT. MOISTEN BASE TO MINIMIZE ABSORPTION OF WATER FROM FRESH CONCRETE. COAT SURFACES OF MANHOLE FRAMES WITH OIL TO PREVENT BOND WITH CONCRETE PAVEMENT.

PLACE CONCRETE IN ACCORDANCE WITH ACI 304R. ENSURE REINFORCEMENT, INSERTS, EMBEDDED PARTS, FORMED JOINTS ARE NOT DISTURBED DURING CONCRETE PLACEMENT. PLACE CONCRETE CONTINUOUSLY OVER THE FILL WIDTH OF THE PANEL AND BETWEEN PREDETERMINED CONSTRUCTION JOINTS. DO NOT BREAK OR INTERRUPT SUCCESSIVE POURS SUCH THAT COLD JOINTS OCCUR. APPLY SURFACE RETARDER TO ALL EXPOSED SURFACES IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

MAXIMUM VARIATION OF SURFACE FLATNESS: ¼"IN 10 FT AND ¼" FROM TRUE POSITION.

ALIGN CURB, GUTTER, AND SIDEWALK JOINTS. PLACE 3/8 INCH WIDE EXPANSION JOINTS AT 20 FOOT INTERVALS AND TO SEPARATE PAVING FROM VERTICAL SURFACES AND OTHER COMPONENTS AND IN PATTERN INDICATED.
FORM JOINTS WITH JOINT FILLER EXTENDING FROM BOTTOM OF PAVEMENT TO WITHIN ½ INCH OF FINISHED SURFACE. SECURE TO RESIST MOVEMENT BY WET CONCRETE.

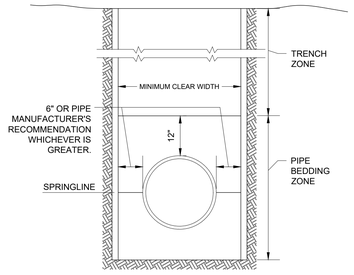
PROVIDE SCORED JOINTS AT SPACING EQUAL TO SIDEWALK WIDTH, OR MAXIMUM FIVE FEET INTERVALS. SAW CUT CONTRACTION JOINTS 3/16 INCH WIDE AT AN OPTIMUM TIME AFTER FINISHING. CUT 1/3 INTO DEPTH OF SLAB. AREA AND SIDEWALK PAVING SHALL RECEIVE LIGHT BROOM TEXTURE PERPENDICULAR TO DIRECTION TO TRAVEL WITH TROWELED AND RADIUSED EDGE RADIUS. CURBS AND GUTTERS SHALL RECEIVE LIGHT BROOM, TEXTURE PARALLEL TO PAVEMENT DIRECTION.

IMMEDIATELY AFTER PLACEMENT, PROTECT PAVEMENT FROM PREMATURE DRYING, EXCESSIVE HOT OR COLD TEMPERATURES, AND MECHANICAL INJURY. DO NOT PERMIT PEDESTRIAN OR VEHICULAR TRAFFIC OVER PAVEMENT FOR 7 DAYS MINIMUM AFTER FINISHING.

SITE RESTORATION

SITE SHALL BE RESTORED ACCORDING TO THE APPROVED LANDSCAPE PLAN. ALL DISTURBED AREAS NOT BEING PAVED OR PLANTED SHALL RECEIVE GRASS SEED MIX WisDOT NO. 40 OR APPROVED EQUAL.

AT THE END OF EACH DAY, THE GROUNDS SHALL BE CLEANED OF ALL LANDSCAPE RELATED REFUSE AND CONSTRUCTION DEBRIS. ALL PAVED SURFACES AFFECTED BY PLANTING OPERATIONS SHALL BE SWEPT AND HOSED OFF WITH SEDIMENT COLLECTED ACCORDING TO THE SWPPP. ALL PLANT BEDS SHALL BE FREE OF WEEDS.



A
STANDARD PIPE BEDDING DETAIL

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Project Number 2334-01-25

A New Office Building for:
ALC CORPORATION
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ALC

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PROJECT # 24-011

DATE 03-20-2026

REVISION	DATE

DRAWING # C002

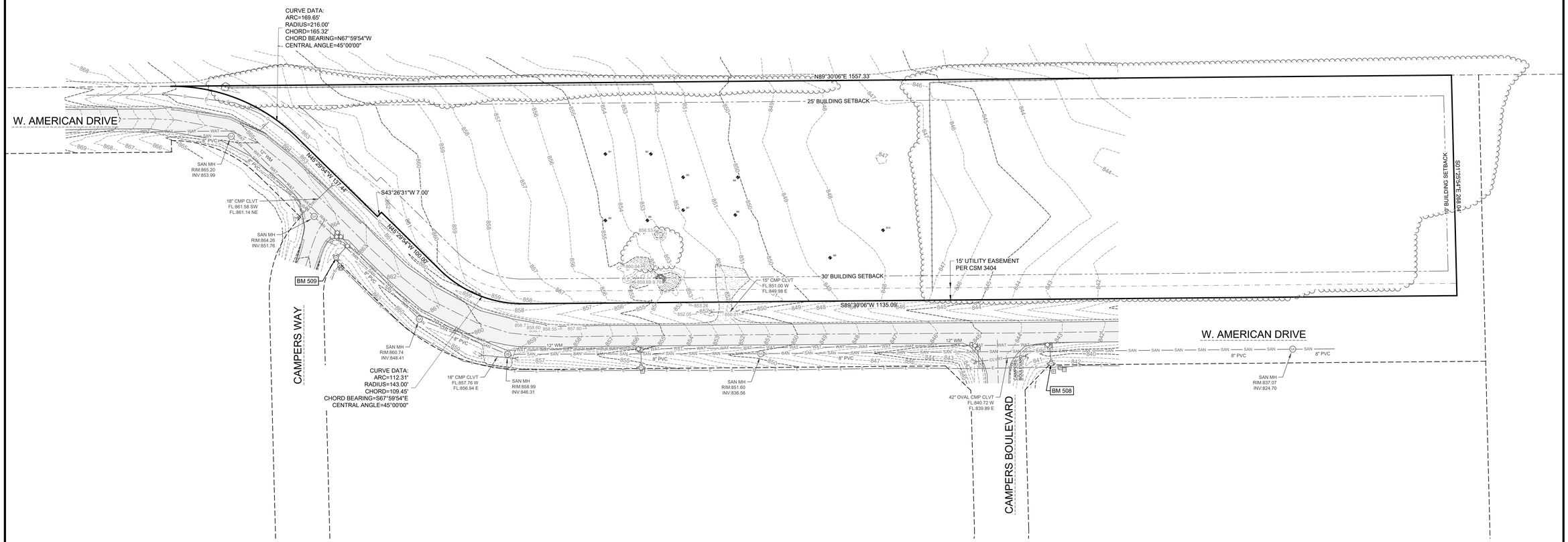
\\Machserver\mach\vJobs\2334-01-25 ALC TOWN OF CLAYTON\DRAWINGS\2334-01-25 Eng.dwg 3/25/2026 8:51:34 AM

EXISTING CONDITIONS

LEGAL DESCRIPTION

LOT 2 OF CERTIFIED SURVEY MAP NO. 3404 (DOC. NO.933460), LOCATED IN PART OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 AND PART OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4, SECTION 12, TOWNSHIP 20 NORTH - RANGE 16 EAST, TOWN OF CLAYTON, WINNEBAGO COUNTY, WISCONSIN.

Benchmarks		
Label	Elevation	Description
BM 508	844.76	HYDRANT BURY BOLT
BM 509	864.95	HYDRANT BURY BOLT



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PROJECT # 24-011

DATE 03-20-2026

REVISION	DATE

DRAWING # C100

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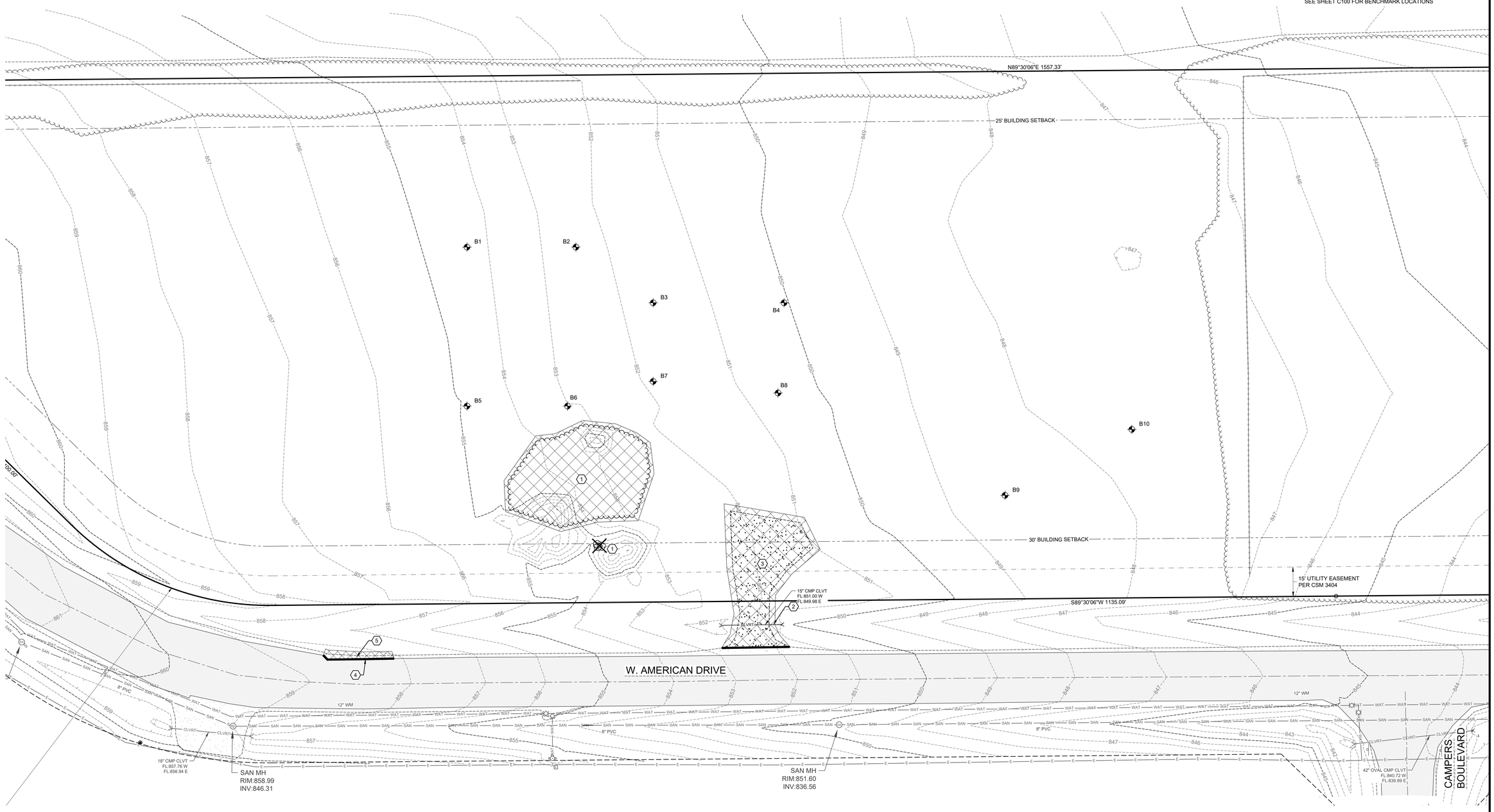
DEMOLITION PLAN

Benchmarks		
Label	Elevation	Description
BM 508	844.76	HYDRANT BURY BOLT
BM 509	864.95	HYDRANT BURY BOLT

SEE SHEET C100 FOR BENCHMARK LOCATIONS



SHEET KEY NOTES:

1. REMOVE TREE(S) IN THEIR ENTIRITY
2. REMOVE CULVERT
3. REMOVE GRAVEL
4. SAW CUT PAVEMENT EDGE FOR CLEAN EDGE
5. RE-GRADE GRAVEL

20 10 0 20 40
GRAPHIC SCALE

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PROJECT #	24-011
DATE	03-20-2026

REVISION	DATE

DRAWING # C101

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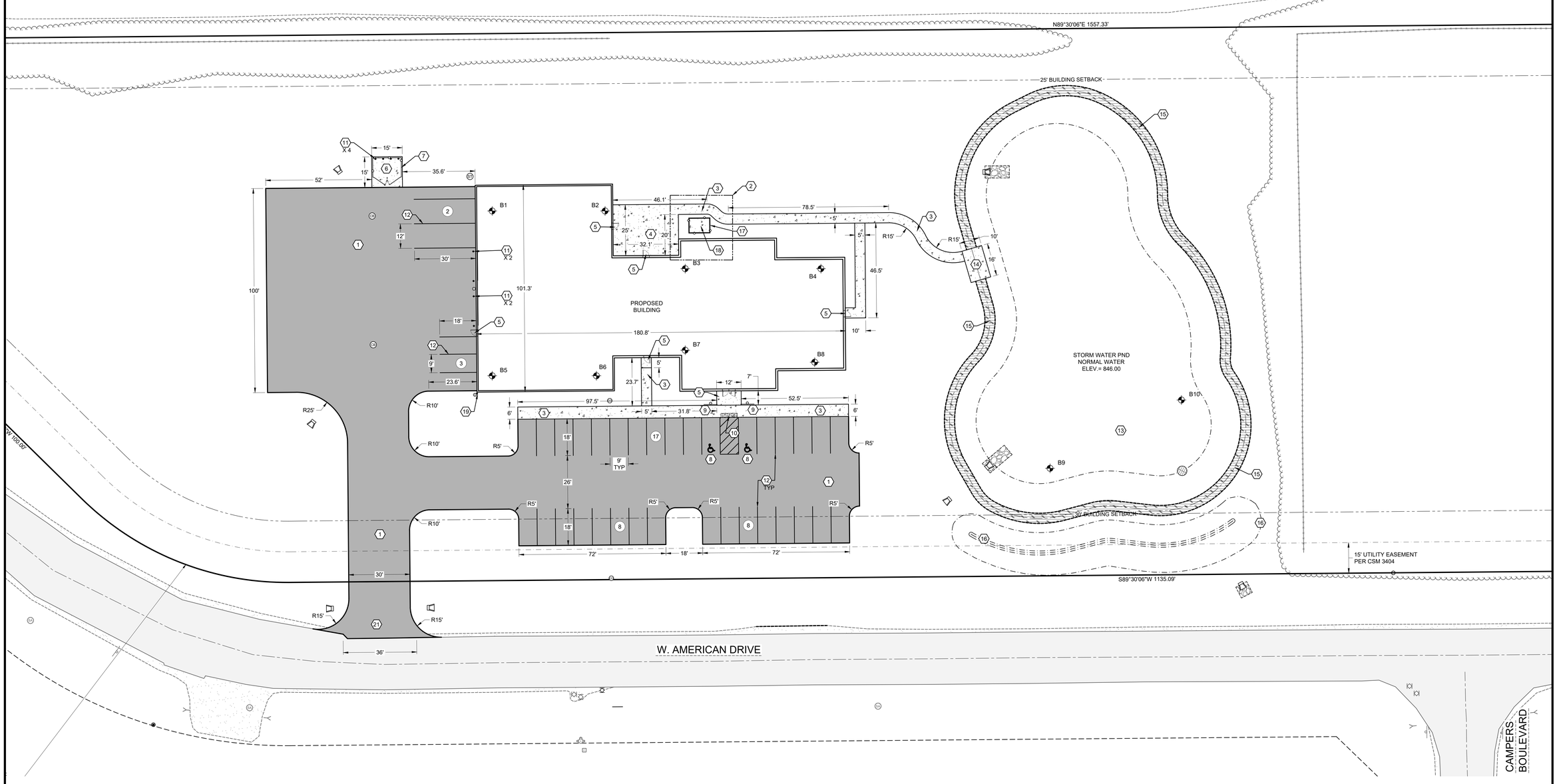
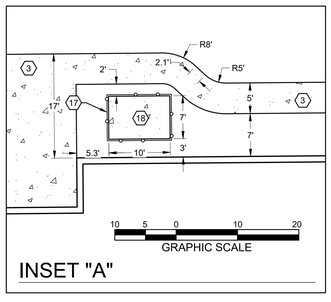
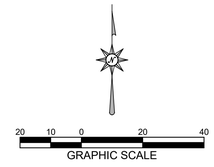
SITE PLAN





SHEET KEY NOTES:

1. ASPHALT PAVEMENT; SEE DETAIL A SHEET C600
2. SEE INSET "A" THIS SHEET
3. CONCRETE SIDEWALK; SEE DETAIL B SHEET C600
4. CONCRETE SLAB, 5" THICK, SLAB TO BE DOWELED TO WAREHOUSE WALL WITH #4 REBAR @ 18" ON CENTER; SEE DETAIL C SHEET C600
5. STOOP LOCATION; REFER TO ARCHITECTURAL DRAWINGS
6. DUMPSTER PAD; SEE DETAIL D SHEET C600
7. DUMPSTER ENCLOSURE; REFER TO ARCHITECTURAL DRAWINGS
8. ADA HANDICAP STALL, SYMBOL; SEE DETAIL F SHEET C600
9. ADA HANDICAP SIGN; SEE DETAIL G SHEET C600
10. ADA HANDICAP WARNING PLATE; SEE DETAIL H SHEET C600
11. BOLLARD; SEE DETAIL I SHEET C600
12. 4" WIDE PAINT STRIPE; COLOR BY OWNER
13. STORM WATER POND; SEE SHEET C400
14. CONCRETE PATIO; SEE DETAIL E SHEET C600
15. WOOD CHIP WALKING TRAIL, 5' WIDE
16. BERM; SEE SHEET C400
17. FENCE; REFER TO ARCHITECTURAL DRAWINGS
18. 6" CONCRETE SLAB FOR RTU UNIT; REFER TO MECHANICAL DRAWINGS
19. BOLLARD; SEE DETAIL I SHEET C600, VERIFY LOCATION OF BOLLARD TO PROTECT GAS METER / SERVICE, COORDINATE LOCATION WITH UTILITY OWNER
20. LIGHT POLE; REFER TO ELECTRICAL DRAWINGS
21. CONTRACTOR TO OBTAIN DRIVEWAY STAKING PERMIT FROM TOWN OF CLAYTON. CONTRACTOR SHALL PAY $500 FEE TO OBTAIN PERMIT. PROVIDE TOWN WITH A MINIMUM NOTICE OF TEN BUSINESS DAYS PRIOR TO CONSTRUCTION.



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PROJECT #	24-011
DATE	03-20-2026
REVISION	DATE
DRAWING #	C200

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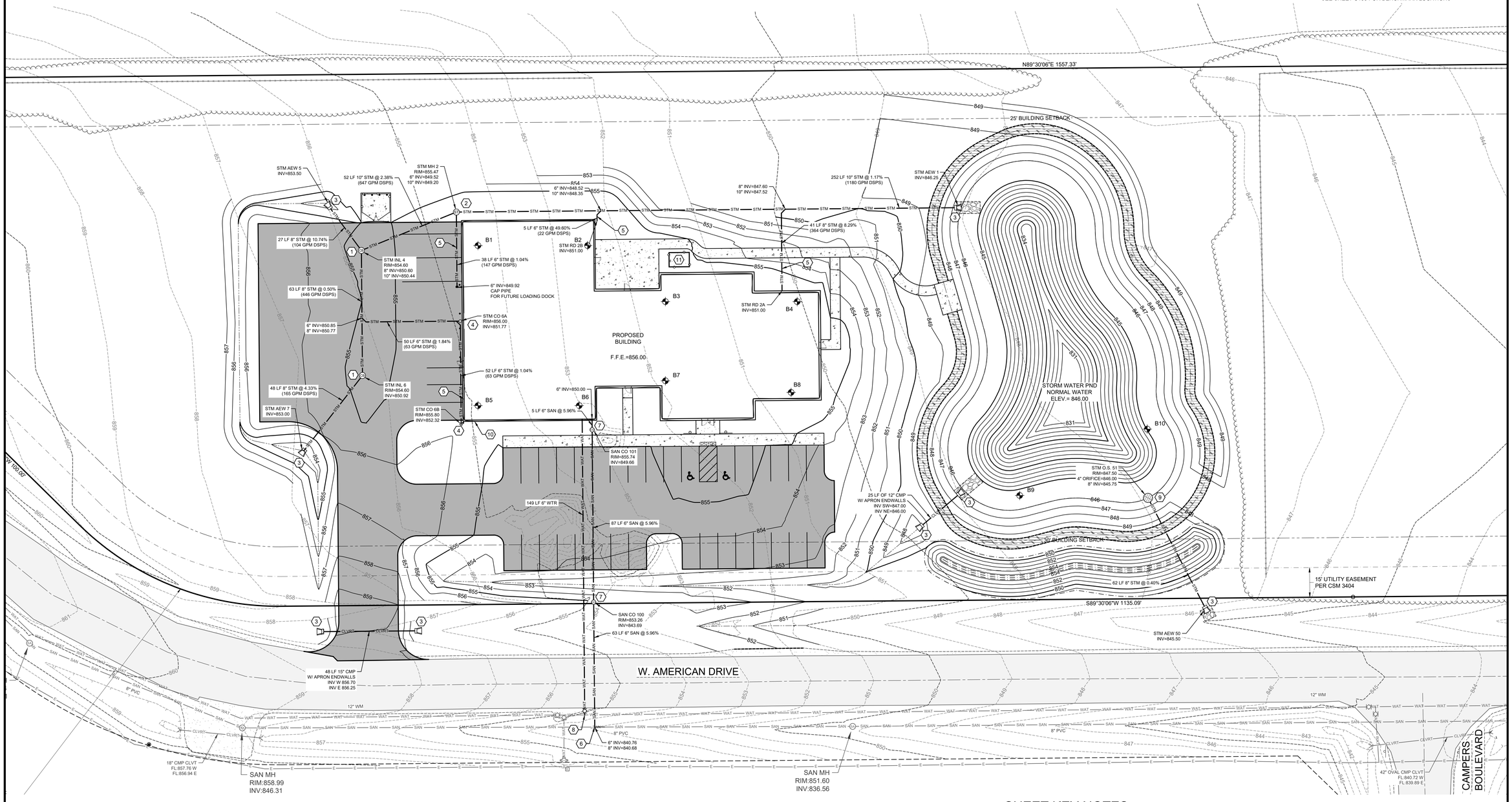
UTILITY PLAN

Benchmarks		
Label	Elevation	Description
BM 508	844.76	HYDRANT BURY BOLT
BM 509	864.95	HYDRANT BURY BOLT

SEE SHEET C100 FOR BENCHMARK LOCATIONS

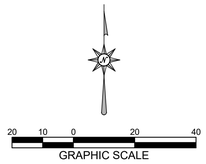


UTILITY NOTES:

1. SANITARY LATERAL SHALL BE PVC SDR 35 (ASTM D-3034) OR SCH 40.
2. WATER SERVICE SHALL BE C909 PVC. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE ENCASED IN POLYETHYLENE WRAP.
3. ALL SERVICE LATERALS SHALL HAVE TRACER WIRE.
4. ALL WORK SHALL CONFORM TO THE MOST RECENT EDITION OF "STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN" AND THE MUNICIPALITY'S STANDARD SPECIFICATIONS.
5. WATER LINE THRUST RESTRAINTS (NOT SHOWN FOR CLARITY) SHALL BE PROVIDED AS SPECIFIED FOR CONCRETE THRUST BLOCKS.
6. STORM SEWER SHALL BE PVC SDR 35 (ASTMD-3034) OR SCH 40.
7. NOTIFY THE MUNICIPALITY THREE WORKING DAYS PRIOR TO WORK IN THE RIGHT OF WAY.
8. CONNECTIONS TO MUNICIPALITY SYSTEMS SHALL BE IN ACCORDANCE WITH THEIR STANDARD SPECIFICATIONS.

SHEET KEY NOTES:

1. STORM INLET - 3' DIAMETER; SEE DETAIL J SHEET C600
2. STORM MANHOLE - 3' DIAMETER; SEE DETAIL K SHEET C600
3. APRON END WALL WITH GRATE
4. STORM CLEANOUT; SEE DETAIL L SHEET C600, CLEANOUTS TO BE LOCATED NO MORE THAN 100 FEET APART
5. ROOF DRAIN CONNECTION. VERIFY LOCATION AND NUMBER OF DOWNSPOUTS WITH ARCHITECTURAL/PLUMBING PLANS.
6. CONNECT TO EXISTING SANITARY SEWER; FIELD VERIFY INVERT. CONTRACTOR TO OBTAIN SANITARY CONNECTION PERMIT AND RIGHT-OF-WAY PERMITTING FROM TOWN OF CLAYTON.
7. SANITARY CLEANOUT; SEE DETAIL L SHEET C600, CLEANOUTS TO BE LOCATED NO MORE THAN 100 FEET APART
8. CONNECT TO EXISTING WATER MAIN WITH 12"X6" TAPPING TEE AND VALVE; SEE DETAIL M SHEET C600. CONTRACTOR TO OBTAIN WATER SERVICE CONNECTION PERMIT WITH FOX CROSSINGS UTILITIES PRIOR TO INSTALLATION. CONTRACTOR SHALL PAY PERMIT FEE OF $150 AT VILLAGE OF FOX CROSSING MUNICIPAL COMPLEX LOCATED AT 2000 MUNICIPAL DRIVE, NEENAH WI 54956. NOTIFY FOX CROSSING UTILITIES A MINIMUM OF 3 BUSINESS DAY PRIOR TO CONSTRUCTION FOR INSPECTION/TAP. PROVIDE METER SIZE TO UTILITY DEPARTMENT SO THEY CAN HAVE CORRECT SIZE AVAILABLE.
9. POND OUTLET STRUCTURE; SEE DETAIL N SHEET C600
10. GAS SERVICE LOCATION; REFER TO MECHANICAL DRAWINGS
11. RTU LOCATION; REFER TO MECHANICAL DRAWINGS



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PROJECT #	24-011
DATE	03-20-2026
REVISION	DATE
DRAWING #	C300

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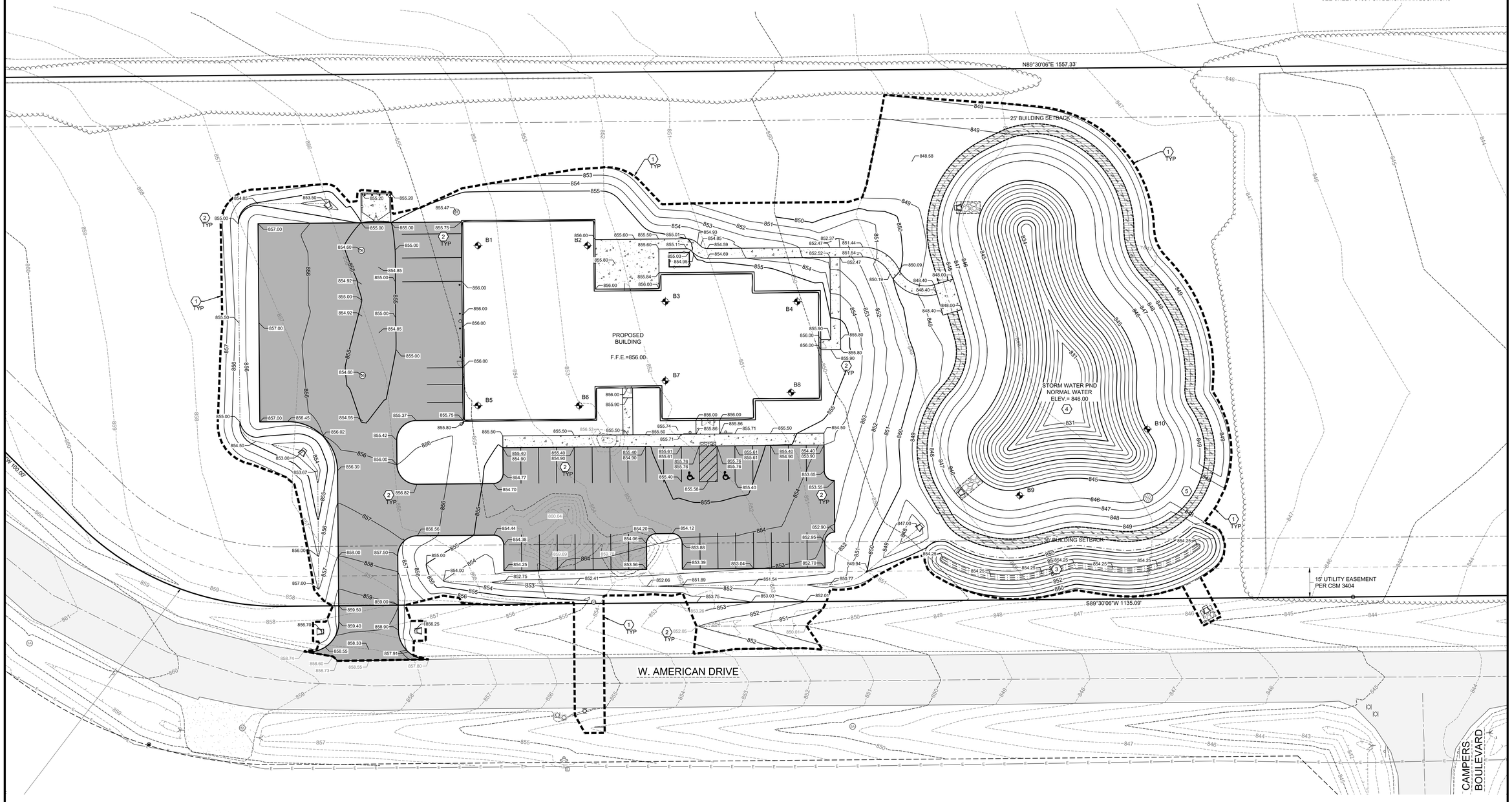
GRADING PLAN

Benchmarks		
Label	Elevation	Description
BM 508	844.76	HYDRANT BURY BOLT
BM 509	864.95	HYDRANT BURY BOLT

SEE SHEET C100 FOR BENCHMARK LOCATIONS



855.40 — TOP OF CURB/WALL
854.90 — GUTTER/PAVEMENT
854.06 — FINISHED GRADE
A 858.55 — EXISTING GRADE

SPOT GRADE KEY

SHEET KEY NOTES:

1. CONSTRUCTION / GRADING LIMITS
2. SPOT GRADE; SEE DETAIL A THIS SHEET
3. BERM; 2 FT TOP AT ELEVATION 854.25 AND 2:1 SIDE SLOPES
4. STORM WATER POND; SEE DETAIL O SHEET C600
5. EMERGENCY OVERFLOW WEIR; SEE DETAIL P SHEET C600

20 10 0 20 40
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PROJECT #	24-011
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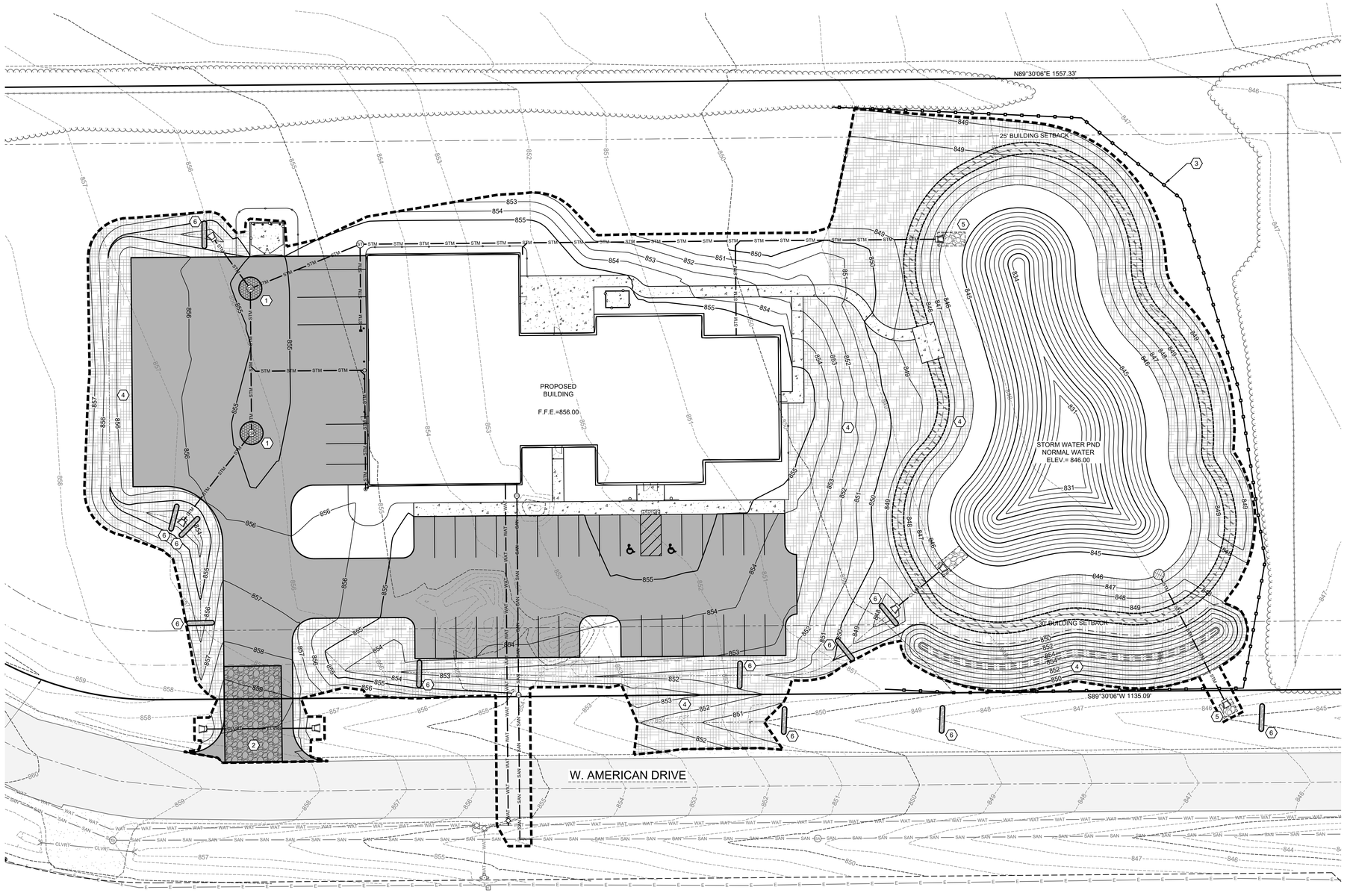
EROSION CONTROL PLAN



EROSION CONTROL NOTES:

1. POST WDNR CERTIFICATE OF PERMIT COVERAGE ON SITE AND MAINTAIN UNTIL CONSTRUCTION ACTIVITIES HAVE CEASED, THE SITE IS STABILIZED, AND A NOTICE OF TERMINATION IS FILED WITH WDNR.
2. KEEP A COPY OF THE CURRENT EROSION CONTROL PLAN ON SITE THROUGHOUT THE DURATION OF THE PROJECT.
3. SUBMIT PLAN REVISIONS OR AMENDMENTS TO THE WDNR AT LEAST 5 DAYS PRIOR TO FIELD IMPLEMENTATION.
4. GENERAL CONTRACTOR IS RESPONSIBLE FOR ROUTINE SITE INSPECTIONS AT LEAST ONCE EVERY 7 DAYS AND WITHIN 24 HOURS AFTER A RAINFALL EVENT OF 0.5 INCHES OR GREATER. KEEP INSPECTION REPORTS ON-SITE AND MAKE THEM AVAILABLE UPON REQUEST.
5. INSPECT AND MAINTAIN ALL INSTALLED EROSION CONTROL PRACTICES UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.
6. WHEN POSSIBLE: PRESERVE EXISTING VEGETATION (ESPECIALLY ADJACENT TO SURFACE WATERS), MINIMIZE LAND-DISTURBING CONSTRUCTION ACTIVITY ON SLOPES OF 20% OR MORE, MINIMIZE SOIL COMPACTION, AND PRESERVE TOPSOIL.
7. REFER TO THE WDNR STORMWATER CONSTRUCTION TECHNICAL STANDARDS AT HTTP://DNR.WI.GOV/TOPIC/STORMWATER/STANDARDS/CONST_STANDARDS.HTML.
8. INSTALL PERIMETER EROSION CONTROLS AND ROCK TRACKING PAD CONSTRUCTION ENTRANCE(S) PRIOR TO ANY LAND-DISTURBING ACTIVITIES, INCLUDING CLEARING AND GRUBBING. USE **WDNR TECHNICAL STANDARD *STONE TRACKING PAD AND TIRE WASHING #1057*** FOR ROCK CONSTRUCTION ENTRANCE(S).
9. INSTALL INLET PROTECTION PRIOR TO LAND-DISTURBING ACTIVITIES IN THE CONTRIBUTING DRAINAGE AREA AND/OR IMMEDIATELY UPON INLET INSTALLATION. COMPLY WITH **WDNR TECHNICAL STANDARD *STORM DRAIN INLET PROTECTION FOR CONSTRUCTION SITES #1060.***
10. PROVIDE ANTI-SCOUR PROTECTION AND MAINTAIN NON-EROSIVE FLOW DURING DEWATERING. PERFORM DEWATERING OF ACCUMULATED SURFACE RUNOFF IN ACCORDANCE WITH **WDNR TECHNICAL STANDARD *DE-WATERING #1061.*** *(REV. FEBRUARY 2017)*
11. COMPLETE AND STABILIZE SEDIMENT BASINS/TRAPS OR WET PONDS PRIOR TO MASS LAND DISTURBANCE TO CONTROL RUNOFF DURING CONSTRUCTION. REMOVE SEDIMENT AS NEEDED TO MAINTAIN 3 FEET OF DEPTH TO THE OUTLET, AND PROPERLY DISPOSE OF SEDIMENT REMOVED DURING MAINTENANCE (REFER TO NR 528). CONSTRUCT AND MAINTAIN THE SEDIMENT BASIN PER **WDNR TECHNICAL STANDARD *SEDIMENT BASIN #1064*** AND **SEDIMENT TRAP # 1063.**
12. INSTALL AND MAINTAIN SILT FENCING PER **WDNR TECHNICAL STANDARD *SILT FENCE #1056.*** REMOVE SEDIMENT FROM BEHIND SILT FENCES AND SEDIMENT BARRIERS BEFORE SEDIMENT REACHES A DEPTH THAT IS EQUAL TO ONE-HALF OF THE FENCE AND/OR BARRIER HEIGHT.
13. REPAIR BREAKS AND GAPS IN SILT FENCES AND BARRIERS IMMEDIATELY. REPLACE DECOMPOSING STRAW BALES (TYPICAL BALE LIFE IS 3 MONTHS). LOCATE, INSTALL, AND MAINTAIN STRAW BALES PER **WDNR TECHNICAL STANDARD *DITCH CHECKS #1062.***
14. INSTALL AND MAINTAIN FILTER SOCKS IN ACCORDANCE WITH **WDNR TECHNICAL STANDARD *INTERIM MANUFACTURED PERIMETER CONTROL AND SLOPE INTERRUPTION PRODUCTS # 1071.***
15. IMMEDIATELY STABILIZE STOCKPILES AND SURROUND STOCKPILES AS NEEDED WITH SILT FENCE OR OTHER PERIMETER CONTROL IF STOCKPILES WILL REMAIN INACTIVE FOR 7 DAYS OR LONGER.
16. IMMEDIATELY STABILIZE ALL DISTURBED AREAS THAT WILL REMAIN INACTIVE FOR 14 DAYS OR LONGER. BETWEEN SEPTEMBER 15 AND OCTOBER 15: STABILZE WITH MULCH, TACKIFIER, AND A PERENNIAL SEED MIXED WITH WINTER WHEAT, ANNUAL OATS, OR ANNUAL RYE, AS APPROPRIATE FOR REGION AND SOIL TYPE OCTOBER 15 THROUGH COLD WEATHER: STABILIZE WITH A POLYMER AND DORMANT SEED MIX, AS APPROPRIATE FOR REGION AND SOIL TYPE.
17. STABILIZE AREAS OF FINAL GRADING WITHIN 7 DAYS OF REACHING FINAL GRADE.
18. SWEEP/CLEAN UP ALL SEDIMENT/TRASH THAT MOVES OFF-SITE DUE TO CONSTRUCTION ACTIVITY OR STORM EVENTS BEFORE THE END OF THE SAME WORKDAY OR AS DIRECTED BY MUNICIPALITY. SEPARATE SWEPT MATERIALS (SOILS AND TRASH) AND DISPOSE OF APPROPRIATELY.
19. GENERAL CONTRACTOR IS RESPONSIBLE FOR CONTROLLING DUST PER **WDNR TECHNICAL STANDARD *DUST CONTROL ON CONSTRUCTION SITES # 1068.***
20. PROPERLY DISPOSE OF ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE, DEBRIS, CLEANING WASTES, OR OTHER CONSTRUCTION MATERIALS) AND DO NOT ALLOW THESE MATERIALS TO BE CARRIED BY RUNOFF INTO THE RECEIVING CHANNEL.
21. FOR NON-CHANNELIZED FLOW ON DISTURBED OR CONSTRUCTED SLOPES, PROVIDE CLASS I TYPE B EROSION CONTROL MATTING. SELECT EROSION MATTING FROM APPROPRITE MATRIX IN WDOT'S WIDOT PRODUCT ACCEPTABILITY LIST (PAL); INSTALL AND MAINTAIN PER **WDNR TECHNICAL STANDARD *NON-CHANNEL EROSION MAT #1052.***
22. MAKE PROVISIONS FOR WATERING DURING THE FIRST 8 WEEKS FOLLOWING SEEDING OR PLANTING OF DISTURBED AREAS WHENEVER MORE THAN 7 CONSECUTIVE DAYS OF DRY WEATHER OCCUR.
23. INSTALL AND MAINTAIN A CONCRETE WASHOUT BASIN PER EPA 833-F-11-006. REQUIRE USE BY ALL CONCRETE CONTRACTORS. LIQUID MAY BE REUSED IN CONCRETE MIXING, EVAPORATED OR DISPOSED OF AS WASTEWATER. REFER TO: HTTPS://WWW3.EPA.GOV/NPDES/PUBS/CONCRETEWASHOUT.PDF

CONSTRUCTION SEQUENCE:

SPRING 2026 TO FALL 2026

- INSTALL EROSION CONTROL DEVICES IN ACCORDANCE WITH THE WDNR TECHNICAL STANDARDS.
- STRIP TOPSOIL WITHIN GRADING LIMITS
- EXCAVATE STORMWATER POND
- ROUGH GRADE SITE
- CONSTRUCT BUILDING
- INSTALL SITE UTILITIES
- INSTALL BASE COURSE
- INSTALL PAVEMENT
- TOPSOIL, SEED, FERTILIZE AND MULCH/EROSION MAT
- RE-SEED ANY UNVEGETATED AREAS
- REMOVE TEMPORARY EROSION CONTROL BMPS UPON SITE STABILIZATION

SHEET KEY NOTES:

1. INLET PROTECTION; SEE DETAIL A SHEET C501
2. STONE TRACKING PAD; SEE DETAIL B SHEET C501
3. SILT FENCE; SEE DETAIL D SHEET C501
4. CLASS I, TYPE B WOOD EROSION CONTROL MAT WITH E-STAPLES; SEE DETAILS D & E SHEET C501
5. ENERGY DISSIPATOR; SEE DETAIL F SHEET C501
6. SEDIMENT LOG; SEE DETAIL G SHEET C501

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PROJECT #
24-011
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03-20-2026

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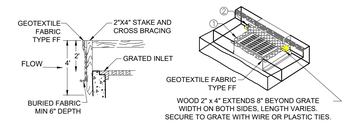
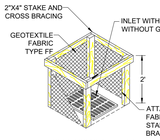
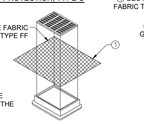
EROSION CONTROL DETAILS



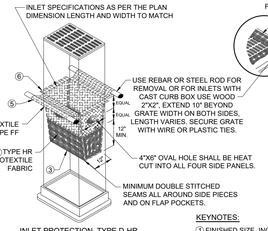
INLET PROTECTION, TYPE C



INLET PROTECTION, TYPE A



INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)
(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE D-HR
(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE:2)

This drawing based on Wisconsin Department of Transportation Standard Detail Drawing 8 E 10-2.

