



INTERDISCIPLINARY SCIENCE BUILDING

8274 Big Bend Blvd.
Webster University
Webster Groves, MO 63119



CONFORMED SET

01 JUL 2016
CannonDesign Project# 4561.01

CANNONDESIGN

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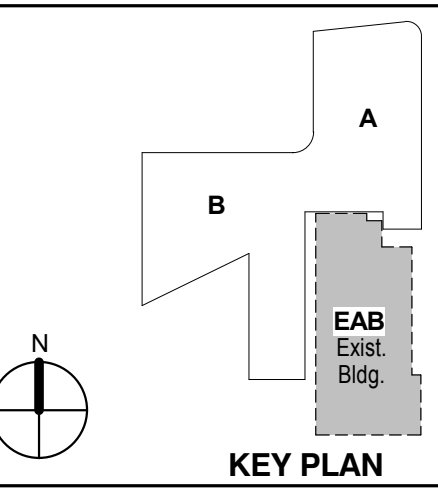
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CONFORMED SET 01 JUL 2016

1 ADDENDUM 1-6 01 MAR 2016
ISSUED FOR CONSTRUCTION (BP1) 15 JAN 2016
No. Description Date

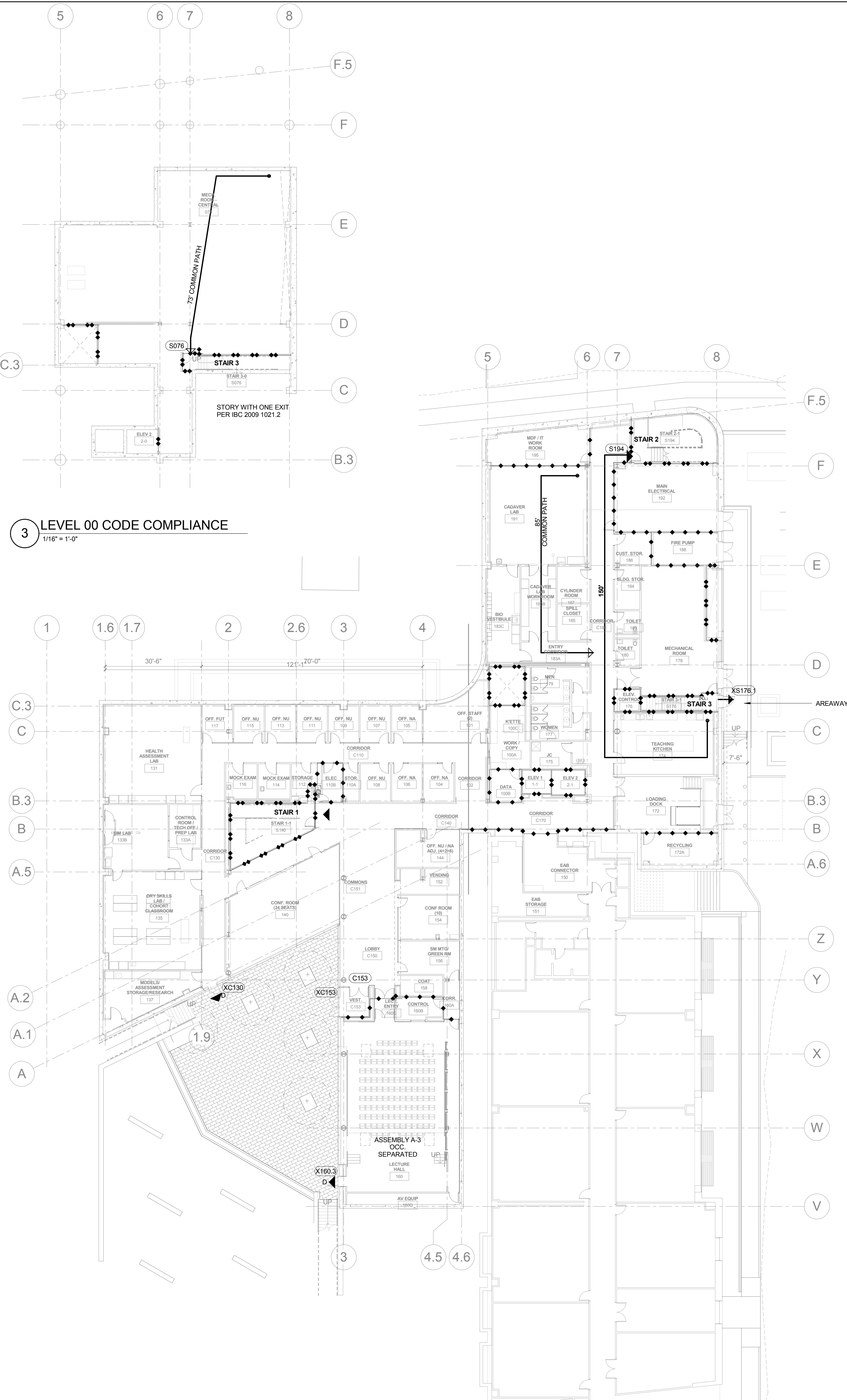


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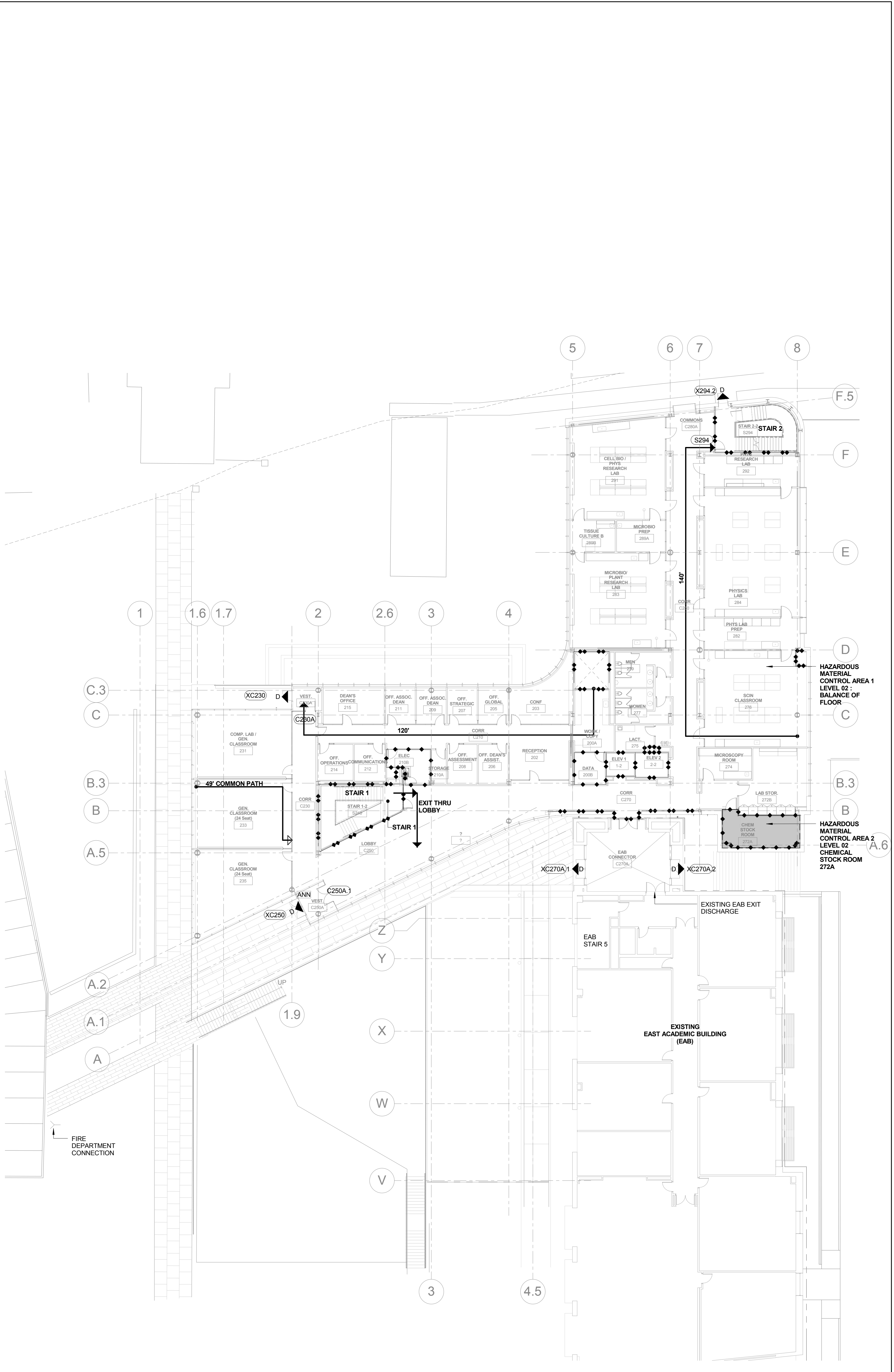
LEVEL 01 AND 02 CODE
COMPLIANCE PLAN

Project No.: 04561.01 Checked by:

G0202



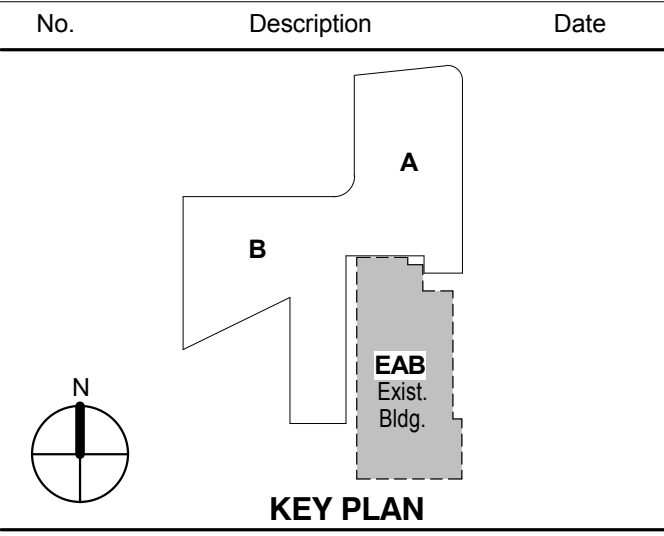
1 LEVEL 01 CODE COMPLIANCE PLAN
1/16" = 1'-0"



2 LEVEL 02 CODE COMPLIANCE PLAN
1/16" = 1'-0"

CONFORMED SET 01 JUL 2016

1 ADDENDUM 1-6 01 MAR 2016
ISSUED FOR CONSTRUCTION (BP1) 15 JAN 2016

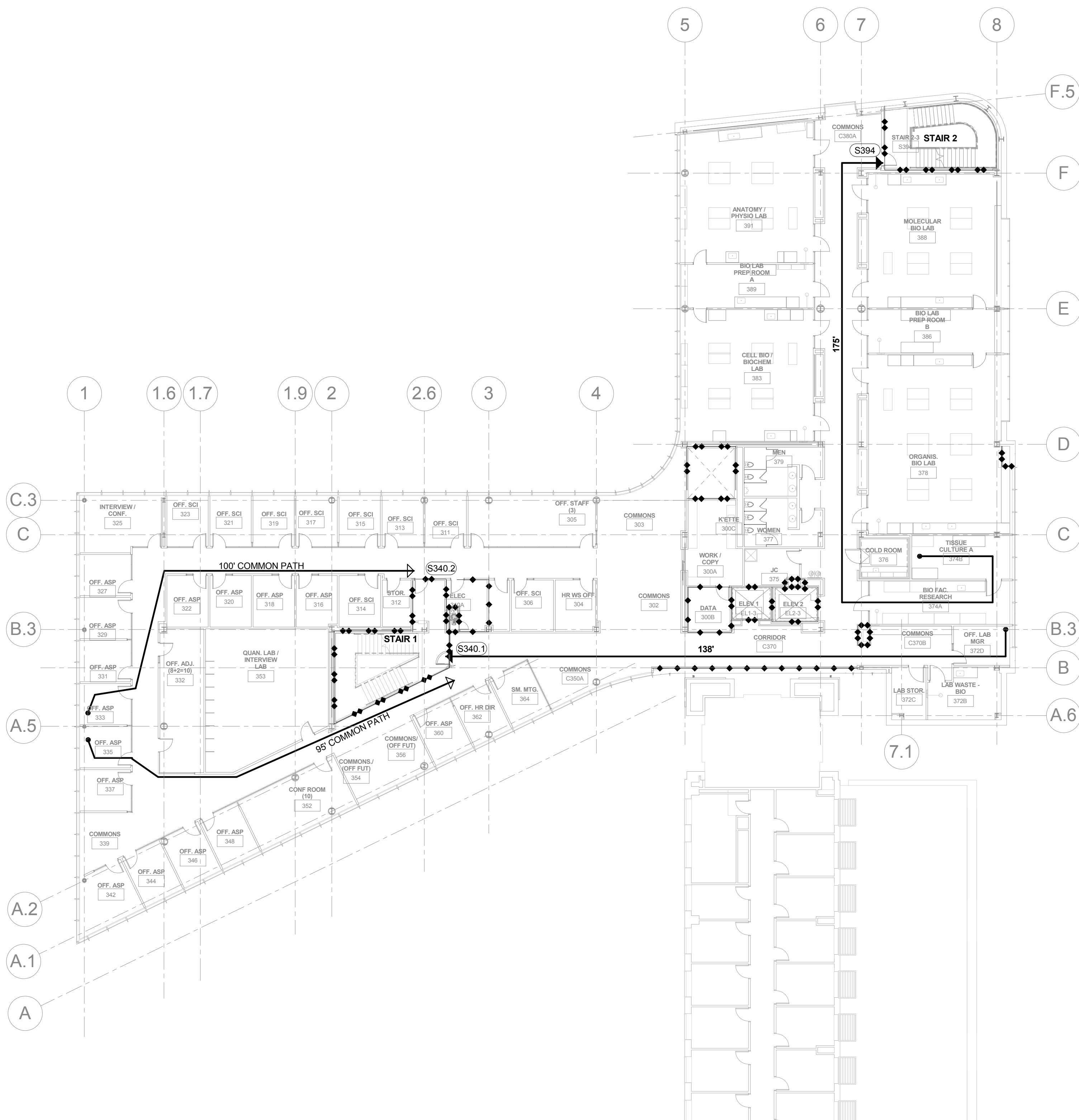


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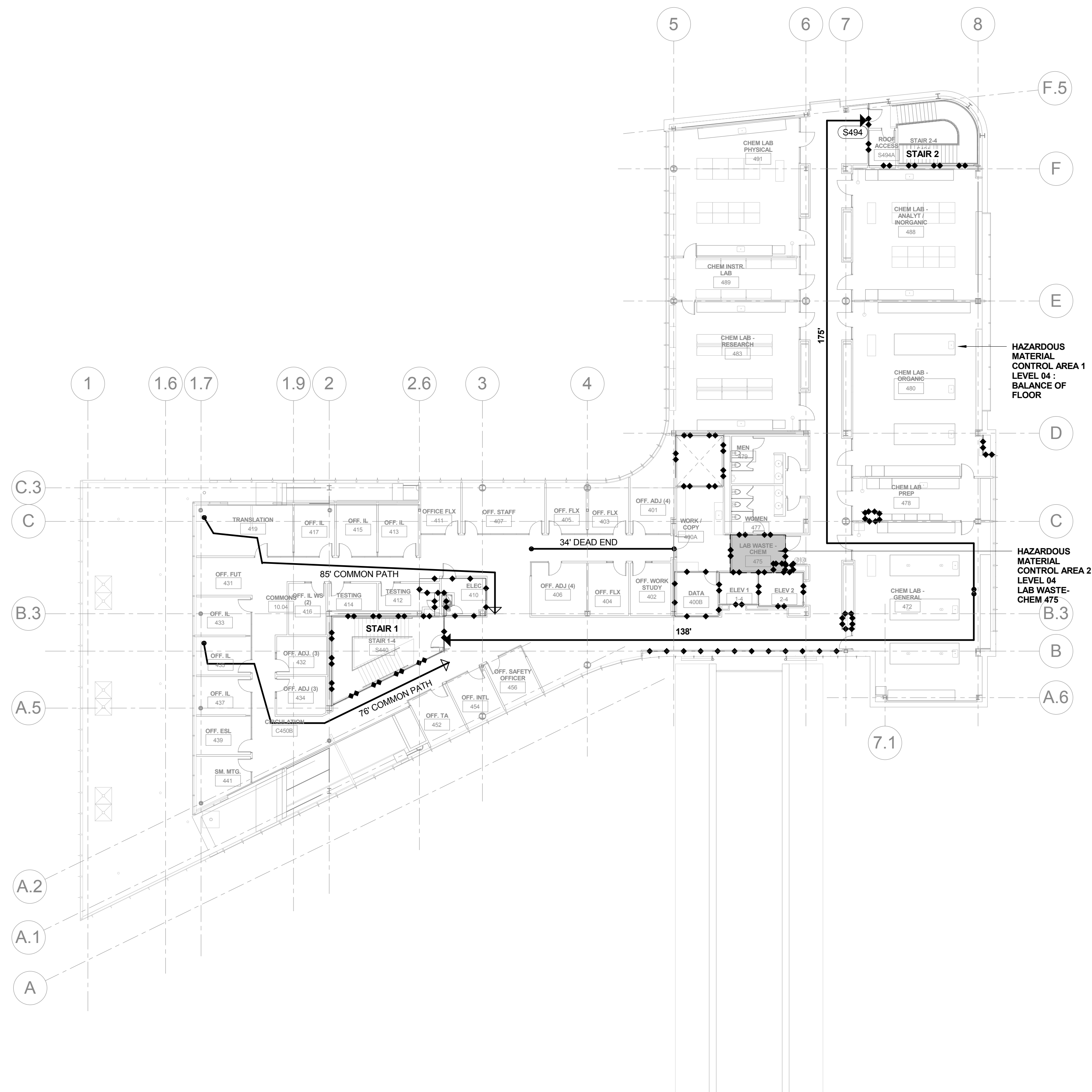
LEVEL 03 AND 04 CODE
COMPLIANCE PLAN

Project No.: 04561.01 Checked by:

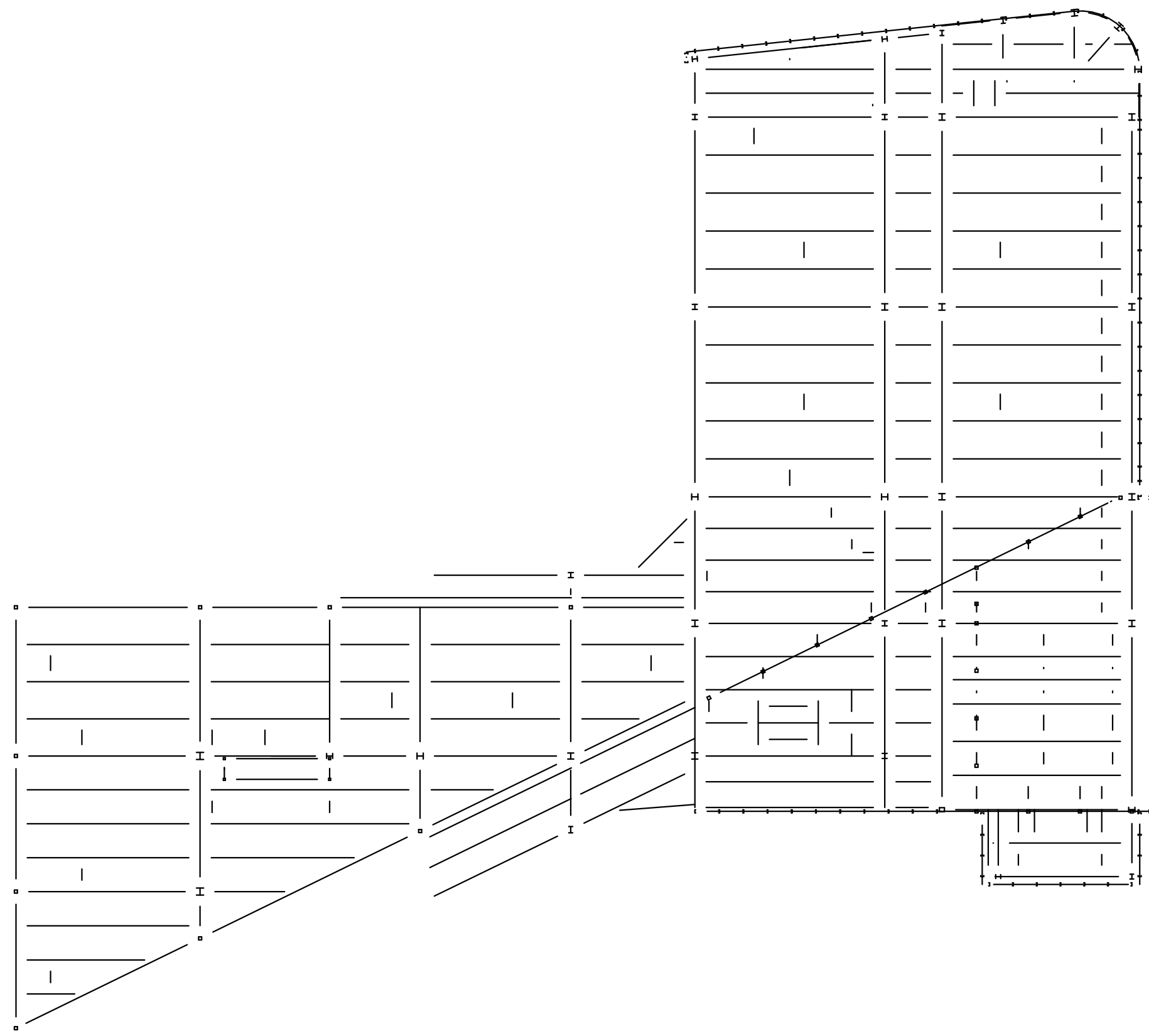
G0203



1 LEVEL 03 CODE COMPLIANCE PLAN
1/16" = 1'-0"

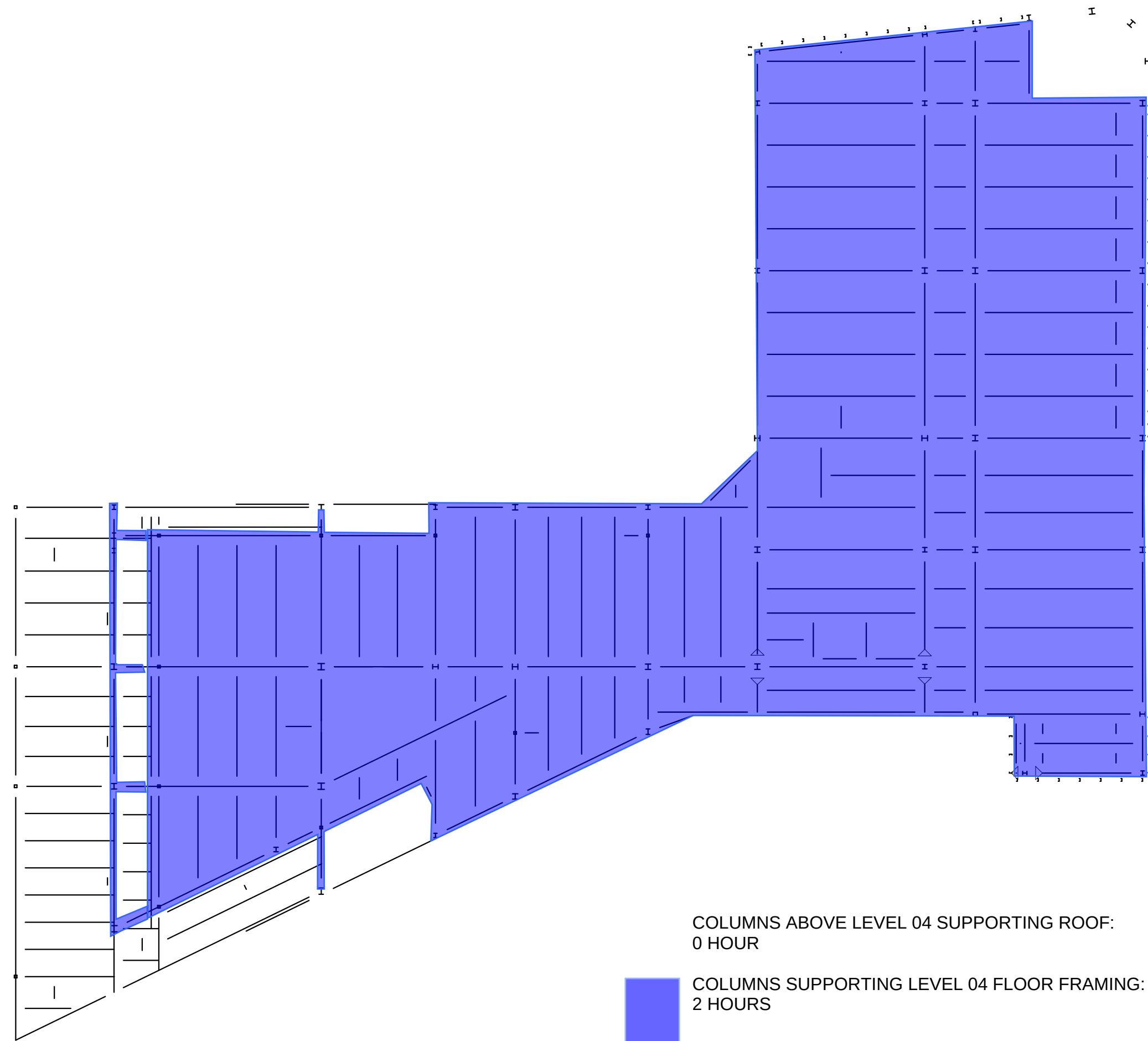


2 LEVEL 04 CODE COMPLIANCE PLAN
1/16" = 1'-0"



ROOF FRAMING AND COLUMNS
SUPPORTING ROOF: 0 HOUR

6 ROOF LEVEL FIRE PROOFING
1" = 20'-0"



COLUMNS ABOVE LEVEL 04 SUPPORTING ROOF:
0 HOUR

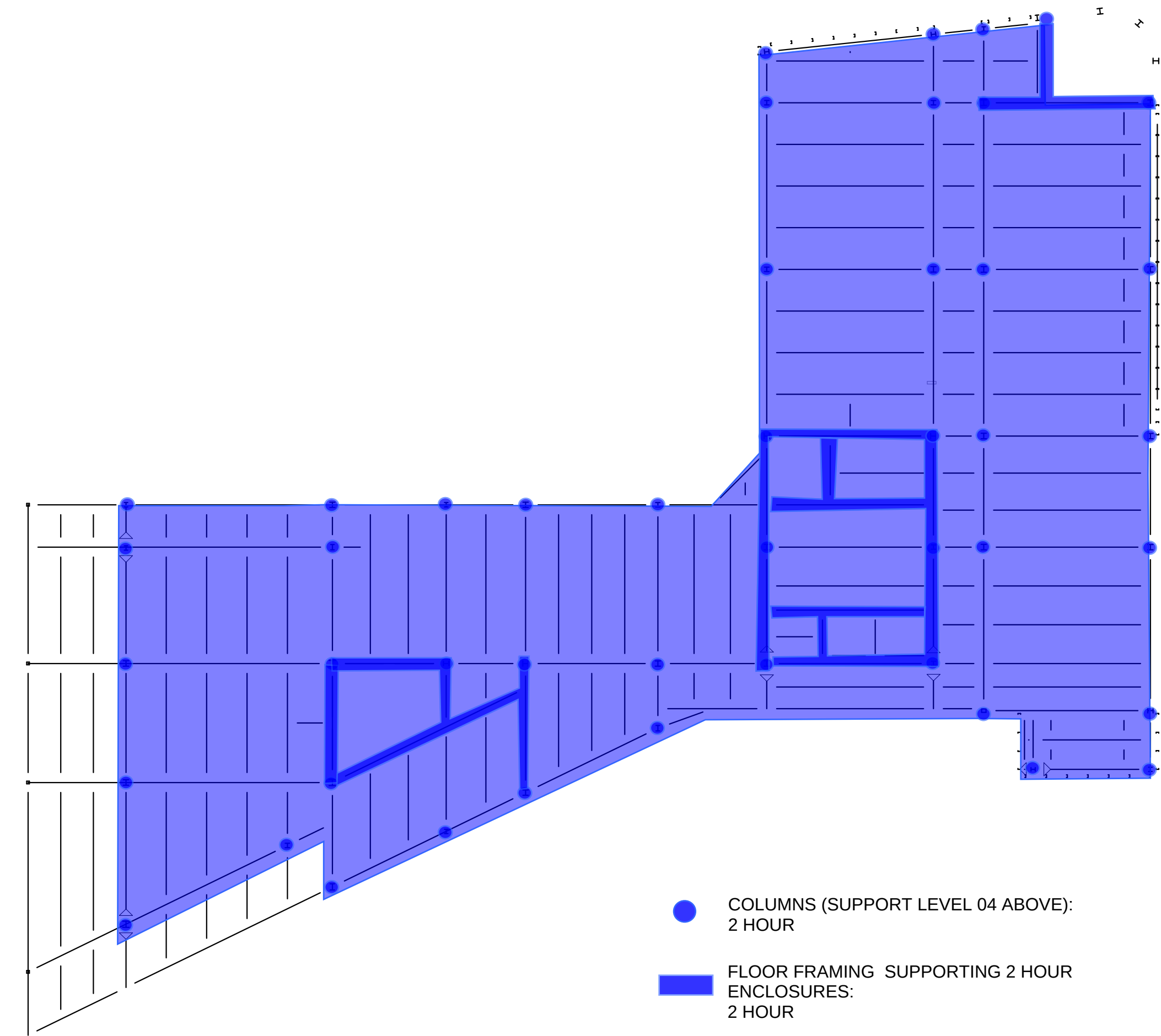
COLUMNS SUPPORTING LEVEL 04 FLOOR FRAMING:
2 HOURS

FLOOR FRAMING SUPPORTING 2 HOUR ENCLOSURES:
2 HOUR

FLOOR FRAMING SUPPORTING 2 HOUR RATED FLOOR FOR
CONTROL AREA AND CONTROL AREA SEPARATION:
2 HOUR

FLOORS: CONCRETE THICKNESS PROVIDES 2 HOUR
RATING (2 HOUR REQUIRED)

5 LEVEL 04 FIRE PROOFING
1" = 20'-0"



COLUMNS (SUPPORT LEVEL 04 ABOVE):
2 HOUR

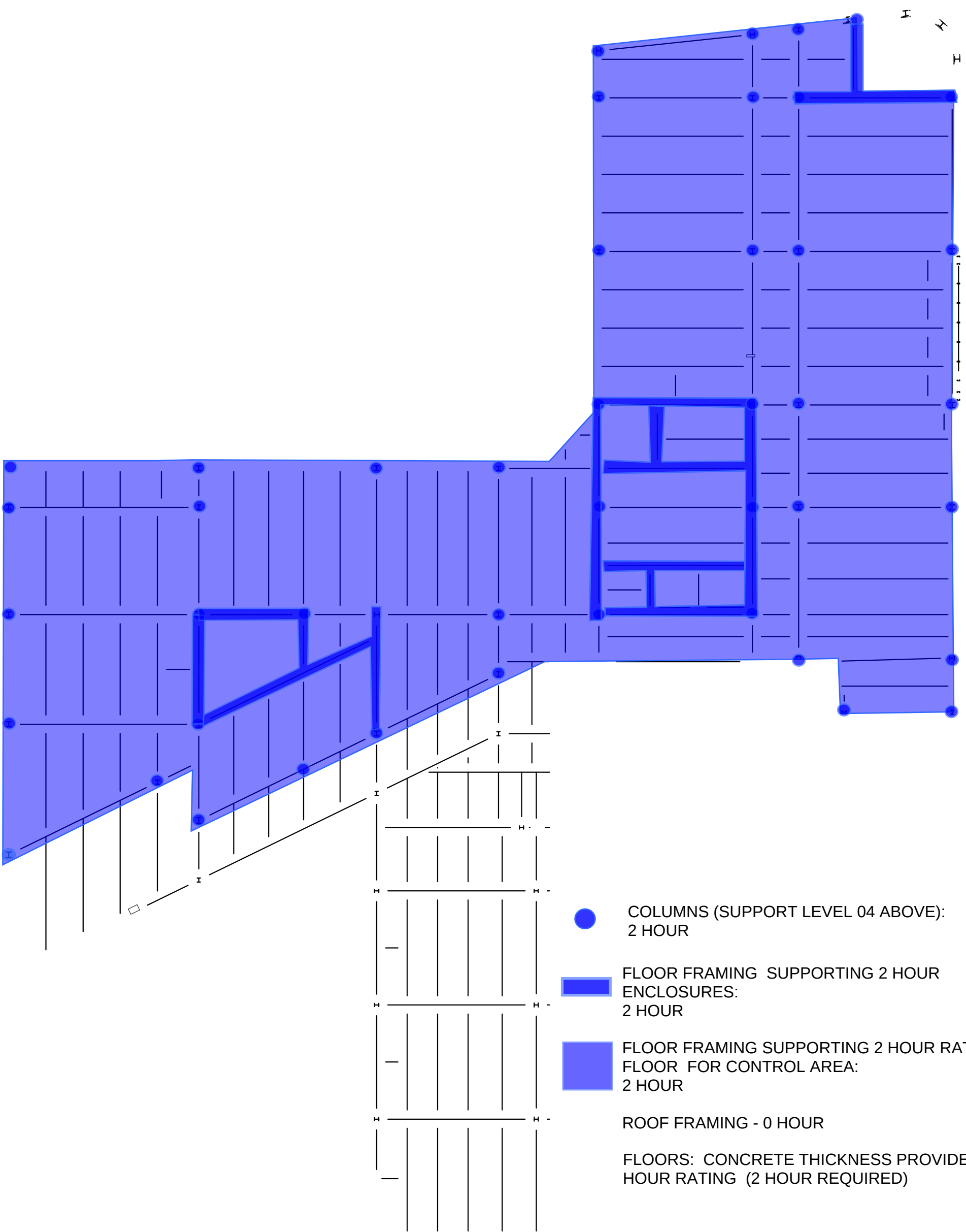
FLOOR FRAMING SUPPORTING 2 HOUR
ENCLOSURES:
2 HOUR

FLOOR FRAMING SUPPORTING 2 HOUR RATED
FLOOR FOR CONTROL AREA:
2 HOUR

FLOOR FRAMING SUPPORTING FLOOR ABOVE
EXTERIOR:
0 HOUR

FLOORS: CONCRETE THICKNESS PROVIDES 2
HOUR RATING (2 HOUR REQUIRED)

4 LEVEL 03 FIRE PROOFING
1" = 20'-0"



COLUMNS (SUPPORT LEVEL 04 ABOVE):
2 HOUR

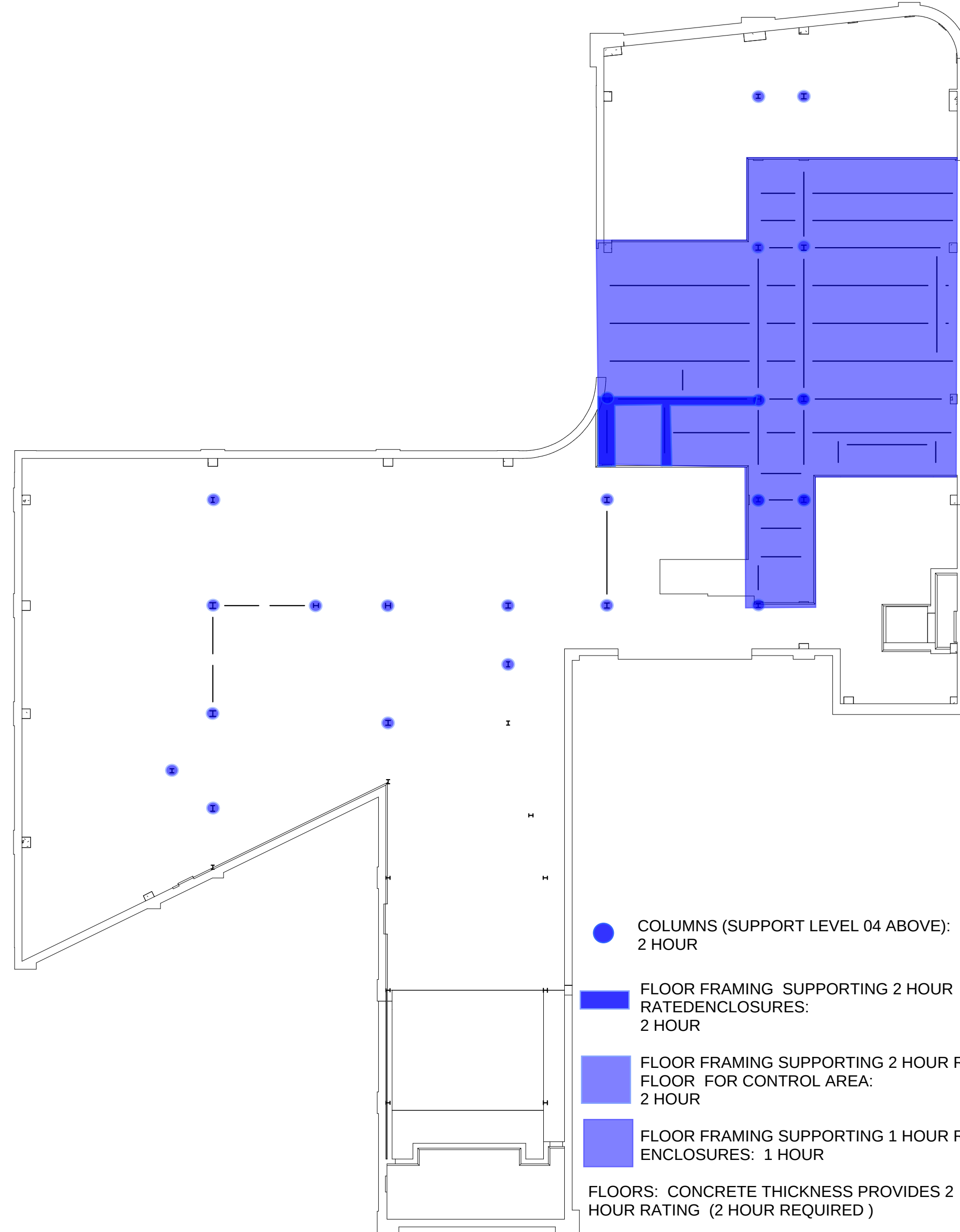
FLOOR FRAMING SUPPORTING 2 HOUR
ENCLOSURES:
2 HOUR

FLOOR FRAMING SUPPORTING 2 HOUR RATED
FLOOR FOR CONTROL AREA:
2 HOUR

ROOF FRAMING - 0 HOUR

FLOORS: CONCRETE THICKNESS PROVIDES 2
HOUR RATING (2 HOUR REQUIRED)

3 LEVEL 02 FIRE PROOFING
1" = 20'-0"



COLUMNS (SUPPORT LEVEL 04 ABOVE):
2 HOUR

FLOOR FRAMING SUPPORTING 2 HOUR
RATED ENCLOSURES:
2 HOUR

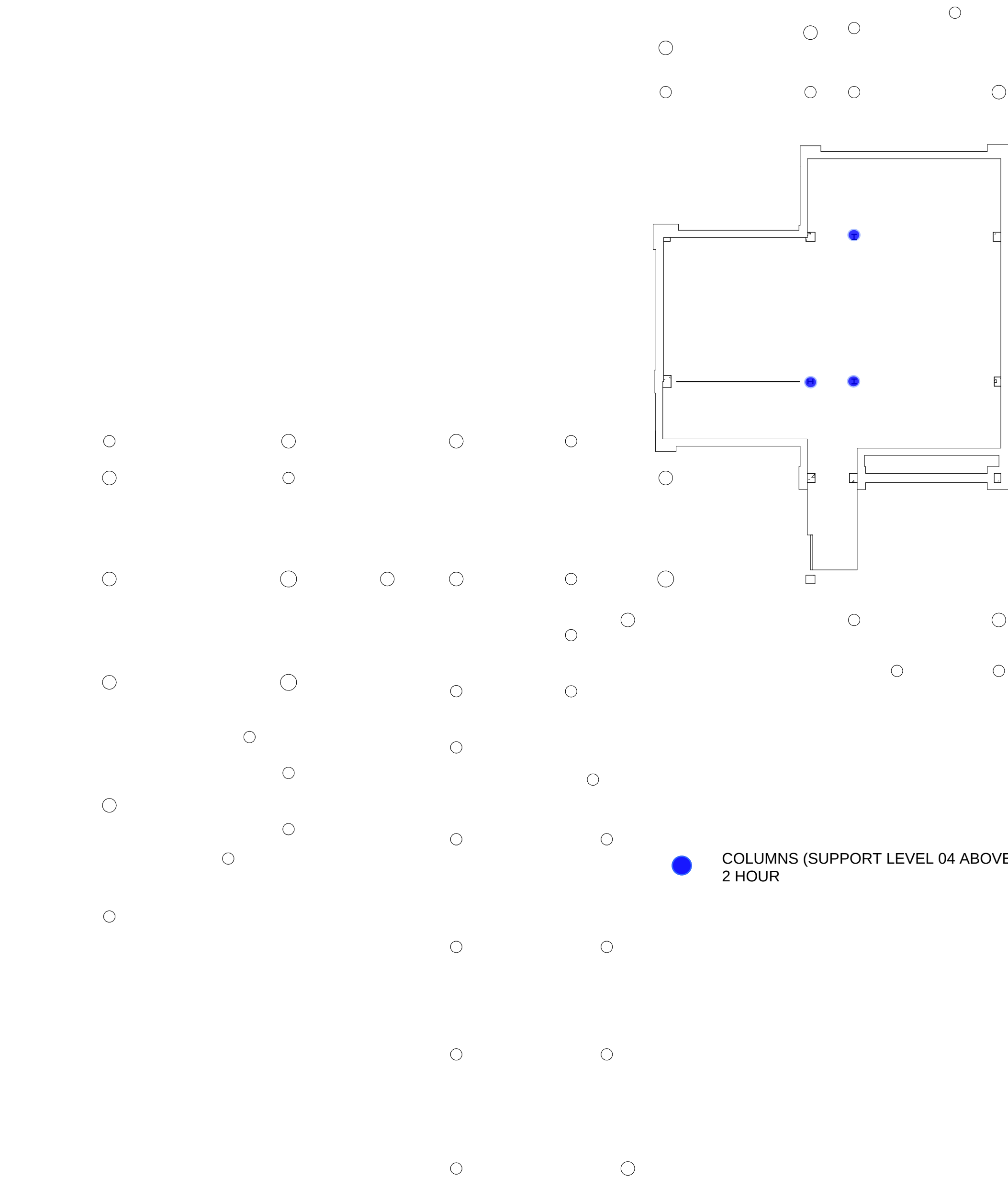
FLOOR FRAMING SUPPORTING 2 HOUR RATED
FLOOR FOR CONTROL AREA:
2 HOUR

FLOOR FRAMING SUPPORTING 1 HOUR RATED
ENCLOSURES: 1 HOUR

FLOORS: CONCRETE THICKNESS PROVIDES 2
HOUR RATING (2 HOUR REQUIRED)

CONCRETE WALLS AND COLUMNS PROVIDE 2
HOUR RATING

2 LEVEL 01 FIRE PROOFING
1" = 20'-0"

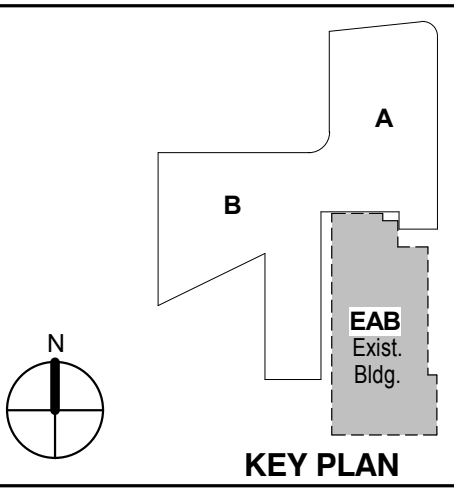


COLUMNS (SUPPORT LEVEL 04 ABOVE):
2 HOUR

1 LEVEL 00 FIRE PROOFING
1" = 20'-0"

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KEY PLAN

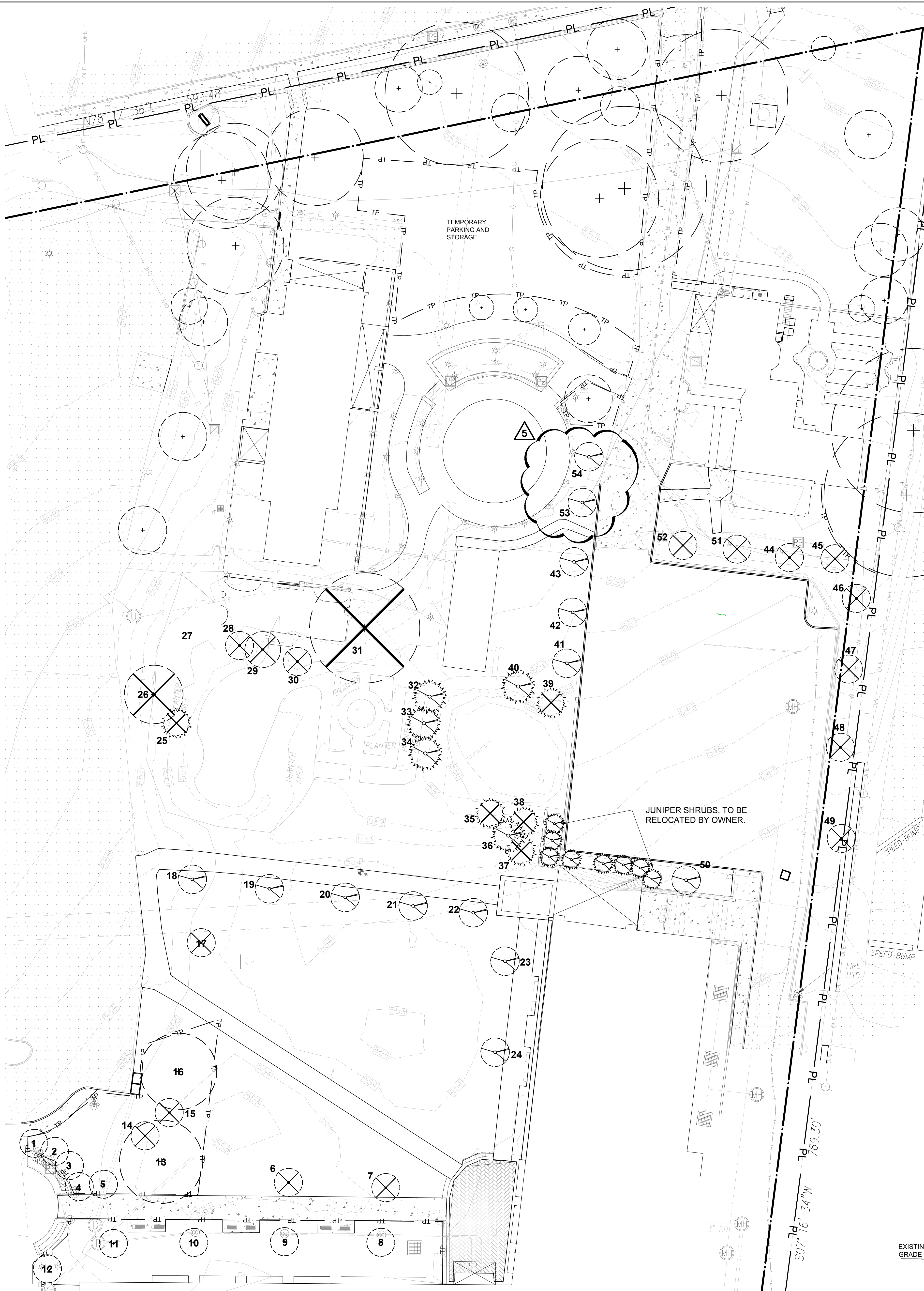
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FIRE PROOFING DIAGRAM

Project No.: 04561.01

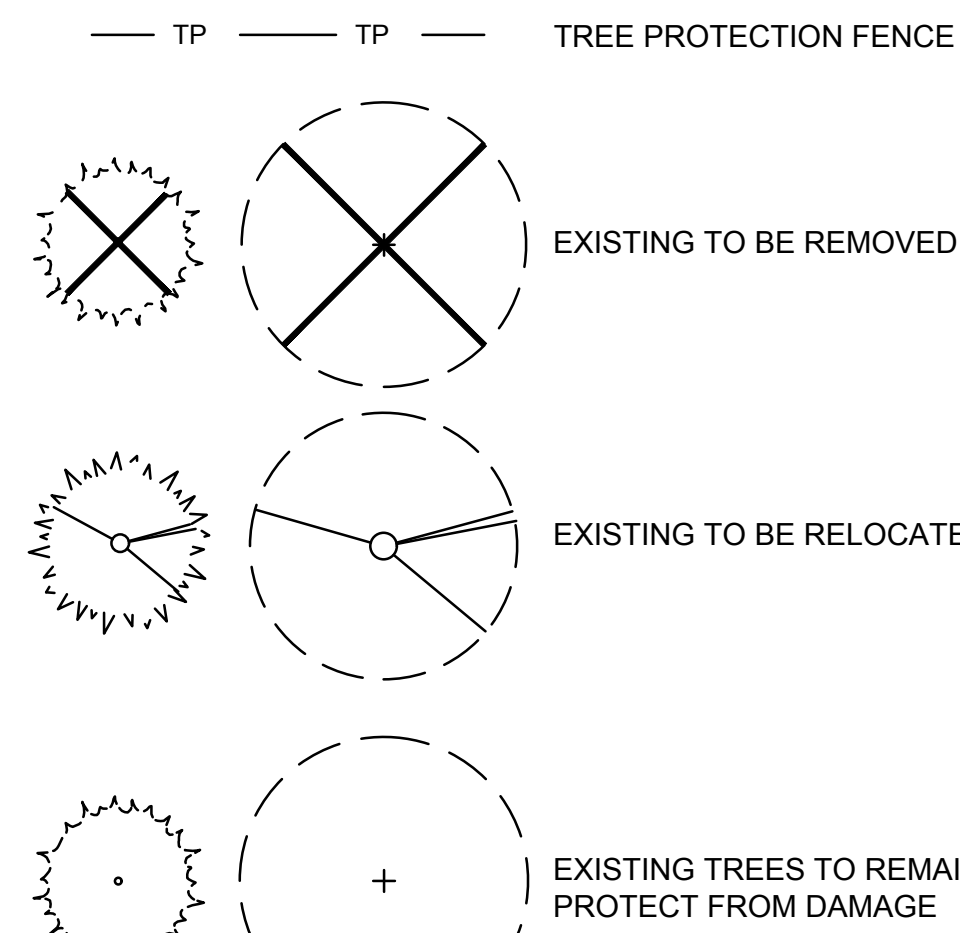
Checked by:

G0301



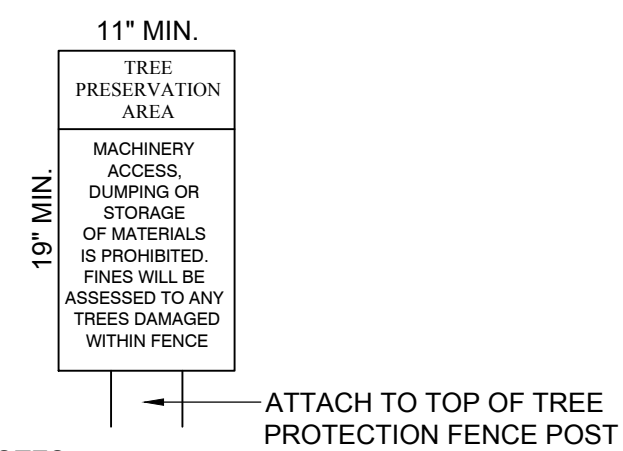
A TREE PROTECTION PLAN
SCALE: 1" = 20'

LEGEND



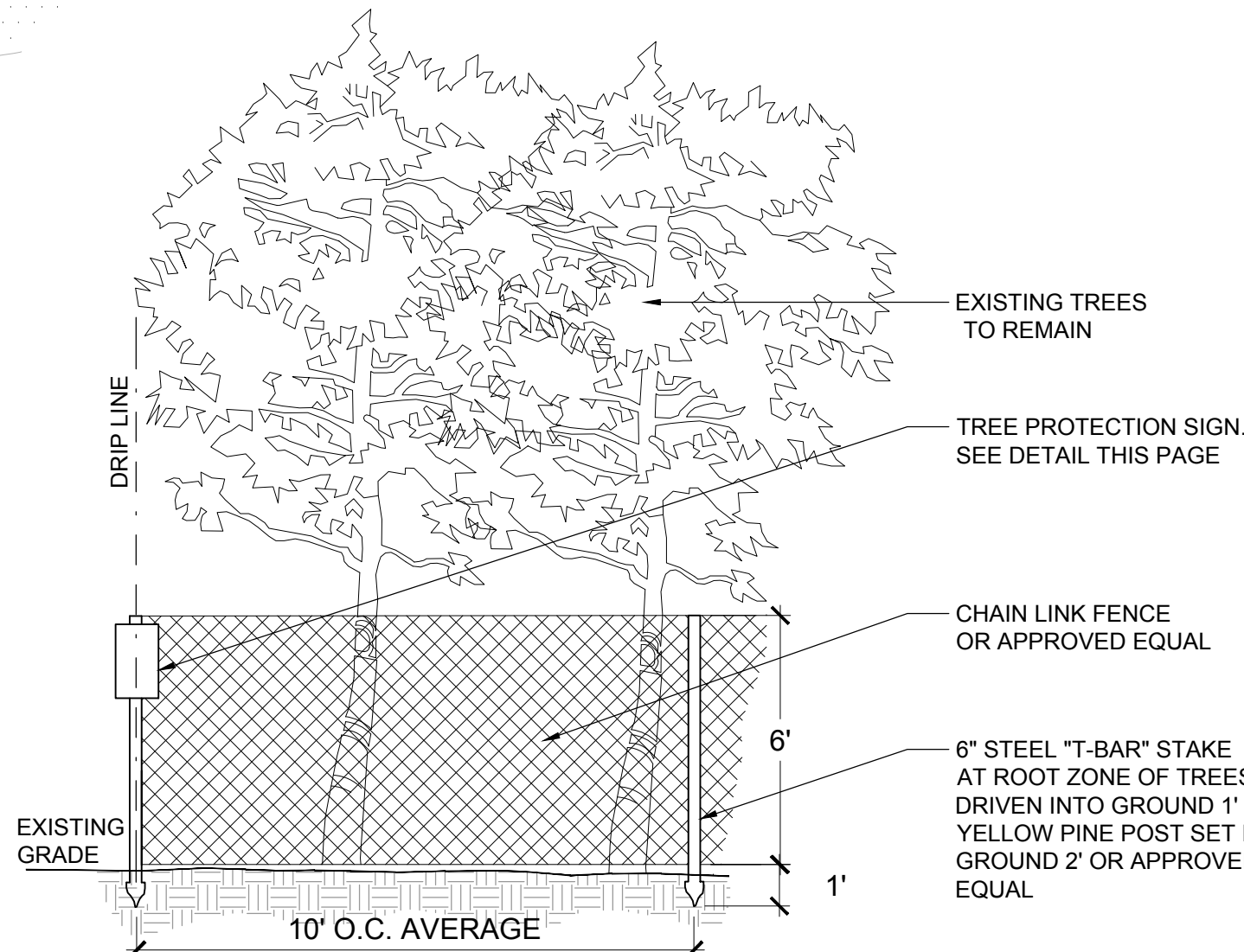
TREE PROTECTION & PRESERVATION NOTES:

- A PRE-CONSTRUCTION MEETING SHALL BE HELD ON-SITE TO EXPLAIN PROTECTION MEASURES TO OPERATORS, CONSTRUCTION SUPERVISORS, CONTRACTOR'S REPRESENTATIVES, AND THE GOVERNING AGENCY'S REPRESENTATIVE (IF NECESSARY).
- CLEARING LIMITS SHALL BE ROUGH STAKED BY CONTRACTOR IN ORDER TO FACILITATE LOCATION FOR TRENCHING AND FENCING INSTALLATION. LIMITS TO BE APPROVED BY LANDSCAPE ARCHITECT OR GOVERNING AGENCY INSPECTOR.
- NO CLEARING OR GRADING SHALL BEGIN IN AREAS WHERE TREE TREATMENT AND PRESERVATION MEASURES HAVE NOT BEEN APPROVED.
- THE SEQUENCE OF TREE TREATMENT AND PRESERVATION MEASURES SHALL BE:
 - ROOT PRUNING TRENCHING
 - TREE PROTECTION FENCING
 - SIGN INSTALLATION
 - TREE PRUNING
- ALL TREATMENT AND PRESERVATION MEASURES SHALL BE DIRECTED IN THE FIELD BY THE PROJECT LANDSCAPE ARCHITECT OR "TREE PROTECTION SUPERVISOR."
- TREE PROTECTION FENCING SHALL BE MAINTAINED AND REPAIRED BY THE CONTRACTOR FOR THE DURATION OF CONSTRUCTION. ONCE APPROVED BY THE LANDSCAPE ARCHITECT OR GOVERNING AGENCY, THE FENCE SHALL NOT BE ALTERED WITHOUT PRIOR APPROVAL BY THE LANDSCAPE ARCHITECT OR GOVERNING AGENCY'S REPRESENTATIVE.
- ACCESS TO FENCED AREAS BY EQUIPMENT, MATERIALS, OR INDIVIDUALS THAT MAY CAUSE HARM TO THE PROTECTED TREES WILL ONLY BE PERMITTED WITH THE PRIOR APPROVAL OF THE LANDSCAPE ARCHITECT OR GOVERNING AGENCY.
- TREES, SHRUBS, OR UNDERGROWTH SHALL BE REMOVED FROM PROTECTED AREAS ONLY WHEN NECESSARY AND SHALL BE PERFORMED WITH HAND TOOLS ONLY.
- ATTACHMENT OF SIGNS, FENCING, ETC. TO ANY TREE TO BE SAVED IS PROHIBITED.
- AFTER CONSTRUCTION, ALL TEMPORARY BARRIERS, FENCING, DEBRIS, ETC. SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.



- NOTES:
- TYPE SIZE SHOULD BE NO SMALLER THAN 48 PT. (1/2" HT.).
 - SIMILAR SIGNS REQUESTING SUBCONTRACTOR COOPERATION AND COMPLIANCE WITH TREE PROTECTION STANDARDS ARE RECOMMENDED AT THE SITE ENTRANCE.
 - SIGNS SHOULD BE PLACED AT A DISTANCE NOT TO EXCEED 50'

C TREE PROTECTION SIGN
SCALE: 1"=4"



B TYPICAL TREE PROTECTION
SCALE: 1"=4"

TREES TO REMAIN							
KEY	SPECIES	SIZE	ADJUSTED SIZE	LANDMARK	SPECIES FACTOR	CONDITION FACTOR	LOCATION FACTOR
1	JAPANESE MAPLE	3" CAL.	2.6" CAL.	N	70	88	70
2	JAPANESE MAPLE	3" CAL.	2.6" CAL.	N	70	88	70
3	JAPANESE MAPLE	3" CAL.	2.6" CAL.	N	70	88	70
4	JAPANESE MAPLE	3" CAL.	2.6" CAL.	N	70	88	70
5	BOWHALL MAPLE	3" CAL.	2.3" CAL.	N	60	78	70
8	BOWHALL MAPLE	4" CAL.	3.4" CAL.	N	60	84	70
9	BOWHALL MAPLE	4" CAL.	3.6" CAL.	N	60	91	70
10	BOWHALL MAPLE	3.5" CAL.	3.2" CAL.	N	60	91	70
11	BOWHALL MAPLE	3" CAL.	2.4" CAL.	N	60	81	70
12	BOWHALL MAPLE	3" CAL.	3.1" CAL.	N	60	88	70
13	PIN OAK	18" CAL.	13.5" CAL.	N	90	75	70
16	PIN OAK	18" CAL.	12.9" CAL.	N	90	72	70

TREES TO BE RELOCATED BY OWNER (PLANTED AS PART OF EAB)							
KEY	SPECIES	SIZE	ADJUSTED SIZE	LANDMARK	SPECIES FACTOR	CONDITION FACTOR	LOCATION FACTOR
18	YELLOWWOOD	1.5" CAL.	1.3" CAL.	N	80	88	70
19	YELLOWWOOD	1.5" CAL.	1.3" CAL.	N	80	88	70
20	YELLOWWOOD	1.5" CAL.	1.3" CAL.	N	80	88	70
21	YELLOWWOOD	1" CAL.	0.9" CAL.	N	80	88	70
22	YELLOWWOOD	1" CAL.	0.9" CAL.	N	80	88	70
23	YELLOWWOOD	1.5" CAL.	1.3" CAL.	N	80	88	70
24	YELLOWWOOD	1.5" CAL.	1.3" CAL.	N	80	88	70
32	NORWAY SPRUCE	3" CAL.	2.8" CAL.	N	90	94	70
33	NORWAY SPRUCE	3" CAL.	2.8" CAL.	N	90	94	70
34	NORWAY SPRUCE	3" CAL.	2.8" CAL.	N	90	94	70
35	NORWAY SPRUCE	4" CAL.	3.3" CAL.	N	90	94	70
40	NORWAY SPRUCE	3.5" CAL.	3.3" CAL.	N	90	94	70
41	BLACK GUM	3.5" CAL.	3.2" CAL.	N	90	91	70
42	BLACK GUM	3.5" CAL.	3.2" CAL.	N	90	91	70
43	SWAMP OAK	4.5" CAL.	4.1" CAL.	N	90	91	70
50	YELLOWWOOD	2" CAL.	1.8" CAL.	N	80	88	70
53	SWAMP OAK	4.5" CAL.	4.1" CAL.	N	90	91	70
54	MAGNOLIA	2" CAL.	1.8" CAL.	N	80	88	70

TREE CALIPER TO BE RELOCATED*

* RELOCATED BY OWNER UNDER SEPARATE CONTRACT TO DIFFERENT LOCATIONS AROUND WEBSTER UNIVERSITY CAMPUS. SEE RELOCATION MAP AVAILABLE FROM OWNER.

TREES TO BE REMOVED THAT WERE REQUIRED AS PART OF EAB							
KEY	SPECIES	SIZE	ADJUSTED SIZE	LANDMARK	SPECIES FACTOR	CONDITION FACTOR	LOCATION FACTOR
6	BOWHALL MAPLE	3" CAL.	2.8" CAL.	N	60	94	70
7	BOWHALL MAPLE	3.5" CAL.	2.8" CAL.	N	60	81	70
36	NORWAY SPRUCE	4" CAL.	3.1" CAL.	N	90	78	70
37	NORWAY SPRUCE	4" CAL.	3.1" CAL.	N	90	78	70
38	NORWAY SPRUCE	4" CAL.	3.1" CAL.	N	90	78	70
39	NORWAY SPRUCE	3.5" CAL.	2.7" CAL.	N	90	78	70
44	RED MAPLE	3.5" CAL.	3.2" CAL.	N	90	91	70
45	RED MAPLE	3.5" CAL.	3.2" CAL.	N	90	91	70
47	SWAMP OAK	3.5" CAL.	3.2" CAL.	N	90	91	70
48	SWAMP OAK	3.5" CAL.	3.2" CAL.	N	90	91	70
51	RED MAPLE	3.5" CAL.	3.2" CAL.	N	90	91	70
52	RED MAPLE	3.5" CAL.	3.2" CAL.	N	90	91	70

TREE CALIPER TO BE REMOVED AND REPLACED

TREES TO BE REMOVED LESS THAN 8" CAL. AND NOT VALUED TREES							
KEY	SPECIES	SIZE	ADJUSTED SIZE	LANDMARK	SPECIES FACTOR	CONDITION FACTOR	LOCATION FACTOR
14	RED MAPLE	6" CAL.	N/A	N	90	78	70
15	SILVER MAPLE	5" CAL.	N/A	N	60	94	70
25	JUNIPER	4" CAL.	N/A	N	60	94	70
26	PIN OAK	7.5" CAL.	N/A	N	90	94	70
27	AMERICAN HOLLY	6" CAL.	N/A	N	70	56	70
28	CRABAPPLE	6" CAL.	N/A	N	75	72	70
29	COLORADO SPRUCE	7" CAL.	N/A	N	90	81	70
30	FLOWERING DOGWOOD	4" CAL.	N/A	N	90	78	70

TREE CALIPER TO BE REMOVED

REQUIRED CALIPER INCH TO BE REPLACED

VALUED TREES TO BE REMOVED							
KEY	SPECIES	SIZE	ADJUSTED SIZE	LANDMARK	SPECIES FACTOR	CONDITION FACTOR	LOCATION FACTOR
17	SHINGLE OAK	24" CAL.	14.3" CAL.	N	80	59	70
46	SAUCER MAGNOLIA	8" CAL.	4.8" CAL.	N	90	59	70
49	BLACK OAK	30" CAL.	15.9" CAL.	N	80	53	70
31	RIVER BIRCH	30" CAL.	24.4" CAL.	N	80	81	70

TREE CALIPER TO BE REMOVED

ADJUSTED TREE CALIPER INCHES TO BE REMOVED

REQUIRED CALIPER INCH TO BE REPLACED (50% OF ADJUSTED SIZE TO BE REMOVED)

TOTAL TREE CALIPER TO BE REMOVED

TOTAL TREE CALIPER TO BE REPLACED

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GENERAL NOTES

GENERAL NOTES

- EXISTING TOPOGRAPHIC CONDITIONS, CONTOURS, AND ELEVATIONS ARE BASED UPON A SURVEY PERFORMED BY GPS JANUARY OF 2015. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER IN WRITING IF EXISTING CONDITIONS DIFFER FROM THAT SHOWN ON THE PLANS, AND TO WHAT EXTENT THE CONSTRUCTION IS AFFECTED.
- DO NOT SCALE DRAWINGS. USE DIMENSIONS SHOWN. ANY DISCREPANCY SHALL BE REPORTED IMMEDIATELY TO THE CONSTRUCTION MANAGER.
- ALL REFERENCES TO THE CONSTRUCTION MANAGER SHALL MEAN REPRESENTATIVE OF WEBSTER UNIVERSITY.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS TO ACCOMPLISH THIS WORK. THE COST OF ALL PERMITS SHALL BE INCLUDED IN THE CONTRACT BID AMOUNT.
- SITE DIMENSIONS ARE TO FACE OF CURB, PROPERTY LINE OR FACE OF BUILDING UNLESS OTHERWISE NOTED. ALL DIMENSIONS AND RADII TO OR FROM CURB LINES ARE TO FACE OF CURB.
- CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SURVEY OR PROPERTY MARKERS AND MONUMENTS. ANY MARKERS OR MONUMENTS THAT ARE REMOVED OR DISTURBED BY THE CONTRACTOR'S ACTIONS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE BY A REGISTERED LAND SURVEYOR IN THE STATE OF MISSOURI.
- DO NOT DISTURB ANY UTILITIES UNLESS NOTED OTHERWISE.
- BURNING ON-SITE WILL NOT BE PERMITTED.
- CONSTRUCTION SIGNS, LIGHTS, AND BARRICADES SHALL BE INSTALLED AND MAINTAINED AT LOCATIONS NECESSARY TO MAINTAIN A SAFE WORK SITE CONDITION AS DIRECTED/APPROVED BY THE CONSTRUCTION MANAGER, AND IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.), LATEST EDITION.
- ALL CONSTRUCTION ACTIVITIES TO COMPLY WITH APPLICABLE OSHA REGULATIONS.
- ALL GROUND SURFACES OUTSIDE OF THE CONSTRUCTION LIMITS DISTURBED BY CONSTRUCTION SHALL BE RESTORED TO ITS ORIGINAL CONDITION.
- HORIZONTAL AND VERTICAL CONTROL POINTS REMOVED OR DISTURBED DURING CONSTRUCTION SHALL BE RESET BY A LAND SURVEYOR REGISTERED IN THE STATE OF MISSOURI AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL CONTROL DUST BY SPRINKLING OF WATER OR ANY OTHER NECESSARY MEANS APPROVED BY THE CONSTRUCTION MANAGER AND THE CITY OF WEBSTER GROVES.
- ALL CONSTRUCTION TO COMPLY WITH THE CITY OF WEBSTER GROVES STANDARDS.
- ALL SIDEWALKS TO BE CONSTRUCTED TO THE CITY OF WEBSTER GROVES, AND ADA STANDARDS. IN THE EVENT OF A CONFLICT THE MOST STRINGENT CRITERIA APPLIES.
- STORMWATER TO BE DISCHARGED TO AN ADEQUATE NATURAL DISCHARGE POINT. SINKHOLES ARE NOT ADEQUATE NATURAL DISCHARGE POINTS. IF THE CONTRACTOR ENCOUNTERS A SINKHOLE HE SHALL IMMEDIATELY NOTIFY THE CONSTRUCTION MANAGER FOR DIRECTION.
- THE CONTRACTOR WILL BE PROVIDED WITH ELECTRONIC FILES OF THE PLANS IN AutoCAD (RELEASE 2013) FORMAT FOR USE IN LAYING OUT THE WORK. THE LAYOUT COORDINATES SHOWN HEREON ARE PROVIDED FOR OVERALL HORIZONTAL AND VERTICAL CONTROL. ADDITIONAL POINTS REQUIRED TO LAYOUT THE WORK SHALL BE CALCULATED BY THE CONTRACTOR AS REQUIRED AT HIS EXPENSE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES WITH THE INFORMATION PROVIDED HEREON PRIOR TO CONSTRUCTION OF THE IMPROVEMENTS.
- PRIOR TO OBTAINING A CONSTRUCTION PERMIT FROM THE METROPOLITAN ST. LOUIS SEWER DISTRICT, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE THE DISTRICT WITH A COPY OF AN EXECUTED CERTIFICATE OF INSURANCE INDICATING THAT THE PERMITEE HAS OBTAINED AND WILL CONTINUE TO CARRY COMMERCIAL GENERAL LIABILITY AND COMPREHENSIVE AUTO LIABILITY INSURANCE. THE REQUIREMENTS AND LIMITS SHALL BE AS STATED IN THE "RULES AND REGULATIONS AND ENGINEERING DESIGN REQUIREMENTS FOR SANITARY AND STORMWATER DRAINAGE FACILITY", SECTION 10.090 (ADDENDUM).

SITE DEMOLITION NOTES

- THE APPROPRIATE UTILITY AGENCY SHALL BE NOTIFIED PRIOR TO THE COMMENCEMENT OF ANY WORK WHICH WILL AFFECT AN EXISTING UTILITY.
- REMOVAL AND/OR ABANDONMENT OF EXISTING SEWERS SHALL BE IN ACCORDANCE WITH THE STANDARD CONSTRUCTION SPECIFICATIONS FOR SEWER AND DRAINAGE FACILITIES OF THE METROPOLITAN ST. LOUIS SEWER DISTRICT, 2009 EDITION.
- HAUL ROUTE APPROVAL SHALL BE OBTAINED FROM THE CONSTRUCTION MANAGER AND CITY OF WEBSTER GROVES PRIOR TO THE COMMENCEMENT OF HAULING.
- IN REMOVING PAVEMENT, CURB, GUTTER, SIDEWALKS AND OTHER SIMILAR IMPROVEMENTS AND WHERE A PORTION OF SUCH IMPROVEMENTS ARE TO BE LEFT IN PLACE, THEY SHALL BE REMOVED TO AN EXISTING JOINT OR SAWCUT AT LIMITS OF REMOVAL.
- ALL EXISTING SIGNAGE SHALL BE PROTECTED, OR REMOVED AND REINSTALLED AT A LOCATION IDENTIFIED BY THE OWNER UNLESS NOTED OTHERWISE ON THE PLANS. THE CONSTRUCTION MANAGER SHALL APPROVE THE FINAL LOCATION OF ALL SIGNAGE. THE CONTRACTOR SHALL REPLACE, AT HIS EXPENSE, ANY SIGNS DAMAGED OR LOST DURING REMOVAL, STORAGE AND RESETING.
- ALL CONDUIT, DUCTS, FITTINGS, VALVES, AND OTHER DEBRIS RESULTING FROM THE DEMOLITION OF UTILITIES SHALL BE REMOVED AND DISPOSED OF OFF SITE.
- ALL DEBRIS RESULTING FROM THE DEMOLITION OF PAVEMENTS, CURBING, STRUCTURES, FOUNDATIONS AND FOOTINGS SHALL BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF UNLESS NOTED OTHERWISE IN THE PROJECT SPECIFICATIONS.
- REMOVE ALL SIGNS, POSTS AND FOOTINGS WITHIN LIMITS OF CONSTRUCTION, STORE AND RESET WITH NEW POSTS AND FOOTINGS AT A LOCATION DESIGNATED BY THE OWNER OR THEIR REPRESENTATIVE AS SITE WORK IS BEING COMPLETED.

SITE ADDRESS: 8274 BIG BEND, ZIP CODE 63119

STORMWATER MANAGEMENT NOTE:
LAND AREA DISTURBED = 2.00 ACRES
(OVERLAP WITH P-28874-00 = 1.17 ACRES)

ANY FUTURE LAND DISTURBANCE AND/OR INCREASE IN IMPERVIOUS AREA ON THIS SITE MAY REQUIRE ADDITIONAL STORM WATER MANAGEMENT PER MSD REGULATIONS IN PLACE AT THAT TIME.

GENERAL NOTES

EXCAVATION/GRADING NOTES

- DAMAGE TO OFF-SITE STREETS AND PROPERTIES DUE TO SOIL EROSION OR SILTATION SHALL BE PREVENTED BY ERECTING SILT BARRIERS OR BASINS, OR BY UTILIZING SIMILAR DEVICES TO EFFECT SOIL STABILIZATION. INSPECTION OF AND NECESSARY REPAIRS MADE TO THE EROSION CONTROL MEASURES MUST BE MADE DAILY FOLLOWING PERIODS OF PRECIPITATION, AND/OR AS DIRECTED BY THE CONSTRUCTION MANAGER. ADDITIONAL EROSION CONTROL MEASURES SHALL BE AT THE DISCRETION OF THE CITY OF WEBSTER GROVES.
- ALL TRENCHES UNDER, OR ADJACENT (WITHIN 3 FEET) TO PROPOSED PAVEMENT OR SIDEWALKS SHALL BE BACKFILLED TO SUBGRADE ELEVATION WITH MoDOT TYPE 5 CRUSHED LIMESTONE. CRUSHED LIMESTONE SHALL BE COMPACTED AS REQUIRED BY THE PROJECT SPECIFICATIONS.
- ELEVATIONS AND CONTOURS SHOWN ARE TO TOP OF FINISHED GROUND OR PAVED SURFACE, UNLESS NOTED OTHERWISE.
- ALL TRASH, DEBRIS, ORGANIC MATERIAL, REFUSE, FROZEN EARTH, ETC., SHALL BE REMOVED FROM FILL AREAS PRIOR TO THE PLACEMENT OF CONTROLLED FILL. ALL FILLS AND BACKFILLS SHALL BE MADE OF SELECTED EARTH MATERIALS, FREE FROM BROKEN MASONRY, ROCK, FROZEN EARTH, RUBBISH, ORGANIC MATERIAL AND DEBRIS.
- CARE SHALL BE EXERCISED IN COMPACTION OF BACKFILL MATERIALS OVER THE TOP OF STRUCTURES OR PIPES IN ORDER TO PREVENT DAMAGE TO THE WATERPROOFING MEMBRANES, JOINTS, SEALS, AND/OR THE PIPES AND STRUCTURES THEMSELVES.
- SILTATION CONTROL SHALL INCLUDE TEMPORARY BERMS AND SWALES TO DIVERT STORM WATER RUN-OFF TO A CONTROLLED DISCHARGE POINT. SILTATION CONTROL DEVICES SHALL BE PLACED AT ALL DISCHARGE POINTS TO PROTECT ADJACENT PROPERTY AND RIGHT-OF-WAYS. UPON COMPLETION OF STORM SEWERS, STRAW BALES SHALL BE PLACED ON ALL SIDES OF INLET STRUCTURES TO KEEP SILT OUT OF STORM SEWER. SILTATION CONTROL DEVICES SHALL BE SECURELY ANCHORED AND PROPERLY MAINTAINED UNTIL ALL DISTURBED AREAS ARE PAVED OR TURF HAS BEEN ESTABLISHED.
- GRADING AND DRAINAGE PER THE CITY OF WEBSTER GROVES, MoDOT, AND MSD STANDARDS.
- SLOPE SHALL NOT EXCEED 3 (HORIZONTAL) : 1 (VERTICAL), UNLESS SUPPORTED BY GEOTECHNICAL REPORT.
- THE CONTRACTOR SHALL PROVIDE A 50' WIDE BY 100' LONG VEHICLE WASH DOWN AREA ADJACENT TO THE LOCATION WHERE THE ACCESS ROAD LEAVES THE SITE. THE CONTRACTOR IS ALSO RESPONSIBLE FOR CONTROLLING AND MITIGATING ANY PETROLEUM AND OTHER CONTAMINANTS THAT MAY RESULT FROM THE WASH DOWN PROCESS. IF ANY MUD AND/OR DEBRIS STILL GETS TRACKED ONTO THE ROADS, THE CONTRACTOR IS ALSO RESPONSIBLE FOR IMMEDIATELY CLEANING THE ROAD OF ANY MATERIAL RESULTING FROM THIS OPERATION. STORMWATER POLLUTION PREVENTION PLAN SHALL BE ADHERED TO AT ALL TIMES BY ALL CONTRACTORS WORKING ON THE SITE. FAILURE TO COMPLY IS JUSTIFICATION OF ISSUANCE OF A "STOP WORK ORDER".
- CLEARING OF VEGETATION/TREES AT THE LIMITS OF CONSTRUCTION SHALL BE THE MINIMUM NECESSARY TO ACCOMPLISH THE ACTIVITY.
- ONLY CLEAN FILL SHALL BE USED IN AREAS REQUIRING FILL.
- CARE SHOULD BE TAKEN TO KEEP MACHINERY OUT OF THE WATERWAY AS MUCH AS POSSIBLE. FUEL OIL AND OTHER PETROLEUM PRODUCTS, EQUIPMENT AND OTHER SOLID WASTE SHALL NOT BE STORED BELOW THE ORDINARY HIGH WATER MARK AT ANY TIME OR IN THE ADJACENT FLOODWAY BEYOND NORMAL WORKING HOURS. ALL PRECAUTIONS SHALL BE TAKEN TO AVOID THE RELEASE OF WASTES OR FUEL TO STREAMS AND OTHER ADJACENT WATER BODIES AS A RESULT OF THIS OPERATION.
- THE FILLING OF SPRINGS SHALL NOT BE ALLOWED. IF SPRINGS OR SINKHOLES ARE ENCOUNTERED, NOTIFY CONSTRUCTION MANAGER AND OBTAIN DIRECTIONS ON ITS TREATMENT.
- ALL EXCESS TOPSOIL THAT WILL NOT BE USED IN LANDSCAPED AREAS AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED FROM THE SITE.
- CONTRACTOR TO GENERATE AND SUBMIT A STORM WATER POLLUTION PREVENTION PLAN BASED ON ACTUAL CONSTRUCTION PRACTICES ANTICIPATED. AN EXAMPLE IS INCLUDED IN THIS SET OF DRAWINGS BUT IS NOT TO BE USED FOR THE LAND DISTURBANCE PERMIT APPLICATION WITH THE CITY OF WEBSTER GROVES.

EARTHWORK QUANTITIES

CUT = --- CUBIC YARDS
FILL = --- CUBIC YARDS

HAUL ROUTE INFORMATION

TOTAL CUBIC YARDS TO BE HAULED ---

THE INFORMATION REGARDING HAULING ROUTES, VOLUMES, ETC. BELOW WAS PROVIDED BY THE CONTRACTOR AND PLACED ON THIS DRAWING PER THE REQUIREMENTS OF -----, IF THE CONTRACTOR DEVIATES FROM WHAT HAS BEEN DESCRIBED BELOW HE/SHE MUST FIRST GET APPROVAL FROM ----- BEFORE HAND, THE ENGINEER IS NOT RESPONSIBLE FOR IT'S ACCURACY AND VERIFICATION IF REQUIRED IS THE RESPONSIBILITY OF -----.

NUMBER OF TRUCKS PER DAY ---
CUBIC YARDS PER TRUCK ---

ROADS TRAVELED,

HAUL FROM SITE ROUTE: START AT JOBSITE ADDRESS OF 8274 BIG BEND, WEBSTER GROVES, MO 63119.

HAUL TO SITE ROUTE: -----

DURATION OF HAUL OPERATION -----

"TRUCKS SHALL NOT EXCEED POSTED WEIGHT LIMITS FOR ST. LOUIS COUNTY BRIDGES DURING HAUL OPERATIONS."



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TOLL FREE

State Law requires 2 days advance notice. "The law in the State of Missouri defines emergency excavation as one preventing danger to life, health, or property."

MISSOURI ONE-CALL SYSTEM INC.
10223 NORTHEAST DR.
JEFFERSON CITY, MO 65109

GENERAL NOTES

SITE ADDRESS: 8274 BIG BEND, WEBSTER GROVES, MO 63119

OWNER: WEBSTER UNIVERSITY

LOCATOR ID 23K521443

MSD BASEMAP: 23K2

FIRM MAP: 29189CD329K

THE SITE LIES IN FLOOD ZONE "X", ZONE "X" IS DESCRIBED AS AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

BENCHMARK:

ST. LOUIS COUNTY BENCHMARK 14-488

CUT "L" ON TOP SOUTHEAST CORNER OF THE 3'x4' RAISED CONCRETE BASE FOR METAL TRAFFIC SIGNAL CONTROL BOX SITUATED IN A GRASSY AREA EAST OF THE SIDEWALK ALONG THE EAST SIDE OF THE RIGHT TURN LANE FROM NORTHBOUND EDGAR ROAD ONTO EASTBOUND BIG BEND BOULEVARD AND WEST OF A DECORATIVE STUCCO WALL OR FENCE, 70 FEET MORE OR LESS SOUTHEAST OF THE CENTERLINE OF BIG BEND BOULEVARD, AND 35 FEET MORE OR LESS NORTHEAST OF THE SOUTHERN BULL NOSE END OF A CONCRETE TRAFFIC ISLAND WITHIN EDGAR ROAD.

ELEVATION: 562.73 (NAVD 1988 DATUM) (USED FOR SURVEY)

563.07 (NGVD 1929 DATUM)

PER - ISB DATUM ADJUSTMENT NOTE:

THE EAB PROJECT HAD BEEN SURVEYED AND DESIGNED BASED ON THE 1929 VERTICAL DATUM. THE ISB PROJECT DEPICTED IN THESE PLANS WAS SURVEYED AND DESIGNED BASED ON THE 1988 VERTICAL DATUM. THE CONVERSION BETWEEN THE 1929 DATUM AND THE 1988 DATUM IS 0.36 FEET. ADDING 0.36 FEET TO THE ISB PLAN ELEVATIONS (1988 DATUM) CONVERTS ELEVATIONS TO THE EAB PLAN ELEVATIONS.

SHEET

TITLE

C100	GENERAL NOTES
C101	GENERAL NOTES
C102	GENERAL NOTES
C200	EXISTING CONDITIONS
C300	DEMOLITION PLAN
C400	SITE IMPROVEMENT PLAN
C500	SITE GRADING PLAN
C600	SEWER PROFILES
C601	SEWER PROFILES
C602	BASIN SECTIONS
C700	CIVIL DETAILS
C701	CIVIL DETAILS
C702	CIVIL DETAILS
C800	EROSION CONTROL DETAILS
C801	EROSION CONTROL DETAILS
C802	EROSION CONTROL DETAILS
C803	EROSION CONTROL DETAILS
C804	INTERIM STORMWATER POLLUTION PREVENTION PLAN
C805	FINAL STORMWATER POLLUTION PREVENTION PLAN
C1000	BMP DAM A1 AND A2 EXISTING CONDITION TOTAL DISTURBED AREA
C1001	BMP DAM PROPOSED CONDITION TOTAL DISTURBED AREA
C1002	BMP DAM A3 EXISTING CONDITION DISTURBED AREA OVERLAP
C1003	BMP DAM POST 28874-00 AND PRE 28874-01 (A4) & A5
C1004	STORM SEWER DRAINAGE AREA MAP
C1005	STORM SEWER FLOW RATE AND DESIGN TABLES
A0102.EB	EXTERIOR - LEVEL 02 AREA B FLOOR PLAN
A0400	EXTERIOR ASSEMBLIES
A0423	EXTERIOR PLAN DETAILS
L155	BMP PLANTING PLAN
L510	PLANTING DETAILS
P0010	LEVEL 0 AREA A UNDER FLOOR PLAN - PLUMBING
P0011	LEVEL 01 AREA A/B UNDER FLOOR PLAN - PLUMBING
P0101.A	LEVEL 01 AREA A FLOOR PLAN - PLUMBING
P0101.B	LEVEL 01 AREA B FLOOR PLAN - PLUMBING
P0402	RISERS - PLUMBING
P0501	DETAILS - PLUMBING
S0003	TYPICAL DETAILS

NOT IN MSD
SUBMITTAL



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St. Louis, MO 63119
314.544.5700

Webb Engineering Services, Inc.
Plumbing & Fire Protection
1400 S. 3rd Street, Suite 201
St. Louis, MO 63104
314.588.0600

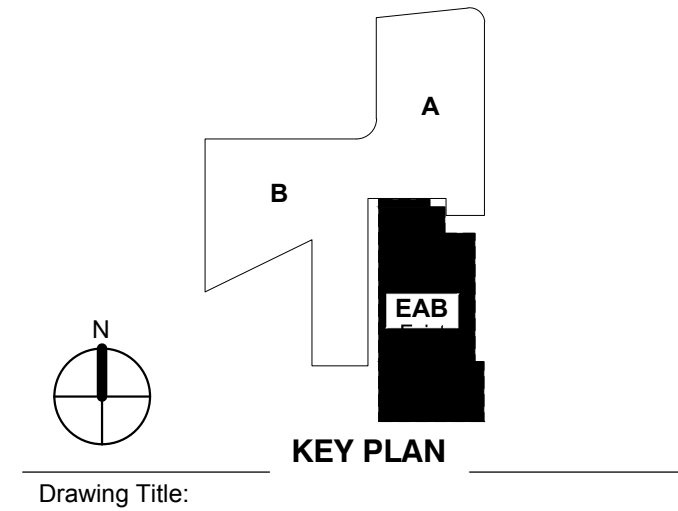


CONFORMED SET

01 JUL 2016

3	ADDENDUM 1-12	16 JUN 2016
2	ADDENDUM 1-10	5 MAY 2016
1	ADDENDUM 1-1	29 JAN 2016
-	ISSUED FOR CONSTRUCTION (BP1)	15 JAN 2016

No.	Description	Date
-----	-------------	------



Drawing Title:

GENERAL
NOTES

Project No.: 04561.00

Checked by:

C100

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GENERAL NOTES

GENERAL UTILITY NOTES

- UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THEREFORE THEIR LOCATIONS SHALL BE CONSIDERED APPROXIMATE ONLY. THE VERIFICATION OF THE LOCATION OF ALL UNDERGROUND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THESE PLANS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THIS WORK SHALL BE COMPLETED PRIOR TO ANY GRADING OR CONSTRUCTION OF THE IMPROVEMENTS. IT WILL BE THE CONTRACTORS RESPONSIBILITY TO PROTECT ALL SUCH UNDERGROUND UTILITIES DURING ALL PHASES OF WORK.
- LOCATE EXISTING UNDERGROUND UTILITIES AND SEWERS IN THE AREAS OF WORK BEFORE STARTING OPERATIONS. WHEN UTILITIES OR SEWERS ARE TO REMAIN IN PLACE, PROVIDE ADEQUATE MEANS OF PROTECTION DURING OPERATIONS. SHOULD UNCHARTED, OR INCORRECTLY CHARTED, PIPING OR OTHER UTILITIES BE ENCOUNTERED DURING EXCAVATION, CONSULT THE CONSTRUCTION MANAGER AND UTILITY OWNER IMMEDIATELY FOR DIRECTIONS. COOPERATE WITH THE SERVICES AND FACILITIES IN OPERATION. REPAIR DAMAGED UTILITIES TO THE SATISFACTION OF THE UTILITY OWNER. REMOVALS OR RELOCATIONS BY UTILITY COMPANIES ARE TO BE INITIATED AND COORDINATED BY THE CONTRACTOR.
- WHERE SEWER, WATER LINES OR OTHER UTILITY LINES CROSS OVER OR UNDER EACH OTHER, PROVIDE CONCRETE ENCASEMENT OF THE TOP PIPE IF THE CLEARANCE IS LESS THAN 24 INCHES, AND CONCRETE ENCASEMENT OF BOTH PIPES IF THE CLEARANCE IS LESS THAN 12 INCHES. ENCASEMENT SHALL EXTEND TO A MINIMUM DISTANCE OF 10 FEET ON BOTH SIDES OF THE CROSSING. SUBMIT CONCRETE ENCASEMENT DETAILS FOR APPROVAL.
- ALL EXISTING UTILITY ACCESS COVERS SUCH AS MANHOLES, VALVE BOXES, VAULT COVERS, METER COVERS AND OTHER SURFACE APPURTENANCES SHALL BE ADJUSTED TO THE PROPER FINISH GRADE ELEVATION IN ACCORDANCE WITH THE REQUIREMENTS OF THE AFFECTED UTILITY COMPANY.
- DESIGN OF SHORING FOR UTILITY AND SEWER TRENCHES IS THE RESPONSIBILITY OF THE CONTRACTOR.
- MoDOT TYPE 5 GRANULAR BACKFILL SHALL BE PLACED UP TO TOP OF SUBGRADE WHERE ALL UTILITIES CROSS PAVEMENT.
- THE CONTRACTOR IS TO MAINTAIN A COMPLETE AND UP TO DATE SET OF AS BUILT DRAWINGS WHICH SHALL BECOME THE PROPERTY OF THE OWNER AT CONSTRUCTION COMPLETION.

WATER LINE CONSTRUCTION NOTES

- ALL MATERIALS AND METHODS OF CONSTRUCTION FOR WATER MAINS, SERVICE LINES, AND APPURTENANCES SHALL BE DONE IN ACCORDANCE WITH THE MISSOURI AMERICAN WATER COMPANY STANDARD SPECIFICATIONS FOR WATER LINE CONSTRUCTION. PIPE SHALL BE DUCTILE IRON, PRESSURE CLASS 350 PSI.
- CONTRACTOR SHALL PROVIDE FOR DISINFECTION OF WATER MAINS IN ACCORDANCE WITH THE MISSOURI AMERICAN WATER COMPANY AND AWWA C601 STANDARDS. CONTRACTOR TO PROVIDE THE OWNER WITH ACCEPTABLE TEST RESULTS PRIOR TO ACCEPTANCE OF WORK.
- ALL WATER LINES SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY, FROM ANY SANITARY SEWER, STORM SEWER, OR MANHOLE. WHENEVER WATER LINES MUST CROSS SANITARY SEWERS, LATERALS OR STORM DRAINS, THE WATER LINES SHALL BE LAID TO HAVE A MINIMUM VERTICAL CLEARANCE OF 18 INCHES AND COMPLY WITH MISSOURI DEPARTMENT OF NATURAL RESOURCES CLEARANCE REQUIREMENTS AND PER LOCAL CODE REQUIREMENTS.
- DEMOLITION OF WATERLINES AND RELATED APPURTENANCES SHALL BE IN ACCORDANCE WITH THE REQUIREMENT OF THE MISSOURI AMERICAN WATER COMPANY. THE CONTRACTOR SHALL OBTAIN ALL PERMITS NECESSARY FOR THE DEMOLITION OF WATERLINES AND APPURTENANCES.
- ALL FITTINGS FOR BURIED PIPING 4-INCH AND LARGER, SHALL BE DUCTILE IRON MECHANICAL JOINT (D.I.M.J.), EPOXY COATED, UNLESS NOTED OTHERWISE. THESE FITTINGS SHALL INCORPORATE RESTRAINING RINGS, MEGA-LUGS OR OTHER APPROVED EQUIVALENT MECHANICAL DEVICES.
- ALL PROPOSED DUCTILE IRON PIPE, FITTINGS AND RESTRAINTS WITHIN FIFTY (50) FEET OF AN EXISTING GAS MAIN SHALL BE POLYETHYLENE ENCASED.
- ALL FASTENERS SHALL BE MANUFACTURED OF NON-CORROSIVE MATERIALS.
- WHERE MINIMUM SEPARATION BETWEEN UTILITIES IS REQUIRED, THE DISTANCE SHALL BE MEASURED FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE.
- CONTRACTOR SHALL MAKE EXPLORATORY EXCAVATIONS AT ALL INTERSECTIONS OF PROPOSED WORK AND EXISTING UTILITIES. THE EXPLORATORY EXCAVATIONS SHALL BE MADE FORTY-EIGHT (48) HOURS IN ADVANCE OF THE PROPOSED WORK. IF THERE IS A CONFLICT THE CONTRACTOR SHALL NOTIFY THE OWNER OR THEIR REPRESENTATIVE IMMEDIATELY. INFORMATION ON THE OBSTRUCTION SHALL BE FURNISHED BY THE CONTRACTOR AND SHALL INCLUDE: LOCATION, ELEVATION, UTILITY TYPE, MATERIAL AND SIZE.
- LOCATIONS AND DIMENSIONS OF EXISTING RIGHTS-OF-WAY AND EASEMENTS ARE BASED ON THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL VERIFY ALL THE LIMITS OF RIGHTS-OF-WAY AND EASEMENTS IN ORDER TO AVOID ENCROACHMENTS.
- THE CONTRACTOR SHALL REPLACE BUT NOT BE LIMITED TO PAVING, STABILIZED EARTH, DRIVEWAYS OR ANY ITEMS DISTURBED OR DAMAGED BY THE CONSTRUCTION OR ITS RELATED ACTIVITIES. THE CONTRACTOR SHALL REPLACE WITH EQUAL MATERIAL OR AS DIRECTED BY THE CONSTRUCTION MANAGER.
- THE DISPOSAL OF ANY EXCESS EARTHWORK MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- IT IS THE CONTRACTORS RESPONSIBILITY TO COORDINATE HIS WORK WITH THE WORK SCHEDULE OF ADJACENT CONTRACTORS.
- PIPE MEASUREMENTS SHALL BE CENTER TO CENTER OF FITTINGS OR VALVES.
- VALVES FOR POTABLE WATER MAINS SHALL BE DUCTILE IRON (D.I.) EPOXY COATED GATE VALVES.

GENERAL NOTES

- ALL PIPE AND POLYETHYLENE SERVICE TUBING SHALL BEAR THE NATIONAL SANITATION FOUNDATION (NSF) SEAL OF APPROVAL FOR POTABLE WATER SERVICE.
- FITTINGS FOR BOTH PVC AND DUCTILE IRON PIPE SHALL BE DUCTILE IRON COMPACT FITTINGS CONFORMING TO THE REQUIREMENTS OF ANSI/AWWA C153/A21.53.
- DUCTILE IRON PIPE AND FITTINGS SHALL HAVE A CEMENT MORTAR INTERIOR LINING CONFORMING TO THE REQUIREMENTS OF ANSI/AWWA C104/A21.4.
- ALL WATER MAINS SHALL BE HYDROSTATICALLY TESTED AND DISINFECTED IN ACCORDANCE WITH AWWA STANDARDS, LATEST REVISIONS. HYDROSTATIC TESTING FOR PVC MAINS SHALL BE 150 PSI FOR MINIMUM OF 2 HOURS AND MEET AWWA STANDARD C605, WITH DUCTILE IRON MAINS TESTED AT 150 PSI FOR 2 HOURS AND PER AWWA C600. ALL NEW MAINS SHALL BE DISINFECTED PER AWWA STANDARD C651. BACTERIOLOGICAL TESTS FOR 2 CONSECUTIVE DAYS SHALL BE APPROVED PRIOR TO PLACING SYSTEM INTO SERVICE.
- PVC POTABLE WATER MAINS SHALL BE SOLID BLUE IN COLOR.
- ALL POTABLE WATER MAINS SHALL BE INSTALLED WITH THE MINIMUM VERTICAL/HORIZONTAL SEPARATION FROM ALL EXISTING AND/OR PROPOSED SANITARY AND STORM PIPING AS REQUIRED BY MDNR RULES. CONFLICTS BETWEEN STORM AND SANITARY SEWER SYSTEMS, FORCE MAINS AND PROPOSED POTABLE WATER MAINS SHALL BE RESOLVED BY ADJUSTING THE PROPOSED POTABLE WATER MAIN.
- ALL WATER MAINS SHALL HAVE AN "EARLY WARNING" PROTECTION TAPE INSTALLED CONTINUOUSLY ALONG THE ENTIRE LENGTH. THE PROTECTION TAPE SHALL BE INSTALLED DURING THE BACK FILLING 6 TO 12 INCHES BELOW FINISH GRADE DIRECTLY OVER THE PIPE AND BE CONTINUOUSLY MARKED WITH "CAUTION - WATER MAIN BURIED BELOW". THE TAPE SHALL HAVE A EMBEDDED METALLIC DETECTABLE STRIP AND BE BLUE IN COLOR. PROTECTION TAPE SHALL BE TERRA-TAPE OR APPROVED EQUAL.
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL EQUIPMENT AND MATERIALS FOR APPROVAL BY THE OWNER PRIOR TO PROCUREMENT.
- ALL NEW WATER MAINS SHALL BE INSTALLED WITH A MINIMUM OF 42" OF COVER, UNLESS NOTED OTHERWISE.
- THE CONTRACTOR SHALL VIDEO THE ENTIRE WORK AREA PRIOR TO COMMENCEMENT OF CONSTRUCTION. ONE COPY OF THE PRE-CONSTRUCTION VIDEO SHALL BE SUBMITTED TO THE OWNER.
- ALL FLANGED COUPLING ADAPTERS SHALL HAVE A MINIMUM OF 4-3/4"Ø STAINLESS STEEL RESTRAINING RODS EQUALLY SPACED.
- ALL CONNECTIONS TO WATER MAINS SHALL BE MADE BY THE CONTRACTOR ONLY AFTER THE CONNECTION PROCEDURE AND HIS WORK SCHEDULE REGARDING THIS ACTIVITY ARE REVIEWED AND APPROVED BY THE MISSOURI AMERICAN WATER COMPANY.
- VALVE BOX AND COVER SHALL BE CONSTRUCTED OF CAST IRON. THE VALVE BOX LID SHALL BE STAMPED WITH "WATER".
- FIRE HYDRANTS SHALL BE AS SPECIFIED BY THE MISSOURI AMERICAN WATER COMPANY AND THE LOCAL FIRE DEPARTMENT.
- MoDOT TYPE 5 GRANULAR BACKFILL SHALL BE PLACED UP TO TOP OF SUBGRADE WHERE WATER LINES CROSS PAVED AREAS.

SEWER CONSTRUCTION NOTES

- ELEVATION OF EXISTING SEWERS ARE FROM AVAILABLE PLANS, RECORD DRAWINGS AND/OR SURVEYS. ACTUAL ELEVATIONS MAY VARY FROM THOSE SHOWN. THE CONTRACTOR SHALL VERIFY LOCATIONS AND ELEVATIONS OF EXISTING SEWERS PRIOR TO COMMENCING CONSTRUCTION.
- EXISTING INLETS, MANHOLES AND SEWERS TO BE ABANDONED (T.B.A.) SHALL BE ABANDONED IN ACCORDANCE WITH THE METROPOLITAN ST. LOUIS SEWER DISTRICTS "STANDARD CONSTRUCTION SPECIFICATIONS", 2009 EDITION. THE CONTRACTOR SHALL CAREFULLY COORDINATE SEWERS ABANDONMENT TO INSURE THAT ACTIVE SEWERS ARE NOT DAMAGED OR FILLED.
- TOPS OF ALL MANHOLES AND INLETS TO REMAIN IN PLACE SHALL BE ADJUSTED TO PROPER FINISH GRADE ELEVATION, IN ACCORDANCE WITH REQUIREMENTS OF MSD.
- FOR SEWER PIPE (STORM, SANITARY AND COMBINED) WITH A DESIGN GRADE LESS THAN ONE PERCENT (1%), VERIFICATION OF THE PIPE GRADE WILL BE REQUIRED FOR EACH INSTALLED REACH OF SEWER, PRIOR TO ANY SURFACE RESTORATION OR INSTALLATION OF ANY SURFACE IMPROVEMENTS. THE CONTRACTOR'S FIELD SUPERVISOR WILL BE REQUIRED TO PROVIDE DAILY DOCUMENTATION VERIFYING THAT THE AS-BUILT PIPE GRADE MEETS THE DESIGN GRADE THROUGH THE SUBMITTAL OF SIGNED CUT SHEETS TO THE MSD INSPECTOR UPON REQUEST.
- FIELD SURVEYED VERIFICATION MUST BE MADE UNDER THE DIRECTION OF A LICENSED LAND SURVEYOR OR REGISTERED ENGINEER. THE CONTRACTOR WILL BE REQUIRED TO REMOVE AND REPLACE ANY SEWER REACH HAVING AN AS-BUILT GRADE WHICH IS FLATTER THAN THE DESIGN GRADE BY MORE THAN 0.1%. SEWERS WITH GRADES GREATER THAN THE DESIGN SLOPE MAY BE LEFT IN PLACE, PROVIDED NO OTHER SEWER GRADE IS REDUCED BY THIS VARIANCE IN THE AS-BUILT GRADE.
- MSD ALSO RESERVES THE RIGHT TO REQUIRE THE CONTRACTOR TO REMOVE AND REPLACE ANY SEWER AT ANY TIME PRIOR TO CONSTRUCTION APPROVAL FOR WHICH THE AS-BUILT GRADE DOES NOT COMPLY WITH THE GRADE TOLERANCE STATED ABOVE.
- THE SEWER CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COSTS ASSOCIATED WITH THE FIELD VERIFICATION OF THE SEWER GRADE, OR REMOVAL AND REPLACEMENT OF THE SEWER PIPE OR ASSOCIATED APPURTENANCES.
- MAINTENANCE OF THE SEWERS DESIGNATED AS "PUBLIC" SHALL BE THE RESPONSIBILITY OF THE METROPOLITAN ST. LOUIS SEWER DISTRICT UPON DEDICATION OF THE SEWERS TO THE DISTRICT. SELECTED GRANULAR BACKFILL SHALL BE PLACED UP TO TOP OF SUBGRADE WHEN SEWER LINES CROSS PAVED AREAS.
- MoDOT TYPE 5 GRANULAR BACKFILL SHALL BE PLACED UP TO TOP OF SUBGRADE WHERE SEWER LINES CROSS PAVED AREAS.
- AS BUILT DOCUMENTATION IS TO BE RECORDED AS IMPROVEMENTS ARE COMPLETED. DRAWINGS ARE TO BE UPDATED AND SUBMITTED TO MSD BY THE CONTRACTOR ACCORDING TO THE DISTRICTS GUIDELINES.

GENERAL NOTES

- ALL STORM AND SANITARY SEWER STRUCTURES AND APPURTENANCES TO BE DEDICATED TO MSD, OR TO BE PRIVATE UNDER MSD INSPECTION, SHALL CONFORM TO THE METROPOLITAN ST. LOUIS SEWER DISTRICT, STANDARD CONSTRUCTION SPECIFICATIONS FOR SEWERS AND DRAINAGE FACILITIES, 2009. THAT WILL INCLUDE STANDARD DETAILS SHOWN THEREIN, AND SHALL INCLUDE ALL SUBSEQUENT CHANGES MADE THERETO.
- SOME RECENT CHANGES CONCERN PIPE FIELD TESTING AND PERFORMANCE, AND INCLUDE THE FOLLOWING:

PART 4 -PIPE SEWER CONSTRUCTION

- SECTION B, PIPE, FIELD TESTS, PARAGRAPH 2, REACH INTEGRITY TESTING - DELETE THE FIRST SENTENCE AND THE FOLLOWING REPLACEMENT APPLIES:
ALL SANITARY AND COMBINED SEWERS SHALL SUSTAIN A MAXIMUM LEAKAGE LIMIT OF 100 GALLONS/INCH OF PIPE DIAMETER/MILE OF LINE/DAY, AS REQUIRED BY THE MISSOURI DEPARTMENT OF NATURAL RESOURCES SPECIFICATIONS.
- SECTION B, PIPE, FIELD TESTS, PARAGRAPH 2, REACH INTEGRITY TESTING, SUBPARAGRAPH C, INFILTRATION/EXFILTRATION TESTING - DELETE THE SIXTH SENTENCE, CONCERNING LEAKAGE LIMITS, AND THE FOLLOWING REPLACEMENT APPLIES:
THE MEASUREMENT OF LEAKAGE SHALL NOT EXCEED 100 GALLONS/INCH OF PIPE DIAMETER/MILE OF LINE/DAY, AS REQUIRED BY THE MISSOURI DEPARTMENT OF NATURAL RESOURCES SPECIFICATIONS.
- SECTION B, PIPE, FIELD TESTS, PARAGRAPH 4, MANHOLE TESTING, SUBPARAGRAPH A, VACUUM TESTING - AFTER THE FIRST SENTENCE, THE FOLLOWING ADDITION APPLIES:
THE VACUUM TEST MUST BE PERFORMED PRIOR TO BACKFILLING AROUND THE MANHOLE UNLESS THE CONTRACTOR PROVIDES DOCUMENTATION FROM THE PRECAST MANHOLE MANUFACTURER STATING THAT THE MANHOLE MAY BE VACUUM TESTED AFTER BACKFILLING AS TAKEN PLACE. THE CONTRACTOR MUST SUBMIT THIS DOCUMENTATION PRIOR TO BACKFILLING AROUND ANY MANHOLE.
- SECTION B, PIPE, FIELD TESTS, PARAGRAPH 4, MANHOLE TESTING, SUBPARAGRAPH B, EXFILTRATION TESTING - DELETE THE SECOND SENTENCE, CONCERNING LEAKAGE LIMITS AND THE FOLLOWING ADDITION APPLIES:
FOR EXFILTRATION TESTING, THE ALLOWABLE LEAKAGE LIMIT IS 100 GALLONS/INCH OF PIPE DIAMETER/MILE OF LINE/DAY WHEN THE AVERAGE HEAD ON THE TEST SECTION IS THREE FEET (3') OR LESS.

GENERAL UTILITY NOTES

- THE FOLLOWING UTILITY COMPANIES HAVE FACILITIES WITHIN THE CONSTRUCTION AREA. THE CONTRACTOR SHALL COORDINATE WITH THE APPROPRIATE AGENCY PRIOR TO THE COMMENCEMENT OF ANY WORK WHICH WILL AFFECT ANY EXISTING UTILITY.

Ameren Missouri Ellisville District 280 Old State Road Ellisville, MO 63021 Attn: Mr. Dave Muntean (314-992-8903)	Laclede Gas Company 720 Olive Street St. Louis, MO 63101 Attn: Lisa Stuart (314-342-0694)	Southwestern Bell Telephone 14780 Manchester Road Ballwin, Missouri 63011 Attn: Sherry Schmdie (636-256-1468)
Metropolitan Sewer District 2350 Market St. St. Louis, Missouri 63103-2555 (314-768-6200)	Missouri One-Call 1-800-334-7483	Missouri American Water Company 1050 Research Blvd. St. Louis, Missouri 63132 Attn: Roger Timmermeier (314-996-2464)

CONTRACTOR TO PROVIDE SIGNED AND SEALED SHOP DRAWINGS TO BE APPROVED BY THE PROJECT ENGINEER & MSD CONTACT MSD AT 314-335-2072.

CONSTRUCTION SITE RUNOFF SHALL NOT FLOW INTO THE WATER QUALITY BMP(s). ALL STORMWATER FLOW TO THE WATER QUALITY BMP(s) SHALL BE DIVERTED, PLUGGED OR DISCONNECTED UNTIL THE CONSTRUCTION SITE IS STABLE AND THE MSD DEDICATION INSPECTOR PROVIDES APPROVAL TO PLACE THE BMP(s) ONLINE.

LOCATOR NO. - 23K521443
FEMA MAP NUMBER - 29189C0329K DATE: FEBRUARY 4, 2015

UTILITIES
WATER - MISSOURI AMERICAN WATER COMPANY
SANITARY SEWER - METROPOLITAN SEWER DISTRICT
STORM SEWER - METROPOLITAN SEWER DISTRICT
ELECTRIC - AMEREN UE
TELEPHONE - SOUTHWESTERN BELL TELEPHONE
GAS - LACLEDE GAS COMPANY

WEBSTER UNIVERSITY CONTACT FOR MAINTAINING THE BMP'S IS:
CRAIG MILLER
470 E LOCKWOOD AVE, WEBSTER GROVES, MO 63119
(314) 968-6900
CRAIGMILLER29@WEBSTER.EDU

ALL FILLED AREAS, INCLUDING TRENCH BACKFILLS, UNDER BUILDINGS, PROPOSED STORM AND SANITARY SEWER LINES, AND PAVED AREAS SHALL BE COMPACTED TO A MINIMUM OF 90 PERCENT OF "MODIFIED PROCTOR". FILL IS TO BE PLACED IN A MAXIMUM OF 9-INCH LIFTS. TESTS SHALL BE TAKEN AT A MAXIMUM OF 50-FOOT INTERVALS ALONG THE ROUTE OF THE PIPE; AT A MAXIMUM OF 2-FOOT VERTICALLY; AND Laterally ON EACH SIDE OF THE PIPE, AT A DISTANCE EQUAL TO THE DEPTH OF FILL OVER THE PIPE. A COPY OF THESE RESULTS WILL BE SUBMITTED TO MSD PRIOR TO CONSTRUCTION APPROVAL.



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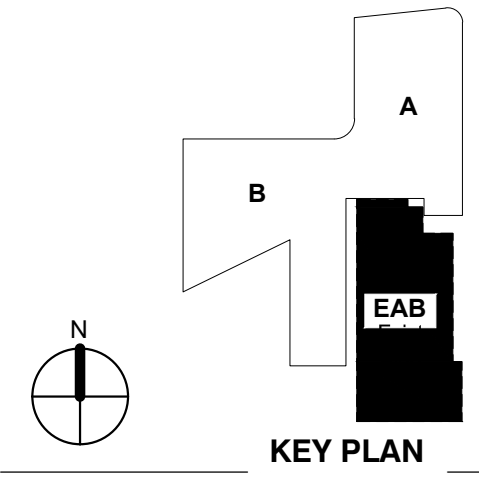
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CONFORMED SET 01 JUL 2016

2	ADDENDUM 1-12	16 JUN 2016
1	ADDENDUM 1-10	5 MAY 2016
-	ISSUED FOR CONSTRUCTION (BP1)	15 JAN 2016
No.	Description	Date



**GENERAL
NOTES**

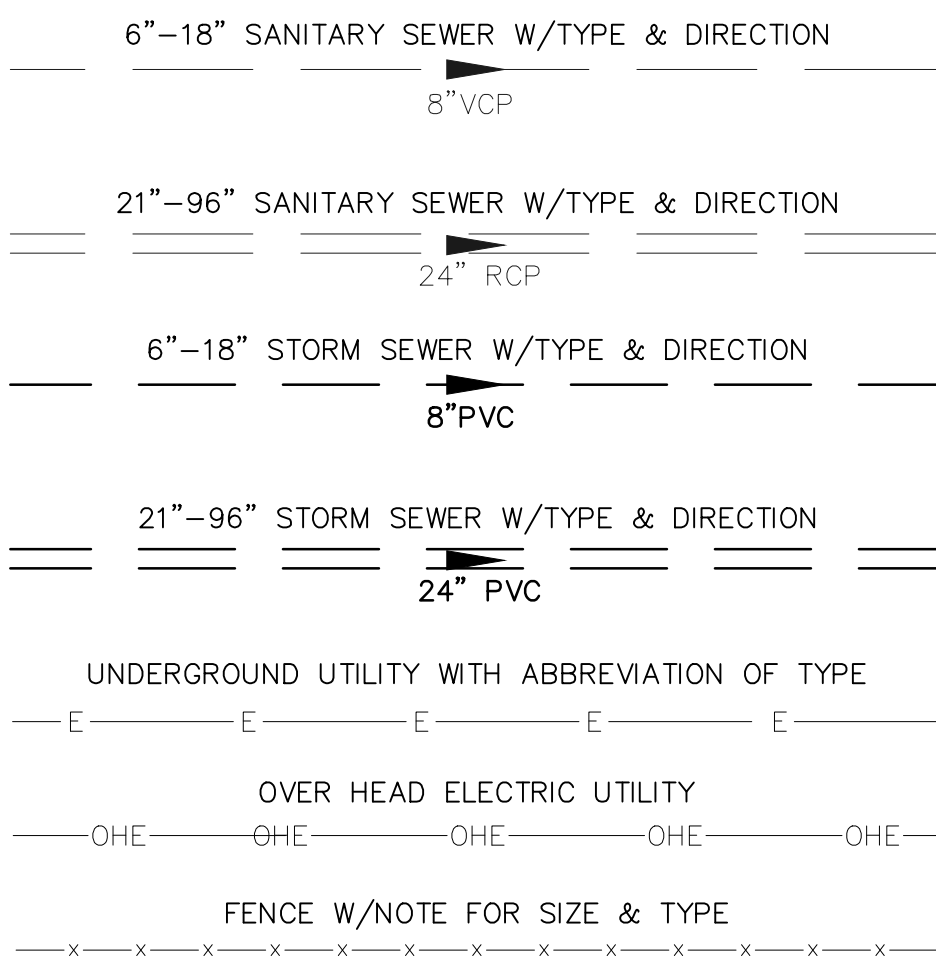
Project No.: 04561.00 Checked by:

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LEGEND		
EXISTING		PROPOSED
	FOUND CUT CROSS	
	ELECTRIC BREAKER/OUTLET BOX	
	POWER POLE	
	POWER POLE W/GUY WIRE	
	GAS VALVE	
	WATER MANHOLE	
	WATER METER	
	MASTER CONTROL VALVE	
	FIRE HYDRANT	
	ELECTRIC MANHOLE	
	DOWNSPOUT-ROOFDRAIN	
	OBSERVATION WELL	
	TRAPPED UNDERDRAIN	
	LIGHT STANDARD	
	STREET SIGN	
	PARKING METER	
	POST (WOOD TYP)	
	BOLLARD	
	MAILBOX	
	BUSH	
	TREE	
	CURB/AREA INLET	
	SEWER MANHOLE	
	GRATED MANHOLE	
	GRATED INLET	
	BENCH MARK	
	INLET	
	AREA DRAIN	
	MANNOLE	

ABBREVIATIONS			
APPX.	APPROXIMATE	OC	ON CENTER
ASPH.	ASPHALT	OD	OUTSIDE DIAMETER
A.T.G.	ADJUST TO GRADE	OHE	OVERHEAD ELECTRIC
B.C.	BOTTOM OF CURB	OW	OBSERVATION WELL
BLDG.	BUILDING	PC	PORTLAND CEMENT
BM	BENCHMARK	PCC	POINT OF COMPOUND CURVATURE
C	CURVE	PI	POINT OF INTERSECTION
CATV	CABLE TV	PL	PROPERTY LINE
CI	CURB INLET	P	PROPERTY LINE
CL	CENTERLINE	PC	POINT OF CURVATURE
CL	CENTERLINE	PRC	POINT OF REVERSE CURVATURE
CO	CONC.	PRFS	PROPOSED
CONC.	CONCRETE	PT	POINT OF TANGENCY
CONST.	CONSTRUCTION	PUMI	PRIVATE UNDER MSD INSPECTION
E	ELECTRIC	PVC	POINT OF VERTICAL CURVATURE
EAB	BUSINESS SCHOOL	PVI	POINT OF VERTICAL INTERSECTION
ELEV.	ELEVATION	PVM	PAVEMENT
EXIST.	EXISTING	PVT	POINT OF VERTICAL TANGENCY
FC	FACE OF CURB	R	RADIUS
F.E.S.	FLARED END SECTION	RD	ROOF DRAIN
FL	FLOWLINE	REQ'D.	REQUIRED
G	GAS	SAN	SANITARY
GV	GAS VALVE	SF	SQUARE FEET
HORIZ.	HORIZONTAL	SPEC	SPECIFICATIONS
HP	HIGH POINT	ST	STORM
IN	INCHES	STA.	STATION
INVERT	INVERT	TBA	TO BE ABANDONED
IP	IRON PIPE	TBA&F	TO BE ABANDONED AND FILLED
IR	IRON ROD	TBR	TO BE REMOVED
JT	JOINT	TBR&R	TO BE REMOVED AND REPLACED
LF	LINEAR FEET	TBR&REL	TO BE REMOVED AND RELOCATED
LP	LIMITS OF PONDING	TC	TOP OF CURB
MAX.	MAXIMUM	TD	TRENCH DRAIN
MH	MANHOLE	TU	TRAPPED UNDERDRAIN
MIN.	MINIMUM	TYP.	TYPICAL
NO.	NUMBER	UGE	UNDER GROUND ELECTRIC
N.I.C.	NOT IN CONTRACT	UIP	USE IN PLACE
N.T.S.	NOT TO SCALE	VERT.	VERTICAL
		W	WATER
		WV	WATER VALVE
		Ø	DIAMETER
		⊗	AT



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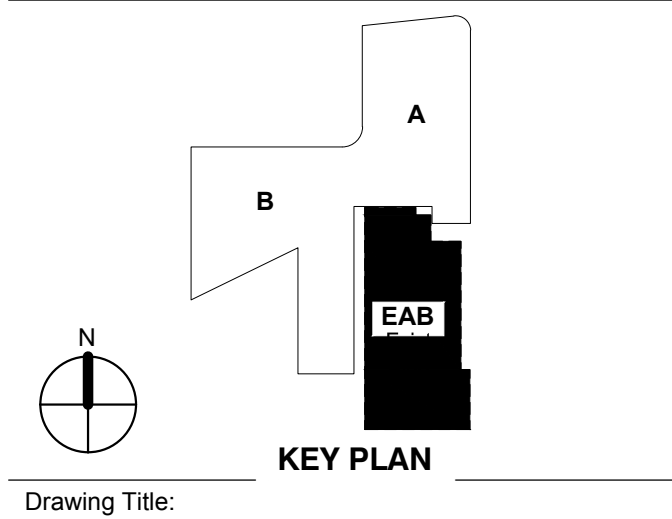
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CONFORMED SET 01 JUL 2016

1	ADDENDUM 1-10	5 MAY 2016
-	ISSUED FOR CONSTRUCTION (BP1)	15 JAN 2016
No.	Description	Date



**GENERAL
NOTES**

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MSD P# 28874-01 MSD BASE MAP 23K2



- NOTES:
1. PER WEBSTER UNIVERSITY THE SANITARY SEWER FOR THE PEARSON HOUSE AND THE PRIEST BUILDING EXITS BOTH BUILDINGS ON THE NORTH SIDE AND FLOW TOWARDS BIG BEND BLVD.
 2. PER THE MSD AS-BUILT DRAWINGS THE BUSINESS SCHOOL BUILDING SANITARY SEWER DRAINS TO THE SANITARY SEWER EAST OF THAT BUILDING.
 3. STORM SEWER SERVES DOWNSPOUT LATERALS FROM PEARSON HOUSE.
 4. LINE WORK ASSOCIATED WITH ENTRANCE AND DRIVE IS FROM THE EAB AS BUILT DRAWINGS AND IS NOT BY THE SURVEYOR OF RECORD.



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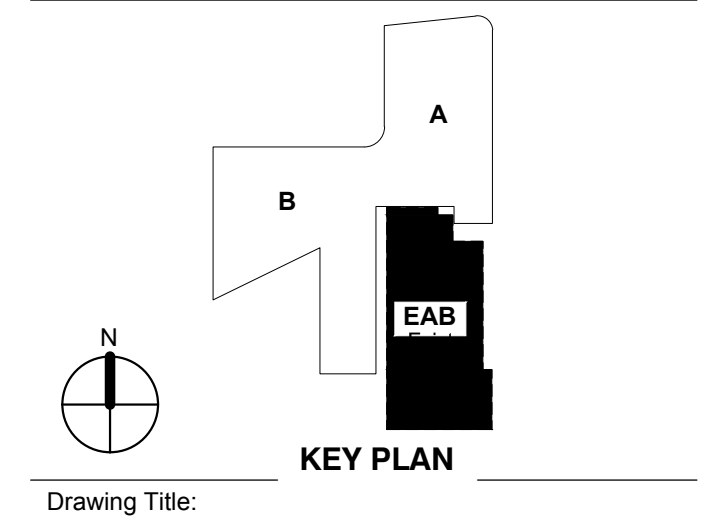
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CONFORMED SET 01 JUL 2016

1. ADDENDUM 1-10	5 MAY 2016
ISSUED FOR CONSTRUCTION (BPI)	15 JAN 2016
No.	Description Date



EXISTING
CONDITIONS

Project No.: 04561.00 Checked by:

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MSD P# 28874-01 MSD BASE MAP 23K2

LEGEND (THIS SHEET ONLY)

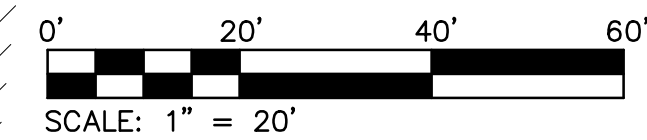
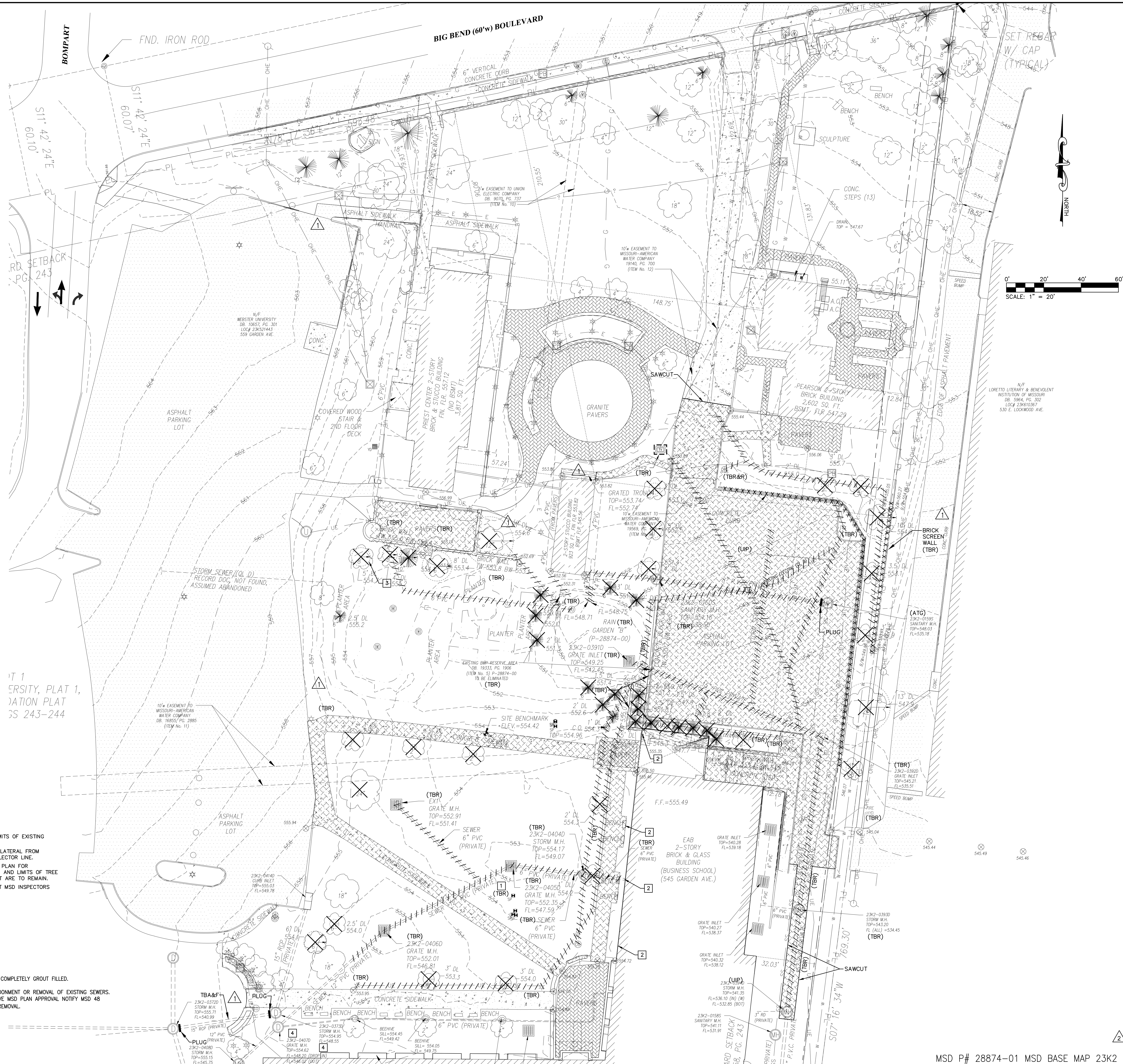
- ////// UTILITY TO BE REMOVED
- XXXXXXXX WALL TO BE REMOVED
- PMVT TO BE REMOVED
- TREE TO BE REMOVED

KEYED DEMOLITION NOTES

- SEE LANDSCAPE DRAWINGS FOR LIMITS OF EXISTING IRRIGATION SYSTEM REMOVAL.
- DISCONNECT EXISTING DOWNSPOUT LATERAL FROM COLLECTOR LINE AND REMOVE COLLECTOR LINE.
- SEE LANDSCAPE TREE PROTECTION PLAN FOR ADDITIONAL TREES TO BE REMOVED AND LIMITS OF TREE PROTECTION ZONE FOR TREES THAT ARE TO REMAIN.
- TO BE REMOVED AND REPLACED AT MSD INSPECTORS DISCRETION.

SHEET GENERAL NOTES

- ANY ABANDONED SEWERS SHALL BE REMOVED OR COMPLETELY GROUT FILLED.
- MSD PERMITS ARE REQUIRED PRIOR TO THE ABANDONMENT OR REMOVAL OF EXISTING SEWERS. TO RECEIVE MSD PERMITS THE PROJECT MUST HAVE MSD PLAN APPROVAL NOTIFY MSD 48 HOURS PRIOR TO SEWER ABANDONMENT AND/OR REMOVAL.



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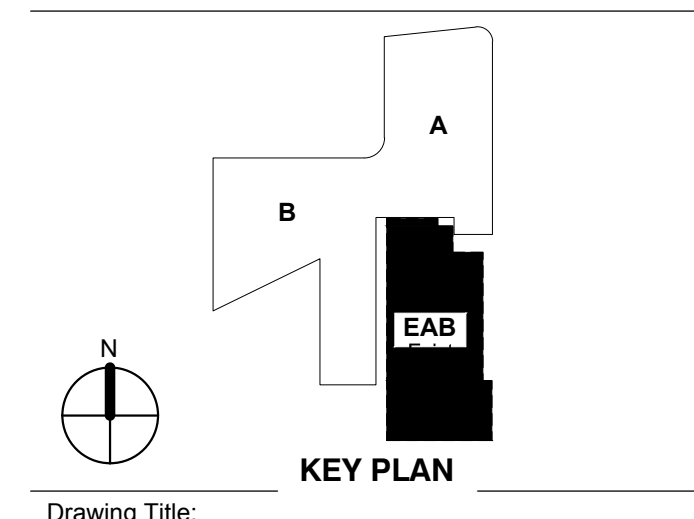
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Drawing Title:

DEMOLITION PLAN

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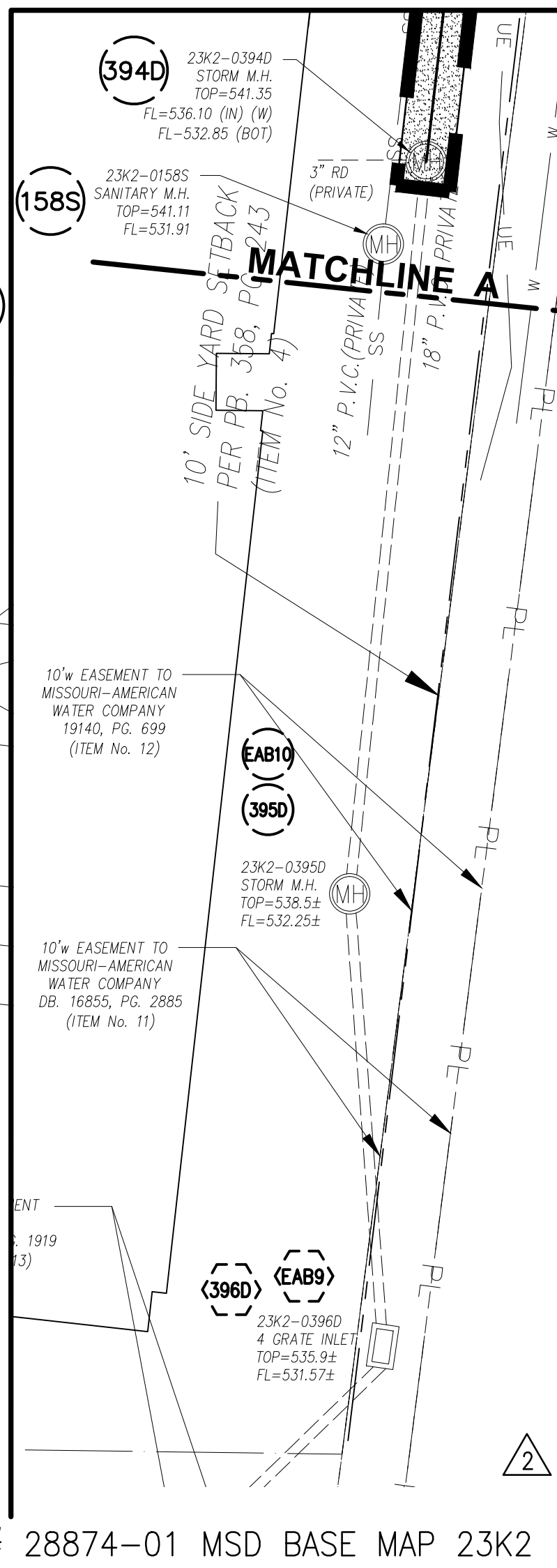
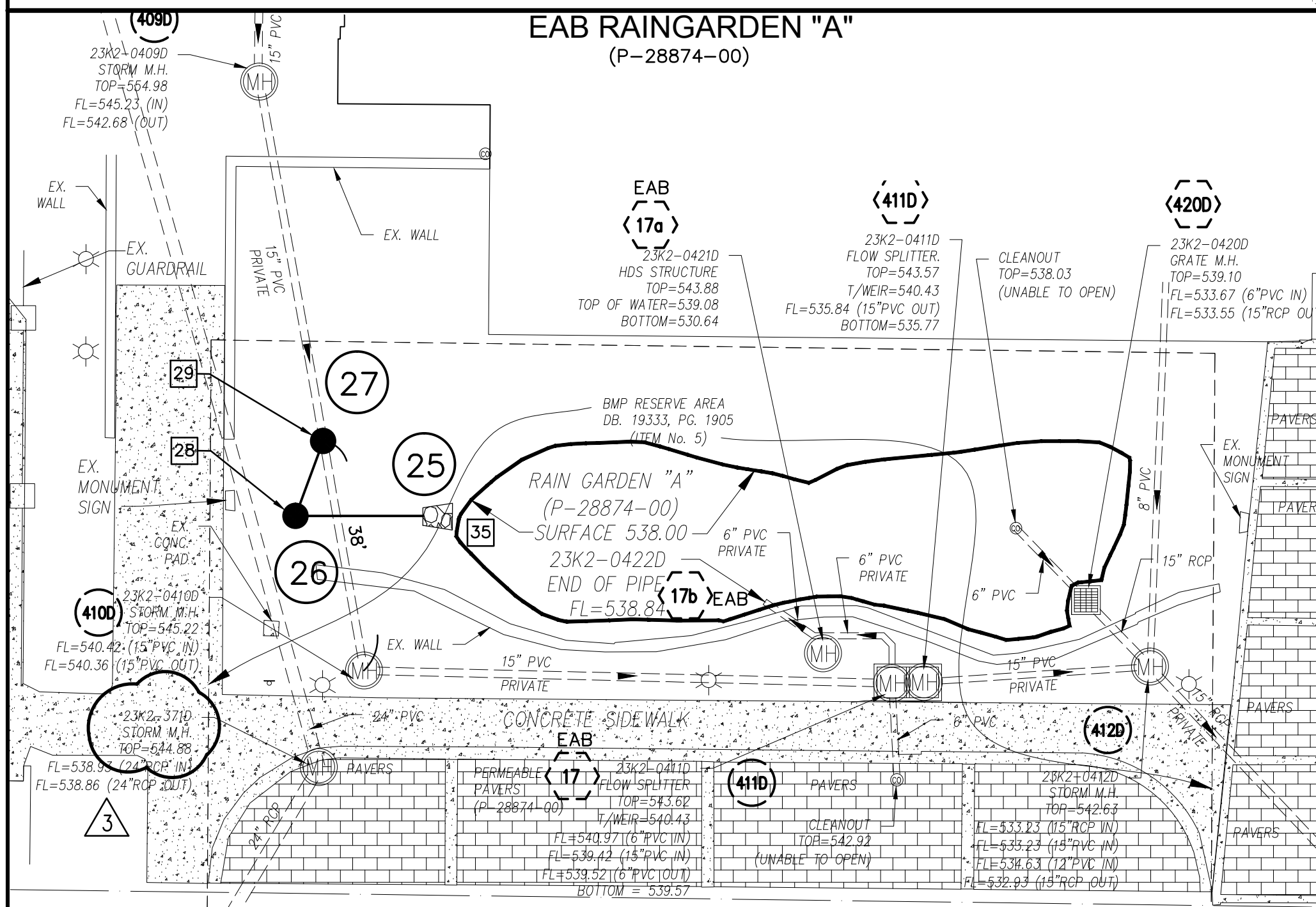
MSD P# 28874-01 MSD BASE MAP 23K2

SHEET GENERAL NOTES:

- IF STORM AD SANITARY SEWERS ARE PARALLEL AND IN THE SAME TRENCH, THE UPPER PIPE SHALL BE PLACED ON A SHELF AND THE LOWER PIPE SHALL BE BEDDED IN COMPACTED GRANULAR FILL TO THE FLOW LINE OF THE UPPER PIPE. NOTE - PIPE JOINTS WITH ADAPTERS AND COUPLINGS SHALL BE SUPPLIED AND INSTALLED WITH 316 STAINLESS STEEL NUT AND BOLT CLAMPS (T-BOLT) CONFIGURATION; AND WITH STAINLESS STEEL SHEAR BANDS, BEING A MINIMUM OF 12 (12) MILS (MSD STD. CONST. SPECS. PT. 2, SUBSECTION H 11). WORM DRIVE HOSE CLAMPS AND CONCRETE BACKFILLING (CAUSTICITY) WILL NO LONGER BE ALLOWED AT THOSE JOINTS. GRANULAR BACKFILL SHOULD BE USED. IF FLOWABLE FILL IS REQUIRED, THE CONTRACTOR SHALL WRAP AND TAPE THE ADAPTERS AND COUPLINGS WITH A SIX (6) MIL POLYETHYLENE SHEET.
- LIMITS OF DISTURBANCE: THE CONTRACTOR SHALL STAY WITH THE LIMITS OF DISTURBANCE AS SHOWN ON THE PLANS AND MINIMIZE DISTURBANCE WITHIN THE WORK AREA WHENEVER POSSIBLE.
- CONSTRUCTION OF STRAPPED PLUMBING SHALL BE CONSISTENT WITH MSD RULES AND REGULATIONS AND ENGINEERING DESIGN REQUIREMENTS FOR SANITARY SEWER AND STORMWATER DRAINAGE FACILITIES (FEBRUARY 2006), FIGURES 3-1 & 3-2.
- A BACKWATER VALVE SHALL BE REQUIRED ON ALL SANITARY BUILDING LATERALS PER ST. LOUIS COUNTY PLUMBING CODE.
- THE OWNER ACKNOWLEDGES THE POTENTIAL OF FLOODING DUE TO THE 100-YR OVERLAND FLOW PATH BEING BLOCKED WITH THE PROPOSED IMPROVEMENTS. THE POTENTIAL FLOODING LOCATIONS ARE IDENTIFIED AS THE FOLLOWING AREAS: PROPOSED AREA DRAINS #10 THROUGH #50 AND PROPOSED TRENCH DRAIN #170.
- EXTERNAL GREASE TRAPS AND SAMPLING MANHOLE: AN EXTERNAL GREASE TRAP IS REQUIRED IN AN ACCESSIBLE LOCATION FOR MSD INSPECTION, PROVIDE MEANS FOR VISUAL INSPECTION FROM ABOVE FOR BOTH INFLUENT AND EFFLUENT SIDES. A MSD SAMPLING MANHOLE WILL BE LOCATED ON A PRIVATE LATERAL IN AN ACCESSIBLE LOCATION FOR MSD SAMPLING. THE SAMPLING MANHOLE WILL BE LOCATED DOWNSTREAM OF THE GREASE TRAP AND END OF PIPE HEADWALL OR VIA BUBBLER. MATCH EXISTING PIPE TYPE, DIAMETER AND SLOPE. GREASE TRAPS AND SAMPLING MANHOLES WILL BE SHOWN ON THE PLANS AND NOT BE LOCATED IN DRIVE-THRU LANES OR WITHIN PARKING SPACES.
- THE ENTIRE EXISTING RAIN GARDEN "A" MIGHT HAVE TO BE REPLACED DURING CONSTRUCTION IF THE MSD INSPECTOR BELIEVES THAT THE RAIN GARDEN IS GETTING PLUGGED UP DURING THE CONSTRUCTION OF THE PROPOSED FLOW SPLITTER, DOWNSTREAM DEFENDER AND ASSOCIATED PIPING.
- AN INTERNAL GREASE INTERCEPTOR SHALL BE PROVIDED FOR THE BUILDING AS SHOWN ON PLUMBING PLAN SHEET P0011. THIS ITEM SHALL BE CONNECTED TO THE BUILDING SANITARY SEWER.
- A SAND INTERCEPTOR SHALL BE PROVIDED FOR THE BUILDING FOUNDATION DRAIN TILES AS SHOWN ON PLUMBING PLAN SHEET P0010. THIS ITEM SHALL BE CONNECTED TO THE BUILDING STORM SEWER.

KEYED SITE PLAN NOTES

- CONTRACTOR TO FIELD LOCATE EXISTING DOWNSPOUT LINE AND RELOCATE WITH 8" PVC TIED INTO PROPOSED STORM SEWER SYSTEM.
- SEE LANDSCAPE PLANS FOR HARDSCAPE DETAILS.
- CONSTRUCT TRENCH DRAIN BEHIND SEAT WALL ON GRASS SIDE AND AT THE BASE OF THE SEAT WALL ON THE PLAZA SIDE. DISCHARGE UPPER TRENCH DRAIN TO PLAZA (3A). DISCHARGE LOWER TRENCH DRAIN TO MANHOLE 23 (PRIVATE).
- CONCRETE RETAINING WALL WITH ARCHITECTURAL FINISH.
- CONCRETE RETAINING WALL WITH FIBER/CEMENT PANEL FINISH.
- PLACE 2 AREA DRAINS IN AREA WELL AND CONNECT WITH 8" PVC TO MANHOLE, SEE PROFILE.
- CONSTRUCT DUMPSTER PAD AND ENCLOSURE.
- 8" DIAMETER PVC TO BUILDING DOWNSPOUT, SEE PLUMBING FOR CONTINUATION. FL AT WALL = 552.00. ROCK BLANKET 5'Lx5'Wx1'D.
- 6" DIAMETER PERFORATED SUB DRAIN, (TYP)
- DISCHARGE EXISTING STORM DRAINS TO BASIN EITHER DIRECTLY IF FLOWLINE ALLOWS WITH END OF PIPE HEADWALL OR VIA BUBBLER. MATCH EXISTING PIPE TYPE, DIAMETER AND SLOPE. ROCK BLANKET 5'Lx5'Wx1'D.
- 4" DIAMETER PERFORATED SUB DRAIN, (TYP) INSTALL CLEANOUT AT END PER DETAIL.
- SAMPLING "T"
- CLEANOUT (CO) TOP = 552.00, FL = 547.25 (TYP)
- INLET 180 IS SIMILAR TO INLET 3D, DRAIN THRU RETAINING WALL WITH 8" PVC. TOP = 554.70, FL = 552.67, FL = 552.00 AT RAIN GARDEN. ROCK BLANKET 5'Lx5'Wx1'D.
- PRIVATE 6" SANITARY SEWER LATERAL AT 2% MIN.
- SAMPLING MANHOLE
- GREASE INTERCEPTOR, SEE PLUMBING.
- BUILDING DOWNSPOUT, SEE PLUMBING
- PAVERS TO BE REMOVED AND REPLACED IN KIND TO FACILITATE CONSTRUCTION OF WATER LINE.
- PLAZA OBSERVATION WELL TOP = 540.85, FL = 538.67 (TYP)
- CONDENSING UNITS, SEE MECHANICAL FOR LOCATION
- RAIN GARDEN INFORMATIONAL SIGN
- PICOP INFORMATION SIGN
- GAS METER, 6"X6" THICK CONCRETE PAD WITH 4 BOLLARDS PAINTED YELLOW, ONE IN EACH CORNER. SEE SHEET C701 FOR DETAIL AND MECHANICAL FOR PIPING.
- 5-12" DIAMETER PRECAST CONCRETE BOLLARDS
- INTEGRAL CURB AND SIDEWALK.
- ADJUST LOCATION OF DRAINS AND PIPING BASED ON DOUBLE WALL CONFIGURATION.
- NEW HYDRO INTERNATIONAL 48" DOWNSTREAM DEFENDER.
- NEW FLOW SPLITTER MANHOLE.
- NEW FIRE HYDRANT
- REMOVE AND REPLACE EXISTING BRICK SCREEN WALL. SEE ARCHITECTURAL AND STRUCTURAL.
- CLEANOUT (CO) TOP = 551.00, FL = 546.25 (TYP)
- TRAPPED UNDERDRAIN (TU) TOP = 541.26, FL = 539.64 (TYP), FL = 538.98 (TYP)
- TRAP AT MSD INSPECTOR'S DISCRETION
- ROCK BLANKET (5'X5'Lx1'D)
- PRIVATE 6" PVC SANITARY SEWER LATERAL @ 2% MIN FOR INTERIOR GREASE INTERCEPTOR.
- 8" PVC BUBBLER, TOP ELEVATION 552.50, CONNECT TO 4" BUILDING DOWNSPOUT PER DETAIL.
- NEW SAMPLING MANHOLE, CONSTRUCT OVER EXISTING SEWER



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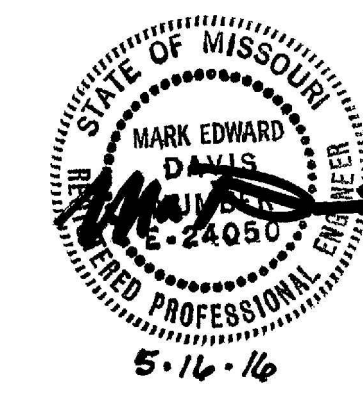
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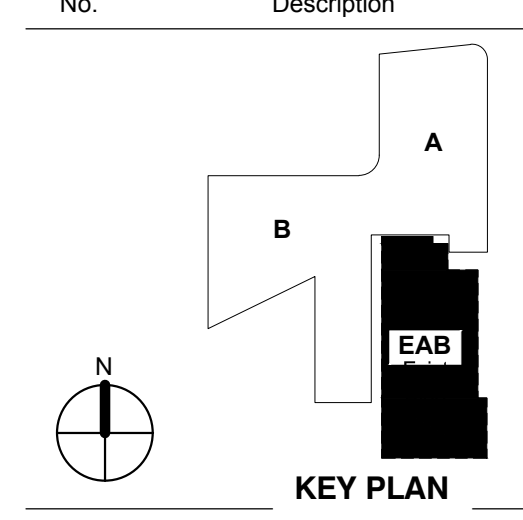
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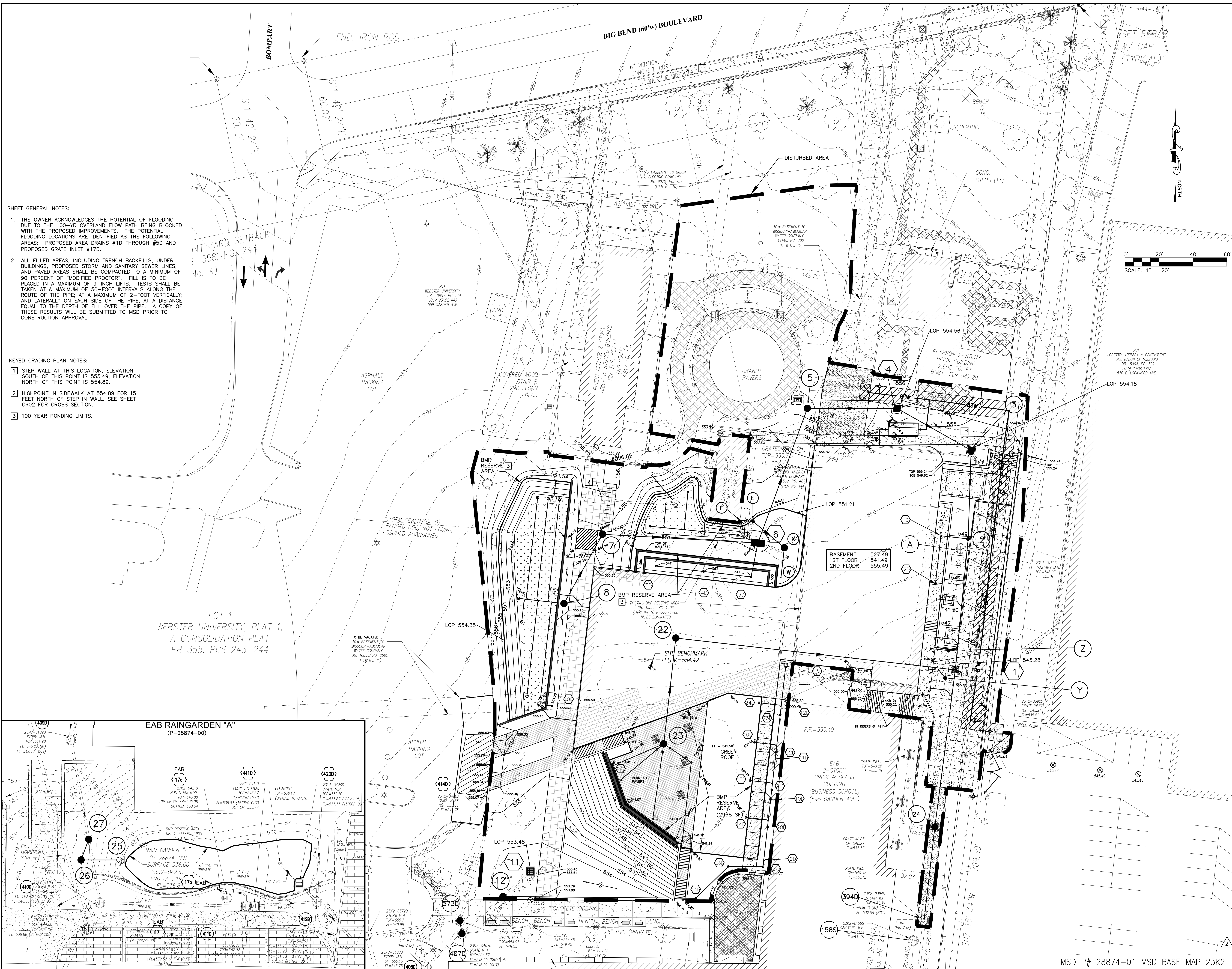
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SITE IMPROVEMENT PLAN

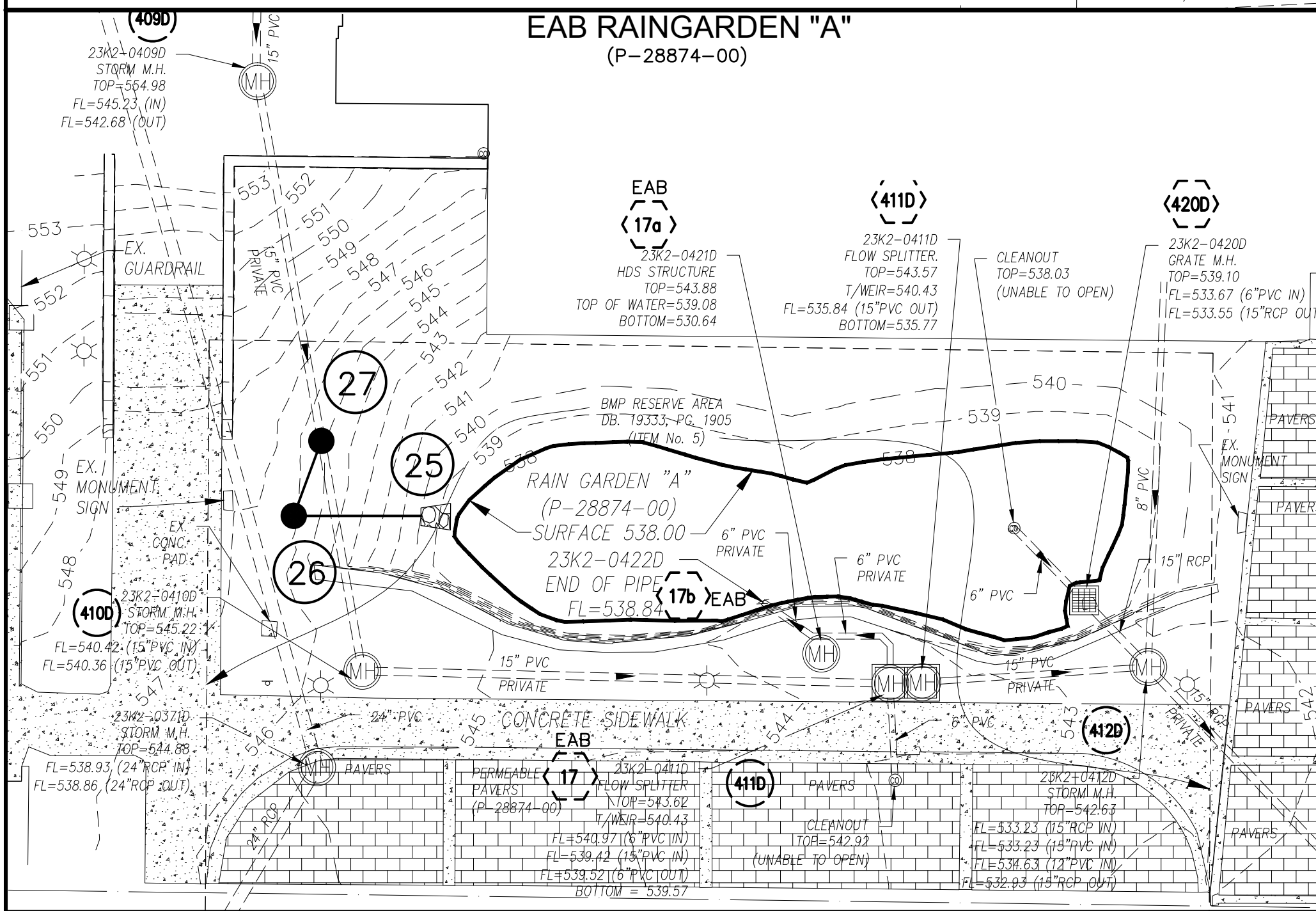
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- SHEET GENERAL NOTES:**
1. THE OWNER ACKNOWLEDGES THE POTENTIAL OF FLOODING DUE TO THE 100-YR OVERLAND FLOW PATH BEING BLOCKED WITH THE PROPOSED IMPROVEMENTS. THE POTENTIAL FLOODING LOCATIONS ARE IDENTIFIED AS THE FOLLOWING AREAS: PROPOSED AREA DRAINS #10 THROUGH #50 AND PROPOSED GRATE INLET #17D.
 2. ALL FILLED AREAS, INCLUDING TRENCH BACKFILLS, UNDER BUILDINGS, PROPOSED STORM AND SANITARY SEWER LINES, AND PAVED AREAS SHALL BE COMPACTED TO A MINIMUM OF 90 PERCENT OF "MODIFIED PROCTOR". FILL IS TO BE PLACED IN A MAXIMUM OF 9-INCH LIFTS. TESTS SHALL BE TAKEN AT A MAXIMUM OF 50-FOOT INTERVALS ALONG THE ROUTE OF THE PIPE; AT A MAXIMUM OF 2-FOOT VERTICALLY; AND LATERALLY ON EACH SIDE OF THE PIPE, AT A DISTANCE EQUAL TO THE DEPTH OF FILL OVER THE PIPE. A COPY OF THESE RESULTS WILL BE SUBMITTED TO MSD PRIOR TO CONSTRUCTION APPROVAL.

- KEYED GRADING PLAN NOTES:**
- 1 STEP WALL AT THIS LOCATION, ELEVATION SOUTH OF THIS POINT IS 555.49, ELEVATION NORTH OF THIS POINT IS 554.89.
 - 2 HIGHPOINT IN SIDEWALK AT 554.89 FOR 15 FEET NORTH OF STEP IN WALL. SEE SHEET C602 FOR CROSS SECTION.
 - 3 100 YEAR PONDING LIMITS.



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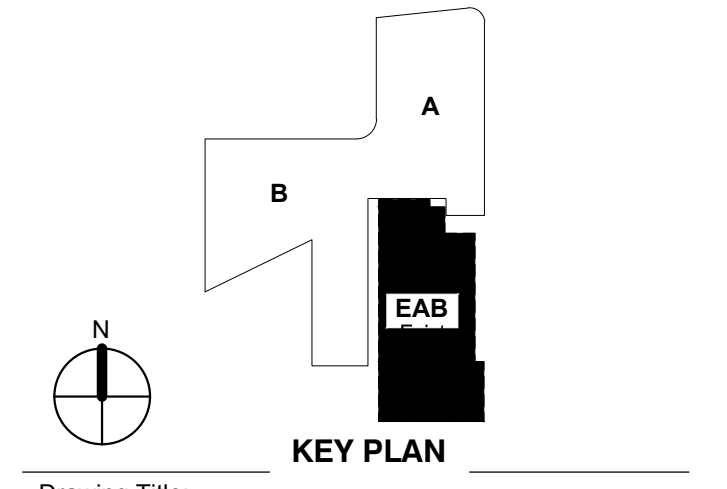
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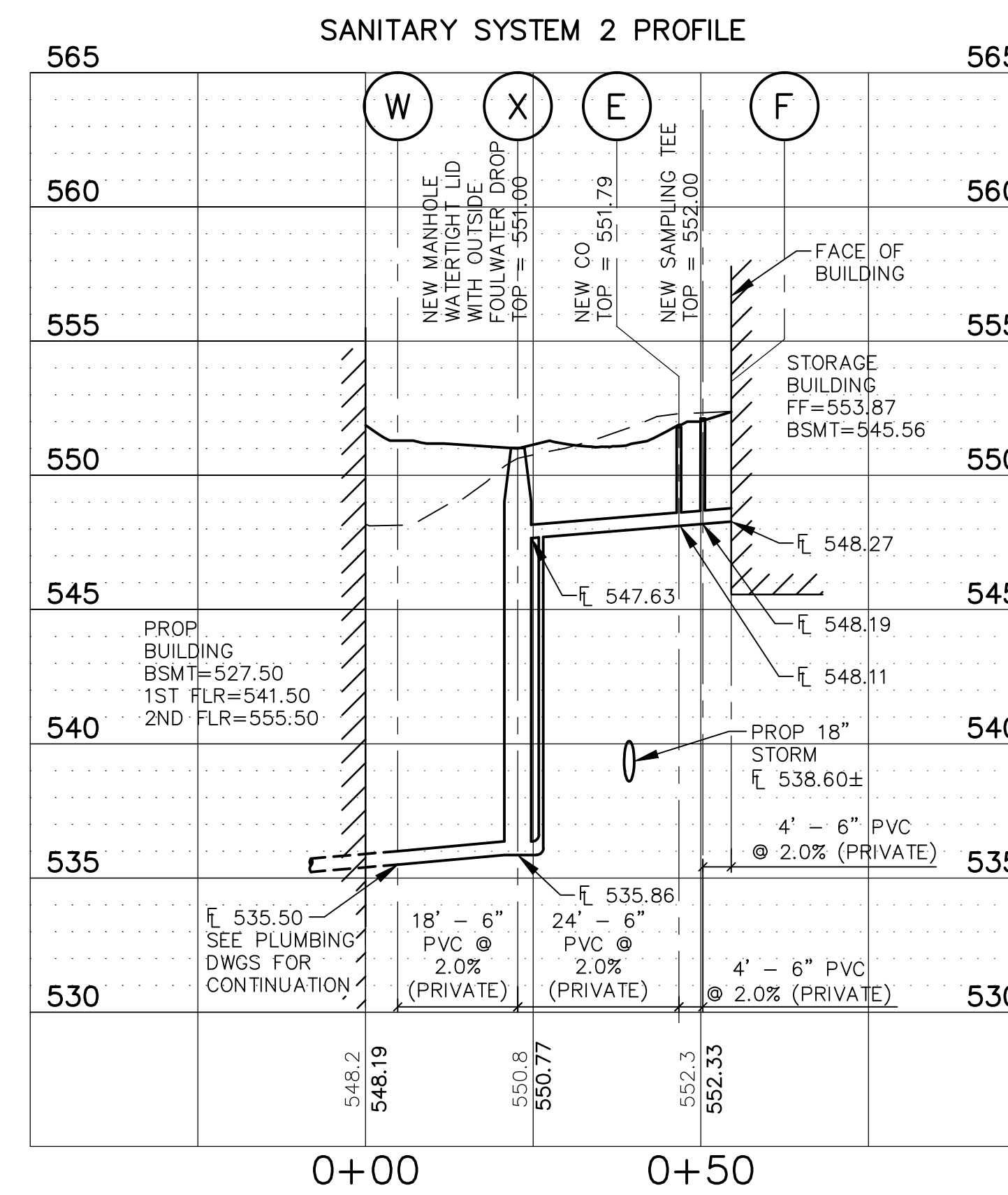


SITE GRADING PLAN

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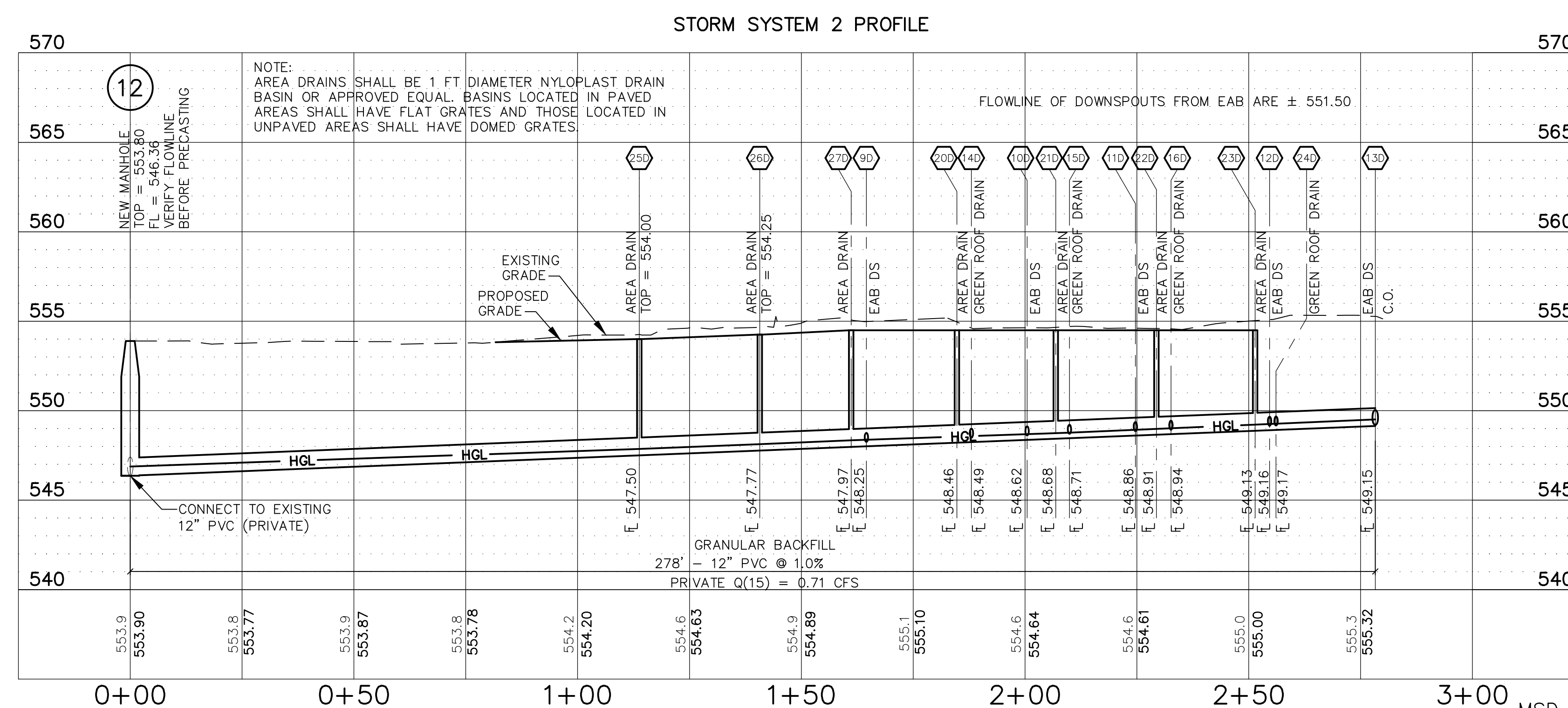
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HORIZONTAL SCALE: 1" = 20'

VERTICAL SCALE: 1" = 5'

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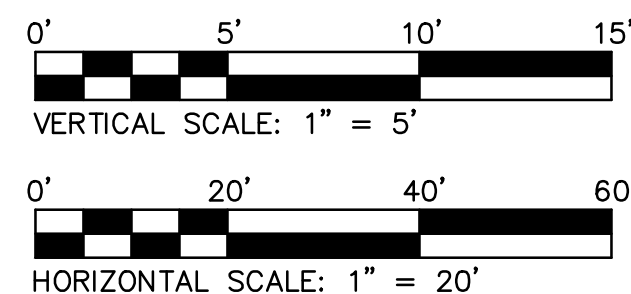
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STORM SYSTEM LOCATION
1. MAIN STORM SEWER
2. DOWNSPOUT LATERAL SYSTEM FOR EAB
3. THRU BUILDING SYSTEM
4. INLET 11
5. PLAZA TRENCH DRAIN
6. AREA WELL EAST SIDE OF ISB
7. AREA WELL NORTH OF WEST WING



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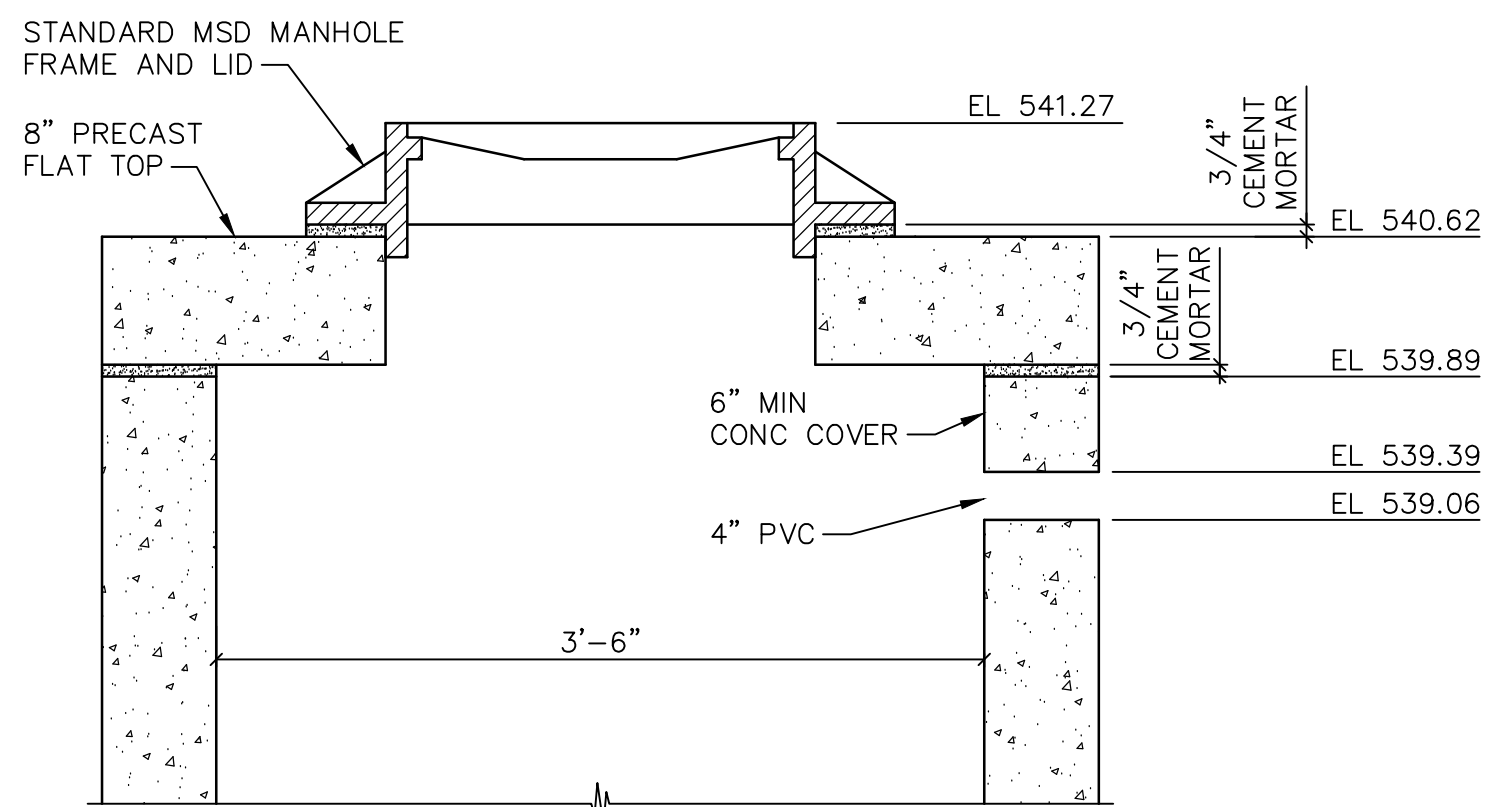
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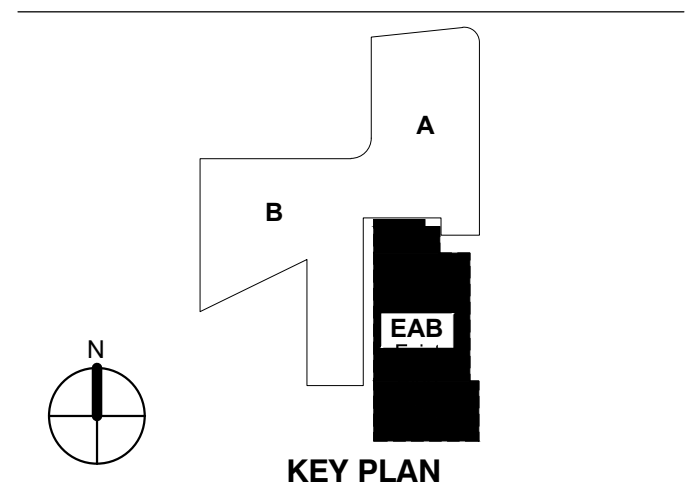


MANHOLE 23 TOP SECTION
N.T.S.



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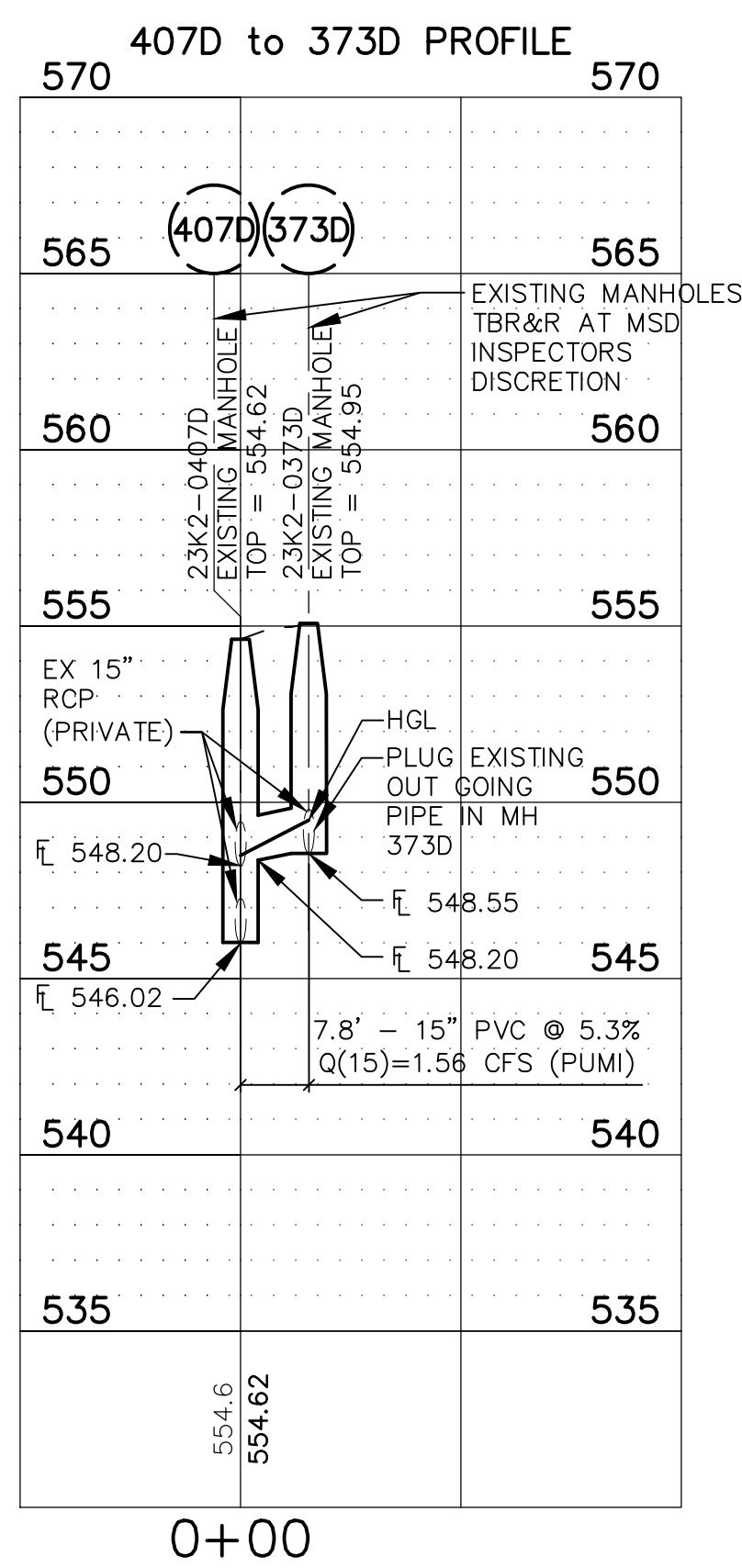
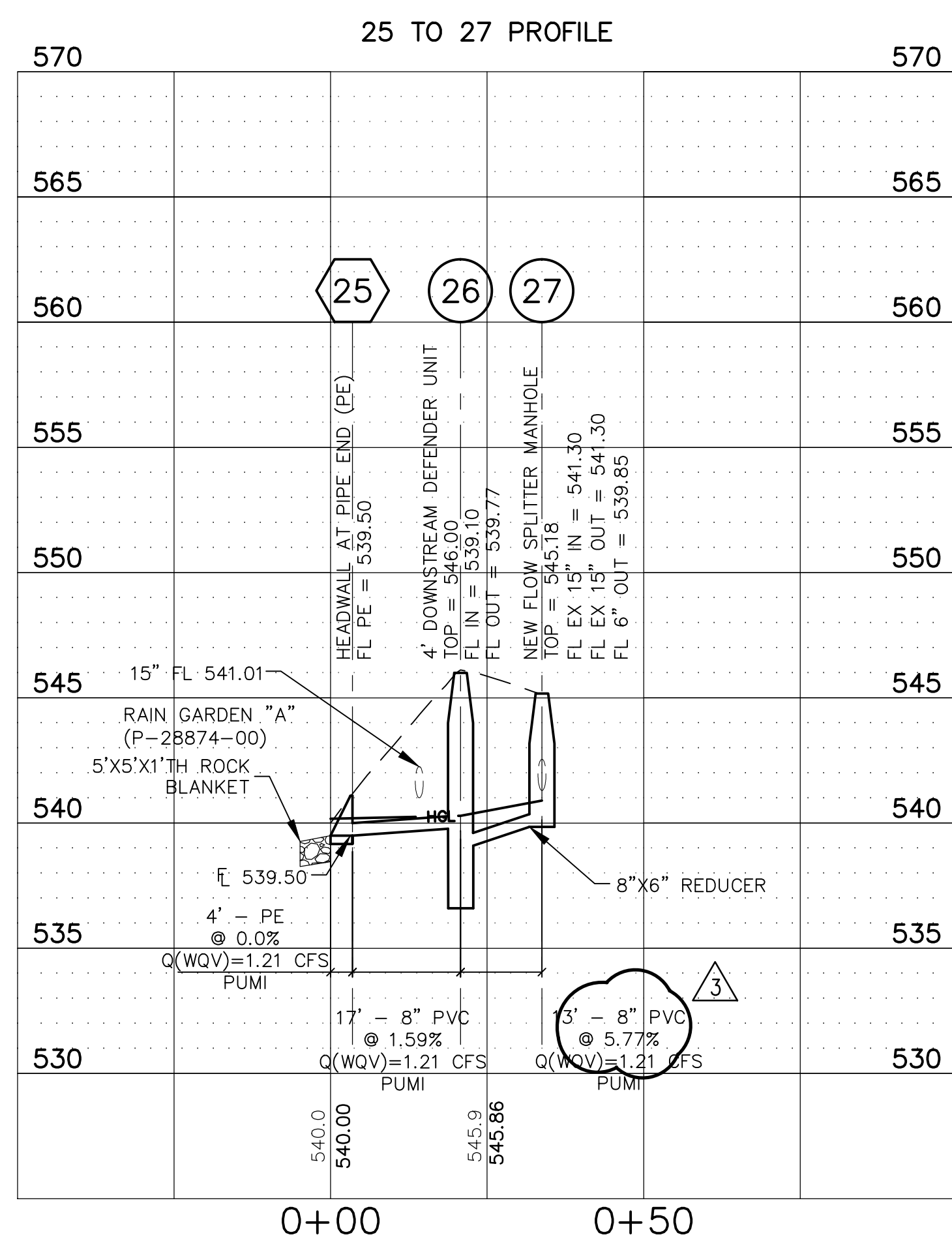
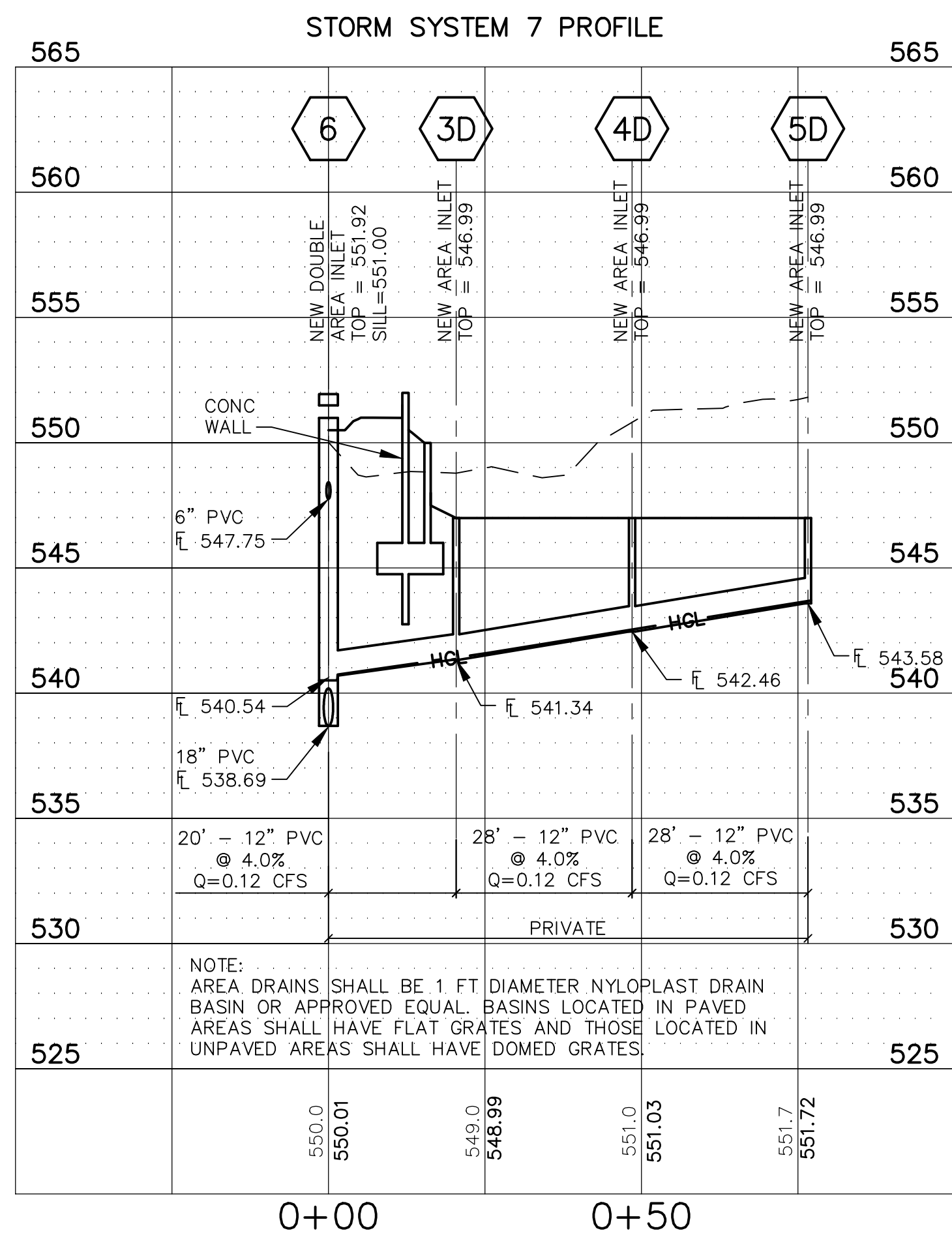
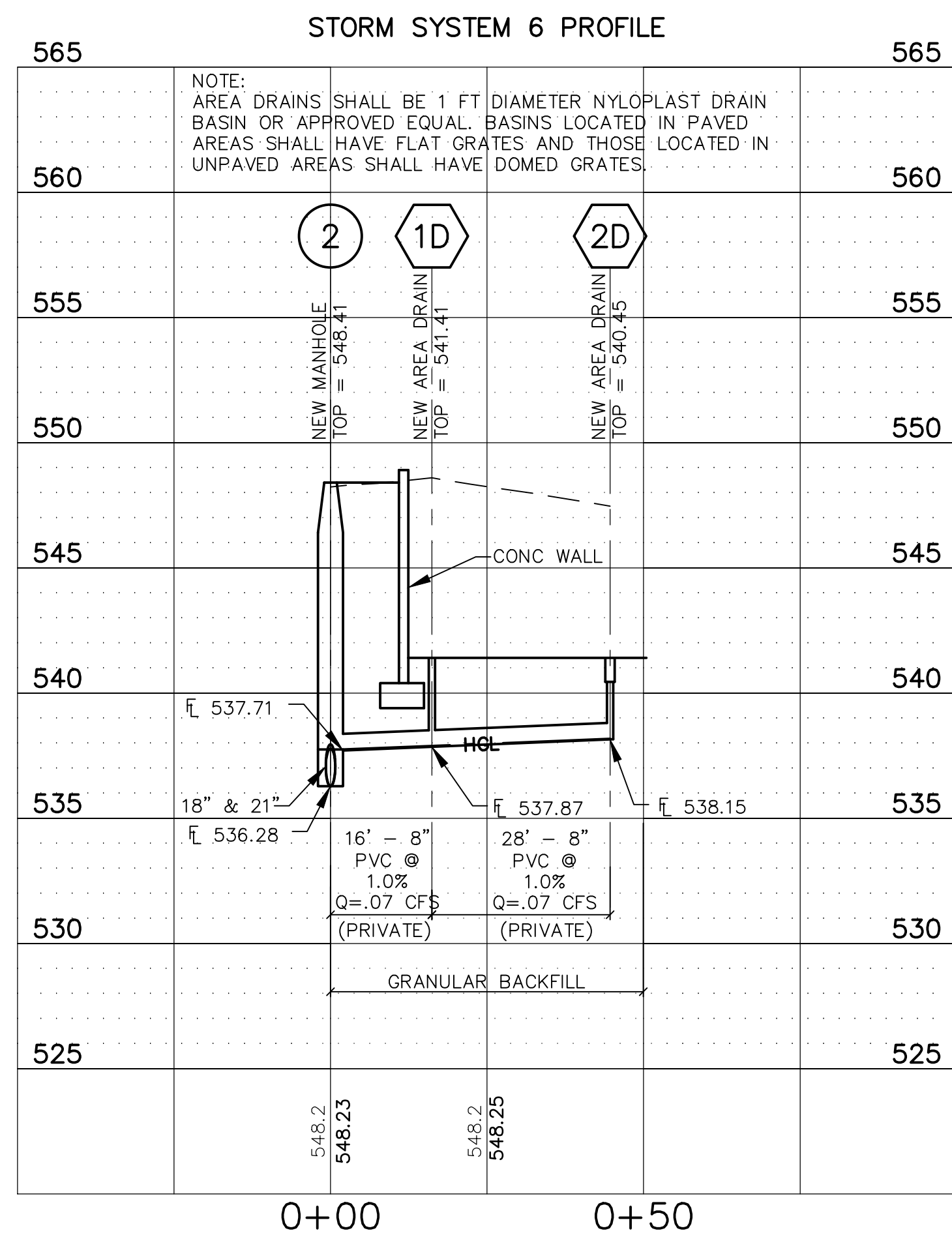
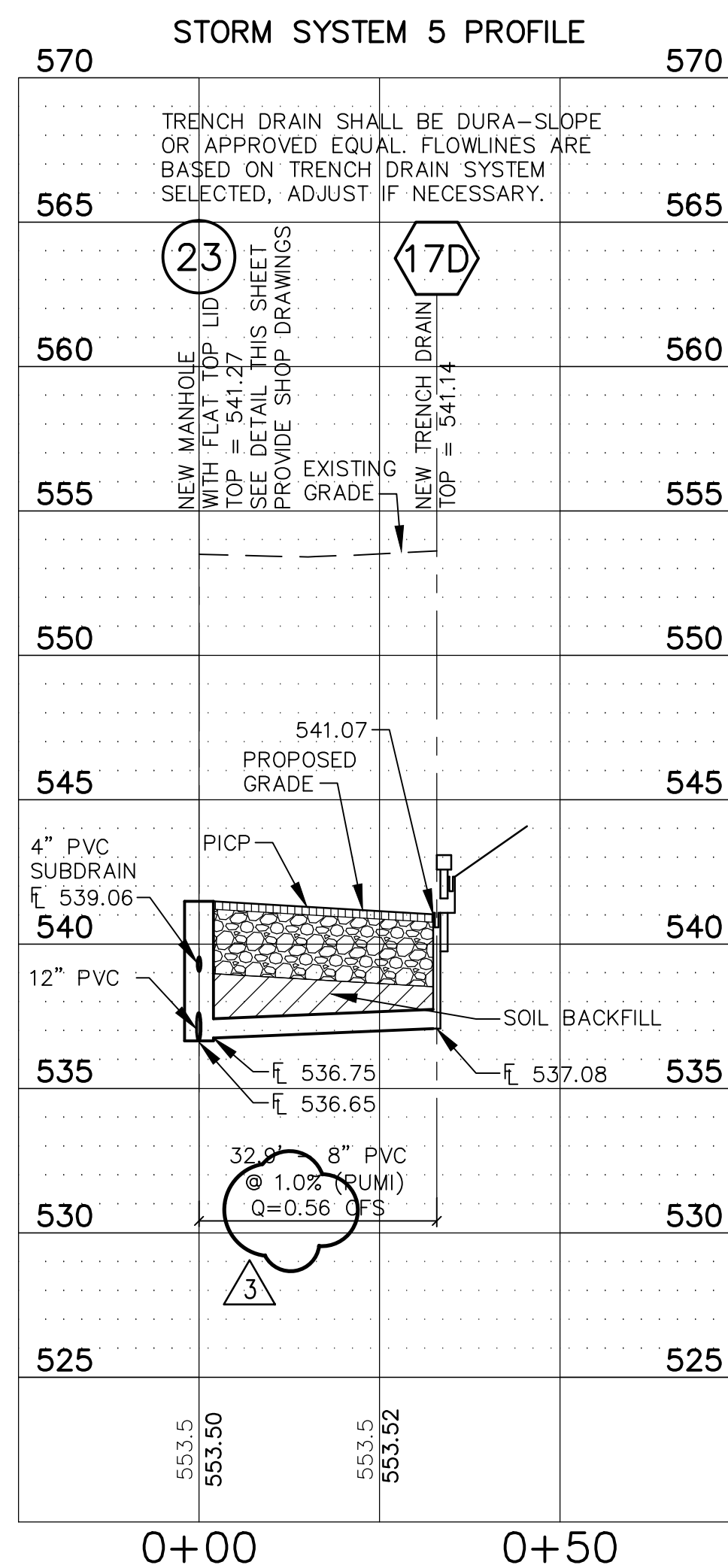
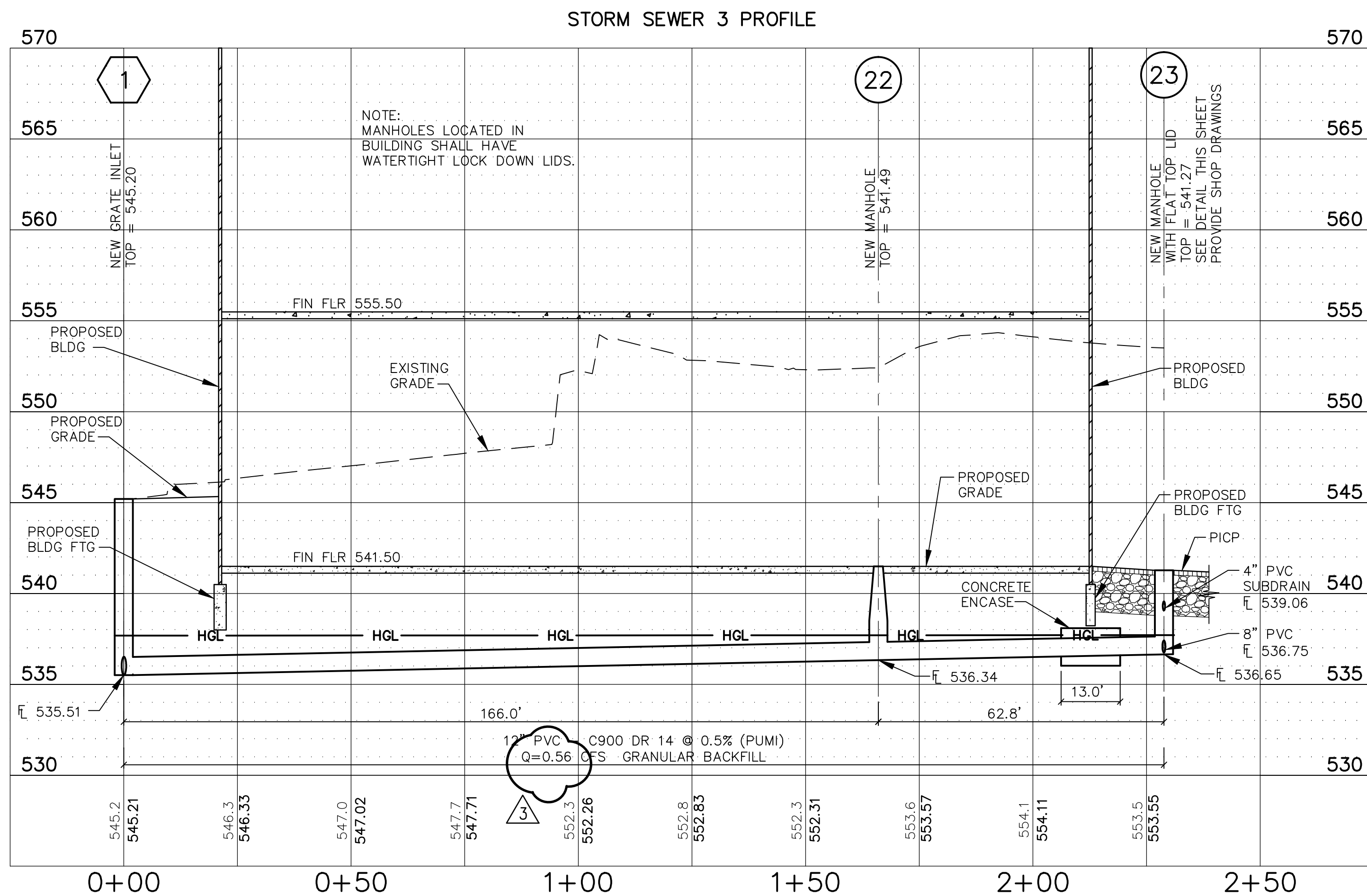
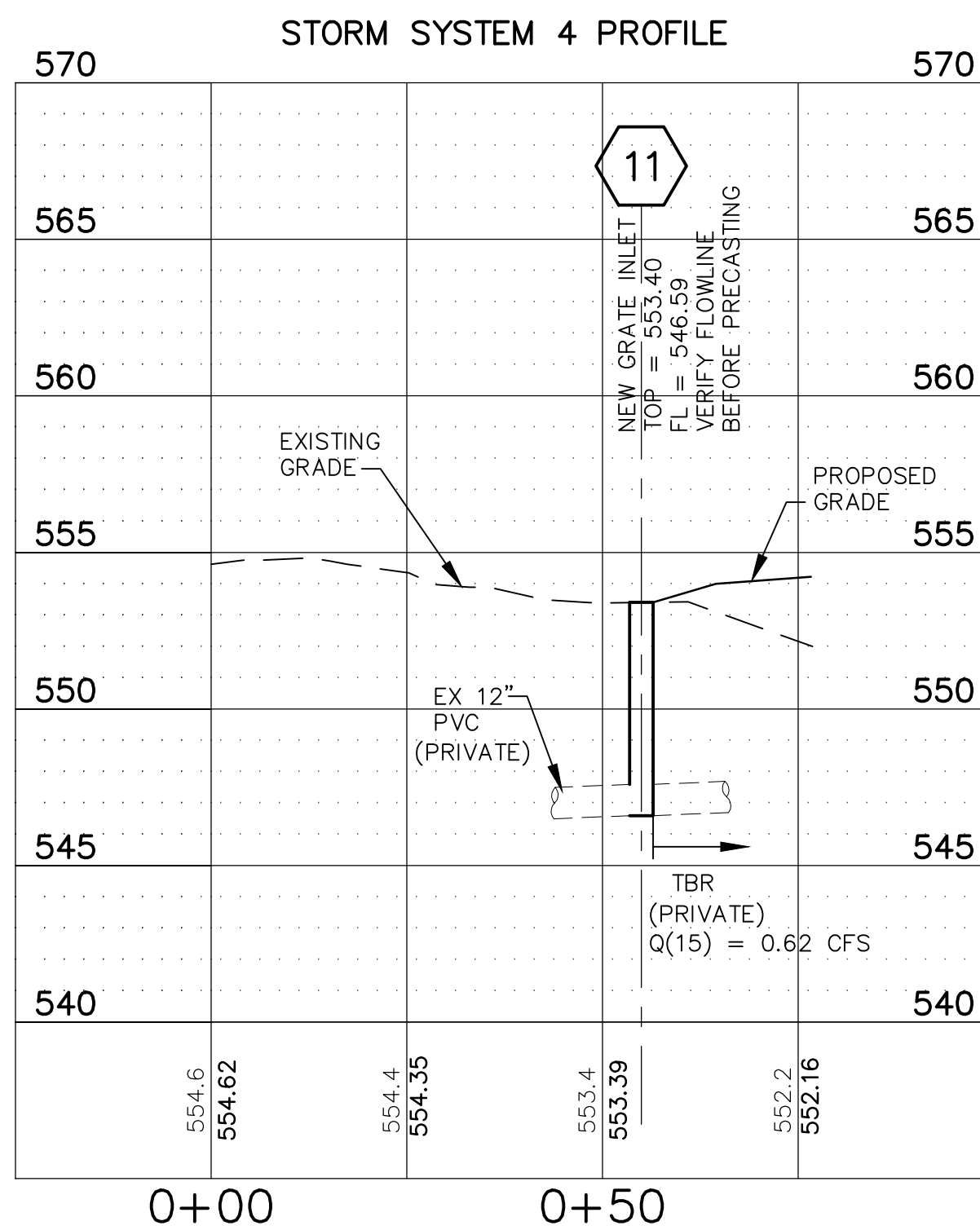


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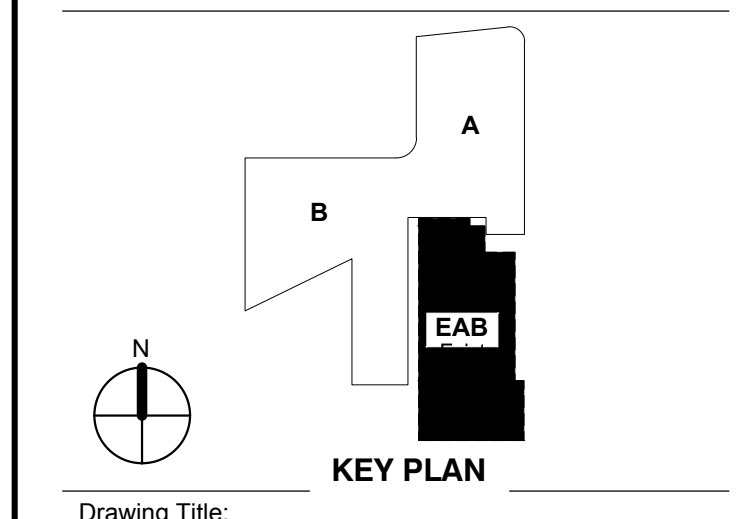
NOTE:
FLOWS (Q) AND HYDRAULIC GRADE LINE
(HGL) INFORMATION ARE FOR 100 YEAR 20
MINUTE STORM EVENT EXCEPT AS NOTED.

MSD P# 28874-01 MSD BASE MAP 23K2



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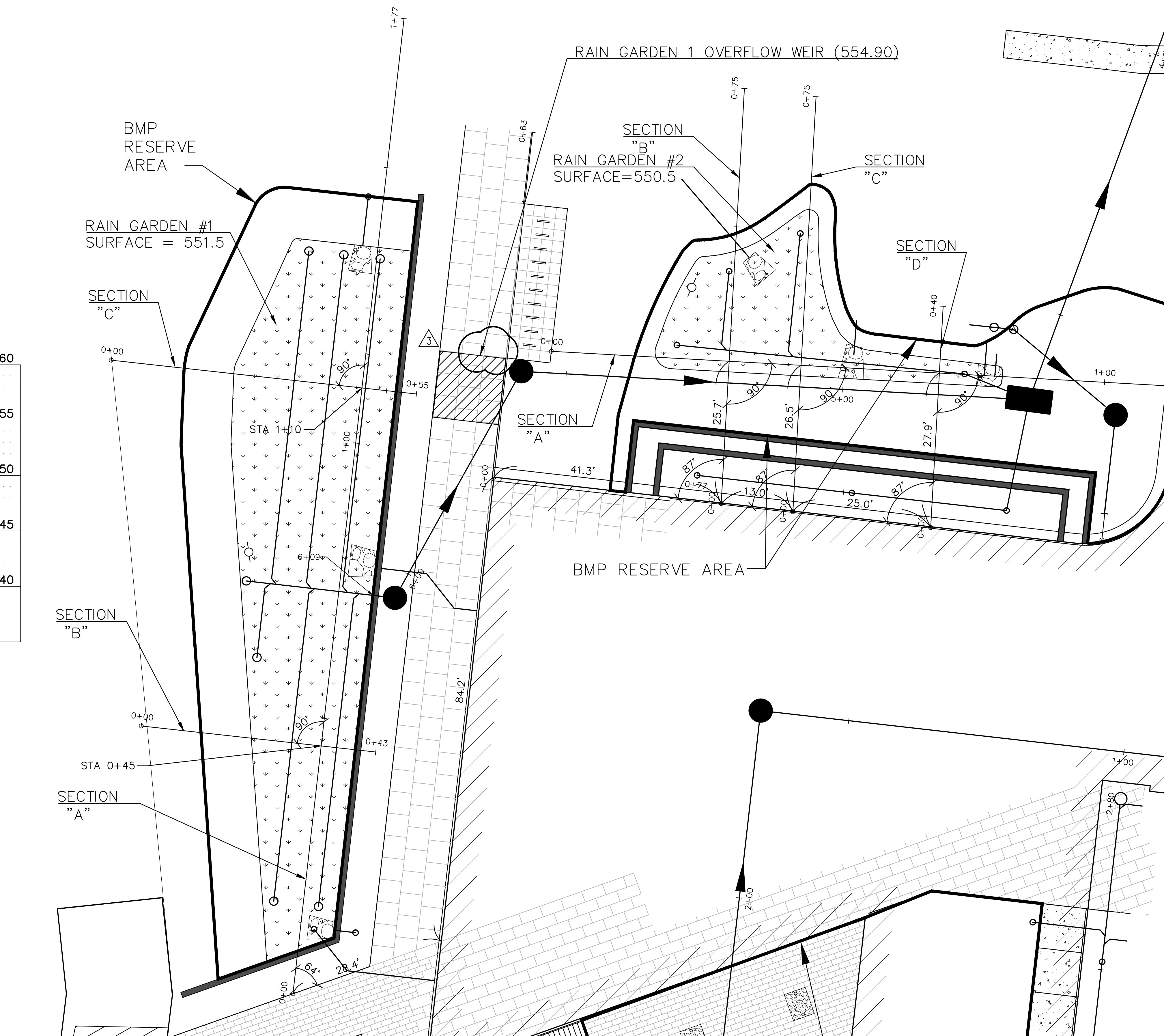
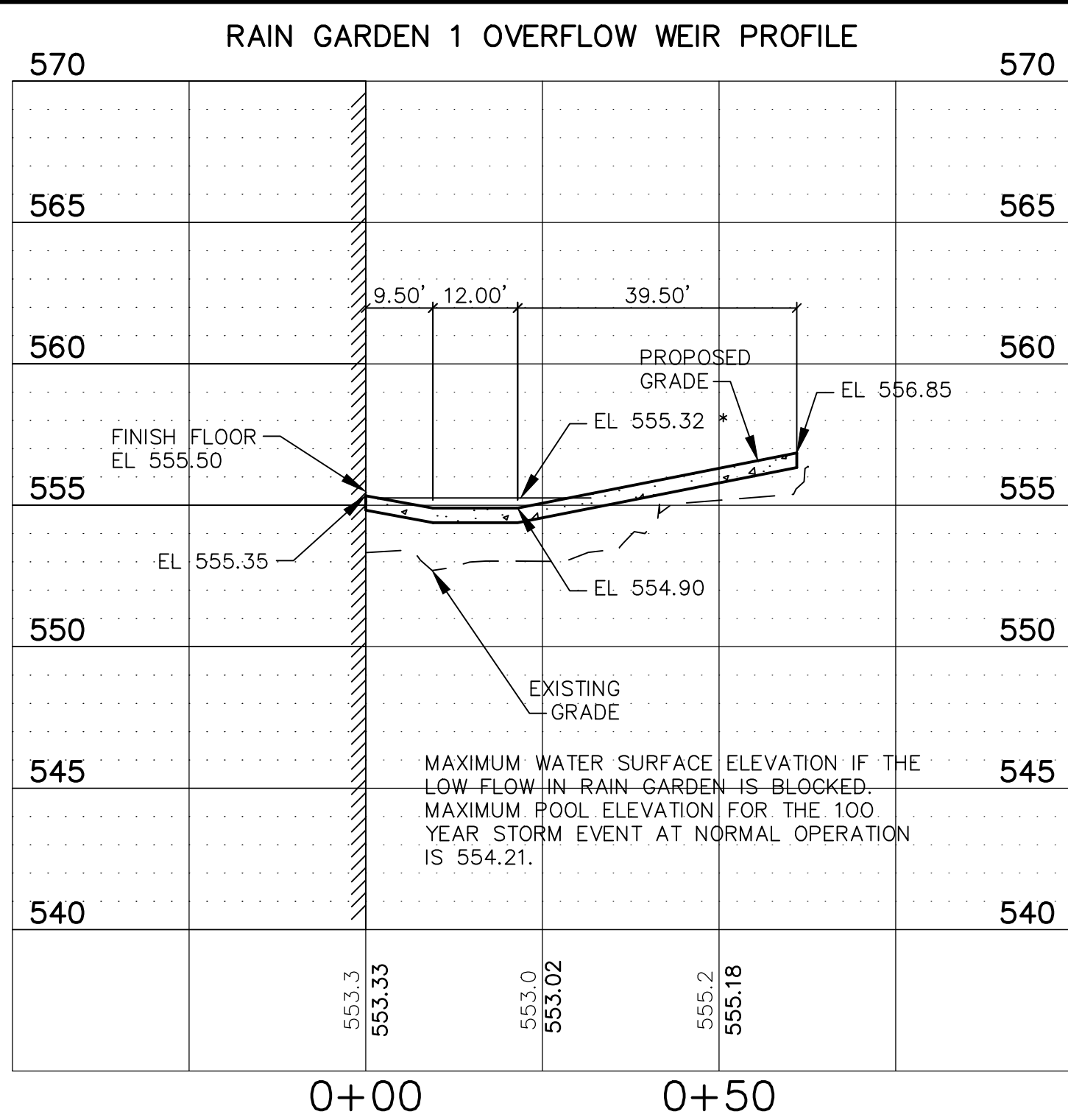
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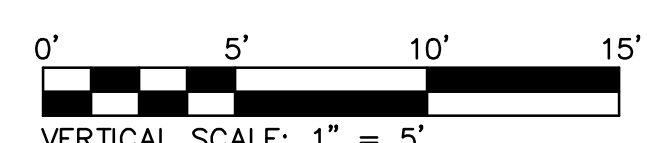
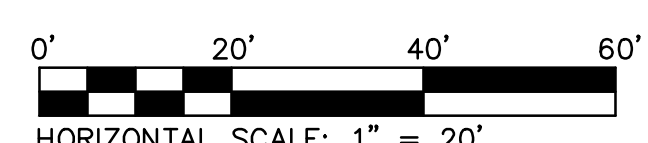
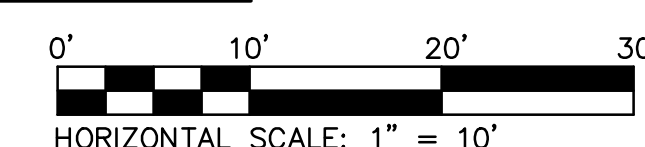
BASIN SECTIONS

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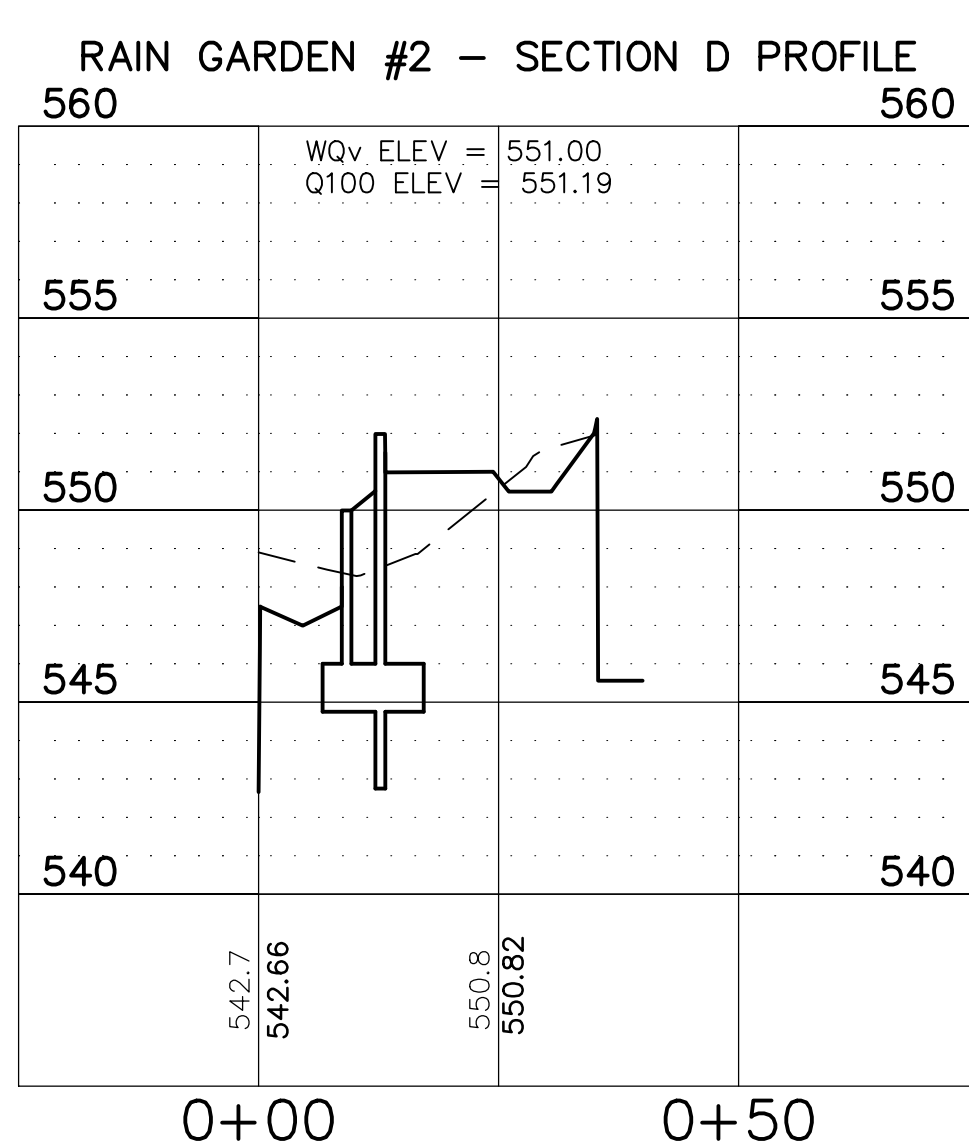
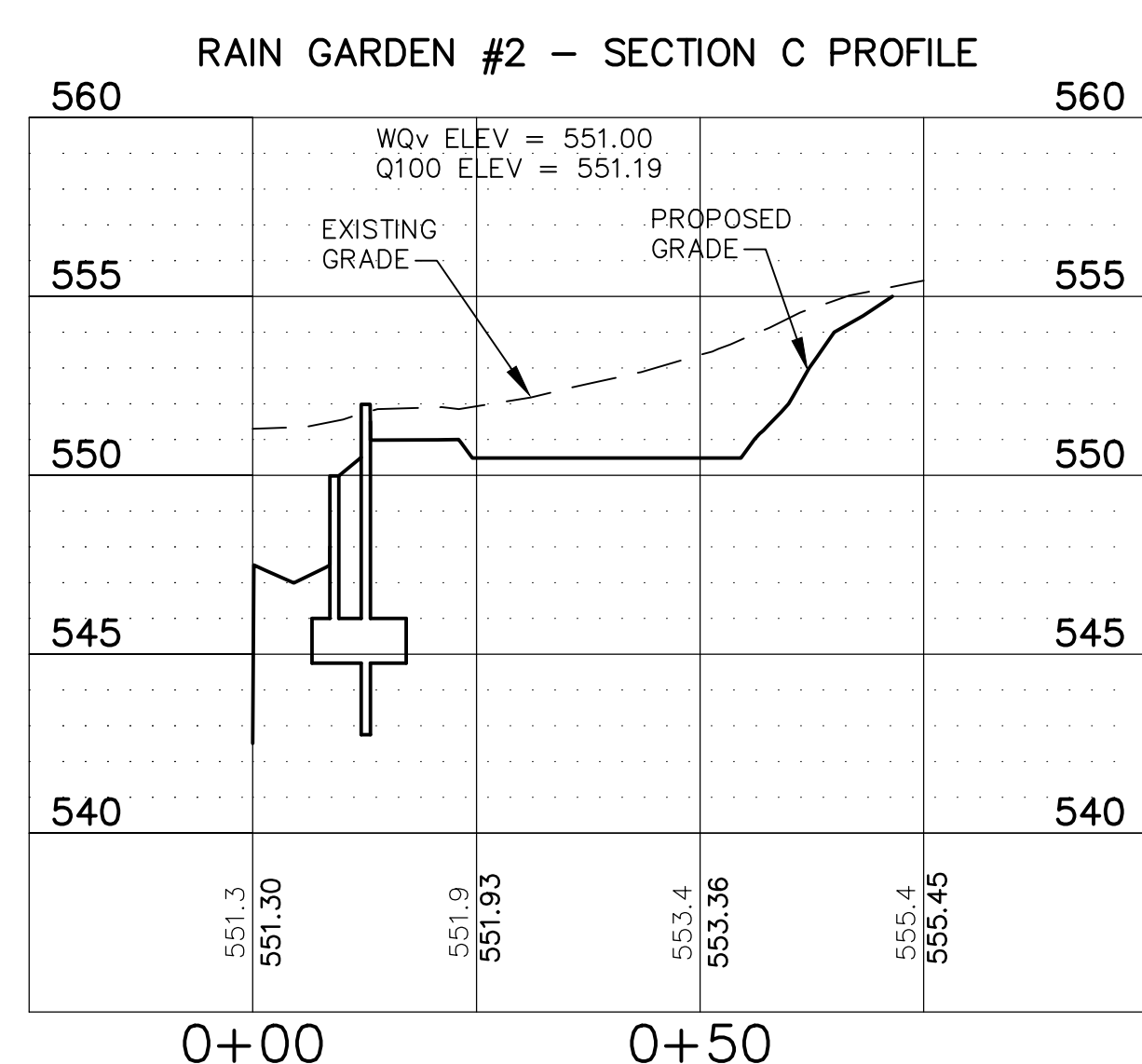
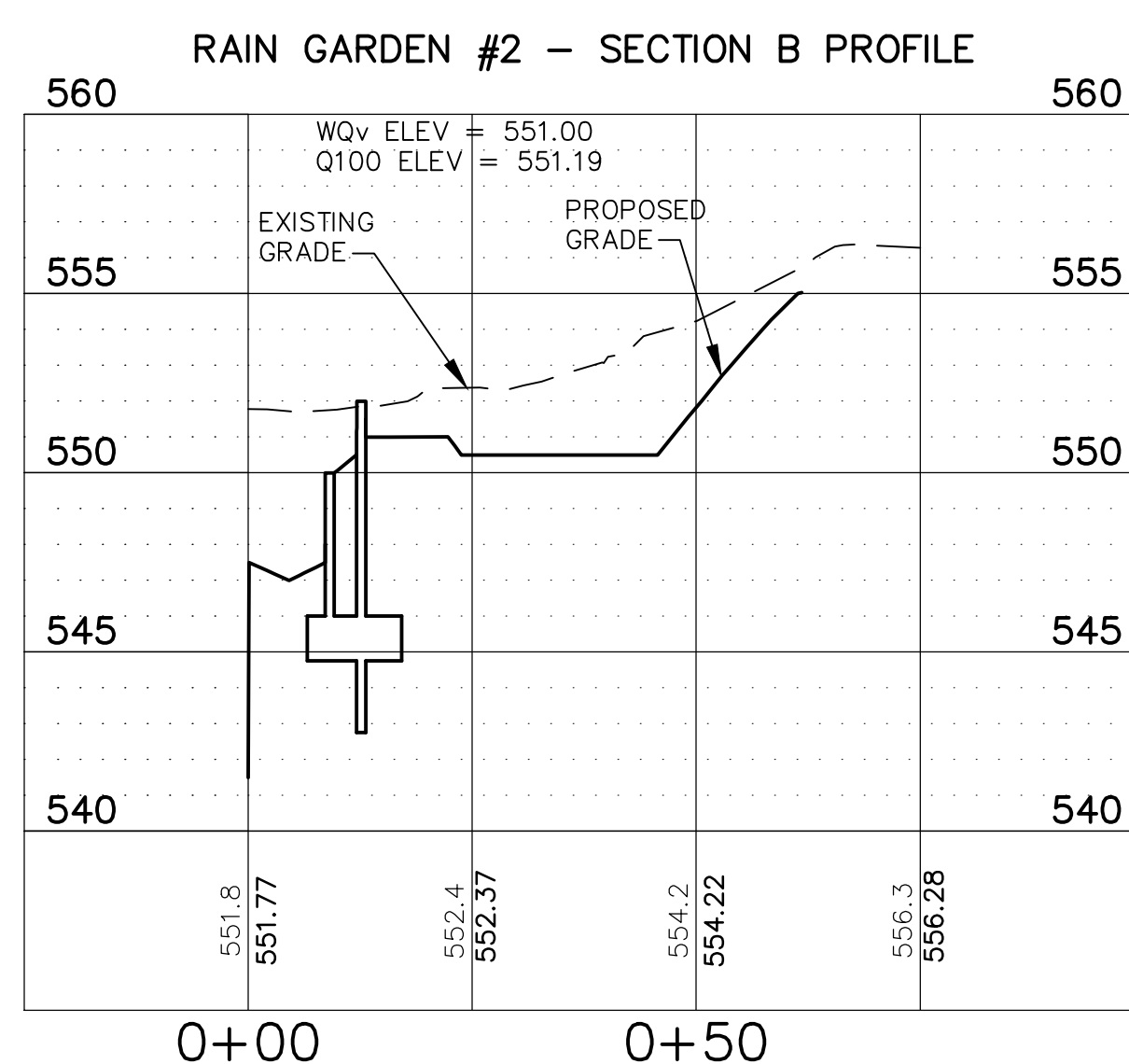
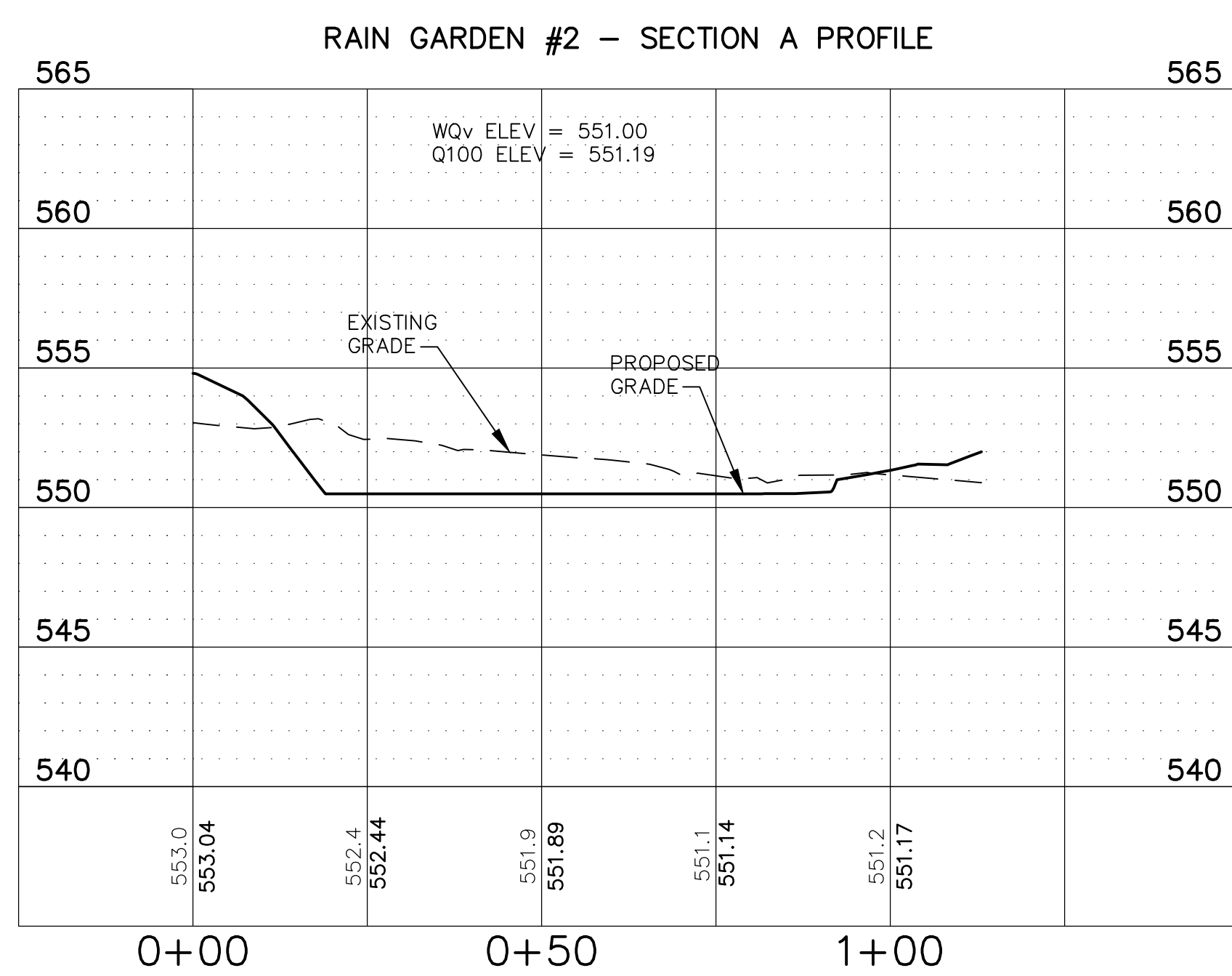
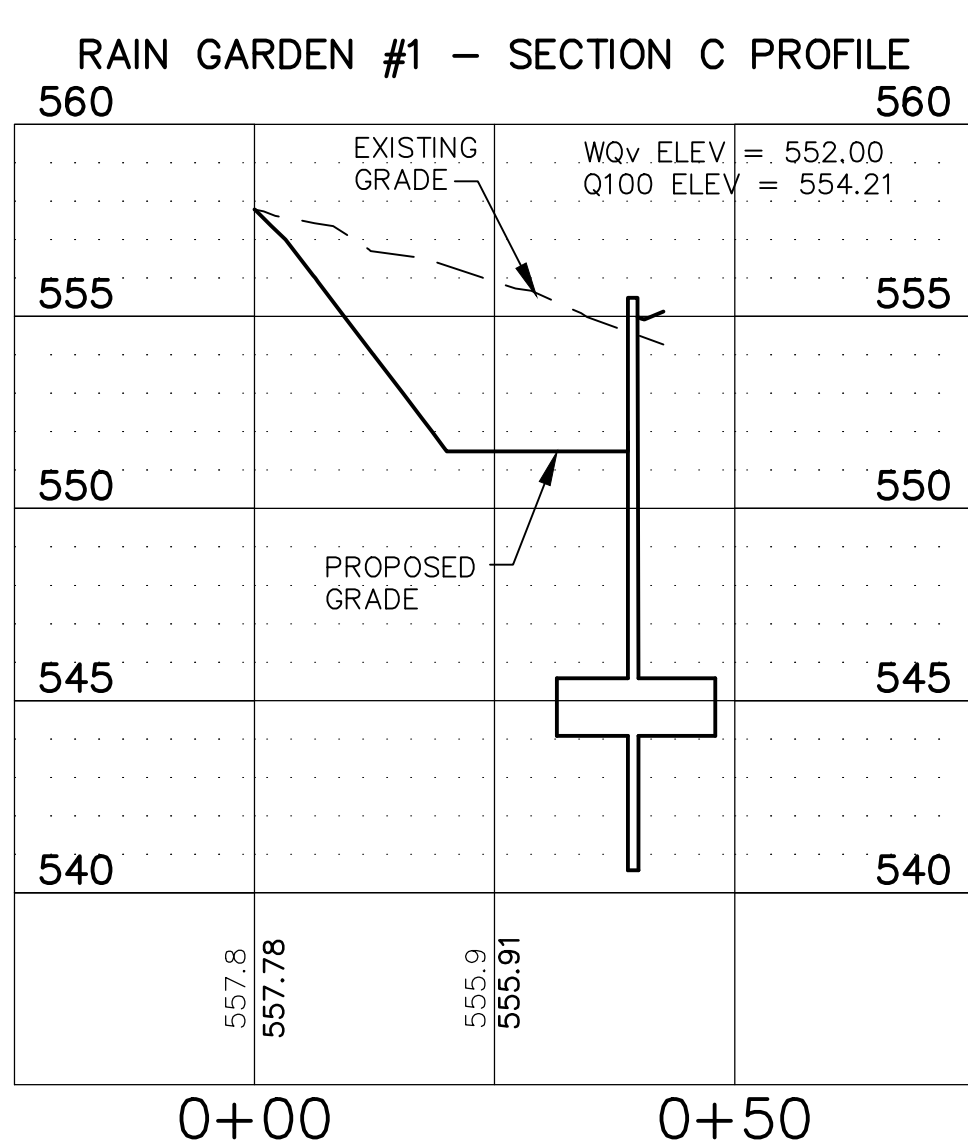
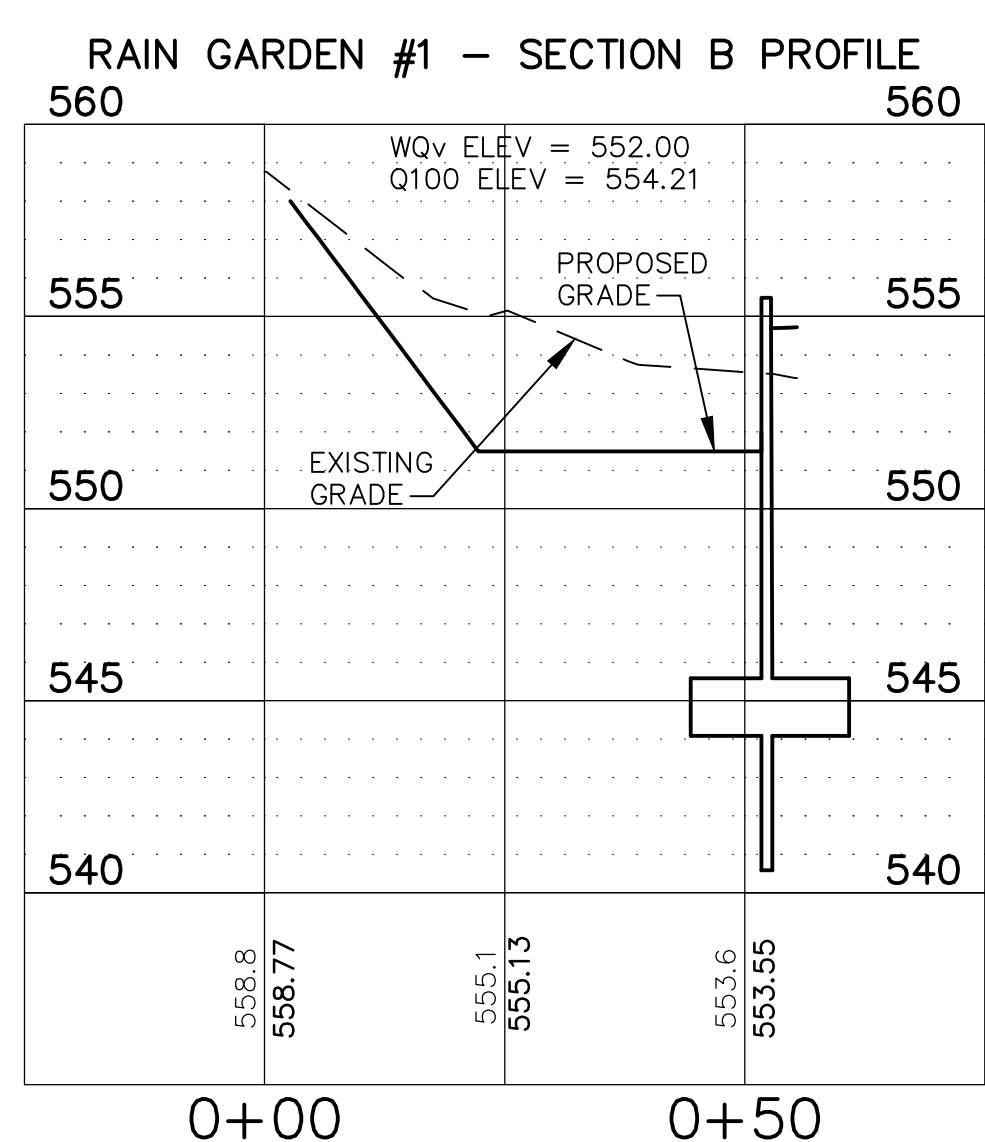
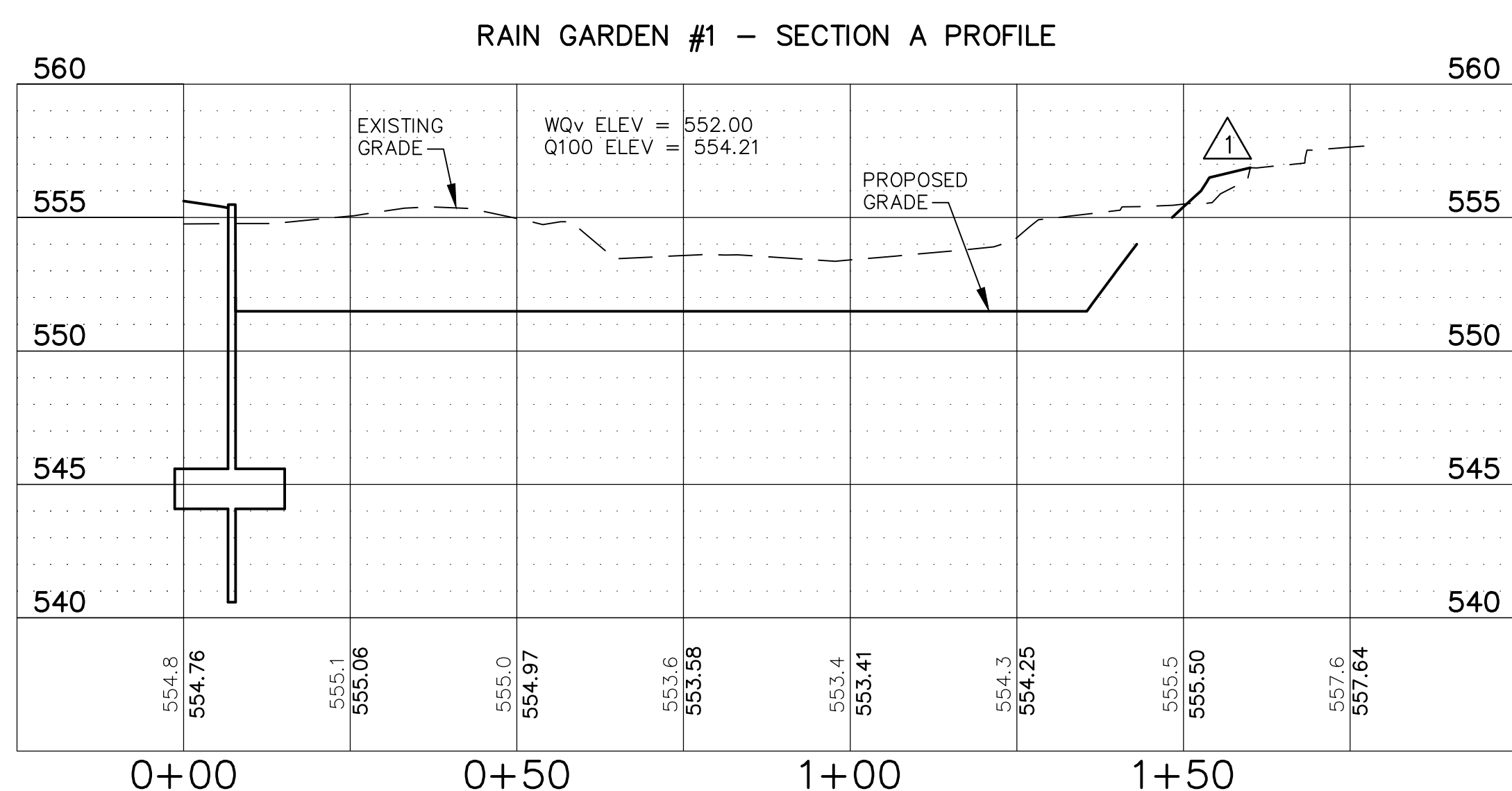
C602

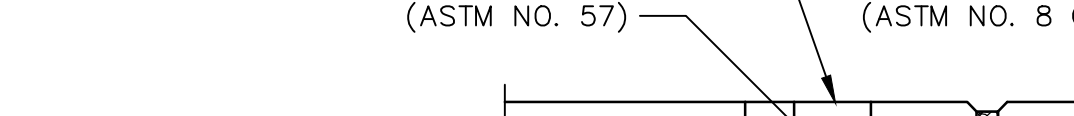
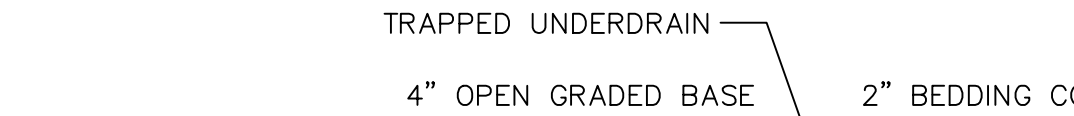
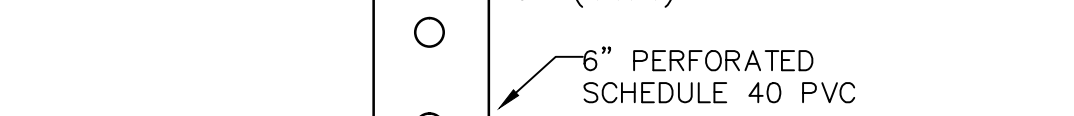
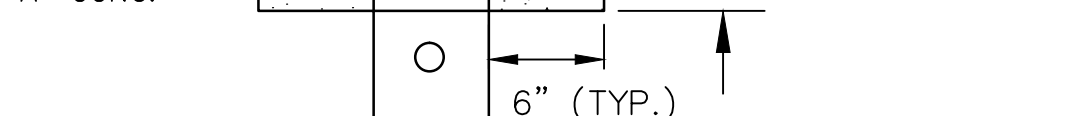
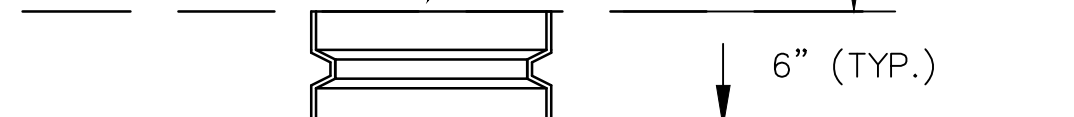
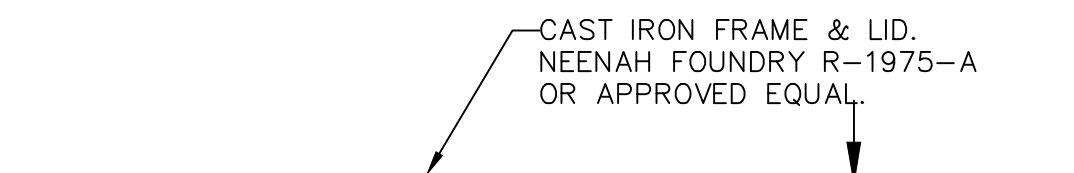
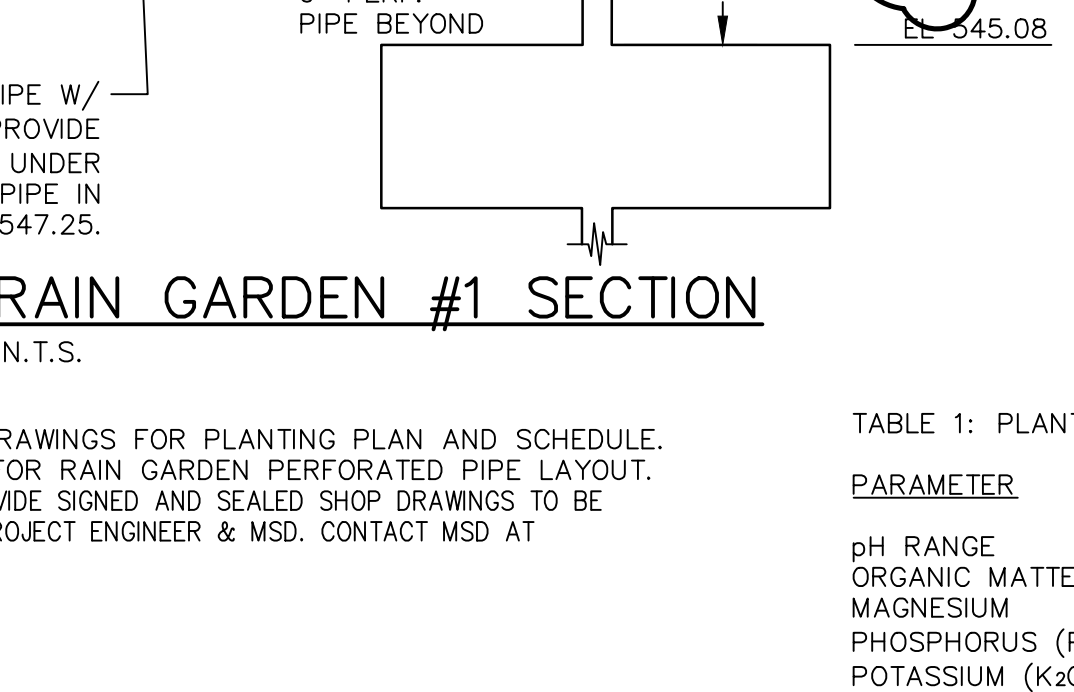
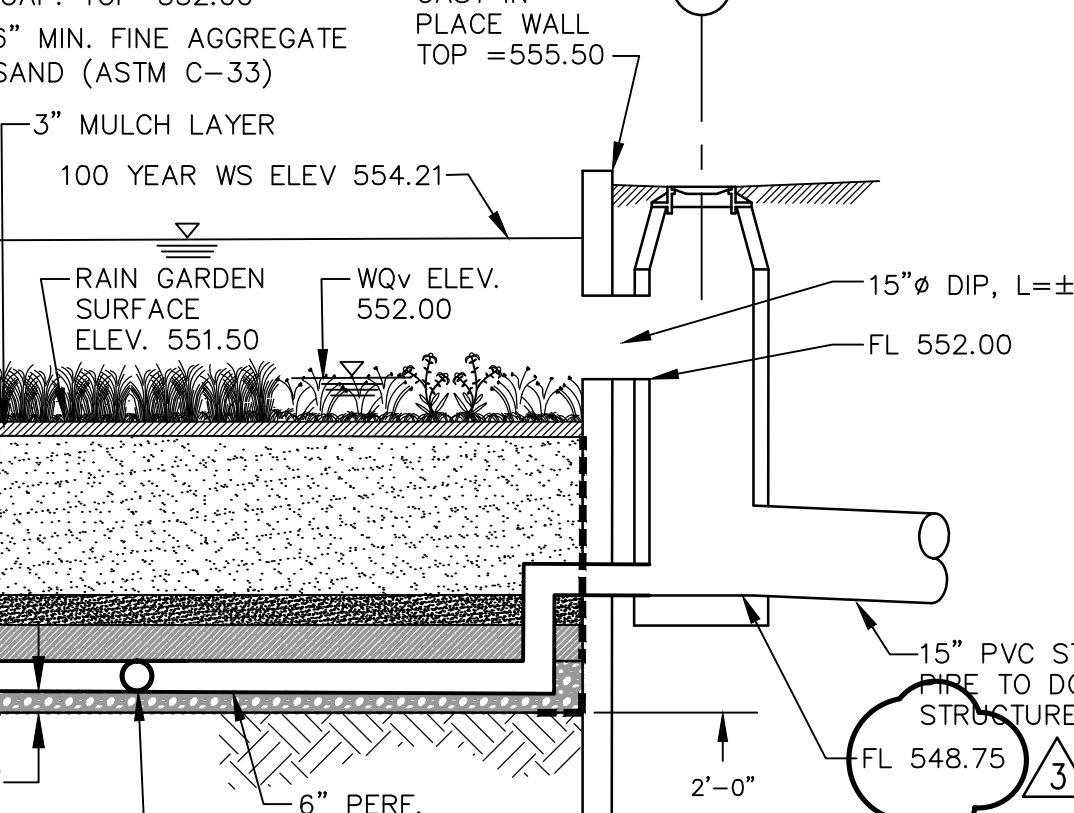
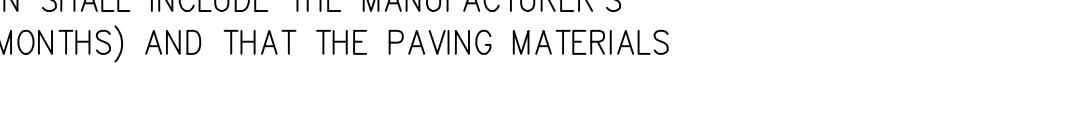
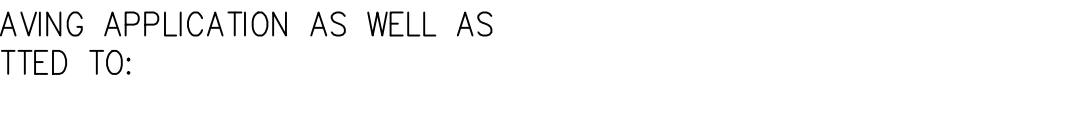
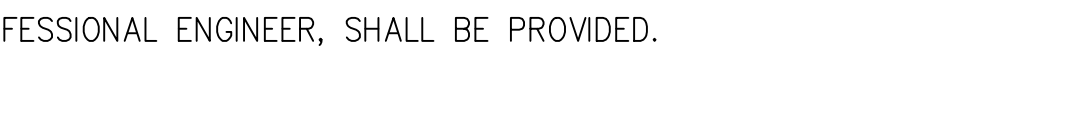
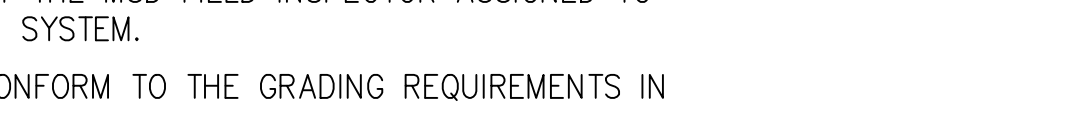
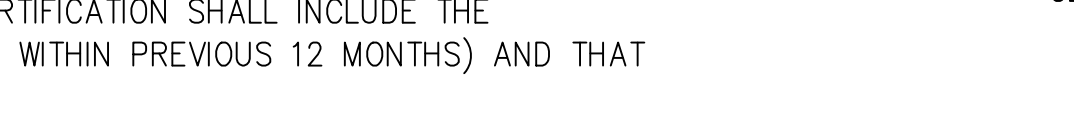
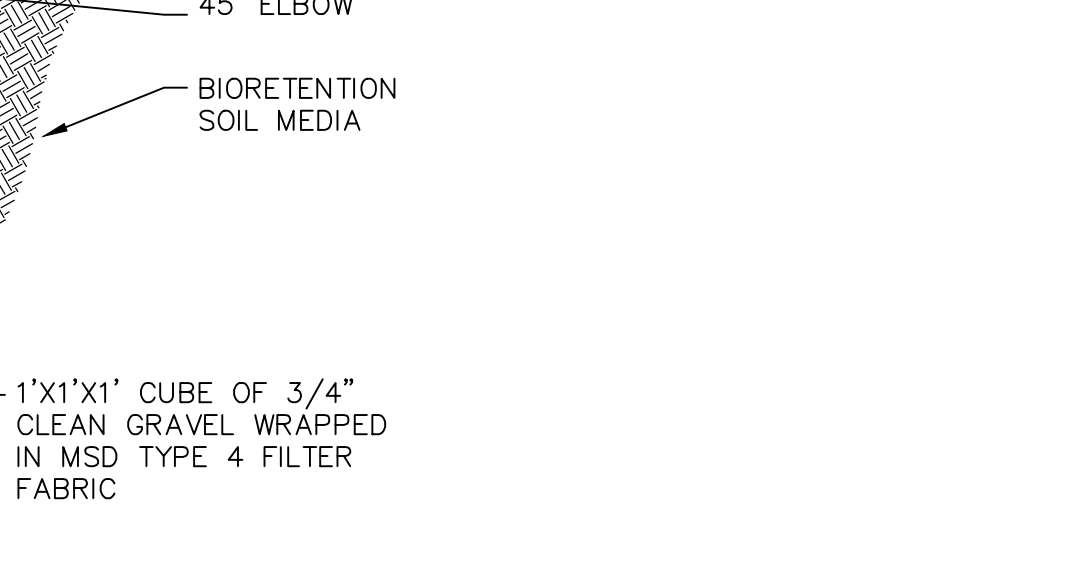
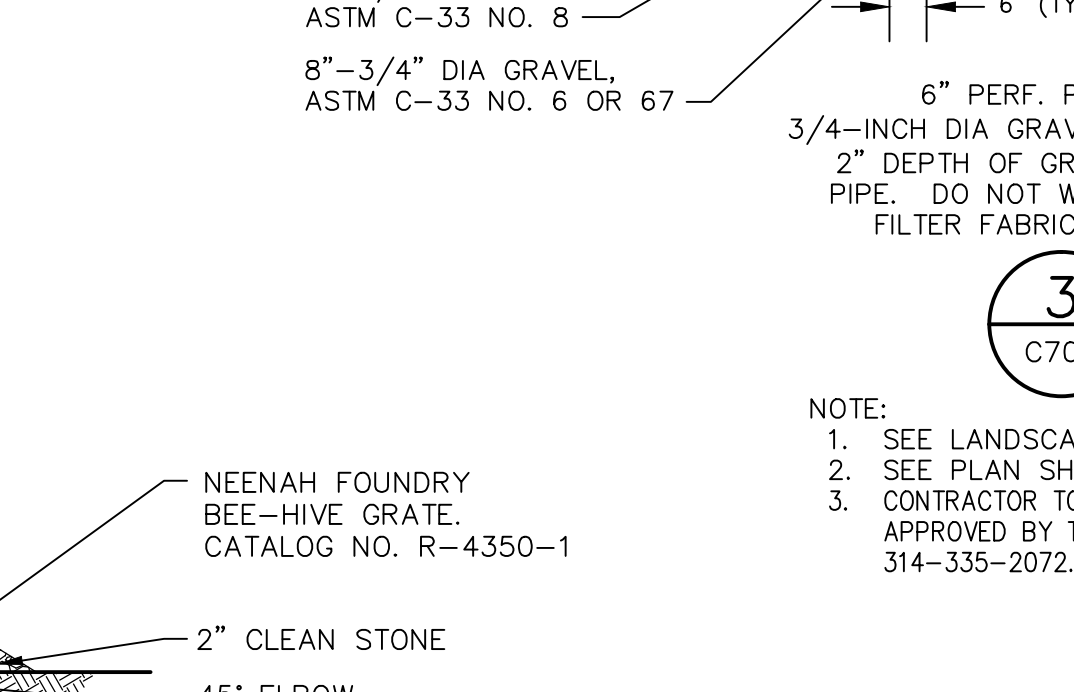
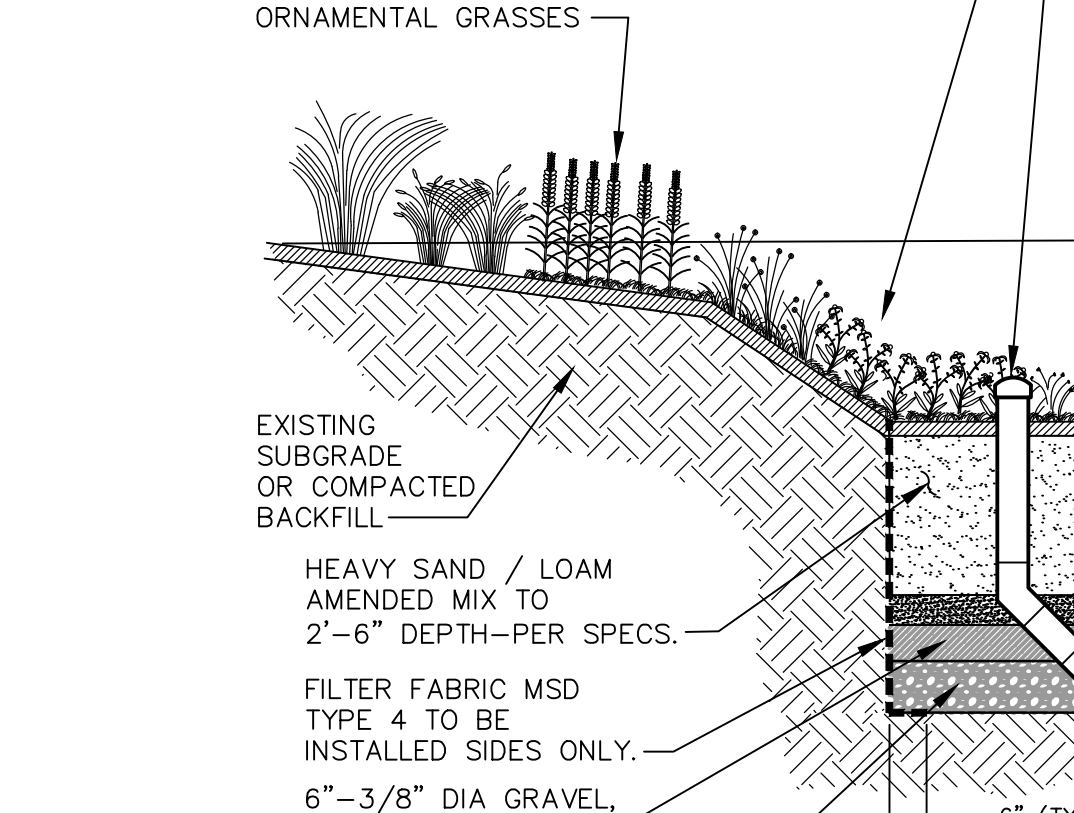
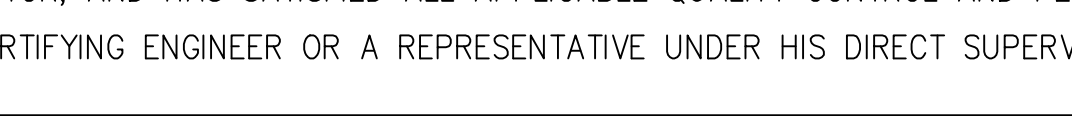
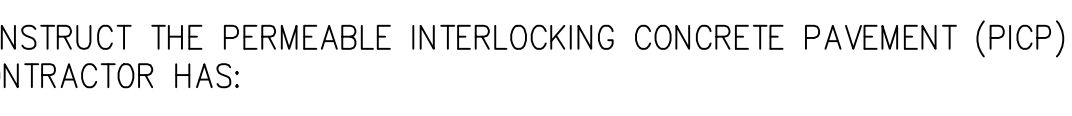
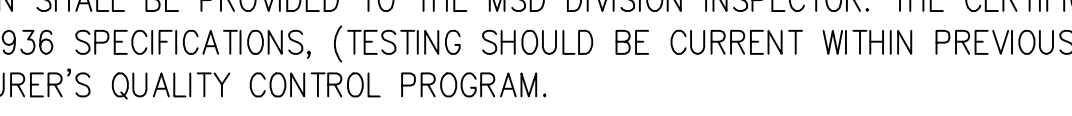
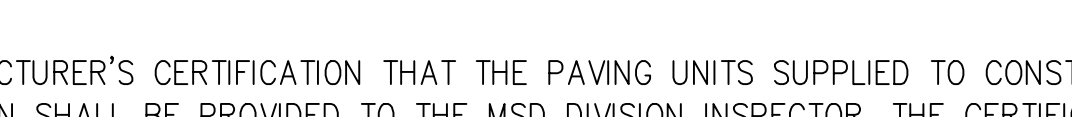
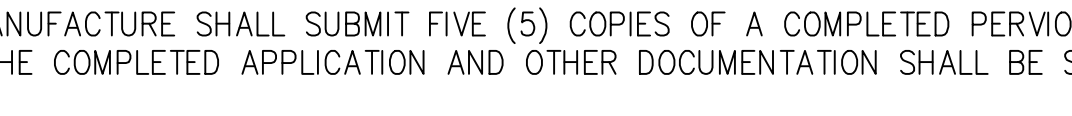
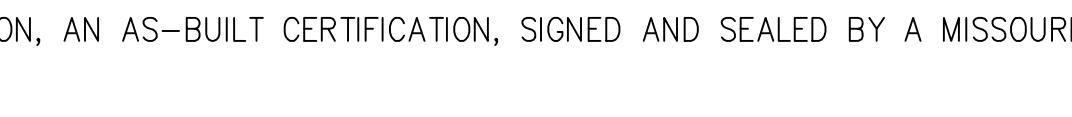
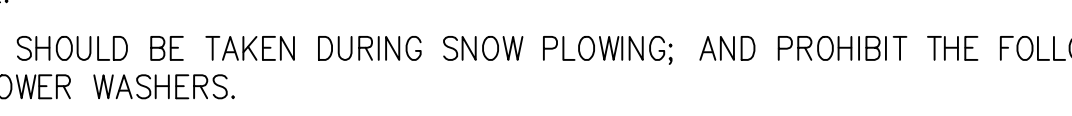
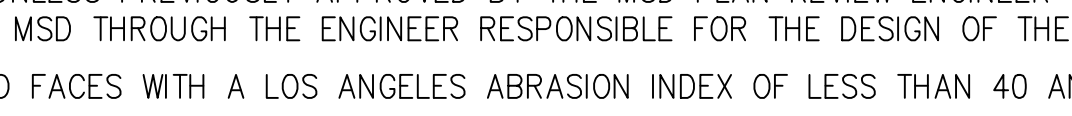
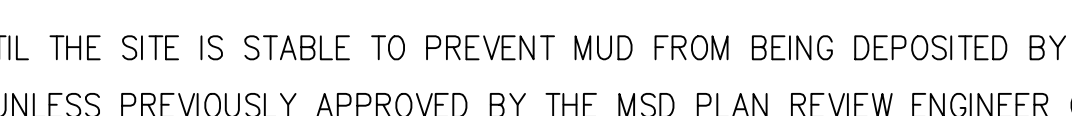
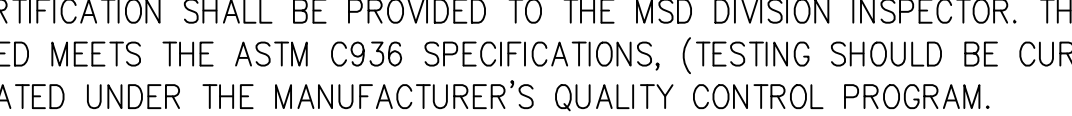
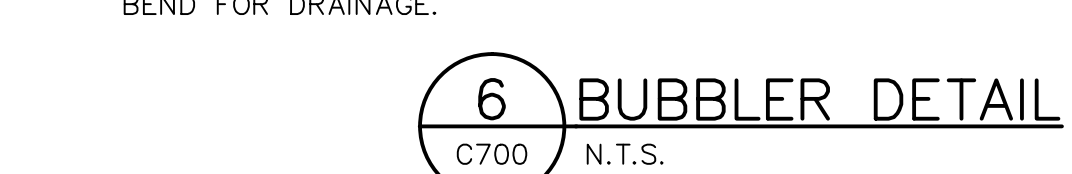
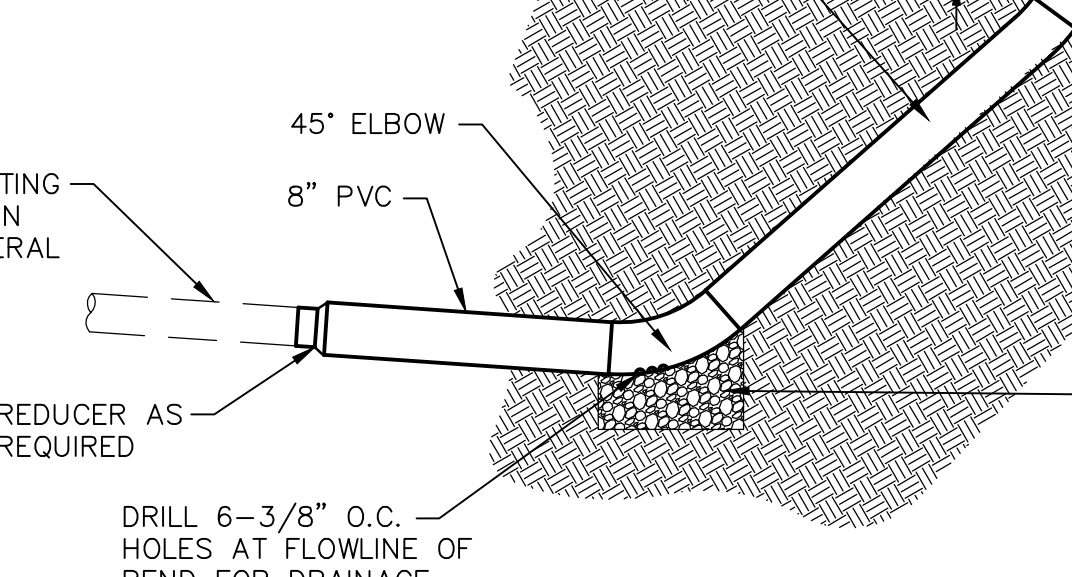
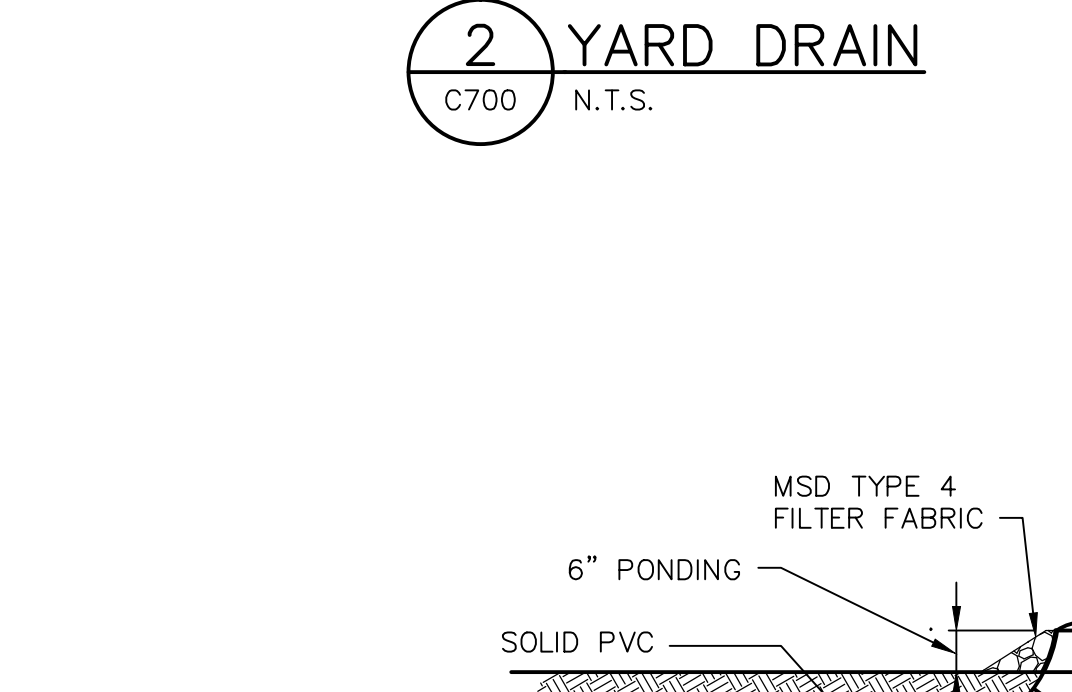
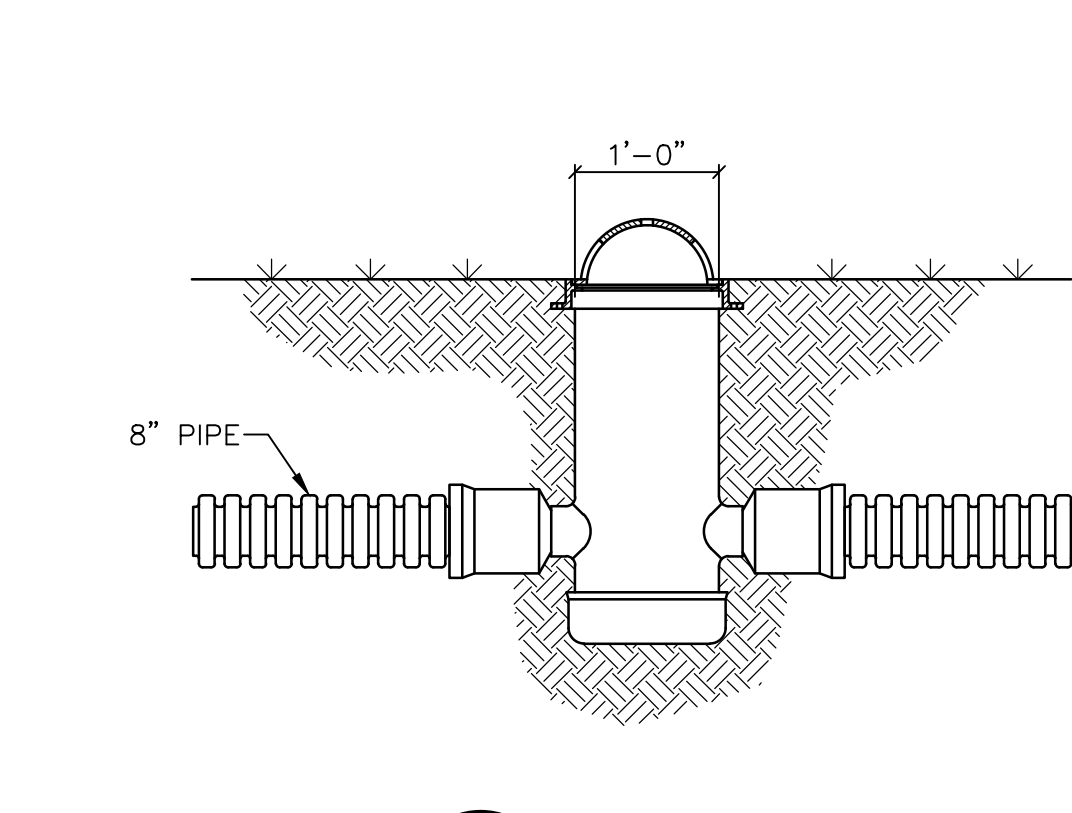
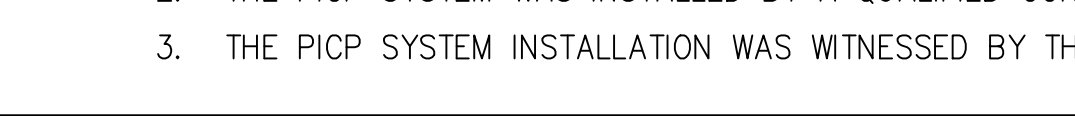
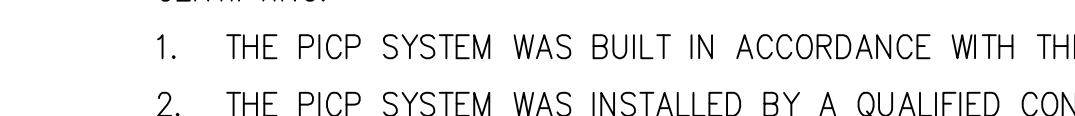
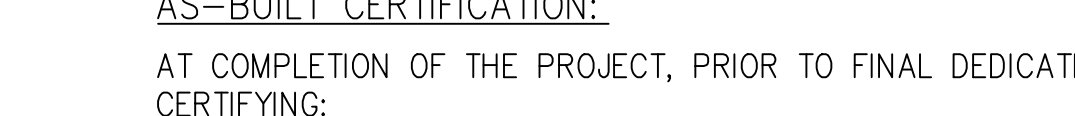
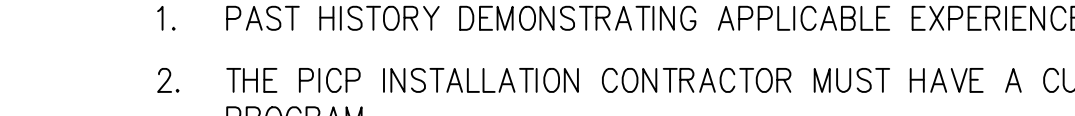
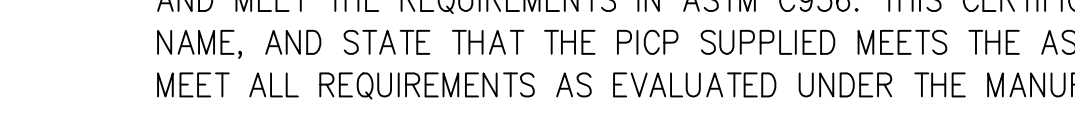
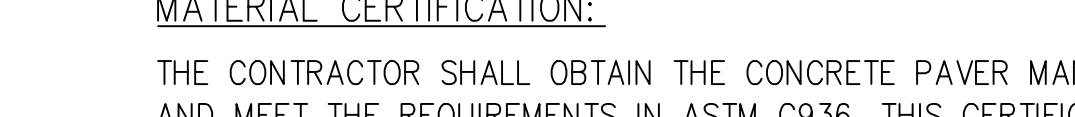
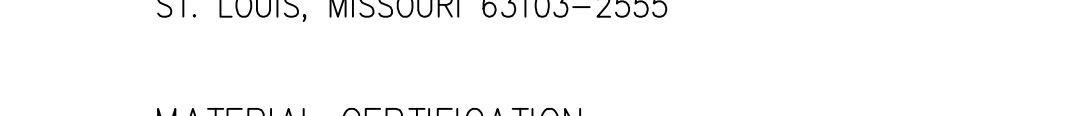
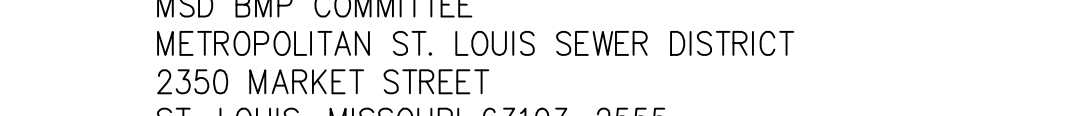
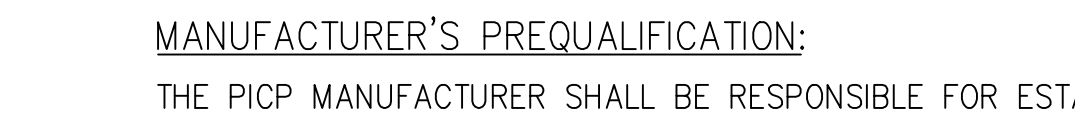
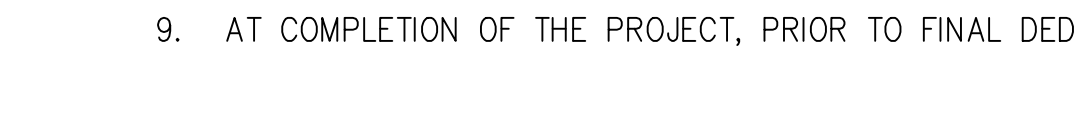
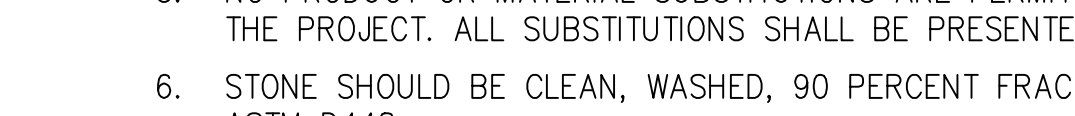
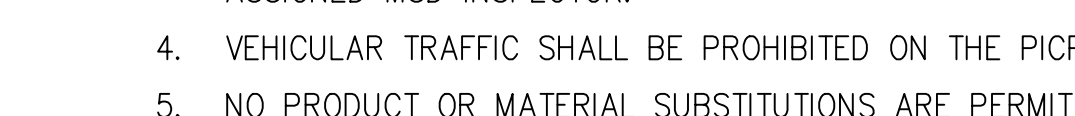
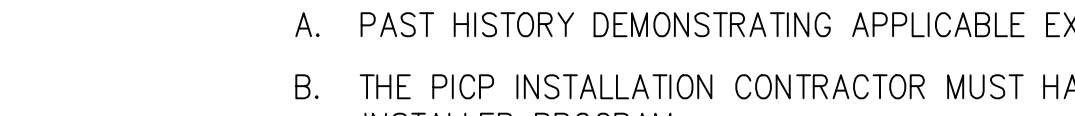
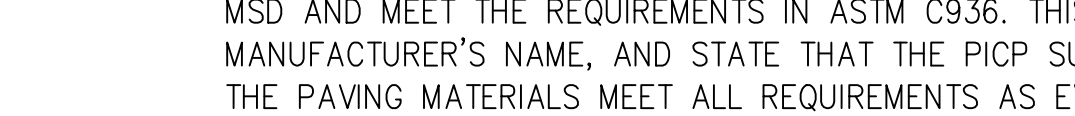
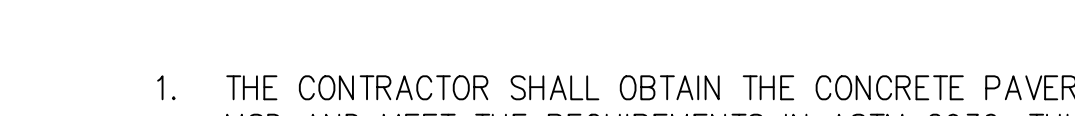
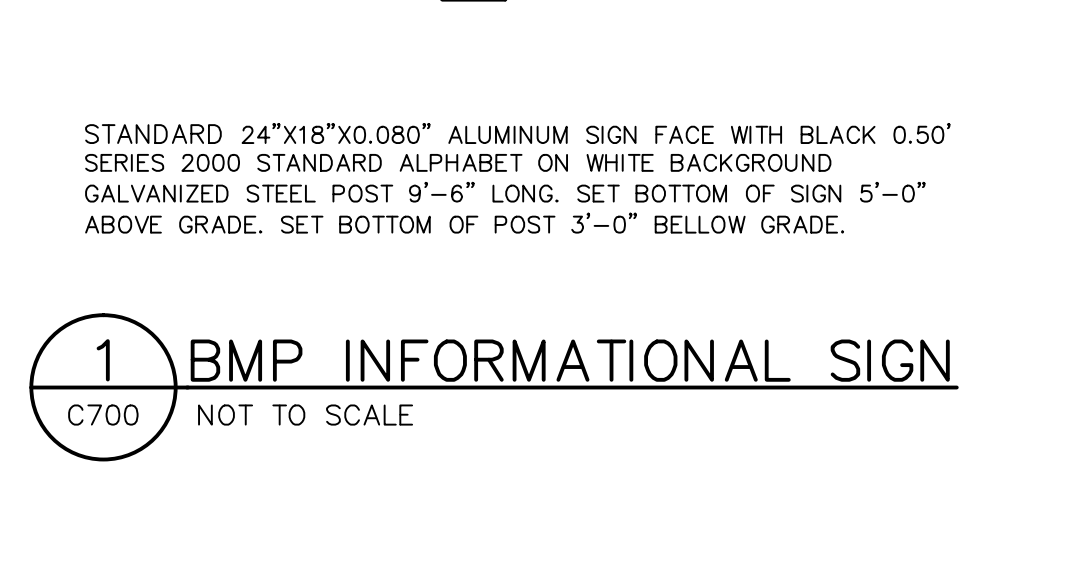
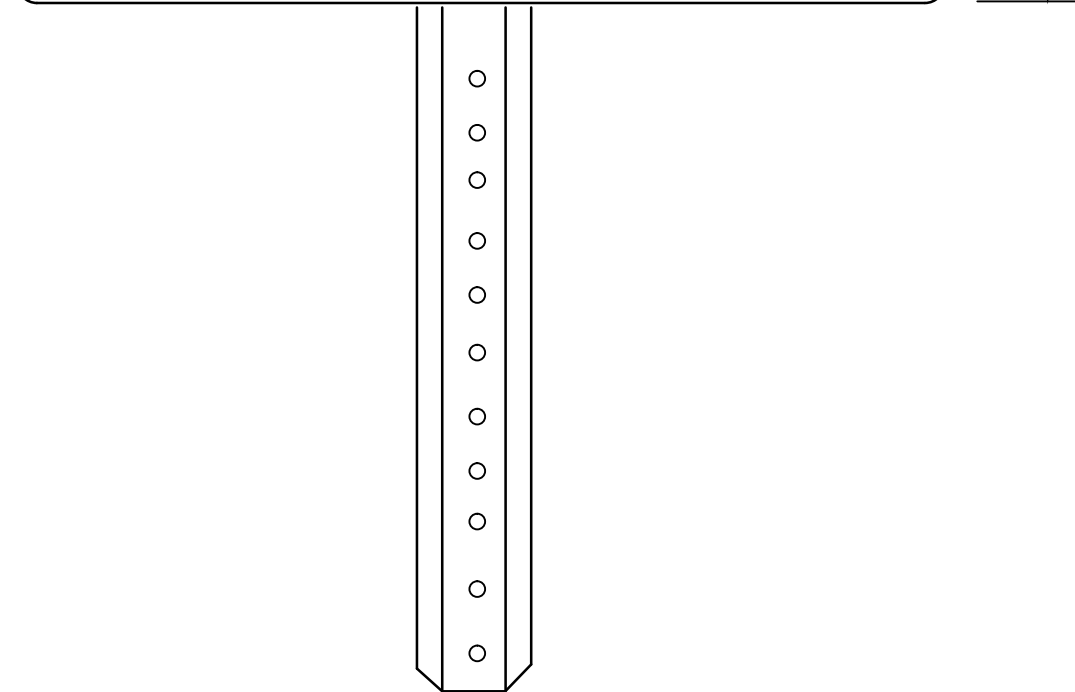
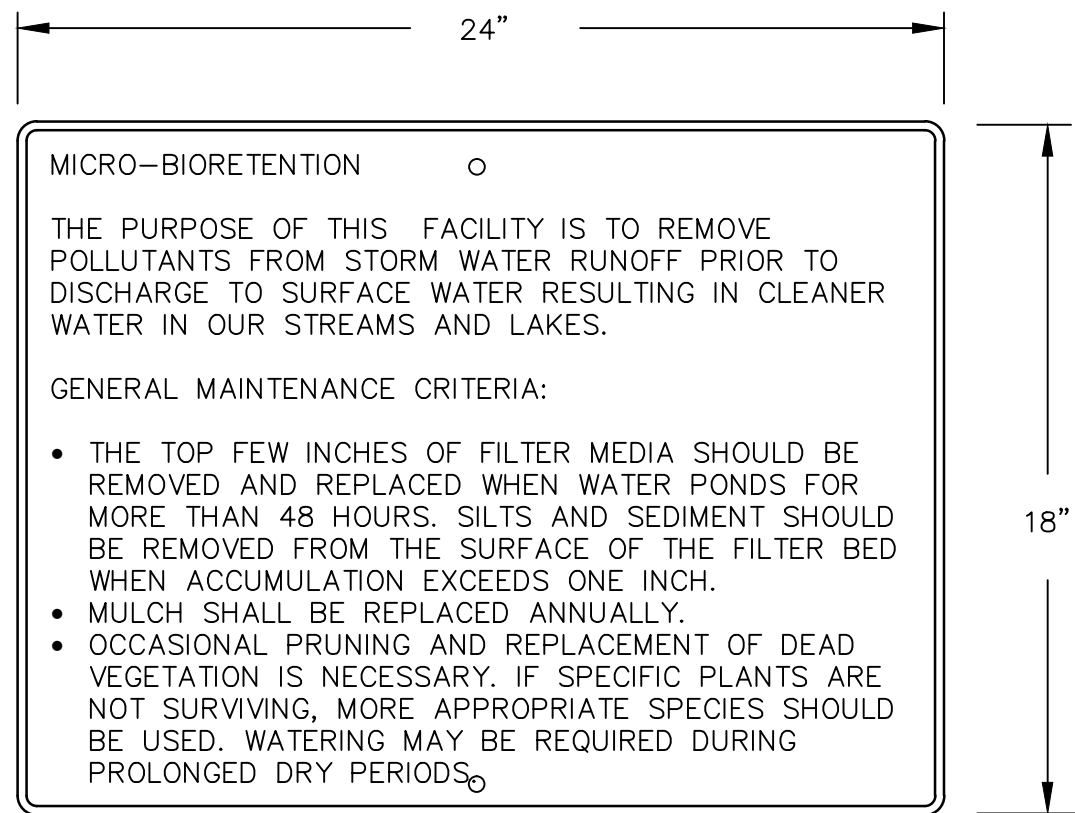


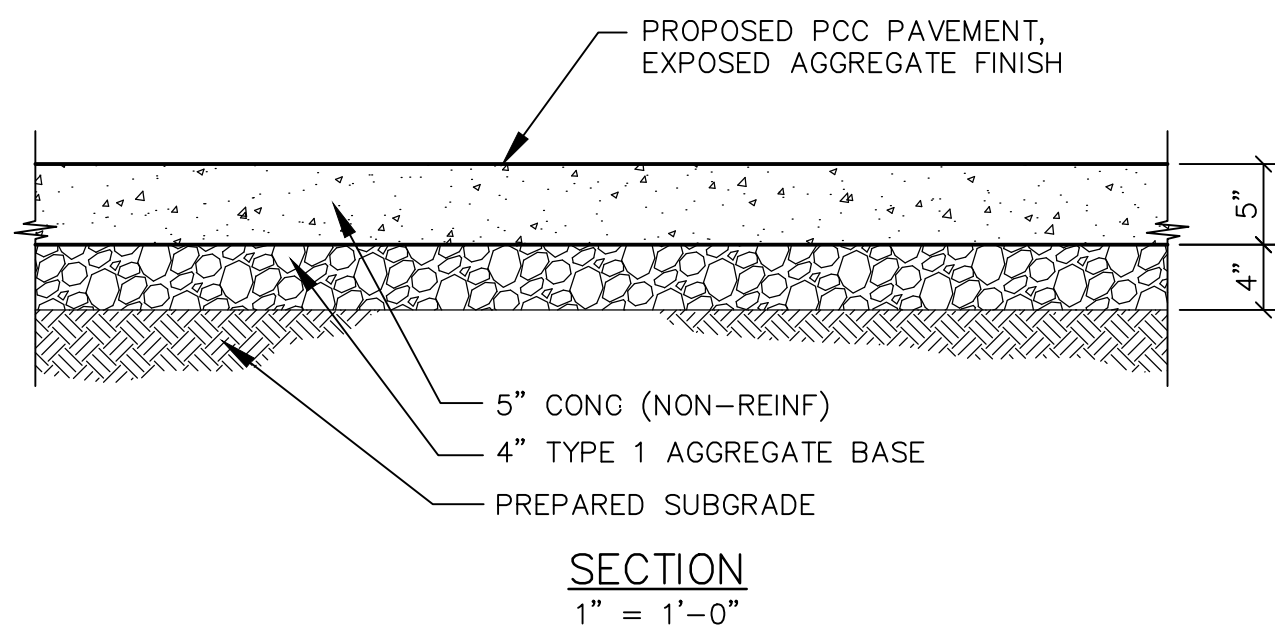
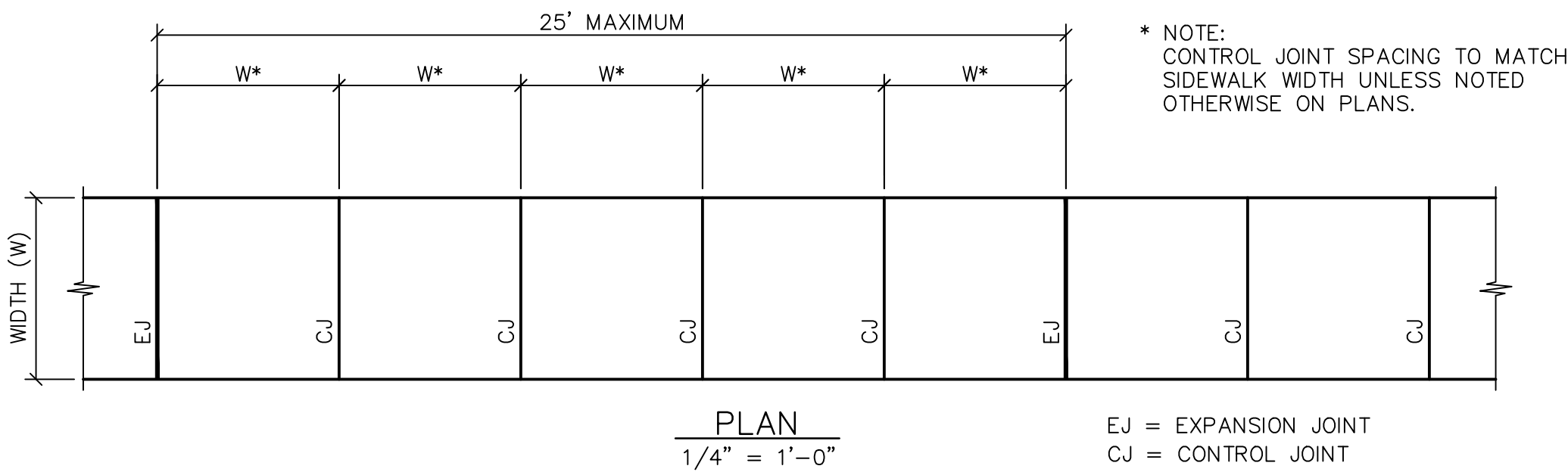
NOTE:
CONTRACTOR TO PROVIDE SIGNED AND SEALED SHOP DRAWINGS TO BE APPROVED BY THE PROJECT ENGINEER AND MSD. CONTACT MSD AT 314-335-2072.



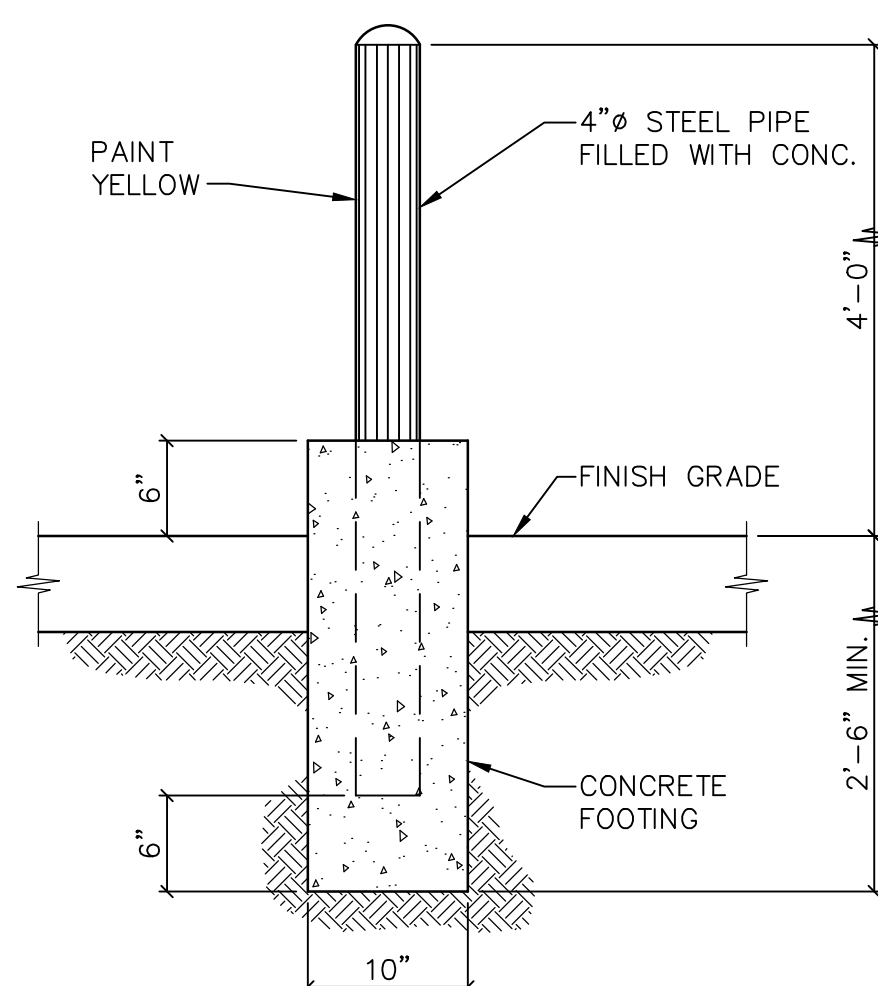
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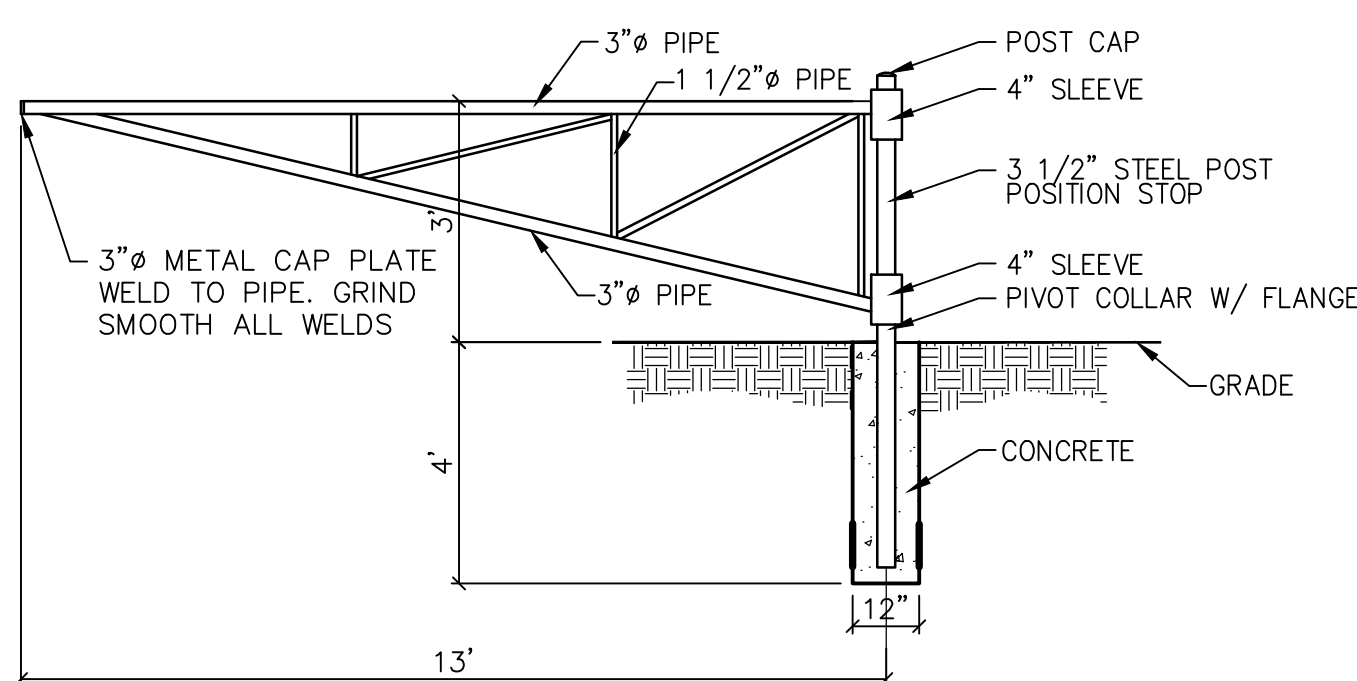




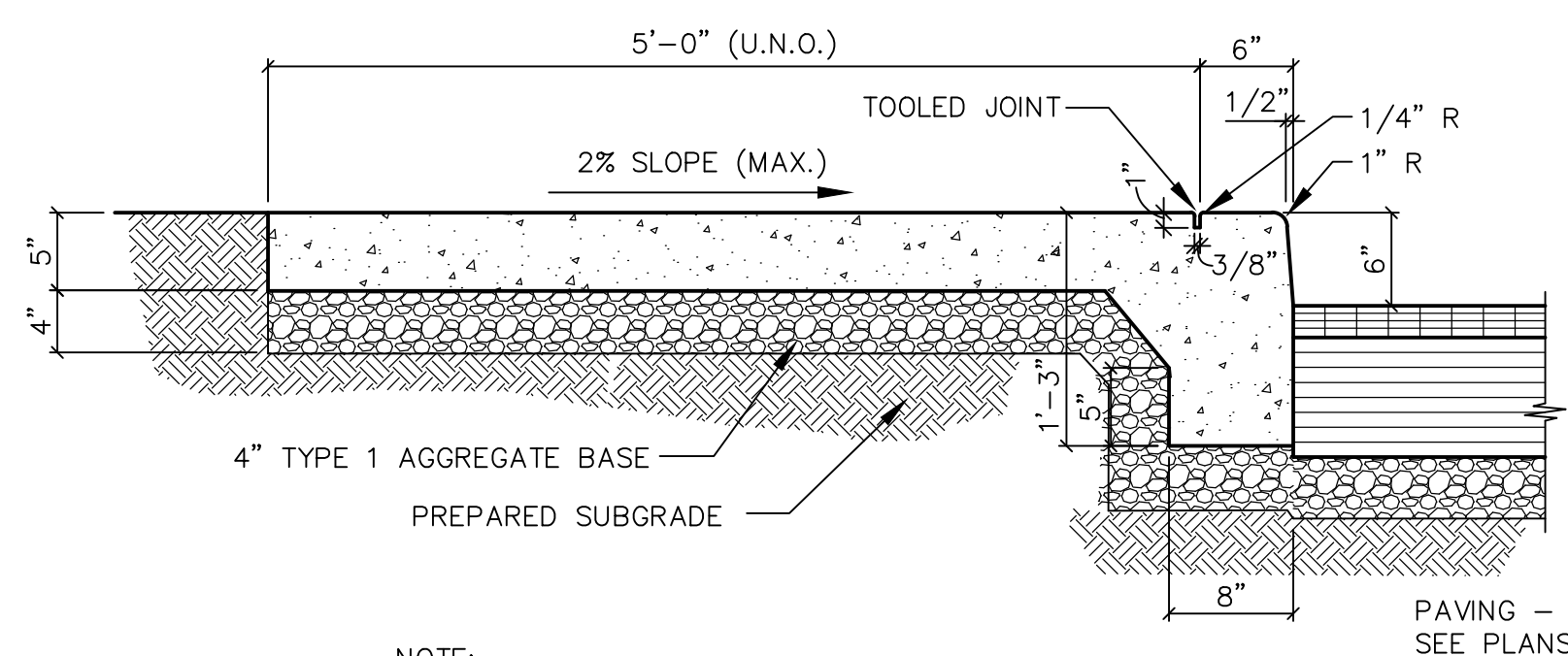
1 WALK CONCRETE SLAB DETAIL
C701 N.T.S.



5 BOLLARD DETAIL
C701 N.T.S.

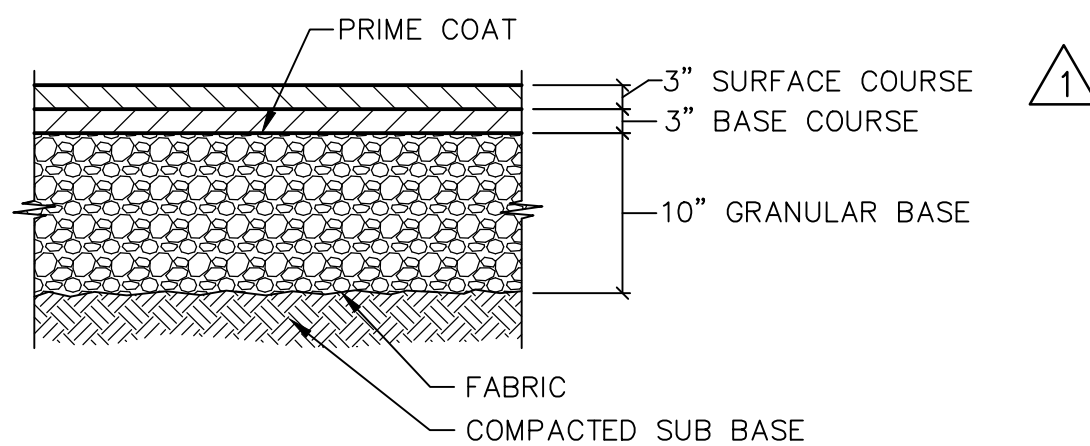


8 POST BARRIER GATE
C701 N.T.S.

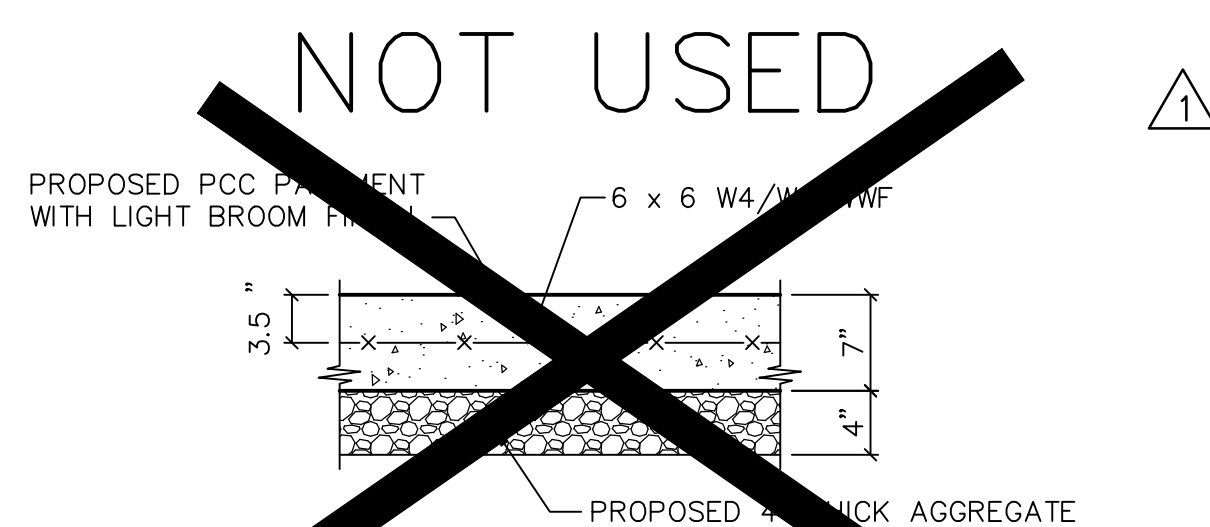


NOTE:
CONTRACTOR TO PROVIDE 1/2" EXPANSION JOINTS IN CURB AND SIDEWALK AT 25' O.C. (MAX.)

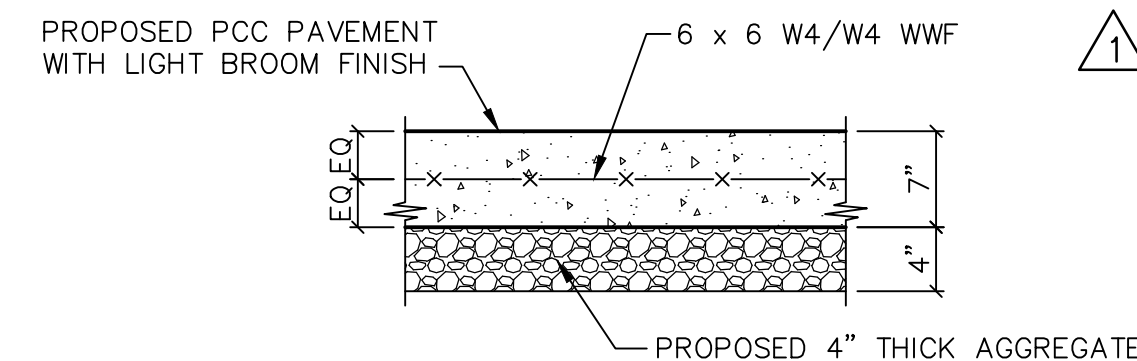
9 CONCRETE SIDEWALK WITH INTEGRAL CURB
C701 N.T.S.



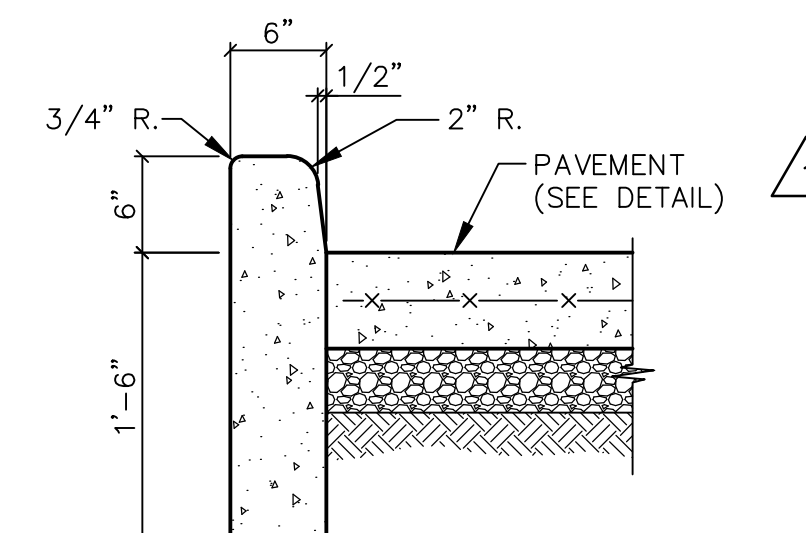
2 NEW ASPHALT PAVEMENT
C701 N.T.S.



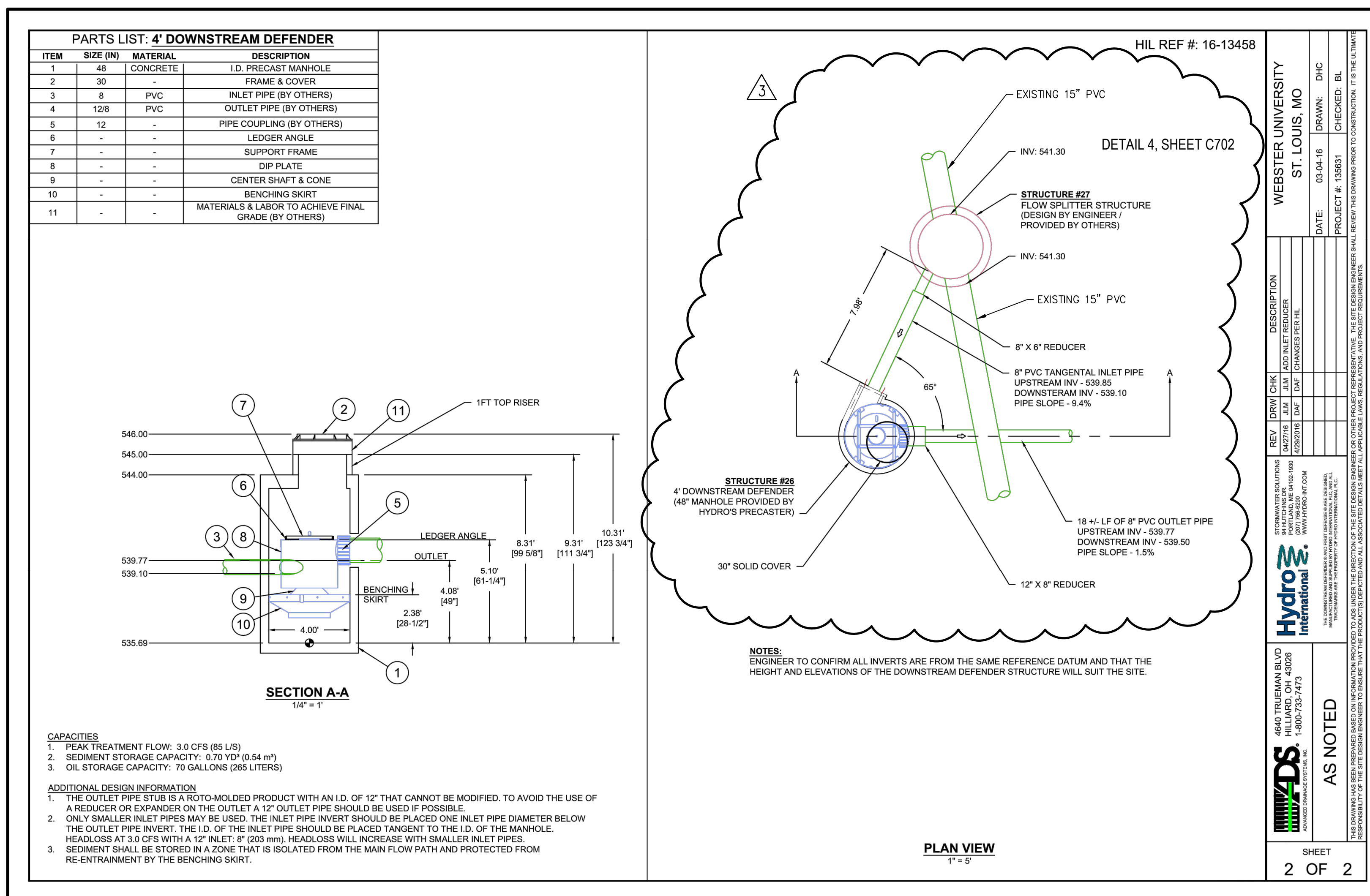
3 HVAC AREA CONCRETE SLAB DETAIL
C701 N.T.S.



6 CONCRETE PAVEMENT DETAIL
C701 N.T.S.



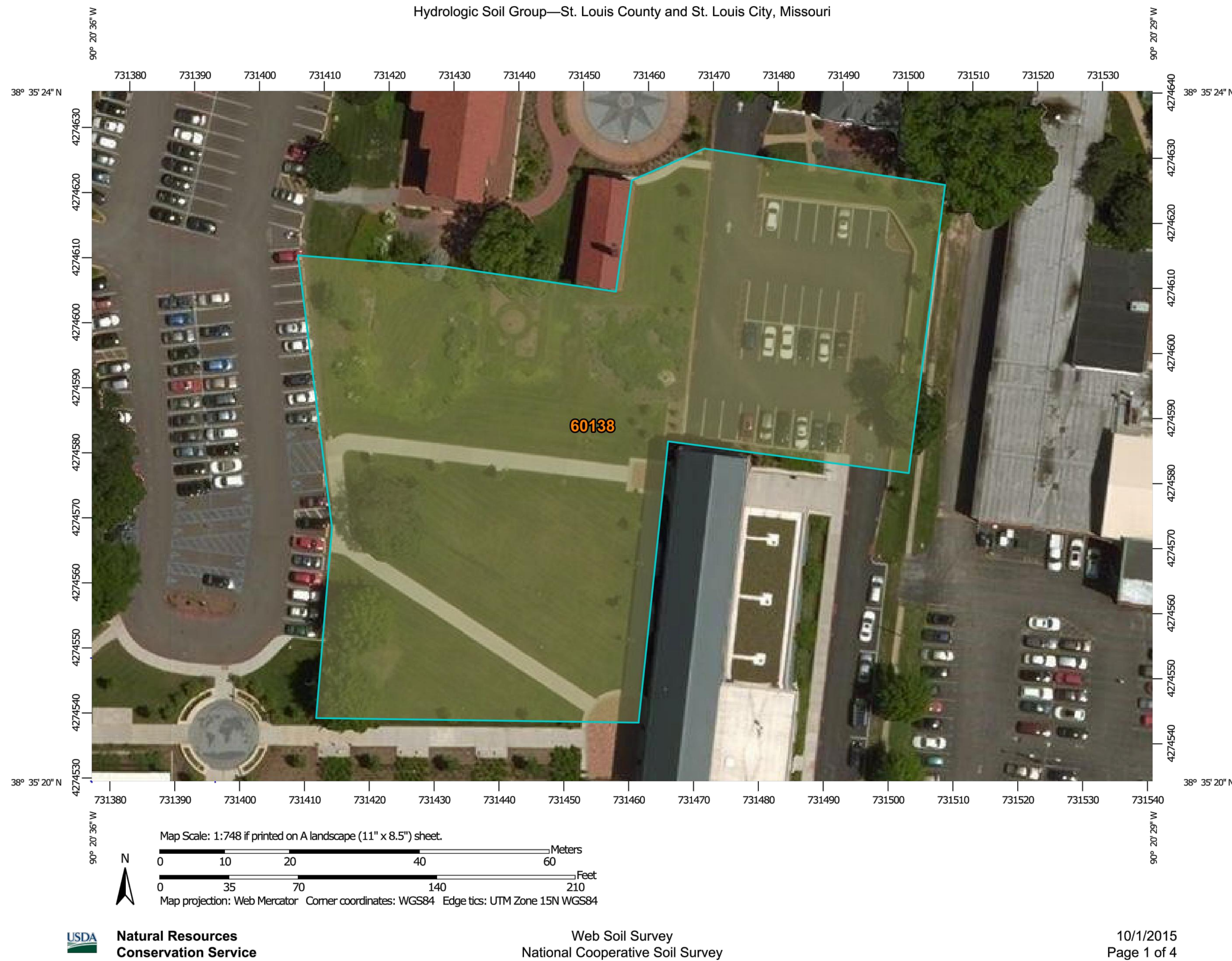
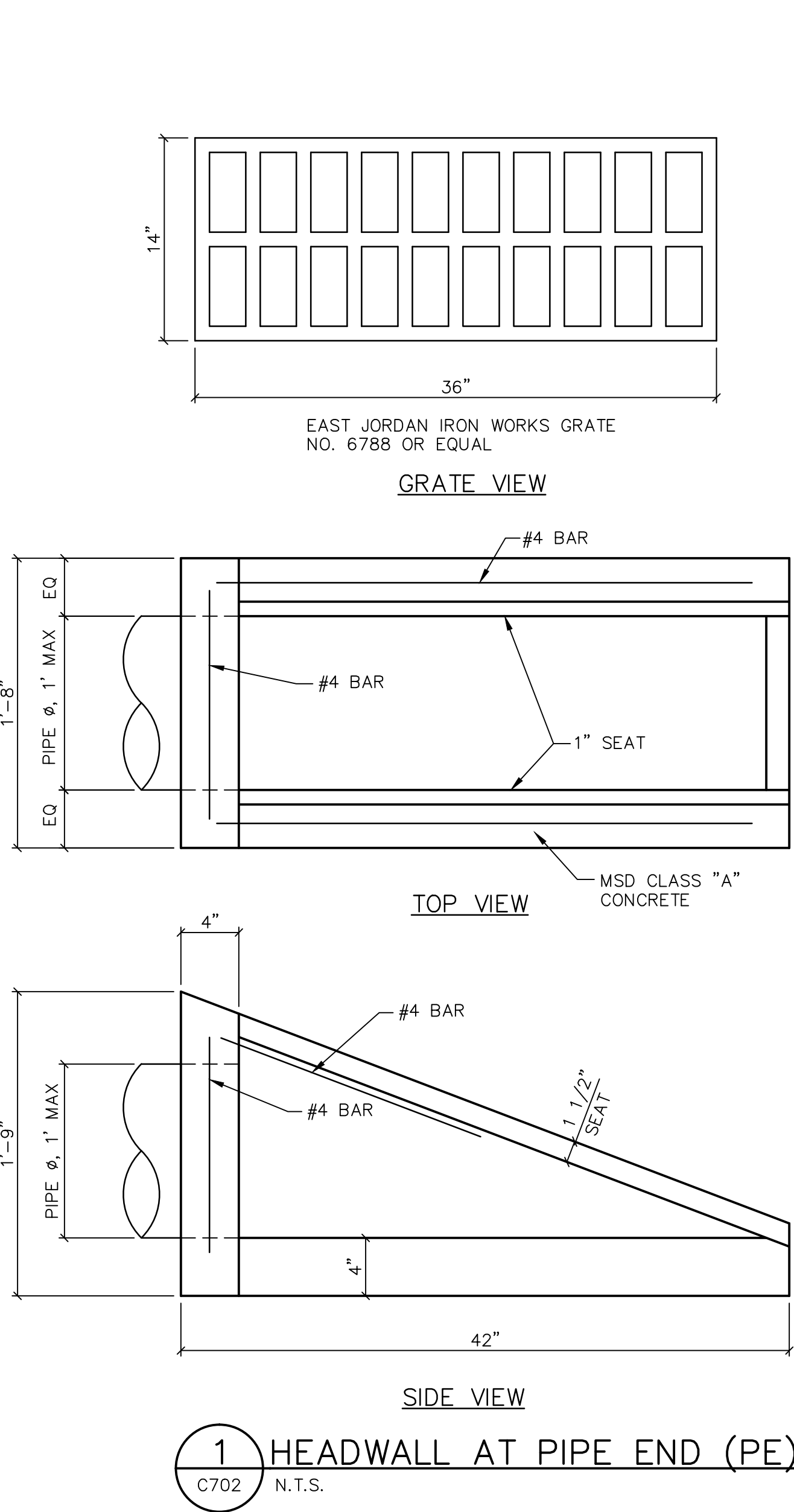
7 VERTICAL CONCRETE CURB DETAIL
C701 N.T.S.



10 48" DOWNSTREAM DEFENDER
C701 N.T.S.

CONTRACTOR TO PROVIDE SIGNED AND SEALED SHOP DRAWINGS TO BE APPROVED BY THE PROJECT ENGINEER & MSD CONTACT MSD AT 314-335-2072.

DETAILS SHOWN FOR PRIVATE CONSTRUCTION ONLY.
REFER TO MSD SPECIFICATIONS AND DETAILS FOR PUBLIC SEWER AND PRIVATE UNDER MSD INSPECTION SEWER CONSTRUCTION.



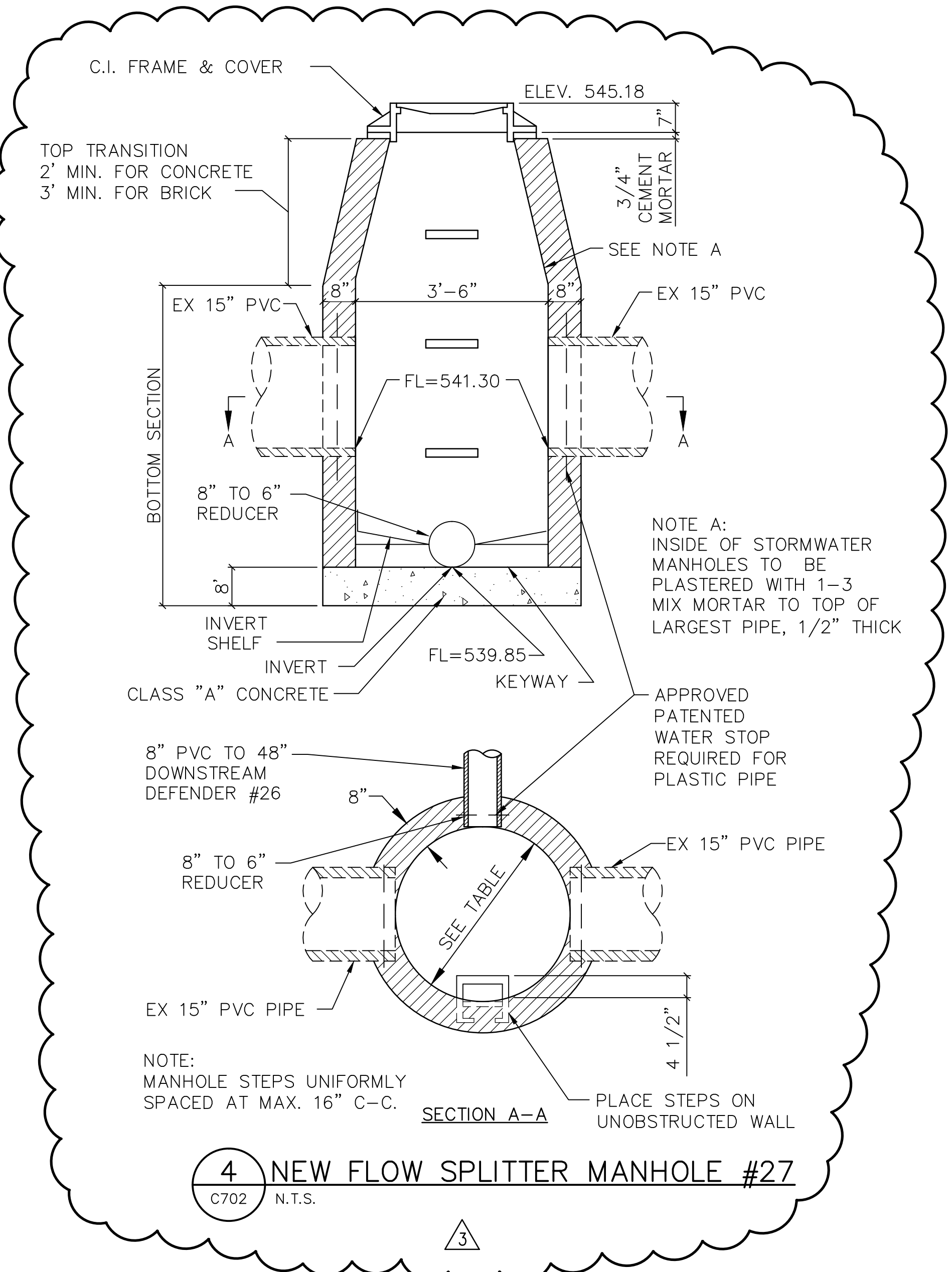
3 EXISTING SITE RESOURCES MAP

C702 N.T.S.

Hydrologic Soil Group

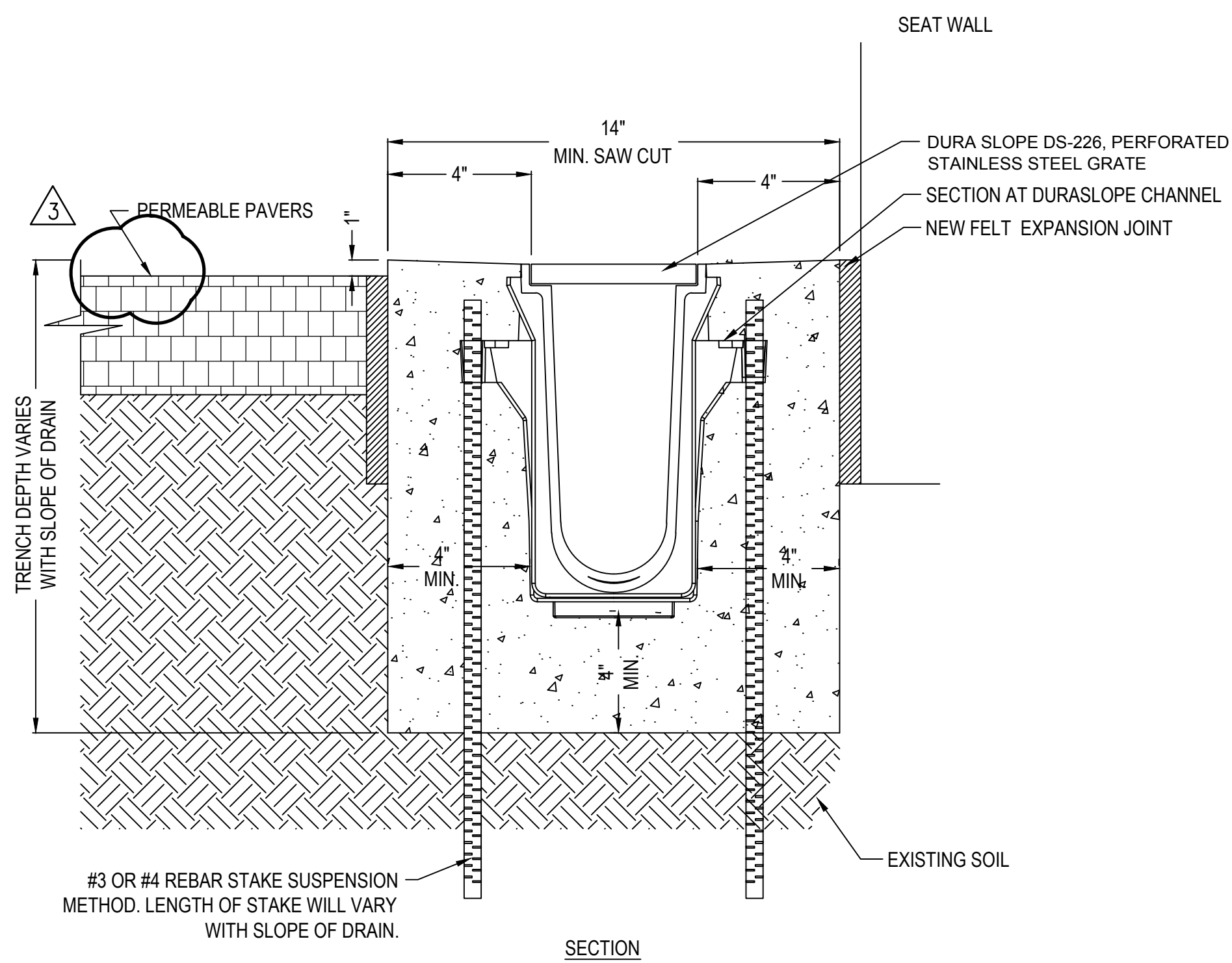
Hydrologic Soil Group— Summary by Map Unit — St. Louis County and St. Louis City, Missouri (MO189)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
60138	Iva-Urban land complex, 1 to 3 percent slopes	C/D	1.4	100.0%
Totals for Area of Interest			1.4	100.0%

NATURAL RESOURCES	PRESENCE ?	ADDITIONAL INFORMATION
WETLANDS	NO	NOT IDENTIFIED DURING SITE WALK
STREAMS AND FLOODPLAINS	NO	NOT IDENTIFIED DURING SITE WALK
KARST	NO	NOT IDENTIFIED DURING SITE WALK
PONDS	NO	NOT IDENTIFIED DURING SITE WALK



CONTRACTOR TO PROVIDE SIGNED AND SEALED SHOP DRAWINGS TO BE APPROVED BY THE PROJECT ENGINEER & MSD CONTACT MSD AT 314-335-2072.

CONTRACTOR MUST VERIFY THE DIMENSIONS BETWEEN THE LOW FLOW PIPE AND THE OVERFLOW PIPE PRIOR TO BACKFILL OF THE STRUCTURE AND NOTIFY THE DESIGN ENGINEER IMMEDIATELY OF ANY DISCREPANCY WITH THE DIMENSIONS ON THE APPROVED PLANS. STRUCTURES BUILT INCORRECTLY WILL REQUIRE REMOVAL AND REPLACEMENT.



- NOTES:
- CHANNELS TO BE INSTALLED WITH BLANK GRATE. GRATE TO BE PROTECTED FROM CONCRETE POUR (COVER HOLES WITH TAPE).
 - INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
 - DO NOT SCALE DRAWING.

2 DURA SLOPE TRENCH DRAIN SYSTEM

C702 N.T.S.

DURA SLOPE INSTALLATION DETAIL - CLASS 'A' & 'B' 4" ENCASMENT, REBAR SUSPENSION METHOD



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Interdisciplinary Science Building

CANNONDESIGN

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William Tao & Associates, Inc.
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7955 Manchester Road, Suite 125
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David Mason & Associates, Inc.
Structural & Civil Engineer
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800 South Vandeventer Avenue
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314.534.1053

Faith Group
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3101 S. Hanley Rd., Suite 100
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Kuhlmann Leavitt, Inc.
Environmental Graphics & Signage
7400 Pershing Ave
St. Louis, MO 63130
314.725.6616

KWA Architects
Architecture
9721 Litzinger Road
St. Louis, MO 63124
314.962.2960

Spellman Brady & Company
Interior Designer
8251 Maryland Avenue, Suite 300
St. Louis, MO 63105
314.862.0070

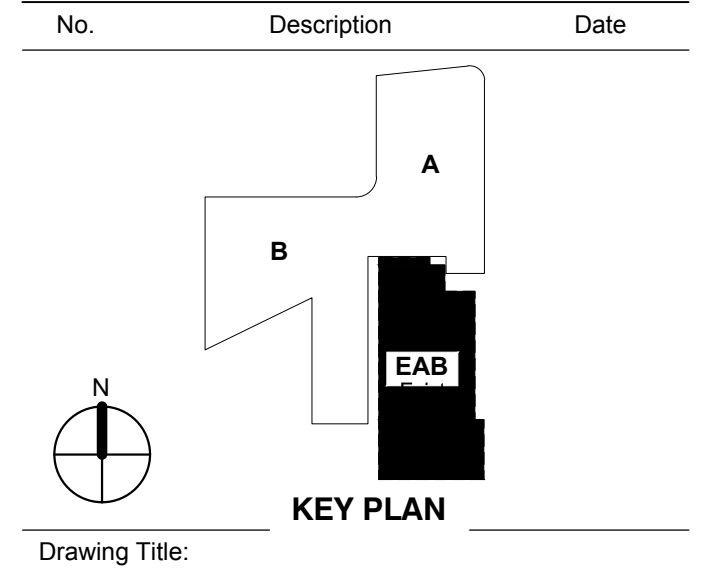
SWT Design
Landscape Architect
7722 Big Bend Blvd
St. Louis, MO 63119
314.544.5700

Webb Engineering Services, Inc.
Plumbing & Fire Protection
1400 S. 3rd Street, Suite 201
St. Louis, MO 63104
314.588.0600



CONFORMED SET 01 JUL 2016

3	ADDENDUM 1-12	16 JUN 2016
2	ADDENDUM 1-10	5 MAY 2016
1	ADDENDUM 1-1	29 JAN 2016
-	ISSUED FOR CONSTRUCTION (BP1)	15 JAN 2016



CIVIL DETAILS

Project No.: 04561.00 Checked by:

C702

MSD P# 28874-01 MSD BASE MAP 23K2

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1. THE CONTRACTOR SHALL PREPARE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP), SPECIFIC TO THE PROJECT, IN ACCORDANCE WITH THE REQUIREMENTS OF MODNR. AT A MINIMUM, THE SWPPP SHALL IDENTIFY ALL SIGNIFICANT CONSTRUCTION ACTIVITIES SUCH AS CLEARING, GRUBBING, STRIPPING, EXCAVATING, GRADING OR OTHER ACTIVITIES THAT RESULT IN THE DISPLACEMENT OR DESTRUCTION OF THE ROOT ZONE. THE SWPPP SHALL IDENTIFY BEST MANAGEMENT PRACTICES (BMP'S) TO BE USED TO REDUCE THE AMOUNT OF SEDIMENT AND OTHER POLLUTANTS IN STORM WATER DISCHARGES ASSOCIATED WITH THE LAND DISTURBANCE ACTIVITIES.

2. THE ENGINEER WILL PROVIDE ELECTRONIC FILES OF THE CONSTRUCTION DOCUMENTS FOR USE BY THE CONTRACTOR IN PREPARING THE SWPPP. THE ELECTRONIC FILES WILL BE PROVIDED TO THE CONTRACTOR AT NO COST. THE ENGINEER WILL ASSIST THE CONTRACTOR IN THE PREPARATION OF THE SWPPP, ONLY AT THE CONTRACTORS REQUEST. ALL COSTS FOR ASSISTANCE BY THE ENGINEER IN PREPARING OR UPDATING THE SWPPP SHALL BE BORNE BY THE CONTRACTOR, AND SHALL BE INCLUDED IN HIS COSTS FOR THE PROJECT.

3. NON-STORM WATER DISCHARGES SHALL BE CLEARLY IDENTIFIED IN THE STORM WATER PREVENTION PLAN. NON-STORM DISCHARGES INCLUDE BUT ARE NOT LIMITED TO DE-WATERING ACTIVITIES, FLUSHING HYDRANTS AND POTABLE WATER LINES, RINSING OF STREETS AND BUILDINGS, SITE WATERING AND IRRIGATION TO ESTABLISH VEGETATION.

4. THE SWPPP SHALL IDENTIFY MEASURES TO BE TAKEN TO PREVENT NON-STORM WATER DISCHARGES SUCH AS HAZARDOUS SUBSTANCES, PETROLEUM PRODUCTS FROM ON-SITE SPILLS AND RE-FUELING OPERATIONS, WASH AND/OR RINSE WATERS FROM CONCRETE MIXING EQUIPMENT INCLUDING READY MIX CONCRETE TRUCKS (UNLESS SUCH DISCHARGES ARE ADEQUATELY TREATED AND ADDRESSED IN THE SWPPP), AND DOMESTIC WASTEWATERS INCLUDING GRAY WATERS.

5. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF COUNTY AND LOCAL AGENCIES HAVING JURISDICTION OVER THE PROJECT, WHERE LOCAL REGULATIONS ARE MORE STRINGENT THAN STATE WATER QUALITY STANDARDS.

6. THE CONTRACTOR SHALL EMPLOY BEST MANAGEMENT PRACTICES (BMP'S) TO MINIMIZE THE TRANSPORT OF SEDIMENT FROM THE SITE AND TO CONTROL EROSION. BMP'S SHOWN ON THIS SHEET ARE EXAMPLES ONLY, AND ARE NOT INTENDED TO BE ALL-INCLUSIVE. THE CONTRACTOR SHALL EMPLOY ADDITIONAL MEASURES AS REQUIRED TO COMPLY WITH STATE WATER QUALITY STANDARDS

7. DISCHARGES SHALL BE FREE FROM SUBSTANCES IN SUFFICIENT AMOUNTS TO CAUSE FORMATION OF PUTRESCENT, UNSIGHTLY OR HARMFUL BOTTOM DEPOSITS OR PREVENT FULL MAINTENANCE OF BENEFICIAL USES OF STATE WATERS.

8. DISCHARGES SHALL BE FREE FROM OIL, SCUM, AND FLOATING DEBRIS IN SUFFICIENT AMOUNTS TO CAUSE UNSIGHTLY TURBIDITY, OFFENSIVE ODOR, OR PREVENT FULL MAINTENANCE OF BENEFICIAL USES OF STATE WATERS.

9. DISCHARGES SHALL BE FREE FROM SUBSTANCES OR CONDITIONS IN SUFFICIENT AMOUNTS TO HAVE A HARMFUL EFFECT ON HUMAN, ANIMAL, OR AQUATIC LIFE.

10. THERE SHALL BE NO SIGNIFICANT HUMAN HEALTH HAZARD FROM INCIDENTAL CONTACT WITH DISCHARGES.

11. THERE SHALL BE NO ACUTE TOXICITY TO LIVESTOCK OR WILDLIFE WATERING.

12. DISCHARGES SHALL BE FREE FROM PHYSICAL, CHEMICAL OR HYDROLOGIC CHANGES THAT WOULD IMPAIR THE NATURAL BIOLOGICAL COMMUNITY.

13. ALL FUELING FACILITIES PRESENT ON THE SITE SHALL ADHERE TO APPLICABLE FEDERAL AND STATE REGULATIONS CONCERNING UNDERGROUND AND ABOVE GROUND STORAGE AND DISPENSERS, INCLUDING SPILL PREVENTION, CONTROL, AND COUNTER MEASURES.

14. THE CONTRACTOR SHALL DESIGNATE AN ON-SITE REPRESENTATIVE WHO SHALL BE RESPONSIBLE FOR ALL MATTERS PERTAINING TO WATER QUALITY OF STORM DISCHARGE FROM THE SITE. THE CONTRACTOR SHALL INSPECT AND MAINTAIN ALL STRUCTURES THAT FUNCTION TO PREVENT POLLUTION OF STORM WATER OR TO REMOVE POLLUTANTS FROM STORM WATER AND OF THE FACILITY IN GENERAL TO ENSURE THAT BMP'S ARE CONTINUALLY IMPLEMENTED AND EFFECTIVE.

15. ALL PAINTS, SOLVENTS, PETROLEUM PRODUCTS AND PETROLEUM WASTE PRODUCTS, AND STORAGE CONTAINERS (SUCH AS DRUMS, CANS, OR CARTONS) SHALL BE STORED SO THAT THESE MATERIALS ARE NOT EXPOSED TO STORM WATER. SUFFICIENT PRACTICES OR SPILL PREVENTION, CONTROL, AND/OR MANAGEMENT SHALL BE PROVIDED TO PREVENT ANY SPILLS OF THESE POLLUTANTS FROM ENTERING WATERS OF THE STATE. ANY CONTAINMENT SYSTEM USED TO IMPLEMENT THIS REQUIREMENT SHALL BE CONSTRUCTED OF MATERIALS COMPATIBLE WITH THE SUBSTANCE CONTAINED AND SHALL ALSO PREVENT THE CONTAMINATION OF GROUND WATER.

16. THE SWPPP SHALL CONTAIN INFORMATION TO IDENTIFY THE SITE, FACILITY, AND OUTFALL INFORMATION. THE SWPPP SHALL HAVE SUFFICIENT INFORMATION TO BE OF PRACTICAL USE TO CONTRACTORS AND SITE CONSTRUCTION WORKERS TO GUIDE THE INSTALLATION AND MAINTENANCE OF BMP'S.

17. CLEARING AND GRUBBING WITHIN 50 FEET OF A DEFINED DRAINAGE COURSE SHALL BE AVOIDED. WHERE CHANGES TO DEFINED DRAINAGE COURSES OCCUR AS PART OF THE PROJECT, CLEARING AND GRUBBING WITHIN 50 FEET OF THE DEFINED DRAINAGE COURSE SHALL BE DELAYED UNTIL ALL MATERIALS AND EQUIPMENT NECESSARY TO PROTECT THE COMPLETE DRAINAGE CHANGE ARE ON SITE. CHANGES TO DEFINED DRAINAGE COURSES SHALL BE COMPLETED AS QUICKLY AS POSSIBLE ONCE THE WORK HAS BEEN INITIATED. THE AREA IMPACTED BY THE LAND DISTURBANCE OF THE DRAINAGE COURSE CHANGE SHALL BE REVEGETATED OR PROTECTED FROM EROSION AS SOON AS POSSIBLE. AREAS WITHIN 50 FEET OF DEFINED DRAINAGE WAYS SHALL BE RECONTOURED AS NEEDED AND REVEGETATED, SEEDED, OR OTHERWISE PROTECTED WITHIN FIVE (5) WORKING DAYS AFTER GRADING HAS CEASED.

18. THE SWPPP SHALL INCLUDE A DESCRIPTION OF ALL BMP'S TO BE IMPLEMENTED AT THE SITE. THE SWPPP SHALL INCLUDE A PHYSICAL DESCRIPTION OF THE BMP; THE LOCATION OF THE BMP WITH RESPECT TO THE OTHER SITE FEATURES; WHEN THE BMP WILL BE INSTALLED WITH RESPECT TO THE TIMING OF CONSTRUCTION ACTIVITIES; AND SITE CONDITIONS THAT MUST BE MET PRIOR TO REMOVAL OF THE BMP, IF THE BMP IS NOT A PERMANENT FEATURE.

19. SLOPES FOR DISTURBED AREAS MUST BE IDENTIFIED IN THE SWPPP. WHERE SOIL DISTURBING ACTIVITIES CEASE IN AN AREA FOR MORE THAN FOURTEEN (14) DAYS, THE DISTURBED AREAS SHALL BE PROTECTED FROM EROSION BY STABILIZING THE AREA WITH MULCH OR OTHER SIMILARLY EFFECTIVE EROSION CONTROL BMP'S. IF THE SLOPE OF THE AREA IS GREATER THAN 3:1 OR IF THE SLOPE IS GREATER THAN 3 PERCENT AND GREATER THAN 150 FEET IN LENGTH, THE DISTURBED AREA SHALL BE PROTECTED WITH MULCH OR OTHER SIMILARLY EFFECTIVE EROSION CONTROL BMP'S IF ACTIVITIES CEASE FOR MORE THAN SEVEN (7) DAYS. THESE REQUIREMENTS DO NOT APPLY TO THE SLOPES OF A SEDIMENT BASIN OR THE AREAS THAT CLEARLY DRAIN THERETO.

20. THE CONTRACTOR SHALL ENSURE THAT BMP'S ARE PROPERLY INSTALLED AT THE LOCATIONS AND RELATIVE TIMES SPECIFIED IN THE SWPPP. PERIPHERAL OR BORDER BMP'S TO CONTROL RUNOFF FROM DISTURBED AREAS SHALL BE INSTALLED AND MARKED FOR PRESERVATION BEFORE GENERAL SITE CLEARING IS STARTED. STORM WATER DISCHARGES FROM DISTURBED AREAS, WHICH LEAVE THE SITE, SHALL PASS THROUGH AN APPROPRIATE IMPEDIMENT TO SEDIMENT MOVEMENT, SUCH AS A SEDIMENTATION BASIN, SEDIMENT TRAPS, SILT FENCES, OR OTHER BMP'S PRIOR TO LEAVING THE LAND DISTURBANCE SITE. PROJECT BENCHMARKS SHALL BE REFERENCED FOR PROPER INSTALLATION, OPERATION, AND MAINTENANCE OF DRAINAGE COURSE CHANGES.

21. THE SWPPP SHALL REQUIRE EXISTING VEGETATION TO BE PRESERVED WHERE PRACTICAL. THE TIME PERIOD FOR DISTURBED AREAS TO BE WITHOUT VEGETATIVE COVER SHALL BE MINIMIZED TO THE EXTENT POSSIBLE. EXAMPLES OF NON-STRUCTURAL BMP'S INCLUDE, BUT ARE NOT LIMITED TO: PRESERVATION OF TREES AND MATURE VEGETATION, PROTECTION OF EXISTING VEGETATION FOR BUFFER STRIPS, MULCHING, SODDING, TEMPORARY SEEDING, FINAL SEEDING, GEOTEXTILES, STABILIZATION OF DISTURBED AREAS, PRESERVING EXISTING STREAM CHANNELS AS OVERFLOW AREAS WHEN CHANNEL STRAIGHTENING OR SHORTENING IS ALLOWED, SOIL STABILIZING EMULSIONS AND TACKIFIERS, MULCH TACKIFIERS, STABILIZED SITE ENTRANCES/EXITS, AND OTHER APPROPRIATE BMP'S.

22. EXAMPLES OF STRUCTURAL BMP'S THAT MAY BE IMPLEMENTED IN THE SWPPP INCLUDE BUT ARE NOT LIMITED TO: FLOW DIVERSION SWALES, SILTATION FENCES (STRAW BALES OR FILTER FABRIC), EARTHEN DIVERSION DIKES, DRAINAGE SWALES, SEDIMENT TRAPS, ROCK CHECK DAMS, SUBSURFACE DRAINS, PIPE SLOPE DRAINS, STORM DRAIN INLET AND OUTLET PROTECTION, REINFORCED SOIL RETAINING SYSTEMS, GABIONS, TEMPORARY OR PERMANENT SEDIMENT BASINS, OR OTHER APPROPRIATE BMP'S.

23. WHERE THE USE OF SEDIMENT BASINS OF THE REQUIRED SIZE BECOME IMPRACTICAL, THE CONTRACTOR SHALL EVALUATE AND CONSTRUCT OTHER SIMILARLY EFFECTIVE BMP'S TO CONTROL EROSION AND SEDIMENT DELIVERY. ALL ALTERNATIVE BMP'S SHALL BE CLEARLY IDENTIFIED ON THE SWPPP FOR APPROVAL.

24. THE CONTRACTOR SHALL PROVIDE ADDITIONAL SITE MANAGEMENT BMP'S TO PREVENT CONTACT OF STORM RUNOFF. SUCH BMP'S INCLUDE, BUT ARE NOT LIMITED TO: SOLID AND HAZARDOUS WASTE MANAGEMENT INCLUDING TRASH CONTAINERS, REGULAR SITE CLEANUP OF SCRAP BUILDING MATERIALS, FOOD CONTAINERS, SHIPPING AND PACKING MATERIALS; PROPER DISPOSAL OF WASTE PAINTS, SOLVENTS, AND CLEANING COMPOUNDS; PROVISIONS FOR PORTABLE TOILETS; STORAGE OF CONSTRUCTION MATERIALS AWAY FROM DRAINAGE COURSES OR LOW AREAS; INSTALLATION OF CONTAINMENT BERMS AND USE OF DRIP PANS AT PETROLEUM PRODUCT AND LIQUID STORAGE TANKS AND CONTAINERS.

25. THE CONTRACTOR SHALL AMEND AND UPDATE THE SWPPP DURING THE TERM OF THE LAND DISTURBANCE WHENEVER THE FOLLOWING OCCURS: DESIGN OR OPERATION OF BMP'S ARE CHANGED; THE DESIGN OF THE PROJECT IS CHANGED SUCH THAT SIGNIFICANT AFFECTS ON THE QUALITY OF STORM WATER DISCHARGE WILL OCCUR; INSPECTIONS INDICATE DEFICIENCIES IN THE SWPPP OR BMP'S; NOTIFICATION BY THE MODNR OF DEFICIENCIES IN THE SWPPP; THE SWPPP IS DETERMINED TO BE INEFFECTIVE IN SIGNIFICANTLY MINIMIZING OR CONTROLLING EROSION AND SEDIMENTATION; VISUAL EVIDENCE OF EXCESSIVE EROSION OR SEDIMENT DEPOSITS IN STREAMS OR LAKES; TOTAL SETTLEABLE SOLIDS FROM STORM WATER OUTFALLS EXCEED 2.5 ML/L/HR; MODNR DETERMINES THAT VIOLATIONS OF WATER QUALITY STANDARDS MAY OCCUR, OR HAVE OCCURRED.

26. THE CONTRACTOR SHALL INSPECT ALL DISTURBED AREAS ON A REGULAR SCHEDULE (AT A MINIMUM OF ONCE PER WEEK) AND WITHIN 72 HOURS FOLLOWING PERIODS OF HEAVY RAINFALL. ALL BMP'S AND OTHER POLLUTION CONTROL MEASURES SHALL BE INSPECTED FOR PROPER INSTALLATION, OPERATION, AND MAINTENANCE. LOCATIONS WHERE STORM WATER LEAVES THE SITE SHALL BE INSPECTED FOR EVIDENCE OF EROSION OR SEDIMENT DEPOSITION. ANY DEFICIENCIES SHALL BE NOTED IN A WEEKLY REPORT OF THE INSPECTION(S) AND CORRECTED WITHIN SEVEN (7) DAYS. THE CONTRACTOR SHALL KEEP A LOG OF ALL INSPECTIONS AND CORRECTIVE ACTION TAKEN IN ACCORDANCE WITH THE REQUIREMENTS OF MODNR.

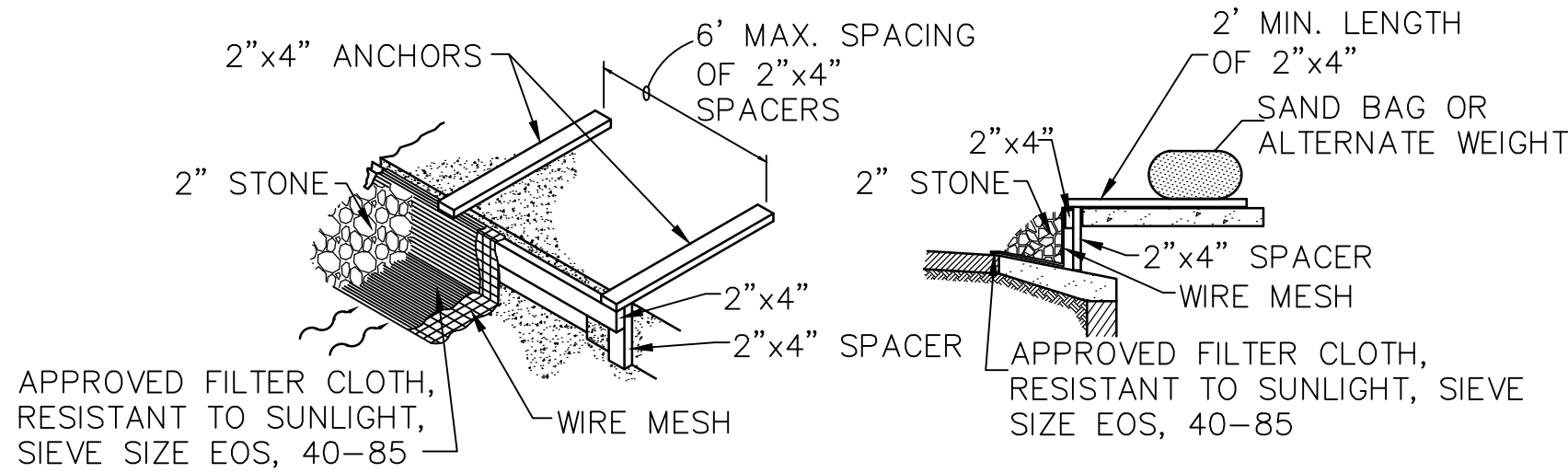
27. THE CONTRACTOR SHALL AT ALL TIMES MAINTAIN ALL POLLUTION CONTROL MEASURES AND SYSTEMS IN GOOD ORDER TO ACHIEVE COMPLIANCE WITH THE TERMS OF THE MODNR LAND DISTURBANCE PERMIT.

28. THE CONTRACTOR SHALL NOTIFY ALL SUBCONTRACTORS, SUPPLIERS, PRIVATE OR PUBLIC UTILITY AGENCIES, AND OTHER AUTHORIZED PARTIES PERFORMING WORK AT THE SITE OF THE EXISTENCE OF THE SWPPP AND WHAT ACTIONS AND PRECAUTIONS TO BE TAKEN WHILE ON SITE TO MINIMIZE THE POTENTIAL FOR EROSION OR POTENTIAL DAMAGE TO ANY BMP. IF ADDITIONAL LAND IS DISTURBED OR ANY BMP DAMAGED, THE CONTRACTOR SHALL BE RESPONSIBLE TO HAVE THE DAMAGE REPAIRED.

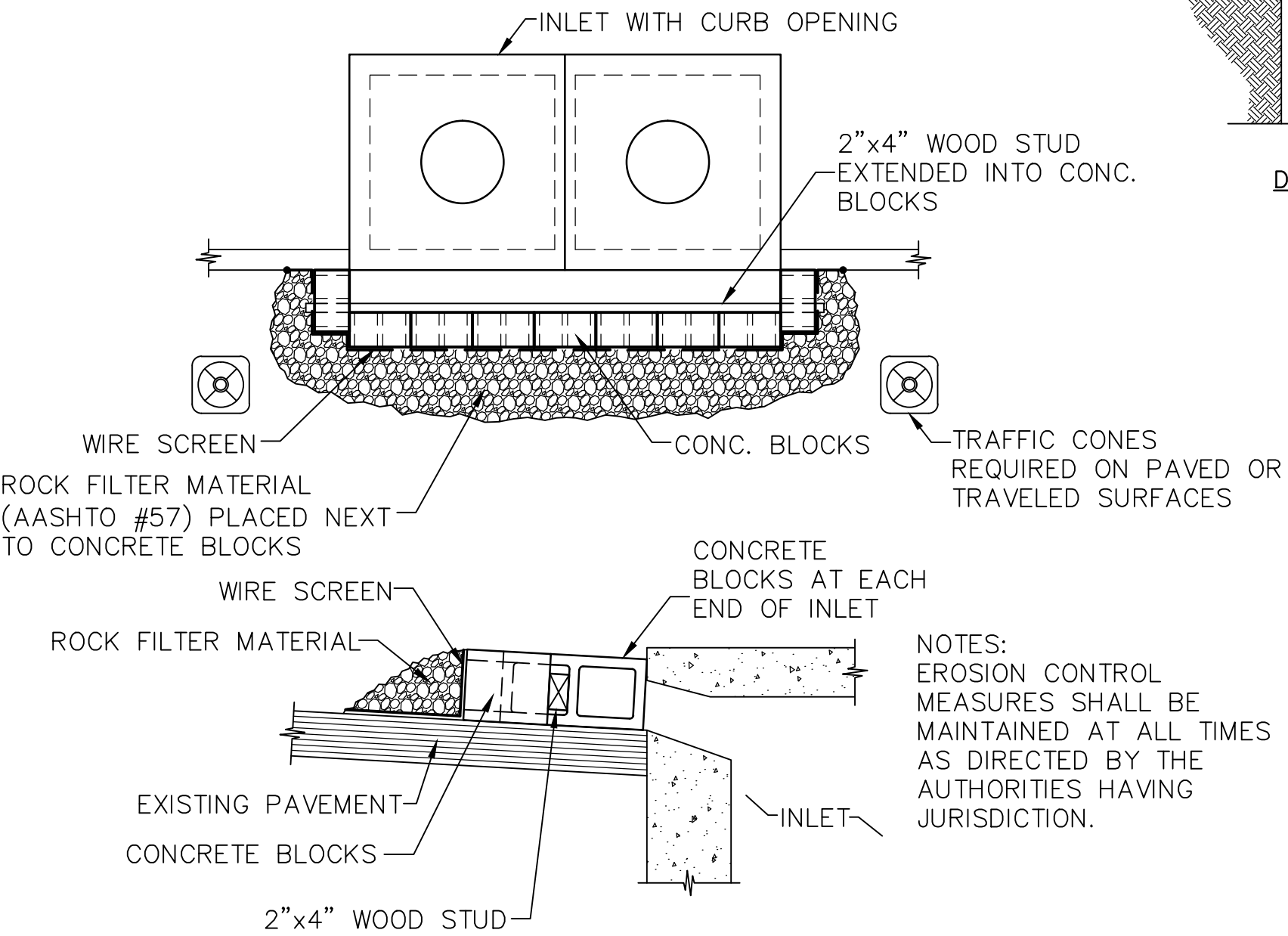
29. DISCHARGES FROM THE SITE SHALL NOT VIOLATE STATE WATER QUALITY STANDARDS. SETTLEABLE SOLIDS SHALL NOT EXCEED A MAXIMUM OF 2.5 ML/L/HR FOR EACH STORM WATER OUTFALL.

30. REGULAR SAMPLING IS NOT REQUIRED UNLESS THE FOLLOWING OCCURS: SAMPLING IS REQUIRED AS A CONDITION OF THE MODNR LAND DISTURBANCE PERMIT; COMPLIANCE ISSUES, COMPLAINT INVESTIGATIONS, OR EVIDENCE OF OFF-SITE CONTAMINATION FROM ACTIVITIES AT THE SITE.

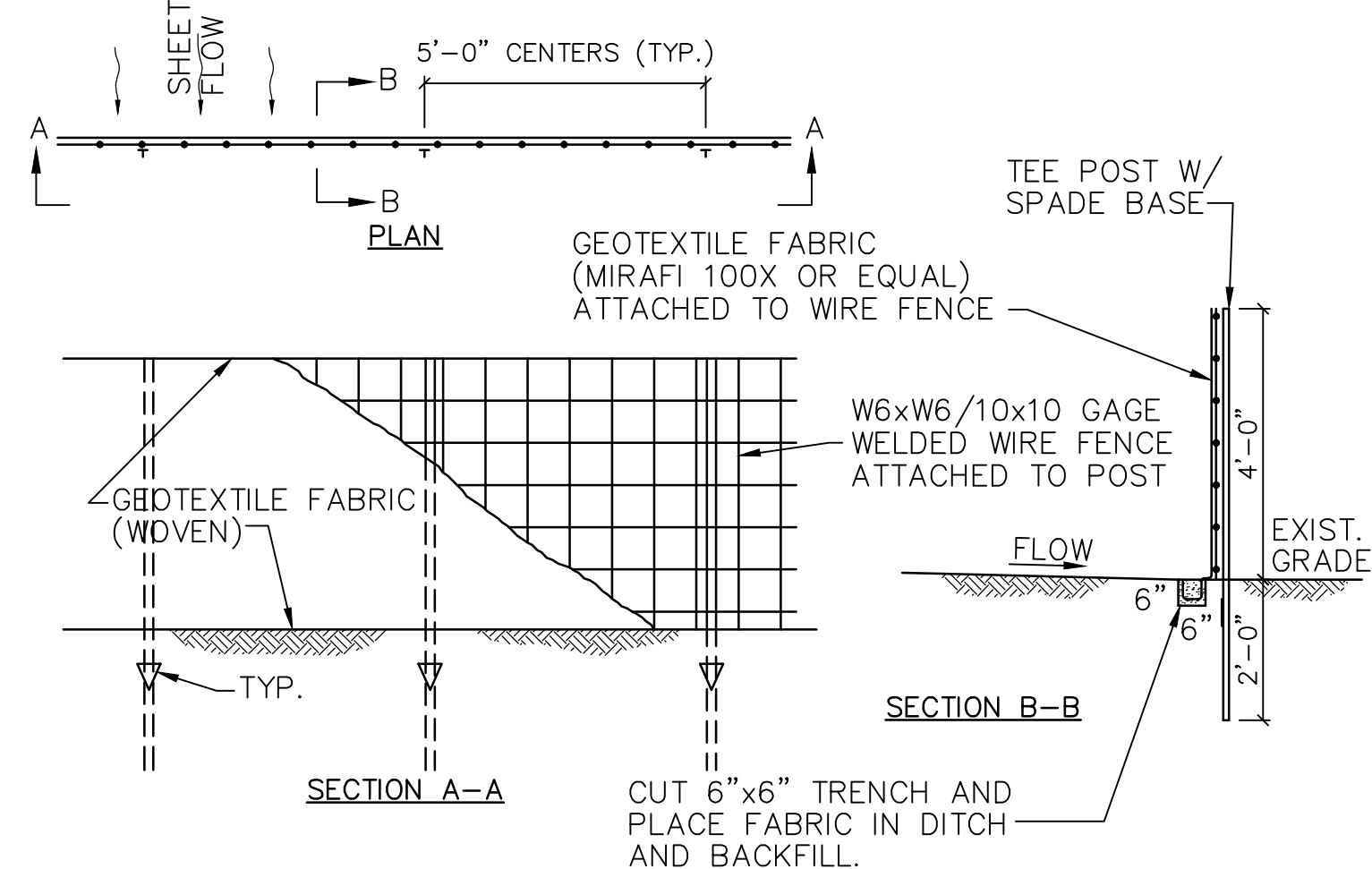
31. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE SWPPP AT THE SITE AT ALL TIMES. ADDITIONAL COPIES SHALL BE PROVIDED TO THOSE WHO ARE RESPONSIBLE FOR THE IMPLEMENTATION OF THE SWPPP AND THE INSTALLATION AND MAINTENANCE OF BMP'S.



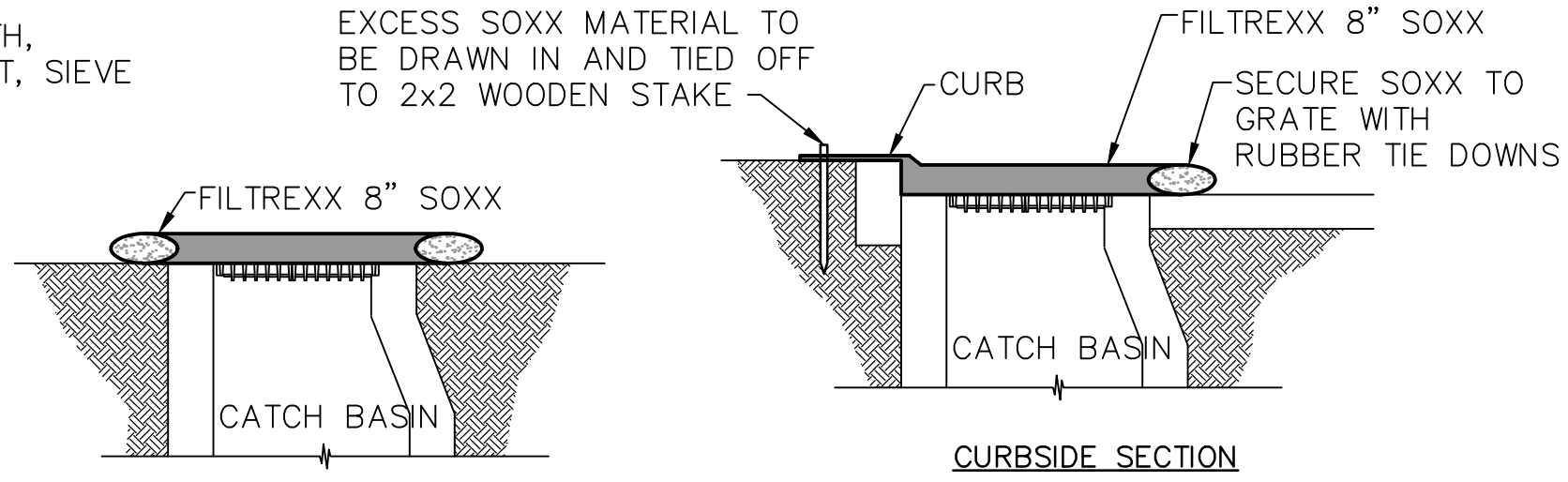
GRAVEL CURB INLET FILTER (OPTION A)
N.T.S.



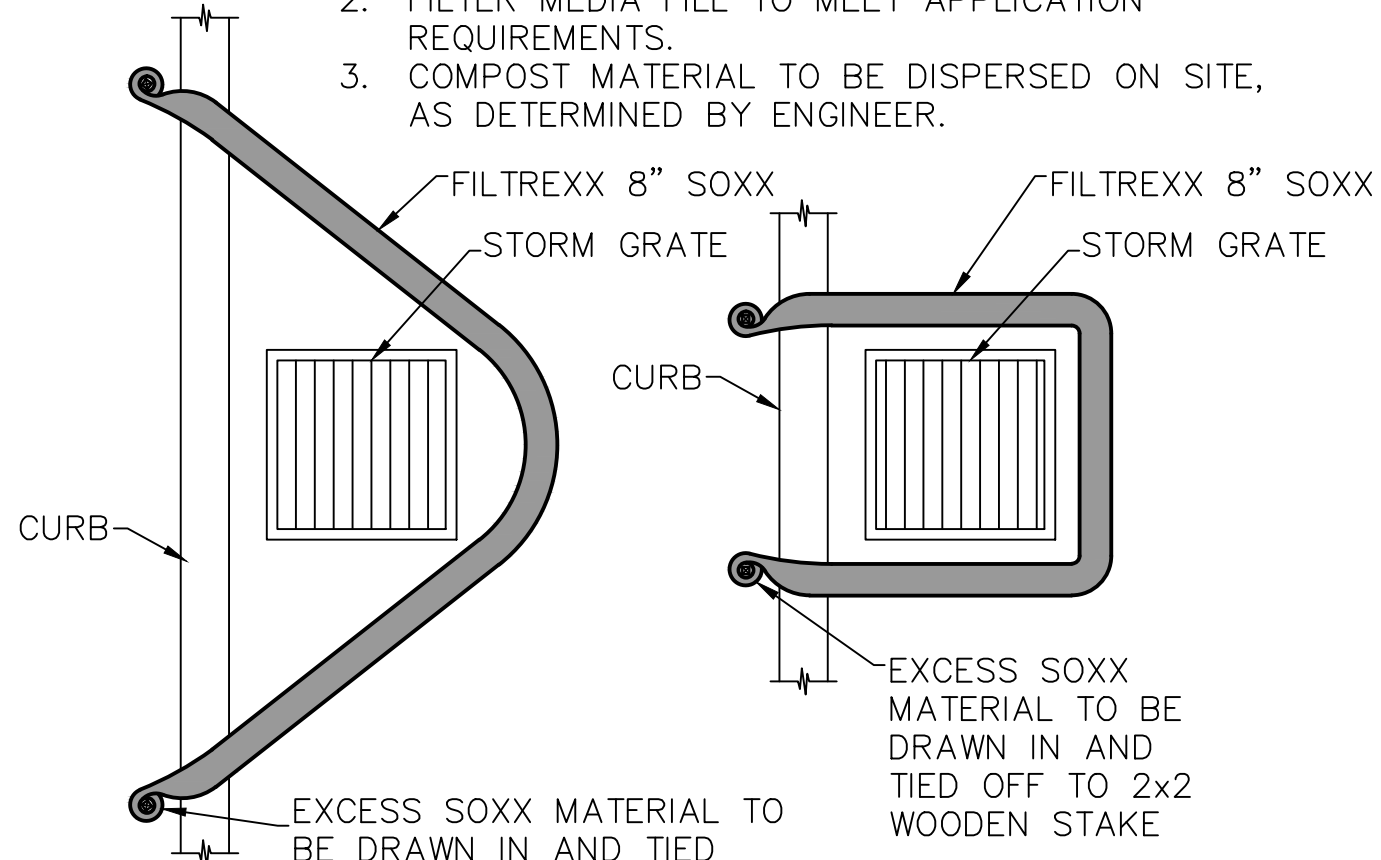
GRAVEL CURB INLET FILTER (OPTION B)
N.T.S.



SILTATION FENCE DETAIL
N.T.S.



NOTES:
1. ALL MATERIAL TO MEET FILTEREXX SPECIFICATIONS.
2. FILTER MEDIA FILL TO MEET APPLICATION REQUIREMENTS.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.



FILTEREXX INLET FILTER
N.T.S.

THE CONTRACTOR AND ALL SUBCONTRACTORS ARE TO PERFORM THE WORK THEY ARE RESPONSIBLE FOR IN ACCORDANCE WITH ST LOUIS COUNTY HIGHWAYS & TRAFFIC PUBLIC WORKS "SEDIMENT AND EROSION CONTROL MANUAL" DATED NOVEMBER 1, 2014. MOST PERTINENT EXCERPTS FROM THE MANUAL ARE INCLUDED IN SHEETS C802 - C804 FOR CONVENIENCE.

MULCH

PHYSICAL DESCRIPTION - A layer of organic material designed to protect exposed soil or freshly seeded areas from erosion by eliminating direct impact of precipitation and slowing overland flow rates. Mulch materials may include, but are not limited to, such things as grass, hay, straw, wood chips, wood fibers, hydro mulch and shredded bark. Type 1 mulch is prohibited in the flood plain.

- Type I Mulch-Vegetative (includes grass, hay, straw).
- Type II Mulch-Vegetative with asphalt emulsion (includes grass, hay, straw).
- Type III Mulch-Vegetative with overspray (includes grass, hay, straw).
- Type V Mulch-Hydro mulch (includes wood fiber, wood cellulose).
- Shredded Hardwood Bark Mulch.
- Wood Chips, (not recycled lumber).

WHERE BMP IS TO BE INSTALLED - Typically installed on seeded areas for temporary use, and in landscaped areas for permanent use.

CONDITIONS FOR EFFECTIVE USE OF BMP

Type of Flow:	Sheet flow only
Slopes:	See attached chart for types of mulch acceptable as a function of slope length and steepness
Mulching Rates:	See attached table

WHEN BMP IS TO BE INSTALLED - Immediately after grading landscaped areas or seeding other areas.

INSTALLATION / CONSTRUCTION PROCEDURES

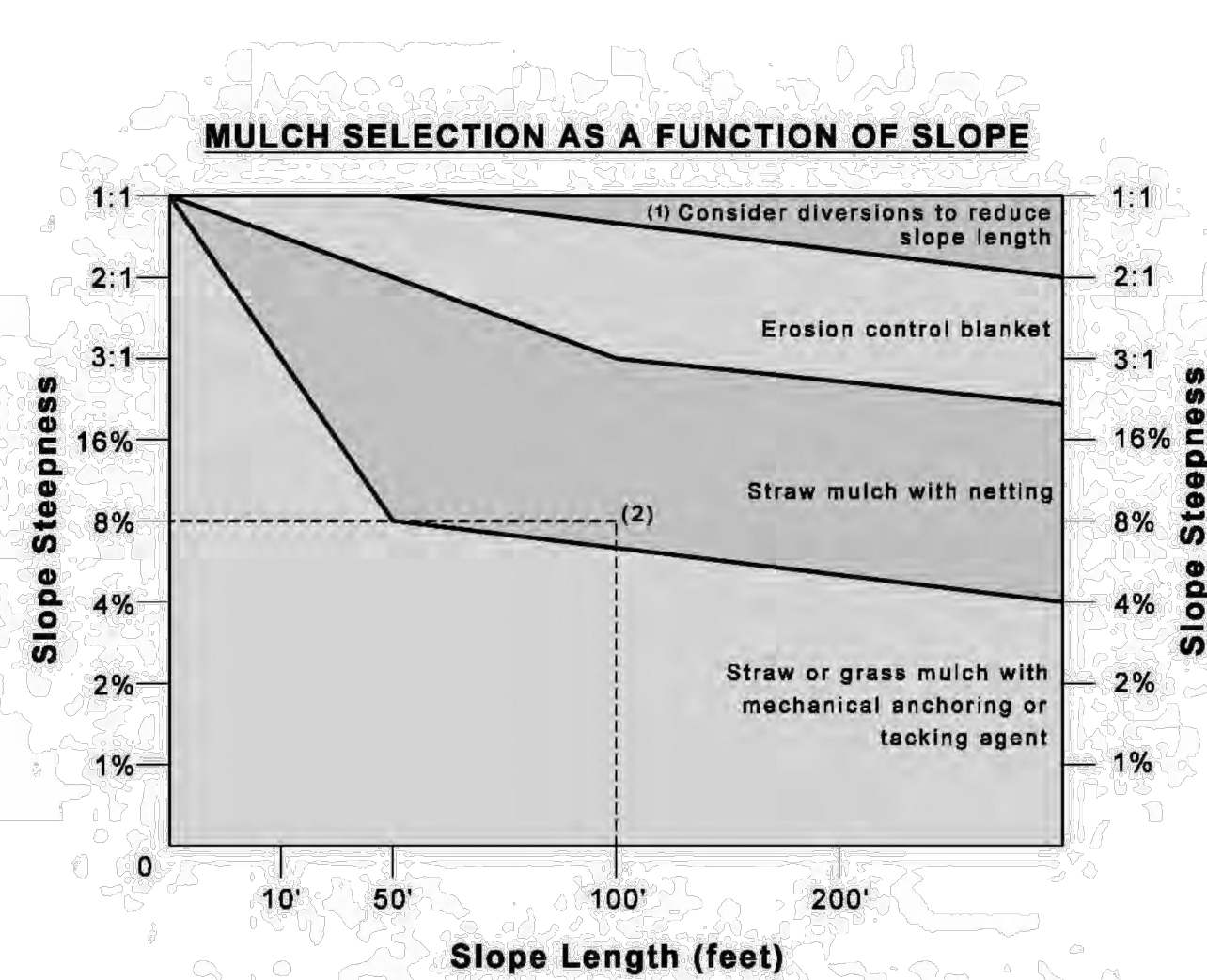
- Install upstream BMP's to protect area to be mulched
- Rough grade area and remove all debris larger than 1 inch if area is to be vegetated and mowed in the future, larger than 2 inches if area is to be permanently mulched
- If area is to be seeded, follow requirements of Seeding BMP
- Spread mulch and anchor by punching it into the ground, using netting, peg and twine, or tacking with liquid binder
- For additional information see Section 802 of St. Louis County's Standard Specifications for Highway Construction.

O&M PROCEDURES

- Inspect every week and after every storm until adequate vegetation is established; annually for permanent mulch.
- Protect from vehicular and foot traffic.
- Repair damaged, degraded or eroded areas - reseed as needed and replace mulch.

SITE CONDITIONS FOR REMOVAL - Temporary mulch should be removed when adequate vegetation is established.

TYPICAL DETAILS - Type of mulch required for various slopes and application rates attached.



- (1) For slopes steeper than 1:1, consider building a diversion above slope to divert water.
(2) Example: An 8% slope, 100 feet long, requires straw mulch with netting.

GENERAL MULCH RECOMMENDATIONS TO PROTECT FROM SPLASH AND SHEET FLOW

Material	Rate Per Acre	Requirements	Notes
Straw	2 to 2.5 tons	Dry, unchopped or unweathered; avoid weeds	Spread by hand or machine; must be tacked or tied down
Wood Fiber or Wood Cellulose	0.5 to 1 ton	Air dry. Add nitrogen fertilizer at 12 lb per ton	Use with hydro seeder; may be used to tack straw. Do not use in hot, dry weather.
Wood Chips	5 to 6 tons	Air dry. Add nitrogen fertilizer at 12 lb per ton	Apply with blower, chip handler, or by hand. Not for fine turf areas.
Bark	35 cu. yds.	Air dry, shredded, or hammermilled; or chips	Apply with mulch blower, chip handler or by hand. Do not use asphalt tack.

O&M PROCEDURES

- Inspect every week and after every storm.
- Remove sediment buildup deeper than ½ the fence height or 12", whichever is less.
- Replace torn or clogged fabric; repair loose fabric.
- Repair unstable or broken posts.
- Stabilize any areas susceptible to undermining.
- Extend fence or add additional row(s) of fence if necessary to provide adequate protection.

SITING AND DESIGN CONSIDERATIONS - The material for silt fences should be a pervious sheet of synthetic fabric such as polypropylene, nylon, and polyester or polyethylene yarn. Choose the material based on the minimum synthetic fabric requirements shown in Table 1 below.

Table 1- Temporary Silt Fence Property Requirements

Physical Property	Test Method	Units	MARV Geotextile Requirements		
			Supported Silt Fence ²	Unsupported Silt Fence	
				Woven	Non-Woven
Post Spacing (Maximum)		feet	4	4	6
Height of Wire / Polymer Fence (Minimum)		inches	30	---	---
Graß Strength (Minimum): Machine Direction Cross Machine Direction	ASTM D 4632	pounds	90 90	125 100	125 100
Permittivity (Minimum)	ASTM D 4491	sec ⁻¹	0.05	0.05	0.05
Apparent Opening Size (AOS) ¹	ASTM D 4751	Sieve Number	30	30	30
Ultraviolet Stability (Minimum) (retained strength)	ASTM D 4355		70% after 500 h of exposure		

Notes:

MARV Minimum Average Roll Value

¹ Elongation measured in accordance with ASTM D 4632

² Silt Fence Support - 14-gauge steel wire with a mesh spacing of 6 inches by 6 inches (or a prefabricated polymeric mesh of equivalent strength)

³ Maximum Average Roll Value

SITE CONDITIONS FOR REMOVAL - After permanent vegetation of slope is established. Remove fence and post, re-grade trench area and vegetation.

TYPICAL DETAIL - 806-70.0

SEEDING

PHYSICAL DESCRIPTION - Establishment of vegetation by spreading grass seed designed to protect exposed soil from erosion by eliminating direct impact of precipitation and slowing overland flow rates. Once established, the vegetative cover will also filter pollutants from the runoff. Use only perennial vegetation for final stabilization.

WHERE BMP IS TO BE INSTALLED - To exposed soil after a phase of rough or finish grading has been completed, or areas where no activity will occur for 30 days.

CONDITIONS FOR EFFECTIVE USE OF BMP

Type of Flow:	Sheet flow
Contributing Slope Length:	30 foot maximum for 3:1 slopes 50 foot maximum for slope between 3:1 and 10:1 100 foot maximum for slopes under 10%
Minimum Rates:	See attached chart(s)
Acceptable Dates:	See attached chart

WHEN BMP IS TO BE INSTALLED - Immediately after rough or finished grading is completed.

INSTALLATION / CONSTRUCTION PROCEDURES

- Install upstream BMP's to protect area to be seeded.
- Rough grade area and remove all debris larger than 1-inch in diameter and concentrated areas of smaller debris.
- Install stabilization grids, if needed.
- Mix soil amendments (lime, fertilizer, etc.) into top 3 to 6 inches of soil as needed.
- Plant seed ½ to ½ inch deep.
- Roll lightly to firm surface.
- Cover seeded area with mulch unless seeding completed during optimum spring and summer dates.
- Install additional stabilization (netting, bonded fiber matrix, etc.) as required.
- Water immediately - enough to soak 4 inches into soil without causing runoff.
- If contract / permit allows seeding to be used for final stabilization, only perennial vegetation seeds shall be used.
- For additional information see Sections 805 and 806.50 of St. Louis County's Standard Specification for Highway Construction.

O&M PROCEDURES:

- Inspect every week and after every storm
- Protect area from vehicular and foot traffic
- Re-seed areas that have not sprouted within 21 days of planting.
- Repair damaged or eroded areas and reseed and stabilize as needed
- Do not mow until 4 inches of growth occurs
- During the first 4 months, mow no more than ½ the grass height
- Re-fertilize during 2nd growing season

SITE CONDITIONS FOR REMOVAL - Does not require removal, but temporary seeding can be removed immediately prior to work returning to an area

SEEDING REQUIREMENTS

Dates for Seeding											
Permanent Seeding	Jan	Feb	March	April	May	June	July	Aug	Sep	Oct	Nov
Tall Fescue	O	O	O	O	O	O	O	O	O		
Smooth Brome	O	O	O	O	O	O	O	O	O		
Fescue & Brome	O	O	O	O	O	O	O	O	O		
Fescue, Rye & Bluegrass	A	A	O	O	O	P	P	O	O	P	P
Temporary Seeding	Jan	Feb	March	April	May	June	July	Aug	Sep	Oct	Nov
Rye or Sudan	A	A	O	O	O	O	O	O	O	O	A
Os	A	O	O	O	O	O	O	O	O		

O = Optimum seeding dates
A = Acceptable seeding dates
P = Permitted seeding dates with reseeding 2 months later - Initially use 50% of seed and 75% of fertilizer. Reseed with additional 75% seed and remaining fertilizer.

Minimum Fertilizer and Seeding Rates		
Permanent Seeding ¹	Pounds per acre	Pounds Per 1000 sq. ft.
Tall Fescue	300	7.0
Smooth Brome	200	4.6
Mixture #1	250	5.7
Mixture #2	210	4.6
Mixture #1 = Tall Fescue @ 150 pounds per acre and Brome @ 100 pounds per acre. Mixture #2 = Tall Fescue @ 100 pounds per acre; Perennial Rye grass @ 100 pounds per acre; and Kentucky Blue grass @ 10 pounds per acre.		
¹ = Seeding rate for slopes in excess of 20% (5:1), shall be 10 pounds per 1000 sq. ft.		
Temporary Seeding	Pounds per acre	Pounds Per 1000 sq. ft.
Rye or Sudan	150	3.5
Os	200	2.5

Fertilizer		
	Permanent Seeding (pounds per acre)	Temporary Seeding (pounds per acre)
Nitrogen	45	30
Phosphate	65	30
Potassium	65	30
Lime - ENM	600	600

ENM = Effective neutralizing material per State evaluation of quarried rock.

WASHDOWN STATION

PHYSICAL DESCRIPTION - An area located at construction entrances designed to wash sediment from the tires and undercarriage of exiting vehicles and prevent sediment from being tracked onto existing roadways.

WHERE BMP IS TO BE INSTALLED - Across or immediately adjacent to exit paths from unpaved construction sites.

CONDITIONS FOR EFFECTIVE USE OF BMP

Drainage: Downstream BMP sized to treat dirty runoff from washdown station

WHEN BMP IS TO BE INSTALLED - First order of work, along with construction entrance, prior to vehicles or equipment accessing unpaved areas.

INSTALLATION/CONSTRUCTION PROCEDURES

- Grade and compact area for drainage under washdown pad.
- Install steel-ribbed plate on frame or other support to allow a 2" drain space.
- Grade and vegetate downstream BMP (V-ditch shown on detail).
- Install water supply and hose.
- Post sign in advance of station indicating that all exiting vehicles and equipment must use station prior to exiting site.

O&M PROCEDURES:

- Remove sediment daily.
- Repair settled areas.
- Replace rock if necessary to maintain clean surface.

SITE CONDITIONS FOR REMOVAL - Remove when vehicles and equipment will no longer access unpaved areas.

TYPICAL DETAIL - 806-46.00

CONSTRUCTION ENTRANCE

PHYSICAL DESCRIPTION - A stabilized entrance to a construction site designed to minimize the amount of sediment tracked from the site on vehicles and equipment. Stabilization generally consists of aggregate over geogrid and geosynthetic material. Mud and sediment fall off of tires as they travel along the stabilized entrance; however, additional measures in the form of a washdown area should also be included on site. The stabilized entrance also distributes the axle load of vehicles over a larger area; thereby mitigating the rutting impact vehicles normally have on unpaved areas. See additional information in the "Construction Site Access Requirements" section of this manual.

WHERE BMP IS TO BE INSTALLED - At locations where it is safe for construction vehicles and equipment to access existing streets - preferably at location of future streets or drives.

CONDITIONS FOR EFFECTIVE USE OF BMP

Drainage: Ditches or pipes, if needed, sized for 15 year, 20 minute storm; HGL 6" below surface of entrance

WHEN BMP IS TO BE INSTALLED - First order of work, along with washdown area, prior to vehicles or equipment accessing unpaved areas.

INSTALLATION / CONSTRUCTION PROCEDURES

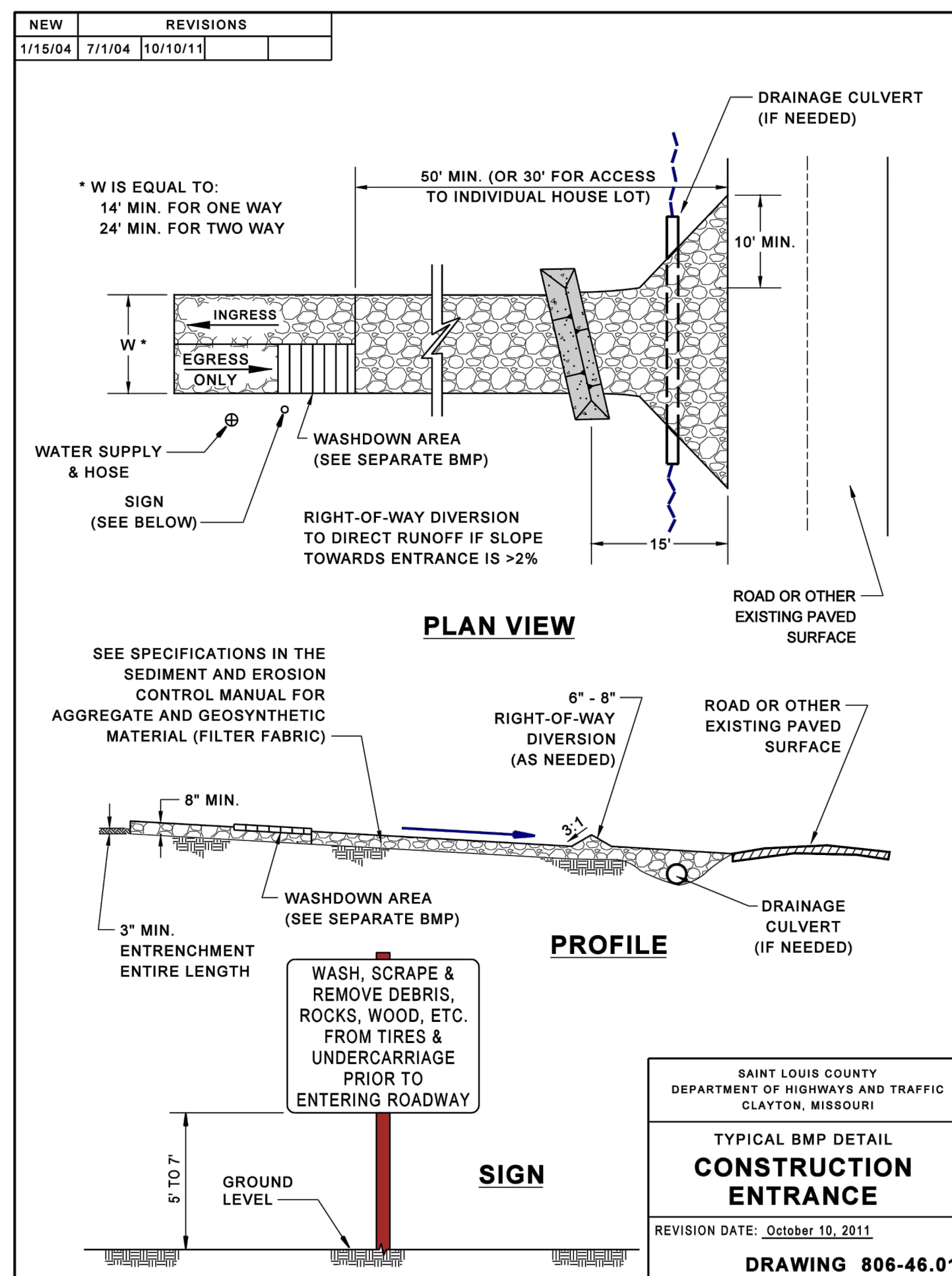
- Grade and compact area of construction entrance.
- Install culvert under entrance if needed to maintain positive drainage.
- Place geosynthetic material next to compacted soil, lay geogrid on top of this, and cover with aggregate, forming diversion across entrance if needed to direct runoff away from roadway.
- See Washdown Station BMP for additional steps.

O&M PROCEDURES:

- Immediately remove any mud or debris tracked onto paved surfaces.
- Remove sediment and clods of dirt from construction entrance continuously.
- Replace rock if necessary to maintain clean surface.
- Repair settled areas.

SITE CONDITIONS FOR REMOVAL - Remove when vehicles and equipment will no longer access unpaved areas.

TYPICAL DETAIL - 806-46.01



NON-SEDIMENT POLLUTION CONTROL

PHYSICAL DESCRIPTION - Control measures designed to prohibit chemicals, hazardous materials, solid waste and construction debris from polluting stormwater. Pollutants carried in solution or as surface films on runoff will be carried through most erosion control and sediment capture BMP's. Keeping substances like fuel, oil, asphalt, paint, solvents, fertilizer, soil additives, concrete wash water, solid waste and construction debris from polluting runoff can be accomplished to a large extent through good housekeeping on the site and following the manufacturer's recommendations for disposal.

WHERE BMP IS TO BE INSTALLED - Collection, storage and fueling areas should be located onsite in an area that does not receive a substantial amount of runoff from upland areas and does not drain directly to lakes, creeks, streams, rivers, sewers, groundwater, wetlands, or road ditches.

CONDITIONS FOR EFFECTIVE USE OF BMP

- Reduction in pollutants depends heavily on how construction personnel perform their duties. An effective management system requires training and signage to promote proper storage, handling and disposal of materials. Follow up observations of actions and inspection of storage areas by management personnel is also required.
- Plans should contain notes clearly stating requirements for addressing potential pollutants.
- Fueling areas and storage areas for hazardous materials should be protected by berms or other means of catching leaks or spills. Do not store hazardous chemicals, drums, or bagged materials directly on the ground. Place these items on a pallet and under cover in secondary containment.

WHEN BMP IS TO BE INSTALLED - Immediately following installation of construction entrance and wash station.

INSTALLATION / CONSTRUCTION PROCEDURES

- Place waste receptacles near area of work.
- Construct protective berm or other devices around fueling and hazardous materials storage areas.
- Install appropriate signage.
- Post guidelines for proper handling, storage and disposal of materials, and emergency spill cleanup on site.

O&M PROCEDURES:

- Inspect activities on regular basis.
- Inspect storage areas and control devices at least every two weeks and after every storm.
- Make necessary corrections and repairs.

SITE CONDITIONS FOR REMOVAL - Maintain practices until all construction on the site has been completed.

TYPICAL DETAILS - General pollution prevention notes attached.

SODDING

PHYSICAL DESCRIPTION - A ¾ inch to 1 inch thick mat of vigorous turf, free of disease, insects and weeds. Sod prevents raindrops from disrupting the soil structure and causing erosion. Sod slows water runoff and acts as a filter when sediment-laden runoff crosses over the sodded area.

WHERE BMP IS TO BE INSTALLED - Typically installed in areas requiring immediate erosion protection, such as swales or detention ponds and as filter strips, around inlets, and adjacent to curbs. Also installed in areas requiring immediate aesthetic appearance or function such as entrances to new subdivision and off site construction areas.

CONDITIONS FOR EFFECTIVE USE OF BMP - Type of Flow: Sheet flow and low concentrated flows with velocities less than 5 fps.

WHEN BMP IS TO BE INSTALLED - Immediately after finish grading, installation of area inlets, and installation of underground services and foundations of new homes.

INSTALLATION / CONSTRUCTION PROCEDURES

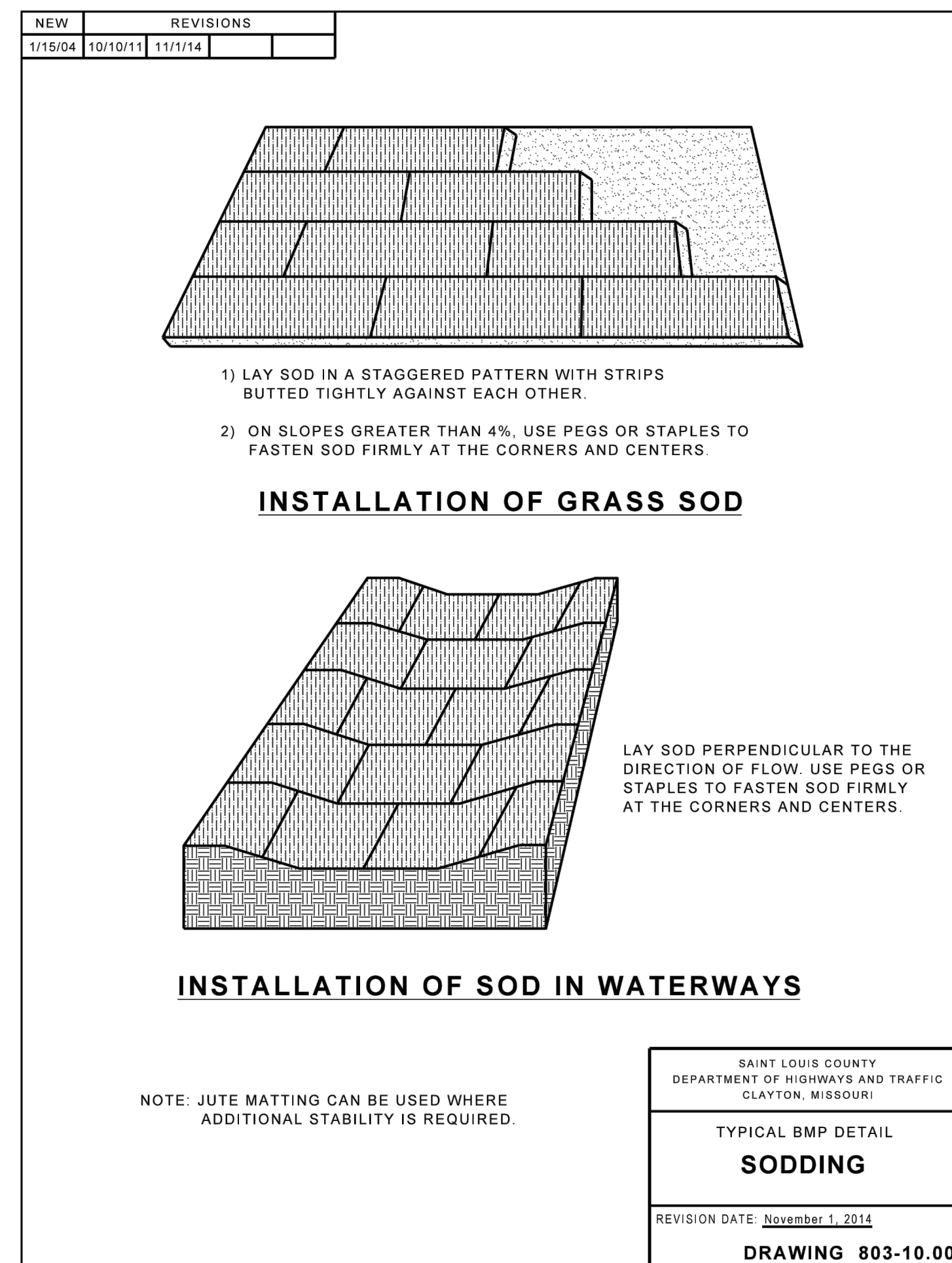
- Finish grade area and remove all debris larger than ½ inch in diameter and concentrated areas of smaller debris.
- Soil preparation of area to be sodded shall be determined by tests to determine lime and fertilizer requirements. Soil amendments shall be mixed into top 3 to 6 inches of soil by disk or other means.
- Level and roll soil lightly to provide an even grade and firm the surface. Soil should not be excessively wet or dry.
- Lay first row of sod perpendicular to the slope or direction of flow. Butt subsequent rows tight against previous rows with strips staggered in brick-like pattern. Fill minor gaps with good soil and roll entire surface to ensure contact.
- Stake, staple and/or net corners and centers of sod strips as required.
- Water immediately after installation enough to soak 4 inches into soil without causing runoff.
- For additional information see Section 803 of St. Louis County's Standard Specification for Highway Construction.
- Type of sod shall be as specified in the contract or on the approved plans.

O&M PROCEDURES:

- Water sod daily for 3 weeks - enough to soak 4-inches into soil without causing runoff.
- Reposition areas of sod that has moved along the slope.
- Remove sediment accumulations - replace sod if necessary.
- Repair any eroded areas, replace sod, and stabilize as needed.
- Do not mow until 3-inches of new growth occur. During the first 4 months, mow no more than ½ the grass height.

SITE CONDITIONS FOR REMOVAL - Not applicable.

TYPICAL DETAIL - 803-10.00



ROCK OUTLET / EMBANKMENT PROTECTION / PAVED DITCH

PHYSICAL DESCRIPTION - A rock apron installed over a geotextile fabric at a point of concentrated discharge, designed to slow the velocity of flow and protect the receiving area from erosion.

Follow guidelines shown in the St. Louis County Standard Specifications for Highway Construction concerning use of related BMP's such as:

- Light Stone Revetment;
- Heavy Stone Revetment;
- Articulating Cellular Concrete Erosion Control System;
- Concrete Slope Protection;
- Gabions;
- Reno Mattresses;
- Type 2 Rock Blanket;
- Ditch Lining;
- Rock Lining.

WHERE BMP IS TO BE INSTALLED - Installed at BMP outlets, for example, at the end of pipe slope drains, the emergency overflow or outlet pipe of a sediment basin.

CONDITIONS FOR EFFECTIVE USE OF BMP

Type of Flow: Concentrated flow
Flow at Outlet: Maximum velocity of 10 fps

WHEN BMP IS TO BE INSTALLED - With the construction of the upstream BMP that creates the concentrated discharge.

INSTALLATION / CONSTRUCTION PROCEDURES

- ✓ Grade subgrade of rock blanket to required section.
- ✓ Place filter fabric, providing enough slack to assure that rock will not tear the fabric when it is placed.
- ✓ Install rock with uniform profile and cross section.

O&M PROCEDURES:

- ✓ Inspect every week and after every storm during construction.
- ✓ Remove sediment and trash accumulation.
- ✓ Replace displaced rock - larger rock may be required.
- ✓ Stabilize eroded areas - extend if necessary.

SITE CONDITIONS FOR REMOVAL - Removed concurrently with upstream BMP. Some may be left as a permanent post construction BMP as shown on approved plans or in the permit.

TYPICAL DETAIL

The Design Criteria Manual includes standard drawing numbers:

- C609.15 - Paved Ditches and Gutters
- C611.50 - Heavy Stone Revetment Ditch Liner
- C611.60 - Concrete Slope Protection
- C611.70 - Gabion Walls

CONCRETE WASTE MANAGEMENT

DESCRIPTION - The purpose of this specification is to set forth procedures and practices designed to eliminate the discharge of concrete waste materials to storm drainage systems, drainage areas, streets or watercourses, which shall be required of the contractor.

APPROPRIATE APPLICATION OF BMP - Concrete waste management procedures and practices will be implemented on construction projects as follows:

- Where concrete is used as a construction material or where concrete dust and debris result from demolition activities.
- Where slurries containing Portland cement concrete (PCC), asphaltic concrete (AC) or bituminous concrete (BC) are generated, such as from saw cutting, coring, grinding, grooving and hydro-concrete demolition.
- Where concrete trucks and other concrete-coated equipment are washed on-site, when approved by the Resident Engineer or Construction Inspector.
- Where mortar-mixing station exist.

AWARENESS / ENFORCEMENT

- Contractor's and / or permit holder's superintendent or representative shall oversee and enforce concrete waste management procedures.
 - Discuss the concrete management techniques described in this BMP (such as handling of concrete waste and washout) with the ready-mix concrete supplier before any deliveries are made.
- The site superintendent shall make drivers aware of the presence of the concrete waste management facilities. The site superintendent should post signage indicating the location and designated use of the concrete waste management areas, and provide careful oversight to inspect for evidence of improper dumping of concrete waste and wash water.

IMPLEMENTATION

- Contractors, private individuals, public agencies, etc. using concrete material, shall incorporate requirements for concrete waste management into material supplier and subcontractor agreements. Include requirements in contracts with concrete delivery companies that drivers must use designated concrete washout facilities.
- Store dry and wet materials under cover, away from drainage areas.
- Avoid mixing excess amounts of fresh concrete.
- Do not allow excess concrete to be dumped on-site, except in designated areas.
- Cover the structures before predicted rainstorms to prevent overflows.
- Monitor on site concrete waste storage and disposal procedures at least weekly or as directed by the Resident Engineer or Construction Inspector.
- In St. Louis County, the contractor is required by Missouri State Law (10 CSR 10-6.170) and County Ordinance (612.340) to control fugitive dust blown from the construction site, signal installation, etc. Dust control, including saw-cut material etc., on the construction site shall be monitored for safety purposes and to prevent nuisances. The contractor / permittee shall apply reasonable measures to control dust and particulate matter (of any size or source) due to roadway / construction traffic, grading, clearing and grubbing, building demolition, saw-cutting etc. from migrating off the site of origin. Operations residue from grinding, saw-cutting etc. should be picked up (cleaned-up) by means of a vacuum device or swept up. Compressed or blown air may be used to clean negligible residual dust that the vacuum or sweeping did not clean up, as long as the above dust control procedures (and law and ordinance) are met. Saw cutting residue, slurry or dry, should not be allowed to enter storm drains or watercourses. Saw cutting residue should not be allowed to flow across the pavement and should not be left on the surface of the pavement when traffic is present, when precipitation is anticipated before cleanup or overnight. In approved locations, saw-cut slurry may flow into the dirt (where it can soak into the ground) adjacent to the saw-cutting operation and be buried, on site, 2' minimum below finished grade. Other dust control and clean-up procedures may be acceptable as approved by the Engineer or St. Louis County. See additional Concrete Waste Management requirements in this Manual.

WASHOUT AREA PROTOCOL

- Contain concrete washout on site or take it offsite for disposal in designated areas only.
- Do not wash out concrete trucks into storm drains, open ditches, streets, or streams.
- For onsite washout:
 - Locate washout area on-site at least 50 feet from storm drains, open ditches, or water bodies. Do not allow runoff from this area by constructing a temporary pit or bermed area large enough to contain liquid and solid waste. Locate it in a dirt area where the liquid portion of the washout can soak into the ground. They are preferably built below-grade to prevent breaches and reduce the likelihood of runoff. Discontinue use of the washout once it reaches 75% capacity. Washouts should be sized to handle solids and wash water to prevent overflow. It is estimated that 7 gallons of wash water are used to wash one truck chute and 50 gallons are used to wash out the hopper of a concrete pump. Implement a maintenance schedule for washout areas.
 - Temporary washout facilities should have pit or bermed areas of sufficient volume to completely contain all liquid and waste concrete materials generated during washout procedures.
 - Wash out wastes into the pit where the concrete can set, be broken up, and used on site; or buried on site; or disposed of properly.
- Do not wash sweepings from exposed aggregate concrete into the street or storm drain. Collect and return sweepings to aggregate base stockpile or dispose of in the trash.
- Do not place concrete wash water in a pit that is connected to the storm drain system or that drains to nearby waterways.
- Locate concrete washout facilities in an area that allows convenient access for concrete trucks, preferably near the area where the concrete is being poured. Appropriate gravel or rock should cover paths to concrete washout facilities if the facilities are located on undeveloped property. These areas should be far enough away from other construction traffic to reduce the likelihood of accidental damage and spills. The number of facilities you install should depend on the expected demand for use. On large sites with extensive concrete work, place washouts in multiple locations for ease of use. If the dried concrete washout is buried on the site it shall have a 2-foot cover minimum. The 2-foot cover shall match with surrounding finished grade.
- Concrete washed out in areas other than those designated for such activity, shall be cleaned up by the contractor.
- Install signage adjacent to each washout facility to inform concrete equipment operators to utilize the proper facilities.
- Perform washout of concrete mixers, delivery trucks and other delivery systems in designated areas only.
- Wash out concrete from concrete pumper bins into concrete pumper trucks and discharge into designated washout area.
- Equipment that cannot be easily moved, such as concrete pavers, shall only be washed in designated areas that do not drain to waterways or storm drain systems.
- Backfill and repair holes, depressions or other ground disturbance caused by the removal of the temporary concrete washout facilities.
- Wash out concrete on site into a future designated final concrete pour location. This location cannot be within 50 feet of a storm or sanitary sewer; or water course; or where it can drain off site. The washout cannot jeopardize the integrity of the final concrete pour. Concrete to be removed from the site shall be disposed of in conformance with the provisions in Standard Specification Manual, Section 202, all as directed by the Engineer. No additional payment will be made for complying with the above specification.
- A self-contained and watertight container may be used to control, capture, and contain concrete wastewater and wash-out material. The container must be portable and temporary, damage resistant, protect against spills and leaks, and sized to handle solids and wash water to prevent overflow. The container should be emptied and cleaned when 75% of its capacity is reached. After all liquids evaporate or are pumped and vacuumed, and the remaining slurry solidified, the Contractor may bury the solids on site. On County Highway Projects the solids may be buried on site if approved by the Engineer. In either case, solids shall be buried a minimum of 2 feet below finished grade. Disposal of container contents that are removed from the site shall be made at an approved landfill. In order to prevent overflows caused by natural occurrences and to provide security for safety purposes and against acts of vandalism, the container shall be covered at the end of each workday and remain covered until the beginning of the next workday. The cover shall remain on site with the container at all times. Container shall be free of liquids during any on-site relocation process or transport to another site. On County Highway projects, location(s) for the container shall be approved by the Engineer.

TYPICAL DETAIL - 806-46.03

INLET PROTECTION - FABRIC DROP AND DROP IN FILTER

PHYSICAL DESCRIPTION - A woven fabric barrier braced around an area inlet or drop in type filter designed to prevent sediment from entering the storm sewer. Shallow temporary ponding during and after rainfall should be expected. Use an alternate method if flooding of driving lanes, adjacent property, etc. is possible.

WHERE BMP IS TO BE INSTALLED - At inlets designed to drain a small gently sloping area with maximum grade of 5%. Overflow capacity is limited on standard area inlets.

CONDITIONS FOR EFFECTIVE USE OF BMP

Type of Flow: Shallow sheet flow.
Contributing Area: Maximum of 2 c.f.s. flowing to inlet.

WHEN BMP IS TO BE INSTALLED - Immediately after placement of inlet and before construction starts on existing inlets.

INSTALLATION / CONSTRUCTION PROCEDURES

- ✓ Backfill, compact and uniformly grade area around inlet.
- ✓ Construct downstream berm, if required. Rock bags or sand bags may be used to construct berm.
- ✓ Drive posts or wood frame close to inlet sill so overflow will fall directly on the structure and not on unprotected soil.
- ✓ Dig trench around inlet for fabric to be buried.
- ✓ Cut required length of fabric from one roll to eliminate joints. Fasten fabric tightly around posts/frame to enhance stability.
- ✓ Backfill and compact trench.
- ✓ Install drop in type filter per manufacturer specifications.

O&M PROCEDURES

- ✓ Inspect every week and after every storm.
- ✓ Remove trash accumulation and sediment once it reaches depth of 6" at inlet.
- ✓ Replace loose, torn or clogged fabric.
- ✓ Repair any erosion or settlement of temporary berm downstream of inlet.
- ✓ Maintain drop in type filter per manufacturer specifications.

SITE CONDITIONS FOR REMOVAL - Remove after contributing drainage areas have been adequately stabilized. Restore area to grade and vegetate.

TYPICAL DETAIL - 806-45.12 (Single Unit)
806-45.13 (Double Unit)

VEHICLE MAINTENANCE AND WASHING AREAS

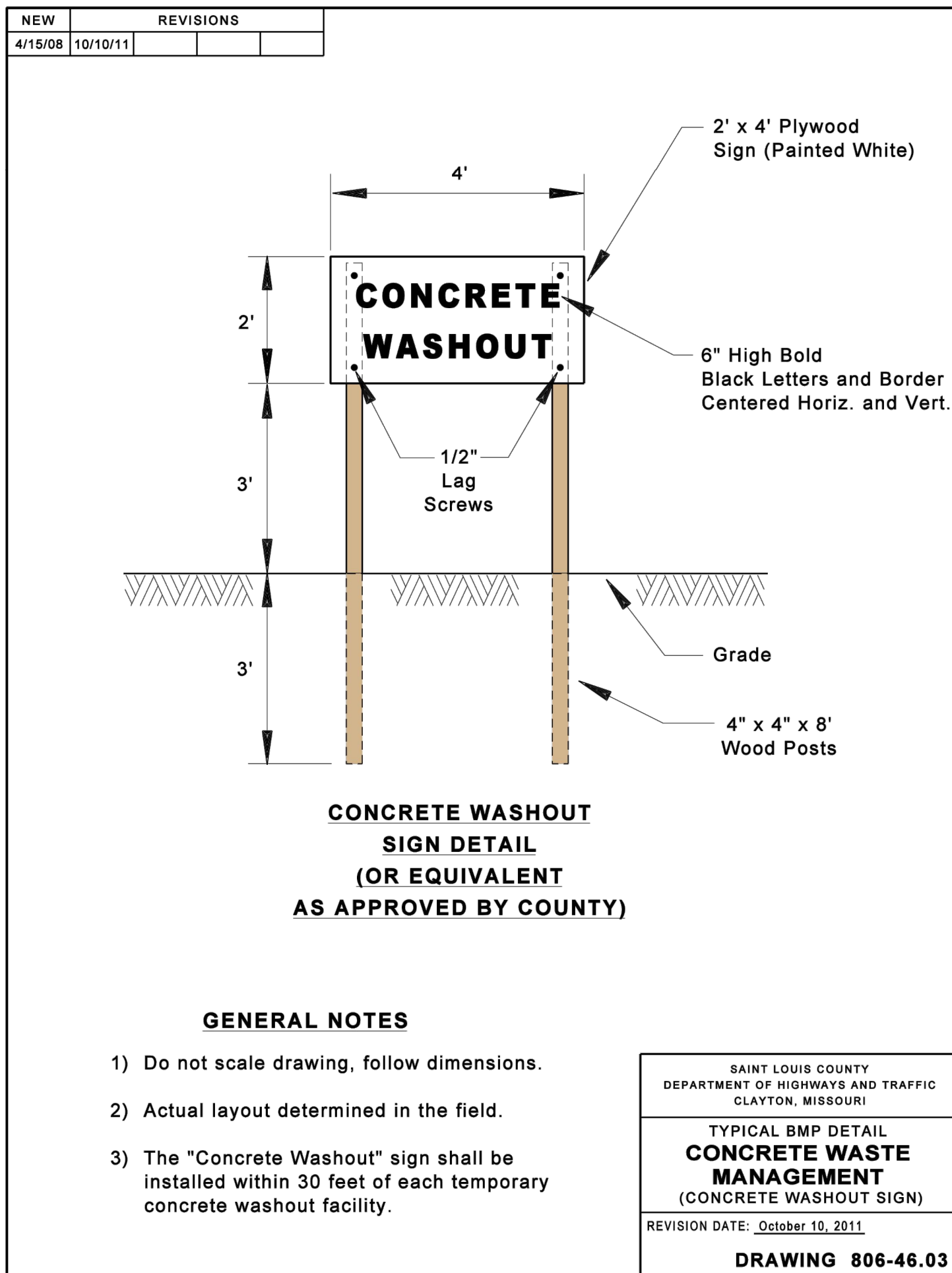
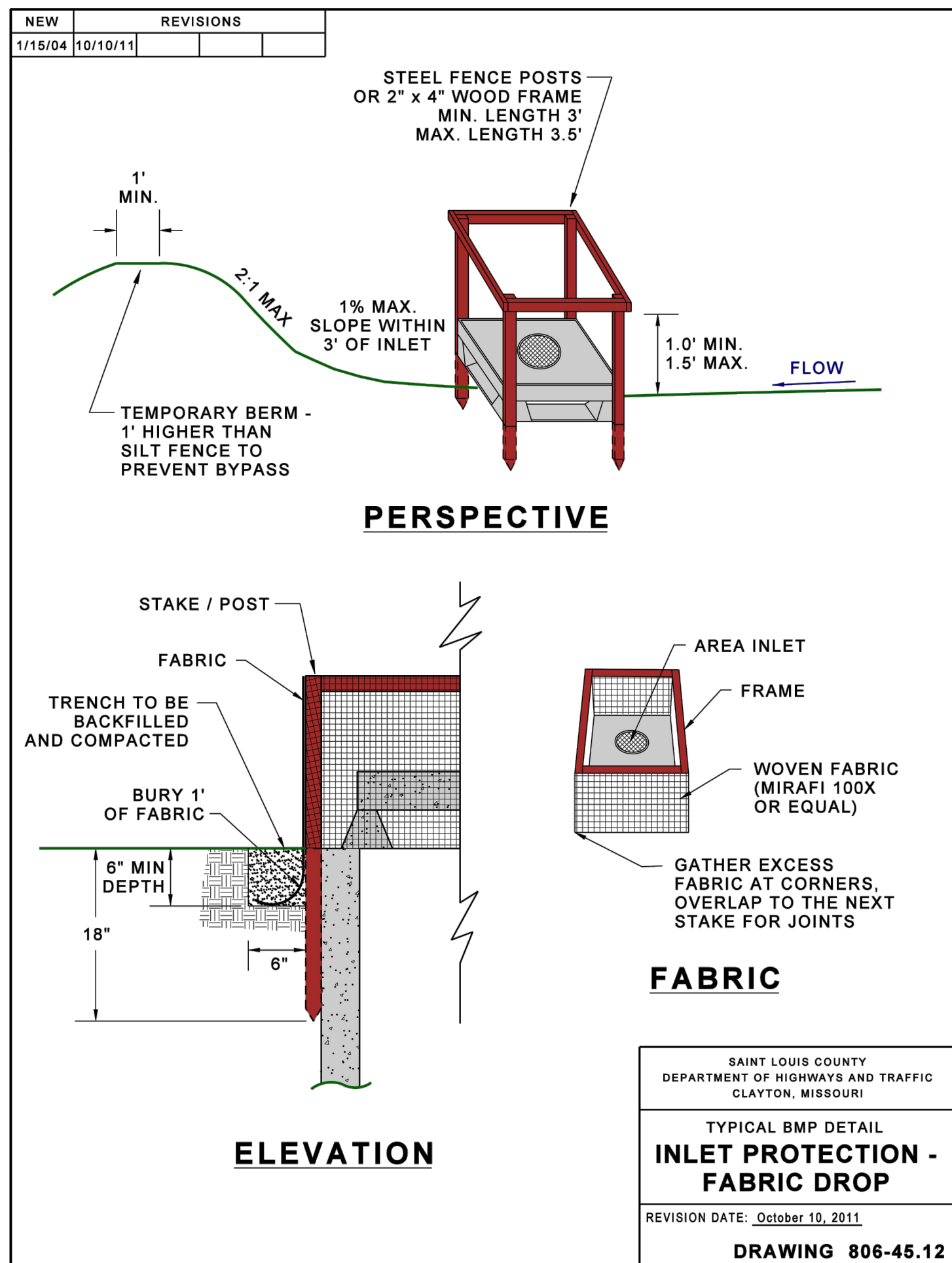
DESCRIPTION - Ideally, vehicle maintenance and washing occurs in garages and wash facilities, not on active construction sites. However, if these activities must occur onsite, operators should follow appropriate BMPs to prevent untreated nutrient-enriched wastewater or hazardous wastes from being discharged to surface or ground waters. Vehicle maintenance and washing BMPs prevent construction site spills of wash water, fuel, or coolant from contaminating surface or ground water. They apply to all construction sites.

APPROPRIATE APPLICATION OF BMP - Inspect construction vehicles daily, and repair any leaks immediately. Dispose of all used oil, antifreeze, solvents and other automotive-related chemicals according to manufacturer instructions. These wastes require special handling and disposal. Used oil, antifreeze, and some solvents can be recycled at designated facilities, but other chemicals must be disposed of at a hazardous waste disposal site. Local government agencies can help identify such facilities.

Designate special paved areas for vehicle repair. To direct wash water to sanitary sewer systems or other treatment facilities, ensure that vehicle washing areas are impervious and are bermed. Use blowers or vacuums instead of water to remove dry materials from vehicles if possible. Because water alone can remove most dirt adequately, use high-pressure water spray without detergents at vehicle washing areas. If you must use detergents, avoid phosphate- or organic-based cleansers to reduce nutrient enrichment and biological oxygen demand in wastewater. Use only biodegradable products that are free of halogenated solvents. Clearly mark all washing areas, and inform workers that all washing must occur in this area.

O&M PROCEDURES - Vehicle maintenance operations produce substantial amounts of hazardous and other wastes that require regular disposal. Clean up spills and dispose of cleanup materials immediately. Inspect equipment and storage containers regularly to identify leaks or signs of deterioration. Maintenance of vehicle wash areas is minimal, usually involving repairs to berms and drainage to the sanitary sewer system.

TYPICAL DETAILS - Not applicable.



GENERAL NOTES

- 1) Do not scale drawing, follow dimensions.
- 2) Actual layout determined in the field.
- 3) The "Concrete Washout" sign shall be installed within 30 feet of each temporary concrete washout facility.

SAINT LOUIS COUNTY
DEPARTMENT OF HIGHWAYS AND TRAFFIC
CLAYTON, MISSOURI
TYPICAL BMP DETAIL
CONCRETE WASTE
MANAGEMENT
(CONCRETE WASHOUT SIGN)
REVISION DATE: October 10, 2011
DRAWING 806-46.03



Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
60138	Hydric land complex, 1 to 3 percent slopes	CD	1.4	100.0%
Totals for Area of Interest			1.4	100.0%



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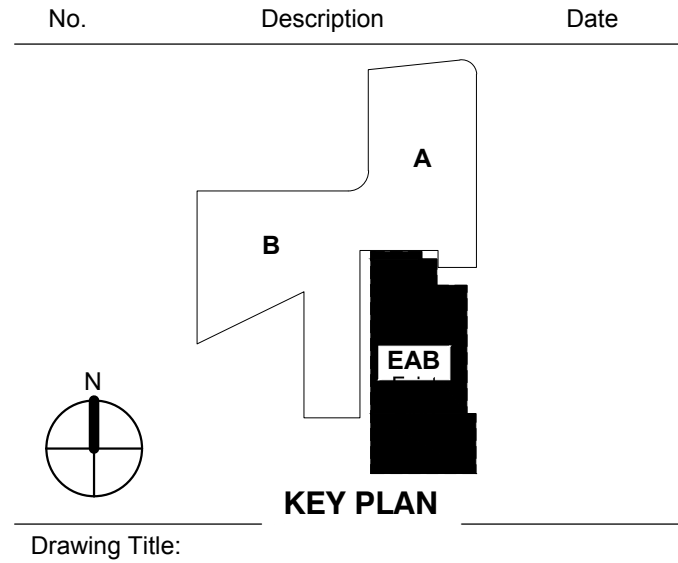
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CONFORMED SET

01 JUL 2016

1 ADDENDUM 1-10 5 MAY 2016
- ISSUED FOR CONSTRUCTION (BP1) 15 JAN 2016



**EROSION
CONTROL
DETAILS**

Project No.: 04561.00

Checked by:

C803

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MSD P# 28874-01 MSD BASE MAP 23K2



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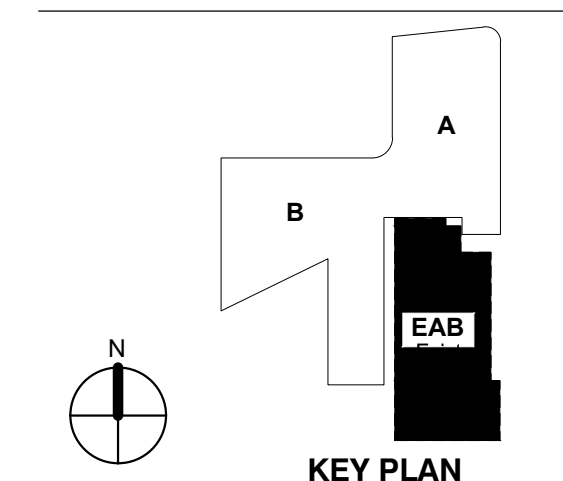
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CONFORMED SET 01 JUL 2016

2	ADDENDUM 1-10	5 MAY 2016
1	ADDENDUM 1-5	09 FEB 2016
-	ISSUED FOR CONSTRUCTION (BP1)	15 JAN 2016
No.	Description	Date



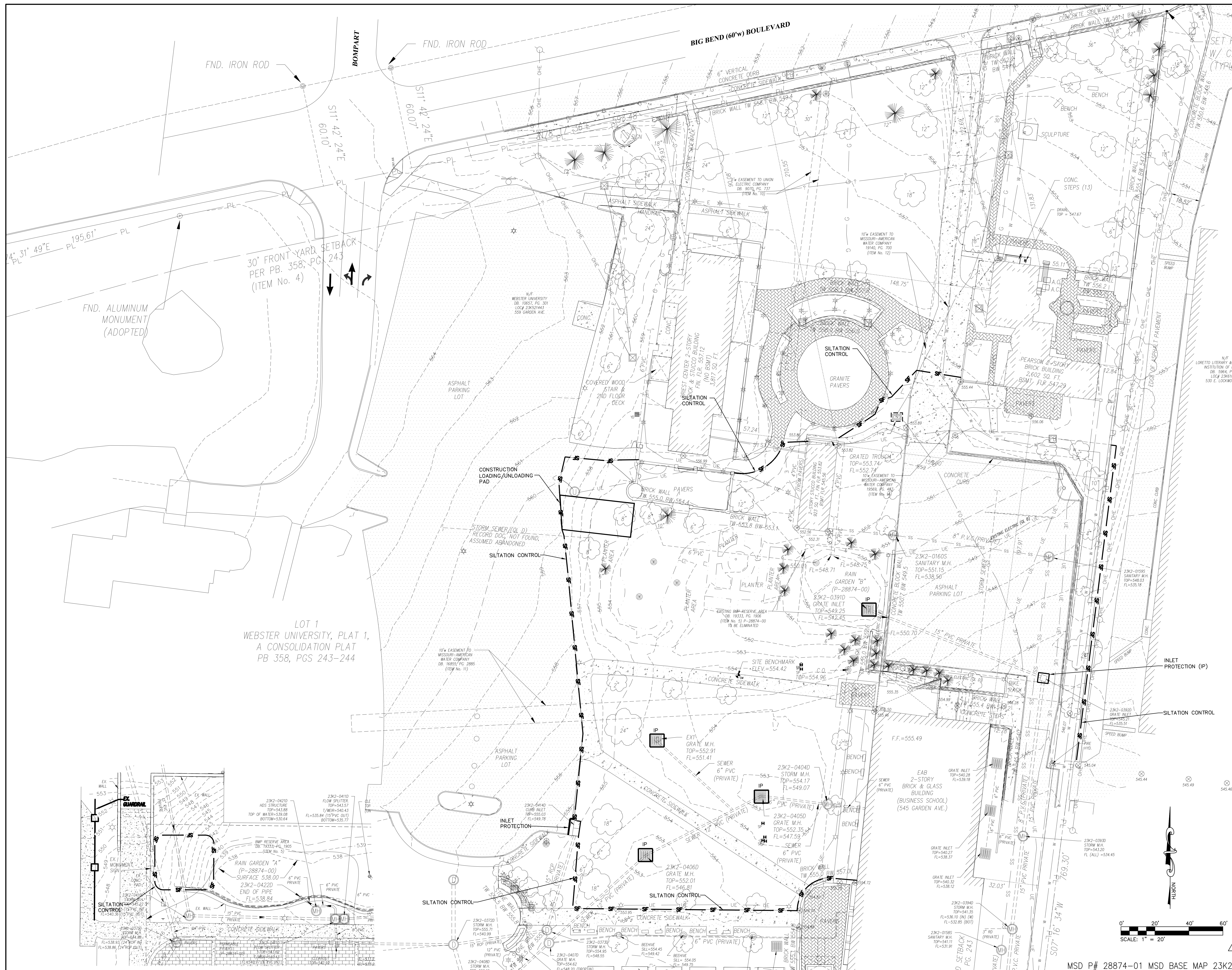
Drawing Title: _____

INTERIM STORMWATER POLLUTION PREVENTION PLAN

Project No.: 04561.00 Checked by:

C804

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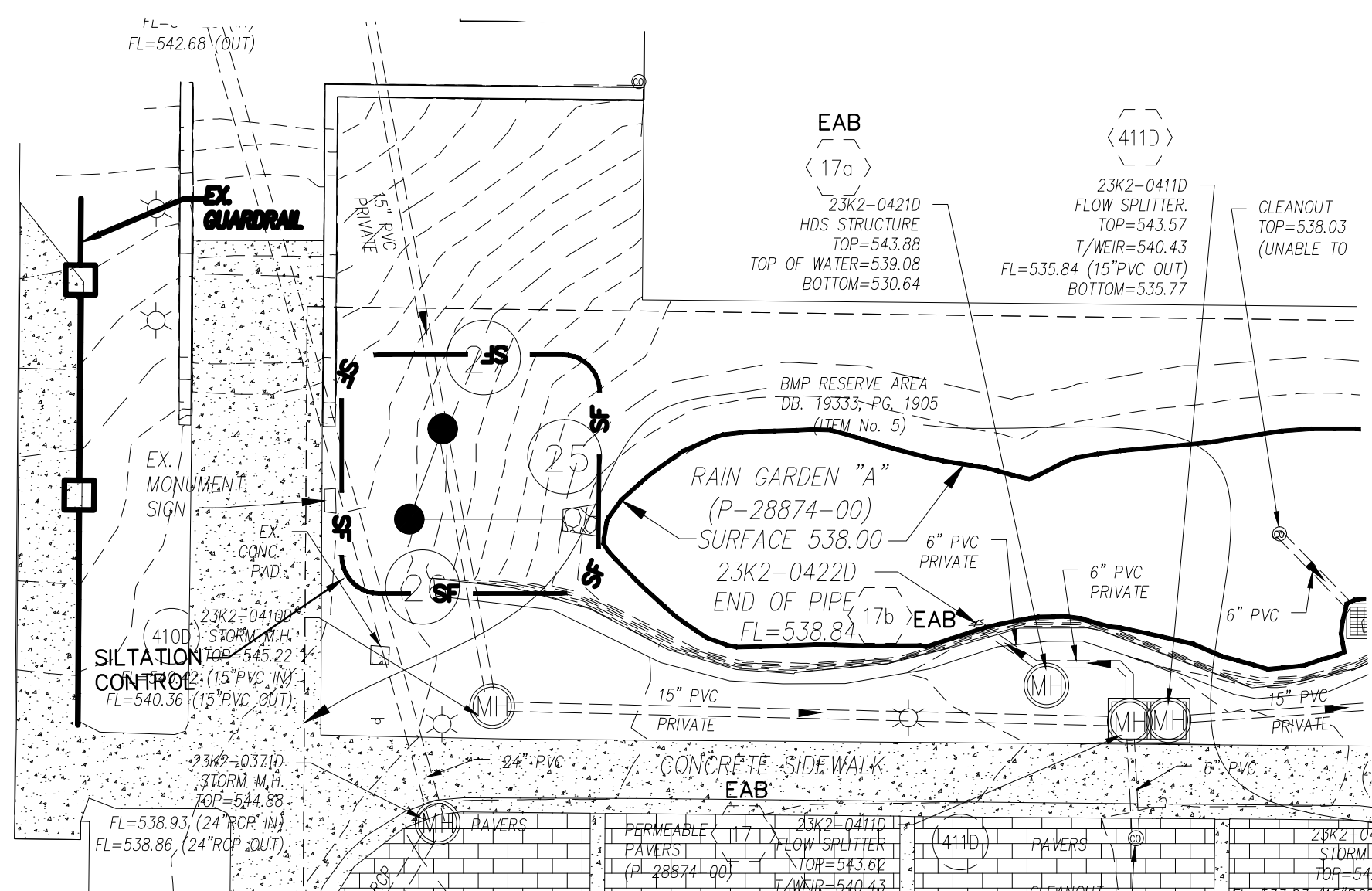
SHEET GENERAL NOTES.

1. THE CONTRACTOR SHALL FOLLOW ALL RULES AND GUIDELINES AS SET FORTH IN CHAPTER 81, LAND DISTURBANCE CODE & CHAPTER 82, STORM WATER IN THE CODE OF WEBSTER GROVES.
2. THE CONTRACTOR CAN USE THIS EROSION CONTROL PLAN AS A BASE TO IDENTIFY LAY DOWN AREAS, WASH DOWN AREAS, SEDIMENTATION BASINS, HAZARDOUS MATERIAL LOCATION AND SPILL AND CONTAINMENT PROCEDURES. THE CONTRACTOR WILL BE REQUIRED TO FOLLOW ALL GUIDELINES SET FORTH BY THE CITY OF WEBSTER GROVES, THE MISSOURI DEPARTMENT OF NATURAL RESOURCES, AND THE ENVIRONMENTAL PROTECTION AGENCY REGARDING ALL LAND DISTURBANCE ACTIVITIES.
3. ANY LAND CLEARING, CONSTRUCTION, OR DEVELOPMENT INVOLVING THE MOVEMENT OF EARTH SHALL BE IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN, AND THE CONTRACTOR WILL ASSUME AND ACKNOWLEDGE RESPONSIBILITY FOR COMPLIANCE WITH THIS ARTICLE AND THE STORMWATER POLLUTION PREVENTION PLAN AT THE SITE OF THE PERMITTED ACTIVITY.
4. THE CONTRACTOR SHALL CERTIFY THAT THEY HAVE FOLLOWED THE GUIDELINES AS OUTLINED IN "THE MODEL BEST MANAGEMENT PRACTICES (BMPs) FOR LAND DISTURBANCE, SEDIMENT AND EROSION CONTROL OF ST. LOUIS COUNTY", THIS DOCUMENT SHALL BE THE GENERAL DESIGN GUIDELINES FOR ADDRESSING LAND DISTURBANCE ACTIVITIES.
5. THE PERMIT-HOLDER SHALL SIGN A "DEVELOPER AGREEMENT" ATTESTING TO THE FOLLOWING:

- NOTIFY ALL CONTRACTORS AND OTHER ENTITIES (INCLUDING UTILITY CREWS, CITY EMPLOYEES, OR THEIR AGENTS) THAT WILL PERFORM WORK AT THE SITE, OF THE EXISTENCE OF THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND WHAT ACTIONS OR PRECAUTIONS SHALL BE TAKEN WHILE ON SITE TO MINIMIZE THE POTENTIAL FOR EROSION AND THE POTENTIAL FOR DAMAGING ANY BEST MANAGEMENT PRACTICES (BMPs);

- DETERMINE THE NEED FOR AND ESTABLISH TRAINING PROGRAMS TO ENSURE THAT ALL SITE WORKERS HAVE BEEN TRAINED, AT A MINIMUM, IN EROSION CONTROL, MATERIAL HANDLING AND STORAGE, AND HOUSEKEEPING; AND
- PROVIDE COPIES OF THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) TO ALL PARTIES WHO ARE RESPONSIBLE FOR INSTALLATION, OPERATION OR MAINTENANCE OF ANY BEST MANAGEMENT PRACTICES (BMPs); AND
- MAINTAIN A CURRENT COPY OF THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) ON THE SITE AT ALL TIMES.