INSTALLATION NOTES TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE. THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

GENERAL NOTES

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED. WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

KEYNOTES:

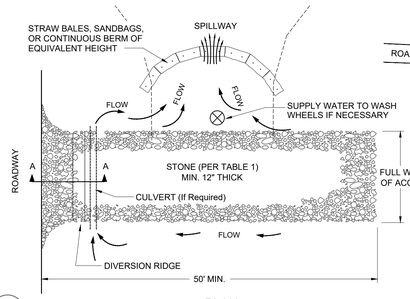
1. FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
2. FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
3. TAPER BOTTOM OF BAG TO MAINTAIN THREE INCHES OF CLEARANCE BETWEEN BAG AND THE STRUCTURE, MEASURED FROM BOTTOM OF THE OVERFLOW OPENINGS TO THE STRUCTURE WALL.
4. GEOTEXTILE FABRIC, TYPE FF FOR FLAPS AND TOP HALF OF FILTER BAG. GEOTEXTILE FABRIC, TYPE HR FOR BOTTOM HALF OF FILTER BAG WITH FRONT, BACK, AND BOTTOM BEING ONE PIECE.
5. FRONT LIFTING FLAP IS TO BE USED WHEN REMOVING AND MAINTAINING FABRIC BAG.
6. SIDE FLAPS SHALL BE A MAXIMUM OF TWO INCHES LONG. FOLD THE FABRIC OVER AND REINFORCE WITH MULTIPLE STITCHES.
7. FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2" X 2". THE REBAR, STEEL PIPE OR WOOD SHALL BE INSTALLED IN THE REAR FLAP AND SHALL NOT BLOCK THE TOP HALF OF THE CURB FACE OPENING.

INLET PROTECTION TYPES:

1. ALL INLETS IN PUBLIC RIGHTS OF WAY SHALL RECEIVE INLET PROTECTION TYPE D-HR AS DETAILED ON SHEET C5.1.
2. INLETS ON PRIVATE PROPERTY SHALL RECEIVE INLET PROTECTION TYPE B OR C(DEPENDANT ON CASTING TYPE), FOR INLETS IN PAVED AREAS, AND INLET PROTECTION TYPE A IN UN-PAVED AREAS.

A
INLET PROTECTION

TABLE 1: GRADATION FOR STONE TRACKING PADS	
SIEVE SIZE	% PASSING BY WEIGHT
3"	100
2 1/2"	90-100
1 1/2"	25-60
3/4"	0-20
3/8"	0-5



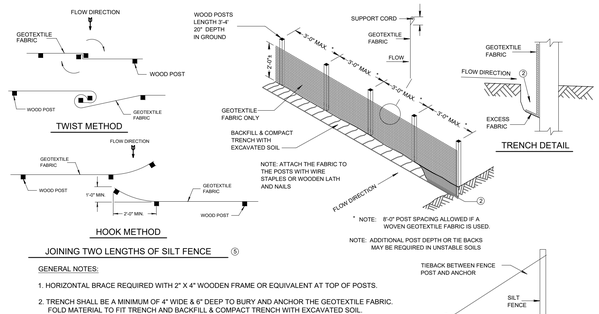
PLAN

SECTION A - A

NOTES:

1. TRACKING PAD SHALL BE FULL WIDTH OF THE ACCESS POINT UNLESS EXITING TRAFFIC IS RESTRICTED TO A DEDICATED EGRESS LANE WITH A MINIMUM 12 FOOT WIDTH.
2. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
3. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
4. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED EROSION CONTROL BMP.
5. USE SANDBAGS, STRAW BALES OR OTHER APPROVED METHODS TO CHANNELIZE RUNOFF TO BMP AS REQUIRED.

B
STONE TRACKING PAD



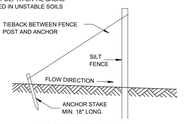
* NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

JOINING TWO LENGTHS OF SILT FENCE 5

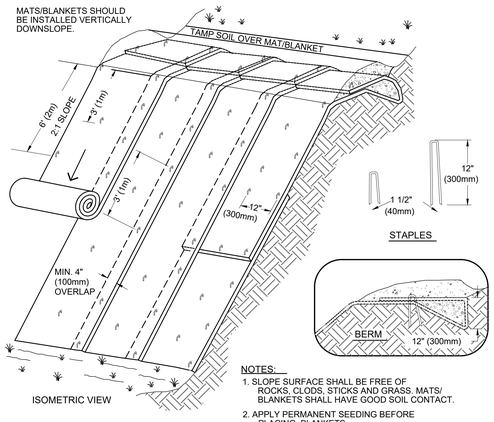
GENERAL NOTES:

1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



SILT FENCE TIE BACK
(WHEN ADDITIONAL SUPPORT REQUIRED)

C
SILT FENCE



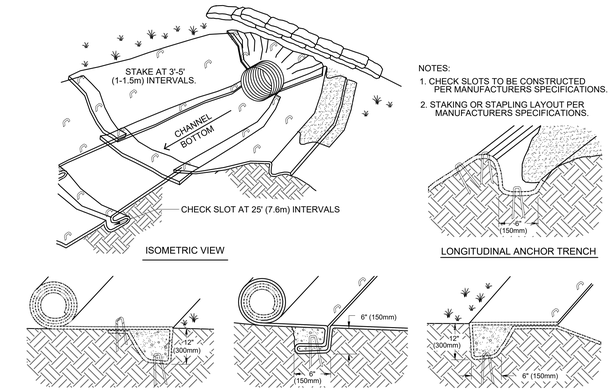
ISOMETRIC VIEW

TYPICAL SLOPE SOIL STABLIZATION

NOTES:

1. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS/ BLANKETS SHALL HAVE GOOD SOIL CONTACT.
2. APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
3. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.

D
EROSION CONTROL MAT FOR SLOPE INSTALLATION



ISOMETRIC VIEW

LONGITUDINAL ANCHOR TRENCH

INITIAL CHANNEL ANCHOR TRENCH

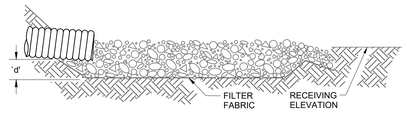
INTERMITTENT CHECK SLOT

TERMINAL SLOPE AND CHANNEL ANCHOR TRENCH

NOTES:

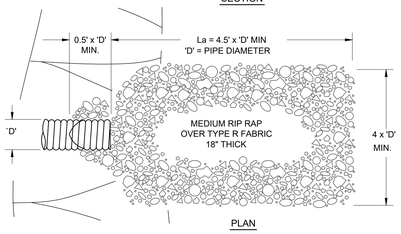
1. CHECK SLOTS TO BE CONSTRUCTED PER MANUFACTURERS SPECIFICATIONS.
2. STAKING OR STAPLING LAYOUT PER MANUFACTURERS SPECIFICATIONS.

E
EROSION CONTROL MAT FOR CHANNEL INSTALLATION



THICKNESS ('d') = 1.5 x MAX. ROCK DIAMETER (18" MIN.)

SECTION

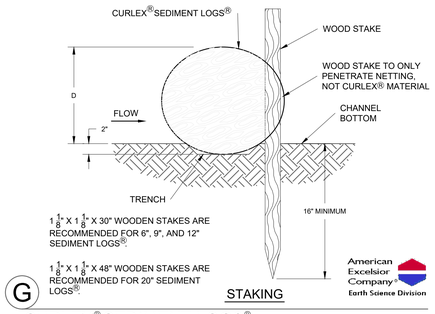


PLAN

NOTES:

1. 'La' = LENGTH OF APRON. DISTANCE 'La' SHALL BE OF SUFFICIENT LENGTH TO DISSIPATE ENERGY.
2. APRON SHALL BE SET AT A ZERO GRADE AND ALIGNED STRAIGHT.
3. FILTER MATERIAL SHALL BE WDOT TYPE HR FILTER FABRIC

F
ENERGY DISSIPATOR



1 1/8" X 1 1/8" X 30" WOODEN STAKES ARE RECOMMENDED FOR 6", 9", AND 12" SEDIMENT LOGS®.

1 1/8" X 1 1/8" X 48" WOODEN STAKES ARE RECOMMENDED FOR 20" SEDIMENT LOGS®

STAKING

American Excelsior Company® Earth Science Division

G
CURLEX® SEDIMENT LOGS®

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202 West Main, PO Box 357 Hortonville, WI 54944
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2260 Satchelder Court Green Bay, WI 54313
PH:(920)-569-5795, Fax: 920-569-5797
www.mach4v.com
Project Number 2334-01-25

A New Office Building for:
ALC CORPORATION
2830 American Drive
Neenah, Wisconsin 54956

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PROJECT # 24-011

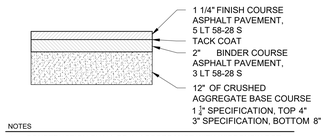
DATE 03-20-2026

REVISION	DATE

DRAWING # C501

\\Machserver\mach4v\Jobs\2334-01-25 ALC TOWN OF CLAYTON\DRAWINGS\2334-01-25 Eng dwg 3/25/2026 8:52:25 AM

SITE & UTILITY DETAILS

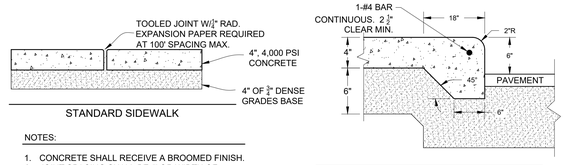


NOTES

1. CONSTRUCTION SHALL BE IN ACCORDANCE WITH WISCONSIN DOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION.

A

STANDARD DUTY ASPHALT PAVEMENT

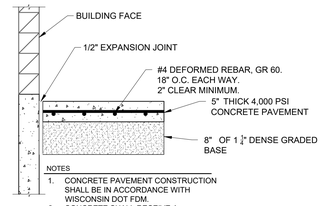


NOTES:

1. CONCRETE SHALL RECEIVE A BROOMED FINISH.
2. JOINT SPACING SHALL BE 5' OR WIDTH OF SIDEWALK, WHICHEVER IS GREATER. (10' MAX).
3. SIDEWALK WIDTH VARIES.

B

CONCRETE SIDEWALK

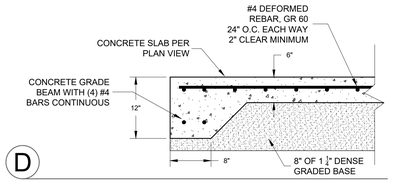


NOTES

1. CONCRETE PAVEMENT CONSTRUCTION SHALL BE IN ACCORDANCE WITH WISCONSIN DOT FDM.
2. CONCRETE SHALL RECEIVE A BROOMED FINISH.
3. SLAB TO BE DOWELED TO WAREHOUSE WALL WITH #4 REBAR AT 18" ON CENTER.

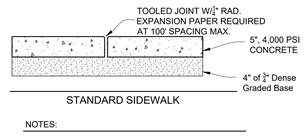
C

CONCRETE PAVEMENT/SLAB



D

DUMPSTER ENCLOSURE PAD



NOTES:

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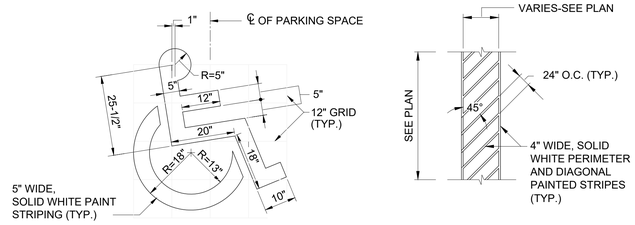
2. JOINT SPACING SHALL BE 5' OR WIDTH OF SIDEWALK, WHICHEVER IS GREATER. (10' MAX).
3. SIDEWALK WIDTH VARIES.

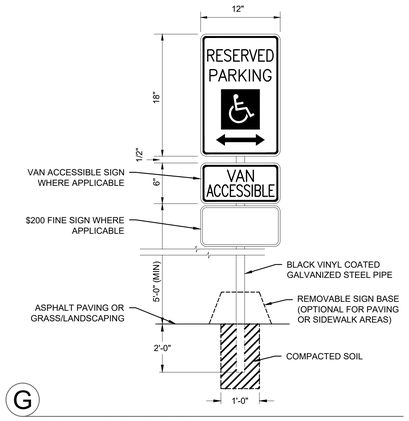
E

CONCRETE PATIO



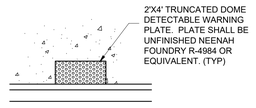
F

HANDICAP PAVEMENT MARKING DETAILS



G

ADA HANDICAP SIGN

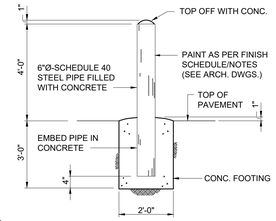


NOTES:

1. DETECTABLE WARNING SHALL BE PLACED WHERE PEDESTRIAN TRAFFIC IS AT GRADE WITH VEHICULAR TRAFFIC.

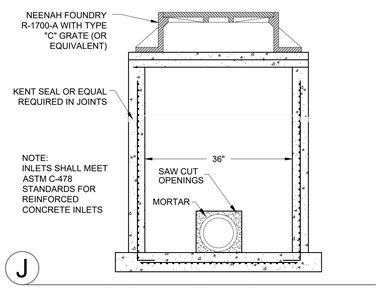
H

ADA DETECTABLE WARNING PLATE



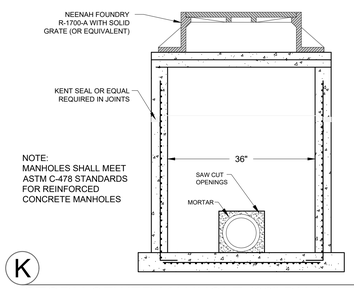
I

PIPE BOLLARD



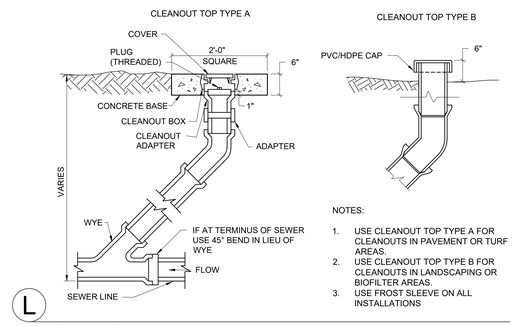
J

STORM SEWER INLET (36" DIA.)



K

STORM SEWER MANHOLE (36" DIA.)

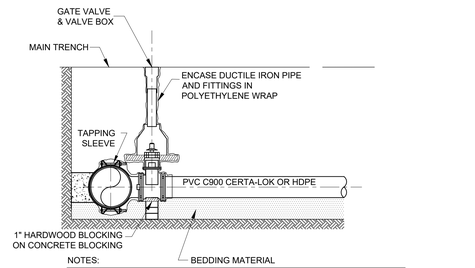


NOTES:

1. USE CLEANOUT TOP TYPE A FOR CLEANOUTS IN PAVEMENT OR TURF AREAS.
2. USE CLEANOUT TOP TYPE B FOR CLEANOUTS IN LANDSCAPING OR BIOFILTER AREAS.
3. USE FROST SLEEVE ON ALL INSTALLATIONS

L

CLEANOUT

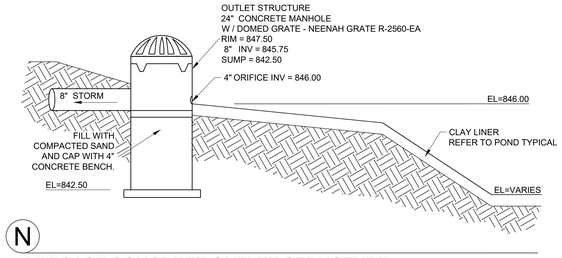


NOTES:

1. WATER SERVICE CONNECTION SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARD SPECIFICATION FOR SEWER & WATER CONSTRUCTION IN WISCONSIN.
2. DISTANCE FROM CURB STOP TO RIGHT OF WAY LINE VARIES BY MUNICIPALITY. CONTRACTOR SHALL CONTACT LOCAL PUBLIC WORKS/WATER DEPARTMENT TO COORDINATE CURB STOP PROXIMITY TO RIGHT OF WAY LINE.
3. PROVIDE FROST PROTECTION ON SERVICE BOX IN ACCORDANCE WITH STATE STANDARDS.
4. PIPE MATERIAL SHALL BE IN ACCORDANCE WITH LOCAL MUNICIPAL STANDARD.

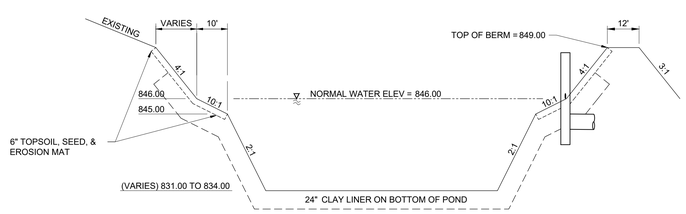
M

LARGE SERVICE CONNECTION WITH TAPPING SLEEVE



N

PRECAST CONCRETE OUTLET STRUCTURE

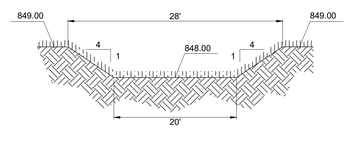


CLAY LINER CRITERIA:

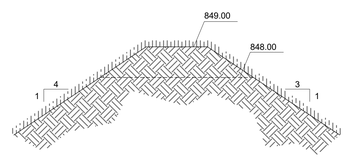
1. CLAY LINER BOTTOM TO BE 1 FOOT ABOVE NORMAL WATER ELEVATION.
2. 50% FINES (200 SIEVE) OR MORE IN-PLACE HYDRAULIC CONDUCTIVITY OF 1 X 10^ -6 CM/SEC OR LESS.
3. AVERAGE LIQUID LIMIT VALUE OF 16 OR GREATER WITH NO VALUE LESS THAN 14.
4. AVERAGE PI OF 7 OR MORE WITH NO VALUES LESS THAN 5.
5. CLAY COMPACTION AND DOCUMENTATION AS SPECIFIED IN NRCS WISCONSIN CONSTRUCTION SPECIFICATION 204.

O

POND TYPICAL SECTION



TRANSVERSE X-SECTION



LONG. X-SECTION

P

POND OVERFLOW WEIR

SCALE: N.T.S.

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A New Office Building for:

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2830 American Drive
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PROJECT # 24-011

DATE 03-20-2026

REVISION	DATE

DRAWING # C600

\\Machserver\mach\Jobs\2334-01-25 ALC TOWN OF CLAYTON\DRAWINGS\2334-01-25 Eng.dwg 3/25/2026 8:52:29 AM

LANDSCAPE PLAN

LANDSCAPE REQUIREMENTS

REQUIRED:

PARKING LOT LANDSCAPING:
- 1 TREE PER ISLAND
- 2 TREES BETWEEN PLANTING ISLAND

BUILDING LANDSCAPING:
- 1 TREE PER 4,500 SF OF DEVELOPED AREA
- 1 SHRUB PER 1,000 SF OF DEVELOPED AREA
  - DEVELOPED AREA = 29,312 SF

29,312 SF / 4,500 SF = 7 TREES
29,312 SF / 1,000 SF = 30 SHRUBS

ZONE B: 100% FRONT FACADE AND 25% SIDE SHALL BE LANDSCAPED

PROVIDED:

PARKING LOT LANDSCAPING:
- 3 TREES

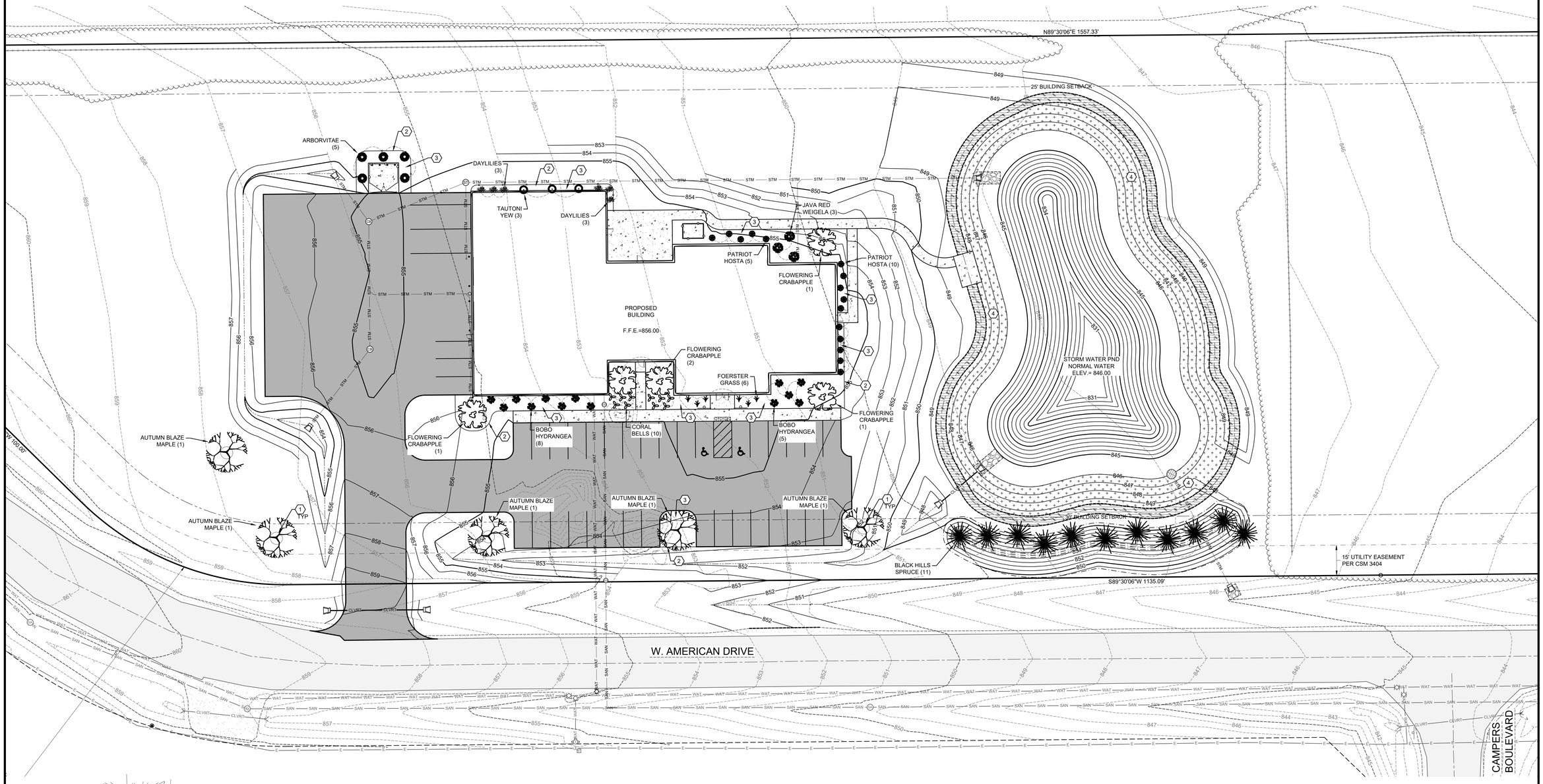
BUILDING LANDSCAPING:

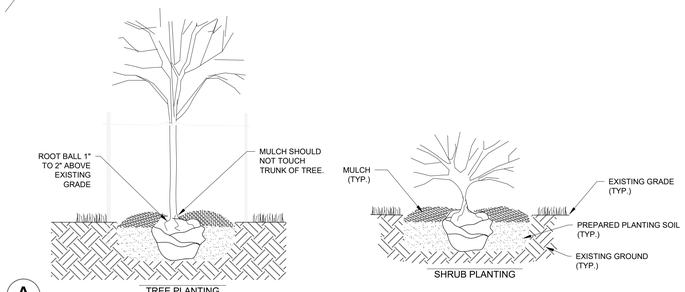
26 TREES
56 SHRUBS

100% FRONT AND 100% SIDE

PLANT TABLE

SYMBOL	COMMON NAME	SCIENTIFIC NAME	QUANTITY	SIZE
	AUTUMN BLAZE MAPLE	ACER X FREEMANI 'JEFFERSRED'	5	2 1/2"
	FLOWERING CRABAPPLE	MALUS 'R0SACEAE'	5	11/4"
	BLACK HILLS SPRUCE	PICEA GLAUCA DENSATA	11	4'
	TAUTONI YEW	TAXUS X MEDIA 'TAUTONI'	3	18"
	ARBORVITAE	THUJA OCCIDENTALIS 'SMARAGD'	5	4'
	BOBO HYDRANGEA	HYDRANGEA PANICULATA	13	12"
	PATRIOT HOSTA	HOSTA 'PATRIOT'	15	1 GAL.
	JAVA RED WEIGELA	WEIGELA FLORIDA 'JAVA RED'	3	12"
	DAYLILIES	HEMEROCALLIS	6	1 GAL.
	FOERSTER GRASS	CALAMAGROSTIS X ACUTIFLORA	6	12"
	CORAL BELLS	HEUCHERA	10	1 GAL.





A PLANTING DETAIL

1. PLANTING HOLE SHALL BE A MINIMUM OF TWO TIMES THE DIAMETER OF THE ROOT BALL, AND EQUAL TO THE DETPH OF THE ROOT BALL.
2. EXCAVATED SOIL FROM PLANTING HOLE SHALL BE MIXED WITH 1 PART POTTING SOIL TO 2 PARTS EXCAVATED SOIL.
3. PLANT SO THAT THE ROOT COLLAR WILL BE 1" TO 2" ABOVE EXISTING GRADE.
4. IF BALLED AND BURLAPED, PLACE PLANT IN HOLE, CUT THE BALLING TWINE, AND PEEL BACK THE TOP TWO THIRDS OF BURLAP. IF POTTED REMOVE POT, AND PLACE PLANT INTO HOLE.
5. BACKFILL HOLE WITH PREPARED SOIL, AND MOUND SOIL 2" TO 3" HIGH IN A RING AT THE PERIMETER OF THE EXCAVATED HOLE. WATER AND SMOOTH RING PRIOR TO MULCHING.
6. UNLESS NOTED OTHERWISE, MULCH WITH 3" OF SHREDDED HARDWOOD MULCH OR LANDSCAPE STONE (RIVER ROCK, NOT CRUSHED STONE)
7. IF STAKING IS REQUIRED FOR TREES TWO STAKES SHALL BE USED ONE ON THE PREVAILING WIND SIDE OF THE TREE, AND THE OTHER STAKE ON THE OPPOSITE SIDE. STAKES SHALL BE FASTENED TO THE TREE USING RUBBER TUBING, OR NYLON STRAPPING.

LANDSCAPE NOTES

1. DIAMETERS OF PLANT MATERIALS AS DRAWN ARE REPRESENTATIVE OF PLANTS AT OR NEAR MATURITY RATHER THAN AT INITIAL PLANTING SIZES.
2. THE PLANT LIST IS INTENDED AS A GUIDE FOR THE CONTRACTOR. IN THE EVENT OF DISCREPANCY BETWEEN THE NUMBER OF PLANTS ON THE PLANT LIST AND ON THE DRAWING, THE GREATER NUMBER SHALL APPLY.
3. ADJUSTMENTS IN LOCATIONS OF PLANT MATERIALS MAY BE NECESSARY DUE TO NEW OR EXISTING UTILITIES OR SITE OBSTRUCTIONS. REVIEW WITH ARCHITECT BEFORE ADJUSTMENTS ARE MADE.
4. ALL SHRUBS OCCURRING IN CONTINUOUS ROW OR FORMAL ARRANGEMENT SHALL HAVE UNIFORM HEIGHT, SPREAD AND HABIT OF GROWTH. FOR GROUNDCOVER LOCATIONS, FILL AREA WITH QUANTITY OF PLANTS DESIGNATED; EVENLY SPACED.
5. A MINIMUM OF 12" DEPTH OF 50% TOPSOIL AND 50% COMPOST SHALL BE PLACED IN ALL BED AREAS BY THE CONTRACTOR PRIOR TO PLANT INSTALLATION.
6. MULCH TREES WITH MIN. 3" DEPTH OF GRAVEL OR HARDWOOD MULCH AS NOTED ON PLAN AND PER DETAILS. MULCH SHALL EXTEND IN A CONTINUOUS LAYER WITHIN PLANTING BEDS FROM FACE TO FACE OF SITE STRUCTURES - WALKS, BUILDING, OR OTHER PLANT BED LIMITS.
7. PROTECT EXISTING LAWN AREAS; REPAIR ANY CONTRACT RELATED DAMAGE TO LAWN AREAS.
8. THE CONTRACTOR SHALL MAINTAIN ALL PLANTS AND BEDS FOR A 60 DAY PERIOD AFTER ACCEPTANCE OF THE WORK BY THE ARCHITECT. THIS INCLUDES REGULAR WATERING, WEEDING AND MOWING.
9. THE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIALS FOR ONE-YEAR FROM DATE OF ACCEPTANCE. BEFORE END OF WARRANTY PERIOD CONTRACTOR SHALL REPLACE ALL TREES, SHRUBS OR PLANTINGS NOT ALIVE OR IN A HEALTHY GROWING CONDITION.
10. SEED ALL DISTURBED AREAS WITH WDot No. 40 GRASS MIX OR EQUAL.

SHEET KEY NOTES:

1. 6' DIAMETER SPADE EDGE & 3" HARDWOOD MULCH; SEE DETAIL A THIS SHEET
2. PROFESSIONAL GRADE EDGING
3. 1½" RIVER ROCK 3" THICK WITH WEED BARRIER FABRIC
4. AREA TO BE PLANTED WITH WET DETENTION SEED MIX BY PRAIRIE MOON NURSERY OR EQUAL

20 10 0 20 40
GRAPHIC SCALE

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PROJECT #	
24-011	
DATE	
03-20-2026	
REVISION	DATE

DRAWING # L100

\\Machserver\mach4v\Jobs\2334-01-25 ALC TOWN OF CLAYTON\DRAWINGS\2334-01-25 Eng.dwg 3/25/2026 8:52:38 AM

FLOOR LIVE LOADS
OFFICES (2ND): 50 PSF
CORRIDORS (2ND): 80 PSF
PUBLIC AREAS: 100 PSF
STAIRS: 100 PSF

ROOF/SNOW LOADS:
GROUND SNOW LOAD Pg 40 PSF
IMPORTANCE FACTOR I 1.0
EXPOSURE FACTOR Ce 1.0
TEMPERATURE FACTOR Ct 1.0
FLAT ROOF SNOW LOAD Pf 28 PSF
SNOW DRIFT LOAD PER IBC, SEE PLANS

WIND LOADS PER ASCE 7-10
ULTIMATE WIND SPEED 120 MPH
IMPORTANCE FACTOR 1.0
EXPOSURE FACTOR 1.0
INTERNAL PRESSURE COEFFICIENT +/-0.18
NOMINAL PRESSURE = 0.6 * ULTIMATE
MAIN WIND FORCE RESISTING SYSTEM (NOMINAL PRESSURE)
WALLS WINDWARD 10.3 PSF LEEWARD -2.0 PSF
ROOF WINDWARD -9.1 PSF LEEWARD -3.4 PSF

SEISMIC
Ss: .08 Sds: .04
S2.1: .068 Sd1: .061
Ie: 1.0
OCCUPANCY CATEGORY: II
SITE CLASS: D
SEISMIC DESIGN CATEGORY: A
Cs: 0.013W

CODE REFERENCES
ALL WORK SHALL CONFORM TO THE LATEST VERSIONS OF THE FOLLOWING CONSTRUCTION AND MATERIAL CODES:
OVERALL:
WISCONSIN ENROLLED COMMERCIAL CODE
INTERNATIONAL BUILDING CODE 2021
CONCRETE:
ACI 301 - "SPECIFICATIONS FOR STRUCTURAL CONCRETE" ACI
MCP - "MANUAL OF CONCRETE PRACTICE"
ACI 318 - "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"
ACI 318.1 - BUILDING CODE REQUIREMENTS FOR STRUCTURAL PLAIN CONCRETE"
CONCRETE REINFORCEMENT:
ACI 315 - "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT
ACI 318 - "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"
MSP2 - "CRSI MANUAL OF STANDARD PRACTICE"
AWS D1.4 - "STRUCTURAL WELDING CODE - REINFORCING STEEL"
PCI - "WELDED WIRE FABRIC MANUAL OF STANDARD PRCTICE"
STEEL REINFORCING MATERIAL SPECIFICATIONS:
ASTM A615 (GRADE 60) DEFORMED
WELDED WIRE FABRIC, ASTM A185
STRUCTURAL STEEL DESIGN AND FABRICATION:
AISC - "SPECIFICATION FOR DESIGN, FABRICATION AND ERECTION OF STEEL FOR BUILDINGS"
AISC - "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES"
AWS D1.1 - STRUCTURAL WELDING CODE - STEEL"
AISC - "STRUCTURAL STEEL DETAILING MANUAL"
STRUCTURAL STEEL MATERIAL SPECIFICATIONS:
HOT ROLLED WIDE FLANGE AND WT SHAPES ASTM A992 (Fy=50 KSI)
ALL OTHER STRUCTURAL SHAPES AND PLATES - ASTM A36 (Fy=36 KSI)
STRUCTURAL STEEL PIPE - ASTM A53 GRADE B (Fy=35 KSI)
HOLLOW STRUCTURAL SECTIONS (HSS) - ASTM A500 GRADE B (Fy=46 KSI)
HIGH STRENGTH BOLTS - ASTM A325N (BEARING TYPE) OR ASTM A325F (FRICTION TYPE)
ANCHOR BOLTS - ASTM F1554 GRADE 36 OR A36
COLD FORMED STRUCTURAL MATERIAL
AISI - "SPECIFICATIONS FOR THE DESIGN OF LIGHT-GAUGE COLD-FORMED STEEL STRUCTURAL MEMBERS.
AISC - "SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS"
GENERAL
1. ALL MATERIALS, WORKMANSHIP AND DETAILS SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITION OF THE WISCONSIN ENROLLED COMMERCIAL BUILDING CODE".
2. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE ARCHITECTURAL MECHANICAL, ELECTRICAL, AND STRUCTURAL DRAWINGS. CHASES, OPENINGS, INSERTS, SLEEVES OR OTHER ITEMS MAY NOT BE SHOWN ON THE STRUCTURAL DRAWINGS. IT IS THE CONTRACTORS RESPONSIBILITY TO COORDINATE AND INSTALL THESE ITEMS.
3. OPENINGS SHOWN ON THE STRUCTURAL DRAWINGS SHALL NOT BE MODIFIED WITHOUT WRITTEN APPROVAL OF THE ENGINEER.
4. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, AND PROJECT WORKPOINTS. REPORT ANY DISCREPANCIES TO THE ARCHITECT OR ENGINEER.
5. TYPICAL DETAILS NOT SPECIFICALLY LOCATED ON THE DRAWINGS SHALL BE APPLICABLE TO ALL PARTS OF THE CONTRACT DRAWINGS UNLESS SPECIFICALLY NOTED OTHERWISE.
6. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SAFETY ON THE CONTRUCTION SITE.

FOUNDATIONS
1. FOUNDATION WORK FOR THIS PROJECT SHALL CONSIST OF SPREAD FOOTINGS, CONTINUOUS WALL FOOTINGS, AND SLABS-ON-GRADE.
2. FOUNDATIONS ARE DESIGNED TO BE SUPPORTED ON APPROVED EXISTING SUBGRADE OR APPROVED COMPACTED STRUCTURAL FILL HAVING AN ASSUMED BEARING CAPACITY OF 2000 PSF
3. ALL EXTERIOR FOUNDATIONS SHALL BEAR ON APPROVED SUBGRADE AT A MINIMUM DEPTH OF 4'-0" BELOW ADJACENT EXTERIOR FINISH GRADE.
4. FOOTING ELEVATIONS SHOWN ON THE DRAWINGS REPRESENT ESTIMATED DEPTHS AND ARE NOT TO BE CONSTRUED AS LIMITING THE AMOUNT OF EXCAVATION REQUIRED TO REACH SUITABLE BEARING MATERIAL.
5. CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORTS ADJACENT TO EXISTING STRUCTURES, STREETS, UTILITIES OR PROPERTY TO PREVENT HORIZONTAL OR VERTICAL MOVEMENT OF THE ADJACENT SOIL OR PROPERTY.
6. CONTRACTOR SHALL CONTROL SURFACE AND SUBSURFACE WATER TO INSURE THAT ALL FOUNDATION WORK IS DONE IN THE DRY.
7. DO NOT PLACE FOUNDATIONS ON FROZEN SUBGRADE. IF FROST OCCURS, CONTRACTOR SHALL REMOVE FROZEN SUBGRADE, PLACE COMPACTED FILL AND PLACE CONCRETE PRIOR TO NEW FROST PENETRATION.
8. PROTECT ALL EXPOSED CONCRETE FROM FROST PENETRATION UNTIL THE PROJECT IS COMPLETE.
9. BRACE FOUNDATION WALLS DURING BACKFILLING AND COMPACTION OPERATIONS. BRACING SHALL REMAIN IN PLACE UNTIL PERMANENT STRUCTURAL SUPPORT IS INSTALLED AND APPROVEDD BY THE ENGINEER.
10. BACKFILL WALLS EVENLY ON BOTH SIDES.

CONCRETE
1. CONCRETE SHALL HAVE A MINIMUM 28-DAY ULTIMATE COMPRESSIVE STRENGTH AS FOLLOWS:
SLABS-ON-GRADE 4,000 PSI
FOOTINGS AND FROST WALLS 3,000 PSI
EXTERIOR EXPOSED CONCRETE 4,000 PSI
2. CONCRETE TO BE EXPOSED TO THE WEATHER SHALL HAVE AIR-ENTRAINING ADMIXTURE AS REQUIRED TO PROVIDE 4-6% AIR ENTRAINMENT.
3. GROUT USED TO SET PLATES SHALL BE NON-SHRINK AND NON-METALLIC.
4. PROVIDE A MINIMUM OF 6" COMPACTED GRANULAR FILL UNDER ALL SLABS-ON-GRADE.
5. CONTRACTOR SHALL USE SMOOTH FORMS FOR EXPOSED CONCRETE SURFACES. BOARD FORMS MAY BE USED FOR UNEXPOSED CONCRETE SURFACES. EARTH FORMS ARE FORBIDDEN.

REINFORCEMENT
1. REINFORCEMENT FABRICATOR SHALL PROVIDE AND SCHEDULE ON SHOP DRAWINGS ALL REQUIRED REINFORCING STEEL AND THE NECESSARY ACCESSORIES TO HOLD REINFORCEMENT SECURELY IN PLACE AT THE CORRECT LOCATIONS.
2. CLEARANCES FOR REINFORCEMENT: CONCRETE PLACED DIRECTLY ON EARTH (FOOTINGS, SLABS, ETC.) 3" FROM BOTTOM; ALL OTHER CONCRETE PROVIDE 2" CLEAR TO REINFORCING, UNLESS SHOWN OTHERWISE ON DRAWINGS.
3. WHERE REINFORCEMENT IS REQUIRED IN SECTIONS, REINFORCEMENT IS CONSIDERED TYPICAL WHEREVER SECTION APPLIES.
4. WELDED WIRE FABRIC SHALL LAP A MINIMUM OF 6" AND BE TIED TOGETHER.
5. CONTRACTOR SHALL NOTIFY ARCHITECT OF COMPLETION OF REINFORCEMENT INSTALLATION AND ALLOW AT LEAST 24 HOURS BEFORE SCHEDULED CONCRETE PLACEMENT FOR ARCHITECT TO INSPECT REINFORCEMENT.

STRUCTURAL STEEL
1. PROVIDE 2 MIL THICK RED OR GREY OXIDE PRIMER ON ALL STEEL SURFACES UNLESS NOTED OTHERWISE.
2. ANCHOR BOLTS SHALL BE PRESET WITH TEMPLATES AT REQUIRED LOCATIONS.
3. LEVELING PLATES AND BEARING PLATES SHALL BE SET IN FULL BED OF NON-SHRINK GROUT.
4. CONNECTIONS MAY BE EITHER BOLTED OR WELDED AT THE FABRICATOR'S OPTION. BOLTED CONNECTIONS SHALL BE MINIMUM BOLT DIAMETER: 3/4"
5. SHEAR CONNECTIONS FOR NON-MOMENT CONNECTED MEMBERS: BEARING TYPE HIGH STRENGTH BOLTS IN SINGLE OR DOUBLE SHEAR.
6. ALL BEAM CONNECTIONS NOT DETAILED, SHALL SUPPORT 1/2 OF THE TOTAL UNIFORM LOAD CAPACITY FOR THE GIVEN BEAM AND SPAN OR THE INDICATED REACTION, WHICHEVER IS GREATER. CONNECTIONS SHALL GENERALLY FOLLOW THE TYPES SHOWN IN THE "AISC MANUAL OF STEEL CONSTRUCTION", TABLE II, III, OR X.
7. WELDS SHALL FULLY DEVELOP STRENGTH OF THE MATERIALS BEING WELDED, UNLESS NOTED OTHERWISE, EXCEPT THAT FILLET WELDS SHALL BE A MINIMUM 3/16".
8. WELDED CONNECTIONS SHALL BE MADE BY APPROVED CERTIFIED WELDERS USING FILLER METAL CONFORMING TO E70XX.
9. CONTRACTOR SHALL PROVIDE TEMPORARY ERECTION BRACING AND SUPPORTS TO HOLD STRUCTURAL STEEL FRAMING SECURELY IN POSITION. TEMPORARY BRACING SHALL REMAIN INTL. THE PERMANENT LATERAL BRACING HAS BEEN INSTALLED AND THE CONCRETE FOR FLOOR SLABS HAS ATTAINED 75% OF ITS REQUIRED STRENGTH.
10. STRUCTURAL STEEL FRAMING SHALL BE TRUE AND PLUMB BEFORE FINAL BOLTING OR WELDING OF CONNECTIONS.
11. CONTRACTOR SHALL NOT MODIFY OR CUT ANY STRUCTURAL STEEL WITHOUT WRITTEN APPROVAL FROM THE ENGINEER.
12. CONTRACTOR SHALL FIELD TOUCH UP ALL ABRASIONS, BURNS, AND SIMILAR DEFECTS IN PAINT OF THE STRUCTURAL STEEL, JOISTS, AND STEEL DECK.

COLD FORMED STRUCTURAL STEEL MEMBERS INCLUDING LIGHT GAUGE STEEL
ASTM A653 COLD FORMED GALVANIZED LIGHT GAUGE FRAMING MEMBERS
1. STUDS AND JOISTS SHALL BE CHANNEL SHAPED WITH LIPPED FLANGES, PUNCHED WEB, SIZE, GAUGE AND GRADE AS SHOWN ON THE DRAWINGS (AS REQUIRED BY STRUCTURAL CALCULATIONS).
2. TRACKS SHALL BE CHANNEL SHAPED SOLID WEB, DEPTH COMPATIBLE WITH STUDS GAUGE AND GRADE AS SHOWN ON THE DRAWINGS (AS REQUIRED BY STRUCTURAL CALCULATIONS).
3. FRAMING ACCESSORIES SHALL HAVE A MINIMUM YIELD STRENGTH OF 65 KSI.
4. SCREWS SHALL BE CORROSION RESISTANT, SELF DRILLING PAN OR HEX WASHER HEAD, AS SHOWN ON THE DRAWINGS (AS REQUIRED BY STRUCTURAL CALCULATIONS)
5. POWDER ACTUATED FASTENERS: ASTI 1062 OR 1065 STEEL, MINIMUM CORE HARDNESS 50 TO 54 HRC AND ZINC PLATED IN ACCORDANCE WITH ASTM B 633. DIAMETER AND LENGTH AS SHOWN ON THE DRAWINGS (AS REQUIRED BY STRUCTURAL CALCULATIONS)
6. ALL LIGHT GAUGE FRAMING MEMBERS SHALL BE DIETRICH CSJ SERIES UNLESS NOTED OTHERWISE.
7. WIND DESIGN LOADING FOR SECONDARY FRAMING PER THE LATEST ADDITION OF ASCE 7 FOR COMPONENTS AND CLADDING. WIND DESIGN SPEED AND EXPOSURE ARE NOTED UNDER DESIGN LOADS.
8. MATERIAL SUPPLIER IS RESPONSIBLE FOR MEMBER DESIGN. CALCULATIONS MUST BE INCLUDED WITH SHOP DRAWINGS FOR APPROVAL.

SHEAR WALLS
1. ALL EXTERIOR WALLS ARE TO BE CONSTRUCTUED AS SHEAR WALLS.
2. METAL STUD SHEAR WALLS SHALL BE CONSTRUCTED AS FOLLOWS:
METAL STUDS @ 16" OC, T/16" (MIN) OSB SHEATHING, 8DX1" SCREW FASTENERS @ 6" OC
3. BRICK VENEER IS NOT REQUIRED TO PROVIDE LATERAL SUPPORT

FOOTING SCHEDULE

MARK	FOOTINGS WIDTH	LENGTH	THICK.	REINFORCING LONG.	TRAN.	REMARKS
F1	4'-0"	4'-0"	12"	(5) #5	(5) #5	
F2	5'-0"	5'-0"	12"	(6) #5	(6) #5	

CONCRETE PIER SCHEDULE

MARK	SIZE	VERT	TIES	AB	TOP	BOT	DETAIL/NOTES
P1	12"x12"	(4) #5	#3@12"	(4) ¾"	100'-0"	98'-0"	8/S1.0
P2	12"x18"	(4) #5	#3@12"	(4) ¾"	100'-0"	98'-0"	8A/S1.0 PEMB HAIRPIN
P3	12"x12"	(4) #5	#3@12"	(4) ¾"	99'-4"	98'-0"	8/S1.0
P4	12"x12"	(4) #5	#3@12"	(4) ¾"	111'-10"	98'-4"	8/S1.0, 8/S2.1 EMBED

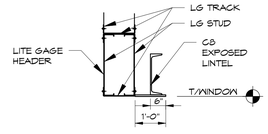
STEEL COLUMN SCHEDULE

MARK	SIZE	BASEPLATE / CAP PLATE SIZE (txBxN)	BOLTS	B/BPL	T/COL	DETAIL
C1	W8x24	¾"x10"x10"	(4) ¾"A307	99'-6"	VARIES HIGH ROOF	9/S1.0
C1	W8x24	¾"x10"x10"	(4) ¾"A307	100'-2"	VARIES HIGH ROOF	9/S1.0
C3	W8x24	¾"x10"x10"	(4) ¾"A307	100'-2"	VARIES LOW ROOF	9/S1.0
C4	W8x24	¾"x10"x10"	(4) ¾"A307	99'-6"	VARIES LOW ROOF	9/S1.0

BOT/BPL = T/CONC + 2" GROUT
T/COL = T/STEEL (MARK ON PLAN)

LINTEL/HEADER SCHEDULE

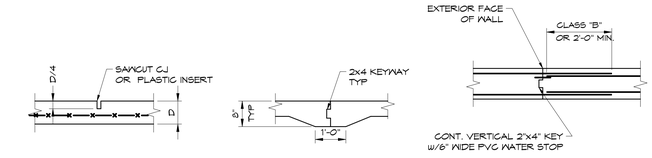
MARK	TYPE	SIZE	LOAD		DETAIL
H1	LITE GAGE	6"X12" BOX	DL=200 PLF LL=500 PLF	SPAN <= 6'-4"	
L1	CHANNEL	C8X11.5 +⅜"PLX12"	DL=200 PLF DL=500 PLF		



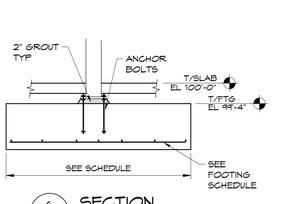
LITE GAGE HEADER TO BE DESIGNED BY SUPPLIER FOR LOADS SHOWN. HEADER CONFIGURATION MAY CHANGE BASED ON SPECIFIC DESIGN. REFER TO LITE GAGE SHOP DRAWINGS FOR CONNECTIONS AND SPECIFIC SECTIONS

HAIRPIN SCHEDULE

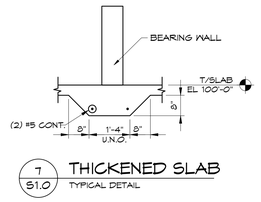
MARK	SIZE	CUT LENGTH	REMARKS
H1	#5	20'-0"	9.5' LEGS @ 30 DEG



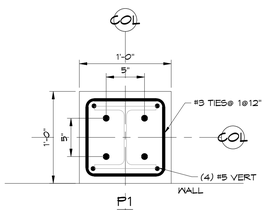
1 S1.0 CONTROL JOINT — TYPICAL DETAIL
2 S1.0 CONST JOINT — TYPICAL DETAIL
3 S1.0 WALL JOINT — TYPICAL DETAIL
4 S1.0 WALL CORNER — TYPICAL DETAIL
5 S1.0 STOOP SECTION — TYPICAL DETAIL



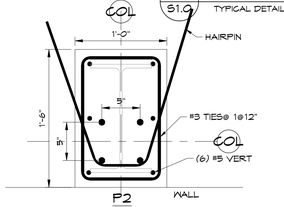
6 S1.0 SECTION — TYPICAL DETAIL



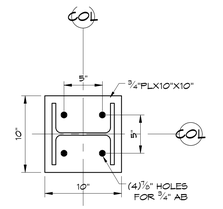
7 S1.0 THICKENED SLAB — TYPICAL DETAIL



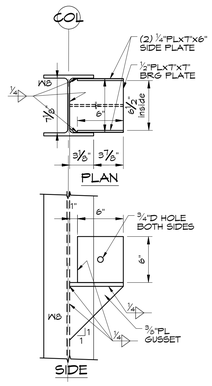
8 S1.0 SECTION — SCALE: ½" = 1'-0" T/PIER EL 100'-0" UNLESS NOTED



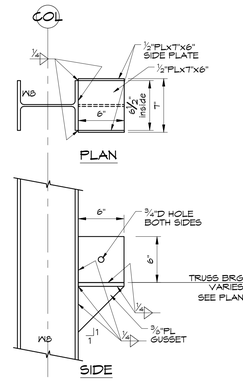
8A S1.0 SECTION — SCALE: ½" = 1'-0" VERIFY WITH PEMB DATA



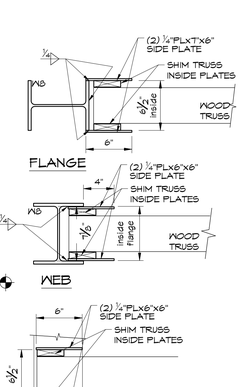
9 S1.0 BASEPLATE — SCALE: ½" = 1'-0"



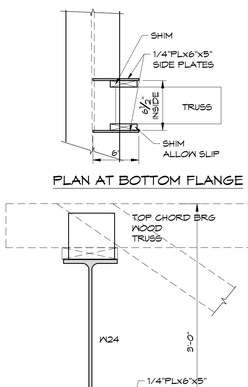
10 S1.0 BOTTOM CHORD WEB BRACKET — SCALE: ½" = 1'-0" SHOP FAB WITH COLUMN (5/S2.3)



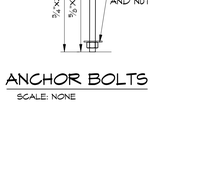
11 S1.0 BOTTOM CHORD FLANGE BRACKET — SCALE: ½" = 1'-0" SHOP FAB WITH COLUMN (2/S2.4)



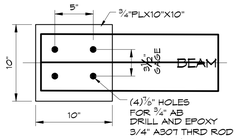
12 S1.0 TOP CHORD SIDE PLATES — SCALE: ½" = 1'-0" SHOP FAB WITH COLUMN/BEAM



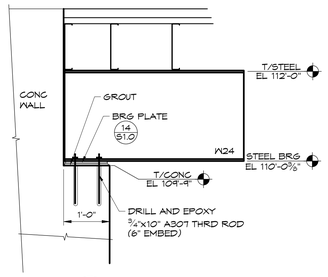
13 S1.0 BOTTOM CHORD SIDE PLATES — SCALE: ½" = 1'-0" SHOP FAB WITH BEAM (6/S2.3)



ANCHOR BOLTS
SCALE: NONE



14 S1.0 BEARING PLATE — SCALE: 1½" = 1'-0"



15 S1.1 SECTION — SCALE: ¾" = 1'-0"

STRUCTURAL SHEET INDEX

S1.0 STRUCTURAL NOTES AND DETAILS
S2.1 FOUNDATION PLAN AND DETAILS
S2.2 SECOND FLOOR FRAMING AND DETAILS
S2.3 LOW ROOF FRAMING AND DETAILS
S2.4 HIGH ROOF FRAMING AND DETAILS

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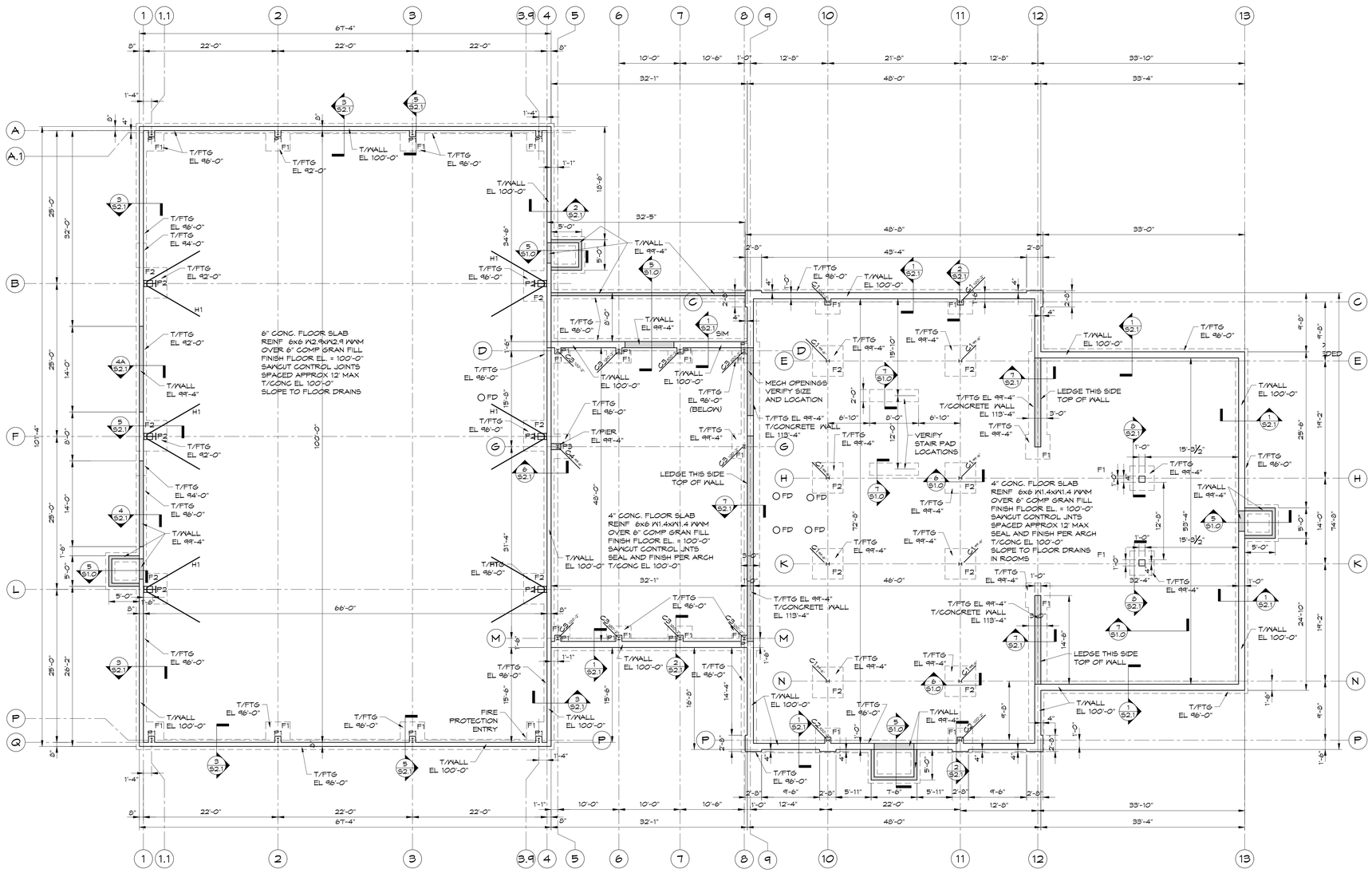
PROJECT # 24-011
DATE 3-20-2026

REVISION	DATE

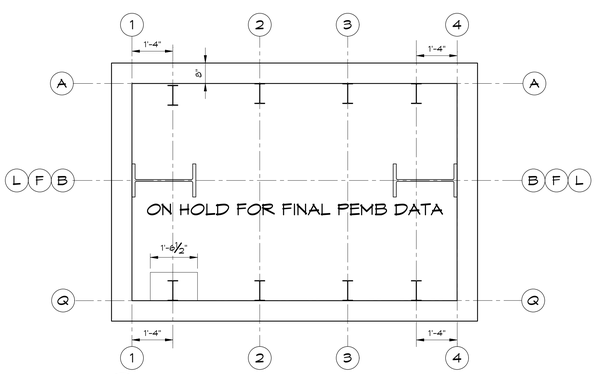
DRAWING # S1.0



FOUNDATION PLAN

NORTH

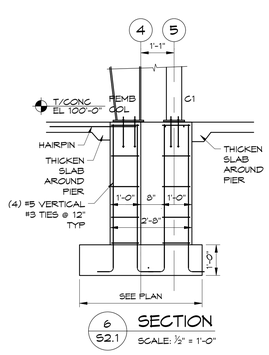
SCALE: 1/8" = 1'-0"
ARCH 100'-0"
CIVIL 856.0'



PEMB PIER AND ANCHOR BOLT PLAN

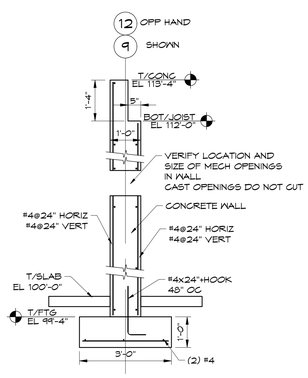
NORTH

SCALE: 1/8" = 1'-0"
PEMB WAREHOUSE
VERIFY WITH FINAL PEMB DATA



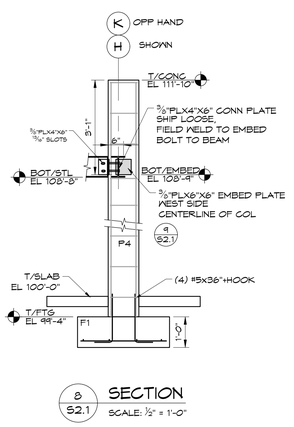
6 S2.1 SECTION

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



7 S2.1 SECTION

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



8 S2.1 SECTION

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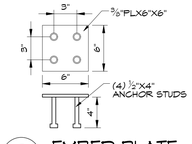
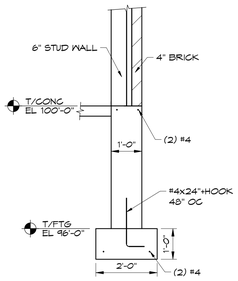


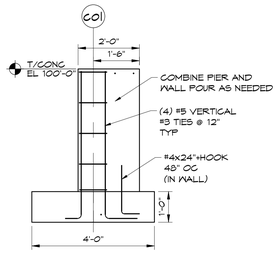
9 S2.1 EMBED PLATE

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



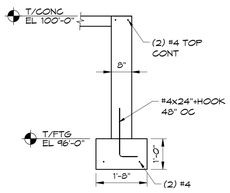
1 S2.1 SECTION

SCALE: 1/2" = 1'-0"
OFFICE FROST WALL



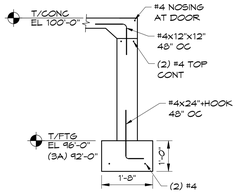
2 S2.1 SECTION

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



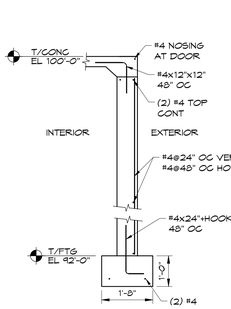
3 S2.1 SECTION

SCALE: 1/2" = 1'-0"
PEMB FROST WALL



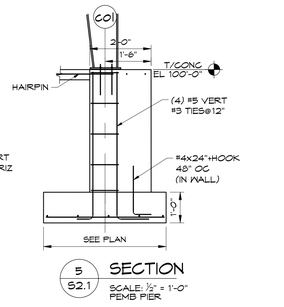
4 S2.1 SECTION

SCALE: 1/2" = 1'-0"
PEMB WALL AT DOOR



4A S2.1 SECTION

SCALE: 1/2" = 1'-0"
PEMB WALL AT FUTURE TRUCK WELL DOOR



5 S2.1 SECTION

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

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A New Office Building for:

ALC CORPORATION

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PROJECT # 24-011

DATE 3-20-2026

REVISION	DATE

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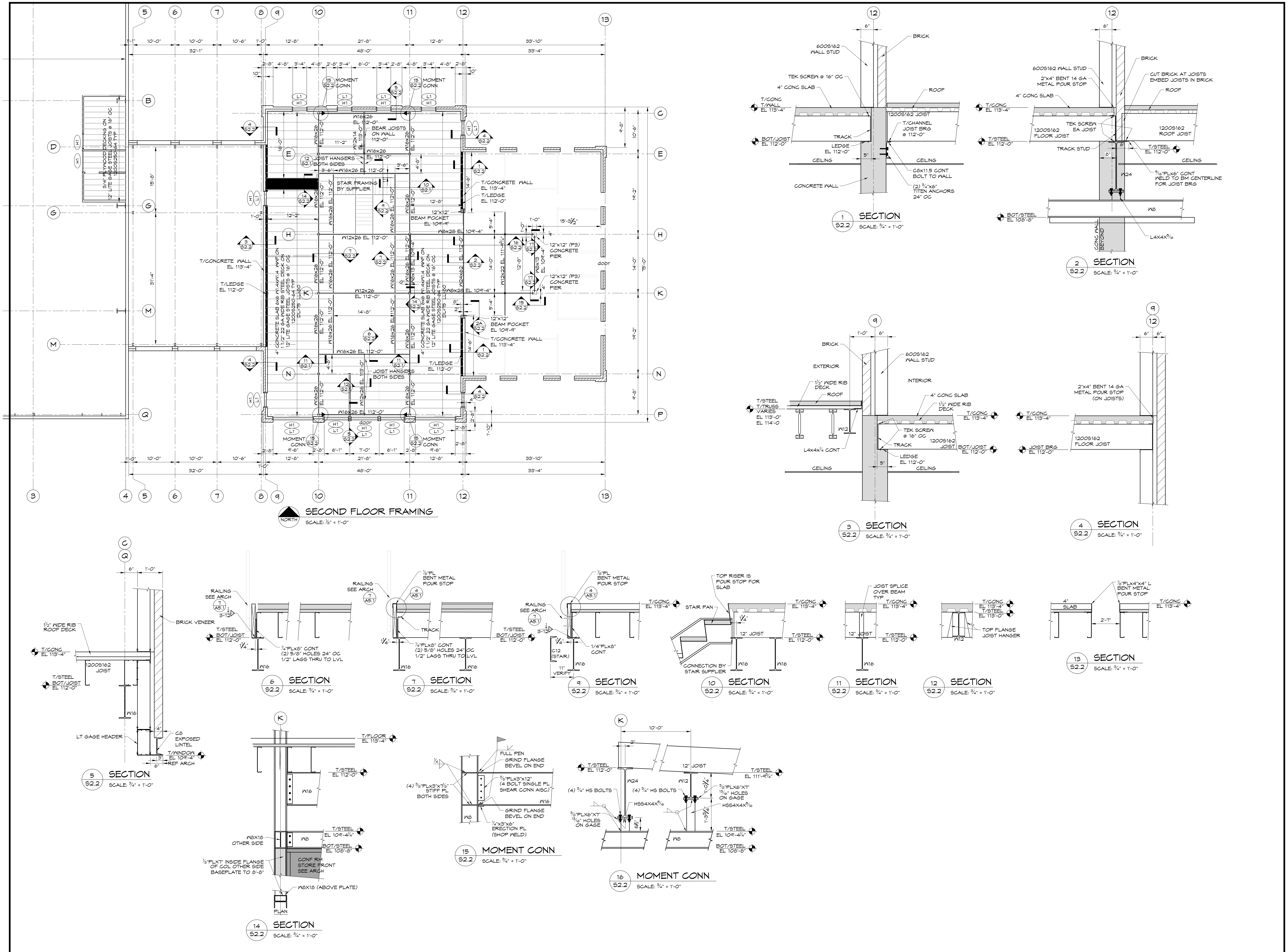

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Neenah, Wisconsin 54956

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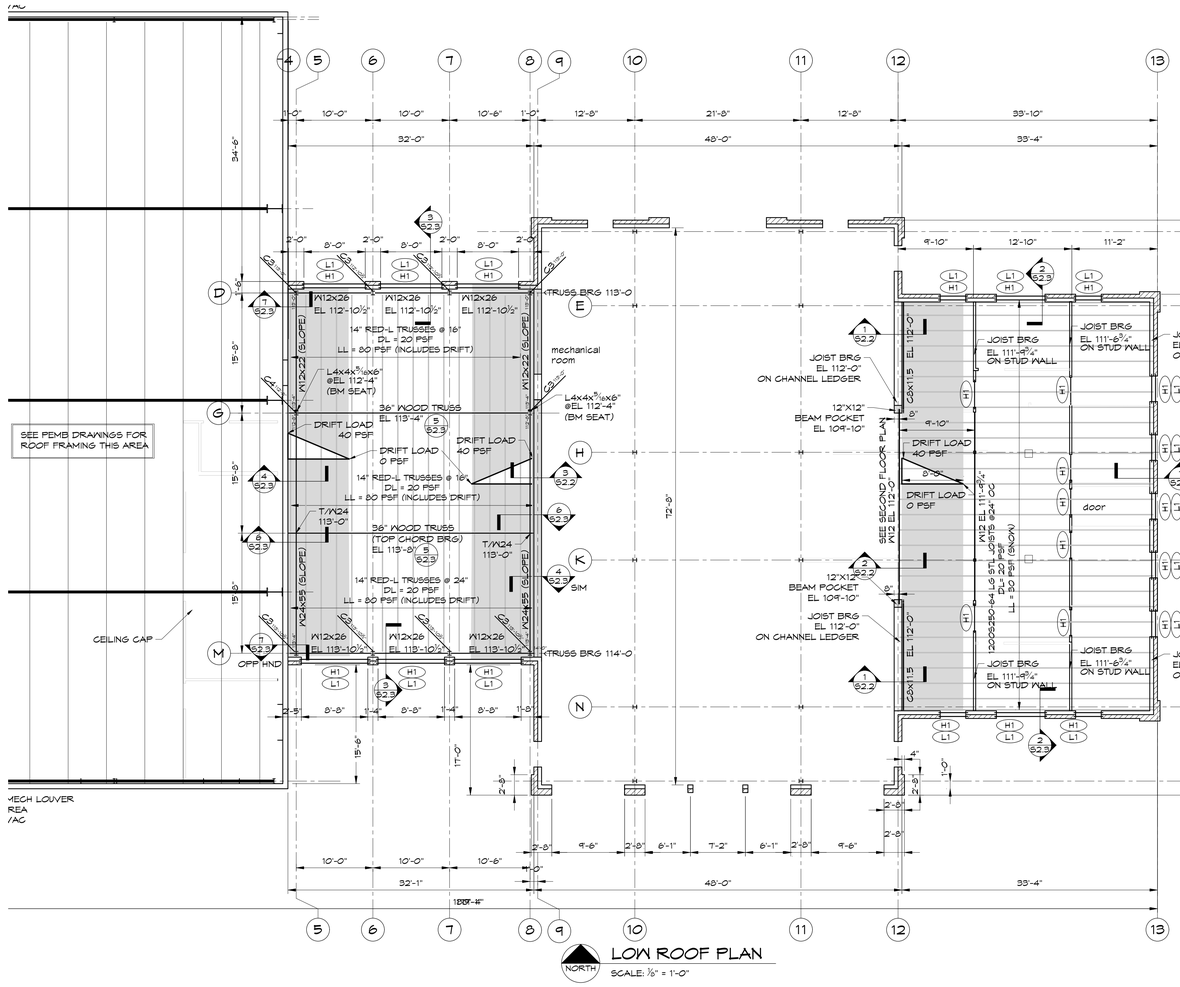
PROJECT # 24-011

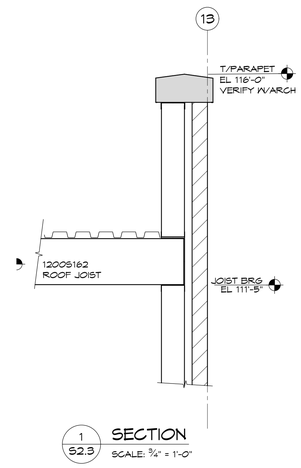
DATE 3-20-2026

REVISION	DATE

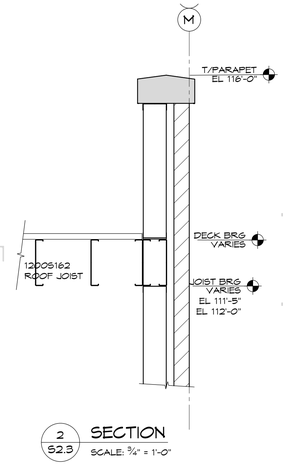
DRAWING # S2.2



LOW ROOF PLAN
NORTH
SCALE: 1/8" = 1'-0"



1 / S2.3 SECTION
SCALE: 3/4" = 1'-0"



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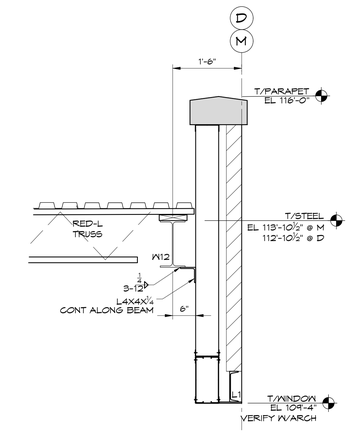

3 / S2.3 SECTION
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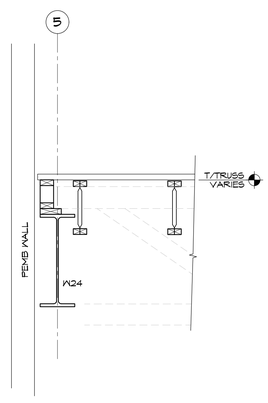
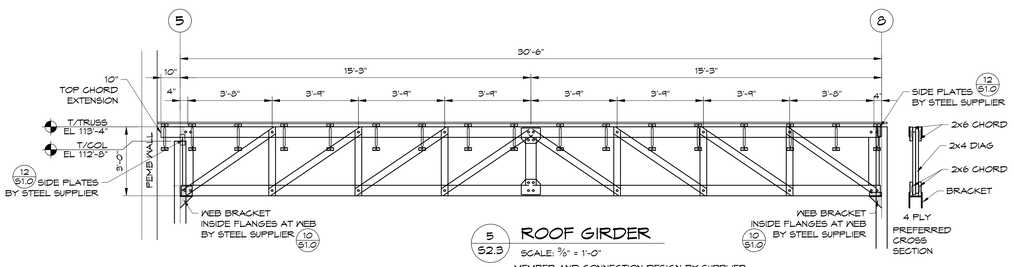
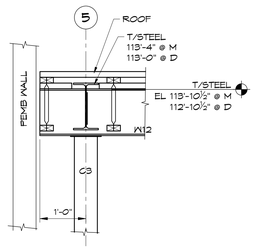


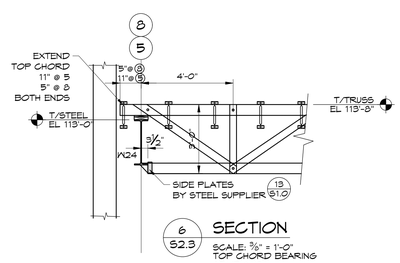
4 / S2.3 SECTION
SCALE: 3/4" = 1'-0"



5 / S2.3 ROOF GIRDER
SCALE: 3/8" = 1'-0"
MEMBER AND CONNECTION DESIGN BY SUPPLIER
TOP CHORD LOADS
DL = 320 PLF (20 PSF)
LL = 1280 PLF (80 PSF)



7 / S2.3 SECTION
SCALE: 3/4" = 1'-0"



6 / S2.3 SECTION
SCALE: 3/4" = 1'-0"
TOP CHORD BEARING AT J5 & J8

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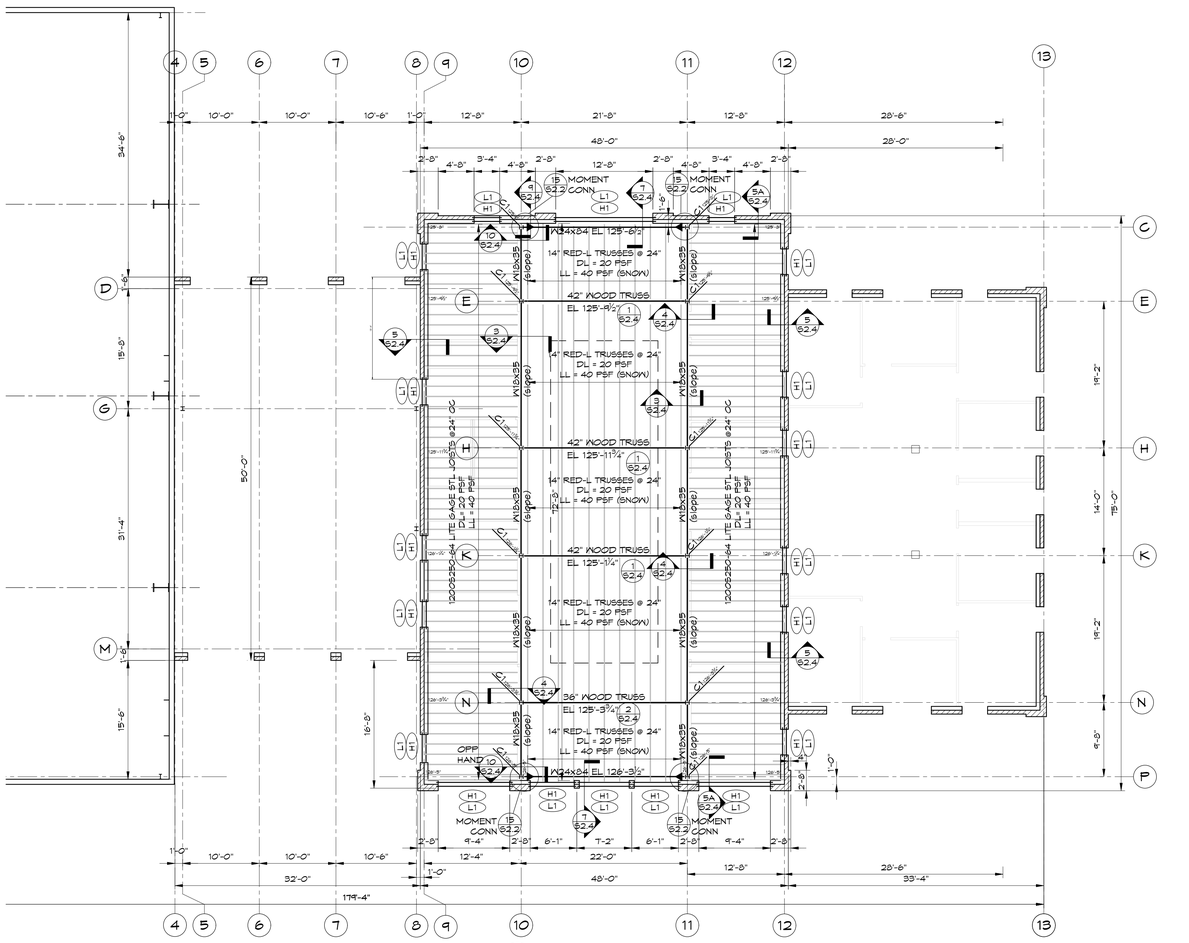
PROJECT # 24-011

DATE 3-20-2026

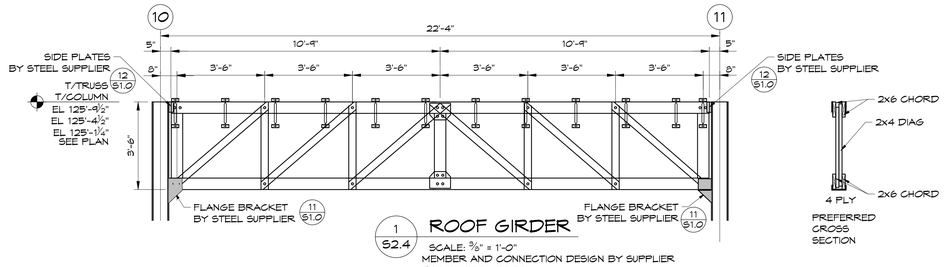
REVISION	DATE

DRAWING # S2.3

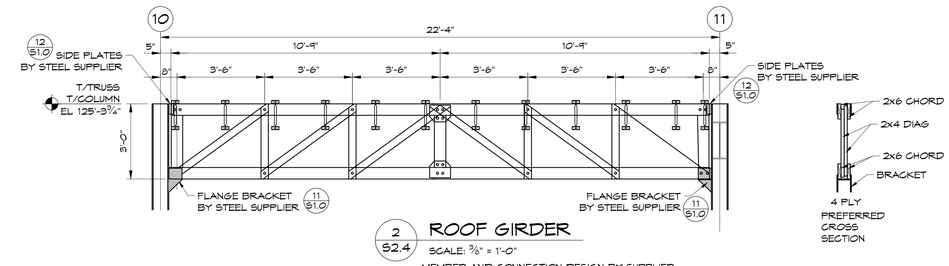


NORTH

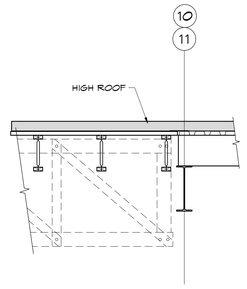
HIGH ROOF PLAN
SCALE: ⅛" = 1'-0"



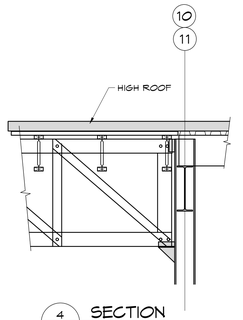
1 / S2.4 **ROOF GIRDER**
SCALE: ⅜" = 1'-0"
MEMBER AND CONNECTION DESIGN BY SUPPLIER
TOP CHORD LOADS
DL = 320 PLF (20 PSF)
LL = 640 PLF (40 PSF)



2 / S2.4 **ROOF GIRDER**
SCALE: ⅜" = 1'-0"
MEMBER AND CONNECTION DESIGN BY SUPPLIER
TOP CHORD LOADS
DL = 320 PLF (20 PSF)
LL = 640 PLF (40 PSF)



3 / S2.4 **SECTION**
SCALE: ½" = 1'-0"



4 / S2.4 **SECTION**
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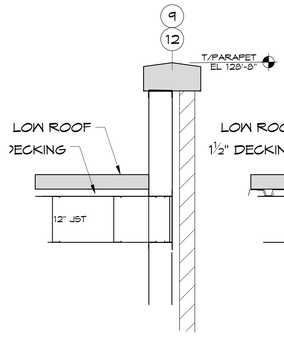

5 / S2.4 **SECTION**
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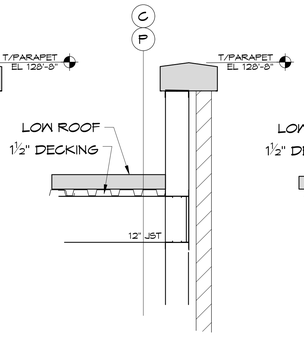
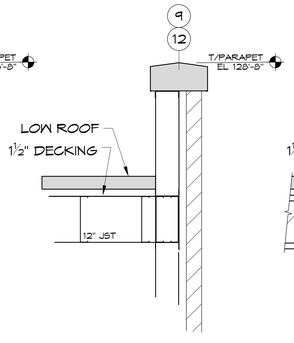
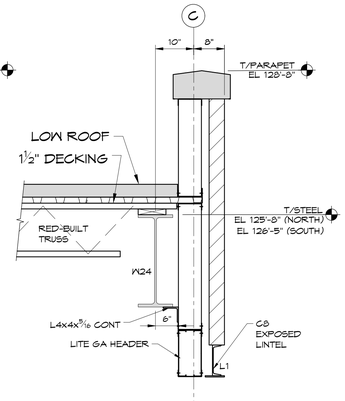


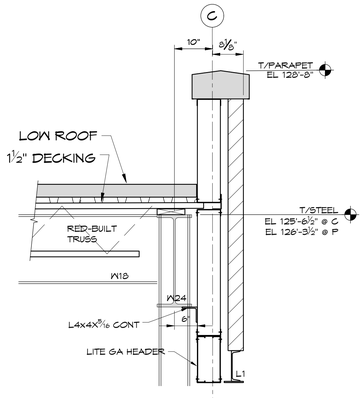
5A / S2.4 **SECTION**
SCALE: ¾" = 1'-0"



6 / S2.4 **SECTION**
SCALE: ¾" = 1'-0"



7 / S2.4 **SECTION**
SCALE: ¾" = 1'-0"



9 / S2.4 **SECTION**
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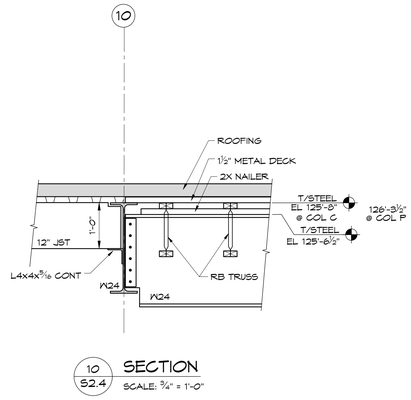

10 / S2.4 **SECTION**
SCALE: ¾" = 1'-0"

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PROJECT # 24-011

DATE 3-20-2026

REVISION	DATE

DRAWING # S2.4

CODE SUMMARY

OCCUPANCY GROUP: PRIMARY USE: B (BUSINESS)
SECONDARY USE: S2 (STORAGE)

CONSTRUCTION TYPE: 5B, NON-SEPARATED, FULLY SPRINKLED

ALLOWABLE HEIGHT ABOVE GRADE PLANE: 60 FEET, PER TABLE 504.3

NUMBER OF STORIES ALLOWED ABOVE GRADE PLANE: 3 PER TABLE 504.4

ALLOWABLE AREA FOR TYPE 5B CONSTRUCTION- OCCUPANCY GROUP - b: 27,000 S.F. (PER IBC TABLE 506.2)

TOTAL AREA OF FIRST FLOOR IS: 13,538 S.F.
TOTAL AREA OF SECOND FLOOR IS: 2,995 S.F.