6. PROVIDE INLET PROTECTION FOR ALL AREA DRAINS.



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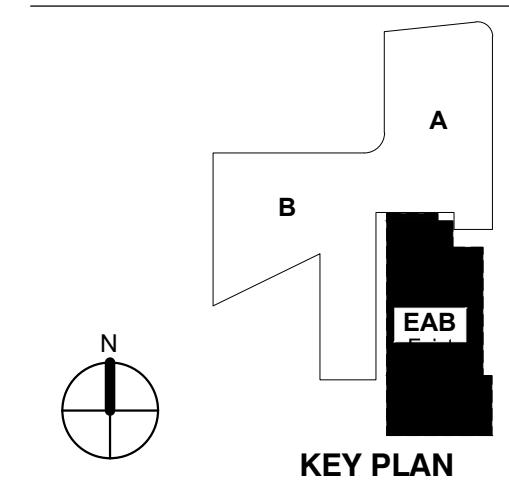
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CONFORMED SET 01 JUL 2016

3	ADDENDUM 1-10	5 MAY 2016
2	ADDENDUM 1-5	09 FEB 2016
1	ADDENDUM 1-1	29 JAN 2016
-	ISSUED FOR CONSTRUCTION (BPI)	15 JAN 2016
No.	Description	Date



Drawing Title:

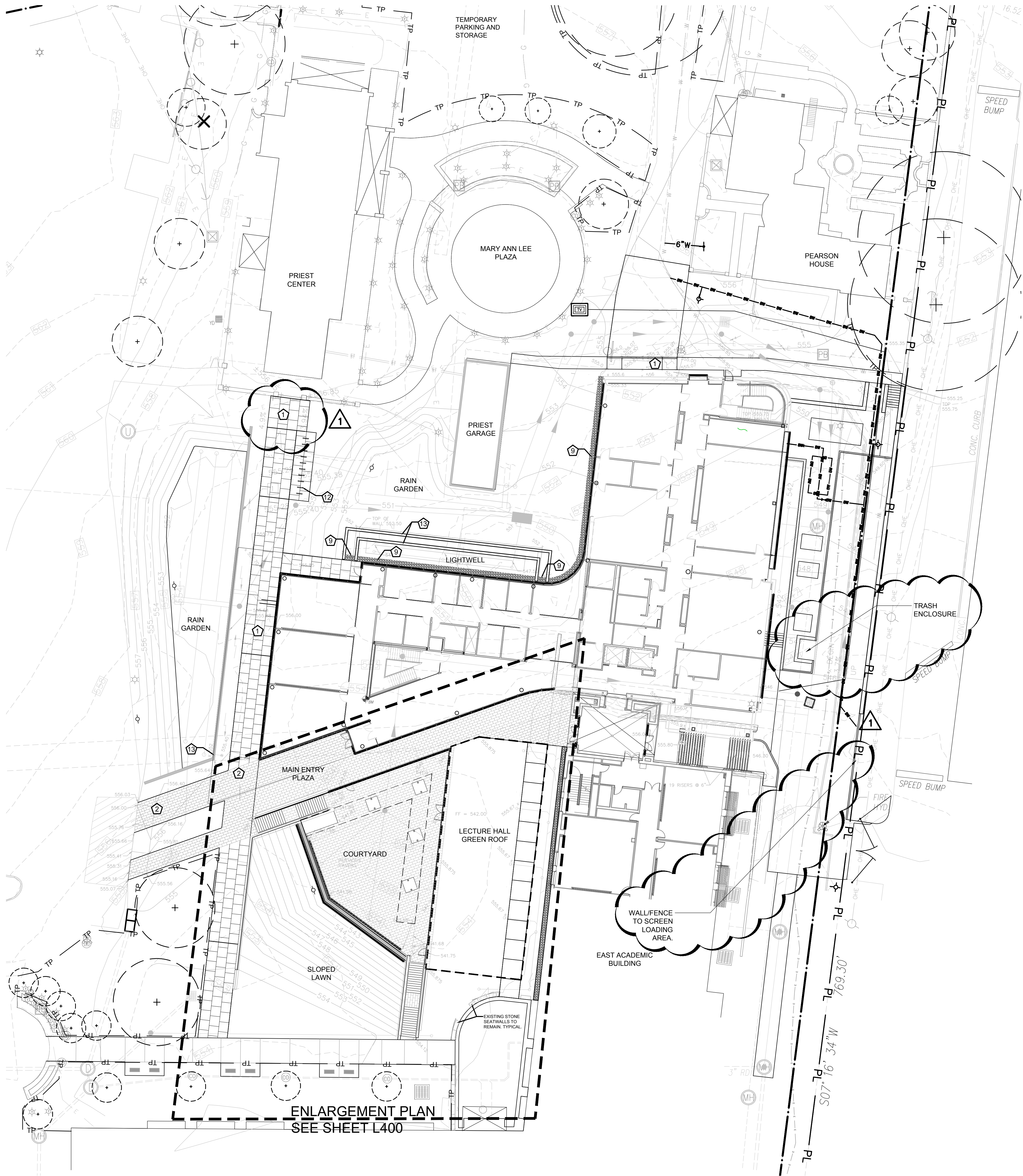
**FINAL STORMWATER
POLLUTION
PREVENTION PLAN**

Project No.: 04561.00 Checked by:

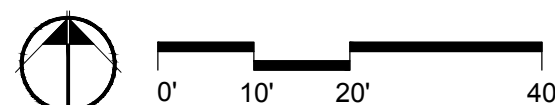
C805

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MSD P# 28874-01 MSD BASE MAP 23K2



A MATERIALS PLAN
SCALE: 1" = 20'



LEGEND

- EJ EXPANSION JOINTS
CJ CONTROL JOINT
- 1 STANDARD CONCRETE PAVING**
5" THICK CONCRETE PAVING, LIGHT BROOM FINISH.
EDGES TO BE 1/4" TOOLED RADIUS, SAW CUT JOINTS.
SEE CIVIL DRAWINGS FOR LAYOUT. CONTRACTOR
TO COORDINATE LOCATION OF ALL JOINTS WITH
LANDSCAPE ARCHITECT.
- 2 CONCRETE PAVERS**
WAUSAU TILE
12" X 24", COLOR TO BE: XP-40
SAND SETTING BED ON CONCRETE BASE
SEE DETAIL A/L501
- 3 CONCRETE PAVERS**
WAUSAU TILE
12" X 24", COLOR TO BE: XP-40
PEDESTAL SYSTEM
SEE DETAILS F,G/ L501
- 4 TREE PIT**
CLEAN 3" TRAP ROCK MULCH AT TREE PITS.
INCLUDES (2) LED UPLIGHTS PER TREE:
HYDREL MODEL, M9440-SS-12LED-WHT53K-MVOLT-VWFL-FLC20-34S-IHL-LP
SEE DETAILS C,D /L500
- 5 PERMEABLE CONCRETE PAVER**
HANOVER ARCHITECTURAL PRODUCTS
12" x 18", COLOR TO BE DETERMINED
SEE DETAIL SHEETS C, D/ L500 & CIVIL DRAWING DETAIL 5/C700
- 6 CONCRETE SEATWALL**
WITH IPE WOOD TOP.
SEE DETAIL D/L501
- 7 STAIRS**
SEE ARCHITECTURAL DRAWINGS
- 8 GREENROOF EDGE RESTRAINT**
HEIGHT OF EDGE VARIES. SEE ARCHITECTURAL
DRAWINGS
- 9 DECORATIVE GRAVEL MAINTENANCE STRIP**
BLACK MOUNTAIN TRAP ROCK
SEE DETAIL B/L500
- 10 EXISTING STONE BENCHES TO REMAIN**
PROTECT FROM DAMAGE
- 11 TRENCH DRAIN**
6" WIDE W/ PERFORATED STAINLESS STEEL
GRATE, MODEL #DS-226 BY NDS. INSTALL PER
MANUFACTURER RECOMMENDATIONS. SEE
CIVIL DRAWINGS FOR DETAILS
- 12 BIKE RACK**
LANDSCAPE FORMS
SEE DETAIL SHEET A/L500
- 13 CONCRETE RETAINING WALL**
CAST IN PLACE CONCRETE WALL WITH FORM
LINER FINISH. FORM LINER PATTERN TO BE
DETERMINED. REFERENCE ARCHITECTURAL
WALL DETAILS



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CONFORMED SET 01 JUL 2016

1 ADDENDUM 3-3 21 APR 2016
- ISSUED FOR CONSTRUCTION (BPS) 15 MAR 2016

No.	Description	Date
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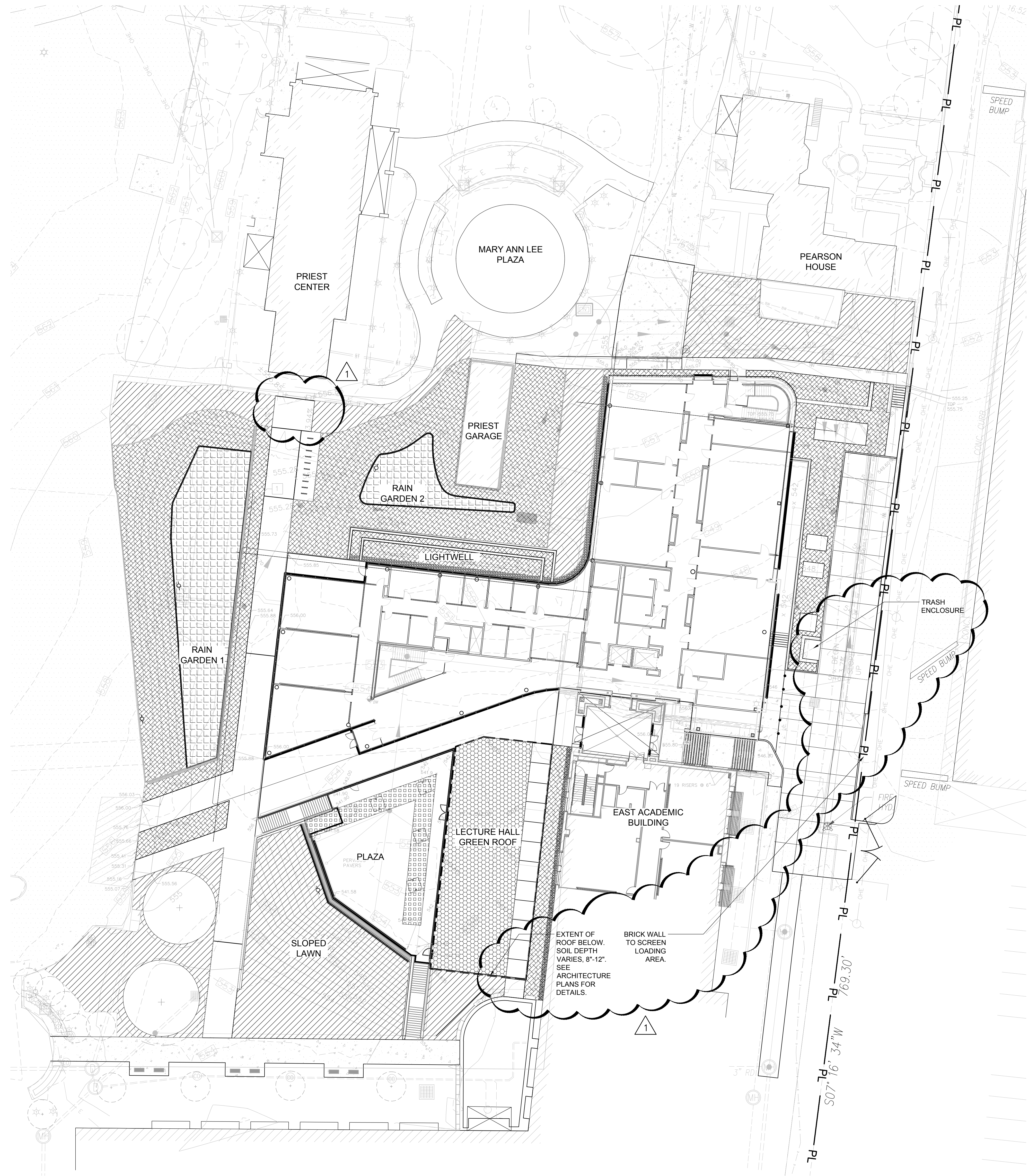
Drawing Title:

MATERIALS PLAN

SWT Project No.: 20018.01 Checked by:

L101

MSD P# 28874-01 MSD BASE MAP 23K2



SOILS LEGEND

- BIO-RETENTION SOIL MEDIA
PER CIVIL DRAWINGS
- PLANTING SOIL (18" DEPTH)
- GREEN ROOF SOIL (DEPTH VARIES, 8" - 12").
SEE SPECIFICATIONS.
- LAWN SOIL (4" DEPTH)
- CORNELL UNIVERSITY STRUCTURAL SOIL



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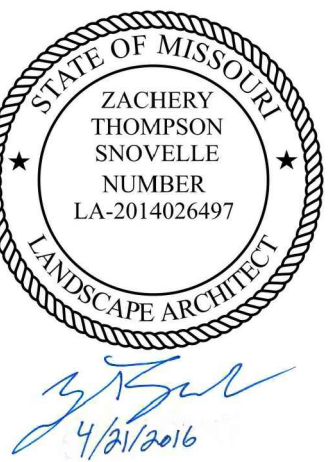
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1 ADDENDUM 3-3 21 APR 2016
- ISSUED FOR CONSTRUCTION (BPS) 15 MAR 2016

No.	Description	Date
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Drawing Title:

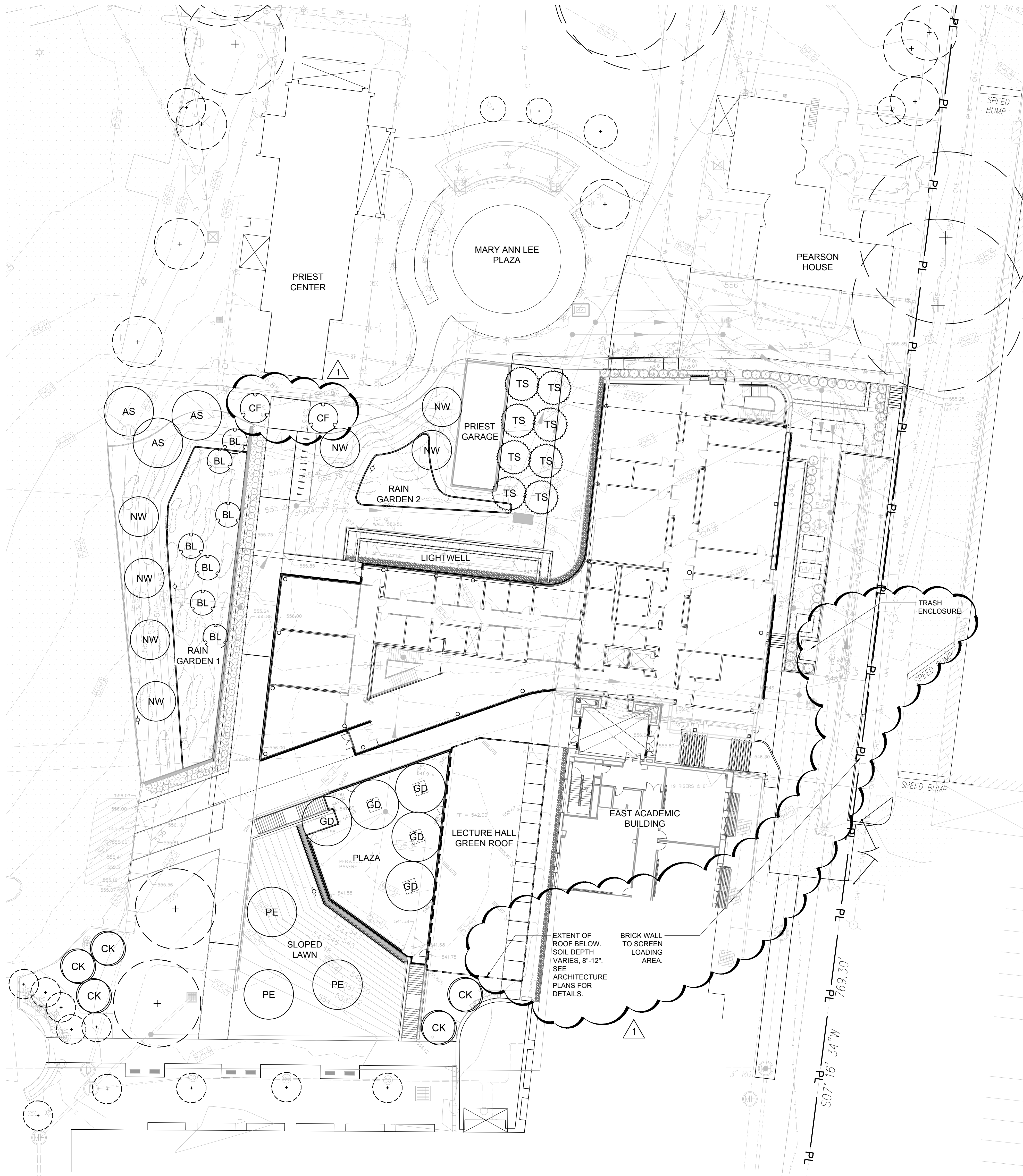
SOILS PLAN

SWT Project No.: 20018.01 Checked by:

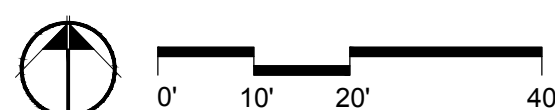
L130

MSD P# 28874-01 MSD BASE MAP 23K2

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A TREE PLANTING PLAN
SCALE: 1" = 20'



WEBSTER UNIVERSITY ISB SCHEDULE

TREES	QTY	BOTANICAL NAME	COMMON NAME	SPACING	SIZE	COMMENTS
AS	3	Acer miyabei 'State Street'	Miyabei Maple	As Shown	3"Cal	Per Details, B&B, 6' Clear Trunk Ht.
BL	7	Betula nigra 'Little King' TM	Fox Valley Birch	As Shown	1.5"Cal	Multi-stem; B&B; 3-5 Trunks
CF	2	Cornus florida	Eastern Dogwood	As Shown	2"Cal	Per Details, B&B
CK	5	Cladrastis kentukea	American Yellowwood	As Shown	3"Cal	Per Details, B&B
GD	5	Gymnocladus dioica 'Espresso'	Kentucky Coffeetree	As Shown	3"Cal	Per Details, B&B
NW	7	Nyssa sylvatica 'Wildfire'	Black Gum	As Shown	2.5"Cal	Per Details, B&B
PE	3	Platanus x acerifolia 'Exclamation' TM	Exclamation London Plane Tree	As Shown	3"Cal	Per Details, B&B
TS	8	Taxodium distichum 'Shawnee Brave' TM	Bald Cypress	As Shown	12' Ht.	Per Details, B&B

SEE SHEET L510 FOR FULL PROJECT PLANT SCHEDULE

LANDSCAPE REQUIREMENTS

TOTAL PROJECT AREA = 75,000 SF
PERCENTAGE OF AREA LANDSCAPED
PERCENTAGE OF AREA SODDED
CANOPY TREES PER 50 FEET OF FRONTAGE
ORNAMENTAL TREES PER 20 FEET OF LINEAR BUILDING WALL FRONTAGE
150 FEET OF BUILDING FRONTAGE = 8 REQUIRED ORNAMENTAL TREES
150 FEET OF BUILDING FRONTAGE = 150 REQUIRED SHRUBS

LANDSCAPE PROVIDED

21% (16,140 SF)
21% (15684 SF)
N/A
9 (2 CORNUS FLORIDA AND 7 BETULA NIGRA 'LITTLE KING')
182 (134 BUXUS X 'GREEN MOUND' AND 48 JUNIPERUS VIRGINIANA 'TAYLOR')



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No.	Description	Date
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Drawing Title:

**TREE
PLANTING PLAN**

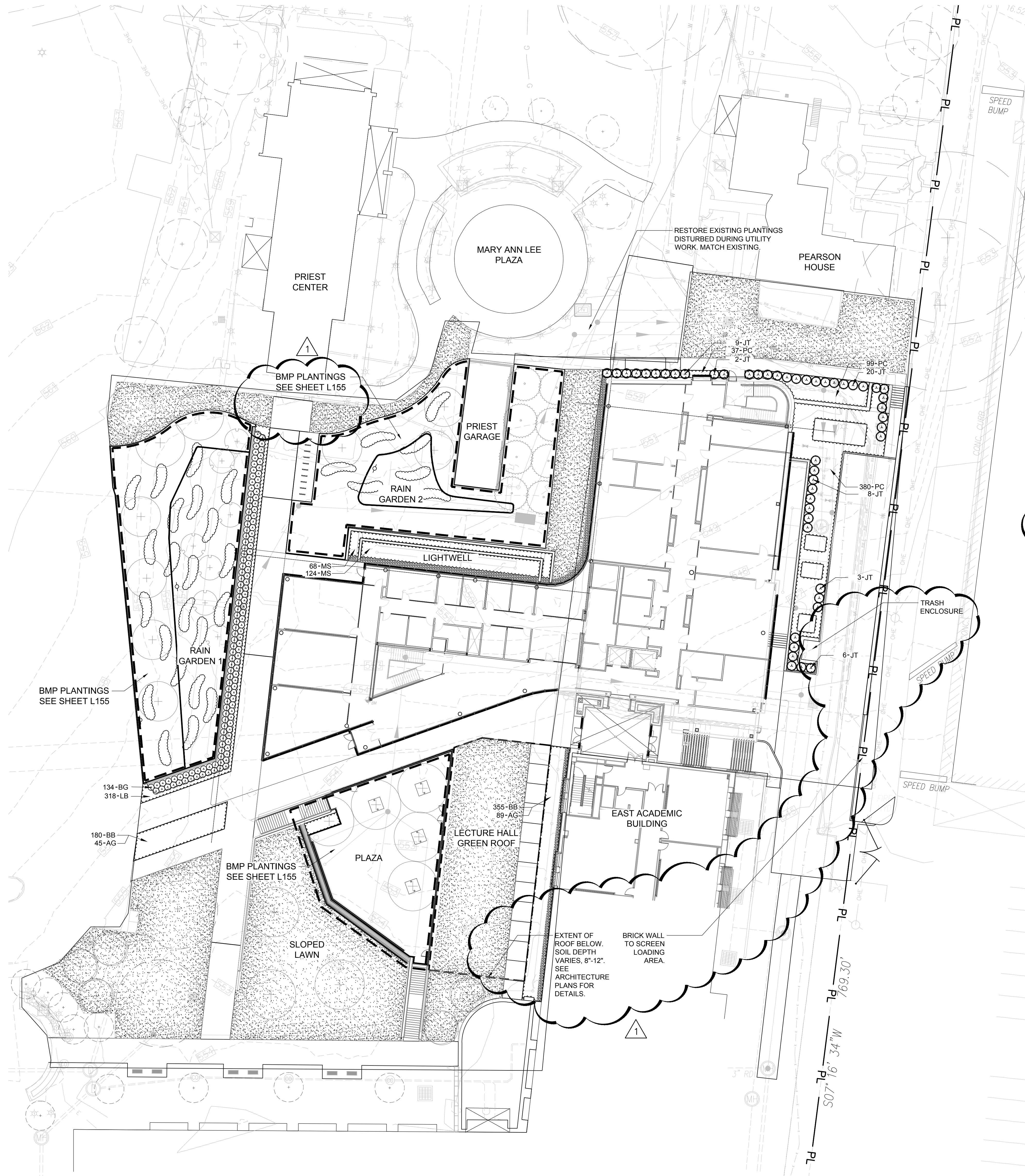
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L140

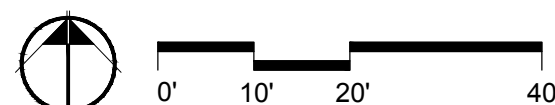
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A UNDERSTORY PLANTING PLAN
SCALE: 1" = 20'



WEBSTER UNIVERSITY ISB SCHEDULE					
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SPACING	SIZE
BG	134	Buxus x 'Green Mound'	Green Mound Boxwood	As Shown	#5
JT	48	Juniperus virginiana 'Taylor'	Taylor Eastern Redcedar	4' O.C.	6' Ht.
PERENNIALS / GRASSES	QTY	BOTANICAL NAME	COMMON NAME	SPACING	SIZE
AG	142	Allium 'Persian Blue'	Persian Blue Giant Allium	36" O.C.	Bulb
BB	568	Bouteloua gracilis 'Blonde Ambition'	Blue Grama	18" O.C.	#1
CA	3,845	Carex amphibola	Creek Sedge	15" O.C.	#1
CG	1,229	Carex grayi	Morning Star Sedge	15" O.C.	#1
CO	198	Conoclinium coelestinum	Wild Ageratum	15" O.C.	#1
CV	1,221	Carex vulpinoidea	Brown Fox Sedge	15" O.C.	#1
IV	264	Iris virginica	Blue Flag Iris	15" O.C.	#1
LB	318	Liriope muscari 'Big Blue'	Big Blue Lilyturf	12" O.C.	#1
LG	231	Lysimachia punctata	Garden Loosestife	15" O.C.	#1
MS	192	Matteuccia struthiopteris	Ostrich Fern	24" O.C.	#1
PC	516	Panicum virgatum 'Cape Breeze'	Switch Grass	24" O.C.	#1
ZA	264	Zizia aurea	Golden Alexander	15" O.C.	#1
GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	TYPE	-
	15,684 sf	Turf Sod	Drought Tolerant Fescue Blend	Sod	

SEE SHEET L510 FOR FULL PROJECT PLANT SCHEDULE

LANDSCAPE REQUIREMENTS

TOTAL PROJECT AREA = 75,000 SF
PERCENTAGE OF AREA LANDSCAPED
PERCENTAGE OF AREA SODDED
CANOPY TREES PER 50 FEET OF FRONTAGE
ORNAMENTAL TREES PER 20 FEET OF LINEAR BUILDING WALL FRONTAGE
150 FEET OF BUILDING FRONTAGE = 8 REQUIRED ORNAMENTAL TREES
150 FEET OF BUILDING FRONTAGE = 150 REQUIRED SHRUBS

LANDSCAPE PROVIDED

21% (16,140 SF)
21% (15684 SF)
N/A
9 (2 CORNUS FLORIDA AND 7 BETULA NIGRA 'LITTLE KING')
182 (134 BUXUS X 'GREEN MOUND' AND 48 JUNIPERUS VIRGINIANA 'TAYLOR')



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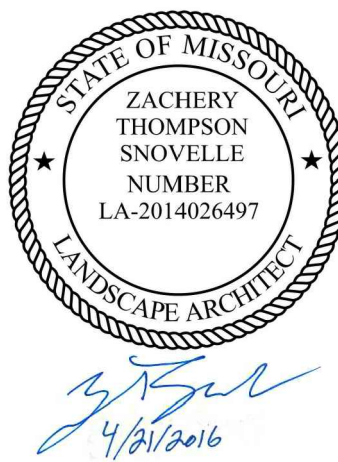
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01 JUL 2016

1	ADDENDUM 3-3	21 APR 2016
-	ISSUED FOR CONSTRUCTION (BPS)	15 MAR 2016
No.	Description	Date

Drawing Title:

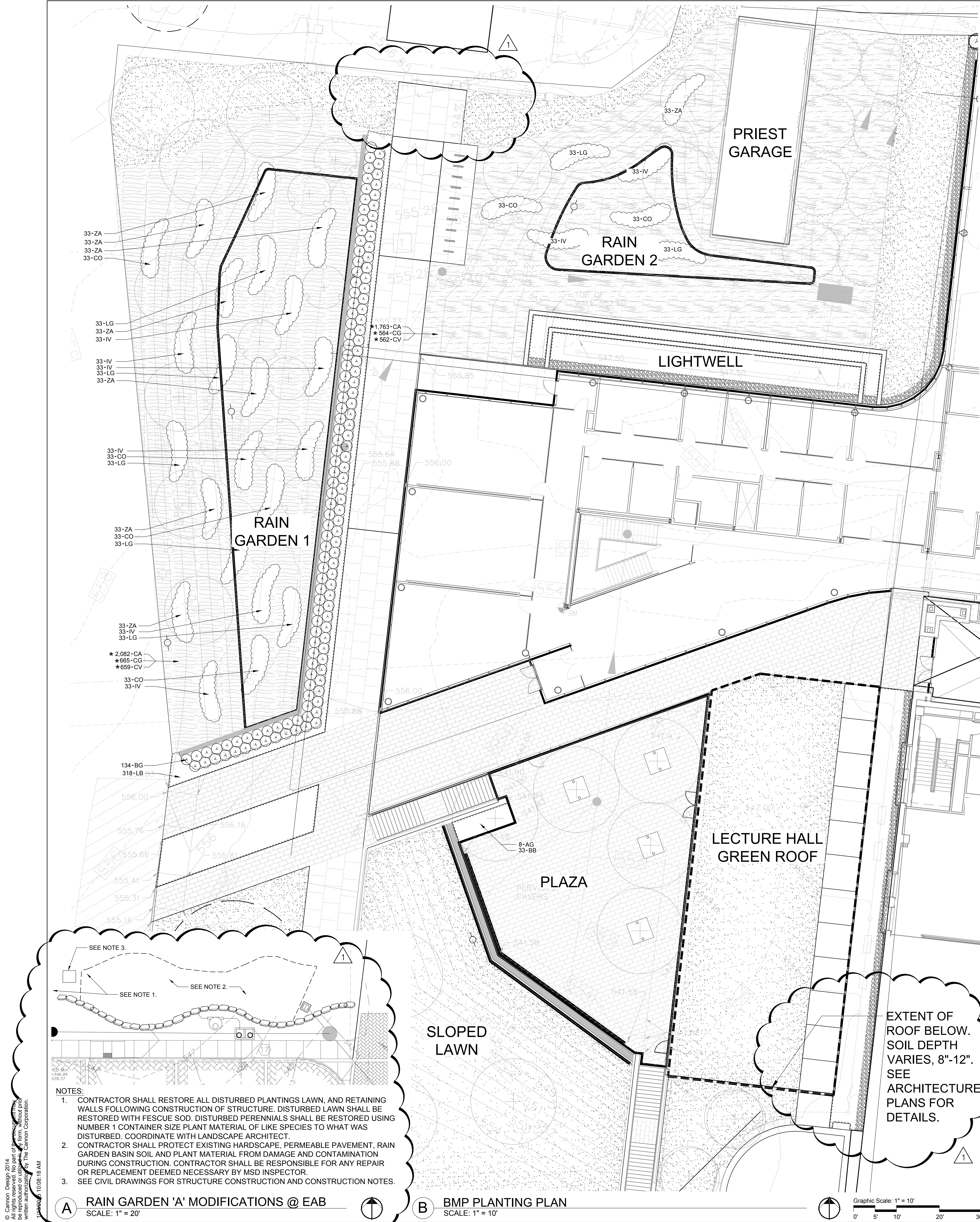
**UNDERSTORY
PLANTING PLAN**

SWT Project No.: 20018.01 Checked by:

L150

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PLANT SCHEDULE RAIN GARDEN 1						
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SPACING	SIZE	COMMENTS
BG	134	Buxus x 'Green Mound'	Green Mound Boxwood	As Shown	#5	Per Details, Cont.
PERENNIALS / GRASSES						
CA	2,082	Carex amphibola	Creek Sedge	15" O.C.	#1	Per Details, Cont.
CG	665	Carex grayi	Morning Star Sedge	15" O.C.	#1	Per Details, Cont.
CO	132	Conoclinium coelestinum	Wild Ageratum	15" O.C.	#1	Per Details, Cont.
CV	659	Carex vulpinoidea	Brown Fox Sedge	15" O.C.	#1	Per Details, Cont.
IV	198	Iris virginica	Blue Flag Iris	15" O.C.	#1	Per Details, Cont.
LB	318	Liriope muscari 'Big Blue'	Big Blue Lilyturf	12" O.C.	#1	Per Details, Cont.
LG	165	Lysimachia punctata	Garden Loosestrife	15" O.C.	#1	Per Details, Cont.
ZA	231	Zizia aurea	Golden Alexander	15" O.C.	#1	Per Details, Cont.
GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	TYPE	-	COMMENTS
	984 sf	Turf Sod	Drought Tolerant Fescue Blend	Sod		Per Specifications; 3 Improved Cultivars, Min.

* COORDINATE LAYOUT OF INDICATED PLANTS IN THE FIELD WITH LANDSCAPE ARCHITECT.

PLANT SCHEDULE RAIN GARDEN 2						
PERENNIALS / GRASSES	QTY	BOTANICAL NAME	COMMON NAME	SPACING	SIZE	COMMENTS
CA	1,763	Carex amphibola	Creek Sedge	15" O.C.	#1	Per Details, Cont.
CG	564	Carex grayi	Morning Star Sedge	15" O.C.	#1	Per Details, Cont.
CO	66	Conoclinium coelestinum	Wild Ageratum	15" O.C.	#1	Per Details, Cont.
CV	562	Carex vulpinoidea	Brown Fox Sedge	15" O.C.	#1	Per Details, Cont.
IV	66	Iris virginica	Blue Flag Iris	15" O.C.	#1	Per Details, Cont.
LG	66	Lysimachia punctata	Garden Loosestrife	15" O.C.	#1	Per Details, Cont.
MS	192	Matteuccia struthiopteris	Ostrich Fern	24" O.C.	#1	Per Details, Cont.
ZA	33	Zizia aurea	Golden Alexander	15" O.C.	#1	Per Details, Cont.
GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	TYPE	-	COMMENTS
	1,827 sf	Turf Sod	Drought Tolerant Fescue Blend	Sod		Per Specifications; 3 Improved Cultivars, Min.

* COORDINATE LAYOUT OF INDICATED PLANTS IN THE FIELD WITH LANDSCAPE ARCHITECT.

PLANT SCHEDULE PLAZA						
PERENNIALS / GRASSES	QTY	BOTANICAL NAME	COMMON NAME	SPACING	SIZE	COMMENTS
AG	8	Allium 'Persian Blue'	Persian Blue Giant Allium	36" O.C.	Bulb	Per Details, Bulb
BB	33	Bouteloua gracilis 'Blonde Ambition'	Blue Grama	18" O.C.	#1	Per Details, Cont.

PLANT SCHEDULE GREEN ROOF					
GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	TYPE	COMMENTS
	2,795 sf	Turf Sod	Drought Tolerant Fescue Blend	Sod	Per Specifications; 3 Improved Cultivars, Min.

SEE SHEET L510 FOR FULL PROJECT PLANT SCHEDULE

Table 3: Planting, Water and Mulch Requirements

Water Availability	Required Planting Period	Minimum Container Size	Water Requirement First 3 Weeks*	Water Requirement After 3 Weeks*	Maximum Mulch Depth****
No ability to water after initial planting	Late Feb. - April only	2.25" x 3.75" or larger (plug)	Water each plug immediately after planting**	1" (60 min) every 7 days until plants established***	1.5" for plugs
Manual watering with standard sprinkler	Late Feb. - Early June Sept. - October	4.5" x 5" (quart) or larger in summer & fall	1" (60 min) every 4 days	1" (60 min) every 7 days until plants established***	1.5" for plugs 2.5" for quarts
Automatic irrigation (set to water more frequently than normal during first two months after planting)	Late Feb. - Early Oct.	2.25" x 3.75" (plug) or larger in spring 4.5" x 5" (quart) or larger in summer & fall	1" (60 min) every 4 days in spring and fall 1" (60 min) every 3 days in summer	1" (60 min) every 7 days until plants established***	1.5" for plugs 2.5" for quarts

*This water amount includes natural rainfall. If you get a 1/8 inch of natural rain then you will need to add a 1/8 inch of water to meet the 1 inch requirement.

**Requires transport of water to the planting site in large containers and pouring enough water onto each plant (after planting) to moisten the entire planting pit.

***Plants are established when roots have grown out of the container soil and into the native soil by 3-5 inches. This normally takes 3-4 months for most perennials and grasses and up to 6-7 months for trees and shrubs.

****Shredded leaf compost is recommended for use with perennials and grasses. Shredded bark mulch is recommended for tree and shrub plantings at a depth of 3 inches.

C MSD PLANTING AND WATERING REQUIREMENTS

SCALE: 1" = 20'



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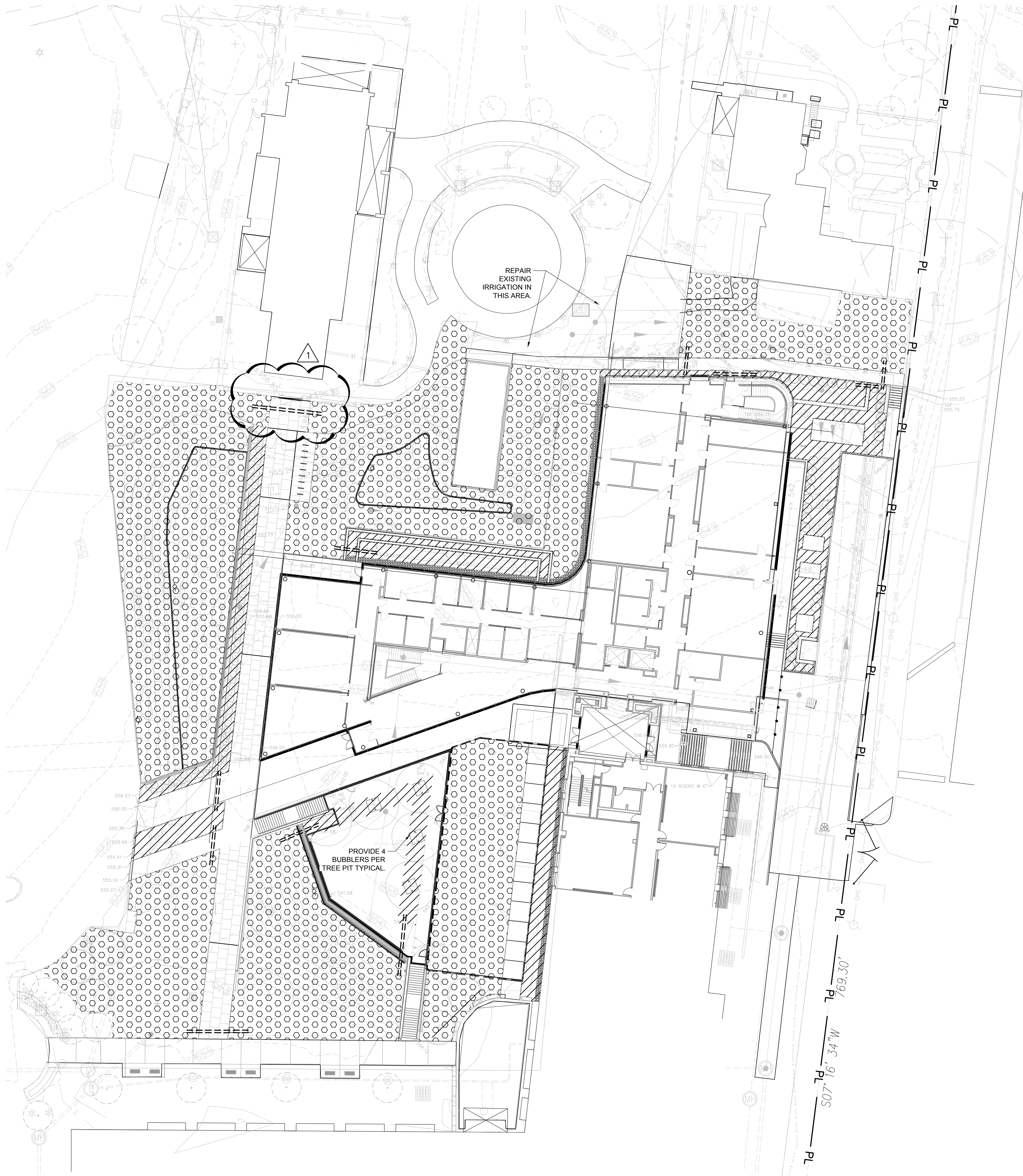
1 ADDENDUM 3-3 21 APR 2016
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No.	Description	Date
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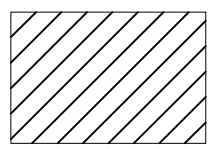
BMP
PLANTING PLAN

SWT Project No.: 20018.01 Checked by:

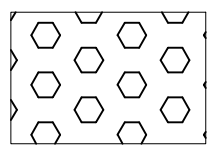
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LEGEND

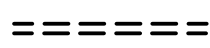


POP UP SHRUB BUBBLERS



SPRAY IRRIGATION

- TURF AREAS, POPUP ROTORS.
- BMP AREAS SHALL BE IRRIGATED BY HIGH POPUP SPRAYS/ROTORS LOCATED ALONG THE PERIMETER OF THE PLANTING AREAS.



IRRIGATION SLEEVE

NOTES:

1. COORDINATE CONTROLLER LOCATION WITH OWNER.
2. COORDINATE BACKFLOW LOCATION WITH CIVIL/MEP DRAWINGS.
3. SEE SPECIFICATIONS.



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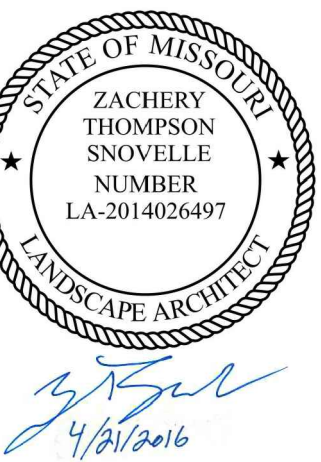
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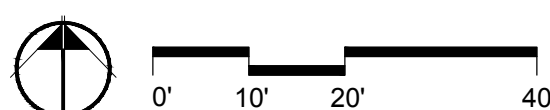
IRRIGATION
PLAN

SWT Project No.: 20018.01 Checked by:

L170

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A IRRIGATION PLAN
SCALE: 1" = 20'





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Drawing Title:

ENLARGEMENT PLAN

SWT Project No.: 20018.01 Checked by:

L400

LEGEND

EJ EXPANSION JOINTS
CJ CONTROL JOINT

1 STANDARD CONCRETE PAVING
5" THICK CONCRETE PAVING, LIGHT BROOM FINISH.
EDGES TO BE 1/4" TOOLED RADIUS, SAW CUT JOINTS.
SEE CIVIL DRAWINGS FOR LAYOUT. CONTRACTOR
TO COORDINATE LOCATION OF ALL JOINTS WITH
LANDSCAPE ARCHITECT.

2 CONCRETE PAVERS
WAUSAU TILE
12" X 24", COLOR TO BE: XP-40
SAND SETTING BED ON CONCRETE BASE
SEE DETAIL A/L501

3 CONCRETE PAVERS
WAUSAU TILE
12" X 24", COLOR TO BE: XP-40
PEDESTAL SYSTEM
SEE DETAILS F,G/ L501

4 TREE PIT
CLEAN 3/4" TRAP ROCK MULCH AT TREE PITS.
INCLUDES (2) LED UPLIGHTS PER TREE:
HYDREL MODEL, M9440-SS-12LED-WHT53K-MVOL-1VWFL-FLC20-34S-IHL-LP
SEE DETAILS C,D /L500

5 PERMEABLE CONCRETE PAVER
HANOVER ARCHITECTURAL PRODUCTS
12" x 18", COLOR TO BE DETERMINED
SEE DETAIL SHEETS C, D/ L500 & CIVIL DRAWING DETAIL 5/C700

6 CONCRETE SEATWALL
WITH IPE WOOD TOP.
SEE DETAIL D/L501

7 STAIRS
SEE ARCHITECTURAL DRAWINGS

8 GREENROOF EDGE RESTRAINT
HEIGHT OF EDGE VARIES. SEE ARCHITECTURAL
DRAWINGS

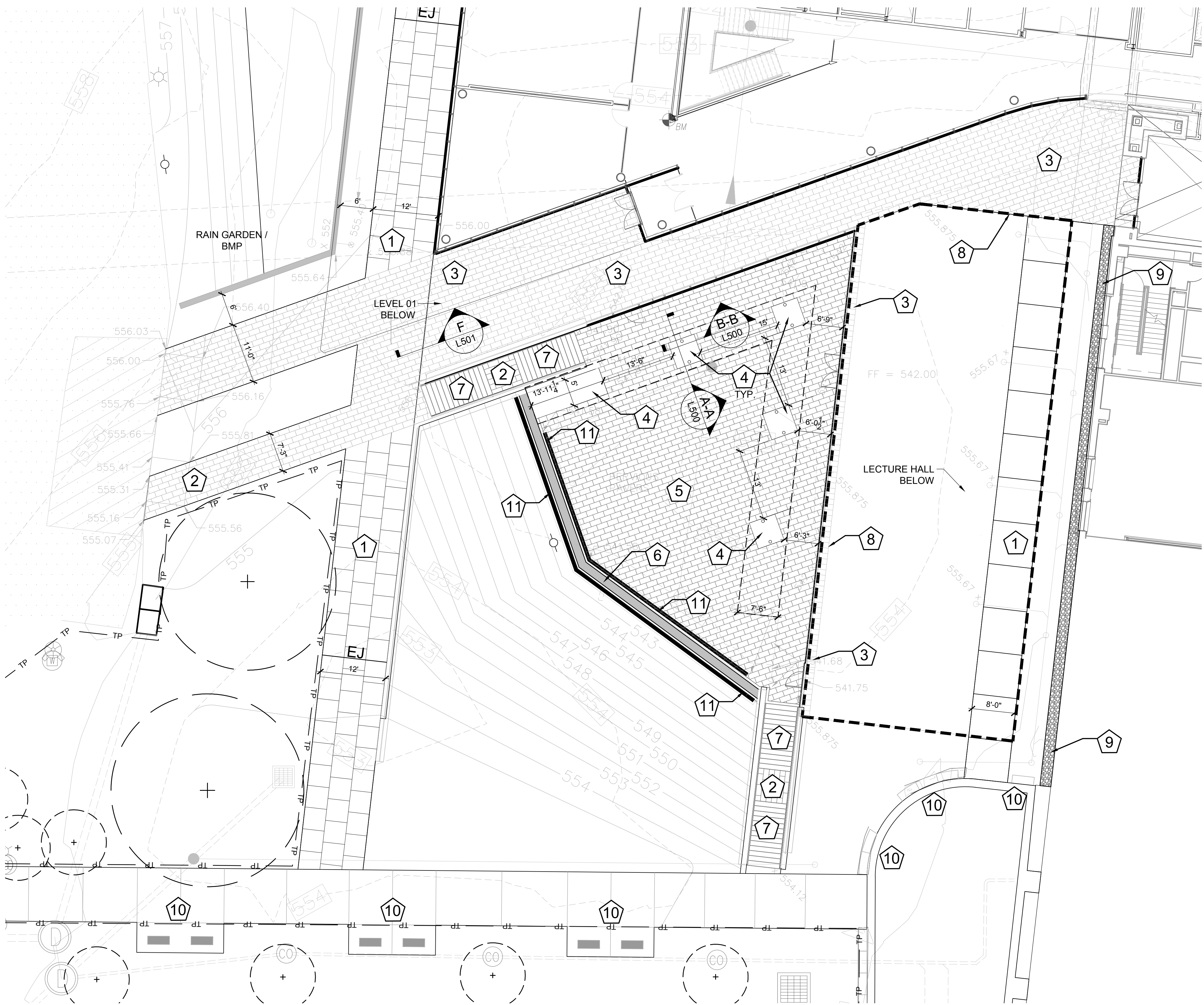
9 DECORATIVE GRAVEL MAINTENANCE STRIP
BLACK MOUNTAIN TRAP ROCK
SEE DETAIL B/L500

10 EXISTING STONE BENCHES TO REMAIN
PROTECT FROM DAMAGE

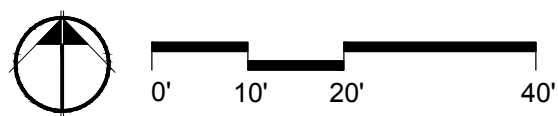
11 TRENCH DRAIN
6" WIDE W/ PERFORATED STAINLESS STEEL
GRATE, MODEL #DS-226 BY NDS. INSTALL PER
MANUFACTURER RECOMMENDATIONS. SEE
CIVIL DRAWINGS FOR DETAILS

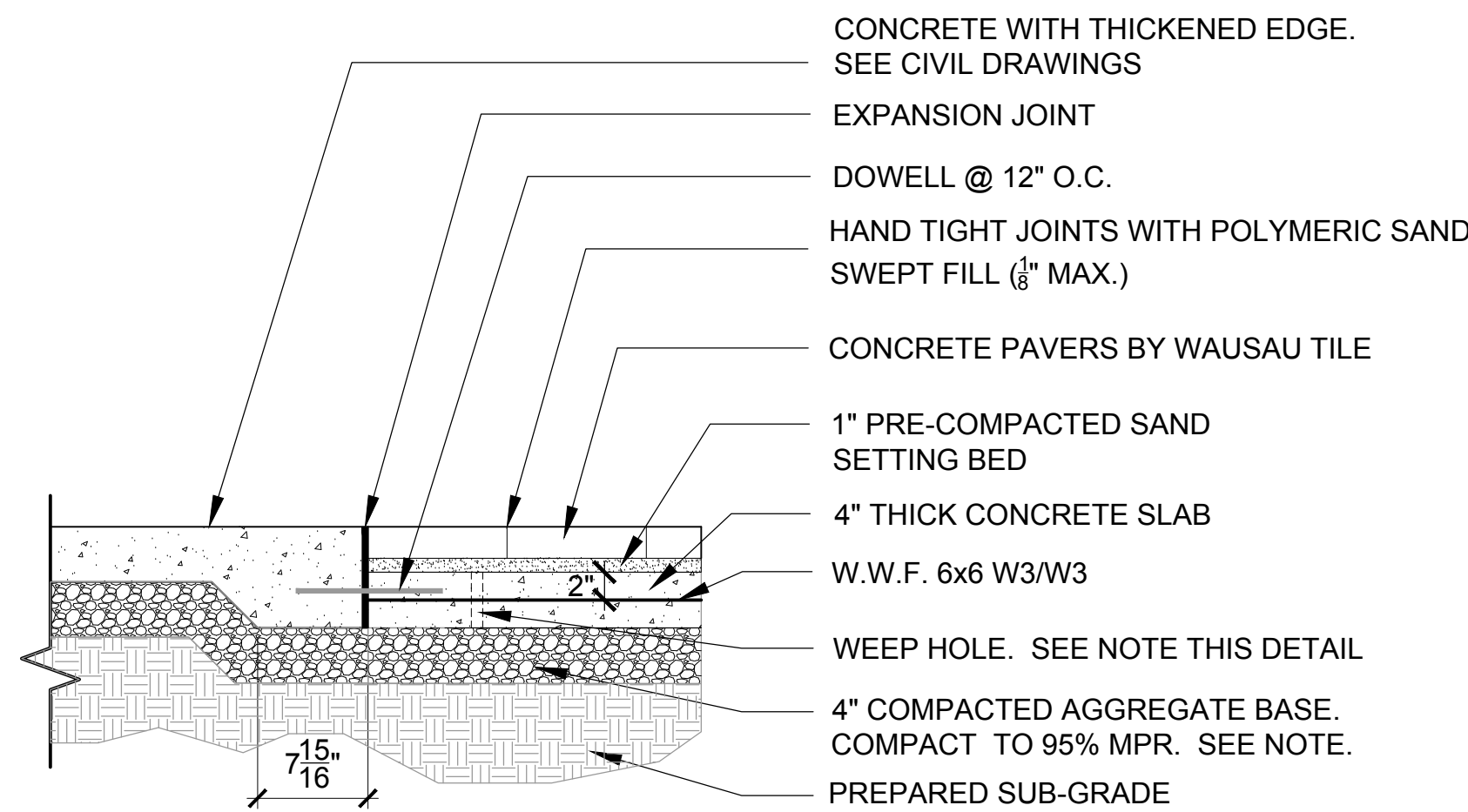
12 BIKE RACK
LANDSCAPE FORMS
SEE DETAIL SHEET A/L500

13 CONCRETE RETAINING WALL
CAST IN PLACE CONCRETE WALL WITH FORM
LINER FINISH. FORM LINER PATTERN TO BE
DETERMINED. REFERENCE ARCHITECTURAL
WALL DETAILS



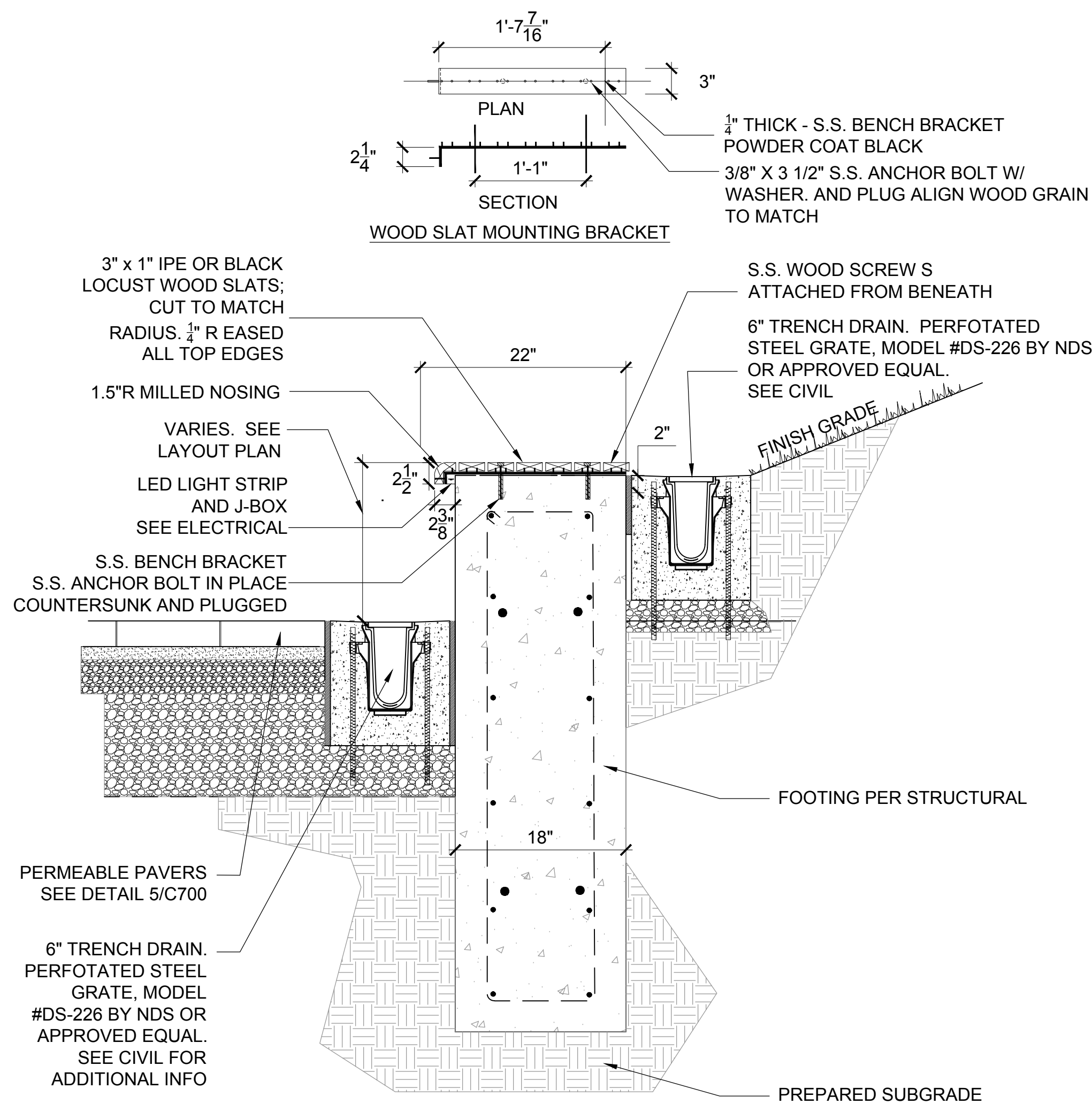
A ENLARGED COURTYARD PLAN
SCALE: 1" = 10'





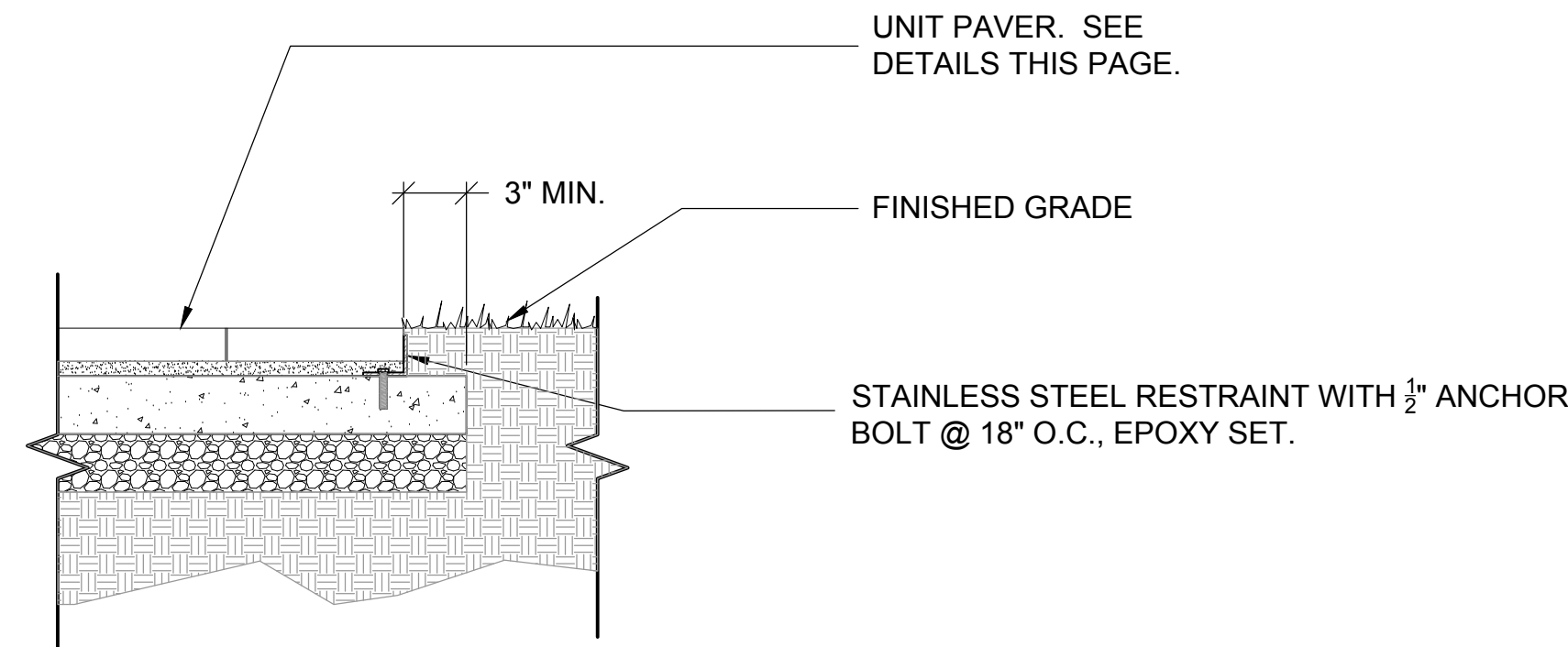
- NOTES:
1. SLOPE TOP OF CONCRETE BASE IN ACCORDANCE WITH GRADING PLAN
 2. PROVIDE $\frac{3}{4}$ " WEEPS AT LOW POINTS 24" O.C. AND/OR 5' O.C. EACH WAY, COVER WEEPS WITH FILTER FABRIC. CONTRACTOR TO PROVIDE LAYOUT FOR APPROVAL
 3. SEE LAYOUT PLAN WHERE CONCRETE IS ADJACENT TO PAVERS.
 4. MPR = MATERIALS MODIFIED PROCTOR - ASTM D 1557 - MAXIMUM DRY DENSITY (TYP.)

A PAVERS ON CONCRETE BASE
NTS

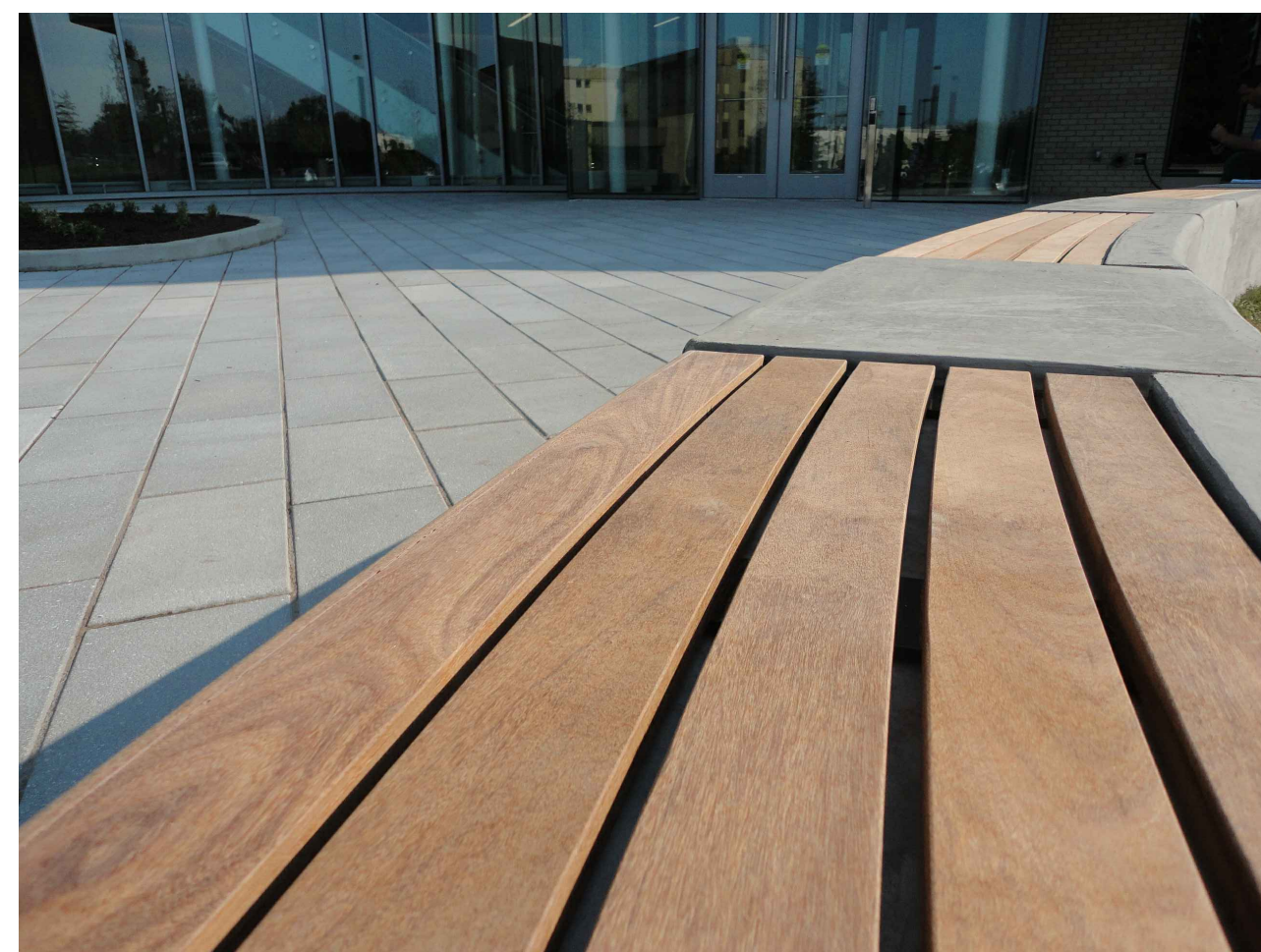


- NOTES:
1. PROVIDE SHOP DRAWINGS.
 2. PREPARED SUBGRADE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEERING REPORT.
 3. MPR = MATERIALS MODIFIED PROCTOR - ASTM D 1557 - MAXIMUM DRY DENSITY (TYP.)
 4. ALL GLUE UPS FOR OUT DOOR INSTALLATIONS SHALL BE WATERPROOF GLUES.
 5. ALL WOOD TO BE FURNISHED 4 SIDES.

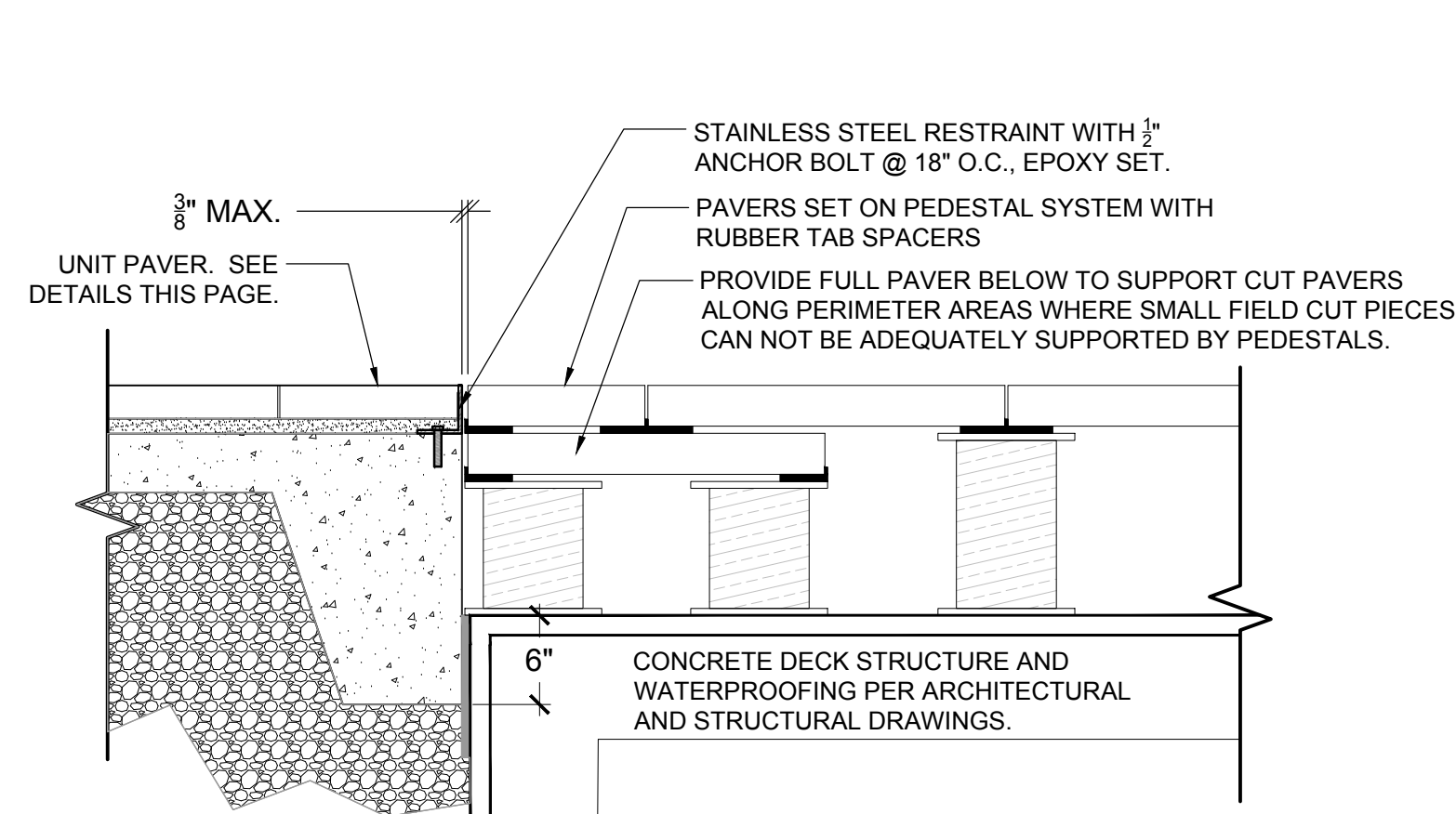
D SEATWALL WITH WOOD TOP
NTS



B PAVERS EDGE RESTRAINT
NTS



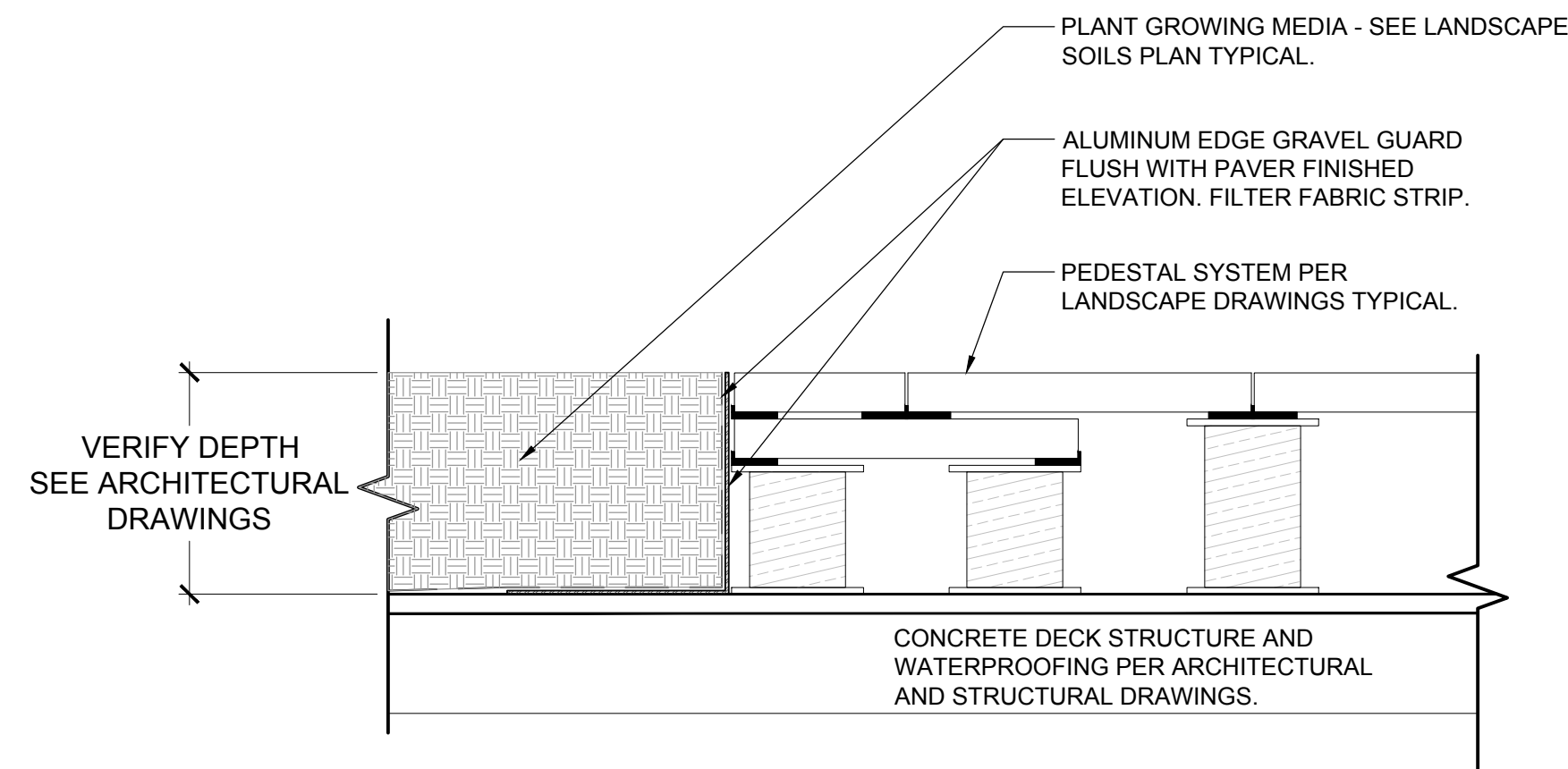
E SEATWALL CHARACTER IMAGES (FOR REFERENCE ONLY)
NTS



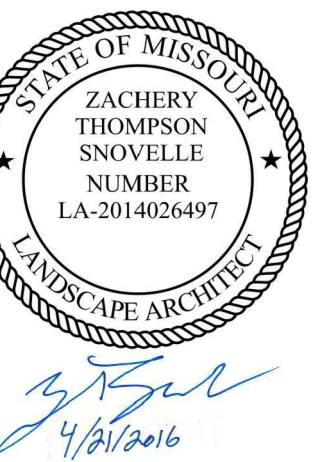
F PAVER JOINT AT BUILDING EDGE BELOW GRADE
NTS



C PAVERS CHARACTER IMAGE (FOR REFERENCE ONLY)
NTS



G PAVER JOINT AT BUILDING EDGE BELOW GRADE
NTS



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1	ADDENDUM 3-3	21 APR 2016
-	ISSUED FOR CONSTRUCTION (BP3)	15 MAR 2016
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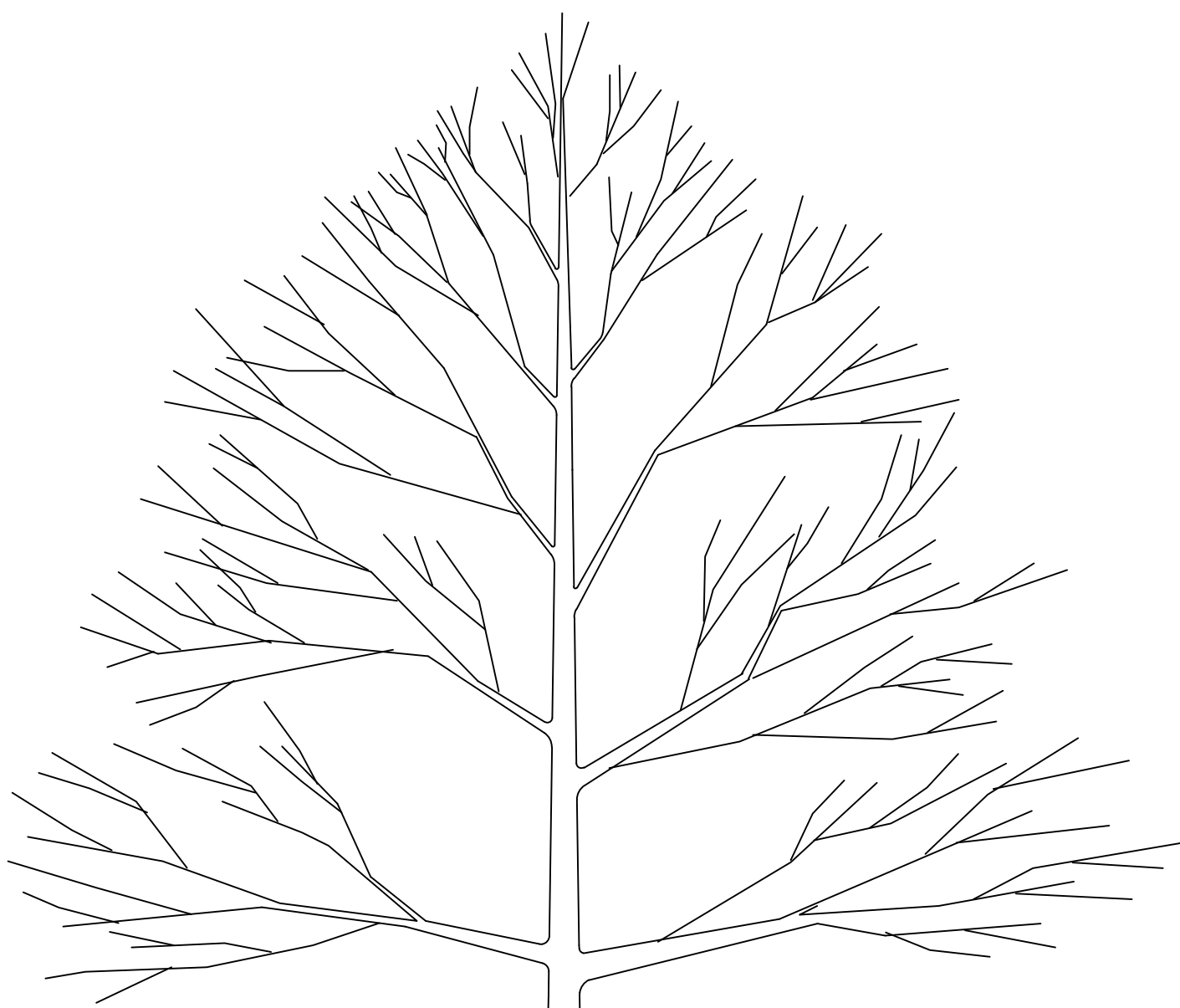
Drawing Title:

SITE DETAILS

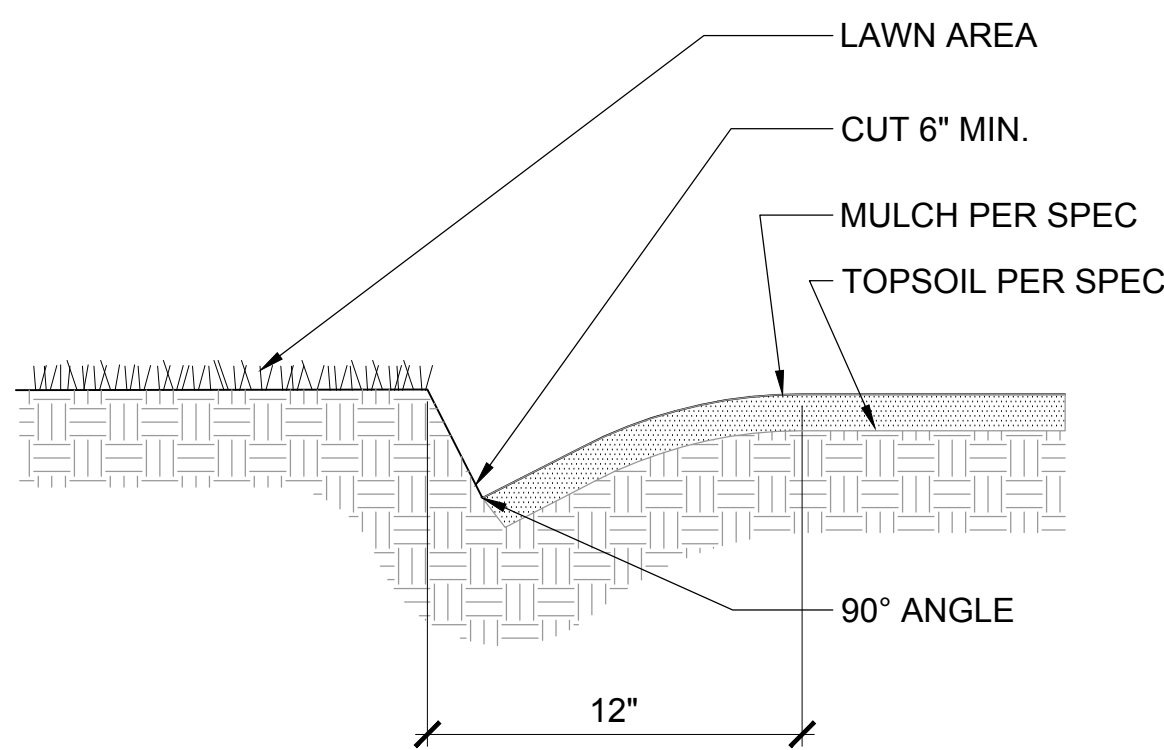
SWT Project No.: 20018.01 Checked by:

L501

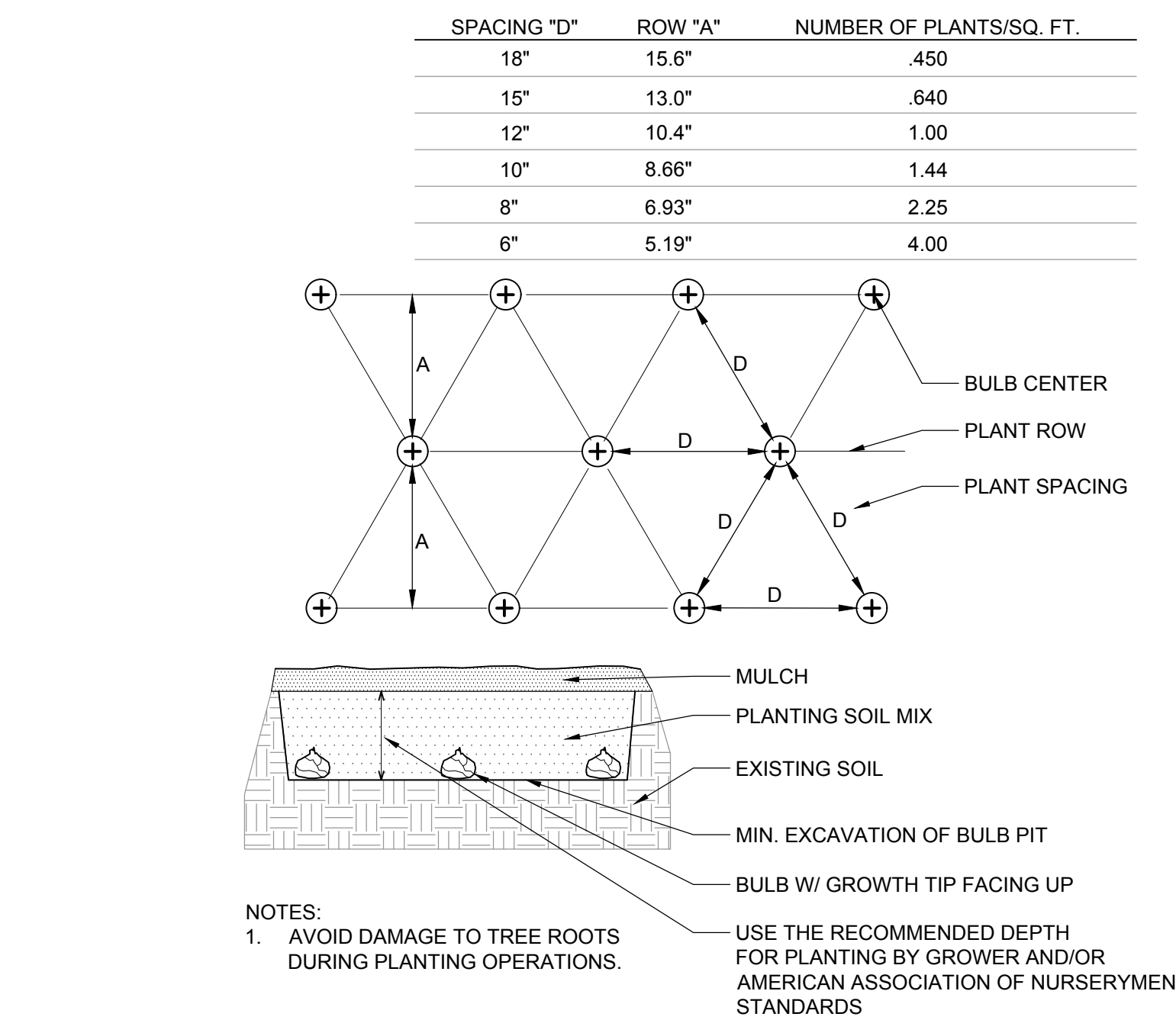
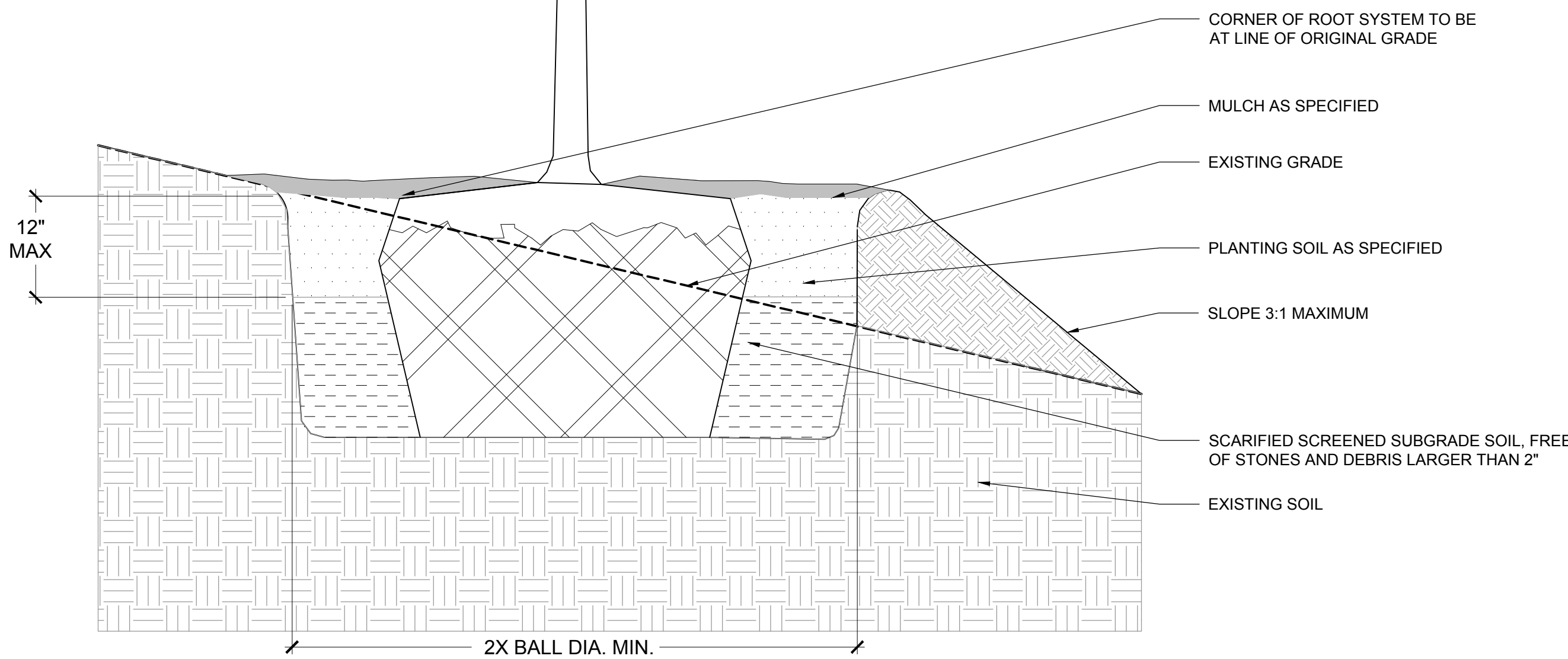
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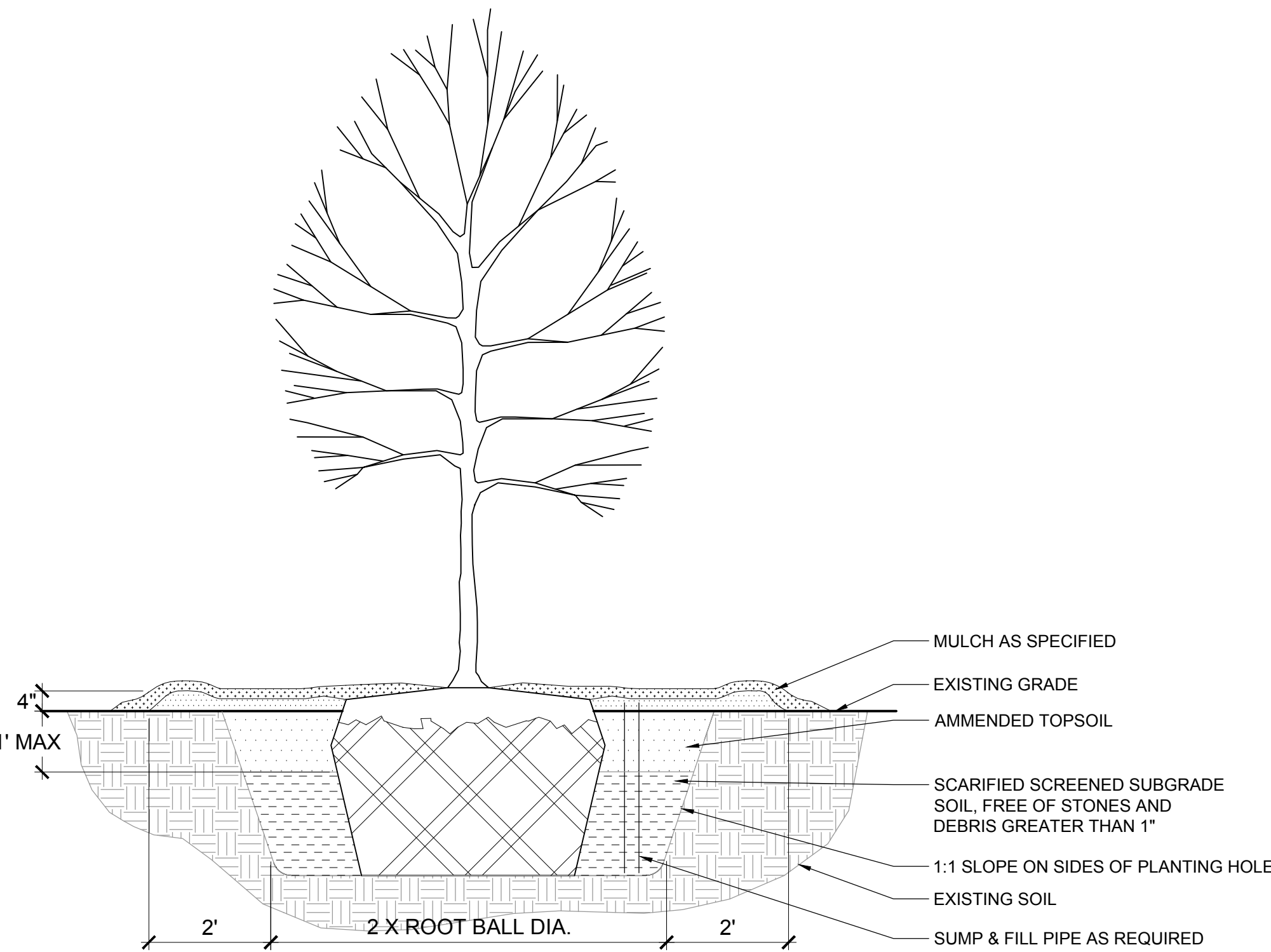
A TREE PLANTING ON SLOPE DETAIL
N.T.S.



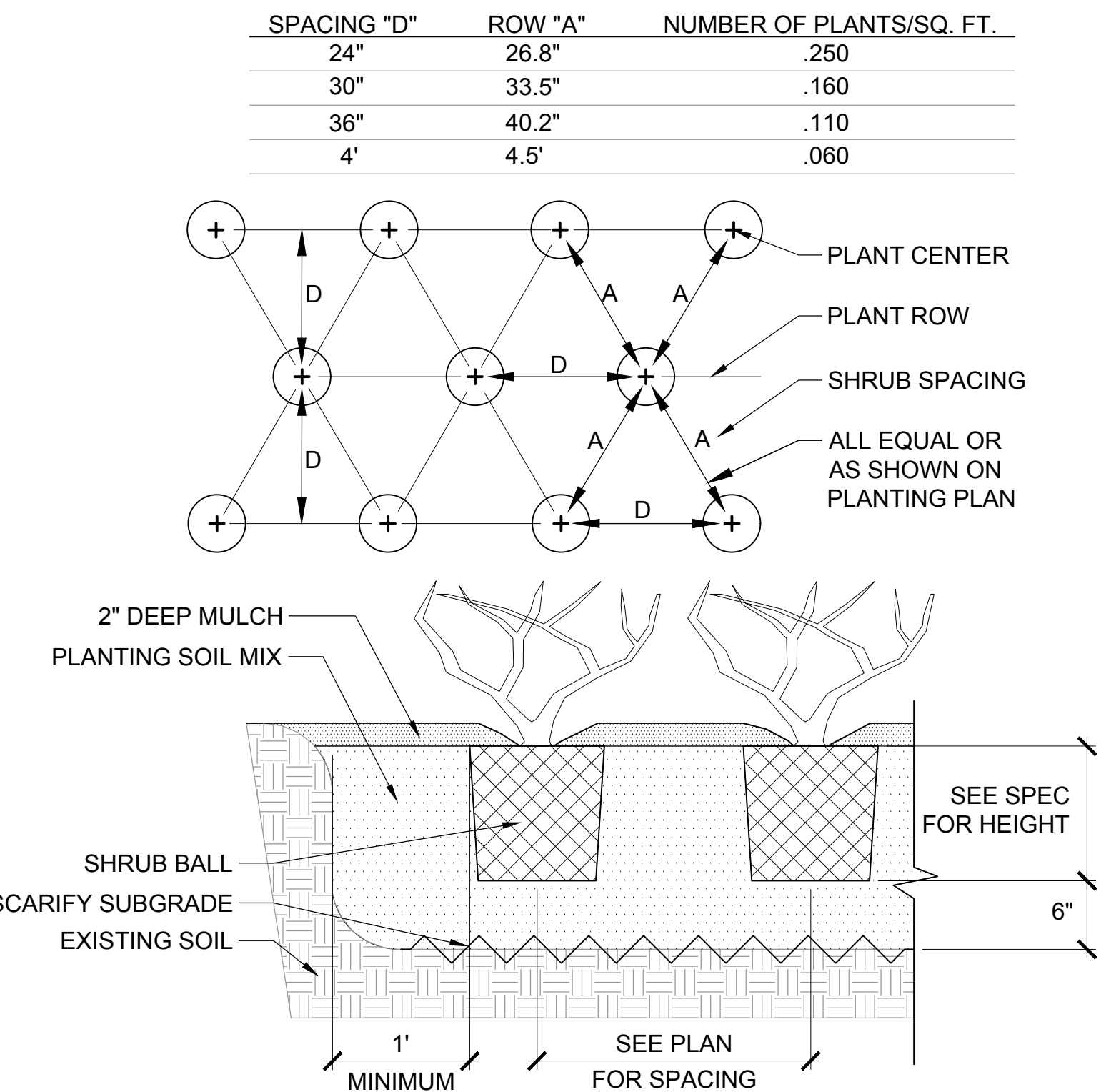
B SPADE CUT EDGE DETAIL
N.T.S.



D GRADING - BERM
N.T.S.

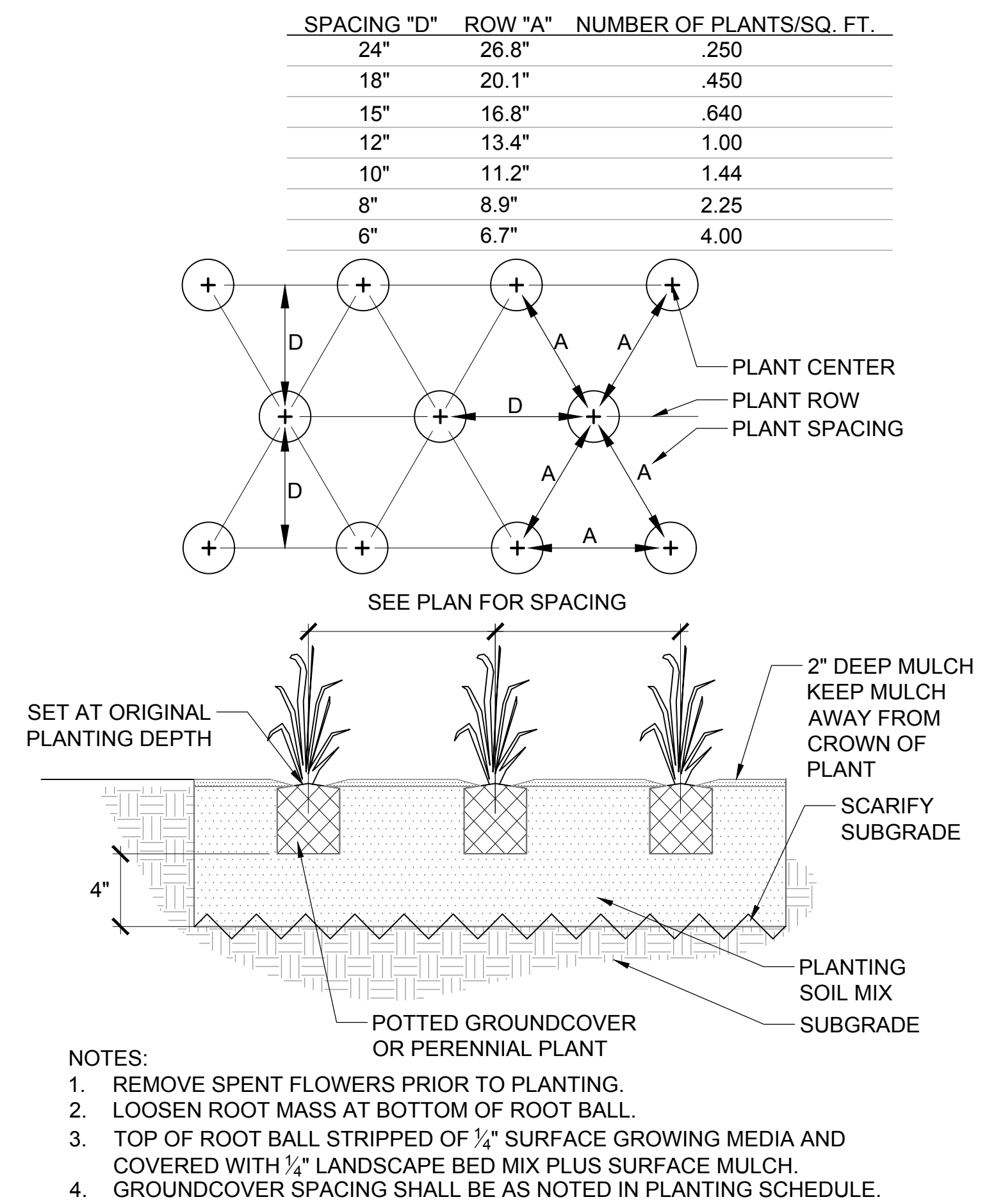


E SHRUB PLANTING
N.T.S.



- NOTES:
1. SHRUB SPACING SHALL BE AS NOTED IN PLANTING SCHEDULE.
 2. IF SHRUBS ARE B&B, ROPES AT TOP OF BALL SHALL BE CUT. REMOVE TOP 1/3 OF BURLAP. NON-BIODEGRADABLE MATERIAL SHALL BE COMPLETELY REMOVED.

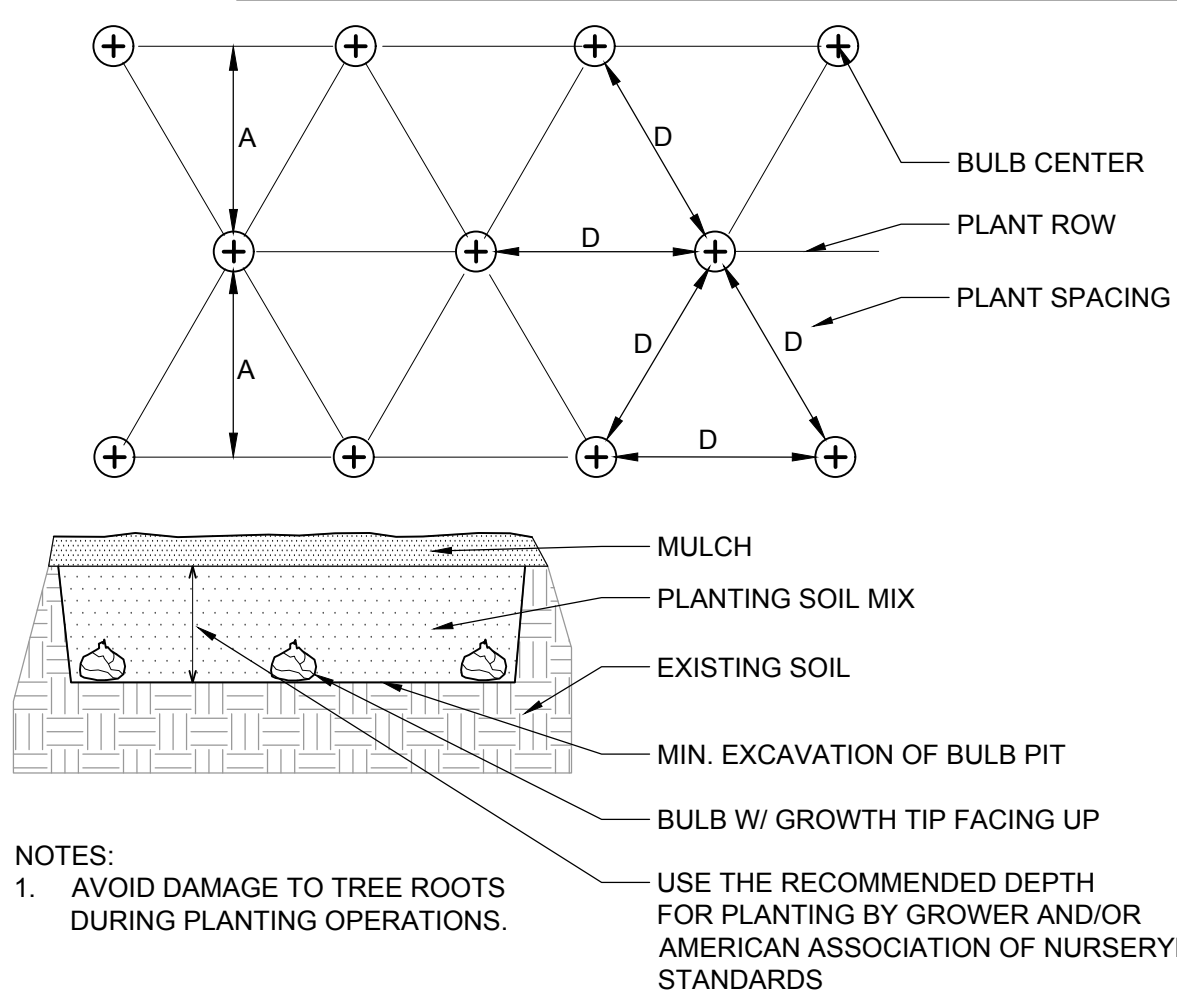
F TREE PLANTING DETAIL
N.T.S.



G GROUNDCOVER/PERENNIAL PLANTING
N.T.S.

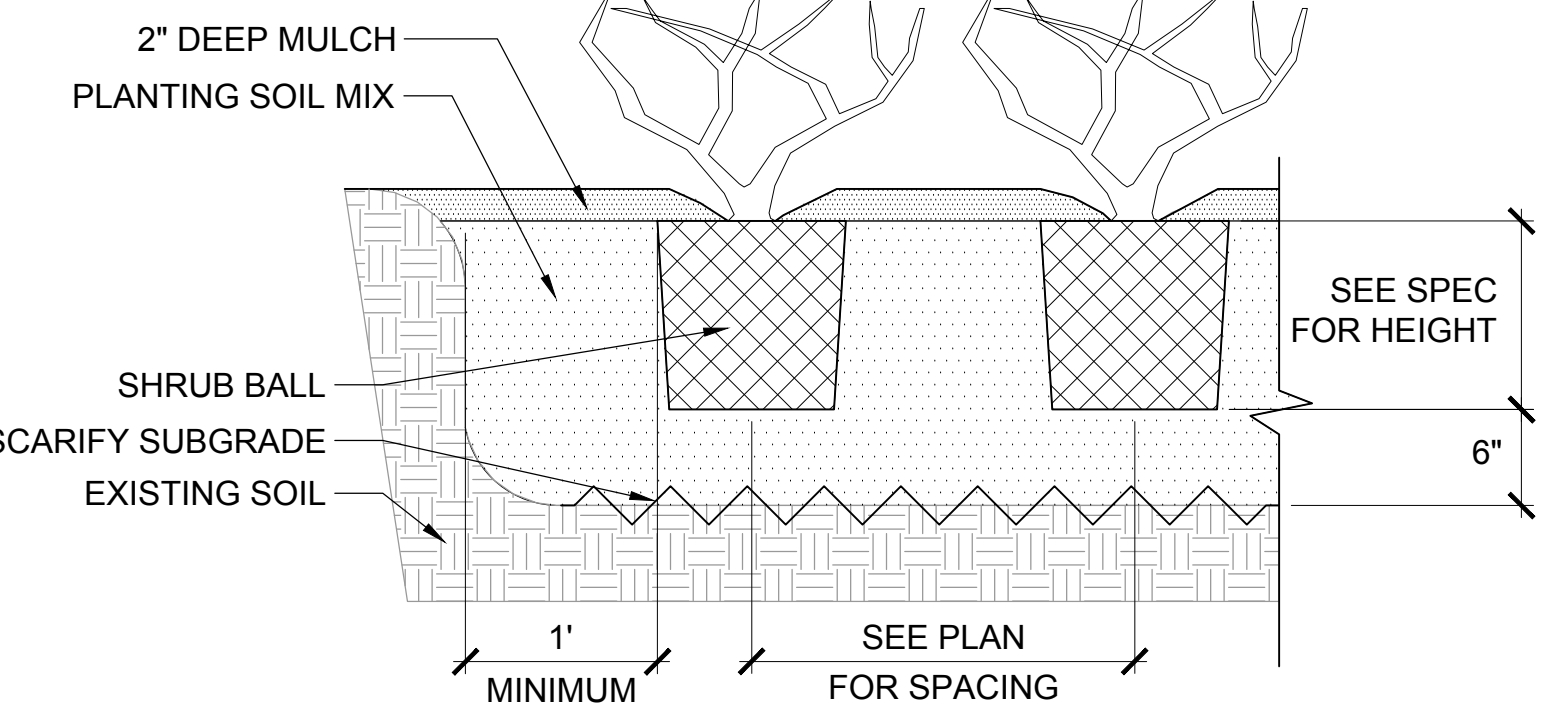
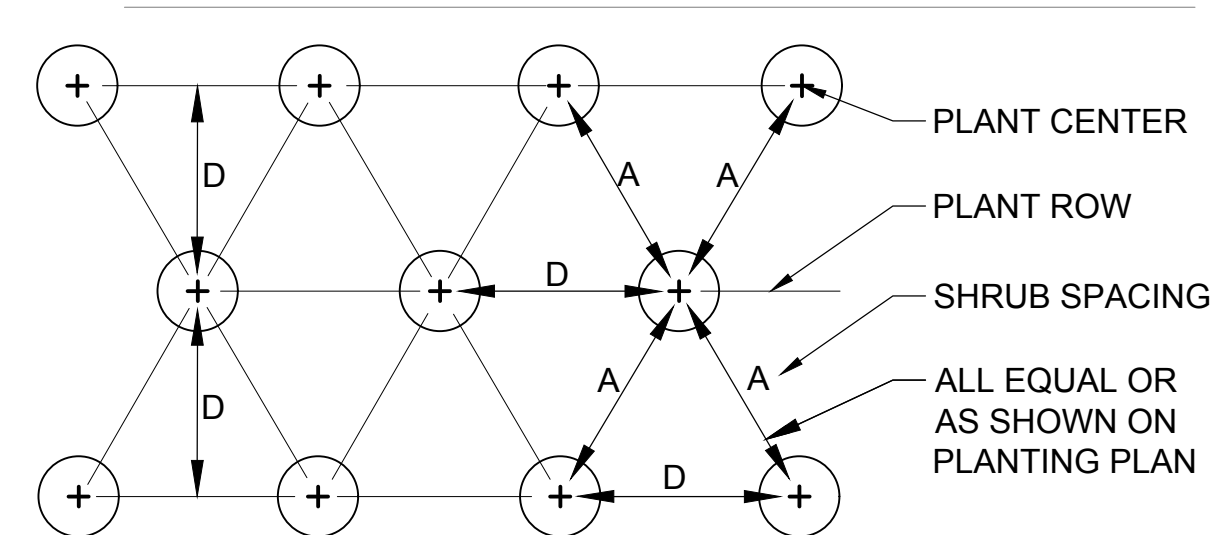
WEBSTER UNIVERSITY ISB SCHEDULE						
TREES	QTY	BOTANICAL NAME	COMMON NAME	SPACING	SIZE	COMMENTS
AS	3	Acer miyabei 'State Street'	Miyabei Maple	As Shown	3"Cal	Per Details, B&B, 6" Clear Trunk Ht.
BL	7	Betula nigra 'Little King' TM	Fox Valley Birch	As Shown	1.5"Cal	Multi-stem; B&B; 3-5 Trunks
CF	2	Cornus florida	Eastern Dogwood	As Shown	2"Cal	Per Details, B&B
CK	5	Cladrastis kentukea	American Yellowwood	As Shown	3"Cal	Per Details, B&B
GD	5	Gymnocladus dioica 'Espresso'	Kentucky Coffeetree	As Shown	3"Cal	Per Details, B&B
NW	7	Nyssa sylvatica 'Wildfire'	Black Gum	As Shown	2.5"Cal	Per Details, B&B
PE	3	Platanus x acerifolia 'Exclamation' TM	Exclamation London Plane Tree	As Shown	3"Cal	Per Details, B&B
TS	8	Taxodium distichum 'Shawnee Brave' TM	Bald Cypress	As Shown	12' Ht.	Per Details, B&B
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SPACING	SIZE	COMMENTS
BG	134	Buxus x 'Green Mound'	Green Mound Boxwood	As Shown	#5	Per Details, Cont.
JT	48	Juniperus virginiana 'Taylor'	Taylor Eastern Redcedar	4' O.C.	6' Ht.	Per Details, Cont.
PERENNIALS / GRASSES	QTY	BOTANICAL NAME	COMMON NAME	SPACING	SIZE	COMMENTS
AG	142	Allium 'Persian Blue'	Persian Blue Giant Allium	36" O.C.	Bulb	Per Details, Bulb
BB	568	Bouteloua gracilis 'Blonde Ambition'	Blue Grama	18" O.C.	#1	Per Details, Cont.
CA	3,845	Carex amphibola	Creek Sedge	15" O.C.	#1	Per Details, Cont.
CG	1,229	Carex grayi	Morning Star Sedge	15" O.C.	#1	Per Details, Cont.
CO	198	Conoclinium coelestinum	Wild Ageratum	15" O.C.	#1	Per Details, Cont.
CV	1,221	Carex vulpinoidea	Brown Fox Sedge	15" O.C.	#1	Per Details, Cont.
IV	264	Iris virginica	Blue Flag Iris	15" O.C.	#1	Per Details, Cont.
LB	318	Liriope muscari 'Big Blue'	Big Blue Lilyturf	12" O.C.	#1	Per Details, Cont.
LG	231	Lysimachia punctata	Garden Loosetrife	15" O.C.	#1	Per Details, Cont.
MS	192	Matteuccia struthiopteris	Ostrich Fern	24" O.C.	#1	Per Details, Cont.
PC	516	Panicum virgatum 'Cape Breeze'	Switch Grass	24" O.C.	#1	Per Details, Cont.
ZA	264	Zizia aurea	Golden Alexander	15" O.C.	#1	Per Details, Cont.
GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	TYPE	-	COMMENTS
	15,684 sf	Turf Sod	Drought Tolerant Fescue Blend	Sod		Per Specifications; 3 Improved Cultivars, Min.

SPACING "D"	ROW "A"	NUMBER OF PLANTS/SQ. FT.
18"	15.6"	.450
15"	13.0"	.640
12"	10.4"	1.00
10"	8.66"	1.44
8"	6.93"	2.25
6"	5.19"	4.00



C BULB PLANTING
N.T.S.

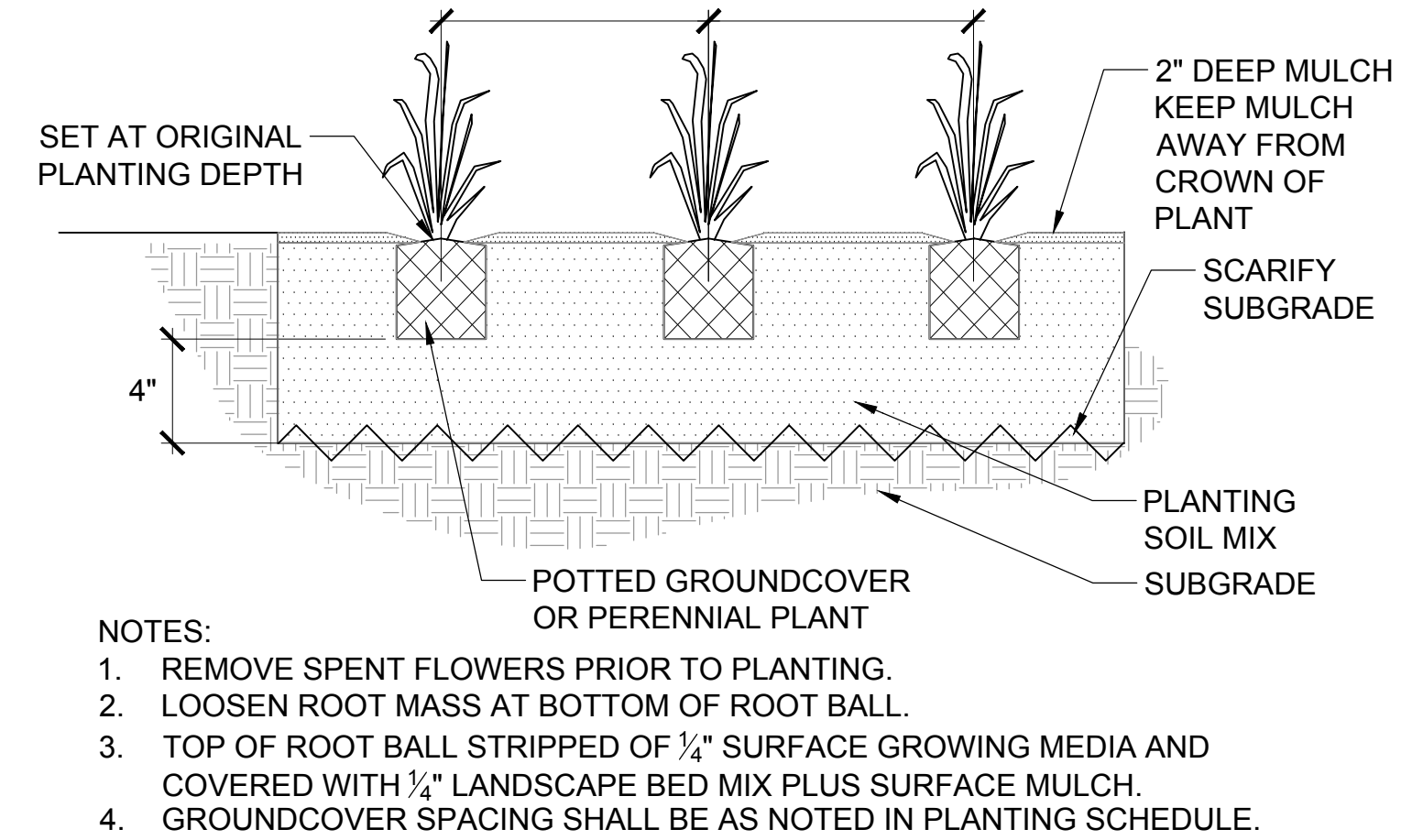
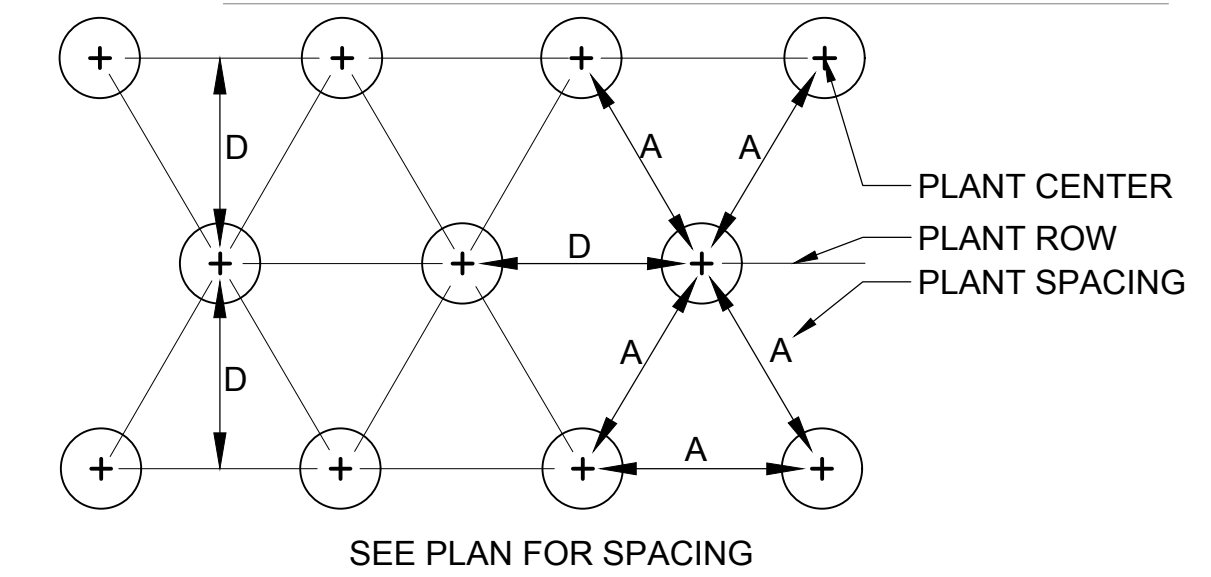
SPACING "D"	ROW "A"	NUMBER OF PLANTS/SQ. FT.
24"	26.8"	.250
30"	33.5"	.160
36"	40.2"	.110
4'	4.5'	.060



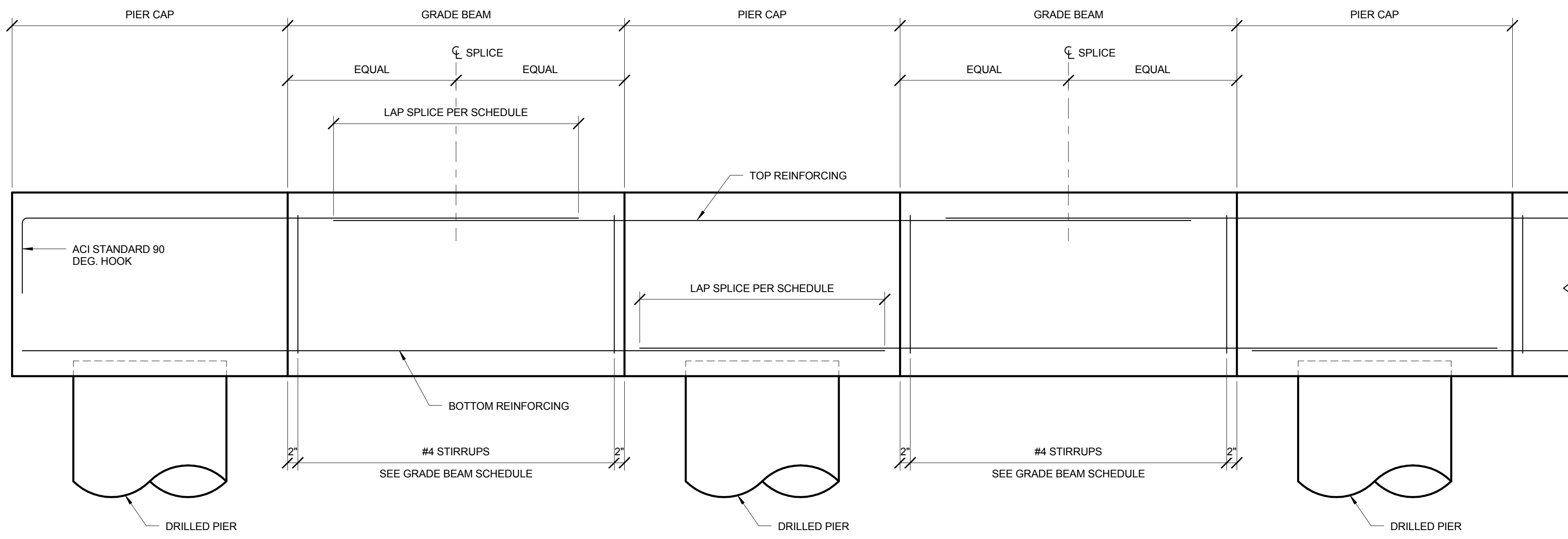
- NOTES:
1. SHRUB SPACING SHALL BE AS NOTED IN PLANTING SCHEDULE.
 2. IF SHRUBS ARE B&B, ROPES AT TOP OF BALL SHALL BE CUT. REMOVE TOP 1/3 OF BURLAP. NON-BIODEGRADABLE MATERIAL SHALL BE COMPLETELY REMOVED.

E SHRUB PLANTING
N.T.S.

SPACING "D"	ROW "A"	NUMBER OF PLANTS/SQ. FT.
24"	26.8"	.250
18"	20.1"	.450
15"	16.8"	.640
12"	13.4"	1.00
10"	11.2"	1.44
8"	8.9"	2.25
6"	6.7"	4.00



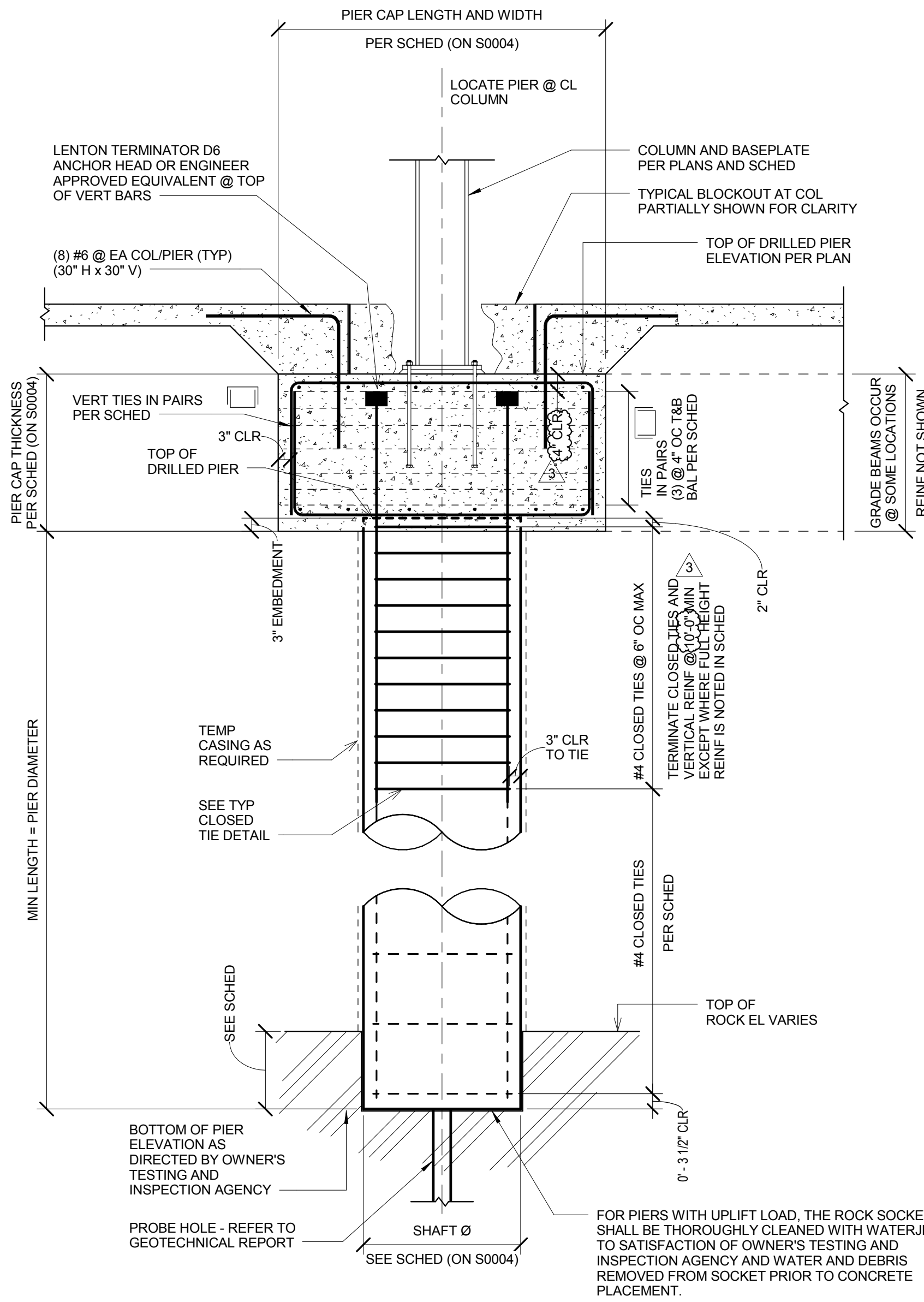
G GROUNDCOVER/PERENNIAL PLANTING
N.T.S.



BAR SIZE	TOP OR SIDE REINF.	BOTTOM REINF.
#4	36"	30"
#5	42"	36"
#6	48"	42"
#7	72"	54"
#8	84"	66"
#9	96"	72"
#10	102"	84"

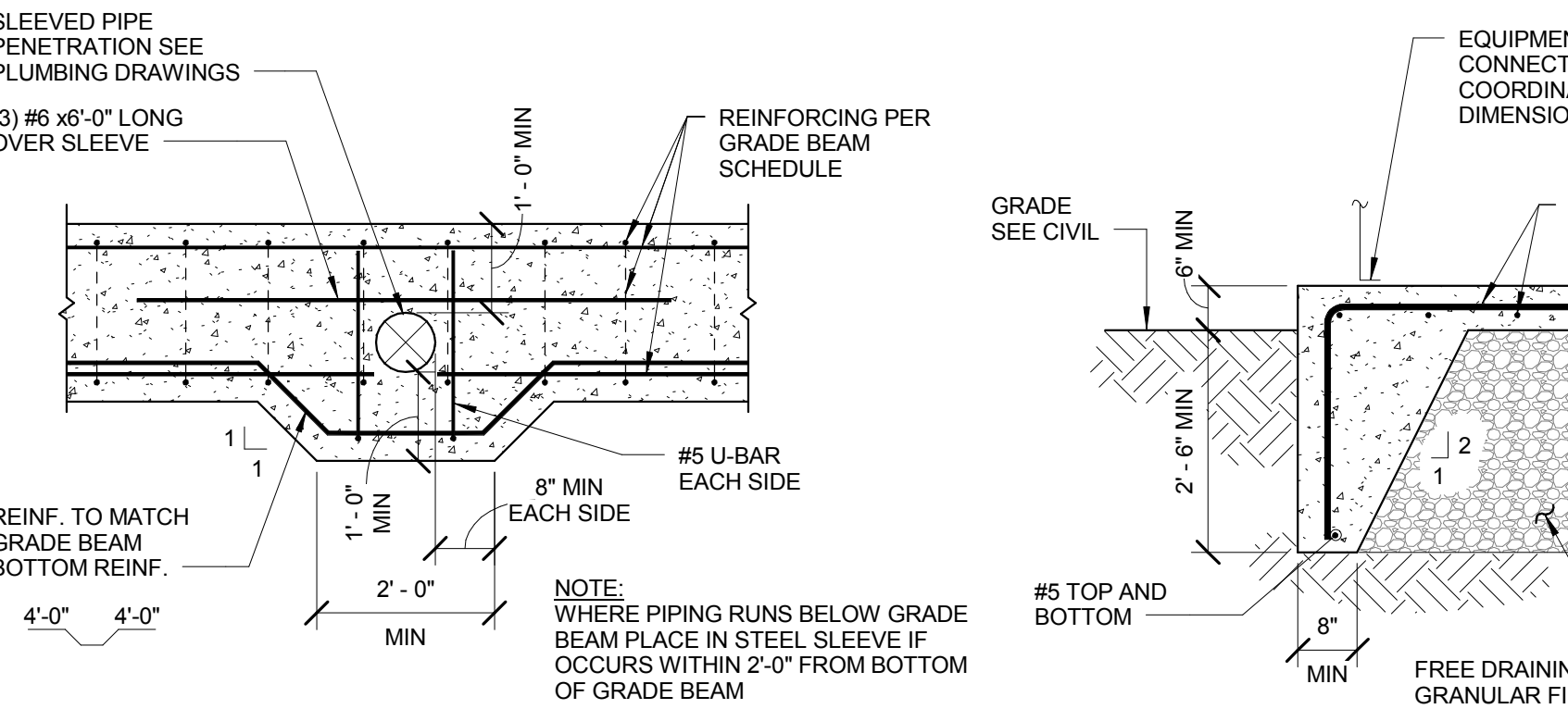
- NOTES:
- LAP SPlice TOP REINFORCING AT GRADE BEAM MIDSPAN.
 - LAP SPlice BOTTOM REINFORCING AT DRILLED PIER SUPPORT.
 - LAP SPlice SIDE REINFORCING AT DRILLED PIER SUPPORT.
 - WHERE (2) LAYERS OF TOP OR BOTTOM REINFORCING IS SHOWN IN GRADE BEAM SCHEDULE - PROVIDE 1 1/2" CLEAR DISTANCE BETWEEN THE 2 LAYERS.

1 TYPICAL GRADE BEAM REINFORCING
3/4" = 1'-0"



- TYPICAL DRILLED PIER NOTES:
- DRILLED PIER FOUNDATION DESIGN IS BASED ON THE GEOTECHNICAL INVESTIGATION REPORT.
 - DETERMINATION OF THE SUITABILITY OF THE BEARING ROCK WILL BE MADE BY THE GEOTECHNICAL ENGINEER.
 - BOTTOM OF ALL PIER HOLES SHALL BE MADE AVAILABLE FOR INSPECTION BY THE GEOTECHNICAL ENGINEER.
 - GEOTECHNICAL ENGINEER SHALL WITNESS THE POURING OF CONCRETE.
 - SHAFTS SHALL BE DRILLED PLUMB AND STRAIGHT. SEE SPECIFICATIONS FOR TOLERANCES.
 - ALL LOOSE MATERIAL SHALL BE REMOVED FROM THE BOTTOM OF PIER HOLES. PROVIDE A LEVEL OR LEDGED BOTTOM. SLOPING BOTTOM SURFACES WILL NOT BE ALLOWED.
 - NOT MORE THAN 2" WATER WILL BE ALLOWED IN ANY PIER HOLE AT THE TIME OF CONCRETE PLACEMENT.
 - SEE SPECIFICATIONS FOR DEWATERING.
 - PIER CONCRETE: F_c = 5000 PSI @ 28 DAYS (145 PCF).
 - PIER REINFORCING: A615 GRADE 60, EPOXY COATING NOT REQUIRED FOR PIER REINFORCING.
 - WHERE PERMANENT CASING IS CALLED FOR OR REQUIRED BY THE GEOTECHNICAL FIELD REPRESENTATIVE, THE CASING SHALL BE PUSHED AHEAD OF THE EXCAVATION.
 - CONTRACTOR SHALL PROTECT THE REBAR (DOWELS) AND ANCHOR BOLTS PROTRUDING OUT OF THE PIERS WITH PLASTIC CAPS AND FILL ALL PIER EXCAVATIONS WITH GRANULAR FILL AS SPECIFIED.
 - CONTRACTOR SHALL PROVIDE THE OWNER WITH AS-BUILT REPRODUCIBLE DRAWINGS AT COMPLETION.
 - CONSTRUCTION OF FOUNDATION SHALL BE IN ACCORDANCE WITH REPORT OF GEOTECHNICAL INVESTIGATION.
 - PIER W/ UPLIFT REQUIRES FULL DEPTH REINFORCING CAGES. SEE PIER SCHEDULE ON SHEET S0004.
 - ROCK SOCKET LENGTH AS DETERMINED BY OWNER'S TESTING AND INSPECTION AGENCY BASED ON REQUIRED LOAD CAPACITY AND CONDITIONS ENCOUNTERED (MIN. DEPTH = 2 x PIER Ø).

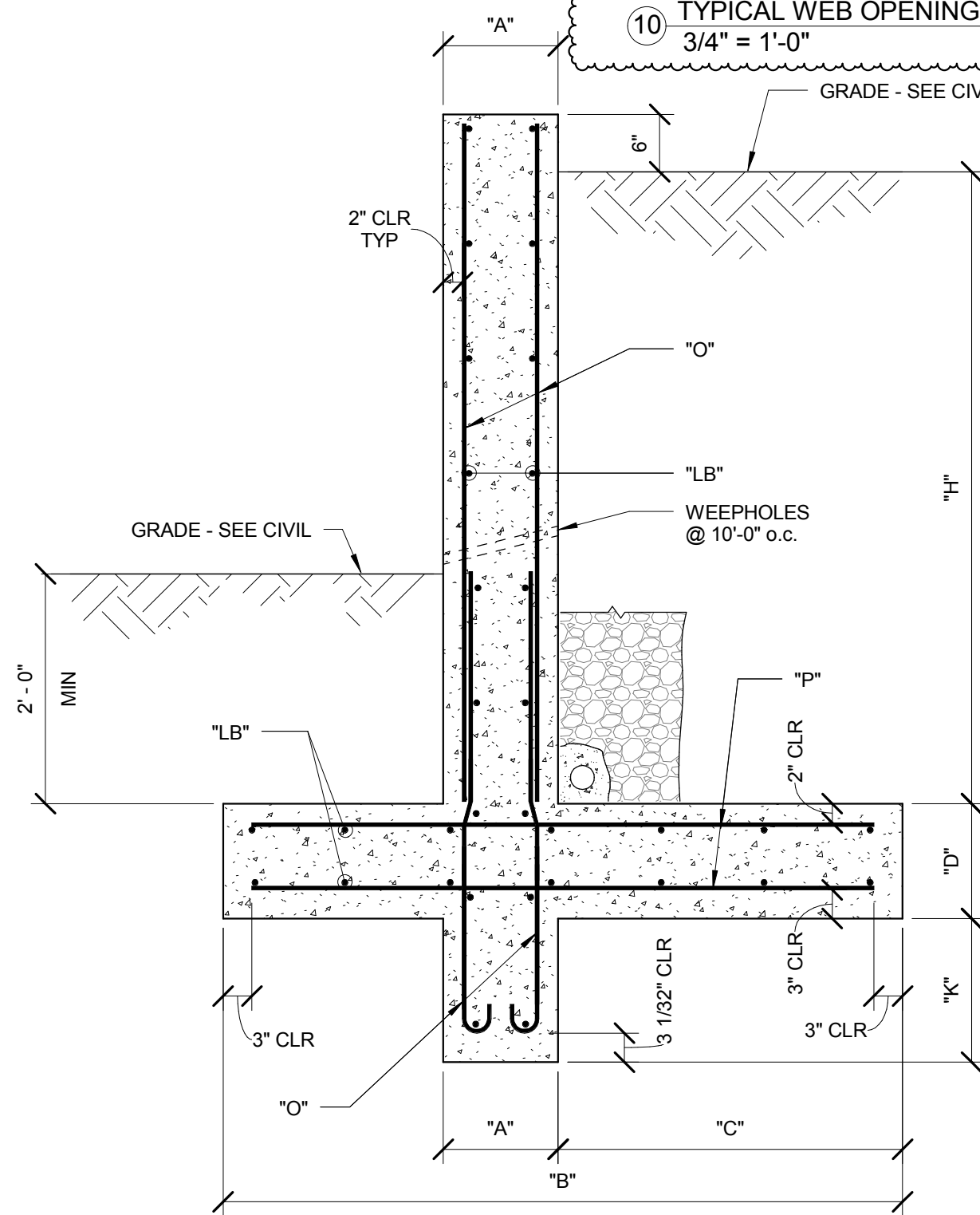
3 TYPICAL DRILLED PIER
1/2" = 1'-0"



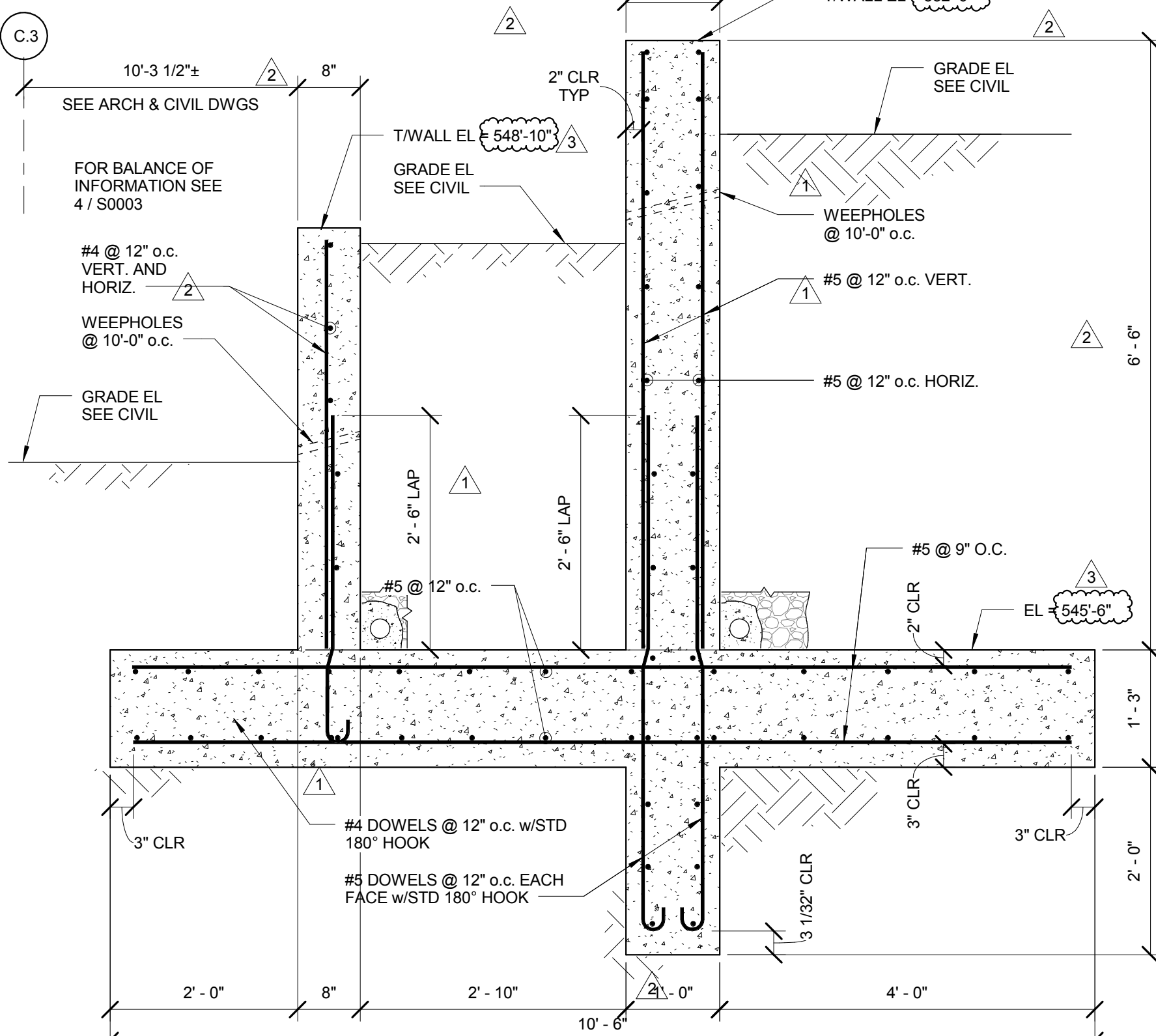
6 TYPICAL PIPE PENETRATION IN GRADE BEAM
1/2" = 1'-0"

- NOTES:
- SEE DETAIL FOR TYPICAL DRILLED PIER.
 - VERTICAL SPLICES IN REINFORCING IN PIERS ARE NOT ALLOWED UNLESS THEY ARE FULL TENSION MECHANICAL SPLICES (TENSION COUPLERS).

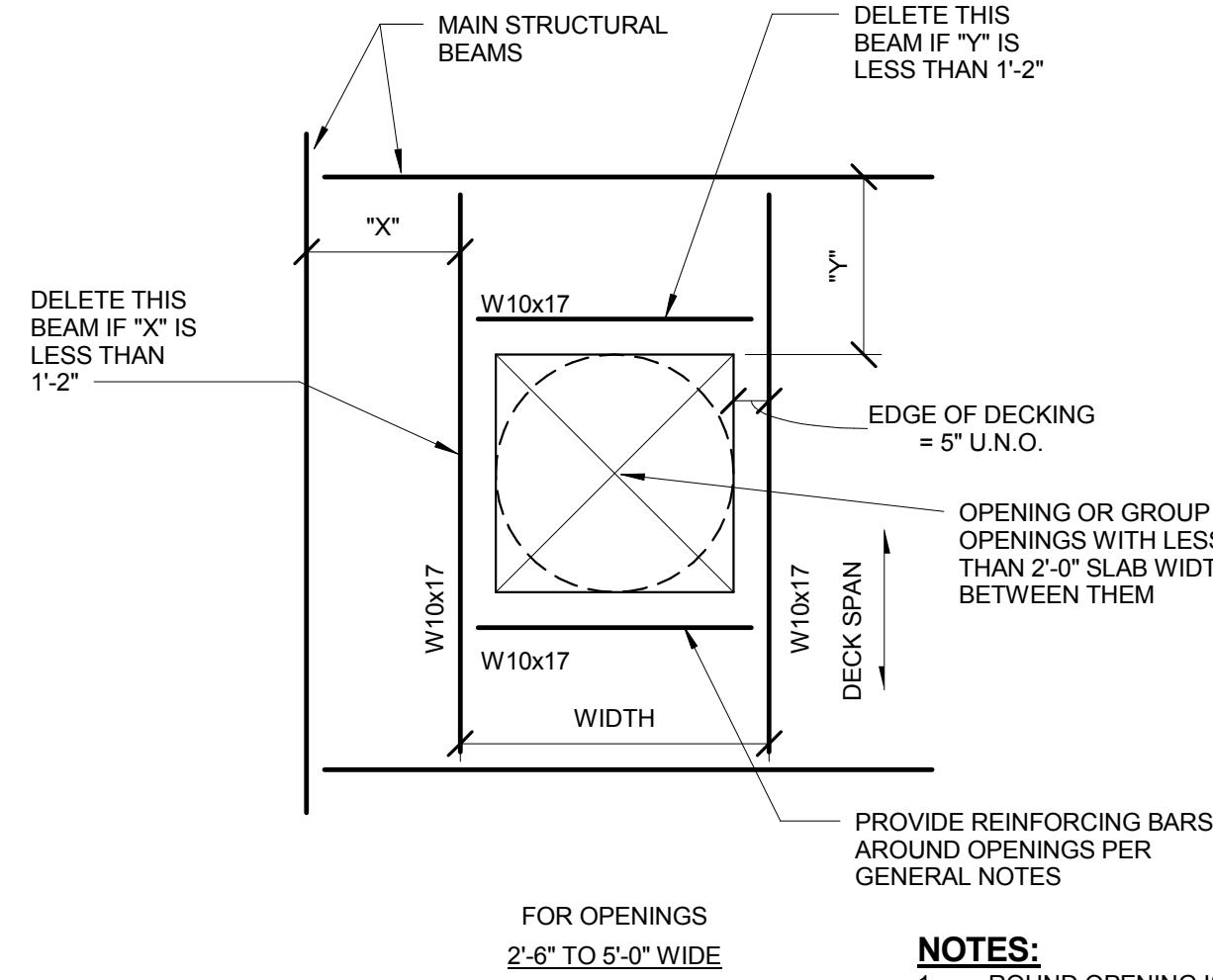
9 TYPICAL SPANDREL BEAM DETAIL
3/4" = 1'-0"



4 TYPICAL CONCRETE SITE RETAINING WALL SCHEDULE
3/4" = 1'-0"

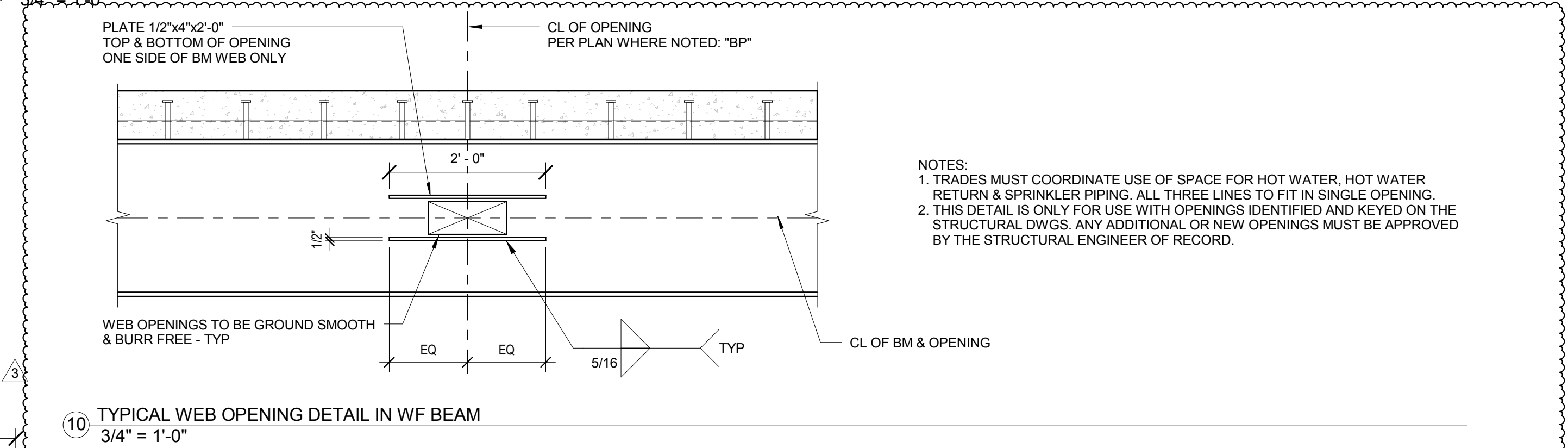


5 TYPICAL TERRACED CONCRETE SITE RETAINING WALL
3/4" = 1'-0"



- NOTES:
- ROUND OPENING IS SIMILAR.
 - NO REINFORCING REQUIRED FOR OPENINGS OF 12" OR LESS.
 - FORM OPENINGS WITH SHEET METAL OR WOOD. DECK CAN BE CUT OUT AFTER CONCRETE HAS ATTAINED 75% OF ITS 28 DAY STRENGTH.

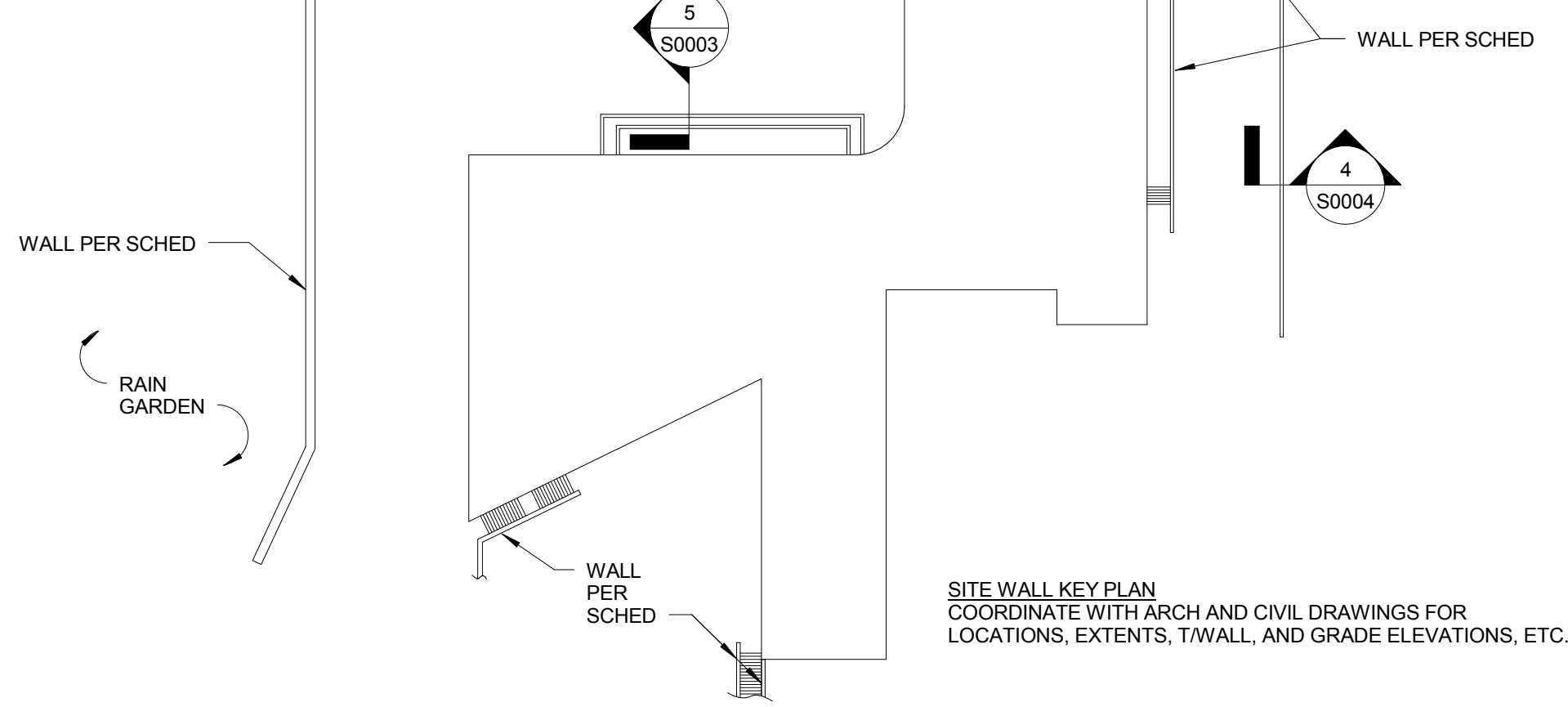
2 TYPICAL FLOOR DECK OPENING FRAME
3/4" = 1'-0"



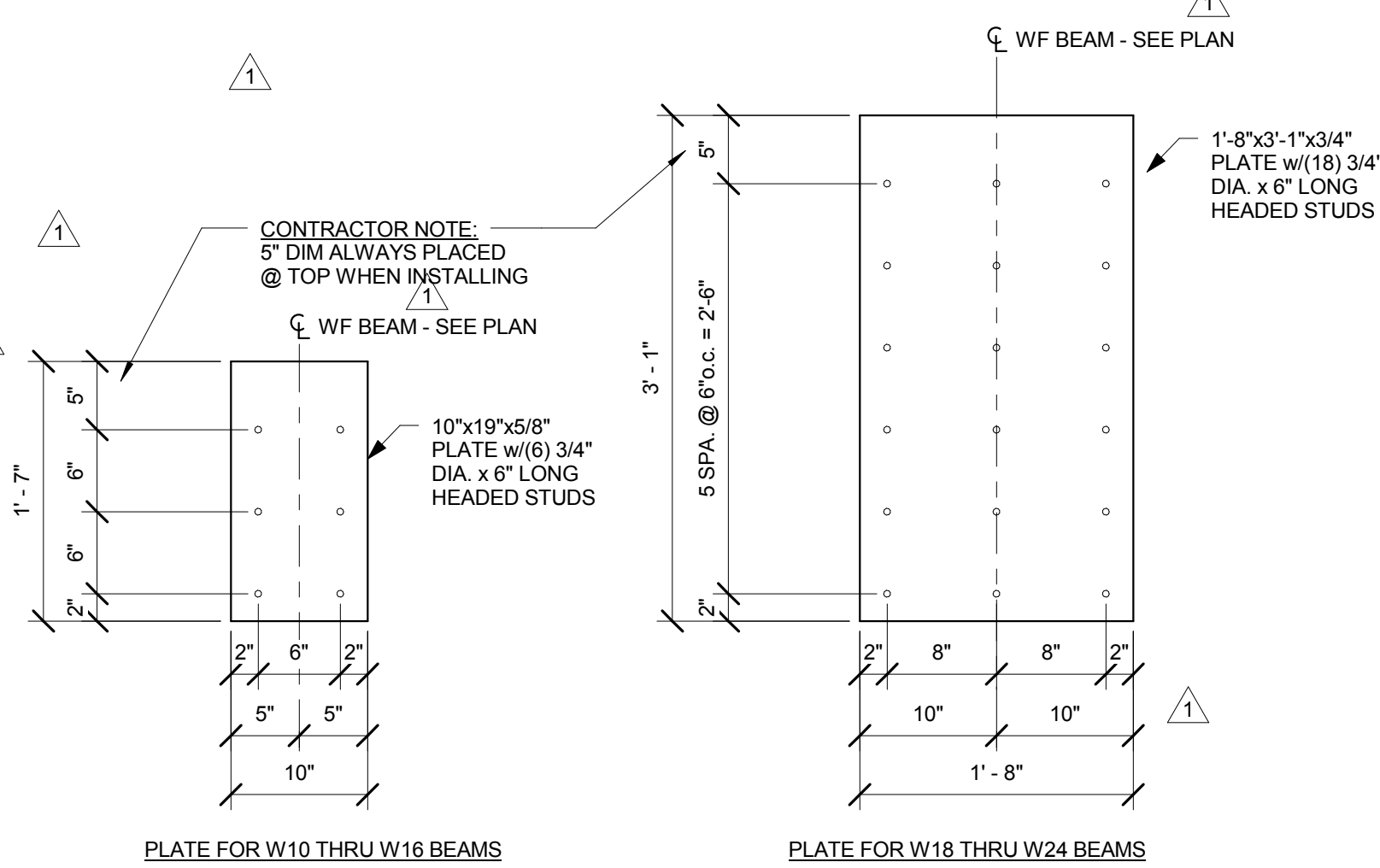
10 TYPICAL WEB OPENING DETAIL IN WF BEAM
3/4" = 1'-0"

SITE CONCRETE RETAINING WALL SCHEDULE									
"H"	"A"	"B"	"C"	"D"	"K"	"Q"	"LB"	"P"	REMARKS
6'-6" MAX	1'-0"	8'-0"	4'-0"	1'-3"	2'-0"	#5 @ 12"	#4 @ 12"	#5 @ 12"	
8'-6" MAX	1'-0"	9'-0"	5'-0"	1'-3"	4'-0"	#5 @ 9"	#4 @ 12"	#5 @ 9"	
13'-6" MAX	1'-0"	16'-6"	8'-0"	1'-6"	3'-6"	#7 @ 6"	#5 @ 12"	#7 @ 6"	

- NOTES:
- SPACE CONTROL JOINTS AT 20'-0" ON CENTER MAXIMUM.
 - SPACE EXPANSION JOINTS AT 100'-0" ON CENTER MAXIMUM.



4 TYPICAL CONCRETE SITE RETAINING WALL SCHEDULE
3/4" = 1'-0"



7 TYPICAL EMBEDDED PLATE DETAILS FOR BEAM CONNECTION TO CONCRETE WALLS
1" = 1'-0"

GRADE BEAM NOTES

1. PROVIDE STANDARD HOOKS FOR TOP & BOTTOM BARS AS INDICATED AT SUPPORTS
2. PROVIDE CORNER BARS AT INTERSECTING GRADE BEAMS.

(A) TYPICAL #4 STIRRUP
1 1/2" = 1'-0"

21

@ PIER LOCATIONS



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CONFORMED SET 01 JUL 2016

2	ADDENDUM 1-11	13 MAY 2016
1	ADDENDUM 1-1	29 JAN 2016
-	ISSUED FOR CONSTRUCTION (BP1)	15 JAN 2016
No.	Description	Date

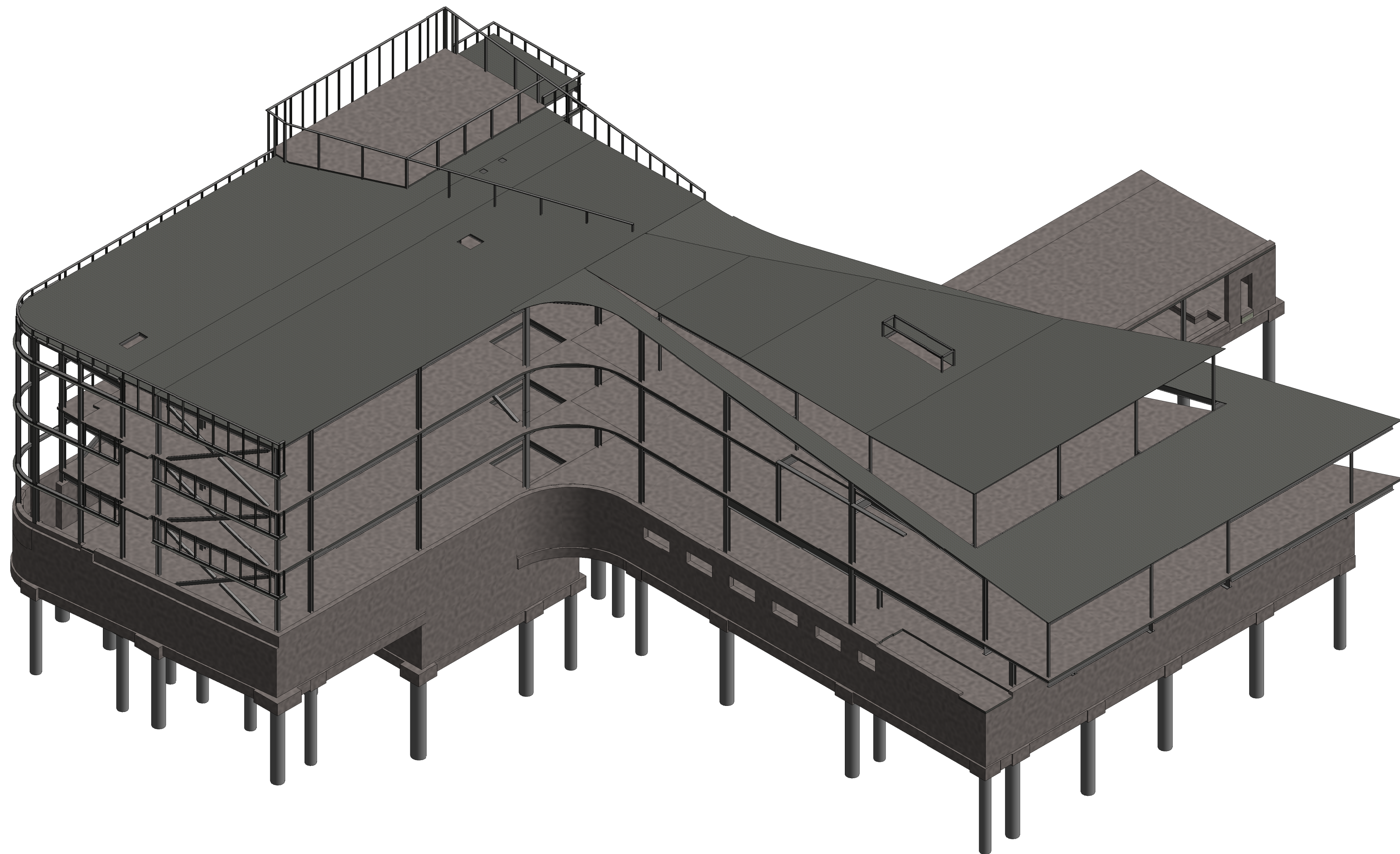
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FOUNDATION SCHEDULES

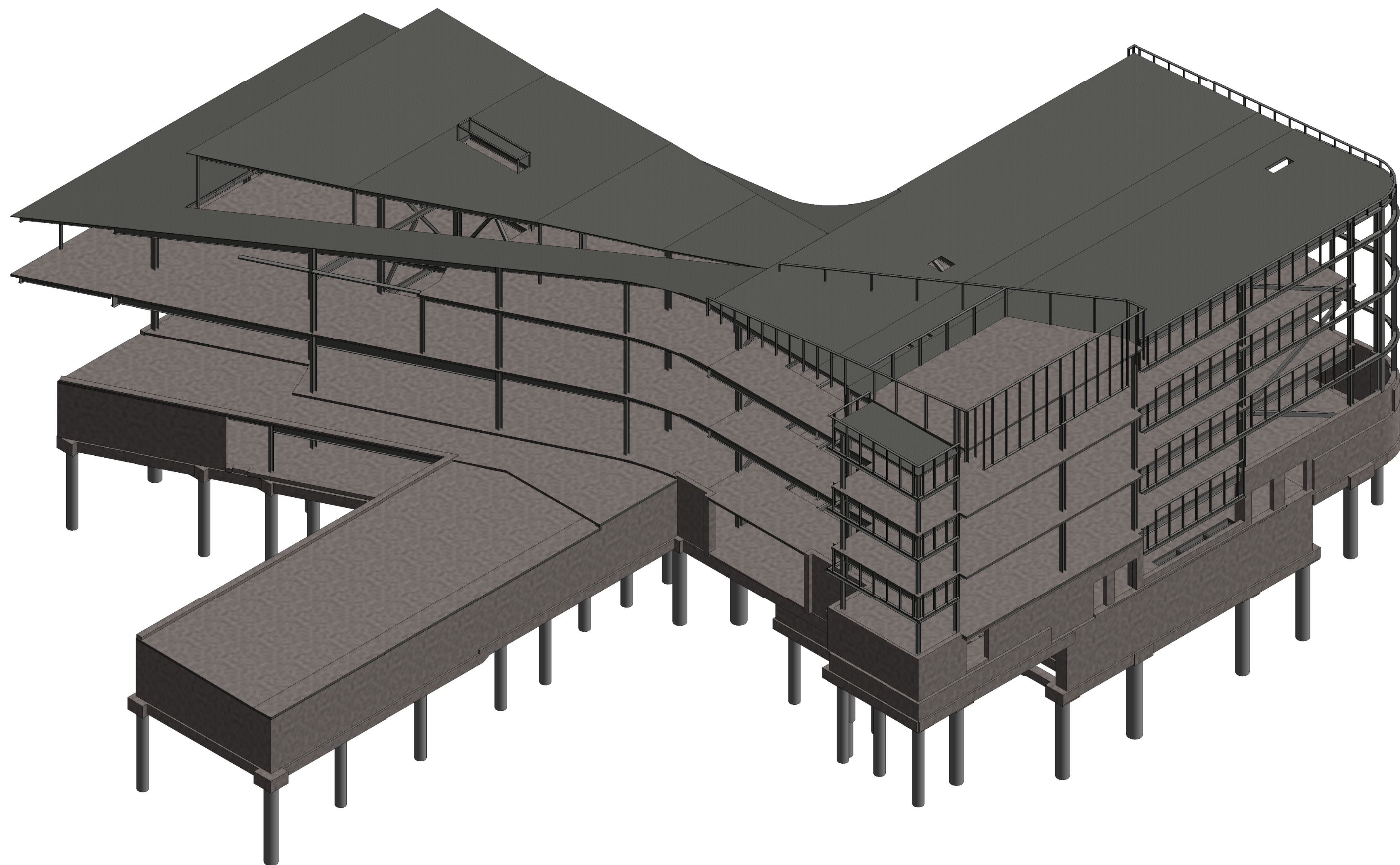
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1 Axonometric - from NW



2 Axonometric - from SE



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ISSUED FOR CONSTRUCTION (BP1) 15 JAN 2016

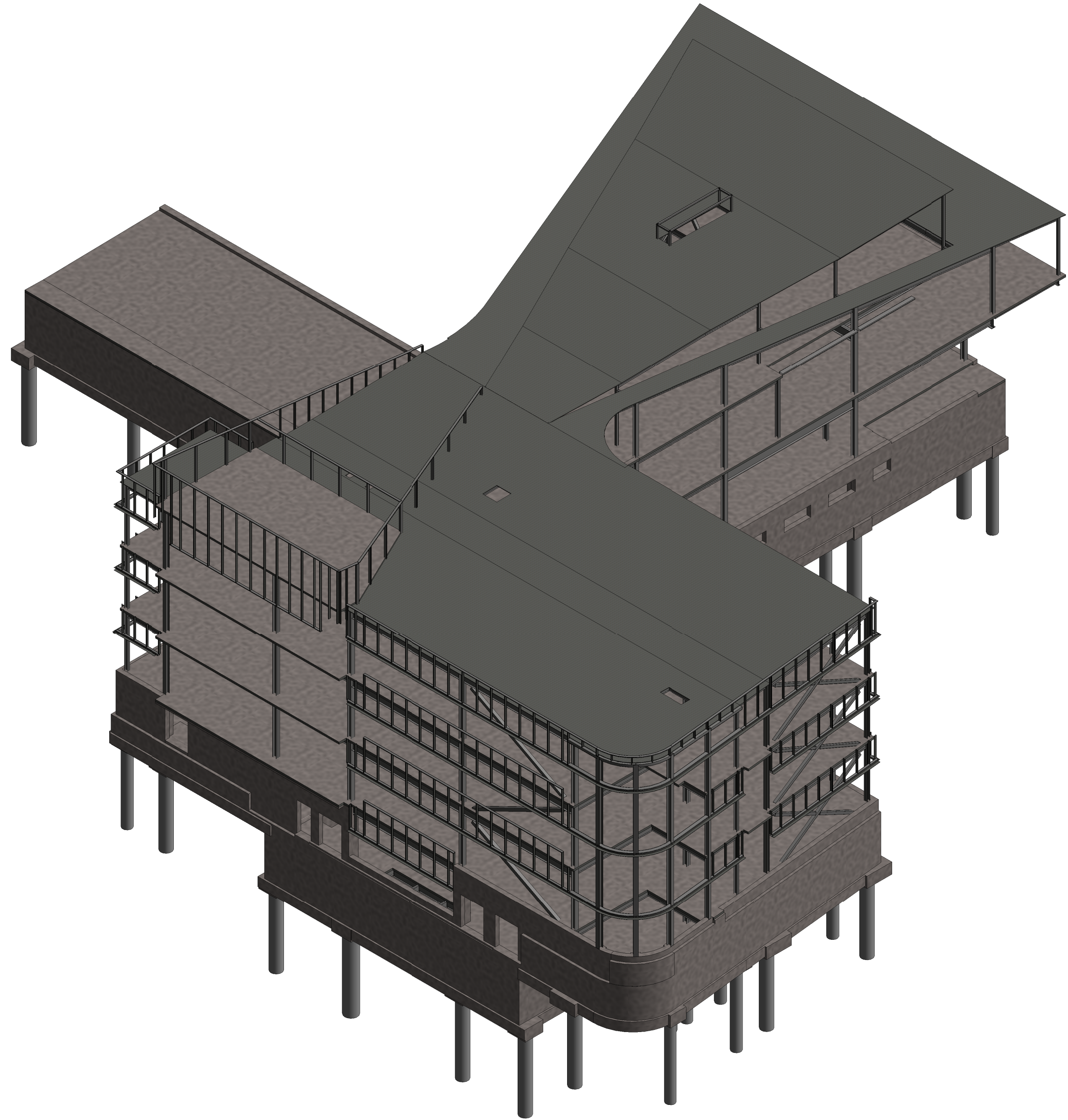
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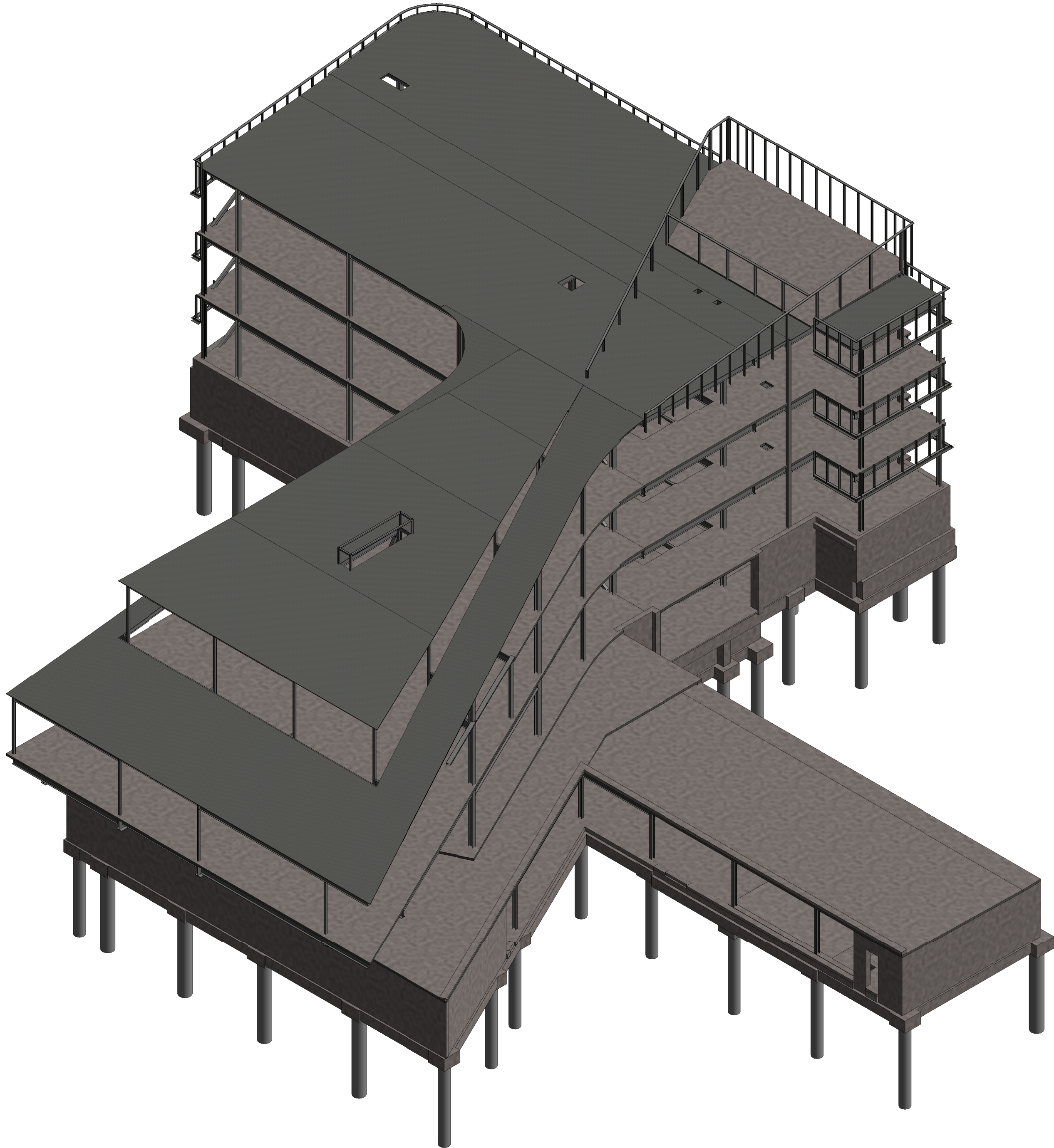
AXONOMETRICS

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① Axonometric - from NE



② Axonometric - from SW



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No.	Description	Date
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Drawing Title:

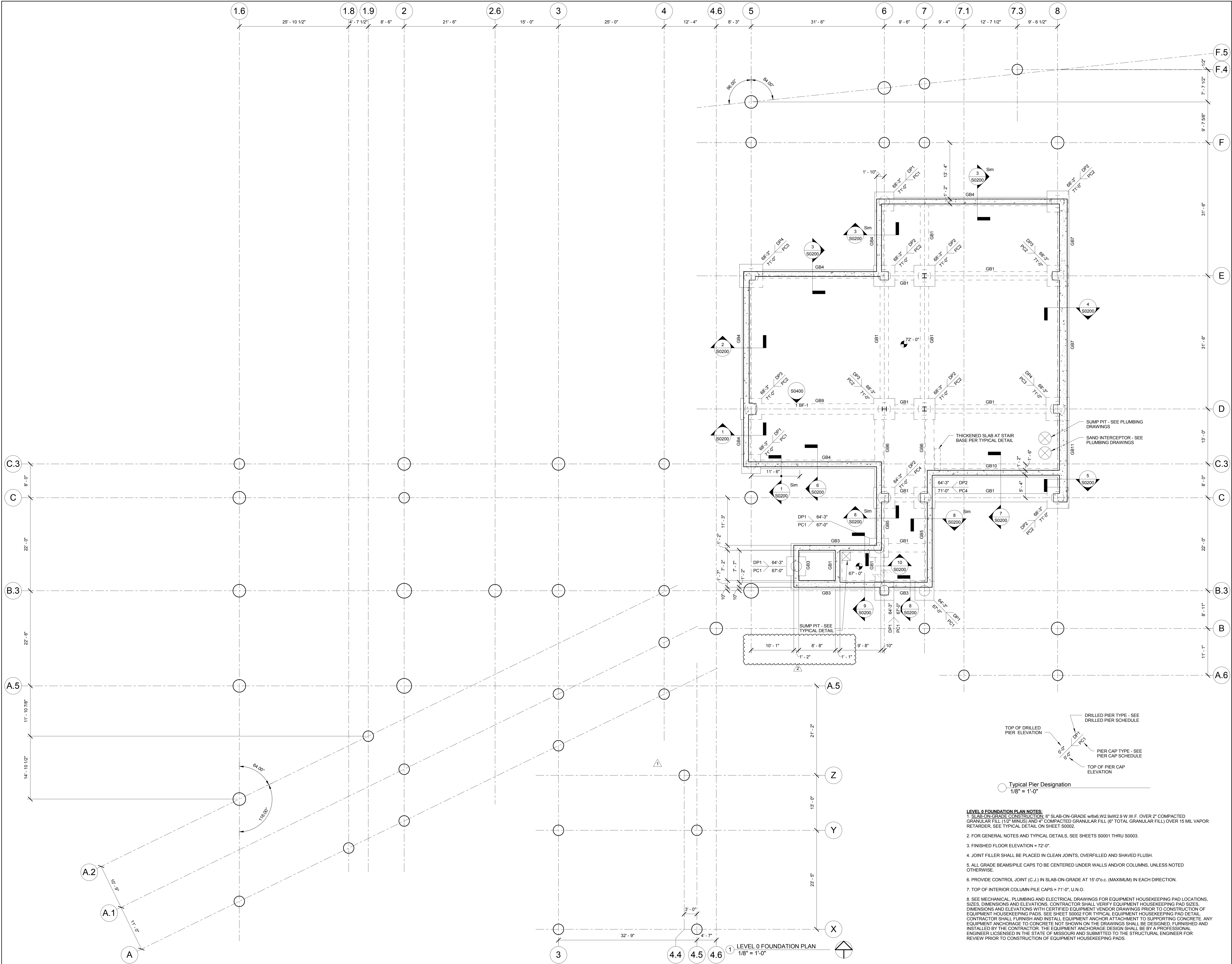
AXONOMETRICS

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CONFORMED SET 01 JUL 2016

2	ADDENDUM 1-7	16 MAR 2016
1	ADDENDUM 1-1	29 JAN 2016
-	ISSUED FOR CONSTRUCTION (BP1)	15 JAN 2016
No.	Description	Date

Drawing Title:

LEVEL 0 FOUNDATION PLAN

Project No.: 04561.01 Checked by:

S0100

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- LEVEL 01 FRAMING PLAN NOTES:**
1. FLOOR CONSTRUCTION: 4" 10' NORMAL WEIGHT CONCRETE SLAB REINFORCED WITH 6#6, W2.9xW2.9 W.W.F. ON 2'x18 GA. GALVANIZED COMPOSITE METAL DECK BY VULCRAFT OR ENGINEER APPROVED EQUAL WITH THE FOLLOWING MINIMUM PROPERTIES: $f_y = 0.558 \text{ ksi}$, $S_y = 0.495 \text{ in}^3$, $F_y = 60 \text{ ksi}$, $S_y = 0.694 \text{ in}^3$. LOCATE W.W.F. 1" CLEAR FROM TOP OF CONCRETE. WELD COMPOSITE METAL DECK TO ALL INTERIOR SUPPORTING STEEL. EDGE RIBS OF PANELS AT EACH SUPPORT AND ALONG ALL SUPPORTING PERIMETER EDGE AND SLAB EDGE STEEL WITH 5/8" DIAMETER PUDLE WELDS @ 12" O.C. MAXIMUM. PROVIDE #10 TEK-SCREW SIDE LAP CONNECTIONS AT 36" O.C. MAXIMUM BETWEEN SUPPORTS. (TOTAL SLAB THICKNESS = 6 1/2").
 2. FOR GENERAL NOTES AND TYPICAL DETAILS, SEE SHEETS S0001 THRU S0003.
 3. FOR COLUMN SCHEDULE, SEE SHEETS S0500 THRU S0502.
 4. COORDINATE ALL FLOOR OPENINGS WITH MECHANICAL DRAWINGS.
 5. FINISHED FLOOR ELEVATION = 86'-0".
 6. TOP OF STRUCTURAL STEEL ELEVATION = 85'-5 1/2", U.N.O.
 7. TOP OF STRUCTURAL STEEL ELEVATION = BOTTOM OF METAL DECK ELEVATION, UNLESS NOTED THUS (XX") ON PLAN REFERENCED FROM BOTTOM OF METAL DECK ELEVATION.
 8. FOR COMPOSITE BEAM NOTES AND TYPICAL COMPOSITE BEAM DETAILS, SEE SHEETS S0002 THRU S0003.

DESIGN FLOOR LOADS:

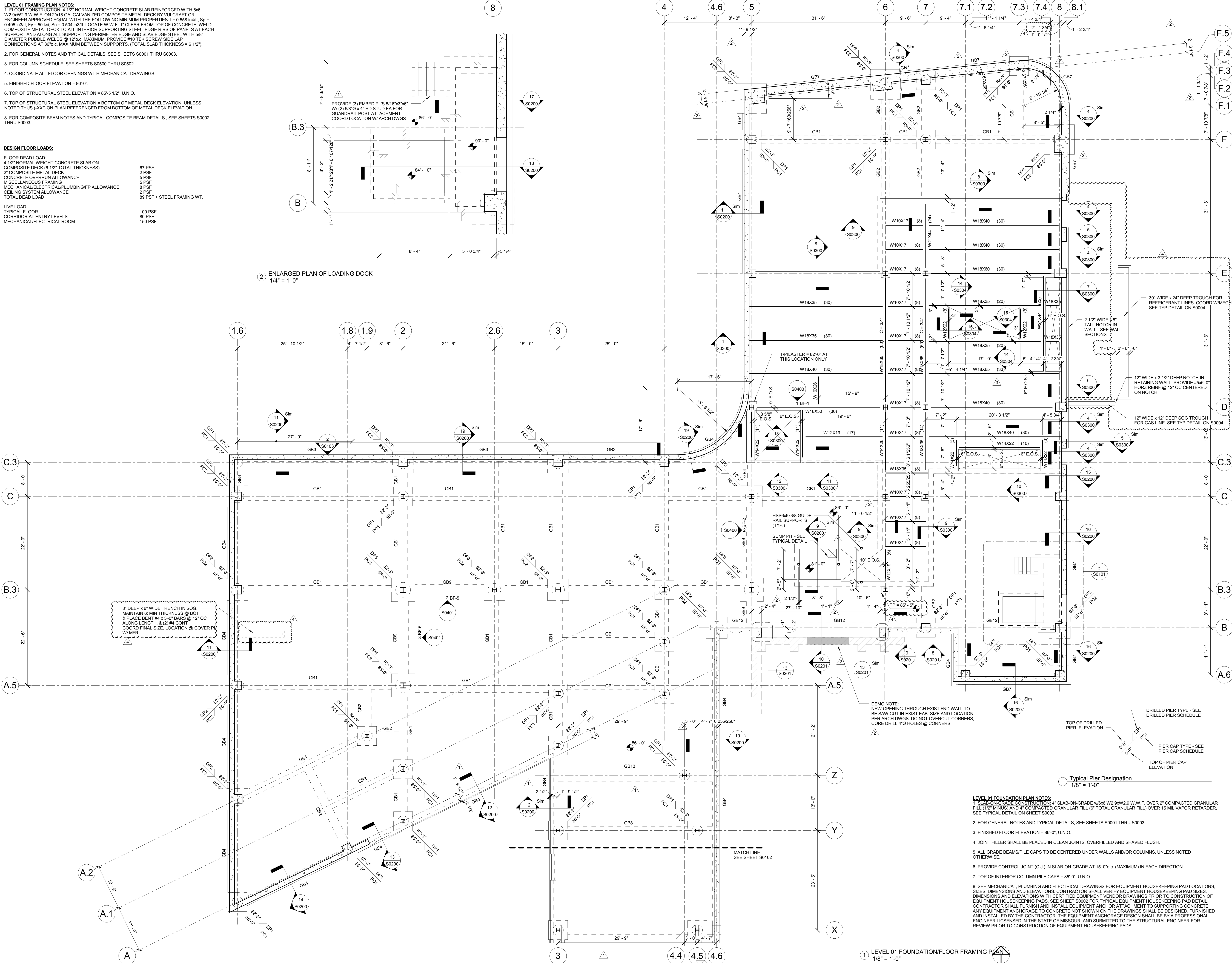
FLOOR DEAD LOAD:
4 1/2" NORMAL WEIGHT CONCRETE SLAB ON
COMPOSITE DECK (6 1/2" TOTAL THICKNESS)
2" COMPOSITE METAL DECK
CONCRETE OVERRUN ALLOWANCE
MISCELLANEOUS FRAMING
MECHANICAL/ELECTRICAL/PLUMBING/FP ALLOWANCE
CEILING SYSTEM ALLOWANCE
TOTAL DEAD LOAD

67 PSF
2 PSF
5 PSF
5 PSF
8 PSF
2 PSF
89 PSF + STEEL FRAMING WT.

LIVE LOAD:
TYPICAL FLOOR
CORRIDOR AT ENTRY LEVELS
MECHANICAL/ELECTRICAL ROOM

100 PSF
80 PSF
150 PSF

2 ENLARGED PLAN OF LOADING DOCK
1/4" = 1'-0"



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CONFORMED SET

01 JUL 2016

4	ADDENDUM 1-11	13 MAY 2016
3	ADDENDUM 1-8	12 APR 2016
2	ADDENDUM 1-7	16 MAR 2016
1	ADDENDUM 1-1	29 JAN 2016
-	ISSUED FOR CONSTRUCTION (BPI)	15 JAN 2016
No.	Description	Date

Drawing Title:

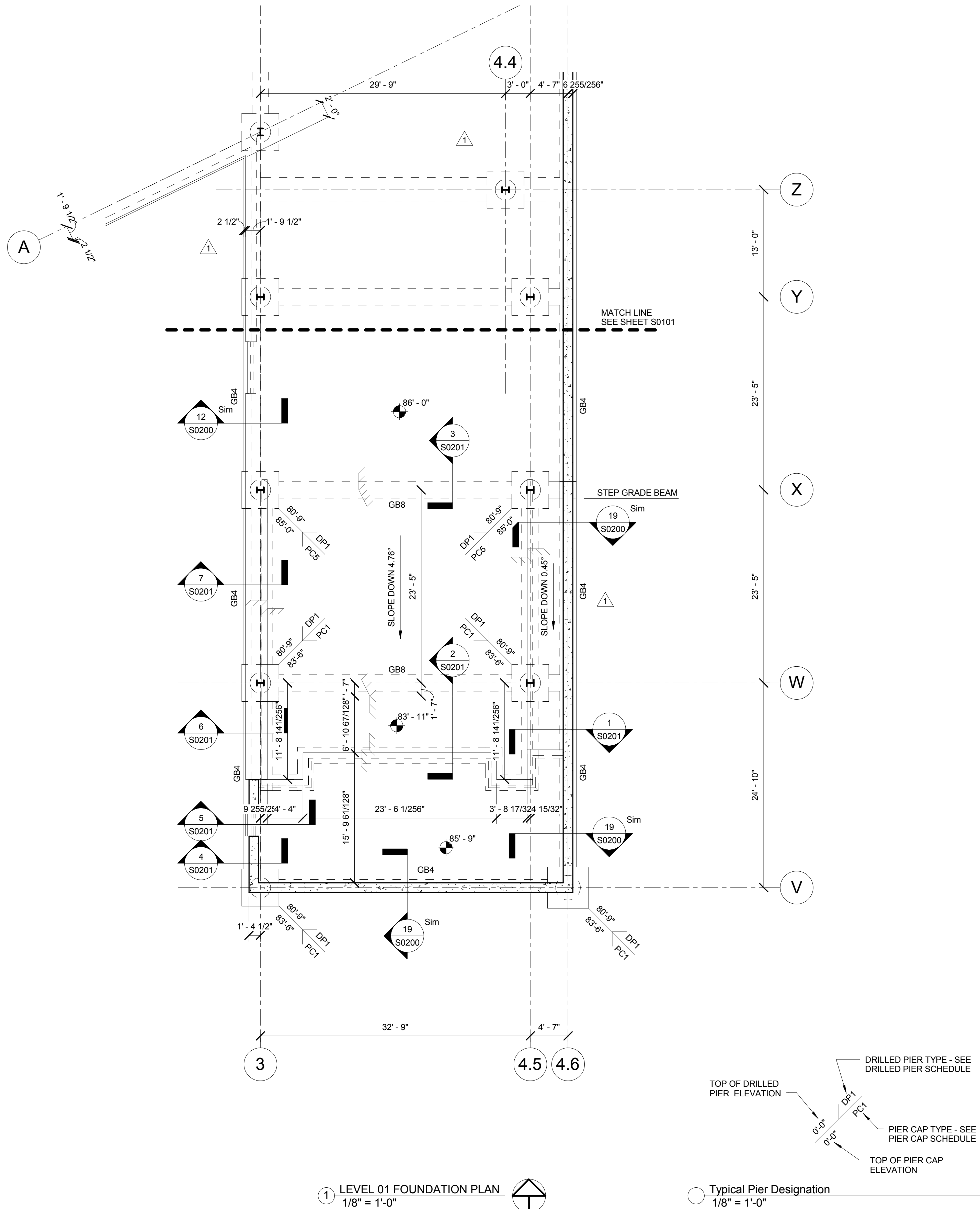
**LEVEL 01
FOUNDATION/FLOOR
FRAMING PLAN**

Project No.: 04561.01

Checked by:

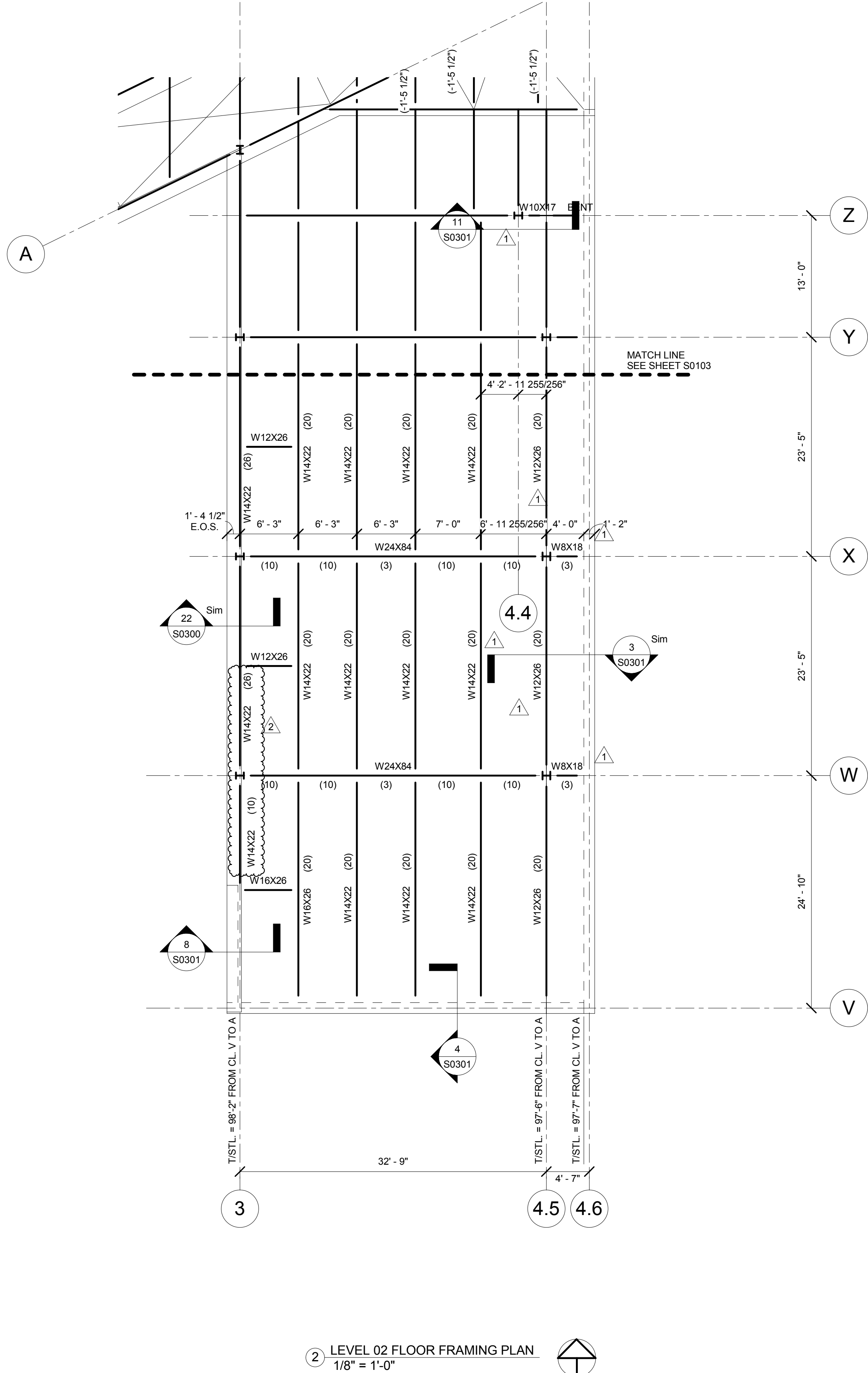
S0101

- LEVEL 01 FOUNDATION PLAN NOTES:**
1. SLAB-ON-GRADE CONSTRUCTION: 4" SLAB-ON-GRADE w/6x6 W2.9xW2.9 W.W.F. OVER 2" COMPACTED GRANULAR FILL (1/2" MINUS) AND 4" COMPACTED GRANULAR FILL (6" TOTAL GRANULAR FILL) OVER 15 MIL VAPOR RETARDER, SEE TYPICAL DETAIL ON SHEET S0002.
 2. FOR GENERAL NOTES AND TYPICAL DETAILS, SEE SHEETS S0001 THRU S0003.
 3. FINISHED FLOOR ELEVATION = 86'-0", U.N.O..
 4. JOINT FILLER SHALL BE PLACED IN CLEAN JOINTS, OVERFILLED AND SHAVED FLUSH.
 5. ALL FOOTINGS TO BE CENTERED UNDER WALLS AND/OR COLUMNS, UNLESS NOTED OTHERWISE.
 6. PROVIDE CONTROL JOINT (C.J.) IN SLAB-ON-GRADE AT 15'-0"o.c. (MAXIMUM) IN EACH DIRECTION.
 7. TOP OF INTERIOR COLUMN FOOTINGS = 85'-0", U.N.O..



- LEVEL 02 FLOOR FRAMING PLAN NOTES:**
1. FLOOR CONSTRUCTION: 4 1/2" NORMAL WEIGHT CONCRETE SLAB REINFORCED WITH 6x6, W2.9xW2.9 W.W.F. ON 2"x18 GA. GALVANIZED (G90 AT GREEN ROOF AND PAVES SYSTEMS) COMPOSITE METAL DECK BY VULCRAFT OR ENGINEER APPROVED EQUAL WITH THE FOLLOWING MINIMUM PROPERTIES: 1 + 0.558 in./ft. Sp = 0.485 in./ft. fy = 50 ksi. Sn = 0.504 in./ft. LOCATE W.W.F. 1" CLEAR FROM TOP OF CONCRETE. WELD COMPOSITE METAL DECK TO ALL INTERIOR SUPPORTING STEEL. EDGE RIBS OF PANELS AT EACH SUPPORT AND ALONG ALL SUPPORTING PERIMETER EDGE AND SLAB EDGE STEEL WITH 5/8" DIAMETER PUDDLE WELDS @ 12"o.c. MAXIMUM. PROVIDE #10 TEK SCREW SIDE LAP CONNECTIONS AT 36"o.c. MAXIMUM BETWEEN SUPPORTS. (TOTAL SLAB THICKNESS = 6 1/2").
 2. FOR GENERAL NOTES AND TYPICAL DETAILS, SEE SHEETS S0001 THRU S0003.
 3. FOR COLUMN SCHEDULE, SEE SHEETS S0500 THRU S0502.
 4. COORDINATE ALL FLOOR OPENINGS WITH MECHANICAL DRAWINGS.
 5. FINISHED FLOOR ELEVATION = 100'-0", U.N.O..
 6. TOP OF STRUCTURAL STEEL ELEVATION = 99'-5 1/2, U.N.O..
 7. TOP OF STRUCTURAL STEEL ELEVATION = BOTTOM OF METAL DECK ELEVATION, UNLESS NOTED THUS (XX") ON PLAN REFERENCED FROM BOTTOM OF METAL DECK ELEVATION.
 8. FOR COMPOSITE BEAM NOTES AND TYPICAL COMPOSITE BEAM DETAILS, SEE SHEETS S0002 THRU S0003.

DESIGN FLOOR LOADS
SEE SHEET S0103 FOR DESIGN LOADS.



CONFORMED SET 01 JUL 2016

2	ADDENDUM 1-11	13 MAY 2016
1	ADDENDUM 1-1	29 JAN 2016
-	ISSUED FOR CONSTRUCTION (BP1)	15 JAN 2016
No.	Description	Date

Drawing Title:

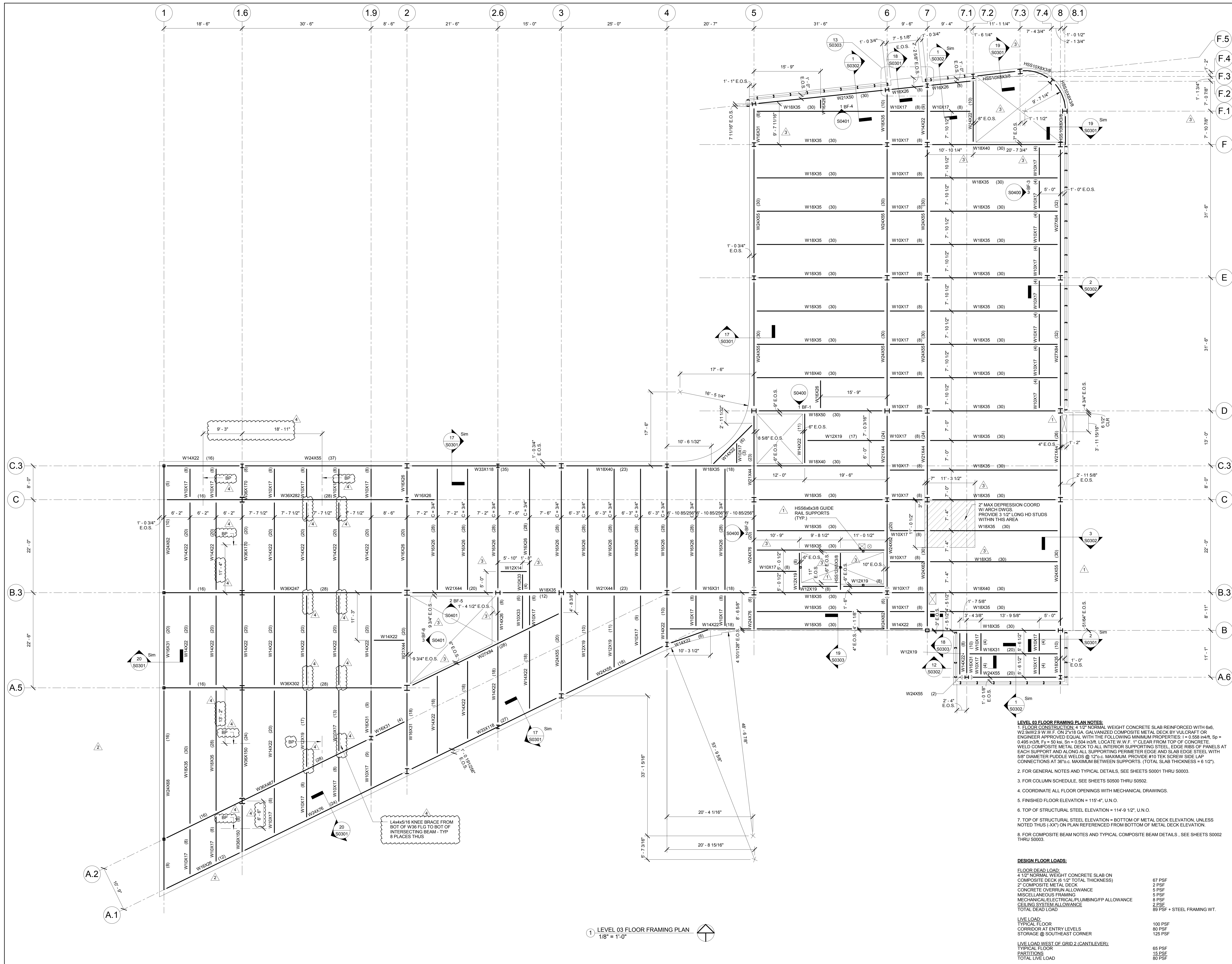
LEVEL 01 FOUNDATION
PLAN AND LEVEL 02
FLOOR FRAMING PLAN

Project No.: 04561.01 Checked by:

S0102

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S0104



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CONFORMED SET 01 JUL 2016

2	ADDENDUM 1-7	16 MAR 2016
1	ADDENDUM 1-1	29 JAN 2016
-	ISSUED FOR CONSTRUCTION (BP1)	15 JAN 2016
No.	Description	Date

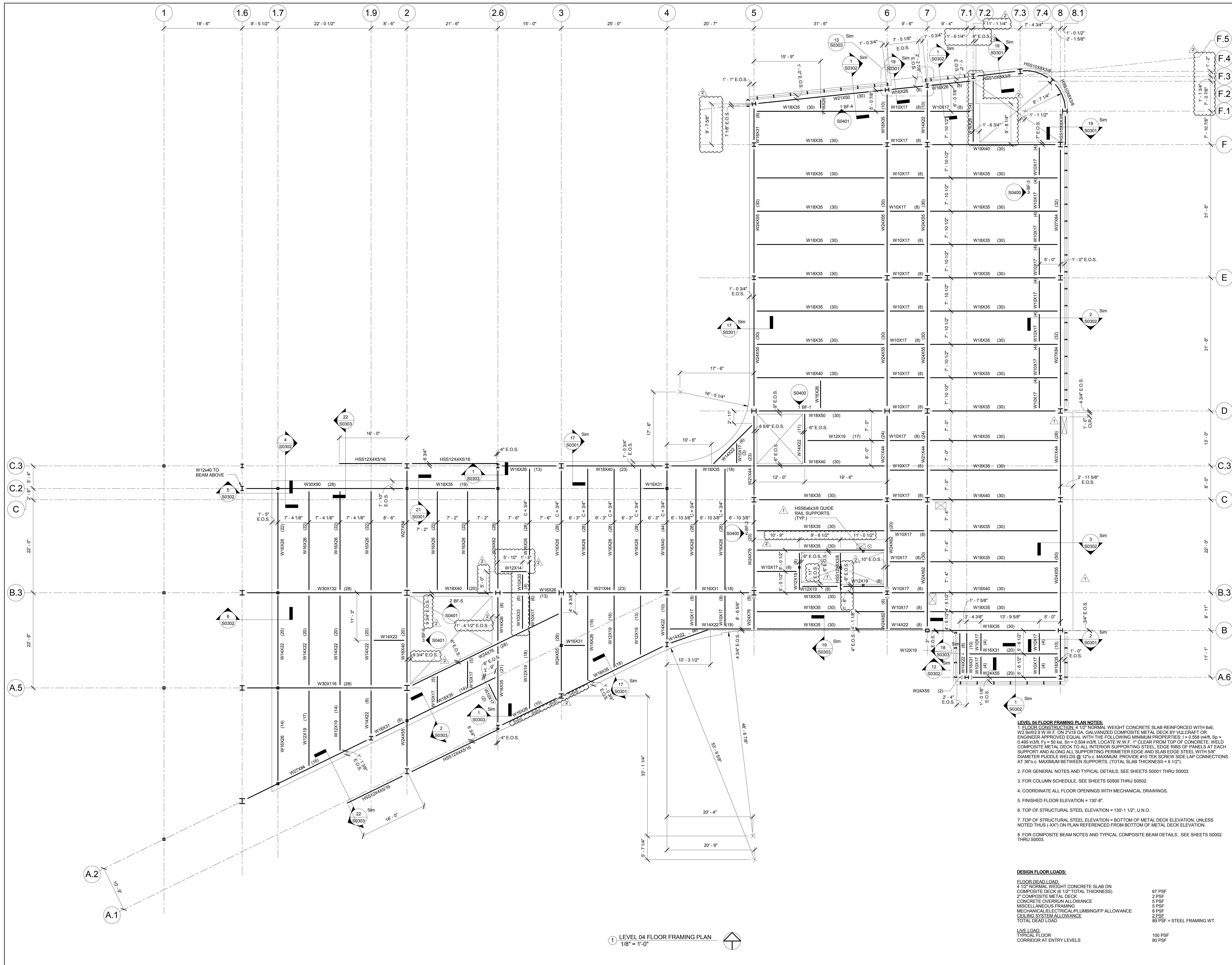
Drawing Title:

**LEVEL 04 FLOOR
FRAMING PLAN**

Project No.: 04561.01
Checked by:

S0105

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CONFORMED SET 01 JUL 2016

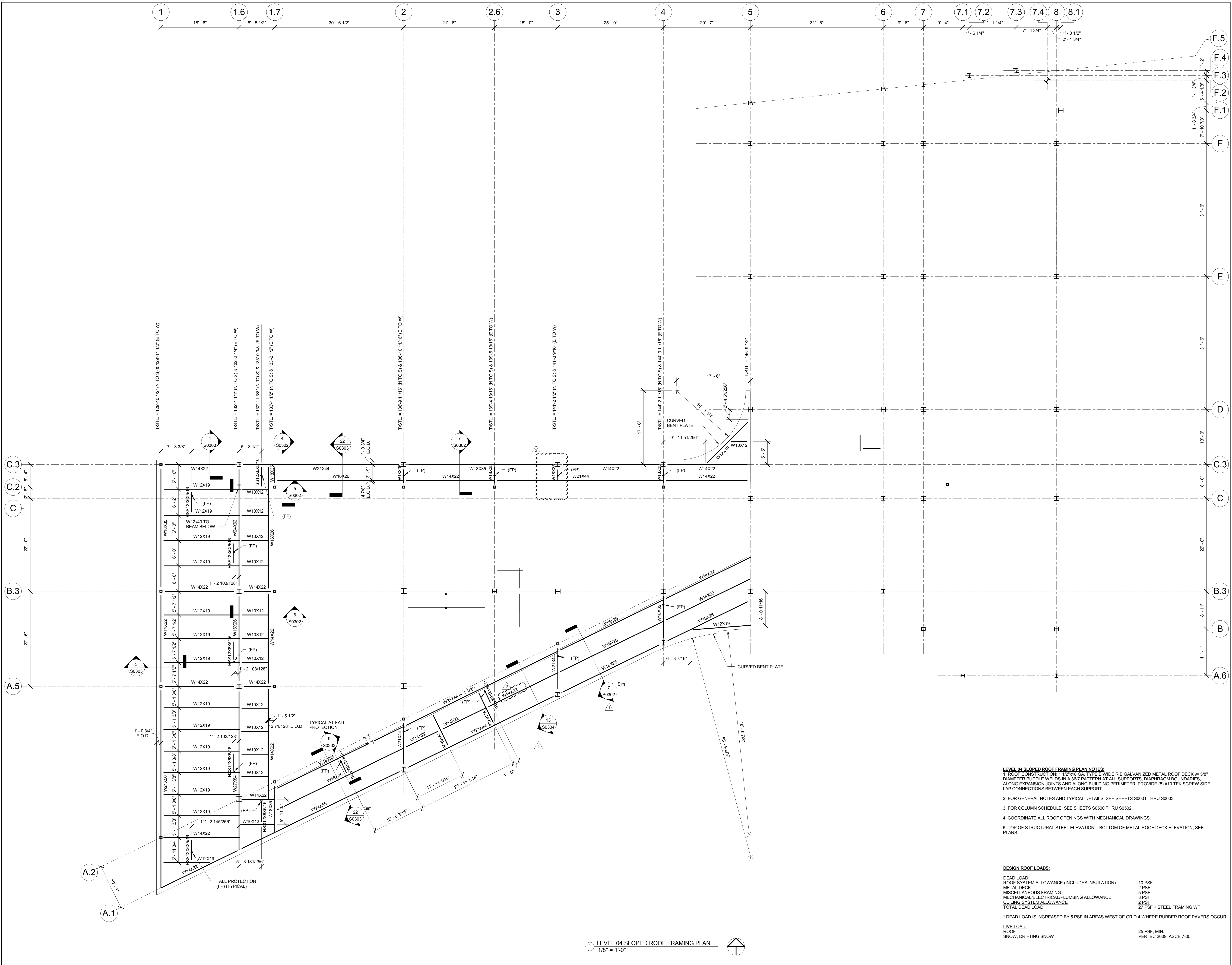
2	ADDENDUM 1-11	13 MAY 2016
1	ADDENDUM 1-7	16 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP1)	15 JAN 2016
No.	Description	Date

Drawing Title:

LEVEL 04 SLOPED ROOF
FRAMING PLAN

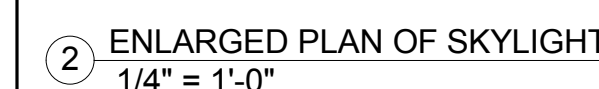
Project No.: 04561.01 Checked by:

S0106



1 LEVEL 04 SLOPED ROOF FRAMING PLAN
1/8" = 1'-0"



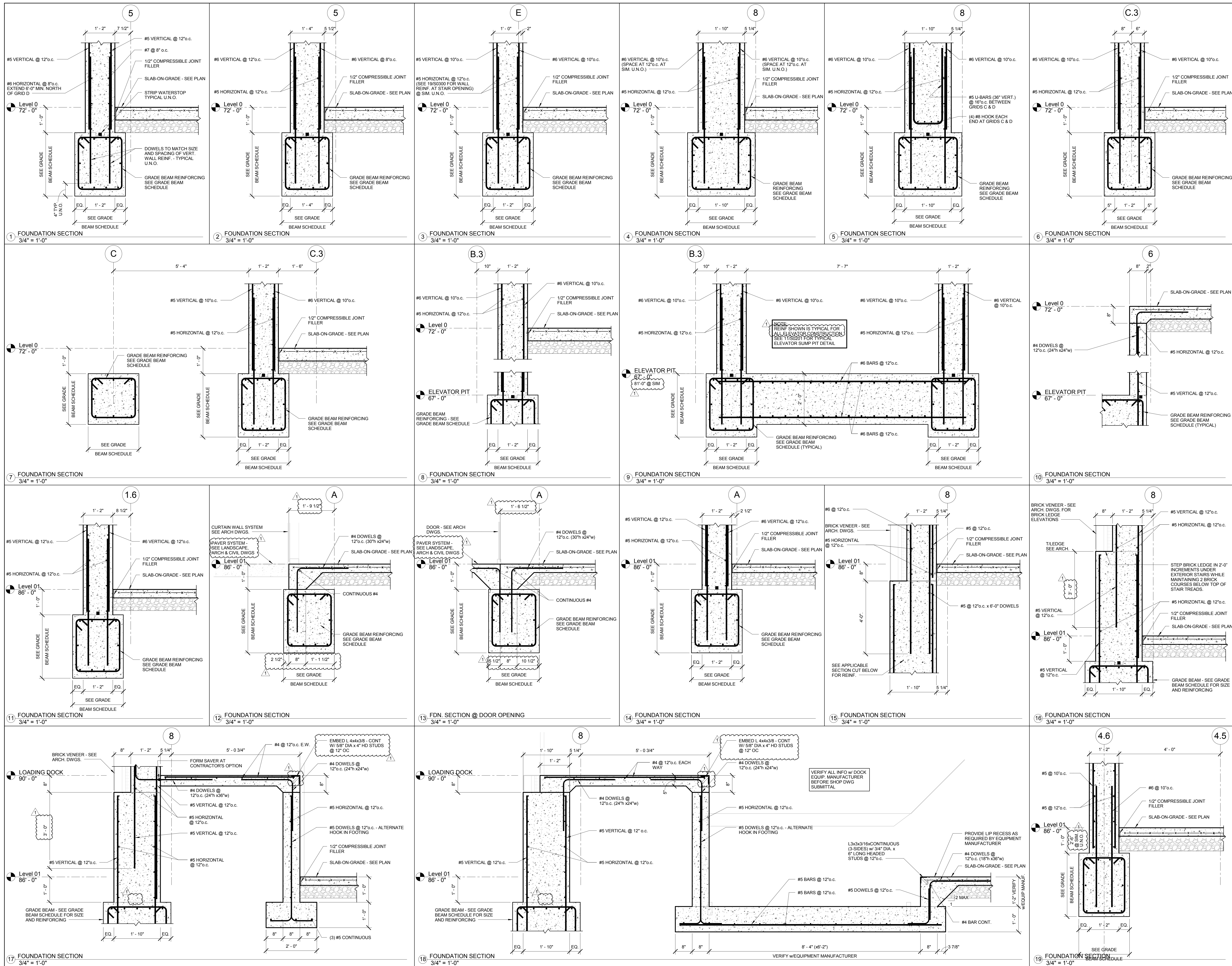


1 LEVEL 05 ROOF FRAMING PLAN
1/8" = 1'-0"



<u>LIVE LOAD:</u>	
ROOF	25 PSF, MIN.
SNOW, DRIFTING SNOW	PER IBC 2009, ASCE 7-05

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CONFORMED SET 01 JUL 2016

1. ADDENDUM 1-1 29 JAN 2016
- ISSUED FOR CONSTRUCTION (BPT) 15 JAN 2016
No. Description Date

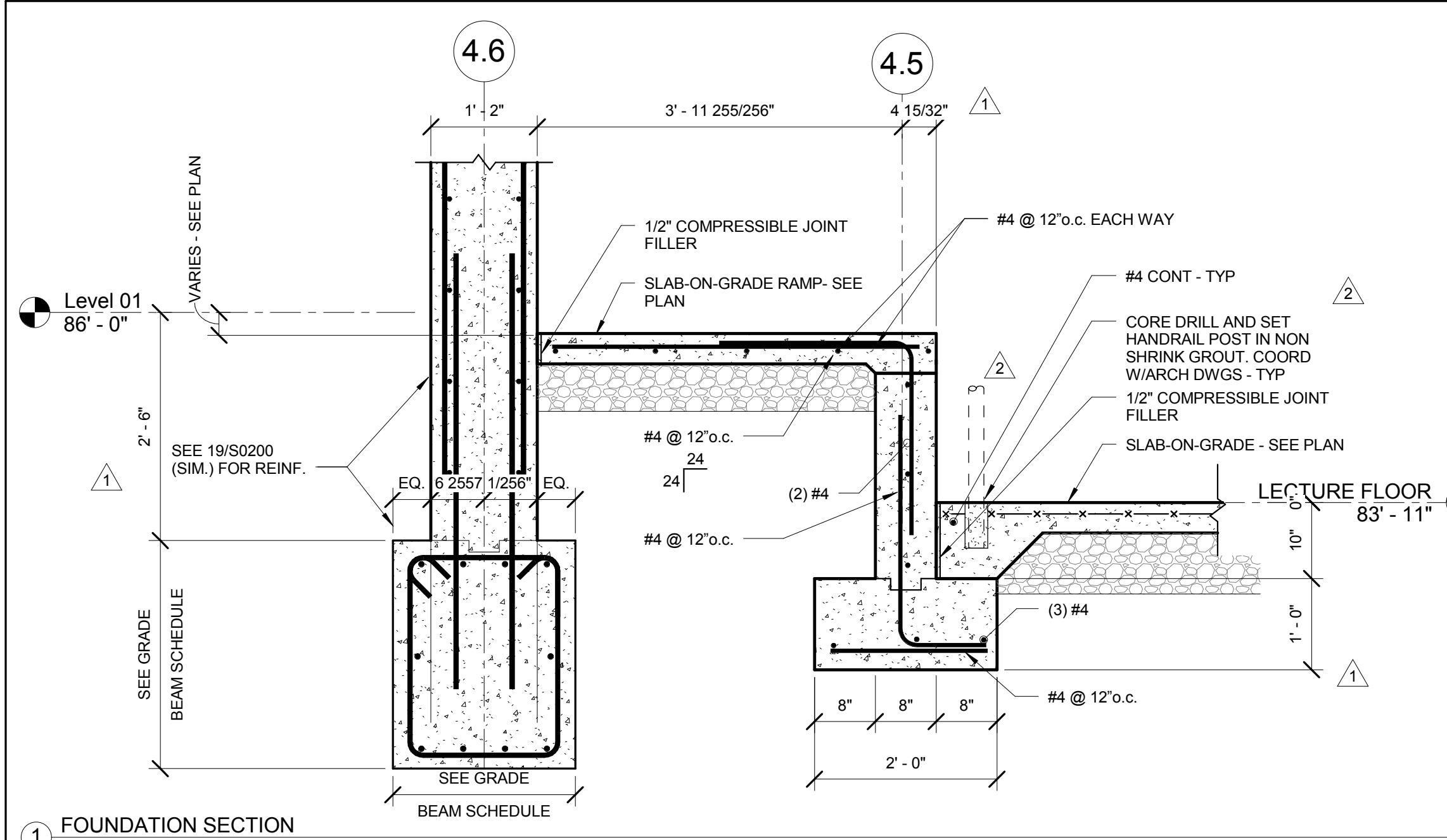
Drawing Title:

**FOUNDATION SECTIONS
AND DETAILS**

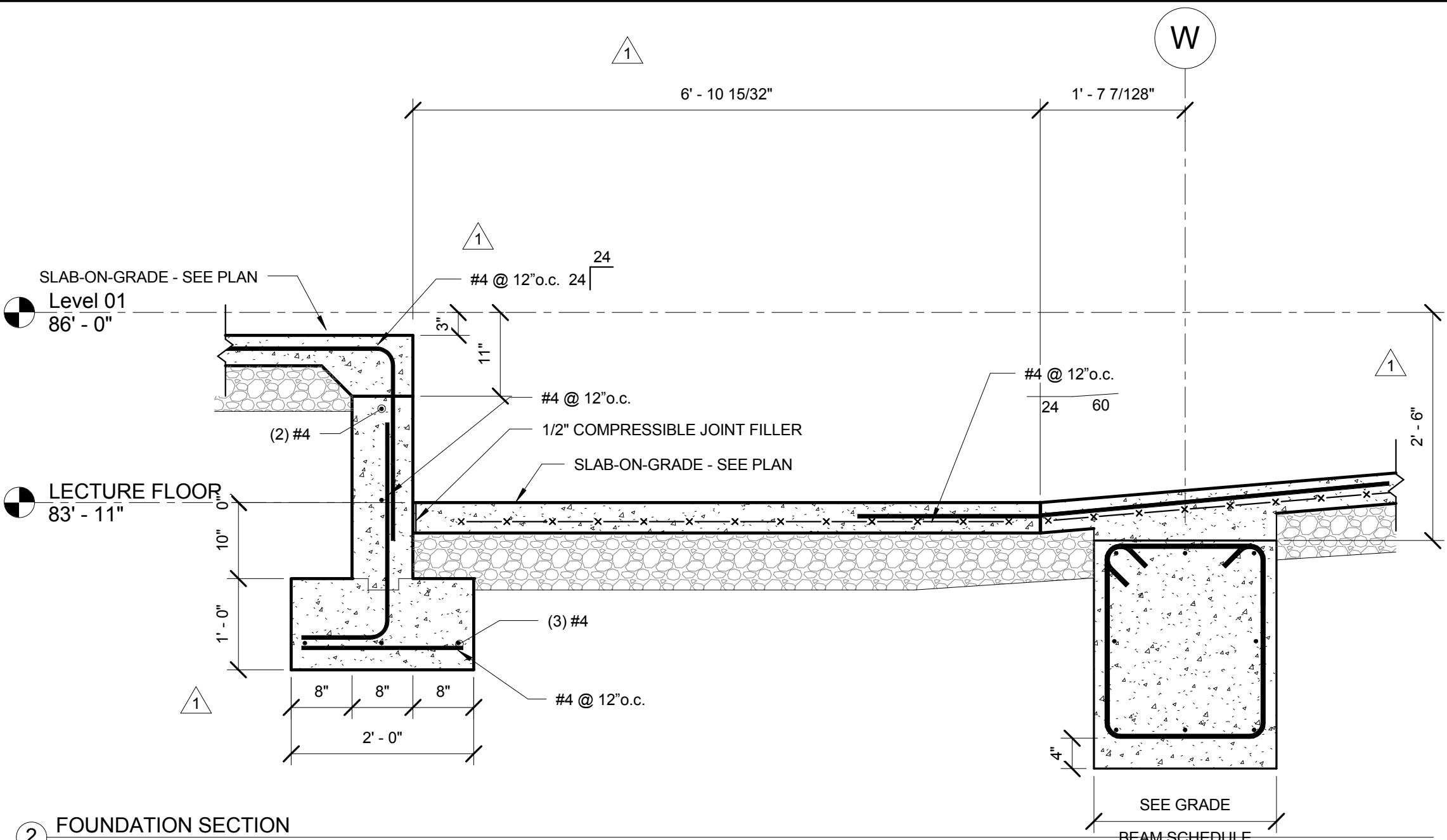
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Checked by:

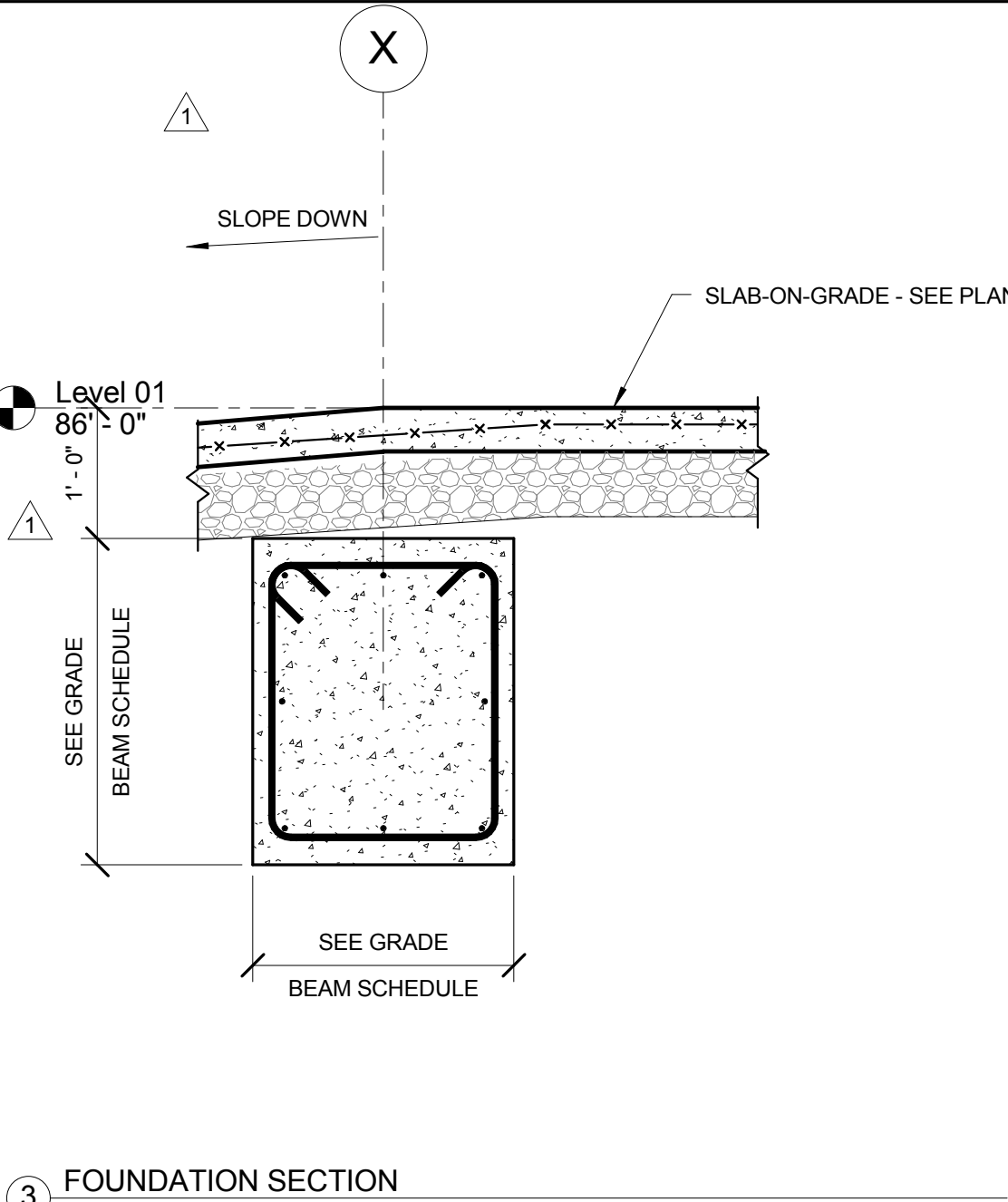
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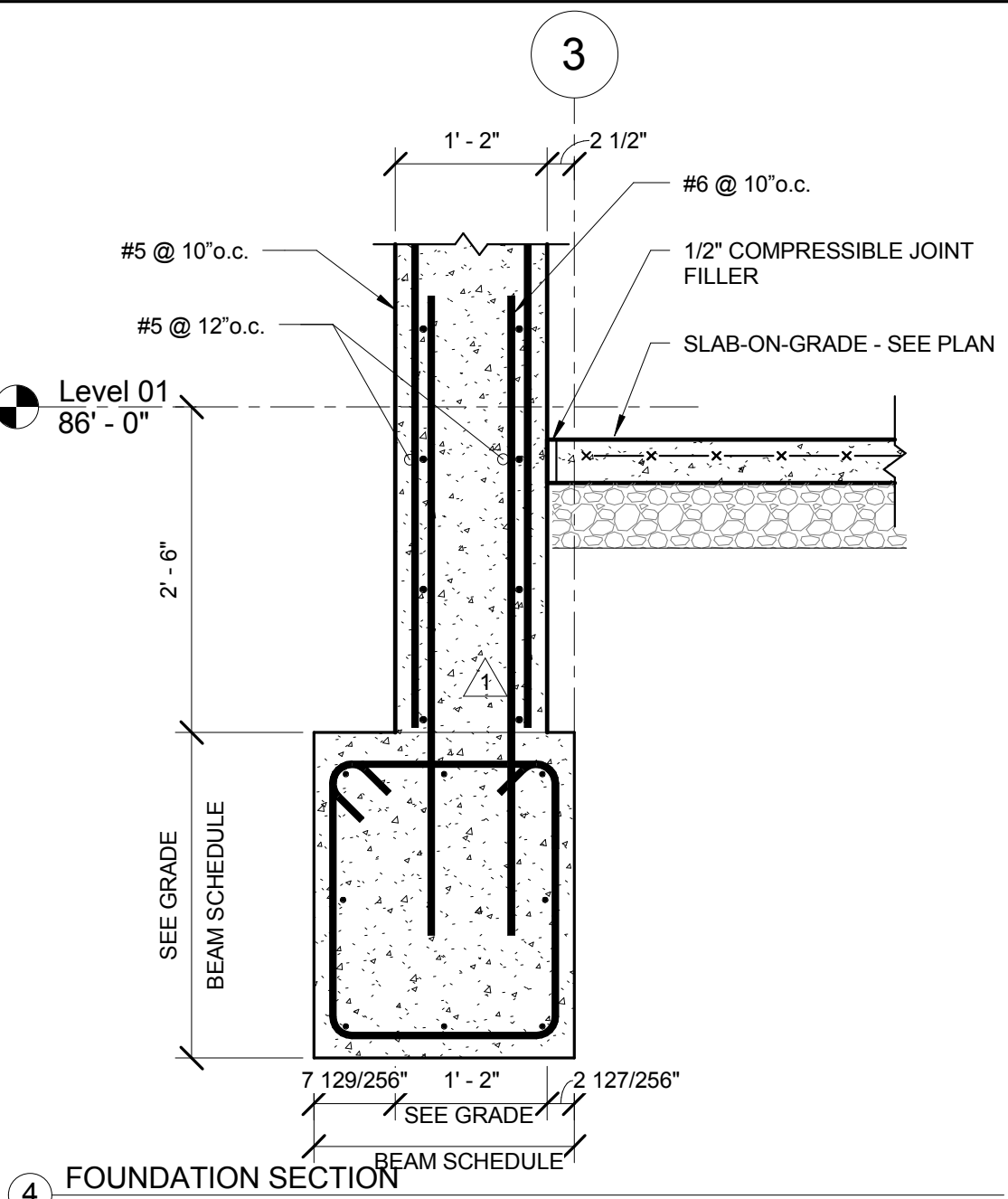
1 FOUNDATION SECTION
3/4" = 1'-0"



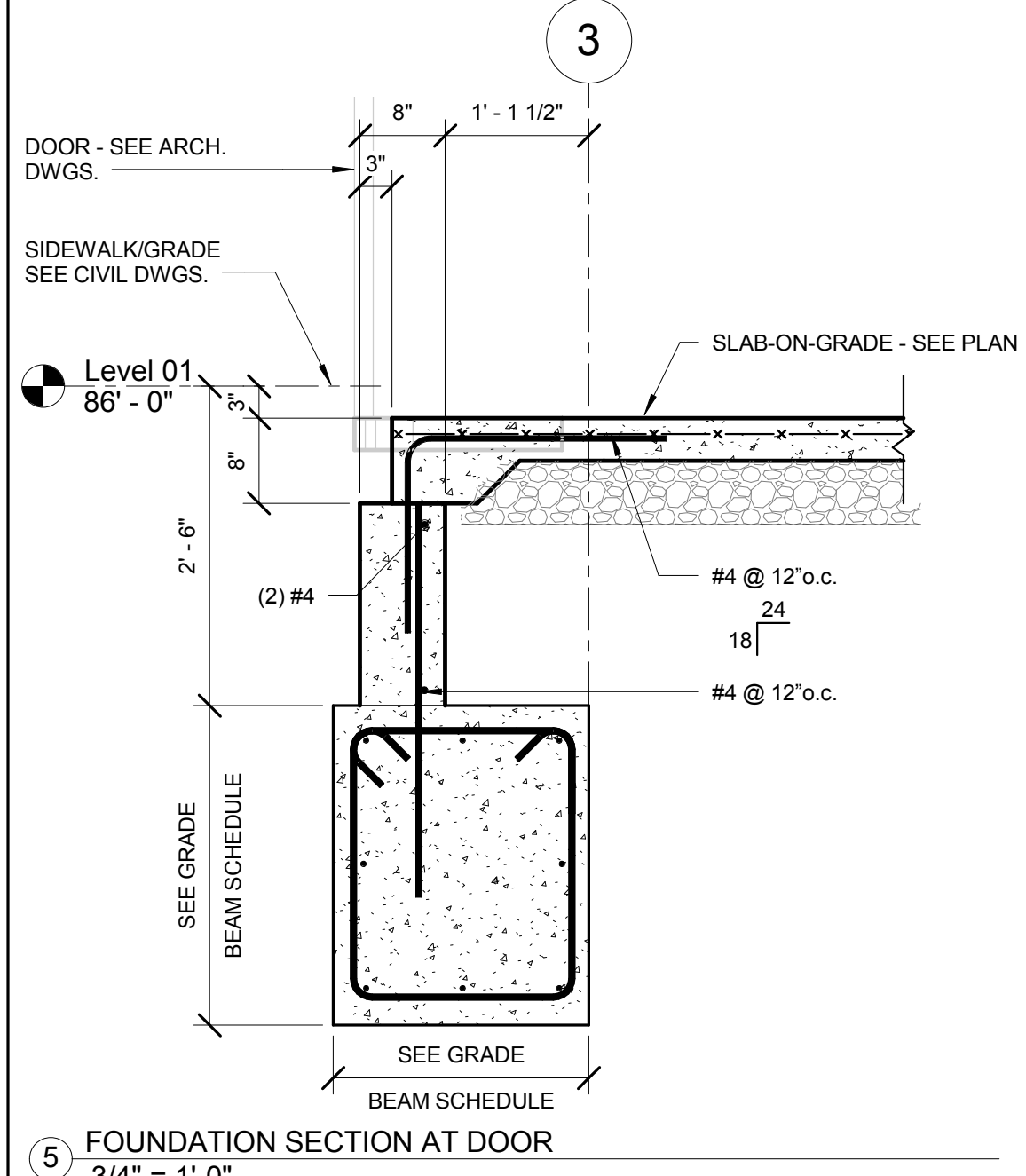
2 FOUNDATION SECTION
3/4" = 1'-0"



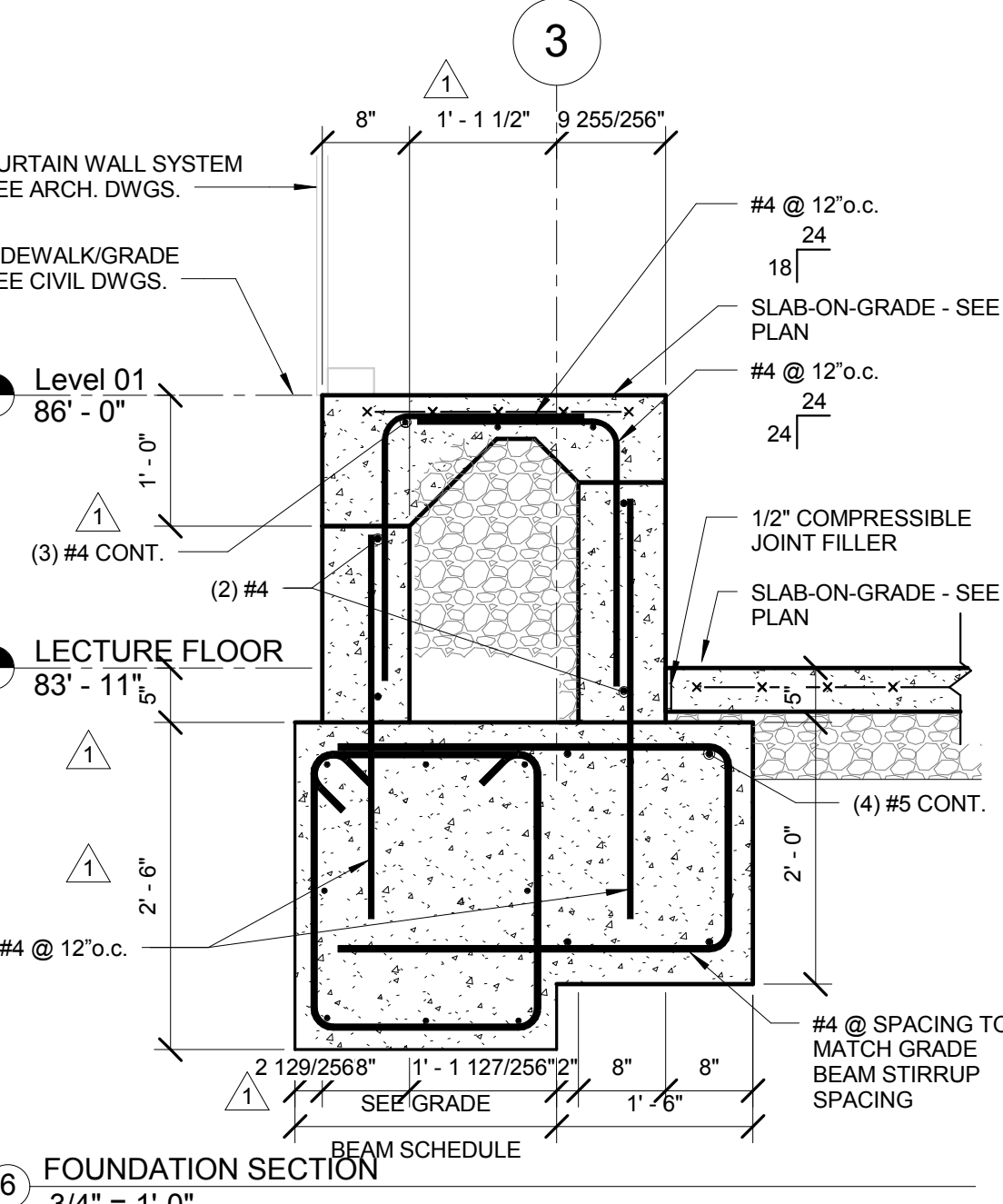
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3/4" = 1'-0"



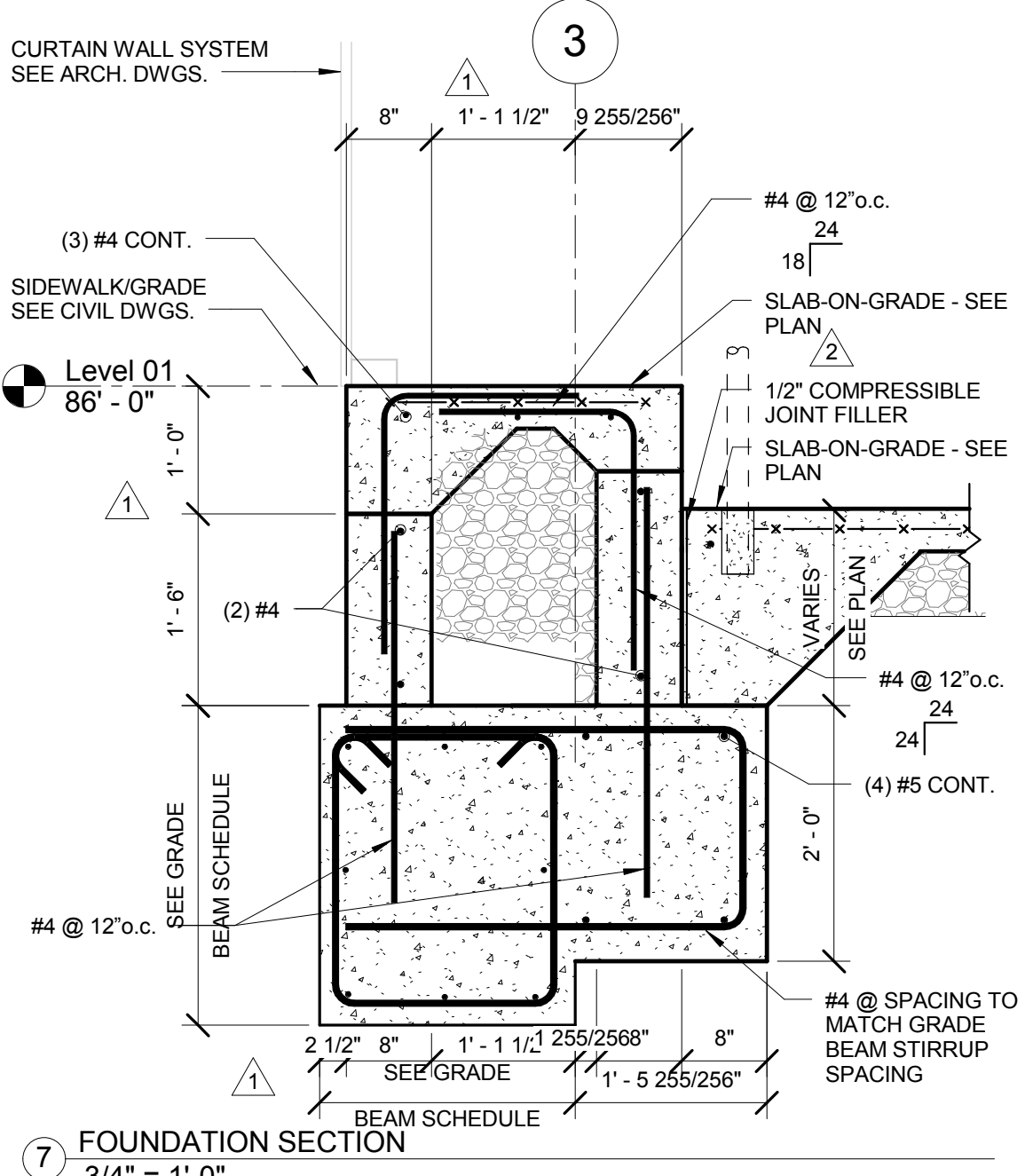
4 FOUNDATION SECTION
3/4" = 1'-0"



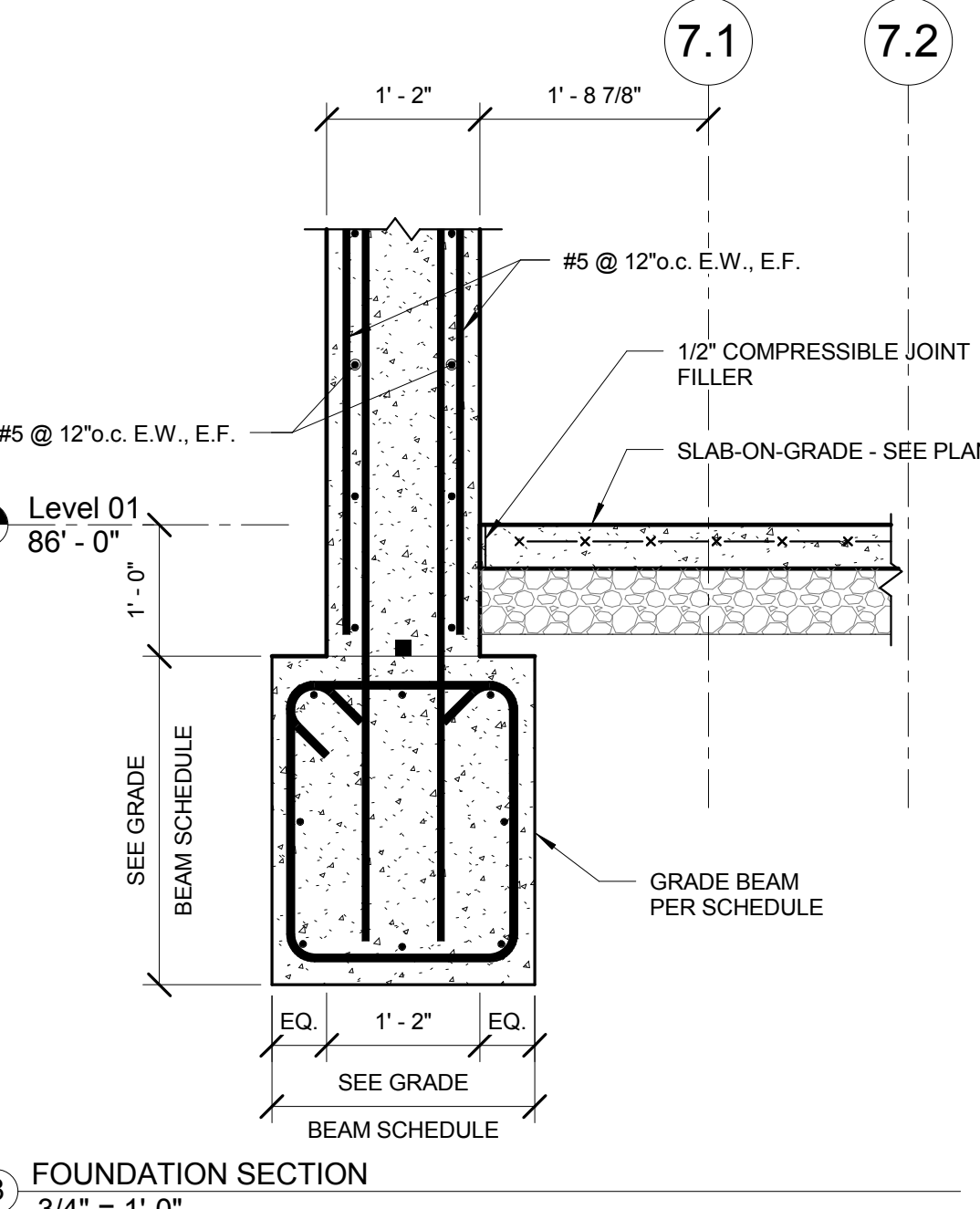
5 FOUNDATION SECTION AT DOOR
3/4" = 1'-0"



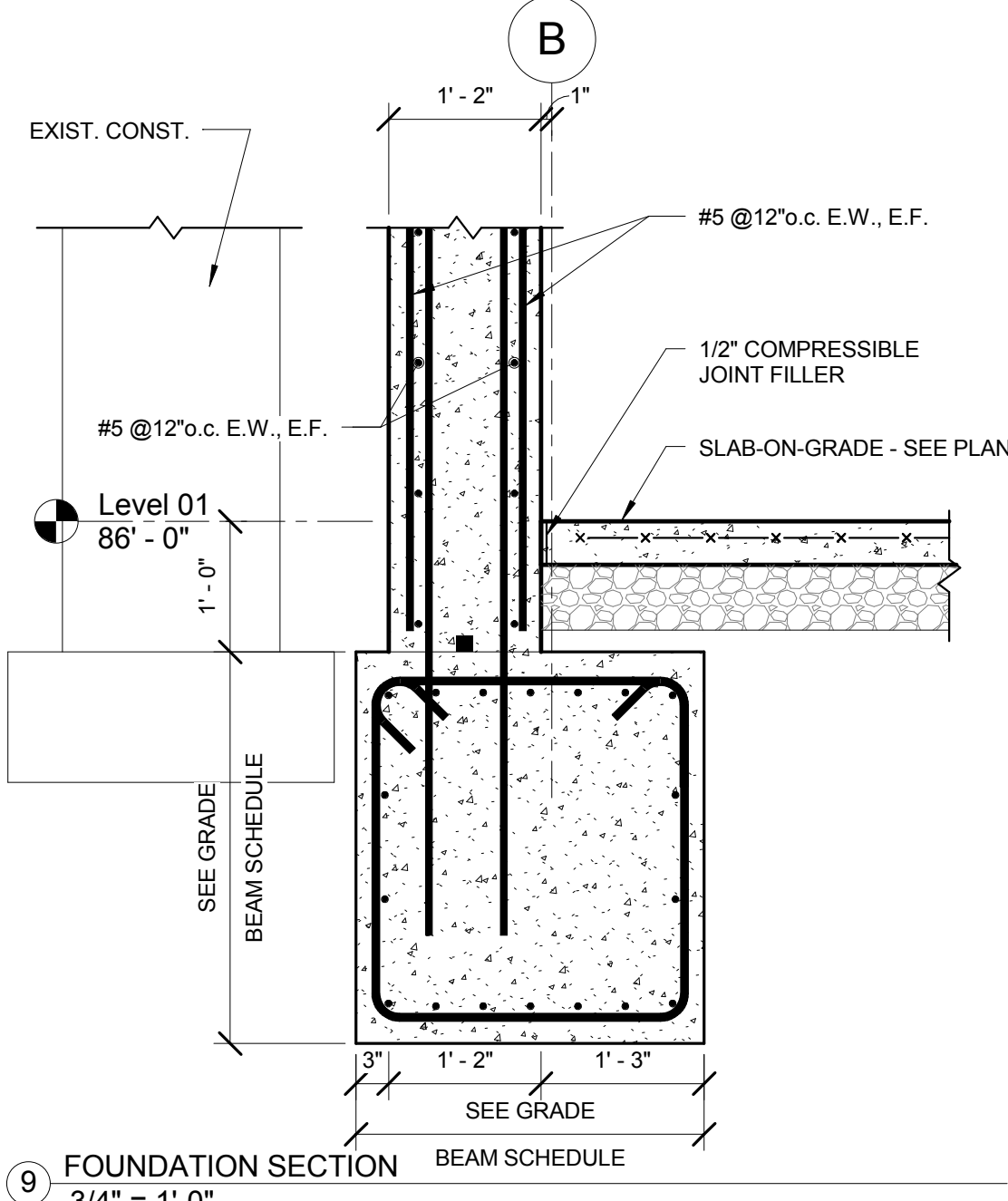
6 FOUNDATION SECTION
3/4" = 1'-0"



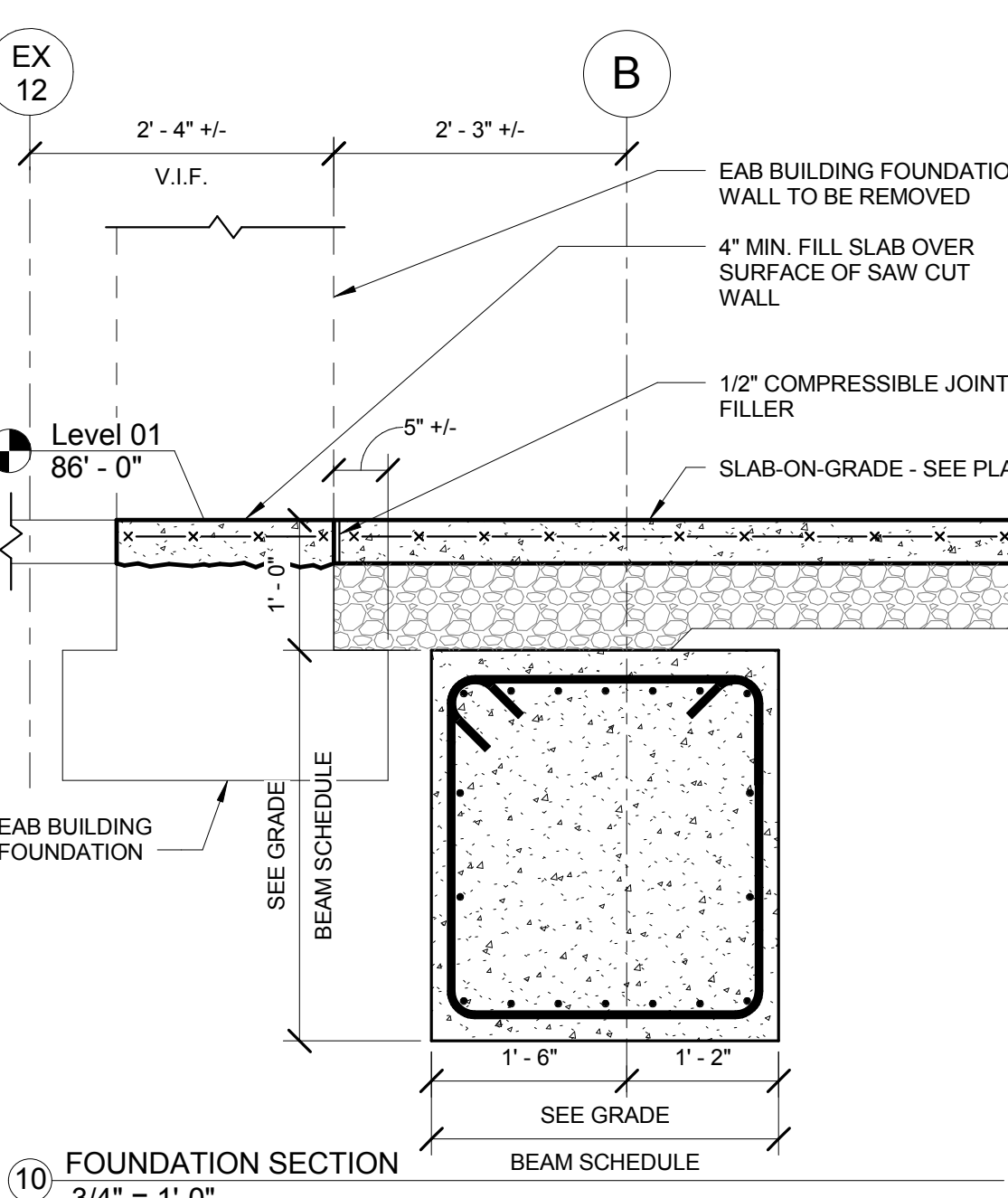
7 FOUNDATION SECTION
3/4" = 1'-0"



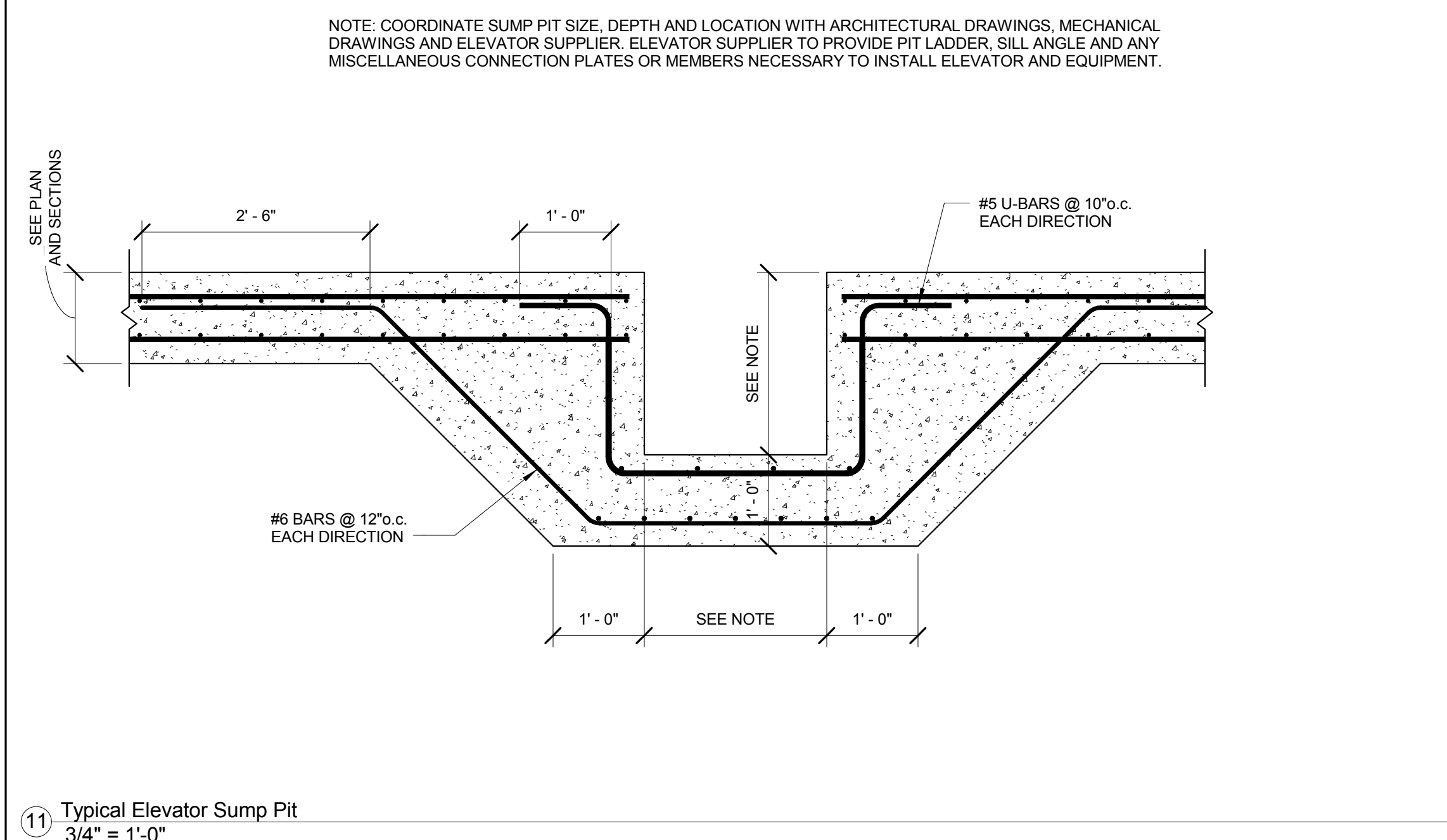
8 FOUNDATION SECTION
3/4" = 1'-0"



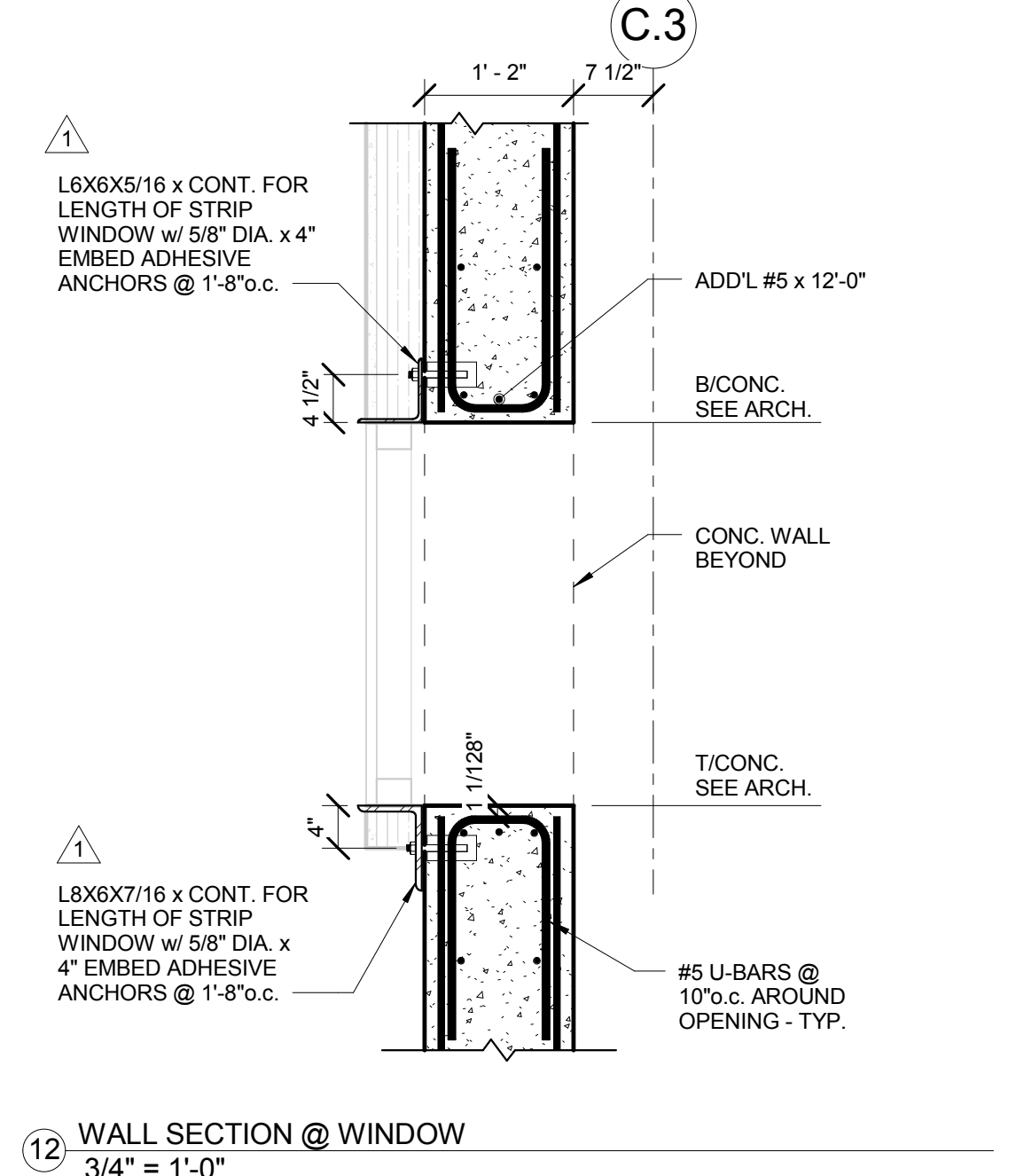
9 FOUNDATION SECTION
3/4" = 1'-0"



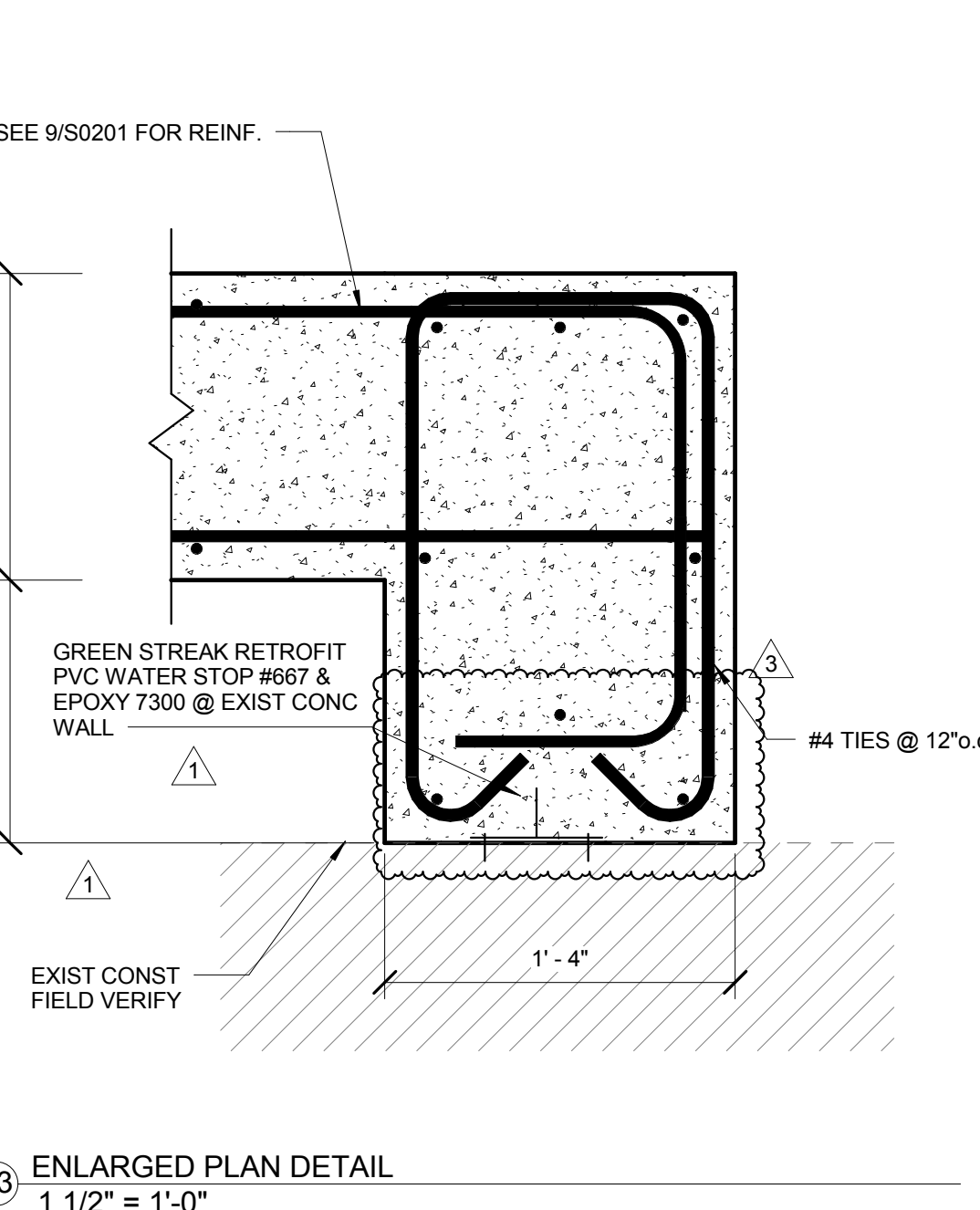
10 FOUNDATION SECTION
3/4" = 1'-0"



11 Typical Elevator Sump Pit
3/4" = 1'-0"



12 WALL SECTION @ WINDOW
3/4" = 1'-0"



13 ENLARGED PLAN DETAIL
1 1/2" = 1'-0"



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CONFORMED SET 01 JUL 2016

3	ADDENDUM 1-11	13 MAY 2016
2	ADDENDUM 1-7	16 MAR 2016
1	ADDENDUM 1-1	29 JAN 2016
-	ISSUED FOR CONSTRUCTION (BP1)	15 JAN 2016
No.	Description	Date

Drawing Title:

**FOUNDATION SECTIONS
AND DETAILS**

Project No.: 04561.01 Checked by:

S0201



CONFORMED SET 01 JUL 2016

3	ADDENDUM 1-7	16 MAR 2016
2	ADDENDUM 1-2	01 FEB 2016
1	ADDENDUM 1-1	29 JAN 2016
-	ISSUED FOR CONSTRUCTION (BPT)	15 JAN 2016
No.	Description	Date

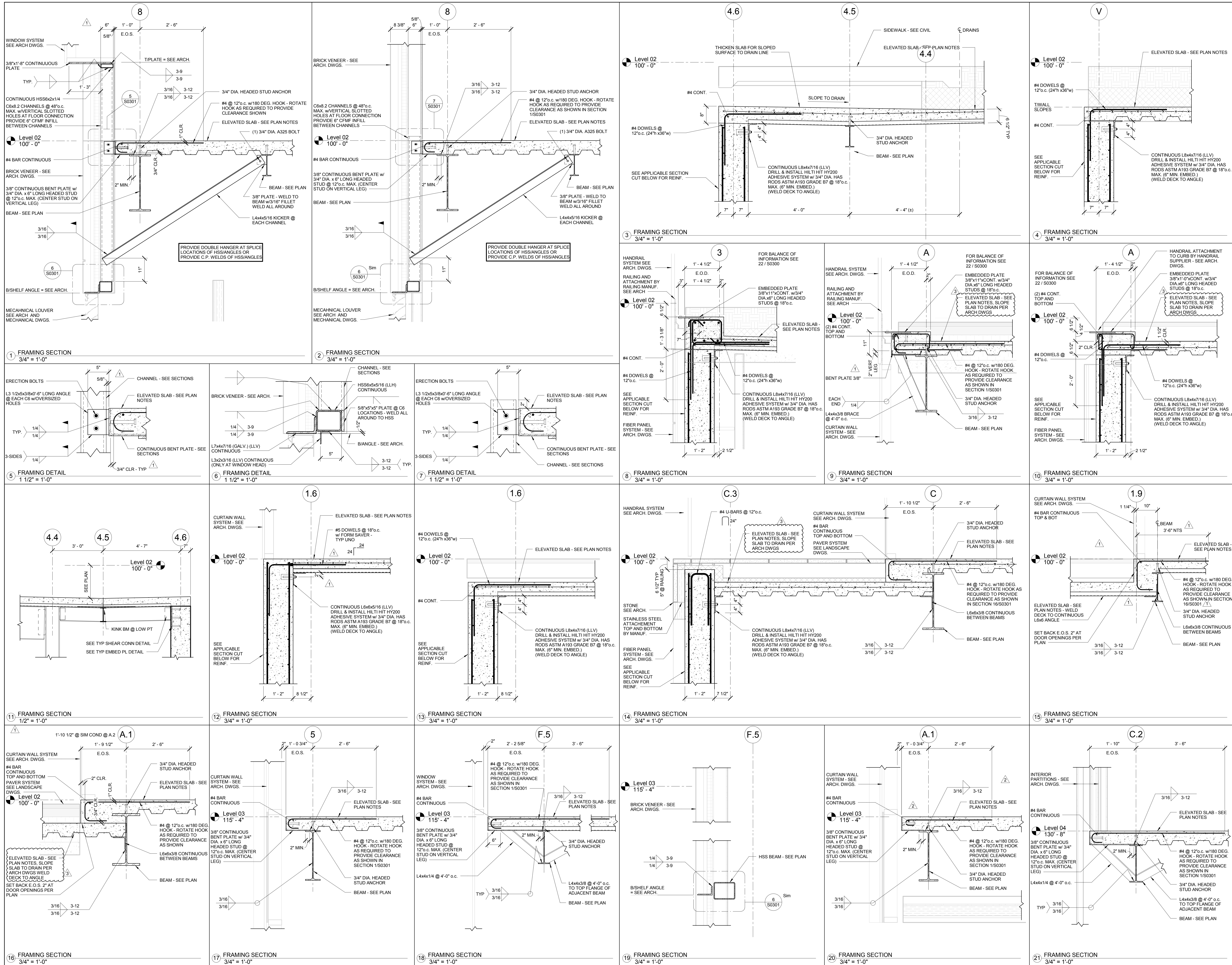
Drawing Title:

**FRAMING SECTIONS AND
DETAILS**

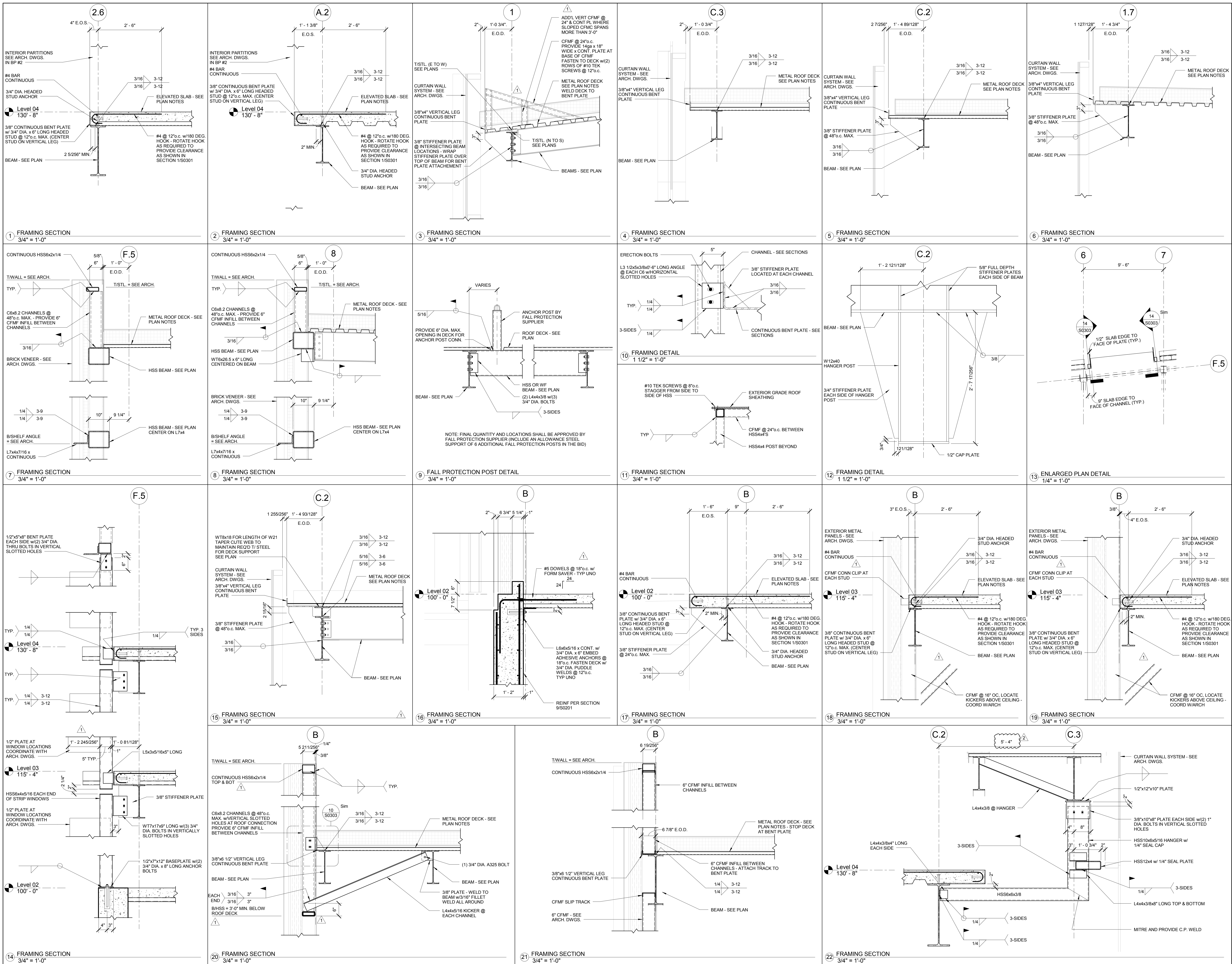
Project No.: 04561.01

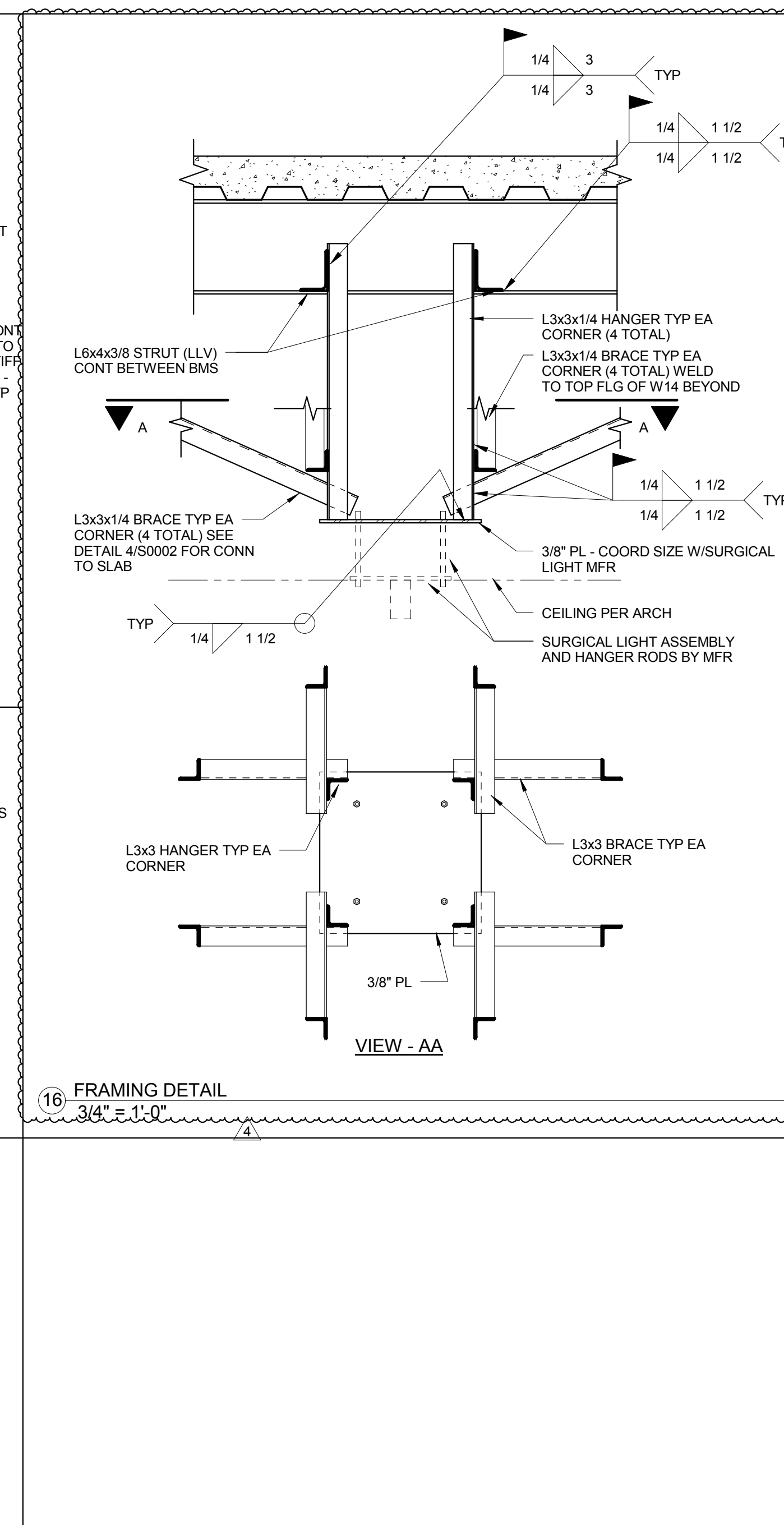
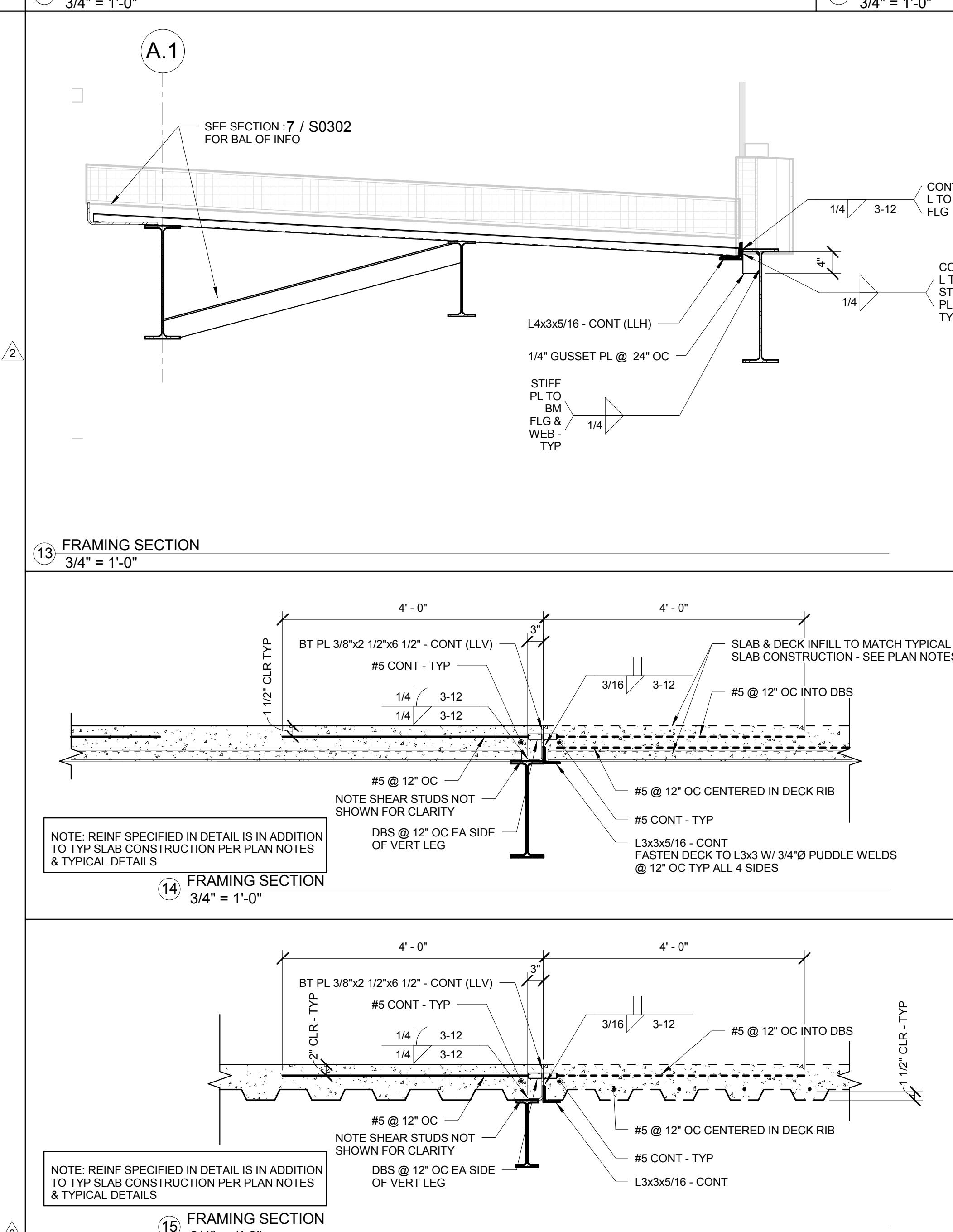
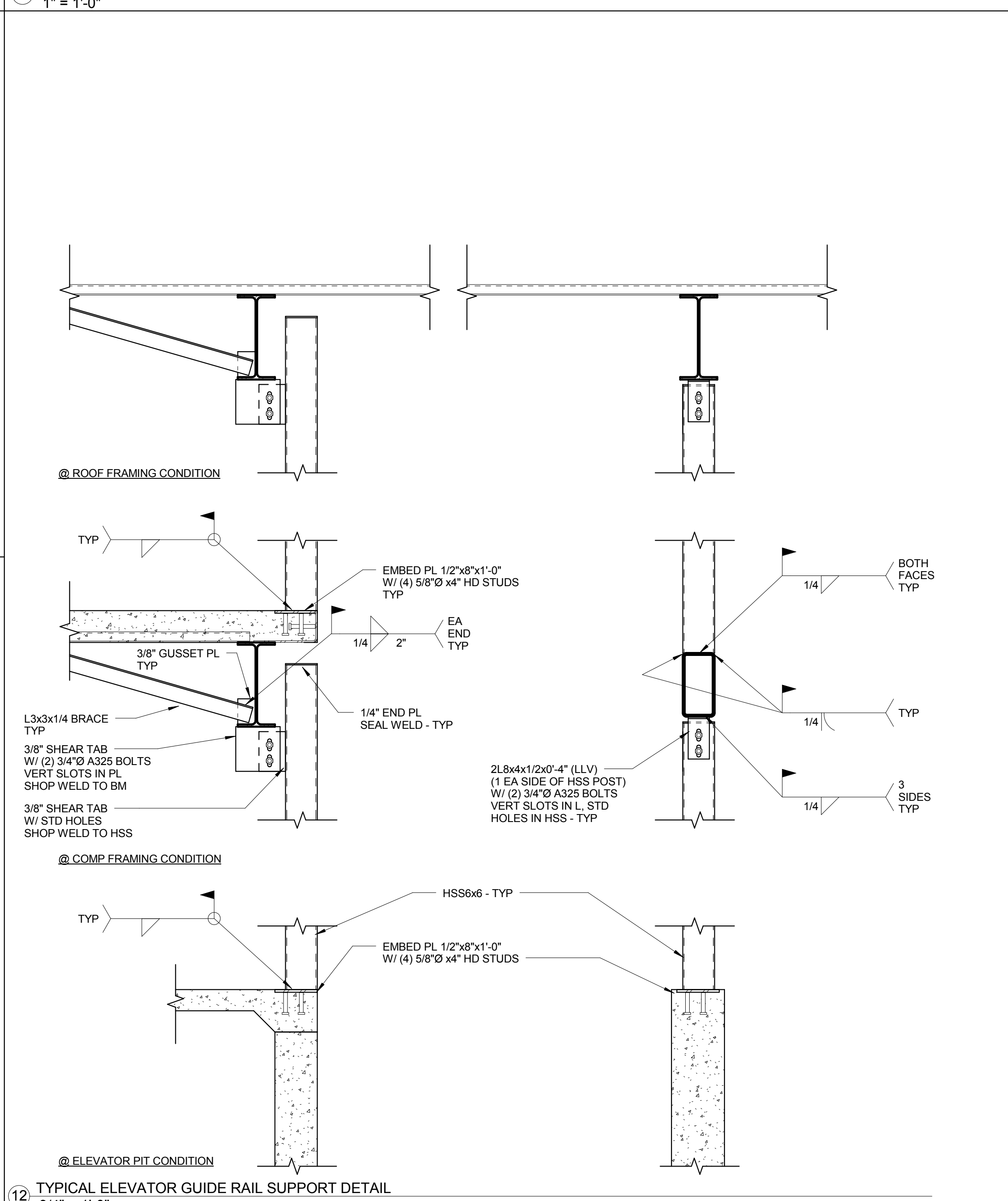
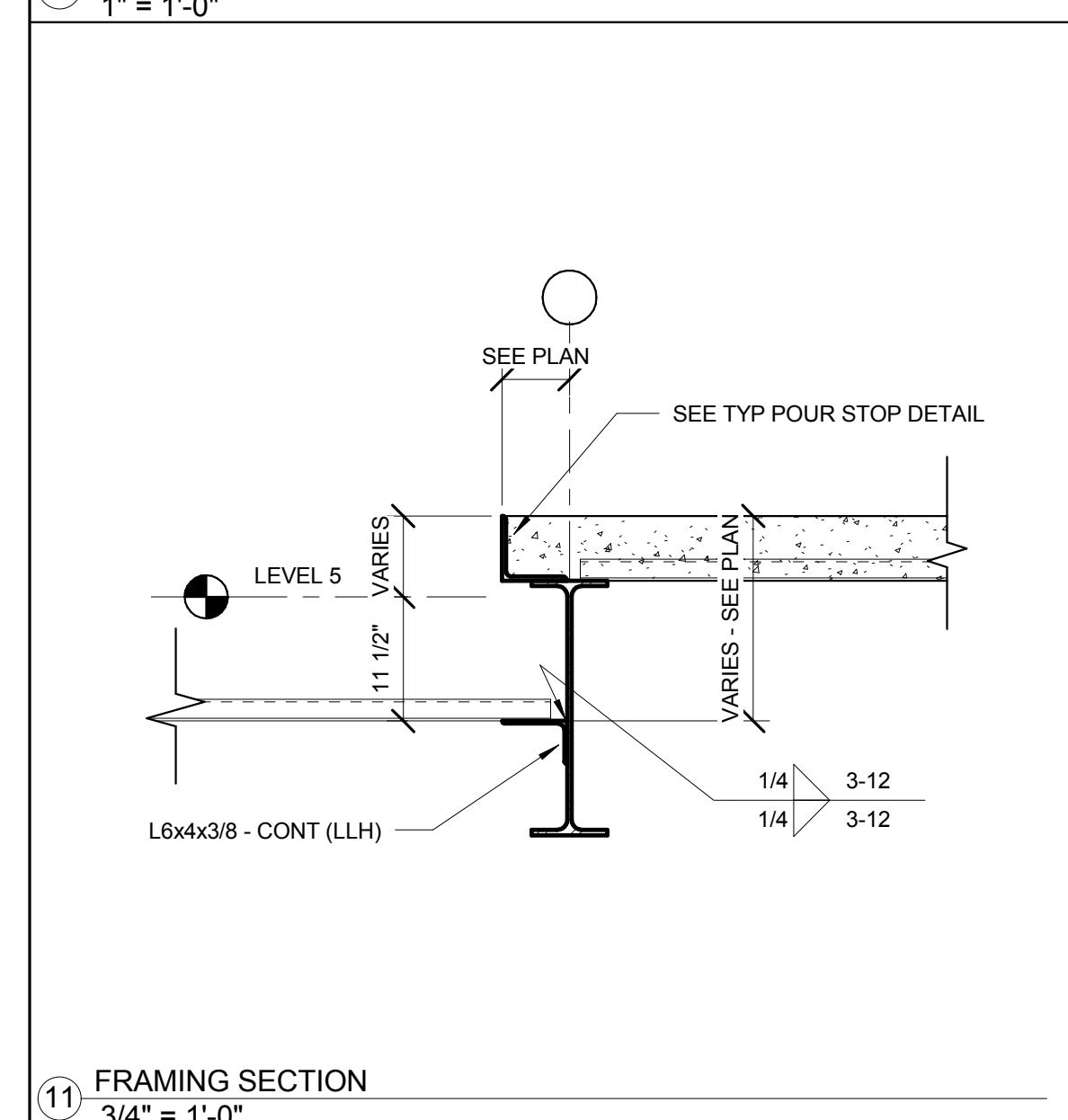
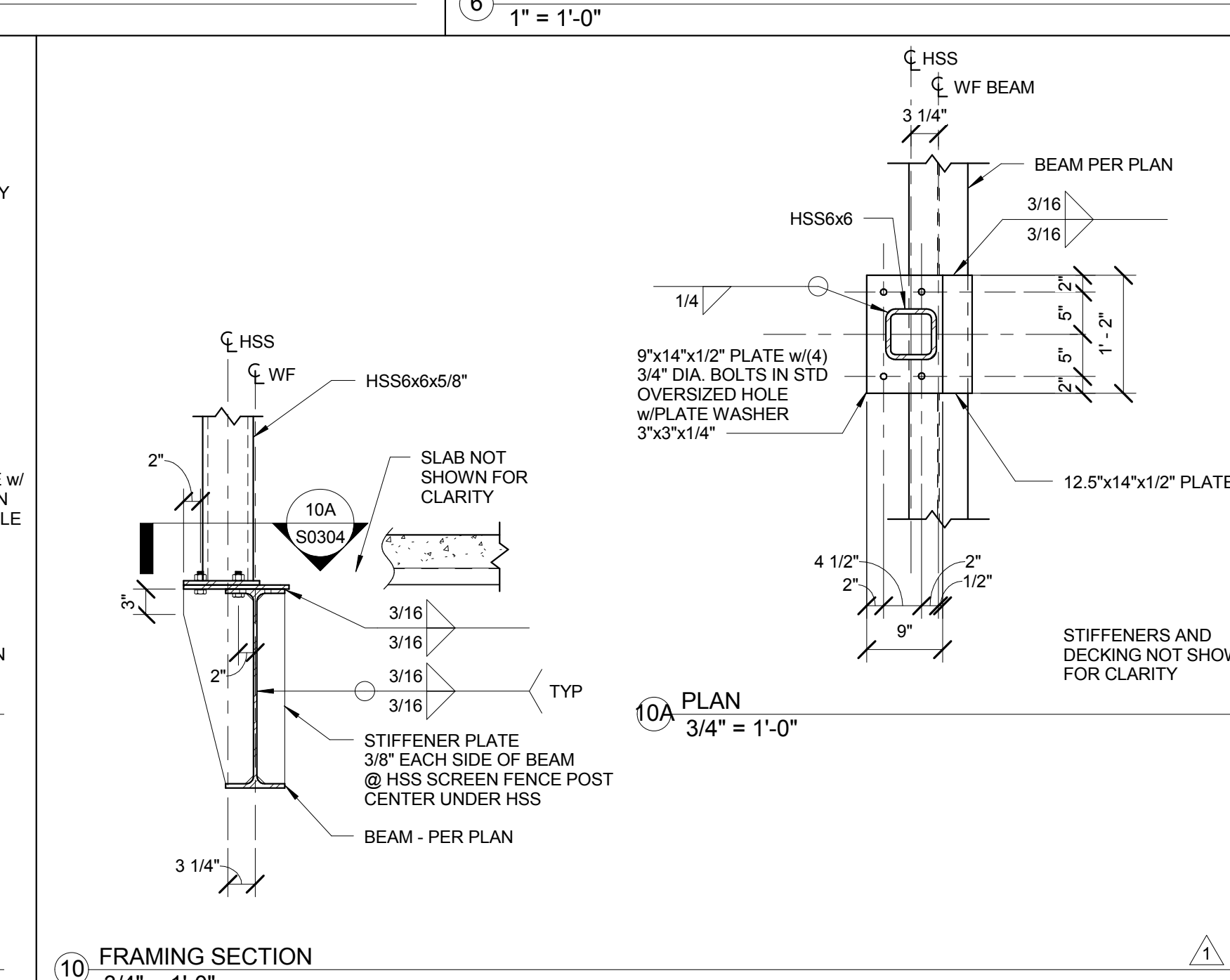
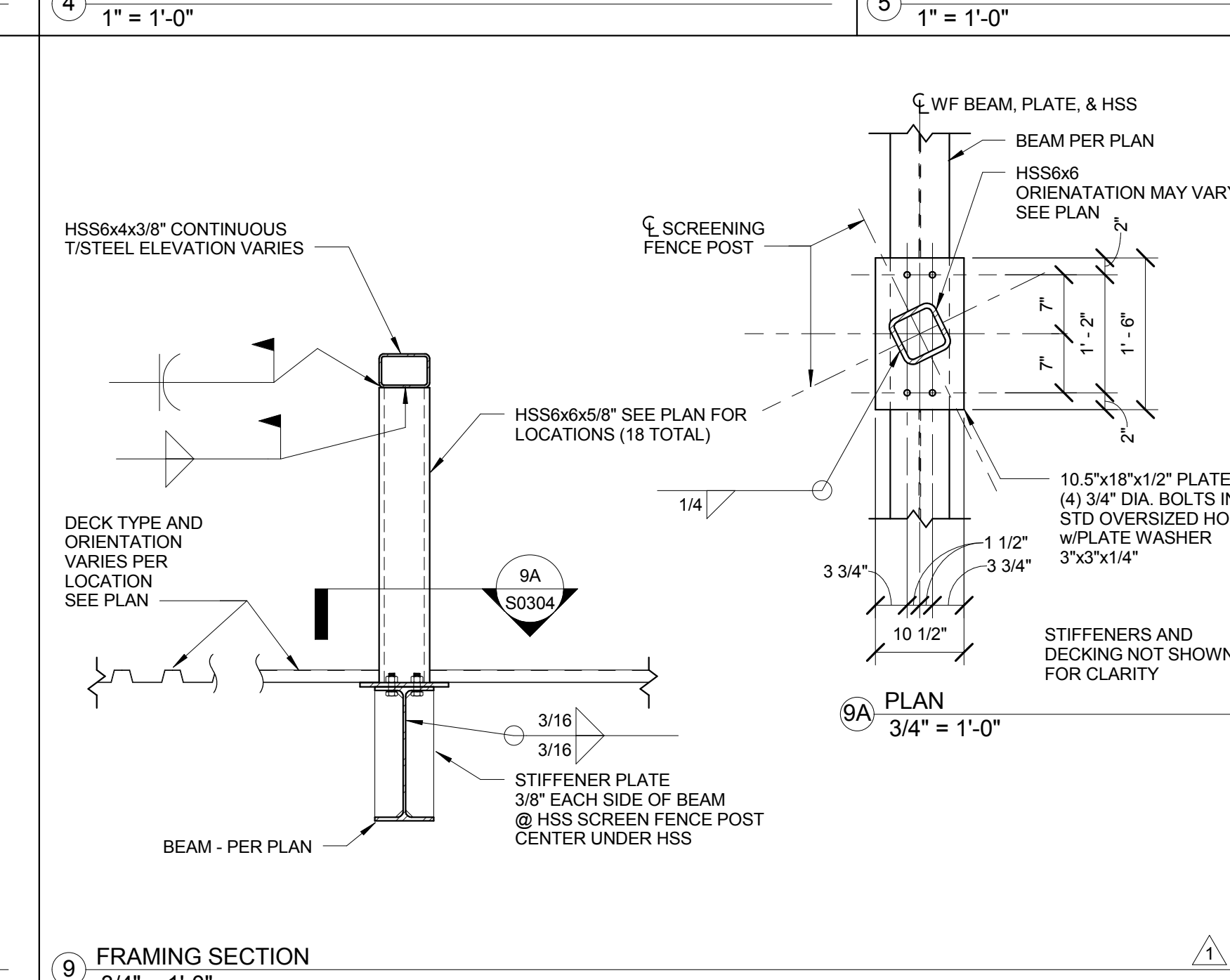
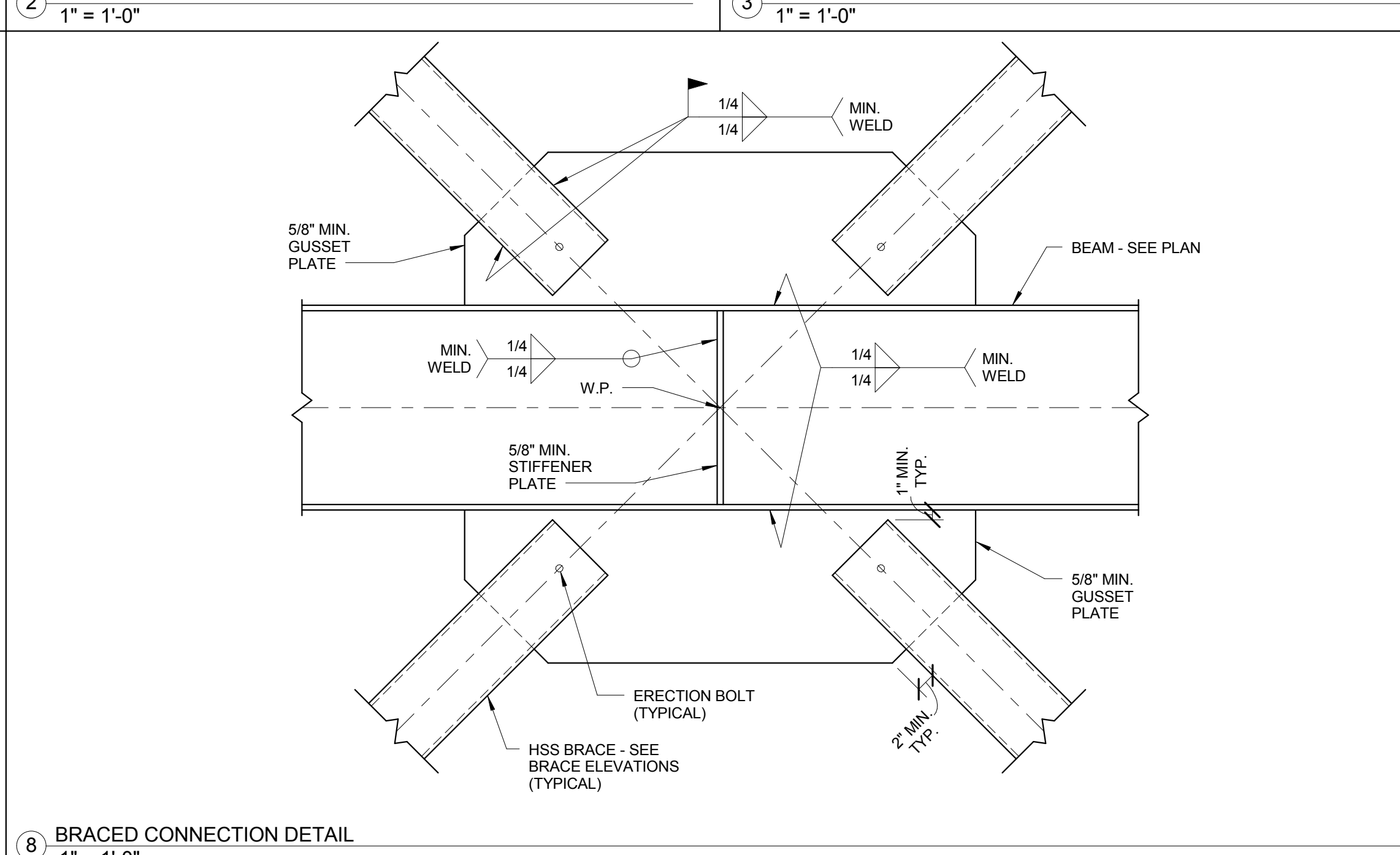
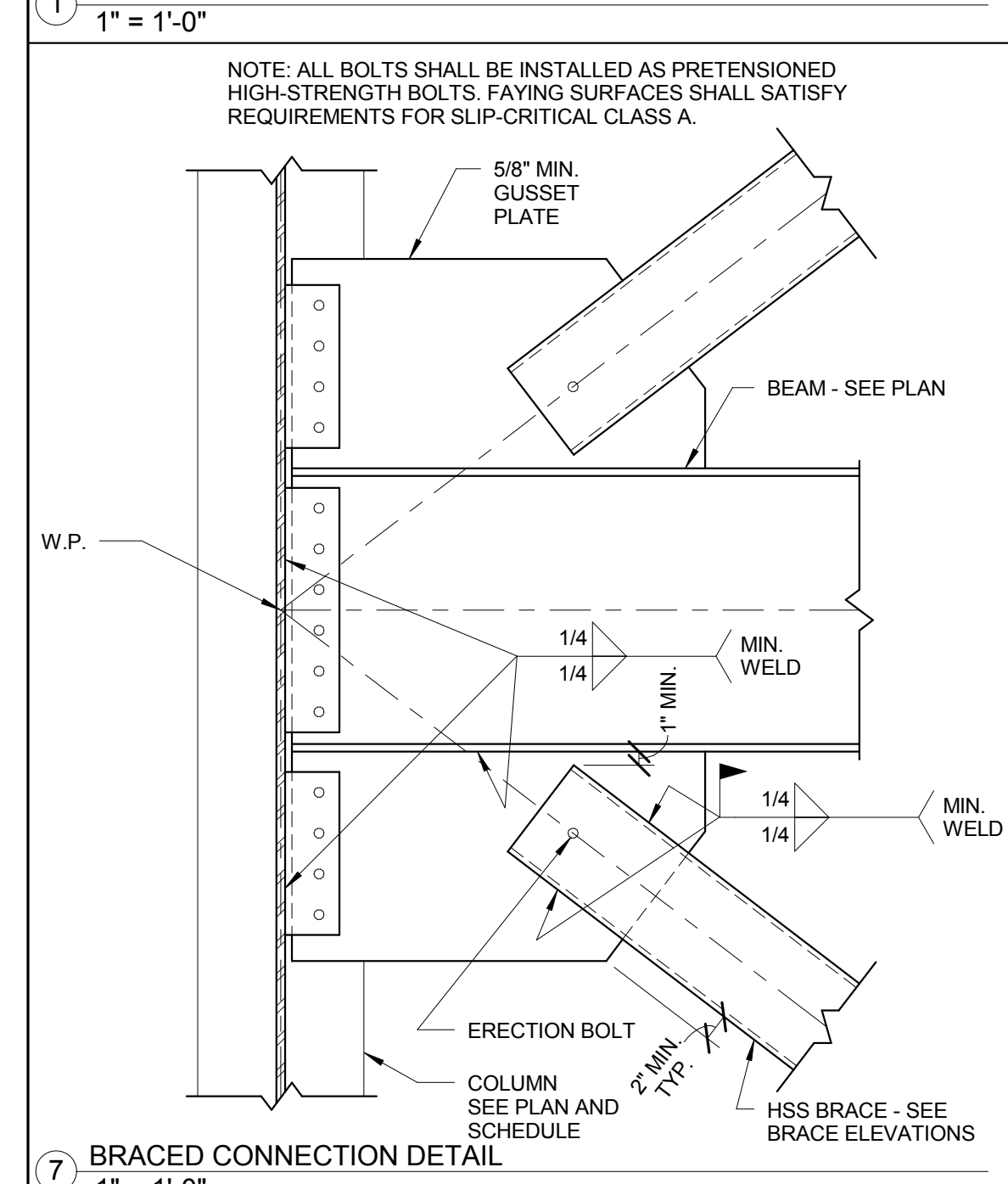
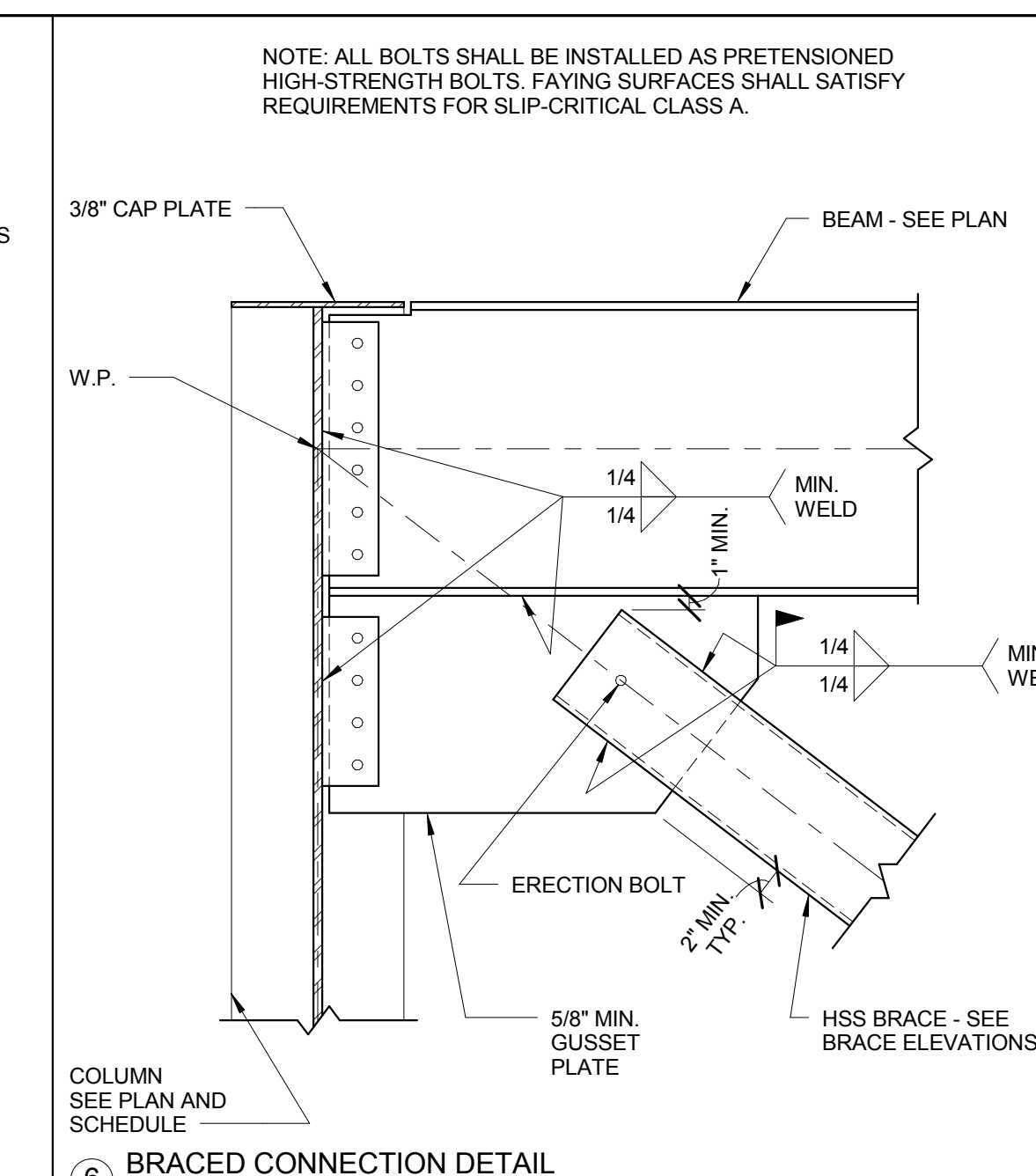
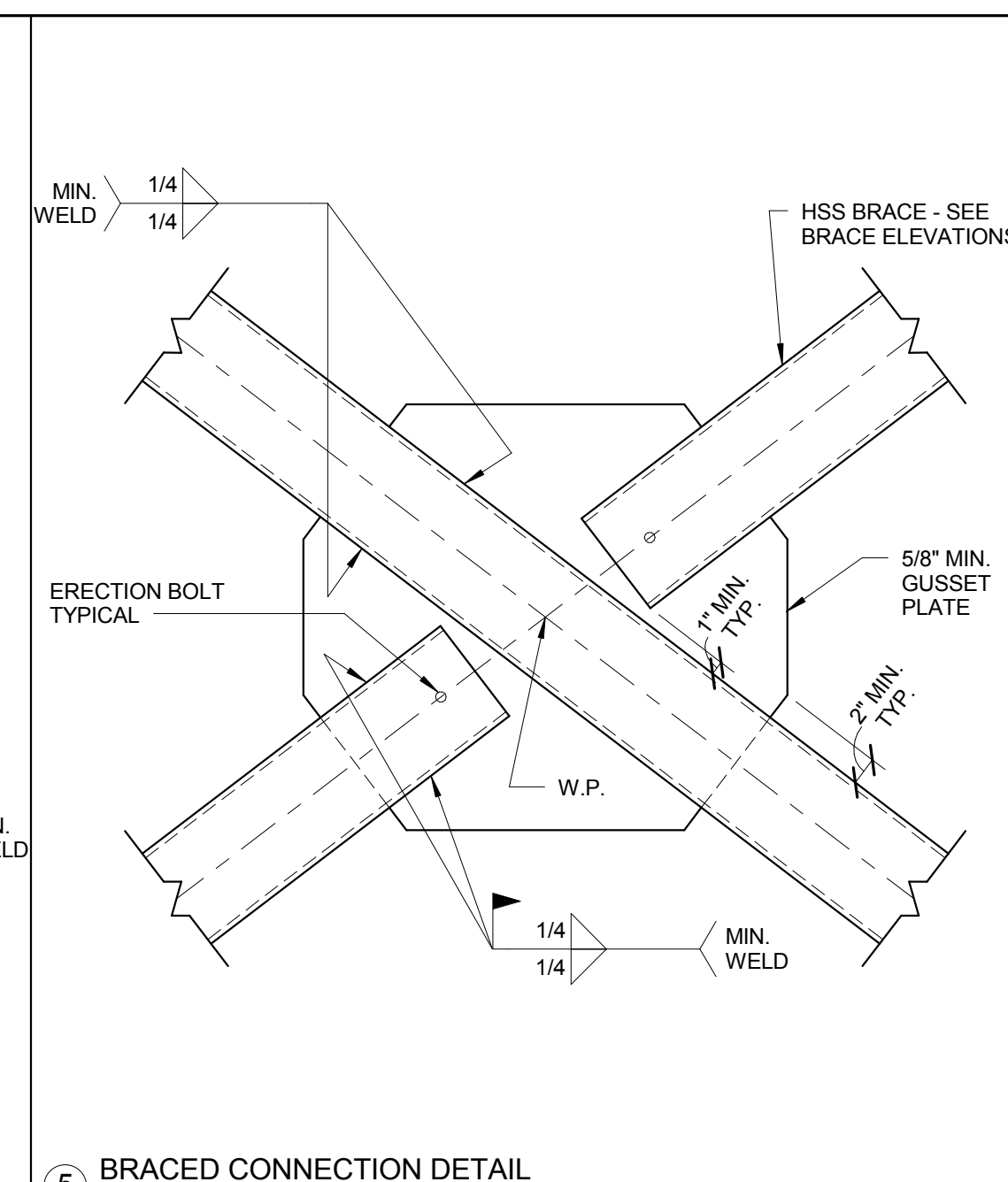
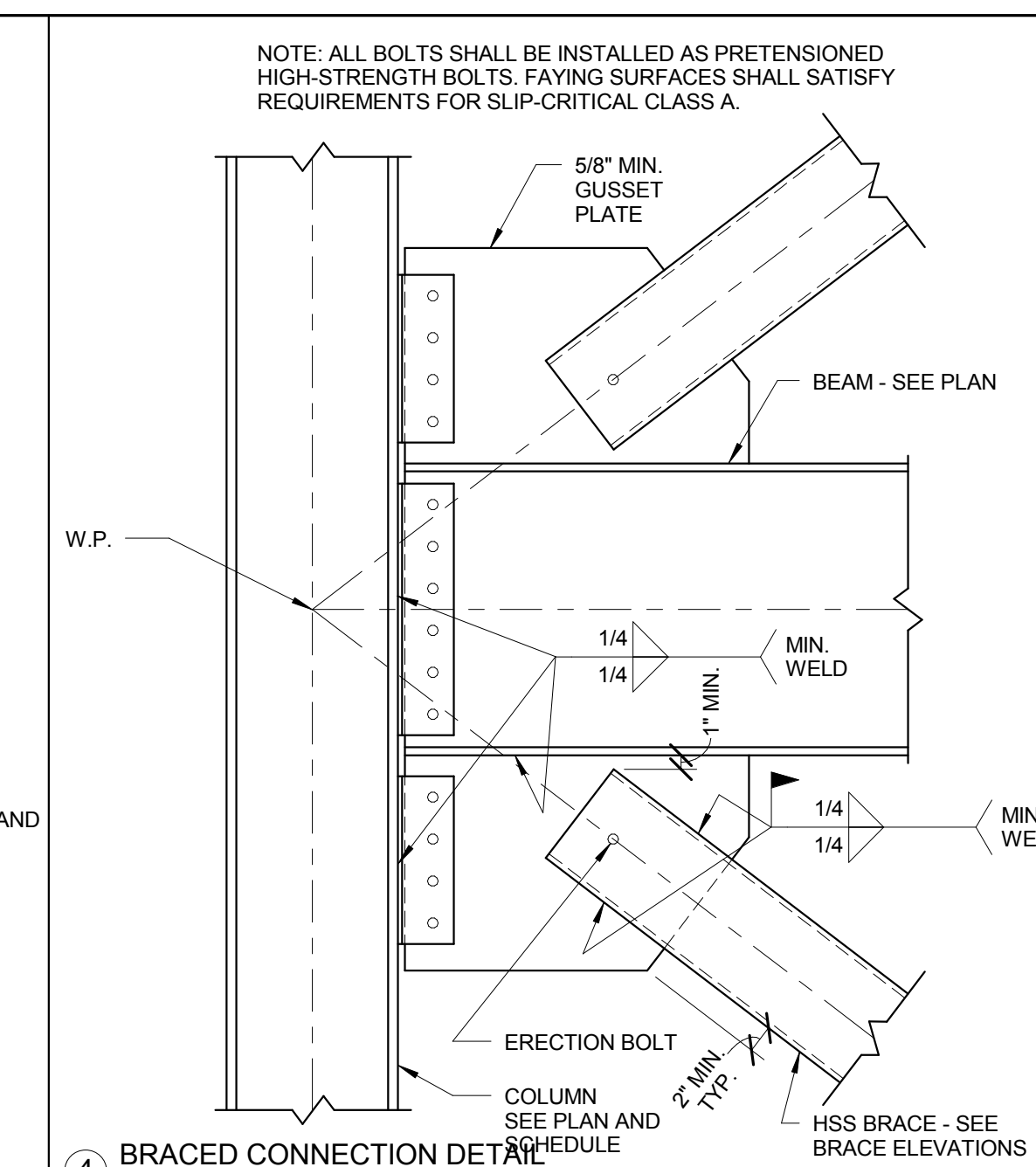
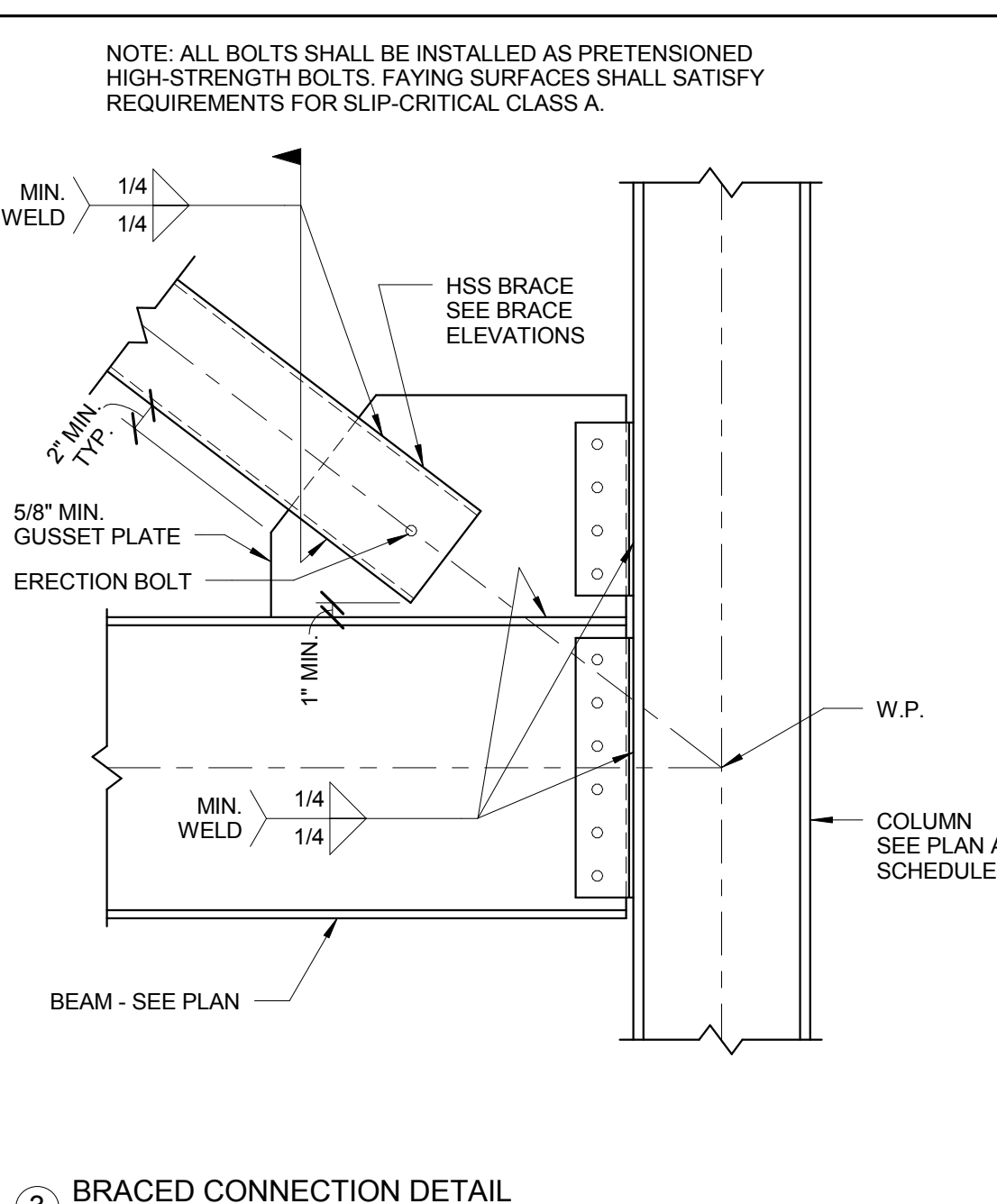
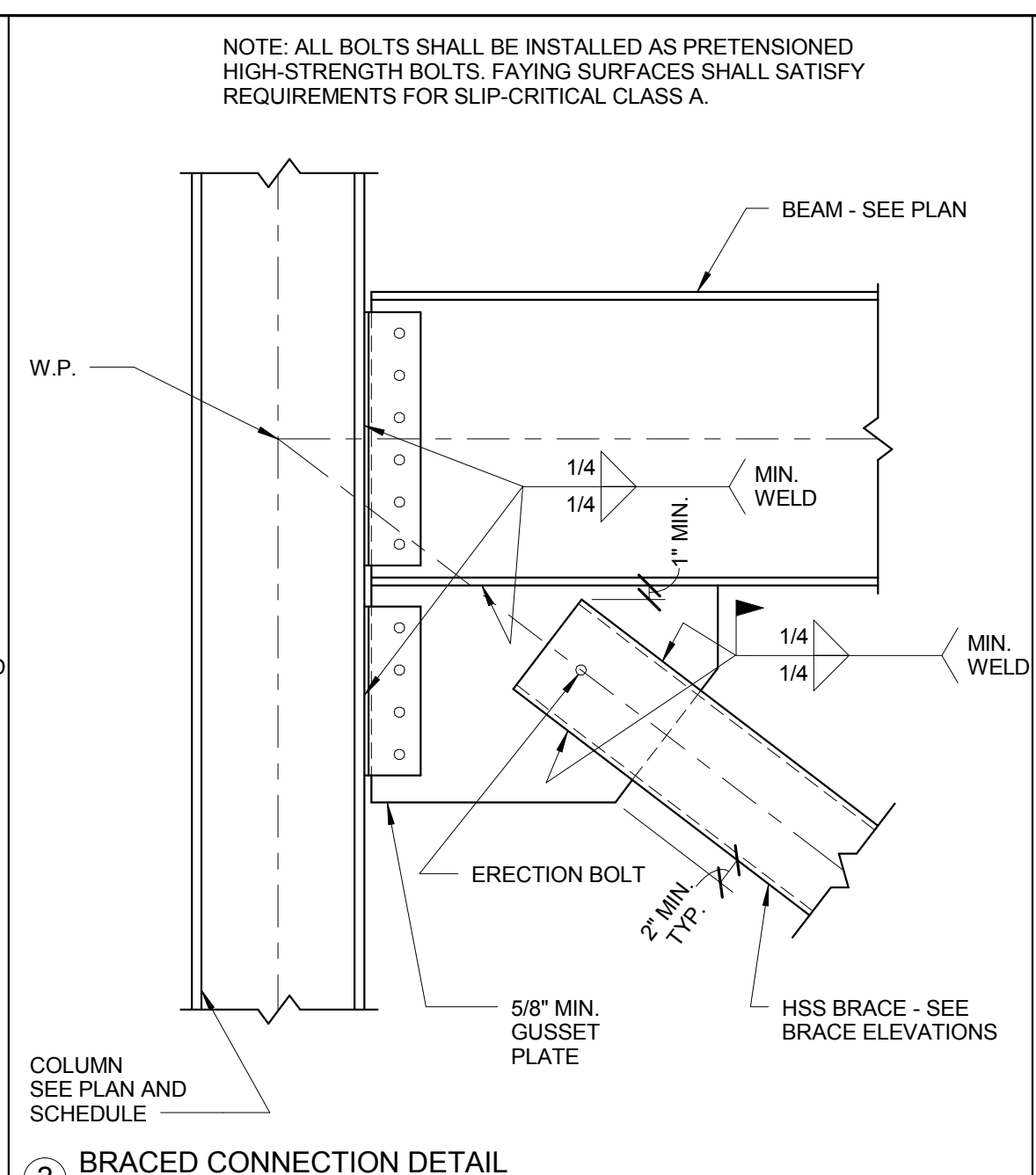
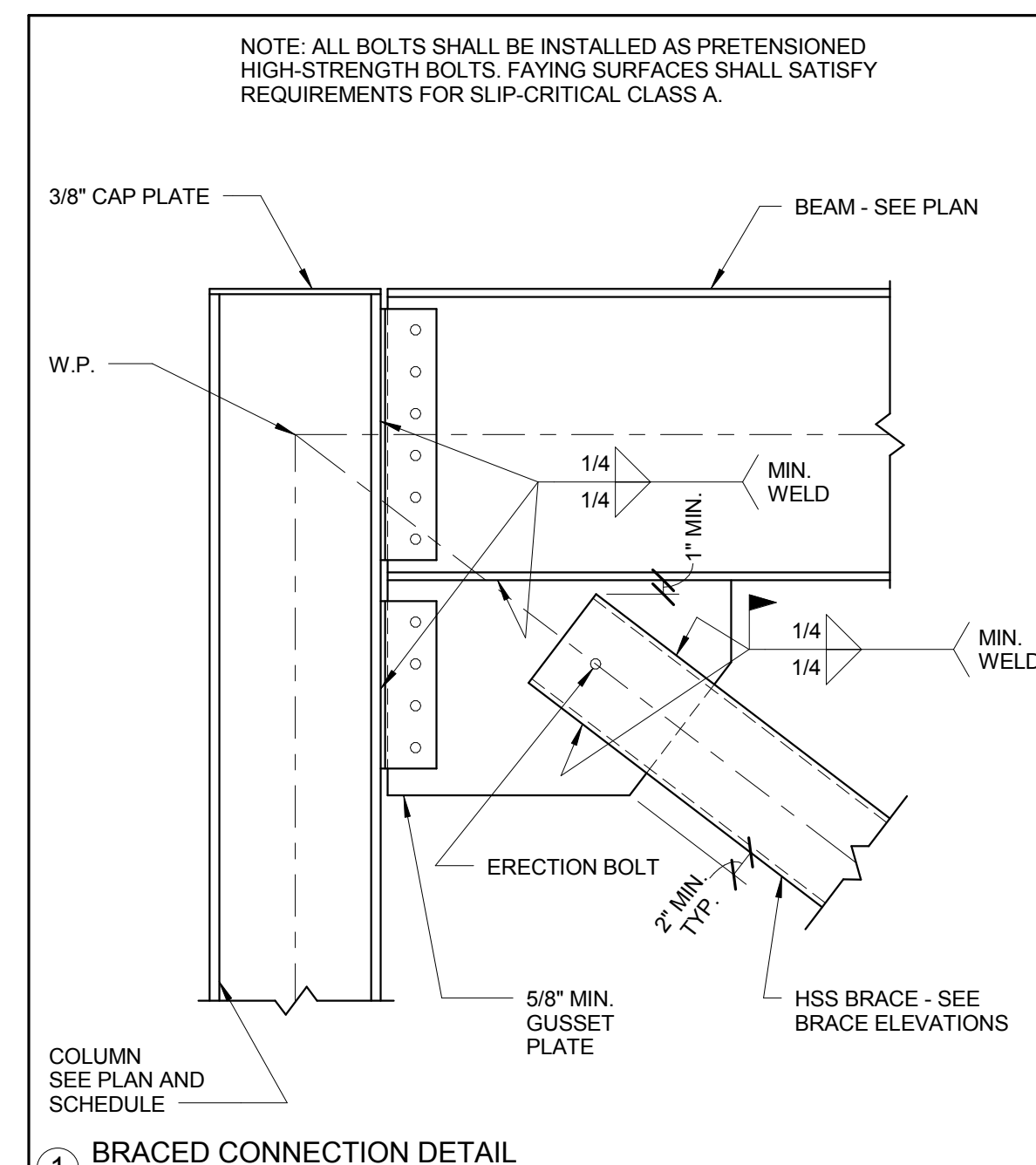
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S0301

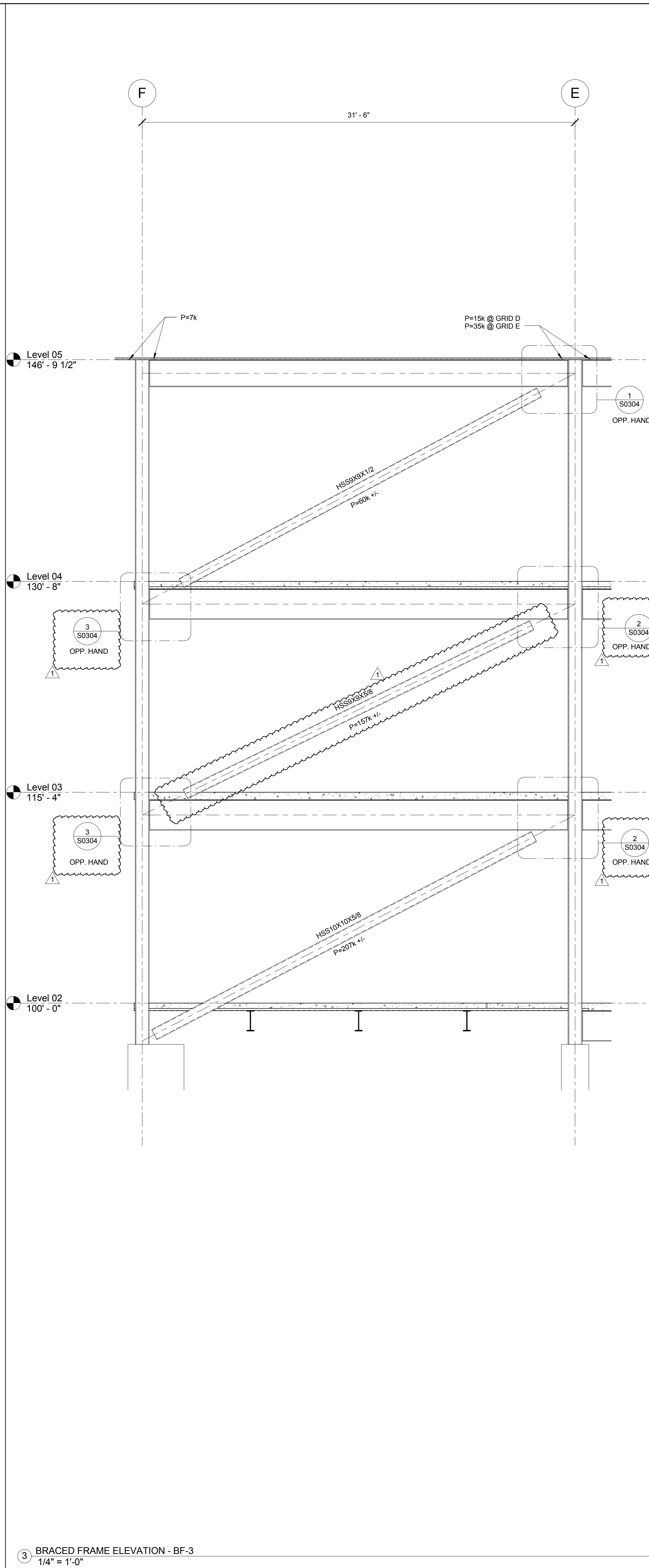
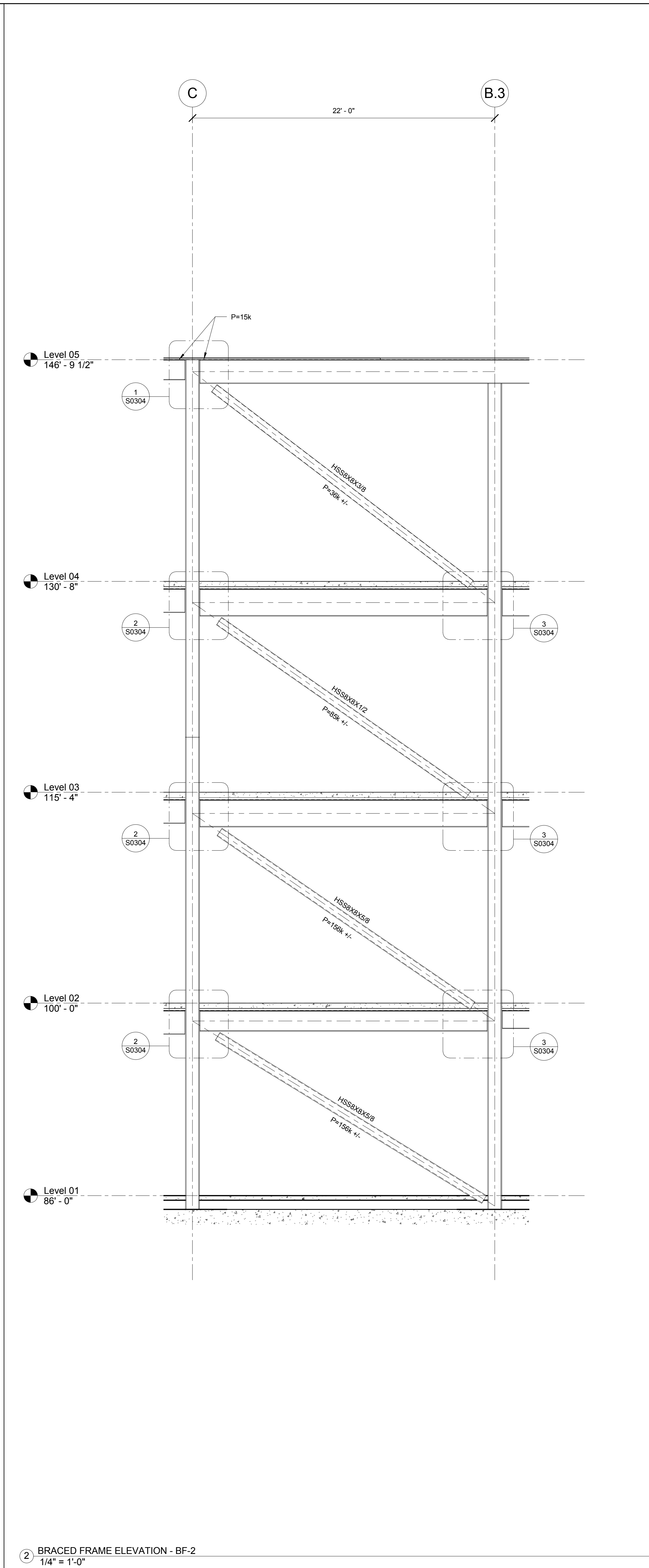
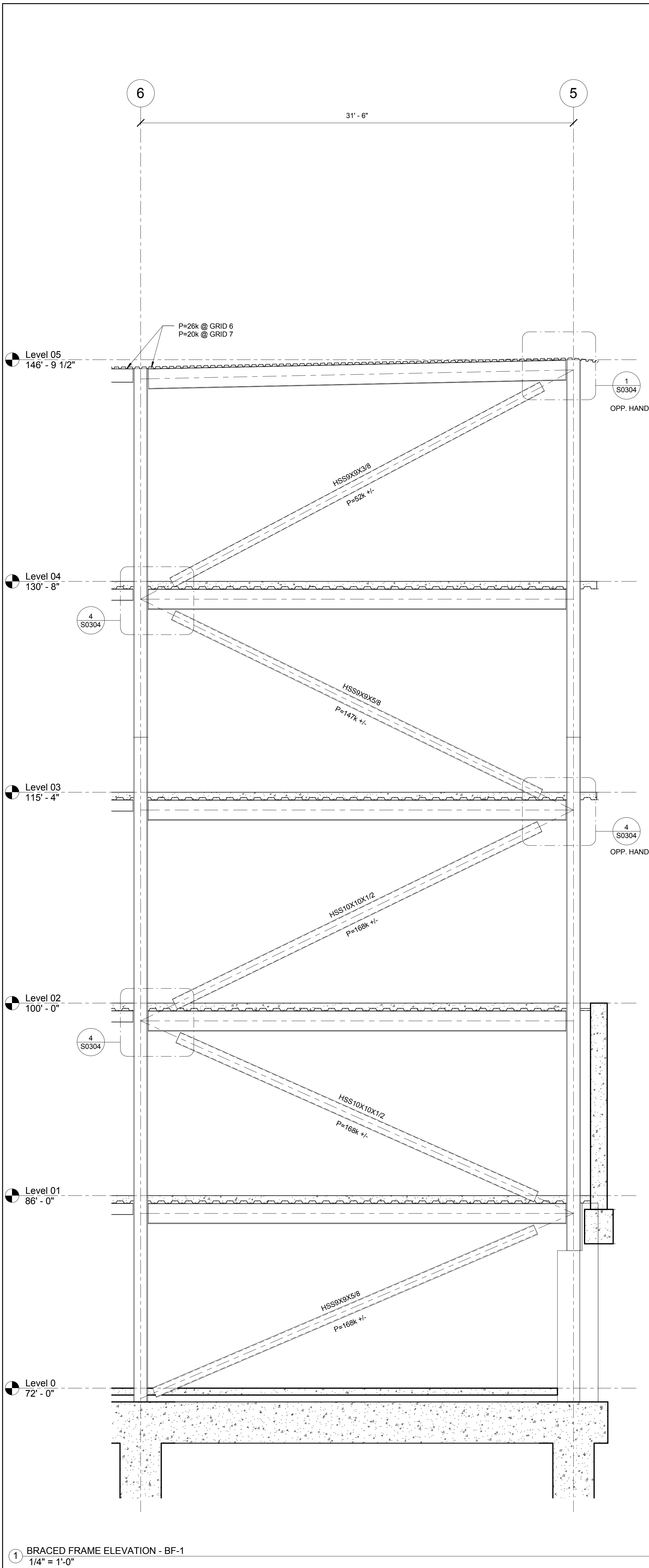


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CONFORMED SET 01 JUL 2016

1	ADDENDUM 1-7	16 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP1)	15 JAN 2016
No.	Description	Date

Drawing Title:

**BRACED FRAME
ELEVATIONS**

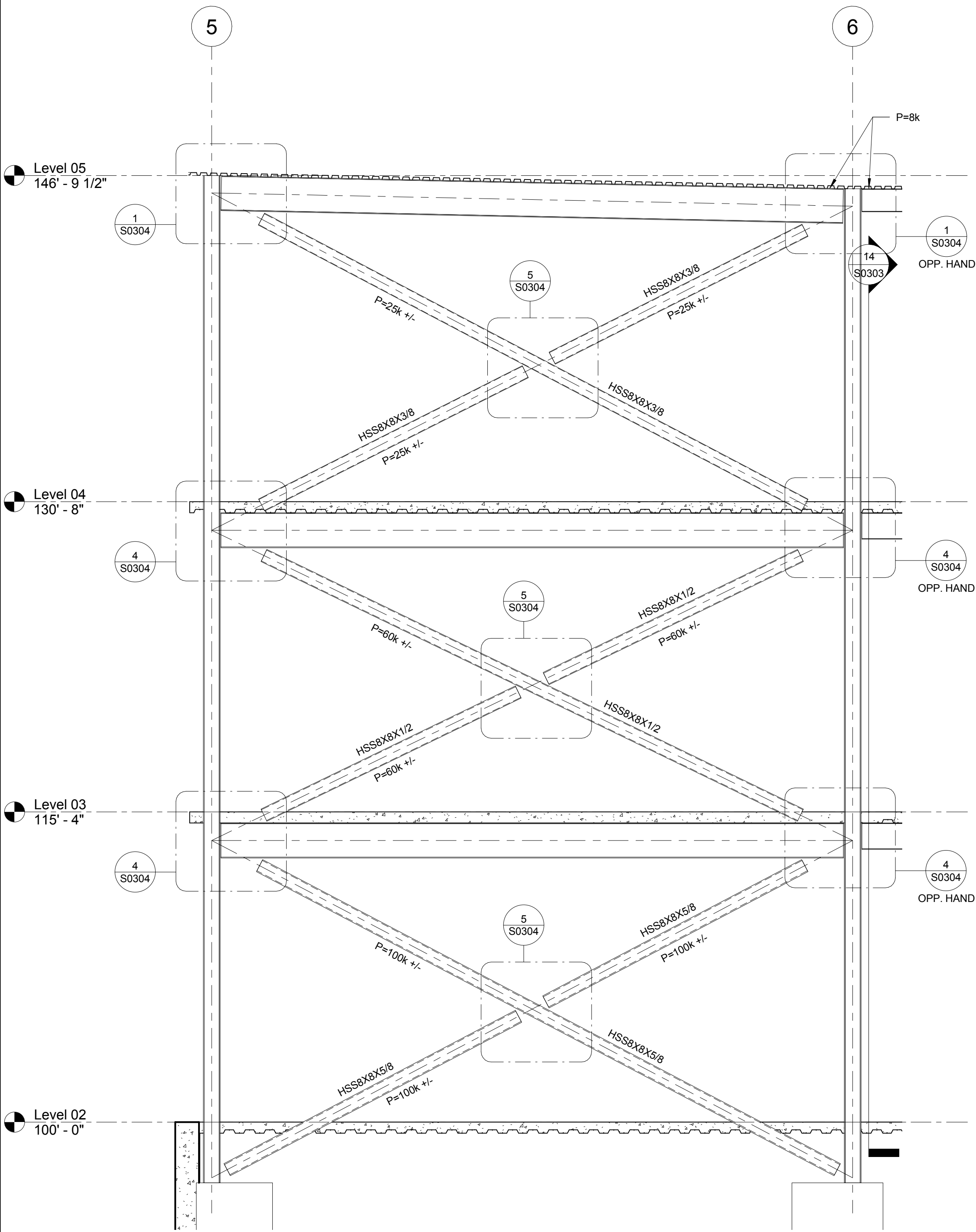
Project No.: 04561.01 Checked by:

S0400

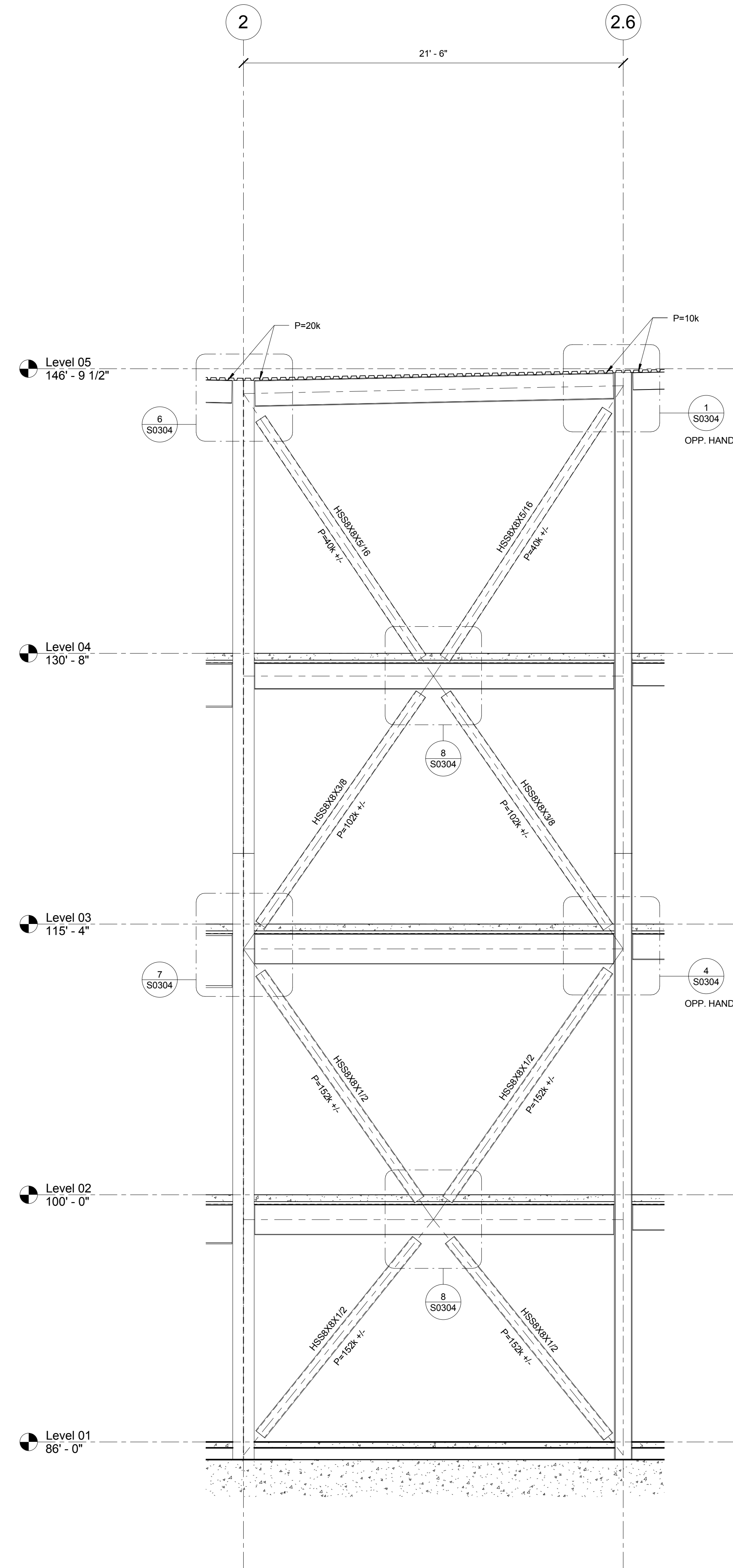
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1/15/2016 10:49:04 AM

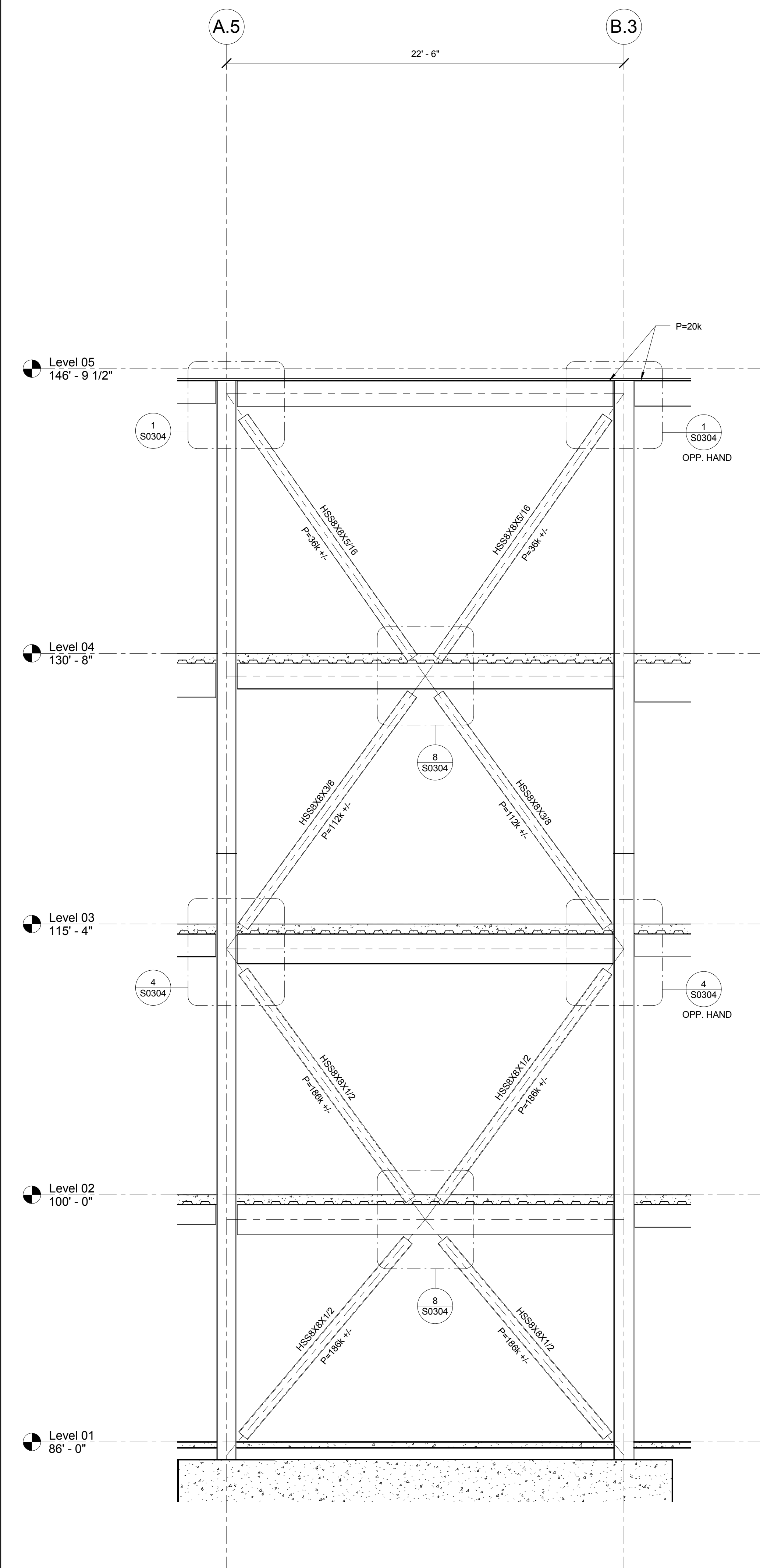
1 BRACED FRAME ELEVATION - BF-4
1/4" = 1'-0"



2 BRACED FRAME ELEVATION - BF-5
1/4" = 1'-0"



3 BRACED FRAME ELEVATION - BF-6
1/4" = 1'-0"



CONFORMED SET 01 JUL 2016

ISSUED FOR CONSTRUCTION (BP1) 15 JAN 2016
No. Description Date

Drawing Title:

BRACED FRAME
ELEVATIONS

Project No.: 04561.01 Checked by:

S0401

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CONFORMED SET 01 JUL 2016

1	ADDENDUM 1-11	13 MAY 2016
-	ISSUED FOR CONSTRUCTION (BP1)	15 JAN 2016
No.	Description	Date

Drawing Title:

COLUMN SCHEDULE

Project No.: 04561.01

Checked by:

S0500

1	ADDENDUM 1-11	13 MAY 2016
-	ISSUED FOR CONSTRUCTION (BP1)	15 JAN 2016
No.	Description	Date

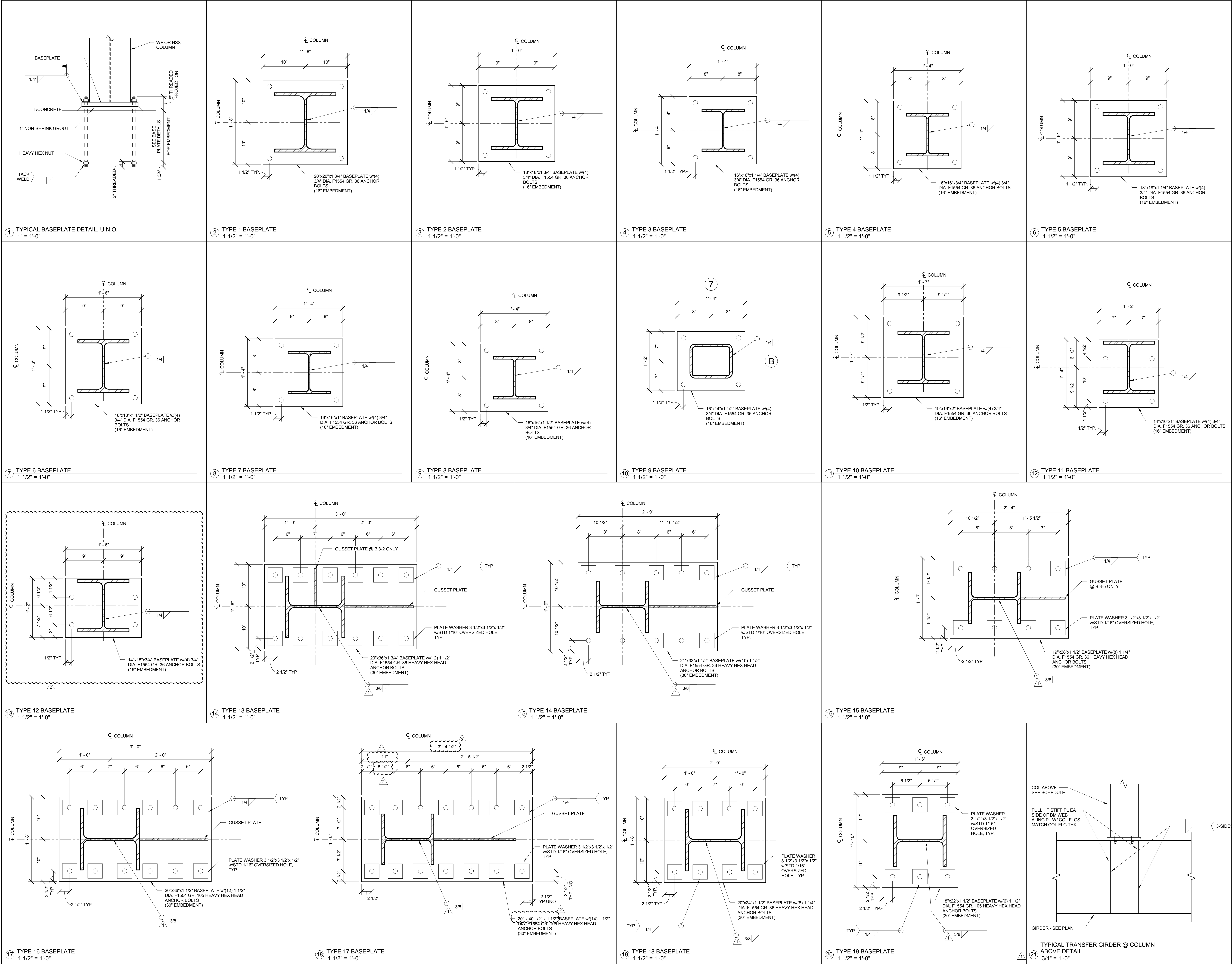
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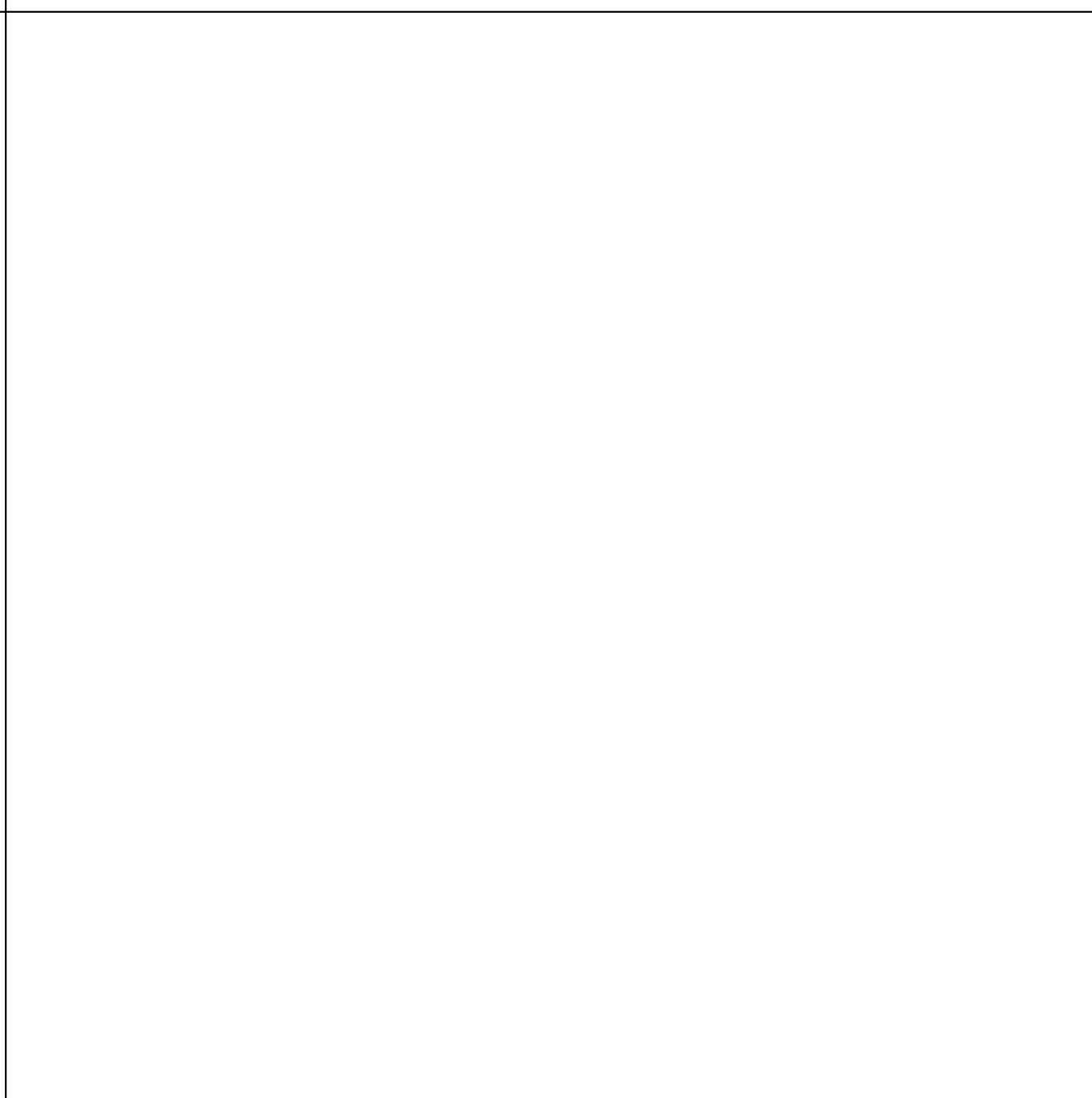
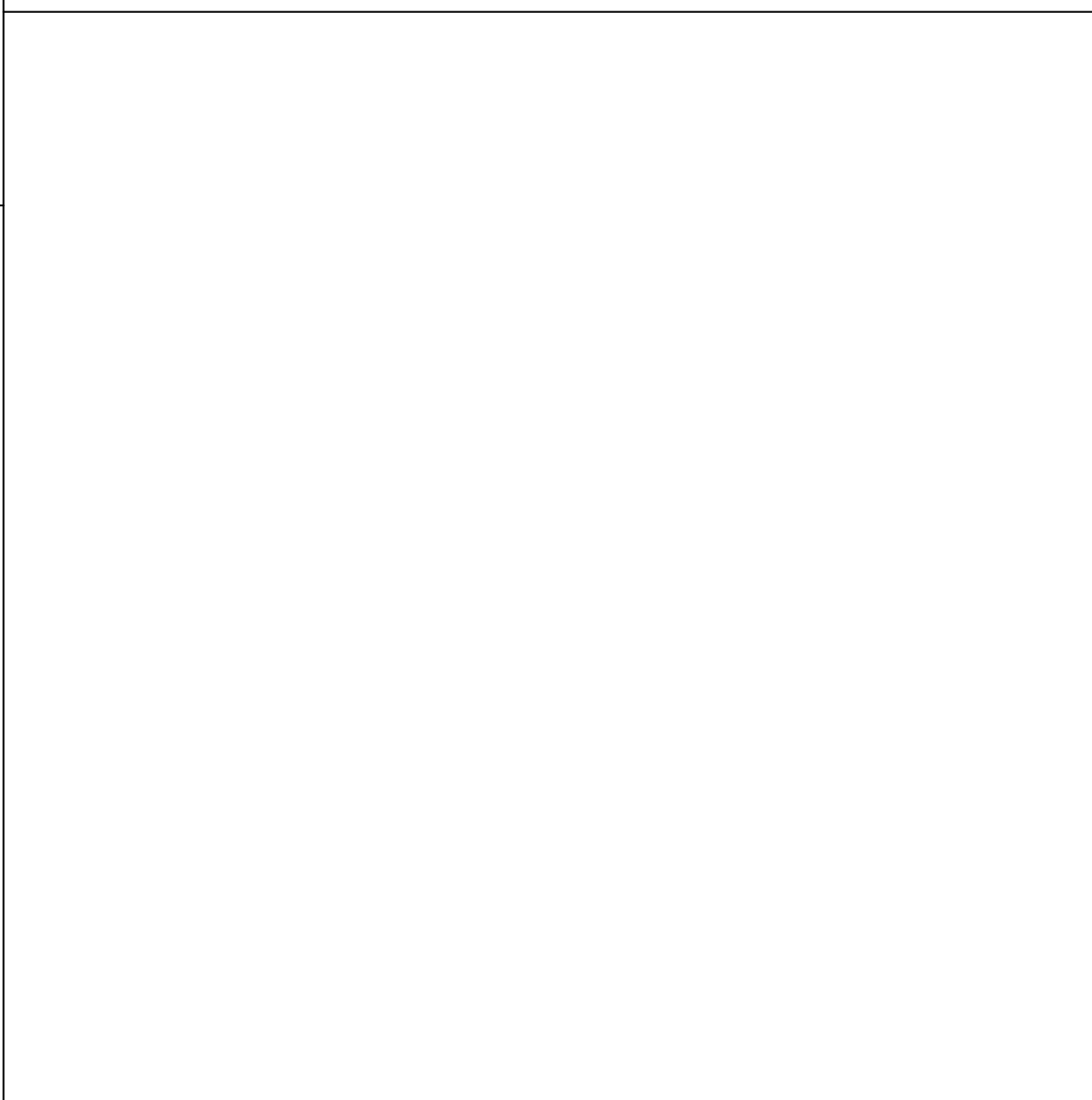
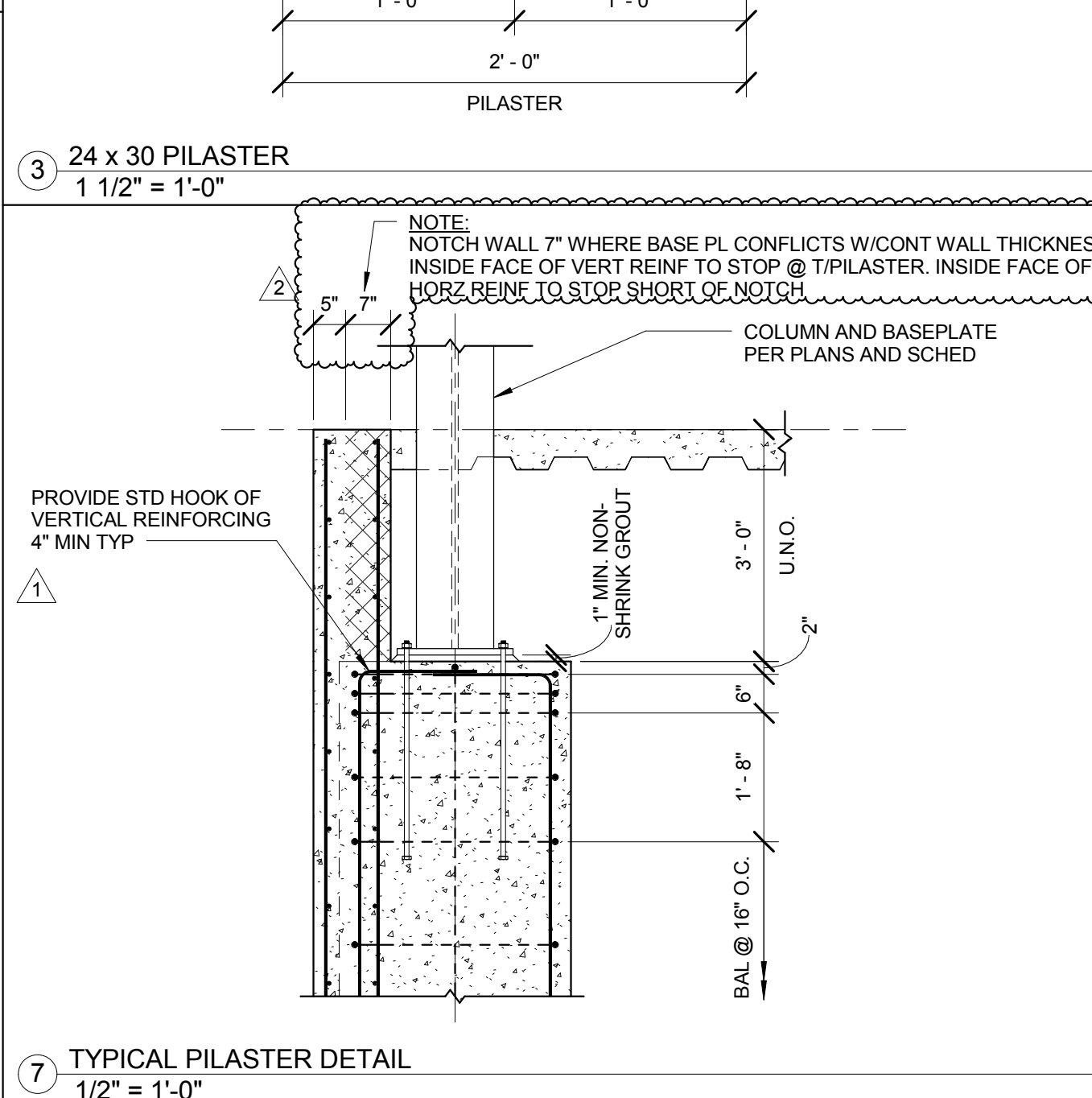
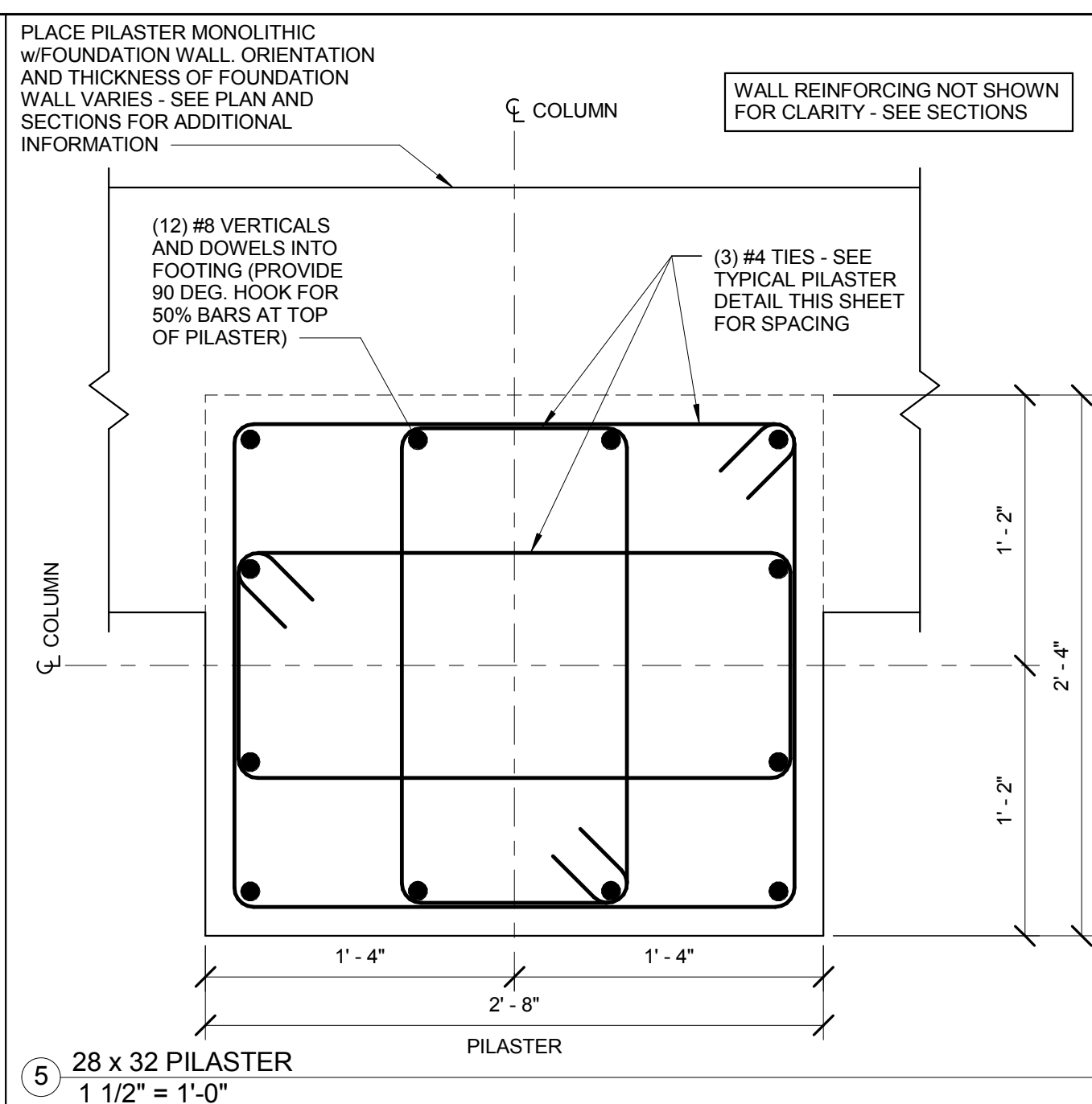
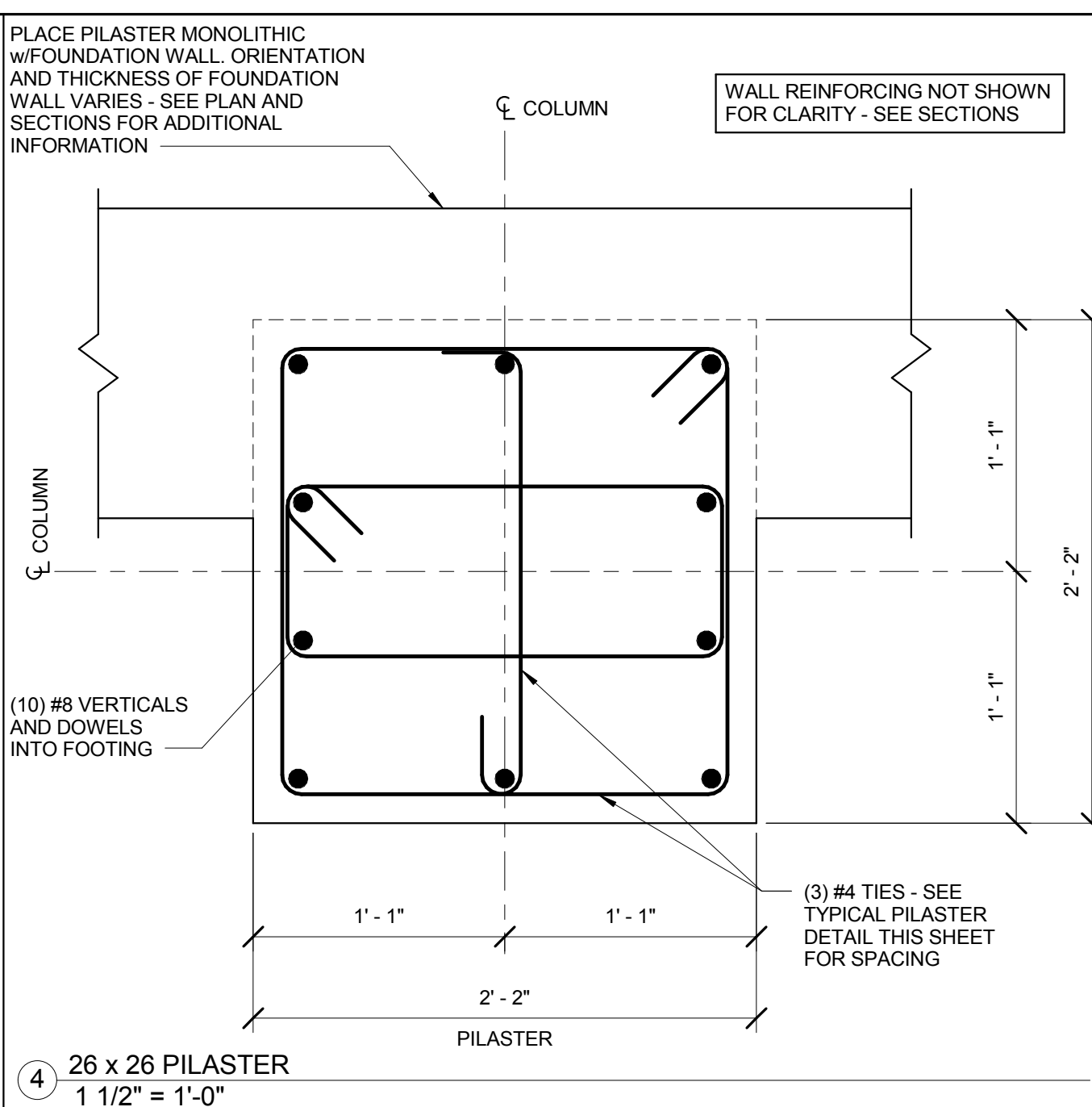
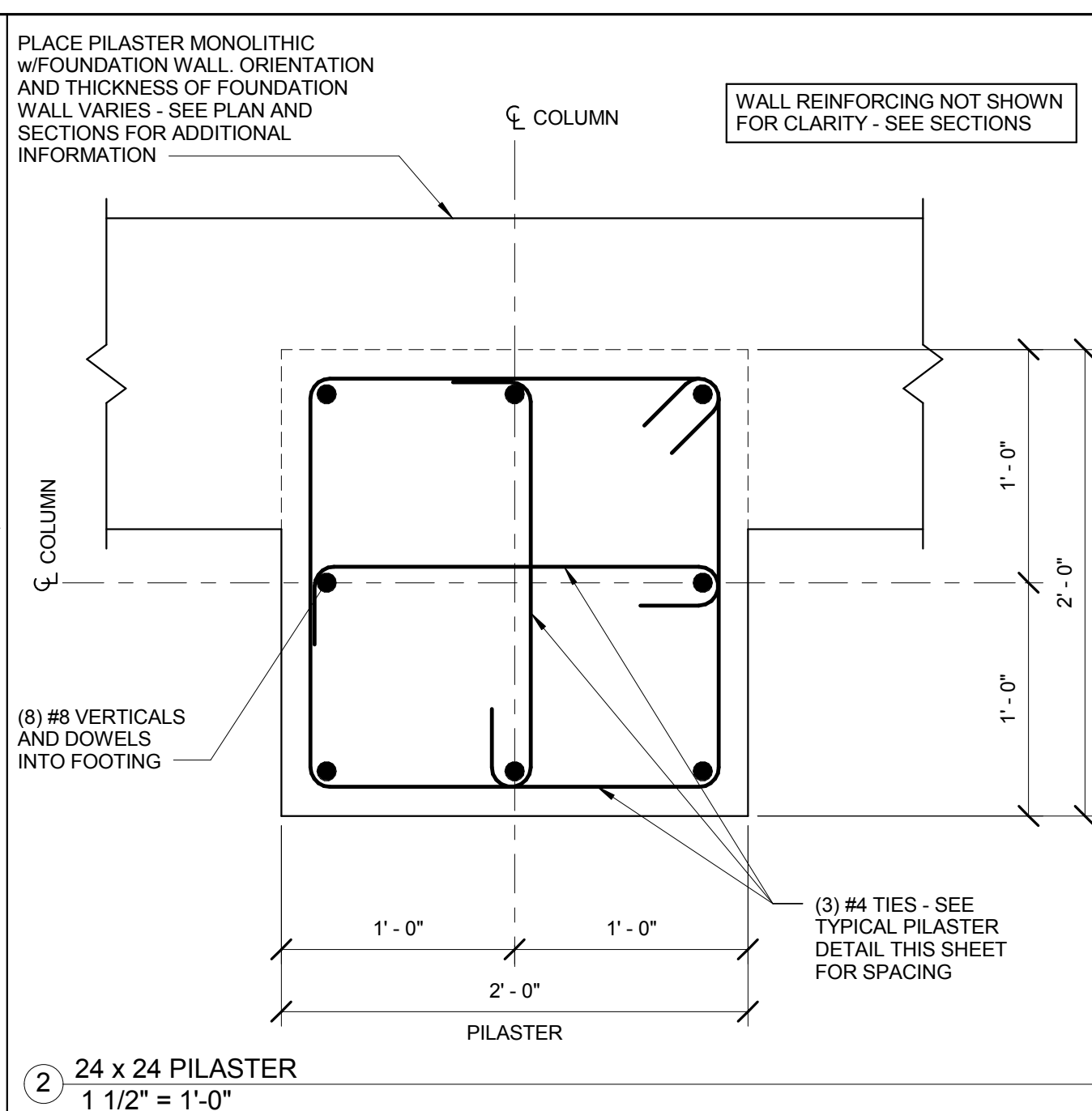
CONFORMED SET 01 JUL 2016

3	ADDENDUM 1-11	13 MAY 2016
2	ADDENDUM 1-7	16 MAR 2016
1	ADDENDUM 1-1	29 JAN 2016
-	ISSUED FOR CONSTRUCTION (BP1)	15 JAN 2016
No.	Description	Date

COLUMN SCHEDULE

S0502







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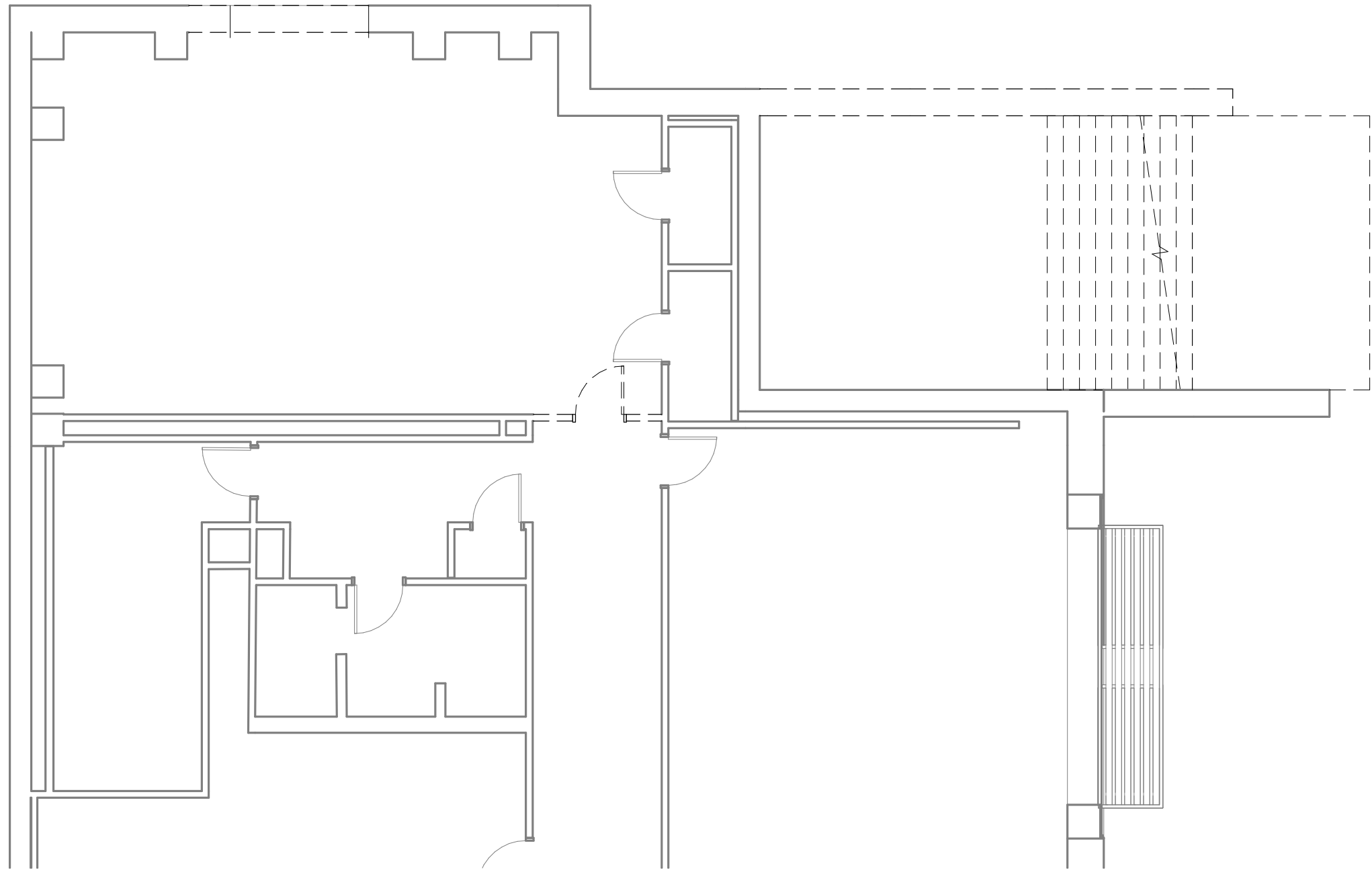
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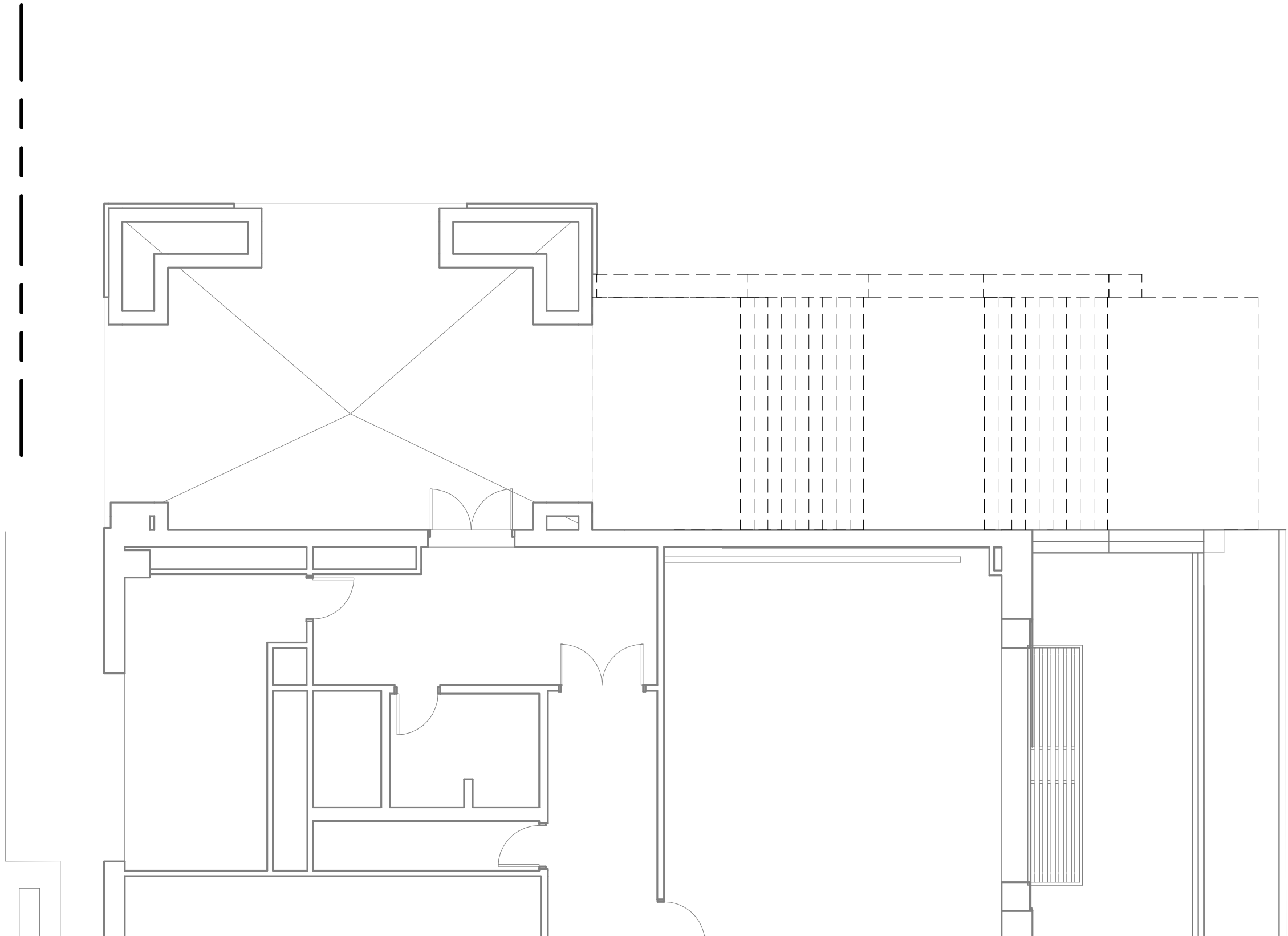
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3 LEVEL 01 ARCHITECTURAL DEMOLITION PLAN
1/8" = 1'-0"



1 LEVEL 02 ARCHITECTURAL DEMOLITION PLAN
1/8" = 1'-0"

CONFORMED SET 01 JUL 2016

ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016

No.	Description	Date
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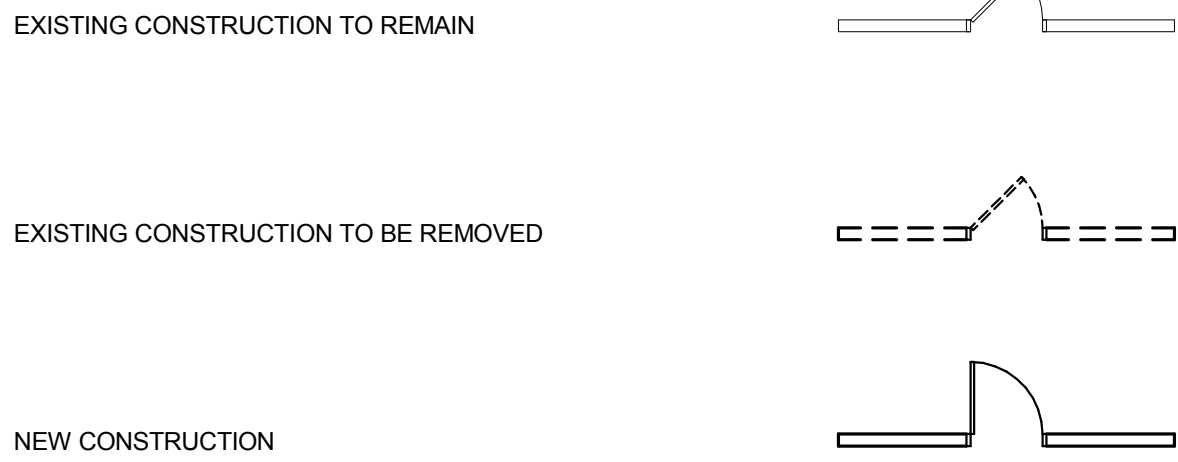
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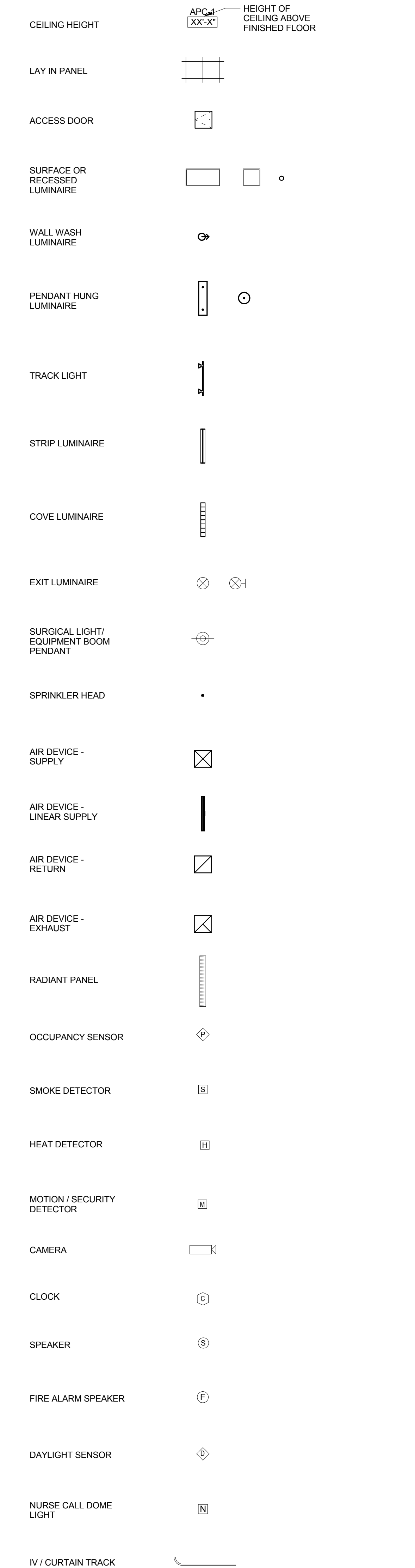
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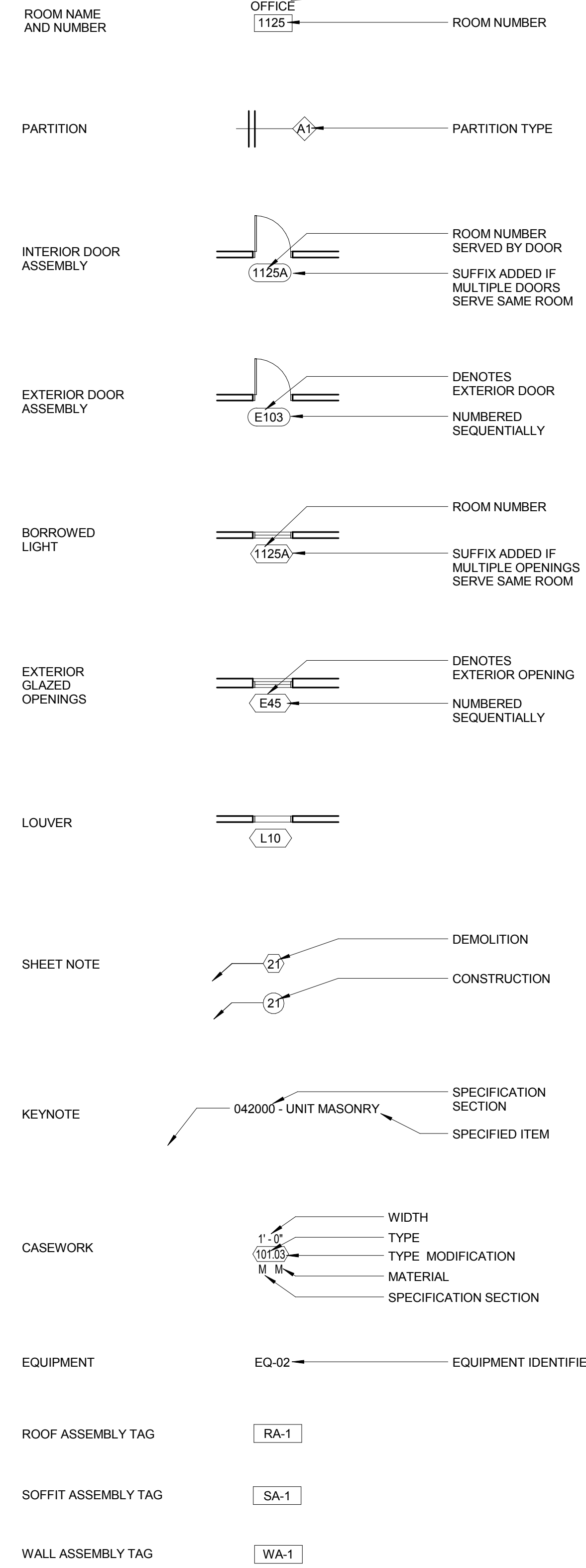
PLAN SYMBOLS



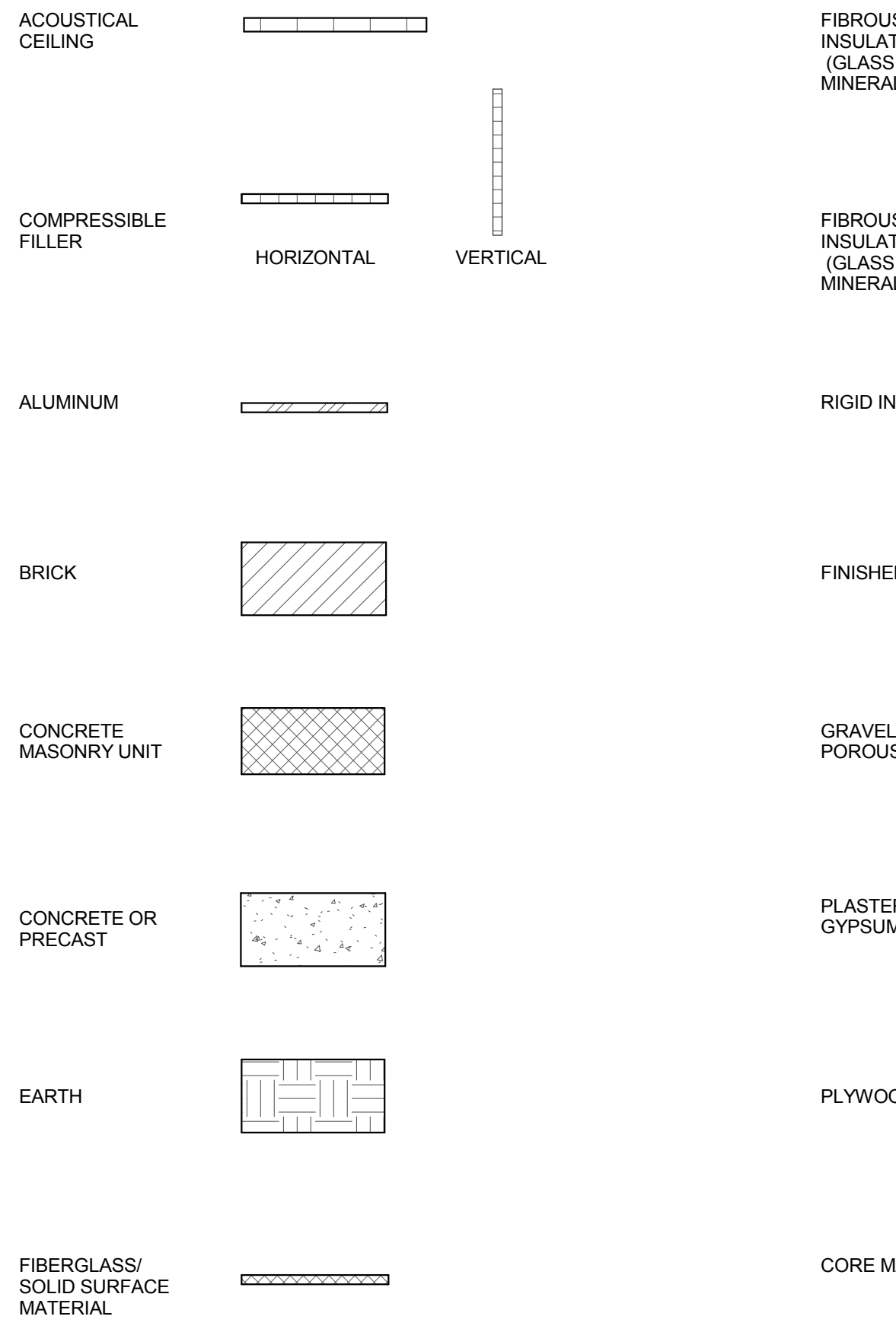
REFLECTED CEILING PLAN SYMBOLS



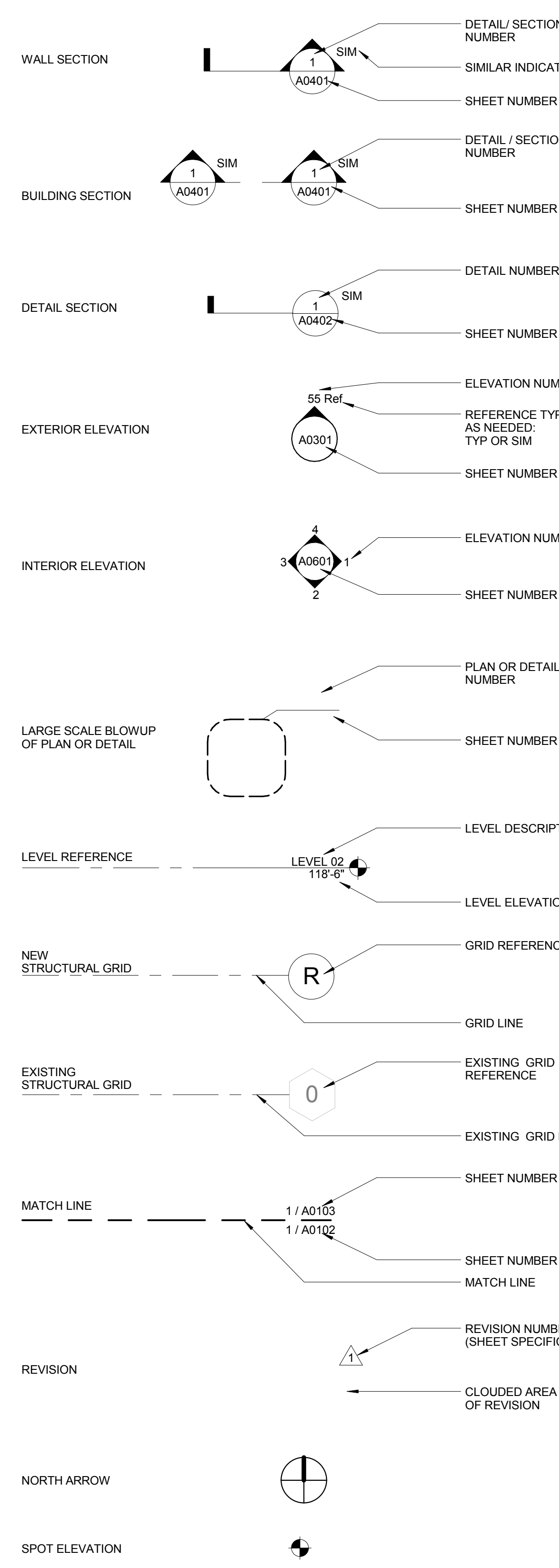
REFERENCE SYMBOLS (ARCHITECTURAL)



MATERIAL SYMBOLS



REFERENCE SYMBOLS (ALL DISCIPLINES)



GENERAL NOTES

1. ENCLOSE ALL EXPOSED DUCTS, PIPES, CONDUITS, ETC. IN FINISHED SPACE WITH CONSTRUCTION AND FINISH TO MATCH ADJACENT CONSTRUCTION UNO.
2. PROVIDE ACCESS DOORS OF APPROPRIATE SIZE, TYPE AND FIRE RATING FOR ALL CONCEALED ITEMS THAT REQUIRE ADJUSTMENT, MAINTENANCE, MONITORING, ETC. COORDINATE LOCATIONS WITH ARCHITECT.
3. DO NOT DETERMINE DIMENSIONS AND SIZE OF THE GRAPHIC REPRESENTATIONS SHOWN ON THE DRAWINGS BY USING MEASURING DEVICES (DO NOT "SCALE"). RELY ON THE NUMERIC DIMENSIONS SHOWN ON THE DRAWINGS FOR MEASUREMENT.
4. DIMENSIONS ARE TAKEN FROM CENTERLINE OF STRUCTURE, FACE OF CONCRETE OR FINISHED FACE OF PARTITIONS UNO. SEE PARTITION TYPES SHEETS (A1000 SERIES) FOR PARTITION THICKNESS AND MATERIALS.
5. CENTER ITEMS IN CEILING PANELS UNO.
6. REFER TO FINISH LEGEND FOR FINISH PLAN SYMBOLS.

ABBREVIATIONS

AC	AIR CONDITIONING	MACH	MACHINE
ACC	ACCESSIBLE	MARB	MARBLE
ACM	ASBESTOS CONTAINING MATERIAL	MAS	MASONRY
ADJ	ADJACENT	MATL	MATERIAL
AF	ABOVE FINISHED FLOOR	MAX	MAXIMUM
AGF	ARCHITECTURAL GLASS FLOORING	MB	MARKER BOARD
AHU	AIR HANDLING UNIT	MCM	METAL COMPOSITE MATERIAL
ALUM	ALUMINUM	MECH	MECHANICAL
ALT	ALTERNATE	MES	METAL EDGE STRIP
APC	ACOUSTICAL PANEL CEILING	MEZZ	MEZZANINE
APR	APPROXIMATE	MFR	MANUFACTURER / MANUFACTURED
ARCH	ARCHITECT(URAL)	MIN	MINIMUM
ASN	ABRASIVE STAIR NOSING	MISC	MISCELLANEOUS
ATC	ACOUSTICAL TILE CEILING	MO	MASONRY OPENING
AUTO	AUTOMATIC	MPC	METAL PANEL CEILING
AWP	ACOUSTICAL WALL PANEL	MSS	METAL SUSPENSION SYSTEM
		MTL	METAL
		MW	MILLWORK
BLDG	BUILDING	NIC	NOT IN CONTRACT
BLKG	BLOCKING	NO	NUMBER
BRG	BEARING	NOM	NOMINAL
BSMT	BASEMENT	NTS	NOT TO SCALE
C	COURSE	OC	ON CENTER
CF	CONDUCTIVE FLOORING	OD	OUTSIDE DIAMETER
CFMF	COLD-FORMED METAL FRAMING	OF	OWNER FURNISHED - CONTRACTOR INSTALLED
CG	CORNER GUARD	OF	OWNER FURNISHED - OWNER INSTALLED
CIP	CAST-IN-PLACE	OF	OWNER FURNISHED - OWNER INSTALLED
CJ	CONTROL JOINT	OP	OPENING
CL	CENTERLINE	OPP	OPPOSITE
CLG	CEILING	ORD	OVERFLOW ROOF DRAIN
CLO	CLOSE		
CLR	CLEARANCE		
CLRM	CLASSROOM	PBD	PARTICLE BOARD
CMT	CERAMIC MOSAIC TILE	PCC	PRECAST CONCRETE
CMB	CERAMIC MOSAIC TILE BASE	PCF	POUNDS PER CUBIC FOOT
CMU	CONCRETE MASONRY UNIT	PCONC	POLISHED CONCRETE
CN	CLEAN OUT	PERF	PERFORATE(D)
COL	COLUMN	PL	PLATE
COMM	COMMUNICATION	PLP	PLASTIC PANEL
CONC	CONCRETE	PLYWD	PLYWOOD
CONF	CONFERENCE	PREFAB	PREFABRICATED
CONT	CONTINUOUS	PREFIN	PREFINISHED
CONTR	CONTRACTOR	PRT	POLY RESIN TILE
CORR	CORRIDOR	PSF	POUNDS PER SQUARE FOOT
CPT	CARPETING	PSI	POUNDS PER SQUARE INCH
CR	CRASH RAIL	PLSHD	PLUSHED
CT	CERAMIC TILE	PMT	PORCELAIN MOSAIC TILE
CTB	CERAMIC TILE BASE	PNT	PAINTED
CUH	CABINET UNIT HEATER	PORCELAIN TILE	PORCELAIN TILE
CW	CASEWORK	PTB	PORCELAIN TILE BASE
DEMO	DEMOLISH / DEMOLITION	QT	QUARRY TILE
DEPT	DEPARTMENT	QTB	QUARRY TILE BASE
DIA	DIAMETER	QTY	QUANTITY
DIAG	DIAGONAL		
DIM	DIMENSION	R	RISER
DN	DOWN	RAD	RADIUS
DS	DOWNSPOUT	RAF	RESILIENT ATHLETIC FLOORING
EA	EACH	RBF	RUBBER FLOORING
EIFS	EXTERIOR INSULATION FINISH SYSTEM	RBT	RUBBER TILE
EJ	EXPANSION JOINT	RC	REFLECTED CLG PLAN
ELEC	ELECTRICAL	RD	ROOF DRAIN
EL	ELEVATION	REF	REFER TO / REFERENCE TO
ELEV	ELEVATOR	REFG	REFRIGERATOR
EM	ENTRANCE MATS	REINF	REINFORCED / REINFORCING
EMB	ELECTRONIC MARKER BOARD	REIN	REINFORCED
EMER	EMERGENCY	RES	RESILIENT
EOS	EDGE OF SLAB	RESB	RESILIENT BASE
EQU	EQUIPMENT	REV	REVISE / REVISION
EQ	EPOXY RESIN	RF	RESINUS FLOORING
EST	ESTIMATED	RFG	ROUGH OPENING
EXH	EXHAUST	RH	RIGHT HAND
EXIST	EXISTING	RM	ROOM
EXP	EXPANSION	RO	ROUGH OPENING
EXPD	EXPOSED	ROW	RIGHT OF WAY
EXT	EXTERIOR	RSN	RESILIENT STAIR NOSING
EW	ELECTRIC WATER COOLER	RST	RESILIENT STAIR TREAD
FD	FLOOR DRAIN	RT	RESILIENT TILE
FDTN	FOUNDATION	RTU	ROOF TOP UNIT
FE	FIRE EXTINGUISHER	RV	RIGID VINYL
FEC	FIRE EXTINGUISHER CABINET	S	SEALED
FG	FOOT GRILLE	SDF	STATIC DISSIPATIVE FLOORING
FHC	FIRE HOSE CABINET	SECT	SECTION
FIN	FINISHED	SGT	STRUCTURAL GLAZED TILE
FLR	FLOOR	SHR	SHOWER
FP	FILLER PANEL	SHT	SHEET
FT	FOOT/FEET	SIM	SIMILAR
FTG	FOOTING	SM	SPECIALIZED METAL
FURN	FURNISHED / FURNISHINGS	SOC	SLAB-ON-GRADE
FWP	FABRIC WRAPPED PANEL	SP	SAFETY PAD
		SPEC	SPECIFY / SPECIFICATION
		SQ	SQUARE
GA	GAUGE / GAGE	SS	SOLID SURFACE / SURFACING
GALV	GALVANIZED	SST	STAINLESS STEEL
GFRG	GLASS FIBER REINF CONCRETE	ST	STONE
GFRG	GLASS FIBER REINF GYPSUM	STC	SOUND TRANSMISSION CLASS
GL	GLASS	STD	STANDARD
GLMT	GLASS MOSAIC TILE	STL	STEEL
GLMU	GLASS MASONRY UNIT	STOR	STORAGE
GLT	GLASS TILE	STRUCT	STRUCTURE / STRUCTURAL
GST	GLASS STAIR TREAD	SUSP	SUSPENDED
GW	GYPSUM WALL BOARD	SV	SHEET VINYL
GYP	GYPSUM	SWC	SPECIAL WALL COATING
		T	TREAD
HDW	HARDWARE	TB	TACK BOARD
HM	HOLLOW METAL	TBD	TO BE DETERMINED
HORIZ	HORIZONTAL	TEMP	TEMPORARY
HOSP	HOSPITAL	TER	TERRAZZO
HP	HIGH POINT	TERB	TERRAZZO BASE
HPC	HIGH PERFORMANCE COATING	TEXT	TEXTURE
HPL	HIGH PRESSURE DECORATIVE LAMINATE	THK	THICK(NESS)
HR	HANDRAIL	TLT	TOILET
HSS	HOLLOW STRUCTURAL SECTION	TOS	TOP OF STEEL
HT	HEIGHT	TOW	TOP OF WALL
HVAC	HEATING-VENTILATING-AIR CONDITIONING	TP	TANGENT POINT
HWB	HEAT WELDING BEAD	TS	TACKABLE SURFACE
		TRSLT	TRANSLUCENT
		TYP	TYPICAL
		T&G	TONGUE & GROOVE
ID	INSIDE DIAMETER	UC	UNDERCOUNTER
INST	INSTALLED	UPH	UPHOLSTERY
INSUL	INSULATION / INSULATED	UNO	UNLESS NOTED OTHERWISE
INT	INTERIOR		
JAN	JANITOR	VAC	VACUUM
JO	JOINT	VCT	VINYL COMPOSITION TILE
KS	KITCHEN	VEST	VESTIBULE
KIT	KITCHEN	VET	VINYL ENHANCED TILE
		VIF	VERIFY IN FIELD
LAB	LABORATORY	VNL	VINYL
LAM	LAMINATED	VTR	VENT THROUGH ROOF
LAV	LAVATORY	VWC	VINYL WALL COVERING
LGT	LENGTH		
LH	LEFT HAND	WAF	WOOD ATHLETIC FLOORING
LN	NOLEUM	WC	WATER CLOSET
LP	LOW POINT	WCV	WALL COVERING
LT	LIGHT	WD	WOOD
LWT	LIGHTWEIGHT	WDWTR	WINDOW TREATMENT
LVT	LUXURY VINYL TILE	WP	WORK POINT
		WPC	WOOD PANEL CEILING
		WT	WEIGHT



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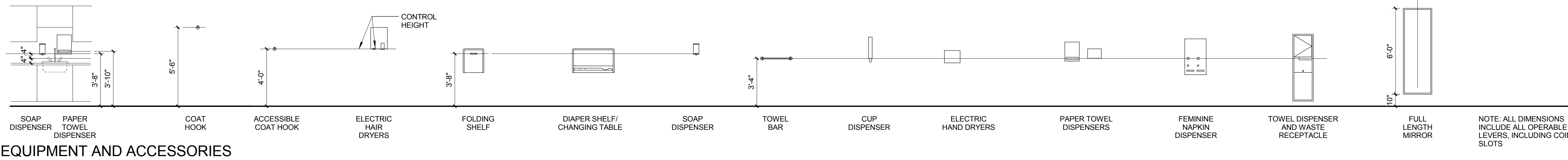
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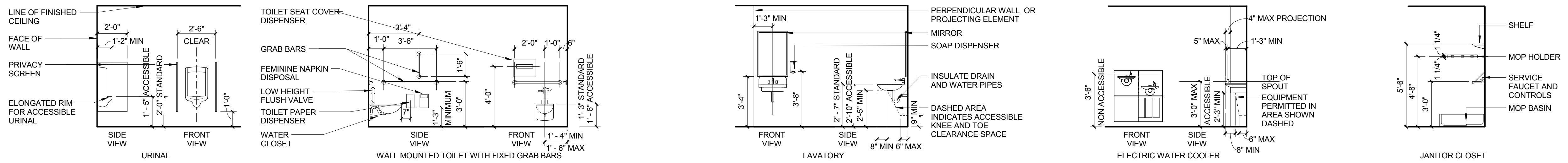
SYMBOLS &
ABBREVIATIONS

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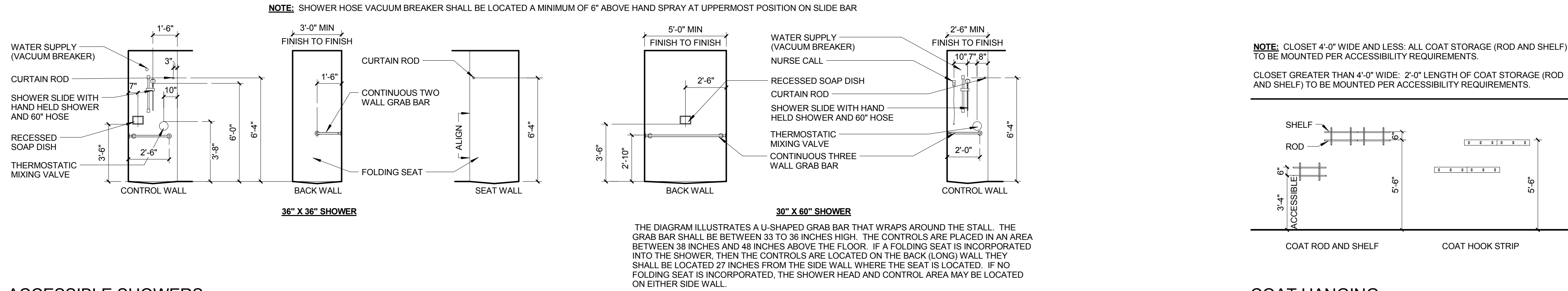


EQUIPMENT AND ACCESSORIES



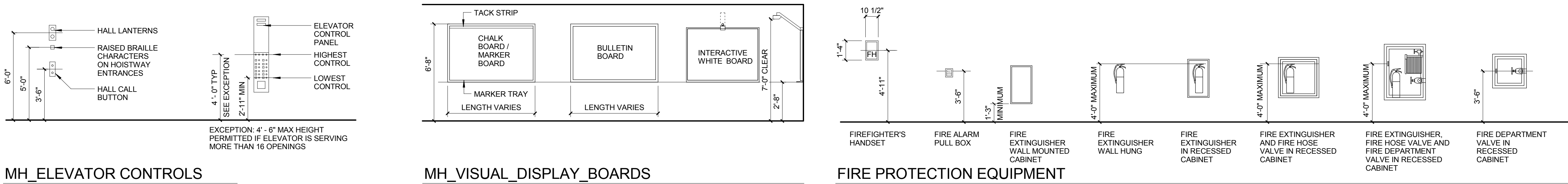
NOTE: ACCESSIBLE AND NON-ACCESSIBLE PLUMBING FIXTURES ARE INDICATED IN THE PLUMBING DRAWINGS.