TOTAL AREA OF ENTIRE BUILDING IS: 16,533 S.F.

FIRE WALLS ARE NOT REQUIRED FOR THIS PROJECT

OCCUPANCY OF NEW AREAS (PER IBC TABLE 1004.1.1):

FIRST FLOOR PLAN:	46
SECOND FLOOR PLAN:	19

TOTAL OCCUPANT LOAD OF ALL FLOORS COMBINED: 65

TOTAL PARKING: NUMBER OF STALLS BEING PROVIDED: 33
REQUIRED ACCESSIBLE PER 1106.1: 2
REQUIRED VAN ACCESSIBLE PER 1106.5: 1

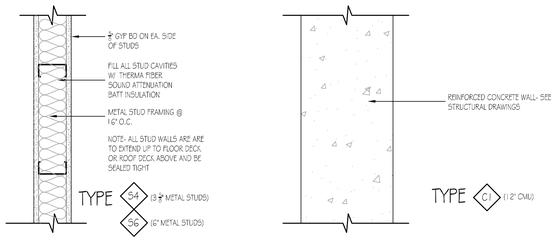
NUMBER OF PLUMBING FIXTURES REQUIRED (PER IBC TABLE 2902.1):

TOILETS (MALE)	2
TOILETS (FEMALE)	2
LAVATORIES (MALE)	1
LAVATORIES (FEMALE)	1
UNISEX TOILETS	0
UNISEX LAVATORIES	0
DRINKING FOUNTAINS	1
SERVICE SINKS	1

NUMBER OF PLUMBING FIXTURES BEING PROVIDED:

TOILETS (MALE)	2
TOILETS (FEMALE)	2
LAVATORIES (MALE)	2
LAVATORIES (FEMALE)	2
UNISEX TOILETS	3
UNISEX LAVATORIES	3
DRINKING FOUNTAINS	2
SERVICE SINK	1

GOVERNING AUTHORITY:	WISCONSIN DEPARTMENT OF COMMERCE SAFETY AND BUILDINGS DIVISION
BUILDING CODE:	2021 IBC AS MODIFIED BY SPS 362
EXISTING BUILDING CODE:	2015 IEBC AS MODIFIED BY SPS 366
ACCESSIBILITY CODE:	2021 IBC AS MODIFIED BY SPS 362; 2017 ANSI A117.1
MECHANICAL CODE:	2021 IMC AS MODIFIED BY SPS 365
PLUMBING CODE:	SPS 381-384
ELECTRICAL CODE:	2017 NEC AS MODIFIED BY SPS 316
ENERGY CODE:	2021 IECC AS MODIFIED BY SPS 363
FIRE / LIFE SAFETY CODE:	2012 NFPA AS MODIFIED BY SPS 314

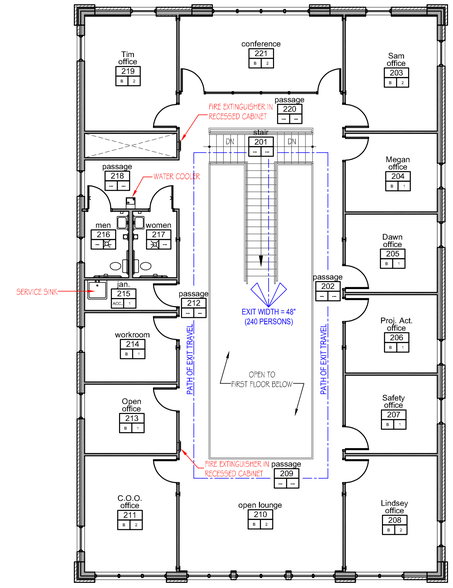


NOTE:

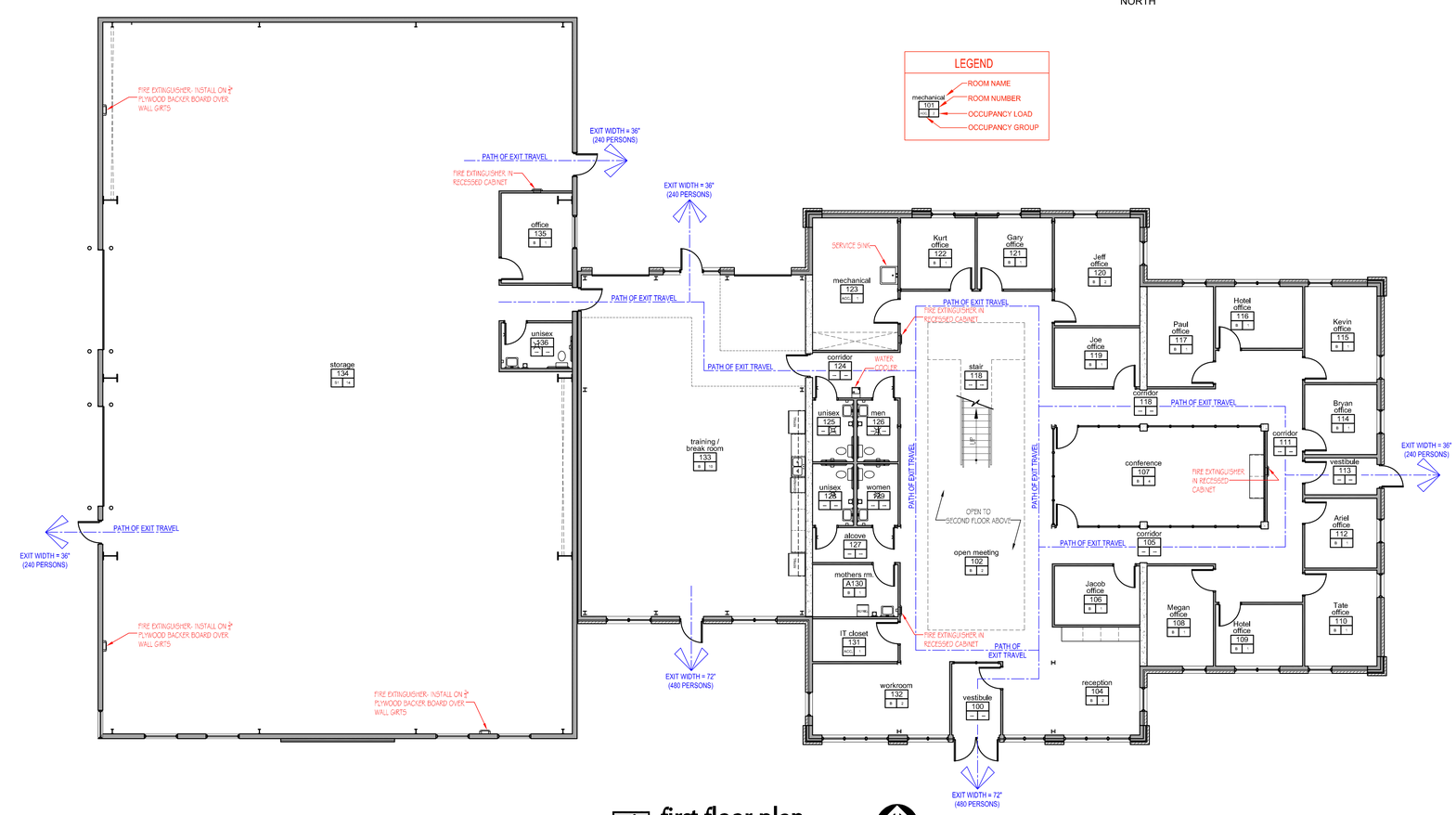
UNLESS OTHERWISE INDICATED ON THE DRAWINGS, ALL INTERIOR WALLS (STUD AND/OR MASONRY) ARE TO EXTEND TO FLOOR OR ROOF DECK ABOVE, AND BE SEALED TIGHT.

UNLESS OTHERWISE INDICATED ON THE DRAWINGS, ALL INTERIOR STUD WALLS ARE TO BE TYPE S4.

3 wall types
not to scale



2 second floor plan
1/8"=1'-0"



1 first floor plan
1/8"=1'-0"

NORTH

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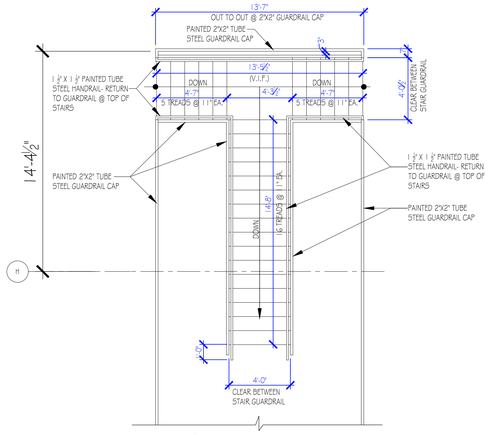
PROJECT # 24-011

DATE 3-20-2026

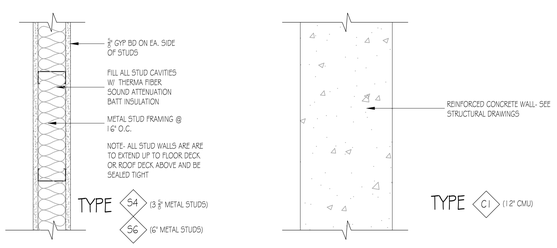
REVISION	DATE

DRAWING # A2.0



enlarged
4 stair plan
1/4"=1'-0"

NORTH

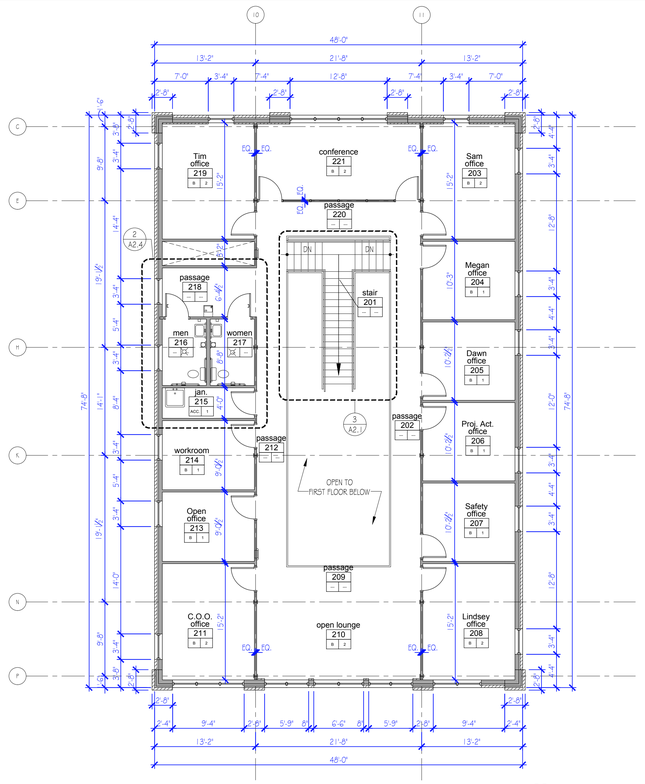


NOTE:

UNLESS OTHERWISE INDICATED ON THE DRAWINGS, ALL INTERIOR WALLS (STUD AND/OR MASONRY) ARE TO EXTEND TO FLOOR OR ROOF DECK ABOVE, AND BE SEALED TIGHT.

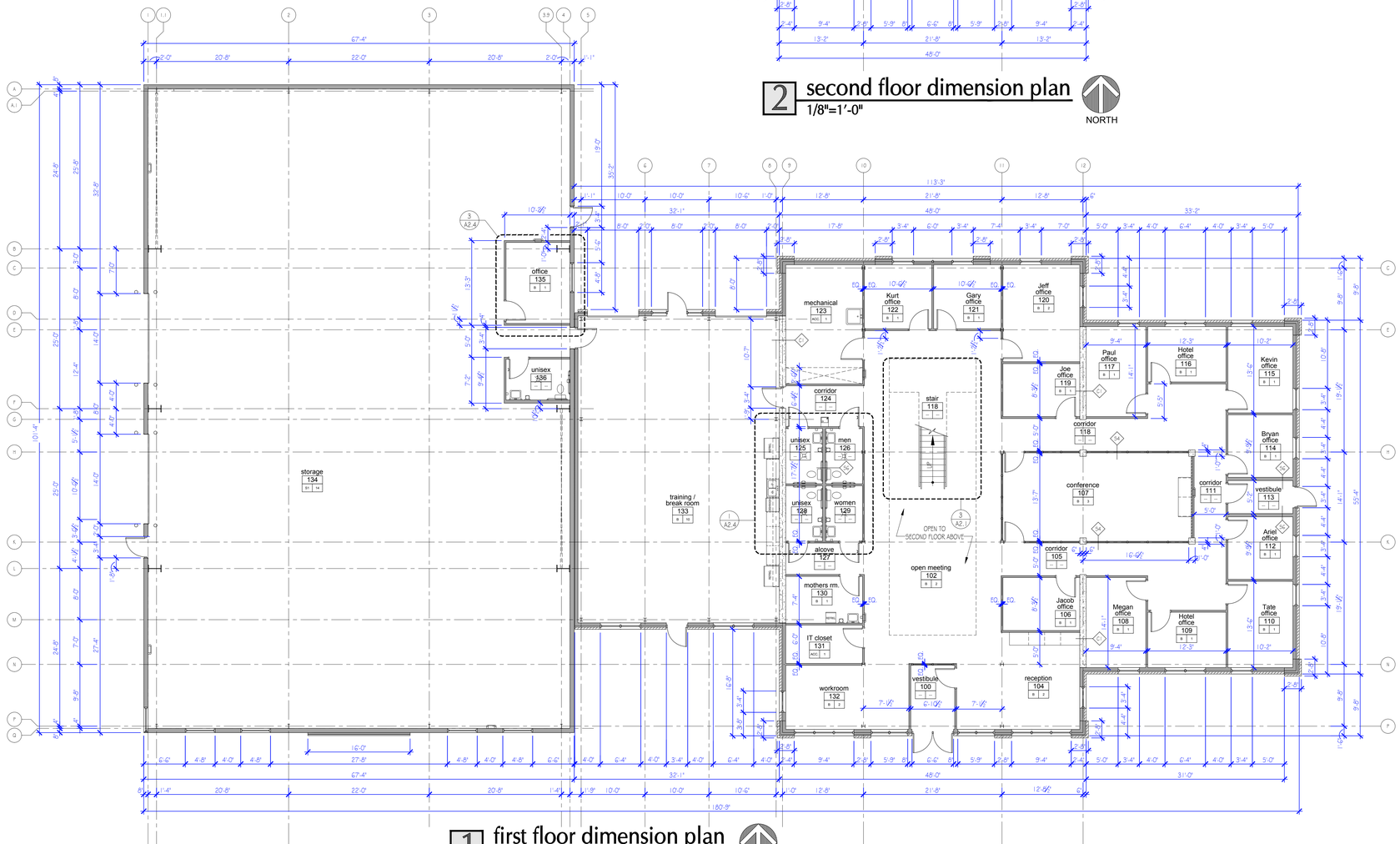
UNLESS OTHERWISE INDICATED ON THE DRAWINGS, ALL INTERIOR STUD WALLS ARE TO BE TYPE 5A.

3 wall types
not to scale



2 second floor dimension plan
1/8"=1'-0"

NORTH



1 first floor dimension plan
1/8"=1'-0"

NORTH

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PROJECT # 24-011

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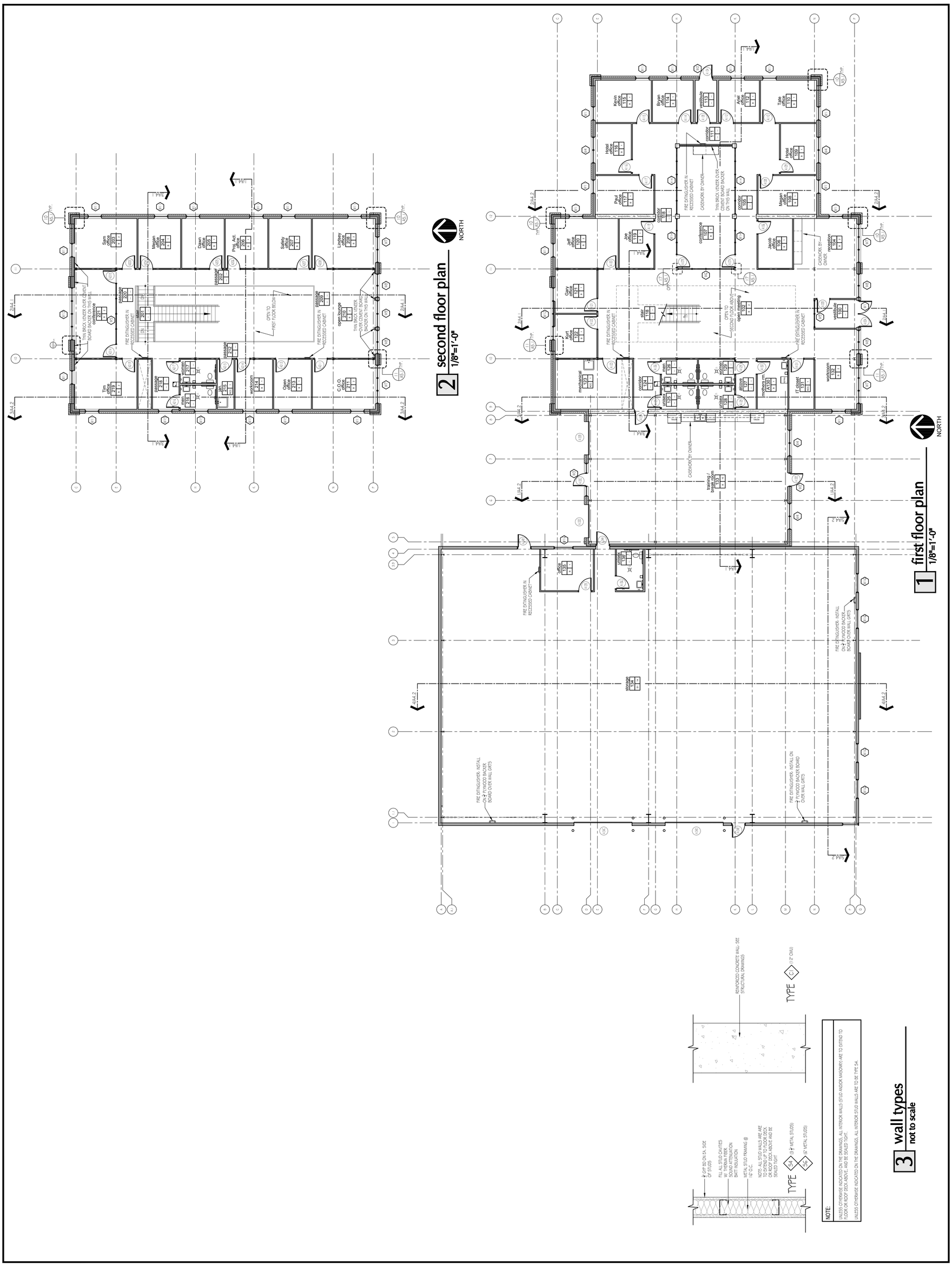
DRAWING # A2.1



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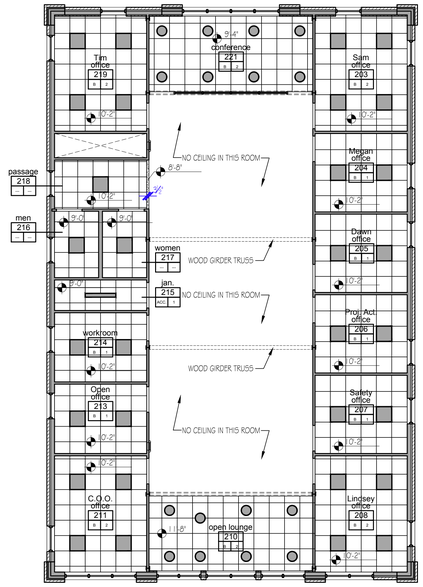
PROJECT # 24-011
DATE 3-20-2026
REVISION DATE
DRAWING # A2.2

CEILING MATERIAL LEGEND

- GYPSUM WALLBOARD CEILING OR SOFFIT
- ACT-1 (2X2' MINERAL FIBER LAY-IN CEILING TILES)
- 2X4' LIGHT FIXTURE
- EMERGENCY LIGHTING- SEE PLAN FOR LOCATIONS
- 2X2' LIGHT FIXTURE
- RECESSED CAN LIGHT FIXTURE
- PENDANT MOUNTED LIGHT FIXTURE
- 1'X4' LIGHT FIXTURE

NOTES:
1. CEILING HEIGHTS ARE IDENTIFIED ON PLANS AND ARE NOTED AS FEET & INCHES ABOVE THE FINISHED FLOOR.
2. LIGHTING LAYOUT (INCLUDING EMERGENCY LIGHTING) IS DIAGRAMATIC ONLY. FINAL LAYOUT TO BE BY ELECTRICAL CONTRACTOR AND IS TO BE COORDINATED WITH OWNER.
3. ALL DIFFUSERS, FIRE PROTECTION HEADS, LIGHTS, ETC. ARE TO BE CENTERED IN CEILING TILES.



2 **second floor reflected ceiling plan**
1/8"=1'-0"

NORTH

1 **first floor reflected ceililng plan**
1/8"=1'-0"

NORTH

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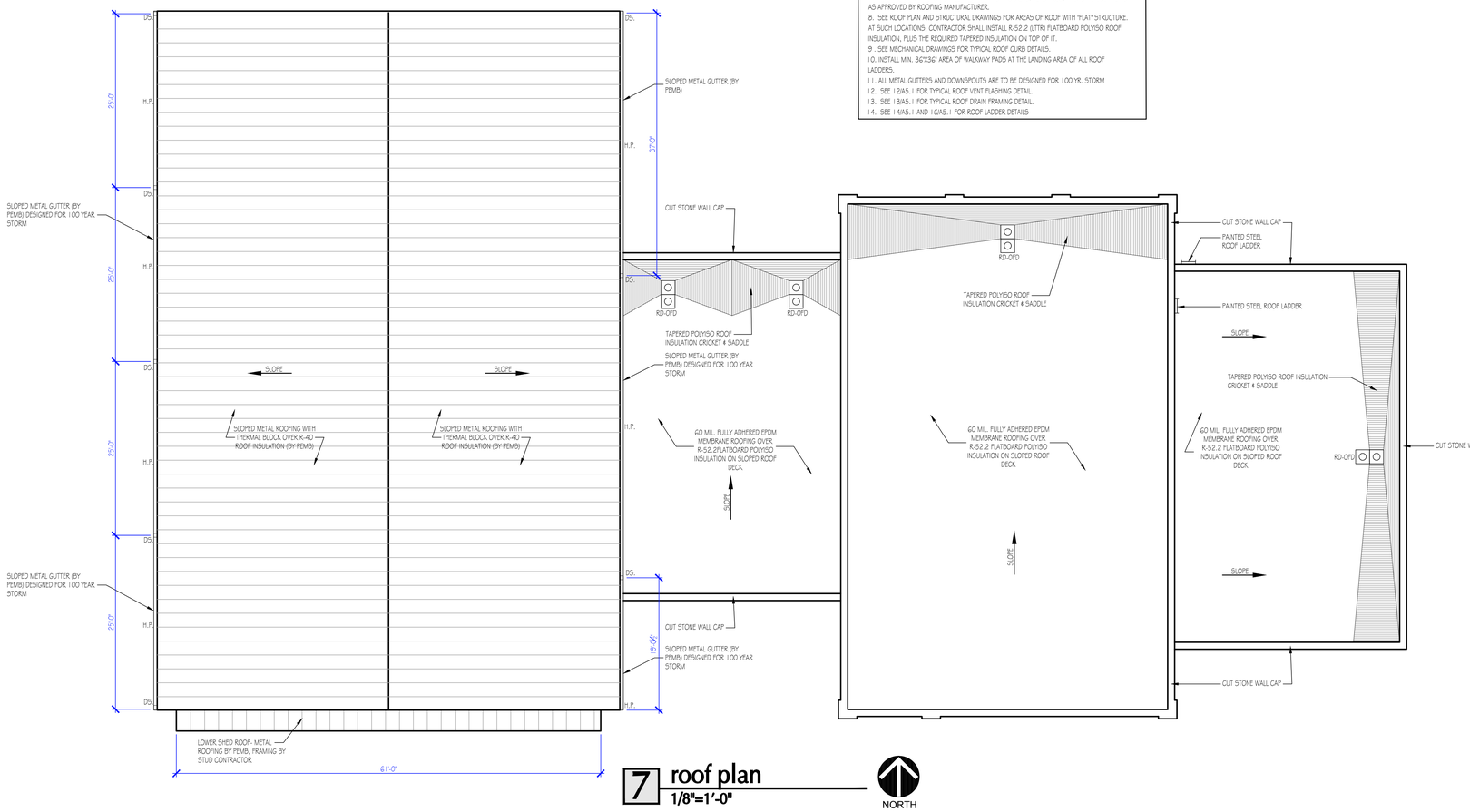
DRAWING # A2.3

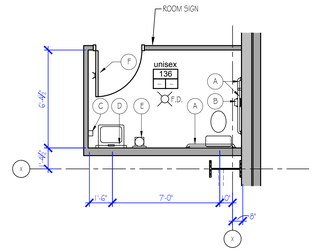
GENERAL ROOFING NOTES

1. ROOFING CONTRACTOR SHALL FIELD VERIFY AND APPROVE ALL DIMENSIONS , CONDITIONS AND LOCATIONS, ETC., PRIOR TO STARTING ANY WORK.
2. ROOFING CONTRACTOR SHALL BE RESPONSIBLE FOR WATER TIGHTNESS OF ALL ITEMS ON THE ROOF INCLUDING MECHANICAL UNITS AND SHALL PROVIDE POSITIVE DRAINAGE AT ALL AREAS WHETHER INDICATED OR NOT.
3. BECAUSE ALL ROOF PENETRATIONS MAY NOT BE INDICATED ON THIS PLAN, REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR ROOF PENETRATION LOCATIONS.
4. ALL MECHANICAL CURBS SHALL BE BY MECHANICAL CONTRACTOR AND ALL FLASHING SHALL BE BY ROOFING CONTRACTOR.
5. ROOFING CONTRACTOR HAS THE OPTION TO BUILD THE ROOF SADDLES FROM THE SPECIFIED INSULATION OR PERLITE BOARD.
6. ALL WOOD BLOCKING USED IN ROOF CONSTRUCTION SHALL BE TREATED.
7. ROOFING CONTRACTOR SHALL PROVIDE PITCH POCKETS, FLASHINGS, AND OTHER DETAILING AS APPROVED BY ROOFING MANUFACTURER.
8. SEE ROOF PLAN AND STRUCTURAL DRAWINGS FOR AREAS OF ROOF WITH 1"FLAT" STRUCTURE. AT SUCH LOCATIONS, CONTRACTOR SHALL INSTALL R-52.2 (1.1"R) FLATBOARD POLYISO ROOF INSULATION, PLUS THE REQUIRED TAPERED INSULATION ON TOP OF IT.
9. SEE MECHANICAL DRAWINGS FOR TYPICAL ROOF CURB DETAILS.
10. INSTALL MIN. 36"X36" AREA OF WALKWAY PADS AT THE LANDING AREA OF ALL ROOF LADDERS.
11. ALL METAL GUTTERS AND DOWNSPOUTS ARE TO BE DESIGNED FOR 100 YR. STORM
12. SEE 1/2/A5.1 FOR TYPICAL ROOF VENT FLASHING DETAIL
13. SEE 1/3/A5.1 FOR TYPICAL ROOF DRAIN FRAMING DETAIL.
14. SEE 1/4/A5.1 AND 1/6/A5.1 FOR ROOF LADDER DETAILS



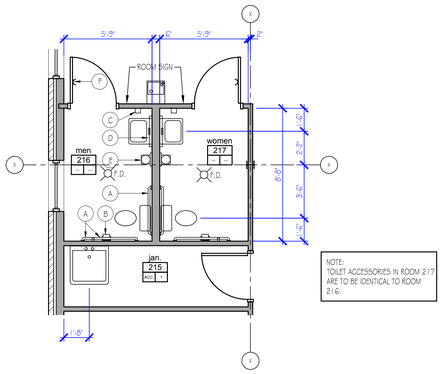
7 roof plan
1/8"=1'-0"

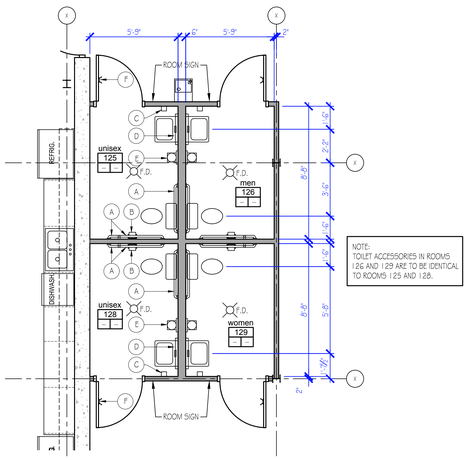
NORTH



3 enlarged restroom plan
1/4"=1'-0"

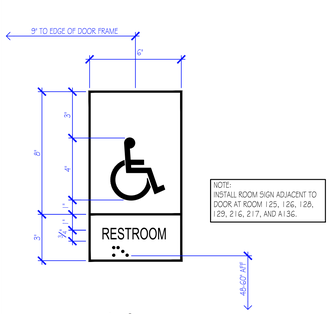
NORTH



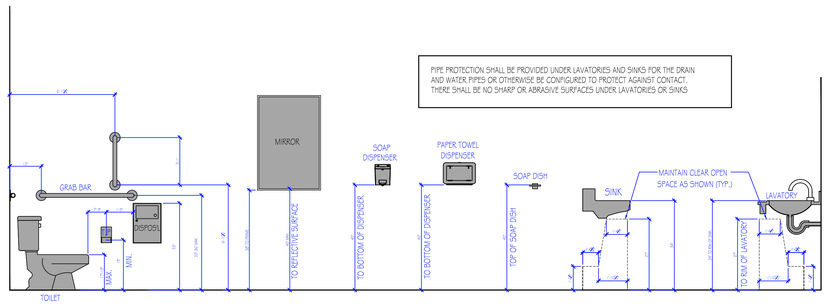


2 enlarged restroom plan
1/4"=1'-0"

NORTH



6 typical restroom sig
3"=1'-0"



5 typical toilet accessory mounting heights
not to scale

TOILET ACCESSORY SCHEDULE

KEY NO.	DESCRIPTION	MANUFACTURER	MODEL NO.	REMARKS
A	GRAB BARS	BOBRICK	B-5806	2, 1, 5
B	TOILET PAPER HOLDER	BOBRICK	B2730	2, 5
C	SOAP DISPENSER			2, 3, 5
D	MIRROR	BOBRICK	B-165	2, 4, 5
E	ELECTRIC HAND DRYER			3, 5
F	COAT HOOK	BOBRICK	B-212	2, 5

REMARKS KEY

1. BARS BEHIND TOILETS TO BE 36" LONG, BARS @ SIDE OF TOILET TO BE 42" LONG, VERTICAL BAR TO BE 18" LONG
2. PROVIDED AND INSTALLED BY OWNER
3. PROVIDE AT ALL NEW SINK LOCATIONS THROUGHOUT THIS BUILDING.
4. MIRRORS ARE TO BE 24X30.
5. ALL TOILET ACCESSORIES ARE TO BE MOUNTED IN ACCORDANCE WITH ANSI A117.1, 1998 EDITION.

4 tpilet accessory schedule
N/A

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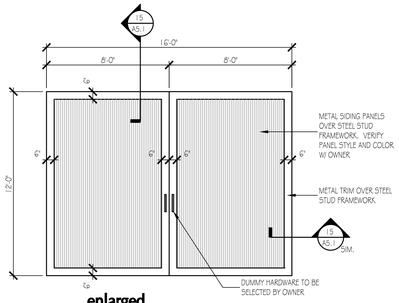
PROJECT # 24-011

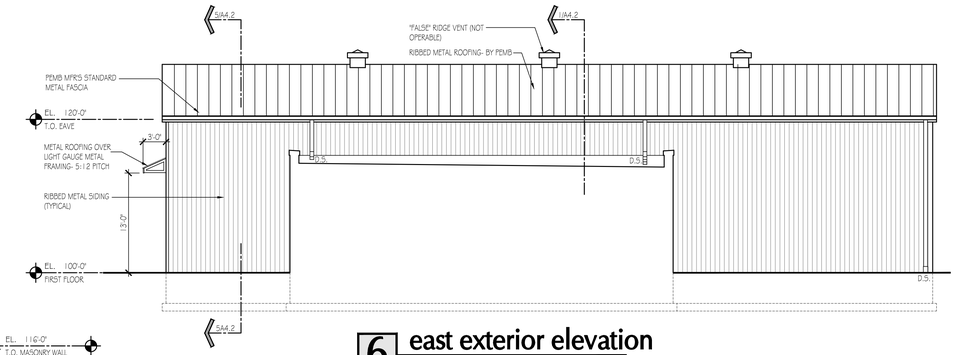
DATE 3-20-2026

REVISION	DATE

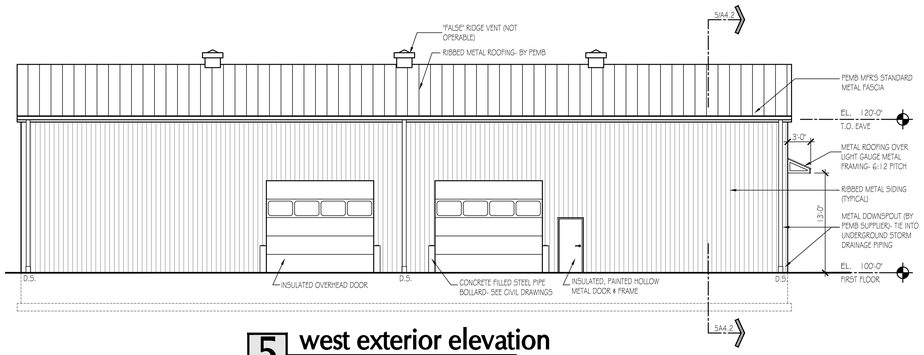
DRAWING # A2.4



9 enlarged "false" door elevation
1/4"=1'-0"



6 east exterior elevation
1/8"=1'-0"



5 west exterior elevation
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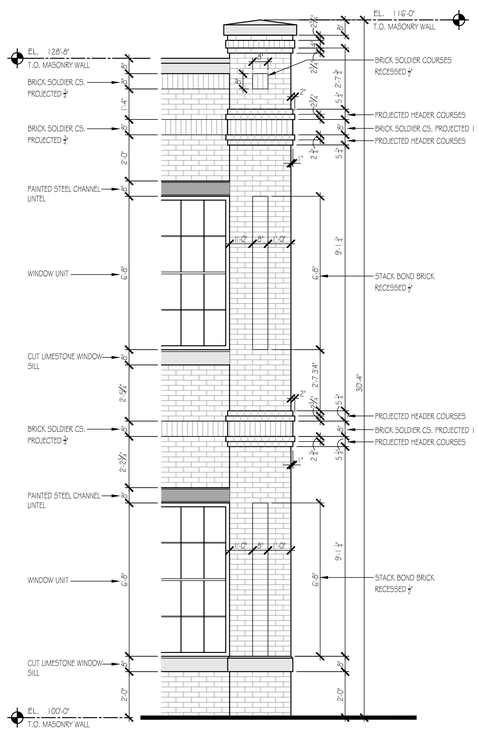
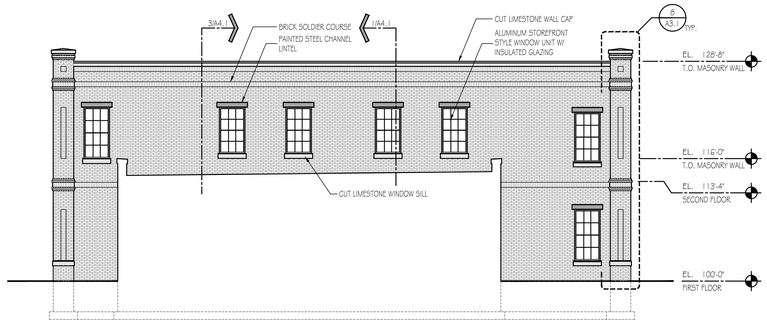
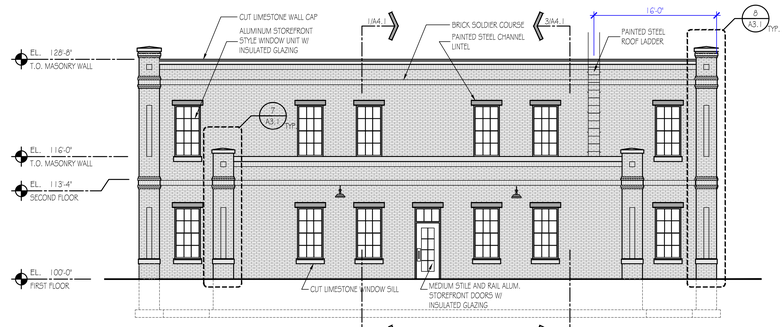


8 enlarged brick corner details
3/8"=1'-0"

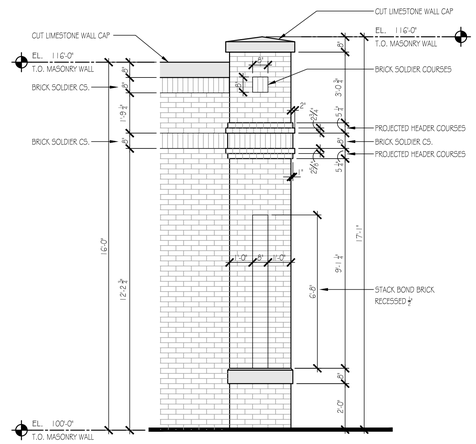


4 west exterior elevation
1/8"=1'-0"

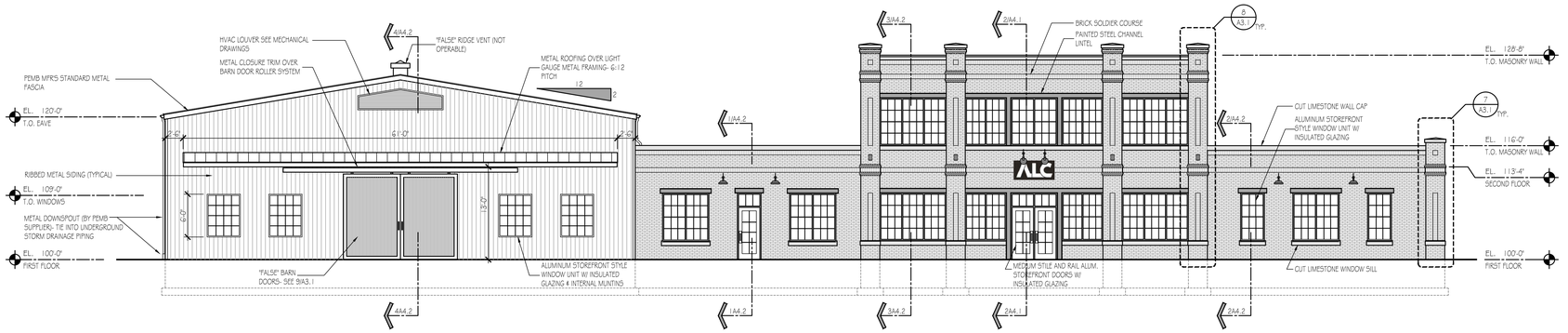


3 east exterior elevation
1/8"=1'-0"

2 north exterior elevation
1/8"=1'-0"



7 enlarged brick corner details
3/8"=1'-0"



1 south exterior elevation
1/8"=1'-0"

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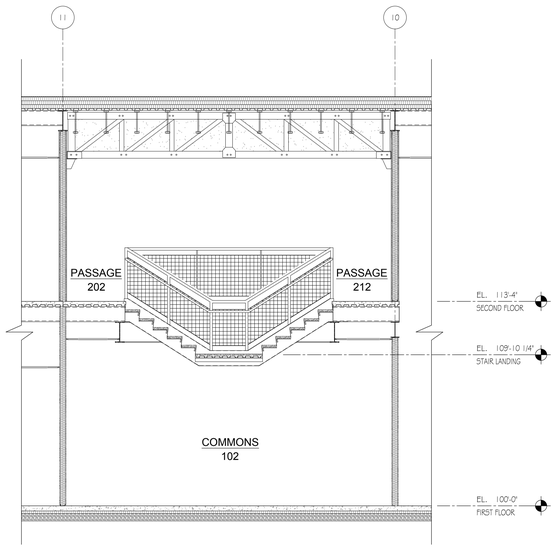
PROJECT # 24-011

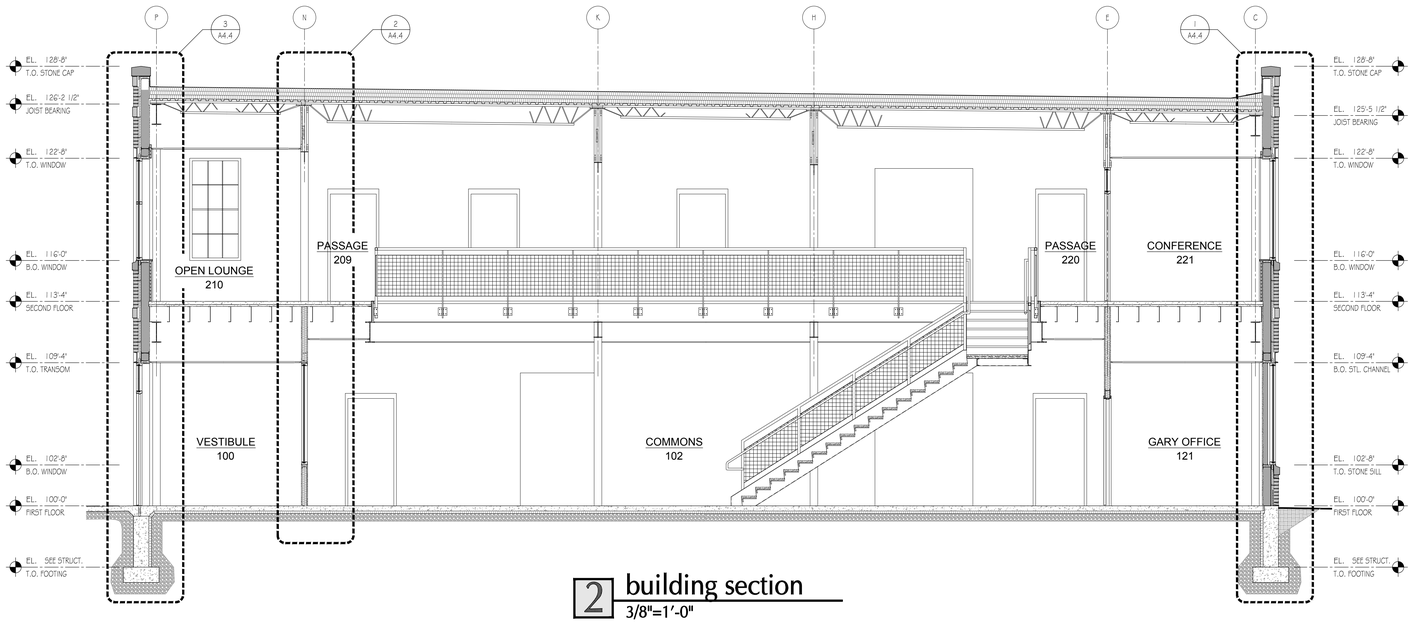
DATE 3-20-2026

REVISION	DATE

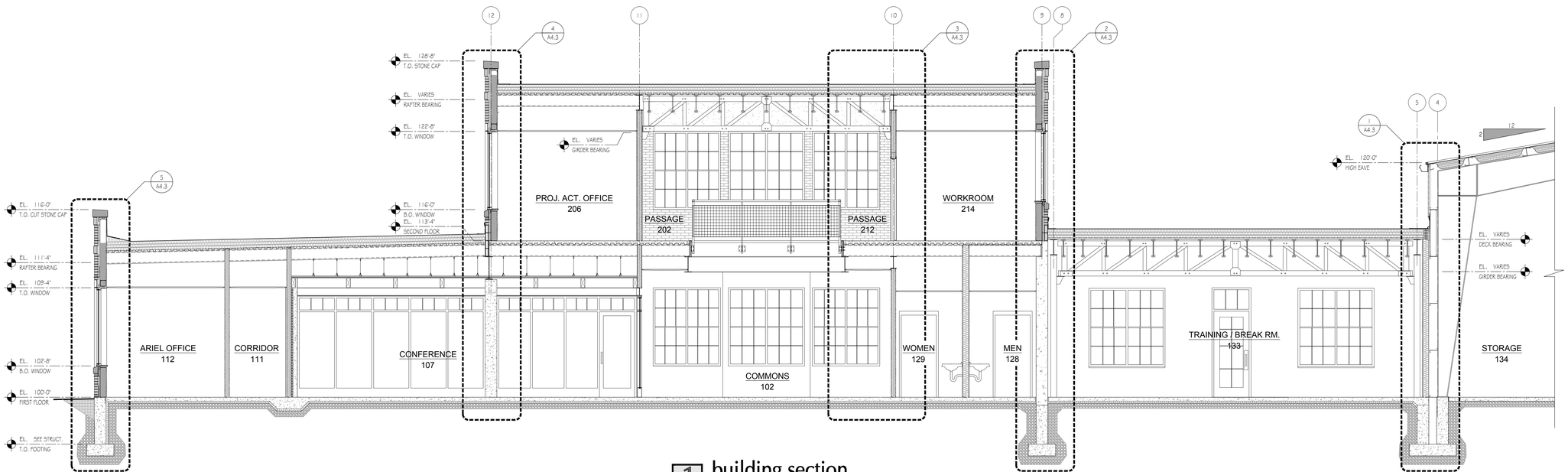
DRAWING # A3.1



3 building section
3/8"=1'-0"



2 building section
3/8"=1'-0"



1 building section
3/8"=1'-0"

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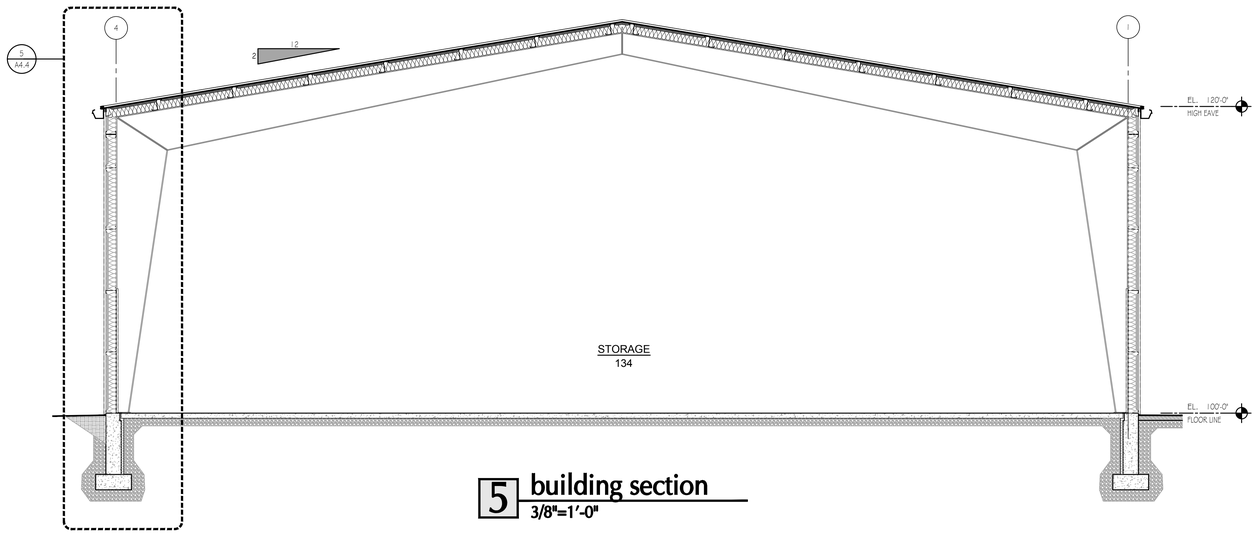
PROJECT # 24-011

DATE 3-20-2026

REVISION	DATE

DRAWING # A4.1



5 building section
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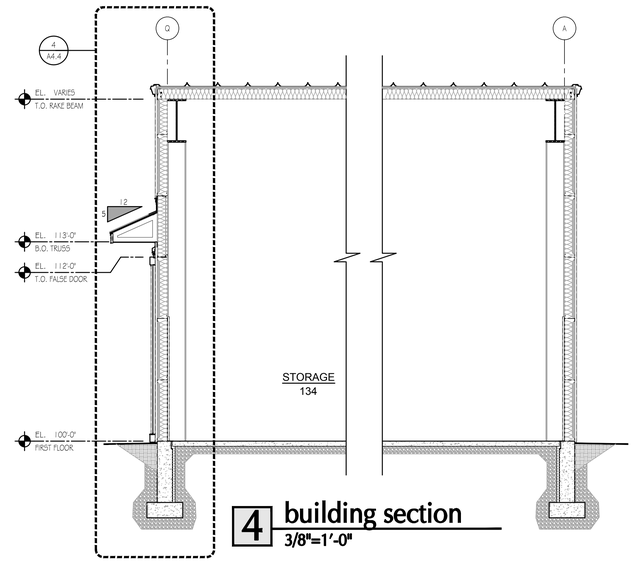
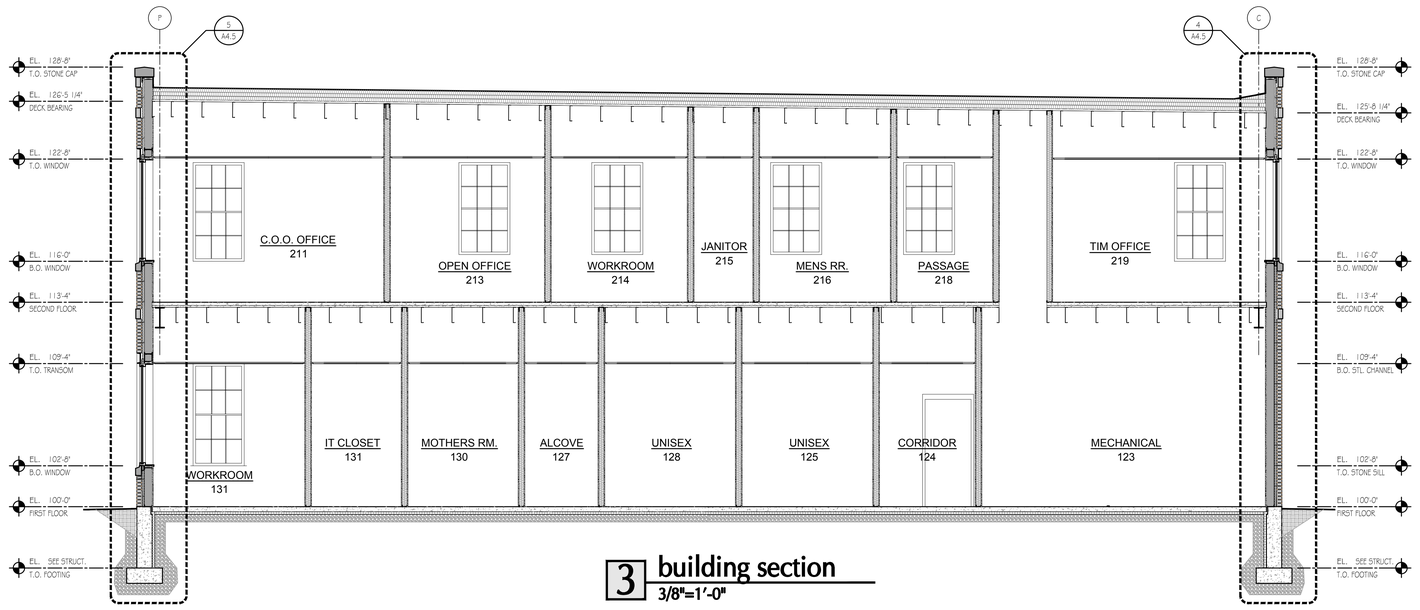
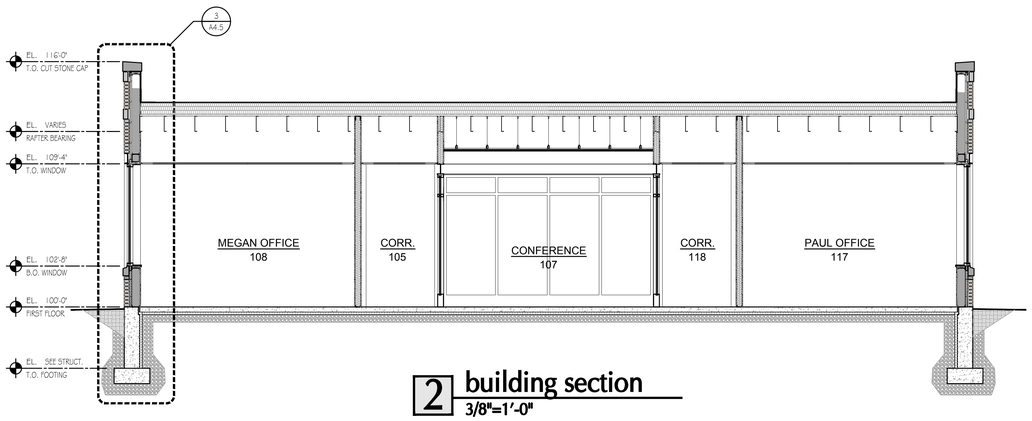


4 building section
3/8"=1'-0"



3 building section
3/8"=1'-0"



2 building section
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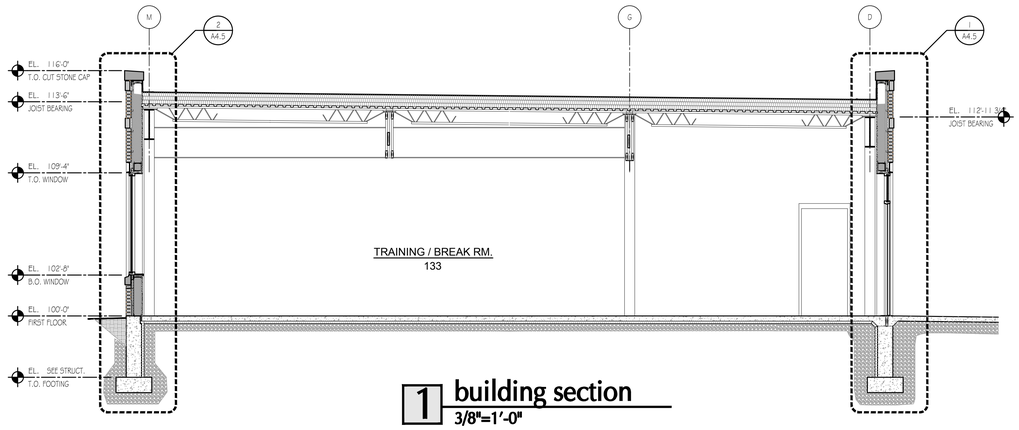

1 building section
3/8"=1'-0"

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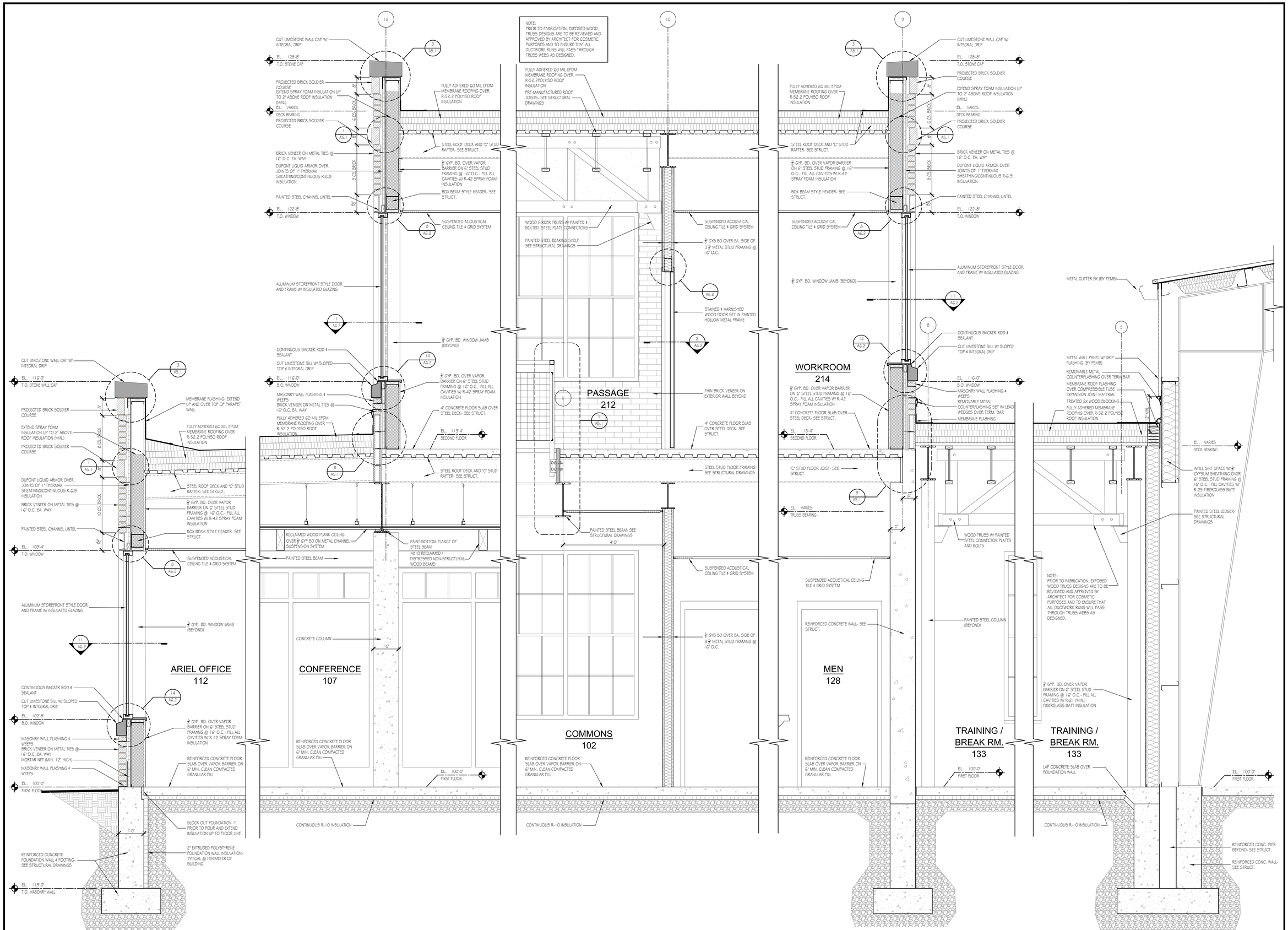
PROJECT # 24-011

DATE 3-20-2026

REVISION	DATE

DRAWING # A4.2



5 wall section 3/4"=1'-0"

4 wall section 3/4"=1'-0"

3 wall section 3/4"=1'-0"

2 wall section 3/4"=1'-0"

1 wall section 3/4"=1'-0"

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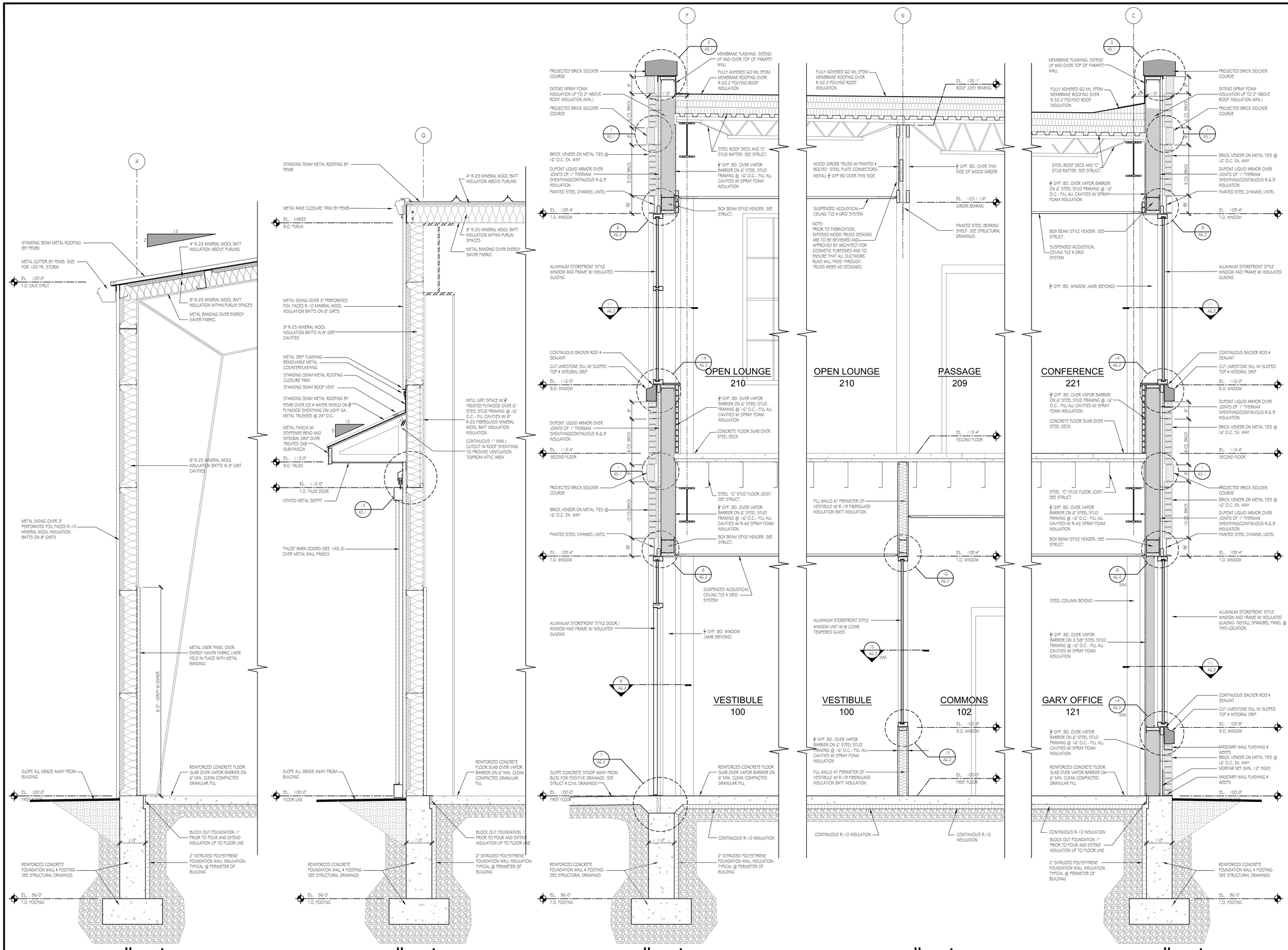
PROJECT # 24-011

DATE 3-20-2026

REVISION	DATE

DRAWING # A4.3



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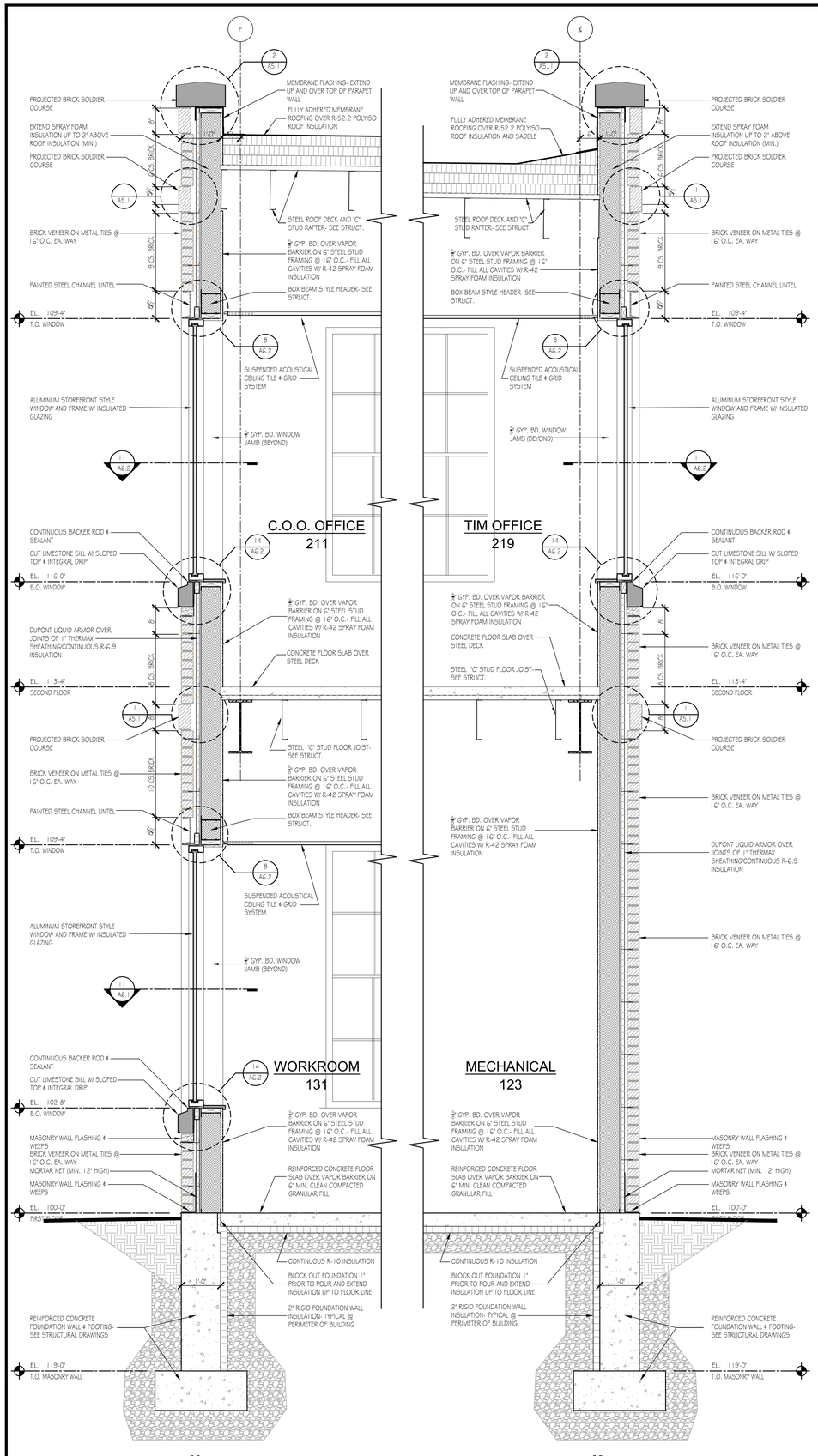
PROJECT # 24-011

DATE 3-20-2026

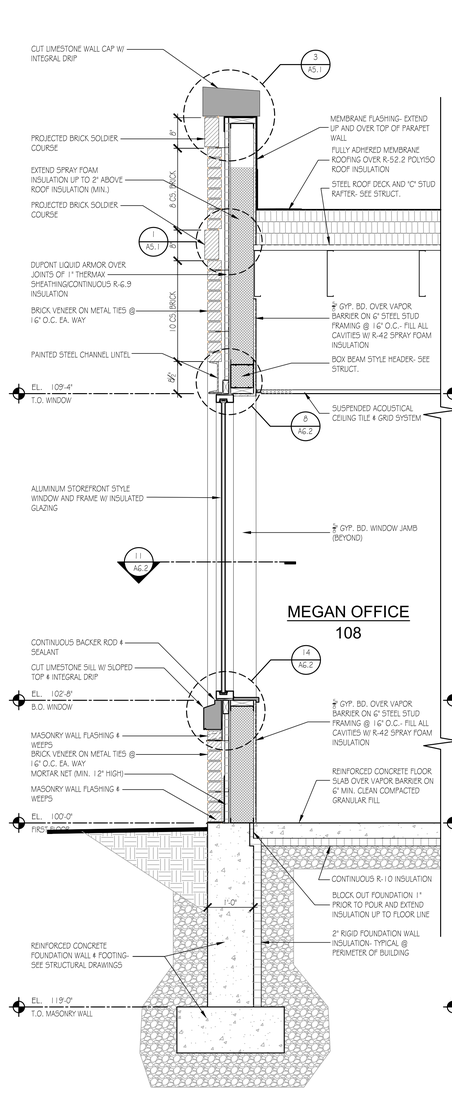
REVISION	DATE

DRAWING # A4.4



5 wall section
3/4"=1'-0"

4 wall section
3/4"=1'-0"



3 wall section
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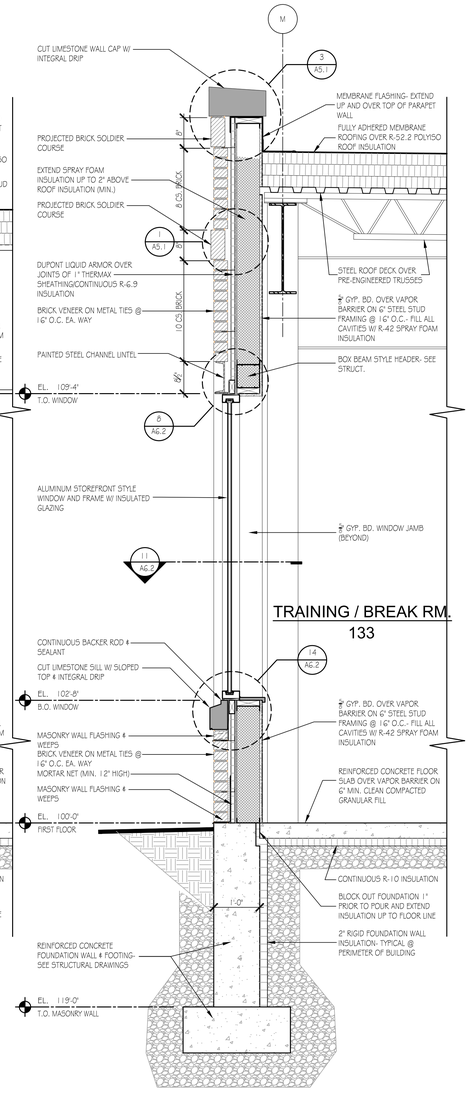
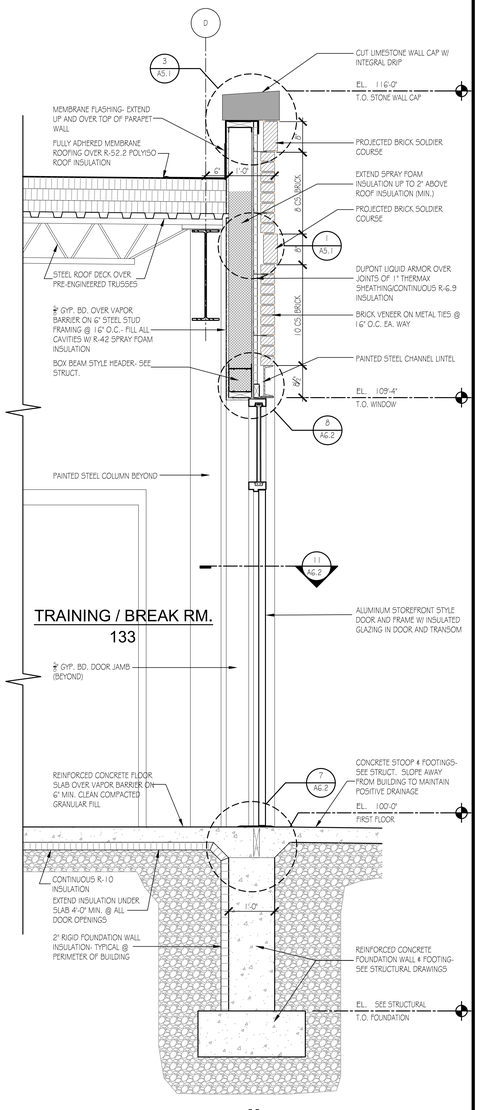


2 wall section
3/4"=1'-0"



1 wall section
3/4"=1'-0"

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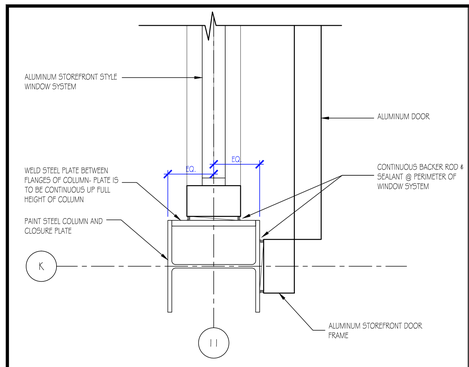
PROJECT # 24-011

DATE 3-20-2026

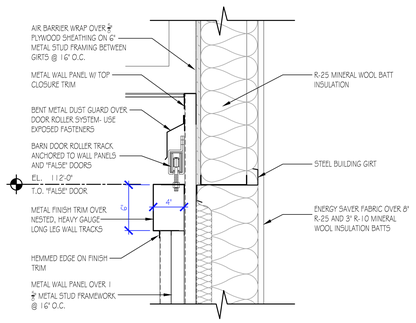
REVISION	DATE

DRAWING #

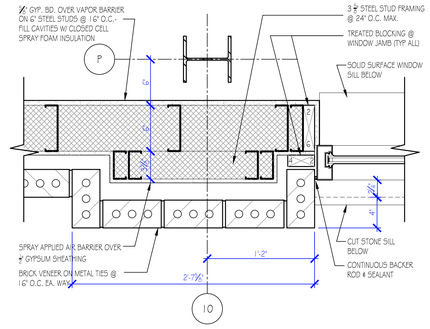
A4.5



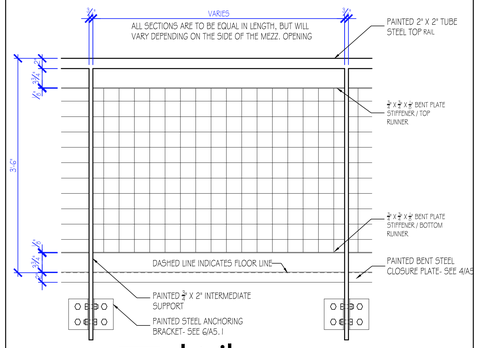
17 detail
3"=1'-0"



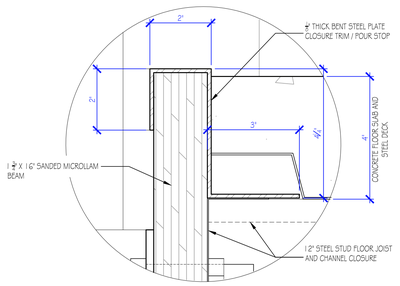
15 detail
1 1/2"=1'-0"



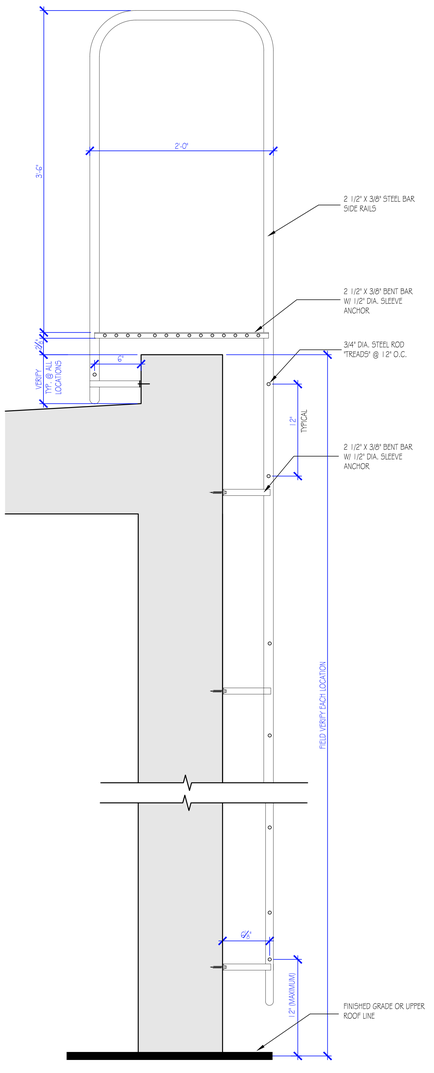
11 detail
1 1/2"=1'-0"



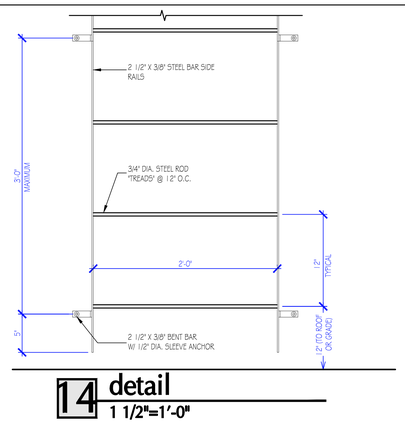
7 detail
1"=1'-0"



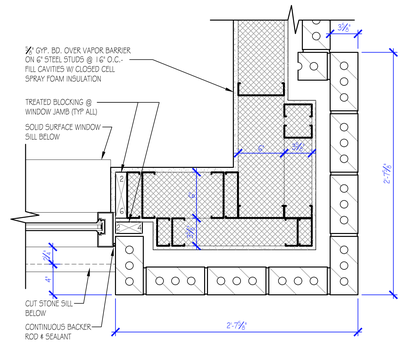
4 detail
6"=1'-0"



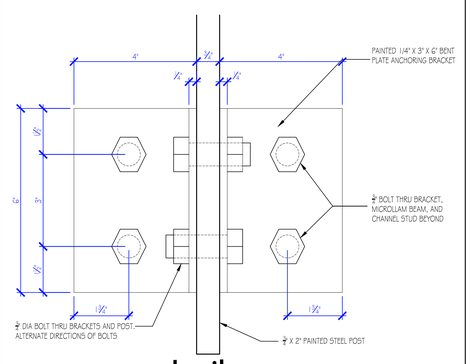
16 detail
1 1/2"=1'-0"



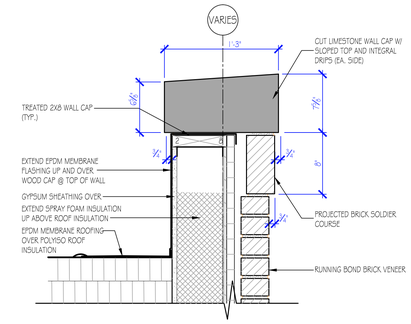
14 detail
1 1/2"=1'-0"



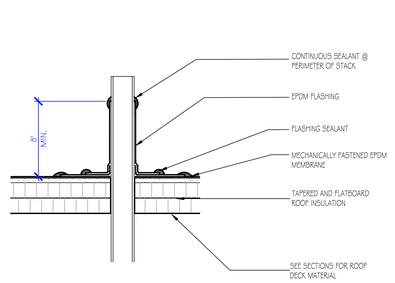
10 detail
1 1/2"=1'-0"



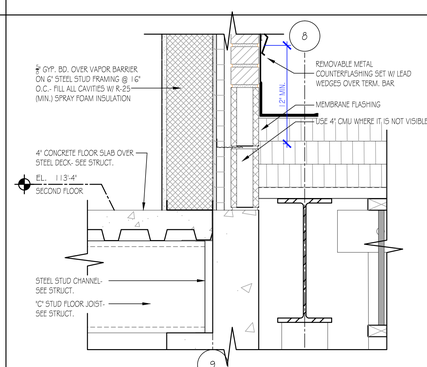
6 detail
6"=1'-0"



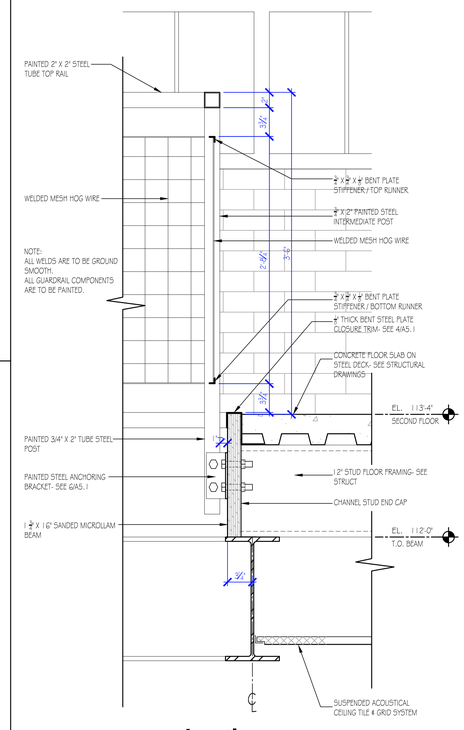
3 detail
1 1/2"=1'-0"