ACCESSORIES AND PLUMBING



ACCESSIBLE SHOWERS

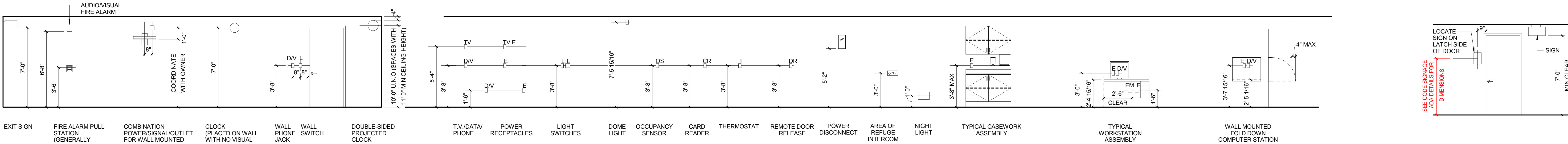
COAT HANGING



MH_ELEVATOR CONTROLS

MH_VISUAL_DISPLAY_BOARDS

FIRE PROTECTION EQUIPMENT



ELECTRICAL CONTROL DEVICES

SPACE SIGNAGE

CONFORMED SET

01 JUL 2016

ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016
No. Description Date

Drawing Title:

MOUNTING HEIGHTS

Project No.: 04561.01 Checked by:

A0002



- A0100.A**

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1 LEVEL 01
1/16" = 1'-0"



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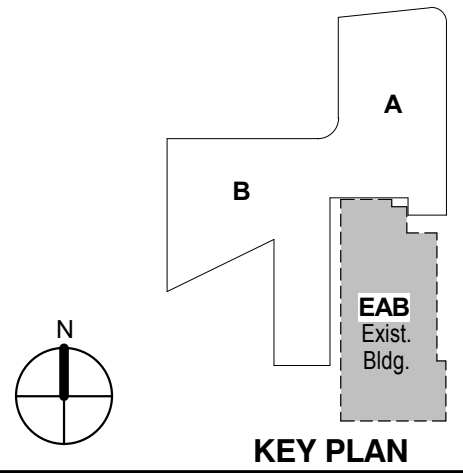
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No. Description Date

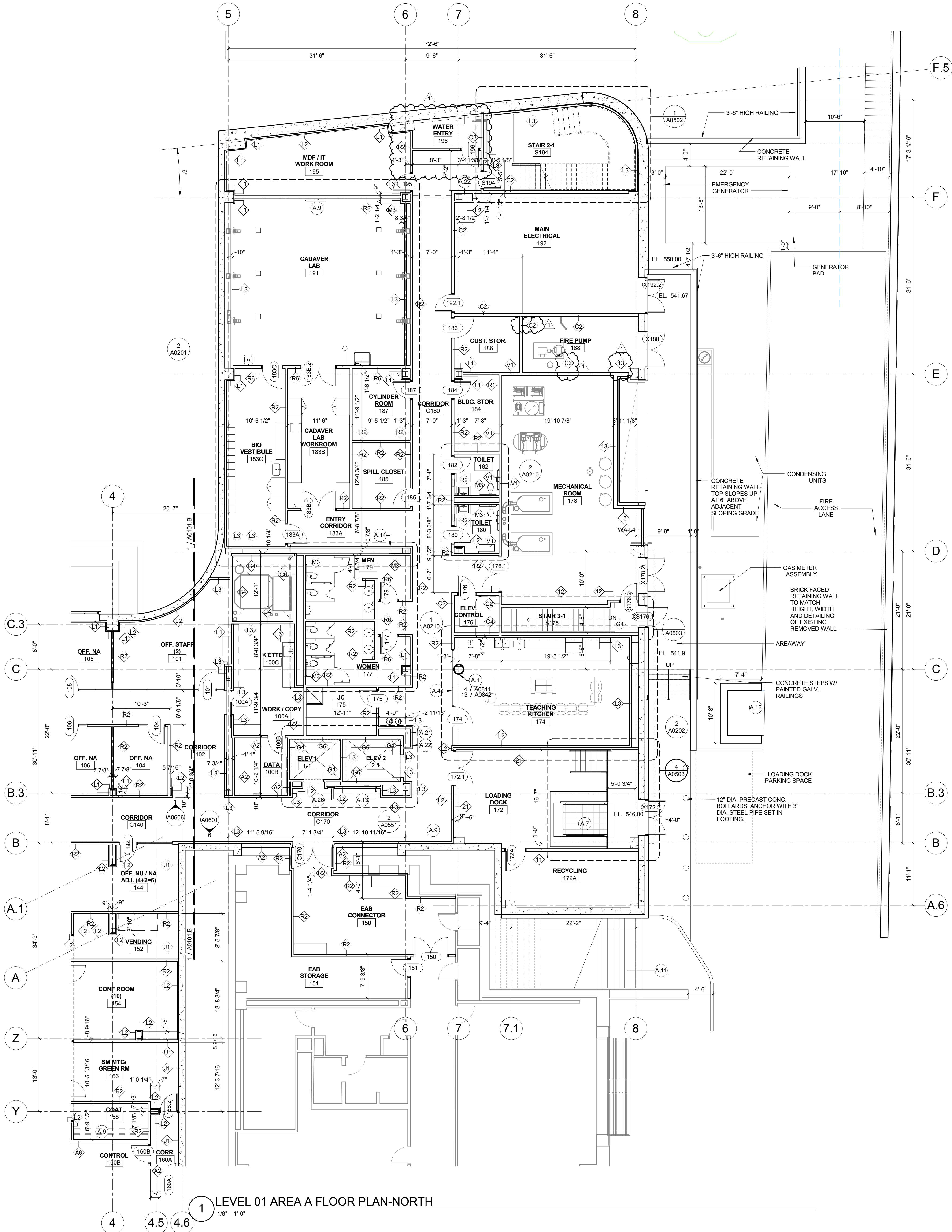


KEY PLAN

LEVEL 01 FLOOR PLAN

Project No.: 04561.01 Checked by:

A0101



1 LEVEL 01 AREA A FLOOR PLAN-NORTH

1/8" = 1'-0"

KEYED NOTE LEGEND - PLAN

- A.1 092709 GRG COLUMN COVER TO 3" ABOVE CEILING - 20" DIA. TYP. SEE DETAIL 4/A0811 AND 13/A0842.
A.2 081216 INTERIOR GLAZING SYSTEM: IGS-1: REFER TO TYPICAL INT. ELEVATIONS 1 AND 2 ON SHEET A0603
A.3 081216 INTERIOR GLAZING SYSTEM IGS-2: SEE TYPICAL ELEVATION 5 AND 6 A0603
A.4 081216 INTERIOR GLAZING SYSTEM: IGS-3: REFER TO INTERIOR ELEVATIONS
A.5 088813 FIRE RATED GLAZING- 120 MIN. FIRE RATED GLAZING 10'-0" HIGH. BASIS OF DESIGN: VETROTECH CONTRAFRAMM STRUTTURA - WITH BUTT JOINTS AND PERIMETER FRAMING
A.6 088813 FIRE RATED GLAZING AND FRAME- 120 MIN. FIRE RATED GLAZING 1'-8" HIGH X 5'-0" WIDE. BASIS OF DESIGN: VETROTECH CONTRAFRAMM WITH PERIMETER FRAMING
A.7 111519 LOADING DOCK LIFT - STATIONARY - 6W X 8' DEEPW/ 14' PIT
A.8 ALTERNATING TREAD STAIRWAY UP TO ROOF HATCH
A.9 UNDERSLAB DRAINAGE SYSTEM PER OWNER'S GEOTECHNICAL CONSULTANT RECOMMENDATION TYPICAL ALL SLAB ON GRADE AREAS
A.11 NEW CONCRETE STEPS TO MATCH EXISTING REMOVED FOR CONSTRUCTION
A.12 553006 BRICK FACED CONCRETE DUMPSTER ENCLOSURE TOP OF WALL
A.13 LCD SIGNAGE SCREEN IN WALL RECESS (OFCI)
A.14 MARKERBOARD SURFACE
A.15 WOOD SCREEN W/ SOLID LUMBER
A.17 VIDEO WALL - 24 55" SCREENS
A.18 LCD SCREEN LOCATION (OFOI)
A.19 AIR PLENUM - INSULATED PLENUM CONSTRUCTION BY DIVISION 23
A.20 12200 CURTAIN LOCATION
A.21 104313 AED CABINET LOCATION
A.22 10 4413 FEC WITH FIRE EXTINGUISHER
A.23 08 4423 SULL SASH LOCATION: PROVIDE 1/4" TEMPERED CLEAR GLAZING AT INTERIOR FACE OF CURTAIN WALL MULLIONS FOR ACOUSTICAL SEPARATION.
A.24 6" X 8" FORMED CONCRETE TRENCH IN FLOOR W/ METAL PLATE COVER. PROVIDE BLIND SIDE WATERPROOFING
A.25 BUILT IN SALT WATER FISH TANK LOCATION. SIZE APPROX. 7'-6" X 2'-4" X 2'-6" HIGH. LOW IRON GLASS VIEW WINDOW ON CORRIDOR SIDE. SLIDING DOOR ON LAB SIDE. FISH TANK EQUIPMENT BELOW TANK W/ CABINET DOOR ACCESS ON LAB SIDE. FINISHED INTERIOR FACE OF WALLS AND CEILING INSIDE CAVITY W/ WATER RESISTANT GYP BOARD AND EPOXY PAINT.
A.26 LCD SIGNAGE SCREEN IN WALL RECESS (OFCI)
A.27 CONSTRUCT 2 HOUR RATED SEPARATION BETWEEN BOTTOM OF STAIR AND UTILITY PIPING CROSSING THIS AREA. USE HORIZ. GYP BD. ENCLOSURE ON SHEET A1002

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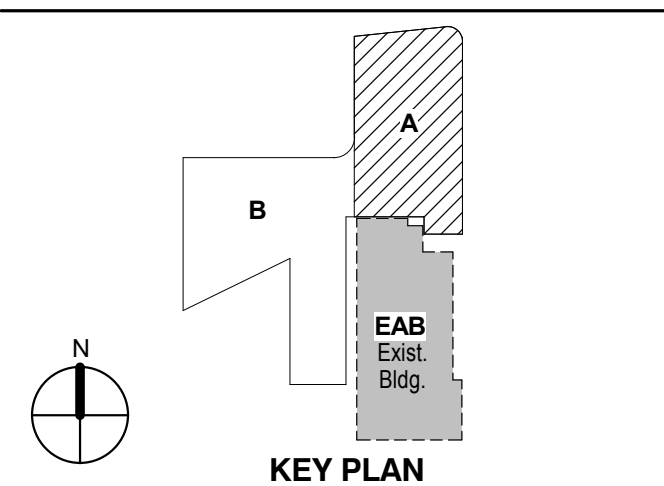
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CONFORMED SET 01 JUL 2016

1 ADDENDUM 3-1 05 APR 2016
ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016



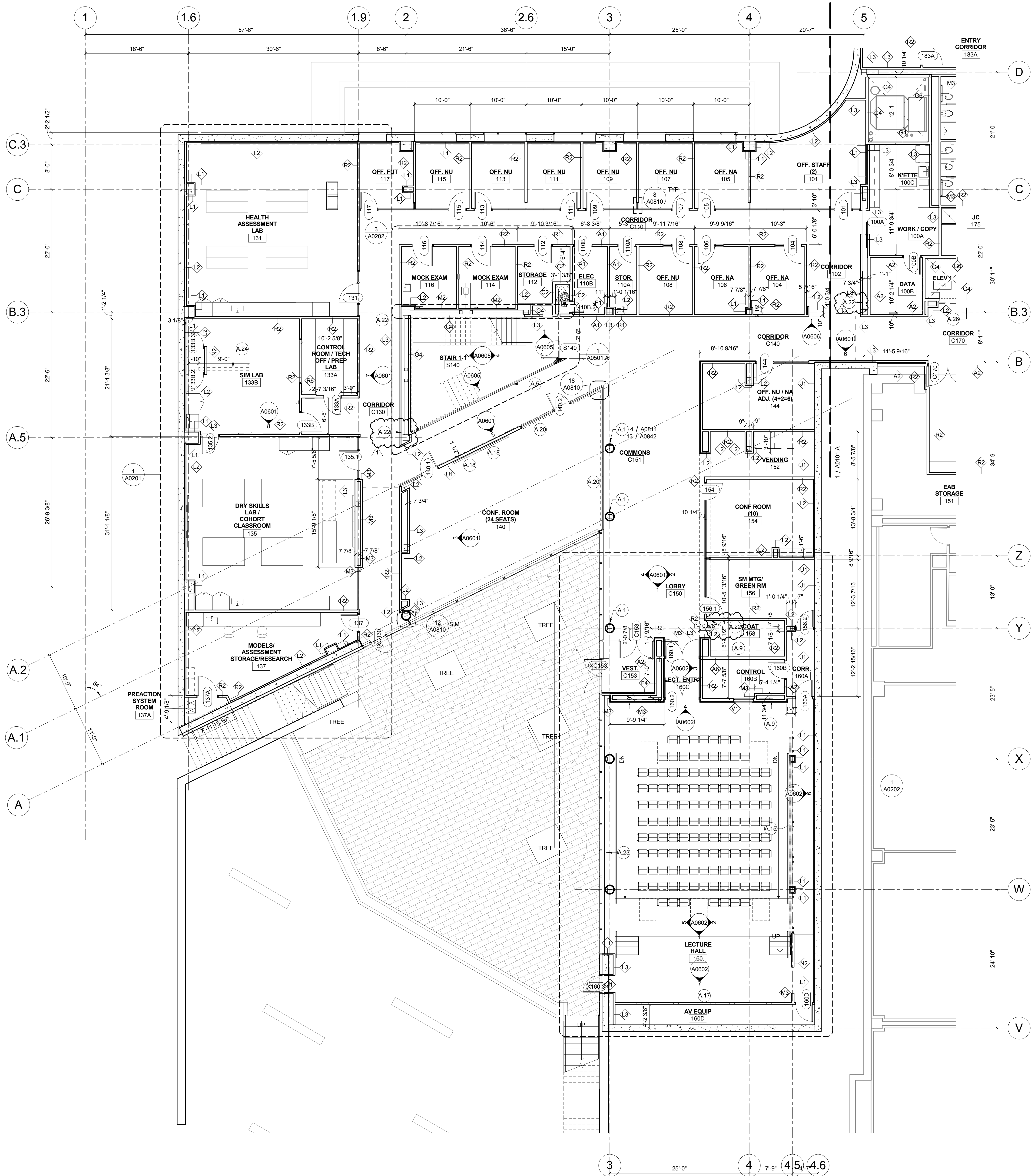
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LEVEL 01 AREA A FLOOR
PLAN

Project No.: 04561.01 Checked by:

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1 LEVEL 01 AREA B FLOOR PLAN-WEST
1/8" = 1'-0"

- KEYED NOTE LEGEND - PLAN**
- A.1 092700 GRG COLUMN COVER TO 3" ABOVE CEILING - 20" DIA. TYP. SEE DETAIL 4/A0811 AND 13/A0842.
 - A.2 081216 INTERIOR GLAZING SYSTEM: IGS-1: REFER TO TYPICAL INT. ELEVATIONS 1 AND 2 ON SHEET A0603
 - A.3 081216 INTERIOR GLAZING SYSTEM IGS-2: SEE TYPICAL ELEVATION 5 AND 6 A0603
 - A.4 081216 INTERIOR GLAZING SYSTEM: IGS-3: REFER TO INTERIOR ELEVATIONS
 - A.5 088813 FIRE RATED GLAZING- 120 MIN. FIRE RATED GLAZING 10'-0" HIGH. BASIS OF DESIGN: VETROTECH CONTRAFILAMM STRUTURA - WITH BUTT JOINTS AND PERIMETER FRAMING.
 - A.6 088813 FIRE RATED GLAZING AND FRAME- 120 MIN. FIRE RATED GLAZING 1'-8" HIGH X 5'-0" WIDE. BASIS OF DESIGN: VETROTECH CONTRAFILAMM WITH PERIMETER FRAMING.
 - A.7 111519 LOADING DOCK LIFT - STATIONARY - 6W X 8' DEEPW/ 14" PIT
 - A.8 ALTERNATING TREAD STAIRWAY UP TO ROOF HATCH
 - A.9 UNDERSLAB DRAINAGE SYSTEM PER OWNER'S GEOTECHNICAL CONSULTANT RECOMMENDATION TYPICAL ALL SLAB ON GRADE AREAS
 - A.11 NEW CONCRETE STEPS TO MATCH EXISTING REMOVED FOR CONSTRUCTION
 - A.12 553006 BRICK FACED CONCRETE DUMPSTER ENCLOSURE TOP OF WALL
 - A.13 LCD SIGNAGE SCREEN IN WALL RECESS (OFCI)
 - A.14 MARKERBOARD SURFACE
 - A.15 WOOD SCREEN W/ SOLID LUMBER
 - A.17 VIDEO WALL - 24 55" SCREENS
 - A.18 LCD SCREEN LOCATION (OFOI)
 - A.19 AIR PLENUM - INSULATED PLENUM CONSTRUCTION BY DIVISION 23
 - A.20 122200 CURTAIN LOCATION
 - A.21 104313 AED CABINET LOCATION
 - A.22 10 4413 FEC WITH FIRE EXTINGUISHER
 - A.23 08 4423 SULL SASH LOCATION: PROVIDE 14" TEMPERED CLEAR GLAZING AT INTERIOR FACE OF CURTAIN WALL MULLIONS FOR ACOUSTICAL SEPARATION.
 - A.24 6" X 8" FORMED CONCRETE TRENCH IN FLOOR W/ METAL PLATE COVER. PROVIDE BLIND SIDE WATERPROOFING
 - A.25 BUILT IN SALT WATER FISH TANK LOCATION. SIZE APPROX. 7'-6" X 2'-4" X 2'-6" HIGH. LOW IRON GLASS VIEW WINDOW ON CORRIDOR SIDE. SLIDING DOOR ON LAB SIDE. FISH TANK EQUIPMENT BELOW TANK W/ CABINET DOOR ACCESS ON LAB SIDE. FINISHED INTERIOR FACE OF WALLS AND CEILING INSIDE CAVITY W/ WATER RESISTANT GYP BOARD AND EPOXY PAINT.
 - A.26 LCD SIGNAGE SCREEN IN WALL RECESS (OFCI)
 - A.27 CONSTRUCT 2 HOUR RATED SEPARATION BETWEEN BOTTOM OF STAIR AND UTILITY PIPING CROSSING THIS AREA. USE HORIZ. GYP BD. ENCLOSURE ON SHEET A1002



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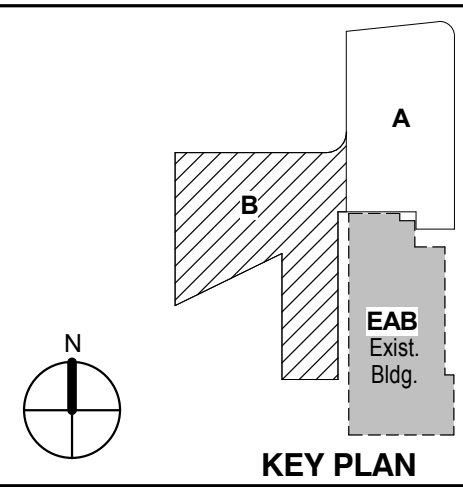
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CONFORMED SET 01 JUL 2016

1	ADDENDUM 3-1	05 APR 2016
1	ISSUED FOR CONSTRUCTION (BP3)	15 MAR 2016
No.	Description	Date



KEY PLAN

LEVEL 01 AREA B FLOOR PLAN

Project No.: 04561.01 Checked by:

A0101.B

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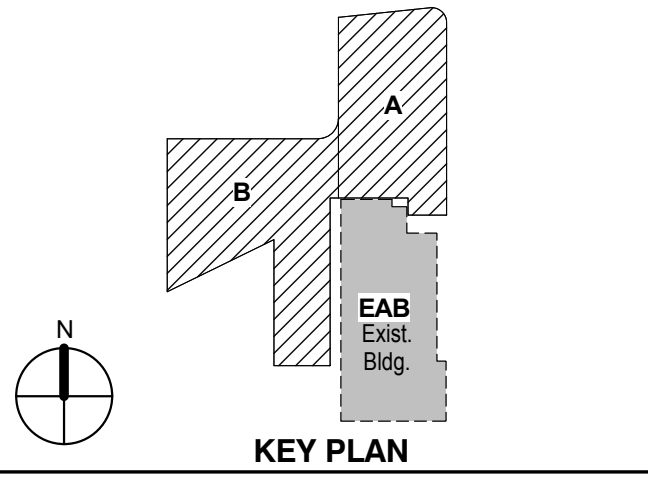
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314-558-0600

CONFORMED SET 01 JUL 2016

ISSUED FOR CONSTRUCTION (BP1) 15 JAN 2016

No.	Description	Date
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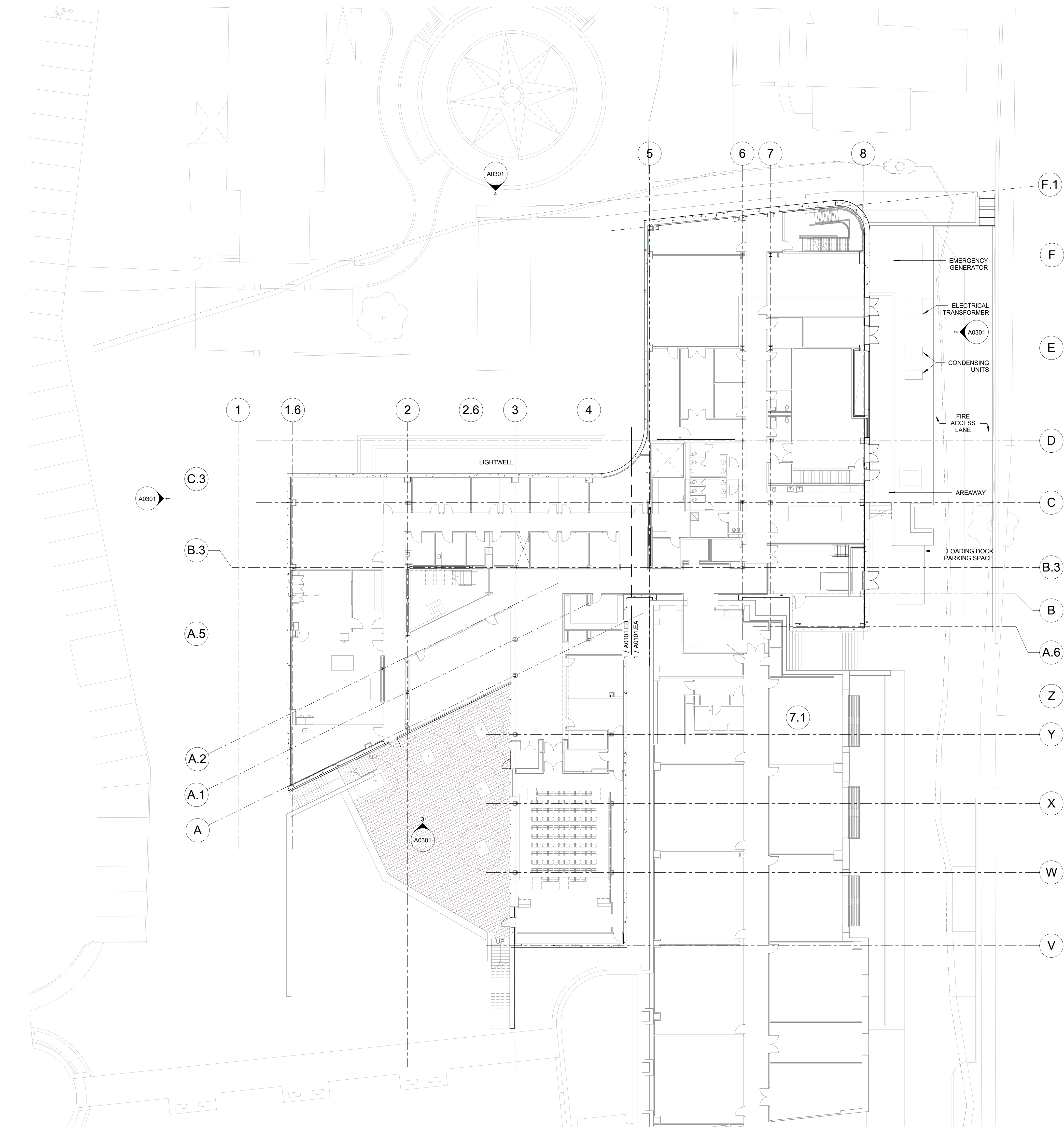


KEY PLAN

EXTERIOR - LEVEL 01
FLOOR PLAN

Project No.: 04561.01 Checked by:

A0101.E



1 EXTERIOR - LEVEL 01 FLOOR PLAN
3/16" = 1'-0"

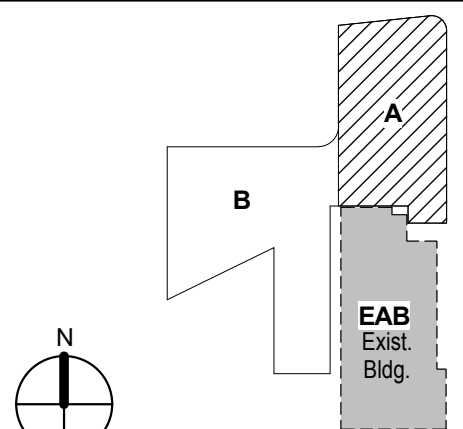




Kathy R. Williams
4.21.16

CONFORMED SET 01 JUL 2016

1 ADDENDUM 1-9		21 APR 2016
ISSUED FOR CONSTRUCTION (BP1)		15 JAN 2016
No.	Description	Date



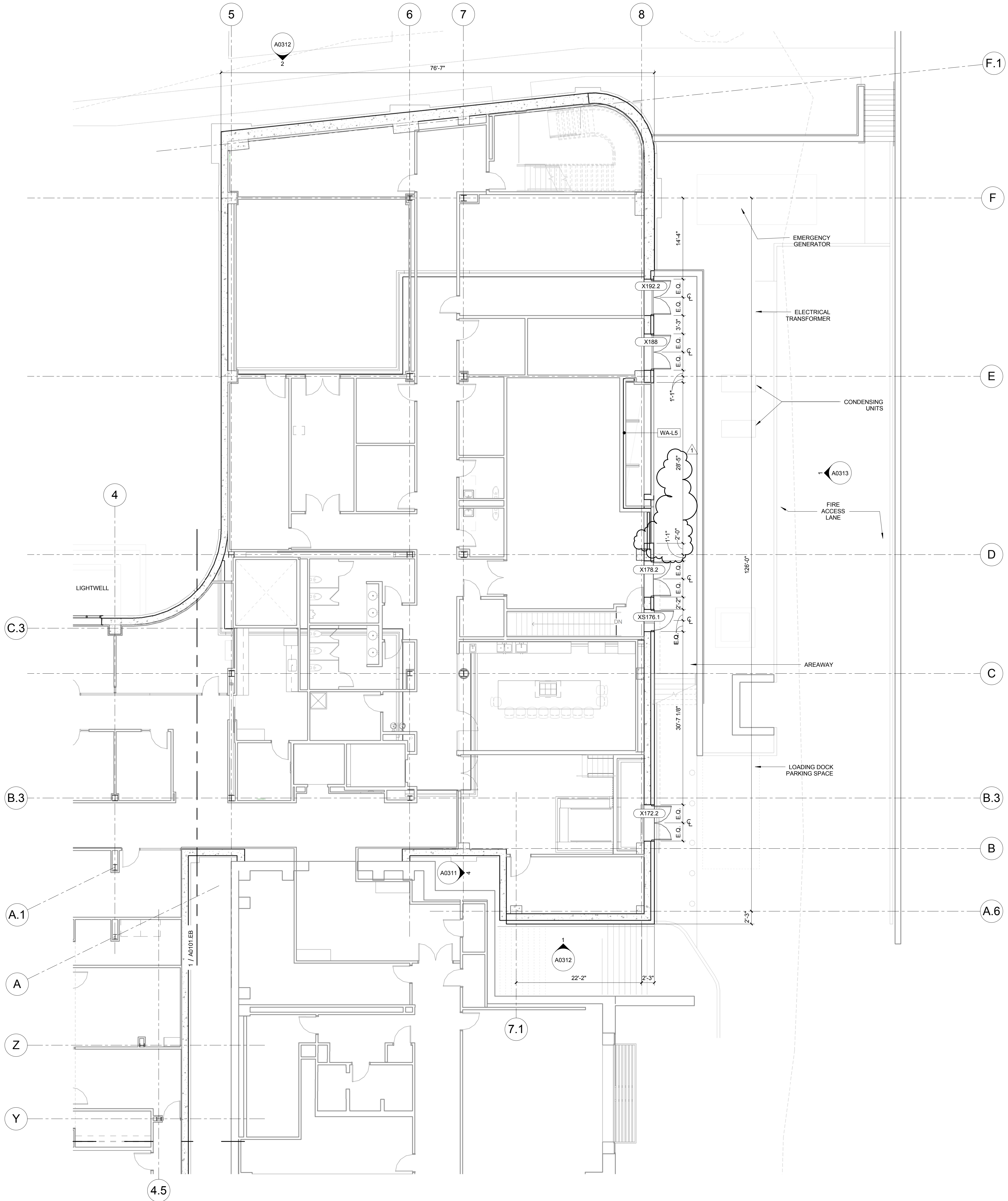
KEY PLAN

Drawing Title:

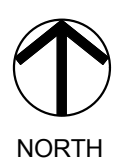
EXTERIOR - LEVEL 01
AREA A FLOOR PLAN

Project No.: 04561.01 Checked by:

A0101.EA



1 EXTERIOR - LEVEL 01 AREA A FLOOR PLAN
1/8" = 1'-0"



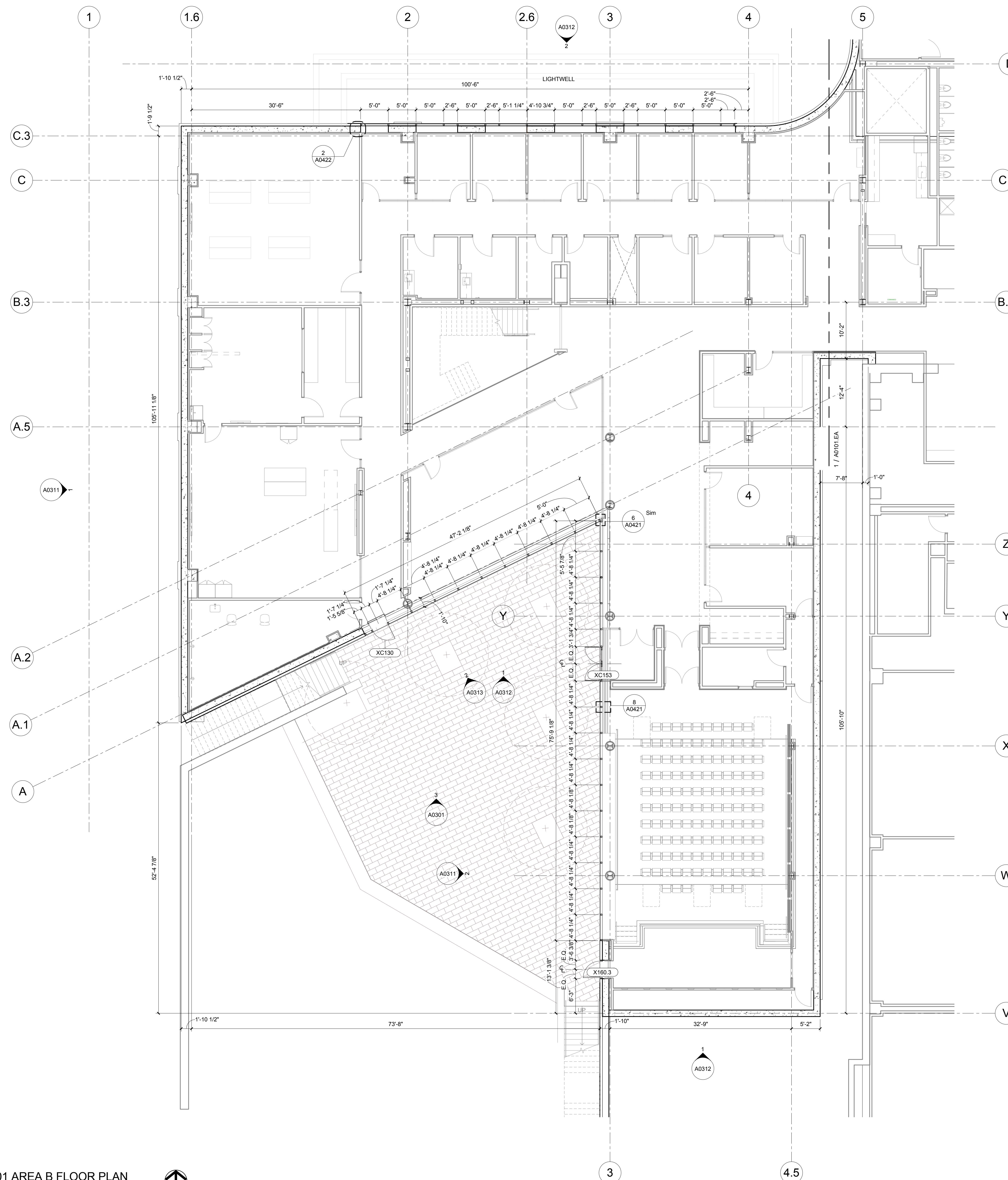
Webb Engineering Services, Inc.
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Drawing Title: _____

Project No.: 04561.01 Checked by:

A0101.EB

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1 LEVEL 01 AREA B FLOOR PLAN
1/8" = 1'-0"

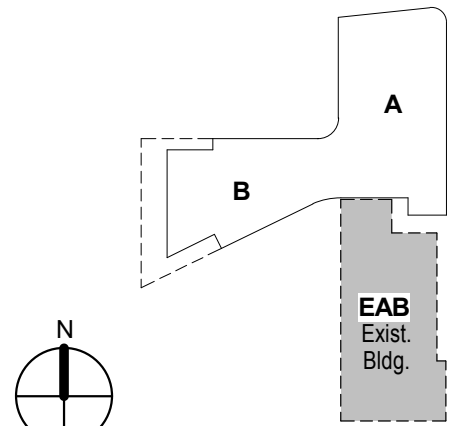




1 LEVEL 02
1/16" = 1'-0"

CONFORMED SET 01 JUL 2016

ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016
No. Description Date



KEY PLAN

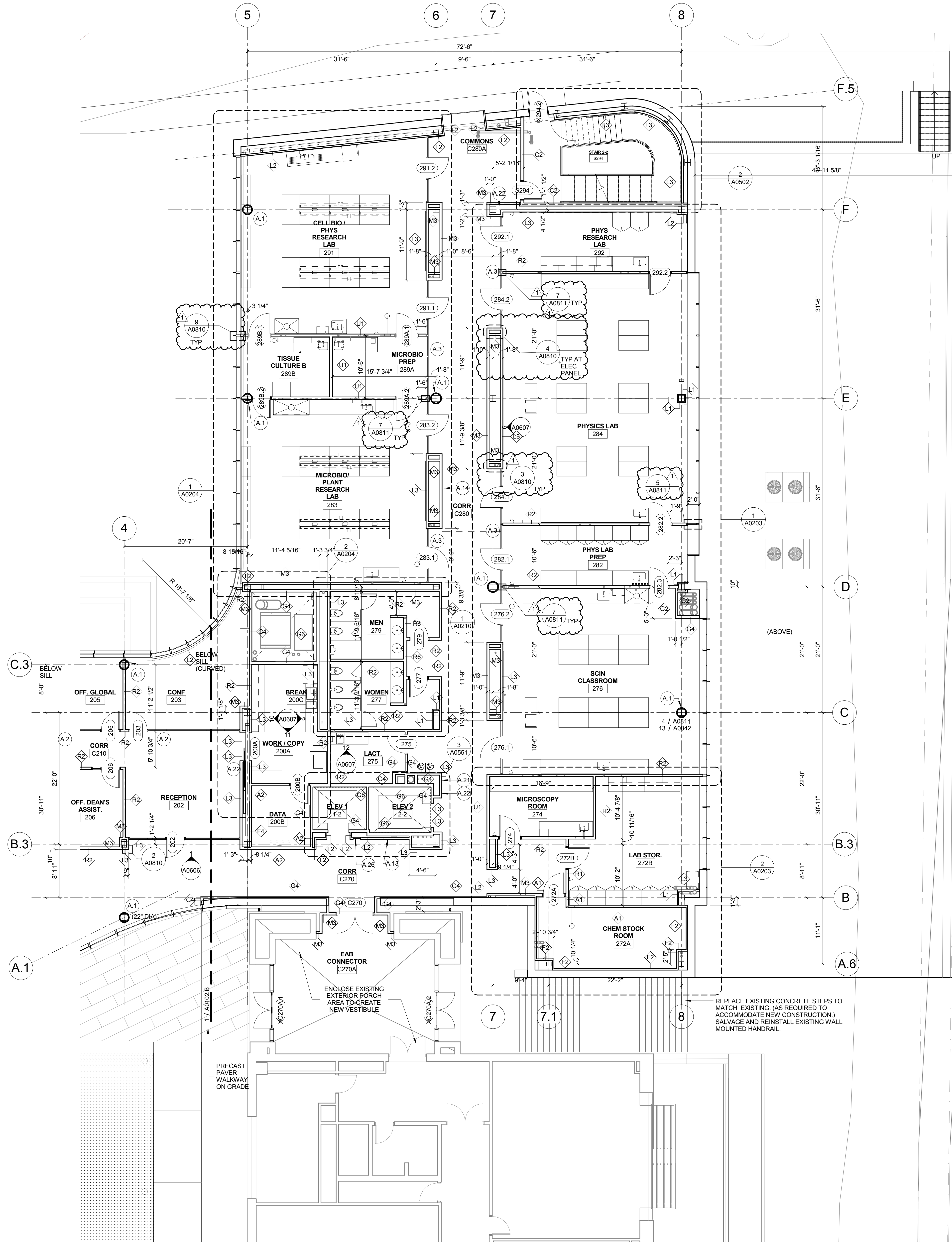
Drawing Title:

LEVEL 02 FLOOR PLAN

Project No.: 04561.01 Checked by:

A0102

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4/15/2016 4:49:51 PM



1 LEVEL 02- AREA A FLOOR PLAN
1/8" = 1'-0"

- KEYED NOTE LEGEND - PLAN**
- A.1 092700 GRG COLUMN COVER TO 3" ABOVE CEILING - 20" DIA. TYP. SEE DETAIL 4/A0811 AND 13/A0842.
 - A.2 081216 INTERIOR GLAZING SYSTEM: IGS-1: REFER TO TYPICAL INT. ELEVATIONS 1 AND 2 ON SHEET A0803
 - A.3 081216 INTERIOR GLAZING SYSTEM IGS-2. SEE TYPICAL ELEVATION 5 AND 6 A0603
 - A.4 081216 INTERIOR GLAZING SYSTEM: IGS-3: REFER TO INTERIOR ELEVATIONS
 - A.5 088813 FIRE RATED GLAZING- 120 MIN. FIRE RATED GLAZING 10'-0" HIGH. BASIS OF DESIGN: VETROTECH CONTRAFILAMM STRUTTURA - WITH BUTT JOINTS AND PERIMETER FRAMING
 - A.6 088813 FIRE RATED GLAZING AND FRAME- 120 MIN. FIRE RATED GLAZING 1'-8" HIGH X 5'-0" WIDE. BASIS OF DESIGN: VETROTECH CONTRAFILAMM WITH PERIMETER FRAMING
 - A.7 111519 LOADING DOCK LIFT - STATIONARY - 6W X 8' DEEPW/ 14" PIT
 - A.8 ALTERNATING TREAD STAIRWAY UP TO ROOF HATCH
 - A.9 UNDERSLAB DRAINAGE SYSTEM PER OWNER'S GEOTECHNICAL CONSULTANT RECOMMENDATION TYPICAL ALL SLAB ON GRADE AREAS
 - A.11 NEW CONCRETE STEPS TO MATCH EXISTING REMOVED FOR CONSTRUCTION
 - A.12 553006 BRICK FACED CONCRETE DUMPSTER ENCLOSURE TOP OF WALL
 - A.13 LCD SIGNAGE SCREEN IN WALL RECESS (OFCI)
 - A.14 MARKERBOARD SURFACE
 - A.15 WOOD SCREEN W/ SOLID LUMBER
 - A.17 VIDEO WALL - 24 55" SCREENS
 - A.18 LCD SCREEN LOCATION (OFOI)
 - A.19 AIR PLENUM - INSULATED PLENUM CONSTRUCTION BY DIVISION 23
 - A.20 122200 CURTAIN LOCATION
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 - A.22 10 4413 FEC WITH FIRE EXTINGUISHER
 - A.23 08 4423 SULL SASH LOCATION: PROVIDE 1/4" TEMPERED CLEAR GLAZING AT INTERIOR FACE OF CURTAIN WALL MULLIONS FOR ACOUSTICAL SEPARATION.
 - A.24 6" X 8" FORMED CONCRETE TRENCH IN FLOOR W/ METAL PLATE COVER. PROVIDE BLIND SIDE WATERPROOFING
 - A.25 BUILT IN SALT WATER FISH TANK LOCATION. SIZE APPROX. 7'-6" X 2'-4" X 2'-6" HIGH. LOW IRON GLASS VIEW WINDOW ON CORRIDOR SIDE. SLIDING DOOR ON LAB SIDE. FISH TANK EQUIPMENT BELOW TANK W/ CABINET DOOR ACCESS ON LAB SIDE. FINISHED INTERIOR FACE OF WALLS AND CEILING INSIDE CAVITY W/ WATER RESISTANT GYP BOARD AND EPOXY PAINT.
 - A.26 LCD SIGNAGE SCREEN IN WALL RECESS (OFCI)
 - A.27 CONSTRUCT 2 HOUR RATED SEPARATION BETWEEN BOTTOM OF STAIR AND UTILITY PIPING CROSSING THIS AREA. USE HORIZ. GYP BD. ENCLOSURE ON SHEET A1002

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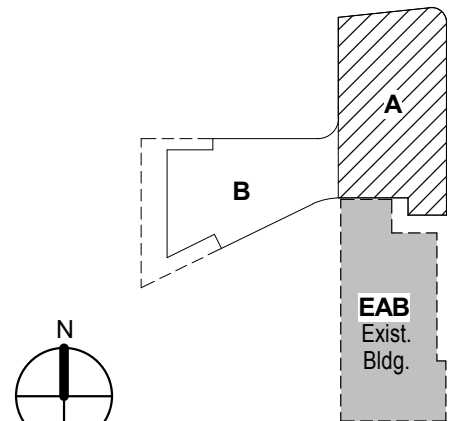
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CONFORMED SET 01 JUL 2016

1	ADDENDUM 3-2	15 APR 2016
-	ISSUED FOR CONSTRUCTION (BP3)	15 MAR 2016
No.	Description	Date

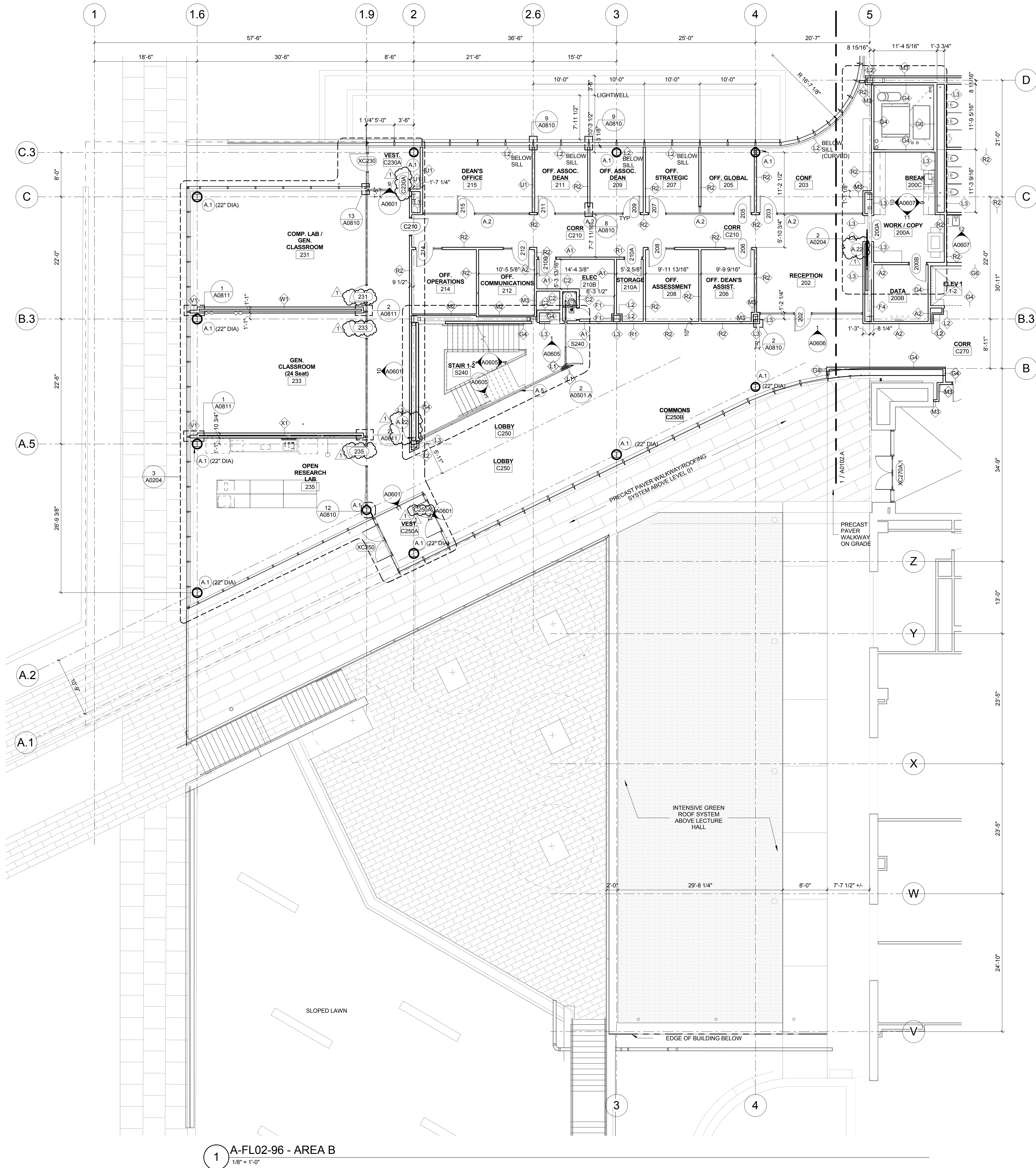


KEY PLAN

LEVEL 02 AREA A FLOOR PLAN

Project No.: 04561.01 Checked by:

A0102.A

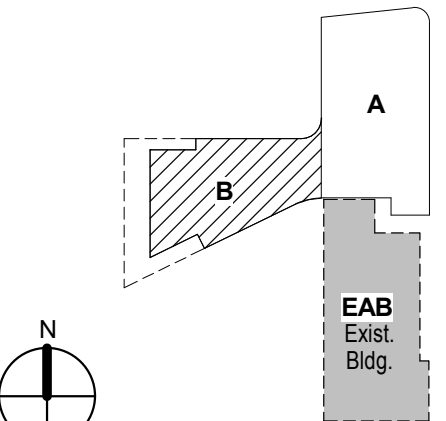


1 A-FL02-96 - AREA B
1/8" = 1'-0"

- KEYED NOTE LEGEND - PLAN**
- A.1 092700 GRG COLUMN COVER TO 3" ABOVE CEILING - 20" DIA. TYP. SEE DETAIL 4/A0811 AND 13/A0842.
 - A.2 081216 INTERIOR GLAZING SYSTEM: IGS-1. REFER TO TYPICAL INT. ELEVATIONS 1 AND 2 ON SHEET A0803
 - A.3 081216 INTERIOR GLAZING SYSTEM IGS-2. SEE TYPICAL ELEVATION 5 AND 6 A0603
 - A.4 081216 INTERIOR GLAZING SYSTEM: IGS-3. REFER TO INTERIOR ELEVATIONS
 - A.5 088813 FIRE RATED GLAZING- 120 MIN. FIRE RATED GLAZING 10'-0" HIGH. BASIS OF DESIGN: VETROTECH CONTRAFRAMM STRUTTURA - WITH BUTT JOINTS AND PERIMETER FRAMING.
 - A.6 088813 FIRE RATED GLAZING AND FRAME- 120 MIN. FIRE RATED GLAZING 1'-8" HIGH X 5'-0" WIDE. BASIS OF DESIGN: VETROTECH CONTRAFRAMM WITH PERIMETER FRAMING.
 - A.7 111519 LOADING DOCK LIFT - STATIONARY - 6W x 8' DEEPW/ 14" PIT
 - A.8 ALTERNATING TREAD STAIRWAY UP TO ROOF HATCH
 - A.9 UNDERSLAB DRAINAGE SYSTEM PER OWNER'S GEOTECHNICAL CONSULTANT RECOMMENDATION TYPICAL ALL SLAB ON GRADE AREAS
 - A.11 NEW CONCRETE STEPS TO MATCH EXISTING REMOVED FOR CONSTRUCTION
 - A.12 553006 BRICK FACED CONCRETE DUMPSTER ENCLOSURE TOP OF WALL
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 - A.14 MARKERBOARD SURFACE
 - A.15 WOOD SCREEN W/ SOLID LUMBER
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 - A.24 6" X 8" FORMED CONCRETE TRENCH IN FLOOR W/ METAL PLATE COVER. PROVIDE BLIND SIDE WATERPROOFING
 - A.25 BUILT IN SALT WATER FISH TANK LOCATION. SIZE APPROX. 7'-6" X 2'-4" X 2'-6" HIGH. LOW IRON GLASS VIEW WINDOW ON CORRIDOR SIDE. SLIDING DOOR ON LAB SIDE. FISH TANK EQUIPMENT BELOW TANK W/ CABINET DOOR ACCESS ON LAB SIDE. FINISHED INTERIOR FACE OF WALLS AND CEILING INSIDE CAVITY W/ WATER RESISTANT GYP BOARD AND EPOXY PAINT.
 - A.26 LCD SIGNAGE SCREEN IN WALL RECESS (OFCI)
 - A.27 CONSTRUCT 2 HOUR RATED SEPARATION BETWEEN BOTTOM OF STAIR AND UTILITY PIPING CROSSING THIS AREA. USE HORIZ. GYP BD. ENCLOSURE ON SHEET A1002

CONFORMED SET 01 JUL 2016

1	ADDENDUM 3-1	05 APR 2016
1	ISSUED FOR CONSTRUCTION (BP3)	15 MAR 2016
No.	Description	Date



KEY PLAN

LEVEL 02 AREA B FLOOR PLAN

Project No.: 04561.01 Checked by:

A0102.B

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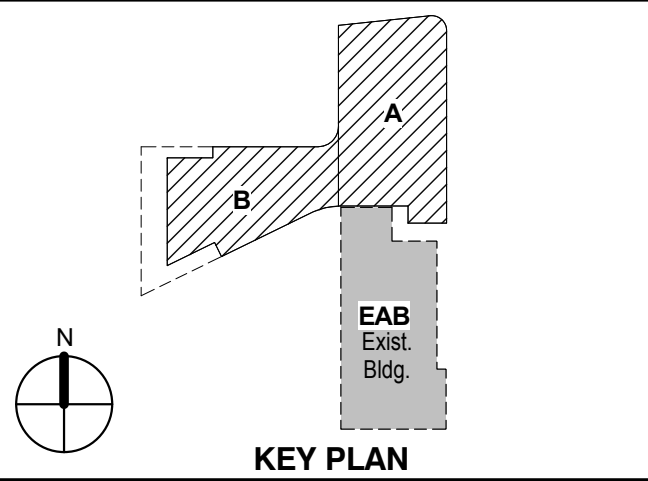
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CONFORMED SET 01 JUL 2016

ISSUED FOR CONSTRUCTION (BP1) 15 JAN 2016

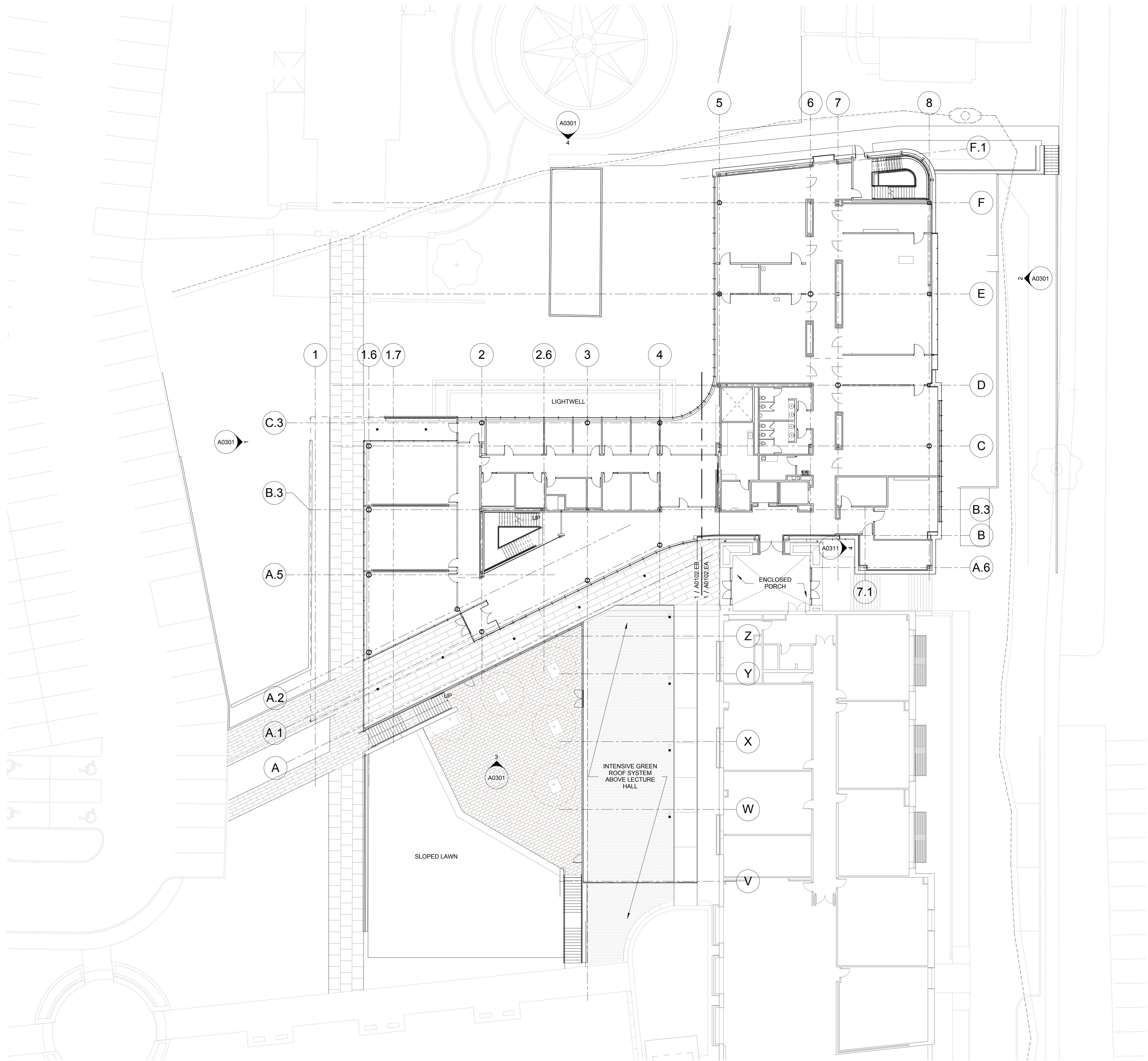


Drawing Title:

EXTERIOR - LEVEL 02
FLOOR PLAN

Project No.: 04561.01 Checked by:

A0102.E



1 EXTERIOR - LEVEL 02
1/16" = 1'-0"

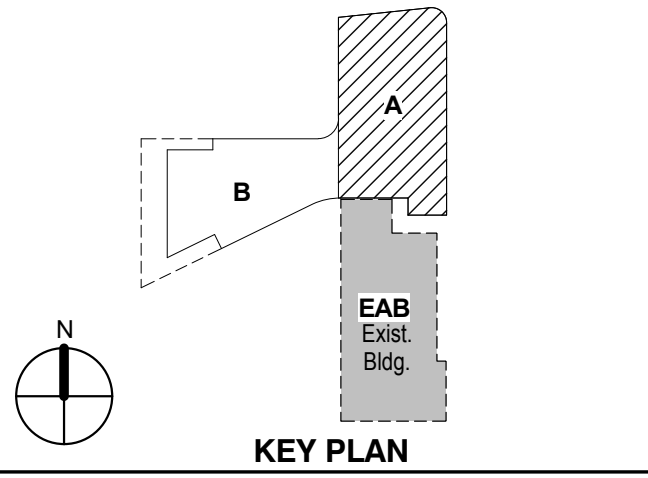


NORTH

CONFORMED SET 01 JUL 2016

ISSUED FOR CONSTRUCTION (BP1) 15 JAN 2016

No.	Description	Date
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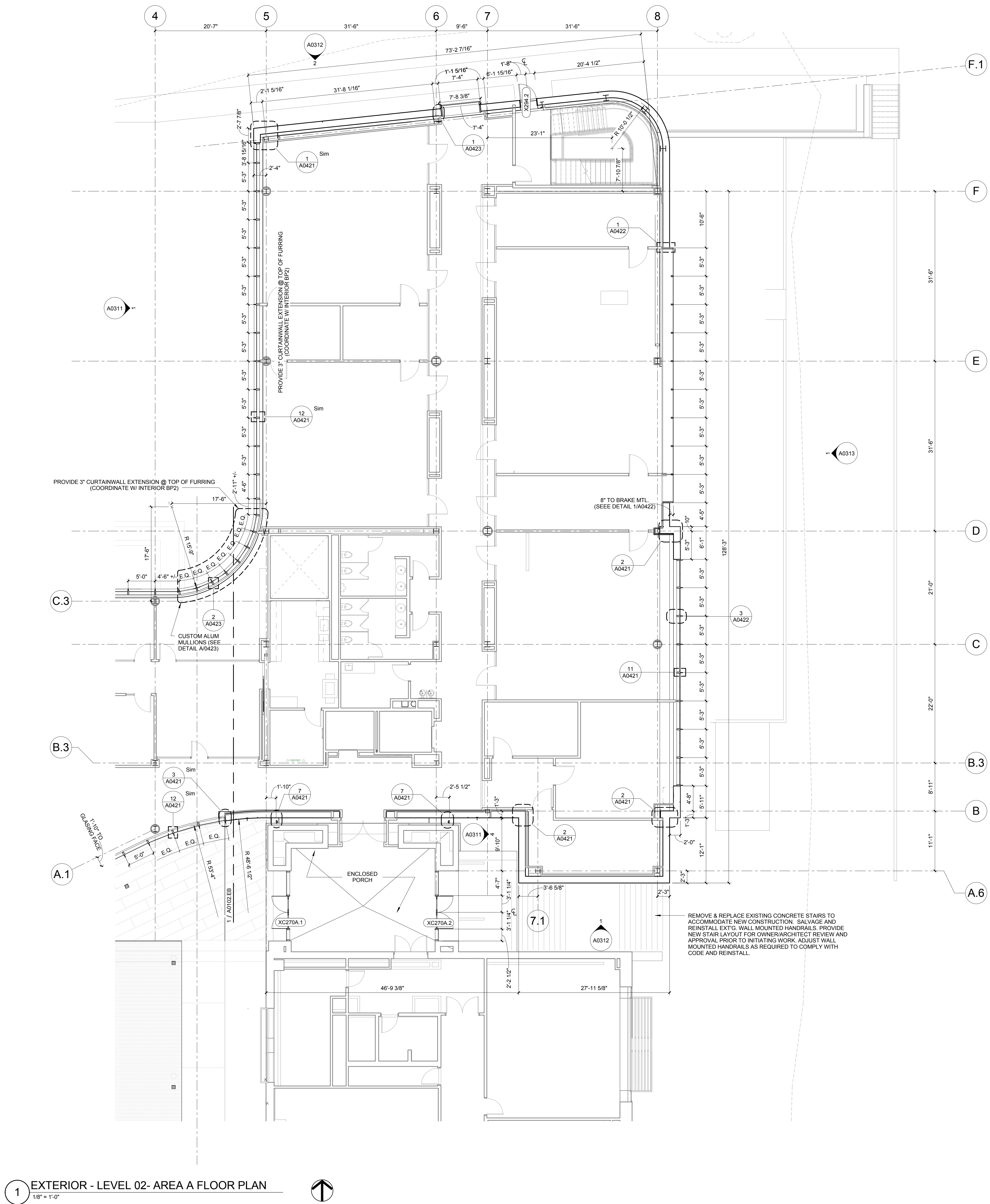


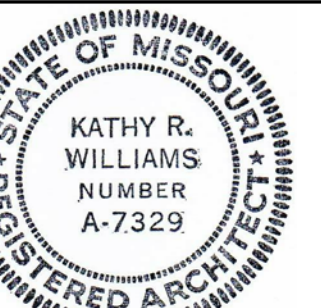
KEY PLAN

EXTERIOR LEVEL 02 AREA
A FLOOR PLAN

Project No.: 04561.01 Checked by:

A0102.EA

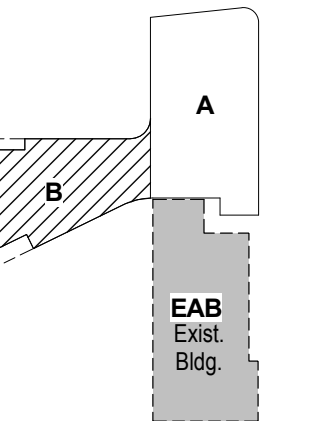




Kathy R. Williams
3.16.16

CONFORMED SET 01 JUL 2016

1 ADDENDUM 1-7 16 MAR 2016
ISSUED FOR CONSTRUCTION (BP1) 15 JAN 2016
No. Description Date

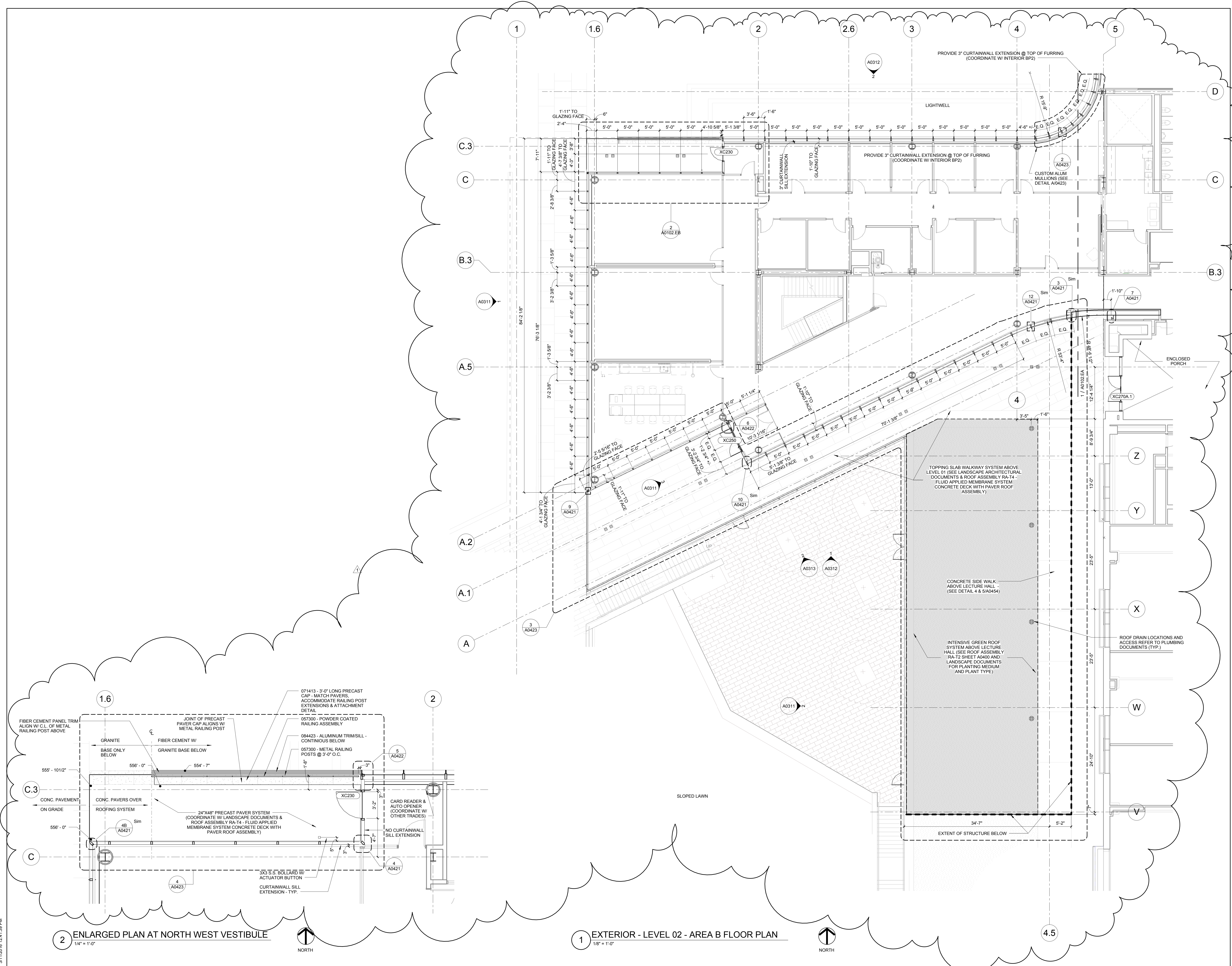


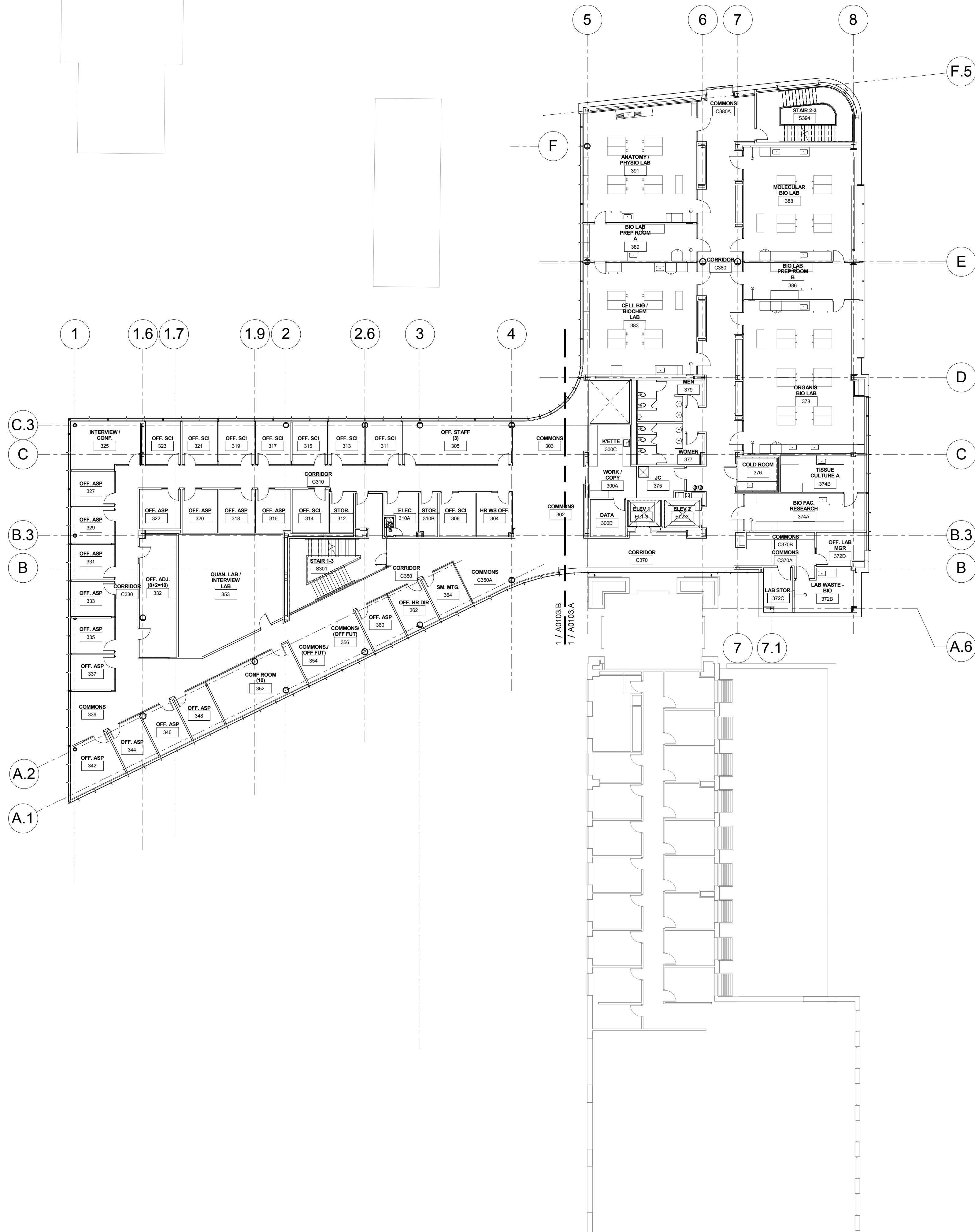
KEY PLAN

EXTERIOR - LEVEL 02
AREA B FLOOR PLAN

Project No.: 04561.01 Checked by:

A0102.EB

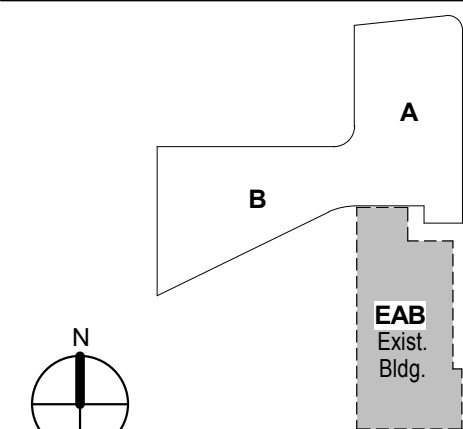




1 LEVEL 03
1/16" = 1'-0"

CONFORMED SET 01 JUL 2016

ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016
No. Description Date



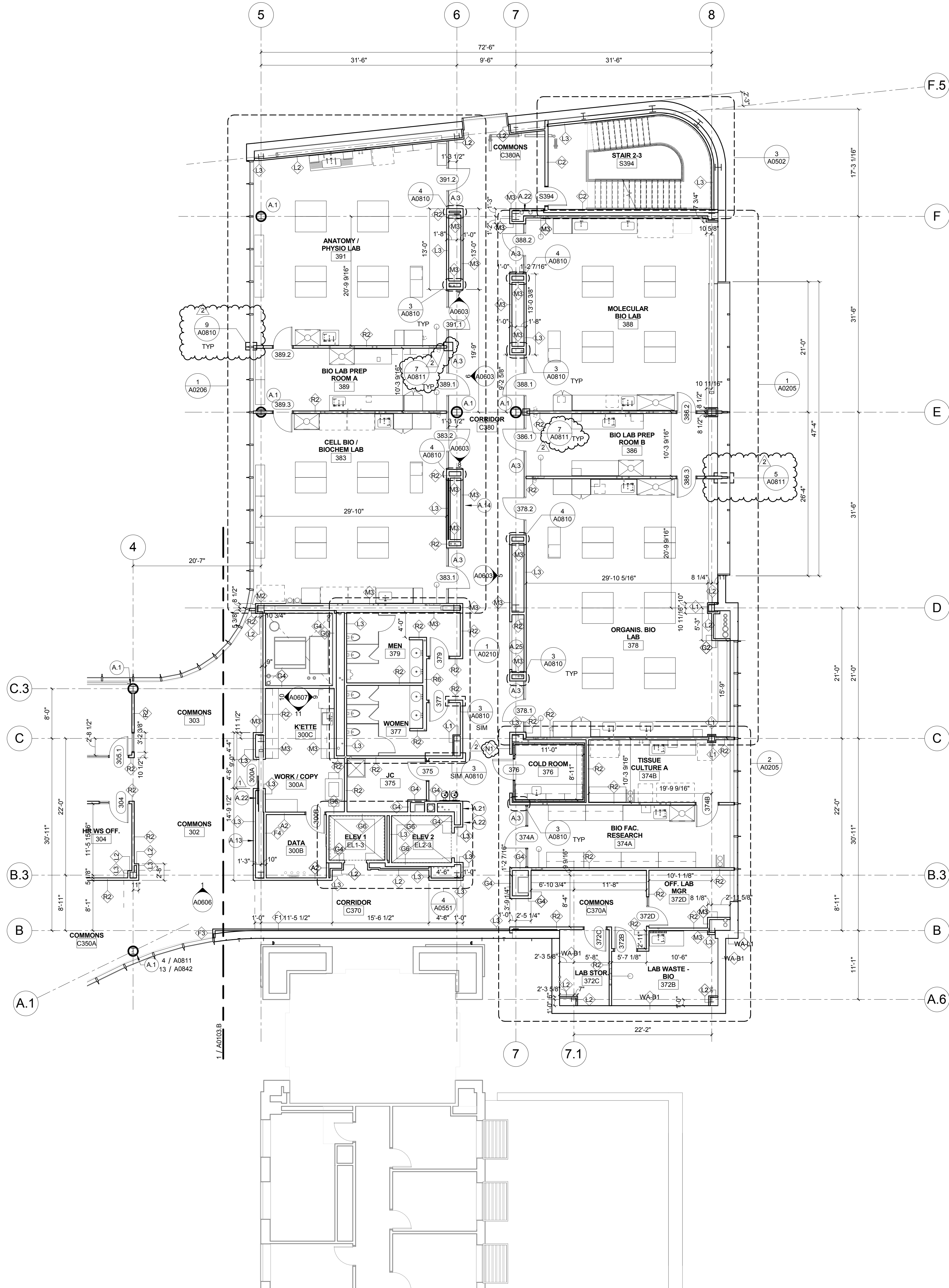
KEY PLAN

Drawing Title:

LEVEL 03 FLOOR PLAN

Project No.: 04561.01 Checked by:

A0103



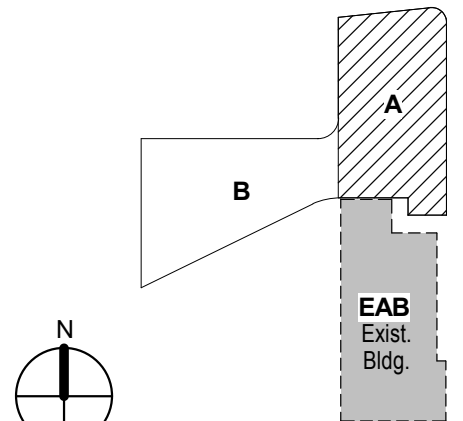
1 LEVEL 03 AREA A - NORTH FLOOR PLAN
1/8" = 1'-0"

- KEYED NOTE LEGEND - PLAN**
- A.1 092709 GRG COLUMN COVER TO 3" ABOVE CEILING - 20" DIA. TYP. SEE DETAIL 4/A0811 AND 13/A0842.
 - A.2 081216 INTERIOR GLAZING SYSTEM: IGS-1: REFER TO TYPICAL INT. ELEVATIONS 1 AND 2 ON SHEET A0803
 - A.3 081216 INTERIOR GLAZING SYSTEM IGS-2: SEE TYPICAL ELEVATION 5 AND 6 A0603
 - A.4 081216 INTERIOR GLAZING SYSTEM: IGS-3: REFER TO INTERIOR ELEVATIONS
 - A.5 088813 FIRE RATED GLAZING- 120 MIN. FIRE RATED GLAZING 10'-0" HIGH. BASIS OF DESIGN: VETROTECH CONTRAFILAMM STRUTTURA - WITH BUTT JOINTS AND PERIMETER FRAMING.
 - A.6 088813 FIRE RATED GLAZING AND FRAME- 120 MIN. FIRE RATED GLAZING 1'-8" HIGH X 5'-0" WIDE. BASIS OF DESIGN: VETROTECH CONTRAFILAMM WITH PERIMETER FRAMING.
 - A.7 111519 LOADING DOCK LIFT - STATIONARY - 6W x 8' DEEPW/ 14" PIT
 - A.8 ALTERNATING TREAD STAIRWAY UP TO ROOF HATCH
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 - A.25 BUILT IN SALT WATER FISH TANK LOCATION. SIZE APPROX. 7'-6" X 2'-4" X 2'-6" HIGH. LOW IRON GLASS VIEW WINDOW ON CORRIDOR SIDE. SLIDING DOOR ON LAB SIDE. FISH TANK EQUIPMENT BELOW TANK W/ CABINET DOOR ACCESS ON LAB SIDE. FINISHED INTERIOR FACE OF WALLS AND CEILING INSIDE CAVITY W/ WATER RESISTANT GYP BOARD AND EPOXY PAINT.
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 - A.27 CONSTRUCT 2 HOUR RATED SEPARATION BETWEEN BOTTOM OF STAIR AND UTILITY PIPING CROSSING THIS AREA. USE HORIZ. GYP BD. ENCLOSURE ON SHEET A1002

CONFORMED SET 01 JUL 2016

2	ADDENDUM 3-2	15 APR 2016
1	ADDENDUM 3-1	06 APR 2016
-	ISSUED FOR CONSTRUCTION (BP3)	15 MAR 2016

No.	Description	Date
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KEY PLAN

LEVEL 03 AREA A FLOOR PLAN

Project No.: 04561.01 Checked by:

A0103.A



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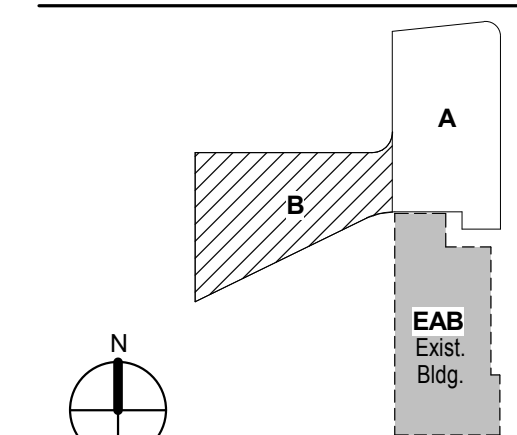
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CONFORMED SET 01 JUL 2016

1	ADDENDUM 3-1	05 APR 2016
-	ISSUED FOR CONSTRUCTION (BP3)	15 MAR 2016
No.	Description	Date

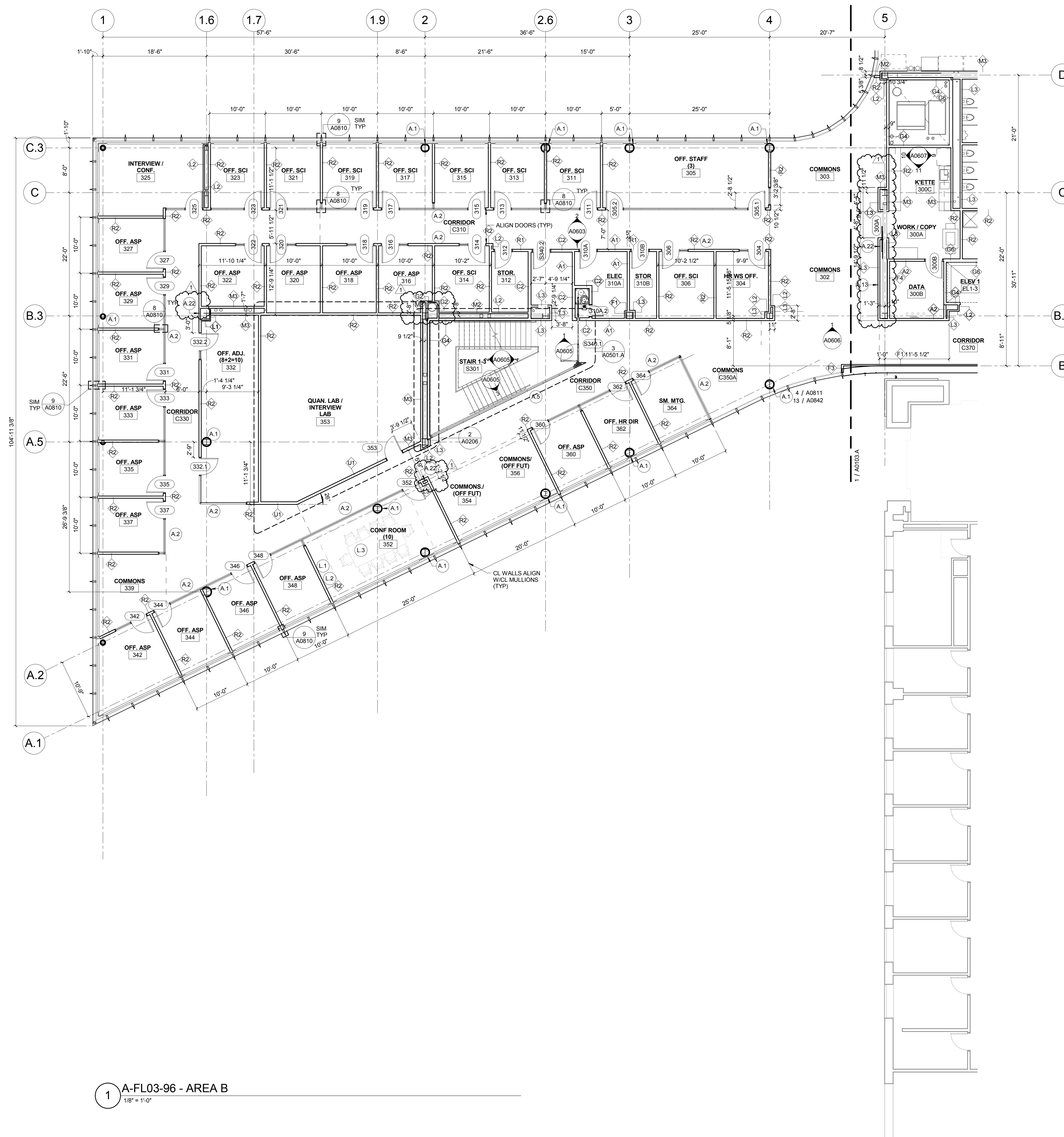


KEY PLAN

**LEVEL 03 AREA B FLOOR
PLAN**

Project No.: 04561.01 Checked by:

A0103.B



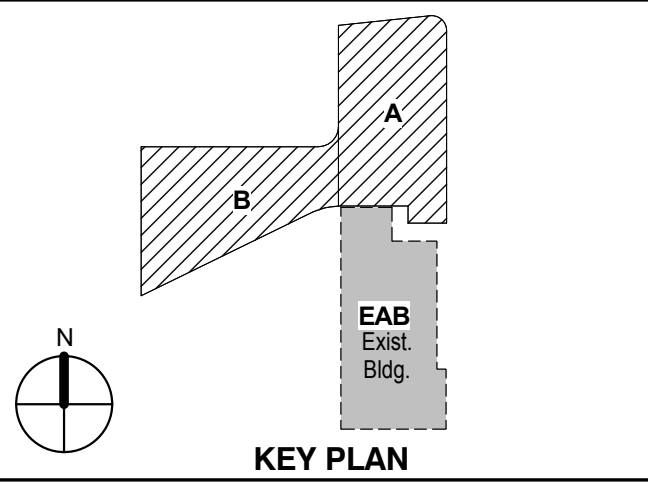
1 A-FL03-96 - AREA B
1/8" = 1'-0"

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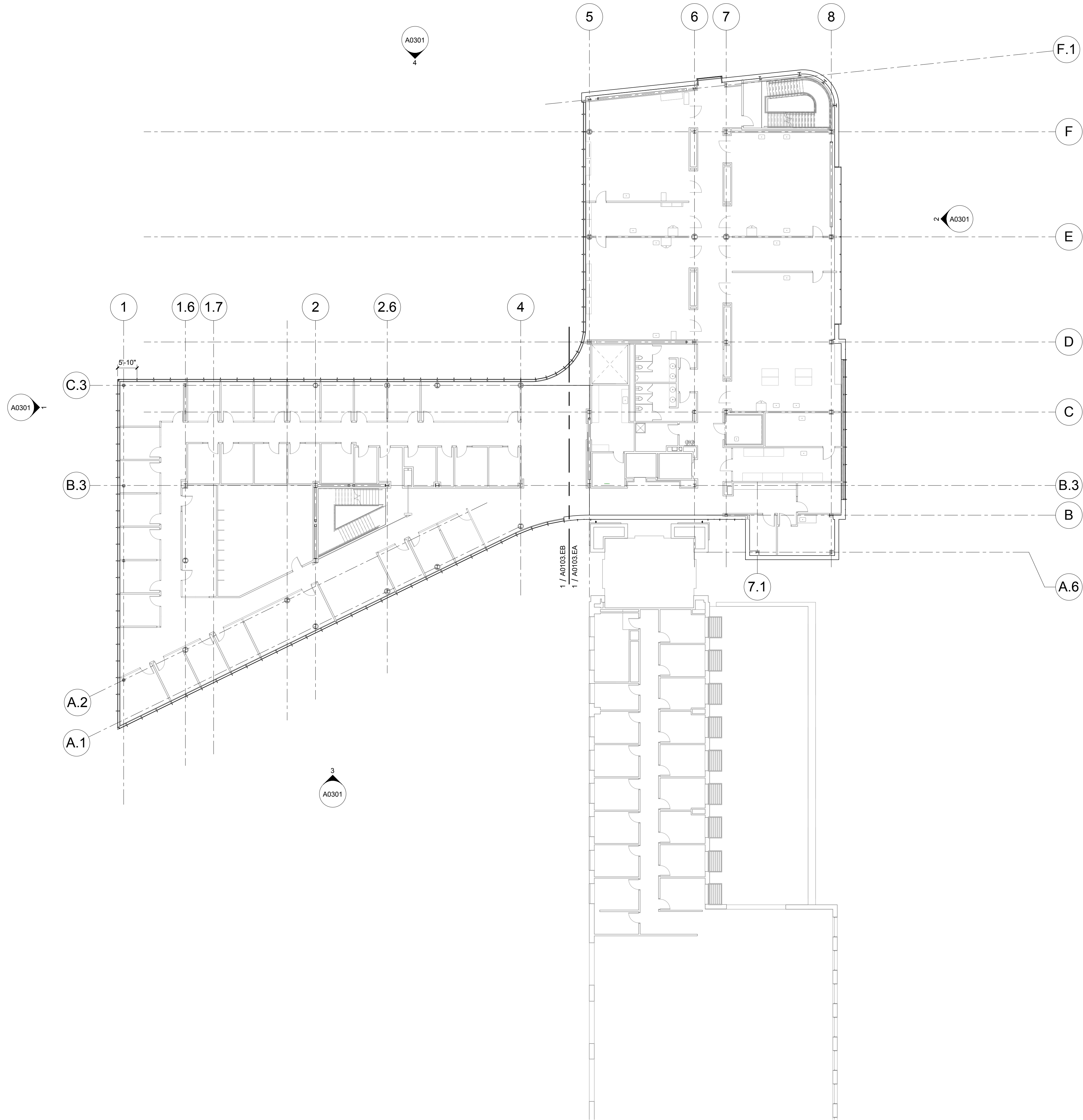
ISSUED FOR CONSTRUCTION (BP1) 15 JAN 2016



EXTERIOR - LEVEL 03
FLOOR PLAN

Project No.: 04561.01 Checked by:

A0103.E



1 EXTERIOR - LEVEL 03
1/16" = 1'-0"

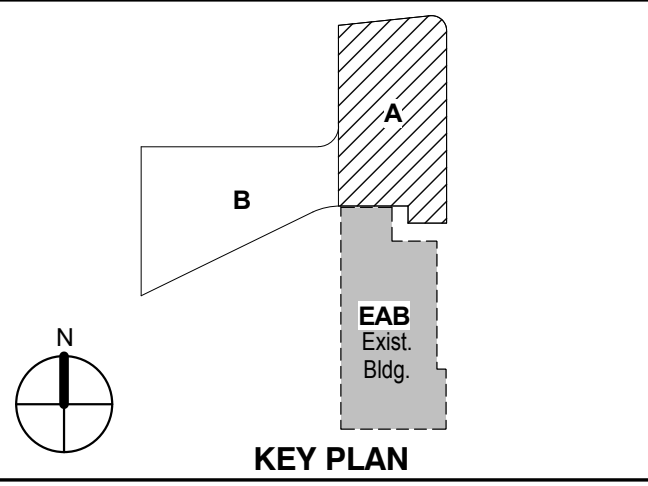


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No. Description Date

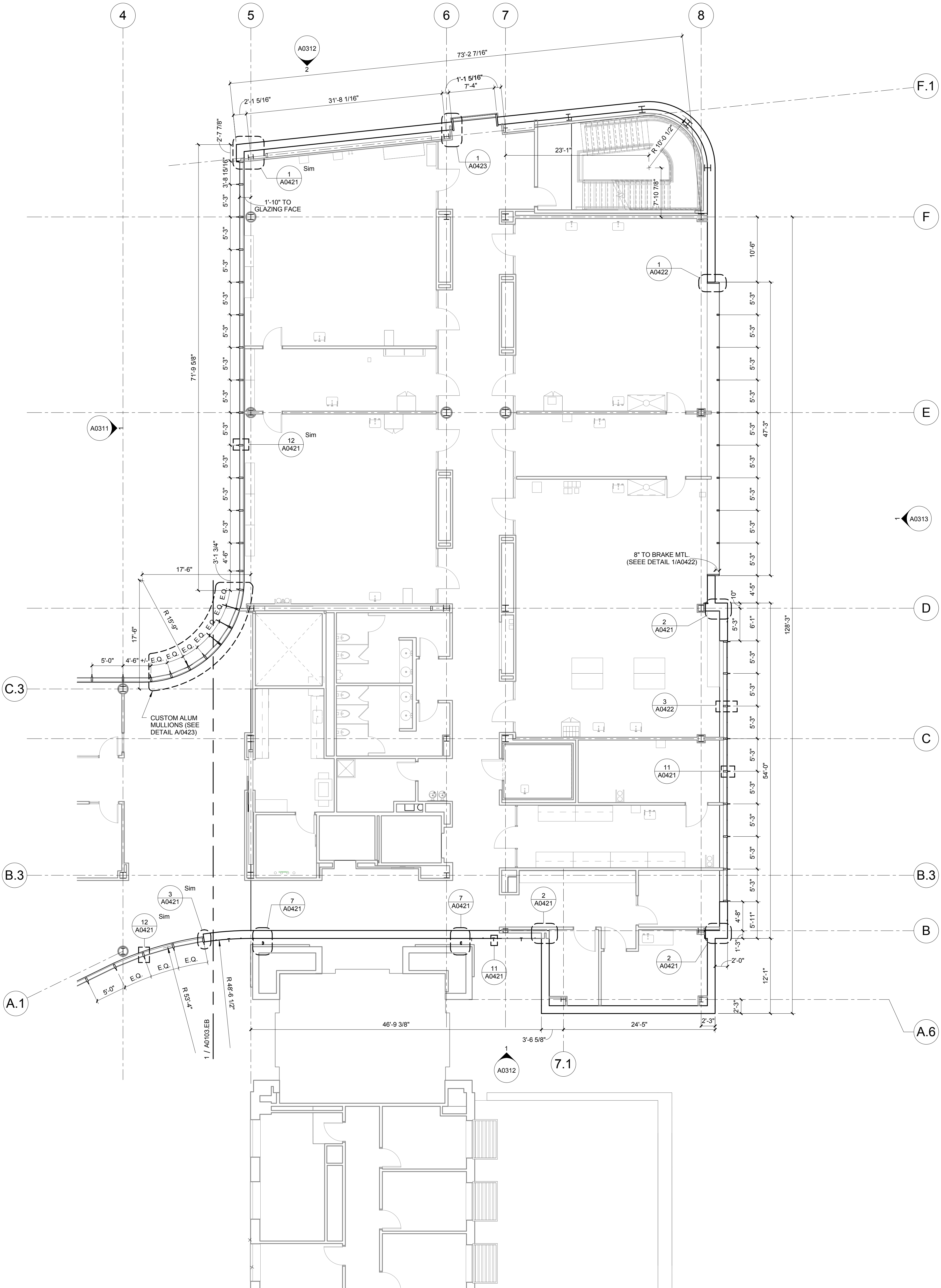


KEY PLAN

EXTERIOR - LEVEL 03
AREA A FLOOR PLAN

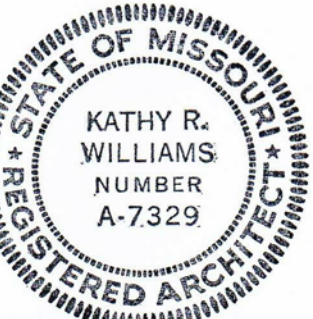
Project No.: 04561.01 Checked by:

A0103.EA



1 EXTERIOR - LEVEL 03 - AREA A FLOOR PLAN
1/8" = 1'-0"





Kathy R. Williams
3.16.16

CONFORMED SET

01 JUL 2016

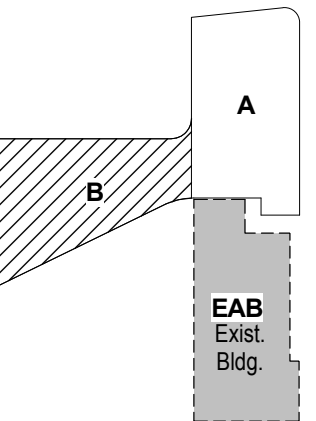
1 ADDENDUM 1-7

16 MAR 2016

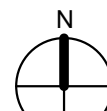
ISSUED FOR CONSTRUCTION (BP1)

15 JAN 2016

No.	Description	Date
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KEY PLAN



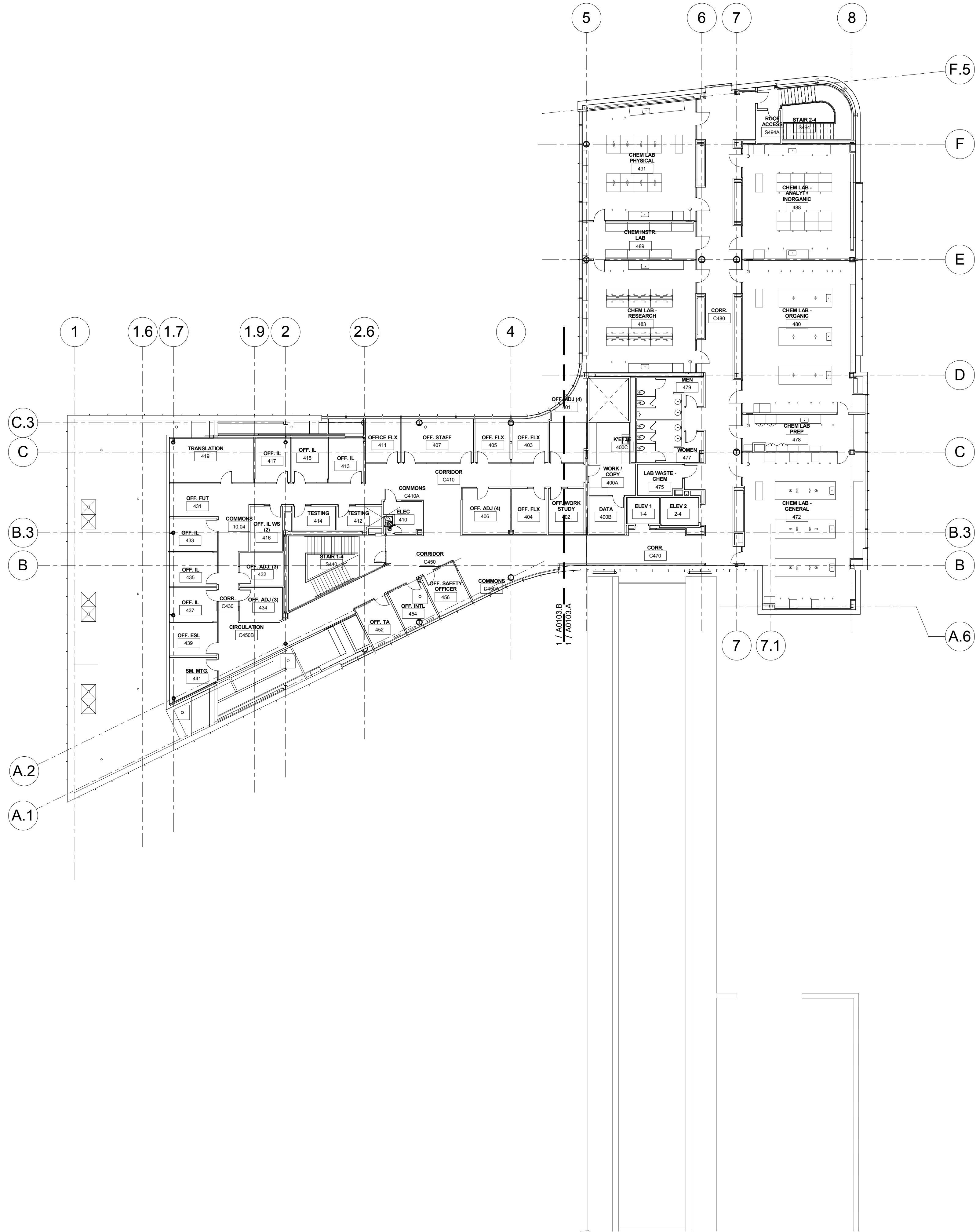
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EXTERIOR - LEVEL 03
AREA B FLOOR PLAN

Project No.: 04561.01

Checked by:

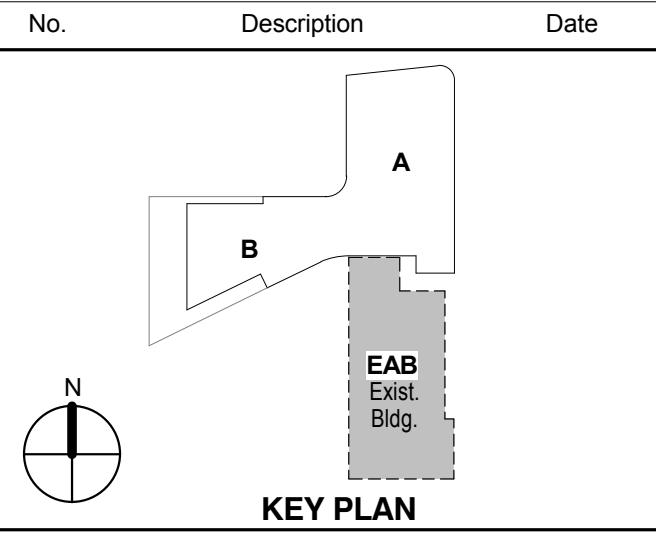
A0103.EB



1 LEVEL 04
1/16" = 1'-0"

CONFORMED SET 01 JUL 2016

ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016



KEY PLAN

LEVEL 04 FLOOR PLAN

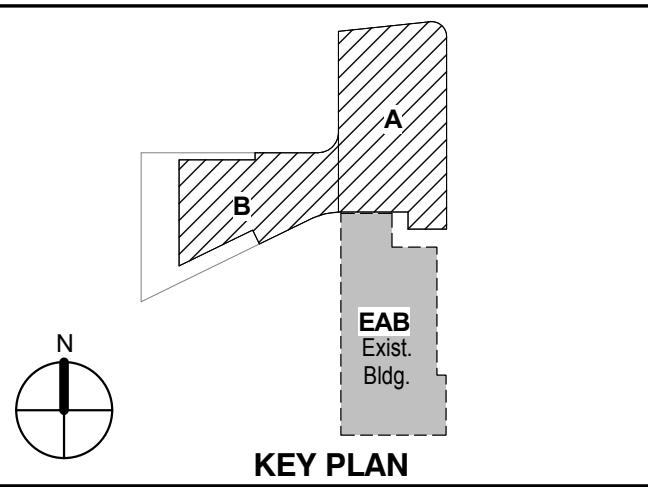
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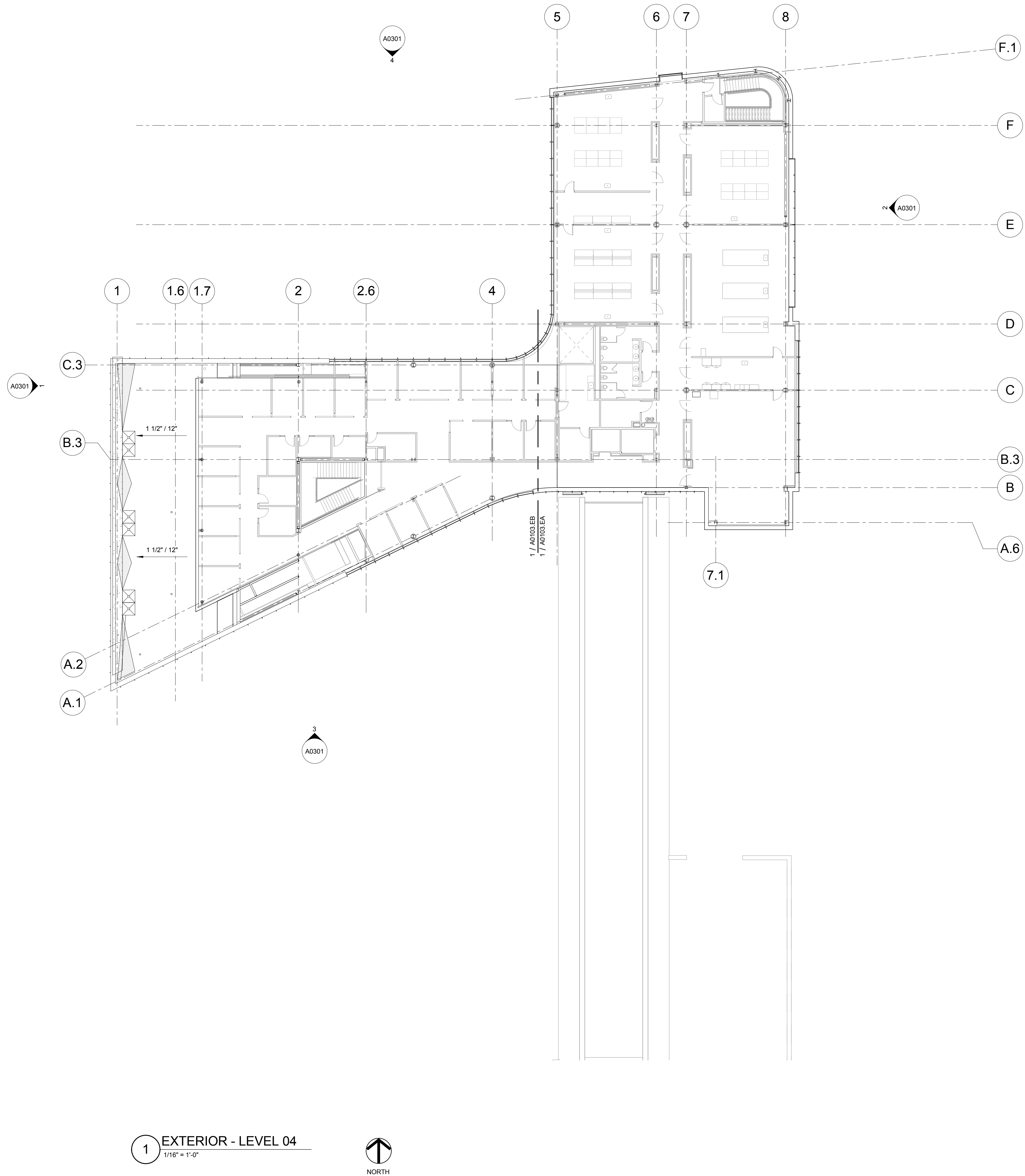


KEY PLAN

EXTERIOR LEVEL 04
FLOOR PLAN

Project No.: 04561.01 Checked by:

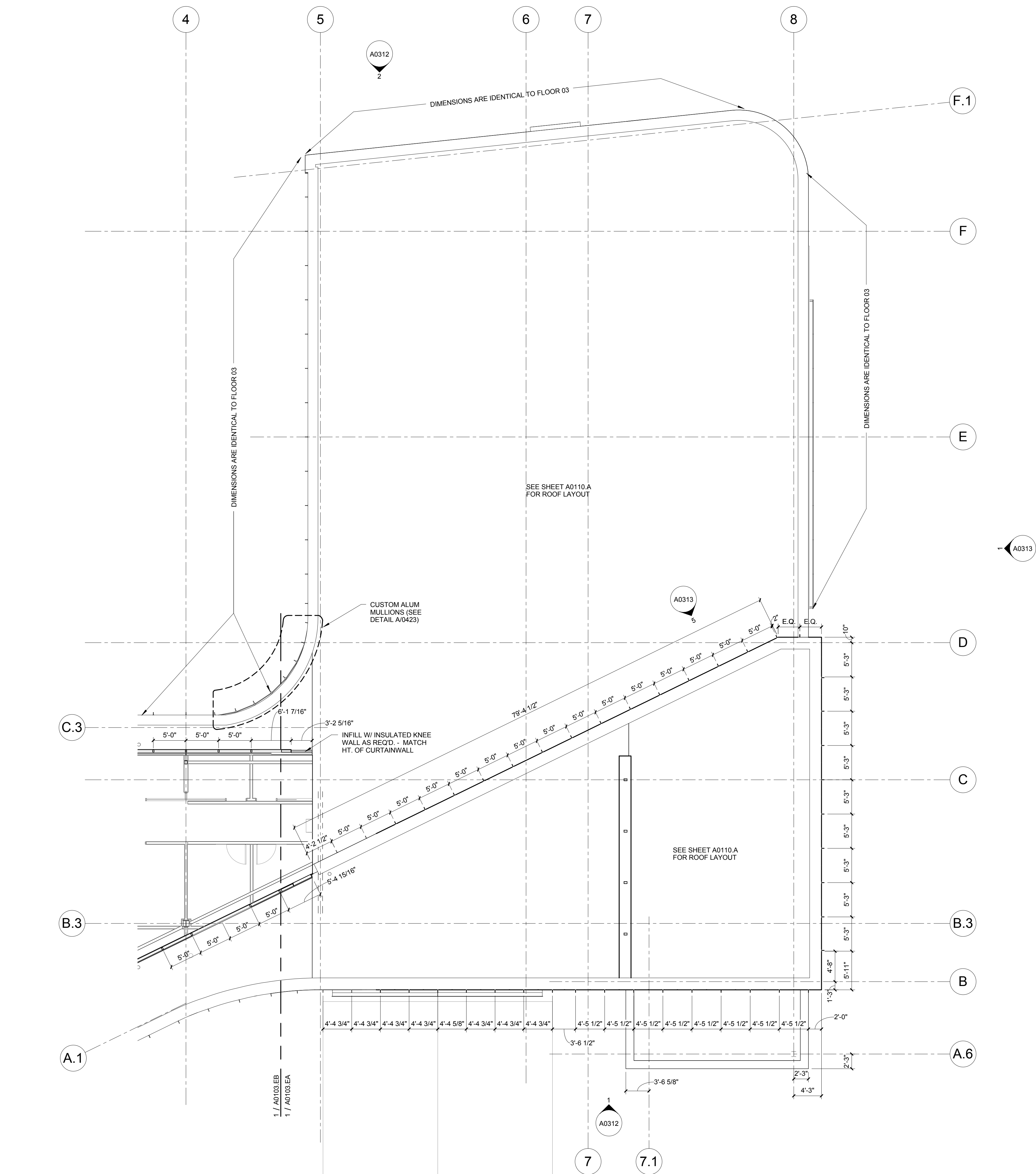
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1 EXTERIOR - LEVEL 04
1/16" = 1'-0"



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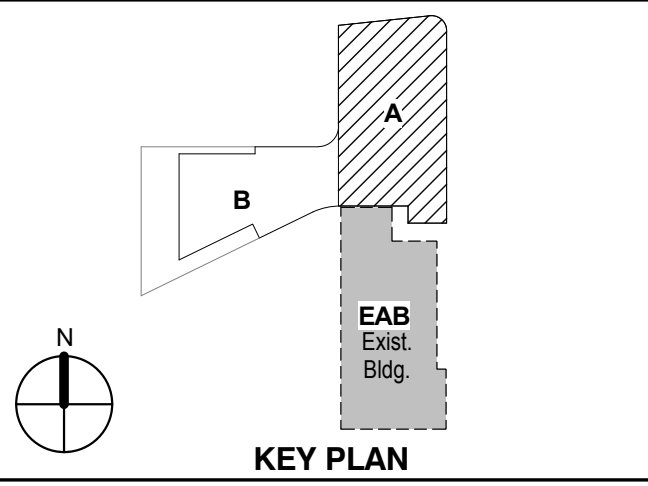


1 EXTERIOR - LEVEL 04 AREA A FLOOR PLAN
1/8" = 1'-0"



CONFORMED SET 01 JUL 2016

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No. Description Date



KEY PLAN

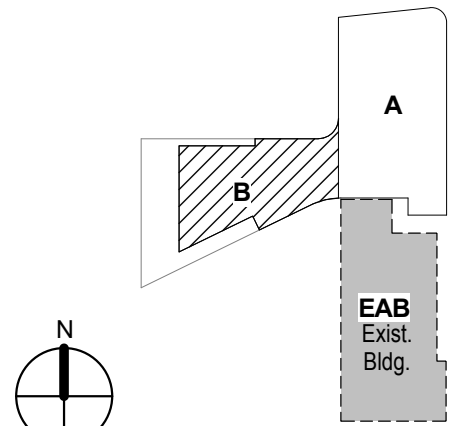
EXTERIOR LEVEL 04 AREA
A FLOOR PLAN

Project No.: 04561.01 Checked by:

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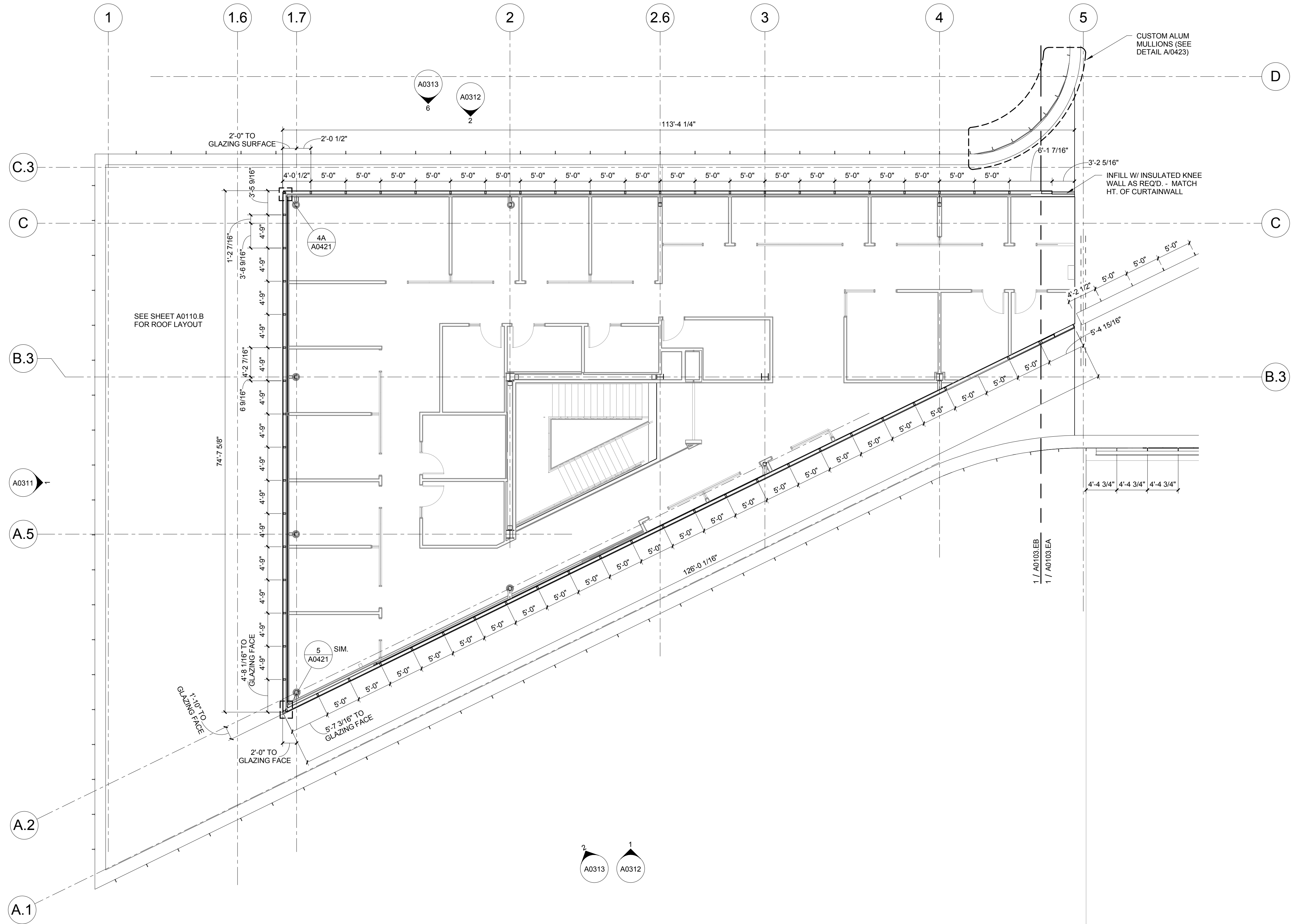
KEY PLAN

Drawing Title:

EXTERIOR - LEVEL 04
AREA B FLOOR PLAN

Project No.: 04561.01 Checked by:

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1 EXTERIOR - LEVEL 04 AREA B FLOOR PLAN
1/8" = 1'-0"



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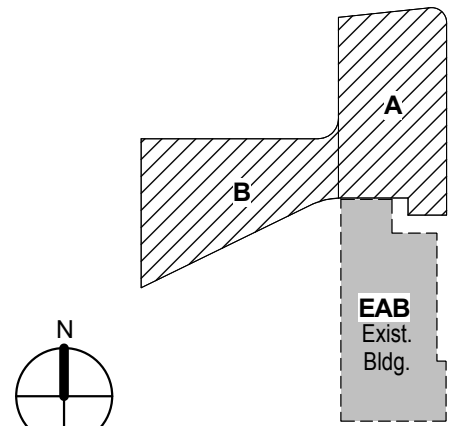
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KEY PLAN

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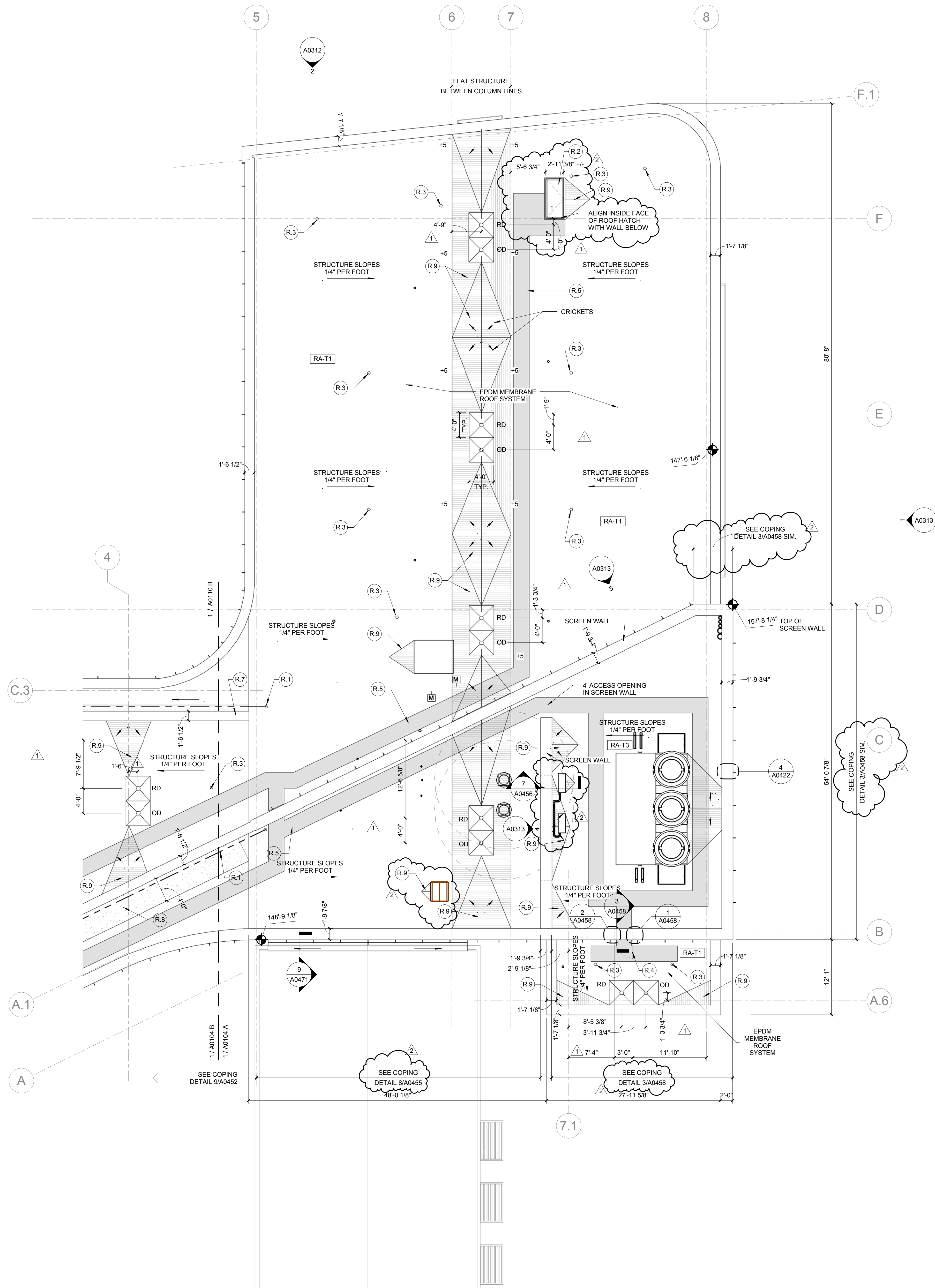
ROOF PLAN

Project No.: 04561.01 Checked by:

A0110

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1 ROOF- AREA A
1/8" = 1'-0"



KEYED NOTE LEGEND - ROOF PLAN	
R.1	077200 LIFE SAFETY CABLE SYSTEM
R.2	077200 ROOF HATCH
R.3	077200 LIFE SAFETY TIE OFF
R.4	HINGED ACCESS PANEL/DOOR
R.5	WALK PADS
R.7	PROVIDE INSULATED KNEE WALL TO MATCH HEIGHT OF ESG-2 AS REQ'D.
R.8	CFMF FRAMED STICK-BUILT CRICKETS WITH PLYWOOD SHEATHING
R.9	075323 TAPERED INSULATION

- NOTES:
- SEE SHEET A0471 - FOR MISCELLANEOUS ROOFING DETAILS AS REQUIRED.
 - M.E.P. PENETRATIONS NOT SHOWN - COORDINATE WITH M.E.P. DOCUMENTS FOR LOCATIONS.
 - ROOF VAPOR BARRIER EXISTS ONLY ABOVE CONC. DECK AT RA-T3. SEE ROOF PLANS FOR LOCATION. TERMINATE VAPOR BARRIER WITH FLUID APPLIED AVB PER MANUFACTURER'S DETAILS.
 - ALL CRICKETS SHALL BE SLOPED 1/2" PER FOOT PER SPECIFICATION SECTION 075323



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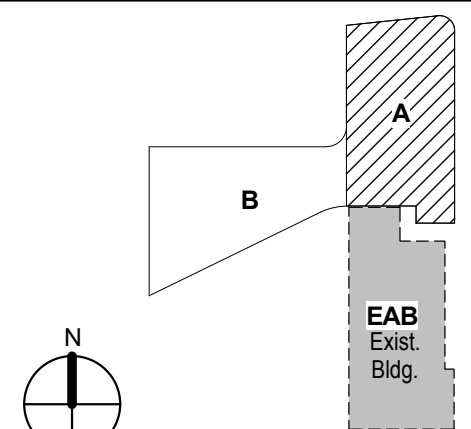
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Kathy R. Williams
3.16.16

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2	ADDENDUM 1-7	16 MAR 2016
1	ADDENDUM 1-1	29 JAN 2016
-	ISSUED FOR CONSTRUCTION (BP1)	15 JAN 2016
No.	Description	Date



KEY PLAN

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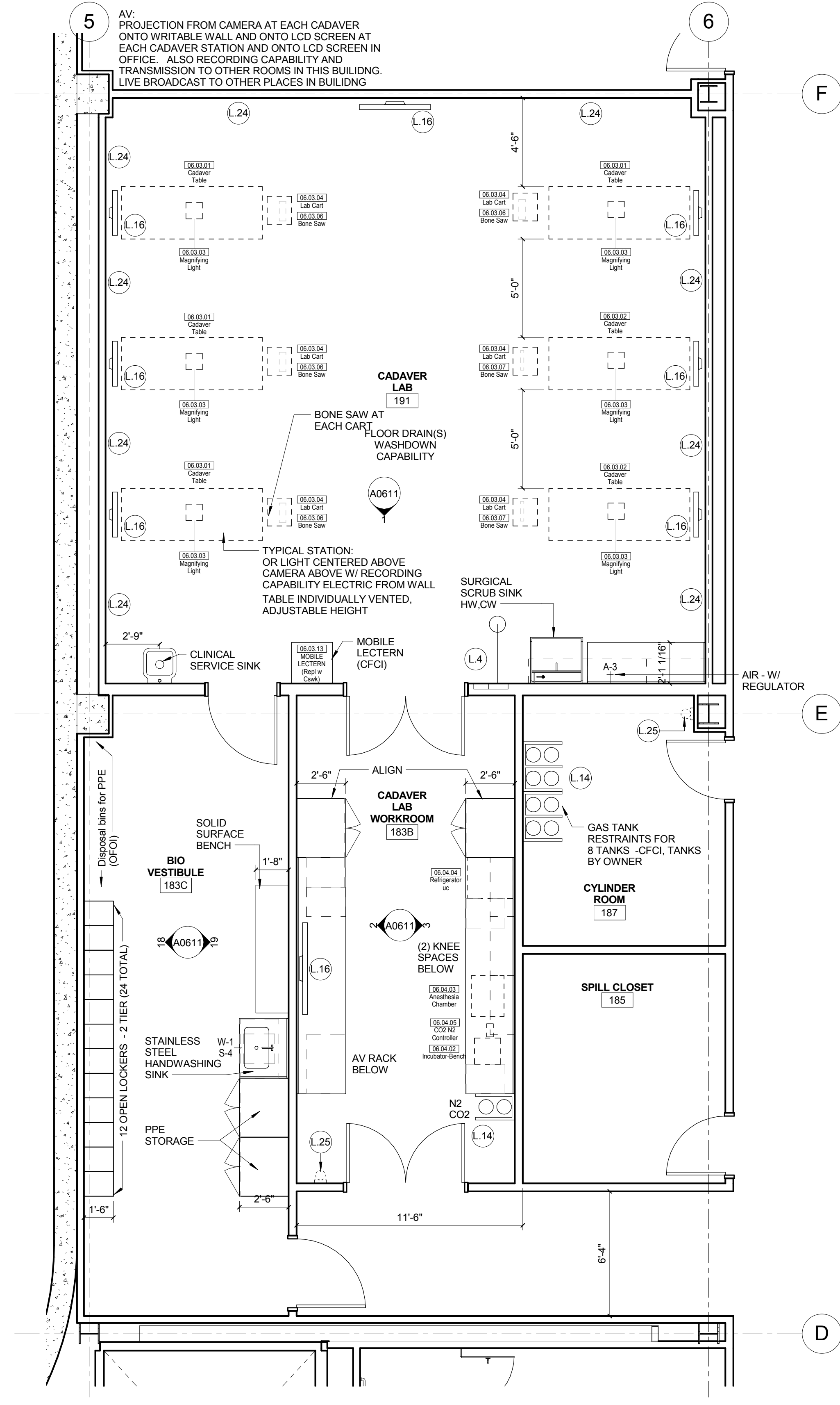
ROOF PLAN-AREA A

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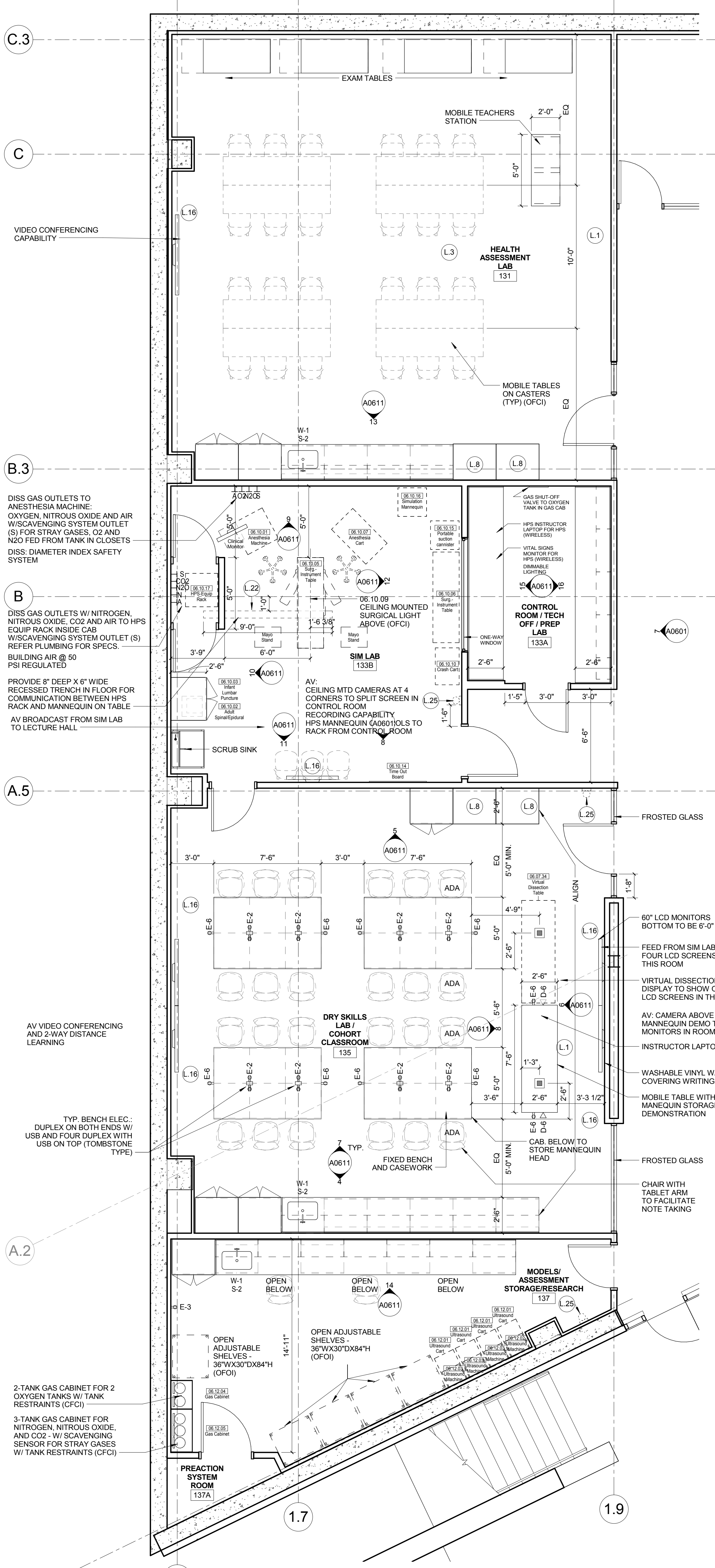
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2 LEVEL 01 - AREA A - WEST - CADAVER LAB
1/4" = 1'-0"



1 LEVEL 01 - AREA B-WEST - NURSING/ANESTHESIA
1/4" = 1'-0"



LAB KEYED NOTE LEGEND

- L.1 WRITABLE AND PROJECTABLE SURFACE, DIMENSIONS AS NOTED
- L.2 RECESSED, CEILING MOUNTED PROJECTION SCREEN
- L.3 WALL MOUNTED PROJECTOR ABOVE
- L.4 EMERGENCY SAFETY SHOWER WITH EYEWASH
- L.5 1151313 CHEMICAL FUME HOOD W/ STORAGE BELOW. TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED.
- L.7 WOOD LAB CASEWORK MICROSCOPE CAB
- L.8 WOOD LAB CASEWORK TALL CABINET WITH OPEN CUBBIES FOR BOOK BAG STORAGE.
- L.9 11 51313 CHEMICAL FUME HOOD - ACCESSIBLE - WITH MOBILE STORAGE BELOW, WHERE SHOWN. TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED.
- L.10 CABS BELOW WHITEBOARD
- L.11 RECESSED MOTORIZED ROOM DARKENING / BLACKOUT SHADES. USE DOUBLE SHADES AT WEST CLASSROOMS LEVEL 02 AND LECTURE HALL. REFER TO REFLECTED CEILING PLANS LCD MONITOR
- L.12 CAMERA FOR SKYPE INTERVIEW
- L.14 GAS CYLINDER STORAGE RACK (CFCI), CYLINDERS TO BE "OFCI"
- L.15 RECESSED MOTORIZED ROOM DARKENING / BLACKOUT SHADES. USE DOUBLE SHADES AT WEST CLASSROOMS LEVEL 02 AND LECTURE HALL. REFER TO REFLECTED CEILING PLANS LCD MONITOR
- L.16 MOBILE LABORATORY CASEWORK SYSTEM. SEE DETAIL 09A0911
- L.18 MOVEABLE WOOD LABORATORY CASEWORK, TABLE WITH MODIFIED EPOXY COUNTERTOP, CABINETS SUSPENDED BELOW AS INDICATED.
- L.20 FIXED WOOD LABORATORY CASEWORK, BASE CABINETS, MODIFIED EPOXY COUNTERTOP, WALL CABINETS AS SHOWN ON ELEVATION
- L.21 SEE CEILING PLAN FOR CEILING MOUNTED UNISTRUT SYSTEM SUPPORTED BY STRUCTURE ABOVE
- L.22 8" DEEP x 6" WIDE TRENCH WITH METAL COVER TO RECIEVE FLOOR FINISH TO MATCH ADJACENT FLOOR
- L.23 FLOOR BOX FOR ELECTRICAL & DATA
- L.24 09 6666 DRY ERASE FINISH (AWC-1)
- L.25 PROVIDE BLOCKING FOR FIRE EXTINGUISHER, MOUNTING HEIGHT: 3'-0" TO TOP OF EXTINGUISHER, FIRE EXTINGUISHER & ITS BRACKET BY OWNER.
- L.26 POINT EXHAUST (SNORKEL) FOR SOLDERING. SEE DETAIL 5/ A0913.

LAB UTILITY LEGEND

- CW WATER COLD WATER FAUCET, DECK MOUNTED GOOSENECK WITH SERRATED NOZZLE, VACUUM BREAKER
- W-1 WATER GENERAL MIXING FAUCET, DECK MOUNTED WITH VACUUM BREAKER, SERRATED NOZZLE.
- DI WATER FAUCET DECK MOUNTED
- PWS DI WATER FAUCET DECK MOUNTED
- PWR WATER PROCESS COLD WATER RETURN
- EW WATER EYEWASH, DECK MOUNTED, AUTOFLOW SWING-DOWN
- DH WATER DRENCH HOSE
- G GAS FUME HOOD CONTROL
- V VAC FUME HOOD CONTROL
- V-3 VAC WALL MOUNTED, SINGLE SERRATED OUTLET
- V-1 VAC TURRET BASE, SINGLE SERRATED OUTLET
- V-4 VAC OUTLET FOR BIOSAFETY CABINET CONNECTIONS
- V-5 VAC QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
- A FUM FUM FUME HOOD CONTROL
- A-1 AIR TURRET BASE, SINGLE SERRATED OUTLET
- A-3 AIR WALL MOUNTED, SINGLE SERRATED OUTLET
- A-4 AIR OUTLET FOR BIOSAFETY CABINET CONNECTIONS
- A-5 AIR QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
- N NITROGEN FUMEHOOD CONTROL
- E ELEC. DUPLEX OUTLET (GFI) ON FUME HOOD
- E-1 ELEC. COUNTERTOP MOUNTED PEDESTAL, (1) DUPLEX ELECTRICAL OUTLET
- E-2 ELEC. COUNTERTOP MOUNTED PEDESTAL, (2) DUPLEX ELECTRICAL OUTLET
- E-3 ELEC. WALL MOUNTED, (1) DUPLEX ELECTRICAL OUTLET
- E-5 ELEC. DUPLEX ELECTRICAL OUTLET ON OVERHEAD SERVICE CARRIER
- D DATA DATA OUTLET
- D-1 DATA COUNTERTOP MOUNTED PEDESTAL, (2) DATA OUTLETS
- D-5 DATA DATA OUTLET ON OVERHEAD SERVICE CARRIER
- D-6 DATA DATA OUTLET ON TABLE APRON
- S SINK CUP SINK LIPPED MODIFIED EPOXY CUP SINK, 9"X3" W OVAL (DROP-IN), LIPPED MODIFIED EPOXY ADA SINK 25"X15"X10"D (DROP-IN)
- S-1 SINK LIPPED MODIFIED EPOXY ADA SINK 25"X15"X10"D (DROP-IN)
- S-2 SINK LIPPED MODIFIED EPOXY ADA SINK 25"X15"X10"D (DROP-IN)
- S-3 SINK STAINLESS STEEL SINK 25"X15"X10"D (DROP-IN)
- S-4 SINK STAINLESS STEEL ADA SINK 25"X15"X10"D (DROP-IN)
- S-5 SINK LIPPED MODIFIED EPOXY ADA SINK 18"X15"X10"D (DROP-IN)
- S-6 SINK LIPPED MODIFIED EPOXY SINK, 36"X15"X10"D (DROP-IN)
- OSC OVERHEAD SERVICE CARRIER. SEE DETAIL 10/ A0913.
- PTD PAPER TOWEL DISPENSER

CHEMICAL FUME HOOD LEGEND

- CFH-4 4'-0" WIDE CHEMICAL FUME HOOD
- CFH-6 6'-0" WIDE CHEMICAL FUME HOOD

LAB GENERAL NOTES

- ALL DIMENSIONS ARE TO GWB FACE PARTITION OR COLUMN CENTERLINE UNLESS NOTED
- OWNER FURNISHED OWNER INSTALLED (OFCI) ITEMS ARE SHOWN DASHED FOR REFERENCE ONLY. COORDINATE SIZE AND INSTALLATION REQUIREMENTS WITH OWNERS REPRESENTATIVE.
- CENTER ALL DRYING RACKS WITH DRIP STOP TROUGHS ABOUT CENTERLINE OF SINKS UNLESS NOTED
- ALL APRONS AT OPEN KNEE SPACE TO BE 4" U.N.O. PROVIDE APRON OF SOLID WOOD WITH EASED BOTTOM EDGE. FINISH TO MATCH VENEER SPECIES. MAINTAIN MINIMUM 27" CLEAR ABOVE FLOOR FINISH
- CENTER ALL COUNTERTOP MOUNTED UTILITY OUTLETS ON CENTER OF CASEWORK UNLESS NOTED
- ALL SURFACE MOUNTED RACEWAY TO HAVE OUTLETS AT 2'-0" O.C. AND SHALL BE MOUNTED DIRECTLY ABOVE BACKSPLASH UNLESS NOTED
- ALL BACKSPLASHES TO BE 4" HIGH UNLESS NOTED
- DASHED LINES ON ELEVATIONS INDICATED ADJUSTABLE SHELVING INSIDE CASEWORK
- PROVIDE FINISHED BACK PANEL AT KNEE SPACES BELOW ALL FUMEHOODS, TYPICAL. SIMILAR TO DETAIL 10/ A0911
- PROVIDE FINISHED BACK PANEL AT ALL KNEE SPACES, TYPICAL
- PROVIDE LOCK AND KEY WHERE A CIRCLE NEXT TO DRAWER OR DOOR HANDLE IS SHOWN OR WHERE NOTED
- REFER SHEETS A0911 FOR LABORATORY CASEWORK / MILLWORK DETAILS
- FOR TYPICAL MOUNTING HEIGHTS REF: 1/A0911
- ALL CASEWORK TO BE WOOD UNLESS NOTED
- ALL CASEWORK IS LABORATORY CASEWORK UNLESS NOTED AS MILLWORK OR OFCI. SEE DIVISION 12 3553 - LABORATORY CASEWORK FOR SPECIFICATIONS
- ALL EQUIPMENT ITEMS HAVE A EQUIPMENT TAG - XXX.XX. SEE SHEETS A111 FOR EQUIPMENT SCHEDULES
- PROVIDE PAPER TOWEL DISPENSER (PTD) AT EACH SINK LOCATION



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No. Description Date

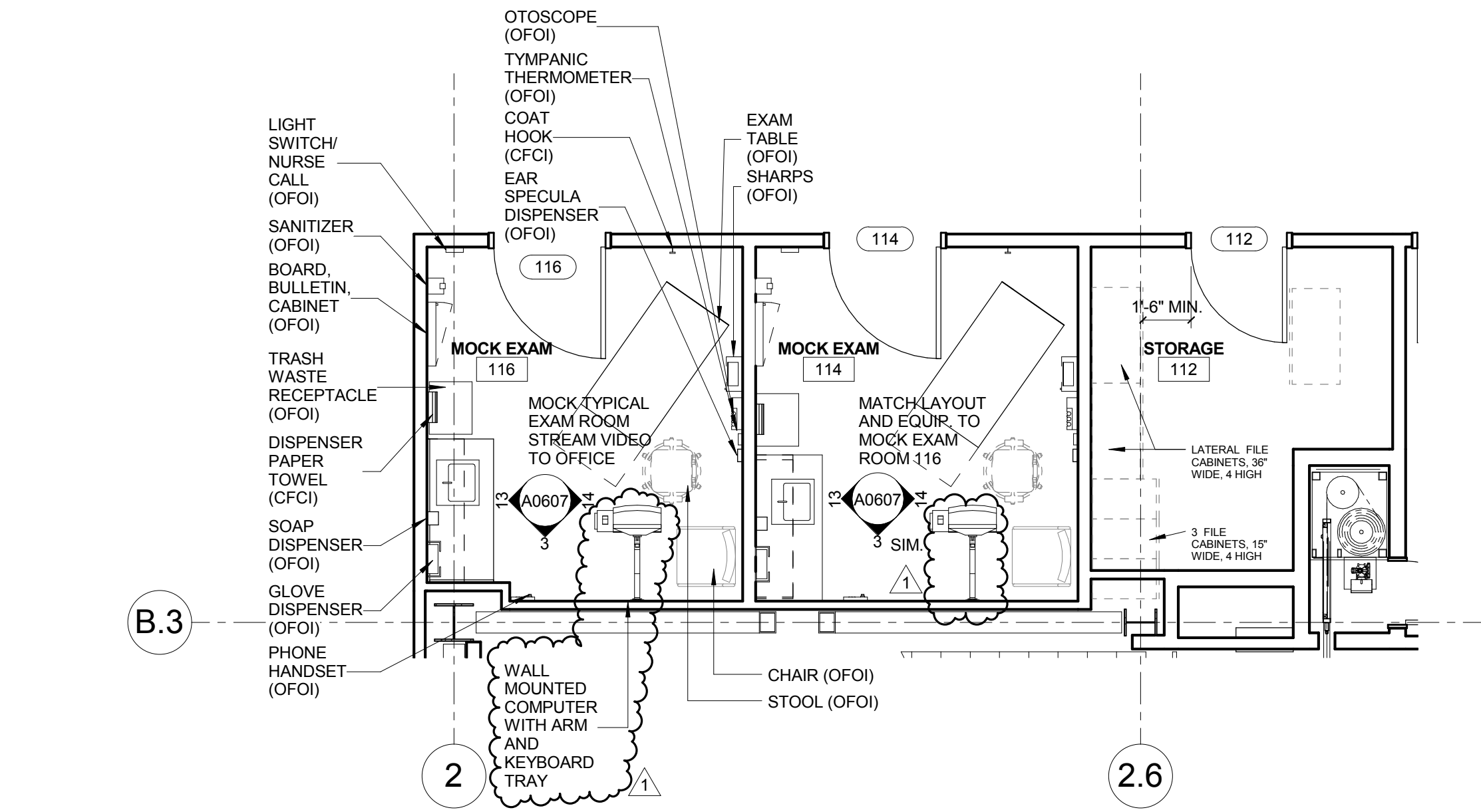
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ENLARGED PLANS-LEVEL
01

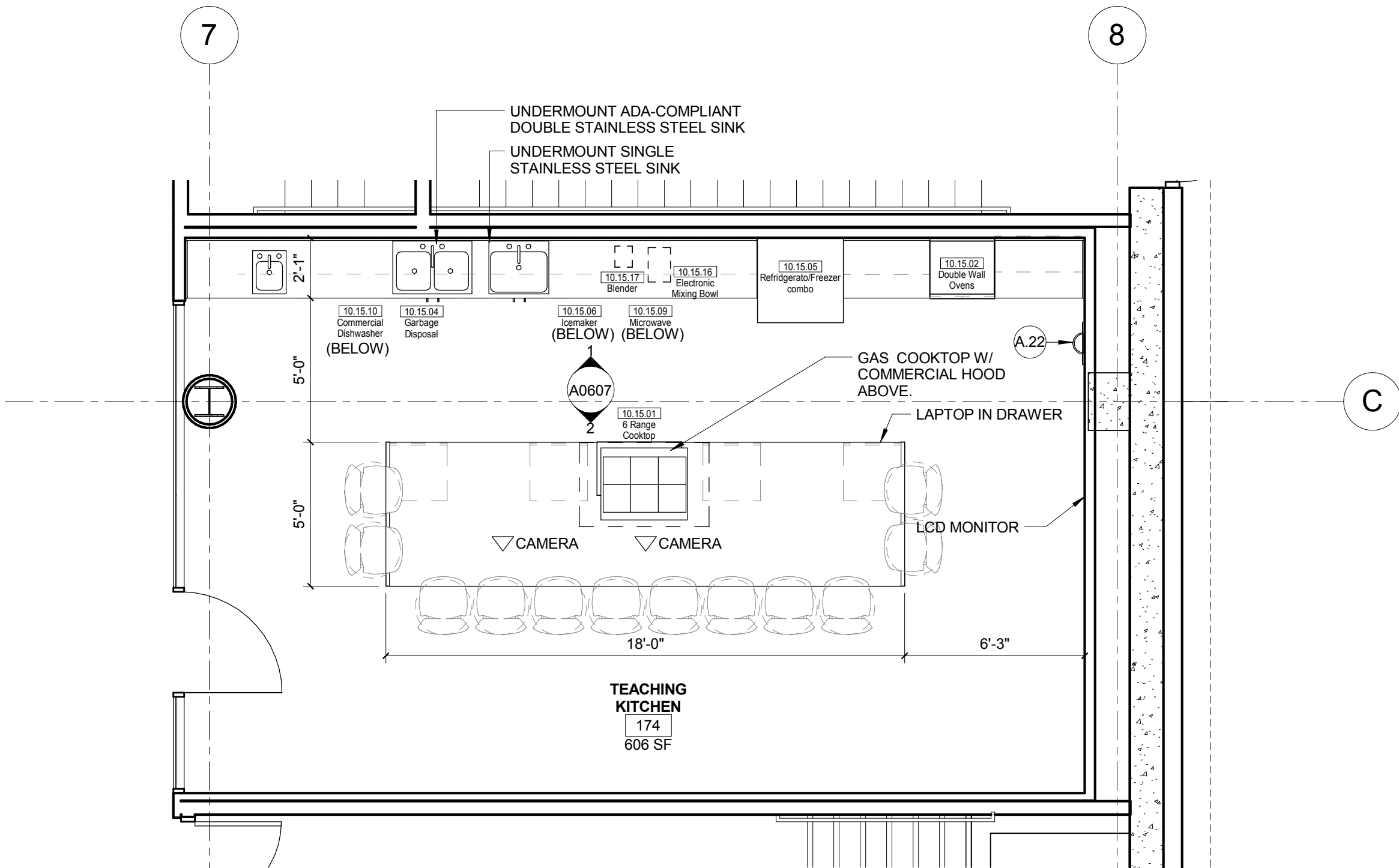
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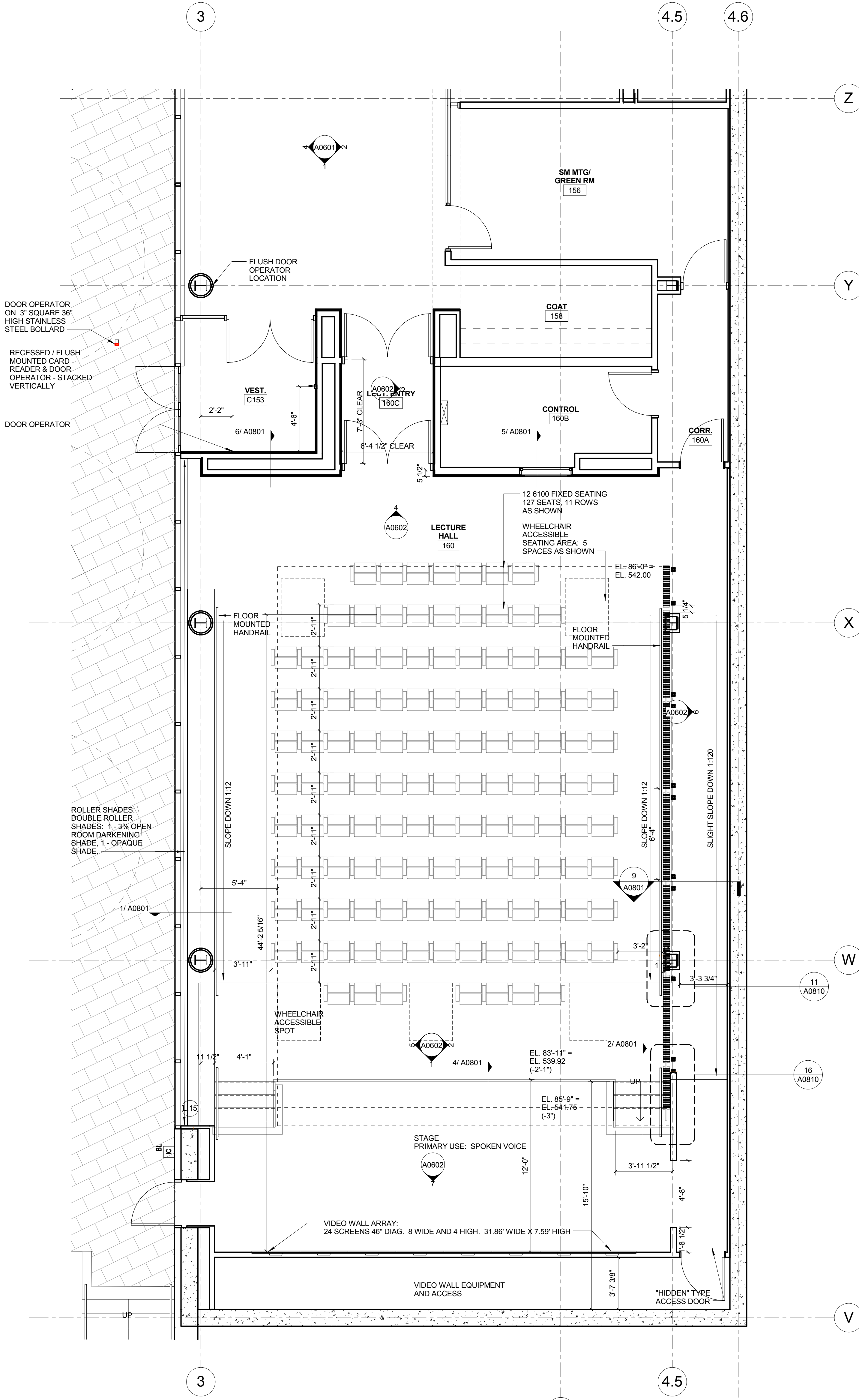
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3 LEVEL 01 - AREA B-WEST - MOCK EXAM ROOMS
1/4" = 1'-0"



2 LEVEL 01 AREA A FLOOR PLAN-NORTH - TEACHING KITCHEN
1/4" = 1'-0"



1 LEVEL 01 - AREA B - LECTURE HALL
1/4" = 1'-0"

- KEYED NOTE LEGEND - PLAN**
- A.1 002700 GRG COLUMN COVER TO 3" ABOVE CEILING - 20" DIA. TYP. SEE DETAIL 4A0811 AND 13A0842
 - A.2 081216 INTERIOR GLAZING SYSTEM: IGS-1: REFER TO TYPICAL INT. ELEVATIONS 1 AND 2 ON SHEET A0803
 - A.3 081216 INTERIOR GLAZING SYSTEM IGS-2: SEE TYPICAL ELEVATION 5 AND 6 A0803
 - A.4 081216 INTERIOR GLAZING SYSTEM: IGS-3: REFER TO INTERIOR ELEVATIONS
 - A.5 088813 FIRE RATED GLAZING- 120 MIN. FIRE RATED GLAZING 10'-0" HIGH. BASIS OF DESIGN: VETROTECH CONTRAFILAMM STRUTTURA - WITH BUTT JOINTS AND PERIMETER FRAMING.
 - A.6 088813 FIRE RATED GLAZING AND FRAME- 120 MIN. FIRE RATED GLAZING 1'-8" HIGH X 5'-0" WIDE. BASIS OF DESIGN: VETROTECH CONTRAFILAMM WITH PERIMETER FRAMING.
 - A.7 111519 LOADING DOCK LIFT - STATIONARY - 6W X 8' DEEP/W 14" PIT
 - A.8 ALTERNATING TREAD STAIRWAY UP TO ROOF HATCH
 - A.9 UNDERSLAB DRAINAGE SYSTEM PER OWNER'S GEOTECHNICAL CONSULTANT RECOMMENDATION TYPICAL ALL SLAB ON GRADE AREAS
 - A.11 NEW CONCRETE STEPS TO MATCH EXISTING REMOVED FOR CONSTRUCTION
 - A.12 553006 BRICK FACED CONCRETE DUMPSTER ENCLOSURE TOP OF WALL
 - A.13 LCD SIGNAGE SCREEN IN WALL RECESS (OFCI)
 - A.14 MARKERBOARD SURFACE
 - A.15 WOOD SCREEN W/ SOLID LUMBER
 - A.17 VIDEO WALL - 24 55" SCREENS
 - A.18 LCD SCREEN LOCATION (OFCI)
 - A.19 AIR PLENUM - INSULATED PLENUM CONSTRUCTION BY DIVISION 23
 - A.20 122200 CURTAIN LOCATION
 - A.21 104313 AED CABINET LOCATION
 - A.22 10 4413 FEC WITH FIRE EXTINGUISHER
 - A.23 08 4423 SULL SASH LOCATION: PROVIDE 1/4" TEMPERED CLEAR GLAZING AT INTERIOR FACE OF CURTAIN WALL MULLIONS FOR ACOUSTICAL SEPARATION.
 - A.24 6" X 8" FORMED CONCRETE TRENCH IN FLOOR W/ METAL PLATE COVER. PROVIDE BLIND SIDE WATERPROOFING
 - A.25 BUILT IN SALT WATER FISH TANK LOCATION. SIZE APPROX. 7'-6" X 2'-4" X 2'-6" HIGH. LOW IRON GLASS VIEW WINDOW ON CORRIDOR SIDE. SLIDING DOOR ON LAB SIDE. FISH TANK EQUIPMENT BELOW TANK W/ CABINET DOOR ACCESS ON LAB SIDE. FINISHED INTERIOR FACE OF WALLS AND CEILING INSIDE CAVITY W/ WATER RESISTANT GYP BOARD AND EPOXY PAINT
 - A.26 LCD SIGNAGE SCREEN IN WALL RECESS (OFCI)
 - A.27 CONSTRUCT 2 HOUR RATED SEPARATION BETWEEN BOTTOM OF STAIR AND UTILITY PIPING CROSSING THIS AREA. USE HORIZ. GYP BD. ENCLOSURE ON SHEET A1002



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1	ADDENDUM 3-2	15 APR 2016
1	ISSUED FOR CONSTRUCTION (BP3)	15 MAR 2016
No.	Description	Date

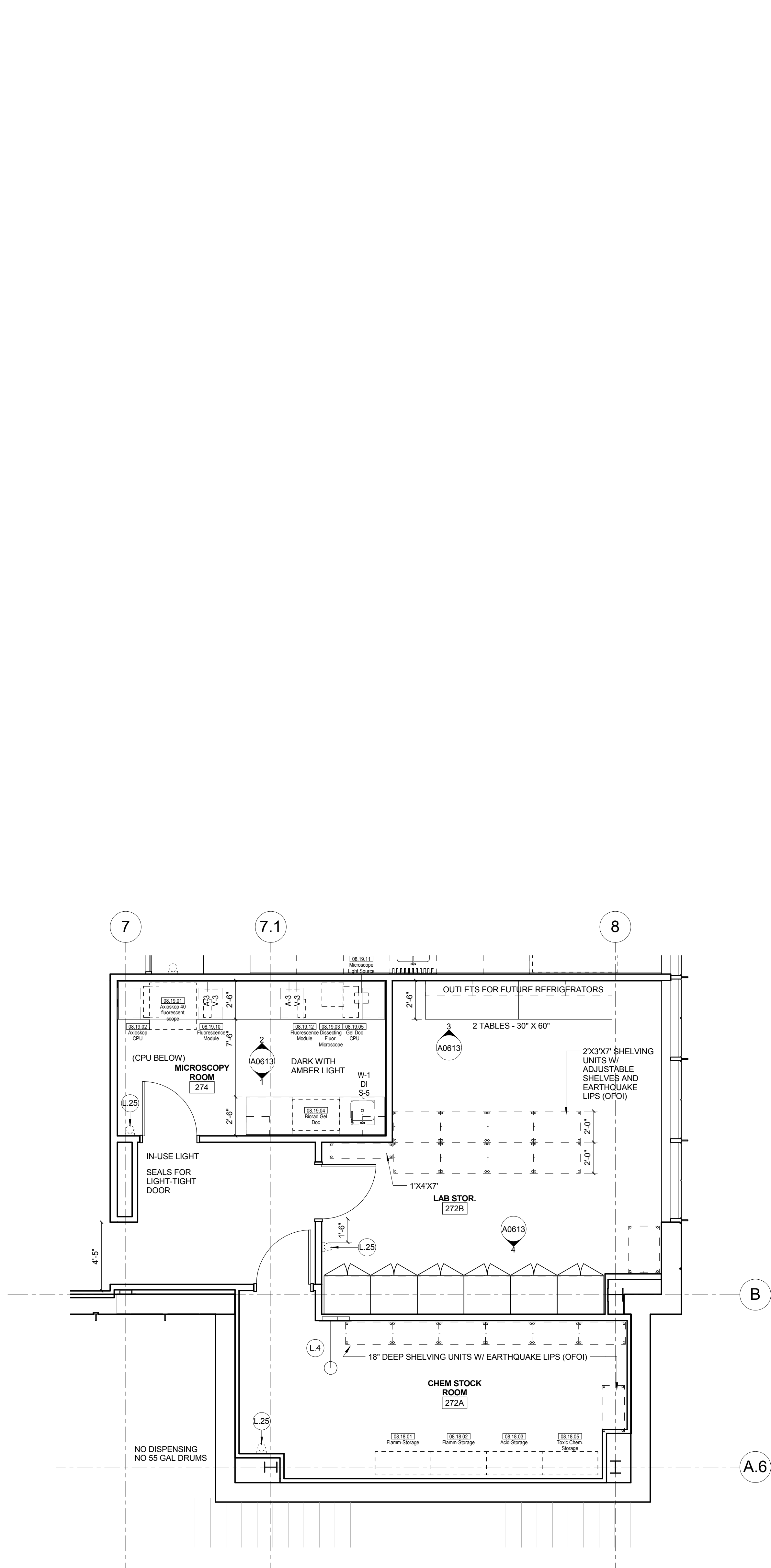
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**ENLARGED PLANS-LEVEL
01**

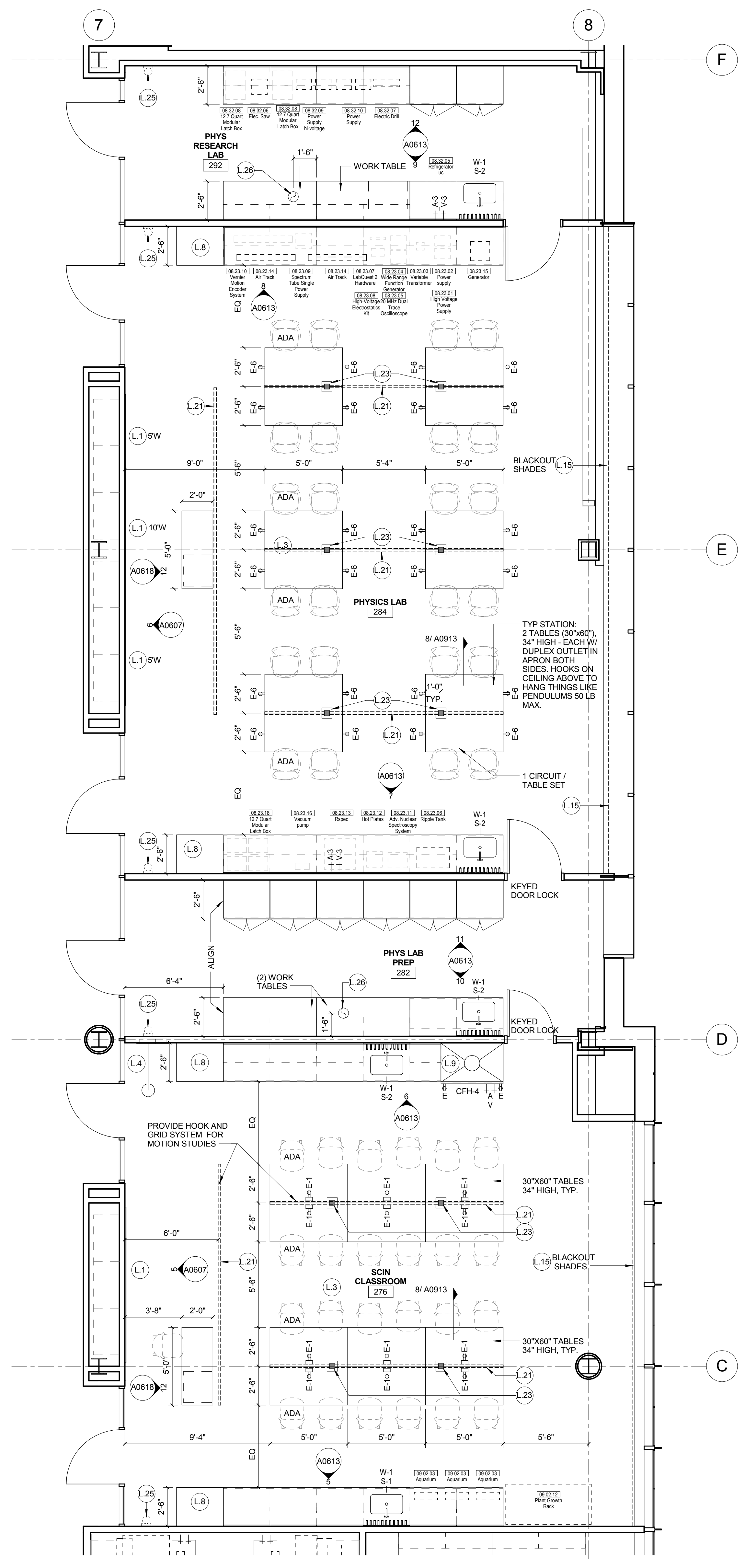
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2 LEVEL 02 - AREA A - EAST - SOUTH END
1/4" = 1'-0"



1 LEVEL 02 - AREA A - EAST - NORTH END
1/4" = 1'-0"

LAB KEYED NOTE LEGEND

- L.1 WRITABLE AND PROJECTABLE SURFACE, DIMENSIONS AS NOTED
- L.2 RECESSED, CEILING MOUNTED PROJECTION SCREEN
- L.3 WALL MOUNTED PROJECTOR ABOVE
- L.4 EMERGENCY SAFETY SHOWER WITH EYEWASH
- L.5 115313 CHEMICAL FUME HOOD W/ STORAGE BELOW. TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED.
- L.6 WOOD LAB CASEWORK MICROSCOPE CAB
- L.7 WOOD LAB CASEWORK: TALL CABINET WITH OPEN CUBBIES FOR BOOK BAG STORAGE
- L.8 115313 CHEMICAL FUME HOOD - ACCESSIBLE - WITH MOBILE STORAGE BELOW, WHERE SHOWN. TYPICAL FUME HOOD TO HAVE ELECTRIC, AND UTILITIES AS INDICATED.
- L.9 CAB BELOW WHITEBOARD
- L.10 CAMERA FOR SKYPE INTERVIEW
- L.11 GAS CYLINDER STORAGE RACK (CFI), CYLINDERS TO BE "OFOI"
- L.12 RECESSED MOTORIZED ROOM DARKENING / BLACKOUT SHADES. USE DOUBLE SHADES AT WEST CLASSROOMS LEVEL 02 AND LECTURE HALL. REFER TO REFLECTED CEILING PLANS
- L.13 LCD MONITOR
- L.14 MOBILE LABORATORY CASEWORK SYSTEM. SEE DETAIL 09A0911
- L.15 MOVEABLE WOOD LABORATORY CASEWORK: TABLE WITH MODIFIED EPOXY COUNTERTOP, CABINETS SUSPENDED BELOW AS INDICATED.
- L.16 FIXED WOOD LABORATORY CASEWORK: BASE CABINETS, MODIFIED EPOXY COUNTERTOP, WALL CABINETS AS SHOWN ON ELEVATION
- L.17 SEE CEILING PLAN FOR CEILING MOUNTED UNISTRUT SYSTEM SUPPORTED BY STRUCTURE ABOVE
- L.18 8" DEEP x 6" WIDE TRENCH WITH METAL COVER TO RECEIVE FLOOR FINISH TO MATCH ADJACENT FLOOR
- L.19 FLOOR BOX FOR ELECTRICAL & DATA
- L.20 09 6666 DRY ERASE FINISH (AWC-1)
- L.21 PROVIDE BLOCKING FOR FIRE EXTINGUISHER, MOUNTING HEIGHT - 3'-0" TO TOP OF EXTINGUISHER, FIRE EXTINGUISHER & ITS BRACKET BY OWNER.
- L.22 POINT EXHAUST (SNORKEL) FOR SOLDERING. SEE DETAIL 5/ A0913.

LAB UTILITY LEGEND

- CW WATER COLD WATER FAUCET, DECK MOUNTED GOOSENECK WITH SERRATED NOZZLE, VACUUM BREAKER
- W-1 WATER GENERAL MIXING FAUCET, DECK MOUNTED WITH VACUUM BREAKER, SERRATED NOZZLE.
- DI WATER FAUCET DECK MOUNTED.
- PWS WATER PROCESS COLD WATER SUPPLY.
- PWR WATER PROCESS COLD WATER RETURN.
- EW WATER EYEWASH, DECK MOUNTED, AUTOFLOW SWING-DOWN.
- DH WATER DRENCH HOSE
- G GAS FUME HOOD CONTROL
- V VAC FUME HOOD CONTROL
- V-3 VAC WALL MOUNTED, SINGLE SERRATED OUTLET
- V-1 VAC TURRET BASE, SINGLE SERRATED OUTLET
- V-4 VAC OUTLET FOR BIOSAFETY CABINET CONNECTIONS
- V-5 VAC QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
- AIR FUME HOOD CONTROL
- A-1 AIR TURRET BASE, SINGLE SERRATED OUTLET
- A-3 AIR WALL MOUNTED, SINGLE SERRATED OUTLET
- A-4 AIR OUTLET FOR BIOSAFETY CABINET CONNECTIONS
- A-5 AIR QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
- N NITROGEN FUMEHOOD CONTROL
- E ELEC DUPLEX OUTLET (CFI) ON FUME HOOD
- E-1 COUNTERTOP MOUNTED PEDESTAL, (1) DUPLEX ELECTRICAL OUTLET.
- E-2 ELEC COUNTERTOP MOUNTED PEDESTAL, (2) DUPLEX ELECTRICAL OUTLET.
- E-3 ELEC WALL MOUNTED, (1) DUPLEX ELECTRICAL OUTLET.
- E-5 ELEC DUPLEX ELECTRICAL OUTLET ON OVERHEAD SERVICE CARRIER
- E-6 ELEC DUPLEX ELECTRICAL OUTLET ON TABLE APRON
- D DATA DATA OUTLET
- D-1 DATA COUNTERTOP MOUNTED PEDESTAL, (2) DATA OUTLETS
- D-5 DATA DATA OUTLET ON OVERHEAD SERVICE CARRIER
- D-6 DATA DATA OUTLET ON TABLE APRON
- CS CUP SINK LIPPED MODIFIED EPOXY CUP SINK.
- S-1 SINK 9"X3" W OVAL (DROP-IN).
- S-2 LIPPED MODIFIED EPOXY ADA SINK 25"X15"X10"D (DROP-IN).
- S-3 SINK LIPPED MODIFIED EPOXY ADA SINK 25"X15"X15"D (DROP-IN).
- S-4 SINK STAINLESS STEEL ADA SINK 25"X15"X15"D (DROP-IN).
- S-5 SINK LIPPED MODIFIED EPOXY ADA SINK 18"X15"X15"D (DROP-IN).
- S-6 SINK LIPPED MODIFIED EPOXY ADA SINK 36"X15"X15"D (DROP-IN).
- OSC OVERHEAD SERVICE CARRIER. SEE DETAIL 10 / A0913.
- PTD PAPER TOWEL DISPENSER

CHEMICAL FUME HOOD LEGEND

- CFH-4 4'-0" WIDE CHEMICAL FUME HOOD
- CFH-6 6'-0" WIDE CHEMICAL FUME HOOD

LAB GENERAL NOTES

- ALL DIMENSIONS ARE TO GWB FACE PARTITION OR COLUMN CENTER LINE U.N.O.
- OWNER FURNISHED OWNER INSTALLED (OFOI) ITEMS ARE SHOWN DASHED FOR REFERENCE ONLY. COORDINATE SIZE AND INSTALLATION REQUIREMENTS WITH OWNER'S REPRESENTATIVE.
- CENTER ALL DRYING RACKS WITH DRIP STOP TROUGHS ABOUT CENTERLINE OF SINKS, U.N.O.
- ALL APRONS AT OPEN KNEE SPACE TO BE 4" U.N.O. PROVIDE APRON OF SOLID WOOD WITH EASED BOTTOM EDGE. FINISH TO MATCH VENEER SPECIES. MAINTAIN MINIMUM 27" CLEAR ABOVE FLOOR FINISH.
- CENTER ALL COUNTERTOP MOUNTED UTILITY OUTLETS ON CENTER OF CASEWORK U.N.O.
- ALL SURFACE MOUNTED RACEWAY TO HAVE OUTLETS AT 2'-0" O.C. AND SHALL BE MOUNTED DIRECTLY ABOVE BACKSPASH U.N.O.
- ALL BACKSPASHES TO BE 4" HIGH U.N.O.
- DASHED LINES ON ELEVATIONS INDICATED ADJUSTABLE SHELVING INSIDE CASEWORK.
- PROVIDE FINISHED BACK PANEL AT KNEE SPACES BELOW ALL FUMEHOODS, TYPICAL. SIMILAR TO DETAIL.
- PROVIDE FINISHED BACK PANEL AT ALL KNEE SPACES. TYPICAL. PROVIDE LOCK AND KEY WHERE A CIRCLE NEXT TO DRAWER OR DOOR HANDLE IS SHOWN OR WHERE NOTED.
- REFER SHEETS A0913 FOR LABORATORY CASEWORK / MILLWORK DETAILS.
- FOR TYPICAL MOUNTING HEIGHTS REF. 1/A0911
- ALL CASEWORK TO BE WOOD U.N.O.
- ALL CASEWORK IS LABORATORY CASEWORK UNLESS NOTED AS MILLWORK OR OFOI. SEE DIVISION "12 3553 - LABORATORY CASEWORK" FOR SPECIFICATIONS.
- ALL EQUIPMENT ITEMS HAVE A EQUIPMENT TAG - XX-XX.XX. SEE SHEETS A1104 FOR EQUIPMENT SCHEDULES.
- PROVIDE PAPER TOWEL DISPENSER (PTD) AT EACH SINK LOCATION.



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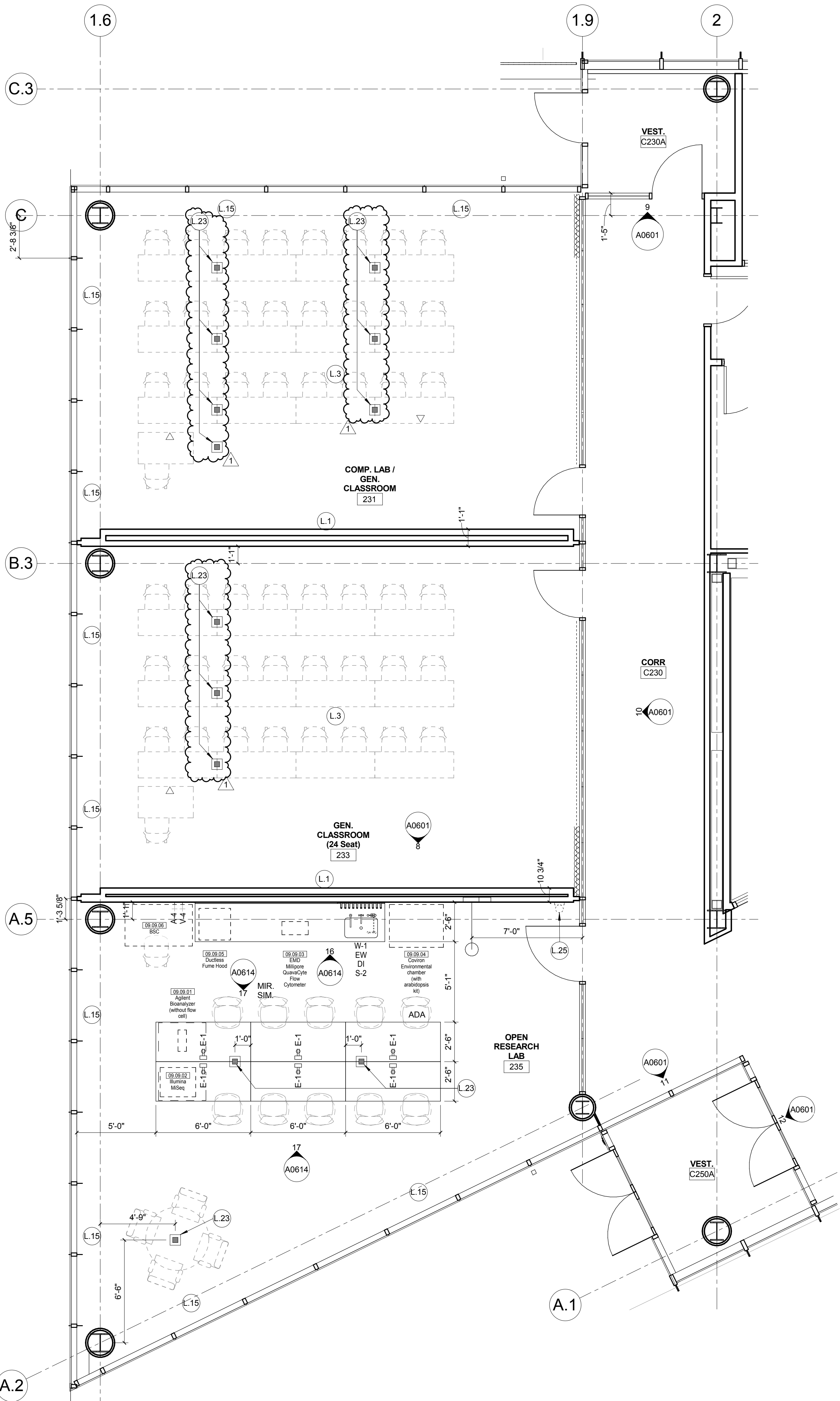
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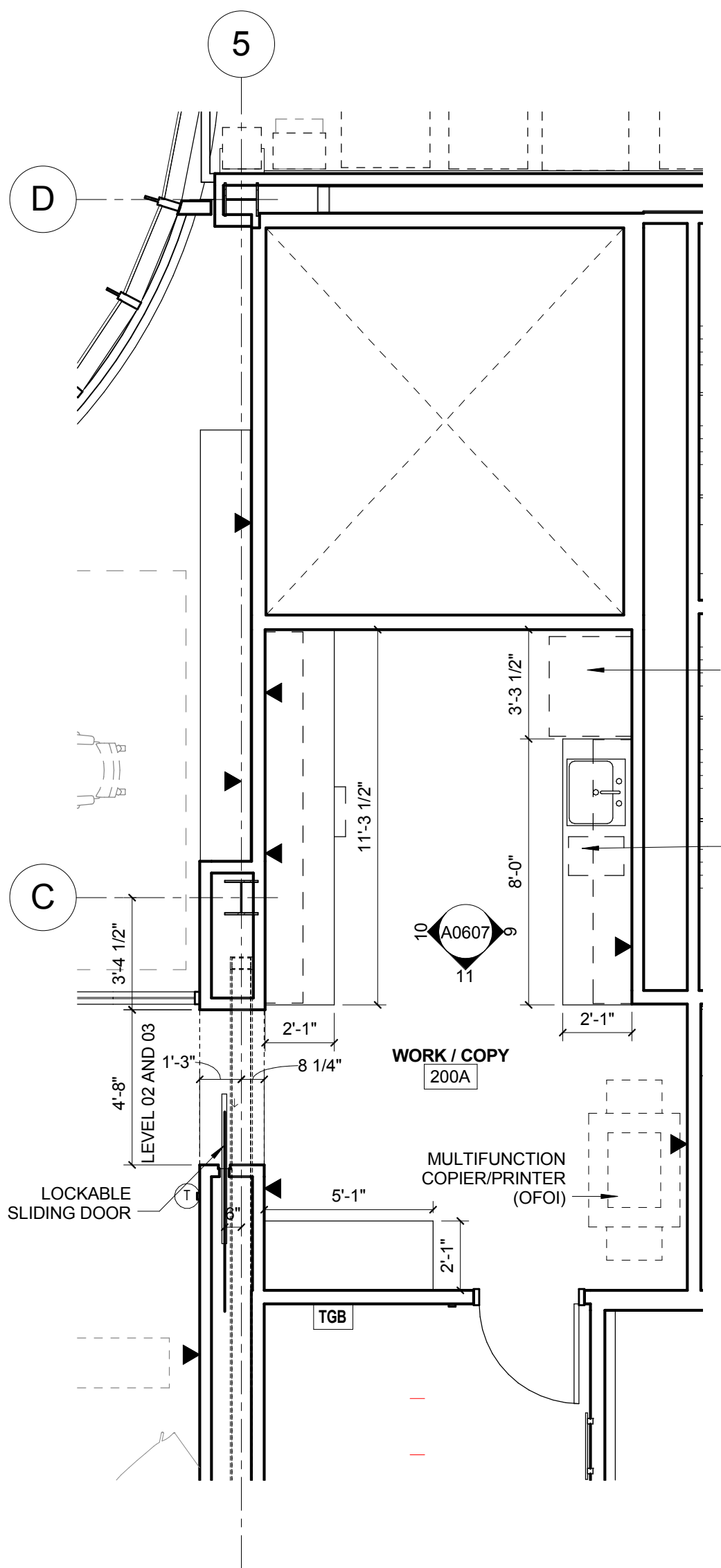
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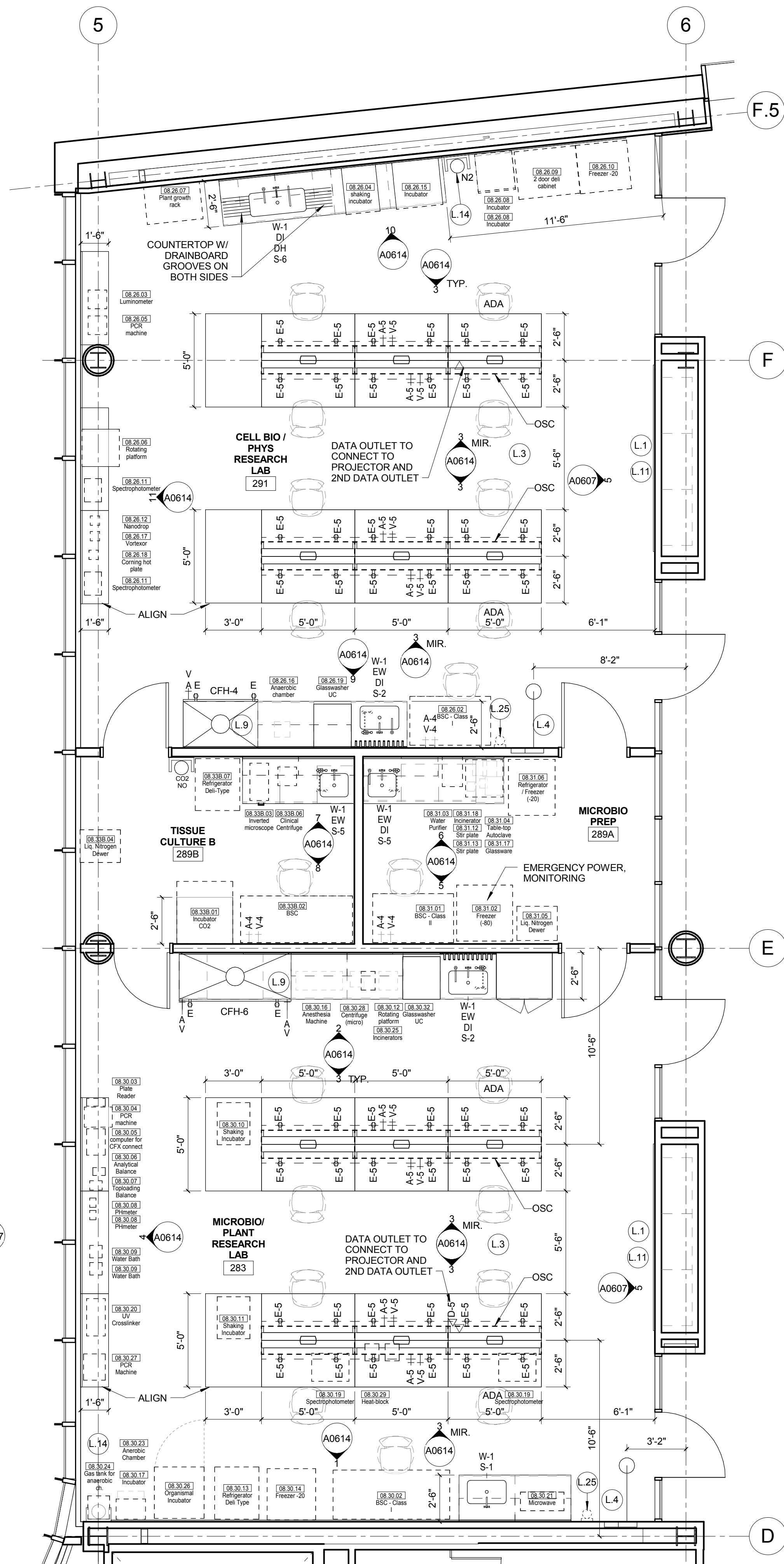
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3 LEVEL 02 - AREA B - WEST - CLASSROOMS
1/4" = 1'-0"



2 LEVEL 02 - AREA B - WORKROOM
1/4" = 1'-0"



1 LEVEL 02 - AREA A - WEST - BIO LABS
1/4" = 1'-0"

LAB KEYED NOTE LEGEND

- L.1 WRITABLE AND PROJECTABLE SURFACE. DIMENSIONS AS NOTED
- L.2 RECESSED, CEILING MOUNTED PROJECTION SCREEN
- L.3 WALL MOUNTED PROJECTOR ABOVE
- L.4 EMERGENCY SAFETY SHOWER WITH EYEWASH
- L.5 115313 CHEMICAL FUME HOOD W/ STORAGE BELOW. TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED.
- L.6 WOOD LAB CASEWORK MICROSCOPE CAB
- L.7 WOOD LAB CASEWORK: TALL CABINET WITH OPEN CUBBIES FOR BOOK BAG STORAGE.
- L.8 115313 CHEMICAL FUME HOOD - ACCESSIBLE - WITH MOBILE STORAGE BELOW, WHERE SHOWN. TYPICAL FUME HOOD TO HAVE ELECTRIC, AND UTILITIES AS INDICATED.
- L.9 CABS BELOW WHITEBOARD
- L.10 CAMERA FOR SKYPE INTERVIEW
- L.11 GAS CYLINDER STORAGE RACK (CFO), CYLINDERS TO BE "OFF"
- L.12 RECESSED MOTORIZED ROOM DARKENING / BLACKOUT SHADES. USE DOUBLE SHADES AT WEST CLASSROOMS LEVEL 02 AND LECTURE HALL. REFER TO REFLECTED CEILING PLANS
- L.13 LCD MONITOR
- L.14 MOBILE LABORATORY CASEWORK SYSTEM. SEE DETAIL 09A0911.
- L.15 MOVEABLE WOOD LABORATORY CASEWORK: TABLE WITH MODIFIED EPOXY COUNTERTOP. CABINETS SUSPENDED BELOW AS INDICATED.
- L.16 FIXED WOOD LABORATORY CASEWORK: BASE CABINETS, MODIFIED EPOXY COUNTERTOP. WALL CABINETS AS SHOWN ON ELEVATION
- L.17 SEE CEILING PLAN FOR CEILING MOUNTED UNISTRUT SYSTEM SUPPORTED BY STRUCTURE ABOVE
- L.18 8" DEEP x 6" WIDE TRENCH WITH METAL COVER TO RECEIVE FLOOR FINISH TO MATCH ADJACENT FLOOR
- L.19 FLOOR BOX FOR ELECTRICAL & DATA
- L.20 09 6666 DRY ERASE FINISH (AWC-1)
- L.21 PROVIDE BLOCKING FOR FIRE EXTINGUISHER, MOUNTING HEIGHT - 3'-0" TO TOP OF EXTINGUISHER. FIRE EXTINGUISHER & ITS BRACKET BY OWNER.
- L.22 POINT EXHAUST (SNORKEL) FOR SOLDERING. SEE DETAIL 5/ A0913.

LAB UTILITY LEGEND

- CW WATER COLD WATER FAUCET, DECK MOUNTED GOOSENECK WITH SERRATED NOZZLE. VACUUM BREAKER.
- W-1 WATER GENERAL MIXING FAUCET, DECK MOUNTED WITH VACUUM BREAKER, SERRATED NOZZLE.
- DI WATER DI WATER FAUCET DECK MOUNTED.
- PWS WATER PROCESS COLD WATER SUPPLY.
- PWR WATER PROCESS COLD WATER RETURN.
- EW WATER EYEWASH, DECK MOUNTED, AUTOFLOW SWING-DOWN.
- DH WATER DRENCH HOSE.
- G GAS FUME HOOD CONTROL
- V VAC FUME HOOD CONTROL
- V-3 VAC WALL MOUNTED, SINGLE SERRATED OUTLET
- V-1 VAC TURRET BASE, SINGLE SERRATED OUTLET
- V-4 VAC OUTLET FOR BIOSAFETY CABINET CONNECTIONS
- V-5 VAC QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
- A AIR FUME HOOD CONTROL
- A-1 AIR TURRET BASE, SINGLE SERRATED OUTLET
- A-3 AIR WALL MOUNTED, SINGLE SERRATED OUTLET
- A-4 AIR OUTLET FOR BIOSAFETY CABINET CONNECTIONS
- A-5 AIR QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
- N NITROGEN FUMEHOOD CONTROL
- E ELEC. DUPLEX OUTLET (GF) ON FUME HOOD
- E-1 ELEC. COUNTERTOP MOUNTED PEDESTAL, (1) DUPLEX ELECTRICAL OUTLET.
- E-2 ELEC. COUNTERTOP MOUNTED PEDESTAL, (2) DUPLEX ELECTRICAL OUTLET.
- E-3 ELEC. WALL MOUNTED, (1) DUPLEX ELECTRICAL OUTLET.
- E-5 ELEC. DUPLEX ELECTRICAL OUTLET ON OVERHEAD SERVICE CARRIER.
- E-6 ELEC. DUPLEX ELECTRICAL OUTLET ON TABLE APRON
- D DATA DATA OUTLET
- D-1 DATA COUNTERTOP MOUNTED PEDESTAL, (2) DATA OUTLETS
- D-5 DATA DATA OUTLET ON OVERHEAD SERVICE CARRIER
- D-6 DATA DATA OUTLET ON TABLE APRON
- CS CUP SINK LIPPED MODIFIED EPOXY CUP SINK.
- S-1 SINK LIPPED MODIFIED EPOXY SINK, 25"X15"Wx10"D (DROP-IN).
- S-2 SINK LIPPED MODIFIED EPOXY ADA SINK 25"X15"Wx5"D (DROP-IN).
- S-3 SINK STAINLESS STEEL SINK 25"X15"Wx10"D (DROP-IN).
- S-4 SINK STAINLESS STEEL ADA SINK 25"X15"Wx5"D (DROP-IN).
- S-5 SINK LIPPED MODIFIED EPOXY ADA SINK 18"X15"Wx5"D (DROP-IN).
- S-6 SINK LIPPED MODIFIED EPOXY SINK, 36"X15"Wx10"D (DROP-IN).
- OSC OVERHEAD SERVICE CARRIER. SEE DETAIL 10 / A0913.
- PTD PAPER TOWEL DISPENSER

CHEMICAL FUME HOOD LEGEND

- CFH-4 4'-0" WIDE CHEMICAL FUME HOOD
- CFH-6 6'-0" WIDE CHEMICAL FUME HOOD

LAB GENERAL NOTES

- ALL DIMENSIONS ARE TO GWB FACE PARTITION OR COLUMN CENTERLINE U.N.O.
- OWNER FURNISHED OWNER INSTALLED (OFO) ITEMS ARE SHOWN DASHED FOR REFERENCE ONLY. COORDINATE SIZE AND INSTALLATION REQUIREMENTS WITH OWNER'S REPRESENTATIVE.
- CENTERLINE OF SINKS, U.N.O.
- ALL APRONS AT OPEN KNEE SPACE TO BE 4" U.N.O. PROVIDE APRON OF SOLID WOOD WITH EASED BOTTOM EDGE. FINISH TO MATCH VENEER SPECIES. MAINTAIN MINIMUM 27" CLEAR ABOVE FLOOR FINISH.
- CENTER ALL COUNTERTOP MOUNTED UTILITY OUTLETS ON CENTER OF CASEWORK U.N.O.
- ALL SURFACE MOUNTED RACEWAY TO HAVE OUTLETS AT 2'-0" O.C. AND SHALL BE MOUNTED DIRECTLY ABOVE BACKSPLASH U.N.O.
- ALL BACKSPLASHES TO BE 4" HIGH U.N.O.
- DASHED LINES ON ELEVATIONS INDICATED ADJUSTABLE SHELVING INSIDE CASEWORK.
- PROVIDE FINISHED BACK PANEL AT KNEE SPACES BELOW ALL FUMEHOODS, TYPICAL, SIMILAR TO DETAIL.
- PROVIDE FINISHED BACK PANEL AT ALL KNEE SPACES, TYPICAL.
- PROVIDE LOCK AND KEY WHERE A CIRCLE NEXT TO DRAWER OR DOOR HANDLE IS SHOWN OR WHERE NOTED.
- REFER SHEETS A0914 FOR LABORATORY CASEWORK / MILLWORK DETAILS.
- FOR TYPICAL MOUNTING HEIGHTS REF. 1A0911
- ALL CASEWORK TO BE WOOD U.N.O.
- ALL CASEWORK IS LABORATORY CASEWORK UNLESS NOTED AS MILLWORK OR OFO. SEE DIVISION 12 5655 - LABORATORY CASEWORK FOR SPECIFICATIONS.
- ALL EQUIPMENT ITEMS HAVE A EQUIPMENT TAG - XXXXXX. SEE SHEETS A114 FOR EQUIPMENT SCHEDULES.
- PROVIDE PAPER TOWEL DISPENSER (PTD) AT EACH SINK LOCATION.



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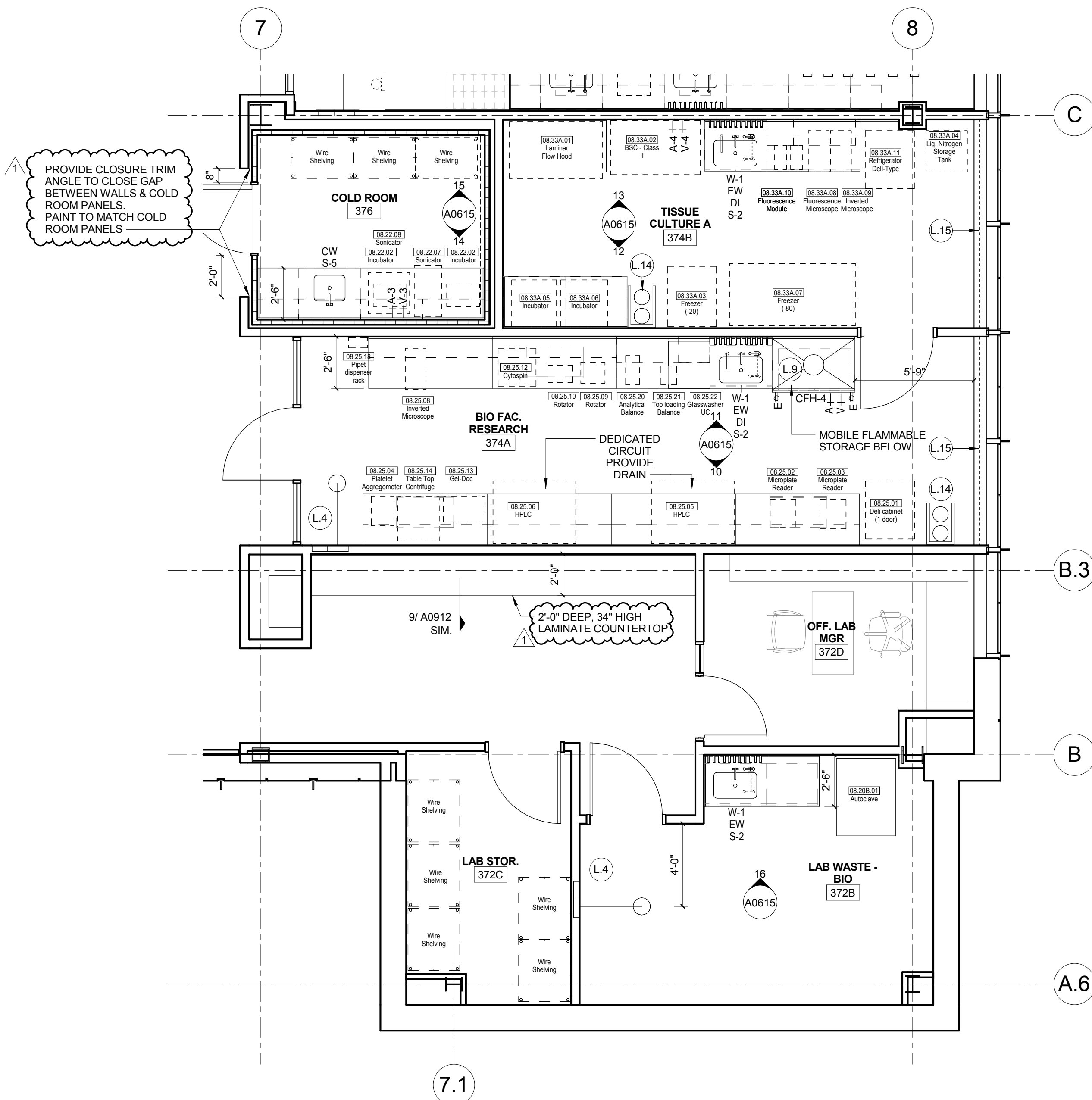
**ENLARGED PLANS-LEVEL
02**

Project No.: 04561.01 Checked by:

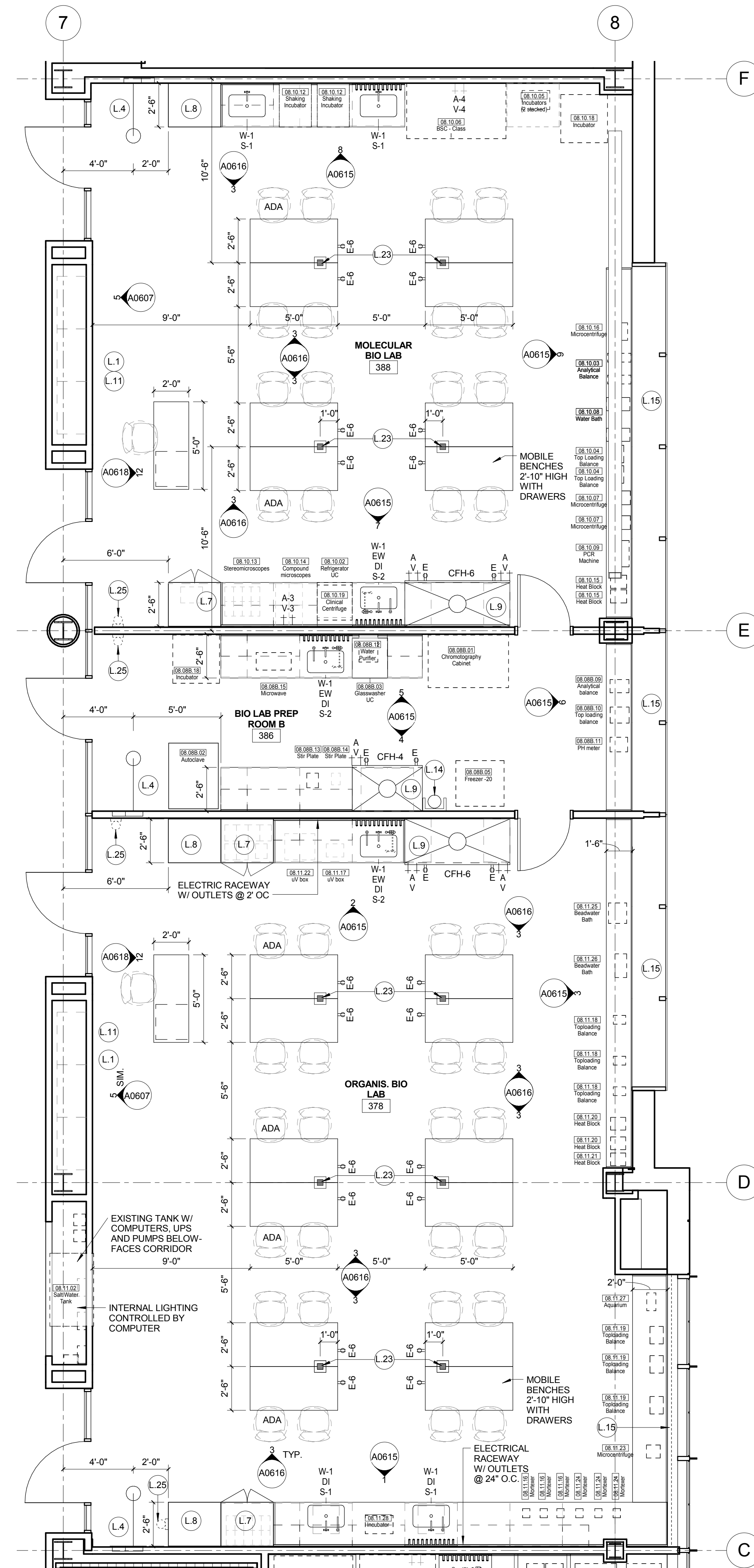
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2 LEVEL 03 - BIOLOGY - EAST SIDE-S
1/4" = 1'-0"



1 LEVEL 03 - BIOLOGY - EAST SIDE-N
1/4" = 1'-0"



LAB KEYED NOTE LEGEND

- L.1 WRITABLE AND PROJECTABLE SURFACE. DIMENSIONS AS NOTED
L.2 RECESSED, CEILING MOUNTED PROJECTION SCREEN
L.3 WALL MOUNTED PROJECTOR ABOVE
L.5 EMERGENCY SAFETY SHOWER WITH EYEWASH
L.5 115313 CHEMICAL FUME HOOD W/ STORAGE BELOW. TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED.
L.7 WOOD LAB CASEWORK MICROSCOPE CAB
L.8 WOOD LAB CASEWORK. TALL CABINET WITH OPEN CUBBIES FOR BOOK BAG STORAGE.
L.9 115313 CHEMICAL FUME HOOD - ACCESSIBLE - WITH MOBILE STORAGE BELOW, WHERE SHOWN. TYPICAL FUME HOOD TO HAVE ELECTRIC, AND UTILITIES AS INDICATED.
L.11 CABS BELOW WHITEBOARD
L.12 CAMERA FOR SKYPE INTERVIEW
L.14 GAS CYLINDER STORAGE RACK (CFI), CYLINDERS TO BE "OFF"
L.15 RECESSED MOTORIZED ROOM DARKENING / BLACKOUT SHADES. USE DOUBLE SHADES AT WEST CLASSROOMS LEVEL 02 AND LECTURE HALL. REFER TO REFLECTED CEILING PLANS LCD MONITOR
L.16 MOBILE LABORATORY CASEWORK SYSTEM. SEE DETAIL 09A0911.
L.19 MOVEABLE WOOD LABORATORY CASEWORK. TABLE WITH MODIFIED EPOXY COUNTERTOP, WALL CABINETS AS SHOWN ON ELEVATION
L.20 FIXED WOOD LABORATORY CASEWORK. BASE CABINETS, MODIFIED EPOXY COUNTERTOP, WALL CABINETS AS SHOWN ON ELEVATION
L.21 SEE CEILING PLAN FOR CEILING MOUNTED UNISTRUT SYSTEM SUPPORTED BY STRUCTURE ABOVE
L.22 8" DEEP x 8" WIDE TRENCH WITH METAL COVER TO RECEIVE FLOOR FINISH TO MATCH ADJACENT FLOOR
L.23 FLOOR BOX FOR ELECTRICAL & DATA
L.24 09 6866 DRY ERASE FINISH (AWC-1)
L.25 PROVIDE BLOCKING FOR FIRE EXTINGUISHER. MOUNTING HEIGHT - 3'-0" TO TOP OF EXTINGUISHER. FIRE EXTINGUISHER & ITS BRACKET BY OWNER.
L.26 POINT EXHAUST (SNORKEL) FOR SOLDERING. SEE DETAIL 5/ A0913.

LAB UTILITY LEGEND

- CW WATER COLD WATER FAUCET, DECK MOUNTED GOOSENECK WITH SERRATED NOZZLE, VACUUM BREAKER.
W-1 WATER GENERAL MIXING FAUCET, DECK MOUNTED WITH VACUUM BREAKER, SERRATED NOZZLE.
DI WATER PROCESS COLD WATER SUPPLY.
PWS WATER PROCESS COLD WATER RETURN.
EW WATER EYEWASH, DECK MOUNTED, AUTOFLOW SWING-DOWN.
DH WATER DRENCH HOSE.
G GAS FUME HOOD CONTROL
V VAC FUME HOOD CONTROL
V-3 VAC WALL MOUNTED, SINGLE SERRATED OUTLET
V-1 VAC TURRET BASE, SINGLE SERRATED OUTLET
V-4 VAC OUTLET FOR BIOSAFETY CABINET CONNECTIONS
V-5 VAC QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
A-1 AIR FUME HOOD CONTROL
A-3 AIR TURRET BASE, SINGLE SERRATED OUTLET
A-4 AIR WALL MOUNTED, SINGLE SERRATED OUTLET
A-5 AIR QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
N NITROGEN FUMEHOOD CONTROL
ELEC. DUPLEX OUTLET (GFI) ON FUME HOOD
E-1 ELEC. COUNTERTOP MOUNTED PEDESTAL, (1) DUPLEX ELECTRICAL OUTLET.
E-2 ELEC. COUNTERTOP MOUNTED PEDESTAL, (2) DUPLEX ELECTRICAL OUTLET.
E-3 ELEC. WALL MOUNTED, (1) DUPLEX ELECTRICAL OUTLET.
E-5 ELEC. DUPLEX ELECTRICAL OUTLET ON OVERHEAD SERVICE CARRIER
E-6 ELEC. DUPLEX ELECTRICAL OUTLET ON TABLE APRON
D DATA DATA OUTLET
D-1 DATA COUNTERTOP MOUNTED PEDESTAL, (2) DATA OUTLETS
D-5 DATA DATA OUTLET ON OVERHEAD SERVICE CARRIER
D-6 DATA DATA OUTLET ON TABLE APRON
S SINK LIPPED MODIFIED EPOXY CUP SINK, 9"x3" W OVAL (DROP-IN).
S-1 SINK LIPPED MODIFIED EPOXY ADA SINK 25"x15"x10" (DROP-IN).
S-2 SINK LIPPED MODIFIED EPOXY ADA SINK 25"x15"x10" (DROP-IN).
S-3 SINK STAINLESS STEEL ADA SINK 25"x15"x10" (DROP-IN).
S-4 SINK STAINLESS STEEL ADA SINK 25"x15"x10" (DROP-IN).
S-5 SINK LIPPED MODIFIED EPOXY ADA SINK 18"x15"x10" (DROP-IN).
S-6 SINK LIPPED MODIFIED EPOXY ADA SINK 36"x15"x10" (DROP-IN).
OSC OVERHEAD SERVICE CARRIER. SEE DETAIL 10 / A0913.
PTD PAPER TOWEL DISPENSER

CHEMICAL FUME HOOD LEGEND

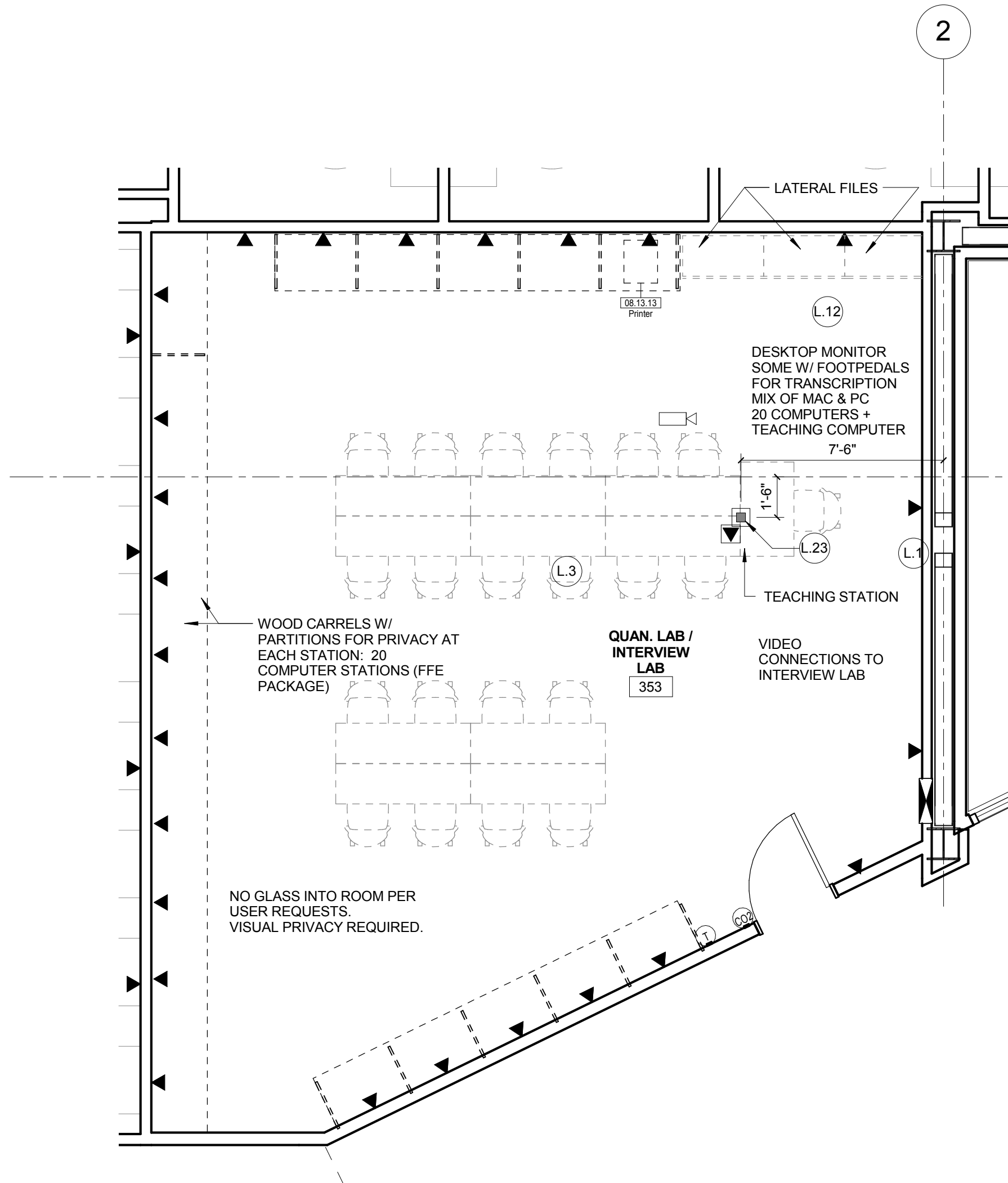
- CFH-4 4'-0" WIDE CHEMICAL FUME HOOD
CFH-6 6'-0" WIDE CHEMICAL FUME HOOD

LAB GENERAL NOTES

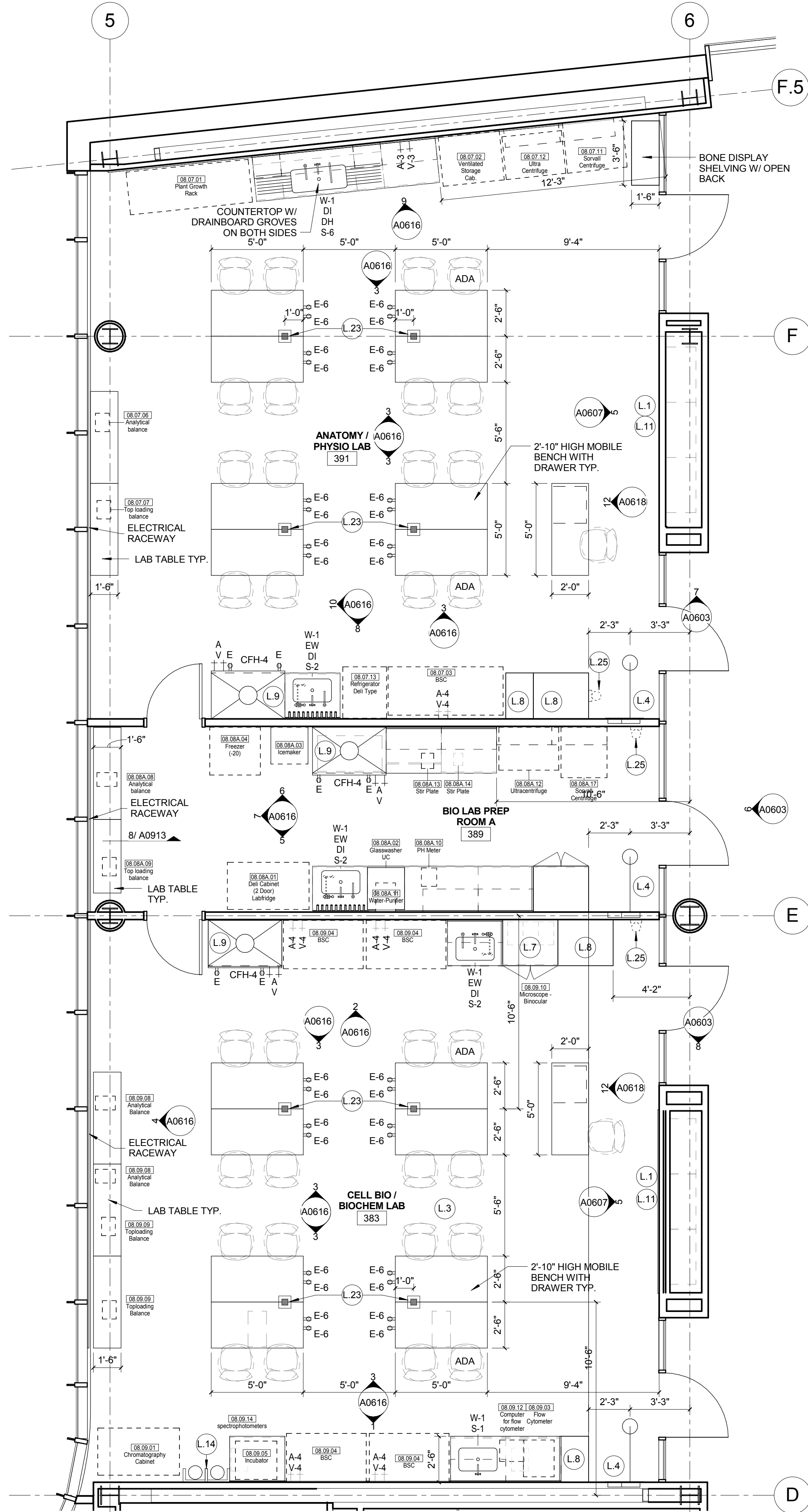
- ALL DIMENSIONS ARE TO GWB FACE PARTITION OR COLUMN CENTER LINE UNLESS NOTED.
- OWNER FURNISHED OWNER INSTALLED (OFOI) ITEMS ARE SHOWN DASHED FOR REFERENCE ONLY. COORDINATE SIZE AND INSTALLATION REQUIREMENTS WITH OWNERS REPRESENTATIVE.
- CENTER ALL DRYING RACKS WITH DRIP STOP TROUGHS ABOVE CENTERLINE OF SINKS, U.N.O.
- ALL APRONS AT OPEN KNEE SPACE TO BE 4" U.N.O. PROVIDE APRON OF SOLID WOOD WITH EASED BOTTOM EDGE. FINISH TO MATCH VENEER SPECIES. MAINTAIN MINIMUM 2" CLEAR ABOVE FLOOR FINISH.
- CENTER ALL COUNTERTOP MOUNTED UTILITY OUTLETS ON CENTER OF CASEWORK U.N.O.
- ALL SURFACE MOUNTED RACEWAY TO HAVE OUTLETS AT 2'-0" O.C. AND SHALL BE MOUNTED DIRECTLY ABOVE BACKSPLASH U.N.O.
- ALL BACKSPLASHES TO BE 4" HIGH U.N.O.
- DASHED LINES ON ELEVATIONS INDICATED ADJUSTABLE SHELVE INSIDE CASEWORK.
- PROVIDE FINISHED BACK PANEL AT KNEE SPACES BELOW ALL FUMEHOODS. TYPICAL. SIMILAR TO DETAIL.
- PROVIDE FINISHED BACK PANEL AT ALL KNEE SPACES. TYPICAL.
- PROVIDE LOCK AND KEY WHERE A CIRCLE NEXT TO DRAWER OR DOOR HANDLE IS SHOWN OR WHERE NOTED.
- REFER SHEETS A0914 FOR LABORATORY CASEWORK / MILLWORK DETAILS.
- FOR TYPICAL MOUNTING HEIGHTS REF. 1/A0911
- ALL CASEWORK TO BE WOOD U.N.O.
- ALL CASEWORK IS LABORATORY CASEWORK UNLESS NOTED AS MILLWORK OR OFOI. SEE DIVISION 12 3553 - LABORATORY CASEWORK FOR SPECIFICATIONS.
- ALL EQUIPMENT ITEMS HAVE A EQUIPMENT TAG - XX-XX-XX. SEE SHEETS A1104 FOR EQUIPMENT SCHEDULES.
- PROVIDE PAPER TOWEL DISPENSER (PTD) AT EACH SINK LOCATION.

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2 A-FL03-96 - AREA B - Quantitative Lab
1/4" = 1'-0"



1 LEVEL 03 - BIOLOGY - WEST
1/4" = 1'-0"



LAB KEYED NOTE LEGEND

- L.1 WRITABLE AND PROJECTABLE SURFACE. DIMENSIONS AS NOTED
L.2 RECESSED, CEILING MOUNTED PROJECTION SCREEN
L.3 WALL MOUNTED PROJECTOR ABOVE
L.4 EMERGENCY SAFETY SHOWER WITH EYEWASH.
L.5 115313 CHEMICAL FUME HOOD W/ STORAGE BELOW. TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED.
L.6 WOOD LAB CASEWORK MICROSCOPE CAB
L.7 WOOD LAB CASEWORK: TALL CABINET WITH OPEN CUBBIES FOR BOOK BAG STORAGE.
L.8 11 5313 CHEMICAL FUME HOOD - ACCESSIBLE - WITH MOBILE STORAGE BELOW, WHERE SHOWN. TYPICAL FUME HOOD TO HAVE ELECTRIC, AND UTILITIES AS INDICATED.
L.9 CABS BELOW WHITEBOARD
L.10 CAMERA FOR SKYPE INTERVIEW
L.11 GAS CYLINDER STORAGE RACK (CFOI). CYLINDERS TO BE "OF" OI.
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L.13 MOBILE LABORATORY CASEWORK SYSTEM. SEE DETAIL 09/A0911.
L.14 MOVEABLE WOOD LABORATORY CASEWORK: TABLE WITH MODIFIED EPOXY COUNTERTOP. CABINETS SUSPENDED BELOW AS INDICATED.
L.15 FIXED WOOD LABORATORY CASEWORK: BASE CABINETS, MODIFIED EPOXY COUNTERTOP. WALL CABINETS AS SHOWN ON ELEVATION
L.16 SEE CEILING PLAN FOR CEILING MOUNTED UNISTRUT SYSTEM SUPPORTED BY STRUCTURE ABOVE
L.17 8" DEEP x 8" WIDE TRENCH WITH METAL COVER TO RECEIVE FLOOR FINISH TO MATCH ADJACENT FLOOR
L.18 FLOOR BOX FOR ELECTRICAL & DATA
L.19 09 6666 DRY ERASE FINISH (AWC-1)
L.20 PROVIDE BLOCKING FOR FIRE EXTINGUISHER, MOUNTING HEIGHT - 3'-0" TO TOP OF EXTINGUISHER. FIRE EXTINGUISHER & ITS BRACKET BY OWNER
L.21 POINT EXHAUST (SNORKEL) FOR SOLDERING. SEE DETAIL 5/ A0913.

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G GAS FUME HOOD CONTROL
V VAC FUME HOOD CONTROL
V-3 VAC WALL MOUNTED, SINGLE SERRATED OUTLET
V-1 VAC TURRET BASE, SINGLE SERRATED OUTLET
V-4 VAC OUTLET FOR BIOSAFETY CABINET CONNECTIONS
V-5 VAC QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
A AIR FUME HOOD CONTROL
A-1 AIR TURRET BASE, SINGLE SERRATED OUTLET
A-3 AIR WALL MOUNTED, SINGLE SERRATED OUTLET
A-4 AIR OUTLET FOR BIOSAFETY CABINET CONNECTIONS
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N NITROGEN FUMEHOOD CONTROL
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E-5 ELEC. DUPLEX ELECTRICAL OUTLET ON OVERHEAD SERVICE CARRIER
E-6 ELEC. DUPLEX ELECTRICAL OUTLET ON TABLE APRON
D DATA DATA OUTLET
D-1 DATA COUNTERTOP MOUNTED PEDESTAL, (2) DATA OUTLETS
D-5 DATA DATA OUTLET ON OVERHEAD SERVICE CARRIER
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S-1 SINK LIPPED MODIFIED EPOXY SINK, 25"Lx15"Wx10"D (DROP-IN).
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S-6 SINK LIPPED MODIFIED EPOXY SINK, 36"Lx15"Wx10"D (DROP-IN).
OSC OVERHEAD SERVICE CARRIER. SEE DETAIL 10 / A0913.
PTD PAPER TOWEL DISPENSER

CHEMICAL FUME HOOD LEGEND

- CFH-4 4'-0" WIDE CHEMICAL FUME HOOD
CFH-6 6'-0" WIDE CHEMICAL FUME HOOD

LAB GENERAL NOTES

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- FOR TYPICAL MOUNTING HEIGHTS REF. 1A0911
- ALL CASEWORK TO BE WOOD U.N.O.
- ALL CASEWORK IS LABORATORY CASEWORK UNLESS NOTED AS MILLWORK OR OF/OI. SEE DIVISION 12 3555 - LABORATORY CASEWORK FOR SPECIFICATIONS.
- ALL EQUIPMENT ITEMS HAVE A EQUIPMENT TAG - XX-XXXX. SEE SHEETS A114x FOR EQUIPMENT SCHEDULES.
- PROVIDE PAPER TOWEL DISPENSER (PTD) AT EACH SINK LOCATION.



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CONFORMED SET 01 JUL 2016

ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016
No. Description Date

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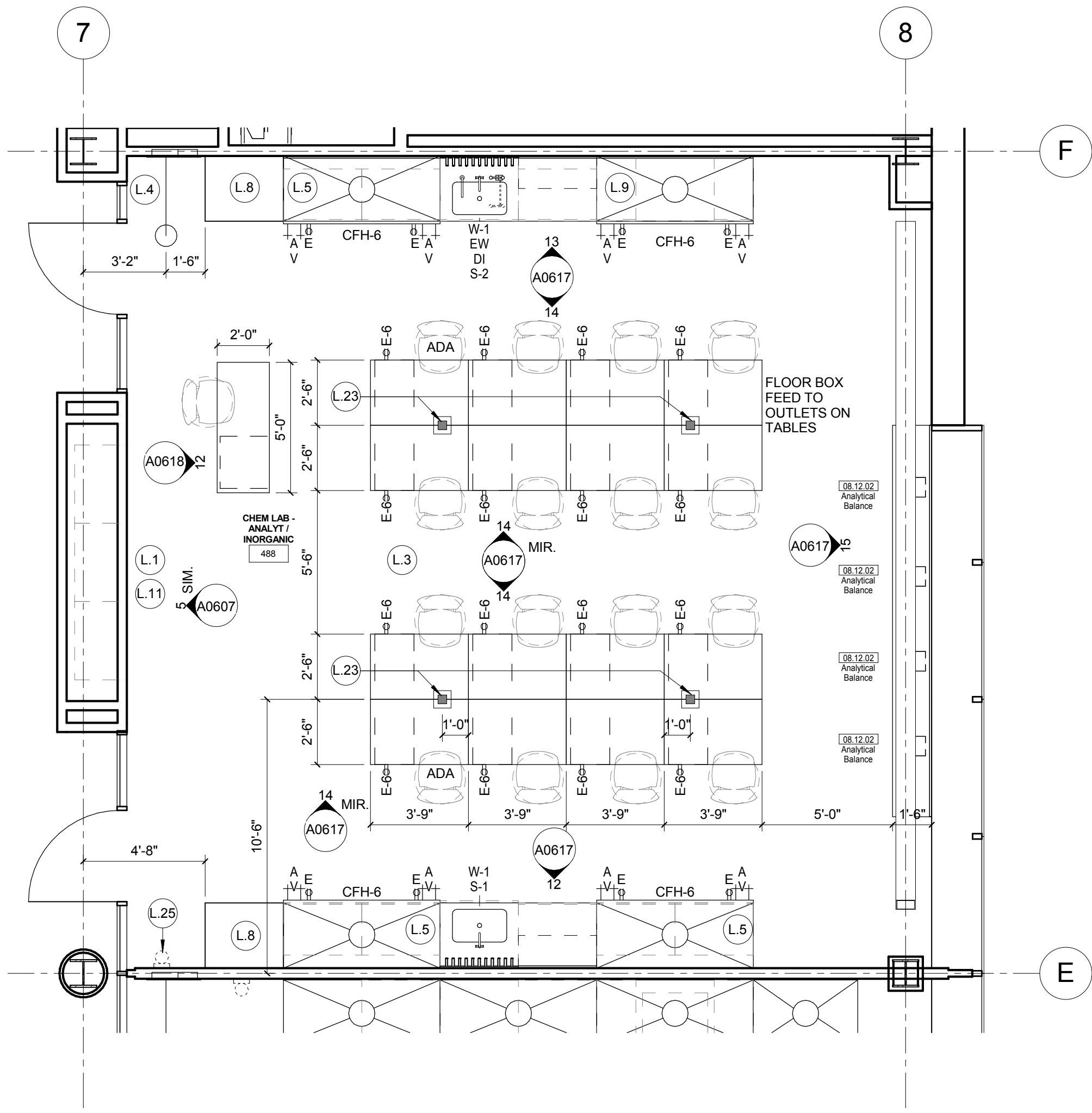
ENLARGED PLANS-LEVEL 03

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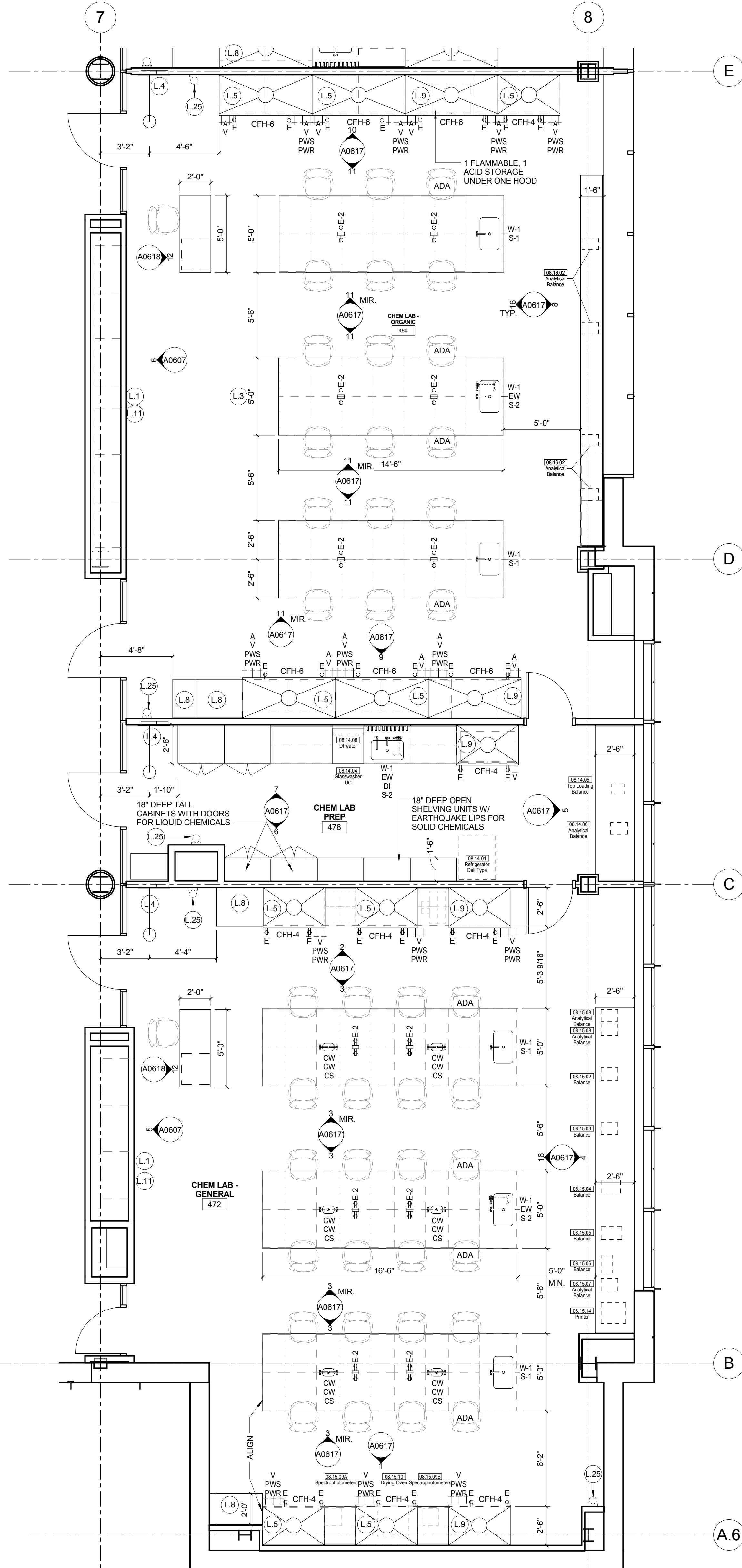
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3/30/2016 11:51:07 PM

1 LEVEL 04 - CHEMISTRY EAST - N
1/4" = 1'-0"



2 LEVEL 04 - CHEMISTRY EAST - S
1/4" = 1'-0"



LAB KEYED NOTE LEGEND

- L.1 WRITABLE AND PROJECTABLE SURFACE, DIMENSIONS AS NOTED
- L.2 RECESSED, CEILING MOUNTED PROJECTION SCREEN
- L.3 WALL MOUNTED PROJECTOR ABOVE
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- L.16 LCD MONITOR
- L.18 MOBILE LABORATORY CASEWORK SYSTEM. SEE DETAIL 09/A0911.
- L.19 MOVEABLE WOOD LABORATORY CASEWORK: TABLE WITH MODIFIED EPOXY COUNTERTOP. CABINETS SUSPENDED BELOW AS INDICATED.
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- V-1 VAC TURRET BASE, SINGLE SERRATED OUTLET
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- E-3 ELEC. WALL MOUNTED, (1) DUPLEX ELECTRICAL OUTLET
- E-5 ELEC. DUPLEX ELECTRICAL OUTLET ON OVERHEAD SERVICE CARRIER
- E-6 ELEC. DUPLEX ELECTRICAL OUTLET ON TABLE APRON
- D DATA DATA OUTLET
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- OSC OVERHEAD SERVICE CARRIER. SEE DETAIL 10/ A0913.
- PTD PAPER TOWEL DISPENSER

CHEMICAL FUME HOOD LEGEND

- CFH-4 4'-0" WIDE CHEMICAL FUME HOOD
- CFH-6 6'-0" WIDE CHEMICAL FUME HOOD

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- CENTER ALL COUNTERTOP MOUNTED UTILITY OUTLETS ON CENTER OF CASEWORK U.N.O.
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CONFORMED SET

01 JUL 2016

ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016
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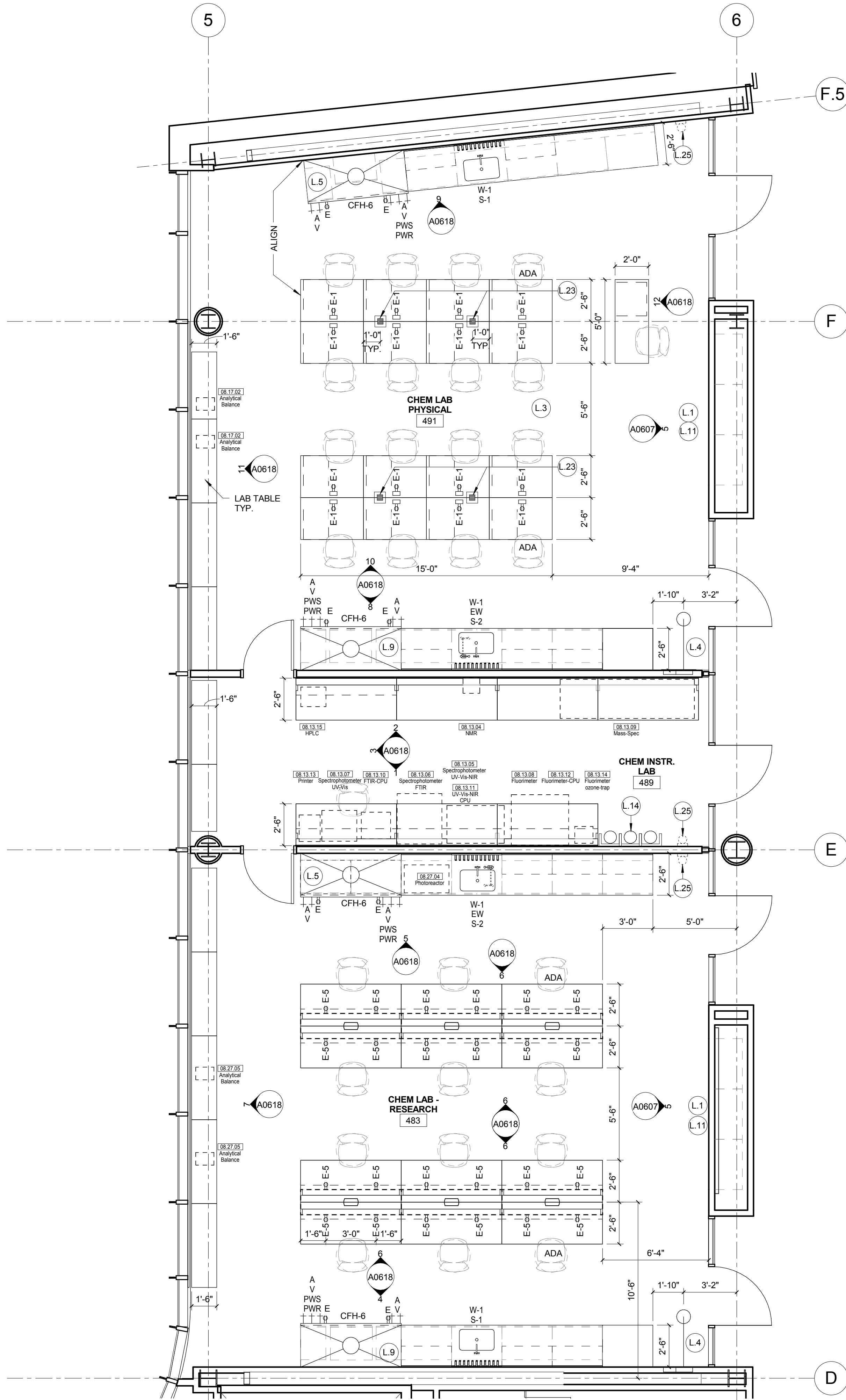
ENLARGED PLANS-LEVEL
04

Project No.: 04561.01

Checked by:

A0207

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1 L04 - AREA A - WEST CHEMISTRY LAB PLAN
1/4" = 1'-0"

LAB KEYED NOTE LEGEND

- L.1 WRITABLE AND PROJECTABLE SURFACE. DIMENSIONS AS NOTED
- L.2 RECESSED. CEILING MOUNTED PROJECTION SCREEN
- L.3 WALL MOUNTED PROJECTOR ABOVE
- L.4 EMERGENCY SAFETY SHOWER WITH EYEWASH
- L.5 11513 CHEMICAL FUME HOOD W/ STORAGE BELOW. TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED.
- L.7 WOOD LAB CASEWORK MICROSCOPE CAB
- L.8 WOOD LAB CASEWORK TALL CABINET WITH OPEN CUBBIES FOR BOOK BAG STORAGE
- L.9 115313 CHEMICAL FUME HOOD - ACCESSIBLE - WITH MOBILE STORAGE BELOW, WHERE SHOWN. TYPICAL FUME HOOD TO HAVE ELECTRIC, AND UTILITIES AS INDICATED.
- L.11 CABS BELOW WHITEBOARD
- L.12 CAMERA FOR SKYPE INTERVIEW
- L.14 GAS CYLINDER STORAGE RACK (CFI), CYLINDERS TO BE "OF" OF
- L.15 RECESSED MOTORIZED ROOM DARKENING / BLACKOUT SHADES. USE DOUBLE SHADES AT WEST CLASSROOMS LEVEL 02 AND LECTURE HALL. REFER TO REFLECTED CEILING PLANS
- L.16 LCD MONITOR
- L.18 MOBILE LABORATORY CASEWORK SYSTEM. SEE DETAIL 09/A0911.
- L.19 MOVEABLE WOOD LABORATORY CASEWORK: TABLE WITH MODIFIED EPOXY COUNTERTOP. CABINETS SUSPENDED BELOW AS INDICATED.
- L.20 FIXED WOOD LABORATORY CASEWORK - BASE CABINETS. MODIFIED EPOXY COUNTERTOP. WALL CABINETS AS SHOWN ON ELEVATION
- L.21 SEE CEILING PLAN FOR CEILING MOUNTED UNISTRUT SYSTEM SUPPORTED BY STRUCTURE ABOVE
- L.22 8" DEEP V 6" WIDE TRENCH WITH METAL COVER TO RECIEVE FLOOR FINISH TO MATCH ADJACENT FLOOR
- L.23 FLOOR BOX FOR ELECTRICAL & DATA
- L.24 09 6666 DRY ERASE FINISH (AWC-1)
- L.25 PROVIDE BLOCKING FOR FIRE EXTINGUISHER. MOUNTING HEIGHT - 3'-0" TO TOP OF EXTINGUISHER. FIRE EXTINGUISHER & ITS BRACKET BY OWNER.
- L.26 POINT EXHAUST (SNORKEL) FOR SOLDERING. SEE DETAIL 5/ A0913.

LAB UTILITY LEGEND

- CW WATER COLD WATER FAUCET. DECK MOUNTED GOOSENECK WITH SERRATED NOZZLE. VACUUM BREAKER.
- W-1 WATER GENERAL MIXING FAUCET. DECK MOUNTED WITH VACUUM BREAKER. SERRATED NOZZLE.
- DI WATER DI WATER FAUCET DECK MOUNTED.
- PWS WATER PROCESS COLD WATER SUPPLY.
- EW WATER PROCESS COLD WATER RETURN.
- EW WATER EYEWASH. DECK MOUNTED. AUTOFLOW SWING-DOWN. WATER DRENCH HOSE.
- G GAS FUME HOOD CONTROL
- V VAC FUME HOOD CONTROL
- V-3 VAC WALL MOUNTED. SINGLE SERRATED OUTLET
- V-1 VAC TURRET BASE. SINGLE SERRATED OUTLET
- V-4 VAC OUTLET FOR BIOSAFETY CABINET CONNECTIONS
- V-5 VAC QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
- A AIR FUME HOOD CONTROL
- A-1 AIR TURRET BASE. SINGLE SERRATED OUTLET
- A-3 AIR WALL MOUNTED. SINGLE SERRATED OUTLET
- A-4 AIR OUTLET FOR BIOSAFETY CABINET CONNECTIONS
- A-5 AIR QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
- N NITROGEN FUMEHOOD CONTROL
- E ELEC DUPLEX OUTLET (CFI) ON FUME HOOD
- E-1 ELEC COUNTERTOP MOUNTED PEDESTAL. (1) DUPLEX ELECTRICAL OUTLET.
- E-2 ELEC COUNTERTOP MOUNTED PEDESTAL. (2) DUPLEX ELECTRICAL OUTLET.
- E-3 ELEC WALL MOUNTED. (1) DUPLEX ELECTRICAL OUTLET.
- E-5 ELEC DUPLEX ELECTRICAL OUTLET ON OVERHEAD SERVICE CARRIER
- E-6 ELEC DUPLEX ELECTRICAL OUTLET ON TABLE APRON
- D DATA DATA OUTLET
- D-1 DATA COUNTERTOP MOUNTED PEDESTAL. (2) DATA OUTLETS
- D-5 DATA DATA OUTLET ON OVERHEAD SERVICE CARRIER
- D-6 DATA DATA OUTLET ON TABLE APRON
- CS CUP SINK LIPPED MODIFIED EPOXY CUP SINK. 9"X3" W OVAL (DROP-IN).
- S-1 SINK LIPPED MODIFIED EPOXY SINK. 25"Lx15"Wx10"D (DROP-IN).
- S-2 SINK LIPPED MODIFIED EPOXY ADA SINK 25"Lx15"Wx6"D (DROP-IN).
- S-3 SINK STAINLESS STEEL SINK 25"Lx15"Wx10"D (DROP-IN).
- S-4 SINK STAINLESS STEEL ADA SINK 25"Lx15"Wx6"D (DROP-IN).
- S-5 SINK LIPPED MODIFIED EPOXY ADA SINK 18"Lx15"Wx5"D (DROP-IN).
- S-6 SINK LIPPED MODIFIED EPOXY SINK. 36"Lx15"Wx10"D (DROP-IN).
- OSC OVERHEAD SERVICE CARRIER. SEE DETAIL 10 / A0913.
- PTD PAPER TOWEL DISPENSER

CHEMICAL FUME HOOD LEGEND

- CFH-4 4'-0" WIDE CHEMICAL FUME HOOD
- CFH-6 6'-0" WIDE CHEMICAL FUME HOOD

LAB GENERAL NOTES

- ALL DIMENSIONS ARE TO GWB FACE PARTITION OR COLUMN CENTER LINE U.N.O.
- OWNER FURNISHED OWNER INSTALLED (OF/OI) ITEMS ARE SHOWN DASHED FOR REFERENCE ONLY. COORDINATE SIZE AND INSTALLATION REQUIREMENTS WITH OWNER'S REPRESENTATIVE.
- CENTER ALL DRYING RACKS WITH DRIP STOP TROUGHS ABOUT CENTERLINE OF SINKS. U.N.O.
- ALL APRONS AT OPEN KNEE SPACE TO BE 4" U.N.O. PROVIDE APRON OF SOLID WOOD WITH EASED BOTTOM EDGE. FINISH TO MATCH VENEER SPECIES. MAINTAIN MINIMUM 2" CLEAR ABOVE FLOOR FINISH.
- CENTER ALL COUNTERTOP MOUNTED UTILITY OUTLETS ON CENTER OF CASEWORK U.N.O.
- ALL SURFACE MOUNTED RACEWAY TO HAVE OUTLETS AT 2'-0" O.C. AND SHALL BE MOUNTED DIRECTLY ABOVE BACKSPLASH U.N.O.
- ALL BACKSPLASHES TO BE 4" HIGH U.N.O.
- DASHED LINES ON ELEVATIONS INDICATED ADJUSTABLE SHELVING INSIDE CASEWORK.
- PROVIDE FINISHED BACK PANEL AT KNEE SPACES BELOW ALL FUMEHOODS. TYPICAL. SIMILAR TO DETAIL.
- PROVIDE FINISHED BACK PANEL AT ALL KNEE SPACES. TYPICAL
- PROVIDE LOCK AND KEY WHERE A CIRCLE NEXT TO DRAWER OR DOOR HANDLE IS SHOWN OR WHERE NOTED.
- REFER SHEETS A001x FOR LABORATORY CASEWORK / MILLWORK DETAILS.
- FOR TYPICAL MOUNTING HEIGHTS REF. 1/A0911
- ALL CASEWORK TO BE WOOD U.N.O.
- ALL CASEWORK IS LABORATORY CASEWORK UNLESS NOTED AS MILLWORK OR OF/OI. SEE DIVISION 12 3555 - LABORATORY CASEWORK FOR SPECIFICATIONS.
- ALL EQUIPMENT ITEMS HAVE A EQUIPMENT TAG - XX-XX-XX. SEE SHEETS A11xx FOR EQUIPMENT SCHEDULES.
- PROVIDE PAPER TOWEL DISPENSER (PTD) AT EACH SINK LOCATION.



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CONFORMED SET 01 JUL 2016

ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016
No. Description Date

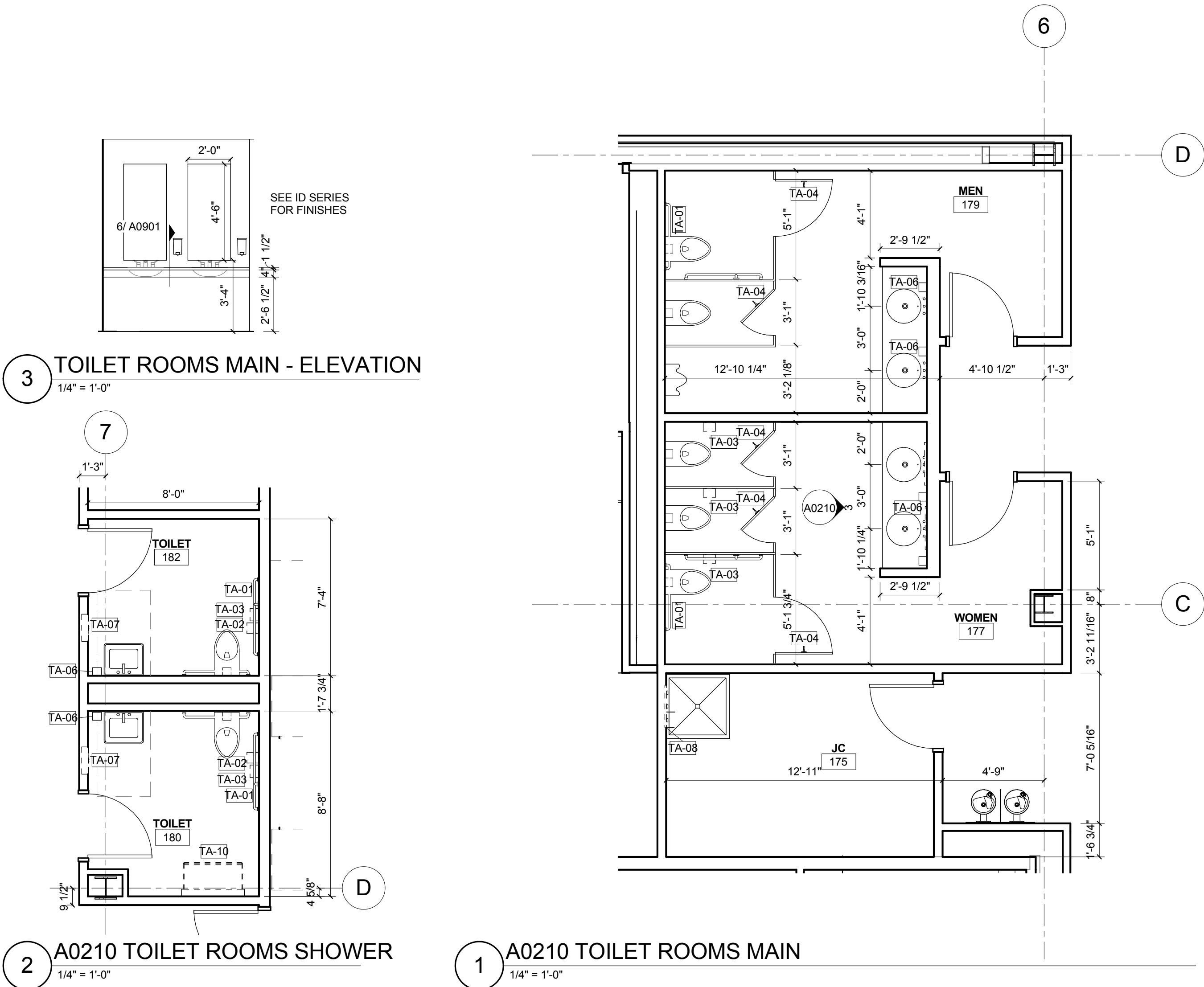
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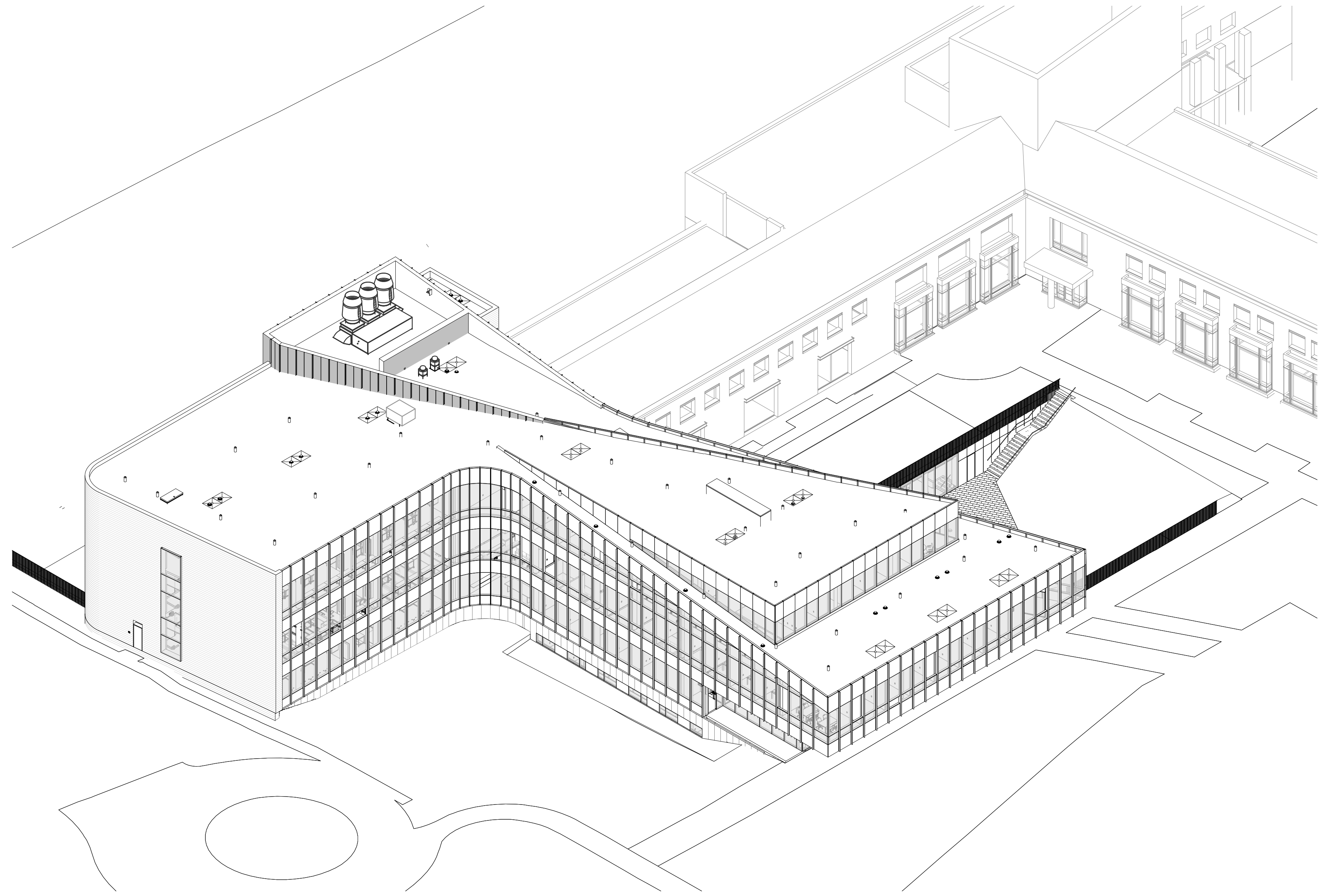
ENLARGED PLANS-LEVEL 04

Project No.: 04561.01 Checked by:

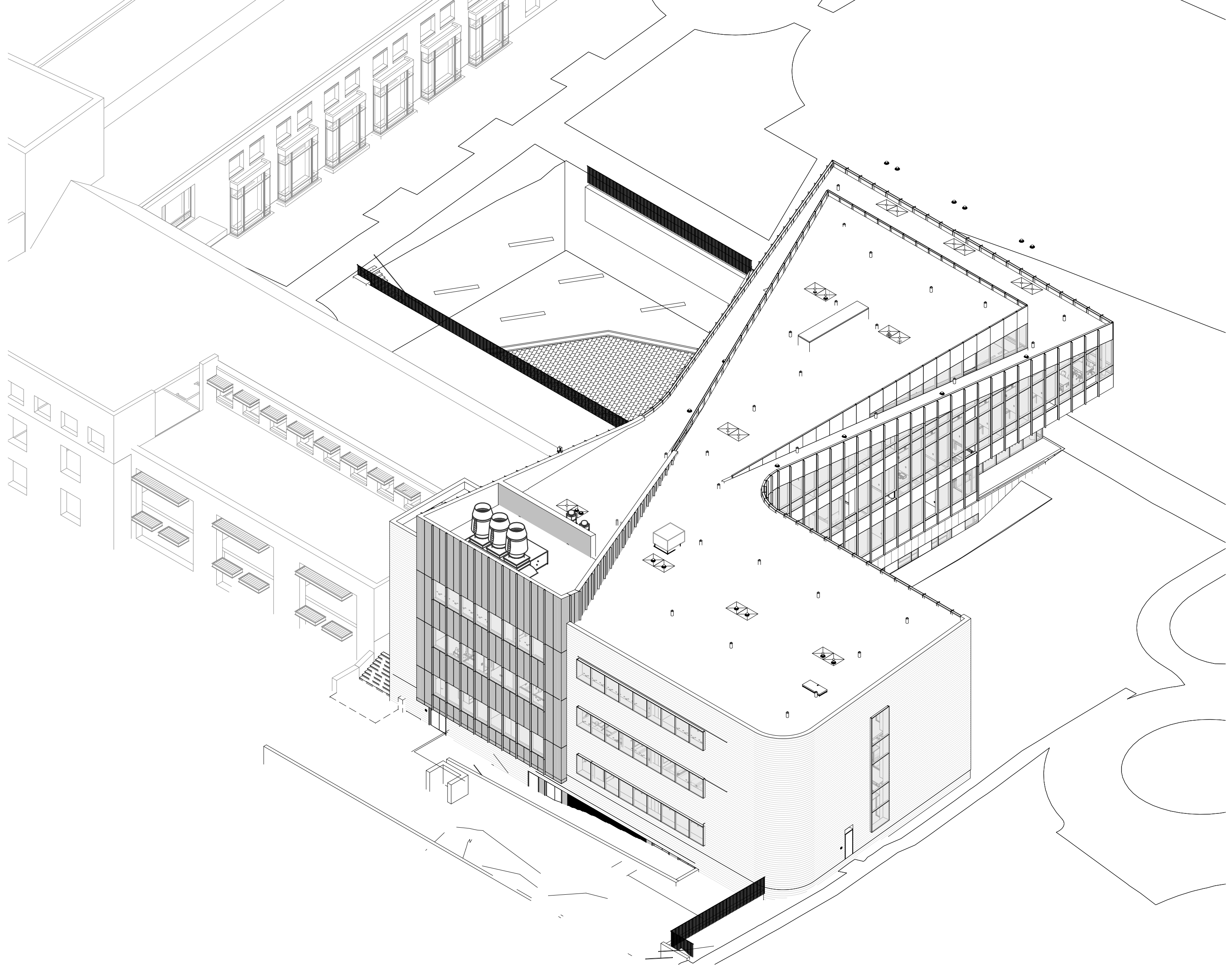
A0208

TOILET ACCESSORIES LEGEND	
Type Mark	Description
TA-01	GRAB BAR
TA-02	TOILET PAPER DISPENSER
TA-03	NAPKIN DISPOSAL
TA-04	COAT HOOK
TA-05	SURFACE-MOUNTED HAND DRYER
TA-06	SOAP DISPENSER (OFOI)
TA-07	WASTE DISPENSER
TA-08	MOP RACK & SHELF
TA-10	DIAPER CHANGING STATION
TA-11	SMALL PAPER TOWEL DISPENSER

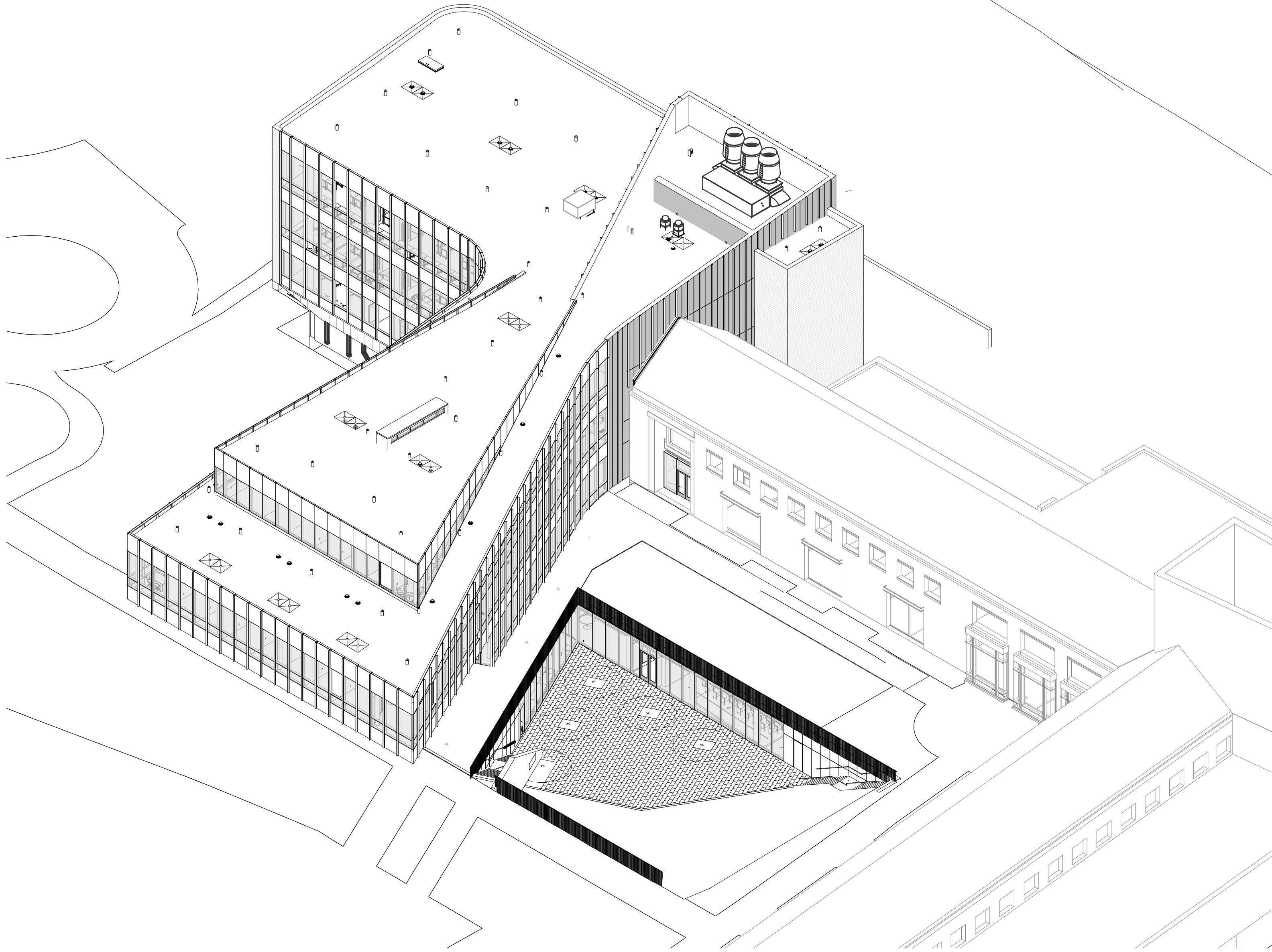




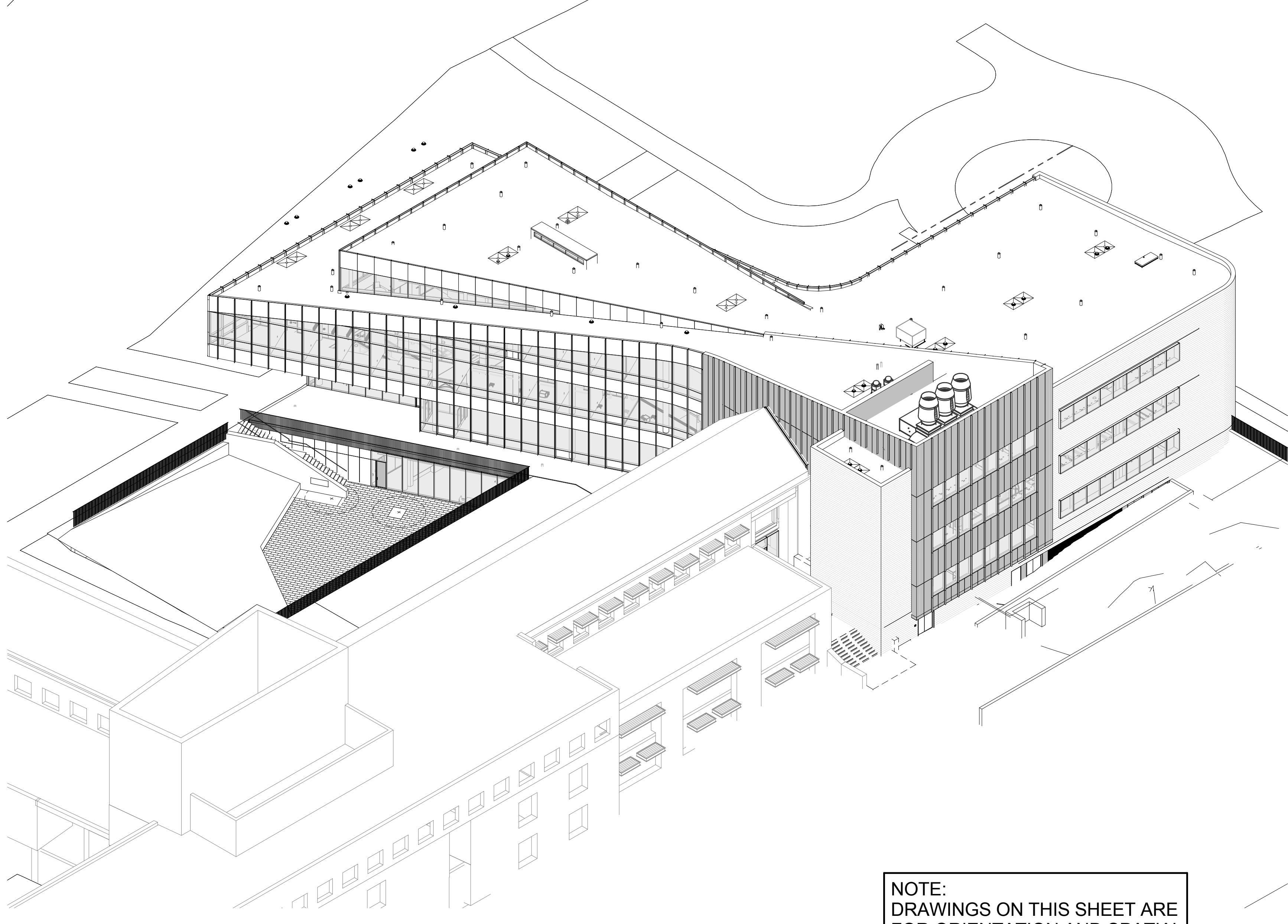
4 3D VIEW - NW CORNER



3 3D VIEW - NE CORNER



2 3D VIEW - SW CORNER



1 3D VIEW - SE CORNER

NOTE:
DRAWINGS ON THIS SHEET ARE
FOR ORIENTATION AND SPATIAL
RELATIONSHIPS ONLY.



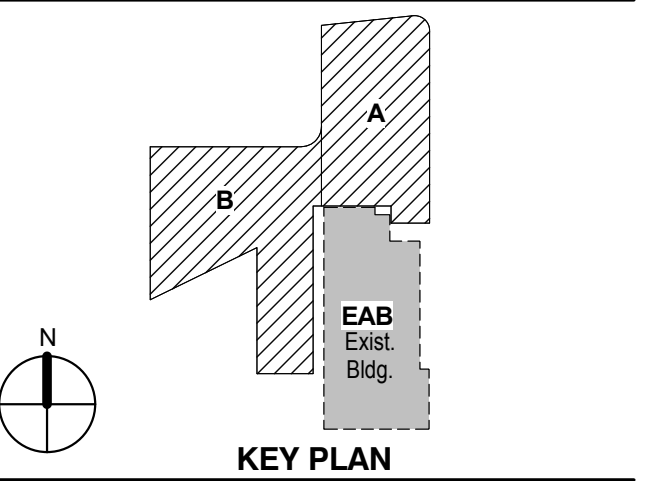
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ISSUED FOR CONSTRUCTION (BP1) 15 JAN 2016



KEY PLAN

Drawing Title:

3D VIEWS

Project No.: 04561.01 Checked by:

A0300

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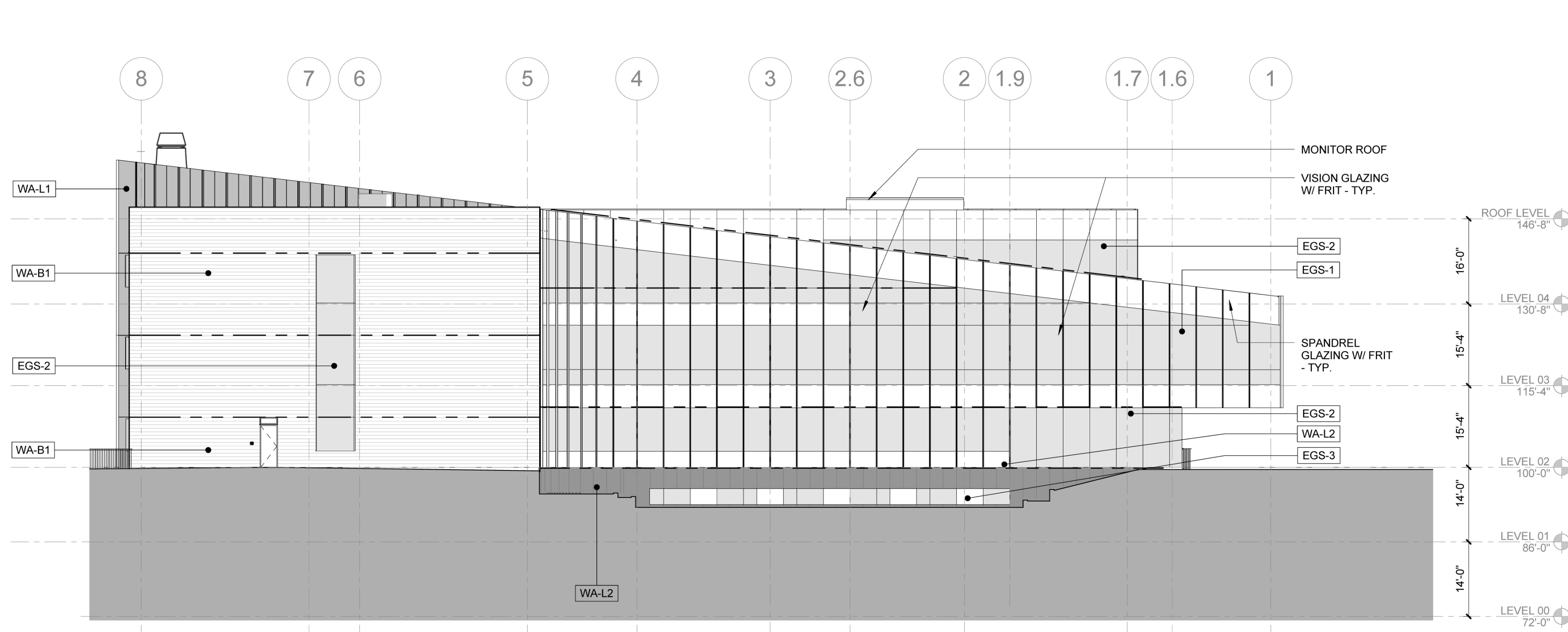
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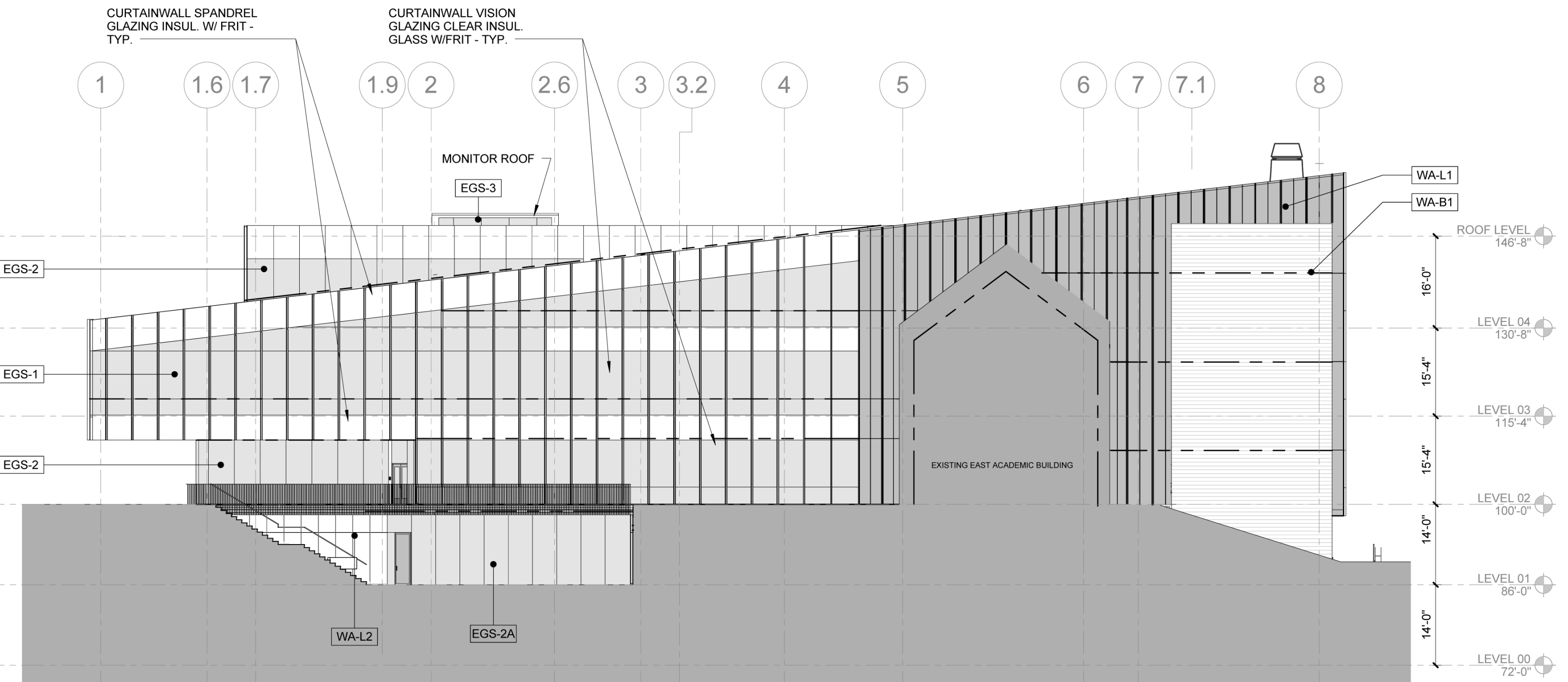
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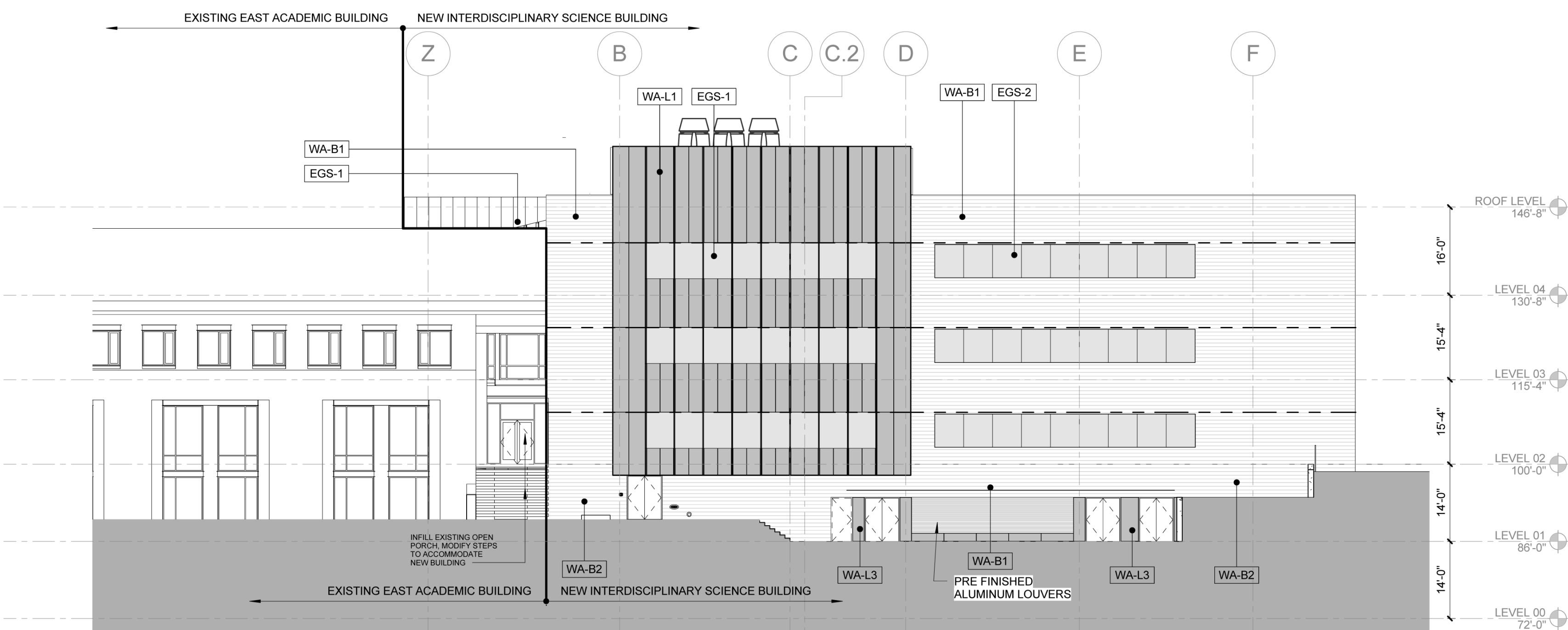
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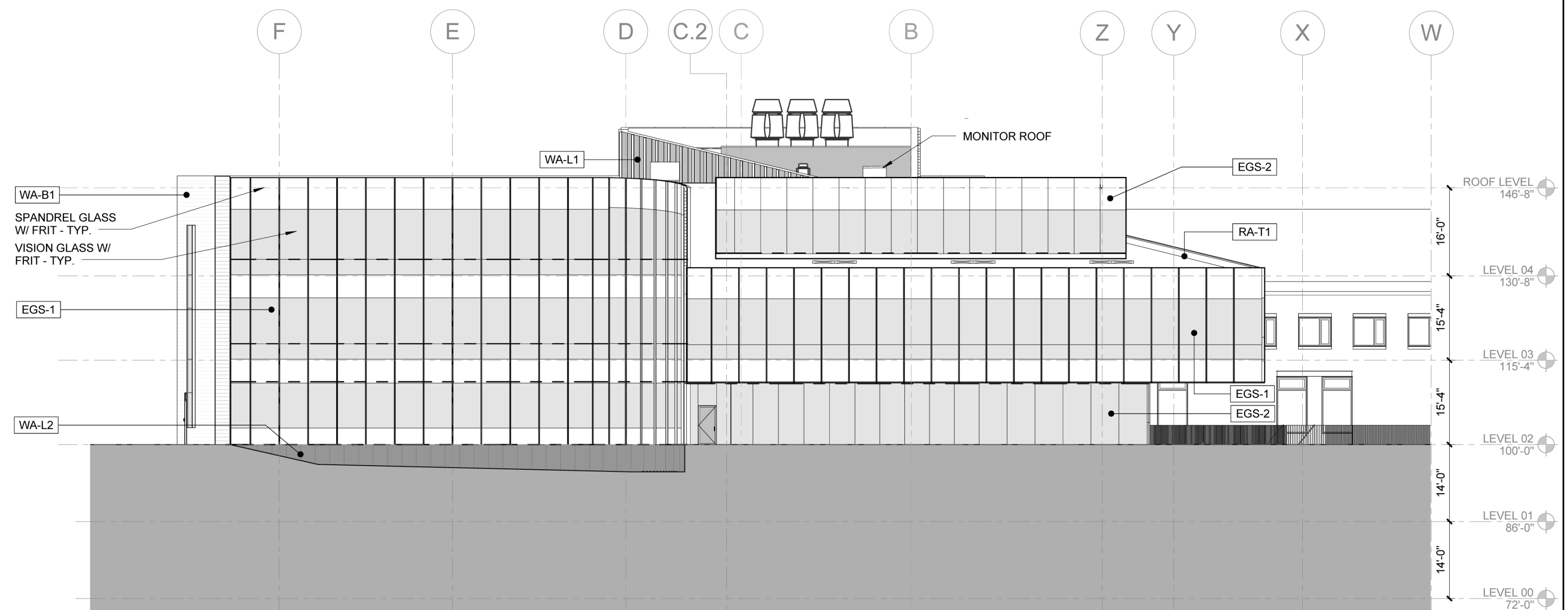
4 EXTERIOR NORTH
1/16" = 1'-0"



3 EXTERIOR SOUTH
1/16" = 1'-0"



2 EXTERIOR EAST
1/16" = 1'-0"

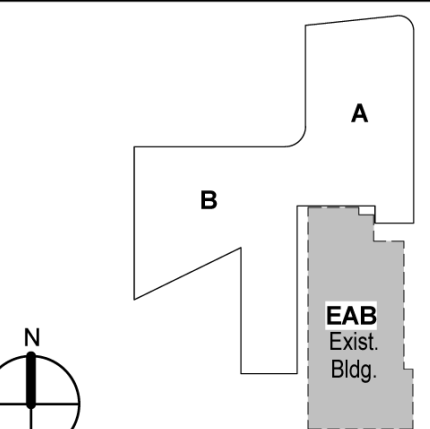


1 EXTERIOR WEST
1/16" = 1'-0"

NOTE:
1. SEE SPECIFICATIONS FOR EGS TYPES
2. SEE SHEET A0400 FOR WALL AND ROOF ASSEMBLIES

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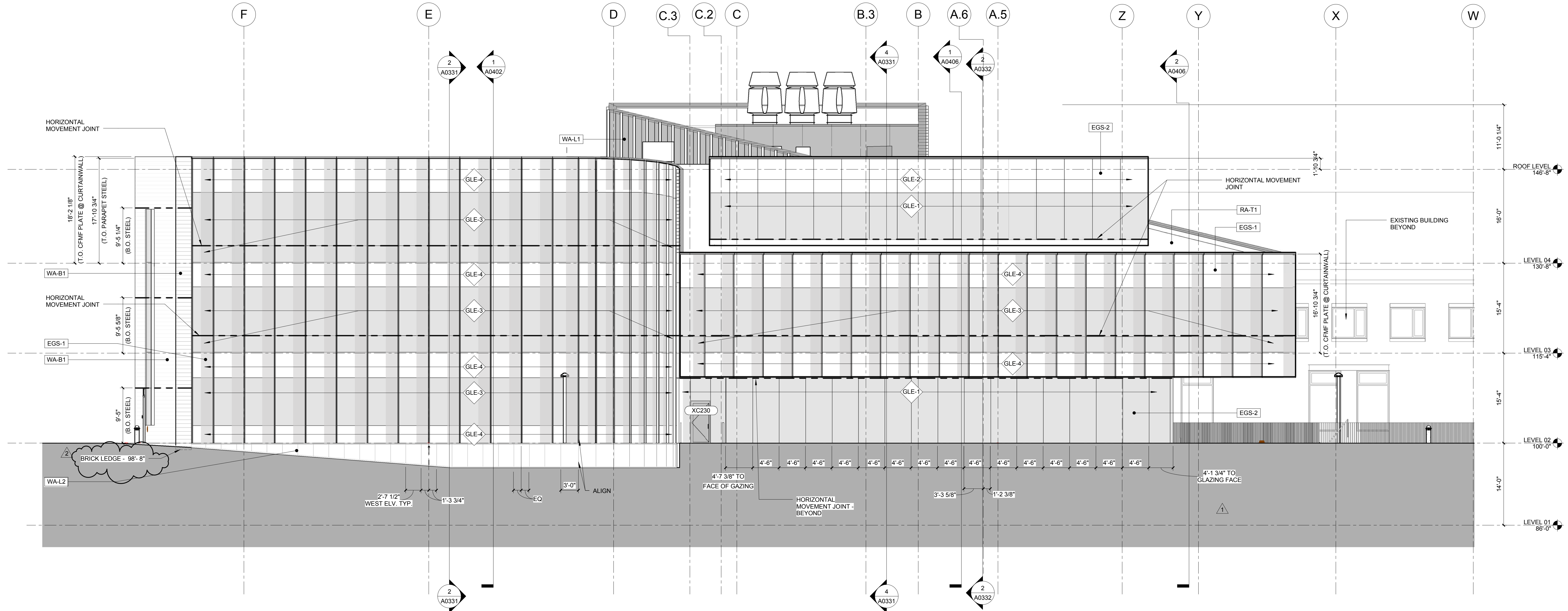
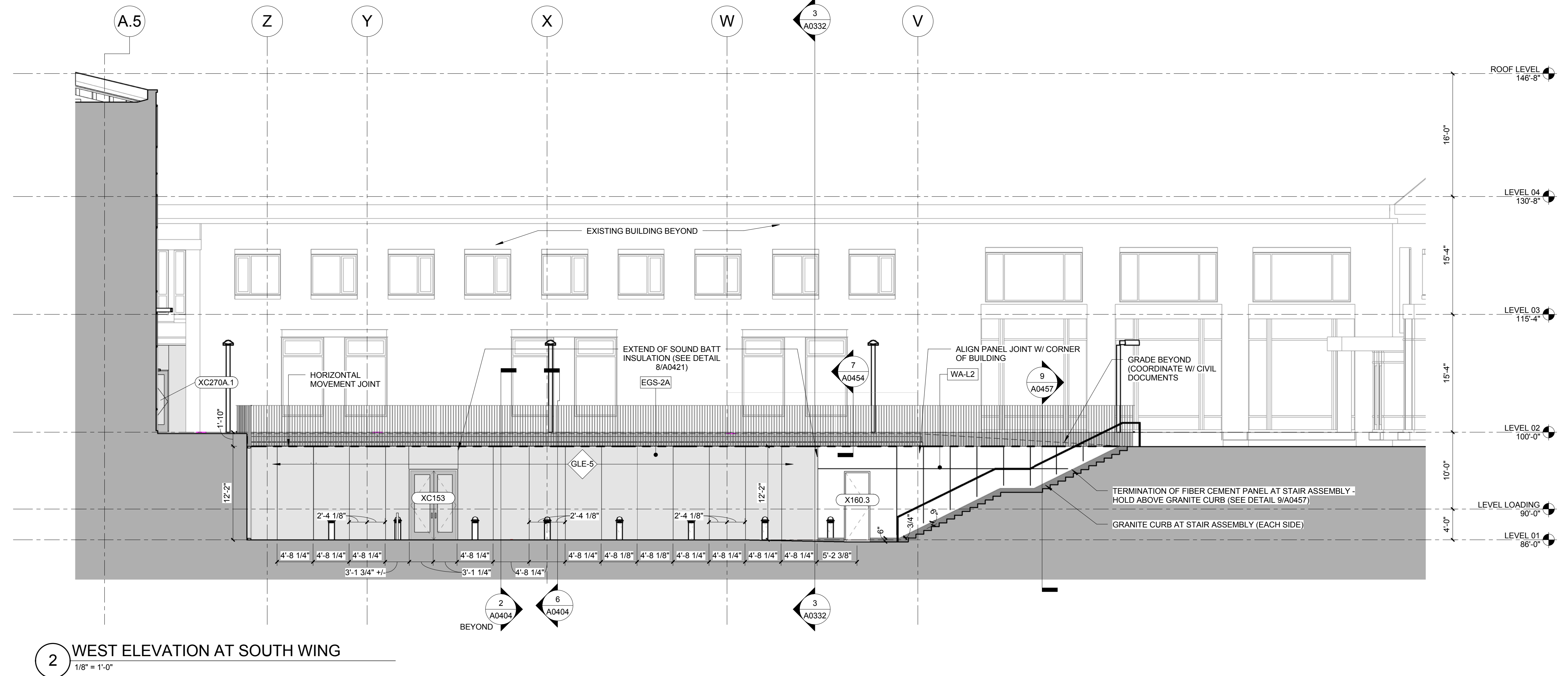
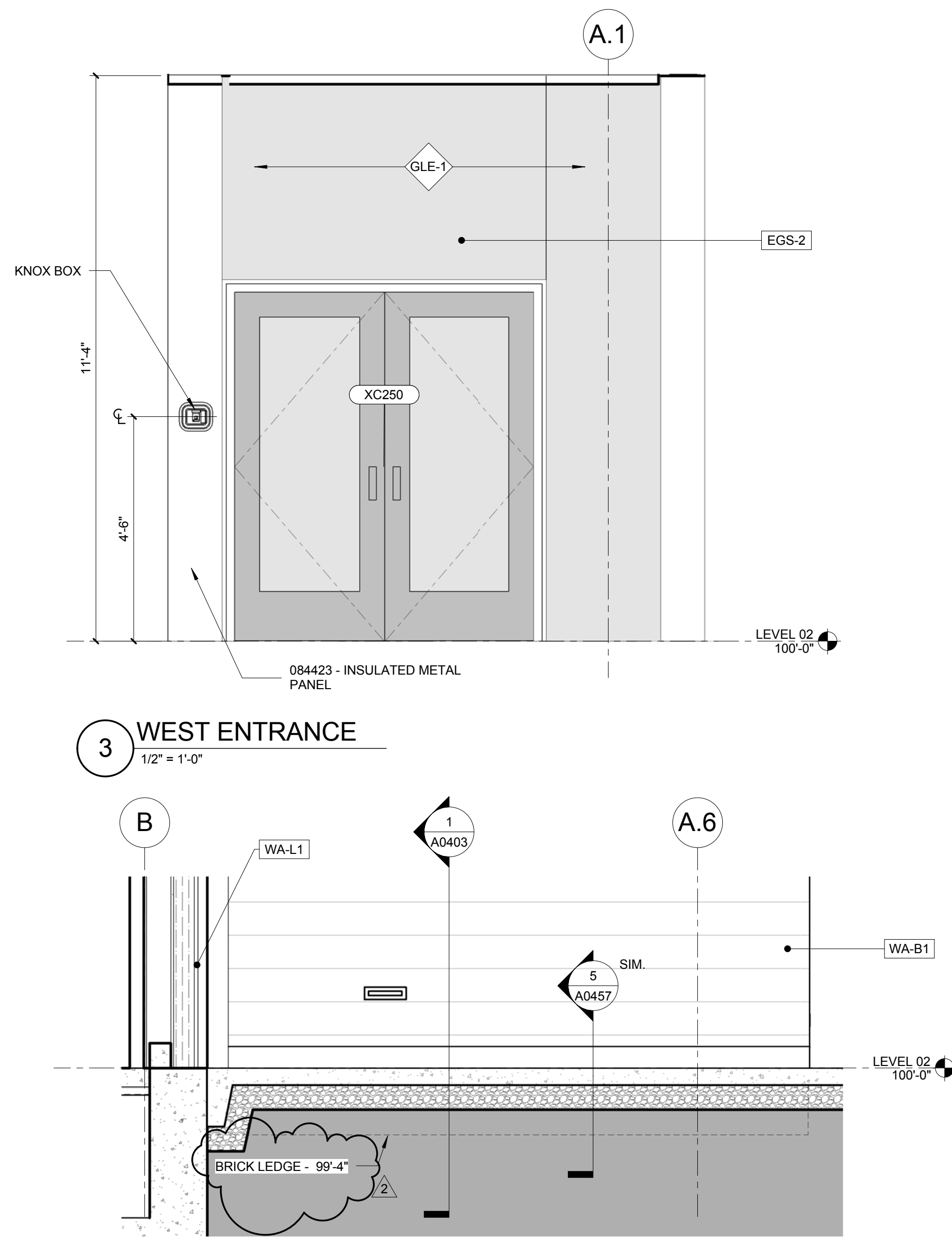
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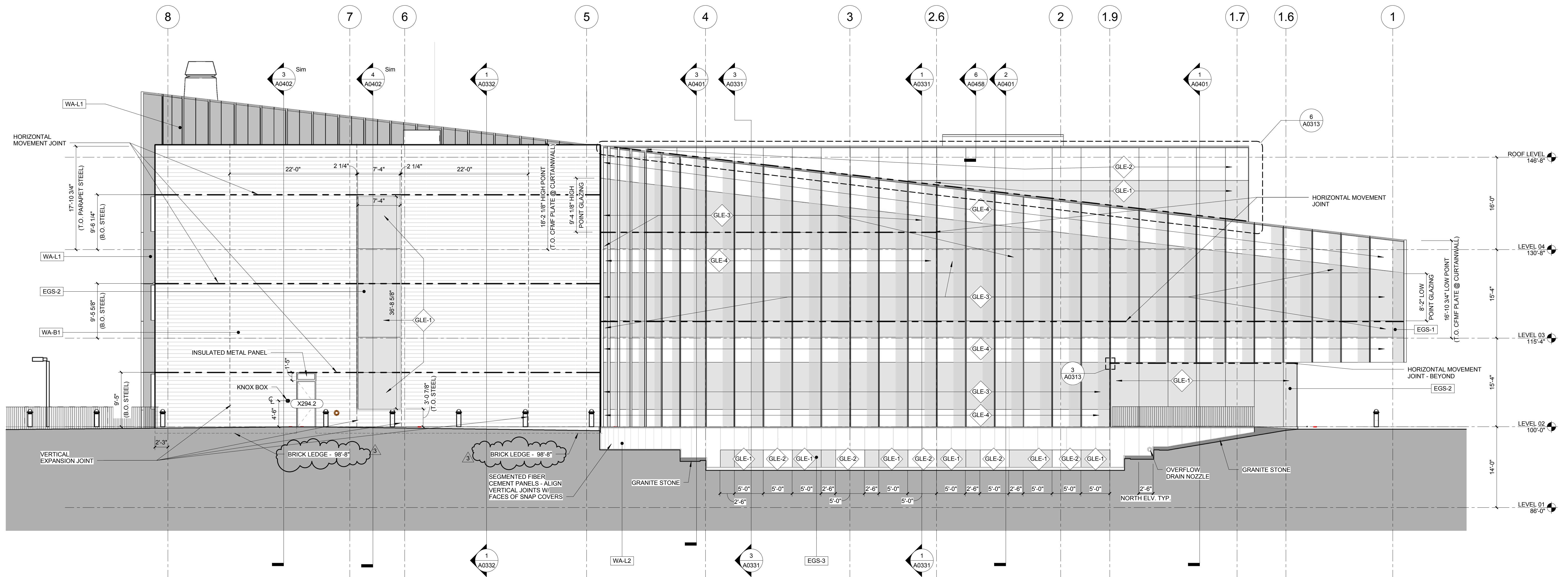
OVERALL EXTERIOR
ELEVATIONS

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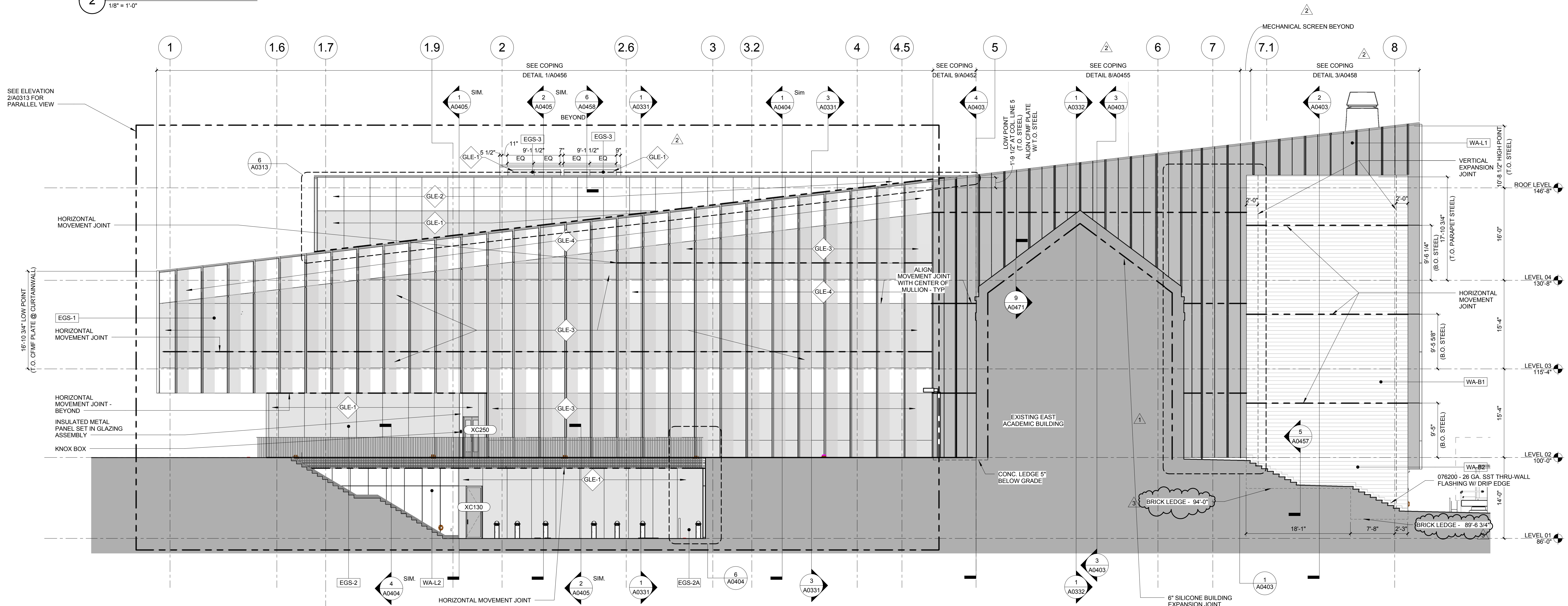
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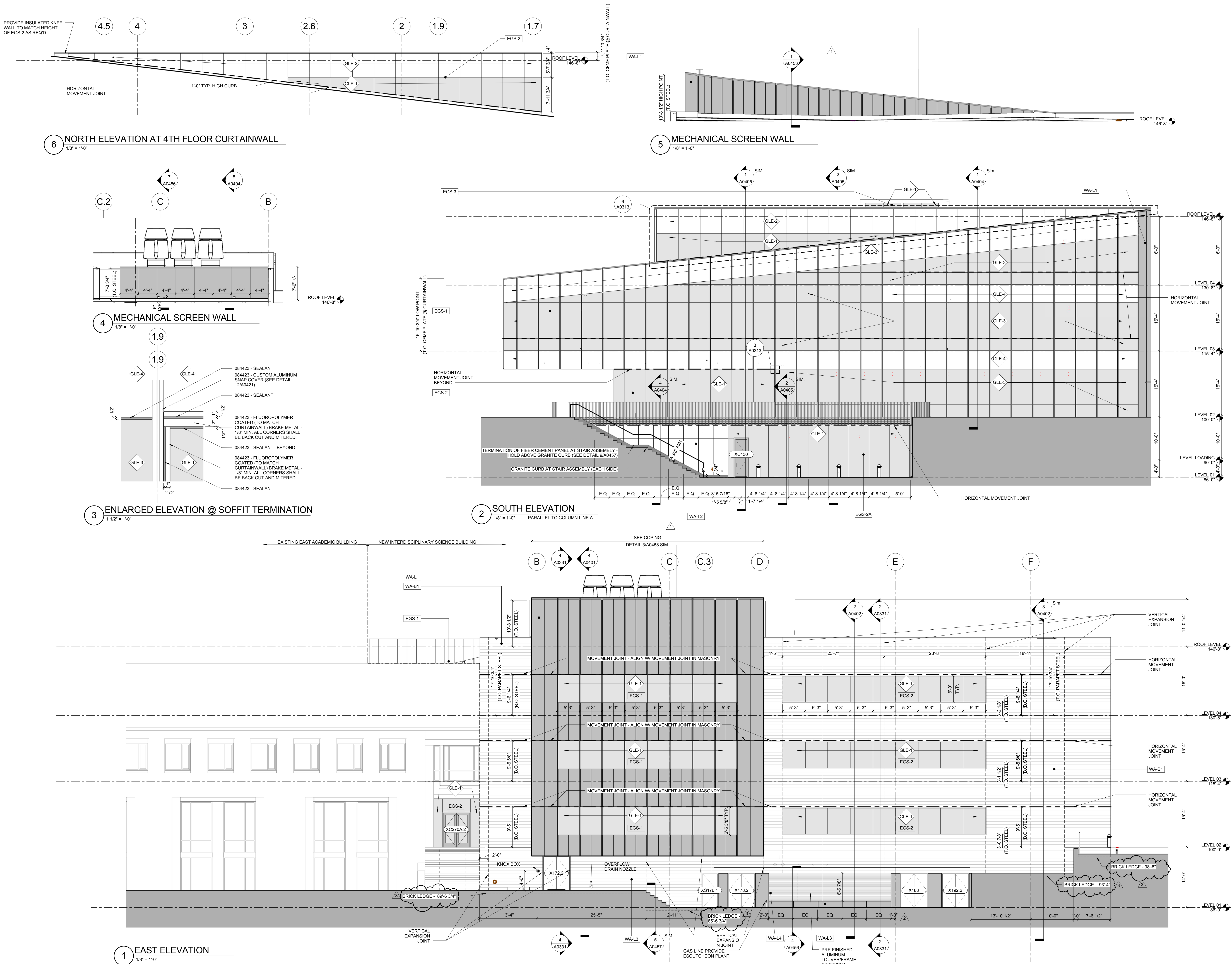




2 NORTH ELEVATION
1/8" = 1'-0"



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



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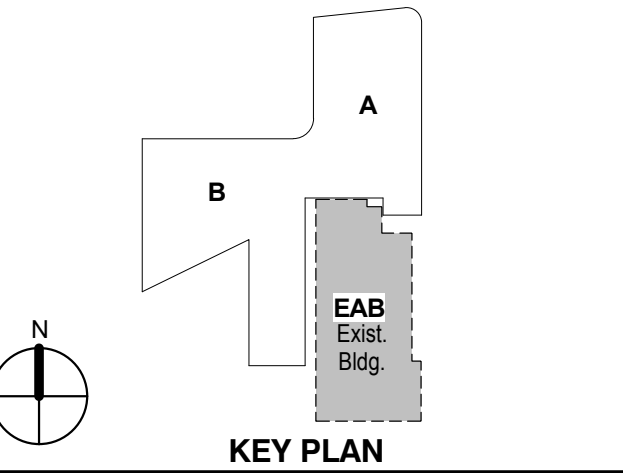
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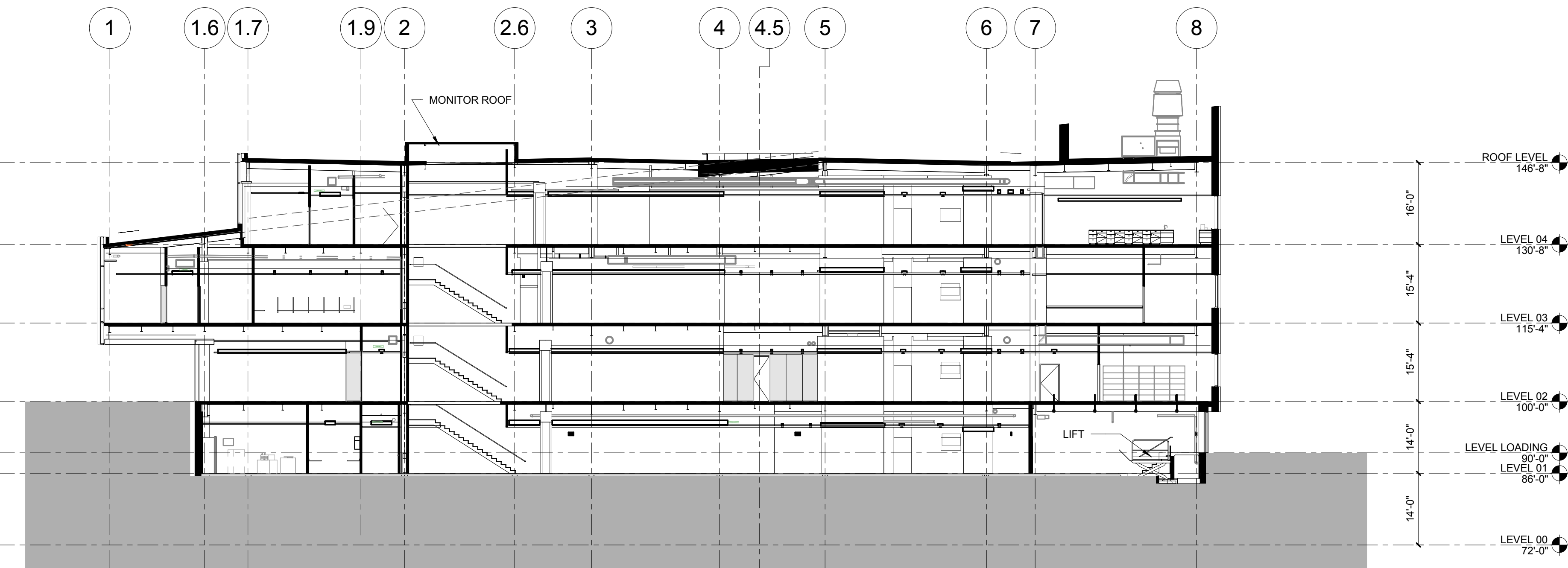


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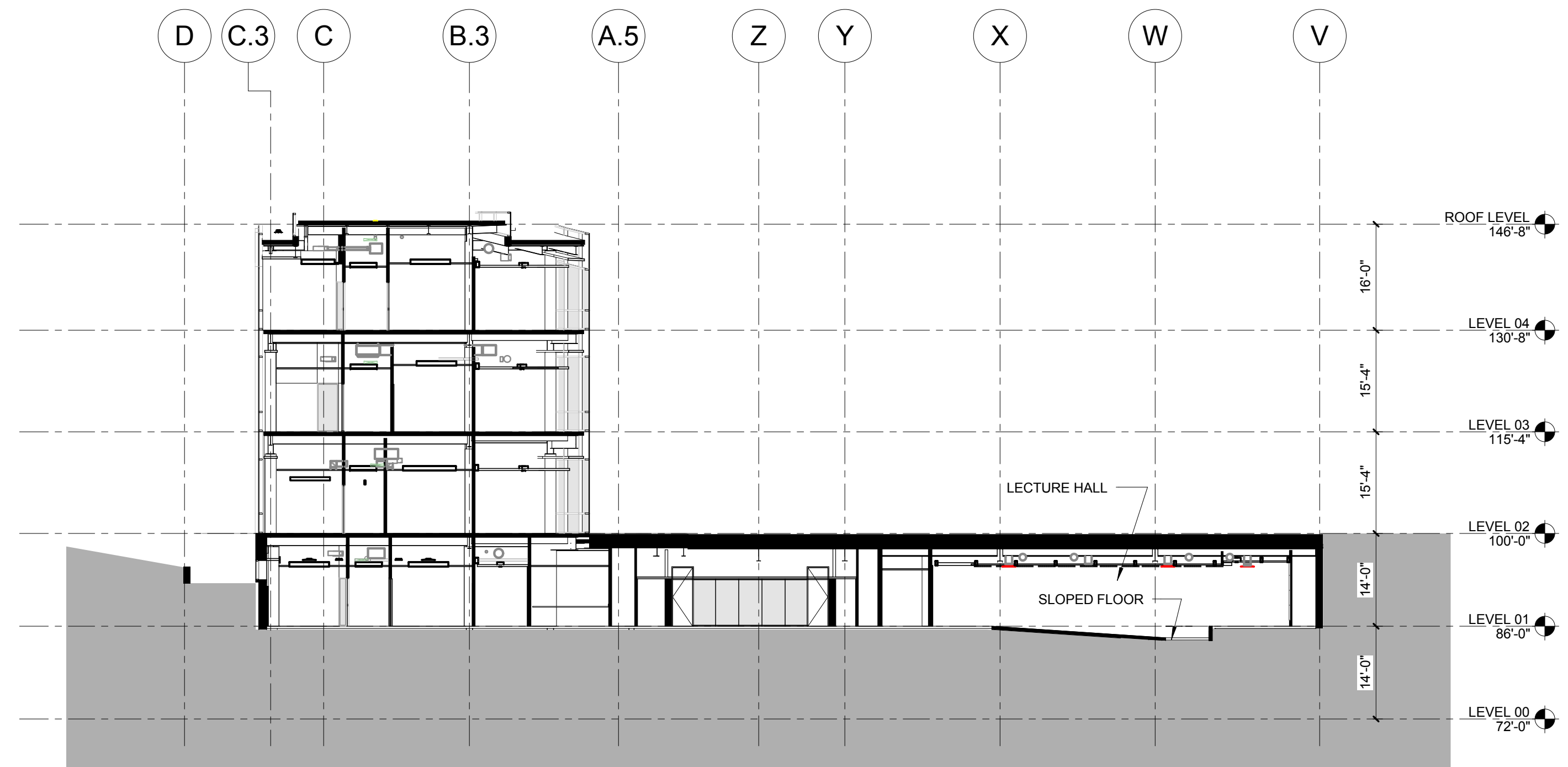
BUILDING SECTIONS

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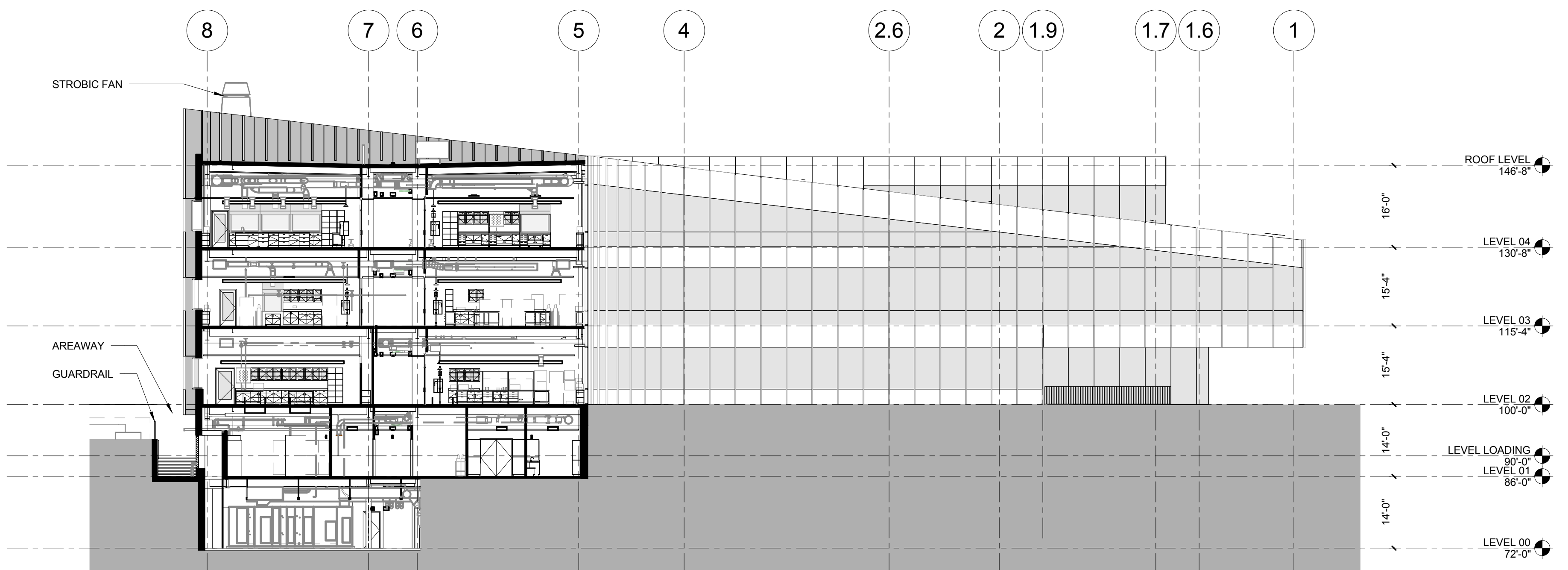
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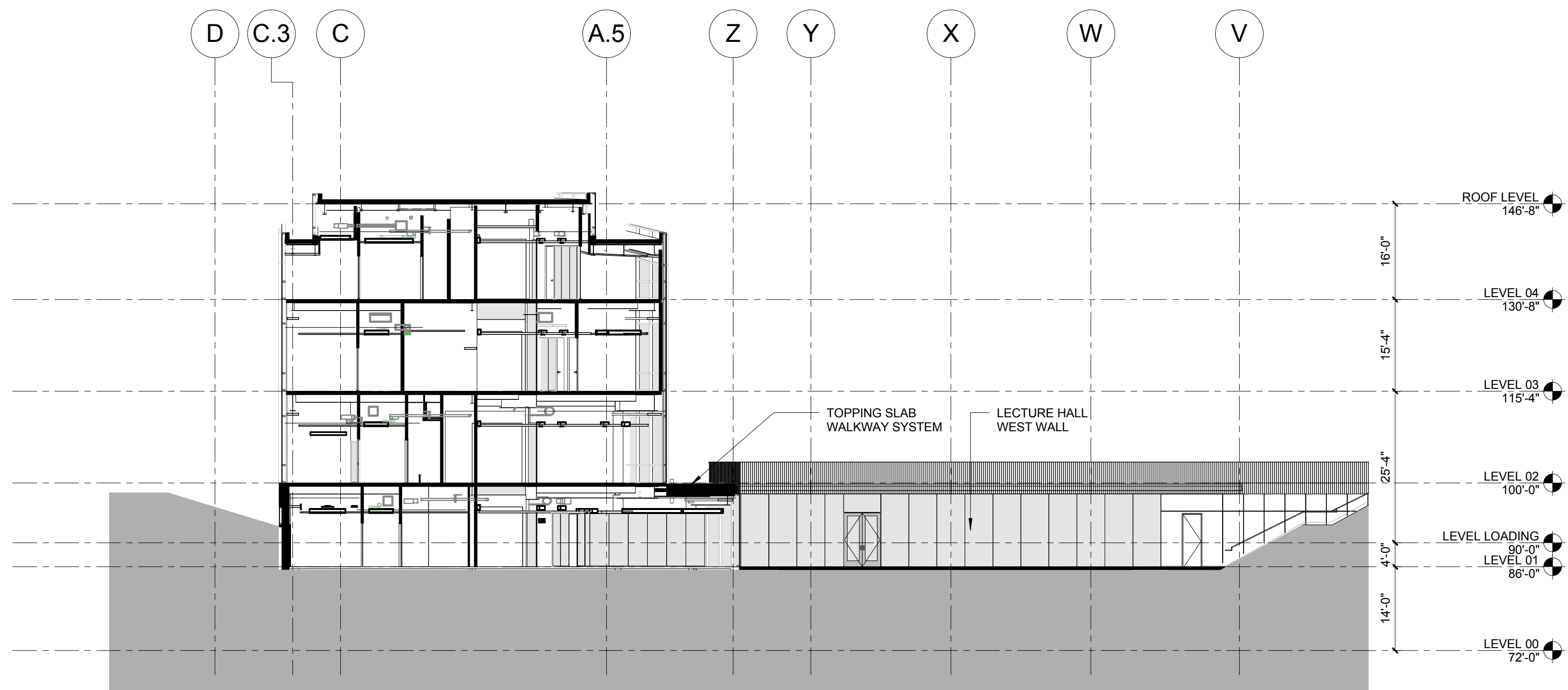
4 EAST WEST BUILDING SECTIONS
1/16" = 1'-0"



3 NORTH SOUTH AUDITORIUM BUILDING SECTIONS
1/16" = 1'-0"



2 SECTION THROUGH NORTH WING LOOKING SOUTH BUILDING SECTIONS
1/16" = 1'-0"



1 NORTH SOUTH COURTYARD BUILDING SECTIONS
1/16" = 1'-0"

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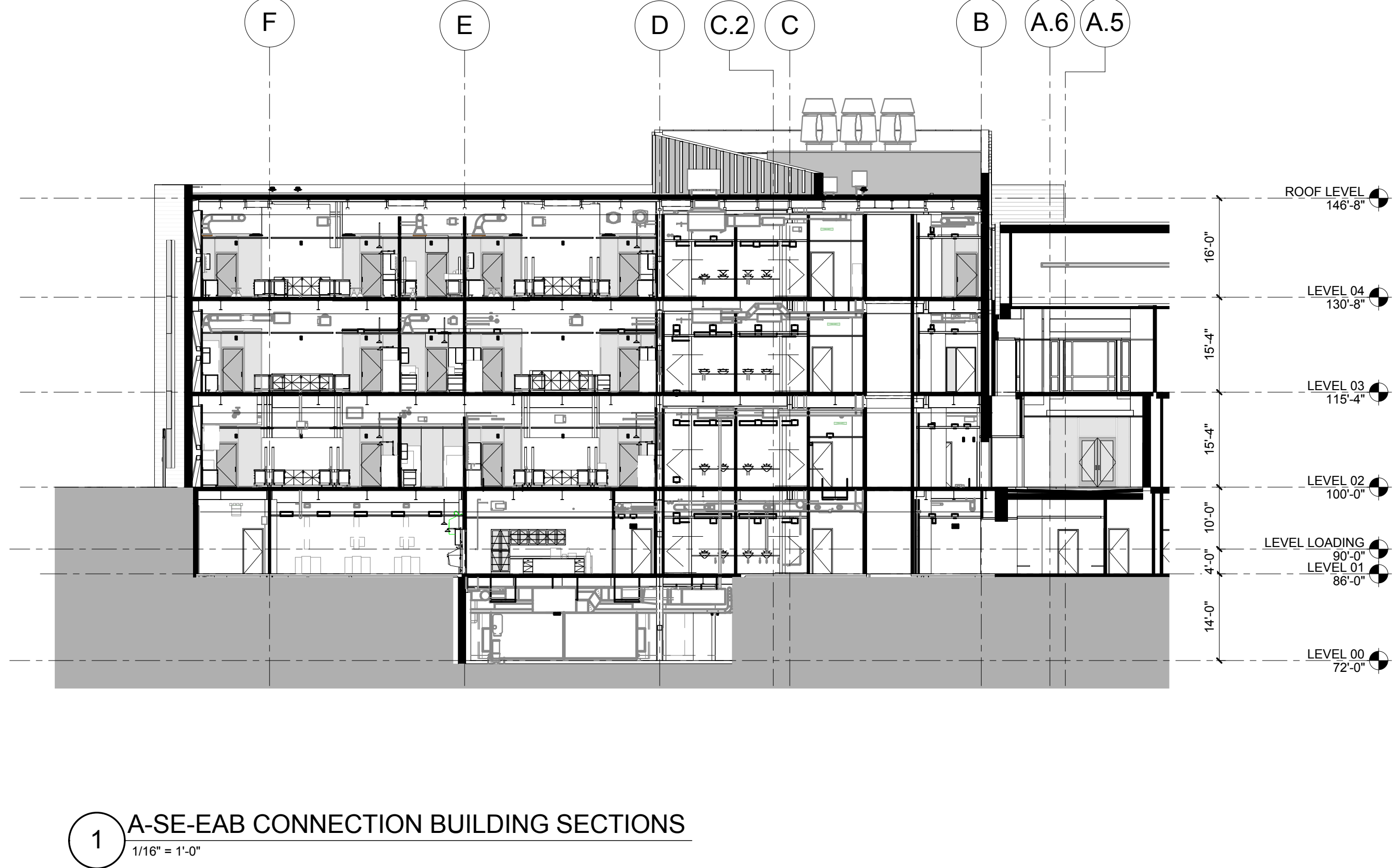
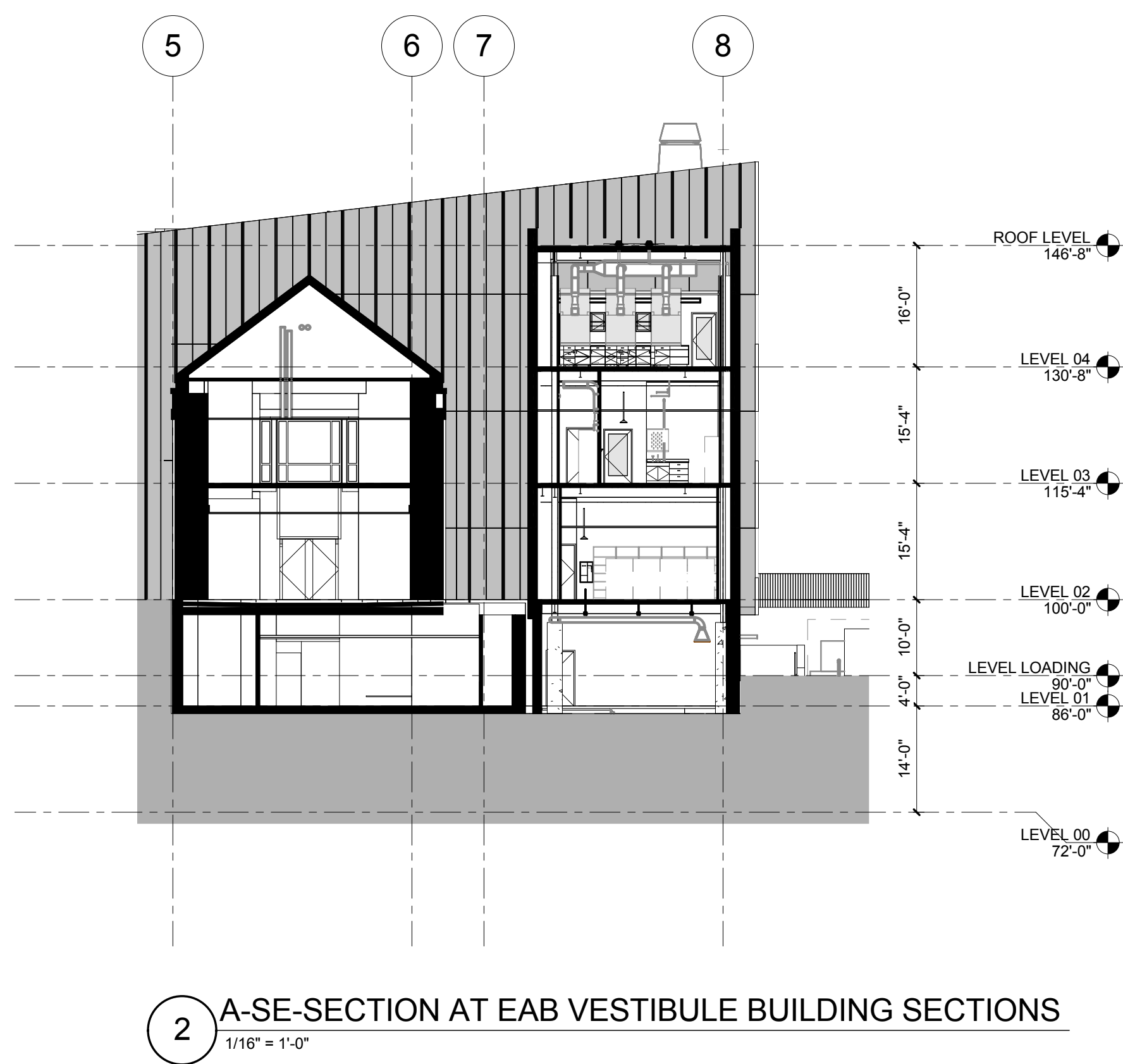
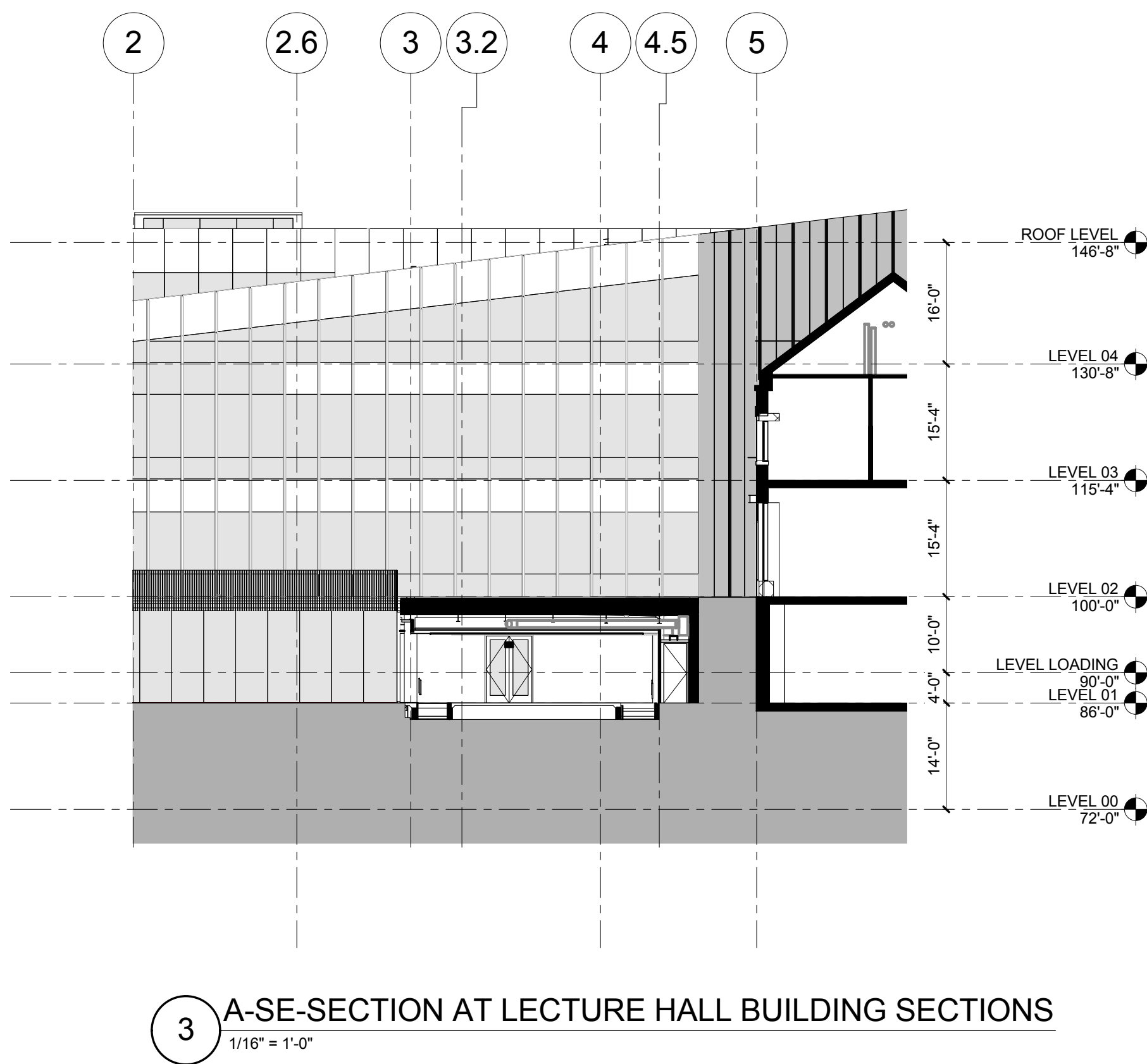
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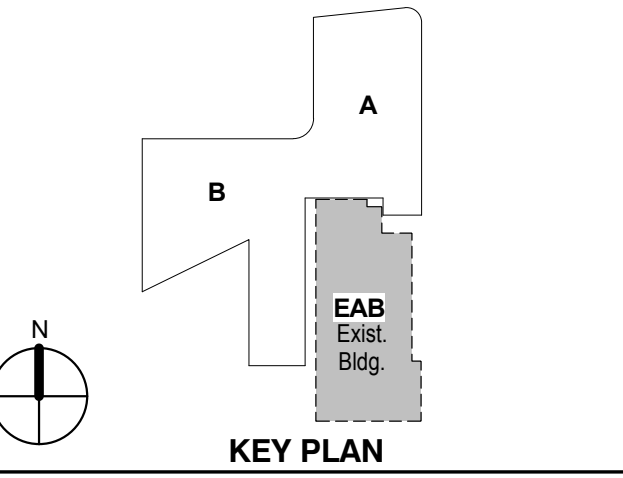
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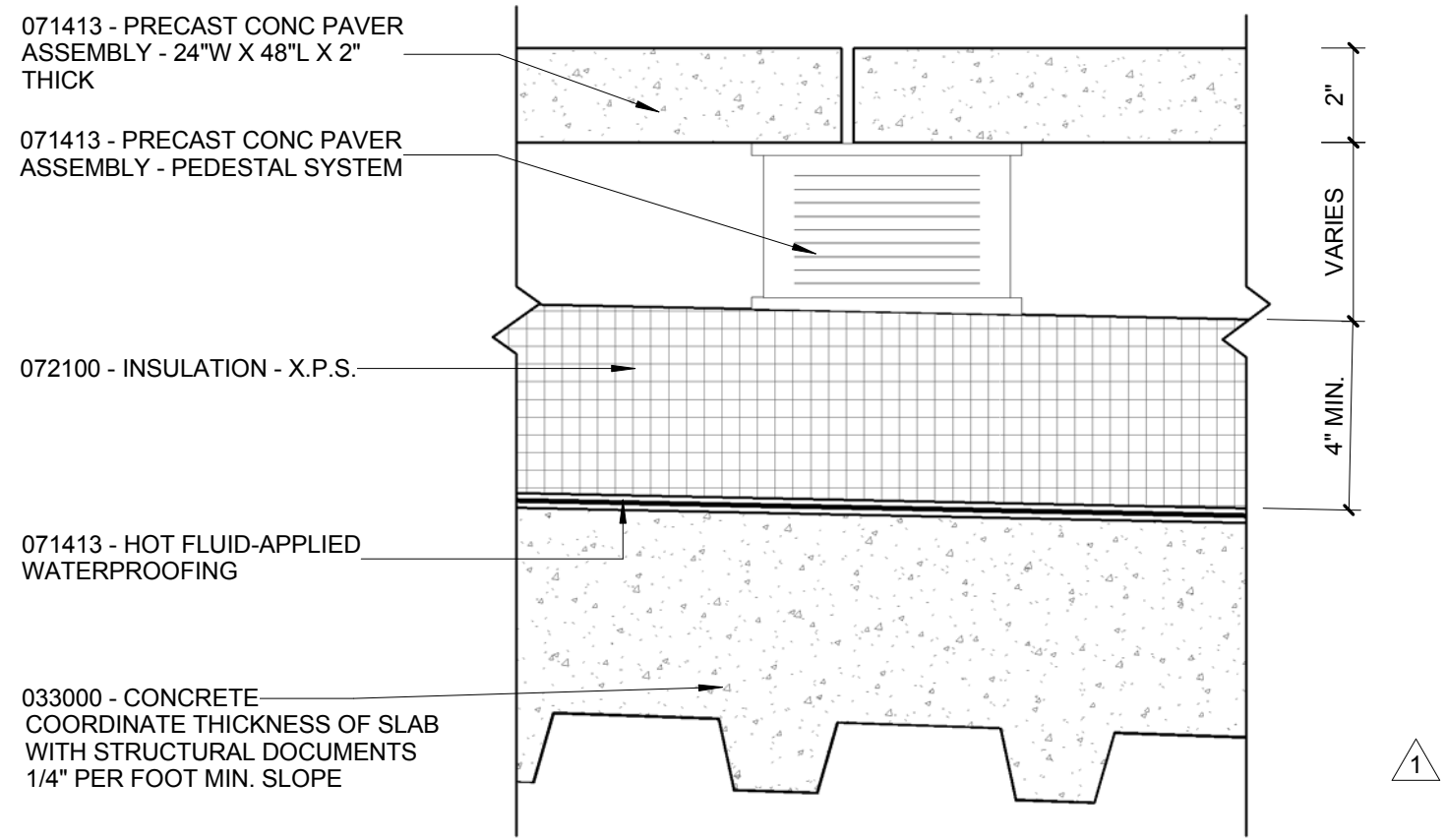


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BUILDING SECTIONS

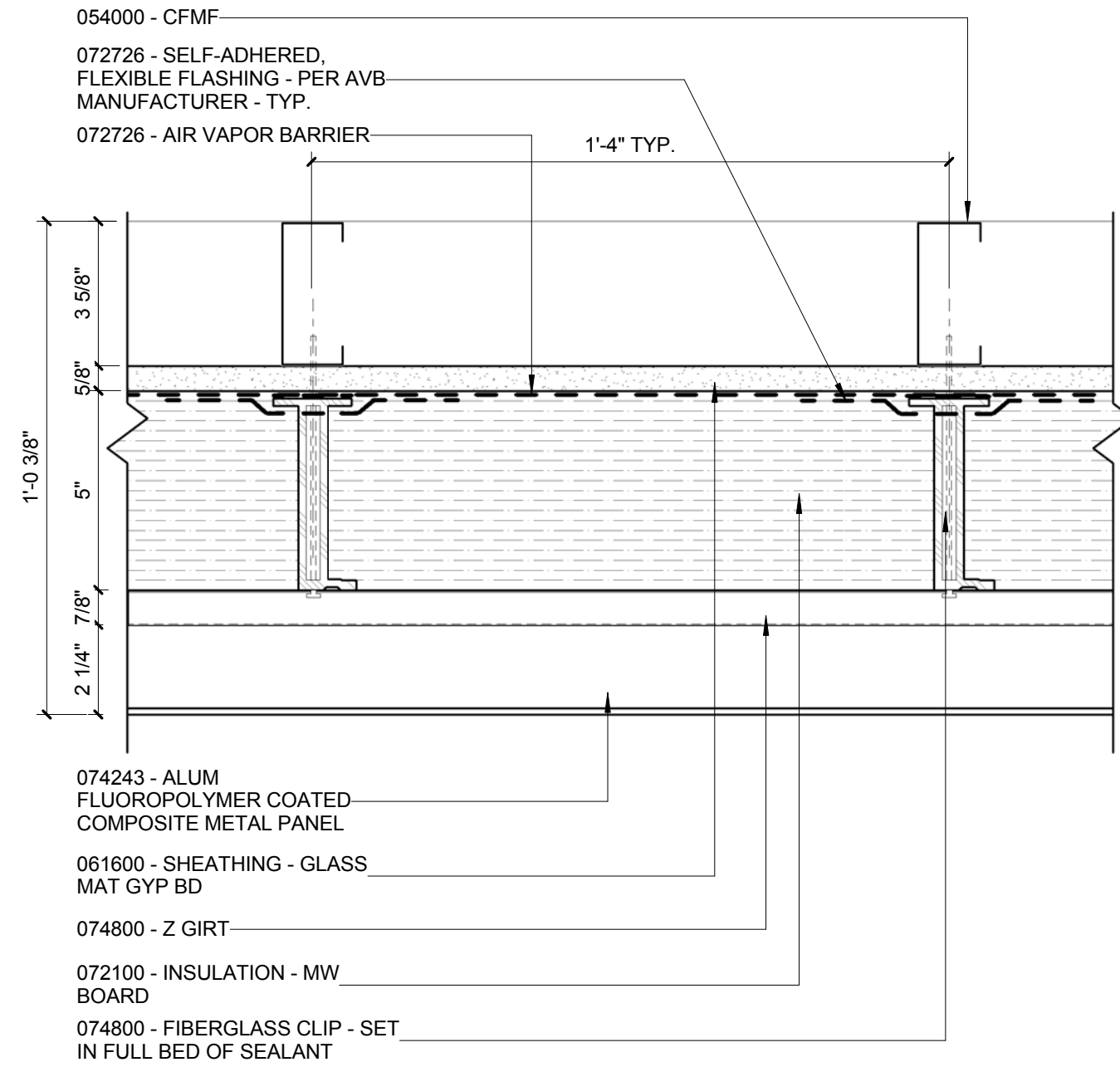
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A0332



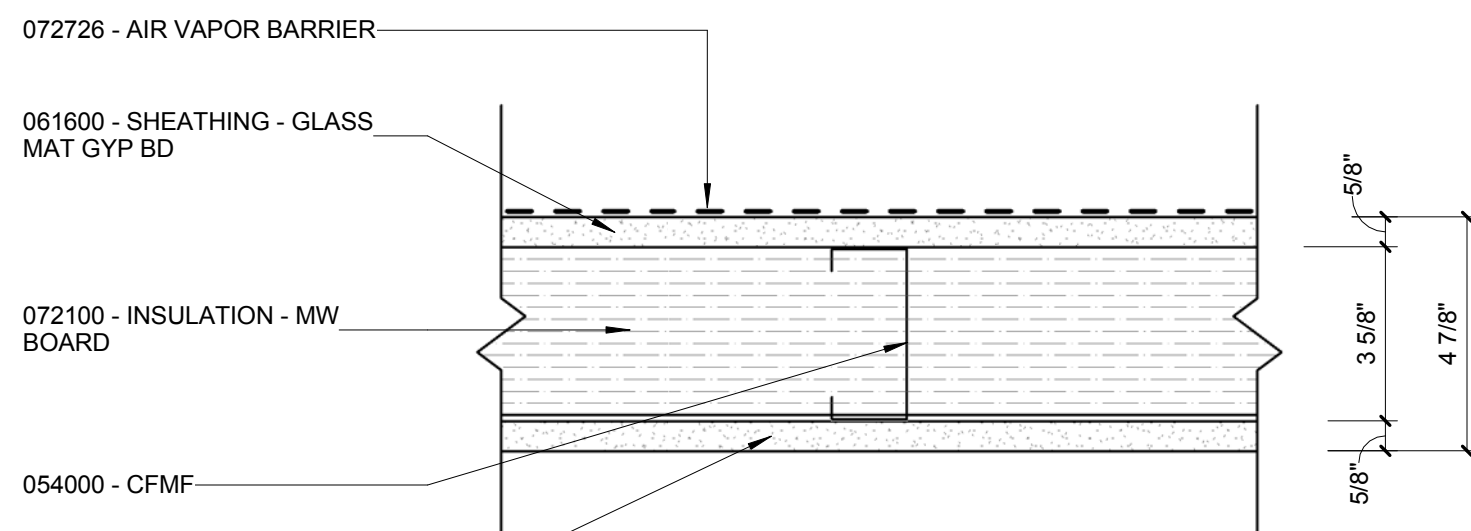
ROOF ASSEMBLY - FLUID APPLIED MEMBRANE SYSTEM
CONCRETE DECK WITH PAVER ROOF

RA-T4
3" = 1'-0"



WALL ASSEMBLY - EXTERIOR GYP. OVER CMU

WA-L5
3" = 1'-0"

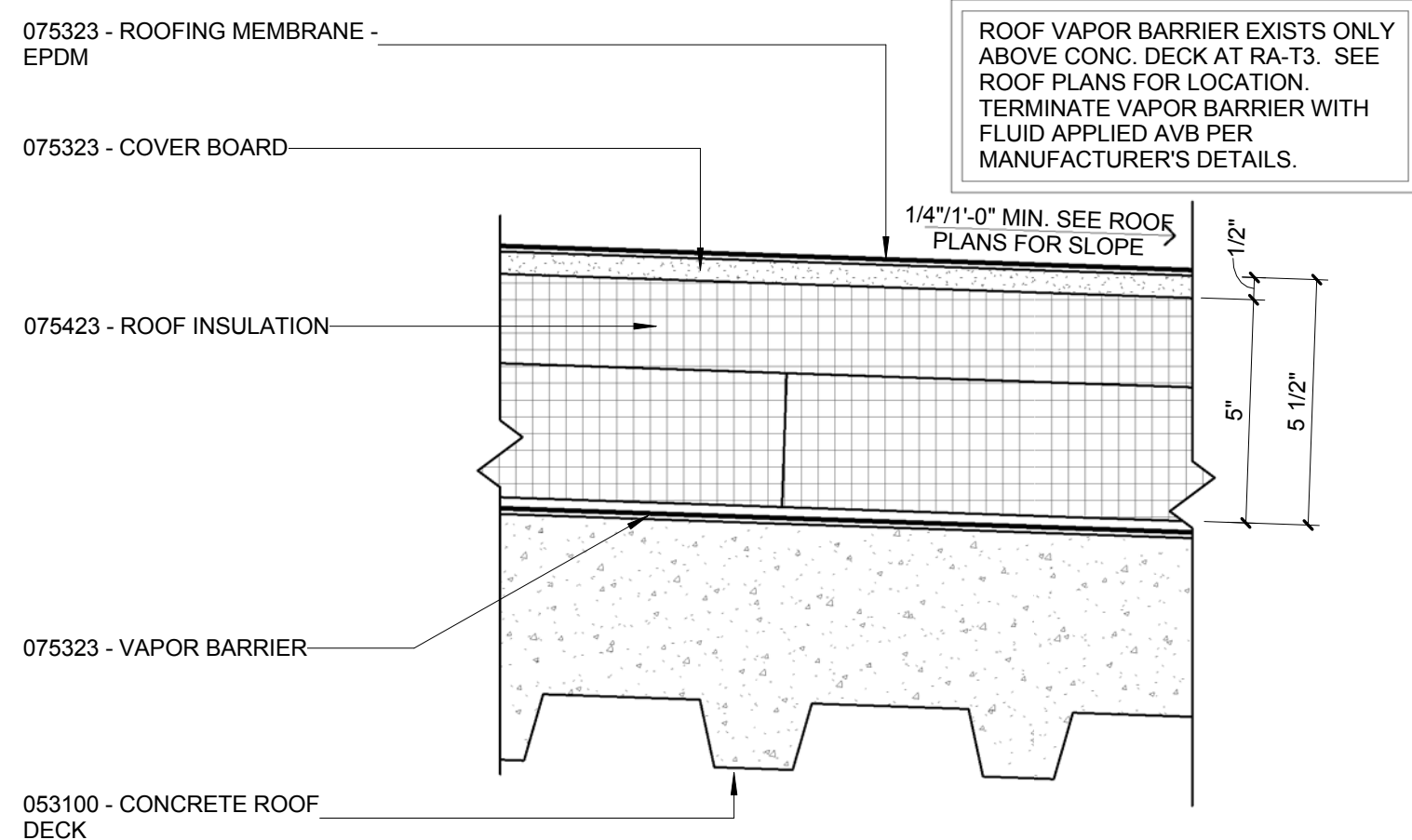


WALL ASSEMBLY - EXTERIOR GLASS MAT GYP.

WA-L4
3" = 1'-0"

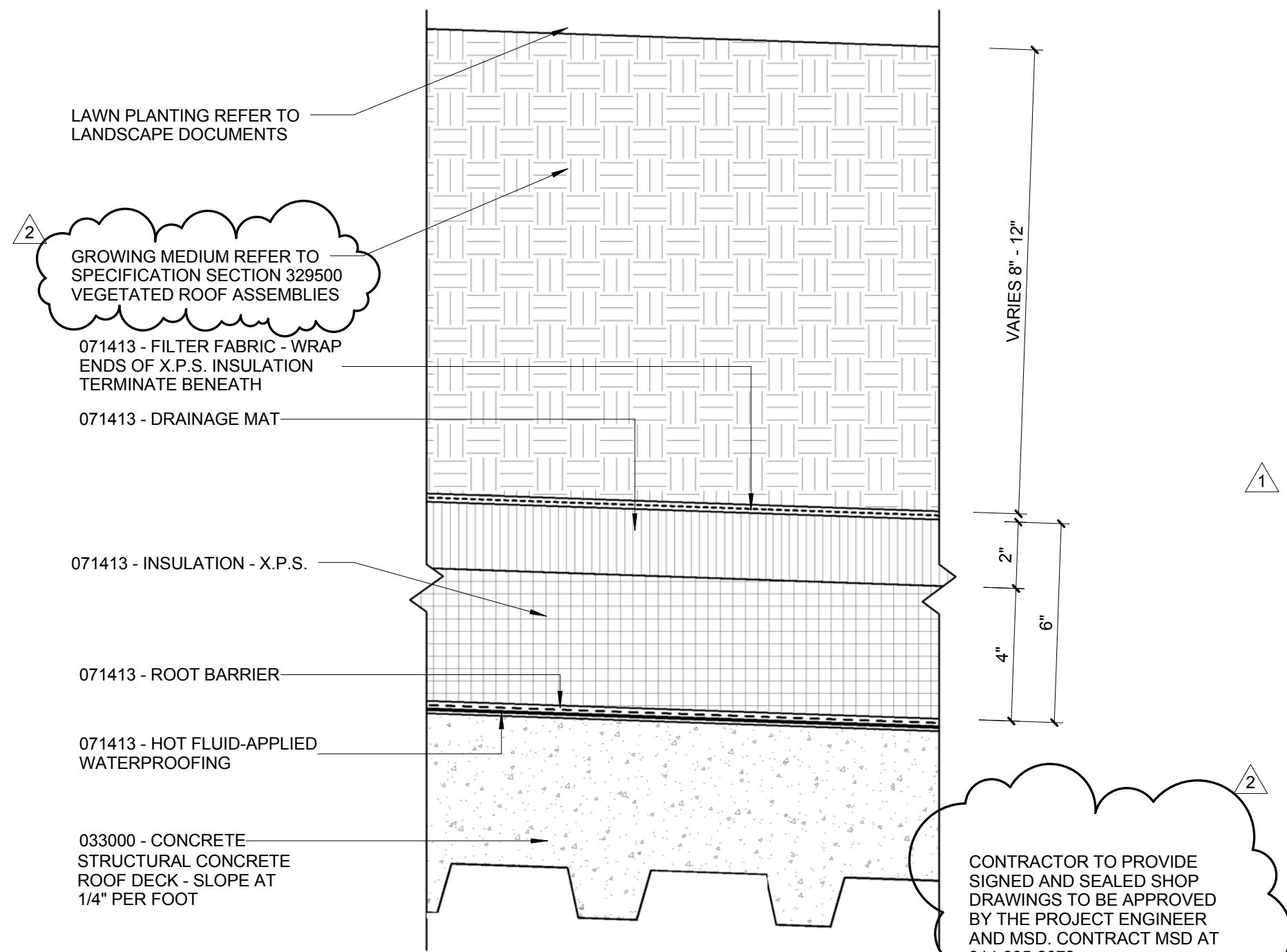
SOFFIT ASSEMBLY - LIGHT CLADDING
CFMF WITH FIBROUS INSULATION WITH FIBERGLASS CLIPS

SA-L1
3" = 1'-0"



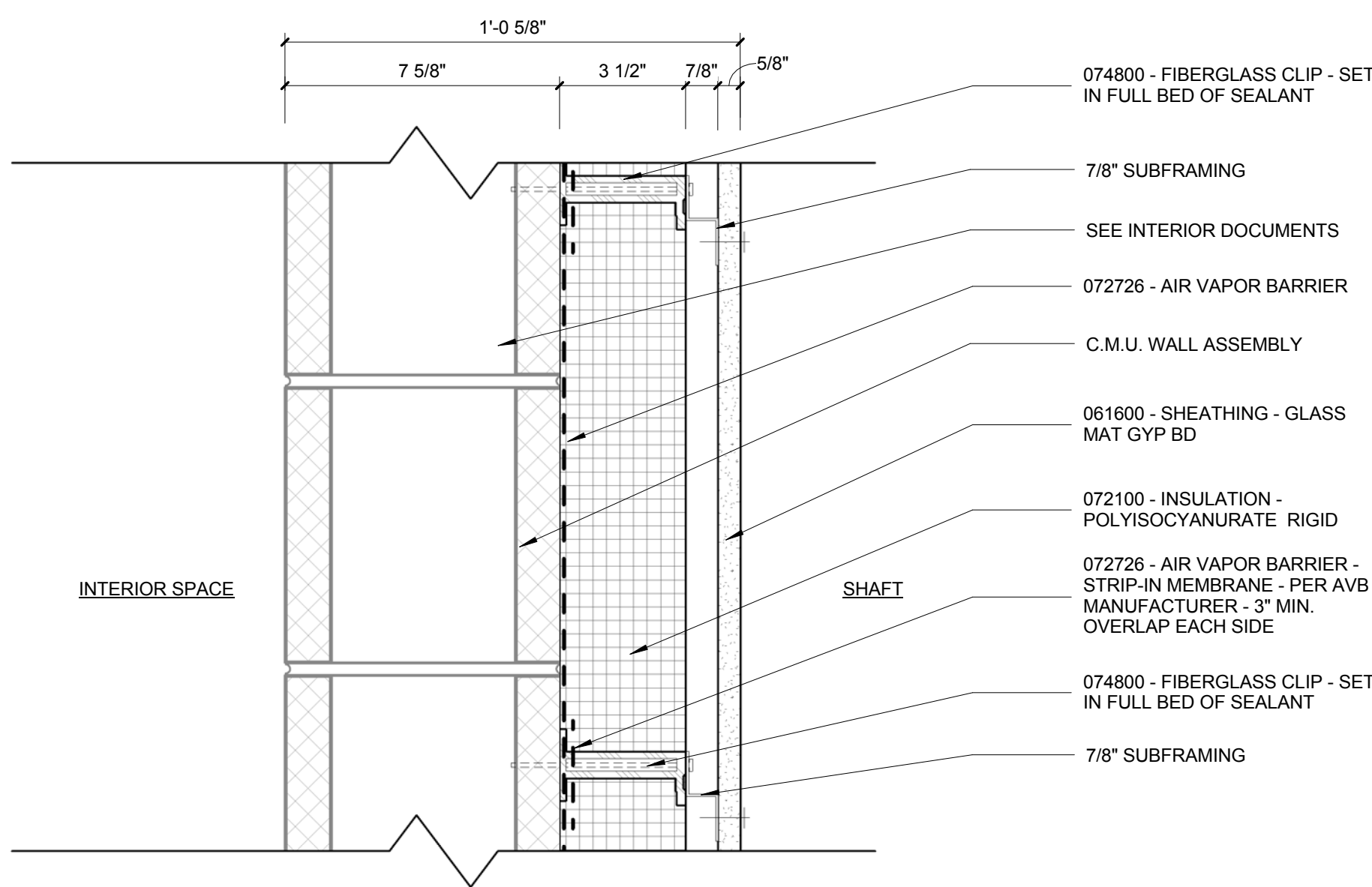
ROOF ASSEMBLY - EPDM
SLOPING CONCRETE DECK WITH INSULATION/VAPOR BARRIER

RA-T3
3" = 1'-0"



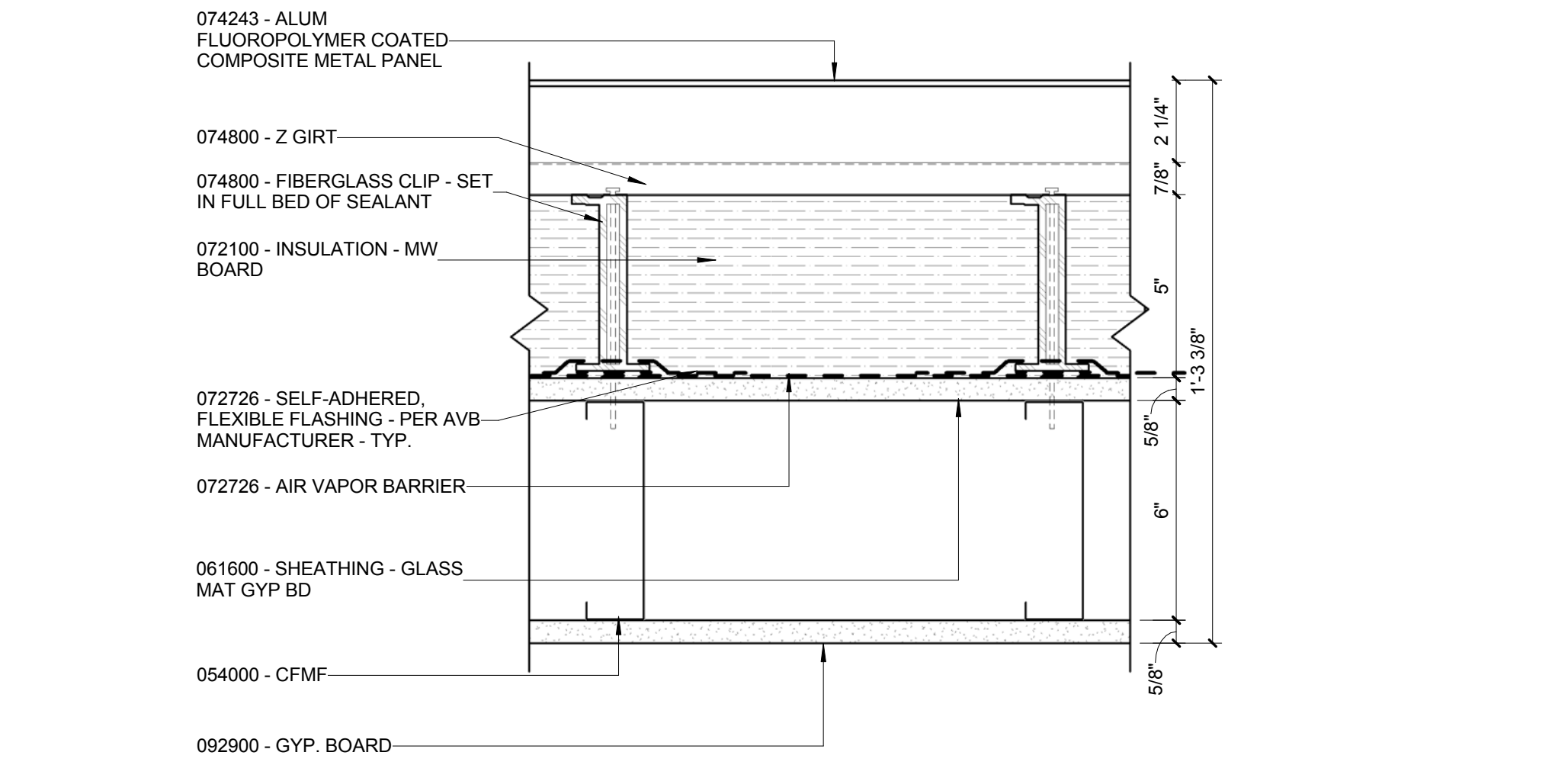
ROOF ASSEMBLY - FLUID APPLIED MEMBRANE SYSTEM
CONCRETE DECK WITH "INTENSIVE" VEGETATIVE ROOF

RA-T2
3" = 1'-0"



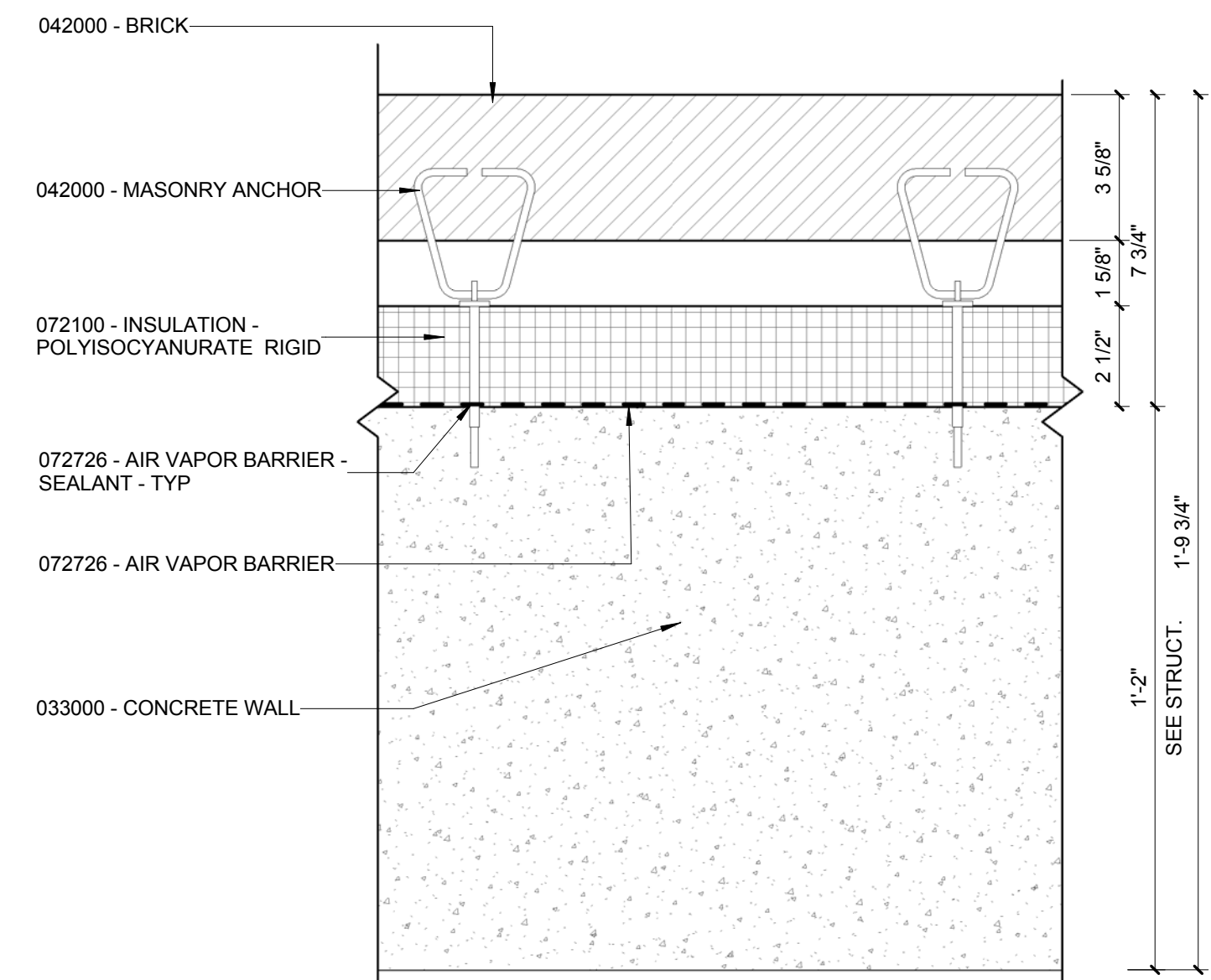
WALL ASSEMBLY - FIBER CEMENT PANELS W/ THERMAL BREAK
OVER CONC. WITH INSULATION - VERTICAL SUBGIRTS

WA-L2
3" = 1'-0"



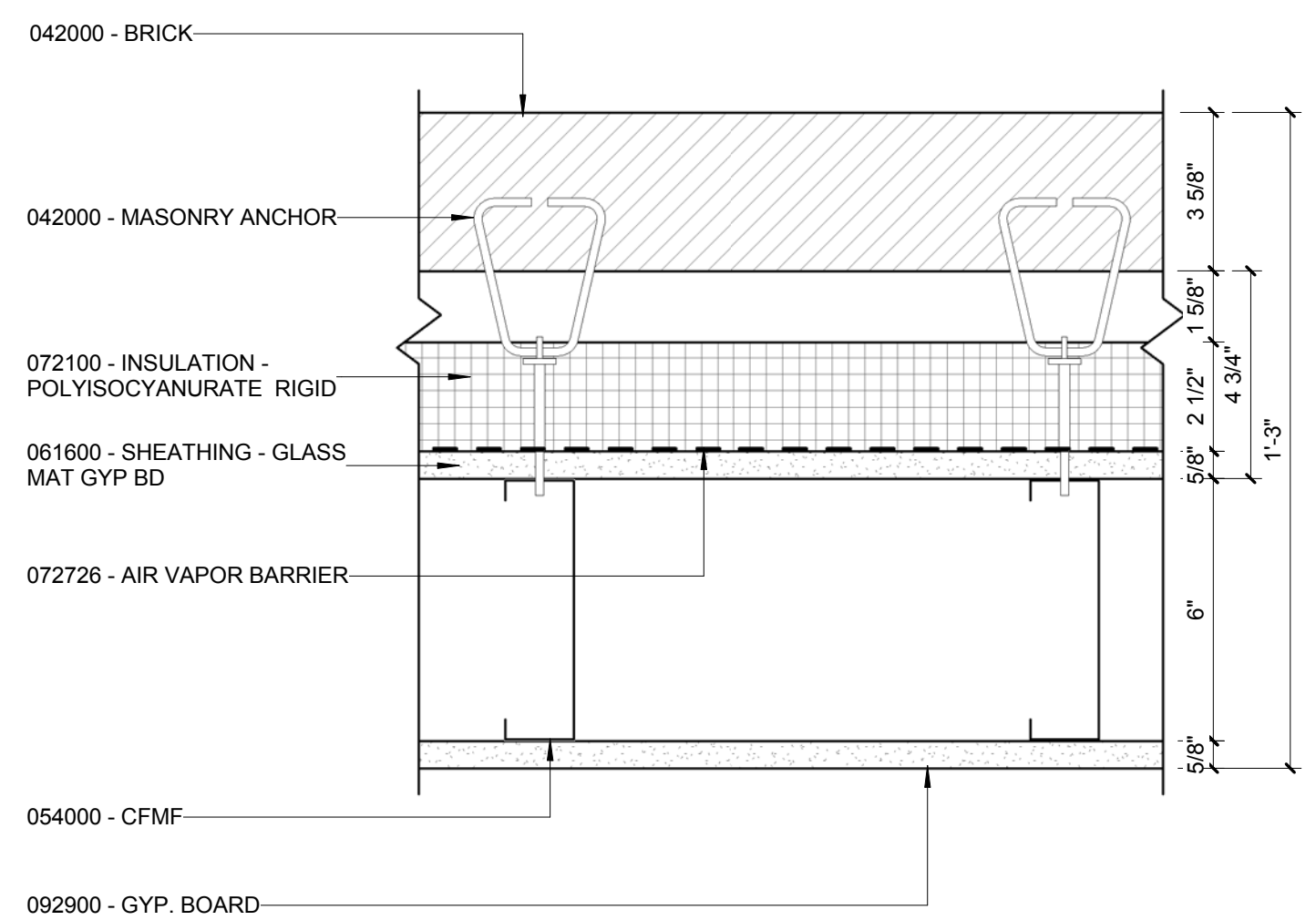
WALL ASSEMBLY - METAL PANELS WITH THERMAL BREAK
OVER CFMF WITH INSULATION - HORIZONTAL SUBGIRTS

WA-L1
3" = 1'-0"



WALL ASSEMBLY - FACE BRICK
OVER CONC WITH INSULATION

WA-B2
3" = 1'-0"



WALL ASSEMBLY - FACE BRICK OVER CFMF WITH INSULATION
(WA-B2 SIMILAR)

WA-B1
3" = 1'-0"

WALL ASSEMBLY - METAL PANELS WITH THERMAL BREAK
CONC WITH INSULATION - HORIZONTAL SUBGIRTS

WA-L3
3" = 1'-0"



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1 NORTH WALL SECTION A - OVERHANG
3/8" = 1'-0"

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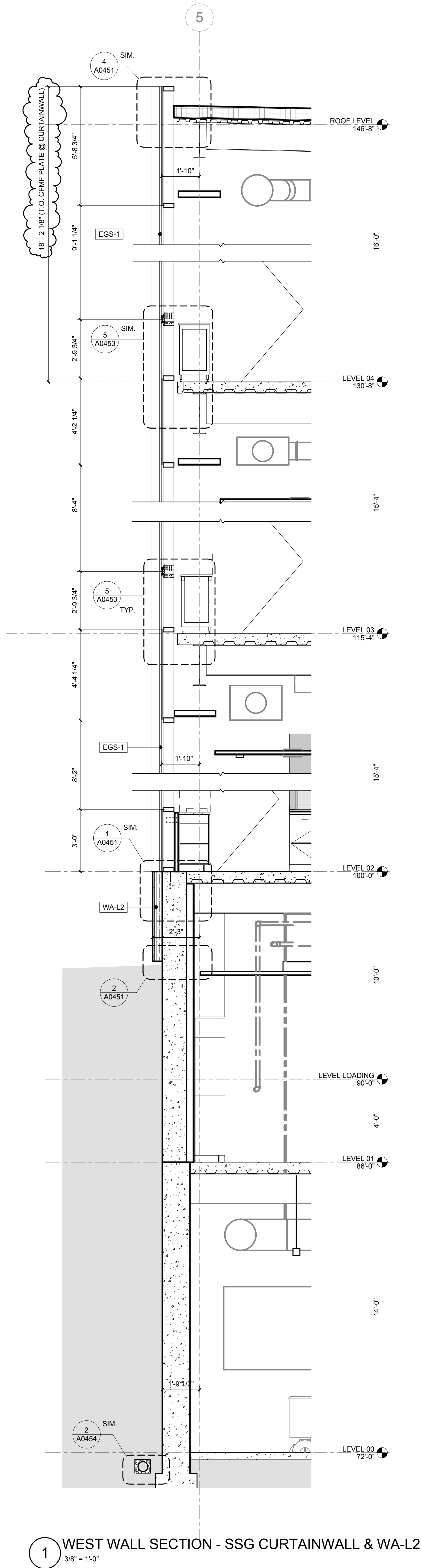
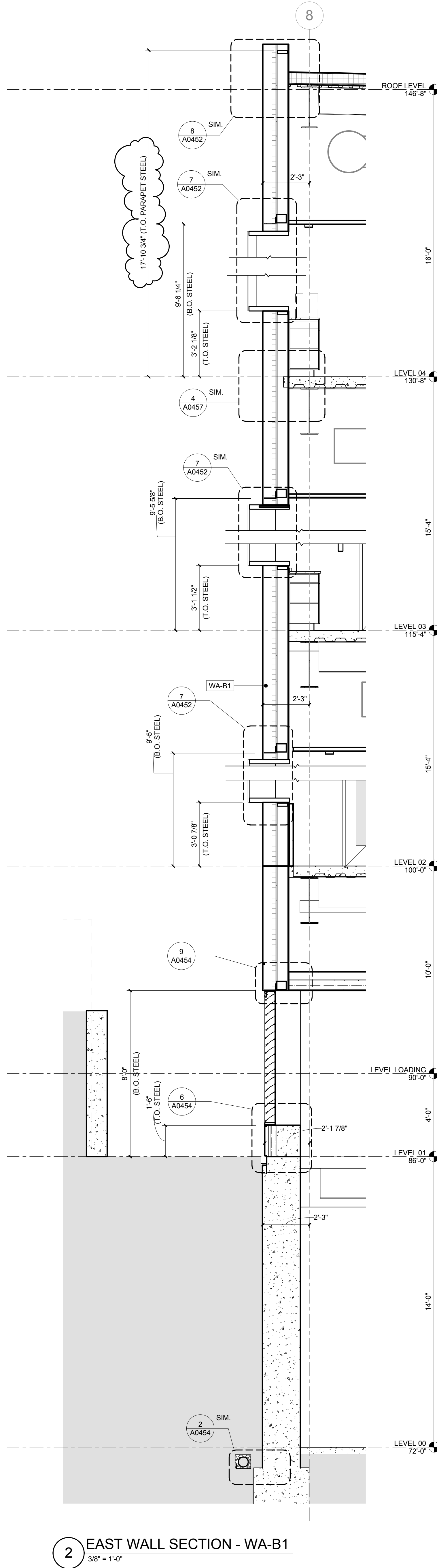
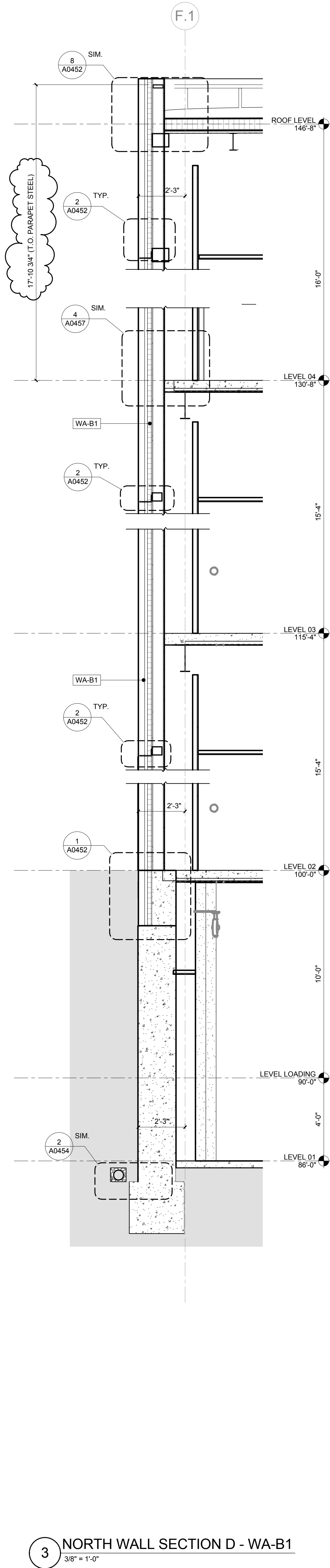
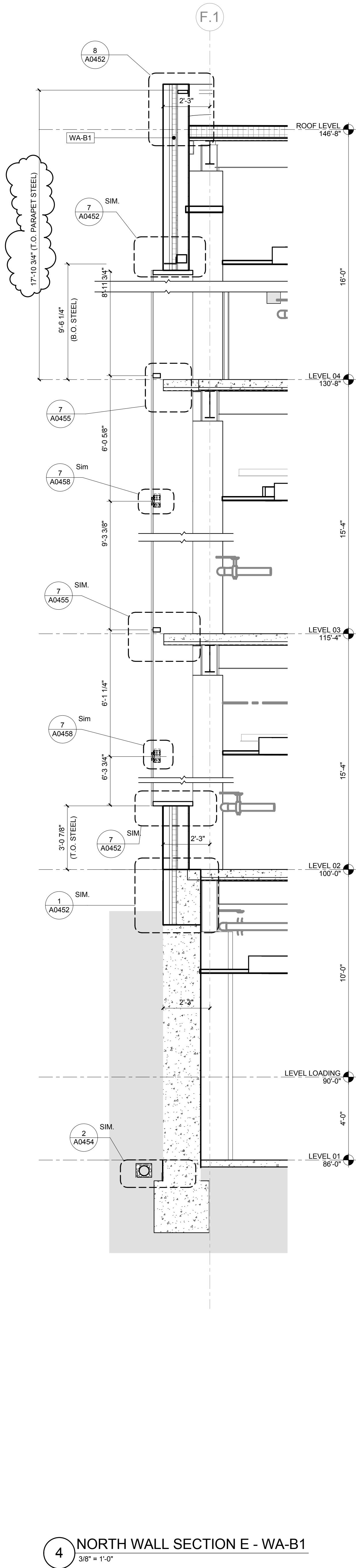
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ISSUED FOR CONSTRUCTION (BP1) 15 JAN 2016
No. Description Date

Drawing Title:

WALL SECTIONS

Project No.: 04561.01 Checked by:

A0402





Kathy R. Williams
3.16.16

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2 ADDENDUM 1-7 16 MAR 2016
1 ADDENDUM 1-1 29 JAN 2016
ISSUED FOR CONSTRUCTION (BPI) 15 JAN 2016

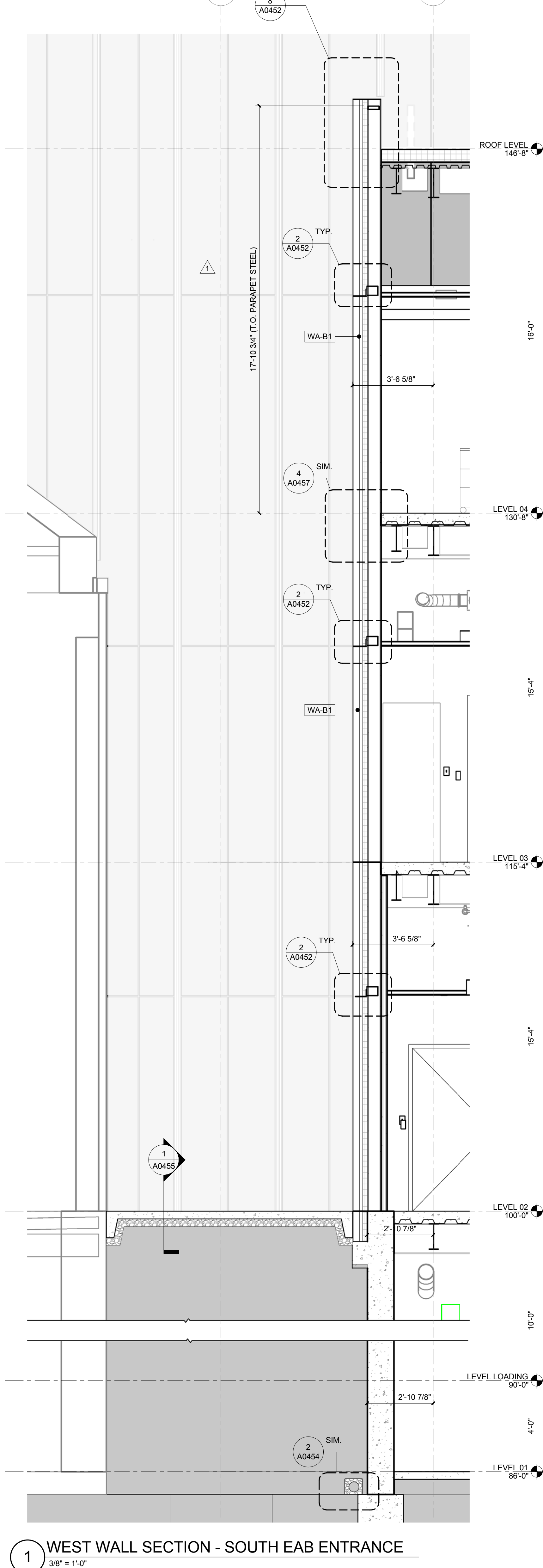
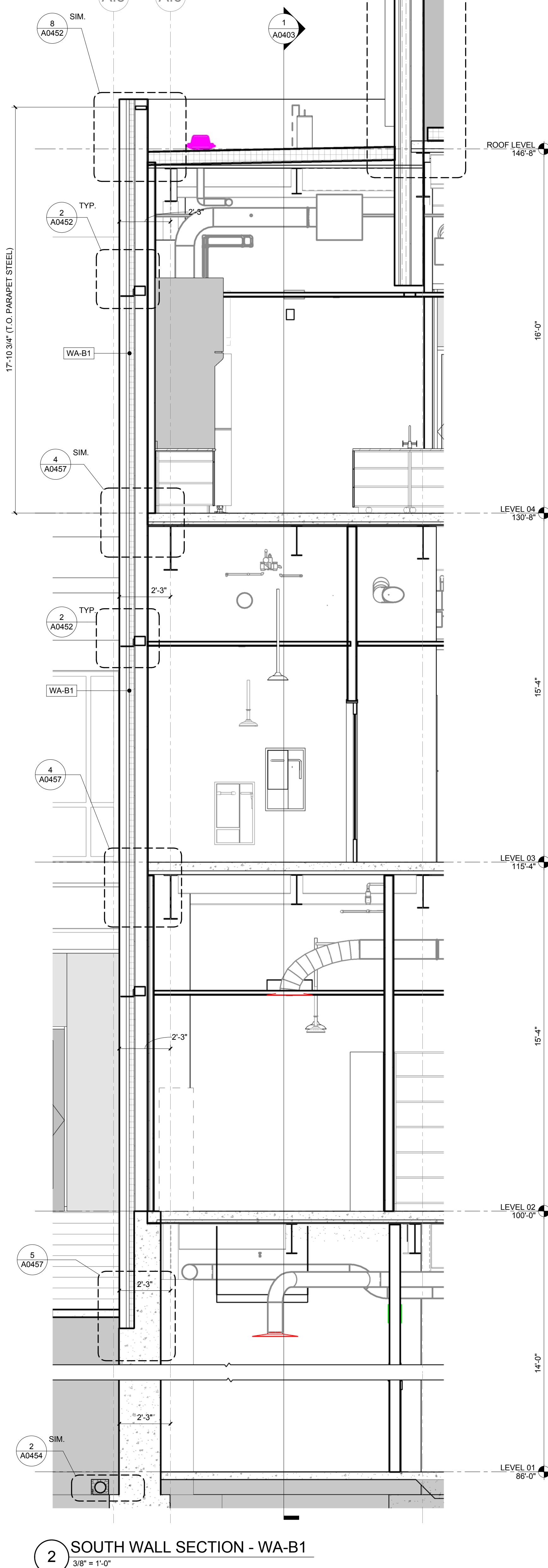
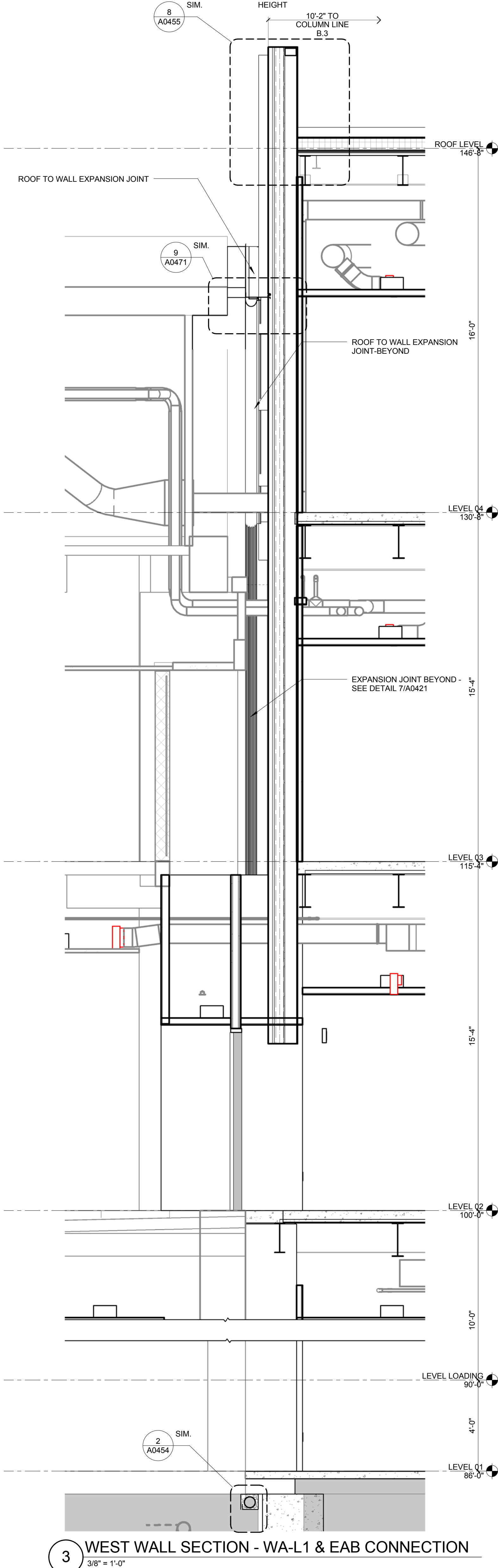
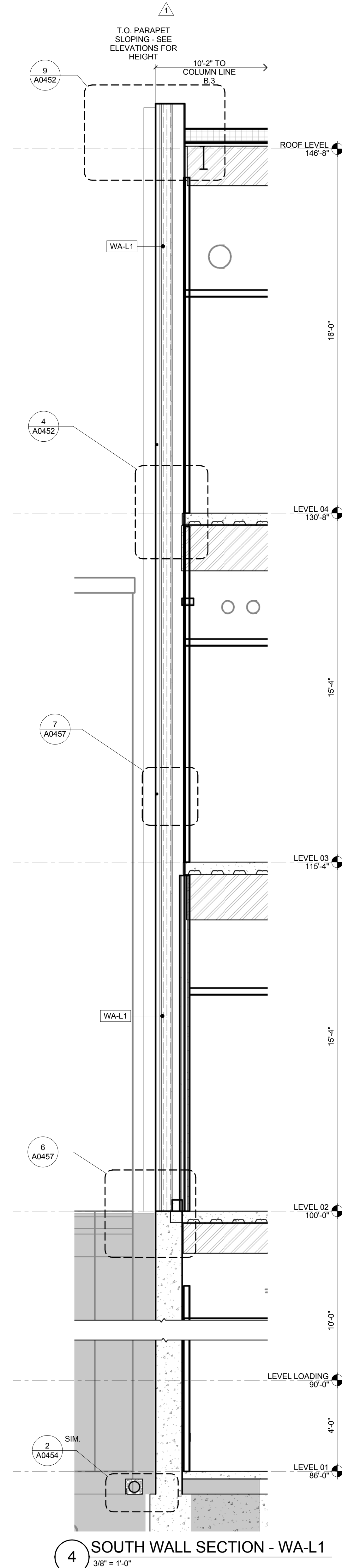
No.	Description	Date
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Drawing Title:

WALL SECTIONS

Project No.: 04561.01 Checked by:

A0403



CONFORMED SET 01 JUL 2016

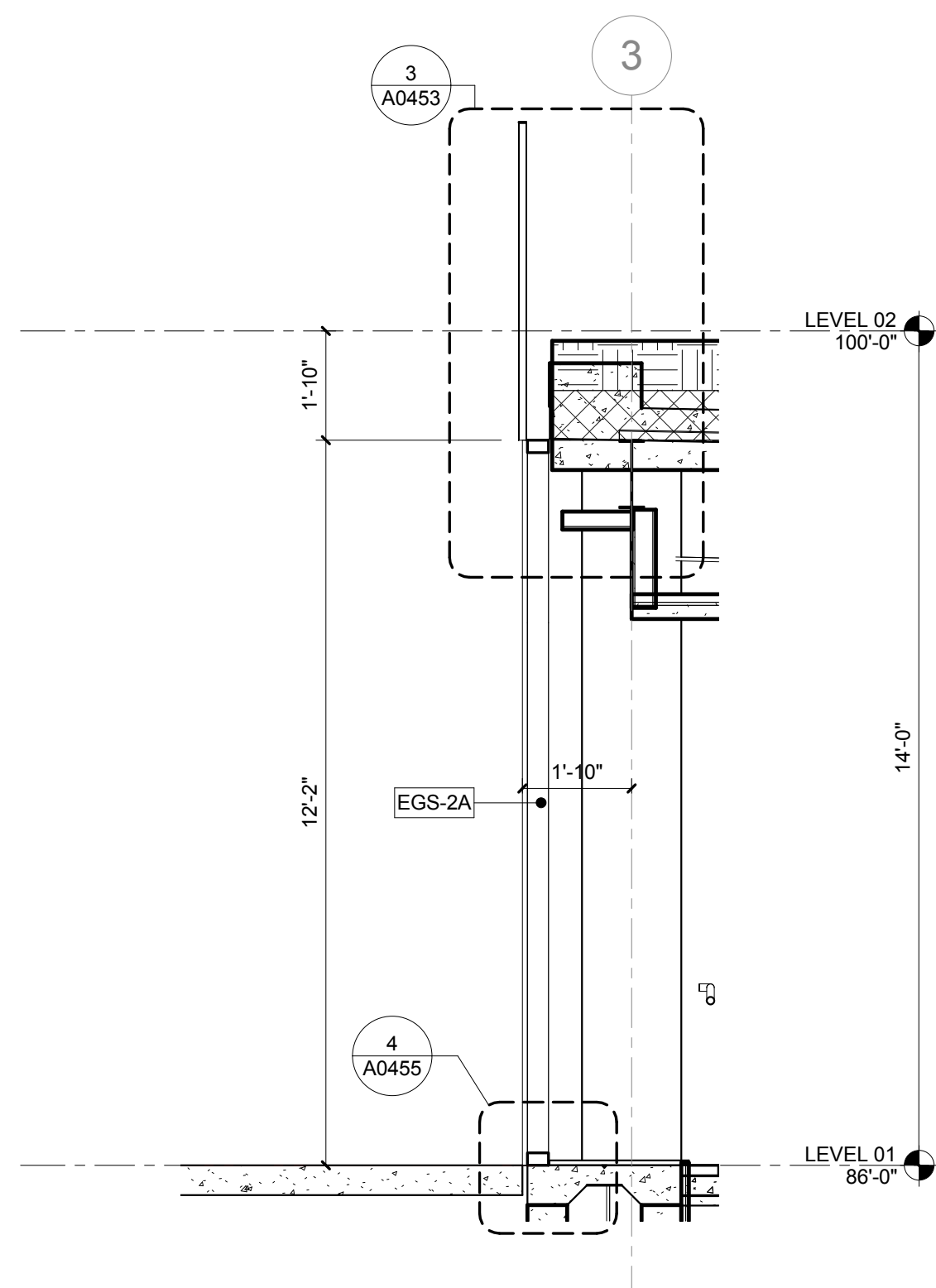
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ISSUED FOR CONSTRUCTION (BP1) 15 JAN 2016
No. Description Date

Drawing Title:

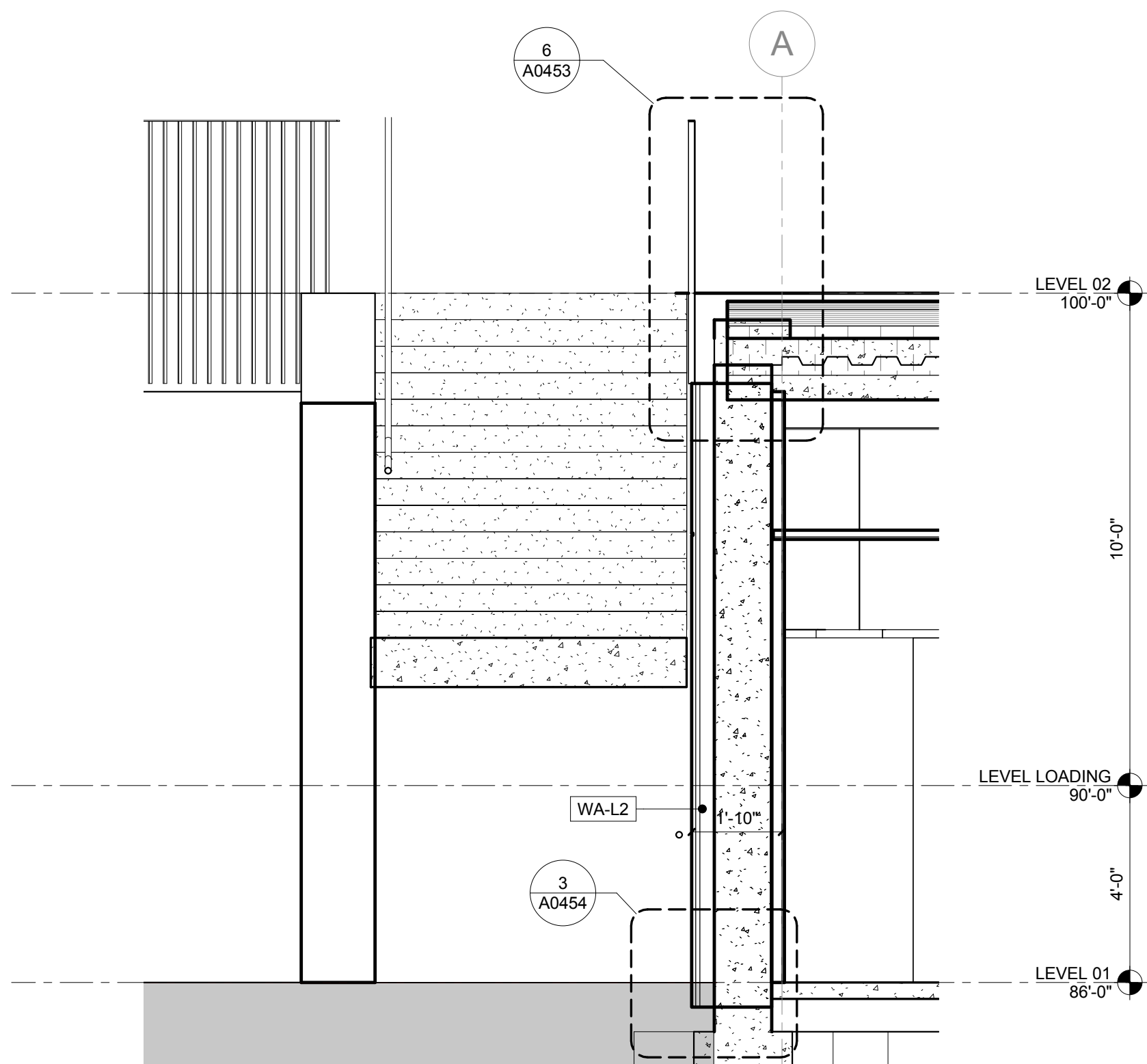
WALL SECTIONS

Project No.: 04561.01 Checked by:

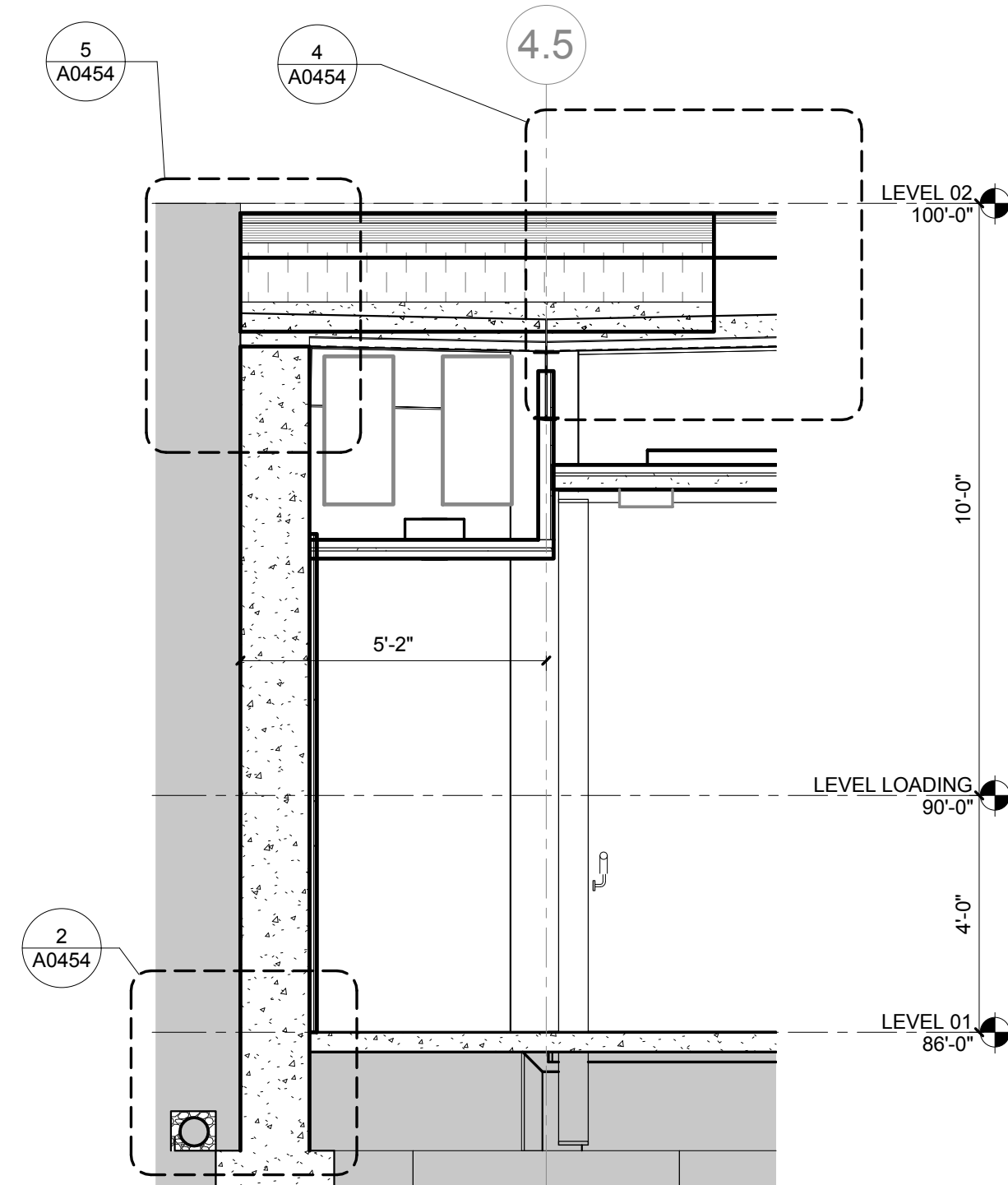
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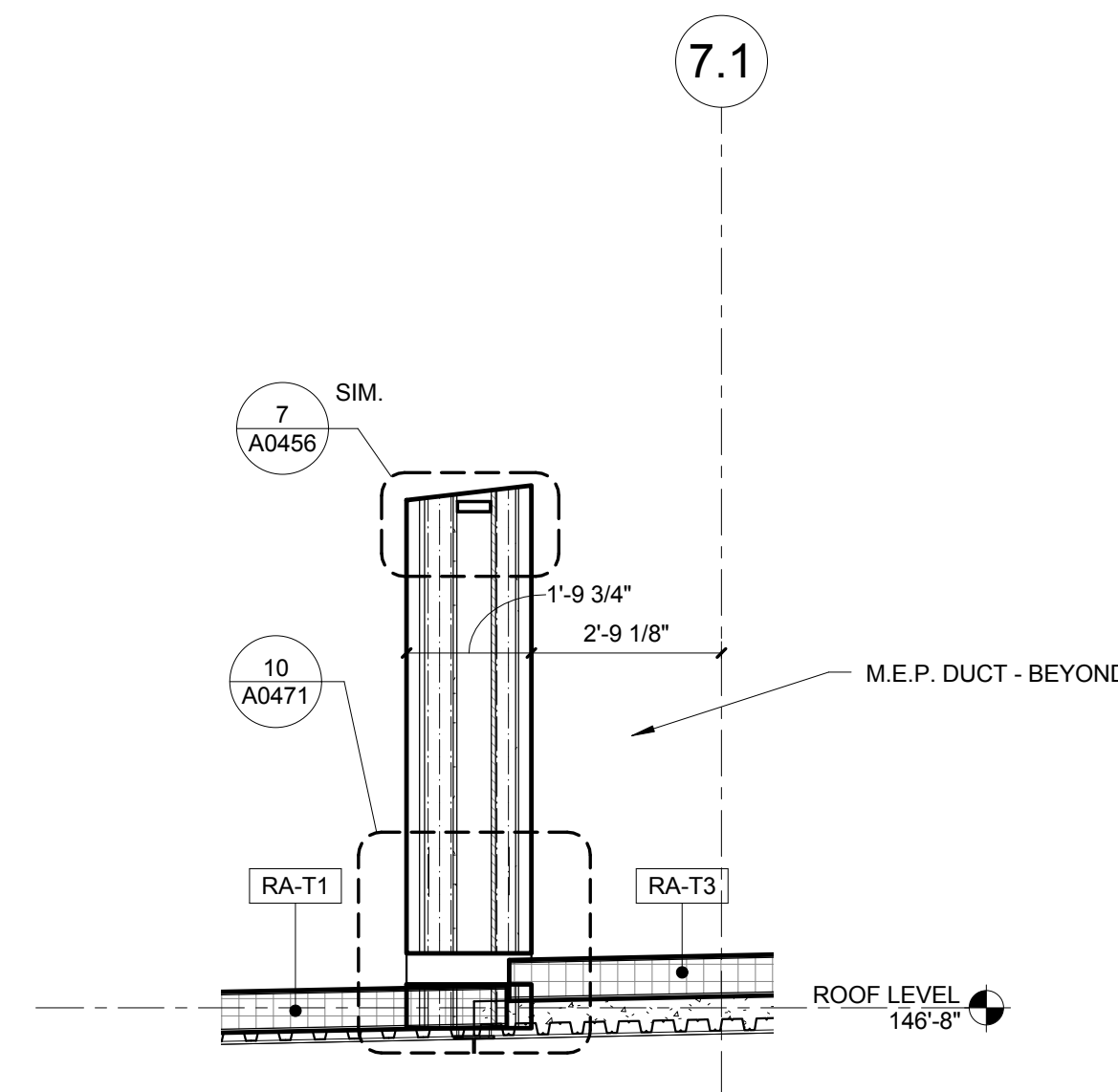
6 WEST WALL SECTION - COURTYARD
3/8" = 1'-0"



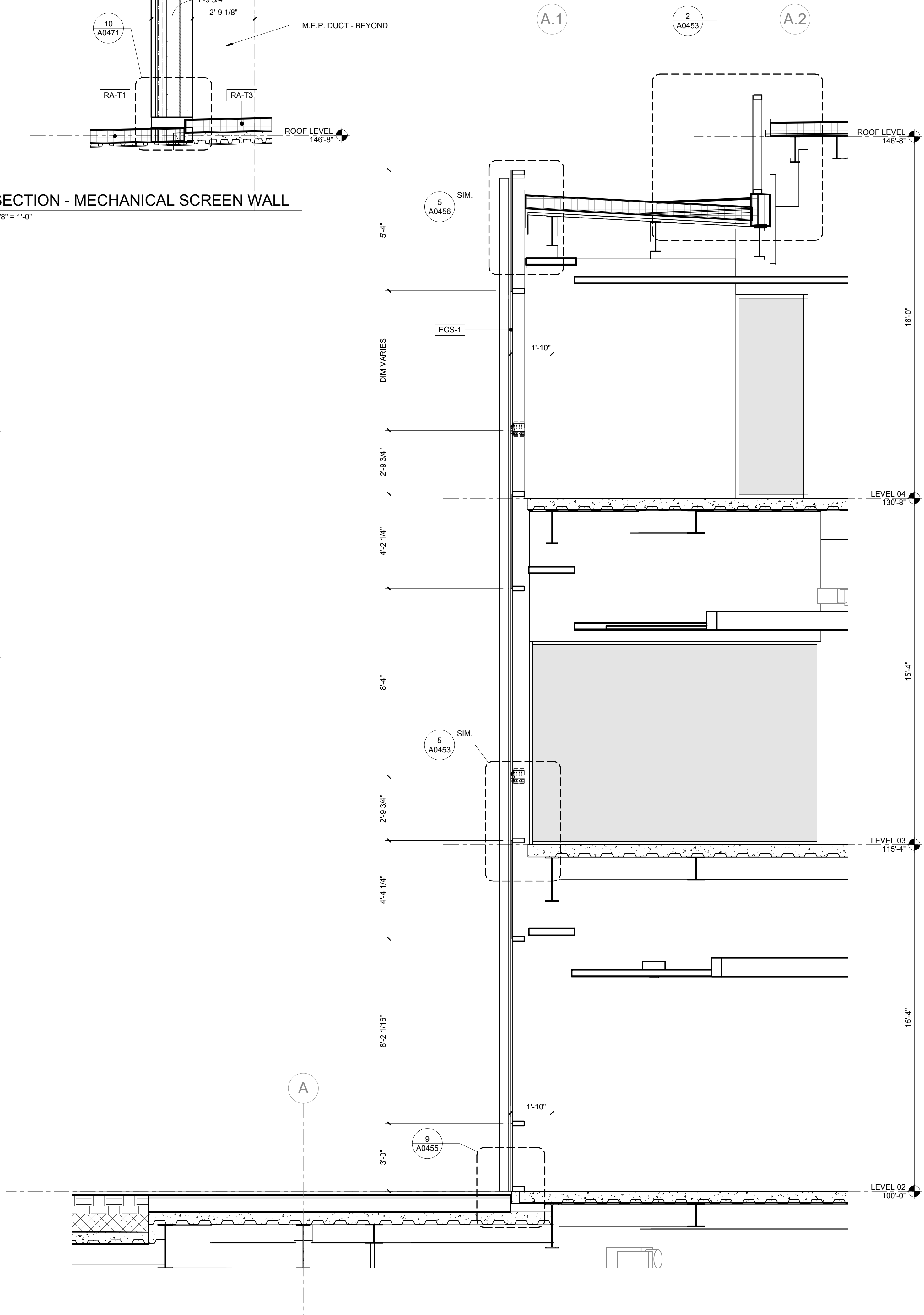
4 SOUTH WALL SECTION - WEST STAIR ASSEMBLY
3/8" = 1'-0"



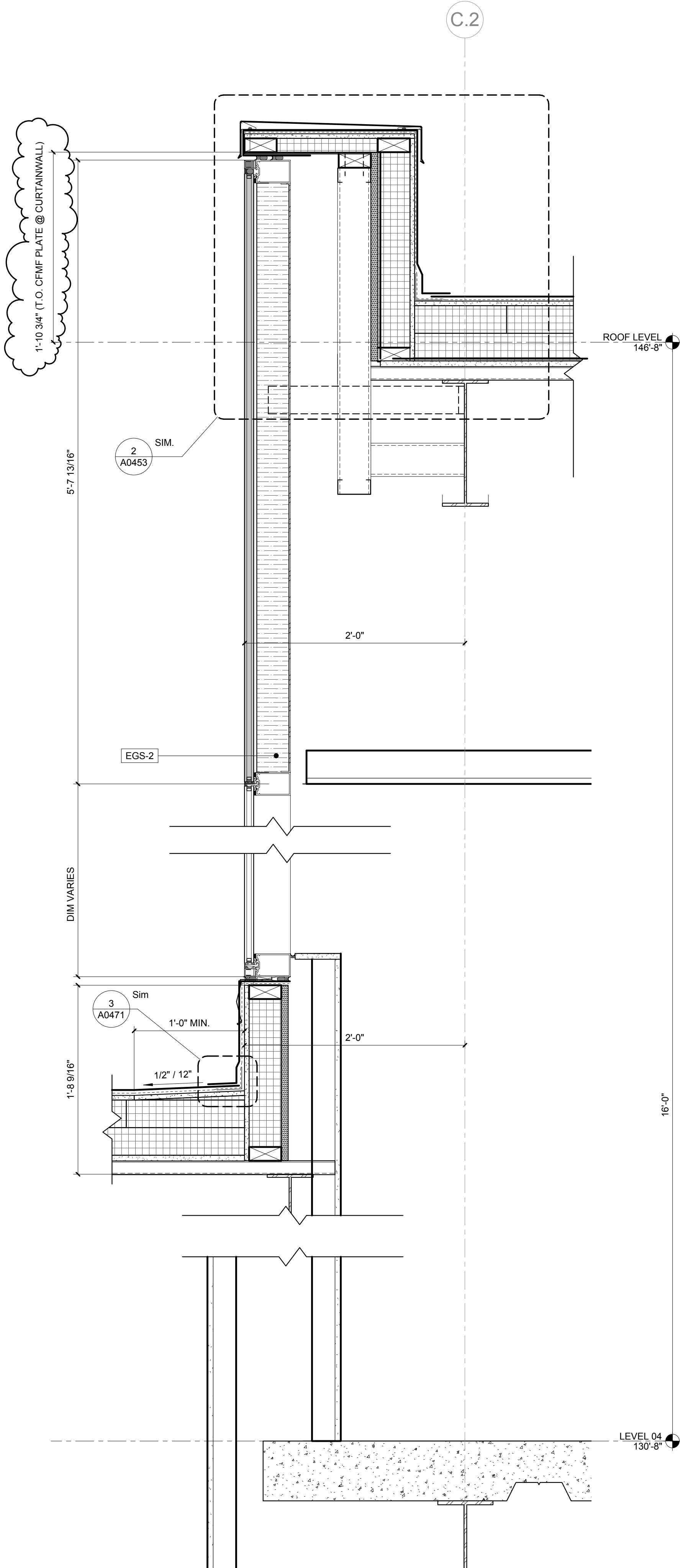
2 EAST WALL SECTION - COURTYARD
3/8" = 1'-0"



5 SECTION - MECHANICAL SCREEN WALL
3/8" = 1'-0"



1 SOUTH WALL SECTION - SSG CURTAINWALL
3/8" = 1'-0"



3 ENLARGED DETAIL - NORTH CURTAINWALL @ ROOF ASSEMBLY
1 1/2" = 1'-0"

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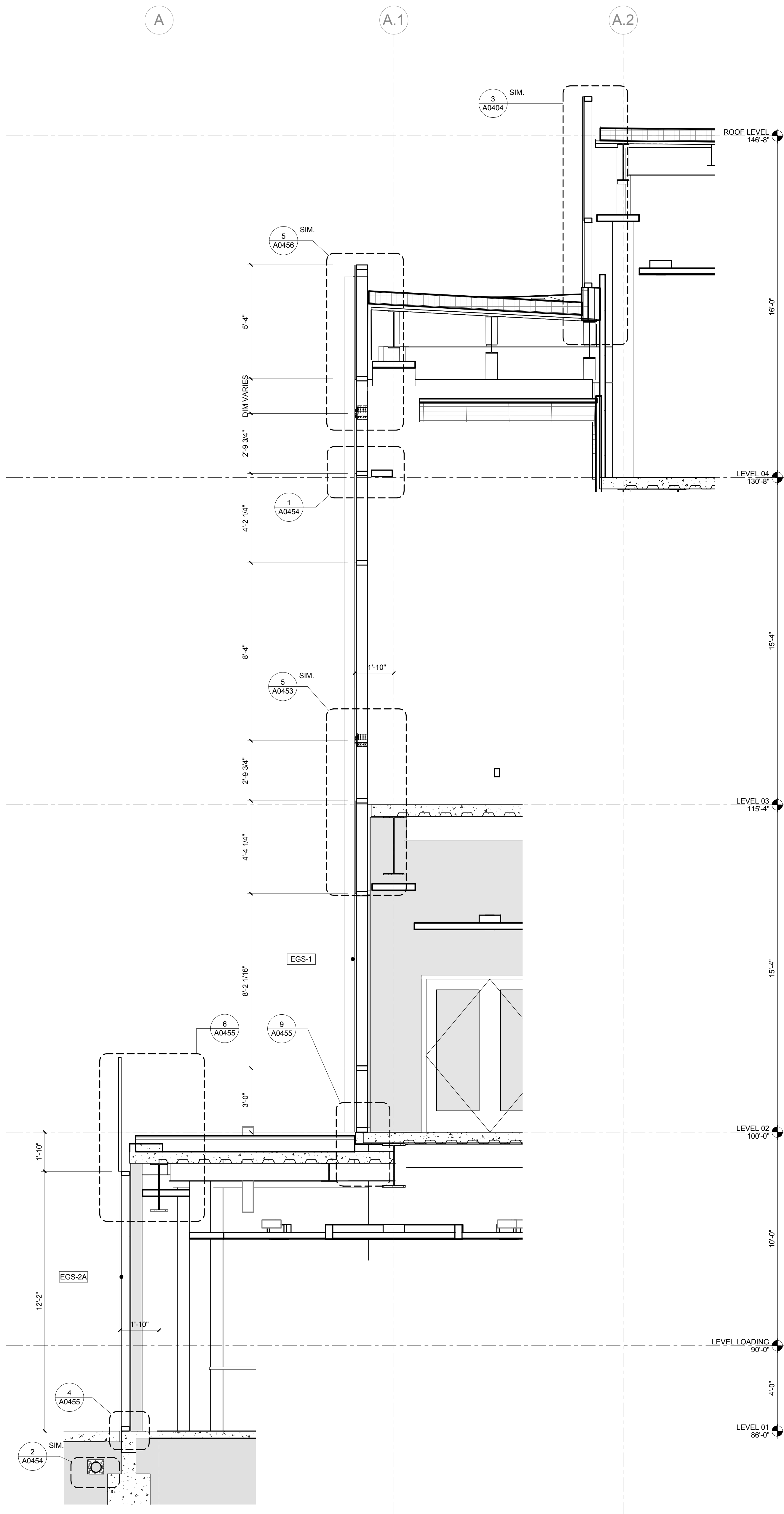
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No. Description Date

Drawing Title:

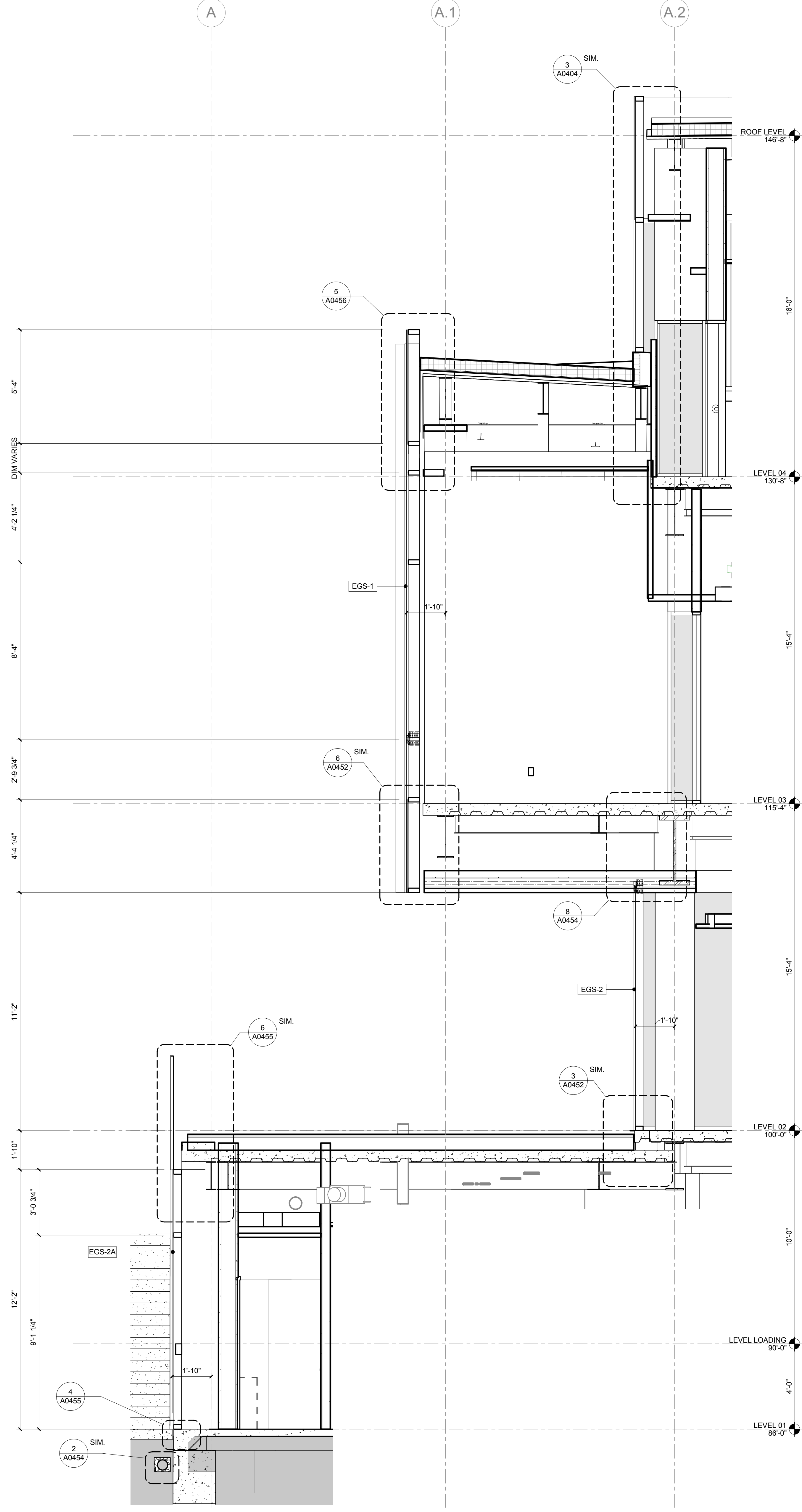
WALL SECTIONS

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A0405

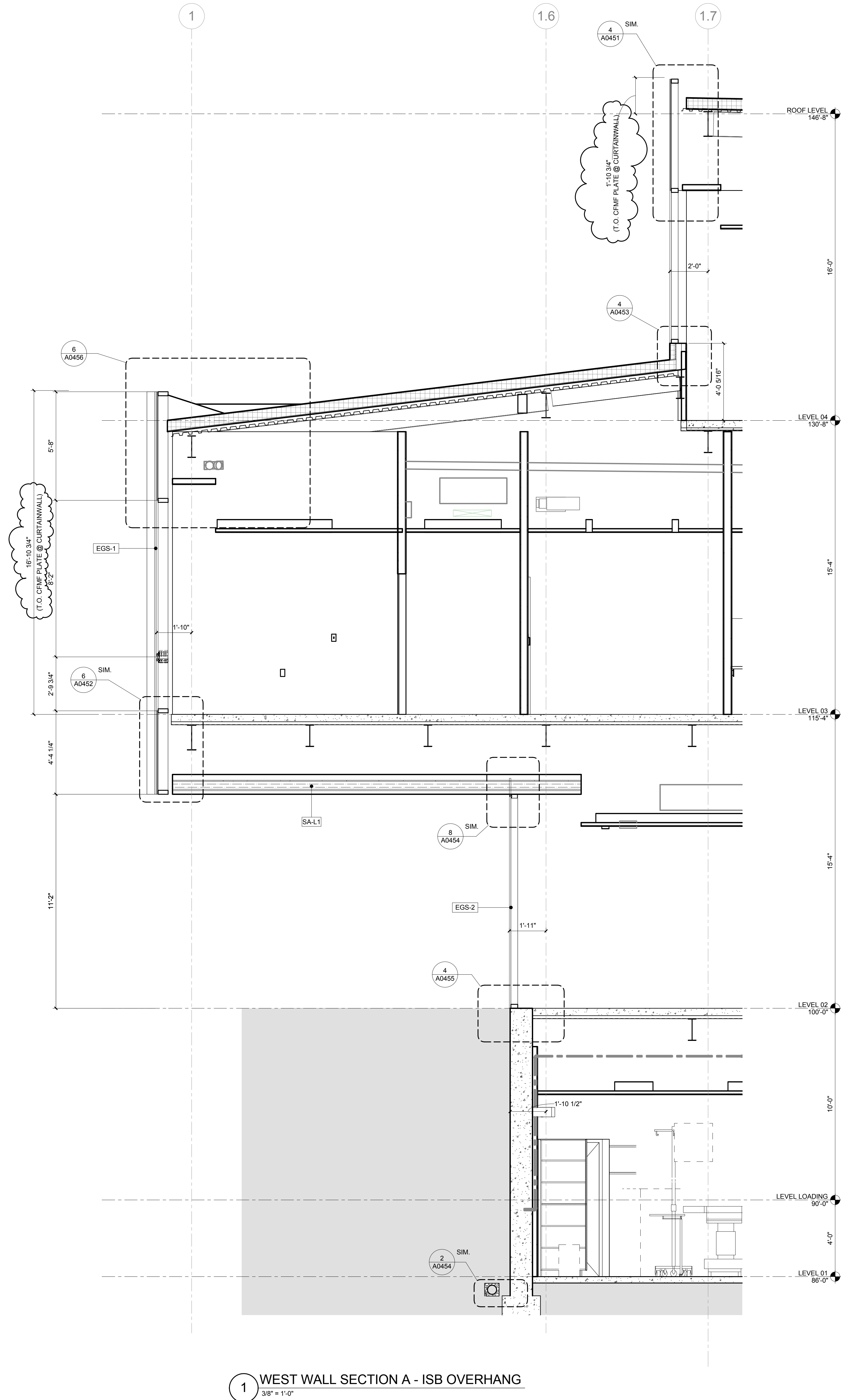
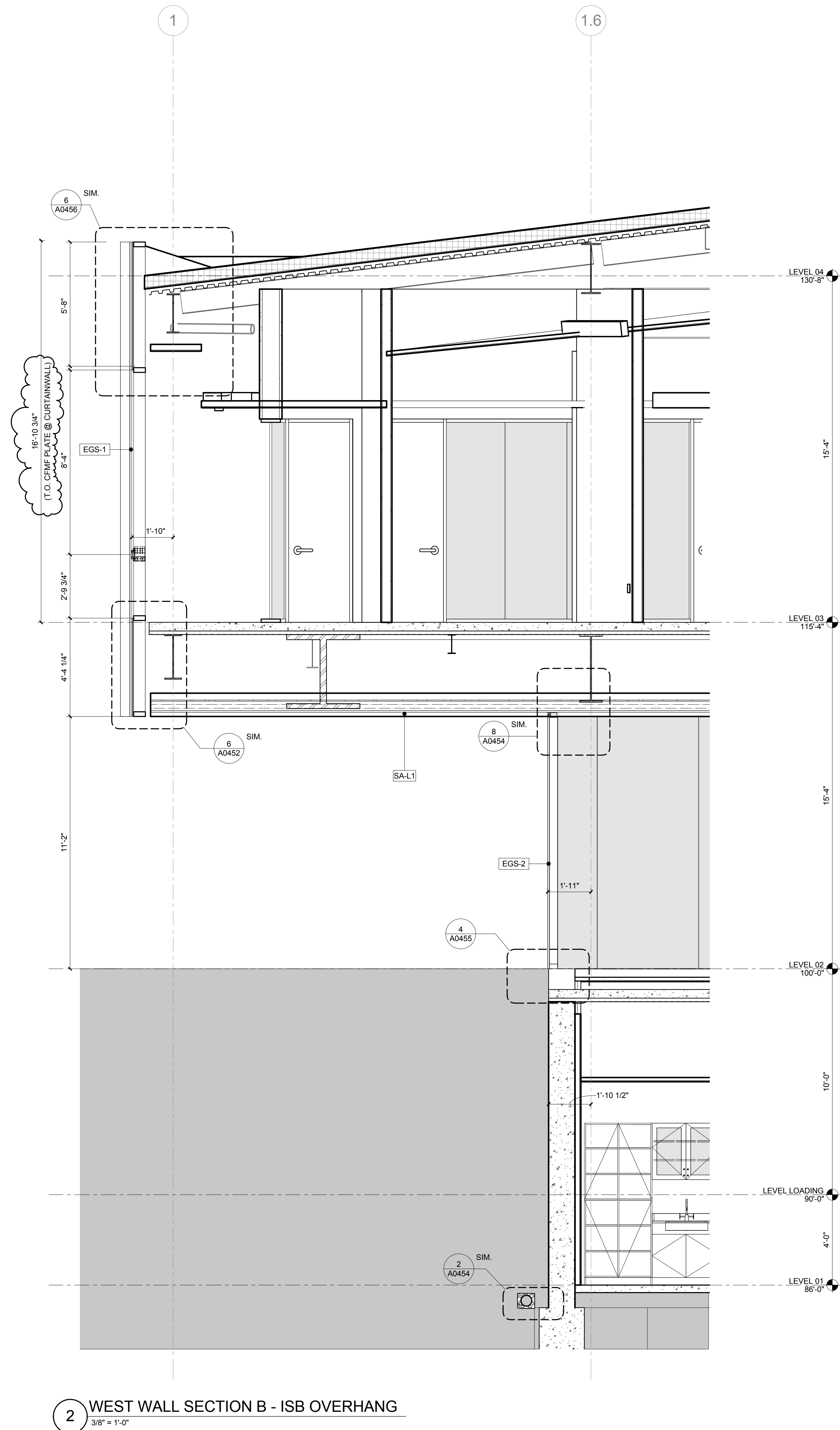


2 SOUTH WALL SECTION - COURTYARD
3/8" = 1'-0"



1 SOUTH WALL SECTION - COURTYARD @ ISB OVERHANG
3/8" = 1'-0"

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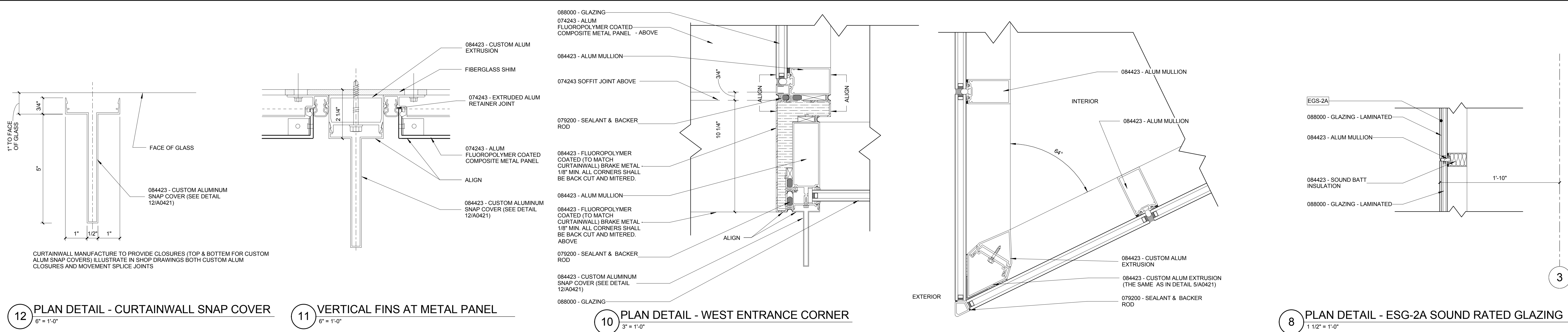
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ISSUED FOR CONSTRUCTION (BP1) 15 JAN 2016
No. Description Date

Drawing Title:

WALL SECTIONS

Project No.: 04561.01 Checked by:

A0406



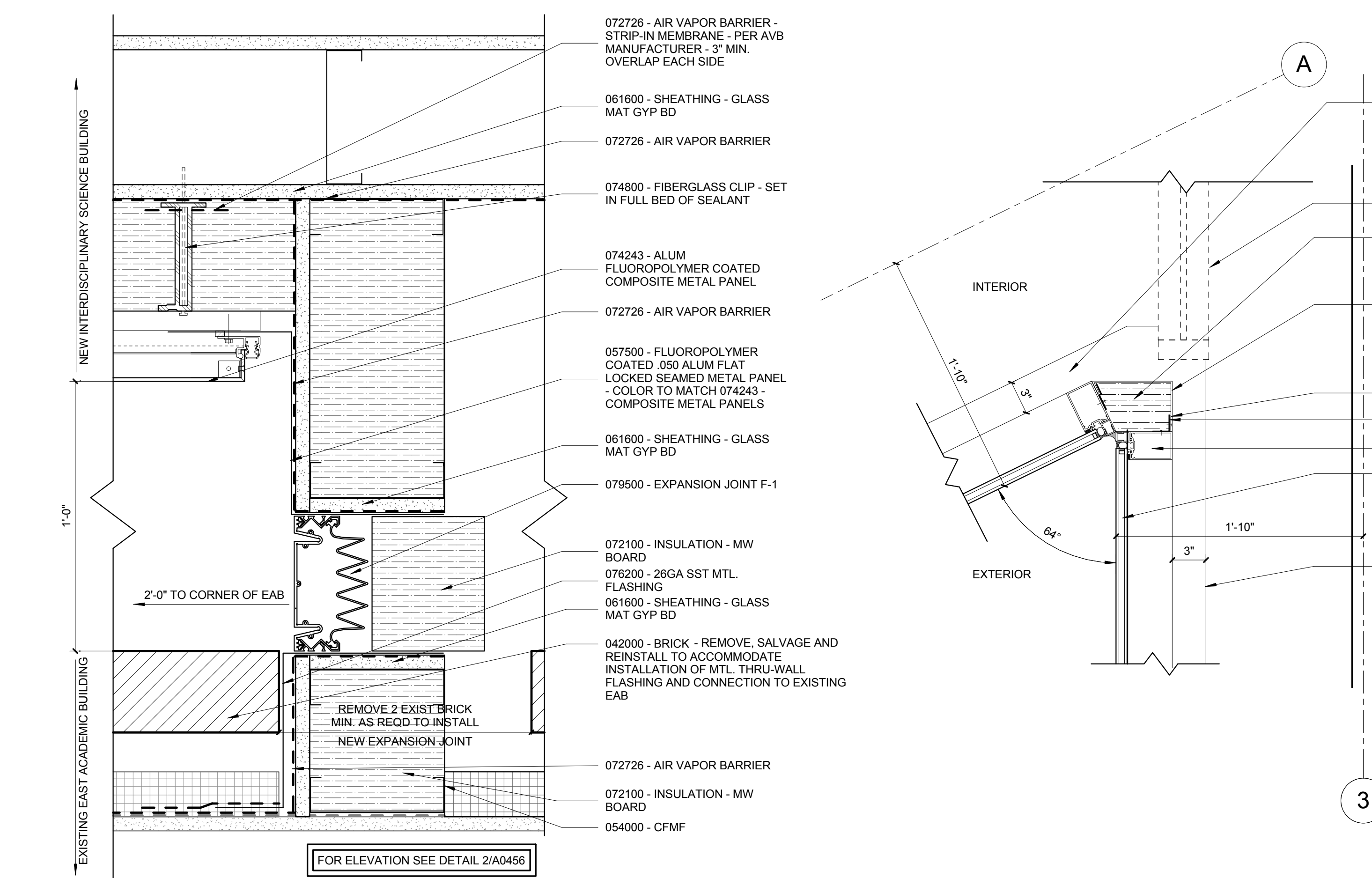
12 PLAN DETAIL - CURTAINWALL SNAP COVER
6" = 1'-0"

11 VERTICAL FINS AT METAL PANEL
6" = 1'-0"

10 PLAN DETAIL - WEST ENTRANCE CORNER
3" = 1'-0"

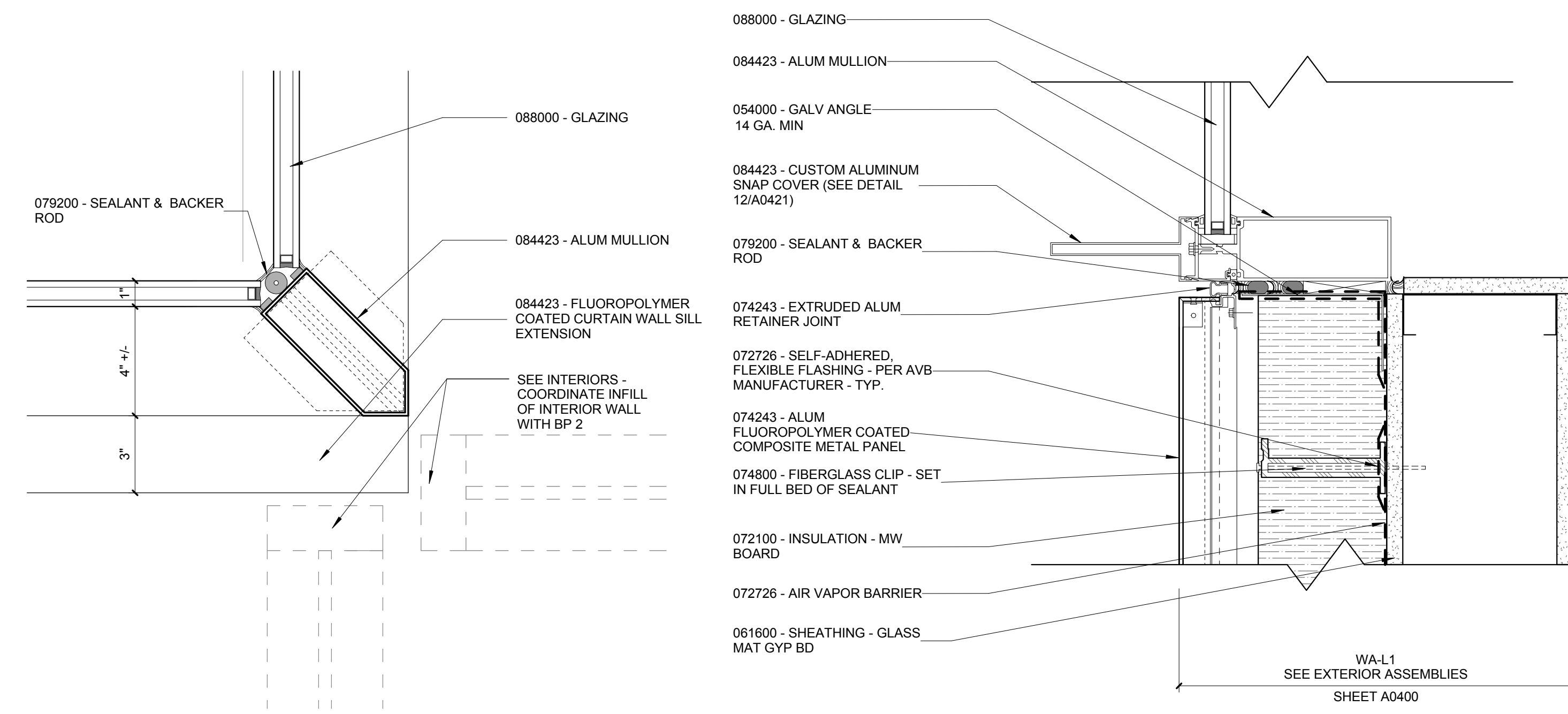
9 CURTAINWALL OUTSIDE CORNER @2ND FLR
3" = 1'-0"

8 PLAN DETAIL - ESG-2A SOUND RATED GLAZING
1 1/2" = 1'-0"



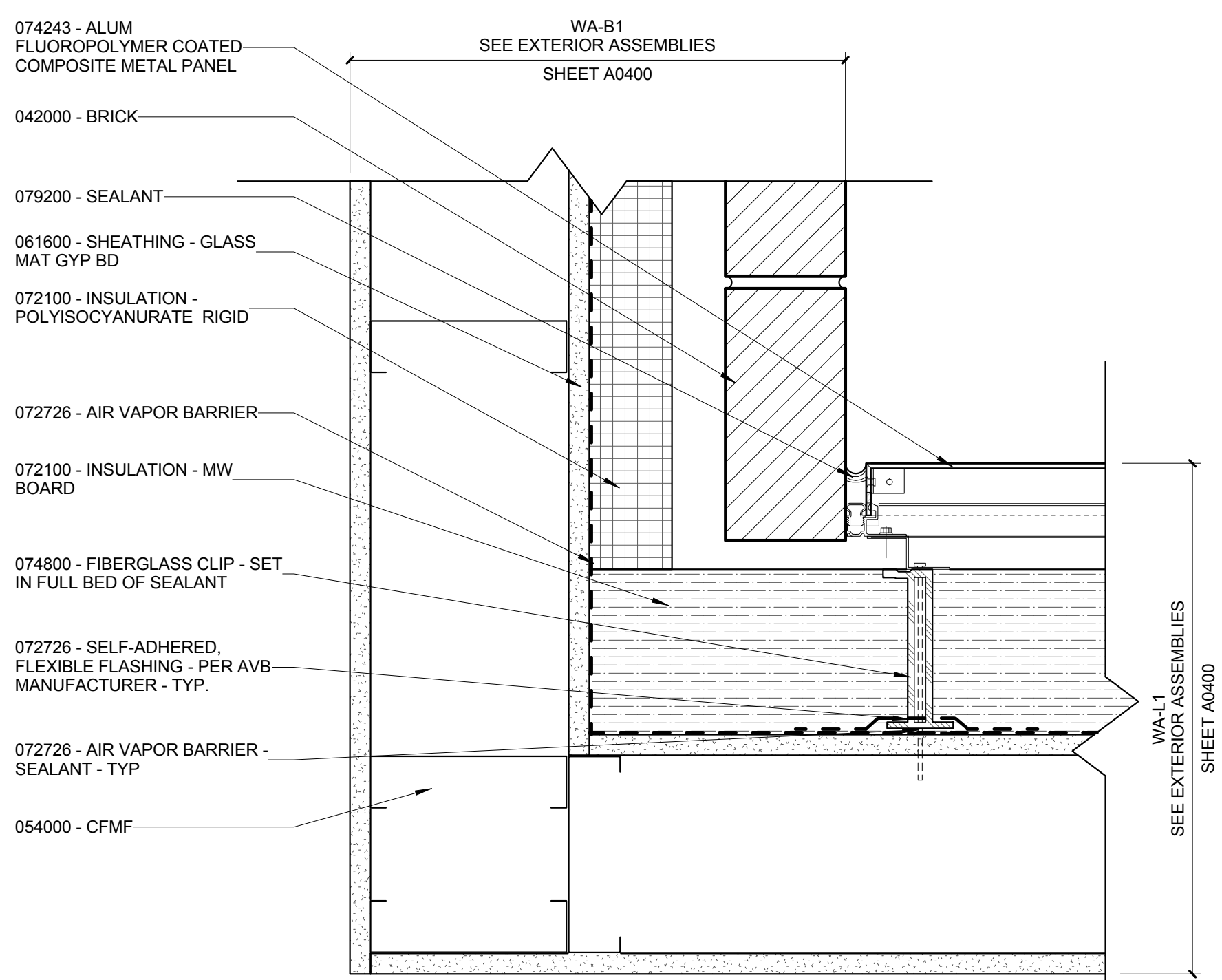
7 ISB TO EAB WALL TO WALL EXPANSION JOINT
3" = 1'-0"

6 PLAN DETAIL - INSIDE CORNER 1ST FLOOR CURTAINWALL
1 1/2" = 1'-0"

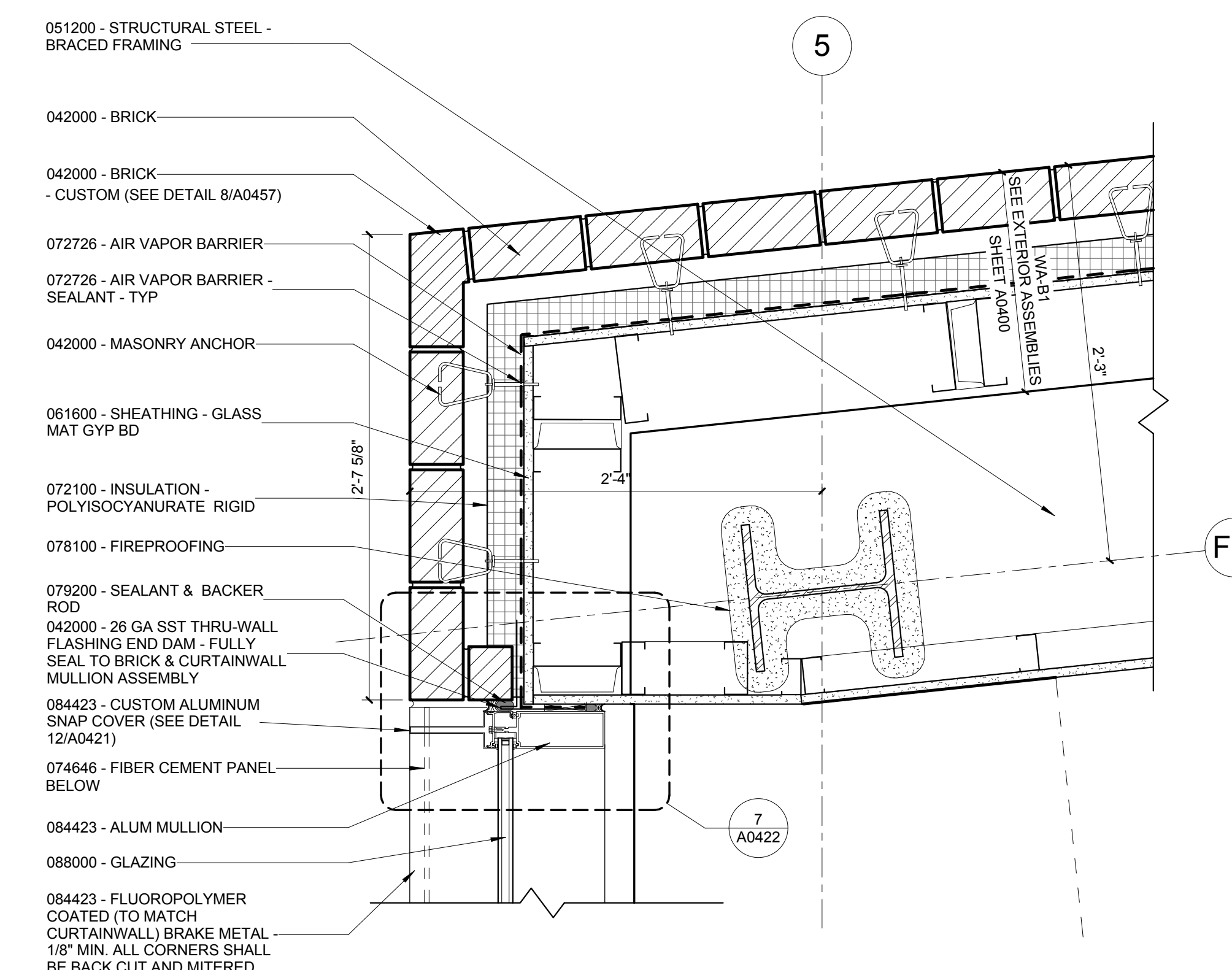


4 CURTAINWALL @ 90 DEGREE INSIDE CORNER
3" = 1'-0"

3 PLAN DETAIL - CURTAINWALL JAMB @ METAL COMPOSITE PANEL
3" = 1'-0"



2 PLAN DETAIL - WA-B1 TO WA-L1
3" = 1'-0"



1 PLAN DETAIL - NW CORNER - BRICK TO CW
1 1/2" = 1'-0"

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EXTERIOR PLAN DETAILS

Project No.: 04561.01 Checked by:

A0421

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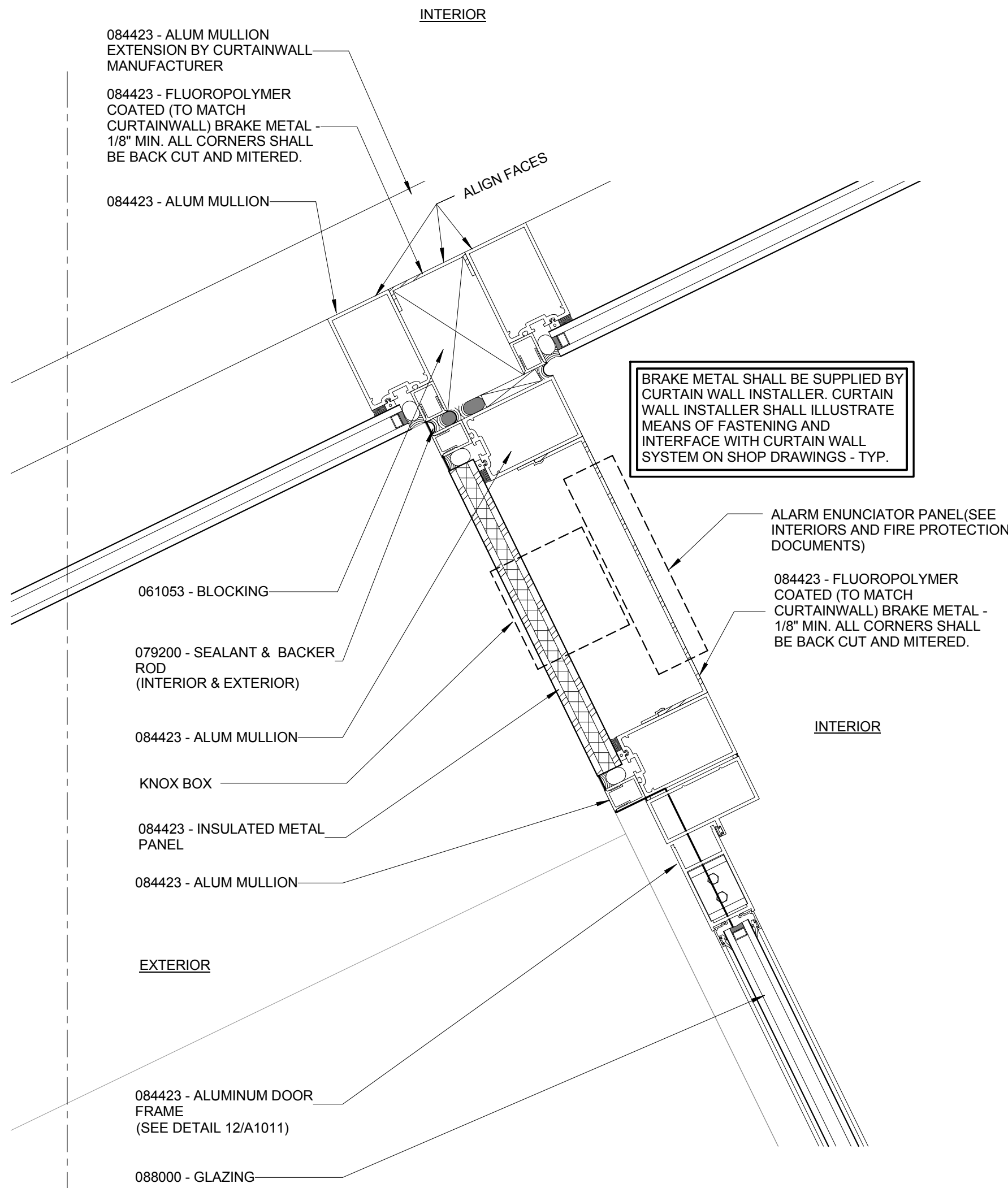
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-	ISSUED FOR CONSTRUCTION (BP1)	15 JAN 2016
No.	Description	Date

Drawing Title:

EXTERIOR PLAN DETAILS

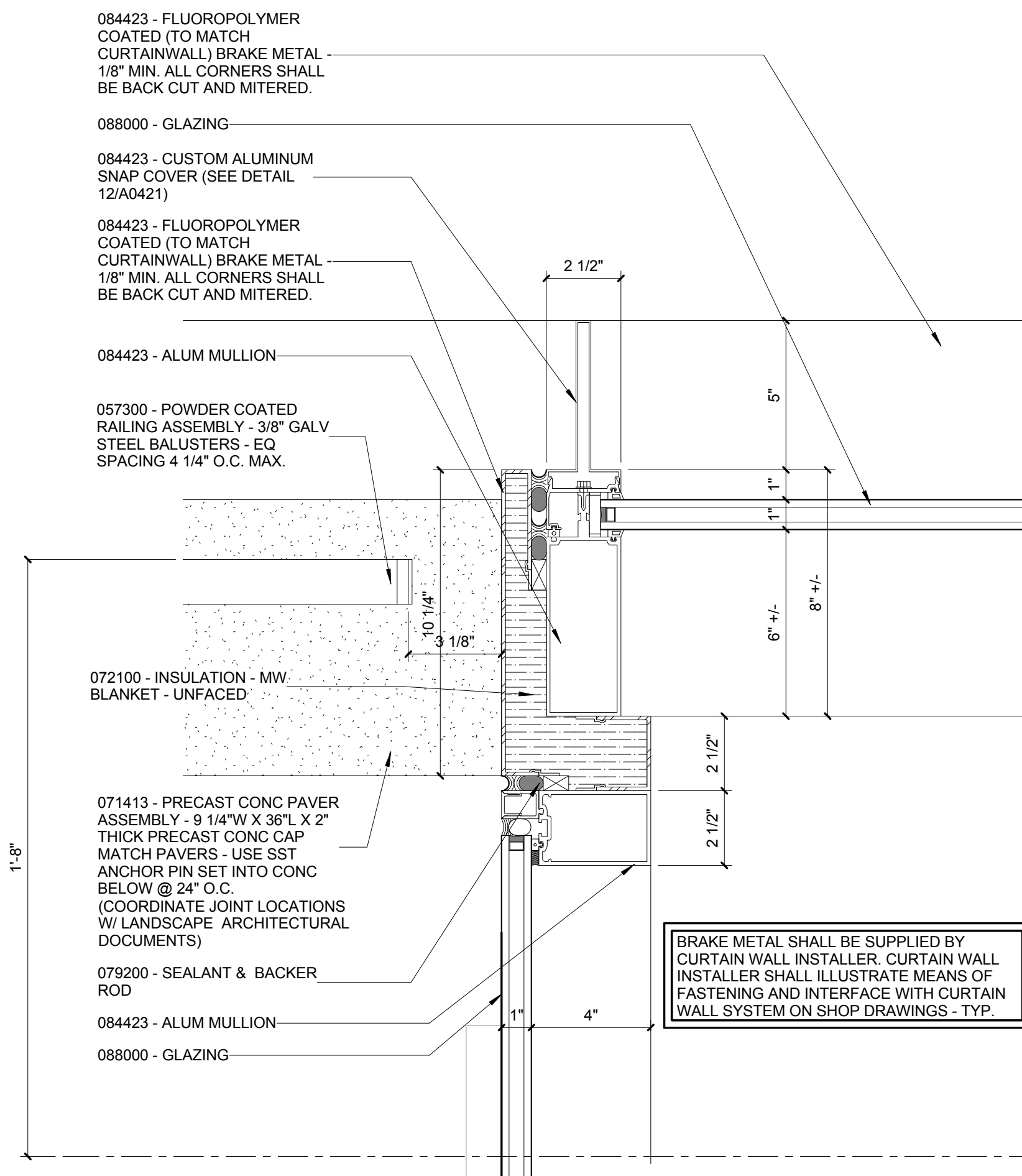
Project No.: 04561.01 Checked by:

A0422

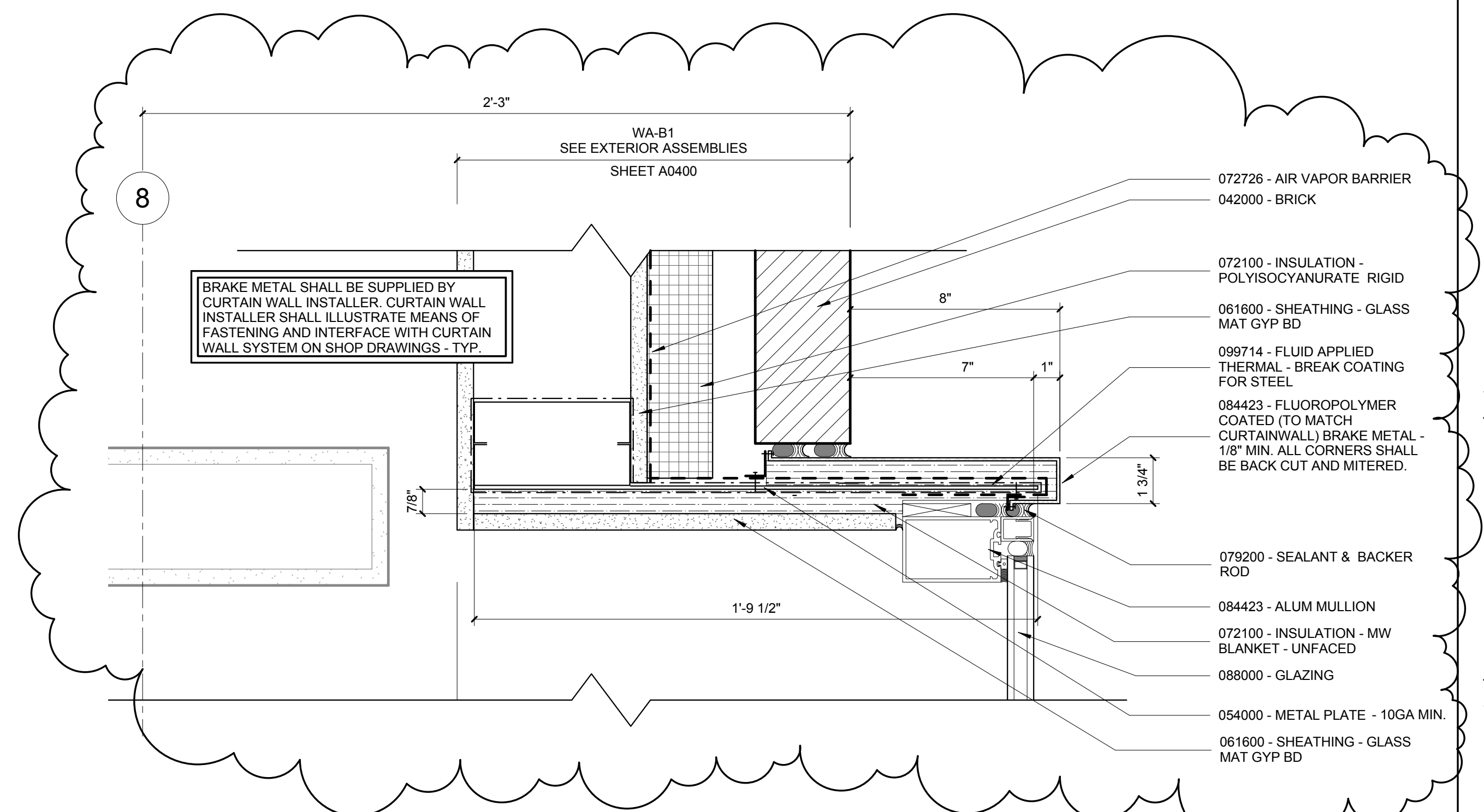


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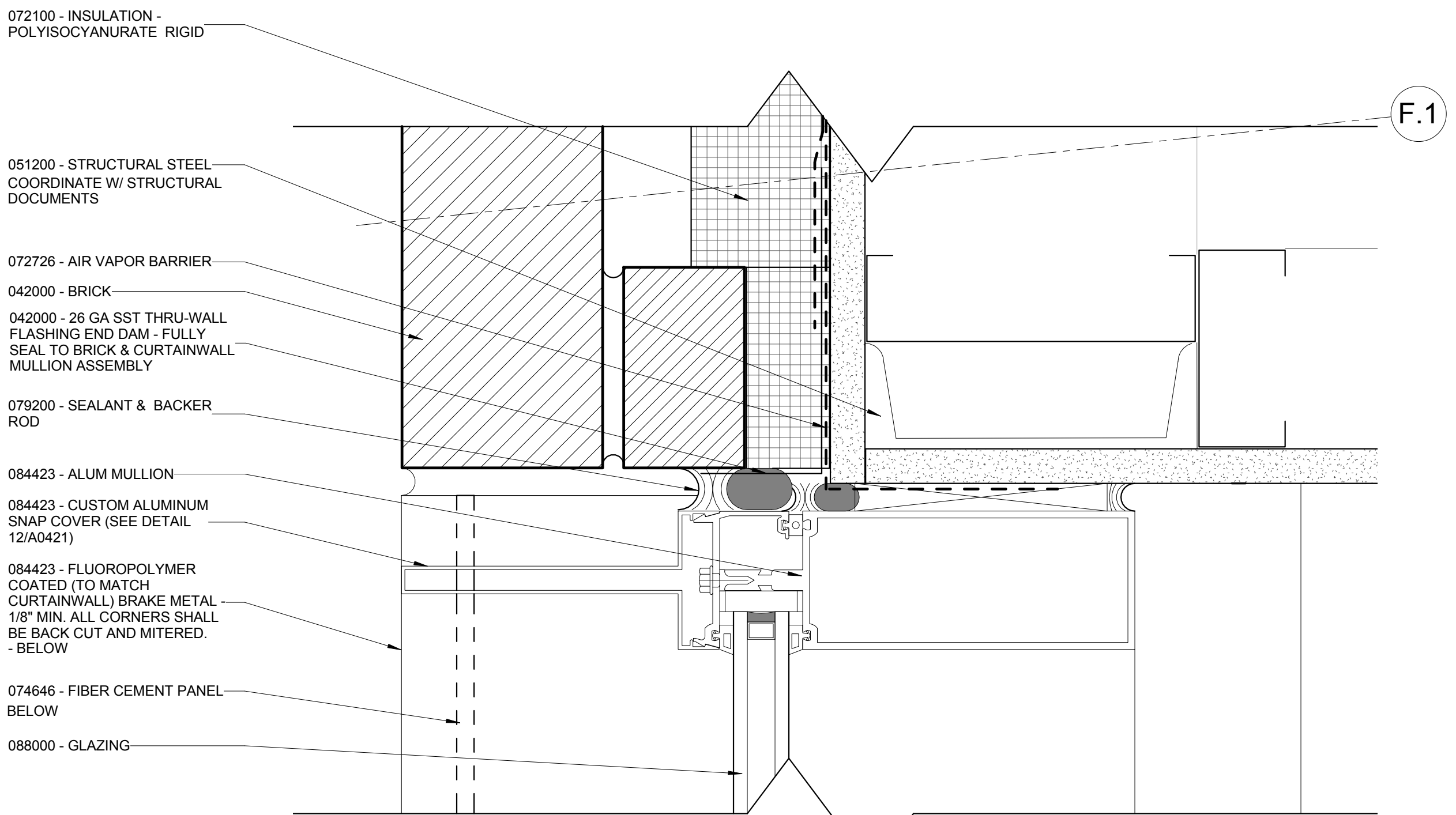
6 PLAN DETAIL - INSULATED COMPOSITE PANEL IN CURTAINWALL
3" = 1'-0"



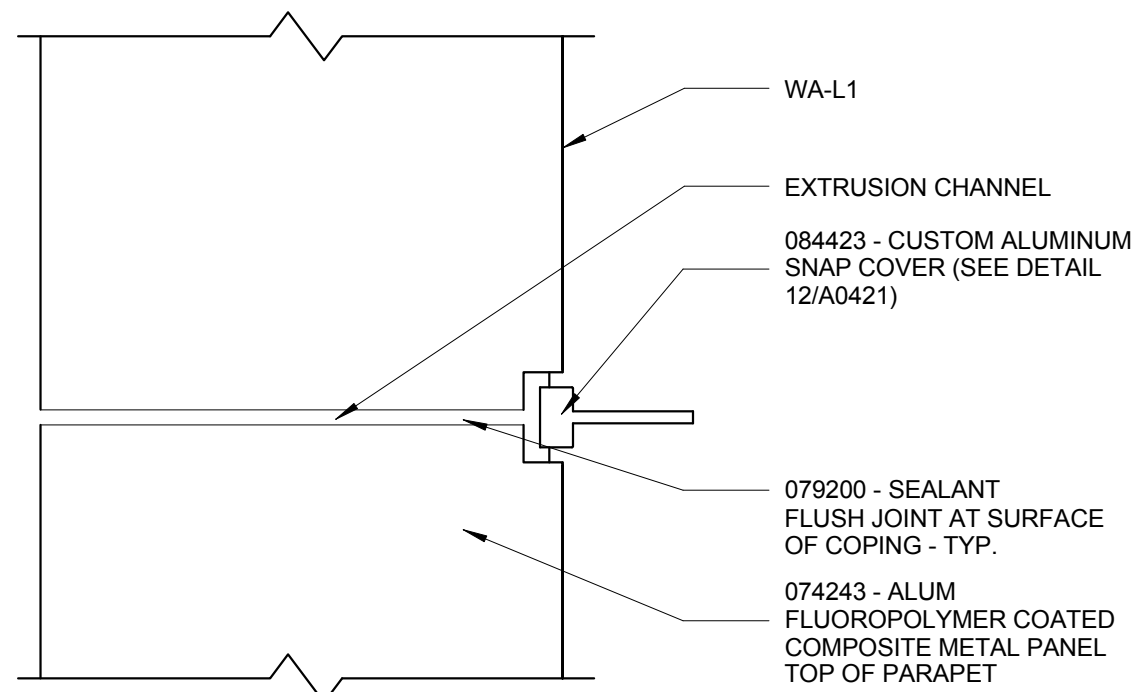
5 PLAN DETAIL - CURTAINWALL 90 DEGREE OUTSIDE CORNER AT
C.L. C.3
3" = 1'-0"



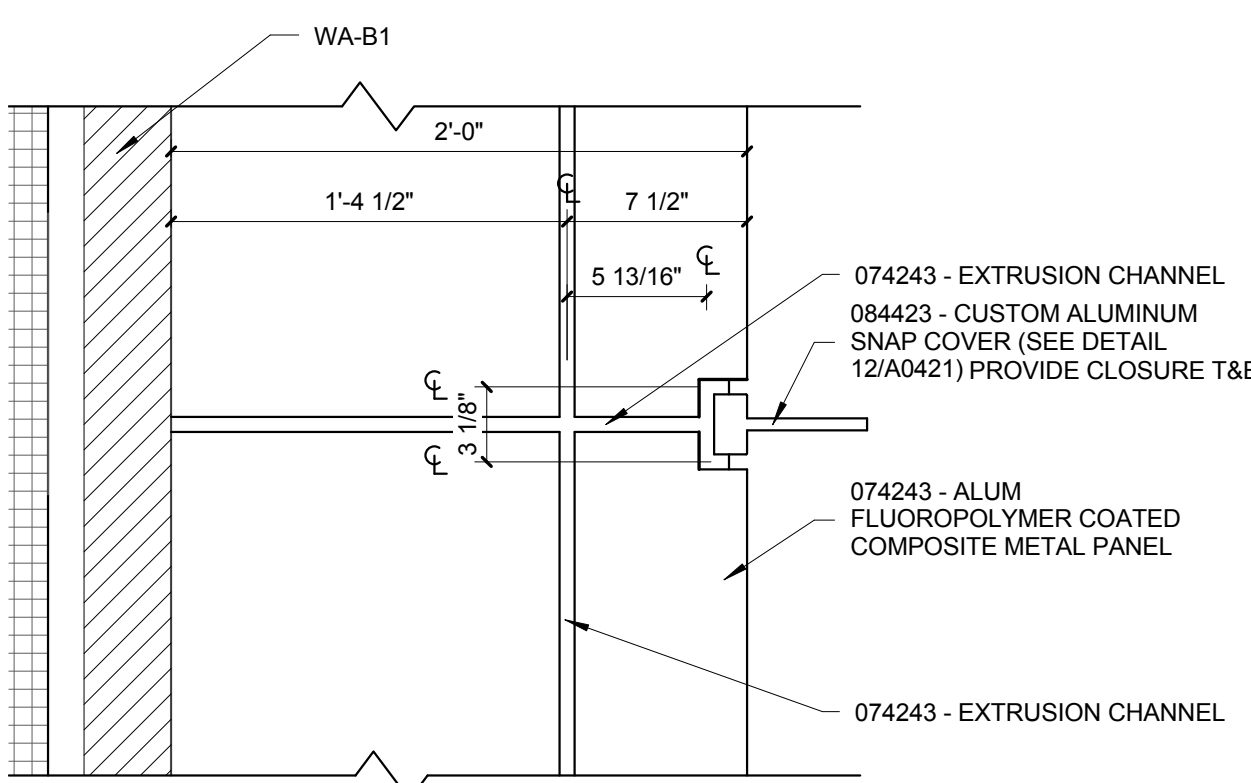
1 PLAN DETAIL - EAST PROJECTED CURTAINWALL-JAMB
3" = 1'-0"



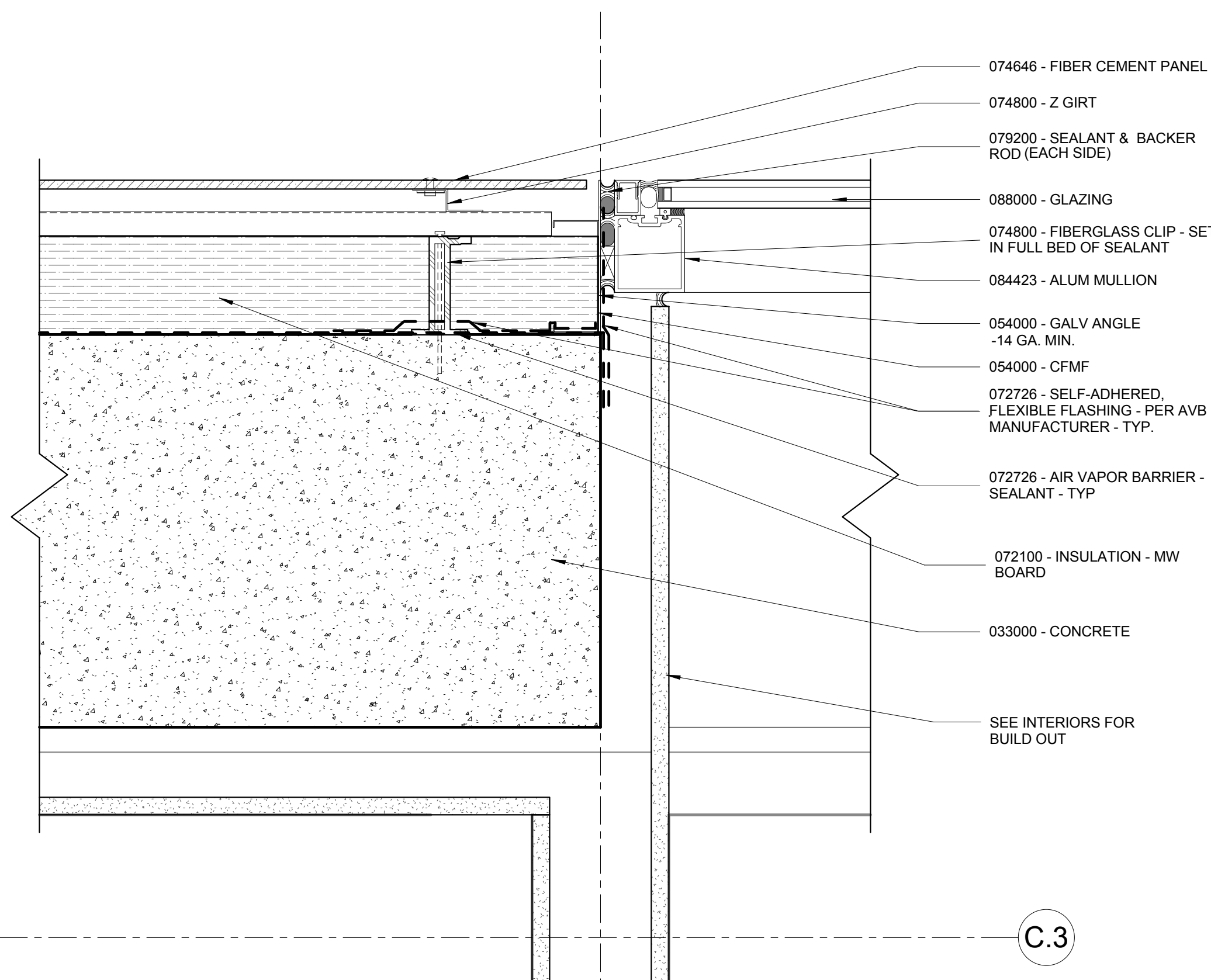
7 ENLARGED PLAN DETAIL - NW CORNER - BRICK TO CW
6" = 1'-0"



4 PLAN DETAIL - COMPOSITE METAL TOP OF PARAPET
1 1/2" = 1'-0"

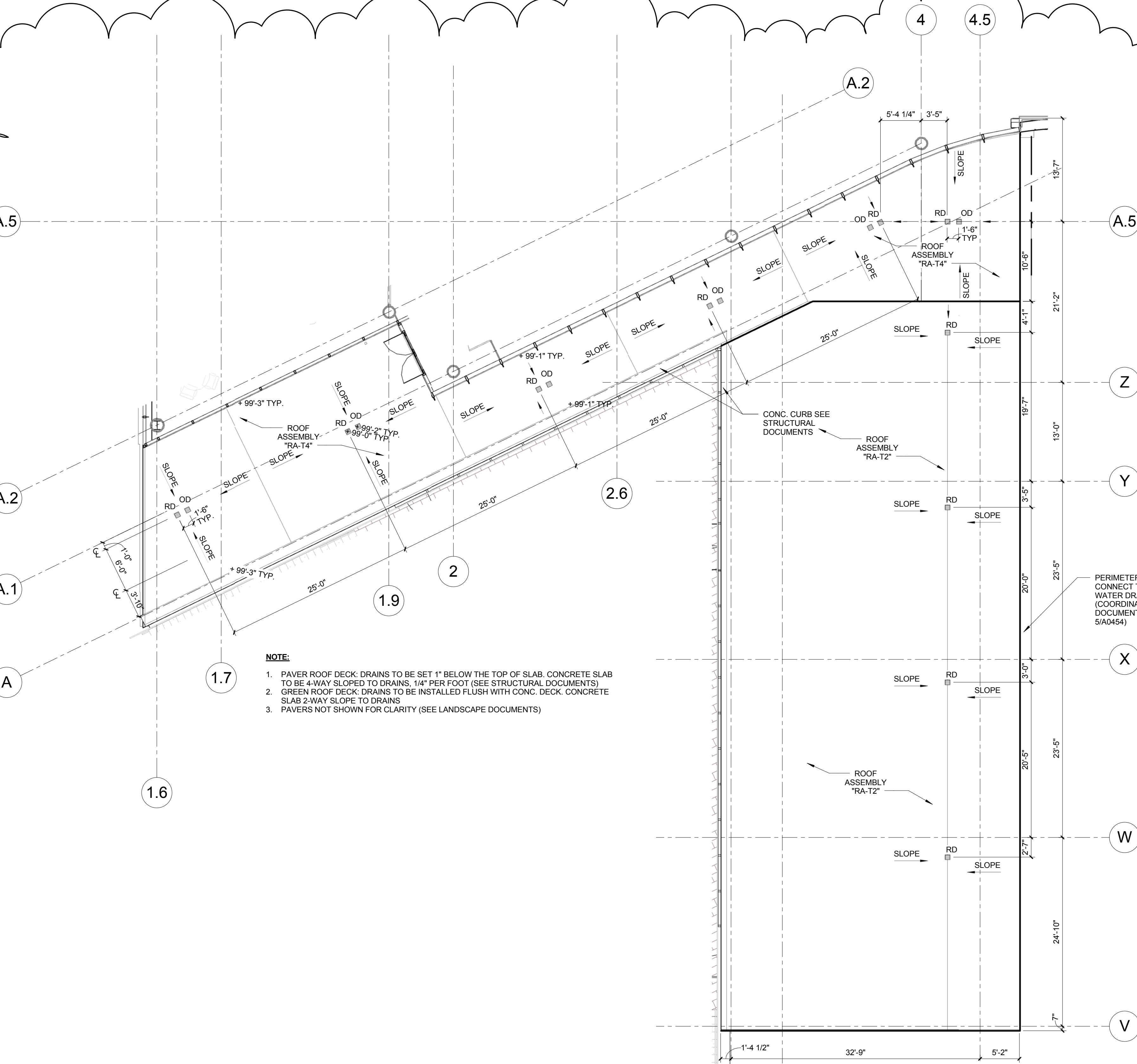


3 REFLECTED SOFFIT PLAN DETAIL - EAST ELEVATION
COMPOSITE METAL SOFFIT @ BRICK
1 1/2" = 1'-0"

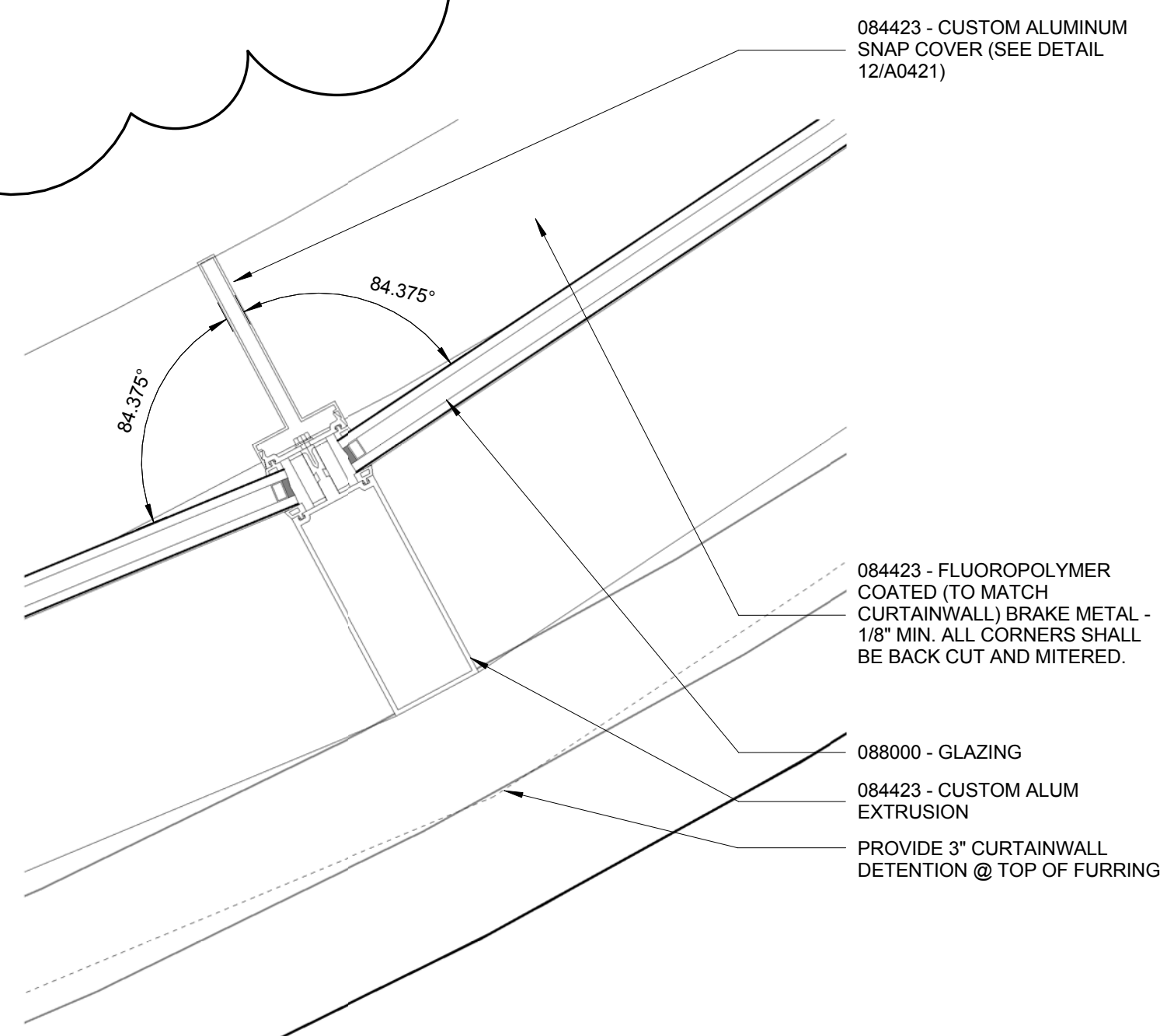


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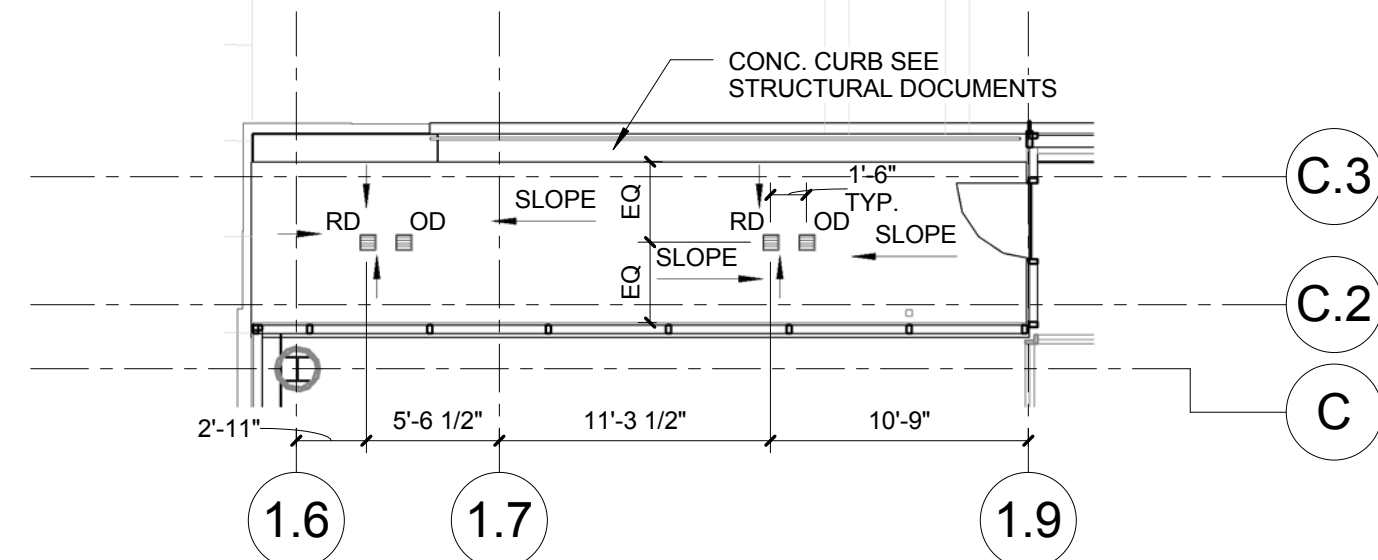
2 PLAN DETAIL - WA-L2 @ CURTAINWALL
3" = 1'-0"