13 detail
1 1/2"=1'-0"



9 detail
1 1/2"=1'-0"



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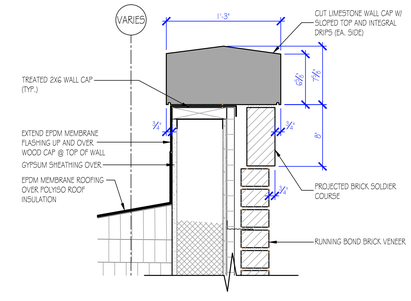

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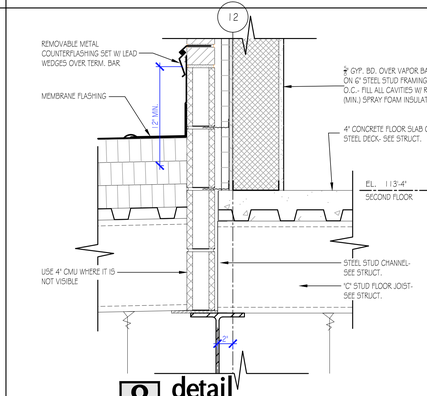

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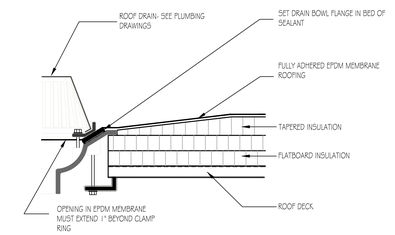

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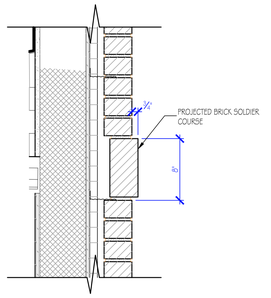

1 detail
1 1/2"=1'-0"

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(920) 572-BLUE www.bluedesigngroupllc.com

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ALC CORPORATION

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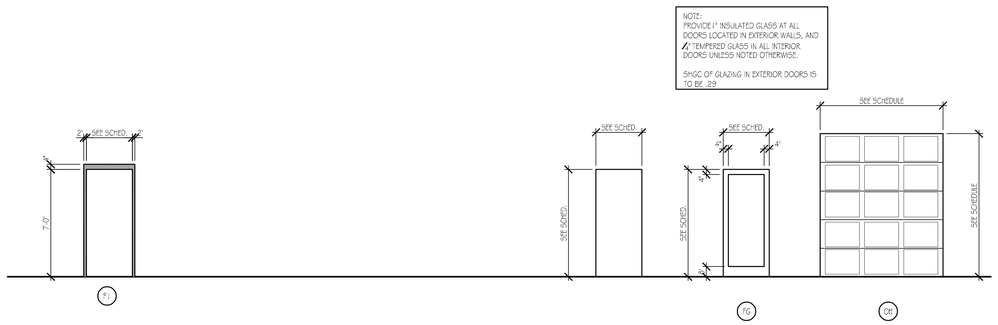
PROJECT # 24-011

DATE 3-20-2026

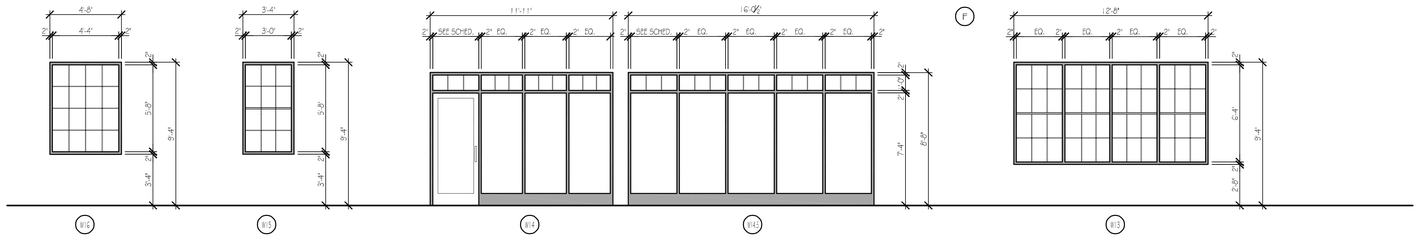
REVISION	DATE

DRAWING # A5.1



3 door frame elevations
1/4"=1'-0"

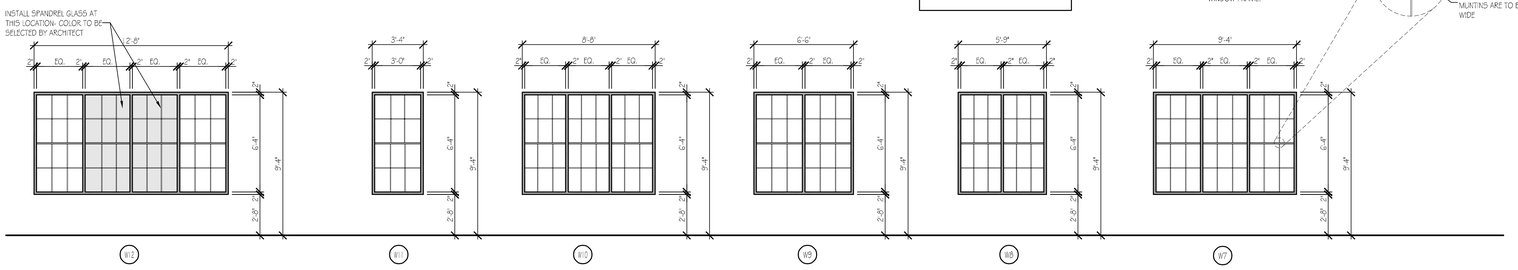
2 door elevations
1/4"=1'-0"

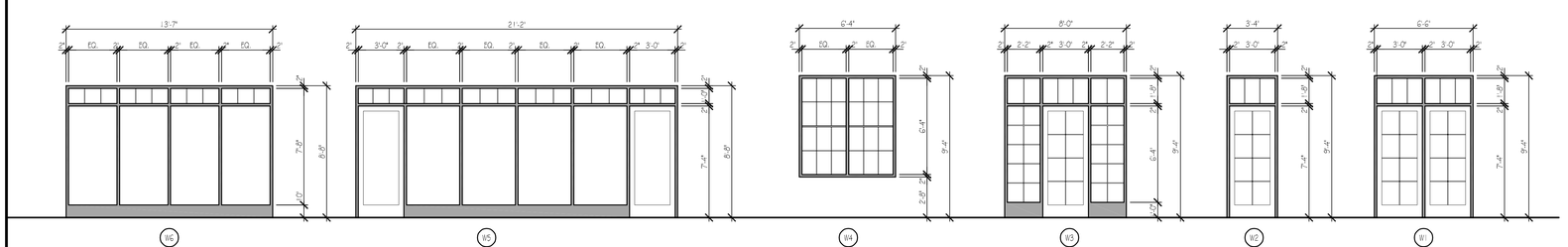


NOTE:
PROVIDE 1" INSULATED GLASS AT ALL EXTERIOR WINDOWS.

SHGC OF GLAZING IN EXTERIOR WINDOWS IS TO BE .29

NOTE:
MUNTINS IN ALL WINDOW UNITS ARE TO BE BETWEEN THE GLASS, AND ARE TO BE METAL WHICH IS COLOR MATCHED TO THE WINDOW FRAME.





1 window elevations
1/4"=1'-0"

FIRST FLOOR DOOR SCHEDULE

NO.	DOOR				FRAME		DETAIL			HDWR GROUP	LABEL/ FIRE RATING	REMARKS
	WIDTH	HEIGHT	TYPE	MAT.	TYPE	MAT.	HEAD	JAMB	SILL			
100A	(2) 3'-0"	7'-4"	FG	AL	W1	AL	8/A6.2	9, 10/A6.2	7/A6.2			
100B	3'-0"	7'-4"	FG	AL	W2	AL	3/A6.2	4/A6.2	---			
106	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			
107A	3'-0"	7'-0"	FG	AL	W2	AL	3/A6.2	4/A6.2	---			
107B	3'-0"	7'-0"	FG	AL	W2	AL	3/A6.2	4/A6.2	---			
108	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			
109	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			
110	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			
112	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			
113A	3'-0"	7'-4"	FG	AL	W2	AL	8/A6.2	10/A6.2	7/A6.2			
113B	3'-0"	7'-0"	FG	AL	W2	AL	3/A6.2	4/A6.2	---			
114	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			
115	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			
117	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			
119	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			
120	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			
121	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			
122	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			
123	3'-4"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			
125	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			NOTE #2
126	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			NOTE #2
128	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			NOTE #2
129	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			NOTE #2
130	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			NOTE #2
131	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			
133A	3'-0"	7'-0"	F	WD	F1	HM	5/A6.2	6/A6.2	---			
133B	8'-0"	9'-4"	OH	AL	---	---	12/A6.2	13/A6.2	7/A6.2 SIM.			
133C	3'-0"	7'-0"	FG	AL	W3	AL	8/A6.2	10, 11/A6.2	7/A6.2			
133D	8'-0"	9'-4"	OH	AL	---	---	12/A6.2	13/A6.2	7/A6.2 SIM.			
133E	3'-0"	7'-0"	FG	AL	W4	AL	8/A6.2	11/A6.2	7/A6.2			
134A	3'-0"	7'-0"	F	HM	F1	HM	1/A6.2	2/A6.2	---			NOTE #1
134B	3'-0"	7'-0"	F	HM	F1	HM	---	---	---			
134C	12'-0"	14'-0"	OH	STL	---	---	---	---	---			
134D	12'-0"	14'-0"	OH	STL	---	---	---	---	---			
134E	3'-0"	7'-0"	F	HM	F1	HM	---	---	---			
135	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			
136	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			

SECOND FLOOR DOOR SCHEDULE

NO.	DOOR				FRAME		DETAIL			HDWR GROUP	LABEL/ FIRE RATING	REMARKS
	WIDTH	HEIGHT	TYPE	MAT.	TYPE	MAT.	HEAD	JAMB	SILL			
203	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			
204	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			
205	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			
206	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			
207	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			
208	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			
211	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			
213	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			
214	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			
215	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			NOTE #2
216	3'-0"	7'-0"	F	AL	F1	HM	1/A6.2	2/A6.2	---			NOTE #2
217	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			NOTE #2
219	3'-0"	7'-0"	F	WD	F1	HM	1/A6.2	2/A6.2	---			
221A	3'-0"	7'-0"	FG	AL	W4	HM	3/A6.2	4/A6.2	---			
221B	3'-0"	7'-0"	FG	AL	W4	HM	3/A6.2	4/A6.2	---			

NOTES

NOTE #1
PROVIDE 4 INSTALL METAL CLOSURE TRIM @ EXPANSION JOINT

NOTE #2
PROVIDE 1" UNDERCUT ON THIS DOOR

ABBREVIATIONS

WD = WOOD
HM = HOLLOW METAL
AL = ALUMINUM
STL = STEEL
STL = STEEL
F = FLUSH
HG = HALF GLASS
DG = DOUBLE GLASS
NL = NARROW LITE
OHC = OVERHEAD COILING

UNLESS INDICATED OTHERWISE, ALL INTERIOR DOORS ARE TO BE FACTORY STAINED AND VARNISHED MAPLE. COLOR OF STAIN IS TO BE SELECTED/APPROVED BY OWNER.

ALL INTERIOR WOOD DOORS WITH LITES ARE TO HAVE WOOD STOPS. COUNTERSINK ALL NAILS AND FILL TO MATCH STAIN COLOR.

ALL INTERIOR HOLLOW METAL FRAMES ARE TO HAVE ¾" BACKBEND FOR DRYWALL.

ALL HOLLOW METAL DOOR FRAMES ARE TO BE 16 GA.

EXTERIOR HOLLOW METAL DOORS ARE TO BE LEVEL 2 HEAVY DUTY, WITH GALVANEALED FINISH FOR FIELD PAINTING. CORE MATERIAL IS TO BE POLYSTYRENE.

ALL GLASS OVERHEAD DOORS ARE TO BE CLOPAY 'ARCHITECTURAL SERIES' #9041I DOORS WITH R-VALUE OF 3.8 AND U-FACTOR OF .73, INSULATED GLASS AND INSULATED CORES

ALUMINUM STOREFRONT WINDOW AND DOOR SYSTEM IS TO BE KAWNEER TRI-FAB VERSAGLAZE 451UT FRAMING SYSTEM.

SEE WINDOW ELEVATIONS FOR MUNTIN SIZES IN ALL WINDOW UNITS.

GLAZING IN ALL EXTERIOR WINDOW UNITS IS TO BE .1" AND IS TO HAVE A SHGC OF .29.

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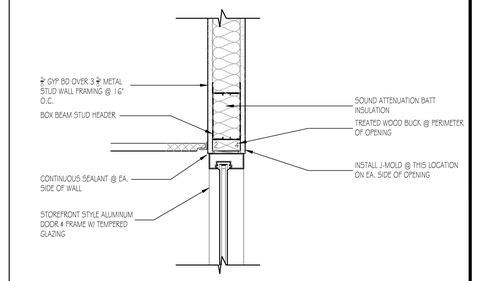
PROJECT # 24-011

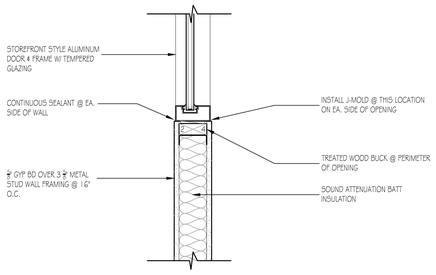
DATE 3-20-2026

REVISION	DATE

DRAWING # A6.1



16 head detail
1 1/2"=1'-0"



15 jamb detail
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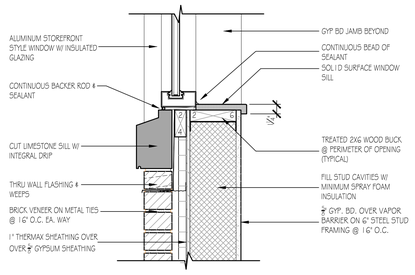

14 sill detail
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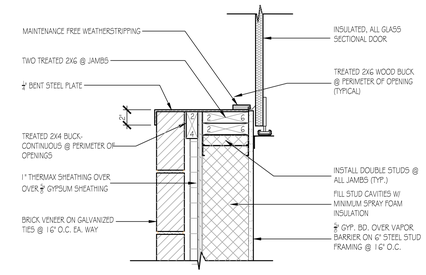
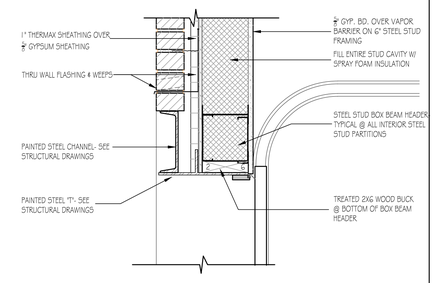
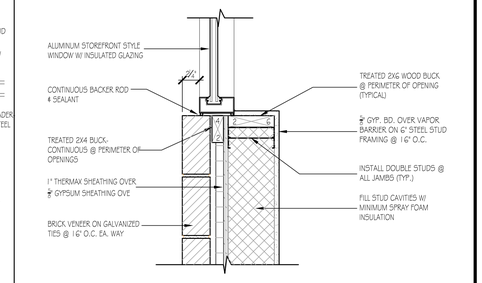


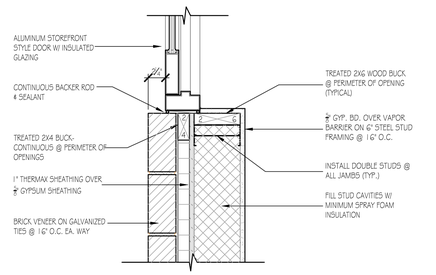
13 jamb detail
1 1/2"=1'-0"



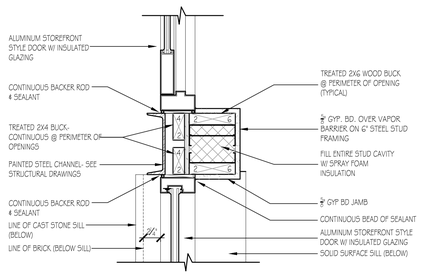
12 head detail
1 1/2"=1'-0"



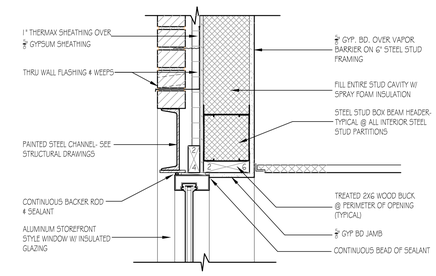
11 jamb detail
1 1/2"=1'-0"



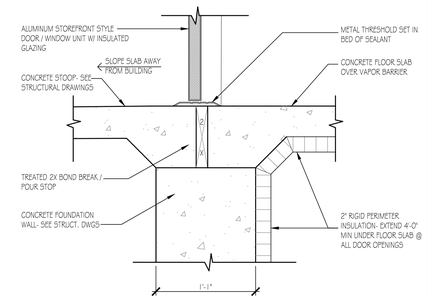
10 jamb detail
1 1/2"=1'-0"



9 jamb detail
1 1/2"=1'-0"



8 head detail
1 1/2"=1'-0"



7 sill detail
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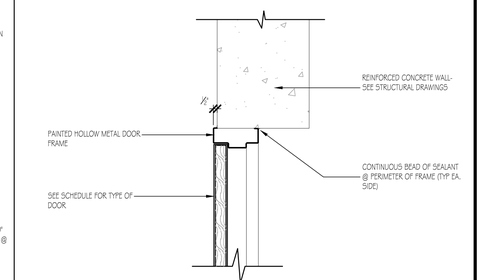
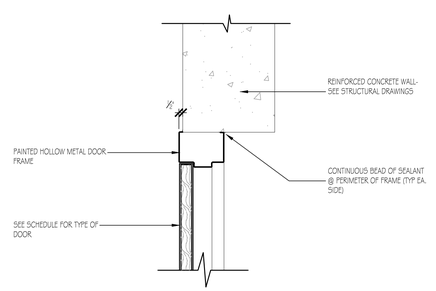
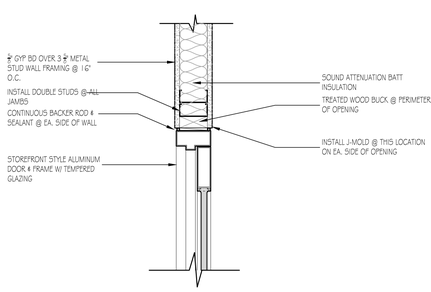


6 jambl detail
1 1/2"=1'-0"



5 head detail
1 1/2"=1'-0"



4 jamb detail
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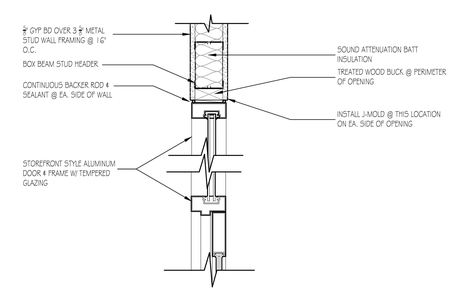
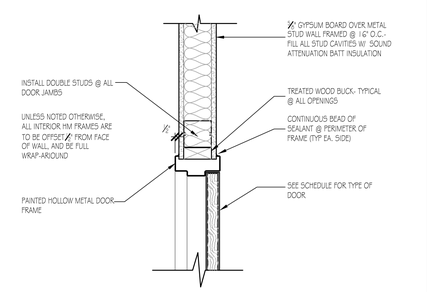
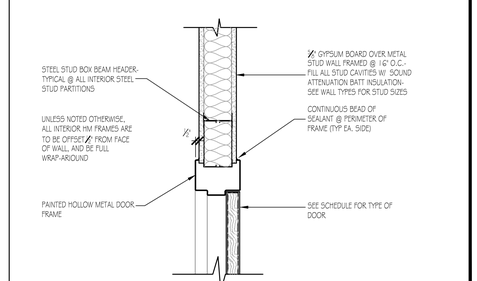


3 head detail
1 1/2"=1'-0"



2 jamb detail
1 1/2"=1'-0"



1 head detail
1 1/2"=1'-0"

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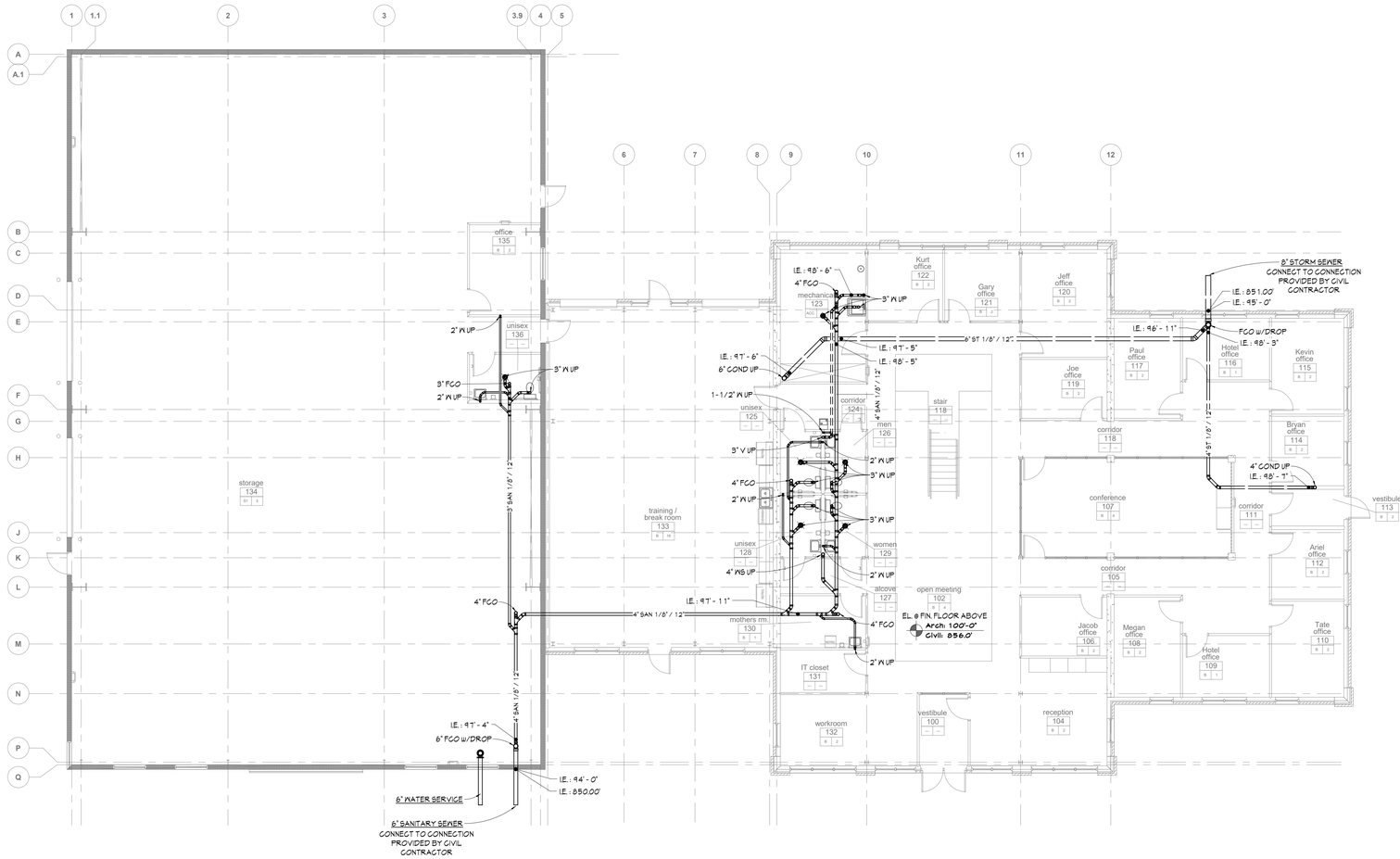
PROJECT # 24-011

DATE 3-20-2026

REVISION	DATE

DRAWING # A6.2



1 below grade plan - plumbing

1/8" = 1'-0"

NORTH

KEY OF PLUMBING SYMBOLS

SYMBOLS	ABBR.	DESCRIPTION	SYMBOLS	ABBR.	DESCRIPTION
	SAN.S.	SANITARY SEWER OR DRAIN	DT	DTR.	DRAIN TILE RECEIVER WITH TRAP AND CLEANOUT
	W.	SANITARY WASTE PIPING	DT	DTCO	DRAIN TILE CLEANOUT
	STM.S.	STORM SEWER OR DRAIN		C.C. / P.C.	CAPPED CONNECTION or PLUGGED CONNECTION
	COND.	CONDUCTOR PIPING		H.B.	HOSE BIBB
AW	A.W.	ACID WASTE PIPING		R.D.	ROOF DRAIN
GW	G.W.	GREASY WASTE PIPING		F.D.	FLOOR DRAIN
CL	CL.W.	CLEARWATER WASTE PIPING		H.D.	HUB DRAIN
DT	D.T.	DRAIN TILE		F.S.	FLOOR SINK
	V.	VENT PIPING		EL.	FLOOR AND/OR GRADE ELEVATION
CL	CL.V.	CLEARWATER VENT	IE.: 0'-0"	I.E.	INVERT ELEVATION (ARCHITECTURAL DATUM)
AV	AV.	ACID VENT PIPING	IE.: 0.0'	I.E.	INVERT ELEVATION (ENGINEERING DATUM)
	CW.	COLD WATER PIPING		B.O.	FURNISHED BY-OTHERS (PLB. ROUGH-IN & CONN.)
S	CW.S.	SOFTENED COLD WATER PIPING	A123	RM.	ROOM NUMBERS
	HW.	HOT WATER PIPING		V.T.	VENT TERMINAL
	CR.	HOT WATER CIRCULATING RETURN PIPING		THERM.	THERMOMETER
G	G.	GAS PIPING		P.G.	PRESSURE GAUGE
A	A.	COMPRESSED AIR PIPING		W.H.A.	WATER HAMMER (SHOCK) ARRESTOR
NP	N.P.	NON-POTABLE WATER		SAWCUT	APPRX. AREA OF EXISTING FLOOR TO BE REMOVED
	BL.V.	BALL VALVE		UN.	UNION OR DIELECTRIC UNION
	BF.V.	BUTTERFLY VALVE		V.T.R.	VENT THROUGH ROOF
	PRV	PRESSURE REGULATING VALVE		A.F.	ABOVE FLOOR
	CK.V.	CHECK VALVE		W.S.	WASTE STACK
	B.V.	BALANCING VALVE		V.S.	VENT STACK
CO FCO	CO/FCO	CLEANOUT or FLUSH CLEANOUT (AS NOTED)			

GENERAL NOTES

1. FIXTURES OR EQUIPMENT IDENTIFIED AS BEING 'BY-OWNER' OR 'BY-OTHERS' INDICATE SPECIFIC FIXTURES OR EQUIPMENT FURNISHED BY ANOTHER CONTRACTOR, VENDOR OR THE OWNER. THEIR NUMBER, KIND, APPROXIMATE SIZE AND POSITION OF OUTLETS ARE FOR THE USE OF ESTIMATING ONLY. THE EXACT DIMENSIONS FOR ROUGHING-IN AND CONNECTION LOCATION SHALL BE OBTAINED FROM THE MECHANICAL DRAWINGS FURNISHED BY THE EQUIPMENT CONTRACTOR OR OWNER.
2. SUPPLY PIPING IN CONTACT WITH EARTH, SHALL BE TYPE 'K' COPPER AND SHALL BE INSULATED WITH ARMAFLEX (3/4" THICK).
3. PROVIDE SHUT-OFF STOPS OR VALVES AT EACH FIXTURE AND PIECE OF EQUIPMENT.
4. ISOMETRIC DIAGRAMS SHOW THE KIND OF FIXTURE AND NOT THE SPECIFIC TYPE. REFER TO THE FLOOR PLANS FOR SPECIFIC TYPE.
5. PROVIDE WATER HAMMER (SHOCK) ARRESTORS WHERE REQUIRED BY CODE AND AT ALL QUICK CLOSING FIXTURES.
6. ALL PVC PIPING INSTALLED IN AIR PLENUMS SHALL BE CONTAINED IN A DRYWALL ENCLOSURE OR CODE APPROVED PLENUM WRAP.
7. ALL SLEEVES IN WALLS ADJACENT TO AIR PLENUMS SHALL BE CAULKED WITH THYCOL RUBBER SEAL AND MADE AIR-TIGHT.
8. PROVIDE FROST PROTECTION FOR SEWER AND WATER PIPING AS REQUIRED BY CODE.
9. STORM, SANITARY SEWER AND WATER SERVICE: WHERE SERVICE PASSES FROM AN UNDERGROUND SPACE TO AN UNEXCAVATED OR EXTERIOR SPACE PROVIDE LINK-SEAL, MODEL 'CS' WALL SLEEVE AND SEAL OPENING WITH LINK-SEAL, MODEL 'C'.
10. ISOMETRIC/3D DRAWINGS ARE DIAGRAMMATIC. INSTALLING CONTRACTOR IS REQUIRED TO INSTALL PROPER FITTINGS PER SPECIFICATIONS AND CODE REQUIREMENTS.

WISCONSIN
JASON R. SCHNELL
D-1894-P
WEST BEND, WIS.
DESIGNER

For Sheets P-1 to P-6 Only

PLUMBING SHEET INDEX

SHEET	DESCRIPTION
P-1	BELOW GRADE PLAN
P-2	FIRST & SECOND FLOOR PLANS
P-3	ROOF PLAN & DETAILS
P-4	ISOMETRICS
P-5	SCHEDULES & DETAILS
P-6	SPECIFICATIONS

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2830 American Drive
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PROJECT # **24-011**

DATE **3-20-2026**

REVISION	DATE

DRAWING # **P-1**

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TYPICAL FIXTURE CONNECTIONS

WATER CLOSET (WC-1 & WC-2) = 3" W & 1-1/4" CW

LAVATORY (L-1 & L-2) = 2" W - 1-1/2" V, 3/8" HW & 3/8" CW (PEX)

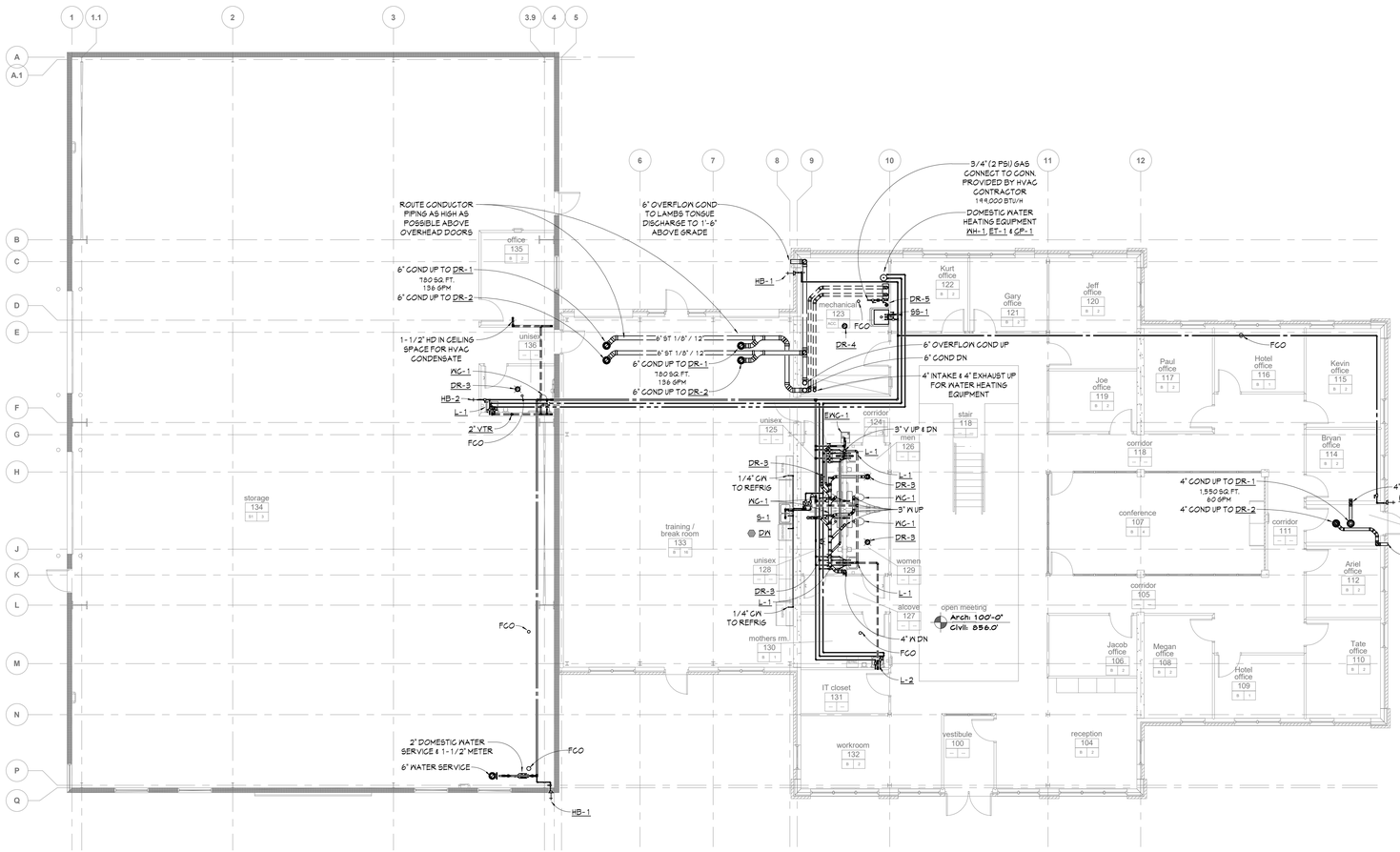
BREAKROOM SINK (S-1) = 2" W - 1-1/2" V, 1/2" HW & 1/2" CW

DISHWASHER (DW) = 1/2" HW w/SHOCK ARRESTORS

SERVICE SINK (SS-1) = 3" W, 3/4" HW & 3/4" CW

ELECTRIC WATER COOLER (EWC-1) = 2" W, 1-1/2" V & 1/2" CW

HOSE BIBB (HB-1 & 2) = 3/4" CW w/BFP



1 first floor plan - plumbing
1/8" = 1'-0"

NORTH

2 second floor plan - plumbing
1/8" = 1'-0"

NORTH

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DATE **3-20-2026**

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DRAWING # **P-2**

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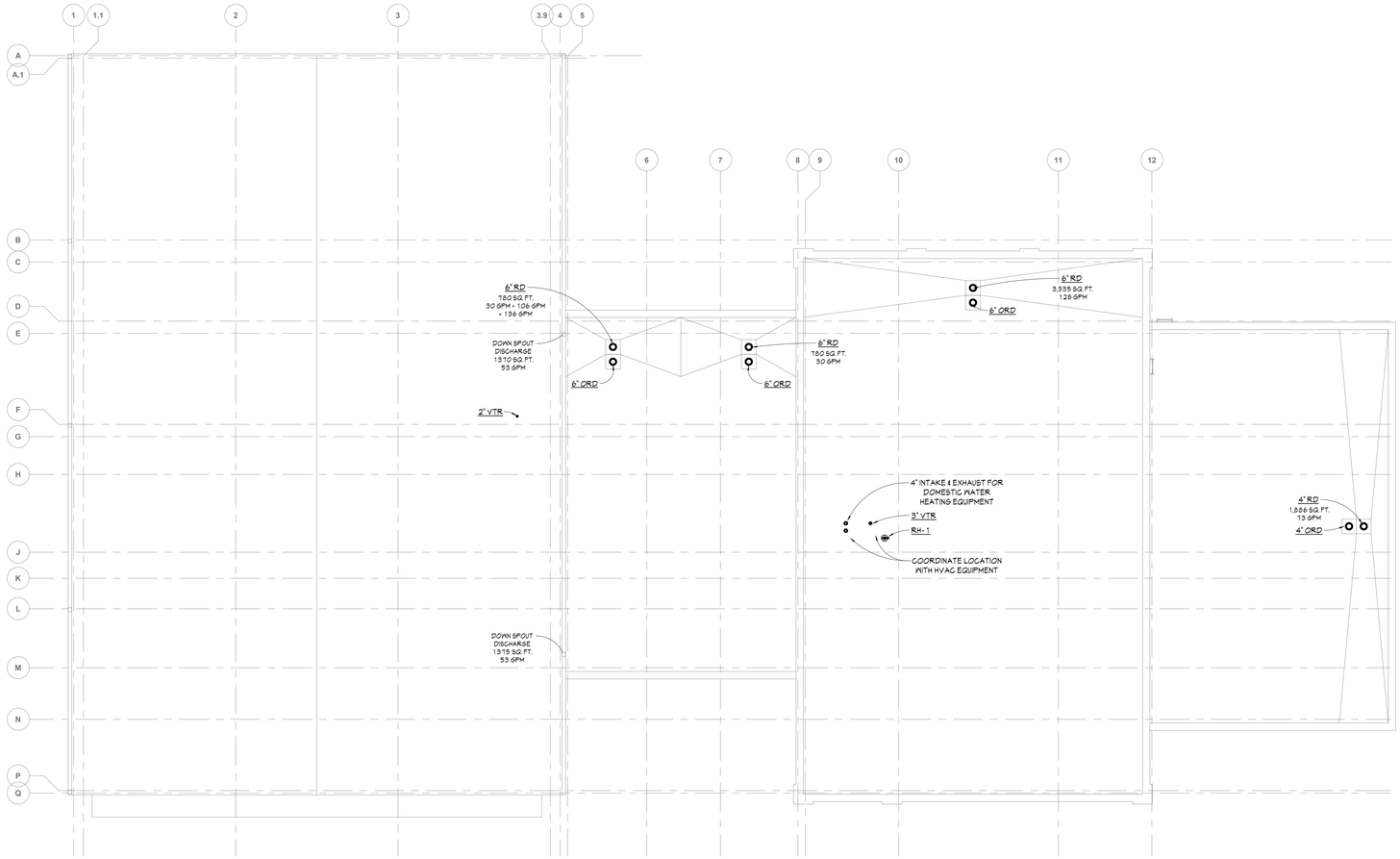
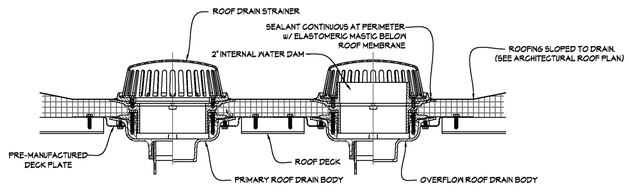
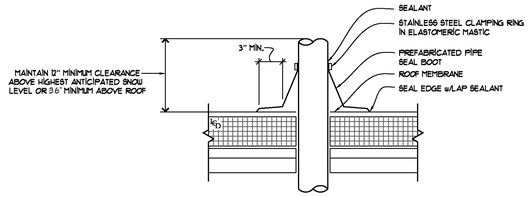


1 roof plan - plumbing
1/8" = 1'-0"