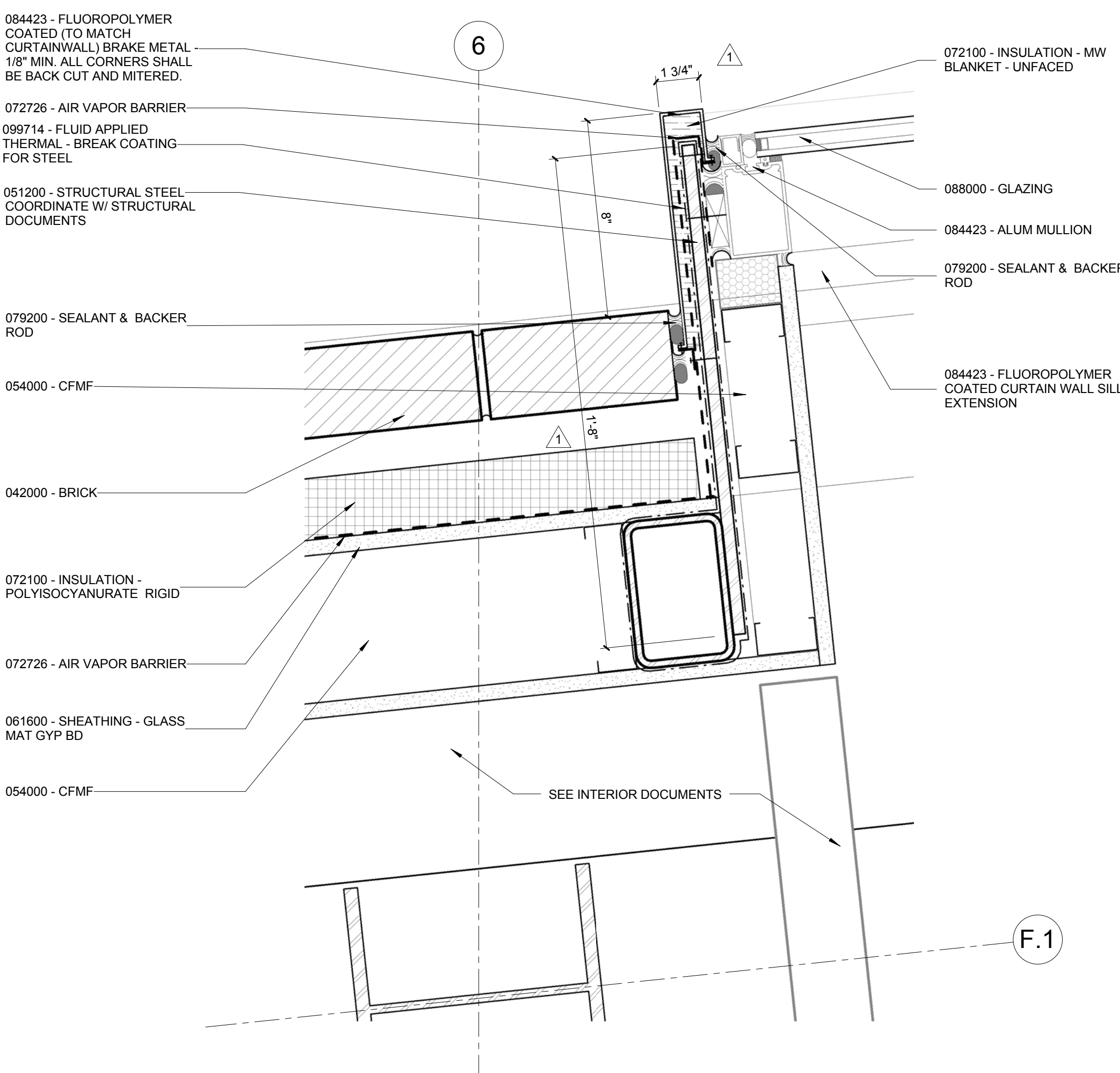
3 PLAN DETAIL - GREEN ROOF & SOUTH PAVER ROOF
1/8" = 1'-0"



2 PLAN DETAIL - CUSTOM MULLION @ CURVED CURTAINWALL
3" = 1'-0"



4 PLAN DETAIL - NORTH PAVER ROOF PLAN
1/8" = 1'-0"



1 PLAN DETAIL - NORTH PROJECTED CURTAINWALL
3" = 1'-0"



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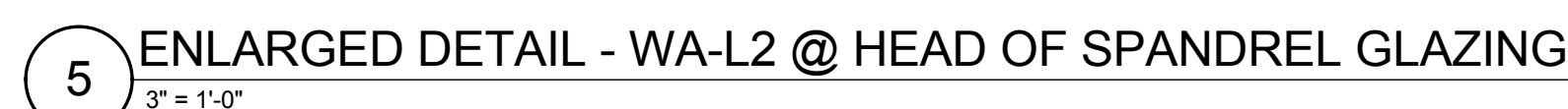
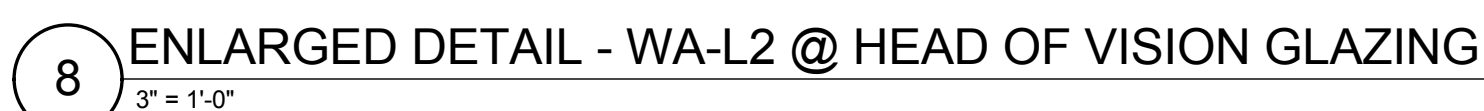
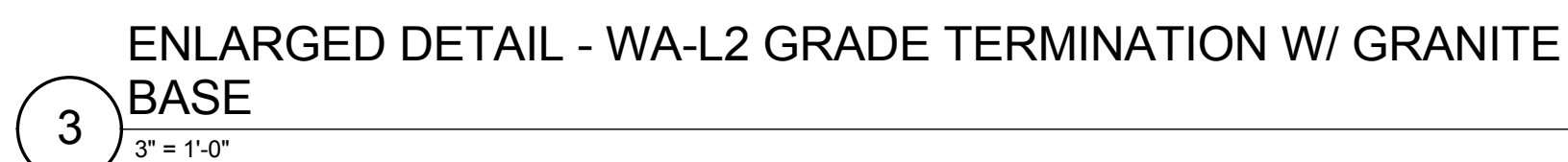
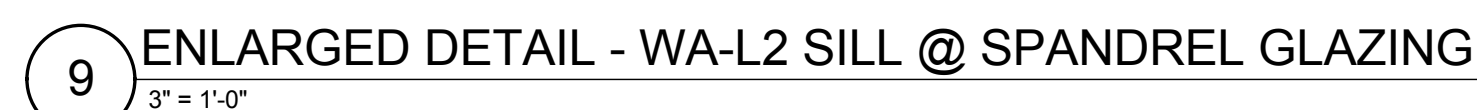
Webb Engineering Services, Inc.
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314.588.0600

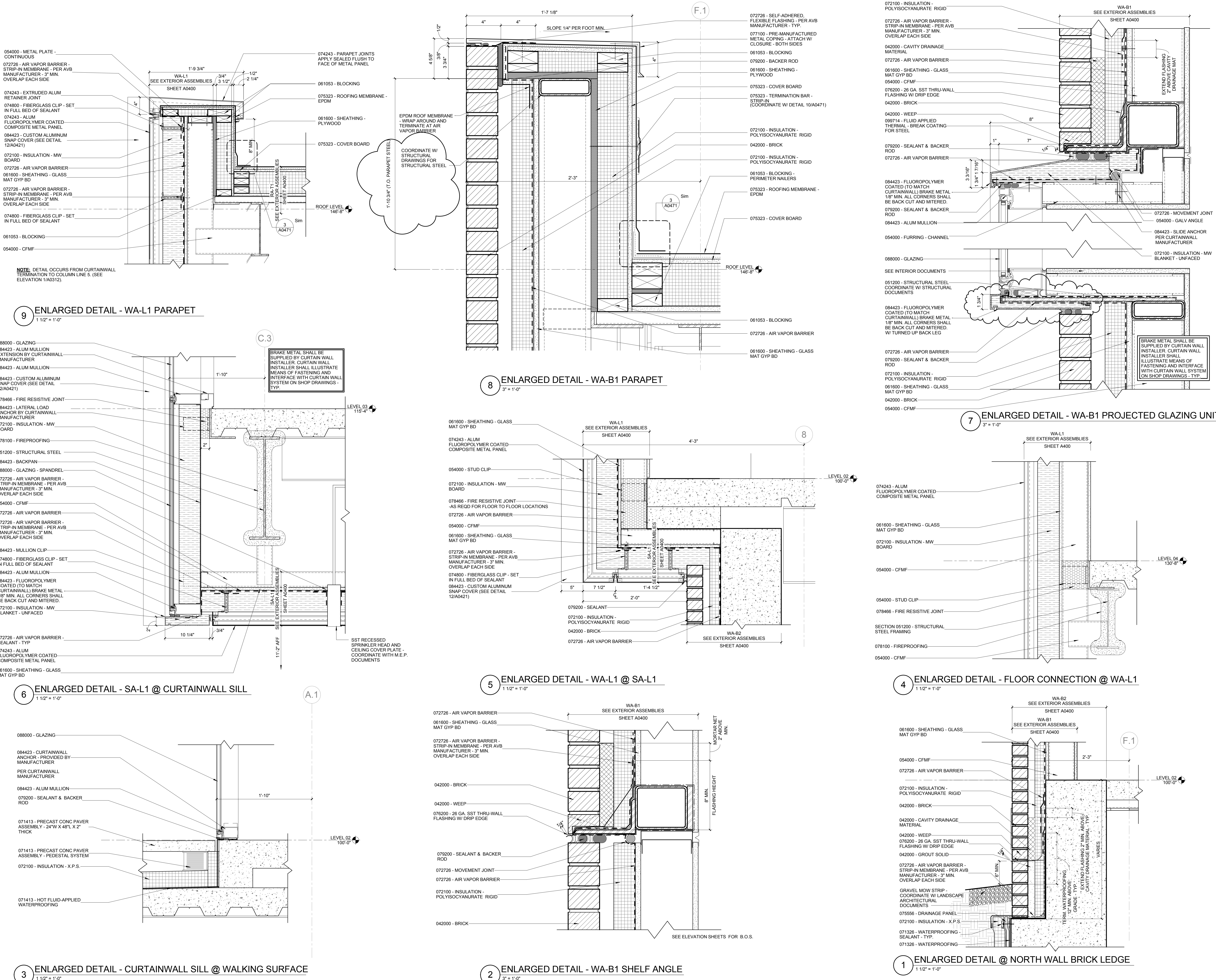
1	ADDENDUM 1-1	29 JAN 2016
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EXTERIOR SECTION DETAILS

A0451

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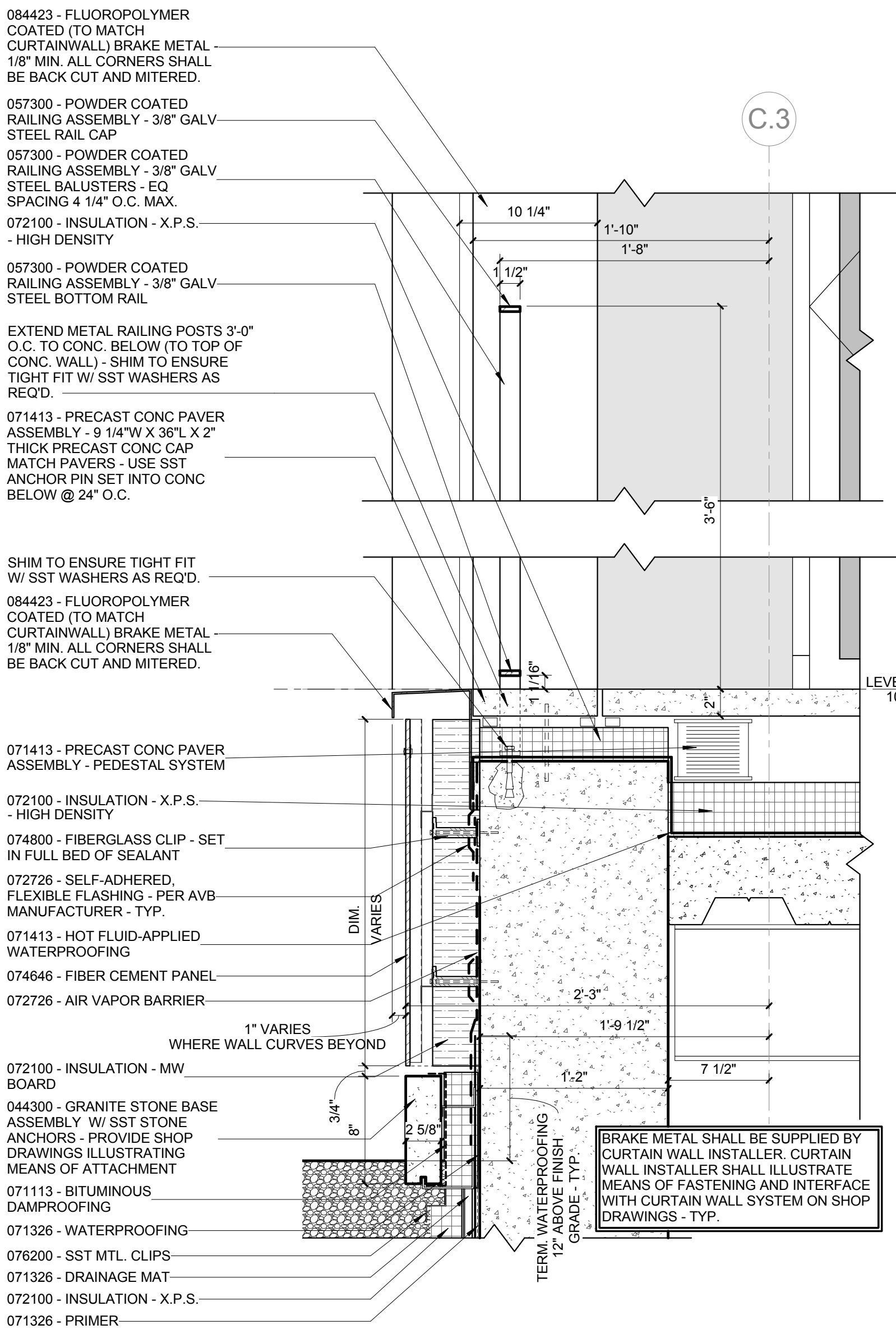
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No.	Description	Date

Drawing Title:

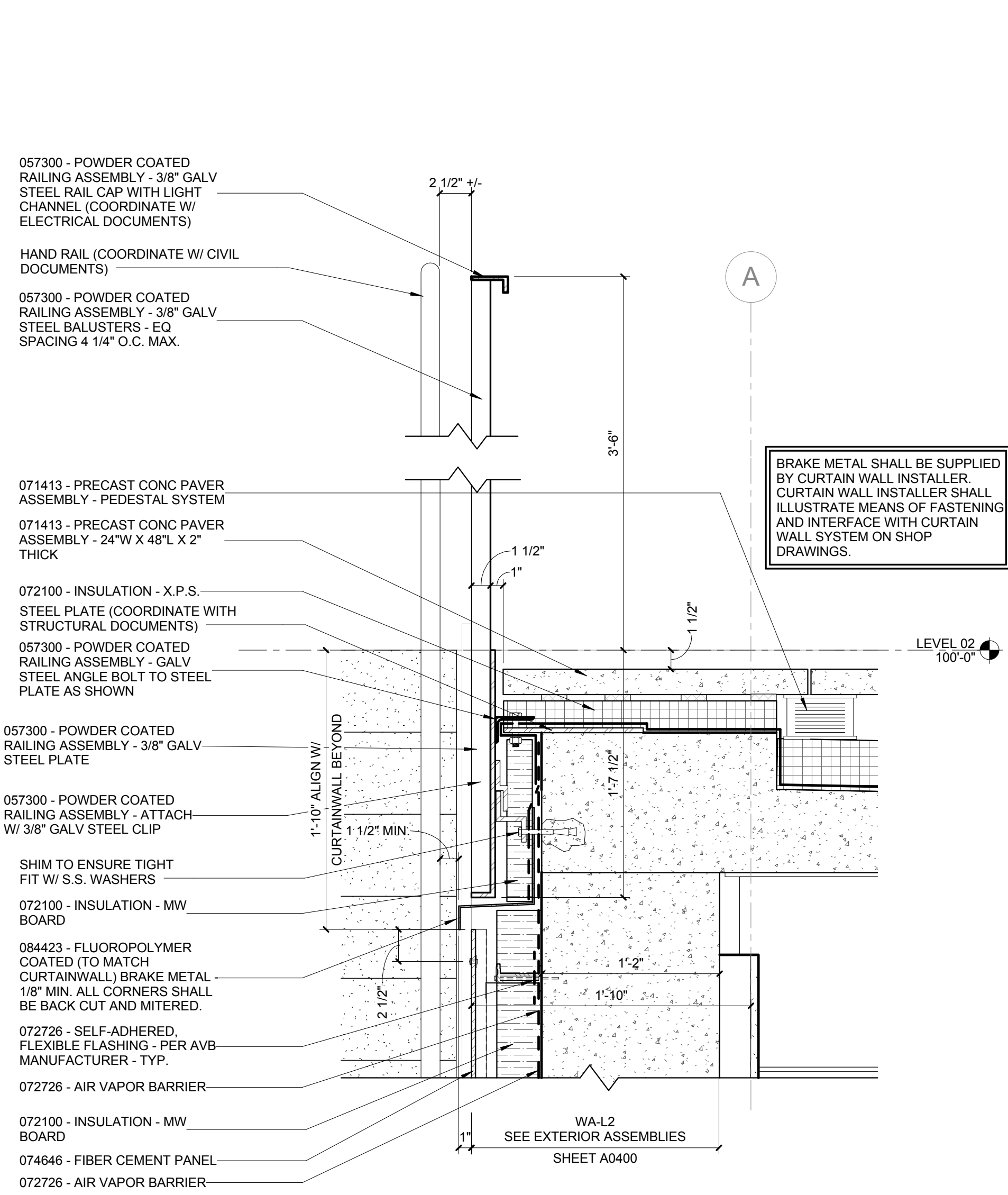
EXTERIOR SECTION
DETAILS

Project No.: 04561.01 Checked by:

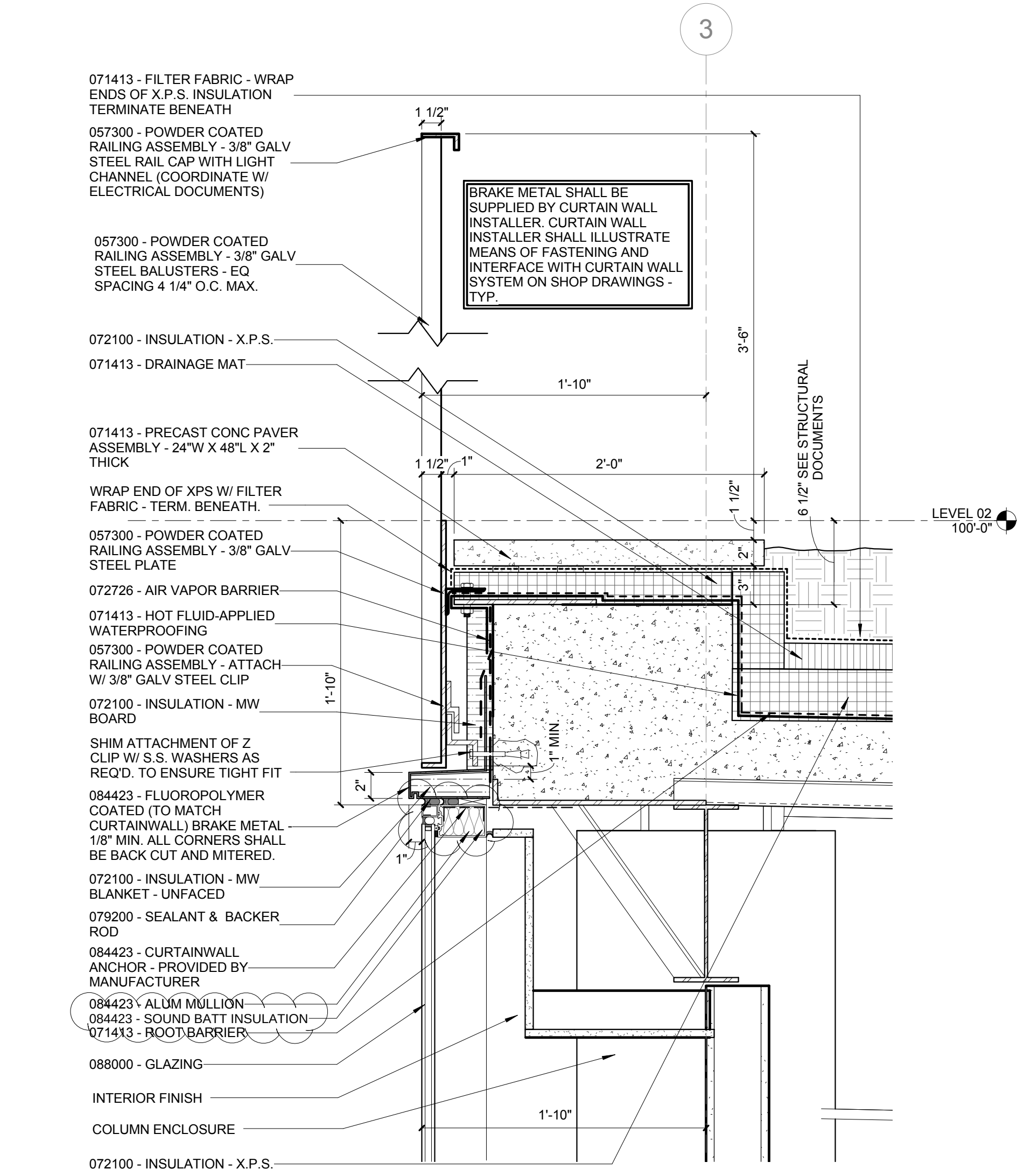
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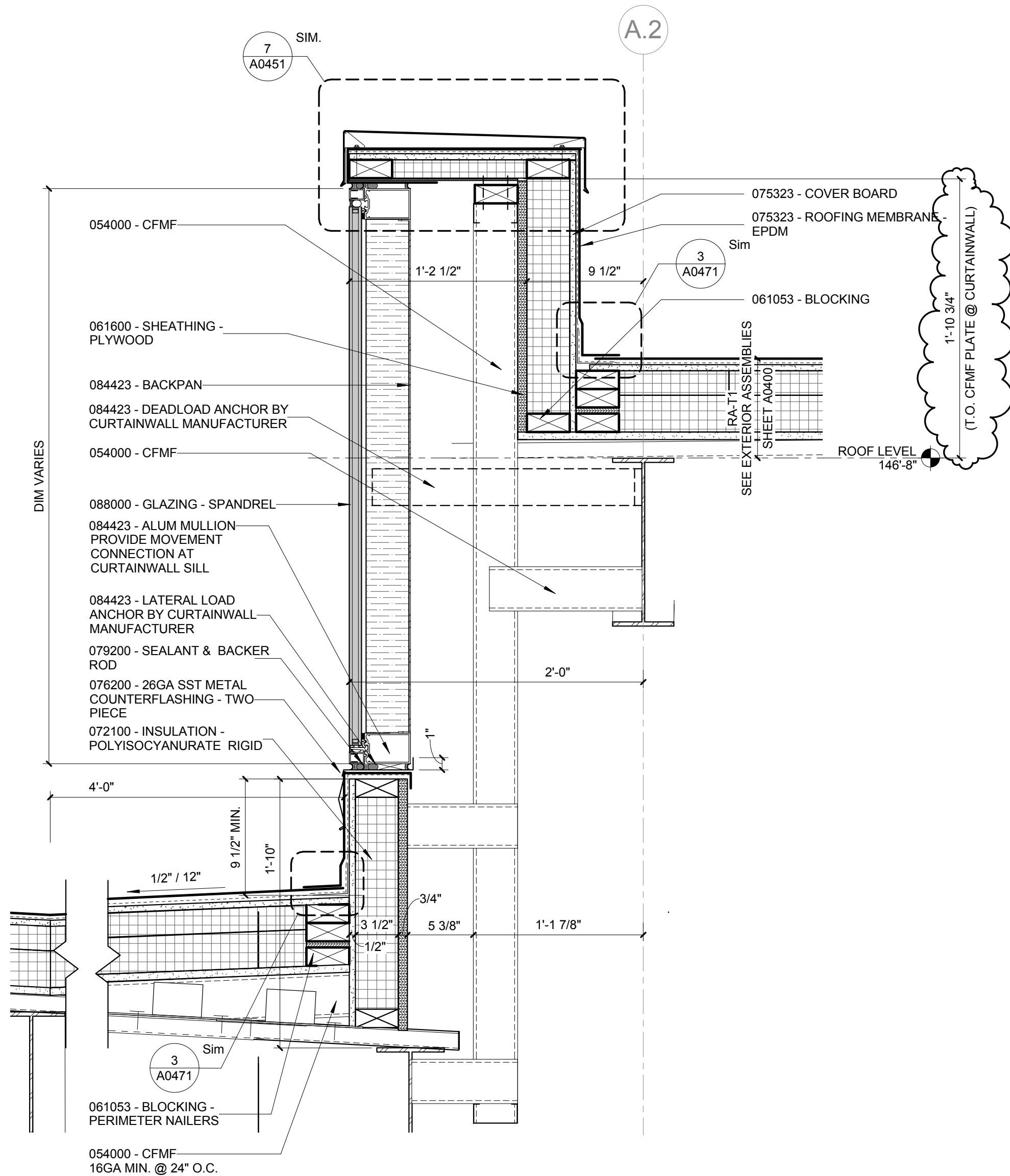
7 ENLARGED DETAIL - WALKING SURFACE @ NORTH AREAWAY
1 1/2" = 1'-0"



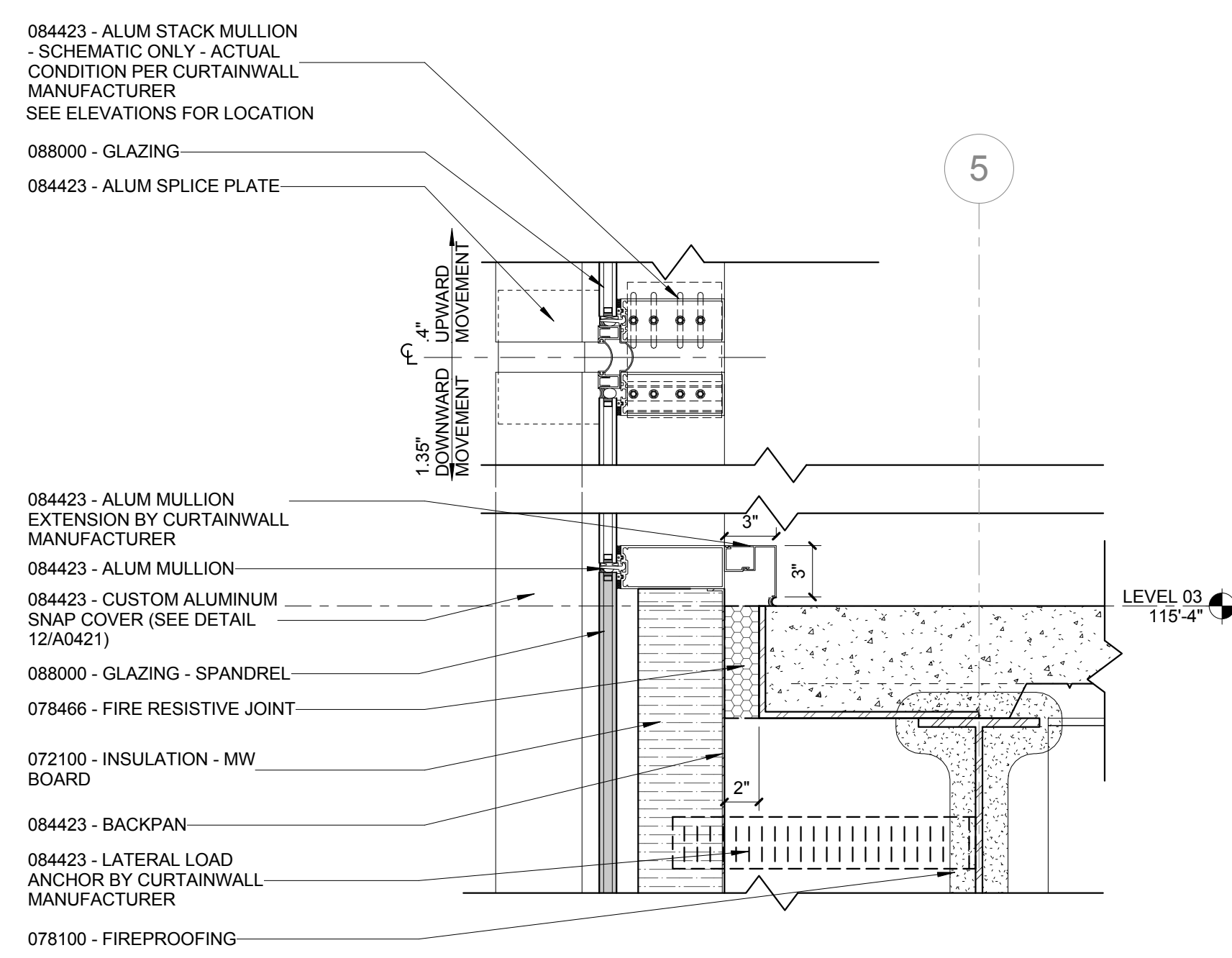
6 ENLARGED DETAIL - WALKING SURFACE @ WA-L2
1 1/2" = 1'-0"



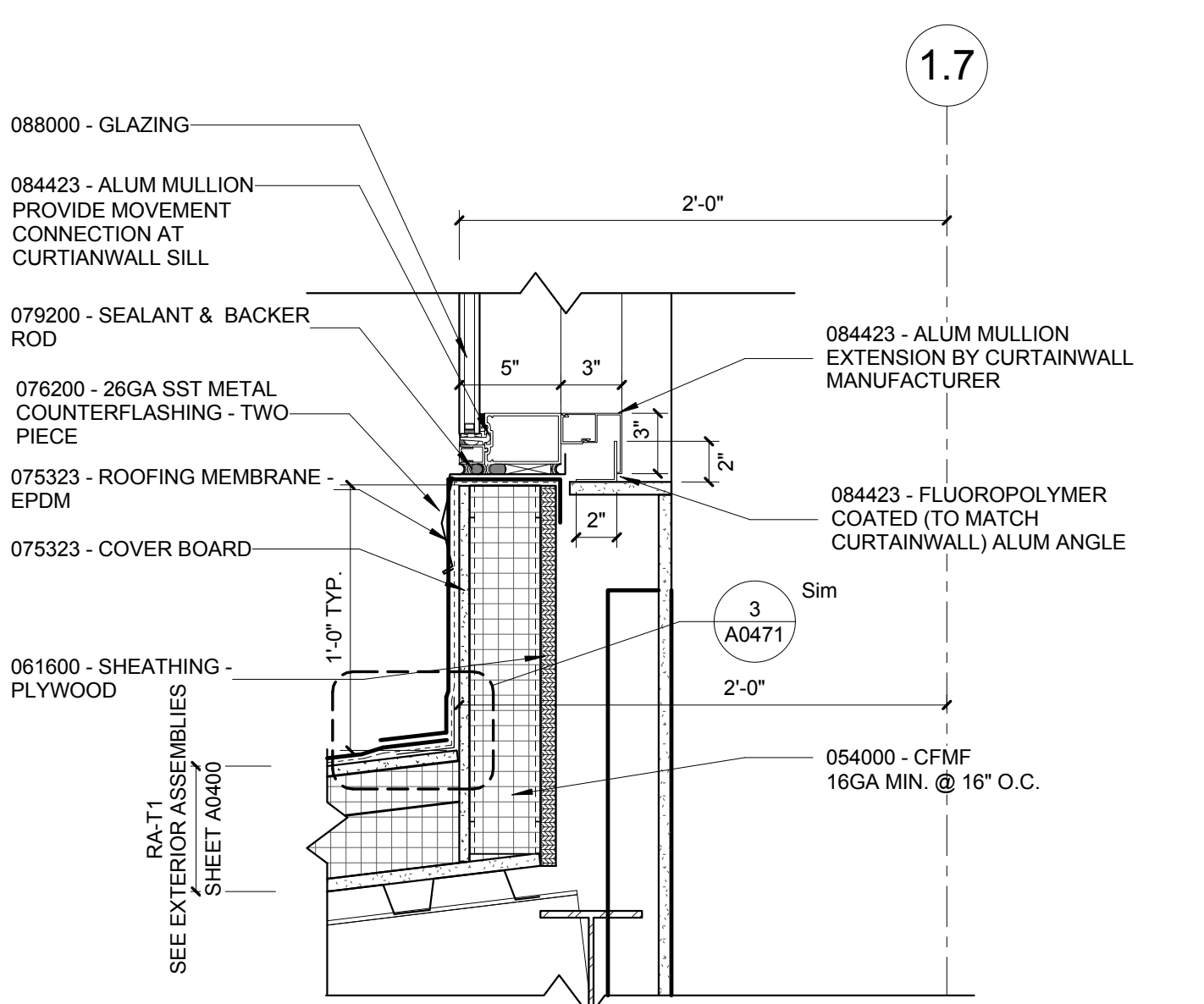
3 ENLARGED DETAIL - GREEN ROOF @ WEST CURTAINWALL
1 1/2" = 1'-0"



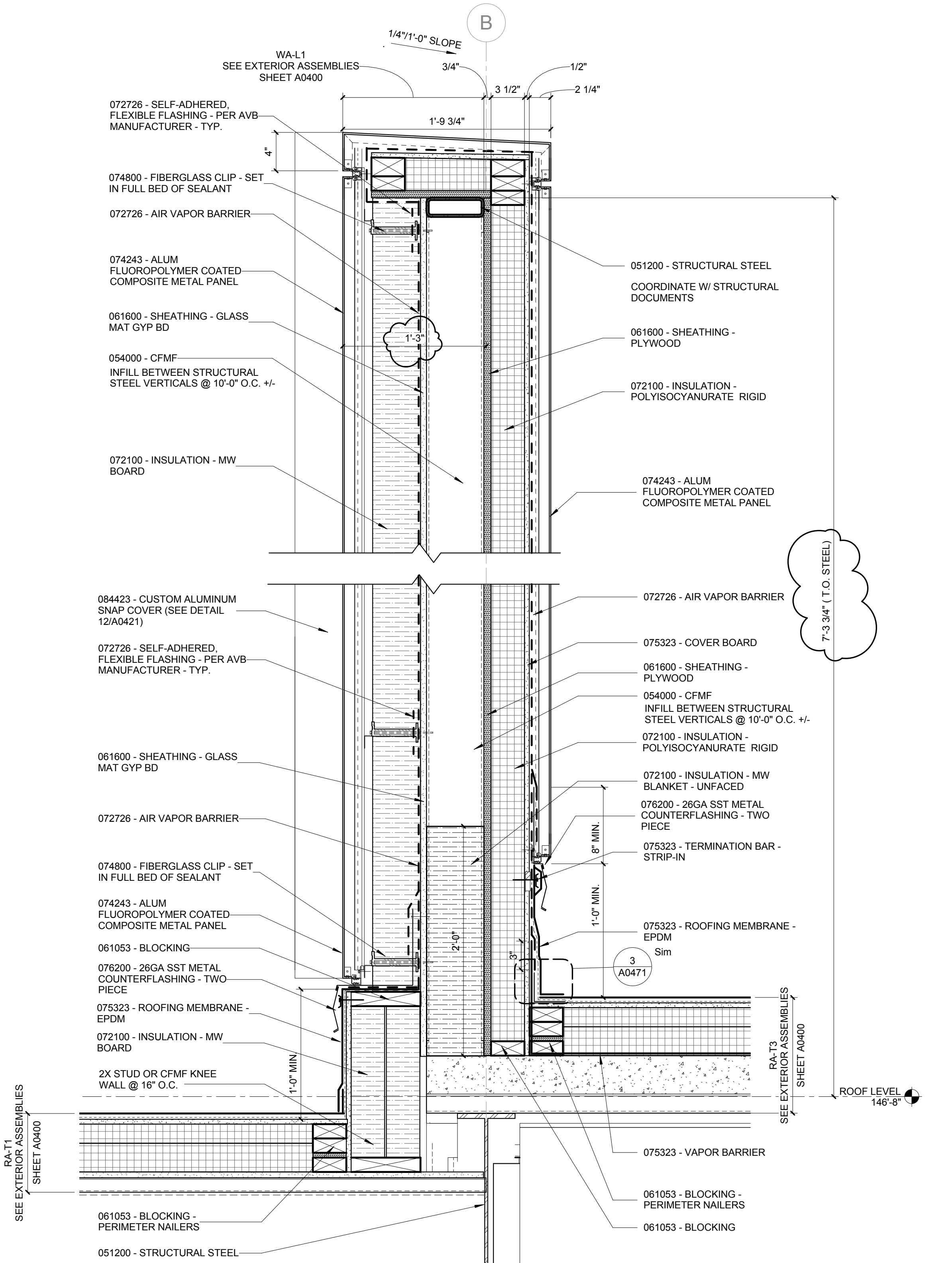
2 ENLARGED DETAIL - CURTAINWALL PARAPET
1 1/2" = 1'-0"



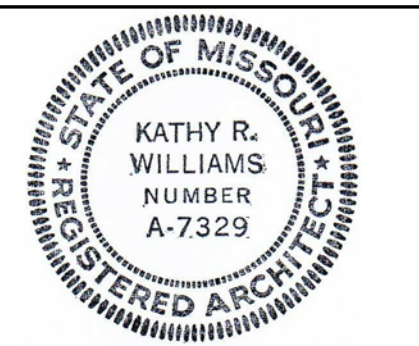
5 ENLARGED DETAIL - CURTAINWALL FLOOR CONNECTION
1 1/2" = 1'-0"



4 ENLARGED DETAIL - WEST WALL CURTAINWALL SILL @ 4TH FLR
1 1/2" = 1'-0"



1 ENLARGED DETAIL - MECHANICAL SCREEN
1 1/2" = 1'-0"



Kathy R. Williams
3.16.16

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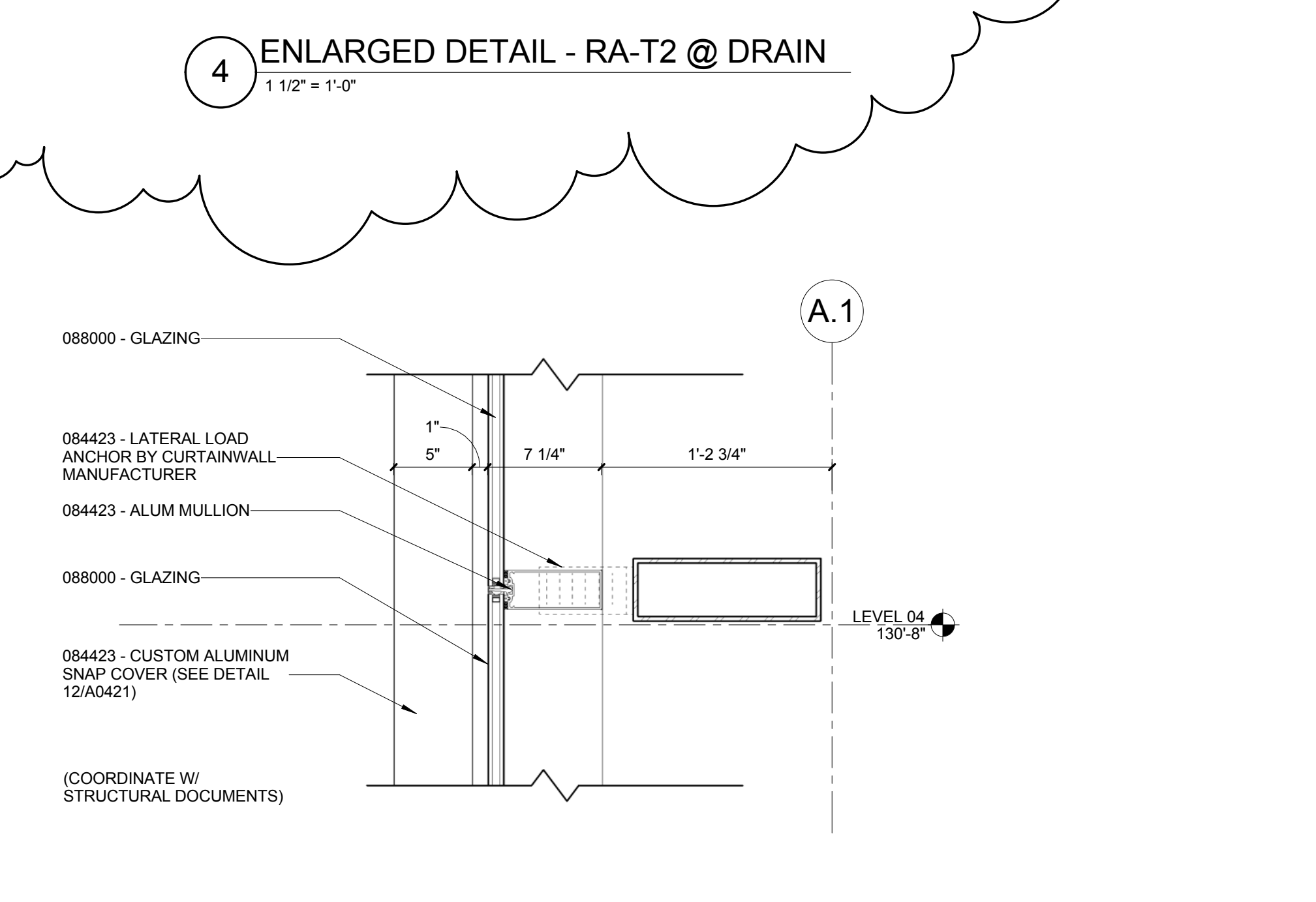
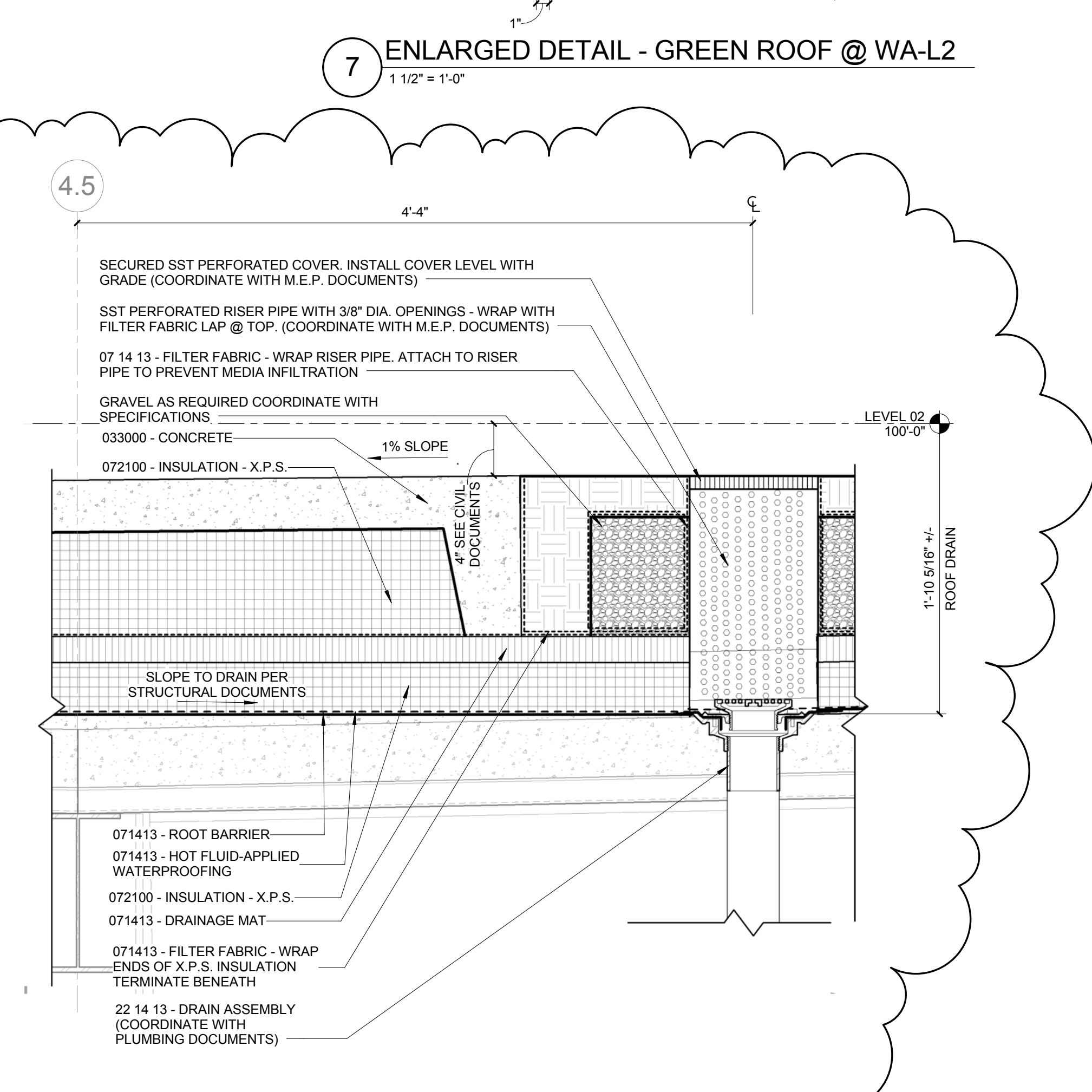
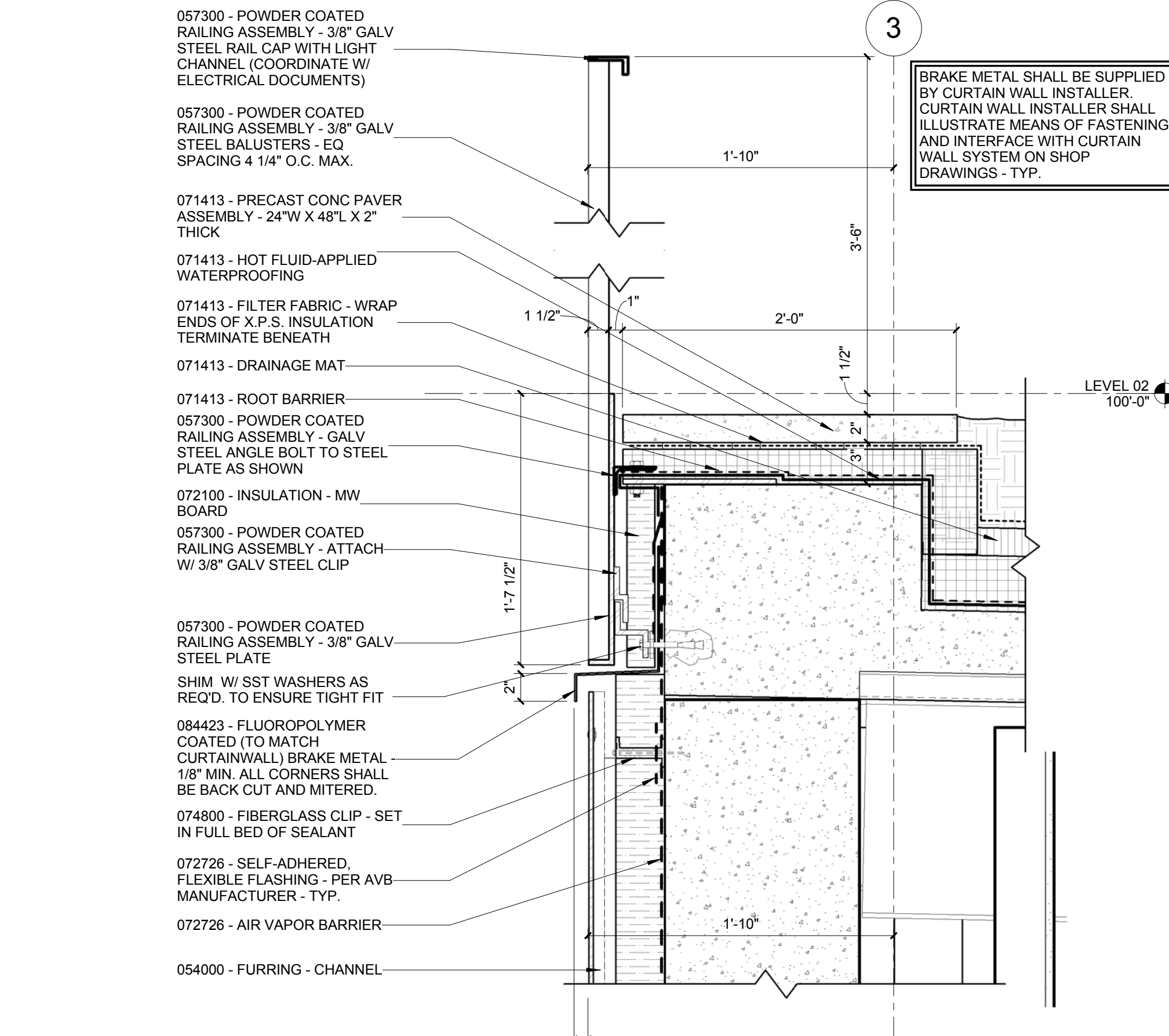
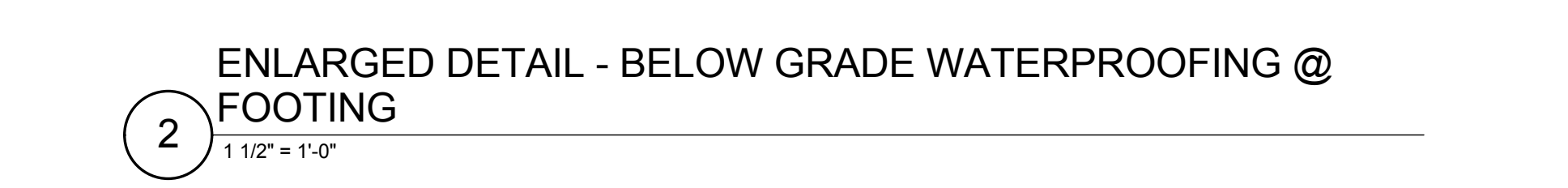
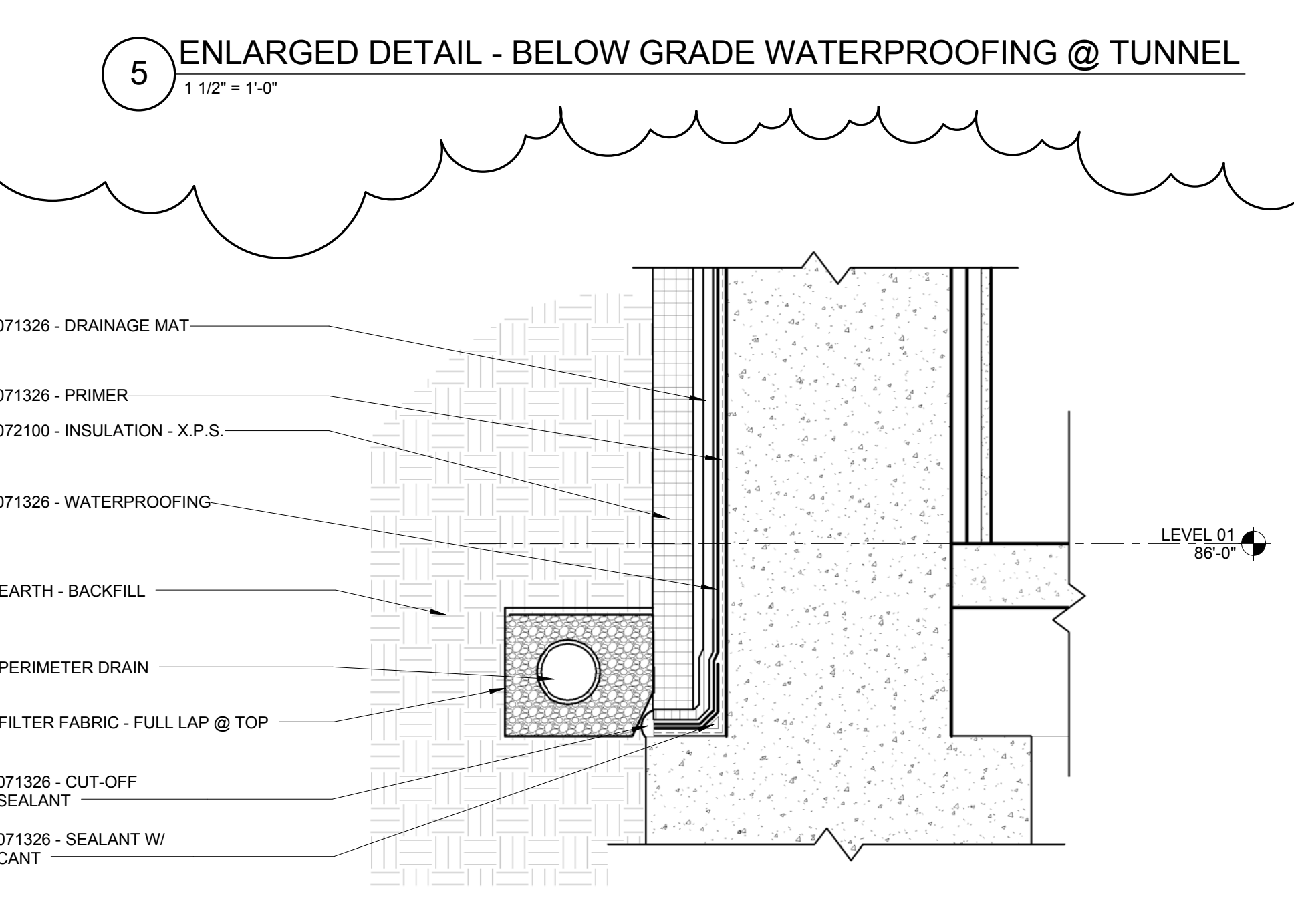
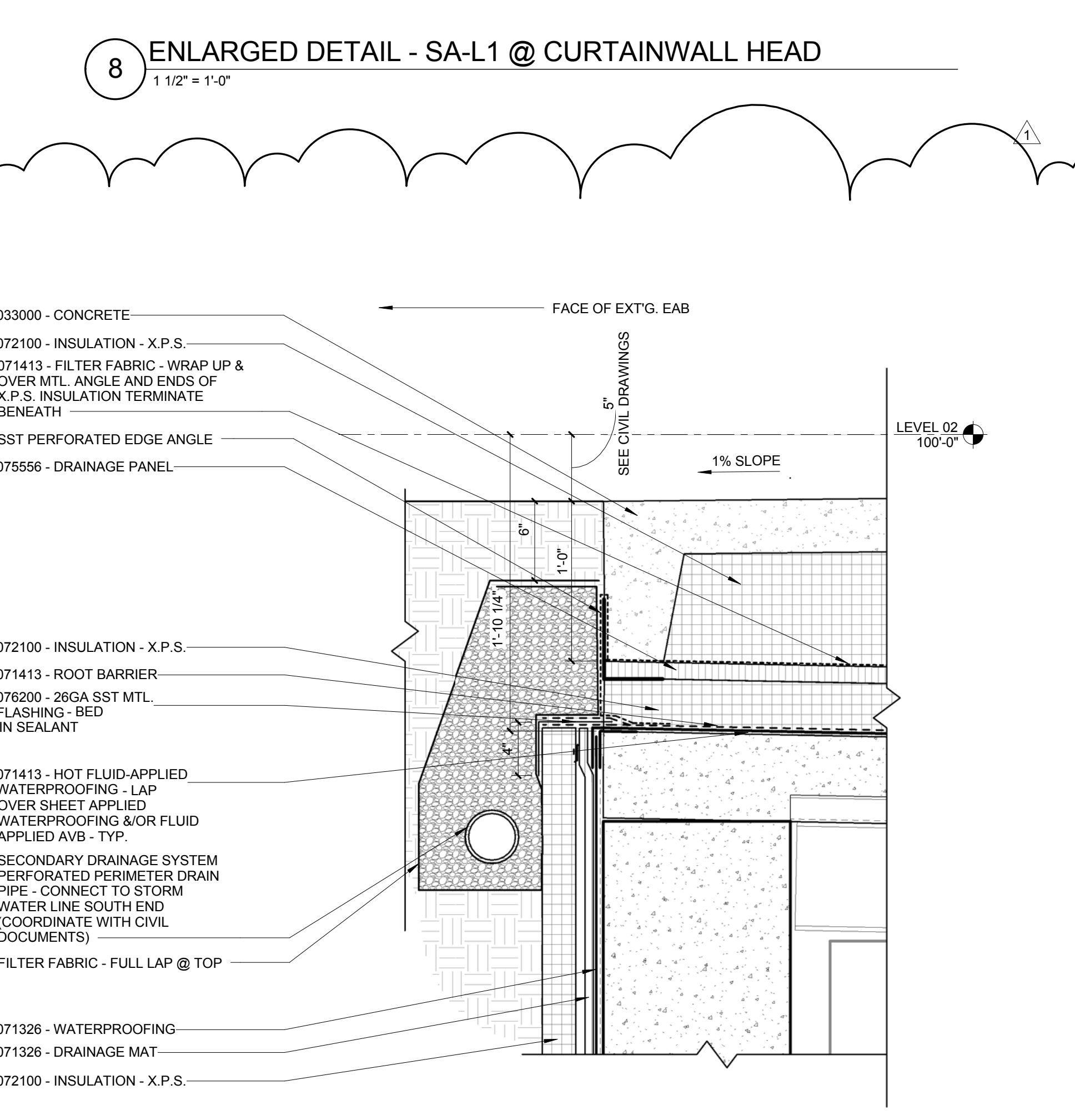
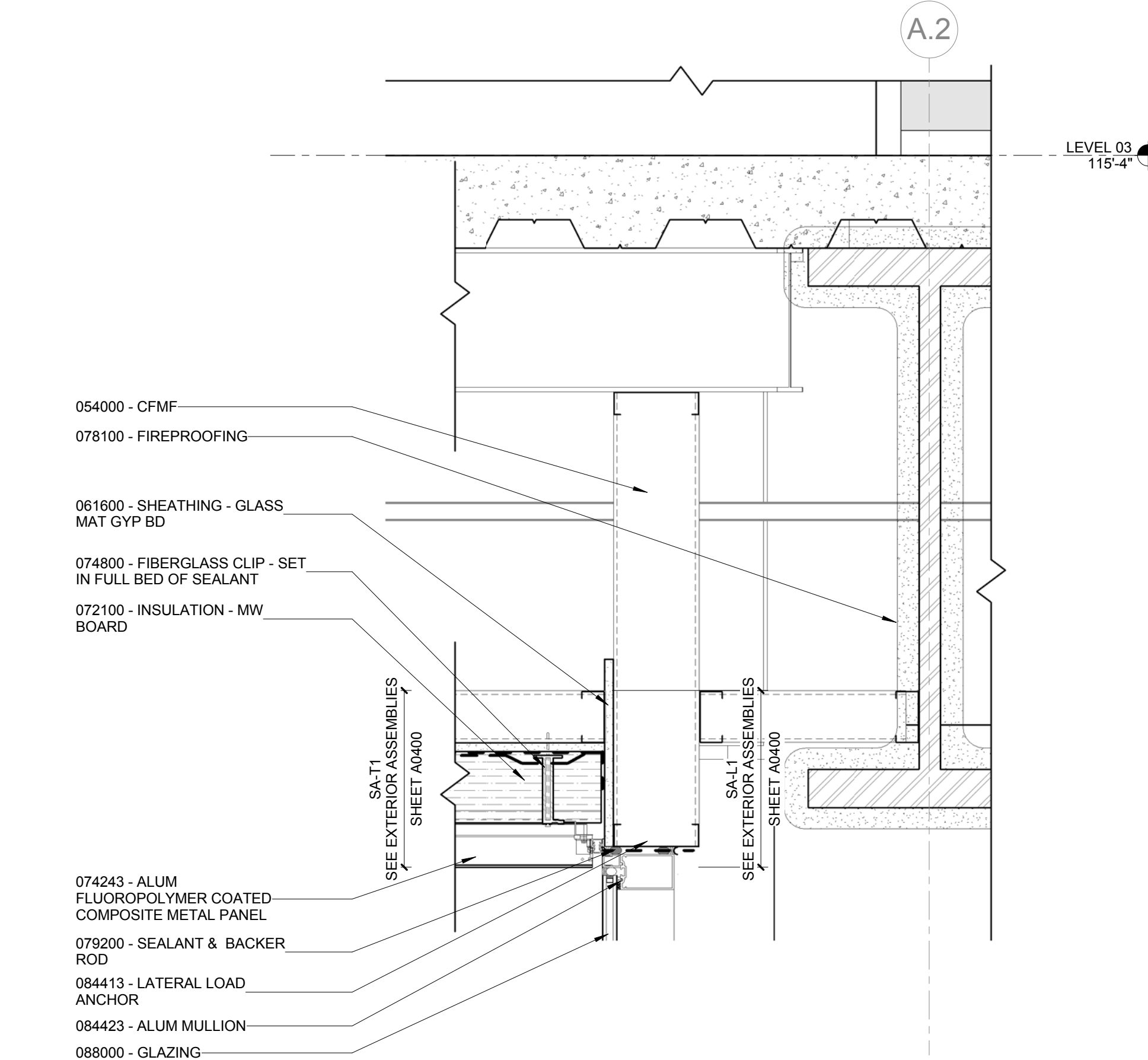
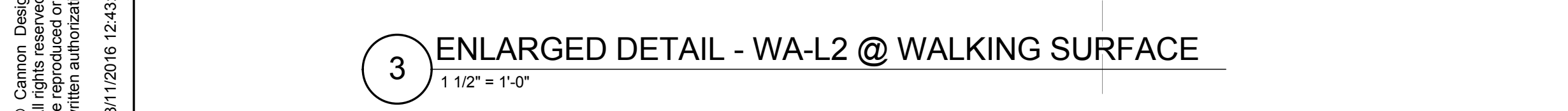
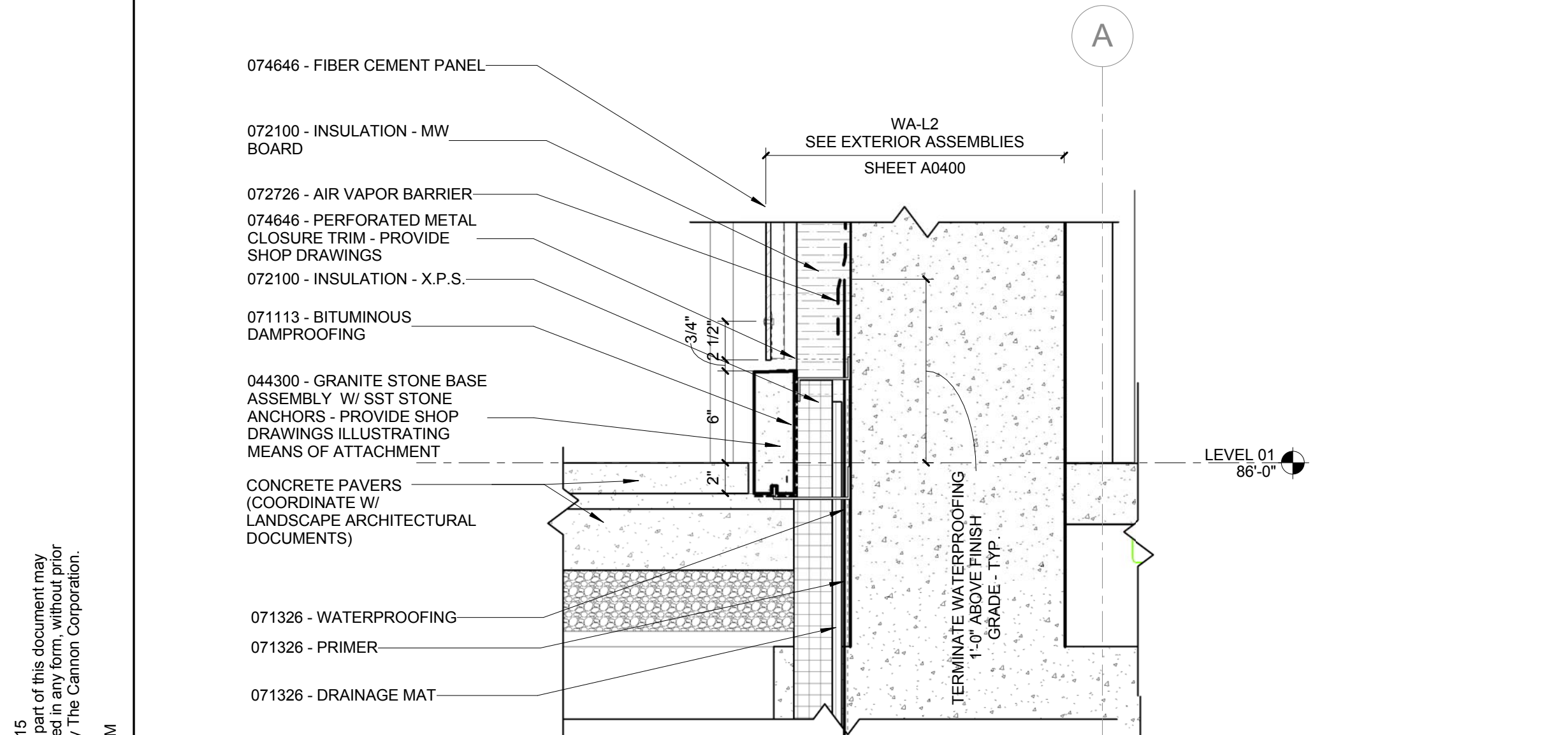
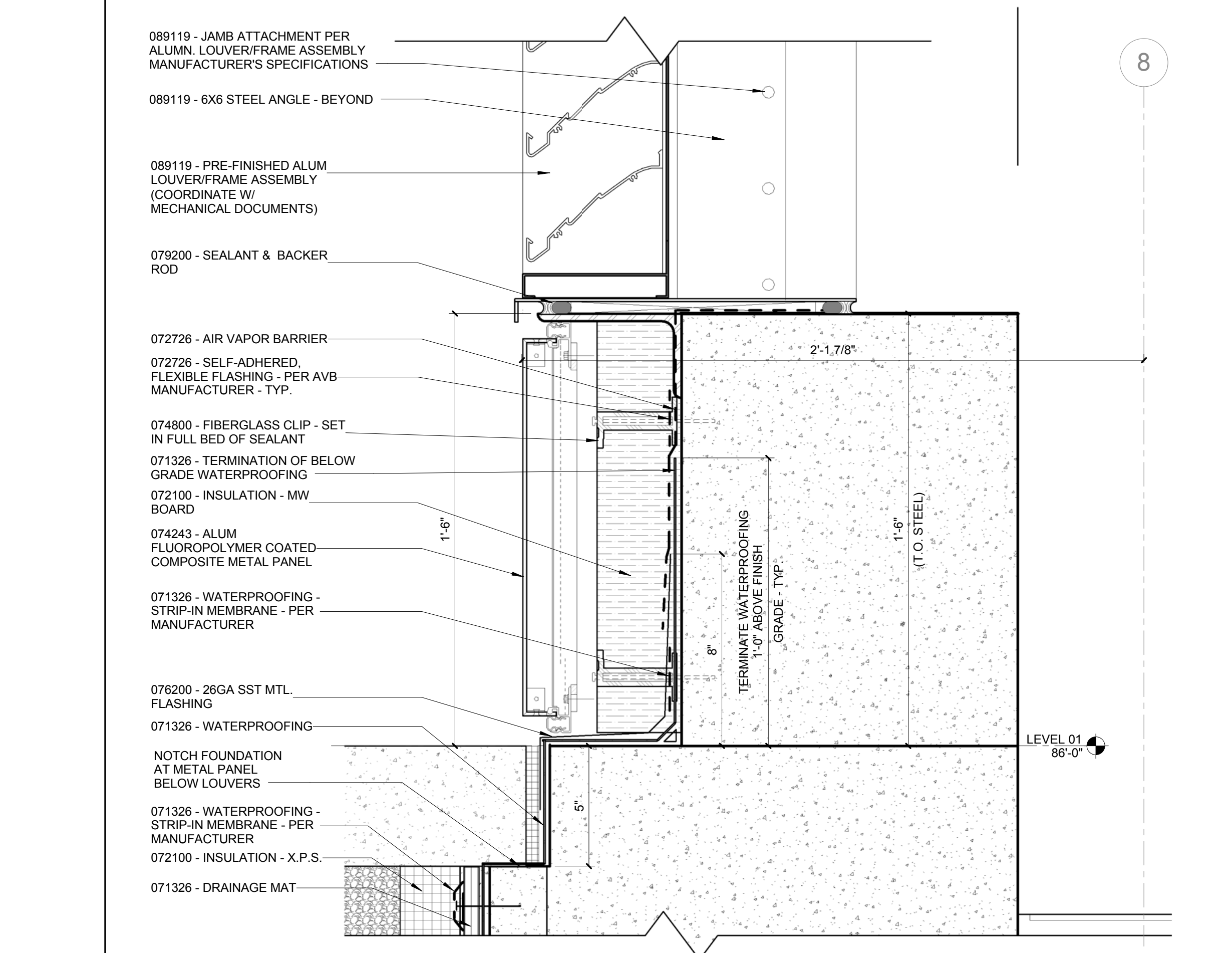
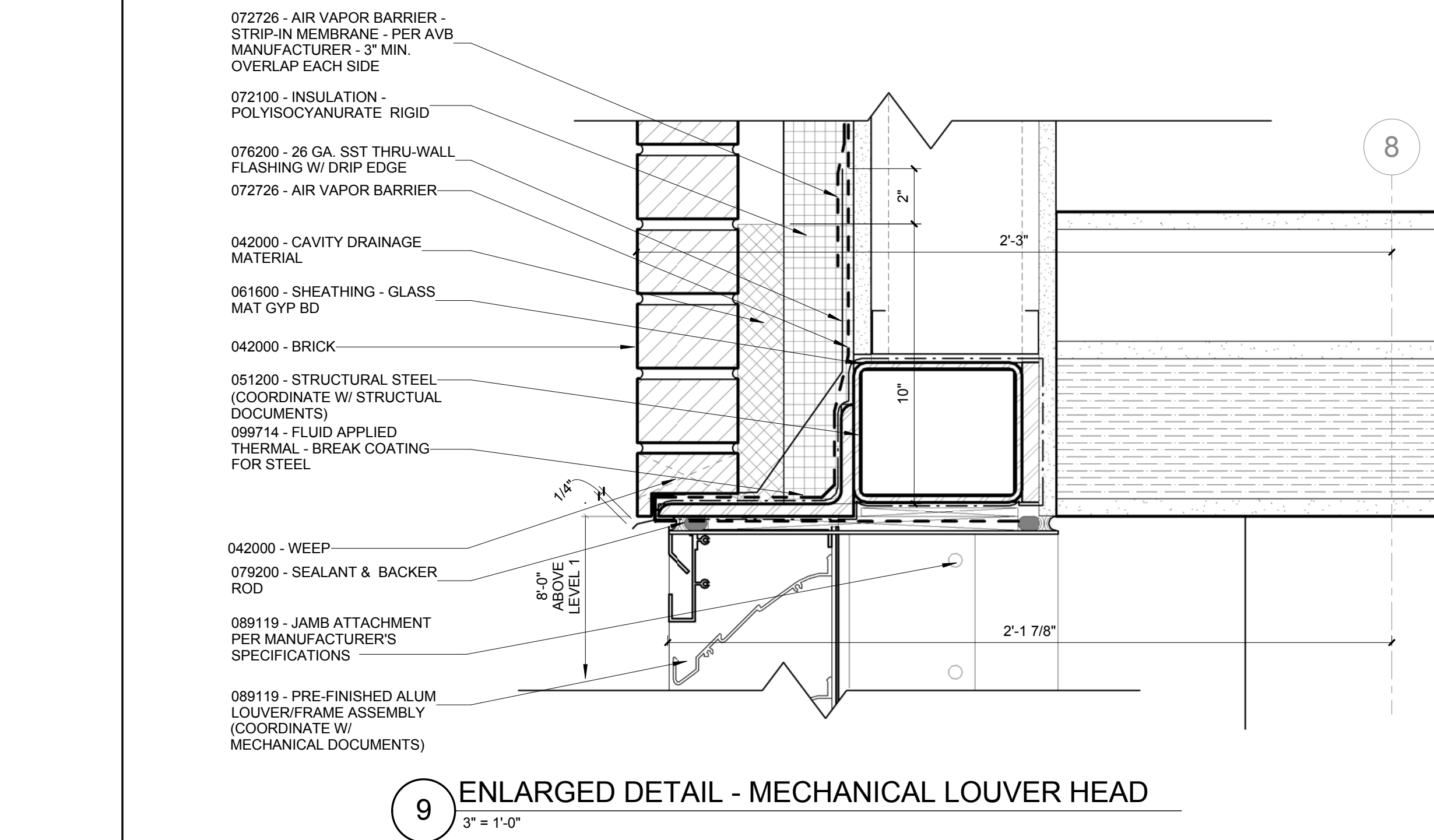
1	ADDENDUM 1-7	16 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP1)	15 JAN 2016
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Drawing Title:

EXTERIOR SECTION DETAILS

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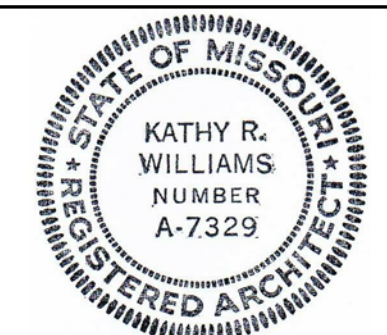
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1 1/2" = 1'-0"

$$3'' = 1'-0''$$

8) $1\frac{1}{2}'' = 1'-0''$

5) $3'' = 1'-0''$

$$2 \overline{) 3'' = 1'-0''}$$
$$3'' = 1'-0''$$
$$3'' = 1'-0''$$
$$1\frac{1}{2}'' = 1'-0''$$


Kathy R. Wilkins
3.16.16

CONFORMED SET 01 JUL 2016

2	ADDENDUM 1-7	16 MAR 2016
1	ADDENDUM 1-1	29 JAN 2016
-	ISSUED FOR CONSTRUCTION (BP1)	15 JAN 2016
No.	Description	Date

Drawing Title:

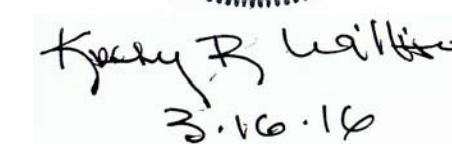
EXTERIOR SECTION DETAILS

Project No.: 04561.01

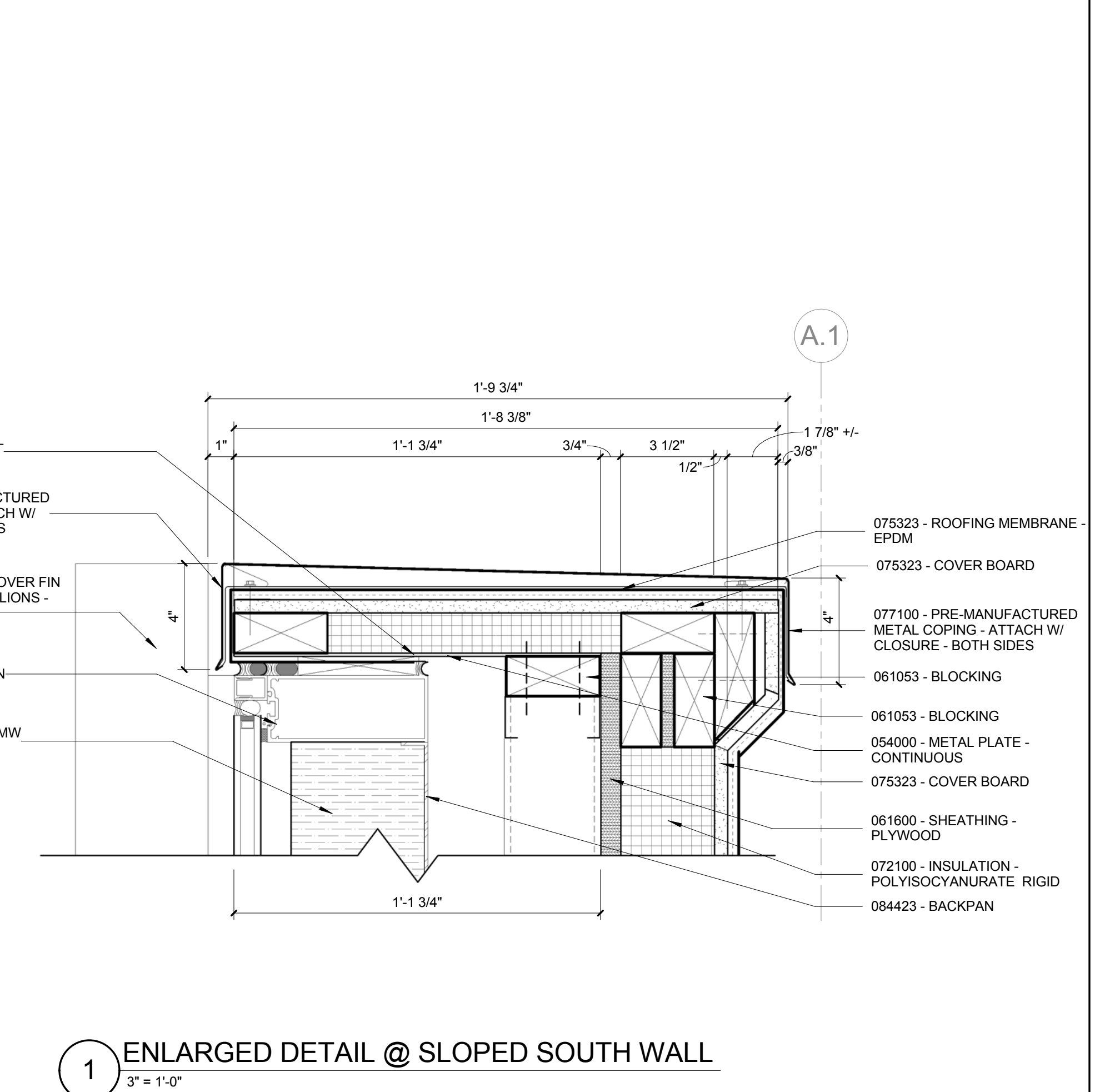
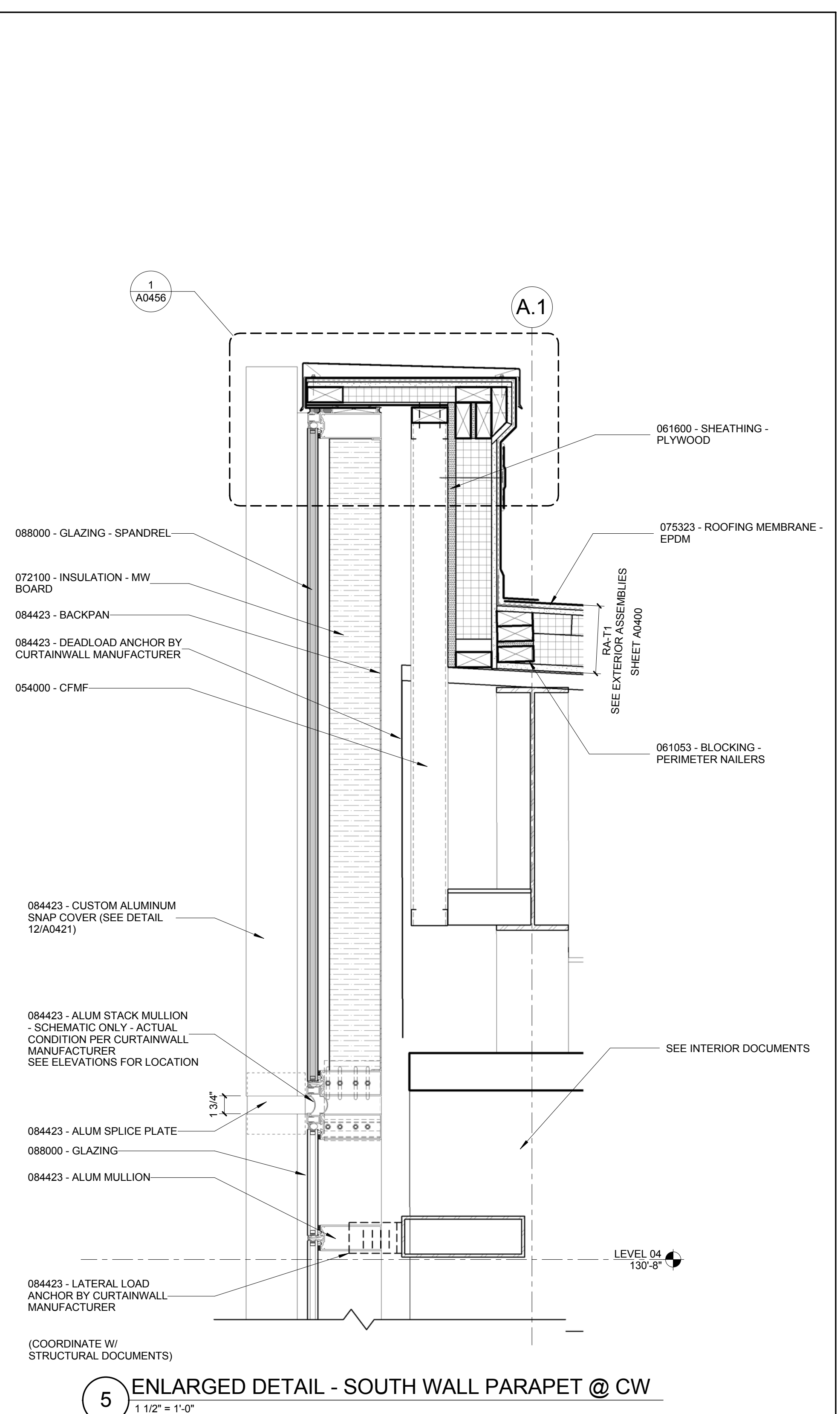
Checked by:

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CONFORMED SET 01 JUL 2016

ISSUED FOR CONSTRUCTION (BP1) 15 JAN 2016

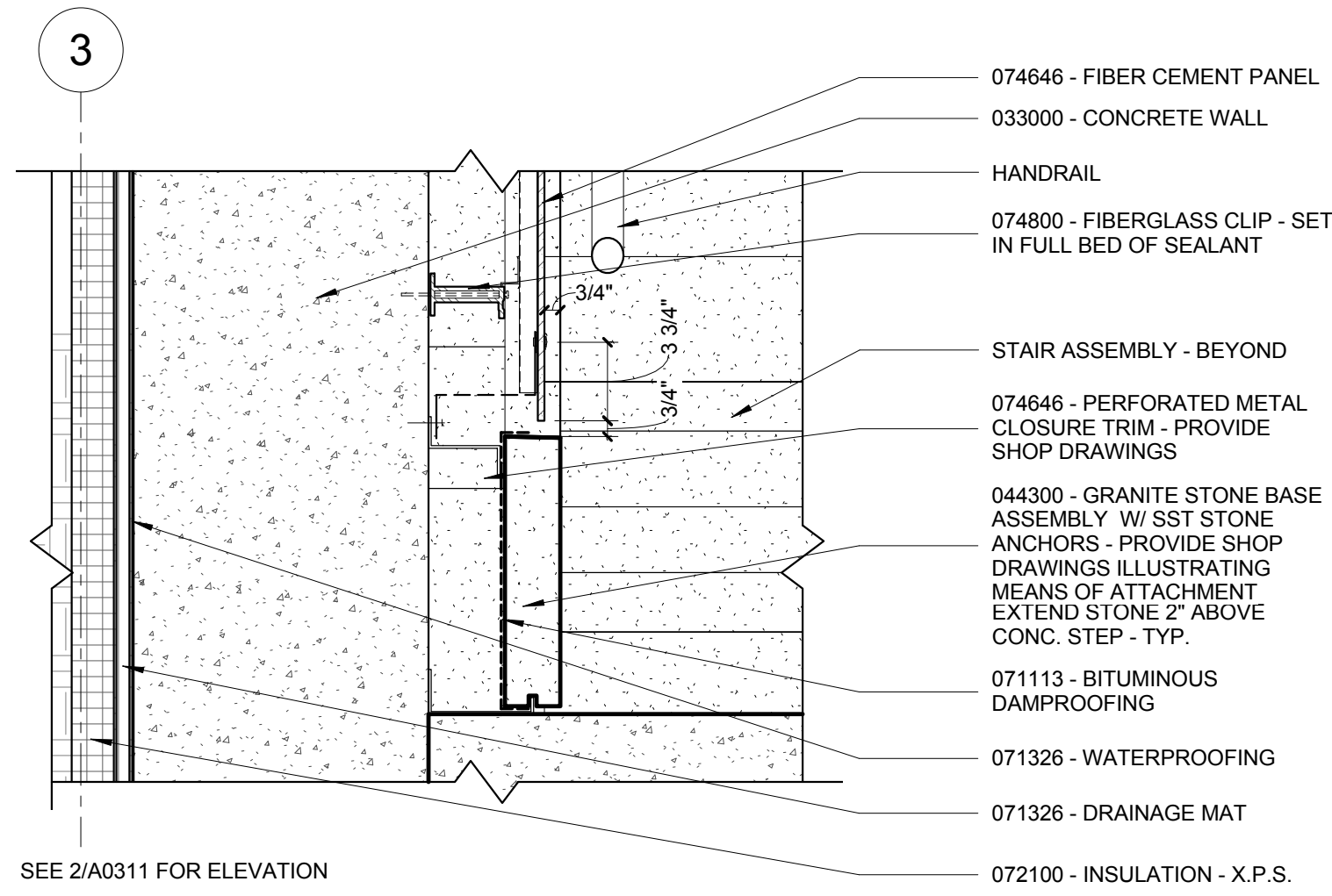
No.	Description	Date
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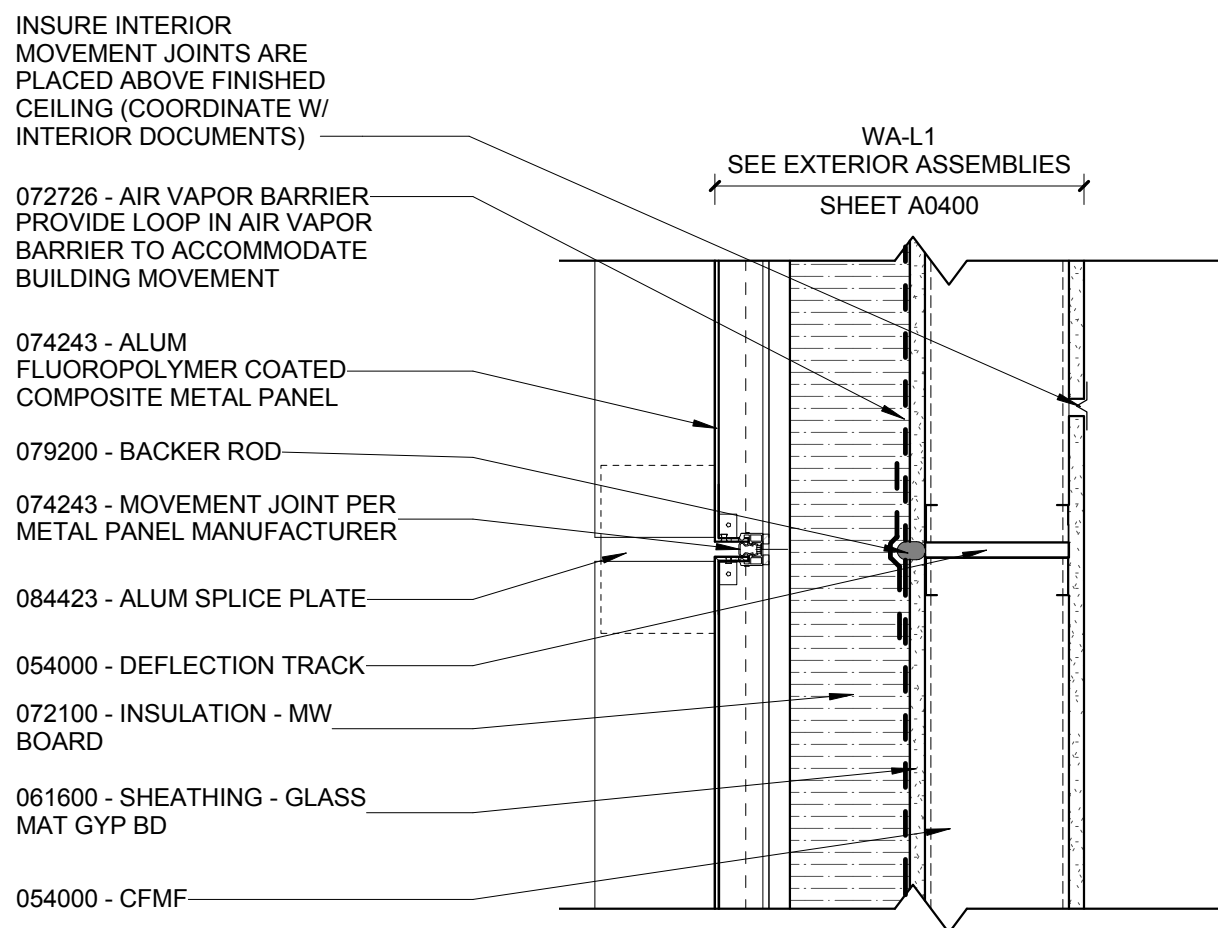
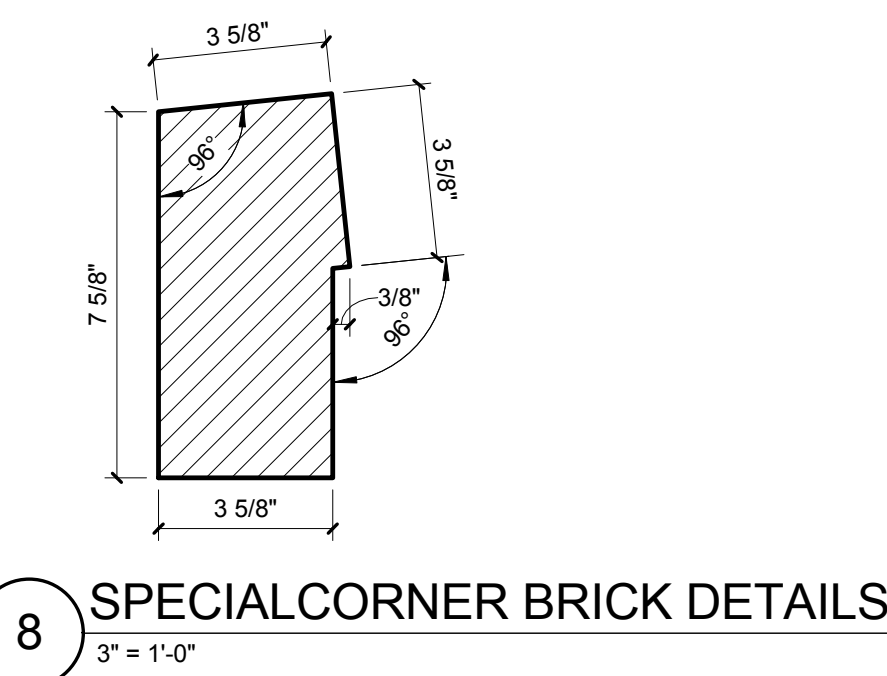
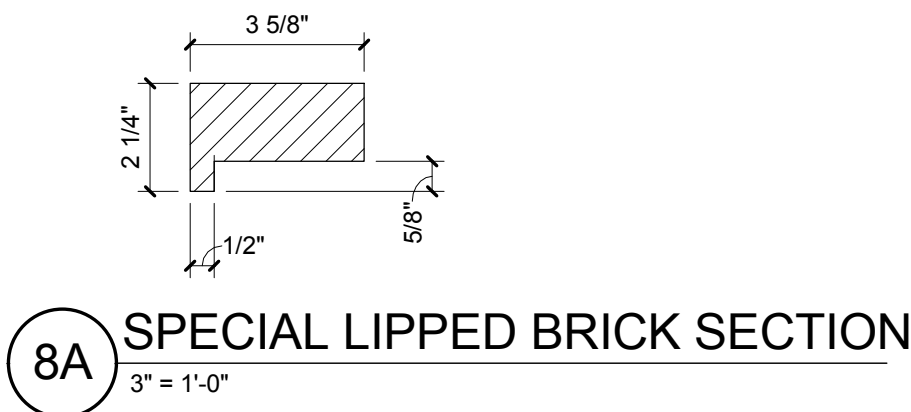
EXTERIOR SECTION
DETAILS

Project No.: 04561.01 Checked by:

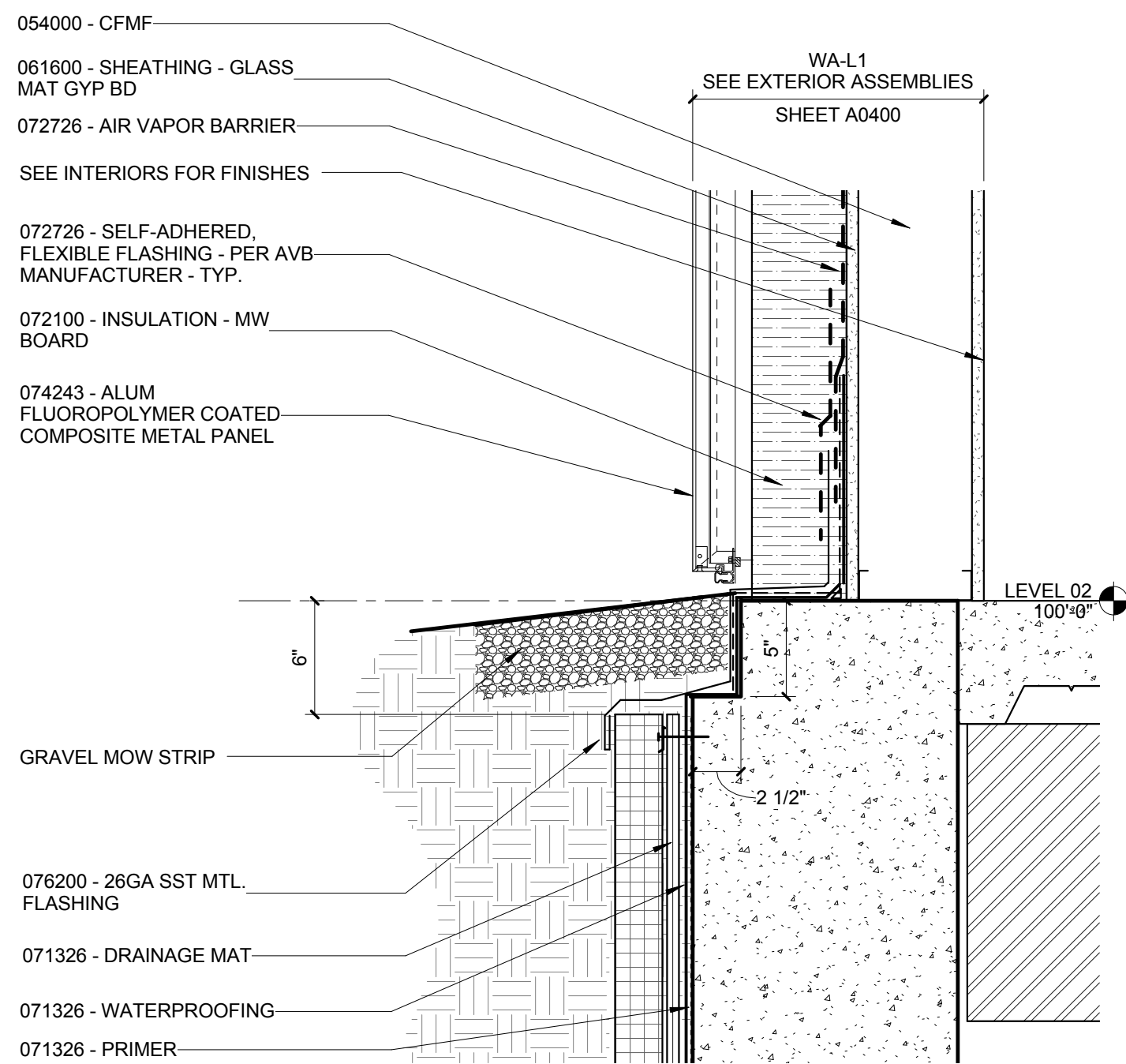
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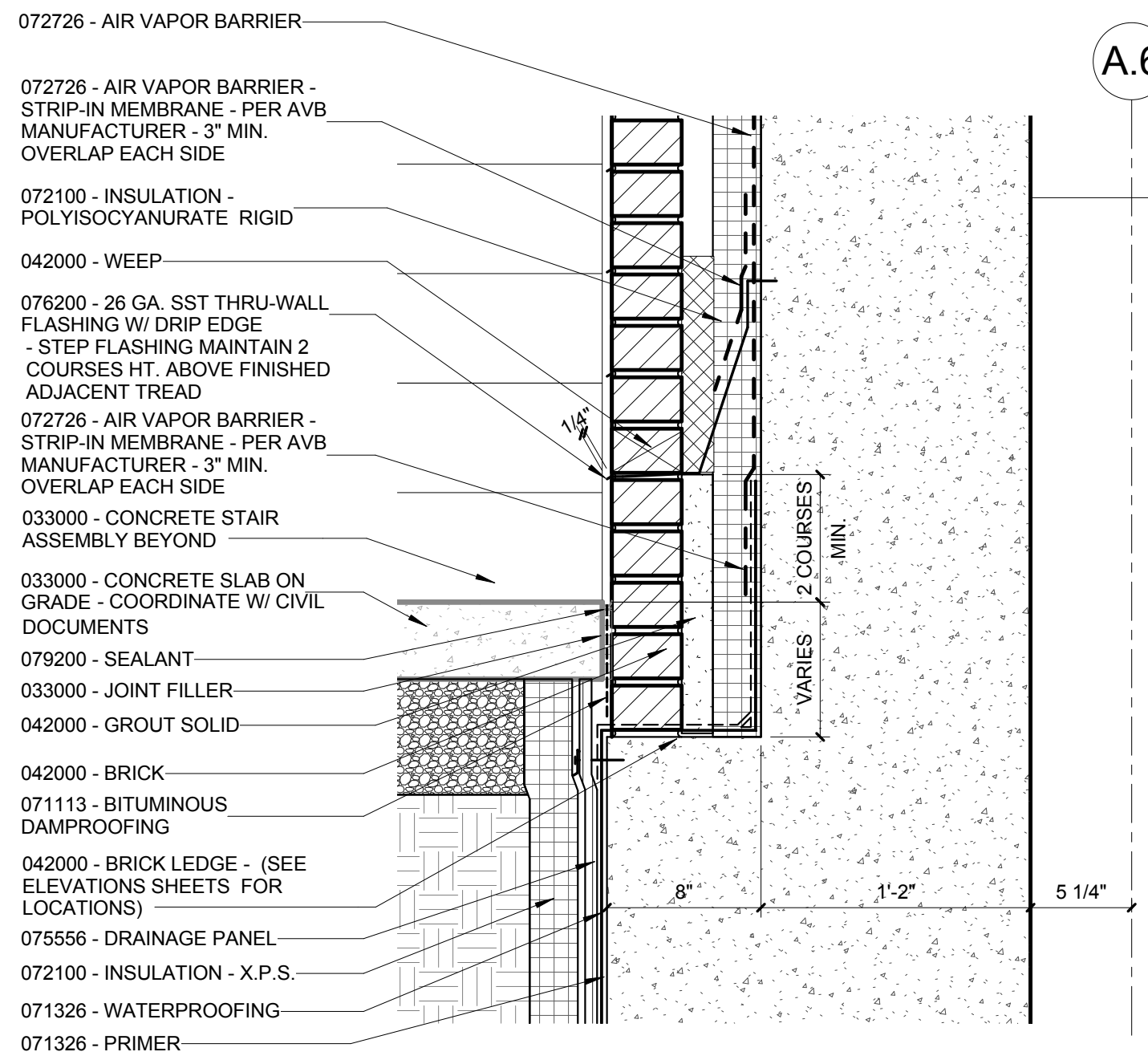
9 ENLARGED DETAIL - WA-L2 @ RETAINING WALL/CONC. STAIRS
1 1/2" = 1'-0"



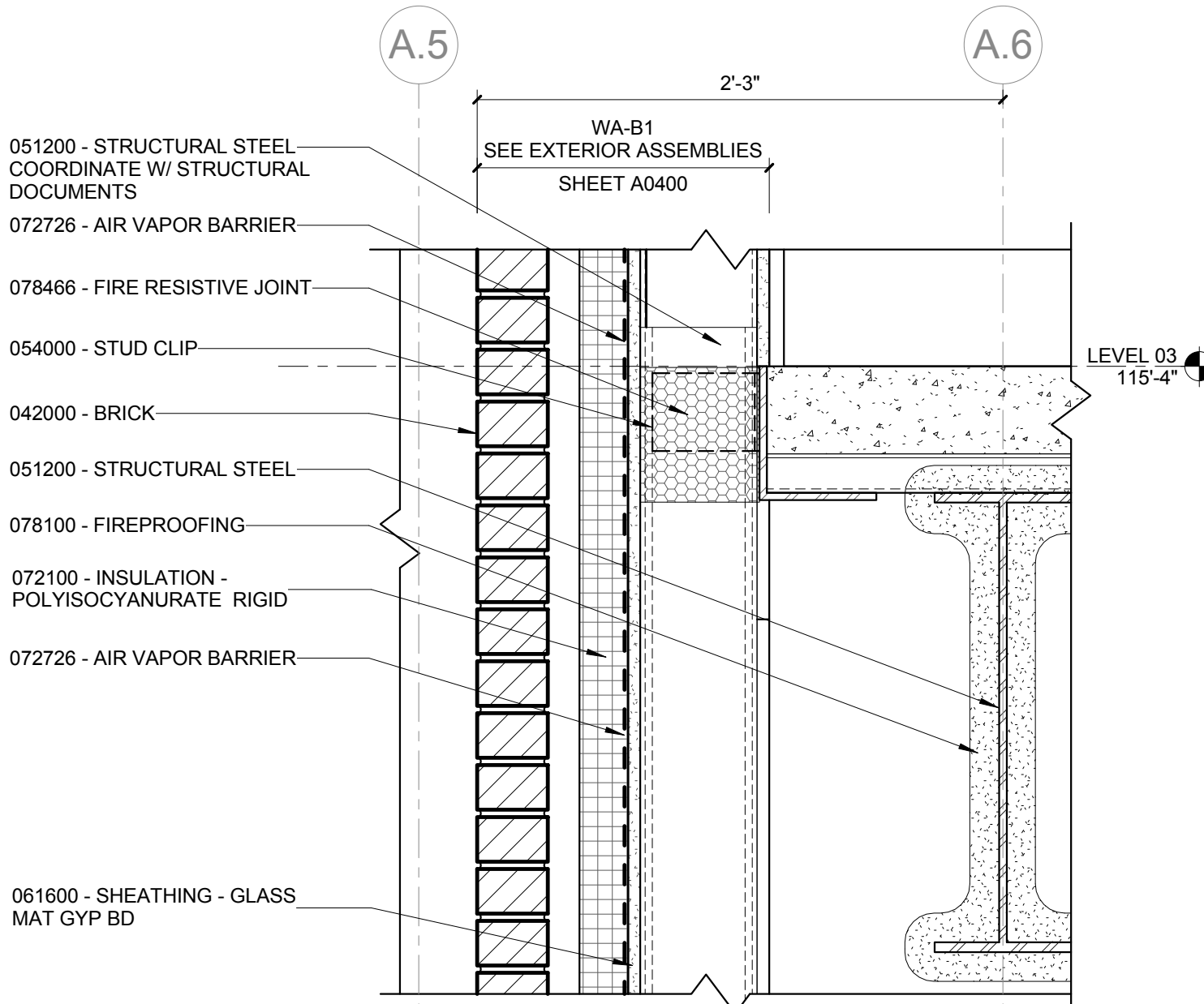
7 ENLARGED DETAIL - WA-L1 MOVEMENT JOINT
1 1/2" = 1'-0"



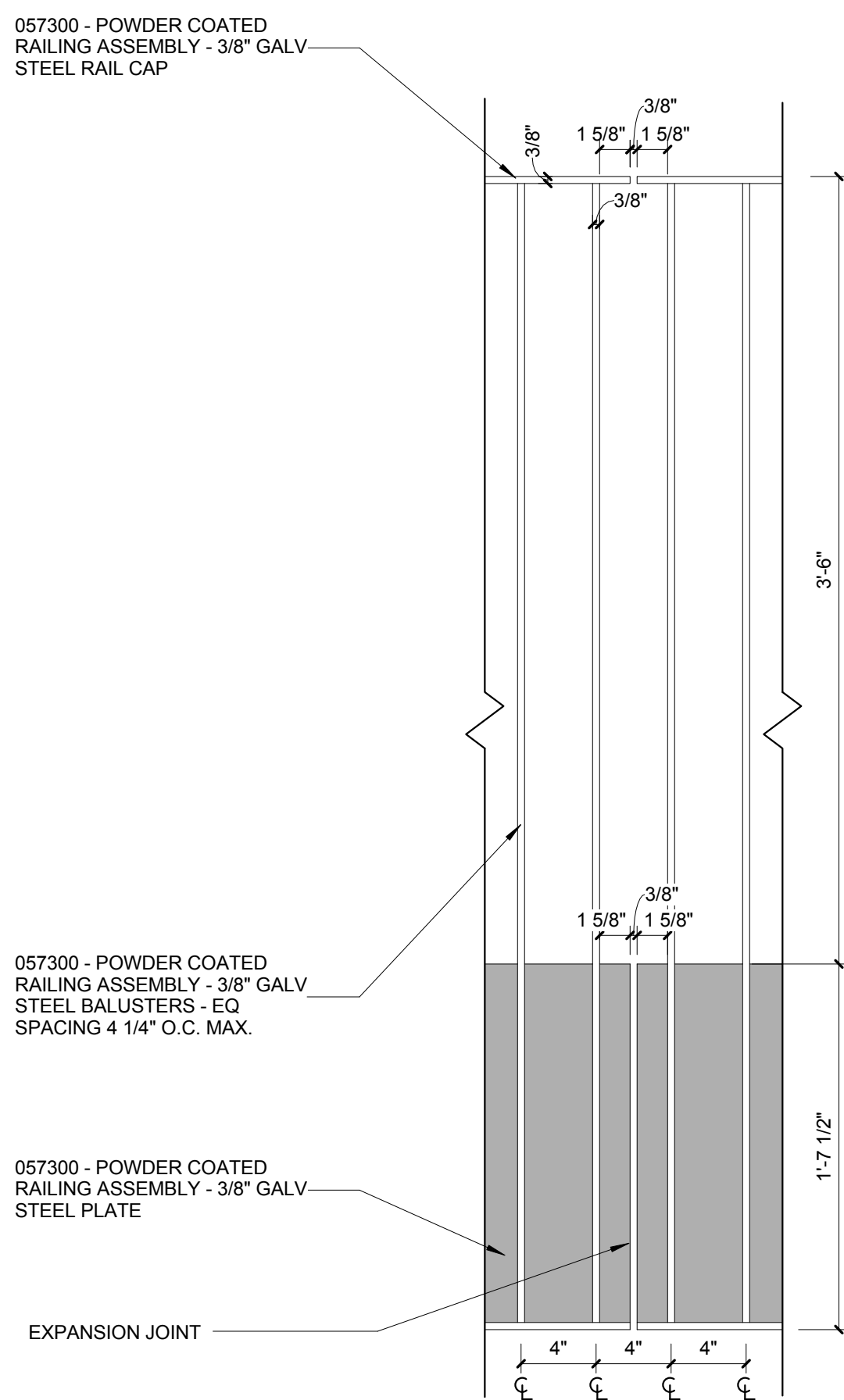
6 ENLARGED DETAIL - WA-L1 SILL
1 1/2" = 1'-0"



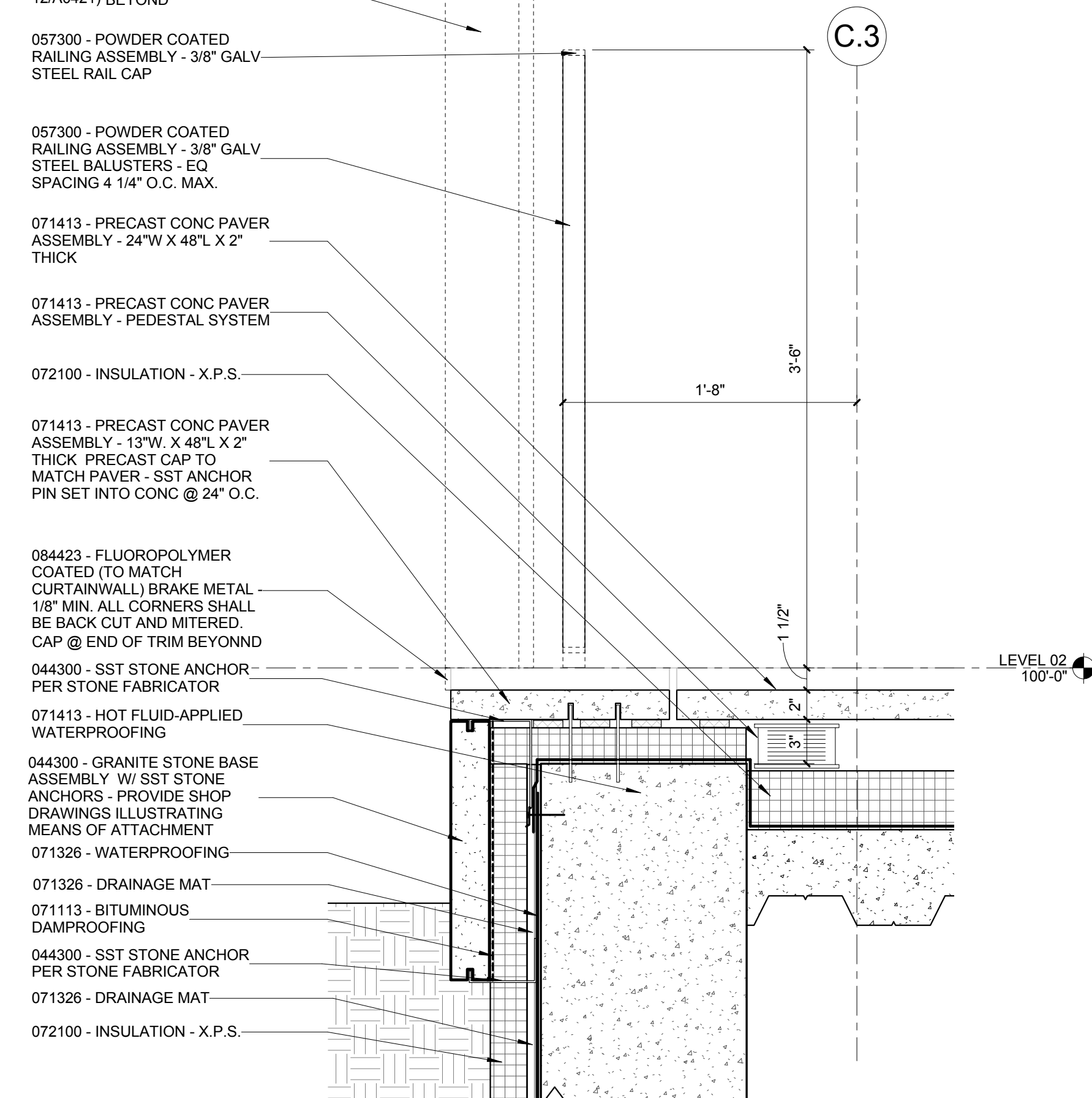
5 ENLARGED DETAIL - BRICK LEDGE AT STAIRS
1 1/2" = 1'-0"



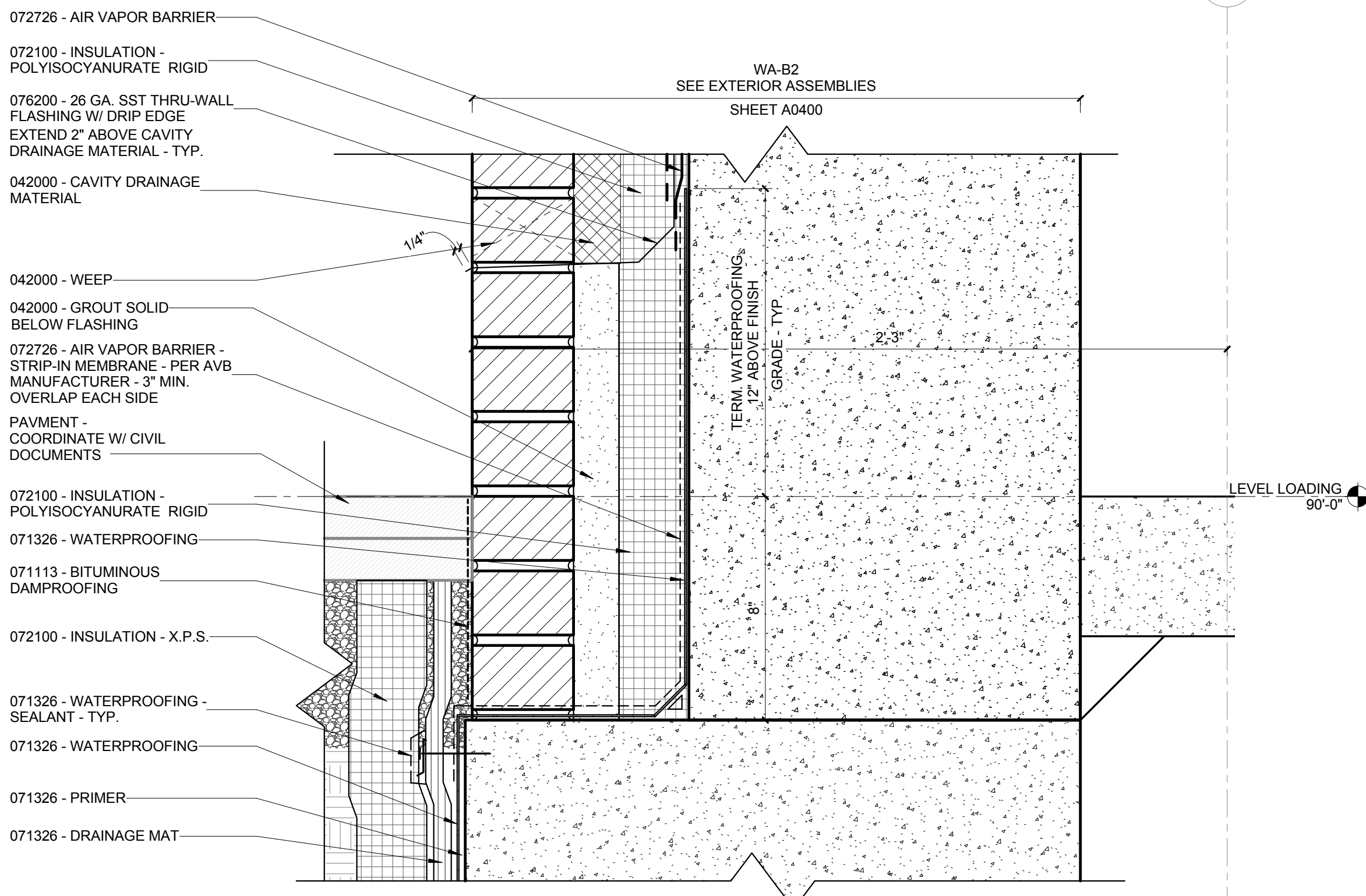
4 ENLARGED DETAIL - WA-B1 AT FLOOR CONNECTION
1 1/2" = 1'-0"



3 RAILINGS TERMINATION - FRONT
1 1/2" = 1'-0"

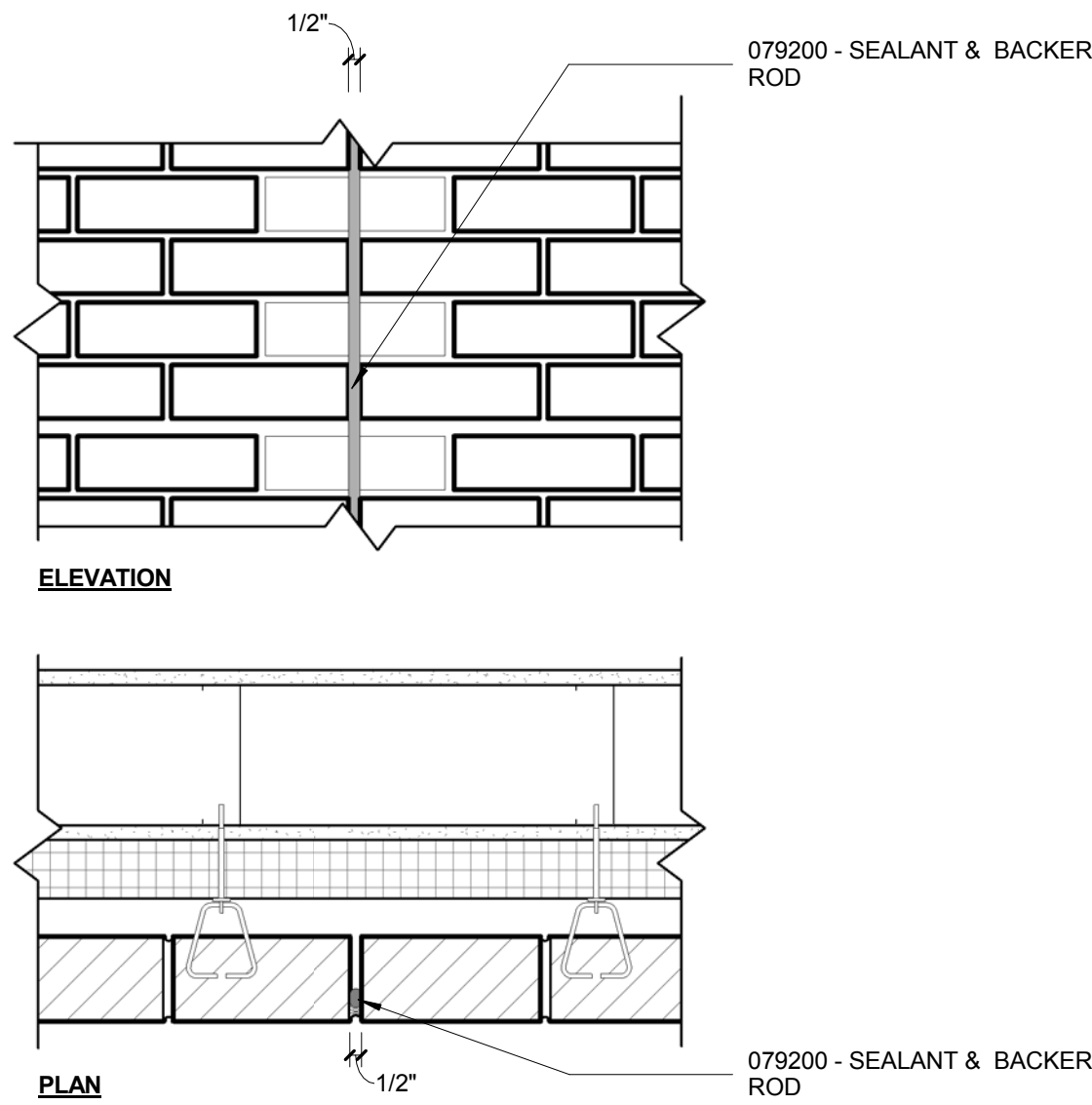


2 ENLARGED DETAIL - WEST END OF NORTH WALKWAY
1 1/2" = 1'-0"

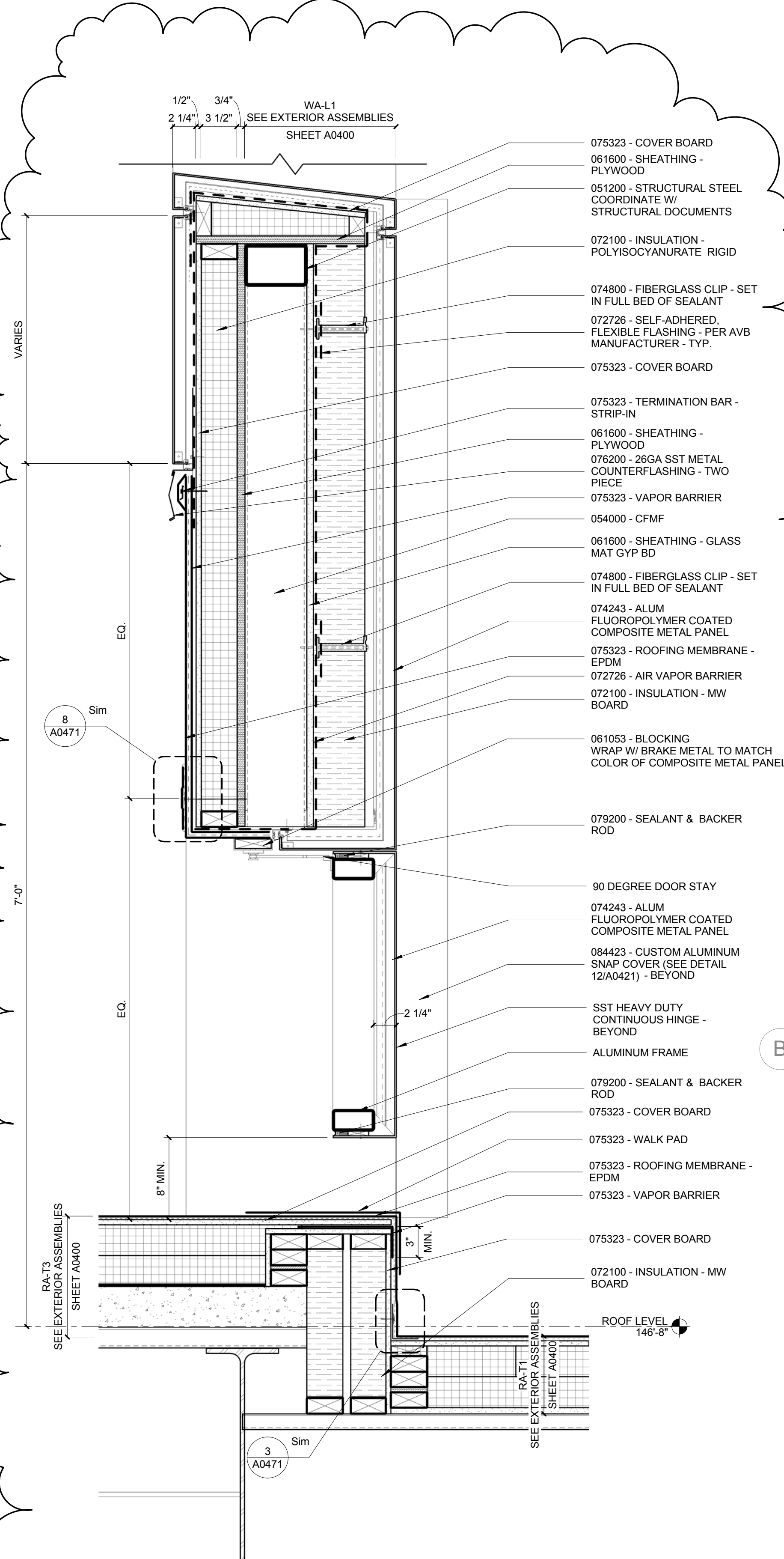


1 ENLARGED DETAIL - WA-B2 @ BRICK LEDGE
3" = 1'-0"

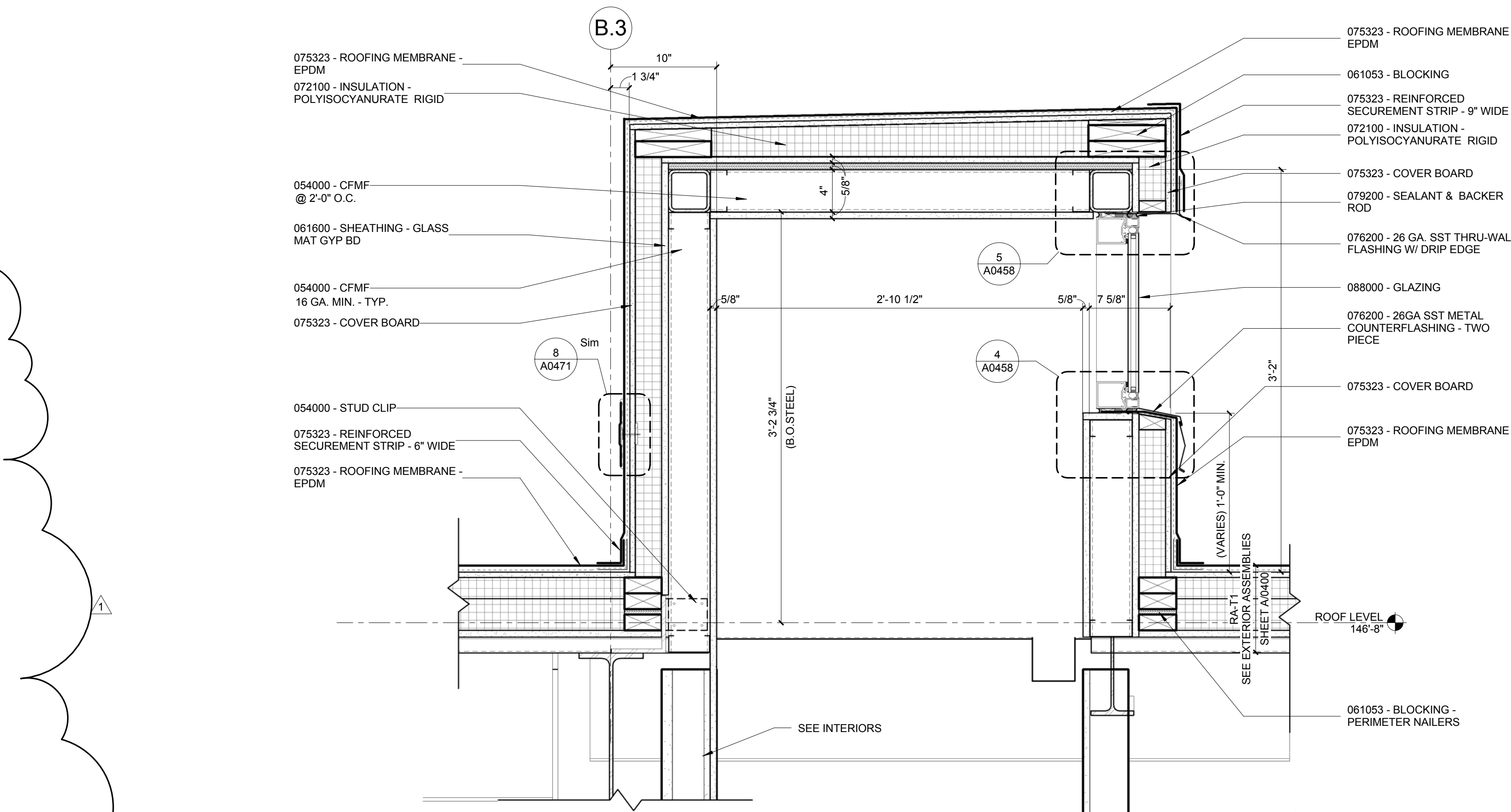
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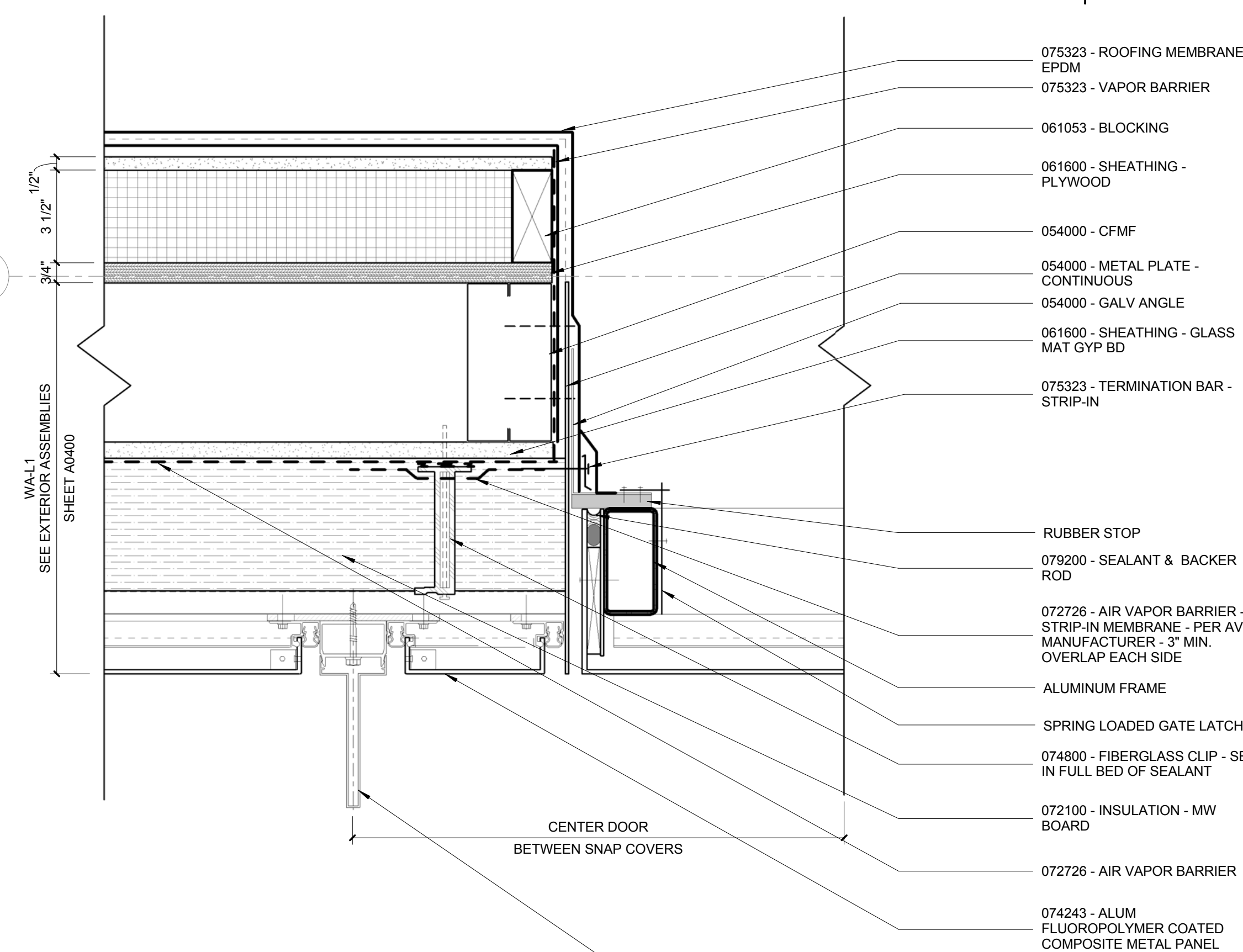
8 VERTICAL CONTROL JOINT
1 1/2" = 1'-0"



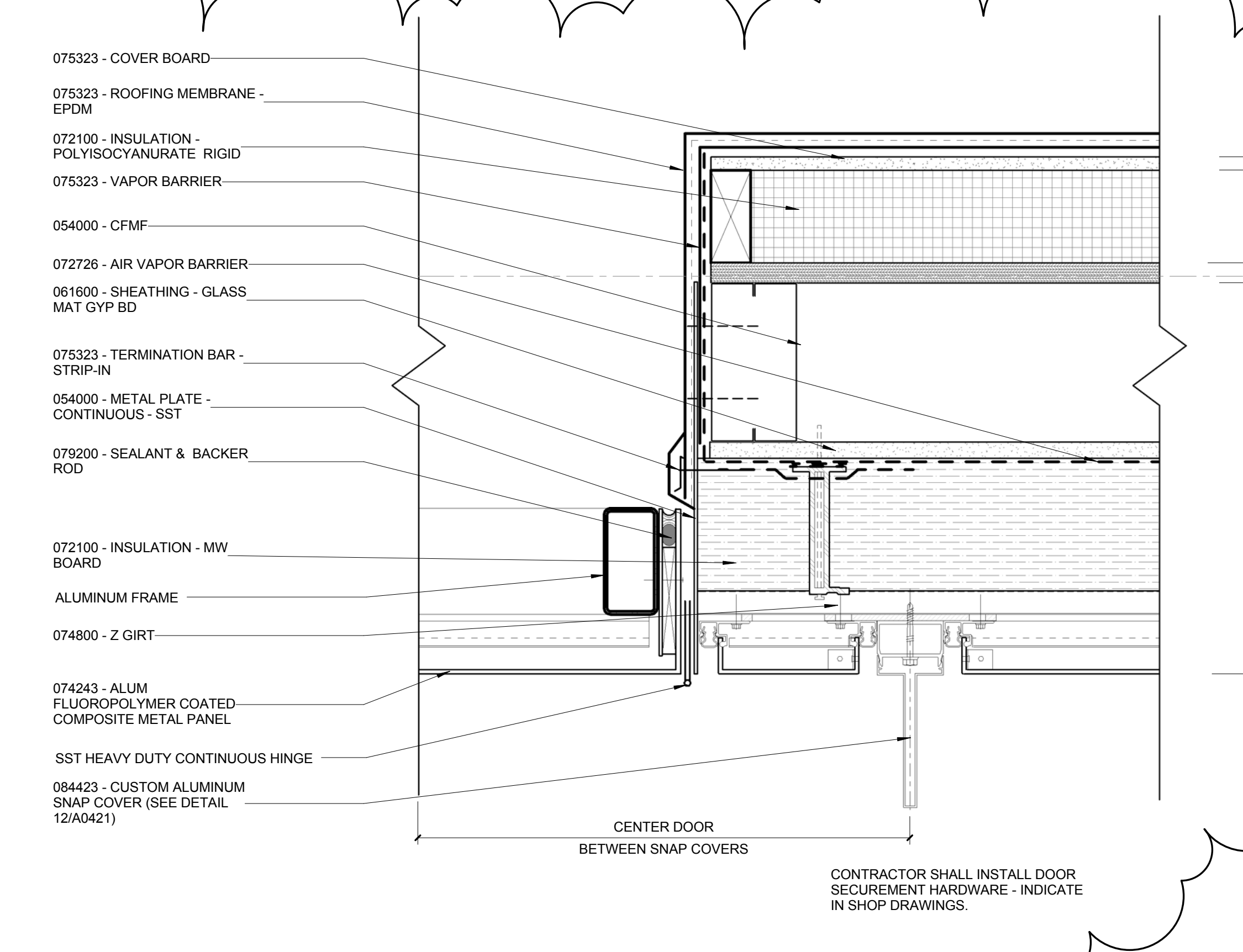
3 ENLARGED DETAIL - DOOR @ SOUTH ROOF
1 1/2" = 1'-0"



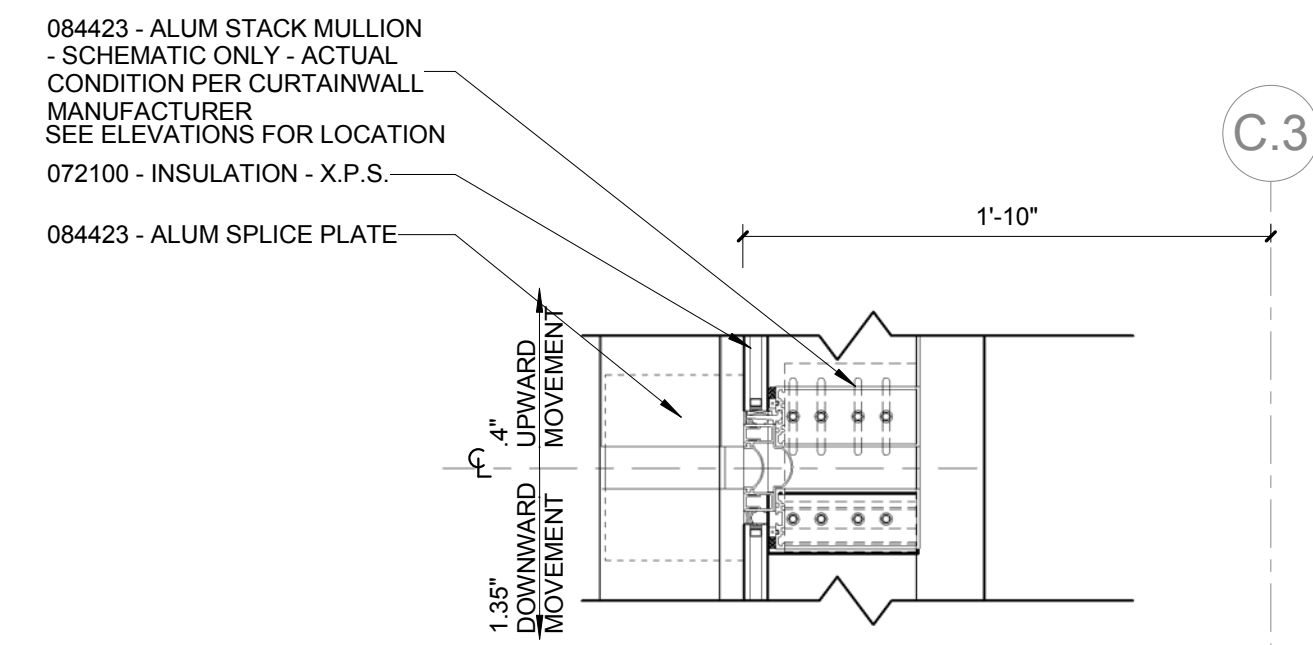
6 ENLARGED DETAIL - MONITOR ROOF
1 1/2" = 1'-0"



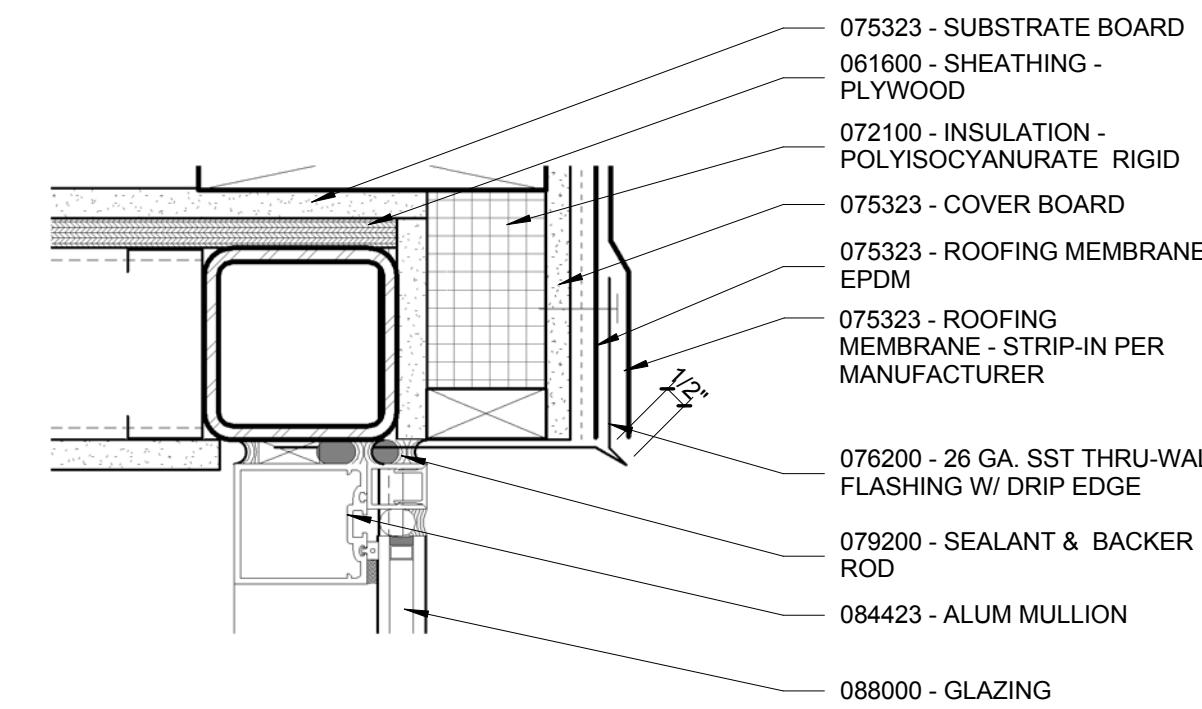
2 ENLARGED DETAIL - DOOR JAMB @ SOUTH ROOF
3" = 1'-0"



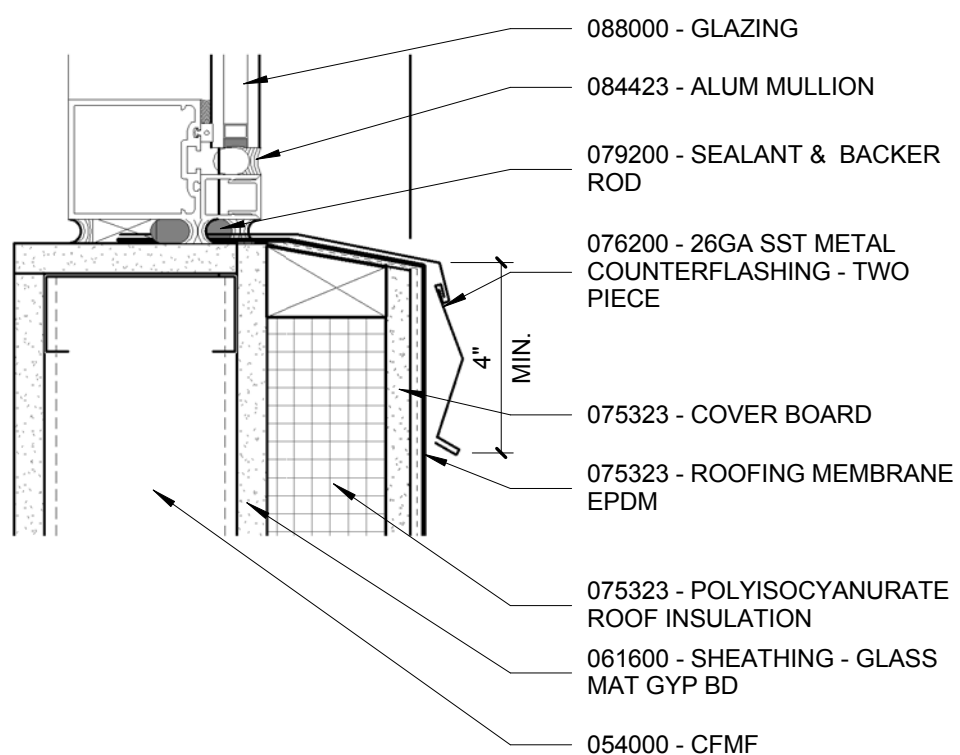
1 ENLARGED DETAIL - DOOR HINGE @ SOUTH ROOF
3" = 1'-0"



7 ENLARGED DETAIL - CURTAINWALL MOVEMENT JOINT
1 1/2" = 1'-0"



5 ENLARGED DETAIL - MONITOR ROOF HEAD DETAIL
3" = 1'-0"



4 ENLARGED DETAIL - MONITOR ROOF SILL DETAIL
3" = 1'-0"

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Kathy R. Williams
3.16.16

CONFORMED SET 01 JUL 2016

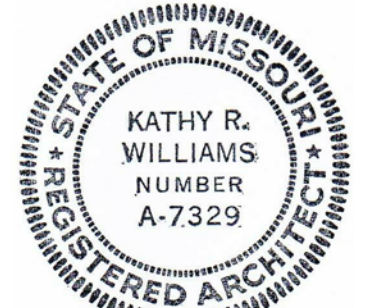
No.	Description	Date
1	ADDENDUM 1-7	16 MAR 2016
1	ISSUED FOR CONSTRUCTION (BPI)	15 JAN 2016

Drawing Title:

EXTERIOR SECTION DETAILS

Project No.: 04561.01 Checked by:

A0458



Kathy R. Williams
3.16.16

CONFORMED SET

01 JUL 2016

1	ADDENDUM 1-7	16 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP1)	15 JAN 2016
No.	Description	Date

Drawing Title:

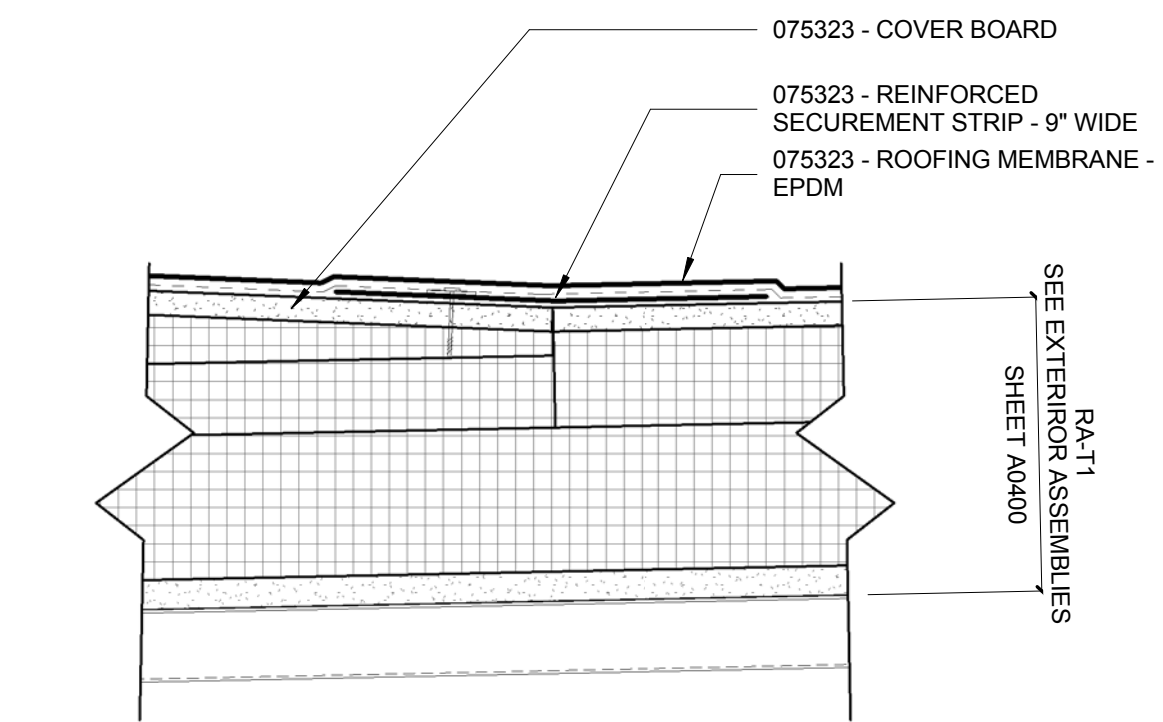
ROOF DETAILS

Project No.: 04561.01

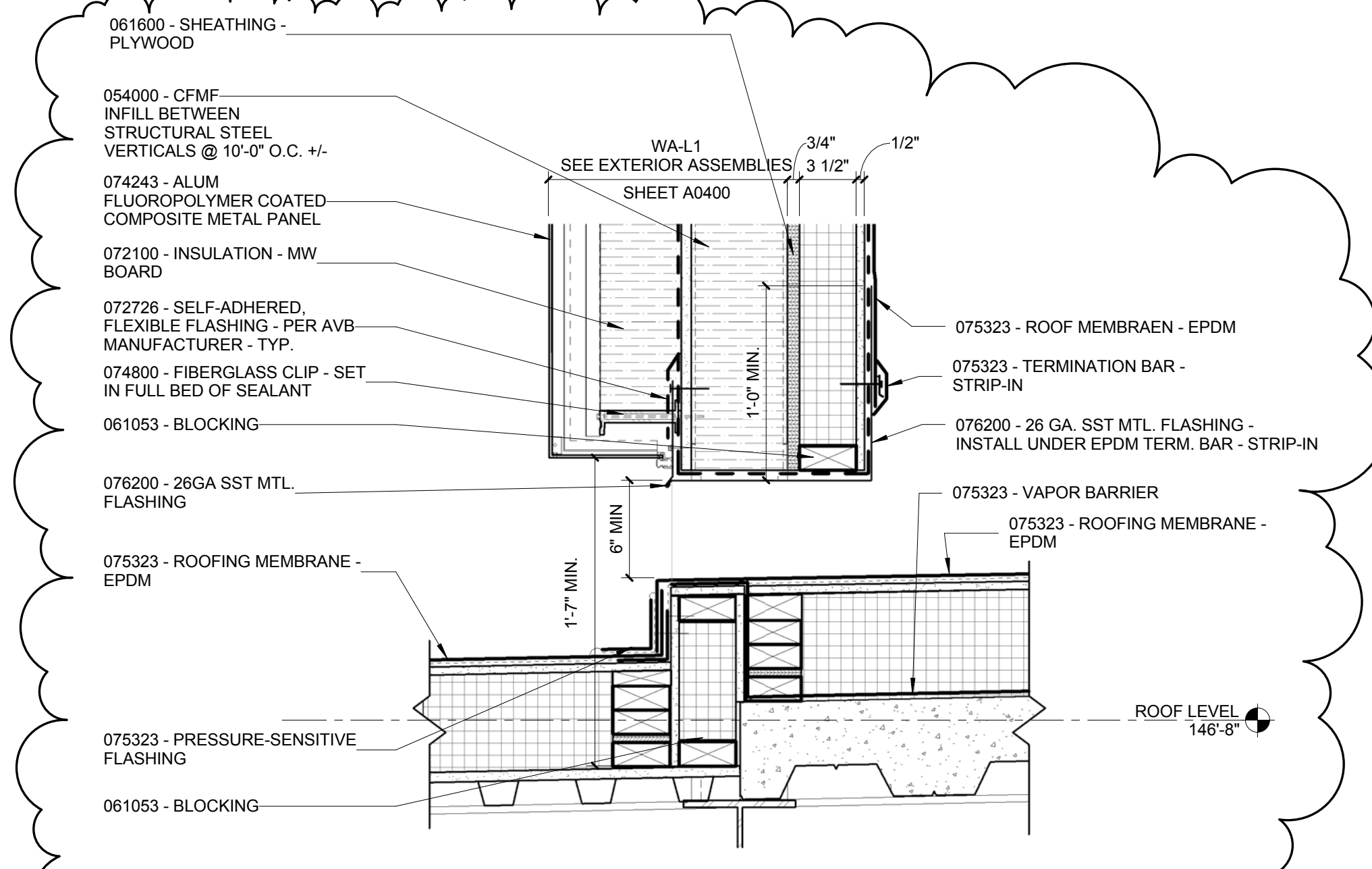
Checked by:

A0471

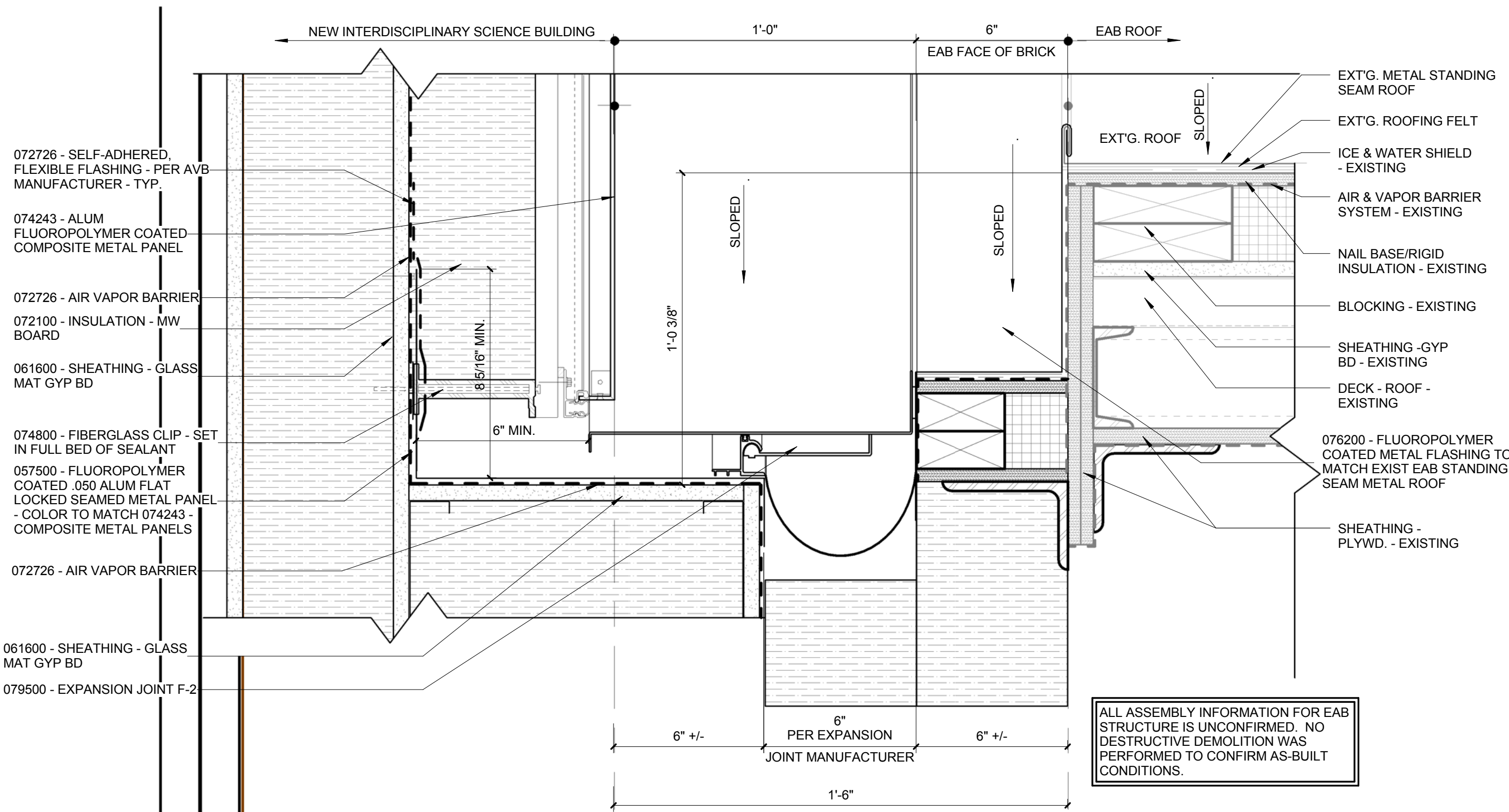
NOTES:
VALLEY FLASHING SHALL BE USED IN ALL
AREAS WHERE SLOPE EXCEEDS 1 1/2" PER
FOOT



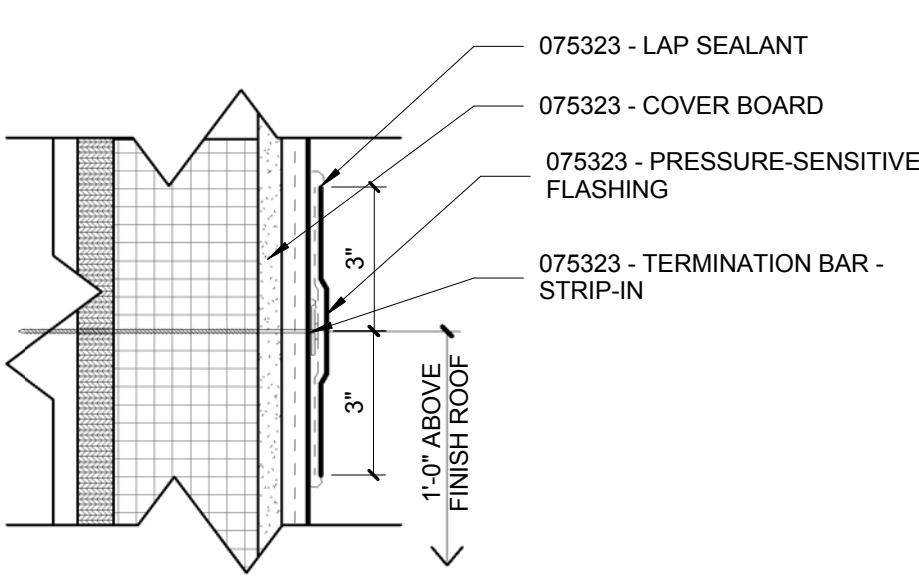
11 ENLARGED DETAIL - EPDM VALLEY - TYP
3" = 1'-0"



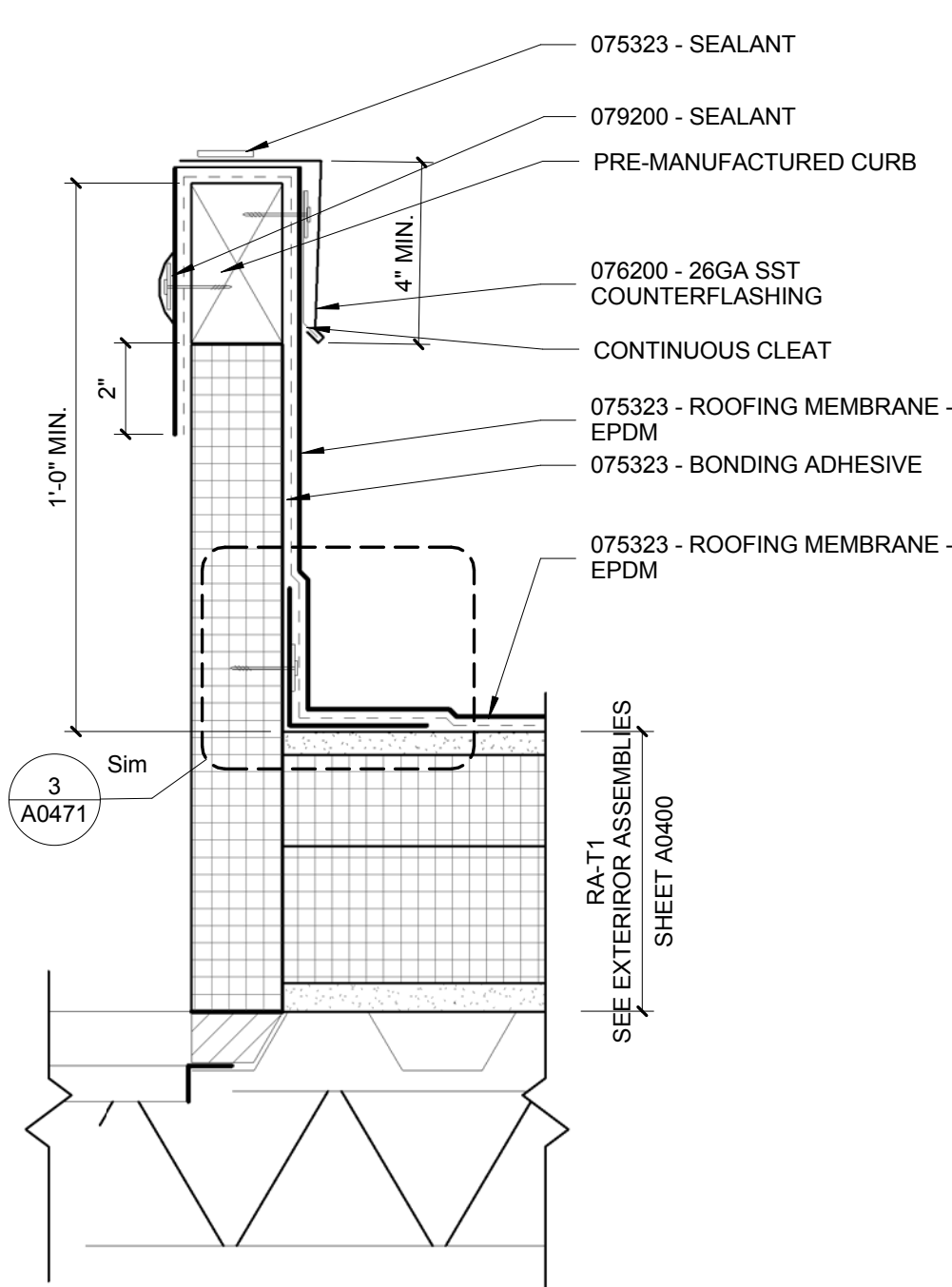
10 ENLARGED DETAIL - SCUPPER @ MECHANICAL SCREEN
1 1/2" = 1'-0"



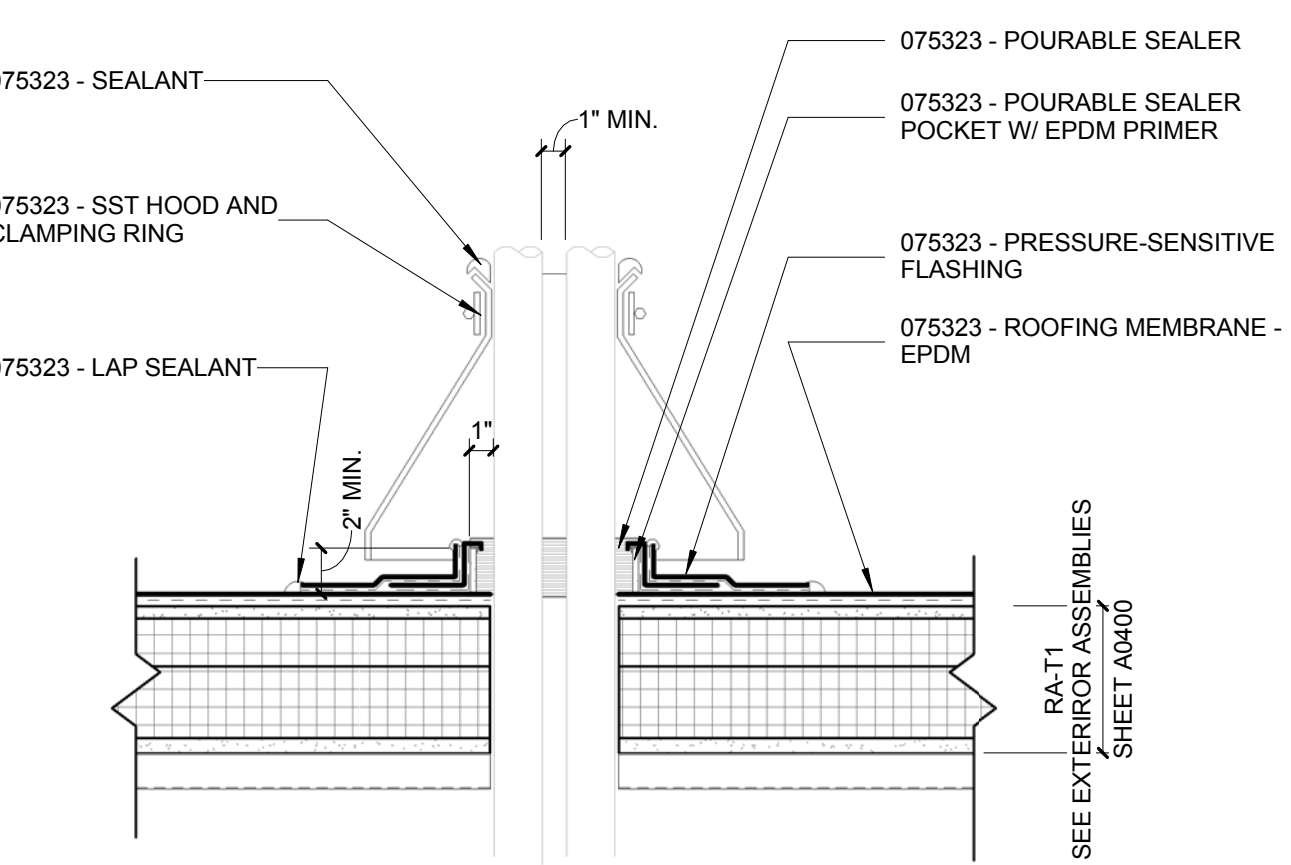
9 ISB TO EAB ROOF TO WALL EXPANSION JOINT DETAIL
3" = 1'-0"



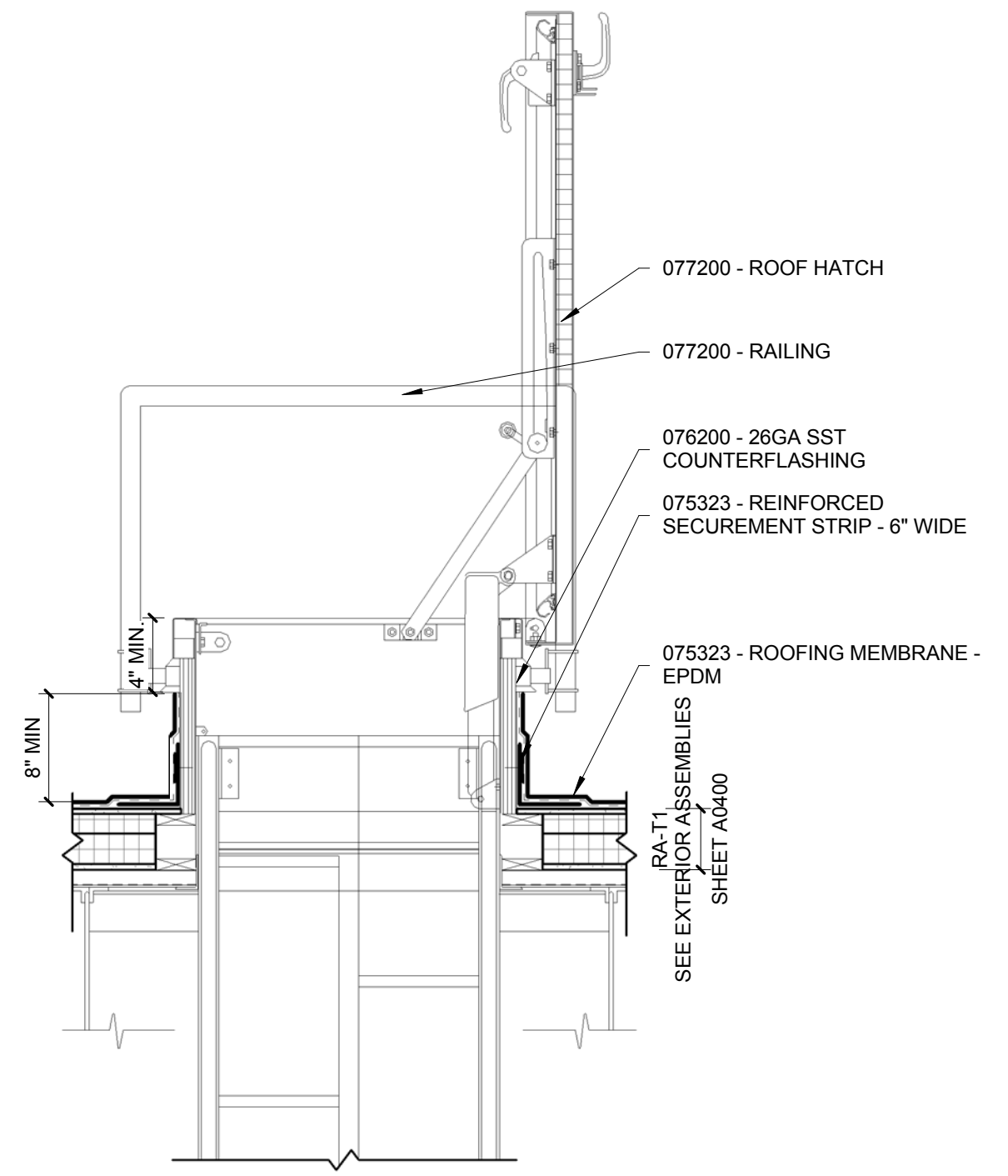
8 ENLARGED DETAIL - TERM. BAR FLASHING - TYP
3" = 1'-0"



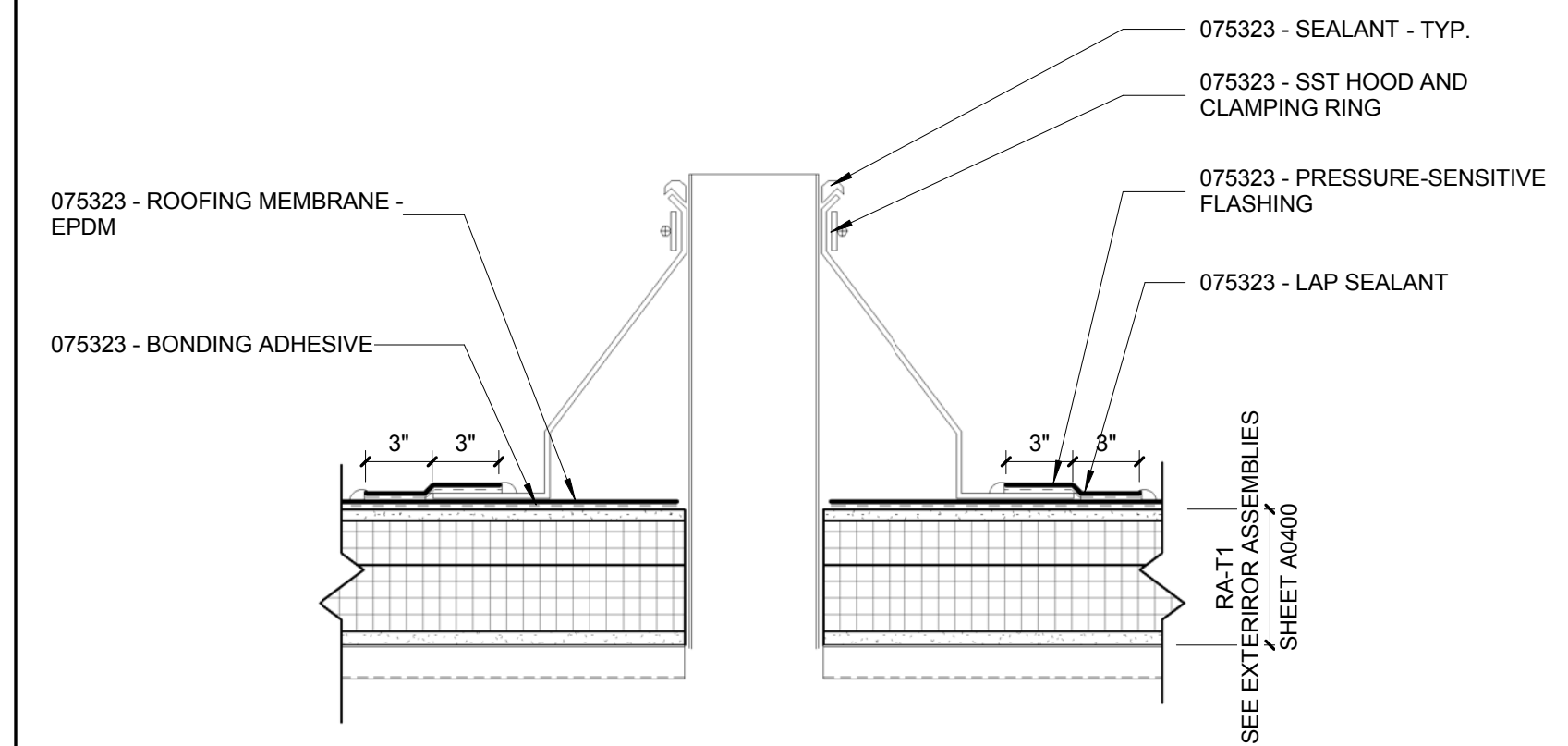
7 ENLARGED DETAIL - PRE-MANUFACTURED ROOF CURB
3" = 1'-0"



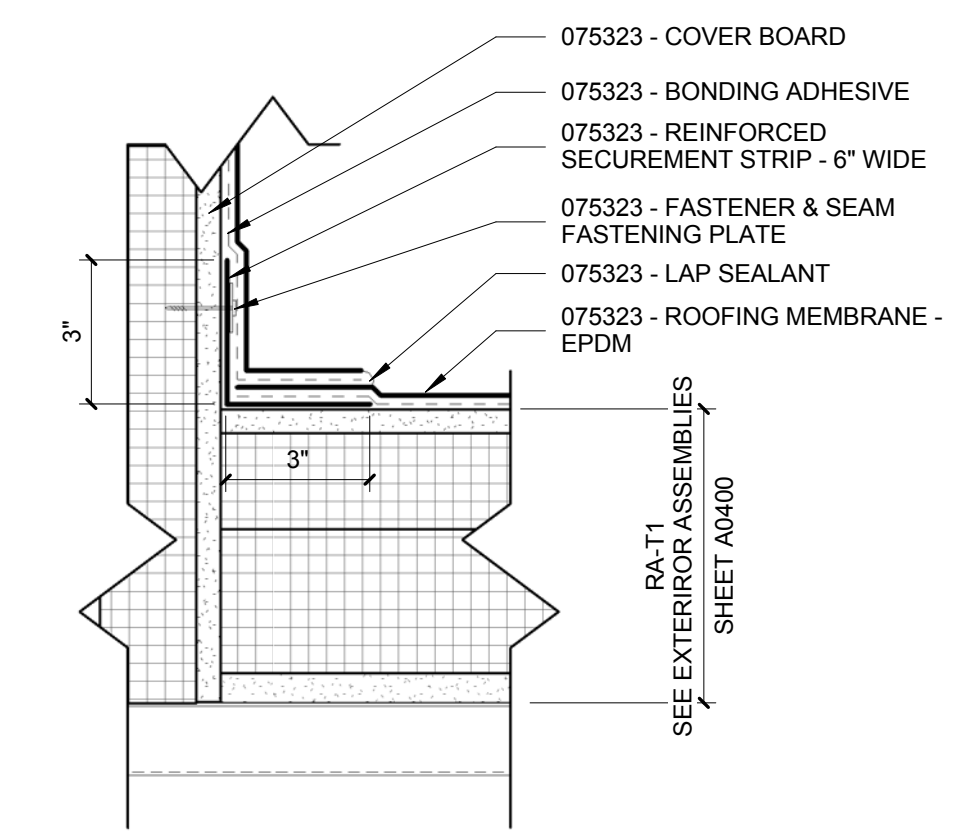
6 ENLARGED DETAIL - PITCH POCKET
1 1/2" = 1'-0"



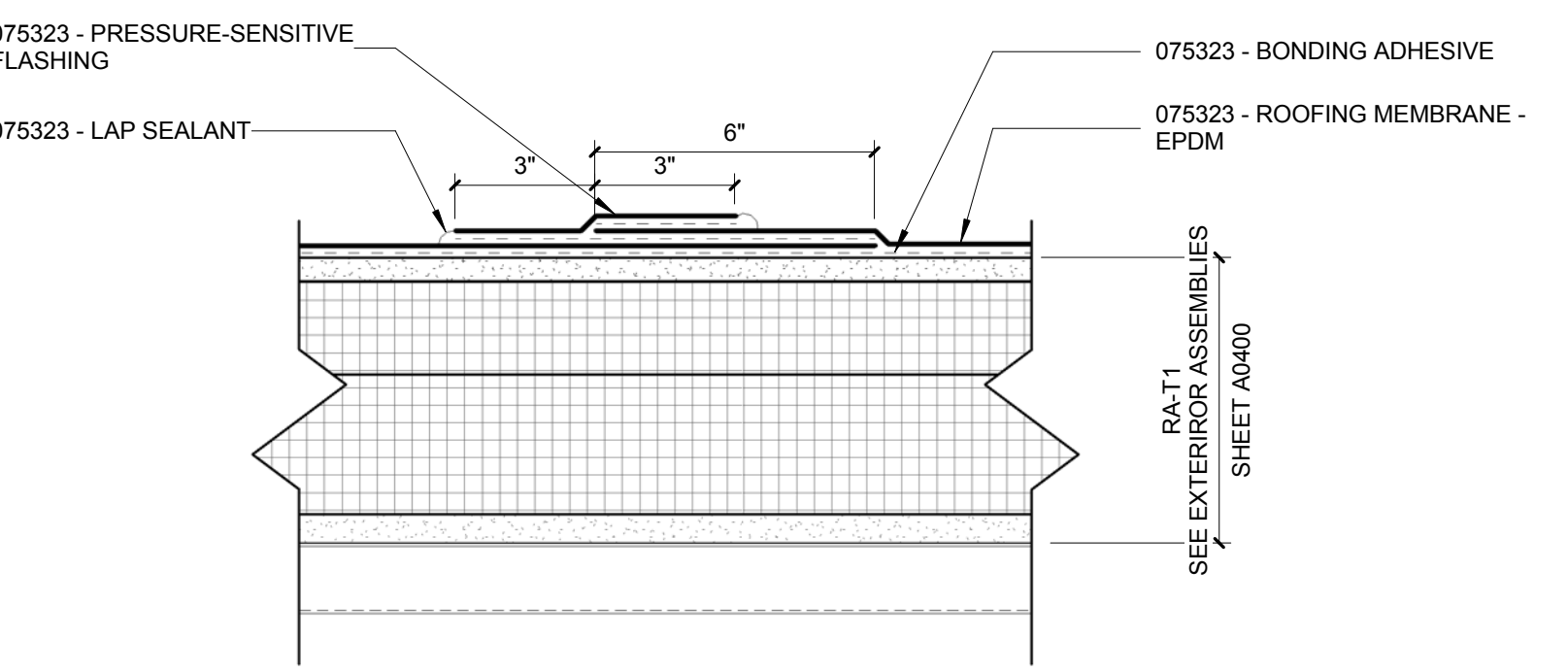
5 ENLARGED DETAIL - PRE-MANUFACTURED ROOF HATCH
3/4" = 1'-0"



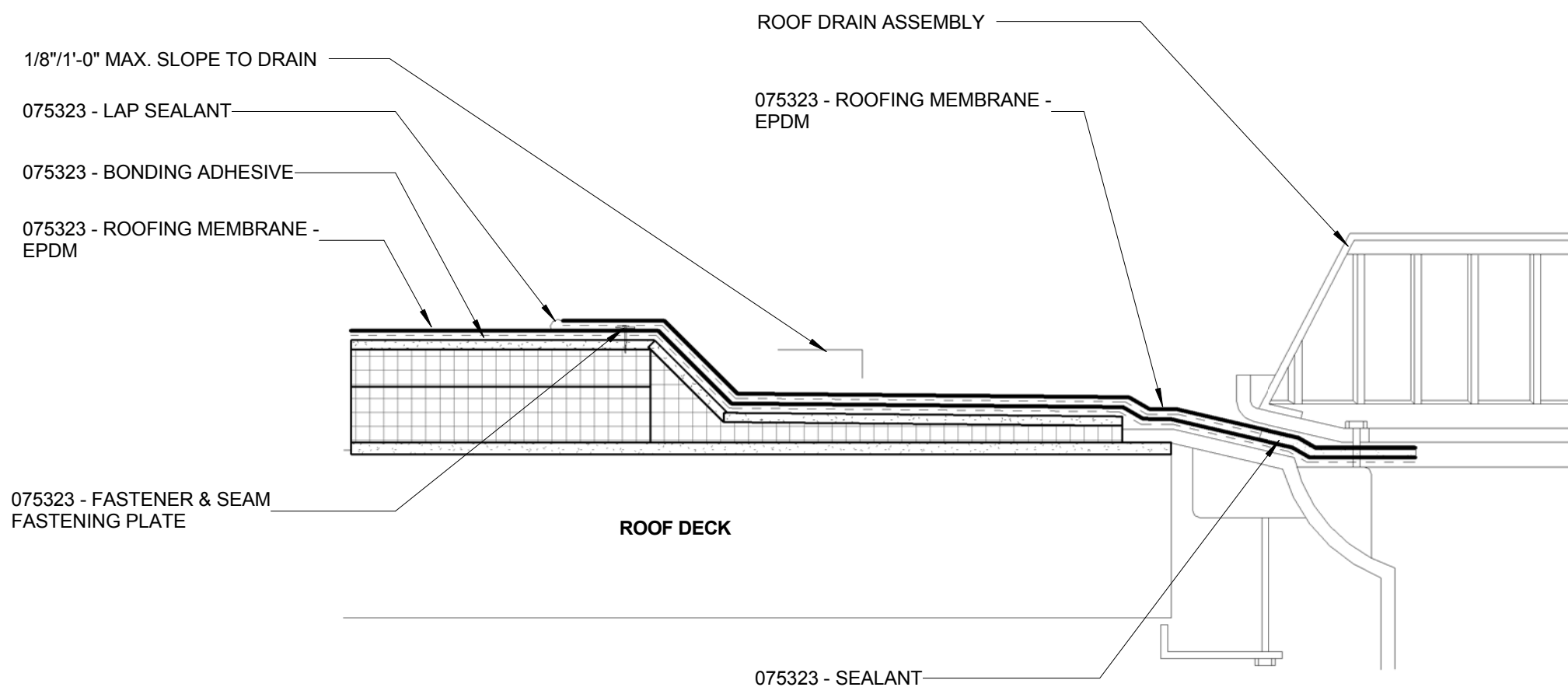
4 ENLARGED DETAIL - PRE-MOLDED PIPE BOOT DETAIL
1 1/2" = 1'-0"



3 ENLARGED DETAIL - ROOF TO WALL FLASHING - TYP
3" = 1'-0"



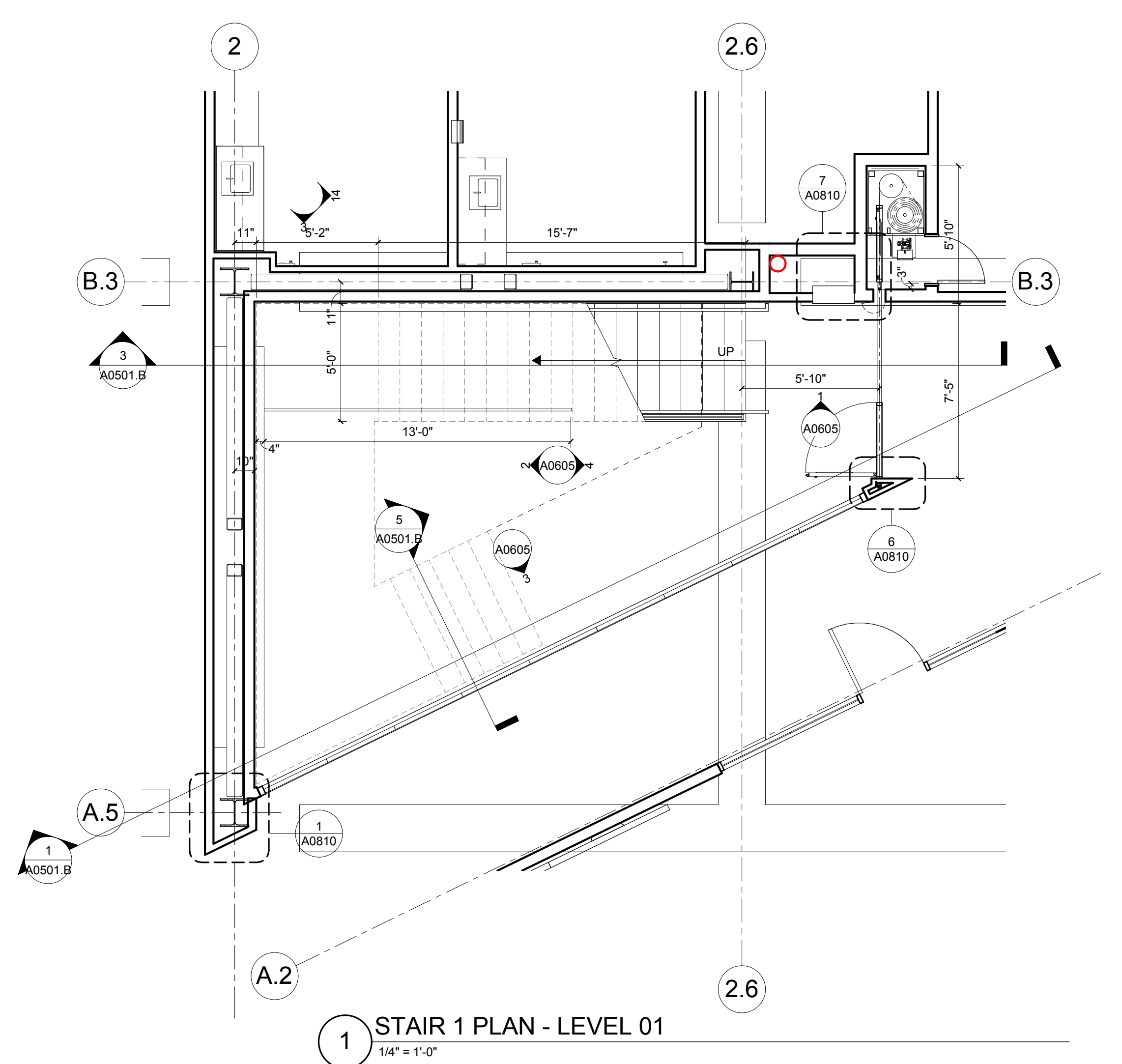
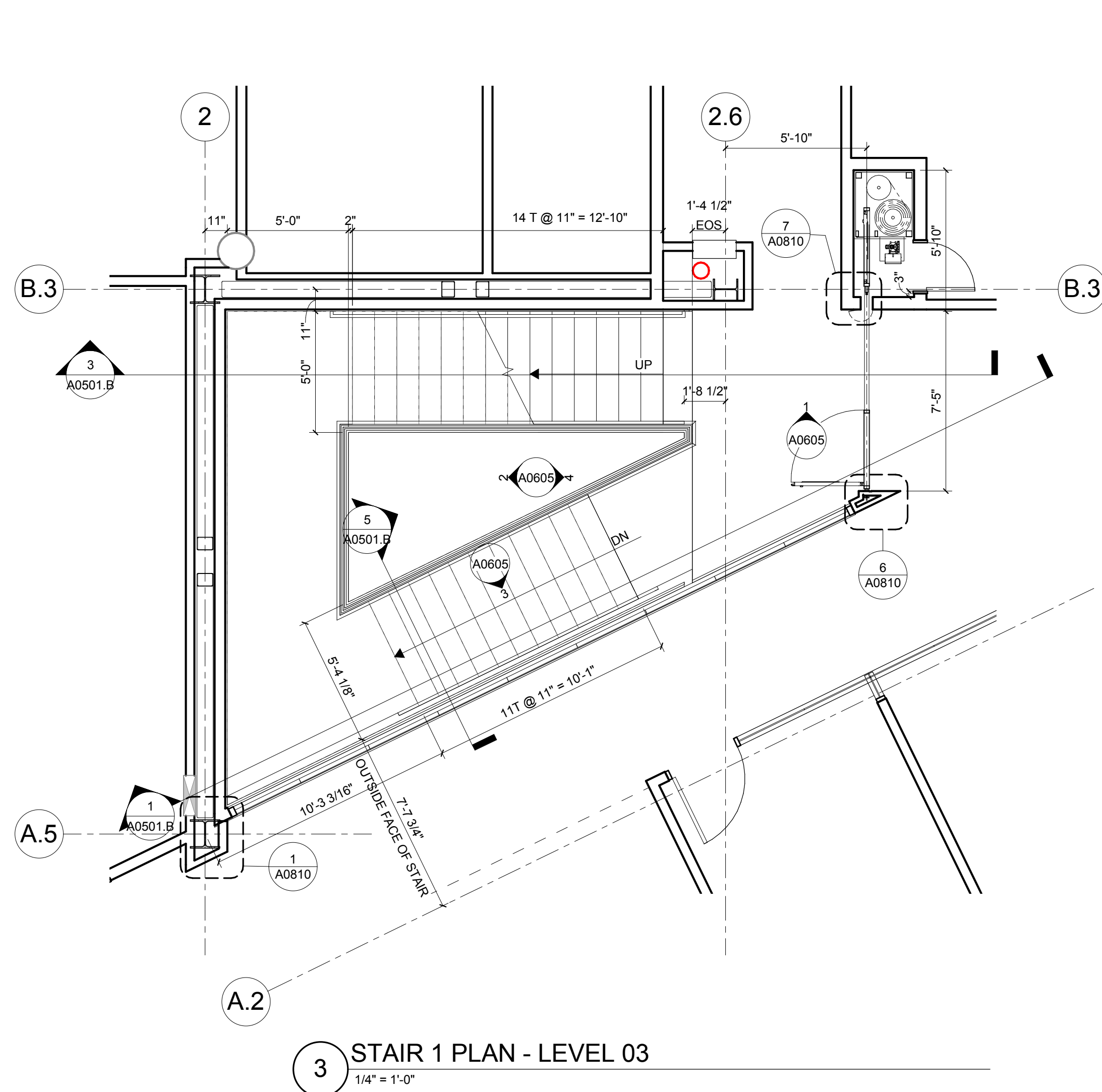
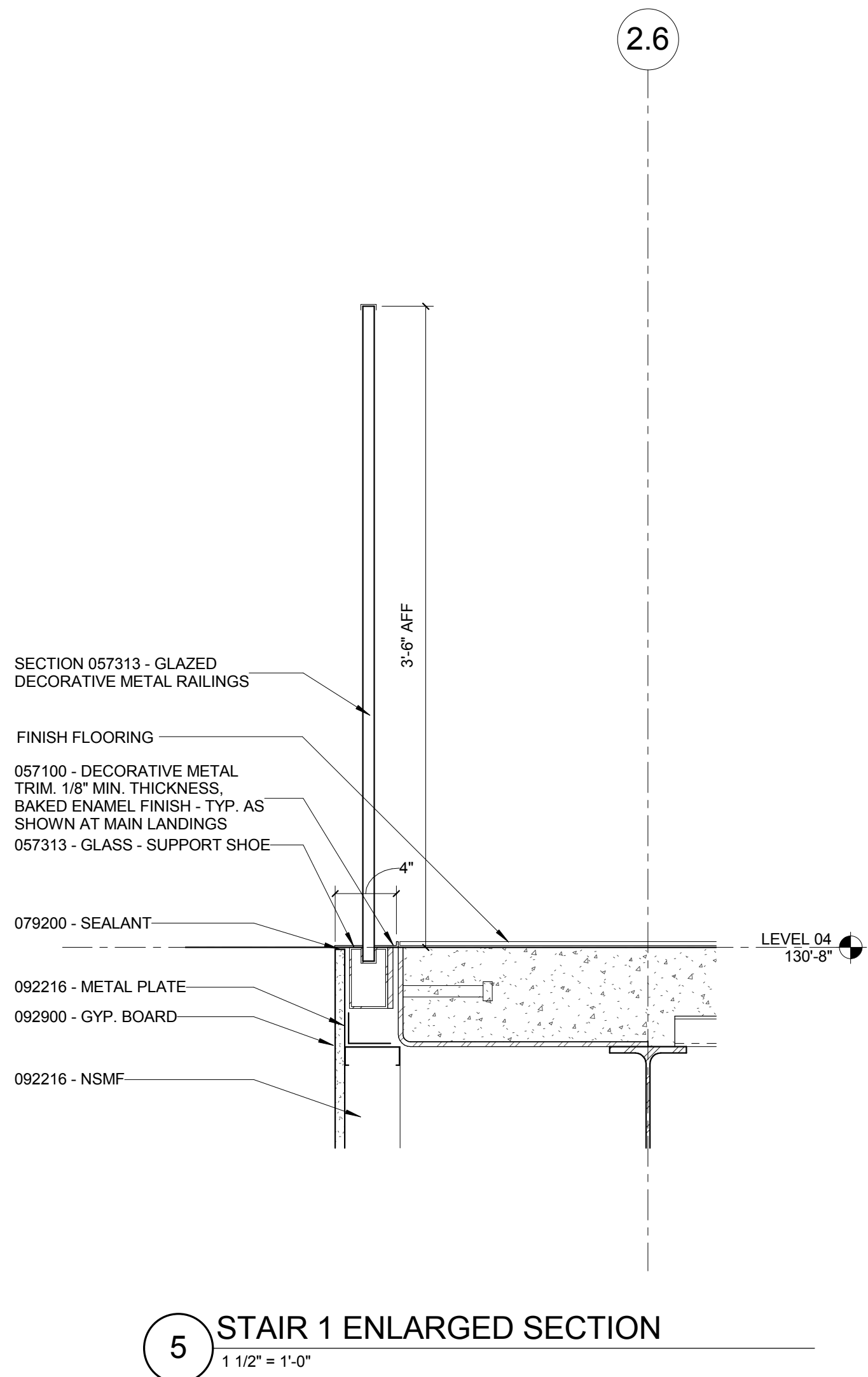
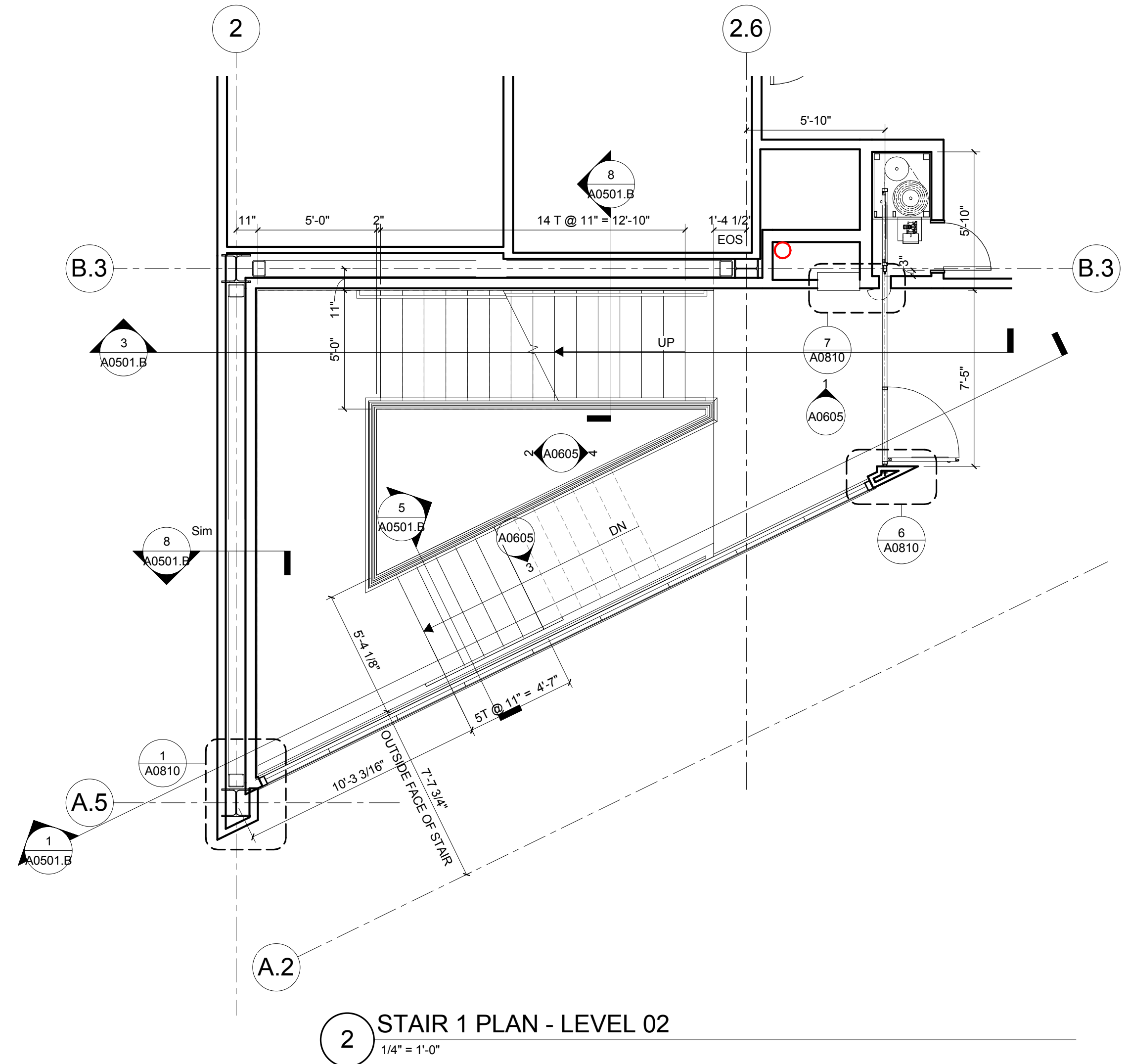
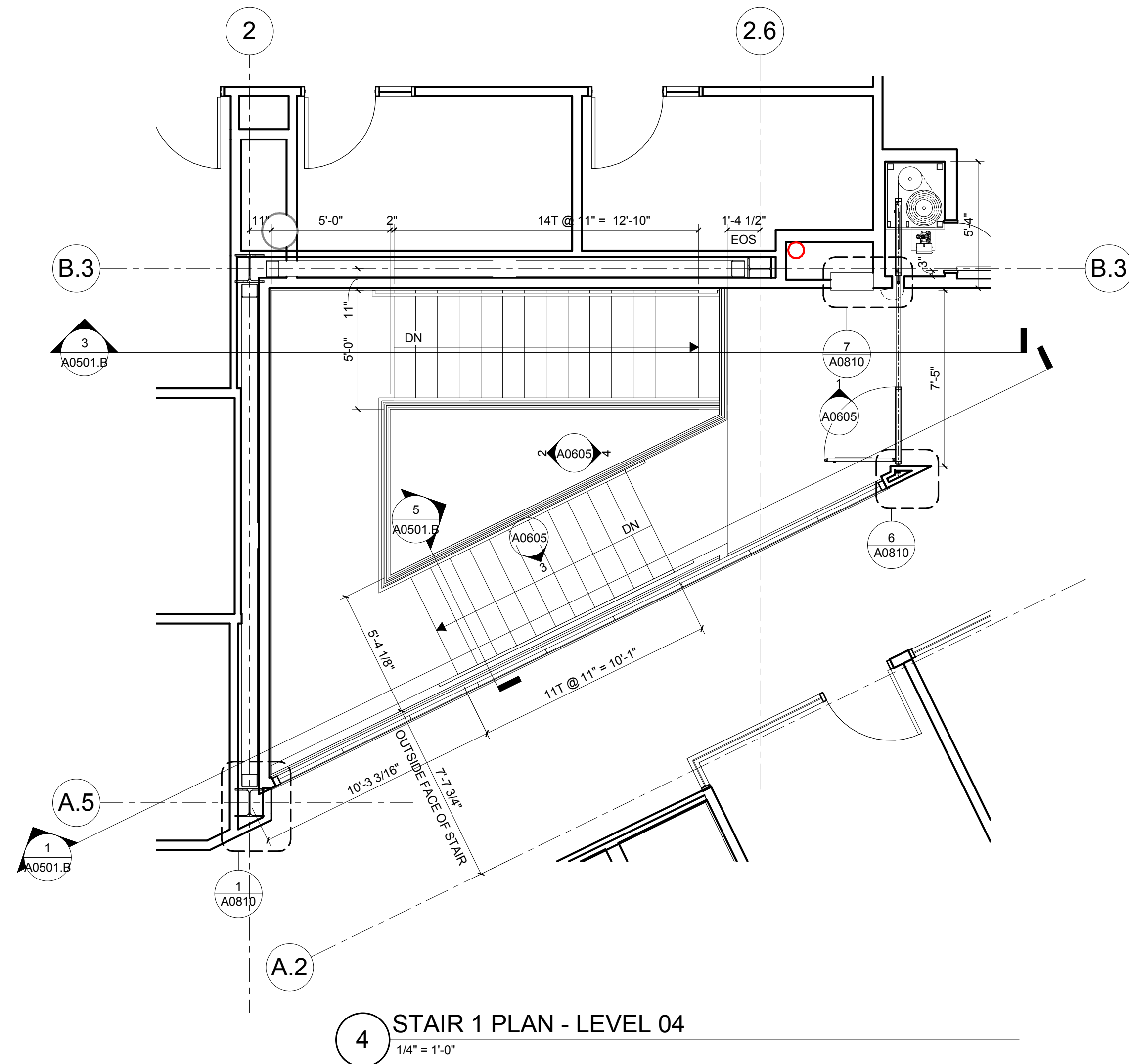
2 ENLARGED DETAIL - EPDM STRIP-IN - TYP
3" = 1'-0"



1 ENLARGED DETAIL - ROOF DRAIN
1 1/2" = 1'-0"

NOTES:
1. WHERE SEAMS RUN WITHIN 18" OF DRAIN INSTALL A 4'-0" X 4'-0" EPDM PATCH ON TOP OF
MEMBRANE ASSURING SEAM IS COVERED, OR STRIP-IN SEAM WITH 6" X 12" WIDE MEMBRANE





CONFORMED SET 01 JUL 2016

ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016
No. Description Date

Drawing Title:

STAIR 1 PLANS AND
SECTIONS

Project No.: 04561.01 Checked by:

A0501.A

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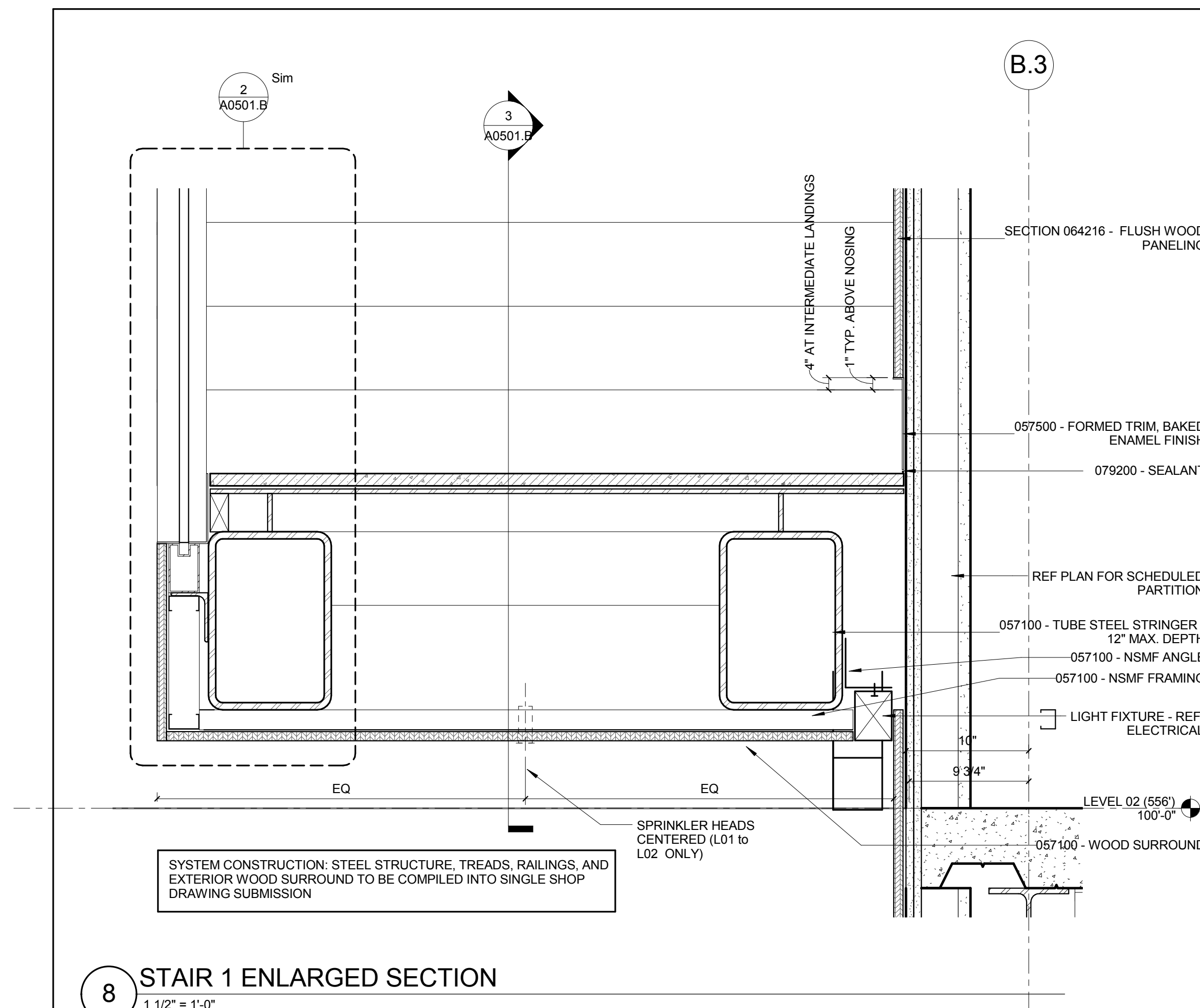
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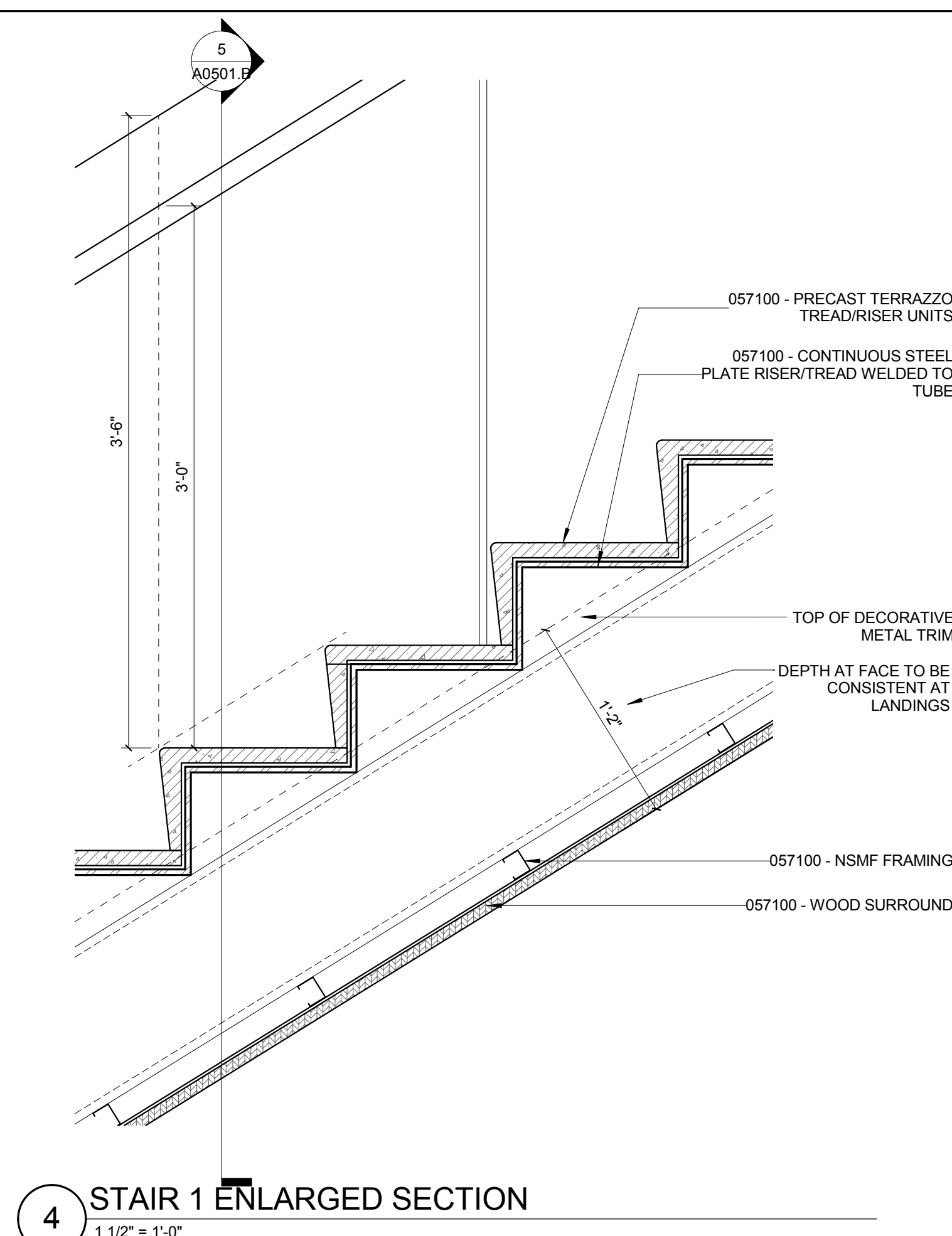
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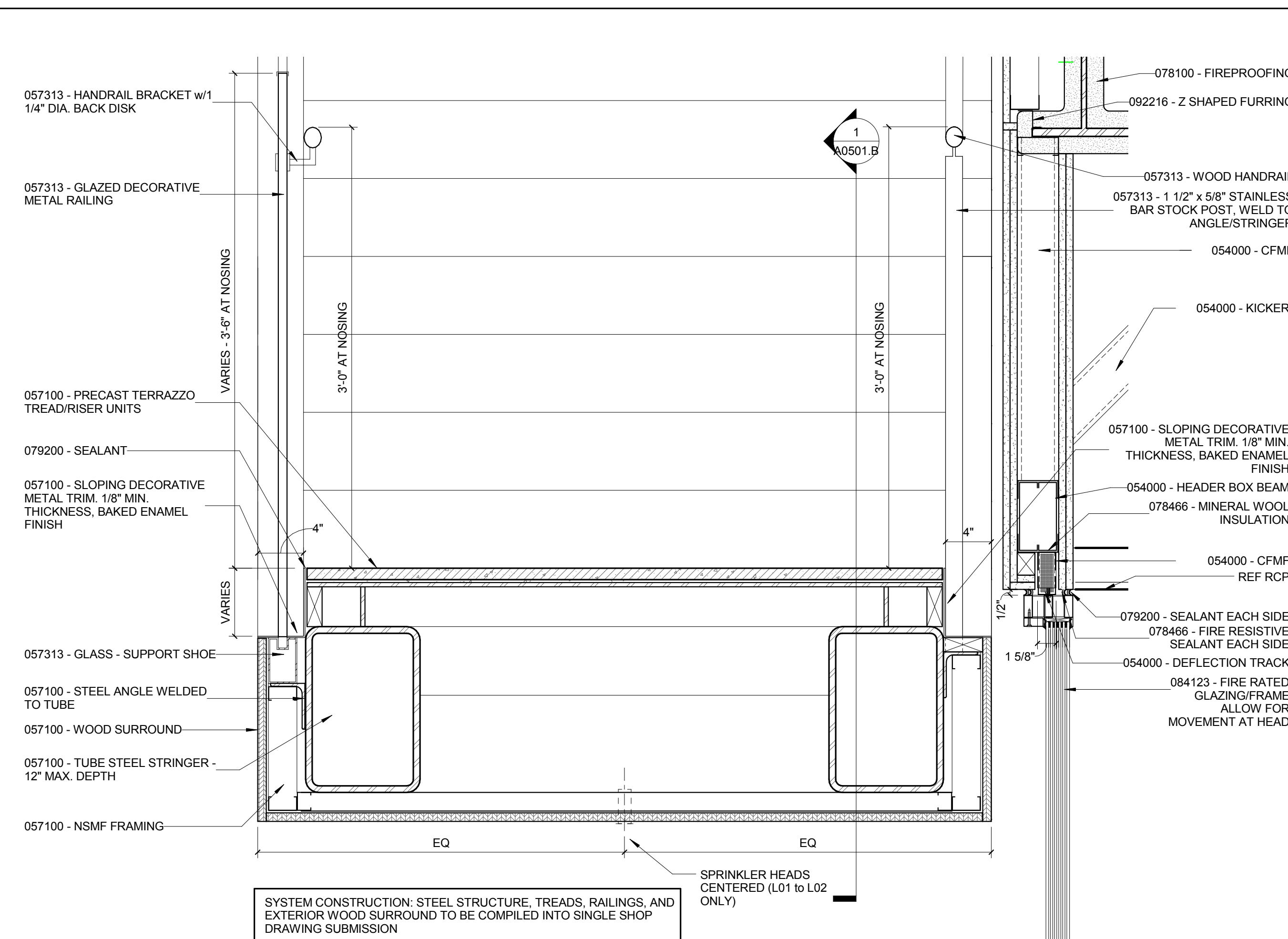
Webb Engineering Services, Inc.
Plumbing & Fire Protection
1400 S. 3rd Street, Suite 201
St. Louis, MO 63104
314 588 0600



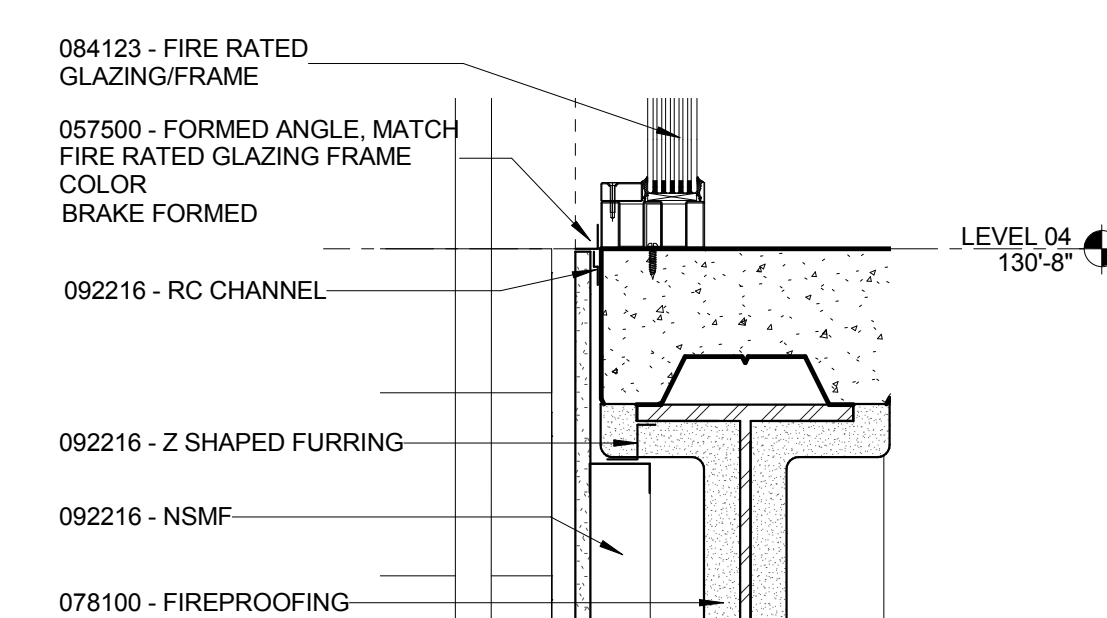
8 STAIR 1 ENLARGED SECTION
1 1/2" = 1'-0"



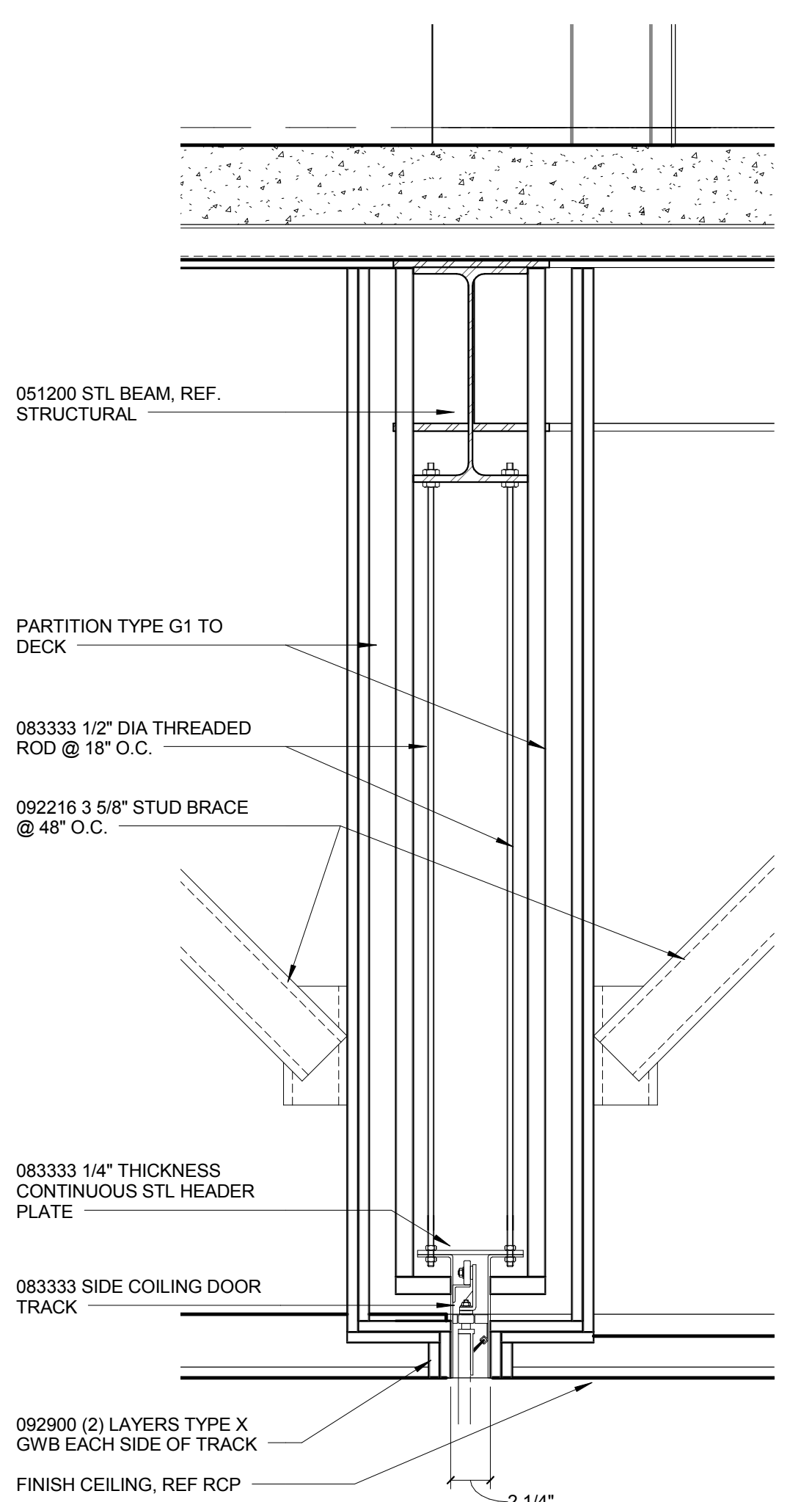
4 STAIR 1 ENLARGED SECTION
1 1/2" = 1'-0"



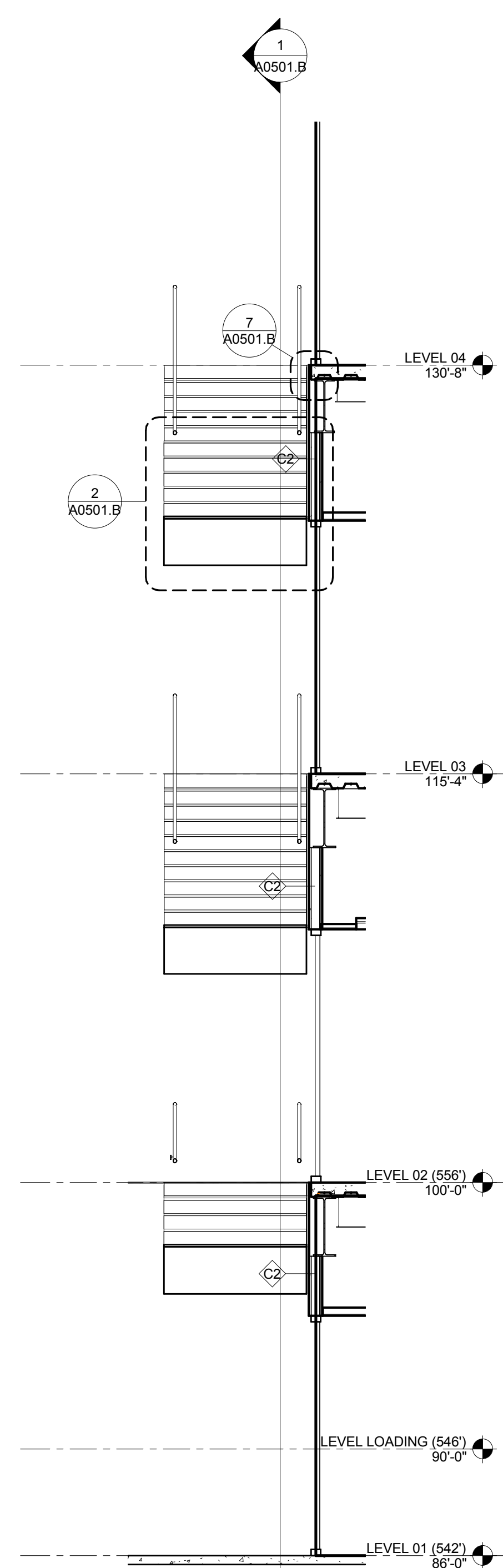
2 STAIR 1 ENLARGED SECTION



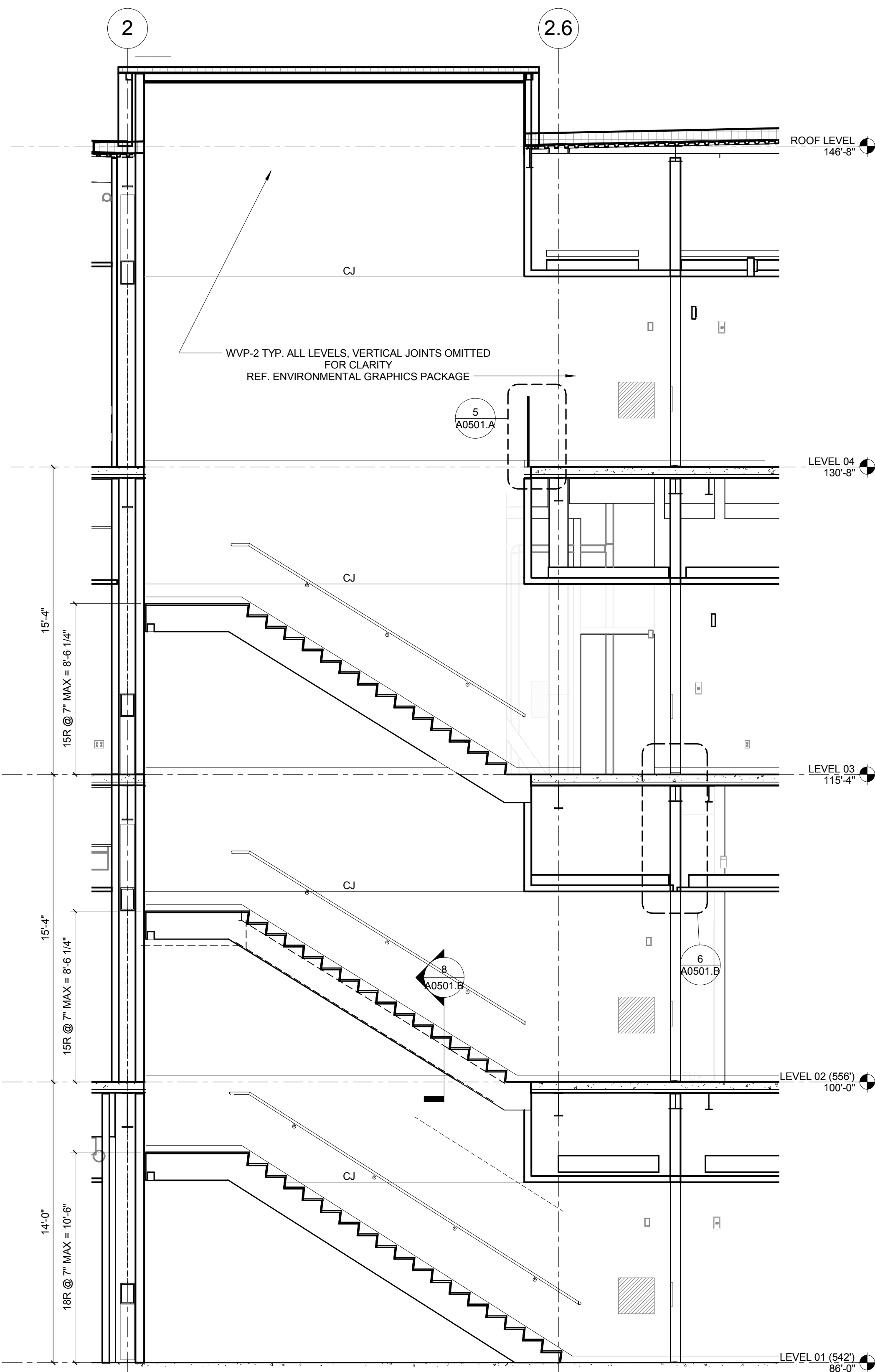
7 STAIR 1 ENLARGED SECTION
1 1/2" = 1'-0"



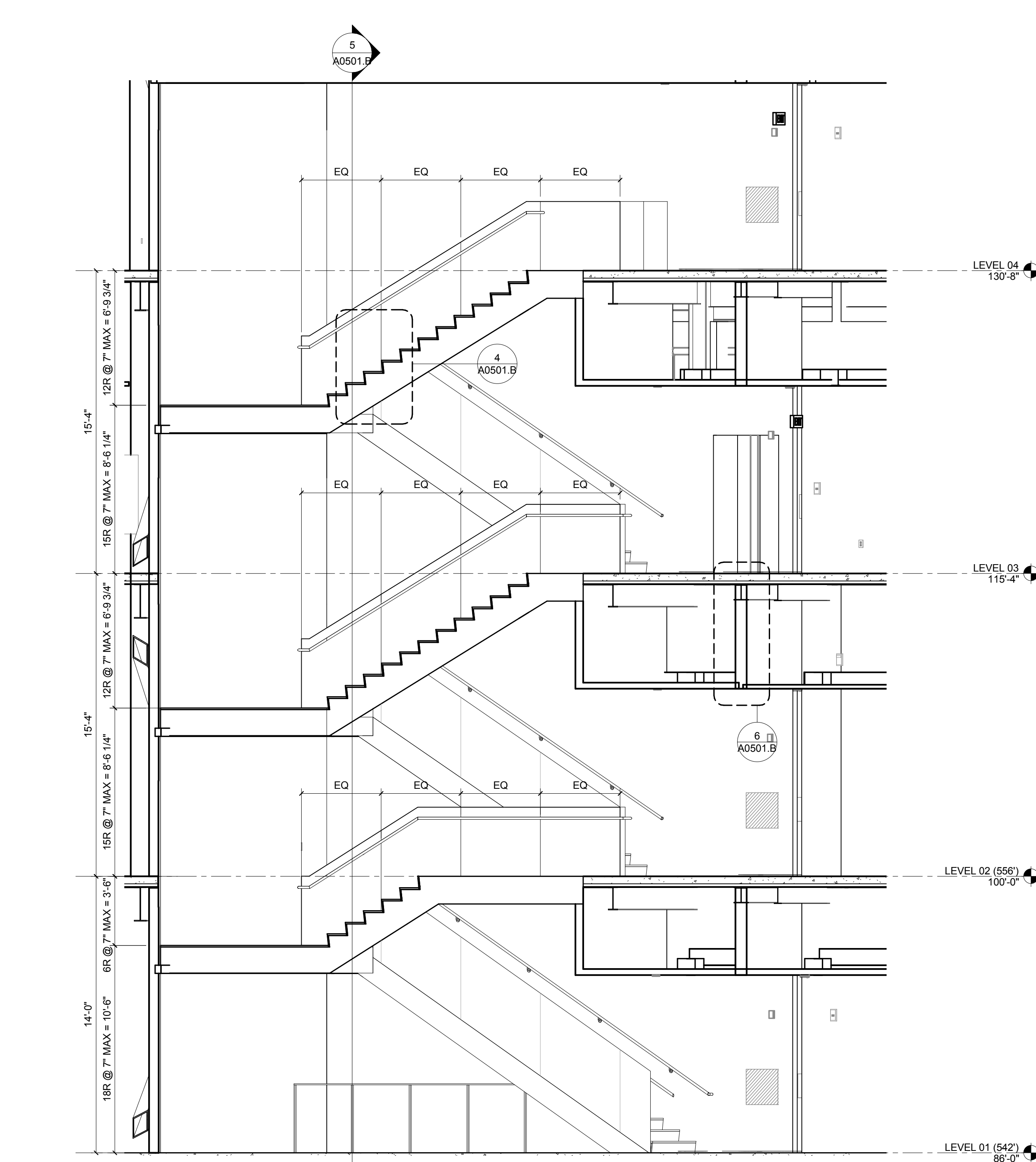
6 TYP. SIDE COILING DOOR HEAD
1'-10" = 1'-0"



5 STAIR 1 SECTION



3 STAIR 1 SECTION



1 STAIR 1 SECTION
1/4" = 1' 0"

CONFORMED SET 01 JUL 2016

- ISSUED FOR CONSTRUCTION (BP3)	15 MAR 2016
No.	Description
	Date

Drawing Title:

STAIR 1 SECTIONS

Project No.: 04561.01 Checked by:

A0501.B

CONFORMED SET 01 JUL 2016

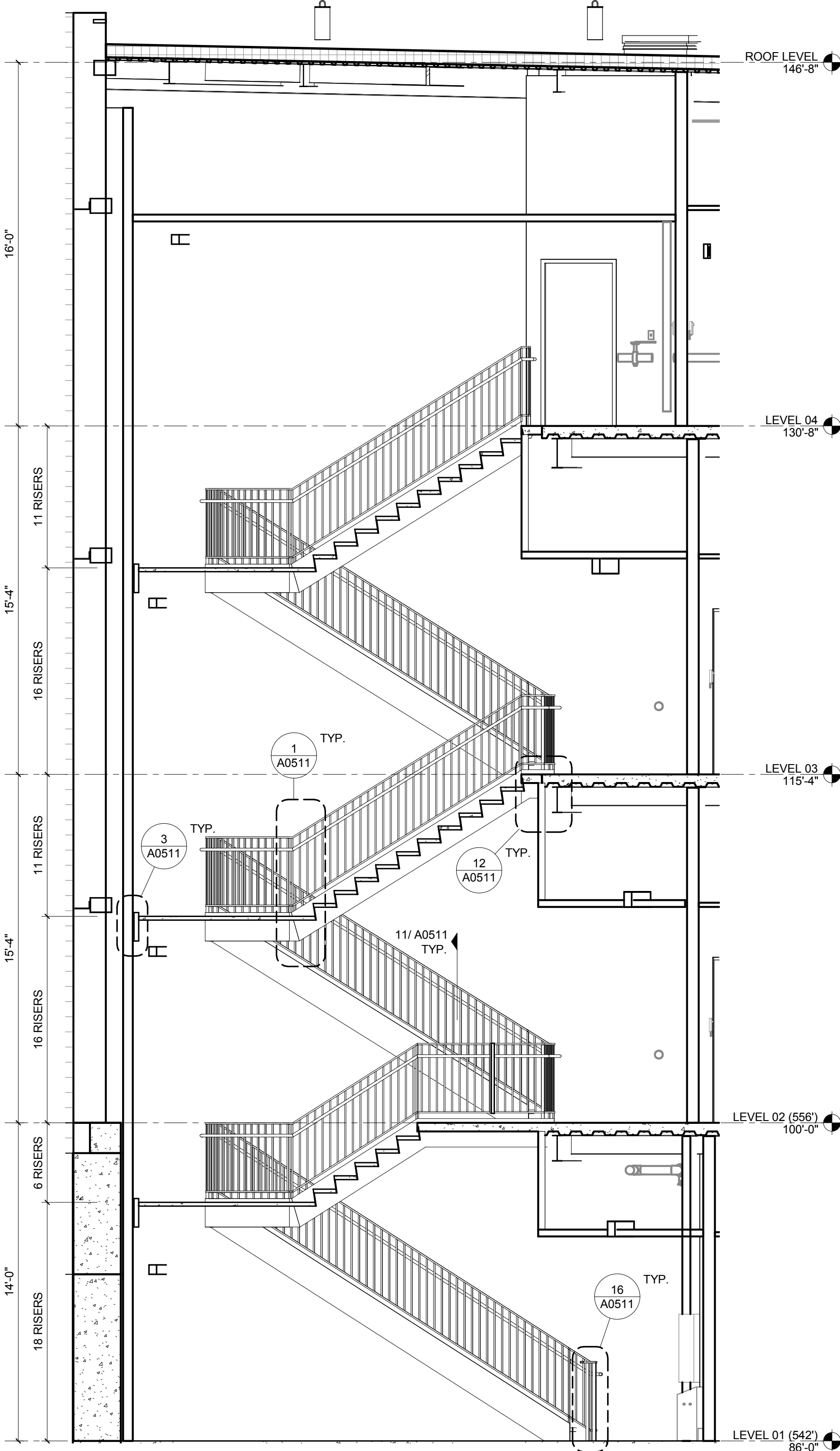
ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016
No. Description Date

Drawing Title:

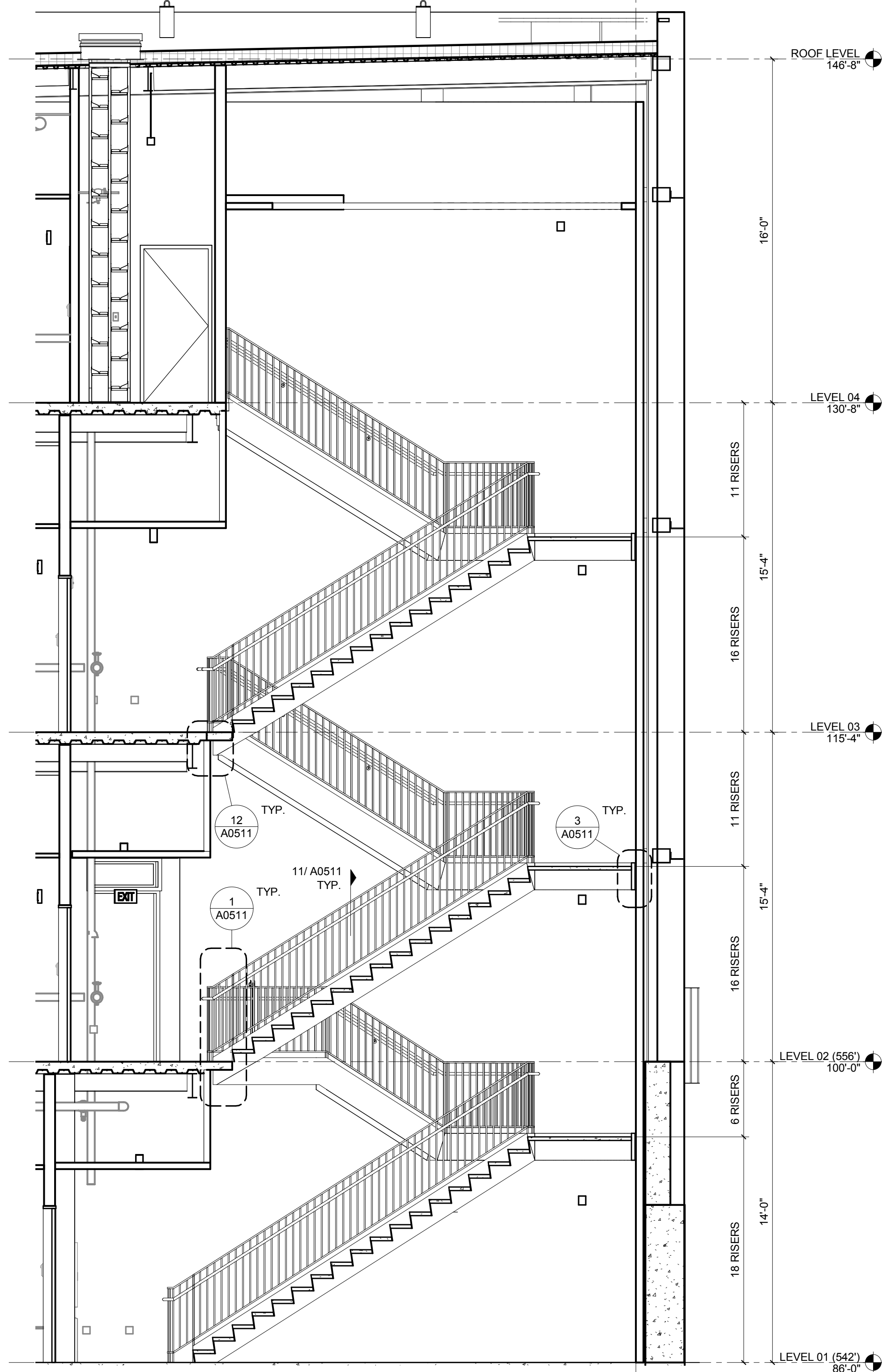
STAIR 2 PLANS AND
SECTIONS

Project No.: 04561.01 Checked by:

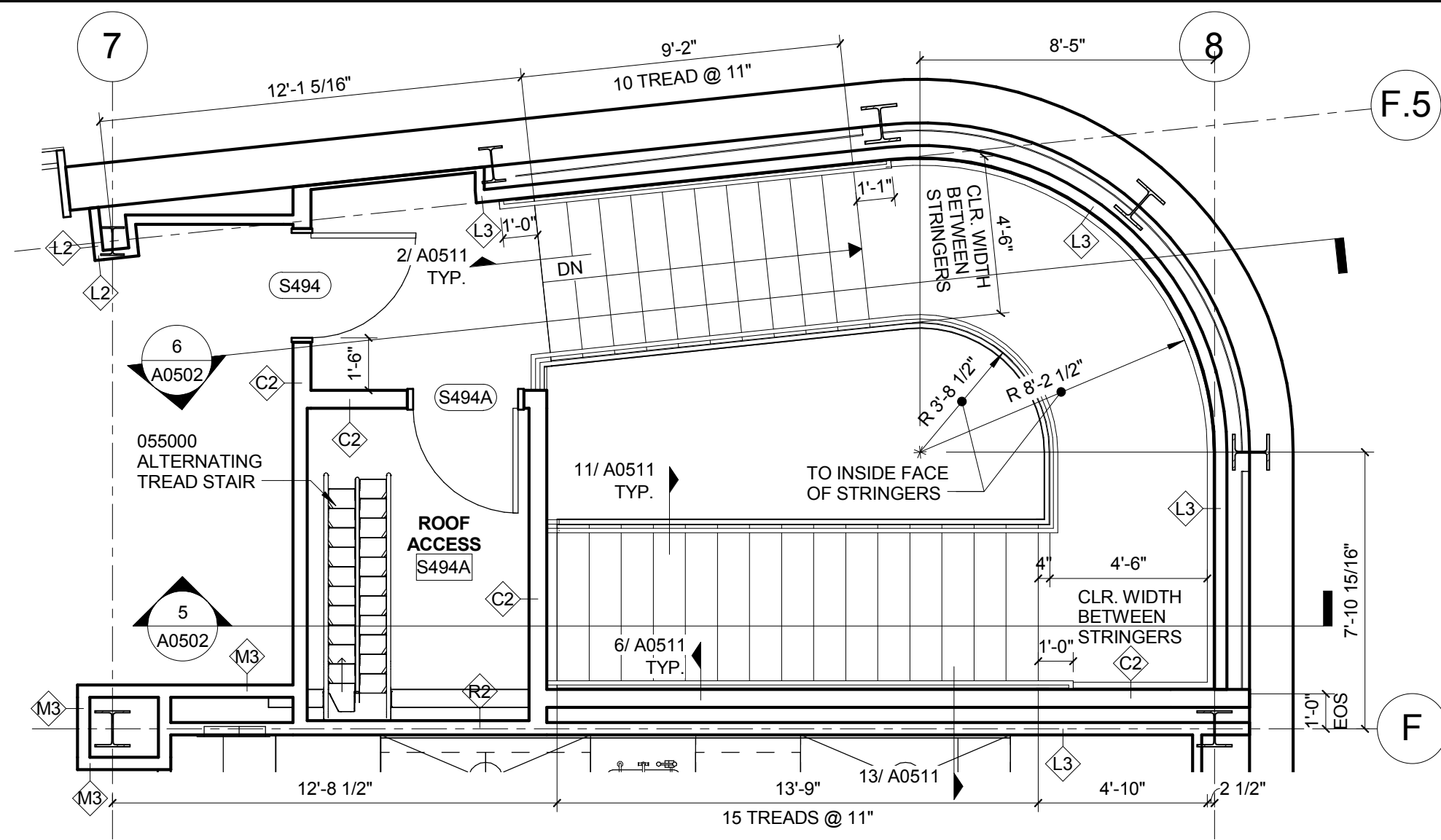
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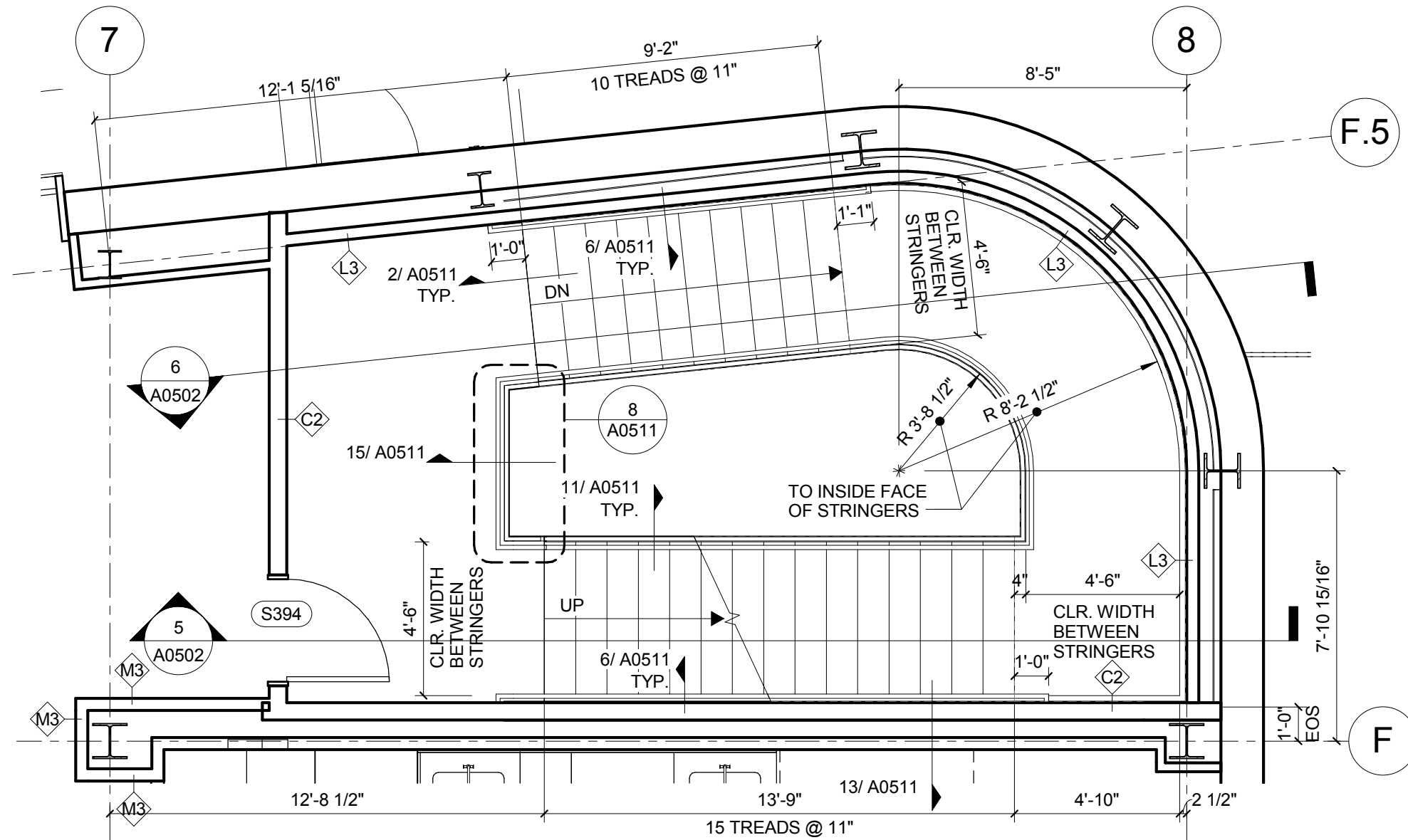
5 STAIR 2 SECTION - 2
1/4" = 1'-0"



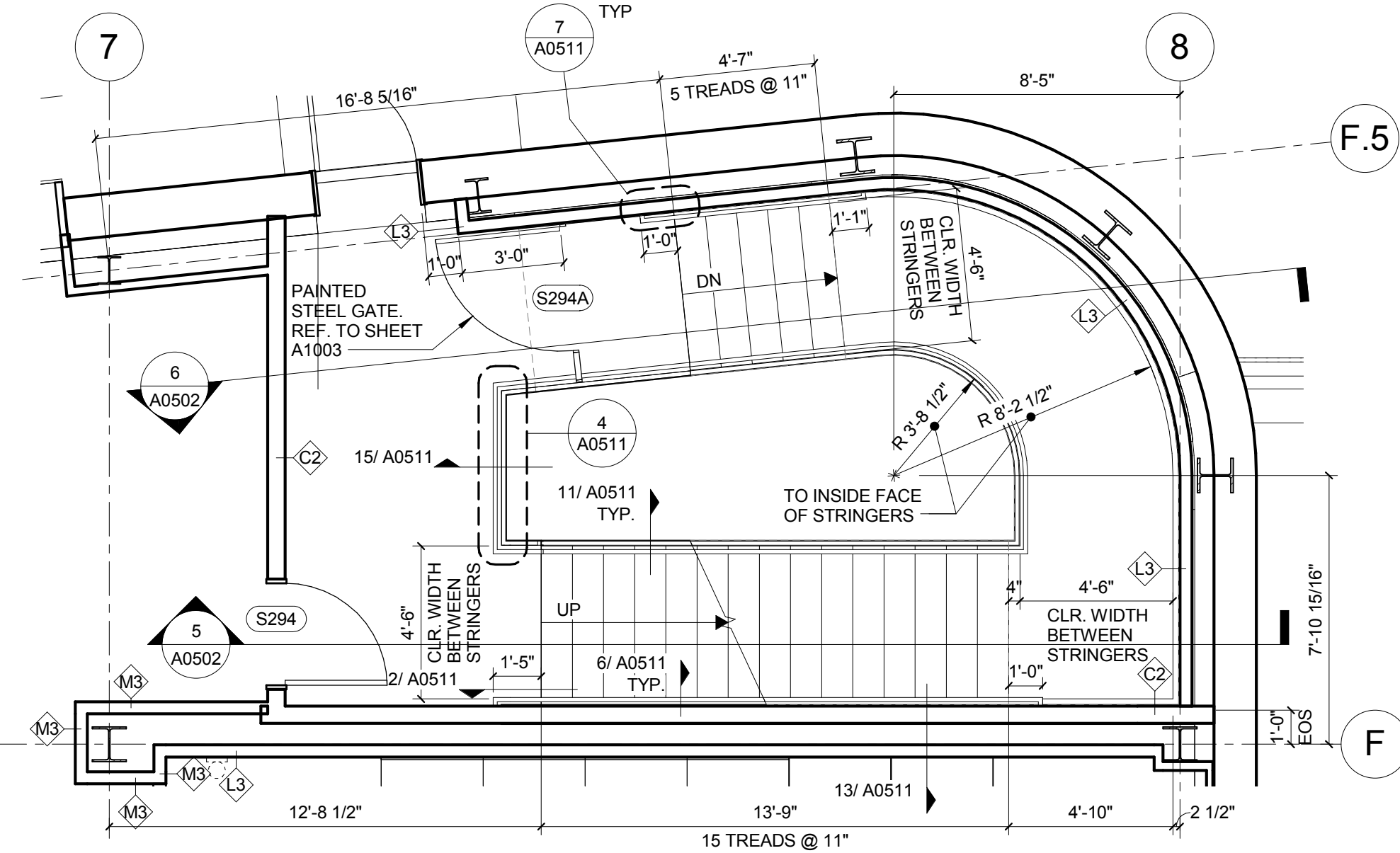
5 STAIR 2 SECTION - 1
1/4" = 1'-0"



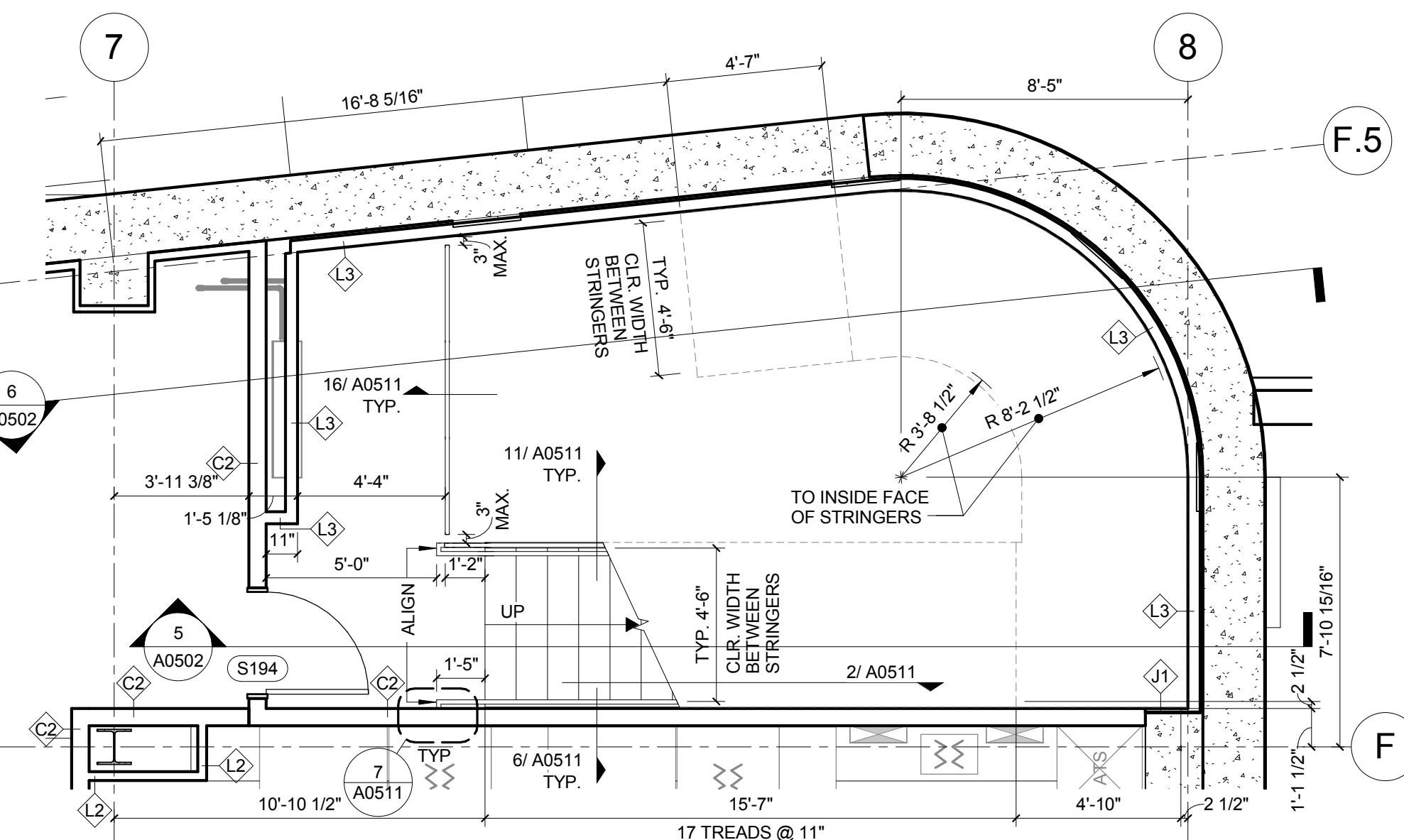
4 STAIR 2 PLAN - LEVEL 04
1/4" = 1'-0"



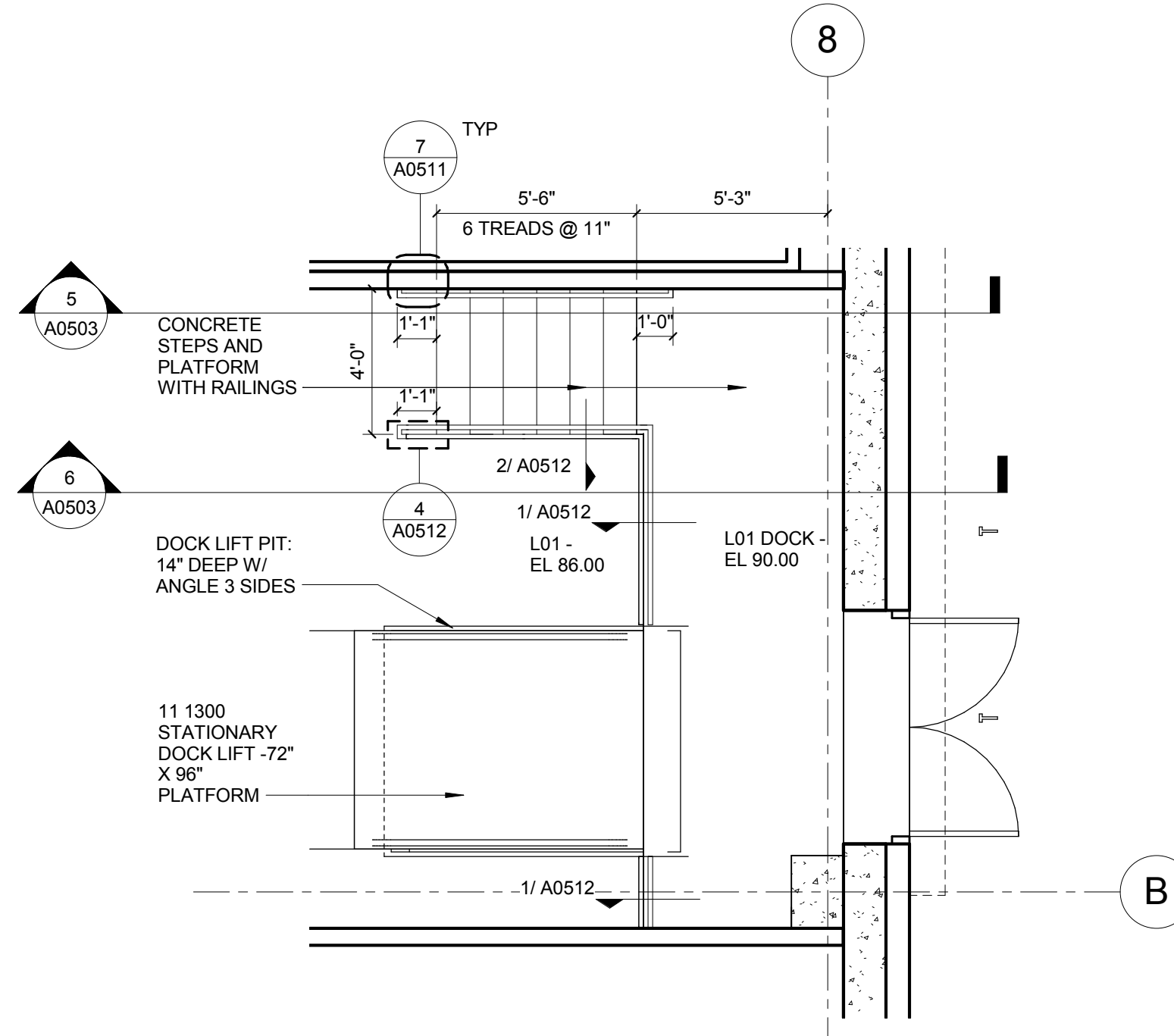
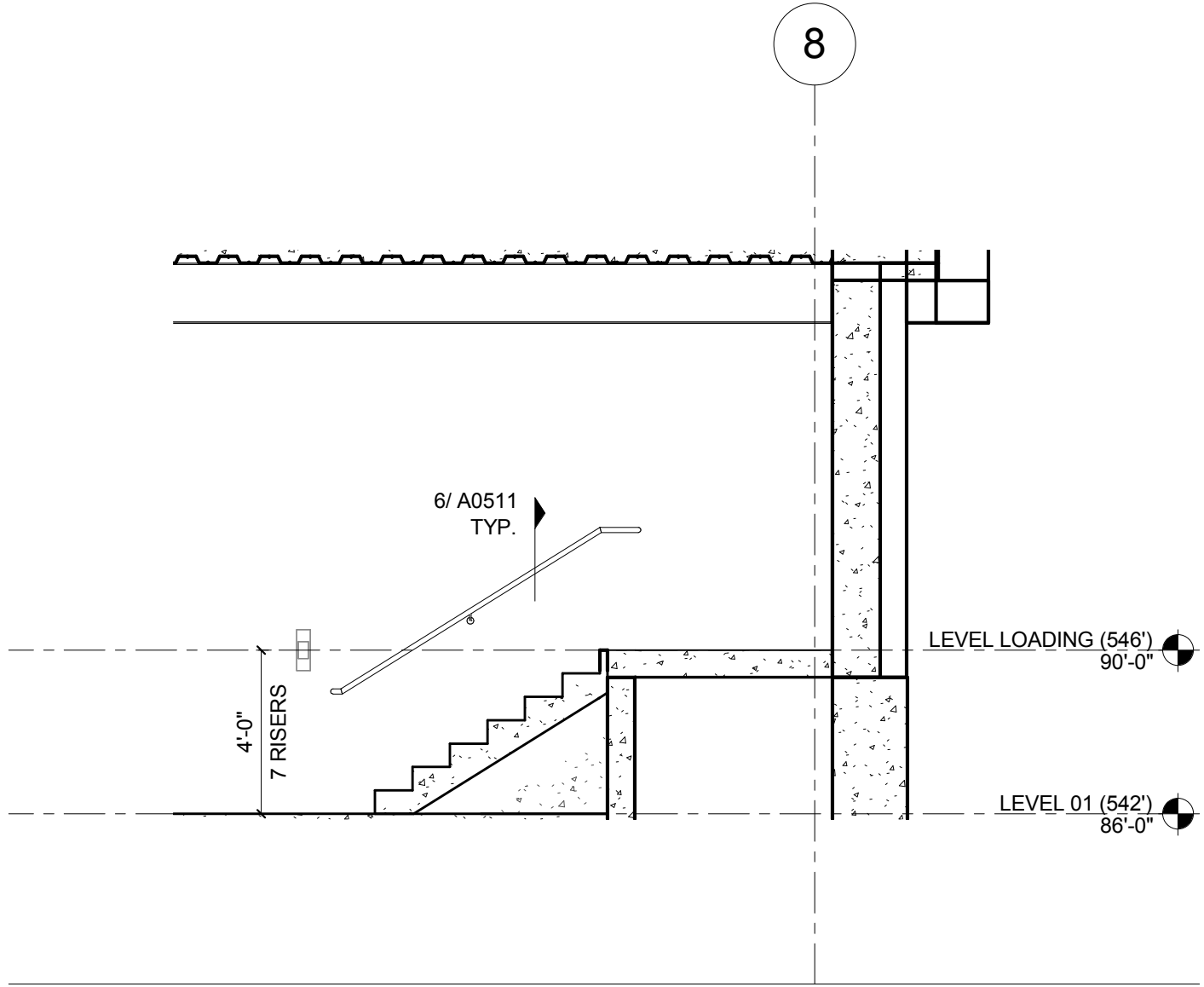
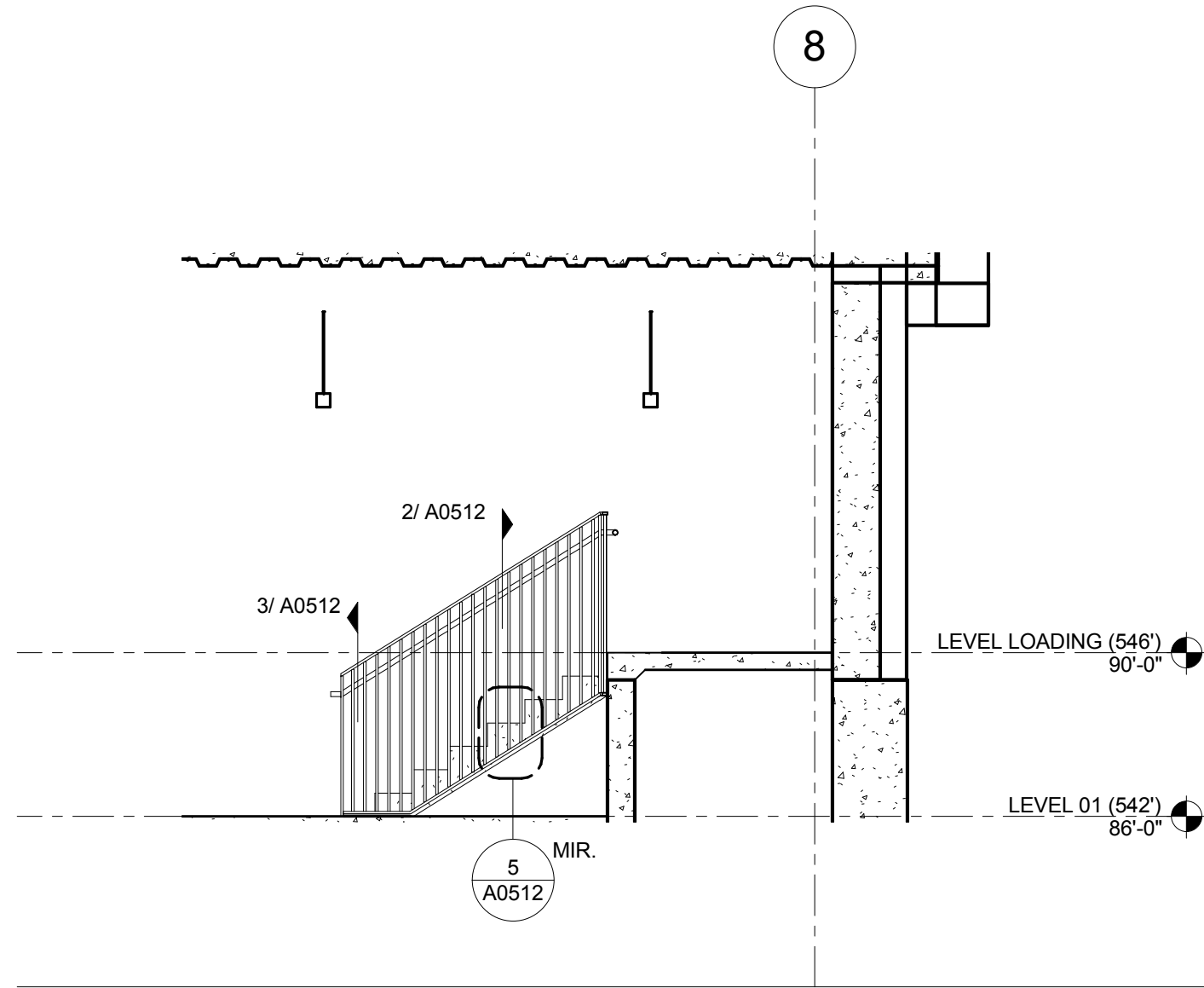
3 STAIR 2 PLAN - LEVEL 03
1/4" = 1'-0"



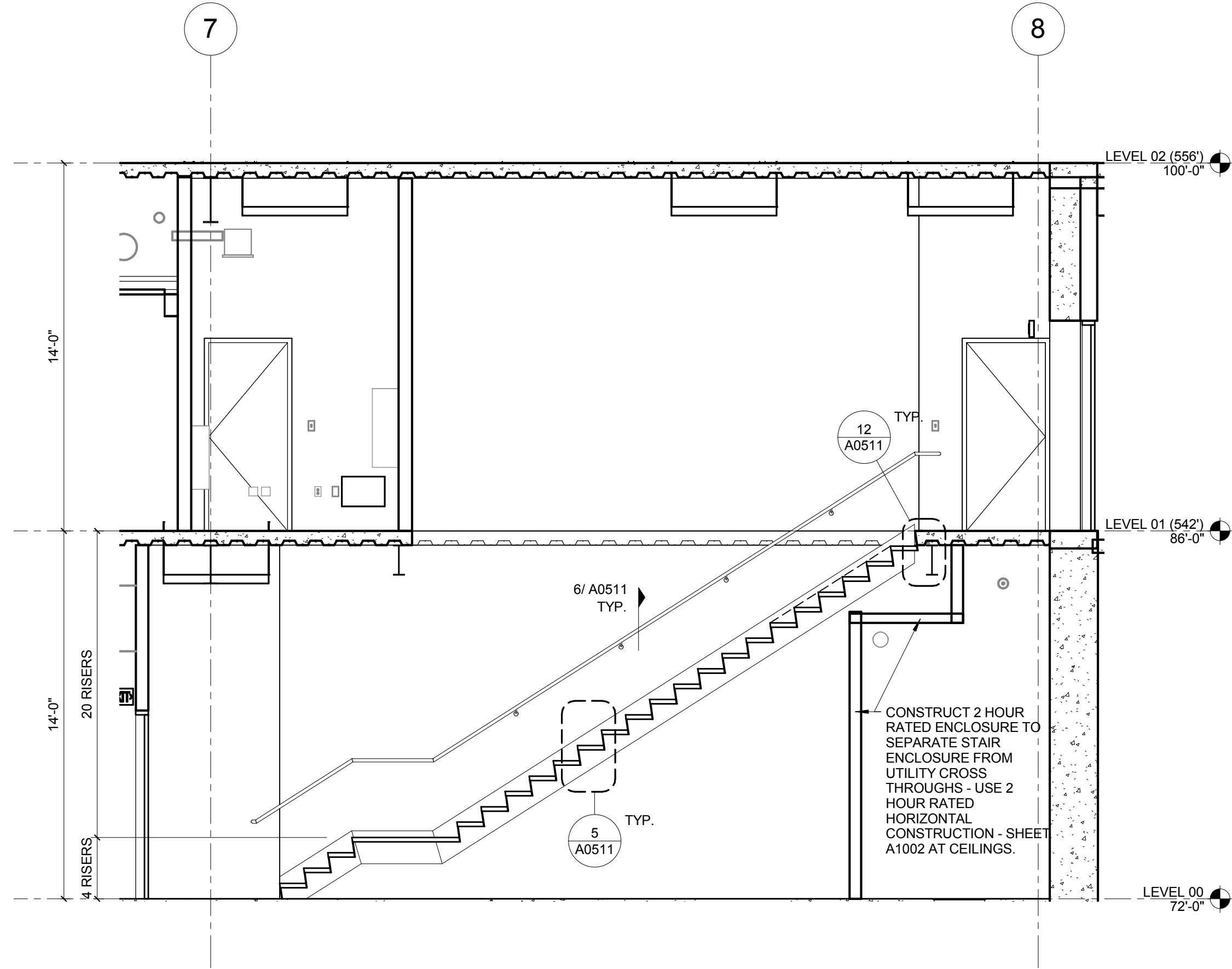
2 STAIR 2 PLAN - LEVEL 02
1/4" = 1'-0"



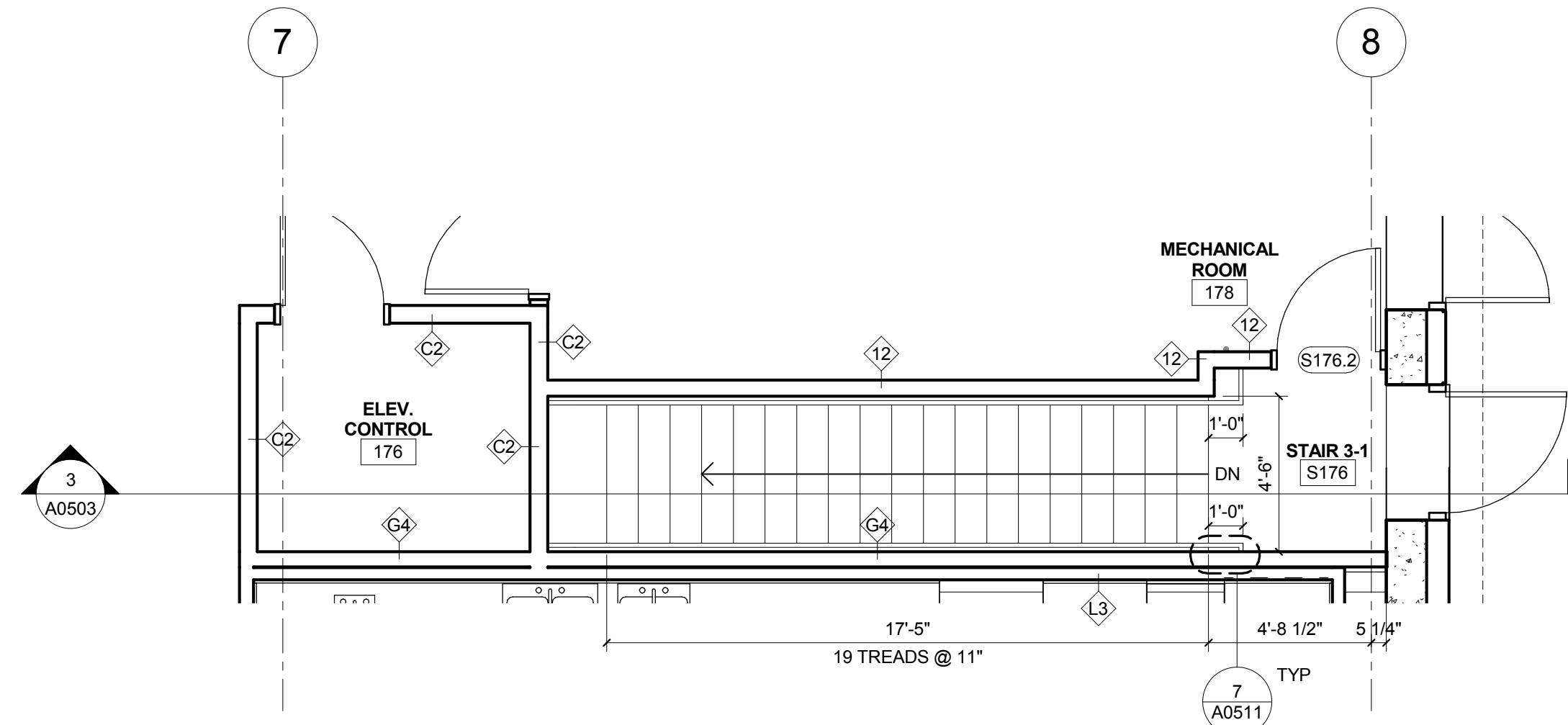
1 STAIR 2 PLAN - LEVEL 01
1/4" = 1'-0"



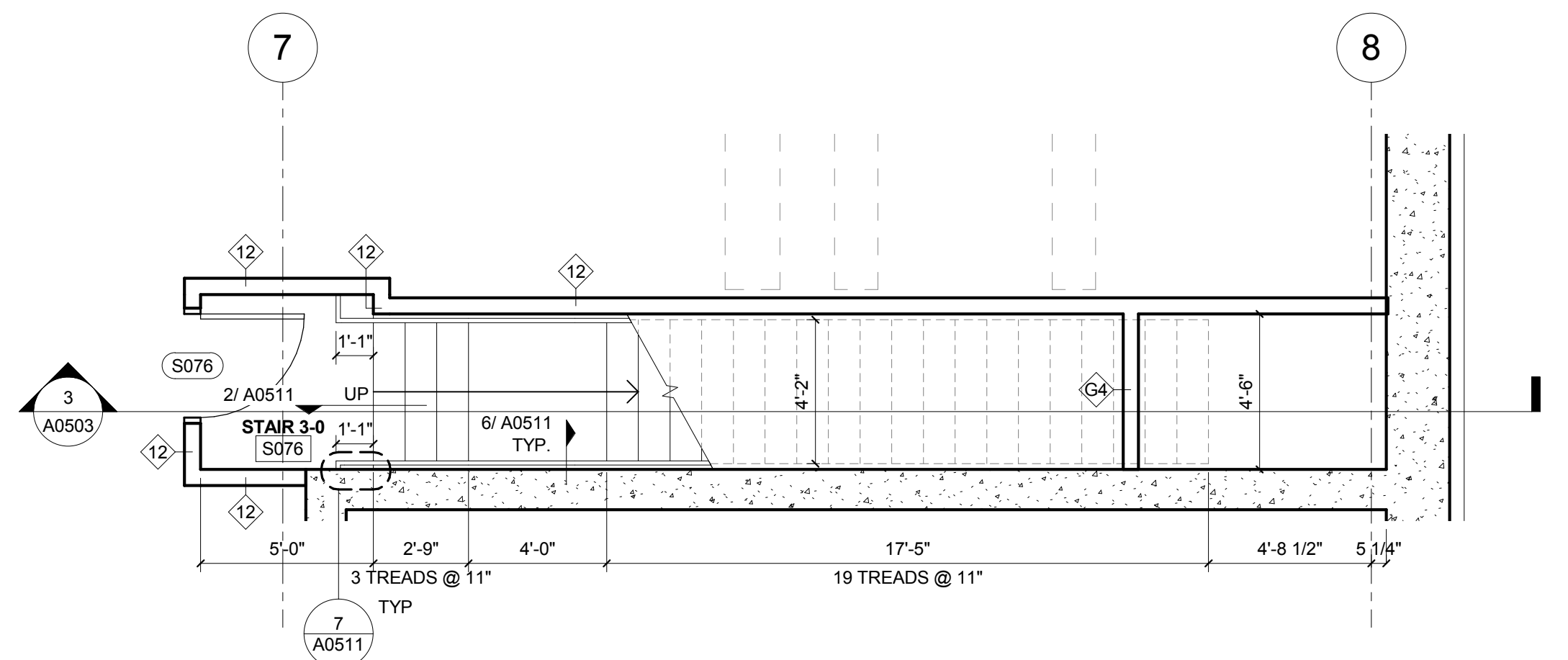
4 STAIR 4 PLAN - LEVEL 01
1/4" = 1'-0"



3 STAIR 3 SECTION
1/4" = 1'-0"



1 STAIR 3 PLAN - LEVEL 01
1/4" = 1'-0"



2 STAIR 3 PLAN - LEVEL 00
1/4" = 1'-0"

CONFORMED SET 01 JUL 2016

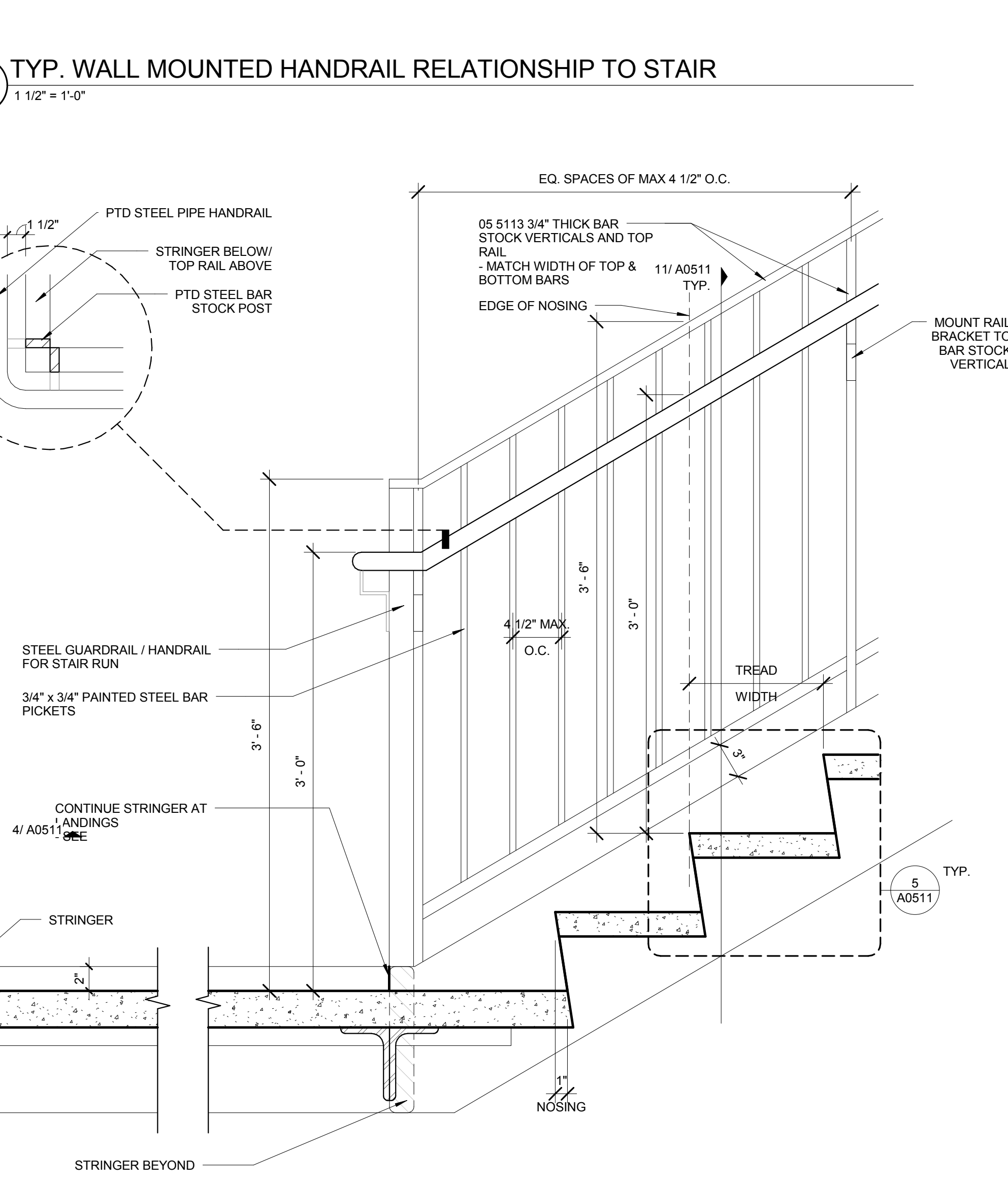
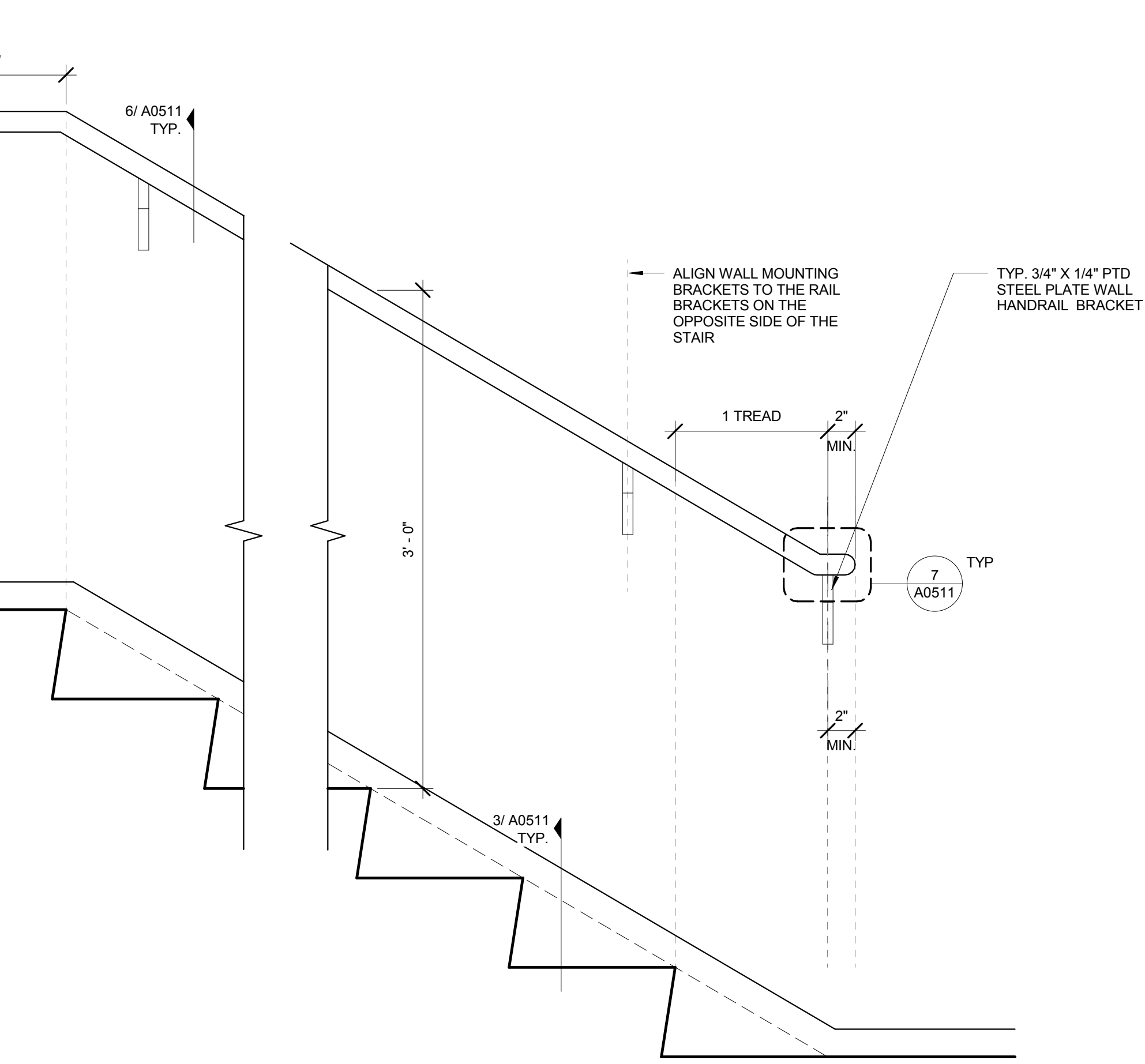
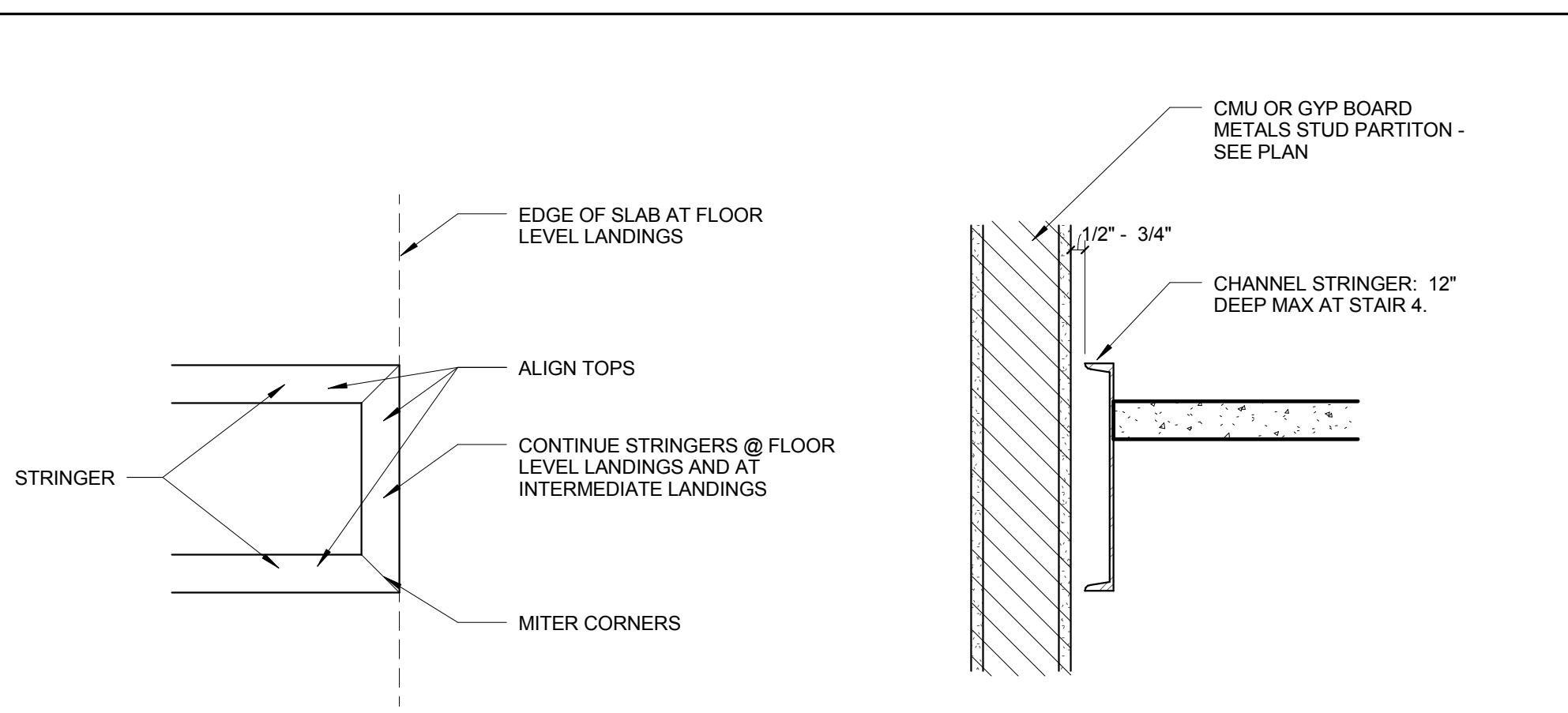
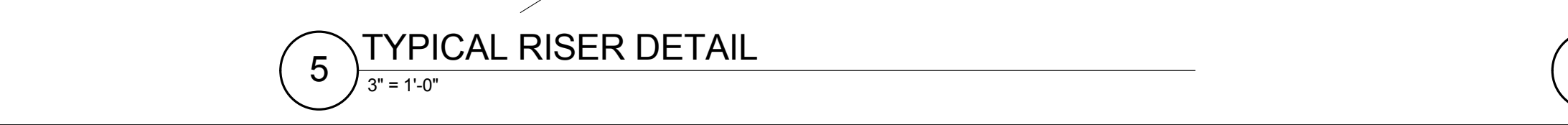
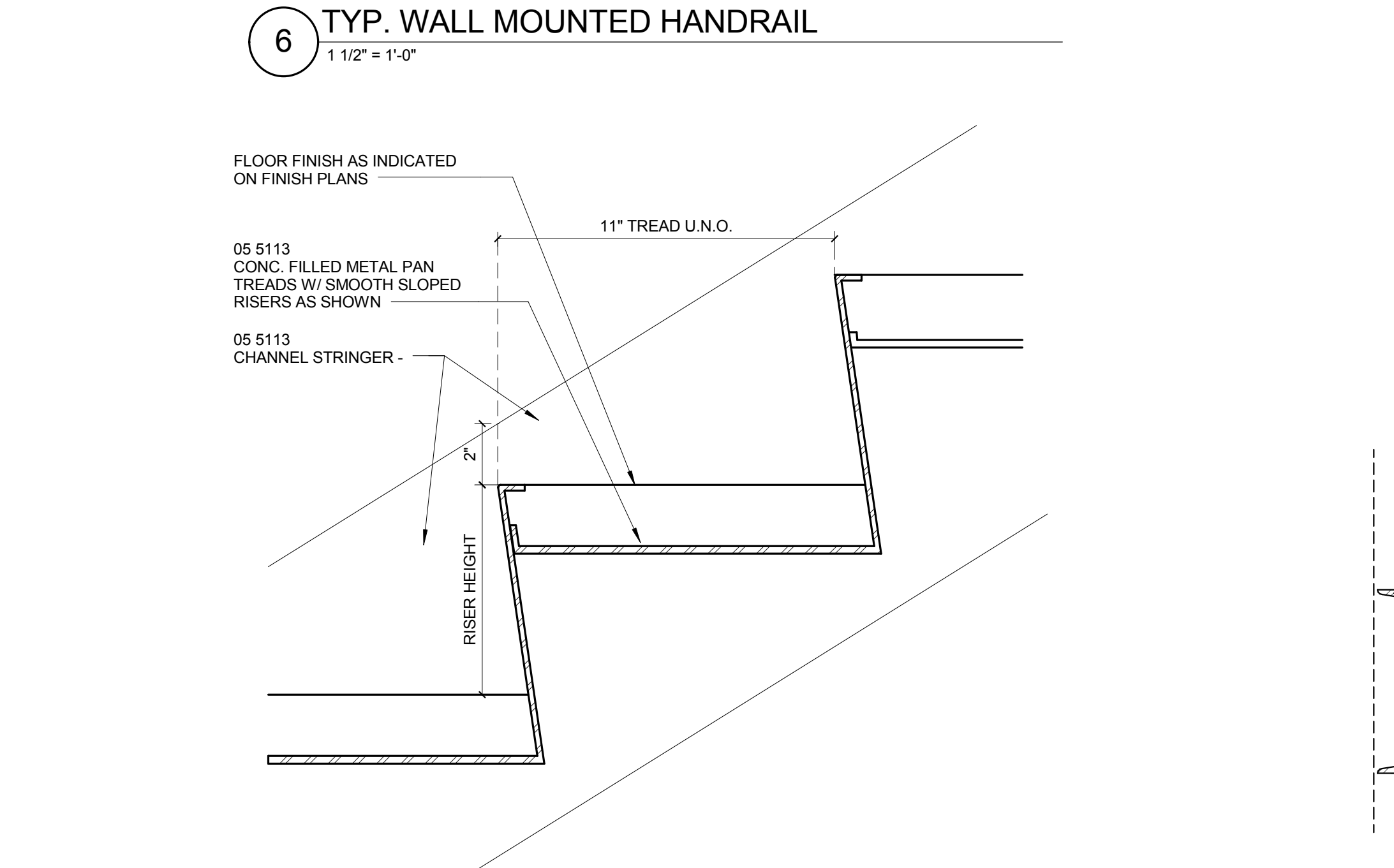
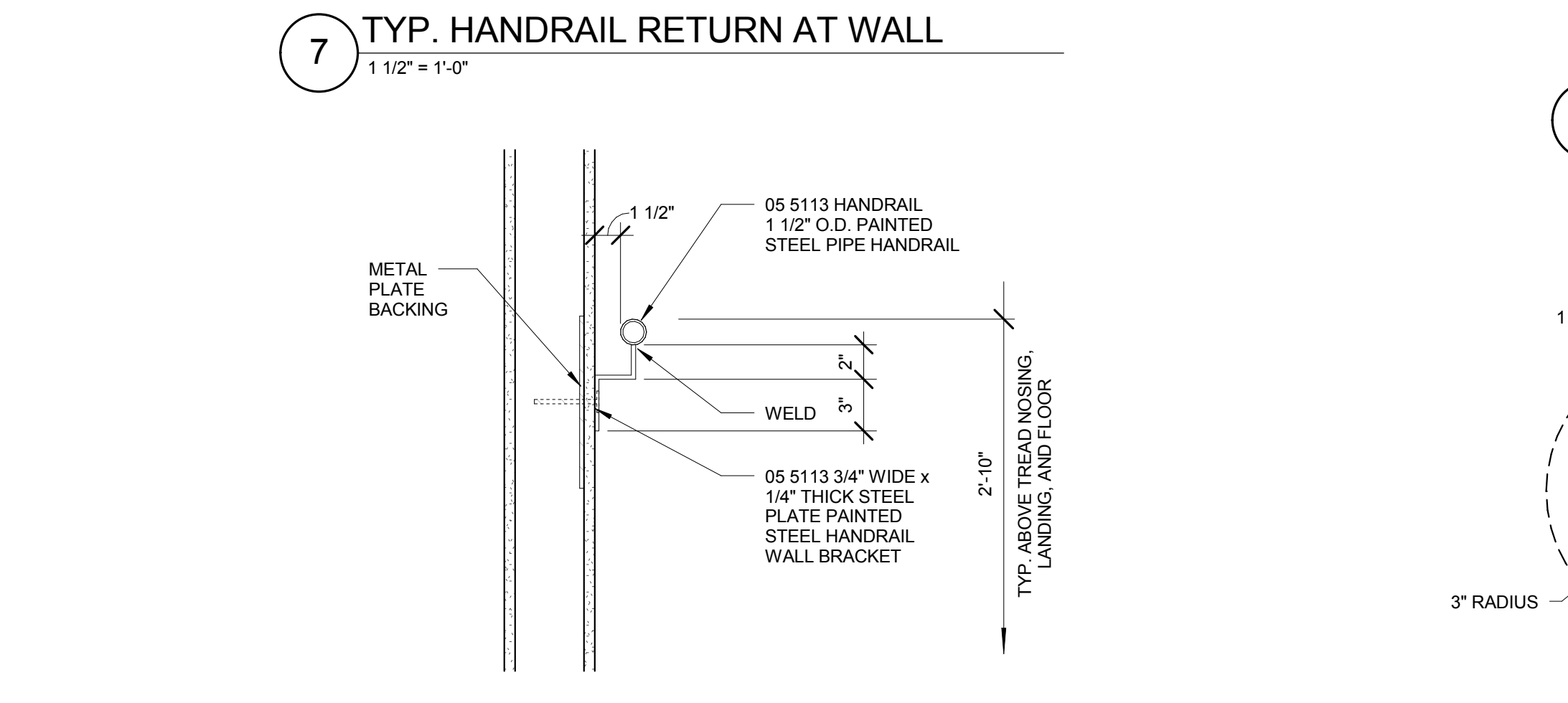
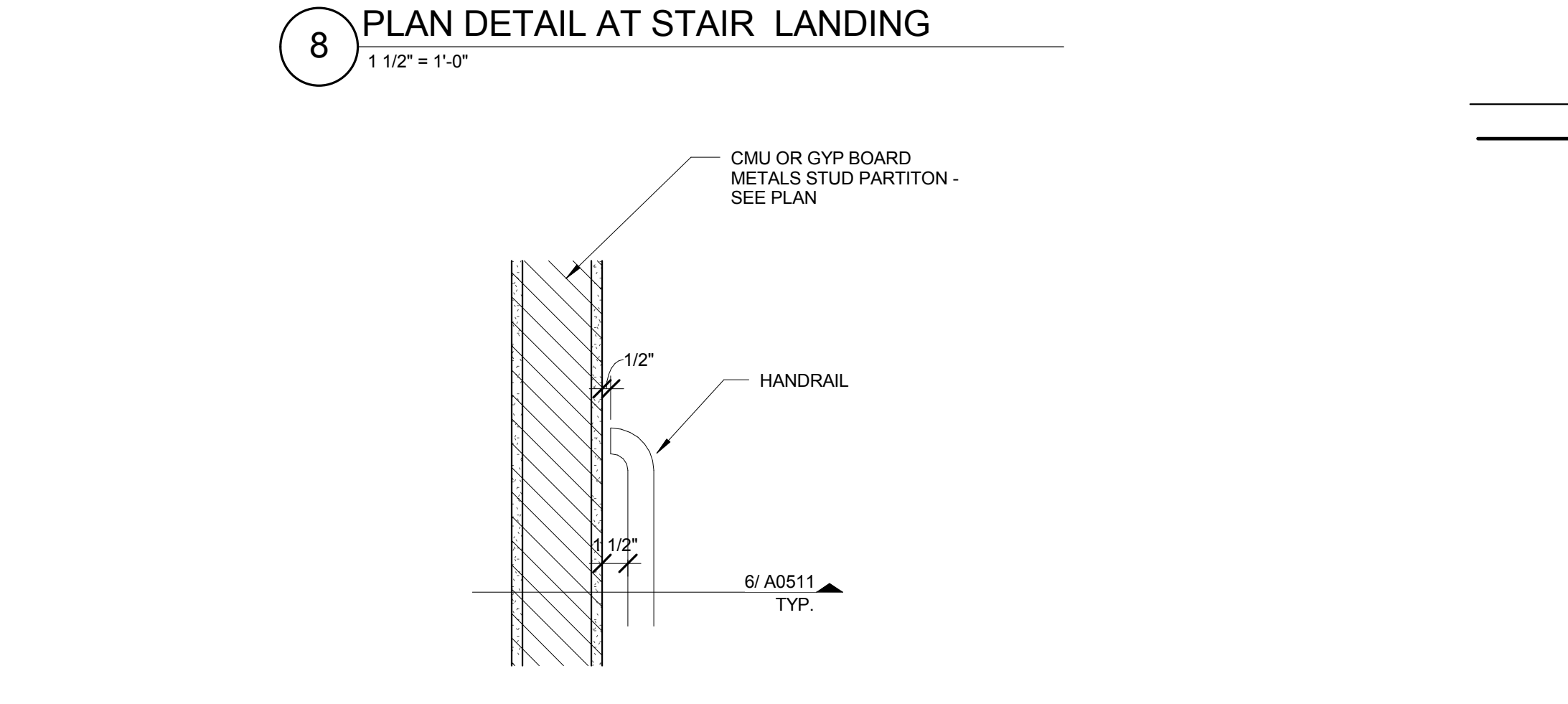
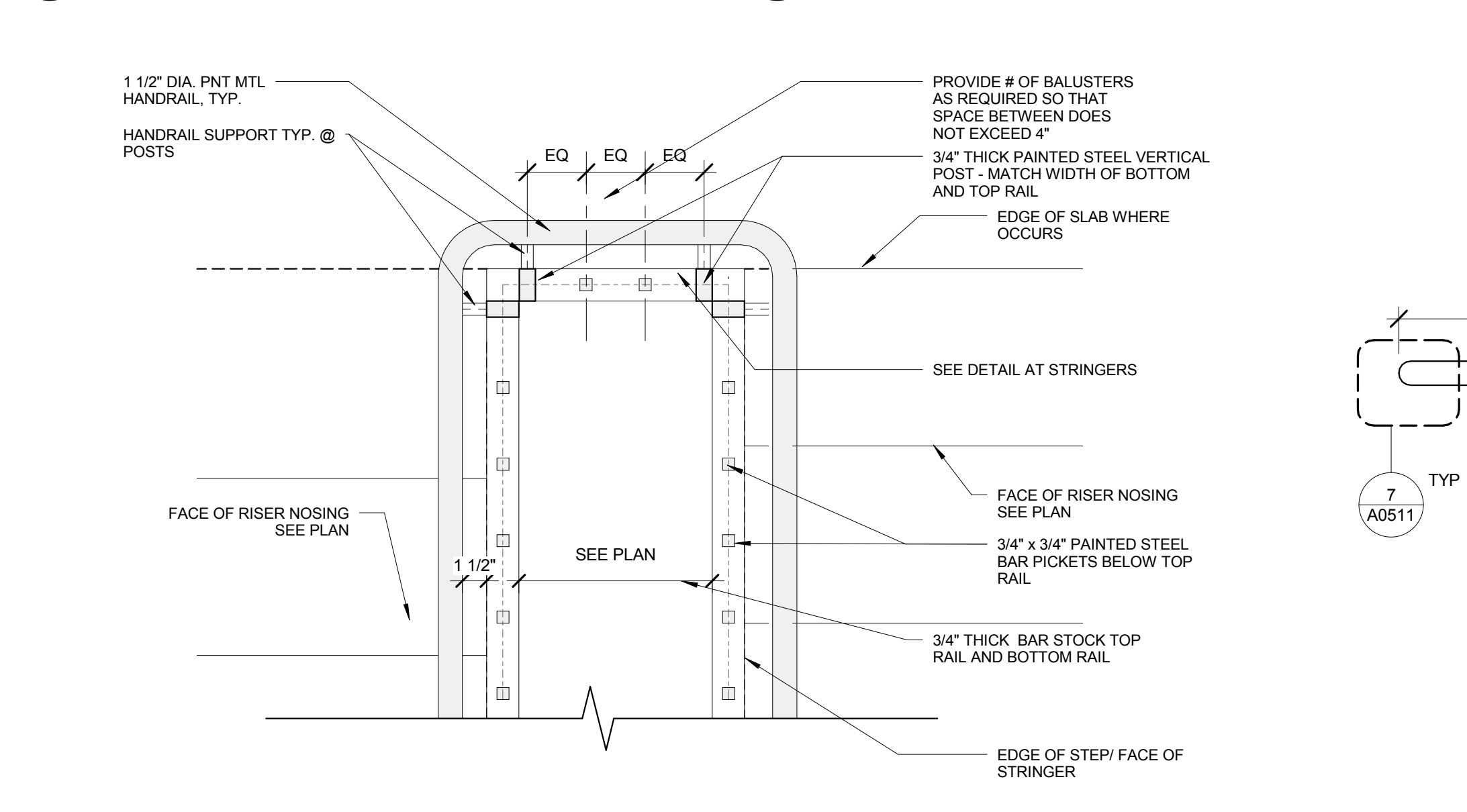
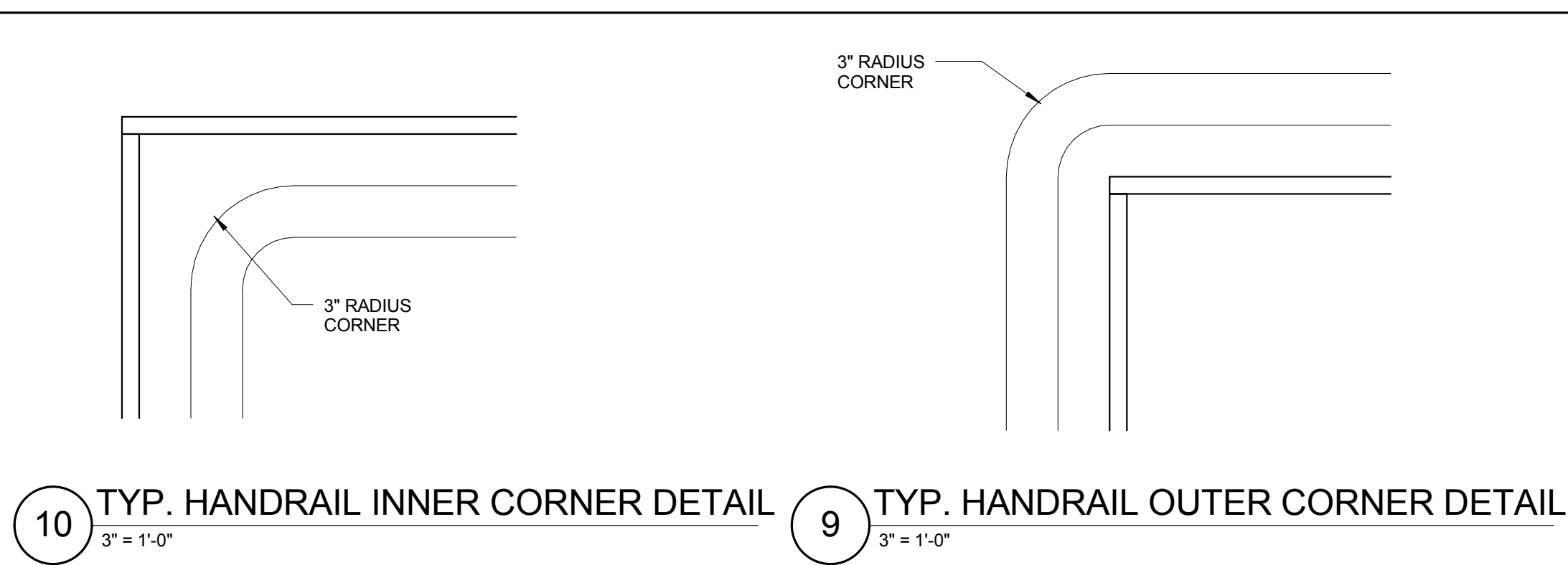
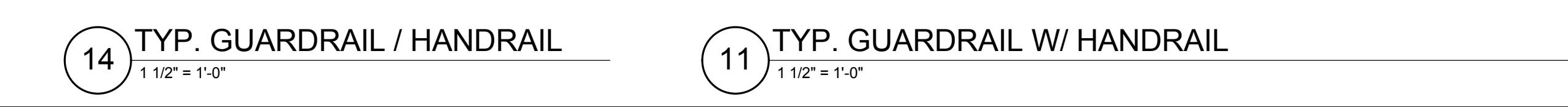
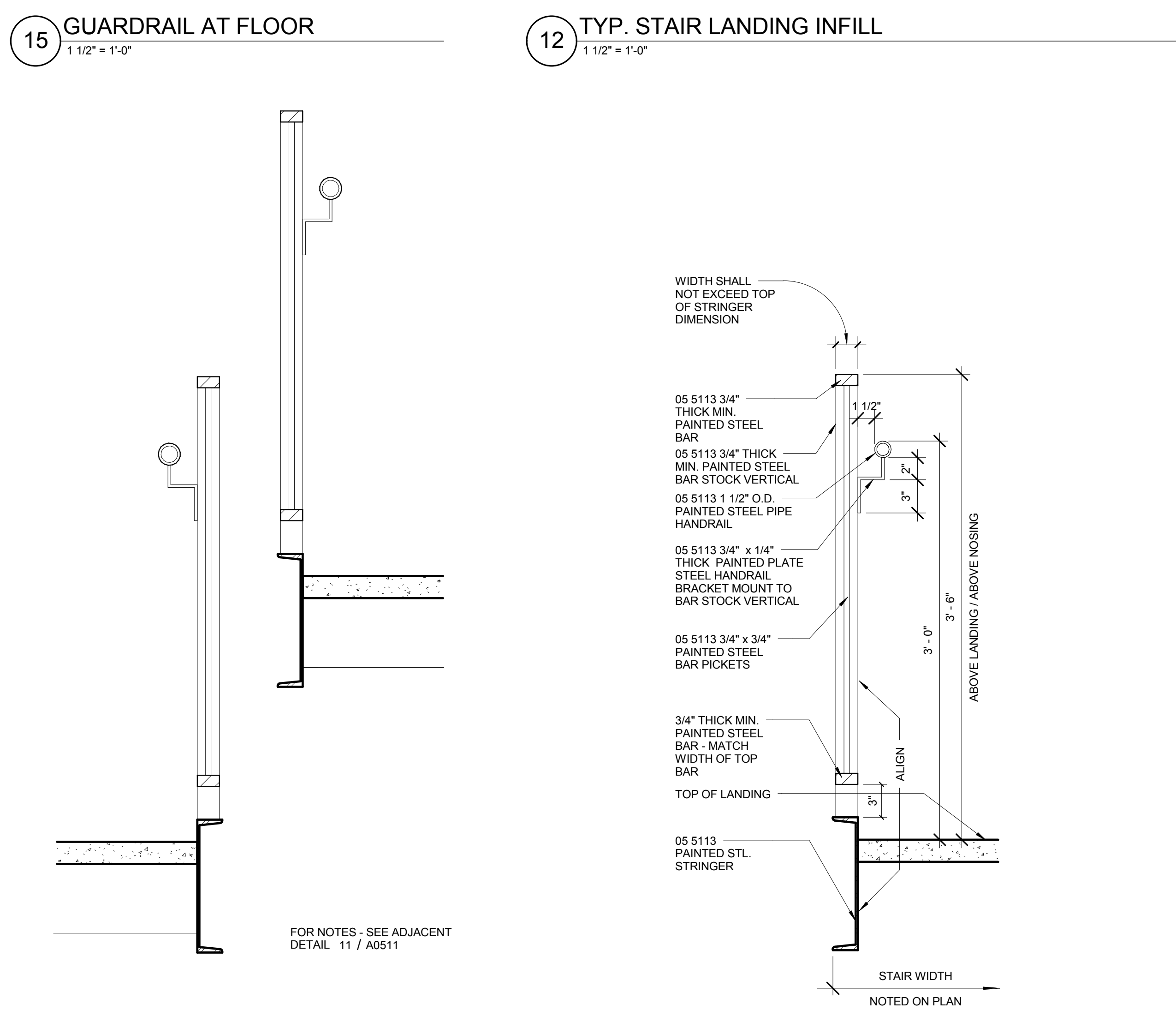
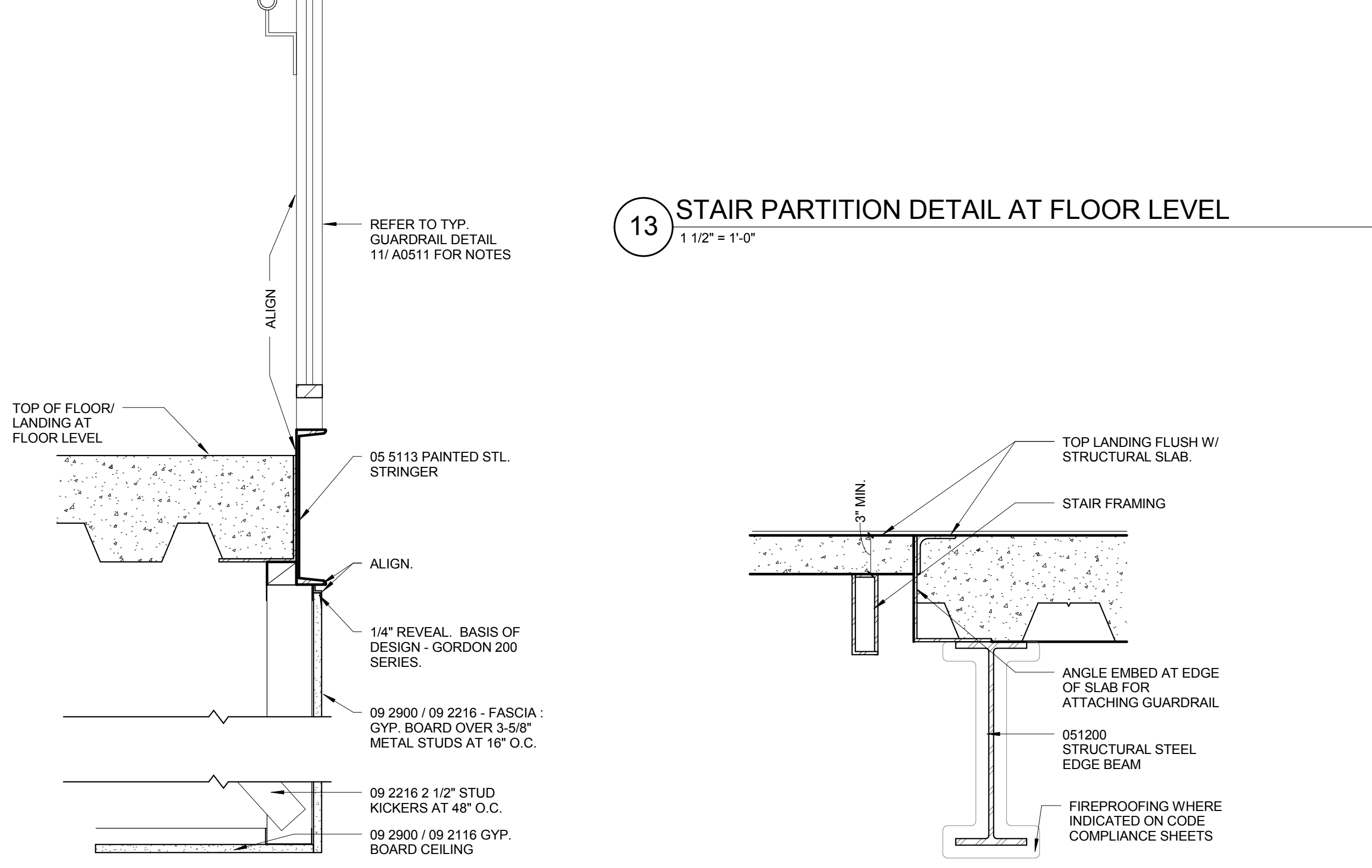
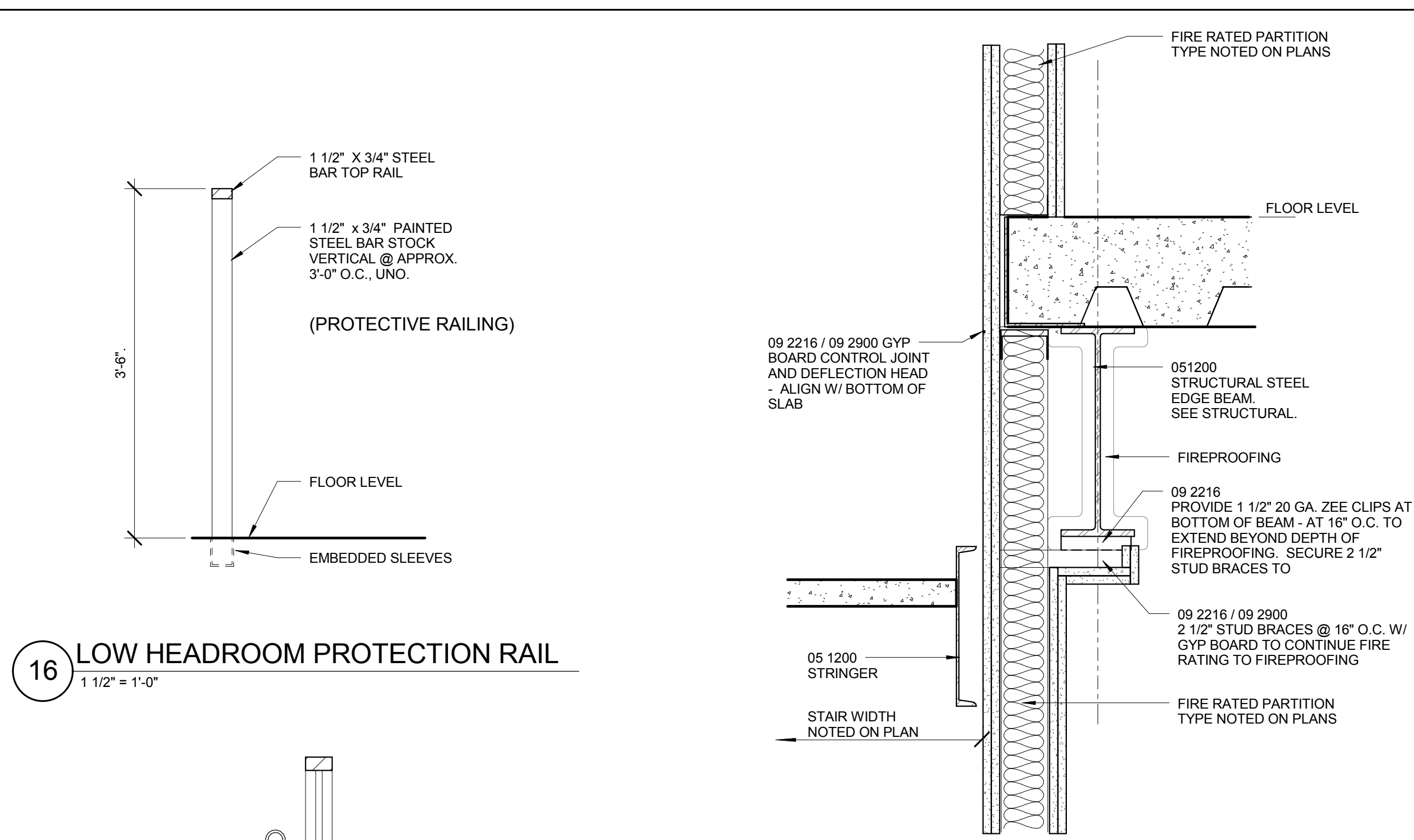
ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016
No. Description Date

Drawing Title:

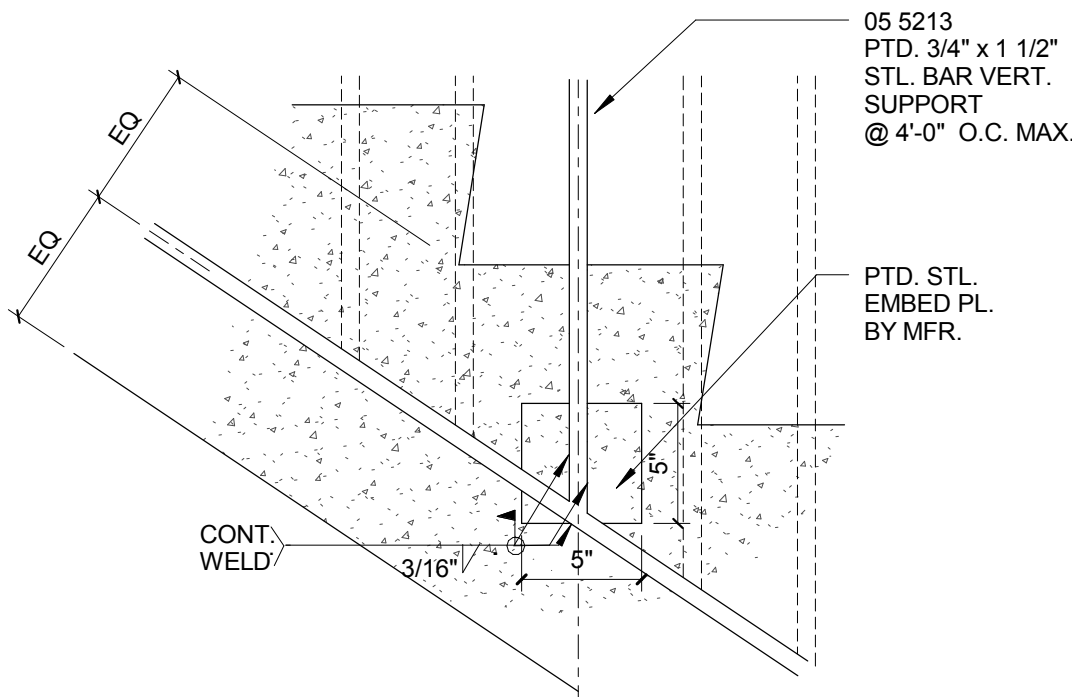
STAIR 3 & 4 - PLANS AND
SECTIONS

Project No.: 04561.01 Checked by:

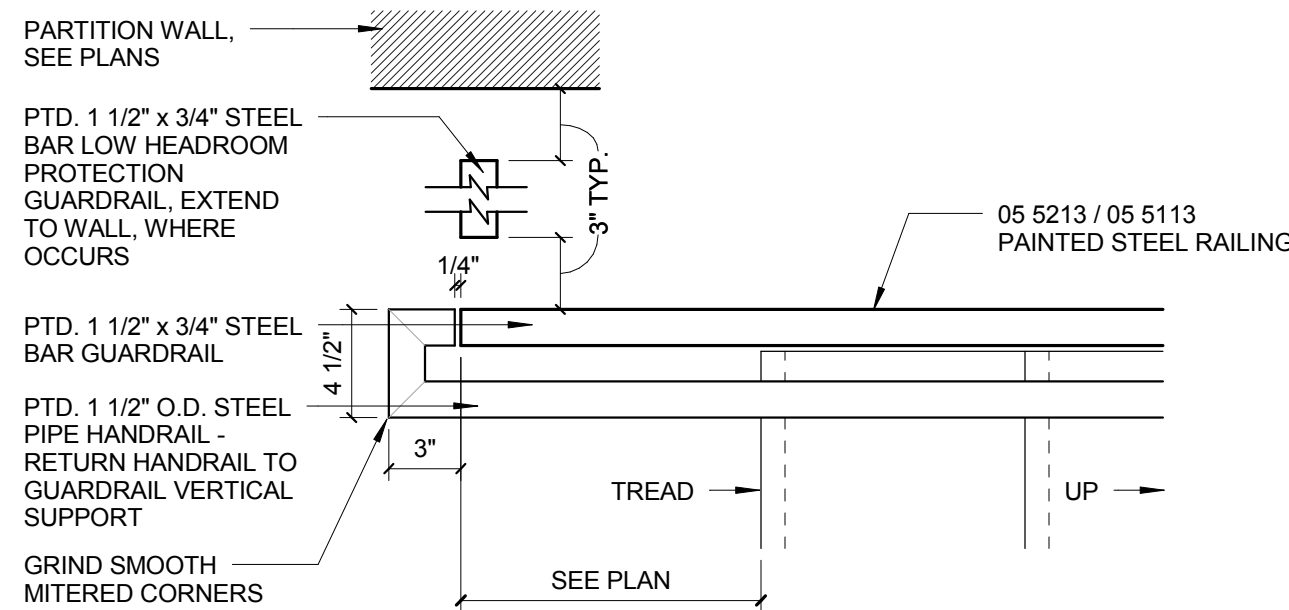
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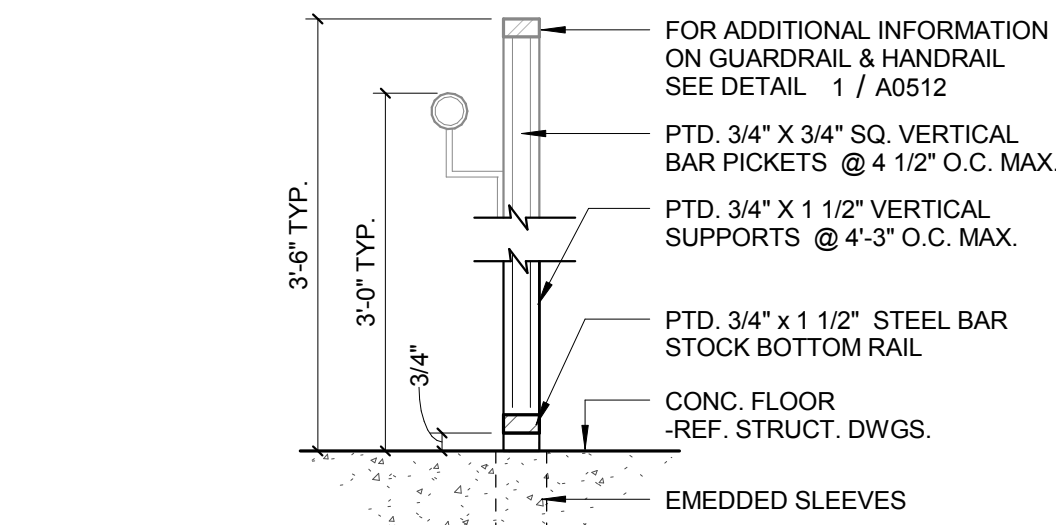
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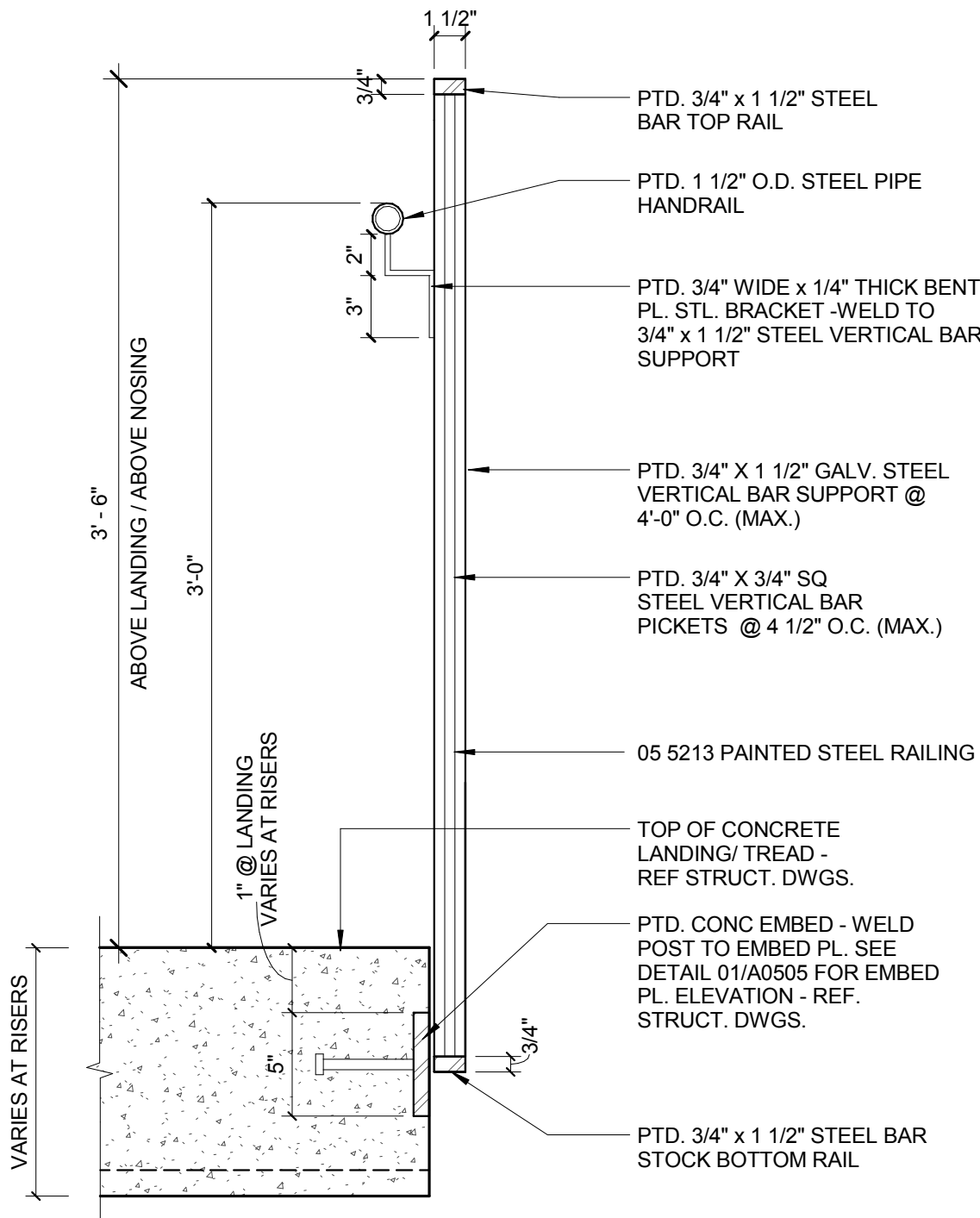
5 RAILING SUPPORT EMBED PL. CONN.
1 1/2" = 1'-0"



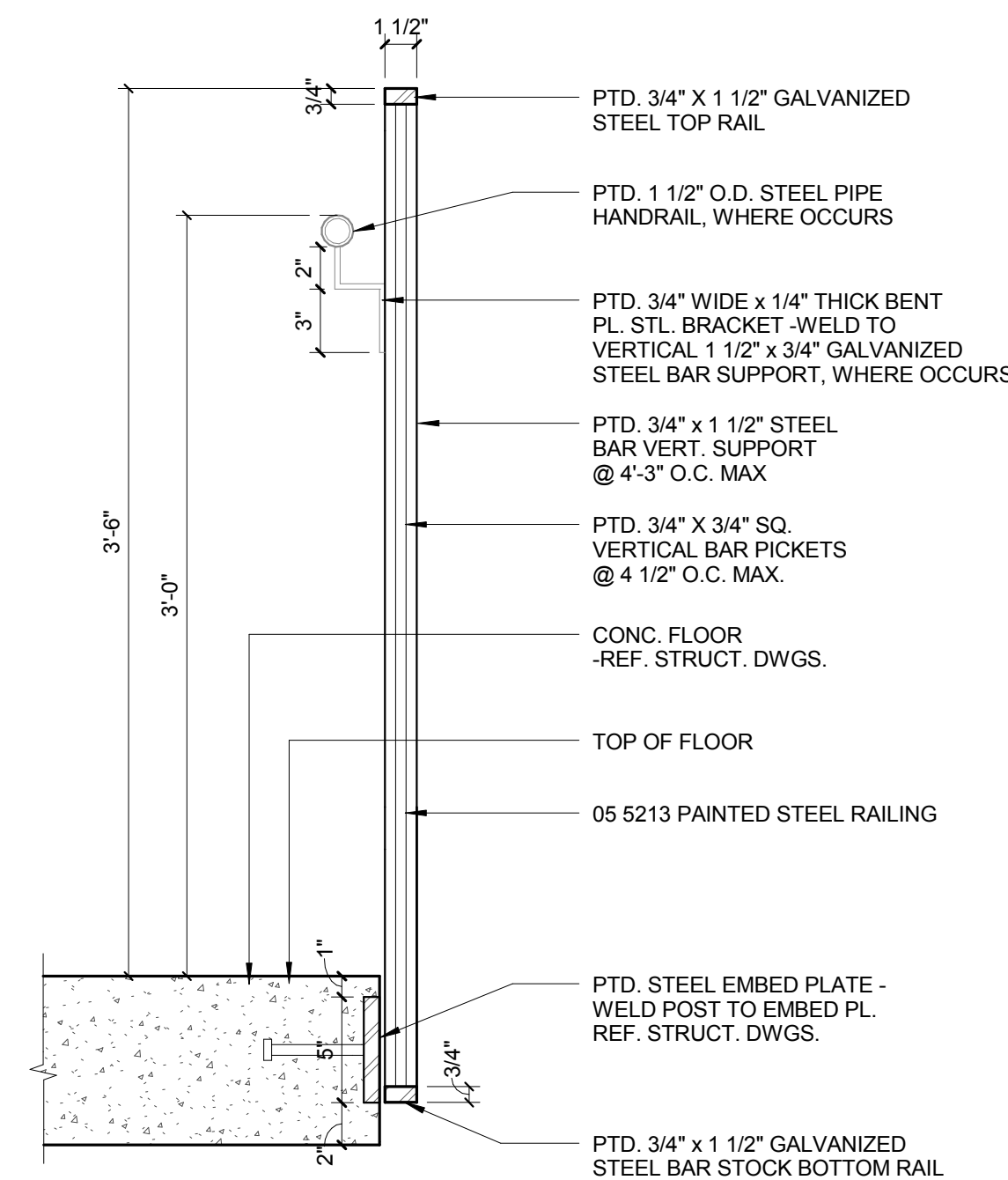
4 RAILING DETAIL - BOTTOM LANDING
1 1/2" = 1'-0"



3 RAILING DTL. @ LEVEL 01 LOADING
1 1/2" = 1'-0"



2 TYP. RAILING DTL. @ STAIR & INT. LANDING
1 1/2" = 1'-0"



1 TYP. RAILING DTL. @ FLOOR LEVEL
1 1/2" = 1'-0"

CONFORMED SET 01 JUL 2016

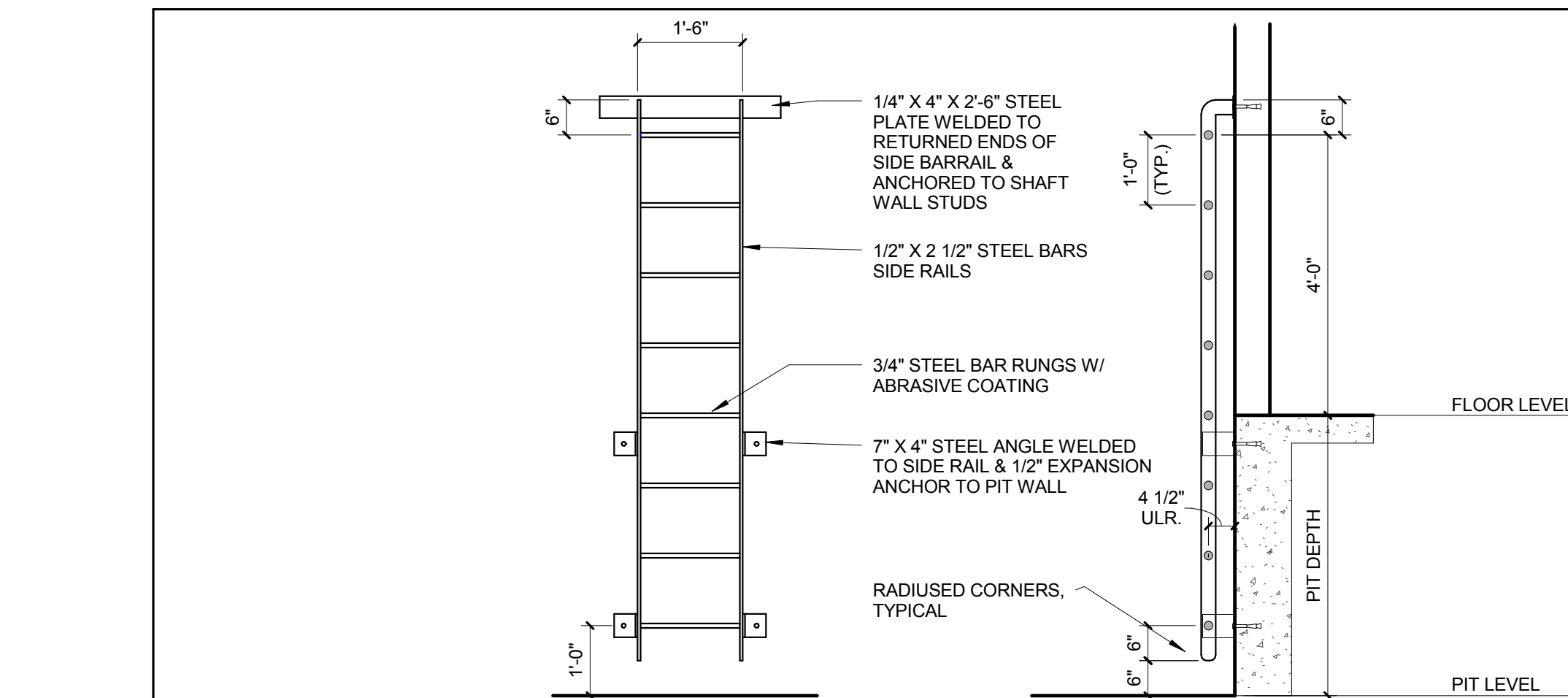
ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016
No. Description Date

Drawing Title:

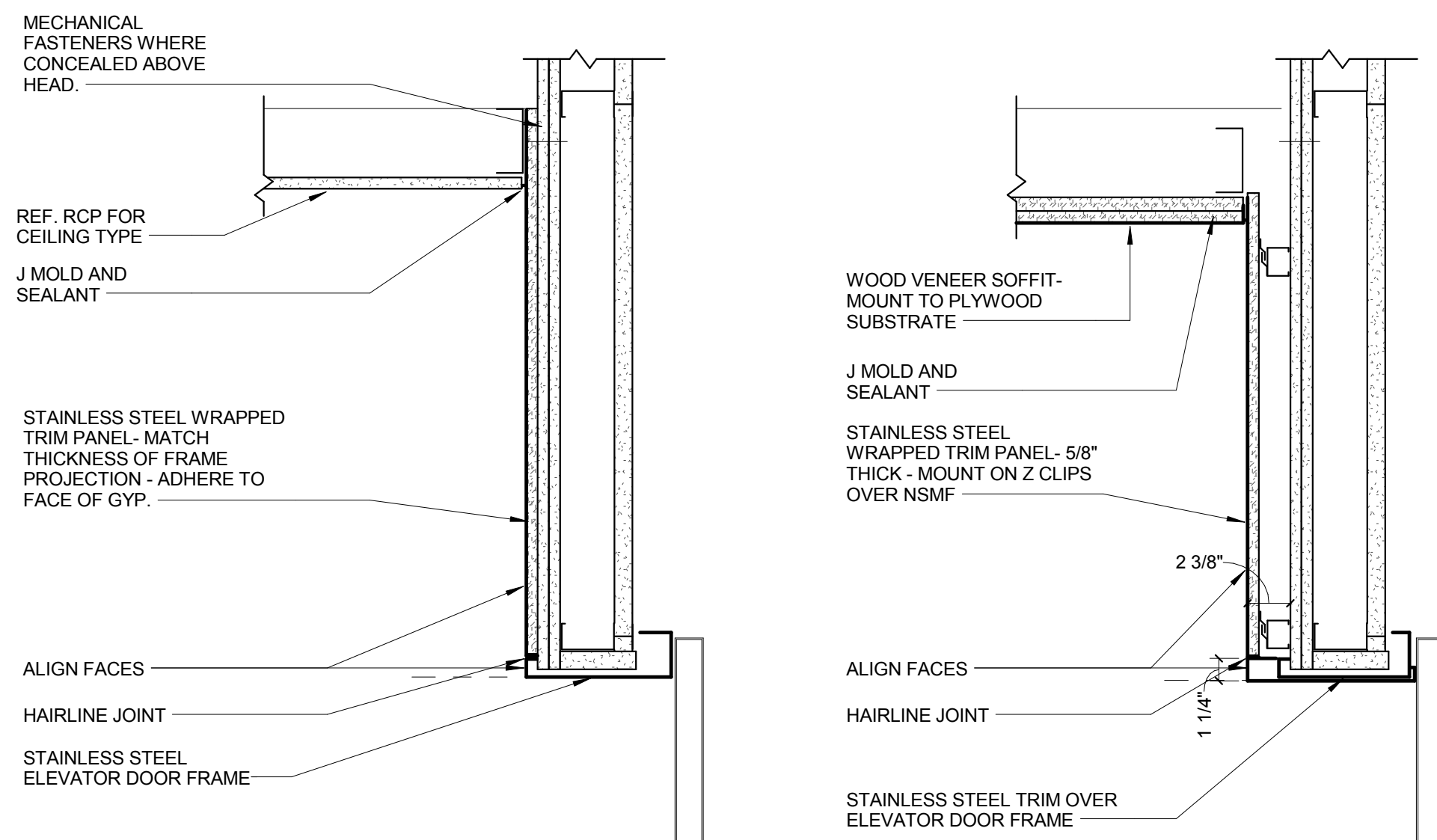
ELEVATORS

Project No.: 04561.01 Checked by:

A0551

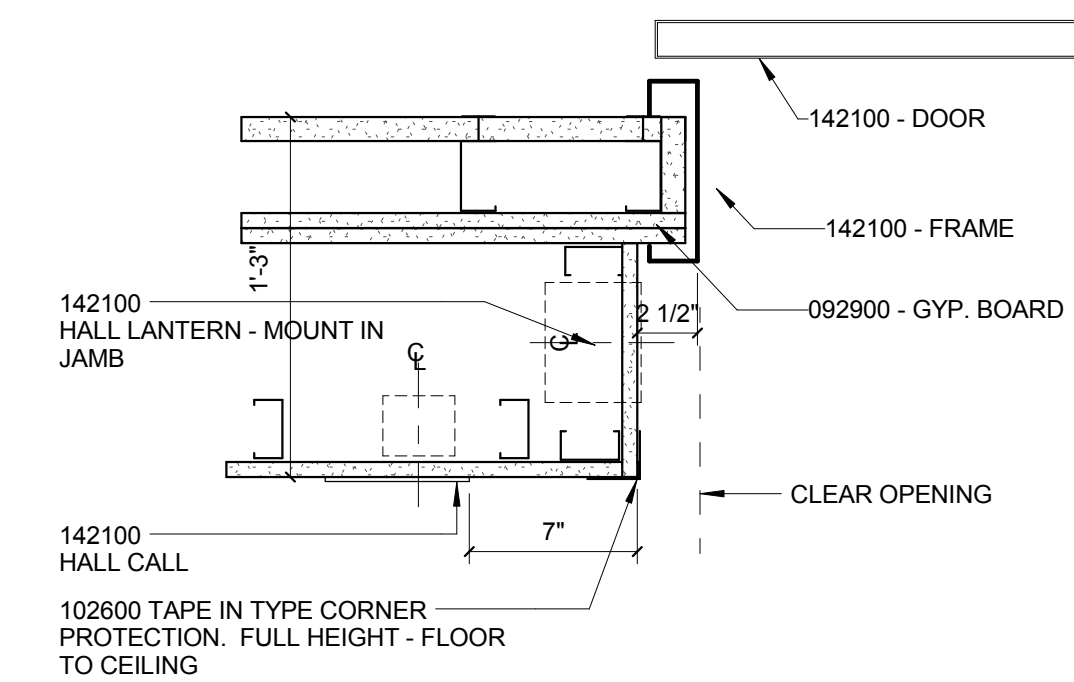


21 A0551 - ELEVATOR PIT LADDER
1/2" = 1'-0"

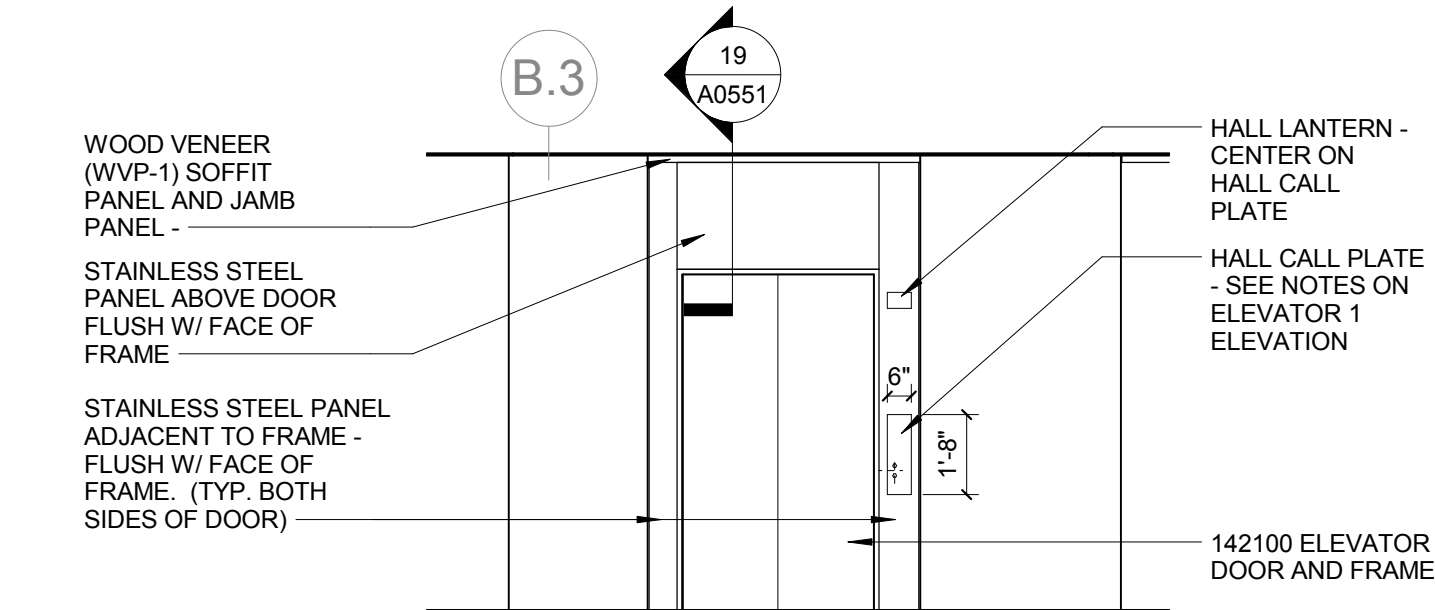


20 ELEVATOR DOOR HEAD DETAIL
1 1/2" = 1'-0"

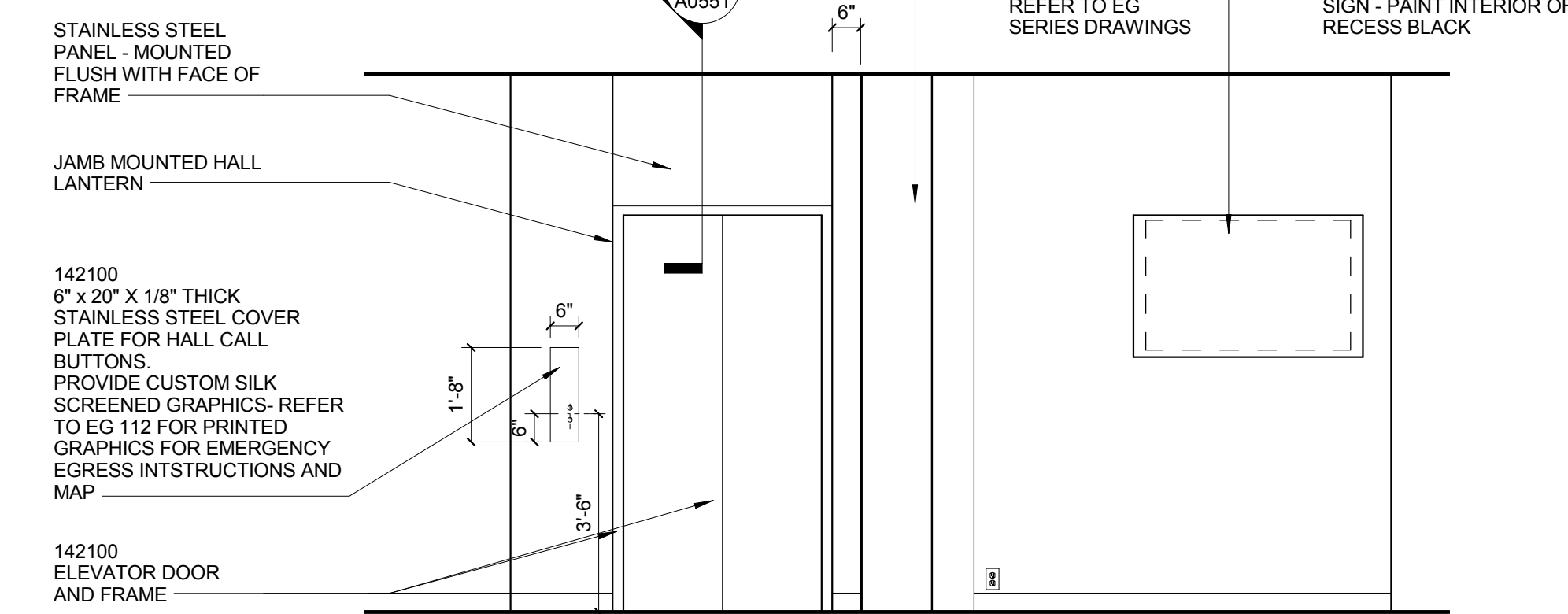
19 ELEVATOR 2 DOOR HEAD DETAIL
1 1/2" = 1'-0"



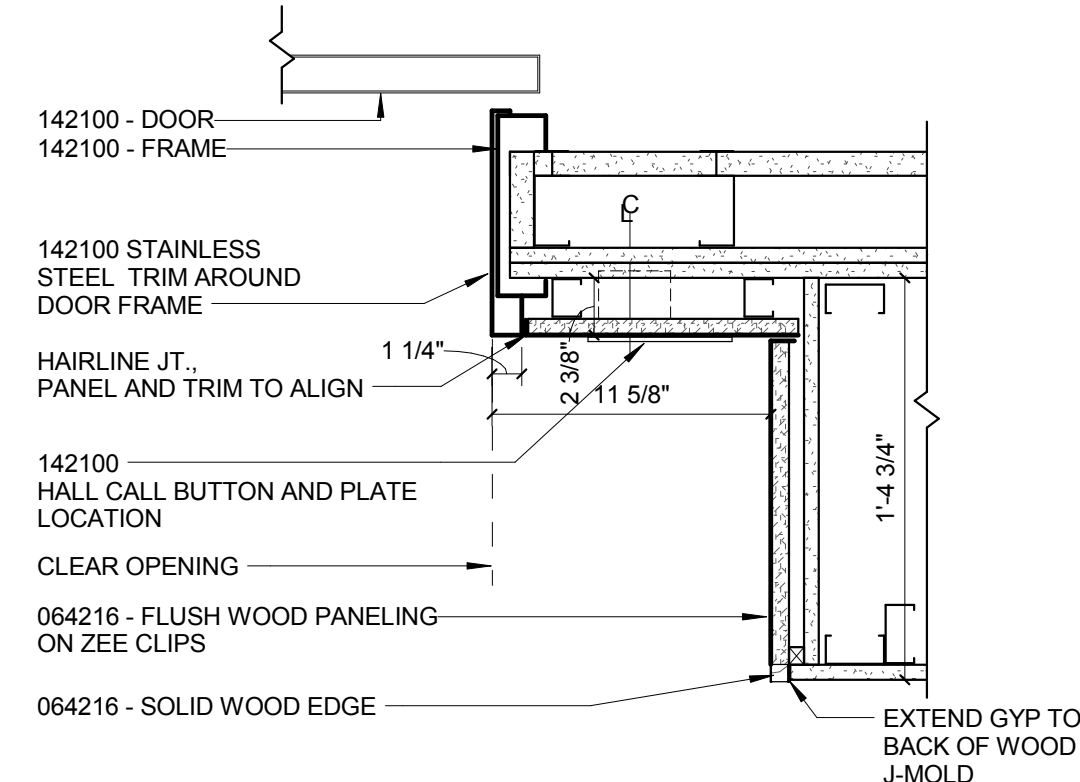
18 ELEVATOR JAMB DETAIL
1 1/2" = 1'-0"



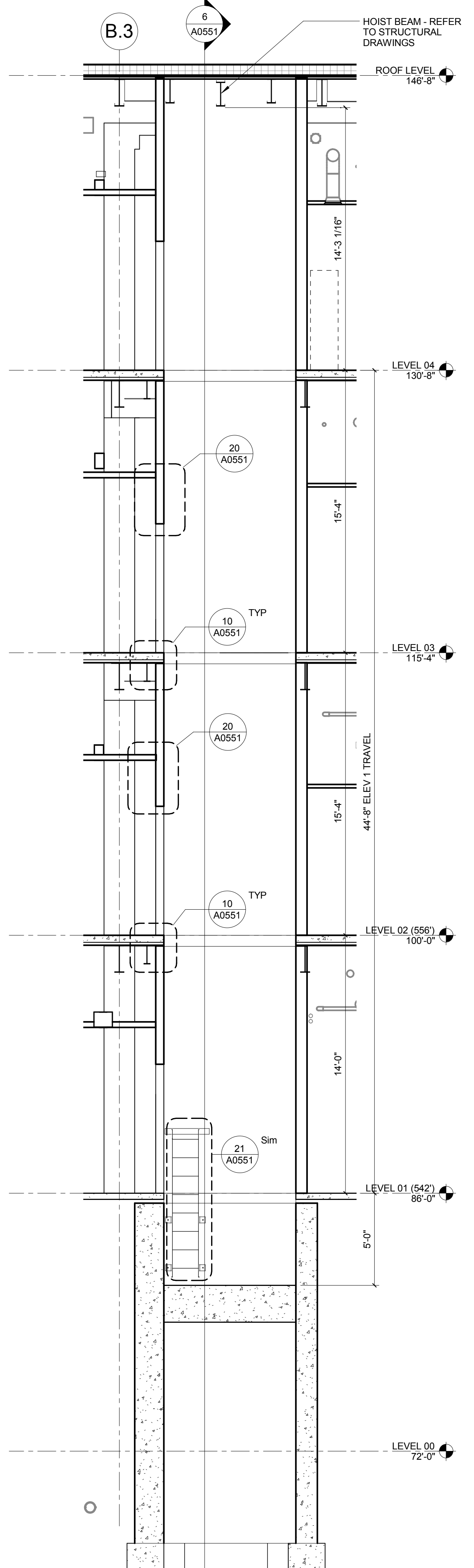
17 ELEVATOR 2 ELEVATION - TYPICAL L01-L04
1/4" = 1'-0"



16 ELEVATOR 1 - TYPICAL ELEVATION
3/8" = 1'-0"



15 ELEVATOR 2 JAMB DETAIL
1 1/2" = 1'-0"





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- ISSUED FOR CONSTRUCTION (BP3)		15 MAR 2016
No.	Description	Date

INTERIOR ELEVATIONS

Checked by:

A0601

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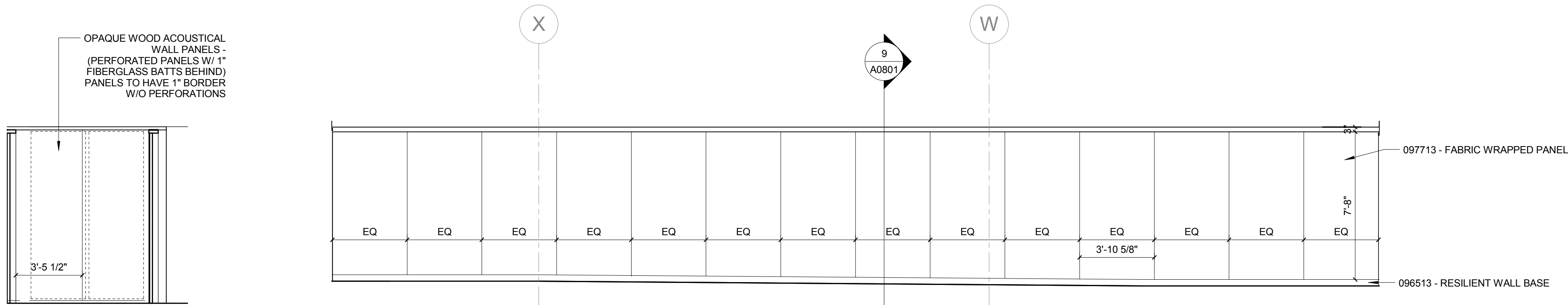
No.	Description	Date
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Drawing Title:

INTERIOR ELEVATIONS
LECTURE HALL

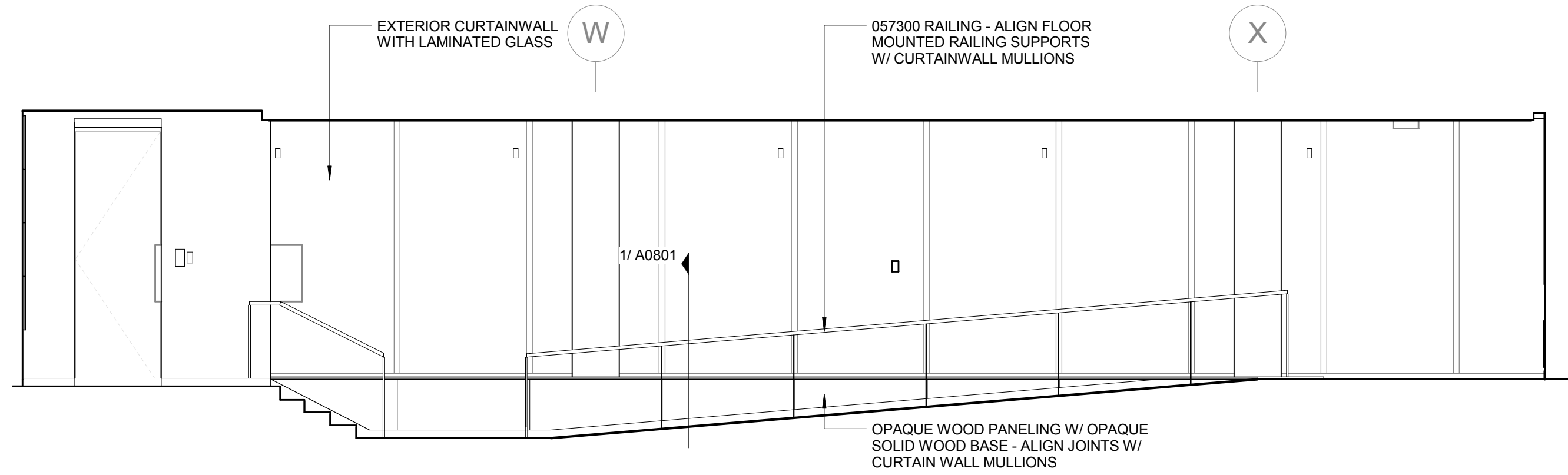
Project No.: 04561.01 Checked by:

A0602

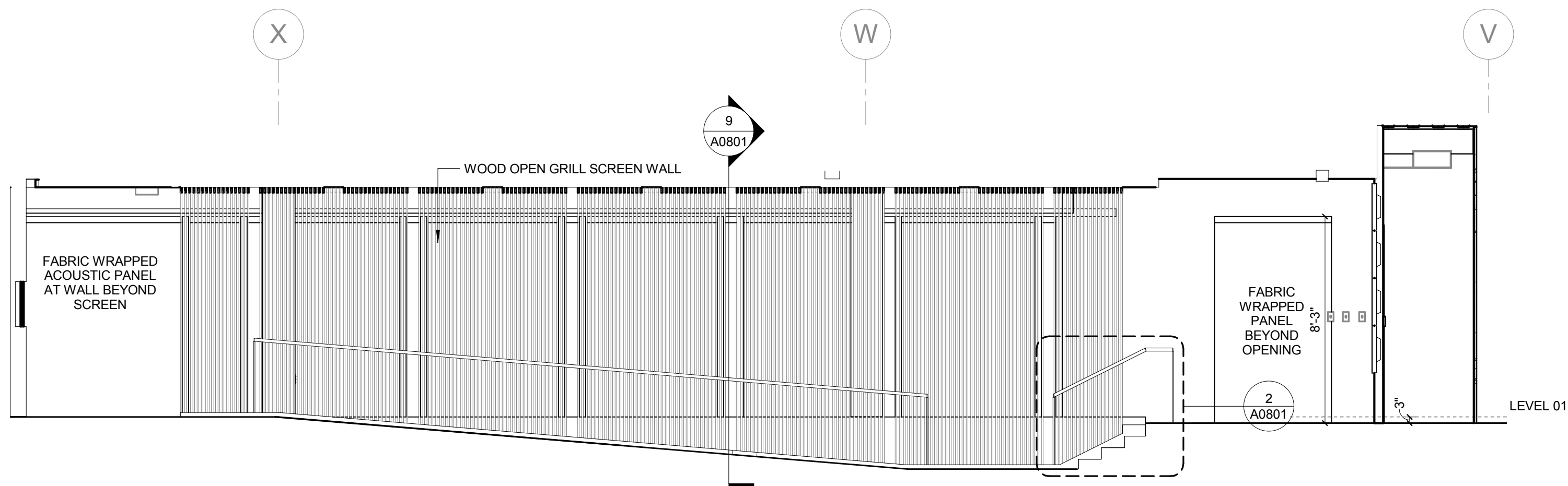


3 LECTURE HALL ENTRY
1/4" = 1'-0"

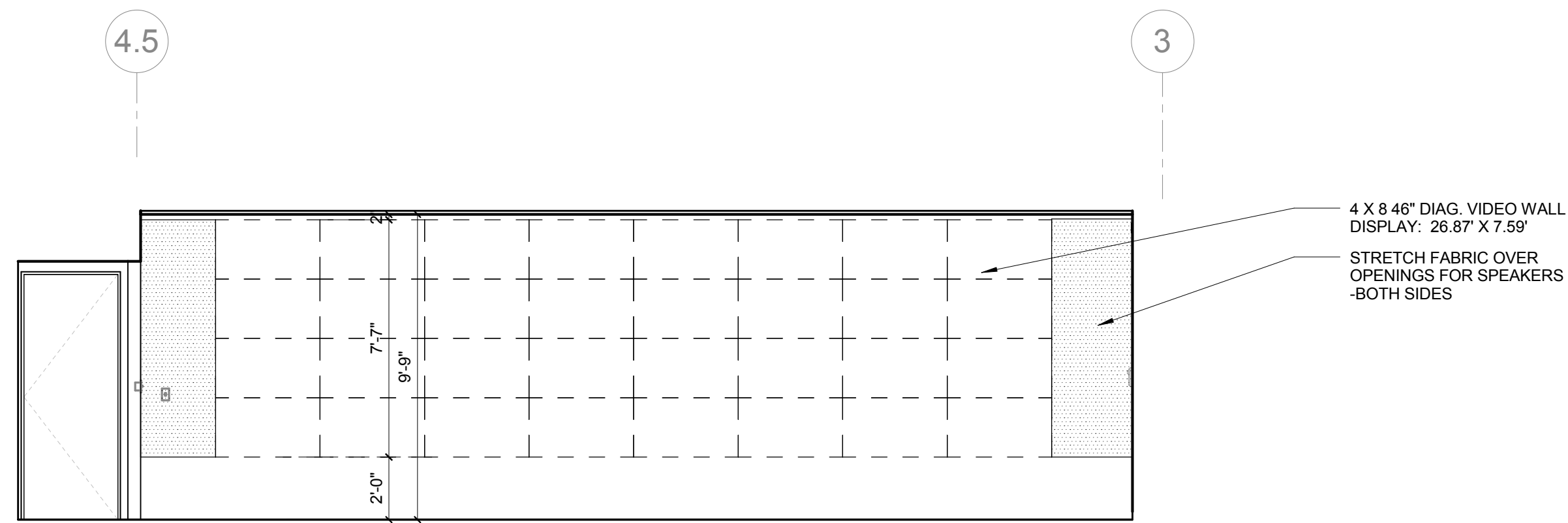
6 LECTURE HALL COORIDOR
1/4" = 1'-0"



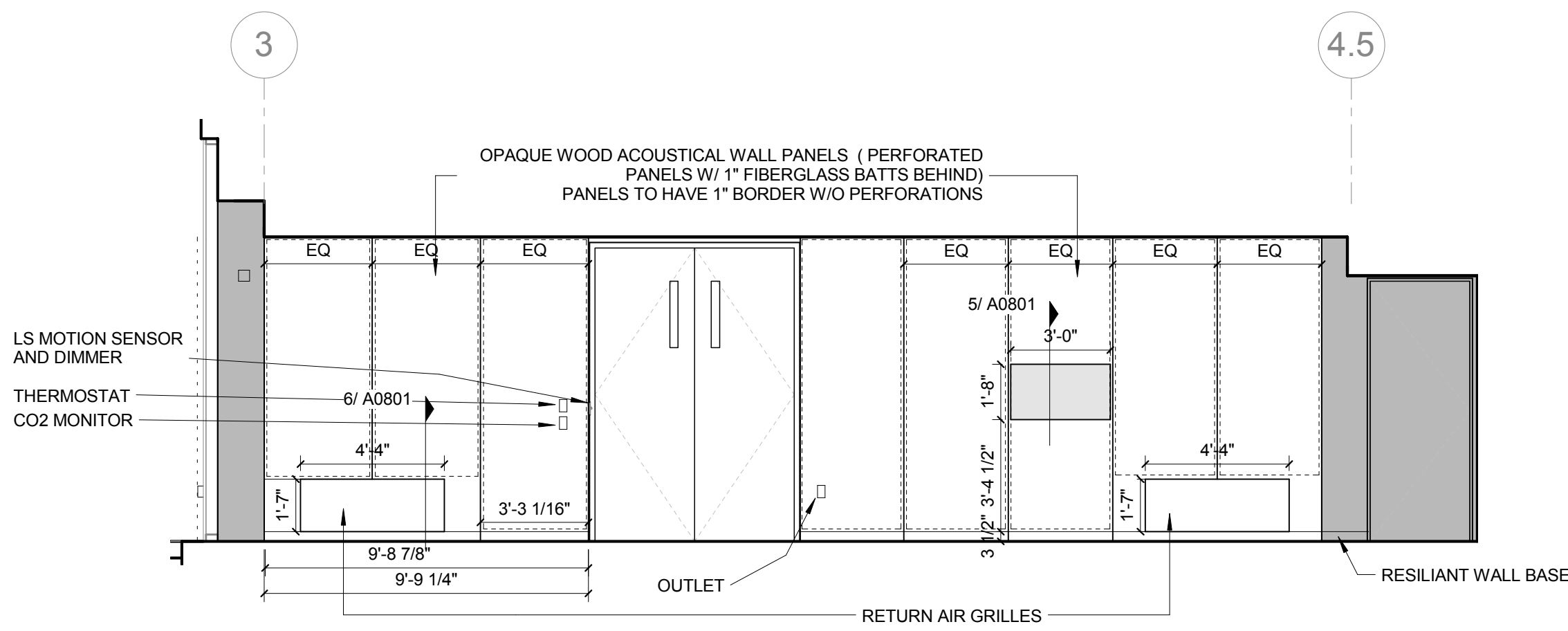
5 L01 LECTURE HALL ELEVATION - WEST
1/4" = 1'-0"



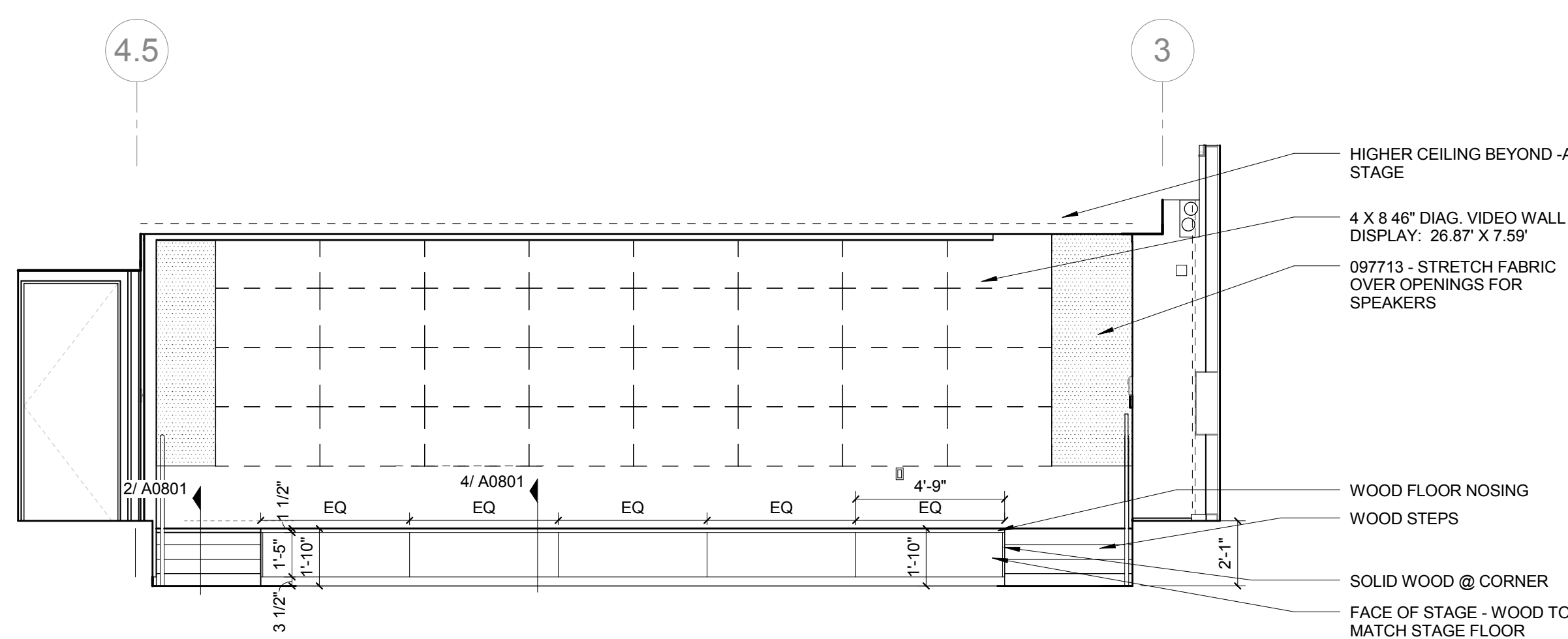
2 L01 LECTURE HALL ELEVATION - EAST
1/4" = 1'-0"



7 L01 LECTURE HALL - SOUTH STAGE
1/4" = 1'-0"



4 L01 LECTURE HALL ELEVATION - NORTH
1/4" = 1'-0"



1 L01 LECTURE HALL ELEVATION - SOUTH
1/4" = 1'-0"

CONFORMED SET 01 JUL 2016

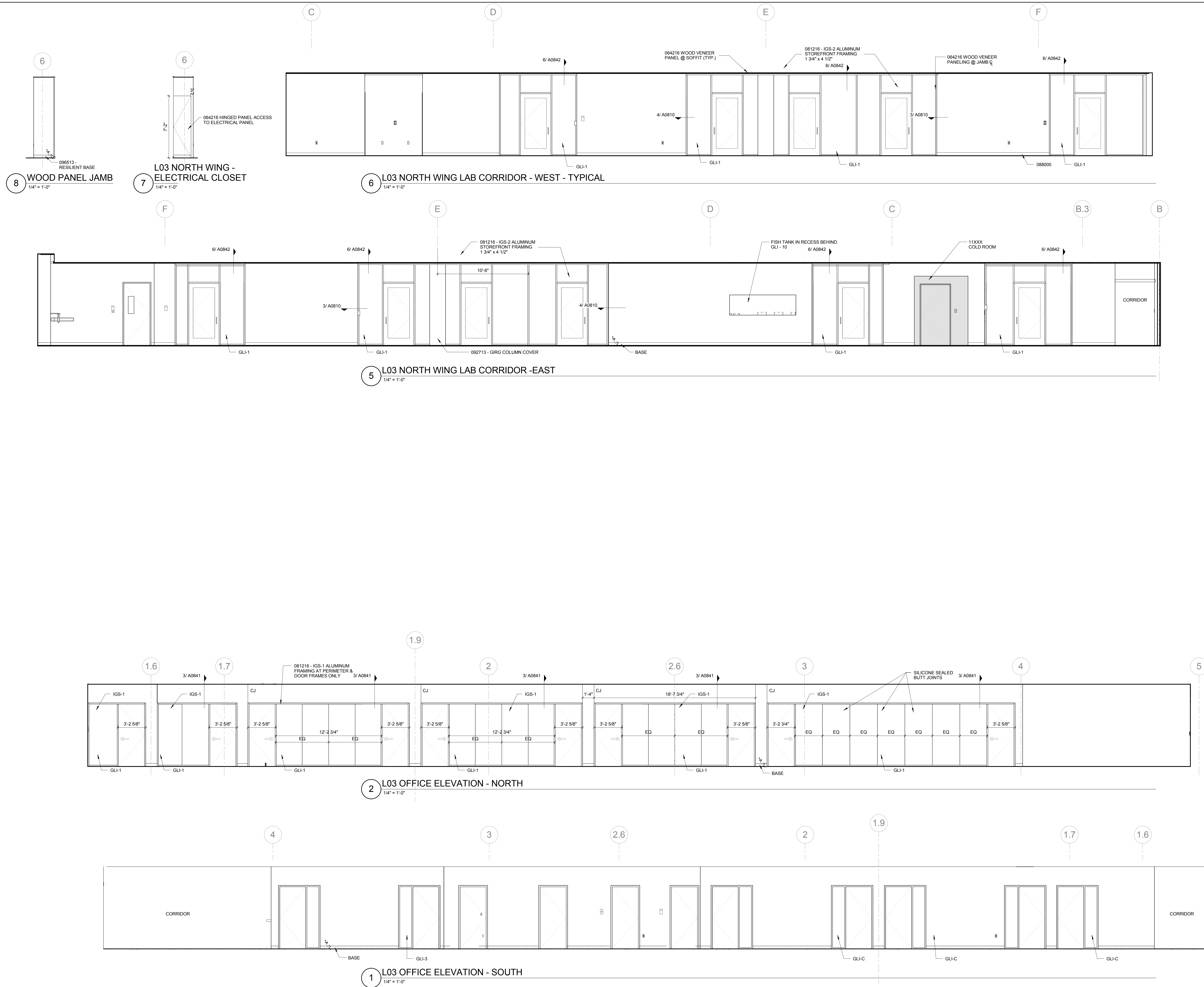
ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016
No. Description Date

Drawing Title:

INTERIOR ELEVATIONS

Project No.: 04561.01 Checked by:

A0603



CONFORMED SET 01 JUL 2016

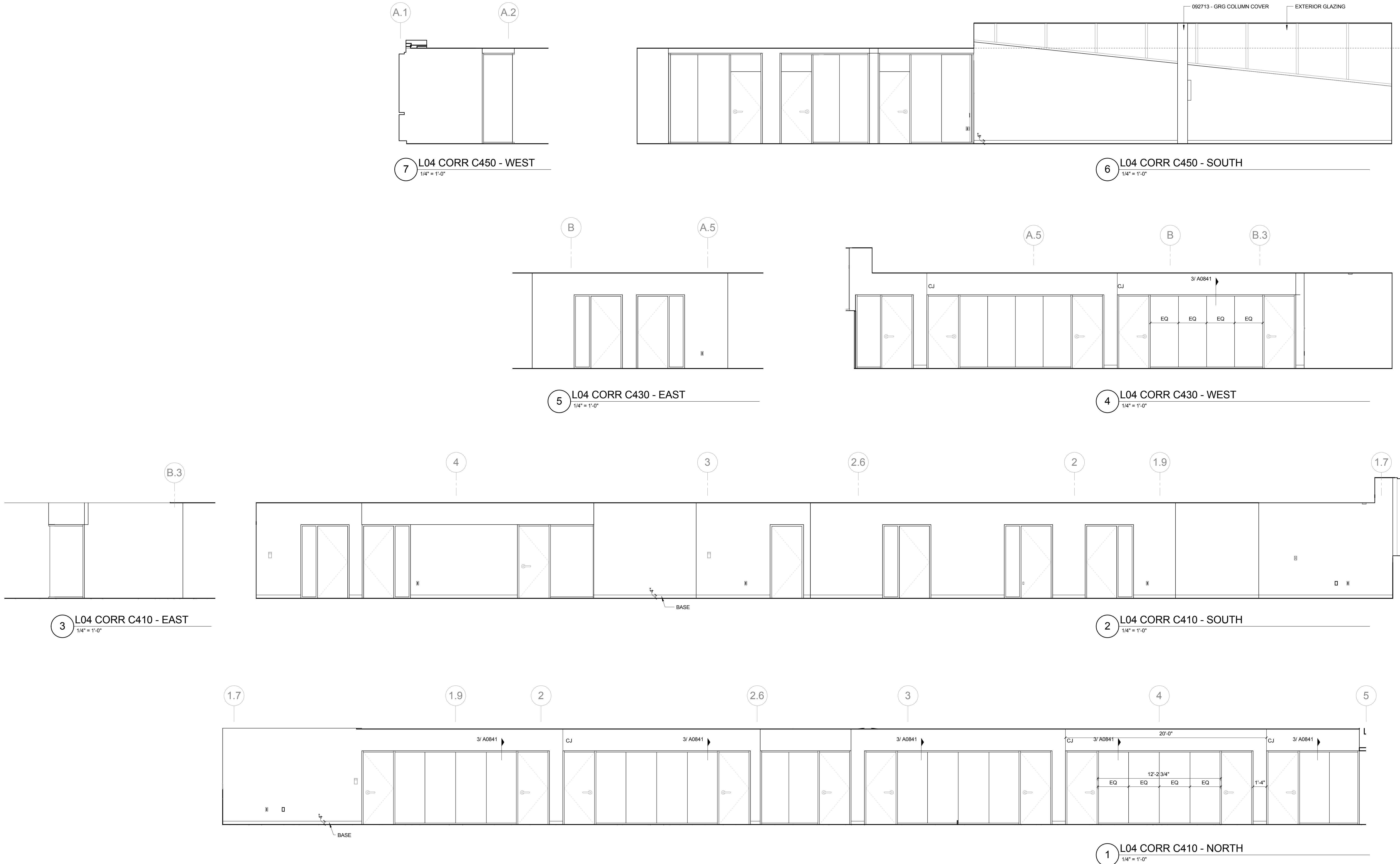
ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016
No. Description Date

Drawing Title:

INTERIOR ELEVATIONS
LEVEL 04

Project No.: 04561.01 Checked by:

A0604



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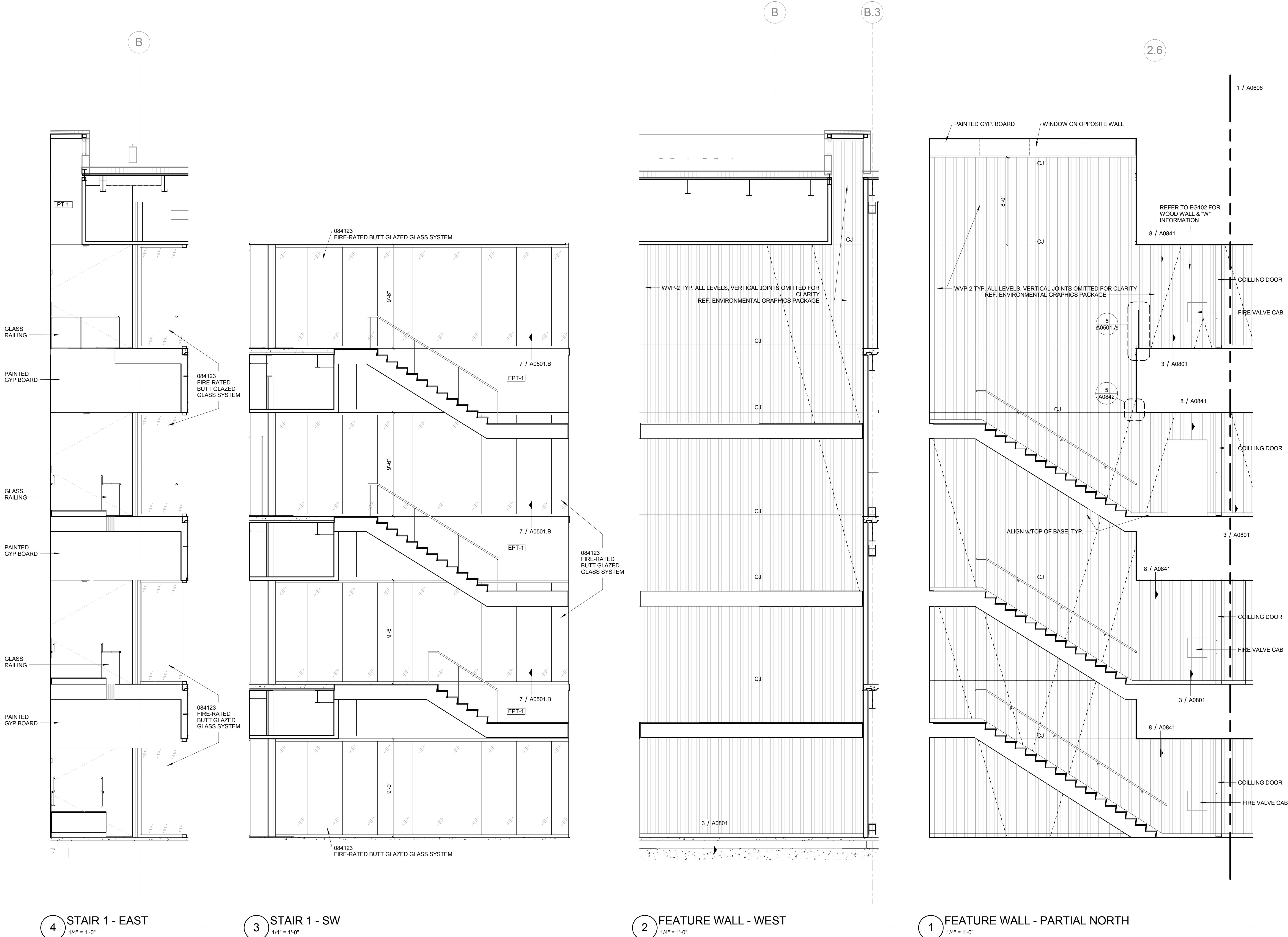
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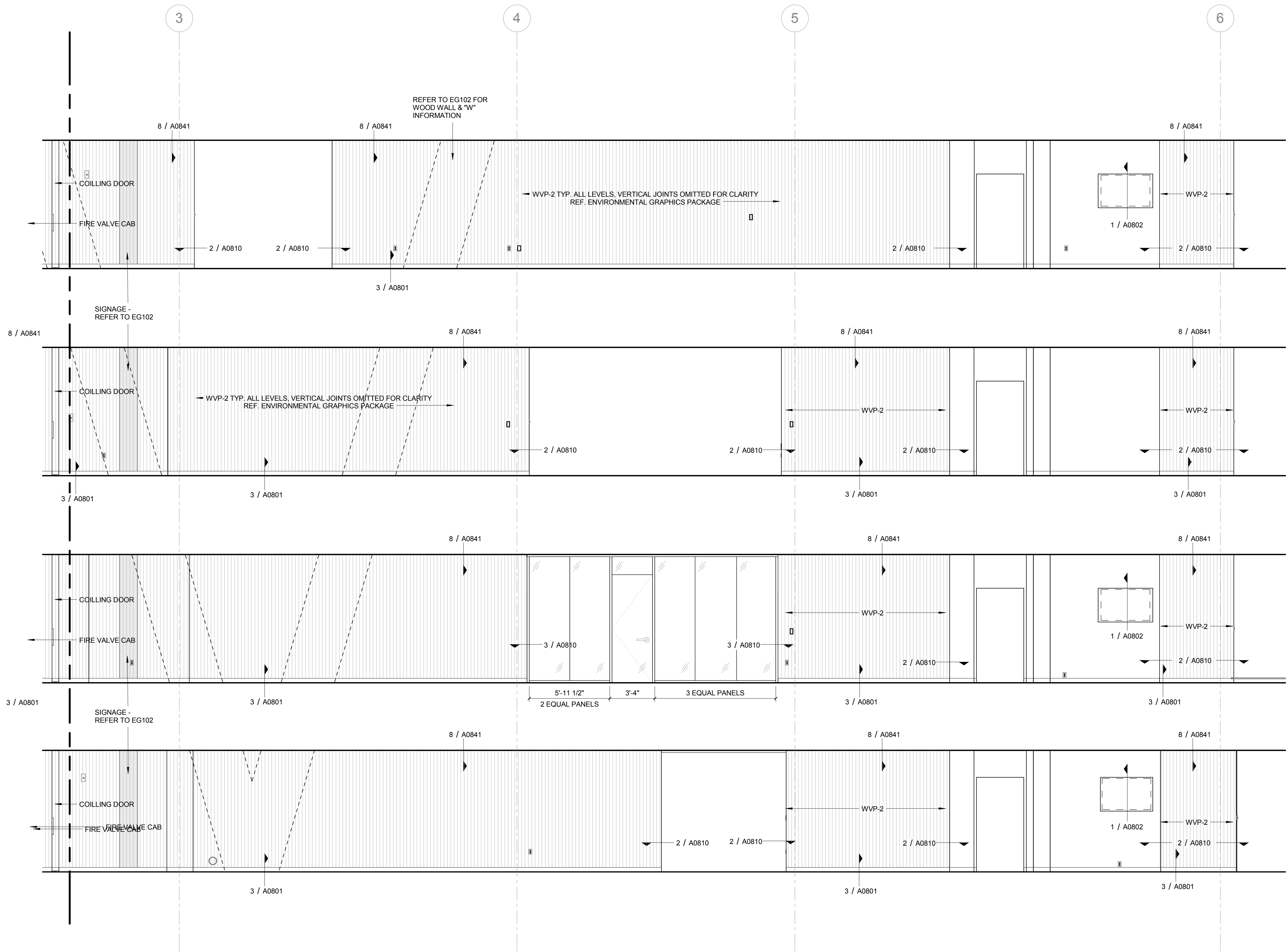
Drawing Title:

INTERIOR ELEVATIONS -
STAIR 01

Project No.: 04561.01 Checked by:

A0605





1 FEATURE WALL - PARTIAL NORTH (EAST)
1/4" = 1'-0"

CONFORMED SET 01 JUL 2016

ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016

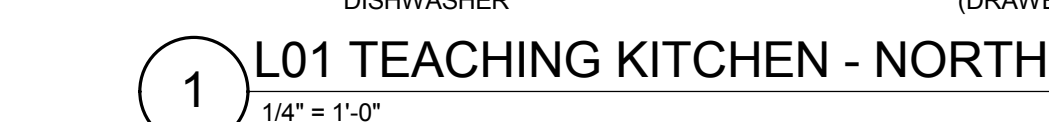
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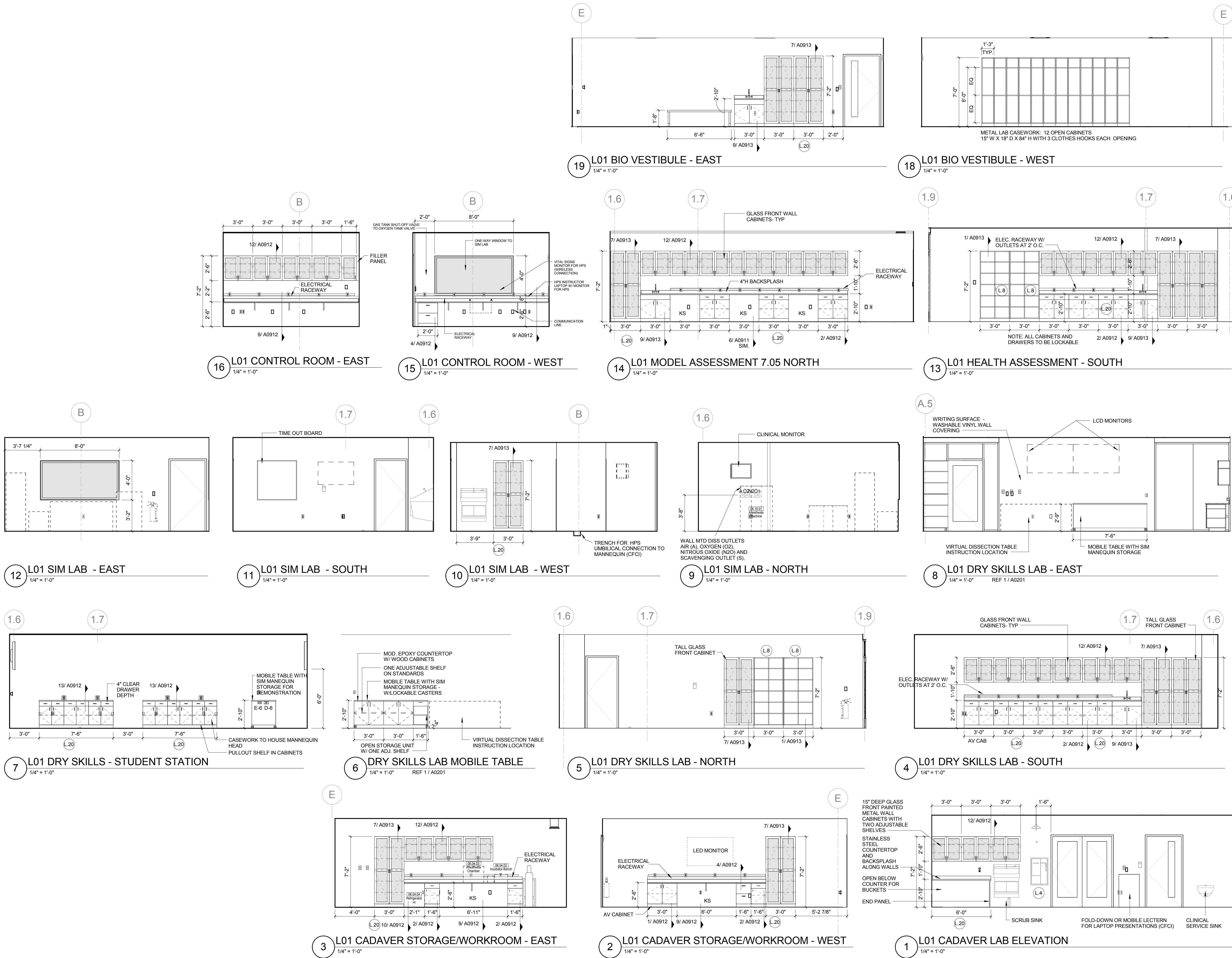
Drawing Title:

INTERIOR ELEVATIONS

Project No.: 04561.01 Checked by:

A0606





LAB KEYED NOTE LEGEND

- L.1 WRITABLE AND PROJECTABLE SURFACE, DIMENSIONS AS NOTED
L.2 RECESSED, CEILING MOUNTED PROJECTION SCREEN
L.3 WALL MOUNTED PROJECTOR ABOVE
L.4 EMERGENCY SAFETY SHOWER WITH EYEWASH
L.5 115313 CHEMICAL FUME HOOD W/ STORAGE BELOW, TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED.
L.6 WOOD LAB CASEWORK MICROSCOPE CAB
L.7 WOOD LAB CASEWORK: TALL CABINET WITH OPEN CUBBIES FOR BOOK BAG STORAGE.
L.8 115313 CHEMICAL FUME HOOD - ACCESSIBLE - WITH MOBILE STORAGE BELOW, WHERE SHOWN, TYPICAL FUME HOOD TO HAVE ELECTRIC, AND UTILITIES AS INDICATED.
L.9 CABS BELOW WHITEBOARD
L.10 CAMERA FOR SKYPE INTERVIEW
L.11 GAS CYLINDER STORAGE RACK (CFI), CYLINDERS TO BE "O.F.O."
L.12 RECESSED MOTORIZED ROOM DARKENING / BLACKOUT SHADES. USE DOUBLE SHADES AT WEST CLASSROOMS LEVEL 02 AND LECTURE HALL, REFER TO REFLECTED CEILING PLANS
L.13 LCD MONITOR
L.14 MOBILE LABORATORY CASEWORK SYSTEM. SEE DETAIL 09/A0911.
L.15 MOVEABLE WOOD LABORATORY CASEWORK: TABLE WITH MODIFIED EPOXY COUNTERTOP, CABINETS SUSPENDED BELOW AS INDICATED.
L.16 FIXED WOOD LABORATORY CASEWORK - BASE CABINETS, MODIFIED EPOXY COUNTERTOP, WALL CABINETS AS SHOWN ON ELEVATION
L.17 SEE CEILING PLAN FOR CEILING MOUNTED UNISTRUT SYSTEM SUPPORTED BY STRUCTURE ABOVE
L.18 8" DEEP X 6" WIDE TRENCH WITH METAL COVER TO RECEIVE FLOOR FINISH TO MATCH ADJACENT FLOOR
L.19 FLOOR BOX FOR ELECTRICAL & DATA
L.20 08 6868 DRY ERASE FINISH (AWC-1)
L.21 PROVIDE BLOCKING FOR FIRE EXTINGUISHER, MOUNTING HEIGHT - 3'-0" TO TOP OF EXTINGUISHER, FIRE EXTINGUISHER & ITS BRACKET BY OWNER.
L.22 POINT EXHAUST (SNORKEL) FOR SOLDERING. SEE DETAIL 5/ A0913.

LAB UTILITY LEGEND

- CW WATER COLD WATER FAUCET, DECK MOUNTED GOOSENECK WITH SERRATED NOZZLE, VACUUM BREAKER
W-1 WATER GENERAL MIXING FAUCET, DECK MOUNTED WITH VACUUM BREAKER, SERRATED NOZZLE.
DI WATER DI WATER FAUCET, DECK MOUNTED
PWS WATER PROCESS COLD WATER SUPPLY
PWR WATER PROCESS COLD WATER RETURN
EW WATER EYEWASH, DECK MOUNTED, AUTOFLOW SWING-DOWN
DH WATER DRENCH HOSE
G GAS FUME HOOD CONTROL
V VAC FUME HOOD CONTROL
V-3 VAC WALL MOUNTED, SINGLE SERRATED OUTLET
V-1 VAC TURRET BASE, SINGLE SERRATED OUTLET
V-4 VAC OUTLET FOR BIOSAFETY CABINET CONNECTIONS
V-5 VAC QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
A-1 AIR FUME HOOD CONTROL
A-1 AIR TURRET BASE, SINGLE SERRATED OUTLET
A-3 AIR WALL MOUNTED, SINGLE SERRATED OUTLET
A-4 AIR OUTLET FOR BIOSAFETY CABINET CONNECTIONS
A-5 AIR QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
N NITROGEN FUMEHOOD CONTROL
E ELEC. DUPLEX OUTLET (GFI) ON FUME HOOD
E-1 ELEC. COUNTERTOP MOUNTED PEDESTAL, (1) DUPLEX ELECTRICAL OUTLET.
E-2 ELEC. COUNTERTOP MOUNTED PEDESTAL, (2) DUPLEX ELECTRICAL OUTLET.
E-3 ELEC. WALL MOUNTED, (1) DUPLEX ELECTRICAL OUTLET.
E-5 ELEC. DUPLEX ELECTRICAL OUTLET ON OVERHEAD SERVICE CARRIER
E-6 ELEC. DUPLEX ELECTRICAL OUTLET ON TABLE APRON
D DATA DATA OUTLET
D-1 DATA COUNTERTOP MOUNTED PEDESTAL, (2) DATA OUTLETS
D-5 DATA DATA OUTLET ON OVERHEAD SERVICE CARRIER
D-6 DATA DATA OUTLET ON TABLE APRON
CS CUP SINK LIPPED MODIFIED EPOXY CUP SINK, 9"LX3"W OVAL (DROP-IN).
S-1 SINK LIPPED MODIFIED EPOXY SINK, 25"Lx15"Wx10"D (DROP-IN).
S-2 SINK LIPPED MODIFIED EPOXY ADA SINK 25"Lx15"Wx5"D (DROP-IN).
S-3 SINK STAINLESS STEEL SINK 25"Lx15"Wx10"D (DROP-IN).
S-4 SINK STAINLESS STEEL ADA SINK 25"Lx15"Wx5"D (DROP-IN).
S-5 SINK LIPPED MODIFIED EPOXY ADA SINK 18"Lx15"Wx5"D (DROP-IN).
S-6 SINK LIPPED MODIFIED EPOXY SINK, 36"Lx15"Wx10"D (DROP-IN).
OSC OVERHEAD SERVICE CARRIER. SEE DETAIL 10/ A0913.
PTD PAPER TOWEL DISPENSER

CHEMICAL FUME HOOD LEGEND

- CPH-4 4'-0" WIDE CHEMICAL FUME HOOD
CPH-6 6'-0" WIDE CHEMICAL FUME HOOD

LAB GENERAL NOTES

- ALL DIMENSIONS ARE TO GWB FACE PARTITION OR COLUMN CENTERLINE U.N.O.
- OWNER FURNISHED OWNER INSTALLED (OFOI) ITEMS ARE SHOWN DASHED FOR REFERENCE ONLY. COORDINATE SIZE AND INSTALLATION REQUIREMENTS WITH OWNER'S REPRESENTATIVE.
- CENTER ALL DRYING RACKS WITH DRIP STOP TROUGHS ABOUT CENTERLINE OF SINKS, U.N.O.
- ALL APRONS AT OPEN KNEE SPACE TO BE 4" U.N.O. PROVIDE APRON OF SOLID WOOD WITH EASED BOTTOM EDGE. FINISH TO MATCH VENEER SPECIES. MAINTAIN MINIMUM 2" CLEAR ABOVE FLOOR FINISH.
- CENTER ALL COUNTERTOP MOUNTED UTILITY OUTLETS ON CENTER OF CASEWORK U.N.O.
- ALL SURFACE MOUNTED RACEWAY TO HAVE OUTLETS AT 2'-0" O.C. AND SHALL BE MOUNTED DIRECTLY ABOVE BACKSPLASH U.N.O.
- ALL BACKSPLASHES TO BE 4" HIGH U.N.O.
- DASHED LINES ON ELEVATIONS INDICATED ADJUSTABLE SHELVE INSIDE CASEWORK.
- PROVIDE FINISHED BACK PANEL AT KNEE SPACES BELOW ALL FUMEHOODS, TYPICAL, SIMILAR TO DETAIL.
- PROVIDE FINISHED BACK PANEL AT ALL KNEE SPACES, TYPICAL.
- PROVIDE LOCK AND KEY WHERE A CIRCLE NEXT TO DRAWER OR DOOR HANDLE IS SHOWN OR WHERE NOTED.
- REFER SHEETS A0914 FOR LABORATORY CASEWORK / MILLWORK DETAILS.
- FOR TYPICAL MOUNTING HEIGHTS REF. 1/A0911
- ALL CASEWORK TO BE WOOD U.N.O.
- ALL CASEWORK IS LABORATORY CASEWORK UNLESS NOTED AS MILLWORK OR O.F.O. SEE DIVISION 12 3555 - LABORATORY CASEWORK FOR SPECIFICATIONS.
- ALL EQUIPMENT ITEMS HAVE A EQUIPMENT TAG - XXX-XXX-XX. SEE SHEETS A114 FOR EQUIPMENT SCHEDULES.
- PROVIDE PAPER TOWEL DISPENSER (PTD) AT EACH SINK LOCATION.

CONFORMED SET

01 JUL 2016

ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016

No.	Description	Date
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Drawing Title:

**INTERIOR LAB
ELEVATIONS LEVEL 01**

Project No.: 04561.01

Checked by:

A0611

L.1 WRITABLE AND PROJECTABLE SURFACE, DIMENSIONS AS
NOTED

L.2 RECESSED, CEILING MOUNTED PROJECTION SCREEN

L.3 WALL MOUNTED PROJECTOR ABOVE

L.4 EMERGENCY SAFETY SHOWER WITH EYEWASH.

L.5 1151313 CHEMICAL FUME HOOD W/ STORAGE BELOW. TYPICAL
FUME HOOD TO HAVE 10" MIN. LIFT LUGS AS INDICATED.

L.6 WOOD LAB CHEMICAL MICROSCOPE CAB

L.7 WOOD LAB CASWORK/ LAB CABBINET WITH OPEN CUBBIES

L.8 1151313 CHEMICAL FUME HOOD - ACCESSIBLE - WITH MOBILE
STORAGE BELOW, WHERE SHOWN. TYPICAL FUME HOOD TO
BE ELECTRIC, AND AS SHOWN AS INDICATED.

L.9 CABS BELOW WHITEBOARD

L.10 CAMERA FOR SKYPE INTERVIEW

L.11 GAS CYLINDER STORAGE RACK (CFL) CYLINDERS TO BE
300#

L.12 RECESSED MOTORIZED ROOM DARKENING / BLACKOUT
SHADES. USE DOUBLE SHADES AT WEST CLASSROOMS LEVEL.

L.13 RECESSED LECTURE HALL. REFLECT TO REFLECTED GLASS PLANS
LCD MONITOR

L.14 MOBILE LABORATORY CASWORK SYSTEM. SEE DETAIL
008911

L.15 MOVABLE WOOD LABORATORY CASWORK - TABLE WITH
MODIFIED EPOXY COUNTERTOP. CABINETS SUSPENDED
ELECTRICALLY INDICATED

L.16 FIXED WOOD LABORATORY CASWORK - BASE CABINETS,
MODIFIED EPOXY COUNTERTOP, LAB CABINETS AS SHOWN
ON PLAN

L.17 SEE CEILING PLAN FOR CEILING MOUNTED INSTRUMENT SYSTEM
SUPPORT BY STRUCTURE ABOVE

L.18 6" DEEP X 6" WIDE TRENCH WITH METAL COVER TO RECEIVE
FLOORING IN UNIT

L.22 FLOOR BOX FOR ELECTRICAL & DATA

L.23 96 6666 DRY ERASE FINISH (AWG-1)

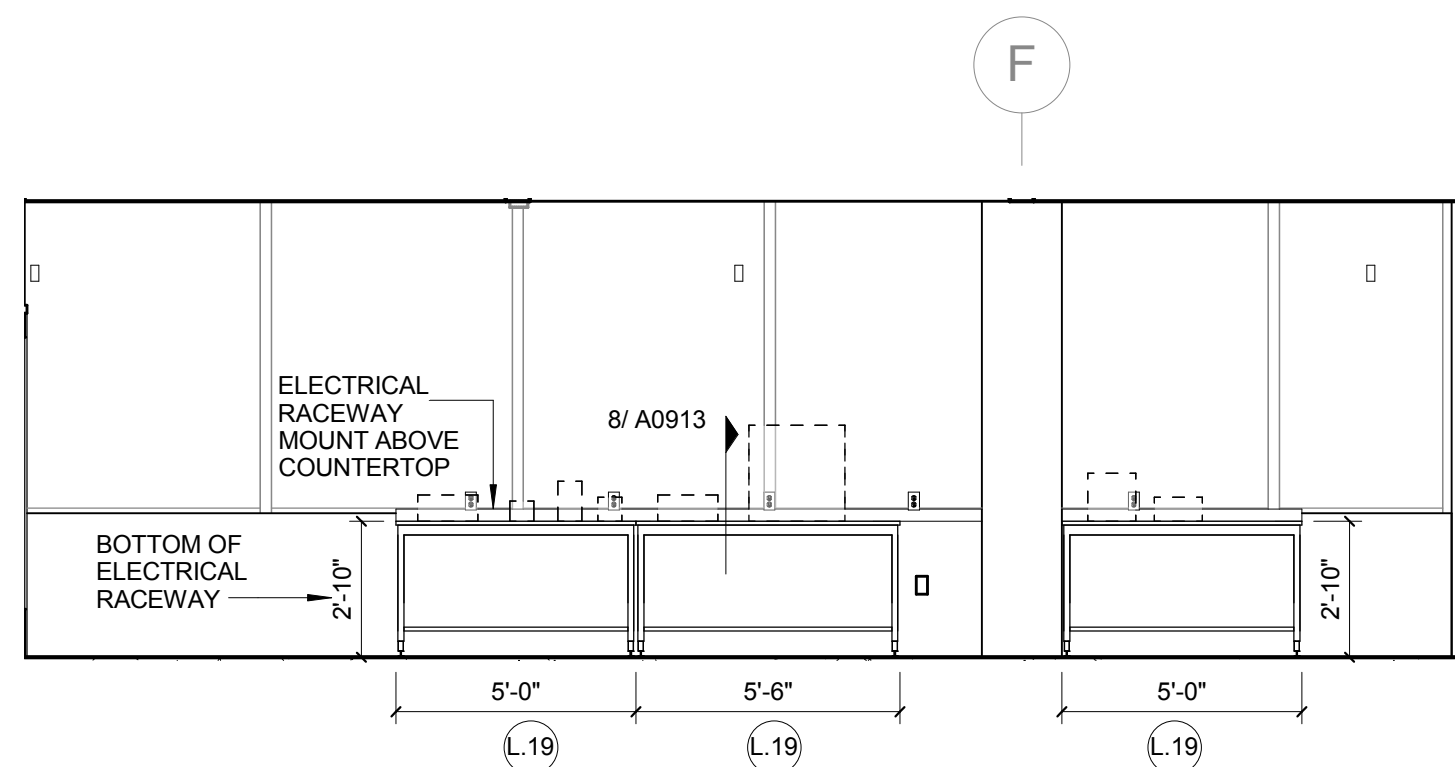
L.24 PINK BLUETOOTH FOR FIRE EXTINGUISHER, FIRE EXTINGUISHER
HEIGHT 3'-3 3/4" TO TOP OF EXTINGUISHER, FIRE EXTINGUISHER
TIN BRACKET BY OWNER.

L.26 PAIN EXHAUST (SNORKEL) FOR SOLDERING. SEE DETAIL 5
A997

WV	WATER COLD WATER FAUCET, DECK MOUNTED GOOSENECK WITH SERRATED NOZZLE, VACUUM BREAKER
WI	WATER GENERAL MIXING FAUCET, DECK MOUNTED WITH VACUUM BREAKER AND SERRATED NOZZLE
D-1	WATER DI WATER DI FAUCET, DECK MOUNTED.
WV	WATER COLD WATER FAUCET, DECK MOUNTED GOOSENECK WITH SERRATED NOZZLE, VACUUM BREAKER
PWR	WATER PROCESS COLD WATER RETURN
WV	WATER EYEWASH, DECK MOUNTED, AUTOFLOW SWING-DOWN WITH EYE WIPER DISK
G	GAS FUME HOOD CONTROL
V	VAC FUME HOOD CONTROL
V-1	VAC WALL MOUNTED, SINGLE SERRATED OUTLET
V-4	VAC TURRET BASE, SINGLE SERRATED OUTLET
V-1	VAC OUTLET FOR BIOSAFETY CABINET CONNECTIONS
V-4	VAC QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
A	AIR FUME HOOD CONTROL
A-1	AIR TURRET BASE, SINGLE SERRATED OUTLET
A-1	AIR WALL MOUNTED, SINGLE SERRATED OUTLET
A-4	AIR TURRET BASE, SINGLE SERRATED OUTLET
A-5	AIR QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
E	ELECTRICAL OUTLET
E-E	ELECTRICAL OUTLET (GF) ON FUME HOOD
E-1	ELECTRICAL COUNTERTOP MOUNTED PEDESTAL, (1) DUPLEX ELECTRICAL OUTLET
E-2	ELECTRICAL COUNTERTOP MOUNTED PEDESTAL, (2) DUPLEX ELECTRICAL OUTLET
E-3	ELECTRICAL WALL MOUNTED, (1) DUPLEX ELECTRICAL OUTLET
E-5	ELECTRICAL DUPLEX ELECTRICAL OUTLET ON OVERHEAD SERVICE CARRIER
E-6	ELECTRICAL DUPLEX ELECTRICAL OUTLET ON TABLE APPARATUS
D-1	DATA DATA OUTLET
D-2	DATA DATA OUTLET MOUNTED PEDESTAL, (2) DATA OUTLETS
D-5	DATA DATA OUTLET ON OVERHEAD SERVICE CARRIER
D-6	DATA DATA OUTLET ON TABLE APPARATUS
S-1	SINK LIPPED MODIFIED EPOXY SINK, 9" CUP SINK, 91x53x 3/8" OVAL DROP-IN
S-1	SINK LIPPED MODIFIED EPOXY SINK, 25x15x15x1/8" (DROP-IN)
S-2	SINK LIPPED MODIFIED EPOXY ADA SINK 25x15x15x5/8" (DROP-IN)
S-3	SINK STAINLESS STEEL SINK 25x15x15x1/8" (DROP-IN)
S-4	SINK STAINLESS STEEL ADA SINK 25x15x15x5/8" (DROP-IN)
S-5	SINK LIPPED MODIFIED EPOXY SINK 18x15x15x5/8" (DROP-IN)
S-6	SINK LIPPED MODIFIED EPOXY SINK, 36x15x15x1/8" (DROP-IN)
QSD	OVERHEAD SERVICE CARRIER, SEE DETAIL 10 / A0913
PTC	PAPER TOWEL DISPENSER

CFH-4 4'-0" WIDE CHEMICAL FUME HOOD
CFH-6 6'-0" WIDE CHEMICAL FUME HOOD

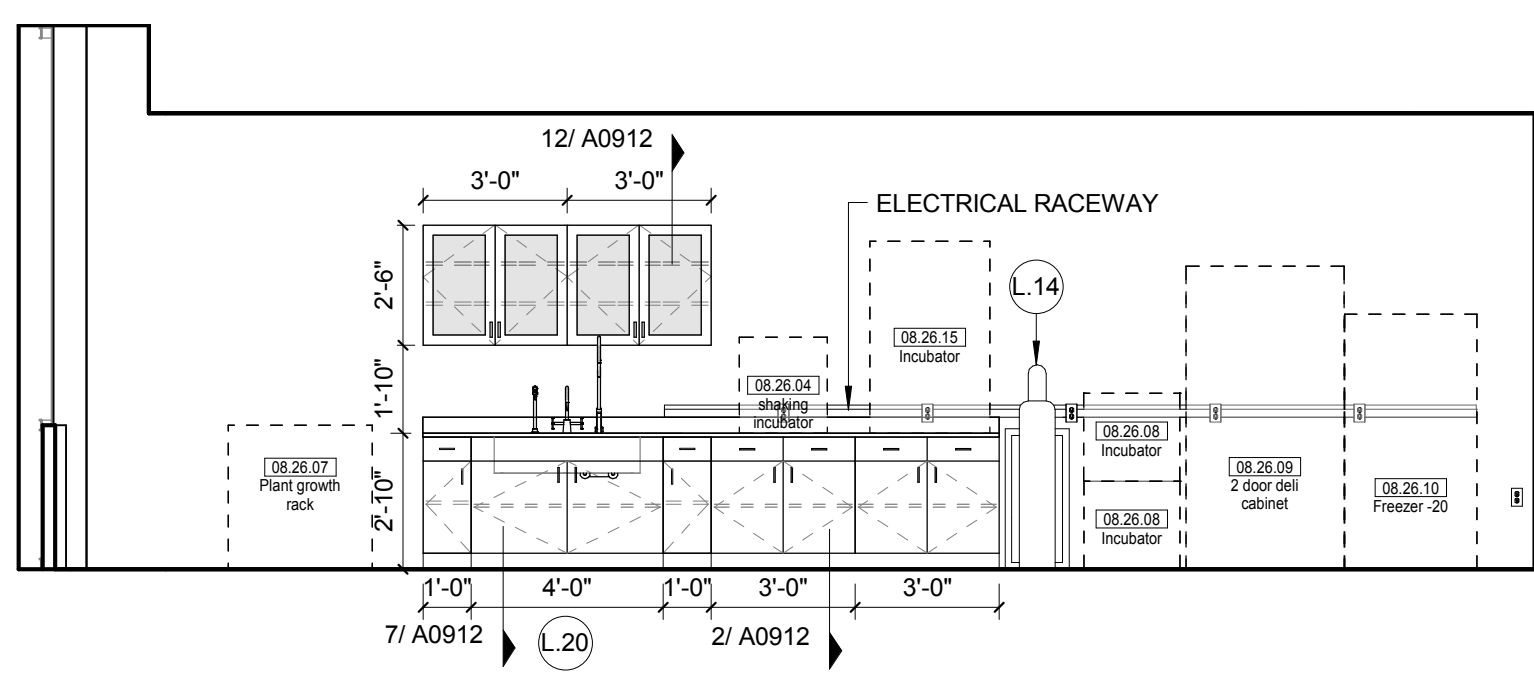
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11 L02W CELL BIO AND PHYSICS RESEARCH - WEST

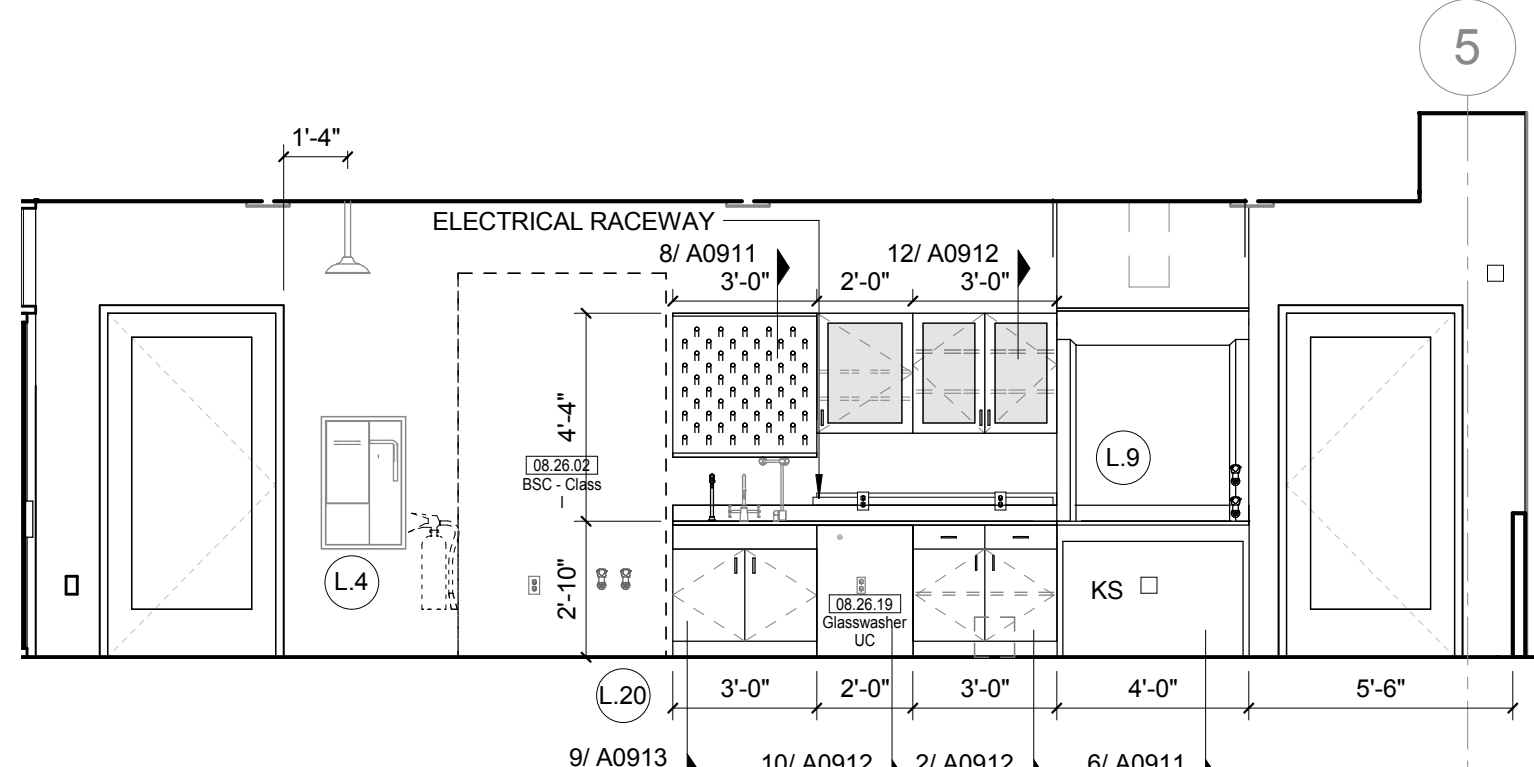
1/4" = 1'-0"

REF 1 / A0204



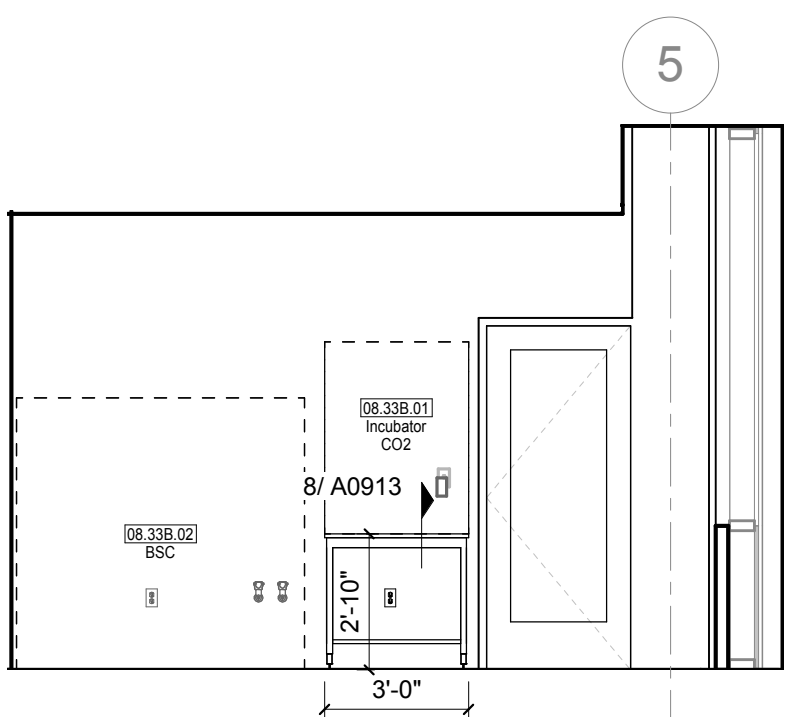
10 L02 CELL BIO AND PHYS RESEARCH - NORTH

1/4" = 1'-0"



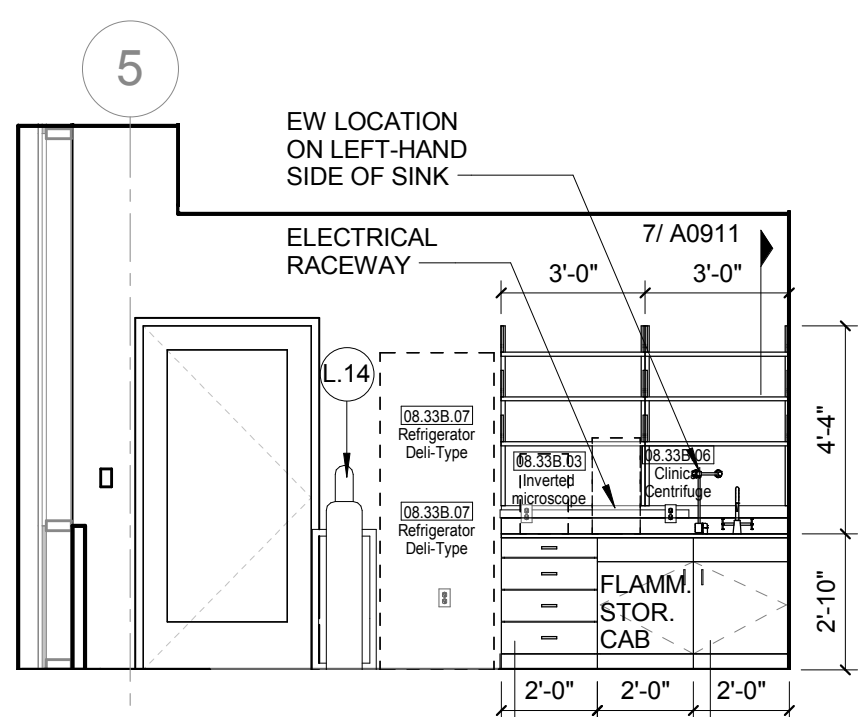
9 L02 CELL BIO / PHYSIO RESEARCH - SOUTH

1/4" = 1'-0"



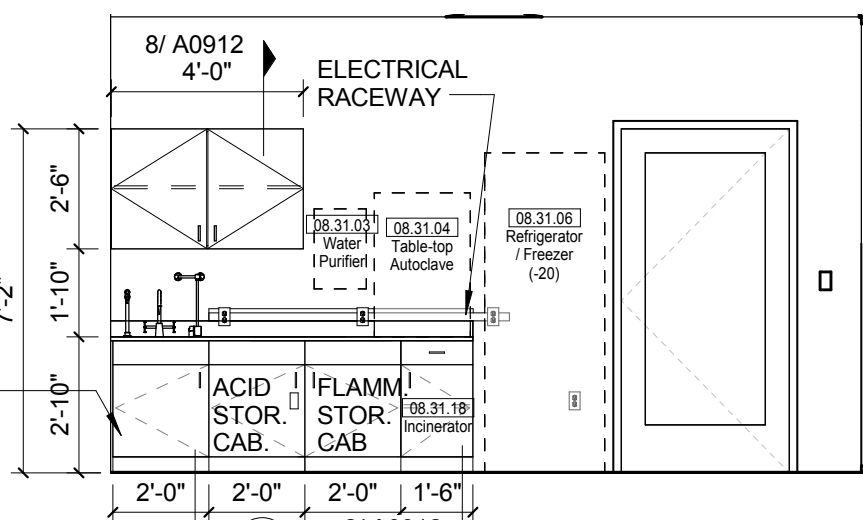
8 L02 TISSUE CULTURE - SOUTH

1/4" = 1'-0"



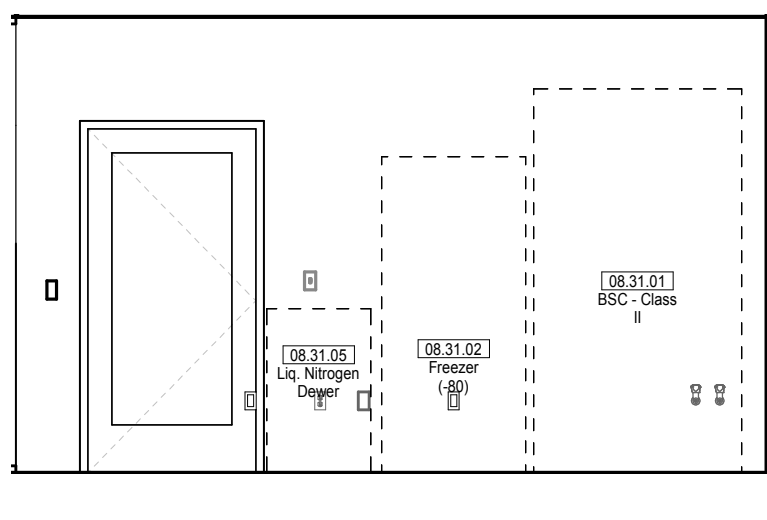
7 L02 TISSUE CULTURE - NORTH

1/4" = 1'-0"



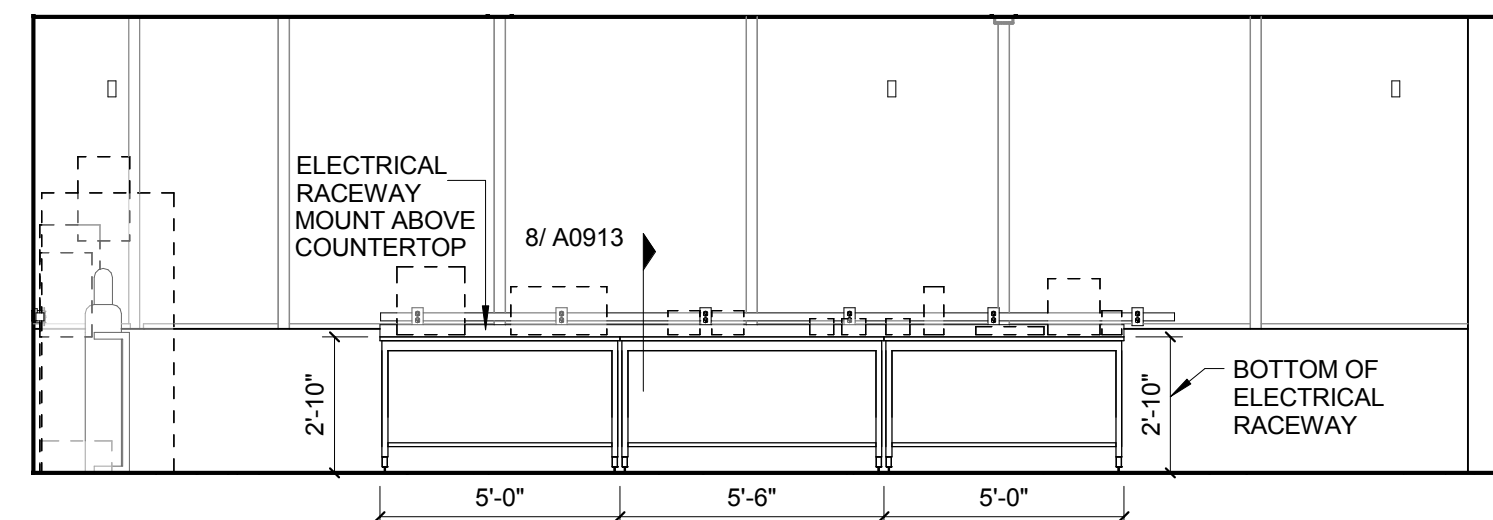
6 L02 MICROBIO PREP AND TC - NORTH

1/4" = 1'-0"



5 L02 MICROBIO PREP AND TC - SOUTH

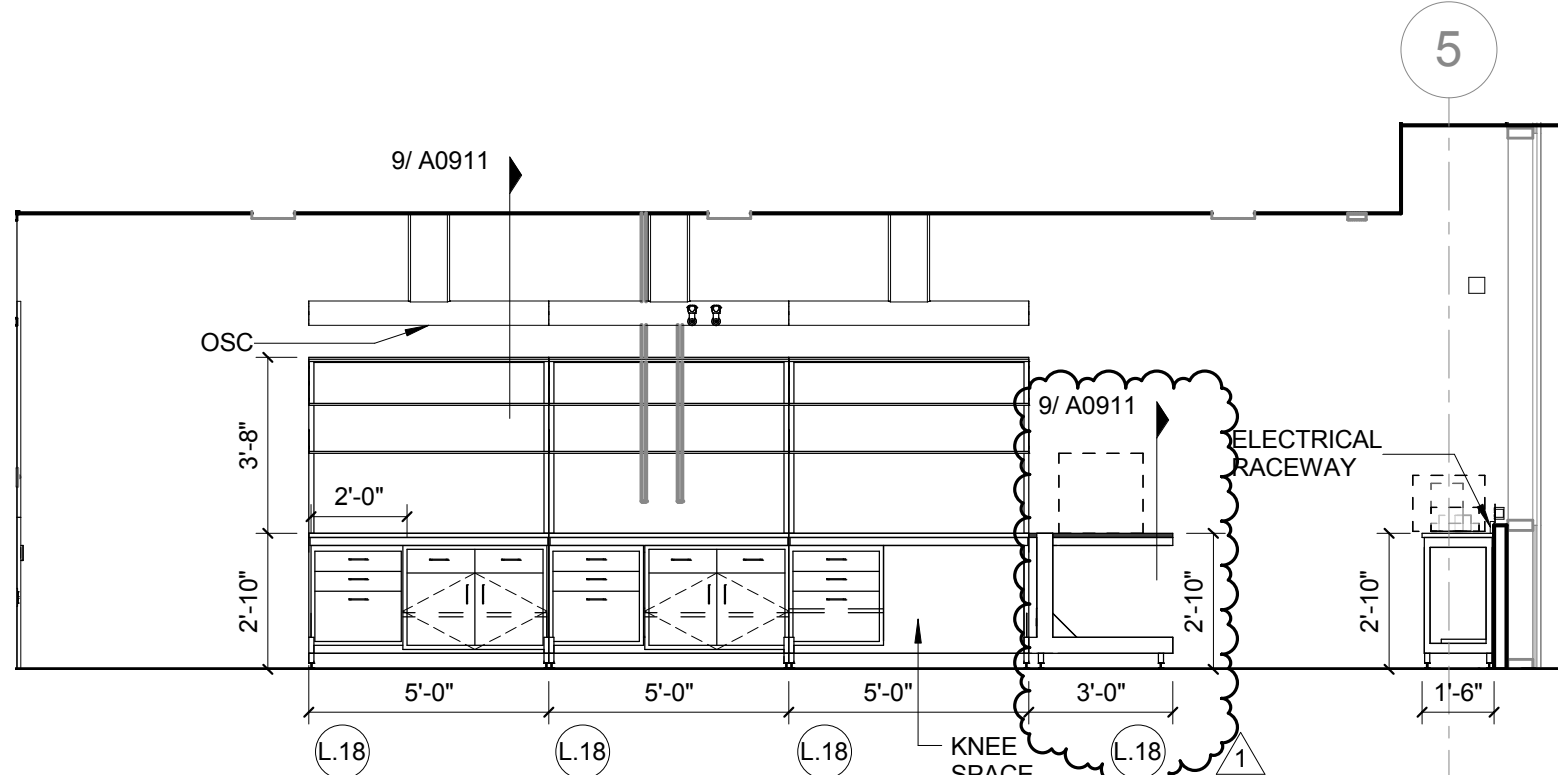
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4 L02W MICRO / PLANT RESEARCH - WEST

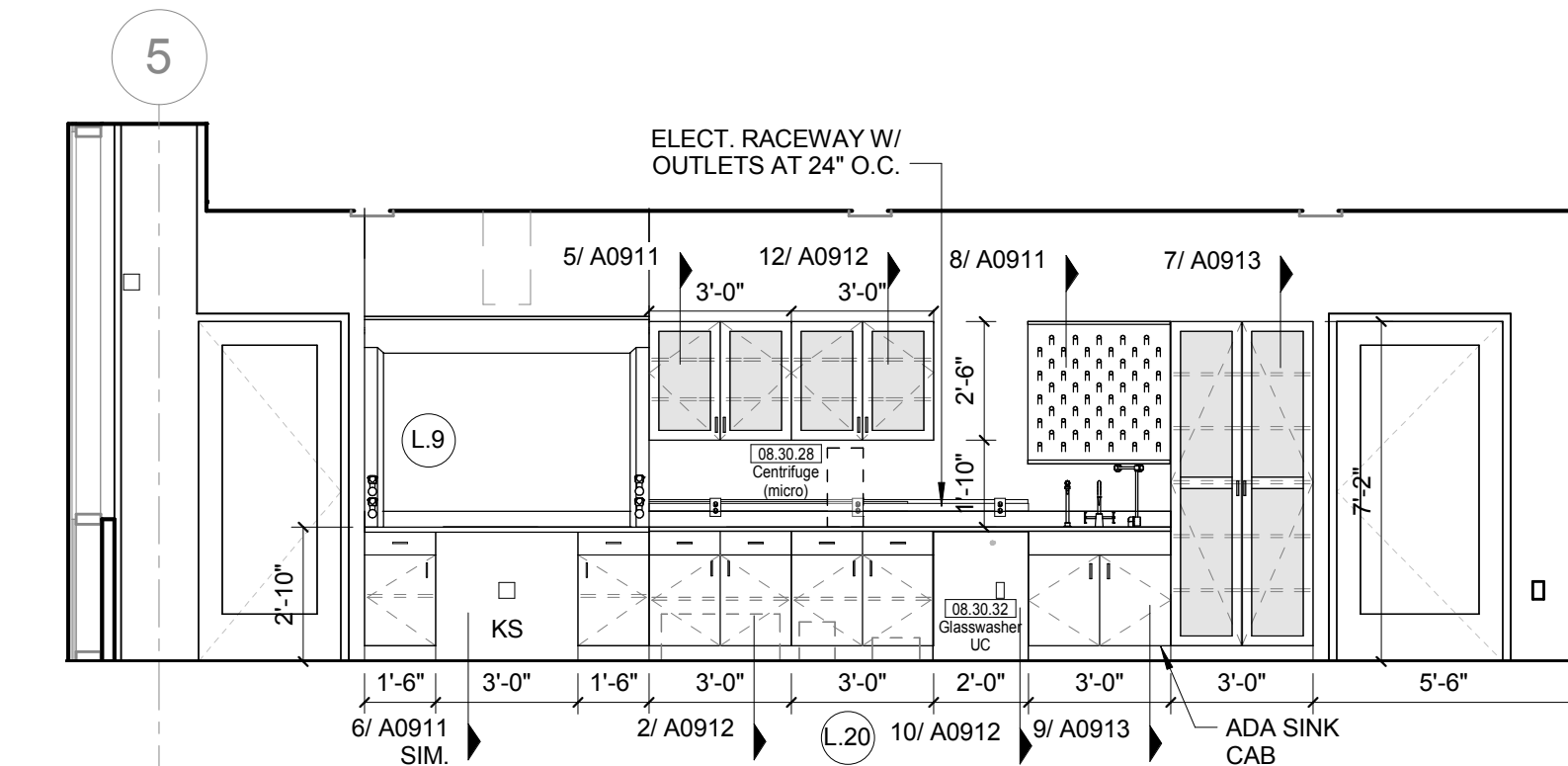
1/4" = 1'-0"

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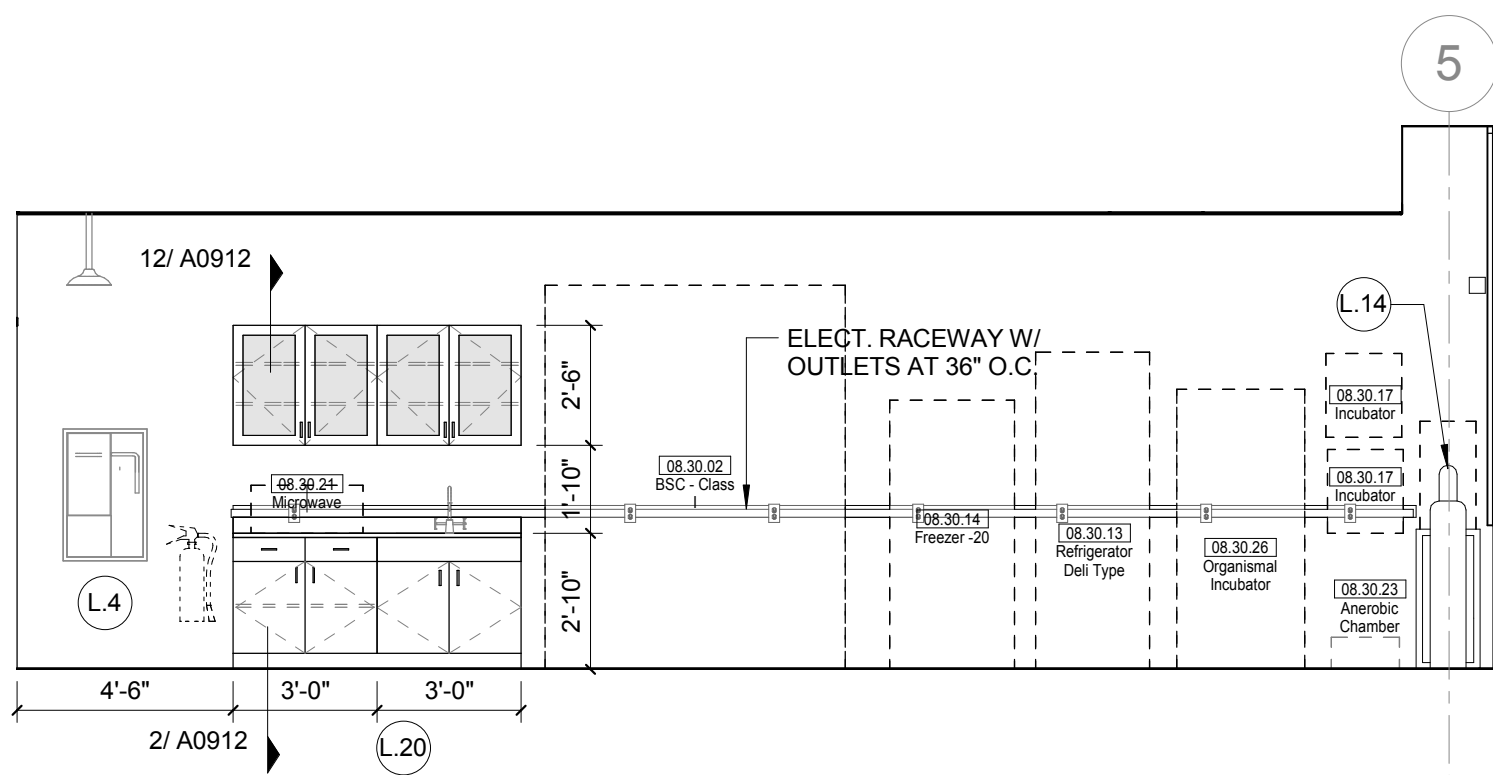
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1/4" = 1'-0"



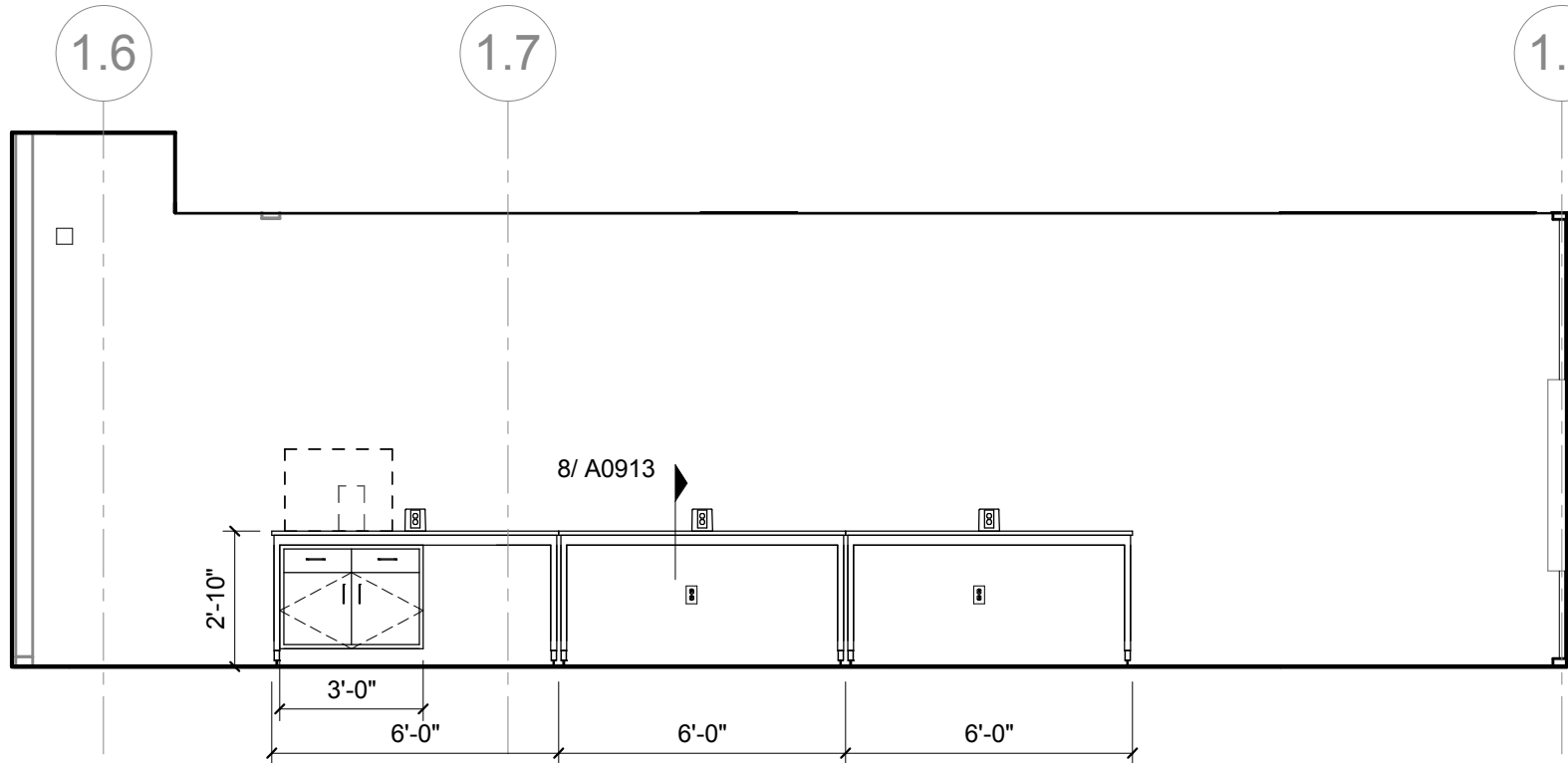
2 L02 MICRO/ PLANT BIOLOGY RESEARCH - NORTH

1/4" = 1'-0"



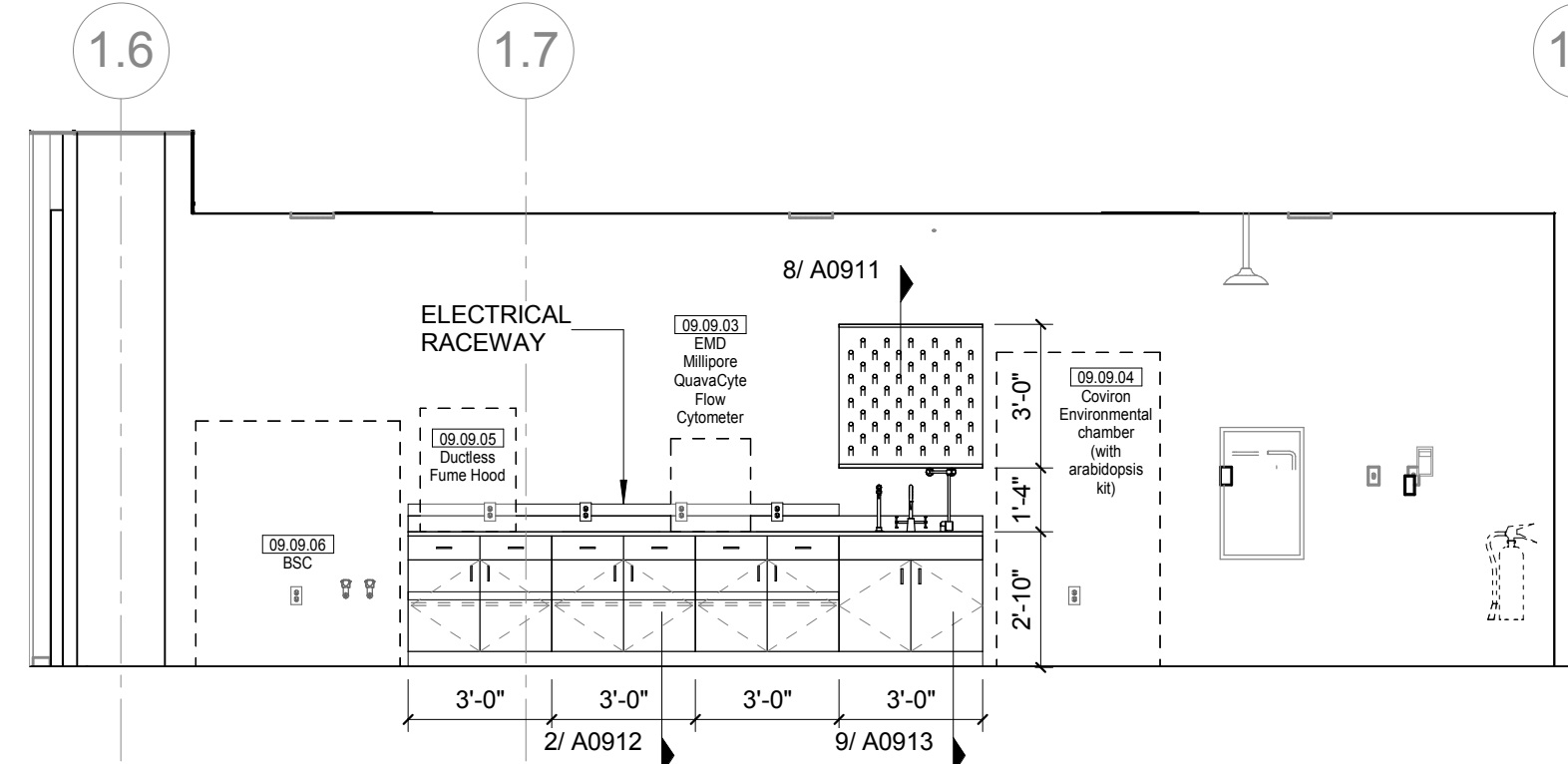
1 L02 MICRO / PLANT BIO RESEARCH - SOUTH

1/4" = 1'-0"



17 L02 OPEN RESEARCH LAB - TABLES - NORTH & SOUTH ELEVATION

1/4" = 1'-0"



16 L02 OPEN RESEARCH LAB - NORTH

1/4" = 1'-0"

LAB KEYED NOTE LEGEND

- L.1 WRITABLE AND PROJECTABLE SURFACE, DIMENSIONS AS NOTED
- L.2 RECESSED, CEILING MOUNTED PROJECTION SCREEN
- L.3 WALL MOUNTED PROJECTOR ABOVE
- L.4 EMERGENCY SAFETY SHOWER WITH EYEWASH
- L.5 115313 CHEMICAL FUME HOOD W/ STORAGE BELOW. TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED.
- L.6 WOOD LAB CASEWORK MICROSCOPE CAB
- L.7 WOOD LAB CASEWORK TALL CABINET WITH OPEN CUBBIES FOR BOOK BAG STORAGE.
- L.8 115313 CHEMICAL FUME HOOD - ACCESSIBLE - WITH MOBILE STORAGE BELOW, WHERE SHOWN. TYPICAL FUME HOOD TO HAVE ELECTRIC, AND UTILITIES AS INDICATED.
- L.9 CABS BELOW WHITEBOARD
- L.10 CAMERA FOR SKYPE INTERVIEW
- L.11 GAS CYLINDER STORAGE RACK (CFCI), CYLINDERS TO BE "OF OR"
- L.12 RECESSED MOTORIZED ROOM DARKENING / BLACKOUT SHADES. USE DOUBLE SHADES AT WEST CLASSROOMS LEVEL 02 AND LECTURE HALL. REFER TO REFLECTED CEILING PLANS
- L.13 LCD MONITOR
- L.14 MOBILE LABORATORY CASEWORK SYSTEM. SEE DETAIL 09/A0911.
- L.15 MOVEABLE WOOD LABORATORY CASEWORK: TABLE WITH MODIFIED EPOXY COUNTERTOP, CABINETS SUSPENDED BELOW AS INDICATED.
- L.20 FIXED WOOD LABORATORY CASEWORK: BASE CABINETS, MODIFIED EPOXY COUNTERTOP, WALL CABINETS AS SHOWN ON ELEVATION
- L.21 SEE CEILING PLAN FOR CEILING MOUNTED UNISTRUT SYSTEM SUPPORTED BY STRUCTURE ABOVE
- L.22 8" DEEP x 6" WIDE TRENCH WITH METAL COVER TO RECEIVE FLOOR FINISH TO MATCH ADJACENT FLOOR
- L.23 FLOOR BOX FOR ELECTRICAL & DATA
- L.24 09 6666 DRY ERASE FINISH (AWC-1)
- L.25 PROVIDE BLOCKING FOR FIRE EXTINGUISHER, MOUNTING HEIGHT - 3'-0" TO TOP OF EXTINGUISHER, FIRE EXTINGUISHER & ITS BRACKET BY OWNER.
- L.26 POINT EXHAUST (SNORKEL) FOR SOLDERING. SEE DETAIL 5/ A0913.

LAB UTILITY LEGEND

- CW WATER COLD WATER FAUCET, DECK MOUNTED GOOSENECK WITH SERRATED NOZZLE, VACUUM BREAKER
- W-1 WATER GENERAL MIXING FAUCET, DECK MOUNTED WITH VACUUM BREAKER, SERRATED NOZZLE.
- DI WATER DI WATER FAUCET DECK MOUNTED
- PWS WATER PROCESS COLD WATER SUPPLY
- PWR WATER PROCESS COLD WATER RETURN
- EW WATER EYEWASH, DECK MOUNTED, AUTOFLOW SWING-DOWN
- DH WATER DRENCH HOSE
- G GAS FUME HOOD CONTROL
- V VAC FUME HOOD CONTROL
- V-3 VAC WALL MOUNTED, SINGLE SERRATED OUTLET
- V-1 VAC TURRET BASE, SINGLE SERRATED OUTLET
- V-4 VAC OUTLET FOR BIOSAFETY CABINET CONNECTIONS
- V-5 VAC QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
- A-1 AIR FUME HOOD CONTROL
- A-3 AIR TURRET BASE, SINGLE SERRATED OUTLET
- A-4 AIR WALL MOUNTED, SINGLE SERRATED OUTLET
- A-5 AIR QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
- N NITROGEN FUMEHOOD CONTROL
- E-1 ELEC DUPLEX OUTLET (GFI) ON FUME HOOD
- E-2 ELEC COUNTERTOP MOUNTED PEDESTAL, (1) DUPLEX ELECTRICAL OUTLET
- E-3 ELEC COUNTERTOP MOUNTED PEDESTAL, (2) DUPLEX ELECTRICAL OUTLET
- E-5 ELEC DUPLEX ELECTRICAL OUTLET ON OVERHEAD SERVICE CARRIER
- E-6 ELEC DUPLEX ELECTRICAL OUTLET ON TABLE APRON
- D DATA DATA OUTLET
- D-1 DATA COUNTERTOP MOUNTED PEDESTAL, (2) DATA OUTLETS
- D-5 DATA DATA OUTLET ON OVERHEAD SERVICE CARRIER
- D-6 DATA DATA OUTLET ON TABLE APRON
- CS CLIP SINK LIPPED MODIFIED EPOXY CLIP SINK, 9"Lx3"W OVAL (DROP-IN)
- S-1 SINK LIPPED MODIFIED EPOXY SINK, 25"Lx15"Wx10"D (DROP-IN)
- S-2 SINK LIPPED MODIFIED EPOXY ADA SINK 25"Lx15"Wx6"D (DROP-IN)
- S-3 SINK STAINLESS STEEL SINK 25"Lx15"Wx10"D (DROP-IN)
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- S-5 SINK LIPPED MODIFIED EPOXY ADA SINK 18"Lx15"Wx5"D (DROP-IN)
- S-6 SINK LIPPED MODIFIED EPOXY SINK, 36"Lx15"Wx10"D (DROP-IN)
- OSC OVERHEAD SERVICE CARRIER. SEE DETAIL 10 / A0913
- PTD PAPER TOWEL DISPENSER

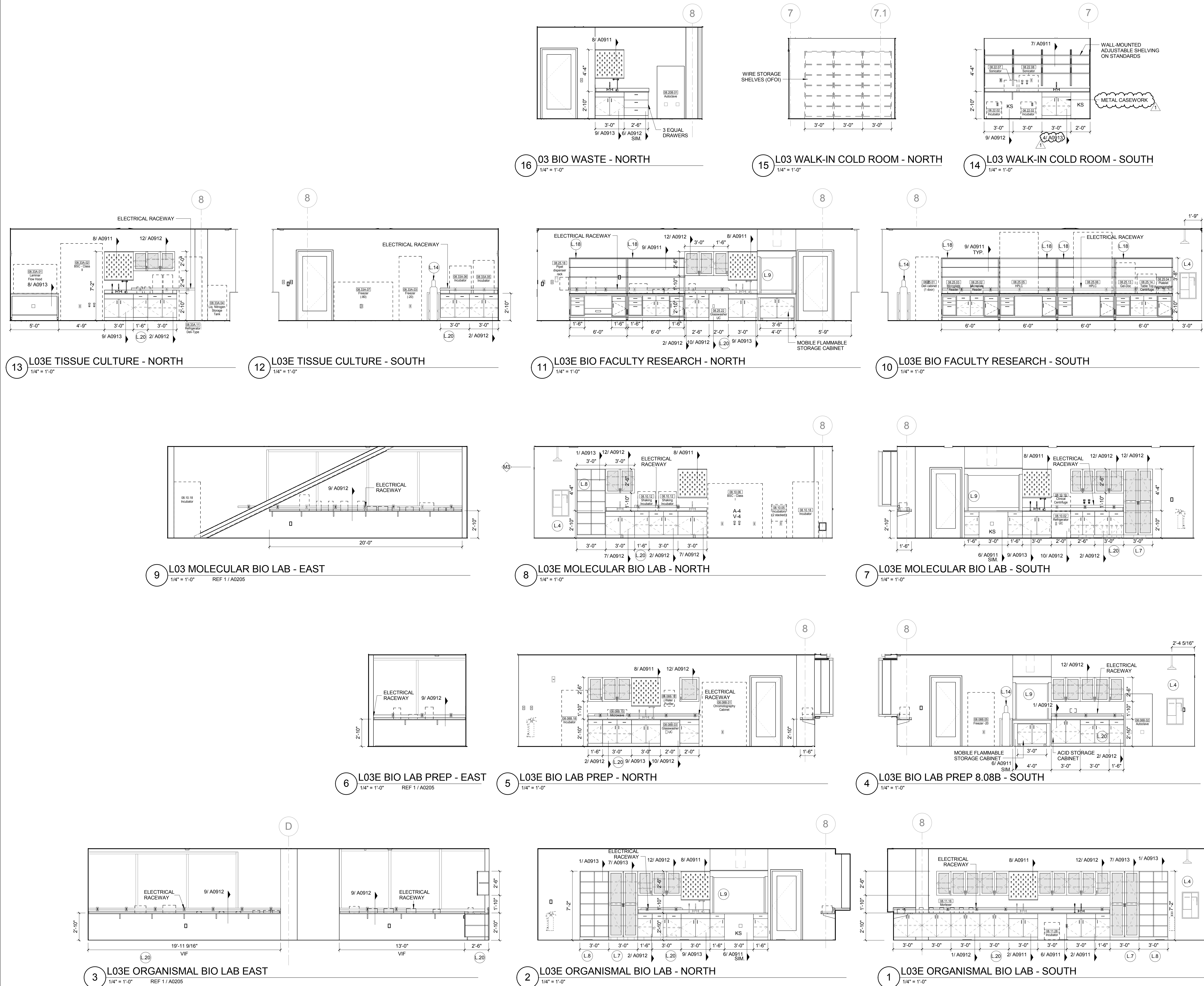
CHEMICAL FUME HOOD LEGEND

- CFH-4 4'-0" WIDE CHEMICAL FUME HOOD
- CFH-6 6'-0" WIDE CHEMICAL FUME HOOD

LAB GENERAL NOTES

- ALL DIMENSIONS ARE TO GWB FACE PARTITION OR COLUMN CENTER LINE U.N.O.
- OWNER FURNISHED OWNER INSTALLED (OFOI) ITEMS ARE SHOWN DASHED FOR REFERENCE ONLY. COORDINATE SIZE AND INSTALLATION REQUIREMENTS WITH OWNER'S REPRESENTATIVE.
- CENTER ALL DRYING RACKS WITH DRIP STOP TROUGHS ABOUT CENTERLINE OF SINKS, U.N.O.
- ALL APRONS AT OPEN KNEE SPACE TO BE 4" U.N.O. PROVIDE APRON OF SOLID WOOD WITH EASED BOTTOM EDGE. FINISH TO MATCH VENEER SPECIES. MAINTAIN MINIMUM 2" CLEAR ABOVE FLOOR FINISH.
- CENTER ALL COUNTERTOP MOUNTED UTILITY OUTLETS ON CENTER OF CASEWORK U.N.O.
- ALL SURFACE MOUNTED RACEWAY TO HAVE OUTLETS AT 2'-0" O.C. AND SHALL BE MOUNTED DIRECTLY ABOVE BACKSPLASH U.N.O.
- ALL BACKSPLASHES TO BE 4" HIGH U.N.O.
- DASHED LINES ON ELEVATIONS INDICATED ADJUSTABLE SHELVE INSIDE CASEWORK
- PROVIDE FINISHED BACK PANEL AT KNEE SPACES BELOW ALL FUMEHOODS, TYPICAL. SIMILAR TO DETAIL
- PROVIDE FINISHED BACK PANEL AT ALL KNEE SPACES, TYPICAL
- PROVIDE LOCK AND KEY WHERE A CIRCLE NEXT TO DRAWER OR DOOR HANDLE IS SHOWN OR WHERE NOTED
- REFER SHEETS A0914 FOR LABORATORY CASEWORK / MILLWORK DETAILS
- FOR TYPICAL MOUNTING HEIGHTS REF: 1/A0911
- ALL CASEWORK TO BE WOOD U.N.O.
- ALL CASEWORK IS LABORATORY CASEWORK UNLESS NOTED AS MILLWORK OR O.F.O.I. SEE DIVISION 12-3555 - LABORATORY CASEWORK FOR SPECIFICATIONS.
- ALL EQUIPMENT ITEMS HAVE A EQUIPMENT TAG - XXX-XXX. SEE SHEETS A114 FOR EQUIPMENT SCHEDULES.
- PROVIDE PAPER TOWEL DISPENSER (PTD) AT EACH SINK LOCATION.

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LAB KEYED NOTE LEGEND

- L.1 WRITABLE AND PROJECTABLE SURFACE, DIMENSIONS AS NOTED
- L.2 RECESSED, CEILING MOUNTED PROJECTION SCREEN
- L.3 WALL MOUNTED PROJECTOR ABOVE
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- L.18 MOBILE LABORATORY CASEWORK SYSTEM. SEE DETAIL 09/A0911.
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- V-1 VAC TURRET BASE, SINGLE SERRATED OUTLET
- V-4 VAC OUTLET FOR BIOSAFETY CABINET CONNECTIONS
- V-5 VAC QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
- A AIR FUME HOOD CONTROL
- A-1 AIR TURRET BASE, SINGLE SERRATED OUTLET
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- E-2 ELEC COUNTERTOP MOUNTED PEDESTAL, (2) DUPLEX ELECTRICAL OUTLET.
- E-3 ELEC WALL MOUNTED, (1) DUPLEX ELECTRICAL OUTLET.
- E-5 ELEC DUPLEX ELECTRICAL OUTLET ON OVERHEAD SERVICE CARRIER
- E-6 ELEC DUPLEX ELECTRICAL OUTLET ON TABLE APRON
- D DATA DATA OUTLET
- D-1 DATA COUNTERTOP MOUNTED PEDESTAL, (2) DATA OUTLETS
- D-5 DATA DATA OUTLET ON OVERHEAD SERVICE CARRIER
- D-6 DATA DATA OUTLET ON TABLE APRON
- S-1 SINK LIPPED MODIFIED EPOXY SINK, 25"Lx15"Wx10"D (DROP-IN)
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- CFH-4 4'-0" WIDE CHEMICAL FUME HOOD
- CFH-6 6'-0" WIDE CHEMICAL FUME HOOD

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- PROVIDE PAPER TOWEL DISPENSER (PTD) AT EACH SINK LOCATION.



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St. Louis, MO 63104
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CONFORMED SET 01 JUL 2016

1 ADDENDUM 3-2 15 APR 2016
ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016

No.	Description	Date
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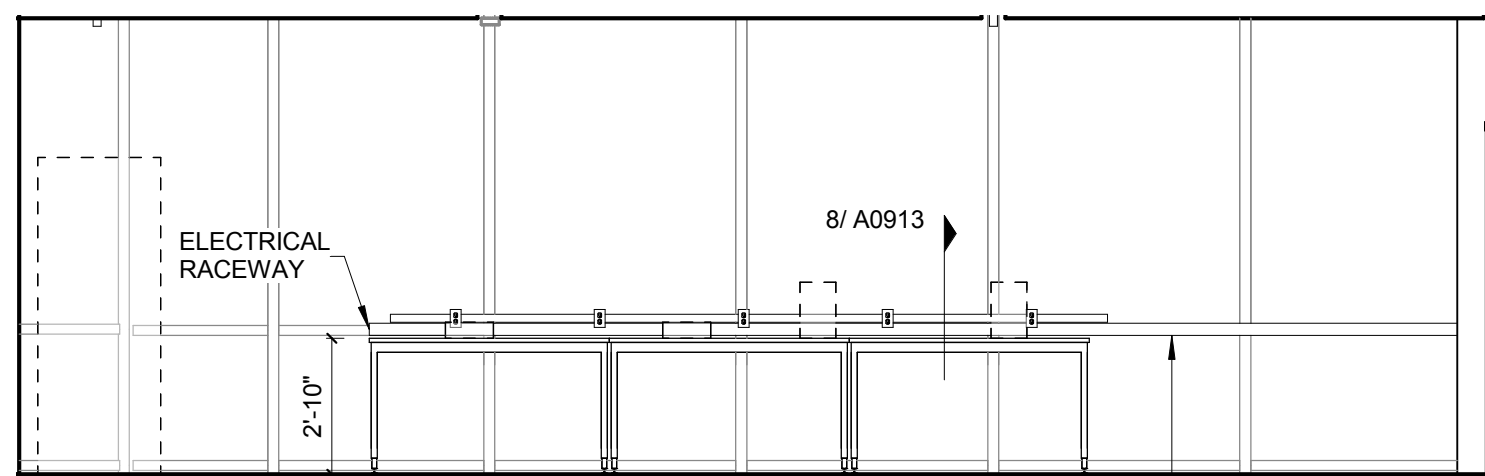
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ELEVATIONS LEVEL 03**

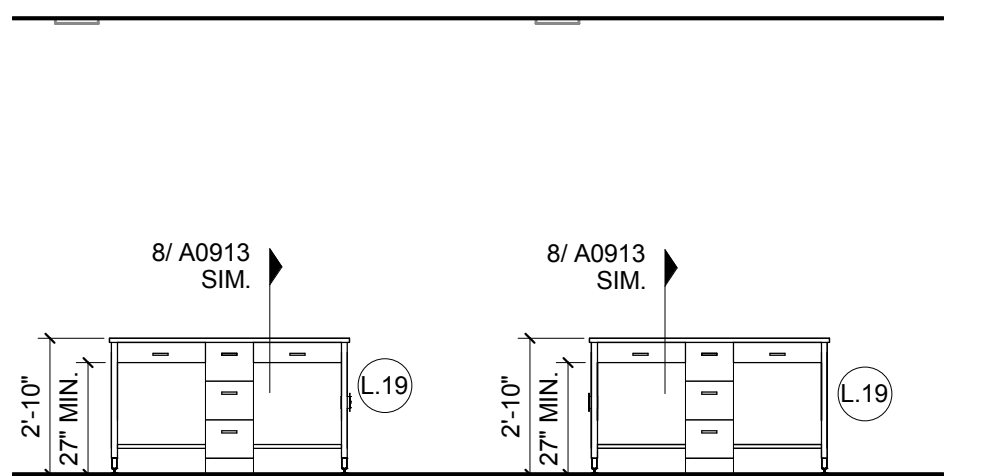
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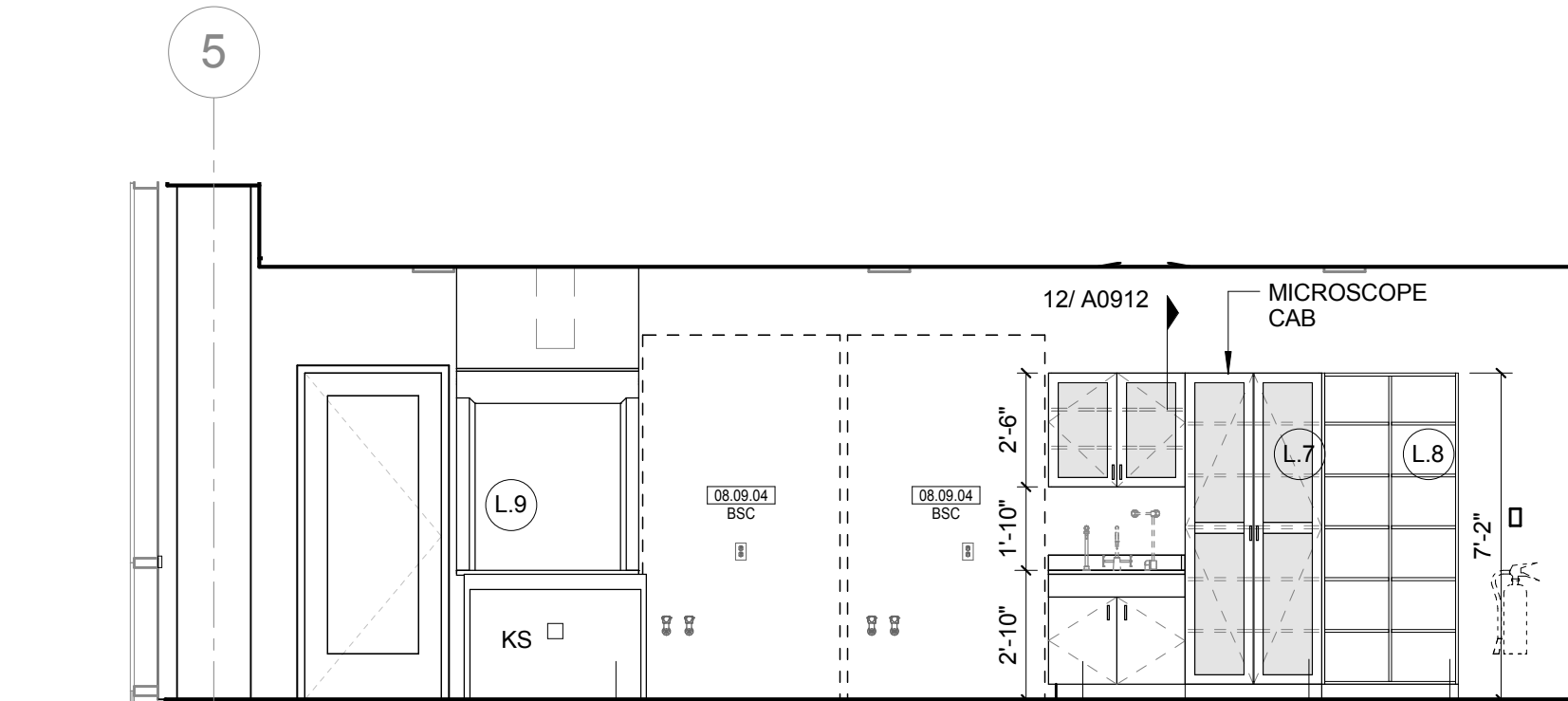
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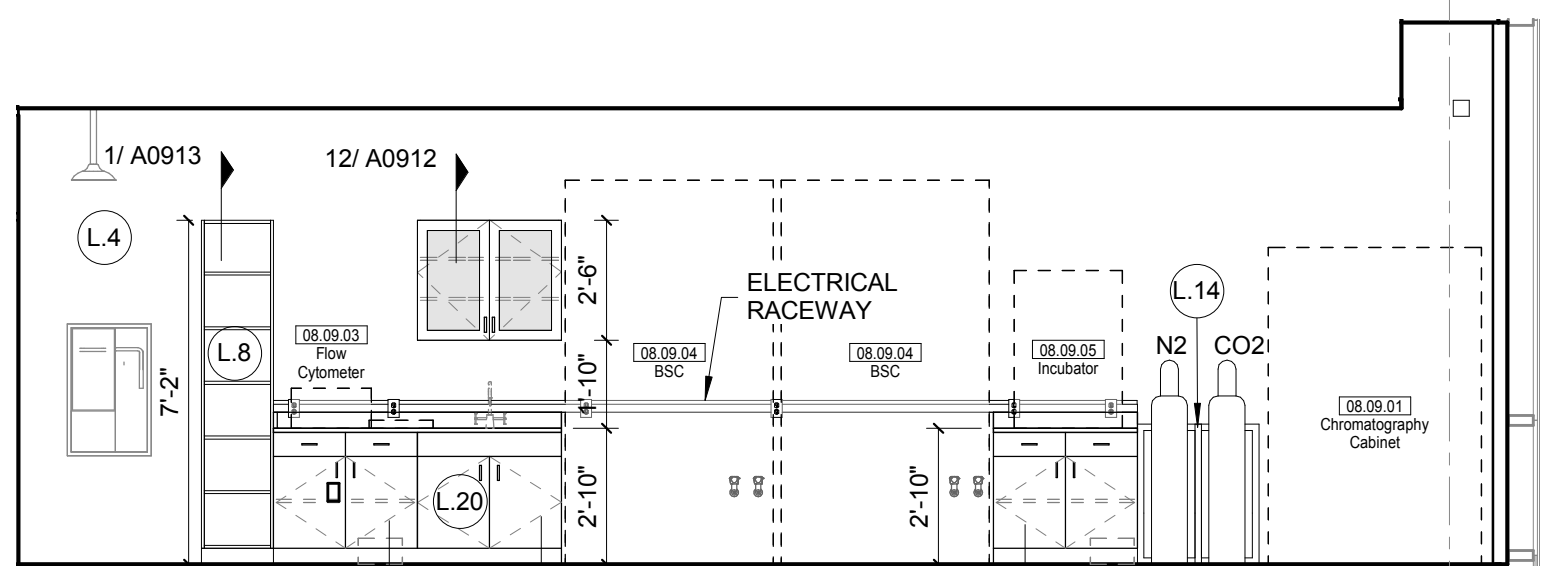
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1/4" = 1'-0"



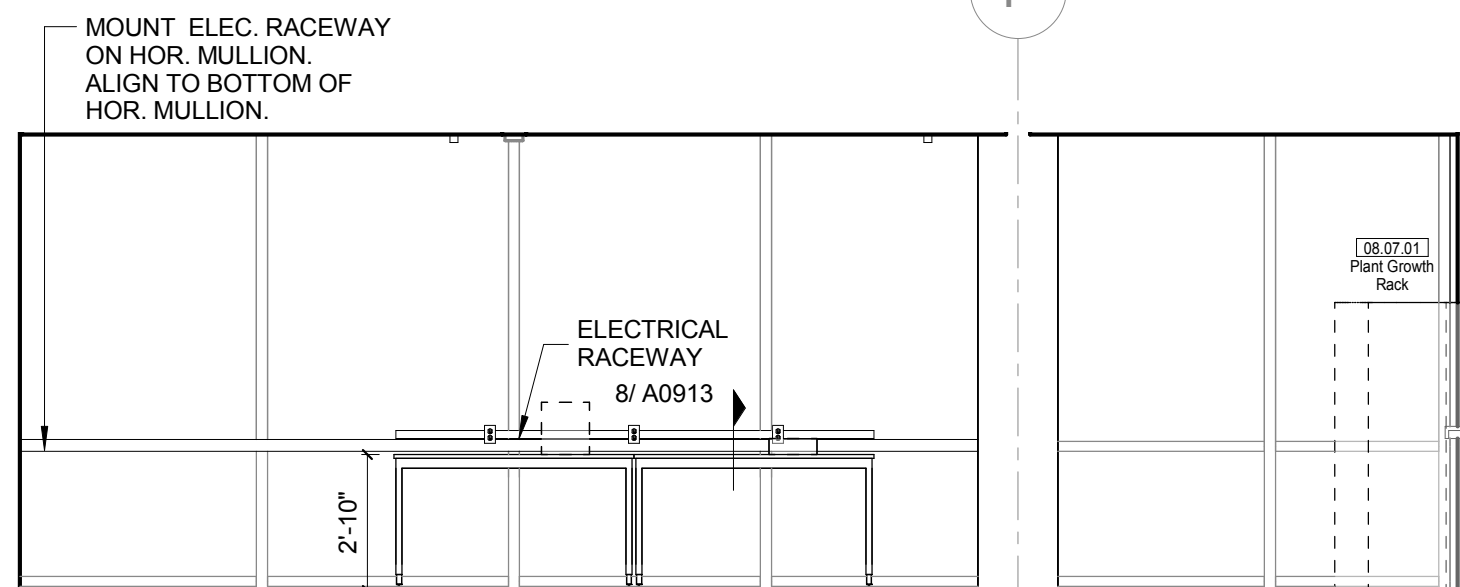
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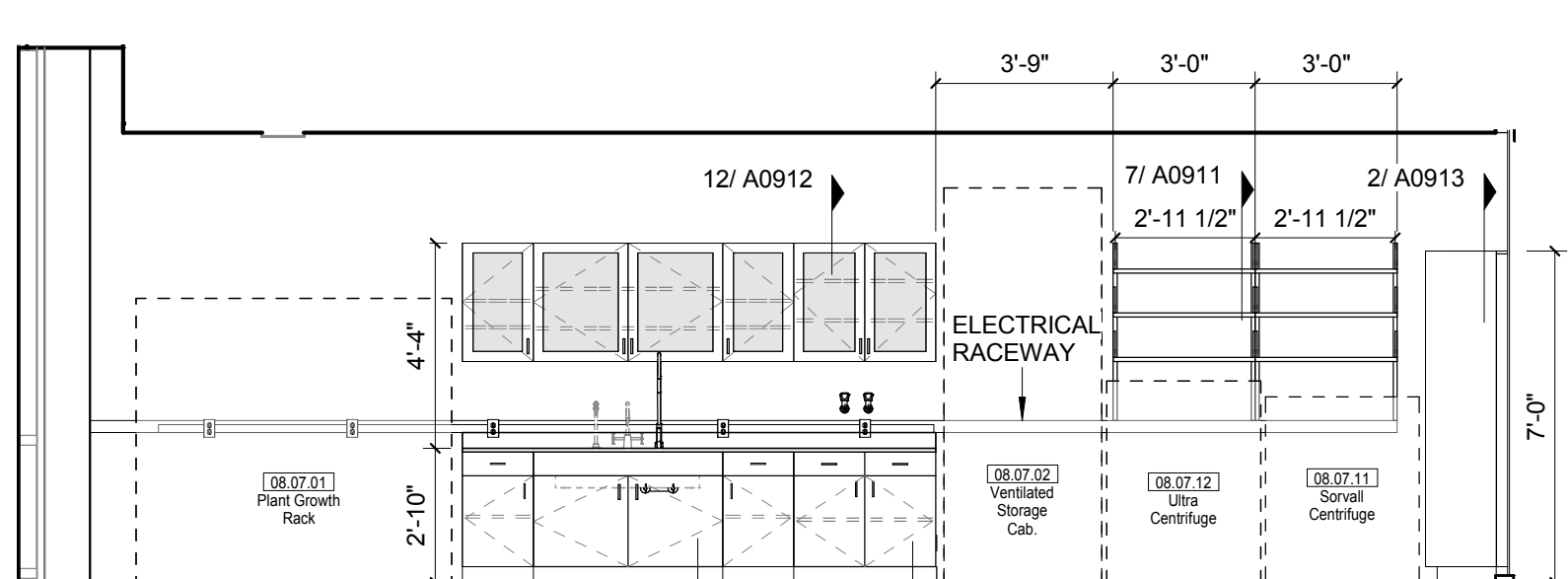
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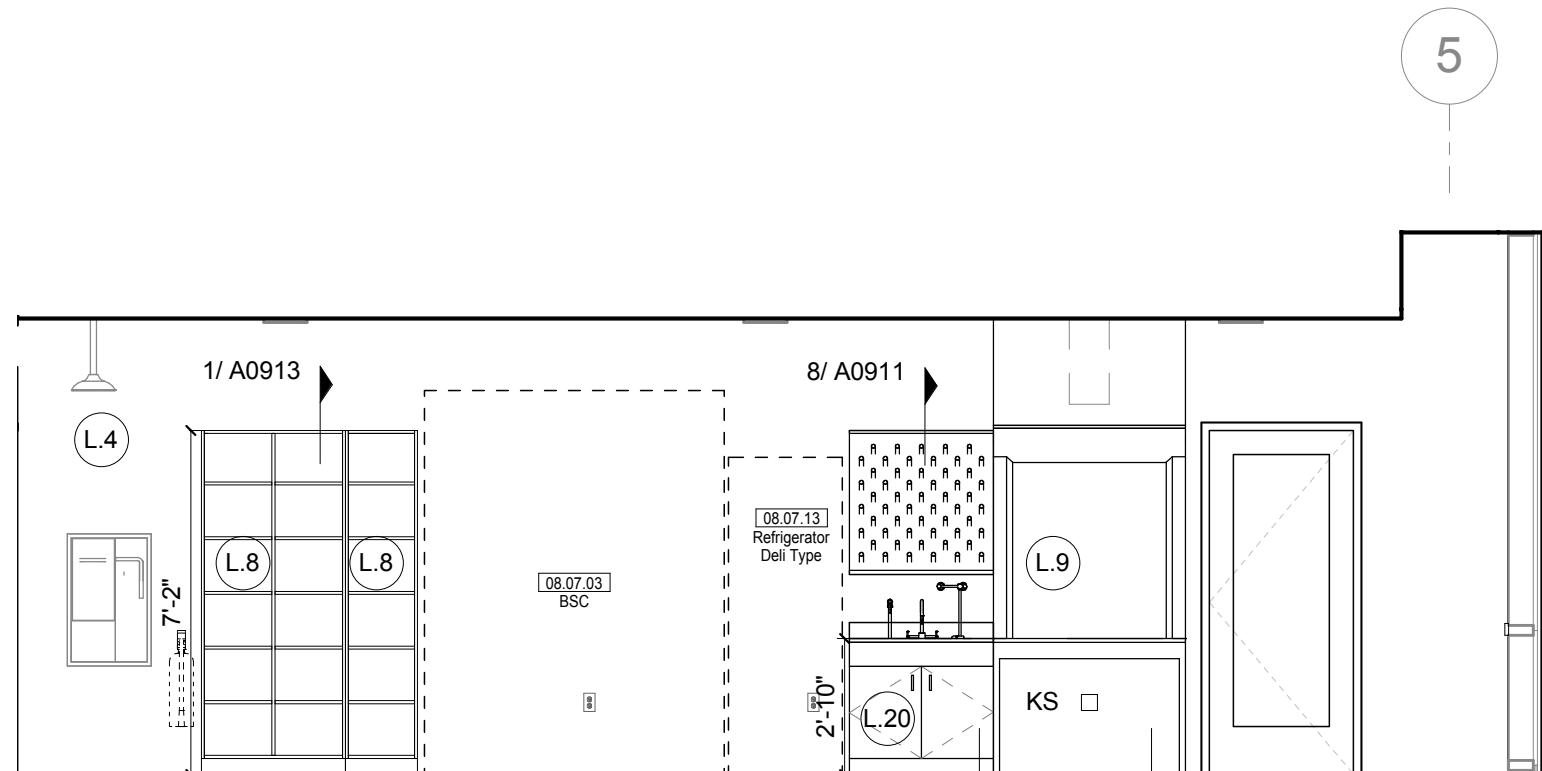
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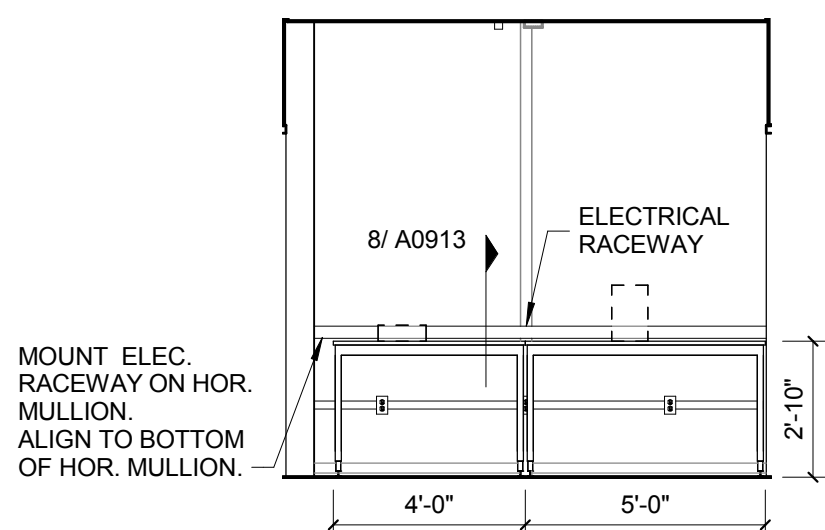
10 L03 ANATOMY/ PHYSIO LAB - WEST
1/4" = 1'-0"



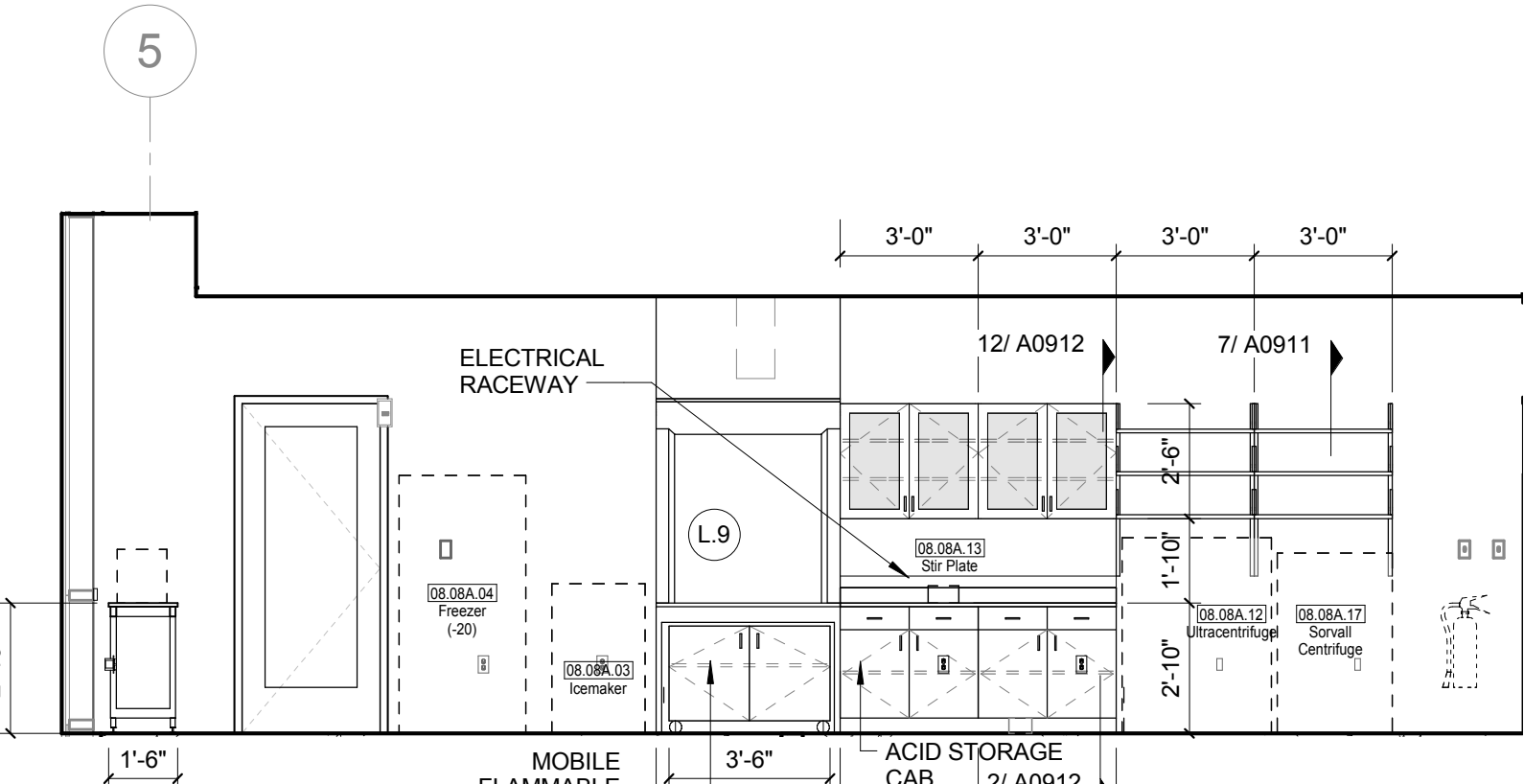
9 L03 ANATOMY/ PHYSIO LAB - NORTH
1/4" = 1'-0"



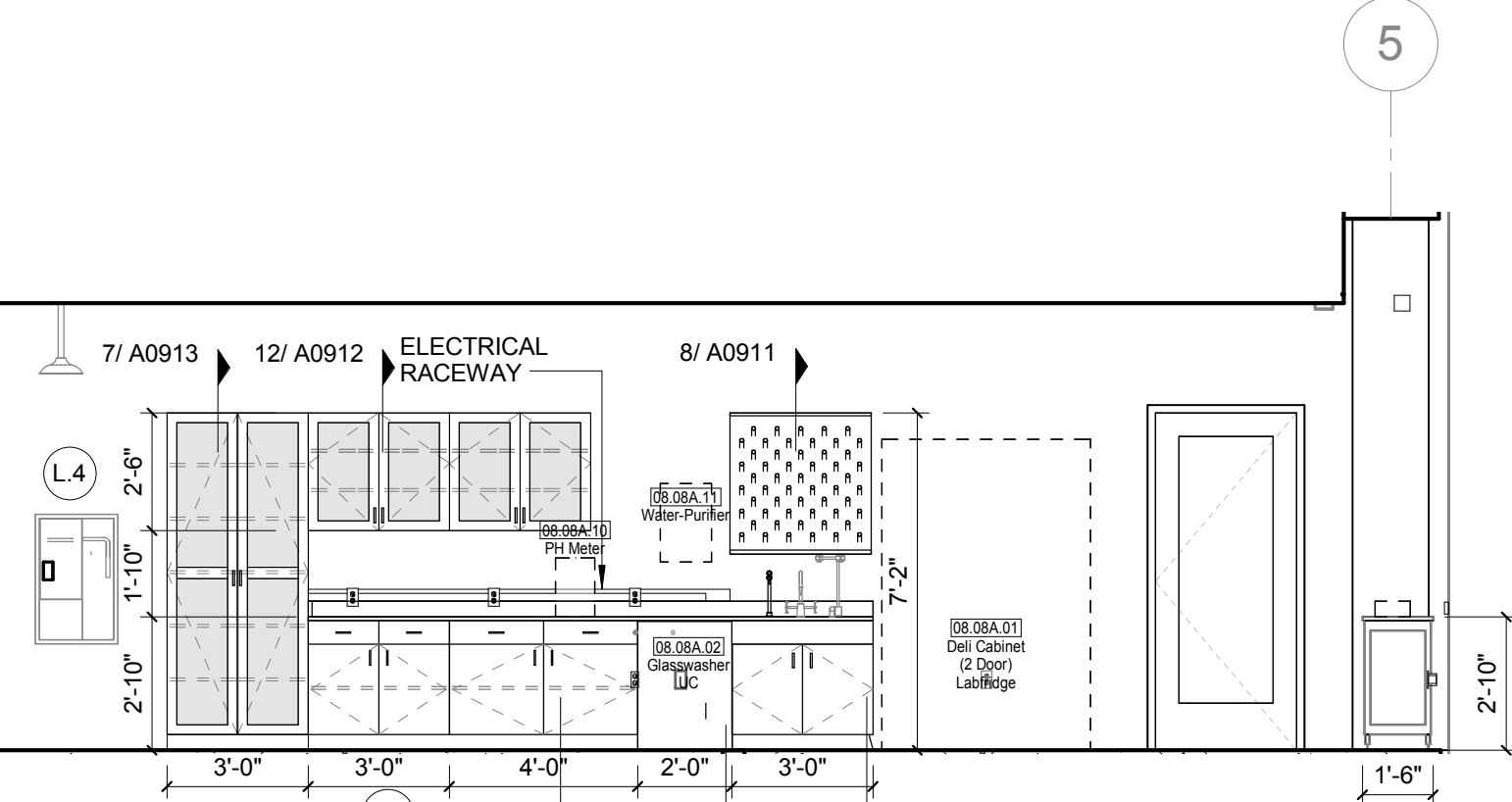
8 L03 ANATOMY / PHYSIO LAB - SOUTH
1/4" = 1'-0"



7 L03 BIO LAB PREP 8.08A - WEST
1/4" = 1'-0"



6 L03 BIO LAB PREP 8.08A - NORTH
1/4" = 1'-0"



5 L03 BIO LAB PREP 8.08A - SOUTH
1/4" = 1'-0"

LAB KEYED NOTE LEGEND

- L.1 WRITABLE AND PROJECTABLE SURFACE, DIMENSIONS AS NOTED
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L.14 GAS CYLINDER STORAGE RACK (CFI), CYLINDERS TO BE "0"0".
L.15 RECESSED MOTORIZED ROOM DARKENING / BLACKOUT SHADES. USE DOUBLE SHADES AT WEST CLASSROOMS LEVEL 02 AND LECTURE HALL, REFER TO REFLECTED CEILING PLANS
L.16 LCD MONITOR
L.18 MOBILE LABORATORY CASEWORK SYSTEM, SEE DETAIL 09/A0911.
L.19 MOVEABLE WOOD LABORATORY CASEWORK: TABLE WITH MODIFIED EPOXY COUNTERTOP, CABINETS SUSPENDED BELOW AS INDICATED.
L.20 FIXED WOOD LABORATORY CASEWORK - BASE CABINETS, MODIFIED EPOXY COUNTERTOP, WALL CABINETS AS SHOWN ON ELEVATION
L.21 SEE CEILING PLAN FOR CEILING MOUNTED UNISTRUT SYSTEM SUPPORTED BY STRUCTURE ABOVE
L.22 8" DEEP X 6" WIDE TRENCH WITH METAL COVER TO RECEIVE FLOOR FINISH TO MATCH ADJACENT FLOOR
L.23 FLOOR BOX FOR ELECTRICAL & DATA
L.24 09 6666 DRY ERASE FINISH (AWC-1)
L.25 PROVIDE BLOCKING FOR FIRE EXTINGUISHER, MOUNTING HEIGHT - 3'-0" TO TOP OF EXTINGUISHER, FIRE EXTINGUISHER & ITS BRACKET BY OWNER.
L.26 POINT EXHAUST (SNORKEL) FOR SOLDERING, SEE DETAIL 5/ A0913.

LAB UTILITY LEGEND

- CW WATER COLD WATER FAUCET, DECK MOUNTED GOOSENECK WITH SERRATED NOZZLE, VACUUM BREAKER
W-1 WATER GENERAL MIXING FAUCET, DECK MOUNTED WITH VACUUM BREAKER, SERRATED NOZZLE.
DI WATER DI WATER FAUCET DECK MOUNTED
PWS WATER PROCESS COLD WATER SUPPLY
PWR WATER PROCESS COLD WATER RETURN
EW WATER EYEWASH, DECK MOUNTED, AUTOFLOW SWING-DOWN
DH WATER DRENCH HOSE
G GAS FUME HOOD CONTROL
V VAC FUME HOOD CONTROL
V-3 VAC WALL MOUNTED, SINGLE SERRATED OUTLET
V-1 VAC TURRET BASE, SINGLE SERRATED OUTLET
V-4 VAC OUTLET FOR BIOSAFETY CABINET CONNECTIONS
V-5 VAC QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
A AIR FUME HOOD CONTROL
A-1 AIR TURRET BASE, SINGLE SERRATED OUTLET
A-3 AIR WALL MOUNTED, SINGLE SERRATED OUTLET
A-4 AIR OUTLET FOR BIOSAFETY CABINET CONNECTIONS
A-5 AIR QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
N NITROGEN FUMEHOOD CONTROL
E ELEC. DUPLEX OUTLET (GFI) ON FUME HOOD
E-1 ELEC. COUNTERTOP MOUNTED PEDESTAL, (1) DUPLEX ELECTRICAL OUTLET
E-2 ELEC. COUNTERTOP MOUNTED PEDESTAL, (2) DUPLEX ELECTRICAL OUTLET
E-3 ELEC. WALL MOUNTED, (1) DUPLEX ELECTRICAL OUTLET
E-5 ELEC. DUPLEX ELECTRICAL OUTLET ON OVERHEAD SERVICE CARRIER
E-6 ELEC. DUPLEX ELECTRICAL OUTLET ON TABLE APRON
D DATA DATA OUTLET
D-1 DATA COUNTERTOP MOUNTED PEDESTAL, (2) DATA OUTLETS
D-5 DATA DATA OUTLET ON OVERHEAD SERVICE CARRIER
D-6 DATA DATA OUTLET ON TABLE APRON
CS CUP SINK LIPPED MODIFIED EPOXY CUP SINK, 9"Lx3"W OVAL (DROP-IN)
S-1 SINK LIPPED MODIFIED EPOXY SINK, 25"Lx15"Wx10"D (DROP-IN)
S-2 SINK LIPPED MODIFIED EPOXY ADA SINK 25"Lx15"Wx5"D (DROP-IN)
S-3 SINK STAINLESS STEEL SINK 25"Lx15"Wx10"D (DROP-IN)
S-4 SINK STAINLESS STEEL ADA SINK 25"Lx15"Wx5"D (DROP-IN)
S-5 SINK LIPPED MODIFIED EPOXY ADA SINK 18"Lx15"Wx5"D (DROP-IN)
S-6 SINK LIPPED MODIFIED EPOXY SINK, 36"Lx15"Wx10"D (DROP-IN)
OSC OVERHEAD SERVICE CARRIER, SEE DETAIL 10 / A0913
PTD PAPER TOWEL DISPENSER

CHEMICAL FUME HOOD LEGEND

- CFH-4 4'-0" WIDE CHEMICAL FUME HOOD
CFH-6 6'-0" WIDE CHEMICAL FUME HOOD

LAB GENERAL NOTES

- ALL DIMENSIONS ARE TO GWB FACE PARTITION OR COLUMN CENTER LINE U.N.O.
- OWNER FURNISHED OWNER INSTALLED (OFOI) ITEMS ARE SHOWN DASHED FOR REFERENCE ONLY. COORDINATE SIZE AND INSTALLATION REQUIREMENTS WITH OWNER'S REPRESENTATIVE.
- CENTER ALL DRYING RACKS WITH DROP STOP TROUGHS ABOUT CENTERLINE OF SINKS, U.N.O.
- ALL APRONS AT OPEN KNEE SPACE TO BE 4" U.N.O. PROVIDE APRON OF SOLID WOOD WITH EASED BOTTOM EDGE, FINISH TO MATCH VENEER SPECIES, MAINTAIN MINIMUM 27" CLEAR ABOVE FLOOR FINISH.
- CENTER ALL COUNTERTOP MOUNTED UTILITY OUTLETS ON CENTER OF CASEWORK U.N.O.
- ALL SURFACE MOUNTED RACEWAY TO HAVE OUTLETS AT 2'-0" O.C. AND SHALL BE MOUNTED DIRECTLY ABOVE BACKSPLASH U.N.O.
- ALL BACKSPLASHES TO BE 4" HIGH U.N.O.
- DASHED LINES ON ELEVATIONS INDICATED ADJUSTABLE SHELVING INSIDE CASEWORK
- PROVIDE FINISHED BACK PANEL AT KNEE SPACES BELOW ALL FUMEHOODS, TYPICAL, SIMILAR TO DETAIL
- PROVIDE FINISHED BACK PANEL AT ALL KNEE SPACES, TYPICAL
- PROVIDE LOCK AND KEY WHERE A CIRCLE NEXT TO DRAWER OR DOOR HANDLE IS SHOWN OR WHERE NOTED
- REFER SHEETS A091x FOR LABORATORY CASEWORK / MILLWORK DETAILS
- FOR TYPICAL MOUNTING HEIGHTS REF: 1/A0911
- ALL CASEWORK TO BE WOOD U.N.O.
- ALL CASEWORK IS LABORATORY CASEWORK UNLESS NOTED AS MILLWORK OR OFOI. SEE DIVISION "12 3553 - LABORATORY CASEWORK" FOR SPECIFICATIONS
- ALL EQUIPMENT ITEMS HAVE A EQUIPMENT TAG - XX-XX-XX. SEE SHEETS A11x FOR EQUIPMENT SCHEDULES.
- PROVIDE PAPER TOWEL DISPENSER (PTD) AT EACH SINK LOCATION.



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CONFORMED SET

01 JUL 2016

ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016
No. Description Date

Drawing Title:

**INTERIOR LAB
ELEVATIONS LEVEL 03**

Project No.: 04561.01 Checked by:

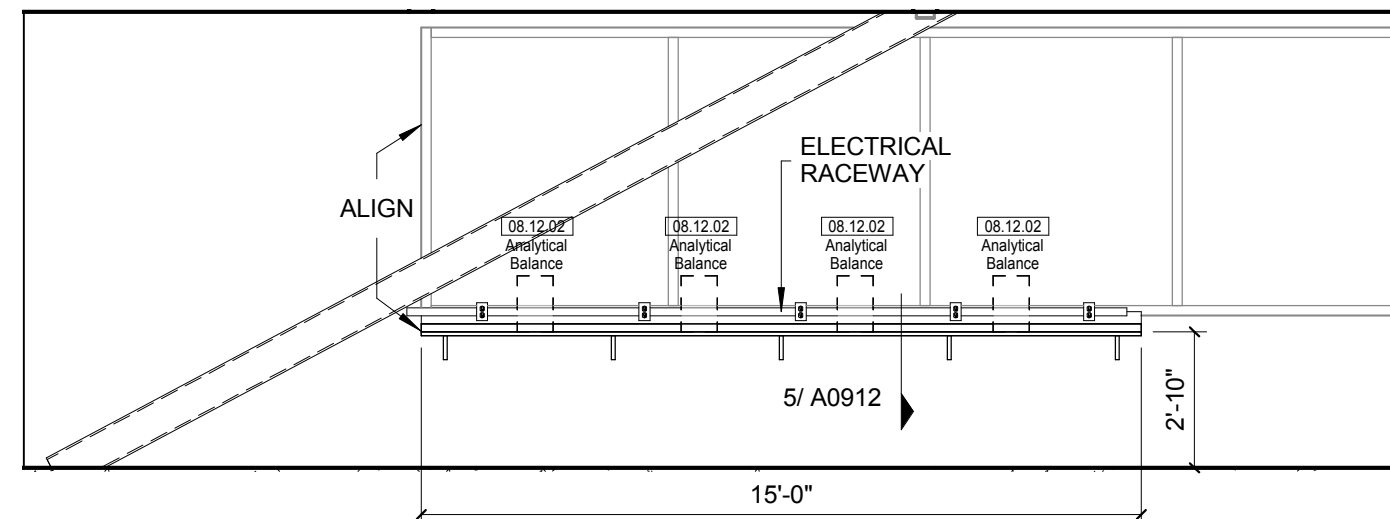
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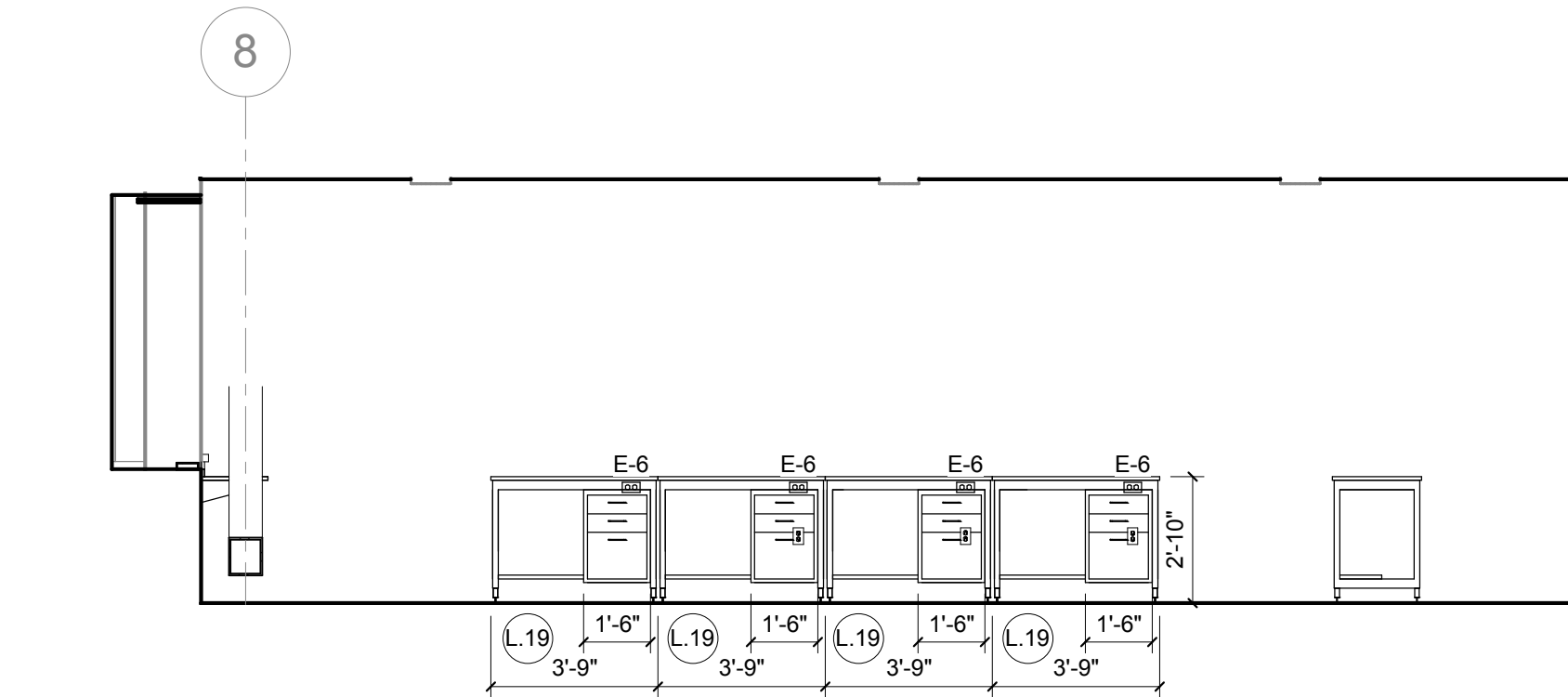
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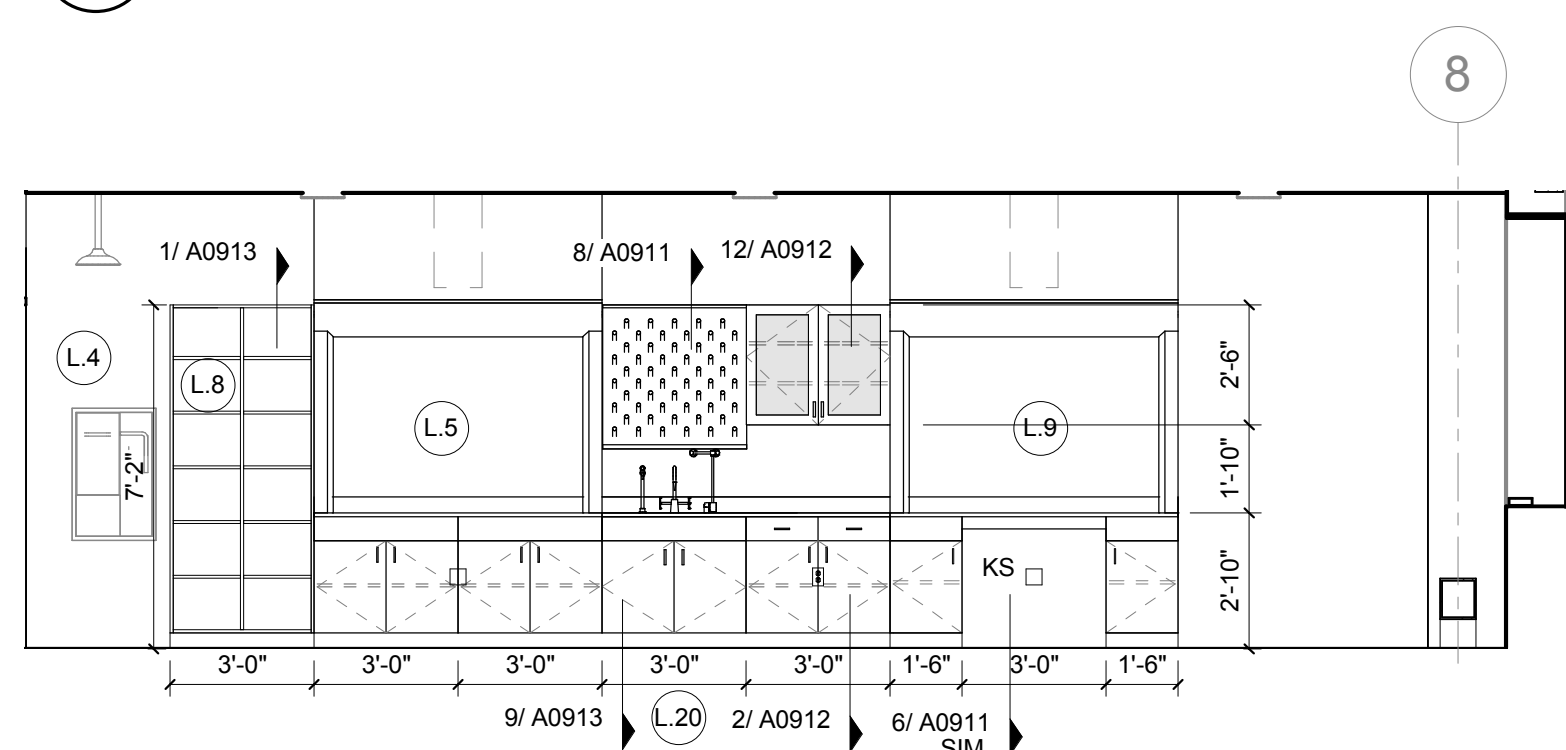
16 CHEM LAB - WEST
1/4" = 1'-0"



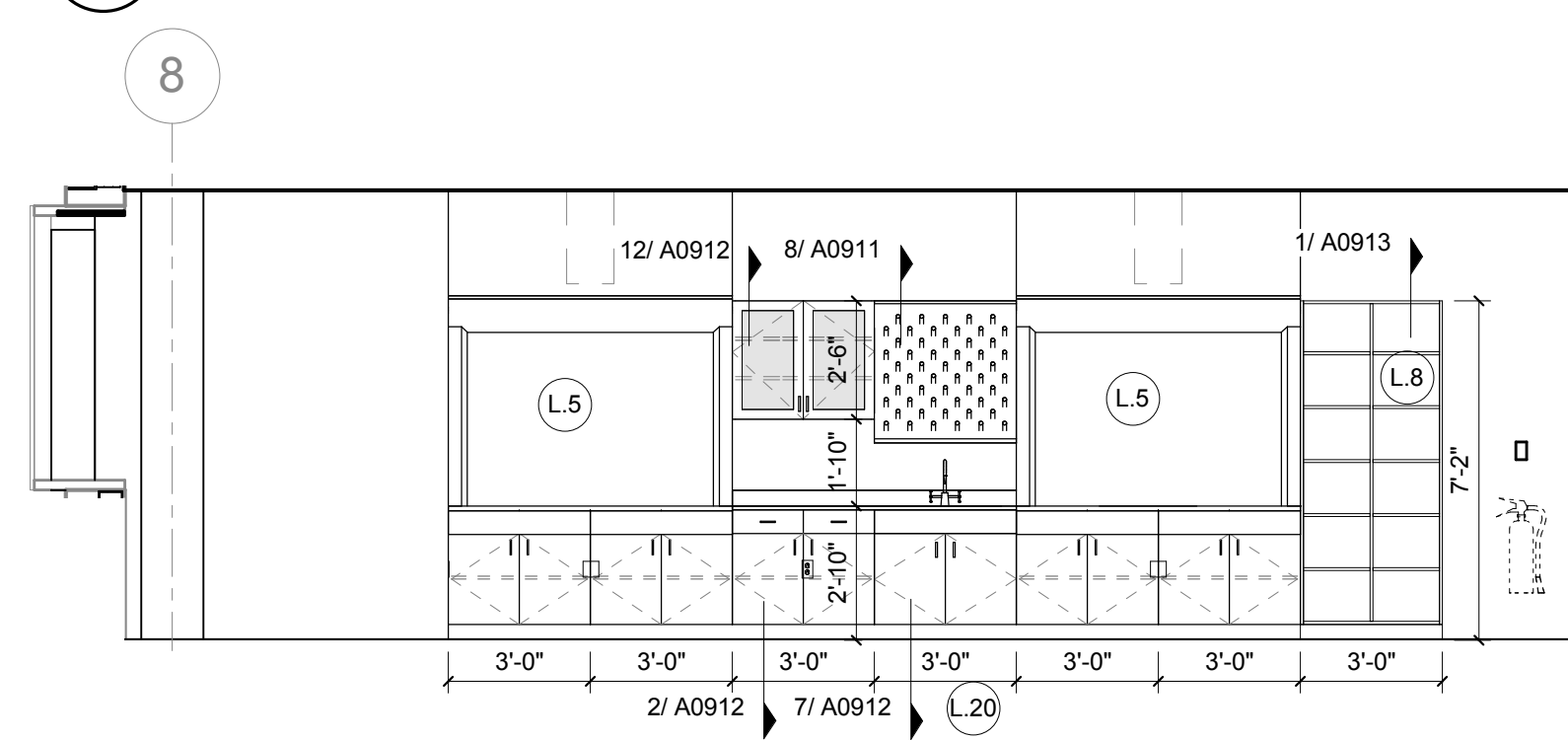
15 L04 ANALYTICAL/INORGANIC CHEM LAB - EAST
1/4" = 1'-0"



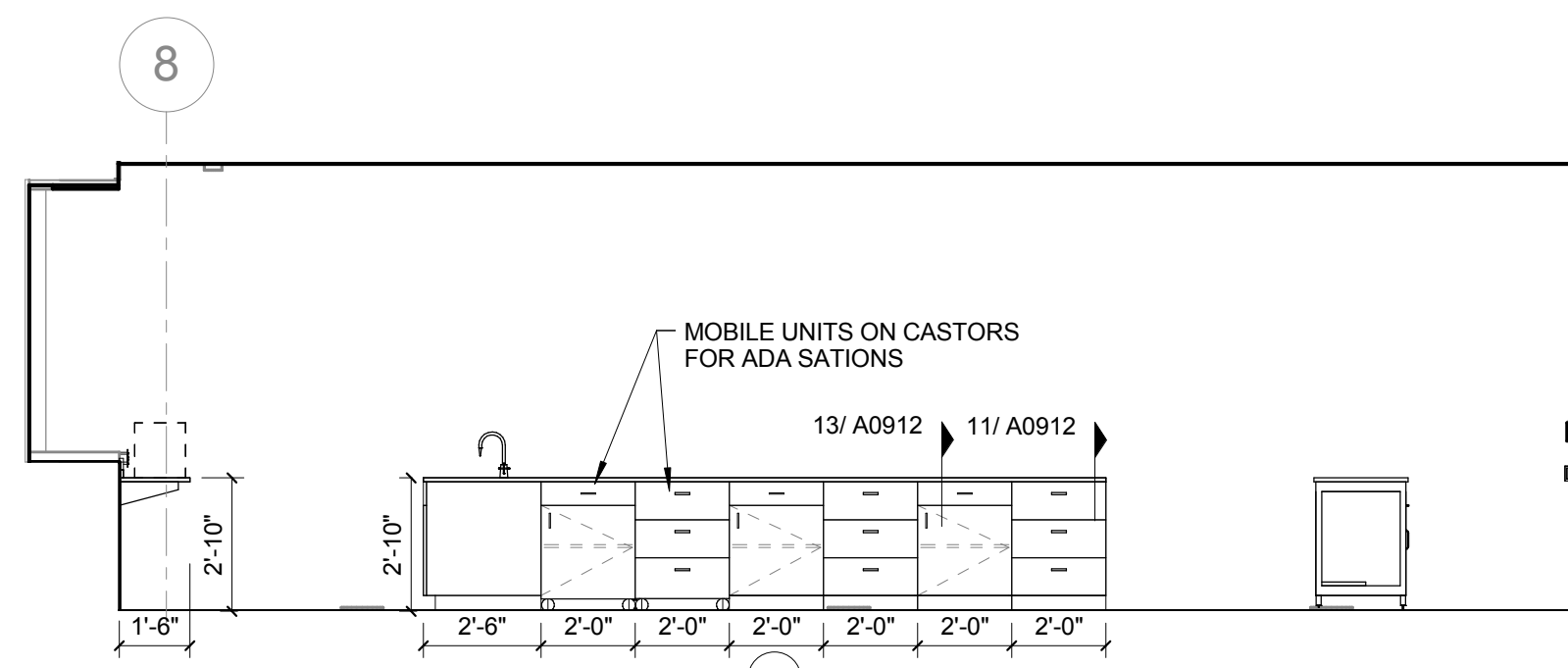
14 L04 ANALYTICAL/INORGANIC CHEM LAB - STUDENT
1/4" = 1'-0"



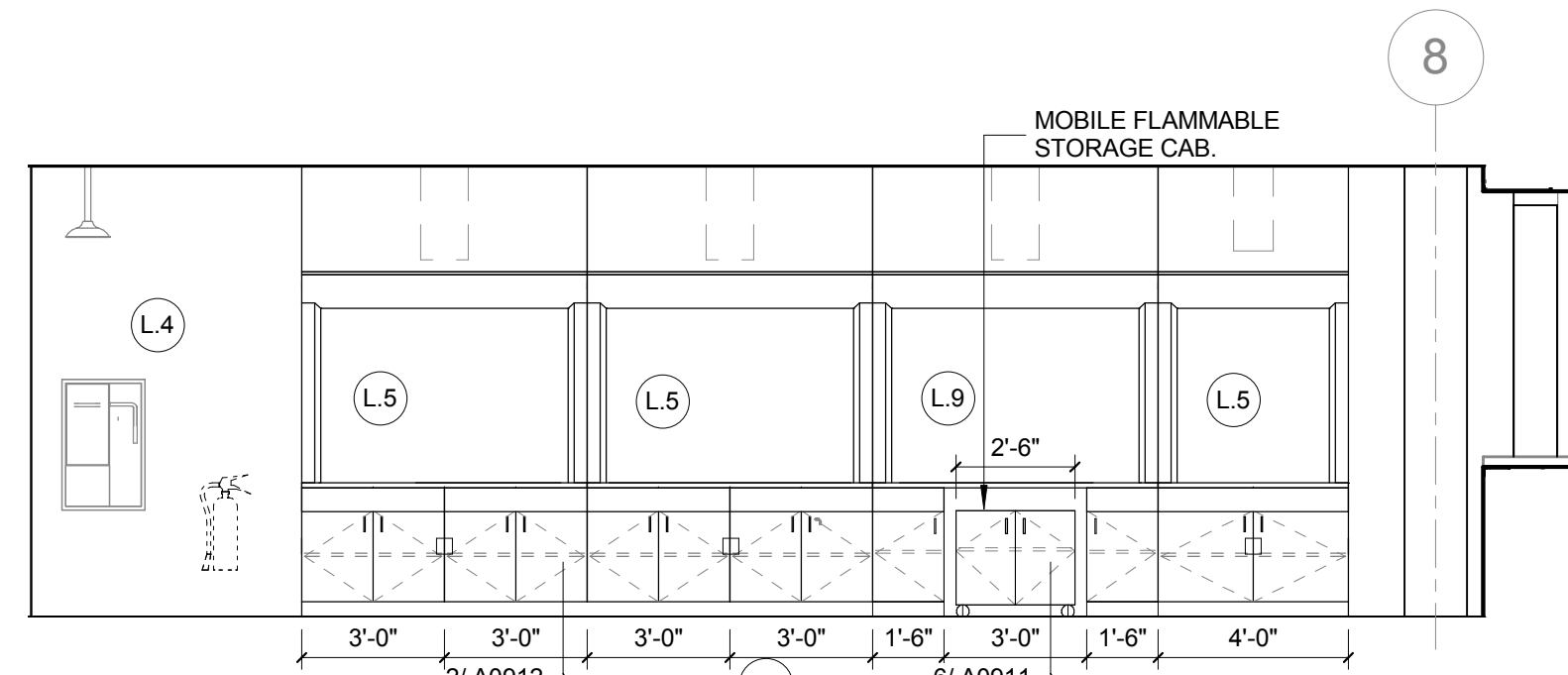
13 L04 ANALYTICAL/INORGANIC CHEM LAB - NORTH
1/4" = 1'-0"



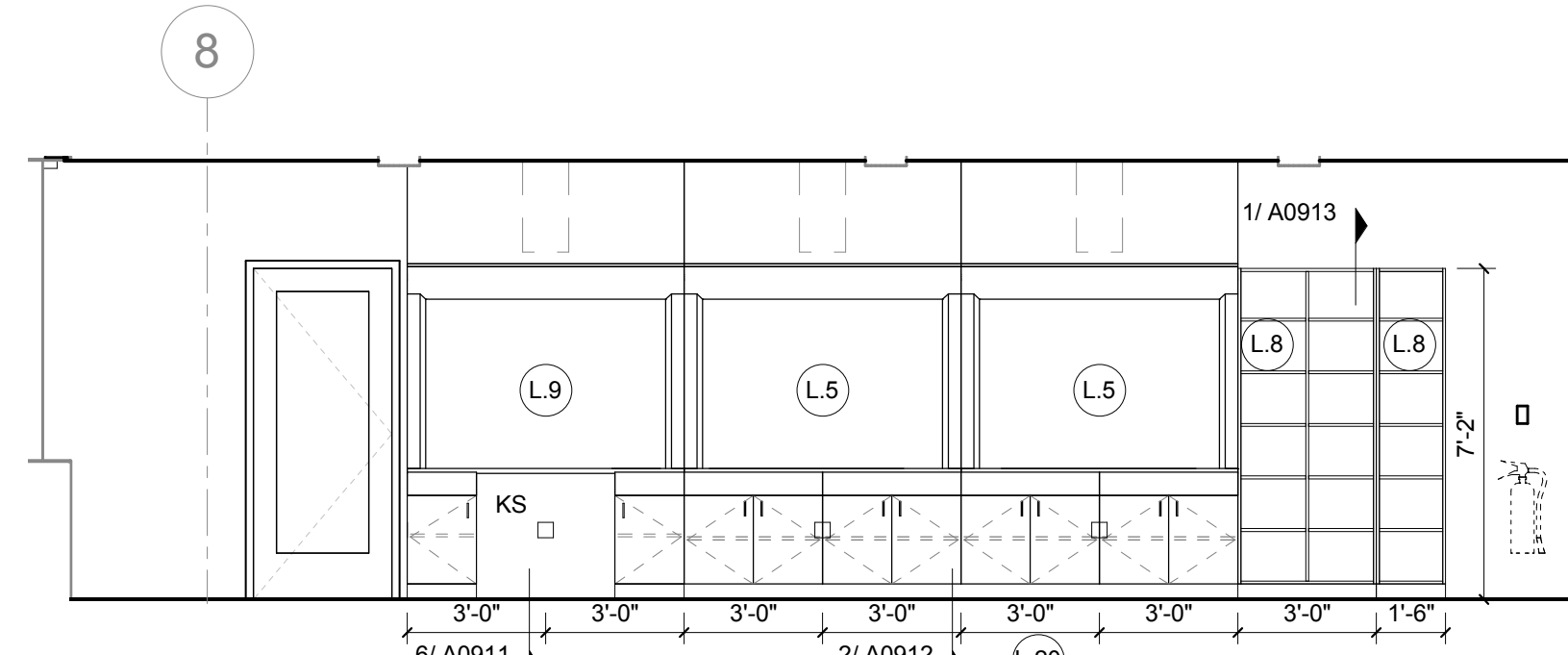
12 L04 ANALYTICAL/INORGANIC CHEM LAB - SOUTH
1/4" = 1'-0"



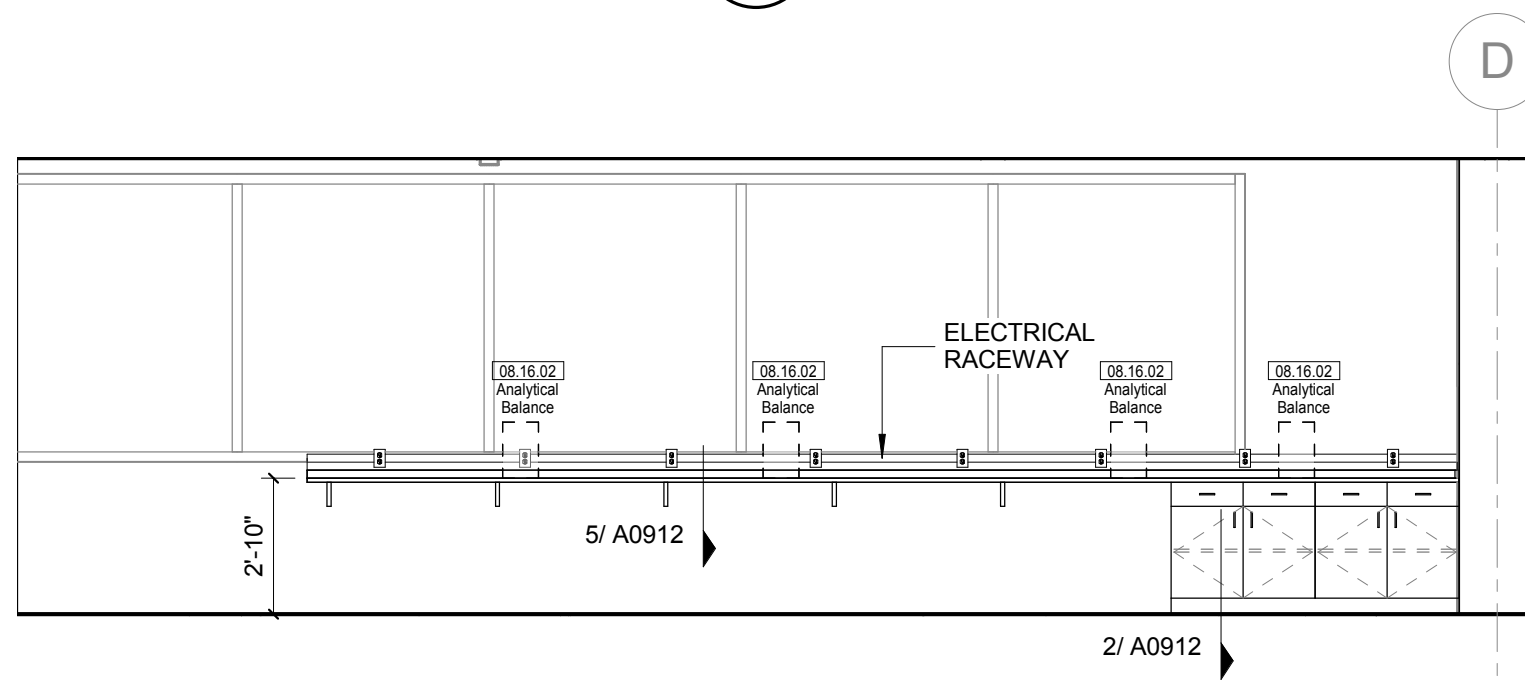
11 L04 ORGANIC CHEMISTRY LAB - STUDENT
1/4" = 1'-0"



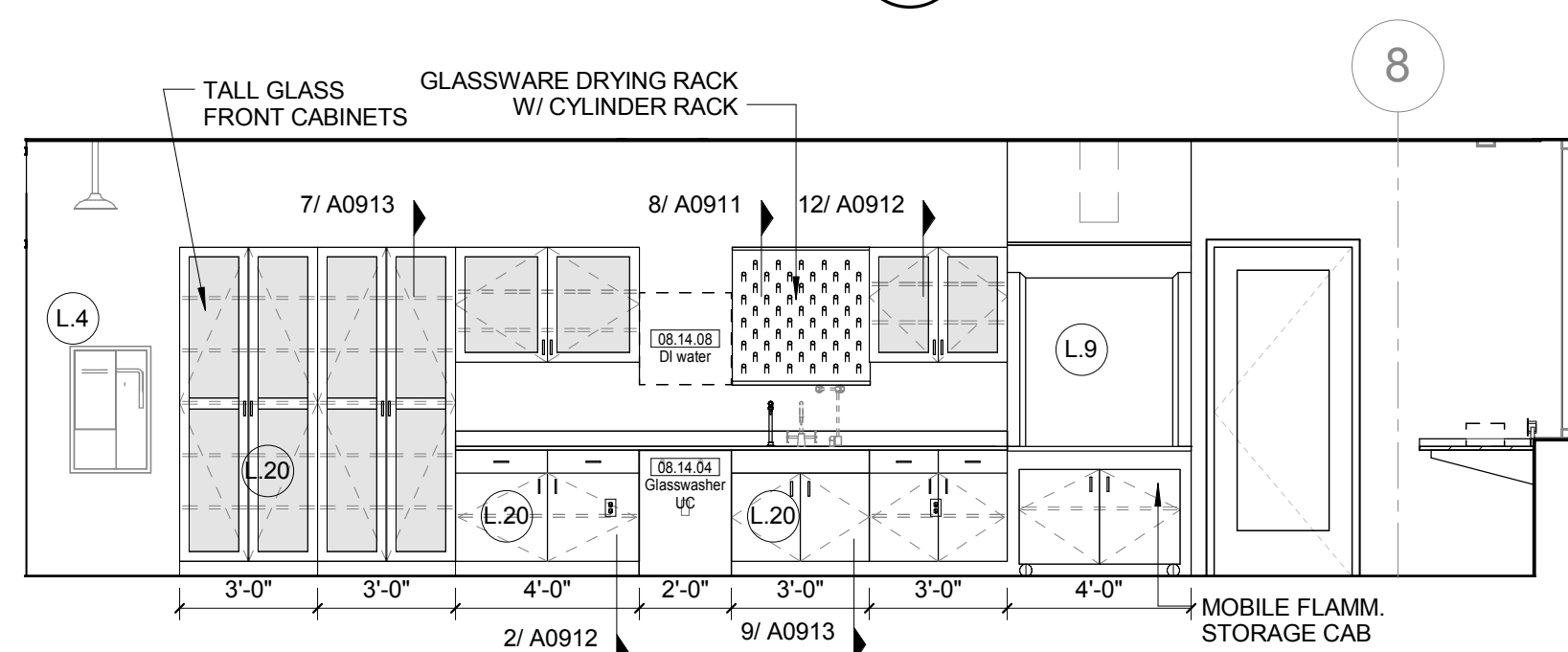
10 L04 ORGANIC CHEMISTRY LAB - NORTH
1/4" = 1'-0"



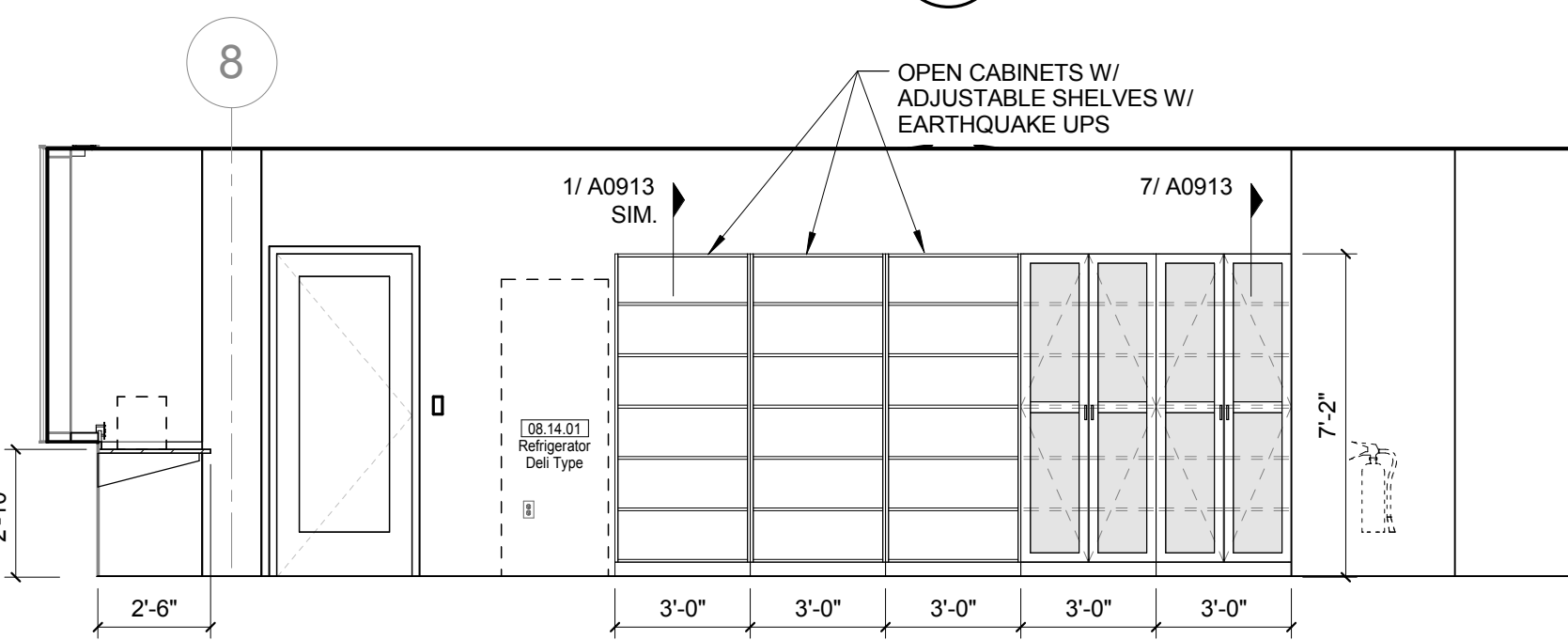
9 L04 ORGANIC CHEMISTRY LAB - SOUTH
1/4" = 1'-0"



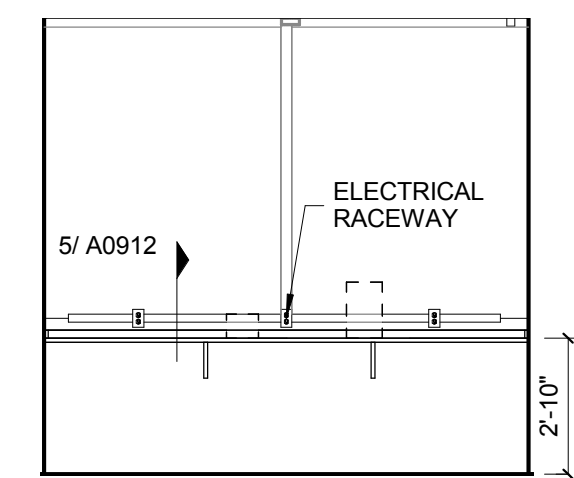
8 L04 ORGANIC CHEMISTRY LAB - EAST
1/4" = 1'-0"



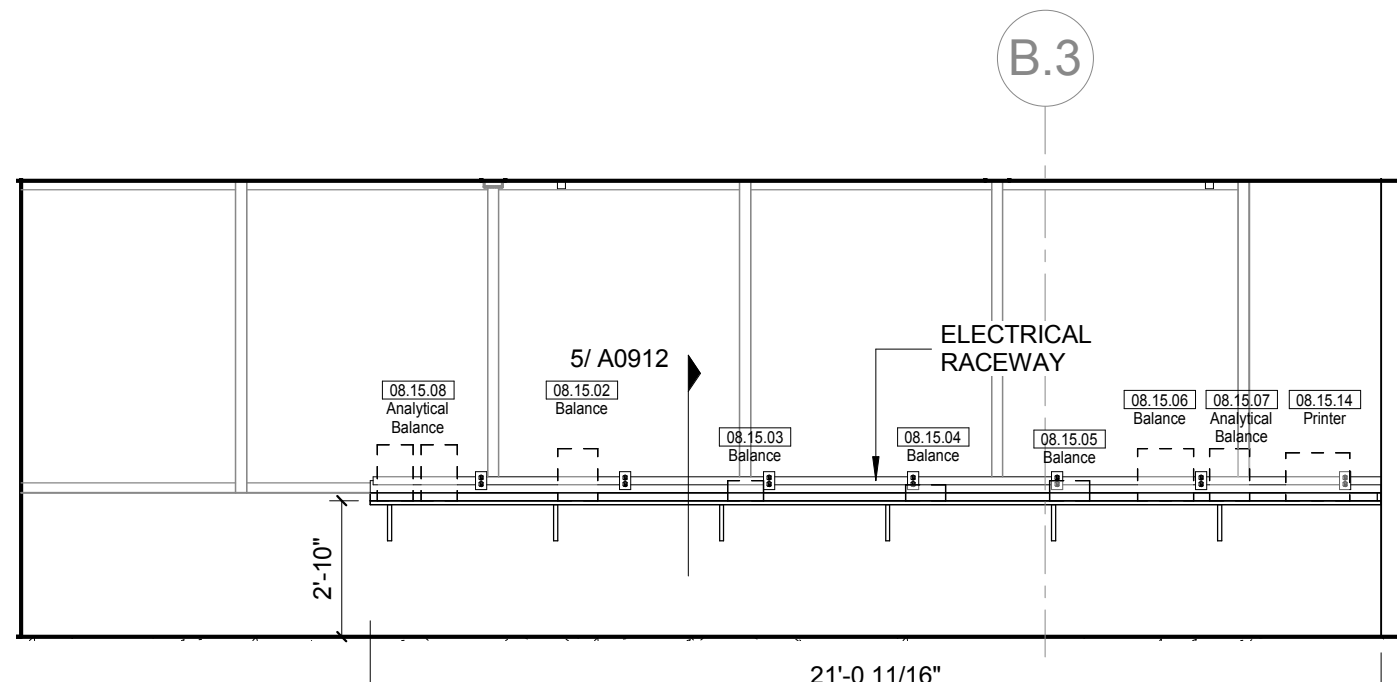
7 L04 CHEMISTRY LAB PREP NORTH
1/4" = 1'-0"



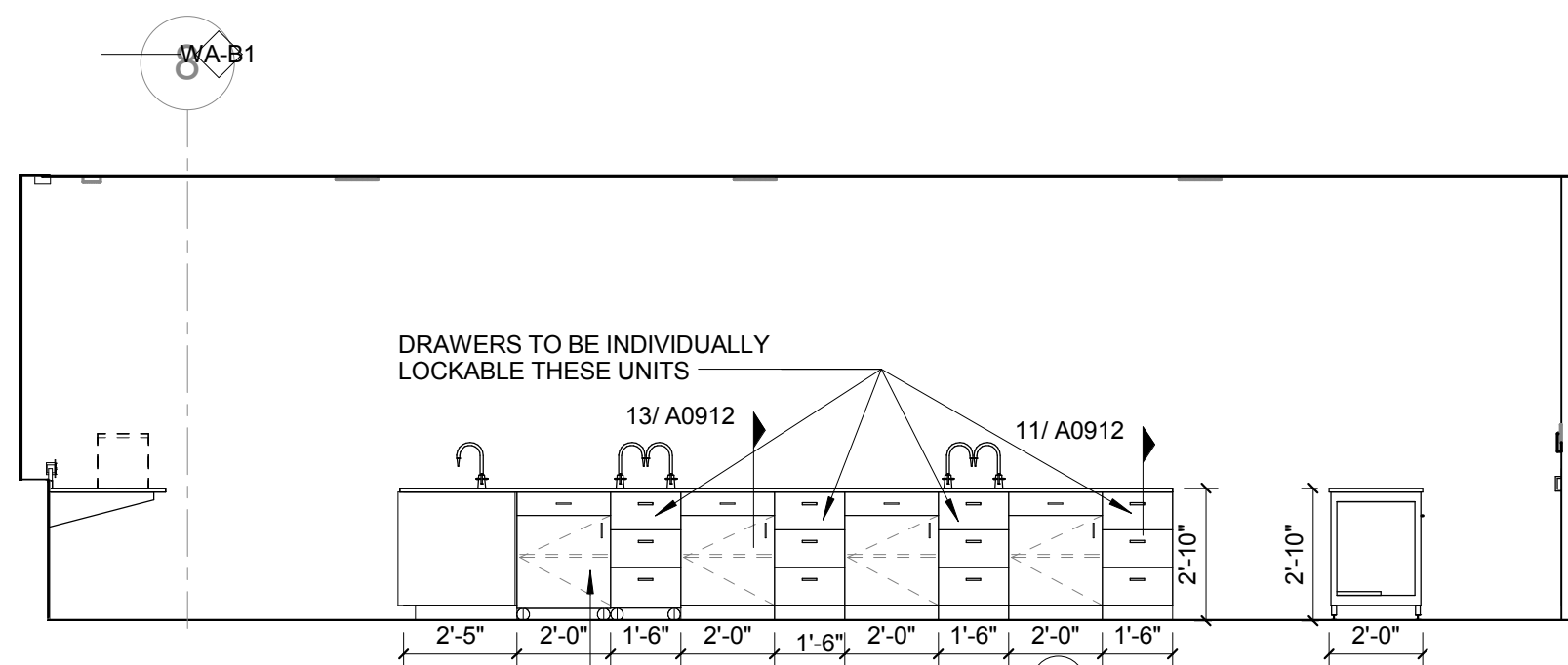
6 L04 CHEMISTRY LAB PREP - SOUTH
1/4" = 1'-0"



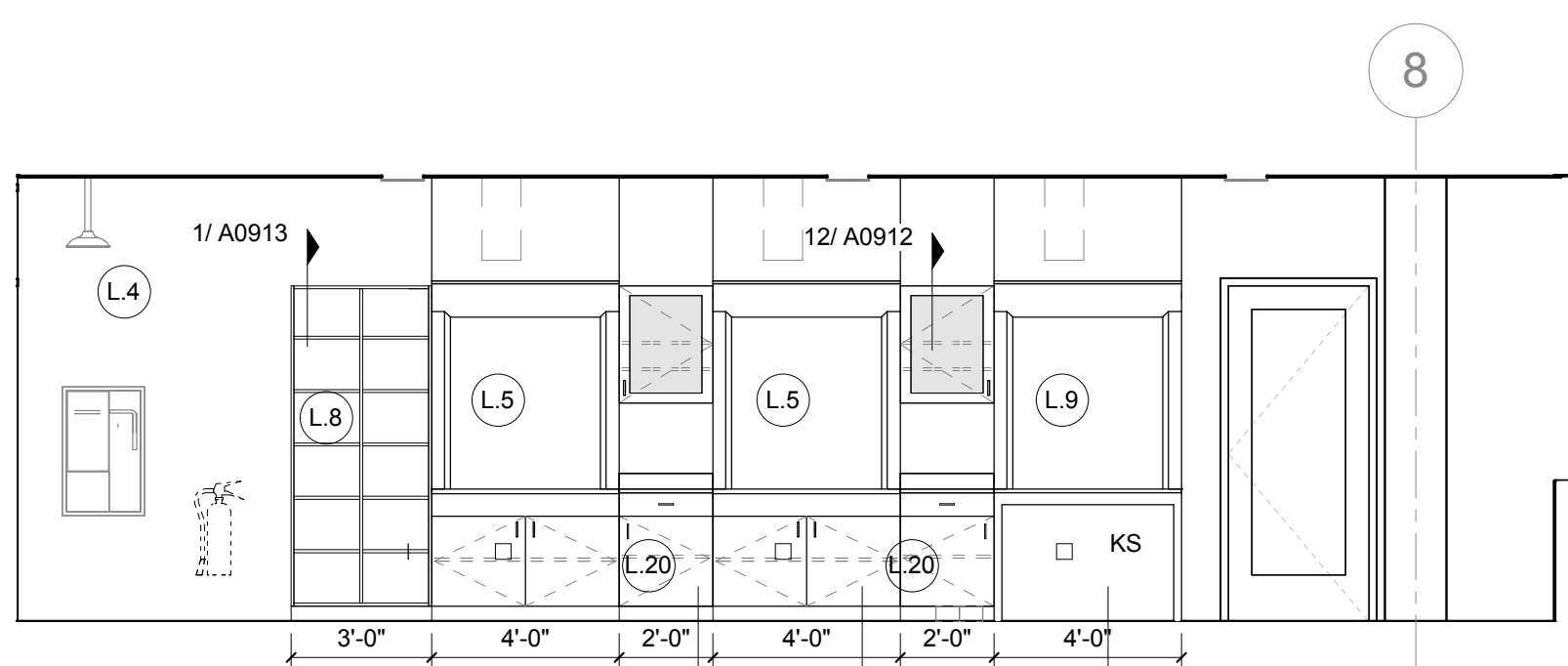
5 L04 CHEMISTRY LAB PREP - EAST
1/4" = 1'-0" REF 2 / A0207



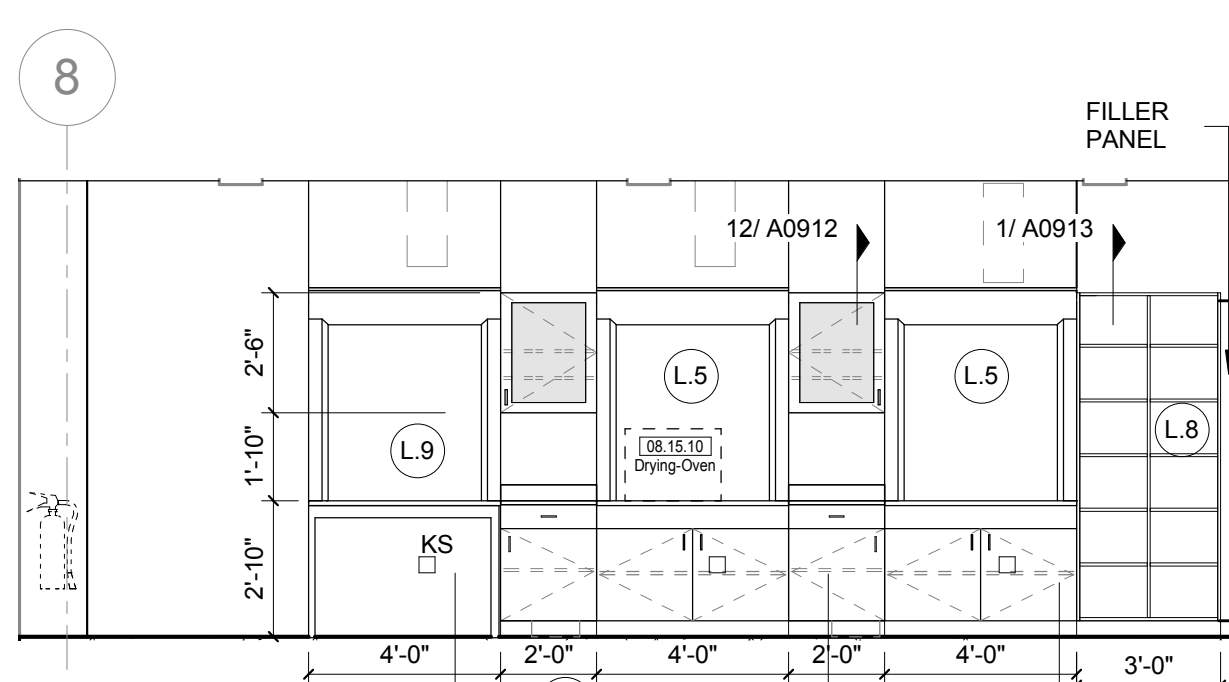
4 L04 GENERAL CHEMISTRY LAB - EAST
1/4" = 1'-0"



3 L04 GENERAL CHEMISTRY LAB - STUDENT
1/4" = 1'-0"



2 L04 GENERAL CHEMISTRY LAB - NORTH
1/4" = 1'-0"



1 L04 GENERAL CHEMISTRY LAB - SOUTH
1/4" = 1'-0"

LAB KEYED NOTE LEGEND

- L.1 WRITABLE AND PROJECTABLE SURFACE, DIMENSIONS AS NOTED
- L.2 RECESSED, CEILING MOUNTED PROJECTION SCREEN
- L.3 WALL MOUNTED PROJECTOR ABOVE
- L.4 EMERGENCY SAFETY SHOWER WITH EYEWASH
- L.5 115313 CHEMICAL FUME HOOD W/ STORAGE BELOW. TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED.
- L.7 WOOD LAB CASEWORK MICROSCOPE CAB
- L.8 WOOD LAB CASEWORK TALL CABINET WITH OPEN CUBBIES FOR BOOK BAG STORAGE
- L.9 115313 CHEMICAL FUME HOOD - ACCESSIBLE - WITH MOBILE STORAGE BELOW, WHERE SHOWN. TYPICAL FUME HOOD TO HAVE ELECTRIC, AND UTILITIES AS INDICATED.
- L.11 CABS BELOW WHITEBOARD
- L.12 CAMERA FOR SKYPE INTERVIEW
- L.14 GAS CYLINDER STORAGE RACK (CFOI), CYLINDERS TO BE "O"OF"
- L.15 RECESSED MOTORIZED ROOM DARKENING / BLACKOUT SHADES. USE DOUBLE SHADES AT WEST CLASSROOMS LEVEL 02 AND LECTURE HALL. REFER TO REFLECTED CEILING PLANS
- L.16 LCD MONITOR
- L.18 MOBILE LABORATORY CASEWORK SYSTEM. SEE DETAIL 09/A0911.
- L.19 MOVEABLE WOOD LABORATORY CASEWORK: TABLE WITH MODIFIED EPOXY COUNTERTOP, CABINETS SUSPENDED BELOW AS INDICATED.
- L.20 FIXED WOOD LABORATORY CASEWORK: BASE CABINETS, MODIFIED EPOXY COUNTERTOP, WALL CABINETS AS SHOWN ON ELEVATION
- L.21 SEE CEILING PLAN FOR CEILING MOUNTED UNISTRUT SYSTEM SUPPORTED BY STRUCTURE ABOVE
- L.22 8" DEEP X 6" WIDE TRENCH WITH METAL COVER TO RECEIVE FLOOR FINISH TO MATCH ADJACENT FLOOR
- L.23 FLOOR BOX FOR ELECTRICAL & DATA
- L.24 09 6969 DRY ERASE FINISH (AFC-1)
- L.25 PROVIDE BLOCKING FOR FIRE EXTINGUISHER, MOUNTING HEIGHT - 3'-0" TO TOP OF EXTINGUISHER. FIRE EXTINGUISHER & ITS BRACKET BY OWNER.
- L.26 POINT EXHAUST (SNORKEL) FOR SOLDERING. SEE DETAIL 5/ A0913.

LAB UTILITY LEGEND

- CW WATER COLD WATER FAUCET, DECK MOUNTED GOOSENECK WITH SERRATED NOZZLE, VACUUM BREAKER
- W-1 WATER GENERAL MIXING FAUCET, DECK MOUNTED WITH VACUUM BREAKER, SERRATED NOZZLE.
- DW WATER DI WATER FAUCET DECK MOUNTED
- PWS WATER PROCESS COLD WATER SUPPLY
- PWR WATER PROCESS COLD WATER RETURN
- EW WATER EYEWASH, DECK MOUNTED, AUTOFLOW SWING-DOWN
- DH WATER DRENCH HOSE
- G GAS FUME HOOD CONTROL
- V VAC FUME HOOD CONTROL
- V-3 VAC WALL MOUNTED, SINGLE SERRATED OUTLET
- V-1 VAC TURRET BASE, SINGLE SERRATED OUTLET
- V-4 VAC OUTLET FOR BIOSAFETY CABINET CONNECTIONS
- V-5 VAC QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
- A AIR FUME HOOD CONTROL
- A-1 AIR TURRET BASE, SINGLE SERRATED OUTLET
- A-3 AIR WALL MOUNTED, SINGLE SERRATED OUTLET
- A-4 AIR OUTLET FOR BIOSAFETY CABINET CONNECTIONS
- A-5 AIR QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
- N NITROGEN FUMEHOOD CONTROL
- E ELEC. DUPLEX OUTLET (GFI) ON FUME HOOD
- E-1 ELEC. COUNTERTOP MOUNTED PEDESTAL, (1) DUPLEX ELECTRICAL OUTLET.
- E-2 ELEC. COUNTERTOP MOUNTED PEDESTAL, (2) DUPLEX ELECTRICAL OUTLET.
- E-3 ELEC. WALL MOUNTED, (1) DUPLEX ELECTRICAL OUTLET.
- E-5 ELEC. DUPLEX ELECTRICAL OUTLET ON OVERHEAD SERVICE CARRIER
- E-6 ELEC. DUPLEX ELECTRICAL OUTLET ON TABLE APRON
- D DATA DATA OUTLET
- D-1 DATA COUNTERTOP MOUNTED PEDESTAL, (2) DATA OUTLETS
- D-5 DATA DATA OUTLET ON OVERHEAD SERVICE CARRIER
- D-6 DATA DATA OUTLET ON TABLE APRON
- CS CLIP SINK LIPPED MOD. EPOXY CLIP SINK, 9"LX3"W OVAL (DROP-IN).
- S-1 SINK LIPPED MODIFIED EPOXY ADA SINK 25"Lx15"Wx10"D (DROP-IN).
- S-2 SINK LIPPED MODIFIED EPOXY ADA SINK 25"Lx15"Wx5"D (DROP-IN).
- S-3 SINK STAINLESS STEEL SINK 25"Lx15"Wx10"D (DROP-IN).
- S-4 SINK STAINLESS STEEL ADA SINK 25"Lx15"Wx5"D (DROP-IN).
- S-5 SINK LIPPED MODIFIED EPOXY ADA SINK 18"Lx15"Wx5"D (DROP-IN).
- S-6 SINK LIPPED MODIFIED EPOXY SINK, 36"Lx15"Wx10"D (DROP-IN).
- OSC OVERHEAD SERVICE CARRIER. SEE DETAIL 10 / A0913.
- PTD PAPER TOWEL DISPENSER

CHEMICAL FUME HOOD LEGEND

- CFH-4 4'-0" WIDE CHEMICAL FUME HOOD
- CFH-6 6'-0" WIDE CHEMICAL FUME HOOD

LAB GENERAL NOTES

- ALL DIMENSIONS ARE TO GWB FACE PARTITION OR COLUMN CENTER UNLESS NOTED.
- OWNER FURNISHED OWNER INSTALLED (OFOI) ITEMS ARE SHOWN DASHED FOR REFERENCE ONLY. COORDINATE SIZE AND INSTALLATION REQUIREMENTS WITH OWNER'S REPRESENTATIVE.
- CENTER ALL DRYING RACKS WITH DRIP STOP TROUGHS ABOUT CENTERLINE OF SINKS, U.N.O.
- ALL APRONS AT OPEN KNEE SPACE TO BE 4" U.N.O. PROVIDE APRON OF SOLID WOOD WITH EASED BOTTOM EDGE. FINISH TO MATCH VENER SPECIES. MAINTAIN MINIMUM 2" CLEAR ABOVE FLOOR FINISH.
- CENTER ALL COUNTERTOP MOUNTED UTILITY OUTLETS ON CENTER OF CASEWORK U.N.O.
- ALL SURFACE MOUNTED RACEWAY TO HAVE OUTLETS AT 2'-0" O.C. AND SHALL BE MOUNTED DIRECTLY ABOVE BACKSPLASH U.N.O.
- ALL BACKSPLASHES TO BE 4" HIGH U.N.O.
- DASHED LINES ON ELEVATIONS INDICATED ADJUSTABLE SHELVING INSIDE CASEWORK.
- PROVIDE FINISHED BACK PANEL AT KNEE SPACES BELOW ALL FUMEHOODS, TYPICAL, SIMILAR TO DETAIL.
- PROVIDE FINISHED BACK PANEL AT ALL KNEE SPACES, TYPICAL.
- PROVIDE LOCK AND KEY WHERE A CIRCLE NEXT TO DRAWER OR DOOR HANDLE IS SHOWN OR WHERE NOTED.
- REFER SHEETS A0914 FOR LABORATORY CASEWORK / MILLWORK DETAILS.
- FOR TYPICAL MOUNTING HEIGHTS REF. 1/A0911
- ALL CASEWORK TO BE WOOD U.N.O.
- ALL CASEWORK IS LABORATORY CASEWORK UNLESS NOTED AS MILLWORK OR GOLF. SEE DIVISION 12 3555 - LABORATORY CASEWORK FOR SPECIFICATIONS.
- ALL EQUIPMENT ITEMS HAVE A EQUIPMENT TAG - XXX-XXX. SEE SHEETS A114x FOR EQUIPMENT SCHEDULES.
- PROVIDE PAPER TOWEL DISPENSER (PTD) AT EACH SINK LOCATION.

CONFORMED SET

01 JUL 2016

ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016
No. Description Date

Drawing Title:

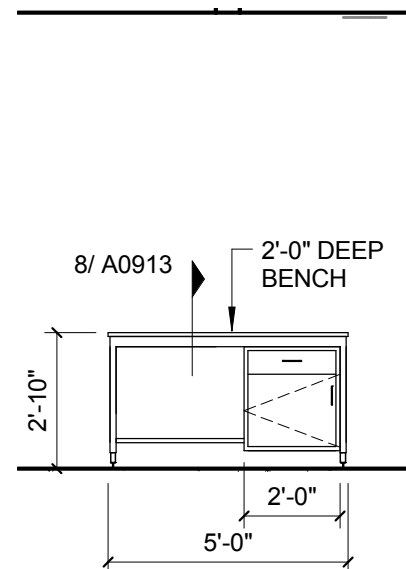
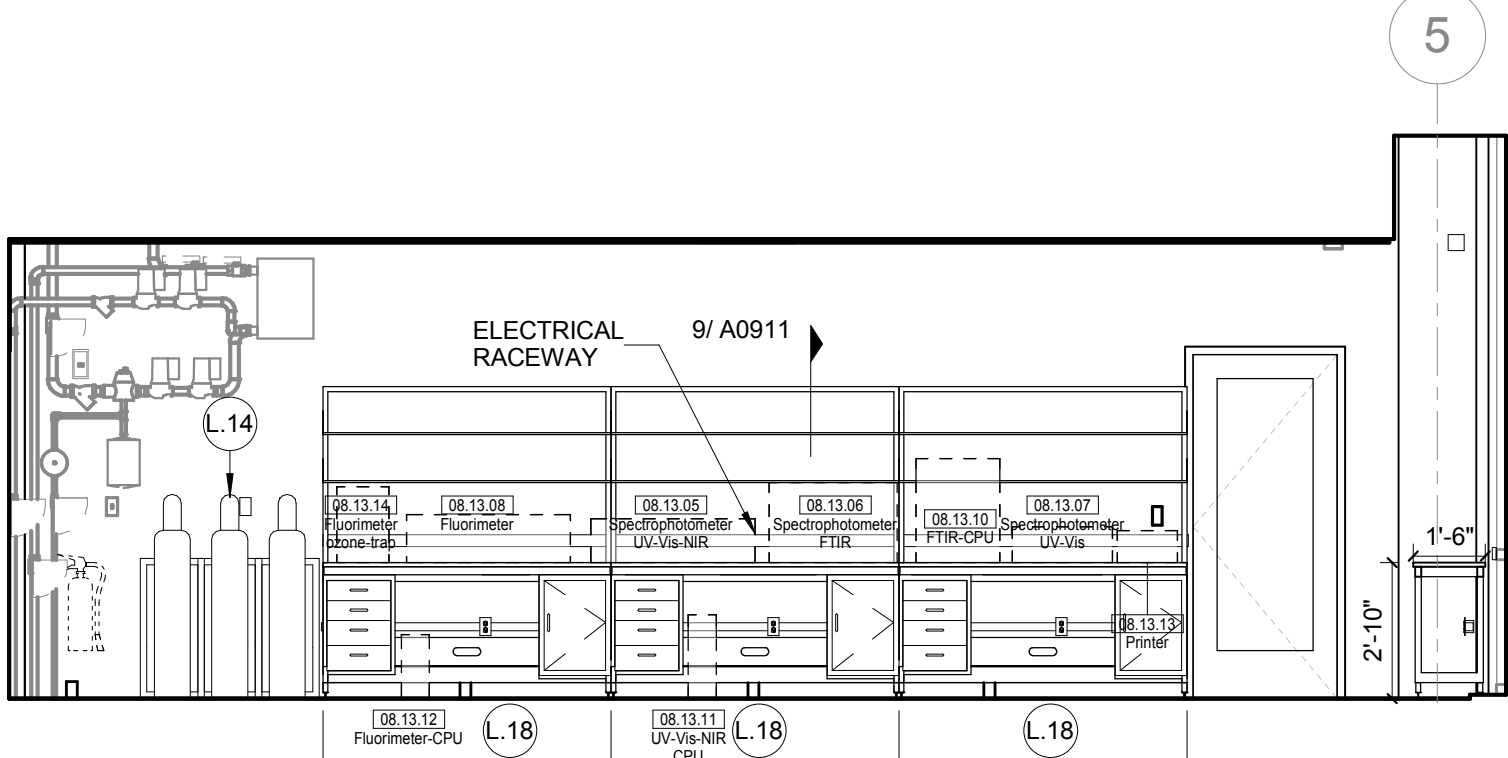
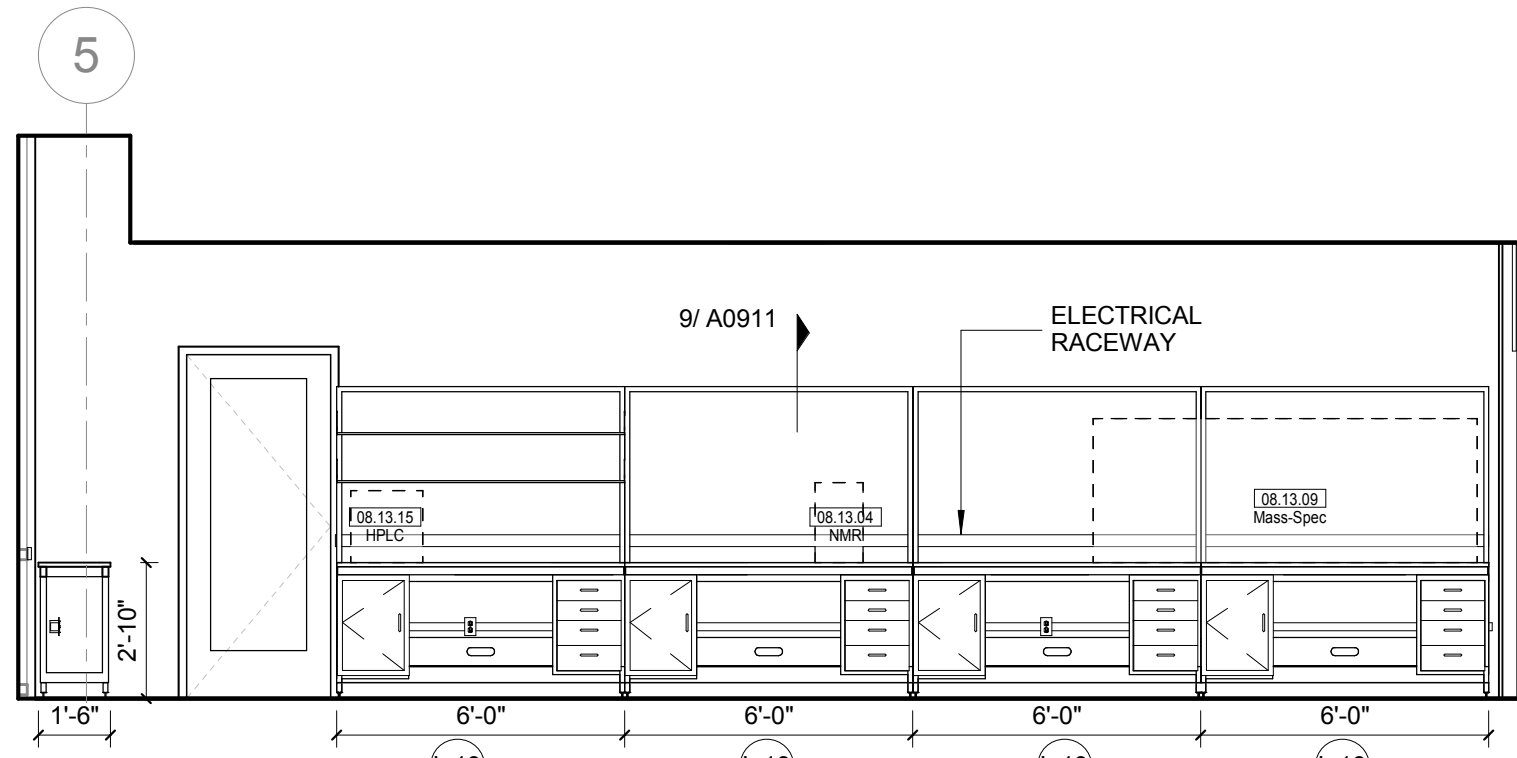
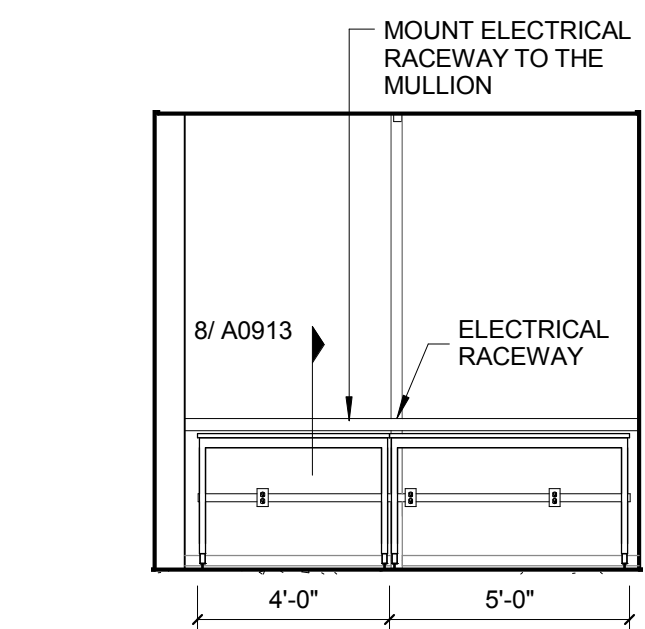
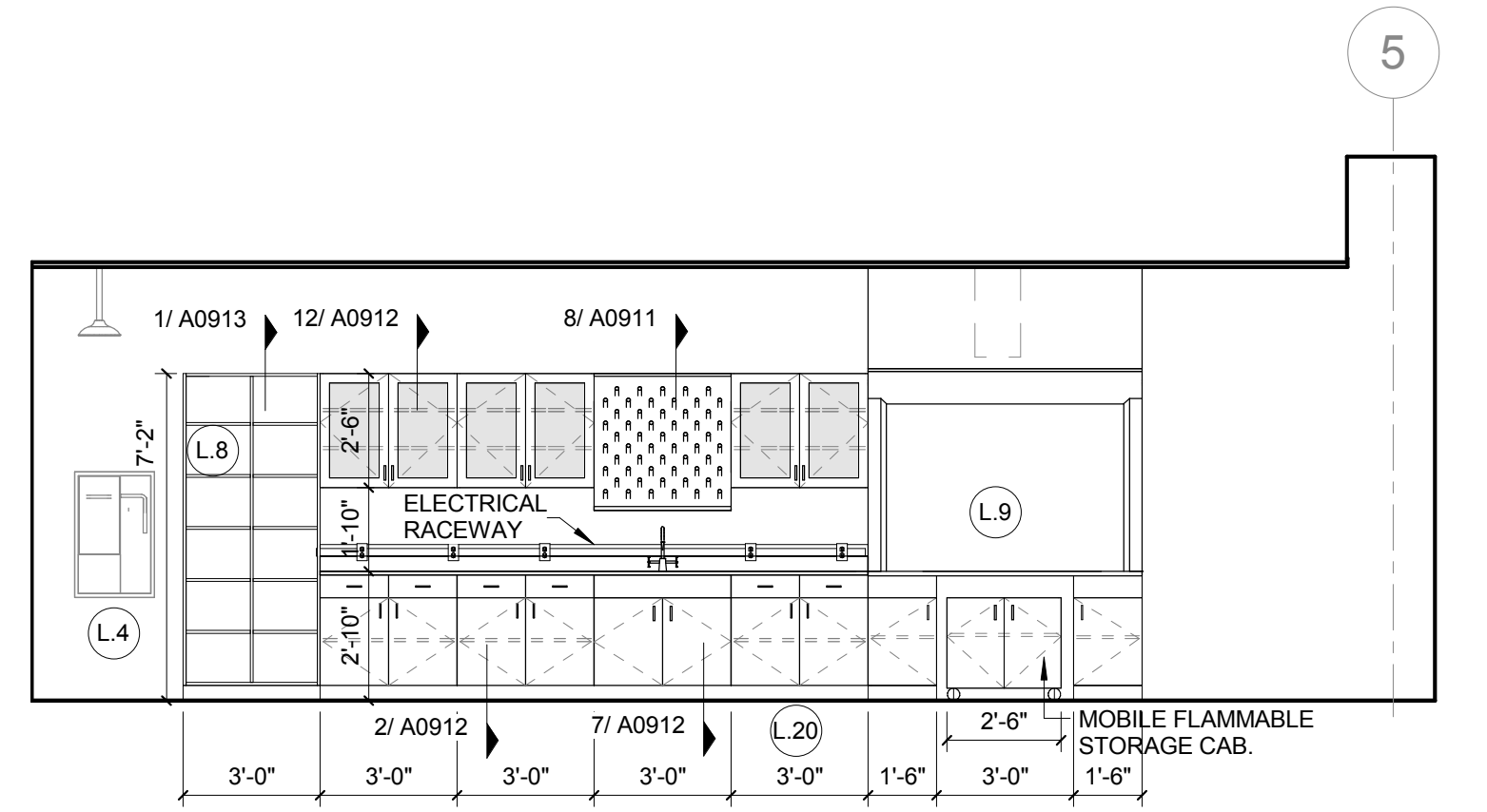
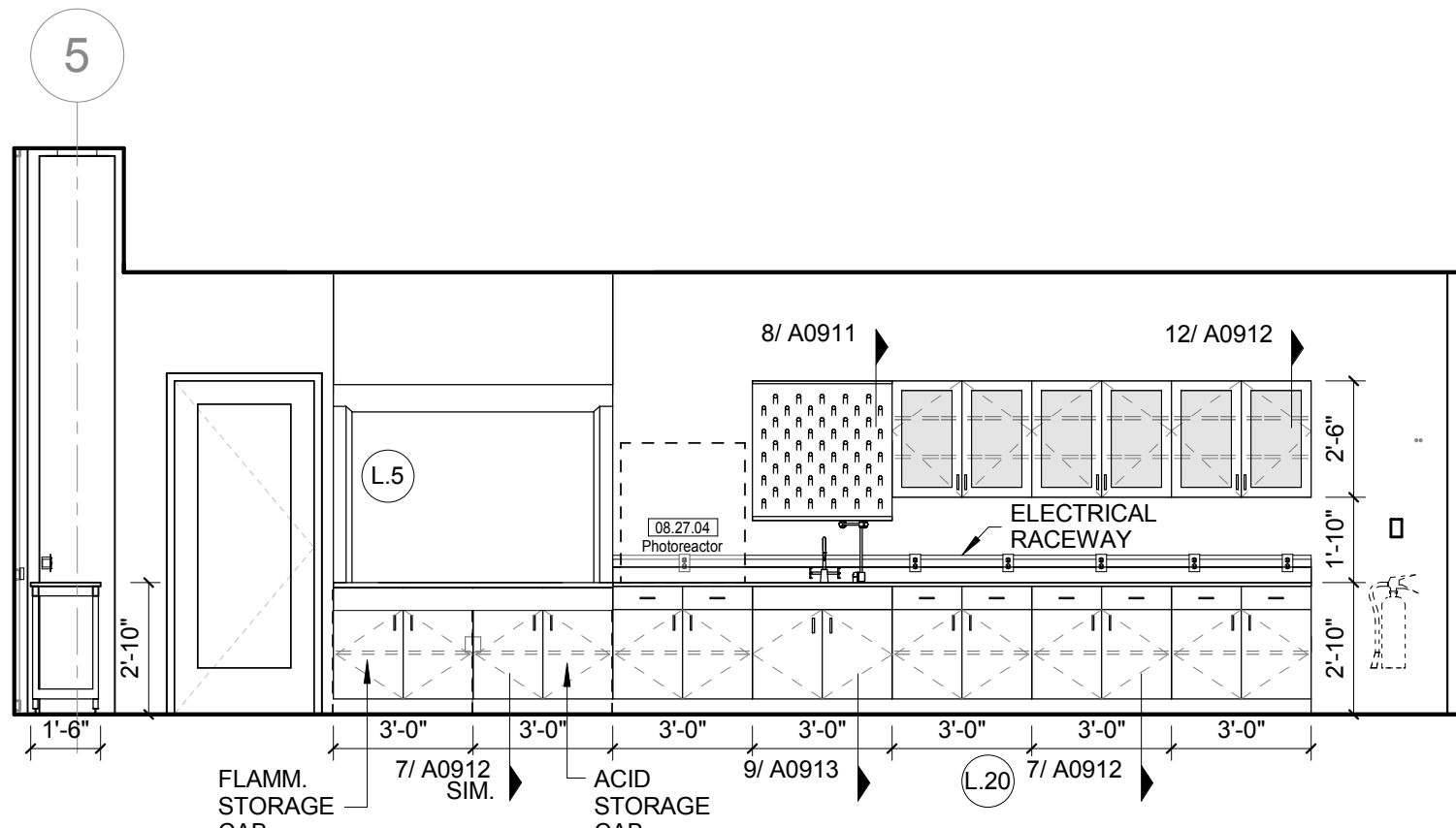
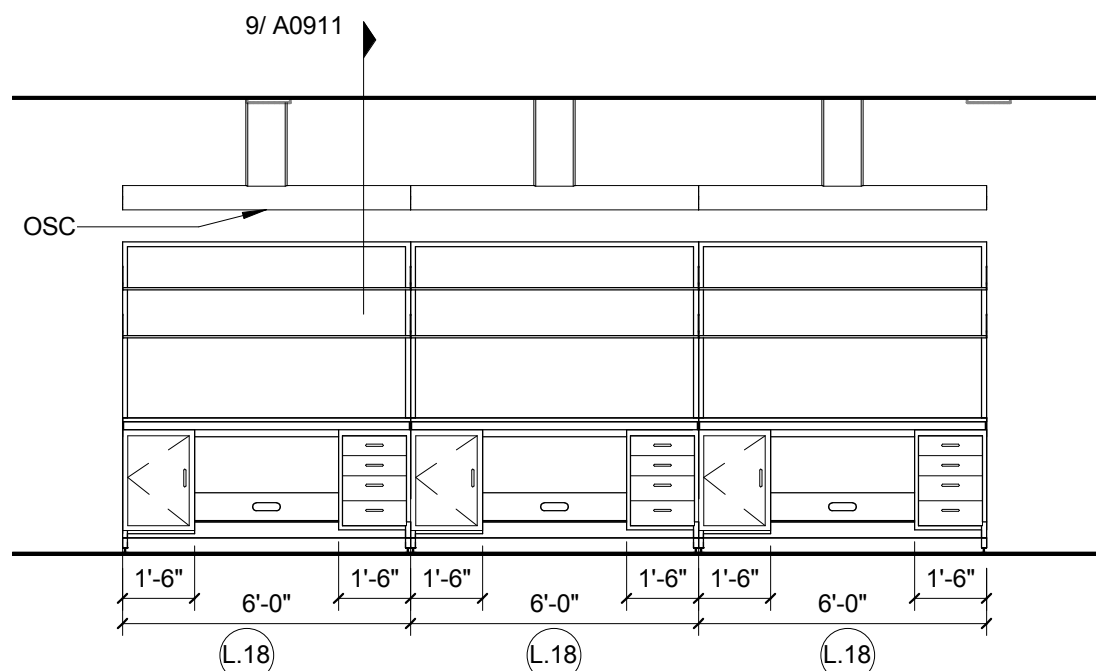
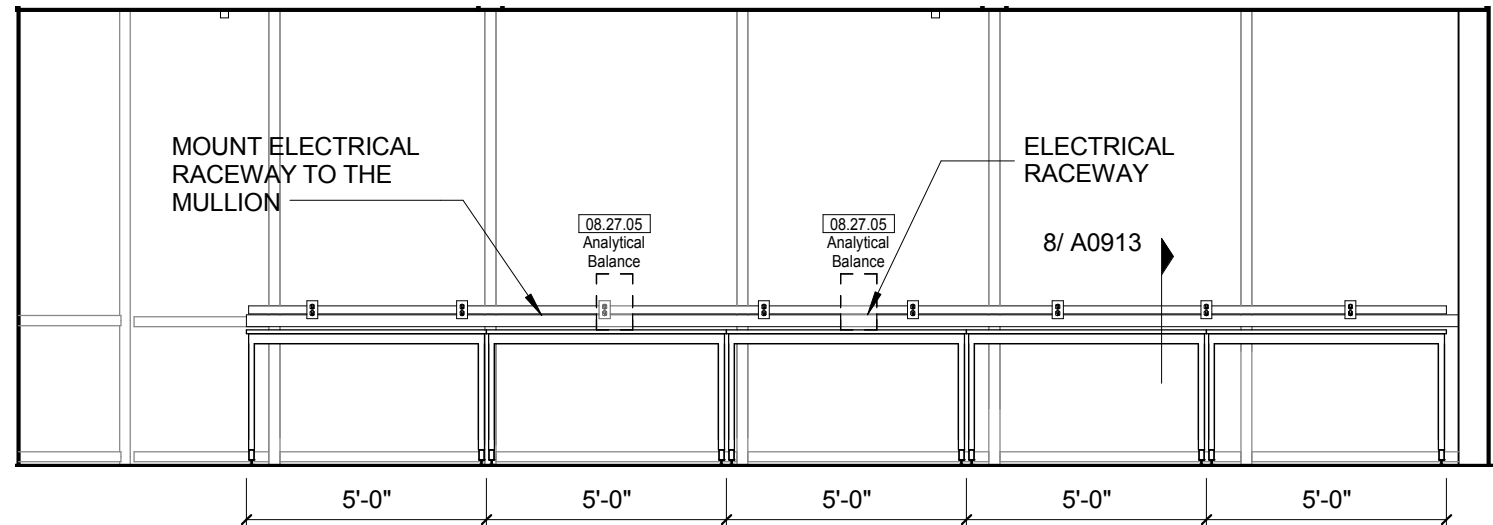
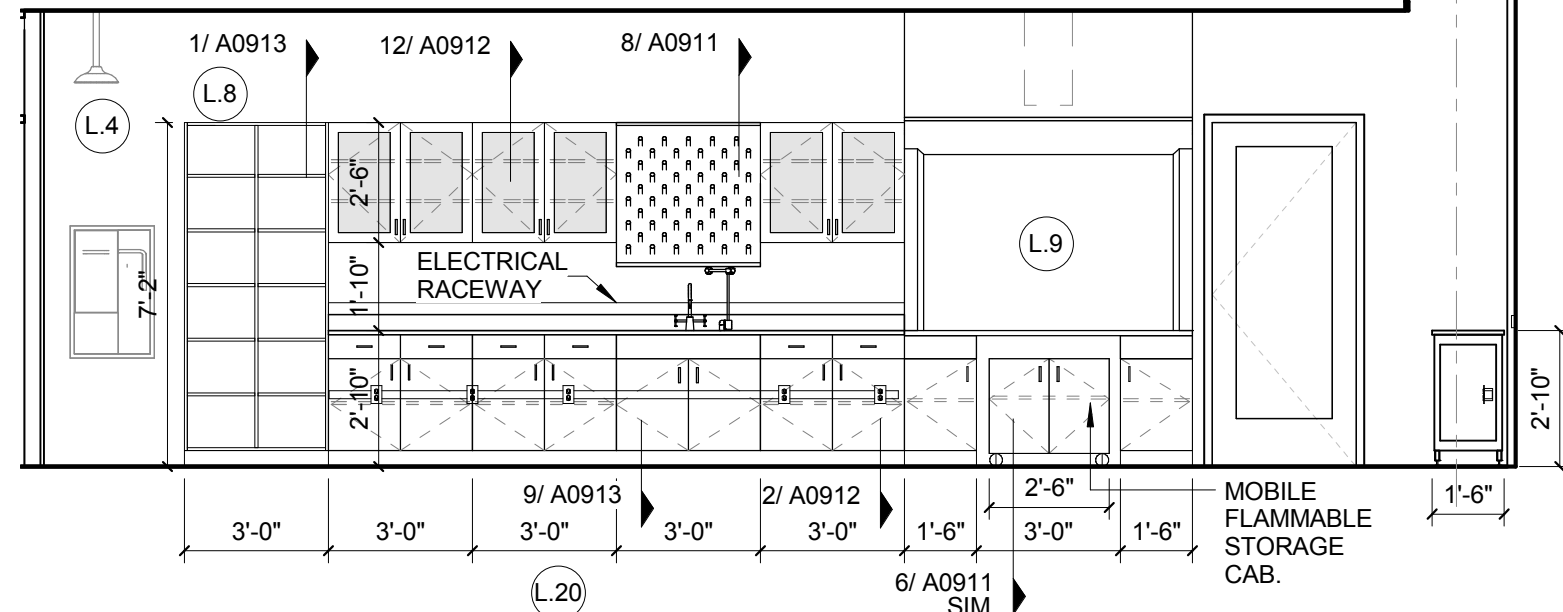
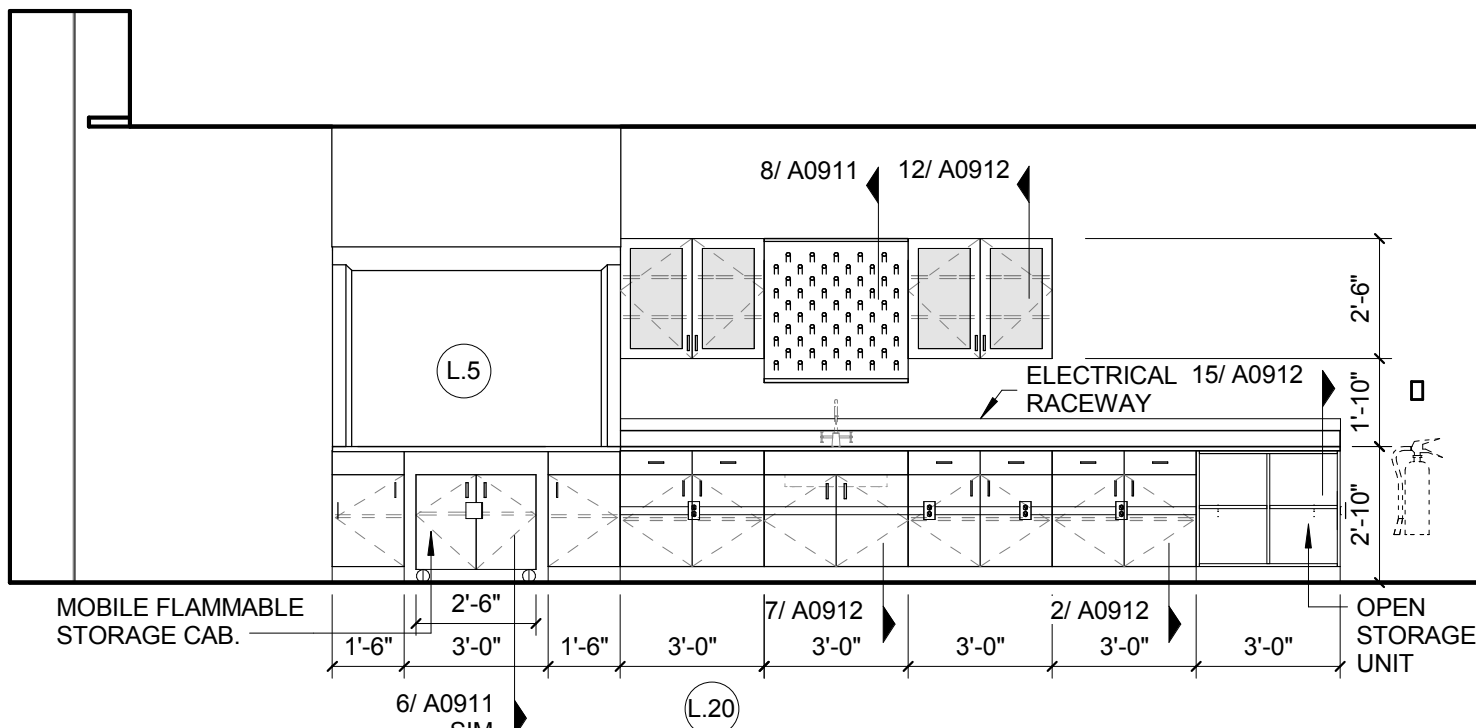
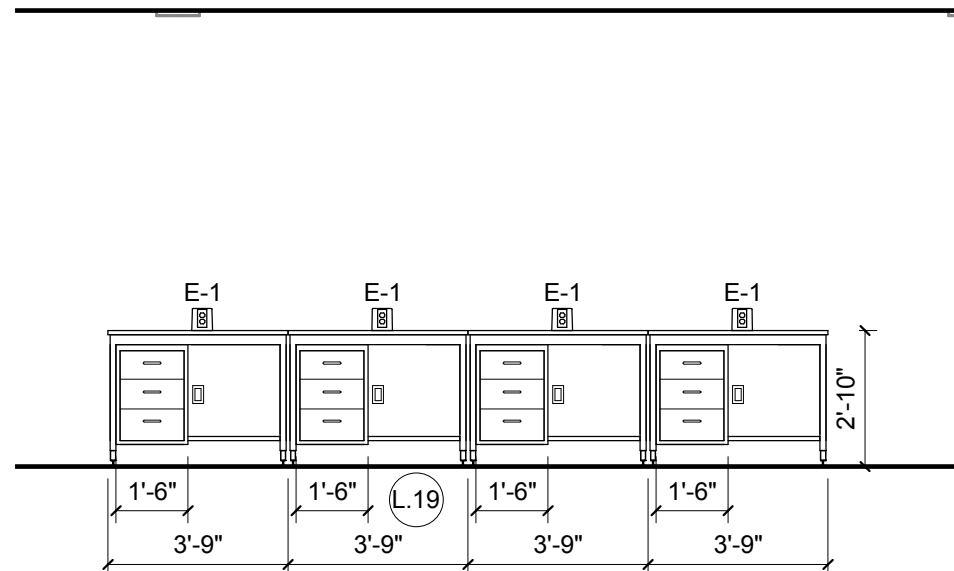
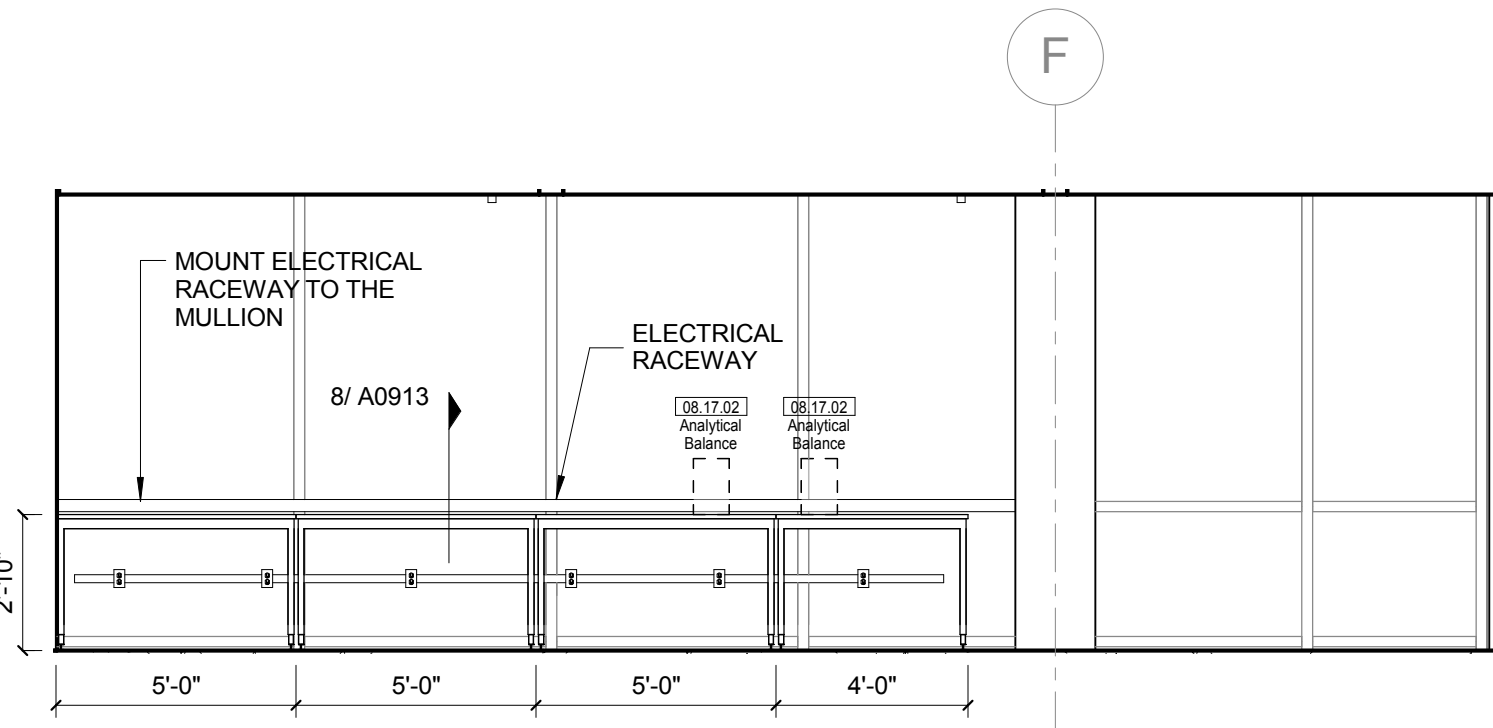
INTERIOR LAB
ELEVATIONS LEVEL 04

Project No.: 04561.01

Checked by:

A0617

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LAB KEYED NOTE LEGEND

- L.1 WRITABLE AND PROJECTABLE SURFACE, DIMENSIONS AS NOTED
L.2 RECESSED, CEILING MOUNTED PROJECTION SCREEN
L.3 WALL MOUNTED PROJECTOR ABOVE
L.4 EMERGENCY SAFETY SHOWER WITH EYEWASH
L.5 115313 CHEMICAL FUME HOOD W/ STORAGE BELOW, TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED.
L.7 WOOD LAB CASEWORK MICROSCOPE CAB
L.8 WOOD LAB CASEWORK TALL CABINET WITH OPEN CUBBIES FOR BOOK BAG STORAGE.
L.9 115313 CHEMICAL FUME HOOD - ACCESSIBLE - WITH MOBILE STORAGE BELOW, WHERE SHOWN, TYPICAL FUME HOOD TO HAVE ELECTRIC, AND UTILITIES AS INDICATED.
L.11 CABS BELOW WHITEBOARD
L.12 CAMERA FOR SKYPE INTERVIEW
L.14 GAS CYLINDER STORAGE RACK (CFO), CYLINDERS TO BE "O"O".
L.15 RECESSED MOTORIZED ROOM DARKENING / BLACKOUT SHADES. USE DOUBLE SHADES AT WEST CLASSROOMS LEVEL 02 AND LECTURE HALL, REFER TO REFLECTED CEILING PLANS
L.16 LCD MONITOR
L.18 MOBILE LABORATORY CASEWORK SYSTEM, SEE DETAIL 09/A0911.
L.19 MOVEABLE WOOD LABORATORY CASEWORK: TABLE WITH MODIFIED EPOXY COUNTERTOP, CABINETS SUSPENDED BELOW AS INDICATED.
L.20 FIXED WOOD LABORATORY CASEWORK - BASE CABINETS, MODIFIED EPOXY COUNTERTOP, WALL CABINETS AS SHOWN ON ELEVATION
L.21 SEE CEILING PLAN FOR CEILING MOUNTED UNISTRUT SYSTEM SUPPORTED BY STRUCTURE ABOVE
L.22 8" DEEP x 6" WIDE TRENCH WITH METAL COVER TO RECEIVE FLOOR FINISH TO MATCH ADJACENT FLOOR
L.23 FLOOR BOX FOR ELECTRICAL & DATA
L.24 09 6668 DRY ERASE FINISH (AWC-1)
L.25 PROVIDE BLOCKING FOR FIRE EXTINGUISHER, MOUNTING HEIGHT - 3'-0" TO TOP OF EXTINGUISHER, FIRE EXTINGUISHER & ITS BRACKET BY OWNER.
L.26 POINT EXHAUST (SNORKEL) FOR SOLDERING, SEE DETAIL 5/ A0913.

LAB UTILITY LEGEND

- CW WATER COLD WATER FAUCET, DECK MOUNTED GOOSENECK WITH SERRATED NOZZLE, VACUUM BREAKER
W-1 WATER GENERAL MIXING FAUCET, DECK MOUNTED WITH VACUUM BREAKER, SERRATED NOZZLE.
DI WATER DI WATER FAUCET DECK MOUNTED.
PWS WATER PROCESS COLD WATER SUPPLY.
PWR WATER PROCESS COLD WATER RETURN.
EW WATER EYEWASH, DECK MOUNTED, AUTOFLOW SWING-DOWN.
DH WATER DRENCH HOSE.
G GAS FUME HOOD CONTROL
V VAC FUME HOOD CONTROL
V-3 VAC WALL MOUNTED, SINGLE SERRATED OUTLET
V-1 VAC TURRET BASE, SINGLE SERRATED OUTLET
V-4 VAC OUTLET FOR BIOSAFETY CABINET CONNECTIONS
V-5 VAC QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
A AIR FUME HOOD CONTROL
A-1 AIR TURRET BASE, SINGLE SERRATED OUTLET
A-3 AIR WALL MOUNTED, SINGLE SERRATED OUTLET
A-4 AIR OUTLET FOR BIOSAFETY CABINET CONNECTIONS
A-5 AIR QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
N NITROGEN FUMEHOOD CONTROL
ELEC DUPLEX OUTLET (GF) ON FUME HOOD
E-1 ELEC COUNTERTOP MOUNTED PEDESTAL, (1) DUPLEX ELECTRICAL OUTLET.
E-2 ELEC COUNTERTOP MOUNTED PEDESTAL, (2) DUPLEX ELECTRICAL OUTLET.
E-3 ELEC WALL MOUNTED, (1) DUPLEX ELECTRICAL OUTLET.
E-5 ELEC DUPLEX ELECTRICAL OUTLET ON OVERHEAD SERVICE CARRIER
E-6 ELEC DUPLEX ELECTRICAL OUTLET ON TABLE APRON
D DATA DATA OUTLET
D-1 DATA COUNTERTOP MOUNTED PEDESTAL, (2) DATA OUTLETS
D-5 DATA DATA OUTLET ON OVERHEAD SERVICE CARRIER
D-6 DATA DATA OUTLET ON TABLE APRON
CUP SINK LIPPED MODIFIED EPOXY ADA SINK, 9"X3" W OVAL (DROP-IN).
S-1 SINK LIPPED MODIFIED EPOXY ADA SINK, 25"X15"Wx10"D (DROP-IN).
S-2 SINK LIPPED MODIFIED EPOXY ADA SINK, 25"X15"Wx8"D (DROP-IN).
S-3 SINK STAINLESS STEEL SINK, 25"X15"Wx10"D (DROP-IN).
S-4 SINK STAINLESS STEEL ADA SINK, 25"X15"Wx8"D (DROP-IN).
S-5 SINK LIPPED MODIFIED EPOXY ADA SINK, 18"X15"Wx8"D (DROP-IN).
S-6 SINK LIPPED MODIFIED EPOXY ADA SINK, 36"X15"Wx10"D (DROP-IN).
OSC OVERHEAD SERVICE CARRIER, SEE DETAIL 10 / A0913.
PTD PAPER TOWEL DISPENSER

CHEMICAL FUME HOOD LEGEND

- CFH-4 4'-0" WIDE CHEMICAL FUME HOOD
CFH-6 6'-0" WIDE CHEMICAL FUME HOOD

LAB GENERAL NOTES

- ALL DIMENSIONS ARE TO GWB FACE PARTITION OR COLUMN CENTER LINE U.N.O.
- OWNER FURNISHED OWNER INSTALLED (OFOI) ITEMS ARE SHOWN DASHED FOR REFERENCE ONLY. COORDINATE SIZE AND INSTALLATION REQUIREMENTS WITH OWNER'S REPRESENTATIVE.
- CENTER ALL DRYING RACKS WITH DRIP STOP TROUGHS ABOUT CENTERLINE OF SINKS, U.N.O.
- ALL APRONS AT OPEN KNEE SPACE TO BE 4" U.N.O. PROVIDE APRON OF SOLID WOOD WITH EASED BOTTOM EDGE. FINISH TO MATCH VENEER SPECIES, MAINTAIN MINIMUM 2" CLEAR ABOVE FLOOR FINISH.
- CENTER ALL COUNTERTOP MOUNTED UTILITY OUTLETS ON CENTER OF CASEWORK U.N.O.
- ALL SURFACE MOUNTED RACEWAY TO HAVE OUTLETS AT 2'-0" O.C. AND SHALL BE MOUNTED DIRECTLY ABOVE BACKSPLASH U.N.O.
- ALL BACKSPLASHES TO BE 4" HIGH U.N.O.
- DASHED LINES ON ELEVATIONS INDICATED ADJUSTABLE SHELVEING INSIDE CASEWORK.
- PROVIDE FINISHED BACK PANEL AT KNEE SPACES BELOW ALL FUMEHOODS, TYPICAL, SIMILAR TO DETAIL.
- PROVIDE FINISHED BACK PANEL AT ALL KNEE SPACES, TYPICAL.
- PROVIDE LOCK AND KEY WHERE A CIRCLE NEXT TO DRAWER OR DOOR HANDLE IS SHOWN OR WHERE NOTED.
- REFER SHEETS A0914 FOR LABORATORY CASEWORK / MILLWORK DETAILS.
- FOR TYPICAL MOUNTING HEIGHTS REF. 1/A0911
- ALL CASEWORK TO BE WOOD U.N.O.
- ALL CASEWORK IS LABORATORY CASEWORK UNLESS NOTED AS MILLWORK OR OFOI. SEE DIVISION 12-3555 - LABORATORY CASEWORK FOR SPECIFICATIONS.
- ALL EQUIPMENT ITEMS HAVE A EQUIPMENT TAG - XX-XX-XX. SEE SHEETS A1104 FOR EQUIPMENT SCHEDULES.
- PROVIDE PAPER TOWEL DISPENSER (PTD) AT EACH SINK LOCATION.



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Building

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CONFORMED SET

01 JUL 2016

ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016
No. Description Date

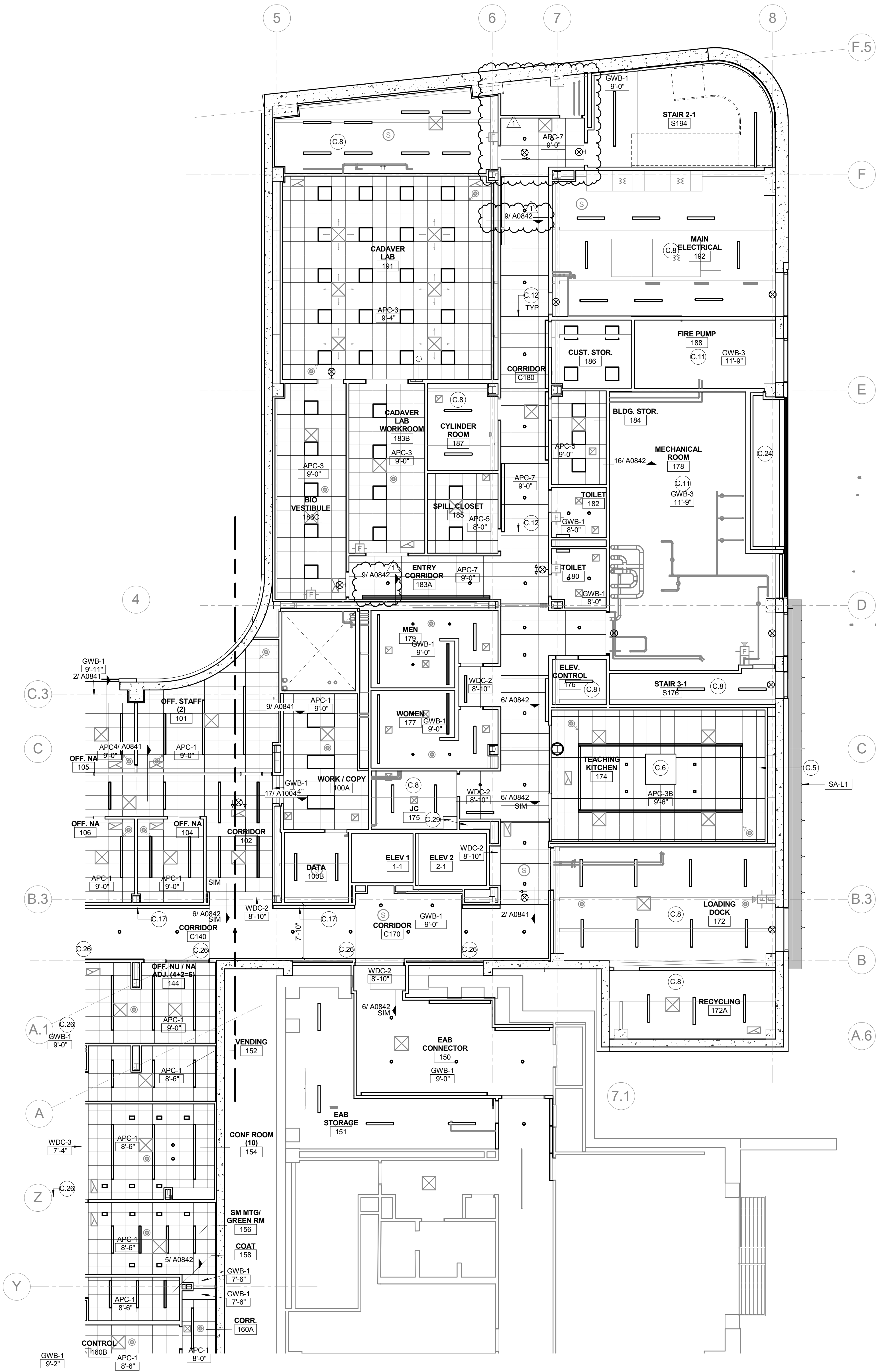
Drawing Title:

**INTERIOR LAB
ELEVATIONS LEVEL 04**

Project No.: 04561.01

Checked by:

A0618



1 LEVEL 01 REFLECTED CEILING PLAN - AREA A
1/8" = 1'-0"

KEYED NOTE LEGEND - REFLECTED CEILING PLAN

- C.1 122413 TYPE 1 SHADES: MOTORIZED ROLLER SHADES IN CONTINUOUS RECESSED POCKET (OFCI)
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C.6 EXHAUST HOOD LOCATION - REFER TO FOOD SERVICE DRAWINGS
C.7 FUME HOOD LOCATION - HOOD ENCLOSURE EXTENDS 6" ABOVE CEILING
C.8 EXPOSED STRUCTURE
C.9 083333 SIDE COILING DOOR TRACK
C.10 ACOUSTICAL PANEL CEILING ABOVE WOOD GRILLE CEILING. 1" THICK
C.11 ACOUSTICAL ISOLATION CEILING: 2 LAYERS 1/2" GYP BOARD CEILING ON SUSPENDED METAL FRAMING SUSPENSION SYSTEM TO BE ACOUSTICALLY ISOLATED FROM STRUCTURE BY SPRING/NEOPRENE ISOLATION HANGER - KINETIC NOISE CONTROL MODEL MUTA HANGERS PROVIDE CONTINUOUS LAYERS OF 3/5" FIBERGLASS ACOUSTIC BATTES. REFER TO DETAIL 16 SHEET A0842
C.12 6" PANEL WHERE SHOWN @ 10'-6" O.C. MATCH CEILING TYPE
C.13 RECESSED DRAPEY TRACK AND CURTAINS
C.15 122413 TYPE 5 MOTORIZED DOUBLE ROLLER SHADE IN RECESSED POCKET.
C.16 WOOD CEILING AT BOTTOM OF STAIRS - REFER TO STAIR 1 DRAWINGS AND DETAILS SHEET A0842
C.17 CONTINUOUS COVE TYPE LIGHTING FIXTURE TAPED INTO GYP BOARD CEILING. REFER TO ELECTRICAL LIGHTING DRAWINGS AND TO DETAIL AT WALL SHEET A0842
C.18 CEILING IN COLD ROOM BY COLD ROOM MFG
C.19 G57500 MET ALUM. BEAM ENCLOSURE
C.20 UNISTRUT MOUNTED TO CEILING W/ STEEL ANGLE HANGERS AND KICKERS ABOVE FOR SUPPORT
C.21 STAINLESS STEEL STEAM CAPTURE HOOD ABOVE AUTOCLAVE
C.22 REFER TO DETAIL 6/A0452
C.23 122413 TYPE 6 SHADES: MANUAL SHADES IN RECESSED POCKET AT INTERIOR GLAZING: POCKET CONTINUOUS ACROSS OPENING
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C.28 ABOVE CEILING WHERE INDICATED WITH DASHED LINE: PROVIDE 2 HOUR RATED HORIZONTAL GYP BOARD ENCLOSURE AROUND STANDPIPE RUN. REFER TO DETAIL SHEET A1002
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C.30 122413 TYPE 7 SHADES: MOTORIZED DOUBLE ROLLER SHADES: SURFACE MOUNTED W/ CUSTOM COLOR FASCIA
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C.35 EMERGENCY SAFETY SHOWER - PIPING TO HEAD ABOVE CEILING
C.36 122413 TYPE 3 SHADES: MANUAL SHADES - STEPPED WITH SLOPE IN CONT. SLOPED OPENING

CEILING LEGEND

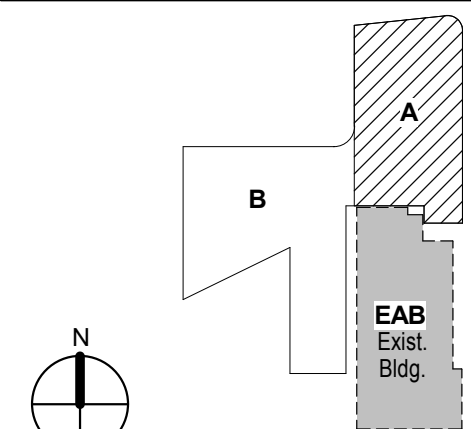
- APC-1 2' x 2' - ARMSTRONG OPTIMA TEGULAR 1" THICK, NRC - 90, IN 9/16" GRID
APC-3A 2' x 2' - ARMSTRONG ULTIMA HEALTH ZONE IN 9/16" GRID
APC-3B 2' x 2' - ARMSTRONG ULTIMA HEALTH ZONE TEGULAR 9/16" GRID
APC-4 NOT USED
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APC-6 088310 ACOUSTICAL PLASTER: BASWAPHON (40 MM) OVER 1 1/2" INSULATION OVER GYP. BOARD
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- WDC-1 09 5426 WOOD GRILLE CEILING W/ 3/4" x 2 1/4" MEMBERS - 6 PER FOOT - NINEWOOD GRILL 1400 W/ 1" THICK ARMSTRONG OPTIMA PANELS FIT TO GRID SUPPORT ABOVE
WDC-2 06 4216 FLUSH WOOD PANEL SOFFIT - MATCH WVP-1
WDC-3 06 4216 OPAQUE WOOD PANEL TO MATCH WOOD ACOUST WALL PANEL

- GWB-1 PAINTED GYP. BOARD
GWB-2 GYP. BOARD W/ COATING TO MATCH ADJACENT ACOUST. PLASTER

CONFORMED SET 01 JUL 2016

1 ADDENDUM 3-2 15 APR 2016		
ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016		
No.	Description	Date



KEY PLAN

**LEVEL 01 REFLECTED
CEILING PLAN AREA A**

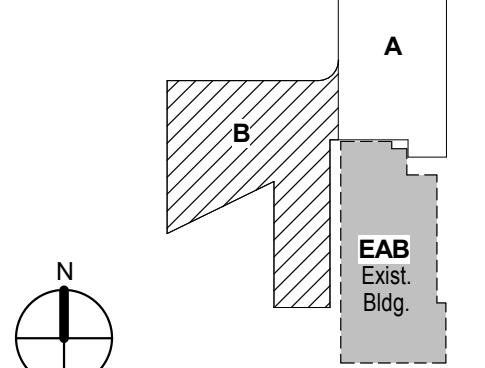
Project No.: 04561.01 Checked by:

A0701.A

CONFORMED SET 01 JUL 2016

1 ADDENDUM 3-2 15 APR 2016
ISSUED FOR CONSTRUCTION (BPS) 15 MAR 2016

No. Description Date

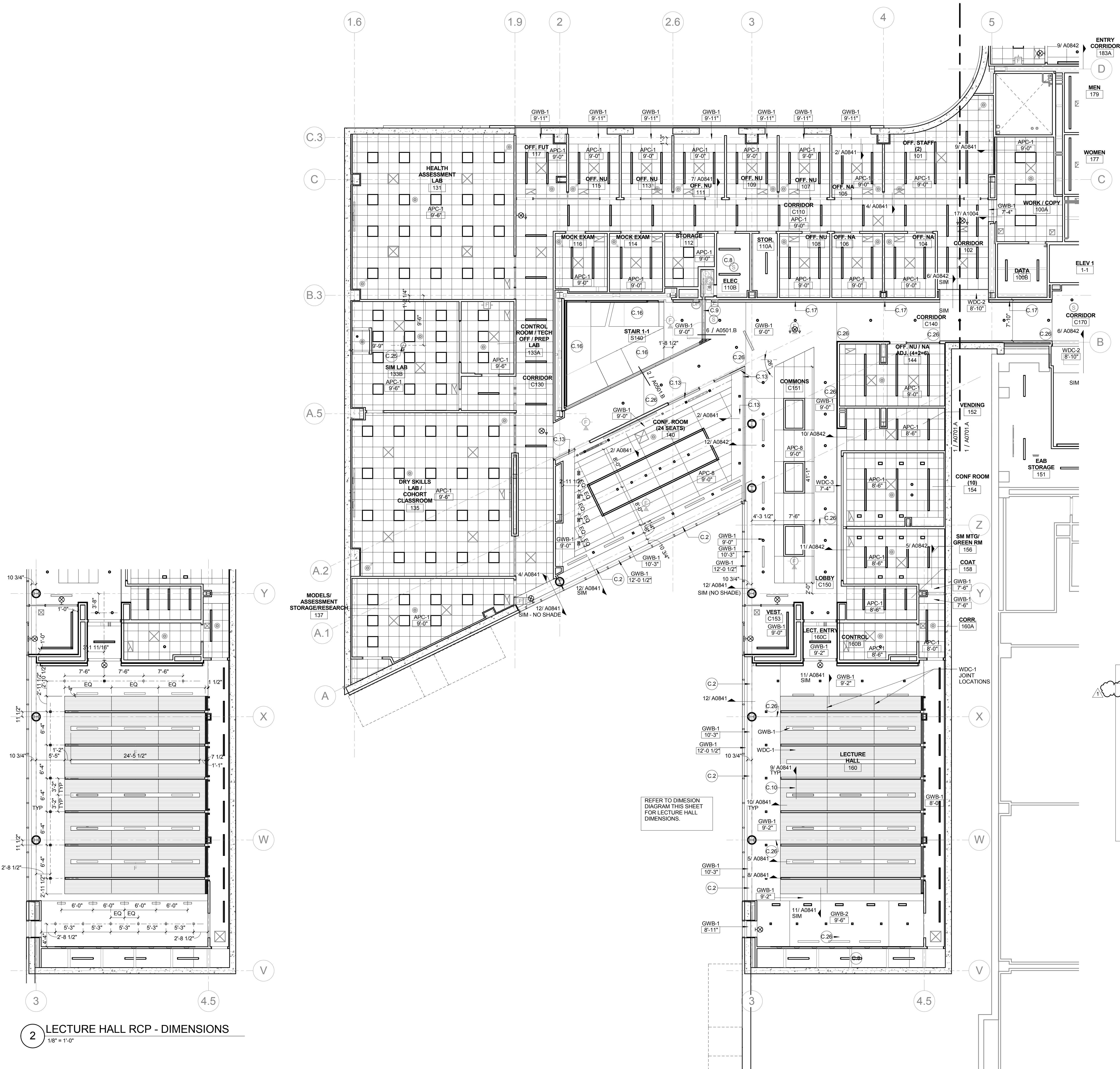


KEY PLAN

LEVEL 01 REFLECTED
CEILING PLAN AREA B

Project No.: 04561.01 Checked by:

A0701.B



2 LECTURE HALL RCP - DIMENSIONS
1/8" = 1'-0"

1 LEVEL 01 REFLECTED CEILING PLAN - AREA B
1/8" = 1'-0"

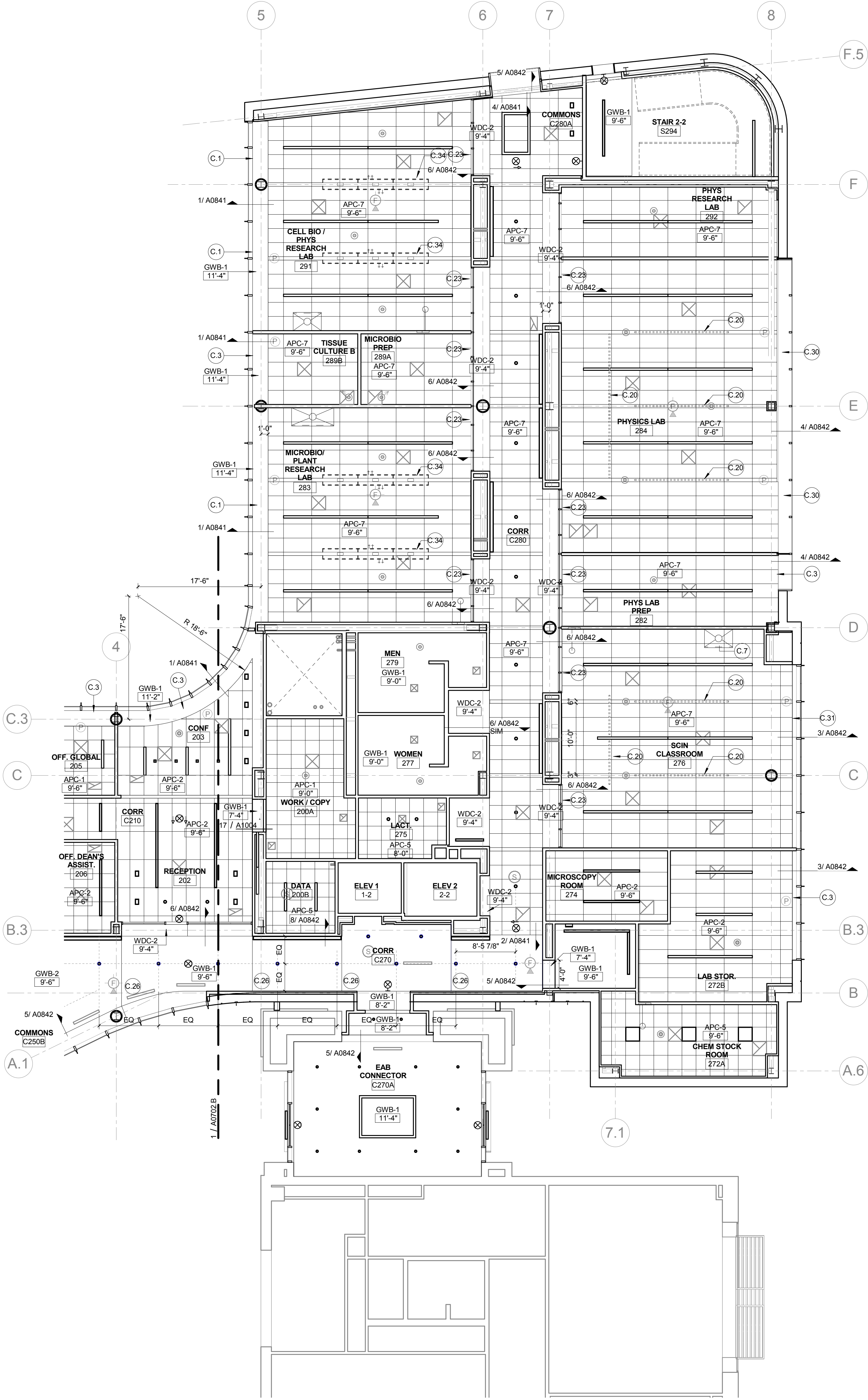
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- C.13 RECESSED DRAPEY TRACK AND CURTAINS
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- C.17 CONTINUOUS COVE TYPE LIGHTING FIXTURE TAPERED INTO GYP BOARD CEILING. REFER TO ELECTRICAL LIGHTING DRAWINGS AND TO DETAIL AT WALL SHEET A0842
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- C.19 G57500 MET ALUM. BEAM ENCLOSURE
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- C.26 CONTROL JOINT LOCATION
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- C.33 REVEAL TRIM AROUND DIAGONAL BRACE PENETRATION THROUGH CEILING - LEAVE 3/4" GAP ALL SIDES
- C.34 LABORATORY OVERHEAD SERVICE CARRIER - REFER TO ENLARGED FLOOR PLANS
- C.35 EMERGENCY SAFETY SHOWER - PIPING TO HEAD ABOVE CEILING
- C.36 122413 TYPE 3 SHADES: MANUAL SHADES - STEPPED WITH SLOPE IN CONT. SLOPED OPENING

CEILING LEGEND

- APC-1 2' x 2' - ARMSTRONG OPTIMA REGULAR 1" THICK IN 9/16" GRID
- APC-2 2' x 2' - ARMSTRONG ULTIMA REGULAR 1" THICK IN 9/16" GRID
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- GWB-1 PAINTED GYP. BOARD
- GWB-2 GYP. BOARD W/ COATING TO MATCH ADJACENT ACOUST. PLASTER



1 LEVEL 02 REFLECTED CEILING PLAN - AREA A
1/8" = 1'-0"

KEYED NOTE LEGEND - REFLECTED CEILING PLAN

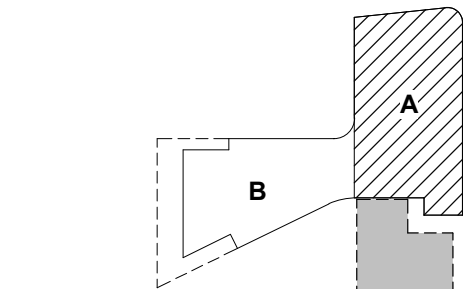
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- GWB-2 GYP. BOARD W/ COATING TO MATCH ADJACENT ACOUST. PLASTER

CONFORMED SET 01 JUL 2016

No.	Description	Date
1	ADDENDUM 3-2	15 APR 2016
2	ISSUED FOR CONSTRUCTION (BP3)	15 MAR 2016



KEY PLAN

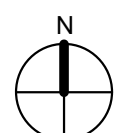
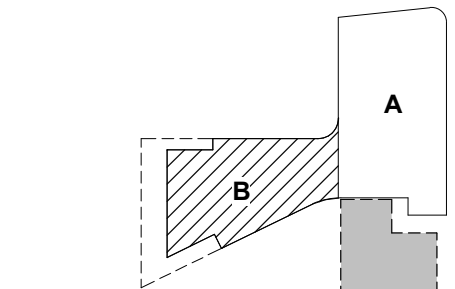
LEVEL 02 REFLECTED
CEILING PLAN AREA A

Project No.: 04561.01 Checked by:

A0702.A

CONFORMED SET 01 JUL 2016

1	ADDENDUM 3-2	15 APR 2016
2	ISSUED FOR CONSTRUCTION (BP3)	15 MAR 2016
No.	Description	Date

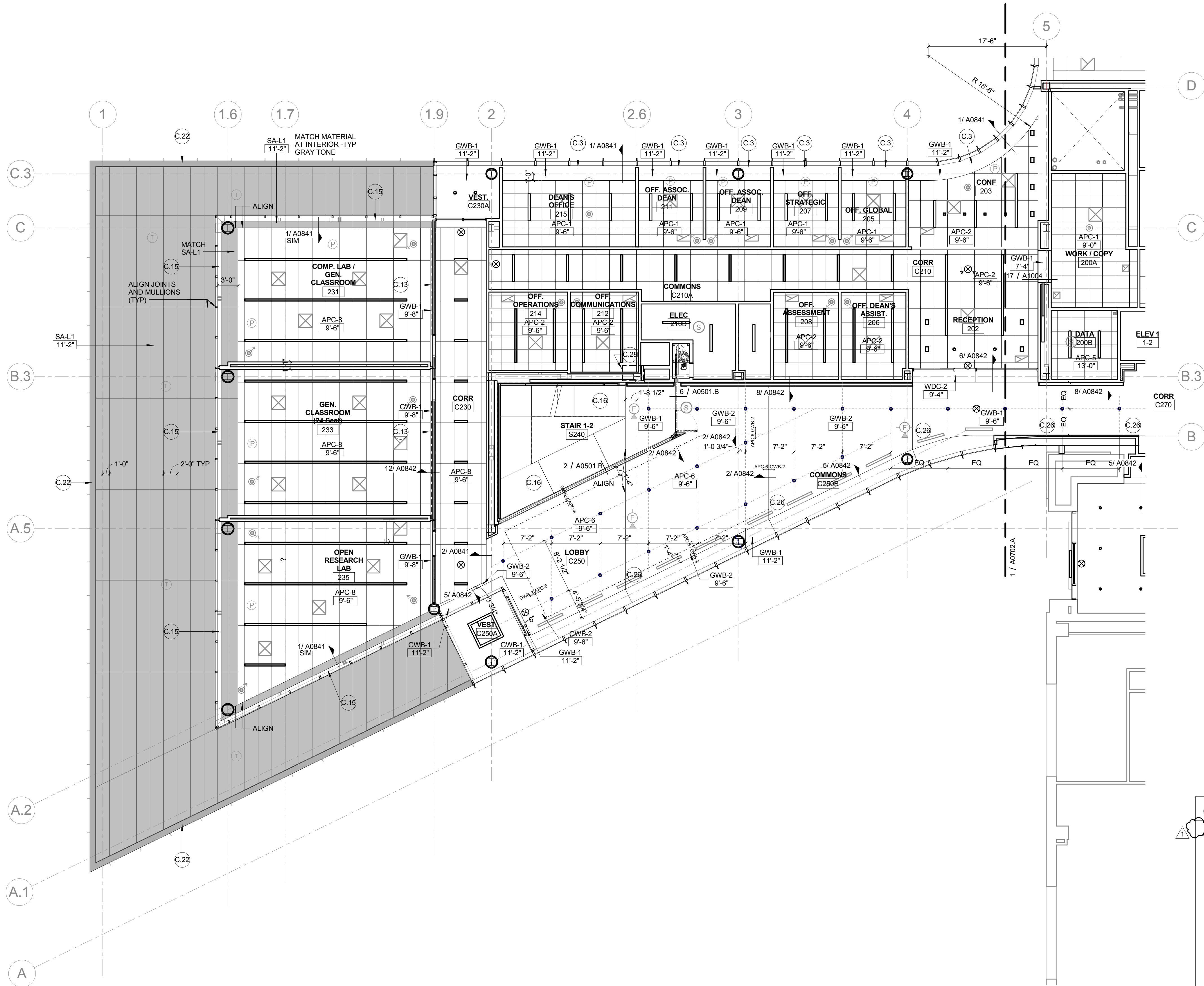


KEY PLAN

LEVEL 02 REFLECTED
CEILING PLAN AREA B

Project No.: 04561.01 Checked by:

A0702.B



1 LEVEL 02 REFLECTED CEILING PLAN - AREA B
1/8" = 1'-0"

KEYED NOTE LEGEND - REFLECTED CEILING PLAN

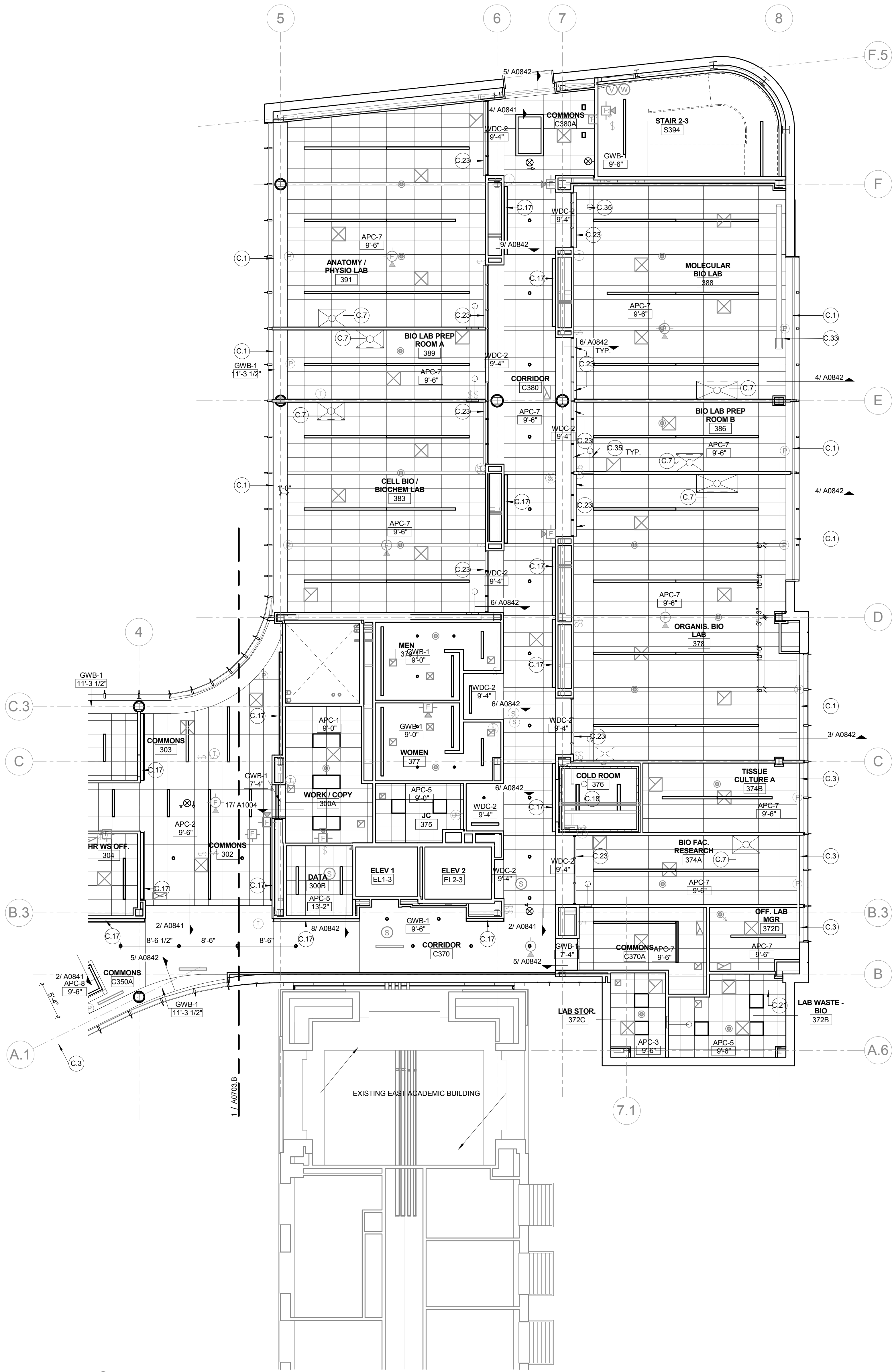
- C.1 122413 TYPE 1 SHADES: MOTORIZED ROLLER SHADES IN CONTINUOUS RECESSED POCKET (GFCI)
- C.2 122413 TYPE 2 SHADES: MOTORIZED DOUBLE ROLLER SHADES: SURFACE MOUNTED W/ CUSTOM COLOR FASCIA
- C.3 122413 TYPE 3 SHADES: MANUAL SHADES IN RECESSED POCKET
- C.4 122413 TYPE 4 SHADES: MULLION MOUNTED SHADE IN CONTINUOUS POCKET
- C.5 CEILING MOUNTING SUSPENSION FOR LCD SCREEN- PROVIDE STEEL SUPPORT ABOVE CEILING
- C.6 EXHAUST HOOD LOCATION - REFER TO FOOD SERVICE DRAWINGS
- C.7 FUME HOOD LOCATION - HOOD ENCLOSURE EXTENDS 6" ABOVE CEILING
- C.8 EXPOSED STRUCTURE
- C.9 083333 SIDE COILING DOOR TRACK
- C.10 ACOUSTICAL PANEL CEILING ABOVE WOOD GRILLE CEILING. 1" THICK
- C.11 ACOUSTICAL ISOLATION CEILING: 2 LAYERS 1/2" GYP BOARD CEILING ON SUSPENDED METAL FRAMING SUSPENSION SYSTEM TO BE ACOUSTICALLY ISOLATED FROM STRUCTURE BY SPRING/NEOPRENE ISOLATION HANGER - KINETIC NOISE CONTROL MODEL MUTA HANGERS. PROVIDE CONTINUOUS LAYERS OF 3/5" FIBERGLASS ACOUSTIC BATT'S. REFER TO DETAIL 16 SHEET A0842
- C.12 6" PANEL WHERE SHOWN @ 10'-6" O.C. MATCH CEILING TYPE
- C.13 RECESSED DRAPEY TRACK AND CURTAINS
- C.15 122413 TYPE 5 MOTORIZED DOUBLE ROLLER SHADE IN RECESSED POCKET.
- C.16 WOOD CEILING AT BOTTOM OF STAIRS - REFER TO STAIR 1 DRAWINGS AND DETAILS FIRST AND
- C.17 CONTINUOUS COVE TYPE LIGHTING FIXTURE TAPERED TO GYP BOARD CEILING. REFER TO ELECTRICAL LIGHTING DRAWINGS AND TO DETAIL AT WALL SHEET A0842
- C.18 CEILING IN COLD ROOM BY COLD ROOM MFG
- C.19 G57500 MET ALUM. BEAM ENCLOSURE
- C.20 UNISTRUT MOUNTED TO CEILING W/ STEEL ANGLE HANGERS AND KICKERS ABOVE FOR SUPPORT
- C.21 STAINLESS STEEL STEAM CAPTURE HOOD ABOVE AUTOCLAVE
- C.22 REFER TO DETAIL 6/A0452
- C.23 122413 TYPE 6 SHADES: MANUAL SHADES IN RECESSED POCKET AT INTERIOR GLAZING. POCKET CONTINUOUS ACROSS OPENING
- C.24 INSULATED SOFFIT - SIMILAR TO WA-14 ON SHEET A0400
- C.25 CEILING MOUNTED SURGICAL LIGHT - SEE EQUIPMENT LIST (OFCI) - PROVIDE STRUCTURAL STEEL SUPPORT TO DECK - 4 - 2X2X 1/4" STEEL ANGLE HANGER WITH 4 - ANGLE KICKERS 2 X 2 X 1/4". AND MOUNTING PLATE PER MANUFACTURER. SEE DETAIL 01/A0814.
- C.26 CONTROL JOINT LOCATION
- C.27 ABOVE CEILING WHERE INDICATED WITH DASHED LINE: PROVIDE 2 HOUR RATED HORIZONTAL GYP BOARD ENCLOSURE AROUND DUCTS SERVING FLOOR GRILLES ON LEVEL ABOVE. REFER TO DETAIL SHEET A1002
- C.28 ABOVE CEILING WHERE INDICATED WITH DASHED LINE: PROVIDE 2 HOUR RATED HORIZONTAL GYP BOARD ENCLOSURE AROUND STANDPIPE RUN. REFER TO DETAIL SHEET A1002
- C.29 PROVIDE 2 HOUR RATED HORIZONTAL GYP BOARD ENCLOSURE AT BOTTOM OF SHAFT. REFER TO DETAIL SHEET A1002
- C.30 122413 TYPE 7 SHADES: MOTORIZED DOUBLE ROLLER SHADES: SURFACE MOUNTED W/ CUSTOM COLOR FASCIA
- C.31 122413 TYPE 8 MOTORIZED DOUBLE ROLLER SHADE IN RECESSED POCKET. SPECIAL ACOUSTICAL SEPARATION CEILING. APPLY KINETICS NOISE CONTROL QUIET TILE CAC-51 TO TOP SIDE OF ACOUSTICAL PANELS. ISOLATE CEILING TILE FROM STRUCTURE ABOVE WITH KNC AF HANGERS. - LEAVE 3/4" GAP ALL SIDES
- C.33 REVEAL TRIM AROUND DIAGONAL BRACE PENETRATION THROUGH CEILING
- C.34 LABORATORY OVERHEAD SERVICE CARRIER - REFER TO ENLARGED FLOOR PLANS.
- C.35 EMERGENCY SAFETY SHOWER - PIPING TO HEAD ABOVE CEILING
- C.36 122413 TYPE 3 SHADES: MANUAL SHADES - STEPPED WITH SLOPE IN CONT. SLOPED OPENING

CEILING LEGEND

- APC-1 2' x 2' ARMSTRONG OPTIMA REGULAR 1" THICK IN 9/16" GRID
- APC-2 2' x 2' ARMSTRONG ULTIMA REGULAR 1" THICK IN 9/16" GRID
- APC-3A 2' x 2' ARMSTRONG ULTIMA HEALTH ZONE IN 9/16" GRID
- APC-3B 2' x 2' ARMSTRONG ULTIMA HEALTH ZONE REGULAR 9/16" GRID
- APC-4 NOT USED
- APC-5 2' x 2' ARMSTRONG FINE FISSURED IN 15/16" GRID
- APC-6 095310 ACOUSTICAL PLASTER: BASWAPHON (40 MM) OVER 1 1/2" INSULATION OVER GYP. BOARD
- APC-7 2' x 4' ARMSTRONG ULTIMA REGULAR IN 9/16" SILHOUETTE XL GRID W/ 6" PANEL INSERTS AS SHOWN
- APC-8 2' x 6' ARMSTRONG OPTIMA REGULAR - 1" THICK, NRC-.90, IN 9/16" SILHOUETTE XL 1/8" GRID MATCH APC-7 - EXCEPT REF. 090113- SPECIAL ACOUSTIC TREATMENT. APPLY SPECIAL
- APC-9 ACOUSTIC MATERIAL TO TOP SIDE OF PANELS AND PROVIDE ISOLATORS FOR CEILING HANGERS:

- WDC-1 09 5426 WOOD GRILLE CEILING W/ 3/4" x 2 1/4" MEMBERS - 6 PER FOOT - NINEWOOD GRILL 1400 W/ 1" THICK ARMSTRONG OPTIMA PANELS FIT TO GRID SUPPORT ABOVE
- WDC-2 06 4216 FLUSH WOOD PANEL SOFFIT - MATCH WV-1
- WDC-3 06 4216 OPAQUE WOOD PANEL TO MATCH WOOD ACOUST WALL PANEL

- GWB-1 PAINTED GYP. BOARD
- GWB-2 GYP. BOARD W/ COATING TO MATCH ADJACENT ACOUST. PLASTER



1 LEVEL 03 REFLECTED CEILING PLAN - AREA A
1/8" = 1'-0"

KEYED NOTE LEGEND - REFLECTED CEILING PLAN

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C.2 122413 TYPE 2 SHADES: MOTORIZED DOUBLE ROLLER SHADES: SURFACE MOUNTED W/ CUSTOM COLOR FASCIA
C.3 122413 TYPE 3 SHADES: MANUAL SHADES IN RECESSED POCKET
C.4 122413 TYPE 4 SHADES: MULLION MOUNTED SHADE IN CONTINUOUS POCKET
C.5 CEILING MOUNTING SUSPENSION FOR LCD SCREEN- PROVIDE STEEL SUPPORT ABOVE CEILING
C.6 EXHAUST HOOD LOCATION - REFER TO FOOD SERVICE DRAWINGS
C.7 FUME HOOD LOCATION - HOOD ENCLOSURE EXTENDS 6" ABOVE CEILING
C.8 EXPOSED STRUCTURE
C.9 083333 SIDE COILING DOOR TRACK
C.10 ACOUSTICAL PANEL CEILING ABOVE WOOD GRILLE CEILING. 1" THICK
C.11 ACOUSTICAL ISOLATION CEILING: 2 LAYERS 1/2" GYP BOARD CEILING ON SUSPENDED METAL FRAMING SUSPENSION SYSTEM TO BE ACOUSTICALLY ISOLATED FROM STRUCTURE BY SPRING/NEOPRENE ISOLATION HANGER - KINETIC NOISE CONTROL MODEL. MUTA HANGERS: PROVIDE CONTINUOUS LAYERS OF 3/8" FIBERGLASS ACOUSTIC BATTES. REFER TO DETAIL 01A0914.
C.12 6" PANEL WHERE SHOWN @ 10'-6" O.C. MATCH CEILING TYPE
C.13 RECESSED DRAPEY TRACK AND CURTAINS
C.15 122413 TYPE 5 MOTORIZED DOUBLE ROLLER SHADE IN RECESSED POCKET.
C.16 WOOD CEILING AT BOTTOM OF STAIRS - REFER TO STAIR 1 DRAWINGS AND DETAILS SHEET A042
C.17 CONTINUOUS COVE TYPE LIGHTING FIXTURE TAPED INTO GYP BOARD CEILING. REFER TO ELECTRICAL LIGHTING DRAWINGS AND TO DETAIL AT WALL SHEET A042
C.18 CEILING IN COLD ROOM BY COLD ROOM MFG
C.19 G57500 MET ALUM. BEAM ENCLOSURE
C.20 UNISTRUT MOUNTED TO CEILING W/ STEEL ANGLE HANGERS AND KICKERS ABOVE FOR SUPPORT
C.21 STAINLESS STEEL STEAM CAPTURE HOOD ABOVE AUTOCLAVE
C.22 REFER TO DETAIL 6/A0452
C.23 122413 TYPE 6 SHADES: MANUAL SHADES IN RECESSED POCKET AT INTERIOR GLAZING. POCKET CONTINUOUS ACROSS OPENING
C.24 INSULATED SOFFIT - SIMILAR TO WA-14 ON SHEET A0406
C.25 CEILING MOUNTED SURGICAL LIGHT - SEE EQUIPMENT LIST (OFCI) - PROVIDE STRUCTURAL STEEL SUPPORT TO DECK - 4 - 2X2X 1/4" STEEL ANGLE HANGER WITH 4 - ANGLE KICKERS 2 X 2 X 1/4". AND MOUNTING PLATE PER MANUFACTURER. SEE DETAIL 01A0914.
C.26 CONTROL JOINT LOCATION
C.27 ABOVE CEILING WHERE INDICATED WITH DASHED LINE: PROVIDE 2 HOUR RATED HORIZONTAL GYP BOARD ENCLOSURE AROUND DUCTS SERVING FLOOR GRILLES ON LEVEL ABOVE. REFER TO DETAIL SHEET A1002
C.28 ABOVE CEILING WHERE INDICATED WITH DASHED LINE: PROVIDE 2 HOUR RATED HORIZONTAL GYP BOARD ENCLOSURE AROUND STANDPIPE RUN. REFER TO DETAIL SHEET A1002
C.29 PROVIDE 2 HOUR RATED HORIZONTAL GYP BOARD ENCLOSURE AT BOTTOM OF SHAFT. REFER TO DETAIL SHEET A1002
C.30 122413 TYPE 7 SHADES: MOTORIZED DOUBLE ROLLER SHADES: SURFACE MOUNTED W/ CUSTOM COLOR FASCIA
C.31 122413 TYPE 8 MOTORIZED DOUBLE ROLLER SHADE IN RECESSED POCKET.
C.32 SPECIAL ACOUSTICAL SEPARATION CEILING: APPLY KINETICS NOISE CONTROL QUIET TILE CAC-51 TO TOP SIDE OF ACOUSTICAL PANELS. ISOLATE CEILING TILE FROM STRUCTURE ABOVE WITH KNC AF HANGERS. - LEAVE 3/4" GAP ALL SIDES
C.33 REVEAL TRIM AROUND DIAGONAL BRACE PENETRATION THROUGH CEILING
C.34 LABORATORY OVERHEAD SERVICE CARRIER - REFER TO ENLARGED FLOOR PLANS
C.35 EMERGENCY SAFETY SHOWER - PIPING TO HEAD ABOVE CEILING
C.36 122413 TYPE 3 SHADES: MANUAL SHADES - STEPPED WITH SLOPE IN CONT. SLOPED OPENING

CEILING LEGEND

- APC-1 2' x 2' - ARMSTRONG OPTIMA REGULAR 1" THICK IN 916" GRID
APC-2 2' x 4' - ARMSTRONG ULTIMA REGULAR IN 916" SILHOUETTE XL 1/8" GRID
APC-3B 2' x 2' - ARMSTRONG ULTIMA HEALTH ZONE REGULAR 916" GRID
APC-4 NOT USED
APC-5 2' x 2' - ARMSTRONG FINE FISSURED IN 1516" GRID
APC-6 08310 ACOUSTICAL PLASTER: BASWAPHON (40 MM) OVER 1 1/2" INSULATION OVER GYP. BOARD
APC-7 2' x 4' - ARMSTRONG ULTIMA REGULAR IN 916" SILHOUETTE XL GRID W/ 6" PANEL INSERTS AS SHOWN
APC-8 2' x 8' - ARMSTRONG OPTIMA REGULAR - 1" THICK, NRC .90, IN 916" SILHOUETTE XL 1/8" GRID
MATCH APC-7 - EXCEPT REF. 085113- SPECIAL ACOUSTIC TREATMENT: APPLY SPECIAL ACOUSTIC MATERIAL TO TOP SIDE OF PANELS AND PROVIDE ISOLATORS FOR CEILING HANGERS
APC-9

- WDC-1 09 5426 WOOD GRILLE CEILING W/ 3/4" x 2 1/4" MEMBERS - 6 PER FOOT - NINEWOOD GRILL 1400 W/ 1" THICK ARMSTRONG OPTIMA PANELS FIT TO GRID SUPPORT ABOVE
WDC-2 08 4216 FLUSH WOOD PANEL SOFFIT - MATCH WVP-1
WDC-3 06 4216 OPAQUE WOOD PANEL TO MATCH WOOD ACOUST WALL PANEL

- GWB-1 PAINTED GYP. BOARD
GWB-2 GYP. BOARD W/ COATING TO MATCH ADJACENT ACOUST. PLASTER

CONFORMED SET

01 JUL 2016

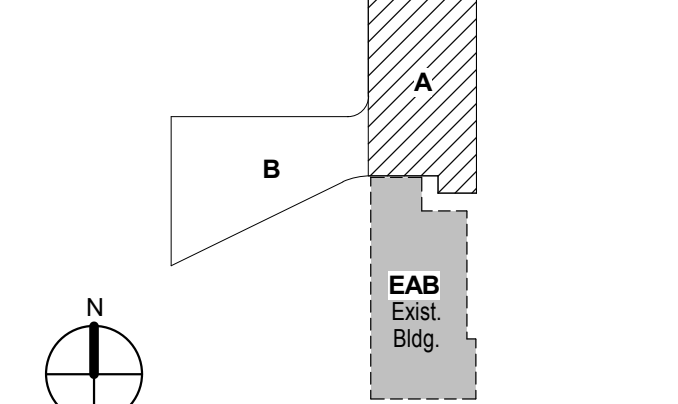
1 ADDENDUM 3-2

ISSUED FOR CONSTRUCTION (BP3)

15 APR 2016

15 MAR 2016

No. Description Date



KEY PLAN

Drawing Title:

LEVEL 03 REFLECTED
CEILING PLAN AREA A

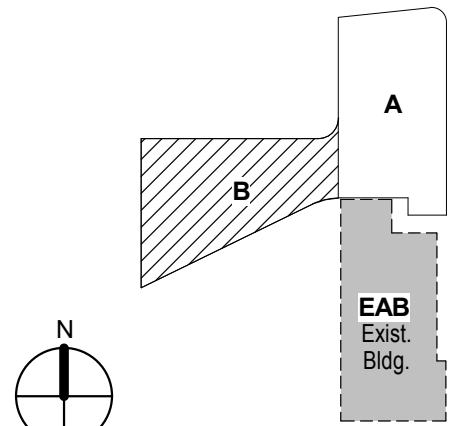
Project No.: 04561.01

Checked by:

A0703.A

CONFORMED SET 01 JUL 2016

1 ADDENDUM 3-2 15 APR 2016
- ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016
No. Description Date

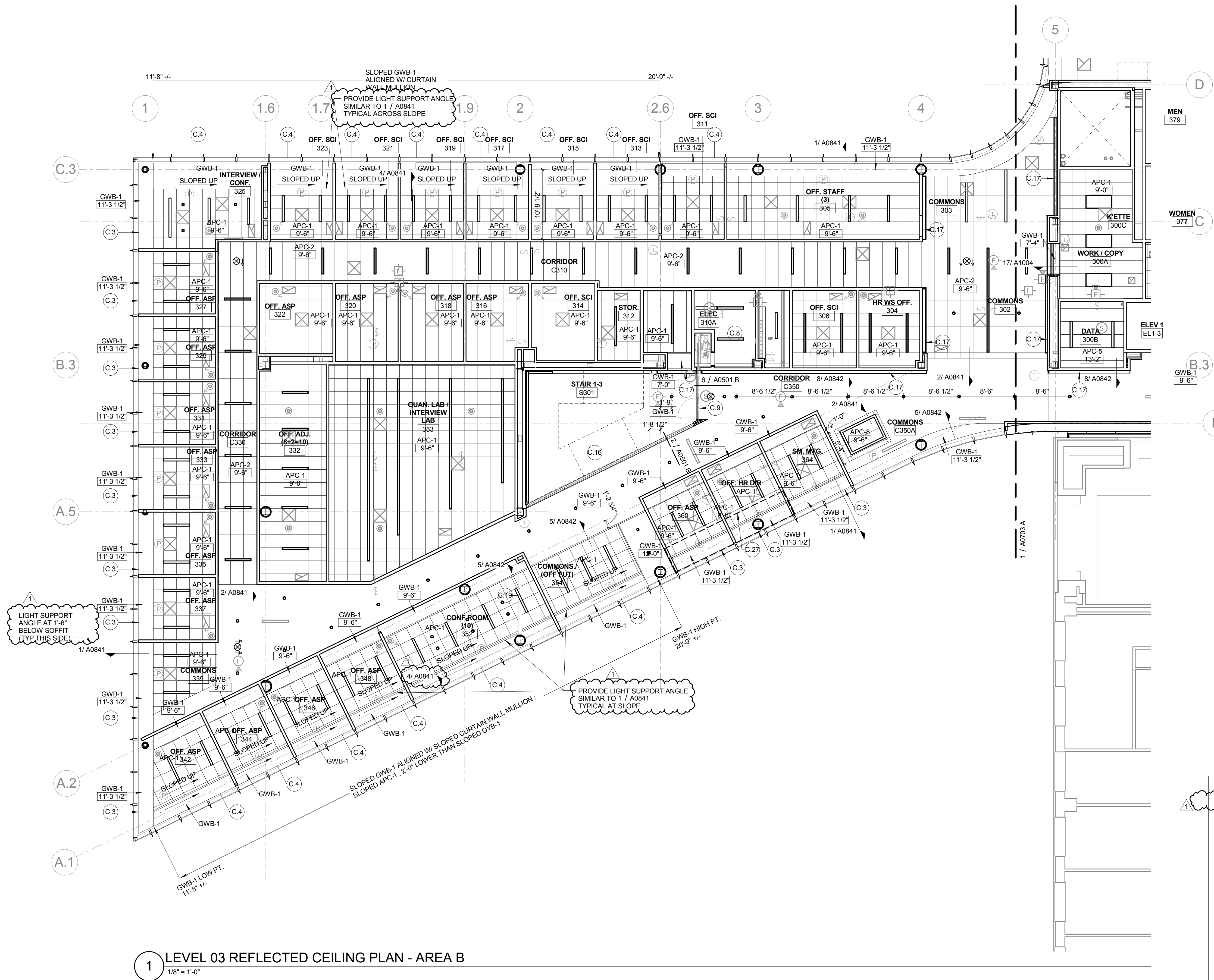


KEY PLAN

LEVEL 03 REFLECTED
CEILING PLAN AREA B

Project No.: 04561.01 Checked by:

A0703.B



KEYED NOTE LEGEND - REFLECTED CEILING PLAN

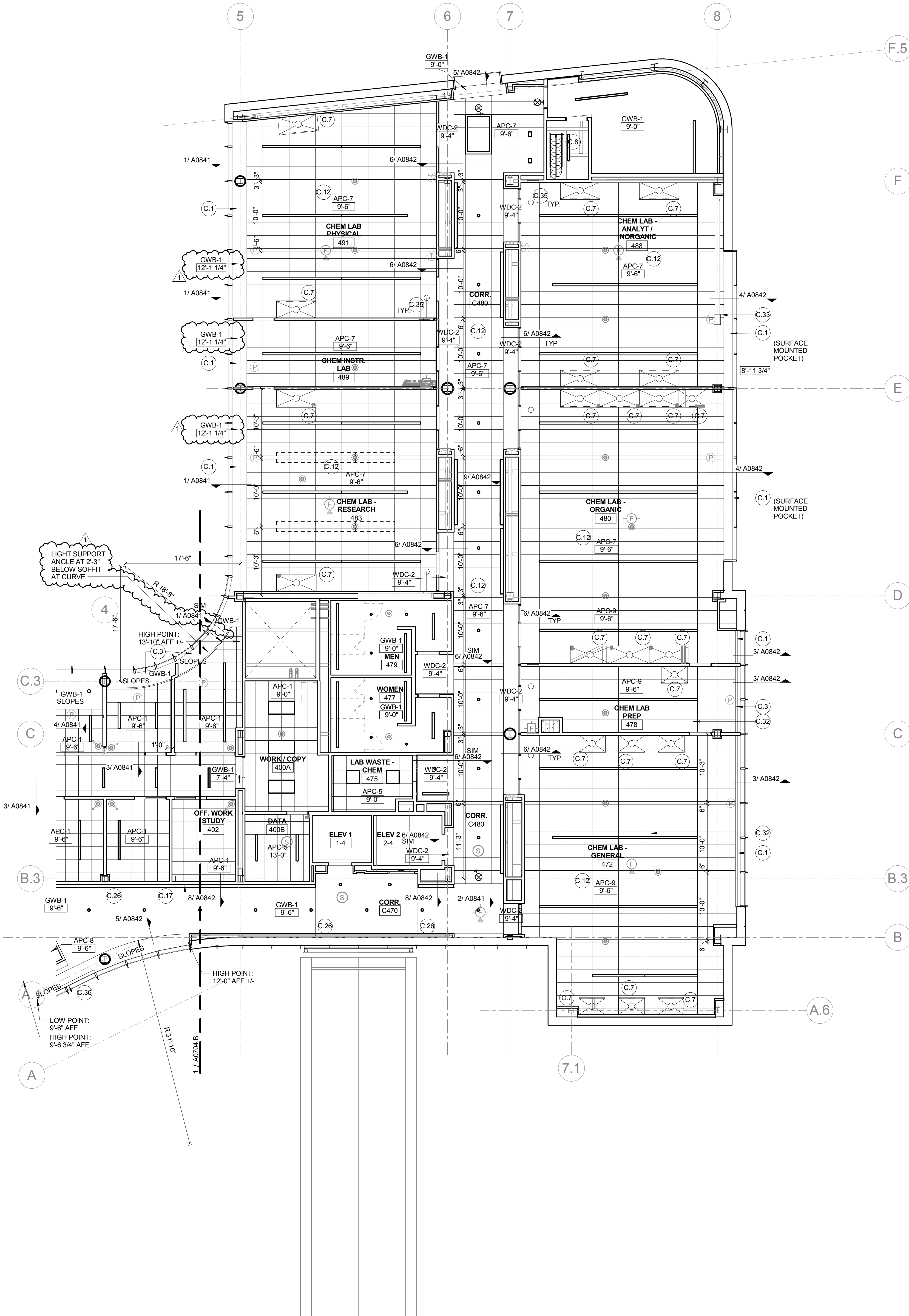
- C.1 122413 TYPE 1 SHADES: MOTORIZED ROLLER SHADES IN CONTINUOUS RECESSED POCKET (FCI)
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- C.7 FUME HOOD LOCATION - HOOD ENCLOSURE EXTENDS 6" ABOVE CEILING
- C.8 EXPOSED STRUCTURE
- C.9 083333 SIDE COILING DOOR TRACK
- C.10 ACOUSTICAL PANEL CEILING ABOVE WOOD GRILLE CEILING. 1" THICK
- C.11 ARMSTRONG OPTIMA TEGULAR - 1" THICK, NRC - 90. IN 9/16" SILHOUETTE XL 1/8" GRID
- C.12 6" PANEL WHERE SHOWN @ 10'-6" O.C. MATCH CEILING TYPE
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- C.15 122413 TYPE 5 MOTORIZED DOUBLE ROLLER SHADE IN RECESSED POCKET.
- C.16 WOOD CEILING AT BOTTOM OF STAIRS - REFER TO STAIR 1 DRAWINGS AND DATA SHEET A0400
- C.17 CONTINUOUS COVE TYPE LIGHTING FIXTURE TAPED TO GYP BOARD CEILING. REFER TO ELECTRICAL LIGHTING DRAWINGS AND TO DETAIL AT WALL SHEET A0402
- C.18 CEILING IN COLD ROOM BY COLD ROOM MFG
- C.19 G57500 MET ALUM. BEAM ENCLOSURE
- C.20 UNISTRUT MOUNTED TO CEILING W/ STEEL ANGLE HANGERS AND KICKERS ABOVE FOR SUPPORT
- C.21 STAINLESS STEEL STEAM CAPTURE HOOD ABOVE AUTOCLAVE
- C.22 REFER TO DETAIL 6/A0452
- C.23 122413 TYPE 6 SHADES: MANUAL SHADES IN RECESSED POCKET AT INTERIOR GLAZING. POCKET CONTINUOUS ACROSS OPENING
- C.24 INSULATED SOFFIT - SIMILAR TO WA-14 ON SHEET A0400
- C.25 CEILING MOUNTED SURGICAL LIGHT - SEE EQUIPMENT LIST (OFCI) - PROVIDE STRUCTURAL STEEL SUPPORT TO DECK - 4 - 2X2X 1/4" STEEL ANGLE HANGER WITH 4 - ANGLE KICKERS 2 X 2 X 1/4". AND MOUNTING PLATE PER MANUFACTURER. SEE DETAIL 01/A0514
- C.26 CONTROL JOINT LOCATION
- C.27 ABOVE CEILING WHERE INDICATED WITH DASHED LINE: PROVIDE 2 HOUR RATED HORIZONTAL GYP BOARD ENCLOSURE AROUND DUCTS SERVING FLOOR GRILLES ON LEVEL ABOVE. REFER TO DETAIL SHEET A1002
- C.28 ABOVE CEILING WHERE INDICATED WITH DASHED LINE: PROVIDE 2 HOUR RATED HORIZONTAL GYP BOARD ENCLOSURE AROUND STANDPIPE RUN. REFER TO DETAIL SHEET A1002
- C.29 PROVIDE 2 HOUR RATED HORIZONTAL GYP BOARD ENCLOSURE AT BOTTOM OF SHAFT. REFER TO DETAIL SHEET A1002
- C.30 122413 TYPE 7 SHADES: MOTORIZED DOUBLE ROLLER SHADES: SURFACE MOUNTED W/ CUSTOM COLOR FASCIA
- C.31 122413 TYPE 8 MOTORIZED DOUBLE ROLLER SHADE IN RECESSED POCKET.
- C.32 SPECIAL ACOUSTICAL SEPARATION CEILING: APPLY KINETICS NOISE CONTROL QUIET TILE CAC-51 TO TOP SIDE OF ACOUSTICAL PANELS. ISOLATE CEILING TILE FROM STRUCTURE ABOVE WITH KNC AF HANGERS.
- C.33 REVEAL TRIM AROUND DIAGONAL BRACE PENETRATION THROUGH CEILING - LEAVE 3/4" GAP ALL SIDES
- C.34 LABORATORY OVERHEAD SERVICE CARRIER - REFER TO ENLARGED FLOOR PLANS
- C.35 EMERGENCY SAFETY SHOWER - PIPING TO HEAD ABOVE CEILING
- C.36 122413 TYPE 3 SHADES: MANUAL SHADES - STEPPED WITH SLOPE IN CONT. SLOPED OPENING

CEILING LEGEND

- APC-1 2' x 4' - ARMSTRONG OPTIMA TEGULAR - 1" THICK, NRC - 90. IN 9/16" SILHOUETTE XL 1/8" GRID
- APC-2 2' x 4' - ARMSTRONG ULTIMA TEGULAR IN 9/16" SILHOUETTE XL 1/8" GRID
- APC-3A 2' x 2' - ARMSTRONG ULTIMA HEALTH ZONE IN 9/16" GRID
- APC-3B 2' x 2' - ARMSTRONG ULTIMA HEALTH ZONE TEGULAR 9/16" GRID
- APC-4 NOT USED
- APC-5 2' x 2' - ARMSTRONG FINE FISSURED IN 15/16" GRID
- APC-6 089310 ACOUSTICAL PLASTER: BASWAPHON (40 MM) OVER 1 1/2" INSULATION OVER GYP. BOARD
- APC-7 2' x 4' - ARMSTRONG ULTIMA TEGULAR IN 9/16" SILHOUETTE XL GRID W/ 6" PANEL INSERTS AS SHOWN
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- MATCH APC-7 - EXCEPT REF. 095113- SPECIAL ACOUSTIC TREATMENT: APPLY SPECIAL ACOUSTIC MATERIAL TO TOP SIDE OF PANELS AND PROVIDE ISOLATORS FOR CEILING HANGERS.

- WDC-1 09 5426 WOOD GRILLE CEILING W/ 3/4" x 2 1/4" MEMBERS - 8 PER FOOT - NINEWOOD GRILL 1400 W/ 1" THICK ARMSTRONG OPTIMA PANELS FIT TO GRID SUPPORT ABOVE
- WDC-2 06 4216 FLUSH WOOD PANEL SOFFIT - MATCH WVP-1
- WDC-3 06 4216 OPAQUE WOOD PANEL TO MATCH WOOD ACOUST WALL PANEL

- GWB-1 PAINTED GYP. BOARD
- GWB-2 GYP. BOARD W/ COATING TO MATCH ADJACENT ACOUST. PLASTER



1 LEVEL 04 REFLECTED CEILING PLAN - AREA A
1/8" = 1'-0"

KEYED NOTE LEGEND - REFLECTED CEILING PLAN

- C.1 122413 TYPE 1 SHADES: MOTORIZED ROLLER SHADES IN CONTINUOUS RECESSED POCKET (SFCI)
- C.2 122413 TYPE 2 SHADES: MOTORIZED DOUBLE ROLLER SHADES: SURFACE MOUNTED W/ CUSTOM COLOR FASCIA
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- C.9 083333 SIDE COILING DOOR TRACK
- C.10 ACOUSTICAL PANEL CEILING ABOVE WOOD GRILLE CEILING. 1" THICK
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- C.12 6" PANEL WHERE SHOWN @ 10'-6" O.C. MATCH CEILING TYPE
- C.13 RECESSED DRAPERY TRACK AND CURTAINS
- C.15 122413 TYPE 5 MOTORIZED DOUBLE ROLLER SHADE IN RECESSED POCKET.
- C.16 WOOD CEILING AT BOTTOM OF STAIRS - REFER TO STAIR 1 DRAWINGS AND DETAIL SHEET A0704.2
- C.17 CONTINUOUS COVE TYPE LIGHTING FIXTURE TAPED INTO GYP BOARD CEILING. REFER TO ELECTRICAL LIGHTING DRAWINGS AND TO DETAIL AT WALL SHEET A0704.2
- C.18 CEILING IN COLD ROOM BY COLD ROOM MFG
- C.19 G57500 MET ALUM. BEAM ENCLOSURE
- C.20 UNISTRUT MOUNTED TO CEILING W/ STEEL ANGLE HANGERS AND KICKERS ABOVE FOR SUPPORT
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- C.22 REFER TO DETAIL 6/A0452
- C.23 122413 TYPE 6 SHADES: MANUAL SHADES IN RECESSED POCKET AT INTERIOR GLAZING. POCKET CONTINUOUS ACROSS OPENING
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- C.26 CONTROL JOINT LOCATION
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- C.35 EMERGENCY SAFETY SHOWER - PIPING TO HEAD ABOVE CEILING
- C.36 122413 TYPE 3 SHADES: MANUAL SHADES - STEPPED WITH SLOPE IN CONT. SLOPED OPENING

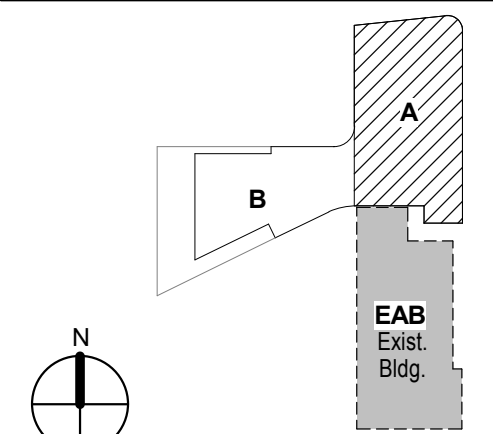
CEILING LEGEND

- APC-1 2' x 2' - ARMSTRONG OPTIMA REGULAR 1" THICK IN 9/16" GRID
- APC-2 2' x 4' - ARMSTRONG ULTIMA REGULAR IN 9/16" SILHOUETTE XL 1/8" GRID
- APC-3A 2' x 2' - ARMSTRONG ULTIMA HEALTH ZONE IN 9/16" GRID
- APC-3B 2' x 2' - ARMSTRONG ULTIMA HEALTH ZONE IN 9/16" GRID
- APC-4 NOT USED
- APC-5 2' x 2' - ARMSTRONG FINE FISSED IN 15/16" GRID
- APC-6 08810 ACOUSTICAL PLASTER: BASWAPHON (40 MM) OVER 1 1/2" INSULATION OVER GYP. BOARD
- APC-7 2' x 4' - ARMSTRONG ULTIMA REGULAR IN 9/16" SILHOUETTE XL GRID W/ 6" PANEL INSERTS AS SHOWN
- APC-8 2' x 6' ARMSTRONG OPTIMA REGULAR - 1" THICK, NRC - .90. IN 9/16" SILHOUETTE XL 1/8" GRID MATCH APC-7 - EXCEPT. REF. 086113: SPECIAL ACOUSTIC TREATMENT. APPLY SPECIAL ACOUSTIC MATERIAL TO TOP SIDE OF PANELS AND PROVIDE ISOLATORS FOR CEILING HANGERS:

- WDC-1 09 5428 WOOD GRILLE CEILING W/ 3/4" x 2 1/4" MEMBERS - 6 PER FOOT - NINEWOOD GRILL 1400 W/ 1" THICK ARMSTRONG OPTIMA PANELS FIT TO GRID SUPPORT ABOVE
- WDC-2 06 4216 FLUSH WOOD PANEL SOFFIT - MATCH WVP-1
- WDC-3 06 4216 OPAQUE WOOD PANEL TO MATCH WOOD ACOUST WALL PANEL
- GWB-1 PAINTED GYP. BOARD
- GWB-2 GYP. BOARD W/ COATING TO MATCH ADJACENT ACOUST. PLASTER

CONFORMED SET 01 JUL 2016

1	ADDENDUM 3-2	15 APR 2016
2	ISSUED FOR CONSTRUCTION (BP3)	15 MAR 2016
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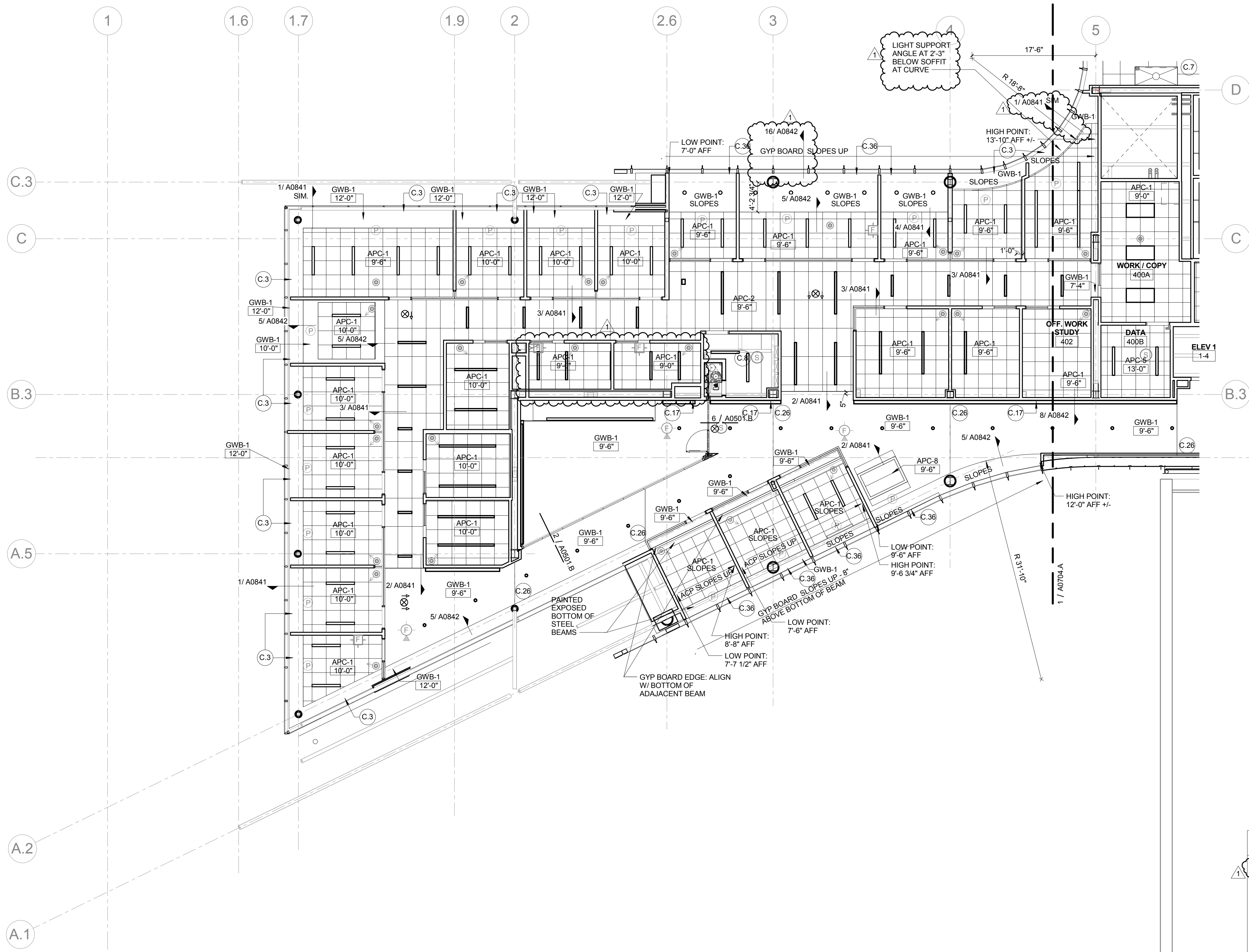


KEY PLAN

LEVEL 04 REFLECTED
CEILING PLAN AREA A

Project No.: 04561.01 Checked by:

A0704.A



1 LEVEL 04 REFLECTED CEILING PLAN - AREA B
1/8" = 1'-0"

- KEYED NOTE LEGEND - REFLECTED CEILING PLAN**
- C.1 122413 TYPE 1 SHADES: MOTORIZED ROLLER SHADES IN CONTINUOUS RECESSED POCKET (GFCI)
 - C.2 122413 TYPE 2 SHADES MOTORIZED DOUBLE ROLLER SHADES: SURFACE MOUNTED W/ CUSTOM COLOR FASCIA
 - C.3 122413 TYPE 3 SHADES: MANUAL SHADES IN RECESSED POCKET
 - C.4 122413 TYPE 4 SHADES: MULLION MOUNTED SHADE IN CONTINUOUS POCKET
 - C.5 CEILING MOUNTING SUSPENSION FOR LCD SCREEN- PROVIDE STEEL SUPPORT ABOVE CEILING
 - C.6 EXHAUST HOOD LOCATION - REFER TO FOOD SERVICE DRAWINGS
 - C.7 FUME HOOD LOCATION - HOOD ENCLOSURE EXTENDS 6" ABOVE CEILING
 - C.8 EXPOSED STRUCTURE
 - C.9 083333 SIDE COILING DOOR TRACK
 - C.10 ACOUSTICAL PANEL CEILING ABOVE WOOD GRILLE CEILING. 1" THICK
 - C.11 ACOUSTICAL ISOLATION CEILING: 2 LAYERS 1/2" GYP BOARD CEILING ON SUSPENDED METAL FRAMING SUSPENSION SYSTEM TO BE ACOUSTICALLY ISOLATED FROM STRUCTURE BY SPRING/NEOPRENE ISOLATION HANGER - KINETIC NOISE CONTROL MODEL. MUTA HANGERS: PROVIDE CONTINUOUS LAYERS OF 3/2" FIBERGLASS ACOUSTIC BATT'S. REFER TO DETAIL 16 SHEET A0842
 - C.12 6" PANEL WHERE SHOWN @ 10'-6" O.C. MATCH CEILING TYPE
 - C.13 RECESSED DRAPEY TRACK AND CURTAINS
 - C.15 122413 TYPE 5 MOTORIZED DOUBLE ROLLER SHADE IN RECESSED POCKET.
 - C.16 WOOD CEILING AT BOTTOM OF STAIRS - REFER TO STAIR 1 DRAWINGS AND DETAILS SHEET A084
 - C.17 CONTINUOUS COVE TYPE LIGHTING FIXTURE TAPERED W/ GYP BOARD CEILING. REFER TO ELECTRICAL LIGHTING DRAWINGS AND TO DETAIL AT WALL SHEET A0842
 - C.18 CEILING IN COLD ROOM BY COLD ROOM MFG
 - C.19 G57500 MET ALUM. BEAM ENCLOSURE
 - C.20 UNISTRUT MOUNTED TO CEILING W/ STEEL ANGLE HANGERS AND KICKERS ABOVE FOR SUPPORT
 - C.21 STAINLESS STEEL STEAM CAPTURE HOOD ABOVE AUTOCLAVE
 - C.22 REFER TO DETAIL 6A0452
 - C.23 122413 TYPE 6 SHADES: MANUAL SHADES IN RECESSED POCKET AT INTERIOR GLAZING. POCKET CONTINUOUS ACROSS OPENING
 - C.24 INSULATED SOFFIT - SIMILAR TO WA-14 ON SHEET A0400
 - C.25 CEILING MOUNTED SURGICAL LIGHT - SEE EQUIPMENT LIST (OFCI) - PROVIDE STRUCTURAL STEEL SUPPORT TO DECK - 4 - 2X2X 1/4" STEEL ANGLE HANGER WITH 4 - ANGLE KICKERS 2 X 2 X 1/4". AND MOUNTING PLATE PER MANUFACTURER. SEE DETAIL 01A0814.
 - C.26 CONTROL JOINT LOCATION
 - C.27 ABOVE CEILING WHERE INDICATED WITH DASHED LINE: PROVIDE 2 HOUR RATED HORIZONTAL GYP BOARD ENCLOSURE AROUND DUCTS SERVING FLOOR GRILLES ON LEVEL ABOVE. REFER TO DETAIL SHEET A1002
 - C.28 ABOVE CEILING WHERE INDICATED WITH DASHED LINE: PROVIDE 2 HOUR RATED HORIZONTAL GYP BOARD ENCLOSURE AROUND STANDPIPE RUN. REFER TO DETAIL SHEET A1002
 - C.29 PROVIDE 2 HOUR RATED HORIZONTAL GYP BOARD ENCLOSURE AT BOTTOM OF SHAFT. REFER TO DETAIL SHEET A1002
 - C.30 122413 TYPE 7 SHADES MOTORIZED DOUBLE ROLLER SHADES: SURFACE MOUNTED W/ CUSTOM COLOR FASCIA
 - C.31 122413 TYPE 8 MOTORIZED DOUBLE ROLLER SHADE IN RECESSED POCKET.
 - C.32 SPECIAL ACOUSTICAL SEPARATION CEILING: APPLY KINETICS NOISE CONTROL QUIET TILE CAC-51 TO TOP SIDE OF ACOUSTICAL PANELS. ISOLATE CEILING TILE FROM STRUCTURE ABOVE WITH KNC AF HANGERS.
 - C.33 REVEAL TRIM AROUND DIAGONAL BRACE PENETRATION THROUGH CEILING - LEAVE 3/4" GAP ALL SIDES
 - C.34 LABORATORY OVERHEAD SERVICE CARRIER - REFER TO ENLARGED FLOOR PLANS.
 - C.35 EMERGENCY SAFETY SHOWER - PIPING TO HEAD ABOVE CEILING
 - C.36 122413 TYPE 3 SHADES: MANUAL SHADES - STEPPED WITH SLOPE IN CONT. SLOPED OPENING

CEILING LEGEND

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- APC-2 2' x 2' - ARMSTRONG ULTIMA TEGULAR IN 9/16" SILHOUETTE XL 1/8" GRID
- APC-3A 2' x 2' - ARMSTRONG ULTIMA HEALTH ZONE IN 9/16" GRID
- APC-3B 2' x 2' - ARMSTRONG ULTIMA HEALTH ZONE TEGULAR 9/16" GRID
- APC-4 NOT USED
- APC-5 2' x 2' - ARMSTRONG FINE FISSURED IN 15/16" GRID
- APC-6 083310 ACOUSTICAL PLASTER: BASWAPHON (40 MM) OVER 1 1/2" INSULATION OVER GYP. BOARD
- APC-7 2' x 4' - ARMSTRONG ULTIMA TEGULAR IN 9/16" SILHOUETTE XL GRID W/ 6" PANEL INSERTS AS SHOWN
- APC-8 2' x 8' ARMSTRONG OPTIMA TEGULAR - 1" THICK, NRC - .90, IN 9/16" SILHOUETTE XL 1/8" GRID MATCH APC-7 - EXCEPT. REF. 095113- SPECIAL ACOUSTIC TREATMENT: APPLY SPECIAL ACOUSTIC MATERIAL TO TOP SIDE OF PANELS AND PROVIDE ISOLATORS FOR CEILING HANGERS:
- WDC-1 09 5426 WOOD GRILLE CEILING W/ 3/4" x 2 1/4" MEMBERS - 6 PER FOOT - NINEWOOD GRILL 1400 W/ 1" THICK ARMSTRONG OPTIMA PANELS FIT TO GRID SUPPORT ABOVE
- WDC-2 06 4216 FLUSH WOOD PANEL SOFFIT - MATCH WVP-1
- WDC-3 06 4216 OPAQUE WOOD PANEL TO MATCH WOOD ACOUST WALL PANEL
- GWB-1 PAINTED GYP. BOARD
- GWB-2 GYP. BOARD W/ COATING TO MATCH ADJACENT ACOUST. PLASTER

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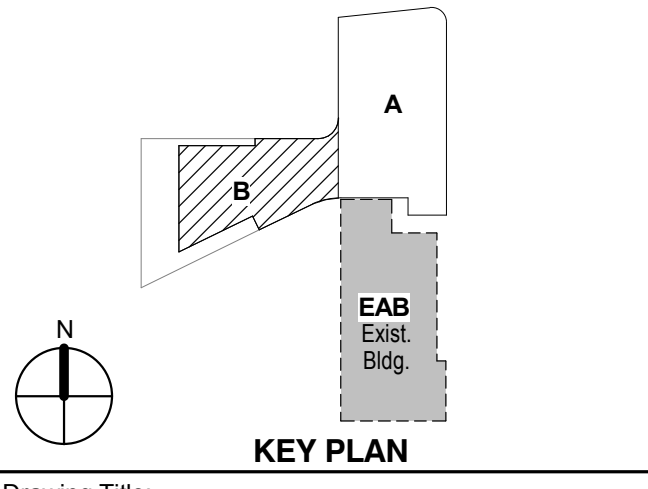
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1	ADDENDUM 3-2	15 APR 2016
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No.	Description	Date



KEY PLAN

**LEVEL 04 REFLECTED
CEILING PLAN AREA B**

Project No.: 04561.01 Checked by:

CONFORMED SET 01 JUL 2016

ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016

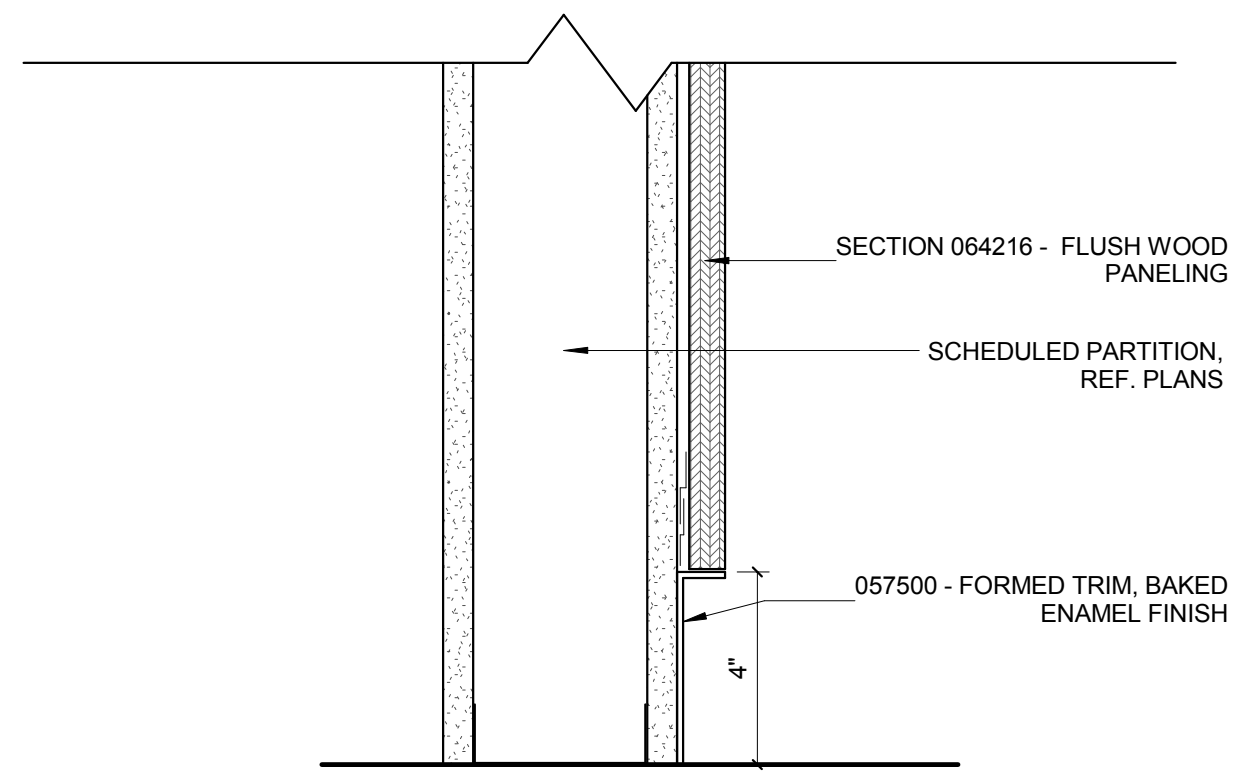
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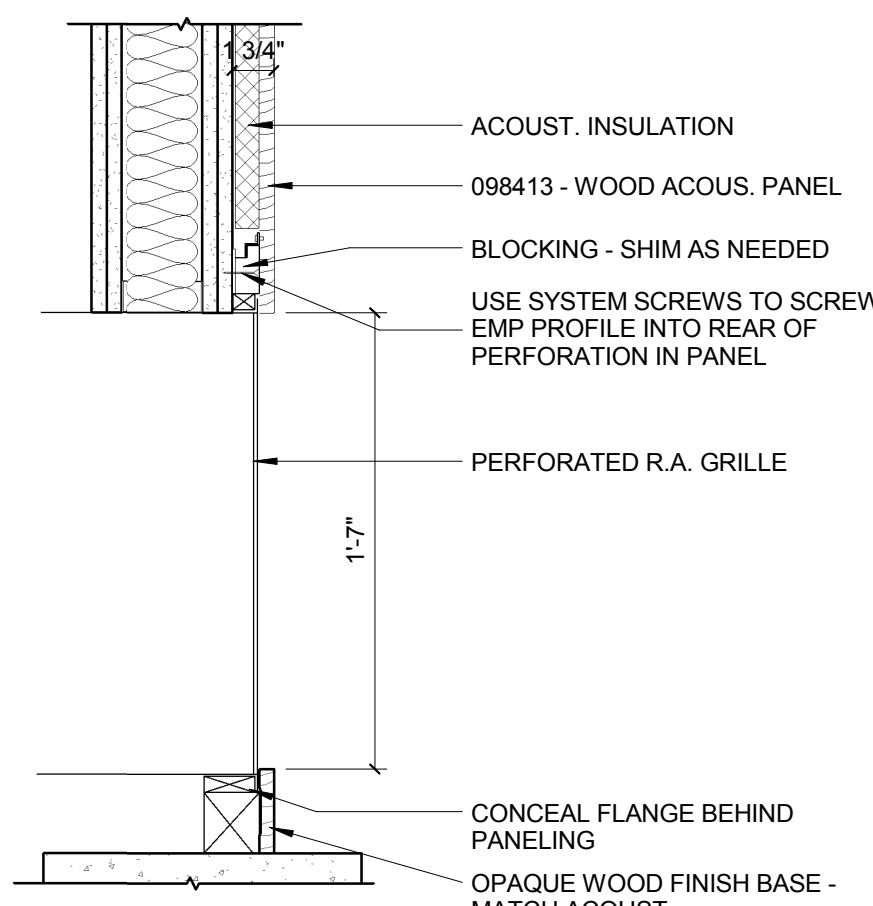
INTERIOR DETAILS

Project No.: 04561.01 Checked by:

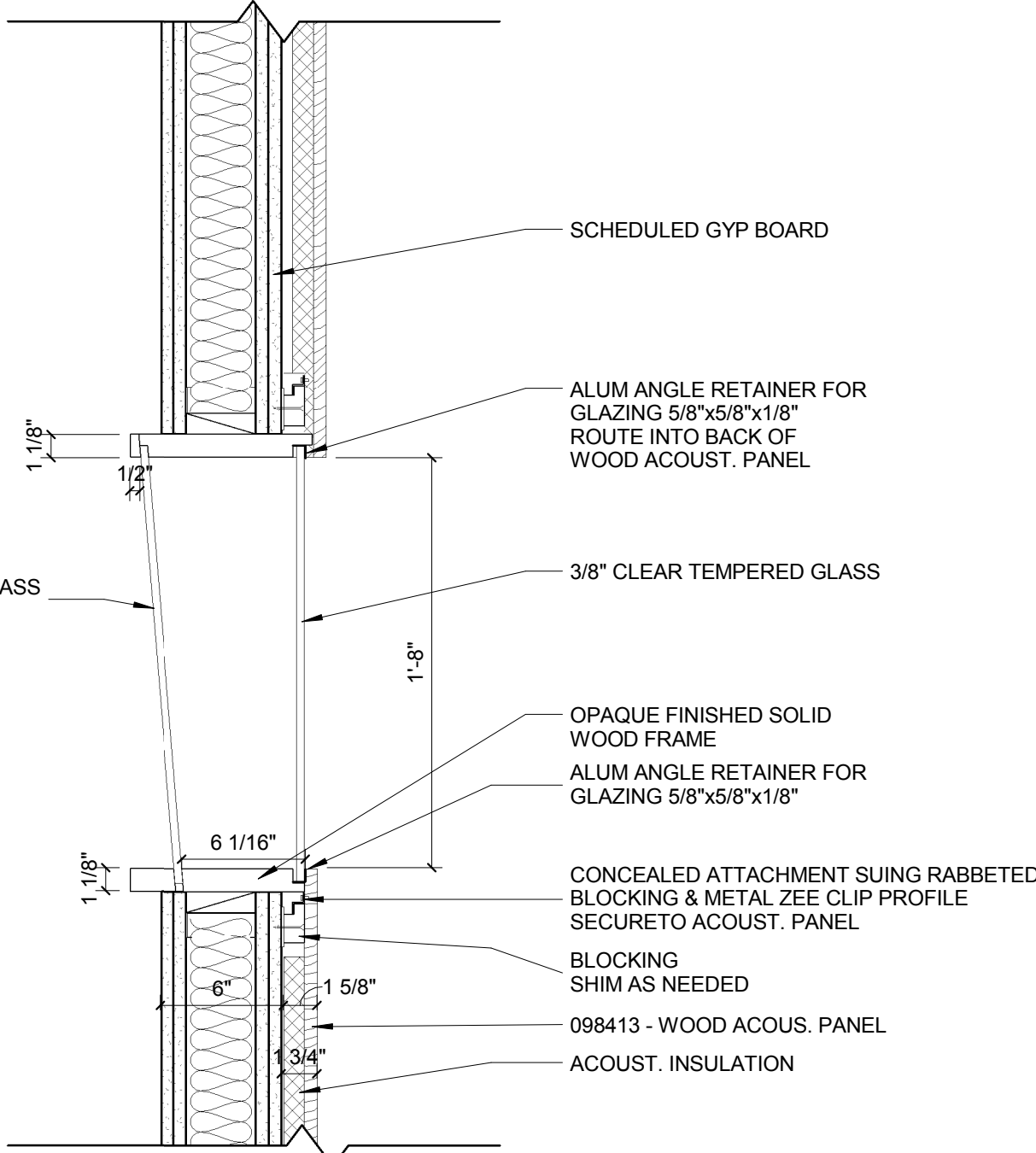
A0801



3 TYP. FLUSH WOOD PANEL BASE DETAIL
3" = 1'-0"

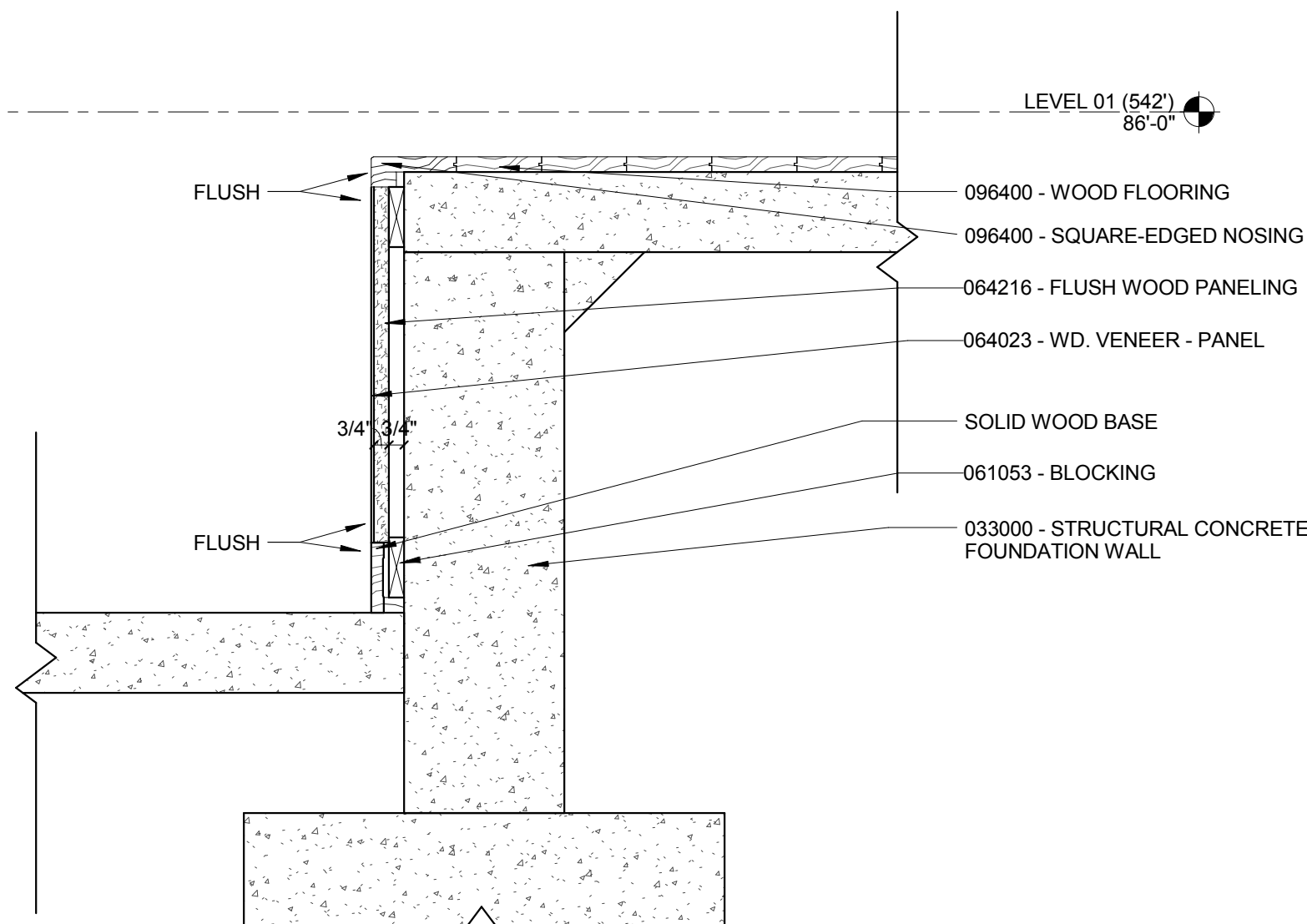
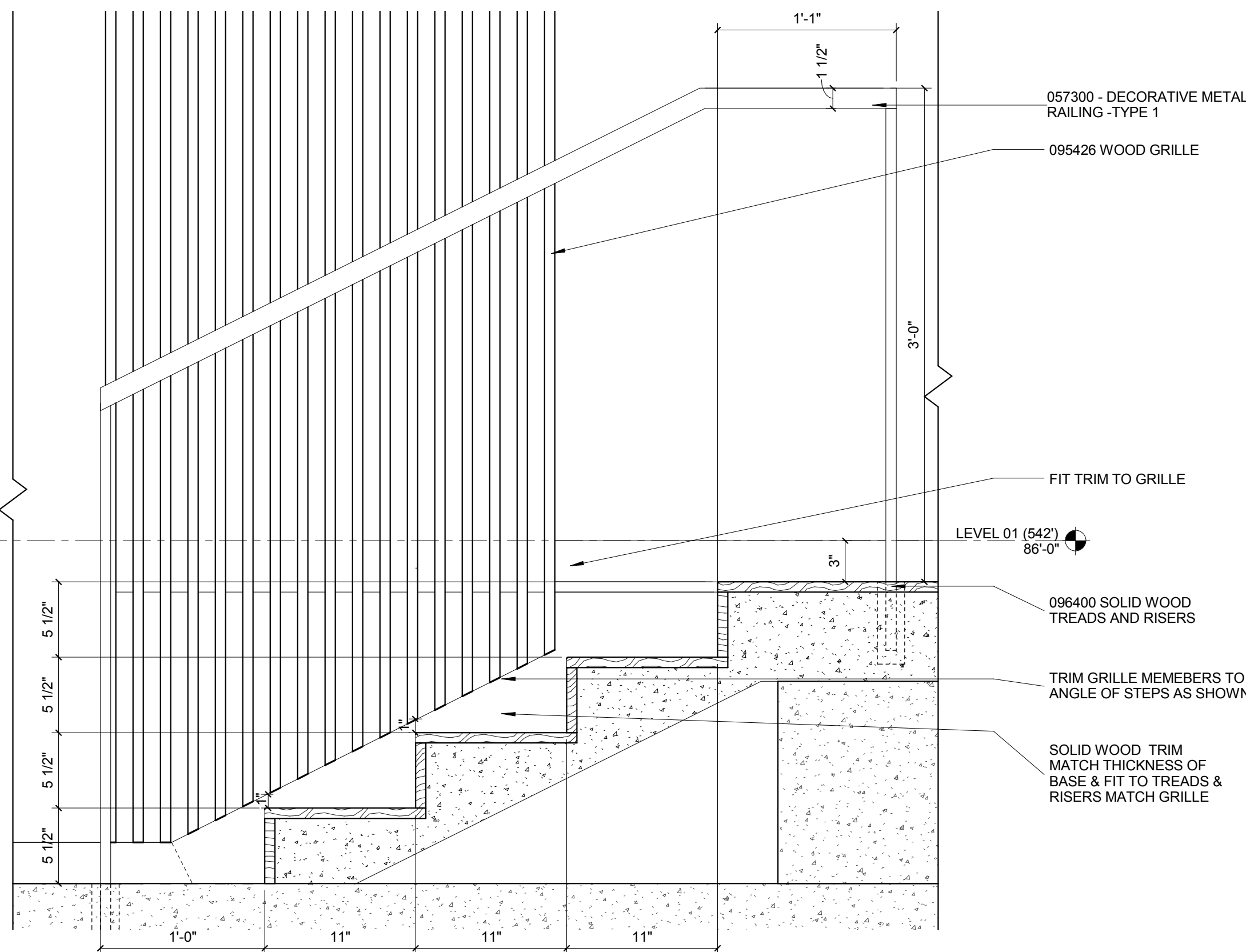


6 LECTURE HALL - RETURN AIR GRILLE DETAIL
1 1/2" = 1'-0"

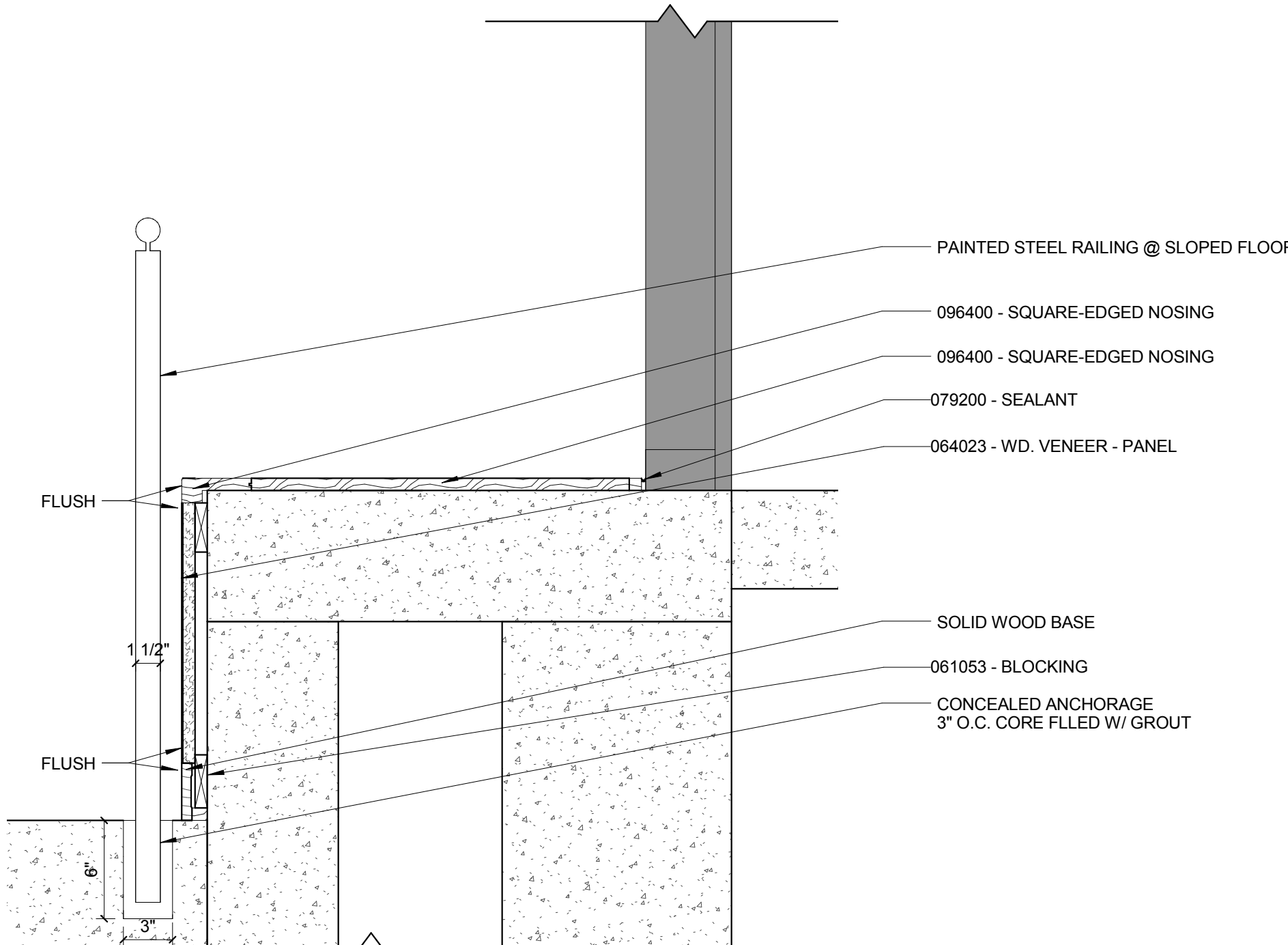


5 LECTURE HALL - CONTROL ROOM WINDOW
1 1/2" = 1'-0"

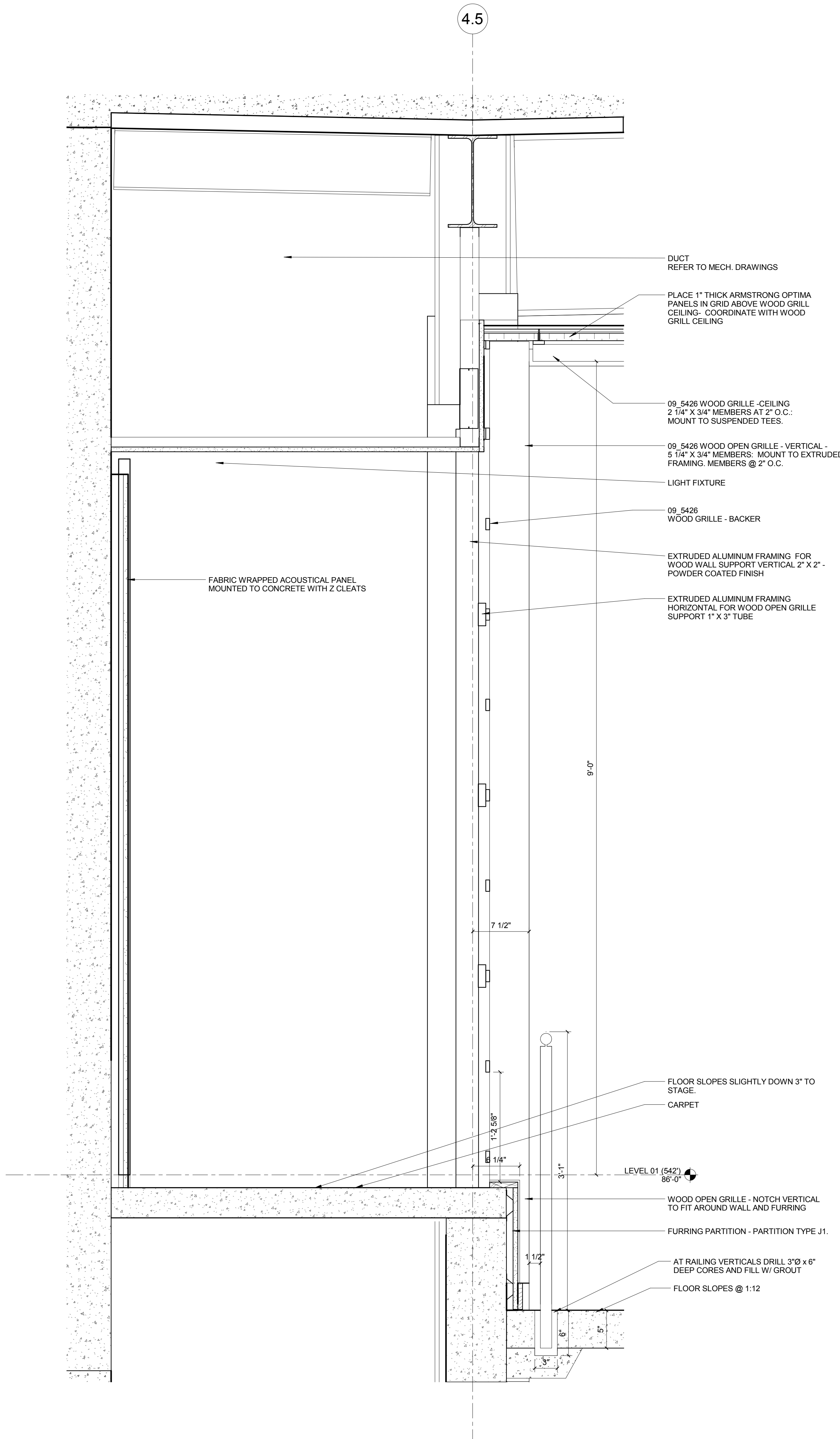
2 LECTURE HALL STAGE STAIR
1 1/2" = 1'-0"



4 EDGE OF STAGE
1 1/2" = 1'-0"

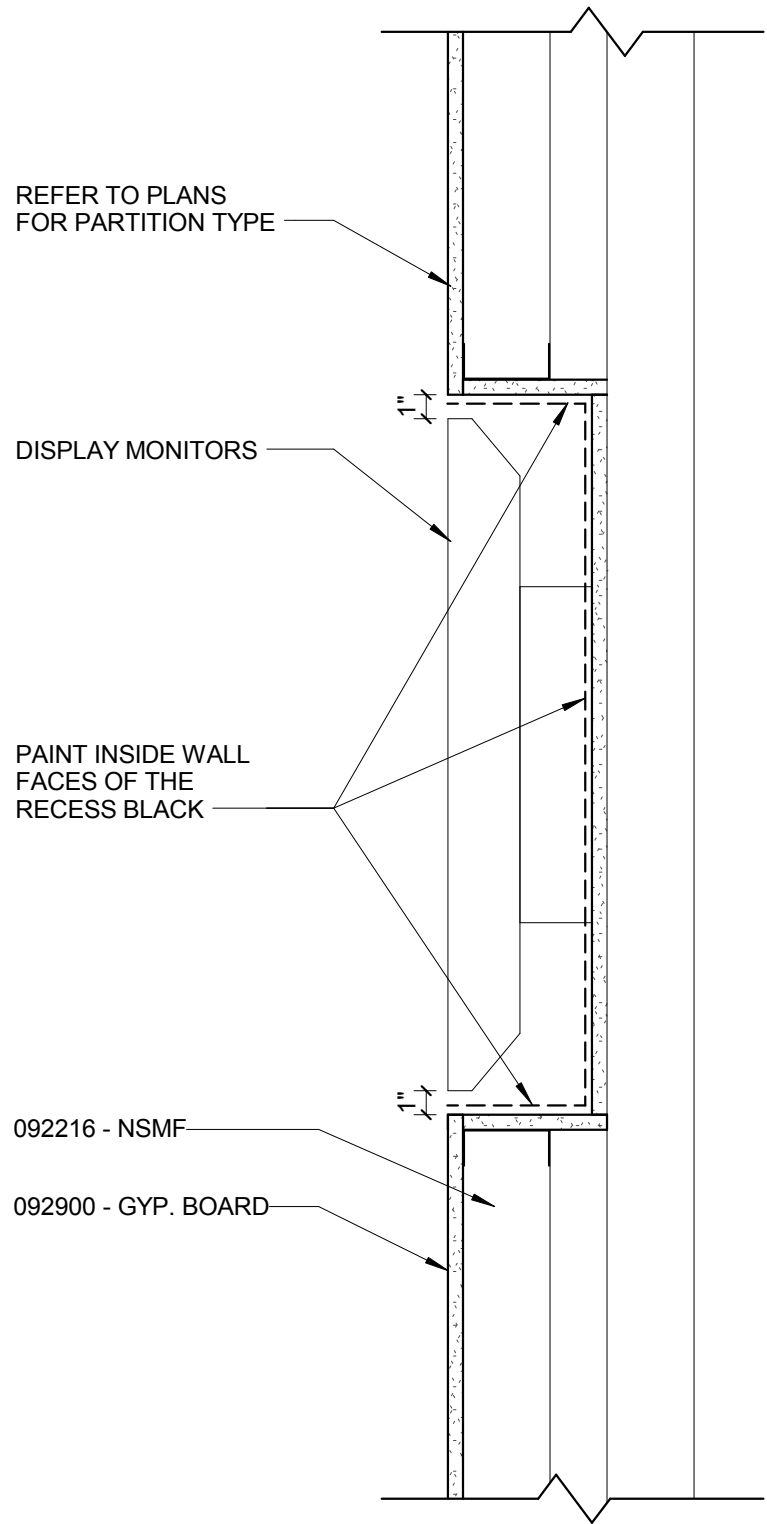


1 SILL DETAIL AT LECTURE HALL
1 1/2" = 1'-0"



9 A0801 Lecture hall detail section
1 1/2" = 1'-0"

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1 MONITOR SCREEN RECESS
1 1/2" = 1'-0"



Webster University
Interdisciplinary Science
Building

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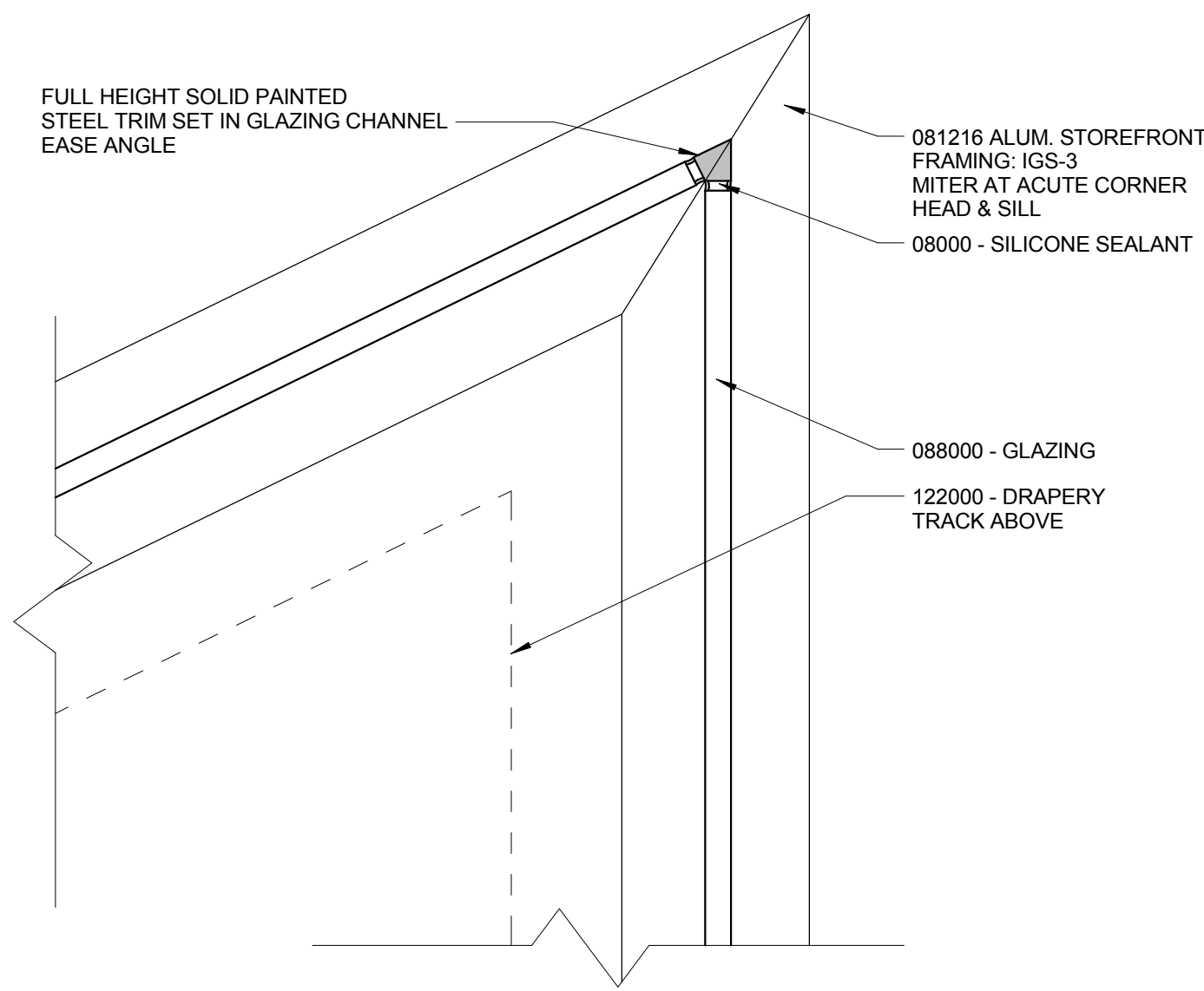
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-	ISSUED FOR CONSTRUCTION (BP3)	15 MAR 2016
No.	Description	Date

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INTERIOR DETAILS

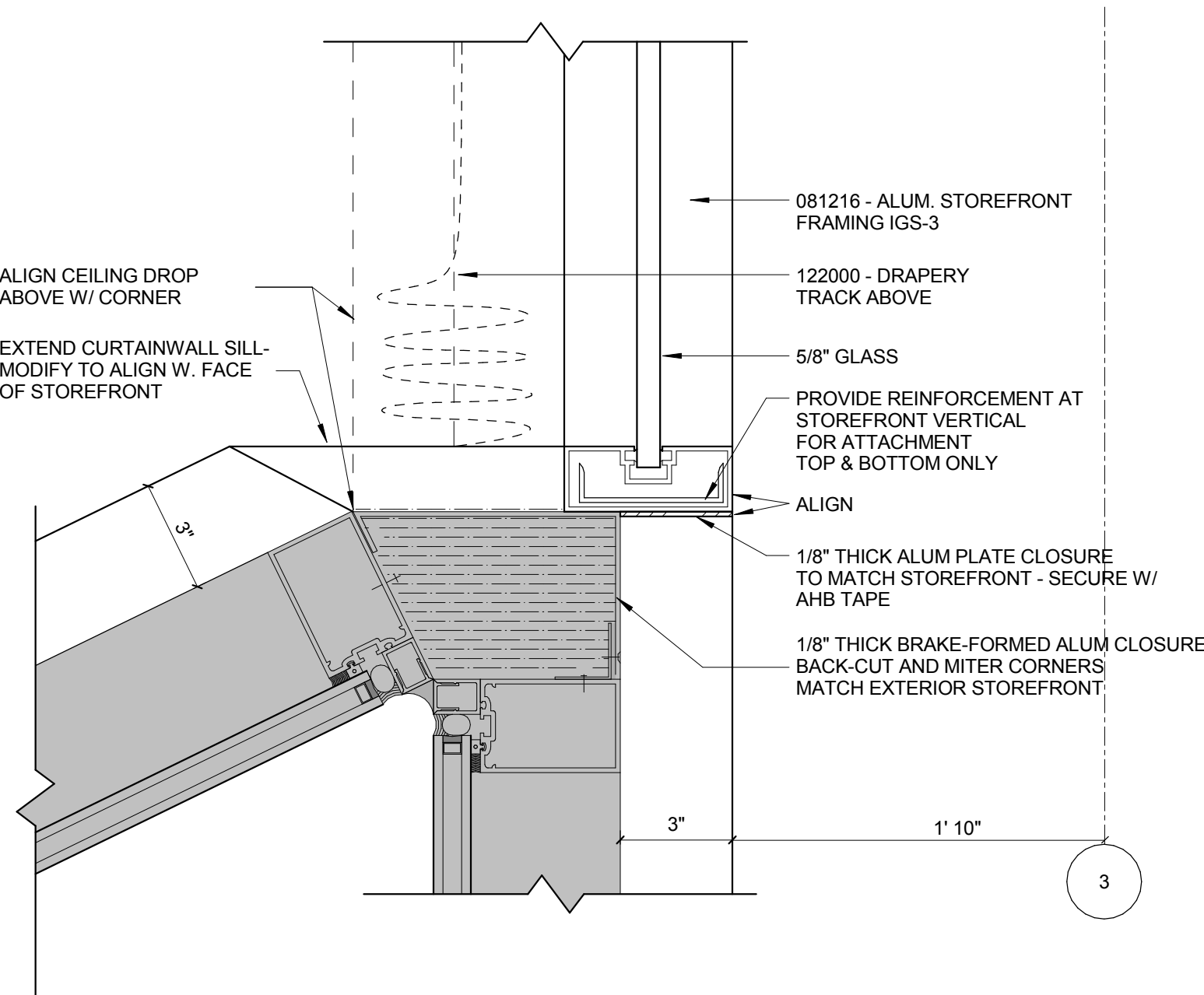
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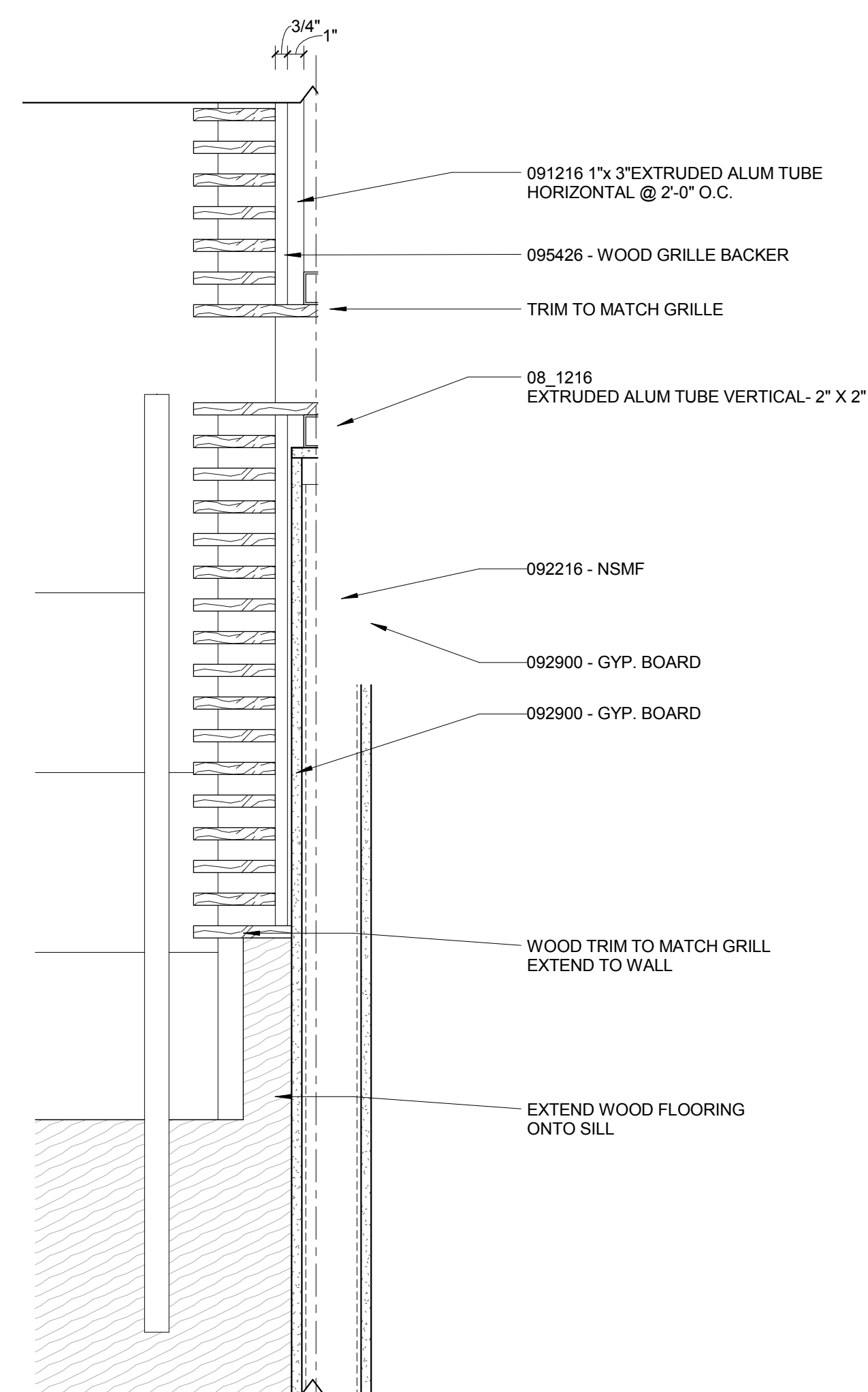
18 CONFERENCE ROOM - MITERED CORNER

3" = 1'-0"



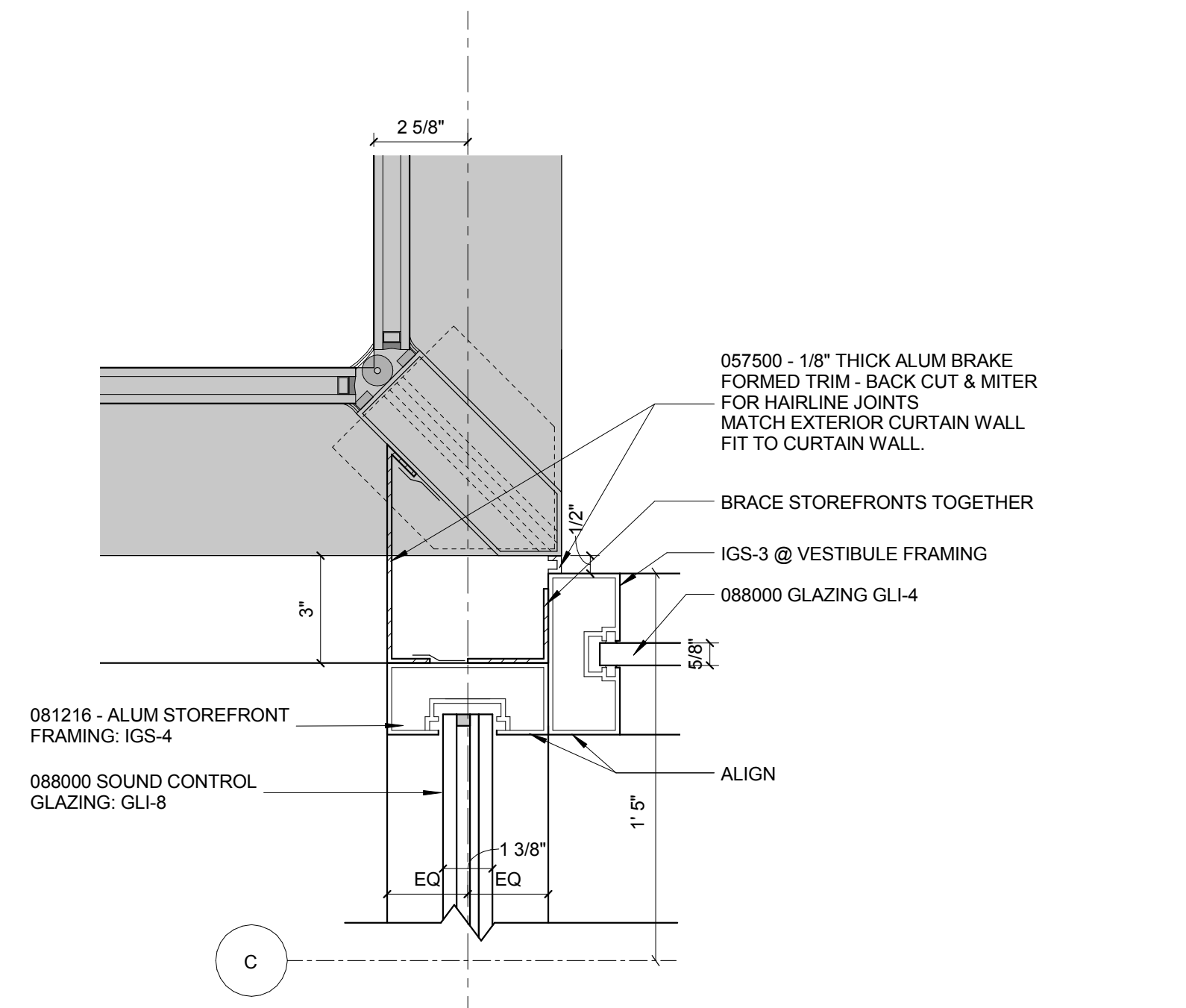
17 EXTERIOR CORNER AT CONFERENCE ROOM

3" = 1'-0"



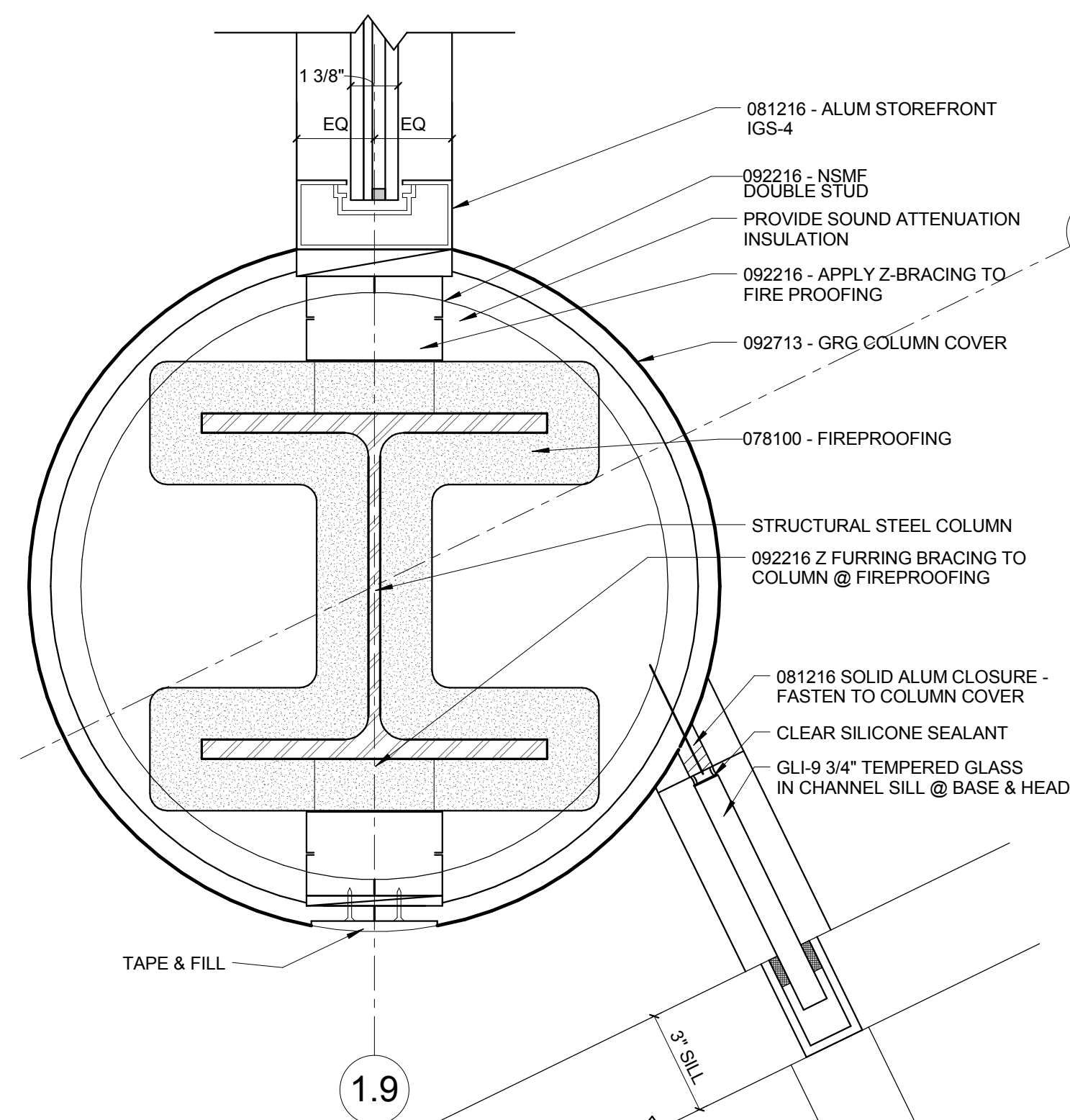
16 WOOD GRILLE AT STAGE STAIR

1 1/2" = 1'-0"



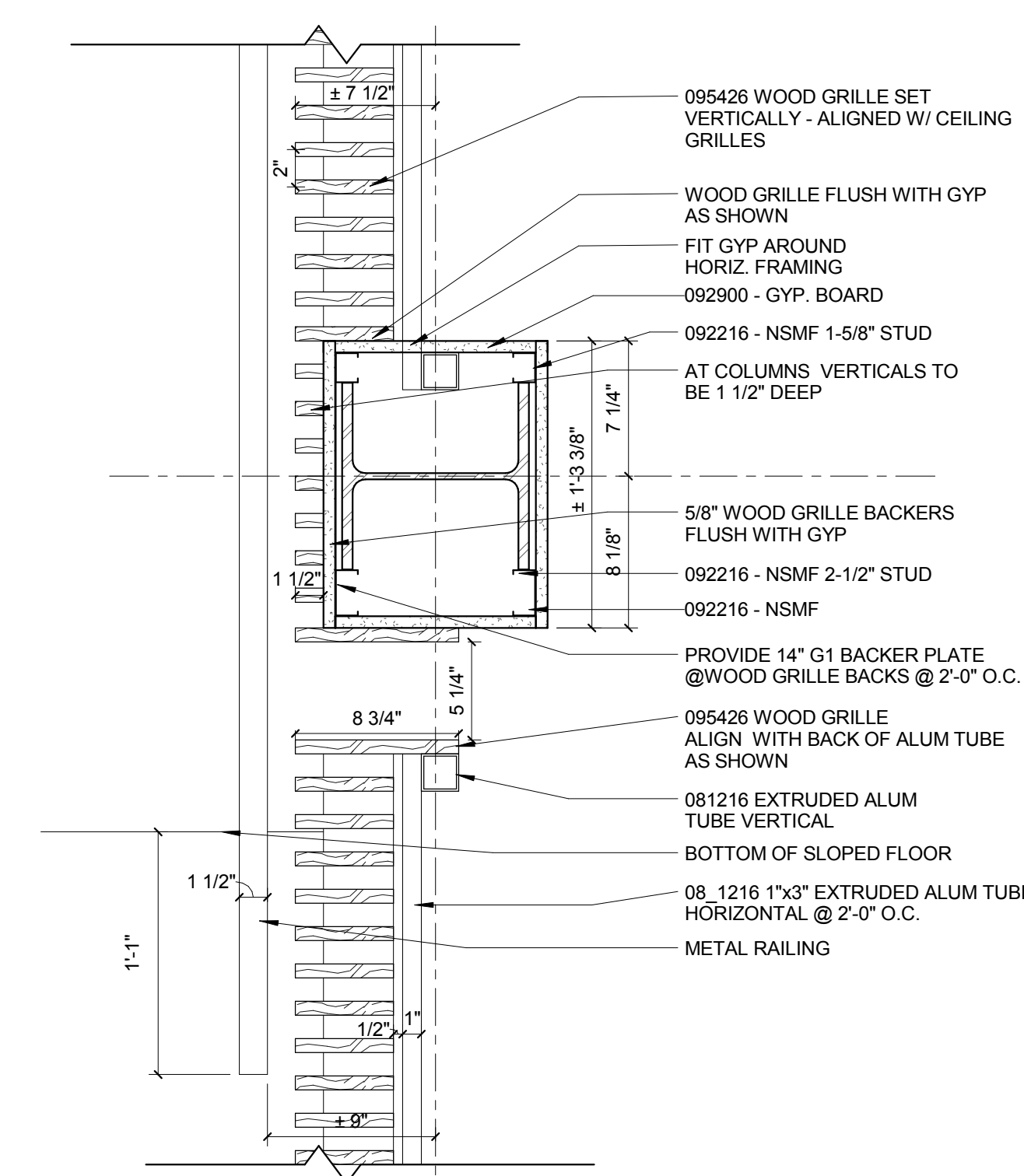
13 PLAN DETAIL - L02 @ EXTERIOR

3" = 1'-0"



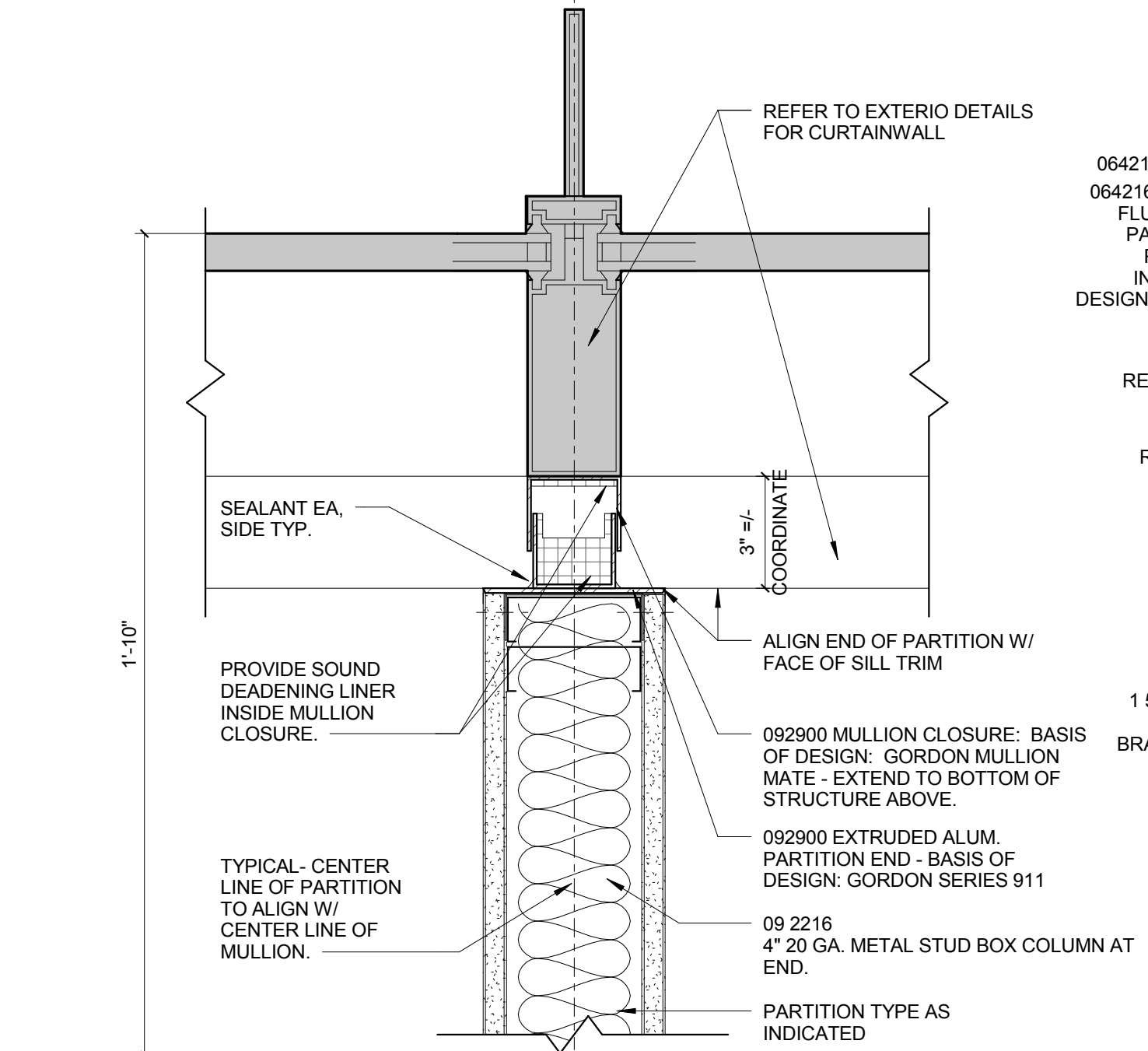
12 COLUMN AT ENTRY

3" = 1'-0"



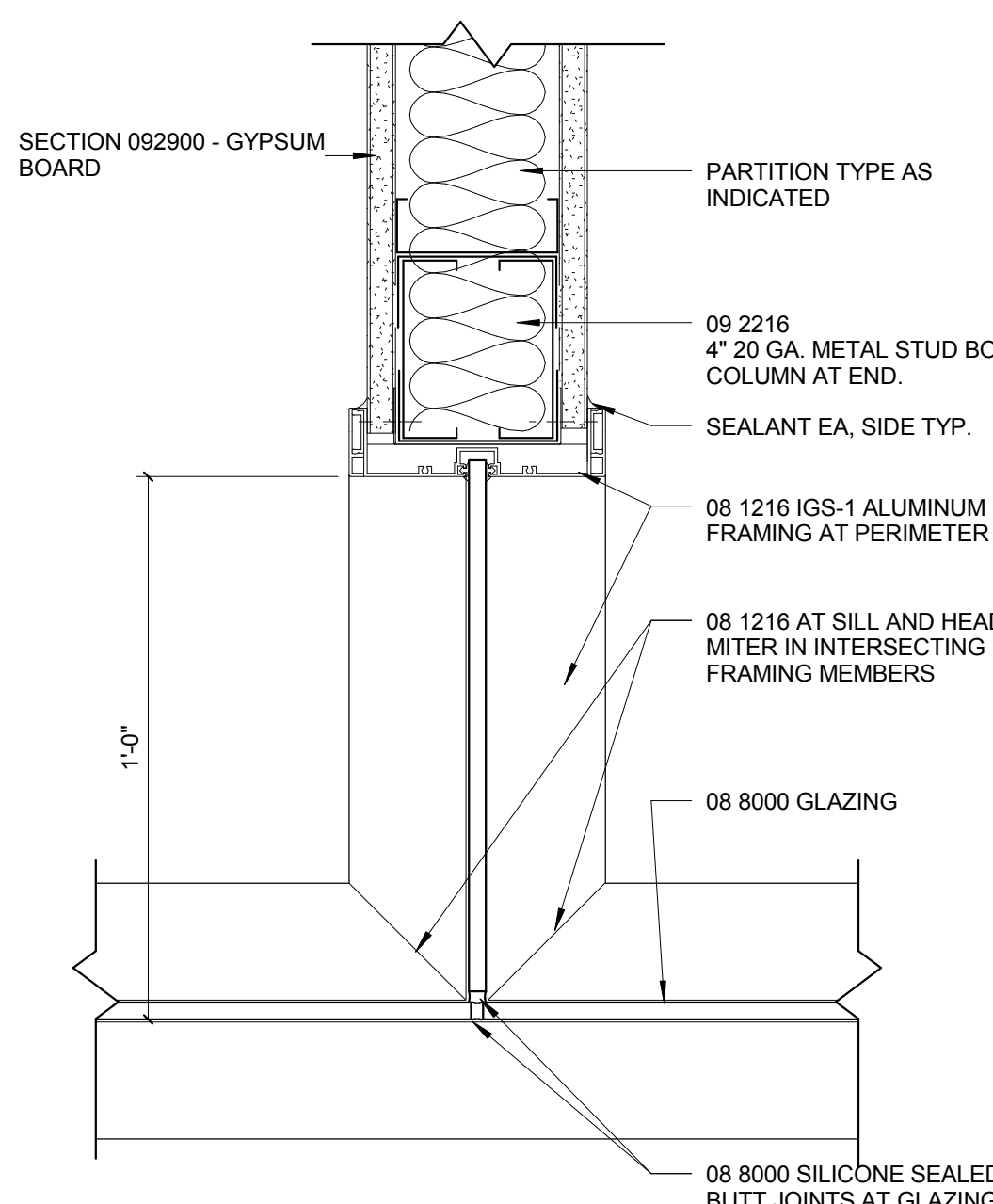
11 PLAN DETAIL - WOOD GRILLE AT COLUMN

1 1/2" = 1'-0"



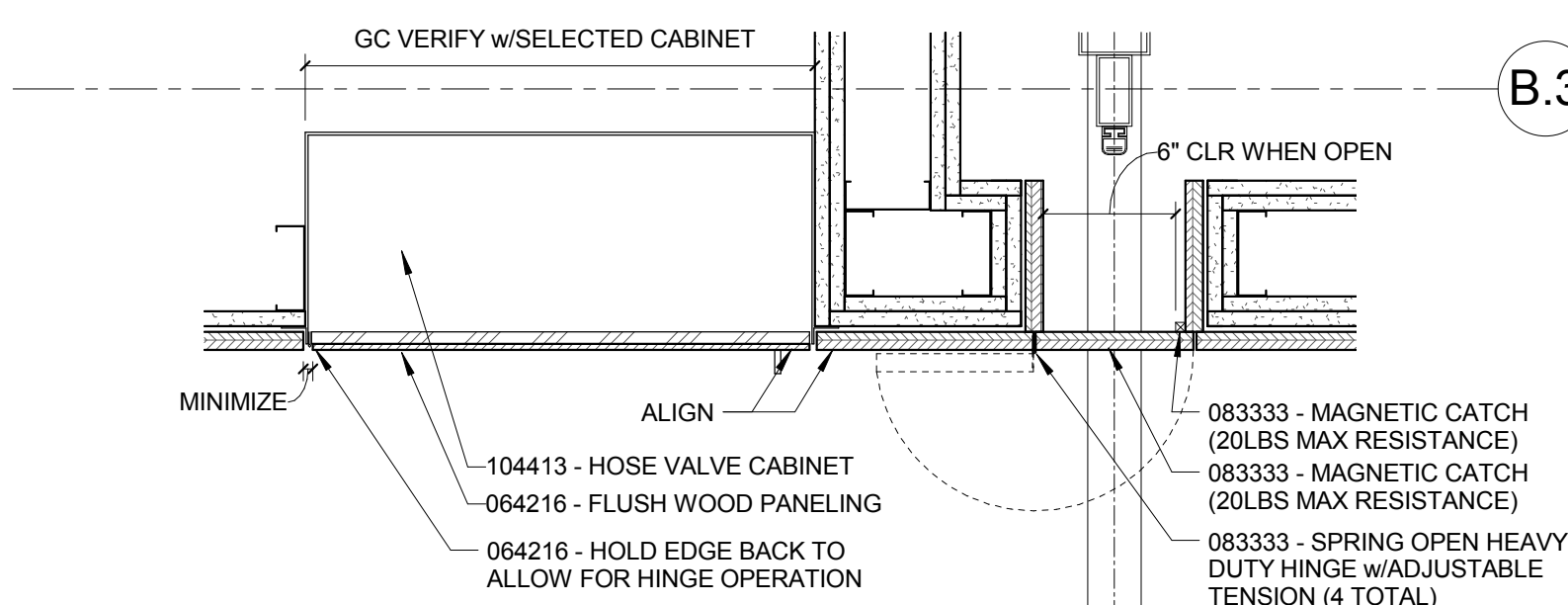
9 PLAN DETAIL AT EXTERIOR CURTAINWALL

3" = 1'-0"



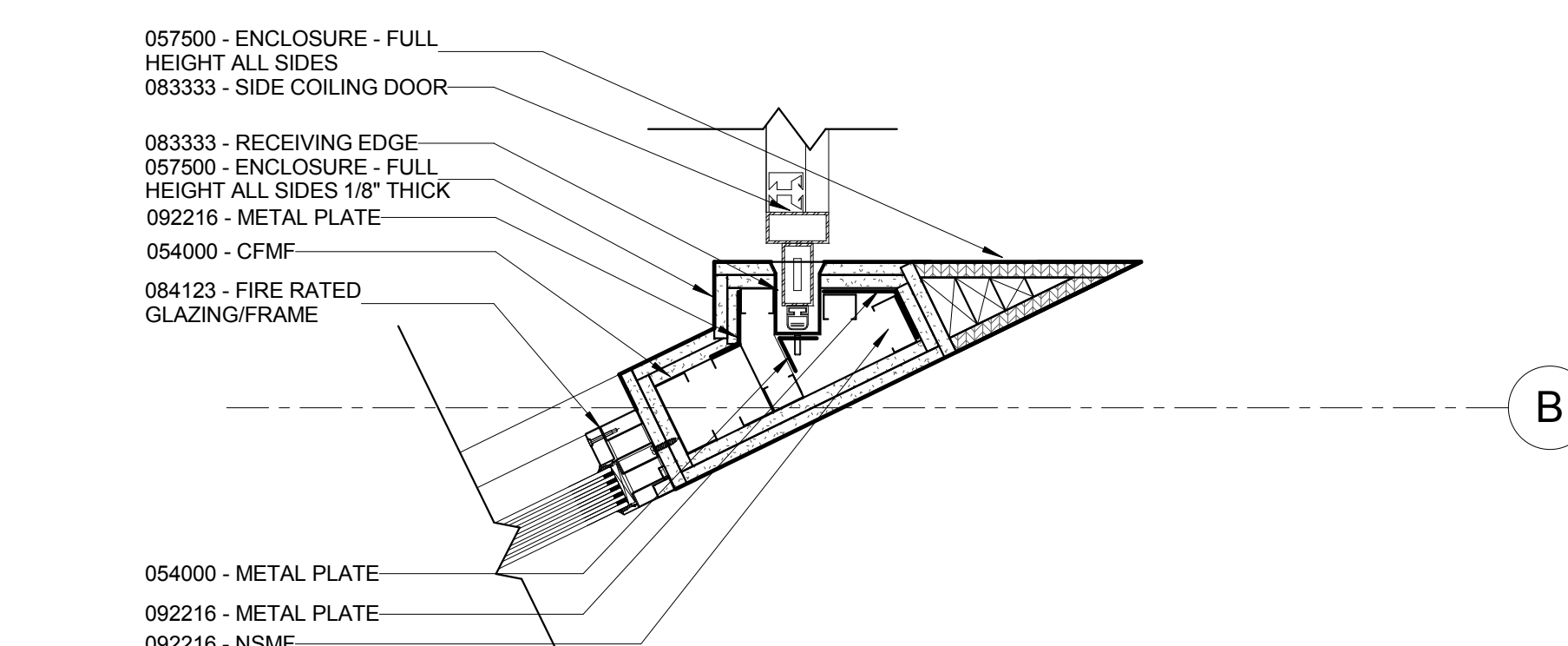
8 PLAN DETAIL AT GLAZING INTERSECTION

3" = 1'-0"



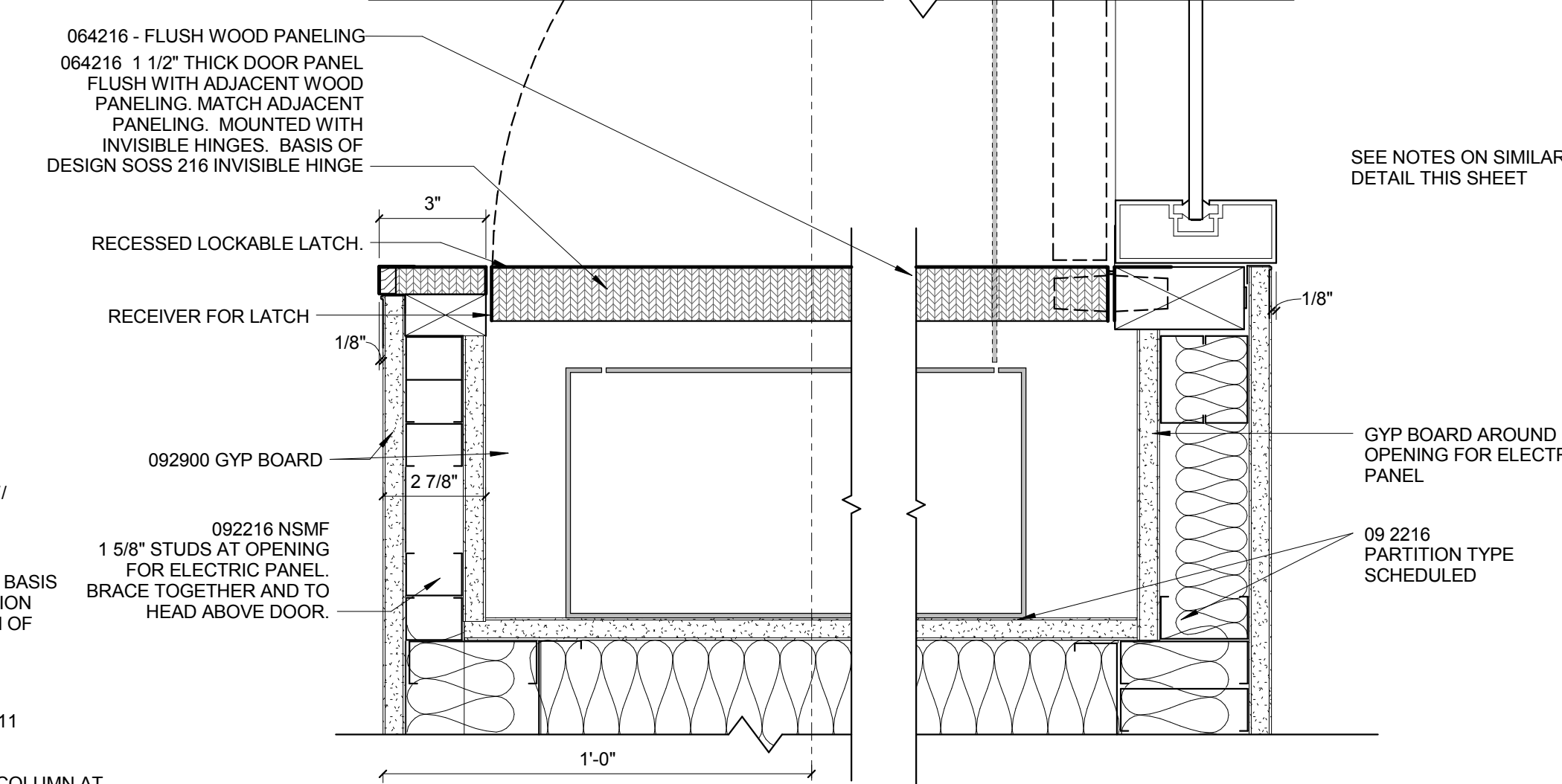
7 PLAN DETAIL - SIDE COILING POCKET/HOSE VALVE CAB

1 1/2" = 1'-0"



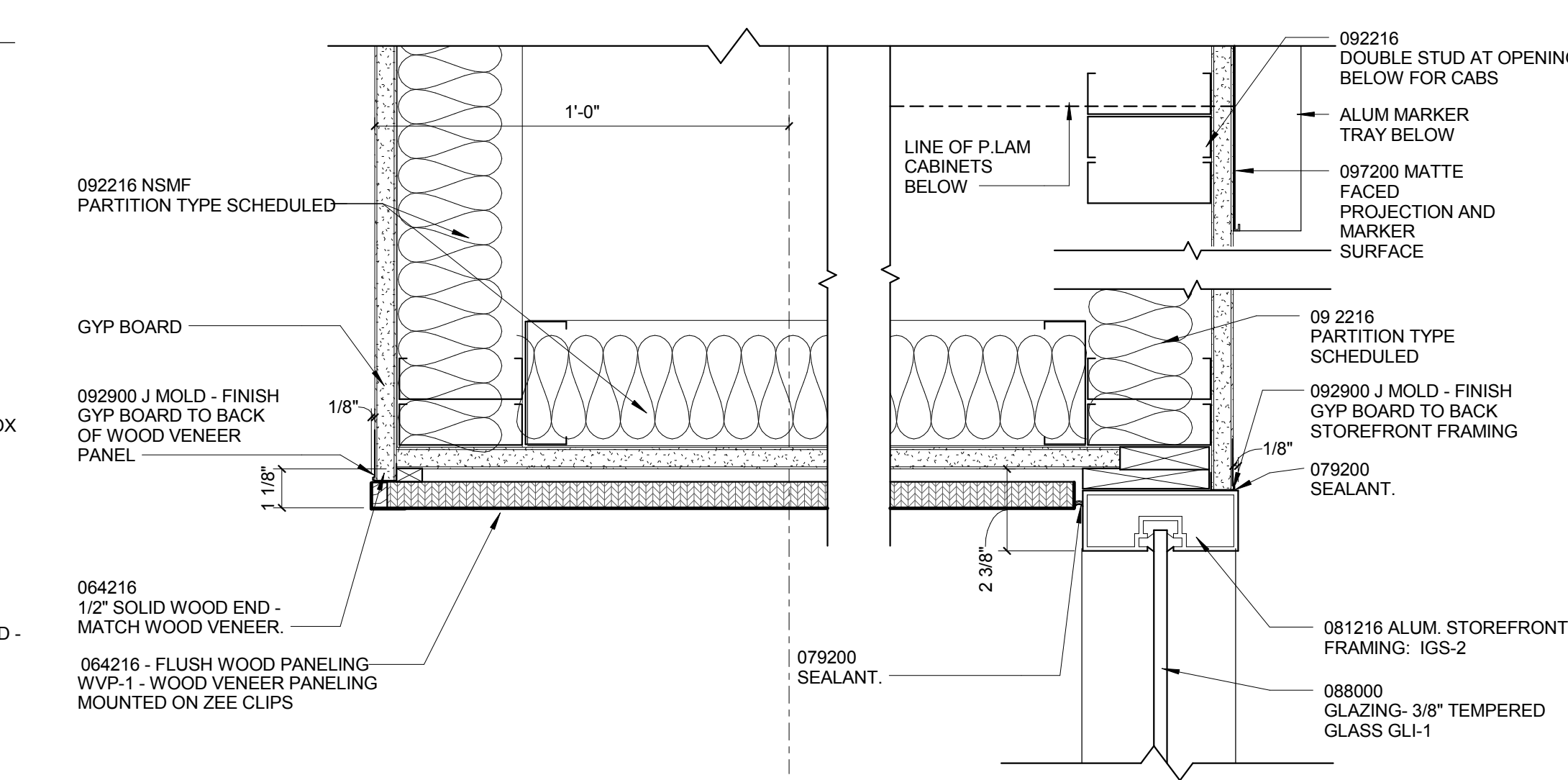
6 PLAN DETAIL - RATED GLAZING/SIDE COILING INTERSECTION

1 1/2" = 1'-0"



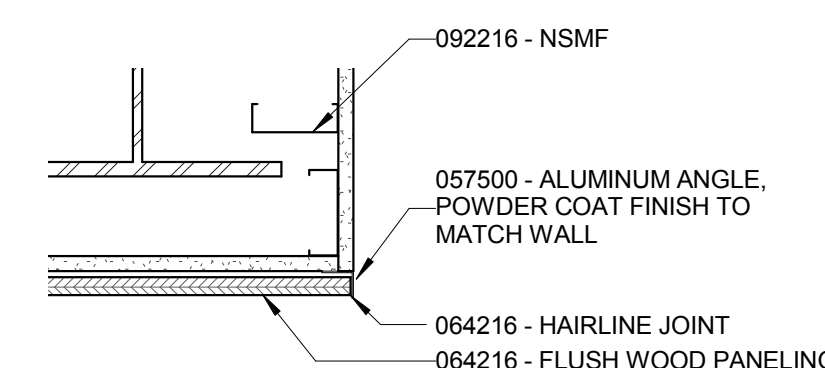
4 PLAN DETAIL AT WOOD JAMB-ELECTRIC PANEL

3" = 1'-0"



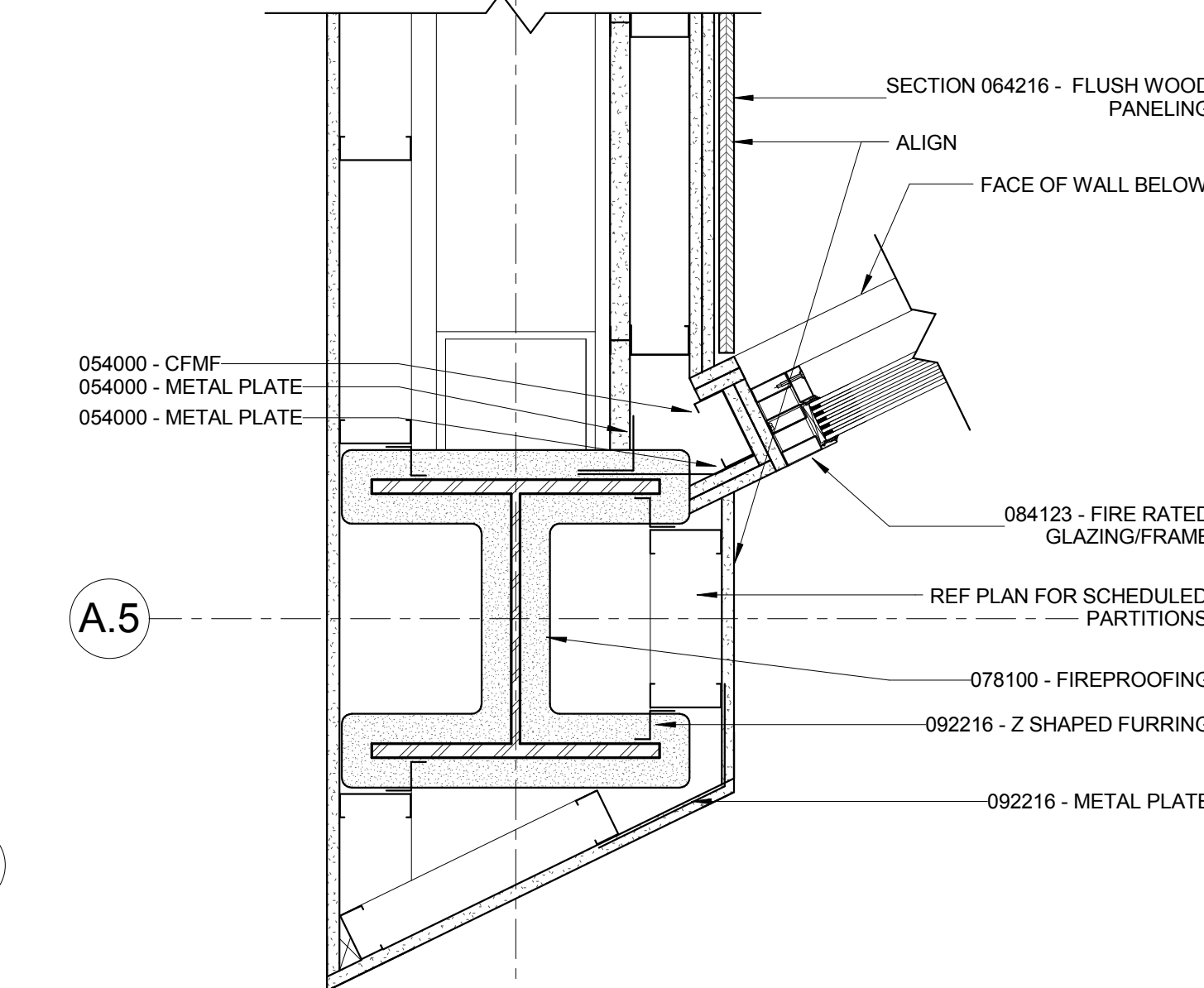
3 PLAN DETAIL AT WOOD JAMB

3" = 1'-0"



2 PLAN DETAIL - TYP. WOOD PANEL OUTSIDE CORNER TO GWB

1 1/2" = 1'-0"



1 PLAN DETAIL - RATED GLAZING @ COLUMN

1 1/2" = 1'-0"

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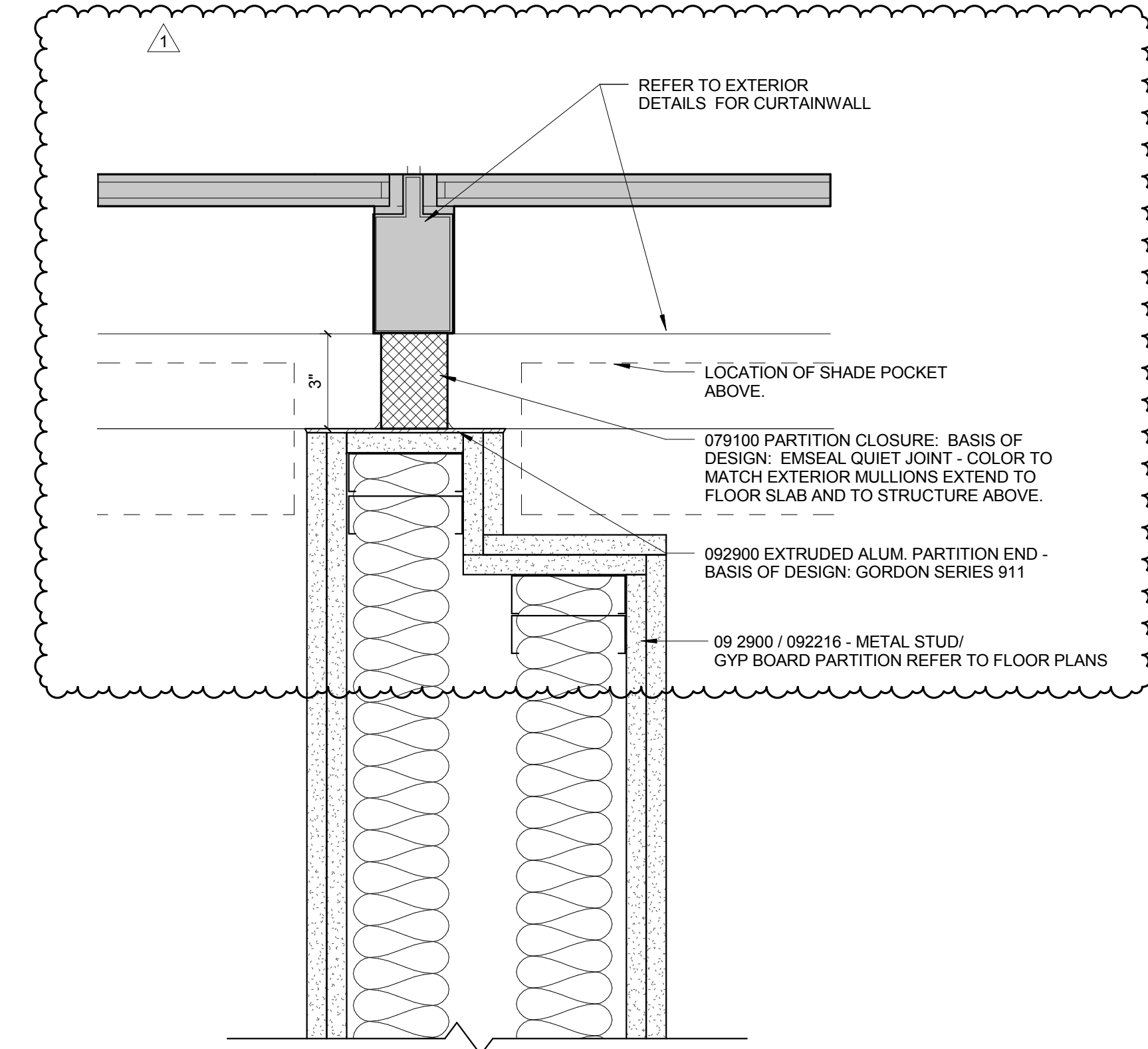
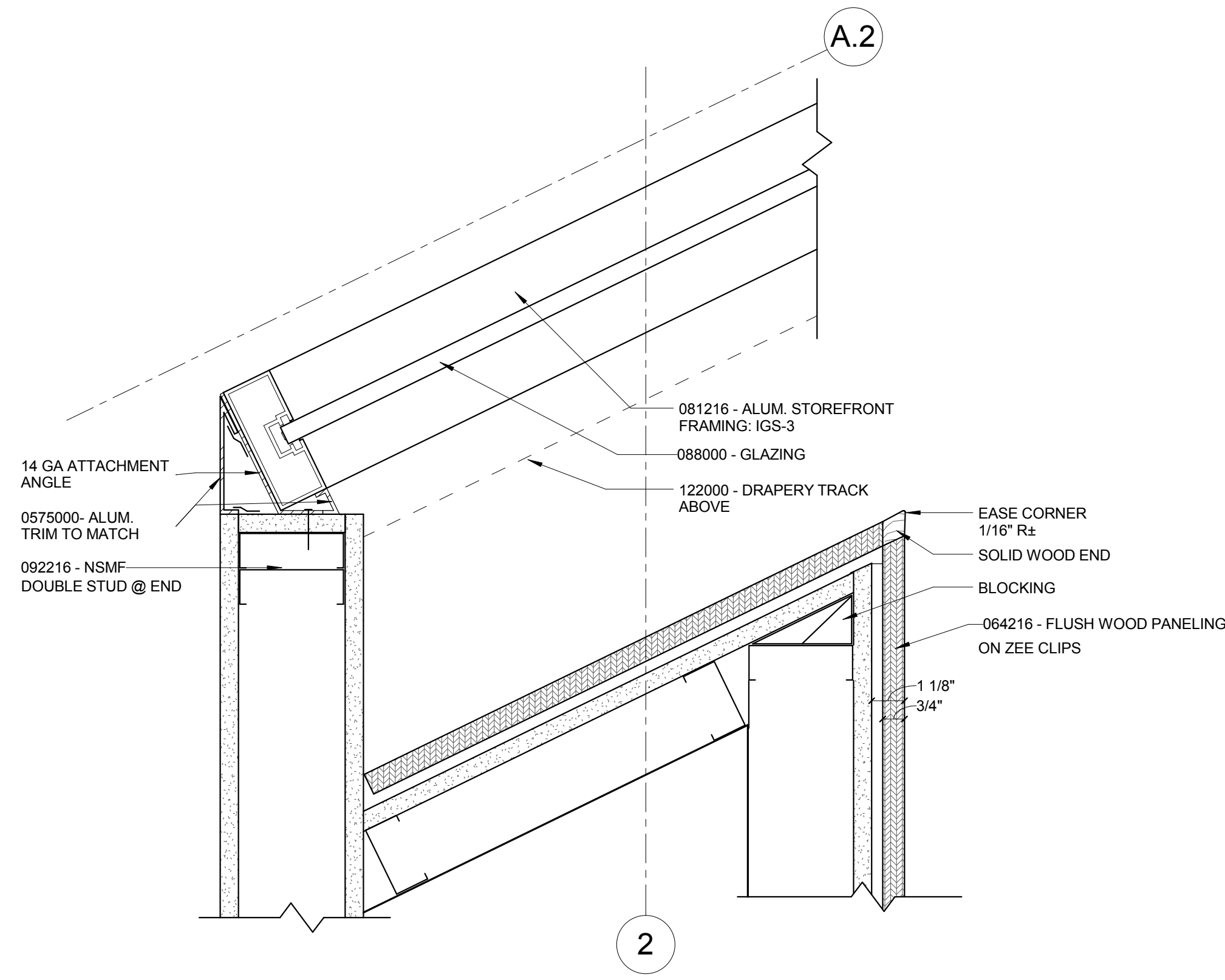
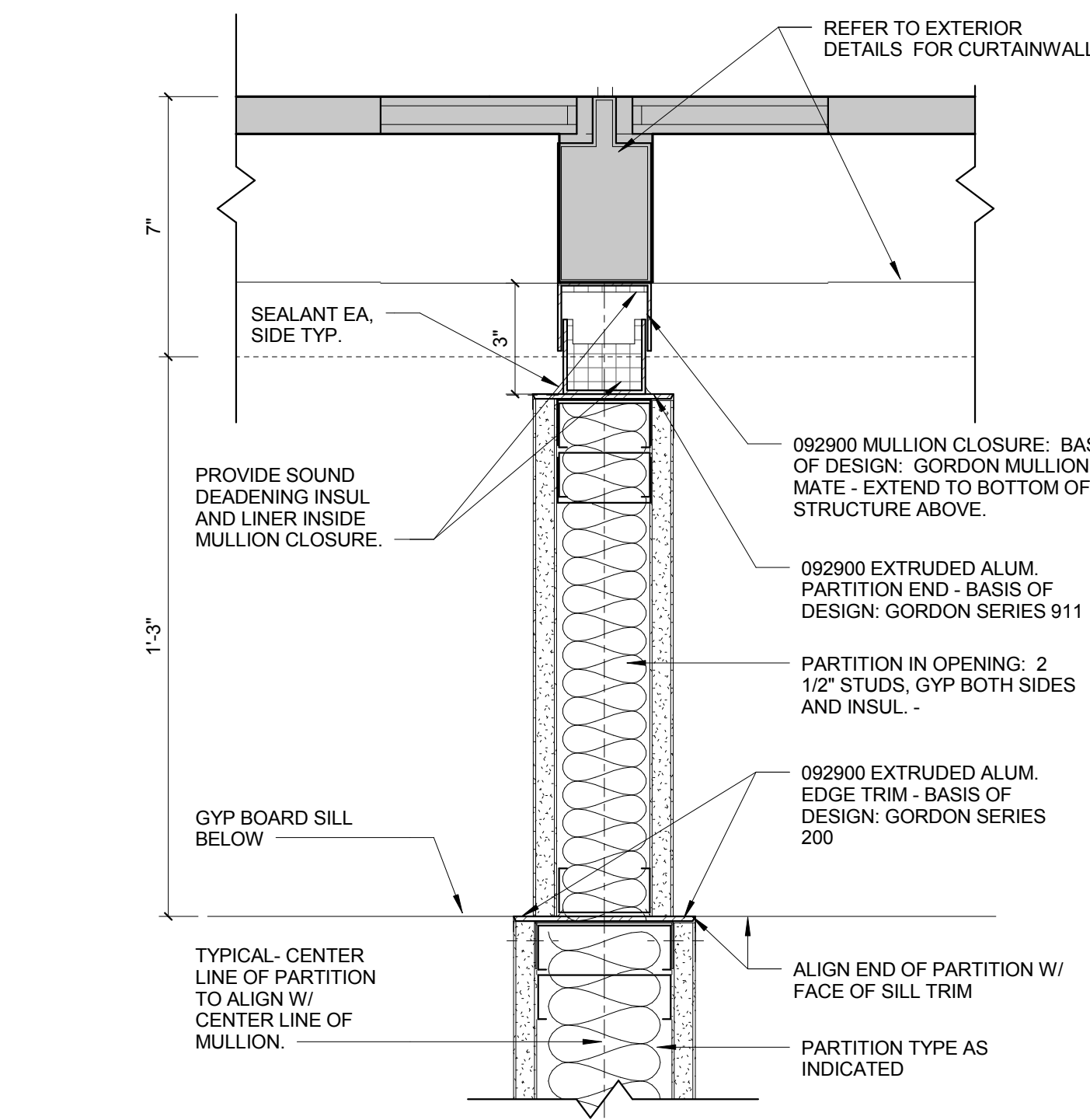
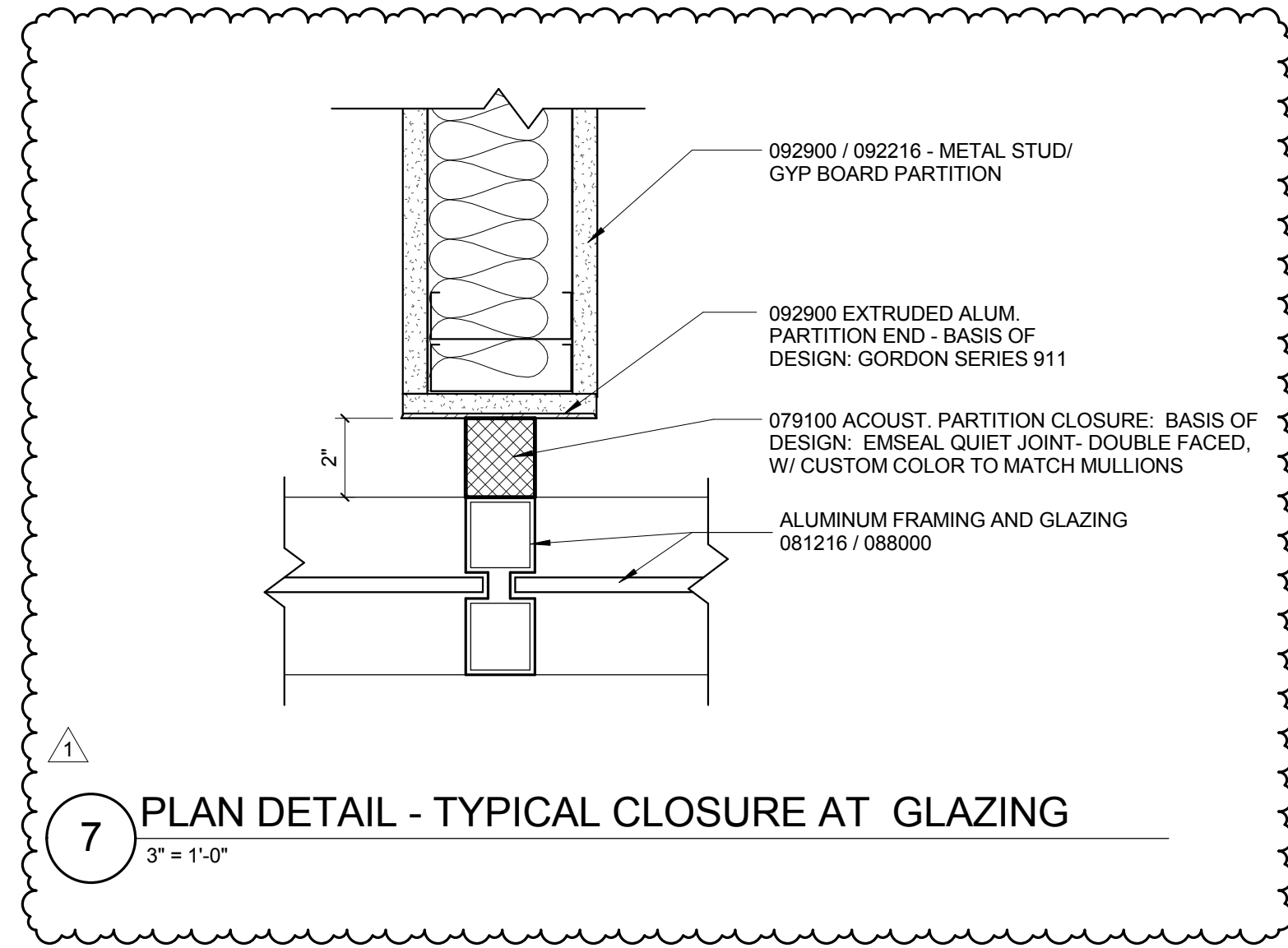
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INTERIOR PLAN DETAILS

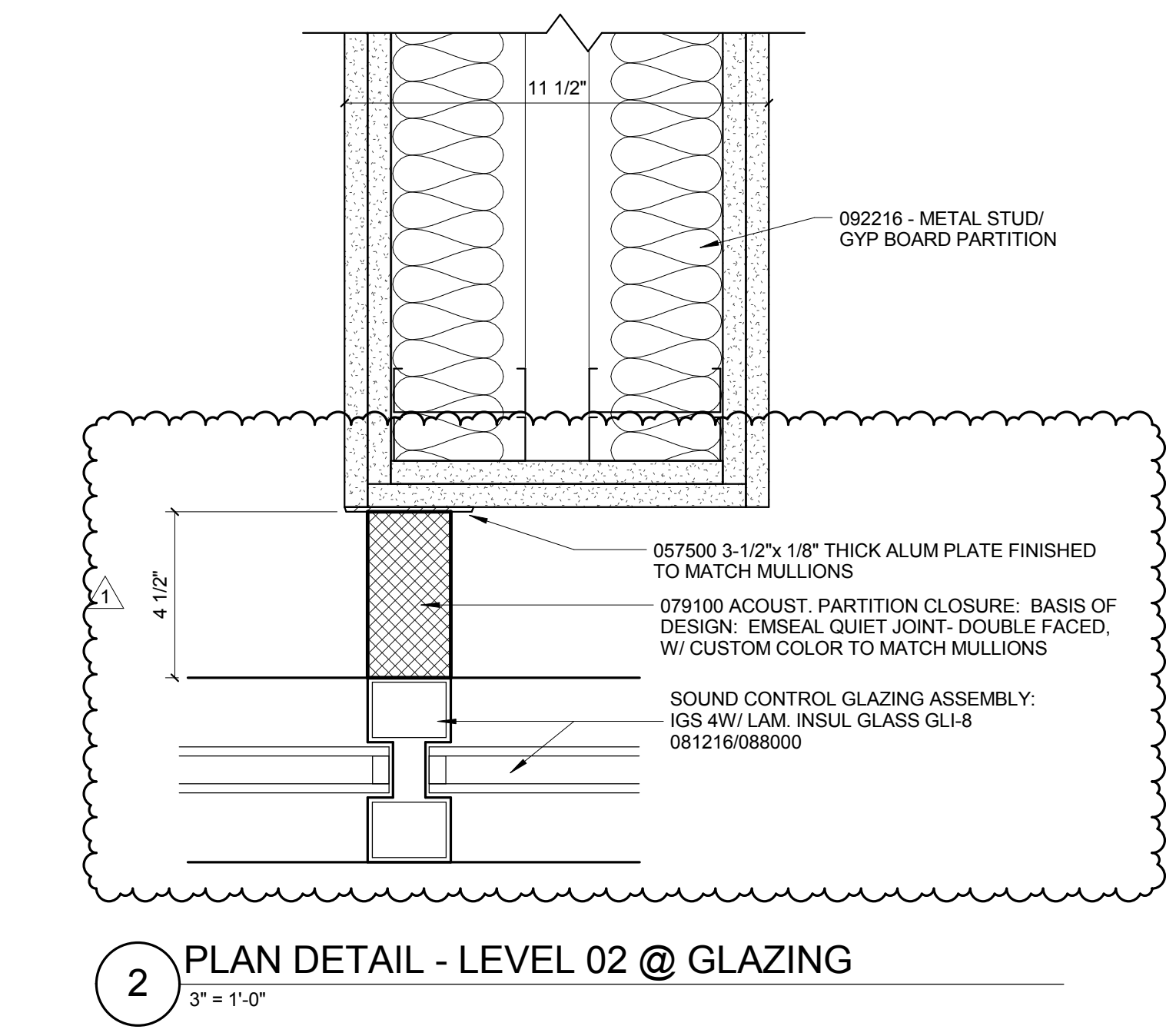
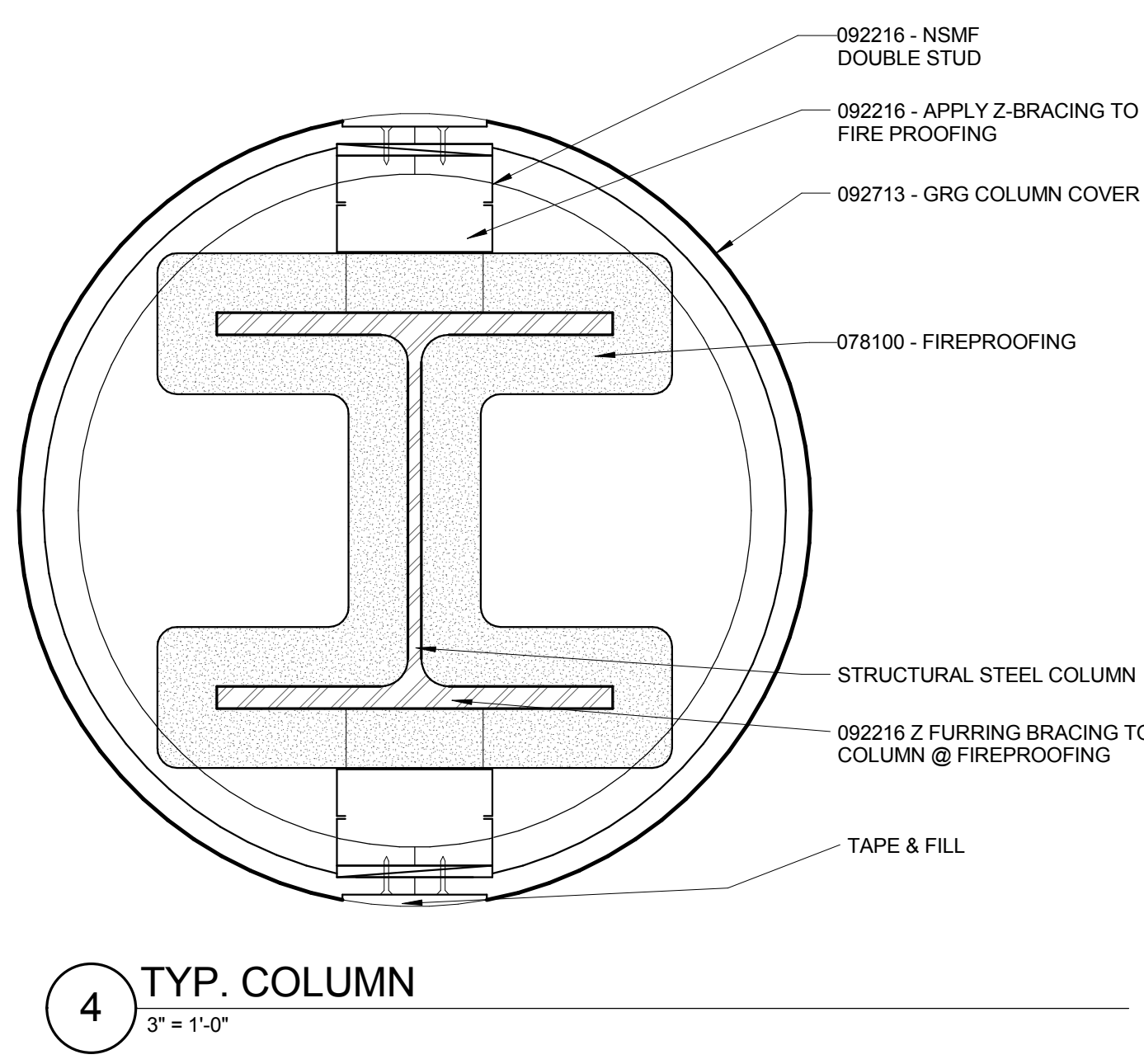
Project No.: 04561.01 Checked by:

A0810



6 PLAN DETAIL AT CONF. ROOM
3" = 1'-0"

1 PLAN DETAIL - WEST WALL
3" = 1'-0"



4 TYP. COLUMN
3" = 1'-0"

2 PLAN DETAIL - LEVEL 02 @ GLAZING
3" = 1'-0"

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1	ADDENDUM 3-2	15 APR 2016
1	ISSUED FOR CONSTRUCTION (BP3)	15 MAR 2016
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INTERIOR PLAN DETAILS

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INTERIOR CEILING DETAILS

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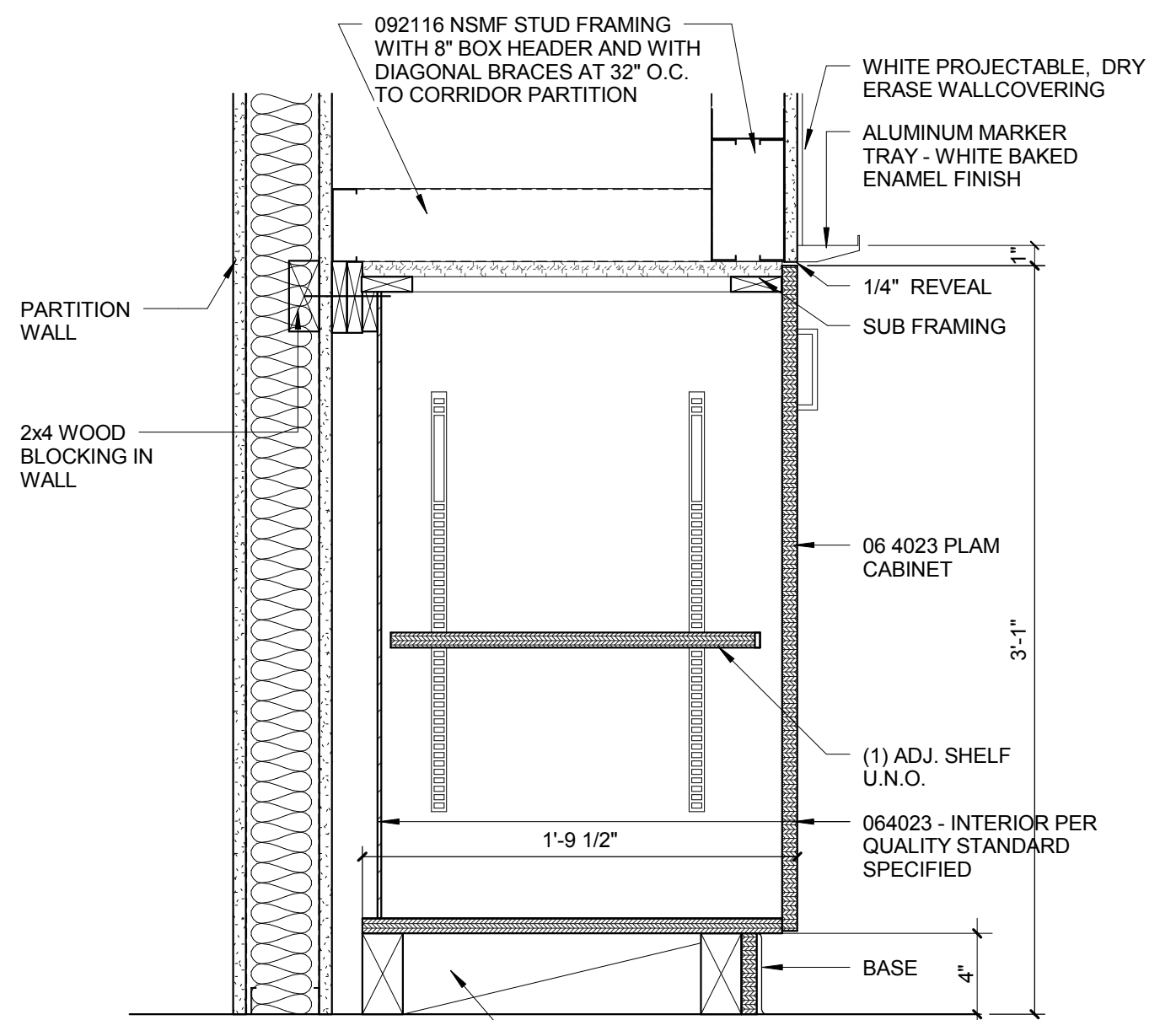
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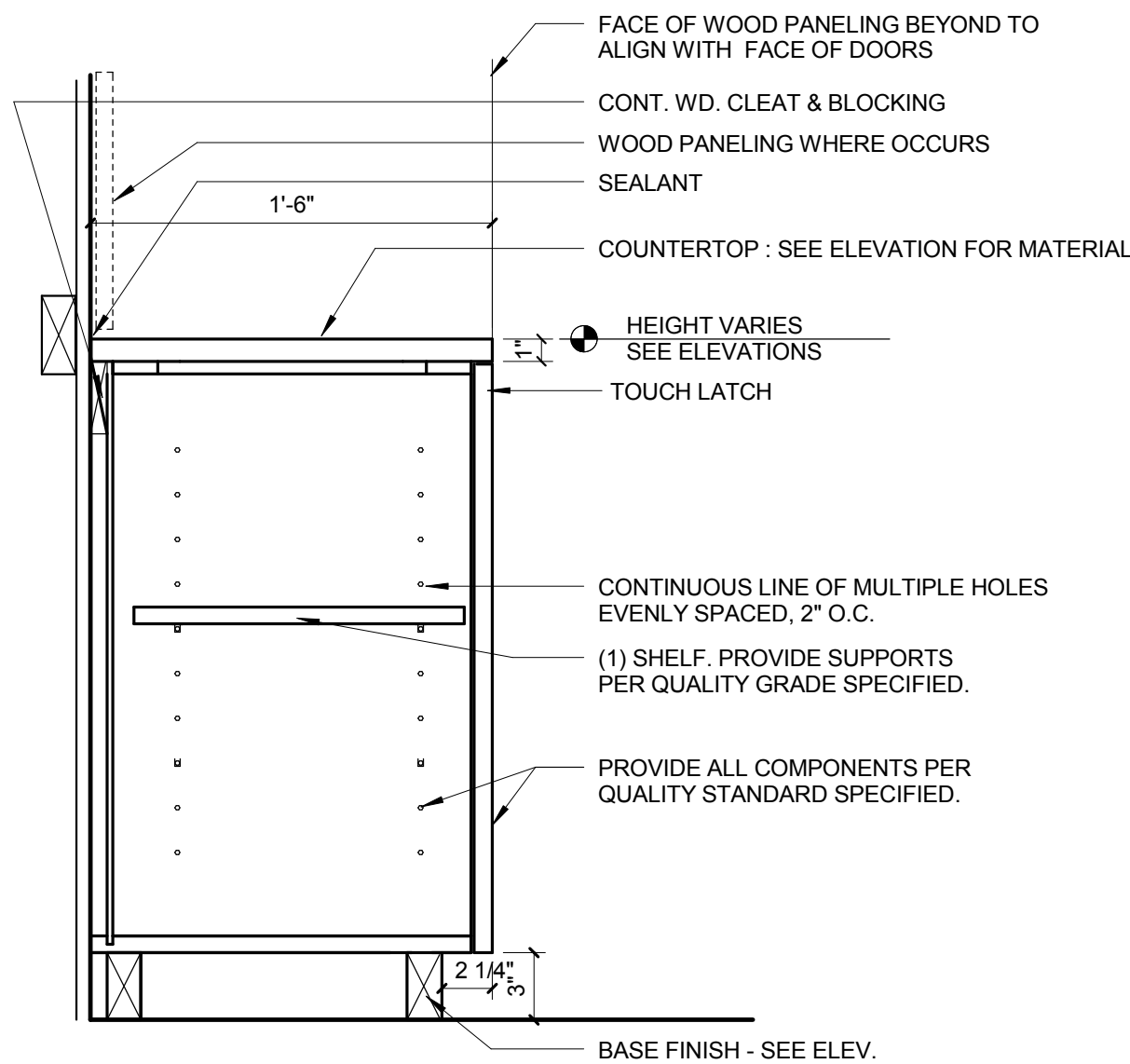
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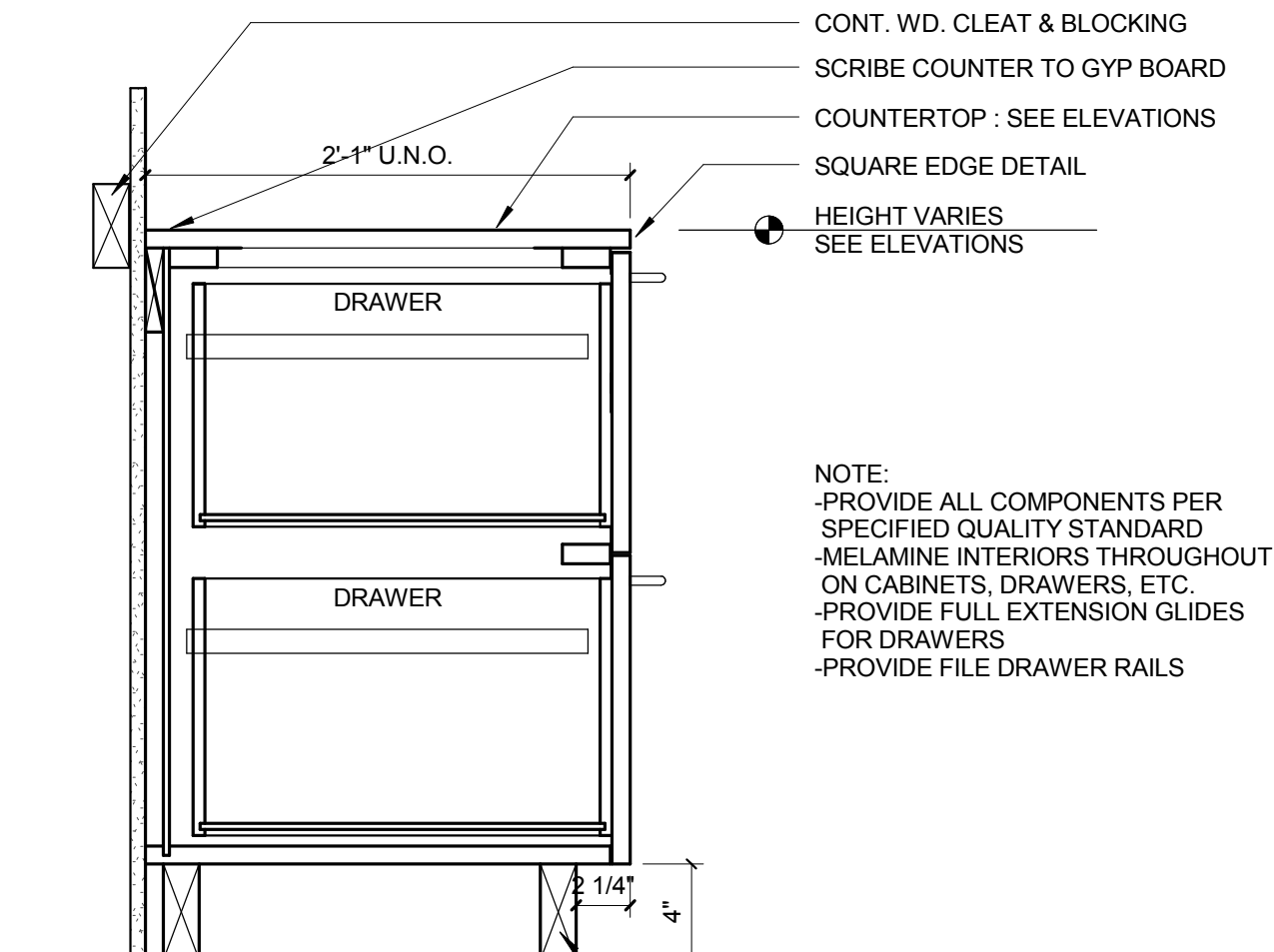
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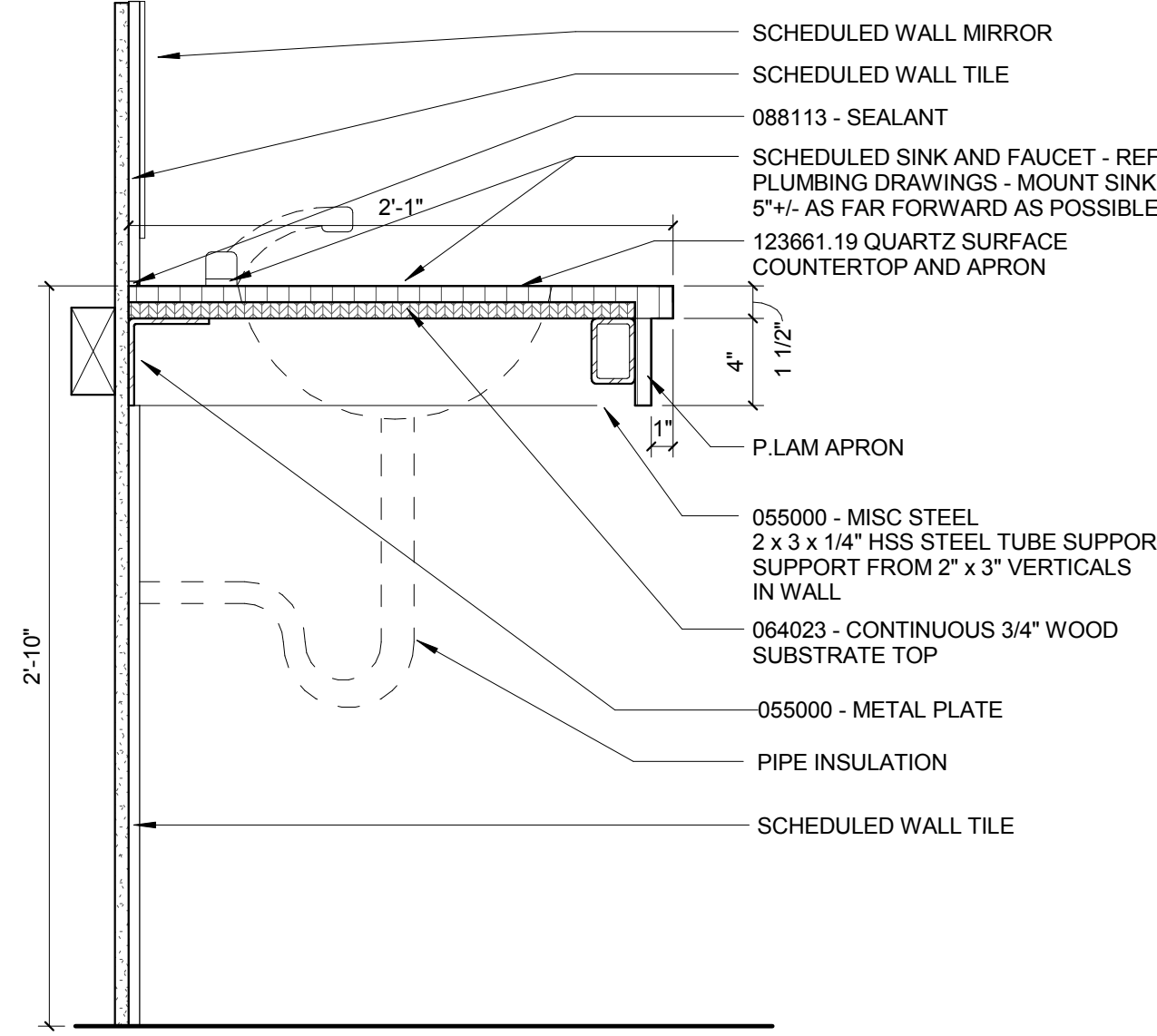
9 BASE CABINET DETAIL BELOW MARKER BOARD
1 1/2" = 1'-0"



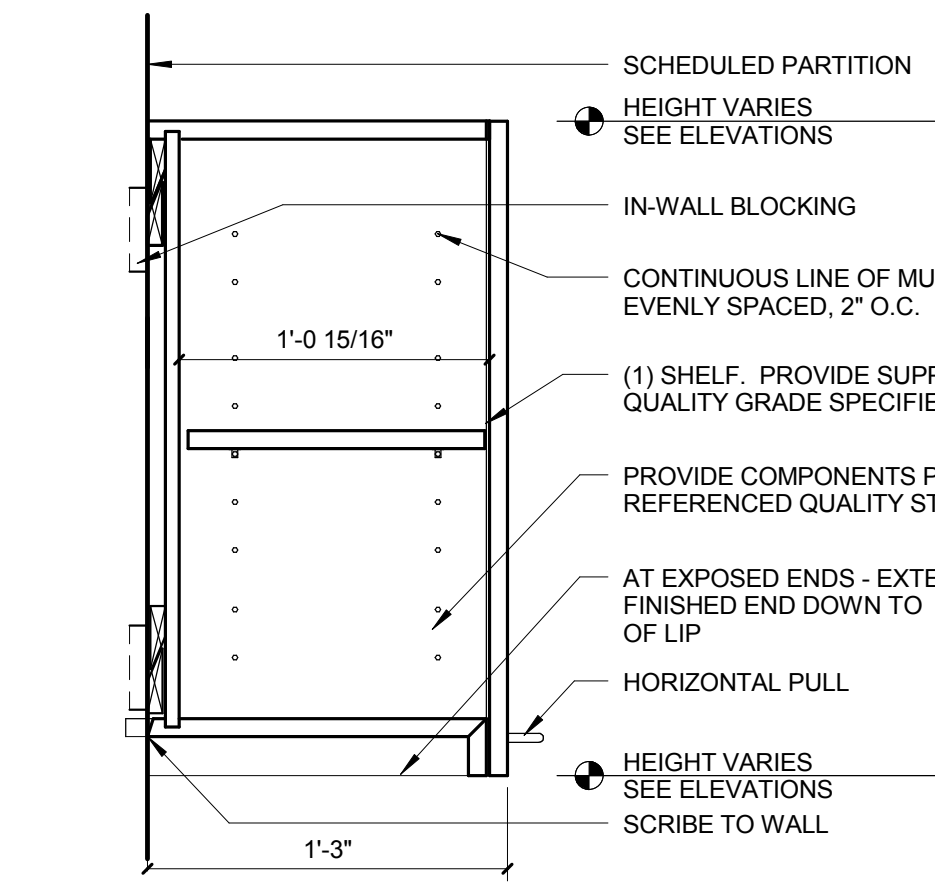
10 CONF ROOM BASE CABINET
1 1/2" = 1'-0"



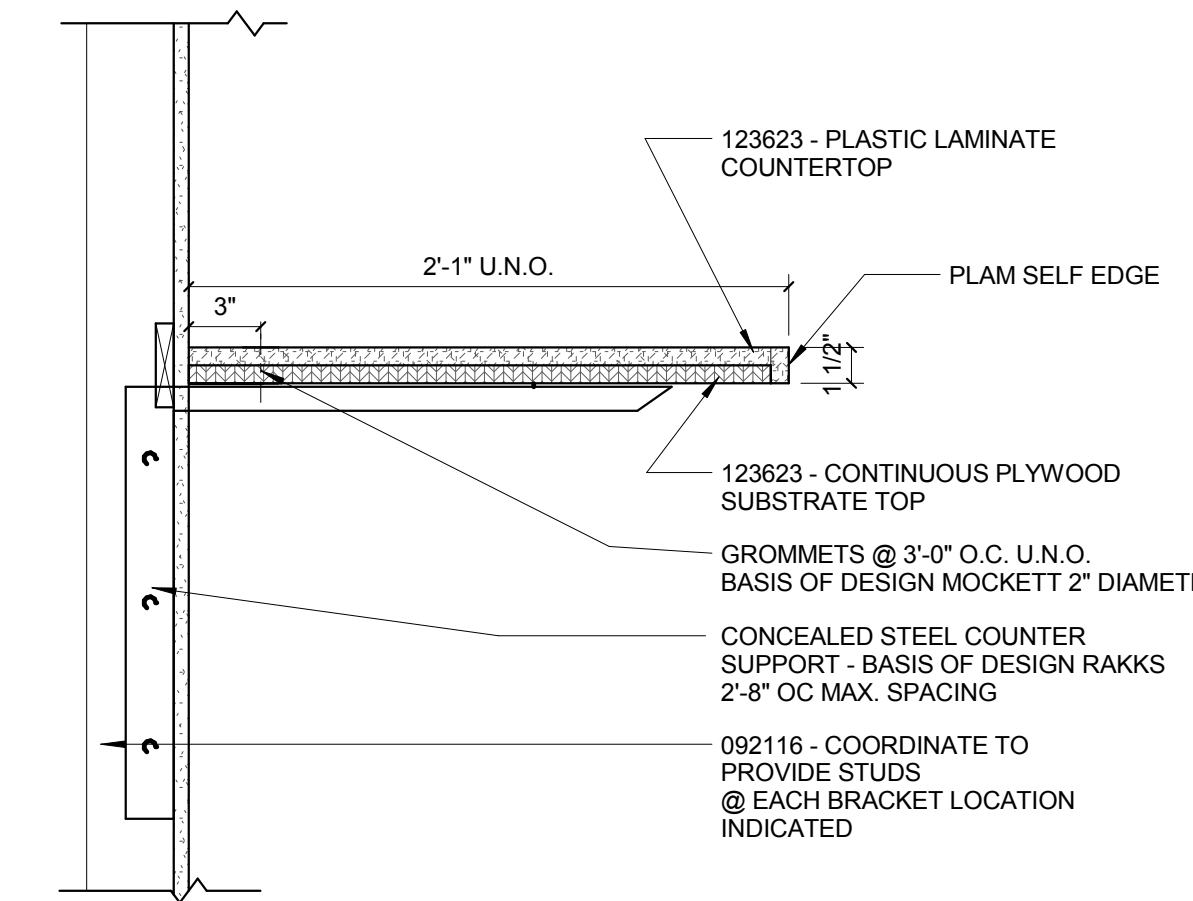
5 BASE CABINET W/ DRAWERS NO BACKSPLASH
1 1/2" = 1'-0"



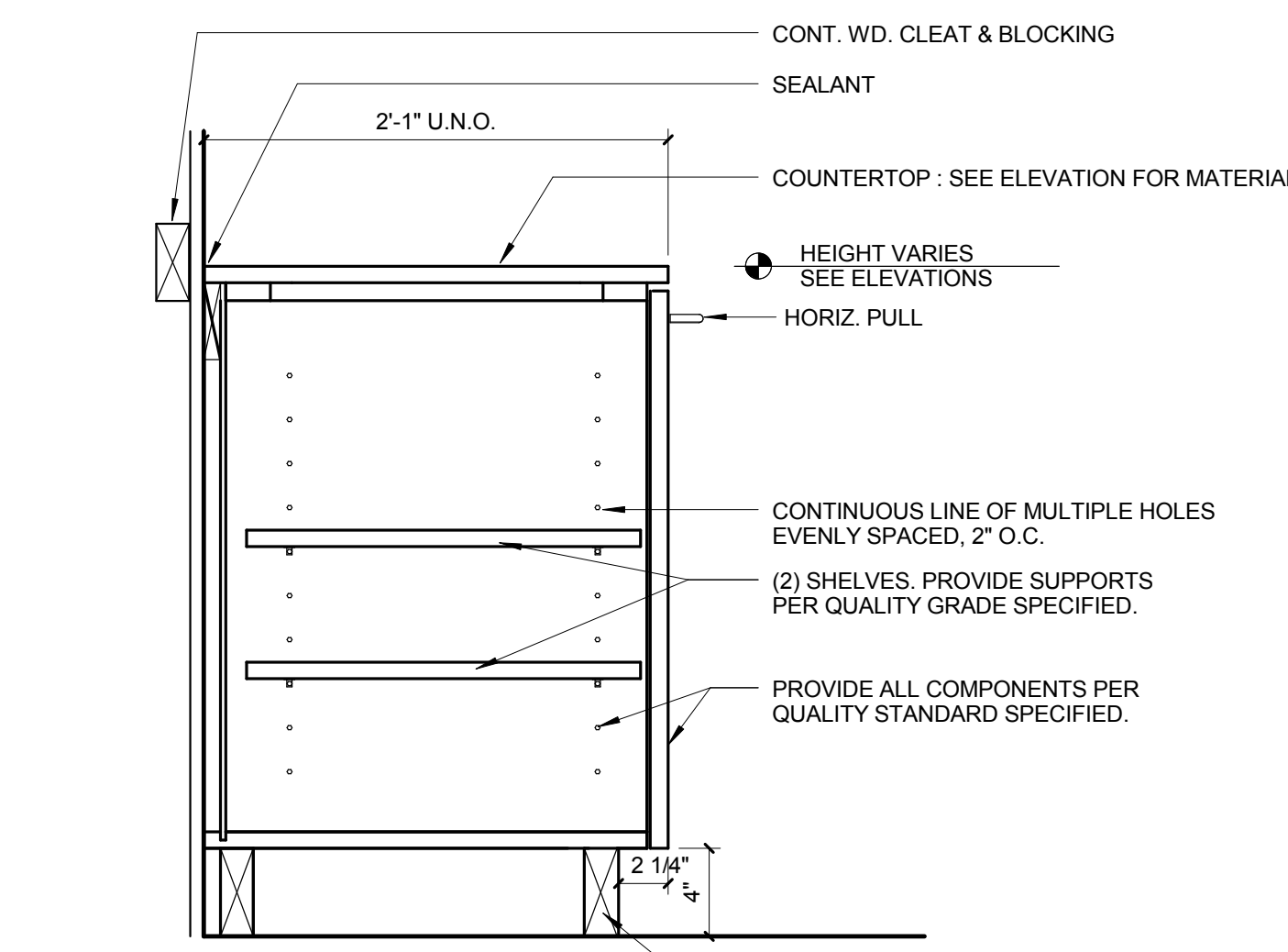
6 COUNTERTOP W LAV
1 1/2" = 1'-0"



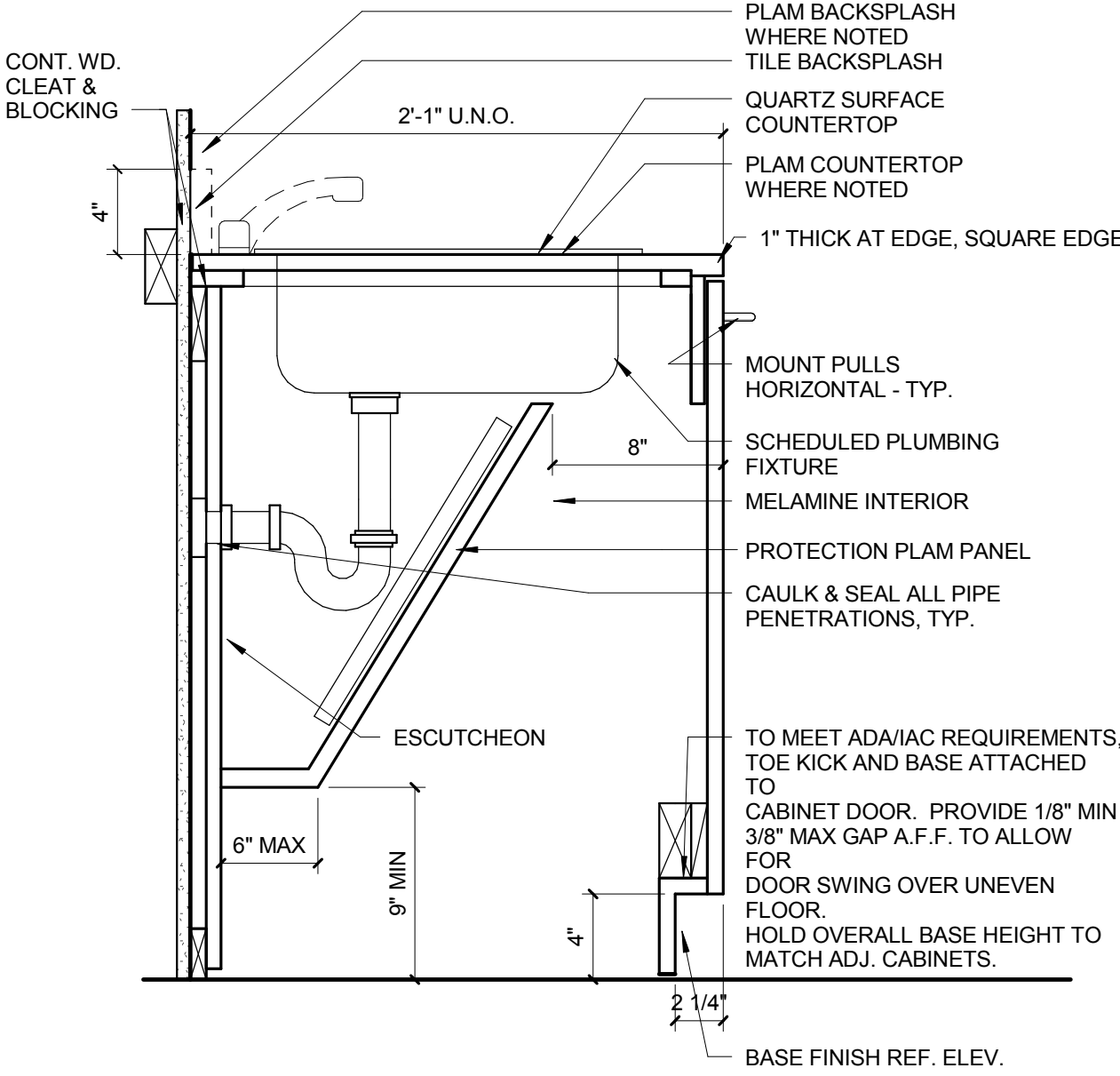
7 UPPER CABINET
1 1/2" = 1'-0"



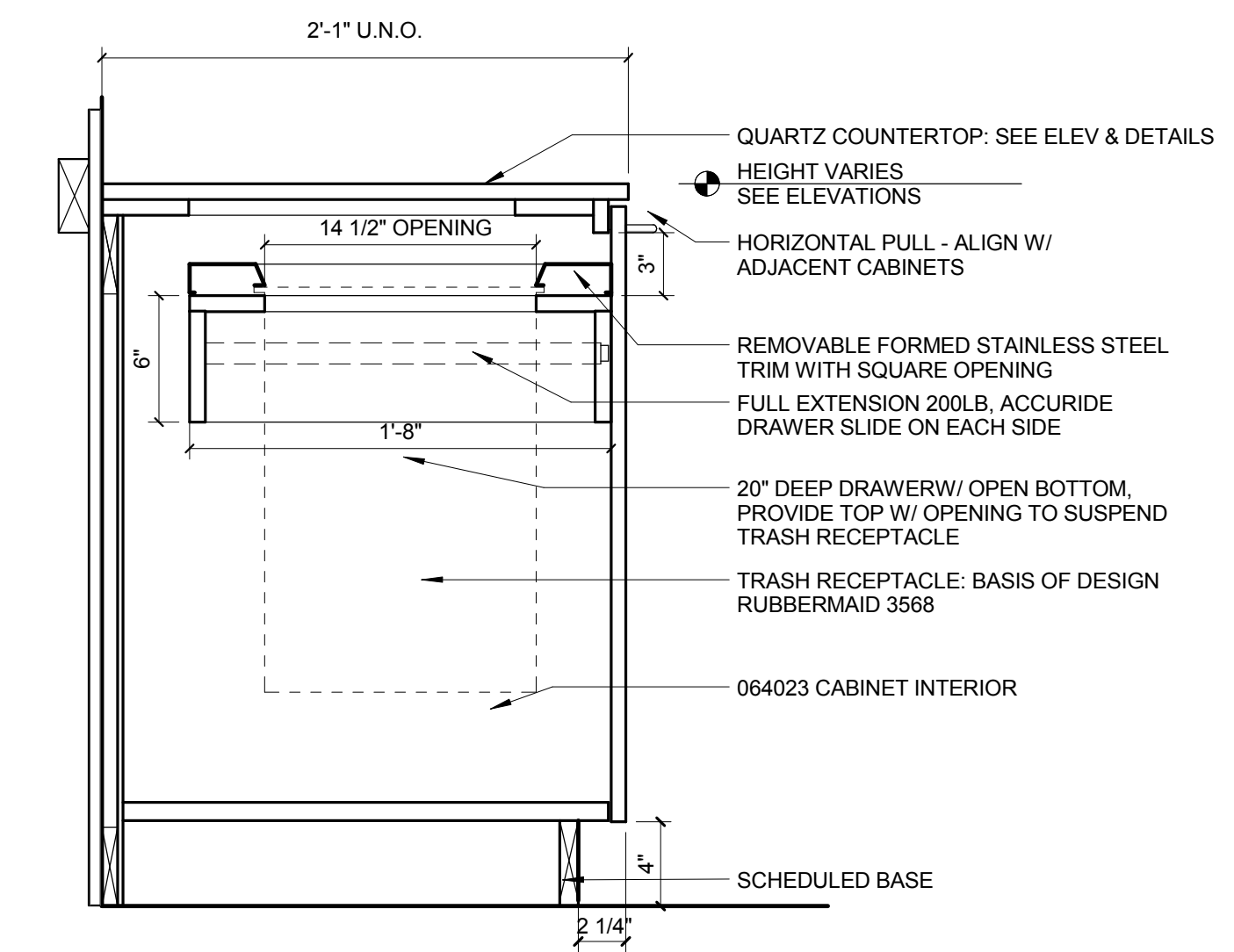
8 SUSPENDED PLAM WORKSURFACE
1 1/2" = 1'-0"



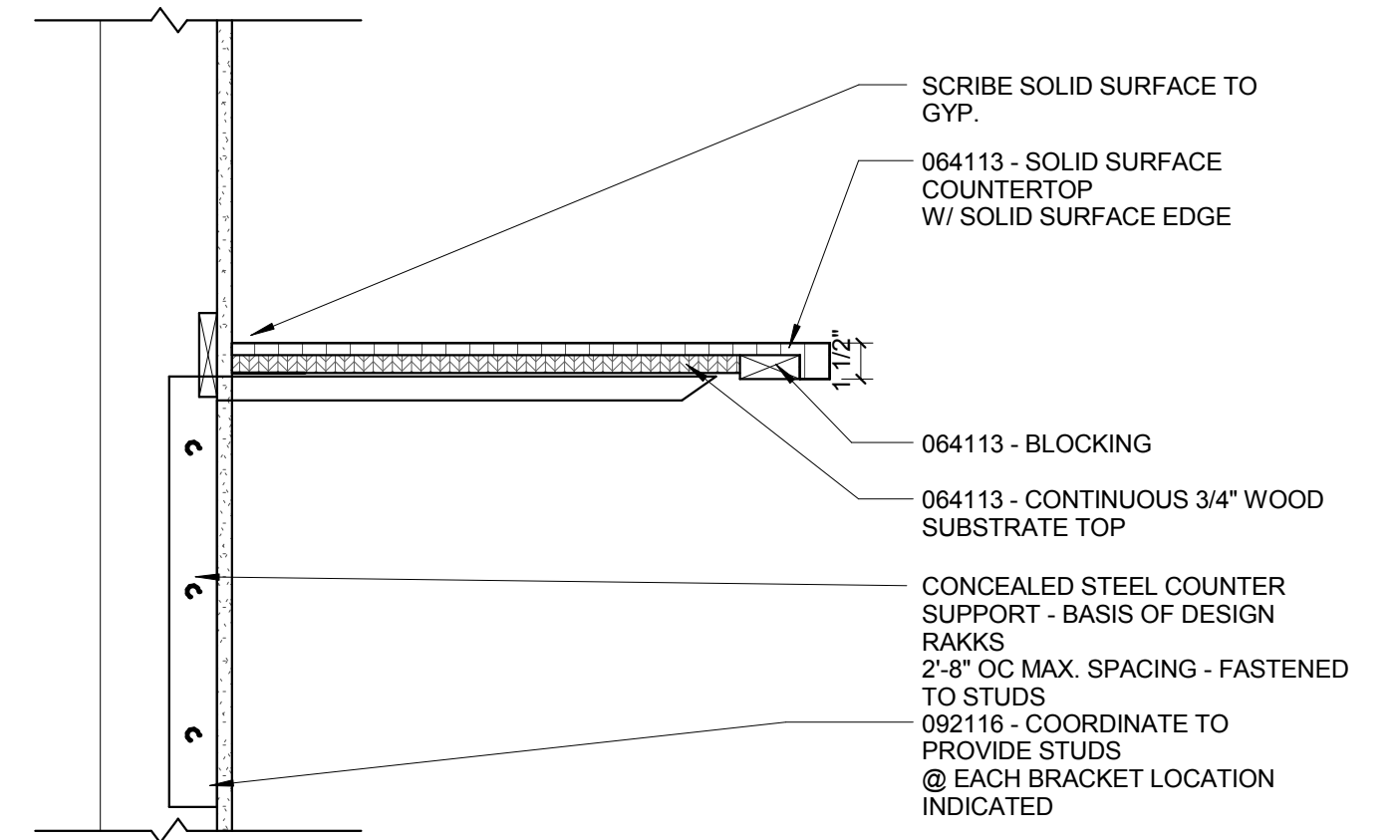
1 BASE CABINET W/ SHELVES NO BACKSPLASH
1 1/2" = 1'-0"



2 ACCESSIBLE BASE CABINET W/SINK
1 1/2" = 1'-0"

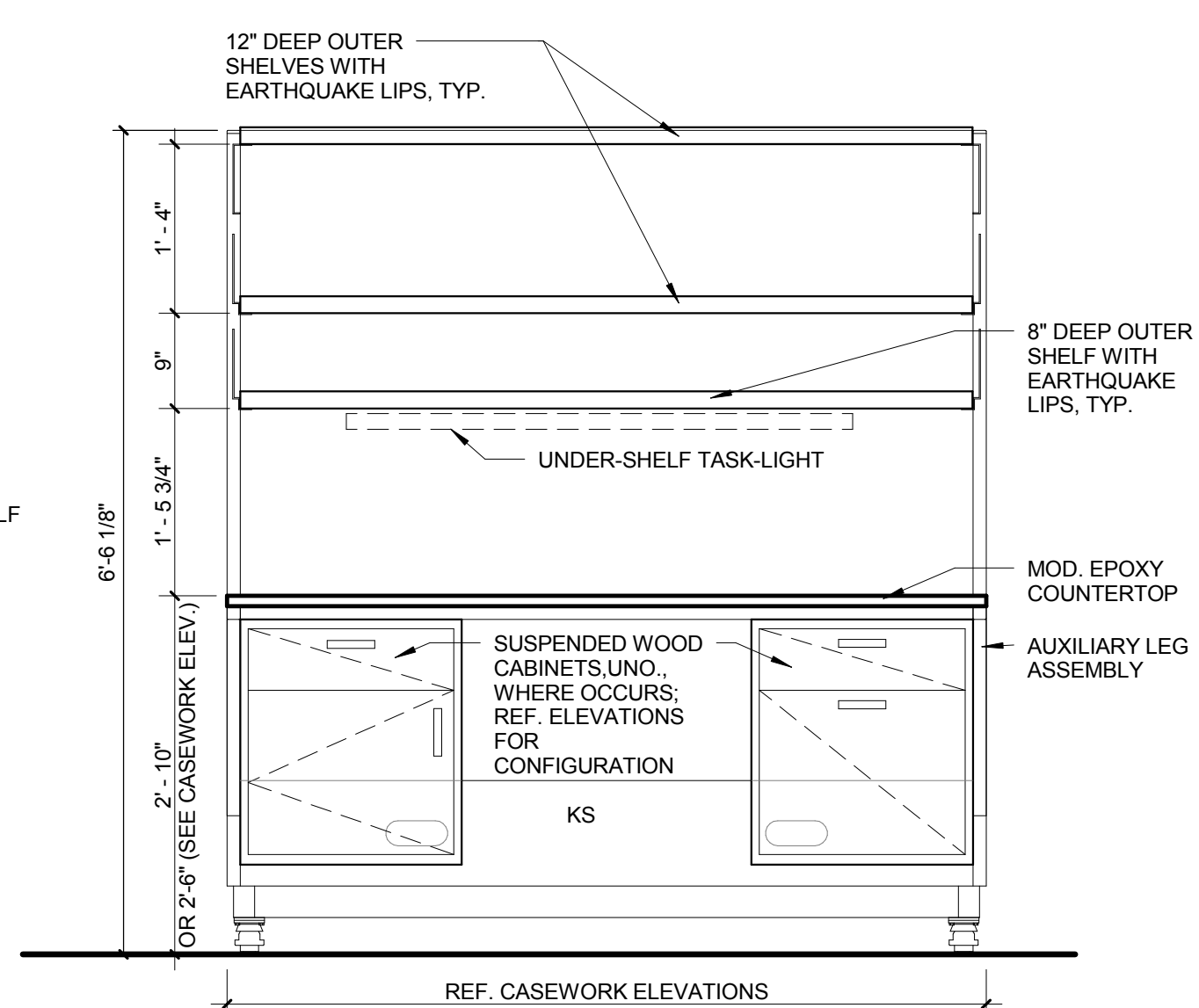
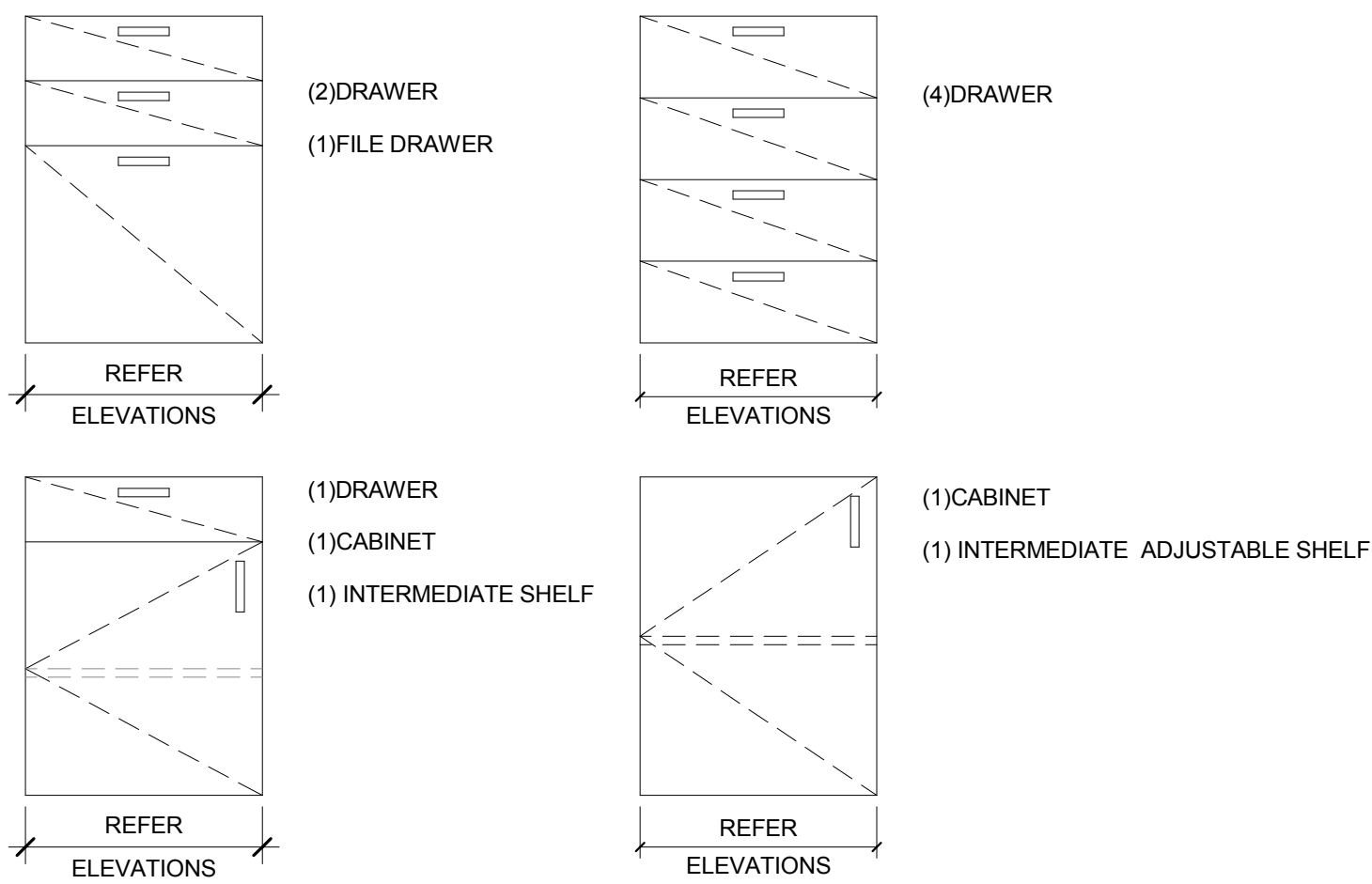


3 BASE CABINET WASTE DRAWER
1 1/2" = 1'-0"

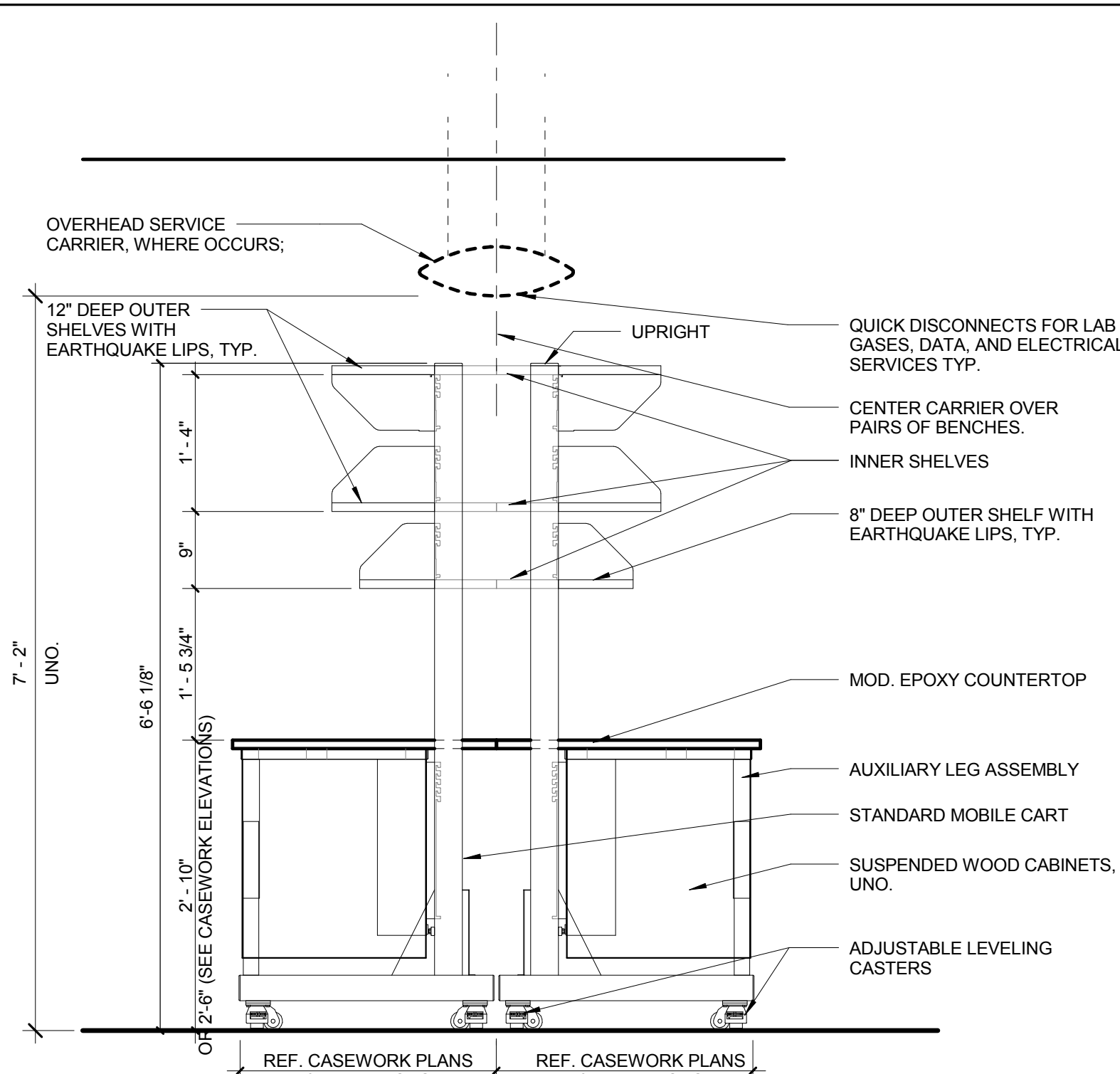


4 SUSPENDED COUNTERTOP
1 1/2" = 1'-0"

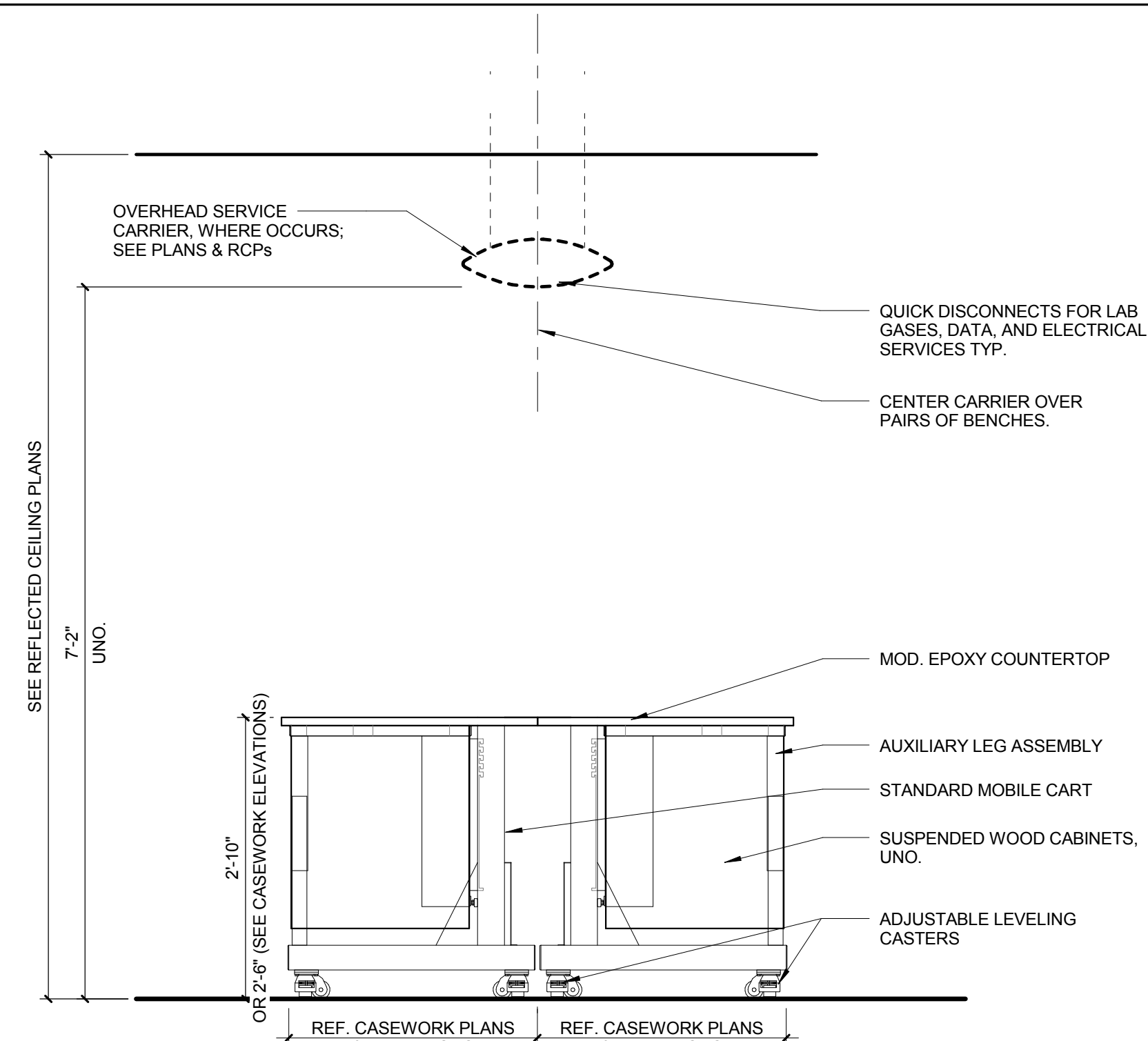
23-1/4" HIGH & 21-1/2" DEEP
SUSPENDED CABINETS -
WOOD (UNO.)