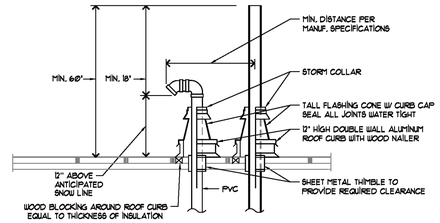
NORTH



2 primary and overflow roof drains
not to scale



3 pipe penetrations at roof
not to scale



4 water heater intake & exhaust
not to scale

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DATE **3-20-2026**

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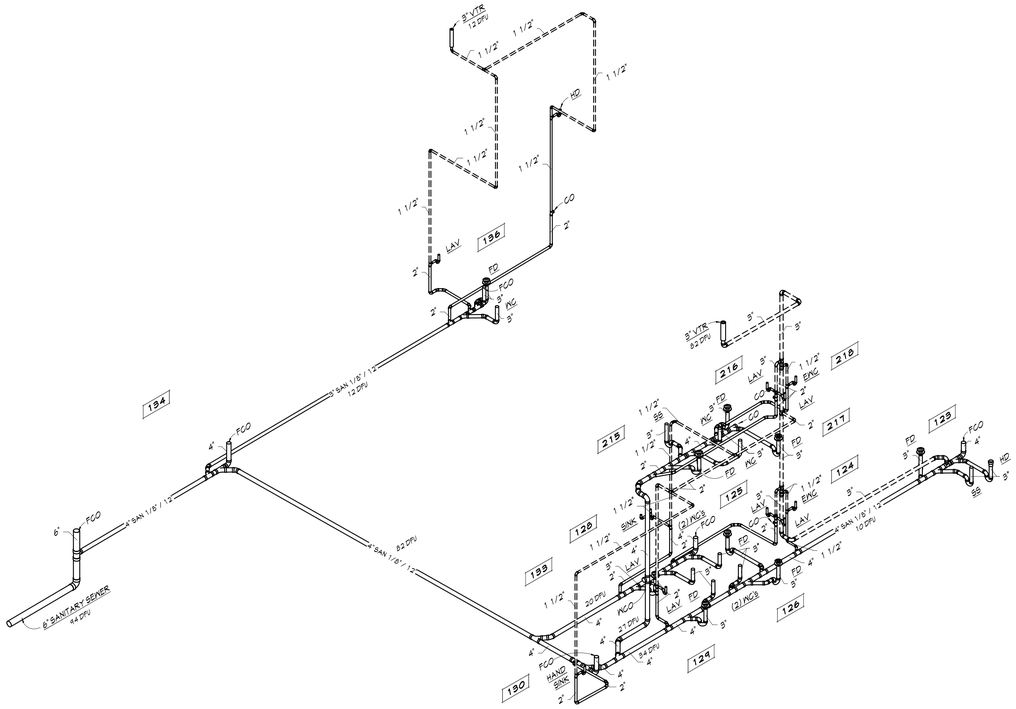
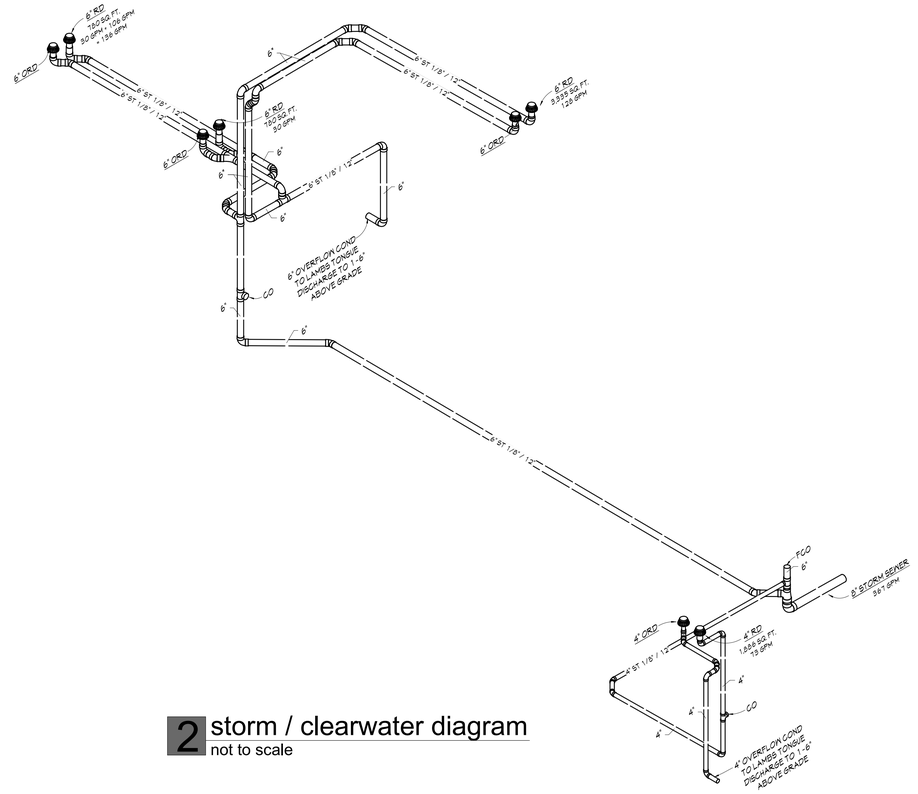
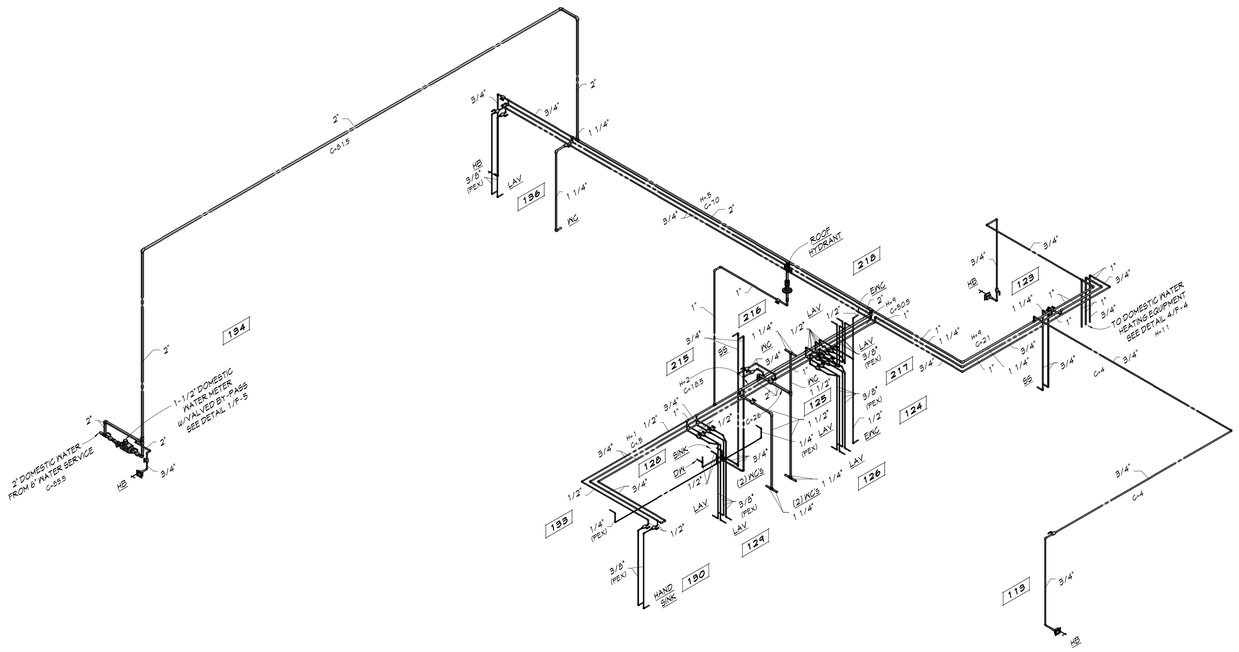


1 waste & vent diagram
not to scale

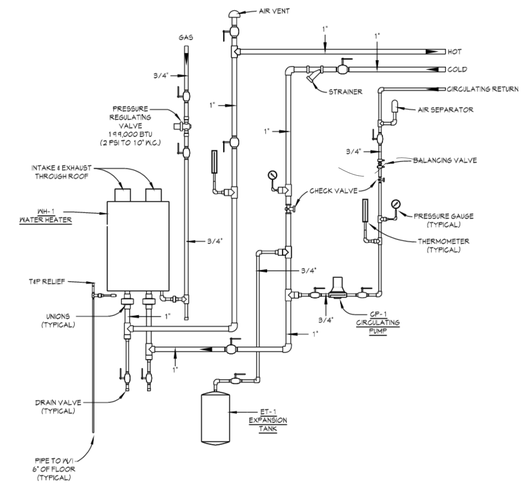


2 storm / clearwater diagram
not to scale

WATER SUPPLY CALCULATIONS				
FIXTURE UNITS:	NEW = 85.50		TOTAL =	64 GPM
MINIMUM WATER PRESSURE AT METER INLET			=	78 PSI
P.S.I. REQUIRED AT MOST REMOTE FLUSH VALVE OR FIXTURE			=	25 PSI
ELEVATION DIFFERENCE FROM METER TO HIGHEST FIXTURE:		16 x 0.434	=	7 PSI
TOTAL DEVELOPED LENGTH FROM METER AND MOST REMOTE FIXTURE:		205 x 1.500	=	308 FT
ADDED LOSSES: WATER METER: = 4 PSI WATER SOFTENER: = 0 PSI RPBFP: = 0 PSI TOTAL LOSS: = 4 PSI		78 - (25 + 7 + 4) / 308 X 100 = 13.7		
AVAILABLE PRESSURE LOSS PER 100' OF PIPING = 14 PSI				
REFER TO PLUMBING SPECIFICATIONS ON SHEET P-6 FOR APPROVED PIPING MATERIAL.				



3 supply riser diagram
not to scale



4 domestic water heating equipment detail
not to scale

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PROJECT # 24-011

DATE 3-20-2026

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DRAWING # **P-4**

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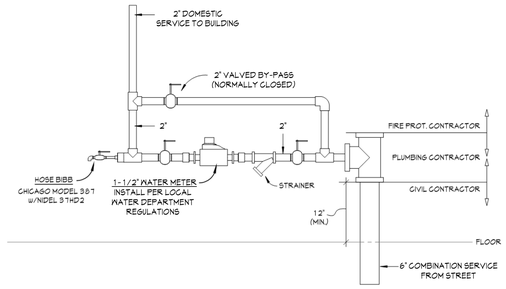
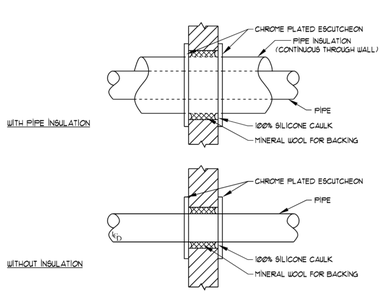
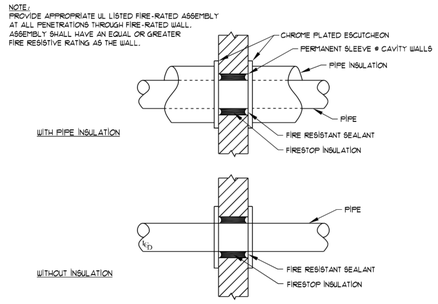


1 domestic water meter detail
not to scale



2 pipe penetrations at non-rated wall
not to scale

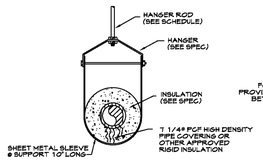
NOTE:
PROVIDE APPROPRIATE UL LISTED FIRE-RATED ASSEMBLY AT ALL PENETRATIONS THROUGH FIRE-RATED WALL. ASSEMBLY SHALL HAVE AN EQUAL OR GREATER FIRE RESISTIVE RATING AS THE WALL.



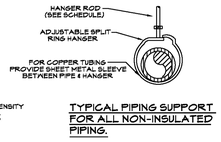
3 pipe penetrations at rated wall
not to scale

PIPE SUPPORT SCHEDULE						
PIPE SIZE (INCHES)	MAXIMUM SPACING (FEET)					HANGER ROD SIZE (INCHES)
	PVC	CPVC	COPPER	STEEL	CAST	
1/2	2 1/2	2 1/2	6	5	-	3/8
3/4	2 1/2	2 1/2	6	6	-	3/8
1	2 1/2	2 1/2	6	7	-	3/8
1 1/4	3	3	6	8	-	3/8
1 1/2	3	3	10	9	5	3/8
2	3	3	10	10	5	3/8
2 1/2	3 1/2	3 1/2	10	11	5	3/8
3	3 1/2	3 1/2	10	12	5	3/8
4	4	4	10	12	5	1/2
5	4	4	10	12	5	1/2
6	4	4	10	12	5	1/2
8	4	4	10	12	5	1/2
10	4	4	10	12	5	1/2
12	4	4	10	12	5	5/8
14	4	4	-	6	-	5/8
15	-	-	-	6	5	5/8
16	4	4	-	-	-	5/8
18	4	-	-	6	-	5/8
20	4	-	-	-	-	5/8

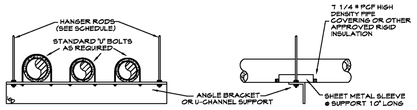
NOTES:1. PIPING MATERIALS LISTED IN THIS SCHEDULE MAY NOT BE ACCEPTABLE FOR ALL APPLICATIONS. REFER TO SPECIFICATIONS SECTION 221005 FOR INTENDED AND APPROVED USAGE.
2. A HIGH DENSITY RIGID INSULATION SHALL BE USED AT ALL PIPE SUPPORTS AND HANGERS FOR COPPER AND CPVC TUBE SIZES 2" & LARGER AND FOR STEEL PIPE 1-1/2" & LARGER.



TYPICAL PIPING SUPPORT FOR ALL INSULATED PIPING.



TYPICAL PIPING SUPPORT FOR ALL NON-INSULATED PIPING.



TRAPEZE HANGER DETAIL

4 typical pipe support details
not to scale

DRAIN SCHEDULE			
SYMBOL	DRAIN TYPE/DESCRIPTION	MANUFACTURER	MODEL NO.
DR-1	ROOF DRAIN w/ POLY DOME	ZURN	Z-100-C-VP
DR-2	OVERFLOW ROOF DRAIN w/ POLY DOME	ZURN	Z-100-C-W2-VP
DR-3	FINISHED AREA FLOOR DRAIN	ZURN	ZN-415-B-VP
DR-4	UNFINISHED AREA FLOOR DRAIN	ZURN	ZB-550
DR-5	PIPE 2" ABOVE FINISHED FLOOR w/INCREASER ONE SIZE LARGER THAN PIPE SIZE SHOWN & INLINE TRAP SEALER	RECTORSEAL	SURESEAL
REFER TO PLUMBING SPECIFICATIONS ON SHEET P-6 FOR ADDITIONAL INFORMATION AND APPROVED EQUALS.			

PUMP SCHEDULE								
UNIT NO.	DESCRIPTION	LOCATION	MANUFACTURER	MODEL NO.	H.P.	RPM	VOLTS/ PHASE/ AMPS	REMARKS
CP-1	HOT WATER SYSTEM CIRC.	MECH. 123	GRUNDFOS	UPS15-35SFC	1/7	VARIES	115V/1/1.7	1
REFER TO PLUMBING SPECIFICATIONS ON SHEET P-6 FOR ADDITIONAL INFORMATION AND APPROVED EQUALS LISTING.								

1: PUMP TO BE ALL STAINLESS STEEL OR BRONZE CONSTRUCTION.

EXPANSION TANK SCHEDULE										
UNIT NO.	DESCRIPTION	LOCATION	MANUFACTURER & MODEL NO.	TANK VOLUME (GALS)	ACCEPT. VOLUME (GALS)	SYSTEM CONN.	FLUID	MAX. OPER. PRESS.	DIMENSIONS	REMARKS
									DIA. HGT.	
ET-1	DOM. HOT WATER SYSTEM	MECH. 123	AMTROL-12C-DD	6.4	3.2	3/4"	WATER	150 PSIG	12" 18"	
REFER TO PLUMBING SPECIFICATIONS ON SHEET P-6 FOR ADDITIONAL INFORMATION AND APPROVED EQUALS LISTING.										

DOMESTIC WATER HEATER SCHEDULE													
UNIT NO.	SYSTEM SERVED	LOCATION	MANUFACTURER	MODEL NO.	GAS INPUT (BTUH)	GPH (@ 80°F Δt)	STOR. (GAL.)	GAS CONN. SIZE	INTAKE PIPE SIZE	EXHAUST PIPE SIZE	VOLTS	PHASE	AMPS	REMARKS
WH-1	DOM. WATER	MECH. 123	TAKAGI	TCT-199I-N	199,000	4.7	N/A	3/4"	3"	3"	120	1	1.48	1
REFER TO PLUMBING SPECIFICATIONS ON SHEET P-6 FOR ADDITIONAL INFORMATION AND APPROVED EQUALS LISTING.														

1: NATURAL GAS INDOOR CONDENSING INSTANTANEOUS UNIT

PLUMBING FIXTURE SCHEDULE					
SYMBOL	FIXTURE TYPE	MANUFACTURER	MODEL NAME/NO.	DESCRIPTION	ACCESSORIES
WC-1	WATER CLOSET	KOHLER	HIGHCLIFF ULTRA K-96057-SS	FLOOR SET BOTTOM OUTLET WHITE VITREOUS CHINA SIPHON JET WATER CLOSET WITH ELONGATED BOWL, 1-1/2" TOP SPUD, 2-1/8" PASSAGEWAY AND 1.6 GAL/FLUSH FLUSHOMETER. INSTALL PER ADA REQUIREMENTS.	FLUSH VALVE: SLOAN GEM-2 111-1.6-XL-CP (1.6 GPF) SEAT: BEMIS 2155SSCT WHITE SOLID PLASTIC OPEN FRONT
L-1	LAVATORY	KOHLER	SOHO K-2053-N-0	WALL MOUNT WHITE VITREOUS CHINA LAVATORY DRILLED FOR CONCEALED ARM CARRIER WITH 8-INCH WIDESPREAD FAUCET OPENING. INSTALL PER ADA REQUIREMENTS.	FAUCET: KOHLER CASTIA K-35908-4-BL (MATTE BLACK) w/WIDESPREAD LEVER HANDLES DRAIN: MCGUIRE 155WC OFFSET w/ PERFORATED STRAINER AND 1-1/4" TAILPIECE TRAP: MCGUIRE 8872C 1-1/4" X 1-1/2" 17 GA. CAST BRASS TRAP AND TUBULAR WALL BEND. WITH C.O. PLUG SUPPLIES: MCGUIRE LF2165CCLK CARRIER: ZURN FLOOR MOUNTED CONCEALED ARM. LAV SHIELD TRUEBRO LAV SHIELD 2018-KO-S (FOR KOHLER SOHO)
L-2	LAVATORY	KOHLER	SOHO K-2053-N-0	WALL MOUNT WHITE VITREOUS CHINA LAVATORY DRILLED FOR CONCEALED ARM CARRIER WITH 8-INCH WIDESPREAD FAUCET OPENING. INSTALL PER ADA REQUIREMENTS.	FAUCET: KOHLER PURIST K-14406-04-BL (MATTE BLACK) w/WIDESPREAD LEVER HANDLES DRAIN: MCGUIRE 155WC OFFSET w/ PERFORATED STRAINER AND 1-1/4" TAILPIECE TRAP: MCGUIRE 8872C 1-1/4" X 1-1/2" 17 GA. CAST BRASS TRAP AND TUBULAR WALL BEND. WITH C.O. PLUG SUPPLIES: MCGUIRE LF2165CCLK CARRIER: ZURN FLOOR MOUNTED CONCEALED ARM. LAV SHIELD TRUEBRO LAV SHIELD 2018-KO-S (FOR KOHLER SOHO)
S-1	SINK	KOHLER	WHITEHAVEN K-6427	UNDER COUNTER MOUNTED, ENAMELED CAST IRON, DOUBLE COMPARTMENT SINK. COLOR TO BE WHITE. INSTALL PER ADA REQUIREMENTS.	FAUCET: KOHLER PURIST K-7506-BL (MATTE BLACK) PULL-OUT SPOUT w/ SINGLE LEVER HANDLE DRAIN: ELKAY LK-35 DRAIN WITH BASKET STRAINER TRAP: MCGUIRE 8912C 1-1/2" X 1-1/2" 17 GA. CAST BRASS TRAP AND TUBULAR WALL BEND. DISPOSER: IN-SINK-ERATOR BADGER 5 1/2 HP AIR GAP: SIOUX CHIEF 249A. SUPPLIES: MCGUIRE LF2167CC
SS-1	MOP BASIN	MUSTEE	63M	FLOOR MOUNTED MOLDED POLYESTER RESIN AND STONE MOP BASIN, 24 INCH X 24 INCH WITH 3 INCH DRAIN, STAINLESS STEEL STRAINER AND VINYL BUMPER GUARDS.	FAUCET: CHICAGO FAUCETS 782-ISCP WALL MOUNTED CONCEALED FITTING w/ INTEGRAL SERVICE STOPS. BFP: NIDEL 37HD2-CH (ASSE 1052) w/ CHROME FINISH HOSE: MUSTEE 65.700 WITH 65.600 MOP HANGER, 63.401 BUMPER GUARDS, AND 67.2424 WALL GUARDS
EWC-1	ELECTRIC WATER COOLER	ELKAY	LZSTL8WSSP-W1	FLEXI-GUARD® STREAMSAVER, WALL MOUNTED, BI-LEVEL BARRIER FREE ELECTRIC WATER COOLER W/ BOTTLE FILLER. 50 DEGREE DRINKING WATER, 370 WATTS, 115V/60HZ/1PH. SS COLOR IS STD FURNISHED. INSTALL PER ADA AND ANSI REQUIREMENTS.	APRON: ELKAY LKAPREZL TRAP: 1-1/4" X 1-1/4" SCHEDULE 40 PVC TRAP STOP: MCGUIRE LFST16LK 1/2 INCH SUPPLY STOP WITH LOOSE KEY CARRIER: ZURN Z1225-BL
HB-1	HOSE BIBB	WOODFORD	MODEL 30 (CH)	FREEZE-PROOF AUTOMATIC DRAINING WALL HYDRANT, 3/4" INLET, 3/4" HOSE THREAD ASSE 1052 BACKFLOW PREVENTER OUTLET, BRASS COMPONENTS, OVAL METAL HANDLE.	
HB-2	HOSE BIBB	CHICAGO FAUCET	387-XKCP	INSIDE SILL FITTING W/ 3/4" INLET & 3/4" HOSE THREAD OUTLET.	BFP: NIDEL 37HD2-CH (ASSE 1052) w/ CHROME FINISH
RH-1	ROOF HYDRANT	WOODFORD	SRH-MS	FREEZELESS ROOF HYDRANT WITH ASSE 1052 DOUBLE CHECK BACKFLOW PREVENTER. PROVIDE MOUNTING SYSTEM WITH HYDRANT SUPPORT, UNDER DECK FLANGE & SEALS.	BFP: NIDEL 37HD2-CH (ASSE 1052) w/ CHROME FINISH
REFER TO PLUMBING SPECIFICATIONS ON SHEET P-6 FOR ADDITIONAL INFORMATION AND APPROVED EQUALS LISTING.					

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PROJECT # **24-011**

DATE **3-20-2026**

REVISION	DATE

DRAWING # **P-5**

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PLUMBING SPECIFICATIONS:

SCOPE
A. DRAWINGS AND GENERAL PROVISIONS OF CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND DIVISION 1 SPECIFICATIONS SECTIONS, APPLY TO WORK UNDER THIS SECTION.

GENERAL
A. IN GENERAL, PLUMBING WORK IS INTENDED TO PROVIDE FOR FINISHED AND COMPLETE PLUMBING SYSTEM AS SHOWN SPECIFIED OR REQUIRED.
B. OBTAIN AT SITE INFORMATION ON CONDITIONS AFFECTING WORK. CHECK FLOW LINES AND LOCATION OF PROPOSED PIPING BEFORE PROCEEDING WITH WORK. OBTAIN COMPLETE INFORMATION AS TO DETAILS OF THE BUILDING CONSTRUCTION, PIPE AND EQUIPMENT LAYOUT, IN ORDER TO INSTALL SYSTEM TO CLEAR ARCHITECTURAL, STRUCTURAL, PIPING AND WORK OF OTHER TRADES. SEE THE GENERAL REQUIREMENTS FOR ACCESSIBILITY AND STORAGE SPACE.
C. IN EVENT DRAWING AND SPECIFICATIONS ARE NOT IN FULL ACCORD WITH CODES AND EQUIPMENT, AND ANY CHANGES, ALTERATIONS, ADDITIONS, DEDUCTIONS ARE NECESSARY TO SIZE OF EQUIPMENT, PIPE SIZES, ETC. OR LAYOUT, CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY IN WRITING AND AWAIT HIS DECISION. ANY EXCEPTIONS MUST BE SUBMITTED TEN DAYS PRIOR TO BID DUE DATE. AFTER BIDS ARE ACCEPTED BY THE OWNER, IT SHALL BE UNDERSTOOD THAT THIS CONTRACTOR HAS STUDIED THE DRAWINGS, SPECIFICATIONS, JOB SITE AND NO FURTHER EXCEPTIONS WILL BE TAKEN AFFECTING CONTRACT AMOUNT DUE TO HIS FAILURE TO COMPLY HEREWITH.
D. THE PLUMBING CONTRACTOR SHALL EXAMINE LOCATION CAREFULLY AND VERIFY ALL MEASUREMENTS, DISTANCES, LEVELS, ETC. BEFORE STARTING WORK. WHEREVER THE LOCATION OF PIPING OR EQUIPMENT IS GOVERNED BY ARCHITECTURAL FEATURES, THIS CONTRACTOR SHALL ESTABLISH THEIR LOCATION BY REFERRING TO THE ARCHITECTURAL DRAWINGS. HE WILL NOT SCALE THE DRAWINGS FOR EXACT DIMENSIONS.
E. COMPLY WITH ALL STATE AND LOCAL CODES, LAWS, AND REGULATIONS. SECURE PERMITS AND LICENSES APPLICABLE TO THIS CONTRACT. PAY PERMIT FEES, POST BONDS INCIDENTAL THERETO. SEE THE GENERAL AND SUPPLEMENTARY CONDITIONS.
F. ALL PRODUCTS AND MATERIALS USED ARE TO BE NEW, UNDAMAGED, CLEAN AND IN GOOD CONDITION. EXISTING PRODUCTS AND MATERIALS ARE NOT TO BE REUSED UNLESS SPECIFICALLY INDICATED.
G. ALL MATERIALS AND EQUIPMENT TO BE INSTALLED AS PER MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS.
H. SUBSTITUTED EQUIPMENT WHICH REQUIRES ADDITIONAL COST BY OTHER TRADES FOR THEIR APPLICATION, SHALL HAVE SUCH COSTS BORNE BY THE CONTRACTOR FURNISHING SAID EQUIPMENT.
I. WHERE APPROVED SUBSTITUTES ARE USED, THE CONTRACTOR ASSUMES RESPONSIBILITY FOR PHYSICAL DIMENSIONS AND OTHER RESULTING CHANGES. THIS RESPONSIBILITY EXTENDS TO INCLUDE EXTRA WORK REQUIRED BY OTHER TRADES AS A RESULT OF THE SUBSTITUTION.
J. DO NOT ROUTE PIPING THROUGH TRANSFORMER VAULTS OR ABOVE TRANSFORMERS, ELECTRIC ROOMS, COMPUTER ROOMS, PANEL BOARDS, OR SWITCHBOARDS, INCLUDING THE REQUIRED SERVICE SPACE FOR THIS EQUIPMENT, UNLESS THE PIPING IS SERVING THIS EQUIPMENT. INSTALL DRIP PANS UNDER PIPING THAT MUST BE ROUTED THROUGH THESE SPACES.

SUBMITTALS
A. NOT MORE THAN TWO WEEKS AFTER AWARD OF CONTRACT BUT BEFORE ANY SHOP DRAWINGS ARE SUBMITTED, CONTRACTOR TO SUBMIT THE FOLLOWING PLUMBING SYSTEM DATA SHEET. LIST PIPING MATERIAL TYPE FOR EACH PIPING SERVICE ON THE PROJECT, ASTM NUMBER, SCHEDULE OR PRESSURE CLASS, JOINT TYPE, MANUFACTURER AND MODEL NUMBER WHERE APPROPRIATE. LIST VALVES AND SPECIALTIES FOR EACH PIPING SERVICE, FIXTURE AND EQUIPMENT WITH MANUFACTURER AND MODEL NUMBER. THE APPROVED PLUMBING SYSTEM DATA SHEET(S) WILL BE MADE AVAILABLE TO THE OWNER'S PROJECT REPRESENTATIVE FOR THEIR USE ON THIS PROJECT.
B. SHOP DRAWING SUBMITTALS ARE TO BE BOUND, LABELED, CONTAIN THE PROJECT MANUAL COVER PAGE AND A MATERIAL INDEX LIST PAGE SHOWING ITEM DESIGNATION, MANUFACTURER AND ADDITIONAL ITEMS SUPPLIED WITH THE INSTALLATION. SUBMIT FOR ALL EQUIPMENT AND SYSTEMS AS INDICATED IN THE RESPECTIVE SPECIFICATION SECTIONS, MARKING EACH SUBMITTAL WITH THAT SPECIFICATION SECTION NUMBER. MARK GENERAL CATALOG SHEETS AND DRAWINGS TO INDICATE SPECIFIC ITEMS BEING SUBMITTED AND PROPER IDENTIFICATION OF EQUIPMENT BY NAME AND/OR NUMBER, AS INDICATED IN THE CONTRACT DOCUMENTS. INCLUDE WIRING DIAGRAMS OF ELECTRICALLY POWERED EQUIPMENT.
C. SUBMIT SUFFICIENT QUANTITIES OF DATA SHEETS AND SHOP DRAWINGS TO ALLOW THE FOLLOWING DISTRIBUTION:
1. OPERATING AND MAINTENANCE MANUALS: 2 COPIES
2. ARCHITECT: 1 COPY
3. ENGINEER/DESIGNER: 1 COPY
4. OWNER: 2 COPIES

D. SUBMIT DRAWINGS TO THE ARCHITECT COVERING THE FOLLOWING:

1. WATER METER	6. GAUGES	11. INSULATION	16. VALVES
2. BACKFLOW PREVENTERS	7. THERMOMETERS	12. PIPE IDENTIFICATION	17. ACCESS PANELS
3. DRAINAGE GRATES & COVERS	8. CARRIERS AND DRAINAGE FITTINGS	13. VALVE TAGS	
4. PLUMBING FIXTURES, AND TRIM	9. HANGERS AND SUPPORTS	14. DRAINS	
5. CLEANOUTS	10. PIPE AND FITTINGS	15. WATER HEATING EQUIPMENT	

OPENINGS, CUTTINGS AND SLEEVES
A. PROVIDE AS NECESSARY TO PERMIT INSTALLATION OF PIPING OR ANY OTHER PART OF THE WORK UNDER THIS SECTION. COOPERATE WITH OTHER TRADES AND ADJUST WITH THEM, SUBJECT TO ARCHITECT'S APPROVAL, ALL QUESTIONS OF INTERFERENCE, RIGHT-OF-WAY FOR PIPING, ETC. MAKE ALL ARRANGEMENTS WITH VARIOUS CONTRACTORS FOR ANY SPECIAL FRAMING, SPACING OR CHASES. ACCURATELY LOCATE ALL OPENINGS AND PROVIDE AND SEAL ALL SLEEVES IN COOPERATION WITH CONTRACTOR WHOSE WORK IS AFFECTED THEREBY.
B. SLEEVES TO BE ONE INCH LARGER THAN OUTSIDE PIPE DIAMETER AND OF SUFFICIENT LENGTH TO PASS THROUGH ENTIRE FLOOR OR WALL CONSTRUCTION, INCLUDING PLASTER. SLEEVES IN CONCRETE OR MASONRY WALLS AND FLOORS, ETC. SHALL BE OF WROUGHT IRON OR STEEL PIPE. ALL OTHER SLEEVES #22 GAUGE GALVANIZED IRON. SLEEVES IN FLOORS SHALL EXTEND 2 INCHES ABOVE FINISHED FLOOR.
C. IN THE EVENT HOLES MUST BE CUT THROUGH REINFORCED CONCRETE, THEY SHALL BE CAREFULLY CORE DRILLED SO AS TO AVOID SPALLING AND UNNECESSARY DAMAGE OR WEAKENING OF ANY STRUCTURAL MEMBER. CHOPPING OR BREAKING OUT WILL NOT BE PERMITTED. OBTAIN ARCHITECT'S APPROVAL BEFORE CUTTING OR DRILLING THROUGH CONCRETE OR MASONRY IN PLACE, AND THEN PROCEED AS DIRECTED.
D. SEAL ALL OPENINGS BETWEEN PIPE, SLEEVE OR OPENING WITH FIBERGLASS AND CAULK OPENING WITH TREMSTOP WB MASTIC/PUTTY OR TREMSTOP WS. PROVIDE "THUNDERLINE" LINK-SEAL, TYPE "L", TREMCO FIRE-STOPPING PRODUCTS WHEN PASSING THROUGH A FIRE RATED WALL OR FLOOR. ALL OPENINGS THROUGH FIRE RATED FLOORS AND WALLS SHALL BE SEALED SO AS TO MAINTAIN THE FIRE RATING OF THE STRUCTURE AND BE MADE WATERPROOF. OR EQUAL: 3M, RECTORSEAL, METALINE, NELSOR, METACAULK, STI SPECSEAL, OR HILTI.
E. ALL CUTTING AND PATCHING IN WALLS, FLOORS, CHASES, ROOFS, CEILINGS AND PAVED AREAS FOR PLUMBING WORK IS THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR. SEE SECTION ON CUTTING AND PATCHING.
F. FLASHING: ALL VENT PIPES EXTENDING THROUGH ROOF SHALL BE CAULKED AROUND STACK AND FLASHED WITH 30 INCH SQUARE 4# SHEET LEAD FLASHING. COORDINATE WITH ROOFING CONTRACTOR. REFER TO DETAIL 2/P4.2.

ACCESS PANELS
A. FURNISH ACCESS PANELS FOR ALL CLEANOUTS, VALVES, OR OTHER EQUIPMENT REQUIRING ADJUSTMENT OR SERVICING CONCEALED WITHIN WALLS, FURRED SPACES OR CEILINGS. PANELS SHALL BE MINIMUM SIZE OF 18 INCH X 18 INCH OR OF SIZE TO PROVIDE ADEQUATE ACCESS. PANELS INSTALLED IN FIRE RATED WALLS OR FLOORS ARE TO MATCH RATING.
B. PANELS SHALL BE MILCOR BY INLAND STEEL PRODUCTS COMPANY, ZURN OR OTHER APPROVED EQUAL, WITH SCREWDRIVER CAM LOCKING DEVICES, AND TO BE OF THE FOLLOWING STYLES:
1. STYLE "A" FOR ACOUSTICAL TILE SURFACES.
2. STYLE "B" FOR ACOUSTICAL PLASTER SURFACES.
3. STYLE "K" FOR PLASTER SURFACES.
4. STYLE "M" FOR MASONRY AND TILE SURFACES.
5. STYLE "DW" FOR DRYWALL SURFACES.

C. REFER TO ROOM FINISH SCHEDULE ON ARCHITECTURAL DRAWINGS FOR LOCATION OF APPLICABLE WALL AND CEILING SURFACES AND FINISHES.
D. DELIVER ACCESS PANELS TO GENERAL CONTRACTOR AT JOB SITE FOR INSTALLATION BY THE GENERAL CONTRACTOR, WHERE AND AS DIRECTED BY THIS CONTRACTOR.

PIPE IDENTIFICATION AND VALVE TAGS
A. ALL PIPE INSTALLATION SHALL BE IDENTIFIED BY PAINTING AND NAME STENCILING OR WITH LABELS AND BANDING IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS.
B. IDENTIFICATION SHALL BE DONE AT INTERVALS NOT TO EXCEED 20 FEET AND AT LEAST ONCE IN EACH ROOM PENETRATED BY PIPE LINES AND LOCATED SO AS TO BE VISIBLE FROM FLOOR OR THROUGH ACCESS PANEL. IF IT IS NECESSARY TO VARY THE ABOVE SCHEME OF IDENTIFICATION FOR ANY REASON, THE ARCHITECT SHALL BE CONSULTED.
C. NAME STENCIL IN BLACK OR CONTRASTING COLOR. SHOW PIPE SIZE, CONTENT, AND FLOW ARROWS. LETTERING TO ¾ INCH HIGH.
D. LABELS AND BANDING: W.H. BRADY, T&B WESTLING, EMED CO., BRIMAR, OR SETON NAME PLATE CORPORATION. LETTERS SHALL BE ¾ INCH HIGH MINIMUM AND STATE PIPE CONTENTS AND SIZE (I.E. 2 INCH COLD WATER) AND WITH DIRECTIONAL FLOW ARROWS. BANDING TAPE COLOR CODE PIPING AS DIRECTED BY THE ARCHITECT. IDENTIFICATION SHALL BE APPLIED AFTER PIPE AND/OR COVERING IS PAINTED, IF PAINTING IS REQUIRED, AS PER MANUFACTURER'S RECOMMENDATIONS, AND SHALL BE WITH LABEL ATTACHED AND SECURED WITH COLOR CODED BANDING TAPE AT EACH END OF LABEL. TAPE SHALL COMPLETELY CIRCUMFERENCE THE PIPE WITH A 3-INCH MINIMUM OVERLAP.
E. IDENTIFY ALL NON-POTABLE PIPING AS PER CODE.
F. IDENTIFY EACH VALVE ON SUPPLIES BY MEANS OF ONE-INCH DIAMETER BRASS OR COPPER TAG FASTENED TO BODY OF VALVE WITH COPPER OR BRASS CHAIN, WITH BRANCH OR RISER IT CONNECTS, IDENTIFIED NUMBER STAMPED THEREON.
G. CHARTS: FURNISH THREE CHARTS, LISTING ALL NEW VALVES, GIVING THEIR LOCATION IN BUILDING WHICH EACH UNIT CONTROLS. ONE CHART, WITH GLASS COVER AND NEAT FRAME, FOR OWNER; TWO CHARTS, WITHOUT FRAMES, DELIVERED TO ARCHITECT.
H. FOR PAINTING OF PIPE SEE ARCHITECTURAL SECTION.

EXCAVATING AND BACKFILLING
A. EXCAVATING: AS REQUIRED TO LAY ALL PIPING AND STRUCTURES. REMOVE ALL SURPLUS EARTH AND PAVING RUBBLE OF TRENCH EXCAVATIONS FROM SITE AND WITHIN BUILDING. ALL TRENCHES MUST BE LEFT OPEN UNTIL ALL PIPING HAS BEEN APPROVED BY THE PLUMBING INSPECTOR. BARRICADE IN STRICT ACCORDANCE WITH ORDINANCES. ALL NEW PIPING, STRUCTURES AND DRAINS SHALL BE LAID ON 6-INCH BED OF PEA GRAVEL.
B. BACKFILLING: AFTER PIPING IS LAID AND APPROVED, BACKFILL AS FOLLOWS:
1. WITHIN BUILDING AREA OR BELOW PAVED AREAS: BACKFILL WITH 6 INCH LAYERS OF SAND SOAKED AND TAMPED OR WASHED, EVENLY GRADED MIXTURE OF CRUSHED STONE, OR CRUSHED OR UN-CRUSHED GRAVEL, WITH 100% PASSING A 1-1/2 INCH SIEVE AND NOT MORE THAN 5% PASSING A NO. 4 SIEVE.
2. FOR EARTH AND LAWN AREAS: BACKFILL WITH 12 INCHES OF SAND OVER PIPE AND BALANCE TO NEW GRADE OF EXCAVATED NATURAL EARTH, CONTAINING NO FROZEN LUMPS OR LARGE STONES, COMPACTED BY SOAKING AND TAMPING.

C. PATCHING: AFTER BACKFILLING IS COMPLETE, PATCH EXISTING FLOOR, PAVED SURFACE OR EARTH & LAWN TO MEET PRE-CONSTRUCTION CONDITIONS. COORDINATE ALL LOCATIONS WITH ARCHITECT BEFORE PROCEEDING WITH NEW WORK.
D. PROVIDE FROST PROTECTION FOR SEWERS AND WATER MAINS AS REQUIRED BY CODE.
E. UNSTABLE SOIL: IF UNSTABLE SOIL IS ENCOUNTERED, INSTALLATION TO BE AS PER PLUMBING CODE REQUIREMENTS.
F. ROCK EXCAVATION: THE TERM "ROCK" AS USED HEREIN IS DEFINED TO BE HARD MATERIAL AS FOUND IN NATURE THAT CANNOT BE DISLODGED FROM ITS BED AND REMOVED THEREFROM WITHOUT SAW-CUTTING, HAMMERING OR DRILLING; ANYTHING OTHER IS "EARTH" INSOFAR AS REMOVAL OF THE MATERIAL TO BE EXCAVATED IS CONCERNED, INCLUDING PAVING AND PAVING FOUNDATIONS.
G. BLASTING: NOT ALLOWED.
H. GRADING TRENCH BOTTOM: PERFORM FINAL GRADING OF TRENCH BOTTOMS BY HAND TOOLS, CARRY MACHINE EXCAVATION ONLY TO SUCH DEPTH THAT SOIL BEARINGS FOR PIPES WILL NOT BE DISTURBED, GRADE THE BOTTOM OF TRENCHES EVENLY TO INSURE UNIFORM BEARING FOR ALL PIPES. CUT HOLES AS NECESSARY FOR JOINTS AND JOINT MAKING.
I. AS AN ALTERNATE METHOD, OPTIONAL WITH THE CONTRACTOR, EXCAVATE TRENCHES TO AT LEAST 4 INCHES BELOW THE REQUIRED BOTTOM LEVELS AND REFILL TO THE PROPER GRADE WITH SAND OR GRAVEL FIRMLY COMPACTED.
J. IN ROCK, CEMENTED GRAVEL, OLD MASONRY OR OTHER HARD MATERIAL, EXCAVATE TO AT LEAST 4 INCHES BELOW THE PIPE AT ALL POINTS AND REFILL TO GRADE WITH SAND OR GRAVEL FIRMLY COMPACTED.

SERVICES
A. GENERAL: ELEVATIONS AND LOCATIONS OF ALL SERVICES AS INDICATED ON PLAN ARE APPROXIMATE AND THE CONTRACTOR SHALL DEFINITELY ESTABLISH ELEVATIONS AND LOCATIONS, SERVICES IN THE FIELD. BEFORE PROCEEDING WITH NEW WORK, CHECK LOCATION, ELEVATIONS, AND PITCHES WITH RELATION TO PROPOSED MAINS; REPORT IMMEDIATELY TO ARCHITECT, IN WRITING, ANY MAJOR DEVIATIONS IN LOCATION IN CONFLICT WITH CODE PITCHES CAUSED BY VARIATIONS IN MAINS. AWAIT ARCHITECT'S DECISION ON APPROPRIATE ADJUSTMENT OF LINE LOCATIONS AND ELEVATIONS BEFORE PROCEEDING.

HAZARDOUS SUBSTANCES
A. IF IT IS FOUND OR SUSPECTED THAT ANY EXISTING PIPE OR EQUIPMENT COVERING, BUILDING STRUCTURE AND/OR COMPONENTS IS FOUND TO CONTAIN ASBESTOS, AND THAT ASBESTOS IS TO BE DISTURBED OR IS FOUND TO BE LOOSE, FRIABLE OR UNENCAPSULATED, IT SHOULD BE CALLED TO THE OWNER'S ATTENTION. OWNER WILL BE RESPONSIBLE FOR REMOVAL OR ECAPSULATION. CONTRACTOR'S ATTENTION IS DIRECTED TO OSHA AND STATE/LOCAL CODES REGARDING ASBESTOS REMOVAL AND IT SHALL BE THIS CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH ALL POSSIBLE APPLICABLE PROVISIONS. SEE GENERAL CONDITIONS.