TYP. ELEVATION

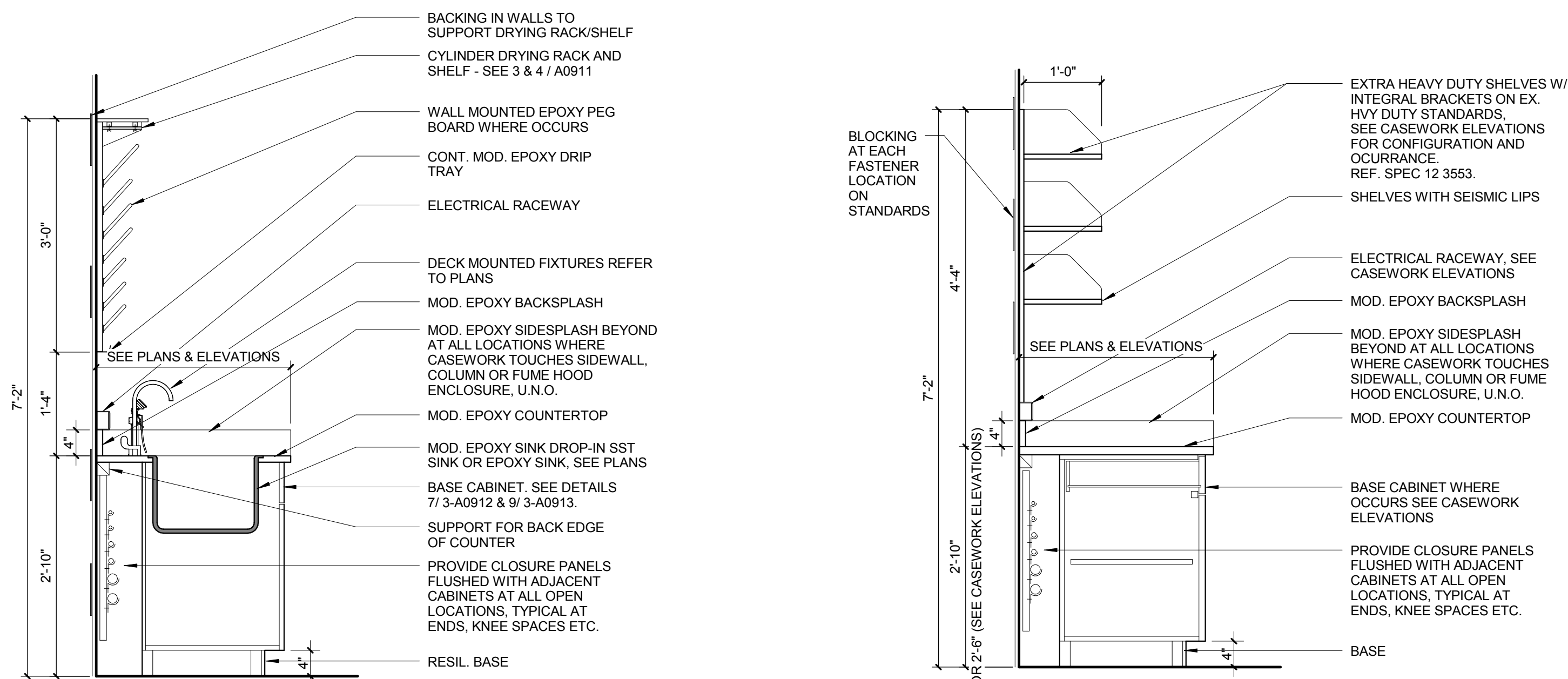


TYP. SECTION WITH SHELVES

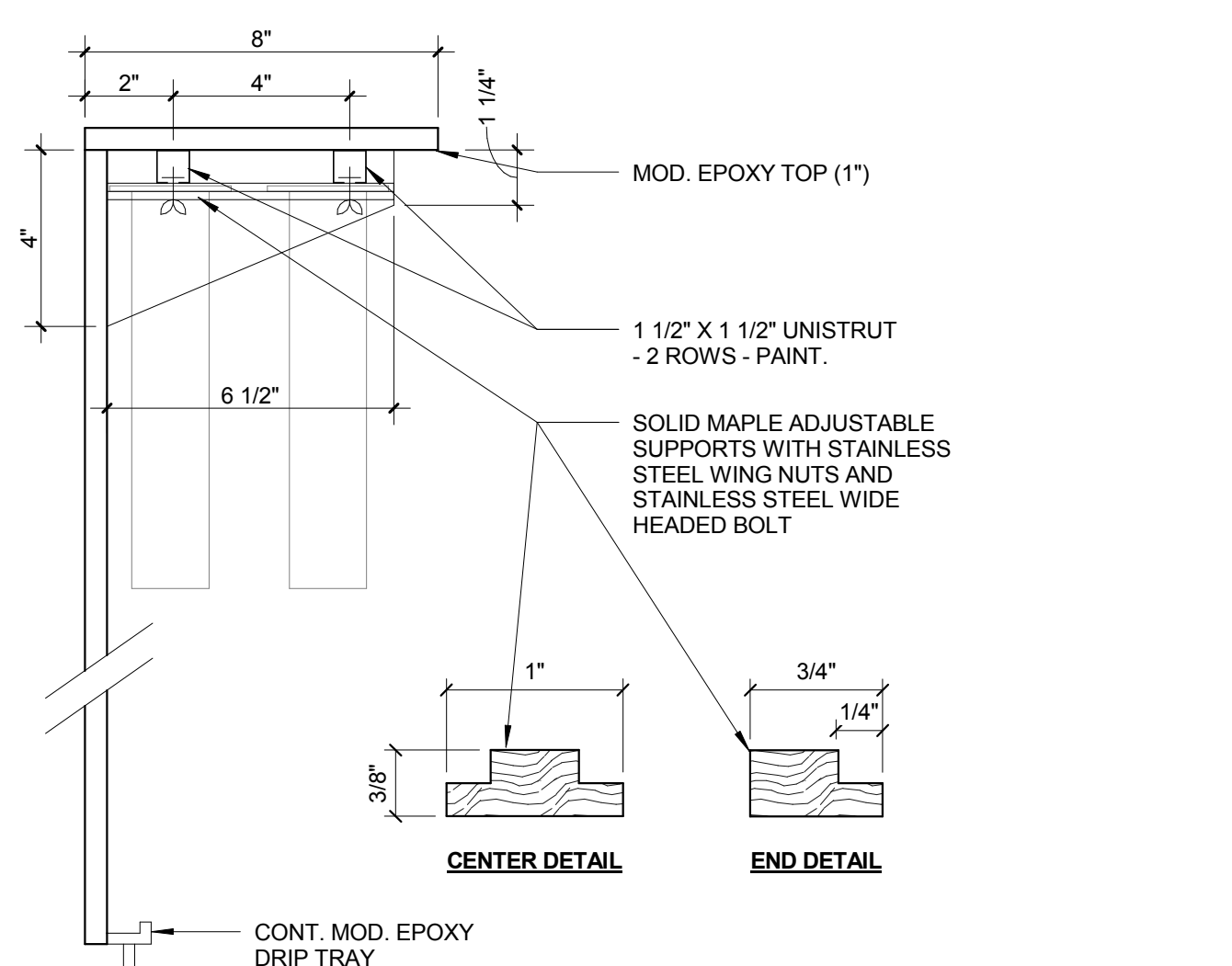
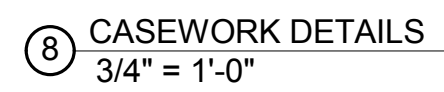


TYP. SECTION WITHOUT SHELVES

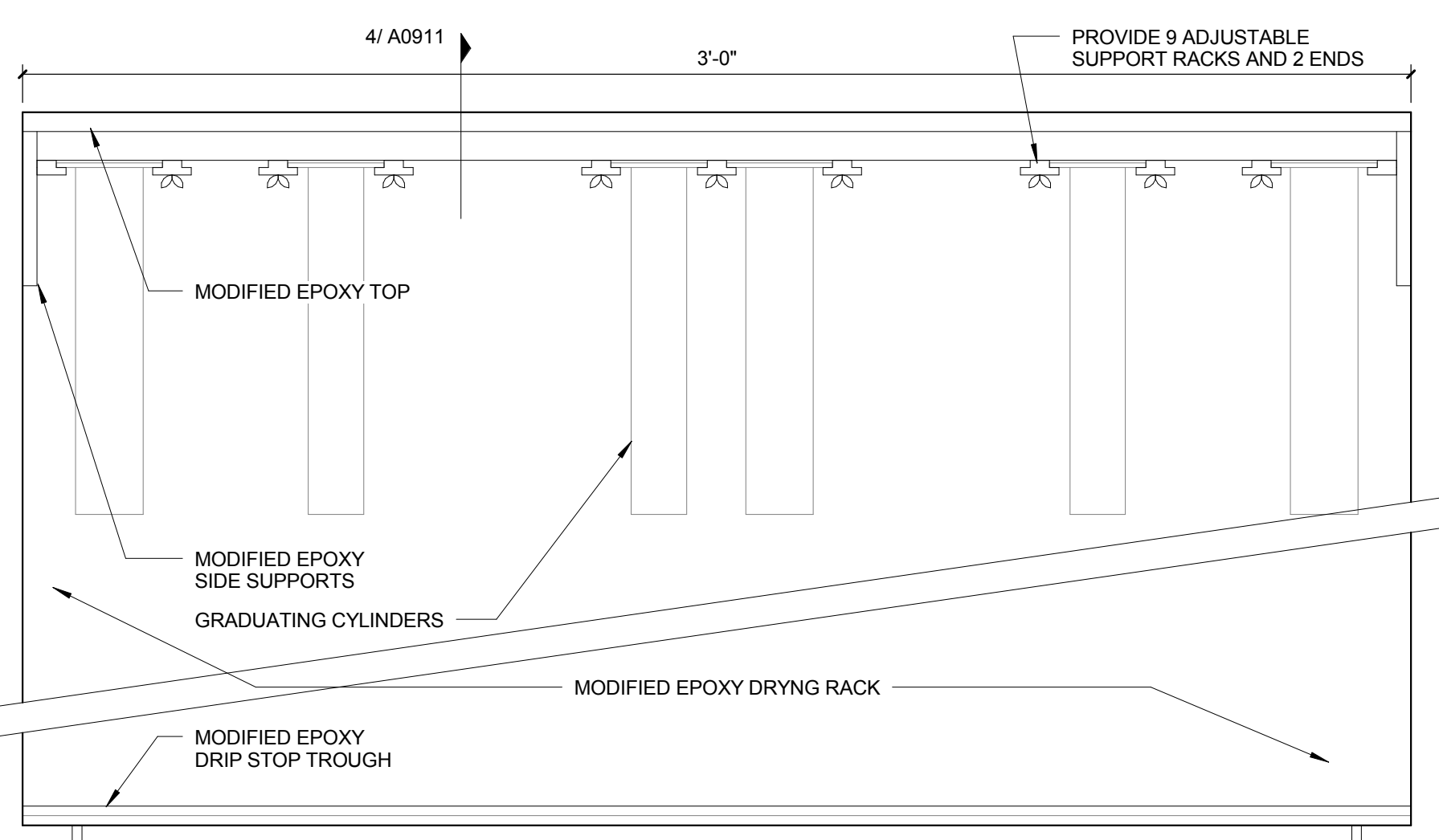
⑨ MOBILE CASEWORK DETAILS
3/4" = 1'-0"



⑦ CASEWORK DETAILS
3/4" = 1'-0"

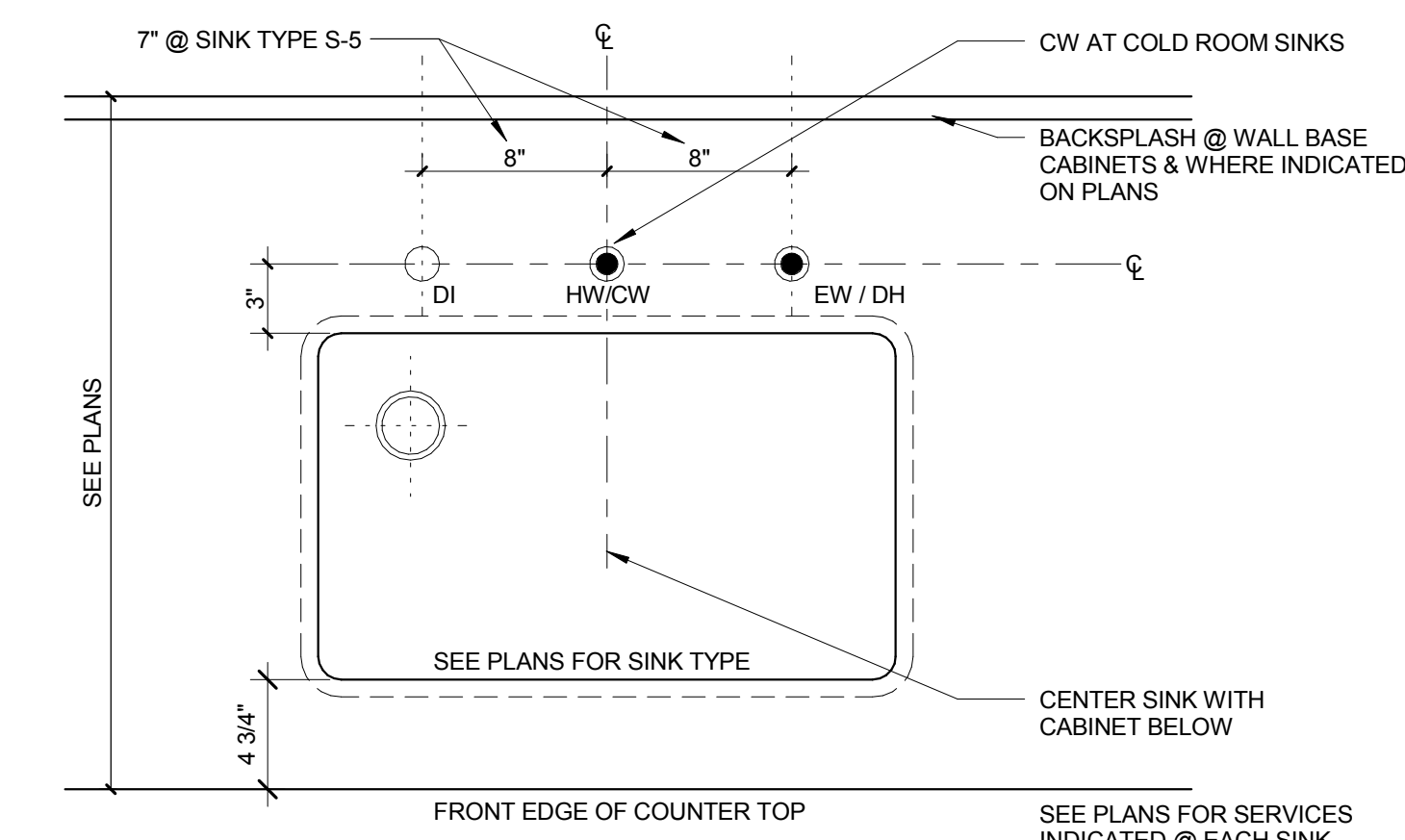


④ GRADUATED CYLINDER RACK - SECTION
3" = 1'-0"

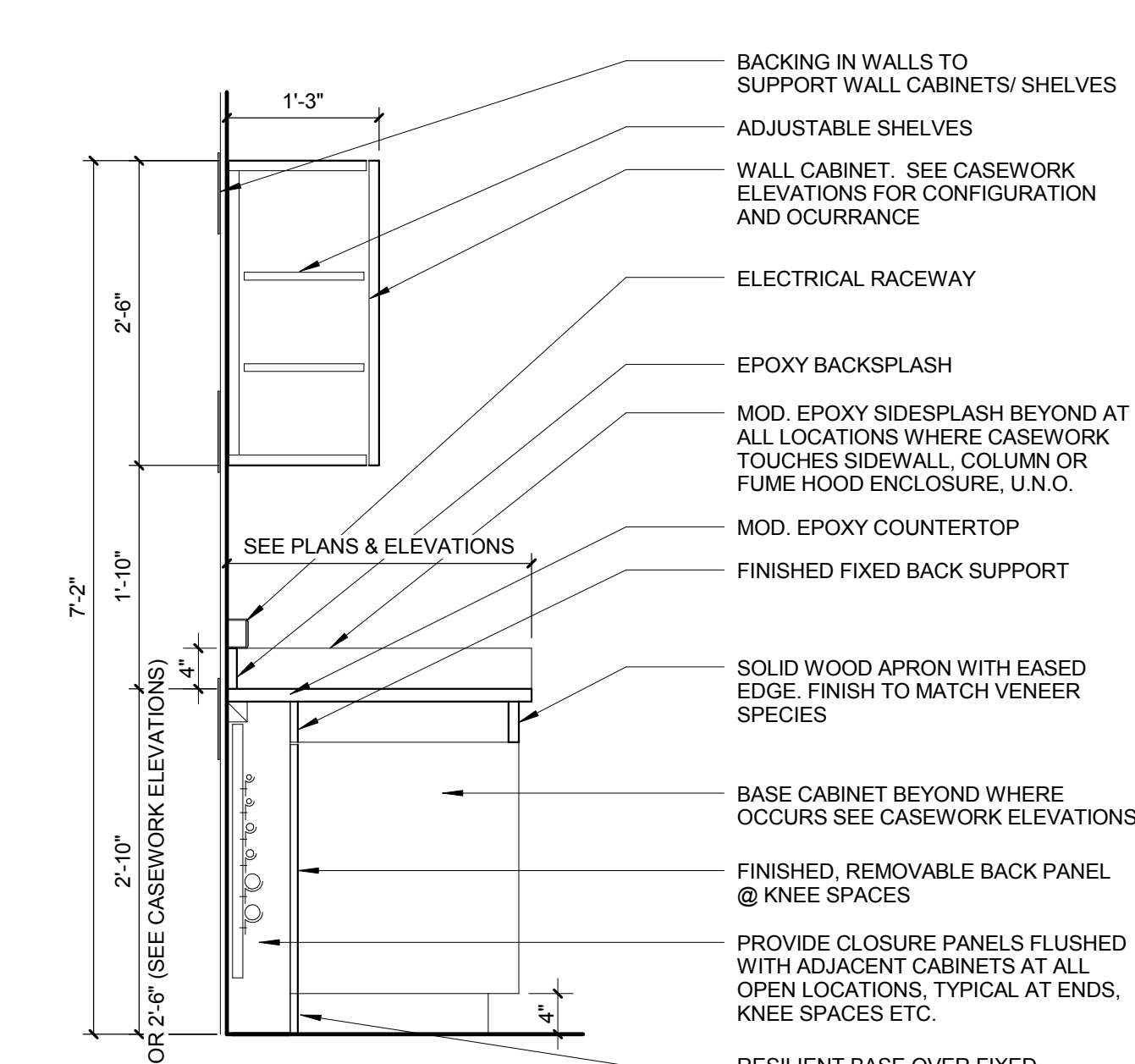


GRADUATED CYLINDER RACK -
ELEVATION

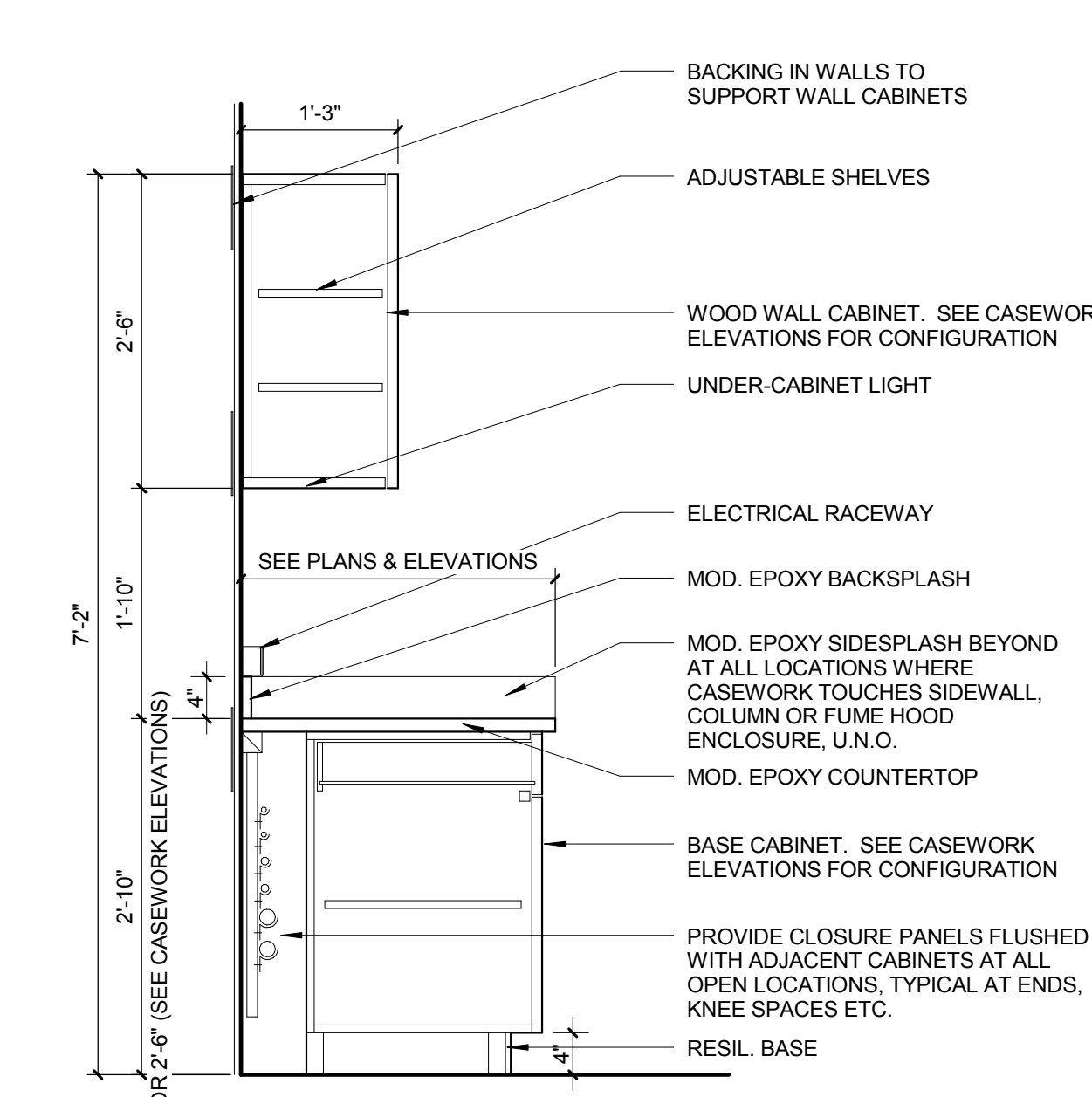
③ $3'' = 1'-0''$



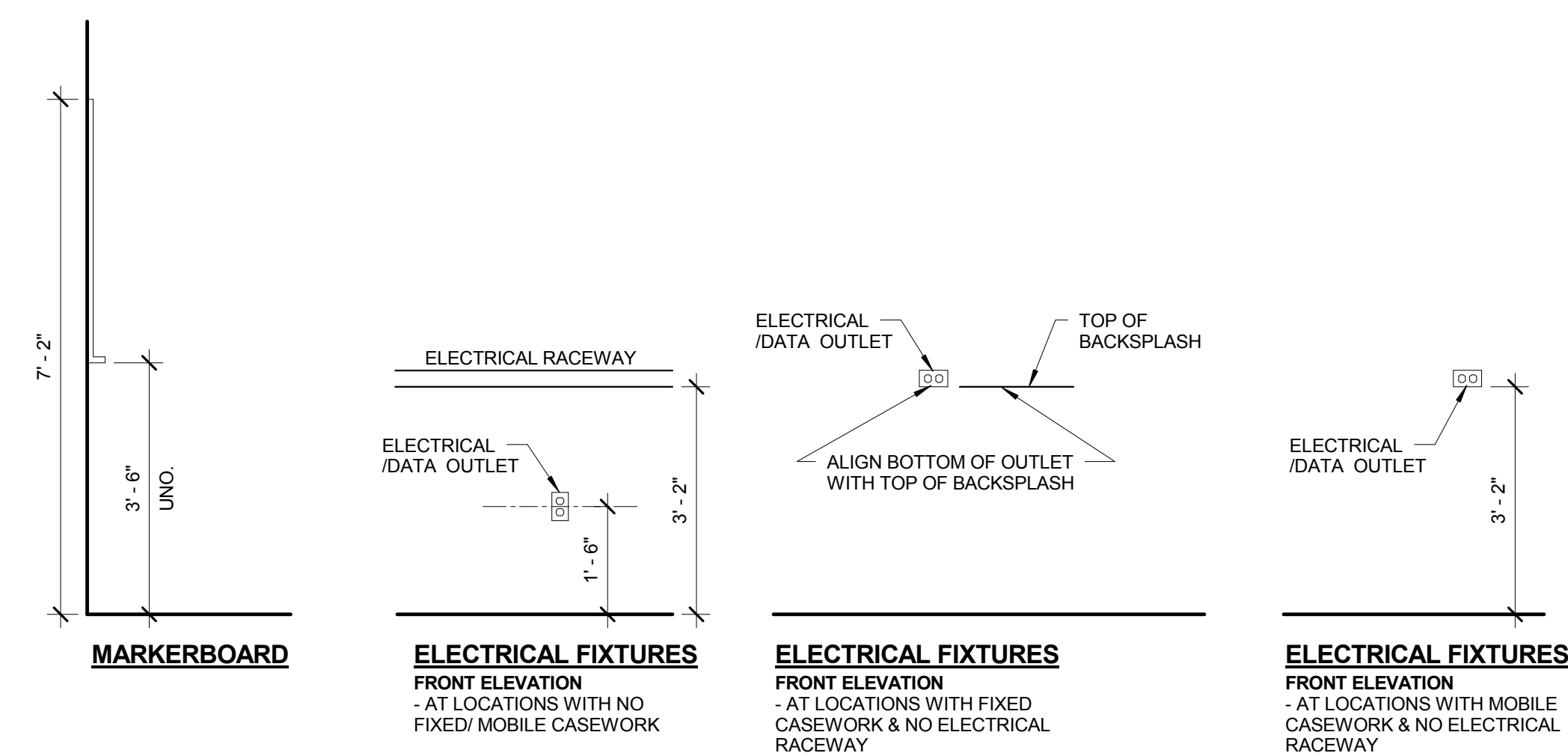
② TYP. SINK DETAIL @ BASE CABINETS
1 1/2" = 1'-0"



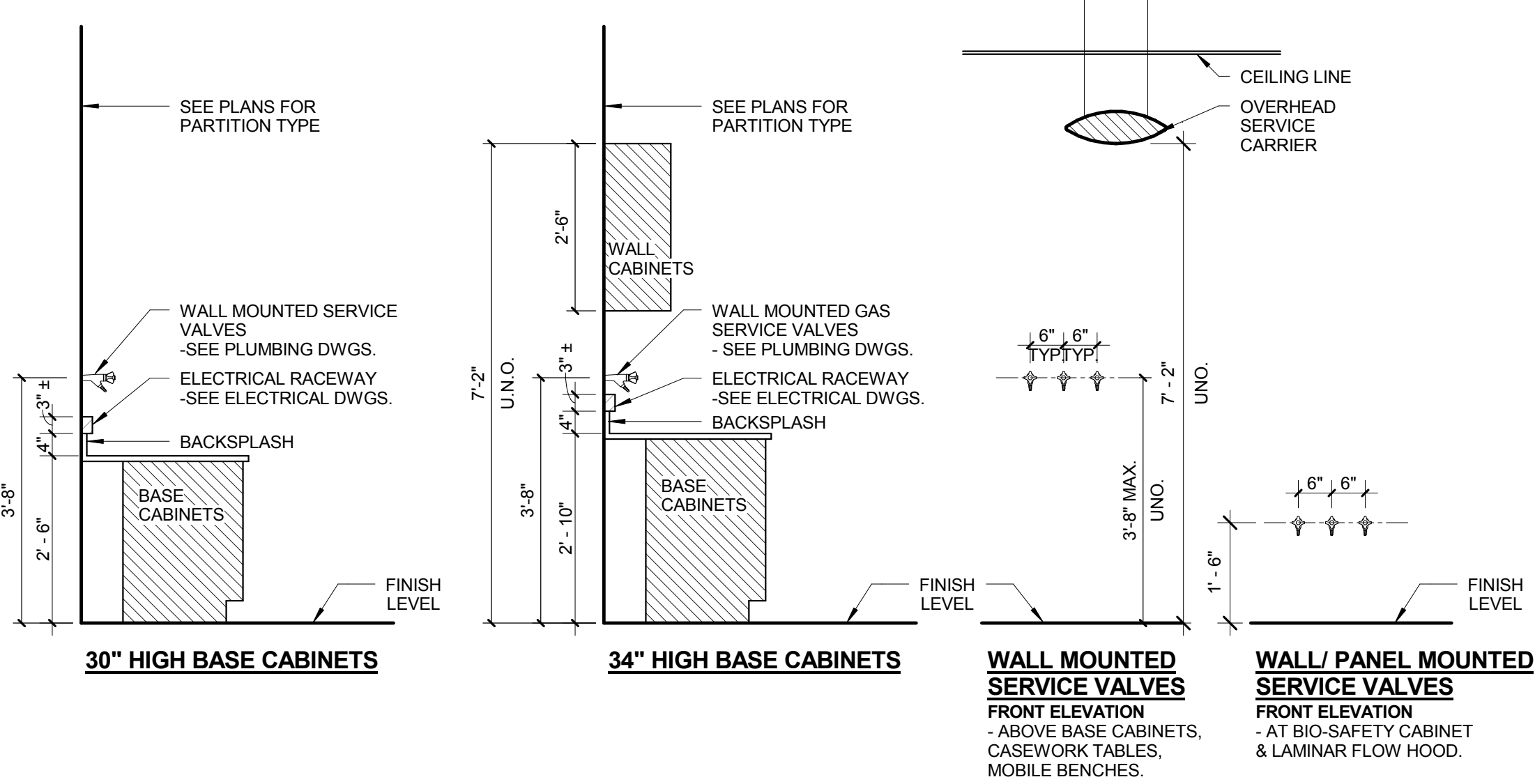
⑥ CASEWORK DETAILS
3/4" = 1'-0"

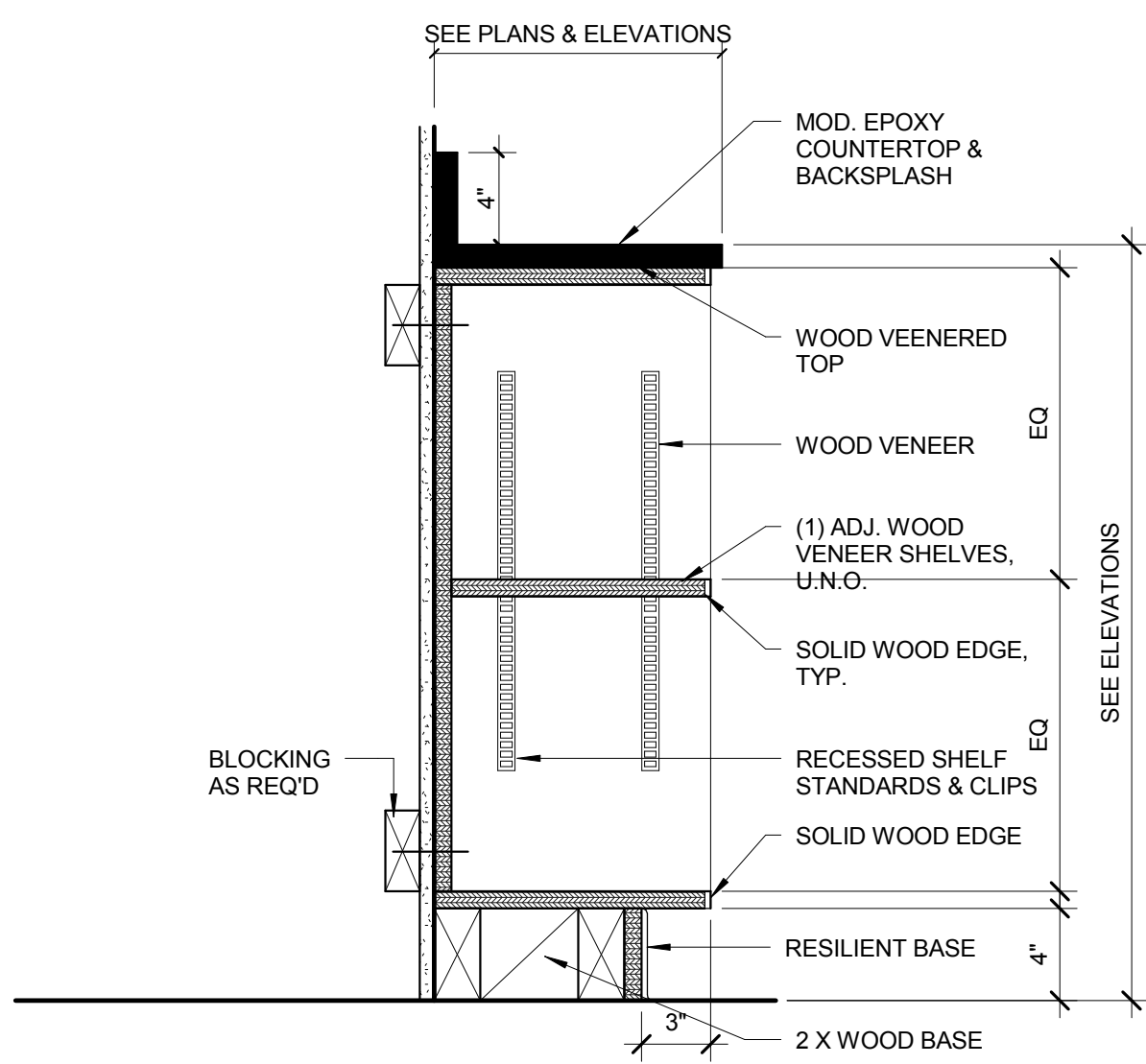


⑤ CASEWORK DETAILS
3/4" = 1'-0"

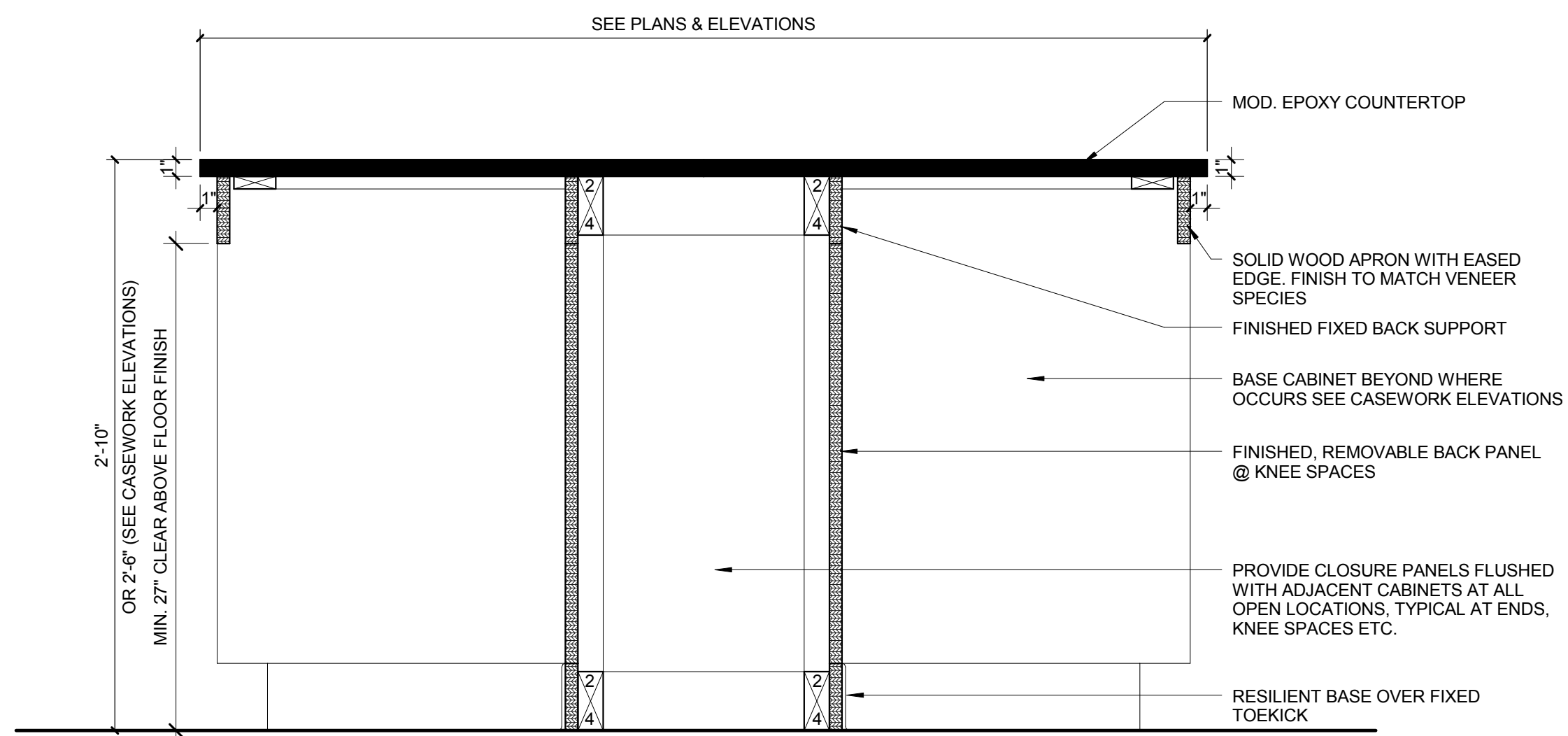


① LAB SERVICES MOUNTING HEIGHTS
1/2" = 1'-0"

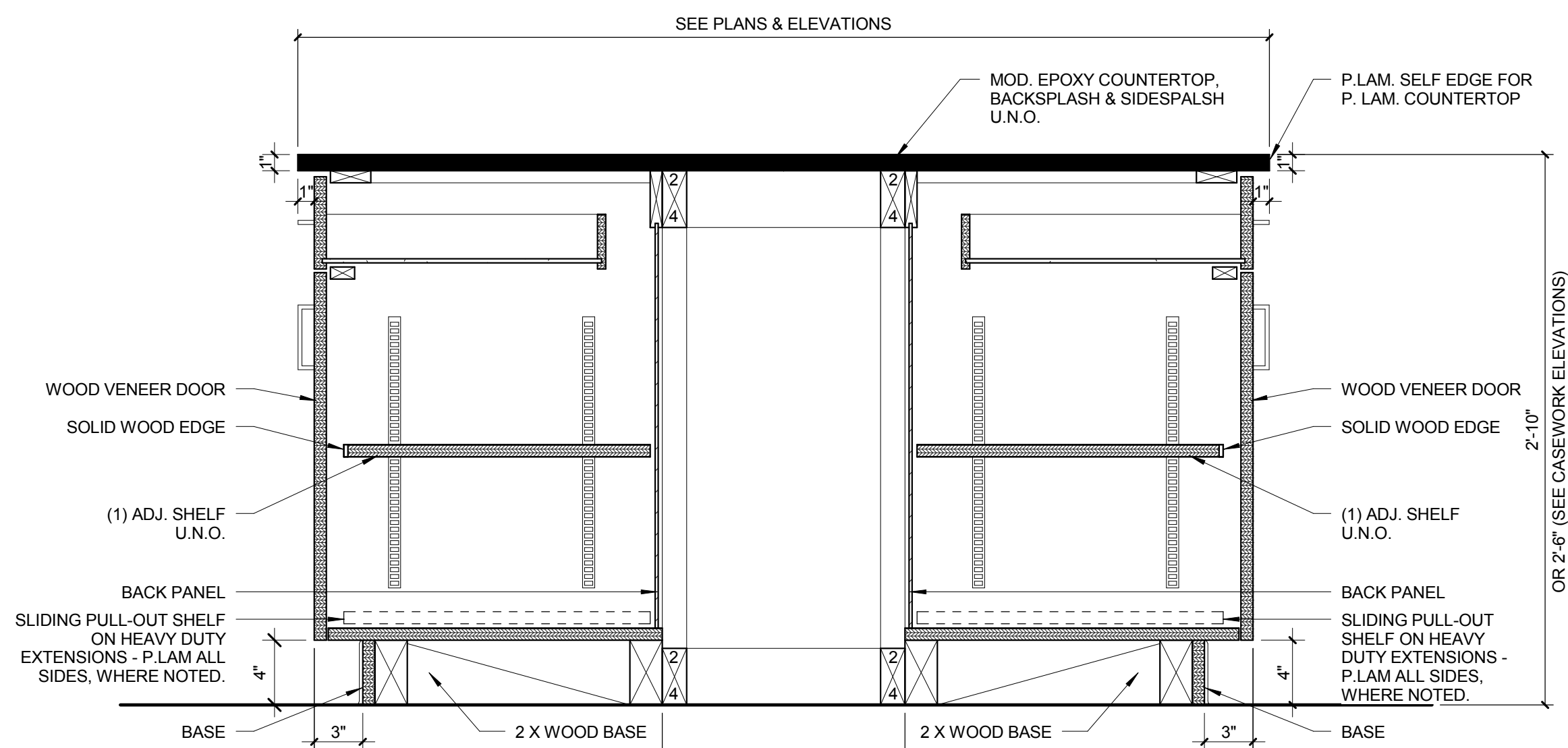




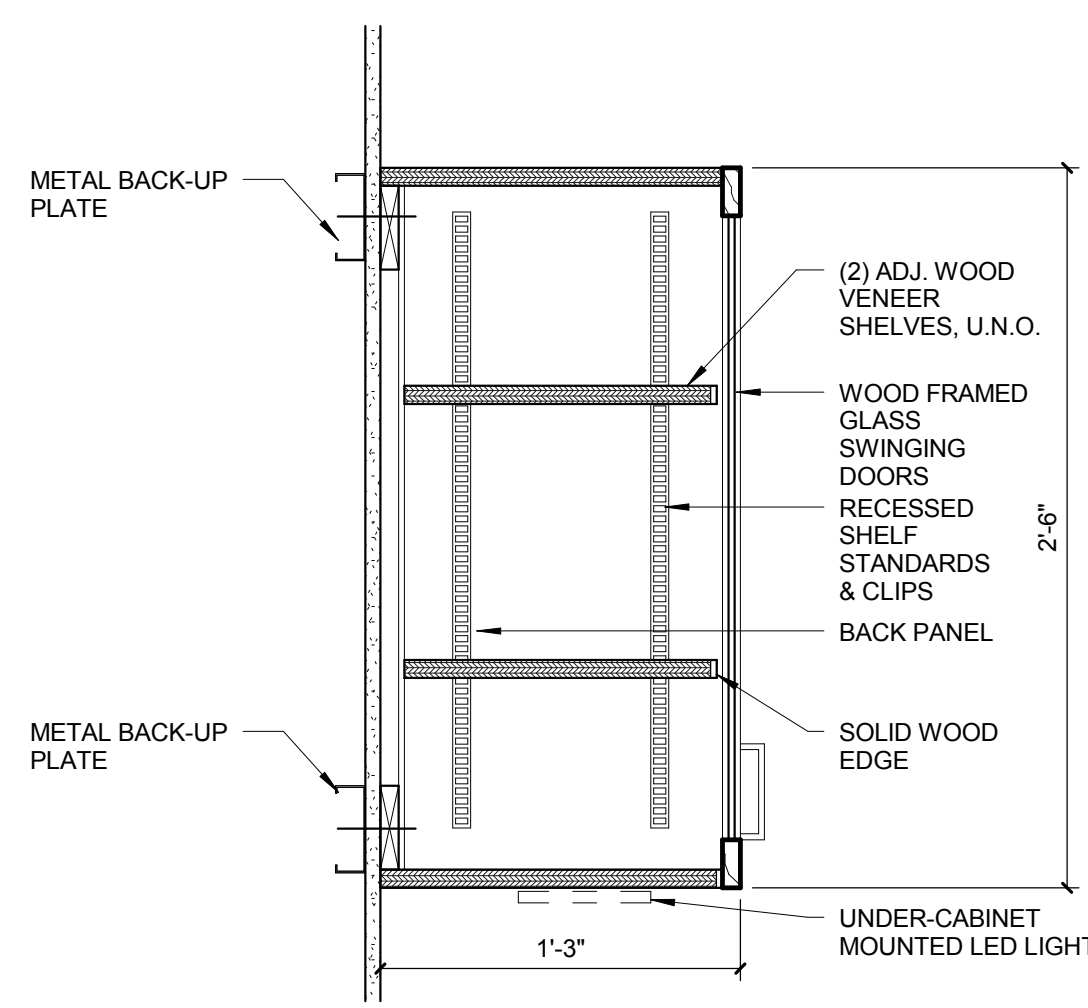
15 CASEWORK DETAIL - BOOKCASE
1 1/2" = 1'-0"



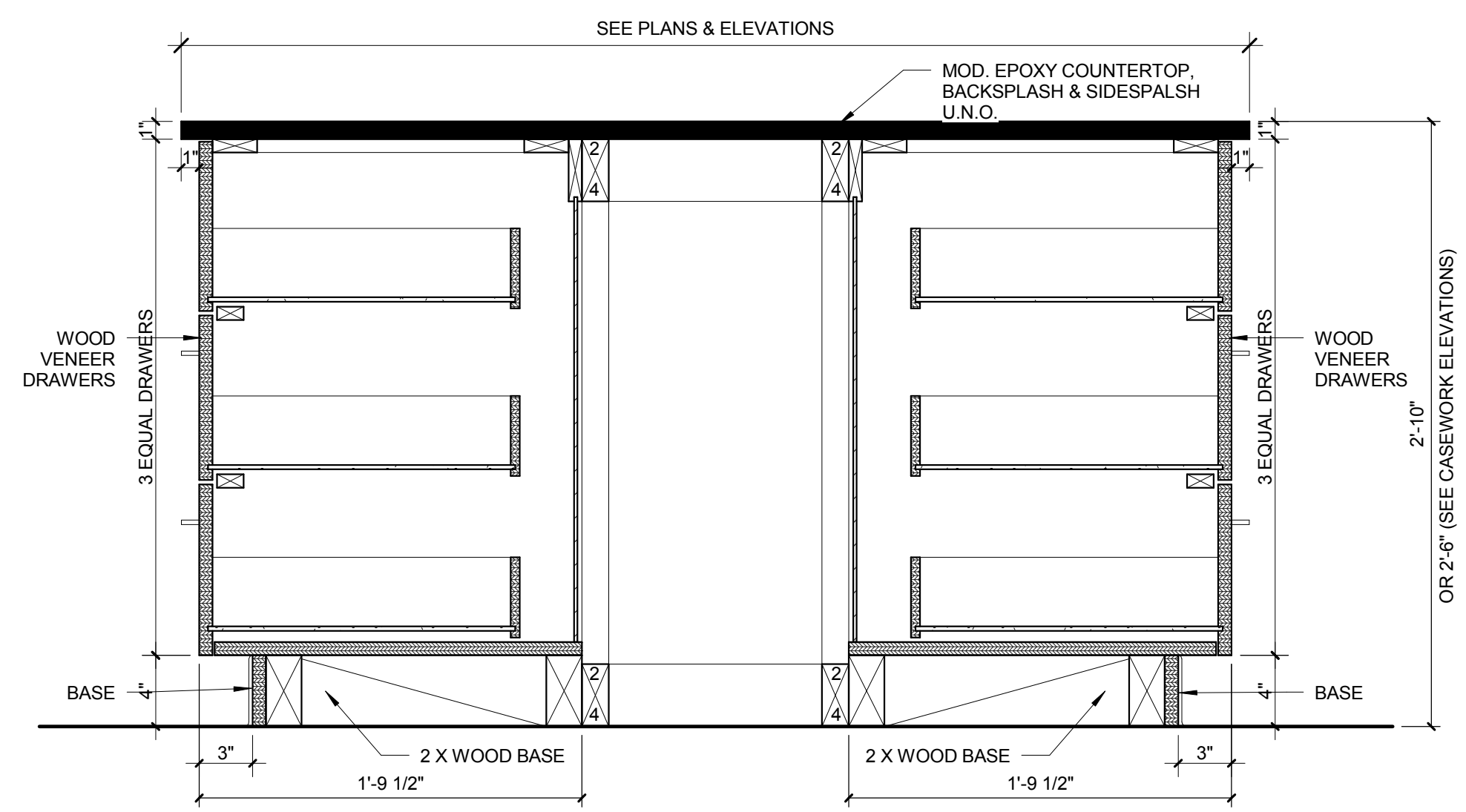
14 BASE CABINET DETAIL - ISLAND_KS
1 1/2" = 1'-0"



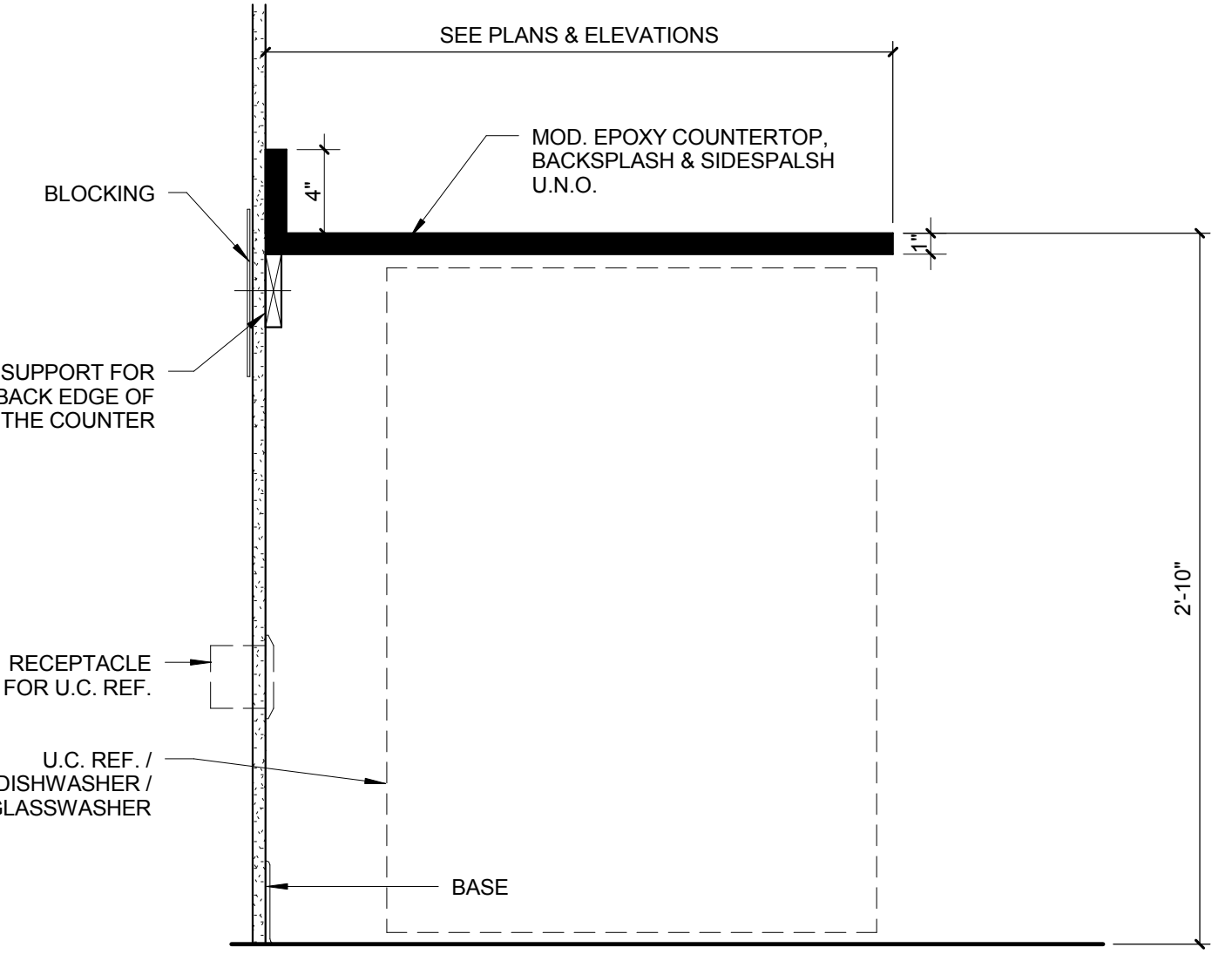
13 BASE CABINET DETAIL - ISLAND_DRAWER+DOOR
1 1/2" = 1'-0"



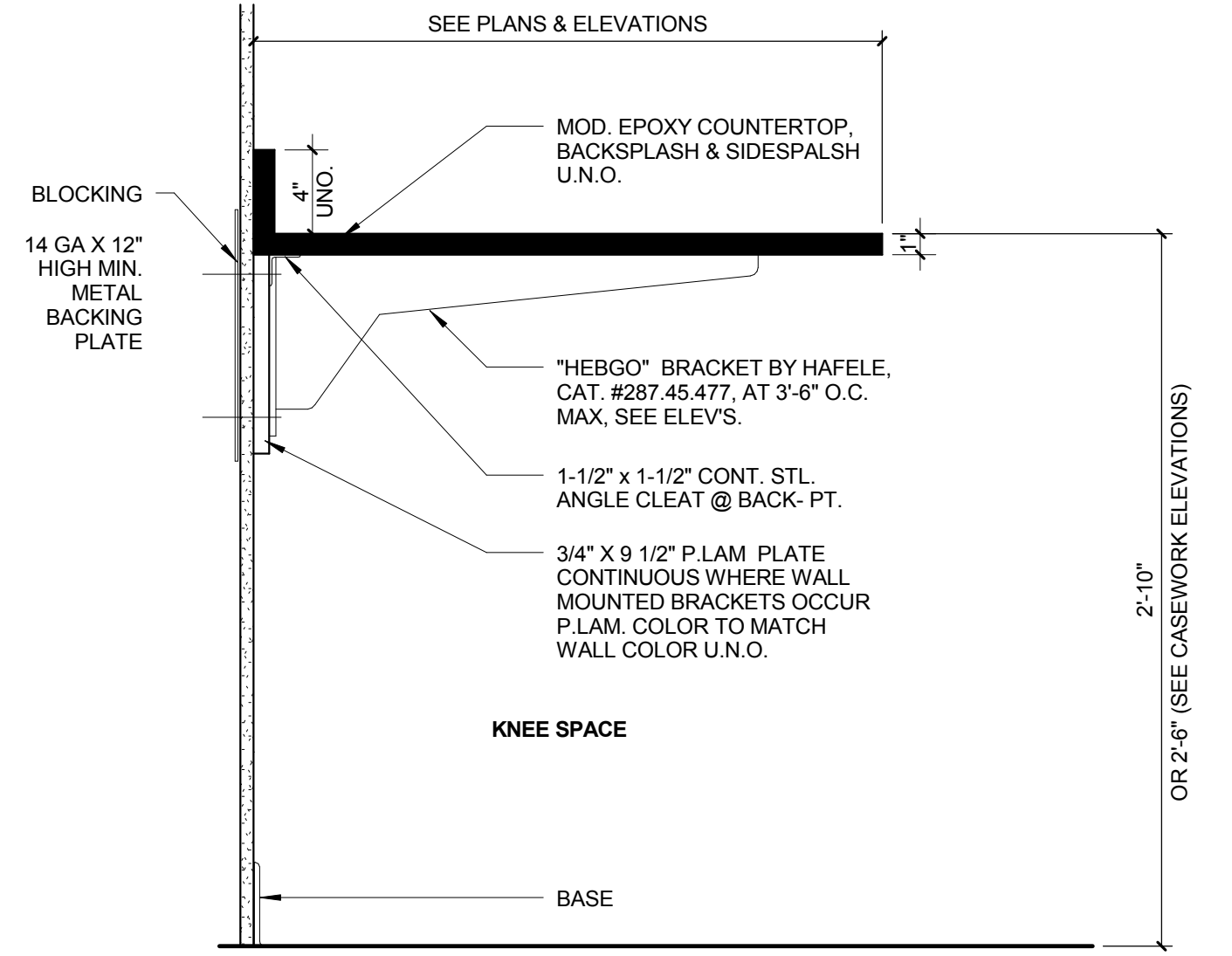
12 WALL CABINET DETAIL - FRAMED GLASS DOORS
1 1/2" = 1'-0"



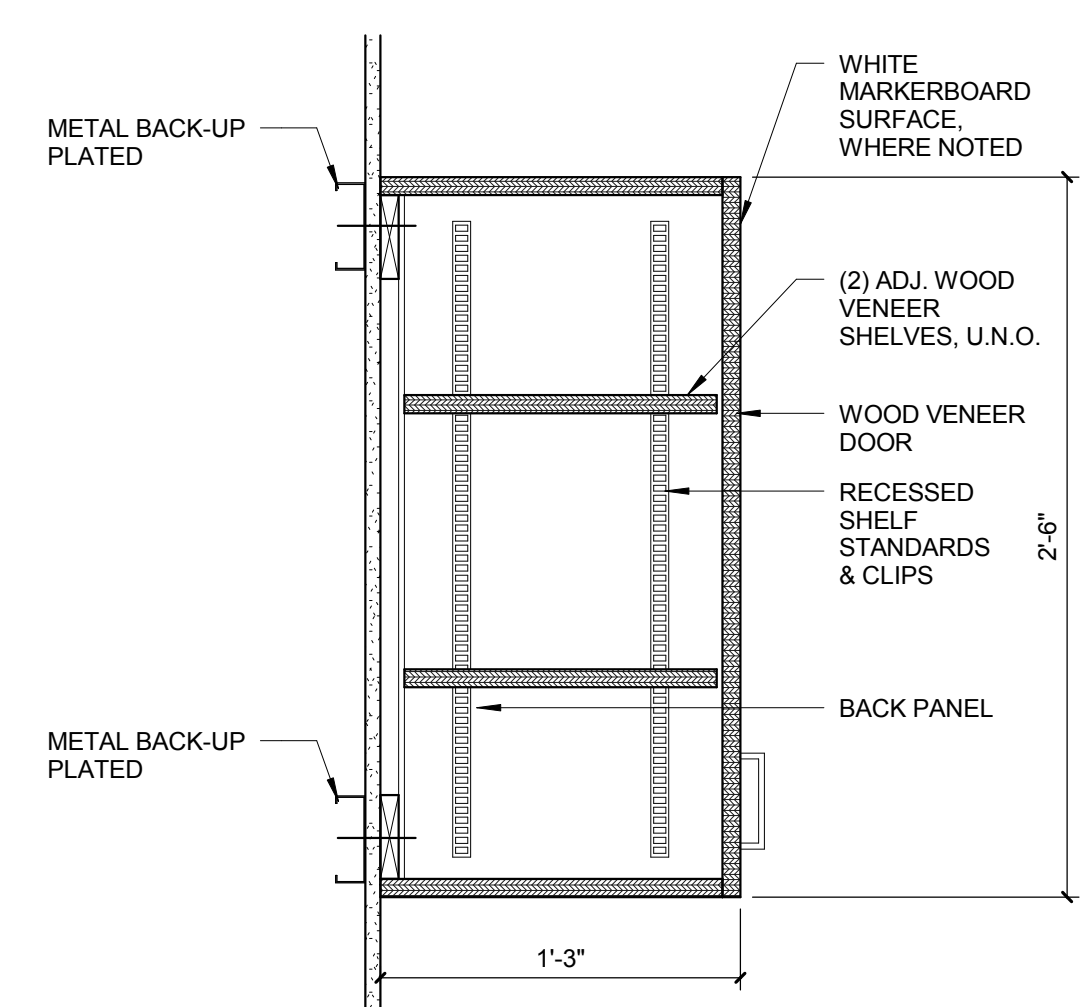
11 BASE CABINET DETAIL - ISLAND_DRAWERS(4)
1 1/2" = 1'-0"



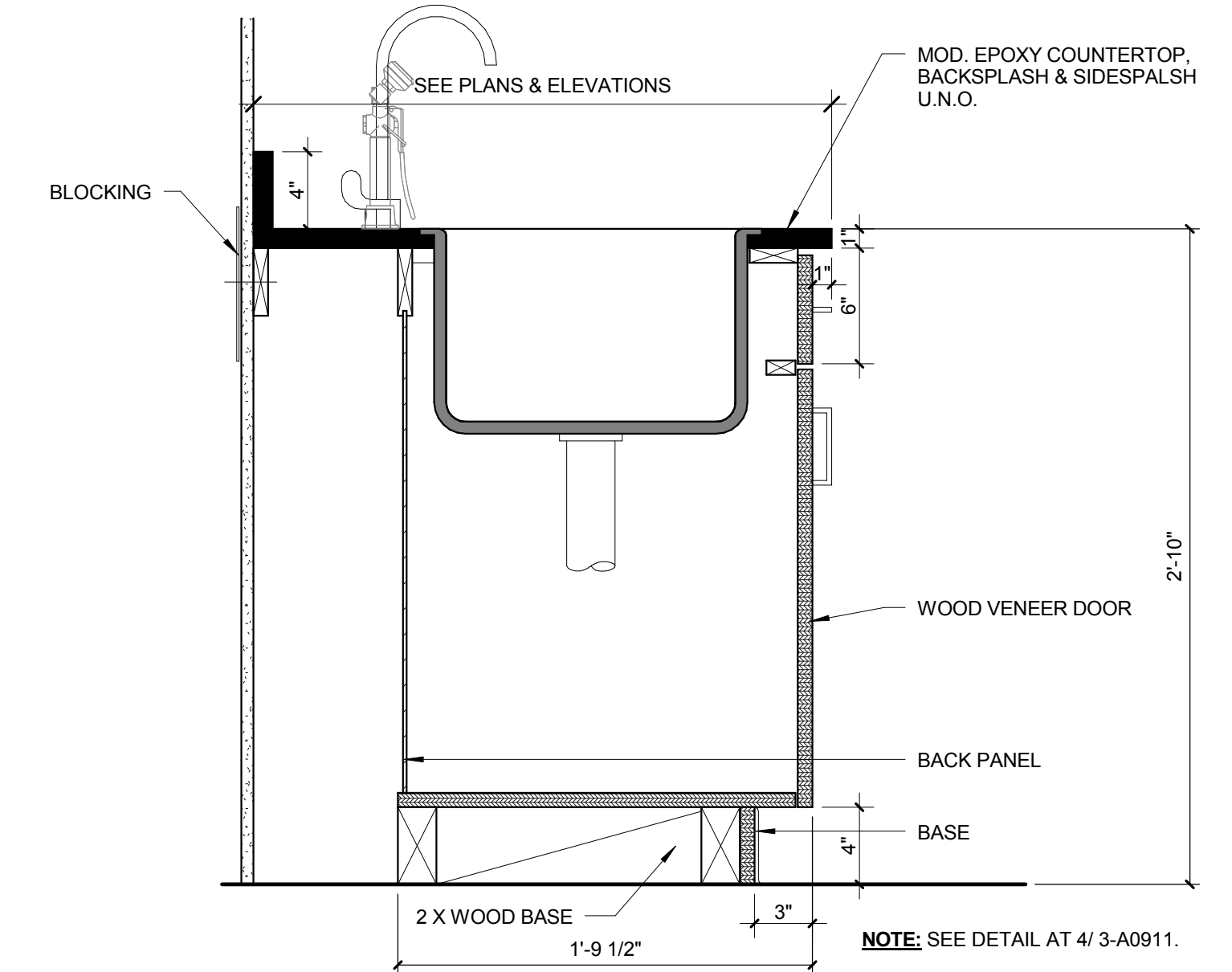
10 CASEWORK DETAIL - U.C. REF.
1 1/2" = 1'-0"



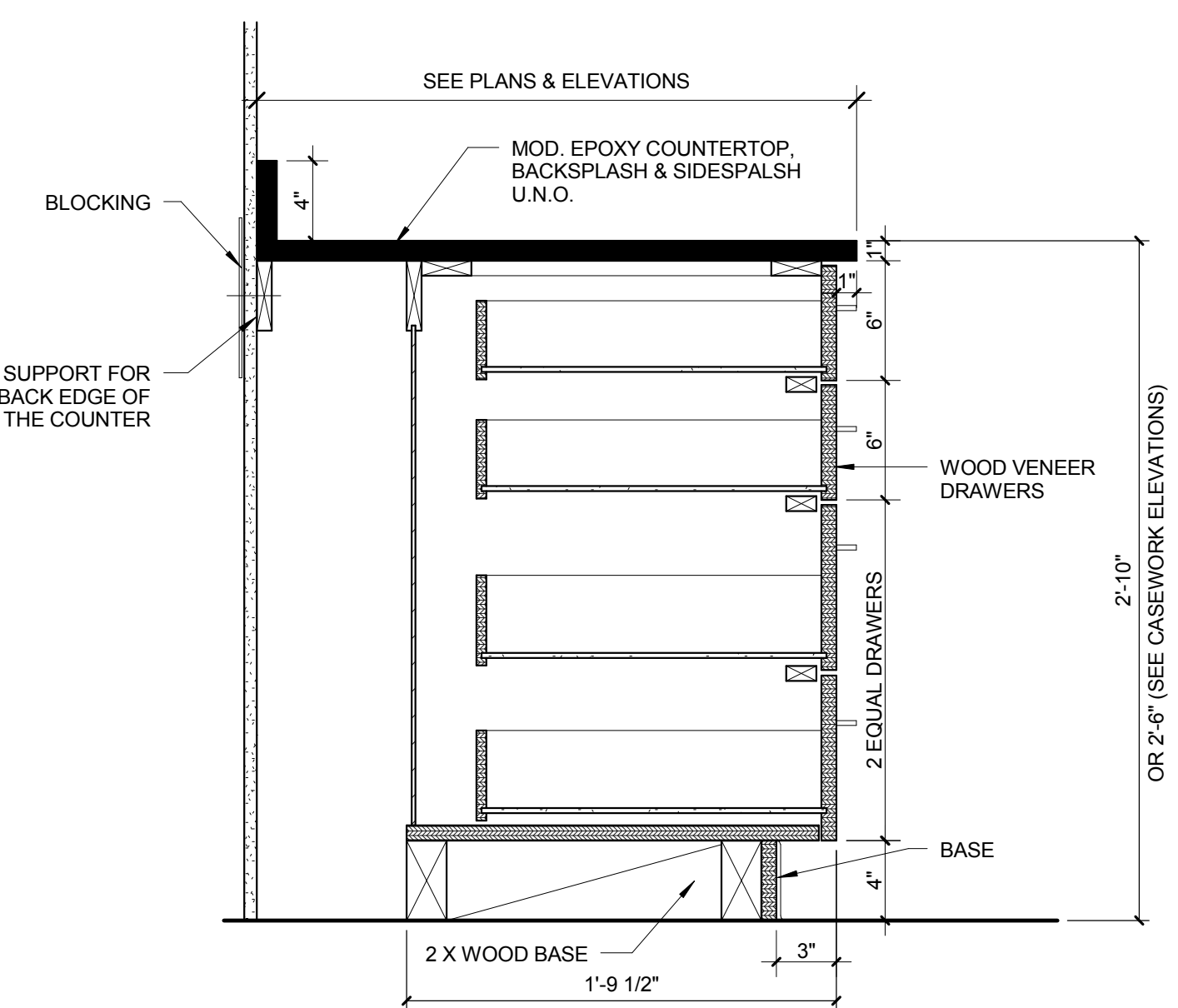
9 CASEWORK DETAIL - METAL BRACKET
1 1/2" = 1'-0"



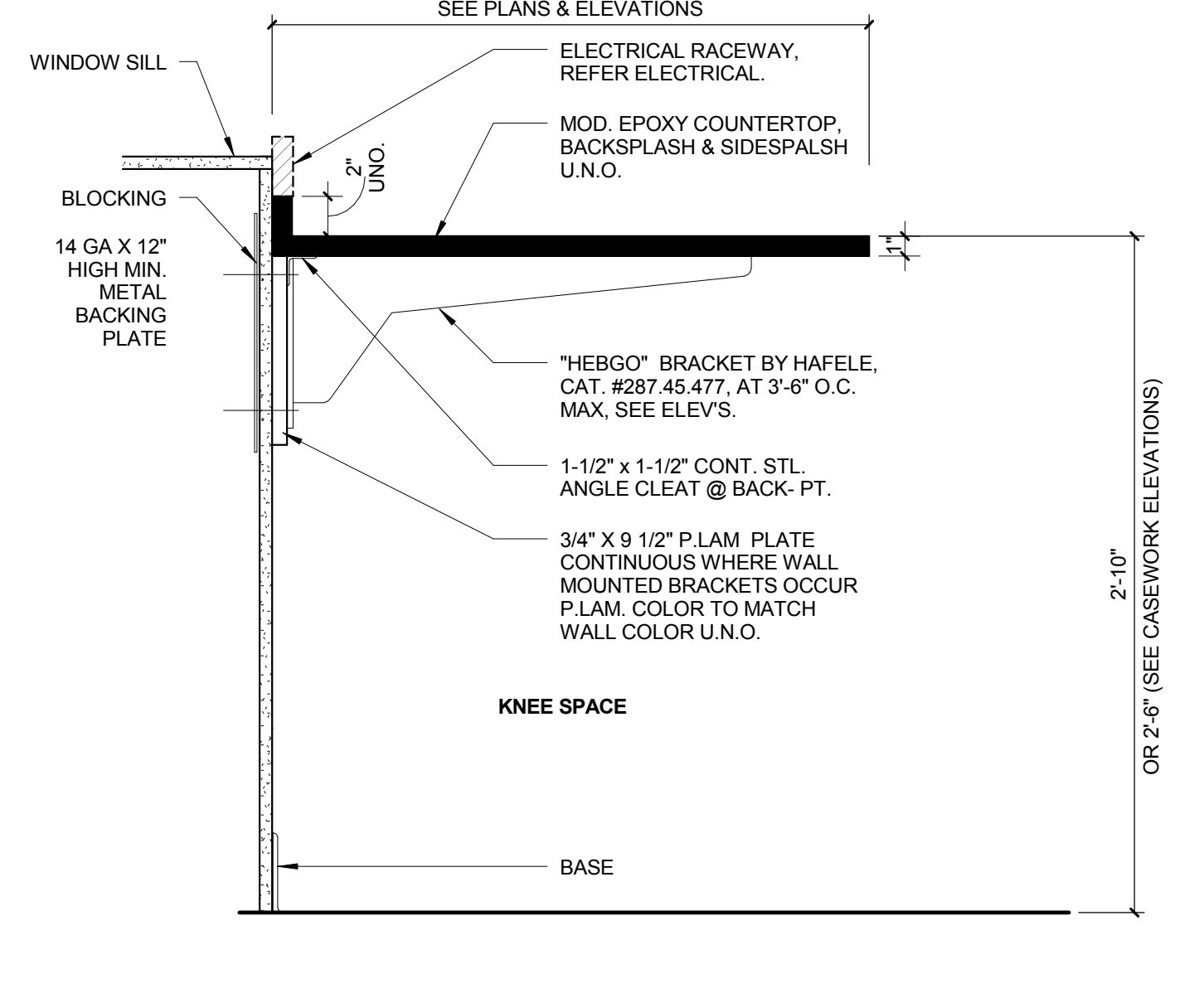
8 WALL CABINET DETAIL - SOLID DOORS
1 1/2" = 1'-0"



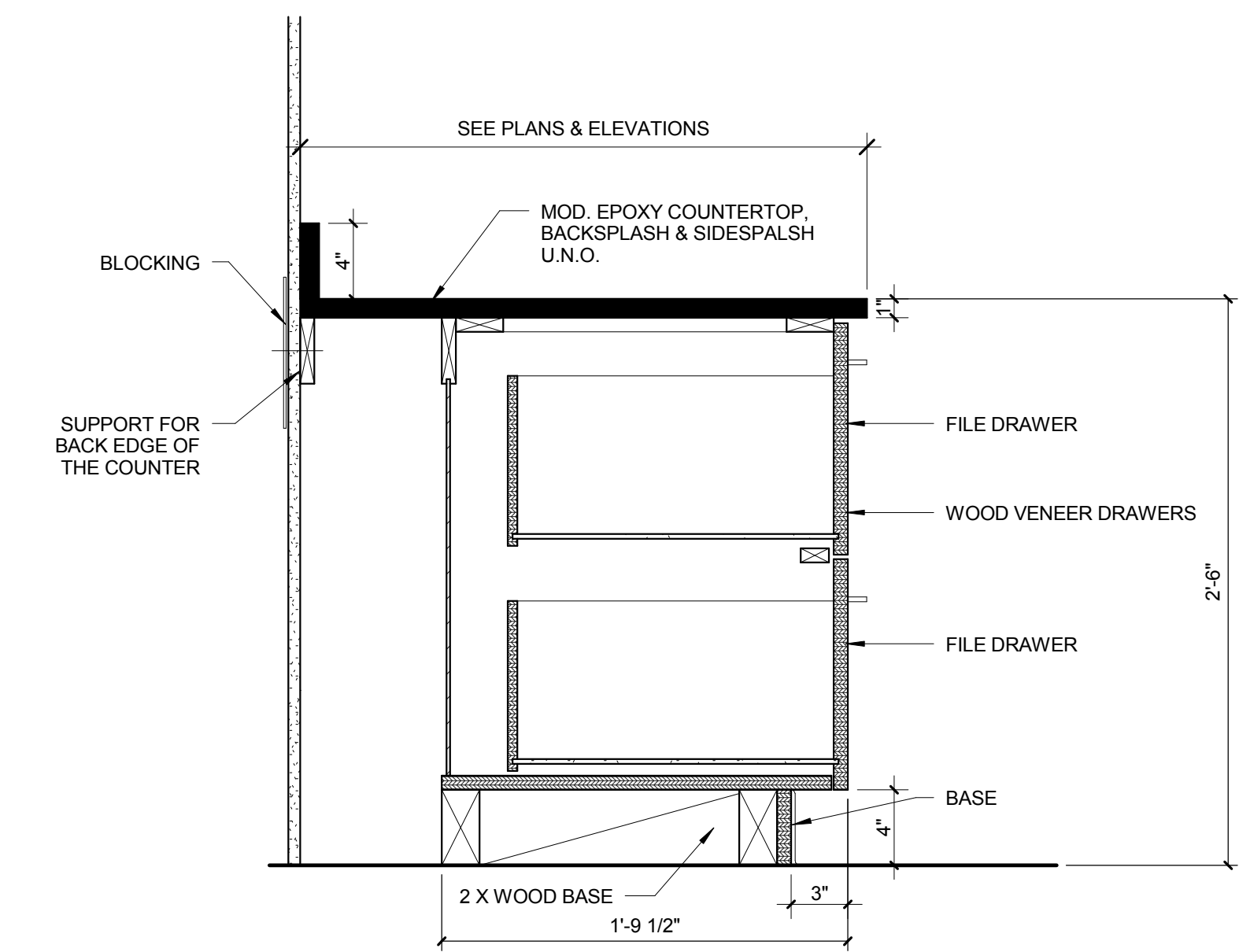
7 BASE SINK CABINET DETAIL
1 1/2" = 1'-0"



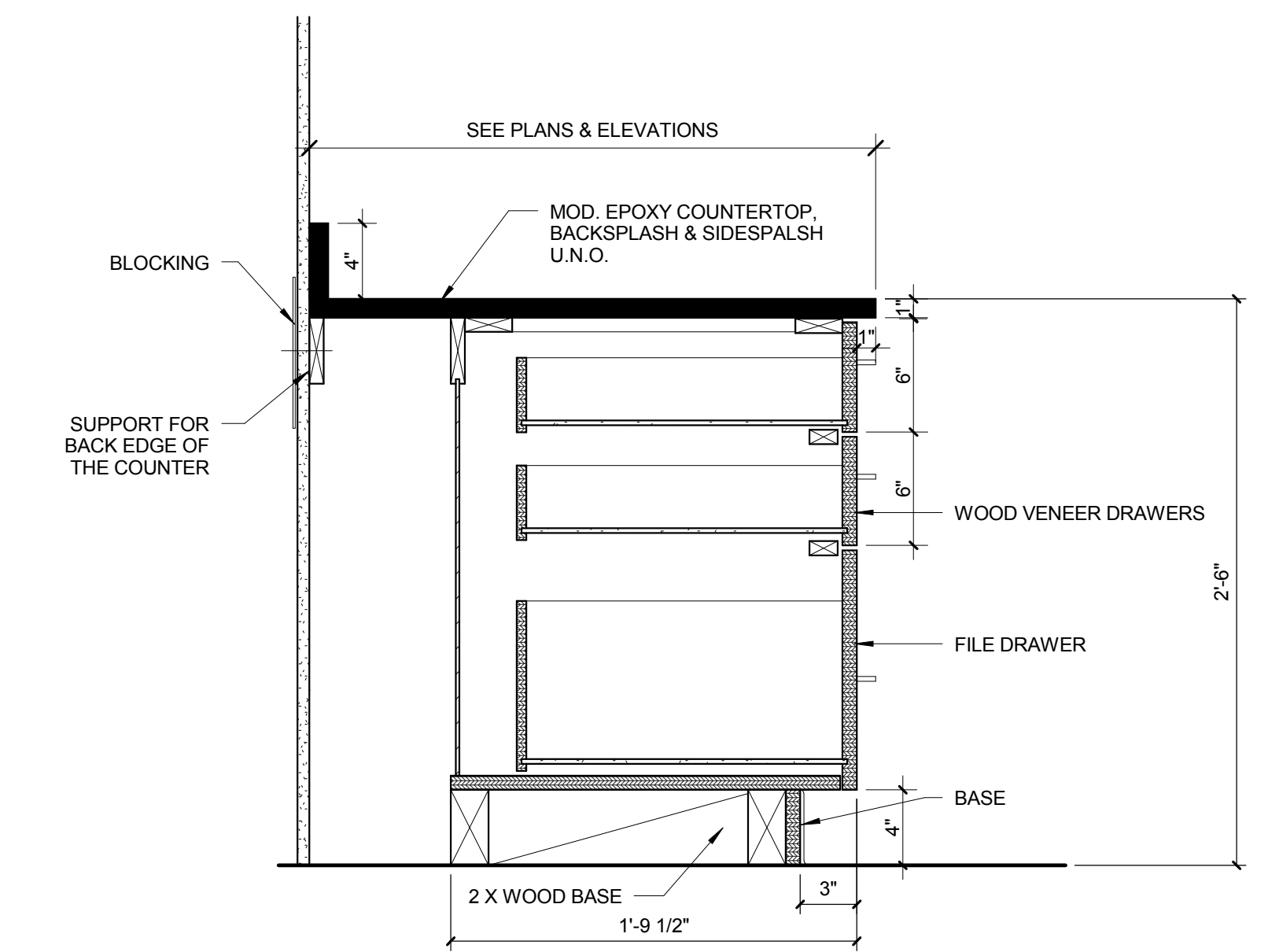
6 BASE CABINET DETAIL - DRAWERS(4)
1 1/2" = 1'-0"



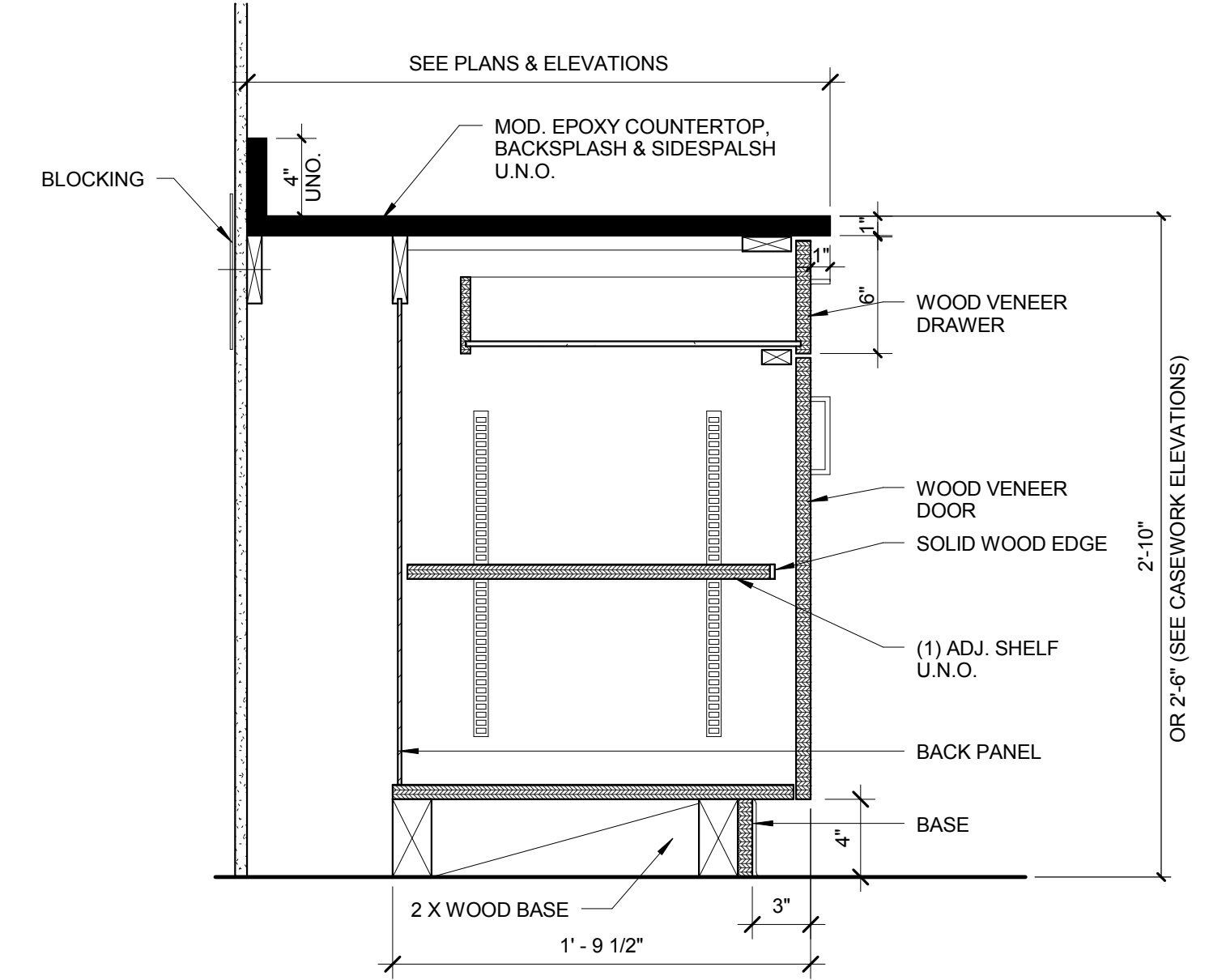
5 CASEWORK DETAIL - METAL BRACKET @ EAST WALL
1 1/2" = 1'-0"



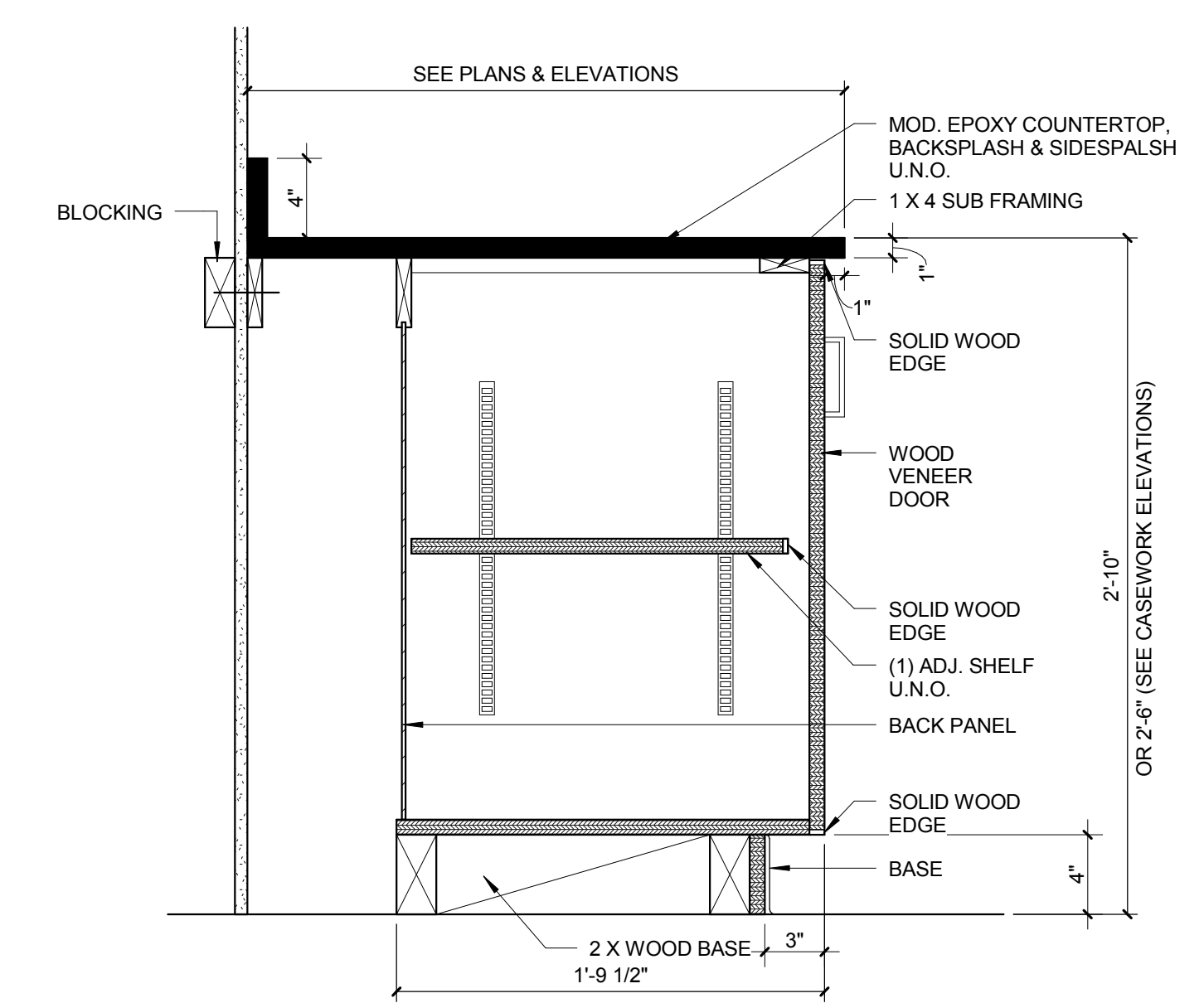
4 BASE CABINET DETAIL - FILE DRAWERS(2)
1 1/2" = 1'-0"



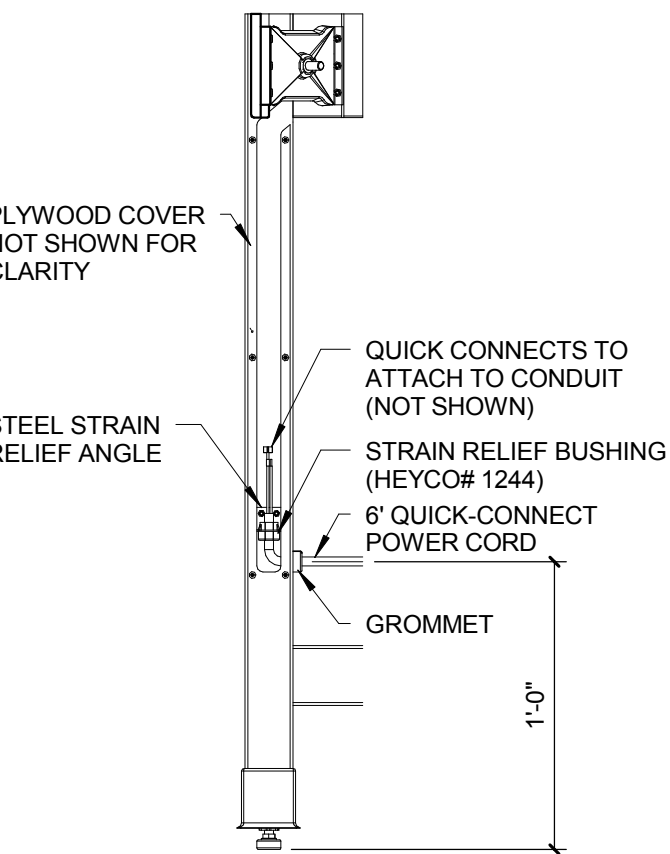
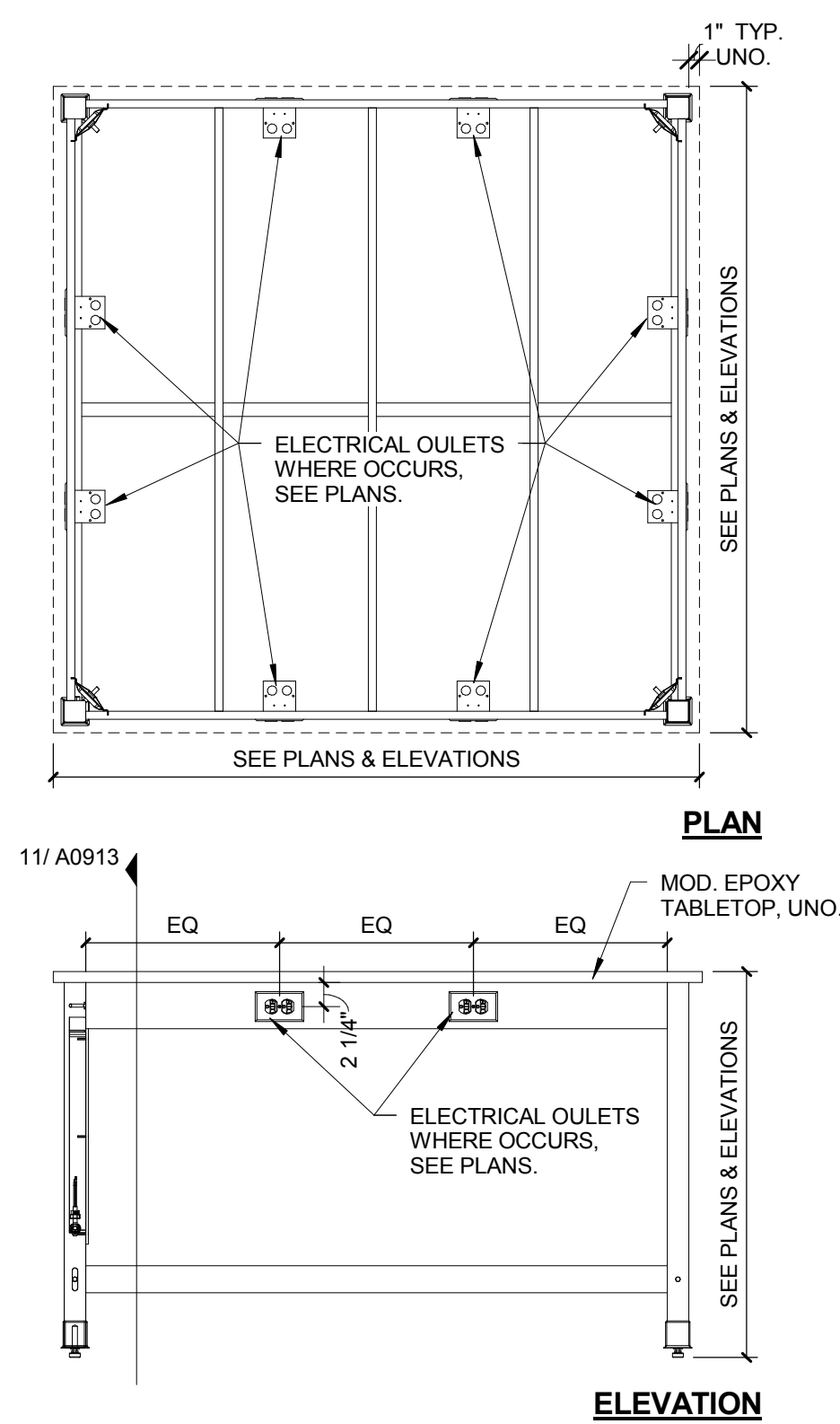
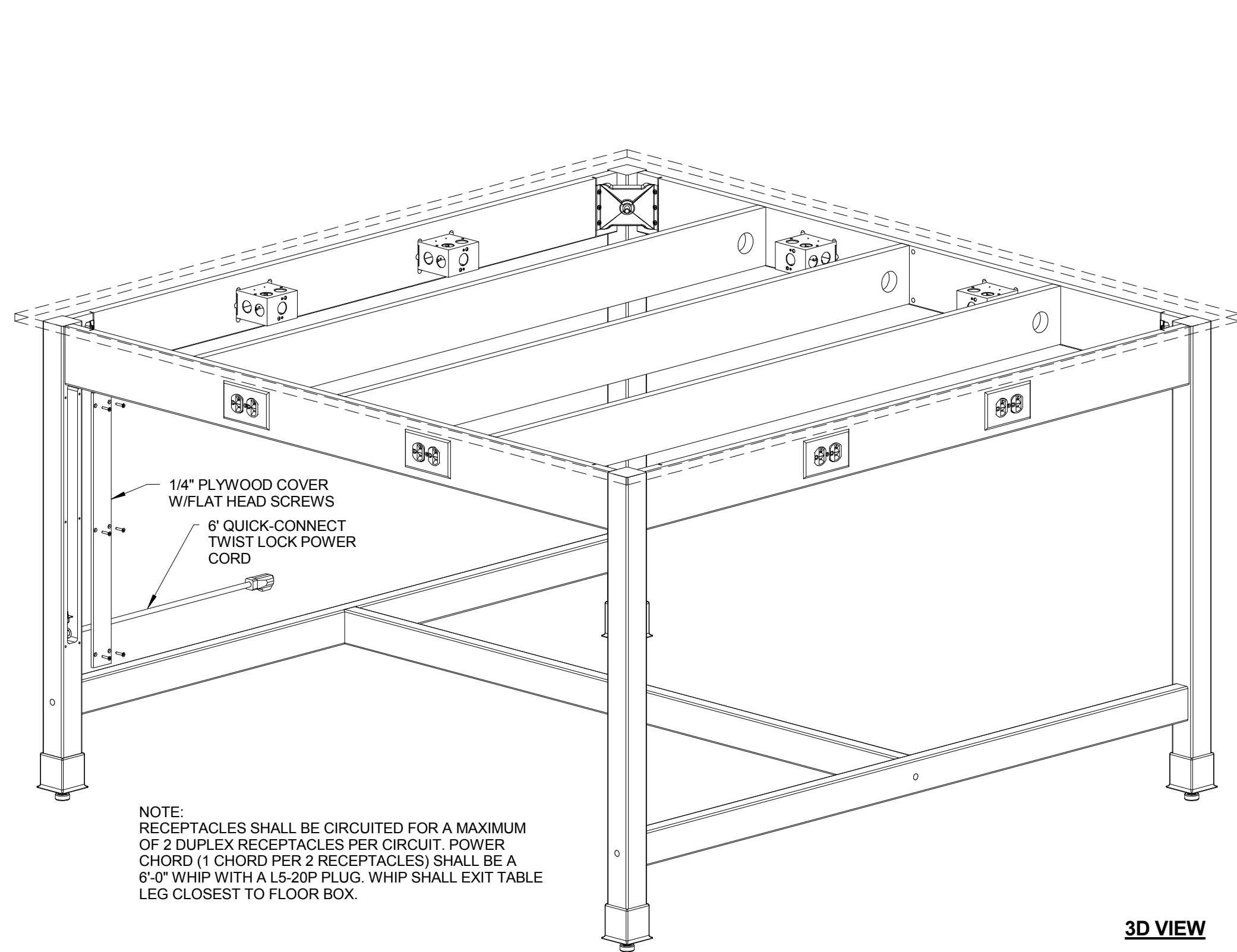
3 BASE CABINET DETAIL - DRAWERS(2)+FILE DRAWER
1 1/2" = 1'-0"



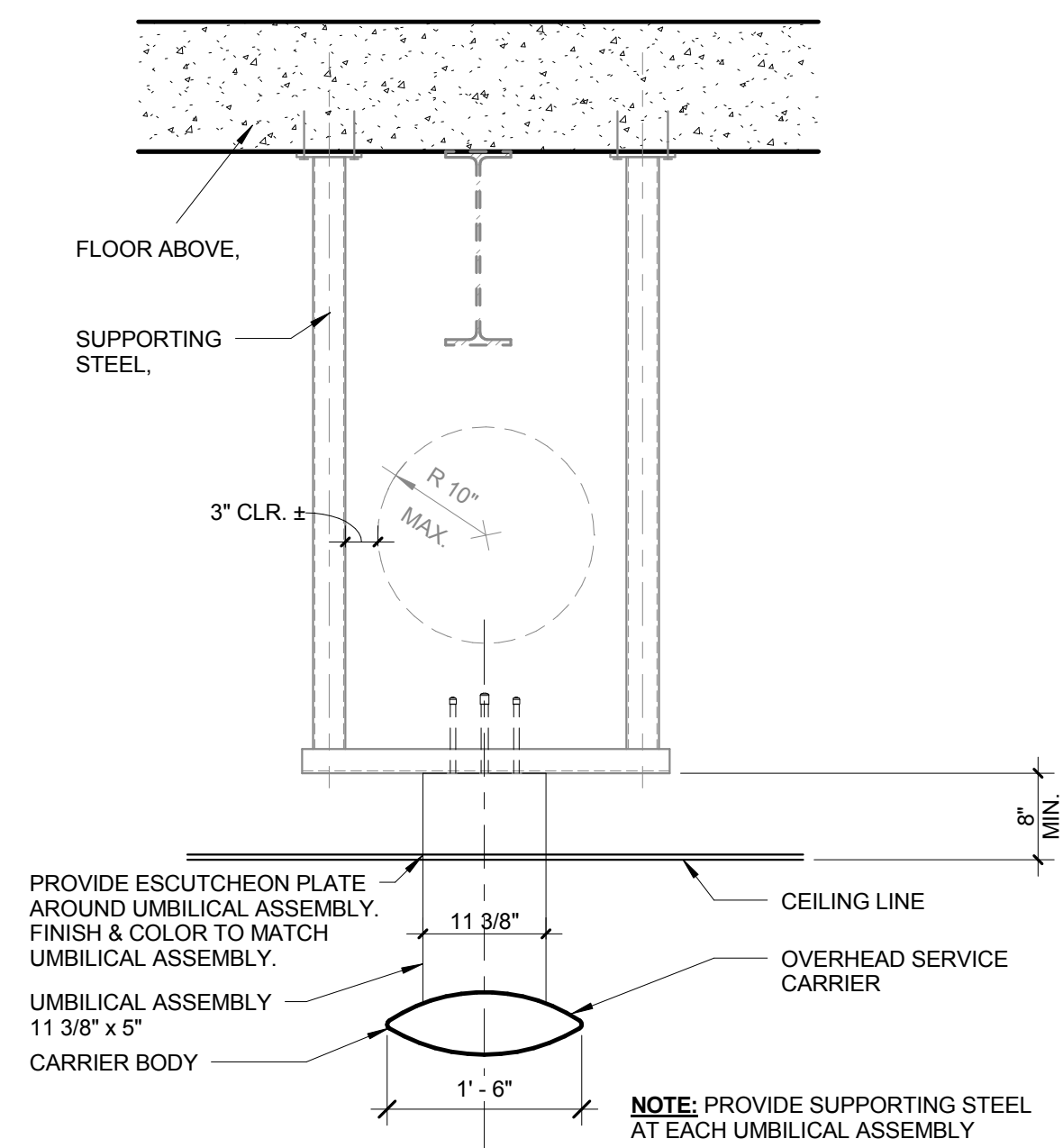
2 BASE CABINET DETAIL - DRAWER+DOOR
1 1/2" = 1'-0"



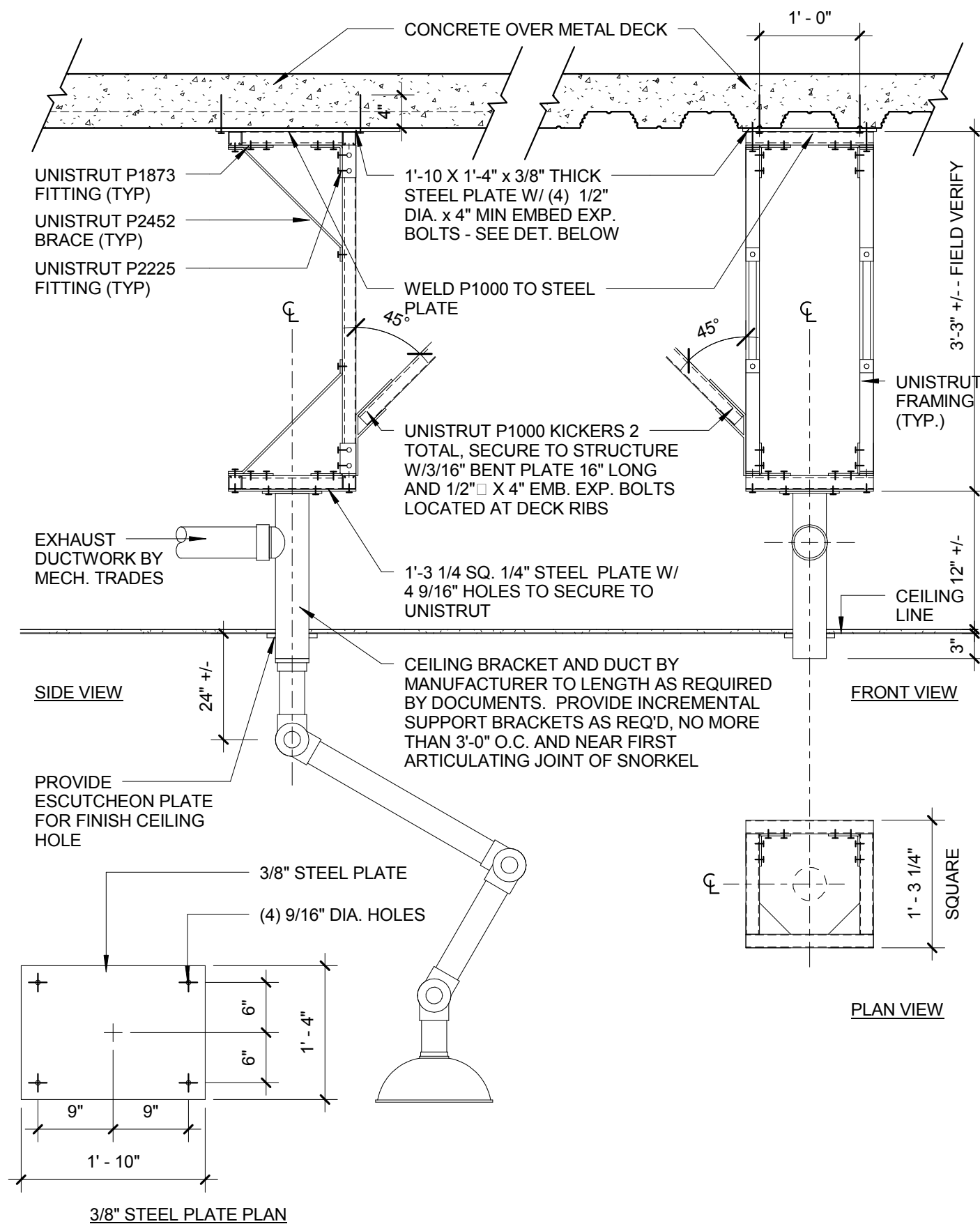
1 BASE CABINET DETAIL
1 1/2" = 1'-0"



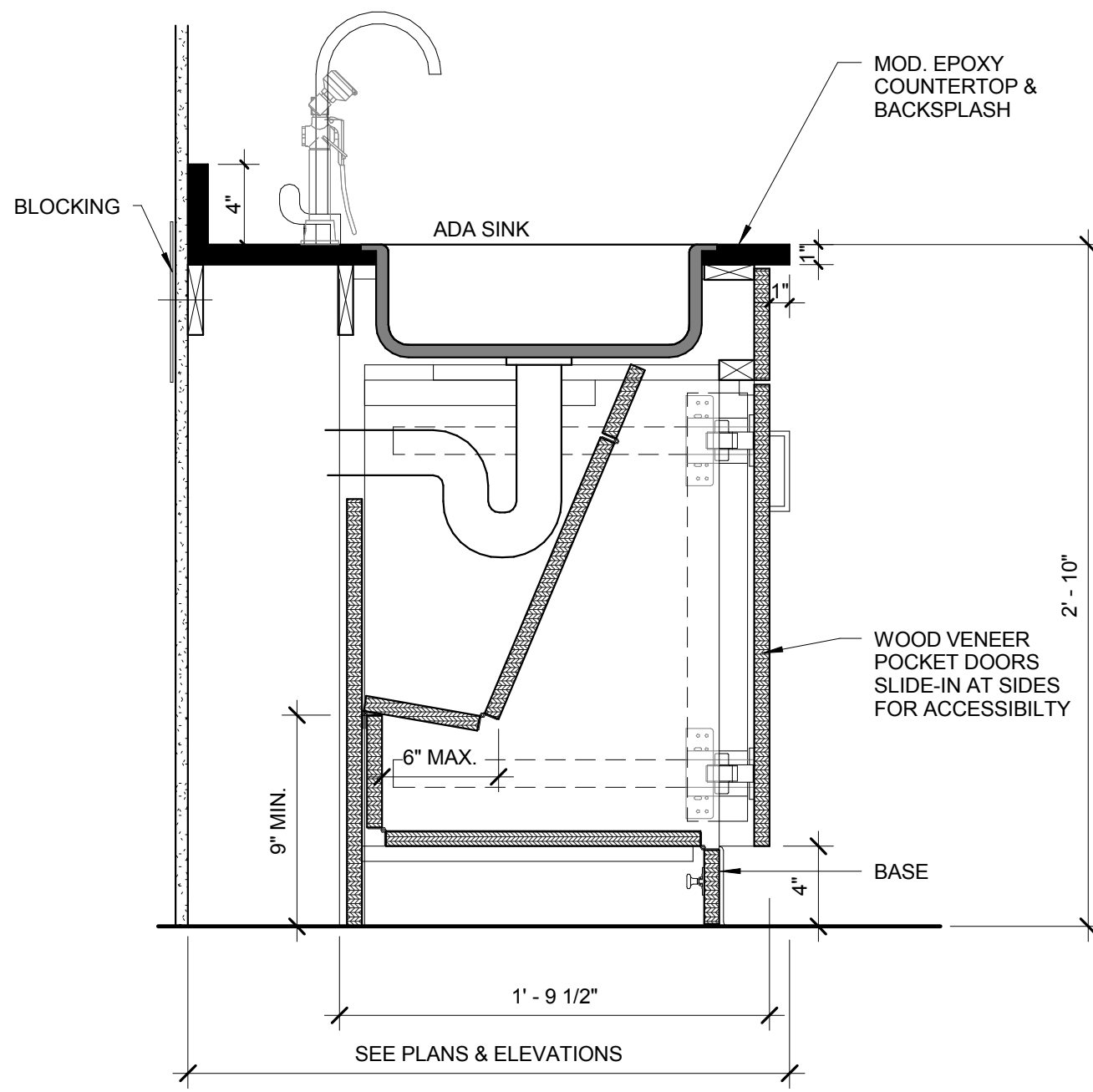
12 TABLE WITH ELEC. OUTLETS ON APRON
3/4" = 1'-0"



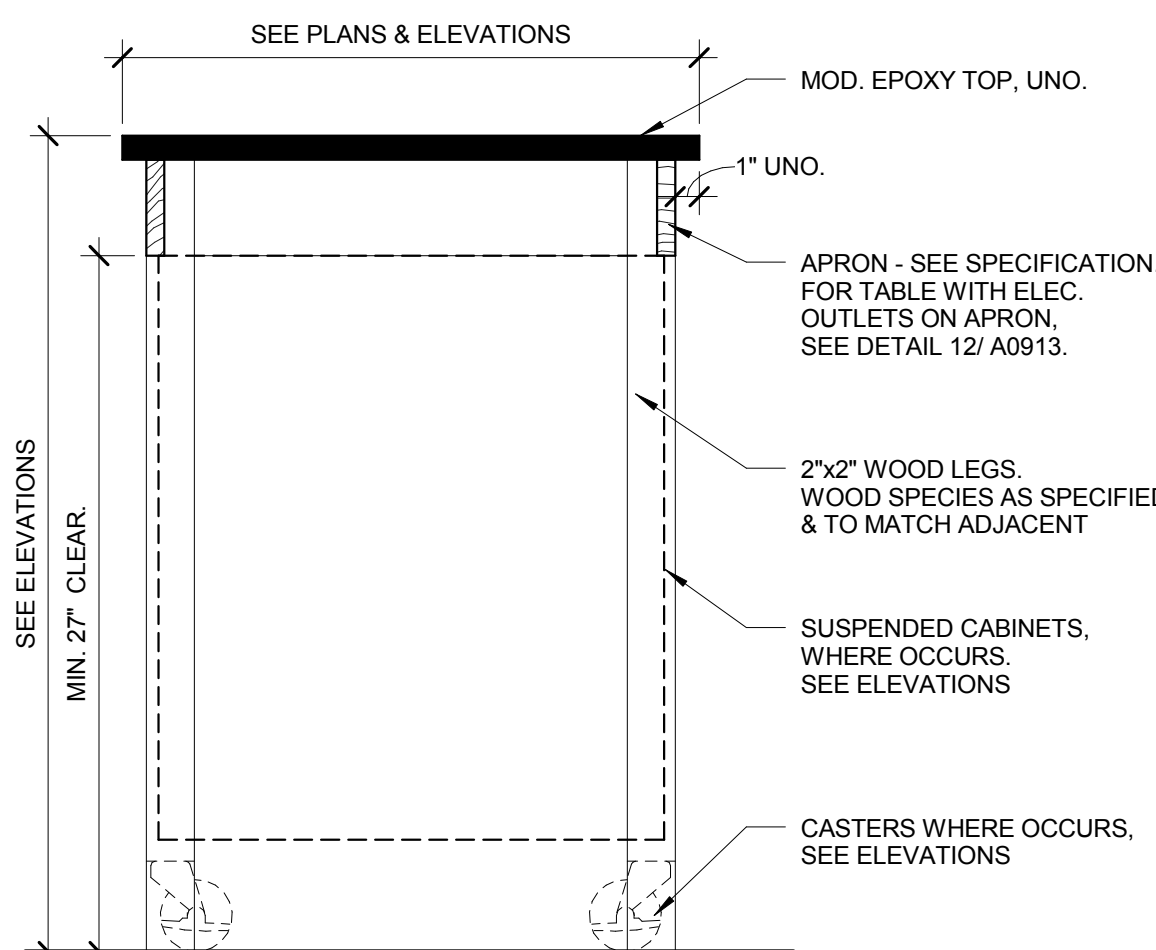
10 OSC MOUNTING DETAIL
3/4" = 1'-0"



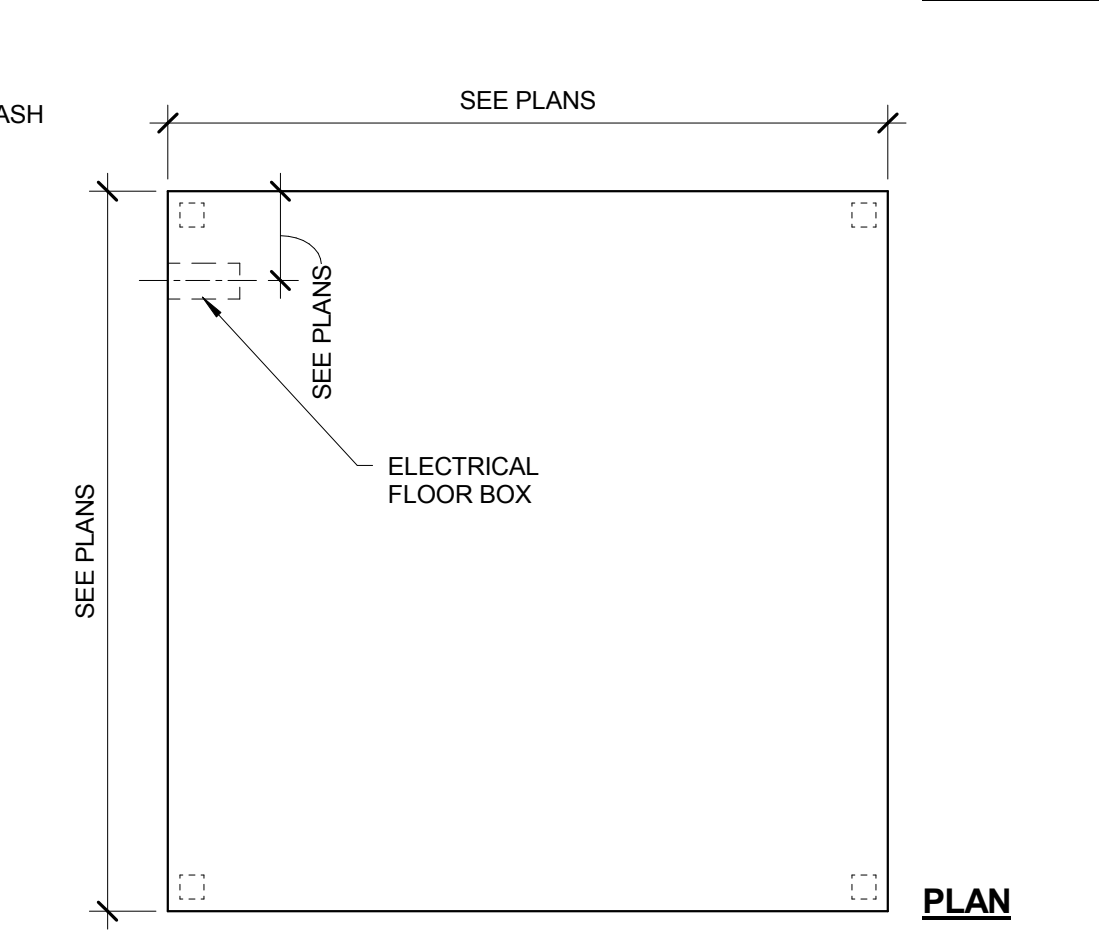
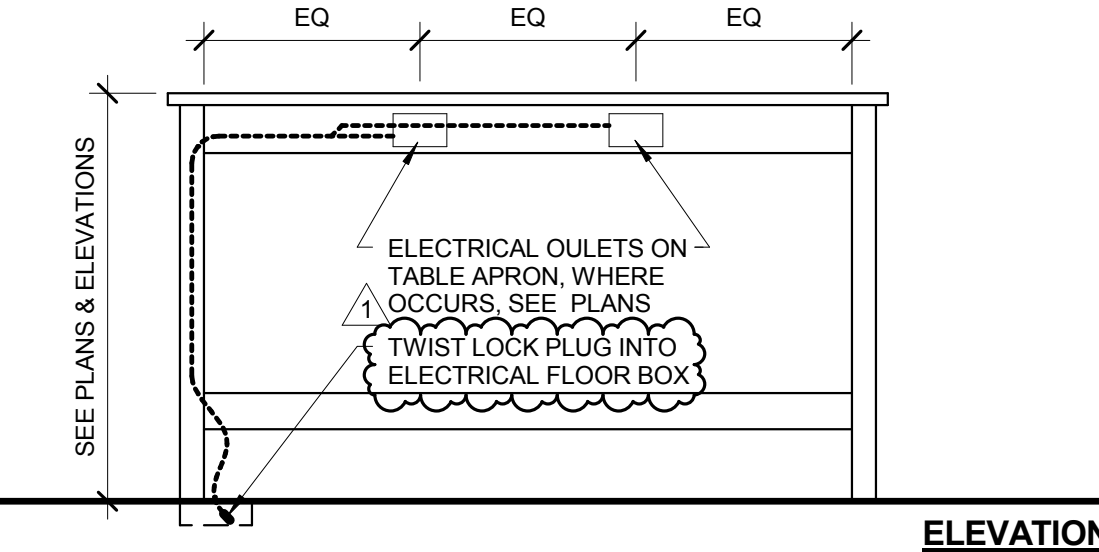
5 SNORKEL EXHAUST MOUNTING DETAIL
3/4" = 1'-0"



9 ADA SINK DETAIL AT SINK TYPES - S-2, S-4, S-5
1 1/2" = 1'-0"



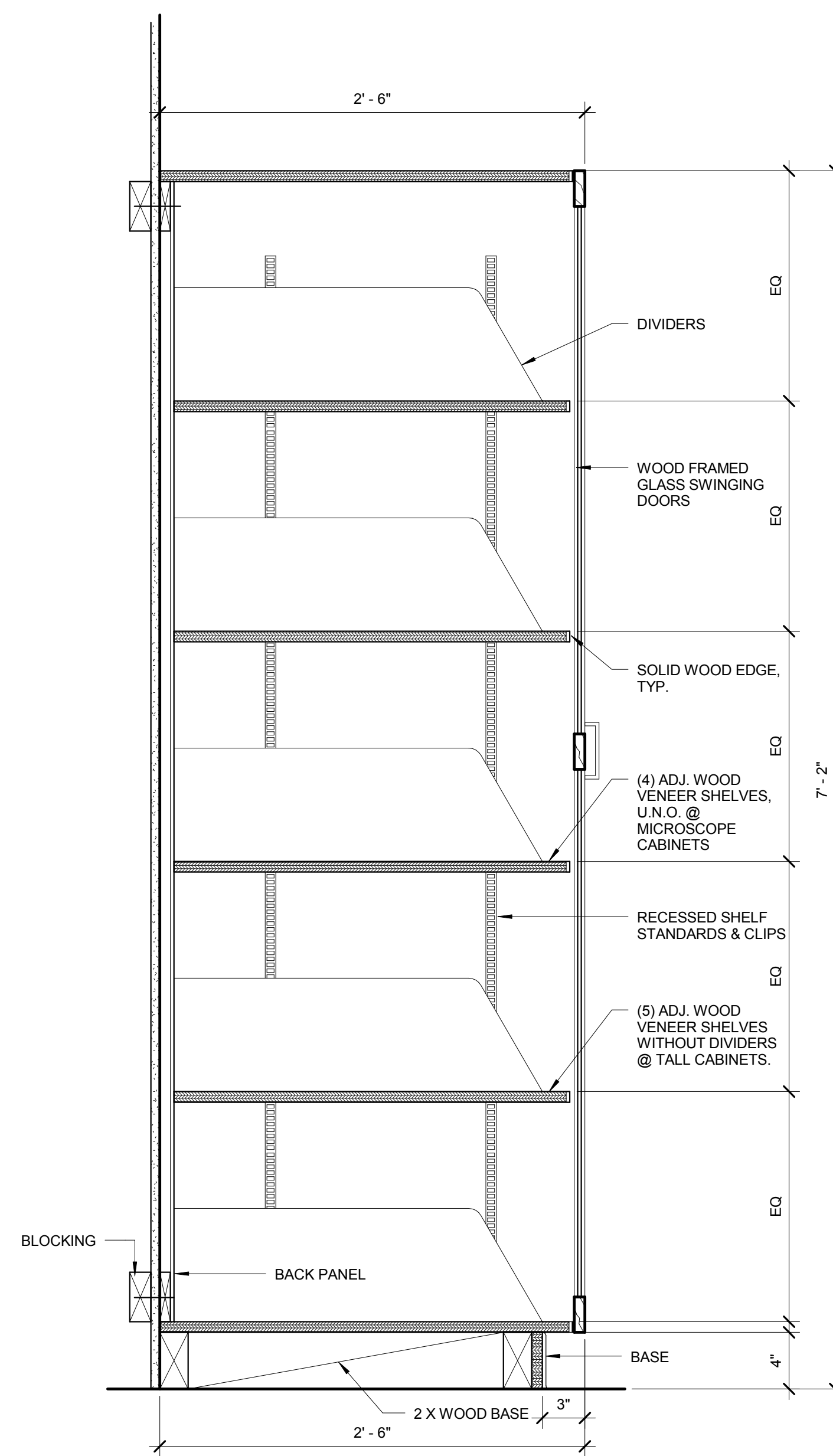
8 TYP. TABLE DETAIL
1 1/2" = 1'-0"



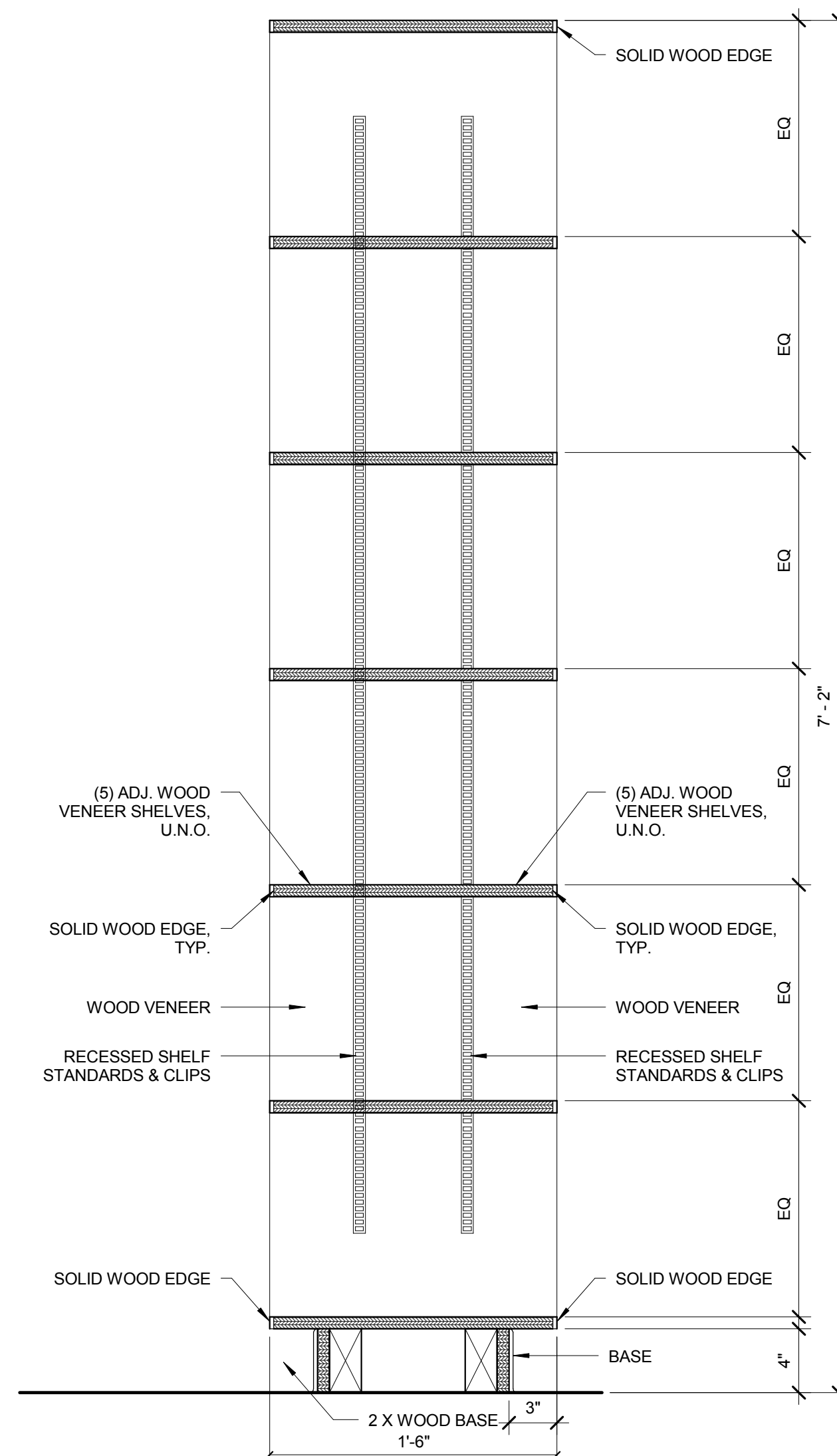
NOTE:
1) MAX. TWO DUPLEX ELECTRICAL OUTLETS PER CIRCUIT.
2) PROVIDE ONE QUICK-CONNECT WHIP PER CIRCUIT.

ELECTRICAL OUTLETS ON TABLE APRON
AT PRE-WIRED FIXED TABLES

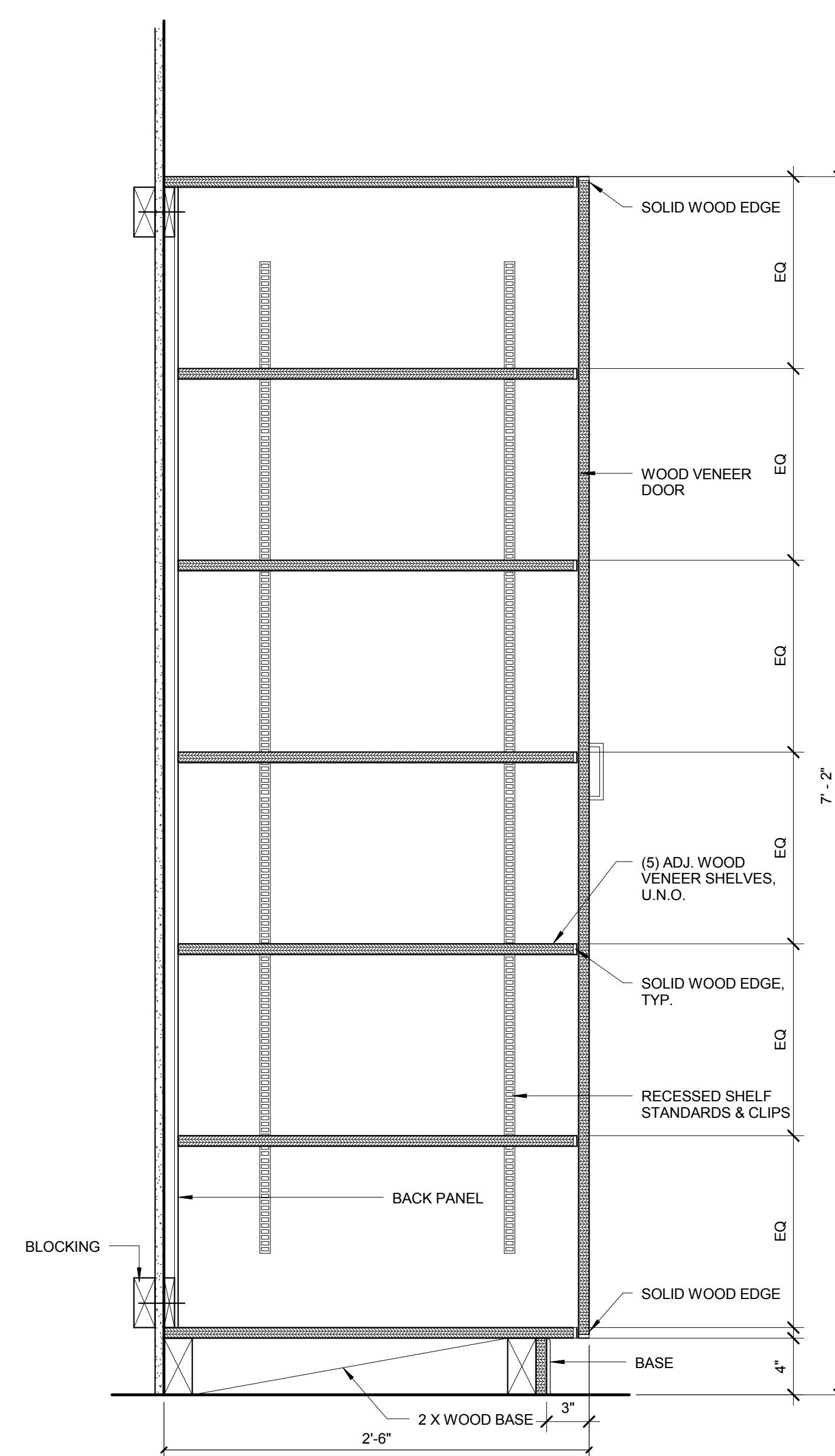
3 ELEC. OUTLETS AT TABLE APRON
3/4" = 1'-0"



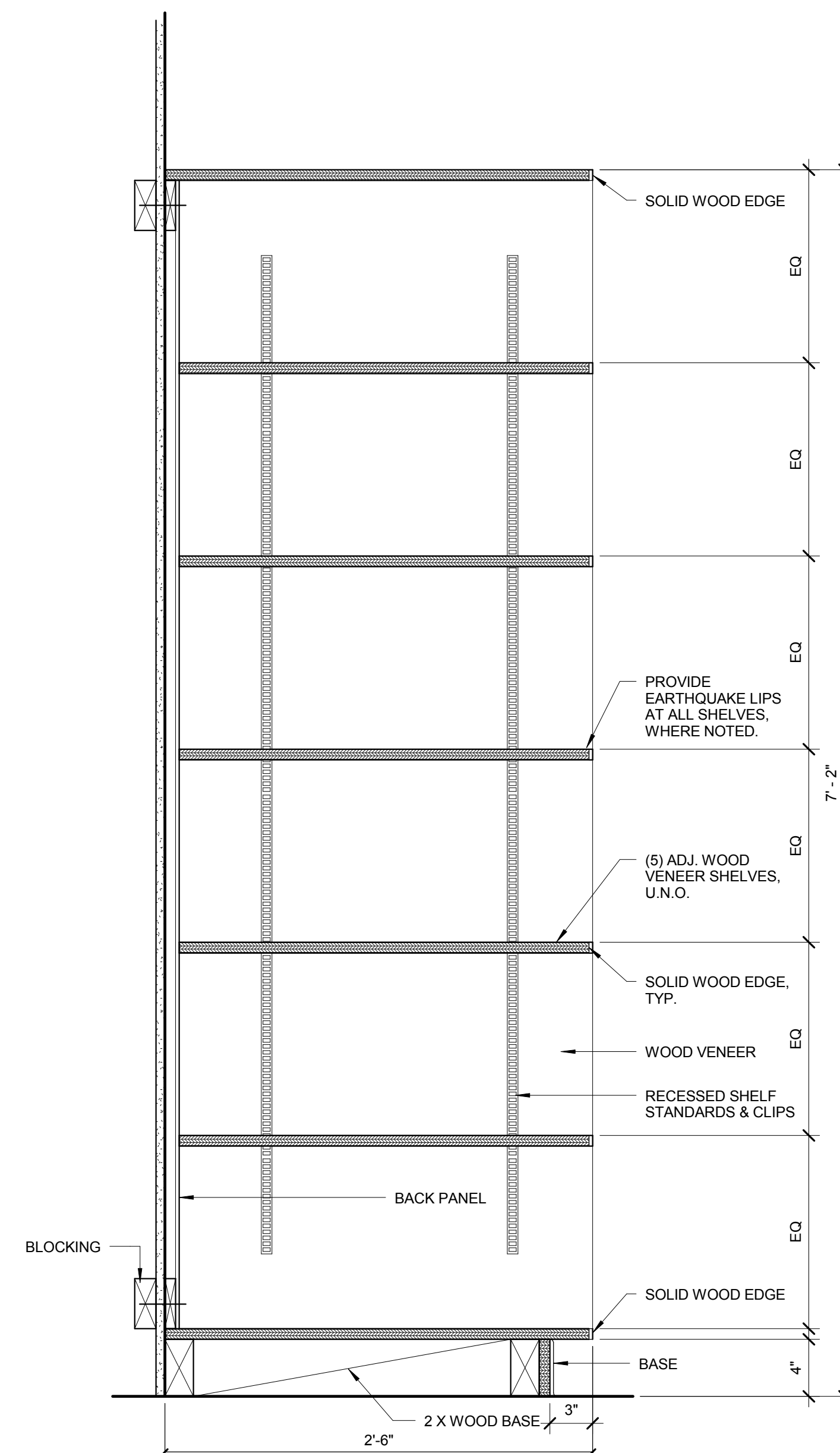
7 MICROSCOPE CABINET & TALL CABINET
DETAIL
1 1/2" = 1'-0"



2 BONE DISPLAY SHELVING
1 1/2" = 1'-0"

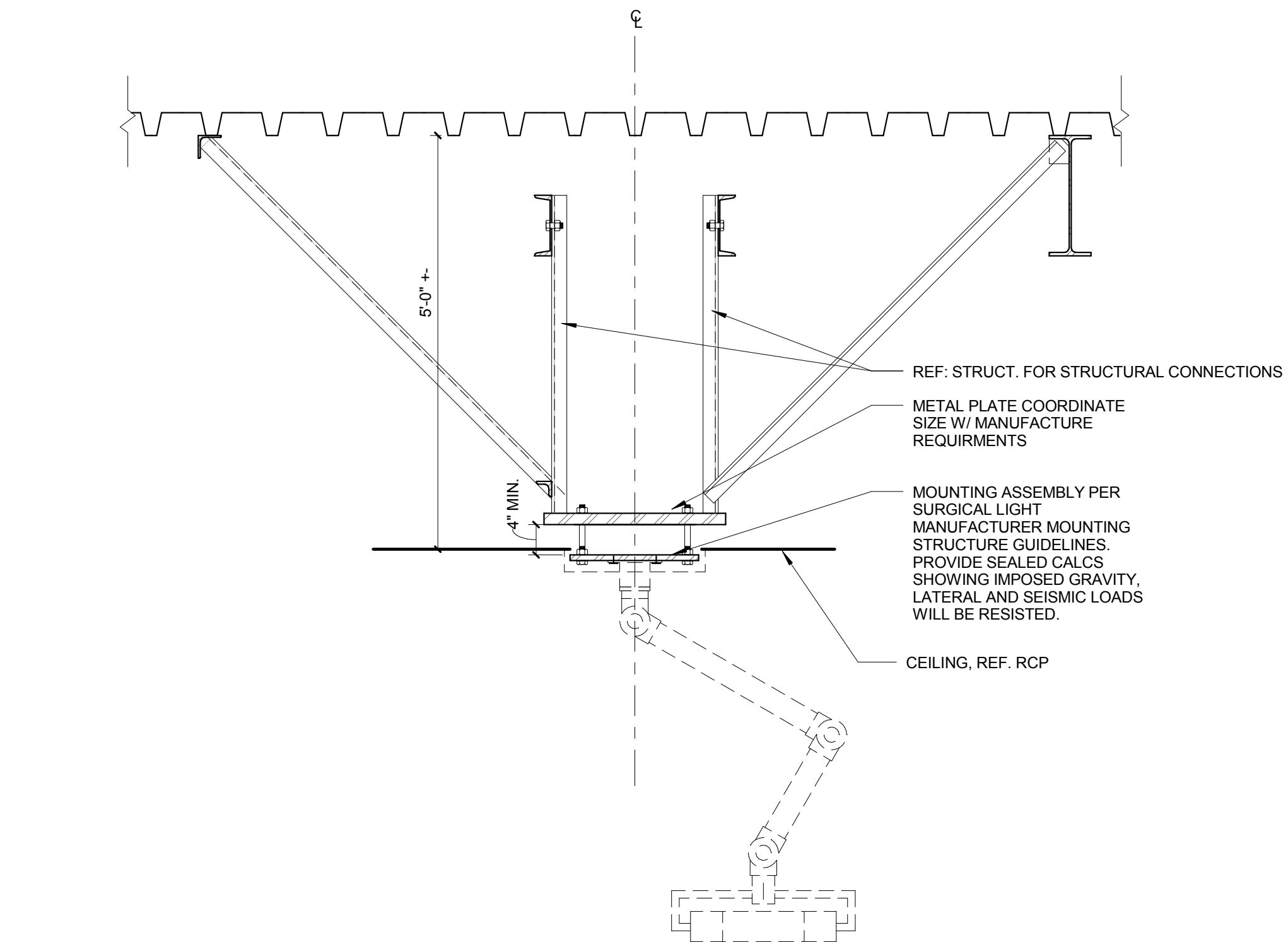


6 CASEWORK DETAIL - TALL CABINETS, FLUSH DOORS
1 1/2" = 1'-0"



1 CASEWORK DETAIL - BOOKS / BAGS STORAGE
1 1/2" = 1'-0"

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1 SURGERY LIGHT SUPPORT
3/4" = 1'-0"



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Interdisciplinary Science
Building

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1400 S. 3rd Street, Suite 201
St. Louis, MO 63104
314.558.0600

CONFORMED SET 01 JUL 2016

ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016

No.	Description	Date
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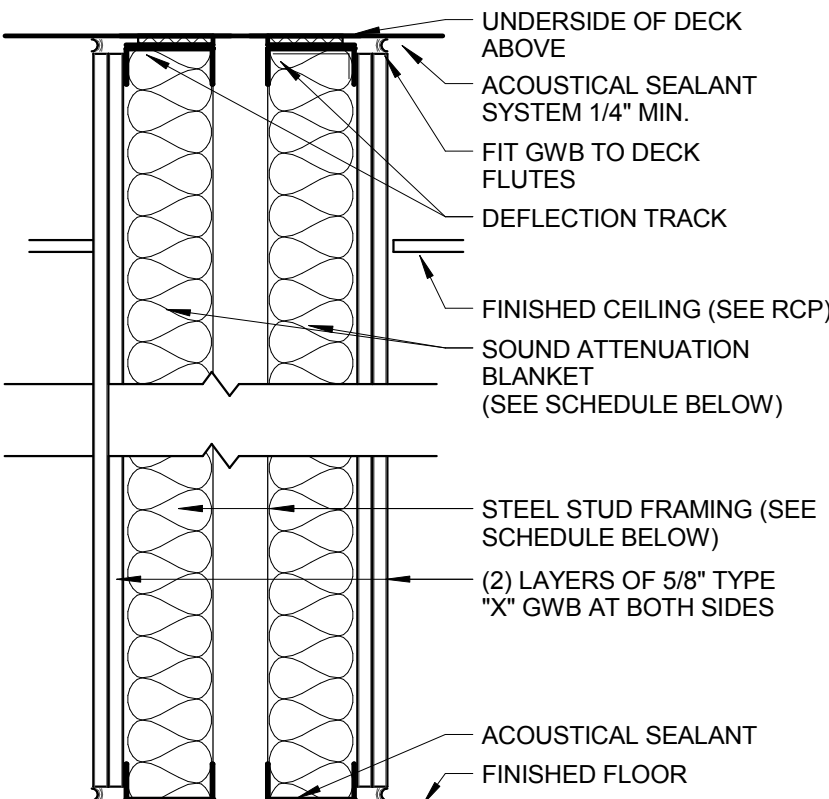
Drawing Title:

LAB CASEWORK/
MILLWORK DETAILS

Project No.: 04561.01 Checked by:

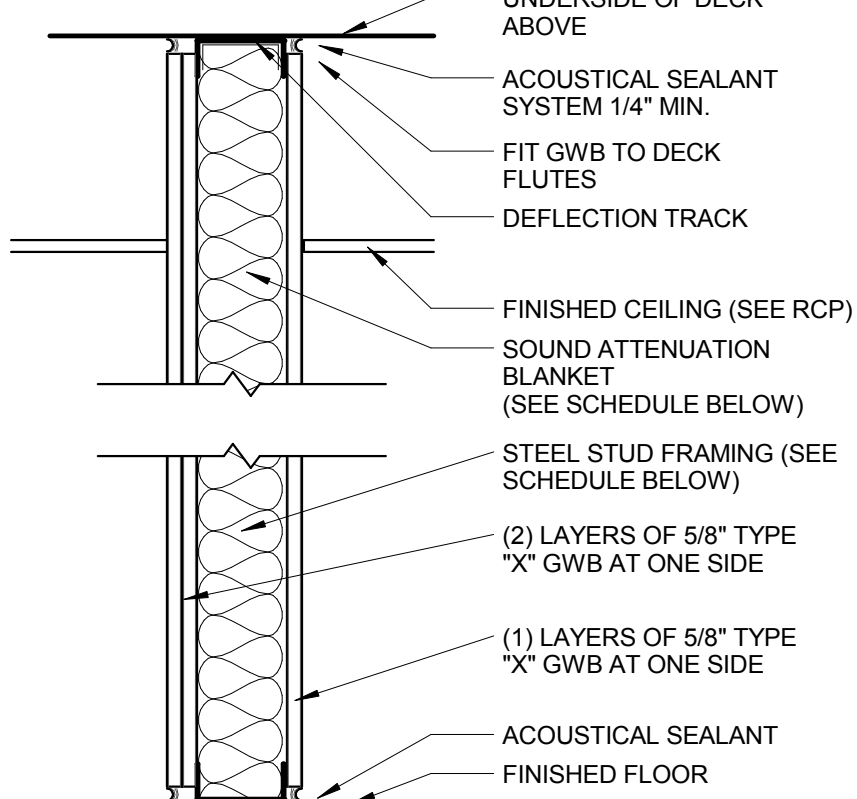
A0914

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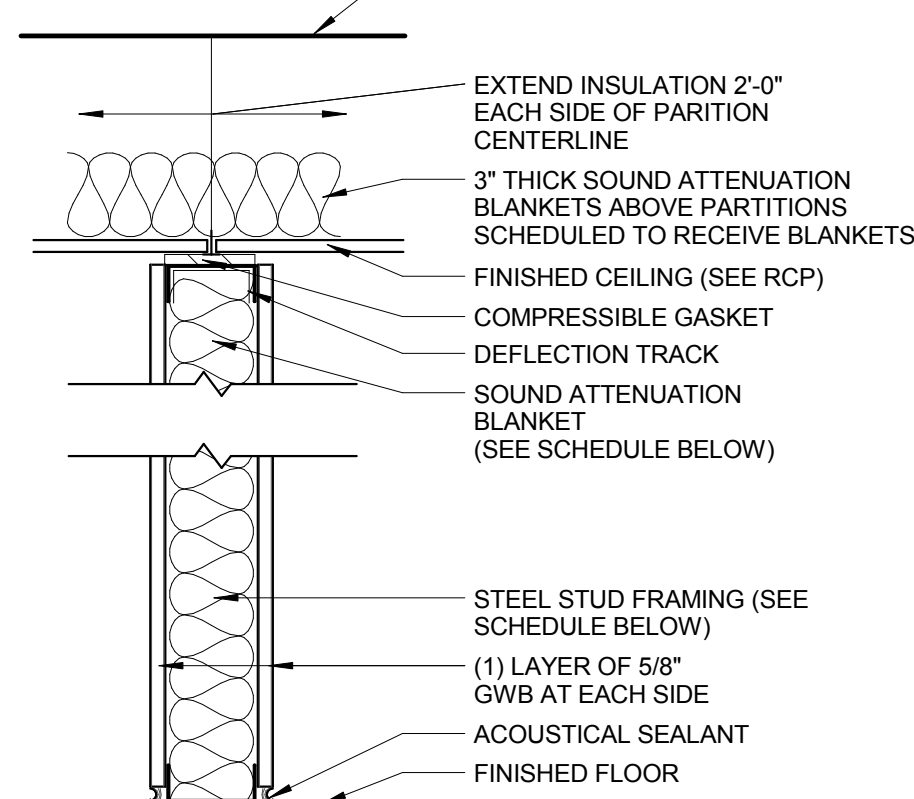
TYPE	STUD SIZE	PART. THICK.	SOUND ATTN. BLANKET	KEYED NOTES
X	3-5/8"	1'-0 1/4"	3"	STC 65

NON-RATED SOUND PARTITION
SCALE: 1 1/2" = 1'-0"



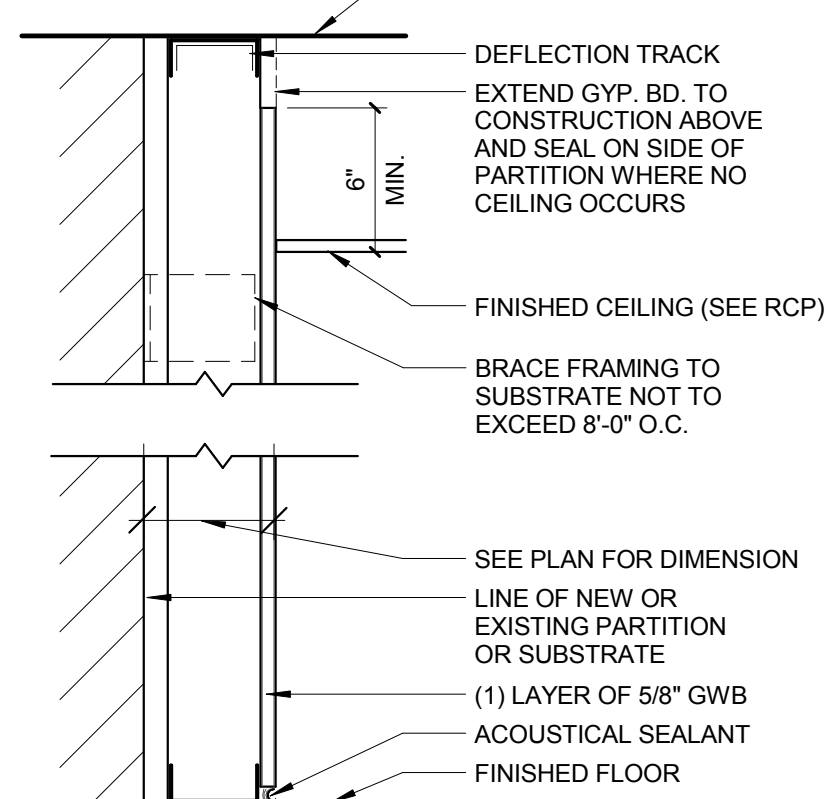
TYPE	STUD SIZE	PART. THICK.	SOUND ATTN. BLANKET	KEYED NOTES
U	3-5/8"	5 1/2"	3"	STC 45
U2	6"	7 7/8"	3"	STC 45

NON-RATED SOUND PARTITION
SCALE: 1 1/2" = 1'-0"



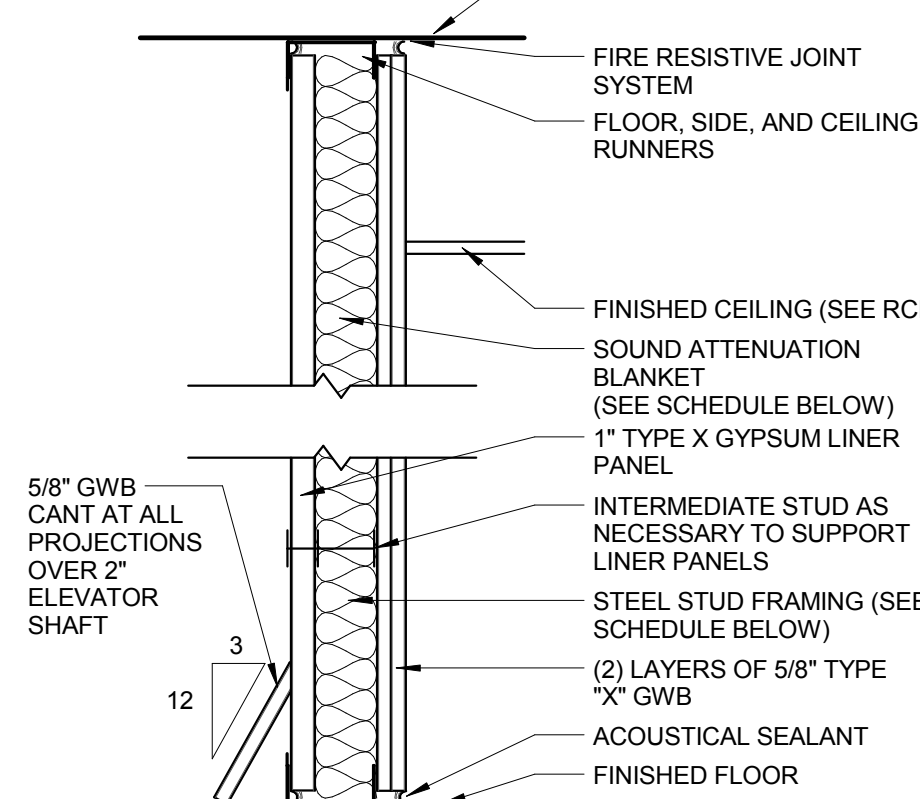
TYPE	STUD SIZE	PART. THICK.	SOUND ATTN. BLANKET	KEYED NOTES
P	2-1/2"	3-3/4"	NONE	N/A
P2	2-1/2"	3-3/4"	3"	N/A
P3	3-5/8"	4-7/8"	NONE	N/A
P4	3-5/8"	4-7/8"	3"	N/A
P5	4"	5-1/4"	NONE	N/A
P6	4"	5-1/4"	3"	N/A

NON-RATED PARTITION
SCALE: 1 1/2" = 1'-0"



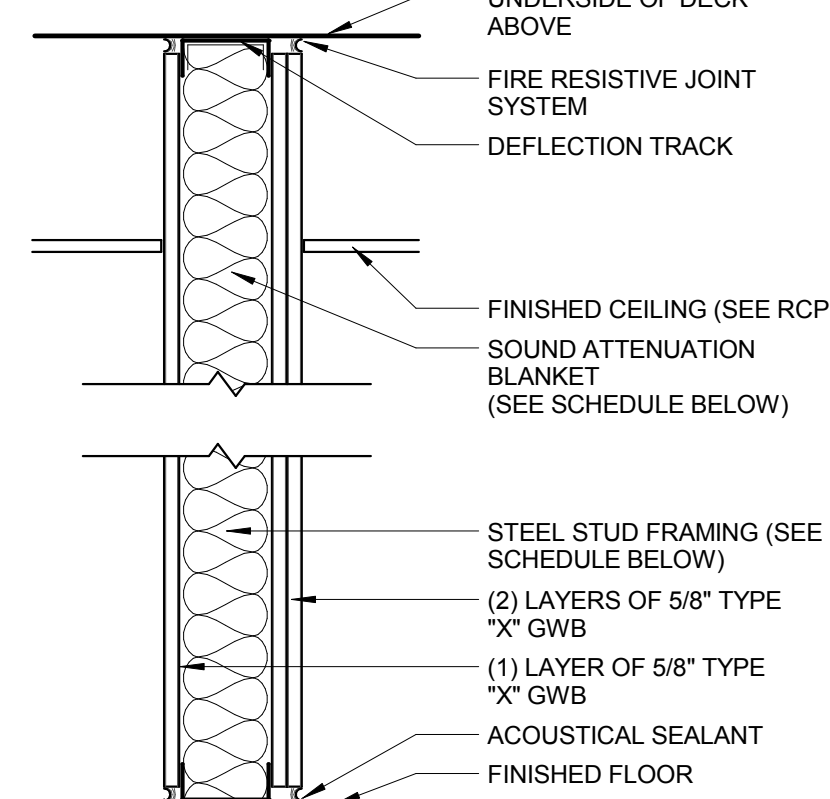
TYPE	STUD SIZE	PART. THICK.	SOUND ATTN. BLANKET	KEYED NOTES
L	1-5/8"	2-1/4"	NONE	N/A
L2	2-1/2"	3-1/8"	NONE	N/A
L3	3-5/8"	4-1/4"	NONE	N/A

NON-RATED PARTITION
SCALE: 1 1/2" = 1'-0"



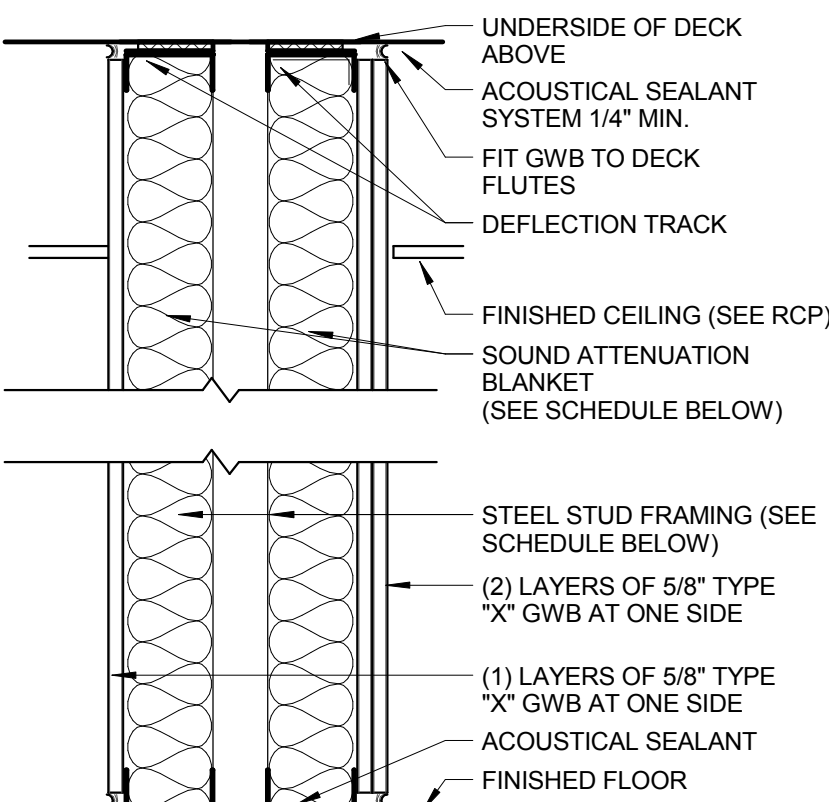
TYPE	STUD SIZE	PART. THICK.	SOUND ATTN. BLANKET	KEYED NOTES
G	2-1/2" CH	3-3/4"	NONE	N/A
G2	2-1/2" CH	3-3/4"	1-1/2"	STC 45
G3	4" CH	5-1/4"	NONE	STC 42
G4	4" CH	5-1/4"	3"	STC 45
G5	6" CH	7-1/4"	NONE	STC 42
G6	6" CH	7-1/4"	3"	STC 45

2 HR RATED PARTITION
SCALE: 1 1/2" = 1'-0" UL DESIGN U415



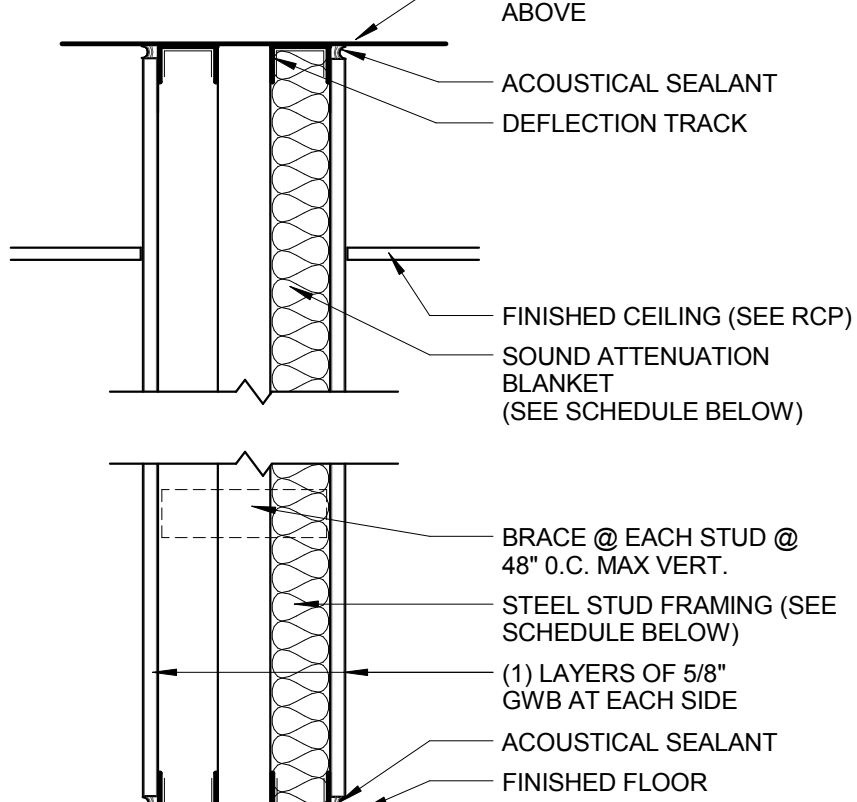
TYPE	STUD SIZE	PART. THICK.	SOUND ATTN. BLANKET	KEYED NOTES
B	3-5/8"	5-1/2"	NONE	N/A
B2	3-5/8"	5-1/2"	3"	N/A
B3	4"	5-7/8"	NONE	N/A
B4	4"	5-7/8"	3"	N/A
B5	6"	7-7/8"	NONE	N/A
B6	6"	7-7/8"	3"	N/A

1 HR RATED PARTITION
SCALE: 1 1/2" = 1'-0" UL DESIGN U465



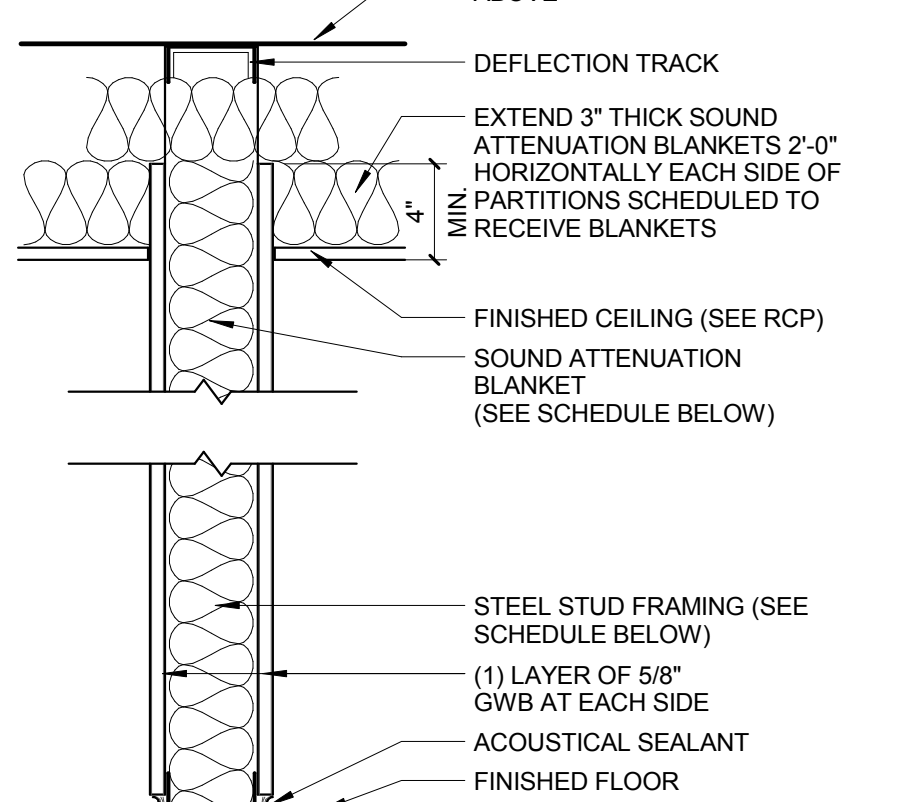
TYPE	STUD SIZE	PART. THICK.	SOUND ATTN. BLANKET	KEYED NOTES
W	3-5/8"	1'-0 1/4"	3"	STC 60

NON-RATED SOUND PARTITION
SCALE: 1 1/2" = 1'-0"



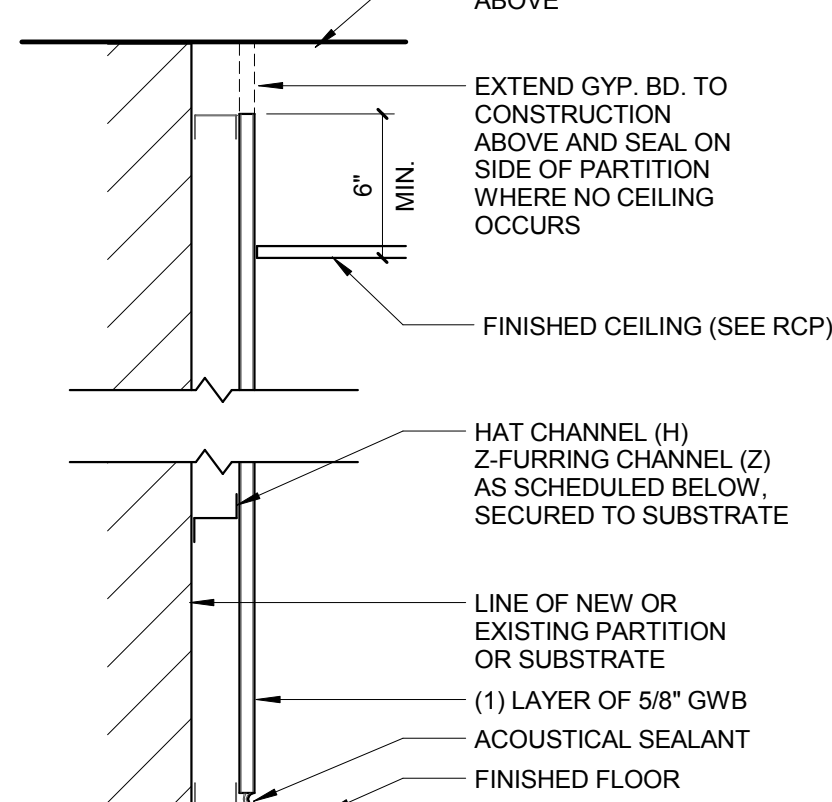
TYPE	STUD SIZE	PART. THICK.	SOUND ATTN. BLANKET	KEYED NOTES
T	2-1/2"	SEE PLAN	NONE	N/A
T2	2-1/2"	SEE PLAN	3"	N/A
T3	3-5/8"	SEE PLAN	NONE	N/A
T4	3-5/8"	SEE PLAN	3"	N/A

NON-RATED PARTITION
SCALE: 1 1/2" = 1'-0"



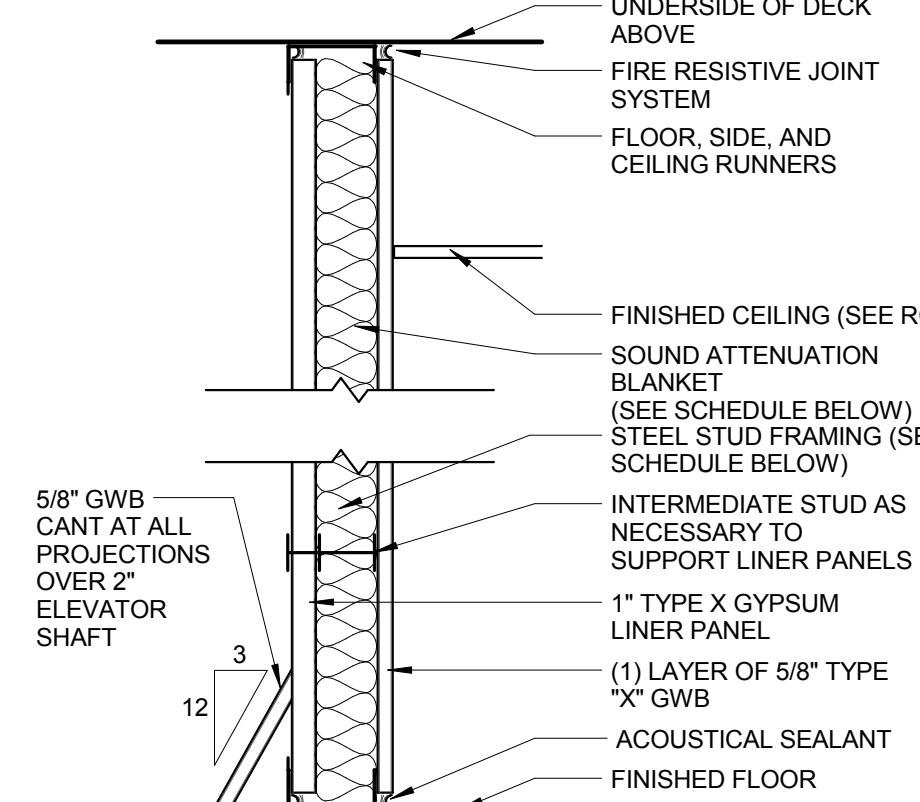
TYPE	STUD SIZE	PART. THICK.	SOUND ATTN. BLANKET	KEYED NOTES
N	3-5/8"	4-7/8"	NONE	N/A
N2	3-5/8"	4-7/8"	3"	N/A
N3	4"	5-1/4"	NONE	N/A
N4	4"	5-1/4"	3"	N/A
N5	6"	7-1/4"	NONE	N/A
N6	6"	7-1/4"	3"	N/A

NON-RATED PARTITION
SCALE: 1 1/2" = 1'-0"



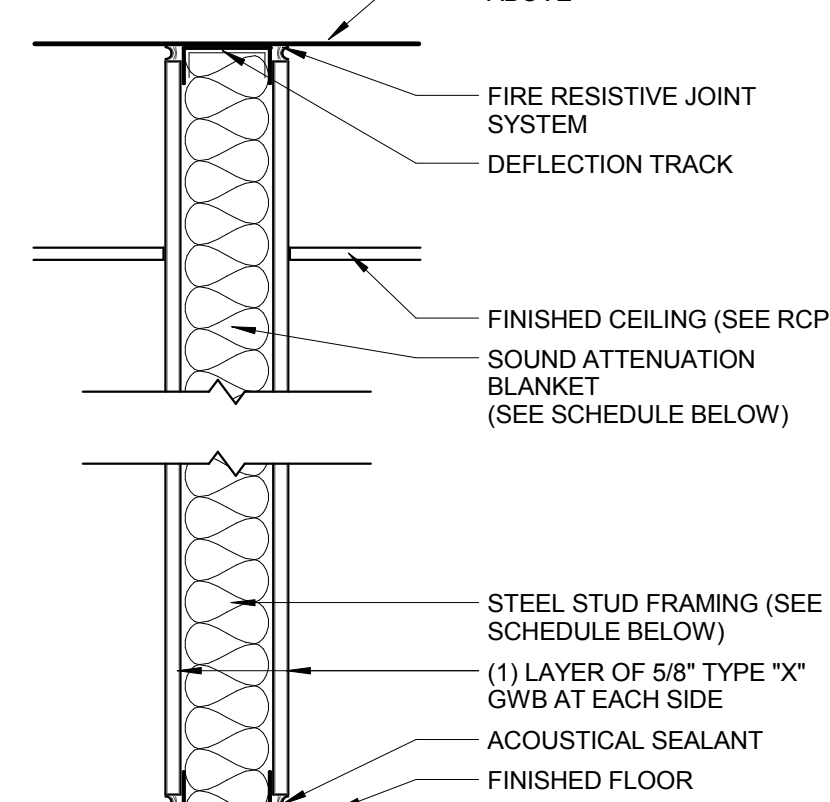
TYPE	STUD SIZE	PART. THICK.	SOUND ATTN. BLANKET	KEYED NOTES
J	7/8" (H)	1-1/2"	NONE	N/A
J2	1" (Z)	1-5/8"	NONE	N/A
J3	1-1/2" (Z)	2-1/8"	NONE	N/A
J4	2" (Z)	2-5/8"	NONE	N/A

NON-RATED PARTITION
SCALE: 1 1/2" = 1'-0"



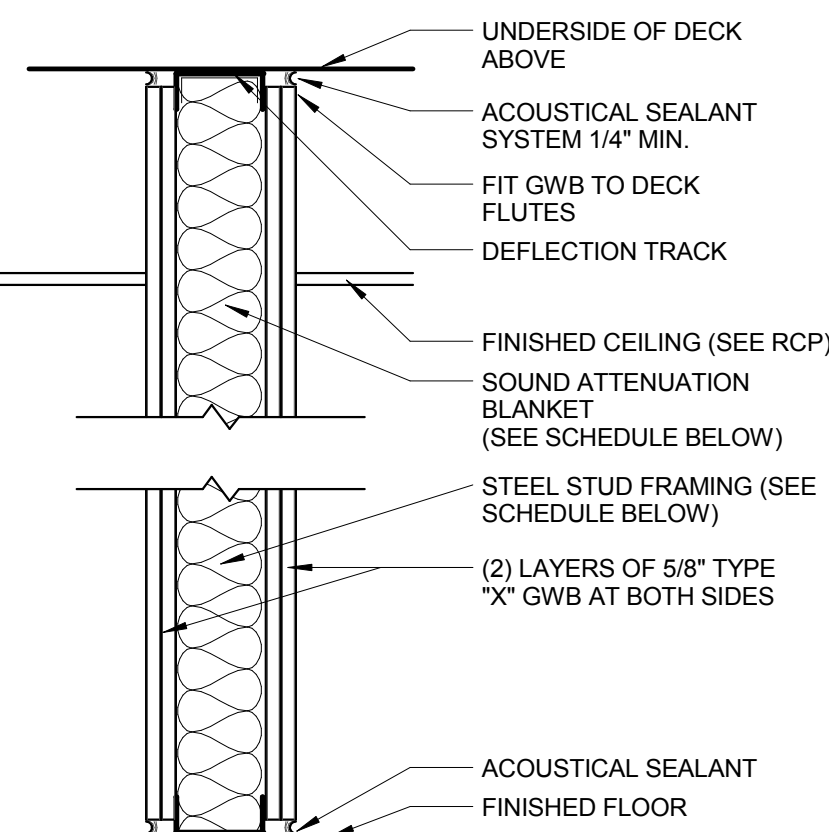
TYPE	STUD SIZE	PART. THICK.	SOUND ATTN. BLANKET	KEYED NOTES
F	2-1/2" CH	3-1/8"	NONE	N/A
F2	2-1/2" CH	3-1/8"	1-1/2"	N/A
F3	4" CH	4-5/8"	NONE	N/A
F4	4" CH	4-5/8"	3"	N/A
F5	6" CH	6-5/8"	NONE	N/A
F6	6" CH	6-5/8"	3"	N/A

1 HR RATED PARTITION
SCALE: 1 1/2" = 1'-0" UL DESIGN U415



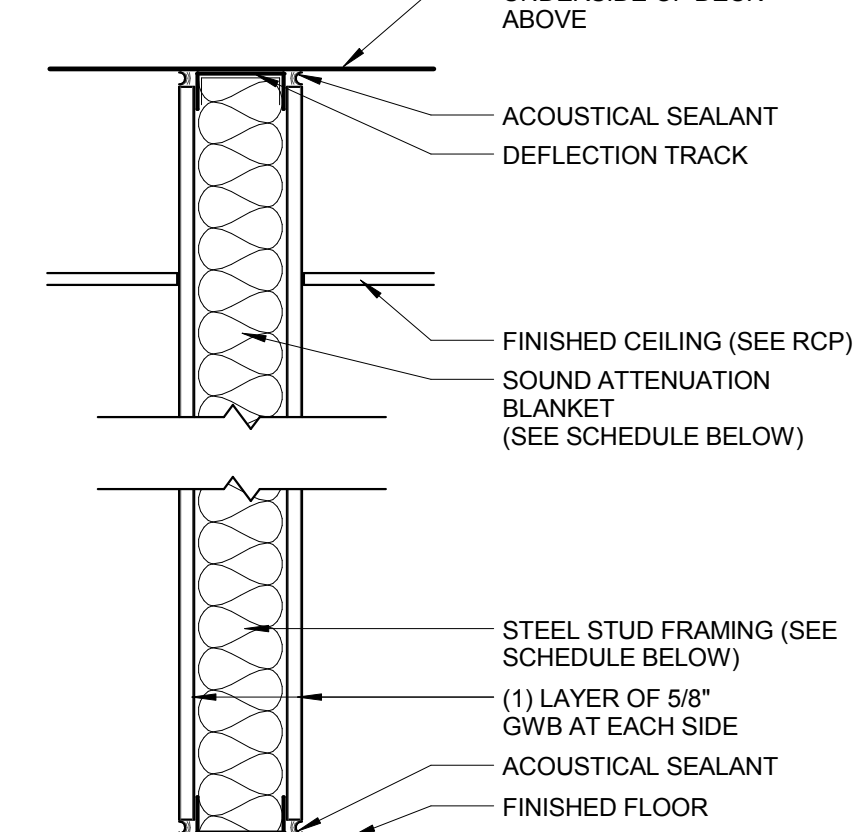
TYPE	STUD SIZE	PART. THICK.	SOUND ATTN. BLANKET	KEYED NOTES
A	3-5/8"	4-7/8"	NONE	N/A
A2	3-5/8"	4-7/8"	3"	STC 40
A3	4"	5-1/4"	NONE	N/A
A4	4"	5-1/4"	3"	STC 40
A5	6"	7-1/4"	NONE	N/A
A6	6"	7-1/4"	3"	STC 40

1 HR RATED PARTITION
SCALE: 1 1/2" = 1'-0" UL DESIGN U465



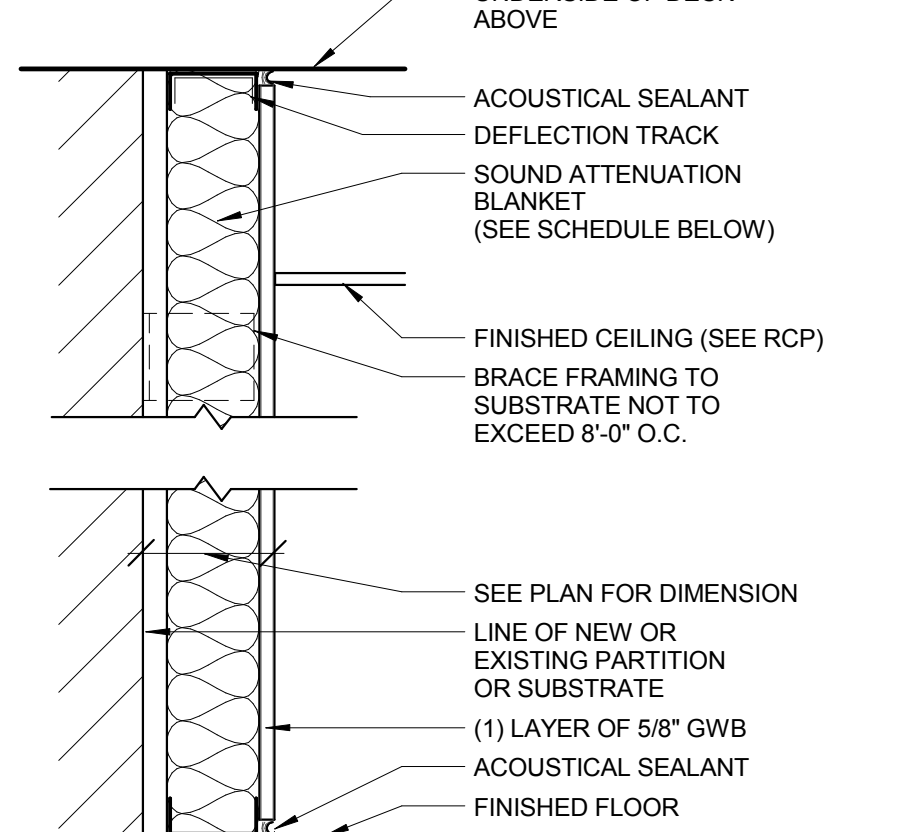
TYPE	STUD SIZE	PART. THICK.	SOUND ATTN. BLANKET	KEYED NOTES
V	3-5/8"	6 1/8"	3"	STC 50
V2	6"	8 1/2"	3"	STC 50

NON-RATED SOUND PARTITION
SCALE: 1 1/2" = 1'-0"



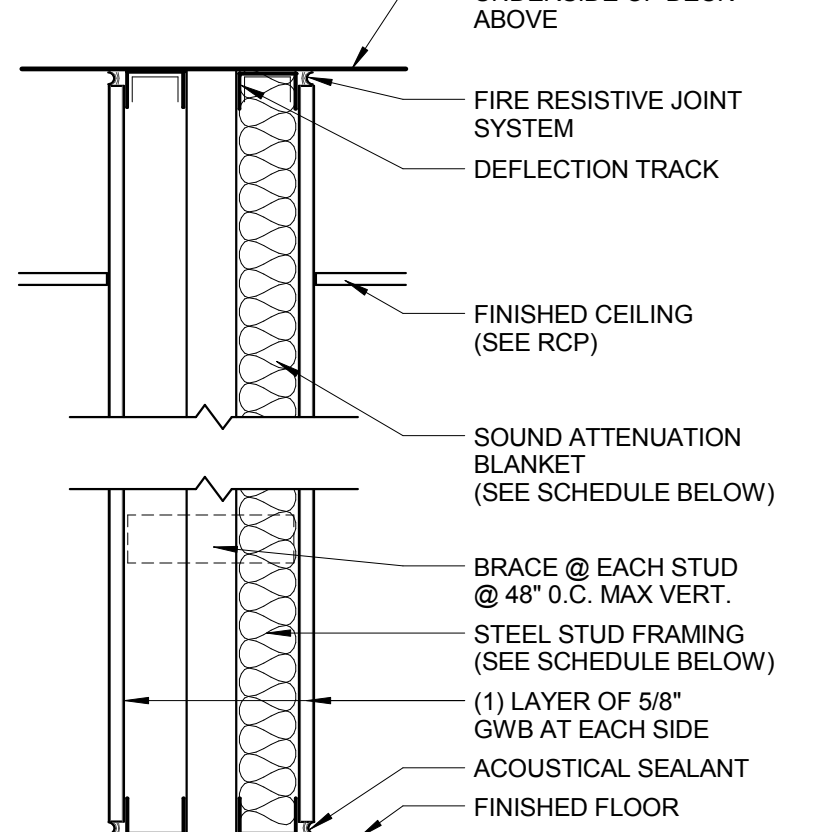
TYPE	STUD SIZE	PART. THICK.	SOUND ATTN. BLANKET	KEYED NOTES
R	3-5/8"	4-7/8"	NONE	N/A
R2	3-5/8"	4-7/8"	3"	STC 40
R3	4"	5-1/4"	NONE	N/A
R4	4"	5-1/4"	3"	STC 40
R5	6"	7-1/4"	NONE	N/A
R6	6"	7-1/4"	3"	STC 40

NON-RATED PARTITION
SCALE: 1 1/2" = 1'-0"



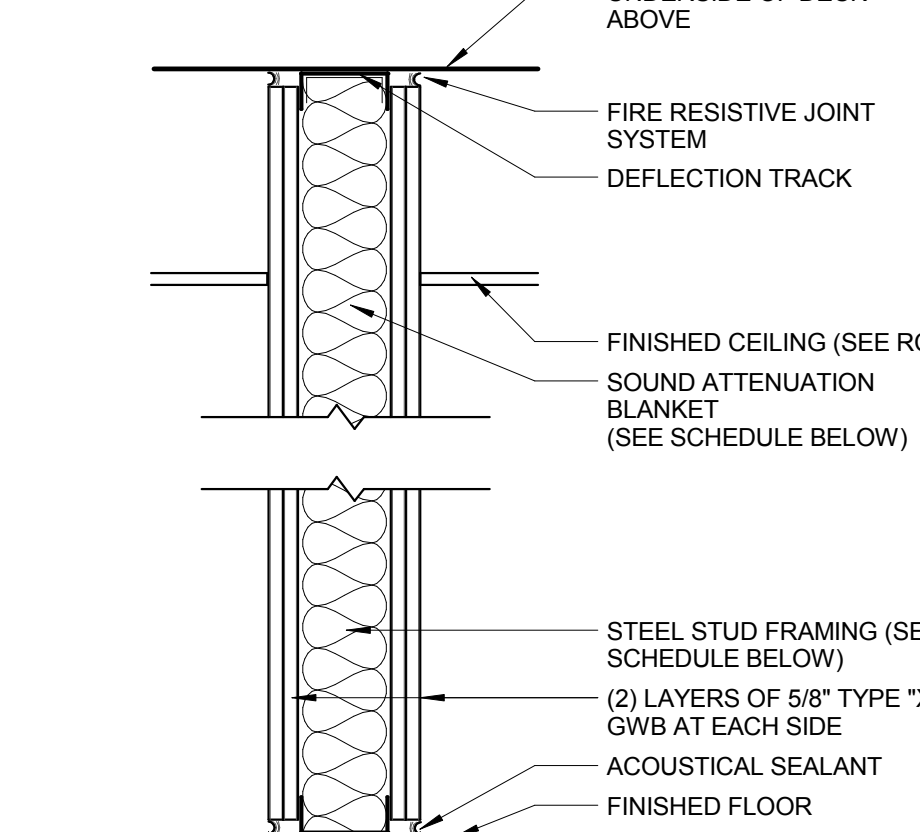
TYPE	STUD SIZE	PART. THICK.	SOUND ATTN. BLANKET	KEYED NOTES
M	1-5/8"	2-1/4"	NONE	N/A
M2	2-1/2"	3-1/8"	2"	N/A
M3	3-5/8"	4-1/4"	3"	N/A

NON-RATED PARTITION
SCALE: 1 1/2" = 1'-0"



TYPE	STUD SIZE	PART. THICK.	SOUND ATTN. BLANKET	KEYED NOTES
H	2-1/2"	SEE PLAN	NONE	N/A
H2	2-1/2"	SEE PLAN	3"	N/A
H3	3-5/8"	SEE PLAN	NONE	N/A
H4	3-5/8"	SEE PLAN	3"	N/A

1 HR RATED PARTITION
SCALE: 1 1/2" = 1'-0" UL DESIGN U420



TYPE	STUD SIZE	PART. THICK.	SOUND ATTN. BLANKET	KEYED NOTES
C	3-5/8"	6-1/8"	NONE	N/A
C2	3-5/8"	6-1/8"	3"	STC 50
C3	4"	6-1/2"	NONE	N/A
C4	4"	6-1/2"	3"	STC 50
C5	6"	8-1/2"	NONE	N/A
C6	6"	8-1/2"	3"	N/A

2 HR RATED PARTITION
SCALE: 1 1/2" = 1'-0" UL DESIGN U411

PARTITION SHEET GENERAL NOTES

NOTE: SEAL ALL OPENINGS, GAPS, PENETRATIONS, AND JOINTS IN PARTITION TYPES AS FOLLOWS:

FIRE RATED PARTITIONS AND SMOKE BARRIERS: SEAL IN ACCORDANCE WITH THE REQUIREMENTS SPECIFIED IN THE DIVISION 07 SPECIFICATION SECTIONS FOR PENETRATION FIRESTOP SYSTEMS AND FIRE RESISTIVE JOINT SYSTEMS. REFER TO CODE COMPLIANCE DRAWINGS FOR LOCATIONS OF SMOKE BARRIERS.

PARTITIONS DESIGNED TO RESIST THE PASSAGE OF SMOKE: SEAL COMPLETELY WITH ELASTOMERIC SEALANT. FOR THE LOCATION AND EXTENT REFER TO CODE COMPLIANCE DRAWINGS.

OTHER LOCATIONS: SEAL AS INDICATED AND REQUIRED ELSEWHERE BY THE CONTRACT DOCUMENTS.

FOR ALL NON-RATED PARTITIONS, CLOSE THE VOID BETWEEN PARTITION AND UNDERSIDE OF FLOOR OR ROOF DECK WITH MINERAL WOOL (SAFING INSULATION) AND PROVIDE 1/2" DEEP NON-SAG ACOUSTICAL SEALANT, BEADED.

ALL PARTITIONS WITH SOUND ATTENUATION BLANKETS AND/OR WITH STC RATINGS INDICATED TO BE CONSIDERED AS ACOUSTICAL PARTITIONS.

PARTITION SHEET KEYED NOTES

CONFORMED SET

01 JUL 2016

ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016
No. Description Date

Drawing Title:

PARTITION TYPES

Project No.: 04561.01 Checked by:

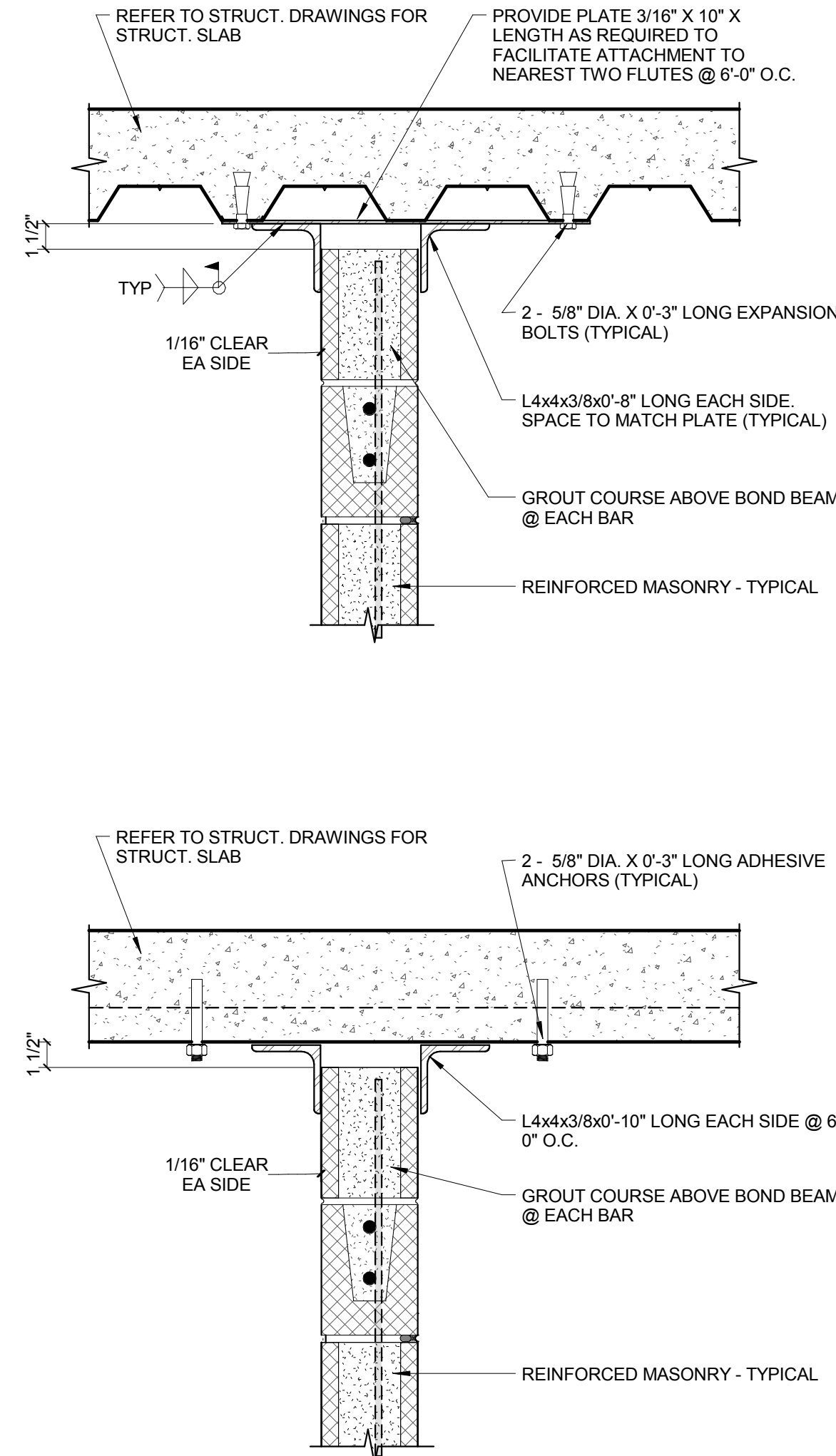
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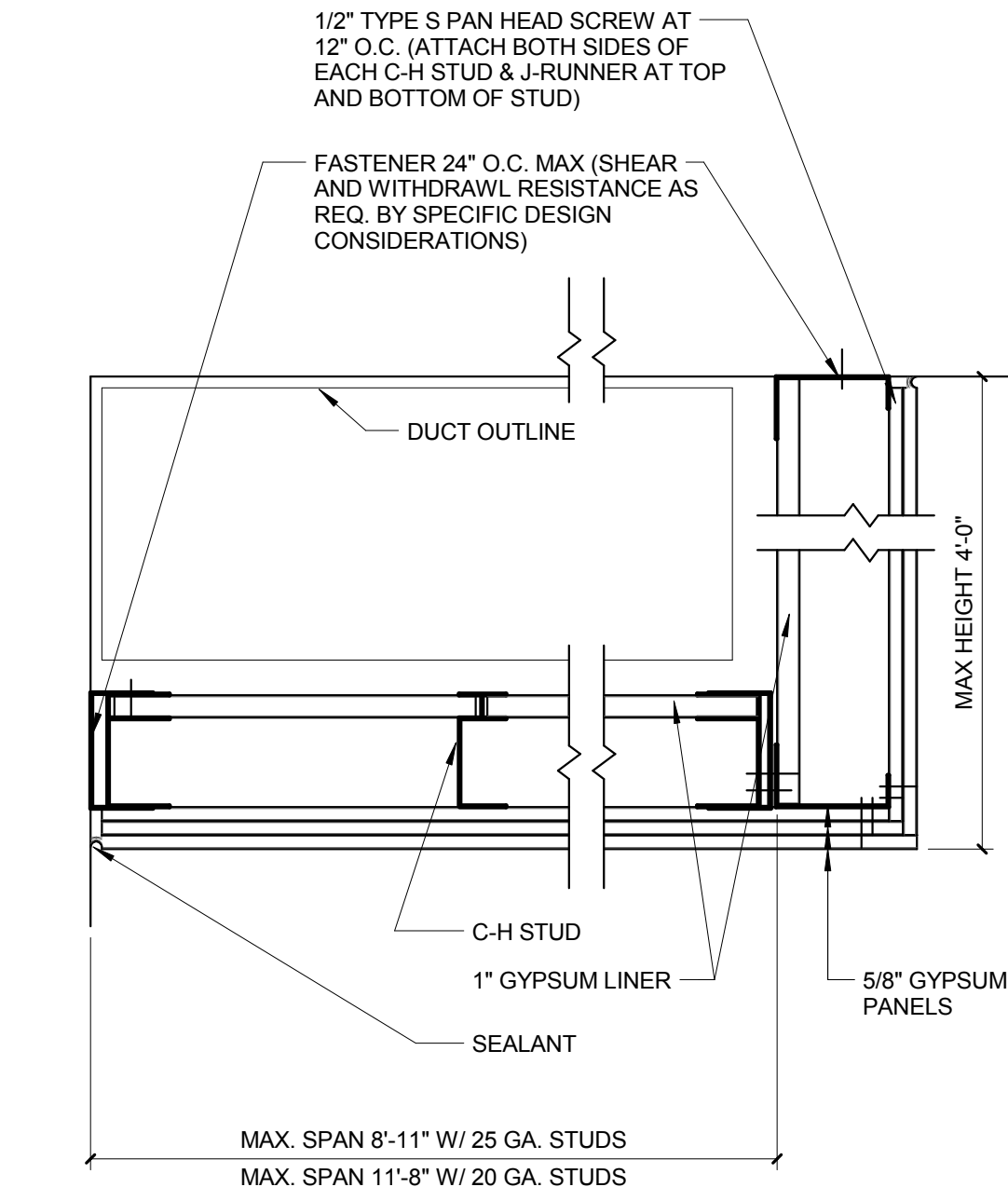
REINFORCED MASONRY NOTES

- MASONRY WALLS SHALL BE EITHER 6" OR 8" AS INDICATED. REINFORCE WALLS WITH #4 @ 48" O.C. AND BOND BEAMS WITH (2) - #4 BARS AT 8" SPACING.
- PROVIDE ADDITIONAL VERTICAL WALL REINFORCING FOR TWO CELLS ADJACENT TO OPENING, OF MATCHING VERTICAL REINFORCING.
- ALL LINTELS SHALL BE REINFORCED MASONRY WITH (2) #4 BARS IN 16" DEEP SOLID GROUTED LINTEL BEAM. EXTEND REINF 24" PAST EDGE OF OPENING. WHERE LINTEL CONNECTS TO CONCRETE WALLS, PROVIDE (1) - #5 x 4'-0" LONG BAR DOWELED TO CONCRETE WITH 8" EMBED AT 4'-0" O.C. IN SOLID GROUTED CELLS. DO NOT CUT MASONRY LINTEL REINFORCING AT CONTROL JOINTS.
-

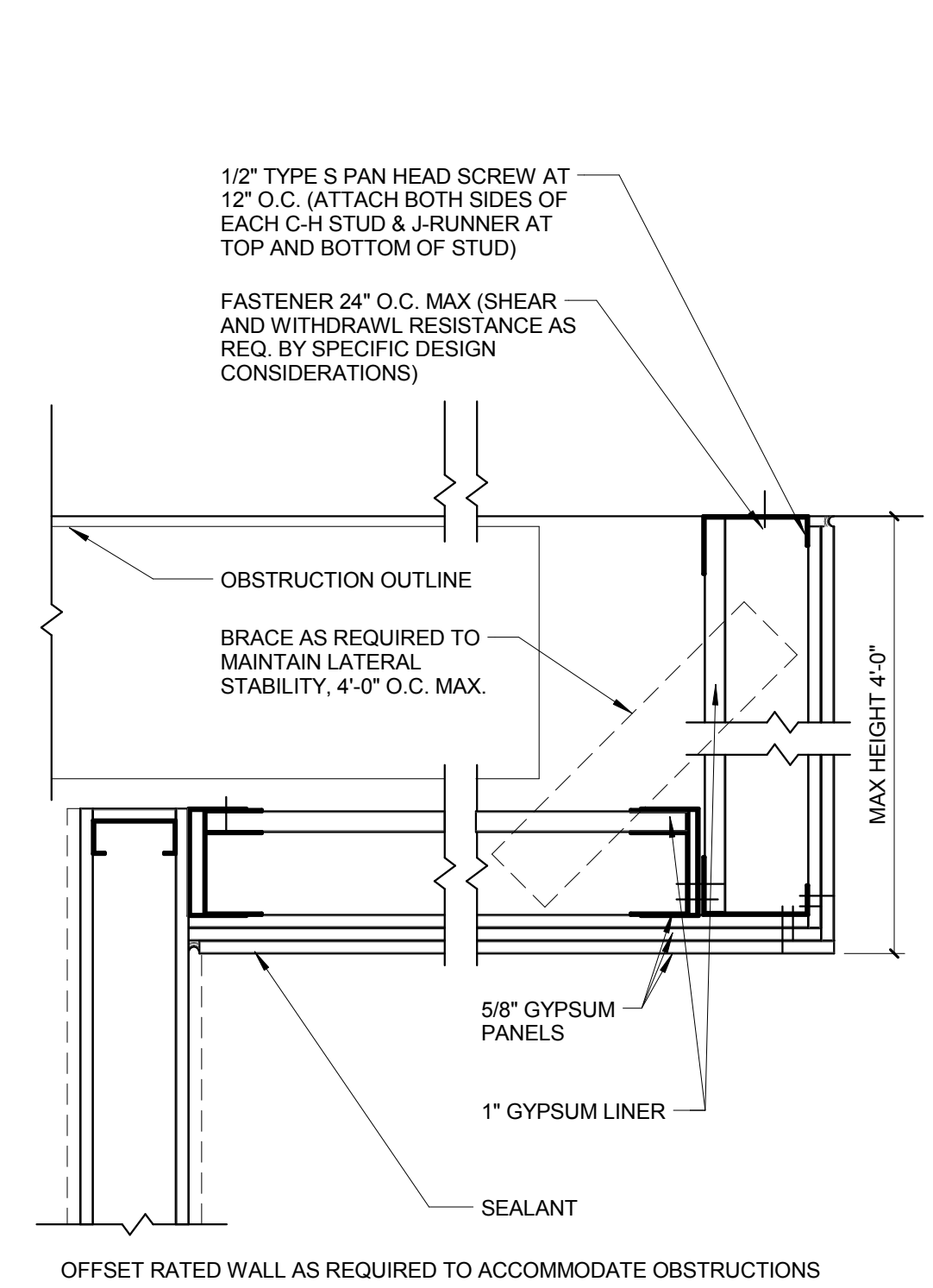
TYPICAL MASONRY WALL TO SLAB CONNECTIONS



HORIZONTAL RATED CONSTRUCTION



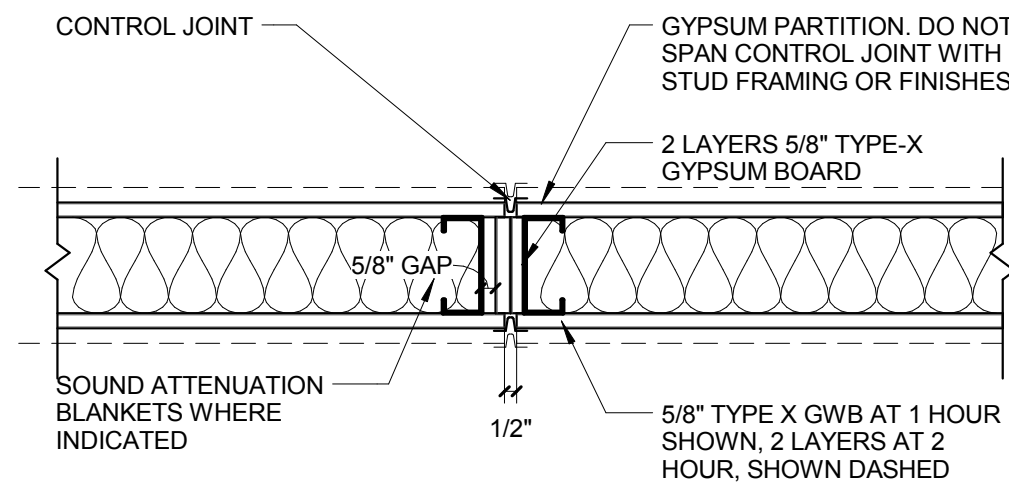
OFFSET RATED WALL CONSTRUCTION



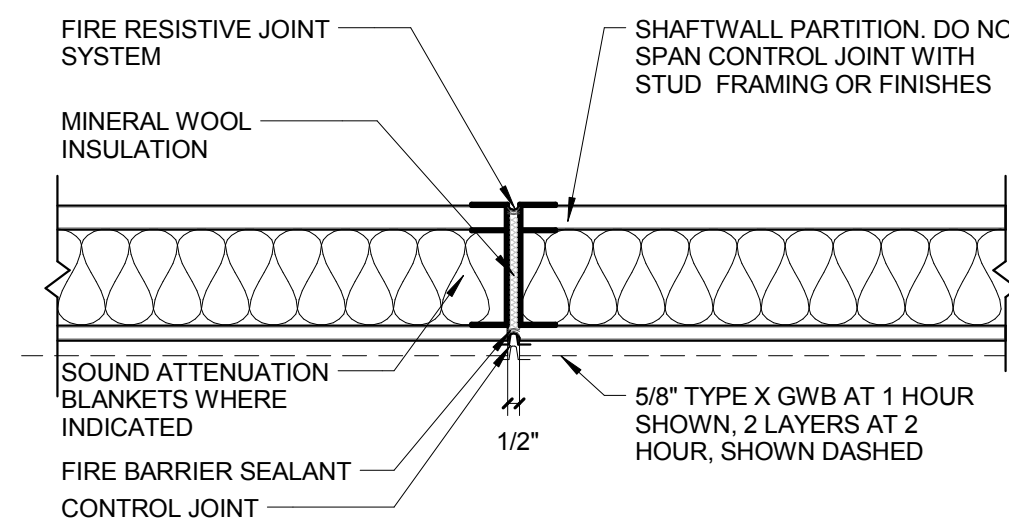
INTERSECTION PRIORITY

CONSTRUCTION	PRIORITY
TWO HOUR FIRE & SMOKE WALL	1
TWO HOUR FIRE & SHAFT WALL	2
ONE HOUR FIRE & SMOKE WALL	3
ONE HOUR FIRE WALL	4
CORRIDOR WALL	5
NON-RATED WALL	6

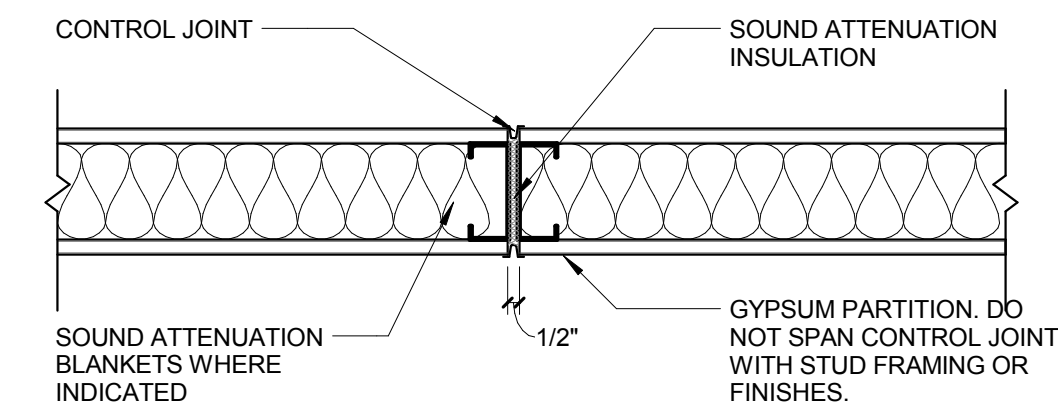
CONTROL JOINT AT RATED GYPSUM WALL



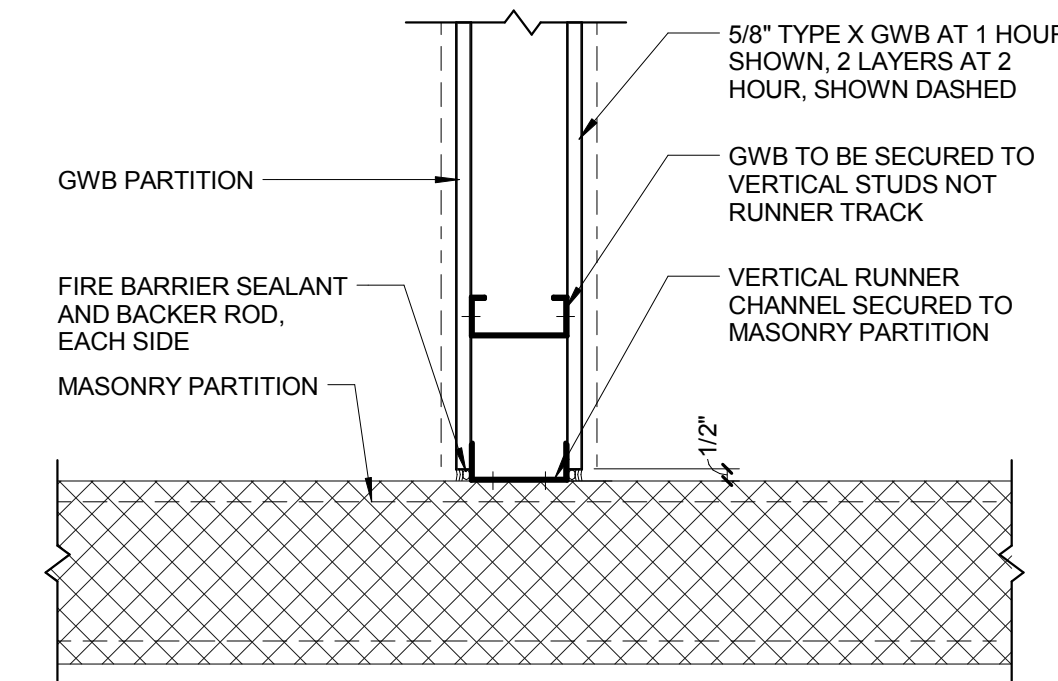
CONTROL JOINT AT RATED SHAFTWALL



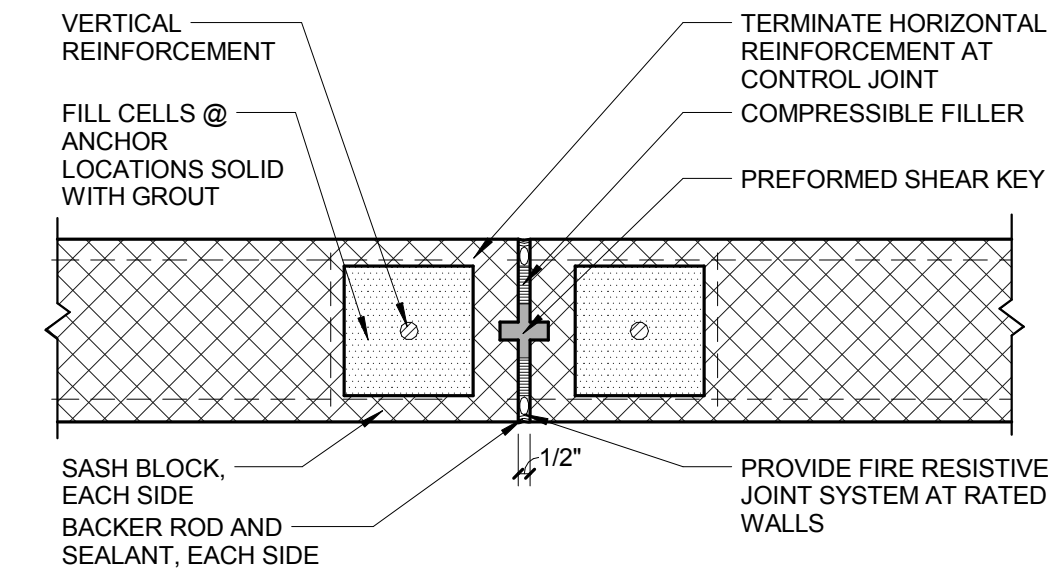
CONTROL JOINT AT NON-RATED WALL



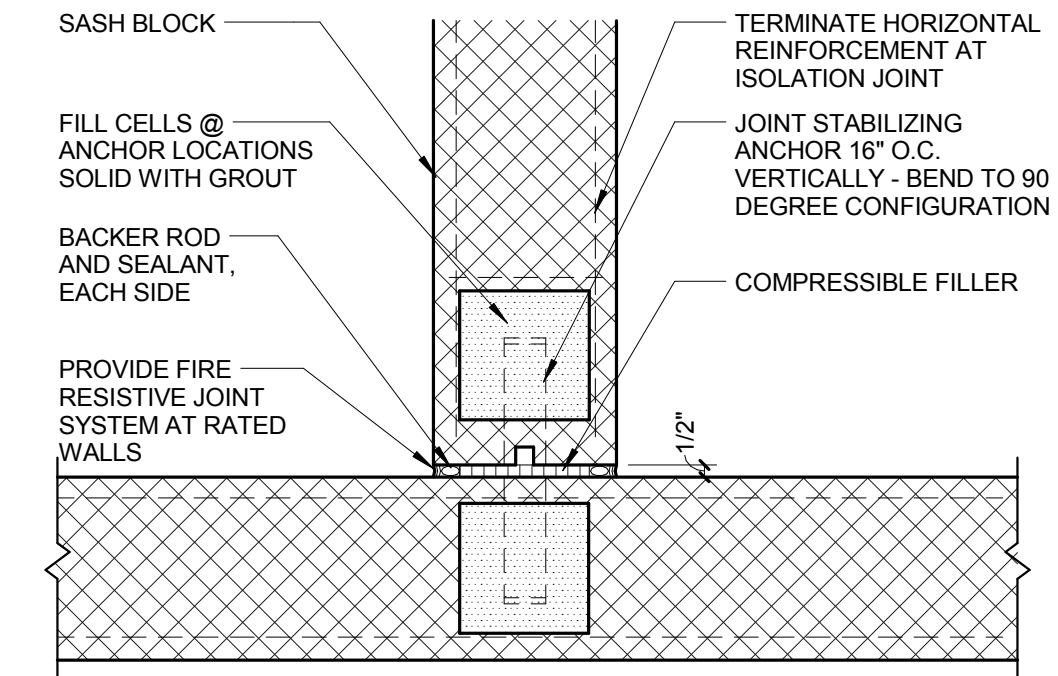
ISOLATION JOINT AT GWB/CMU WALLS



CONTROL JOINT AT CMU WALLS



ISOLATION JOINT AT CMU WALLS

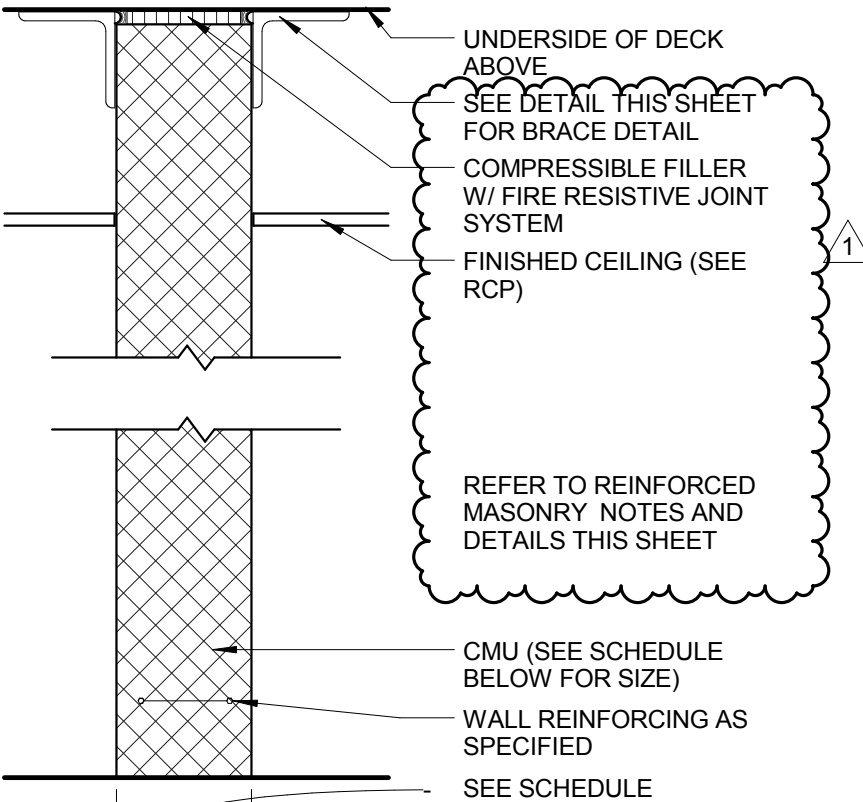


PARTITION TYPES

TYPE	CMU	FIRE RATING	PART THICK	RATING DESIGN
10	4"	1 HR	3-5/8"	NCMA TEK 7-1C
11	6"	1 HR	5-5/8"	NCMA TEK 7-1C
12	6"	2 HR	5-5/8"	UL U906
13	8"	2 HR	7-5/8"	NCMA TEK 7-1C
14	8"	3 HR	7-5/8"	UL U904
15	8"	4 HR	7-5/8"	UL U901

RATED PARTITION

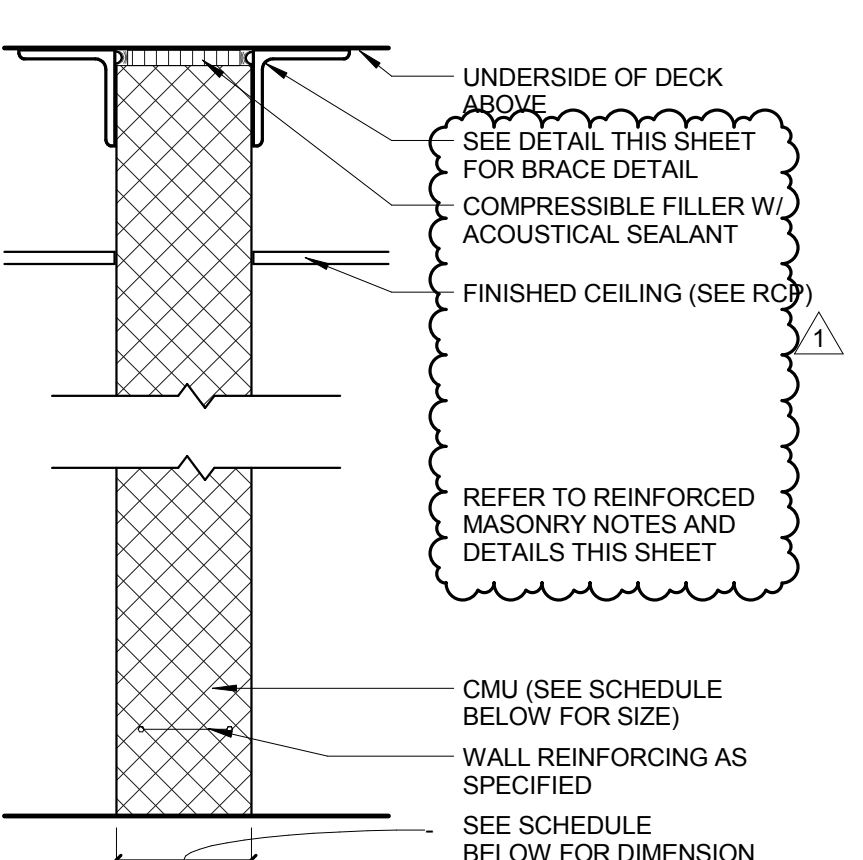
SCALE: 1 1/2" = 1'-0"



NON-RATED PARTITION

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

TYPE	CMU	FIRE RATING	PART THICK	RATING DESIGN
20	4"	---	---	N/A
21	6"	---	5-5/8"	N/A
22	6"	---	7-5/8"	N/A
23	10"	---	9-5/8"	N/A
24	12"	---	11-5/8"	N/A



CONFORMED SET

01 JUL 2016

1	ADDENDUM 3-2	15 APR 2016
2	ISSUED FOR CONSTRUCTION (BP3)	15 MAR 2016
No.	Description	Date

Drawing Title:

PARTITION TYPES

Project No.: 04561.01

Checked by:

A1002

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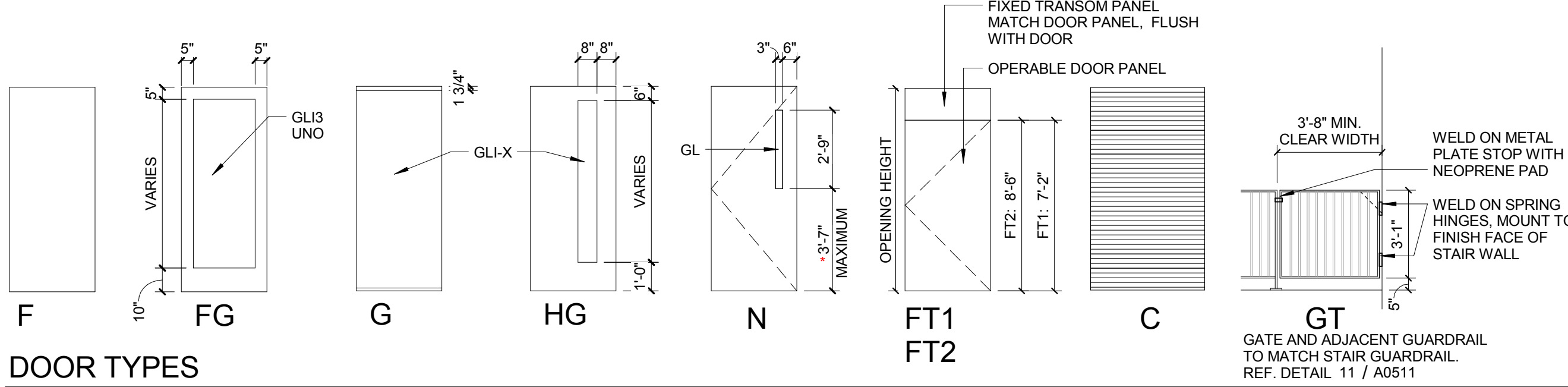
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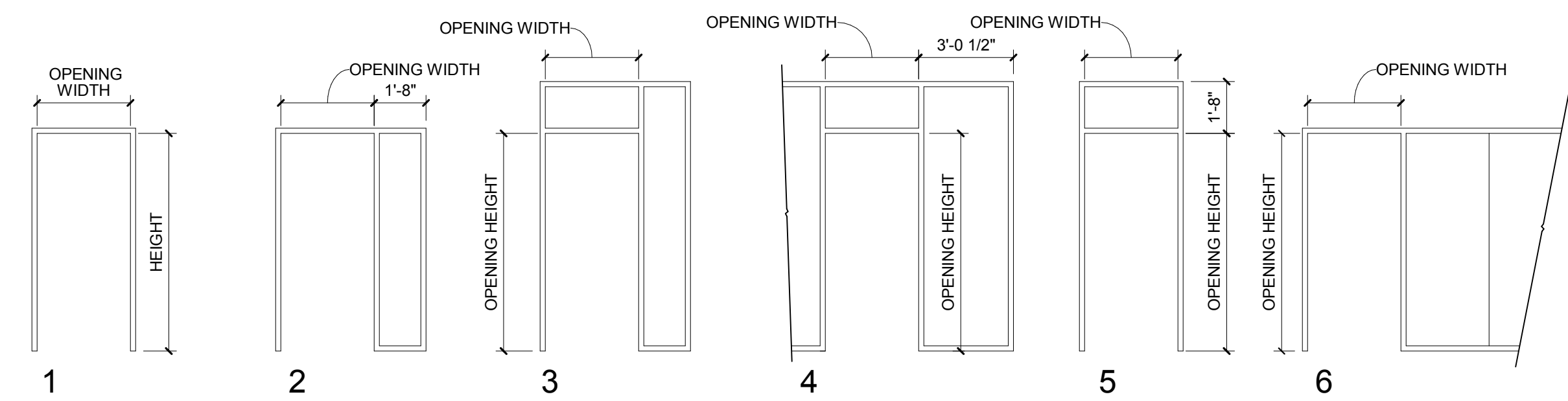


DOOR TYPES

DOOR SCHEDULE				
OPENING NUMBER	TYPE	SIZE		
		OPENING WIDTH	LEAF WIDTH	OPENING HEIGHT
XXX	N/F (UN)	5'-0"	3'-0"	7'-0"

NOTE: WHEN MULTIPLE LEAVES OCCUPY A SINGLE DOOR OPENING, EACH LEAF IS LISTED IN THE SCHEDULE UNDER THE HEADING DOOR TYPE. EXAMPLE N/F (UN). THE WIDTH OF THE FIRST LEAF IS SCHEDULED UNDER THE HEADING LEAF WIDTH. THE WIDTH OF THE SECOND LEAF EQUALS THE DOOR OPENING WIDTH MINUS THE WIDTH OF THE SCHEDULED DOOR LEAF (AND CENTER MULLION IF APPLICABLE). FOR UNEQUAL PAIRS, THE SYMBOL (UN) APPEARS AFTER THE DOOR TYPE.

MULTIPLE LEAF KEY



FRAME TYPES

ALUMINUM FRAME TYPE LEGEND

ALUMINUM FRAME TYPES: REFER TO SPECIFICATION SECTION 081216 FOR FULL DESCRIPTION AND SCHEDULE

AL1: IGS-1 (INTERIOR ALUMINUM FRAMING) 3/4" X PARTITION WIDTH)

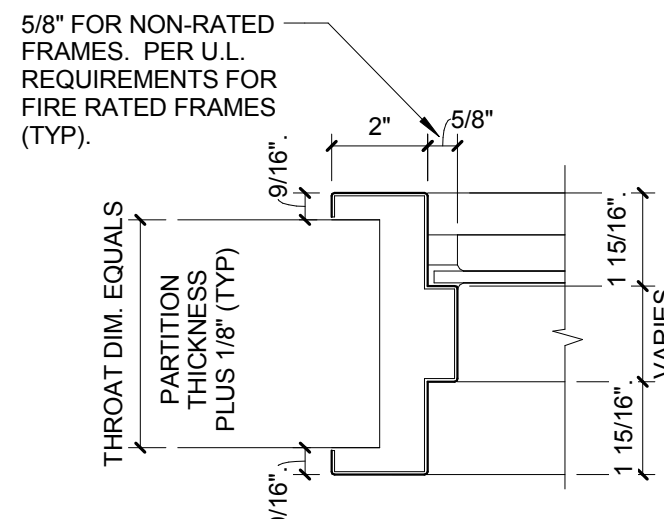
AL2: IGS-2 (ALUMINUM STOREFRONT SYSTEM 1/34" X 1/2")

AL3: IGS-3 (ALUMINUM STOREFRONT SYSTEM 2" X 1/2")

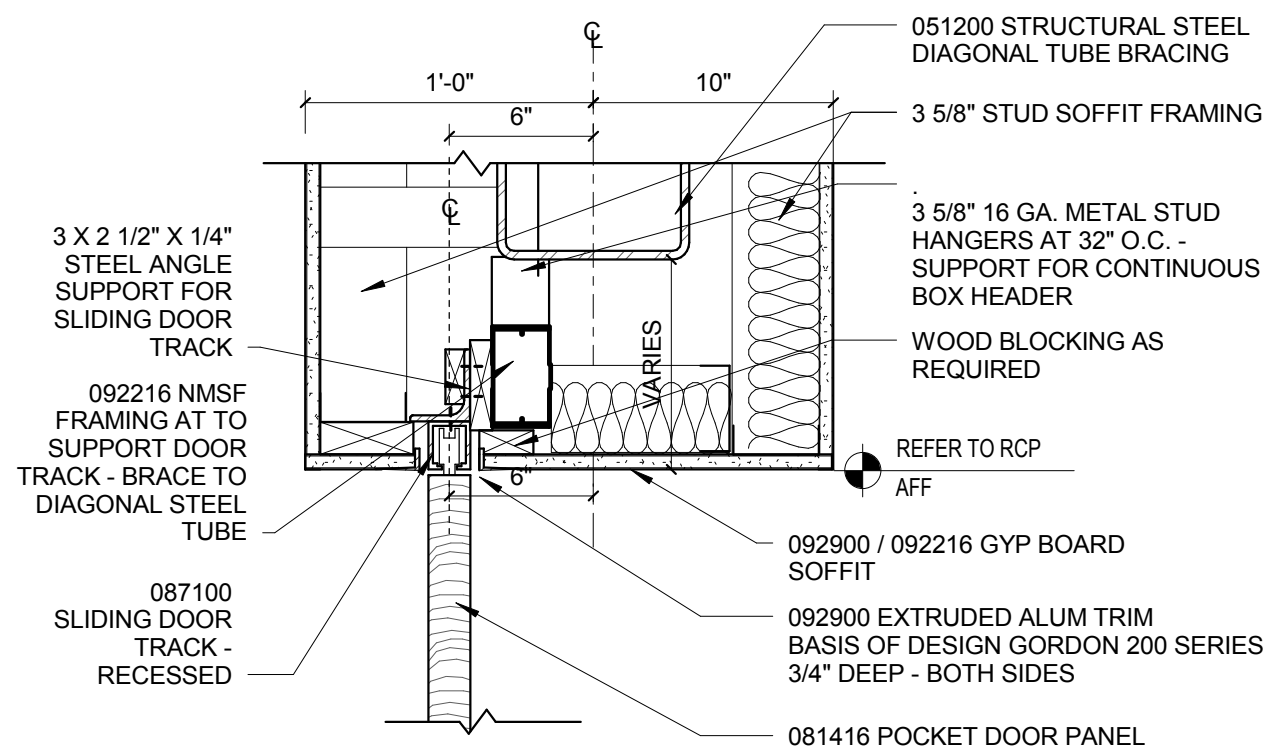
AL4: IGS-4 (ALUMINUM STOREFRONT SYSTEM FOR 1/38" THICK GLASS GLI-8 2" X 4 1/2")

AL6: IGS-6 (MATCH EGS-2 (EXTERIOR CURTAINWALL SYSTEM)

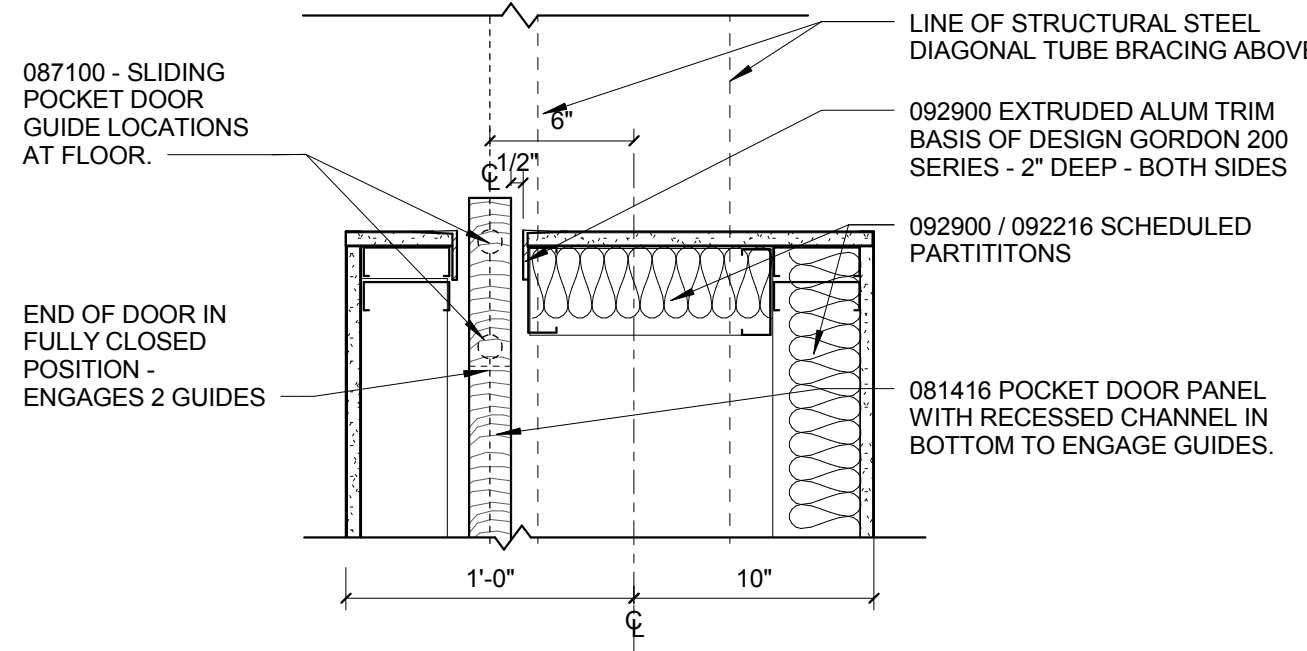
DOOR SCHEDULE															REMARKS	
LEVEL	TYPE	DOOR				FRAME					GLASS	FIRE RATING (MIN.)	HOLD SET	REMARKS		
		OPENING WIDTH	LEAF WIDTH H	OPENING HEIGHT	THK	MATL	GLASS	TYPE	MATL	HEAD					JAMB	SILL
LEVEL 00																
S076	N	3'-0"		7'-0"	1 3/4"	HM	GLI-7	1	HM					45 MIN		
LEVEL 01 (542')																
100A	Pocket Door	4'-8"		7'-4"	1 3/4"	WD			WD	17	16			21	5	
100B	F	3'-0"		7'-2"	1 3/4"	WD		1	HM	3	2		45 MIN	08A	3	
101	F	3'-0"		7'-2 1/4"	1 3/4"	WD		6	AL1	3/A841	8, 7B	GLI-1		22	2	
104	F	3'-0"		7'-2 1/4"	1 3/4"	WD		2	AL1	9	8	GLI-3		22	2	
105	F	3'-0"		7'-2 1/4"	1 3/4"	WD		6	AL1	3/A841	8, 7B	GLI-1		22	2	
106	F	3'-0"		7'-2 1/4"	1 3/4"	WD		2	AL1	9	8	GLI-3		22	2	
107	F	3'-0"		7'-2 1/4"	1 3/4"	WD		6	AL1	3/A841	8, 7B	GLI-1		22	2	
108	F	3'-0"		7'-2 1/4"	1 3/4"	WD		2	AL1	9	8	GLI-3		22	2	
109	F	3'-0"		7'-2 1/4"	1 3/4"	WD		6	AL1	3/A841	8, 7B	GLI-1		22	2	
110A	F	3'-0"		7'-2"	1 3/4"	WD		1	HM				45 MIN	08A	3	
110B	F	3'-0"		7'-2"	1 3/4"	WD		1	HM				45 MIN	08A	3	
110B.2	F	2'-0"		8'-0"	1 3/4"	WD							90 MIN			
111	F	3'-0"		7'-2 1/4"	1 3/4"	WD		6	AL1	3/A841	8, 7B	GLI-1		22	2	
112	F	3'-0"		7'-2"	1 3/4"	WD		1	HM					08A	3	
113	F	3'-0"		7'-2 1/4"	1 3/4"	WD		6	AL1	3/A841	8, 7B	GLI-1		22	2	
114	F	3'-6"		7'-2"	1 3/4"	WD		1	AL1	4	3			18	2	
115	F	3'-0"		7'-2 1/4"	1 3/4"	WD		6	AL1	3/A841	8, 7B	GLI-1		22	2	
116	F	3'-6"		7'-2"	1 3/4"	WD		1	AL1	3				18	2	
117	F	3'-0"		7'-2 1/4"	1 3/4"	WD		6	AL1	3/A841	8, 7B	GLI-1		22	2	
131	FG	3'-6"		7'-2"	1 3/4"	AL/GL	GLI-3		AL2	15	14, 19			18	2	
133A	FG	3'-0"		7'-2"	1 3/4"	WD		1	HM	3	2			14A	2, 9	
133B	F	3'-6"		7'-2"	1 3/4"	WD		1	HM					13	2, 9	
133B.2	F	3'-0"		7'-2"	1 3/4"	HM		1	HM					08A	3	
133B.3	F	3'-0"		7'-2"	1 3/4"	HM		1	HM					08A	3	
135.1	FG	3'-6"		7'-2"	1 3/4"	AL/GL		4	AL2	15	14, 19	GLI-1		14A	2, 9, 13	
135.2	F	3'-0"		7'-2"	1 3/4"	WD		1	HM	3	2			18	2	
137	FG	3'-0"		7'-2"	1 3/4"	AL/GL	GLI-3	1	AL2		19 SIM			13A		
137A	F	3'-6"		7'-2"	1 3/4"	HM		1	HM					08A	3	
140.1	F	3'-0"		8'-10 1/4"	1 3/4"	AL/GL		AL3	15 SIM	14, 19				18A		
140.2	F	3'-0 1/4"		8'-10 1/4"	1 3/4"	WD		6 SIM	AL3	15	14	GLI-4		18A		
144	F	3'-0"		8'-10 1/4"	1 3/4"	WD		6	AL1	9	8, 7B	GLI-1		22	2, 10	
150	FG, FG	6'-0"	3'-0"	7'-2"	1 3/4"	WD		1	HM	3	2			20B	4, 9	
151	F	3'-0"		7'-2"	1 3/4"	WD		1	HM	3	2			08	4	
154	HG	3'-0"		7'-0"	1 3/4"	WD		6 SIM	AL1	11/A0842	8, 7B	GLI-1		19	2	
156.1	HG	3'-0"		7'-0"	1 3/4"	WD		6 SIM	AL1	11/A0842	8, 7B	GLI-1		19	2	
156.2	F	3'-0"		7'-2"	1 3/4"	WD		1	HM	3	2			19A	3	
160.1	F.F	6'-0"	3'-0"	8'-10 1/4"	1 3/4"	WD		1	HM				45 MIN	24	3	
160.2	N.N	6'-0"	3'-0"	8'-10 1/4"	1 3/4"	WD/GL		1	HM					25	3	
160A	F	3'-0"		7'-10"	1 3/4"	WD		1	HM	3	2		45 MIN	19	3	
160B	F	3'-0"		7'-2"	1 3/4"	WD		1	HM	3	2		45 MIN	22A	3, 17	
160D	F	3'-0"		7'-10"	1 3/4"	WD		1	HM	3	2			09	3	
172.1	F.F	6'-0"	3'-0"	7'-2"	1 3/4"	HM		1	HM	5 SIM	5 SIM			12	1	
172A	F	3'-6"		7'-2"	1 3/4"	HM		1	HM	5 SIM	4		45 MIN	17	1	
174	FG	3'-6"		7'-2"	1 3/4"	AL/GL	GLI-3	6 SIM	AL3	15	14, 19	GLI-4		18	2	
175	F	3'-0"		7'-2"	1 3/4"	WD		1	HM					08	3	
176	F	3'-0"		7'-2"	1 3/4"	WD		1	HM				90 MIN	06B	1	
177	F	3'-0"		7'-2"	1 3/4"	WD		1	HM					08	3	
178.1	F.F	6'-0"	3'-0"	7'-2"	1 3/4"	HM		1	HM	3	2			12A		
179	F	3'-0"		7'-2"	1 3/4"	WD		1	HM					11	1	
180	F	3'-0"		7'-2"	1 3/4"	WD		1	HM	3	2			10		
182	F	3'-0"		7'-2"	1 3/4"	WD		1	HM	3	2			10		
183A	HG	3'-6"		7'-2"	1 3/4"	WD		1	HM	3	2			13A	9	
183B.1	F.F	6'-0"	3'-0"	7'-2"	1 3/4"	HM		1	HM	3	2			15	1, 9	
183B.2	FG, FG	6'-0"	3'-0"	7'-2"	1 3/4"	HM		1	HM	3	2			16	1	
183C	HG	3'-6"		7'-2"	1 3/4"	HM		1	HM	3	2			16	1	
184	F	3'-0"		7'-2"	1 3/4"	WD		1	HM	3	2			08	3	
185	F	3'-0"		7'-2"	1 3/4"	HM		1	HM	3	2			08		
186	F	3'-6"		7'-2"	1 3/4"	HM		1	HM	3	2			08		
187	F	3'-0"		7'-2"	1 3/4"	HM		1	HM	3	2			08		
192.1	F	3'-0"		7'-2"	1 3/4"	HM		1	HM	3	2		45 MIN	07		
195	F	3'-0"		7'-2"	1 3/4"	HM		1	HM	3	2			06		
196	F	3'-0"		7'-2"	1 3/4"	HM		1	HM	3	2			08		
C153	FG, FG	6'-0"	3'-0"	8'-10 1/4"	1 3/4"	AL/GL	GLI-3		AL3	15 SIM	14, 19	GLI-1		20A	2, 9	
C170	F.F	7'-0"	3'-6"	8'-9"	1 3/4"	WD		1	HM	3	2		45 MIN	20C	7	
S140	SIDE COILING	8'-8"		9'-0"									90 MIN	16		
S176.2	F	3'-0"		7'-2"	1 3/4"	HM		1	HM	5 SIM	5/4		90 MIN	01		
S194	N	3'-0"		7'-2"	1 3/4"	WD	GLI-7	1	HM	3	2		90 MIN	05		
LEVEL 02 (556')																
200A	Pocket Door	5'-2"		7'-4"	1 3/4"	WD			AL	17	16			21	5	
200B	F	3'-0"		7'-2"	1 3/4"	WD		1	HM	3	2		45 MIN	01	3	
202	FT	3'-0"		9'-4"	1 3/4"	WD		1	AL3					19	2	
203	F	3'-0"		7'-2 1/4"	1 3/4"	WD		6	AL1	3/A841	8, 7B	GLI-1		22	2	
205	F	3'-0"		7'-2 1/4"	1 3/4"	WD		6	AL1	3/A841	8, 7B	GLI-1		22	2	
206	F	3'-0"		7'-2 1/4"	1 3/4"	WD		2	AL1	9	8	GLI-3		22	2	
207	F	3'-0"		7'-2 1/4"	1 3/4"	WD		6	AL1	3/A841	8, 7B	GLI-1		22	2	
208	F	3'-0"		7'-2 1/4"	1 3/4"	WD		2	AL1	9	8	GLI-3		22	2	
209	F	3'-0"		7'-2 1/4"	1 3/4"	WD		6	AL1	3/A841	8, 7B	GLI-1		22	2	
210A	F	3'-0"		7'-2"	1 3/4"	WD		1	HM	3	2			09	3	
210B	F	3'-0"		7'-2"	1 3/4"	WD		1	HM	3	2		45 MIN	01A	3	
210B.2	F	2'-0"		8'-0"	1 3/4"	HM		1	HM	3	2		90 MIN	14	16	
211	F	3'-0"		7'-2 1/4"	1 3/4"	WD		6	AL1	3/A841	8, 7B	GLI-1		22	2	
212	F	3'-0"		7'-2 1/4"	1 3/4"	WD		2	AL1	9	8	GLI-3		22	2	
214	F	3'-0"		7'-2 1/4"	1 3/4"	WD		2	AL1	9	8	GLI-3		22	2	
215	F	3'-0 7/8"		7'-2 1/4"	1 3/4"	WD		6 SIM	AL1	3/A841	8, 7B			23	2	
221	FG	3'-0"		7'-2"	1 3/4"	AL/GL	GLI-11		AL4			GLI-8		13B	2, 9	
233	FG	3'-0"		7'-2"	1 3/4"	AL/GL	GLI-11		AL4			GLI-8		19B	2	
235	FG	3'-6"		7'-2"	1 3/4"	AL/GL	GLI-3		AL4			GLI-14		13A	2, 9	
272A	F	3'-6"		7'-2"	1 3/4"	HM		1	HM	3	2		45 MIN	01		
272B	F	3'-6"		7'-2"	1 3/4"	HM		1	HM	3	2			08		
274	F	3'-6"		7'-2"	1 3/4"	HM		1	HM	3	2			13C	8, 20	
275	F	3'-0"		7'-2"	1 3/4"	WD		1	HM	3	2			10		
276.1	FG	3'-6"		7'-2"	1 3/4"	AL/GL	GLI-3	4	AL2	15	14	GLI-1		14	2	
276.2	FG	3'-6"		7'-2"	1 3/4"	AL/GL	GLI-3	4	AL2	15	14	GLI-1		26	2, 9	
277	F	3'-0"		7'-2"	1 3/4"	WD		1	HM	3	2			11	14	
279	F	3'-0"		7'-2"	1 3/4"	WD		1	HM	3	2			11	14	
282.1	FG	3'-6"		7'-2"	1 3/4"	AL/GL	GLI-3	4	AL2	15	14	GLI-1		08A		
282.2	FG	3'-6"		7'-2"	1 3/4"	WD/GL	GLI-3	1	HM	3	2			18		
282.3	FG	3'-6"		7'-2"	1 3/4"	WD/GL	GLI-3	1	HM	3	2			18		
283.1	FG	3'-6"		7'-2"	1 3/4"	AL/GL	GLI-3	4	AL2	15	14	GLI-1		14	2	
283.2	FG	3'-6"		7'-2"	1 3/4"	AL/GL	GLI-3	4	AL2	15	14	GLI-1		26	2, 9	
284.1	FG	3'-6"		7'-2"	1 3/4"	AL/GL	GLI-3	4	AL2	15	14	GLI-1		31	2	
284.2	FG	3'-6"		7'-2"	1 3/4"	AL/GL	GLI-3	4	AL2	15	14	GLI-1		31	2	
289A.1	FG	3'-6"		7'-2"	1 3/4"	WD/GL	GLI-3	1	HM	3	2			18		
289A.2	FG	3'-6"		7'-2"	1 3/4"	WD/GL	GLI-3	1	HM	3	2			18		
289B.1	FG	3'-6"		7'-2"	1 3/4"	WD/GL	GLI-3	1	HM	3						



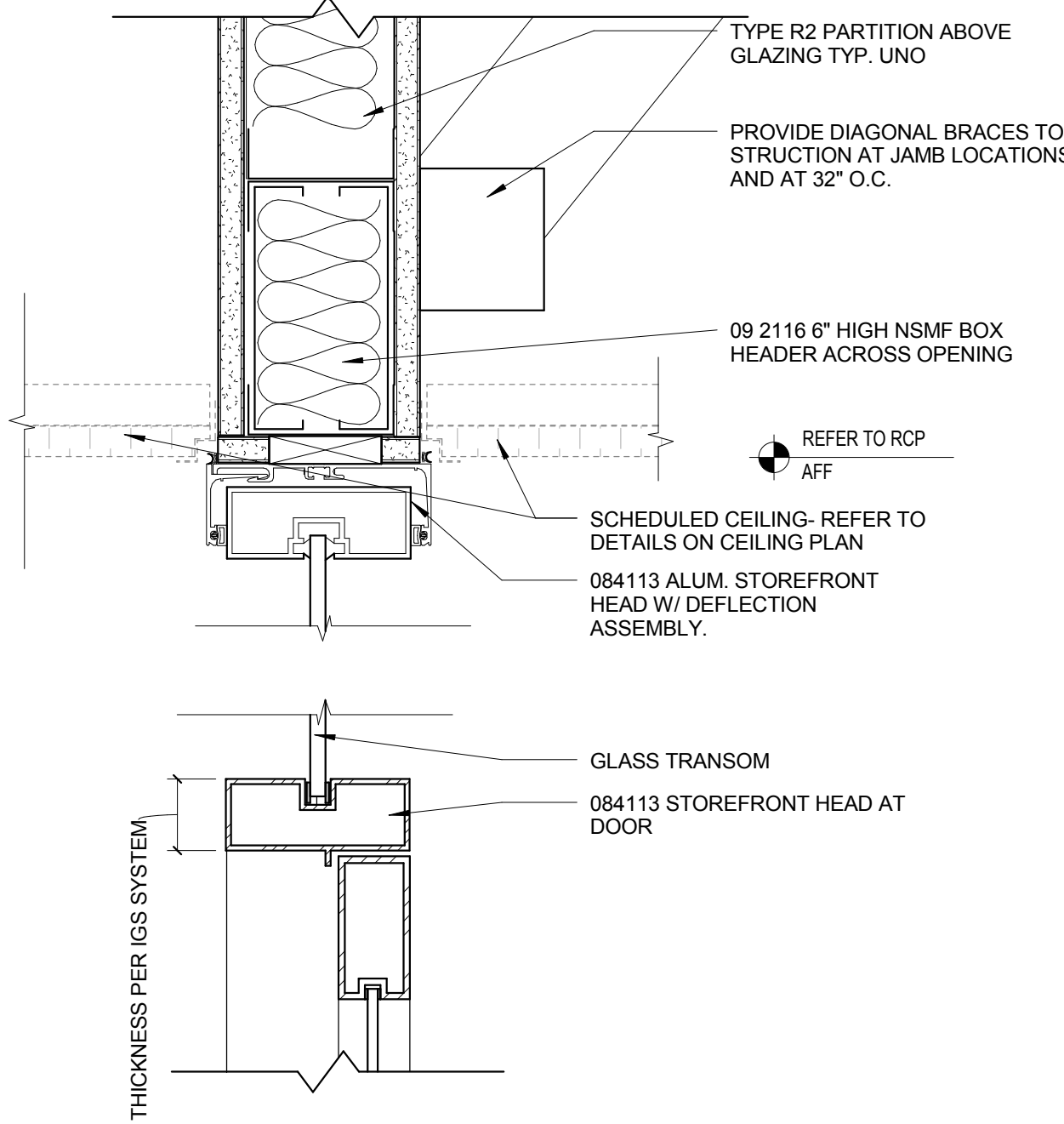
30 HM PROFILE-GLAZING
3" = 1'-0"



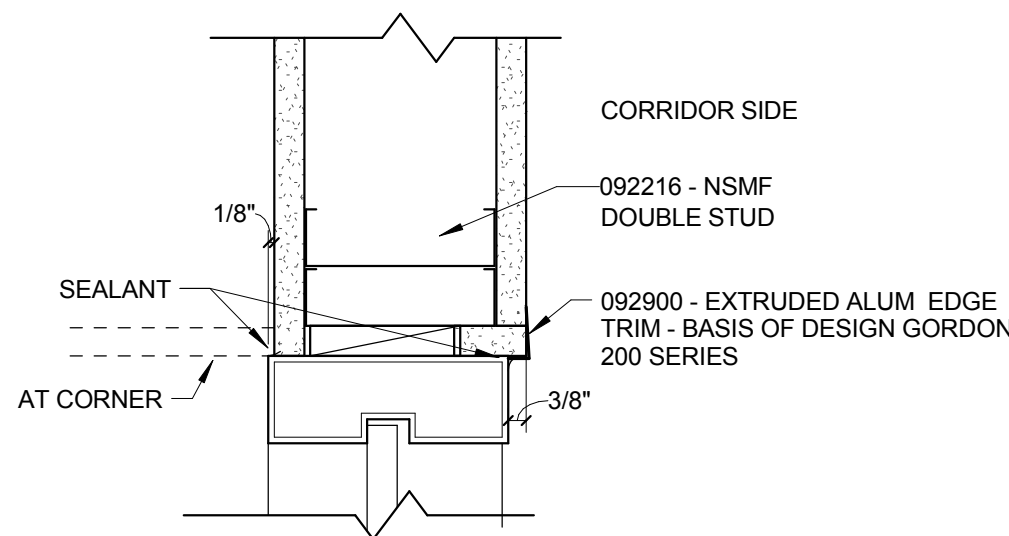
17 POCKET SLIDING DOOR HEAD
1 1/2" = 1'-0"



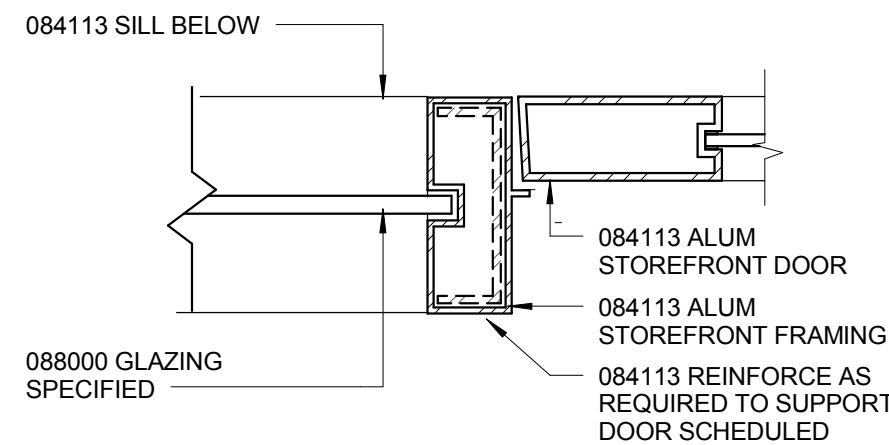
16 POCKET SLIDING DOOR JAMB
1 1/2" = 1'-0"



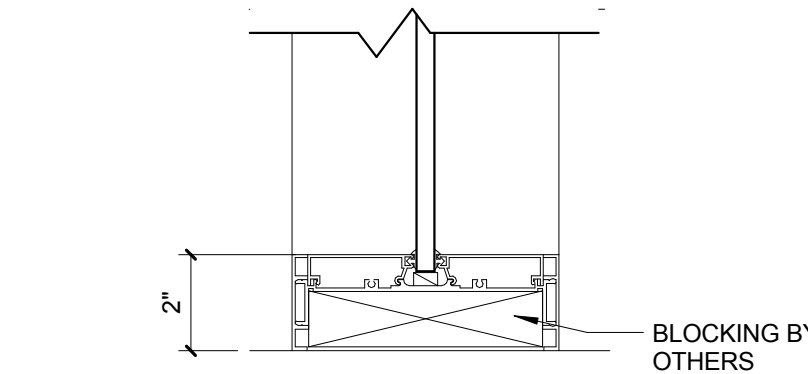
15 STOREFRONT DOOR HEAD AT TRANSOM
3" = 1'-0"



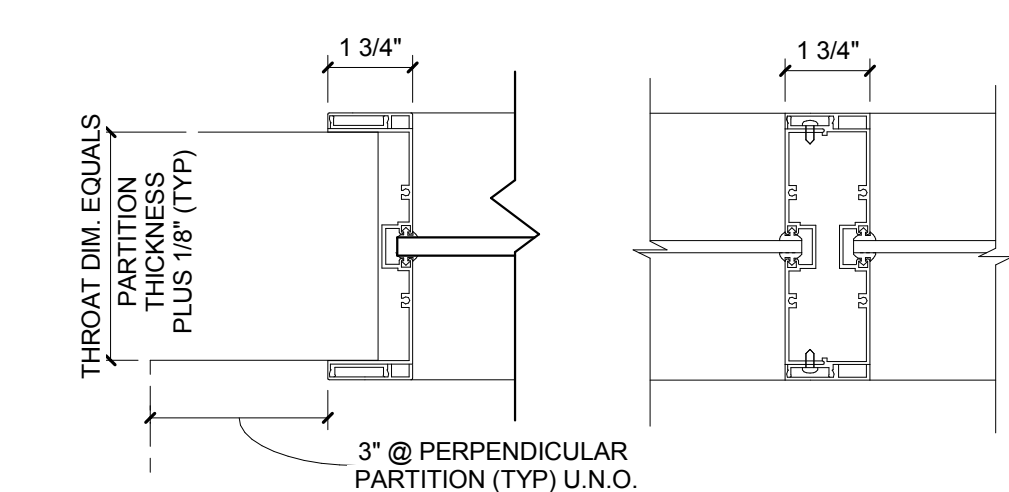
19 TYP IGS 2 OR 3 PLAN DETAIL
3" = 1'-0"



14 ALUM STOREFRONT JAMB
3" = 1'-0"

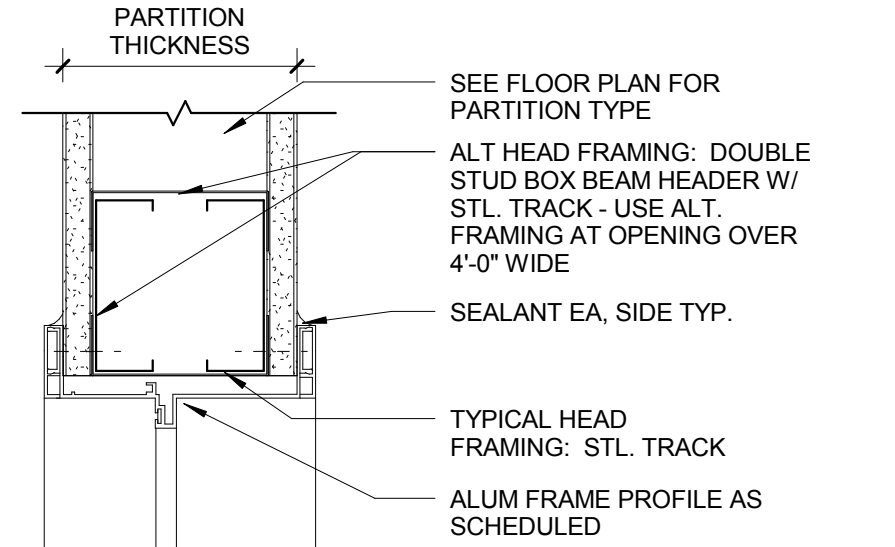


11 ALUM PROFILE
3" = 1'-0"

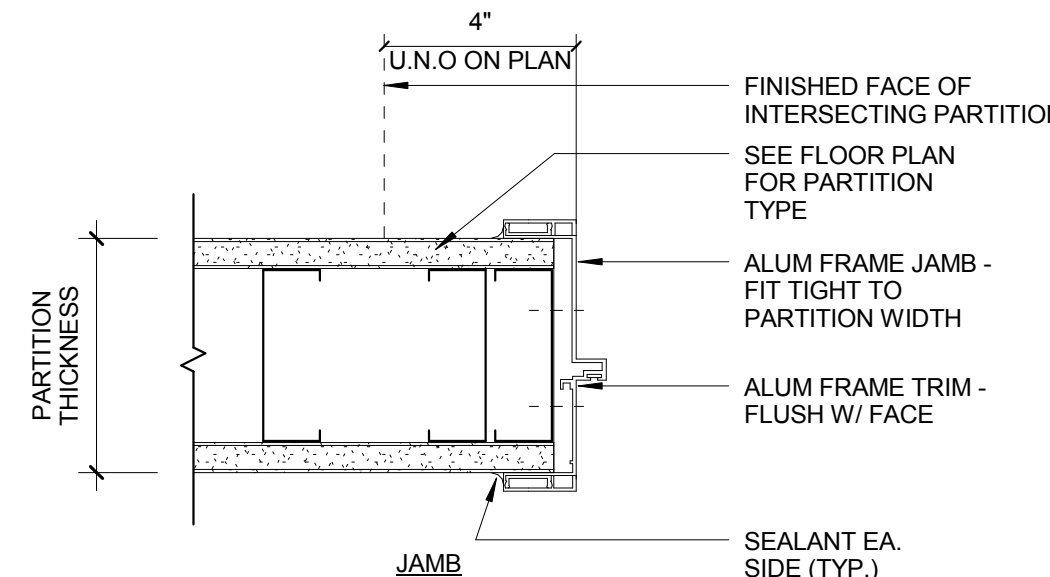


10B ALUM PROFILE
3" = 1'-0"

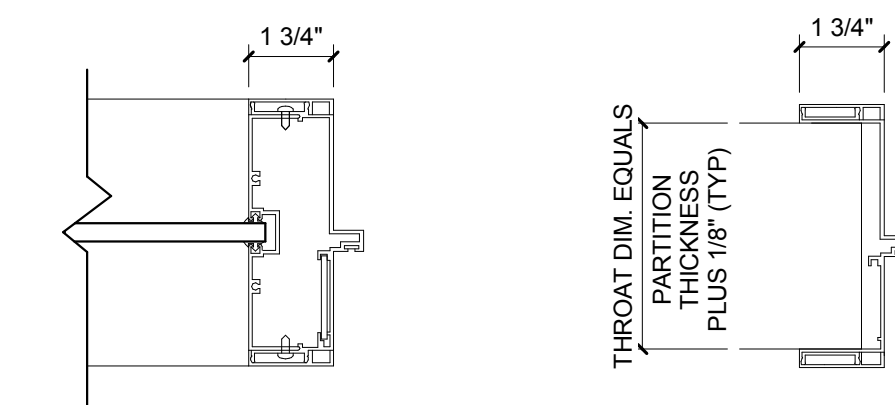
10A ALUM PROFILE
3" = 1'-0"



9 ALUM AL1 @ GYP HEAD DETAIL
3" = 1'-0"

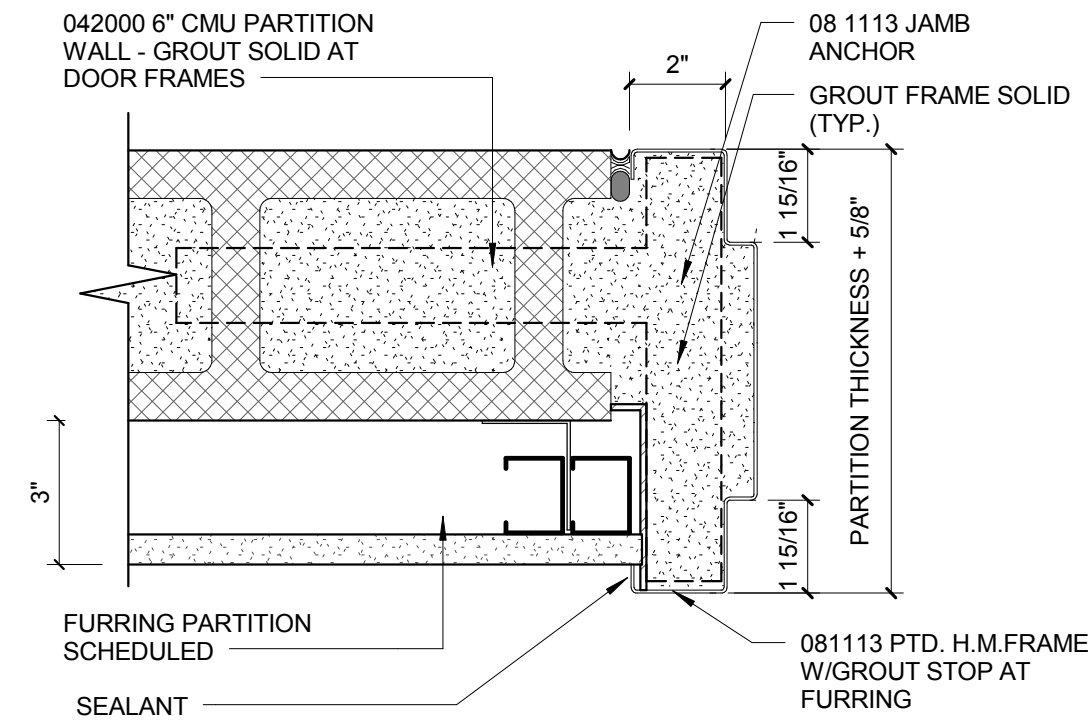


8 ALUM AL1 @ GYP JAMB DETAILS
3" = 1'-0"

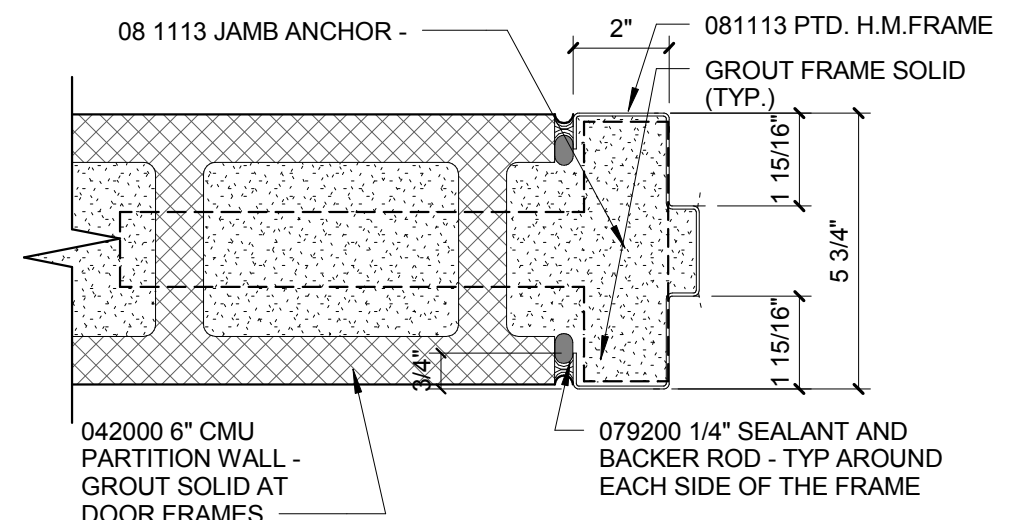


7B ALUM PROFILE
3" = 1'-0"

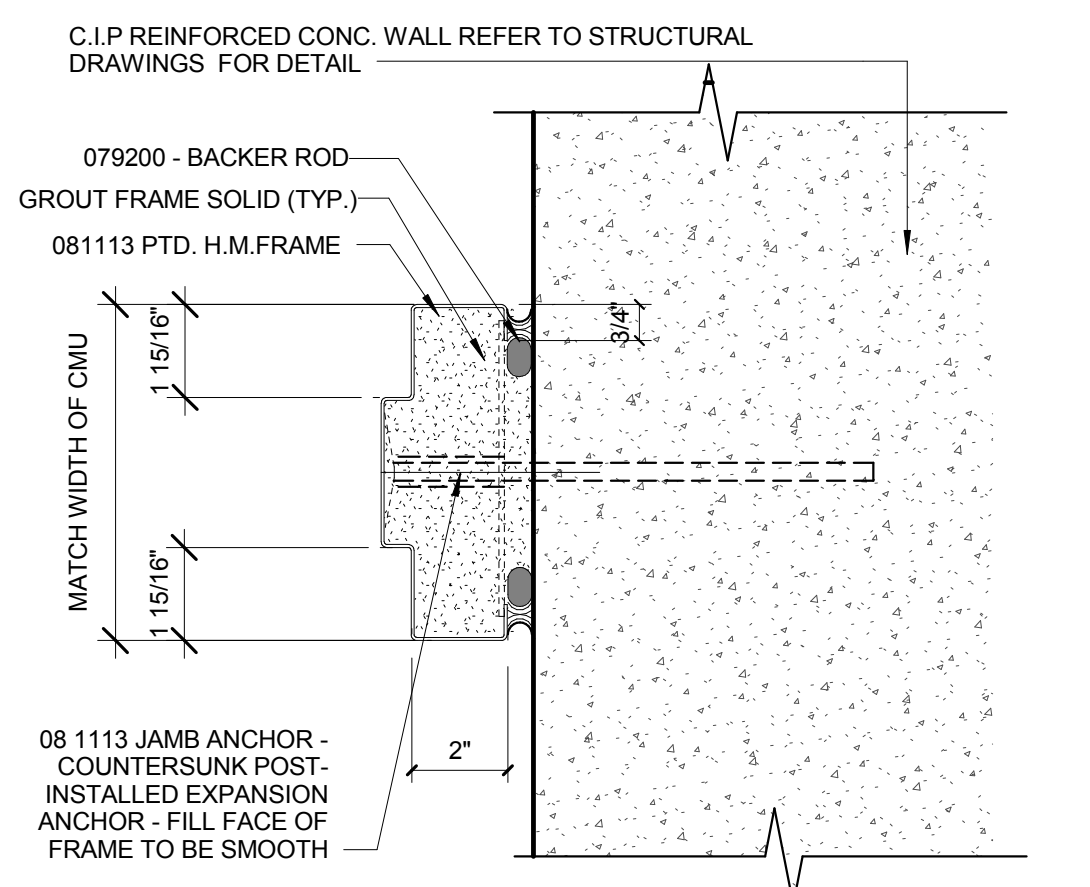
7A ALUM PROFILE
3" = 1'-0"



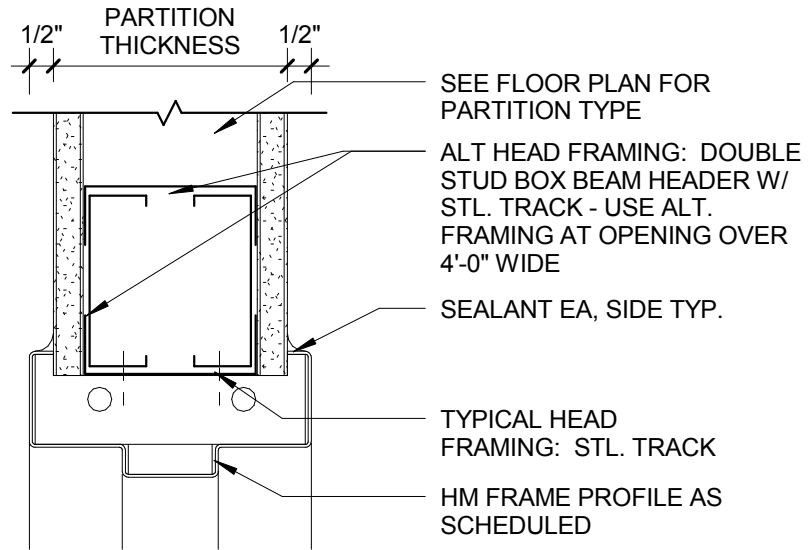
6 H.M. FRAME DETAILS-CMU W/FURRING
3" = 1'-0"



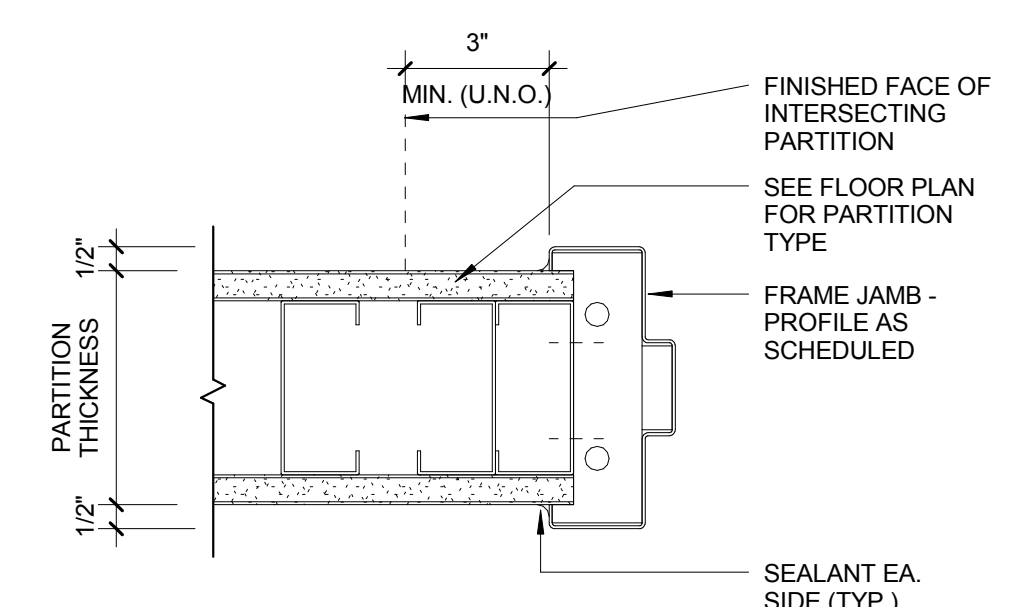
5 H.M. FRAME DETAIL - CMU JAMB
3" = 1'-0"



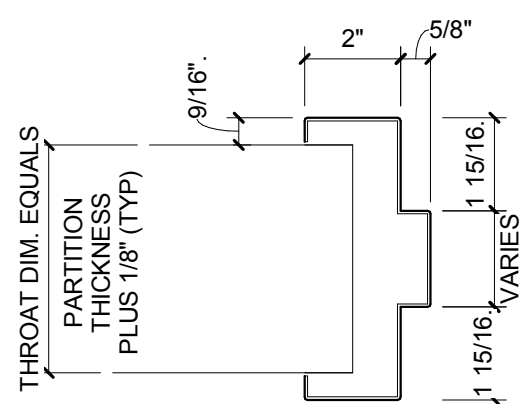
4 H.M. FRAME DETAILS-CONC
3" = 1'-0"



3 HM @ GYP HEAD DETAIL
3" = 1'-0"

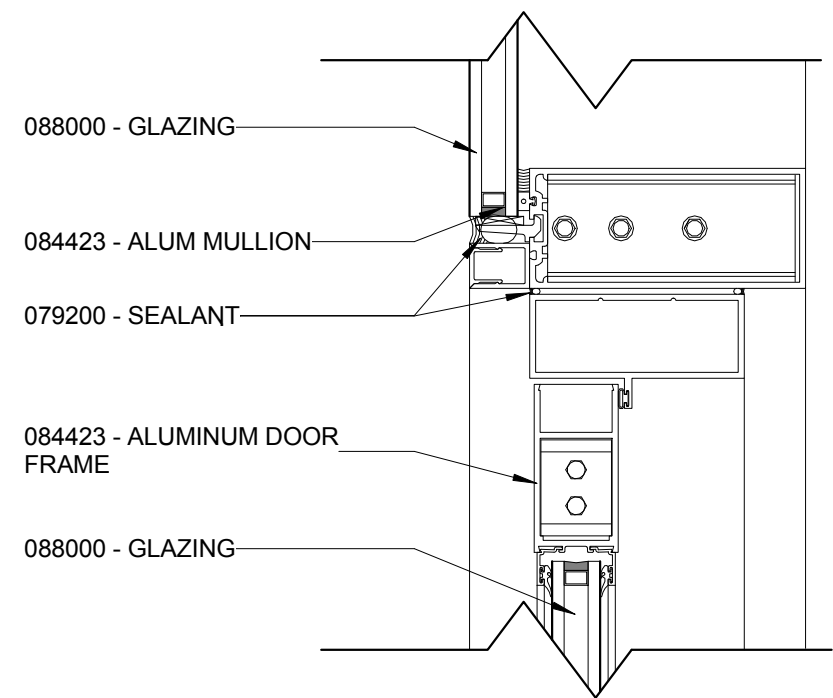


2 HM @ GYP JAMB DETAILS ABC
3" = 1'-0"



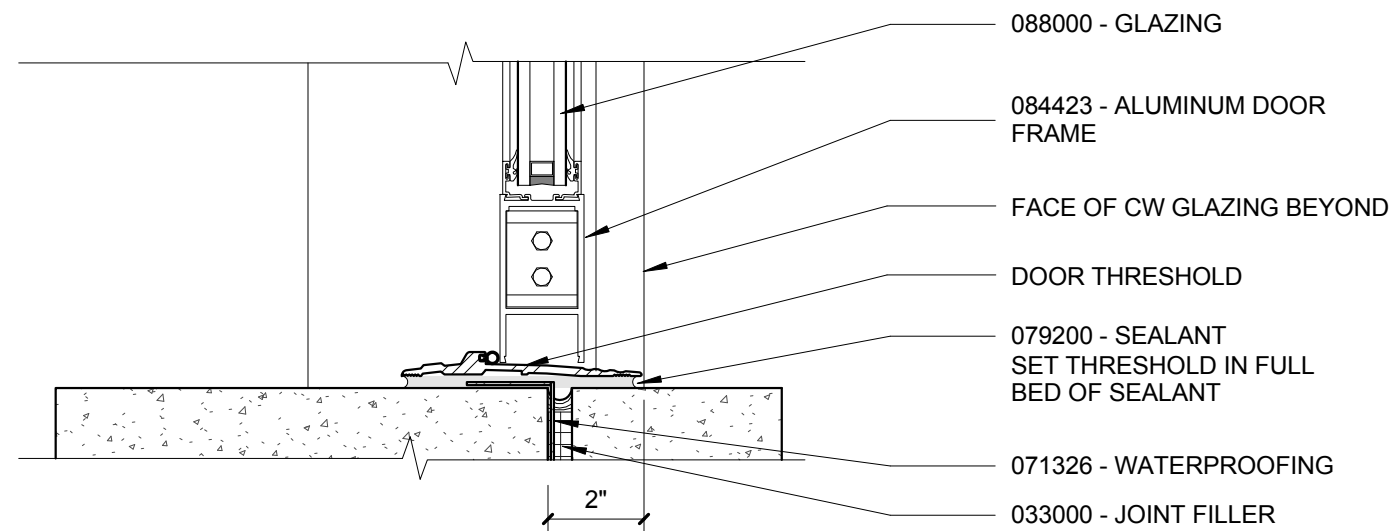
1 HM PROFILE
3" = 1'-0"

EXTERIOR DOOR SCHEDULE															
	DOOR SIZE						FRAME DETAILS								REMARKS
	TYPE	OPENING WIDTH	LEAF WIDTH	OPENING HEIGHT	THK	MATL	GLASS	TYPE	MATL	HEAD	JAMB	SILL	GLASS	FIRE RATING (MIN.)	
LEVEL 01															
X160.3	F	3'-0"		9'-0"	1 3/4"	HM		1	HM	7/A1011	3/A1011	10/A1011		N/A	
X172.2	F.F	6'-0"	3'-0"	7'-10"	1 3/4"	HM		1	HM	6/A1011	2/A1011	9/A1011		N/A	
X178.2	F.F	6'-0"	3'-0"	7'-10"	1 3/4"	HM		1	HM	5/A1011	1/A1011	9/A1011		N/A	
X188	F.F	6'-0"	3'-0"	7'-10"	1 3/4"	HM		1	HM	5/A1011	1/A1011	9/A1011		N/A	
X192.2	F.F	6'-0"	3'-0"	7'-10"	1 3/4"	HM		1	HM	5/A1011	1/A1011	9/A1011		N/A	
XC130	FG	3'-0"		9'-0"	1 3/4"	AL/GL		1	ALUM	12/A1011	12/A1011	11/A1011		N/A	
XC153	FG,FG	6'-0"	3'-0"	9'-0"	1 3/4"	AL/GL		1	ALUM	12/A1011	12/A1011	11/A1011		N/A	
XS176.1	F	3'-6"		7'-10"	1 3/4"	HM		1	HM	5/A1011	1/A1011	9/A1011		N/A	
LEVEL 02															
XC270A.1	FG,FG	6'-0"	3'-0"	8'-0"	1 3/4"	AL/GL		1	ALUM	12/A1011	12/A1011	11/A1011		N/A	
XC270A.2	FG,FG	6'-0"	3'-0"	8'-0"	1 3/4"	AL/GL		1	ALUM	12/A1011	12/A1011	11/A1011		N/A	
X294.2	F	3'-0"		7'-10"	1 3/4"	HM		5	HM	8/A1011	4/A1011	9/A1011		N/A	
XC230	FG,FG	6'-0"	3'-0"	7'-0"	1 3/4"	AL/GL		1	ALUM	12/A1011	12/A1011	11/A1011		N/A	
XC230	FG	3'-2"		7'-0"	1 3/4"	AL/GL		1	ALUM	12/A1011	12/A1011	11/A1011		N/A	
Grand total: 13															

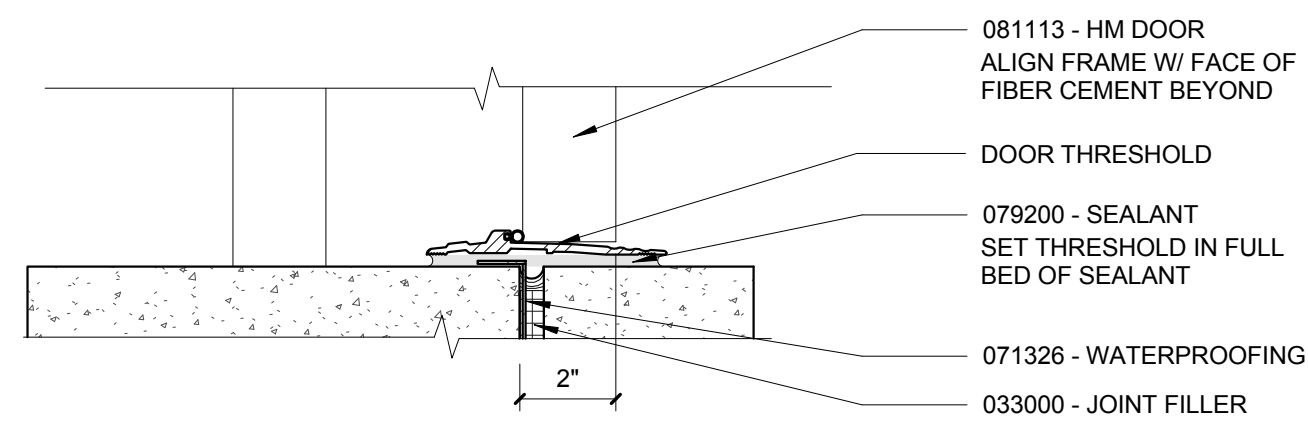


12 CURTAINWALL HEAD/JAMB
3" = 1'-0"

(DOORS: X294.2)

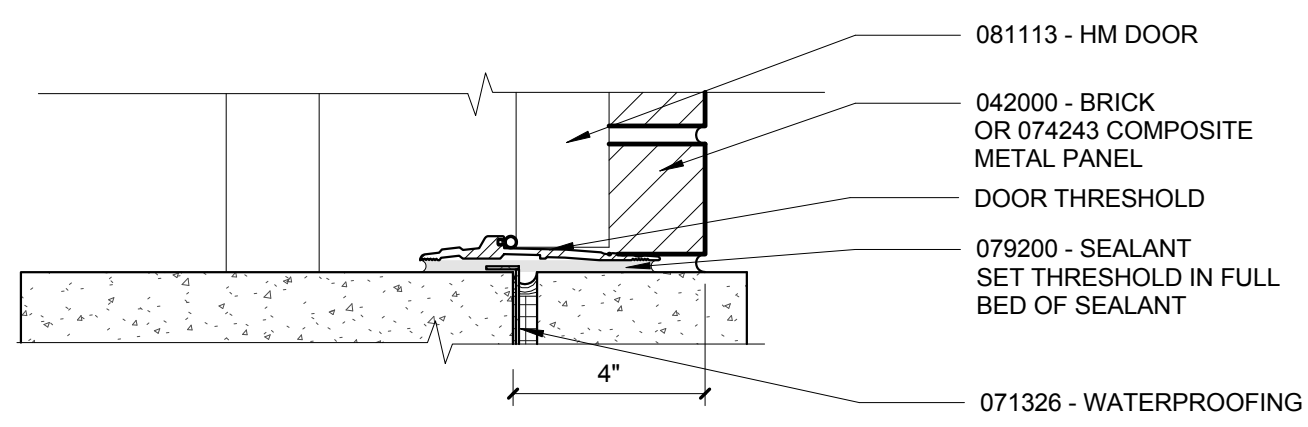


11 DOOR THRESHOLD AT ALUMINUM DOOR ASSEMBLY
3" = 1'-0"

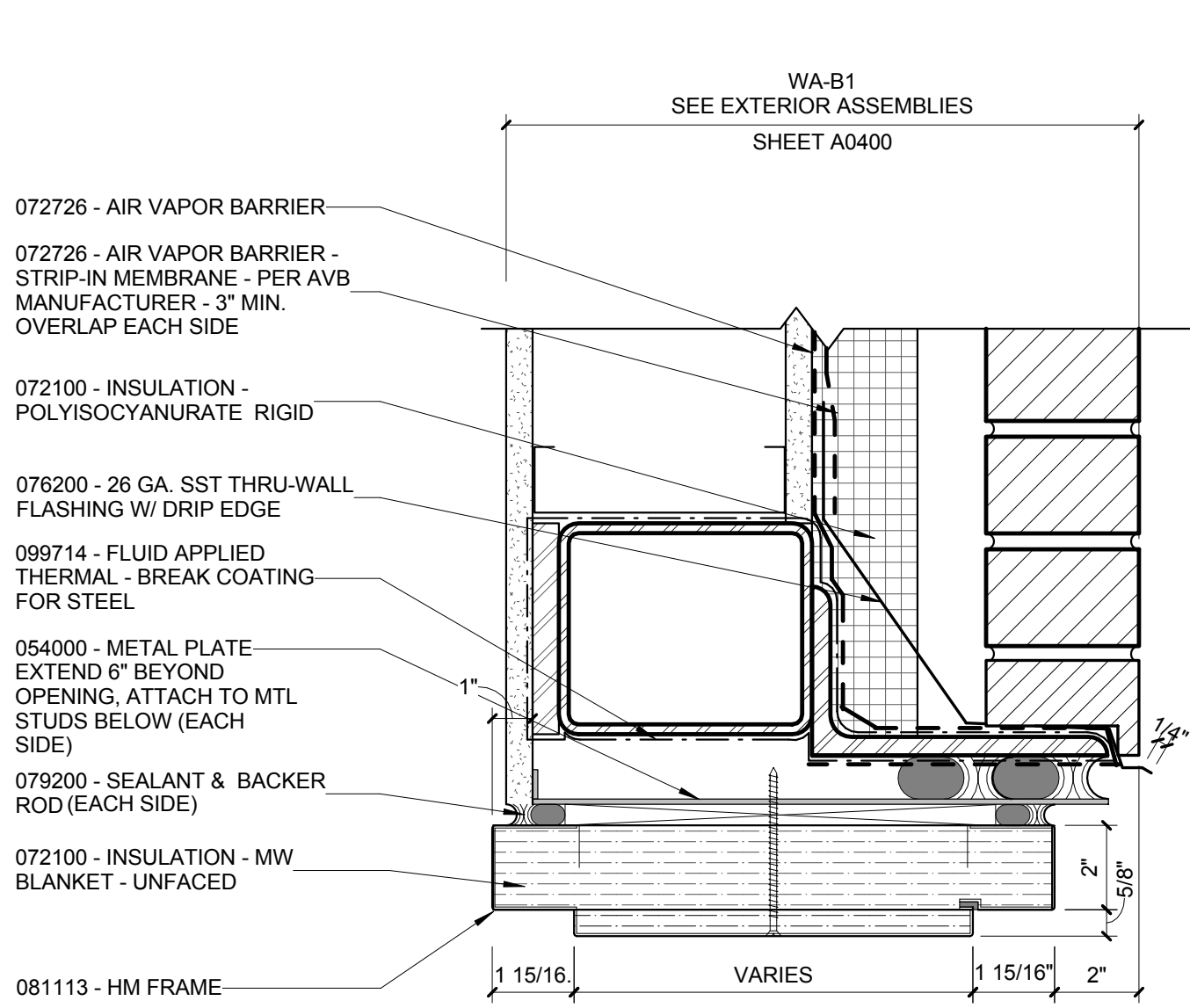


10 HM DOOR THRESHOLD AT WA-L2
3" = 1'-0"

(DOOR X160.3)

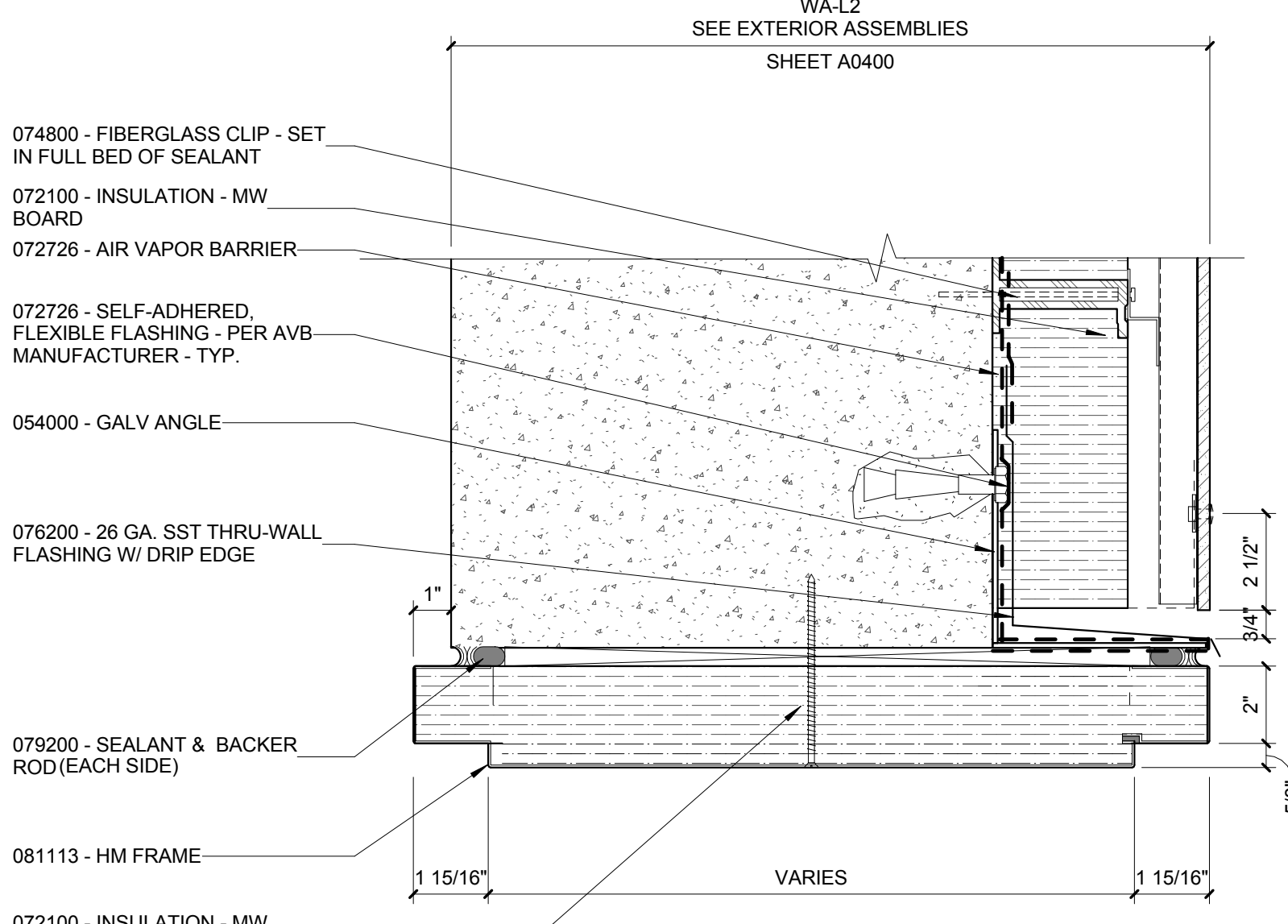


9 HM DOOR THRESHOLD DETAIL
3" = 1'-0"



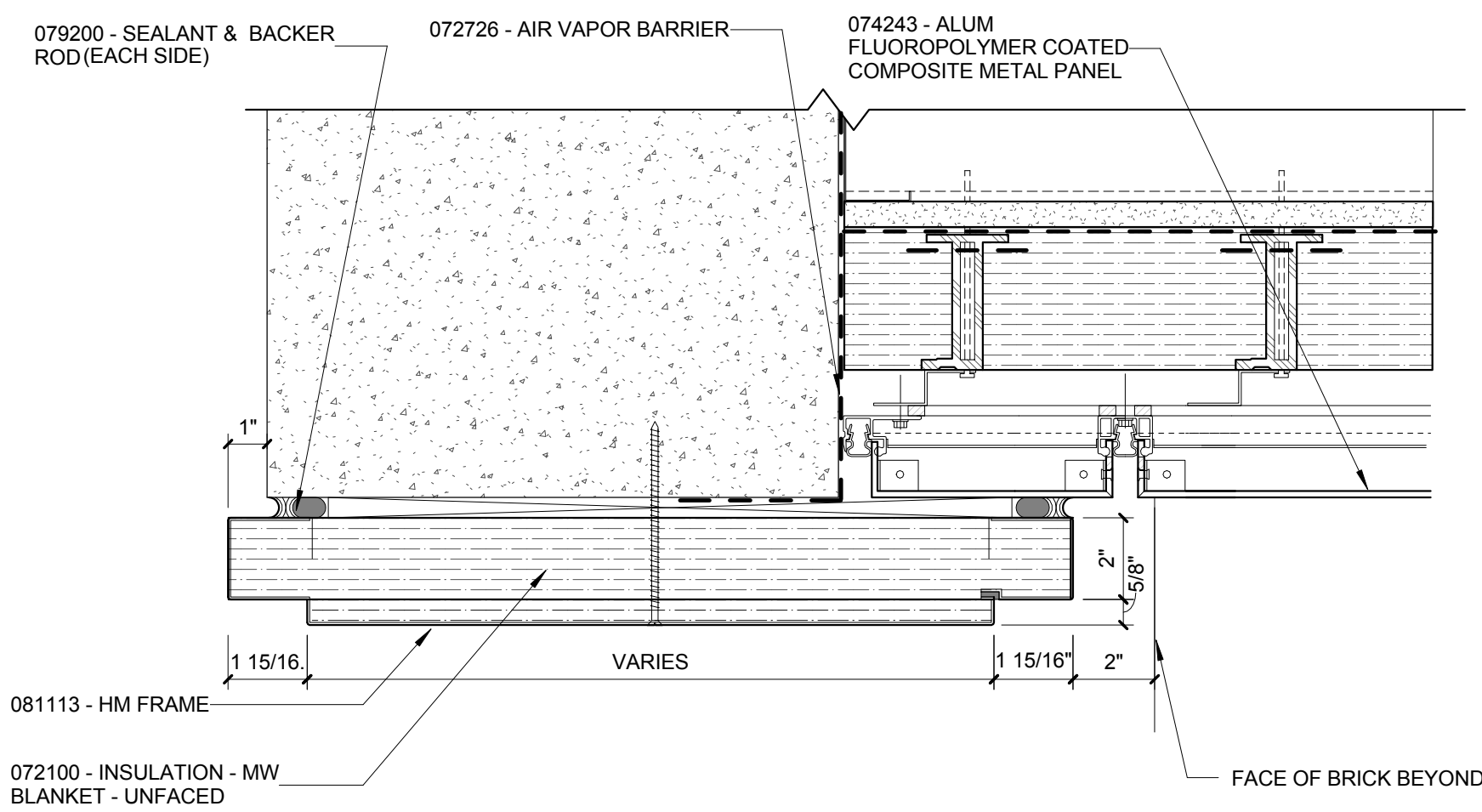
8 HM DOOR HEAD DETAIL @ BRICK/MTL. STUD
3" = 1'-0"

(DOORS: X294.2)



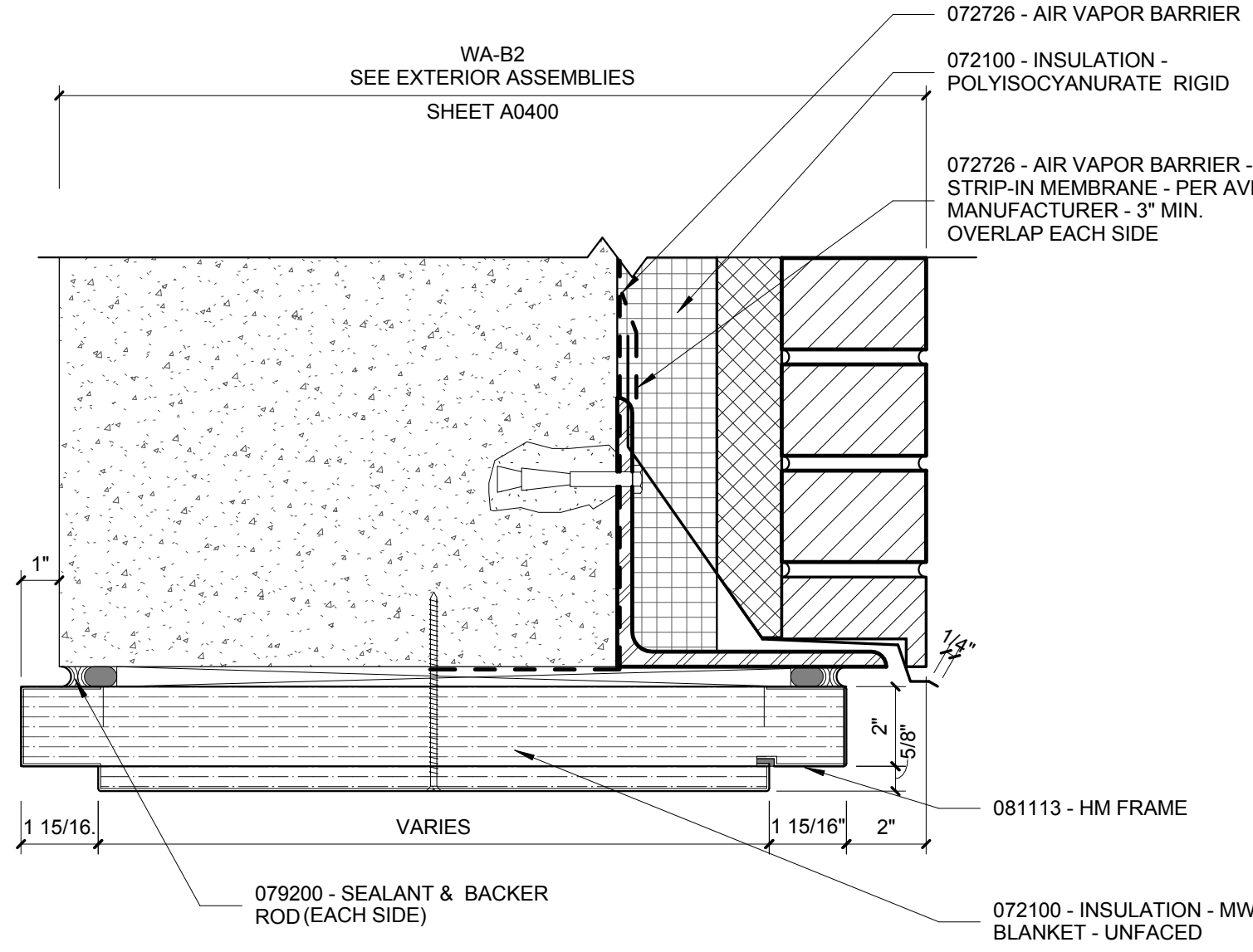
7 HM DOOR HEAD DETAIL @ FIBER CEMENT PANEL
3" = 1'-0"

(DOORS: X160.3)



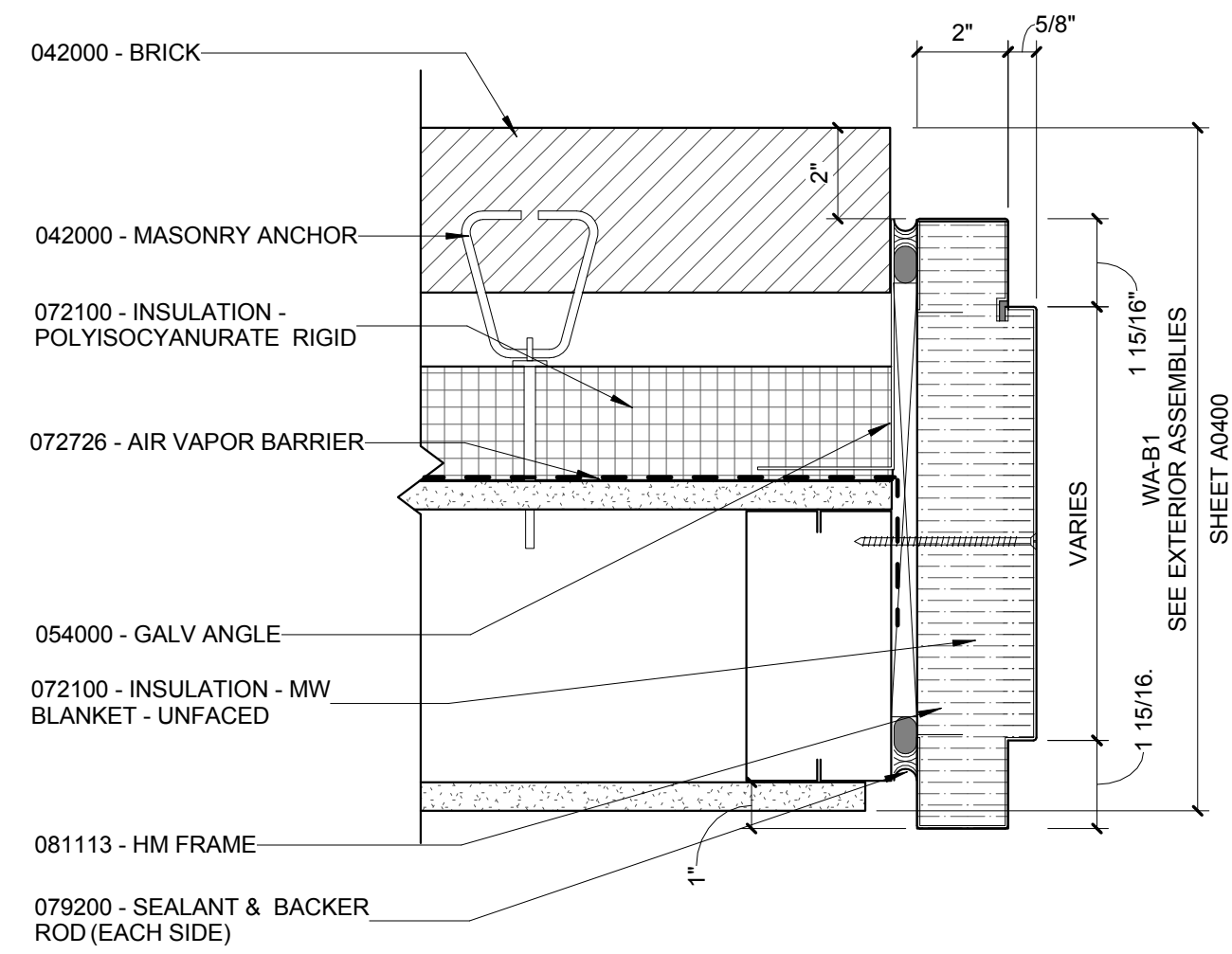
6 HM DOOR HEAD DETAIL @ METAL PANEL SOFFIT
3" = 1'-0"

(DOORS: X172.2)



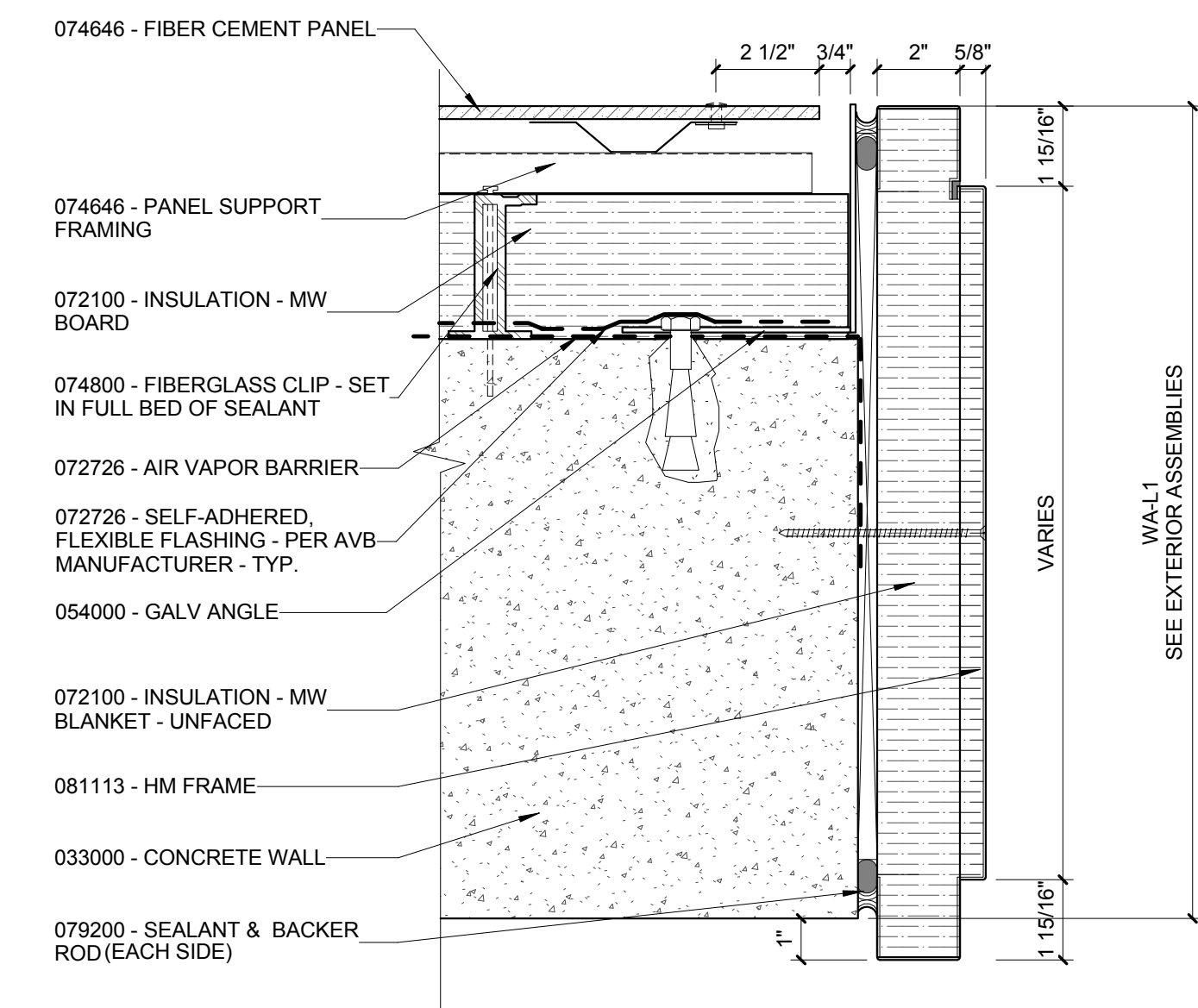
5 HM DOOR HEAD DETAIL @ BRICK/CONCRETE
3" = 1'-0"

(DOORS: XS176.1, X178.2, X188 & X192.2)



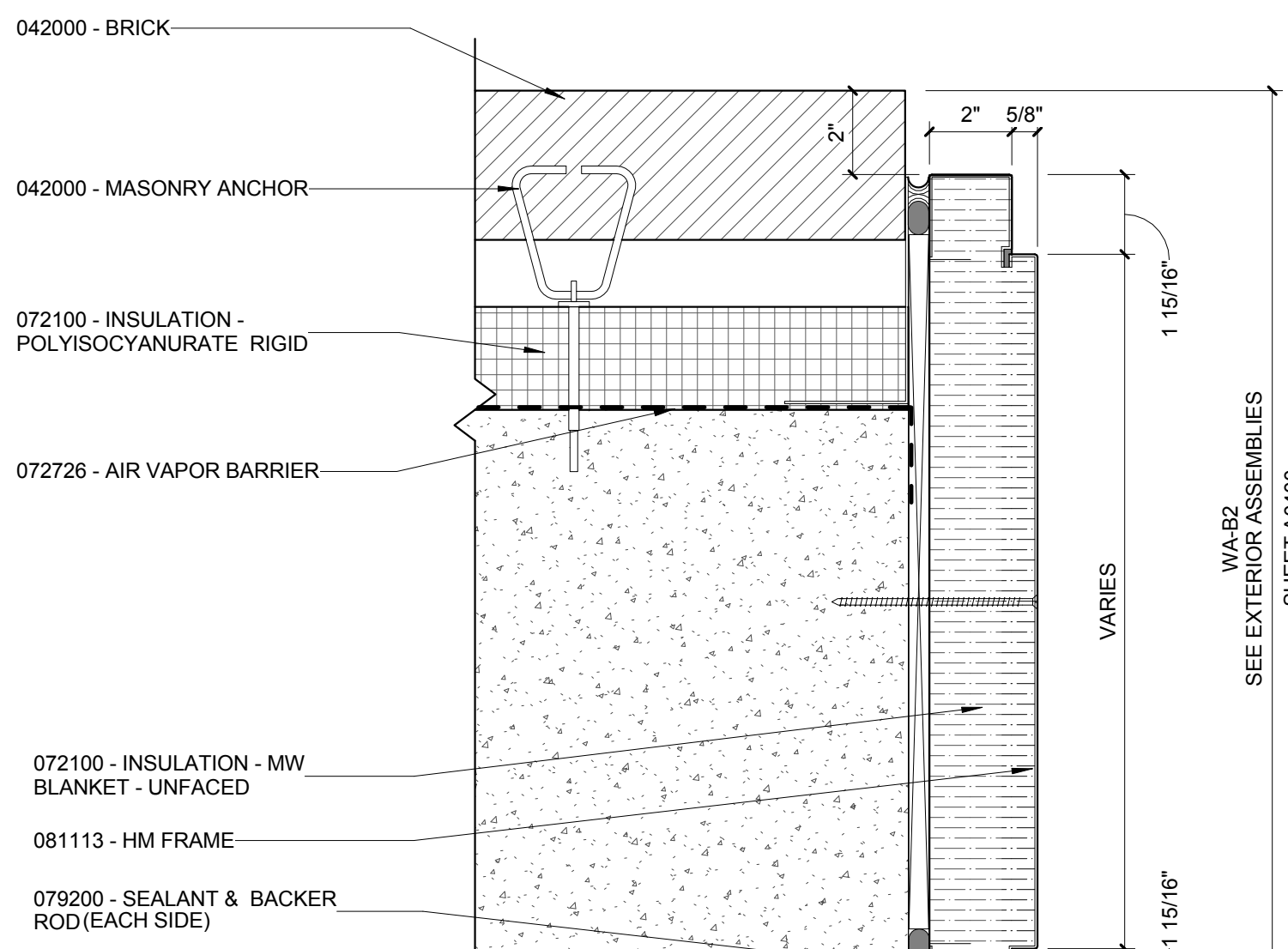
4 HM DOOR JAMB DETAIL @ BRICK/MTL. STUD
3" = 1'-0"

(DOORS: X294.2)



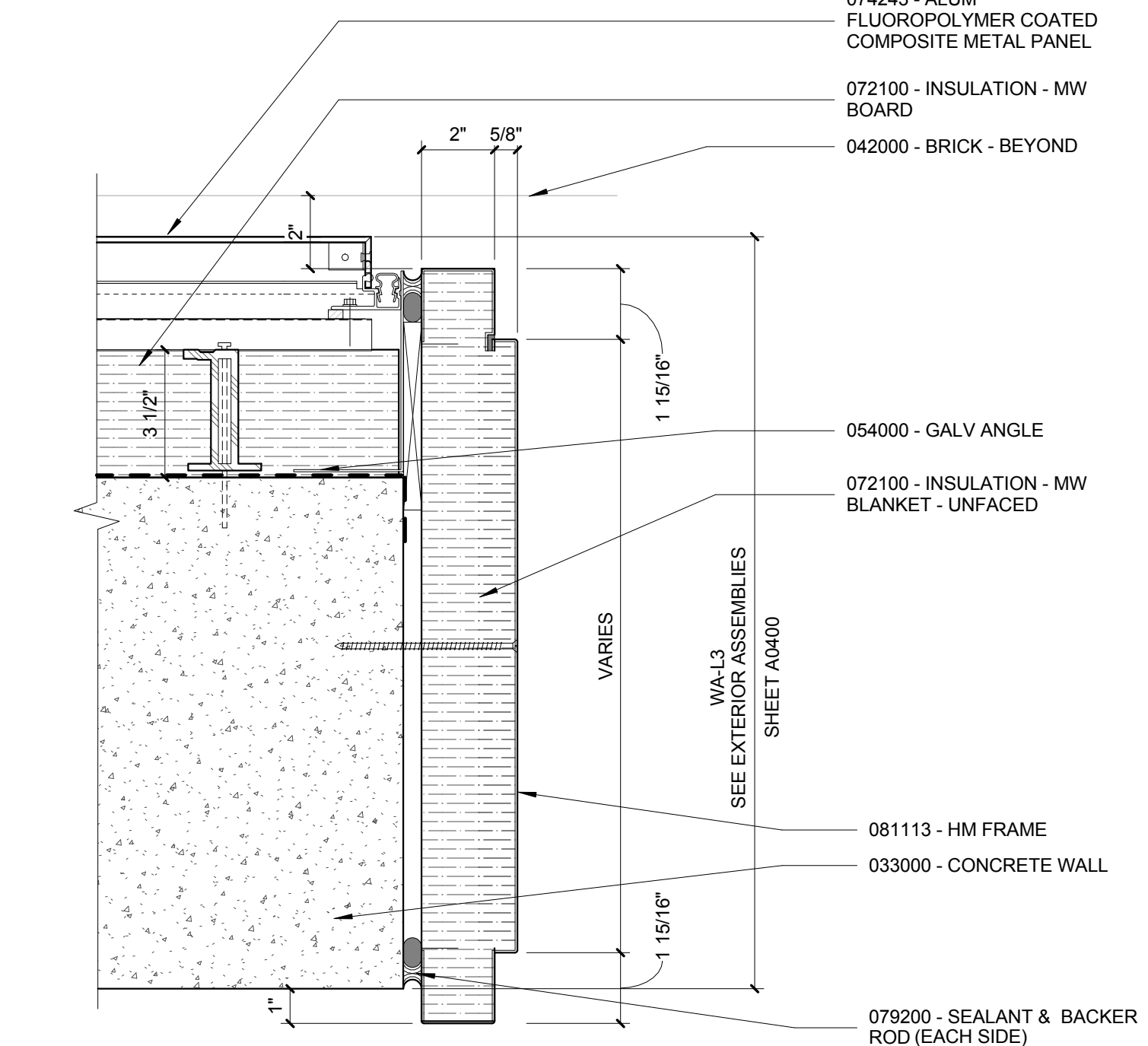
3 HM DOOR JAMB DETAIL @ FIBER CEMENT PANEL
3" = 1'-0"

(DOORS: X160.3)



2 HM DOOR JAMB DETAIL @ BRICK/CONCRETE
3" = 1'-0"

(DOORS: X172.2)



1 HM DOOR JAMB DETAIL @ METAL PANEL
3" = 1'-0"

(DOORS: XS176.1, X178.2, X188 & X192.2)

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LAB EQUIPMENT SCHEDULE_LEVEL-1																													
EQUIPMENT ITEM				Count	Mounting Location *	DIMENSIONS			ELECTRICAL				PLUMBING				MECHANICAL				New (N) / Existing (E)	Existing Location	Furnished & Installed by **	Remarks					
Equipment Number	Description	Manufacturer	Model			Floor Offset	Front	Side	Height	Volts	Emergency Power	Amps	Data	Phase	Watts	Floor Drain	Portable Water	DI Water	Gas	Vacuum					Carbon Dioxide	Nitrogen	Compressed Air	Exhaust	Monitoring
133B																													
SIM LAB																													
06.10.01	Anesthesia Machine	GE Datex-Ohmeda	Aespire	1	F	0"	2'-5"	2'-5"	4'-7"	120	15							X	X					X	X	N		Total dimensions include monitors on top; DISS: Diameter Index Safety System; http://www.dremed.com/catalog/product_info.php/products_id/1818	
06.10.02	Adult Spinal/Epidural	Life Form	LF1036	1	S	0"	1'-5"	1'-5"	10"																	E		https://www.simulab.com	
06.10.03	Infant Lumbar Puncture	SimuLab	LPB-10	1	S	0"	1'-0"	1'-1"	1'-8"																	E			
06.10.05	Surg - Instrument Table	Steris	Amsco 3085SP	1	F	0"	6'-4"	1'-10"	3'-0"	100-120		5														N		http://www.venturemedical.com/products/surgical_tables/steris_amsco_3085sp_surgery_table_refurbished/	
06.10.06	Surg - Instrument Table	Steris	Amsco 3085SP	1	F	0"	6'-4"	1'-10"	3'-0"	100-120		5														N		http://www.venturemedical.com/products/surgical_tables/steris_amsco_3085sp_surgery_table_refurbished/	
06.10.07	Anesthesia Cart	DR Instruments	DRC630K	1	F	0"	3'-5"	2'-1"	2'-7"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N		https://www.drinstruments.com/classic-6-drawer-anesthesia-carts-with-key-lock-bigger-drawer-space.html	
06.10.09	OR Lights	Meditek	BERCHTOLD CHROMOPHARE D660 (435-0300-0175)	1	C	6'-0"	2'-0"	2'-0"	2'-0"																	N	OFCl		
06.10.10	Crash Cart	Global	TrippNT 51072	1	F	0"	2'-7"	1'-8"	4'-0"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N		http://www.globalindustrial.com/p/medical-lab-service-carts/medical-supply-service-carts/6-drawer-procedure-cart-front-locking-20-x-31w-x-48h-cherry-red?infoParam_campaign=131&qclid=CISRs2k0cyCFQEcAQodqQW4Q	
06.10.14	Time Out Board			1	W	3'-0"	4'-0"	1"	4'-0"																	N		http://www.vitalitymedical.com/iv-pole-2-hook-hmr?gold=CNSB2s0kcyGFDYJaQodqQW4Q	
06.10.15	Portable suction cannister	Amsino	EZE-VAC	1	F	0"	2'-0"	2'-0"	2'-0"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N		http://receptai.amsino.com	
06.10.16	Simulation Mannequin	CAE Healthcare	HPS-010	1	F	0"	2'-0"	2'-0"	5'-11"	100-220		2.3								X	X		X	X	N				
06.10.17	HPS-Equip Rack	CAE Healthcare	HPS-010	1	F	0"	2'-3"	2'-4"	3'-6 1/2"	100-220											X	X				N		O2, N2O; http://caehealthcare.com/images/uploads/troc_hures/HPS.pdf	
12																													
135																													
DRY SKILLS LAB / COHORT CLASSROOM																													
06.07.34	Virtual Dissection Table	Anatome		1	F	0"	2'-4"	7'-2"	2'-9"	100-240		10			1150											N		http://www.anatome.com/images/medical/Videos_TN/AnatomeTableBrochure.pdf	
1																													
137																													
MODELS/ ASSESSMENT STORAGE/RESEARCH																													
06.12.01	Ultrasound Cart			4	F	0"	1'-5 1/2"	2'-3"	2'-5"																	N			
06.12.02	Ultrasound Machine	Sonosite	M-turbo	1	B	3'-6"	1'-4"	1'-2"	8"																	E		https://www.sonosite.com/m-turbo	
06.12.03	Ultrasound Machine	Sonosite	M-turbo	3	B	3'-6"	1'-4"	1'-2"	8"	100-240		2														N		https://www.sonosite.com/m-turbo	
06.12.04	Gas Cabinet	Safety Equipment	7200	1	F	0"	2'-0"	1'-6"	6'-3"																	N	CFCl	Spec: 123553; 2-cylinder (2 Oxygen)	
06.12.05	Gas Cabinet	Safety Equipment	7300	1	F	0"	3'-0"	1'-6"	6'-3"																	N	CFCl	Spec: 123553; 3-cylinder (N, N2O, CO2)	
10																													
174																													
TEACHING KITCHEN																													
10.15.01	6 Range Cooktop	KitchenAid	KGCU467VSS	1	B	2'-10"	2'-11 1/4"	1'-10 1/4"	1'-2"										X							N	CFCl	Specification 113100	
10.15.02	Double Wall Ovens	GE	JK3600SFSS (208v)	1	W	1'-1 1/4"	2'-2 3/4"	1'-11 1/2"	4'-3"	208		30														N	CFCl	Specification 113100	
10.15.03	Hood (with sprinkler system)	CaptiveAir	5430 ND-2	1	W	7'-0"	4'-6"	4'-6"	2'-8"																	N	CFCl	Specification 114000	
10.15.04	Garbage Disposal	InSinkErator	SPACESAVER	1	U	0"	1'-0"	1'-0"	1'-6"								X									N	CFCl	Specification 114000	
10.15.05	Refridgerato/Freezer combo	LG	LFX28968ST	1	F	0"	2'-11 3/4"	2'-11 3/4"	5'-9 3/4"																	N	CFCl	Specification 113100	
10.15.06	Icemaker	Hoshizaki	C-101BAH-AD	1	U	0"	1'-3"	1'-11 3/4"	2'-7 1/2"	115		3.6														N	CFCl	Specification 113100	
10.15.09	Microwave	Dacor	MMDV30S	1	B	1'-4"	2'-6"	1'-11 3/8"	1'-4"	120		15														N	CFCl	Specification 113100	
10.15.10	Commercial Dishwasher	Meiko	FV 40.2 G	1	U	0"	2'-0"	2'-0"	2'-5 1/2"	208		43		1												N	CFCl	Specification 114000	
10.15.12	Adjustable Camera			2	C	8'-0"	6"	6"	6"																	N		there were 2 camera. One pointed at the stove and one at the counterop. They could be moved to look elsewhere	
10.15.16	Electronic Mixing Bowl	KitchenAid	KSM150PSE	1	B	2'-10"	9 5/16"	1'-2 5/16"	1'-2"																	N		standard	
10.15.17	Blender	Vitamix	5200	1	B	2'-10"	7 5/16"	8 3/4"	1'-8 1/2"																	N		standard	
12																													
183B																													
CADAVER LAB WORKROOM																													
06.04.02	Incubator-Bench	ThermoScientific	Heracell CO2 with O2 control	1	B	2'-10"	1'-4"	1'-4"	10"																	N		http://www.thermo.fishon.com/CO2WebProject.asp?BookCode=co211fx&from=2w	
06.04.03	Anesthesia Chamber	Kent Scientific	Sonosuit Small Animal Anesthesia system SOMNO-0710	1	B	2'-10"	2'-1"	1'-8"	1'-8"																	N			
06.04.04	Refrigerator uc			1	U	0"	2'-1"	2'-4"	2'-6"																	N			
06.04.05	CO2 N2 Controller	Biospherix	PROOX21	1	B	2'-10"	8"	4"	8"																	N			
4																													
191																													
CADAVER LAB																													
06.03.01	Cadaver Table	Mortech Manufacturing	600024	4	F	0"	2'-8"	7'-2"	4'-1"	-												X				N		http://mortechmfg.com/collections/anatomy-dissection-tables/products/hooded-dissection-table-with-exhaust-chamber	
06.03.02	Cadaver Table	Existing		2	F	0"	2'-8"	7'-2"	4'-1"																	E			
06.03.03	Magnifying Light	Mortech Manufacturing	SLMAG	6	F	0"	10"	10"	5'-2"																	N		http://mortechmfg.com/collections/surgical-lighting/products/surgical-light-magnification-stima9	
06.03.04	Lab Cart	Carolina. Grattell Trolley Storage Cart	705291	6	F	0"	1'-3"	1'-5"	2'-10"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N		<a "="" href="http://www.carolina.com/laboratory-carts/ess-steel-laboratory-cart-300-lb-capacity/7050_20.pr?question=">http://www.carolina.com/laboratory-carts/ess-steel-laboratory-cart-300-lb-capacity/7050_20.pr?question=	
06.03.06	Bone Saw	Mortech	0295-420	4	S	2'-10"	4"	1'-0"	1'-0"	115		8.5														N		http://mortechmfg.com/collections/autopsy-saw-we-vacuums/products/autopsy-saw-0295-270	
06.03.07	Bone Saw			2	S	2'-10"	2"	1'-0"	1'-0"																	E			
06.03.13	MOBILE LECTERN (Repl w Cowl)			1	0"	2'-1"	2'-1"	3'-4"																		N	CFCl	Casework	
25																													

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LAB EQUIPMENT SCHEDULE_LEVEL-2																																		
EQUIPMENT ITEM				Count	Mounting Location *	DIMENSIONS			ELECTRICAL				PLUMBING				MECHANICAL				New (N) / Existing (E)	Existing Location	Furnished & Installed by **	Remarks										
Equipment Number	Description	Manufacturer	Model			Floor Offset	Front	Side	Height	Volts	Emergency Power	Amps	Data	Phase	Watts	Floor Drain	Potable Water	DI Water	Gas	Vacuum					Carbon Dioxide	Nitrogen	Compressed Air	Exhaust	Monitoring					
235 OPEN RESEARCH LAB																																		
09.09.01	Agilent Bioanalyzer (without flow cell)	Agilent	2100 Bioanalyzer (G2943CA)	1	B	2'-10"	6 3/8"	1'-4 3/16"	11 3/8"	100-240	60	10													N									
09.09.02	Illumina MiSeq	Illumina	MiSeq System (S1410-1003)	1	B	2'-10"	2'-3"	1'-10 3/16"	1'-8 5/8"	100-240	10			400											N									
09.09.03	EMD Millipore QuavaCytE Flow Cytometer	EMD Millipore	Quava easyCytE 8HT System (0500-4008)	1	B	2'-10"	1'-8"	10"	1'-11 3/8"	100-240	2			120											N									
09.09.04	Coviron Environmental chamber (with arabidopsis kit)	Coviron	Adaptis A1000 Chamber +AR	1	F	0"	3'-5"	2'-8 1/2"	6'-7"	120	20														N									
09.09.05	Ductless Fume Hood	Thermoscientific	Thermo Scientific Hyperclean TrueAir (B1115242)	1	B	2'-10"	2'-0"	2'-0"	2'-7"	120																								
09.09.06	BSC	Thermoscientific	1300 Series Class II - Type A2 (13-261-222)	1	F	0"	4'-3 3/16"	1'-2 1/2"	5'-1 13/16"	120															N									
				6																														
272A CHEM STOCK ROOM																																		
08.18.01	Flamm-Storage	Justrite	894520	1	F	0"	3'-7"	1'-6"	5'-5"																N									
08.18.02	Flamm-Storage	Justrite	894520	1	F	0"	3'-7"	1'-6"	5'-5"																							45 Gal. Capacity		
08.18.03	Acid-Storage	Justrite	894522	1	F	0"	3'-7"	1'-6"	5'-5"																N							Vented		
08.18.05	Toxic Chem. Storage	Justrite	894520	1	F	0"	3'-7"	1'-6"	5'-5"																N							Lockable		
				4																														
274 MICROSCOPY ROOM																																		
08.19.01	Axioskop 40 fluorescent scope	Zeiss	Axioskop 40	1	B	2'-10"	3'-0"	3'-0"	3'-4"	100-240															E	11								
08.19.02	Axioskop CPU	Dell laptop	up to IT	1	B	2'-10"	1'-0"	2'-0"	2'-0"	110															N									
08.19.03	Dissecting Fluor. Microscope	Zeiss	StereO Discovery V8	1	B	2'-10"	1'-5"	1'-6"	1'-10"	100-240															E	9a								
08.19.04	Biorad Gel Doc	Biorad	Chemidoc MP	1	B	2'-10"	3'-0"	2'-0"	4'-4"	115	2														E	7								
08.19.05	Gel Doc CPU	Dell laptop	up to IT	1	B	2'-10"	1'-0"	2'-0"	2'-0"	110															E	7								
08.19.10	Fluorescence Module	Lumen Dynamics	Xcite series 120Q	1	B	2'-10"	6"	1'-2"	8"	250	4														E	11								
08.19.11	Microscope Light Source	Zeiss	CL 1500 ECO cold light source	1	B	2'-10"	10 5/8"	8"	6 1/2"	110															E	9a								
08.19.12	Fluorescence Module	Zeiss	Xcite series 120Q	1	B	2'-10"	6"	1'-2"	8"	250	4														E	9a								
				8																														
276 SCIN CLASSROOM																																		
09.02.03	Aquarium	petsmart (various)		3	B	2'-10"	1'-6"	6"	1'-0"	110																E	7							
09.02.12	Plant Growth Rack	homeade rack w bulbs		1	F	0"	5'-6"	2'-7"	6'-0"																	E	19							
				4																														
283 MICROBIO/ PLANT RESEARCH LAB																																		
08.30.02	BSC - Class I	Thermo Scientific	1377	1	F	0"	6'-3"	2'-7 1/2"	8'-0"	120								X			X				N							will be used as class I in this space		
08.30.03	Plate Reader	Biotek	powerwav Xa2	1	B	2'-10"	5"	1'-0"	6"	110															E	11								
08.30.04	PCR machine	Biorad	CFX connect	1	B	2'-10"	1'-1"	1'-6"	1'-2"	110	8														E	11								
08.30.05	computer for CFX connect	toshiba	PE3600	1	B	2'-10"	1'-5"	1'-0"	2"	110															E	11								
08.30.06	Analytical Balance	mettler	AR5000	1	B	2'-10"	5"	8"	1'-0"	110	6														E	5								
08.30.07	Toploading Balance	Adventurer	AR0640	1	B	2'-10"	6"	8"	4"	110	6														E	5								
08.30.08	PHmeter	VWR	8000	2	B	2'-10"	6"	4"	4"	110															E	5								
08.30.09	Water Bath	Precision	181	2	B	2'-10"	8"	6"	6"	110															E	5								
08.30.10	Shaking Incubator	new brunswick	C24	1	B	2'-10"	1'-9"	2'-3"	1'-8"	120															N									
08.30.11	Shaking Incubator	new brunswick	C24	1	B	2'-10"	1'-9"	2'-3"	1'-8"	120															E	5						also need 1 new		
08.30.12	Rotating platform	Labnet	Rocker 35	1	S	0"	1'-0"	1'-0"	6"	120															E	5								
08.30.13	Refrigerator Deli Type	Labridge	LF-S24	1	F	0"	2'-4 1/2"	2'-9 1/2"	6'-7"	115	4.1														N									
08.30.14	Freezer -20	fisher	20EFEETSAS	1	F	0"	2'-9"	2'-7 1/4"	5'-7 1/4"	115	X														N									
08.30.16	Anesthesia Machine	somacoustic	mouse anesthesia suite	1	S	0"	2'-6"	1'-0"	1'-0"	110															E	11						in fume hood: uses volatile anesthetics		
08.30.17	Incubator	Midwest Scientific Inc	12-140	2	B	2'-10"	1'-7"	1'-1"	1'-9"	110	2			220																				
08.30.19	Spectrophotometer	Jenway	6320D	2	B	2'-10"	2'-0"	1'-6"	1'-0"	110															E	5								
08.30.20	UV Crosslinker	spectrolink	XL-1000	1	B	2'-10"	2'-0"	1'-0"	1'-0"	120															E	5								
08.30.21	Microwave	walmart	Pro-Ox	1	B	2'-10"	2'-4"	1'-0"	1'-0"	120															N									
08.30.23	Anerobic Chamber	Pro-Ox	P110	1	S	0"	1'-5"	1'-6"	8"	110									X						N							goes in incubator - which incubator? Need port for N2 flush		
08.30.24	Gas tank for anaerobic ch.	praxair N2	s3011	1	F	0"	1'-2"	1'-3"	5'-2"																N									
08.30.25	Incinerators	Fisher/Argos	3990FL	5	S	0"	9"	10"	10"	120															N									
08.30.26	Organismal Incubator	Thermo Fisher	B5TC-06	1	F	0"	2'-6"	2'-0"	5'-10"	120	5.5														N							Humidified and Light/Dark cycle		
08.30.27	PCR Machine	Midwest Scientific Inc	BSTC-96	1	B	2'-10"	1'-5"	1'-2"	1'-5"	75-275															N									
08.30.28	Centrifuge (micro)	labnet	PrismR (C2500-R)	1	B	2'-10"	9"	1'-0"	1'-8"	115															E	5								
08.30.29	Heat-block	Fisher Isotemp	2052FS	2	B	2'-10"	9"	11"	4"	110															E	5								
08.30.32	Glasswasher UC	Labconco	SteamScrubber (4578020)	1	F	0"	2'-0 1/8"	2'-3 3/8"	2'-8 7/8"	115	16					X	X	X							N							CFCI Spec. 115300; Lower spindle rack; upper standard rack; 10 and 32 pin inserts; bulk tube inserts; utensil basket		
				35																														
284 PHYSICS LAB																																		
08.23.01	High Voltage Power Supply	Pasco	SF-9585A	5	S	0"	1'-0"	8"	4"	120	3														NE	327								
08.23.02	Power supply	Pasco	SE-9721A	5	S	0"	1'-0"	8"	4"	120	3														NE	327								
08.23.03	Variable Transformer	Pasco	SE-7351	3	S	0"	6"	6"	6"	120	3														N									
08.23.04	Wide Range Function Generator	Pasco	SB-9548A	5	S	0"	1'-0"	10 1/2"	4 1/2"	115	3														NE	327								
08.23.05	20 Mhz Dual Trace Oscilloscope	Pasco	SB-9591A	3	S	0"	1'-0"	10"	6"	120	3														NE	327								
08.23.06	Ripple Tank	Pasco	WA-9899	1	B	2'-10"	2'-1"	1'-4"	1'-4"	120	2														N									
08.23.07	LabQuest 2: Hardware	Vernier	LABQ2	5	S	0"	1'-0"	2"	6"	120	1														N									
08.23.08	High-Voltage Electrostatics Kit	Vernier	HVEX-CRG	1	S	0"	10"	6"	2"	120	2														N									
08.23.09	Spectrum Tube Single Power Supply	Vernier	ST-SPS	3	S	0"	1'-0"	1'-0"	1'-3"	120	3														N									
08.23.10	Vernier Motion Encoder System	Vernier	VDS-EC	5	S	0"	3'-9"	8"	2"																N									
08.23.11	Adv. Nuclear Spectroscopy System	Pasco	SN-7901B	2	S	0"	1'-3"	1'-0"	2"	120	2														N									
08.23.12	Hot Plates	Arbor Scientific	PX-1043	3	S	0"	1'-0"	1'-0"	3"	120	1.5														E	327								
08.23.13	Arbor Scientific Respec	Arbor Scientific	P2-9605	2	S	0"	2'-0"	2'-0"	2'-0"	120	2														N									
08.23.14	Air Track	Arbor Scientific	PA-2710	1	B	2'-10"	3'-9"	5"	2"	120	3														N									
08.23.15	Generator	Arbor Scientific	P6-3300	1	B	2'-10"	1'-3"	1'-3"	2'-6"	120	2														E	327								
08.23.16	Vacuum pump	Arbor Scientific	P7-6502	1	S	0"	11"	5"	9"	120	5														N									
08.23.18	12.7 Quart Modular Latch Box	Stentite	1884	40	S	0"	1'-3"	11"	6"																									

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LAB EQUIPMENT SCHEDULE_LEVEL-3																														
EQUIPMENT ITEM				DIMENSIONS						ELECTRICAL				PLUMBING				MECHANICAL												
Equipment Number	Description	Manufacturer	Model	Count	Mounting Location *	Floor Offset	Front	Side	Height	Volts	Emergency Power	Amps	Data	Phase	Watts	Floor Drain	Potable Water	DI Water	Gas	Vacuum	Carbon Dioxide	Nitrogen	Compressed Air	Exhaust	Monitoring	New (N) / Existing (E)	Existing Location	Furnished & Installed by **	Remarks	
353	QUAN. LAB / INTERVIEW LAB																													
08.13.13	Printer	hp	desk jet 842 C	1	B	2'-10"	1'-3"	1'-7"	8"	110		1				110										E	10			
372B	LAB WASTE - BIO																													
08.20B.01	Autoclave	Heidolph North America	Model 5075 HSG (Heidolph #019700000)	1	F	0"	2'-10"	3'-9"	5'-5 1/2"	208							X	X								N		CFCI	Spec. 115300	
374A	BIO FAC. RESEARCH																													
08.25.01	Deli cabinet (1 door)	Lab Fridge	LF-S24	1	F	0"	2'-4 1/2"	2'-9 1/2"	6'-7 1/4"	115	4.1															N			explosion proof	
08.25.02	Microplate Reader	Bio-Tek	FLX 800	1	B	2'-10"	1'-3"	1'-4"	9"	110																E	6		flourescent	
08.25.03	Microplate Reader	Bio-Tek	ELX-800	1	B	2'-10"	1'-3"	1'-5"	7"	110																E	6		UV	
08.25.04	Platelet Aggregometer	Chrono-log	480 2D	1	B	2'-10"	1'-1"	1'-5"	6"	110		1														E	6			
08.25.05	HPLC	Bioanalytical Systems	PM80	1	B	2'-10"	4'-0"	3'-0"	6'-4"	110							X									E	6		Uses medical grade CO2; centered around a computer shared by both HPLCs; dedicated circuit	
08.25.06	HPLC	Bioanalytical Systems	PM80	1	B	2'-10"	4'-0"	3'-0"	6'-4"	110							X									E	6		Uses medical grade CO2; centered around a computer shared by both HPLCs; dedicated circuit	
08.25.08	Inverted Microscope	Zeiss	Axiocvert 40C	1	B	2'-10"	1'-0"	2'-0"	1'-8"	110																E	6			
08.25.09	Rotator	Labline	4637	1	B	2'-10"	1'-2"	1'-0"	6"	110																E	6			
08.25.10	Rotator	Labline	maxirotator	1	B	2'-10"	1'-2"	10"	5"	110																E	6			
08.25.12	Cytospin	Shandon	Cytospin2	1	B	2'-10"	1'-10"	1'-10"	1'-0"	110																E	6			
08.25.13	Get-Doc	BIO-RAD	Get-Doc	1	B	2'-10"	2'-0"	1'-3"	3'-2"	115																E	6			
08.25.14	Table Top Centrifuge	HERIUS	BioRage 1512	1	B	2'-10"	2'-0"	2'-2"	2'-0"	110																E	6			
08.25.18	Pipet dispenser rack	Fisher Scientific/POLTEX LLC	LO-01001D	1	F	0"	11"	6"	1'-4"																	N				
08.25.20	Analytical Balance	Fisher Scientific	ACCU224	1	B	2'-10"	8"	1'-5"	1'-0"	110																E	6			
08.25.21	Top loading Balance	Fisher Scientific	ACCU222	1	B	2'-10"	9"	11"	4"	110																E	6			
08.25.22	Glasswasher UC	Labconco	SteamScrubber (4578020)	1	F	0"	2'-0 1/8"	2'-3 3/8"	2'-8 7/8"	115	16						X	X	X							N		CFCI	Spec. 115300; Lower spindle rack; upper standard rack; 10 and 32 pin inserts; bulk tube inserts; utensil basket	
374B	TISSUE CULTURE A																													
08.33A.01	Laminar Flow Hood	Atmos-Tech	EL 4302	1	B	2'-10"	4'-6"	2'-9"	3'-0"	110	-									X			X			E	6			
08.33A.02	BSC - Class II	Thermo Scientific	1375	1	F	0"	4'-4"	2'-7 1/2"	8'-0"	115	8									X			X			N				
08.33A.03	Freezer (-20)	Norlake	NSLF241WMW/OM	1	F	0"	2'-4"	2'-11"	6'-8"	115	X 8.2															X	N			
08.33A.04	Liq. Nitrogen Storage Tank	MVE	Cryosystem 6000	1	F	0"	2'-0"	2'-0"	3'-8"		-															E	6			
08.33A.05	Incubator	CECO Cell Culture	2110	1	B	2'-10"	2'-2"	2'-3"	3'-5"	110	X										X	X				X	E	6		CO2 will be from manifold from CO2 room; O2 and N2 will be from cylinders in the room
08.33A.06	Incubator	New Brunswick Scientific	Excella CO-170; 14-286-147	1	B	2'-10"	2'-3"	2'-3"	2'-10"	120	X										X	X				X	E	6		CO2 will be from manifold from CO2 room; O2 and N2 will be from cylinders in the room
08.33A.07	Freezer (-80)	Revco	ULT178-7-A/UA	1	F	0"	6'-1"	3'-0"	4'-0"	115	X 16														X	E	6			
08.33A.08	Fluorescence Microscope	Zeiss	Axiocvert 40CFL	1	B	2'-10"	1'-0"	2'-0"	1'-11"	110																E	6			
08.33A.09	Inverted Microscope	Zeiss	Axiocvert 40CFL	1	B	2'-10"	1'-0"	2'-0"	1'-11"	110																E	6			
08.33A.10	Fluorescence Module	Zeiss	Xcite 120	2	B	2'-10"	7"	1'-2"	8"	110																E	6			
08.33A.11	Refrigerator Deli-Type	lab fridge	LF-S24	1	F	0"	2'-4 1/2"	2'-9 1/2"	6'-7 1/4"	115	4.1															N				
376	COLD ROOM																													
08.22.02	Incubator	midwest sci	12-140	2	F	0"	1'-7"	1'-1"	1'-9"	110	2															N				
08.22.07	Sonicator	Branson	Sonifier 450	1	B	2'-10"	1'-4"	2'-6"	1'-2"	110	4															E	7			
08.22.08	Sonicator	Diagenode	Bioruptor UCD-200	1	B	2'-10"	2'-0"	2'-0"	1'-8"	115	4															E	7			
378	ORGANIS. BIO LAB																													
08.11.02	Salt Water Tank	custom-existing	none shown	1	B	2'-10"	4'-2"	2'-6"	6'-3"	-	X															E	19		measured existing tank and its casework.	
08.11.03	UPS	APC	UPS1500C3	3	B	2'-10"	1'-0"	8"	1'-3"	110	X															E	7			
08.11.06	Pump	EHEIM	2286370	1	B	2'-10"	8"	8"	10"	120																E	7			
08.11.07	Pump	Rena	Filstar XP	1	B	2'-10"	8"	8"	10"	110	2															E	7			
08.11.08	Pump	Pacific Coast	CL450	1	B	2'-10"	10"	10"	1'-0"	110	4															E	7			
08.11.09	Microscope binocular	Olympus	CHT10	10	S	0"	8"	11"	1'-3"	110																E	19		store in lab	
08.11.10	Microscope binocular	Olympus	CH50	3	S	0"	8"	10"	1'-4"	110																E	19		store in lab	
08.11.11	Microscope - Stereo	Leica	EZ4 Stereo Zoom	7	S	0"	6"	10"	1'-3"	110																E	19		store in lab	
08.11.12	Microscope - Stereo	Leica	EZ4 Stereo Zoom	6	S	0"	6"	10"	1'-3"	110																N				
08.11.16	Mortexer	MidSci	Benchmixer	3	B	2'-10"	5"	6 5/16"	6 11/16"	110																N				
08.11.17	uV box	spectroline	CM-26A	1	S	0"	1'-0"	9"	6 1/2"																	N				
08.11.18	Toploading Balance	my weigh	i600	3	B	2'-10"	6"	8 1/2"	1 3/4"	110																E	19		bench	
08.11.19	Toploading Balance	ENTRIS	153-1S	3	B	2'-10"	11 7/8"	9 1/8"	5 3/8"	120																N			bench; send sheets to architect	
08.11.20	Heat Block	USA Scientific	Thermal-loc	2	B	2'-10"	8 11/16"	5 1/8"	3 3/16"	110																E	19		bench	
08.11.21	Heat Block	USA Scientific	Thermal-loc	1	B	2'-10"	8 11/16"	5 1/8"	3 3/16"	110																N			bench	
08.11.22	uV box	spectroline	FBPDS81	1	S	0"	1'-8 1/2"	1'-6"	1'-2"	110																E	19		storage; bench when in use	
08.11.23	Microcentrifuge	Eppendorf	Minispinplus	1	B	2'-10"	8 7/8"	9 3/8"	4 11/16"	110																N			store in lab; bench when in use	
08.11.24	Mortexer	MidSci	Benchmixer	3	B	2'-10"	5"	6 5/16"	6 11/16"	110																E	19		have 3; will get 3 will	

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LAB EQUIPMENT SCHEDULE_LEVEL-4																										
EQUIPMENT ITEM				Count	Mounting Location *	DIMENSIONS			ELECTRICAL			PLUMBING				MECHANICAL				New (N) / Existing (E)	Existing Location	Furnished & Installed by **	Remarks			
Equipment Number	Description	Manufacturer	Model			Floor Offset	Front	Side	Height	Volts	Emergency Power	Amps	Data	Phase	Walls	Floor Drain	Potable Water	DI Water	Gas					Vacuum	Carbon Dioxide	Nitrogen
472 CHEM LAB - GENERAL																										
08.15.02	Balance	Denver Instruments	TR-64	1	B	2'-10"	10"	1'-1"	1'-1"	110					~12									E	10	
08.15.03	Balance	Fisher	ALF4030	1	B	2'-10"	9"	1'-1"	5"	110		0.1			13									E	10	
08.15.04	Balance	Denver Instruments	TR-6030	1	B	2'-10"	10"	1'-3"	4"	110		0.8			88									E	10	
08.15.05	Balance	Denver Instruments	PI-20316	1	B	2'-10"	10"	1'-4"	5"	110		0.1			21									E	10	
08.15.06	Balance	Fisher	ALF1202	1	B	2'-10"	1'-2"	9"	1'-1"	120		0.1			14									E	10	
08.15.07	Analytical Balance	Mettler	AG 245	1	B	2'-10"	10"	1'-1"	1'-1"	110		0.0			7									E	10	
08.15.08	Analytical Balance	Mettler Toledo	AL54	2	B	2'-10"	9"	1'-1"	1'-2"	100		0.3			10									N		
08.15.09A	Spectrophotometers	Thermo Fisher	Genesys 20	8	S	0"	1'-0"	1'-1"	7"	120														N		
08.15.09B	Spectrophotometers	Thermo Fisher	Genesys 20	4	S	0"	1'-0"	1'-1"	7"	120														E	10	
08.15.10	Drying-Oven	Blue Line	OV-12A	1	B	2'-10"	2'-0"	2'-0"	1'-6"	110		6			660									E	10	
08.15.11	pHmeter	Mettler	MP220 and AGA8035	10	S	0"	1'-0"	1'-0"	6"	110		0.3			33									E	10	
08.15.12	Conductivity meter	fisher	15077977	4	S	0"	6"	1'-0"	4"	9 DC														E	10	
08.15.13A	Hot plates	fisher	PC220	4	S	0"	6"	4"	4"	120		2.6			313									N		
08.15.13B	Hot plates	fisher	PC220	4	S	0"	6"	4"	4"	120		2.6			313									E	10	
08.15.14	Printer	HP	CP2025	1	B	2'-10"	1'-4"	1'-7"	1'-0"	120		6			720									E	10	
44																										
475 LAB WASTE - CHEM																										
08.20A.01	Flammable Liquid Storage Cabinet- Vented	Justrite	894520	1	F	0"	3'-7"	1'-6"	5'-5"															N		
08.20A.02	Acid Storage Cabinet	Justrite	894522	1	F	0"	3'-7"	1'-6"	5'-5"															N		
2																										
478 CHEM LAB PREP																										
08.14.01	Refrigerator Deli Type	Lab fridge (midco)	LF-S24C	1	F	0"	2'-4	2'-9	6'-7	115		4.1		1										N		
08.14.04	Glasswasher UC	Labconco	SteamScrubber (4578020)	1	F	0"	2'-0	2'-3	2'-8	115		16			X	X	X							N		CFCI
08.14.05	Top Loading Balance	Ohaus	AV53	1	B	2'-10"	8"	10"	6"	110		-												N		
08.14.06	Analytical Balance	Mettler Toledo	AL54	1	B	2'-10"	9"	1'-1"	1'-2"	100		0.3			10									N		
08.14.08	DI water			1	W	3'-6"	2'-0"	8"	2'-0"							X								N		
5																										
480 CHEM LAB - ORGANIC																										
08.16.02	Analytical Balance	Mettler Toledo	AL54	4	B	2'-10"	9"	1'-1"	1'-2"	100		0.3			10									N		
4																										
483 CHEM LAB - RESEARCH																										
08.27.02	Flamm-Storage UC (repl w cawk)			1		0"	3'-0"	2'-0"	2'-8"																	
08.27.03	Acid-Storage UC (repl w cawk)			1		0"	3'-0"	2'-0"	2'-8"																	
08.27.04	Photoreactor	Ace Glass	7836-20	1	B	2'-10"	2'-8"	1'-8"	3'-0"	120		3.8			450									E	10	NEEDS WATER SOURCE
08.27.05	Analytical Balance	Mettler Toledo	AL54	2	B	2'-10"	9"	1'-1"	1'-2"	100		0.3			10									N		
5																										
488 CHEM LAB - ANALYT / INORGANIC																										
08.12.02	Analytical Balance	Mettler Toledo	AL54	4	B	2'-10"	9"	1'-1"	1'-2"	100		0.3			10									N		
4																										
489 CHEM INSTR. LAB																										
08.13.04	NMR	Nanalysis	NMR Ready 60e	1	B	2'-10"	1'-0"	11"	1'-8"	100														N		
08.13.05	Spectrophotometer UV-Vis-NIR	Perkin Elmer	Lambda 750	1	B	2'-10"	3'-5"	2'-3"	11"	110														E	10	
08.13.06	Spectrophotometer FTIR	Perkin Elmer	Paragon 500	1	B	2'-10"	2'-8"	3'-0"	1'-8"	110														E	10	
08.13.07	Spectrophotometer UV-Vis	Perkin Elmer	Lambda Bio Rad 10	1	B	2'-10"	2'-11"	1'-10"	9"	110														E	10	
08.13.08	Fluorimeter	ISS	PC1	1	B	2'-10"	3'-5"	3'-0"	1'-0"	120														E	200K	associated with number 12 sn 14
08.13.09	Mass-Spec	Thermo	LCQ Classic	1	B	2'-10"	8'-0"	2'-4"	3'-0"	110													X	E	10	
08.13.10	FTIR-CPU	Dell		1	B	2'-10"	1'-9"	1'-7"	2'-2"	110					250									E	10	
08.13.11	UV-Vis-NIR CPU	lenovo		1	B	2'-10"	7"	1'-5"	1'-9"	110					250									E	10	
08.13.12	Fluorimeter-CPU	Dell		1	B	2'-10"	7"	1'-8"	1'-4"	110					250									E	200K	runs number 8
08.13.13	Printer	hp	desk jet 842 C	1	B	2'-10"	1'-3"	1'-7"	8"	110		1			110									E	10	
08.13.14	Fluorimeter ozone-trap	Newport	66087	1	B	2'-10"	1'-1"	1'-0"	1'-7"	110													X	E	200K	exhausts number 8
08.13.15	HPLC	X-Per Chrom	1400	1	B	2'-10"	1'-2"	1'-6"	1'-6"	110		20												E	10	
12																										
491 CHEM LAB PHYSICAL																										
08.17.02	Analytical Balance	Mettler Toledo	AL54	2	B	2'-10"	9"	1'-1"	1'-2"	100		0.3			10									N		
2																										

GENERAL NOTES: 1) ALL THE EQUIPMENT IS "OFF" U.N.O.	LEGEND: ** MOUNTING LOCATION: B: Benchtop U: Undercounter F: Floor W: Wall C: Ceiling S: Storage ** FURNISHED & INSTALLED BY: CFCI: Contractor Furnishes a Contractor Installed OFI: Owner Furnished Contractor Installed OFIO: Owner Furnished Owner Installed

CONFORMED SET 01 JUL 2016

ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016		
No.	Description	Date

Drawing Title:

EQUIPMENT LIST
LEVEL-04

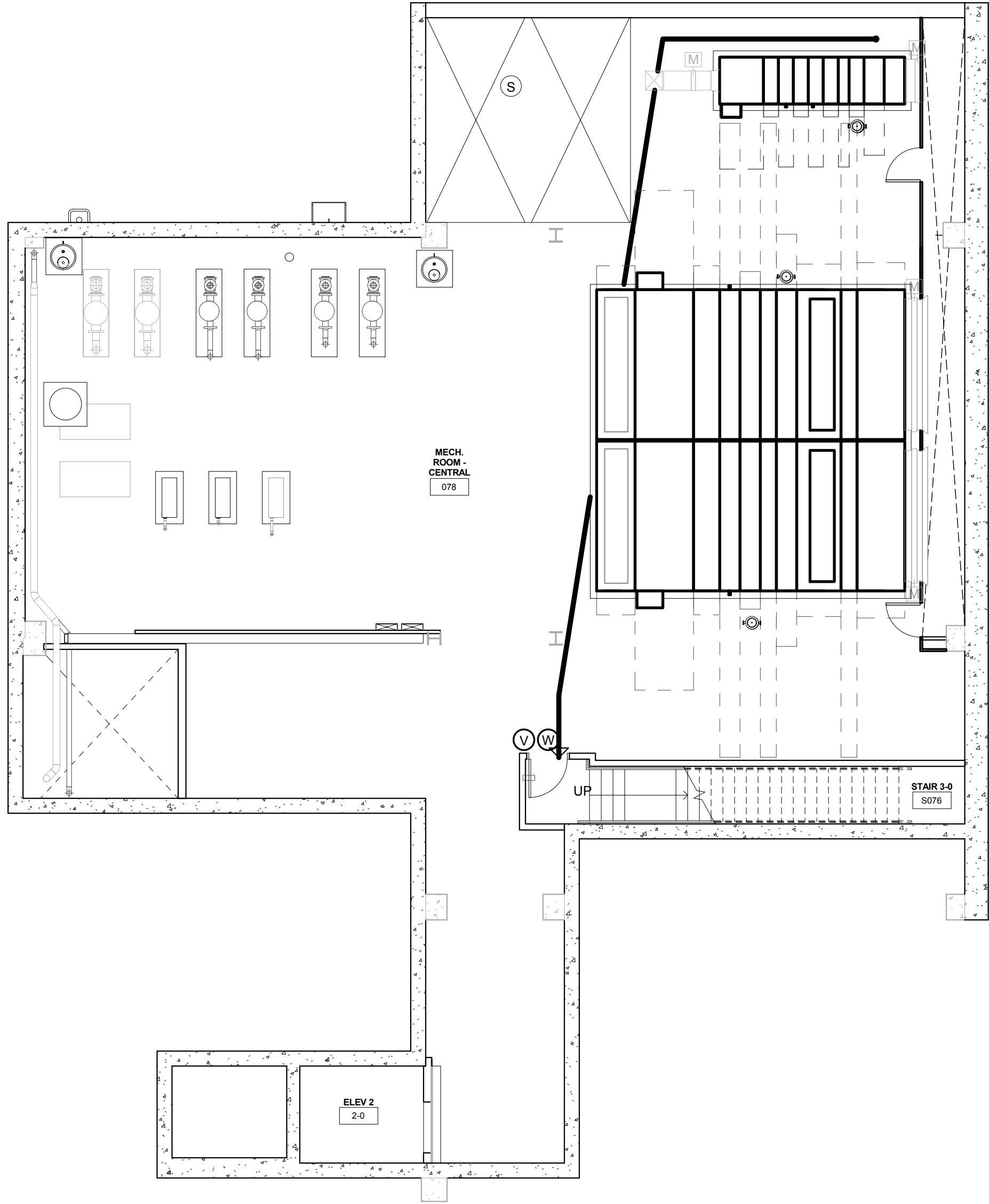
Project No.: 04561.01 Checked by:

A1104

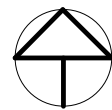
INTERIOR SYMBOLS LEGEND

- SHADED AREAS ARE NOT INCLUDED IN SCOPE OF WORK FOR INTERIOR RENOVATION
- KEYED NOTE
- LVT-1 INSTALLATION DIRECTION. INSTALL PARALLEL WITH DIRECTION OF SYMBOL
- XX-# LOCATION OF FLOORING MATERIAL TRANSITION
- XX-# SPECIFIED FINISH, REFERENCE FINISH SCHEDULE IF NOT NOTED.

INTERIORS SYMBOLS LEGEND
1/8" = 1'-0"



1 LOWER LEVEL TRANSITION PLAN
1/8" = 1'-0"



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Interdisciplinary Science
Building

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CONFORMED SET

01 JUL 2016

ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016

No.	Description	Date
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Drawing Title:

LOWER LEVEL
TRANSITION PLAN

Project No.: 04561.01 Checked by:

ID0100

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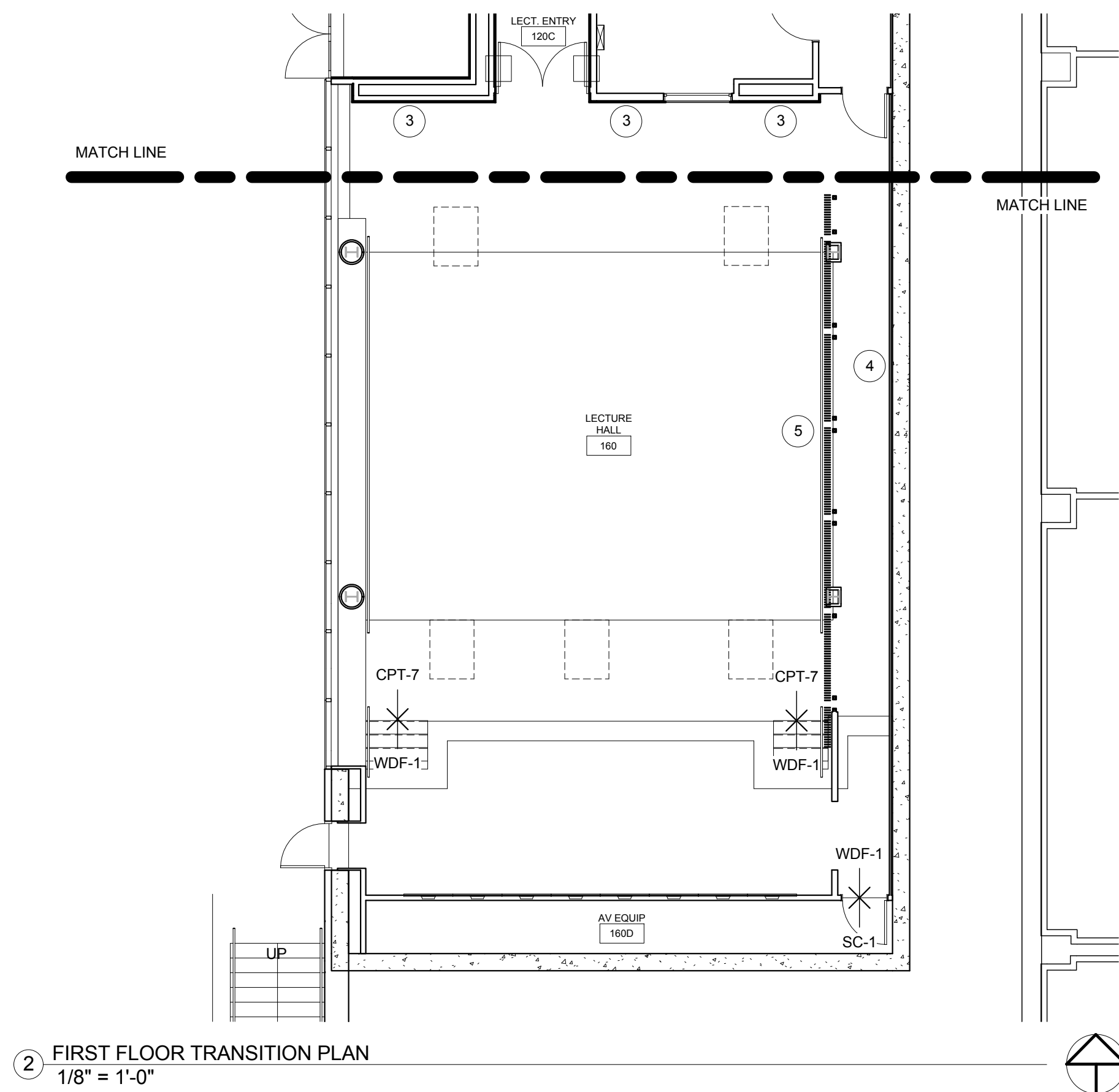
INTERIOR SYMBOLS LEGEND

- SHADED AREAS ARE NOT INCLUDED IN SCOPE OF WORK FOR INTERIOR RENOVATION
- KEYED NOTE
- LVT-1 INSTALLATION DIRECTION. INSTALL PARALLEL WITH DIRECTION OF SYMBOL
- XX-#
- LOCATION OF FLOORING MATERIAL TRANSITION
- SPECIFIED FINISH, REFERENCE FINISH SCHEDULE IF NOT NOTED.

INTERIORS SYMBOLS LEGEND
1/8" = 1'-0"

PLAN KEY NOTES

- WVP-2 OPAQUE, WHITE (LAQUER FINISH) PANELS TO BE LOCATED FLOOR TO CEILING AT DESIGNATED LOCATIONS. SEE ELEVATIONS AND ENVIRONMENTAL GRAPHICS DRAWINGS FOR LAYOUT AND GRAPHIC INLAY.
- WVP-1 TO BE USED ON FACES OF WALLS AND SOFFITS AT DESIGNATED LAB ENTRANCE RECESSES.
- OPAQUE FINISH WOOD PERFORATED PANELS FOR ACOUSTICS WITH 1 1/2" FIBERGLASS ACOUSTICS WHITE BATTS BEHIND. TO BE PAINTED SCHEDULED WALL COLOR.
- AP-1 FABRIC WRAPPED ACOUSTIC PANELS - FULL HEIGHT.
- VERTICAL WOOD GRILLE SCREEN - REFER TO INTERIOR ELEVATIONS.
- AWC-1 MARKER BOARD PAINT TO BE USED FULL HEIGHT.
- CWC-1 CORK WALLCOVERING TO BE APPLIED 3'0" AFF TO CEILING.
- EXTENTS OF WALL TILE. SEE SHEET ID0202 FOR FLOOR AND WALL PATTERN.
- EXTENTS OF FAP-1 PANELS TO BE MOUNTED ABOVE WALL BASE.
- WALL TO HAVE 3/16" SOUND COUSTIC PADS. PADS TO BE PAINTED SCHEDULED WALL COLOR.
- COMBINATION AWC-1 MARKER BOARD PAINT AND CWC-1 CORK WALLCOVERING WALL TREATMENT. CWC-1 TO BE 4'0" WIDE SECTION ON NORTH SIDE OF WALL / REMAINDER OF WALL TO BE AWC-1. SEE ELEVATIONS ON ID0202 FOR TYPICAL.
- ONE WALL TO RECEIVE AWC-1. LOCATION TO BE DETERMINED AFTER OFFICE LAYOUTS FINALIZED.



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CONFORMED SET

01 JUL 2016

1 ADDENDUM 3-2 15 APR 2016
ISSUED FOR CONSTRUCTION (BPS) 15 MAR 2016
No. Description Date

Drawing Title:

FIRST FLOOR TRANSITION
PLAN

Project No.: 04561.01 Checked by:

ID0101

SHADED AREAS ARE NOT INCLUDED IN SCOPE OF WORK FOR INTERIOR RENOVATION

1 → KEYED NOTE

← LVT-1 INSTALLATION DIRECTION.
INSTALL PARALLEL WITH DIRECTION OF SYMBOL

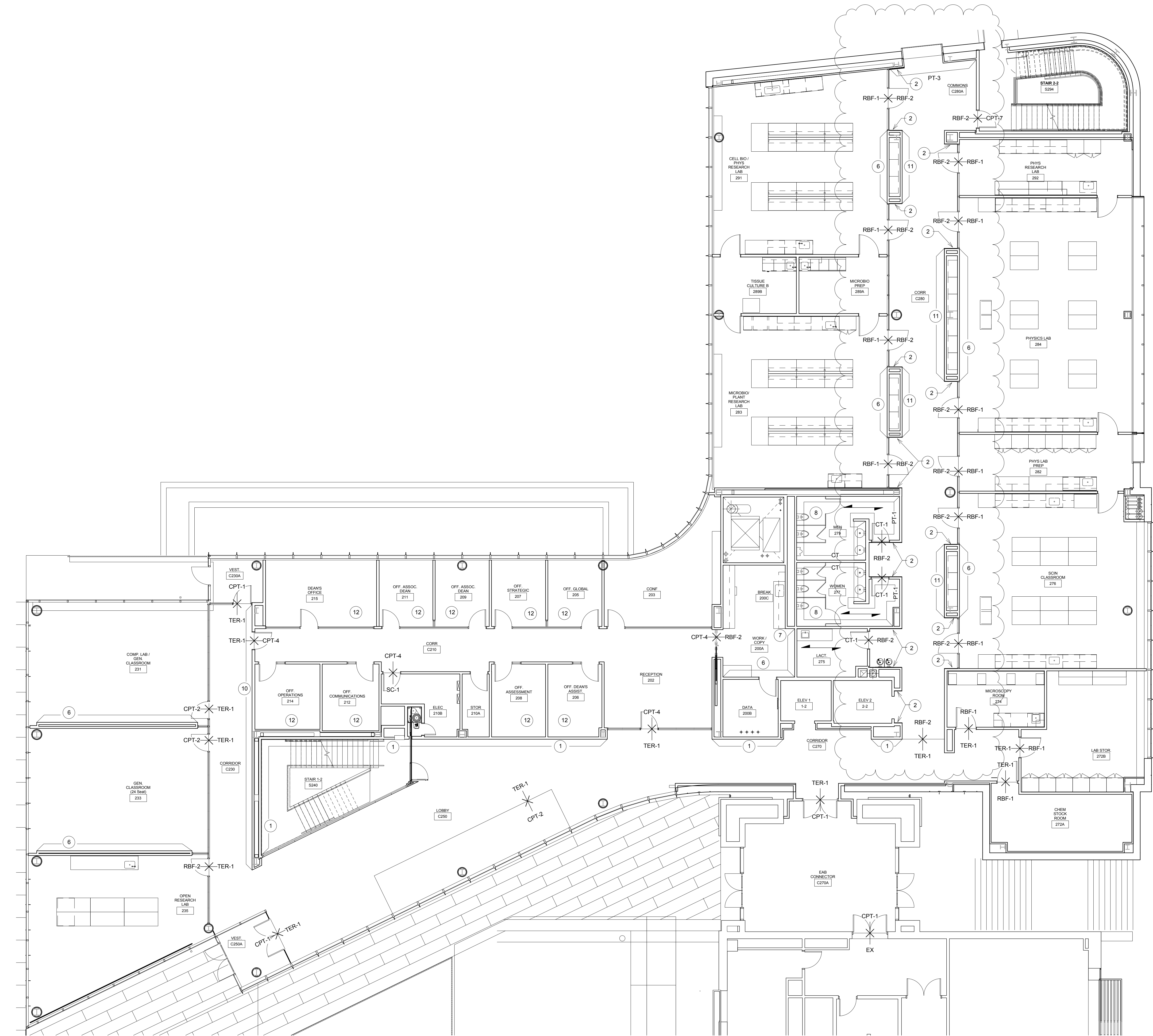
XX-#
X
LOCATION OF FLOORING MATERIAL TRANSITION

XX-#
SPECIFIED FINISH, REFERENCE FINISH SCHEDULE IF NOT NOTED.

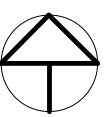
INTERIORS SYMBOLS LEGEND
1/8" = 1'-0"

PLAN KEY NOTES

- 1 WVP-2 OPAQUE, WHITE (LAQUER FINISH) PANELS TO BE LOCATED FLOOR TO CEILING AT DESIGNATED LOCATIONS. SEE ELEVATIONS AND ENVIRONMENTAL GRAPHICS DRAWINGS FOR LAYOUT AND GRAPHIC INLAY.
- 2 WVP-1 TO BE USED ON FACES OF WALLS AND SOFFITS AT DESIGNATED LAB ENTRANCE RECESSES.
- 3 OPAQUE FINISH WOOD PERFORATED PANELS FOR ACOUSTICS WITH 1 1/2" FIBERGLASS ACOUSTICS WHITE BATTS BEHIND. TO BE PAINTED SCHEDULED WALL COLOR.
- 4 AP-1 FABRIC WRAPPED ACOUSTIC PANELS - FULL HEIGHT.
- 5 VERTICAL WOOD GRILLE SCREEN - REFER TO INTERIOR ELEVATIONS.
- 6 AWC-1 MARKER BOARD PAINT TO BE USED FULL HEIGHT.
- 7 CWC-1 CORK WALLCOVERING TO BE APPLIED 3'0" AFF TO CEILING.
- 8 EXTENTS OF WALL TILE. SEE SHEET ID0202 FOR FLOOR AND WALL PATTERN.
- 9 EXTENTS OF FAP-1 PANELS TO BE MOUNTED ABOVE WALL BASE.
- 10 WALL TO HAVE 3/16" SOUND COUSTIC PADS. PADS TO BE PAINTED SCHEDULED WALL COLOR.
- 11 COMBINATION AWC-1 MARKER BOARD PAINT AND CWC-1 CORK WALLCOVERING WALL TREATMENT. CWC-1 TO BE 4'0" WIDE SECTION ON NORTH SIDE OF WALL / REMAINDER OF WALL TO BE AWC-1. SEE ELEVATIONS FOR ID0202 FOR TYPICAL.
- 12 ONE WALL TO RECEIVE AWC-1. LOCATION TO BE DETERMINED AFTER OFFICE LAYOUTS FINALIZED.



1 SECOND FLOOR TRANSITION PLAN
1/8" = 1'-0"



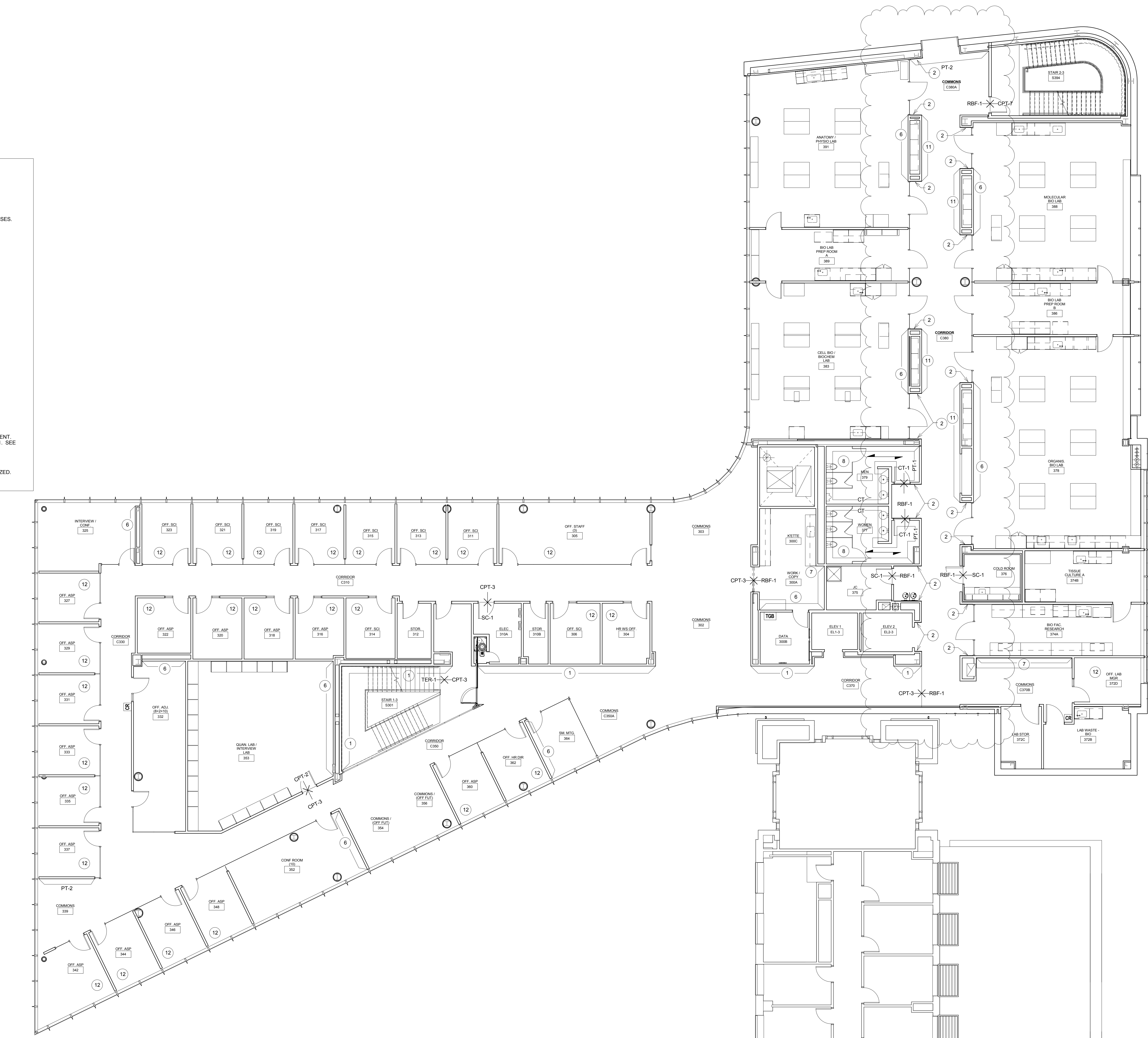
INTERIOR SYMBOLS LEGEND

- SHADED AREAS ARE NOT INCLUDED IN SCOPE OF WORK FOR INTERIOR RENOVATION
- KEYED NOTE
- LVT-1 INSTALLATION DIRECTION. INSTALL PARALLEL WITH DIRECTION OF SYMBOL
- XX-# LOCATION OF FLOORING MATERIAL TRANSITION
- XX-# SPECIFIED FINISH REFERENCE FINISH SCHEDULE IF NOT NOTED.

INTERIORS SYMBOLS LEGEND
1/8" = 1'-0"

PLAN KEY NOTES

- WVP-2 OPAQUE, WHITE (LAQUER FINISH) PANELS TO BE LOCATED FLOOR TO CEILING AT DESIGNATED LOCATIONS. SEE ELEVATIONS AND ENVIRONMENTAL GRAPHICS DRAWINGS FOR LAYOUT AND GRAPHIC INLAY.
- WVP-1 TO BE USED ON FACES OF WALLS AND SOFFITS AT DESIGNATED LAB ENTRANCE RECESSES.
- OPAQUE FINISH WOOD PERFORATED PANELS FOR ACOUSTICS WITH 1 1/2" FIBERGLASS ACOUSTICS WHITE BATTS BEHIND. TO BE PAINTED SCHEDULED WALL COLOR.
- AP-1 FABRIC WRAPPED ACOUSTIC PANELS - FULL HEIGHT.
- VERTICAL WOOD GRILLE SCREEN - REFER TO INTERIOR ELEVATIONS.
- AWC-1 MARKER BOARD PAINT TO BE USED FULL HEIGHT.
- CWC-1 CORK WALLCOVERING TO BE APPLIED 30" AFF TO CEILING.
- EXTENTS OF WALL TILE. SEE SHEET ID0202 FOR FLOOR AND WALL PATTERN.
- EXTENTS OF FAP-1 PANELS TO BE MOUNTED ABOVE WALL BASE.
- WALL TO HAVE 3/16" SOUND COUSTIC PADS. PADS TO BE PAINTED SCHEDULED WALL COLOR.
- COMBINATION AWC-1 MARKER BOARD PAINT AND CWC-1 CORK WALLCOVERING WALL TREATMENT. CWC-1 TO BE 40" WIDE SECTION ON NORTH SIDE OF WALL / REMAINDER OF WALL TO BE AWC-1. SEE ELEVATIONS ON ID0202 FOR TYPICAL.
- ONE WALL TO RECEIVE AWC-1. LOCATION TO BE DETERMINED AFTER OFFICE LAYOUTS FINALIZED.



THIRD FLOOR TRANSITION PLAN
1/8" = 1'-0"

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CONFORMED SET 01 JUL 2016

1	ADDENDUM 3-2	15 APR 2016
1	ISSUED FOR CONSTRUCTION (BP3)	15 MAR 2016
No.	Description	Date

Drawing Title:

THIRD FLOOR
TRANSITION PLAN

Project No.: 04561.01 Checked by:

ID0103

SHADED AREAS ARE NOT INCLUDED IN SCOPE OF WORK FOR INTERIOR RENOVATION

1 KEYED NOTE

LVT-1 INSTALLATION DIRECTION.
INSTALL PARALLEL WITH DIRECTION OF SYMBOL

XX-#

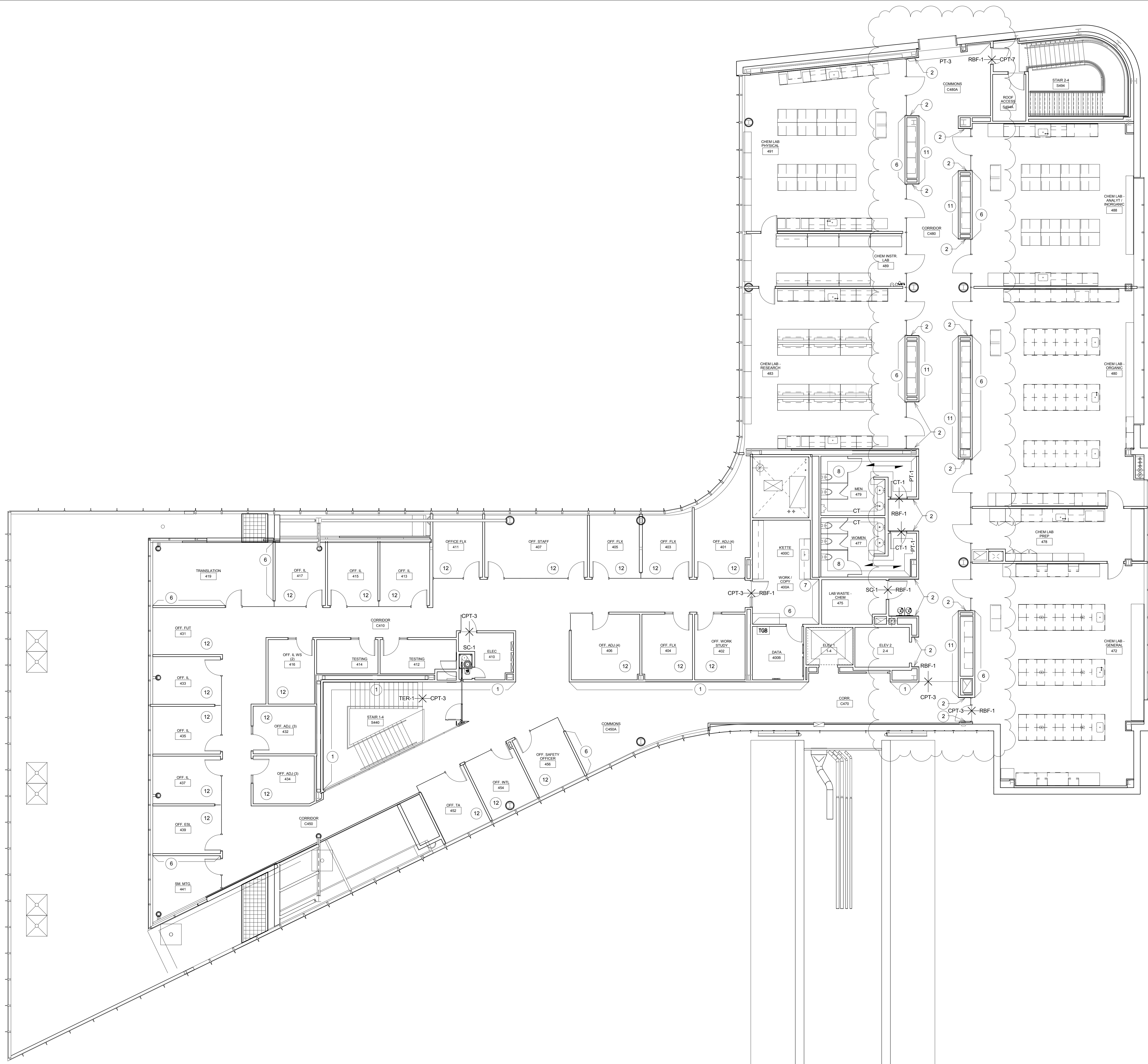
LOCATION OF FLOORING MATERIAL TRANSITION

XX-#

SPECIFIED FINISH, REFERENCE FINISH SCHEDULE IF NOT NOTED.

INTERIORS SYMBOLS LEGEND
1/8" = 1'-0"

- 1 WVP-2 OPAQUE, WHITE (LAQUER FINISH) PANELS TO BE LOCATED FLOOR TO CEILING AT DESIGNATED LOCATIONS. SEE ELEVATIONS AND ENVIRONMENTAL GRAPHICS DRAWINGS FOR LAYOUT AND GRAPHIC INLAY.
- 2 WVP-1 TO BE USED ON FACES OF WALLS AND SOFFITS AT DESIGNATED LAB ENTRANCE RECESSES.
- 3 OPAQUE FINISH WOOD PERFORATED PANELS FOR ACOUSTICS WITH 1 1/2" FIBERGLASS ACOUSTICS WHITE BATTS BEHIND. TO BE PAINTED SCHEDULED WALL COLOR.
- 4 AP-1 FABRIC WRAPPED ACOUSTIC PANELS - FULL HEIGHT.
- 5 VERTICAL WOOD GRILLE SCREEN - REFER TO INTERIOR ELEVATIONS.
- 6 AWC-1 MARKER BOARD PAINT TO BE USED FULL HEIGHT.
- 7 CWC-1 CORK WALLCOVERING TO BE APPLIED 3/0" AFF TO CEILING.
- 8 EXTENTS OF WALL TILE. SEE SHEET ID0202 FOR FLOOR AND WALL PATTERN.
- 9 EXTENTS OF FAP-1 PANELS TO BE MOUNTED ABOVE WALL BASE.
- 10 WALL TO HAVE 3/16" SOUND COUSTIC PADS. PADS TO BE PAINTED SCHEDULED WALL COLOR.
- 11 COMBINATION AWC-1 MARKER BOARD PAINT AND CWC-1 CORK WALLCOVERING WALL TREATMENT. CWC-1 TO BE 4'0" WIDE SECTION ON NORTH SIDE OF WALL / REMAINDER OF WALL TO BE AWC-1. SEE ELEVATIONS ON ID0202 FOR TYPICAL.
- 12 ONE WALL TO RECEIVE AWC-1. LOCATION TO BE DETERMINED AFTER OFFICE LAYOUTS FINALIZED.



1 FOURTH FLOOR TRANSITION PLAN
1/8" = 1'-0"



Webster
UNIVERSITY

Webster University
Interdisciplinary Science
Building

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CONFORMED SET 01 JUL 2016

1	ADDENDUM 3-2	15 APR 2016
-	ISSUED FOR CONSTRUCTION (BP3)	15 MAR 2016
No.	Description	Date

Drawing Title:

FOURTH FLOOR TRANSITION PLAN

Project No.: 04561.01
Checked by:

ID0104

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4/14/2016 7:10:51 AM

FINISH SCHEDULE FLOORS 00-02														
Number	Name	Floor Finish	Base Finish	North / Northwest Wall Finish	South / Southeast Wall Finish	East / Northeast Wall Finish	West / Southwest Wall Finish	Base Cabinet	Countertop	Upper Wall Cabinet	Millwork	Comments	Floor	
078	MECH. ROOM - CENTRAL	SC-1	RB-1	PT-4	PT-4	PT-4	PT-4						00	
S076	STAIR 3-0	SC-1	RB-1	PT-4	PT-4	PT-4	PT-4					4	00	
1-1	ELEV 1	TER-1	PREFINISHED	PLAM-1	PLAM-1	PLAM-1	PLAM-1					2	01	
2-1	ELEV 2	RBF-1	PREFINISHED	STAINLESS	STAINLESS	STAINLESS	STAINLESS					17	01	
100A	WORK / COPY	RBF-2	RB-2	PT-1	AWC-1 / PT-1	CWC-1 / PT-1	PT-1	PLAM-1	PL-1	PLAM-1		3	01	
100B	DATA	RBF-2	RB-1	PT-4	PT-4	PT-4	PT-4						01	
100C	K'ETTE	RBF-2	RB-2	PT-1	PT-1	CT-5 / PT-1	PT-1	PLAM-1	QTZ-1	PLAM-1		7,10	01	
101	OFF. STAFF (2)	CPT-3	RB-2	CWC-1 / PT-1	PT-1	PT-1	PT-1					1,9	01	
102	CORRIDOR	TER-1	TER-1	PT-1	PT-1	PT-1	PT-1					1	01	
104	OFF. FUT	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	01	
105	OFF. NA	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	01	
106	OFF. NA	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	01	
107	OFF. NU	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	01	
108	OFF. NU	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	01	
109	OFF. NU	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	01	
110A	STOR	CPT-3	RB-1	PT-1	PT-1	PT-1	PT-1						01	
110B	ELEC	SC-1	RB-1	PT-4	PT-4	PT-4	PT-4						01	
111	OFF. NU	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	01	
112	STORAGE	CPT-3	RB-1	PT-1	PT-1	PT-1	PT-1						01	
113	OFF. NU	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	01	
114	MOCK EXAM	RBF-2	RB-1	PT-1	PT-1	PT-1	PT-1	PLAM-1	QTZ-2	PLAM-1			01	
115	OFF. NU	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	01	
116	MOCK EXAM	RBF-2	RB-1	PT-1	PT-1	PT-1	PT-1	PLAM-1	QTZ-2	PLAM-1			01	
117	OFF. FUT	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	01	
131	HEALTH ASSESSMENT LAB	RBF-2	RB-1	PT-1	PT-1	PT-1	PT-1	CSW-1	EP-1	CSW-1			01	
133A	CONTROL ROOM / TECH OFF / PREP LAB	RBF-2	RB-1	PT-1	PT-1	PT-1	PT-1	PLAM-1	PL-1	PLAM-1			01	
133B	SIM LAB	RBF-2	RB-1	PT-1	PT-1	PT-1	PT-1	CSW-1	EP-1	CSW-1			01	
135	DRY SKILLS LAB / COHORT CLASSROOM	RBF-2	RB-1	PT-1	PT-1	AWC-1 / PT-1	PT-1	CSW-1	EP-1	CSW-1			01	
137	MODELS/ ASSESSMENT STORAGE/RESEARCH	RBF-2	RB-1	PT-1	PT-1	PT-1	PT-1	CSW-1	EP-1	CSW-1			01	
140	CONF. ROOM (24 SEATS)	CPT-4	WDB-1	PT-1	PT-1	PT-1	PT-1 / WVP-1	CSW-3	QTZ-1				01	
144	OFF. NU / NA. ADJ. (4+2=6)	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	01	
150	EAB CONNECTOR	TER-1,2	TER-1 / WDB-2	PT-1	PT-1	PT-1	PT-1					22	01	
151	EAB STORAGE	RBF-1	RB-2	PT-4	PT-4	PT-4	PT-4						01	
152	VENDING	TER-1	TER-1	PT-1	PT-1	PT-1	PT-1						01	
154	CONF ROOM (10)	CPT-4	WDB-1	PT-1	PT-1	PT-1	PT-1	PLAM-1	QTZ-1			1	01	
156	SM MTG/ GREEN RM	CPT-4	WDB-1	PT-1	PT-1	PT-1	PT-1						01	
158	COAT	TER-1	TER-1	PT-1	PT-1	PT-1	PT-1						01	
160	LECTURE HALL	CPT-7 / WDF-1	WDB-1	PT-1 / ACOUSTIC PANELS	PT-1	AP-1 / PT-1	PT-1					8,19,20	01	
160A	CORR.	CPT-7	RB-1	PT-1	PT-1	PT-1	PT-1						01	
160B	CONTROL	CPT-7	RB-1	PT-6 / PT-6	PT-6	FAP-1 / PT-6	FAP-1 / PT-6						01	
160C	LECT. ENTRY	CPT-7	WDB-1	PT-1	PT-1	PT-1	PT-1					8	01	
160D	AV EQUIP	SC-1	PT-4	PT-4	PT-4	PT-4	PT-4						01	
172	LOADING DOCK	SC-1	RB-1	PT-4	PT-4	PT-4	PT-4						01	
172A	RECYCLING	SC-1	RB-1	FRP-1	FRP-1	FRP-1	FRP-1					11	01	
174	TEACHING KITCHEN	CRK-1	RB-2	CT-5 / PT-1	PT-1	AWC-1 / PT-1	PT-1	PLAM-1	QTZ-1	PLAM-1		7,10	01	
175	JC	SC-1	FRP-1	FRP-1	FRP-1	FRP-1	FRP-1					11	01	
176	ELEV. CONTROL	SC-1	RB-1	PT-4	PT-4	PT-4	PT-4						01	
177	WOMEN	CT-1,3,4 / MT-1	CT-1 / PT-1	CT-1 / PT-1	CT-1	CT-1,4 / PT-1	CT-1,4	PLAM-1	QTZ-1			14,16	01	
178	MECHANICAL ROOM	SC-1	RB-1	PT-4	PT-4	PT-4	PT-4						01	
179	MEN	CT-1,2	CT-1,3,4 / MT-1	CT-1	CT-1 / PT-1	CT-1,4 / PT-1	CT-1,4	PLAM-1	QTZ-1			14,16	01	
180	TOILET	CT-1	CT-1,3 / MT-1	CT-1,4	PT-1	PT-1	PT-1					12	01	
182	TOILET	CT-1	CT-1,3 / MT-1	PT-1	CT-1,4	PT-1	PT-1					12	01	
183A	ENTRY CORRIDOR	RBF-2	RB-2	PT-1	AWC-1 / CWC-1 / PT-1	PT-1	PT-1					18	01	
183B	CADAVER LAB WORKROOM	ERF-1	ERF-1	PT-4	PT-4	PT-4	PT-4	CSW-2	SS-1	CSW-2		21	01	
183C	BIO VESTIBULE	ERF-1	ERF-1	PT-1	PT-1	PT-1	PT-1	CSW-2	SS-1	CSW-2			01	
184	BLDG. STOR.	SC-1	PT-4	PT-4	PT-4	PT-4	PT-4						01	
185	SPILL CLOSET	SC-1	RB-1	PT-4	PT-4	PT-4	PT-4						01	
186	CUST. STOR.	SC-1	RB-1	FRP-1	FRP-1	FRP-1	FRP-1					11	01	
187	CYLINDER ROOM	SC-1	RB-1	PT-4	PT-4	PT-4	PT-4						01	
188	FIRE PUMP	SC-1	RB-1	PT-4	PT-4	PT-4	PT-4						01	
191	CADAVER LAB	ERF-1	ERF-1	PT-4	PT-4	AWC-1 / PT-4	AWC-1 / PT-4	CSW-2	SS-1	CSW-2		21	01	
192	MAIN ELECTRICAL	SC-1	RB-1	PT-4	PT-4	PT-4	PT-4						01	
195	MDF / IT WORK ROOM	SC-1	RB-1	PT-4	PT-4	PT-4	PT-4						01	
C110	CORRIDOR	TER-1	TER-1	PT-1	PT-1	PT-1	PT-1						01	
C130	CORRIDOR	TER-1	TER-1	PT-1	PT-1	PT-1	PT-1						01	
C140	CORRIDOR	TER-1	TER-1	PT-1 / WVP-2	PT-1 / ACOUSTIC PANELS	PT-1	PT-1						01	
C150	LOBBY	TER-1	TER-1	PT-1	PT-1 / ACOUSTIC PANELS	PT-1 / ACOUSTIC PANELS	PT-1						01	
C151	COMMONS	CPT-5 / TER-1	TER-1	PT-1	PT-1	PT-1 / ACOUSTIC PANELS	PT-1					13	01	
C153	VEST.	CPT-1	WDB-1	PT-1	PT-1 / ACOUSTIC PANELS	PT-1 / ACOUSTIC PANELS	PT-1						01	
C170	CORRIDOR	TER-1	TER-1	PT-1 / WVP-2	PT-1	PT-1	PT-1						01	
C180	CORRIDOR	RBF-2 / TER-1	RB-2 / TER-1	PT-2	PT-1	PT-1	PT-1 / WVP-1						01	
S140	STAIR 1-1	TER-1	PREFINISHED	WVP-2	PT-1	PT-1	WVP-2					6,8	01	
S176	STAIR 3-1	SC-1	RB-1	PT-4	PT-4	PT-4	PT-4					4	01	
S194	STAIR 2-1	CPT-7	RB-1	PT-1	PT-1	PT-1	PT-1					5	01	
200A	WORK / COPY	RBF-2	RB-2	PT-1	AWC-1 / PT-1	CWC-1 / PT-1	PT-1	PLAM-1	PL-1	PLAM-1		3	02	
200B	DATA	RBF-2	RB-1	PT-4	PT-4	PT-4	PT-4						02	
200C	BREAK	RBF-2	RB-2	PT-1	PT-1	CT-5 / PT-1	PT-1	PLAM-1	QTZ-1	PLAM-1		7,10	02	
202	RECEPTION	CPT-4	WDB-1	PT-1	PT-1	PT-1	PT-1						02	
203	CONF	CPT-4	WDB-1	PT-1	PT-1	PT-1	PT-1	PLAM-1	QTZ-1				02	
205	OFF. GLOBAL	CPT-4	WDB-1	PT-1	PT-1	PT-1	PT-1					1	02	
206	OFF. DEAN'S ASSIST.	CPT-4	WDB-1	PT-1	PT-1	PT-1	PT-1					1	02	
207	OFF. STRATEGIC	CPT-4	WDB-1	PT-1	PT-1	PT-1	PT-1					1	02	
208	OFF. ASSESSMENT	CPT-4	WDB-1	PT-1	PT-1	PT-1	PT-1					1	02	
209	OFF. ASSOC. DEAN	CPT-4	WDB-1	PT-1	PT-1	PT-1	PT-1					1	02	
210A	STOR	CPT-4	RB-1	PT-1	PT-1	PT-1	PT-1						02	
210B	ELEC	SC-1	RB-1	PT-4	PT-4	PT-4	PT-4						02	
211	OFF. ASSOC. DEAN	CPT-4	WDB-1	PT-1	PT-1	PT-1	PT-1					1	02	
212	OFF. COMMUNICATIONS	CPT-4	WDB-1	PT-1	PT-1	PT-1	PT-1					1	02	
214	OFF. OPERATIONS	CPT-4	WDB-1	PT-1	PT-1	PT-1	PT-1					1	02	
215	DEAN'S OFFICE	CPT-4	WDB-1	PT-1	PT-1	PT-1	PT-1					1	02	
231	COMP. LAB / GEN. CLASSROOM	CPT-2	RB-1	PT-1	AWC-1 / PT-1	PT-1	PT-1						02	
233	GEN. CLASSROOM (24 Seat)	CPT-2	RB-1	PT-1	AWC-1 / PT-1	PT-1	PT-1						02	
235	OPEN RESEARCH LAB	RBF-2	RB-1	PT-1	PT-1	PT-1	PT-1	CSW-1	EP-1	CSW-1			02	
272A	CHEM. STOCK ROOM	RBF-1	RB-1	PT-4	PT-4	PT-4	PT-4						02	
272B	LAB STORAGE	RBF-1	RB-1	PT-4	PT-4	PT-4	PT-4	CSW-1	EP-1	CSW-1			02	
274	MICROSCOPY ROOM	RBF-1	RB-1	PT-1	PT-1	PT-1	PT-1	CSW-1	EP-1	CSW-1			02	
275	LACT.	CT-1	CT-3 / MT-1	PT-1	PT-1	PT-1	PT-1	PLAM-1	QTZ-1				02	
276	SCIN CLASSROOM	RBF-1	RB-1	PT-1	PT-1	PT-1	AWC-1 / PT-1	CSW-1	EP-1	CSW-1			02	
277	WOMEN	CT-1,2	CT-1,3,4 / MT-1	CT-1 / PT-1	CT-1	CT-1,4 / PT-1	CT-1,4	PLAM-1	QTZ-1			14,16	02	
279	MEN	CT-1,2	CT-1,3,4 / MT-1	CT-1	CT-1 / PT-1	CT-1,4 / PT-1	CT-1,4	PLAM-1	QTZ-1			14,16	02	
282	PHYS LAB PREP	RBF-1	RB-1	PT-1	PT-1	PT-1	PT-1	CSW-1	EP-1	CSW-1			02	
283	MICROBIO / PLANT RESEARCH LAB	RBF-1	RB-1	PT-1	PT-1	AWC-1 / PT-1	PT-1	CSW-1	EP-1	CSW-1			02	
284	PHYSICS LAB	RBF-1	RB-1	PT-1	PT-1	PT-1	PT-1	CSW-1	EP-1	CSW-1			02	
289A	MICROBIO PREP	RBF-1	RB-1	PT-1	PT-1	PT-1	PT-1	CSW-1	EP-1	CSW-1			02	
289B	TISSUE CULTURE B	RBF-1	RB-1	PT-1	PT-1	PT-1	PT-1	CSW-1	EP-1	CSW-1			02	
291	CELL BIO / PHYS. RESEARCH LAB	RBF-1	RB-1	PT-1	PT-1	AWC-1 / PT-1	PT-1	CSW-1	EP-1	CSW-1			02	
292	PHYS RESEARCH LAB	RBF-1	RB-1	PT-1	PT-1	PT-1	PT-1	CSW-1	EP-1	CSW-1			02	
C210	CORR	CPT-4	WDB-1	PT-1	PT-1	PT-1	PT-1						02	
C230	CORRIDOR	TER-1	TER-1	PT-1	PT-1	PT-1	PT-1						02	
C230A	VEST.	CPT-1	WDB-1	PT-1	PT-1	PT-1	PT-1						02	
C250	LOBBY	CPT-2												

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FINISH SCHEDULE FLOORS 03-04													
Number	Name	Floor Finish	Base Finish	North / Northwest Wall Finish	South / Southeast Wall Finish	East / Northeast Wall Finish	West / Southwest Wall Finish	Base Cabinet	Countertop	Upper Wall Cabinet	Millwork	Comments	Floor
300A	WORK / COPY	RBF-1	RB-2	PT-1	AWC-1 / PT-1	PT-1	PT-1					3	03
300B	DATA	RBF-1	RB-1	PT-4	PT-4	PT-4	PT-4						03
300C	K'ETTE	RBF-1	RB-2	PT-1	PT-1	CT-5 / PT-1	PT-1	PLAM-1	QTZ-1	PLAM-1		7,10	03
302	COMMONS	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1						03
303	COMMONS	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1						03
304	HR WS OFF.	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	03
305	OFF. STAFF (3)	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	03
306	OFF. SCI	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	03
310A	ELEC	SC-1	RB-1	PT-4	PT-4	PT-4	PT-4						03
310B	STOR	CPT-3	RB-1	PT-1	PT-1	PT-1	PT-1						03
311	OFF. SCI	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	03
312	STOR.	CPT-3	RB-1	PT-1	PT-1	PT-1	PT-1						03
313	OFF. SCI	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	03
314	OFF. SCI	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	03
315	OFF. SCI	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	03
316	OFF. ASP	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	03
317	OFF. SCI	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	03
318	OFF. ASP	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	03
319	OFF. SCI	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	03
320	OFF. ASP	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	03
321	OFF. SCI	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	03
322	OFF. ASP	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	03
323	OFF. SCI	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	03
325	INTERVIEW / CONF.	CPT-3	RB-2	PT-1	PT-1	AWC-1 / PT-1	PT-1						03
327	OFF. ASP	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	03
329	OFF. ASP	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1						03
331	OFF. ASP	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	03
332	OFF. ADJ. (8+2=10)	CPT-3	RB-2	AWC-1 / PT-1	PT-1	PT-1	PT-1						03
333	OFF. ASP	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	03
335	OFF. ASP	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	03
337	OFF. ASP	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	03
339	COMMONS	CPT-3	RB-2	PT-2	PT-1	PT-1	PT-1						03
342	OFF. ASP	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	03
344	OFF. ASP	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1						03
346	OFF. ASP	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	03
348	OFF. ASP	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	03
352	CONF ROOM (10)	CPT-3	RB-2	PT-1	PT-1	AWC-1 / PT-1	PT-1						03
353	QUAN. LAB / INTERVIEW LAB	CPT-2	RB-1	PT-1	PT-1	AWC-1 / PT-1	PT-1						03
354	COMMONS / (OFF FUT)	CPT-3	RB-2		PT-1		PT-2						03
356	COMMONS / (OFF FUT)	CPT-3	RB-2		PT-1	PT-2							03
360	OFF. ASP	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	03
362	OFF. HR DIR	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	03
364	SM. MTG.	CPT-3	RB-2		PT-1		AWC-1 / PT-1						03
372B	LAB WASTE - BIO	RBF-1	RB-1	PT-4	PT-4	PT-4	PT-4	CSW-1	EP-1	CSW-1			03
372C	LAB STOR.	RBF-1	RB-1	PT-4	PT-4	PT-4	PT-4						03
372D	OFF. LAB MGR	RBF-1	RB-2	PT-1	PT-1	PT-1	PT-1					1	03
374A	BIO FAC. RESEARCH	RBF-1	RB-1	PT-1	PT-1	PT-1	PT-1	CSW-1	EP-1	CSW-1			03
374B	TISSUE CULTURE A	RBF-1	RB-1	PT-1	PT-1	PT-1	PT-1	CSW-1	EP-1	CSW-1			03
375	JC	SC-1	RB-1	FRP-1	FRP-1	FRP-1	FRP-1					11	03
376	COLD ROOM	SC-1	RB-1	PT-4	PT-4	PT-4	PT-4	CSW-1	EP-1	CSW-1			03
377	WOMEN	CT-1,2	CT-1,3,4 / MT-1	CT-1 / PT-1	CT-1	CT-1,4 / PT-1	CT-1,4	PLAM-1	QTZ-1			14,16	03
378	ORGANIS. BIO LAB	RBF-1	RB-1	PT-1	PT-1	PT-1	AWC-1 / PT-1	CSW-1	EP-1	CSW-1			03
379	MEN	CT-1,2	CT-1,3,4 / MT-1	CT-1	CT-1 / PT-1	CT-1,4 / PT-1	CT-1,4	PLAM-1	QTZ-1			14,16	03
383	CELL BIO / BIOCHEM LAB	RBF-1	RB-1	PT-1	PT-1	AWC-1 / PT-1	PT-1	CSW-1	EP-1	CSW-1			03
386	BIO LAB PREP ROOM B	RBF-1	RB-1	PT-1	PT-1	PT-1	PT-1	CSW-1	EP-1	CSW-1			03
388	MOLECULAR BIO LAB	RBF-1	RB-1	PT-1	PT-1	PT-1	AWC-1 / PT-1	CSW-1	EP-1	CSW-1			03
389	BIO LAB PREP ROOM A	RBF-1	RB-1	PT-1	PT-1	PT-1	PT-1	CSW-1	EP-1	CSW-1			03
391	ANATOMY / PHYSIO LAB	RBF-1	RB-1	PT-1	PT-1	AWC-1 / PT-1	PT-1	CSW-1	EP-1	CSW-1			03
C310	CORRIDOR	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1						03
C330	CORRIDOR	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1						03
C350	CORRIDOR	CPT-3	RB-2	PT-1 / WVP-2	PT-1	PT-1	PT-1						03
C350A	COMMONS	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1						03
C370	CORRIDOR	CPT-3	RB-2	PT-1 / WVP-2	PT-1	PT-1	PT-1						03
C370B	COMMONS	RBF-1	RB-2	CWC-1 / PT-1	PT-1	PT-1	PT-1		QTZ-1			15	03
C380	CORRIDOR	RBF-1	RB-2	PT-1	PT-1	AWC-1 / CWC-1 / PT-1 / WVP-1	AWC-1 / CWC-1 / PT-1 / WVP-1					18	03
C380A	COMMONS	RBF-1	RB-2	PT-2	PT-1	PT-1	PT-1						03
S301	STAIR 1-3	TER-1	PREFINISHED	WVP-2	PT-1	PT-1	WVP-2					6,8	03
S394	STAIR 2-3	CPT-7	RB-1	PT-1	PT-1	PT-1	PT-1					5	03
400A	WORK / COPY	RBF-1	RB-2	PT-1	AWC-1 / PT-1	CWC-1 / PT-1	PT-1	PLAM-1	PL-1	PLAM-1		3	04
400B	DATA	RBF-1	RB-1	PT-4	PT-4	PT-4	PT-4						04
400C	K'ETTE	RBF-1	RB-2	PT-1	PT-1	CT-5 / PT-1	PT-1	PLAM-1	QTZ-1	PLAM-1		7,10	04
401	OFF. ADJ (4)	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	04
402	OFF. WORK STUDY	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	04
403	OFF. FLX	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	04
404	OFF. FLX	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	04
405	OFF. FLX	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	04
406	OFF. ADJ (4)	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	04
407	OFF. STAFF	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	04
410	ELEC	SC-1	RB-1	PT-4	PT-4	PT-4	PT-4						04
411	OFFICE FLX	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	04
412	TESTING	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1						04
413	OFF. IL	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	04
414	TESTING	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1						04
415	OFF. IL	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	04
416	OFF. IL WS (2)	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	04
417	OFF. IL	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	04
419	TRANSLATION	CPT-3	RB-2	PT-1	AWC-1 / PT-1	AWC-1 / PT-1	PT-1						04
431	OFF. FUT	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	04
432	OFF. ADJ. (3)	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	04
433	OFF. IL	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1						04
434	OFF. ADJ (3)	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	04
435	OFF. IL	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	04
437	OFF. IL	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	04
439	OFF. ESL	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	04
441	SM. MTG.	CPT-3	RB-2	AWC-1 / PT-1	PT-1	PT-1	PT-1						04
452	OFF. TA	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	04
454	OFF. INTL	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	04
456	OFF. SAFETY OFFICER	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1					1	04
472	CHEM LAB - GENERAL	RBF-1	RB-1	PT-1	PT-1	PT-1	AWC-1 / PT-1	CSW-1	EP-1	CSW-1			04
475	LAB WASTE - CHEM	SC-1	RB-1	FRP-1	FRP-1	FRP-1	FRP-1					11	04
477	WOMEN	CT-1,2	CT-1,3,4 / MT-1	CT-1 / PT-1	PT-1	CT-1,4 / PT-1	CT-1,4	PLAM-1	QTZ-1			14,16	04
478	CHEM LAB PREP	RBF-1	RB-1	PT-1	PT-1	PT-1	PT-1	CSW-1	EP-1	CSW-1			04
479	MEN	CT-1,2	CT-1,3,4 / MT-1	CT-1	CT-1 / PT-1	CT-1,4 / PT-1	CT-1,4	PLAM-1	QTZ-1			14,16	04
480	CHEM LAB - ORGANIC	RBF-1	RB-1	PT-1	PT-1	PT-1	AWC-1 / PT-1	CSW-1	EP-1	CSW-1			04
483	CHEM LAB - RESEARCH	RBF-1	RB-1	PT-1	PT-1	PT-1	AWC-1 / PT-1	CSW-1	EP-1	CSW-1			04
488	CHEM LAB - ANALYT / INORGANIC	RBF-1	RB-1	PT-1	PT-1	PT-1	AWC-1 / PT-1	CSW-1	EP-1	CSW-1			04
489	CHEM INSTR. LAB	RBF-1	RB-1	PT-1	PT-1	PT-1	PT-1	CSW-1	EP-1	CSW-1			04
491	CHEM LAB PHYSICAL	RBF-1	RB-1	PT-1	PT-1	AWC-1 / PT-1	PT-1	CSW-1	EP-1	CSW-1			04
C410	CORRIDOR	CPT-3	RB-2	PT-1	PT-1	PT-1	PT-1						04
C450	CORRIDOR	CPT-3	RB-2	PT-1 / WVP-2	PT-1	PT-1	PT-1						04
C450A	COMMONS	CPT-3	RB-2			AWC-1 / PT-3							04
C470	CORR.	CPT-3	RB-2	PT-1 / WVP-2	PT-1	PT-1	PT-1						04
C480	CORRIDOR	RBF-1	RB-2	PT-1	PT-1	AWC-1 / CWC-1 / PT-1 / WVP-1	AWC-1 / CWC-1 / PT-1 / WVP-1					18	04
C480A	COMMONS	RBF-1	RB-2	PT-3	PT-1	PT-1	PT-1						04
S440	STAIR 1-4	TER-1	PREFINISHED	WVP-2	PT-1	PT-1	WVP-2					6,8	04
S494	STAIR 2-4	CPT-7	RB-1	PT-1	PT-1	PT-1	PT-1					5	04
S494A	ROOF ACCESS	SC-1	RB-1	PT-4	PT-4	PT-4	PT-4						04

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MATERIAL FINISH LEGEND							
ABBREVIATION	MANUFACTURER	PRODUCT	COLOR NAME	COLOR NUMBER	WIDTH / SIZE	DETAILS	REP INFORMATION
03 30 00 CAST IN PLACE CONCRETE							
03 30 00 CAST IN PLACE CONCRETE							
SC-1	NA	SEALED CONCRETE	NA	NA	NA	SEE ARCHITECTURAL SPECIFICATIONS FOR FURTHER INFORMATION	
06 41 00 ARCHITECTURAL WOOD CASEWORK							
06 41 13 WOOD VENEER FACED ARCHITECTURAL CABINETS							
CSW-3	CUSTOM	WHITE OAK - RIFT CUT CABINET	CLEAR FINISH	NA	NA	TO MATCH WVP-1 AND SAMPLES TO BE SUBMITTED TO INTERIOR DESIGNER FOR APPROVAL / CABINET HARDWARE: AMEROCK BP29114AB ANTIQUE BRASS 3"	
06 41 16 PLASTIC LAMINATE CLAD ARCHITECTURAL CABINETS							
PLAM-1	FORMICA	HIGH PRESSURE LAMINATE	FINNISH OAK	118-58	NA	MATTE FINISH / EPCO HARDWARE: MC 402-4 WIRE PULL - SATIN CLEAR ANODIZED FINISH	RICHELE SMITH 816-377-6235
06 42 00 WOOD PANELING							
06 42 16 WOOD - VENEER PANELING							
WVP-1	DODGE VENEERS INC.	WHITE OAK - RIFT	CLEAR FINISH	5085 / 3		FSC CONTROLLED	
WVP-2		WHITE OPAQUE PANELS	LAQUER FINISH			SEE ARCHITECTURAL SPECIFICATIONS FOR FURTHER DETAILS	
06 46 00 WOOD TRIM							
06 46 19 WOOD BASE AND SHOE MOULDINGS							
WDB-1	SMITH MILLWORK	S4S BOARD - CUSTOM (OR SIMILAR)	NA	NA	11/16" X 5 1/2"	TO BE STAINED TO MATCH WVP-1 / SAMPLES TO BE SENT TO ARCHITECT AND INTERIOR DESIGNER FOR APPROVAL	
WDB-2	CUSTOM	MATCH EXISTING WOOD BASE IN ACADEMIC BUILDING	NA	NA		TO BE STAINED TO MATCH EXISTING BASE / SAMPLES TO BE SENT TO ARCHITECT AND INTERIOR DESIGNER FOR APPROVAL	
09 30 00 TILING							
09 30 00 TILING							
MT-1	SCHLUTER	DILEX-AHK	SATIN ANODIZED ALUMINUM (AE)	NA	NA	TO BE USED IN LOCATIONS WHERE FLOOR TILE MEETS WALL TILE AND INSIDE CORNERS OF WALL TILE	
MT-2	SCHLUTER	SCHIENE	SATIN ANODIZED ALUMINUM (AE)	NA		TO BE USED AT EXPOSED EDGE OF WALL TILE OR WHERE TERRAZZO FLOORING MEETS CARPET TILE	
MT-3	SCHLUTER	RENO-TK	SATIN ANODIZED ALUMINUM (AE)	NA		TO BE USED IN LOCATIONS WHERE TILE OR TERRAZZO FLOORING MEETS RESILIENT FLOORING OR BROADLOOM CARPET	
09 30 13.13 PORCELAIN TILING							
CT-1	AMERICAN OLEAN	METHOD PORCELAIN TILE - UNPOLISHED	TAUPE TECHNIQUE	MT04	12 X 24	TEC POWER GROUT - 939 MIST	JULIE ZOBEL 314-971-6582
CT-2	AMERICAN OLEAN	KHAKI APPROACH	METHOD PORCELAIN TILE - UNPOLISHED	MT05	12 X 24	TEC POWER GROUT - 939 MIST	JULIE ZOBEL 314-971-6582
CT-3	AMERICAN OLEAN	METHOD PORCELAIN TILE - S-43C9 BULLNOSE	TAUPE TECHNIQUE	MT04	3 X 12	TEC POWER GROUT - 939 MIST	JULIE ZOBEL 314-971-6582
CT-4	AMERICAN OLEAN	METHOD PORCELAIN TILE - MOSAIC TILE	KHAKI APPROACH	MT05	12 X 24	TEC POWER GROUT - 939 MIST	JULIE ZOBEL 314-971-6582
CT-5	ANATOLIA	SOHO - GLOSSY MINI BRICK MOSAICS	WARM GREY	51-062	12 X 12	TEC POWER GROUT - 939 MIST	JULIE ZOBEL 314-971-6582
09 60 00 FLOORING							
09 64 00 WOOD FLOORING							
WDF-1	VINTAGE PREFINISHED HARDWOOD FLOORING	CRAFTED R & Q WIRE BRUSHED WHITE OAK	NATURAL UV OIL	NA	9/16 X 5		AMANDA RIEFFER 314-729-1461
09 65 13.13 RESILIENT WALL BASE							
RB-1	JOHNSONITE	TRADITIONAL WALL BASE WITH TOE	DOVER	NA	4"		LISA POWELL 314-403-6913
RB-2	JOHNSONITE	EQUINOX WALL BASE	DOVER	NA	4.5"		LISA POWELL 314-403-6913
09 65 13.36 RESILIENT CARPET TRANSITIONS							
RCT-1	JOHNSONITE	RUBBER TRANSITION STRIP	BURNT UMBER	CTA-63-HT	2 1/2"	TO BE USED AT ALL BROADLOOM CARPET TO RESILIENT FLOORING TRANSITIONS	LISA POWELL 314-403-6913
RCT-2	JOHNSONITE	RUBBER TRANSITION STRIP	BURNT UMBER	CTA-63-J	2 1/2"	TO BE USED AT ALL BROADLOOM CARPET TO SEALED CONCRETE TRANSITIONS	LISA POWELL 314-403-6913
RCT-3	JOHNSONITE	RUBBER TRANSITION STRIP	BURNT UMBER	SSR-63-B	1 5/8"	TO BE USED AT RESILIENT FLOORING TO SEALED CONCRETE TRANSITIONS	LISA POWELL 314-403-6913
RCT-4	JOHNSONITE	RUBBER TRANSITION STRIP	BURNT UMBER	SLT-63-C	5/8"	TO BE USED AT CARPET TILE TO RESILIENT FLOORING TRANSITIONS	
09 68 13 TILE CARPETING							
CPT-1	MASLAND MODULAR	POSITIVE TRACTION - T7872	RELEASE	78200	24 X 24	100% 6.6 NYLON / QUARTER TURNED INSTALLATION	MATT KOVATOVICH 314-915-5678
CPT-2	MASLAND MODULAR	RESONATE - T502	TORRENT	50207	24 X 24	EARTHSMART REFRESH 6.6 NYLON / QUARTER TURNED INSTALLATION	MATT KOVATOVICH 314-915-5678
CPT-3	BENTLEY	MULTIPLAY TILE - 4MYT40AA0K	FAN BOY	401377	18 X 36	ANTRON LUMENA 6.6 NYLON / BRICK LAY INSTALLATION	MELANIE ROZELL 636-751-5612
CPT-4	BOLYU	BATISTE TILE - TBAT	GROSSGRAIN	BAT56	18 X 36	AVALAR SOLUTION DYED NYLON / ASHLAR INSTALLATION	SEAN GALLAGHER 314-775-9329
CPT-5	TANDUS - CENTIVA	MAELSTROM - 04849	BLUE SPIRIT	33201	24 x 24	DYNEX SOLUTION DYED NYLON / BRICK LAY INSTALLATION	BRIAN AYRES 314-324-0086
CPT-6	NOT USED						
09 68 16 SHEET CARPETING							
CPT-7	BENTLEY	MULTIPLAY TILE - 4MYT40620R	GHOST NINJA	401378	12'	ANTRON LUMENA 6X6 NYLON / BROADLOOM	MELANIE ROZELL 636-751-5612
09 62 00 SPECIALTY FLOORING							
09 62 29 CORK FLOORING							
CRK-1	EXPANKO	PRESTIGE CORK FLOORING	LIGHT	NA	24 X 24 / 3/16 THICK	MATTE POLYURETHANE FINISH / SEALANT REQUIRED PER MANUFACTURER SPECIFICATIONS	LISA POWELL 314-403-6913
09 65 00 RESILIENT FLOORING							
09 65 13.26 RESILIENT STAIR NOSINGS							
VSN-1	JOHNSONITE	FLEXIBLE VINYL STAIR NOSING	BURNT UMBER	VIVCD-63	1/4" MATERIAL	INCLUDE 49 BEIGE CO-EXTRUDED CONTRASTING STRIP FOR VISUALLY IMPAIRED	LISA POWELL 314-403-6913
09 65 16.33 RUBBER SHEET FLOORING							
RBF-1	NORA	NORAPLAN ENVIRONCARE SHEET FLOORING - 1463	SMOKY FENNEL	2931	48" WIDE	HEAT WELD SEAMS	KATIE DEELO 314-952-7610
RBF-2	NORA	NORAPLAN SENTICA SHEET FLOORING - 1701	SNOW DAY	6520	48" WIDE	HEAT WELD SEAMS	KATIE DEELO 314-952-7610
09 66 00 TERRAZZO FLOORING							
09 66 23.16 EPOXY RESIN TERRAZZO FLOORING							
TER-1	MISSOURI TERRAZZO	CUSTOM SAMPLE	NA	15-239	NA	INTEGRAL 4" COVE BASE	KEVIN RICKMAN 314-361-8090
TER-2	MISSOURI TERRAZZO	CUSTOM SAMPLE	NA	11-77	NA	MATCH TO WEBSTER UNIVERSITY ACADEMIC BUILDING	KEVIN RICKMAN 314-361-8090
09 67 00 FLUID-APPLIED FLOORING							
09 67 23 RESINOUS FLOORING							
ERF-1	KEY RESIN COMPANY OR EQUAL	KEY QUARTZ B125 HP	TIMBERWOLF	NA		3/16" THICKNESS / INTEGRAL 4" COVE BASE / 1 TOPCOAT OF 615 CHEMICAL RESISTANT BINDER (CLEAR)	KEN MEYER
09 70 00 WALL FINISHES							
09 72 00 HYGIENIC VINYL WALL COVERINGS							
HWWC-1	ALTRO EQUAL	ALTRO WHITEROCK PANELS	STANDARD WHITE	W3FR	2.5MM	8' 2" PANELS / HEAT WELD APPLIATION FOR SEAMLESS WALL SYSTEM / USE MANUFACTURER'S COORDINATING TRIM PIECES TO CREATE SEAMLESS	GEORGE MALLETT 417-379-1602
09 72 13 CORK WALLCOVERINGS							
CWC-1	WOLF GORDON	BULLETIN BOARD CORK - 1/4 INCH	NATURAL	339	48" WIDE	UNBACKED / REVERSE HANG AND RANDOM MATCH	DAVID SMITH 314-646-0220
09 77 00 SPECIAL WALL SURFACING							
FRP-1	NUDO	FIBER-LITE LINER PANEL LR-F9	TEX WHITE	NA	4' X 8'	.09" THICKNESS / USE MFG COORDINATING TRIM FOR INSTALLATION	
09 80 00 ACOUSTIC TREATMENT							
09 84 33 SOUND ABSORBING WALL UNITS							
AP-1	GOLTERMAN & SABO OR EQUAL	FABRIC WRAPPED ACOUSTI-PANEL	FABRIC: MOMENTUM UNIVERSE - COSMIC / 66" WIDE	NA	1" THICK	FABRIC TO BE PURCHASED BY GOLTERMAN & SABO / INSTALLED WITH ADHESIVE AND IMPALING CLIPS / SEE ARCHITECTURAL ELEVATIONS FOR PANEL SIZES	
FAP-1	NATIONAL WALLCOVERING	ECOCORE PANELS - SNOOPY FABRIC	GRAPHITE	NA	49" X 97"	1" THICK	PEGGY SENDOBRY 314-570-6255
09 90 00 PAINTING AND COATING							
09 91.00 PAINTING							
PT-1	SHERWIN WILLIAMS	PROMAR 400 ZERO VOC INTERIOR LATEX PAINT	SNOWBOUND	SW7004	NA	EGGSHELL FINISH - WALLS / FLAT FINISH - CEILINGS	HANK MEINKING 314-281-7485
PT-2	BENJAMIN MOORE	PROMAR 400 ZERO VOC INTERIOR LATEX PAINT EQUIVALENT	NACHO CHEESE	2018-40	NA	EGGSHELL FINISH - WALLS	
PT-3	SHERWIN WILLIAMS	PROMAR 400 ZERO VOC INTERIOR LATEX PAINT	GEORGIAN BAY	SW6509	NA	EGGSHELL FINISH - WALLS	HANK MEINKING 314-281-7485
PT-4	SHERWIN WILLIAMS	PROMAR 400 ZERO VOC INTERIOR LATEX PAINT	ZIRCON	SW7667	NA	SEMI-GLOSS FINISH - WALLS, HOLLOW METAL FRAMES AND DOORS / CADAVER LAB AND CADAVER WORKROOM TO RECEIVE EPOXY FINISH	HANK MEINKING 314-281-7485
PT-5	SHERWIN WILLIAMS	PROMAR 400 ZERO VOC INTERIOR LATEX PAINT	BLACK MAGIC	SW6991	NA	SEMI-GLOSS FINISH	HANK MEINKING 314-281-7485
PT-6	SHERWIN WILLIAMS	PROMAR 400 ZERO VOC INTERIOR LATEX PAINT	GREENBLACK	SW6994	NA	EGGSHELL FINISH - WALLS	HANK MEINKING 314-281-7485
09 96 00 HIGH PERFORMANCE COATINGS							
09 66 66 AGGREGATE WALL COATINGS							
AWC-1	WOLF GORDON - WINK	DRY ERASE FINISH	CLEAR			PAINT OVER EGGSHELL FINISH	DAVID SMITH 314-646-0220
10 21 13 TOILET COMPARTMENTS							
10 21 13.19 PLASTIC TOILET COMPARTMENTS							
PTC-1	ACCURATE OR EQUAL	SOLID PLASTIC (HDPE) TOILET PARTITIONS	CHARCOAL	9237	NA	100 % POST - CONSUMER RECYCLED MATERIAL / TOUGH TEXTURE (TT) FINISH	
12 30 00 MANUFACTURED CASEWORK							
12 35 53 LABORATORY CASEWORK							
CSW-1	HAMILTON OR SIMILAR	WOOD FLUSH OVERLAY - RIFT WHITE OAK	ND NATURAL	249	NA	SAMPLES TO BE SENT TO ARCHITECT AND DESIGNER FOR APPROVAL PRIOR TO ORDERING	JIM BALDWIN 913-906-8601
CSW-2	HAMILTON OR SIMILAR	STEEL FLUSH OVERLAY	FINISH TO MATCH PT-4	NA	NA	SAMPLES TO BE SENT TO ARCHITECT AND DESIGNER FOR APPROVAL PRIOR TO ORDERING	JIM BALDWIN 913-906-8601
12 36 00 COUNTERTOP SPECIFICATIONS							
12 36 16 METAL COUNTERTOPS							
SS-1	STAINLESS STEEL					INTEGRAL SIDE AND BACK SPLASHES WHERE APPLICABLE / SEE ARCHITECTURAL SPECS FOR MORE DETAILS	
12 36 23.13 PLASTIC LAMINATE - CLAD COUNTERTOPS							
PL-1	WILSONSART	PLASTIC LAMINATE	PEWTER MESH	4878-38	NA	4" SIDE AND BACK SPLASHES WHERE APPLICABLE	PATRICK ANGEVINE 314-809-5114
12 36 53 LABORATORY COUNTERTOPS							
EP-1	DURCON INCORPORATED	EPOXY RESIN LABORATORY COUNTERTOP	GRAPHITE	NA	25MM THICK	BEVELED EDGE	
12 36 61.19 QUARTZ SURFACING COUNTERTOPS							
QTZ-1	LG HAUSYS	VIATERA	TUNDRA ICE	NA	2CM	EASED EDGE / 4" SIDE AND BACK SPLASHES WHERE BACKSPLASH TILE IS NOT USED	JOE JOHNSON 312-805-5763
QTZ-2	LG HAUSYS	VIATERA	SOHO GRAY	NA	2CM	EASED EDGE / 4" SIDE AND BACK SPLASHES WHERE BACKSPLASH TILE IS NOT USED	JOE JOHNSON 312-805-5763



Webster University
Interdisciplinary Science Building

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ADDENDUM 3-3 21 APR 2016
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No. Description Date

Drawing Title:

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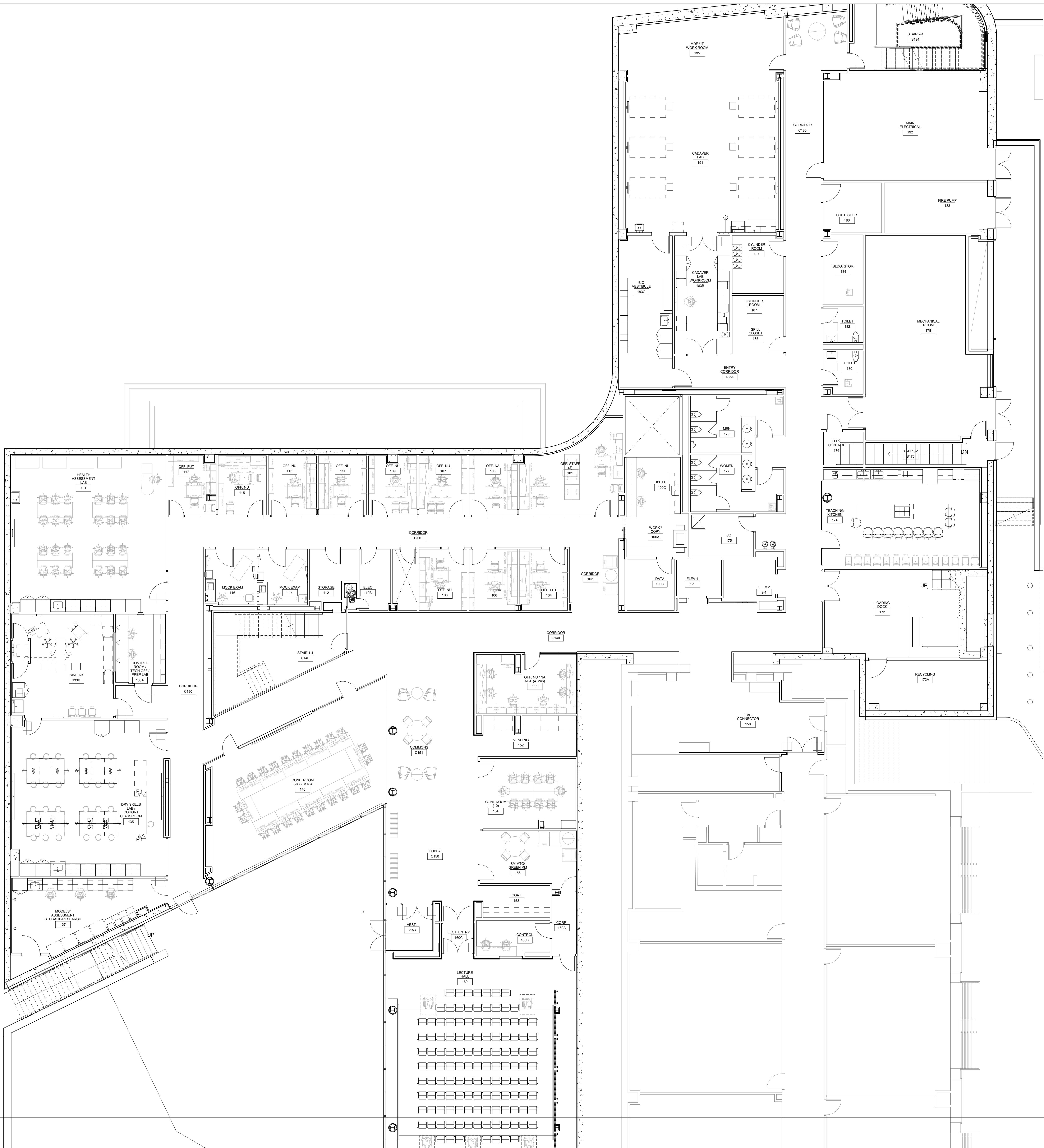
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Drawing Title:

FIRST FLOOR FURNITURE
PLAN FOR REFERENCE
ONLY

Project No.: 04561.01 Checked by:

ID0401



1 LEVEL 01 FURNITURE PLAN
1/8" = 1'-0"

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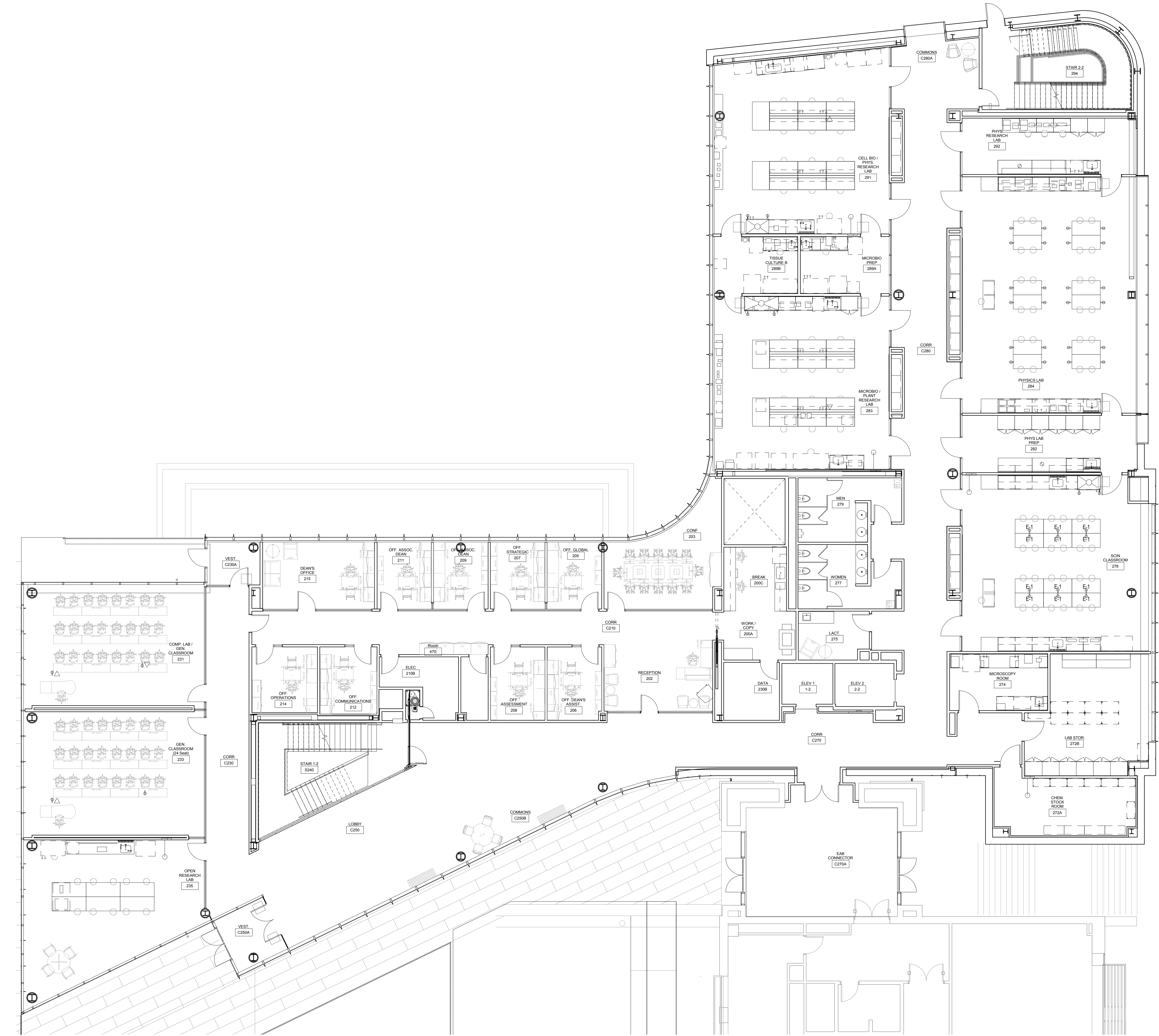
ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016
No. Description Date

Drawing Title:

SECOND FLOOR
FURNITURE PLAN FOR
REFERENCE ONLY

Project No.: 04561.01 Checked by:

ID0402



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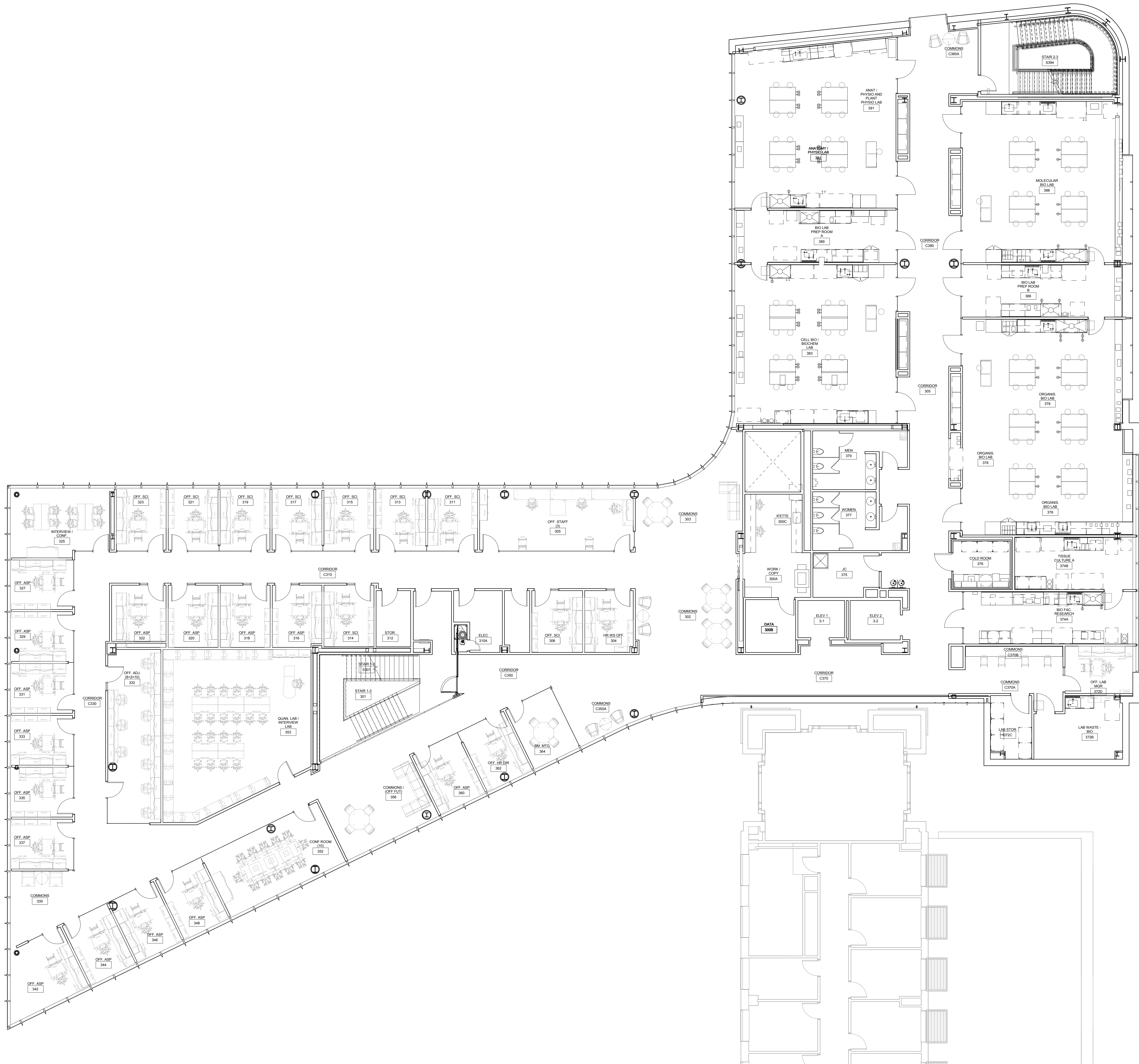
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St. Louis, MO 63105
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Webb Engineering Services, Inc.
Planning & Fire Protection
1400 S. 3rd Street, Suite 201
St. Louis, MO 63104
314.558.0600



1 LEVEL 03 FURNITURE PLAN
1/8" = 1'-0"

CONFORMED SET 01 JUL 2016

ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016
No. Description Date

Drawing Title:

THIRD FLOOR FURNITURE
PLAN FOR REFERENCE
ONLY

Project No.: 04561.01 Checked by:

ID0403

- William Tao & Associates, Inc.**
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- David Mason & Associates, Inc.**
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314-534-1053
- Faith Group**
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314-591-2229
- Kuhmann Leavitt, Inc.**
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- Webb Engineering Services, Inc.**
Plumbing & Fire Protection
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St. Louis, MO 63104
314-558-0600



1 LEVEL 04 FURNITURE PLAN
1/8" = 1'-0"

CONFORMED SET 01 JUL 2016

ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016
No. Description Date

Drawing Title:

FOURTH FLOOR
FURNITURE LAYOUT FOR
REFERENCE ONLY

Project No.: 04561.01 Checked by:

ID0404

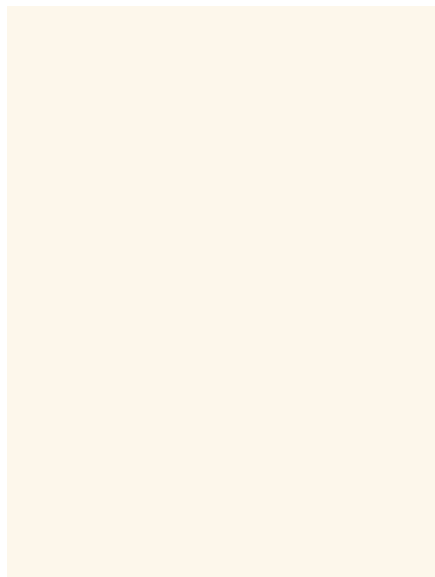
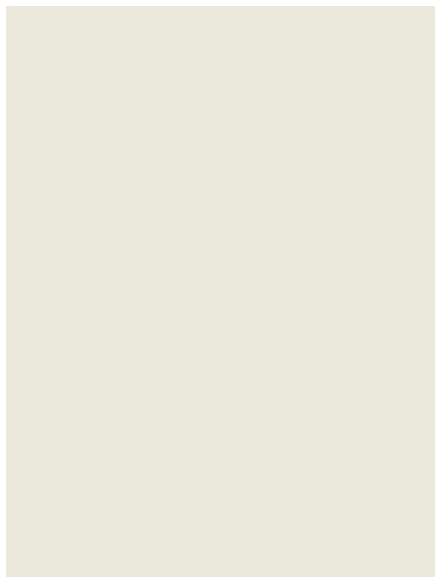
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3/10/2016 3:53:12 PM

Environmental Graphics Signage & Wayfinding Package:

Contents

Type	Description	Sheet	Type	Description	Sheet
	Graphics Guide	EG100			
EG1	EG Location Plans, Level 1-4	EG101	DI-01	Building Directional Long Wrap	EG111
EG-02	EG Multi-Level Feature Wall	EG102	DI-02	Building Directional Short Wrap	EG111
	EG Film on Glass/Semi Private	EG103	DI-03	Building Directional ID	EG111
	EG Film on Glass/Semi Private	EG104	DI-04	EAB Directional	EG111
EG-03	EG Film on Glass/Private	EG105	DI-05	Track Direction LED Plinth	EG111
EG-04	Vinyl Gorlok	EG105			
	Sign Location Plans, Level 1 & 2	EG106	ORI-01	Directory	EG111
	Sign Location Plans, Level 3 & 4	EG107			
	Sign Message Schedule	EG108	RE-01	Building Hours / Information	EG112
	Sign Message Schedule	EG109	RI-01	Stairwell Evacuation	EG112
	Sign Message Schedule	EG110	RI-02	Regulatory Messages	EG112
IDE-01	Exterior Building ID [Level 1]	EG110	RI-03	Elevator Evacuation	EG112
IDI-01	Room ID on Gyp.	EG110			
IDI-02	Room ID on Glass	EG110			
IDI-03	Office ID on Glass	EG110			
IDI-04	Office ID on GYP	EG110			
IDI-05	Restroom Glyphs	EG110			
IDI-06	Back of House	EG110			

Color:

WHITE:	GRAY:	GRAY:	GRAY:	YELLOW:
				
COLOR A SW7004 Sherwin Williams: Snowbound	COLOR B BM OC-97 BEN MOORE: Ballet White	COLOR C BM OC-18 BEN MOORE: Dove Wing	COLOR D BM HC 168 BEN MOORE: Chelsea Gray	COLOR E BM 2018-40 BEN MOORE: Nacho Cheese

EVACUATION MESSAGES:	
	
COLOR K SW 6922 SHER. WILLIAMS Outrageous Green	COLOR L SW 6880 SHER. WILLIAMS Energetic Orange

NOTE:
When applicable, refer to Benjamin Moore and Sherwin Williams paint guides for accurate colors. Colors shown on this page are for representation only. Samples required for approval.

Typeface Family

Franklin Gothic Book

A B C D E F G H I J
K L M N O P Q R S
T U V W X Y Z
a b c d e f g h i j
k l m n o p q r s
t u v w x y z
0 1 2 3 4 5 6 7 8 9
! @ # \$ % ^
& * () + =

Franklin Gothic Medium

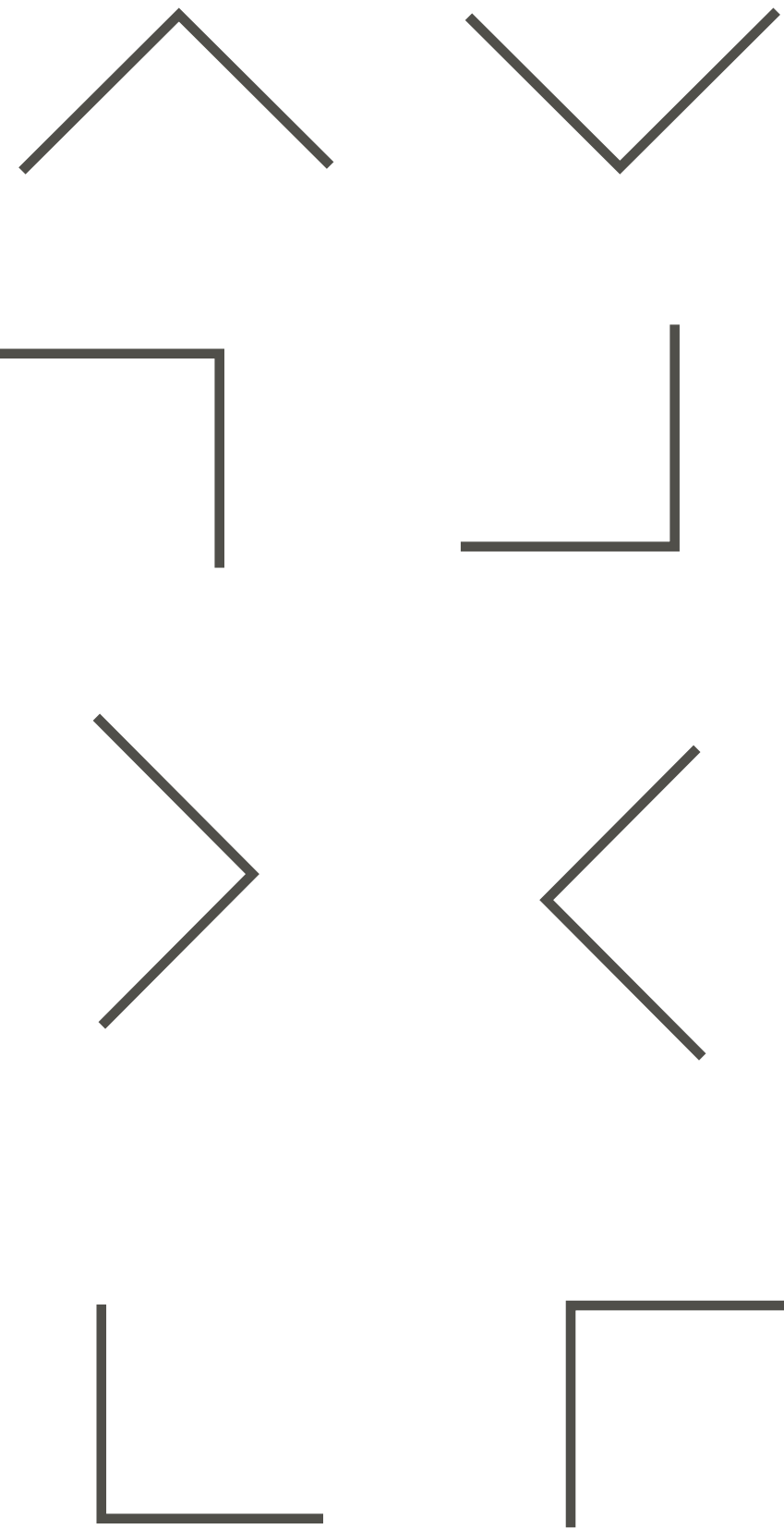
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K L M N O P Q R S
T U V W X Y Z
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Franklin Gothic Demi

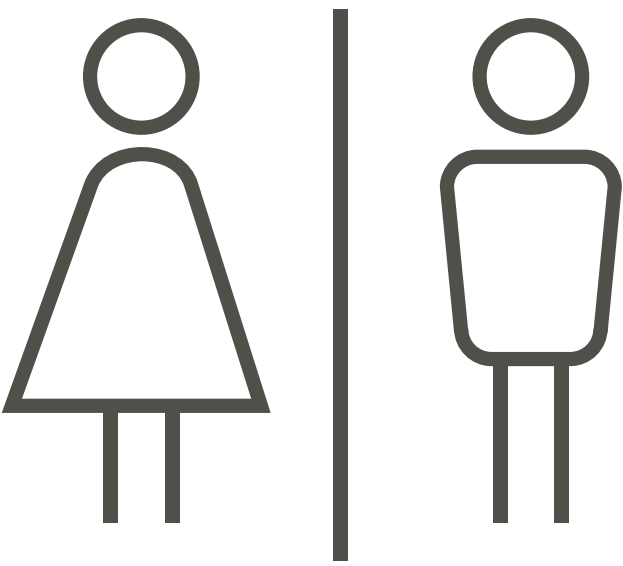
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Glyphs

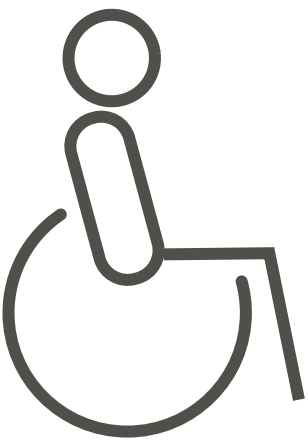
Directional Arrows



Restroom



ADA Accessible



Webster University
Interdisciplinary Science
Building

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CONFORMED SET

01 JUL 2016

ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016
No. Description Date

Drawing Title:

ENVIRONMENTAL GRAPHICS

Project No.: 04561.01 Checked by:

EG100

L1

EG1 111

COLOR KEY:

EG1 = Multi-Level Feature Wall
EG2 = Film On Glass / Semi Private
EG3 = Film On Glass / Private
EG4= Vinyl Gorlok



Sign Locations by Floor:

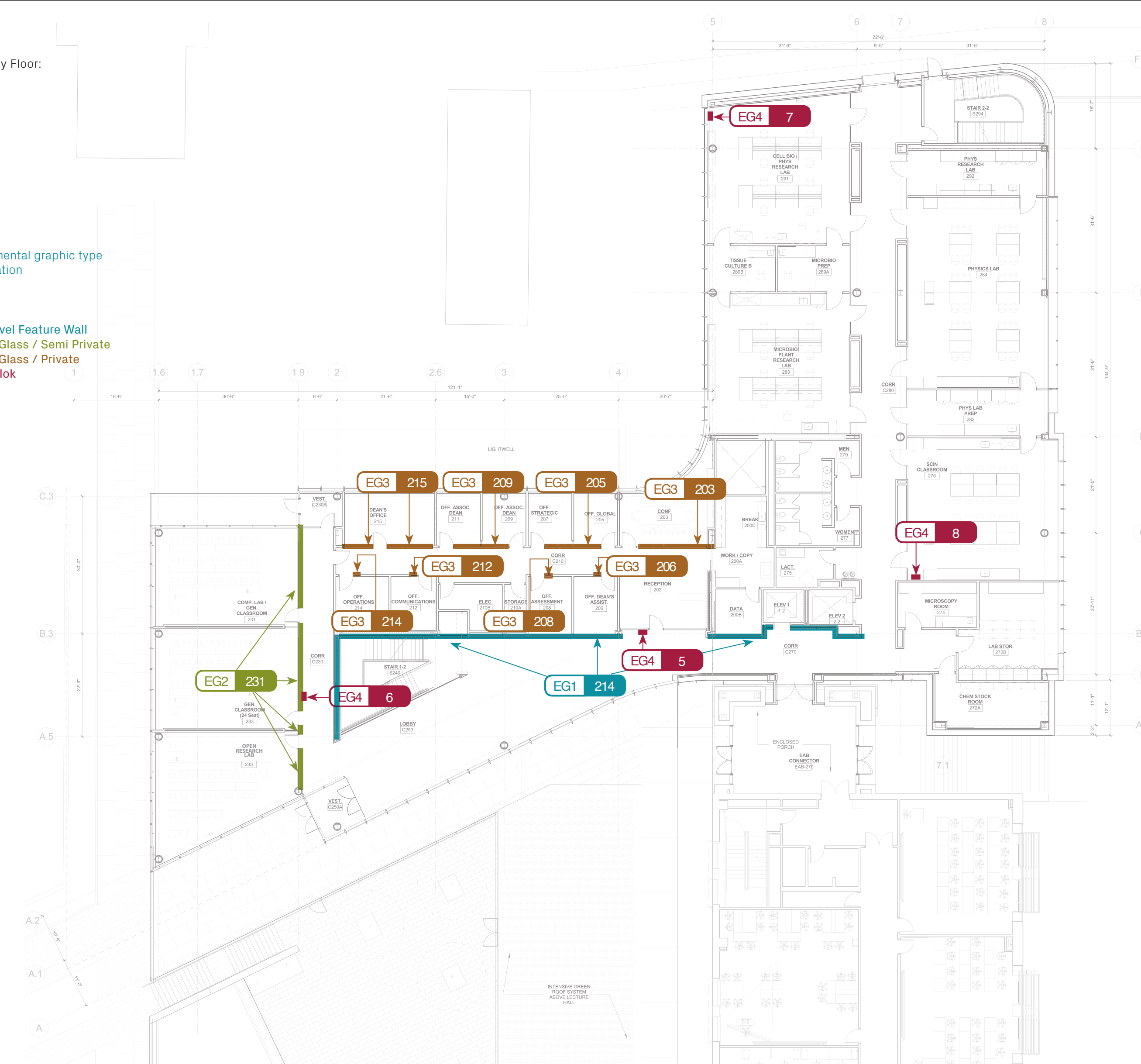
L2

LOCATION KEY:

EG1 214

COLOR KEY:

- EG1 = Multi-Level Feature Wall
- EG2 = Film On Glass / Semi Private
- EG3 = Film On Glass / Private
- EG4= Vinyl Gorlok

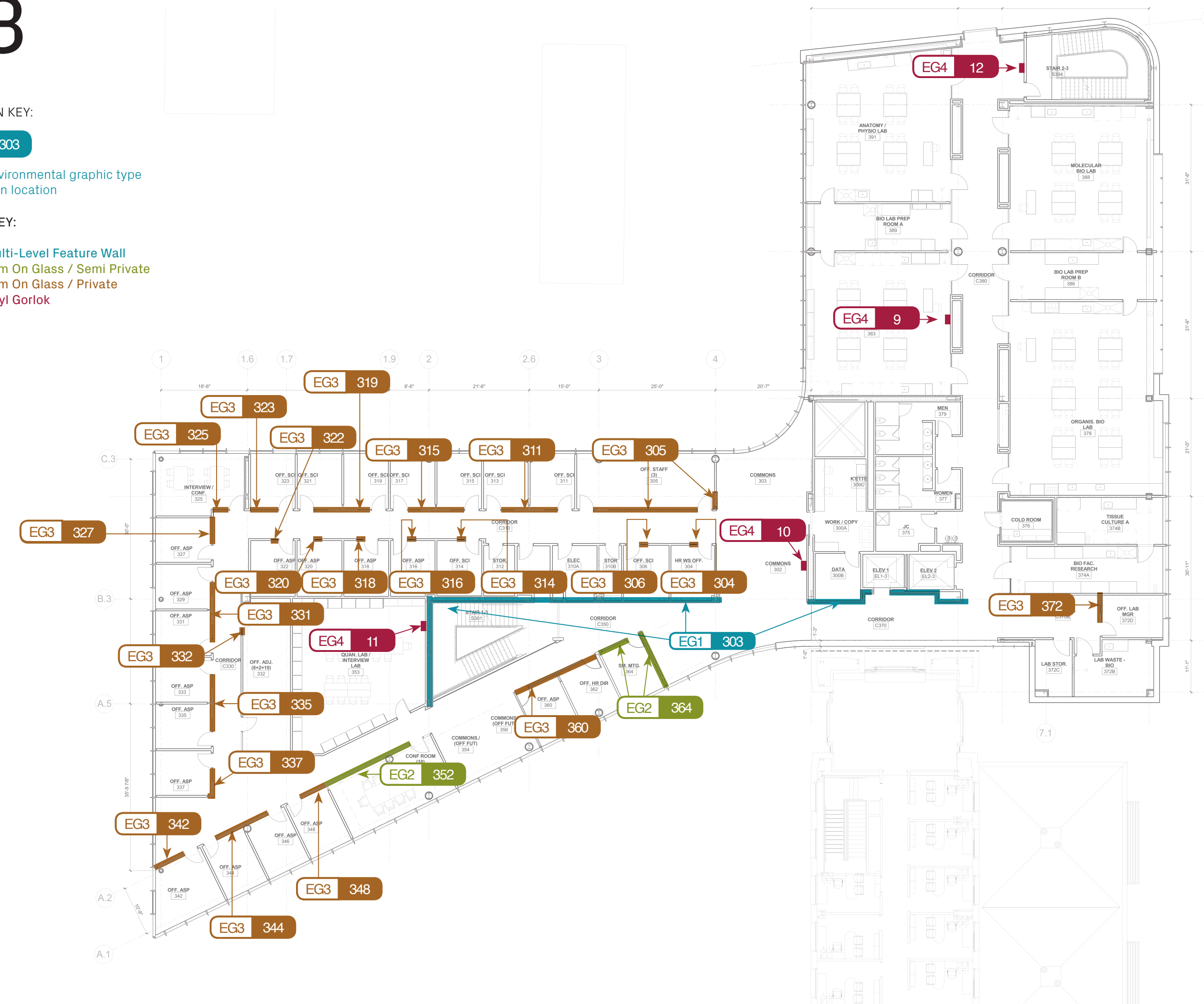


L3

EG1 303

COLOR KEY:

EG1 = Multi-Level Feature Wall
EG2 = Film On Glass / Semi Private
EG3 = Film On Glass / Private
EG4= Vinyl Gorlok



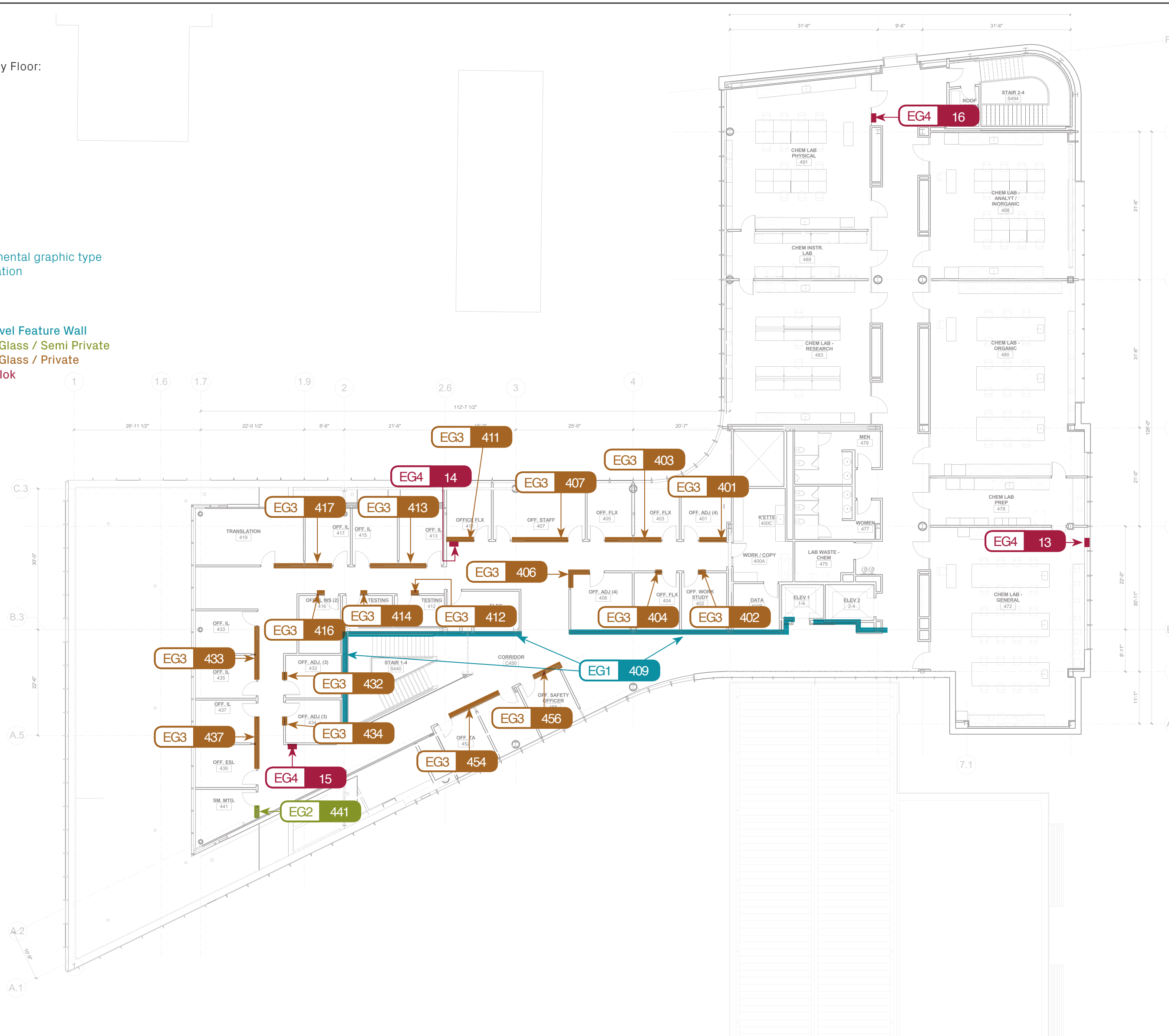
L4

LOCATION KEY:

EG1 = environment
409 = sign location

COLOR KEY:

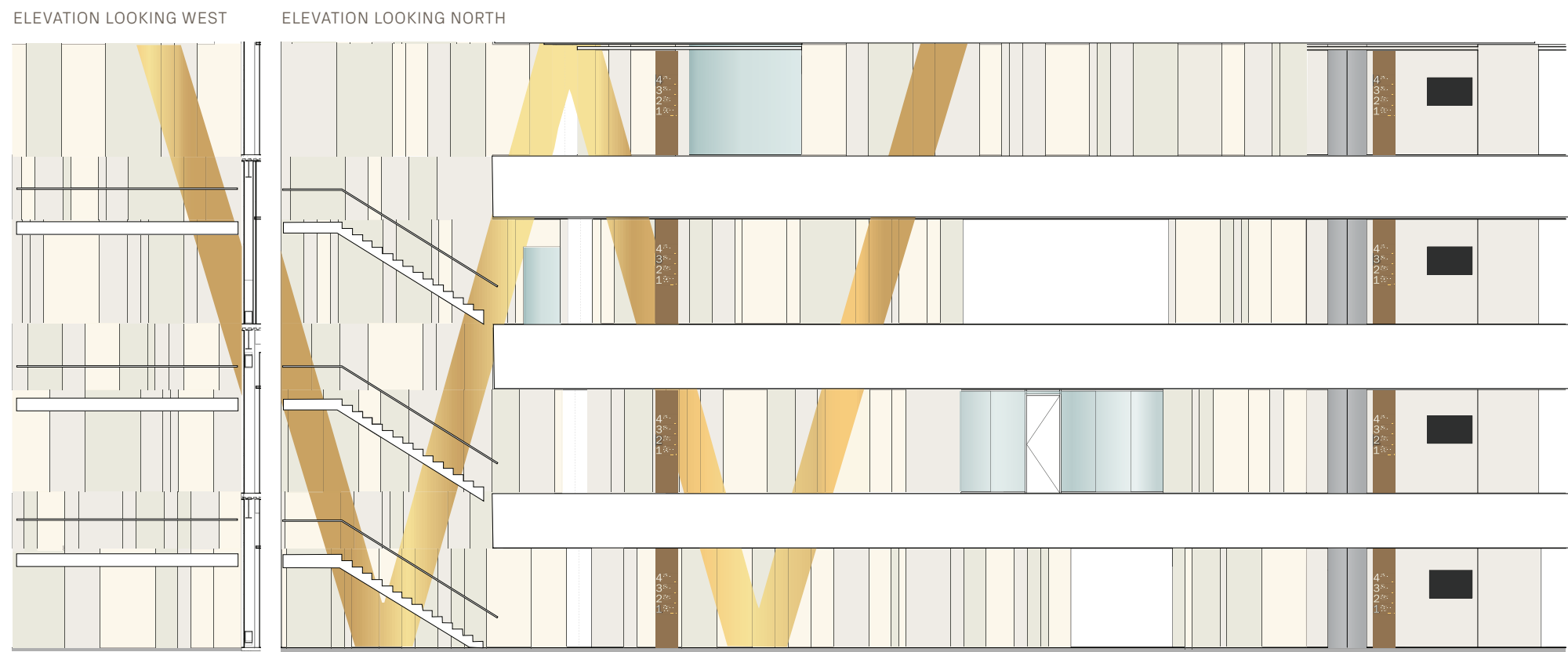
EG1 = Multi-Level Feature Wall
EG2 = Film On Glass / Semi Private
EG3 = Film On Glass / Private
EG4= Vinyl Gorlok



Environmental Graphic Type:

EG1

EG1-Overall
Multi-Level Feature Wall



* DESIGN ASSIST:
FABRICATOR RESPONSIBLE FOR DETERMINING STRUCTURAL INTEGRITY OF INSTALLATION AND OVERALL ENGINEERING THROUGH SHOPS AND THE SAMPLE AND MOCKUP PROCESS. DRAWINGS HERE TO SHOW DESIGN INTENT ONLY AND ARE NOT A REPLACEMENT FOR SHOP DRAWINGS.

* KUHLMANN LEAVITT, INC. TO PROVIDE FINAL TEMPLATE FOR "W" AND DESIGNATIONS PRIOR TO MOCKUP.

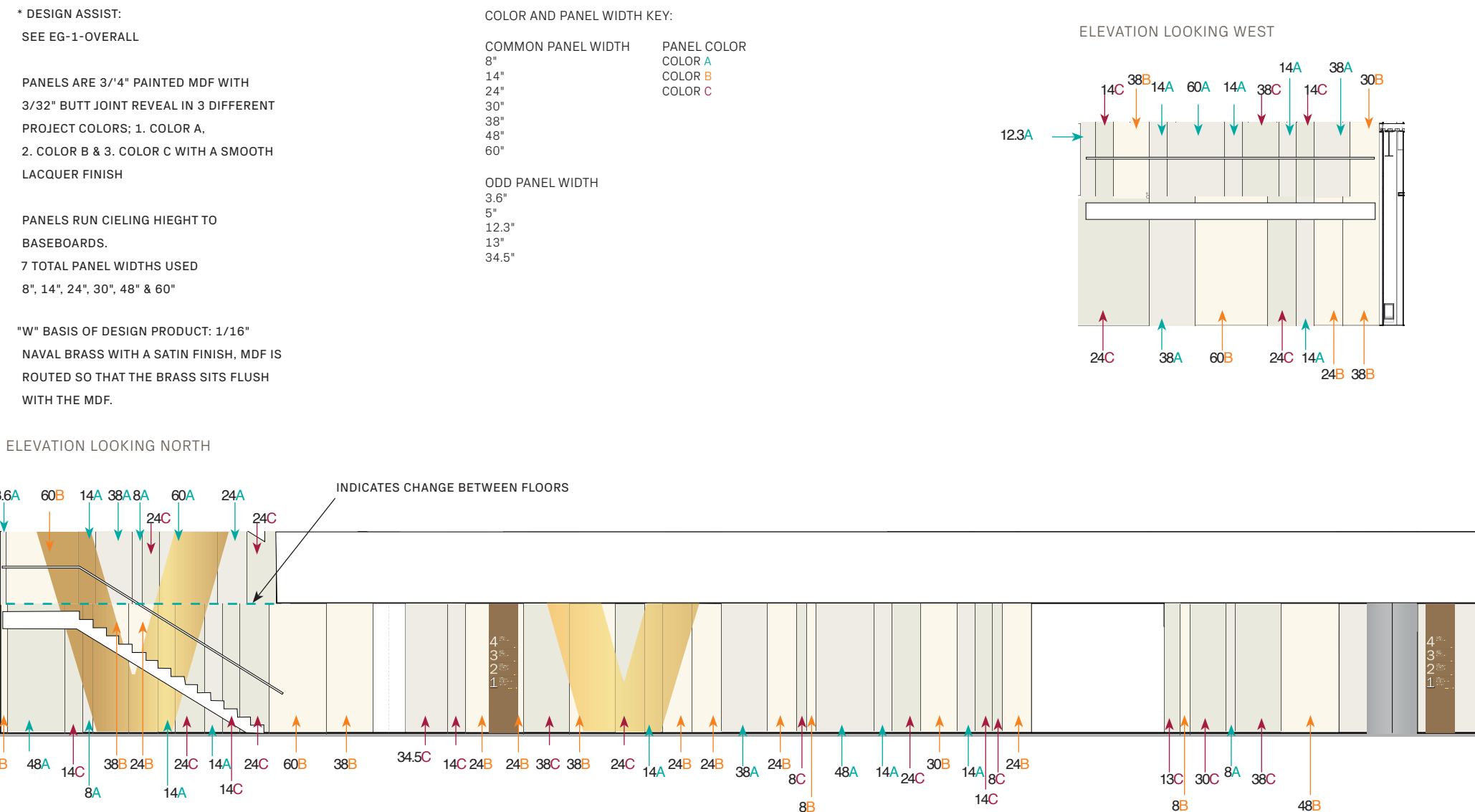
* SEE PROJECT MANUAL SECTION 101400 FOR SAMPLE AND MOCK-UP REQUIREMENTS.

EG1

Environmental Graphic Type:

EG1

EG1-111
Multi-Level Feature Wall

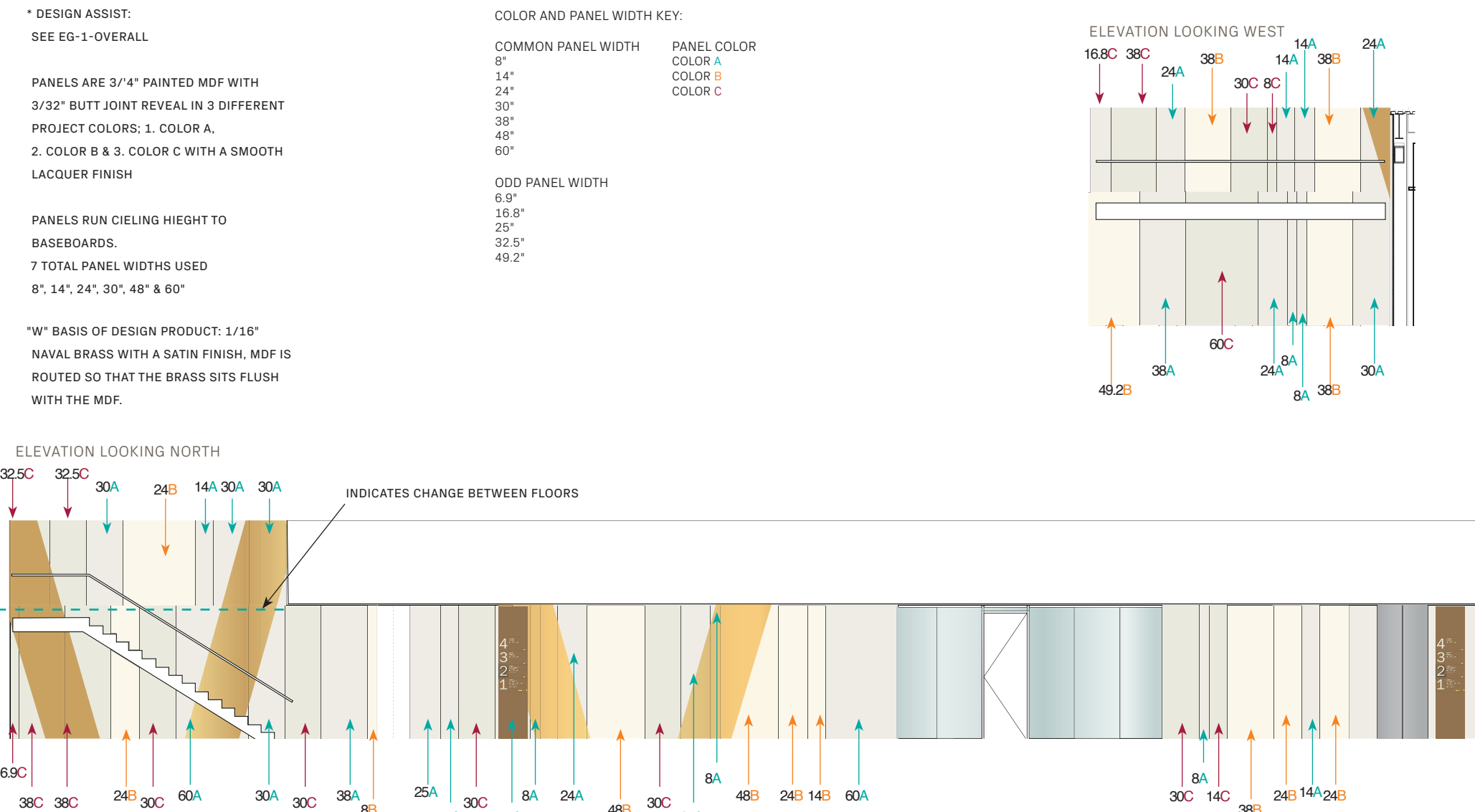


EG1

Environmental Graphic Type:

EG1

EG1-214
Multi-Level Feature Wall

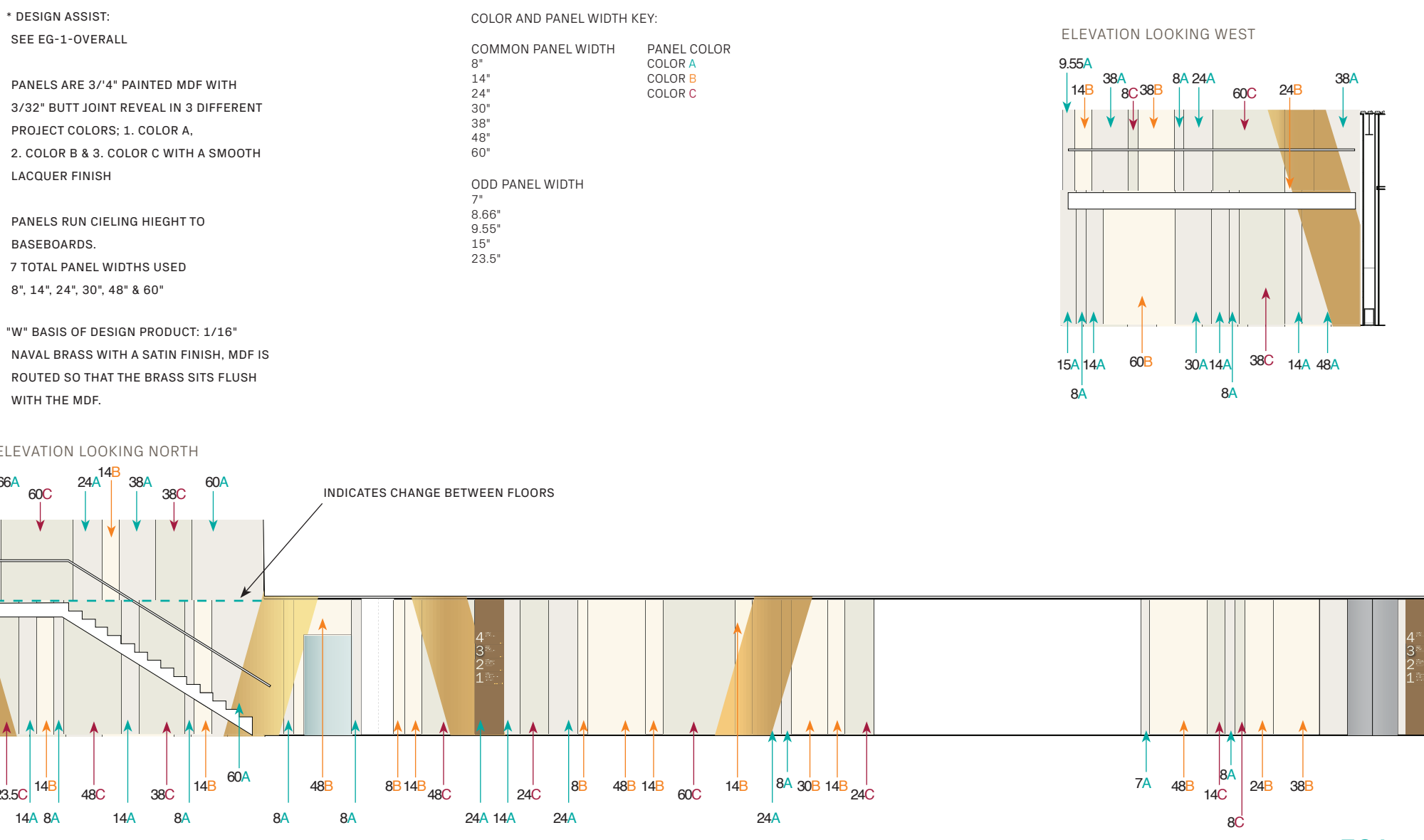


EG1

Environmental Graphic Type:

EG1

EG1-303
Multi-Level Feature Wall

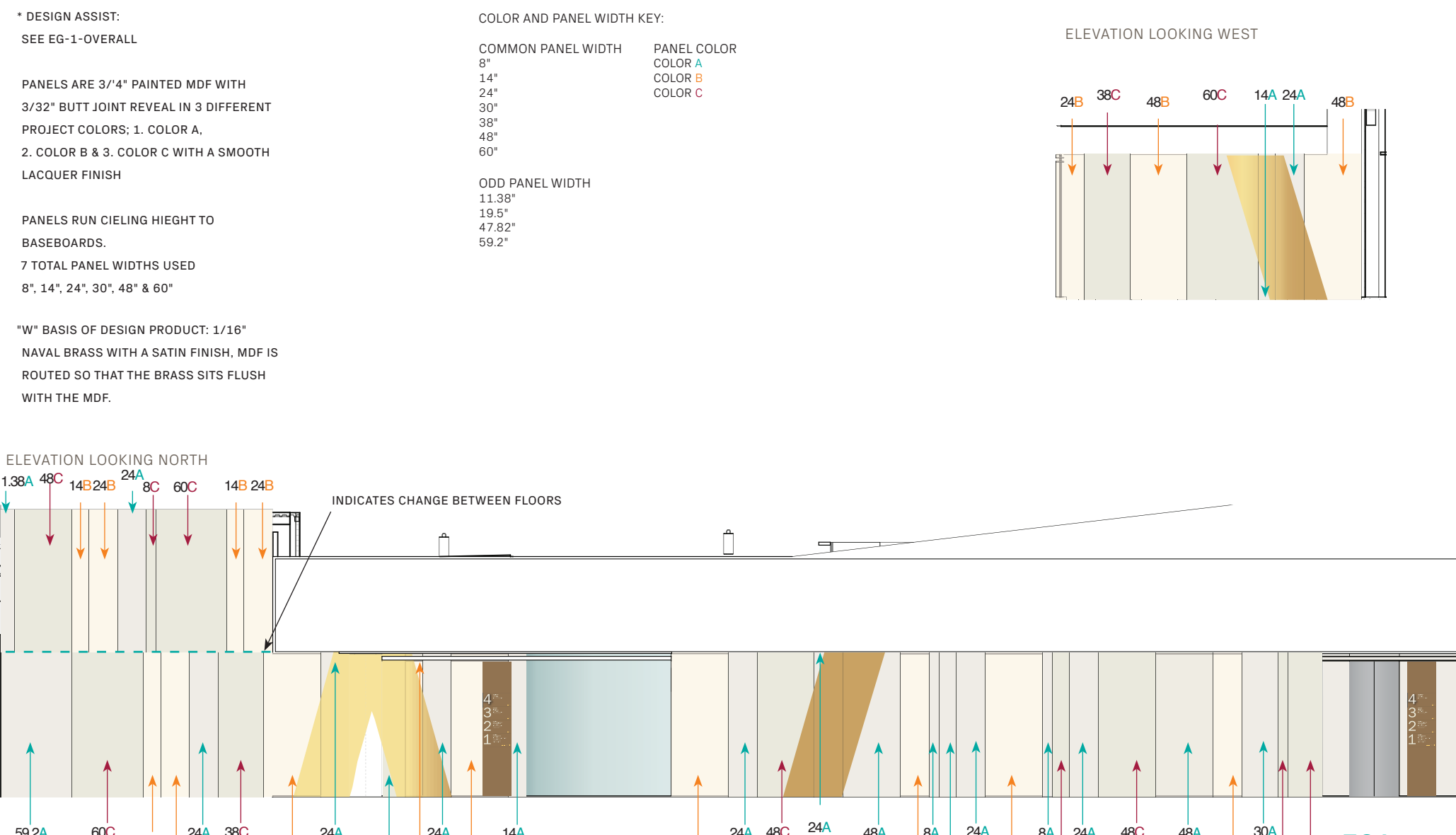


EG1

Environmental Graphic Type:

EG1

EG1-409
Multi-Level Feature Wall



EG1



Webster University
Interdisciplinary Science
Building

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CONFORMED SET

01 JUL 2016

ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016
No. Description Date

Drawing Title:

ENVIRONMENTAL GRAPHICS

Project No.: 04561.01 Checked by:

EG102

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Environmental Graphic Type:

EG2

EG2-131
Film on Glass / Semi Private

*NOTE: IT IS THE VENDORS RESPONSIBILITY TO VERIFY ALL MEASUREMENTS IN THE FIELD BEFORE PROCEEDING WITH LAYOUT AND PRODUCTION OF FINAL ART

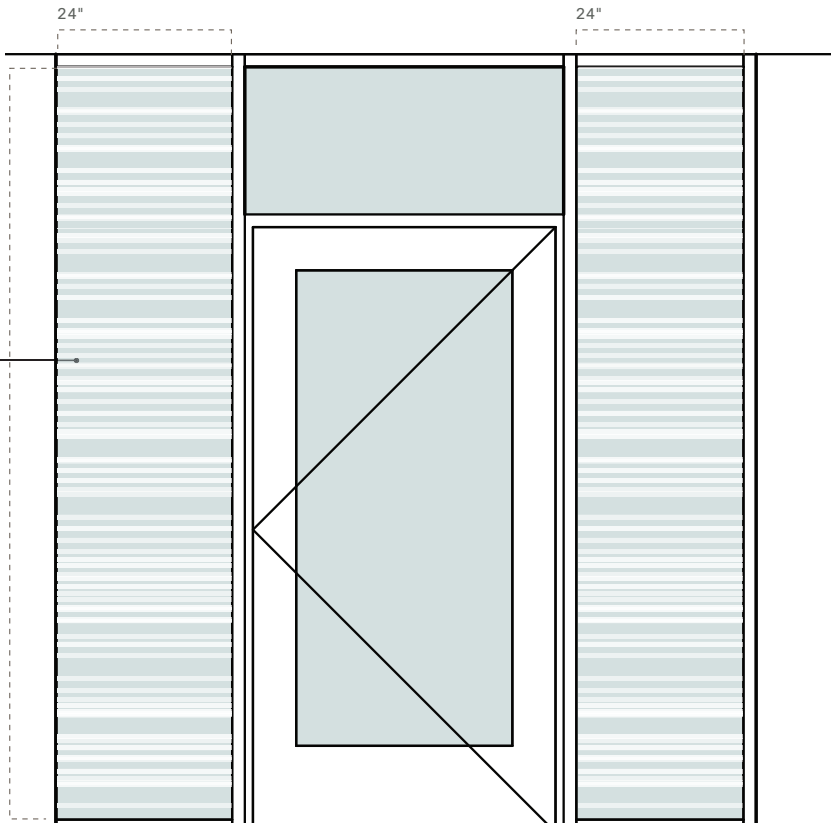
* KLI TO SUPPLY FINAL CUSTOM PATTERN ART AT 100% SCALE TO HEIGHT OF GLAZING. IT WILL BE THE FABRICATORS RESPONSIBILITY TO SET THE WIDTHS FOR ALL GLAZING ACCORDING TO FIELD MEASUREMENTS.

* FINAL COLOR'S WILL BE SELECTED AFTER A FULL SIZE GLAZING PANEL 48"W X 104"H ON-SITE MOCK-UP REVIEW.

* SEE PROJECT MANUAL SECTION 101400 FOR SAMPLE AND MOCK-UP REQUIREMENTS.



TYPICAL SPECIFICATION FOR ALL EG2'S
SOLXX CUSTOM GRAPHICS PRINTED TRANSLUCENT WHITE AT DIFFERENT OPACITIES ON CLEAR, SOLXX POLYESTER FILM WITH UV PROTECTION AND SCRATCH RESISTANT OVER LAMINATE COATING. PATTERNS MUST ALIGN ACROSS FULL WALL OF GLASS WITH LINE ART ALIGNING AT SEAMS.
Custom printed graphics applied to 2nd surface (interior/room side) Full coverage.



*Approx. Dimensions,
NOT TO SCALE

EG2

Environmental Graphic Type:

EG2

EG2-135(a)
Film on Glass / Semi Private

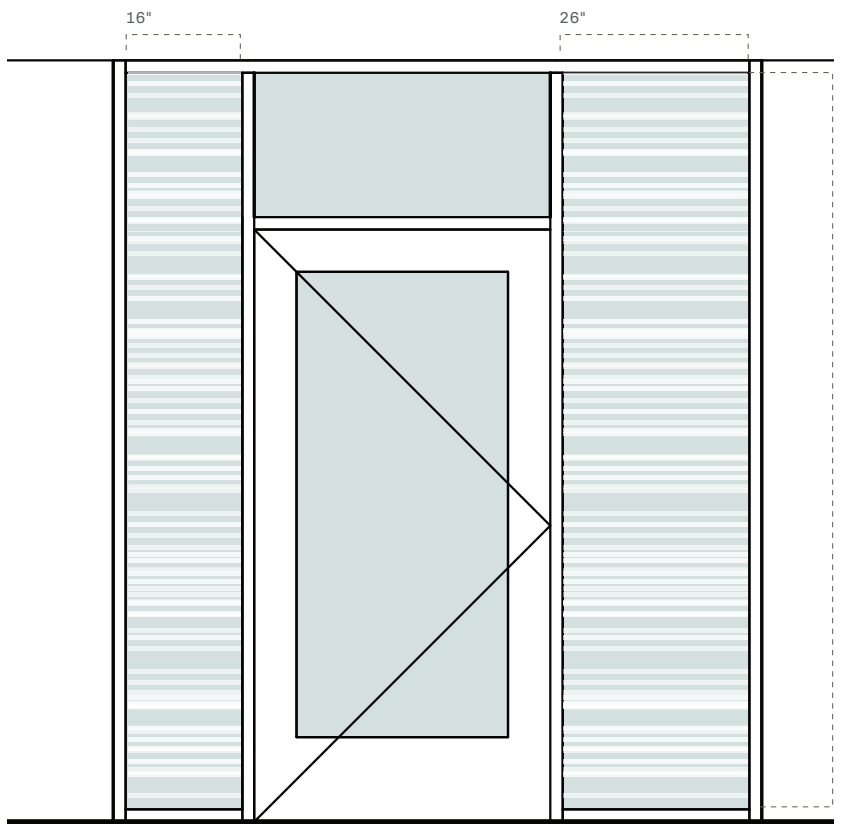
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* SEE PROJECT MANUAL SECTION 101400 FOR SAMPLE AND MOCK-UP REQUIREMENTS.

SEE EG2-131 FOR FILM SPECIFICATIONS



*Approx. Dimensions,
NOT TO SCALE

EG2

Environmental Graphic Type:

EG2

EG2-135(b)
Film on Glass / Semi Private

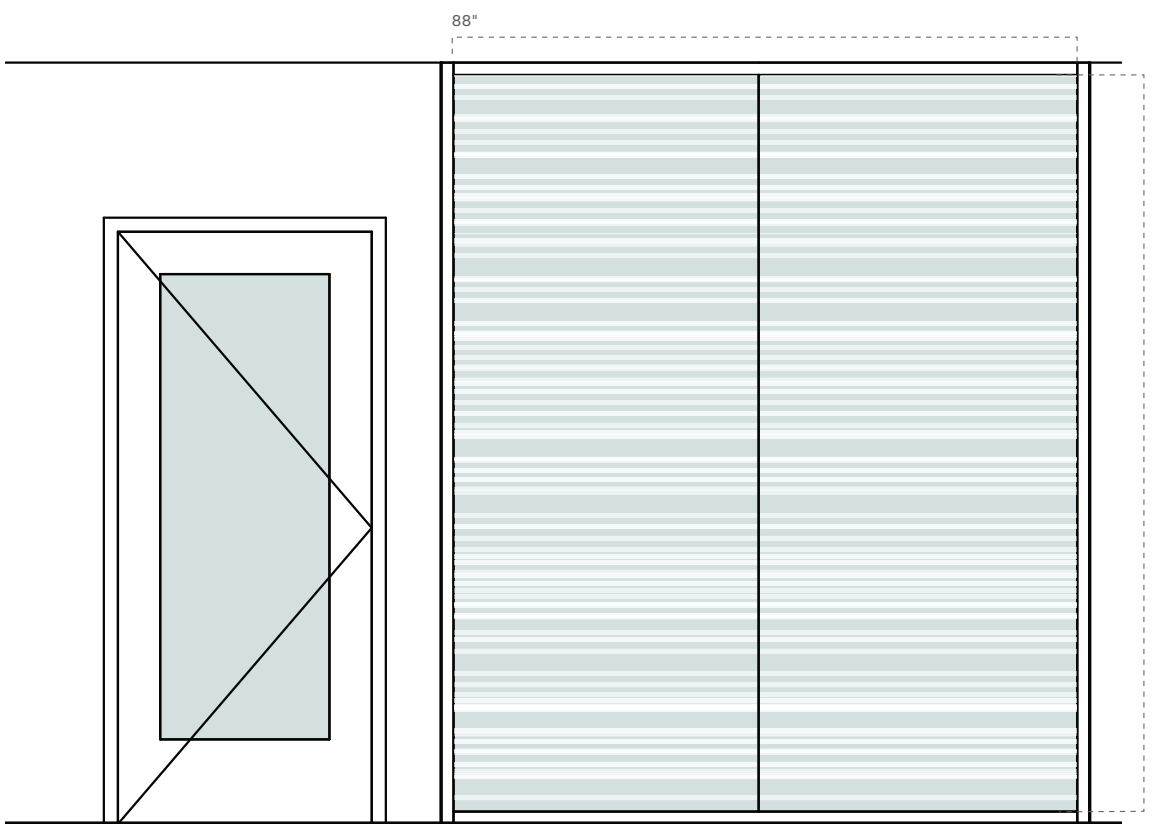
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SEE EG2-131 FOR FILM SPECIFICATIONS



*Approx. Dimensions,
NOT TO SCALE

EG2

EG2

EG2-140
Film on Glass / Semi Private

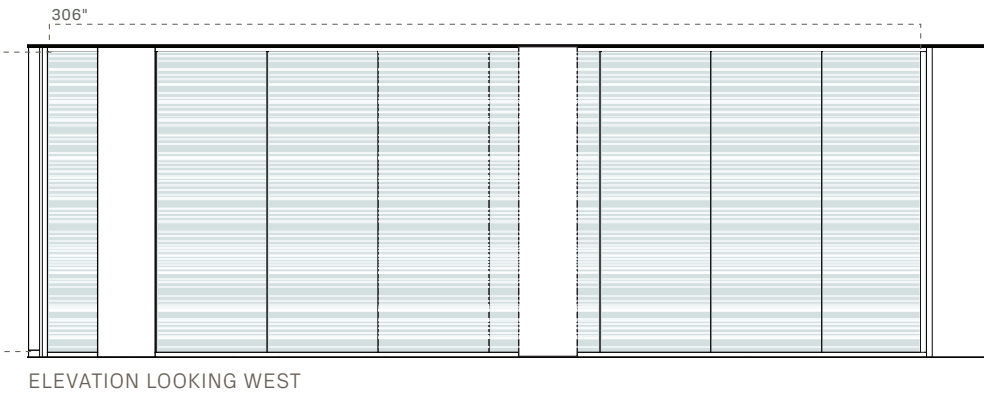
*NOTE: IT IS THE VENDORS RESPONSIBILITY TO VERIFY ALL MEASUREMENTS IN THE FIELD BEFORE PROCEEDING WITH LAYOUT AND PRODUCTION OF FINAL ART

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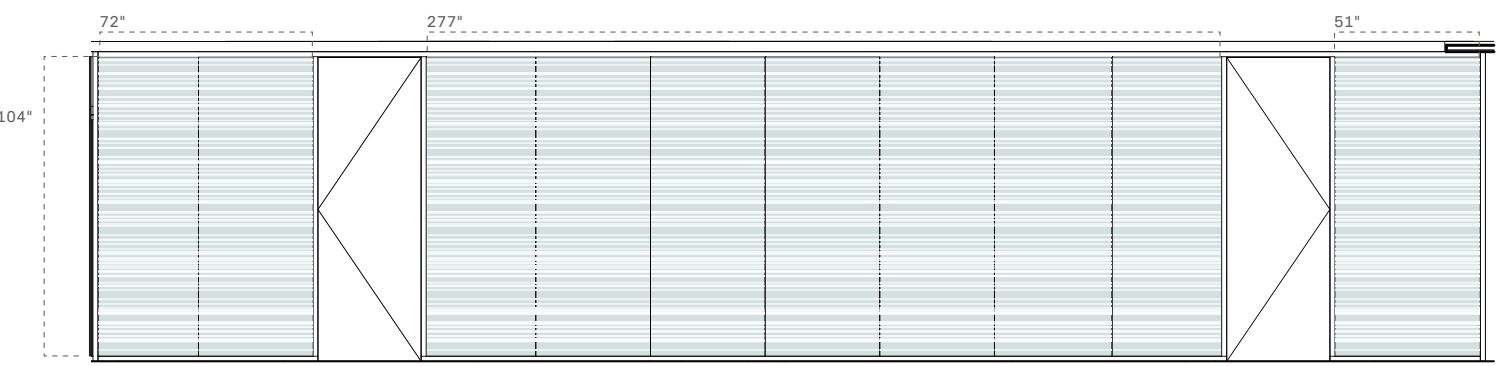
* FINAL COLOR'S WILL BE SELECTED AFTER A FULL SIZE GLAZING PANEL 48"W X 104"H ON-SITE MOCK-UP REVIEW.

* SEE PROJECT MANUAL SECTION 101400 FOR SAMPLE AND MOCK-UP REQUIREMENTS.

SEE EG2-131 FOR FILM SPECIFICATIONS



ELEVATION LOOKING WEST



ELEVATION LOOKING SOUTH

*Approx. Dimensions,
NOT TO SCALE

EG2

EG2

EG2-156
Film on Glass / Semi Private

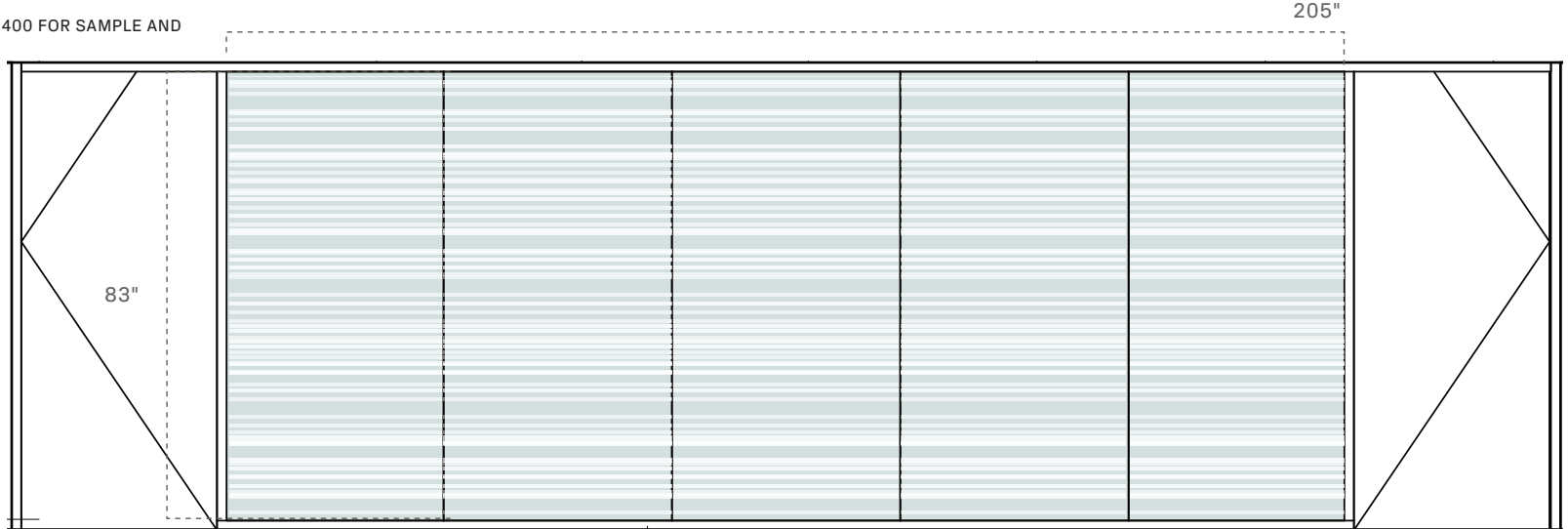
*NOTE: IT IS THE VENDORS RESPONSIBILITY TO VERIFY ALL MEASUREMENTS IN THE FIELD BEFORE PROCEEDING WITH LAYOUT AND PRODUCTION OF FINAL ART

* KLI TO SUPPLY FINAL CUSTOM PATTERN ART AT 100% SCALE TO HEIGHT OF GLAZING. IT WILL BE THE FABRICATORS RESPONSIBILITY TO SET THE WIDTHS FOR ALL GLAZING ACCORDING TO FIELD MEASUREMENTS.

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* SEE PROJECT MANUAL SECTION 101400 FOR SAMPLE AND MOCK-UP REQUIREMENTS.

SEE EG2-131 FOR FILM SPECIFICATIONS



*Approx. Dimensions,
NOT TO SCALE

EG2

EG2

EG2-174
Film on Glass / Semi Private

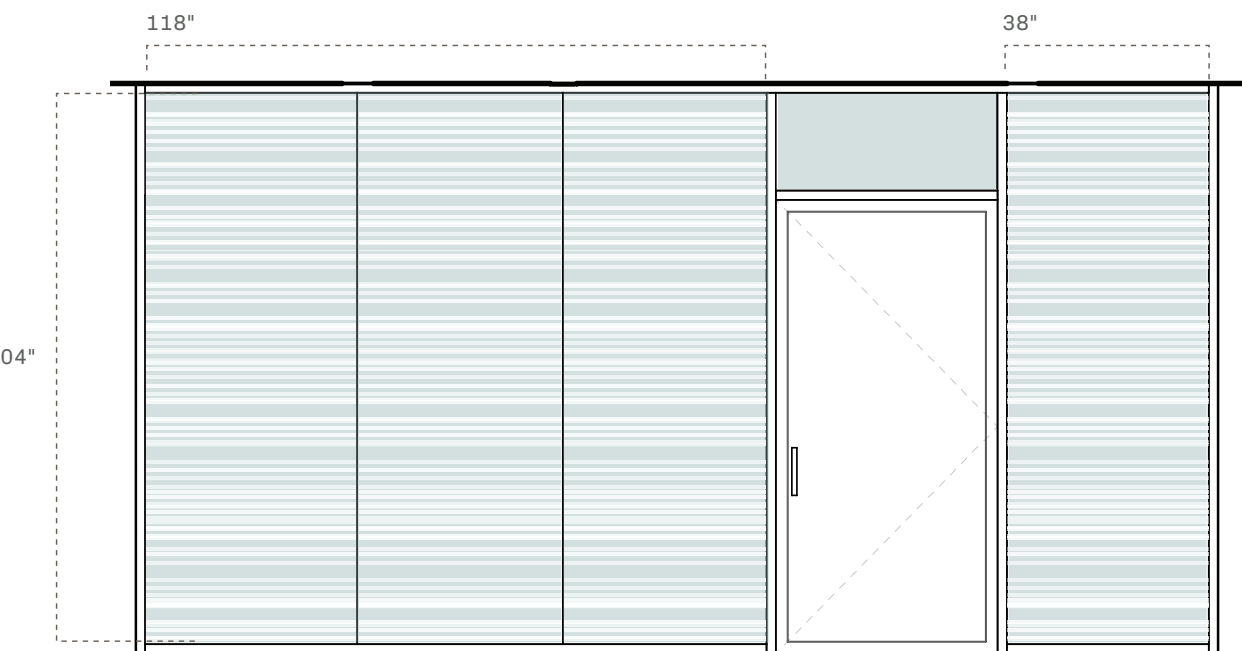
*NOTE: IT IS THE VENDORS RESPONSIBILITY TO VERIFY ALL MEASUREMENTS IN THE FIELD BEFORE PROCEEDING WITH LAYOUT AND PRODUCTION OF FINAL ART

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* SEE PROJECT MANUAL SECTION 101400 FOR SAMPLE AND MOCK-UP REQUIREMENTS.

SEE EG2-131 FOR FILM SPECIFICATIONS



*Approx. Dimensions,
NOT TO SCALE

Environmental Graphic Type:

EG2

EG2-231
Film on Glass / Semi Private

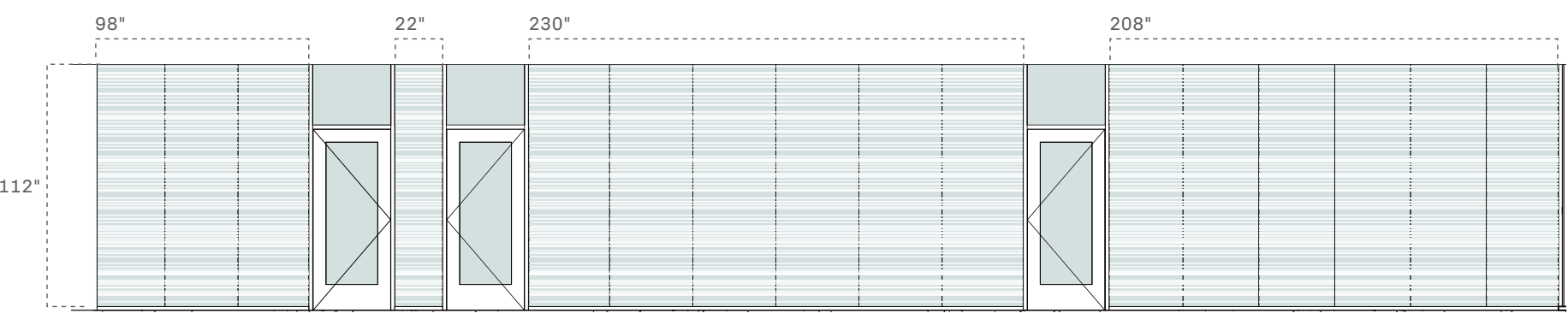
*NOTE: IT IS THE VENDORS RESPONSIBILITY TO VERIFY ALL MEASUREMENTS IN THE FIELD BEFORE PROCEEDING WITH LAYOUT AND PRODUCTION OF FINAL ART

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* SEE PROJECT MANUAL SECTION 101400 FOR SAMPLE AND MOCK-UP REQUIREMENTS.

SEE EG2-131 FOR FILM SPECIFICATIONS



*Approx. Dimensions,
NOT TO SCALE

EG2

Environmental Graphic Type:

EG2

EG2-441
Film on Glass / Semi Private

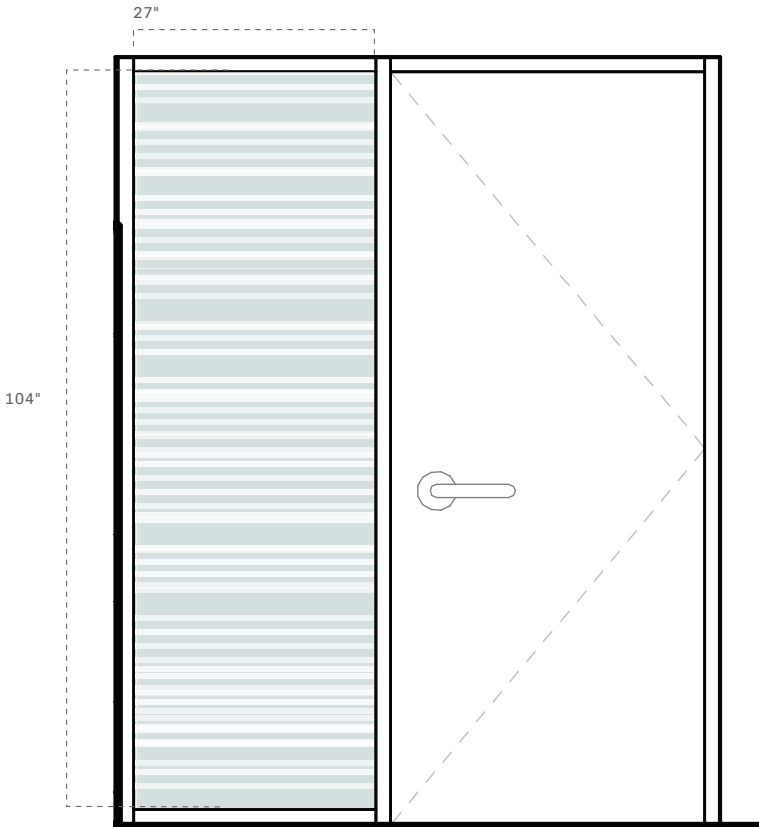
*NOTE: IT IS THE VENDORS RESPONSIBILITY TO VERIFY ALL MEASUREMENTS IN THE FIELD BEFORE PROCEEDING WITH LAYOUT AND PRODUCTION OF FINAL ART

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SEE EG2-131 FOR FILM SPECIFICATIONS



*Approx. Dimensions,
NOT TO SCALE

EG2

Environmental Graphic Type:

EG2

EG2-352
Film on Glass / Semi Private

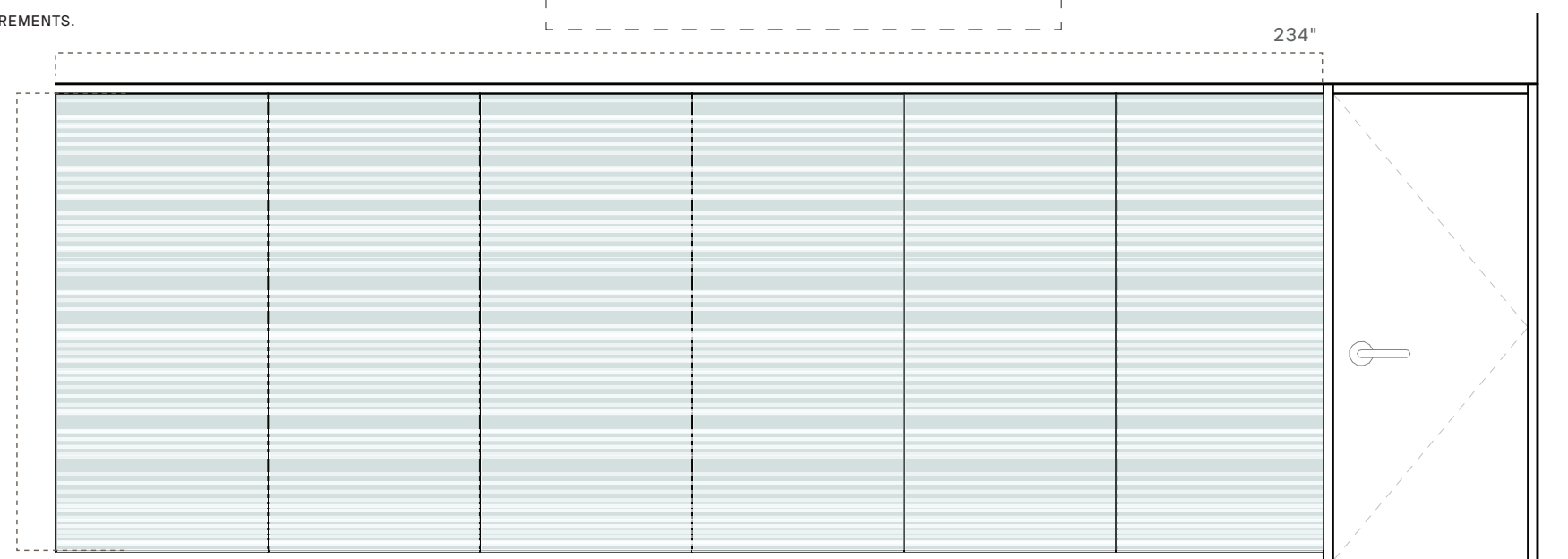
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SEE EG2-131 FOR FILM SPECIFICATIONS



*Approx. Dimensions,
NOT TO SCALE

Environmental Graphic Type:

EG2

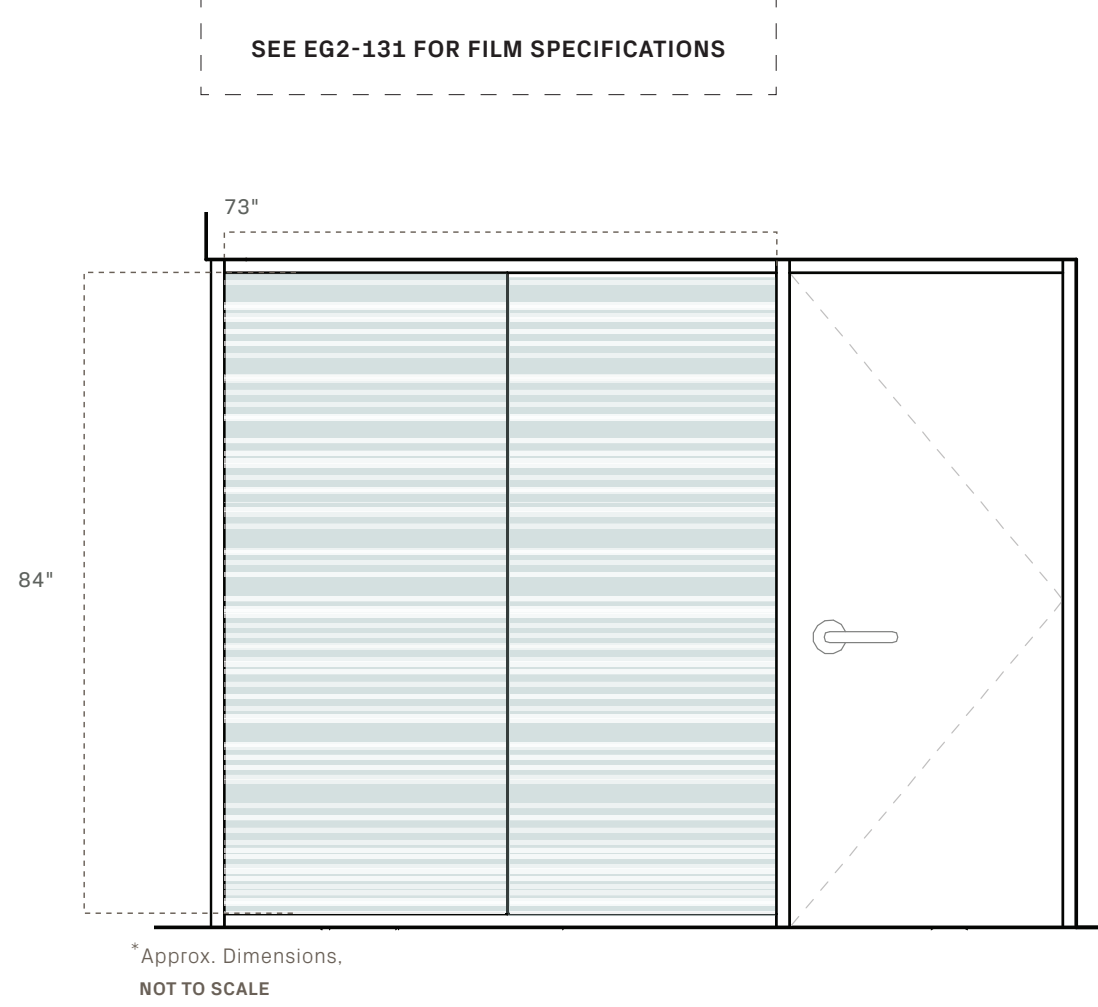
EG2-364
Film on Glass / Semi Private

*NOTE: IT IS THE VENDORS RESPONSIBILITY TO VERIFY ALL MEASUREMENTS IN THE FIELD BEFORE PROCEEDING WITH LAYOUT AND PRODUCTION OF FINAL ART

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*Approx. Dimensions.
NOT TO SCALE

Environmental Graphic Type:

EG3

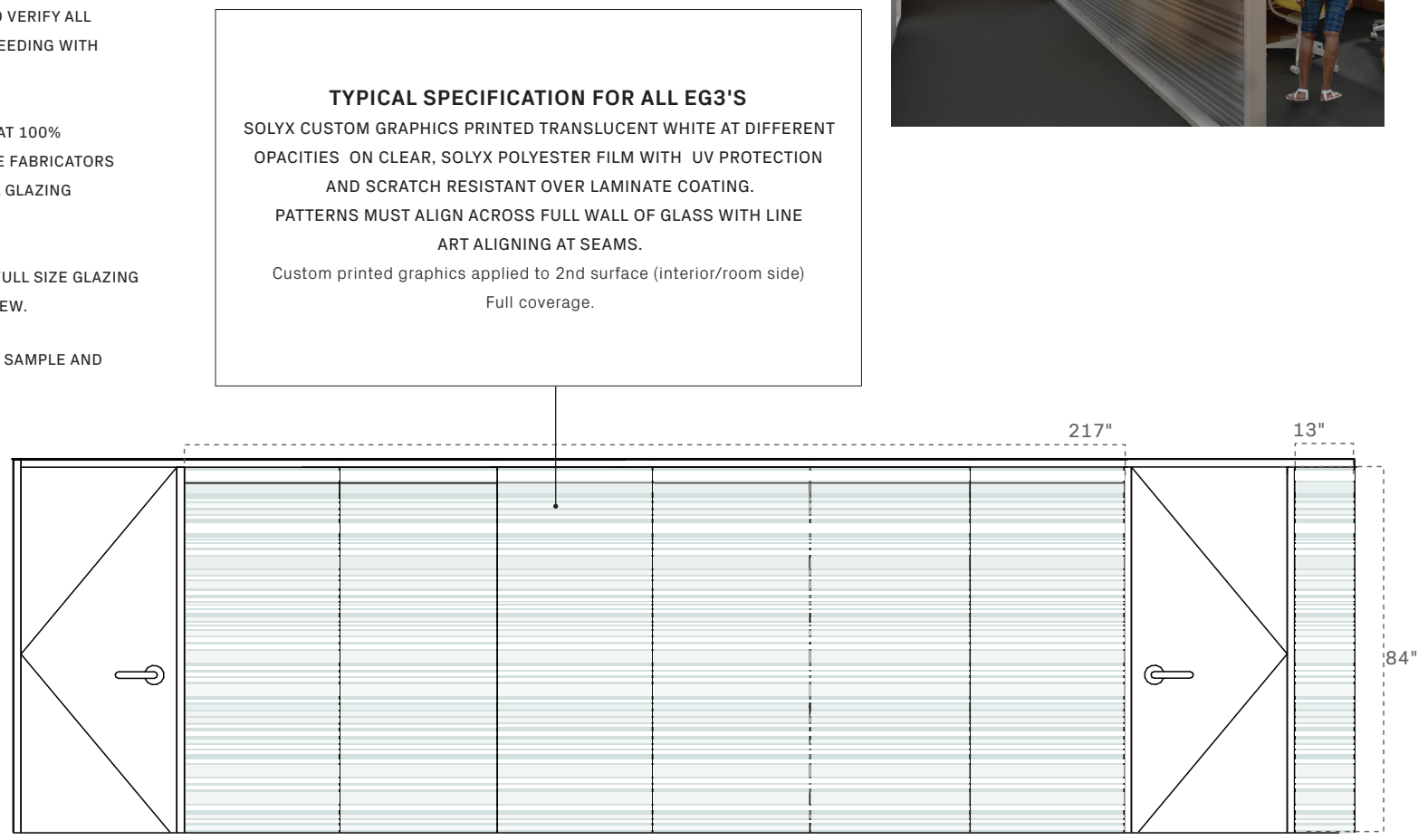
EG3-101
Film on Glass/Private

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* SEE PROJECT MANUAL SECTION 101400 FOR SAMPLE AND MOCK-UP REQUIREMENTS.



*Approx. Dimensions.
NOT TO SCALE

EG3

Environmental Graphic Type:

EG3

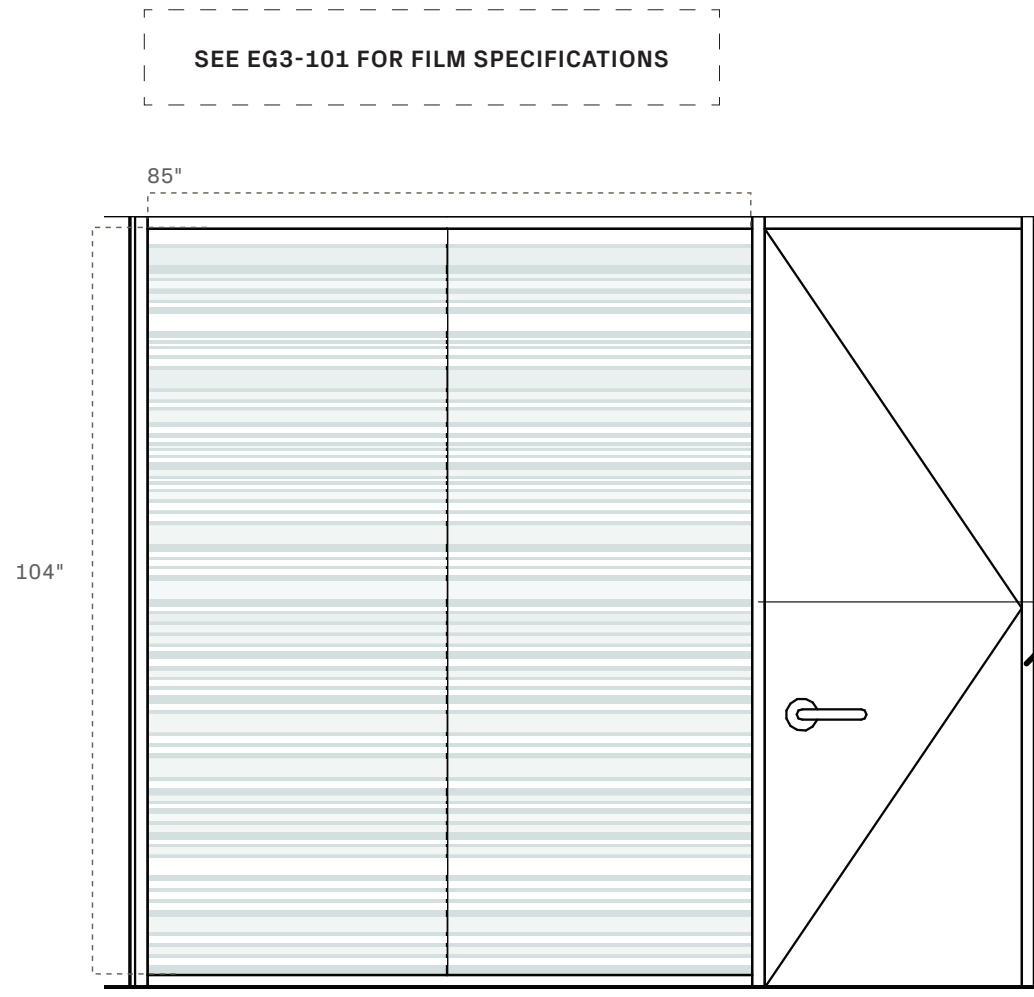
EG3-144
Film on Glass/Private

*NOTE: IT IS THE VENDORS RESPONSIBILITY TO VERIFY ALL MEASUREMENTS IN THE FIELD BEFORE PROCEEDING WITH LAYOUT AND PRODUCTION OF FINAL ART

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* SEE PROJECT MANUAL SECTION 101400 FOR SAMPLE AND MOCK-UP REQUIREMENTS.



*Approx. Dimensions.
NOT TO SCALE

EG3

EG3

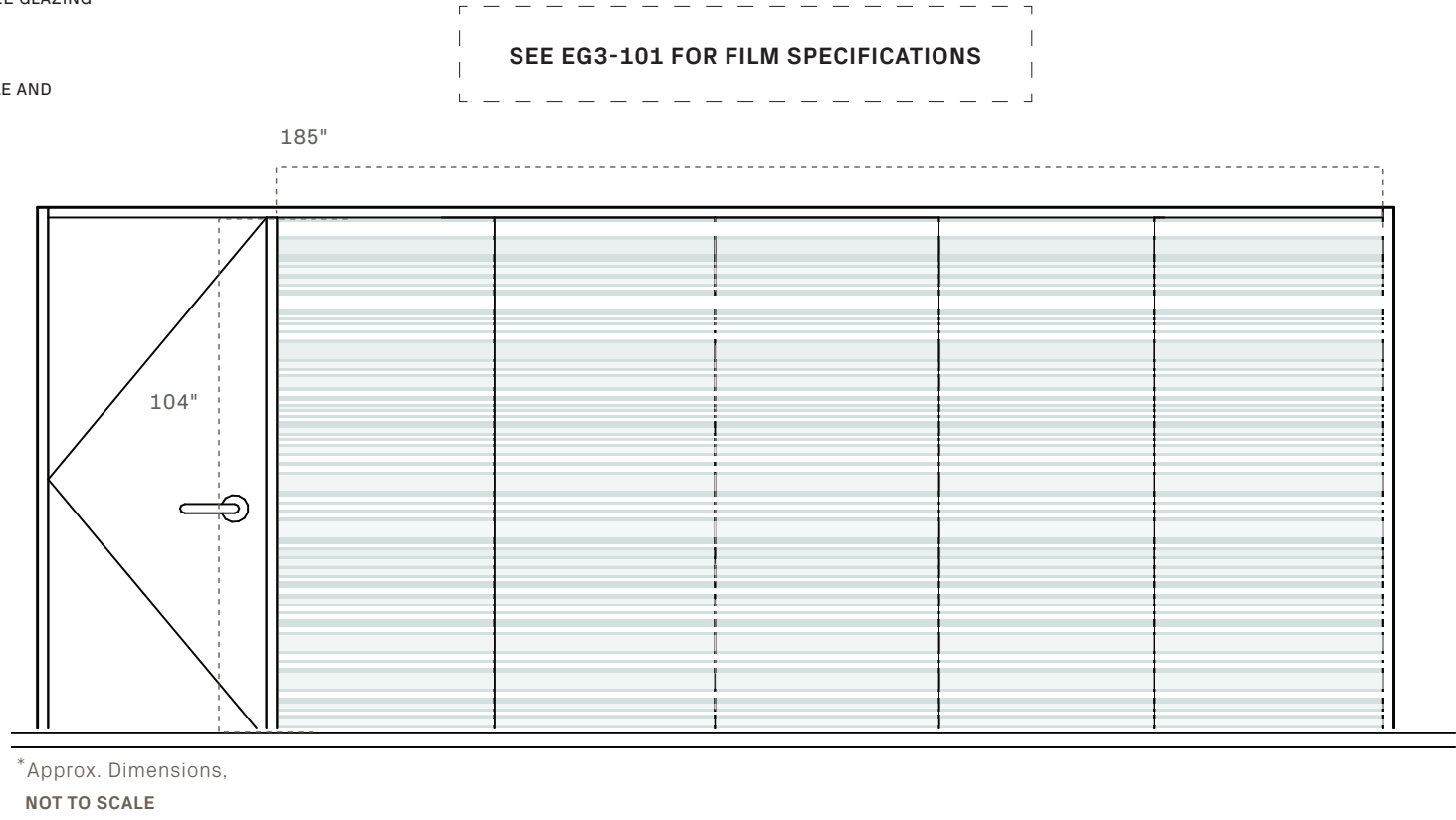
EG3-203
Film on Glass/Private

*NOTE: IT IS THE VENDORS RESPONSIBILITY TO VERIFY ALL MEASUREMENTS IN THE FIELD BEFORE PROCEEDING WITH LAYOUT AND PRODUCTION OF FINAL ART

* KLI TO SUPPLY FINAL CUSTOM PATTERN ART AT 100% SCALE TO HEIGHT OF GLAZING. IT WILL BE THE FABRICATORS RESPONSIBILITY TO SET THE WIDTHS FOR ALL GLAZING ACCORDING TO FIELD MEASUREMENTS.

* FINAL COLOR'S WILL BE SELECTED AFTER A FULL SIZE GLAZING PANEL 48"W X 104"H ON-SITE MOCK-UP REVIEW.

* SEE PROJECT MANUAL SECTION 101400 FOR SAMPLE AND MOCK-UP REQUIREMENTS.



*Approx. Dimensions.
NOT TO SCALE

EG3

EG3

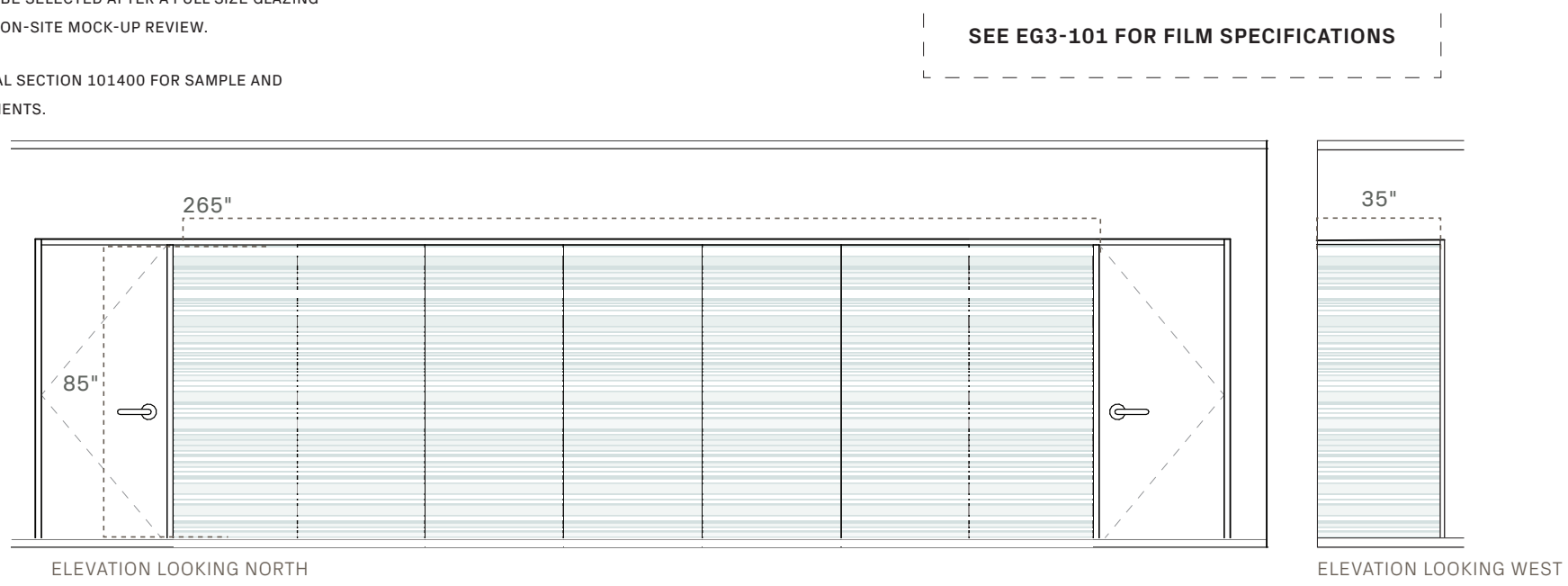
EG3-305
Film on Glass/Private

*NOTE: IT IS THE VENDORS RESPONSIBILITY TO VERIFY ALL MEASUREMENTS IN THE FIELD BEFORE PROCEEDING WITH LAYOUT AND PRODUCTION OF FINAL ART

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EG3

EG3

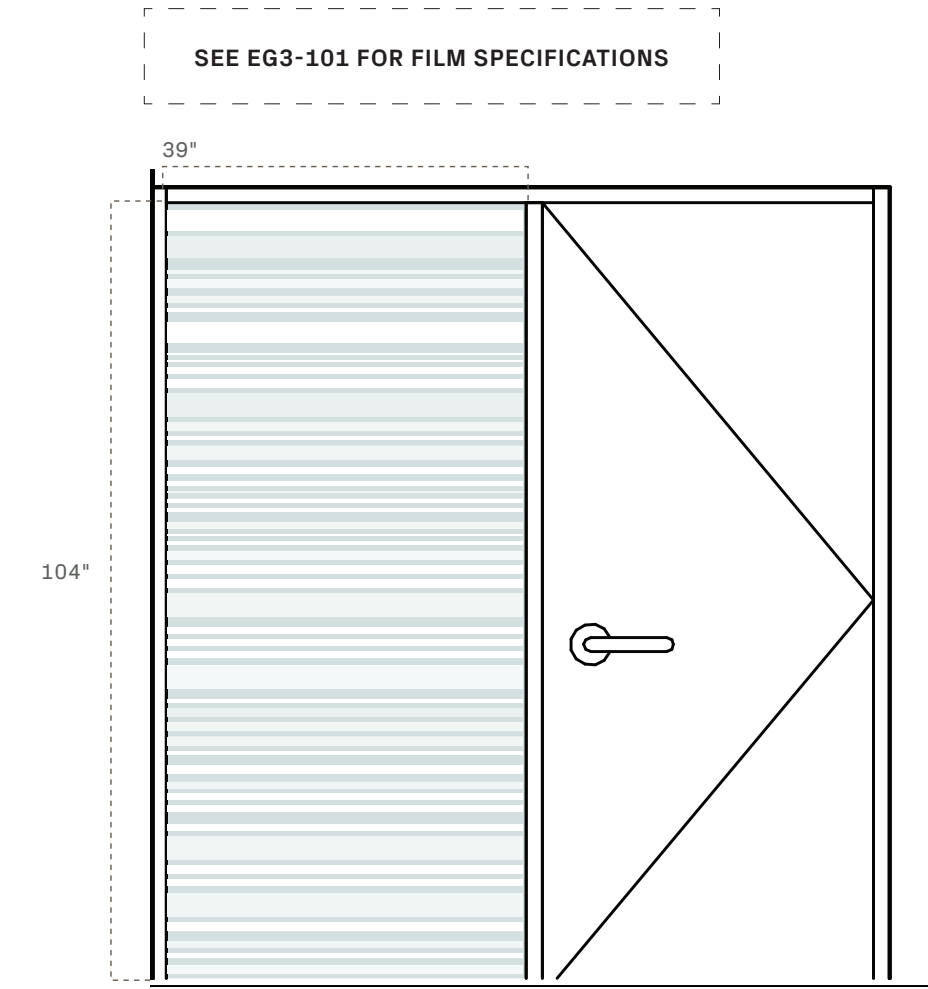
EG3-325
Film on Glass/Private

*NOTE: IT IS THE VENDORS RESPONSIBILITY TO VERIFY ALL MEASUREMENTS IN THE FIELD BEFORE PROCEEDING WITH LAYOUT AND PRODUCTION OF FINAL ART

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*Approx. Dimensions.
NOT TO SCALE

EG3

EG3

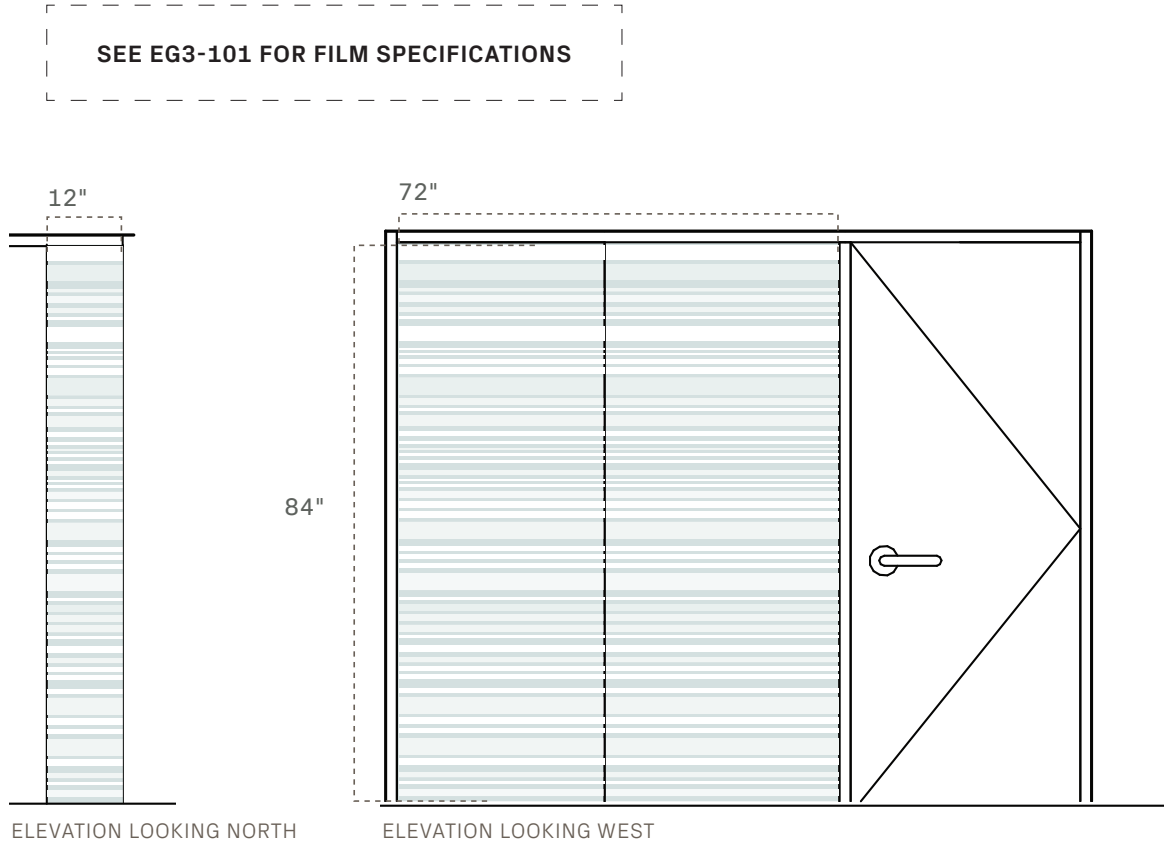
EG3-337
Film on Glass/Private

*NOTE: IT IS THE VENDORS RESPONSIBILITY TO VERIFY ALL MEASUREMENTS IN THE FIELD BEFORE PROCEEDING WITH LAYOUT AND PRODUCTION OF FINAL ART

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* SEE PROJECT MANUAL SECTION 101400 FOR SAMPLE AND MOCK-UP REQUIREMENTS.



EG3

EG3

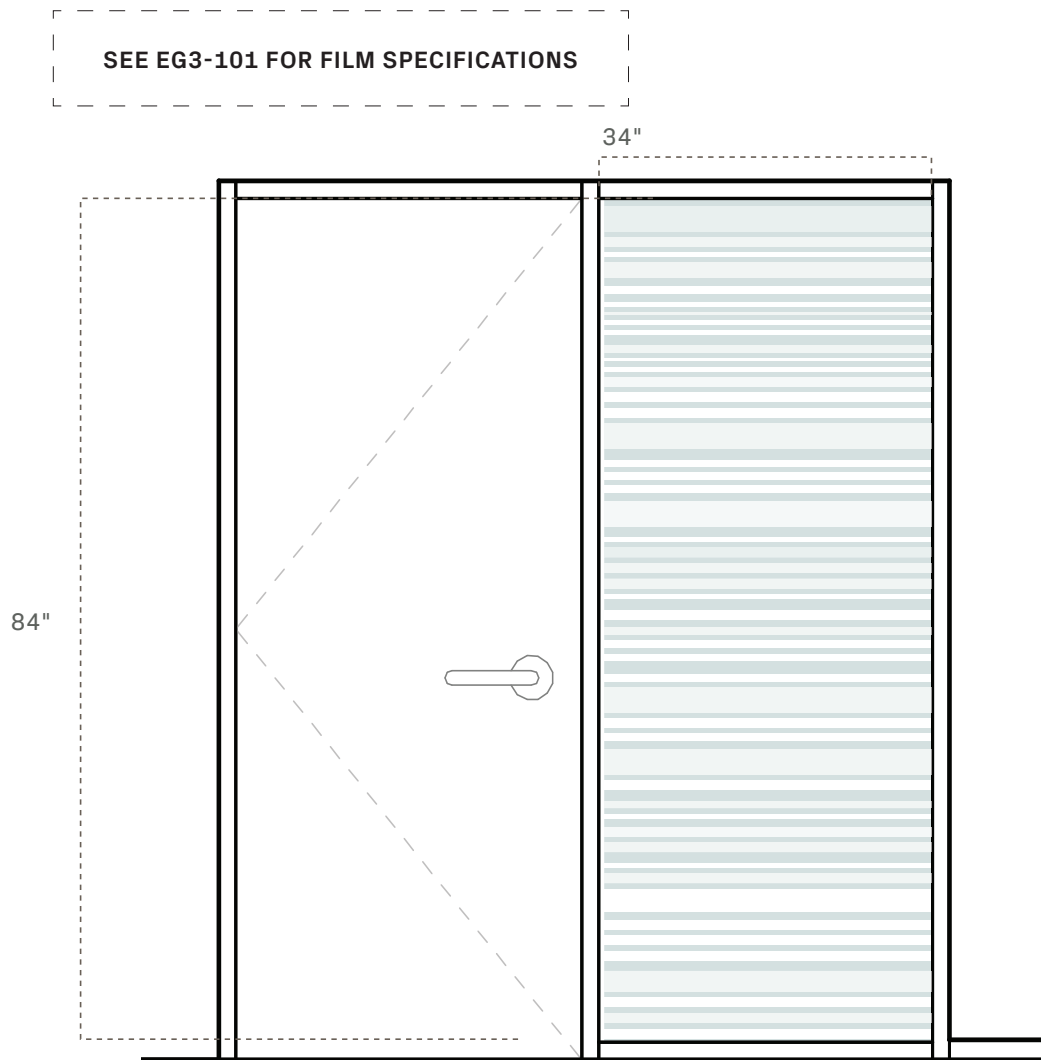
EG3-342
Film on Glass/Private

*NOTE: IT IS THE VENDORS RESPONSIBILITY TO VERIFY ALL MEASUREMENTS IN THE FIELD BEFORE PROCEEDING WITH LAYOUT AND PRODUCTION OF FINAL ART

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* SEE PROJECT MANUAL SECTION 101400 FOR SAMPLE AND MOCK-UP REQUIREMENTS.



EG3

EG3

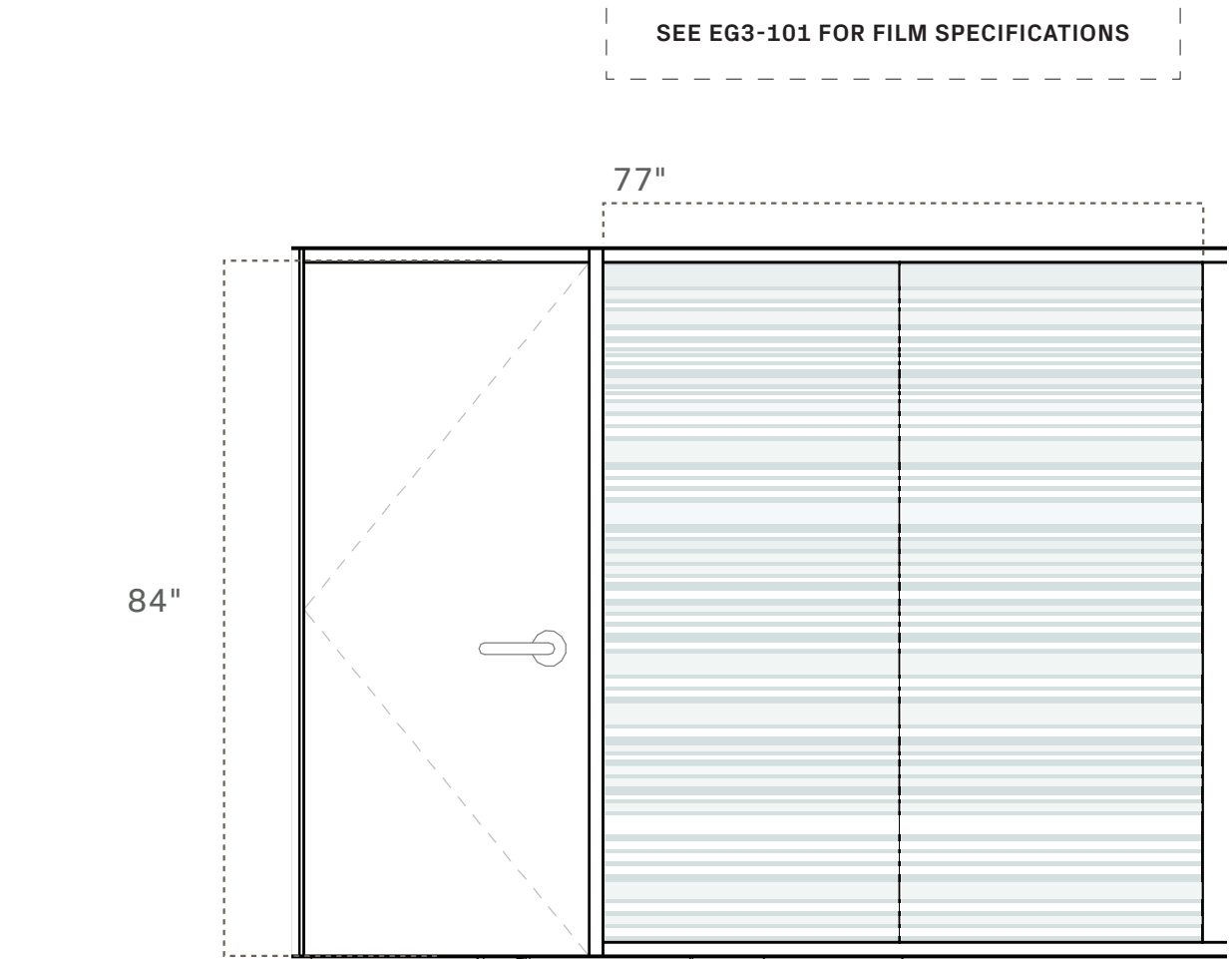
EG3-348
Film on Glass/Private

*NOTE: IT IS THE VENDORS RESPONSIBILITY TO VERIFY ALL MEASUREMENTS IN THE FIELD BEFORE PROCEEDING WITH LAYOUT AND PRODUCTION OF FINAL ART

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* SEE PROJECT MANUAL SECTION 101400 FOR SAMPLE AND MOCK-UP REQUIREMENTS.



EG3



Webster University
Interdisciplinary Science
Building

CANNONDESIGN

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Technology
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Environmental Graphics & Signage
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St. Louis, MO 63130
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Spellman Brady & Company
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314.862.0070

SWT Design
Landscape Architect
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Webb Engineering Services, Inc.
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1400 S. 3rd Street, Suite 201
St. Louis, MO 63104
314.588.0600

CONFORMED SET

01 JUL 2016

ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016

No.	Description	Date
-----	-------------	------

Drawing Title:

ENVIRONMENTAL GRAPHICS

Project No.: 04561.01

Checked by:

EG104

CONFORMED SET

01 JUL 2016

ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016

No.	Description	Date
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Drawing Title:

ENVIRONMENTAL GRAPHICS

Project No.: 04561.01

Checked by:

EG105

© Cannon Design 2015

Environmental Graphic Type:

EG3

EG3-360
Film on Glass/Private

*NOTE: IT IS THE VENDORS RESPONSIBILITY TO VERIFY ALL MEASUREMENTS IN THE FIELD BEFORE PROCEEDING WITH LAYOUT AND PRODUCTION OF FINAL ART

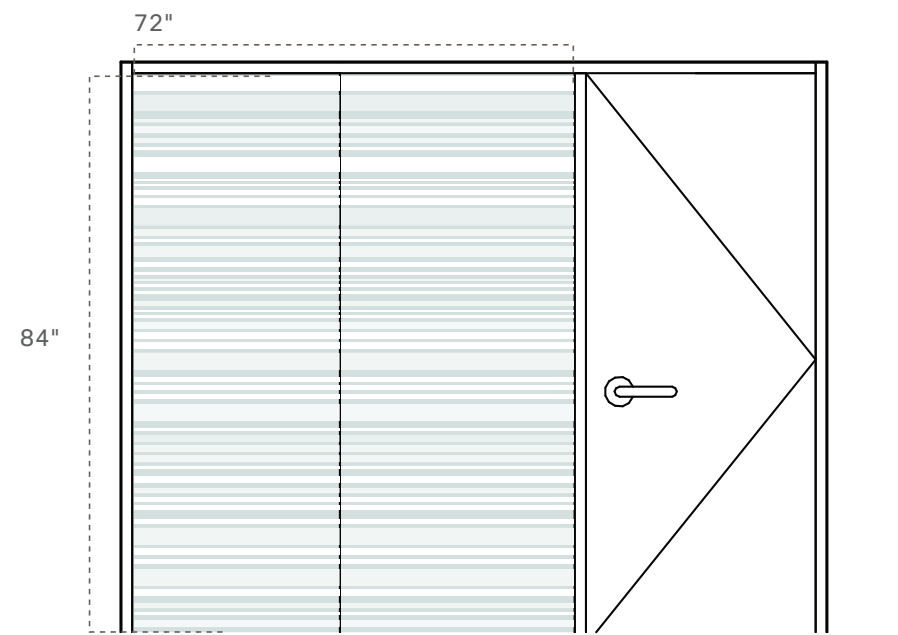
* KLI TO SUPPLY FINAL CUSTOM PATTERN ART AT 100% SCALE TO HEIGHT OF GLAZING. IT WILL BE THE FABRICATORS RESPONSIBILITY TO SET THE WIDTHS FOR ALL GLAZING ACCORDING TO FIELD MEASUREMENTS.

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* SEE PROJECT MANUAL SECTION 101400 FOR SAMPLE AND MOCK-UP REQUIREMENTS.

SEE EG3-101 FOR FILM SPECIFICATIONS

*missing side glazing elevation



EG3

Environmental Graphic Type:

EG3

EG3-406
Film on Glass/Private

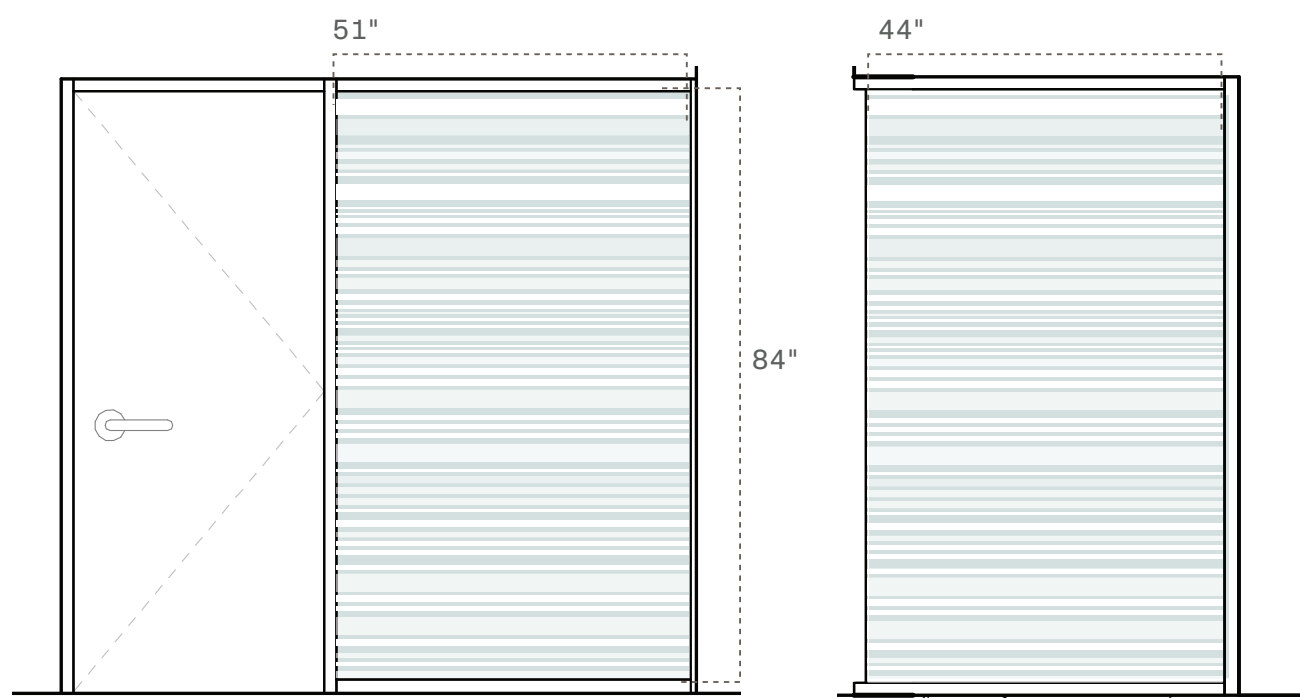
*NOTE: IT IS THE VENDORS RESPONSIBILITY TO VERIFY ALL MEASUREMENTS IN THE FIELD BEFORE PROCEEDING WITH LAYOUT AND PRODUCTION OF FINAL ART

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SEE EG3-101 FOR FILM SPECIFICATIONS



ELEVATION LOOKING SOUTH
*Approx. Dimensions,
NOT TO SCALE

EG3

Environmental Graphic Type:

EG3

EG3-454
Film on Glass/Private

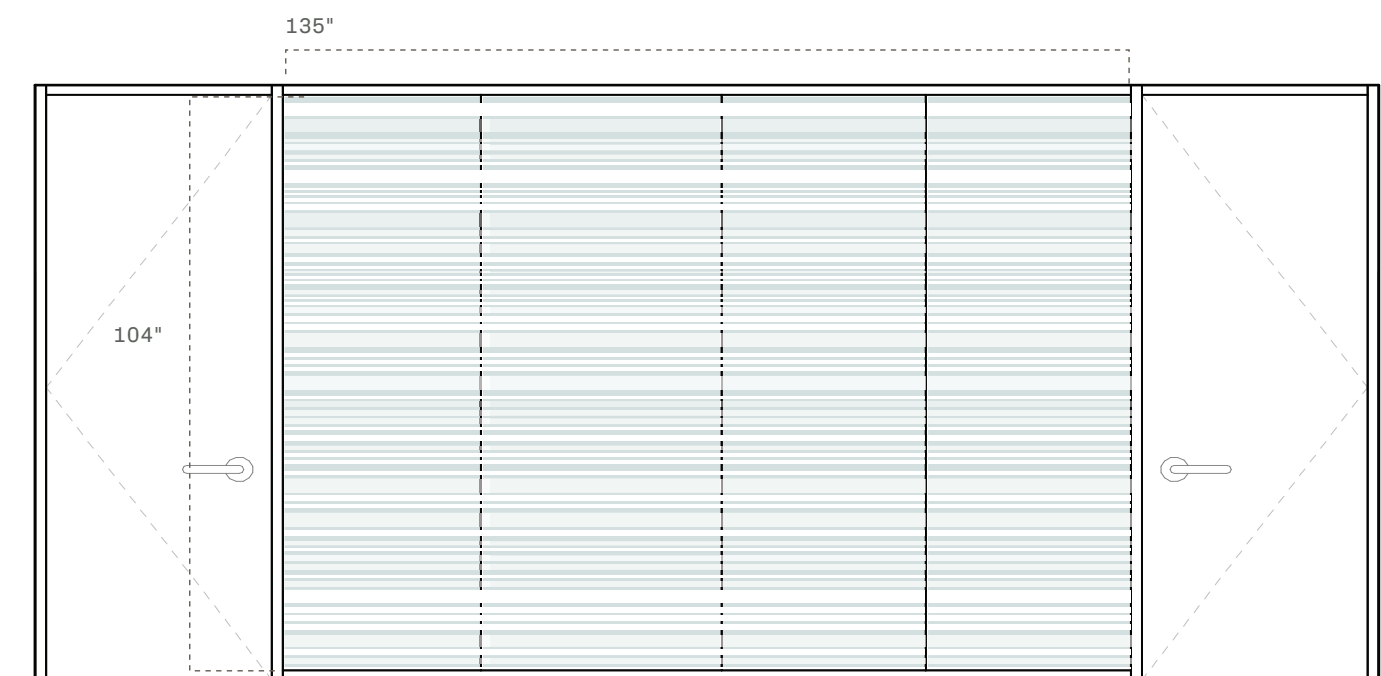
*NOTE: IT IS THE VENDORS RESPONSIBILITY TO VERIFY ALL MEASUREMENTS IN THE FIELD BEFORE PROCEEDING WITH LAYOUT AND PRODUCTION OF FINAL ART

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SEE EG3-101 FOR FILM SPECIFICATIONS



*Approx. Dimensions,
NOT TO SCALE

EG3

EG3

EG3-456
Film on Glass/Private

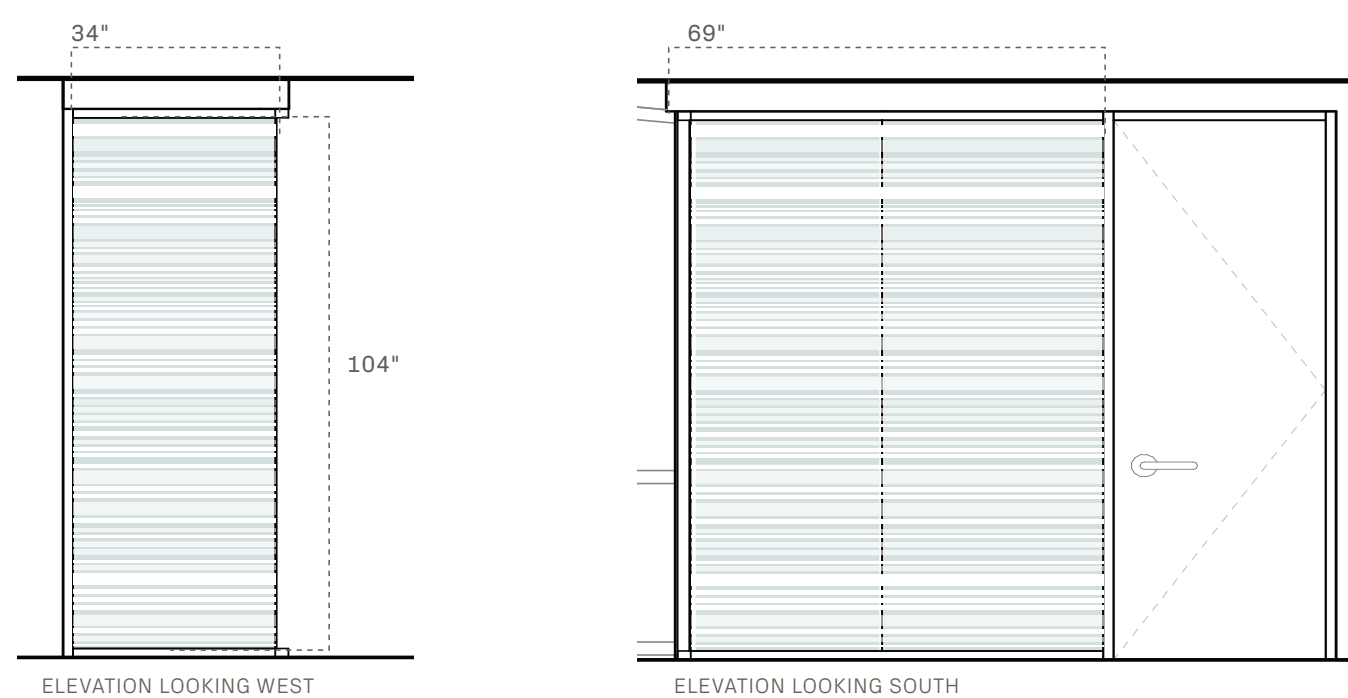
*NOTE: IT IS THE VENDORS RESPONSIBILITY TO VERIFY ALL MEASUREMENTS IN THE FIELD BEFORE PROCEEDING WITH LAYOUT AND PRODUCTION OF FINAL ART

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SEE EG3-101 FOR FILM SPECIFICATIONS



ELEVATION LOOKING WEST
*Approx. Dimensions,
NOT TO SCALE

EG3

Environmental Graphic Type:

EG3

TYP. Elevation For Locations Below
Film on Glass/Private

EG3-107
EG3-111
EG3-115
EG3-205
EG3-209
EG3-215
EG3-311
EG3-315
EG3-319
EG3-331
EG3-335
EG3-344
EG3-360
EG3-403
EG3-407
EG3-413
EG3-417

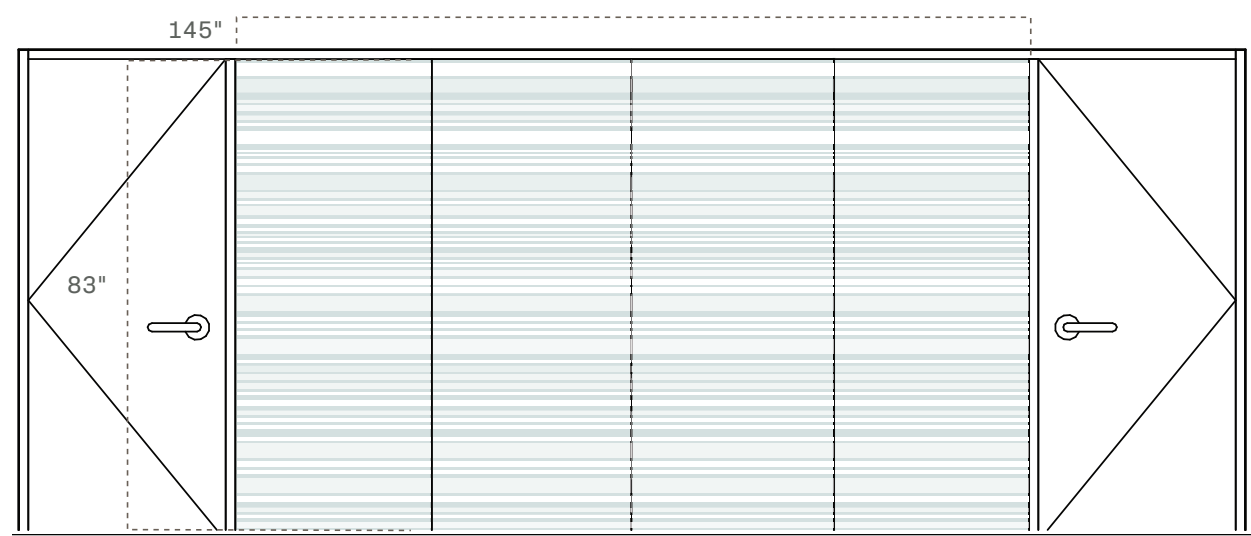
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SEE EG3-101 FOR FILM SPECIFICATIONS



*Approx. Dimensions,
NOT TO SCALE

EG3

Environmental Graphic Type:

EG3

TYP. Elevation For Locations Below
Film on Glass/Private

EG3-323
EG3-327
EG3-401
EG3-411

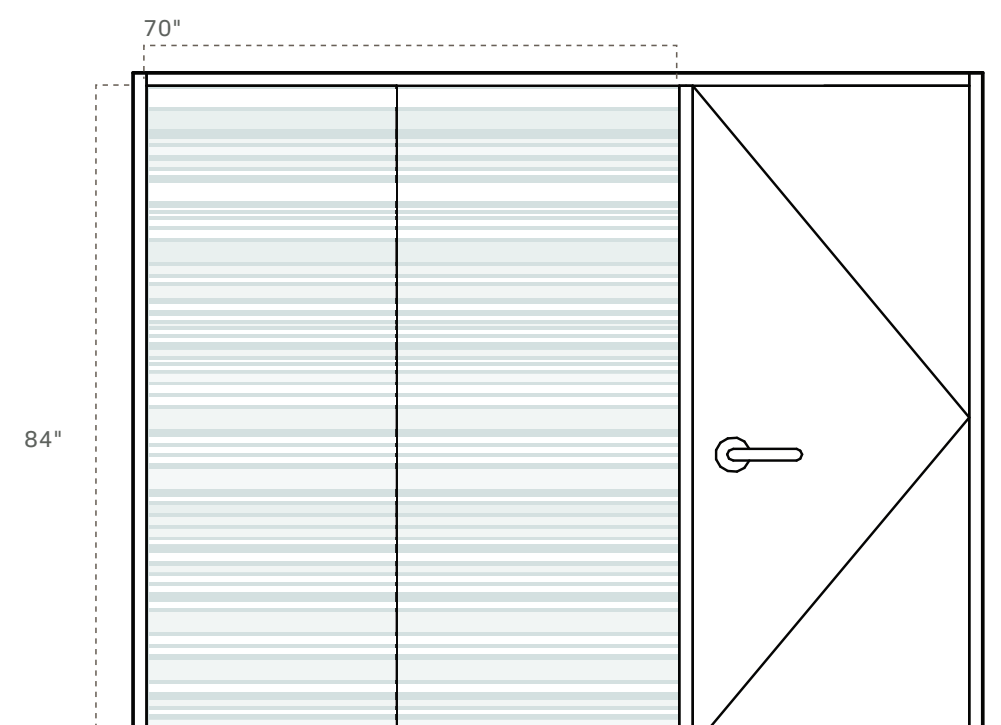
*NOTE: IT IS THE VENDORS RESPONSIBILITY TO VERIFY ALL MEASUREMENTS IN THE FIELD BEFORE PROCEEDING WITH LAYOUT AND PRODUCTION OF FINAL ART

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* SEE PROJECT MANUAL SECTION 101400 FOR SAMPLE AND MOCK-UP REQUIREMENTS.

SEE EG3-101 FOR FILM SPECIFICATIONS



*Approx. Dimensions,
NOT TO SCALE

EG3

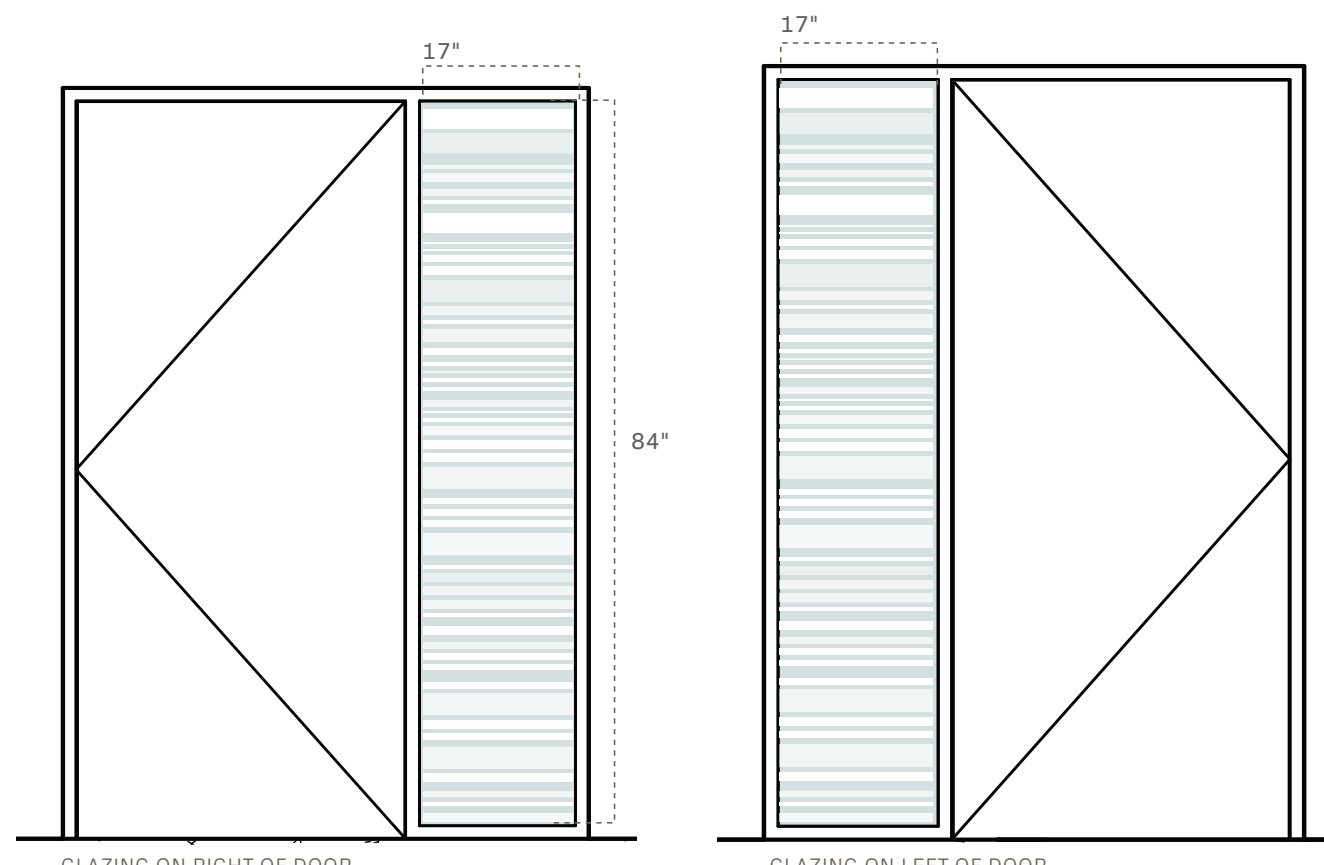
EG3

TYP. Elevation For Locations Below
Film on Glass/Private

EG3-104
EG3-106
EG3-108
EG3-206
EG3-208
EG3-212
EG3-214
EG3-304
EG3-306
EG3-314
EG3-316
EG3-318

EG3-320
EG3-332
EG3-372
EG3-402
EG3-404
EG3-412
EG3-414
EG3-416
EG3-432
EG3-434

SEE EG3-101 FOR FILM SPECIFICATIONS



*Approx. Dimensions,
NOT TO SCALE

EG3

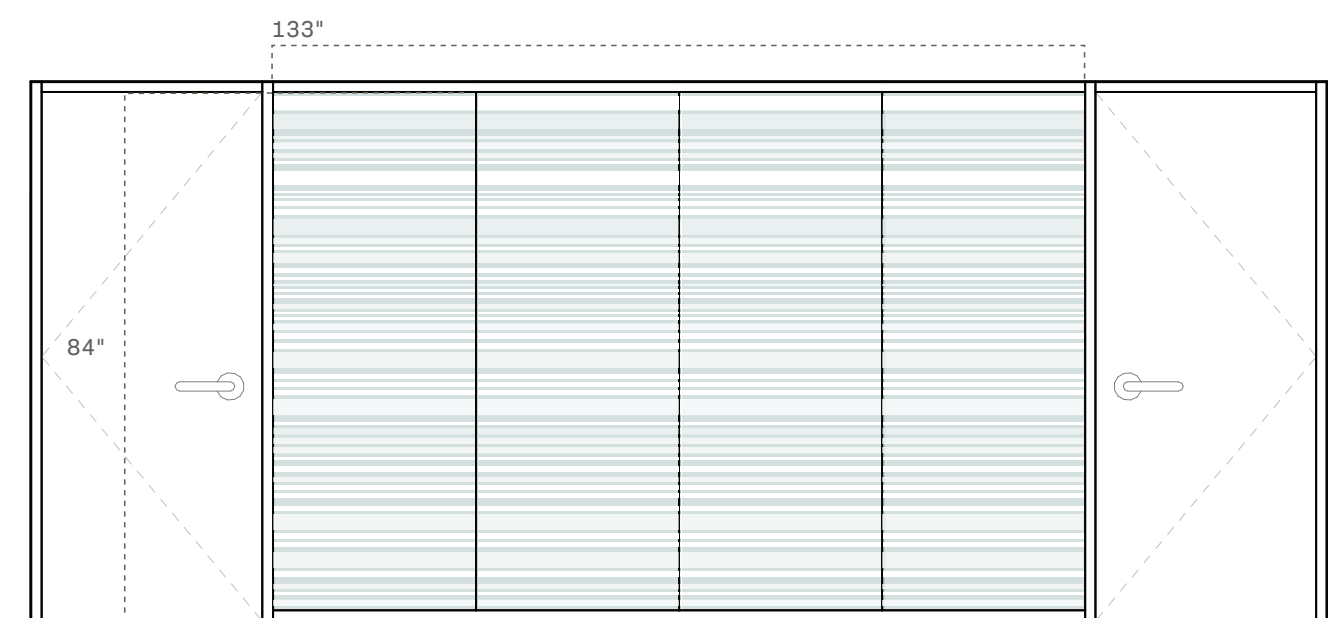
Environmental Graphic Type:

EG3

TYP. Elevation For Locations Below
Film on Glass/Private

EG3-433
EG3-437

SEE EG3-101 FOR FILM SPECIFICATIONS



*Approx. Dimensions,
NOT TO SCALE

EG3

Environmental Graphic Type:

EG4

EG4-1-16
Vinyl Gorlok

* FINAL ARTWORK (ALL GORLOKS SHOWN) TO BE PROVIDED BY KUHMANN LEAVITT, INC.

* FINAL LOCATION TBD. GORLOKS WILL BE PLACED ON EG2'S, EG3'S AND GVP

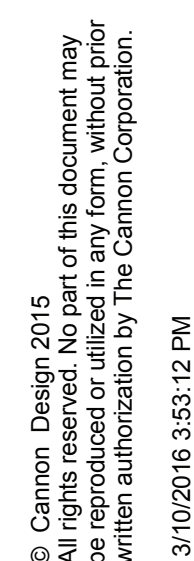
* FINAL VINYL COLORS SELECTED WITH COLOR SAMPLE REVIEW.

* SEE PROJECT MANUAL SECTION 101400 FOR SAMPLE REQUIREMENTS.



*Approx. Dimensions,
NOT TO SCALE

EG4



Sign Locations by Floor:

L3

Section A

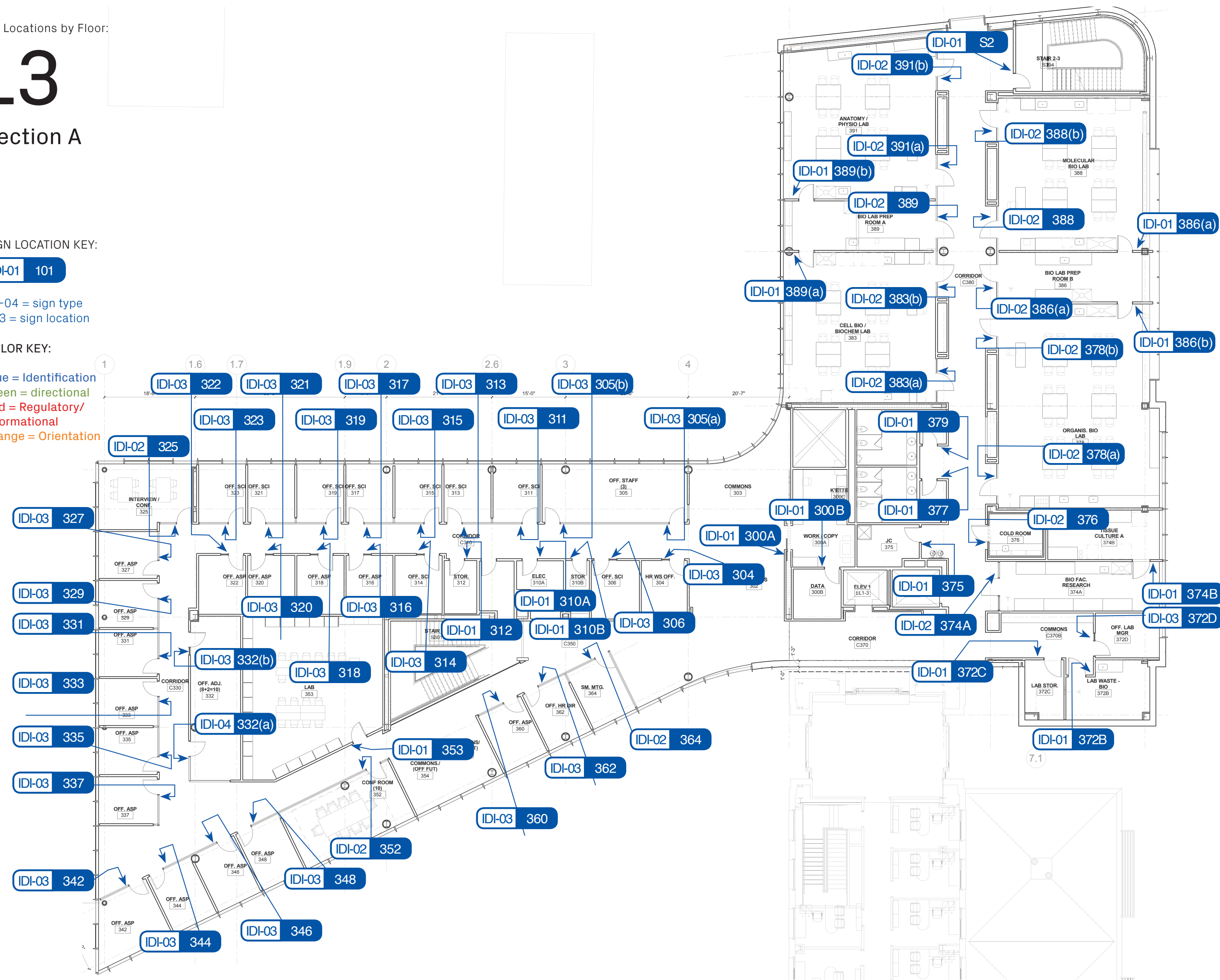
SIGN LOCATION KEY:

IDI-01 101

IDI-04 = sign type
103 = sign location

COLOR KEY:

Blue = Identification
Green = directional
Red = Regulatory/
Informational
Orange = Orientation



Sign Locations by Floor:

L3

Section B

SIGN LOCATION KEY:

ORI 302

ORI = sign type
302 = sign location

COLOR KEY:

Blue = Identification
Green = directional
Red = Regulatory/
Informational
Orange = Orientation



Sign Locations by Floor:

L4

Section A

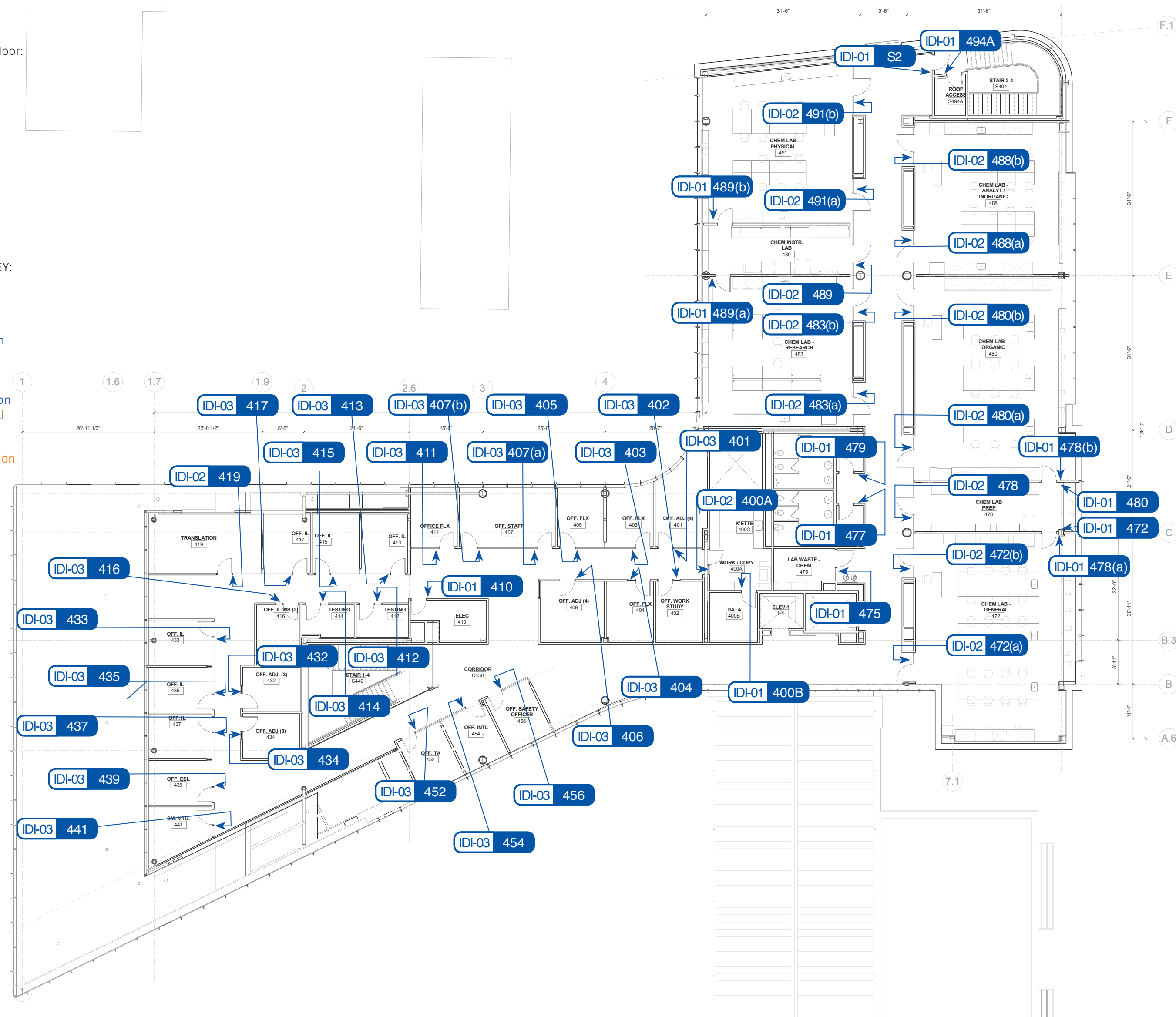
SIGN LOCATION KEY:

IDI-01 404

IDI-01 = sign type
404 = sign location

COLOR KEY:

Blue = Identification
Green = directional
Red = Regulatory/
Informational
Orange = Orientation



Sign Locations by Floor:

L4

Section B

SIGN LOCATION KEY:

ORI 409

ORI = sign type
409 = sign location

COLOR KEY:

Blue = Identification
Green = directional
Red = Regulatory/
Informational
Orange = Orientation



CONFORMED SET 01 JUL 2016

ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016
No. Description Date

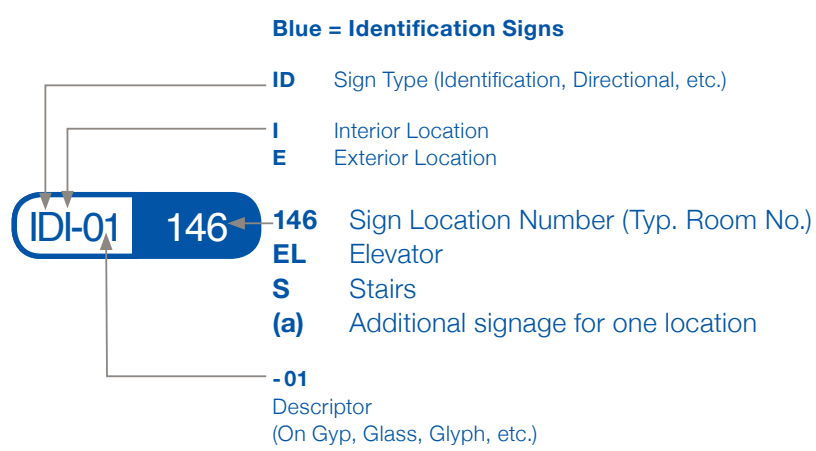
Drawing Title:

ENVIRONMENTAL GRAPHICS

Project No.: 04561.01 Checked by:

EG107

Sign Type Summary



Green = Directional Signs

Orange = Orientation Signs

Red = Regulatory/Informational Signs

TYPE	LOC NO.	DESCRIPTION	NOTES / REMARKS	PACKAGE LOCATION
IDE		EXTERIOR BUILDING ID	Entrance, Exterior Doors, etc	
DI-01		ROOM ID ON GYP (ADA Compliant)	Levels 1-4, plaques (ADA)	
DI-02		ROOM ID ON GLASS (ADA Compliant)	Levels 1-4, (ADA)	
DI-03		OFFICE ID	Levels 1-4	
DI-04		BACK OF HOUSE (ADA Compliant)	Levels 1-4, plaques (ADA)	
DI-05		RESTROOM GLYPHS	Levels 1-4, glyphs (ADA)	
DI-01		LONG WRAP BUILDING DIRECTIONAL	Levels 1-4, on wall	
DI-02		SHORT WRAP BUILDING DIRECTIONAL	Levels 1-4, on wall	
DI-03		DIRECTIONAL ID	Levels 1-4, Blade	
DI-04		EAB DIRECTIONAL	Levels 1-2, on wall	
ORI-01		DIRECTORY LISTING	Level 1-4	
RE-01		INFORMATION	Levels 1 & 2, vinyl on door	
RI-01		STAIRWELL EVACUATION	Levels 1-4, 14" acrylic plaque	
RI-02		REGULATORY MESSAGES	Levels 1-4	
RI-03		ELEVATOR EVACUATION	Levels 1-4 silkscreened on call panel	
RI-04		MAXIMUM OCCUPANCY	Levels 1-4, plaques	

Message Schedule:

L1

Section A

LEVEL ONE	SECTION A	LOC NO.	TYPE	DESCRIPTION	LOCATION NOTES / REMARKS
IDE		100	EXTERIOR BUILDING - ID	BROWNING HALL	
DI-01		100a	ROOM ID - GYP BASE	101 CONTROL ROOM	floor floor
DI-01		100b	ROOM ID - GYP BASE	101 CONTROL ROOM	Inside the green room 156
DI-01		137	ROOM ID - GYP BASE	137 MODEL ASSESSMENT, STORAGE & RESEARCH	Inside lecture hall 180
DI-01		135	ROOM ID - GYP BASE	135 DRY SKILLS LAB, COHORT & CLASSROOM	At the end of corridor C130
DI-01		133a(a)	ROOM ID - GYP BASE	133A CONTROL ROOM, TECHNOLOGY OFFICE & PREPARATION LAB	Inside sim lab 133b
DI-01		133a(b)	ROOM ID - GYP BASE	133A CONTROL ROOM, TECHNOLOGY OFFICE & PREPARATION LAB	Corridor C130
DI-01		133b	ROOM ID - GYP BASE	133B SIMULATION LAB	Inside sim lab 133b
DI-01		133b (b)	ROOM ID - GYP BASE	133B SIMULATION LAB	Inside Control room / Tech Off 133A
DI-01		160b	ROOM ID - GYP BASE	160B CONTROL ROOM	Inside Dry Skills Lab 135
DI-01		156b	ROOM ID - GYP BASE	156 GREEN ROOM	Corridor between Green room & Lecture Hall
DI-01		160a	ROOM ID - GYP BASE	160 LECTURE HALL	Corridor between Green room & Lecture Hall
DI-01		160b	ROOM ID - GYP BASE	160 LECTURE HALL	First set of doors on the right wall of the entry to Lecture Hall 160
DI-01		160(c)	ROOM ID - GYP BASE	160 LECTURE HALL	Second set of doors on the right wall of the entry to Lecture Hall 160
DI-01		100b	ROOM ID - GYP BASE	100B DATA	Corridor between Green room & Lecture Hall
DI-01		102	ROOM ID - GYP BASE	102 WORK / COPY ROOM	Inside work / copy
DI-01		110	ROOM ID - GYP BASE	110 ELECTRICAL	Corridor 102
DI-01		112	ROOM ID - GYP BASE	112 STORAGE	Corridor C110
DI-01		114	ROOM ID - GYP BASE	114 MOCK EXAMINATION ROOM	Corridor C110
DI-01		116	ROOM ID - GYP BASE	116 MOCK EXAMINATION ROOM	Corridor C110
DI-01		144	ROOM ID - GYP BASE	144 ADJUNCT	Corridor C110
DI-01		172	ROOM ID - GYP BASE	172 LOADING DOCK	Across from corridor 102
DI-01		175	ROOM ID - GYP BASE	175 JANITOR	Beginning of corridor C180
DI-01		176	ROOM ID - GYP BASE	176 ELEVATOR CONTROL	Next to water fountains
DI-01		177	ROOM ID - GYP BASE, GOES WITH DI-2	WOMEN	Just outside mechanical room 178
DI-01		178	ROOM ID - GYP BASE	178 MECHANICAL ROOM	Corridor C180
DI-01		179	ROOM ID - GYP BASE, GOES WITH DI-2	MEN	Diagonal from elevator control

Message Schedule:

L1

Section A

LEVEL ONE	SECTION A	LOC NO.	TYPE	DESCRIPTION	LOCATION NOTES / REMARKS
DI-01		180	ROOM ID - GYP BASE, GOES WITH DI-2	BATHROOM	Corridor C180
DI-01		182	ROOM ID - GYP BASE, GOES WITH DI-2	BATHROOM	Across from entry corridor 183A
DI-01		183b(a)	ROOM ID - GYP BASE	183B CADAVER LAB & WORKROOM	Corridor C180
DI-01		183b(b)	ROOM ID - GYP BASE	183B CADAVER LAB & WORKROOM	Entry corridor 183A
DI-01		183c(a)	ROOM ID - GYP BASE	183B BIOLOGY VESTIBULE	Inside cadaver lab 191
DI-01		183c(b)	ROOM ID - GYP BASE	183B BIOLOGY VESTIBULE	End of entry corridor 183A
DI-01		194	ROOM ID - GYP BASE	194 STORAGE	Inside cadaver lab 191
DI-01		189	ROOM ID - GYP BASE	189 SPILL CLOSET	Corridor C180
DI-01		188	ROOM ID - GYP BASE	188 CUSTODIAL STORAGE	Corridor C180
DI-01		187	ROOM ID - GYP BASE	187 CYLINDER ROOM	Corridor C180
DI-01		189	ROOM ID - GYP BASE	189 BUILDING SHOP	Corridor C180
DI-01		191(a)	ROOM ID - GYP BASE	191 CADAVER LAB	Corridor C180
DI-01		191(b)	ROOM ID - GYP BASE	191 CADAVER LAB	Inside cadaver lab & workroom 183B
DI-01		192	ROOM ID - GYP BASE	192 MAIN ELECTRICAL	Inside biology vestibule 183B
DI-01		195	ROOM ID - GYP BASE	195 MDF / IT WORK ROOM	Next to back stair
DI-01		52	ROOM ID - GYP BASE	STAIR 2	End of corridor C180 across from back stair
DI-02		131	ROOM ID - GLASS	131 HEALTH ASSESSMENT LAB	corridor 110
DI-02		135	ROOM ID - GLASS	135 DRY SKILLS LAB & COHORT CLASSROOM	Corridor C130 near Corridor C110
DI-02		140(a)	ROOM ID - GLASS	140 CONFERENCE ROOM	Diagonal from conference room 140
DI-02		140(b)	ROOM ID - GLASS	140 CONFERENCE ROOM	Next to commons C151
DI-02		154	ROOM ID - GLASS	154 CONFERENCE ROOM	Closest to corridor C130
DI-02		196(a)	ROOM ID - GLASS	196 GREEN ROOM	Lobby C150
DI-02		174	ROOM ID - GLASS	174 TEACHING KITCHEN	Adjacent from water fountains
DI-03		101	OFFICE ID	101 (ADA PORTION) NAME TBD	
DI-03		103	OFFICE ID	103 (ADA PORTION) NAME TBD	Closest to work/copy room in corridor 102
DI-03		104	OFFICE ID	104 (ADA PORTION) NAME TBD	corridor 110
DI-03		105	OFFICE ID	105 (ADA PORTION) NAME TBD	corridor 110
DI-03		106	OFFICE ID	106 (ADA PORTION) NAME TBD	corridor 110
DI-03		107	OFFICE ID	107 (ADA PORTION) NAME TBD	corridor 110

Message Schedule:

L1

Section A

LEVEL ONE	SECTION A	LOC NO.	TYPE	DESCRIPTION	LOCATION NOTES / REMARKS
DI-05		177	RESTROOM GLYPH	WOMENS GLYPH	
DI-05		179	RESTROOM GLYPH	MENS GLYPH	
DI-05		180	RESTROOM GLYPH	MENS & WOMENS GLYPH	
DI-05		182	RESTROOM GLYPH	MENS & WOMENS GLYPH	
DI-06		S3(a)	BACK OF HOUSE	STAIR 3	
DI-06		172a	BACK OF HOUSE	RECYCLING	First exterior back door next to stair
DI-06		178b	BACK OF HOUSE	178 MECHANICAL ROOM	Second exterior back door next to stair

Message Schedule:

L1

Section B

LEVEL ONE	SECTION B	LOC NO.	TYPE	DESCRIPTION	LOCATION NOTES / REMARKS
ORI-1		102	DIRECTORY	LEVEL 1 DIRECTORY	Just down from Grand Stair
ORI-1		E1	DIRECTORY	ELEVATOR DIRECTORY	Corridor 140
RE-01		180	BUILDING INFORMATION	EAST ACADEMIC BUILDING	
RI-02		158	REGULATORY	WEBSTER UNIVERSITY IS NOT RESPONSIBLE FOR UNATTENDED ITEMS IN COAT CHECK	Inside coat check 158
RI-02		172(a)	REGULATORY	EXIT ONLY	Inside coat recycling room
RI-02		172(b)	REGULATORY	AUTHORIZED PERSONNEL ONLY	Outside of recycling room exterior side of building
RI-02		176(a)	REGULATORY	EXIT ONLY	Inside stairwell
RI-02		176(b)	REGULATORY	AUTHORIZED PERSONNEL ONLY	Outside of stairwell room exterior side of building
RI-02		178(a)	REGULATORY	EXIT ONLY	Inside mechanical room
RI-02		1178(b)	REGULATORY	AUTHORIZED PERSONNEL ONLY	Outside of mechanical room exterior side of building
RI-02		188	REGULATORY	AUTHORIZED PERSONNEL ONLY / FIRE PUMP	Second exterior back door next to stair
RI-02		S240	Vinyl	FIRE DEPARTMENT VALVE	
RI-01		S1	STAIR EVAC	STAIR 1 LEVEL 1 TO 4 NO ROOF ACCESS EXIT ON LEVEL 1 (Evacuation Map with "you are here" location and fire pull locations) WEBSTER UNIVERSITY INTERDISCIPLINARY SCIENCES BUILDING EVACUATION PLAN (see RI-01 to review full message examples)	
RI-01		S2	STAIR EVAC	STAIR 2 LEVEL 1 TO 4 NO ROOF ACCESS EXIT ON LEVEL 2 (Evacuation Map with "you are here" location and fire pull locations) WEBSTER UNIVERSITY INTERDISCIPLINARY SCIENCES BUILDING EVACUATION PLAN (see RI-01 to review full message examples)	

Message Schedule:

L1

Section B

LEVEL ONE	SECTION B	LOC NO.	TYPE	DESCRIPTION	LOCATION NOTES / REMARKS
RI-01		E1	SILKSREEN ON CALL PANEL	ELEVATOR EVACUATION	
RI-03		E2	SILKSREEN ON CALL PANEL	ELEVATOR EVACUATION	
RI-04		135	MAX OCCUPANCY	MAXIMUM OCCUPANCY 49	
RI-04		140	MAX OCCUPANCY	MAXIMUM OCCUPANCY 49	
RI-04		160	MAX OCCUPANCY	MAXIMUM OCCUPANCY 131	
RI-04		131	MAX OCCUPANCY	MAXIMUM OCCUPANCY 49	
DI-01		180	Directional Sign Plaque	SIDE A > TEACHING KITCHEN & CADAVER LAB GLYPHS < EAB, OFFICES 101 - 117, LECTURE HALL, CONFERENCE ROOMS, MODEL ASSESSMENT / STORAGE / RESEARCH, DRY SKILLS LAB / COHORT CLASSROOM, SIMULATION LAB & HEALTH ASSESSMENT LAB	
DI-01		180	Directional Sign Plaque	SIDE B > TEACHING KITCHEN & CADAVER LAB GLYPHS < EAB, OFFICES 101 - 117, LECTURE HALL, CONFERENCE ROOMS, MODEL ASSESSMENT / STORAGE / RESEARCH, DRY SKILLS LAB / COHORT CLASSROOM, SIMULATION LAB & HEALTH ASSESSMENT LAB	
DI-02		140	Directional Sign Plaque	SIDE A > LECTURE HALL < CONFERENCE ROOM, MODEL ASSESSMENT / STORAGE / RESEARCH, DRY SKILLS LAB / COHORT CLASSROOM, SIMULATION LAB & HEALTH ASSESSMENT LAB	Information is on Corridor C140 side
DI-02		140	Directional Sign Plaque	SIDE B > OFFICES 101 - 117, ELEVATORS, EAST ACADEMIC BUILDING CONNECTOR & GLYPHS	Information Glyph is on Lobby 150 side

Message Schedule:

L1

Section B

LEVEL ONE	SECTION B	LOC NO.	TYPE	DESCRIPTION	LOCATION NOTES / REMARKS
DI-01		102	Directional Sign Plaque	SIDE A < OFFICES 101 - 117, ELEVATORS, EAB CONNECTOR, TEACHING KITCHEN, CADAVER LAB & GLYPHS	Corridor C102 side
DI-01		102	Directional Sign Plaque	SIDE B < OFFICES 101 - 117, ELEVATOR, TEACHING KITCHEN, CADAVER LAB & GLYPHS > LECTURE HALL, CONFERENCE ROOMS, MODEL ASSESSMENT, RESEARCH, DRY SKILLS LAB / COHORT CLASSROOM, SIM LAB & HEALTH ASSESSMENT LAB	Corridor C40 side
DI-03		152	Building ID	(Glyph) VENDING	
DI-03		158	Building ID	(Glyph) COAT CHECK	
DI-03		C180(a)	Building ID	(Glyph) Water Fountain	
DI-03		177	Building ID	(Glyph) Woman	
DI-03		179	Building ID	(Glyph) Men	
DI-03		180(b)	Building ID	(Glyph) Men & Women Glyph	
DI-03		180(c)	Building ID	(Glyph) Stair	
DI-04		150	Directional Sign Plaque, L1 & L2	SIDE A > EAST ACADEMIC BUILDING	Information on Corridor C140 side
DI-04		150	Directional Sign Plaque, L1 & L2	SIDE B EAB	EAB abbreviation inside connector

Message Schedule:

L2

Section A

LEVEL TWO	SECTION A	LOC NO.	TYPE	DESCRIPTION	LOCATION NOTES / REMARKS
DI-01		200a	ROOM ID - GYP BASE	200A BREAK / WORK ROOM	Reception 332 (as this one needed?)
DI-01		200b	ROOM ID - GYP BASE	200B DATA	Inside Break / Work Room
DI-01		210c	ROOM ID - GYP BASE	210C OFFICES	Corridor C213
DI-01		210	ELECTRICAL	210 ELECTRICAL	Corridor C210
DI-01		272a	ROOM ID - GYP BASE	272A CHEMISTRY STOCK ROOM	Off Corridor C280
DI-01		272b	ROOM ID - GYP BASE	272B LABORATORY STORAGE	Off Corridor C280
DI-01		274	ROOM ID - GYP BASE	274 MICROSCOPY ROOM	Off Corridor C280
DI-01		275	ROOM ID - GYP BASE	275 NURSING MOTHERS	Corridor C280, by water fountains
DI-01		276	ROOM ID - GYP BASE	276 SCIENCE CLASSROOM	Inside Physics Lab 284
DI-01		277	ROOM ID - GYP BASE	WOMEN	Corridor C280
DI-01		278	ROOM ID - GYP BASE	MEN	Corridor C280
DI-01		282(a)	ROOM ID - GYP BASE	282 PHYSICS LAB PREPARATION ROOM	Inside Classroom 276
DI-01		282(b)	ROOM ID - GYP BASE	282 PHYSICS LAB PREPARATION ROOM	Inside Physics Lab 284
DI-01		283(a)	ROOM ID - GYP BASE	283 MICROBIOLOGY PLAN RESEARCH LAB	Inside Microbiology Prep 289A
DI-01		283(b)	ROOM ID - GYP BASE	283 MICROBIOLOGY PLAN RESEARCH LAB	Inside Tissue Culture 286B
DI-01		284(a)	ROOM ID - GYP BASE	284 PHYSICS LAB	Inside Physics Lab 284
DI-01		284(b)	ROOM ID - GYP BASE	284 PHYSICS LAB	Inside Physics Lab 284
DI-01		289A(a)	ROOM ID - GYP BASE	289A MICROBIOLOGY PREPARATION ROOM	Inside Microbiology plan research room 283
DI-01		289A(b)	ROOM ID - GYP BASE	289A MICROBIOLOGY PREPARATION ROOM	Inside Cellular biology / Physics Research Lab
DI-01		289B(a)	ROOM ID - GYP BASE	289B TISSUE CULTURE	Inside Microbiology plan research room 283
DI-01		289B(b)	ROOM ID - GYP BASE	289B TISSUE CULTURE	Inside Cellular biology / Physics Research Lab
DI-01		291(a)	ROOM ID - GYP BASE	291 CELLULAR BIOLOGY / PHYSICS RESEARCH LAB	Inside Microbiology Prep 289A
DI-01		291(b)	ROOM ID - GYP BASE	291 CELLULAR BIOLOGY / PHYSICS RESEARCH LAB	Inside Tissue Culture 289B
DI-01		52(a)	ROOM ID - GYP BASE	STAIR 2	Corridor C280
DI-02		231	ROOM ID - GLASS	231 COMPUTER LAB / CLASSROOM	Off Corridor C213
DI-02		276(a)	ROOM ID - GLASS	276 SCIN CLASSROOM	Off Corridor C280
DI-02		276(b)	ROOM ID - GLASS	276 SCIN CLASSROOM	Off Corridor C280
DI-02		282	ROOM ID - GLASS	282 PHYSICS LAB PREPARATION	Off Corridor C280
DI-02		235	ROOM ID - GLASS	235 OPEN RESEARCH LAB	Off Corridor C213

Message Schedule:

L2

Section A

LEVEL TWO	SECTION A	LOC NO.	TYPE	DESCRIPTION	LOCATION NOTES / REMARKS
DI-02		283(a)	ROOM ID - GLASS	283 MICROBIOLOGY PLANT RESEARCH LAB	Off Corridor C280
DI-02		283(b)	ROOM ID - GLASS	283 MICROBIOLOGY PLANT RESEARCH LAB	Off Corridor C280
DI-02		284(a)	ROOM ID - GLASS	284 PHYSICS LAB	Off Corridor C280
DI-02		284(b)	ROOM ID - GLASS	284 PHYSICS LAB	Off Corridor C280
DI-02		291(a)	ROOM ID - GLASS	291 CELL BIOLOGY RESEARCH LAB	Off Corridor C280
DI-02		291(b)	ROOM ID - GLASS	291 CELL BIOLOGY RESEARCH LAB	Off Corridor C280
DI-02		292	ROOM ID - GLASS	292 PHYSICS RESEARCH LAB	Off Corridor C280
DI-03		205	OFFICE ID	205 (ADA PORTION) NAME TBD	Global Office 235
DI-03		206	OFFICE ID	206 (ADA PORTION) NAME TBD	Deans Assistant 236
DI-03		207	OFFICE ID	207 (ADA PORTION) NAME TBD	Strategic Office 237
DI-03		208	OFFICE ID	208 (ADA PORTION) NAME TBD	Assessment Office
DI-03		209	OFFICE ID	209 (ADA PORTION) NAME TBD	Associates Deans 239
DI-03		211	OFFICE ID	211 (ADA PORTION) NAME TBD	Deans Office 241
DI-03		212	OFFICE ID	212 (ADA PORTION) NAME TBD	Communications Office 242
DI-03		214	OFFICE ID	214 (ADA PORTION) NAME TBD	Communications Office 244
DI-03		215	OFFICE ID	215 (ADA PORTION) NAME TBD	Deans Office 245



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CONFORMED SET

01



Webster University
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CONFORMED SET

01 JUL 2016

ISSUED FOR CONSTRUCTION (BP3) 15 MAR 2016

No. Description Date

Drawing Title:

ENVIRONMENTAL GRAPHICS

Project No.: 04561.01

Checked by:

EG109

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Message Schedule:

L2

Section B

LEVEL TWO	SECTION B	TYPE	LOC NO.	TYPE	DESCRIPTION	LOCATION NOTES / REMARKS
ORI	250	DIRECTORY			LEVEL 2 DIRECTORY	Across from commons 202 sitting area
ORI	E1	DIRECTORY			ELEVATOR DIRECTORY	Deans Office 245
RE-1	200A	BUILDING INFORMATION			(TBD)	Vestibule C200A
RE-1	250A(a)	BUILDING INFORMATION			(TBD)	Vestibule C250A(a)
RE-1	250A(b)	BUILDING INFORMATION			(TBD)	Vestibule C250A(b)
RE-1	270A(a)	BUILDING INFORMATION			< BROWNING HALL, > EAST ACADEMIC BUILDING	Vestibule C250A(b)
RE-1	270(b)	BUILDING INFORMATION			> BROWNING HALL, < EAST ACADEMIC BUILDING	Vestibule C250A(b)
RE-1	270(c)	BUILDING INFORMATION			EAB	Vestibule C250A(b)
RE-1	270(D)	BUILDING INFORMATION			BROWNING HALL	Vestibule C250A(b)
RI-01	S2(a)	STAIR EVAC			STAIR 2 LEVEL 1 TO 4 NO ROOF ACCESS EXIT ON LEVEL 2 & 1 (Evacuation Map with "you are here" location and fire pull locations) WEBSTER UNIVERSITY INTERDISCIPLINARY SCIENCES BUILDING EVACUATION PLAN (see RI-01 to review full message examples)	Inside Stair 2
RI-01	S2(b)	STAIR EVAC			STAIR 2 LEVEL 1 TO 4 NO ROOF ACCESS EXIT ON LEVEL 2 & 1 (Evacuation Map with "you are here" location and fire pull locations) WEBSTER UNIVERSITY INTERDISCIPLINARY SCIENCES BUILDING EVACUATION PLAN (see RI-01 to review full message examples)	Inside Stair 2
RI-02	S240	Vinyl			FIRE DEPARTMENT VALVE	
RI-03	E1	SILKSCREEN ON CALL PANEL			ELEVATOR EVACUATION	
RI-03	E2	SILKSCREEN ON CALL PANEL			ELEVATOR EVACUATION	
RI-04	231	MAX OCCUPANCY			MAXIMUM OCCUPANCY 49	RI-04
RI-04	233	MAX OCCUPANCY			MAXIMUM OCCUPANCY 49	RI-04
RI-04	235	MAX OCCUPANCY			MAXIMUM OCCUPANCY 49	RI-04

Message Schedule:

L3

Section A

LEVEL THREE	SECTION A	continued	TYPE	LOC NO.	TYPE	DESCRIPTION	LOCATION NOTES / REMARKS
DI-03	304	OFFICE ID				304 (ADA PORTION) NAME TBD	Corridor C310
DI-03	305(a)	OFFICE ID				305 (ADA PORTION) NAME TBD	Corridor C310
DI-03	305(b)	OFFICE ID				305 (ADA PORTION) NAME TBD	Corridor C310
DI-03	306	OFFICE ID				306 (ADA PORTION) NAME TBD	Corridor C310
DI-03	311	OFFICE ID				3114 (ADA PORTION) NAME TBD	Corridor C310
DI-03	313	OFFICE ID				313 (ADA PORTION) NAME TBD	Corridor C310
DI-03	314	OFFICE ID				314 (ADA PORTION) NAME TBD	Corridor C310
DI-03	315	OFFICE ID				315 (ADA PORTION) NAME TBD	Corridor C310
DI-03	316	OFFICE ID				3164 (ADA PORTION) NAME TBD	Corridor C310
DI-03	317	OFFICE ID				317 (ADA PORTION) NAME TBD	Corridor C310
DI-03	318	OFFICE ID				318 (ADA PORTION) NAME TBD	Corridor C310
DI-03	319	OFFICE ID				319 (ADA PORTION) NAME TBD	Corridor C310
DI-03	320	OFFICE ID				320 (ADA PORTION) NAME TBD	Corridor C310
DI-03	321	OFFICE ID				321 (ADA PORTION) NAME TBD	Corridor C310
DI-03	322	OFFICE ID				322 (ADA PORTION) NAME TBD	Corridor C310
DI-03	323	OFFICE ID				3235 (ADA PORTION) NAME TBD	Corridor C310
DI-03	325	OFFICE ID				304 (ADA PORTION) NAME TBD	Corridor C310 & Corridor C330
DI-03	327	OFFICE ID				327 (ADA PORTION) NAME TBD	Corridor C330
DI-03	329	OFFICE ID				329 (ADA PORTION) NAME TBD	Corridor C330
DI-03	331	OFFICE ID				331 (ADA PORTION) NAME TBD	Corridor C330
DI-03	332	OFFICE ID				332 (ADA PORTION) NAME TBD	Corridor C330
DI-03	333	OFFICE ID				333 (ADA PORTION) NAME TBD	Corridor C330
DI-03	335	OFFICE ID				335 (ADA PORTION) NAME TBD	Corridor C330
DI-03	337	OFFICE ID				337 (ADA PORTION) NAME TBD	Corridor C330
DI-03	342	OFFICE ID				342 (ADA PORTION) NAME TBD	Corridor C330 & Corridor C350
DI-03	344	OFFICE ID				344 (ADA PORTION) NAME TBD	Corridor C350
DI-03	346	OFFICE ID				346 (ADA PORTION) NAME TBD	Corridor C350
DI-03	348	OFFICE ID				348 (ADA PORTION) NAME TBD	Corridor C350
DI-03	352	OFFICE ID				352 (ADA PORTION) NAME TBD	Corridor C350
DI-03	358	OFFICE ID				358 (ADA PORTION) NAME TBD	Corridor C350
DI-03	363	OFFICE ID				362 (ADA PORTION) NAME TBD	Corridor C350
DI-03	364	OFFICE ID				364 (ADA PORTION) NAME TBD	Corridor C350
DI-04	332	OFFICE ID				332 (ADA PORTION) NAME TBD	Corridor C350

Message Schedule:

L4

Section A

LEVEL FOUR	SECTION A	continued	TYPE	LOC NO.	TYPE	MESSAGING	LOCATION NOTES / REMARKS
DI-01	400B	ROOM ID - GYP BASE				400B DATA	Inside Workroom / Copy 400A
DI-01	406	ROOM ID - GLASS				406	Closest to workroom 400A
DI-01	410	ROOM ID - GYP BASE				410 ELECTRICAL	Near Corridor C450
DI-01	472(b)	ROOM ID - GLASS				472 CHEMISTRY LAB	
DI-01	475	ROOM ID - GYP BASE				475 LAB CHEMISTRY WASTE	Near water fountains
DI-01	477	ROOM ID - GYP BASE				WOMEN	
DI-01	478(a)	ROOM ID - GYP BASE				478 CHEMISTRY LAB PREPARATION	
DI-01	478(b)	ROOM ID - GYP BASE				478 CHEMISTRY LAB PREPARATION	
DI-01	480	ROOM ID - GLASS				480 CHEMISTRY LAB ORGANIC	
DI-01	479	ROOM ID - GYP BASE				MEN	
DI-01	486(a)	ROOM ID - GYP BASE				CHEMISTRY INSTRUCTIONAL LAB	
DI-01	486(b)	ROOM ID - GYP BASE				CHEMISTRY INSTRUCTIONAL LAB	
DI-01	494A	ROOM ID - GYP BASE				ROOF ACCESS	
DI-01	52	ROOM ID - GYP BASE				STAIR 2	
DI-02	400A	ROOM ID - GLASS				400A WORKROOM	
DI-02	413	ROOM ID - GLASS				419 TRANSLATION	
DI-02	472(a)	ROOM ID - GLASS				472 CHEMISTRY LAB	
DI-02	472(b)	ROOM ID - GLASS				472 CHEMISTRY LAB	
DI-02	478	ROOM ID - GLASS				478 CHEMISTRY LAB PREPARATION	
DI-02	480(a)	ROOM ID - GLASS				480 CHEMISTRY LAB ORGANIC	
DI-02	480(b)	ROOM ID - GLASS				480 CHEMISTRY LAB ORGANIC	
DI-02	483(a)	ROOM ID - GLASS				480 CHEMISTRY RESEARCH LAB	
DI-02	483(b)	ROOM ID - GLASS				480 CHEMISTRY RESEARCH LAB	
DI-02	486(a)	ROOM ID - GLASS				488 CHEMISTRY ANALYTIC / INORGANIC	
DI-02	486(b)	ROOM ID - GLASS				488 CHEMISTRY ANALYTIC / INORGANIC	
DI-02	489	ROOM ID - GLASS				489 CHEMISTRY INSTRUCTIONAL LAB	
DI-02	491(a)	ROOM ID - GLASS				491 CHEMISTRY LAB PHYSICAL	
DI-02	491(b)	ROOM ID - GLASS				491 CHEMISTRY LAB PHYSICAL	
DI-03	401	OFFICE ID				401 (ADA PORTION) NAME TBD	
DI-03	402	OFFICE ID				402 (ADA PORTION) NAME TBD	
DI-03	403	OFFICE ID				403 (ADA PORTION) NAME TBD	
DI-03	404	OFFICE ID				404 (ADA PORTION) NAME TBD	
DI-03	405	OFFICE ID				405 (ADA PORTION) NAME TBD	

Message Schedule:

L2

Section B

LEVEL TWO	SECTION B	continued	TYPE	LOC NO.	TYPE	DESCRIPTION	LOCATION NOTES / REMARKS
DI-01	280	SIDE A				> SCIN Classroom, Microbiology Plant Research Lab, Physics Labs, Cellular Biology / Physics labs & Stairs Glyphs < Deans Office, Open Research Lab, General Classrooms & Computer Lab	Directional Sign Plaque Corridor C270
DI-01	280	SIDE B				> SCIN Classroom, Microbiology Plant Research Lab, Physics Labs, Cellular Biology / Physics labs & Stairs Glyphs < EAB, Deans Office Open Research Lab, General Classrooms & Computer Lab	Directional Sign Plaque Corridor C280
DI-02	270	SIDE A				> Deans Office > Elevators, SCIN Classroom, Microbiology Plant Research Lab, Physics Labs, Cellular Biology / Physics labs & Stairs Glyphs < Exit, General Classrooms & Computer Lab	Directional Sign Plaque Lobby C250
DI-02	270	SIDE B				INFORMATION GLYPH	Directional Sign Plaque Edge closest to Deans entrance
DI-03	280(a)	Building ID				(Glyph) Water Fountain	
DI-03	280(b)	Building ID				(Glyph) Stair	
DI-03	277	Building ID				(Glyph) Woman	
DI-03	278	Building ID				(Glyph) Man	
DI-04	270	Directional Sign Plaque, L1 & L2				SIDE A > EAST ACADEMIC BUILDING	Corridor C270 side
DI-04	270	Directional Sign Plaque, L1 & L2				SIDE B EAB	EAB abbreviation inside connector

Message Schedule:

L3

Section A

LEVEL THREE	SECTION A	continued	TYPE	LOC NO.	TYPE	DESCRIPTION	LOCATION NOTES / REMARKS
ORI	302	DIRECTORY				LEVEL 2 DIRECTORY	Near Grand Stair
ORI	E1	DIRECTORY				ELEVATOR DIRECTORY	Corridor C370
RI-01	S2	STAIR EVAC				STAIR 2 LEVEL 1 TO 4 NO ROOF ACCESS EXIT ON LEVEL 2 & 1 (Evacuation Map with "you are here" location and fire pull locations) WEBSTER UNIVERSITY INTERDISCIPLINARY SCIENCES BUILDING EVACUATION PLAN (see RI-01 to review full message examples)	Corridor C380
RI-02	S340	Vinyl				FIRE DEPARTMENT VALVE	
RI-03	E1	SILKSCREEN ON CALL PANEL				ELEVATOR EVACUATION	Corridor C370
RI-03	E2	SILKSCREEN ON CALL PANEL				ELEVATOR EVACUATION	Corridor C380
DI-01	302	SIDE A				> OFFICES 305 - 325 > ELEVATORS, ORGANIS BIOLOGY LAB, CELL BIOLOGY / BIOCHEMISTRY LAB & MOLECULAR BIOLOGY LAB & GLYPHS < MEETING ROOM 364, CONFERENCE ROOM 352 QUINTATIVE LAB & OFFICES 327 - 348	Directional Sign Plaque Corner of commons 302 & Corridor C350 (corridor C370 side)
DI-01	302	SIDE B				> OFFICES 305 - 325 > MEETING ROOM 364, CONFERENCE ROOM 352 QUINTATIVE LAB & OFFICES 327 - 348	Corner of commons 302 & Corridor C350 (corridor C302 side)

Message Schedule:

L4

Section A

LEVEL FOUR	SECTION A	continued	TYPE	LOC NO.	TYPE	MESSAGING	LOCATION NOTES / REMARKS
DI-03	406	OFFICE ID				406 (ADA PORTION) NAME TBD	
DI-03	407(a)	OFFICE ID				407 (ADA PORTION) NAME TBD	
DI-03	407(b)	OFFICE ID				407 (ADA PORTION) NAME TBD	
DI-03	410	OFFICE ID				410 (ADA PORTION) NAME TBD	
DI-03	411	OFFICE ID				411 (ADA PORTION) NAME TBD	
DI-03	412	OFFICE ID				412 (ADA PORTION) NAME TBD	
DI-03	413	OFFICE ID				413 (ADA PORTION) NAME TBD	
DI-03	414	OFFICE ID				414 (ADA PORTION) NAME TBD	
DI-03	415	OFFICE ID				415 (ADA PORTION) NAME TBD	
DI-03	416	OFFICE ID				416 (ADA PORTION) NAME TBD	
DI-03	417	OFFICE ID				417 (ADA PORTION) NAME TBD	
DI-03	432	OFFICE ID				432 (ADA PORTION) NAME TBD	
DI-03	433	OFFICE ID				433 (ADA PORTION) NAME TBD	
DI-03	434	OFFICE ID				434 (ADA PORTION) NAME TBD	
DI-03	435	OFFICE ID				435 (ADA PORTION) NAME TBD	
DI-03	437	OFFICE ID				437 (ADA PORTION) NAME TBD	
DI-03	438	OFFICE ID				439 (ADA PORTION) NAME TBD	
DI-03	441	OFFICE ID				441 (ADA PORTION) NAME TBD	
DI-03	452	OFFICE ID				452 (ADA PORTION) NAME TBD	
DI-03	454	OFFICE ID				454 (ADA PORTION) NAME TBD	Near Corridor C450
DI-03	456	OFFICE ID				456 (ADA PORTION) NAME TBD	Near Corridor C450

Message Schedule:

L3

Section A

LEVEL	SECTION						
THREE	A	LOC NO.	TYPE	DESCRIPTION	LOCATION NOTES / REMARKS		
DI-01	363	ROOM ID - GYP BASE		363 QUANTITATIVE / INTERVIEW LAB	Across from commons 354		
DI-01	300A	ROOM ID - GYP BASE		300A WORK ROOM	Commons 303 (is this one needed?)		
DI-01	300B	ROOM ID - GYP BASE		300B DATA	Inside work room 330A		
DI-01	310A	ROOM ID - GYP BASE		310A ELECTRICAL	Corridor 303 off commons 330		
DI-01	310B	ROOM ID - GLASS		310B STORAGE	Corridor C310		
DI-01	312	ROOM ID - GLASS		312 STORAGE	Next to Commons 312		
DI-01	372B	ROOM ID - GYP BASE		372B LAB WASTE	Commons C370B		
DI-01	372C	ROOM ID - GYP BASE		372C LAB STORAGE	Commons C370B		
DI-01	374B	ROOM ID - GYP BASE		374B TISSUE CULTURE A	Inside Bio Fac Research		
DI-01	375	ROOM ID - GYP BASE		375 JANITOR	Corridor C380		
DI-01	377	ROOM ID - GYP BASE		WOMEN	Corridor C380		
DI-01	379	ROOM ID - GYP BASE		MEN	Corridor C380		
DI-01	386(a)	ROOM ID - GYP BASE		386 BIOLOGY LAB PREPARATION ROOM B	Corridor C380		
DI-01	386(b)	ROOM ID - GYP BASE		386 BIOLOGY LAB PREPARATION ROOM B	Corridor C380		
DI-01	388A	ROOM ID - GYP BASE		388 BIOLOGY LAB PREPARATION ROOM A	Cell Bio / Chem Lab side		
DI-01	388B	ROOM ID - GYP BASE		388 BIOLOGY LAB PREPARATION ROOM A	Anatomy Physio lab		
DI-01	52	ROOM ID - GYP BASE		STAIR 2	Corridor C380		
DI-02	374A	ROOM ID - GYP BASE		374A BIOLOGY RESEARCH	Next to Commons 333		
DI-02	376	ROOM ID - GLASS		376 COLD ROOM	Corridor 303		
DI-02	376(a)	ROOM ID - GLASS		376 ORGANIS BIOLOGY LAB	Just off Corridor 303		
DI-02	376(b)	ROOM ID - GLASS		376 ORGANIS BIOLOGY LAB	Corridor 305		
DI-02	383A	ROOM ID - GLASS		383 CELL BIOLOGY / BIOCHEMISTRY LAB	Corridor 305		
DI-02	383B	ROOM ID - GLASS		383 CELL BIOLOGY / BIOCHEMISTRY LAB	Corridor 305		
DI-02	388	ROOM ID - GYP BASE		386 BIOLOGY LAB PREPARATION ROOM B	Corridor 305		
DI-02	388(a)	ROOM ID - GLASS		388 MOLECULAR BIOLOGY LAB	Corridor 305		
DI-02	388(b)	ROOM ID - GLASS		388 MOLECULAR BIOLOGY LAB	Corridor 305		
DI-02	389	ROOM ID - GLASS		389 BIOLOGY LAB PREPARATION ROOM A	Corridor 305		
DI-02	391B	ROOM ID - GLASS		391 ANATOMY PHYSIOLOGY / PLANT PHYSIOLOGY	Corridor 305		
DI-02	391B	ROOM ID - GLASS		391 ANATOMY PHYSIOLOGY / PLANT PHYSIOLOGY	Corridor 305		

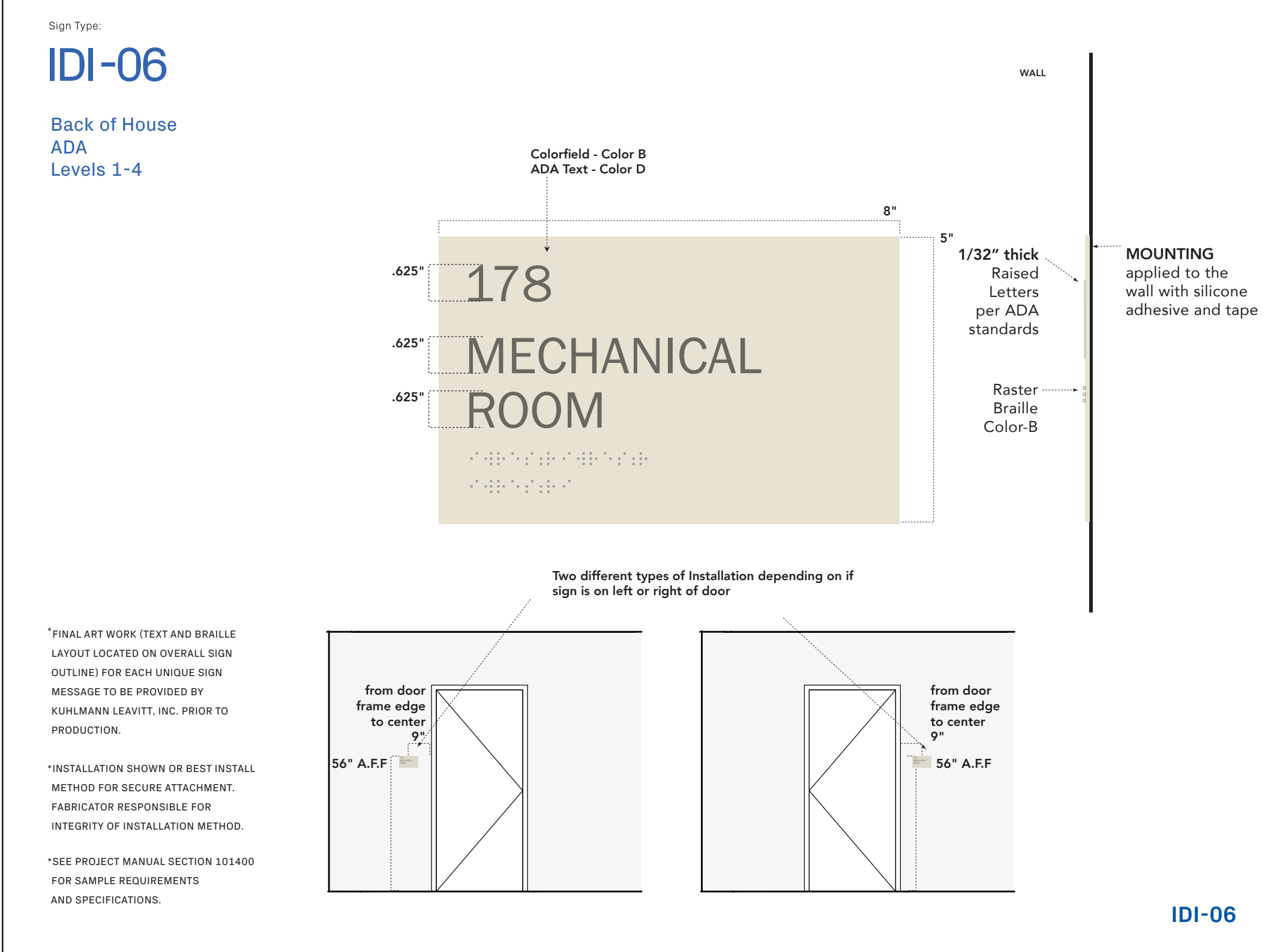
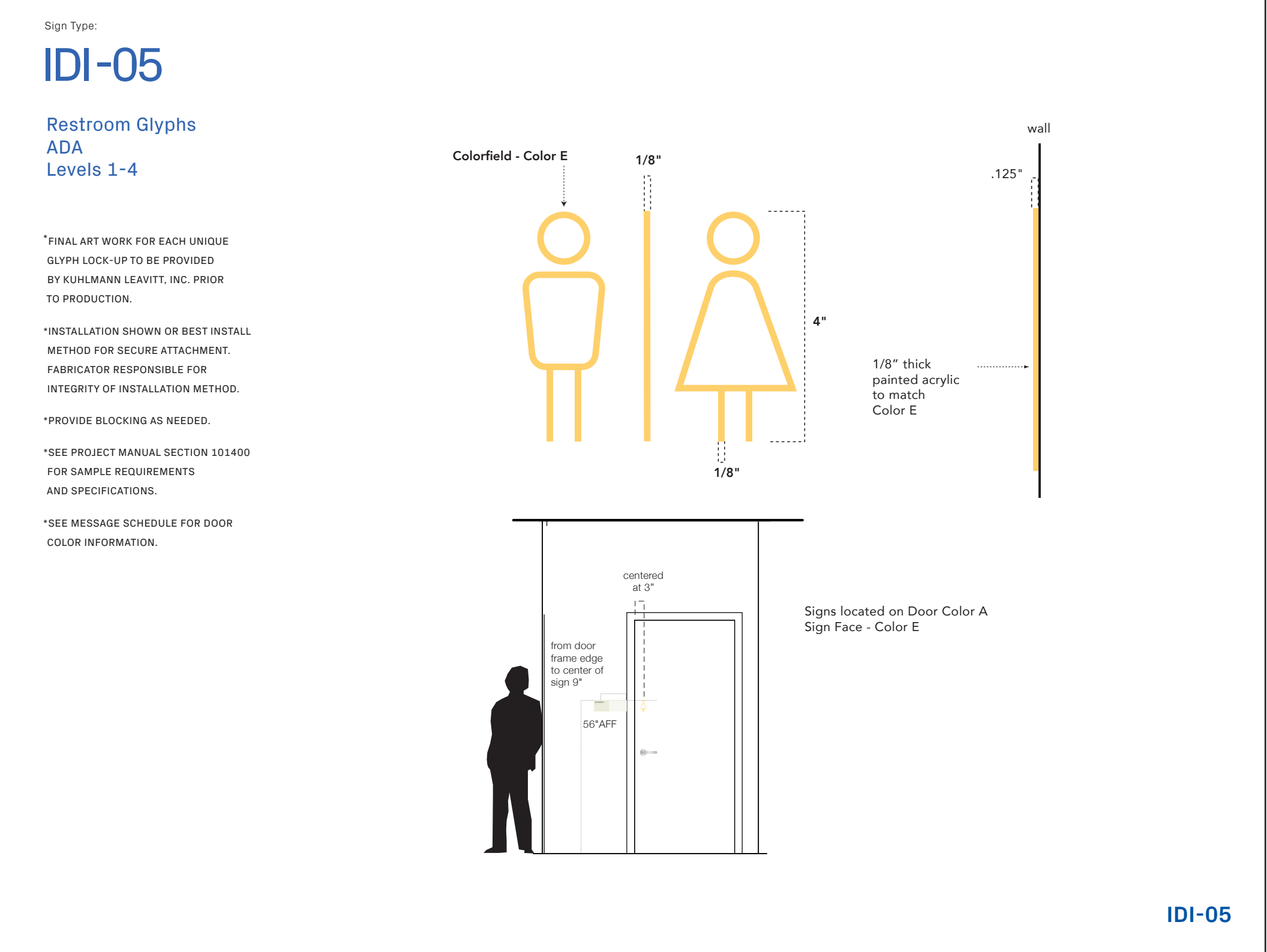
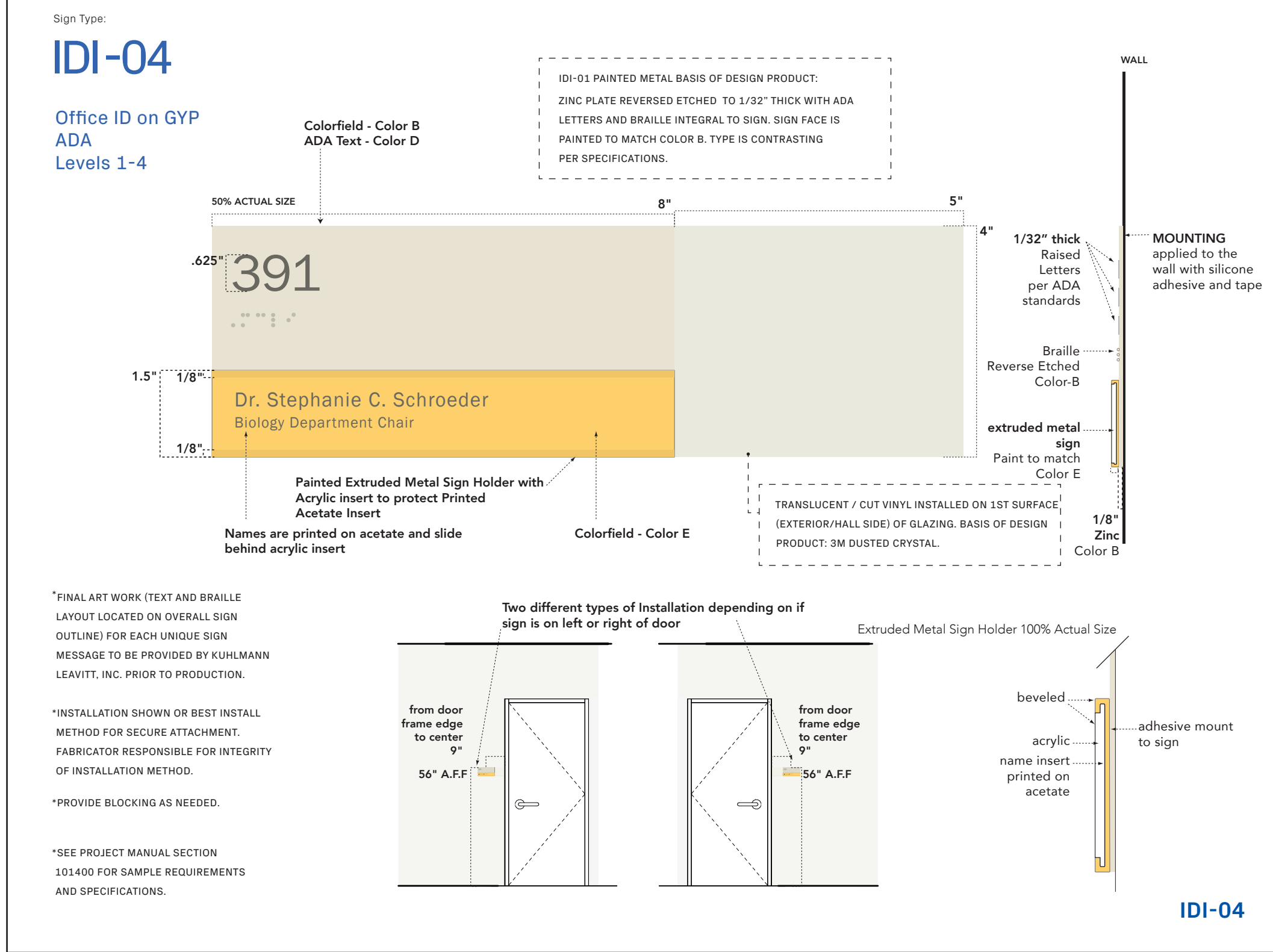
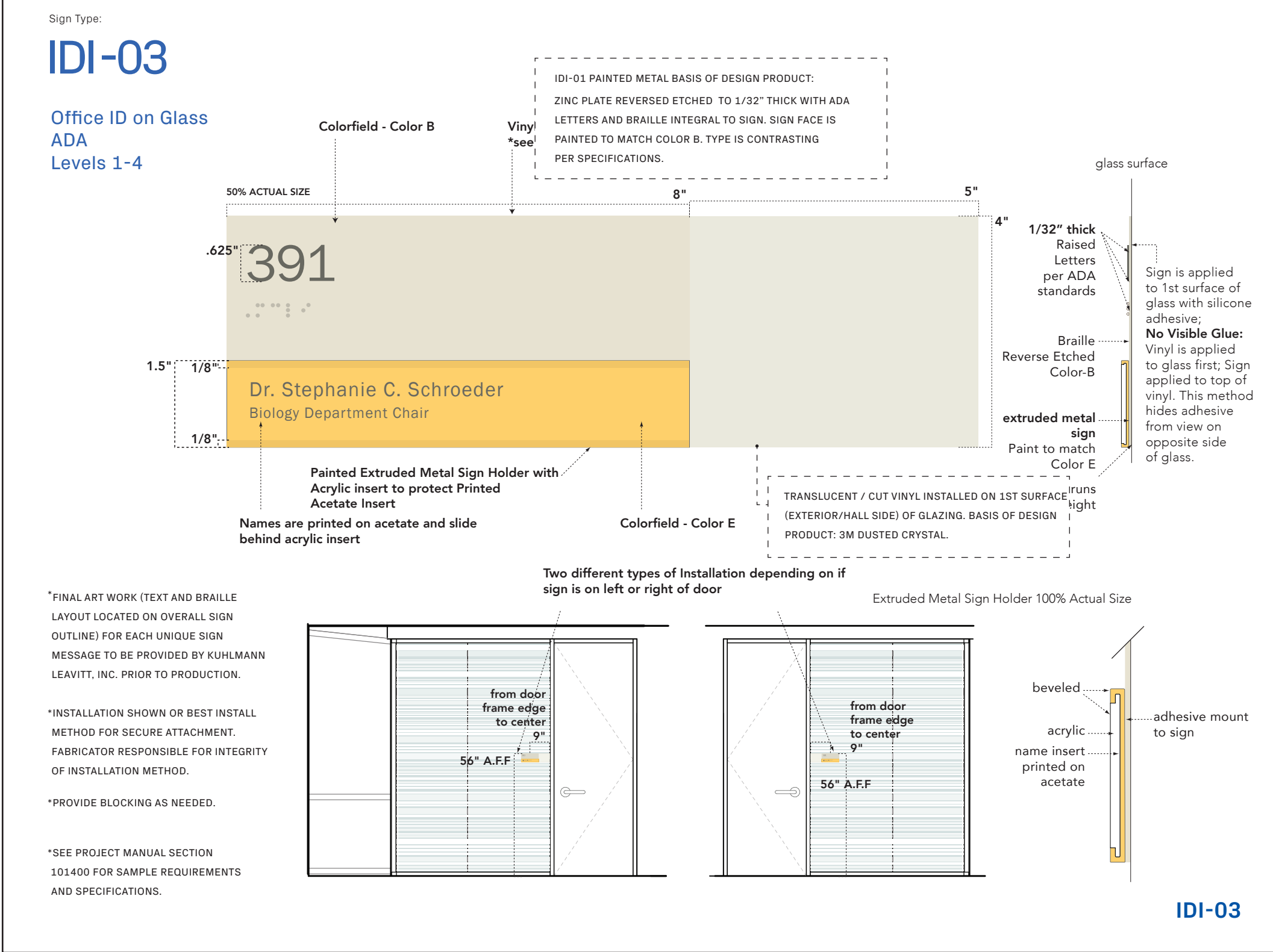
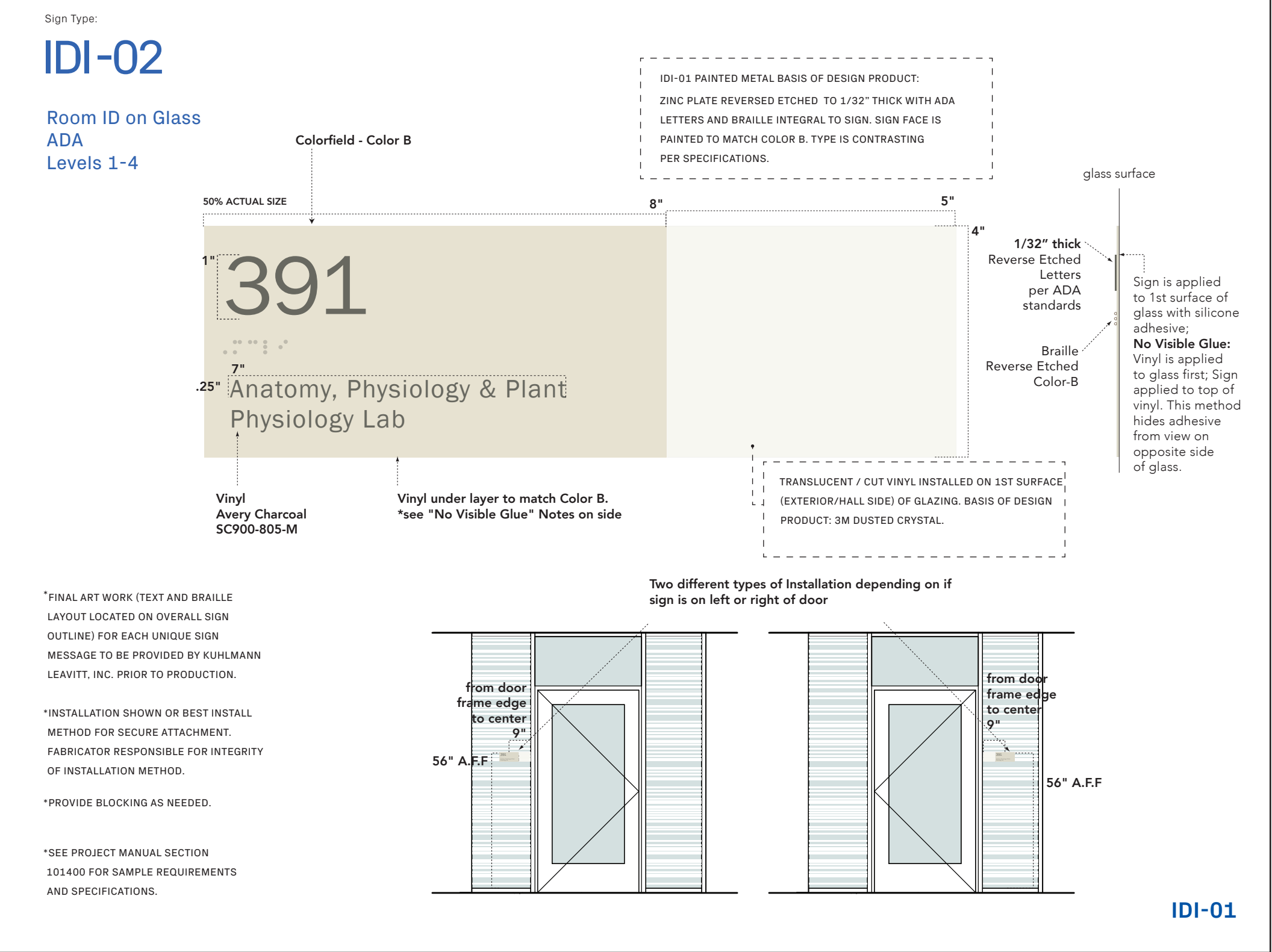
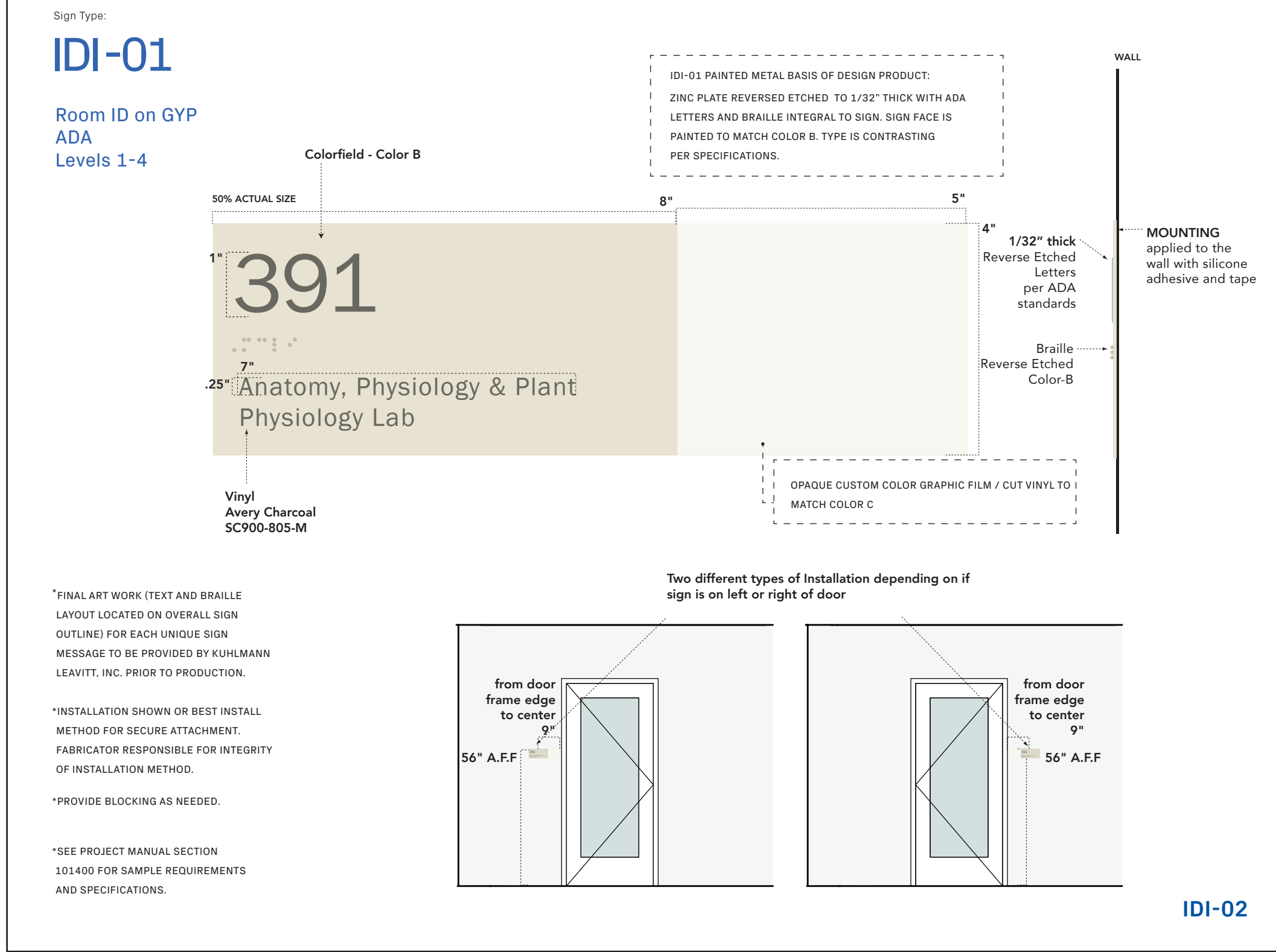
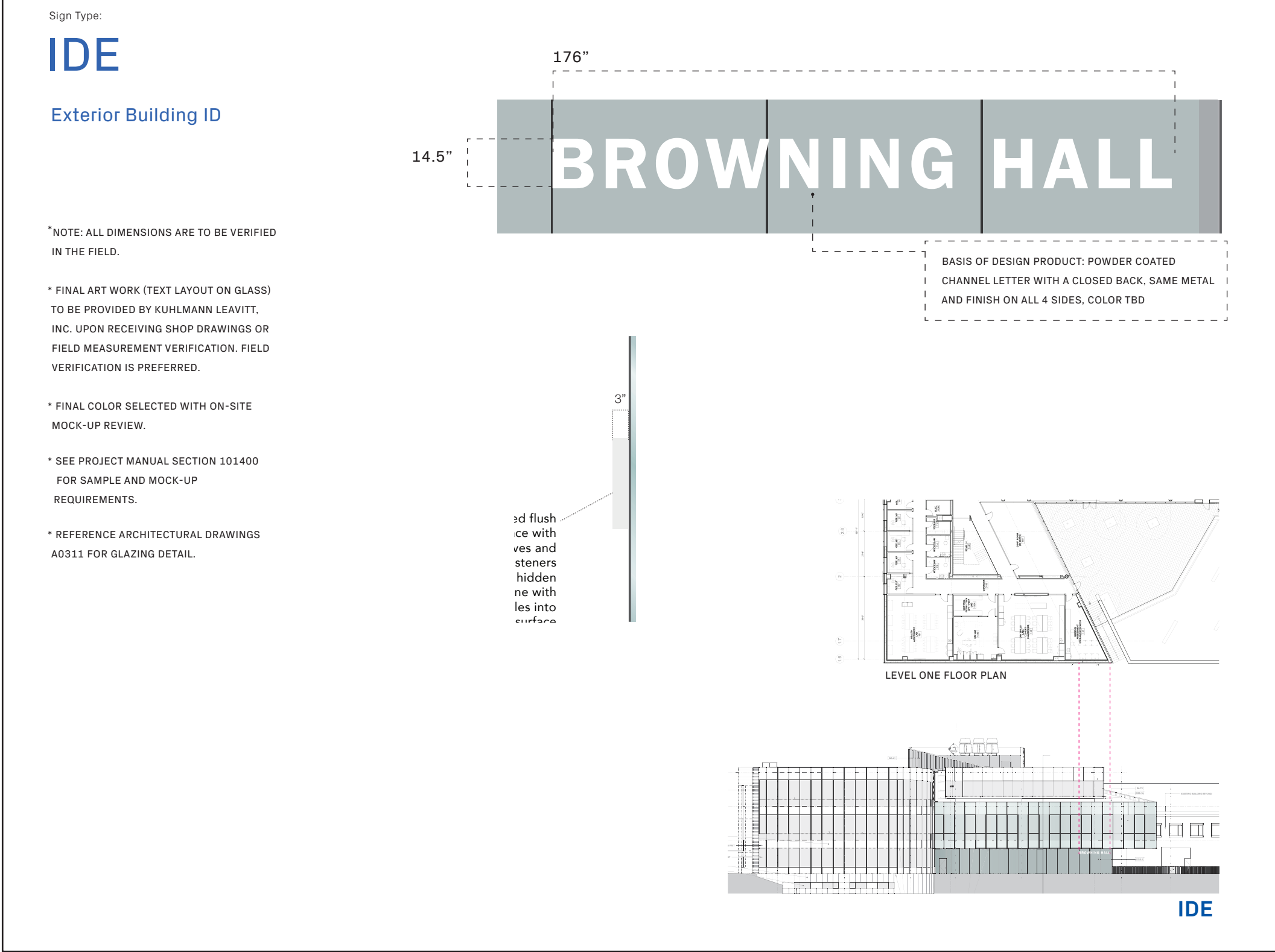
Message Schedule:

L4

Section B

Continued

LEVEL FOUR	SECTION B	<i>continued</i>		
TYPE	LOC NO.	TYPE	MESSAGING	LOCATION NOTES / REMARKS
		SIDE A > CHEMISTRY LAB, CHEMISTRY LAB ORGANIC, CHEMISTRY LAB RESEARCH, CHEMISTRY LAB ANALYTICS / INORGANIC & CHEMISTRY LAB PHYSICAL GLYPHS < OFFICES 401-456	Directional Sign Plaque	side closest to av screen
Dr-01	409			
		SIDE B > CHEMISTRY LAB, CHEMISTRY LAB ORGANIC, CHEMISTRY LAB RESEARCH, CHEMISTRY LAB ANALYTICS / INORGANIC & CHEMISTRY LAB PHYSICAL GLYPHS < OFFICES 401-456	Directional Sign Plaque	Side closet to second elevator
Dr-01	409			
Dr-03	477	Building ID	(Glyph) Woman	
Dr-03	479	Building ID	(Glyph) Man	
Dr-03	409(b)	Building ID	(Glyph) Stair	



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St. Louis, MO 63143
314-884-7600

David Mason & Associates, Inc
Structural & Civil Engineer
800 South Vandeventer Avenue
St. Louis, MO 63110
314.534.1053

Faith Group
Technology
3101 S. Hanley Rd, Suite 100
St. Louis, MO 63143
314.991.2228

Kuhlmann Leavitt, Inc.
Environmental Graphics & Signage
7400 Pershing Ave
St. Louis, MO 63130
314.725.6616

KWA Architects
Architecture
9721 Litzinger Road
St. Louis, MO 63124
314.962.2560

Spellman Brady & Company
Interior Designer
8251 Maryland Avenue, Suite 300
St. Louis, MO 63105
314.862.0070

SWT Design
Landscape Architect
7722 Big Bend Blvd
St. Louis, MO 63119
314.644.5700

Webb Engineering Services, Inc.
Plumbing & Fire Protection
1400 S. 3rd Street, Suite 201
St. Louis, MO 63104
314.588.0600

01 JUL 2016

- ISSUED FOR CONSTRUCTION (BP3)		15 MAR 2016
No.	Description	Date

ENVIRONMENTAL GRAPHICS

Checked by:

EG110

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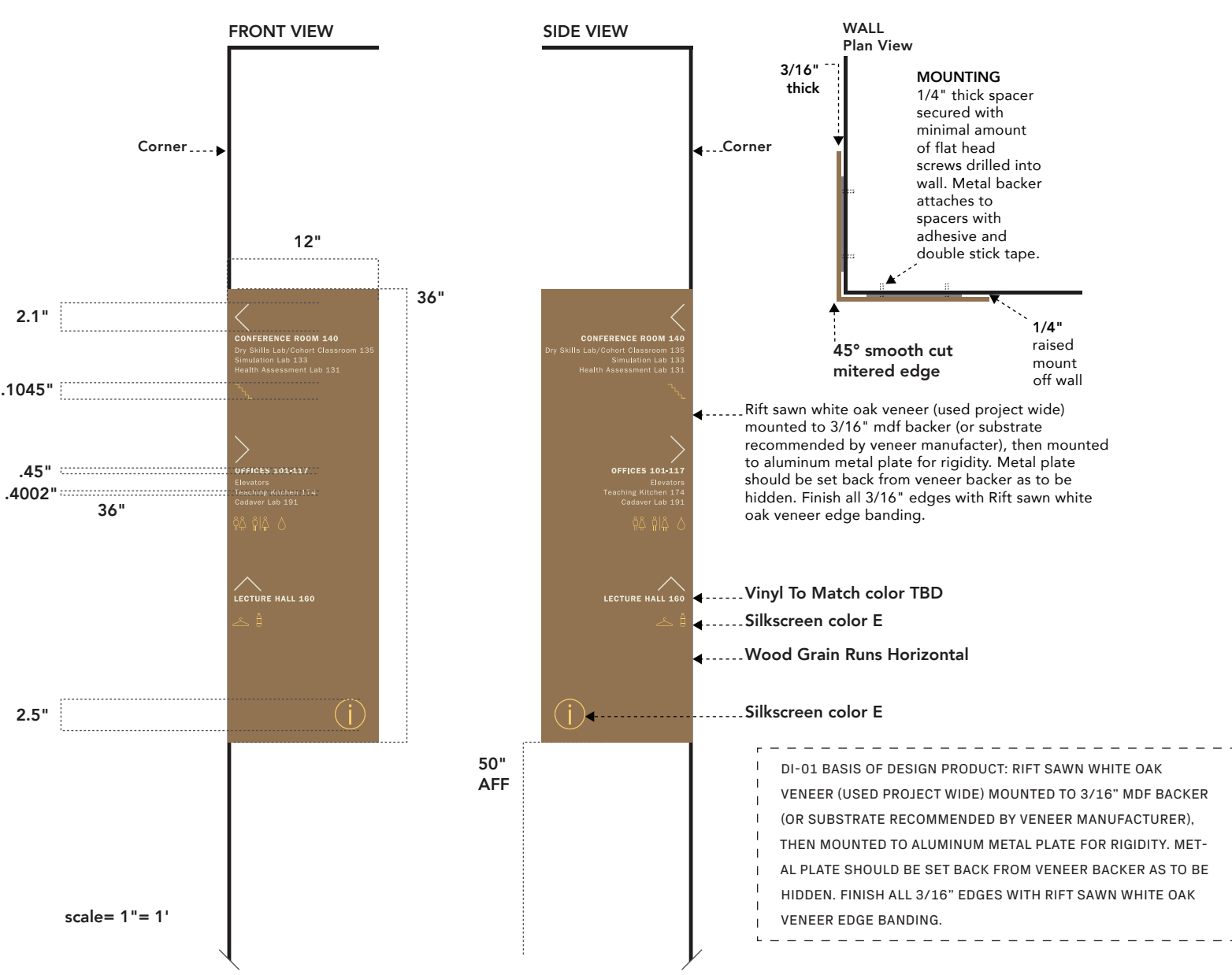
Long Wrap Building
Directional
Levels 1-4

*ART WORK UNIQUE ON ALL

*PROVIDE BLOCKING AS NEEDED.

*SIGN ORIENTATION CHANGES PER LOCATION. SIGN ORIENTATION INDICATED IN MESSAGE SCHEDULE.

*SEE PROJECT MANUAL SECTION 101400 FOR SAMPLE REQUIREMENTS AND SPECIFICATIONS.



DI-01

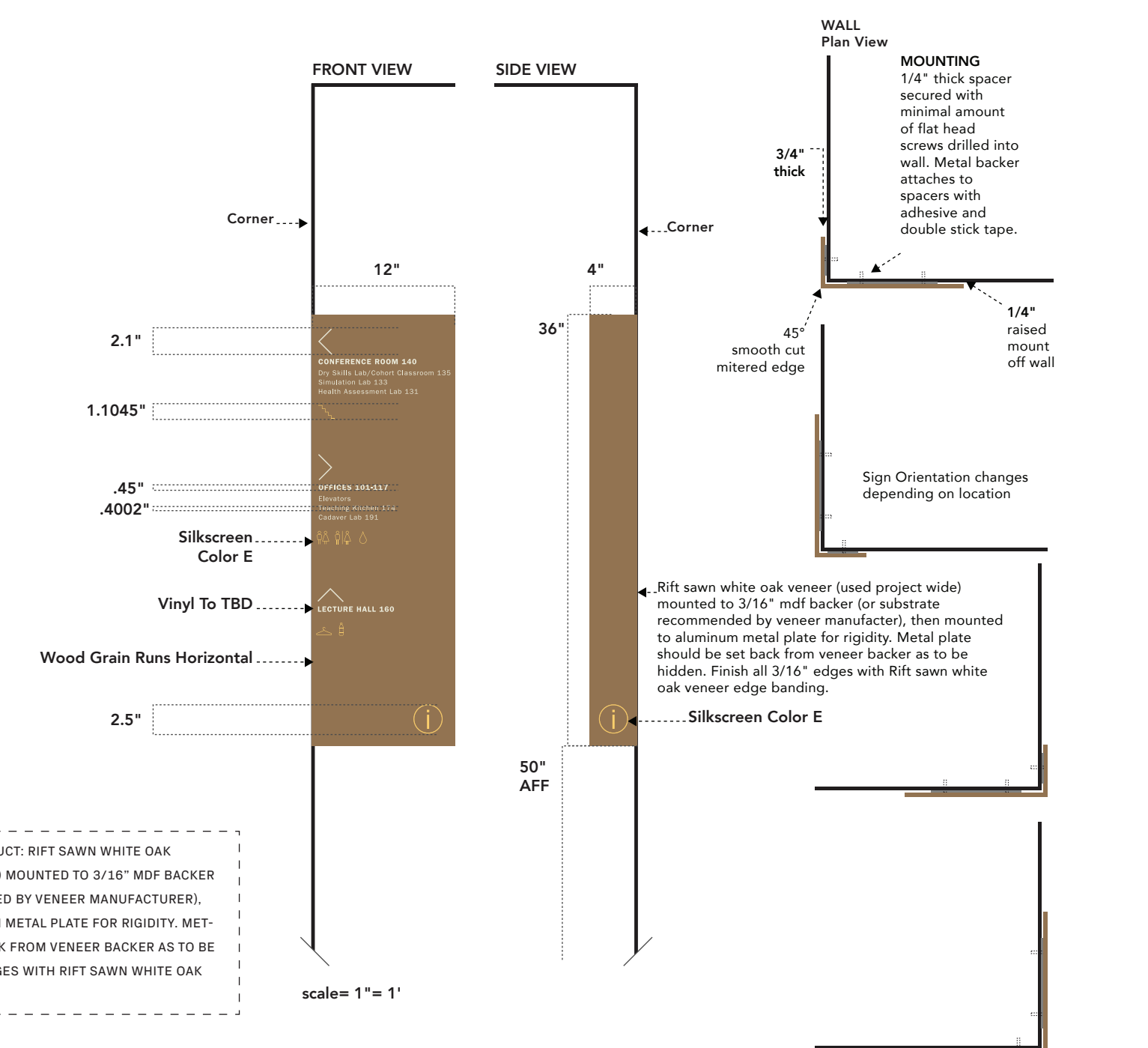
Short Wrap Building Directional Levels 1-4

*ART WORK UNIQUE ON ALL.

*PROVIDE BLOCKING AS NEEDED.

*SIGN ORIENTATION CHANGES PER LOCATION. SIGN ORIENTATION INDICATED IN MESSAGE SCHEDULE.

*SEE PROJECT MANUAL SECTION 101400 FOR SAMPLE REQUIREMENTS AND SPECIFICATIONS.

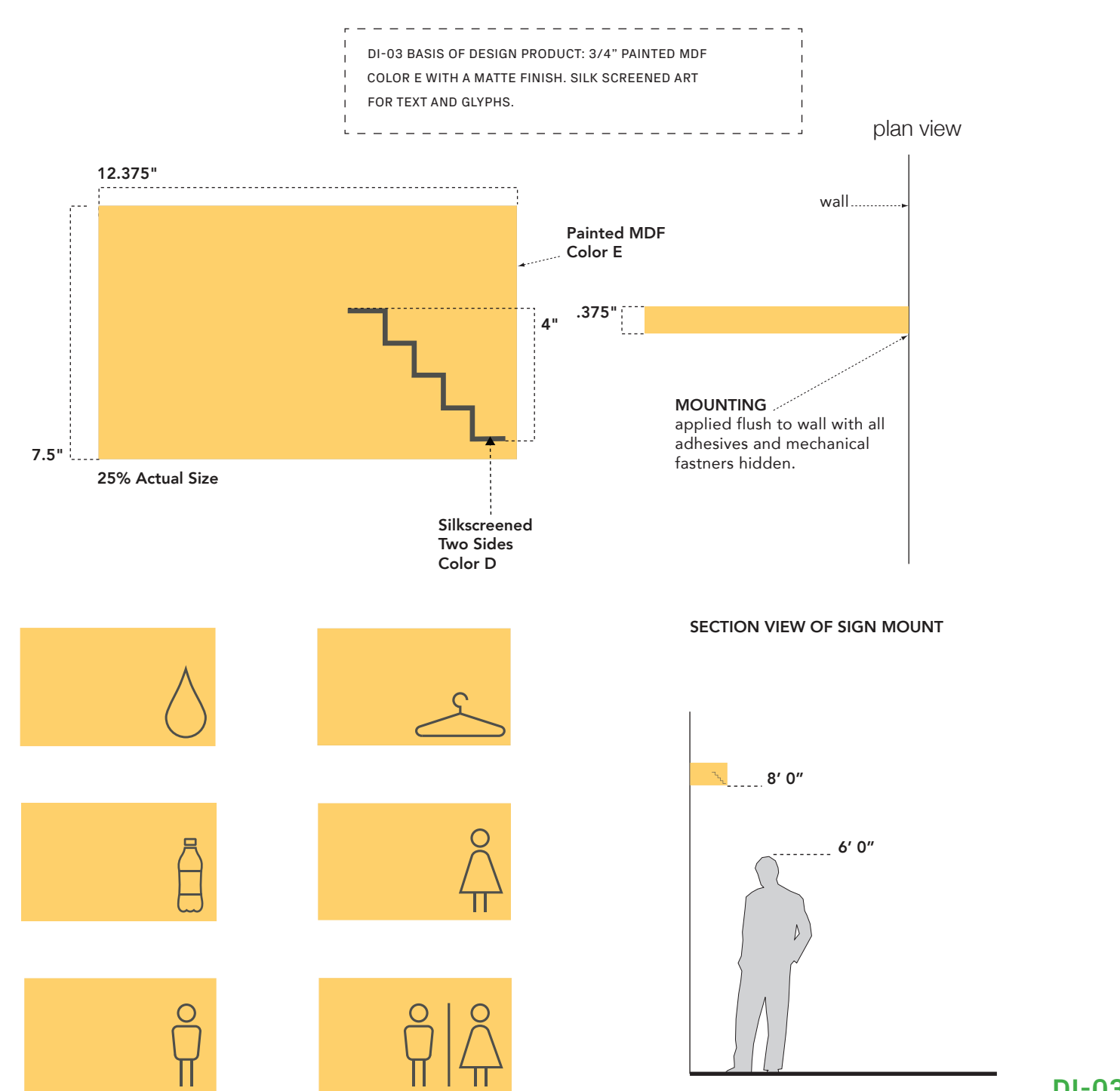


DI-02

Directional ID
Blade Sign
Levels 1-4

*INSTALLATION SHOWN OR BEST INSTALL

*SEE PROJECT MANUAL SECTION 101400
FOR SAMPLE REQUIREMENTS AND
SPECIFICATIONS.

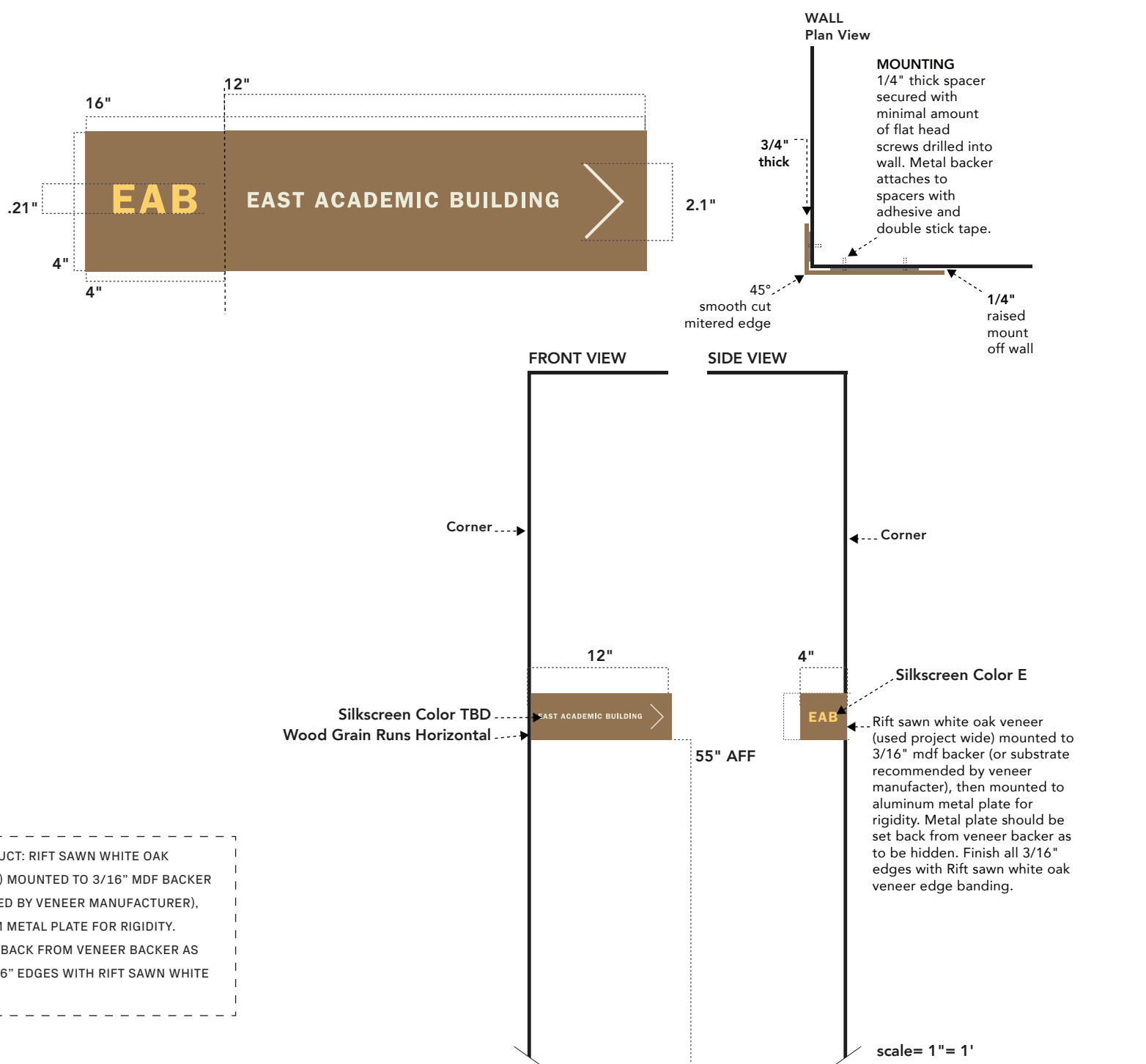


DI-03

EAB Directional Levels 1-4

*INSTALLATION SHOWN OR BEST INSTALL

*SEE PROJECT MANUAL SECTION 101400
FOR SAMPLE REQUIREMENTS AND
SPECIFICATIONS.



DI-04

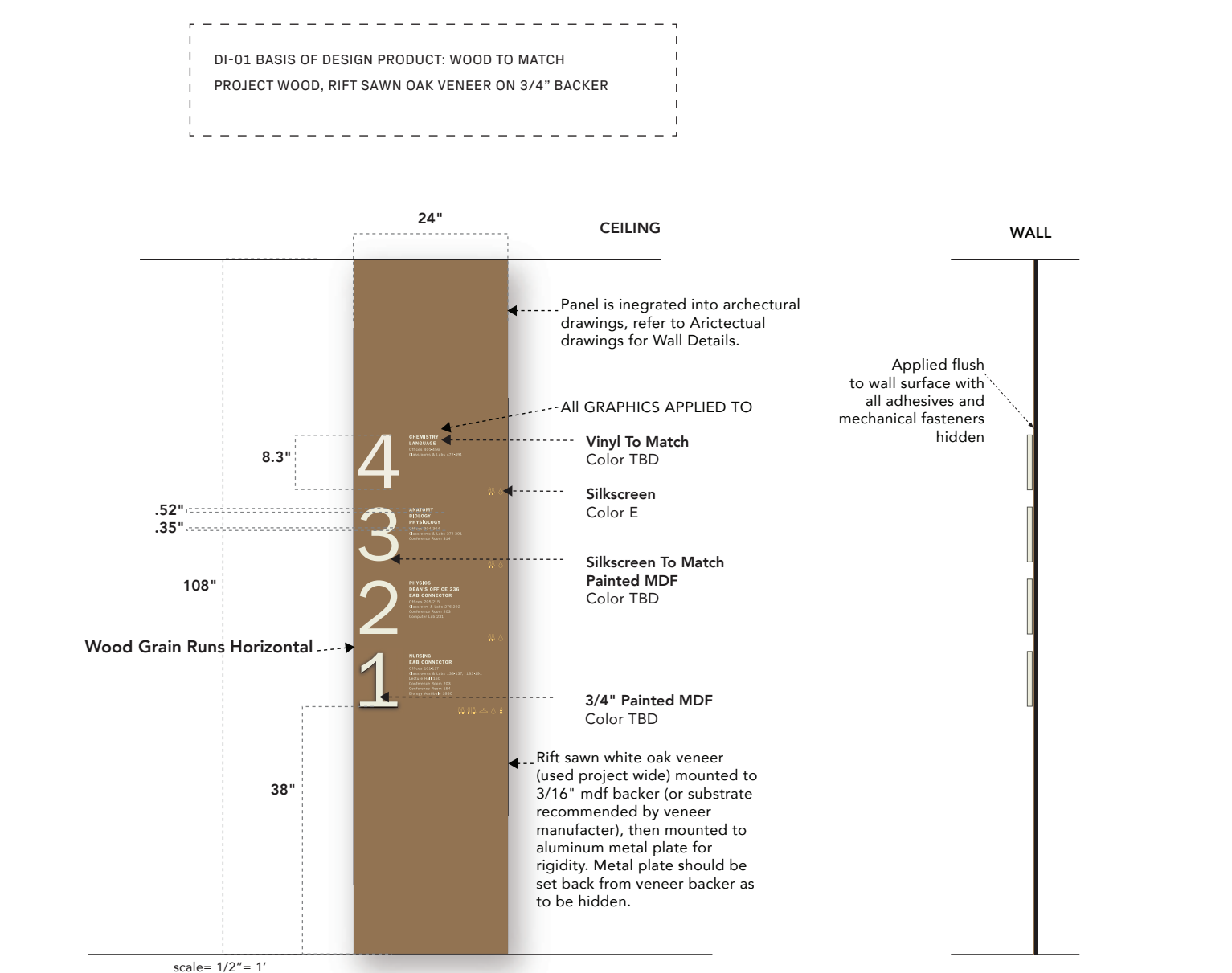
Directory
Levels 1-4

*ART WORK UNIQUE ON ALL.

*INSTALLER TO COORDINATE WITH CONTRACTOR/WOOD WORKER FOR GRAPHICS INSTALLATION BEFORE PANEL IS APPLIED TO WALL.

*PROVIDE BLOCKING AS NEEDED.

*SEE PROJECT MANUAL SECTION 101400 FOR SAMPLE REQUIREMENTS AND SPECIFICATIONS.



ORI-01

CANNONDESIGN

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CONFORMED SET 01 JUL 2016

- ISSUED FOR CONSTRUCTION (BP3)		15 MAR 2016
No.	Description	Date

Drawing Title:

ENVIRONMENTAL GRAPHICS

Project No.: 04561.01 Checked by:

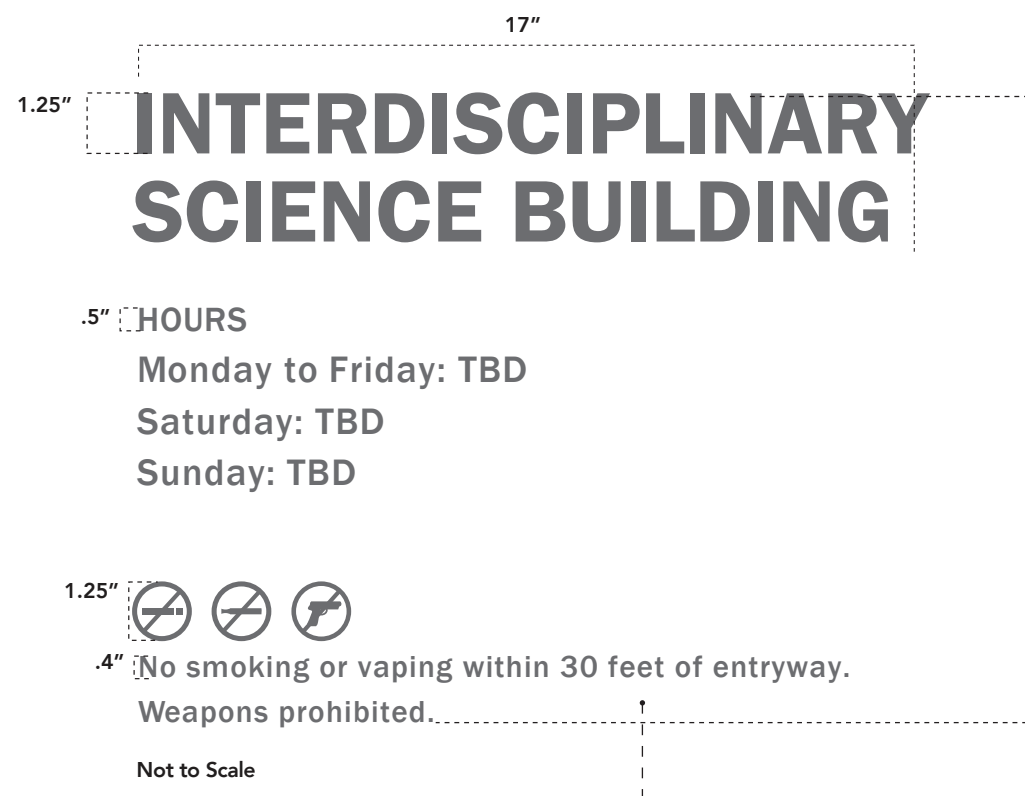
EG111

© Cannon Design 2015

Sign Type:

RE-01

Building
Information
Levels 1-4



EXTERIOR TRANSLUCENT GRAPHIC FILM / VINYL
CUT AND INSTALLED ON INTERIOR SIDE OF GLASS
(BASIS OF DESIGN PRODUCT)
3M TRANSLUCENT FILMS 363D-020 WHITE

RE-01

Sign Type:

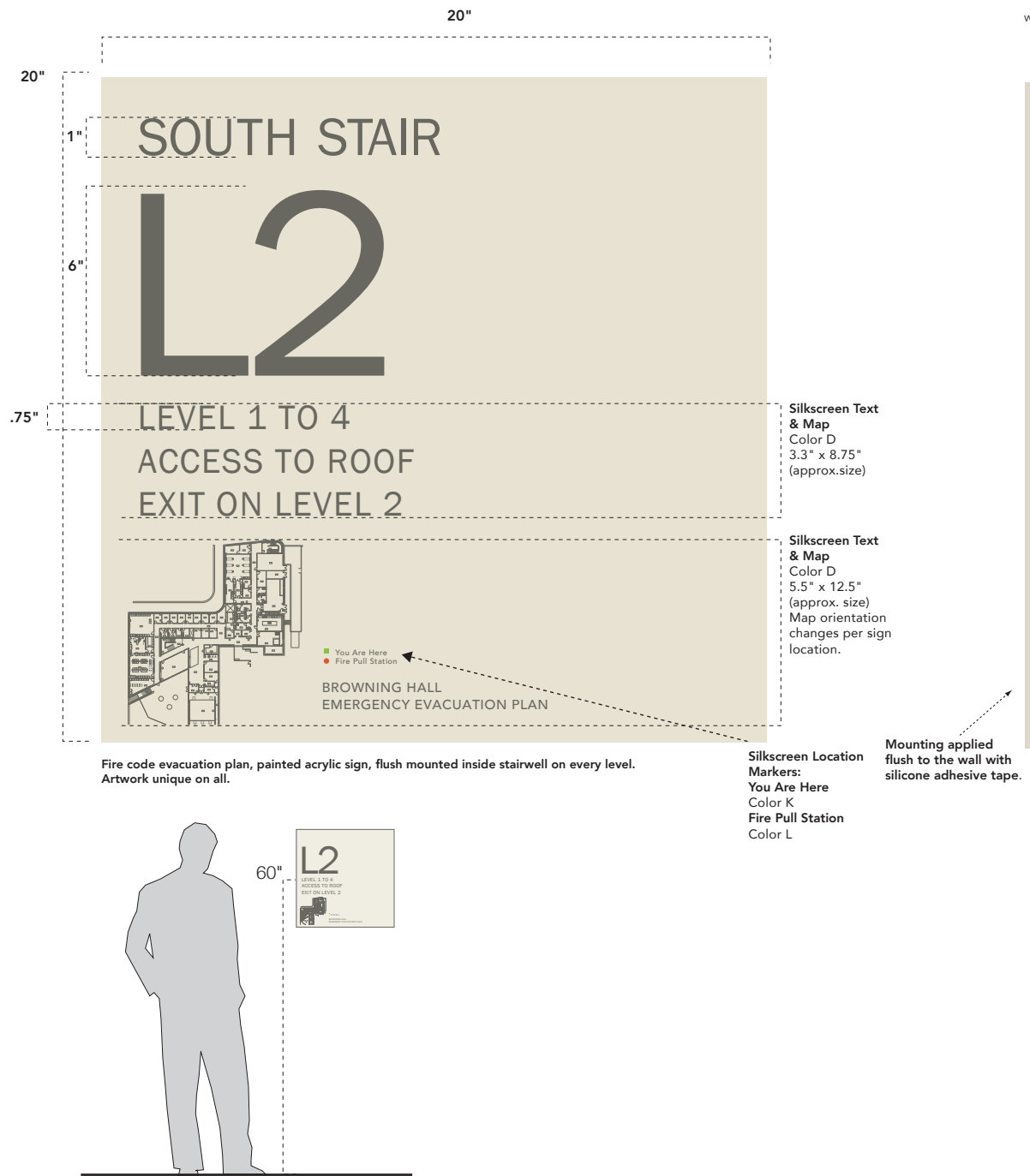
RI-01

Stairwell Evacuation
Levels 1-4

*FINAL ART WORK (TEXT AND
MAP LAYOUT AND ORIENTATION
LOCATED ON OVERALL SIGN
OUTLINE) FOR EACH UNIQUE SIGN
MESSAGE TO BE
PROVIDED BY KUHLMANN LEAVITT,
INC. PRIOR TO PRODUCTION.

*INSTALLATION SHOWN
OR BEST INSTALL METHOD FOR
SECURE ATTACHMENT.
FABRICATOR RESPONSIBLE FOR
INTEGRITY OF INSTALLATION
METHOD.

*SEE PROJECT MANUAL SECTION
101400 FOR SAMPLE
REQUIREMENTS AND SPECIFICA-
TIONS.



Signscreen Text
& Map
Color G
2.3" x 8.75"
Signscreen Label

Signscreen Text
& Map
Color G
2.3" x 8.75"
Signscreen Label

Signscreen Location
Markers:
You Are Here
Color K
Fire Pull Station
Color L

RI-01

Sign Type:

RI-02

Regulatory Messages
Levels 1-4

* FINAL ART WORK (TEXT LAYOUT ON DOOR)
TO BE PROVIDED BY KUHLMANN LEAVITT, INC.
PRIOR TO PRODUCTION.

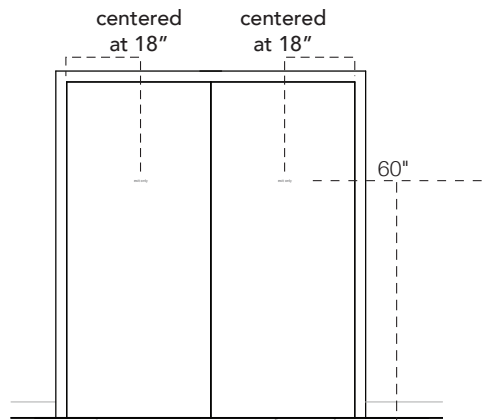
* FINAL COLOR SELECTED WITH COLOR
SAMPLE REVIEW.

* SEE PROJECT MANUAL SECTION 101400
FOR SAMPLE REQUIREMENTS.

* REFERENCE ARCHITECTURAL
DRAWINGS FOR DOOR PAINT
SCHEDULE.



scale : 1/4" = 1'



RI-02

Sign Type:

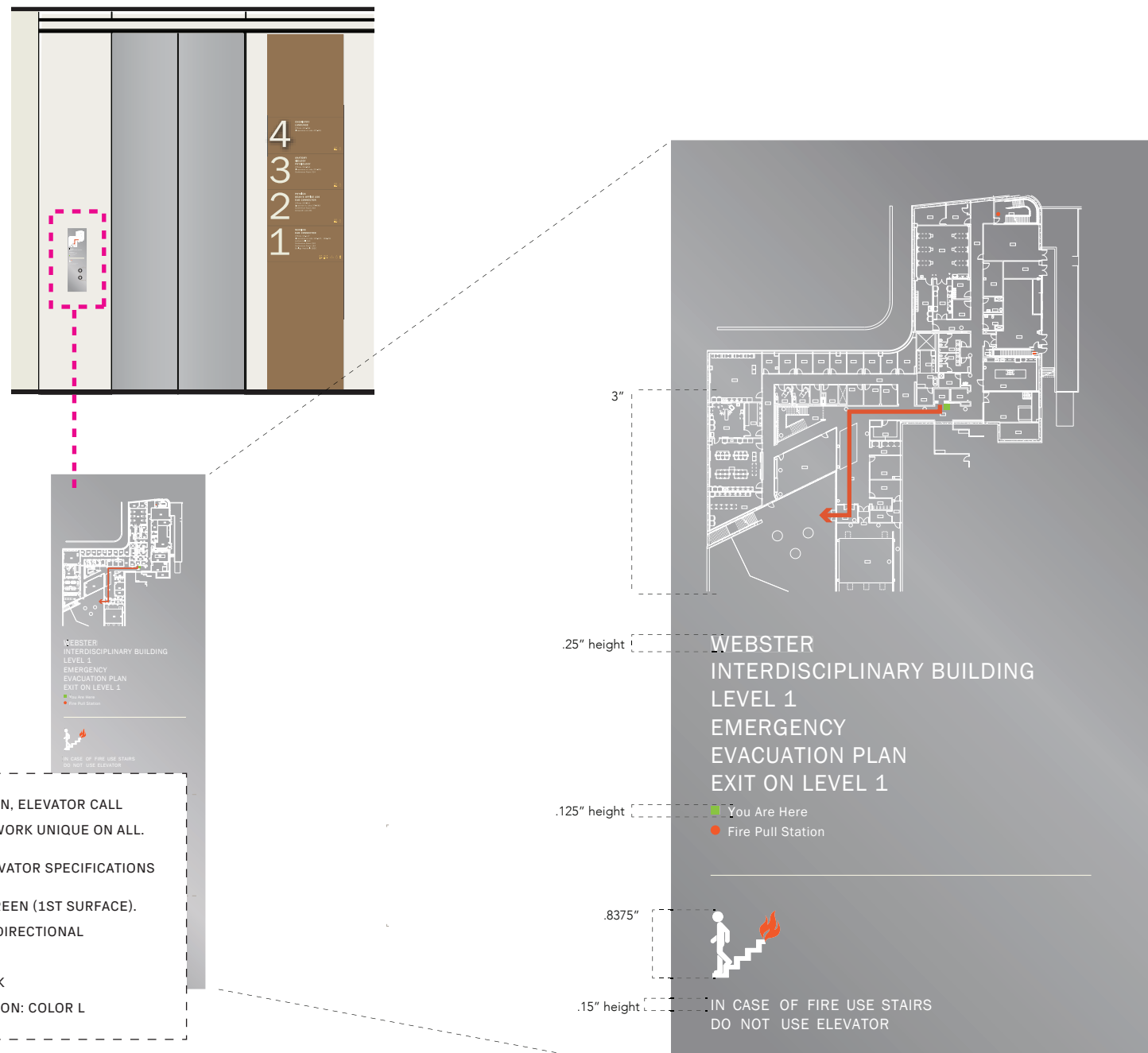
RI-03

Elevator Evacuation
Levels 1-4

*FINAL ART WORK (TEXT AND MAP
LAYOUT AND ORIENTATION LOCATED
ON OVERALL SIGN OUTLINE) FOR
EACH UNIQUE SIGN MESSAGE TO BE
PROVIDED BY KUHLMANN LEAVITT, INC.
PRIOR TO PRODUCTION.

*INSTALLER TO COORDINATE WITH
CONTRACTOR/ELEVATOR
MANUFACTURER FOR CALL PANEL
SILKSCREENING.

*SEE PROJECT MANUAL SECTION
101400 FOR SAMPLE REQUIREMENTS
AND SPECIFICATIONS.



FIRE CODE EVACUATION PLAN, ELEVATOR CALL
PANELS, EVERY LEVEL. ARTWORK UNIQUE ON ALL
CALL PANEL FINISH PER ELEVATOR SPECIFICATIONS
ARTWORK 3-COLOR SILKSCREEN (1ST SURFACE).
SILK SCREENED MAPS AND DIRECTIONAL
INFORMATION: COLOR G
YOU ARE HERE DOT: COLOR K
FIRE PULL STATION & EXIT ICON: COLOR L

RI-02

Sign Type:

RI-04

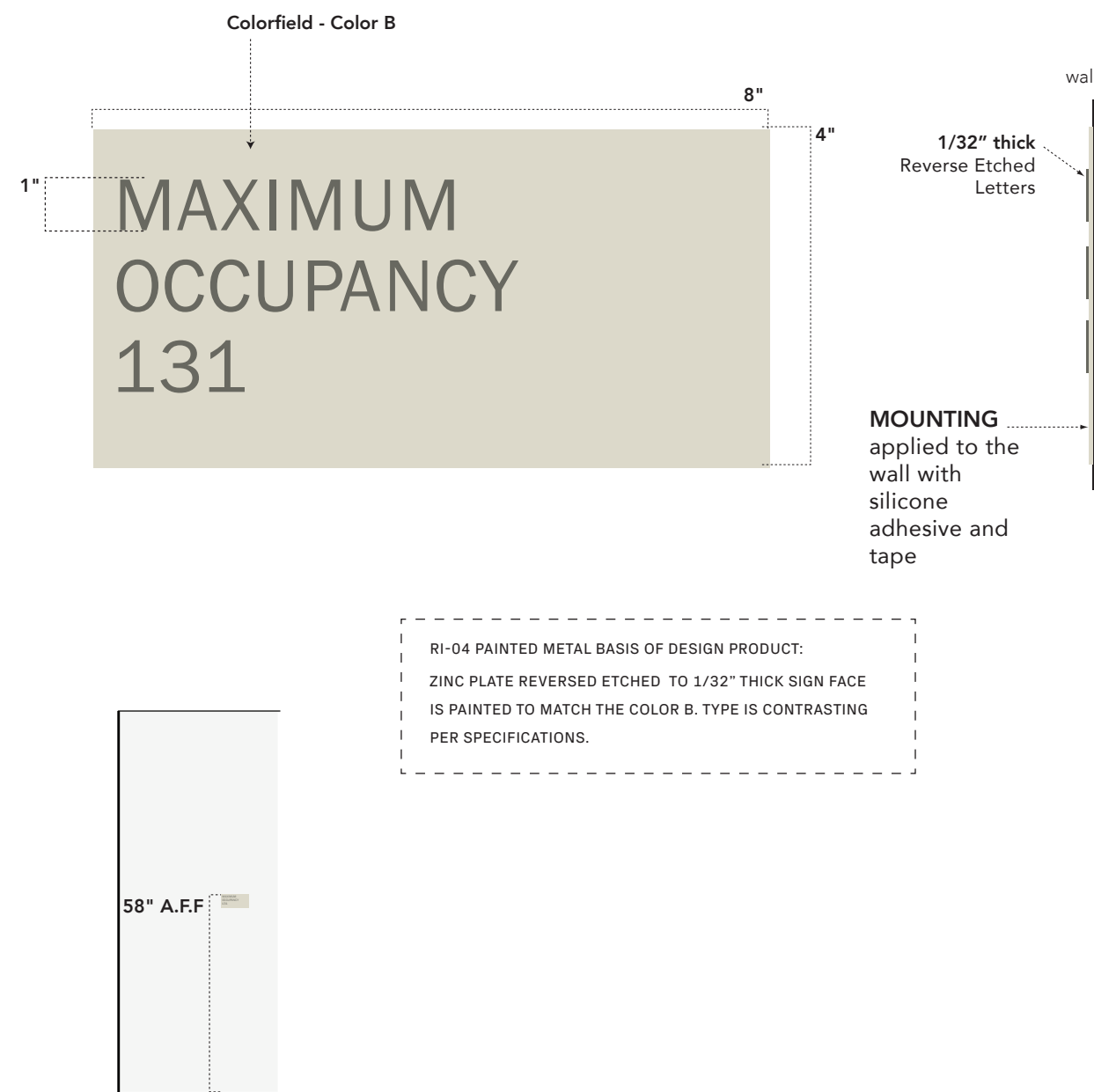
Maximum Occupancy
Levels 1-4

*FINAL ART WORK (TEXT) TO BE PROVIDED
BY KUHLMANN LEAVITT, INC. PRIOR TO
PRODUCTION.

*INSTALLATION SHOWN OR BEST INSTALL
METHOD FOR SECURE ATTACHMENT.
FABRICATOR RESPONSIBLE FOR INTEGRITY
OF INSTALLATION METHOD.

*PROVIDE BLOCKING AS NEEDED.

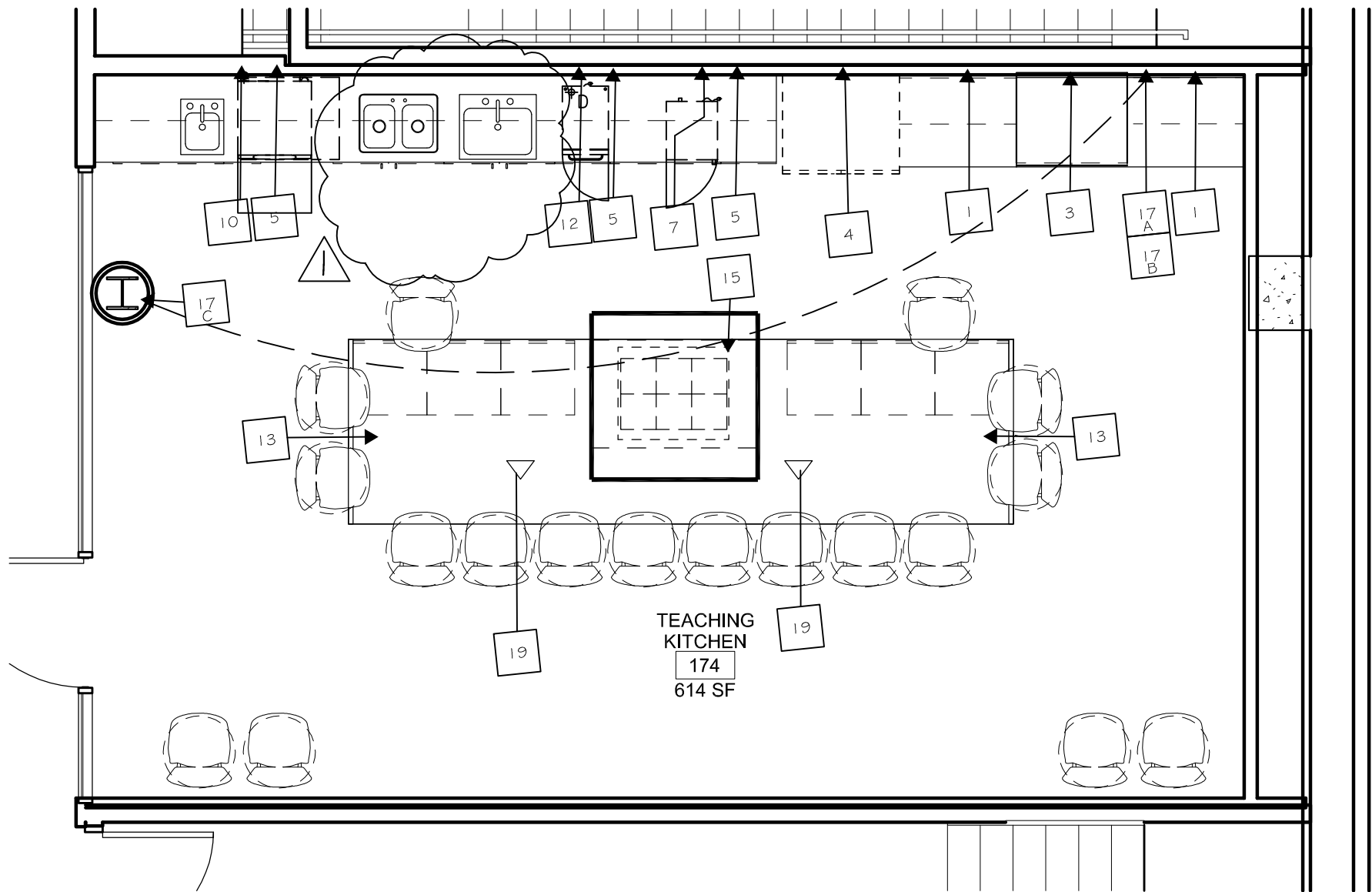
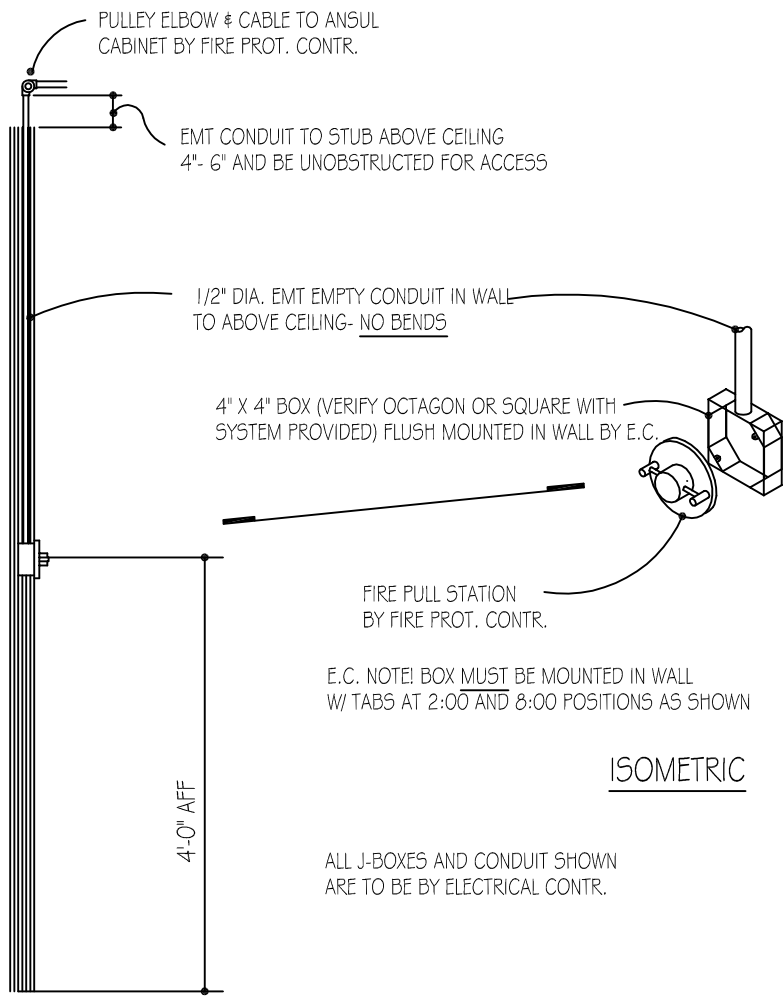
*SEE PROJECT MANUAL SECTION 101400
FOR SAMPLE REQUIREMENTS AND
SPECIFICATIONS.



RI-04 PAINTED METAL BASIS OF DESIGN PRODUCT:
ZINC PLATE REVERSED ETCHED TO 1/32" THICK SIGN FACE
IS PAINTED TO MATCH THE COLOR B. TYPE IS CONTRASTING
PER SPECIFICATIONS.

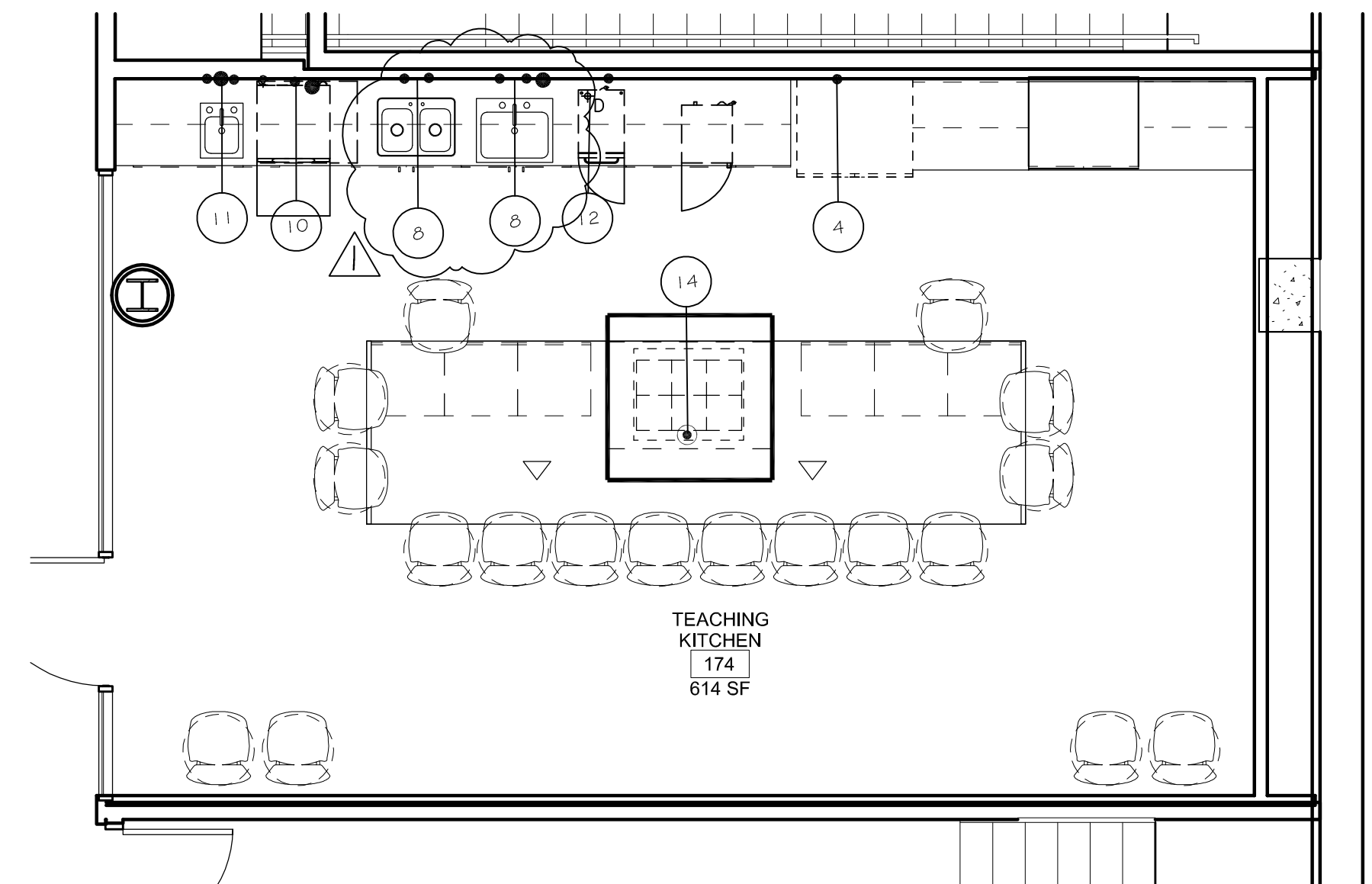
RI-02

ELECTRICAL SCHEDULE									
CONN. NO.	VOLTAGE	PHASE	AMPS LOAD	K.W. LOAD	CONN. TYPE	HGT. A.F.F.	COMMENTS		
1	115	1	20	1.92	D.R.	4'-0"	CONVENIENCE OUTLET		
3	240	1	25.8		J.B.	4'-0"	VERIFY - EQUIPMENT SUPPLIED BY OTHERS		
4	115	1	20	1.92	D.R.	4'-0"	VERIFY - EQUIPMENT SUPPLIED BY OTHERS		
5	115	1	20	1.92	D.R.	4'-0"	CONVENIENCE OUTLET		
9	115	1	17.7	1.92	S.R.	6'-6"	VERIFY - EQUIPMENT SUPPLIED BY OTHERS		
11	240	1	39.6		S.R.	4'-6"	VERIFY - EQUIPMENT SUPPLIED BY OTHERS		
12	115	1	5		D.R.	1'-6"	ELECT. CONTR. SHALL CONNECT TO J-BOX FOR PRE-WIRED CONVENIENCE OUTLETS MOUNTED UNDER TOP OF TABLE BY KEC.		
13	115	1	20	1.92	S.C.	1'-6"	VERIFY - EQUIPMENT SUPPLIED BY OTHERS		
14	115	1	5		J.B.	4'-0"	ELECT. CONTR. SHALL CONNECT TO J-BOX ON TOP OF HOOD FOR PRE-WIRED HOOD LIGHT SWITCH		
15	115	1	15		J.B.	9'-0"	ELECT. CONTR. SHALL PROVIDE 20 AMP 24 HR DEDICATED CIRCUIT FOR HOOD FIRE PROTECTION SYSTEM		
17A	115	1	20	1.92	J.B.	9'-0"	ELECT. CONTR. SHALL INNERCONNECT EXHAUST FANS AND MAKE-UP AIR FANS TO MICRO SWITCH IN FIRE PROTECTION CABINET		
17B					J.B.	9'-0"	ELECT. CONTR. SHALL PROVIDE J-BOX AND EMPTY CONDUIT IN WALL FOR REMOTE MANUAL PULL STATION - SEE DETAIL THIS SHEET		
17C					J.B.	4'-0"	VERIFY REQUIREMENTS AND LOCATIONS FOR CAMERA AND MONITOR EQUIPMENT		
19	115	1	20	1.92	D.R.	9'-0"			



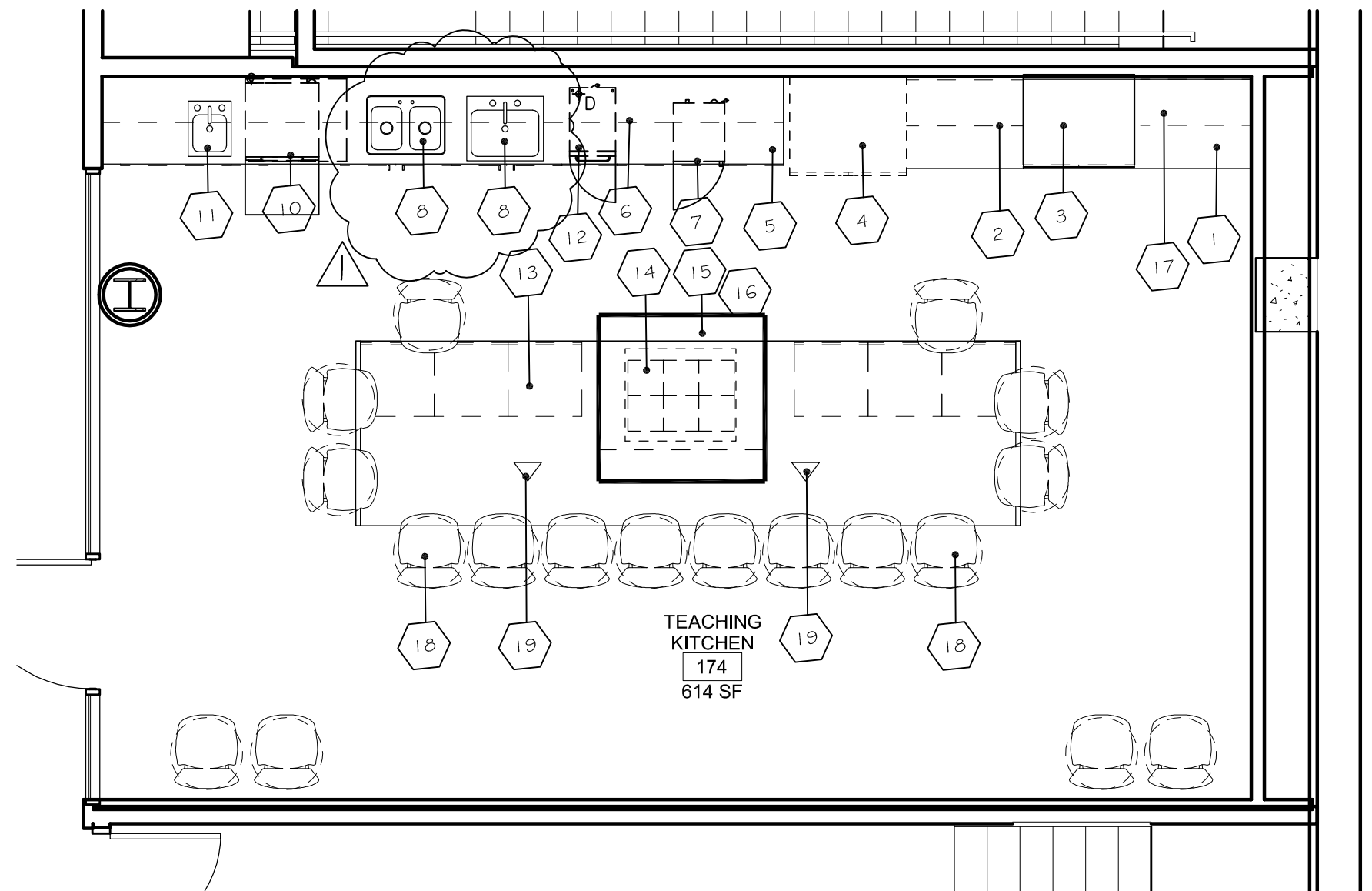
FOODSERVICE EQUIPMENT SPOT ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"

PLUMBING SCHEDULE									
CONN. NO.	HOT WATER	COLD WATER	DIRECT WASTE	IN-DIRECT WASTE	GAS SIZE	GAS MBTU/S	CONN. TYPE	HGT. A.F.F.	COMMENTS
4	1/2"	1/2"					S.O.	4'-0"	FOR BUILT IN ICE MAKER ON UNIT
8	1/2"	1/2"					S.O.	1'-6"	
11	1/2"	1/2"					S.O.	1'-6"	
12	1/2"	1/2"					S.O.	1'-6"	
13	3/4"	1/2"					S.R.	4'-0"	PLBG. CONTR. SHALL PROVIDE 1.0 DEGREE H.W. TO DISH MACHINE
14	1/2"	1/2"					3" HUB	4'-0"	PLBG. CONTR. SHALL PIPE FROM DRAIN ON EQUIPMENT TO HUB DRAIN
15	1/2"	1/2"					S.O.	1'-6"	
16	1/2"	1/2"					S.O.	1'-6"	
17	1/2"	1/2"					S.O.	1'-9"	
18	1/2"	1/2"					S.O.	1'-6"	PLBG. CONTR. SHALL PIPE THRU FILTER IN CABINET BASE - VERIFY
19	1/2"	1/2"					S.O.	1'-6"	PLBG. CONTR. SHALL PIPE TO DRAIN AT SINK
20	1/2"	1/2"					S.O.	1'-6"	VERIFY - UNIT PROVIDED BY OTHERS

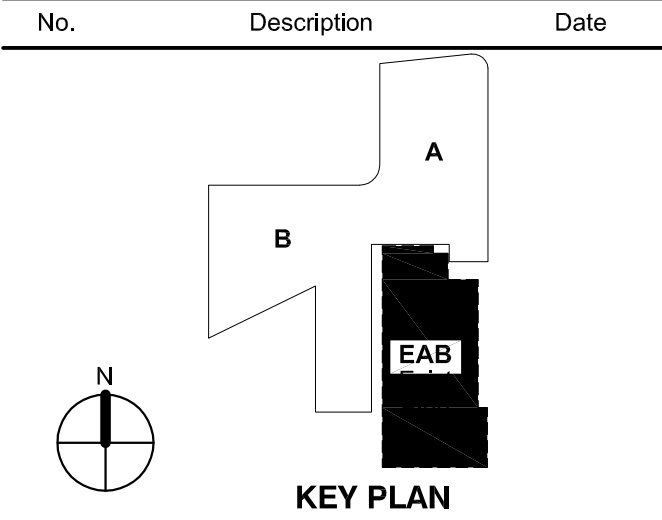


FOODSERVICE EQUIPMENT SPOT PLUMBING PLAN
SCALE: 1/4" = 1'-0"

EQUIPMENT SCHEDULE			
ITEM NO.	QTY.	DESCRIPTION	REMARKS
1	1 LOT	BACK COUNTERS	BY G.C.
2	1 LOT	WALL CABINETS	BY G.C.
3	1	DOUBLE OVFN	BY G.C.
4	1	REFRIGERATOR/FREEZER	BY G.C.
5	1 LOT	BACK COUNTERS	BY G.C.
6	1 LOT	WALL CABINETS	BY G.C.
7	1	MICROWAVE	BY G.C.
8	2	DROP IN SINKS	BY PLUMBER
9	1	SPARE NUMBER	
10	1	DISH WASHER - UNDER COUNTER	HIGH TEMP WITH BUILT IN BOOSTER HEATER
11	1	DROP IN HAND SINK	BY PLUMBER
12	1	UNDER COUNTER ICE MACHINE	BY G.C.
13	1	ISLAND COUNTER	BY G.C.
14	1	DROP IN COOK TOP	BY G.C.
15	1	ISLAND HOOD	BY HVAC
16	1	DUCT AND FAN	
17	1	FIRE PROTECTION SYSTEM	LOCATED IN WALL CABINET
18	1 LOT	FURNITURE	BY G.C.
19	2	CAMERAS AND DIGITAL SCREENS	BY G.C.



FOODSERVICE EQUIPMENT FLOOR PLAN
SCALE: 1/4" = 1'-0"



REVISIONS

REVISION	DESCRIPTION	DATE
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

MISSOURI SPECIALIZED ACCOUNTS

3376 Lynch Rd., Pacific, MO 63069 PHONE: (314) 605-5316 FAX: (314) 605-9730 EMAIL: reg49@captivateair.com

WEBSTER

DATE: 2/5/2016

DWG.#: 2558694

DRAWN BY:

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

MASTER DRAWING

SHEET NO. 1

CAPTIVATE

WEBSTER

0

SHEET NO. 1

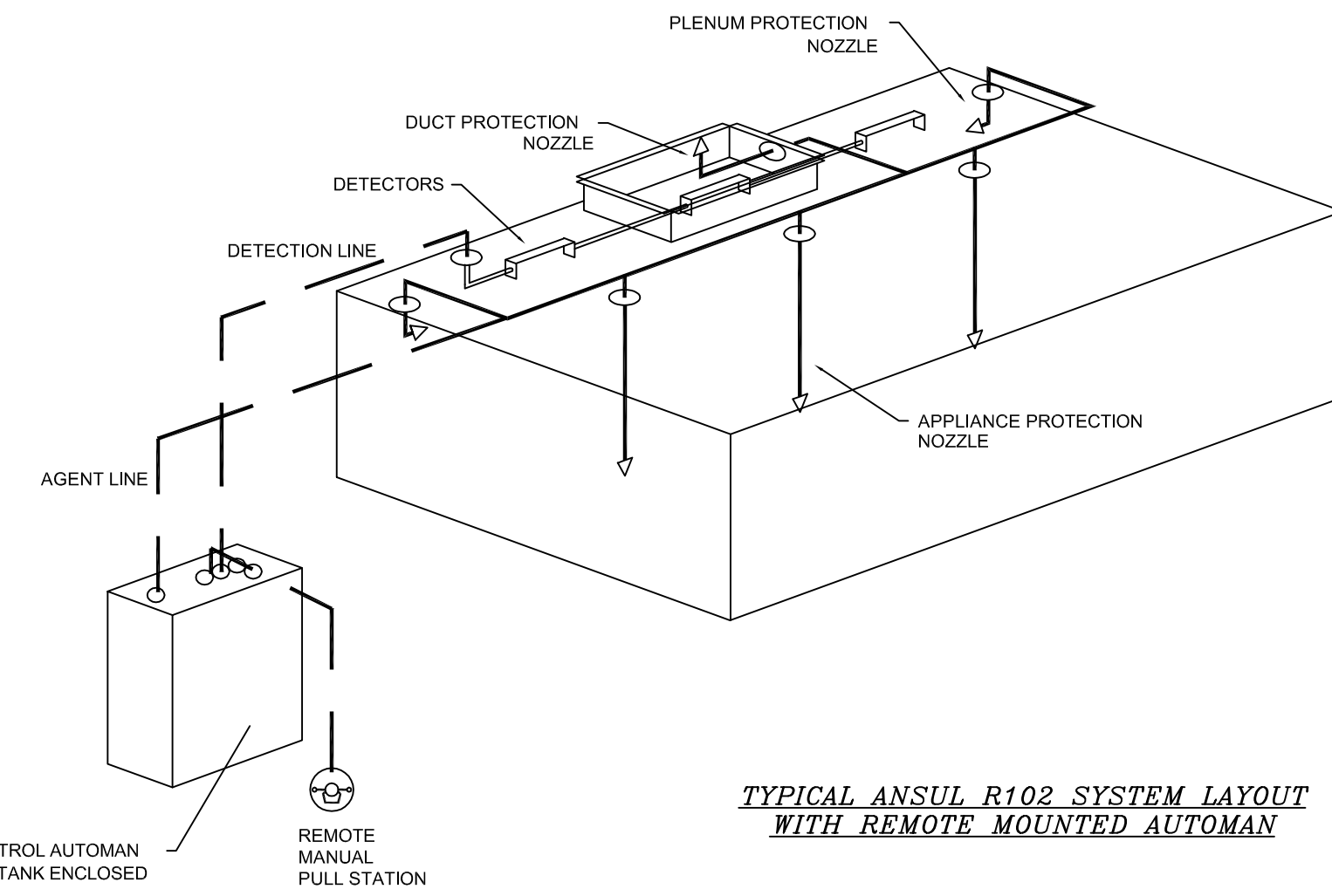
SPECIFICATIONS

THE RESTAURANT FIRE SUPPRESSION SYSTEM SHALL BE THE PRE-ENGINEERED TYPE WITH A FIXED NOZZLE AGENT DISTRIBUTION NETWORK. IT SHALL BE LISTED WITH UNDERWRITERS LABORATORIES, INC. (UL)

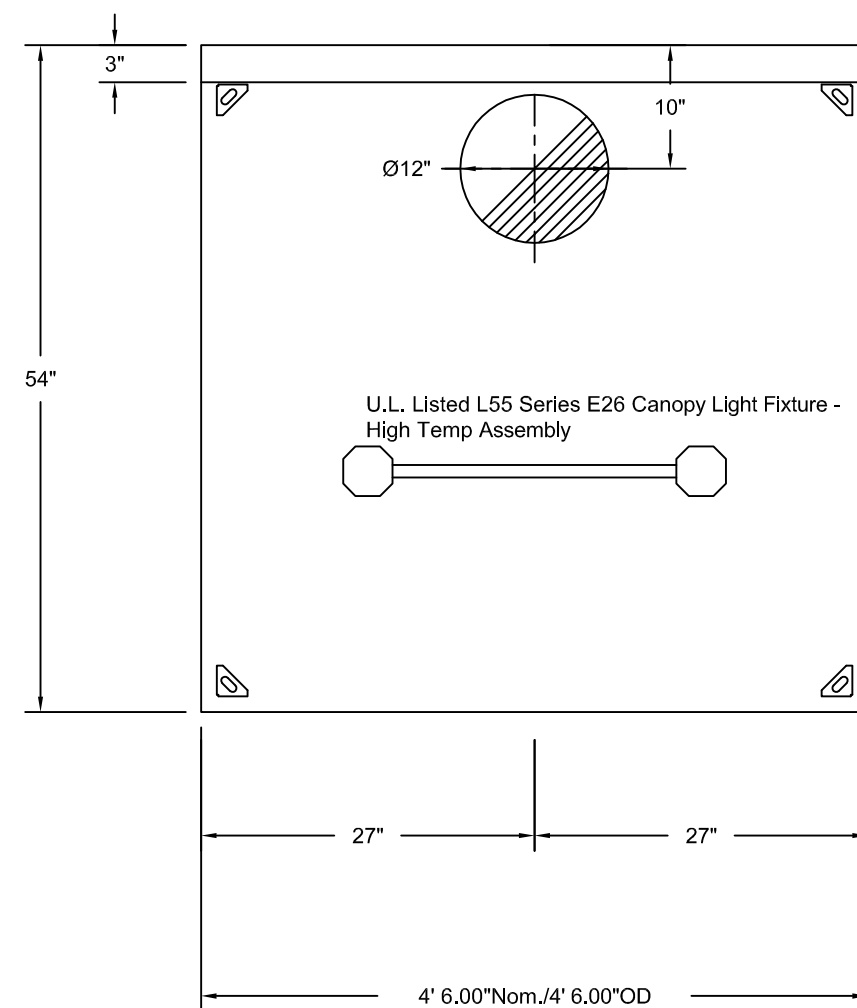
THE SYSTEM SHALL BE CAPABLE OF AUTOMATIC DETECTION AND ACTUATION WITH LOCAL OR REMOTE MANUAL ACTUATION. ACCESSORIES SHALL BE AVAILABLE FOR MECHANICAL OR ELECTRICAL GAS LINE SHUT-OFF APPLICATIONS.

THE EXTINGUISHING AGENT SHALL BE A POTASSIUM CARBONATE, POTASSIUM ACETATE-BASED FORMULATION DESIGNED FOR FLAME KNOCKDOWN AND SECUREMENT OF GREASE RELATED FIRES. IT SHALL BE AVAILABLE IN PLASTIC CONTAINERS WITH INSTRUCTIONS FOR LIQUID AGENT HANDLING AND USAGE.

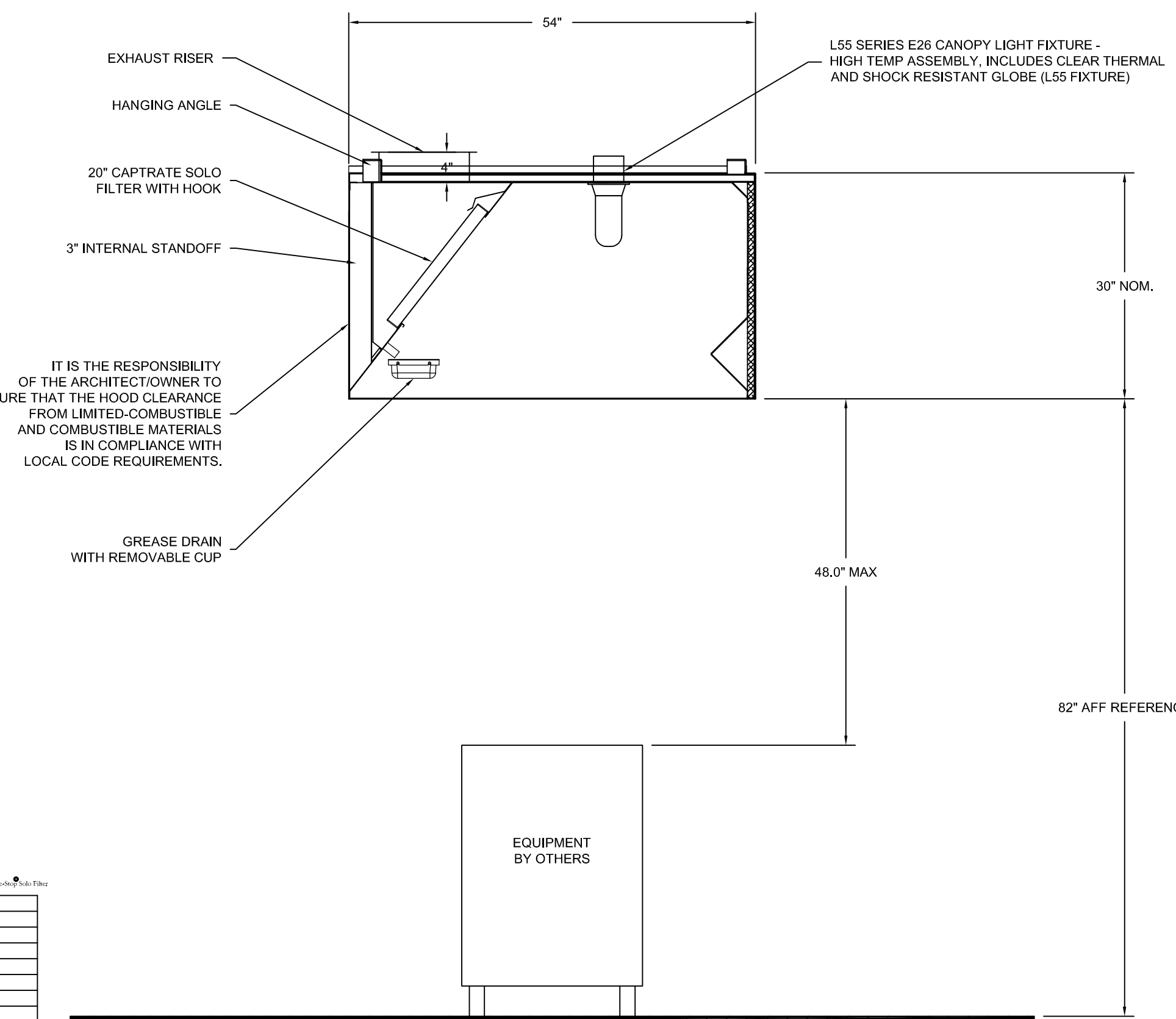
THE REGULATED RELEASE MECHANISM SHALL BE COMPATIBLE WITH A FUSIBLE LINK DETECTION SYSTEM. THE FUSIBLE LINK SHALL BE SELECTED AND INSTALLED ACCORDING TO THE OPERATING TEMPERATURE IN THE VENTILATING SYSTEM. THE FUSIBLE LINK SHALL BE SUPPORTED BY A DETECTOR BRACKET/ LINKAGE ASSEMBLY.



**TYPICAL ANSUL R102 SYSTEM LAYOUT
WITH REMOTE MOUNTED AUTOMAN**



**PLAN VIEW - Hood #1
4' 6.00" LONG 5430ND-2**



**SECTION VIEW - MODEL 5430ND-2
HOOD - #1**

SPECIFICATION: CAPTRATE GREASE-STOP SOLO FILTER

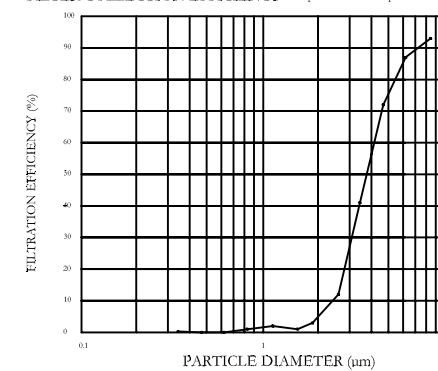
THE CAPTRATE GREASE-STOP SOLO FILTER IS A SINGLE-STAGE FILTER FEATURING A UNIQUE SAMPLE DESIGN IN CONJUNCTION WITH A SLOTTED REAR BAFFLE DESIGN TO DELIVER EXCEPTIONAL FILTRATION EFFICIENCY.

THE FILTER IS STAINLESS STEEL CONSTRUCTION, AND SEED TO FIT INTO STANDARD 24X24 DEEP HOOD CHANNEL(S).

UNITS SHALL INCLUDE STAINLESS STEEL HANDLES AND A FASTENING DEVICE TO SECURE THE TWO COMPONENTS WITH ASSEMBLES.

GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL REMOVE AT LEAST 75% OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND 90% GREASE PARTICLES SEVEN MICRONS IN SIZE AND LARGER, WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 1.0 INCHES OF WATER GAUGE.

THE CAPTRATE GREASE-STOP SOLO WAS TESTED TO ASTM STANDARD F2518-05.



CAPTIVATE FILTERS ARE BUILT IN COMPLIANCE WITH:
NFPA 96
UL STANDARD 96
UL STANDARD 96-1
UL STANDARD 96-2
UL STANDARD 96-3
UL STANDARD 96-4
UL STANDARD 96-5
UL STANDARD 96-6
UL STANDARD 96-7
UL STANDARD 96-8
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CAPTIVE-AIRE HOODS ARE
BUILT IN COMPLIANCE WITH
NFPA #96
AND ARE RECOGNIZED BY ONE
OR MORE OF THE FOLLOWING:

NSF INTERNATIONAL

ETL LISTED FILE# 3054804-001
ETL TESTED IN COMPLIANCE
WITH U.L. 710 STANDARDS.

ND-2WI Series Specification

The ND-2WI series hood is an exhaust only island canopy hood rated for all types of cooking equipment. The hood shall have the size, shape and performance specified on drawings.

Construction shall be type 430 stainless steel with a #3 or #4 polish where exposed. Individual component construction shall be determined by the manufacturer and ETL. Construction shall be dependent on the structural application to minimize distortion and other defects. All seams, joints and penetrations of the hood enclosure to the lower outermost perimeter that directs and captures grease-laden vapor and exhaust gases shall have a liquid-tight continuous external weld in accordance with NFPA 96. Hood shall be island type with fully welded 10 gauge corner hanging angles. Corner hanging rods have a .625 x 1.500 slot pre-punched at the factory, allowing hanging rods to be used for quick and safe installations. Hanging rod and connection is provided by and installed by others.

Ventilator shall be furnished with U.L. classified baffle filters, supplied in size and quantity as required by ventilator. The filters shall extend the full length of the hood including filter panels as needed.

The hood manufacturer shall supply complete computer generated submittal drawings including hood section view(s) and hood plan view(s). These drawings must be available to the engineer, architect and owner for their use in construction, operation and maintenance.

Exhaust duct collar to be 4" high with flange. Duct sizes, CFM and static pressure requirements shall be as shown on drawings. Static pressure requirements shall be precise and accurate; air velocity and volume information shall be accurate within 1-ft increments along the length of the ventilator.

U.L. incandescent light fixtures and globes shall be installed and pre-wired to a junction box. The light fixtures shall be installed with a maximum of 40" spacing on center and allow up to a 100 watt standard light bulb.

The hood shall have:
- A double wall insulated front and back to eliminate condensation and increase rigidity. The insulation shall have a flexural modulus of 475 EI, meet UL 181 requirements and be in accordance with NFPA 96A and 96B.
- An integral front baffle and rear capture flange to direct grease laden vapors toward the exhaust filter bank.
- A built-in wiring chase provided for outlets and electrical controls on the hood face and shall not penetrate the capture area or require an external chaseway.
- A removable grease cup for easy cleaning.

The hood shall be ETL Listed as "Exhaust Hood Without Exhaust Damper", ETL Sanitation Listed and built in accordance with NFPA 96. The hood shall be listed for 450°F cooking surfaces at 269 CFM/ft, 600°F cooking surfaces at 300 CFM/ft, and 700°F cooking surfaces at 350 CFM/ft.

HOOD INFORMATION - Job#2558694

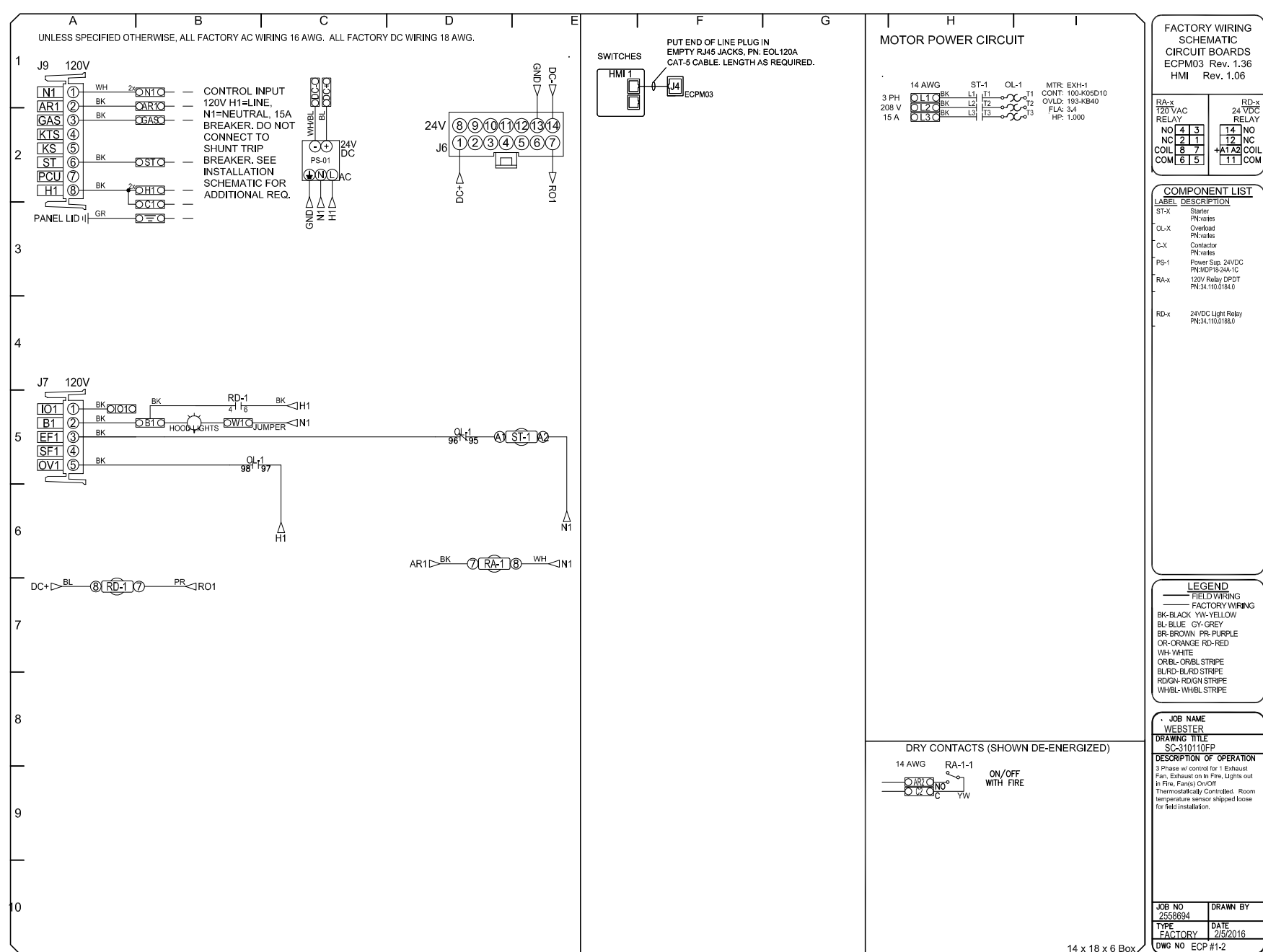
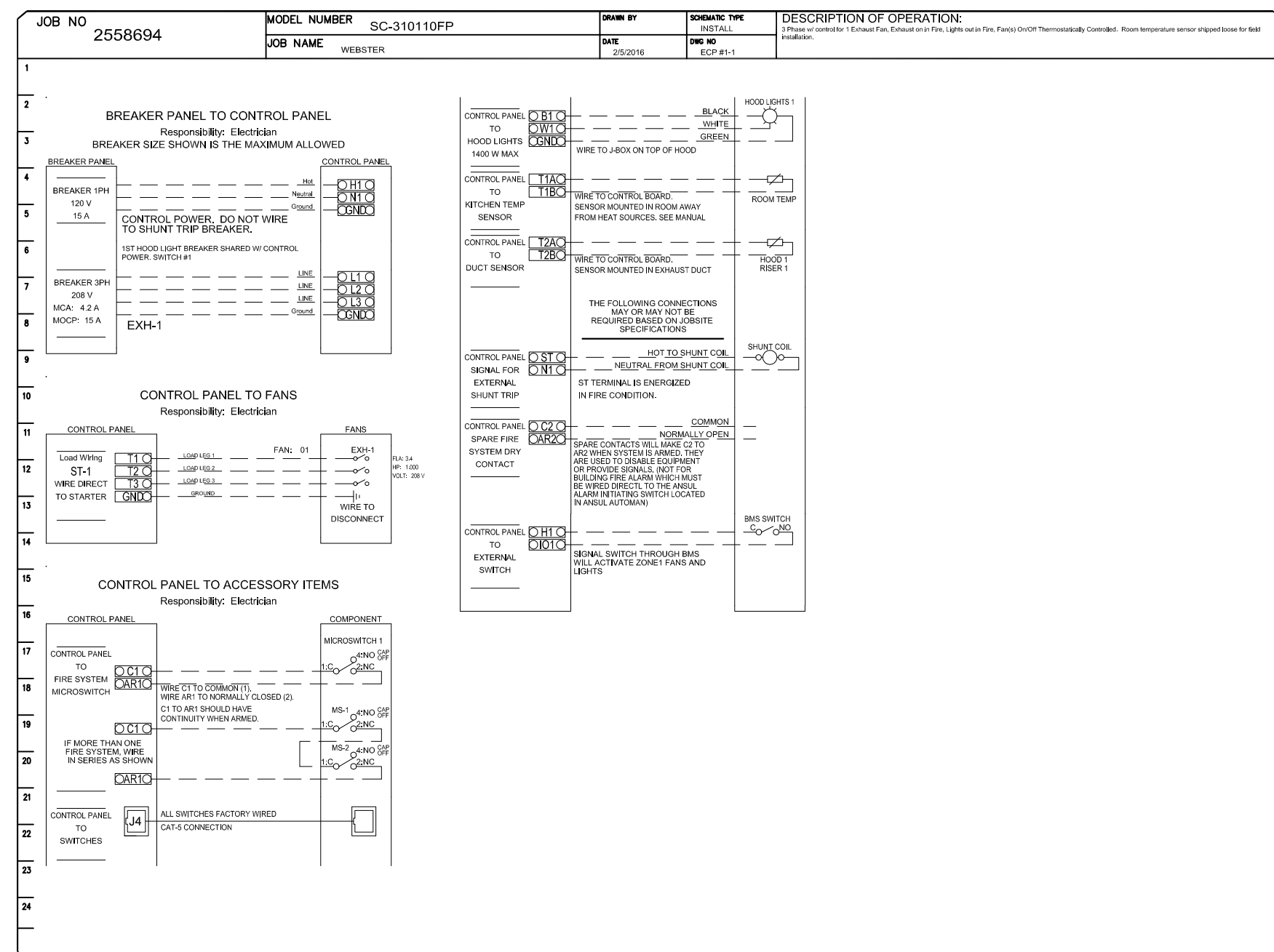
HOOD NO.	TAG	MODEL	LENGTH	MAX. COOKING TEMP.	EXHAUST PLENUM RISER(S)					HOOD CONSTRUCTION	HOOD CONFIG.	
					TOTAL EXH. CFM	WIDTH	LENG.	DIA.	CFM		END TO END	ROW
1		5430 ND-2	4' 6.00"	450 Deg.	1238			12"	1238	-0.627"	304 SS Where Exposed	ALONE

HOOD INFORMATION

HOOD NO.	TAG	TYPE	FILTER(S)				LIGHT(S)		WIRE GUARD	LOCATION	UTILITY CABINET(S)				FIRE SYSTEM PIPING	HOOD HANGING WGT
			QTY.	HEIGHT	LENGTH	EFFICIENCY @ 9 MICRONS	QTY.	TYPE			TYPE	SIZE	MODEL #	QUANTITY		
1		Captrate Solo Filter	3	20"	16"	93% See Filter Spec.	2	L55 Series E26	NO						NO	270 LBS

ELECTRICAL PACKAGES - Job#2558694

NO.	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED			
				LOCATION	QUANTITY		TYPE	Ø	H.P.	VOLT. FLA
1		SC-31010FP	Wall Mount in SS Box	SS Wall Mount Box	1 Light 1 Fan	Smart Controls Thermostatic Control	Exhaust	3	1.000	208 3.4



SEISMIC CODE BLOCK								
LISTING OF EQUIPMENT AND SYSTEM COMPONENTS	ANCHORAGE TO FLOORS, ROOFS, ETC.		SWAY BRACING		LOCATION OF PROFESSIONALLY SEALED ANCHORAGE AND SWAY BRACING DETAILS			COMMENTS
	NOT PROVIDED FOR PROJECT	PROVIDED FOR PROJECT	NOT PROVIDED FOR PROJECT	PROVIDED FOR PROJECT	ON CONSTRUCTION DOCUMENTS	SUBSEQUENT SUBMITTAL		
					DRAWING No. OR SPEC SECTION	SHOP DRAWINGS [1]	SEPARATE PERMIT & PLANS	
BASE MOUNTED FIRE PUMP		X		X		X		
FIRE PUMP CONTROLLER		X		X		X		
JOCKEY PUMP		X		X		X		
JOCKEY PUMP CONTROLLER		X		X		X		
PRE-ACTION SYSTEM CABINET		X		X		X		
PRE-ACTION SYSTEM DRY PIPING		X		X		X		
FDC PIPING (THROUGH BUILDING)		X		X		X		
SPRINKLER PIPING MAINS		X		X		X		
SPRINKLER PIPING BRANCHES		X		X		X		
FIRE SERVICE BACKFLOW PREVENTER		X		X		X		
STANDPIPES		X		X		X		
SPRINKLER HEADS (FOR WET AND DRY SYSTEMS)	X		X					OVERSIZE 2 INCH DIAMETER RING, SLEEVE OR ADAPTOR THROUGH THE CEILING TILE TO ALLOW FOR FREE MOVEMENT OF AT LEAST 1 INCH

[1]

WHERE THIS COLUMN IS SELECTED, THE FOLLOWING SHALL APPLY:

A. THE CONTRACTOR SHALL SUBMIT DETAILS OF ANCHORAGE INCLUDING THE FOLLOWING:

1. SPECIFIC INFORMATION RELATING TO THE SPECIFIC TYPE AND SIZE OF ANCHORAGE

2. SPECIFIC LOCATION OF SUCH ANCHORAGE.

3. DETAILS OF SWAY BRACING AND ANCHORING OF EQUIPMENT TO INCLUDE:

• MATERIAL USED.

• ATTACHMENT OF THE BRACING TO THE STRUCTURE AND COMPONENT BEING BRACED.

• LOCATION OF TRANSVERSE AND LONGITUDINAL SWAY BRACING AND ROD STIFFENERS.

B. ALL SHOP DRAWINGS SUBMITTED AS PART OF THE REQUIREMENTS OF THIS SHEET SHALL CONTAIN THE STAMP OF A REGISTERED MISSOURI PROFESSIONAL ENGINEER.

C. THE CONTRACTOR MAY SUBMIT AUTHORIZED REPRODUCTIONS OF THE CERTAIN DETAILS AND TABLES FROM DESIGN MANUALS OR GOVERNMENTAL AGENCIES THAT PERTAIN TO SEISMIC SUPPORT AND BRACING, AND TABLES SUBMITTED SHALL:

1. BE SIGNED AND SEALED BY A REGISTERED PROFESSIONAL STRUCTURAL ENGINEER WHO PREPARED OR SUPERVISED THE PREPARATION OF THE DETAIL AND ASSOCIATED CALCULATIONS. DEFINE THE COMPONENT, LOCATION AND SIZE TO EASILY IDENTIFY THE INTENT, ITEM TO BRACED OR ANCHORED, APPLICABLE COMPONENTS, AND LOCATION.

2.

D. THE MECHANICAL ENGINEER OF RECORD WILL FORWARD THE SUBMITTED DETAILS, ANY REQUIRED COVER LETTERS OR PROFESSIONAL SEALS. THIS DOES NOT RELIEVE THE CONTRACTOR FROM FURNISHING THE SIGNED AND SEALED DRAWINGS NOTED IN C. ABOVE.

DELEGATED - DESIGN SUBMITTAL

PROVIDE DESIGN CALCULATIONS AND DETAILS FOR SEISMIC RESTRAINTS, COMPLYING WITH PERFORMANCE REQUIREMENTS, DESIGN CRITERIA AND ANALYSIS DATA SIGNED AND SEALED BY THE QUALIFIED PROFESSIONAL ENGINEER RESPONSIBLE FOR THE PREPARATION. CALCULATE STATIC AND DYNAMIC LOADING DUE TO EQUIPMENT WEIGHT, OPERATION AND SEISMIC FORCES REQUIRED TO SELECT VIBRATION ISOLATORS AND SEISMIC RESTRAINTS.

CODE DATA

FOLLOWING LATEST CODES AS ADOPTED BY AUTHORITY HAVING JURISDICTION:

2009 INTERNATIONAL BUILDING CODE (IBC)

2009 INTERNATIONAL MECHANICAL CODE (IMC)

2009 INTERNATIONAL FIRE CODE (IFC)

2009 INTERNATIONAL PLUMBING CODE (UPC)

NATIONAL ELECTRICAL CODE (NEC)

AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE)

NFPA 13 STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS

NFPA 14 STANDARD FOR THE INSTALLATION OF STANDPIPE AND HOSE SYSTEMS

NFPA 20 STANDARD FOR THE INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION

NFPA 45 STANDARD ON THE PROTECTION OF LABORATORIES USING CHEMICALS

FIRE SUPPRESSION GENERAL NOTES:

1.

THESE NOTES, LEGENDS AND DESCRIPTIONS ARE TYPICAL FOR THIS PROJECT ONLY. UNLESS STATED OTHERWISE, ANY CONFLICTS OF WORK SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT MANAGER PRIOR TO THE PURCHASE OF MATERIALS OR COMMENCEMENT OF WORK. IF NOT, THE CONTRACTOR CLAIMS ALL RESPONSIBILITY.
2.

THESE PLANS ARE DIAGRAMMATIC AND ARE NOT INTENDED TO REPRESENT THE ACTUAL SITE CONDITIONS. THE PLUMBING CONTRACTOR SHALL FIELD VERIFY SITE CONDITIONS PRIOR TO COMMENCING WORK. DO NOT SCALE THESE PLANS.
3.

THE FIRE SUPPRESSION CONTRACTOR (FURTHER "CONTRACTOR") SHALL HAVE A GOOD WORKING KNOWLEDGE OF THE PROJECT SITE AND THE SCOPE OF WORK.
4.

WHERE DRAWINGS AND SPECIFICATIONS EXCEED THE (MINIMUM) CODE REQUIREMENTS, THE CONTRACT DOCUMENTS SHALL BE FOLLOWED.
5.

DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR BUILDING CONSTRUCTION AND DIMENSIONS AND TO ROOM FINISH SCHEDULES FOR MATERIAL FINISH AND CONSTRUCTION METHODS FOR WALLS, FLOORS AND CEILINGS IN ORDER TO INSURE PROPER ROUGH-IN INSTALLATION OF WORK.
6.

CONTRACTOR SHALL VISIT THE SITE TO INSPECT SITE CONDITIONS PRIOR TO SUBMITTING BID TO DETERMINE IF ANY EXISTING CONDITIONS THAT MAY AFFECT EXECUTION OF WORK.
7.

CONTRACTOR SHALL OBTAIN REQUIRED PERMITS FOR WORK FROM AUTHORITIES HAVE JURISDICTION AND ASSUME COSTS OF PERMITS AND INSPECTIONS.
8.

CONTRACTOR SHALL COMPLY WITH LOCAL TRADE CUSTOMS AND LABOR TRADE AGREEMENTS WHICH DETERMINE PARTICULAR TRADE THAT SHALL BE EMPLOYED FOR COMPLETION WORK.
9.

CONTRACTOR SHALL COORDINATE WITH OTHER CONSTRUCTION TRADES ON THIS PROJECT AND VERIFY CLEARANCES TO PREVENT CONFLICTS.
10.

ALL OFFSETS, TRANSITIONS AND FITTINGS NECESSARY TO SUCCESSFULLY INSTALL THE FIXTURES, EQUIPMENT AND PIPING SYSTEMS ARE NOT NECESSARY SHOWN ON THESE PLANS, BUT SHALL BE INCLUDED IN THE SCOPE OF WORK.
11.

FIRESTOP ALL OPENINGS FOR PIPING IN RATED WALLS, FLOORS AND CEILINGS AS REQUIRED BY THE SPECIFICATIONS. REFER TO THE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF SUCH RATINGS AND ASSEMBLIES.
12.

NO FLOOR OPENINGS SHALL PENETRATE THE REINFORCED PORTIONS OF THE STRUCTURE. DO NOT CUT STRUCTURAL REINFORCING WITHOUT SPECIFIC WRITTEN DIRECTION FROM THE STRUCTURAL ENGINEER.
13.

CONTRACTOR SHALL FURNISH AND INSTALL ALL SLEEVES WHERE INDICATED ON DRAWINGS AND/OR REQUIRED WHERE FIELD CONDITIONS DICTATE. CONTRACTOR SHALL PROVIDE DIMENSIONED SLEEVE DRAWINGS FOR REVIEW BY ARCHITECT AND ENGINEERS.

FIRE SUPPRESSION NEW WORK NOTES:

1.

THIS FACILITY SHALL BE PROVIDED WITH A FULLY ENGINEERED (DELEGATED DESIGN) WET FIRE SUPPRESSION SYSTEM WITH A DRY-MANUAL CLASS 1 STANDPIPE SYSTEM. SYSTEMS PIPING MAY BE COMBINED IN ACCORDANCE WITH NFPA 13 AND NFPA 14.
2.

SELECTED AREAS OF THIS PROJECT ARE TO BE SERVED WITH A PRE-ACTION FIRE SUPPRESSION SYSTEM. THIS SYSTEM SHALL BE FULLY ENGINEERED FOR THE AREA OF COVERAGE AND THE SPACE ALLOCATED FOR THE PRE-ACTION SYSTEM CABINET/ASSEMBLY.
3.

THE FIRE SUPPRESSION SYSTEMS SHALL BE IN DESIGN, MATERIALS, METHODS AND INSTALLATION IS IN FULL COMPLIANCE WITH APPLICABLE STANDARDS OF NFPA, WHETHER SPECIFICALLY REFERENCED OR NOT, LOCAL ADOPTED CODES, FACTORY MUTUAL AND THE AUTHORITY HAVING JURISDICTION.
4.

THE FIRE SUPPRESSION CONTRACTOR IS RESPONSIBLE TO PERFORM ALL REQUIRED AND NECESSARY FIRE HYDRANT FLOW TEST. TEST RESULTS SHALL BE SUBMITTED WITH THE DELEGATED DESIGN SUBMITTAL, AND BE CONDUCTED WITHIN NINETY DAYS OF THE SUBMITTAL. ALL SAFETY FACTORS SHALL BE ADDRESSED AS REQUIRED.
5.

ALL DEVICES, INCLUDING BUT NOT LIMITED TO; FIRE PUMP, JOCKEY PUMP, CONTROLLERS, CONTROL VALVES, VALVES, DRAINS, TEST LOCATION APPLIANCES AND GAUGES, ETC. SHALL BE LOCATED AND INSTALLED TO ALLOW FOR CLEAR AND UNOBSTRUCTED ACCESS.
6.

THE FIRE PUMP SELECTED FOR THE BASIS OF DESIGN ON THIS PROJECT IS BASED ON A MAXIMUM OF 40 HP. THE ELECTRICAL DESIGN FOR THE BUILDING HAS ACCOUNTED FOR A FIRE PUMP WITH A MAXIMUM HORSEPOWER OF 40. THE DESIGN/BUILD FIRE SPRINKLER CONTRACTOR MAY NOT SELECT A PUMP WHICH EXCEEDS 40 HP DEMAND WITHOUT PRIOR WRITTEN APPROVAL BY THE ELECTRICAL ENGINEER.
7.

PIPING WHERE SHOWN ON THESE PLANS ARE TO BE CONSIDERED AS A GENERAL GUIDE ONLY, AND DOES NOT REFLECT A DESIGN OR ROUTING. THE FIRE SUPPRESSION CONTRACTOR SHALL FULLY COORDINATE THE DESIGN OF THE SUPPRESSION SYSTEMS WITH THE BUILDING STRUCTURE, ARCHITECTURAL ELEMENTS, INCLUDING SPACE LAYOUTS, HVAC MECHANICAL AND ELECTRICAL DESIGNS AND LAYOUT. THIS CONTRACTOR IS RESPONSIBLE FOR ALL FIELD COORDINATION OF THIS WORK.
8.

THE DELEGATED DESIGN SHALL INCLUDE, BUT IS NOT LIMITED TO; FLOW TEST RESULTS, FLOOR PLANS, HYDRAULIC CALCULATIONS, COORDINATED PIPE SIZING AND ROUTING, SEISMIC DATA AND DETAILS, MATERIALS AND EQUIPMENT CUT SHEETS, QUANTITIES AND PLACEMENT OF SPRINKLER HEADS, ETC. SUBMITTAL SHALL BE SEALED AND SIGNED BY A REGISTERED PROFESSIONAL ENGINEER.
9.

ALL MATERIALS, FIXTURES, EQUIPMENT ETC., FURNISHED AND INSTALLED ON THIS PROJECT SHALL BE NEW AND UNUSED.
10.

ALL EQUIPMENT SHALL BE CLEANED PRIOR TO OWNERS ACCEPTANCE.
11.

DAMAGE TO AREAS OR EXISTING MATERIALS OUTSIDE THIS SCOPE OF WORK SHALL BE REPLACED OR REPAIRED TO THE SATISFACTION OF THE OWNER, AT NO COST TO THE OWNER.
12.

PROVIDE DIELECTRIC PIPE FITTINGS AS REQUIRED WHERE JOINING DISSIMILAR MATERIALS.
13.

FIRE SUPPRESSION CONTRACTOR SHALL VERIFY ALL ROUGH-IN DIMENSIONS PRIOR TO ORDERING FIXTURES AND MATERIALS. PROVIDE OFFSETS AND TRANSITIONS AS REQUIRED TO COMPLETE INSTALLATION.
14.

PROVIDE WALL AND CEILING ACCESS DOORS/PANELS AS REQUIRED TO ACCESS SHUT-OFF VALVES. SELECT SIZE AND TYPE BASED ON MOUNTING SURFACE AND USAGE. ACCESS DOORS/PANELS SHALL BE STEEL CONSTRUCTION WITH SCREWDRIVER CAM LOCKS. INSTALLATION BY GENERAL CONTRACTOR.
15.

THE FIRE SUPPRESSION CONTRACTOR SHALL FULLY COORDINATE THIS WORK WITH THE GENERAL CONTRACTOR AND ALL TRADES ON THIS PROJECT. COORDINATION SHALL OCCUR PRIOR TO COMMENCING WORK AND THROUGHOUT THE PROJECT. ALL CONFLICTS DUE TO A LACK OF COORDINATION SHALL BECOME THE SOLE RESPONSIBILITY OF THIS CONTRACTOR.
16.

WITHIN THIS SCOPE OF WORK, FIRE SUPPRESSION WORK WILL BE REQUIRED IN THE EAST ACADEMIC BUILDING (EAB), AT THE CONNECTOR LINKS, AND INTO THE EAB. THE CONTRACTOR IS TO FULLY COORDINATE THIS WORK WITH CONDITIONS OF THE EXISTING BUILDING AND SPRINKLER SYSTEM SERVING THAT STRUCTURE.
17.

OCCUPANCY HAZARD CLASSIFICATION AND MINIMUM DENSITIES LISTED ARE THE MINIMUM ACCEPTABLE DESIGN CRITERIA. WHERE FM GLOBAL GUIDELINES REQUIRE OR SPECIFY A HIGHER OCCUPANCY CLASSIFICATION OR AN INCREASE IN WATER FLOW DENSITIES/COVERAGE, THAT CRITERIA SHALL BE USED IN LIEU OF THE MINIMUM DESIGN CRITERIA.



FIRE SUPPRESSION DRAWING INDEX:

FP0001	FIRE PROTECTION ABBREVIATIONS, SEISMIC, & NOTES
FP0100.A	LEVEL 0 FLOOR PLAN - FIRE PROTECTION
FP0101.A	LEVEL 01 AREA A FLOOR PLAN - FIRE PROTECTION
FP0101.B	LEVEL 01 AREA B FLOOR PLAN - FIRE PROTECTION
FP0102.A	LEVEL 02 AREA A FLOOR PLAN - FIRE PROTECTION
FP0102.B	LEVEL 02 AREA B FLOOR PLAN - FIRE PROTECTION
FP0103.A	LEVEL 03 AREA A FLOOR PLAN - FIRE PROTECTION
FP0103.B	LEVEL 03 AREA B FLOOR PLAN - FIRE PROTECTION
FP0104.A	LEVEL 04 AREA A FLOOR PLAN - FIRE PROTECTION
FP0104.B	LEVEL 04 AREA B FLOOR PLAN - FIRE PROTECTION
FP0501	DETAILS - FIRE PROTECTION
FP0601	SCHEDULES - FIRE PROTECTION

PROJECT MANUAL SPECIFICATION DIVISION 21



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Interdisciplinary Science
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CONFORMED SET

01 JUL 2016

1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016
No.	Description	Date

Drawing Title:

FIRE PROTECTION
ABBREVIATIONS,
SEISMIC, & NOTES

Project No.: 04561.01

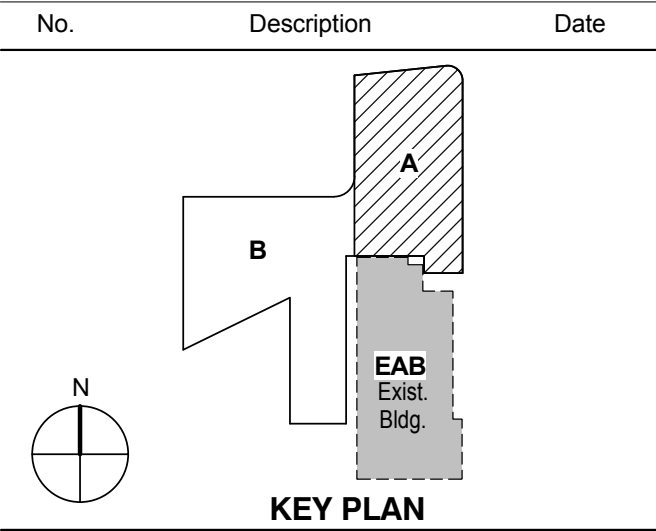
Checked by:

FP0001

CONFORMED SET

01 JUL 2016

1 ADDENDUM 2-1 17 MAR 2016
ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016



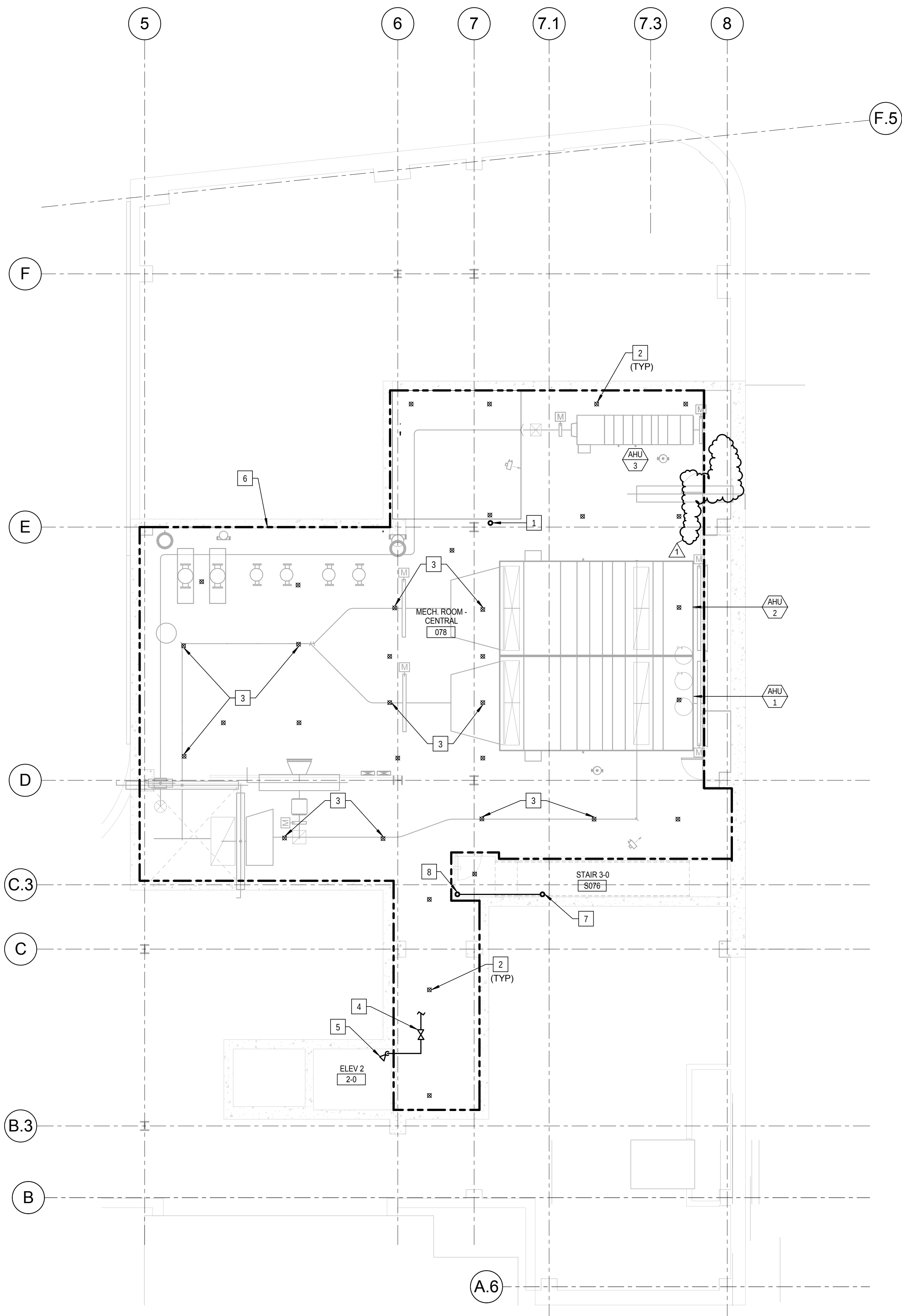
Drawing Title:

LEVEL 0 FLOOR PLAN -
FIRE PROTECTION

Project No.: 04561.01

Checked by:

FP0100.A

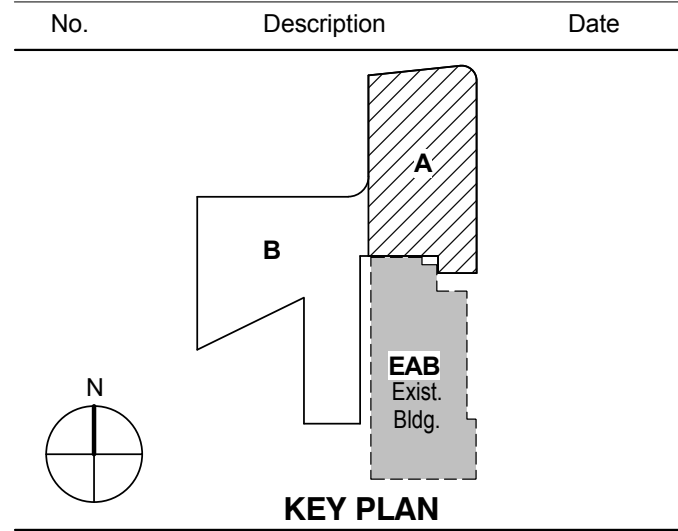


1 LEVEL 0 FLOOR PLAN - FIRE PROTECTION

1/8" = 1'-0"

CONFORMED SET 01 JUL 2016

1 ADDENDUM 2-1 17 MAR 2016
ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016



KEY PLAN

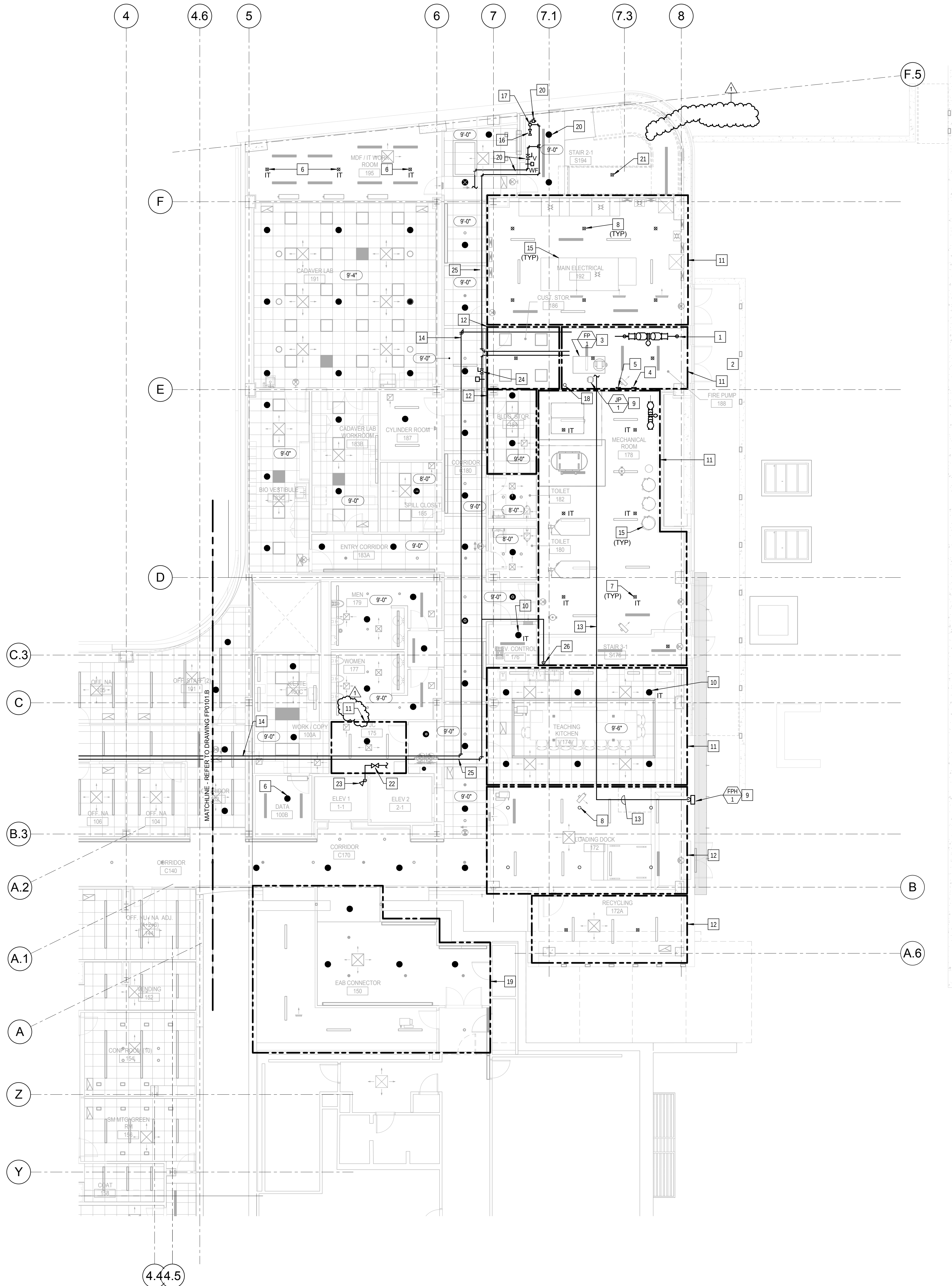
Drawing Title:

LEVEL 01 AREA A FLOOR
PLAN - FIRE PROTECTION

Project No.: 04561.01 Checked by:

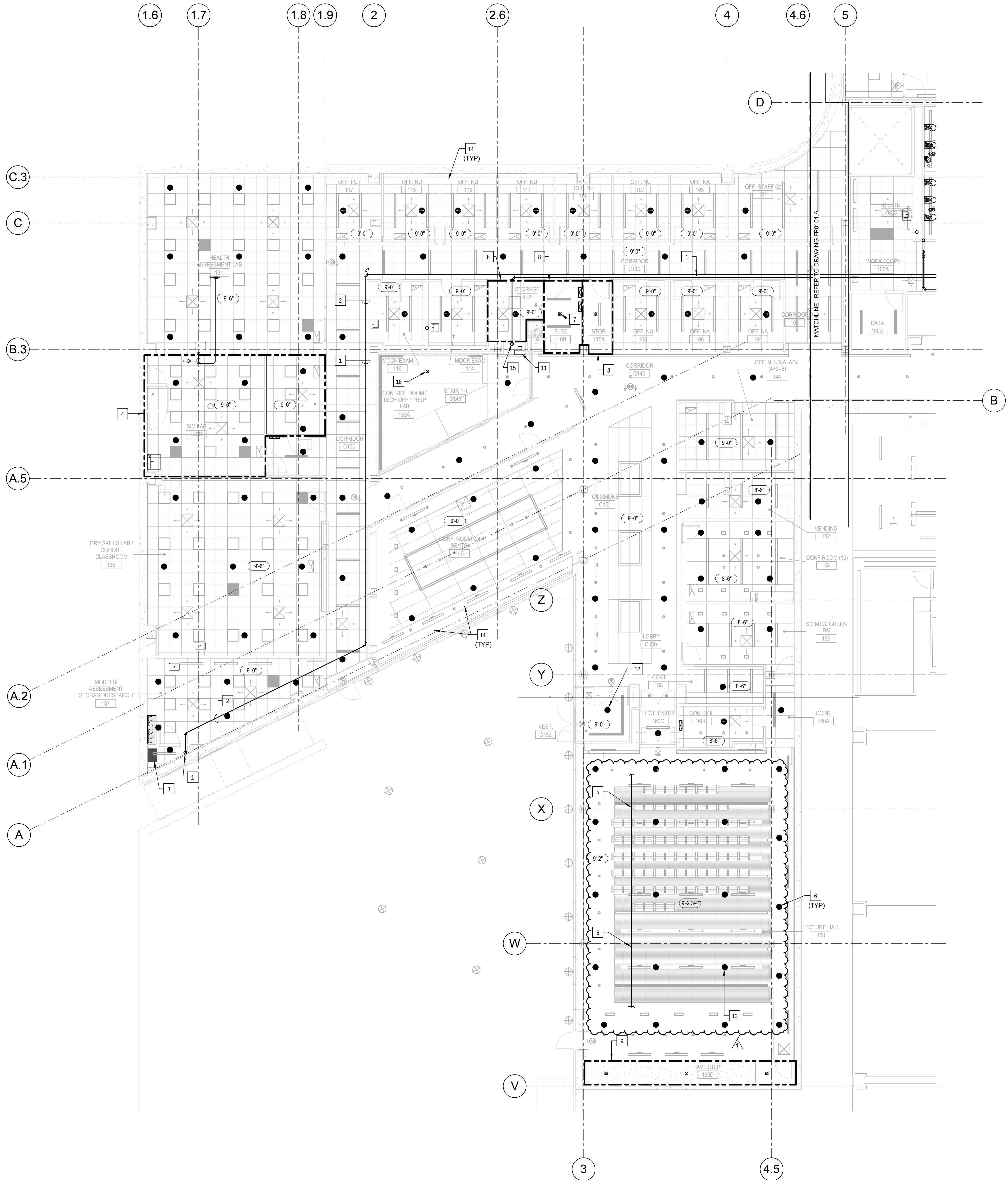
FP0101.A

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1 LEVEL 01 AREA A FLOOR PLAN - FIRE PROTECTION
1/8" = 1'-0"

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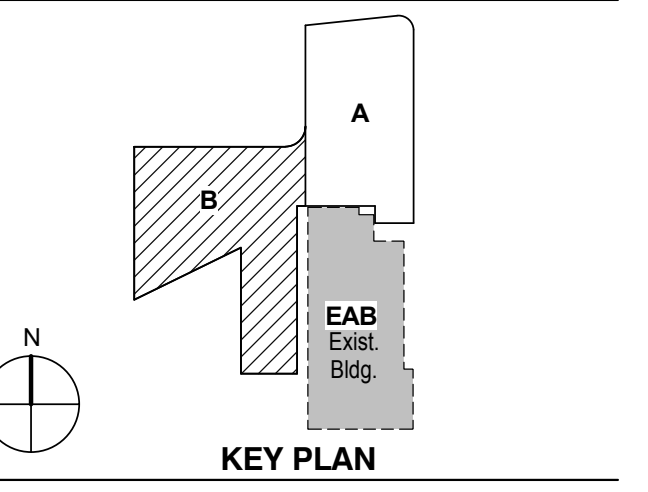
1 LEVEL 01 AREA B FLOOR PLAN - FIRE PROTECTION
1/8" = 1'-0"

KEYED NOTES: (THIS SHEET ONLY)

- 1 FIRE DEPARTMENT CONNECTION PIPING UP FROM BELOW THE FLOOR SLAB. PROVIDE MECHANICAL LINK SEAL AND FLOOR FLANGE. IDENTIFY PIPE IN ACCORDANCE WITH THE SPECIFICATIONS.
- 2 FIRE SERVICE PIPE FROM FIRE DEPARTMENT CONNECTION. ROUTE 6" PIPE ABOVE THE CORRIDOR CEILING, AS HIGH AS POSSIBLE. COORDINATE ROUTING AND INSTALLATION WITH OTHER TRADES. PITCH PIPING TO DRAIN, PROVIDE CAPPED HOSE END DRAIN VALVES AS REQUIRED FOR LOW SPOTS IN THE RUN.
- 3 FREE STANDING PRE-ACTION, DOUBLE INTERLOCK SELF-CONTAINED INTEGRATED FIRE PROTECTION PACKAGE. PRE-ACTION SYSTEM TO PROVIDE PROTECTION FOR THE SIM LAB 133B AND CONTROL ROOM 133A. REFER TO SPECIFICATION SECTION 211316 "DRY-PIPE PRE-ACTION SPRINKLER SYSTEM". COORDINATE INSTALLATION WITH THE ELECTRICAL AND PLUMBING CONTRACTORS.
- 4 THIS SPACE IS TO BE PROTECTED BY THE PRE-ACTION, DOUBLE INTERLOCK FIRE SYSTEM. COORDINATE PLACEMENT OF THE SPRINKLER HEADS AND DETECTION DEVICES WITH CEILING MOUNTED SURGICAL LIGHT.
- 5 COORDINATE THE ROUTING OF THE SPRINKLER PIPING IN THIS SPACE WITH PRE-FABRICATED OPENINGS IN THE STRUCTURAL STEEL. ACCESSIBLE SPACE ABOVE THE CEILING IS LIMITED. COORDINATE ALL PIPING AND SPRINKLER HEAD LOCATIONS WITH THE STRUCTURAL ELEMENTS, LIGHTING AND DUCTWORK. REFER TO THE ARCHITECTURAL PLANS FOR CEILING MATERIALS AND CONSTRUCTION. PIPING SHOWN MAY NOT REFLECT THE ACTUAL OPENING LOCATIONS, AND IS FOR REFERENCE ONLY.
- 6 COORDINATE SPRINKLER HEAD LOCATIONS AND PIPE ROUTING ABOVE AISLE SPACE WITH DUCTWORK, ROOF DRAIN PIPING AND LIGHTING.
- 7 COORDINATE LOCATION OF SPRINKLER HEAD IN THIS ROOM WITH THE ELECTRICAL EQUIPMENT AND OVERHEAD RACEWAYS. HOLD PIPING AS HIGH AS POSSIBLE. PROVIDE INTERMEDIATE TEMPERATURE RATED SPRINKLER HEAD.
- 8 THIS SPACE IS DESIGNATED AS ORDINARY HAZARD, GROUP 1.
- 9 THIS SPACE IS DESIGNATED AS ORDINARY HAZARD, GROUP 2.
- 10 PROVIDE SPRINKLER HEAD WITH CAGE GUARD BELOW STAIRS, CONCEAL SPRINKLER PIPING. EXPOSED/VISIBLE PIPING IS TO BE PAINTED TO MATCH THE BACKGROUND SURFACE.
- 11 RECESSED FIRE HOSE VALVE CABINET WITH 2.5 INCH ANGLE FIRE HOSE VALVE, CAP AND CHAIN. REFER TO ARCHITECTURAL DRAWINGS.
- 12 PROVIDE CONCEALED DRY-PENDENT DRY-TYPE SPRINKLER HEAD AT THIS LOCATION.
- 13 PROVIDE CONCEALED PENDENT SPRINKLER HEADS IN GYP. BOARD PORTION OF THE CEILING. REFER TO THE ARCHITECTURAL DRAWINGS FOR CEILING DETAILS. COORDINATE PLACEMENT WITH THE INSTALLATION OF THE AIR DEVICES AND CEILING MOUNTED WIRING AND/OR DEVICES. PIPING ABOVE THE CEILING THAT IS EXPOSED/VISIBLE IS TO BE PAINTED TO MATCH THE BACKGROUND SURFACE. COVER PLATE FINISH OF THE SPRINKLER HEAD IS TO BE SELECTED AND APPROVED BY THE ARCHITECT. OBTAIN SAMPLES FROM THE SPRINKLER MANUFACTURER OF THE TRUE COVERPLATE FINISHES AS DIRECTED BY THE ARCHITECT PRIOR TO ORDERING.
- 14 CONTRACTOR TO REVIEW ARCHITECTURAL DRAWING FOR RECESSED OR ELEVATED CEILING POCKETS. PROVIDE PROTECTION AS REQUIRED.
- 15 STANDPIPE SUPPLY PIPING UP TO SERVE FIRE HOSE VALVE CABINET ON EACH LEVEL. ROUTE DRAIN PIPING TO MOP BASIN IN JANITOR'S CLOSET #175.

CONFORMED SET 01 JUL 2016

1 ADDENDUM 2-1 17 MAR 2016		
ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016		
No.	Description	Date



Drawing Title:

**LEVEL 01 AREA B FLOOR
PLAN - FIRE PROTECTION**

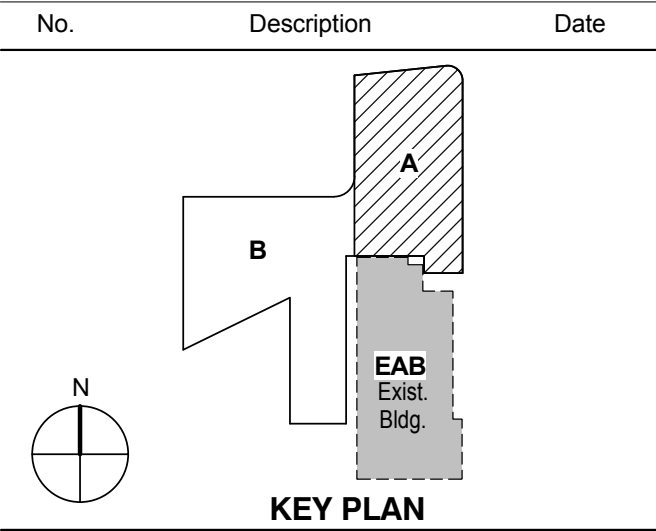
Project No.: 04561.01 Checked by:

FP0101.B

CONFORMED SET

01 JUL 2016

ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016



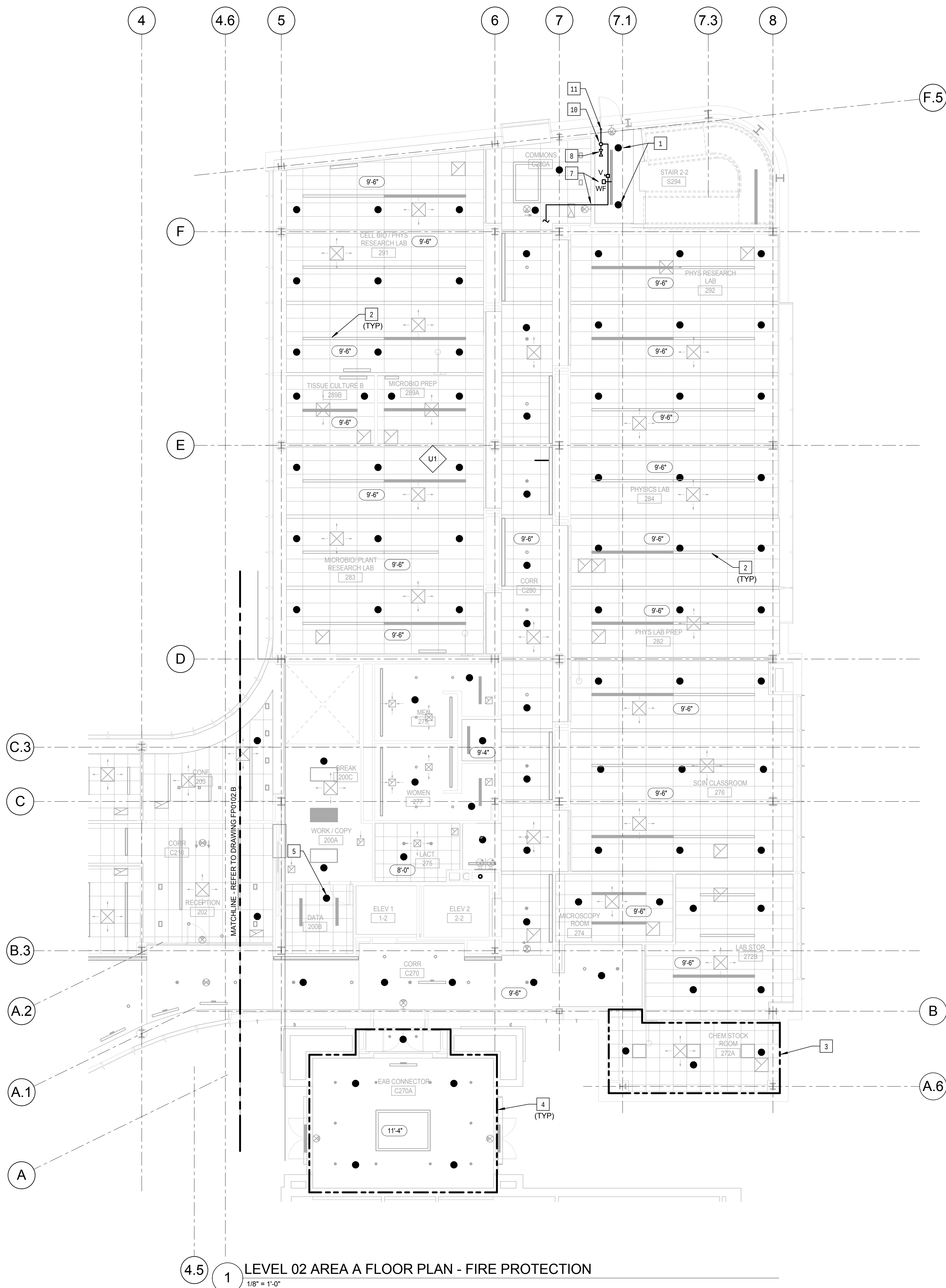
Drawing Title:

LEVEL 02 AREA A FLOOR
PLAN - FIRE PROTECTION

Project No.: 04561.01

Checked by:

FP0102.A



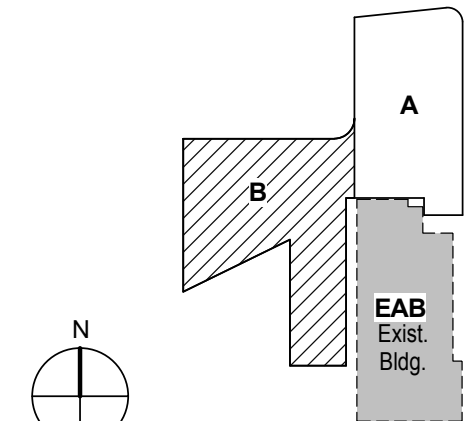
1 LEVEL 02 AREA A FLOOR PLAN - FIRE PROTECTION
1/8" = 1'-0"

KEYED NOTES: (THIS SHEET ONLY)

- 1 PROVIDE CONCEALED DRY-PENDANT SPRINKLER HEAD AT THIS LOCATION.
- 2 COORDINATE LOCATION OF SPRINKLER HEADS WITH SUSPENDED LUMINAIRES. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS.
- 3 THIS AREA IS DESIGNATED AS EXTRA HAZARD , GROUP 2.
- 4 THE CONTRACTOR SHALL FIELD INVESTIGATE THE EXISTING CONDITIONS OF ALL AREAS OF THE TRANSITION CONNECTOR BETWEEN THE NEW AND EXISTING BUILDING. THIS AREA / SPACE IS TO BE FULLY PROTECTED BY SPRINKLERS AS REQUIRED. EXTEND THE SPRINKLER SYSTEM FROM THIS PROJECT TO SERVICE THE TRANSITION AREA. EXISTING OR NEW ROOMS / SPACES CREATED OR MODIFIED IN THE EXISTING BUILDING ARE TO BE SERVED FROM THE SPRINKLER SYSTEM OF THAT BUILDING. COORDINATE ALL WORK IN THE EXISTING BUILDING WITH FACILITIES.
- 5 PROVIDE A SPRINKLER HEAD IN THIS ROOM RATED FOR A TEMPERATURE RATING OF 200°F OR GREATER. COORDINATE LOCATION OF THE SPRINKLER HEAD AND PIPING WITH THE EQUIPMENT, OVERHEAD CABLE TRAY AND RACEWAYS. HOLD PIPING AS HIGH AS POSSIBLE. COORDINATE PLACEMENT AND INSTALLATION WITH EQUIPMENT, OVERHEAD CABLE TRAY AND RACEWAYS. TYPICAL FOR ALL ROOM AND SPACES WITH A SIMILAR OCCUPANCY OR USE.
- 6 FIRE SERVICE PIPING UP AND DOWN AT THIS LOCATION. DRAIN PIPING TO BE RUN PARALLEL WITH THE SUPPLY RISER.
- 7 FIRE SPRINKLER PIPING TO EXTEND TO SERVE THIS LEVEL. PROVIDE MONITORED FLOOR ZONE CONTROL VALVE AND WATER FLOW SWITCH. REFER TO DRAWING FP0501, DETAIL 3 FOR PIPING CONFIGURATION AND REQUIREMENTS. PROVIDE ACCESS PANEL IN CEILING AS REQUIRED.
- 8 EXPOSED 2.5 INCH FIRE DEPARTMENT HOSE VALVE WITH CAP AND CHAIN.
- 9 EXTEND DRAIN TO EXTERIOR. REFER TO DRAWING FP0501, DETAIL 9/FP0501. COORDINATE INSTALLATION WITH THE GENERAL CONTRACTOR.
- 10 FIRE SERVICE RISER TO SERVE FLOORS ABOVE. DRAIN PIPE TO BE RUN PARALLEL WITH SUPPLY RISER.
- 11 EXTEND DRAIN TO BUILDING EXTERIOR. COORDINATE LOCATION AND WALL PENETRATION WITH THE GENERAL CONTRACTOR.

CONFORMED SET 01 JUL 2016

ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016
No. Description Date

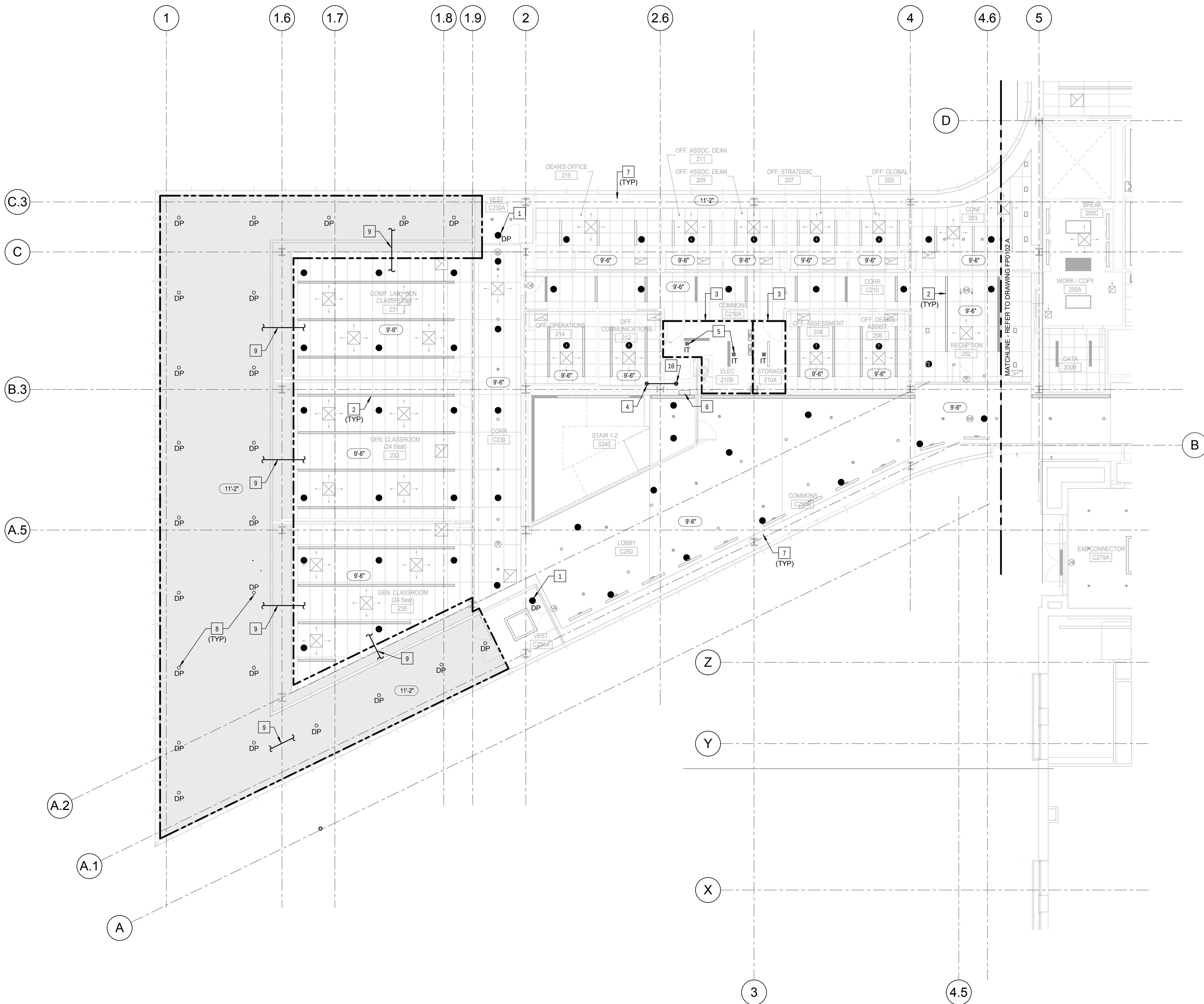


KEY PLAN

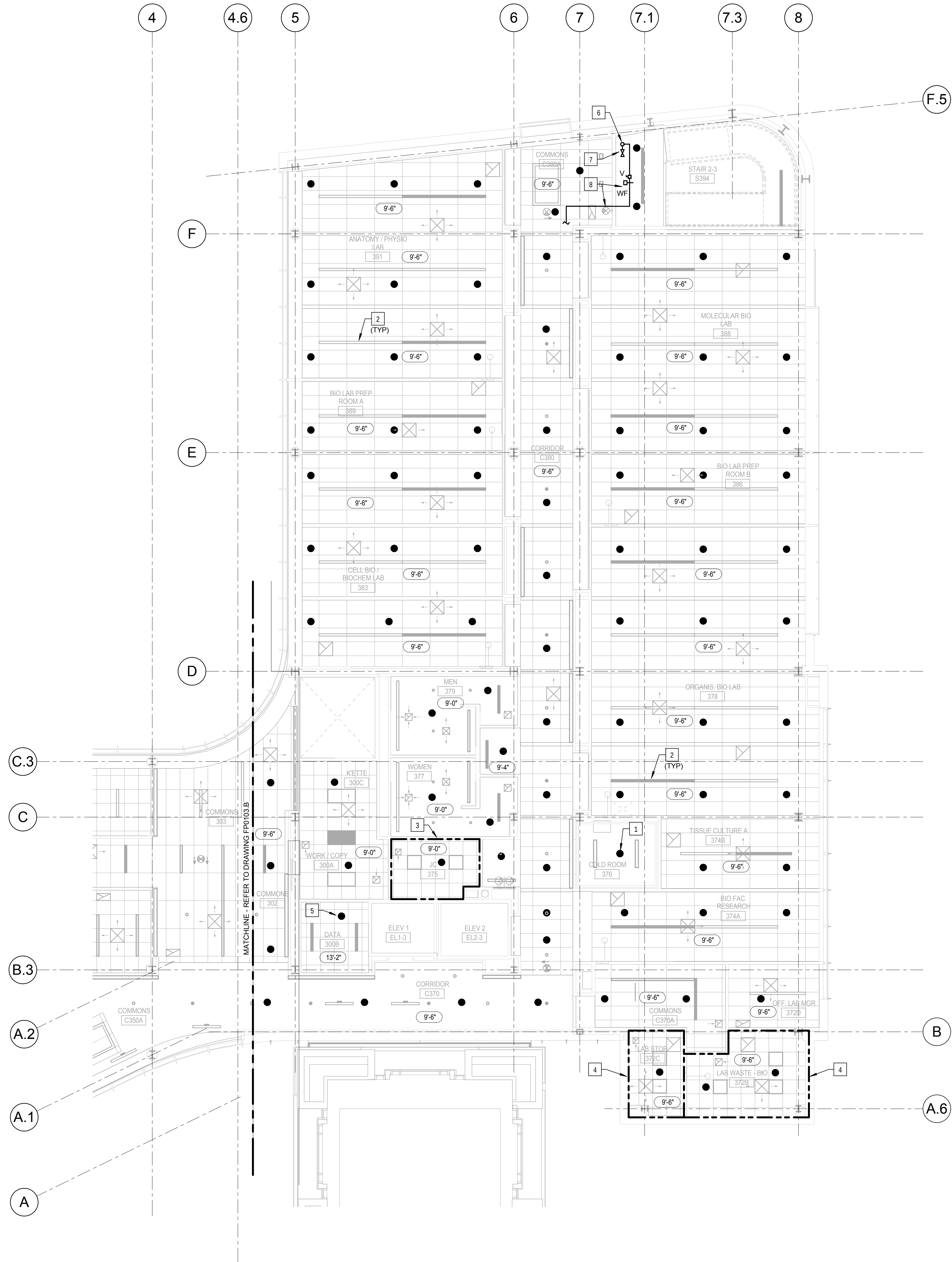
LEVEL 02 AREA B FLOOR
PLAN - FIRE PROTECTION

Project No.: 04561.01 Checked by:

FP0102.B



1 LEVEL 02 AREA B FLOOR PLAN - FIRE PROTECTION
1/8" = 1'-0"



KEYED NOTES: (THIS SHEET ONLY)

- 1 PROVIDE CONCEALED DRY-PENDANT SPRINKLER HEAD AT THIS LOCATION. COORDINATE INSTALLATION WITH ROOM CONSTRUCTION.
- 2 COORDINATE LOCATION OF SPRINKLER HEADS WITH SUSPENDED LUMINARIES. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS.
- 3 THIS AREA IS DESIGNATED AS ORDINARY HAZARD, GROUP 1.
- 4 THIS AREA IS DESIGNATED AS EXTRA HAZARD, GROUP 2.
- 5 PROVIDE A SPRINKLER HEAD IN THIS ROOM WITH A TEMPERATURE RATING OF 200°F OR GREATER. COORDINATE LOCATION OF THE SPRINKLER HEAD AND PIPING WITH THE EQUIPMENT LAYOUT, OVERHEAD CABLE TRAY AND RACEWAY. HOLD PIPING AS HIGH AS POSSIBLE.
- 6 FIRE SERVICE RISER. DRAIN PIPE TO BE RUN PARALLEL WITH SUPPLY RISER.
- 7 EXPOSED 2.5 INCH ANGLE FIRE DEPARTMENT HOSE VALVE, CAP AND CHAIN.
- 8 FIRE SPRINKLER TO EXTEND TO SERVE THIS LEVEL. PROVIDE MONITORED FLOOR ZONE CONTROL VALVE AND WATER FLOW SWITCH. REFER TO DRAWING FP0501, DETAIL 3 FOR PIPING CONFIGURATION AND REQUIREMENTS. PROVIDE ACCESS PANEL IN CEILING AS REQUIRED.

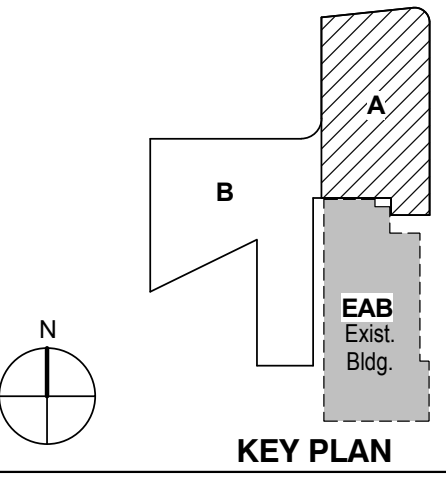
1 LEVEL 03 AREA A FLOOR PLAN - FIRE PROTECTION

1/8" = 1'-0"

CONFORMED SET

01 JUL 2016

ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016
No. Description Date



KEY PLAN

Drawing Title:

LEVEL 03 AREA A FLOOR
PLAN - FIRE PROTECTION

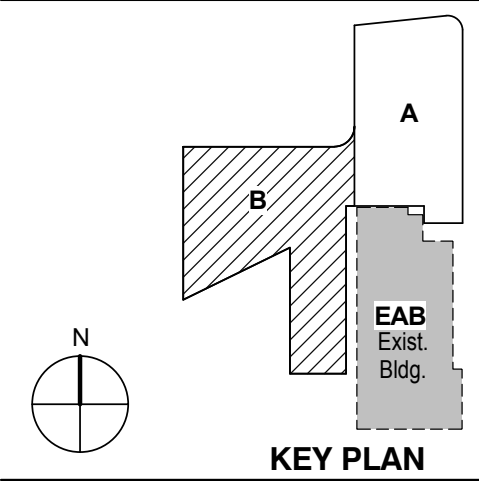
Project No.: 04561.01

Checked by:

FP0103.A

CONFORMED SET 01 JUL 2016

1 ADDENDUM 2-1 17 MAR 2016
ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016
No. Description Date

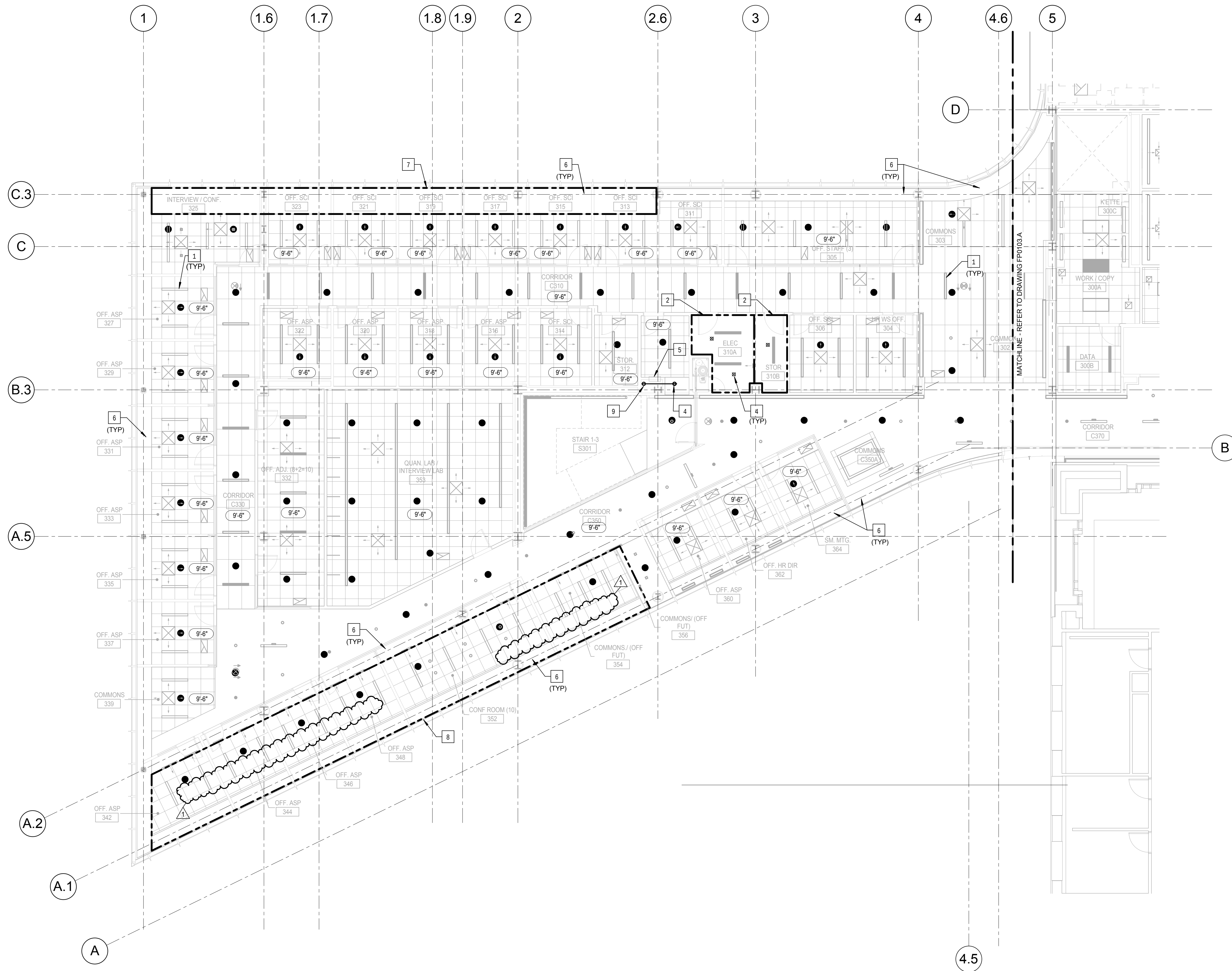


KEY PLAN

LEVEL 03 AREA B FLOOR
PLAN - FIRE PROTECTION

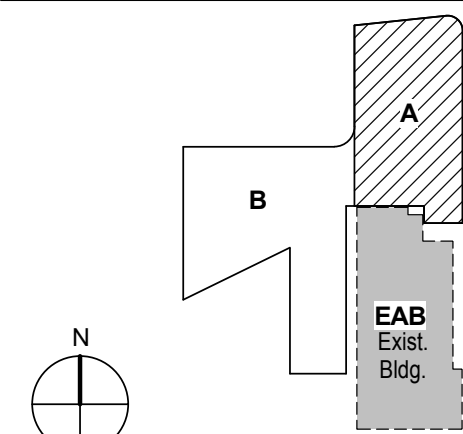
Project No.: 04561.01 Checked by:

FP0103.B



CONFORMED SET 01 JUL 2016

ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016
No. Description Date



KEY PLAN

Drawing Title:

LEVEL 04 AREA A FLOOR
PLAN - FIRE PROTECTION

Project No.: 04561.01 Checked by:

FP0104.A

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CONFORMED SET 01 JUL 2016

- ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016



Drawing Title:

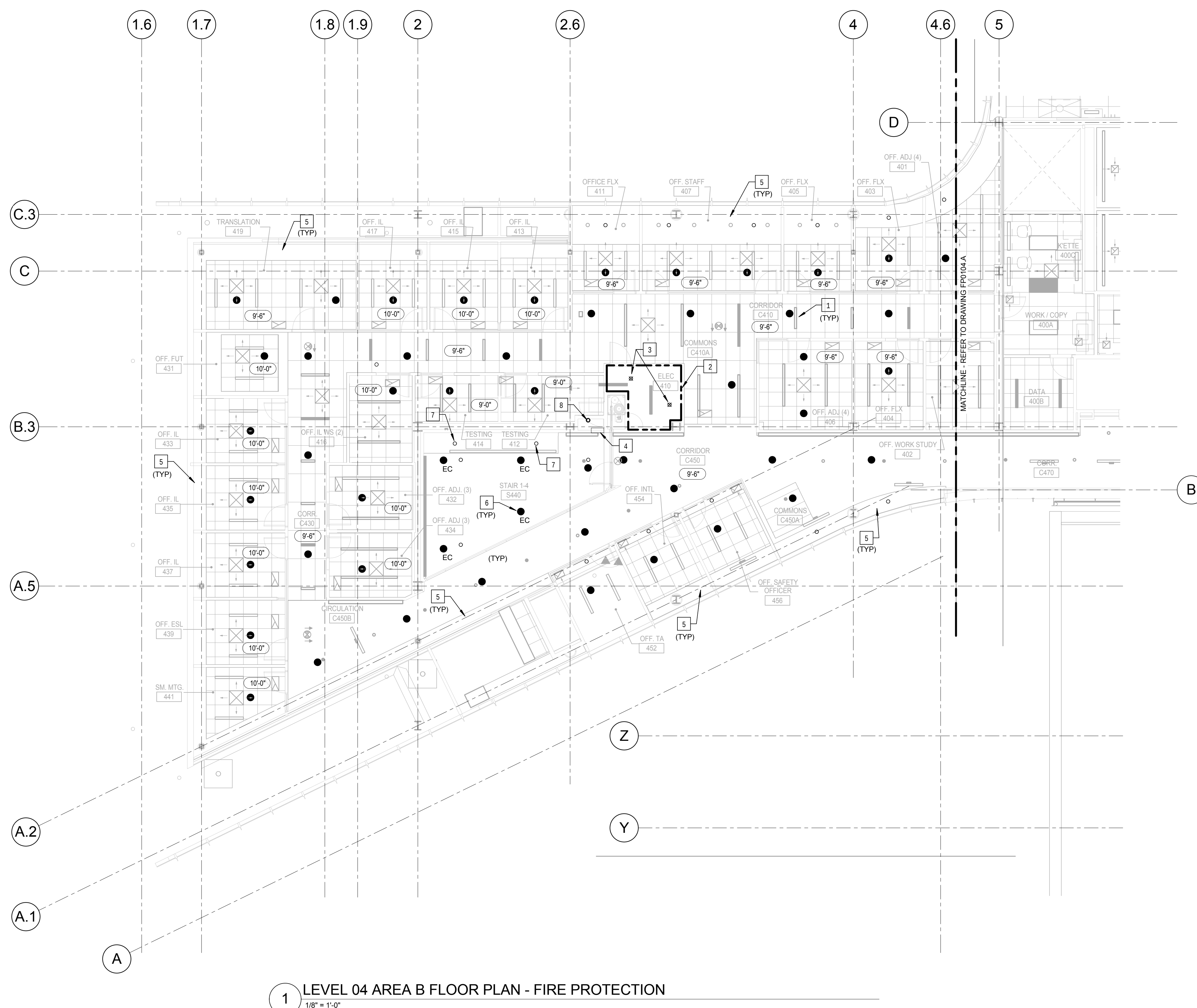
**LEVEL 04 AREA B FLOOR
PLAN - FIRE PROTECTION**

Project No.: 04561.01

Checked by:

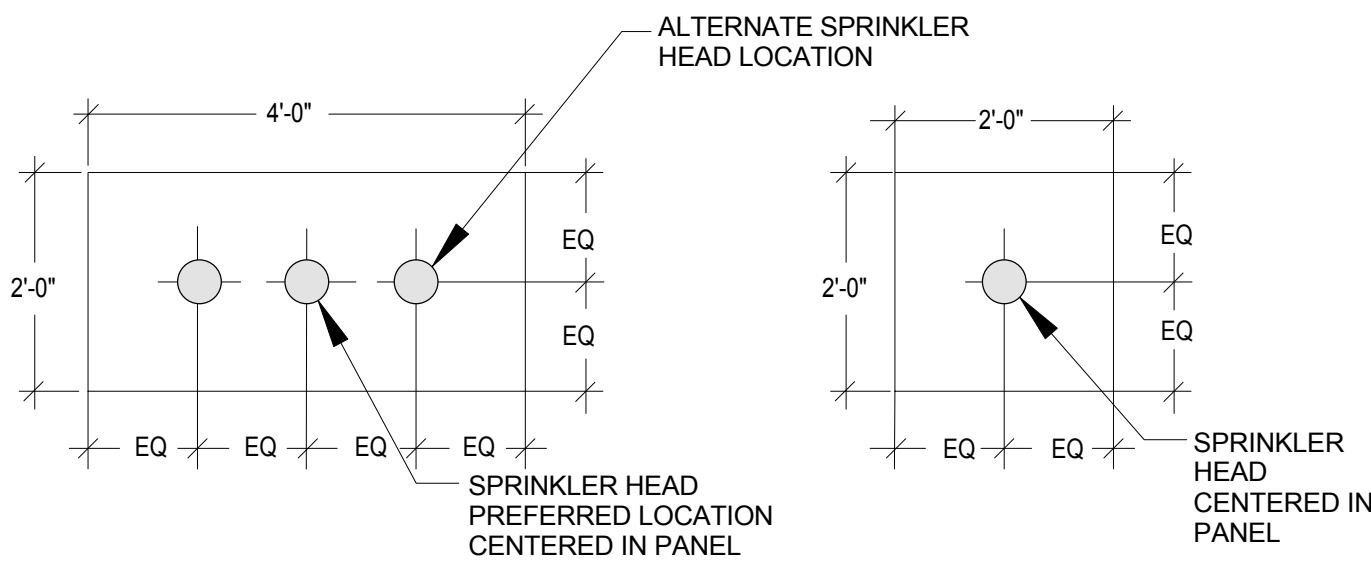
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KEYED NOTES: (THIS SHEET ONLY)

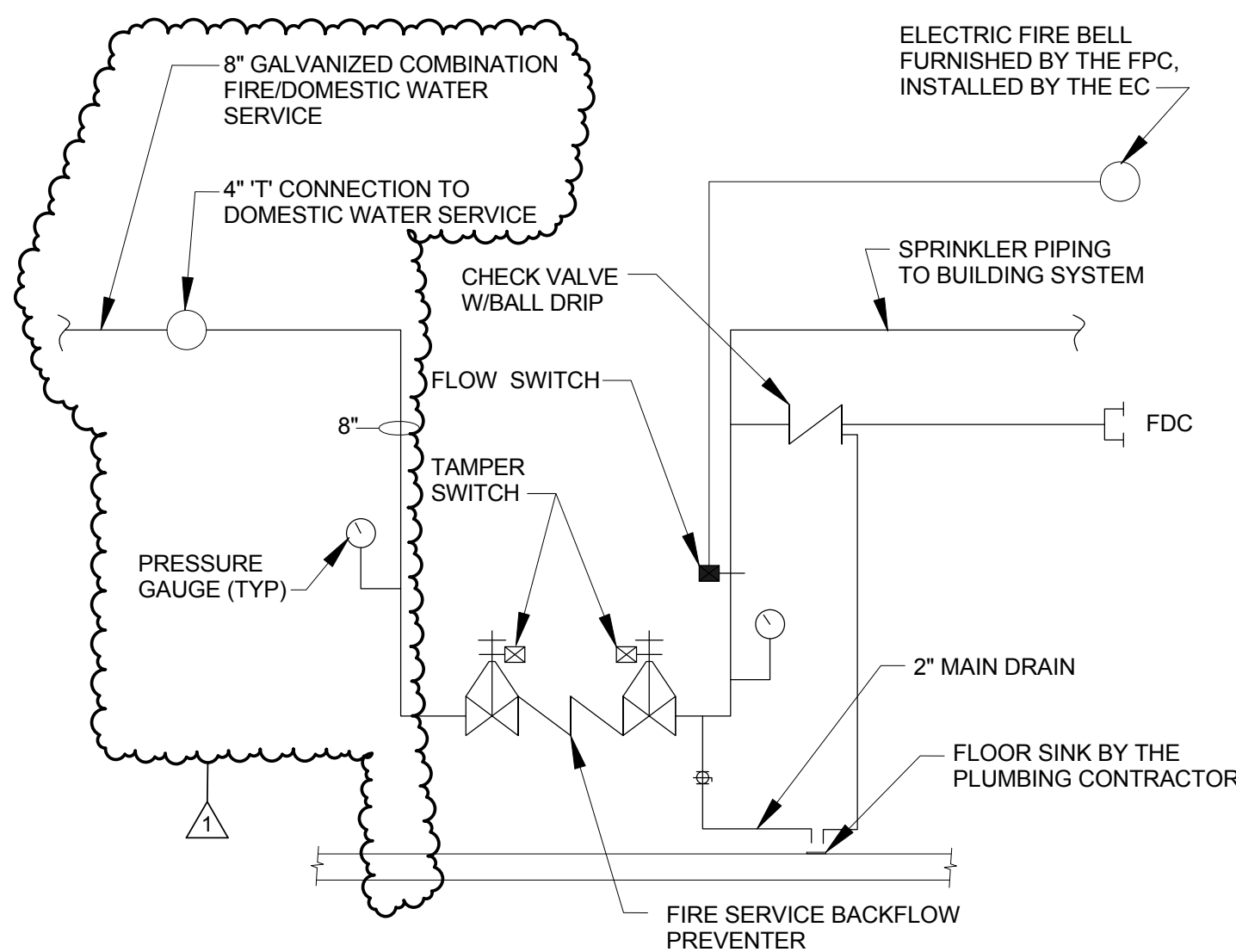
1. COORDINATE LOCATION OF SPRINKLER HEADS WITH SUSPENDED LUMINAIRES. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS.
2. THIS AREA IS DESIGNATED AS ORDINARY HAZARD, GROUP 1.
3. COORDINATE LOCATION OF SPRINKLERS IN THIS ROOM WITH THE ELECTRICAL EQUIPMENT AND OVERHEAD RACEWAY, HUNG PIPING AS HIGH AS POSSIBLE. PROVIDE INTERMEDIATE TEMPERATURE RATED SPRINKLER HEAD.
4. RECESSED FIRE HOSE VALVE CABINET WITH 2.5 INCH ANGLE FIRE DEPARTMENT HOSE VALVE, CAP AND CHAIN. REFER TO THE ARCHITECTURAL DRAWINGS FOR THE EXACT LOCATION.
5. CONTRACTOR TO REVIEW ARCHITECTURAL DRAWINGS FOR RECESSED OR ELEVATED CEILING POCKETS. PROVIDE PROTECTION AS REQUIRED.
6. PROVIDE EXTENDED COVERAGE CONCEALED PENDANT SPRINKLER HEADS IN WOOD SLATE CEILING OF STAIR. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING DETAILS. PIPING ABOVE CEILING THAT IS EXPOSED OR VISIBLE, IS TO BE PAINTED TO MATCH THE BACKGROUND SURFACE. CONCEALED PIPING OF THE SPRINKLER HEAD IS TO BE SELECTED AND APPROVED BY THE ARCHITECT. OBTAIN SAMPLES FROM THE SPRINKLER MANUFACTURER OF THE TRUE COVER/PLATE FINISHES AS DIRECTED BY THE ARCHITECT PRIOR TO INSTALLATION.
7. EXTEND SPRINKLER PROTECTION INTO ROOF MONITOR/SKYLIGHT. PROVIDE SPRINKLER HEADS WITH A TEMPERATURE RATING SUITABLE FOR THE APPLICATION. EXPOSED OR VISIBLE PIPING IS TO BE PAINTED TO MATCH THE BACKGROUND SURFACE.
8. STANDEPIPE SUPPLY RISER MAIN LEVEL 3 TO SERVE FLOOR HOSE VALVE ON THIS LEVEL. PROVIDE PRESSURE GAUGE AT ACCESS LOCATION.



- NOTES:
- PENETRATIONS OF 1x4 OR 2x4 CEILING PANELS BY SPRINKLER HEADS SHALL BE CENTERED IN THE SHORT DIMENSION AND EITHER CENTERED OR AT 1/4 POINTS IN THE LONG DIMENSION.
 - CEILING TILES THAT ARE CUT ALONG A PARTITION THE PENETRATION FOR SPRINKLER HEADS SHALL BE CENTERED BETWEEN THE GRID AND THE PARTITION.
 - FOR A 2'x2' CEILING TILE, THE PENETRATIONS FOR SPRINKLER HEADS SHALL BE CENTERED IN THE PANEL.
 - MAINTAIN CLEARANCES BETWEEN THE SPRINKLER HEAD AND OTHER CEILING MOUNTED OR RECESSED OBJECTS AS REQUIRED BY NFPA 13.

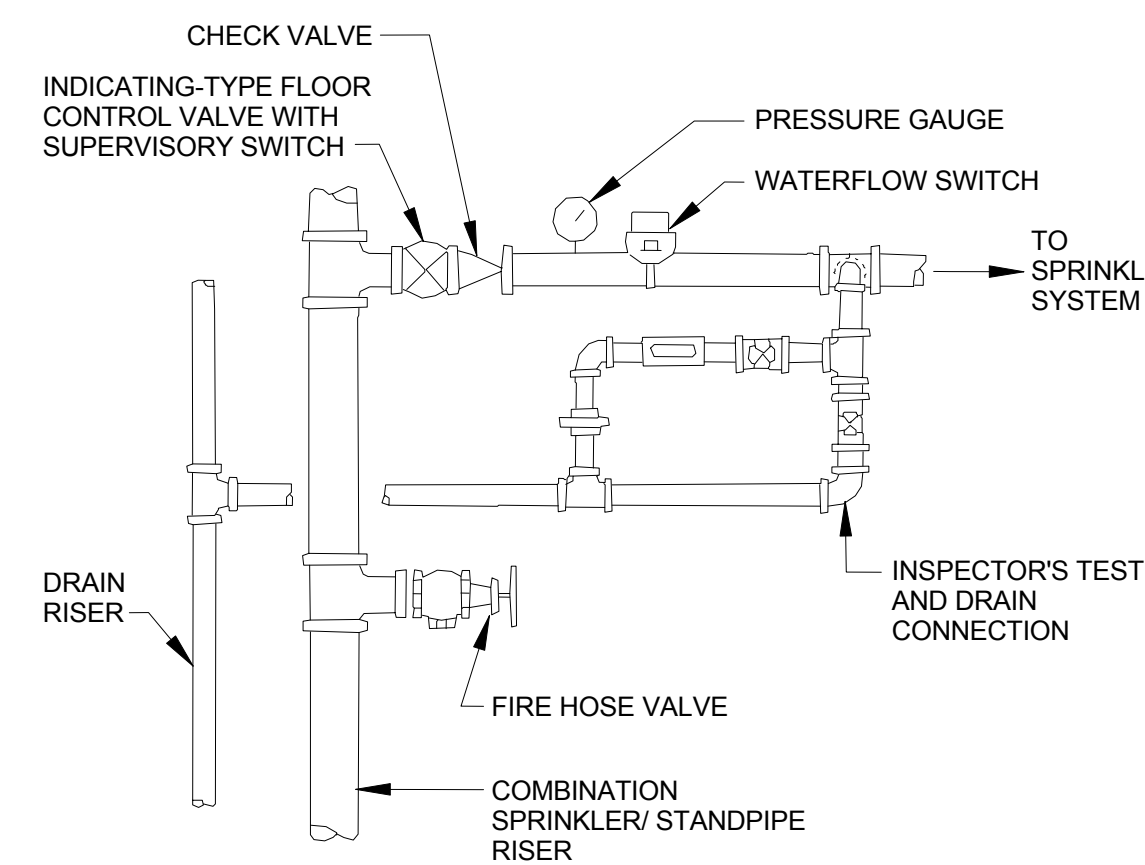
1 TYPICAL CEILING PANEL PENETRATION DETAIL

SCALE: N.T.S.



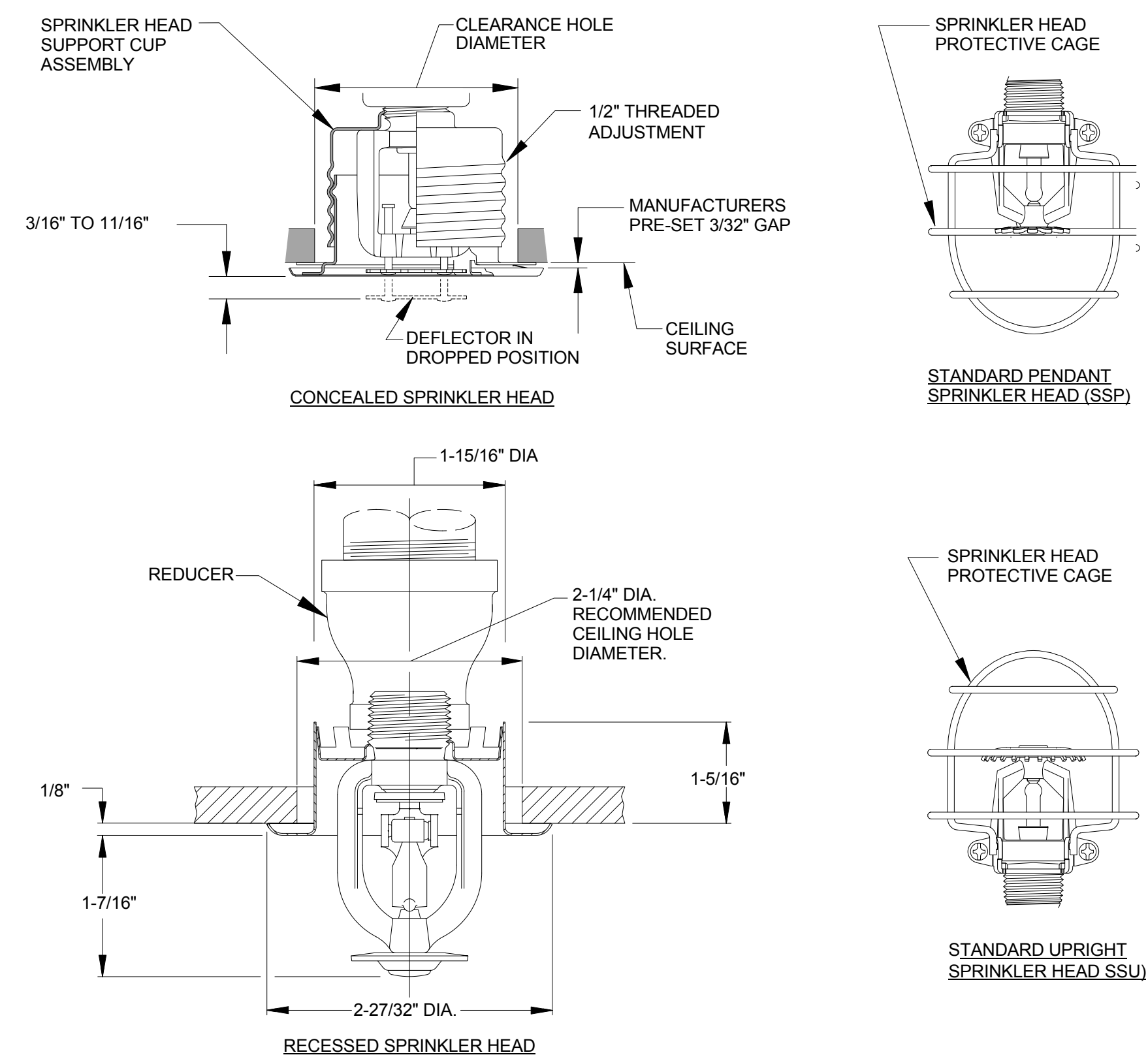
2 TYPICAL FIRE SERVICE ENTRANCE DETAIL

SCALE: N.T.S.



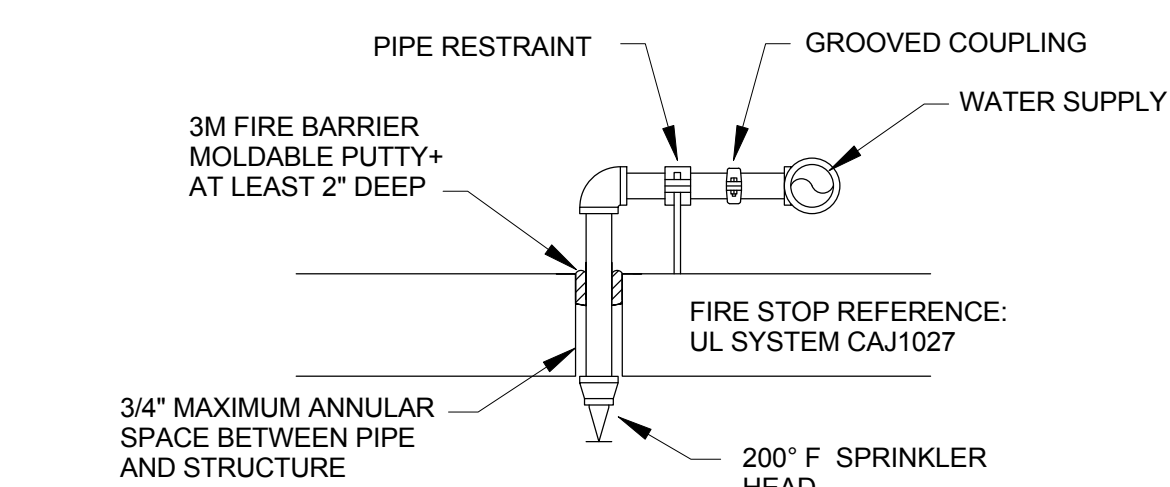
3 TYPICAL COMBINED SERVICE DETAIL

SCALE: N.T.S.



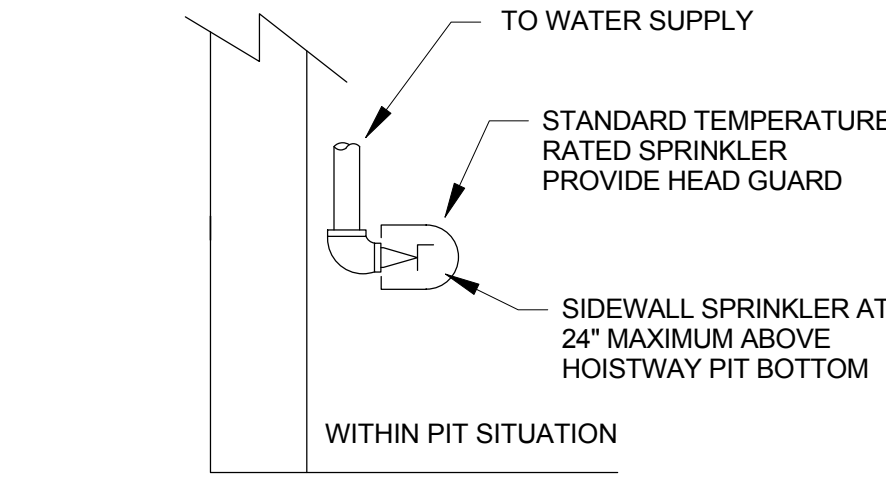
4 TYPICAL FIRE SPRINKLER HEAD DETAIL

SCALE: N.T.S.



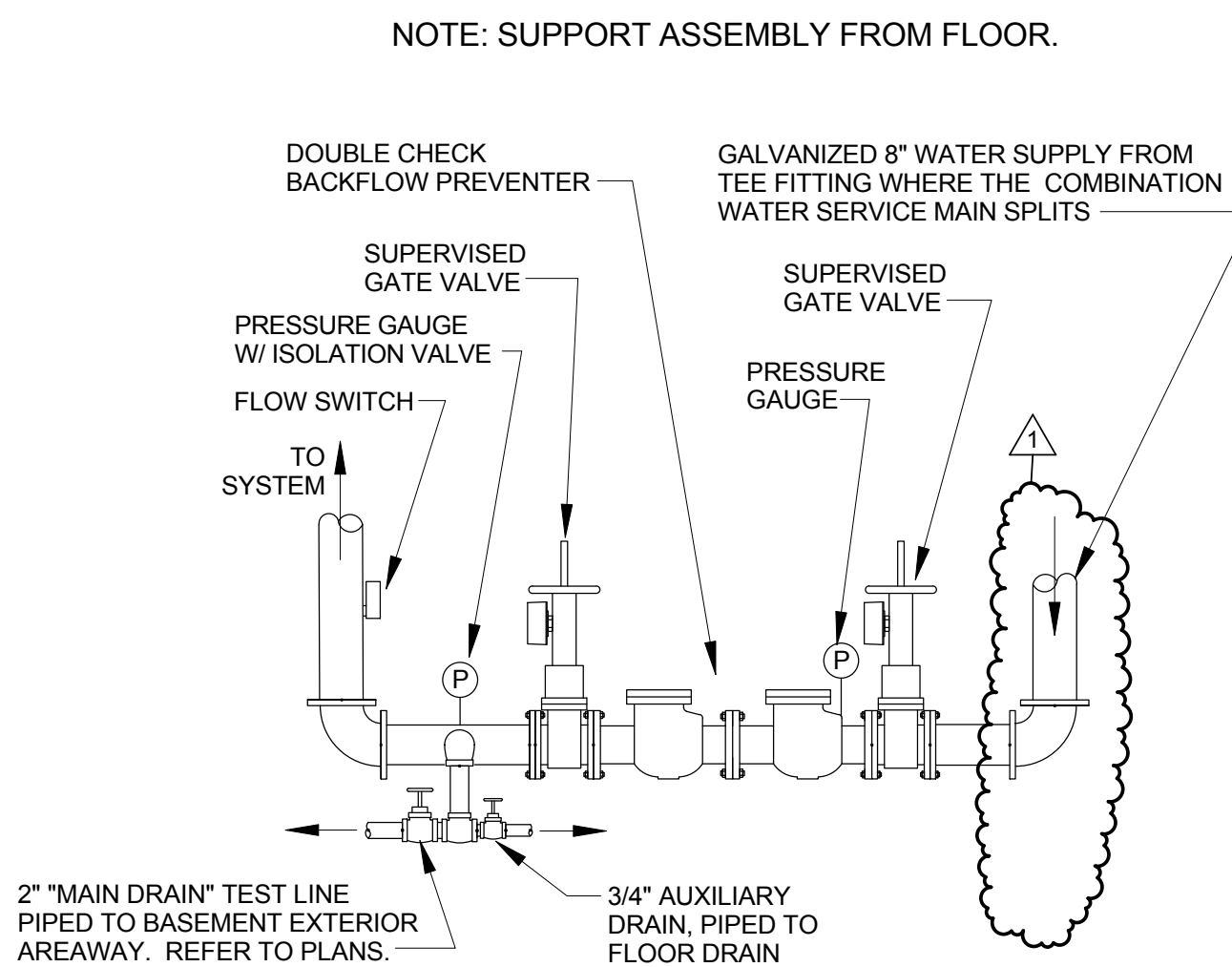
5 TOP OF ELEVATOR HOISTWAY SPRINKER

SCALE: N.T.S.



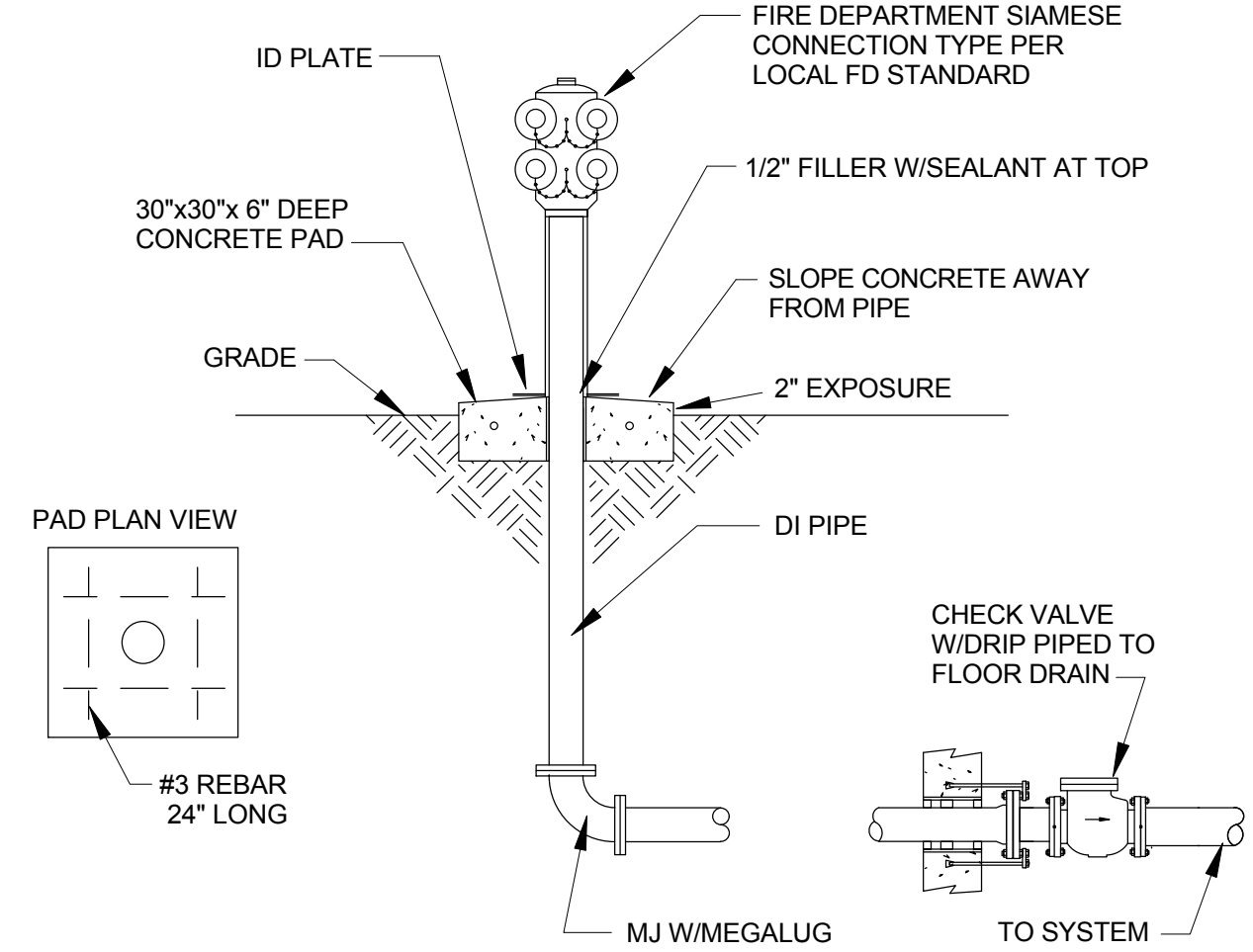
6 ELEVATOR PIT SPRINKLER

SCALE: N.T.S.



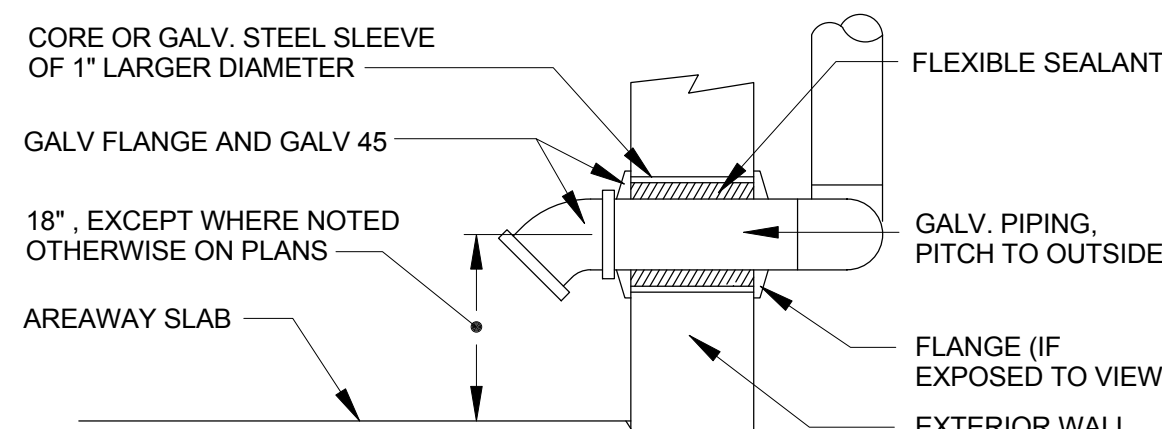
7 BACKFLOW PREVENTER ASSEMBLY

SCALE: N.T.S.



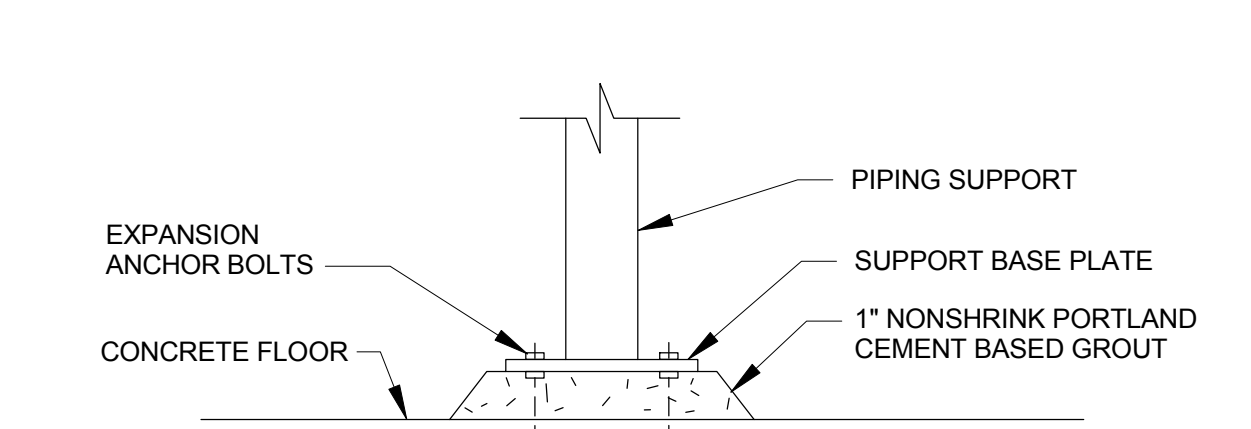
8 SIAMESE CONNECTION

SCALE: N.T.S.



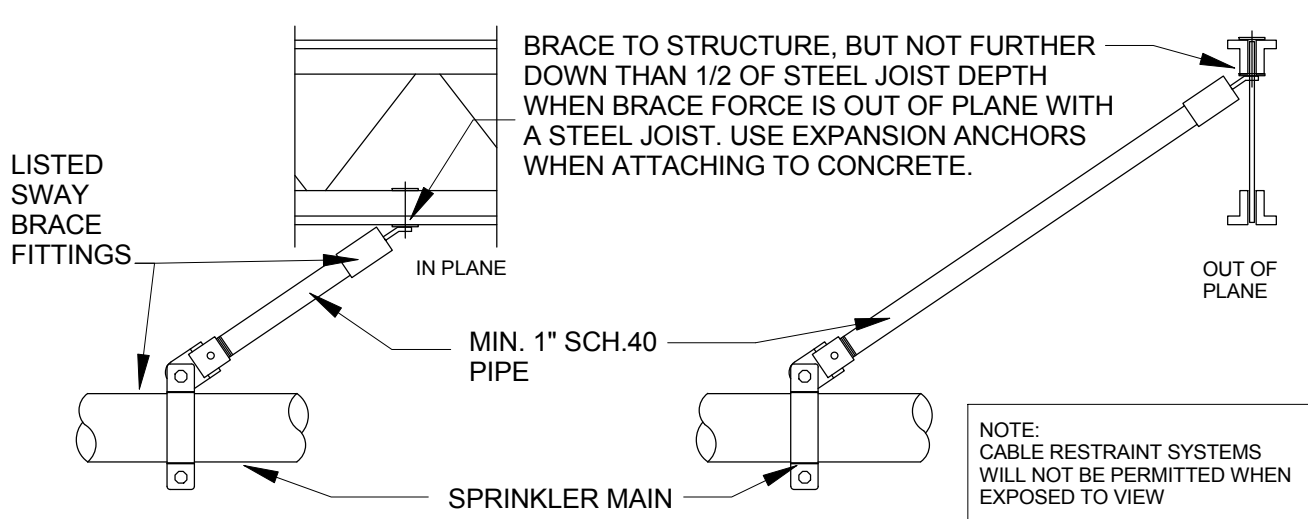
9 "MAIN DRAIN" TEST DISCHARGE THROUGH EXTERIOR WALL

SCALE: N.T.S.



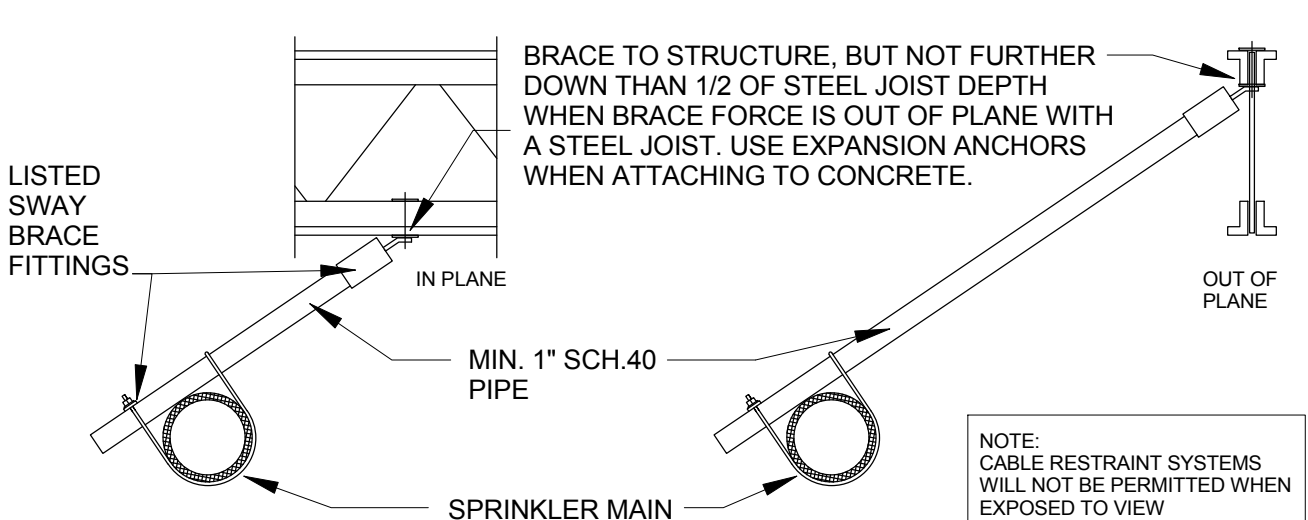
10 PIPING SUPPORT BASE DETAIL

SCALE: N.T.S.



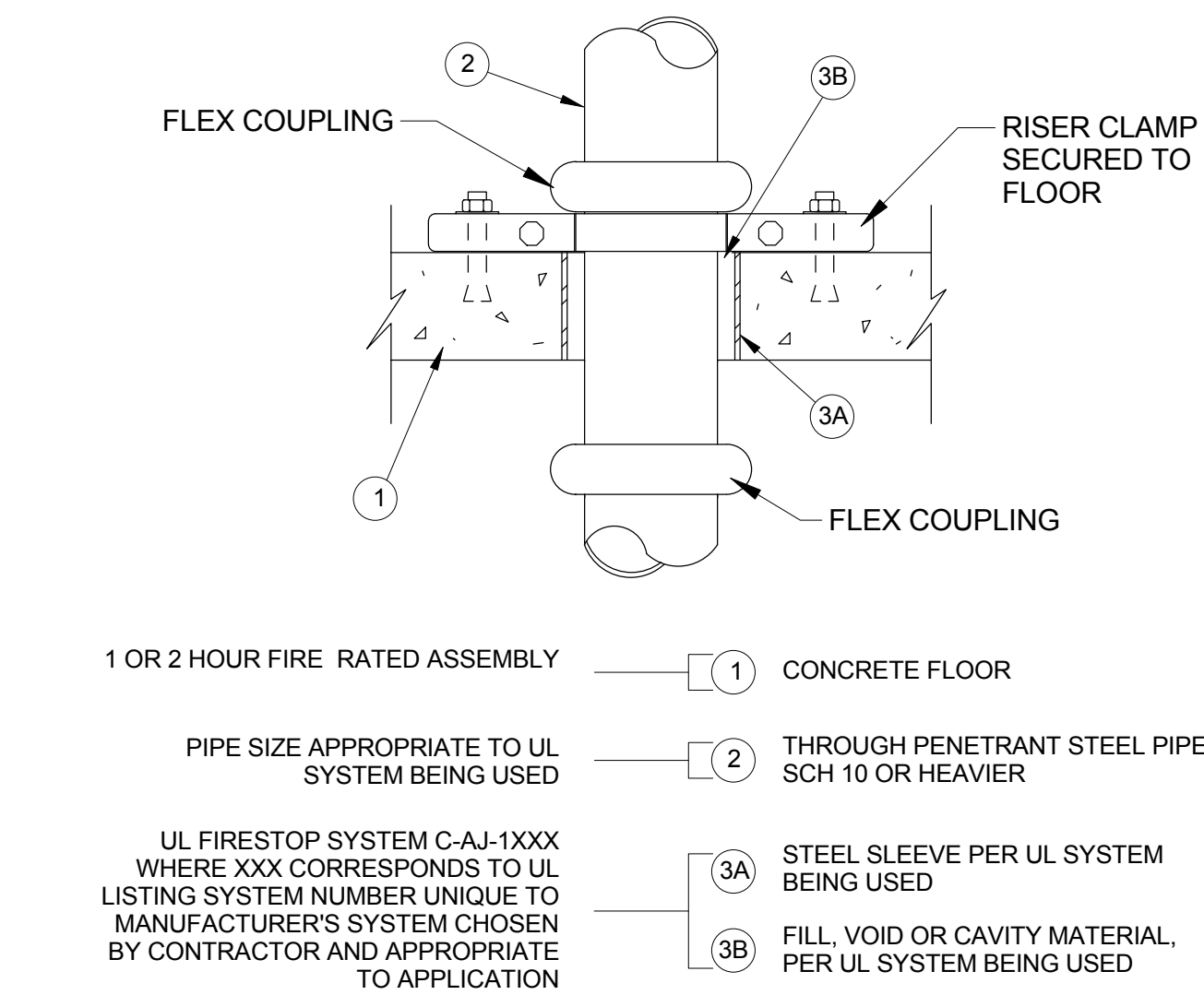
11 LONGITUDINAL SWAY BRACE DETAIL

SCALE: N.T.S.



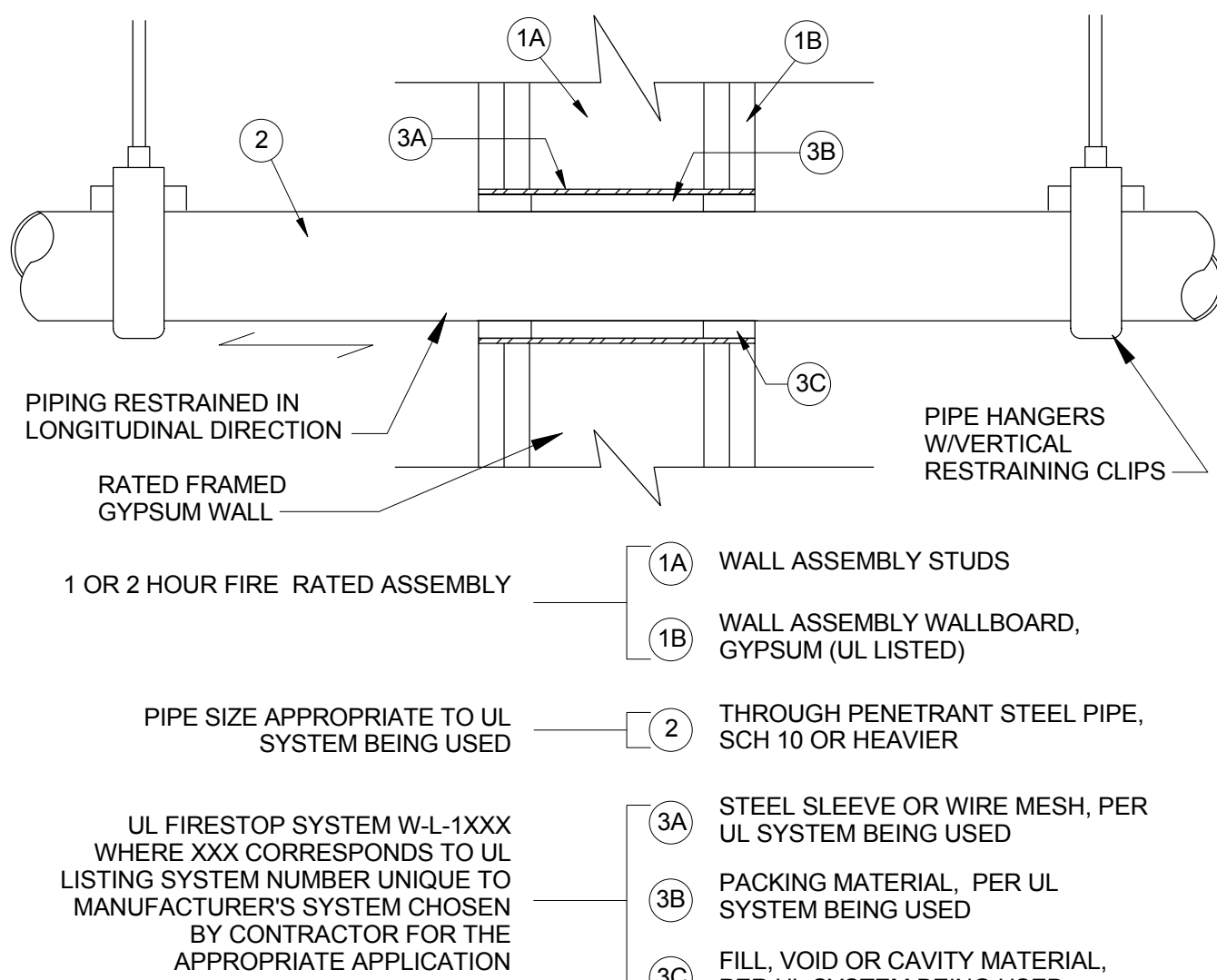
12 LATERAL SWAY BRACE DETAIL

SCALE: N.T.S.



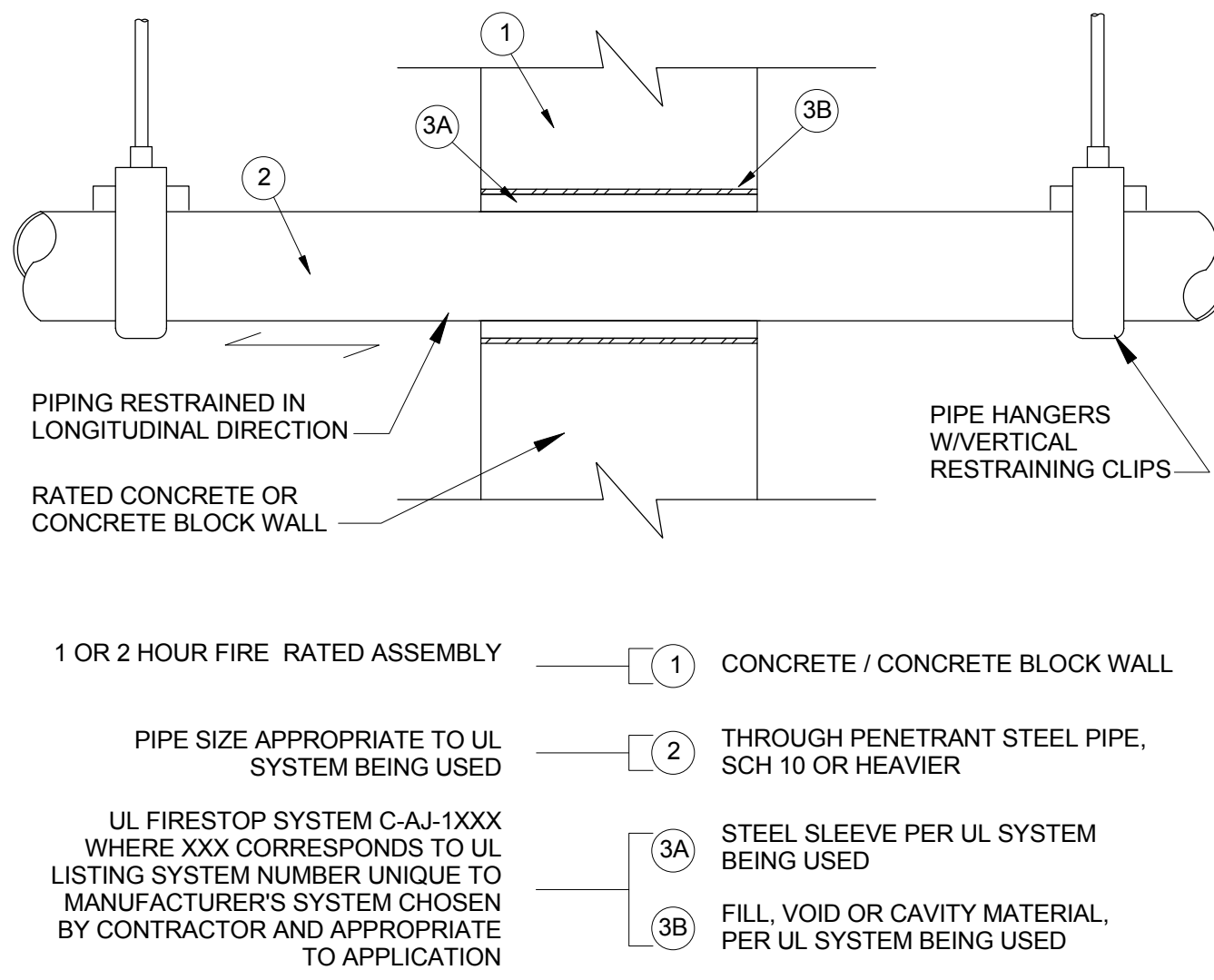
UL FIRESTOP SYSTEM C-AJ-1xxx
1 OR 2 HOUR, THROUGH-PENETRATION
SYSTEM XHEZ FOR METALLIC PIPE

SCALE: N.T.S.



UL FIRESTOP SYSTEM W-L-1xxx
1 OR 2 HOUR, THROUGH-PENETRATION
SYSTEM XHEZ FOR METALLIC PIPE

SCALE: N.T.S.



UL FIRESTOP SYSTEM C-AJ-1xxx
1 OR 2 HOUR, THROUGH-PENETRATION
SYSTEM XHEZ FOR METALLIC PIPE

SCALE: N.T.S.

FIRE SUPPRESSION EQUIPMENT	
SPRINKLER HEAD - RECESSED PENDENT :	TYCO MODEL TY-FRB (TY-323) QUICK RESPONSE RECESSED PENDENT SPRINKLER HEAD WITH STYLE 15 CHROME RECESSED ESCUTCHEON . SPRINKLER HEAD TO BE CHROME, RATED FOR 155°F, 1/2" NOMINAL ORIFICE AND A K FACTOR OF 5.8 . THE TEMPERATURE RATING SHOWN IS NOMINAL, THE ACTUAL RATING TO BE SELECTED FOR THE APPLICATION OR AS NOTED. PROVIDE WITH MANUFACTURERS WRENCH.
SPRINKLER HEAD - EXPOSED PENDENT AND UPRIGHT:	TYCO MODEL TY-FRB (TY-323 FOR PENDANT AND TY-313 FOR UPRIGHT) QUICK RESPONSE UPRIGHT SPRINKLER HEAD WITH SPRINKLER HEAD TO BE NATURAL BRASS, RATED FOR 155°F, 1/2" NOMINAL ORIFICE AND A K FACTOR OF 5.8 . THE TEMPERATURE RATING SHOWN IS NOMINAL, THE ACTUAL RATING TO BE SELECTED FOR THE APPLICATION OR AS NOTED. INSTALL MANUFACTURERS SPRINKLER CAGE GUARD WHERE THE SPRINKLER HEAD IS WITH SEVEN FEET OF THE FLOOR . PROVIDE WITH MANUFACTURERS WRENCH.
SPRINKLER HEAD - CONCEALED EXTENDED COVERAGE (EC)	TYCO CORPORATION QUICK RESPONSE EXTENDED COVERAGE GLASS BULB ELEMENT SERIES RFII 'ROYAL FLUSH II' (TY3532) CONCEALED CEILING SPRINKLER HEAD, BRONZE FRAME AND BRONZE DEFLECTOR, CLASSIFIED FOR ORDINARY HAZARD WITH 155°F TEMPERATURE RATING. COVER PLATE FINISH TO BE SELECTED BY THE ARCHITECT. THE TEMPERATURE RATING SHOWN IS NOMINAL, THE ACTUAL RATING TO BE SELECTED FOR THE APPLICATION OR AS NOTED. PROVIDE MANUFACTURERS SPRINKLER WRENCH.
SPRINKLER HEAD - CONCEALED	TYCO CORPORATION STANDARD AND QUICK RESPONSE GLASS BULB ELEMENT SERIES RFII 'ROYAL FLUSH II' (TY-3531) CONCEALED CEILING SPRINKLER HEAD, BRONZE FRAME AND BRONZE DEFLECTOR, CLASSIFIED FOR ORDINARY HAZARD WITH 155°F TEMPERATURE RATING. COVER PLATE FINISH TO BE SELECTED BY THE ARCHITECT. THE TEMPERATURE RATING SHOWN IS NOMINAL, THE ACTUAL RATING TO BE SELECTED FOR THE APPLICATION OR AS NOTED. PROVIDE MANUFACTURERS SPRINKLER WRENCH .
SPRINKLER HEAD - CONCEALED DRY-PENDANT (DP)	TYCO CORPORATION STANDARD AND QUICK RESPONSE GLASS BULB ELEMENT SERIES RFII 'ROYAL FLUSH II' DS-C (TY3535) DRY-PENDANT CONCEALED CEILING SPRINKLER HEAD, BRONZE FRAME AND BRONZE DEFLECTOR, CLASSIFIED FOR ORDINARY HAZARD WITH 155°F TEMPERATURE RATING. SELECT EXPOSURE LENGTH FOR THE APPLICATION. COVER PLATE FINISH TO BE SELECTED BY THE ARCHITECT. THE TEMPERATURE RATING SHOWN IS NOMINAL, THE ACTUAL RATING TO BE SELECTED FOR THE APPLICATION OR AS NOTED. PROVIDE MANUFACTURERS SPRINKLER WRENCH.
SPRINKLER HEAD - CONCEALED DRY-PENDANT (DPEC)	TYCO CORPORATION QUICK RESPONSE, EXTENDED COVERAGE GLASS BULB ELEMENT SERIES RFII 'ROYAL FLUSH II' DS-ECC (TY3539) DRY-PENDANT CONCEALED CEILING SPRINKLER HEAD, BRONZE FRAME AND BRONZE DEFLECTOR, CLASSIFIED FOR ORDINARY HAZARD WITH 155°F TEMPERATURE RATING. SELECT EXPOSURE LENGTH FOR THE APPLICATION. COVER PLATE FINISH TO BE SELECTED BY THE ARCHITECT. THE TEMPERATURE RATING SHOWN IS NOMINAL, THE ACTUAL RATING TO BE SELECTED FOR THE APPLICATION OR AS NOTED. PROVIDE MANUFACTURERS SPRINKLER WRENCH.
PRE-ACTION DOUBLE INTER-LOCK PACKAGE	TYCO FIRE PROTECTION PRODUCT MODEL DV-5 RED-E CABINET INTEGRATED PRE-ACTION FIRE PROTECTION PACKAGE. ASSEMBLY TO BE COMPLETELY SELF-CONTAINED WITHIN MANUFACTURERS CABINET. SIZING AND SELECTION OF THE PRE-ACTION SYSTEM IS CONSIDERED A FUNCTION OF THE DELEGATED DESIGN SUBMITTAL. REFER TO SPECIFICATION SECTION 213136 - 'DRY-PIPE SPRINKLER SYSTEMS'. COORDINATE INSTALLATION WITH THE ELECTRICAL CONTRACTOR FOR POWER AND ALARM REQUIREMENTS.
DOUBLE CHECK DETECTOR BACKFLOW PREVENTER: FBP-1	WATTS SERIES 709DCCA -OSY DOUBLE CHECK DETECTOR ASSEMBLY; EPXOY COATED CAST IRON WITH BRONZE SEATS AND BRONZE DISC HOLDER, STAINLESS STEEL TRIM, RUBBER CHECK VALVE DISCS AND BRONZE TEST COCKS. UL/FM OUTSIDE SCREW AND YOKE RESILIENT SEATED GATE VALVES. 175 PSI MAXIMUM WORKING PRESSURE. COORDINATE METER SELECTION WITH LOCAL UTILITY. IF UTILITY DOES NOT REQUIRE METER, PROVIDE MANUFACTURERS GPM METER.
FIRE DEPARTMENT CONNECTION: FDC -1	ELKHART BRASS CO., INC. MODEL 15-4W FREE STANDING INLET CONNECTION. 6.0 INCH NPT OUTLET WITH (4) 2.5 INCH NHT INLETS. SNOOT CLAPPER STYLE. ESCUTCHEON TO READ STANDPIPE AND AUTO SPKR. 4-WAY BODY TO BE ROUGH CHROME. WITH THE BALANCE OF PARTS POLISHED CHROME. ASSEMBLY TO BE COMPLETE WITH PLUGS AND CHAINS. COORDINATE EXACT LOCATION WITH THE ARCHITECT AND CIVIL ENGINEER PRIOR TO INSTALLATION. PROVIDE WITH TWO 4" ROUND STEEL PIPE CONCRETE BOLLARDS ON EITHER SIDE OF FDC. FDC TO SET IN POURED CONCRETE BASE FLUSH WITH GRADE.
FIRE HOSE VALVE : FHV	ELKHART BRASS INDUSTRIAL ANGLE VALVE MODEL UR-25-2.5 - CAST BRASS FINISH. INLET TO BE 2-1/2" WITH 2-1/2" MALE FIRE HOSE OUTLET. ASSEMBLY TO BE COMPLETE WITH CAP AND CHAIN. VALVE TO BE RATED FOR 300 PSI, UL LISTED AND FM APPROVED.
FIRE HOSE VALVE CABINET : FVC	LARSEN'S VALVE CABINET MODEL VCAL1818-RT TRIM-LESS CABINET WITH ALUMINUM SOLID DOOR. INSIDE BOX DIMENSIONS 18"x18"x8" DEEP. CABINET TO HAVE INTERIOR CAPACITY TO HOSE ONE 2-1/2" FIRE DEPARTMENT VALVE WITH CAP AND CHAIN. VERIFY AND COORDINATE PLACEMENT AND LOCATION WITH THE ARCHITECT PRIOR TO ROUGH-IN AND INSTALLATION.
FIRE PUMP TEST HEADER : FPH-1	ELKHART BRASS CO., INC. MODEL 784-P FLUSH 4-WAY OUTLET BUILDING CONNECTION. 6.0 INCH NPT OUTLET WITH (4) 2.5 INCH NHT INLETS, INDIVIDUAL DROP CLAPPER. ESCUTCHEON TO READ PUMP TEST CONNECTION. ASSEMBLY TO BE POLISHED CHROME COMPLETE WITH PLUGS AND CHAINS. COORDINATE LOCATION WITH THE ARCHITECT PRIOR TO ROUGH-IN.
FIRE PUMP : FP-1	REFER TO SPECIFICATION SECTION 213113 - 'ELECTRICAL-DRIVE, CENTRIFUGAL FIRE PUMPS'. SIZING AND SELECTION OF THE FIRE PUMP IS CONSIDERED A FUNCTION OF THE DELEGATED DESIGN SUBMITTAL. THE FIRE PUMP AND THE FIRE PUMP CONTROLLER ARE TO BE DESIGNED AND PURCHASED TOGETHER, AND OPERATE AS A COMPLETE PACKAGE. REFER TO SPECIFICATION SECTION 213900 - 'CONTROLLERS FOR FIRE-PUMP DRIVERS'.
PRESSURE MAINTENANCE PUMP : JP-1	REFER TO SPECIFICATION SECTION 213400 - 'PRESSURE MAINTENANCE PUMPS'. SIZING AND SELECTION OF THE PRESSURE MAINTENANCE PUMP IS CONSIDERED A FUNCTION OF THE DELEGATED DESIGN SUBMITTAL. THE PRESSURE MAINTENANCE PUMP AND THE PUMP CONTROLLER ARE TO BE DESIGNED AND PURCHASED TOGETHER, AND OPERATE AS A COMPLETE PACKAGE. REFER TO SPECIFICATION SECTION 213900 - 'CONTROLLERS FOR FIRE-PUMP DRIVERS'.
CONTRACTOR NOTES:	
1. MANUFACTURER AND MODEL NUMBERS LISTED ARE BASIS OF DESIGN. EQUIPMENT AND COMPONENTS OF COMPARABLE QUALITY, DESIGN AND FUNCTION MAY BE CONSIDERED AS AN APPROVED EQUAL, IN ACCORDANCE WITH THE SPECIFICATIONS.	
2. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ROUGH-IN AND INSTALLATION REQUIREMENTS.	
3. ALL PRODUCT SHALL BE FM APPROVED AND UL LISTED. VERIFY EXACT REQUIREMENTS PRIOR TO ORDERING, ROUGH-IN AND INSTALLATION.	
4. REFER TO THE PROJECT MANUAL DIVISION 21 FOR ADDITIONAL REQUIREMENTS, DETAILS, ITEMS AND COMPONENTS AS PART OF THIS SCOPE.	

FIRE SERVICE BACKFLOW PREVENTER SCHEDULE													
PLAN MARK	MANUFACTURER	SERIES	MODEL NUMBER	LOCATION	USE	TYPE/STYLE	SIZE	SHUT-OFF/SERVICE VALVES	MAXIMUM WORKING PRESSURE, PSI	WATER PIPING CONNECTIONS, INCHES		SHIPPING WEIGHT, LBS.	REMARKS
										INLET	OUTLET		
FBP-1	WATTS REGULATOR	709	709-OSY	FIRE PUMP RM.	FIRE SERVICE	DCVA	8"	OS&Y	175	FLANGED	FLANGED	1201	NOTE 1
NOTES: 1. SET ON FIELD OR SHOP FABRICATED STEEL SUPPORT RACK, SECURED TO FLOOR.													



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CONFORMED SET 01 JUL 2016

ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016

No.	Description	Date
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Drawing Title:

SCHEDULES - FIRE PROTECTION

Project No.: 04561.01 Checked by:

FP0601



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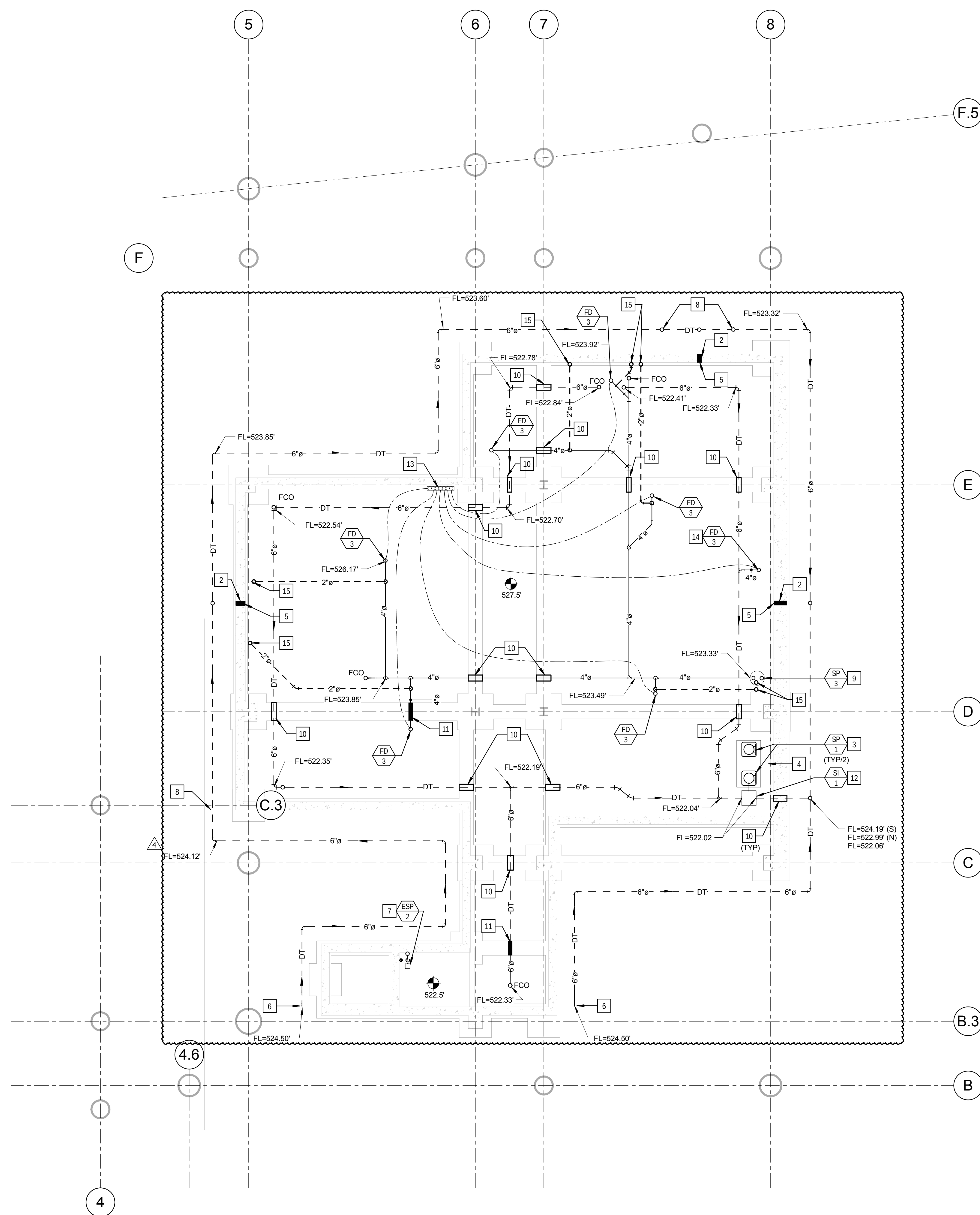
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1 LEVEL 0 AREA A UNDER FLOOR PIPING PLAN - PLUMBING
1/8" = 1'-0"

NOTES:

FURNISH AND INSTALL 6" PERFORATED SCHEDULE 40 PVC DRAIN TILE ALONG PERIMETER FOUNDATION WALLS AND BELOW BASEMENT FLOOR SLAB AS INDICATED. SLOPE DRAIN AT 0.50% MINIMUM. ADJUST EXACT LOCATION AND ROUTING AS NECESSARY TO AVOID PIERS AND ANY OTHER STRUCTURAL ELEMENTS.

FURNISH AND INSTALL SUMP PUMP, SAND INTERCEPTOR AND FLOOR DRAINS PER MSD's STANDARD DETAIL FIGURE 3-2 IN THE LATEST PUBLISHED RULES AND REGULATIONS AND ENGINEERING DESIGN REQUIREMENTS FOR SANITARY SEWER AND STORMWATER DRAINAGE FACILITIES.

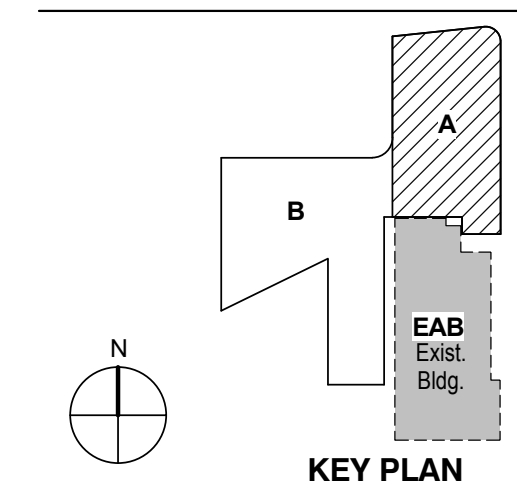
- KEYED NOTES: (THIS SHEET ONLY)**

- | | |
|----|---|
| 1 | NOT USED |
| 2 | SLEEVE AND SEAL WATER TIGHT WITH "LINK-SEAL" ASSEMBLY. REFER TO DETAIL ON DRAWING P0502. |
| 3 | REFER TO DRAWING P0501, DETAIL 8. |
| 4 | 6" SUMP PUMP DISCHARGE LINE UP. |
| 5 | WALL CLEANOUT. INSTALL 24" AFF. REFER TO DRAWINGS P0501, DETAIL 10. |
| 6 | 6" UP TO SUB-SOIL DRAINAGE CLEANOUT, REFER TO DETAIL ON DRAWING P0502. |
| 7 | REFER TO DRAWING P0501, DETAIL 9. |
| 8 | 6" DRAIN TIE UP TO SUBDRAINAGE SYSTEM ABOVE. REFER TO DRAWING P0011 FOR CONTINUATION. |
| 9 | 2" SUMP PUMP DISCHARGE LINE UP. |
| 10 | FURNISH AND INSTALL CAST IRON OR SCH-40 GALVANIZED STEEL PIPE CASING BEHIND EACH GRADE BEAM OR FOOTING. CASTING SHALL LIE TWO PIPE SIZES LARGER THAN THE PIPE IT ENCLOSES. EXTEND ONE FOOT ON BOTH SIDE OF THE GRADE BEAM OR FOOTING. |
| 11 | PIPING TO PASS THROUGH GRADE BEAM IN CAST-IN-PLACE SLEEVE. REFER TO STRUCTURAL DRAWINGS. |
| 12 | REFER TO DRAWING P0501, DETAIL 6. |
| 13 | SEVEN 1/2" CW TO SERVER FLOOR DRAIN TRAP PRIMERS. REFER TP PLUMBING DRAWING P0017 FOR LOCATION OF ELECTRONIC TRAP RIMER UNIT ON LEVEL 0. |
| 14 | FLOOR DRAIN LOCATED AT BOTTOM OF OUTSIDE AIR INTAKE SHATT. MAKE CONNECTION TO DRAIN TIE PIPING WITH SOLID PIPE, PROVIDE FITTINGS AND TRANSITIONS AS REQUIRED. |
| 15 | 2" VENT UP. REFER TO PLUMBING DRAWING P0011 FOR CONTINUATION. |

CONFORMED SET 01 JUL 2016

4	ADDENDUM 2-4	24 MAY 2016
3	ADDENDUM 2-2	19 APR 2016
2	MSD SUBMITTAL	12 APR 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016

No.	Description	Date
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**LEVEL 0 AREA A
UNDERFLOOR PLAN -
PLUMBING**

Project No.: 04561.01

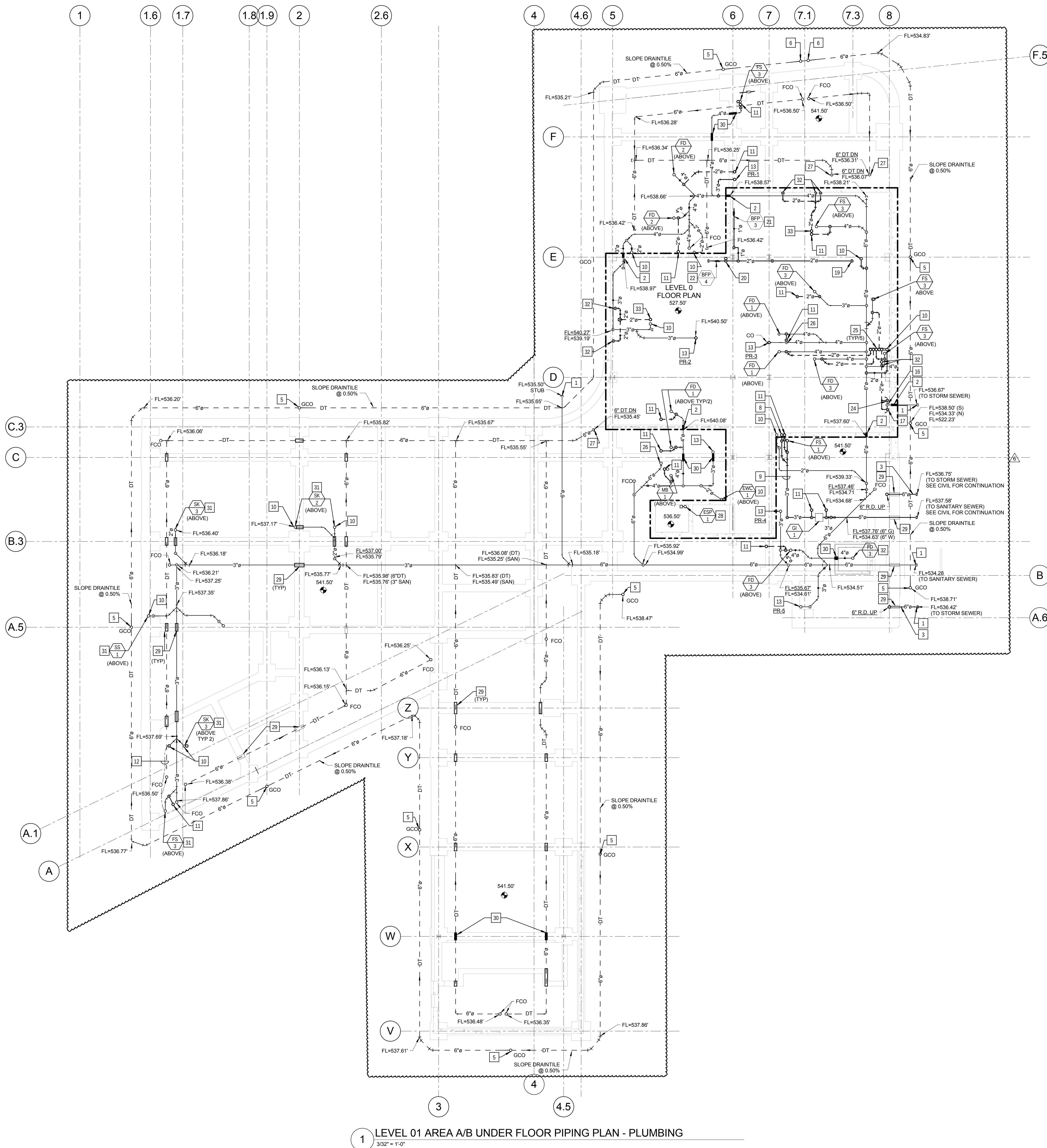
Checked by:

P0010

MSD P# 28874-01 MSD BASE MAP 23K3

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5/24/2016 8:48:17 AM



KEYED NOTES: (THIS SHEET ONLY)

- 1 REFER TO CIVIL SITE PLAN FOR CONTINUATION.
- 2 SLEEVE AND SEAL WATER TIGHT WITH "LINK-SEAL" ASSEMBLY, REFER TO DETAIL ON DRAWING P0501.
- 3 6" ROOF DRAIN LEADER
- 4 (NOT USED)
- 5 SUB-SOIL DRAINAGE CLEANOUTS AT GRADE. REFER TO DETAIL ON DRAWING P0501.
- 6 TWO WAY SUB-SOIL DRAINAGE CLEANOUTS AT GRADE. REFER TO DETAIL ON DRAWING P0501.
- 7 6" SANITARY WASTE LINE
- 8 2" GREASE WASTE LINE UP
- 9 3" GREASE WASTE LINE TO BE CONNECTED TO 35 GALLON GREASE INTERCEPTOR.
- 10 2" WASTE UP
- 11 2" VENT UP
- 12 1/2" TRAP PRIMER CONNECTION UP TO SINK TAIL PIECE.
- 13 3" WASTE UP
- 14 (NOT USED)
- 15 REFER TO THE CIVIL SITE DRAWINGS FOR THE CONTINUATION OF THE (FDC) UNDERGROUND PIPING AND LOCATION OF THE FREE STANDING (FDC).
- 16 6" PUMP DISCHARGE UP FACE OF WALL FROM SUMP PUMP SP-1/SP-2.
- 17 2" VENT UP FACE OF WALL FROM SAND INTERCEPTOR.
- 18 2" VENT UP FROM BELOW FLOOR.
- 19 2" COLD WATER UP TO MECHANICAL ROOM ON LEVEL 1.
- 20 EXTEND 3/4" C.W. DOWN FACE OF WALL TO WALL MOUNTED HOSE BIBB. VERIFY LOCATION WITH MECHANICAL EQUIPMENT. PROVIDE SHUT-OFF VALVE IN LINE.
- 21 BACKFLOW PREVENTER FOR DEIONIZED WATER SYSTEM. VERIFY LOCATION WITH EQUIPMENT PLACEMENT. SUPPORT FROM STRUCTURE, DO NOT SUPPORT FROM PIPE. EXTEND DISCHARGE TO FLOOR DRAIN.
- 22 BACKFLOW PREVENTER TO MECHANICAL MAKE-UP WATER. VERIFY LOCATION WITH MECHANICAL CONTRACTOR.
- 23 SLEEVE THROUGH GRADE BEAM. COORDINATE WITH STRUCTURAL.
- 24 2" VENT UP FACE OF WALL FROM SUMP PUMP SP-1/SP-2.
- 25 2" VENT UP THROUGH FLOOR TO LEVEL 1. REFER TO DRAWING P0101-A FOR CONTINUATION.
- 26 4" WASTE UP TO SERVE TOILET ROOMS ABOVE. REFER TO DRAWING P0101-A FOR CONTINUATION.
- 27 6" DRAIN TILE DOWN TO SUB DRAINAGE SYSTEM BELOW. REFER TO DRAWING P0010 FOR CONTINUATION.
- 28 REFER TO DRAWING P0501, DETAIL 9.
- 29 FURNISH AND INSTALL CAST IRON OR SCH-40 GALVANIZED STEEL PIPE CASING BELOW EACH GRADE BEAM OR FOOTING. CASTING SHALL BE TWO PIPE SIZES LARGER THAN THE PIPE IT ENCLOSES. EXTEND ONE FOOT ON BOTH SIDE OF THE GRADE BEAM OR FOOTING.
- 30 PIPING TO PASS THROUGH GRADE BEAM IN CAST-IN-PLACE SLEEVE. REFER TO STRUCTURAL DRAWINGS.
- 31 REFER TO DRAWING P0402, DETAIL 3 FOR RISER DIAGRAM.
- 32 2" VENT DOWN TO BELOW LEVEL 0. REFER TO PLUMBING DRAWING P0010.A.
- 33 2" VENT UP.

NOTES:

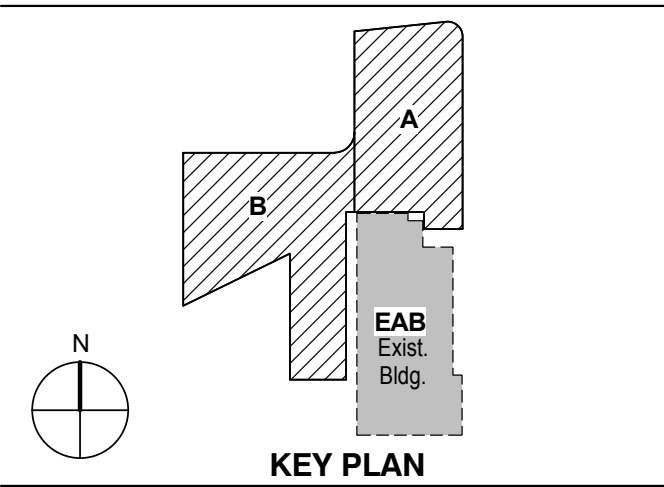
FURNISH AND INSTALL 6" PERFORATED SCHEDULE 40 PVC DRAIN TILE ALONG PERIMETER FOUNDATION WALLS AND BELOW BASEMENT FLOOR SLAB AS INDICATED. SLOPE DRAIN AT 0.50% MINIMUM. ADJUST EXACT LOCATION AND ROUTING AS NECESSARY TO AVOID PIERS AND ANY OTHER STRUCTURAL ELEMENTS.

FURNISH AND INSTALL SUMP PUMP, SAND INTERCEPTOR AND FLOOR DRAINS PER MSD'S STANDARD DETAIL FIGURE 3-2 IN THE LATEST PUBLISHED RULES AND REGULATIONS AND ENGINEERING DESIGN REQUIREMENTS FOR SANITARY SEWER AND STORMWATER DRAINAGE FACILITIES.

CONFORMED SET

01 JUL 2016

6	ADDENDUM 2-4	24 MAY 2016
5	ADDENDUM 2-3	24 APR 2016
4	ADDENDUM 2-2	19 APR 2016
3	MSD SUBMITTAL	12 APR 2016
2	MSD SUBMITTAL	08 APR 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016



Drawing Title:

LEVEL 01 AREA A/B UNDERFLOOR PLAN - PLUMBING

Project No.: 04561.01

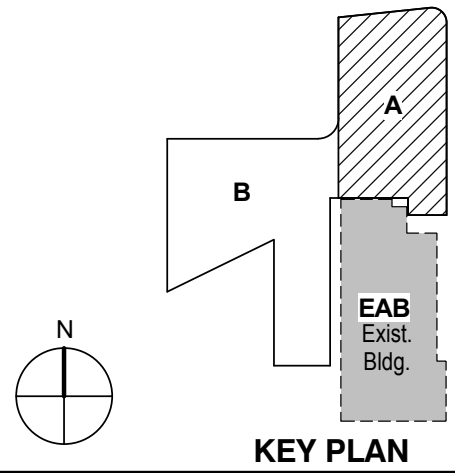
Checked by:

P0011

CONFORMED SET 01 JUL 2016

4	ADDENDUM 2-4	24 MAY 2016
3	ADDENDUM 2-2	19 APR 2016
2	MSD SUBMITTAL	12 APR 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016

No.	Description	Date
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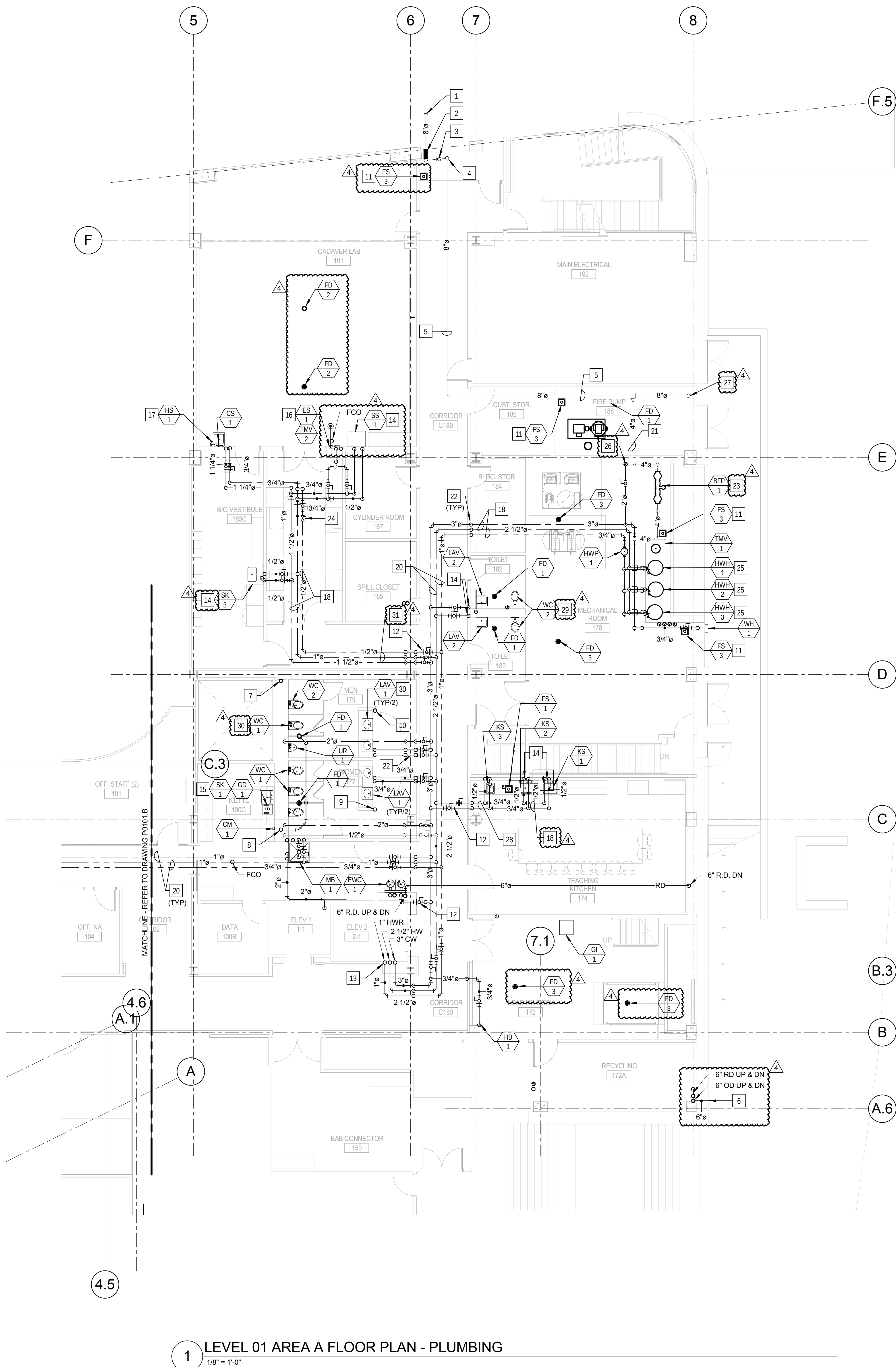
KEY PLAN

Drawing Title:

LEVEL 01 AREA A FLOOR
PLAN - PLUMBING

Project No.: 04561.01 Checked by:

P0101.A

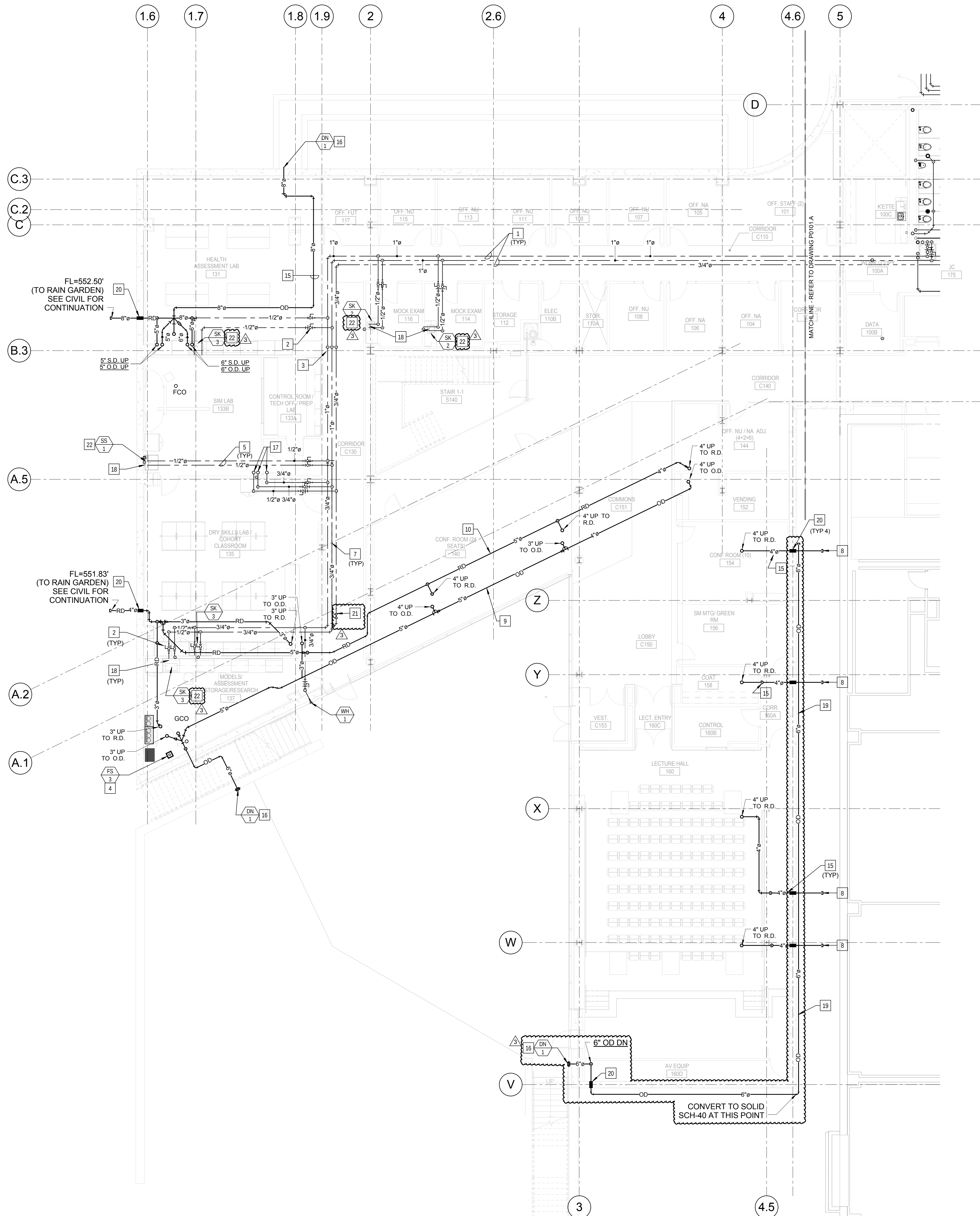


KEYED NOTES - (THIS SHEET ONLY)

- 8" COMBINATION FIRE/DOMESTIC WATER SERVICE. REFER TO CIVIL DRAWINGS FOR CONTINUATION.
- SLEEVE AND SEAL WATER TIGHT WITH "LINK-SEAL" ASSEMBLY. REFER TO DETAIL ON SHEET P0501.
- MAIN SERVICE VALVE FOR COMBINATION DOMESTIC WATER AND FIRE SERVICE. REFER TO DRAWING P0403, DETAIL 1/P0403.
- BUILDING PRESSURE GAUGE POSITION TO BE VISIBLE.
- 8" GALVANIZED COMBINATION FIRE/DOMESTIC WATER SERVICE ABOVE CEILING. COORDINATE WITH OTHER TRADES PRIOR TO ROUGH IN. REFER TO DRAWING P0401, DETAIL 1.
- COORDINATE LOCATION OF DOWN SPOUT NOZZLE AND WALL SLEEVE WITH OTHER TRADES PRIOR TO ROUGH IN.
- 4" SANITARY VENT RISER UP TO SERVE WATER CLOSETS, URINALS AND FLOOR DRAINS ON EACH LEVEL.
- 4" SANITARY WASTE RISER UP TO SERVE WATER CLOSETS, URINALS AND FLOOR DRAINS ON EACH LEVEL.
- 2" SANITARY WASTE RISER UP TO SERVE LAVATORIES ON EACH LEVEL.
- 2" SANITARY VENT RISER UP TO SERVE LAVATORIES ON EACH LEVEL.
- COORDINATE LOCATION OF FLOOR SINK WITH LAYOUT OF ROOM AND FOUNDATION BELOW PRIOR TO ROUGH IN.
- FURNISH AND INSTALL SHUT-OFF VALVES AT THE ENTRY TO EACH ROOM.
- FURNISH AND INSTALL 3" CW, 2 1/2" HW AND 1" HWR PIPING UP TO SERVE LEVEL 2. ALIGN PIPE WITH WALL ABOVE.
- FURNISH AND INSTALL 1/2" CW, 1/2" HW AND 2" VENT DOWN IN WALL TO SERVE FIXTURES.
- BREAK-ROOM SINKS ARE TO BE SERVED FROM WATER, WASTE AND VENT PIPING IN TOILET ROOM CHASE.
- EMERGENCY SHOWER TO BE SERVED WITH FIELD FURNISHED AND INSTALLED 1" TEMPERED WATER TO SHOWER HEAD FROM WALL RECESSED CABINET. EYEWASH PORTION OF ASSEMBLY WILL REQUIRE 2" WASTE AND 2" VENT TYPICAL FOR ALL INSTALLATIONS. REFER TO DRAWING P0403, DETAIL 3/P0403.
- WALL RECESSED CW AND HW HOSE STATION. SERVE WITH 1/2" CW AND 1/2" HW FROM CLINICAL SINK. COORDINATE LOCATION AND MOUNTING HEIGHT WITH OTHER TRADES PRIOR TO ROUGH IN.
- PIPING IN EACH ROOM SHALL BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH IN.
- NOT USED.
- PIPING IN CORRIDOR TO BE AT BOTTOM OF STRUCTURAL STEEL CROSS MEMBERS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH IN.
- 4" GALVANIZED DOMESTIC WATER TO DOMESTIC WATER BACKFLOW PREVENTER.
- DROP PIPING DOWN TO BELOW STRUCTURAL STEEL MEMBER. HOLD TIGHT TO BOTTOM OF STEEL.
- DOMESTIC WATER SERVICE BACK FLOW PREVENTER. REFER TO DRAWING P0501, DETAIL 6/P0501.
- HOT WATER RETURN CIRCUIT SETTER VALVE. LOCATE IN AN ACCESSIBLE LOCATION ABOVE THE CEILING. REFER TO DRAWING P0502, DETAIL 11/P0502.
- REFER TO DRAWING P0403, DETAIL 2/P0403 FOR HOT WATER HEATER PIPING DIAGRAM.
- 2" DOMESTIC WATER SERVICE DOWN TO LEVEL 0. REFER TO DRAWING P0011 FOR CONTINUATION.
- 8" GALVANIZED WATER SERVICE DOWN FOR FIRE SERVICE.
- REFER TO DRAWING P0402, DETAIL 1 FOR RISER DIAGRAMS.
- REFER TO DRAWING P0402, DETAIL 2 FOR RISER DIAGRAMS.
- REFER TO DRAWING P0401 FOR PUBLIC TOILET ROOM RISER DIAGRAMS.
- REFER TO DRAWING P0405 FOR WATER SUPPORT RISER 1.

1 LEVEL 01 AREA A FLOOR PLAN - PLUMBING
1/8" = 1'-0"

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1 LEVEL 01 AREA B FLOOR PLAN - PLUMBING
1/8" = 1'-0"

KEYED NOTES - (THIS SHEET ONLY)

- 1 PIPING IN CORRIDOR TO BE AT BOTTOM OF STRUCTURAL STEEL CROSS MEMBERS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- 2 PROVIDE SHUT-OFF VALVES AT THE ENTRY TO EACH ROOM.
- 3 DROP PIPING DOWN TO BELOW STRUCTURAL STEEL MEMBER. HOLD TIGHT TO BOTTOM OS STEEL.
- 4 COORDINATE LOCATION OF FLOOR SINK WITH LAYOUT OF ROOM AND FOOTINGS/FOUNDATION BELOW.
- 5 PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- 6 NOT USED.
- 7 HOLD PIPING TIGHT TO BOTTOM STRUCTURAL STEEL.
- 8 4" STORM DRAIN FROM GREEN ROOF, EXTEND TO 5'-0" FROM BUILDING WALL. COORDINATE WITH THE CIVIL PLANS FOR FLOW LINE ELEVATIONS. REFER TO THE CIVIL DRAWINGS FOR CONTINUATION OF PIPING.
- 9 STORM PIPING FOR UNDER PAVER SECONDARY STORM DRAINAGE SYSTEM. COORDINATE ROUTING AND INSTALLATION WITH OTHER TRADES PRIOR TO ROUGH-IN. HOLD PIPING AS HIGH AS POSSIBLE TO MAINTAIN SLOPE.
- 10 4" STORM PIPING FOR UNDER PAVER PRIMARY STORM DRAINAGE SYSTEM. COORDINATE ROUTING AND INSTALLATION WITH OTHER TRADES PRIOR TO ROUGH-IN. HOLD PIPING AS HIGH AS POSSIBLE TO MAINTAIN SLOPE.
- 11 NOT USED.
- 12 NOT USED.
- 13 NOT USED.
- 14 NOT USED.
- 15 COORDINATE ROUTING AND INSTALLATION OF STORM PIPING WITH STRUCTURAL STEEL AND DUCTWORK. PIPING WILL BE REQUIRED TO RUN BELOW THE DUCTWORK, AND OFFSET BELOW THE STRUCTURAL MEMBERS.
- 16 COORDINATE AND VERIFY LOCATION OF DOWN SPOUT NOZZLE AND WALL SLEEVE PRIOR TO ROUGH-IN.
- 17 1/4" CW, 1/2" HW AND 1/2" HWR PIPING UP TO LEVEL 2. ALIGN PIPING WITH WALL ABOVE
- 18 1/2" CW, 1/2" HW AND 2" VENT DOWN IN WALL TO SERVE FIXTURE.
- 19 FURNISH AND INSTALL 6" PERFORATED SCHEDULE 40 PVC SECONDARY DRAIN SYSTEM ALONG THE EAST SIDE OF THE GREEN ROOF AS INDICATED ON PLAN. CONVERT TO SOLID SCHEDULE 40 PVC PIPING AS NOTED ON PLAN. COORDINATE WITH CIVIL AND REFER TO THE ARCHITECTURAL PLANS FOR PIPE TRENCH DETAIL.
- 20 SLEEVE AND SEAL WATER TIGHT WITH "LINK-SEAL" ASSEMBLY. REFER TO DETAIL ON SHEET P0501.
- 21 HOT WATER RETURN CIRCUIT SETTER VALVE. LOCATE IN AN ACCESSIBLE LOCATION ABOVE THE CEILING. REFER TO DRAWING P0502, DETAIL 11.
- 22 REFER TO DRAWING P0402, DETAIL 3 FOR RISER DIAGRAM.