ELECTRICAL WORK
A. ALL LINE VOLTAGE WIRING SHALL BE BY THE ELECTRICAL CONTRACTOR.
B. PLUMBING CONTRACTOR SHALL FURNISH COMBINATION-FUSED SWITCHES AND STARTERS AND WIRING DIAGRAMS FOR ELECTRICAL EQUIPMENT FURNISHED TO THE ELECTRICAL CONTRACTOR.
C. PRIOR TO ORDERING ANY AND ALL EQUIPMENT WHICH REQUIRE ELECTRICAL CONNECTIONS, COORDINATE WITH THE ELECTRICAL ENGINEER AND CONTRACTOR FOR THE CORRECT HORSEPOWER AND VOLTAGE AT THE SITE. THE COST ASSOCIATED WITH ANY EQUIPMENT ORDERED WITH THE WRONG VOLTAGE WILL BE THE RESPONSIBILITY OF PLUMBING CONTRACTOR TO CORRECT.
D. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLATION OF LOW VOLTAGE WIRING AND CONNECTIONS FOR EQUIPMENT FURNISHED BY PLUMBING CONTRACTOR, INCLUDING HIRING OF A STATE LICENSED ELECTRICAL CONTRACTOR IF REQUIRED.

DRAINS
A. CATALOG NUMBERS SHOWN ARE FROM ZURN CATALOG, AND ARE INTENDED TO DESIGNATE TYPE ONLY. DRAINS BY WATTS, JOSAM, WADE, MIFAB, OR J.R. SMITH WILL BE ACCEPTABLE PROVIDED THEY ARE OF EQUAL QUALITY AND SIMILAR TYPE AND SUBJECT TO THE ENGINEER'S APPROVAL.
B. OUTLET SPUDS FULL SIZE OF WASTE OR DRAIN CONNECTION SHOWN. DEEP SEAL TRAP SAME SIZE AS DRAIN. TOPS TO BE SET PERFECTLY LEVEL AND AT HEIGHT TO ALLOW PROPER PITCH OF FLOORS TOWARD DRAIN AS DIRECTED. STRAINER AREA EQUAL TO OR LARGER THAN OUTLET.
C. SEE DRAIN SCHEDULE ON DRAWING SHEET P-5.

SAFING
A. SAFING FOR HUB AND FLOOR DRAINS SHALL BE MADE UP WITH 3 POUND SHEET LEAD ASPHALTUM COATED OR CHLORALOY EXTEND 24 INCHES BEYOND DRAIN AND ATTACH DRAIN CLAMPING RING TO SAFING. ALL SAFING SHALL BE TESTED TO SHOW WATER TIGHT CONSTRUCTION, TEST SHALL BE FOR A 5 HOUR PERIOD.
B. SAFING FOR SHOWERS SHALL BE MADE UP WITH 4 POUND SHEET LEAD ASPHALTUM COATED OR CHLORALOY BENEATH THE ENTIRE FIXTURE OR ROOM AND UPWARD ALONG THE SIDES TO A MINIMUM OF 6 INCHES ABOVE THE CURB OF MAXIMUM WATER LEVEL OF THE FIXTURES. THE CORNERS SHALL BE SAFED TO A HEIGHT OF 6 FEET AND 6 INCHES BEYOND ALL CORNERS, ATTACH DRAIN-CLAMPING RING TO SAFING. ALL SAFING SHALL BE TESTED TO SHOW WATERTIGHT CONSTRUCTION, TEST SHALL BE FOR A 5-HOUR PERIOD.

CLEANOUTS
A. PROVIDE CLEANOUTS AT BASE OF EVERY WASTE STACK, CONDUCTOR, OR RISER, WHEREVER THERE IS A CHANGE OF DRAIN OR WASTE PIPE RUN; IN STRAIGHT RUNS OF DRAIN OR WASTE, INSTALL CLEANOUT EVERY 50 FEET AND AT END OF DRAIN LINE.
B. F.C.O.: EXTEND CLEANOUT, JOSAM 56000-NB POLISHED NICKEL OR CLEANOUT TOPS COMPATIBLE TO ACCEPT FLOOR FINISH, FLUSH WITH FINISH FLOOR; SEE ARCHITECTURAL ROOM FINISH SCHEDULE. WHERE CLEANOUTS ARE EXPOSED IN PIPE CHASE ON STACKS, USE JOSAM 58510 OR EQUAL WADE, J.R. SMITH, WATTS, MIFAB, OR ZURN. ON FINISHED WALLS USE JOSAM 58500-20 WITH STAINLESS STEEL COVER. IN HEAVY TRAFFIC ROOMS USE JOSAM 56040-5.
C. AFTER FINISHED FLOORS HAVE BEEN INSTALLED, PLUMBER SHALL REMOVE ALL CLEANOUT COVERS AND PLUGS, ALL DRAIN GRATES, APPLY A HEAVY COATING OF GREASE TO THREADS BOTH INSIDE AND OUTSIDE. ALL CLEANOUTS ABOVE GRADE AND FUTURE CAPPED AND PLUGGED CONNECTIONS ON WASTE AND VENT PIPING TO RECEIVE SAME TREATMENT.
D. WHERE CLEANOUTS ARE EXPOSED AT ENDS OF DRAINS IN PIPE FITTINGS, THEY SHALL BE SOLID BRASS.
E. PROVIDE CARPET MARKERS TO IDENTIFY CLEANOUTS LOCATED BELOW CARPETING OR FITNESS MAT FLOORING.
F. LOCATE CLEANOUTS SO AS NOT TO INTERFERE WITH WALLS, LOCKERS, BENCHES, CASEWORK, EQUIPMENT, ETC.
G. CLEANOUTS LOCATED OUTSIDE BUILDING SHALL BE PROVIDED WITH FROST SLEEVES.

BACKFLOW PREVENTERS
A. ACCEPTABLE MANUFACTURERS FOR SUPPLY SYSTEMS: AMES, APOLLO, BEECO, CLA-VAL, CONBRACO, FEBCO, WATTS, WILKINSON.
B. REDUCED PRESSURE BACKFLOW PREVENTERS: WATTS 900 SERIES, ASSE 1013 REDUCED PRESSURE PRINCIPLE BACKFLOW ASSEMBLY COMPLETE WITH INLET STRAINER, INLET AND OUTLET ISOLATION VALVES. CONSTRUCT OF BRONZE OR EPOXY COATED CAST IRON BODY WITH BRONZE AND PLASTIC INTERNAL PARTS, STAINLESS STEEL SPRINGS, NON-THREADED VENT OUTLET, 4 TEST COCKS, RATED FOR 175 PSIG. FURNISH AND INSTALL A SOFT SEATED CHECK VALVE IN FRONT OF BACKFLOW PREVENTER TO PREVENT FLUCTUATING INLET PRESSURE, WATTS NO. 600 BRONZE VALVE.
C. HOSE CONNECTION VACUUM BREAKERS: ASSE 1011, NICKEL PLATED WITH NON-REMOVABLE AND MANUAL DRAIN FEATURES, AND ASME B1.20.7 GARDEN-HOSE THREADS ON OUTLET. UNITS ATTACHED TO ROUGH-BRONZE-FINISH HOSE CONNECTIONS MAY BE ROUGH BRONZE.

VALVES
A. GENERAL: TO BE MILWAUKEE STANDARD DIMENSIONS, APOLLO, NIBCO OR WATTS, 150-LB. WORKING PRESSURE. ALL VALVES 2 INCHES AND SMALLER SHALL BE BALL VALVES. THE MANUFACTURER'S NAME AND VALVE NUMBER SHALL BE CAST INTO BODY OF VALVE. ALL VALVES FURNISHED SHALL BE OF ONE MANUFACTURER.
B. BALL VALVES: 2 INCHES AND UNDER, BRONZE MILWAUKEE BA-350
C. CHECK VALVES: MILWAUKEE 1510T.
D. DRAIN VALVES: NIBCO T-580 WITH HOSE ADAPTER AND CAPPED WITH A BRASS HOSE THREAD CAP.
E. BALANCING VALVE: B & G MODEL CB CIRCUIT SETTER.
F. GAS VALVES: DEZURIK SERIES 400 PLUG VALVE OR CCN BRACO GB-10.
G. BUTTERFLY VALVE: NIBCO LD 2000.
H. WATER PRESSURE REDUCING VALVES: BRONZE BODY, DIAPHRAGM OPERATED, WITH AN INTEGRAL THERMAL EXPANSION BYPASS VALVE, INLET UNION, STAINLESS STEEL STRAINER, RENEWABLE MONEL OR STAINLESS STEEL SEAT AND ADJUSTABLE REDUCED PRESSURE RANGE, 300 PSIG AT 160° F. PRE-SET FOR THE SCHEDULED PRESSURE REQUIRED BY EQUIPMENT. CONTRACTOR TO VERIFY EXISTING WATER PRESSURE AT SITE. A.W. CASH, CONBRACO, WATTS, WILKINS. PROVIDE BALL VALVE AND STRAINER AT INLET AND BALL VALVE AT OUTLET. INSTALL PRESSURE GAUGES TO INDICATE INLET AND OUTLET PRESSURE AT EACH PRESSURE REDUCING VALVE.
I. VALVING FOR FIXTURES: EACH INDIVIDUAL FIXTURE OR PIECE OF EQUIPMENT SHALL HAVE INDEPENDENT SHUT-OFF VALVE ADJACENT TO FIXTURE IN ADDITION TO BRANCH SHUT-OFF. WHERE SUPPLIES ARE INSTALLED IN WALLS, SHUT-OFF VALVES SHALL BE CONCEALED. PROVIDE AN ACCESS PANEL.
J. VALVING FOR DRAINS; VALVED DRAINS AT LOW POINTS AS REQUIRED; PITCH SUPPLY MAINS, BRANCHES AND RISERS THROUGHOUT TO CAPPED DRAINS.

SUPPORTS AND ANCHORS
A. SUPPORT AND SECURE ALL PIPING THROUGHOUT NEATLY AND SUITABLY IN AN APPROVED MANNER TO ALLOW FOR AMPLE EXPANSION AND CONTRACTION.
B. HANGERS SHALL BE MALLEABLE IRON RING TYPE FOR STEEL OR CAST-IRON WITH SWIVEL RING AND SOLID THREADED STEM SUPPORT OF ADEQUATE SIZE. COPPER PLATED RING TYPE FOR COPPER. ANCHOR TO STRUCTURE BY MEANS OF CONCRETE INSERTS OR SPECIAL FITTING FOR STRUCTURAL STEEL AS REQUIRED. WHERE PIPES ARE GROUPED, INSTALL TRAPEZE HANGERS WITH "U" SPACERS TO HOLD PIPE ALIGNMENT. FOR NON-INSULATED COPPER PIPING PROVIDE SHEET LEAD BETWEEN PIPE AND HANGER.
C. SUPPORT VERTICAL PIPE LINES WITH WROUGHT IRON OR STEEL PIPE CLAMPS AT BEAMS OR FLOOR. SUPPORT HORIZONTAL PIPING AT INTERVALS OF 5 FEET FOR CAST-IRON SOIL OR WASTE, 8 FEET FOR SCREWED PIPE AND 5 FEET FOR COPPER PIPE. PROVIDE & SET ALL CONCRETE INSERTS IN COOPERATION WITH THE CONCRETE CONTRACTOR BEFORE CONCRETE IS POURED; INSERTS TO BE GRINNEL COMPANY #282.
D. ALL ANCHORS, HANGERS, AND SUPPORTS TO BE DESIGNED TO MEET LOCAL STRUCTURAL REQUIREMENTS AND THE ARCHITECT'S APPROVAL. PERFORATED IRON SHALL NOT BE USED ON ANY PART OF THE PLUMBING SYSTEM.
E. ALL PIPE HANGERS MUST BE EQUIPPED WITH INSULATION SHIELDS. SEE TYPICAL PIPE SUPPORT DETAIL 1/P4.2.

PIPE AND FITTINGS
A. PIPE, FITTINGS AND INSTALLATION SHALL CONFORM TO APPROPRIATE FEDERAL OR AMERICAN SOCIETY FOR TESTING MATERIALS SPECIFICATIONS LISTED. THE LATEST ISSUE SHALL APPLY.
B. STORM, SANITARY DRAIN AND VENTS, IN GROUND:
1. CAST IRON SOIL PIPING AND FITTINGS, HUB AND SPIGOT, TARRED, ASTM A74 WITH COMPRESSION GASKET JOINTS. ALL CAST IRON PIPE AND FITTINGS SHALL BE MARKED WITH THE COLLECTIVE TRADEMARK OF THE CAST IRON SOIL PIPE INSTITUTE (CISPI) AND BE LISTED BY NSF INTERNATIONAL.
2. PVC PLASTIC PIPE, SCHEDULE 40, CLASS 12454-B (PVC 1120), ASTM D1785; PVC PLASTIC DRAIN, WASTE AND VENT PIPE AND FITTINGS, ASTM D2665; SOCKET FITTING PATTERNS, ASTM D3311; PRIMER, ASTM F656; SOLVENT CEMENT, ASTM D2564. PVC PIPING SHALL NOT BE INSTALLED FOR ANY DRAINS SERVING AREAS WHERE WASTE TEMPERATURES ARE 140 DEGREES OR ABOVE. INSTALLATION OF PVC PIPING TO CONFORM TO ALL CODES AND ASTM D2321.

C. WASTE, VENT, CONDUCTORS, CLEARWATER, INDIRECT WASTE AND SANITARY PIPE, NOT IN GROUND:
1. HUBLESS CAST IRON SOIL PIPE AND FITTINGS, ASTM A888; WITH NO-HUB COUPLINGS, CISPI 310 OR CISPI 301, LATEST ISSUE SHALL APPLY. ALL CAST IRON PIPE AND FITTINGS SHALL BE MARKED WITH THE COLLECTIVE TRADEMARK OF THE CAST IRON SOIL PIPE INSTITUTE (CISPI) AND BE LISTED BY NSF INTERNATIONAL.
2. TYPE M COPPER WATER TUBE, H (DRAWN) TEMPER, ASTM B88; WITH CAST COPPER DRAINAGE FITTINGS (DWV), ANSI B16.23; WROUGHT COPPER DRAINAGE FITTINGS (DWV), ANSI B16.29; LEAD FREE (<.2%) SOLDER, ASTM B32; FLUX, ASTM B813; COPPER PHOSPHOROUS BRAZING ALLOY, AWS A5.8 BCUP. MECHANICALLY FORMED BRAZED TEE CONNECTIONS MAY BE USED IN LIEU OF SPECIFIED TEE FITTINGS FOR VENT BRANCH TAKEOFFS UP TO ONE-HALF (1/2) THE DIAMETER OF THE MAIN.
3. PVC PLASTIC PIPE, SCHEDULE 40, CLASS 12454-B (PVC 1120), ASTM D1785; PVC PLASTIC DRAIN, WASTE AND VENT PIPE AND FITTINGS, ASTM D2665; SOCKET FITTING PATTERNS, ASTM D3311; PRIMER, ASTM F656; SOLVENT CEMENT, ASTM D2564. PVC PIPING SHALL NOT BE INSTALLED FOR ANY DRAINS SERVING AREAS WHERE WASTE TEMPERATURES ARE 140 DEGREES OR ABOVE. INSTALLATION OF PVC PIPING TO CONFORM TO ALL CODES AND ASTM D2321.

D. WATER PIPE, ABOVE FLOOR: TYPE L COPPER WATER TUBE, H (DRAWN) TEMPER, ASTM B88:
1. WROUGHT COPPER PRESSURE FITTINGS, ANSI B16.22; LEAD FREE (<.2%) SOLDER, ASTM B32; FLUX, ASTM B813.
2. COPPER PRESS-CONNECT FITTINGS AS MANUFACTURED BY VIEGA PRO-PRESS, NIBCO INC. OR APPROVED EQUAL. COPPER, BRONZE, AND COPPER ALLOY FITTINGS SHALL CONFORM TO THE MATERIAL REQUIREMENTS OF ASME B16.18 OR ASME B16.22 AND PERFORMANCE CRITERIA OF ASME B16.51 AND IAPMO PS 117. SEALING ELEMENTS FOR PRESS FITTINGS SHALL BE ETHYLENE PROPYLENE DIENE MONOMER (EPDM) AND SHALL BE FACTORY INSTALLED BY THE FITTING MANUFACTURER. PRESS ENDS SHALL HAVE SMART CONNECT® OR OTHER SIMILAR TECHNOLOGY APPROVED BY THE DESIGNER THAT PROVIDES THE INSTALLER QUICK AND EASY IDENTIFICATION OF CONNECTIONS WHICH HAVE NOT BEEN PRESSED PRIOR TO PUTTING THE SYSTEM INTO OPERATION. FITTINGS TO BE RATED AT 200 PSI MAXIMUM WORKING-PRESSURE RATING AT 250° F. ACCEPTABLE FOR TYPE L HARD COPPER TUBING CONNECTIONS 1/2 INCH TO 4 INCH ONLY.
3. COPPER PHOSPOROUS BRAZING ALLOY, AWS A5.8 BCUP.
4. COPPER MECHANICAL GROOVED FITTINGS AND COUPLINGS ON ROLL GROOVED PIPE MAY BE USED IN LIEU OF SOLDERED, BRAZED OR PRESS STYLE FITTINGS FOR SIZES 3-INCH AND LARGER.

E. INSULATED UNIONS OR FLANGES: ALL CONNECTIONS BETWEEN COPPER PIPE AND STEEL OR DISSIMILAR METALS SHALL BE MADE WITH INSULATING TYPE UNIONS OR FLANGES; EPCO MANUFACTURER OR OTHER APPROVED EQUAL.

INSULATION
A. INSULATION SHALL BE KNAUF, OR APPROVED EQUAL AS MANUFACTURED BY ARMSTRONG, CERTAINTEED, JOHNS MANVILLE OR OWENS-CORNING,. ALL PIPING AND EQUIPMENT TO BE INSULATED MUST BE THOROUGHLY TESTED AND APPROVED AND THOROUGHLY CLEANSED AND DRY PRIOR TO APPLYING INSULATION. PIPE INSULATION AND COVERING SHALL HAVE A FLAME SPREAD RATING NOT EXCEEDING TWENTY-FIVE (25). PIPE INSULATION AND COVERING ON PIPES IN ACTIVE SUPPLY OR RETURN AIR PLENUMS SHALL HAVE SMOKE DEVELOPED RATING NOT EXCEEDING FIFTY (50). PER STATE/LOCAL CODE.
B. PIPE COVERING DETAILS: COVERING SHALL BE FULL THICKNESS AT PIPE SUPPORTS. DO NOT USE BANDS ON INSULATION. COVERING SHIELDS AND PROTECTION SADDLES OF AN APPROVED TYPE SHALL BE PROVIDED WHERE REQUIRED. ALL INSULATION ENDS ARE TO BE TAPERED AND SEALED REGARDLESS OF SERVICE. ALL INSULATION ON FITTINGS SHALL BE FINISHED 8 OZ. GLASS MESH, CHILDERS CP-11 WITH CHIL-GLASS CHILDERS (CP-3) FOR VAPOR-PROOF JACKETS OR PRE-MOLDED PVC FITTING COVER PROTO FITTING COVERS (OR EQUAL); APPLY AS PER MANUFACTURER'S RECOMMENDATIONS.
C. COLD WATER AND COLD WATER SOFT: INSULATE ALL PIPING AND FITTINGS WITH ½ INCH THICK FIBERGLASS INSULATION. COVER WITH WHITE VAPOR-PROOF, ALL-PURPOSE JACKET.
D. HOT WATER AND CIRCULATING RETURN PIPING: INSULATE ALL PIPING AND FITTINGS WITH 1-1/2 INCH THICK FIBERGLASS INSULATION FOR PIPE SIZES 1-1/2 INCH OR SMALLER AND 2 INCH THICK FIBERGLASS INSULATION FOR SIZES 2 INCH AND LARGER. COVER WITH WHITE VAPOR-PROOF, ALL-PURPOSE JACKET.
E. OR EQUAL: ARMAFLEX II, IN PLENUMS ARMAFLEX AP.
F. INSULATE ALL WATER SUPPLY PIPING INSTALLED IN MASONRY WALLS WITH 3/8 INCH THICK ARMAFLEX.

JOINTS
A. CAST-IRON SOIL PIPE: INSTALL COMPRESSION GASKETS AND NO-HUB JOINTS AS PER MANUFACTURER'S RECOMMENDATIONS.
B. SCREWED; THREADS CLEAN CUT AND SQUARE WITH PIPE MADE TIGHT BAKERSEAL COMPOUND. PAINT ALL EXPOSED THREADS WITH RUST-OLEUM #769, THOROUGHLY CLEAN REAM ALL PIPES.
C. SWEAT: CLEAN INTERIOR OF FITTING AND EXTERIOR PIPE. AFTER FLUX, HEAT AND APPLY SOLDER TO FILL VOID. REMOVE EXCESS AND COOL.
D. SOLVENT AND HEAT WELD: AS PER MANUFACTURER'S RECOMMENDATIONS.

WATER SUPPLY SYSTEM
A. GENERAL: EXTEND AND CONNECT WATER PIPING TO ALL PLUMBING FIXTURES, AND OTHERWISE SHOWN AS DESIGNATED OR REQUIRED.
B. PIPE AND VALVES: PROVIDE EACH PIECE OF EQUIPMENT AND EACH FIXTURE WITH SEPARATE STOPS WITH RENEWABLE DISC. EACH GROUP OF FIXTURES, SEPARATE SHUT-OFFS ACCESSIBLE FOR CONTROL AND REPACKING WITH TEES AND VALVES IN WATER LINES WHERE SHOWN. SUSPEND AND SECURE ALL SUPPLY AND BRANCH PIPING IN PLACE WITH PIPE HANGERS. CONCEAL ALL PIPING WHEREVER POSSIBLE. BRING STUB EXTENSIONS AS CLOSE TO FIXTURE CONNECTION AS CONDITIONS WILL PERMIT. INSTALL ALL PIPING SO THAT IT CAN BE PROPERLY DRAINED.
C. EXPANSION ANCHORS: INSTALL AS REQUIRED TO SECURE WATER PIPING SOLIDLY IN PLACE.
D. SWING JOINTS: PROVIDE SWING JOINTS ON ALL WATER CONNECTIONS TO FIXTURES AND ALL CONNECTIONS FROM RISERS TO HORIZONTAL MAINS OR BRANCHES.
E. ALL EXPOSED PIPING, FITTINGS, VALVES, ETC., IN FINISHED AREAS TO BE CHROME-PLATED.
F. DISINFECTING MAINS: FOR PURPOSE OF DISINFECTING MAINS, COMMERCIAL CHLORIDE OF LIME (CALCIUM HYPERCHLORITE) OR OTHER STERILIZING AGENT OF EQUIVALENT VALUE SHALL BE PLACED IN EVERY PIPE BEING LAID, IN JOINT, AFTER PIPE HAS BEEN BRUSHED, IN SUCH MANNER THAT WHEN MAIN IS SUBSEQUENTLY FILLED WITH WATER FOR TESTING, STERILIZING AGENT WILL BE DISSOLVED. TWO TABLESPOONS FULL OF THIS MATERIAL SHALL BE USED FOR EACH 20 FEET OR 4 INCH PIPE, OR A 4 HOUR CONTACT OF 200 PPM OF CHLORINE. FLUSH MAINS AFTER DISINFECTION.
G. SHOCK ARRESTORS: PROVIDE SIZE REGULATED BY CODE. SHOCK ARRESTOR TO CONFORM TO PDI-WH201, 1974, AS REQUIRED PER CODE.
H. ALL CAPS, PLUGS, AND NIPPLES IN WATER SUPPLY SYSTEM TO BE BRASS.
I. HOT WATER AND RETURN CIRCULATING: PITCH AND GRADE ALL PIPE LINES AS REQUIRED TO INSURE SATISFACTORY CIRCULATION, AVOID DIPS OR DEPRESSIONS IN PIPE RUNS. MAKE SATISFACTORY TEST ACCEPTABLE TO ARCHITECT, SHOWING PERFECT AND CONTINUOUS CIRCULATION THROUGH ENTIRE SYSTEM.
J. CONTRACTOR SHALL BE RESPONSIBLE FOR BALANCING THE HOT WATER CIRCULATING RETURN SYSTEM AND SHALL PROVIDE CERTIFICATION THAT THE SYSTEM HAS BEEN BALANCED, NOTING G.P.M. FLOW THROUGH EACH BALANCING VALVE INSTALLED AND ITS OPERATING POSITION. THIS CERTIFICATION SHALL BE INCLUDED IN THE OWNER'S OPERATING MANUAL

PIPING SPECIALTIES
A. OPEN ENDS OF ALL PIPES, DRAINS, WATER FIXTURE OUTLETS, INCLUDING THOSE EXTENDING ABOVE ROOF MUST BE EFFECTIVELY CLOSED AND KEPT CLOSED DURING CONSTRUCTION.
B. SANITARY AND STORM WASTE AND VENT, CONDUCTORS PIPING: AFTER ROUGHING-IN IS COMPLETED, FILL ENTIRE SYSTEM WITH WATER; TEST AND MAKE TIGHT.
C. SUPPLY PIPING: TEST ALL NEW PIPING TO A PRESSURE OF 50 PSIG ABOVE THE OPERATING PRESSURE WITHOUT EXCEEDING THE PRESSURE RATING OF THE PIPING SYSTEM MATERIALS. ALLOW STANDING FOR A PERIOD OF 4 HOURS.
D. TESTS: ALL TESTS TO BE MADE IN THE PRESENCE AND TO THE SATISFACTION OF THE ARCHITECT'S REPRESENTATIVE AND PLUMBING INSPECTOR.
E. ESCUTCHEON: PROVIDE ESCUTCHEONS ON ALL PIPE PASSING THROUGH FINISHED FLOORS, WALLS, CASEWORK, AND CEILINGS WITHOUT OUTSIDE DIAMETER SUFFICIENT TO COVER SLEEVED OPENING AND INSIDE DIAMETER TO FIT SNUGLY WITH FIXTURES AS DIRECTED BY THE ARCHITECT. ALL ESCUTCHEON PLATES TO BE METAL CHROME-PLATED.
F. ALL CAST IRON SOIL PIPE AND FITTINGS SHALL BE MARKED WITH THE COLLECTIVE TRADEMARK OF THE CAST IRON SOIL PIPE INSTITUTE (CISPI) AND BE LISTED BY NSF INTERNATIONAL.
G. ORDER ALL COPPER, CAST IRON, STEEL, PVC PIPE WITH EACH LENGTH MARKED WITH THE NAME OR TRADEMARK OF THE MANUFACTURER AND TYPE OF PIPE; WITH EACH SHIPPING UNIT MARKED WITH THE PURCHASE ORDER NUMBER, METAL OR ALLOY DESIGNATION, TEMPER, SIZE, AND NAME OF SUPPLIER.
H. ANY INSTALLED MATERIAL NOT MEETING THE SPECIFICATION REQUIREMENTS MUST BE REPLACED WITH MATERIAL THAT MEETS THESE SPECIFICATIONS WITHOUT ADDITIONAL COST TO THE OWNER.
I. MANUFACTURER'S: FIRMS REGULARLY ENGAGED IN MANUFACTURE OF PIPE, TUBE AND FITTINGS OF TYPES AND SIZES REQUIRED, WHOSE PRODUCTS HAVE BEEN IN SATISFACTORY USE IN SIMILAR SERVICE FOR NOT LESS THAN FIVE YEARS.

MISCELLANEOUS EQUIPMENT
A. GAUGES SHALL BE INSTALLED ON A VALVED CONNECTION TO SYSTEM AND SHALL CONSIST OF A STEEL CASE, GLASS FACE WITH 3-1/2 INCH (MINIMUM). DIAL READING DIRECTLY IN UNITS (GPM, PSI, ETC.) AS APPLICABLE. MARCH, TRERICE OR APPROVED EQUAL.
B. THERMOMETERS SHALL CONSIST OF STEEL CASE, GLASS FACE WITH 3-1/2 INCH (MINIMUM) DIAL READING IN FAHRENHEIT (F) DEGREES. PROVIDE WITH ADJUSTABLE HEAD OR REMOTE READING FEATURE FOR ACCESSIBLE READING. MARCH, TRERICE OR APPROVED EQUAL.
C. T&P RELIEF VALVES SHALL BE FULLY AUTOMATIC, OF THE REQUIRED RATING, CONFORM TO AMERICAN NATIONAL STANDARD Z1.22, BRONZE CONSTRUCTION. WATTS OR APPROVED EQUAL.
D. PRESSURE REDUCING VALVE ON GAS SUPPLY: AS REQUIRED TO PROVIDE 8 INCHES OF PRESSURE WITH VENT TO ATMOSPHERE. PROVIDE VALVES BY-PASS. VERIFY PRESSURE REQUIREMENTS OF APPLIANCES OR EQUIPMENT BEING SERVED. VERIFY INCOMING PRESSURE WITH HVAC CONTRACTOR. WATTS OR EQUAL.

EQUIPMENT BASES
A. PLUMBING CONTRACTOR SHALL PROVIDE CONCRETE BASES FOR EQUIPMENT FURNISHED AND INSTALLED BY HIM. BASES SHALL BE CONCRETE 4 INCHES HIGH AND EXTEND 4 INCHES BEYOND EQUIPMENT, UNLESS OTHERWISE NOTED.

WATER HEATING EQUIPMENT
A. MANUFACTURERS: A.O. SMITH, BOCK, BRADFORD WHITE, HTP, RHEEM/RUUD, STATE.
B. REFER TO DOMESTIC WATER HEATER, EXPANSION TANK AND PUMP SCHEDULES ON SHEET P-5.
C. WH-1: AUTOMATIC, MODULATING, NATURAL GAS-FIRED, TANKLESS.
1. THE HEATERS SHALL BE SUITABLE FOR SEALED COMBUSTION DIRECT VENTING USING SOLID WALL SCHEDULE 40 PVC FOR AIR INTAKE AND EXHAUST PIPING. THE HEATER SHALL BE ASSEMBLED AND TESTED . THE POWER BURNER SHALL BE OF A DESIGN THAT REQUIRES NO SPECIAL CALIBRATIONS ON START UP. THE HEATERS SHALL BE APPROVED FOR 0" CLEARANCES TO COMBUSTIBLES.
2. THE CONTROL SHALL BE AN INTERGRATED SOLID STATE TEMPERATURE AND IGNITION CONTROL DEVICE WITH INTERGRAL DIAGNOSTICS, LED FAULT DISPLAY CAPABILITY AND A DIGITAL DISPLAY OF TEMPERATURE SETTINGS.
3. THE HEATER SHALL BE FOAM INSULATED AND EQUIPPED WITH AN ASME RATED TEMPERATURE PRESSURE RELIEF VALVE. THE WATER HEATER SHALL BE UL LISTED AND EXCEED THE MINIMUM EFFICIENCY REQUIREMENTS OF ASHRAE/IES 1999.
4. FURNISH AND INSTALL T&P RELIEF VALVE WITH DRAIN LINE TO WITHIN 6" OF FLOOR. VALVED AND UNIONED CONNECTIONS. INSULATION TO MEET OR EXCEED ASHRAE 90A-1992. ALL CONNECTIONS TO BE BRASS.
5. ALL WIRING SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
6. FURNISH AND INSTALL ALL GAS PIPING CONNECTIONS WITH INDIVIDUAL PRESSURE REGULATING VALVES TO EACH HEATER.
7. FURNISH AND INSTALL INTAKE AND EXHAUST PIPING AND CONNECTIONS TO THE HEATER. EXTEND THROUGH THE ROOF AND INSTALL TERMINALS AS REQUIRED BY MANUFACTURES RECOMMENDATIONS. LOCATE THE EXHAUST TERMINALS AWAY FROM WINDOWS, AIR INTAKES, ETC., AS REQUIRED BY CODE.

D. CIRCULATING PUMP:
1. MANUFACTURERS: GRUNDFOS MODEL AS NOTED IN SCHEDULE OR APPROVED EQUAL BY BELL AND GOSSETT OR TACO.
2. TYPE: HORIZONTAL, OIL LUBRICATED, DESIGNED FOR 125 PSI WORKING PRESSURE, 225°F CONTINUOUS WATER TEMPERATURE AND SPECIFICALLY DESIGNED FOR QUIET OPERATION.
3. BODY: BRONZE FOR DOMESTIC WATER SERVICE.
4. SHAFT: STAINLESS STEEL OR CARBON STEEL WITH STAINLESS STEEL OR BRONZE SLEEVE, INTEGRAL THRUST COLLAR.
5. BEARINGS: TWO HORIZONTAL SLEEVE BEARINGS DESIGNED FOR CIRCULATING OIL.
6. SEAL: MECHANICAL, WITH CARBON SEAL FACE ROTATING AGAINST CERAMIC SEAT.
7. MOTOR: NON-OVERLOADING AT ANY POINT ON PUMP CURVE, OPEN, DRIP PROOF, SLEEVE BEARINGS, QUIET OPERATING, RUBBER MOUNTED CONSTRUCTION, BUILT-IN THERMAL OVERLOAD PROTECTION.
8. PUMP TO BE CONTROLLED BY ON/OFF SWITCH.

E. EXPANSION TANK: WESSELS MODEL AS NOTED IN SCHEDULE OR APPROVED EQUAL BY AMTROL, WATTS OR ZILMET.
PROVIDE EXPANSION TANKS OF SIZE AND NUMBER AS INDICATED IN SCHEDULE ON PLANS. TANK TO BE CONSTRUCTED OF STEEL FOR 150-PSI PRESSURE RATING COMPLYING WITH ASME BOILER AND PRESSURE VESSEL CODE AND STAMPED WITH APPROPRIATE SYMBOL. PROVIDE TAPS FOR TANK FITTING, DRAIN VALVE, AND GAUGE GLASS. PROVIDE FULL LENGTH RED LINE GAUGE GLASS WITH GAUGE COCKS, DRAIN VALVE WITH THREADED HOSE CONNECTION, AND MOUNTING SADDLES FOR HORIZONTAL INSTALLATION.

PLUMBING FIXTURES
A. IN EVERY CASE, FIXTURES MUST CONFORM TO THE GENERAL REQUIREMENTS AS GIVEN BELOW AND TO SPECIFIED REQUIREMENTS FOR EACH TYPE. WASTES AND SUPPLIES, UNLESS OTHERWISE SPECIFIED OR REQUIRED, SHALL BE TURNED BACK INTO WALLS AS HIGH AS POSSIBLE UNDER FIXTURE. PIPING SHALL BE FREE FROM CROSS CONNECTION AND OF SUCH DESIGN THAT BACK SIPHONAGE IS IMPOSSIBLE.
B. VITREOUS WARE: FABRICATED OF BEST QUALITY CLAY AND OTHER INGREDIENTS, COMPLYING WITH FEDERAL SPECIFICATION WW-P-541B, WITH WALL AND FLOOR FIXTURE CONTACT SURFACES GROUND TRUE. GLAZING, WHITE, THOROUGHLY FUSED, FREE FROM DISCOLORATION, CHIPS OR FLAWS AND TWICE FIRED.
C. ENAMELED WARE: FABRICATED OF BEST QUALITY CAST IRON OF NECESSARY THICKNESS TO FORM FIXTURES OF BEST GRADE, COMPLYING WITH FEDERAL SPECIFICATION WW-P-541B.
D. IRONWARE: RUBBED, ENAMELED COATING, THOROUGHLY FUSED ON, SMOOTH AND OF EVEN THICKNESS.
E. ENAMEL: ACID RESISTING, WHITE, FREE FROM DISCOLORATION, CHIPS, FLAWS, OR CRAZE. EXTERIOR VISIBLE SURFACES NOT ENAMELED SHALL BE RUBBED SMOOTH, PAINTED ONE COAT OF FILLER AT FACTORY AND ONE COAT FLAT WHITE AND ONE COAT WHITE ENAMEL AFTER BEING SET IN PLACE.
F. FIXTURES SHALL BE SO DESIGNED AND CONSTRUCTED THAT ALL PARTS ARE ACCESSIBLE FOR REPAIRS WHEN FIXTURES ARE IN PLACE. MANUFACTURER'S TRADEMARK OR NAME SHALL BE LOCATED SO THAT IT WILL NOT BE NOTICEABLE.
G. FAUCETS, TRAPS, EXPOSED FITTINGS AND TRIMMINGS SHALL BE CHROMIUM-PLATED OVER NICKEL PLATING, UNLESS OTHERWISE SPECIFIED.
H. WALL SUPPORTS SECURED TO HOLLOW TILE WALLS WITH "ANKYRA" OR TOGGLE BOLTS TO CONCRETE OR MASONRY WITH BOLTS AND IRON LEAD EXPANSION SHIELDS; WOOD PLUGS ARE NOT ACCEPTABLE. SUBMIT CUTS AND DESCRIPTIONS OF ALL FIXTURES TO ARCHITECT FOR APPROVAL.
I. PROVIDE SMOOTH CONTINUOUS BEAD OF SILICONE CAULKING WHERE FIXTURE MEETS FINISHED WALL.
J. FIXTURES AND INSTALLATION OF FIXTURES TO CONFORM TO AMERICAN'S WITH DISABILITIES ACT (ADA) REQUIREMENTS.
K. FLUSH CONTROLS FOR ADA COMPLIANT WATER CLOSETS SHALL BE INSTALLED ON THE WIDE SIDE OF THE TOILET AREA.
L. HANDICAPPED LAVATORIES: INSULATE TRAP AND SUPPLY LINES WITH TCI PRODUCTS AKAL+GAARD, TRUEBRO INC. HANDI-LAV-GUARD, MCGUIRE PRO-WRAP, OR BROCAR PRODUCTS TRAP WRAP KIT 500R OR 500HS FOR OFFSET TRAP.
M. EQUAL FIXTURES AND EQUIPMENT: (THESE MANUFACTURERS WILL BE CONSIDERED AS EQUALS TO THOSE MENTIONED IN THE FIXTURE SCHEDULE). EXCEPTION: TOILET SEATS, LAVATORY FAUCET, ELECTRIC WATER COOLER, SHOWER HEADS & VALVES.
1. FIXTURES & CONNECTED TRIM: AMERICAN STANDARD, CRANE, ELJER, MANSFIELD, SLOAN, ZURN
2. SEATS: BENEKE, BEMIS, OLSONITE, SPERZEL, ZURN
3. FAUCETS: BRADLEY, CHICAGO, DELTA, HYDROTEK, SLOAN, SPEAKMAN, T&S, ZURN.
4. HOSE BIBBS: CHICAGO, WOODFORD, ZURN
5. TRAPS, SUPPLIES, & STOPS: BRASSCRAFT, KEENEY, MAGUIRE, T&S
6. WATER COOLERS: ACORN, HALSEY-TAYLOR, HAWS, ELKAY, OASIS
7. FLUSH VALVES: DELANY, CHICAGO, HYDROTEK, SLOAN, SPEAKMAN, TOTO, ZURN
8. FIXTURE SUPPORTS: JOSAM, J.R. SMITH, WADE, WATTS, OR ZURN
9. MIXING/TEMPERING VALVES: ACORN, BRADLEY, CALEFFI, CHICAGO FAUCET, LAWLER, LEONARD, POWERS, SYMMONS, ZURN

N. REFER TO FIXTURE SCHEDULE ON SHEET P-3.

CLEANING OF PIPING SYSTEMS AND FIXTURES
A. AT THE COMPLETION OF WORK, REMOVE PROTECTION MATERIAL FROM ALL EQUIPMENT AND FIXTURES, ALL PAINT AND PLASTER SPATTERING, AND CLEAN ENTIRE PIPING SYSTEM UNDER THIS SECTION OF WORK; ALL ITEMS SHALL BE LEFT CLEAN AND READY FOR USE.

RUBBISH REMOVAL
A. REMOVE RUBBISH, PROTECTION, DIRT, DEBRIS AND TOOLS. EQUIPMENT, AND UNUSED MATERIALS FROM BUILDING AND SITE; LEAVE BUILDING AND PREMISES IN A CLEAN, ORDERLY CONDITION. SEE SUPPLEMENTARY CONDITIONS.

FINAL REQUIREMENTS
A. MATERIALS, FITTINGS, FIXTURES, ETC. NOT PARTICULARLY SPECIFIED OR SHOWN ON PLANS BUT NECESSARY TO PROVIDE A FIRST CLASS PLUMBING SYSTEM FOR THE BUILDING, MUST BE FURNISHED NOTWITHSTANDING SUCH OMISSION.

GUARANTEE
A. THIS CONTRACTOR GUARANTEES ALL WORK, NEW MATERIALS, AND APPARATUS TO OPERATE TO THE SATISFACTION OF THE OWNER AND ARCHITECT FOR ONE (1) YEAR FROM THE COMPLETION AND ACCEPTANCE OF THE SYSTEM AND MUST KEEP SAME IN REPAIR FOR SAID PERIOD, UNLESS DEFECTS ARE CLEARLY THE RESULT OF BAD MANAGEMENT AFTER APPARATUS IS OUT OF HIS CONTROL. THE GUARANTEE PERIOD SHALL START WHEN THE SYSTEM HAS BEEN ACCEPTED BY THE OWNER AND ARCHITECT AS BEING IN WORKING AND USEABLE ORDER.

END OF SECTION

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