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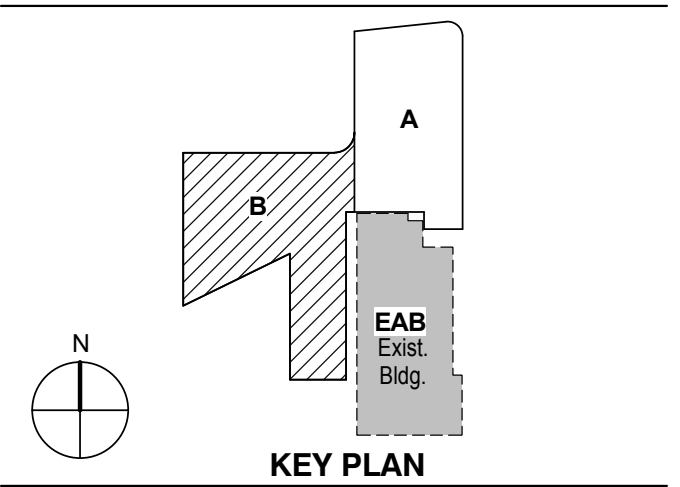
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CONFORMED SET 01 JUL 2016

3 ADDENDUM 2-4 24 MAY 2016
2 ADDENDUM 2-2 19 APR 2016
1 ADDENDUM 2-1 17 MAR 2016
- ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016

No.	Description	Date
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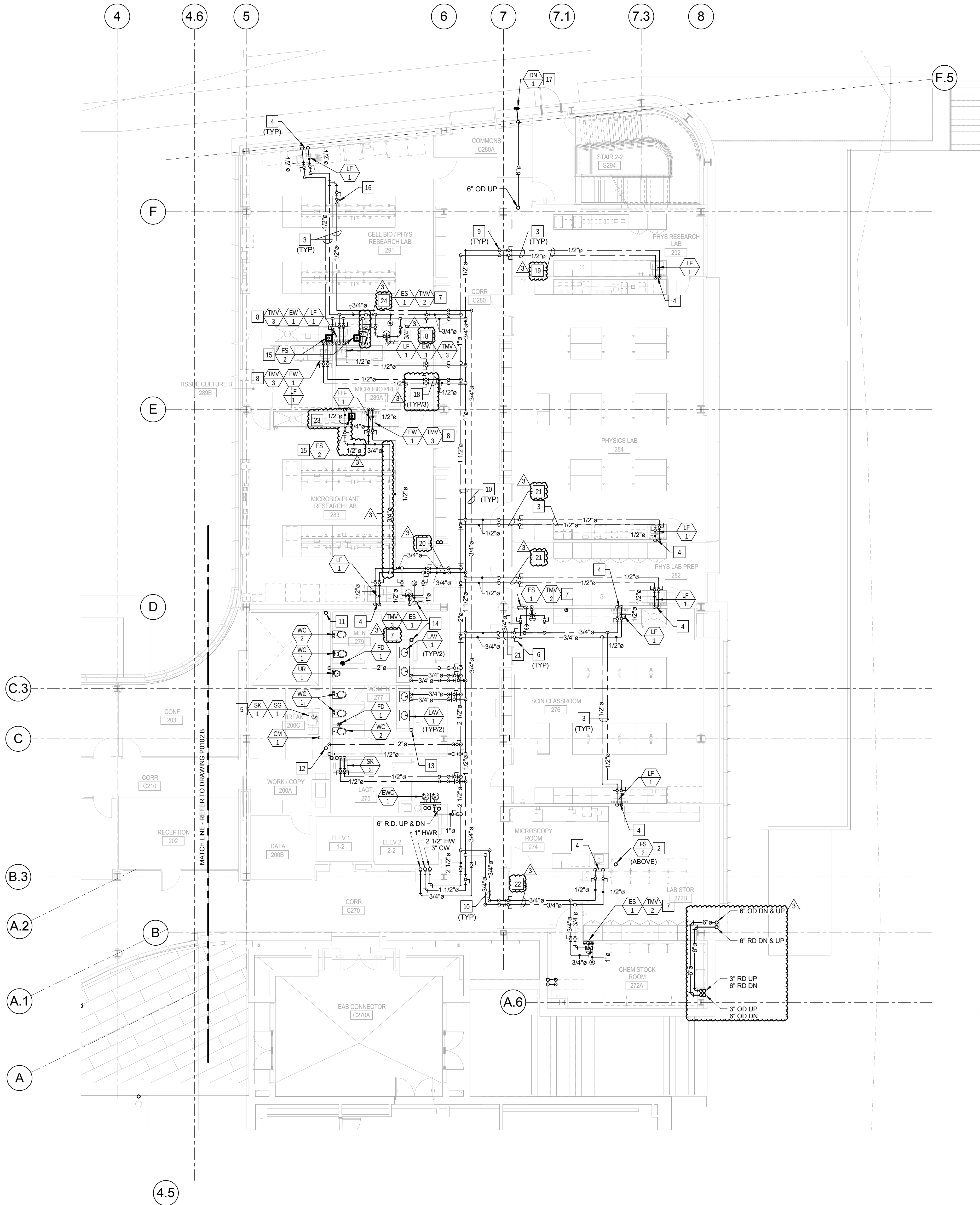
LEVEL 01 AREA B FLOOR
PLAN - PLUMBING

Project No.: 04561.01 Checked by:

P0101.B

KEYED NOTES: (THIS SHEET ONLY)

- 1 NOT USED.
- 2 FLOOR SINK FOR USE ON LEVEL 3. COORDINATE INSTALLATION WITH THE GENERAL CONTRACTOR FOR THE FLOOR OPENING.
- 3 PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- 4 1/2" CW, 1/2" HW AND 2" VENT DOWN IN WALL TO SERVE FIXTURE.
- 5 BREAKROOM SINKS ARE TO BE SERVED FROM WATER, WASTE AND VENT PIPING IN TOILET ROOM CHASE.
- 6 PROVIDE SHUT-OFF VALVES AT THE ENTRY TO EACH ROOM.
- 7 EMERGENCY SHOWER TO BE SERVED WITH FIELD FURNISHED AND INSTALLED 1" TEMPERED WATER TO SHOWER HEAD FROM WALL RECESSED CABINET. EYEWASH PORTION OF ASSEMBLY TO 2" WASTE AND 2" VENT. TYPICAL FOR ALL INSTALLATIONS. REFER TO DRAWING P0403, DETAIL 3.
- 8 DECK MOUNTED EMERGENCY EYEWASH TO BE LOCATED AT SINK. INSTALL THERMOSTATIC MIXING VALVE IN CABINET SPACE BELOW THE SINK. COORDINATE MOUNTING REQUIREMENTS OF EYEWASH AND TMV WITH THE GENERAL CONTRACTOR. TYPICAL FOR ALL INSTALLATION. REFER TO DRAWING P0403, DETAIL 4.
- 9 DROP PIPING DOWN TO BELOW STRUCTURAL STEEL MEMBER. HOLD TIGHT TO BOTTOM OF STEEL.
- 10 PIPING IN CORRIDOR TO BE RUN AT BOTTOM OF STRUCTURAL STEEL CROSS MEMBERS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- 11 4" SANITARY VENT RISER UP TO SERVE WATER CLOSETS, URINALS AND FLOOR DRAINS ON EACH LEVEL.
- 12 4" SANITARY WASTE RISER UP TO SERVE WATER CLOSETS, URINALS AND FLOOR DRAINS ON EACH LEVEL.
- 13 2" SANITARY WASTE RISER UP TO SERVE LAVATORIES ON EACH LEVEL.
- 14 2" SANITARY VENT UP TO SERVE LAVATORIES ON EACH LEVEL.
- 15 FLOOR SINK UNDER COUNTERTOP WITH IN CASEWORK. VERIFY LOCATION WITH EXACT EQUIPMENT PLACEMENT PRIOR TO ROUGH-IN. COORDINATE FLOOR OPENING WITH THE GENERAL CONTRACTOR.
- 16 HOT WATER RETURN CIRCUIT SETTER VALVE. LOCATE IN AN ACCESSIBLE LOCATION ABOVE THE CEILING. REFER TO DRAWING P0502, DETAIL 11/P0502.
- 17 COORDINATE AND VERIFY LOCATION OF DOWNSPOUT NOZZLE AND WALL SLEEVE PRIOR TO ROUGH-IN.
- 18 REFER TO DRAWING P0405 WASTE SUPPLY, RISER 6.
- 19 REFER TO DRAWING P0407 WATER SUPPLY, RISER 3.
- 20 REFER TO DRAWING P0405 WATER SUPPLY, RISER 2.
- 21 REFER TO DRAWING P0407 WATER SUPPLY, RISER 4.
- 22 REFER TO DRAWING P0407 WATER SUPPLY, RISER 3.
- 23 1/2" HW DOWN IN WALL TO SERVE UNDERCOUNTER GLASS WASHER. VERIFY CONNECTION POINT AND LOCATION. PROVIDE ALL FITTINGS AS REQUIRED.
- 24 1/2" CW AND 1/2" HW DOWN IN WALL TO SERVE CLASS 1 BIOLOGICAL CABINET. VERIFY CONNECTION POINT AND LOCATION. PROVIDE ALL FITTINGS AS REQUIRED.

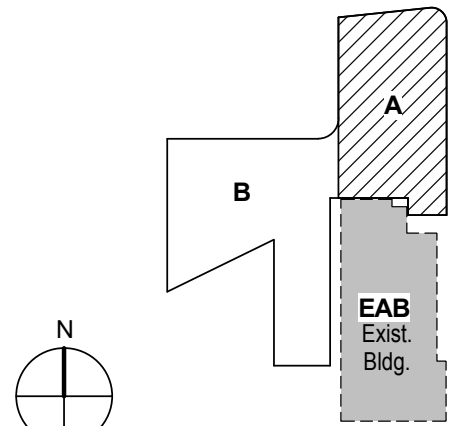


1 LEVEL 02 AREA A FLOOR PLAN - PLUMBING
1/8" = 1'-0"

CONFORMED SET 01 JUL 2016

3	ADDENDUM 2-4	24 MAY 2016
2	ADDENDUM 2-2	19 APR 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016

No.	Description	Date
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KEY PLAN

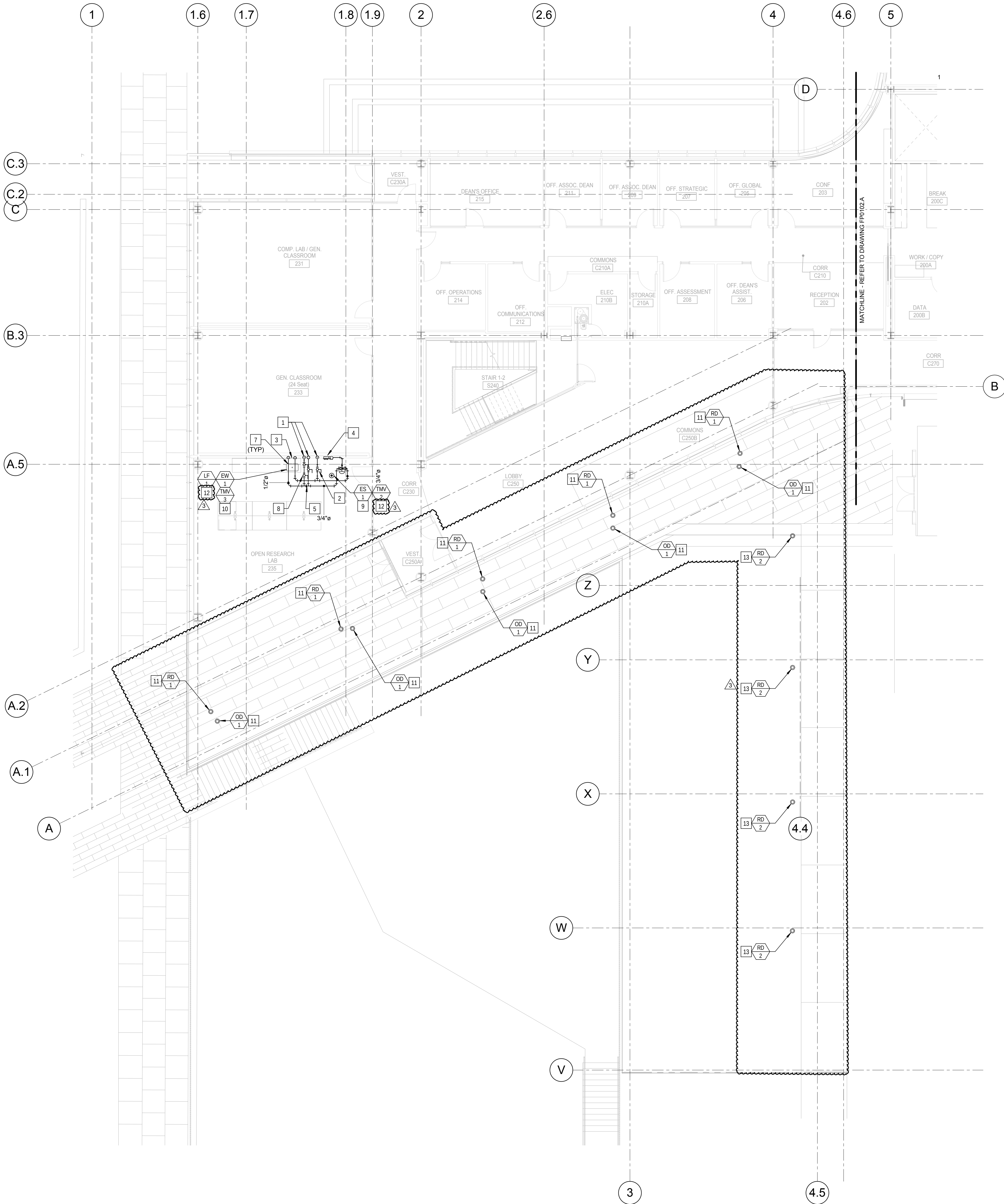
Drawing Title:

LEVEL 02 AREA A FLOOR
PLAN - PLUMBING

Project No.: 04561.01

Checked by:

P0102.A



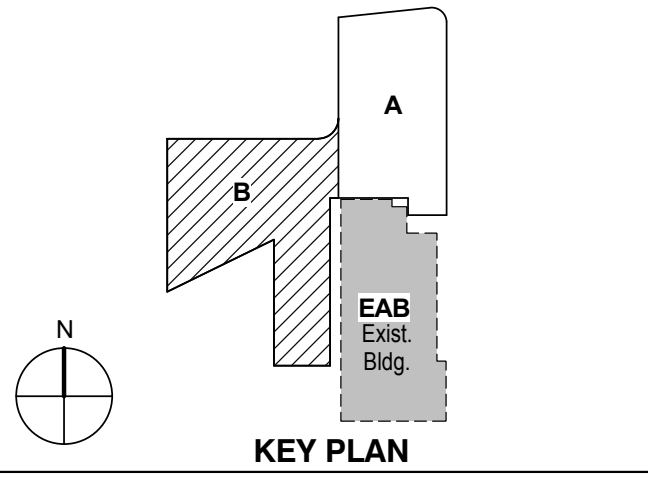
KEYED NOTES-PLUMBING NEW WORK:

- 1 3/4" CW, 3/4" HW AND 1/2" HWR PIPING UP FROM LEVEL 1.
- 2 PROVIDE SHUT-OFF VALVES AT THE ENTRY TO EACH ROOM.
- 3 1/2" CW, 1/2" HW AND 2" VENT DOWN IN WALL TO SERVE FIXTURE.
- 4 2" SANITARY VENT DOWN IN WALL TO SERVE EMERGENCY SHOWER.
- 5 PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- 6 NOT USED.
- 7 HOLD PIPING TIGHT TO BOTTOM STRUCTURAL STEEL.
- 8 HOT WATER CIRCULATING LINE. PROVIDE SHUT-OFF VALVE, CIRCUIT SETTER AND CHECK VALVE. LOCATE IN AN ACCESSIBLE LOCATION ABOVE THE CEILING. REFER TO DRAWING P0102, DETAIL 11.
- 9 EMERGENCY SHOWER TO BE SERVED WITH FIELD FURNISHED AND INSTALLED 1" TEMPERED WATER TO SHOWER HEAD FROM WALL RECESSED CABINET. EYEWASH PORTION OF ASSEMBLY TO PROVIDED 2" WASTE AND 2" VENT. TYPICAL FOR ALL INSTALLATIONS. REFER TO DRAWING P0403, DETAIL 3.
- 10 DECK MOUNTED EMERGENCY EYEWASH TO BE LOCATED AT SINK. INSTALL THERMOSTATIC MIXING VALVE IN CABINET SPACE BELOW THE SINK. COORDINATE MOUNTING REQUIREMENTS OF EYEWASH AND TMV WITH THE GENERAL CONTRACTOR. TYPICAL FOR ALL INSTALLATION. REFER TO DRAWING P0403, DETAIL 4.
- 11 LOCATION OF ROOF DRAIN AND OVERFLOW DRAIN. BELOW THE WALKING PAVERS. REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATION AND DETAILS.
- 12 REFER TO DRAWING P0402, DETAIL 3 FOR RISER DIAGRAMS.
- 13 LOCATION OF ROOF DRAIN FOR THE GREEN ROOF. REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATION AND DETAILS.

CONFORMED SET 01 JUL 2016

3 ADDENDUM 2-4 24 MAY 2016
2 ADDENDUM 2-2 19 APR 2016
1 ADDENDUM 2-1 17 MAR 2016
- ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016

No.	Description	Date
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KEY PLAN

Drawing Title:

**LEVEL 02 AREA B FLOOR
PLAN - PLUMBING**

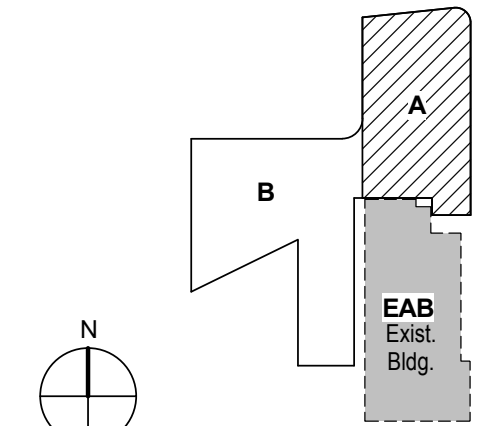
Project No.: 04561.01 Checked by:

P0102.B

CONFORMED SET 01 JUL 2016

3 ADDENDUM 2-4 24 MAY 2016
2 ADDENDUM 2-2 19 APR 2016
1 ADDENDUM 2-1 17 MAR 2016
- ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016

No.	Description	Date
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KEY PLAN

Drawing Title:

LEVEL 03 AREA A FLOOR
PLAN - PLUMBING

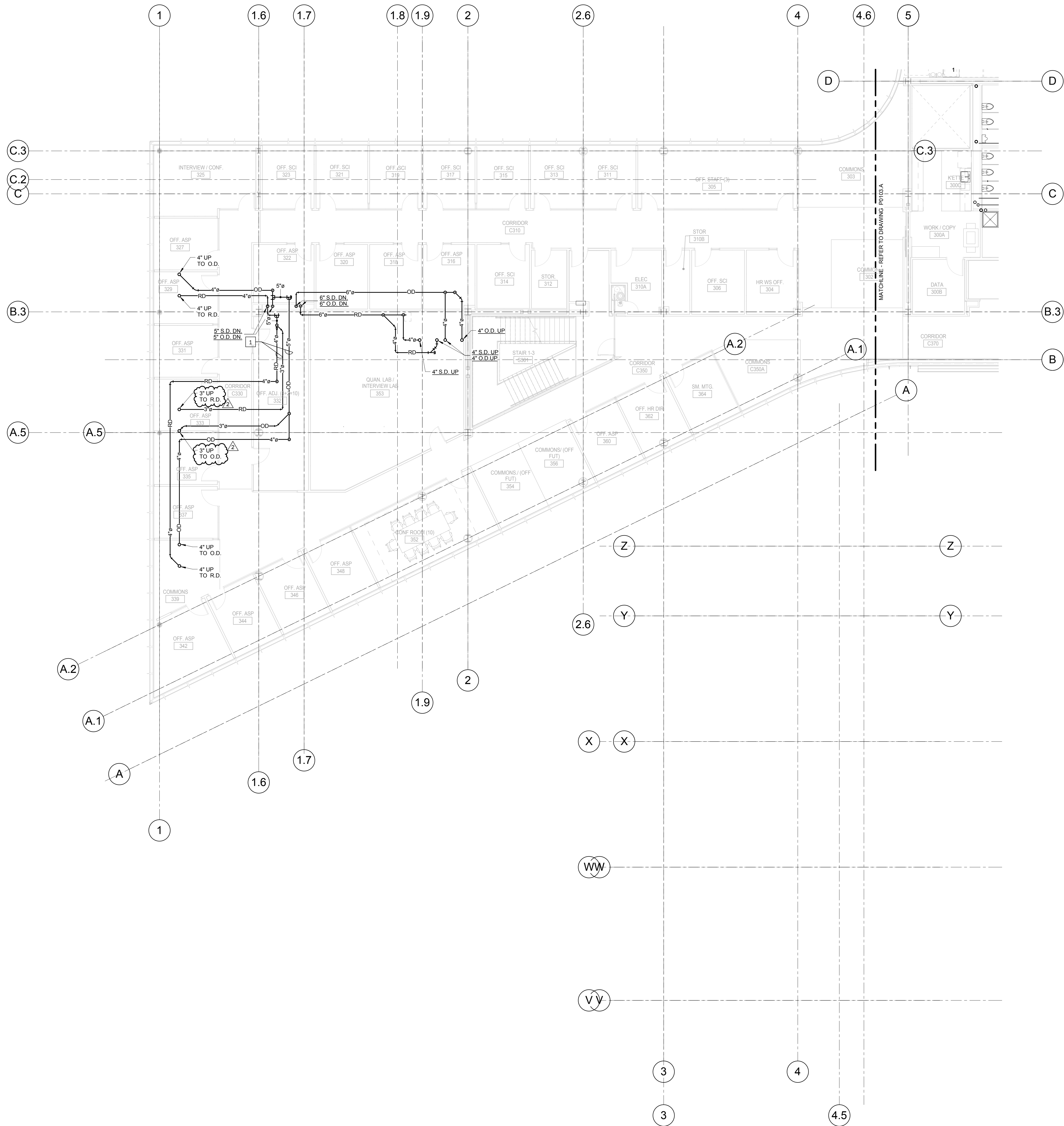
Project No.: 04561.01 Checked by:

P0103.A



1 LEVEL 03 AREA A FLOOR PLAN - PLUMBING
1/8" = 1'-0"

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4/19/2016 9:59:53 AM



KEYED NOTES: (THIS SHEET ONLY)

1 INSTALL PIPING AS HIGH AS POSSIBLE. COORDINATE EXACT ROUTING AND LOCATION WITH ALL CONSTRUCTION TRADES PRIOR TO INSTALLATION.



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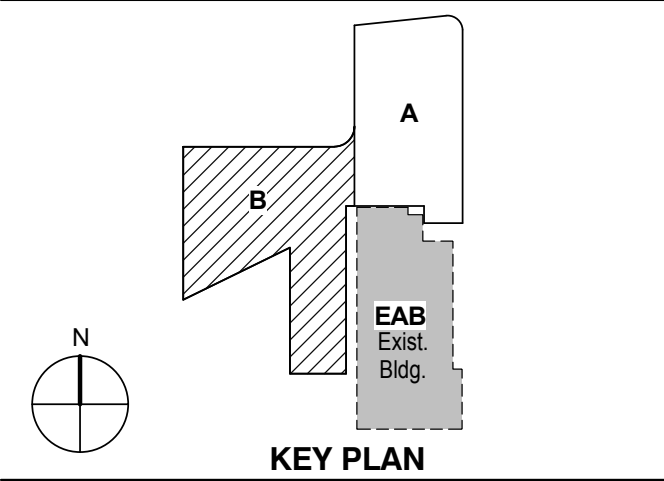
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CONFORMED SET 01 JUL 2016

2 ADDENDUM 2-2 19 APR 2016
1 ADDENDUM 2-1 17 MAR 2016
- ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016



KEY PLAN

Drawing Title:
LEVEL 03 AREA B FLOOR PLAN - PLUMBING

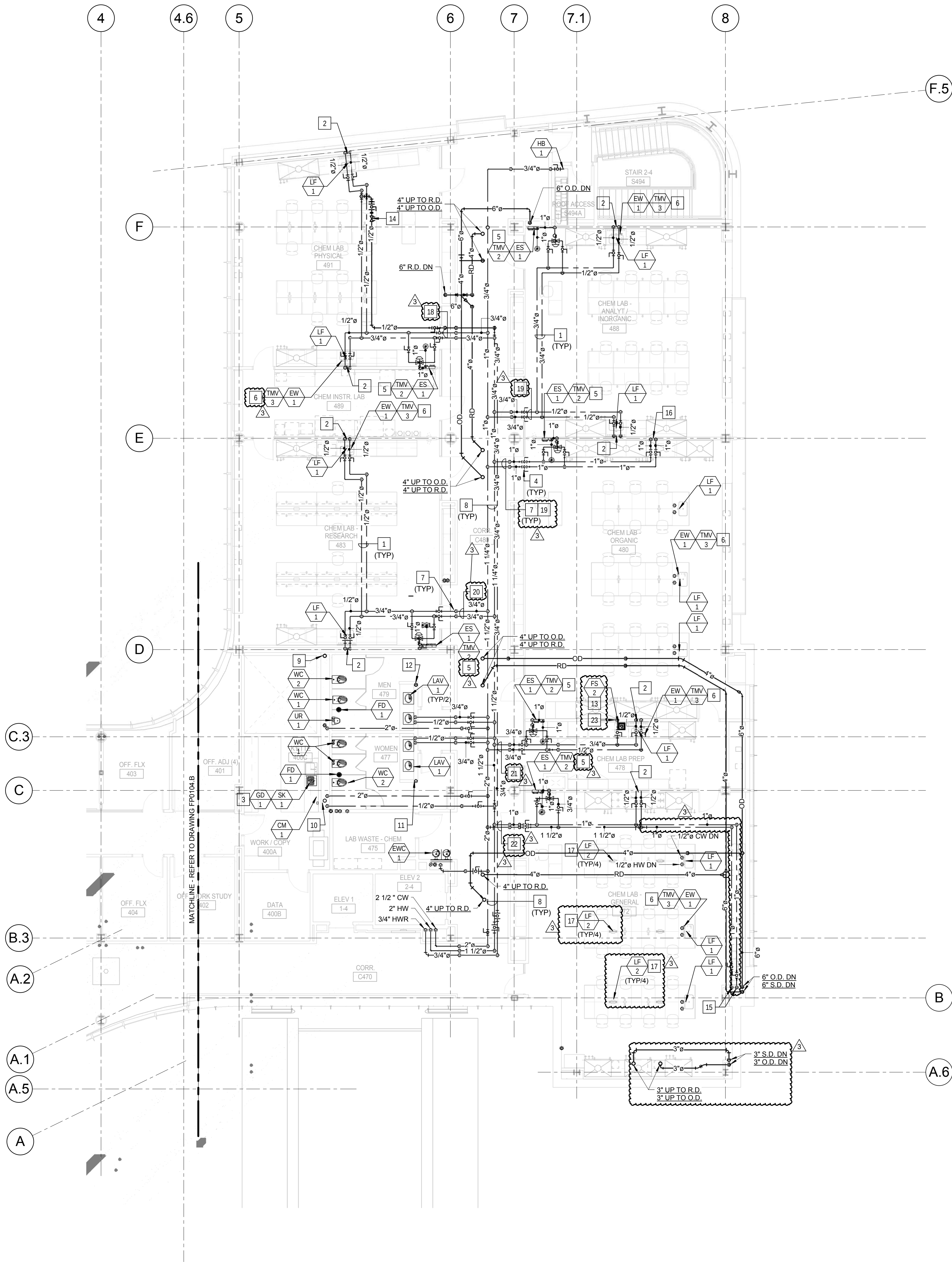
Project No.: 04561.01 Checked by:

P0103.B

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KEYED NOTES: (THIS SHEET ONLY)

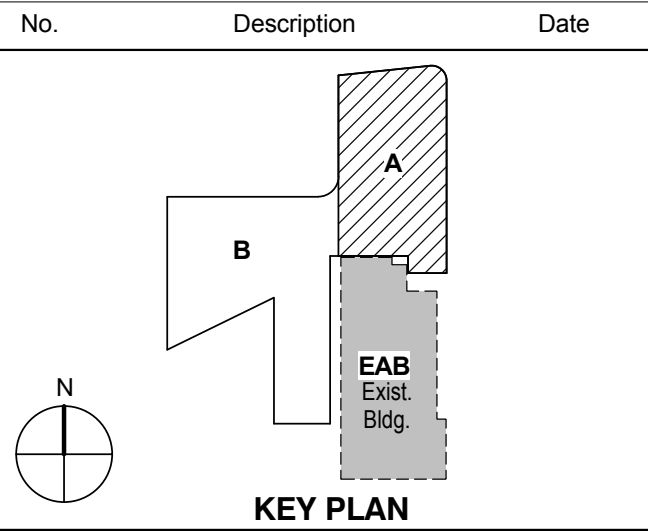
- 1 PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- 2 1/2" CW, 1/2" HW AND 2" VENT DOWN IN WALL TO SERVE FIXTURE.
- 3 BREAKROOM SINKS ARE TO BE SERVED FROM WATER, WASTE AND VENT PIPING IN TOILET ROOM CHASE.
- 4 PROVIDE SHUT-OFF VALVES AT THE ENTRY TO EACH ROOM.
- 5 EMERGENCY SHOWER TO BE SERVED WITH FIELD FURNISHED AND INSTALLED 1" TEMPERED WATER TO SHOWER HEAD FROM WALL RECESSED CABINET. EYEWASH PORTION OF ASSEMBLY TO 2" WASTE AND 2" VENT. TYPICAL FOR ALL INSTALLATIONS. REFER TO DRAWING P0403, DETAIL 4.
- 6 DECK MOUNTED EMERGENCY EYEWASH TO BE LOCATED AT SINK. INSTALL THERMOSTATIC MIXING VALVE IN CABINET SPACE BELOW THE SINK. COORDINATE MOUNTING REQUIREMENTS OF EYEWASH AND TMV WITH THE GENERAL CONTRACTOR. TYPICAL FOR ALL INSTALLATION. REFER TO DRAWING P0403, DETAIL 5.
- 7 DROP PIPING DOWN TO BELOW STRUCTURAL STEEL MEMBER. HOLD TIGHT TO BOTTOM OF STEEL.
- 8 PIPING IN CORRIDOR TO BE RUN AT BOTTOM OF STRUCTURAL STEEL CROSS MEMBERS. COORDINATE INSTALLATION WITH AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- 9 4" SANITARY VENT RISER UP TO SERVE WATER CLOSETS, URINALS AND FLOOR DRAINS ON EACH LEVEL.
- 10 4" SANITARY WASTE RISER UP TO SERVE WATER CLOSETS, URINALS AND FLOOR DRAINS ON EACH LEVEL.
- 11 2" SANITARY WASTE RISER UP TO SERVE LAVATORIES ON EACH LEVEL.
- 12 2" SANITARY VENT UP TO LEVEL 4. REFER TO DRAWING P0104.A FOR VENT PIPING TERMINATION.
- 13 FLOOR SINK UNDER COUNTERTOP WITH IN CASEWORK. VERIFY LOCATION WITH EXACT EQUIPMENT PLACEMENT PRIOR TO ROUGH-IN. COORDINATE FLOOR OPENING WITH THE GENERAL CONTRACTOR.
- 14 HOT WATER RETURN CIRCUIT SETTER VALVE. LOCATE IN AN ACCESSIBLE LOCATION ABOVE THE CEILING. REFER TO DRAWING P0502, DETAIL 11.
- 15 1" CW AND 1" HW DOWN TO LEVEL 3 TO SERVICE LAB BENCH SINKS ON THIS LEVEL FROM BELOW. REFER TO DRAWING P0103.A FOR PIPING ON LEVEL 3.
- 16 1" CW AND 1" HW DOWN TO LEVEL 3 TO SERVICE LAB BENCH SINKS ON THIS LEVEL FROM BELOW. REFER TO DRAWING P0103.A FOR PIPING ON LEVEL 3.
- 17 LAB FAUCET 1/2-2" FOR COLD WATER SERVICE ONLY. PROVIDE TWO FAUCETS FOR EACH CUP SINK. EXTEND CW PIPING WITHIN UTILITY CHASE OF EACH SET OF LAB CASEWORK.
- 18 REFER TO DRAWING P0405 WATER SUPPLY RISER 8.
- 19 REFER TO DRAWING P0407 WATER SUPPLY RISER 2.
- 20 REFER TO DRAWING P0405 WATER SUPPLY RISER 4.
- 21 REFER TO DRAWING P0409 WATER SUPPLY RISER 2.
- 22 REFER TO DRAWING P0409 WATER SUPPLY RISER 4.
- 23 1/2" HW DOWN IN WALL TO SERVE UNDERCOUNTER GLASS WASHER. VERIFY CONNECTION POINT TO UNIT AND LOCATION. PROVIDE ALL FITTINGS AS REQUIRED.



1 LEVEL 04 AREA A FLOOR PLAN - PLUMBING
1/8" = 1'-0"

CONFORMED SET 01 JUL 2016

3	ADDENDUM 2-4	24 MAY 2016
2	ADDENDUM 2-2	19 APR 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016



Drawing Title:
**LEVEL 04 AREA A FLOOR
PLAN - PLUMBING**

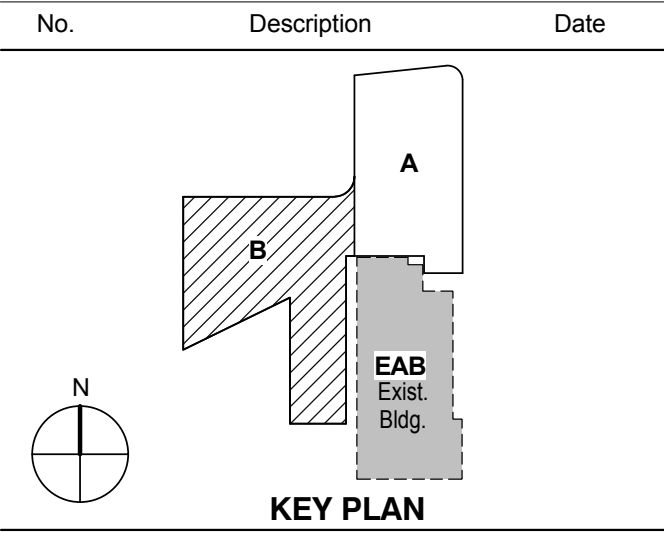
Project No.: 04561.01 Checked by:

P0104.A

CONFORMED SET

01 JUL 2016

1 ADDENDUM 2-1 17 MAR 2016
ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016



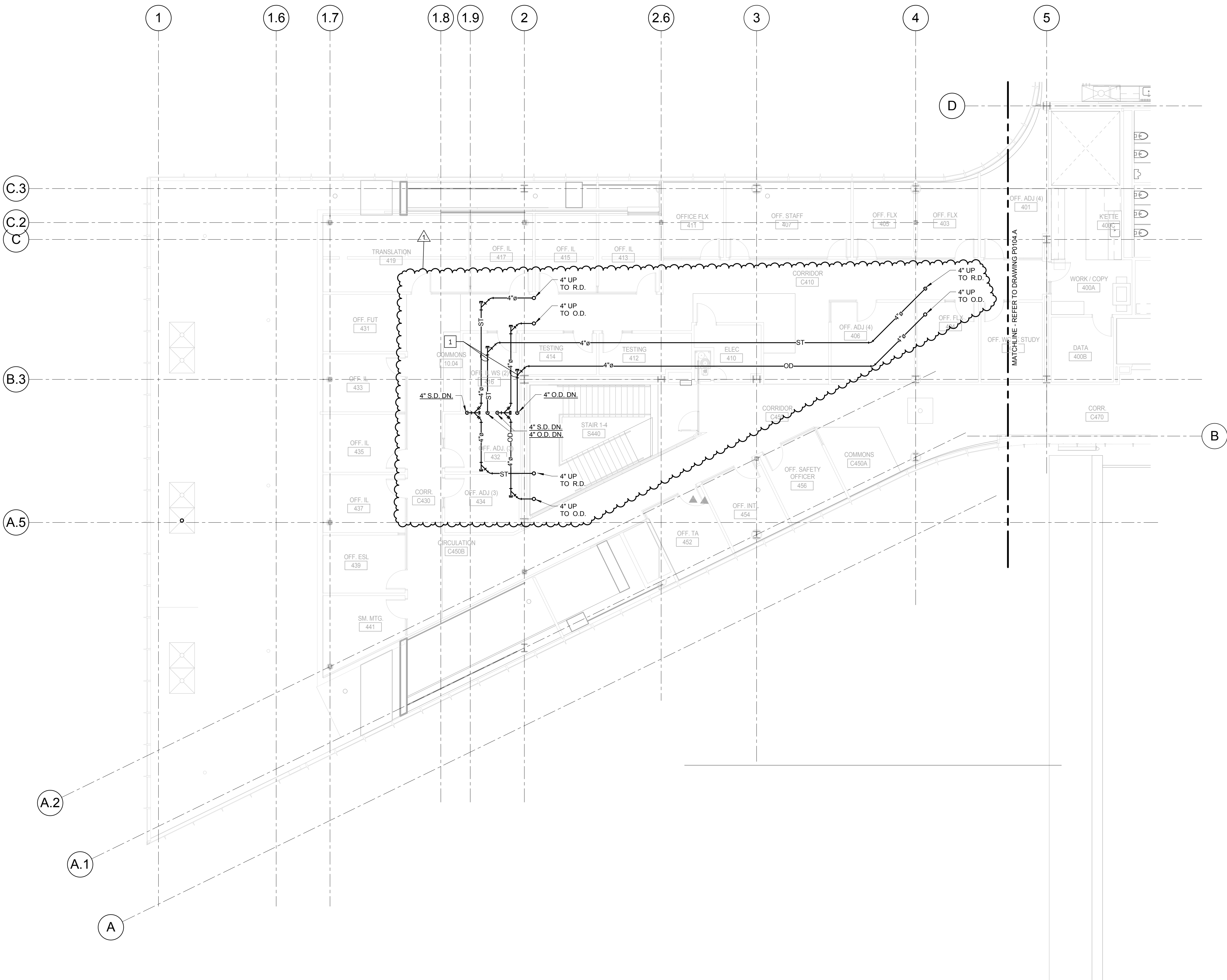
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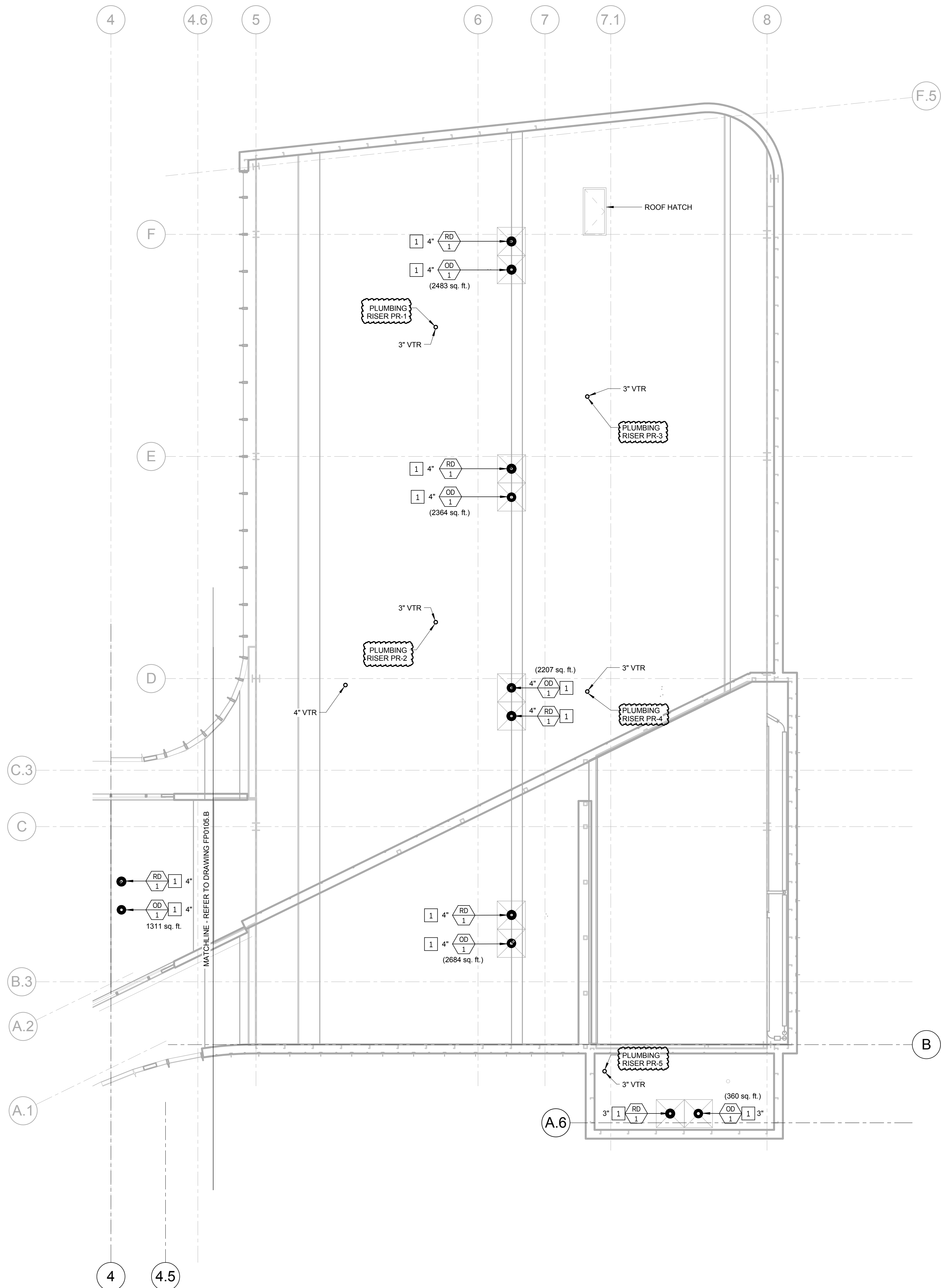
LEVEL 04 AREA B FLOOR
PLAN - PLUMBING

Project No.: 04561.01

Checked by:

P0104.B





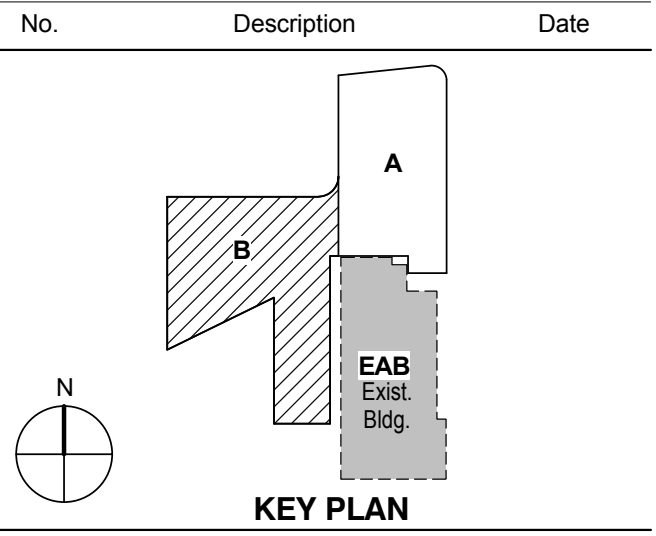
NOTE - PLUMBING NEW WORK

1. CONTRACTOR SHALL FURNISH AND INSTALL ROOF DRAINS AND OVERFLOW DRAINS. REFER TO DETAIL ON DRAWING P0501.

1 LEVEL 05 ROOF PLAN - PLUMBING A
1/8" = 1'-0"

CONFORMED SET 01 JUL 2016

2	ADDENDUM 2-4	24 MAY 2016
1	ADDENDUM 2-2	19 APR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016



Drawing Title:

**LEVEL 05 ROOF PLAN
AREA A - PLUMBING**

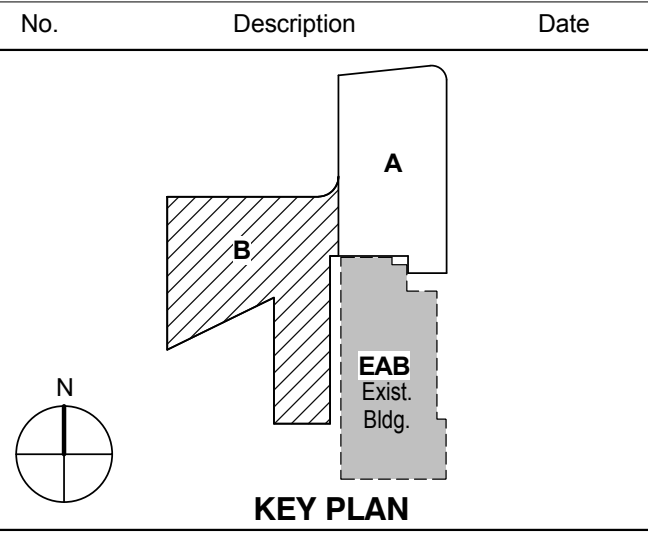
Project No.: 04561.01 Checked by:

P0105.A

CONFORMED SET

01 JUL 2016

1 ADDENDUM 2-2 19 APR 2016
ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016



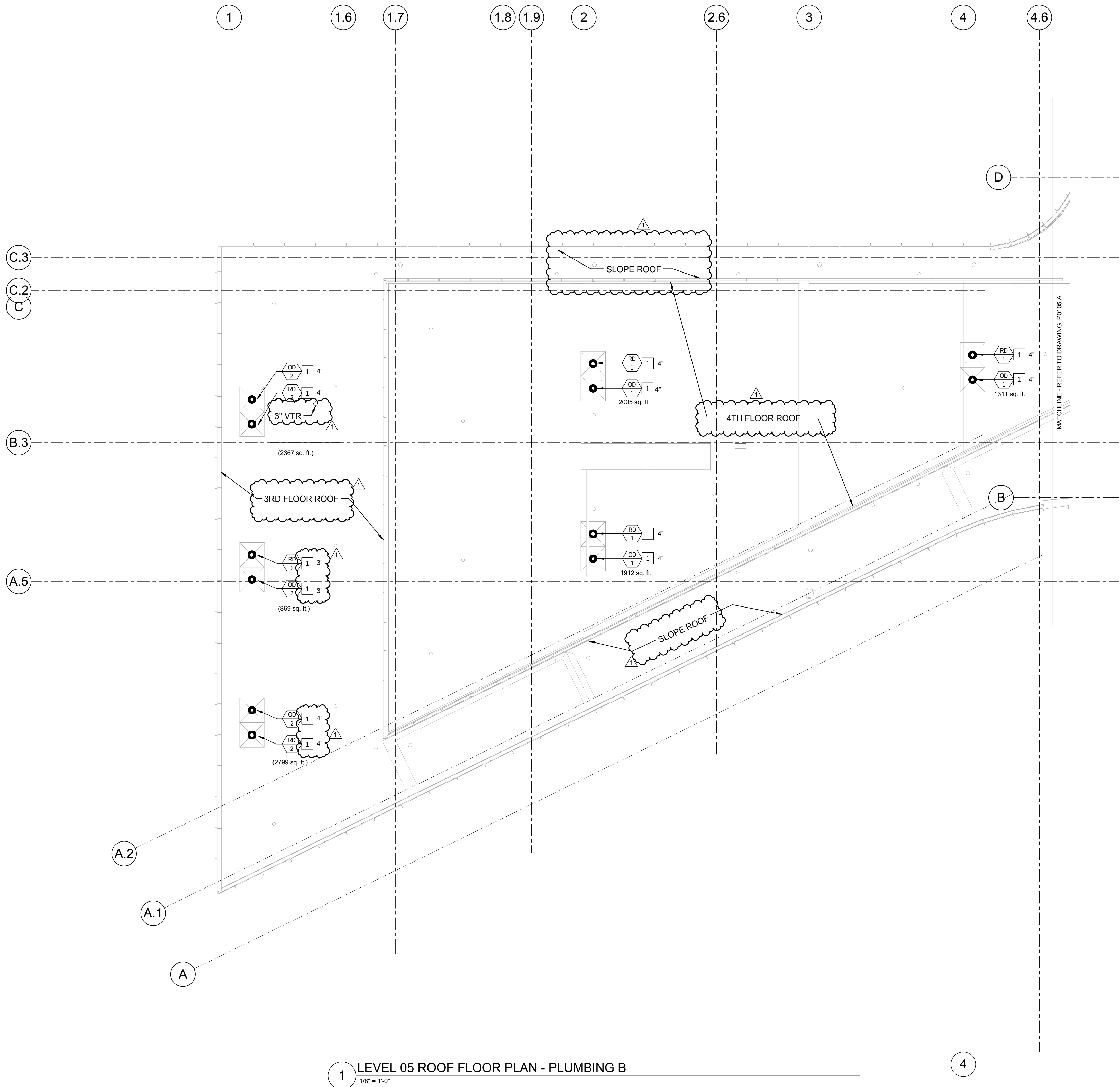
KEY PLAN

LEVEL 05 ROOF PLAN
AREA B - PLUMBING

Project No.: 04561.01

Checked by:

P0105.B



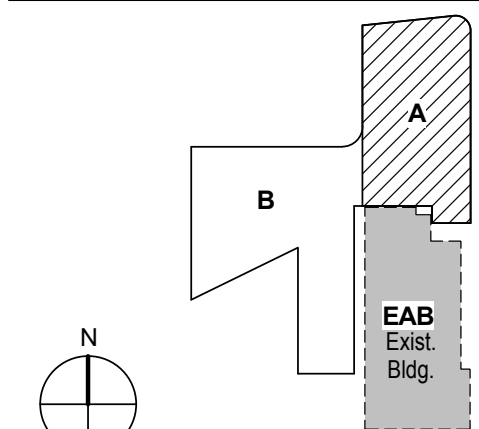
NOTE - PLUMBING NEW WORK

1. CONTRACTOR SHALL FURNISH AND INSTALL ROOF DRAINS AND OVERFLOW DRAINS. REFER TO DETAIL ON DRAWING P0501.

CONFORMED SET 01 JUL 2016

3 ADDENDUM 2-4 24 MAY 2016
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No.	Description	Date
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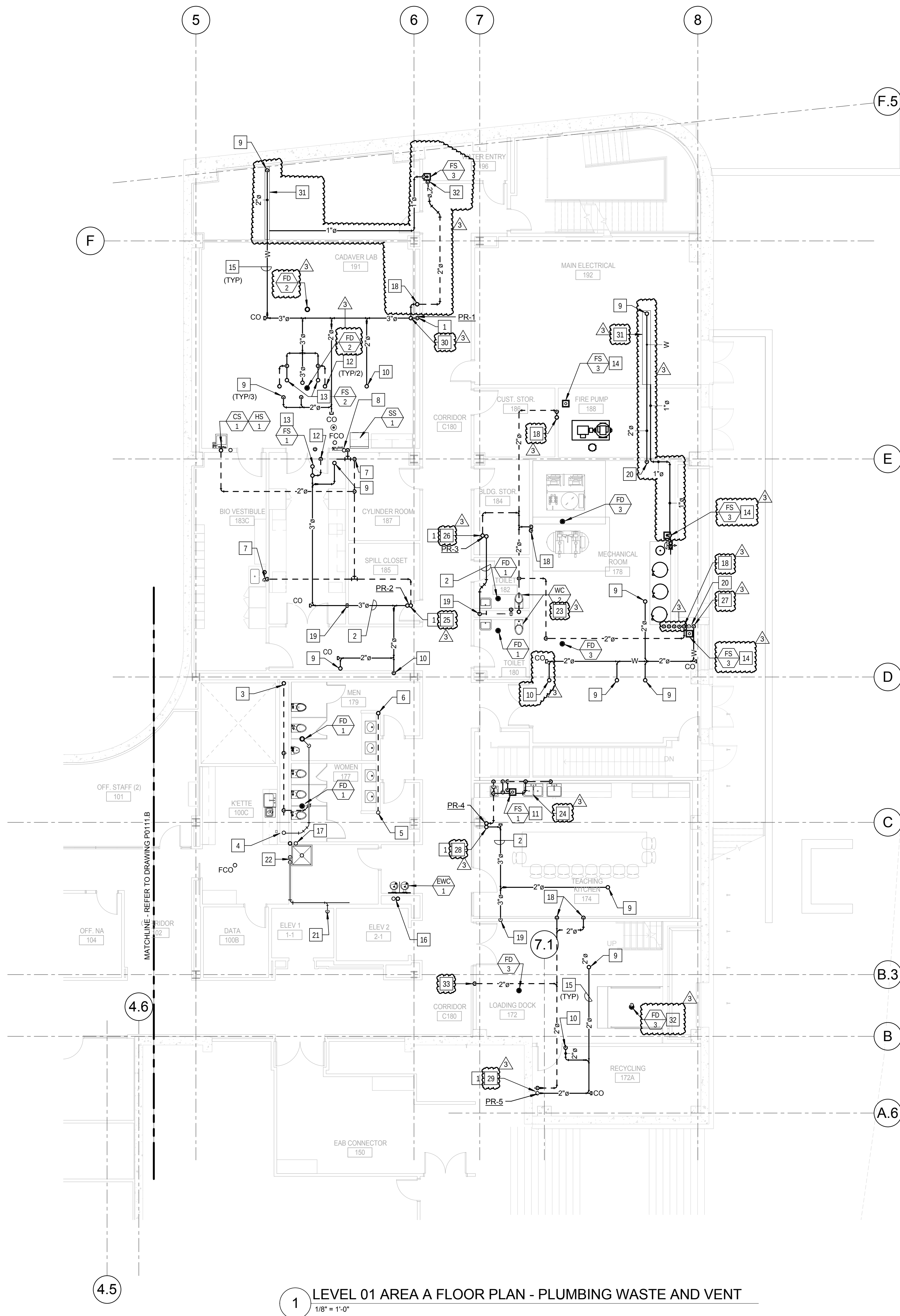


KEY PLAN

LEVEL 01 AREA A FLOOR
PLAN - PLUMBING WASTE
AND VENT

Project No.: 04561.01 Checked by:

P0111.A

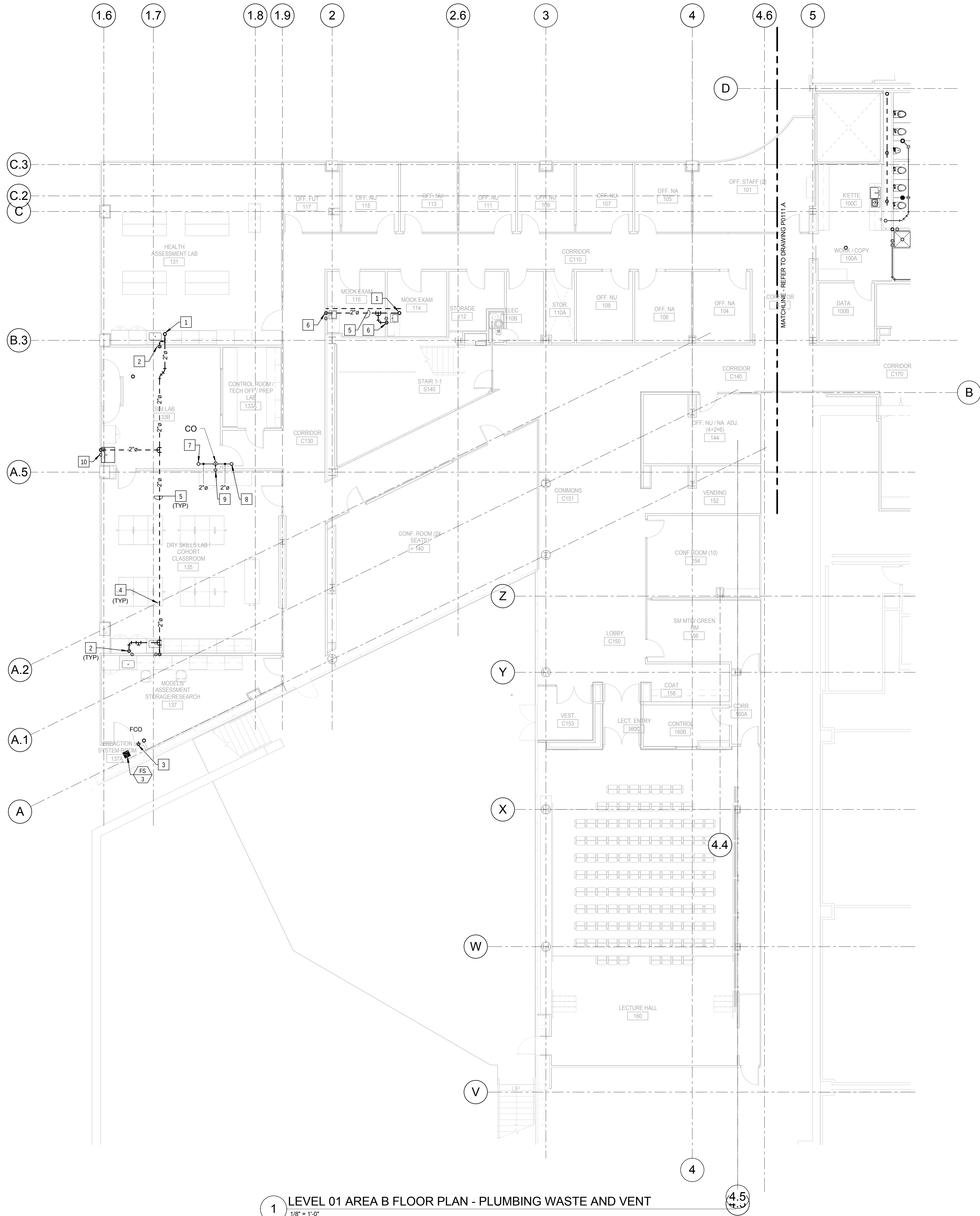


1 LEVEL 01 AREA A FLOOR PLAN - PLUMBING WASTE AND VENT
1/8" = 1'-0"

KEYED NOTES: (THIS SHEET ONLY)

- 1 3" SANITARY WASTE AND 3" SANITARY VENT RISERS.
- 2 3" SANITARY WASTE OFF-SET ABOVE THE CEILING TO CONTINUE DOWN TO LEVEL 0.
- 3 4" SANITARY VENT RISER UP AND DOWN.
- 4 4" SANITARY WASTE UP AND DOWN. REFER TO DRAWING P0401 FOR RISER DIAGRAM.
- 5 2" SANITARY WASTE UP AND DOWN. REFER TO DRAWING P0401 FOR RISER DIAGRAM.
- 6 2" SANITARY VENT UP AND DOWN.
- 7 2" SANITARY VENT DOWN IN WALL TO SERVE LABORATORY SINK.
- 8 2" SANITARY VENT DOWN IN WALL TO SERVE EMERGENCY SHOWER.
- 9 2" SANITARY WASTE UP TO LEVEL 2 LAB SINK.
- 10 2" SANITARY WASTE UP TO LEVEL 2 EMERGENCY SHOWER EYE/FACE WASH STATION. REFER TO DRAWING P0403 DETAIL 3/ P0403.
- 11 FLOOR SINK TO BE LOCATED BELOW THE CASEWORK TO ACCEPT DISCHARGE FROM THE DISHWASHER AND UNDER COUNTER ICE MAKER. COORDINATE LOCATION WITH CABINET AND APPLIANCES.
- 12 2" SANITARY VENT UP TO LEVEL 2, ALIGN WITH CASEWORK AND WALL ABOVE.
- 13 FLOOR SINK SET TO SERVE LEVEL 2. COORDINATE LOCATION OF FLOOR SINK WITH CASEWORK ABOVE AND WITH ABOVE CEILING CONDITIONS ON THIS LEVEL.
- 14 FLOOR SINK SET TO SERVE THIS LEVEL.
- 15 PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- 16 2" SANITARY WASTE AND 2" SANITARY VENT RISERS TO SERVE ELECTRIC WATER COOLERS ON EACH LEVEL. REFER TO DRAWING P0401 FOR WASTE AND VENT RISERS.
- 17 3" SANITARY WASTE AND 2" VENT RISERS TO SERVE MOP BASINS ON LEVELS 1 AND 3 AND COUNTERTOP SINK ON LEVEL 2. REFER TO DRAWING P0401 FOR WASTE AND VENT RISERS.
- 18 2" VENT UP FROM LEVEL 0. REFER TO DRAWING P0011.
- 19 3" WASTE DOWN TO LEVEL 0. REFER TO DRAWING P0011 FOR CONTINUATION.
- 20 2" WASTE DOWN TO LEVEL 0. REFER TO DRAWING P0011 FOR CONTINUATION.
- 21 2" DISCHARGE FROM ELEVATOR SUMP PUMP. EXTEND TO ABOVE THE CEILING OF LEVEL 1 TO JANITOR CLOSET 175.
- 22 TERMINATE ELEVATOR SUMP PUMP DISCHARGE AT THE MOP BASIN WITH AN IN-DIRECT WASTE INTO THE BASIN.
- 23 REFER TO DRAWING P0402 DETAIL 2/ P0402, FOR PLUMBING RISER DIAGRAMS.
- 24 REFER TO DRAWING P0402 DETAIL 1/ P0402, FOR PLUMBING RISER DIAGRAMS.
- 25 REFER TO DRAWING P0404 SANITARY WASTE AND VENT RISER DIAGRAM 2-2.
- 26 REFER TO DRAWING P0406 SANITARY WASTE AND VENT RISER DIAGRAM 3-2.
- 27 REFER TO DRAWING P0406 SANITARY WASTE AND VENT RISER DIAGRAM 3-4.
- 28 REFER TO DRAWING P0408 SANITARY WASTE AND VENT RISER DIAGRAM 4-1.
- 29 REFER TO DRAWING P0408 SANITARY WASTE AND VENT RISER DIAGRAM 5-1.
- 30 REFER TO DRAWING P0404 SANITARY WASTE AND VENT RISER DIAGRAM 1-1.
- 31 TROUGH SAFETY PAN TO BE SUSPENDED BELOW SANITARY WASTE PIPING. EXTEND 1" DRAIN TO SANITARY FLOOD RECEPTOR. REFER TO PLUMBING DRAWING P0503, DETAIL 4.
- 32 2" VENT DOWN IN WALL TO SERVE FLOOR SINK IN WATER ENTRY ROOM.
- 33 2" VENT DOWN IN WALL TO SERVE FLOOR DRAIN IN LOADING DOCK.

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4/19/2016 11:21:29 AM



KEYED NOTES: (THIS SHEET ONLY)

- 1 2" SANITARY VENT UP TO LEVEL 2, ALIGN WITH WALLS ABOVE. REFER TO DRAWING P0112.B FOR CONTINUATION.
- 2 2" SANITARY VENT DOWN IN WALL TO SERVE LAB SINK.
- 3 2" SANITARY VENT IN WALL FROM UNDERFLOOR SERVING FLOOR SINK. COORDINATE ROUTING AND INSTALLATION WITH WALL CONSTRUCTION.
- 4 HOLD PIPING TIGHT TO BOTTOM OF STRUCTURAL STEEL.
- 5 PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- 6 2" SANITARY VENT DOWN IN WALL TO SERVE EXAM ROOM SINKS.
- 7 2" SANITARY WASTE UP TO LEVEL 2 TO SERVE LAB SINK. ALIGN WITH WALL ABOVE. REFER TO DRAWING P0112.B FOR CONTINUATION.
- 8 2" SANITARY WASTE UP TO LEVEL 2 EMERGENCY SHOWER EYE/FACE WASH STATION. ALIGN WITH WALL ABOVE. REFER TO DRAWING P0112.B FOR CONTINUATION.
- 9 2" SANITARY WASTE DOWN IN WALL TO UNDERFLOOR. REFER TO DRAWING P0011.F FOR CONTINUATION.
- 10 2" SANITARY VENTDOWN IN WALL TO SERVE SURGICAL SCRUB SINK.

1 LEVEL 01 AREA B FLOOR PLAN - PLUMBING WASTE AND VENT
1/8" = 1'-0"



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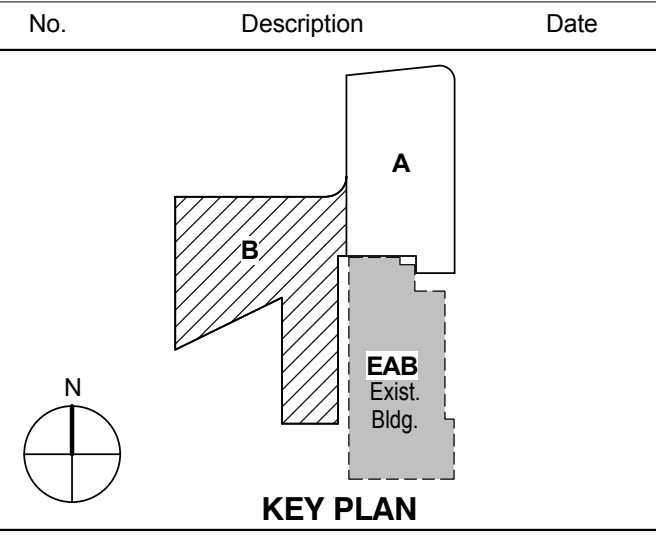
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CONFORMED SET 01 JUL 2016

2	ADDENDUM 2-2	19 APR 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016



Drawing Title:

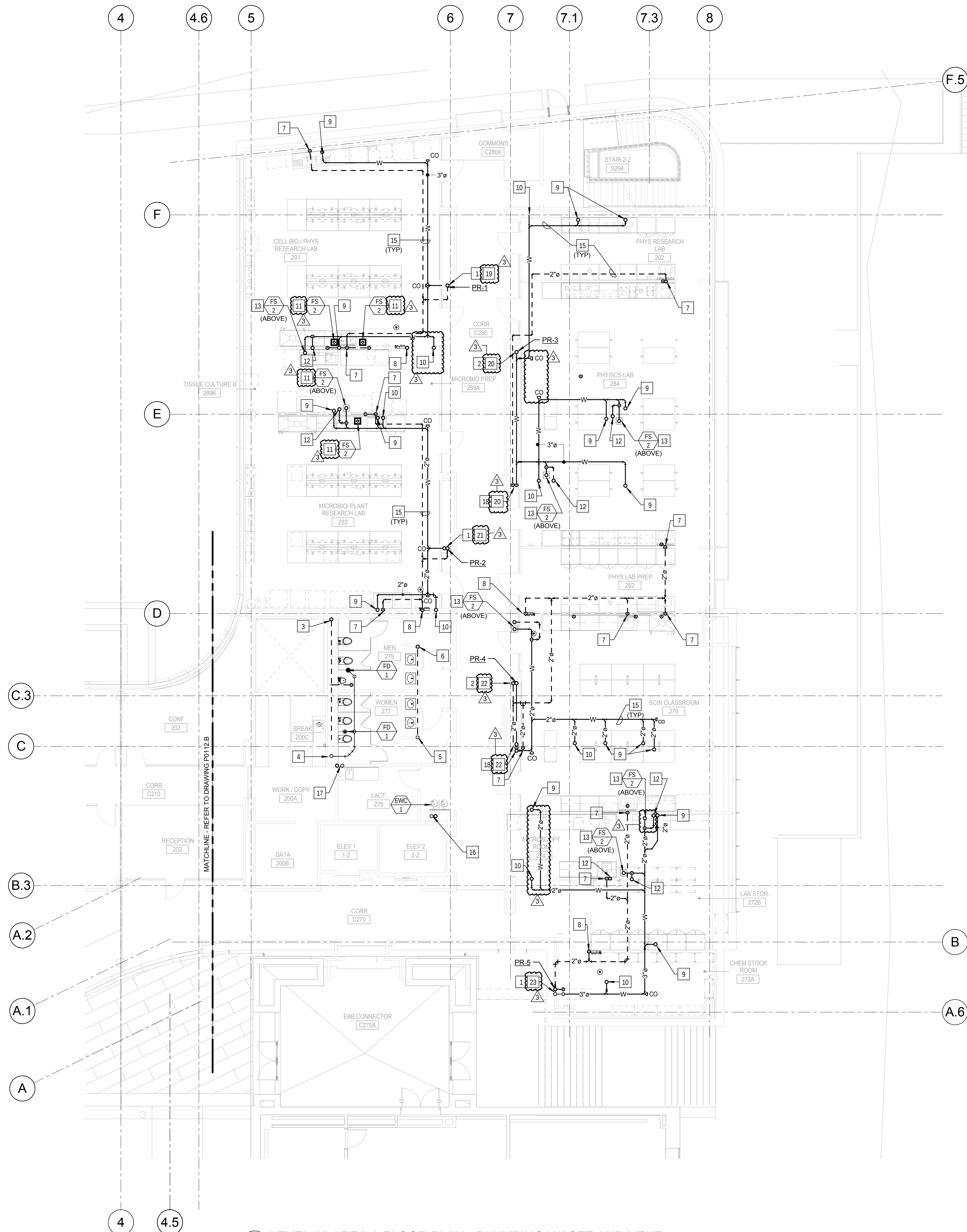
LEVEL 01 AREA B FLOOR PLAN - PLUMBING WASTE AND VENT

Project No.: 04561.01 Checked by:

P0111.B

KEYED NOTES: (THIS SHEET ONLY)

- 1 3" SANITARY WASTE AND 3" SANITARY VENT RISERS.
- 2 3" SANITARY WASTE AND 3" SANITARY VENT DOWN FROM LEVEL 3. OFF-SET ABOVE THE CEILING TO CONTINUE DOWN.
- 3 4" SANITARY VENT RISER UP AND DOWN.
- 4 4" SANITARY WASTE UP AND DOWN. REFER TO DRAWING P0401 FOR RISER DIAGRAMS.
- 5 2" SANITARY WASTE UP AND DOWN. REFER TO DRAWING P0401 FOR RISER DIAGRAMS.
- 6 2" SANITARY VENT UP AND DOWN.
- 7 2" SANITARY VENT DOWN IN WALL TO SERVE LABORATORY SINK.
- 8 2" SANITARY VENT DOWN IN WALL TO SERVE EMERGENCY SHOWER.
- 9 2" SANITARY WASTE UP TO LEVEL 3 LAB SINK.
- 10 2" SANITARY WASTE UP TO LEVEL 3 EMERGENCY SHOWER EYE/FACE WASH STATION. REFER TO DRAWING P0403, DETAIL 3.
- 11 FLOOR SINK TO BE LOCATED BELOW THE CASEWORK TO ACCEPT DISCHARGE FROM THE LAB EQUIPMENT. COORDINATE LOCATION WITH CASEWORK.
- 12 2" SANITARY VENT UP TO LEVEL 3. ALIGN WITH CASEWORK AND WALL ABOVE. REFER TO DRAWING P0403, DETAIL 3.
- 13 FLOOR SINK SET TO SERVE LEVEL 3. COORDINATE LOCATION OF FLOOR SINK WITH CASEWORK ABOVE AND WITH ABOVE CEILING CONDITIONS ON THIS LEVEL.
- 14 NOT USED.
- 15 PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- 16 2" SANITARY WASTE AND 2" SANITARY VENT RISERS TO SERVE ELECTRIC WATER COOLERS ON EACH LEVEL. REFER TO DRAWING P0401 FOR WASTE AND VENT RISER.
- 17 3" SANITARY WASTE AND 2" VENT RISERS TO SERVE MOP BASINS ON LEVELS 1 AND 3 AND COUNTERTOP SINK ON LEVEL 2. REFER TO DRAWING P0401 FOR WASTE AND VENT RISER.
- 18 3" SANITARY WASTE AND 3" SANITARY VENT DOWN.
- 19 REFER TO DRAWING P0404 SANITARY WASTE AND VENT RISER DIAGRAM 1-2.
- 20 REFER TO DRAWING P0406 SANITARY WASTE AND VENT RISER DIAGRAM 3-1.
- 21 REFER TO DRAWING P0404 SANITARY WASTE AND VENT RISER DIAGRAM 2-3.
- 22 REFER TO DRAWING P0408 SANITARY WASTE AND VENT RISER DIAGRAM 4-2.
- 23 REFER TO DRAWING P0408 SANITARY WASTE AND VENT RISER DIAGRAM 5-2.

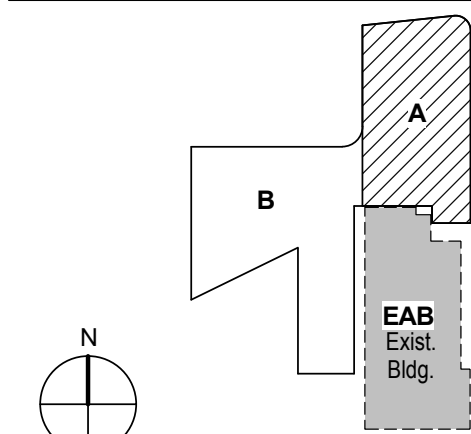


1 LEVEL 02 AREA A FLOOR PLAN - PLUMBING WASTE AND VENT
1/8" = 1'-0"

CONFORMED SET 01 JUL 2016

3	ADDENDUM 2-4	24 MAY 2016
2	ADDENDUM 2-2	19 APR 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016

No.	Description	Date
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KEY PLAN

LEVEL 02 AREA A FLOOR
PLAN - PLUMBING WASTE
AND VENT

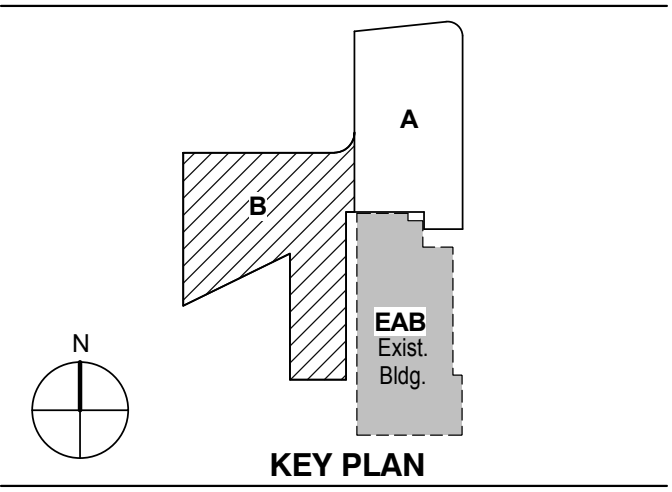
Project No.: 04561.01 Checked by:

P0112.A

CONFORMED SET 01 JUL 2016

3 ADDENDUM 2-4 24 MAY 2016
2 ADDENDUM 2-2 19 APR 2016
1 ADDENDUM 2-1 17 MAR 2016
- ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016

No.	Description	Date
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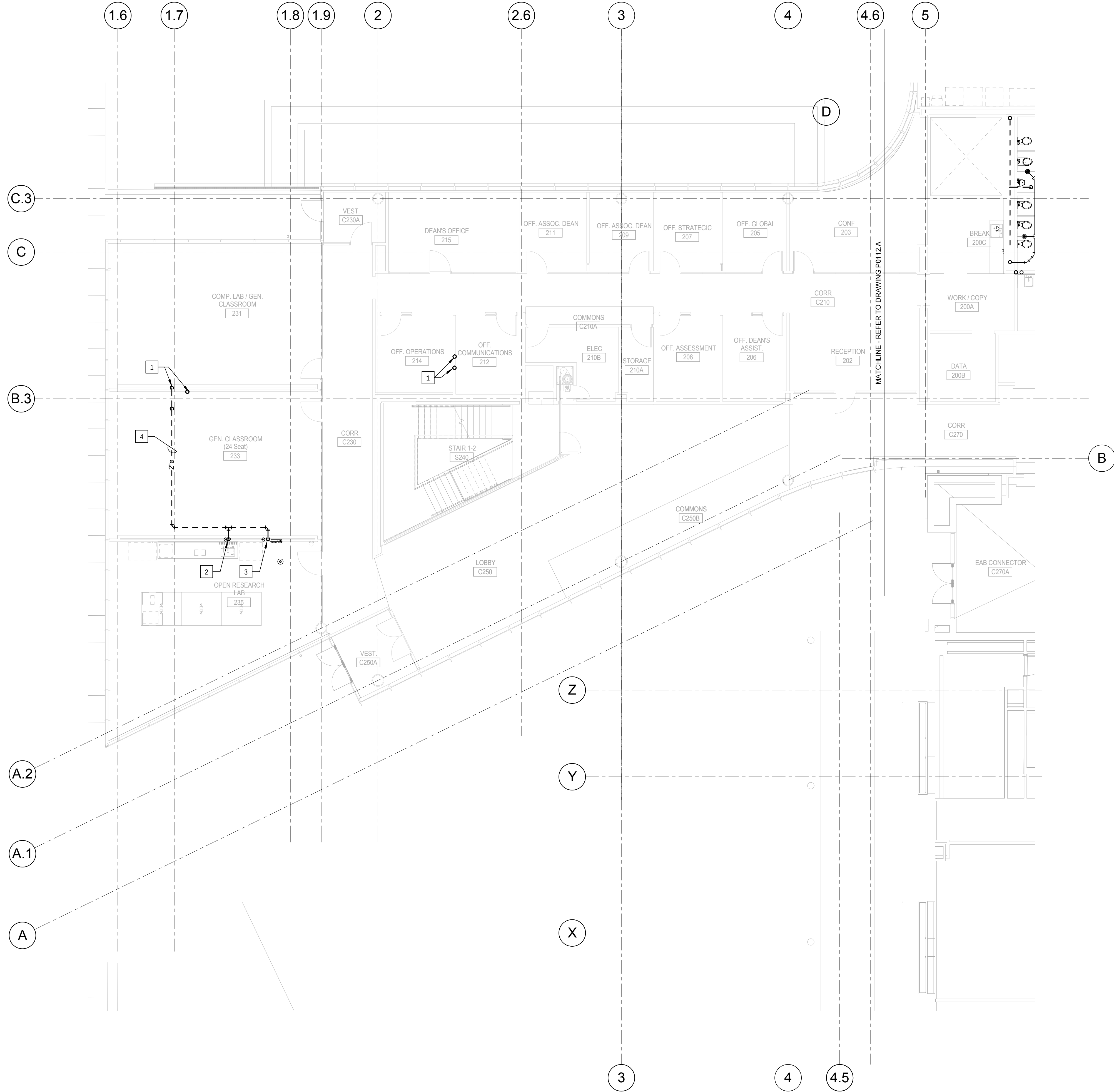


KEY PLAN

LEVEL 02 AREA B FLOOR
PLAN - PLUMBING WASTE
AND VENT

Project No.: 04561.01 Checked by:

P0112.B



1 LEVEL 02 AREA B FLOOR PLAN - PLUMBING WASTE AND VENT
1/8" = 1'-0"

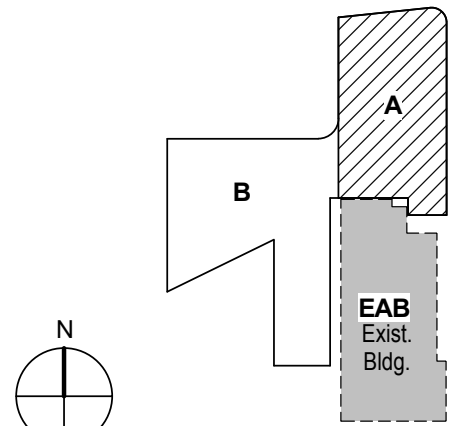
KEYED NOTES: (THIS SHEET ONLY)

- 1 2" SANITARY VENT UP FROM LEVEL 1, TO CONTINUE LEVEL 3, ALIGN WITH WALLS ABOVE. REFER TO DRAWING P0113.B.
- 2 2" SANITARY VENT DOWN IN WALL TO SERVE LAB SINK.
- 3 2" SANITARY VENT DOWN IN WALL TO SERVE EMERGENCY SHOWER.
- 4 PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- 5 NOT USED.

CONFORMED SET 01 JUL 2016

3 ADDENDUM 2-4 24 MAY 2016
2 ADDENDUM 2-2 19 APR 2016
1 ADDENDUM 2-1 17 MAR 2016
- ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016

No.	Description	Date
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KEY PLAN

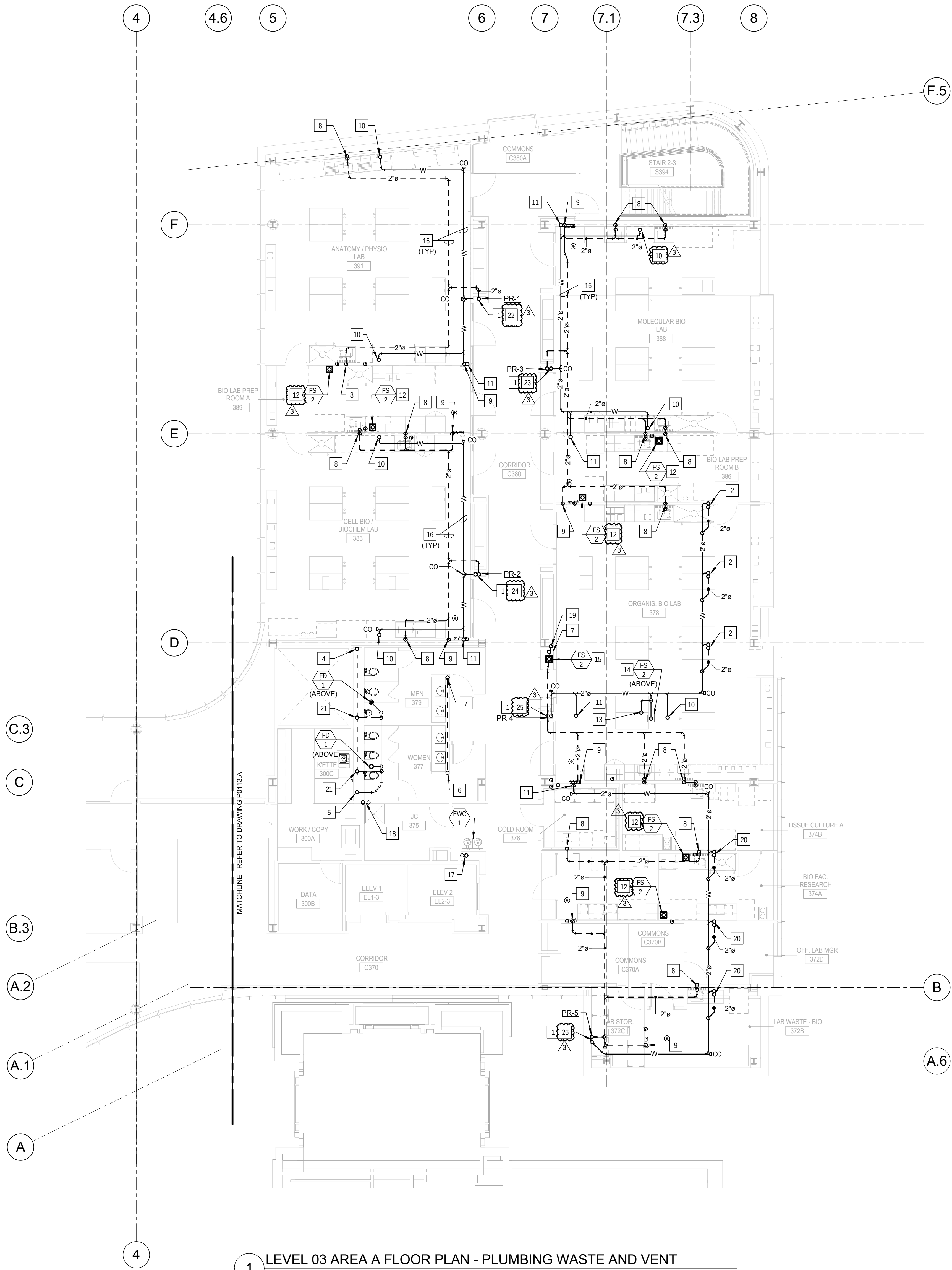
Drawing Title:

LEVEL 03 AREA A FLOOR
PLAN - PLUMBING WASTE
AND VENT

Project No.: 04561.01

Checked by:

P0113.A

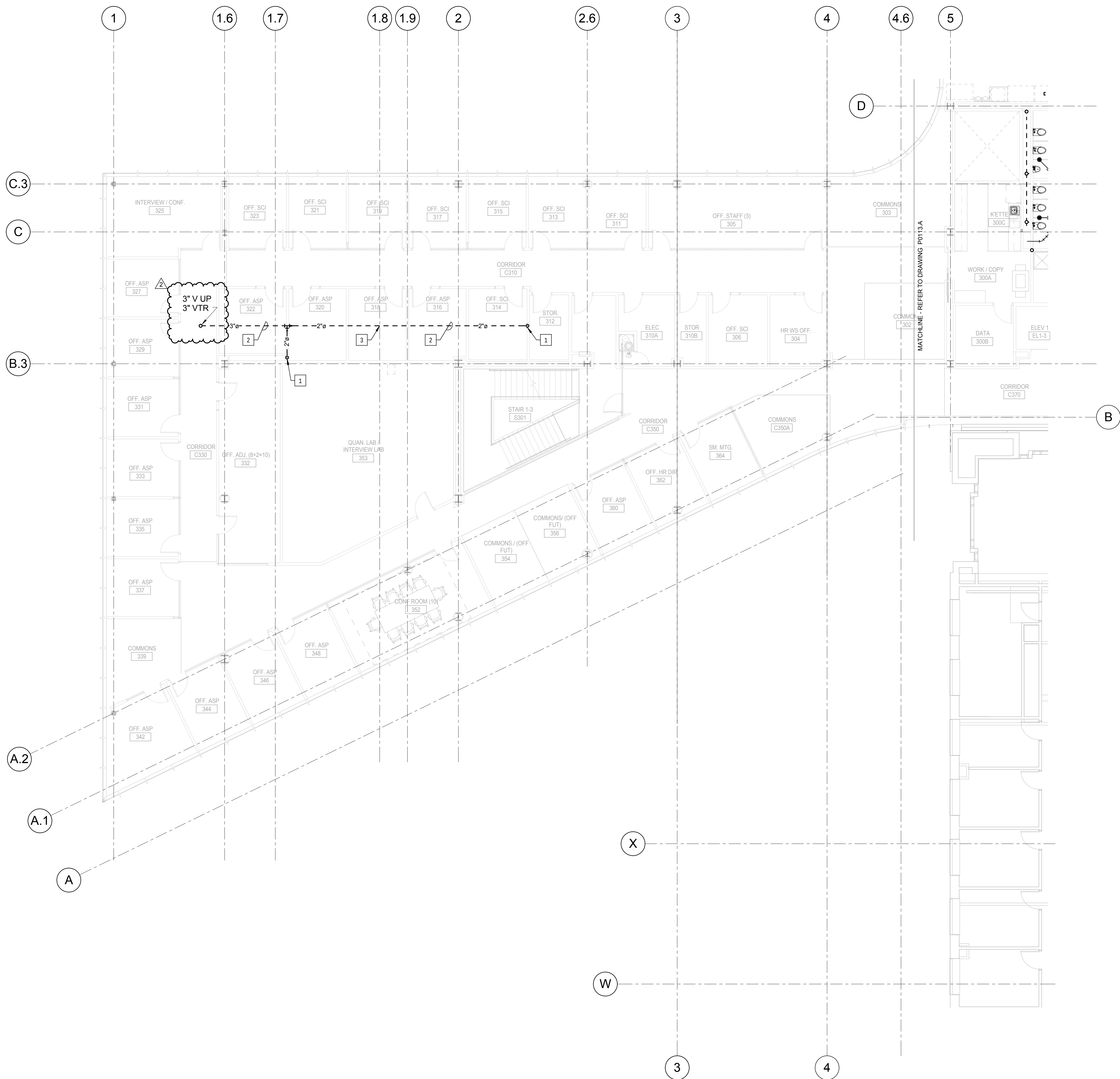


1 LEVEL 03 AREA A FLOOR PLAN - PLUMBING WASTE AND VENT
1/8" = 1'-0"

KEYED NOTES: (THIS SHEET ONLY)

- 3" SANITARY WASTE AND 3" SANITARY VENT RISERS.
- 2" SANITARY WASTE AND 2" SANITARY VENT UP TO ISLAND LAB BENCH SINKS ABOVE. EXTEND THE VENT UP TO BELOW THE COUNTERTOP BEFORE RETURNING DOWN. PROVIDE CLEANOUTS TEES IN WASTE AND VENT PIPING IN CABINET BELOW THE SINK. EXTEND AND CONNECT VENT RETURN TO THE SANITARY WASTE BELOW THE FLOOR, FIVE FOOT DOWN-STREAM.
- 3" SANITARY WASTE AND 3" SANITARY VENT DOWN FROM LEVEL 3. OFF-SET ABOVE THE CEILING TO CONTINUE DOWN.
- 4" SANITARY VENT RISER UP AND DOWN.
- 4" SANITARY WASTE UP AND DOWN. REFER TO DRAWING P0401 FOR RISER DIAGRAMS.
- 2" SANITARY WASTE UP AND DOWN. REFER TO DRAWING P0401 FOR RISER DIAGRAMS.
- 2" SANITARY VENT UP AND DOWN.
- 2" SANITARY VENT DOWN IN WALL TO SERVE LABORATORY SINK.
- 2" SANITARY VENT DOWN IN WALL TO SERVE EMERGENCY SHOWER.
- 2" SANITARY WASTE UP TO LEVEL 4 LAB SINK.
- 2" SANITARY WASTE UP TO LEVEL 4 EMERGENCY SHOWER EYE/FACE WASH STATION.
- FLOOR SINK TO BE LOCATED BELOW THE CASEWORK TO ACCEPT DISCHARGE FROM THE LAB EQUIPMENT. COORDINATE LOCATION WITH CASEWORK.
- 2" SANITARY VENT UP TO LEVEL 4. ALIGN WITH CASEWORK AND WALL ABOVE.
- FLOOR SINK SET TO SERVE LEVEL 4. COORDINATE LOCATION OF FLOOR SINK WITH CASEWORK ABOVE AND WITH ABOVE CEILING CONDITIONS ON THIS LEVEL.
- NOT USED.
- PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- 2" SANITARY WASTE AND 2" SANITARY VENT RISERS TO SERVE ELECTRIC WATER COOLERS ON EACH LEVEL. REFER TO DRAWING P0401 FOR WASTE AND VENT RISER.
- 3" SANITARY WASTE AND 2" VENT RISERS TO SERVE MOP BASINS ON LEVELS 1 AND 3 AND COUNTERTOP SINK ON LEVEL 2. REFER TO DRAWING P0401 FOR WASTE AND VENT RISER.
- 3" SANITARY VENT UP TO LEVEL 4. REFER TO DRAWING P0114.A.
- 2" SANITARY WASTE AND 2" SANITARY VENT UP TO ISLAND LAB BENCH SINKS AND CUP SINKS ABOVE. EXTEND THE VENT UP TO BELOW THE COUNTERTOP BEFORE RETURNING DOWN. PROVIDE CLEANOUTS TEES IN WASTE AND VENT PIPING IN CABINET BELOW THE SINK. EXTEND AND CONNECT VENT RETURN TO THE SANITARY WASTE BELOW THE FLOOR, FIVE FOOT DOWN-STREAM.
- 2" SANITARY VENT UP IN PLUMBING CHASE.
- REFER TO DRAWING P0404 SANITARY WASTE AND VENT RISER DIAGRAM 1-3.
- REFER TO DRAWING P0406 SANITARY WASTE AND VENT RISER DIAGRAM 3-3.
- REFER TO DRAWING P0404 SANITARY WASTE AND VENT RISER DIAGRAM 2-4.
- REFER TO DRAWING P0408 SANITARY WASTE AND VENT RISER DIAGRAM 4-3.
- REFER TO DRAWING P0408 SANITARY WASTE AND VENT RISER DIAGRAM 5-3.

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KEYED NOTES: (THIS SHEET ONLY)

- 1 2" SANITARY VENT UP FROM LEVEL 2.
- 2 PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- 3 HOLD PIPING TIGHT TO BOTTOM STRUCTURAL STEEL.



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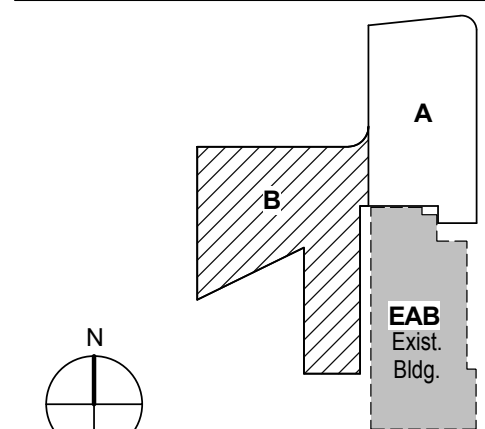
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CONFORMED SET 01 JUL 2016

2 ADDENDUM 2-2 19 APR 2016
1 ADDENDUM 2-1 17 MAR 2016
- ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016

No.	Description	Date
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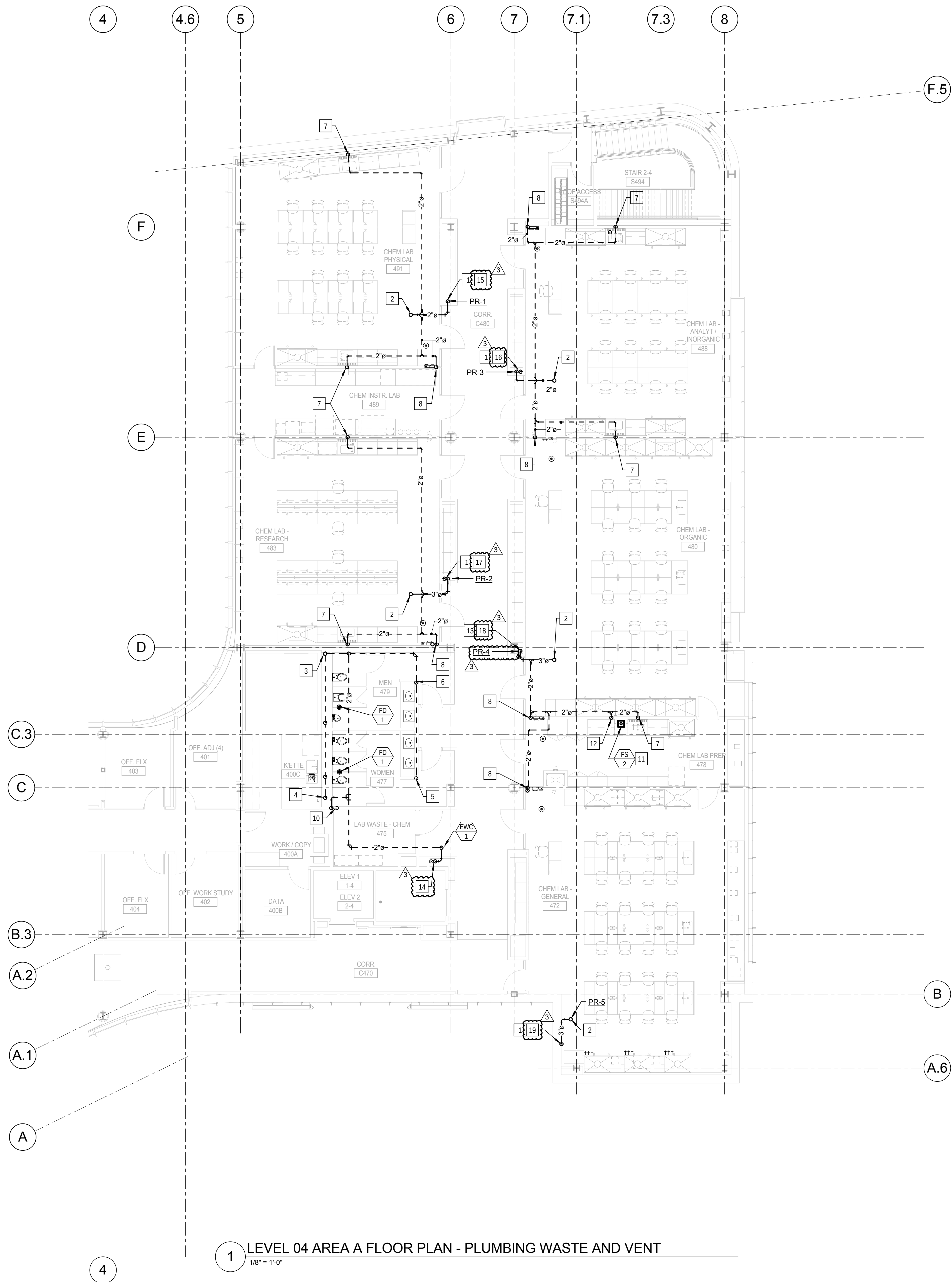
KEY PLAN

Drawing Title:

**LEVEL 03 AREA B FLOOR
PLAN - PLUMBING WASTE
AND VENT**

Project No.: 04561.01 Checked by:

P0113.B



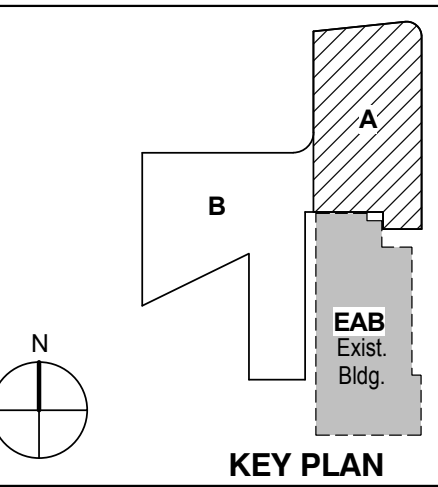
KEYED NOTES: (THIS SHEET ONLY)

- 1 3" SANITARY WASTE DOWN AND 3" SANITARY VENT UP
- 2 3" SANITARY VENT UP, 3" VTR.
- 3 4" SANITARY VENT RISER, EXTEND FULL SIZE THROUGH THE ROOF.
- 4 4" SANITARY WASTE DOWN, 4" SANITARY VENT UP, EXTEND IN CHASE FULL SIZE TO VENT STACK, REFER TO DRAWING P0401 FOR RISER DIAGRAMS
- 5 2" SANITARY WASTE DOWN, 2" SANITARY VENT UP, EXTEND IN CHASE FULL SIZE TO VENT STACK, REFER TO DRAWING P0401 FOR RISER DIAGRAMS
- 6 2" SANITARY VENT UP TO ABOVE THE CEILING, EXTEND AS SHOWN.
- 7 2" SANITARY VENT DOWN IN WALL TO SERVE LABORATORY SINK.
- 8 2" SANITARY VENT DOWN IN WALL TO SERVE EMERGENCY SHOWER.
- 9 NOT USED.
- 10 3" SANITARY WASTE DOWN, 2" SANITARY VENT UP, REFER TO DRAWING P0401 FOR WASTE AND VENT RISER.
- 11 FLOOR SINK TO BE LOCATED BELOW THE CASEWORK TO ACCEPT DISCHARGE FROM LAB EQUIPMENT. COORDINATE LOCATION WITH CASEWORK.
- 12 2" SANITARY VENT UP IN WALL.
- 13 2" SANITARY VENT UP FROM LEVEL 3. REFER TO DRAWING P113.A FOR OFF-SET AT LEVEL 3.
- 14 2" SANITARY WASTE DOWN, 2" SANITARY VENT UP, REFER TO DRAWING P0401 FOR WASTE AND VENT RISER.
- 15 REFER TO DRAWING P0404 SANITARY WASTE AND VENT RISER DIAGRAM 1-3.
- 16 REFER TO DRAWING P0406 SANITARY WASTE AND VENT RISER DIAGRAM 3-3.
- 17 REFER TO DRAWING P0404 SANITARY WASTE AND VENT RISER DIAGRAM 2-4.
- 18 REFER TO DRAWING P0408 SANITARY WASTE AND VENT RISER DIAGRAM 4-3.
- 19 REFER TO DRAWING P0408 SANITARY WASTE AND VENT RISER DIAGRAM 5-3.

CONFORMED SET 01 JUL 2016

3	ADDENDUM 2-4	24 MAY 2016
2	ADDENDUM 2-2	19 APR 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016

No.	Description	Date
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KEY PLAN

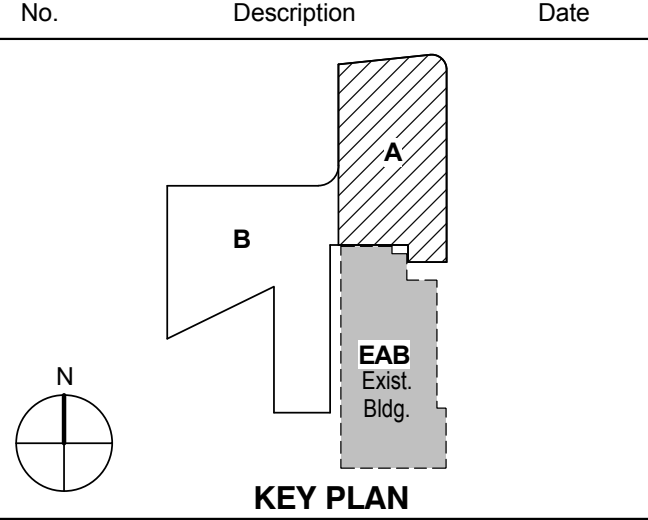
LEVEL 04 AREA A FLOOR PLAN - PLUMBING WASTE AND VENT

Project No.: 04561.01 Checked by:

P0114.A

CONFORMED SET 01 JUL 2016

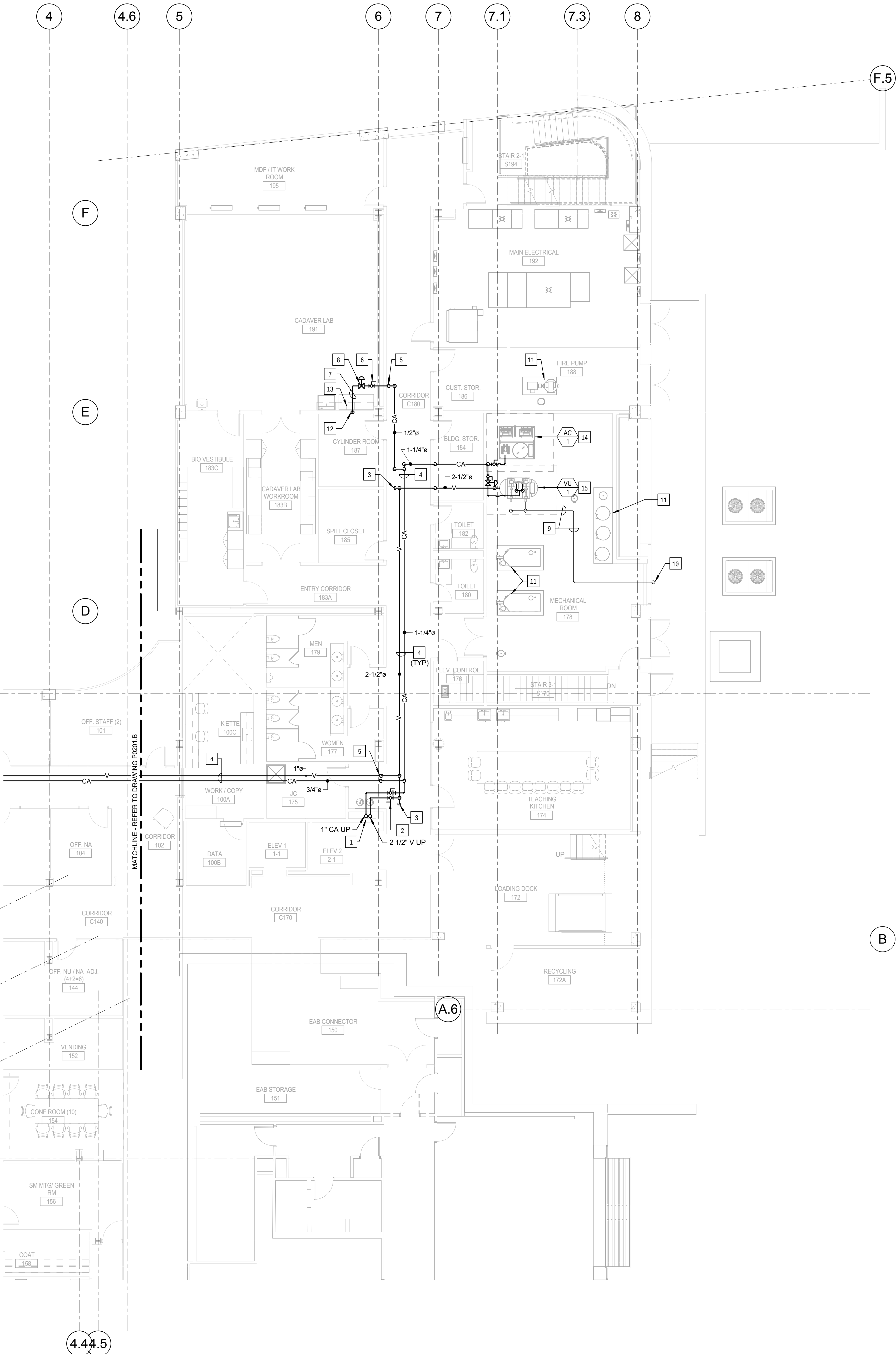
ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016



LEVEL 01 AREA A FLOOR
PLAN- LABORATORY
COMPRESSED AIR AND
VACUUM PIPING

Project No.: 04561.01 Checked by:

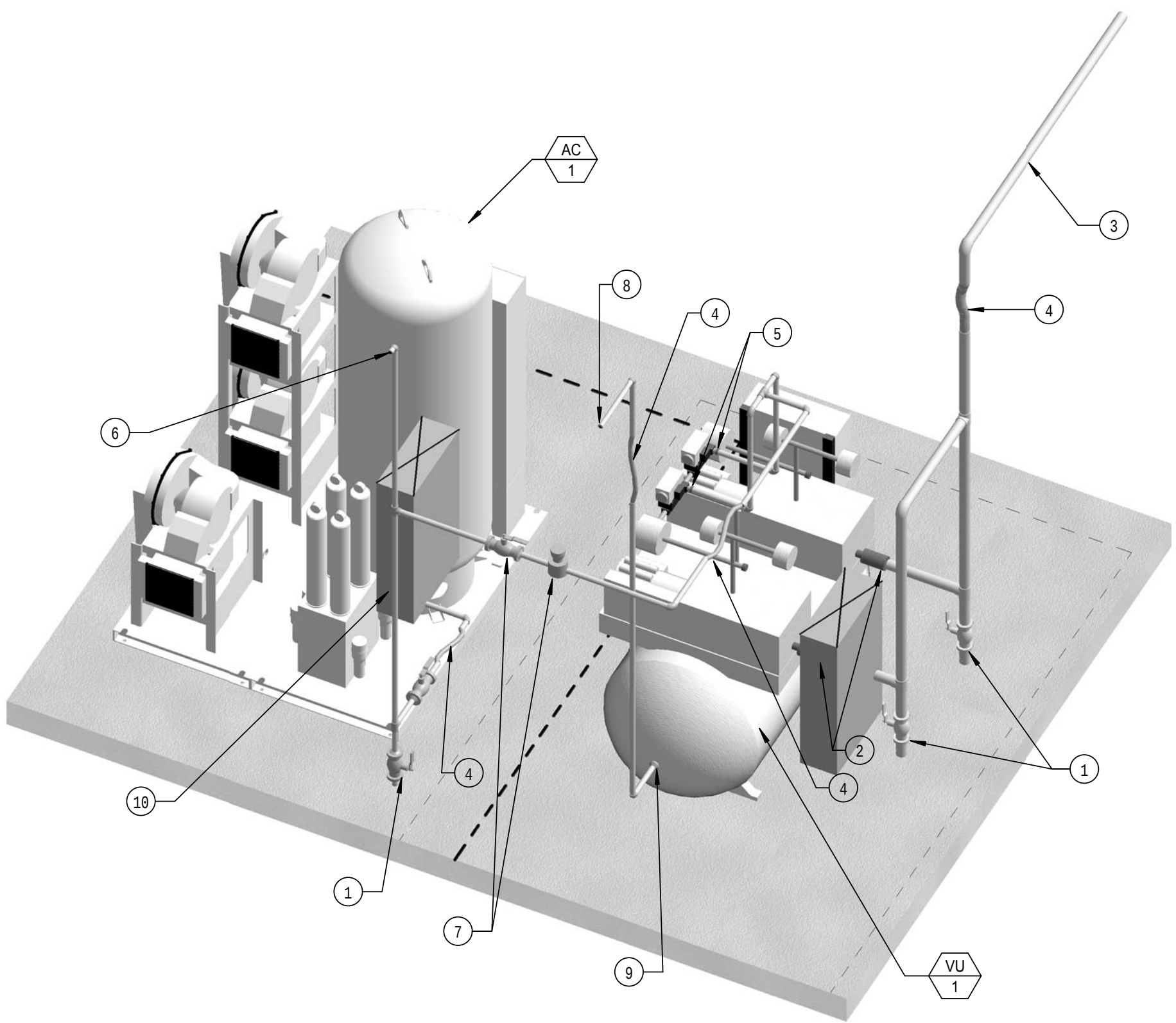
P0201.A



1 LEVEL 01 AREA A FLOOR PLAN - LABORATORY COMPRESSED AIR AND VACUUM PIPING
1/8" = 1'-0"

KEYED NOTES: (THIS SHEET ONLY)

- BUILDING SERVICE RISER FOR LABORATORY COMPRESSED AIR AND VACUUM. COORDINATE INSTALLATION WITH BUILDING STRUCTURE AND OTHER SERVICES WITHIN CHASE.
- PROVIDE RISER ISOLATION VALVES AT EACH FLOOR LEVEL. LOCATE VALVES IN ACCESSIBLE CEILING OR PROVIDE ACCESS PANEL AS REQUIRED.
- PROVIDE CLEANOUT PLUG IN PIPING.
- PIPING IN CORRIDOR TO BE RUN AT BOTTOM OF STRUCTURAL STEEL CROSS MEMBERS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- DROP PIPING DOWN TO BELOW STRUCTURAL STEEL MEMBER. HOLD TIGHT TO BOTTOM OF STEEL.
- PROVIDE SHUT-OFF VALVES AT THE ENTRY TO EACH ROOM.
- PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- INSTALL SINGLE STAGE IN-LINE AIR PRESSURE REGULATOR, BEACONMEDAES MODEL 6-122101-00, 5 INCH INLET AND OUTLET, ADJUSTABLE FROM 5 TO 55 PSI DELIVERY RANGE. PROVIDE WITH MODEL 6-130115-00, 0 TO 100 PSI PRESSURE GAUGE. MOUNT ABOVE THE CEILING IN AN ACCESSIBLE LOCATION. POSITION FOR FULL ACCESS TO THE ADJUSTMENT NUT AND GAUGE.
- CENTRAL VACUUM UNIT EXHAUST TO BE 2-INCH TYPE 'L' COPPER, RUN PIPING AS HIGH AS POSSIBLE. VERIFY EXACT SIZE WITH EQUIPMENT MANUFACTURER.
- CENTRAL VACUUM EXHAUST TO TERMINATE THROUGH EXTERIOR WALL. COORDINATE WALL PENETRATION WITH THE GENERAL CONTRACTOR. PROVIDE SCREENED ELBOW TURNED DOWN. VERIFY EXACT LOCATION PRIOR TO ROUGH-IN.
- PLUMBING, FIRE SUPPRESSION AND MECHANICAL EQUIPMENT SHOWN FOR REFERENCE AND COORDINATION.
- EXTEND 1/2" COMPRESSED AIR DOWN WITHIN WALL TO SERVE LABORATORY SERVICE FITTING. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND TYPE. PROVIDE ALL NECESSARY FITTINGS AND MAKE FINAL CONNECTIONS TO FITTINGS AS REQUIRED.
- LABORATORY COMPRESSED AIR OUTLET SERVICE FITTING.
- BASE MOUNTED, FACTORY ASSEMBLED PACKAGED OIL-LESS SCROLL TRIPLEX LABORATORY CENTRAL AIR COMPRESSOR UNIT WITH SINGLE POINT SERVICE CONNECTIONS. POSITION UNIT ON 4" HIGH CONCRETE HOUSEKEEPING PAD, WITH ELASTOMERIC ISOLATION PADS, MAINTAIN MANUFACTURERS REQUIRED SERVICE CLEARANCES ON ALL SIDES. ALL PIPING CONNECTION TO BE MADE WITH FLEXIBLE CONNECTORS. CONNECT AND EXTEND COPPER DRAIN PIPING TO FLOOR SINK. REFER TO SPECIFICATION SECTION 226119 "COMPRESSED-AIR EQUIPMENT FOR LABORATORY FACILITIES, AND EQUIPMENT SCHEDULE ON DRAWING P0602.
- TANK MOUNTED, FACTORY ASSEMBLED PACKAGED DRY-RUNNING DUPLEX ROTARY CLAW LABORATORY CENTRAL VACUUM UNIT WITH SINGLE POINT SERVICE CONNECTIONS. POSITION UNIT ON 4" HIGH CONCRETE HOUSEKEEPING PAD, WITH ELASTOMERIC ISOLATION PADS, MAINTAIN MANUFACTURERS REQUIRED SERVICE CLEARANCES ON ALL SIDES. ALL PIPING CONNECTION TO BE MADE WITH FLEXIBLE CONNECTORS. CONNECT AND EXTEND COPPER DRAIN PIPING TO FLOOR SINK. REFER TO SPECIFICATION SECTION 226219 "VACUUM EQUIPMENT FOR LABORATORY FACILITIES, AND EQUIPMENT SCHEDULE ON DRAWING P0602.

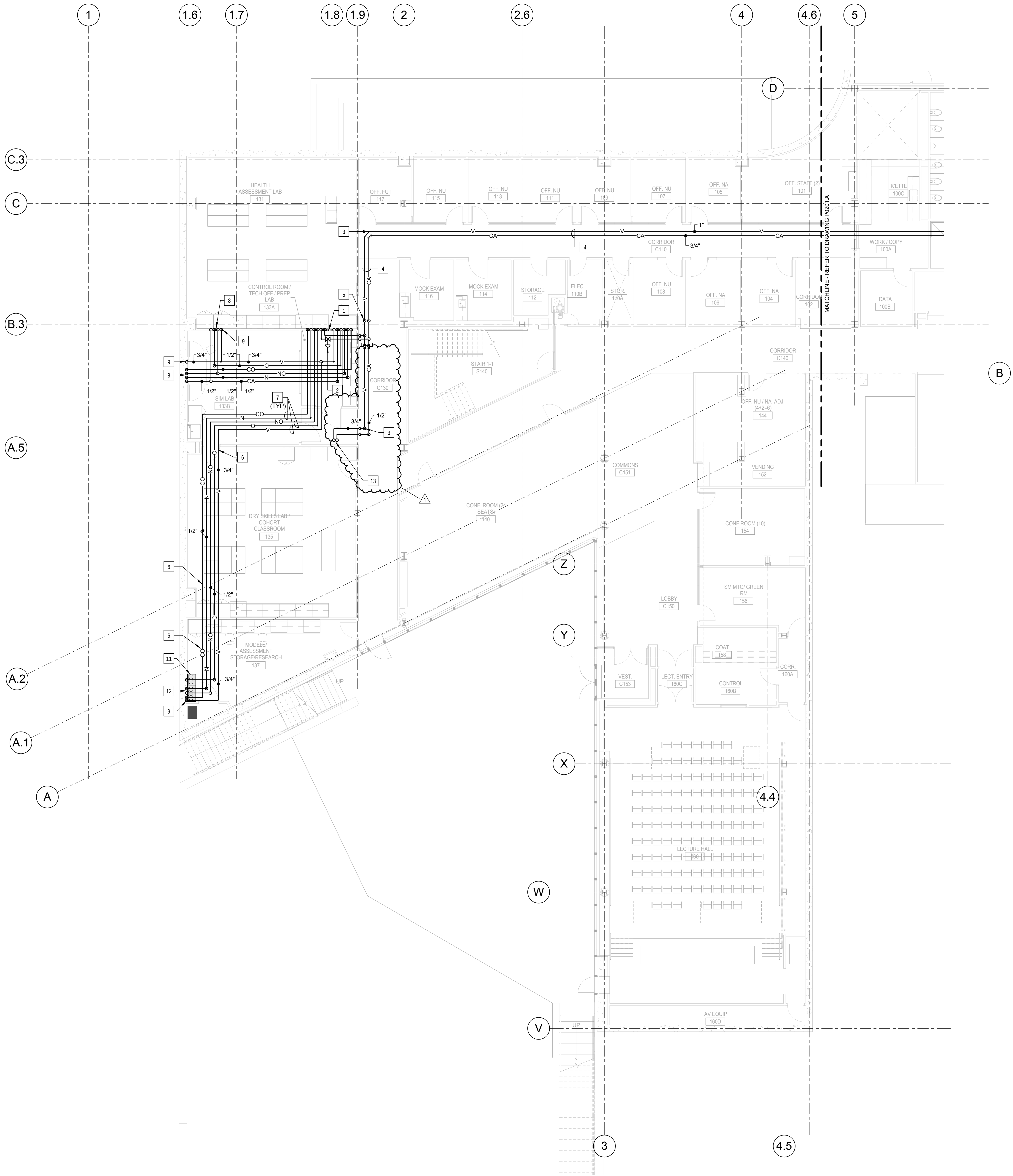


2 CENTRAL VACUUM UNIT AND AIR COMPRESSOR UNIT DETAIL

KEYED NOTES: (DETAIL 2 ONLY)

- PROVIDE FULL SIZE DRIP LEG WITH HOSE END DRAIN VALVE, WITH CAP AND CHAIN. DRIP LEG TO BE MINIMUM OF 12 INCHES LONG.
- MAKE EXHAUST PORT CONNECTIONS TO THE EQUIPMENT AS REQUIRED, PROVIDE THE NECESSARY FITTINGS AND ADAPTERS. SUPPORT PIPING INDEPENDENT OF THE EQUIPMENT.
- VACUUM EXHAUST PIPING.
- FLEXIBLE CONNECTOR, VERIFY LENGTH AND DEFLECTION RECOMMENDATIONS WITH THE EQUIPMENT MANUFACTURER.
- MAKE COMPRESSED AIR CONNECTIONS TO THE VACUUM UNIT AS REQUIRED. PROVIDE THE NECESSARY FITTING AND ADAPTERS. SUPPORT PIPING INDEPENDENT OF THE EQUIPMENT.
- COMPRESSED AIR SERVICE TO THE BUILDING. SET MAIN REGULATOR ON COMPRESSOR TO 100 PSIG. SUPPORT THE PIPING INDEPENDENT OF THE EQUIPMENT.
- PROVIDE 5 INCH SHUT OFF VALVE AND PRESSURE REGULATOR TO SERVE VACUUM UNIT. REGULATOR TO BE BEACONMEDAES MODEL 6-122101-01, 5 INCH INLET/OUTLET, WITH A DELIVERY RANGE OF 40-100 PSIG. PROVIDE WITH MODEL 6-130115-00 0-100 PRESSURE GAUGE. SET REGULATOR TO 80 PSIG. SUPPORT PIPING FROM FIELD FABRICATED WALL BRACKETS.
- MAIN VACUUM SERVICE PIPING TO THE BUILDING, SUPPORT PIPING INDEPENDENT OF THE EQUIPMENT.
- MAIN EQUIPMENT CONNECTION FOR MAIN PIPING TO THE VACUUM UNIT. PROVIDE THE NECESSARY FITTING AND ADAPTERS.
- EQUIPMENT CONNECTION FOR THE MAIN COMPRESSED AIR PIPING TO THE AIR COMPRESSOR. PROVIDE THE NECESSARY FITTING AND ADAPTERS.

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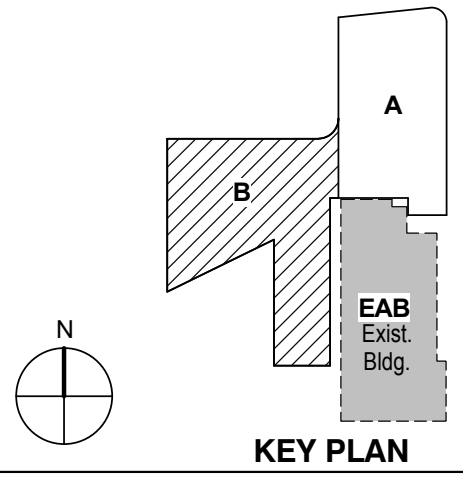


KEYED NOTES: (THIS SHEET ONLY)

- 1 MEDICAL GAS ZONE VALVE BOX RECESSED INTO WALL TO SERVE MEDICAL GASES INDICATED. BEACONMEDAES MOEL ZVB6-AAAAAB-ENG, SIX VALVE CONFIGURATION, WITH FIVE 1/2" VALVES AND ONE 3/4" VALVE FOR VACUUM. ASSEMBLY TO BE COMPLETE WITH MANUFACTURERS PRESSURE GAUGES. REFER TO SPECIFICATION SECTION 228313 GAS PIPING FOR LABORATORY AND HEALTHCARE FACILITIES. REFER TO THE ARCHITECTURAL DRAWINGS FOR ZONE VALVE BOX LOCATION AND MOUNTING HEIGHT.
- 2 INSTALL SINGLE STAGE IN-LINE AIR PRESSURE REGULATOR, BEACONMEDAES MODEL 6-122101-00, ADJUSTABLE FROM 5 TO 55 PSI DELIVERY RANGE, PROVIDE WITH MODEL 6-130115-00, 0 TO 100 PSI PRESSURE GAUGE. MOUNT ABOVE THE CEILING IN AN ACCESSABLE LOCATION. POSITION FOR FULL ACCESS TO THE ADJUSTMENT NUT AND GAUGE. SET TO 50 PSI.
- 3 PROVIDE CLEANOUT PLUG IN PIPING.
- 4 PIPING IN CORRIDOR TO BE RUN AT BOTTOM OF STRUCTURAL STEEL CROSS MEMBERS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- 5 DROP PIPING DOWN TO BELOW STRUCTURAL STEEL MEMBER. HOLD TIGHT TO BOTTOM OF STEEL.
- 6 HOLD PIPING TIGHT TO BOTTOM OF STRUCTURAL MEMBER.
- 7 PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- 8 EXTEND PIPING DOWN IN WALL TO WALL MOUNTED D.I.S.S. SERVICE OUTLETS FOR THE MEDICAL GASES INDICATED. REFER TO SPECIFICATION SECTION 228313 GAS PIPING FOR LABORATORY AND HEALTHCARE FACILITIES FOR D.I.S.S. SERVICE OUTLETS. REFER TO THE ARCHITECTURAL DRAWINGS FOR THE LOCATION AND MOUNTING HEIGHTS.
- 9 PROVIDE D.I.S.S. SERVICE FITTING FOR SCAVENGING SYSTEM CONNECTION.
- 10 NOT USED.
- 11 MANUFACTURED STEEL GAS CYLINDER CABINET FOR TWO OXYGEN CYLINDERS. SERVICE PIPING TO EXTEND DOWN INSIDE WALL AND ENTER THE CABINET FROM THROUGH THE REAR CABINET PANEL. CABINET TO BE FURNISHED AND INSTALLED BY OTHERS. COORDINATE PIPE ENTRY PRIOR TO ROUGH-IN. TERMINATE PIPING IN CABINET TO ACCEPT CONNECTION FROM CYLINDER REGULATOR ASSEMBLY.
- 12 MANUFACTURED STEEL GAS CYLINDER CABINET FOR THREE MEDICAL GAS CYLINDERS: NITROGEN, NITROUS OXIDE AND CARBON DIOXIDE. SERVICE PIPING TO EXTEND DOWN INSIDE WALL AND ENTER THE CABINET FROM THROUGH THE REAR CABINET PANEL. CABINET TO BE FURNISHED AND INSTALLED BY OTHERS. COORDINATE PIPE ENTRY PRIOR TO ROUGH-IN. TERMINATE PIPING IN CABINET TO ACCEPT CONNECTION FROM CYLINDER REGULATOR ASSEMBLY.
- 13 EXTEND VACUUM AND COMPRESSED AIR PIPING UP TO LEVEL 2. ALIGN WITH WALL ABOVE. REFER TO DRAWING P0201.B FOR CONTINUATION.

CONFORMED SET 01 JUL 2016

1	ADDENDUM 2-1	17 MAR 2016
1	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016
No.	Description	Date



KEY PLAN

LEVEL 01 AREA B FLOOR PLAN - LABORATORY COMPRESSED AIR AND VACUUM PIPING

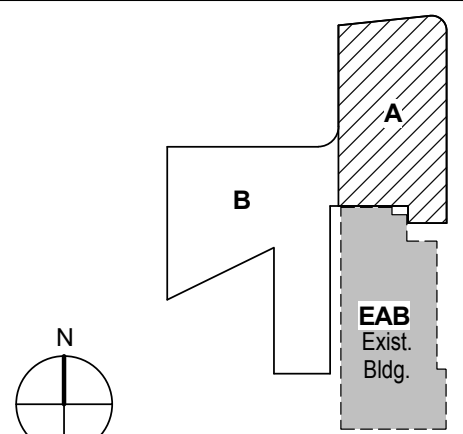
Project No.: 04561.01 Checked by:

P0201.B

CONFORMED SET 01 JUL 2016

2 ADDENDUM 2-4 24 MAY 2016
1 ADDENDUM 2-1 17 MAR 2016
- ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016

No.	Description	Date
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KEY PLAN

Drawing Title:

LEVEL 02 AREA A FLOOR
PLAN - LABORATORY
COMPRESSED AIR AND
VACUUM PIPING

Project No.: 04561.01 Checked by:

P0202.A

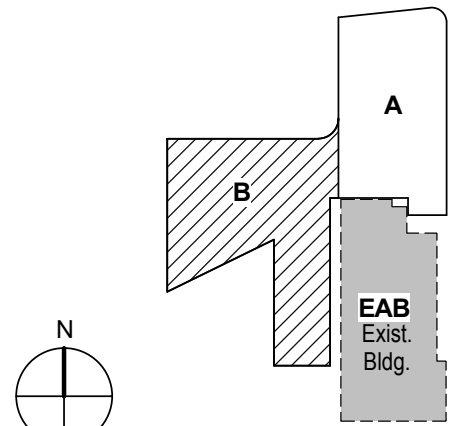


KEYED NOTES: (THIS SHEET ONLY)

- BUILDING SERVICE RISERS FOR LABORATORY COMPRESSED AIR AND VACUUM. COORDINATE INSTALLATION WITH BUILDING STRUCTURE AND OTHER SERVICES WITHIN CHASE.
- PROVIDE FLOOR ISOLATION VALVES AT EACH FLOOR LEVEL. LOCATE VALVES IN ACCESSIBLE CEILING OR PROVIDE ACCESS PANEL AS REQUIRED.
- PROVIDE CLEANOUTS PLUG IN PIPING.
- PIPING IN CORRIDOR TO BE RUN AT BOTTOM OF STRUCTURAL STEEL CROSS MEMBERS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- DROP PIPING DOWN TO BELOW STRUCTURAL STEEL MEMBER. HOLD TIGHT TO BOTTOM OF STEEL.
- PROVIDE SHUT-OFF VALVES AT THE ENTRY TO EACH ROOM.
- PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- INSTALL SINGLE STAGE IN-LINE AIR PRESSURE REGULATOR, BEACONMEDAES MODEL 6-122102-01, .75 INCH INLET AND OUTLET, ADJUSTABLE FROM 40 to 110 PSIG. DELIVERY RANGE, PROVIDE WITH MODEL 6-130116-00, 0 TO 300 PRESSURE GAUGE. MOUNT ABOVE THE CEILING IN AN ACCESSIBLE LOCATION. POSITION FOR FULL ACCESS TO THE ADJUSTMENT NUT AND GAUGE. SET TO 50 PSIG.
- LABORATORY COMPRESSED AIR OUTLET AND VACUUM INLET SERVICE FITTING.
- LABORATORY FUME HOOD OR BIO SAFETY CABINET. REFER TO THE ARCHITECTURAL DRAWINGS FOR THE TYPE.
- EXTEND 1/2" COMPRESSED AIR AND 3/4" VACUUM DOWN WITHIN WALL TO SERVE LABORATORY FUME HOOD OR BIO SAFETY CABINET SERVICE FITTINGS. VERIFY CONNECTION LOCATIONS AND REQUIREMENTS WITH EQUIPMENT MANUFACTURER. PROVIDE ALL NECESSARY FITTINGS AND MAKE FINAL CONNECTIONS TO FITTINGS AS REQUIRED. PIPING TO BE CONCEALED AS MUCH AS POSSIBLE BEHIND THE EQUIPMENT OR BELOW THE COUNTERTOPS.
- EXTEND 1/2" COMPRESSED AIR AND 3/4" VACUUM DOWN WITHIN WALL TO SERVE LABORATORY SERVICE FITTINGS. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND TYPE. PROVIDE ALL NECESSARY FITTINGS AND MAKE FINAL CONNECTIONS TO FITTINGS AS REQUIRED.
- EXTEND 1/2" COMPRESSED AIR AND 3/4" VACUUM DOWN INTO LABORATORY BENCH CASEWORK SERVICE CARRIER. ROUTE PIPING DOWN TO CASEWORK UTILITY CHASE AND CONNECT TO BENCH-TOP LABORATORY SERVICE FITTINGS. REFER TO THE ARCHITECTURAL PLAN FOR THE ENTRY POINT OF THE OVERHEAD SERVICE CARRIER AND SERVICE FITTINGS. PROVIDE ALL NECESSARY FITTINGS AND MAKE FINAL CONNECTIONS. COORDINATE INSTALL AND ROUTING OF PIPING WITH OTHER TRADES UTILIZING THE UTILITY CHASE.

CONFORMED SET 01 JUL 2016

1	ADDENDUM 2-1	17 MAR 2016
1	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016
No.	Description	Date



KEY PLAN

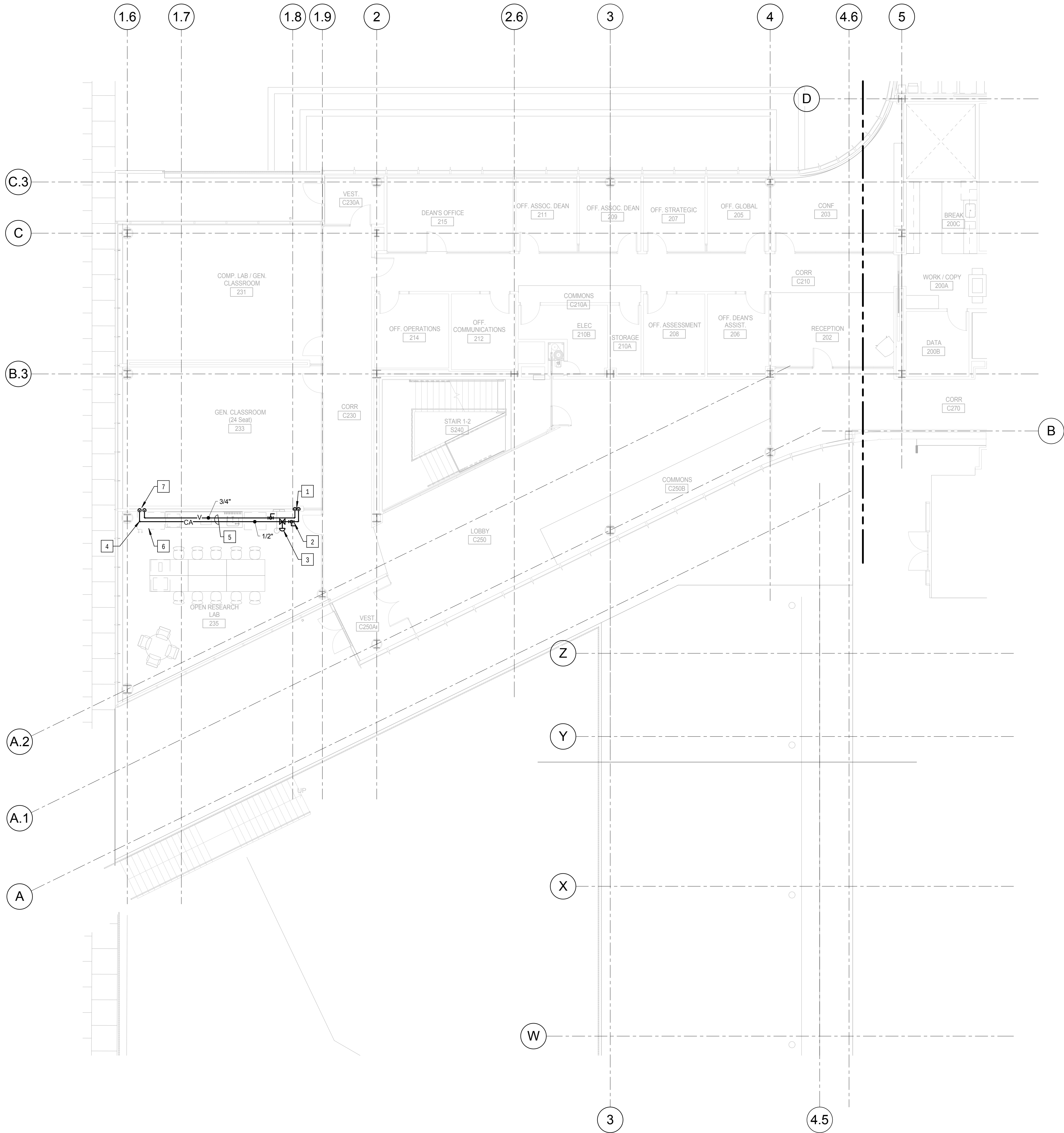
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LEVEL 02 AREA B FLOOR
PLAN - LABORATORY
COMPRESSED AIR AND
VACUUM PIPING

Project No.: 04561.01

Checked by:

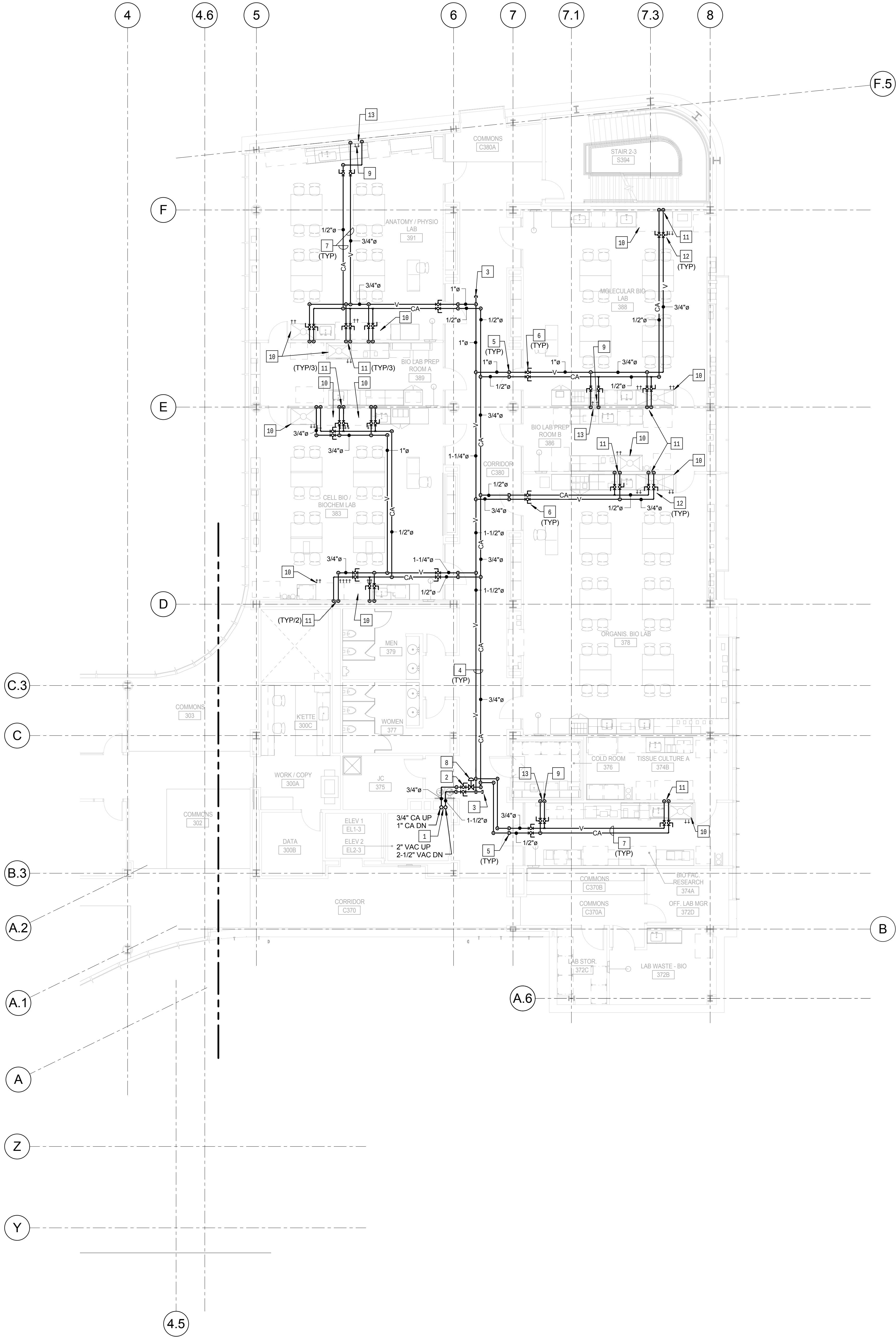
P0202.B



KEYED NOTES: (THIS SHEET ONLY)

- VACUUM AND COMPRESSED AIR UP IN WALL FROM LEVEL 1. REFER TO DRAWING P0201.B
- PROVIDE SHUT-OFF VALVE AT THE ENTRY TO EACH ROOM.
- INSTALL SINGLE STAGE IN-LINE AIR PRESSURE REGULATOR, BEACONMEDAES MODEL 6-122101-00. ADJUSTABLE FROM 5 TO 55 PSI DELIVERY PRESSURE. PROVIDE WITH MODEL 6-1300115-00. 0 TO 100 PSI PRESSURE GAUGE. MOUNT ABOVE THE CEILING IN AN ACCESSABLE LOCATION. POSITION FOR FULL ACCESS TO THE ADJUSTMENT NUT AND GAUGE.
- PROVIDE CLEANOUT PLUG IN PIPING.
- PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- LABORATORY FUME HOOD OR BIO SAFETY CABINET. REFER TO THE ARCHITECTURAL DRAWING FOR THE TYPE.
- EXTEND 1/2" COMPRESSED AIR AND 1/4" VACUUM DOWN WITHIN WALL TO SERVE LABORATORY FUME HOOD OR BIO SAFETY CABINET SERVICE FITTINGS. VERIFY CONNECTION LOCATIONS AND REQUIREMENTS WITH EQUIPMENT MANUFACTURER. PROVIDE ALL NECESSARY FITTINGS AND MAKE FINAL CONNECTIONS TO FITTINGS AS REQUIRED. PIPING TO BE CONCEALED AS MUCH AS POSSIBLE BEHIND THE EQUIPMENT OR BELOW THE COUNTERTOP.

1 LEVEL 02 AREA B FLOOR PLAN - LABORATORY COMPRESSED AIR AND VACUUM PIPING
1/8" = 1'-0"



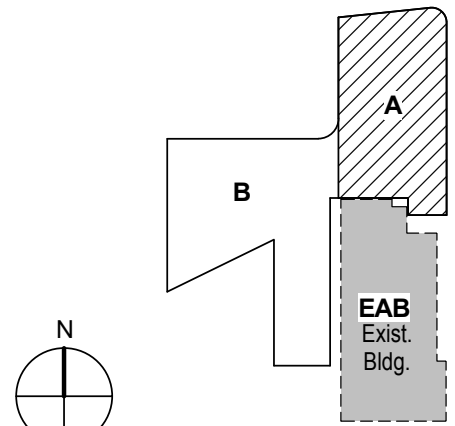
1 LEVEL 03 AREA A FLOOR PLAN - LABORATORY COMPRESSED AIR AND VACUUM PIPING
1/8" = 1'-0"

KEYED NOTES: (THIS SHEET ONLY)

- 1 BUILDING SERVICE RISER FOR LABORATORY COMPRESSED AIR AND VACUUM. COORDINATE INSTALLATION WITH BUILDING STRUCTURE AND OTHER SERVICES WITHIN CHASE.
- 2 PROVIDE FLOOR ISOLATION VALVES AT EACH FLOOR LEVEL. LOCATE VALVES IN ACCESSIBLE CEILING OR PROVIDE ACCESS PANEL AS REQUIRED.
- 3 PROVIDE CLEANOUT PLUG IN PIPING.
- 4 PIPING IN CORRIDOR TO BE RUN AT BOTTOM OF STRUCTURAL STEEL CROSS MEMBERS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- 5 DROP PIPING DOWN TO BELOW STRUCTURAL STEEL MEMBER. HOLD TIGHT TO BOTTOM OF STEEL.
- 6 PROVIDE SHUT-OFF VALVES AT THE ENTRY TO EACH ROOM.
- 7 PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- 8 INSTALL SINGLE STAGE IN-LINE AIR PRESSURE REGULATOR, BEACONMEDAES MODEL 6-122102-01, .75 INCH INLET AND OUTLET, ADJUSTABLE FROM 40 to 110 PSIG DELIVERY RANGE. PROVIDE WITH MODEL 6-130116-00, 0 to 300 PRESSURE GAUGE. MOUNT ABOVE THE CEILING IN AN ACCESSIBLE LOCATION. POSITION FOR FULL ACCESS TO THE ADJUSTMENT NUT AND GAUGE. SET TO 50 PSIG.
- 9 LABORATORY COMPRESSED AIR OUTLET AND VACUUM INLET SERVICE FITTING.
- 10 LABORATORY FUME HOOD OR BIO SAFETY CABINET. REFER TO THE ARCHITECTURAL DRAWINGS FOR THE TYPE.
- 11 EXTEND 1/2" COMPRESSED AIR AND 3/4" VACUUM DOWN WITHIN WALL TO SERVE LABORATORY FUME HOOD OR BIO SAFETY CABINET SERVICE FITTINGS. VERIFY CONNECTION LOCATIONS AND REQUIREMENTS WITH EQUIPMENT MANUFACTURER. PROVIDE ALL NECESSARY FITTINGS AND MAKE FINAL CONNECTIONS TO FITTINGS AS REQUIRED. PIPING TO BE CONCEALED AS MUCH AS POSSIBLE BEHIND THE EQUIPMENT OR BELOW THE COUNTERTOPS.
- 12 PROVIDE EQUIPMENT ISOLATION VALVES IN AN ACCESSIBLE LOCATION ABOVE THE CEILING.
- 13 EXTEND 1/2" COMPRESSED AIR AND 3/4" VACUUM DOWN WITHIN WALL TO SERVE LABORATORY SERVICE FITTINGS. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND TYPE. PROVIDE ALL NECESSARY FITTINGS AND MAKE FINAL CONNECTIONS.

CONFORMED SET 01 JUL 2016

ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016
No. Description Date



KEY PLAN

Drawing Title:

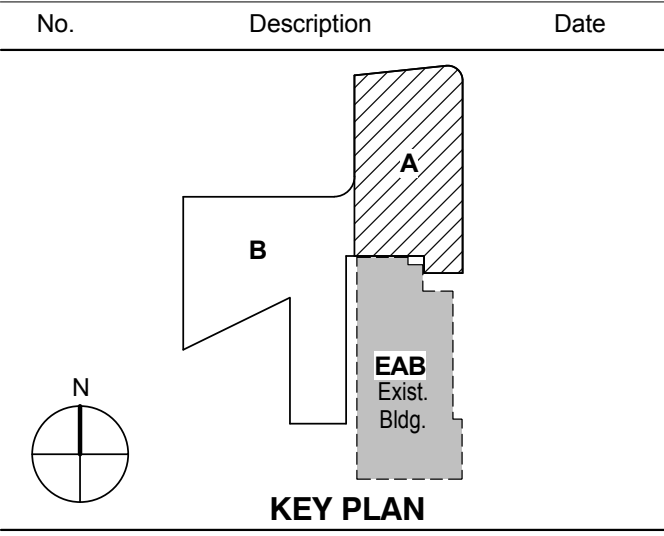
**LEVEL 03 AREA A FLOOR
PLAN- LABORATORY
COMPRESSED AIR AND
VACUUM PIPING**

Project No.: 04561.01 Checked by:

P0203.A

CONFORMED SET 01 JUL 2016

ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016

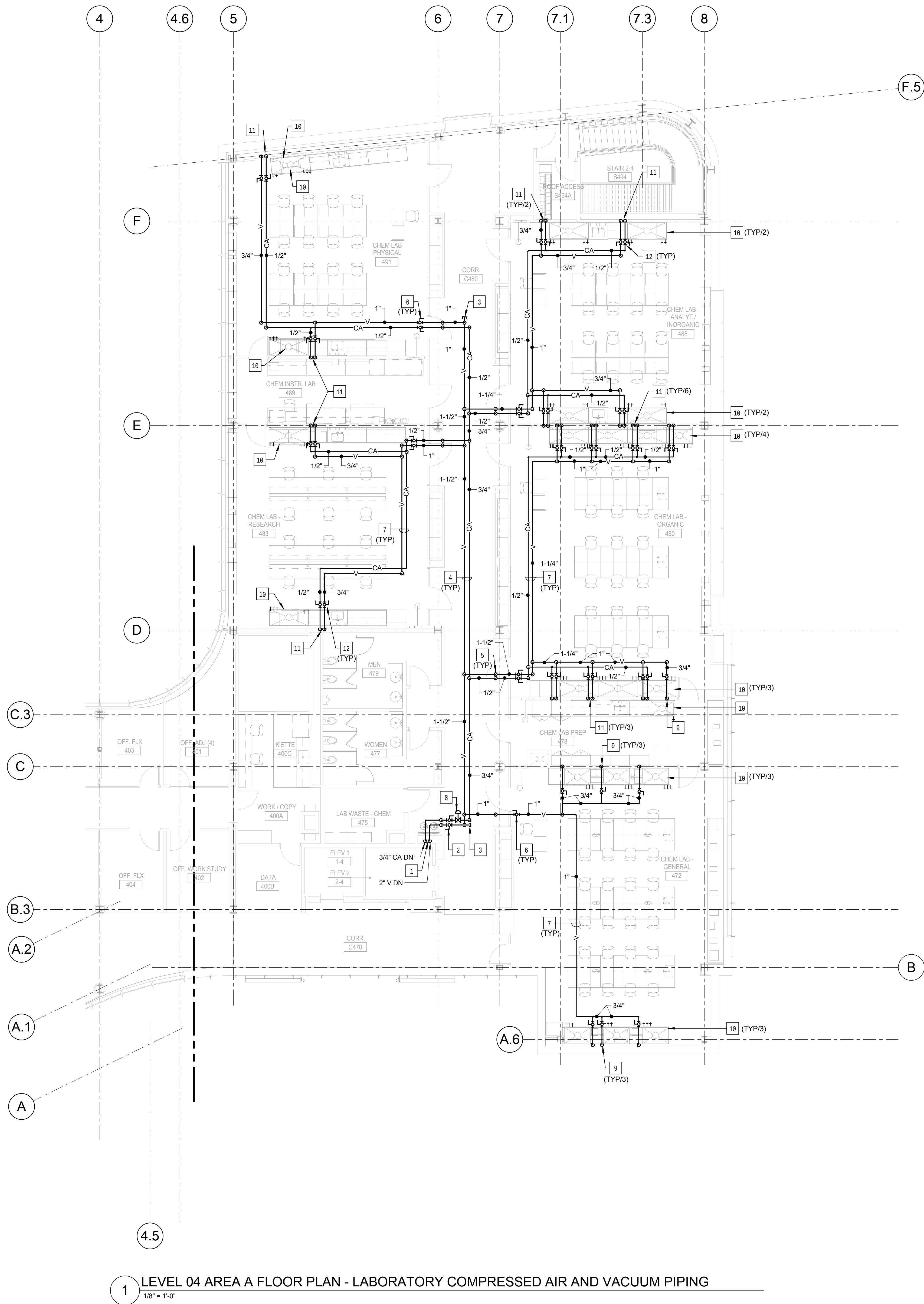


KEY PLAN

LEVEL 04 AREA A FLOOR
PLAN- LABORATORY
COMPRESSED AIR AND
VACUUM PIPING

Project No.: 04561.01 Checked by:

P0204.A



KEYED NOTES: (THIS SHEET ONLY)

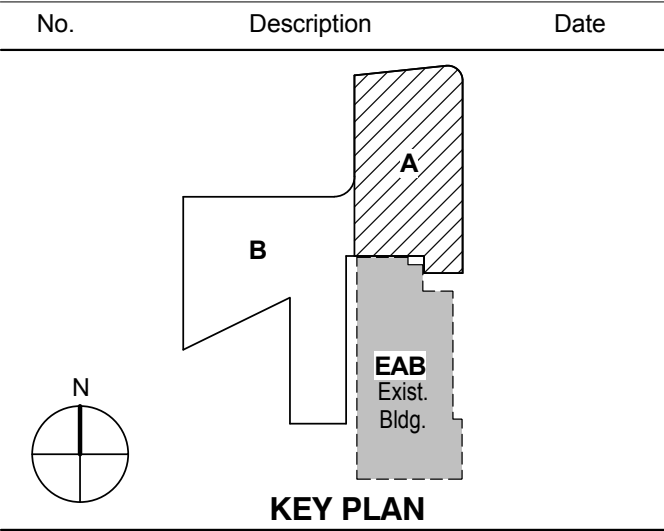
- BUILDING SERVICE RISER FOR LABORATORY COMPRESSED AIR AND VACUUM. COORDINATE INSTALLATION WITH BUILDING STRUCTURE AND OTHER SERVICES WITHIN CHASE.
- PROVIDE FLOOR ISOLATION VALVES AT EACH FLOOR LEVEL. LOCATE VALVES IN ACCESSIBLE CEILING OR PROVIDE ACCESS PANEL AS REQUIRED.
- PROVIDE CLEANOUT PLUG IN PIPING.
- PIPING IN CORRIDOR TO BE RUN AT BOTTOM OF STRUCTURAL STEEL CROSS MEMBERS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- DROP PIPING DOWN TO BELOW STRUCTURAL STEEL MEMBER. HOLD TIGHT TO BOTTOM OF STEEL.
- PROVIDE SHUT-OFF VALVES AT THE ENTRY TO EACH ROOM.
- PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- INSTALL SINGLE STAGE IN-LINE AIR PRESSURE REGULATOR, BEACONMEDAES MODEL 6-122102-01, .75 INCH INLET AND OUTLET, ADJUSTABLE FROM 40 to 110 PSIG DELIVERY RANGE, PROVIDE WITH MODEL 6-130116-00, 0 TO 300 PRESSURE GAUGE. MOUNT ABOVE THE CEILING IN AN ACCESSIBLE LOCATION. POSITION FOR FULL ACCESS TO THE ADJUSTMENT NUT AND GAUGE. SET TO 50 PSIG.
- EXTEND 3/4" VACUUM DOWN WITHIN WALL TO SERVE LABORATORY FUME HOOD SERVICE FITTINGS. VERIFY CONNECTION LOCATIONS AND REQUIREMENTS WITH EQUIPMENT MANUFACTURER. PROVIDE ALL NECESSARY FITTINGS AND MAKE FINAL CONNECTIONS TO FITTINGS AS REQUIRED. PIPING TO BE CONCEALED AS MUCH AS POSSIBLE BEHIND THE EQUIPMENT OR BELOW THE COUNTERTOPS.
- LABORATORY FUME HOOD OR BIO SAFETY CABINET. REFER TO THE ARCHITECTURAL DRAWINGS FOR THE TYPE.
- EXTEND 1/2" COMPRESSED AIR AND 3/4" VACUUM DOWN WITHIN WALL TO SERVE LABORATORY FUME HOOD OR BIO SAFETY CABINET SERVICE FITTINGS. VERIFY CONNECTION LOCATIONS AND REQUIREMENTS WITH EQUIPMENT MANUFACTURER. PROVIDE ALL NECESSARY FITTINGS AND MAKE FINAL CONNECTIONS TO FITTINGS AS REQUIRED. PIPING TO BE CONCEALED AS MUCH AS POSSIBLE BEHIND THE EQUIPMENT OR BELOW THE COUNTERTOPS.
- PROVIDE EQUIPMENT ISOLATION VALVES IN AN ACCESSIBLE LOCATION ABOVE THE CEILING.

1 LEVEL 04 AREA A FLOOR PLAN - LABORATORY COMPRESSED AIR AND VACUUM PIPING
1/8" = 1'-0"

CONFORMED SET

01 JUL 2016

ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016



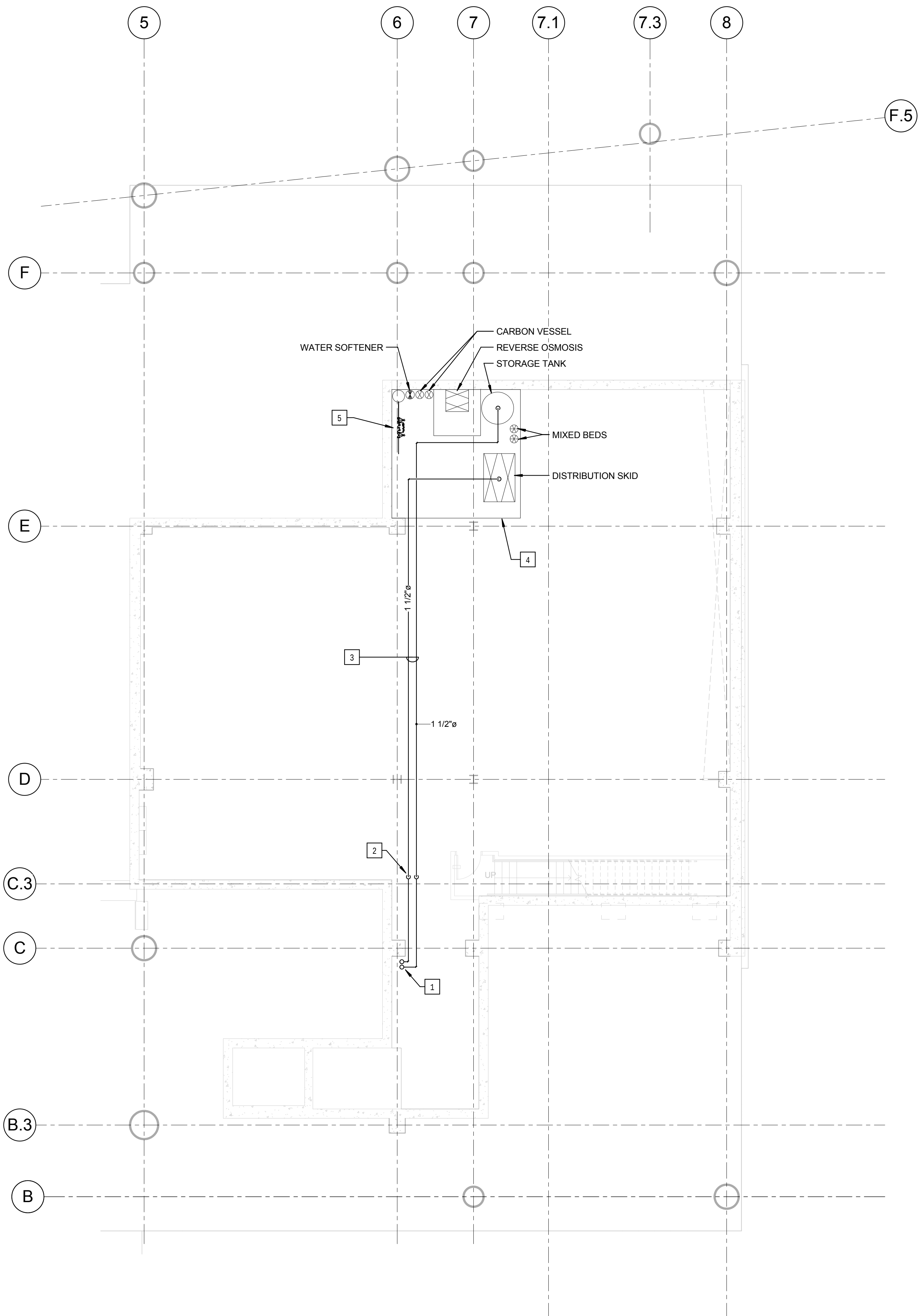
Drawing Title:

LEVEL 0 AREA A FLOOR
PLAN - LABORATORY
DEIONIZED WATER
SYSTEM

Project No.: 04561.01

Checked by:

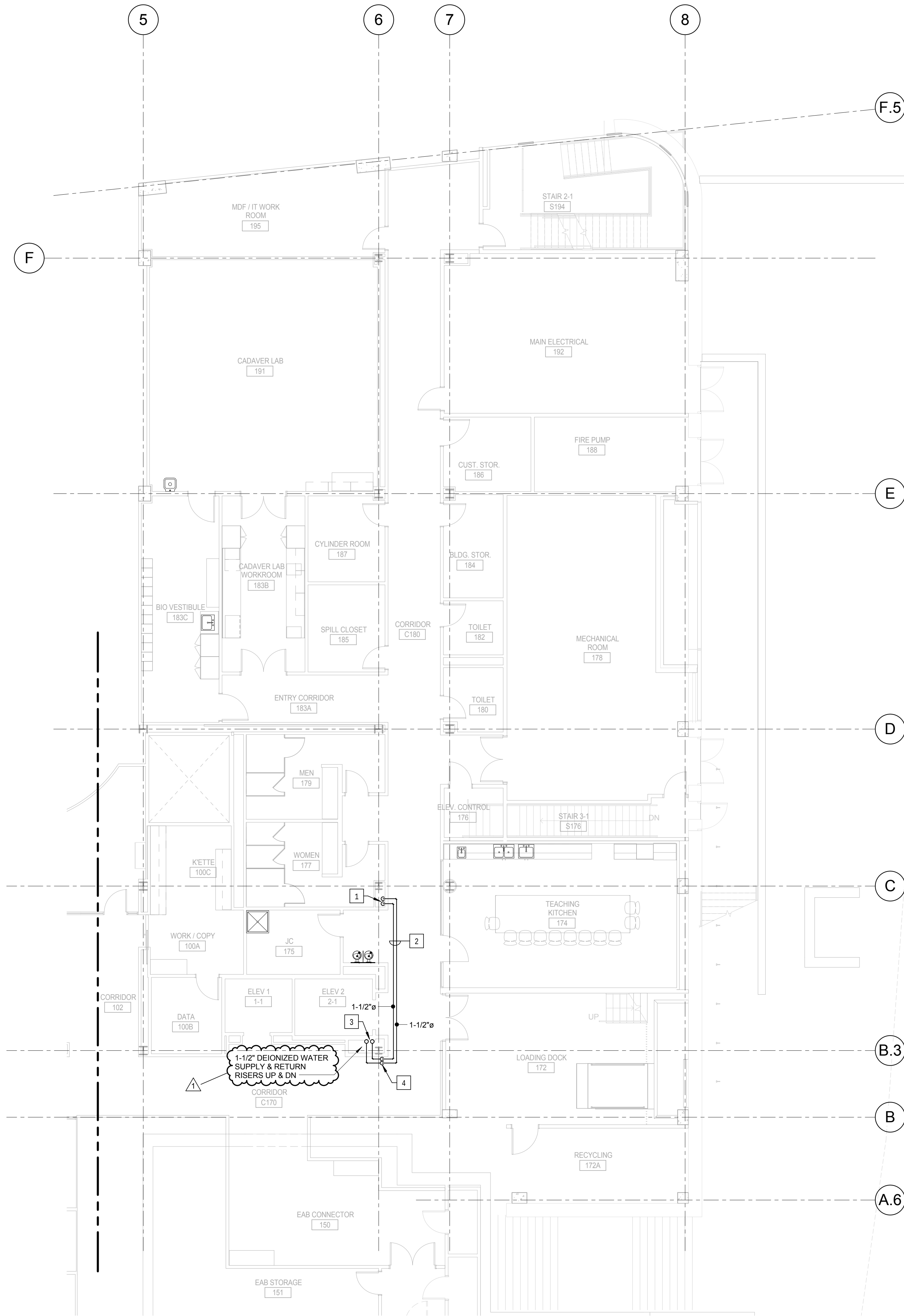
P0300.A



1 LEVEL 0 AREA A FLOOR PLAN - LABORATORY DEIONIZED WATER SYSTEM
1/8" = 1'-0"

KEYED NOTES: (THIS SHEET ONLY)

- 1 DEIONIZED WATER RISERS UP TO LEVEL 1. REFER TO DRAWING P0301.A FOR CONTINUATION.
- 2 DROP PIPING TO BOTTOM OF STRUCTURAL MEMBER. HOLD PIPING TIGHT TO BOTTOM OF STEEL.
- 3 RUN PIPING AT BOTTOM OF STRUCTURAL STEEL CROSS MEMBERS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES.
- 4 DEIONIZED WATER SYSTEM. REFER TO DRAWING P0503, DETAIL 3/P0503 FOR REFERENCE PIPING DIAGRAM. ACTUAL PIPING LAYOUT AND CONFIGURATION MAY VARY WITH DIFFERENT MANUFACTURERS. CONTRACTOR TO COORDINATE INSTALLATION WITH FINAL EQUIPMENT SELECTION.
- 5 BACKFLOW PREVENTER (BFP-3) SHOWN FOR REFERENCE. REFER TO DRAWING P011.

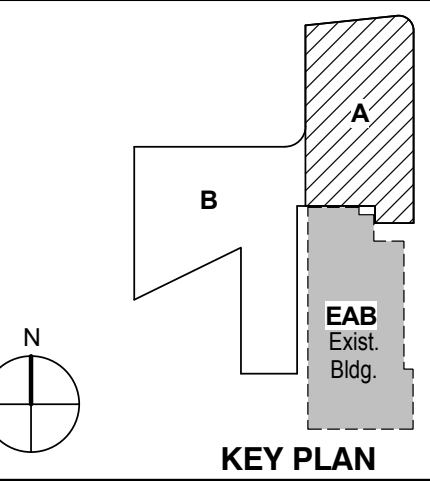


- KEYED NOTES - (THIS SHEET ONLY)**
- 1 DEIONIZED WATER RISERS DOWN TO LEVEL 0. REFER TO DRAWING P0300 A FOR CONTINUATION.
 - 2 RUN PIPING IN CORRIDOR AT BOTTOM OF STRUCTURAL STEEL CROSS MEMBERS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
 - 3 BUILDING SERVICE RISER FOR DEIONIZED WATER. COORDINATE INSTALLATION WITH BUILDING STRUCTURE AND OTHER SERVICES WITHIN CHASE.
 - 4 DROP PIPING DOWN TO BELOW STRUCTURAL STEEL. HOLD TIGHT TO BOTTOM OF STEEL.

1 LEVEL 01 AREA A FLOOR PLAN - LABORATORY DEIONIZED WATER SYSTEM
1/8" = 1'-0"

CONFORMED SET 01 JUL 2016

1 ADDENDUM 2-1 17 MAR 2016		
ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016		
No.	Description	Date



Drawing Title:

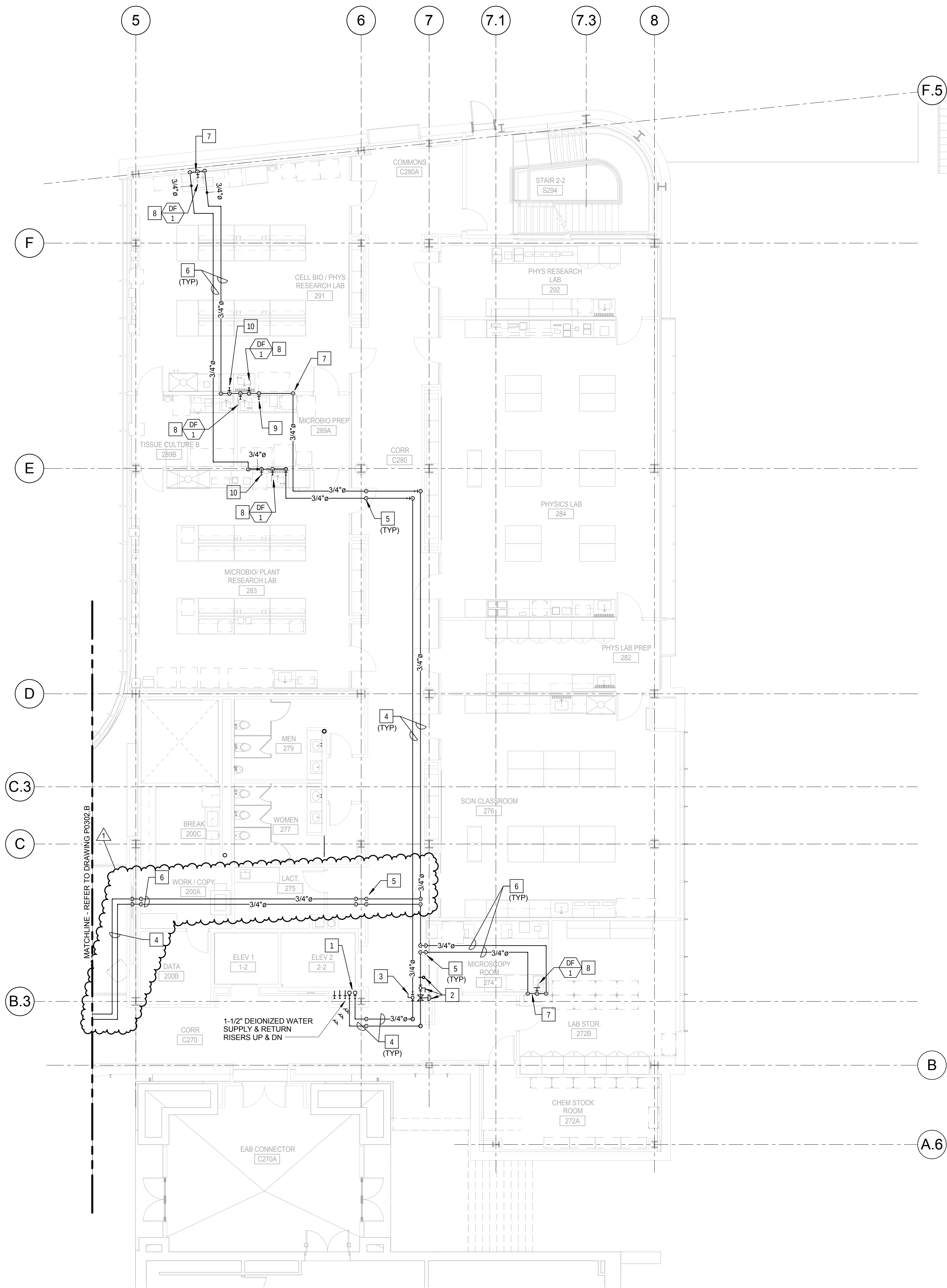
**LEVEL 01 AREA A FLOOR
PLAN - LABORATORY
DEIONIZED WATER
SYSTEM**

Project No.: 04561.01 Checked by:

P0301.A

KEYED NOTES: (THIS SHEET ONLY)

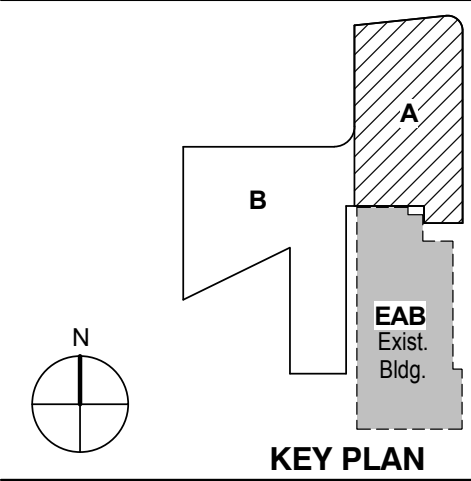
- BUILDING SERVICE RISER FOR DEIONIZED WATER SUPPLY AND RETURN. COORDINATE INSTALLATION AND ROUTING WITH OTHER UTILITIES IN THE CHASE.
- PROVIDE DIAPHRAGM VALVE (GF PIPING SYSTEMS TYPE 514), PRESSURE REDUCING VALVE (GF PIPING SYSTEMS TYPE 552) AND GAGE GUARD/ISOLATOR (GF PIPING SYSTEMS TYPE T53) IN SUPPLY PIPING. LOCATE ASSEMBLY IN AN ACCESSIBLE AREA ABOVE THE CEILING, OR PROVIDE AN ACCESS PANEL AS REQUIRED.
- PROVIDE DIAPHRAGM VALVE (GF PIPING SYSTEMS TYPE 514) IN RETURN PIPING.
- PIPING IN CORRIDOR TO BE RUN AT THE BOTTOM OF THE STRUCTURAL STEEL CROSS MEMBER. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- DROP PIPING DOWN TO BELOW THE STRUCTURAL STEEL MEMBER. HOLD TIGHT TO BOTTOM OF STEEL.
- PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS.
- EXTEND PIPING LOOP DOWN WITHIN WALL TO SERVE DEIONIZED WATER FAUCETS, FIXTURES AND APPLIANCES. EXTEND HORIZONTAL IN WALL TO SERVE EACH OUTLET.
- PROVIDE BALL VALVE CONNECTION BELOW THE COUNTERTOP FOR THE FAUCET. MAKE FINAL CONNECTION BETWEEN THE VALVE AND FAUCET WITH TUBING RECOMMENDED BY THE MANUFACTURER FOR THE APPLICATION. REFER TO DRAWING P0502, DETAIL P0502/2 FOR MORE INFORMATION.
- COUNTERTOP POINT-OF-USE DI WATER POLISHER. PROVIDE VALVE CONNECTION BELOW THE COUNTERTOP. MAKE FINAL CONNECTION BETWEEN THE VALVE AND POLISHER WITH TUBING RECOMMENDED BY THE MANUFACTURER FOR THE APPLICATION. REFER TO DRAWING P0502, DETAIL P0502/2 FOR MORE INFORMATION.
- UNDER COUNTER GLASS WASHER. PROVIDE VALVE CONNECTION BELOW THE COUNTERTOP. MAKE FINAL CONNECTION BETWEEN THE VALVE AND POLISHER WITH TUBING RECOMMENDED BY THE MANUFACTURER FOR THE APPLICATION. REFER TO DRAWING P0502, DETAIL P0502/2 FOR MORE INFORMATION.



1 LEVEL 02 AREA A FLOOR PLAN - LABORATORY DEIONIZED WATER SYSTEM
1/8" = 1'-0"

CONFORMED SET 01 JUL 2016

1 ADDENDUM 2-1 17 MAR 2016		
ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016		
No.	Description	Date



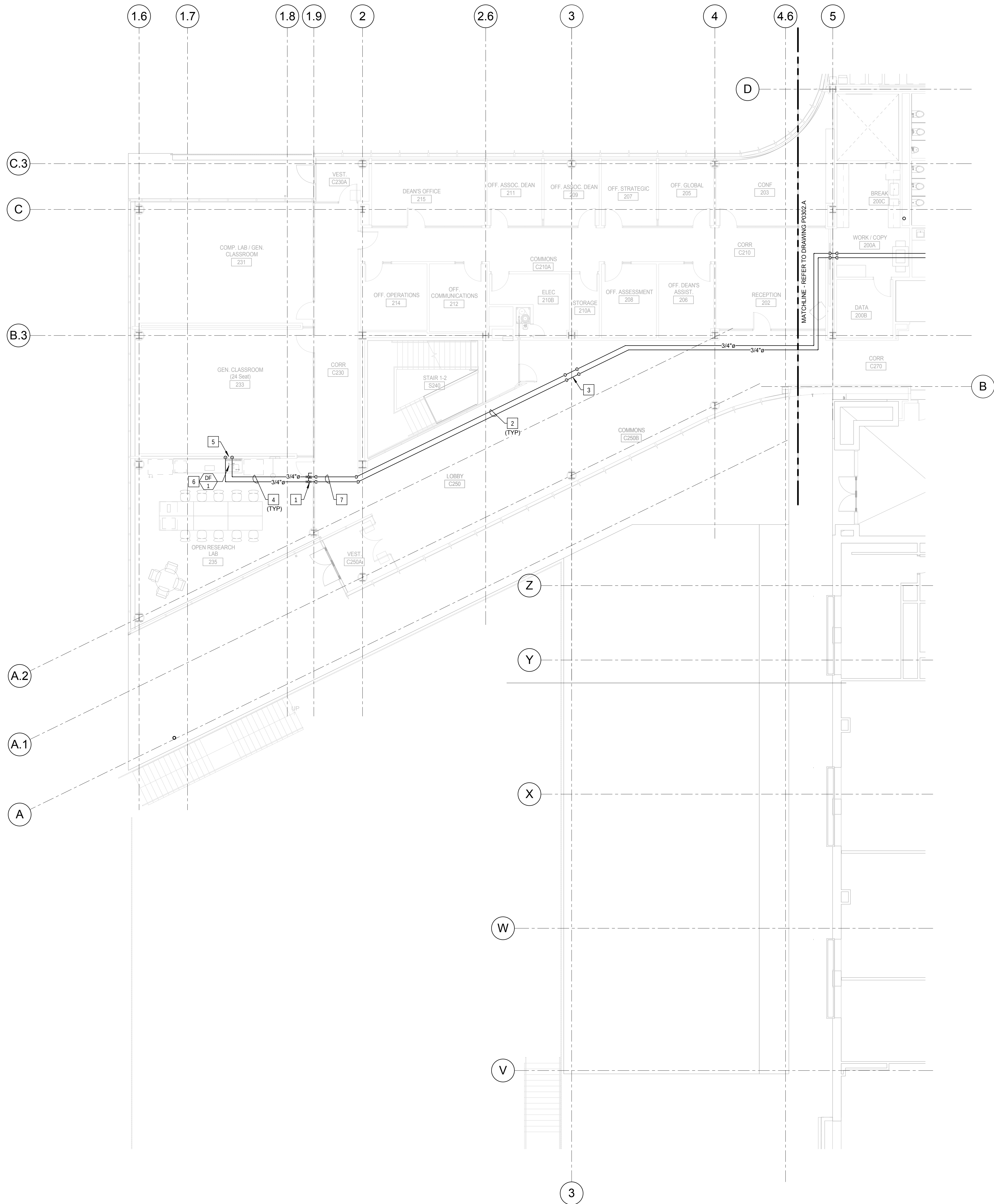
Drawing Title:

LEVEL 02 AREA A FLOOR
PLAN - LABORATORY
DEIONIZED WATER
SYSTEM

Project No.: 04561.01 Checked by:

P0302.A

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3/17/2016 9:55:07 AM



KEYED NOTES: (THIS SHEET ONLY)

- 1 PROVIDE DIAPHRAGM VALVE (GF PIPING SYSTEMS TYPE 514) IN PIPING.
- 2 PIPING IN CORRIDOR TO BE RUN AT THE BOTTOM OF THE STRUCTURAL STEEL CROSS MEMBER. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- 3 DROP PIPING DOWN TO BELOW THE STRUCTURAL STEEL MEMBER. HOLD TIGHT TO BOTTOM OF STEEL.
- 4 PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS.
- 5 EXTEND PIPING LOOP DOWN WITHIN WALL TO SERVE DEIONIZED WATER FAUCETS, FIXTURES AND APPLIANCES. EXTEND HORIZONTAL IN WALL TO SERVE EACH OUTLET.
- 6 PROVIDE BALL VALVE CONNECTION BELOW THE COUNTERTOP FOR THE FAUCET, MAKE FINAL CONNECTION BETWEEN THE VALVE AND FAUCET WITH TUBING RECOMMENDED BY THE MANUFACTURER FOR THE APPLICATION. REFER TO DRAWING P050, DETAIL 2P0502.
- 7 RAISE PIPING CROSSING CORRIDOR AS REQUIRED TO AVOID CONFLICTS WITH OTHER TRADES.



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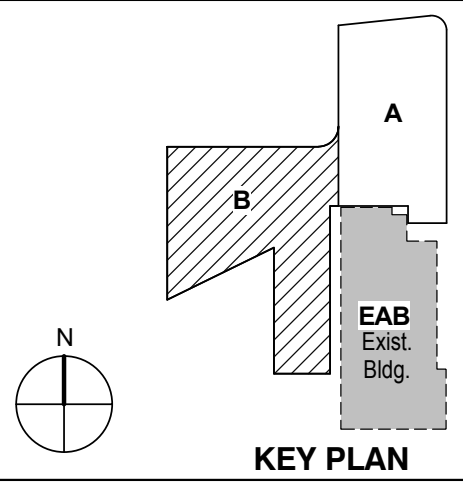
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CONFORMED SET 01 JUL 2016

1	ADDENDUM 2-1	17 MAR 2016
1	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016
No.	Description	Date



KEY PLAN

Drawing Title:

**LEVEL 02 AREA B FLOOR
PLAN - LABORATORY
DEIONIZED WATER
SYSTEM**

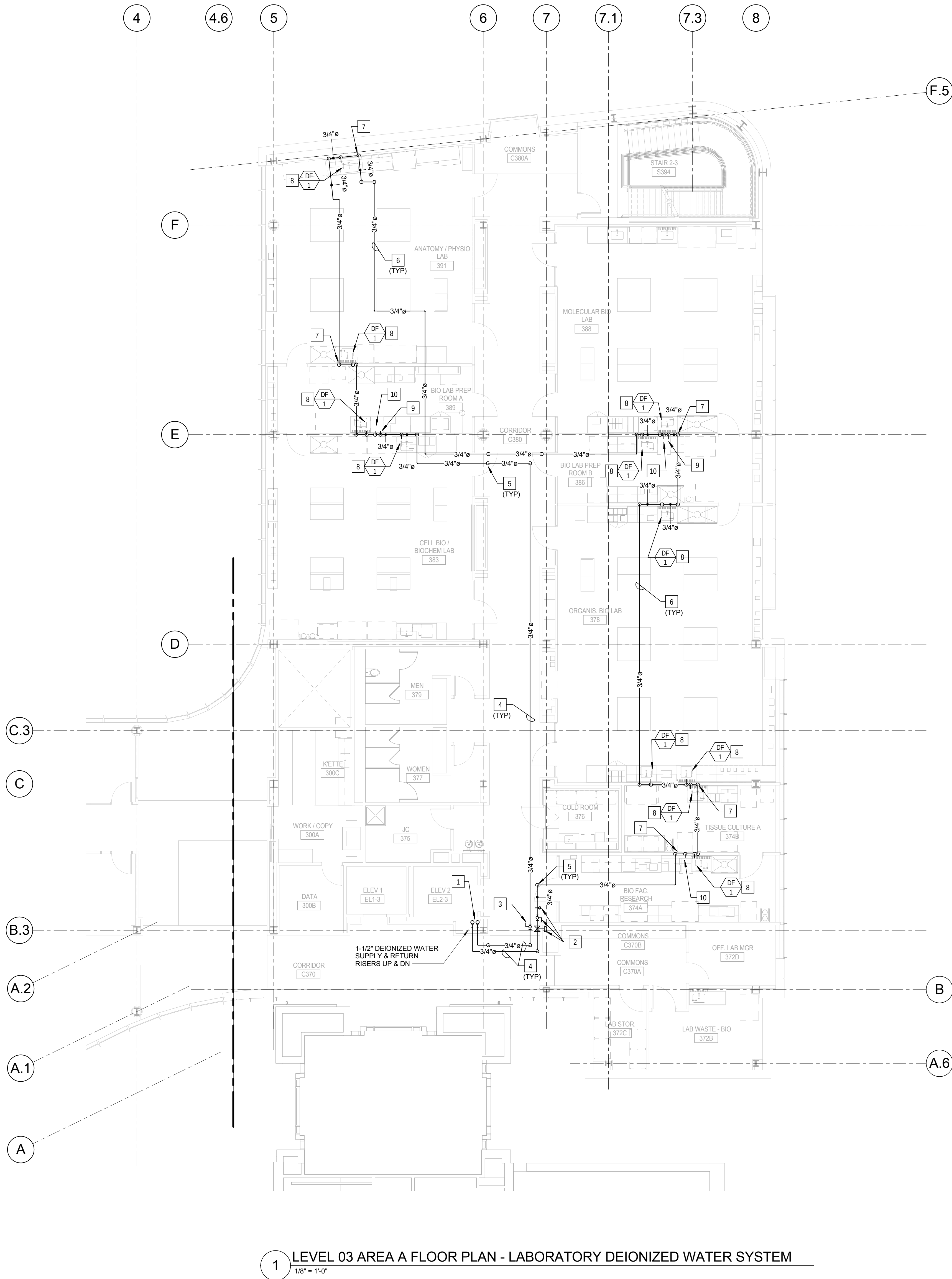
Project No.: 04561.01 Checked by:

P0302.B

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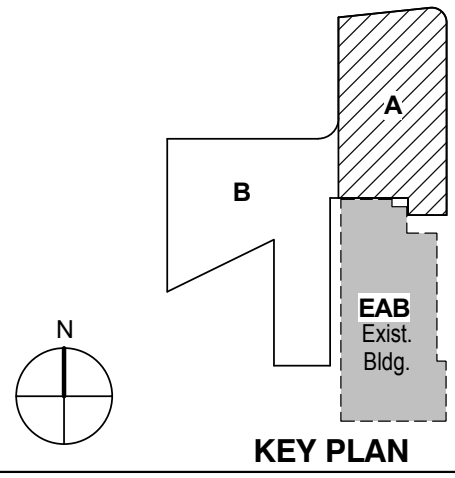
- BUILDING SERVICE RISER FOR DEIONIZED WATER SUPPLY AND RETURN. COORDINATE INSTALLATION AND ROUTING WITH OTHER UTILITIES IN THE CHASE.
- PROVIDE DIAPHRAGM VALVE (GF PIPING SYSTEMS TYPE 514), PRESSURE REDUCING VALVE (GF PIPING SYSTEMS TYPE 582) AND GAGE GUARD/ISOLATOR (GF PIPING SYSTEMS TYPE T53) IN SUPPLY PIPING. LOCATE ASSEMBLY IN AN ACCESSIBLE AREA ABOVE THE CEILING, OR PROVIDE AN ACCESS PANEL AS REQUIRED.
- PROVIDE DIAPHRAGM VALVE (GF PIPING SYSTEMS TYPE 514) IN RETURN PIPING.
- PIPING IN CORRIDOR TO BE RUN AT THE BOTTOM OF THE STRUCTURAL STEEL CROSS MEMBER. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- DROP PIPING DOWN TO BELOW THE STRUCTURAL STEEL MEMBER. HOLD TIGHT TO BOTTOM OF STEEL.
- PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS.
- EXTEND PIPING LOOP DOWN WITHIN WALL TO SERVE DEIONIZED WATER FAUCETS, FIXTURES AND APPLIANCES. EXTEND HORIZONTAL IN WALL TO SERVE EACH OUTLET.
- PROVIDE BALL VALVE CONNECTION BELOW THE COUNTERTOP FOR THE FAUCET. MAKE FINAL CONNECTION BETWEEN THE VALVE AND FAUCET WITH TUBING RECOMMENDED BY THE MANUFACTURER FOR THE APPLICATION. REFER TO DRAWING P0502, DETAIL 2 FOR ADDITIONAL INFORMATION.
- COUNTERTOP POINT-OF-USE DI WATER POLISHER. PROVIDE VALVE CONNECTION BELOW THE COUNTERTOP. MAKE FINAL CONNECTION BETWEEN THE VALVE AND POLISHER WITH TUBING RECOMMENDED BY THE MANUFACTURER FOR THE APPLICATION. REFER TO DRAWING P0502, DETAIL 2 FOR ADDITIONAL INFORMATION.
- UNDER COUNTER GLASS WASHER. PROVIDE VALVE CONNECTION BELOW THE COUNTERTOP. MAKE FINAL CONNECTION BETWEEN THE VALVE AND POLISHER WITH TUBING RECOMMENDED BY THE MANUFACTURER FOR THE APPLICATION. REFER TO DRAWING P0502, DETAIL 2 FOR ADDITIONAL INFORMATION.



1 LEVEL 03 AREA A FLOOR PLAN - LABORATORY DEIONIZED WATER SYSTEM
1/8" = 1'-0"

CONFORMED SET 01 JUL 2016

1 ADDENDUM 2-1 17 MAR 2016		
ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016		
No.	Description	Date

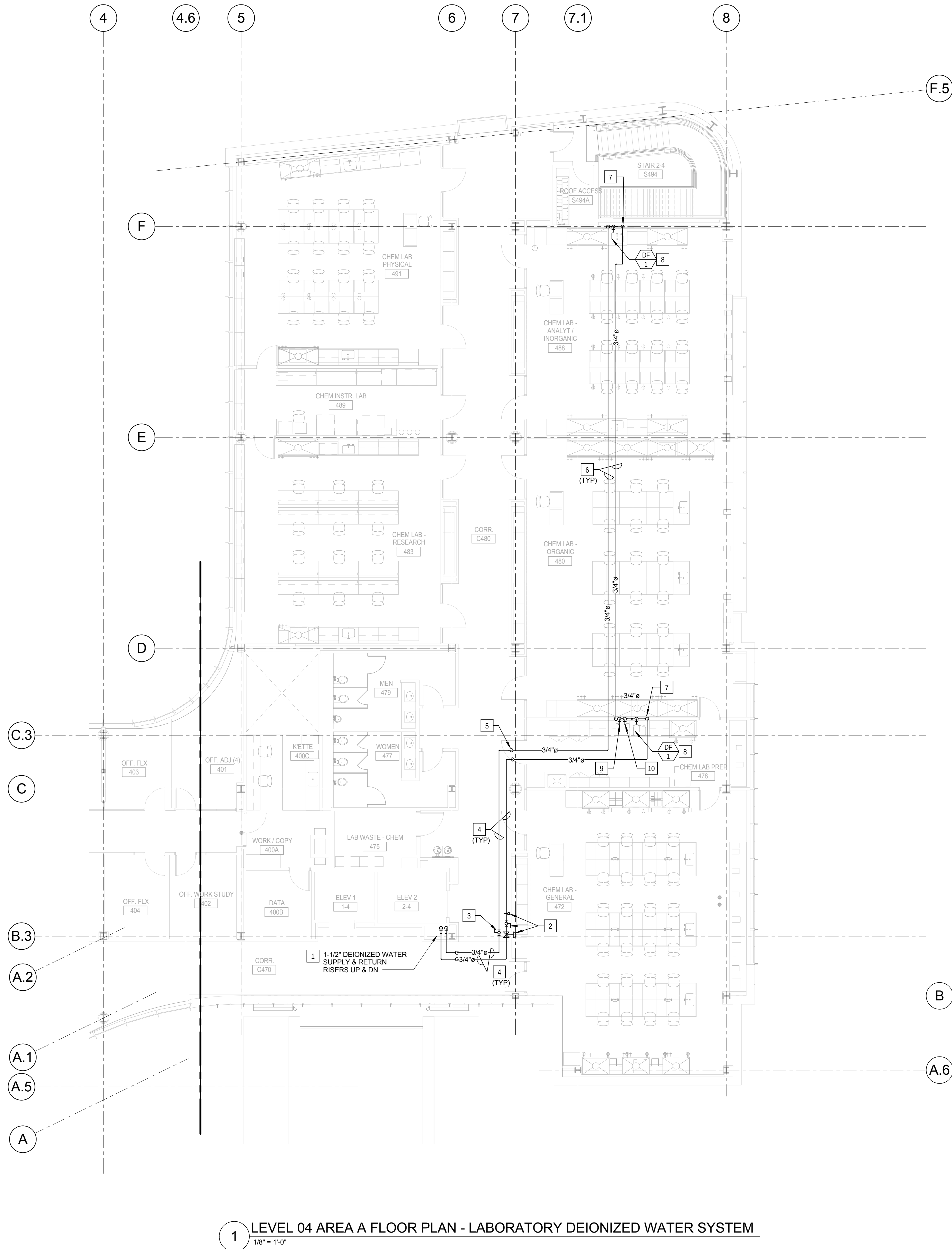


Drawing Title:

LEVEL 03 AREA A FLOOR
PLAN - LABORATORY
DEIONIZED WATER
SYSTEM

Project No.: 04561.01 Checked by:

P0303.A



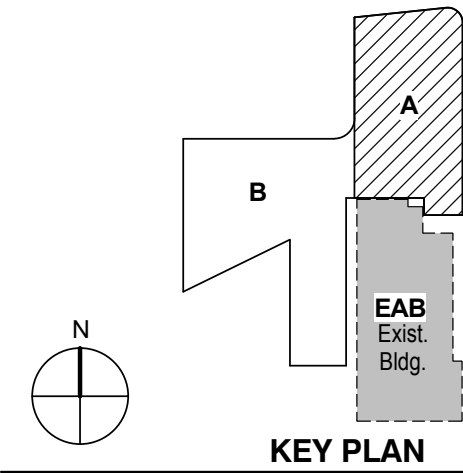
KEYED NOTES: (THIS SHEET ONLY)

- BUILDING SERVICE RISER FOR DEIONIZED WATER SUPPLY AND RETURN. COORDINATE INSTALLATION AND ROUTING WITH OTHER UTILITIES IN THE CHASE.
- PROVIDE DIAPHRAGM VALVE (GF PIPING SYSTEMS TYPE 514), PRESSURE REDUCING VALVE (GF PIPING SYSTEMS TYPE 582) AND GAGE GUARD/ISOLATOR (GF PIPING SYSTEMS TYPE T83) IN SUPPLY PIPING. LOCATE ASSEMBLY IN AN ACCESSIBLE AREA ABOVE THE CEILING, OR PROVIDE AN ACCESS PANEL AS REQUIRED. REFER TO DRAWING P0502, DETAIL 10/P0502.
- PROVIDE DIAPHRAGM VALVE (GF PIPING SYSTEMS TYPE 514) IN RETURN PIPING.
- PIPING IN CORRIDOR TO BE RUN AT THE BOTTOM OF THE STRUCTURAL STEEL CROSS MEMBER. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- DROP PIPING DOWN TO BELOW THE STRUCTURAL STEEL MEMBER. HOLD TIGHT TO BOTTOM OF STEEL.
- PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS.
- EXTEND PIPING LOOP DOWN WITHIN WALL TO SERVE DEIONIZED WATER FAUCETS, FIXTURES AND APPLIANCES. EXTEND HORIZONTAL IN WALL TO SERVE EACH OUTLET.
- PROVIDE BALL VALVE CONNECTION BELOW THE COUNTERTOP FOR THE FAUCET, MAKE FINAL CONNECTION BETWEEN THE VALVE AND FAUCET WITH TUBING RECOMMENDED BY THE MANUFACTURER FOR THE APPLICATION. REFER TO PIPING DETAIL ON THIS SHEET FOR ADDITIONAL INFORMATION. REFER TO DRAWING P0502, DETAIL 2/P0502.
- COUNTERTOP POINT-OF-USE DI WATER POLISHER. PROVIDE VALVE CONNECTION BELOW THE COUNTERTOP. MAKE FINAL CONNECTION BETWEEN THE VALVE AND POLISHER WITH TUBING RECOMMENDED BY THE MANUFACTURER FOR THE APPLICATION. REFER TO PIPING DETAIL ON THIS SHEET FOR ADDITIONAL INFORMATION. REFER TO DRAWING P0502, DETAIL 2/P0502.
- UNDER COUNTER GLASS WASHER. PROVIDE VALVE CONNECTION BELOW THE COUNTERTOP. MAKE FINAL CONNECTION BETWEEN THE VALVE AND POLISHER WITH TUBING RECOMMENDED BY THE MANUFACTURER FOR THE APPLICATION. REFER TO PIPING DETAIL ON THIS SHEET FOR ADDITIONAL INFORMATION. REFER TO DRAWING P0502, DETAIL 2/P0502.

1 LEVEL 04 AREA A FLOOR PLAN - LABORATORY DEIONIZED WATER SYSTEM
1/8" = 1'-0"

CONFORMED SET 01 JUL 2016

ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016
No. Description Date



KEY PLAN

LEVEL 04 AREA A FLOOR
PLAN - LABORATORY
DEIONIZED WATER
SYSTEM

Project No.: 04561.01 Checked by:

P0304.A

CONFORMED SET 01 JUL 2016

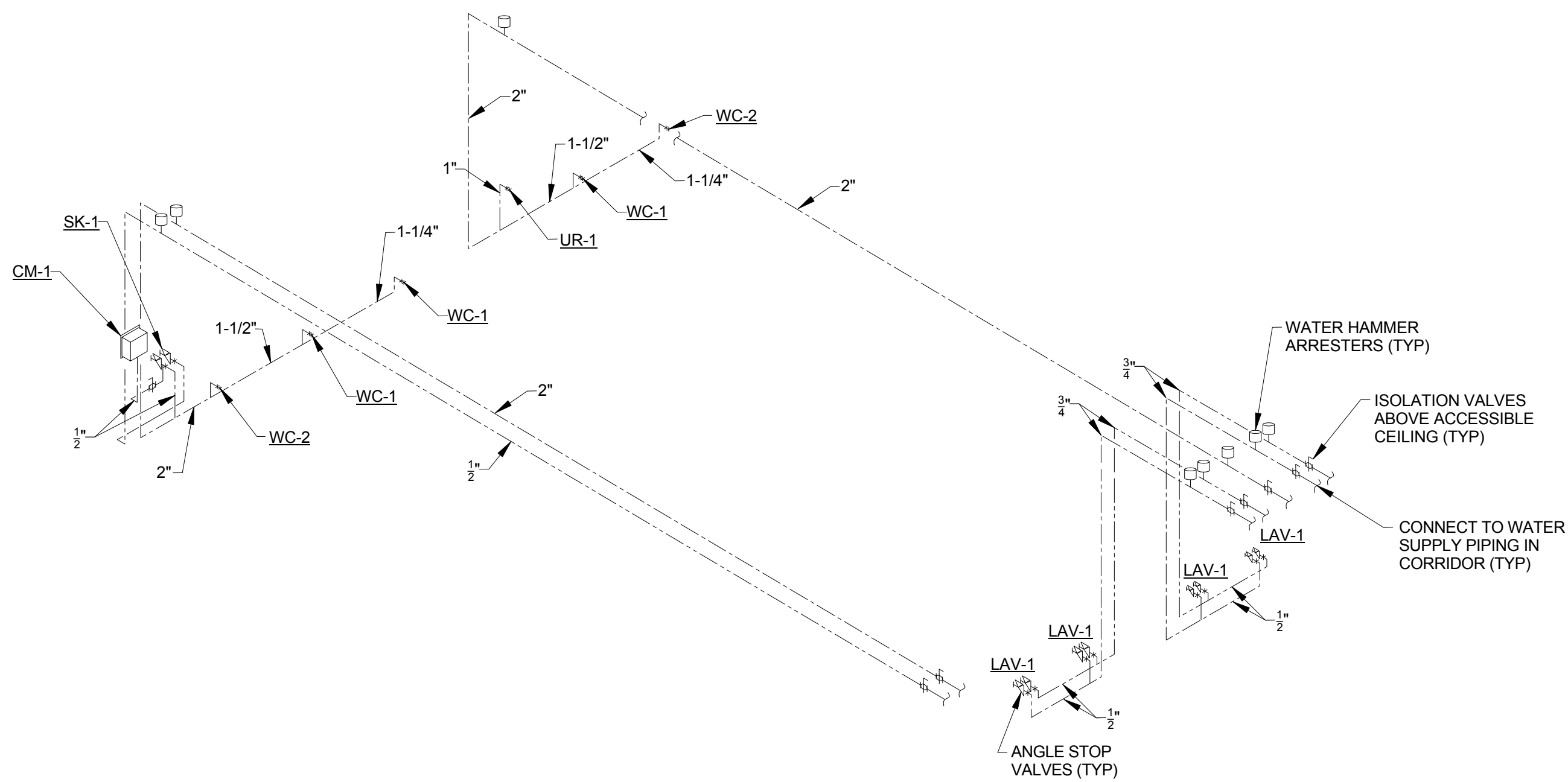
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1	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016
No.	Description	Date

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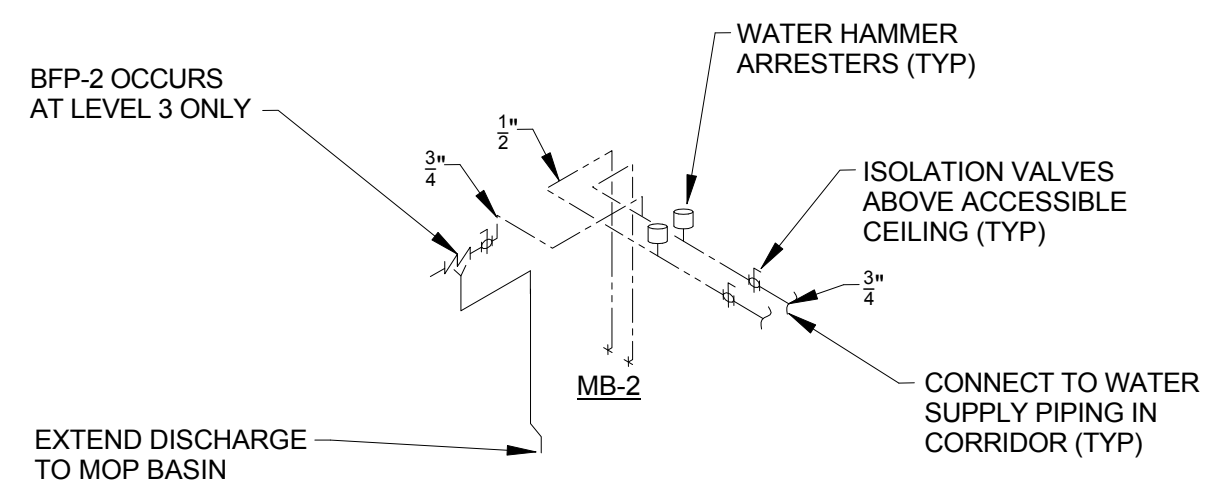
RISERS - PLUMBING

Project No.: 04561.01 Checked by:

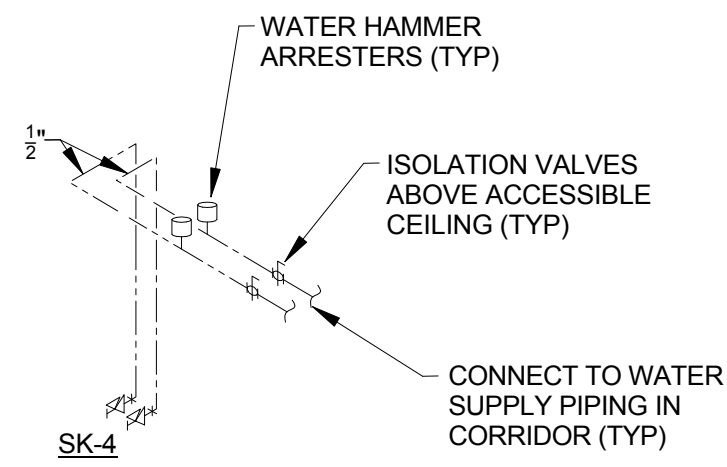
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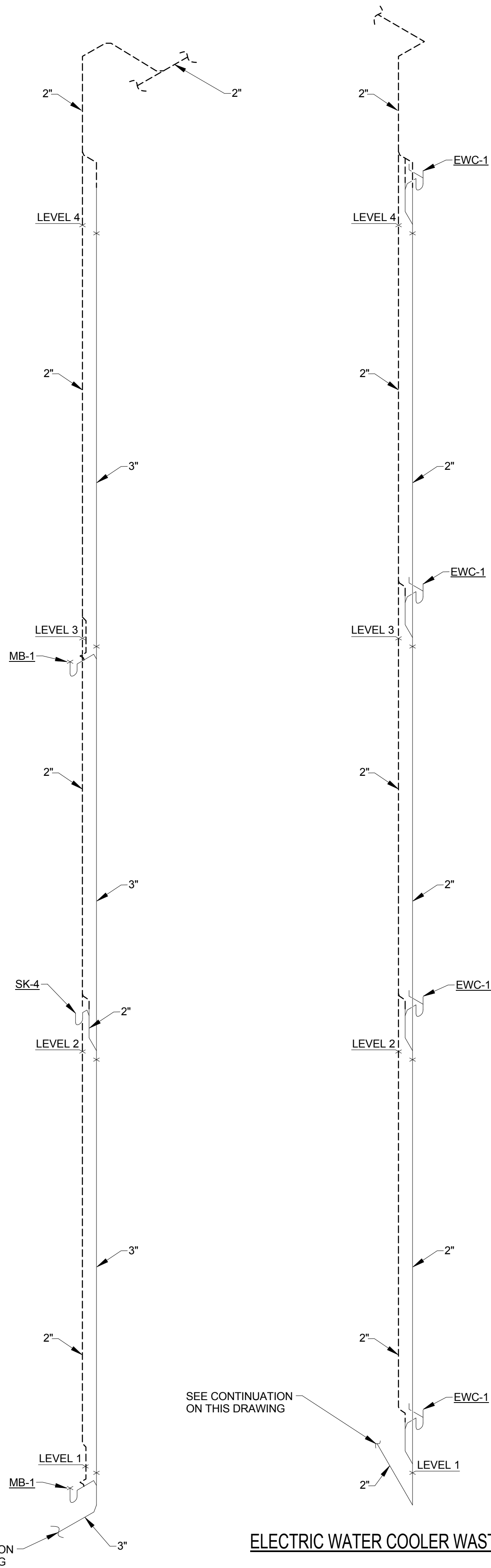
TYPICAL PUBLIC TOILET ROOM WATER SUPPLY DIAGRAM



TYPICAL MOP BASIN WATER SUPPLY DIAGRAM

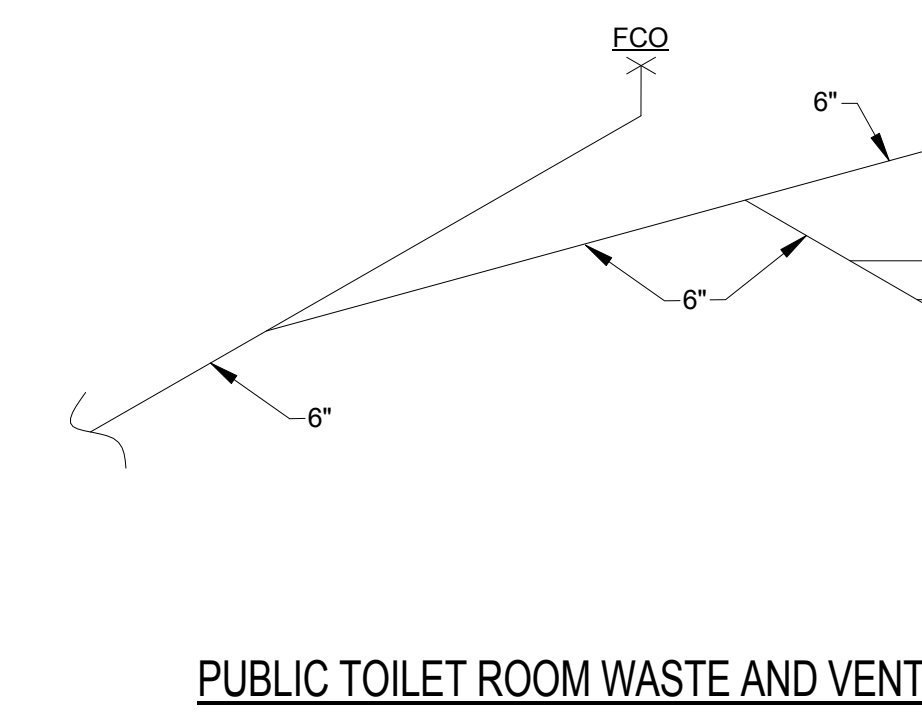


ROOM 275 SINGLE BOWL SINK WATER SUPPLY DIAGRAM



MOP BASIN AND SINK WASTE AND VENT

ELECTRIC WATER COOLER WASTE AND VENT



1
P0401
SCALE: N.T.S.

CENTER CORE PLUMBING RISERS

CONFORMED SET 01 JUL 2016

3	ADDENDUM 2-4	24 MAY 2016
2	ADDENDUM 2-2	19 APR 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016
No.	Description	Date

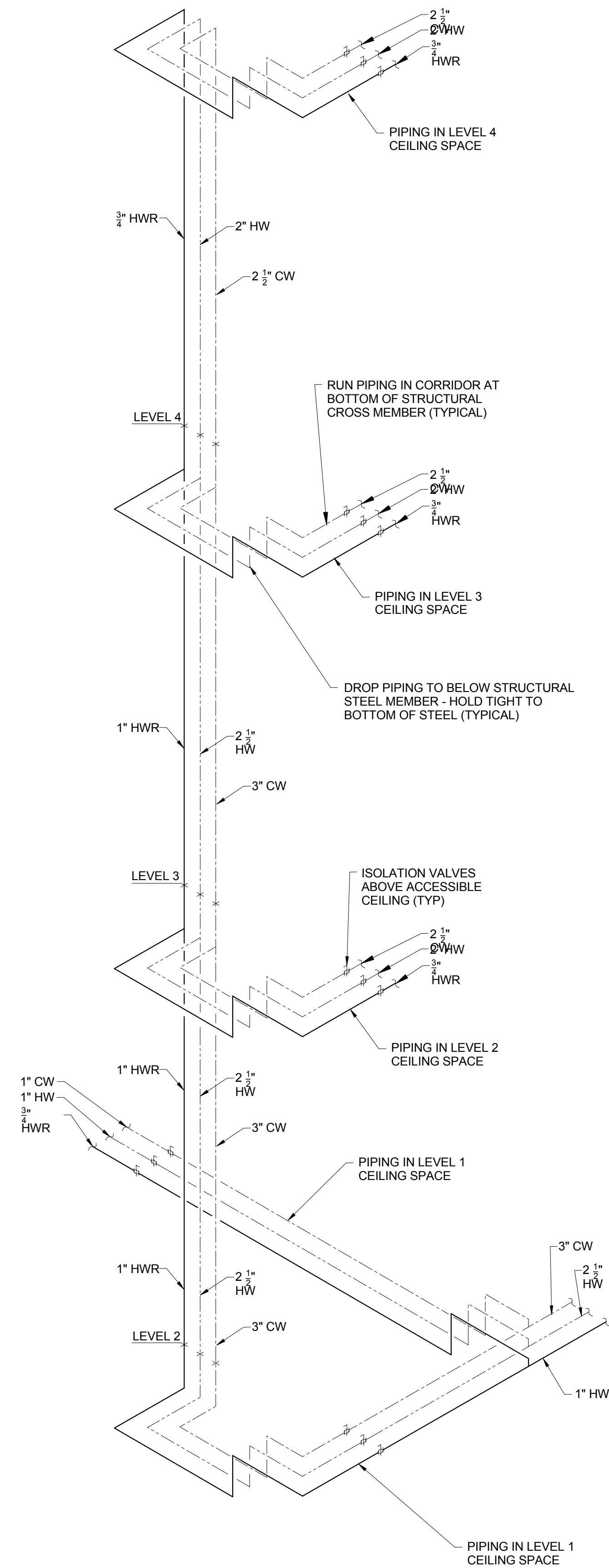
Drawing Title:

RISERS - PLUMBING

Project No.: 04561.01

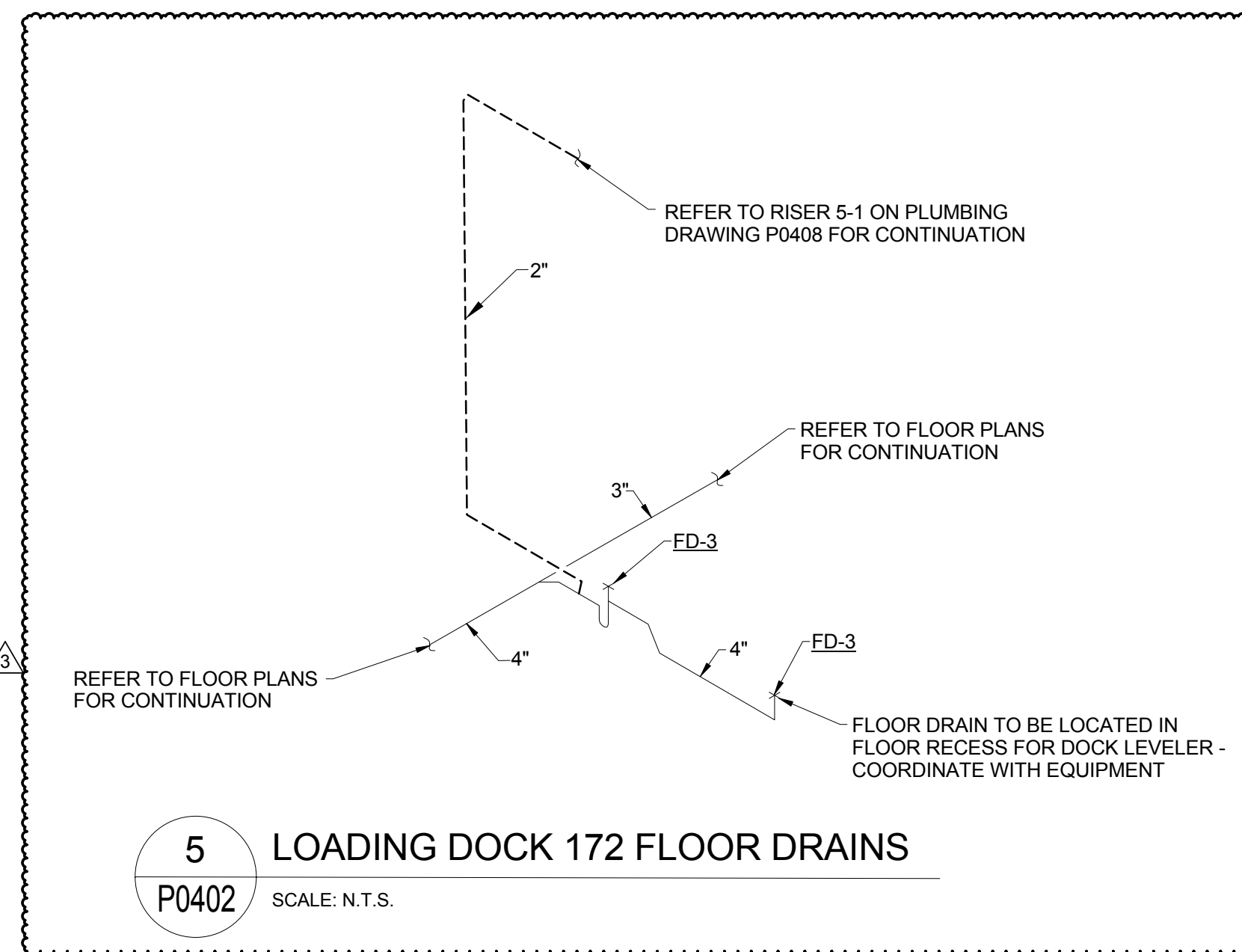
Checked by:

P0402

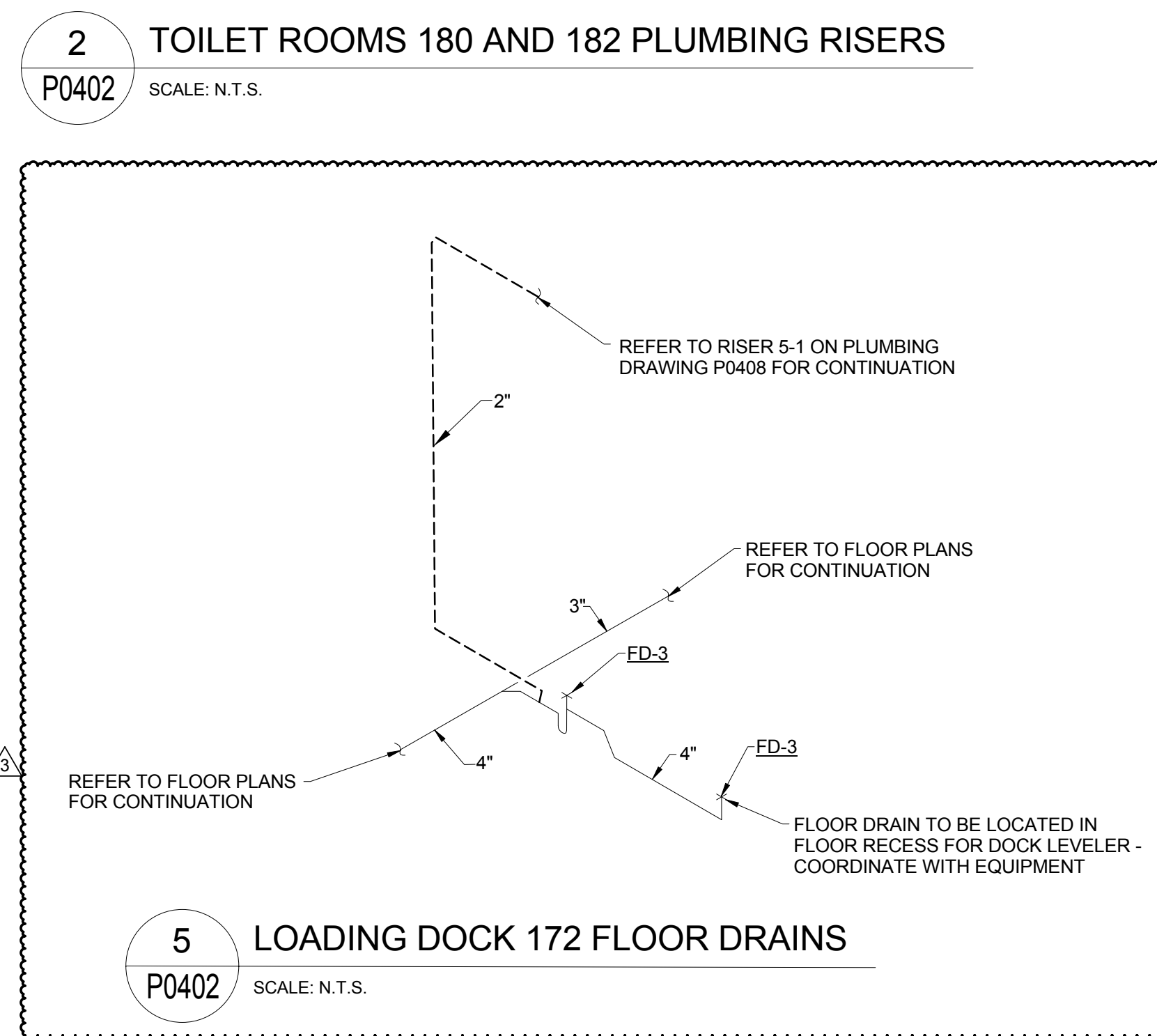


4 DOMESTIC WATER SERVICE BUILDING RISER
P0402 SCALE: N.T.S.

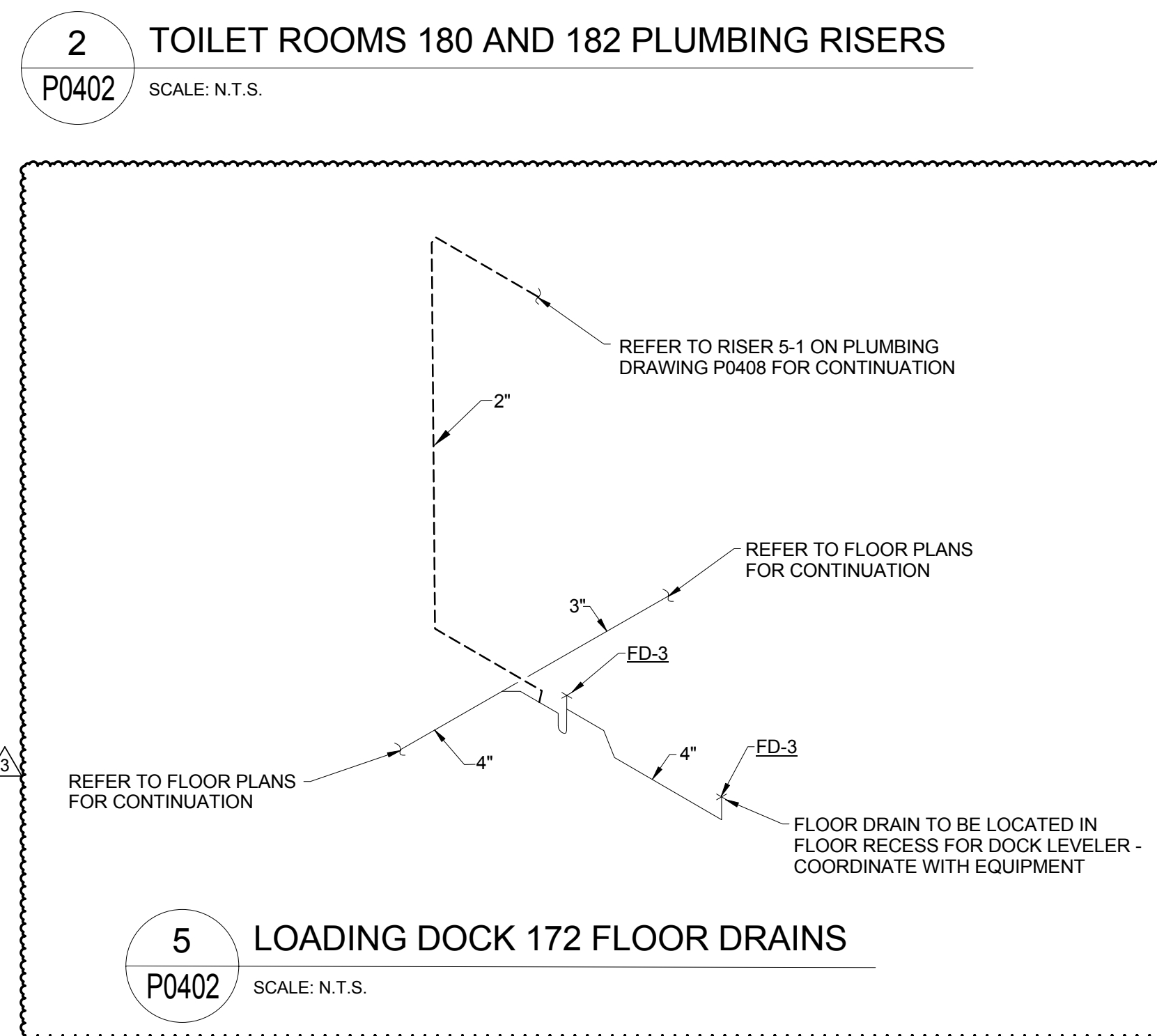
2 TOILET ROOMS 180 AND 182 PLUMBING RISERS
P0402 SCALE: N.T.S.



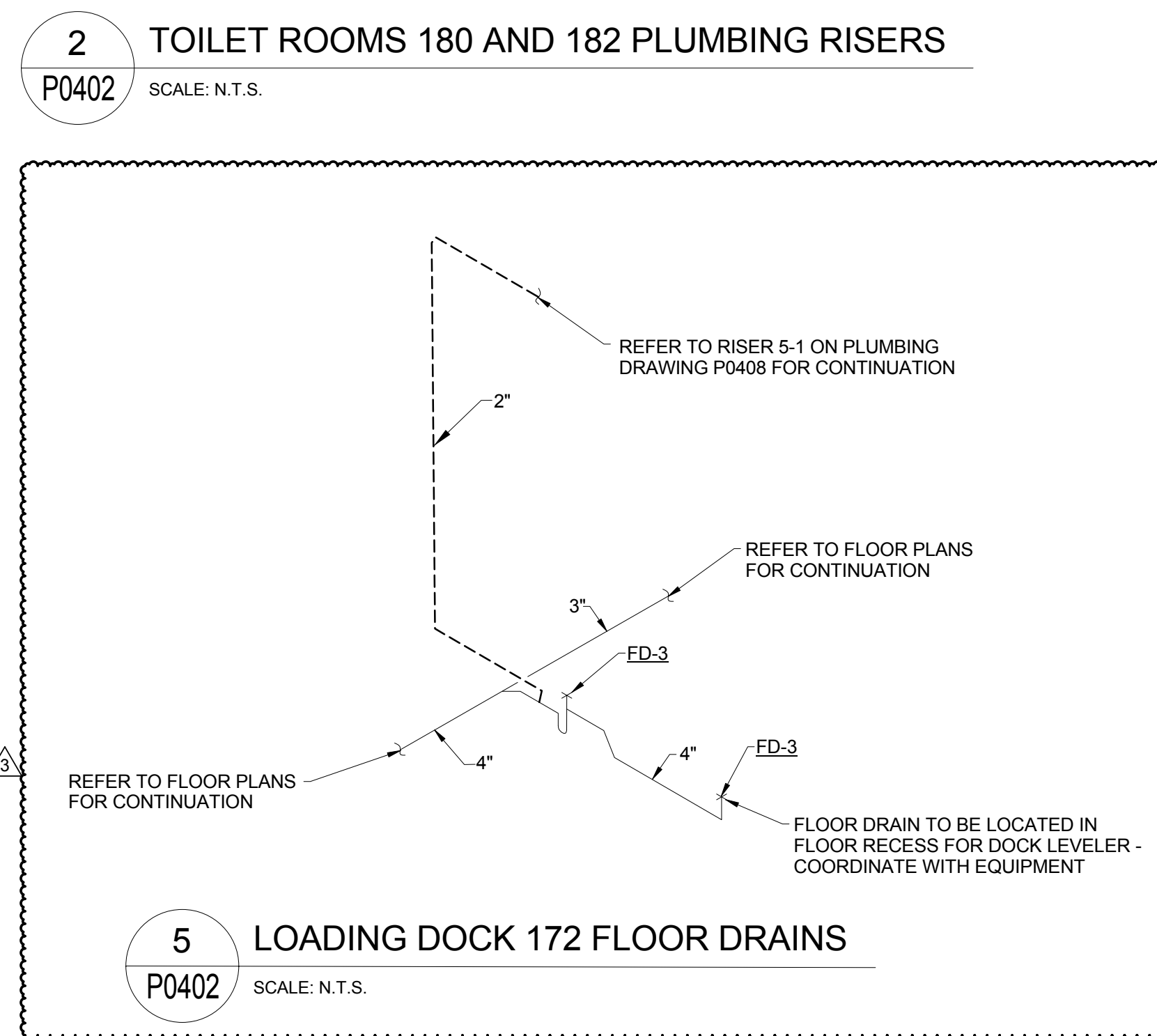
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P0402 SCALE: N.T.S.



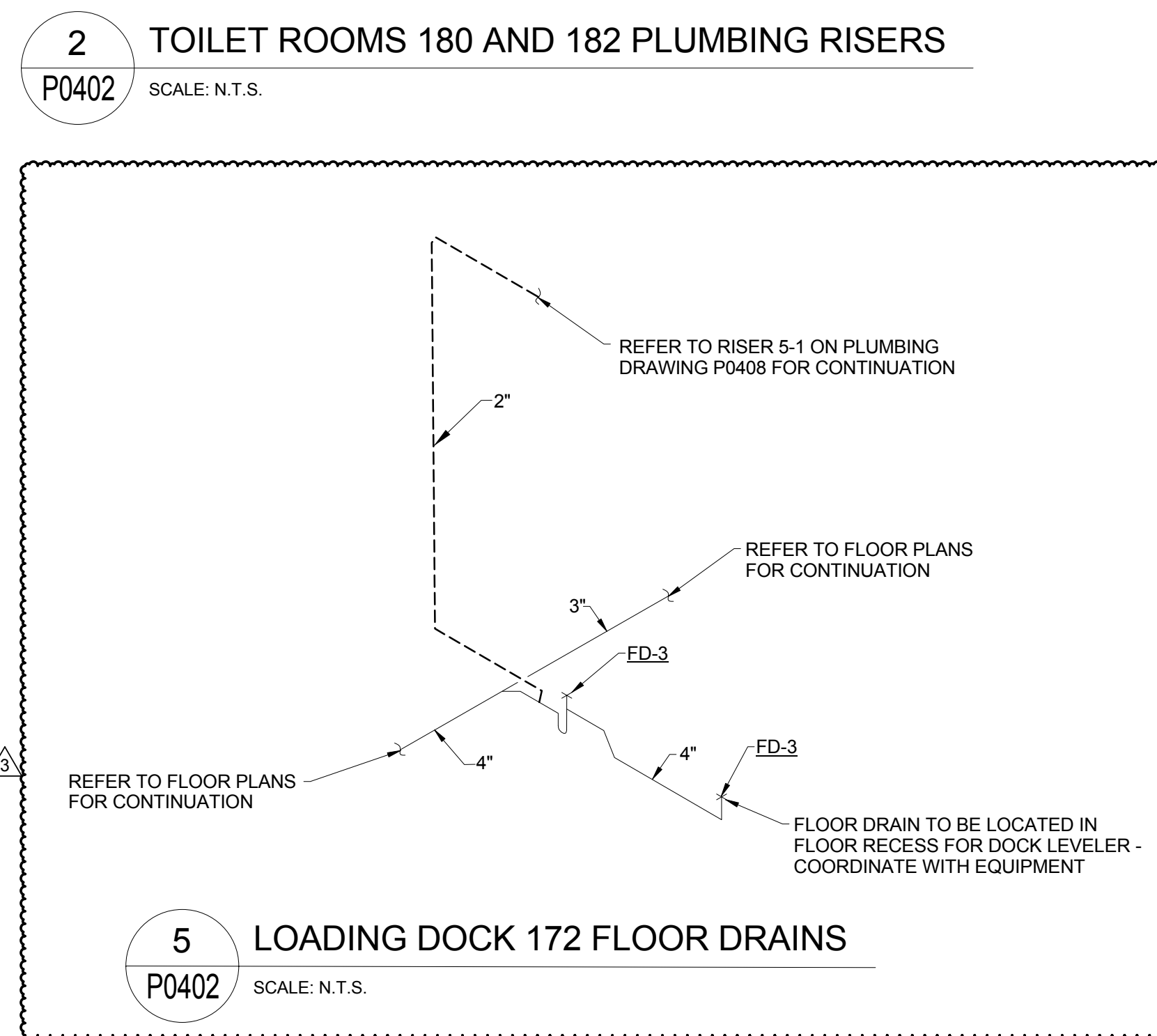
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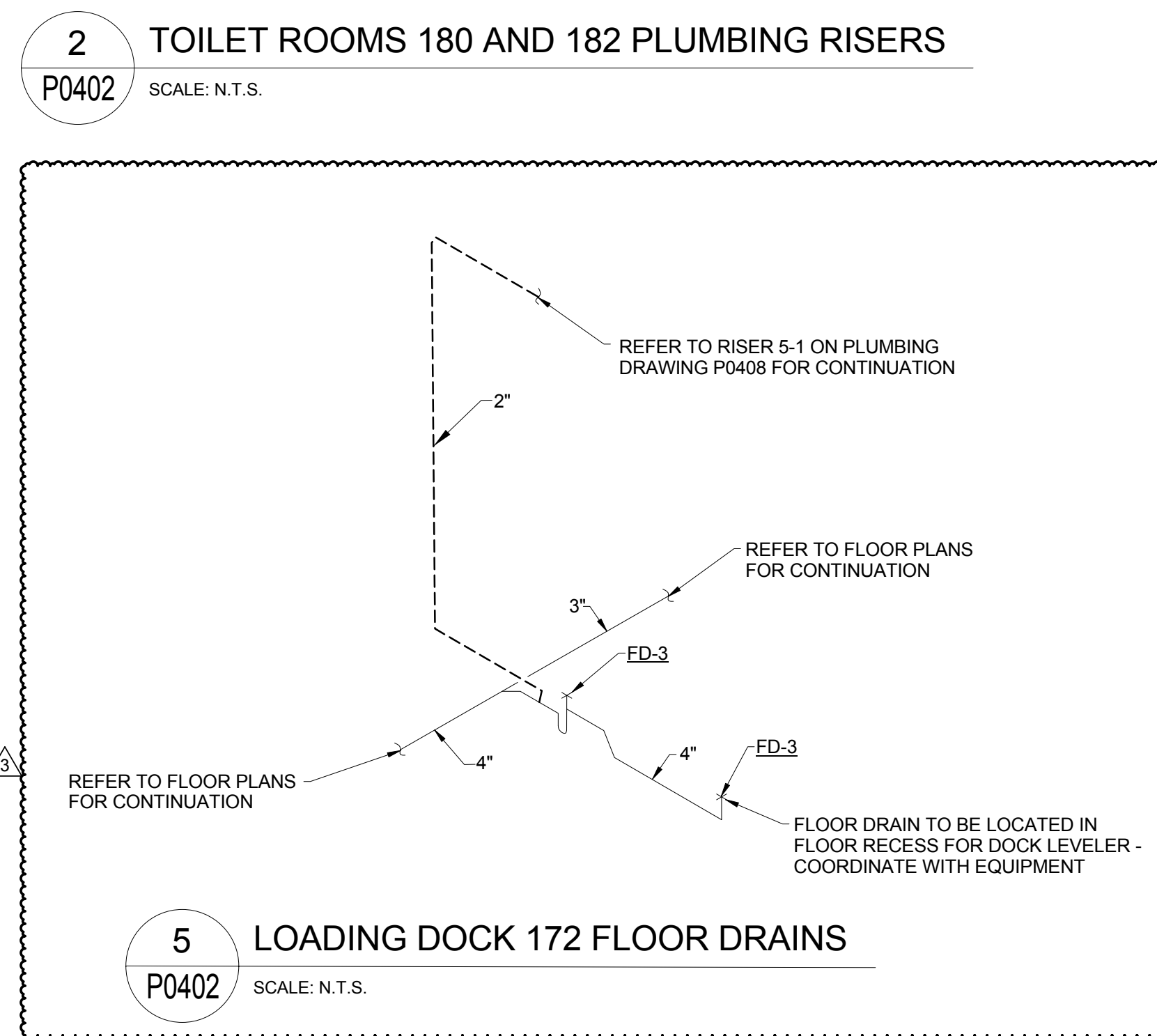
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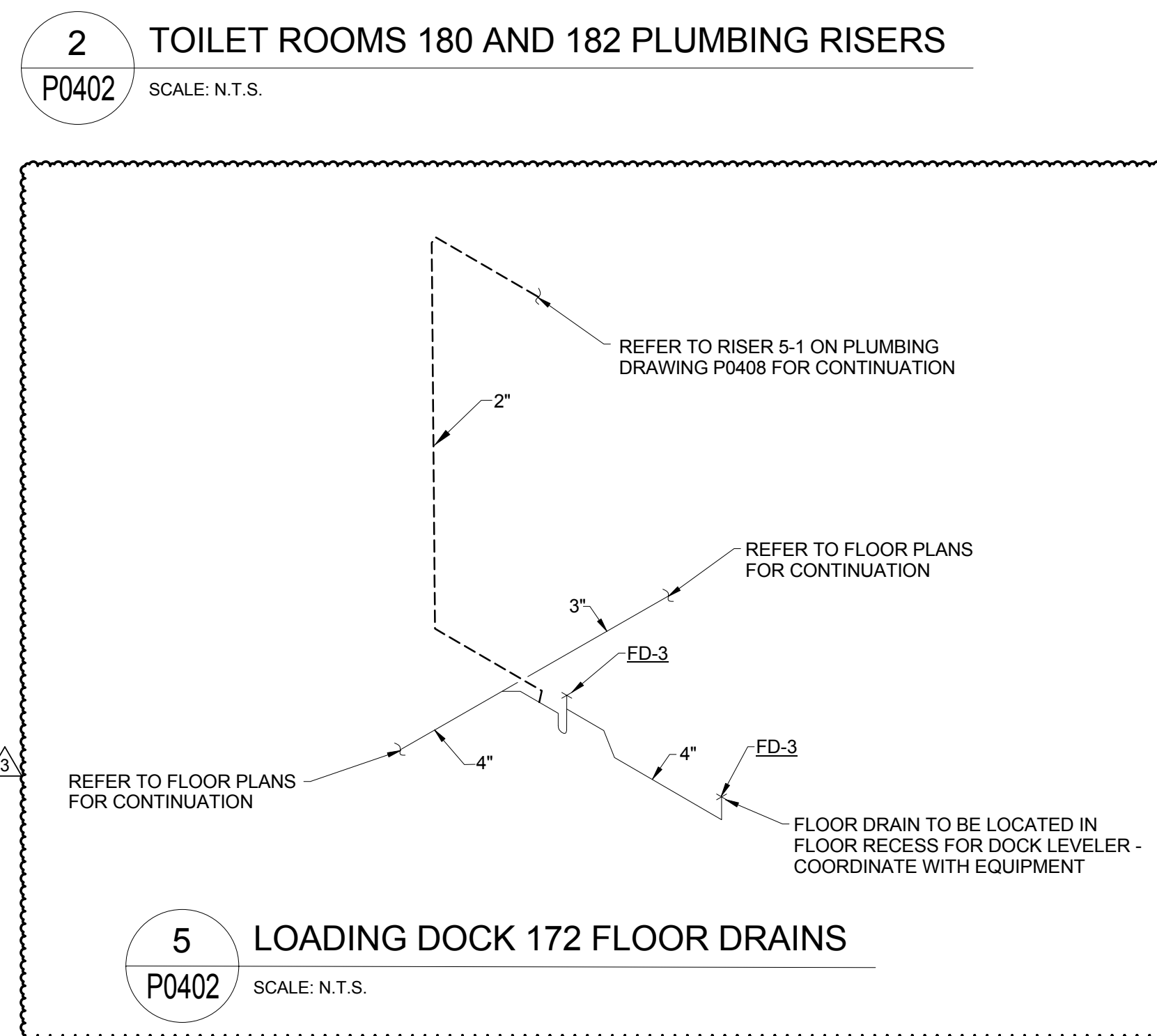
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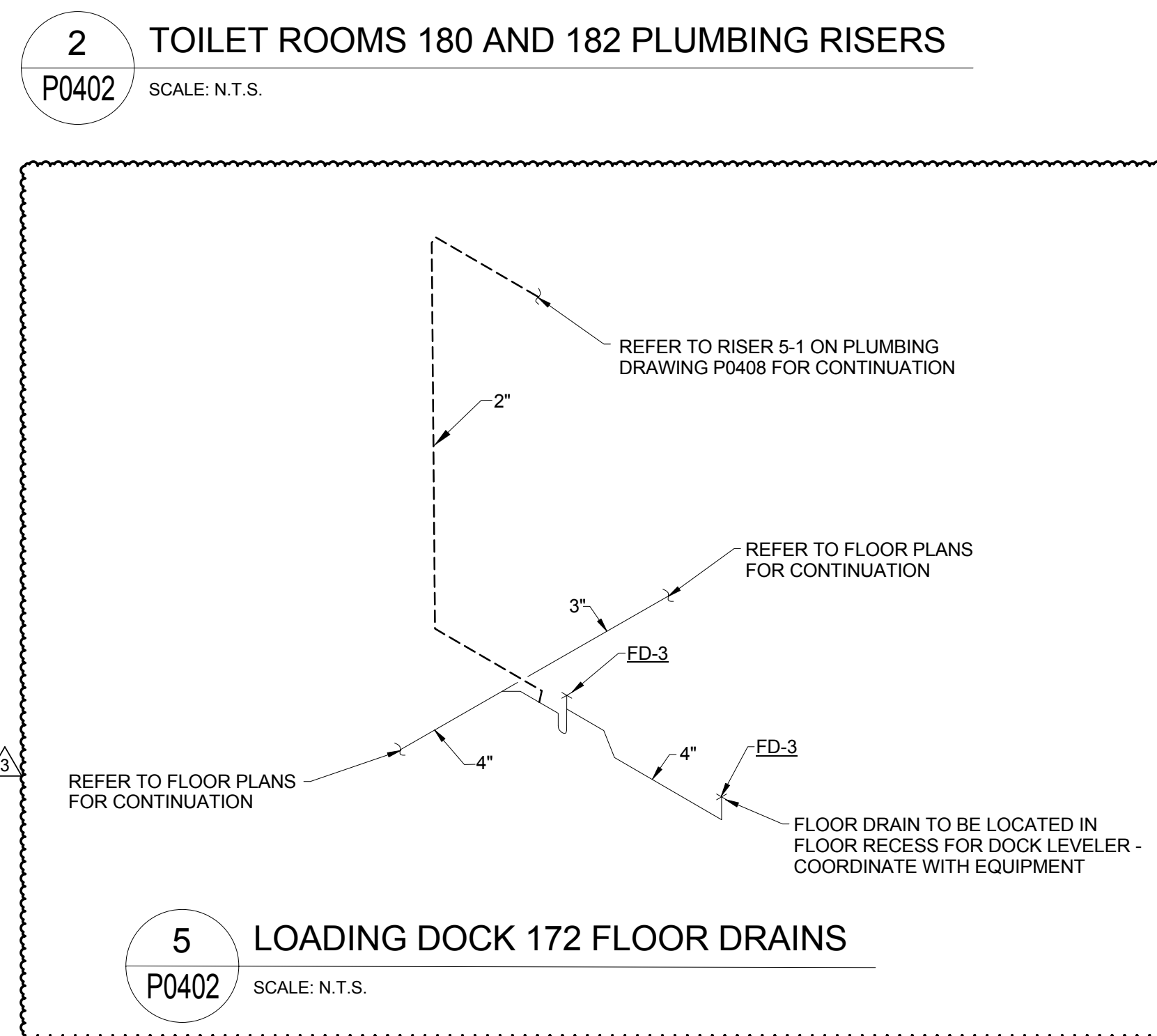
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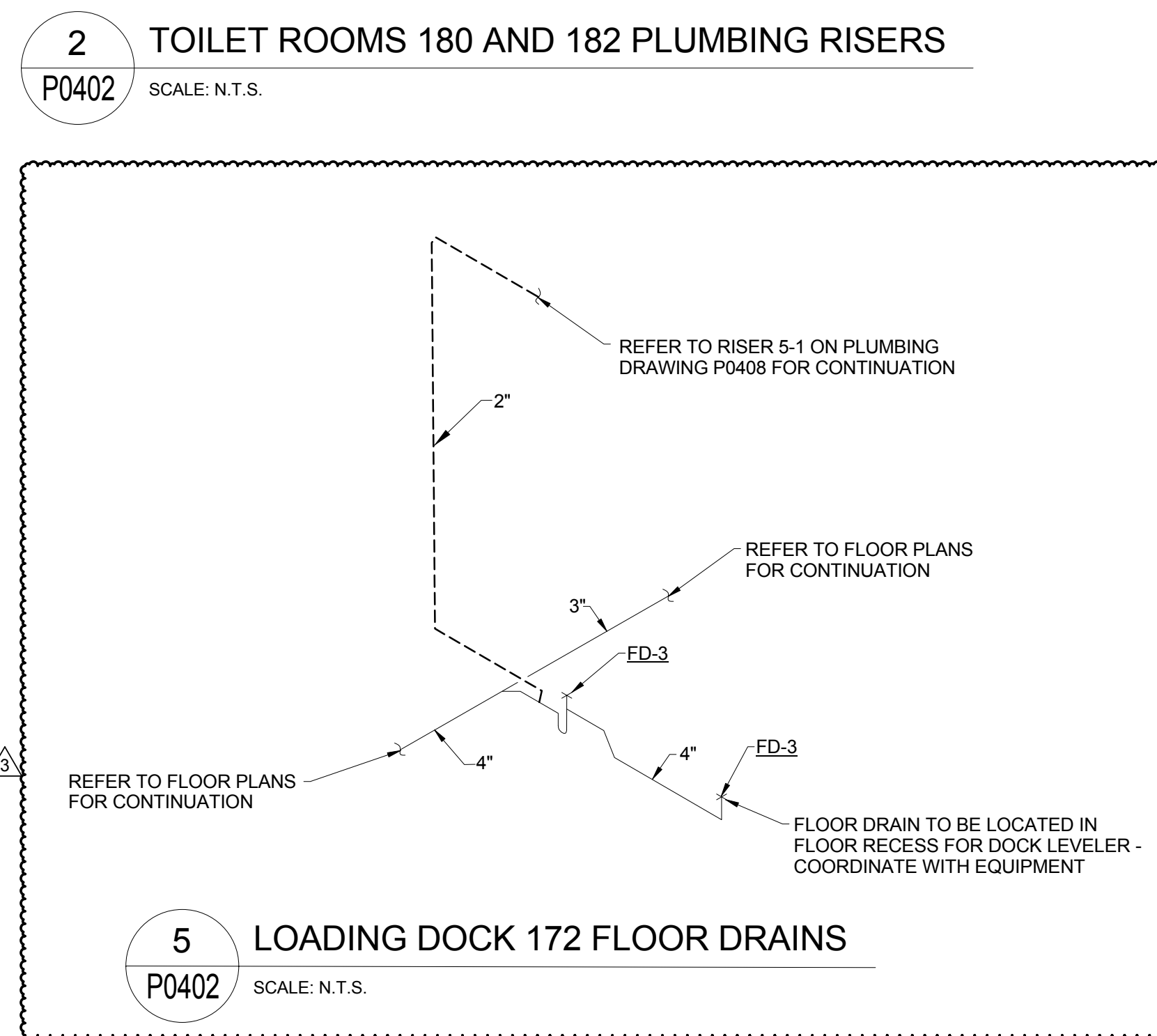
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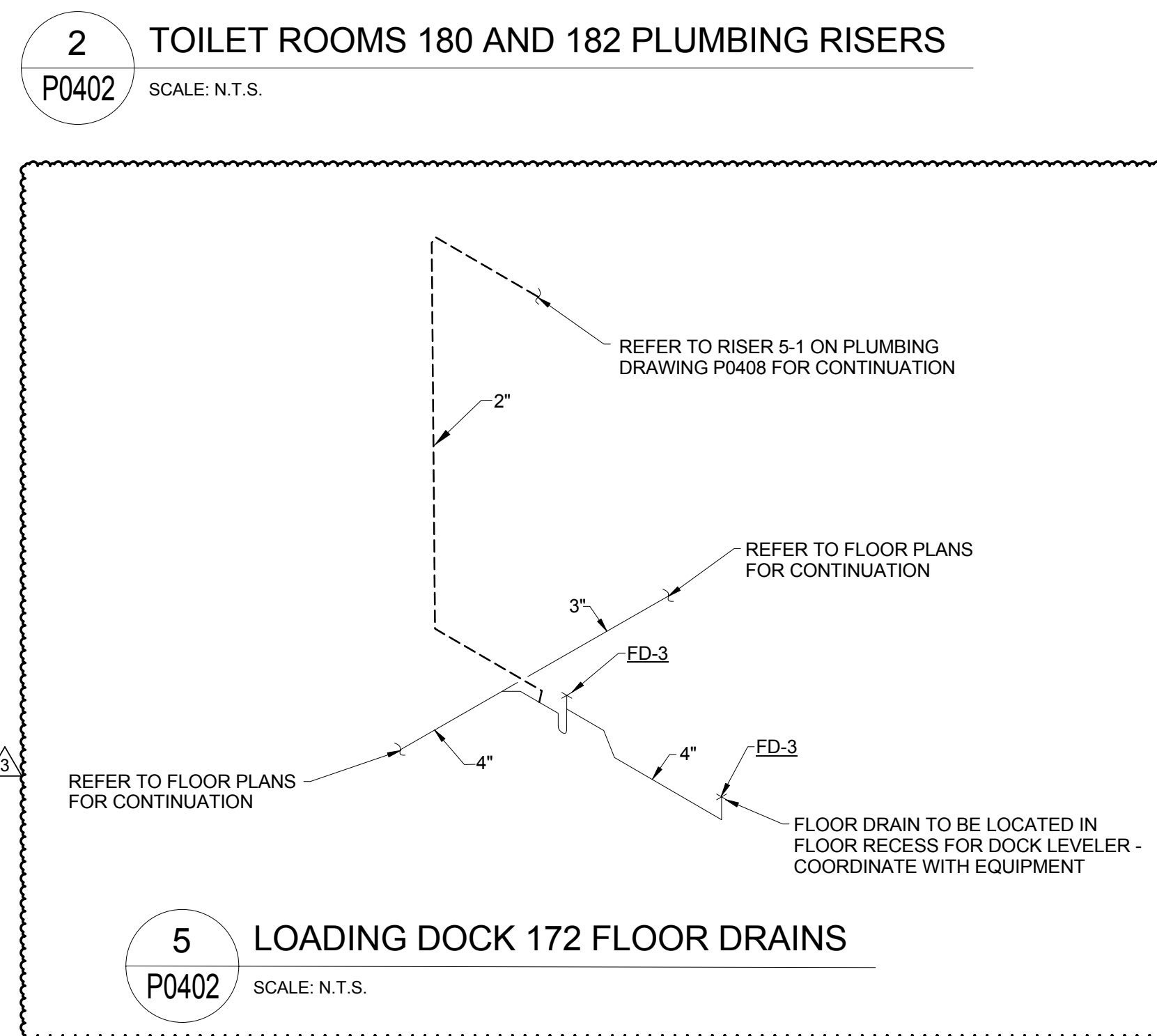
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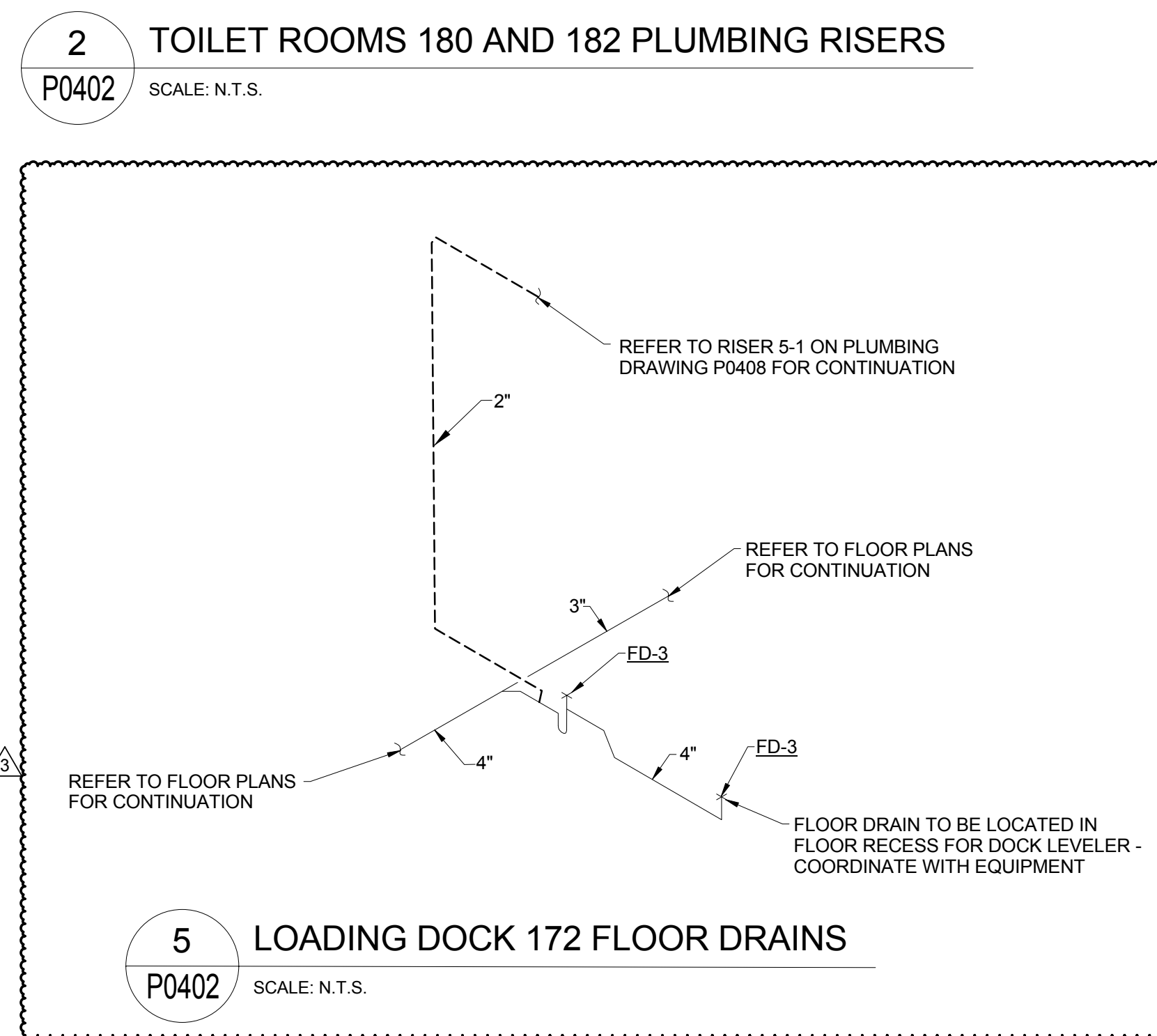
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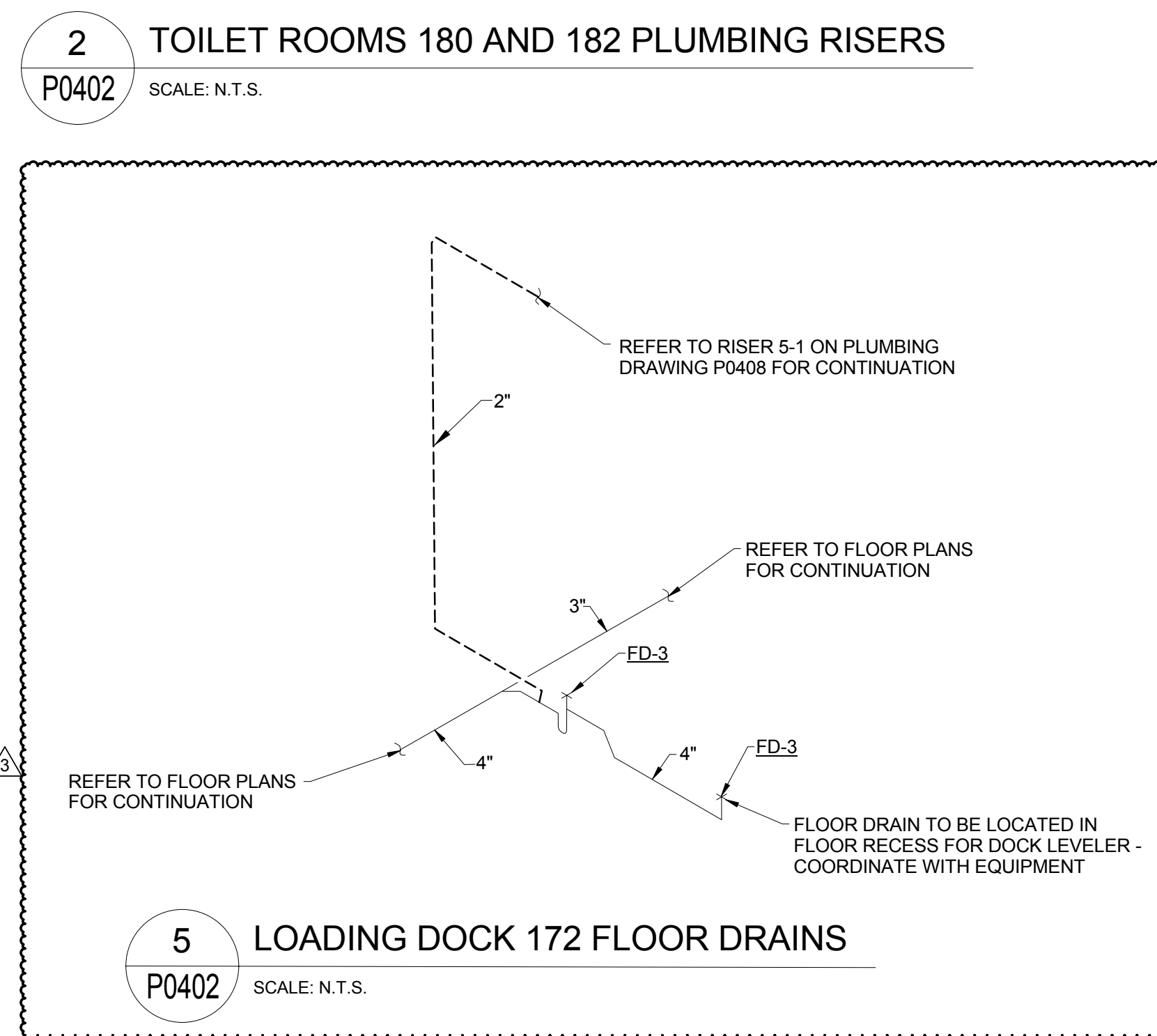
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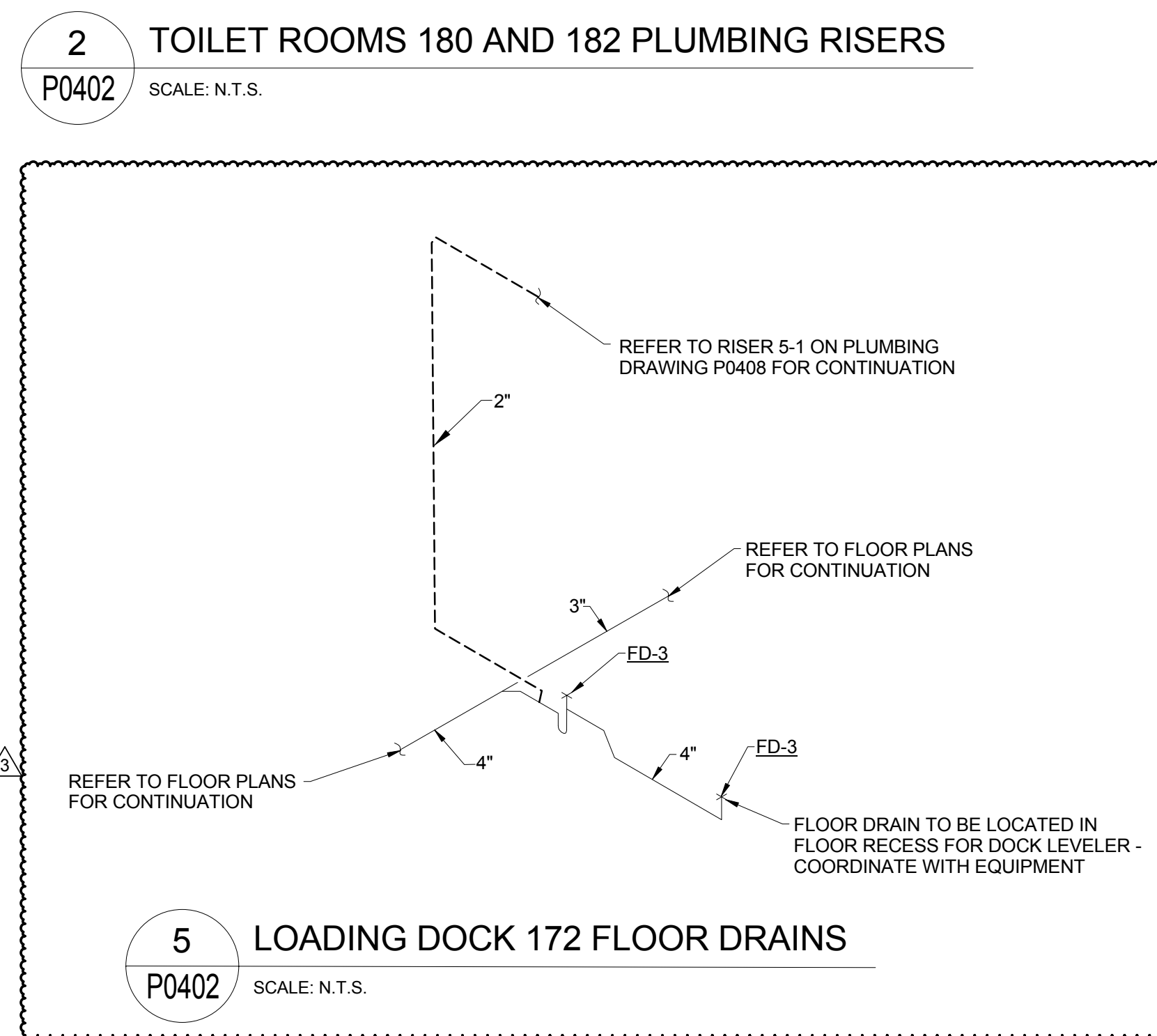
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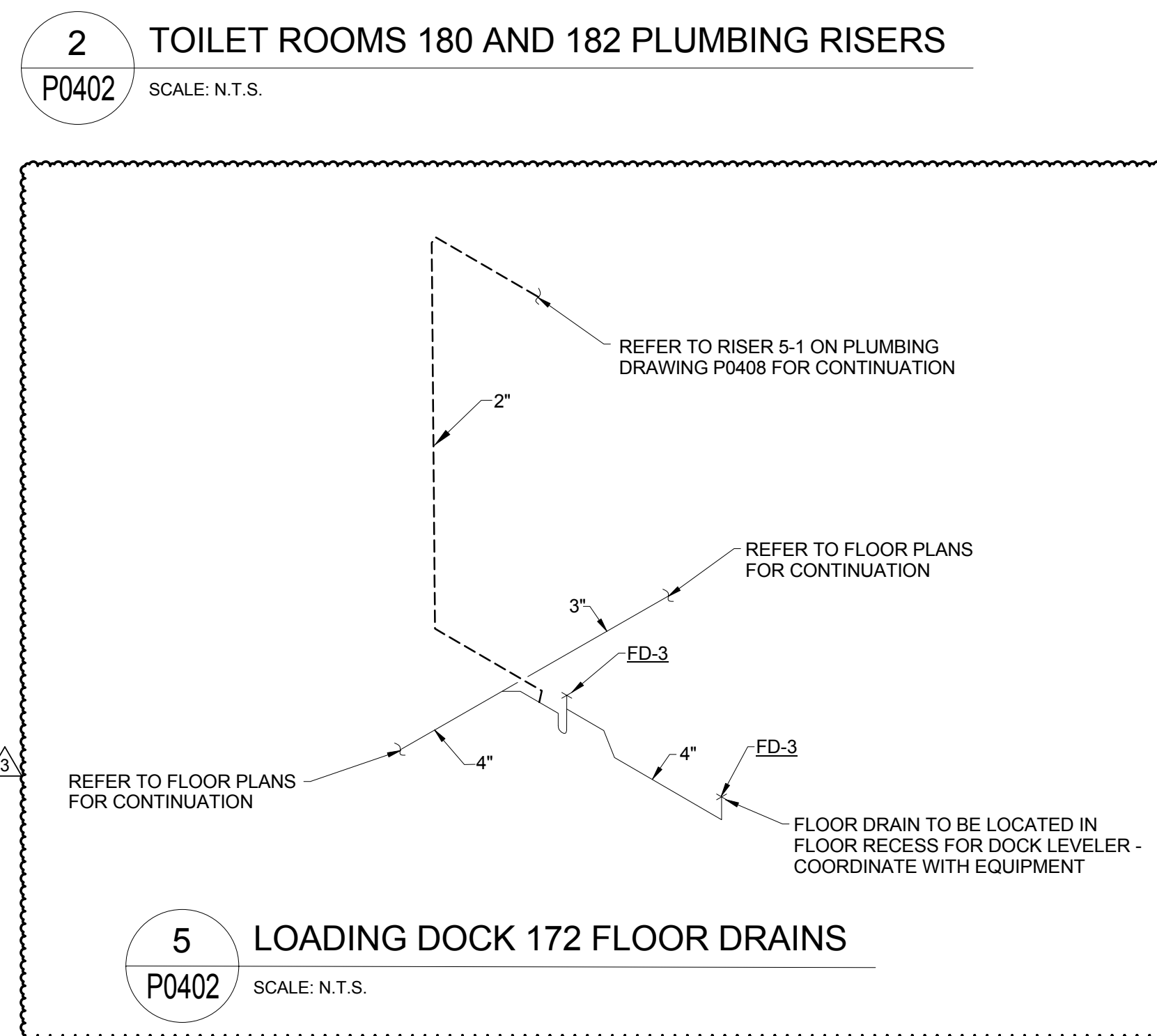
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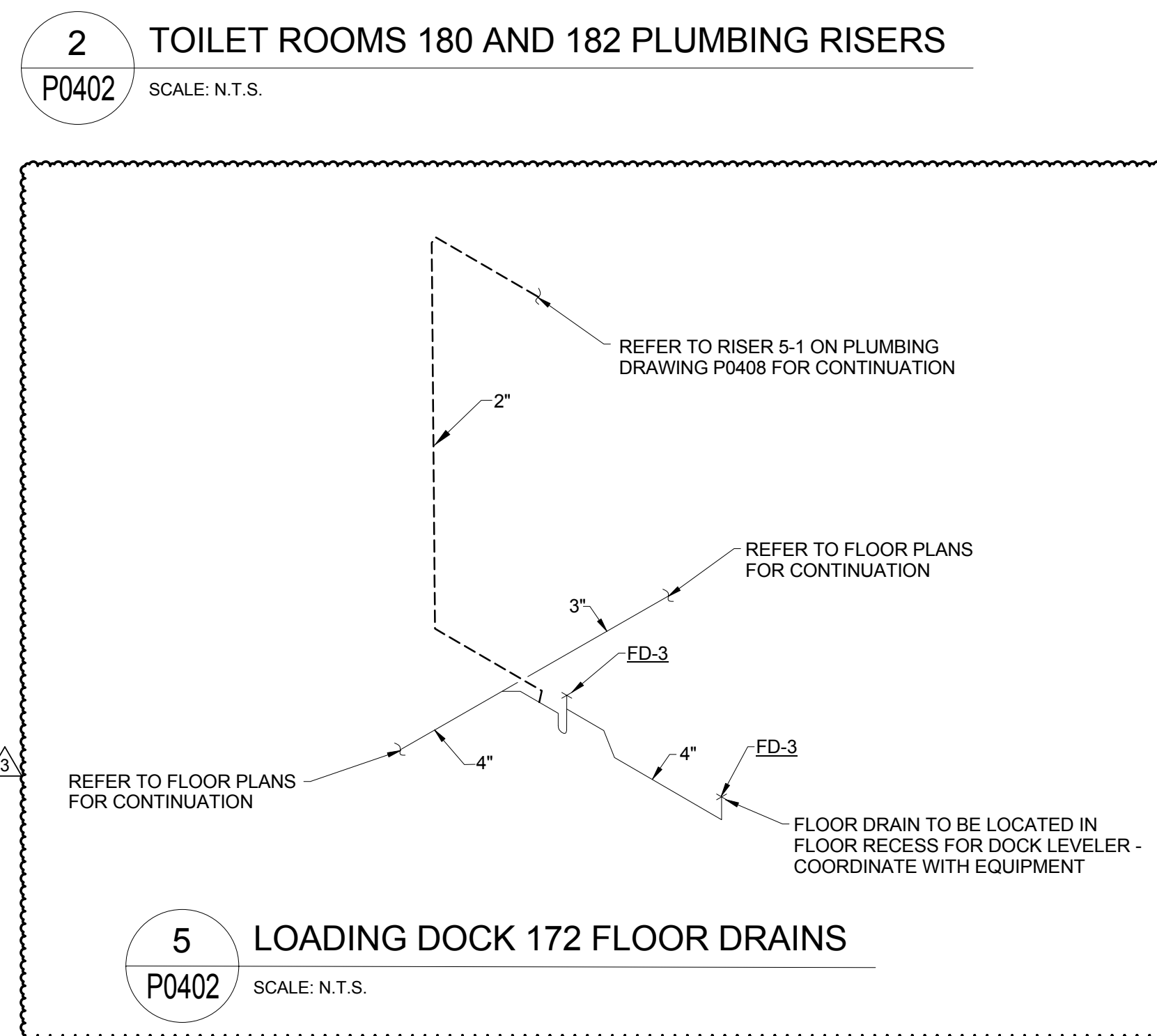
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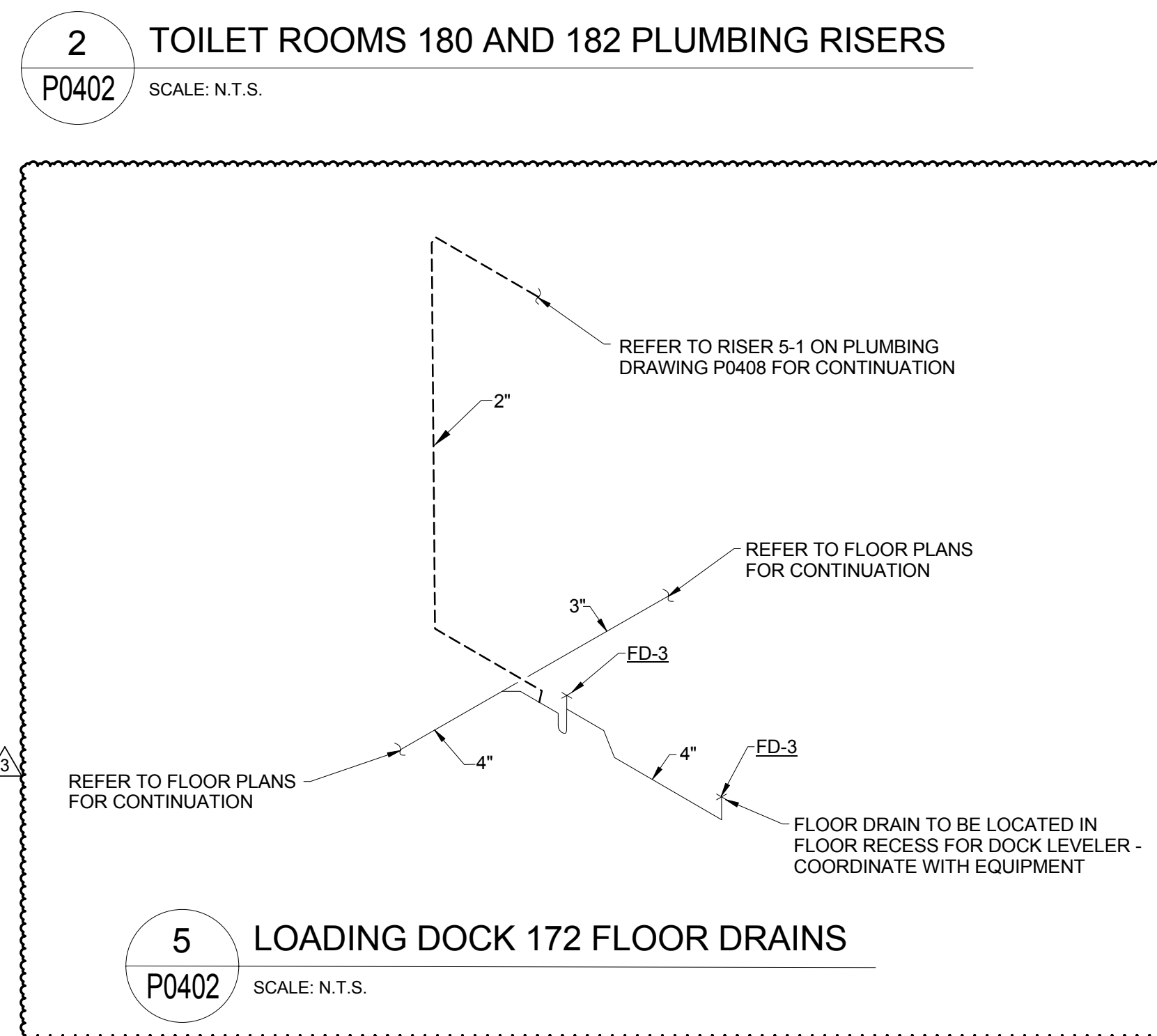
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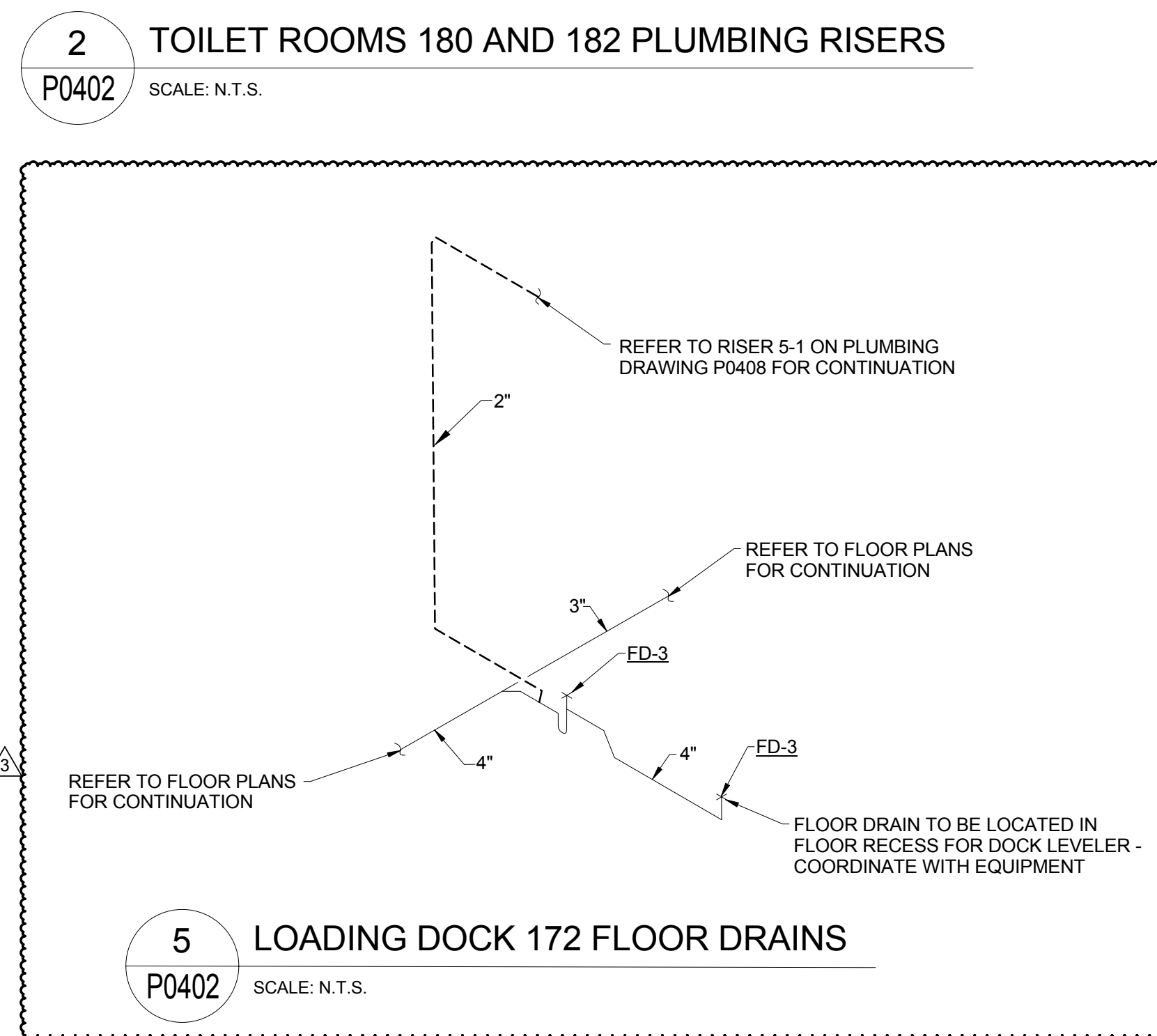
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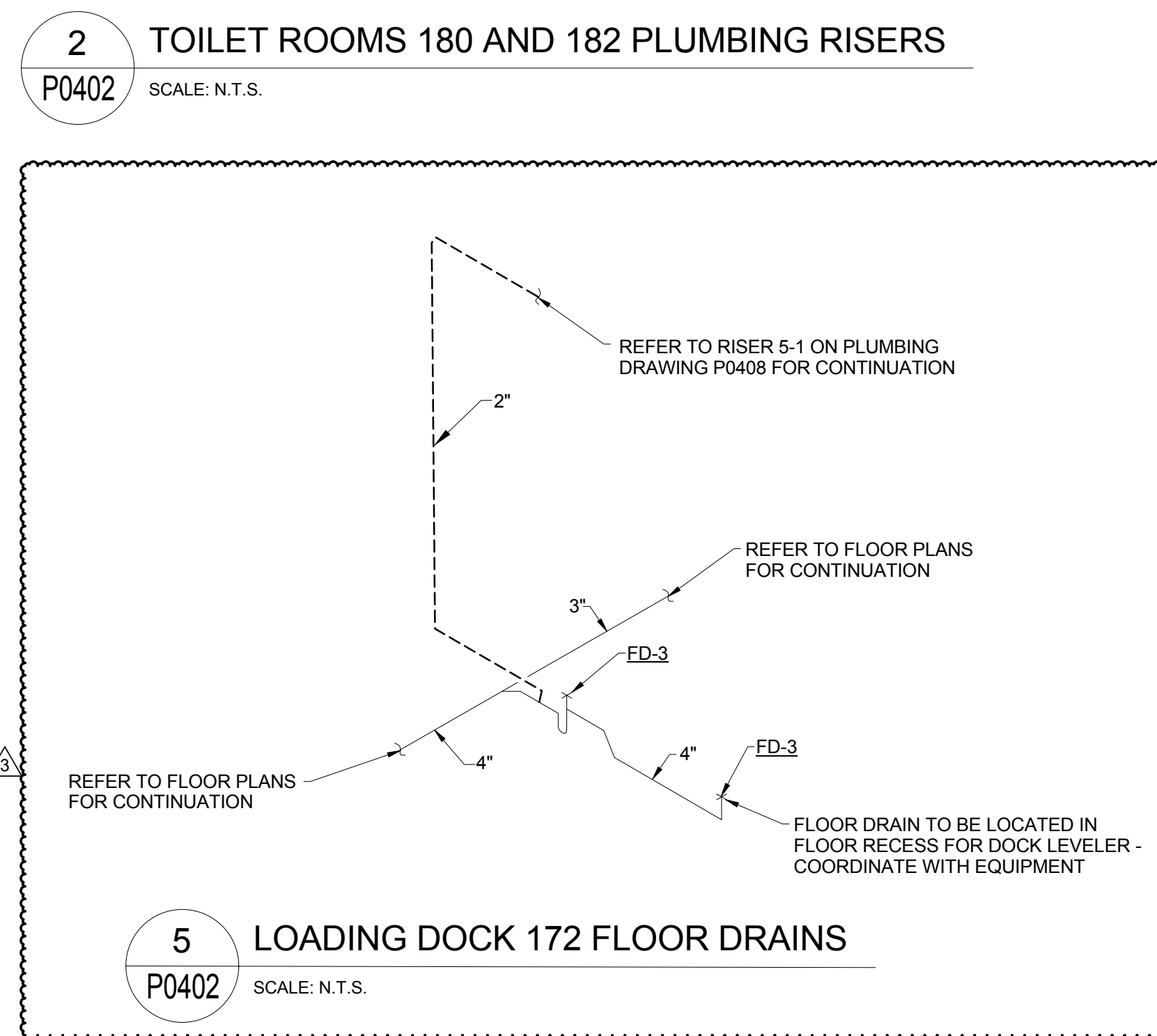
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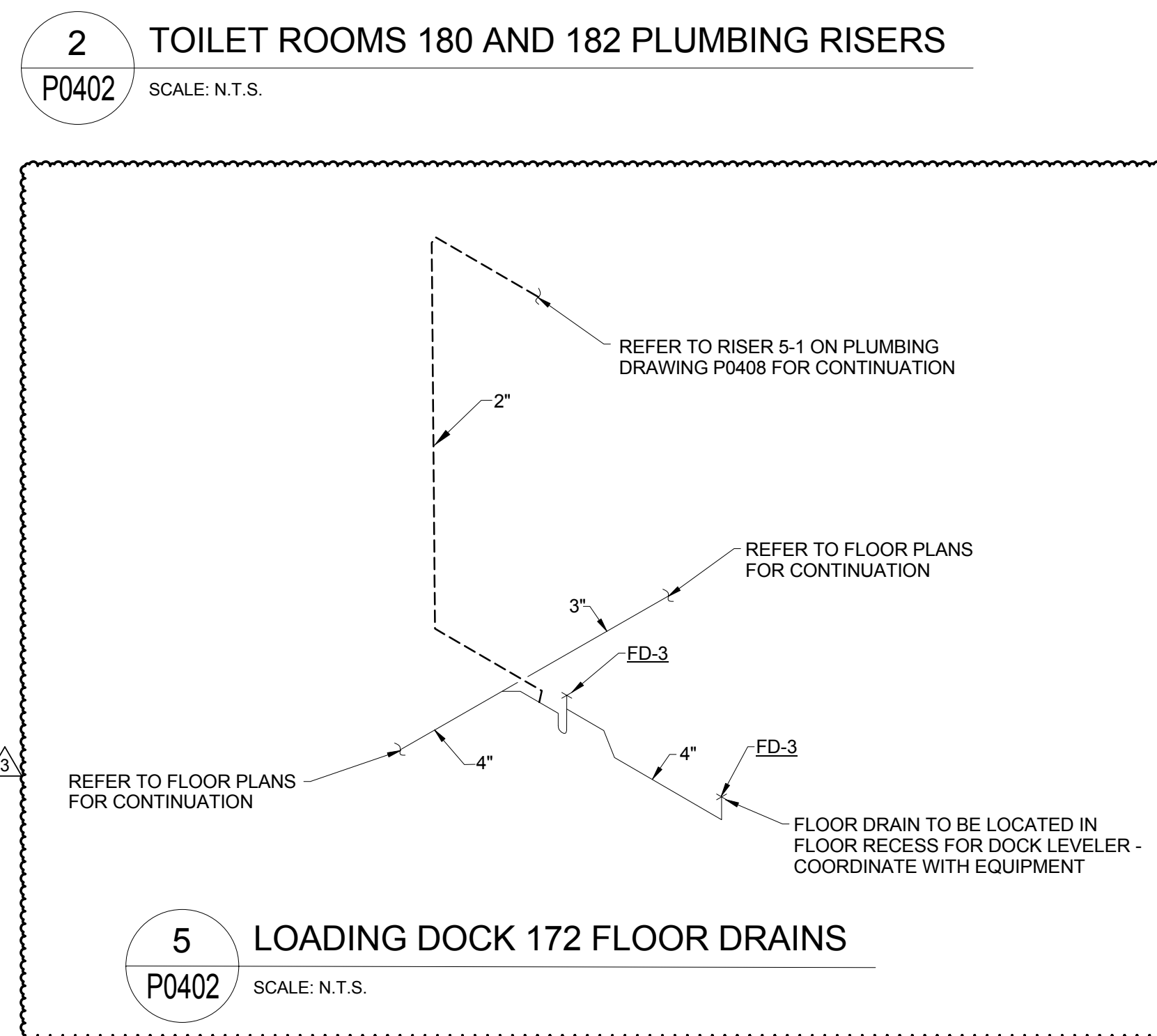
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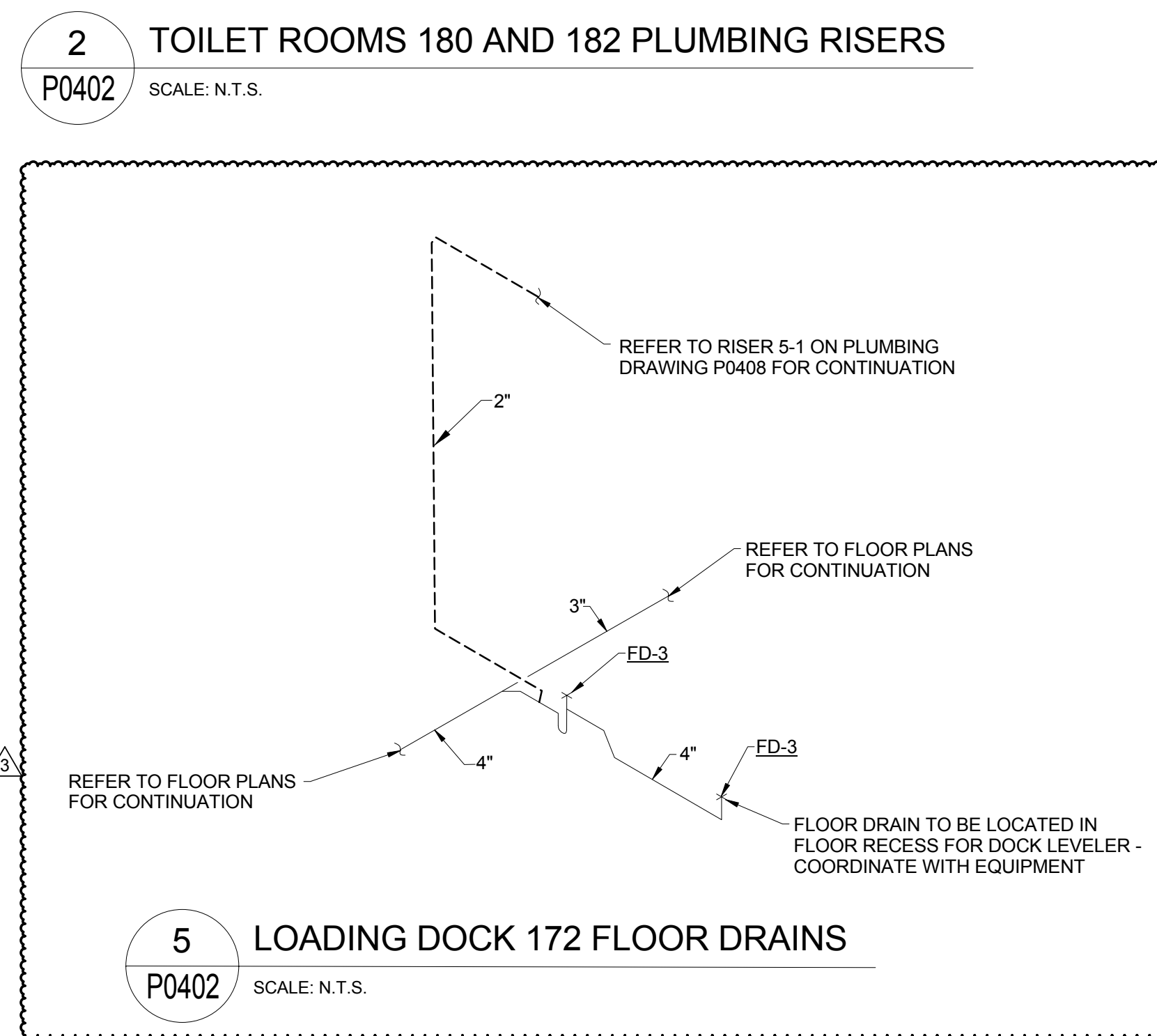
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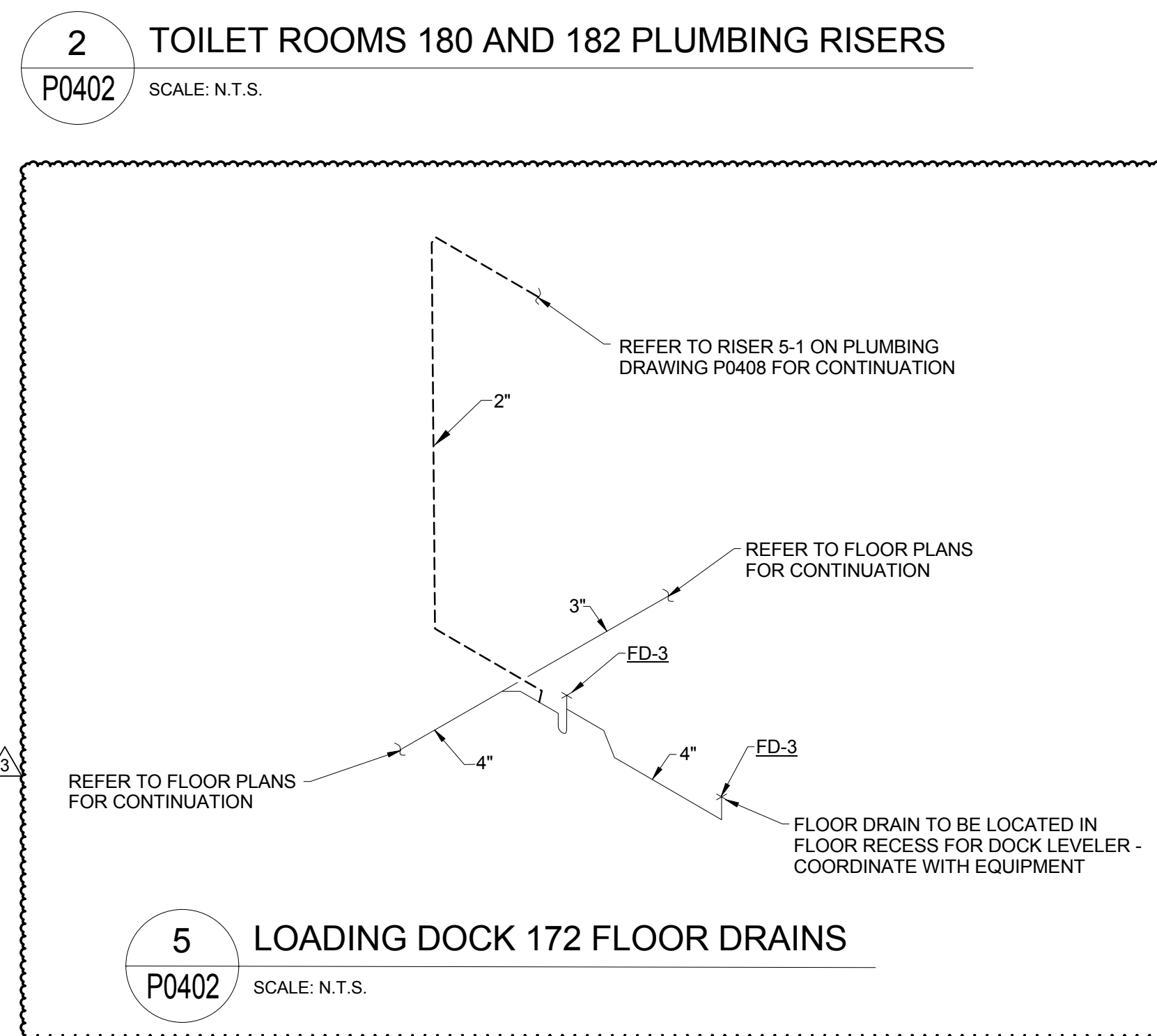
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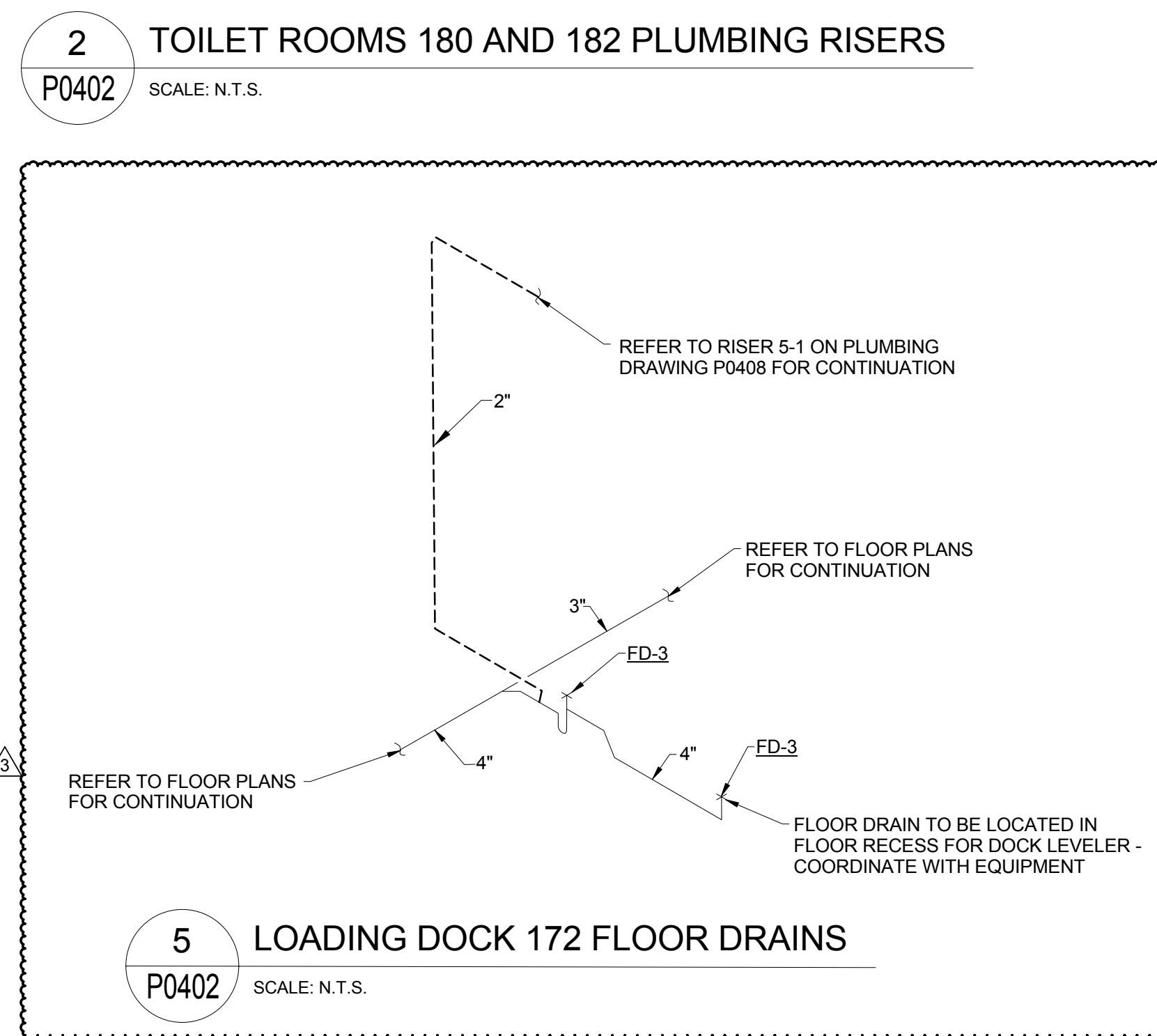
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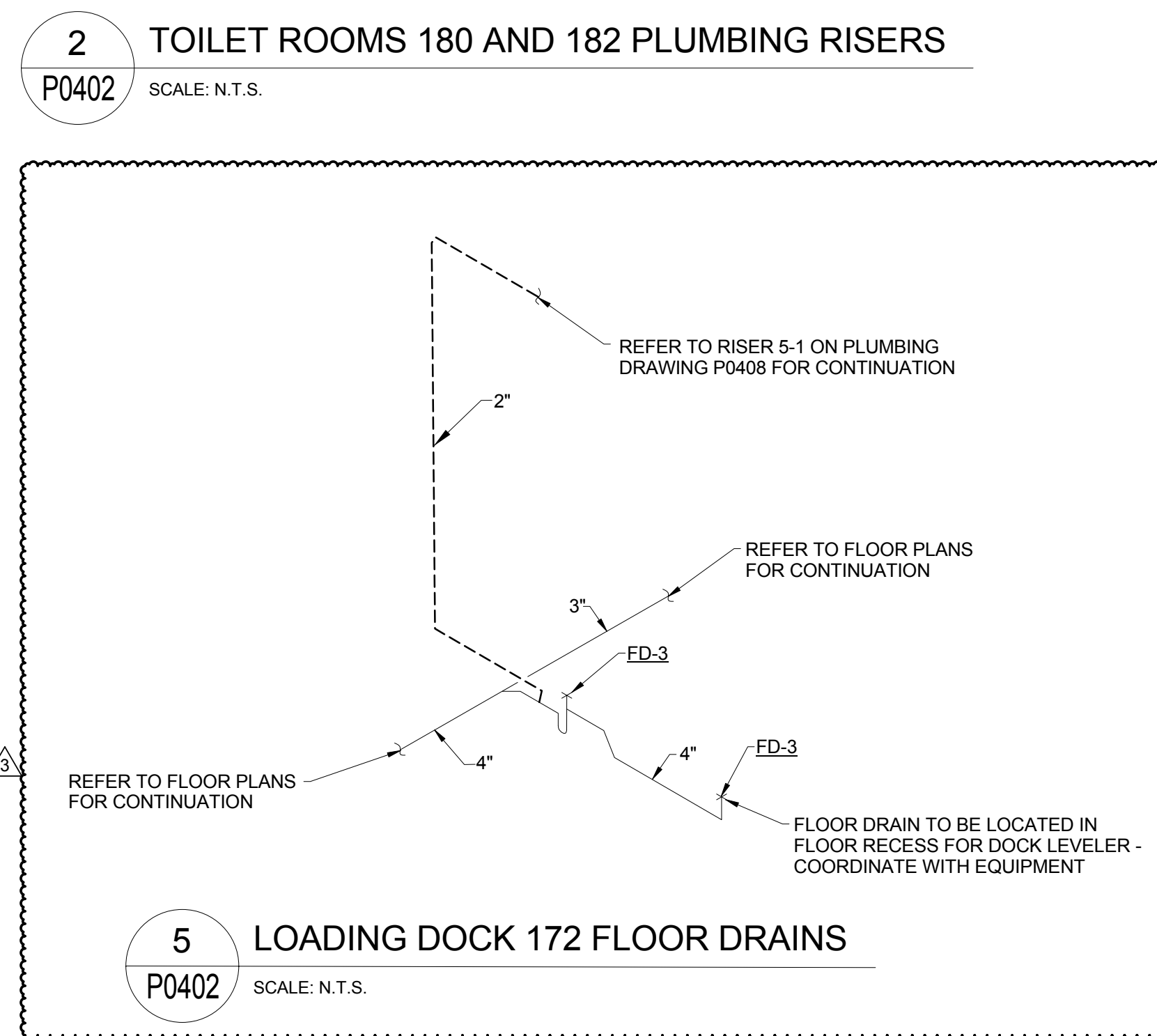
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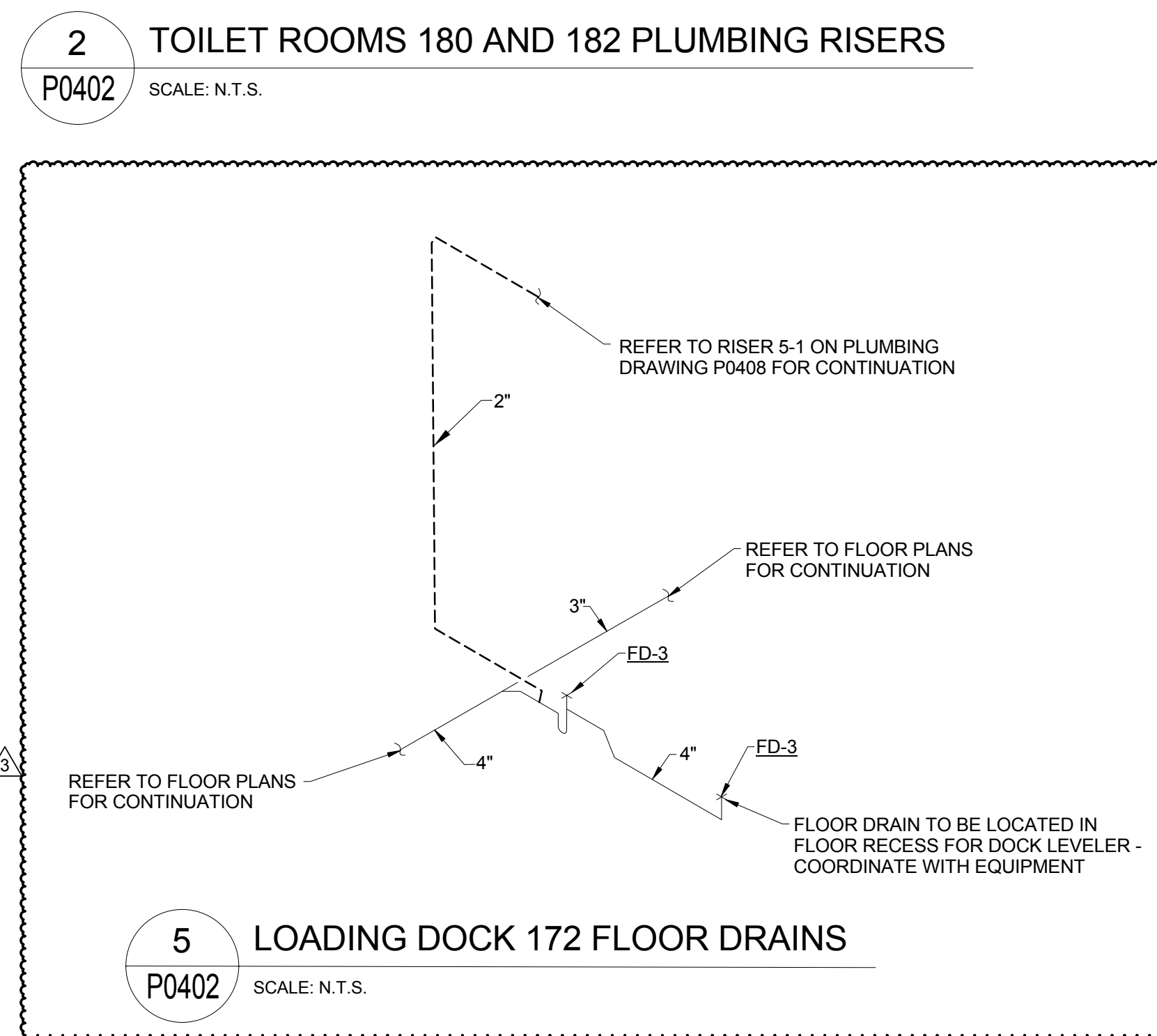
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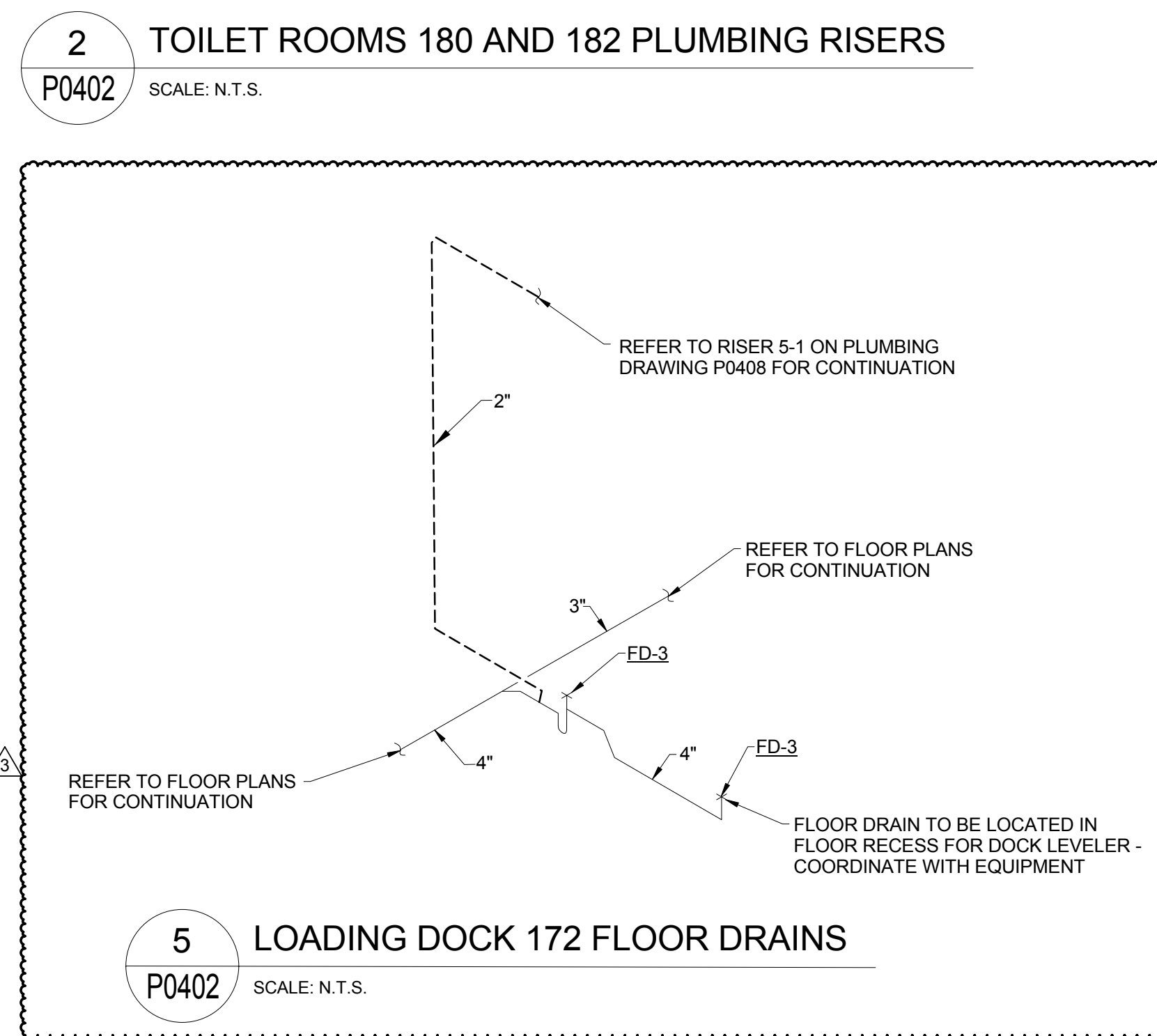
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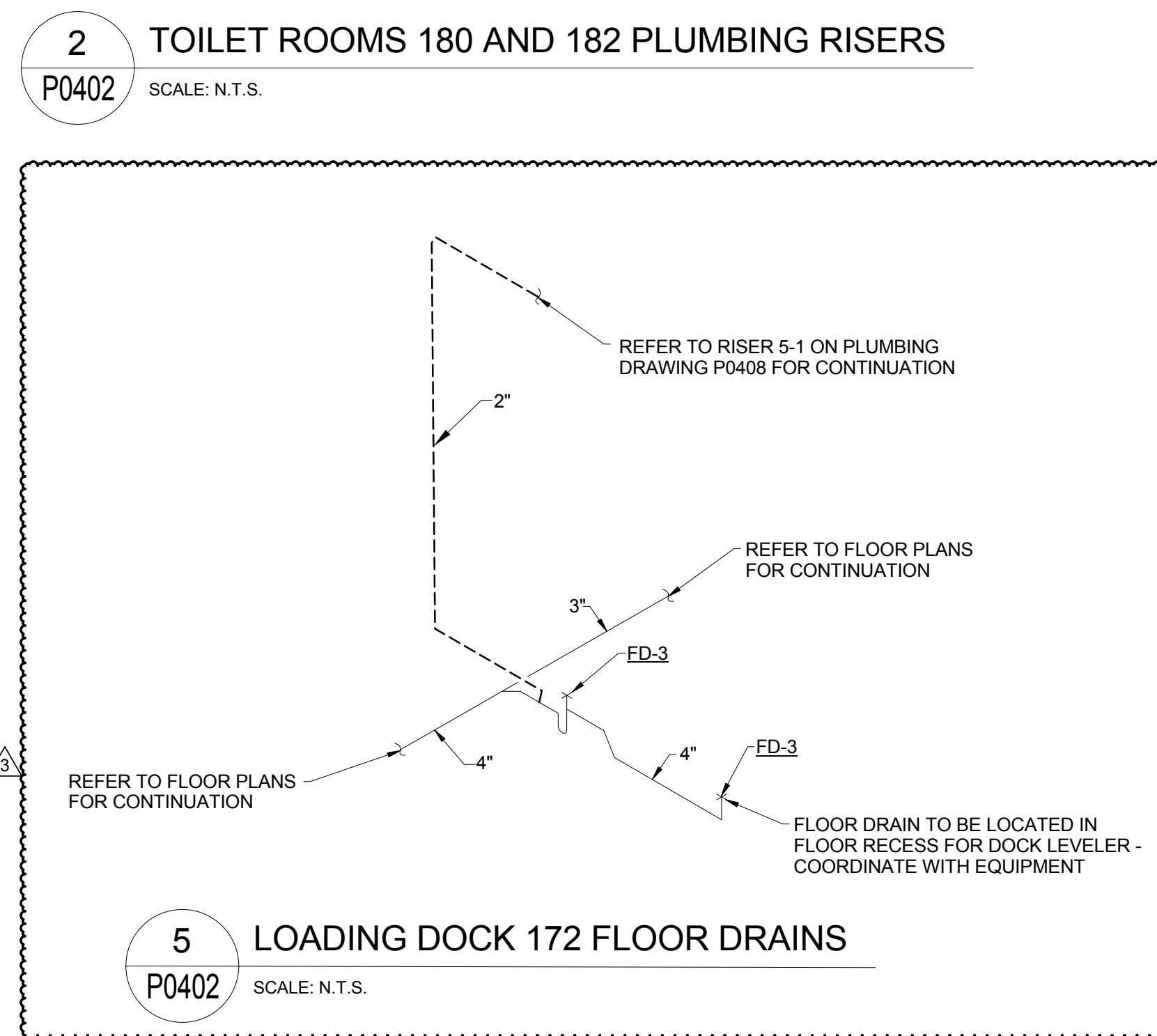
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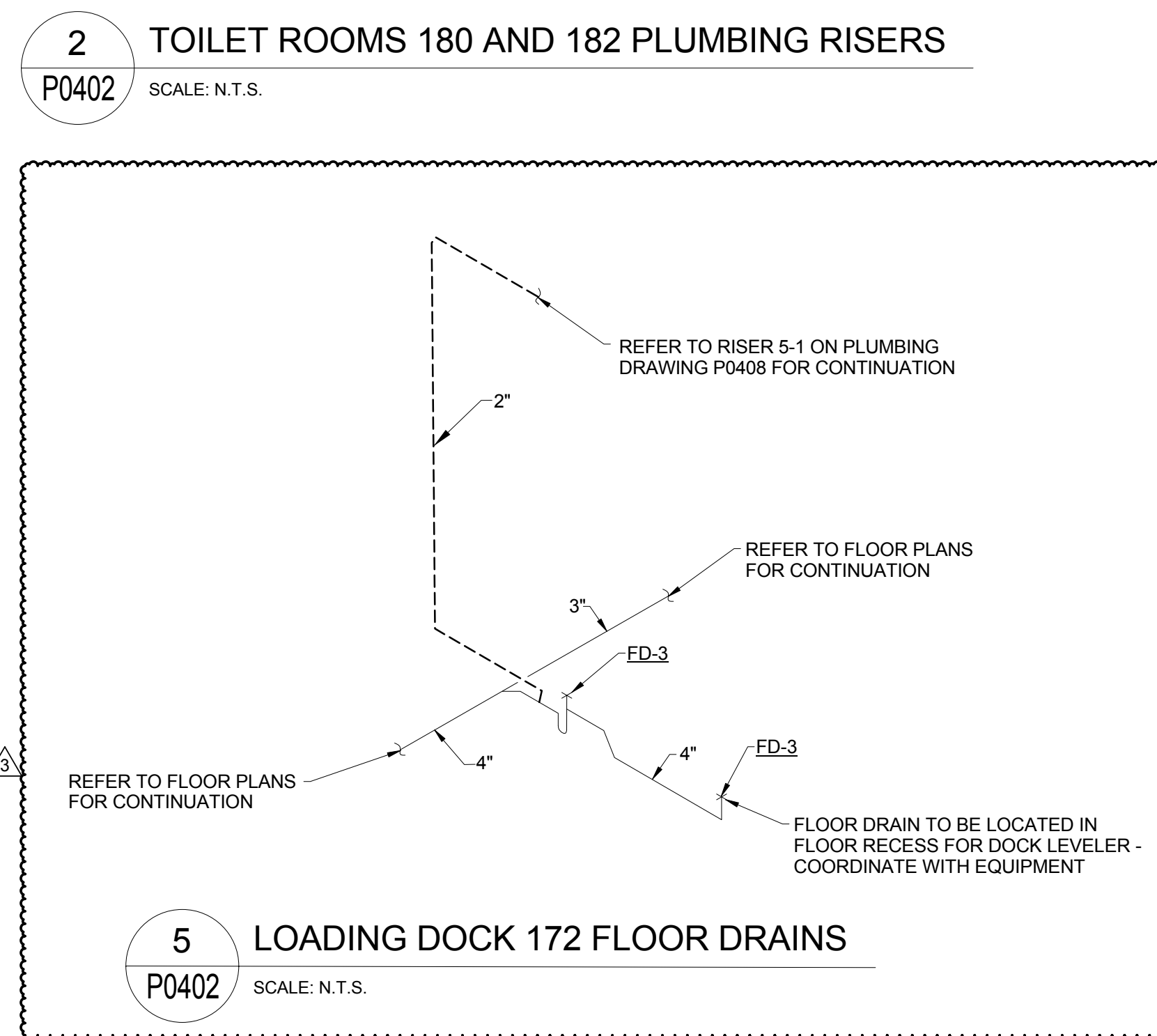
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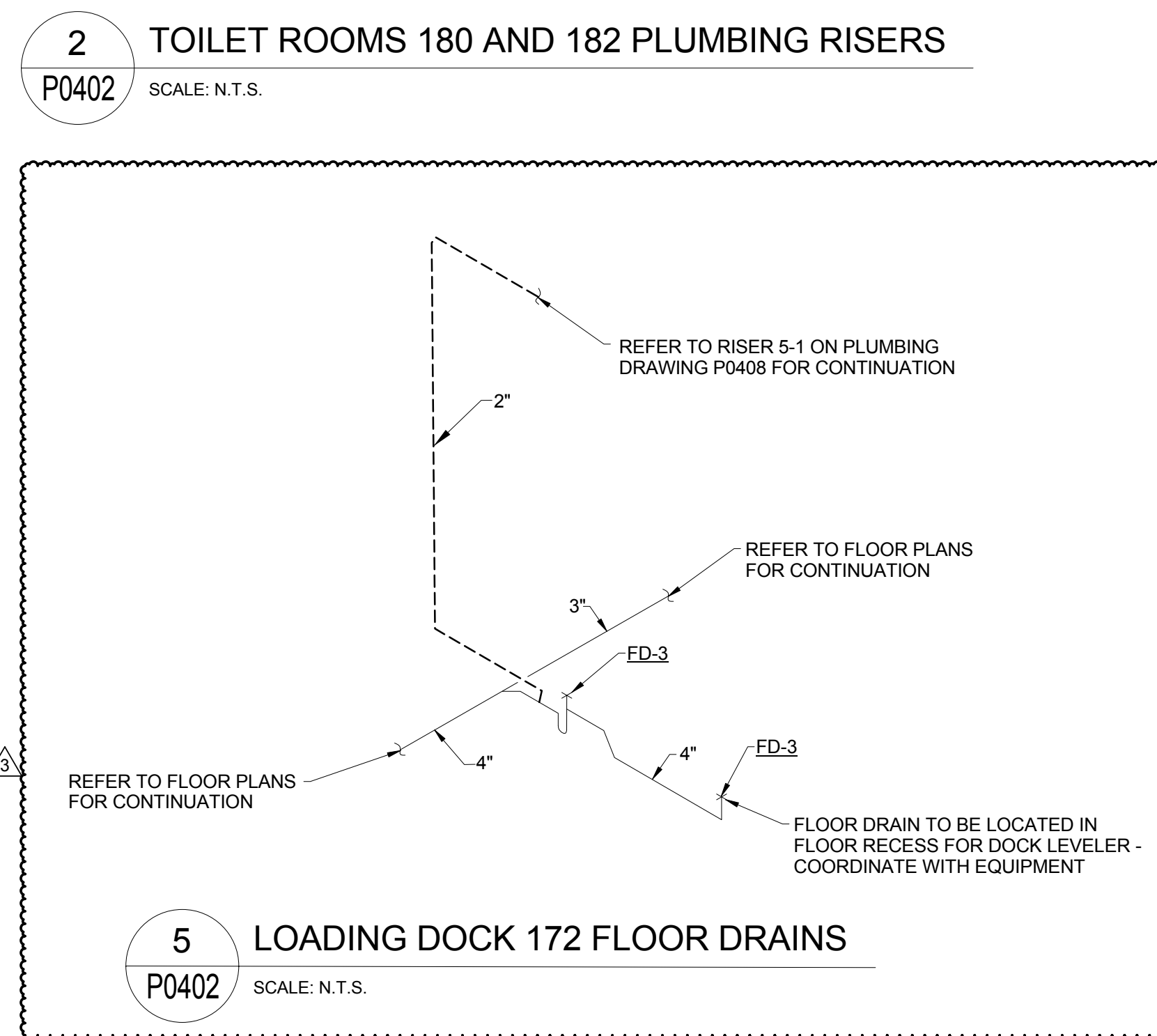
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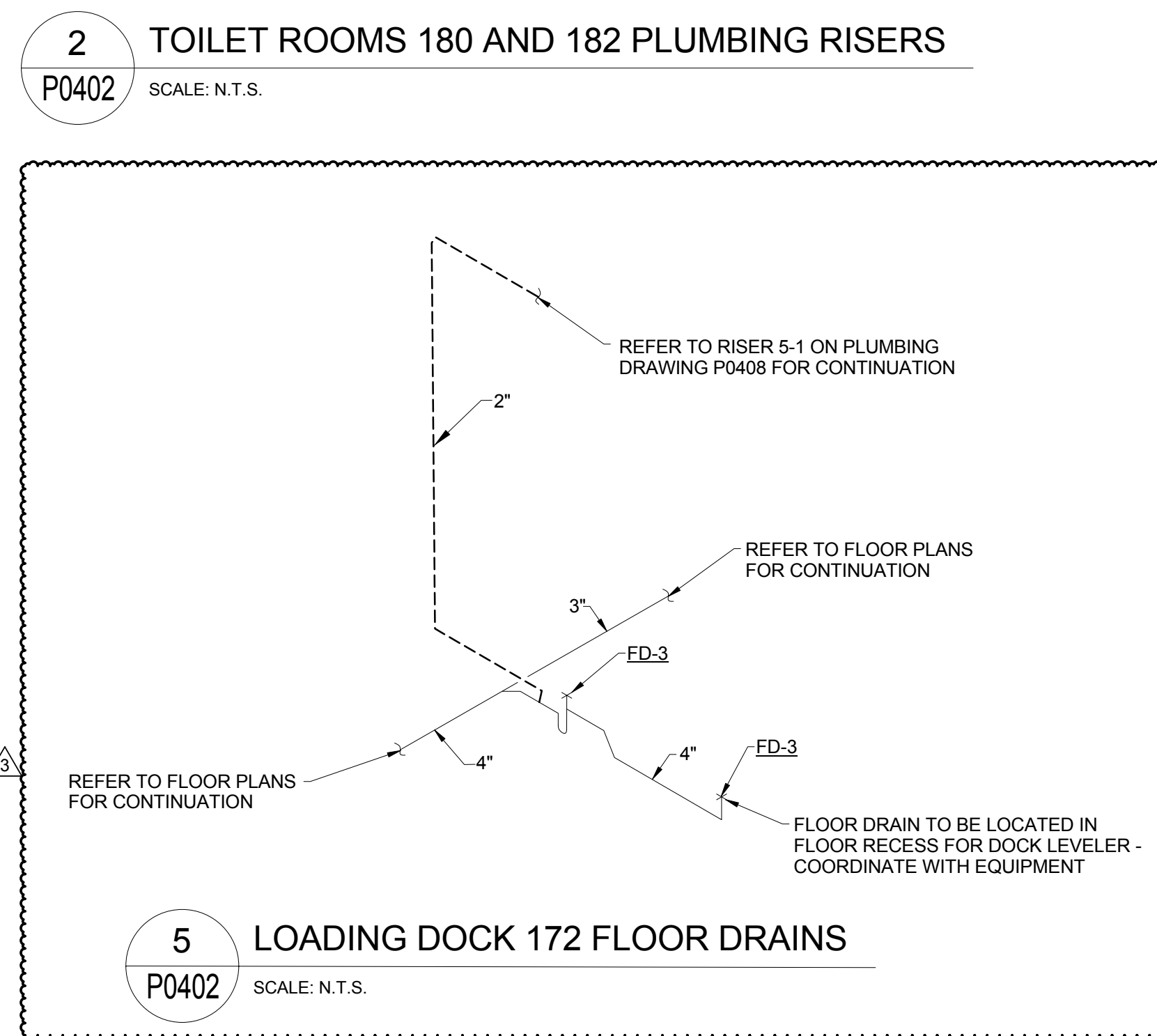
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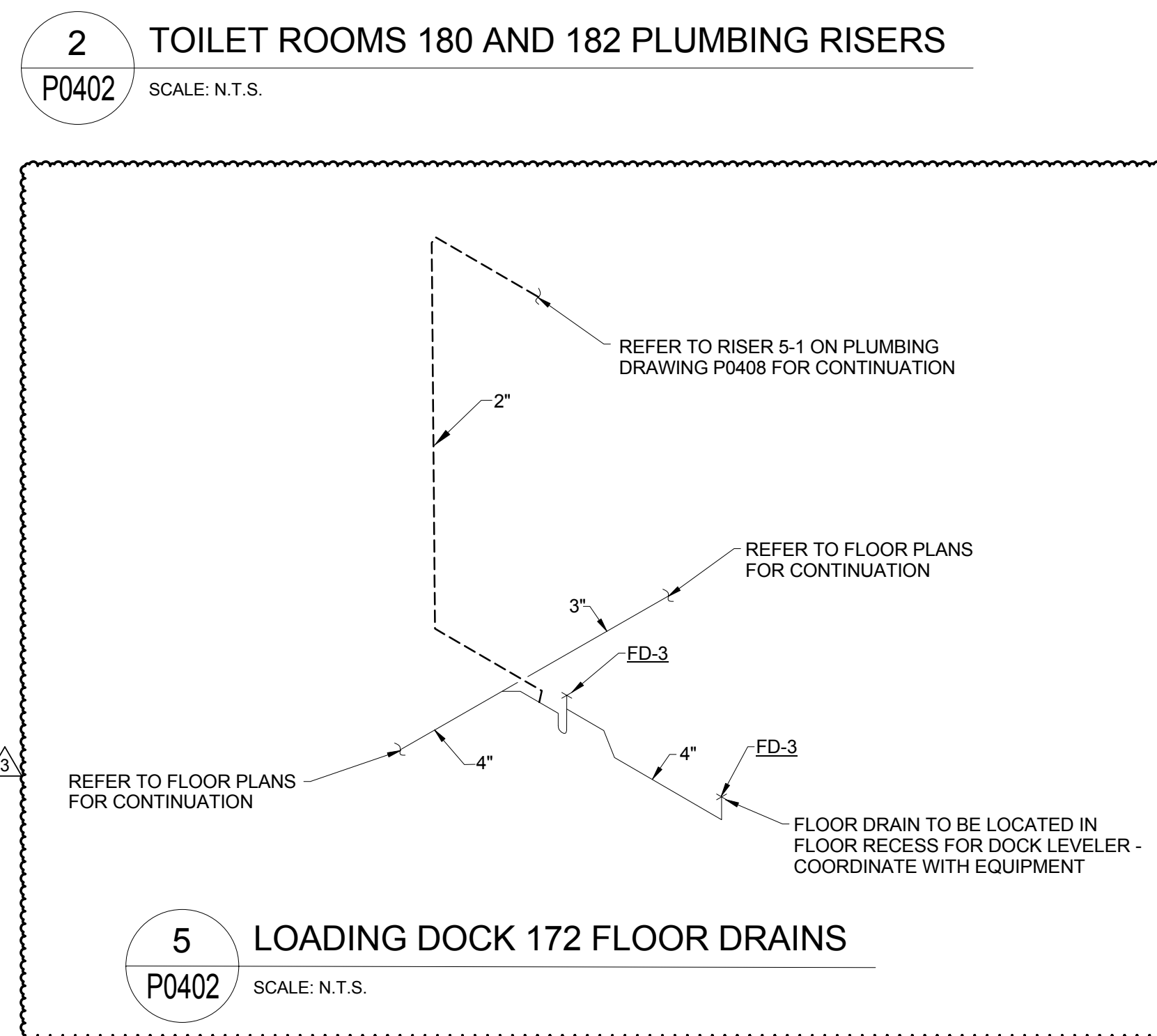
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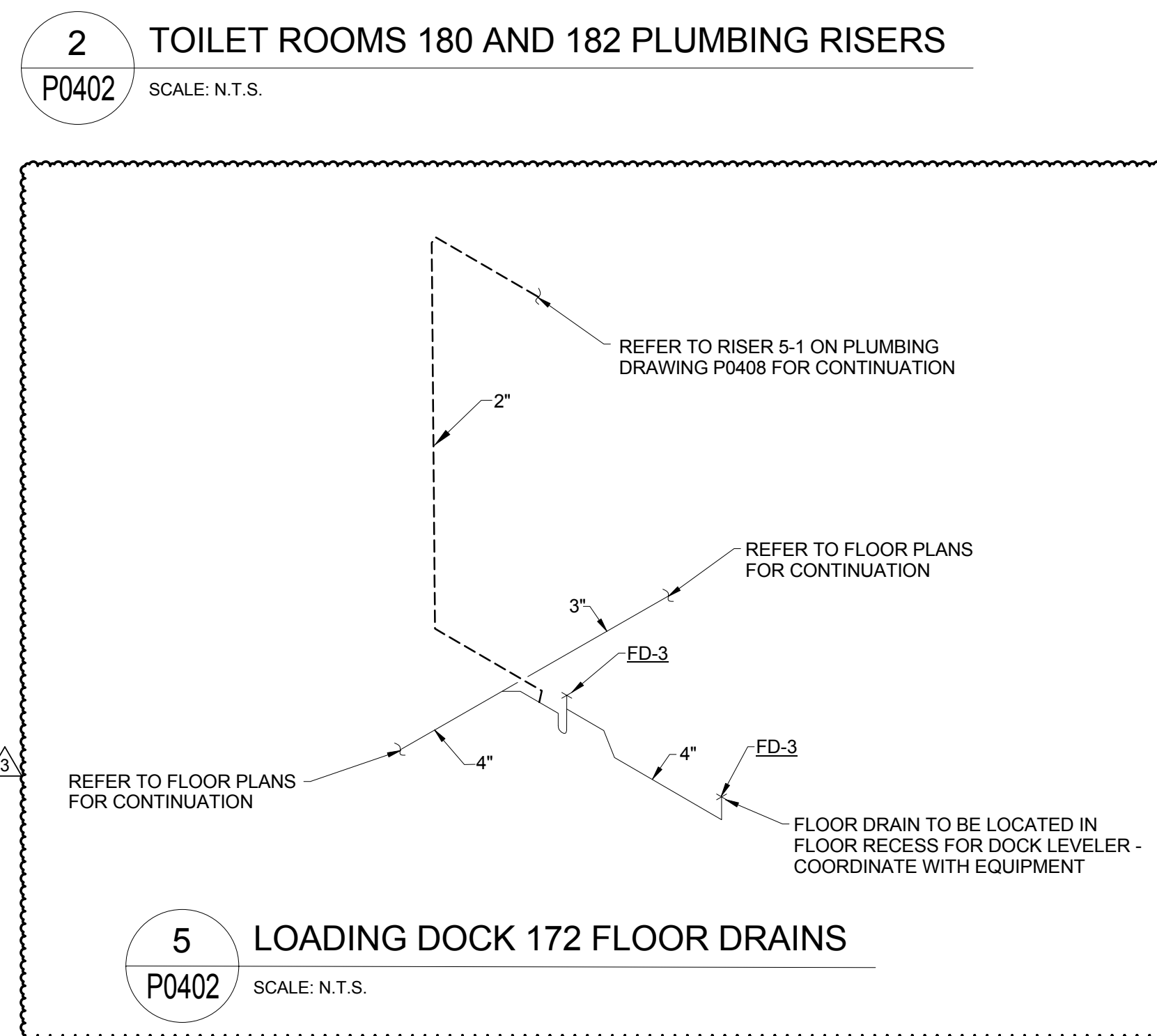
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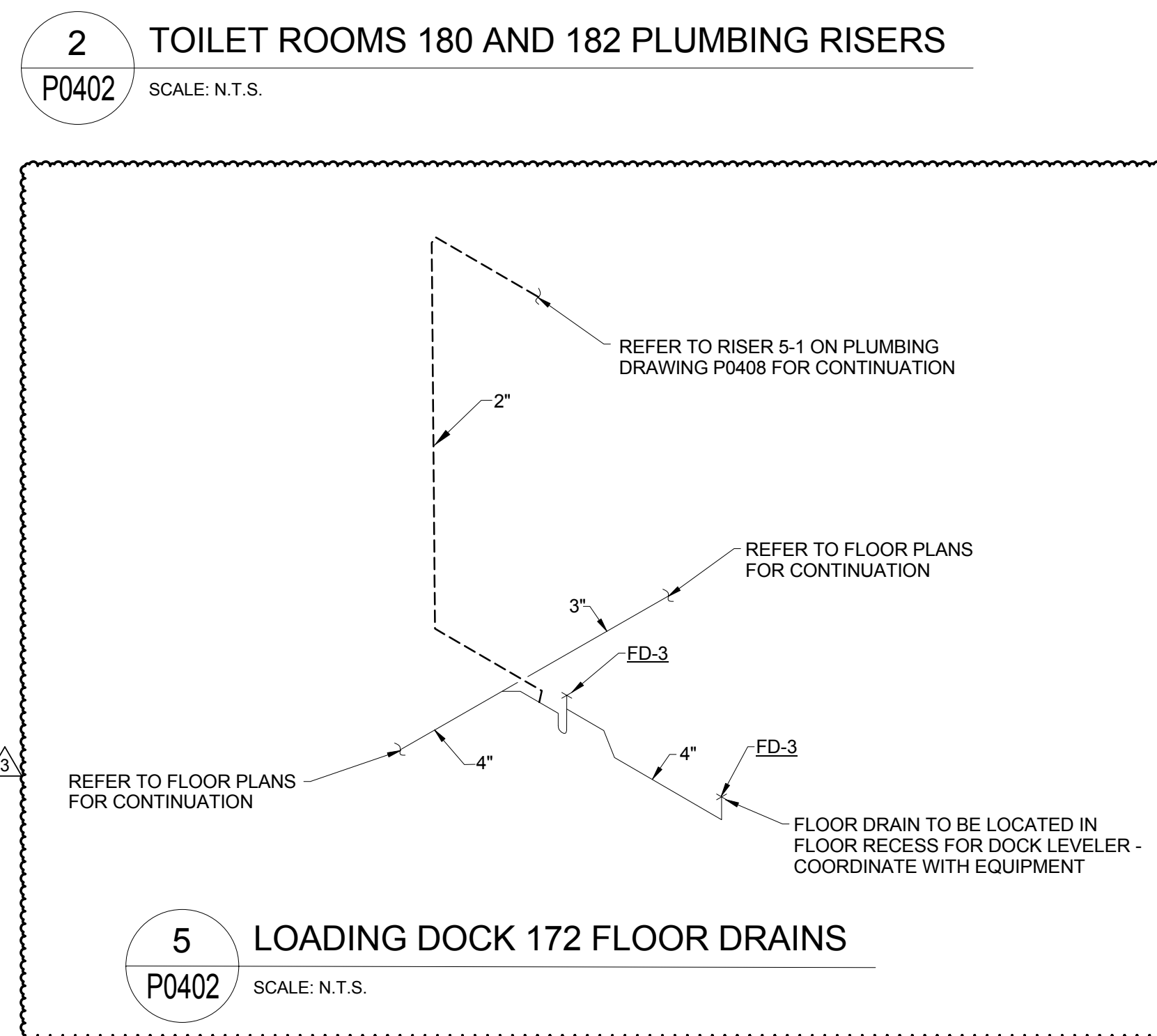
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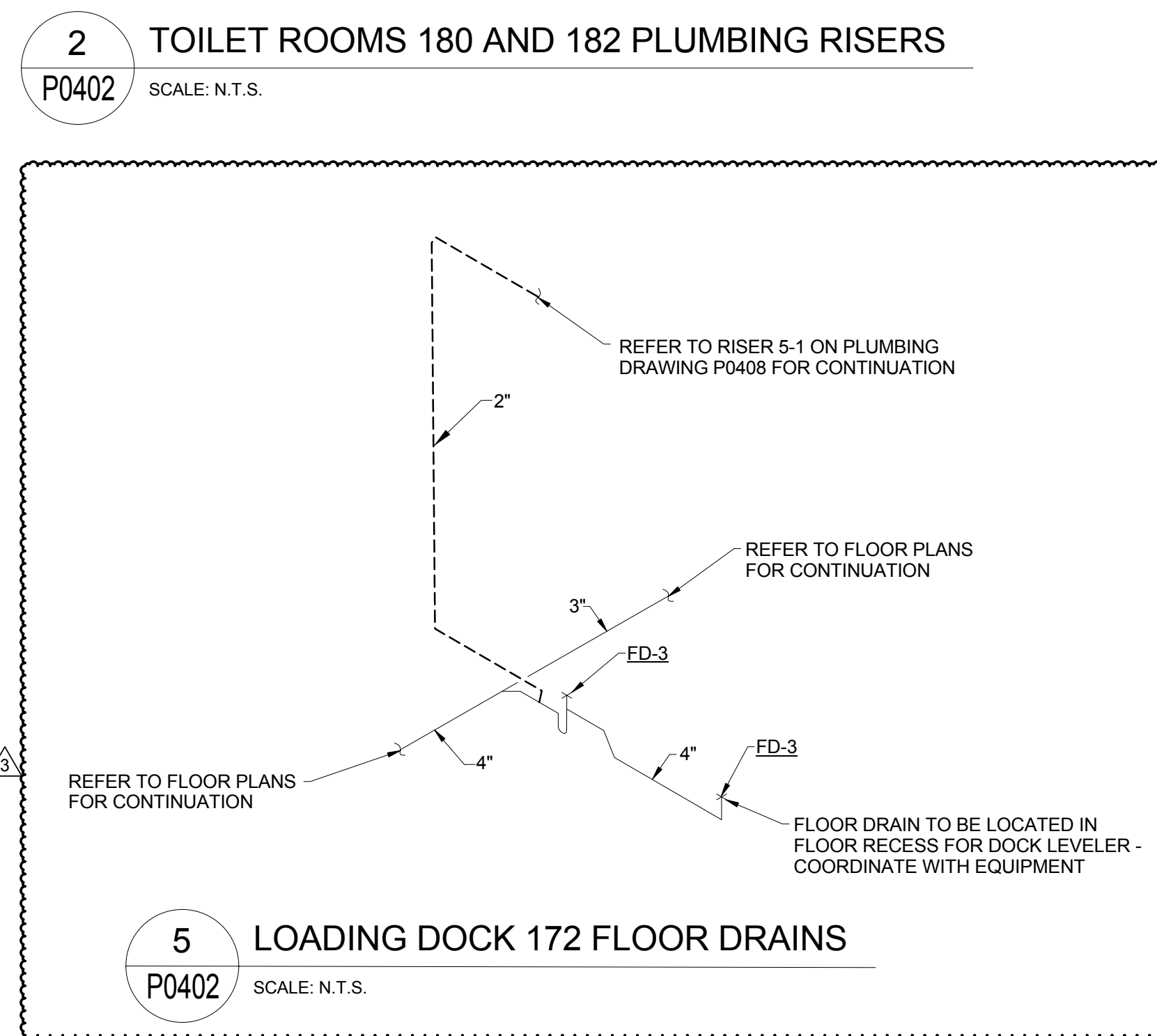
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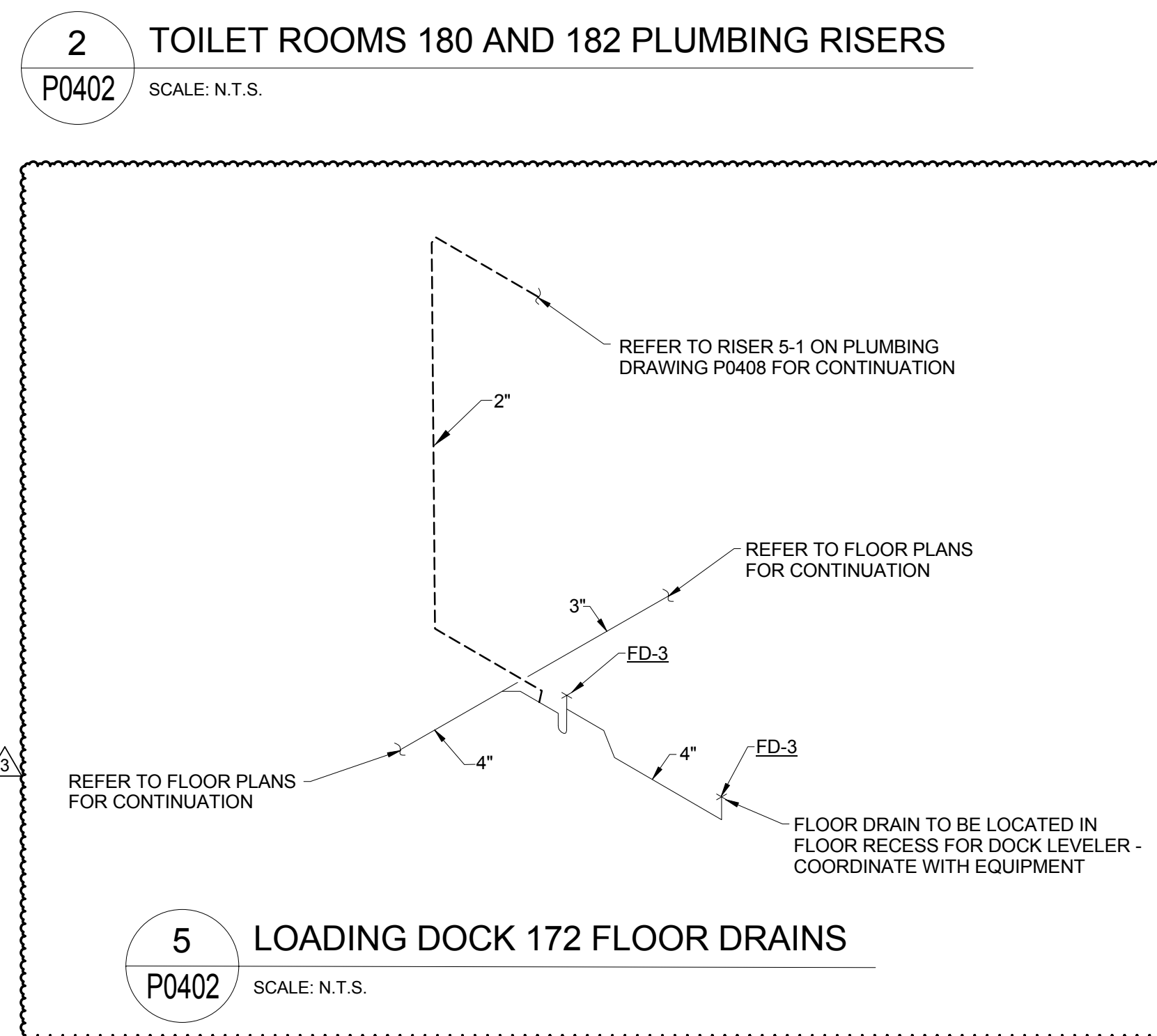
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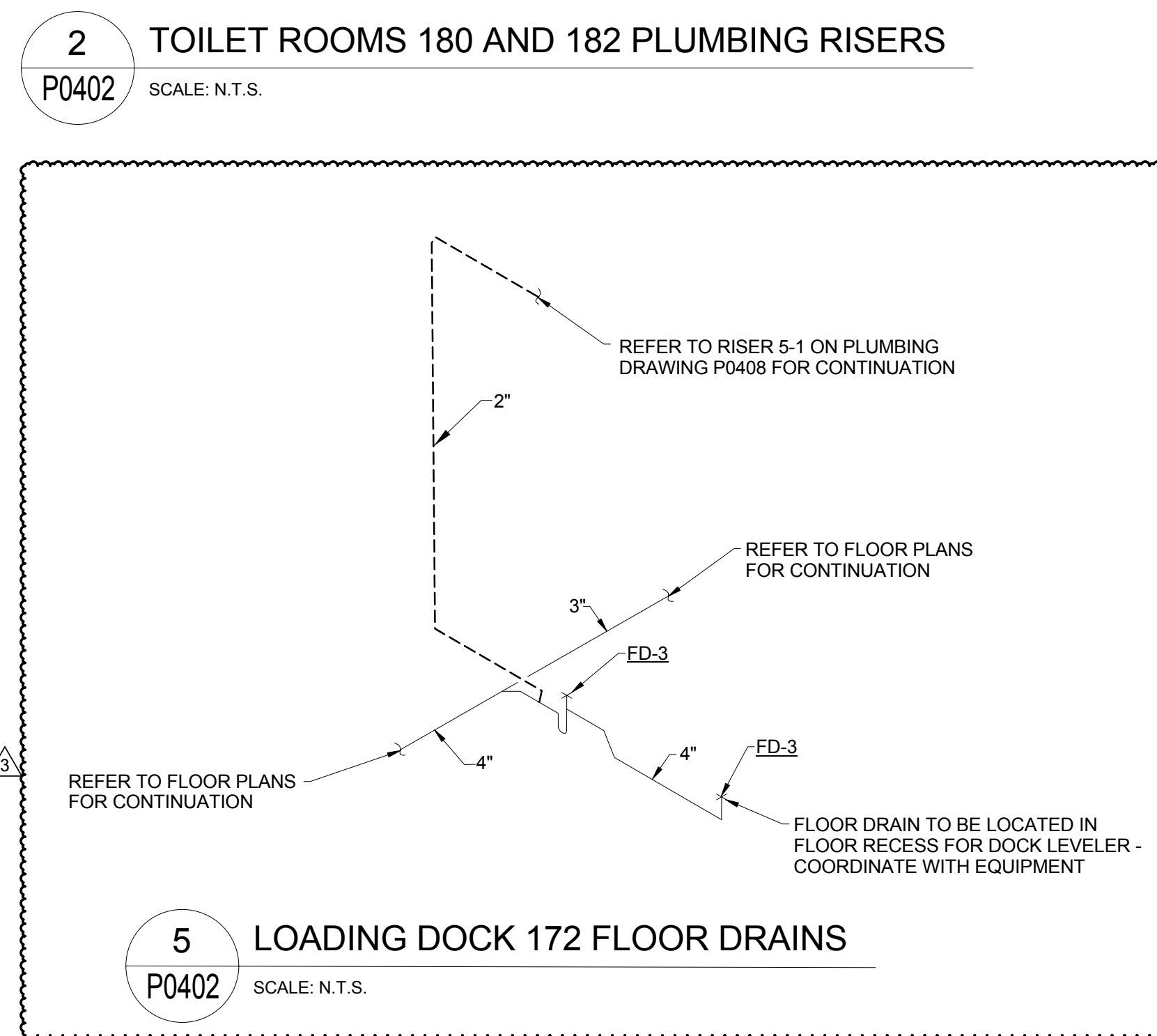
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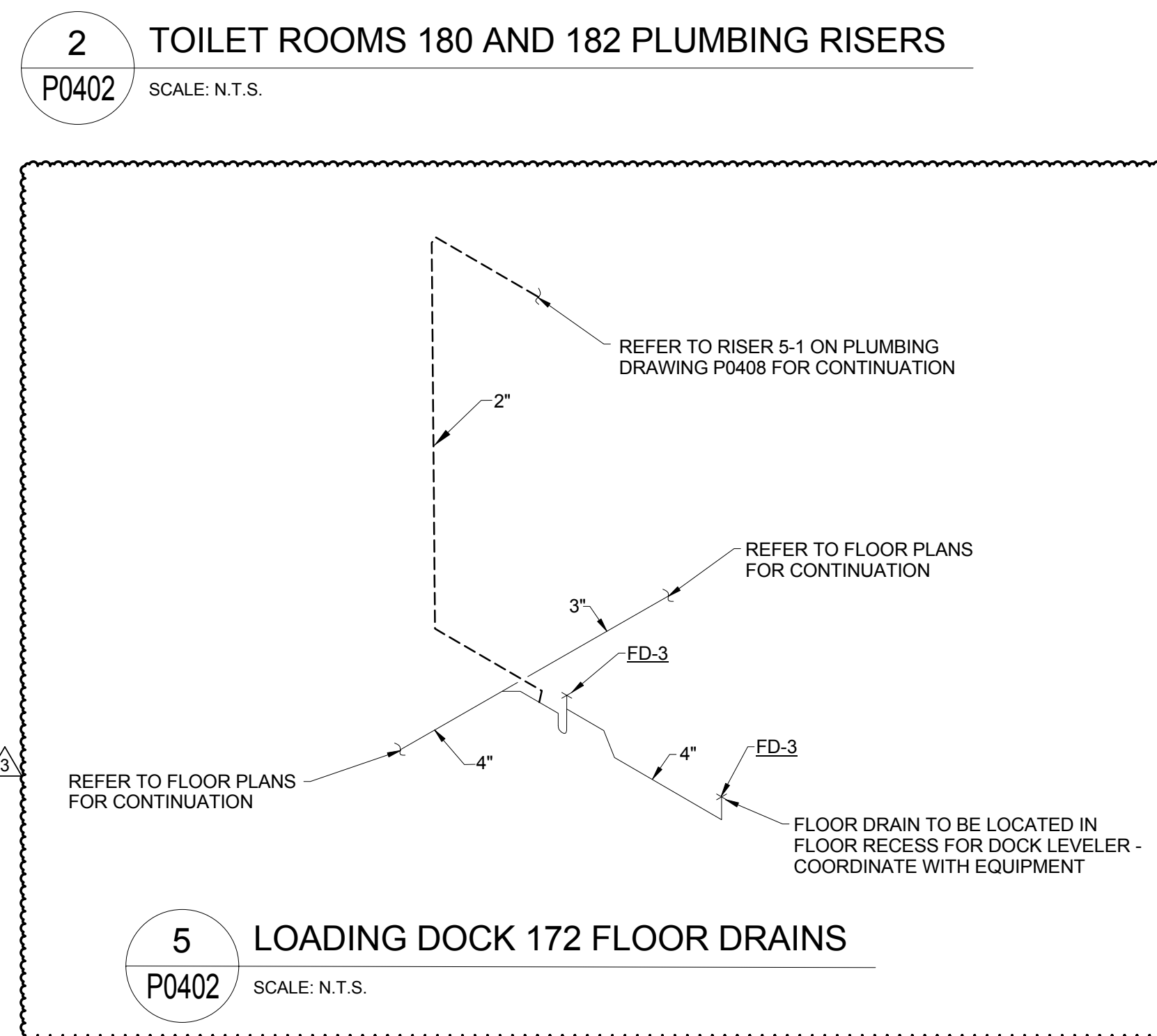
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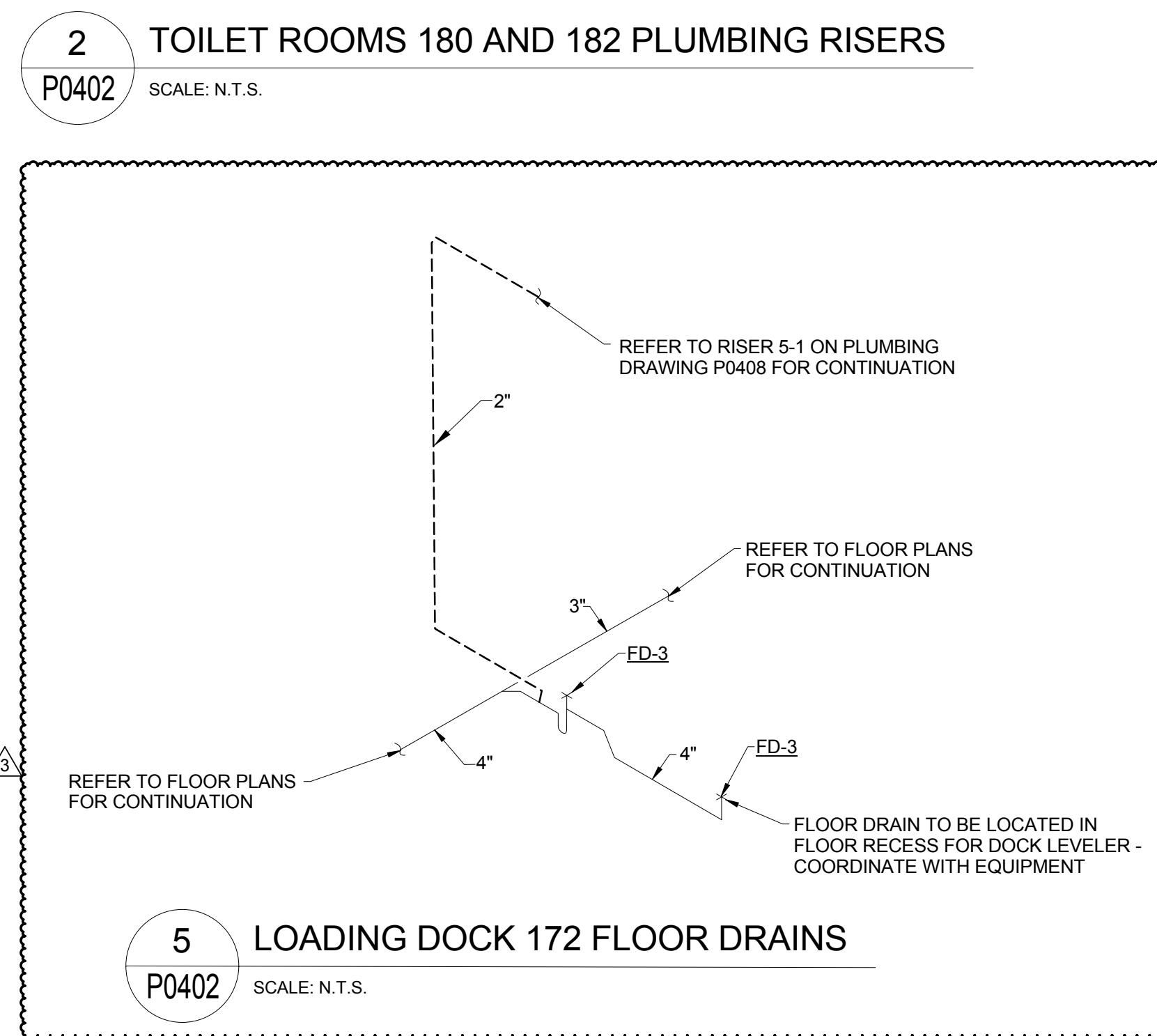
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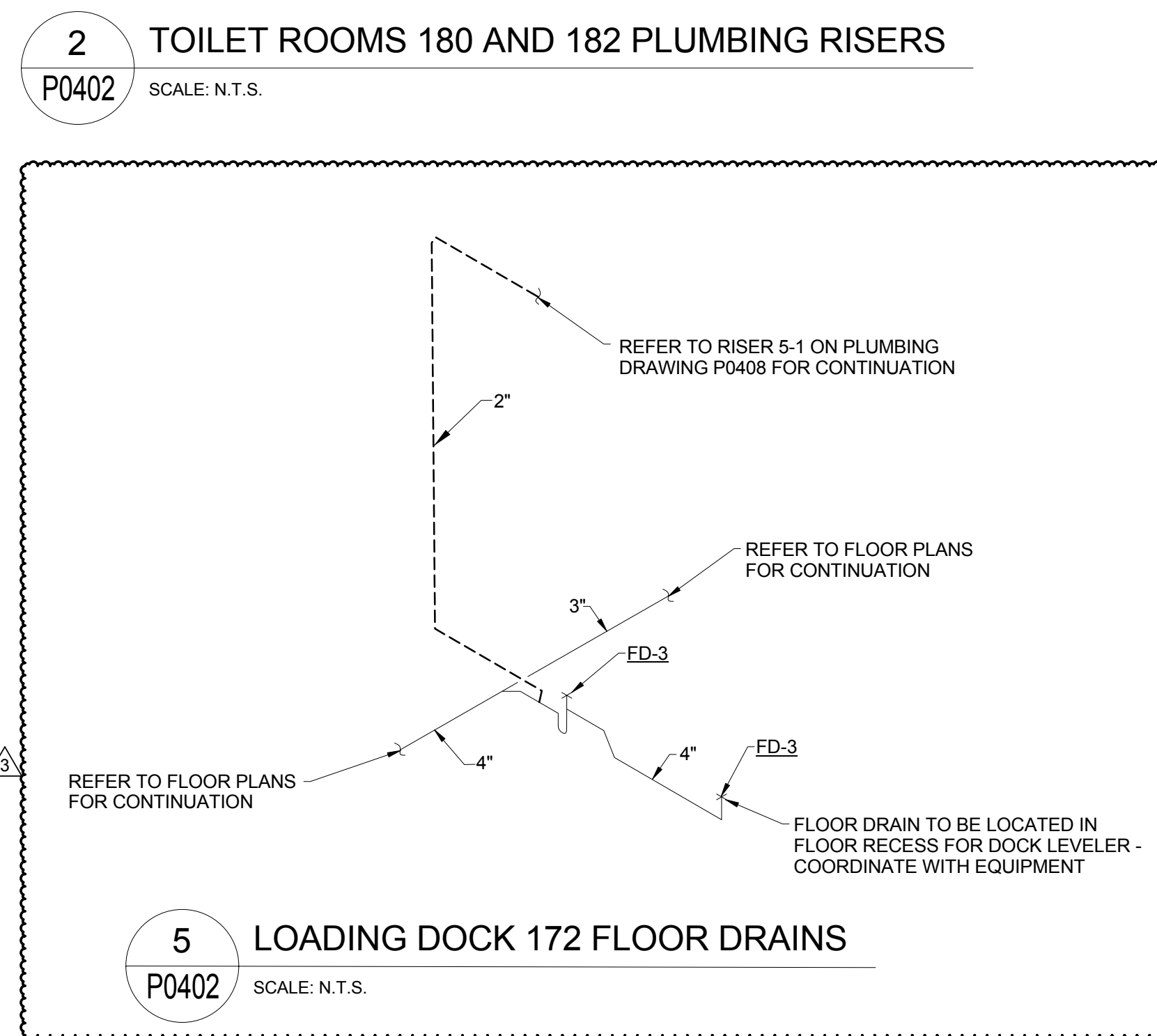
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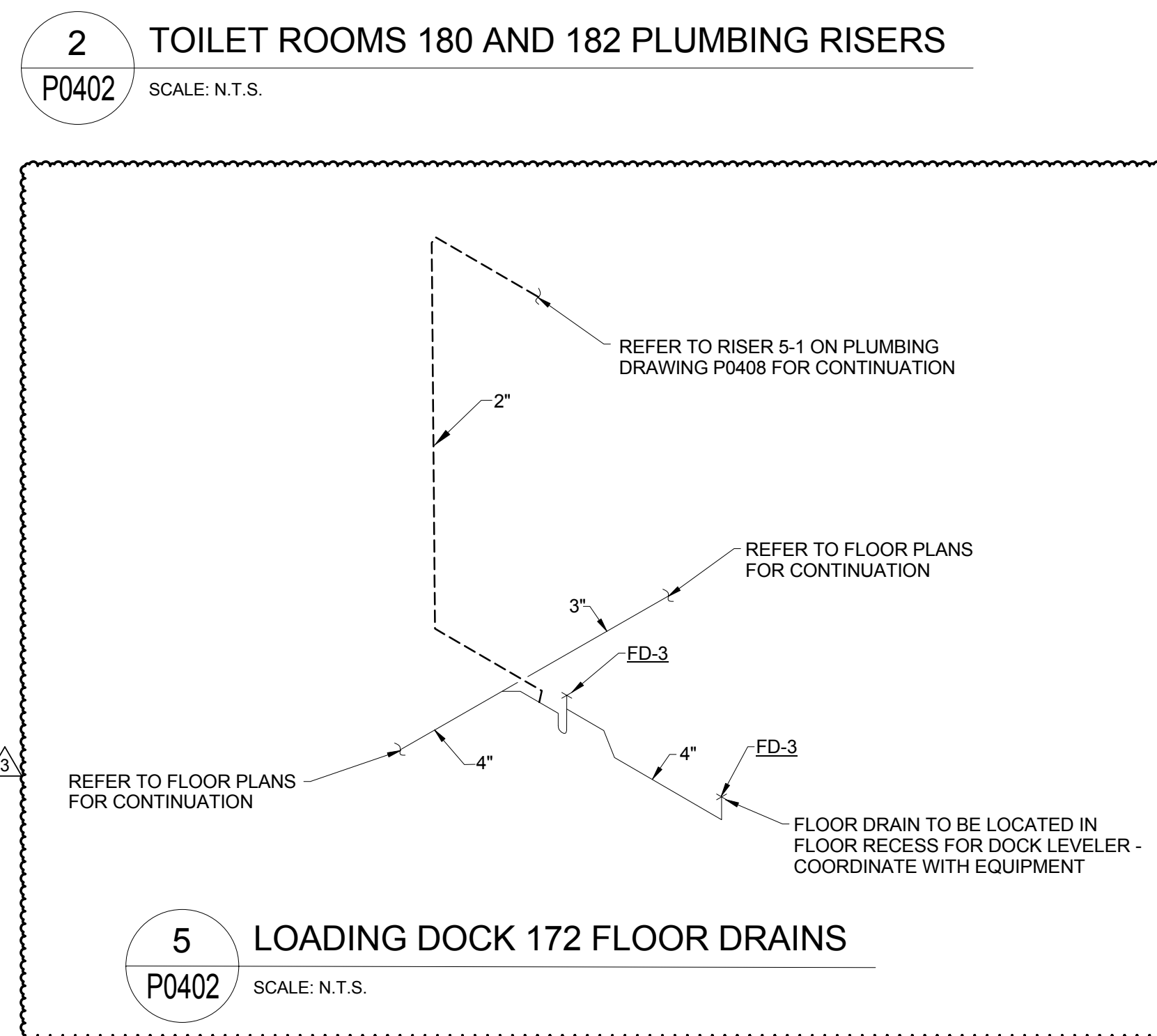
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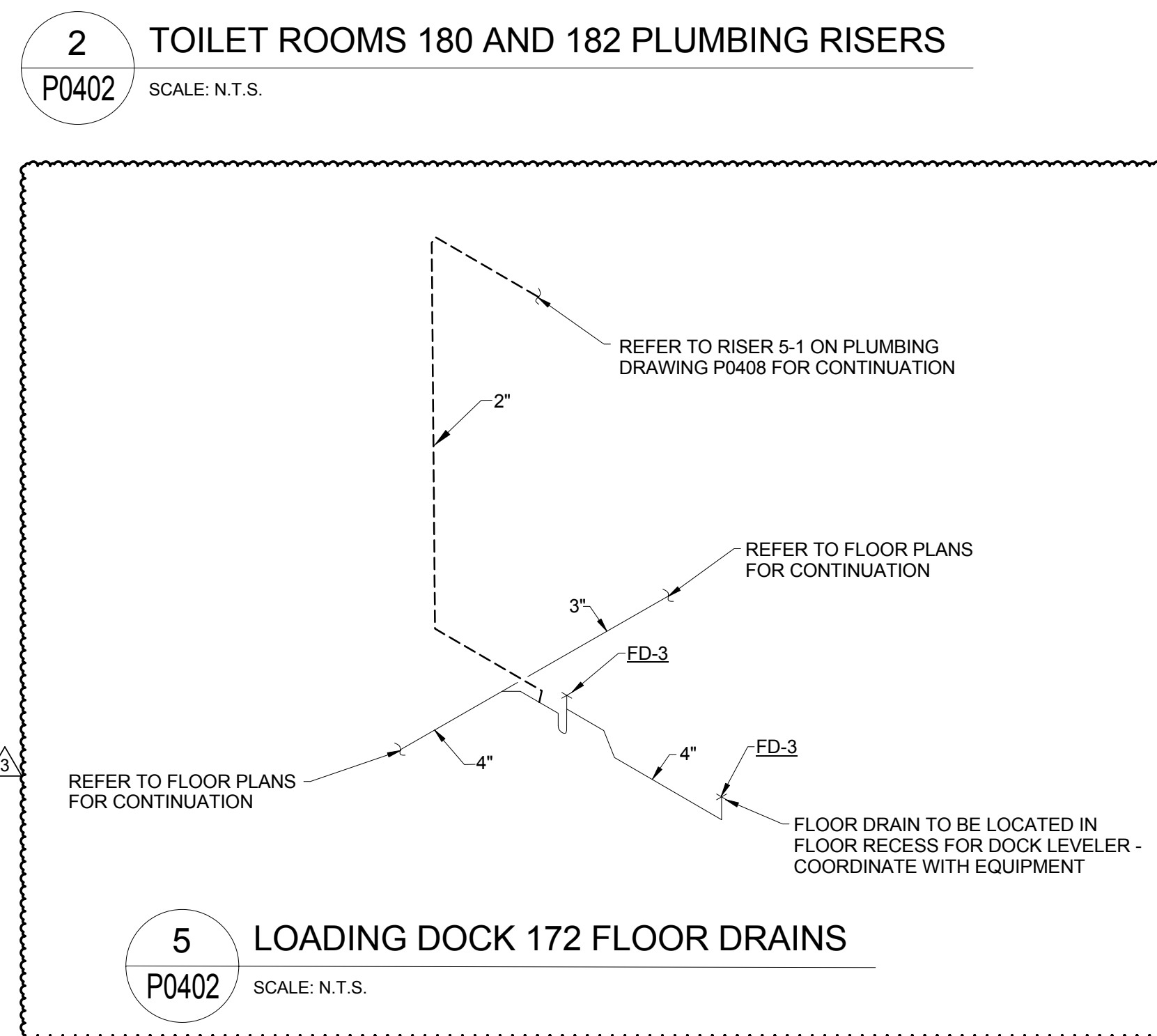
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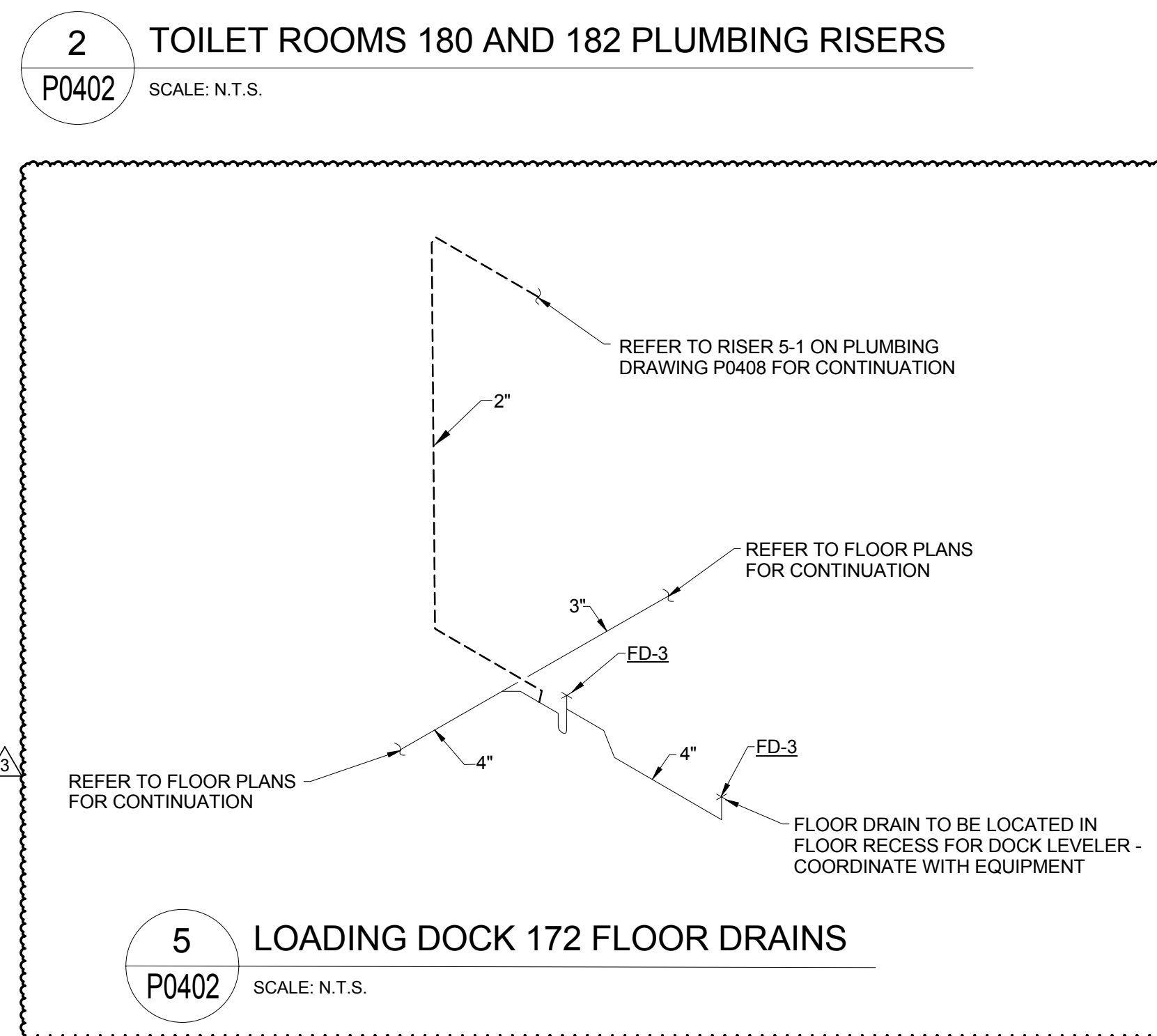
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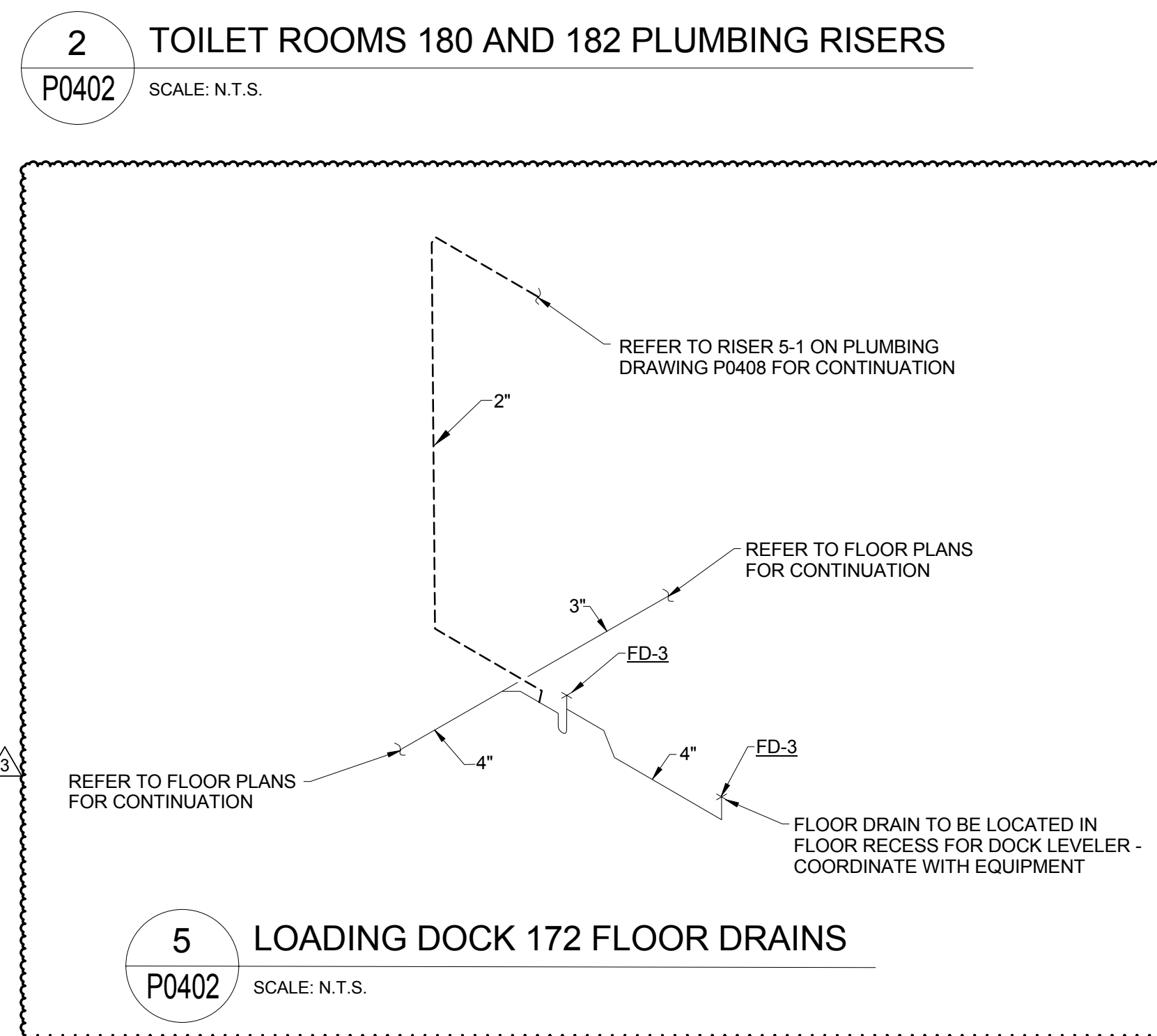
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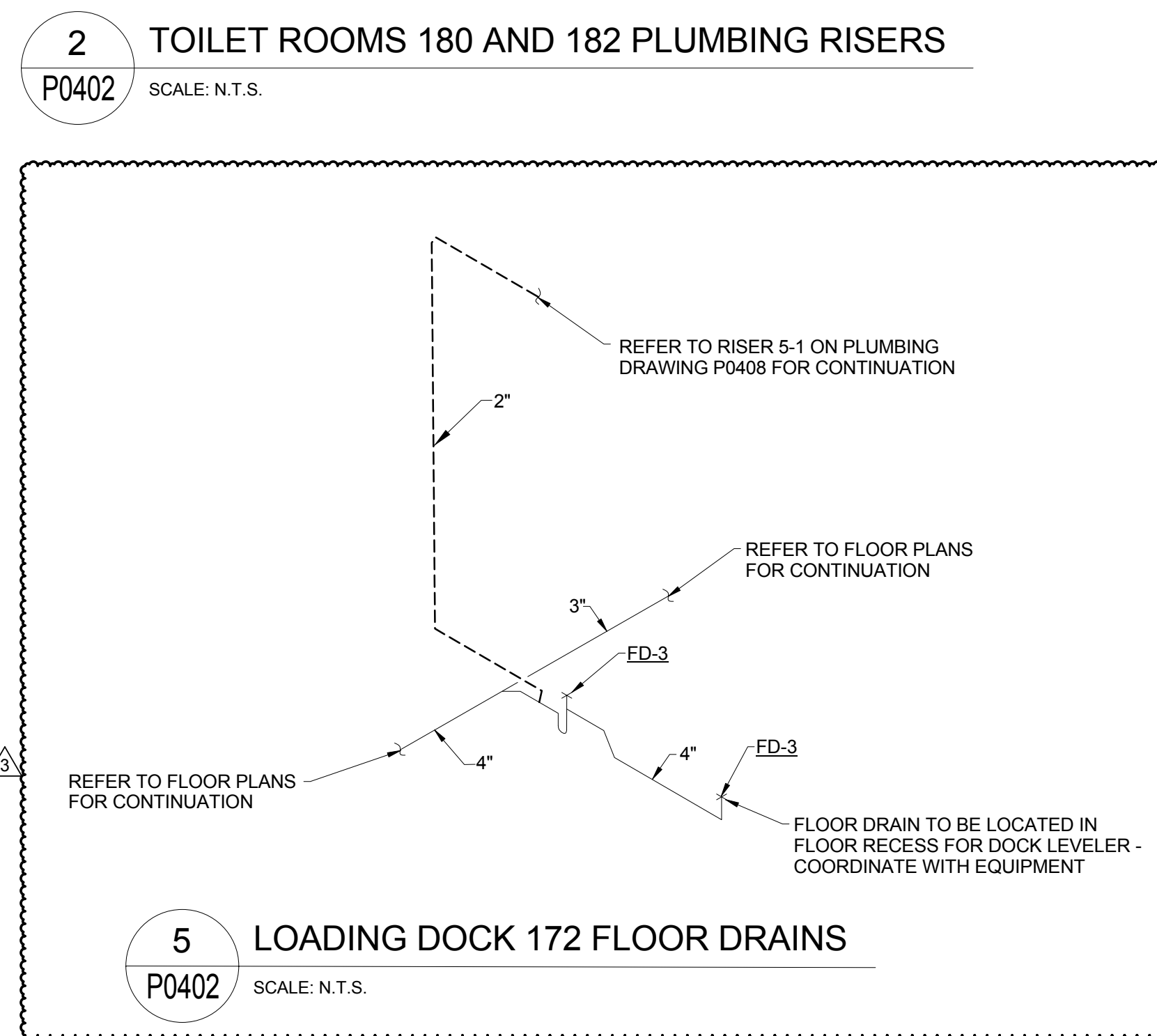
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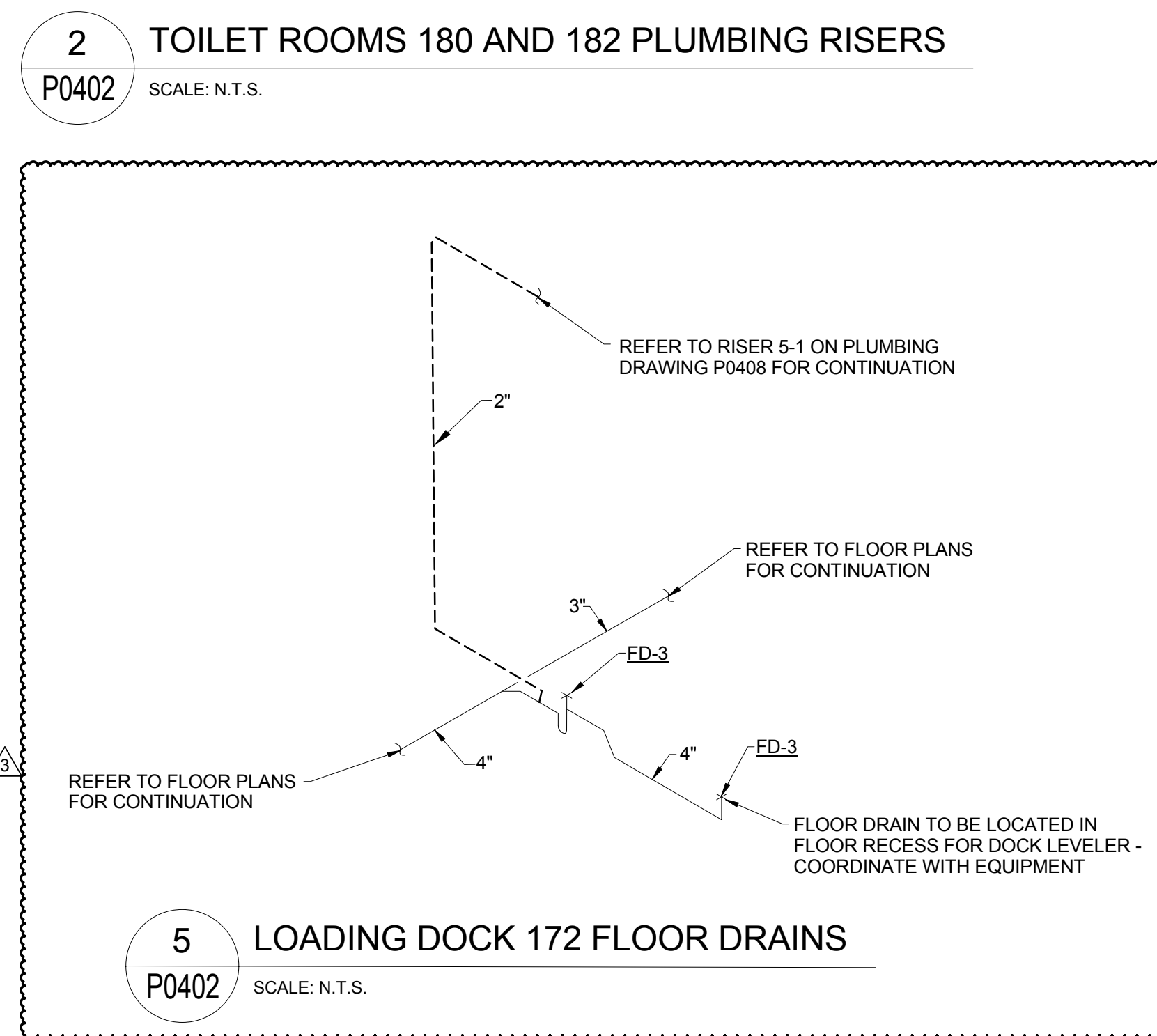
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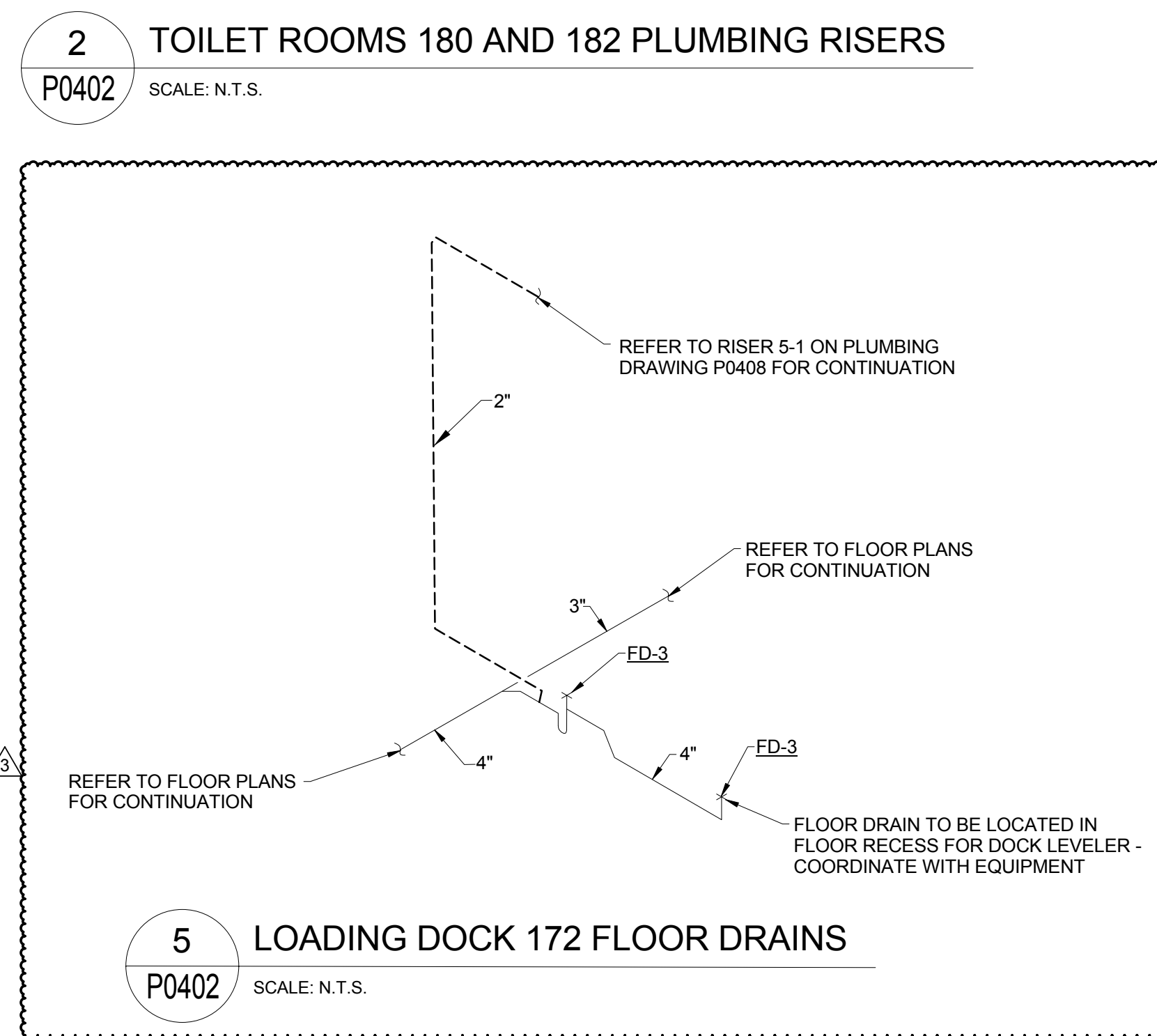
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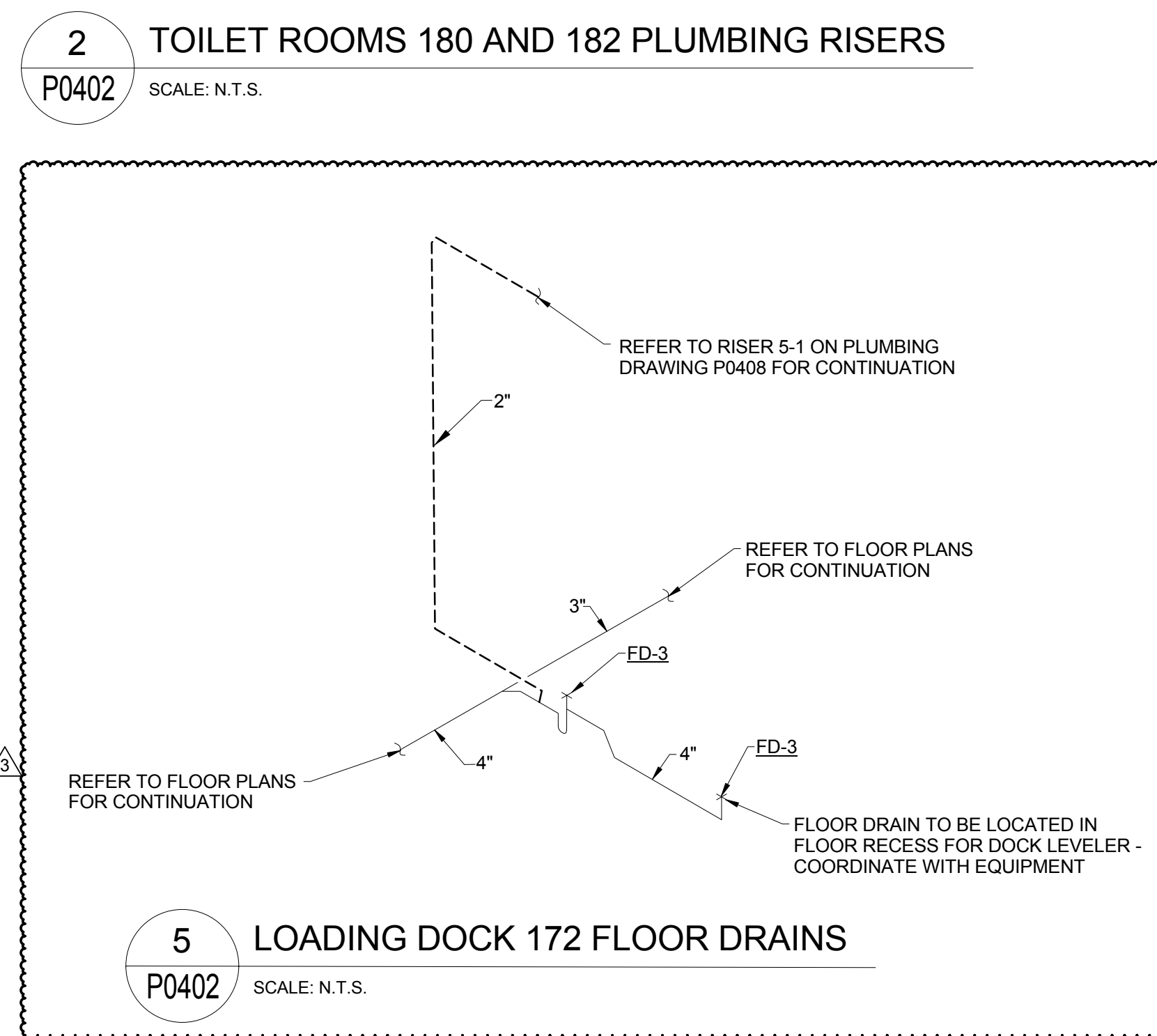
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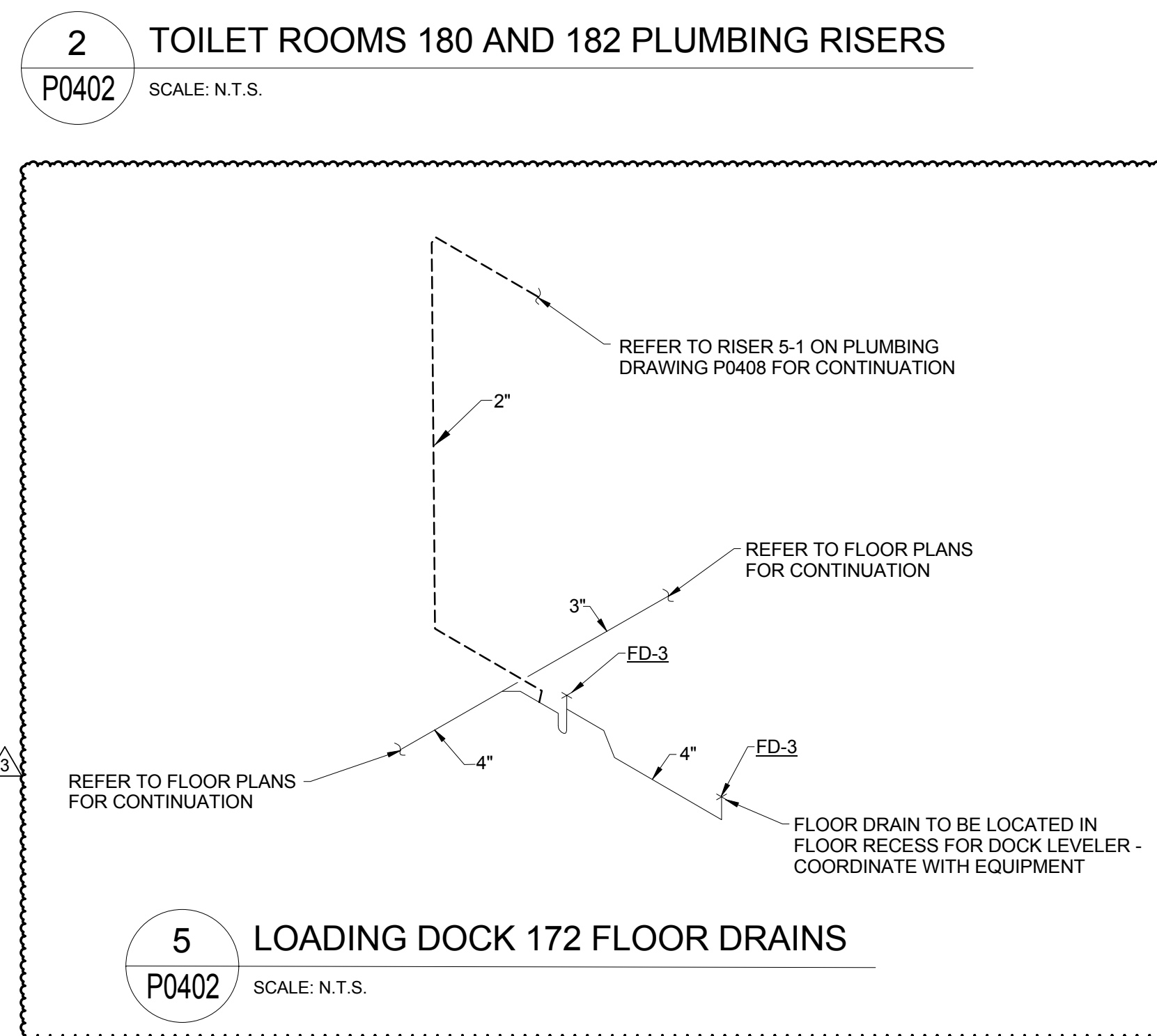
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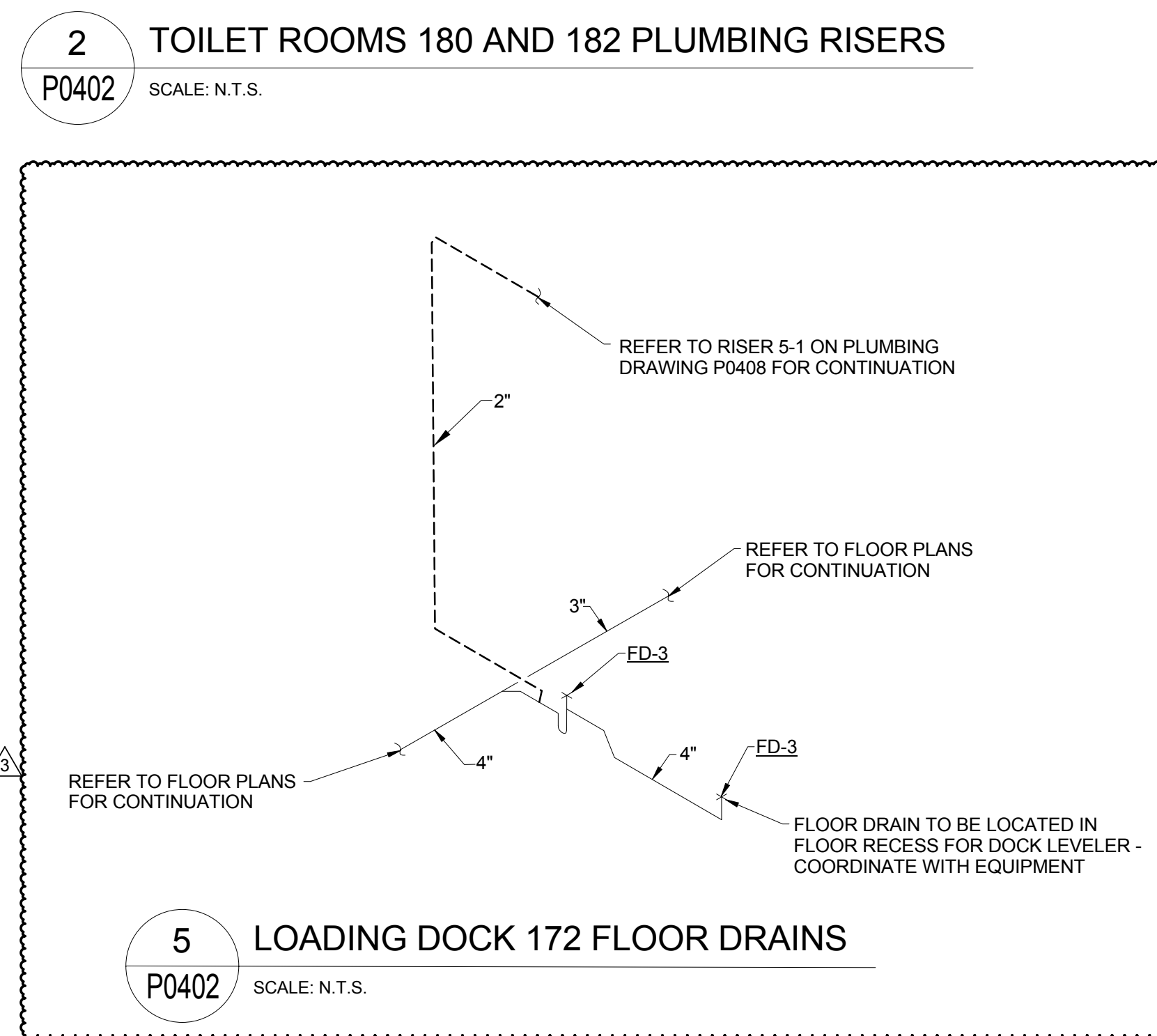
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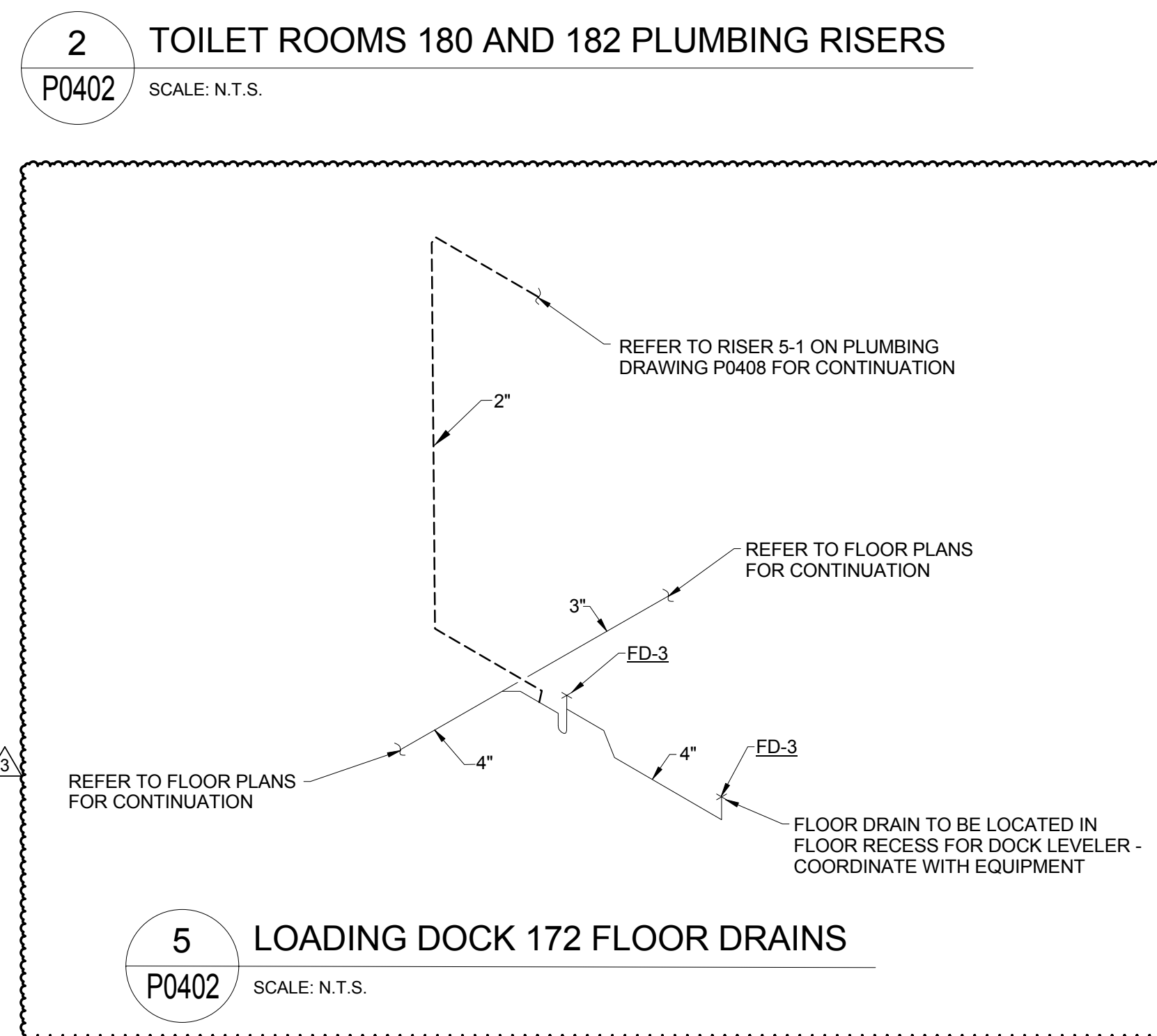
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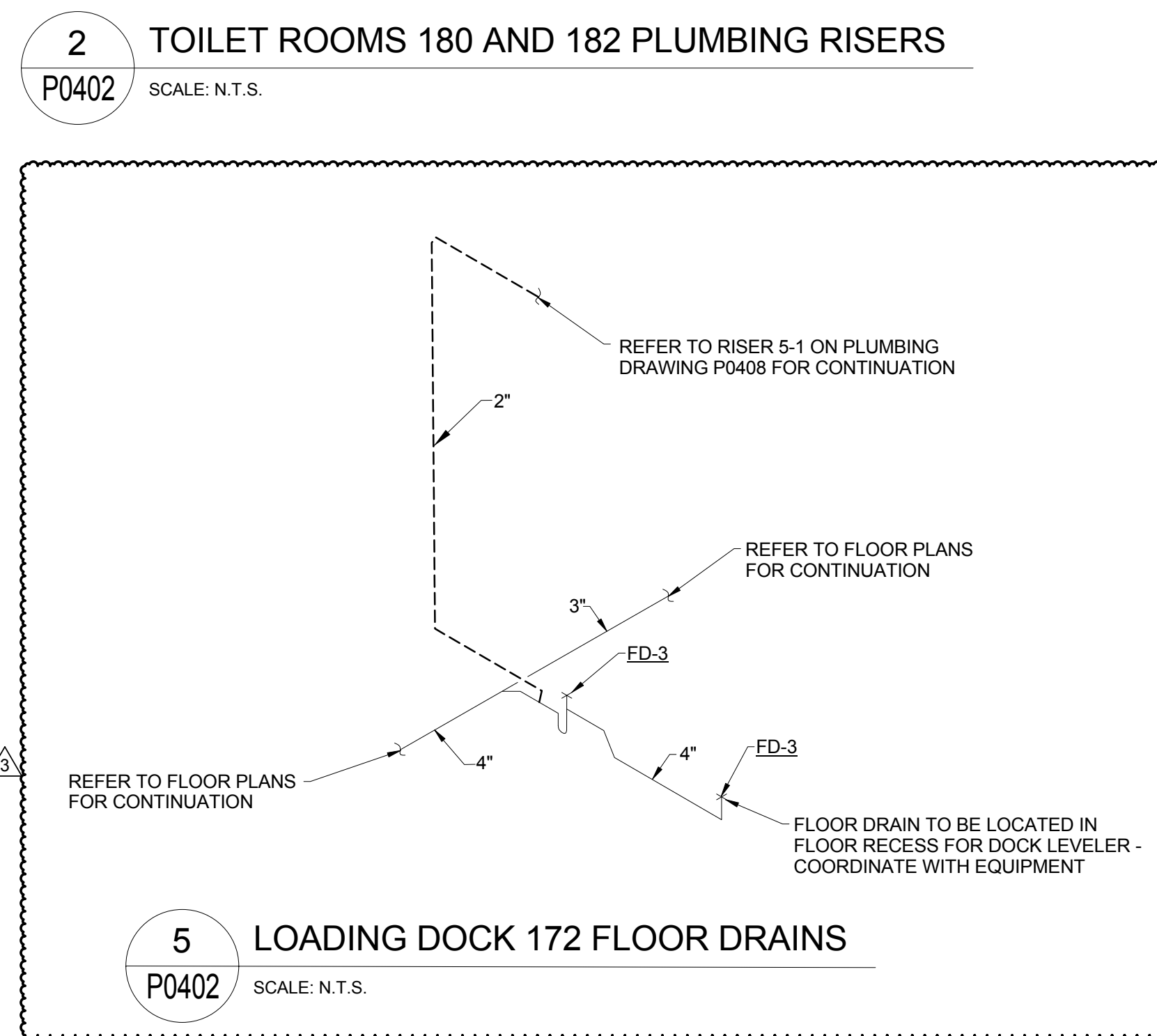
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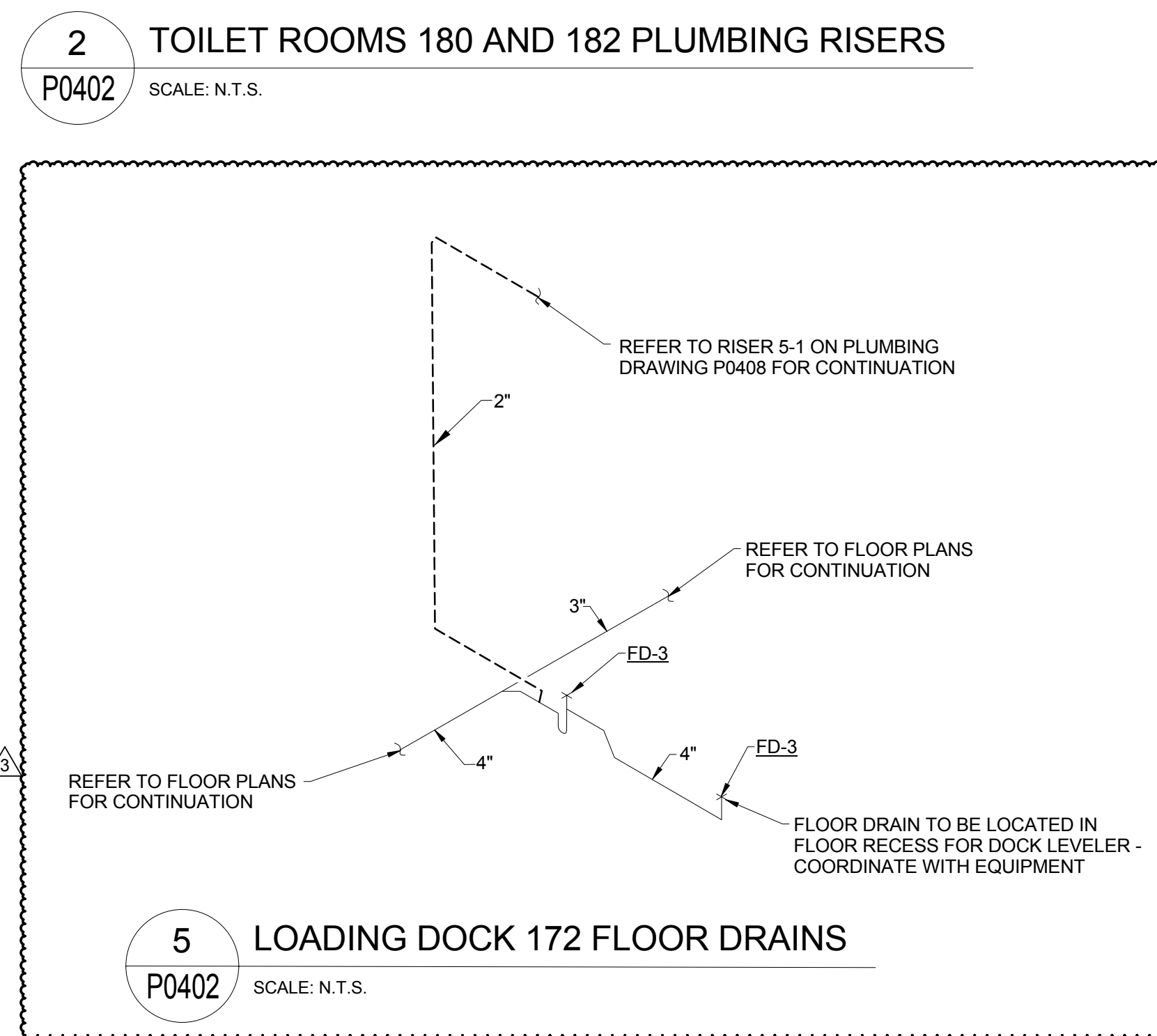
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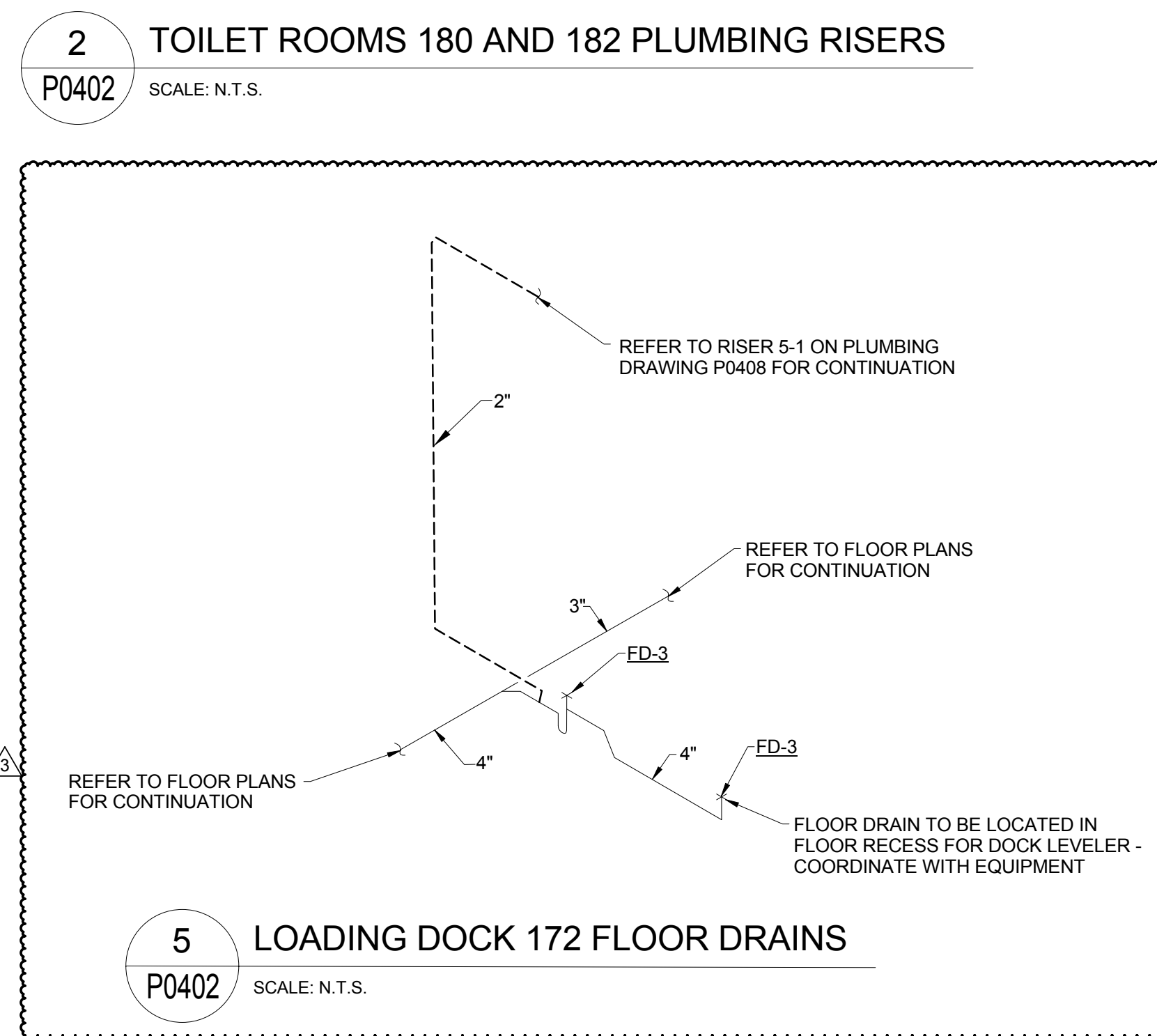
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5 LOADING DOCK 172 FLOOR DRAINS
P0402 SCALE: N.T.S.



5 LOADING DOCK 172 FLOOR DRAINS
P0402 SCALE: N.T.S.



5 LOADING DOCK 172 FLOOR DRAINS
P0402 SCALE: N.T.S.



CONFORMED SET 01 JUL 2016

2	ADDENDUM 2-4	24 MAY 2016
1	ADDENDUM 2-2	19 APR 2016
ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016		
No.	Description	Date

Drawing Title:

RISERS - PLUMBING

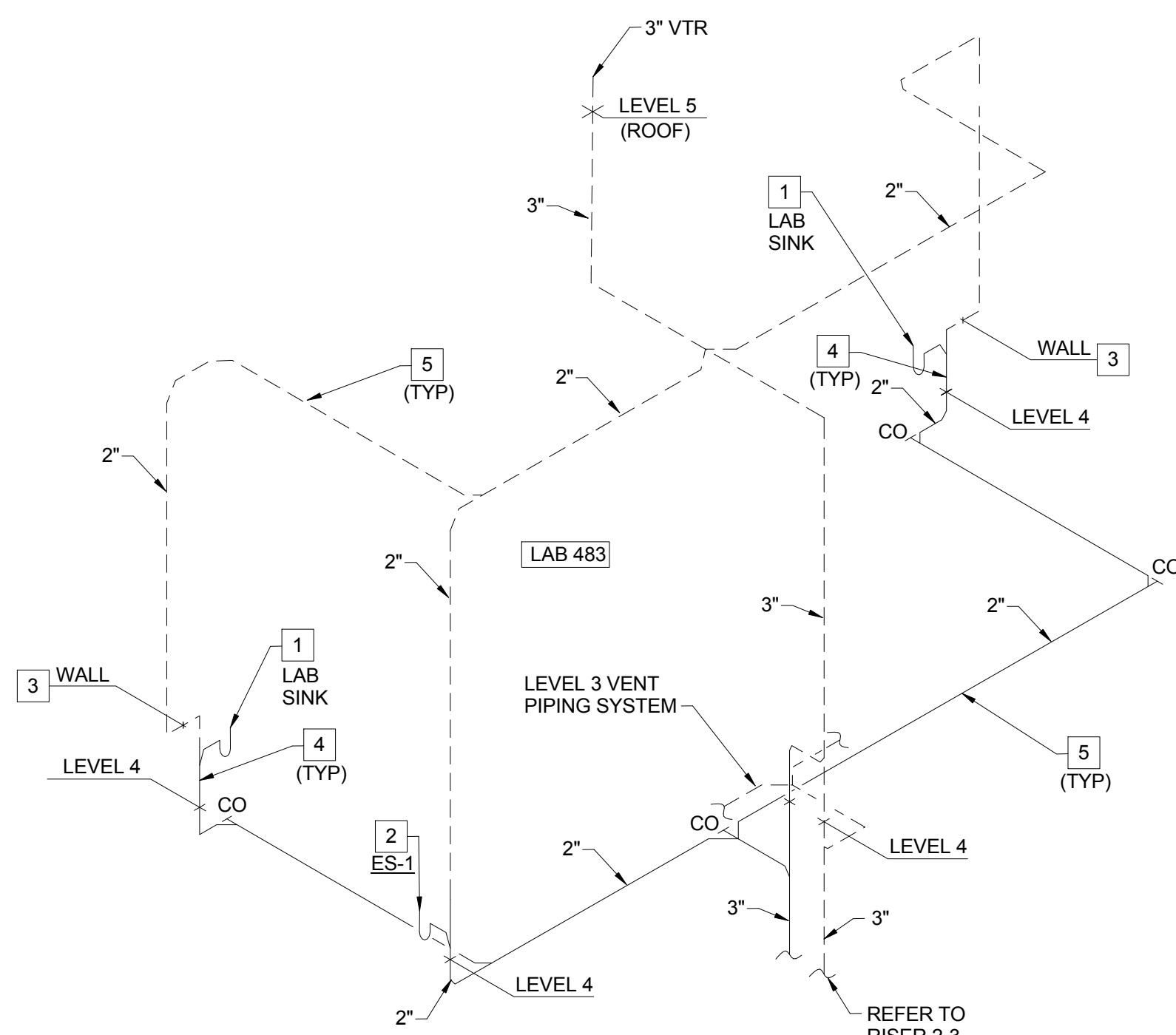
Project No.: 04561.01

Checked by:

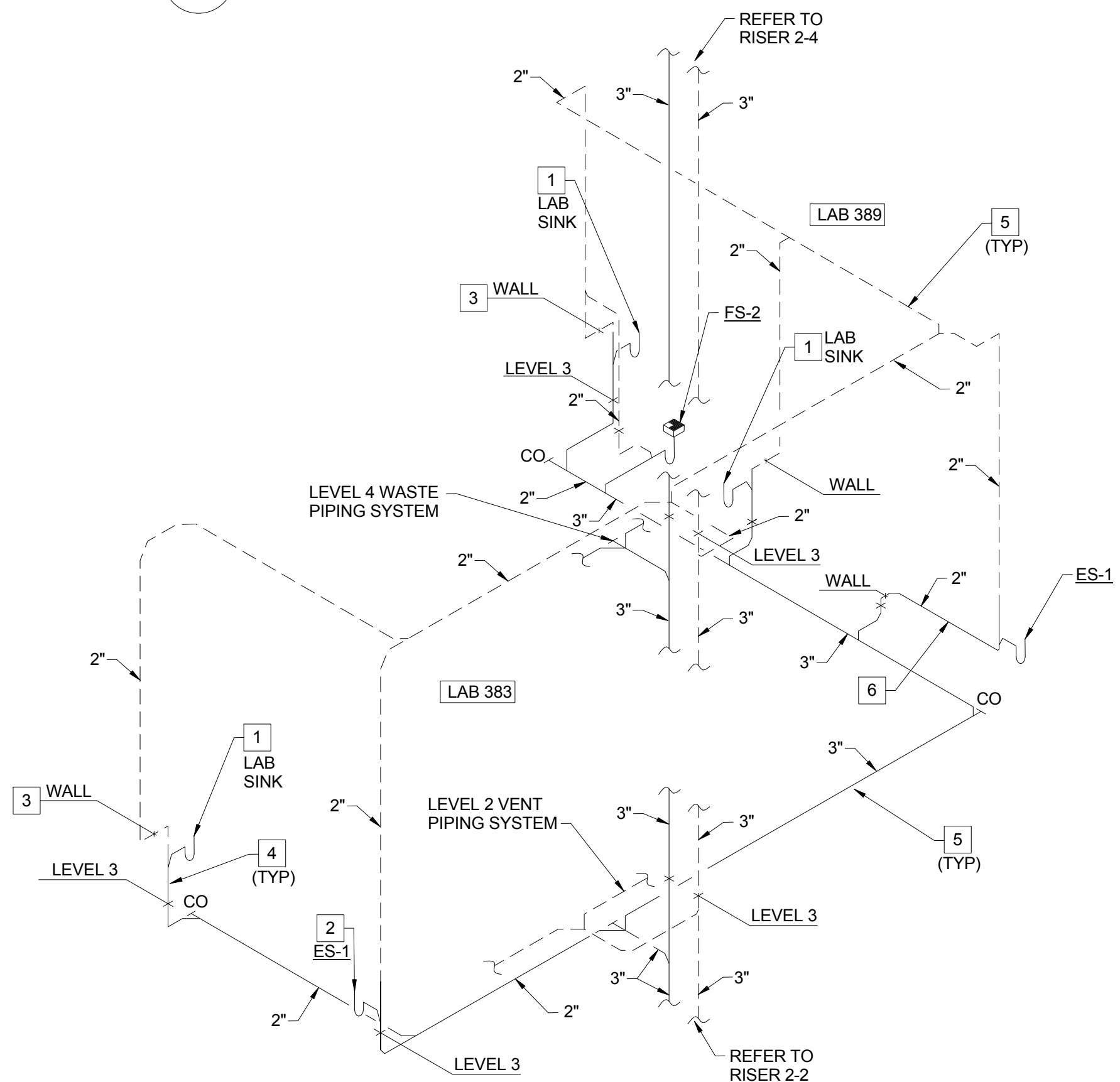
P0404

KEYED NOTES (THIS SHEET ONLY)

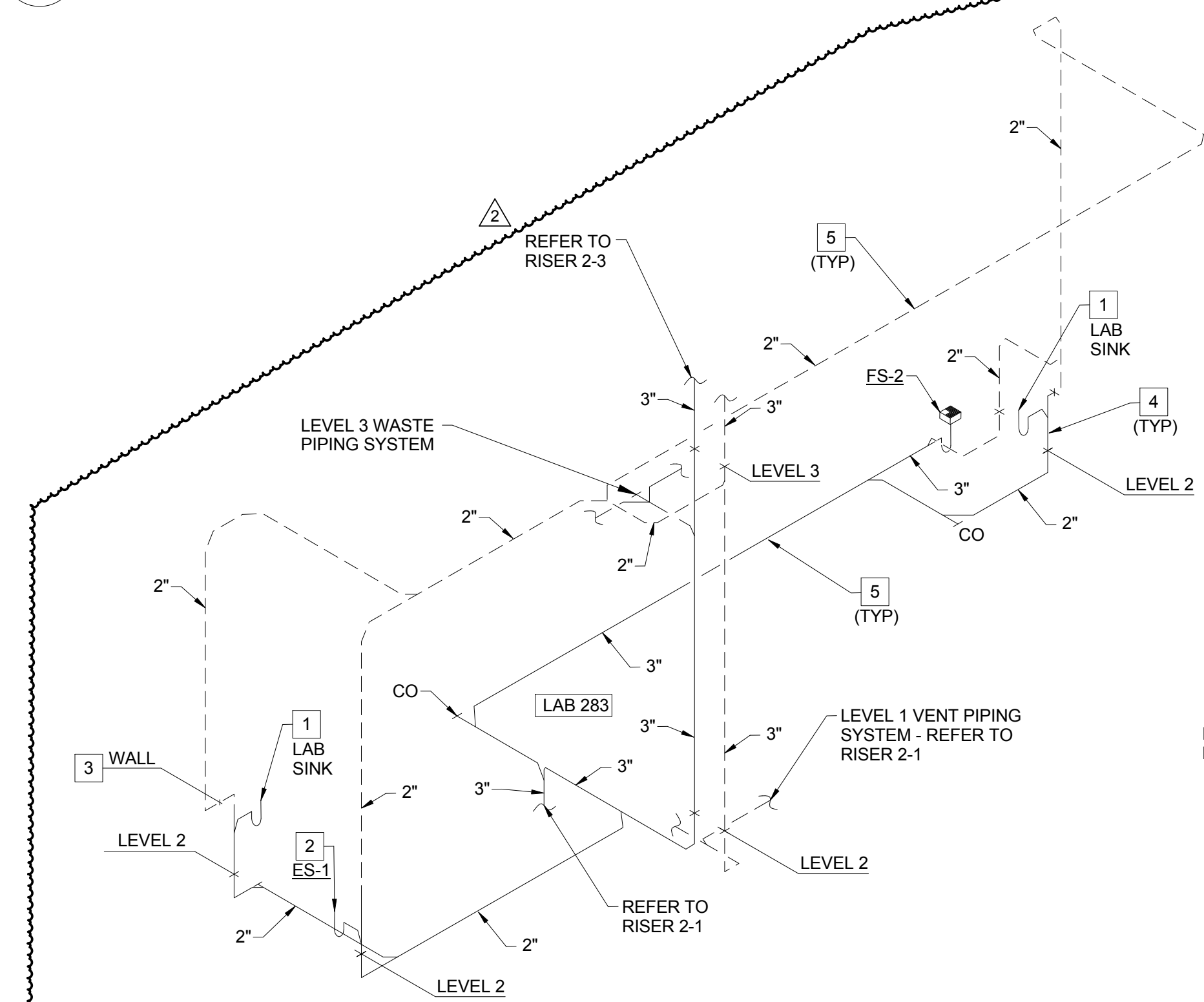
- 1 REFER TO DRAWING P0503, DETAIL 2/P0503 FOR TYPICAL LAB SINK WASTE CONNECTION DETAIL.
- 2 REFER TO DRAWING P0403, DETAIL 3/P0403 FOR TYPICAL EMERGENCY SHOWER PIPING DIAGRAM. COORDINATE PENETRATION THROUGH THE FLOOR WITH THE STRUCTURE BELOW AND THE ARCHITECTURAL DRAWINGS, OFF-SET THE PIPING AS REQUIRED.
- 3 OFF-SET VENT PIPING INTO THE WALL CAVITY TO EXTEND ABOVE THE CEILING. TYPICAL FOR LAB SINKS OR WHERE APPLICABLE.
- 4 WASTE PIPING TO BE LOCATED IN THE UTILITY SPACE BETWEEN THE WALL AND BACK OF CASEWORK. COORDINATE PENETRATION THROUGH THE FLOOR WITH THE STRUCTURE BELOW AND THE ARCHITECTURAL DRAWINGS, OFF-SET PIPING AS REQUIRED. TYPICAL FOR LAB SINKS OR WHERE APPLICABLE.
- 5 COORDINATE ROUTING AND INSTALLATION OF THE WASTE AND VENT PIPING ABOVE THE CEILING WITH STRUCTURAL ELEMENTS AND OTHER TRADES ON THIS PROJECT. HOLD PIPING AS HIGH AS POSSIBLE, WHERE POSSIBLE. TYPICAL FOR ALL ABOVE THE CEILING PIPING.
- 6 EXTEND WASTE FROM EMERGENCY SHOWER HORIZONTAL IN WALL CAVITY TO AN AREA BEHIND THE LABORATORY CASE WORK. TURN PIPING OUT OF WALL WITHIN UTILITY SPACE BEHIND THE CASEWORK TO TURN DOWN THROUGH THE FLOOR. COORDINATE PENETRATION THROUGH THE FLOOR WITH THE STRUCTURE BELOW AND THE ARCHITECTURAL DRAWINGS, OFF-SET PIPING AS REQUIRED.



2-4 SANITARY WASTE AND VENT RISER - LAB 483



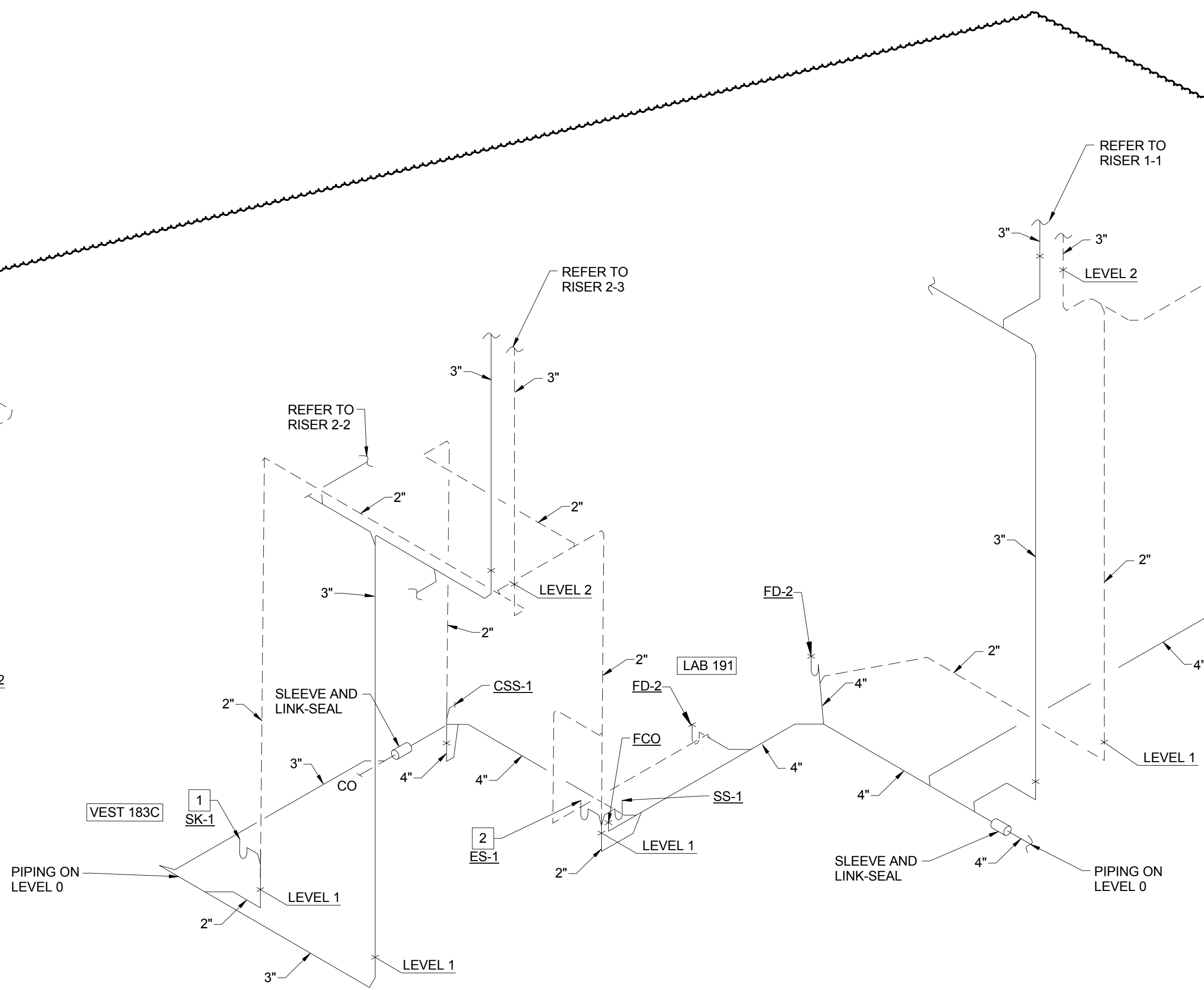
2-3 SANITARY WASTE AND VENT RISER - LAB 383 AND PREP 389



2-2 SANITARY WASTE AND VENT RISER - LAB 283

PLUMBING WASTE AND VENT FOR PLUMBING RISER PR-2

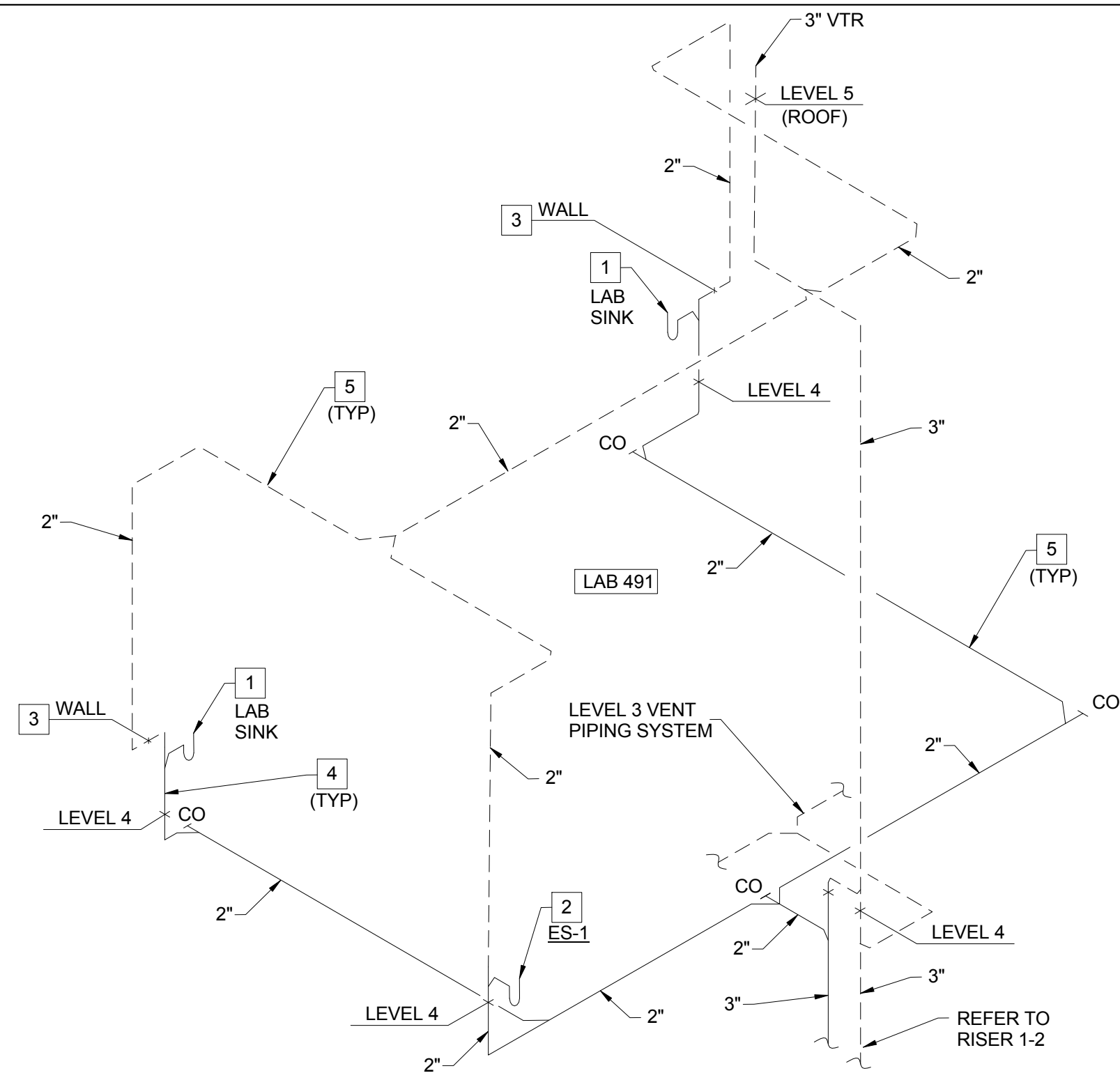
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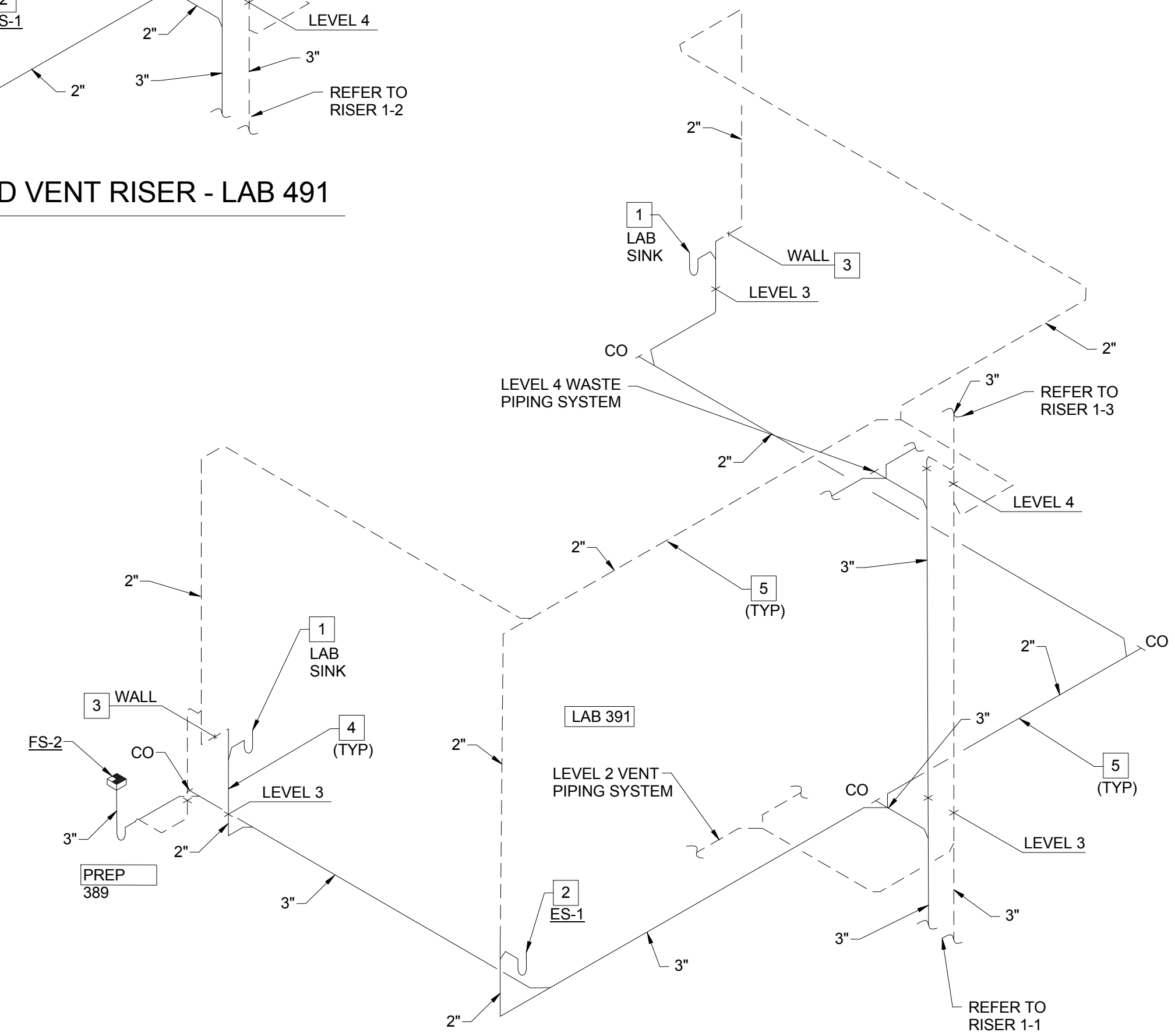
2-1 SANITARY WASTE AND VENT RISER - VESTIBULE 183C AND LAB 191

1 PLUMBING WASTE AND VENT RISERS FOR PLUMBING RIERS PR-1 AND PR-2

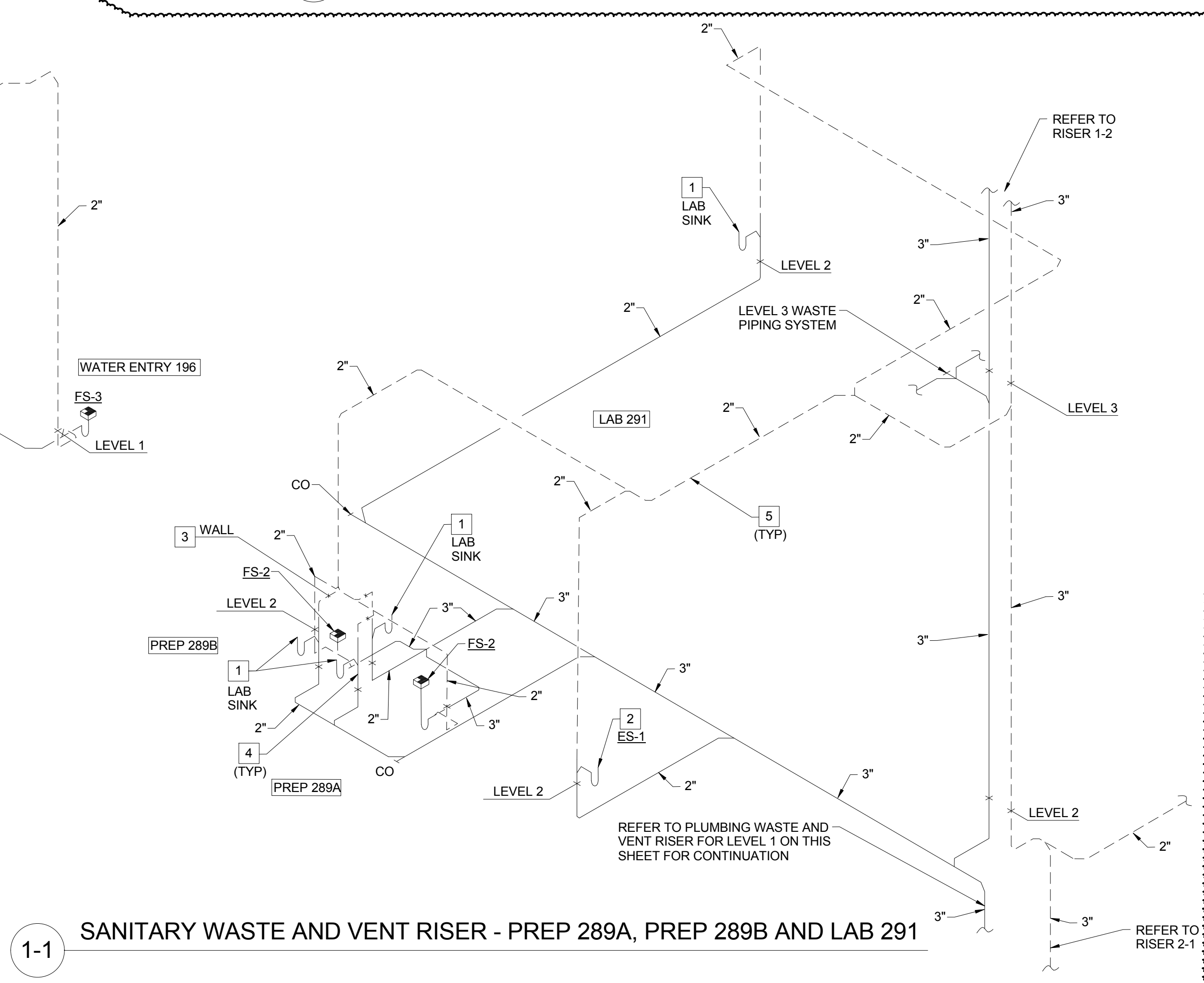
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1-3 SANITARY WASTE AND VENT RISER - LAB 491



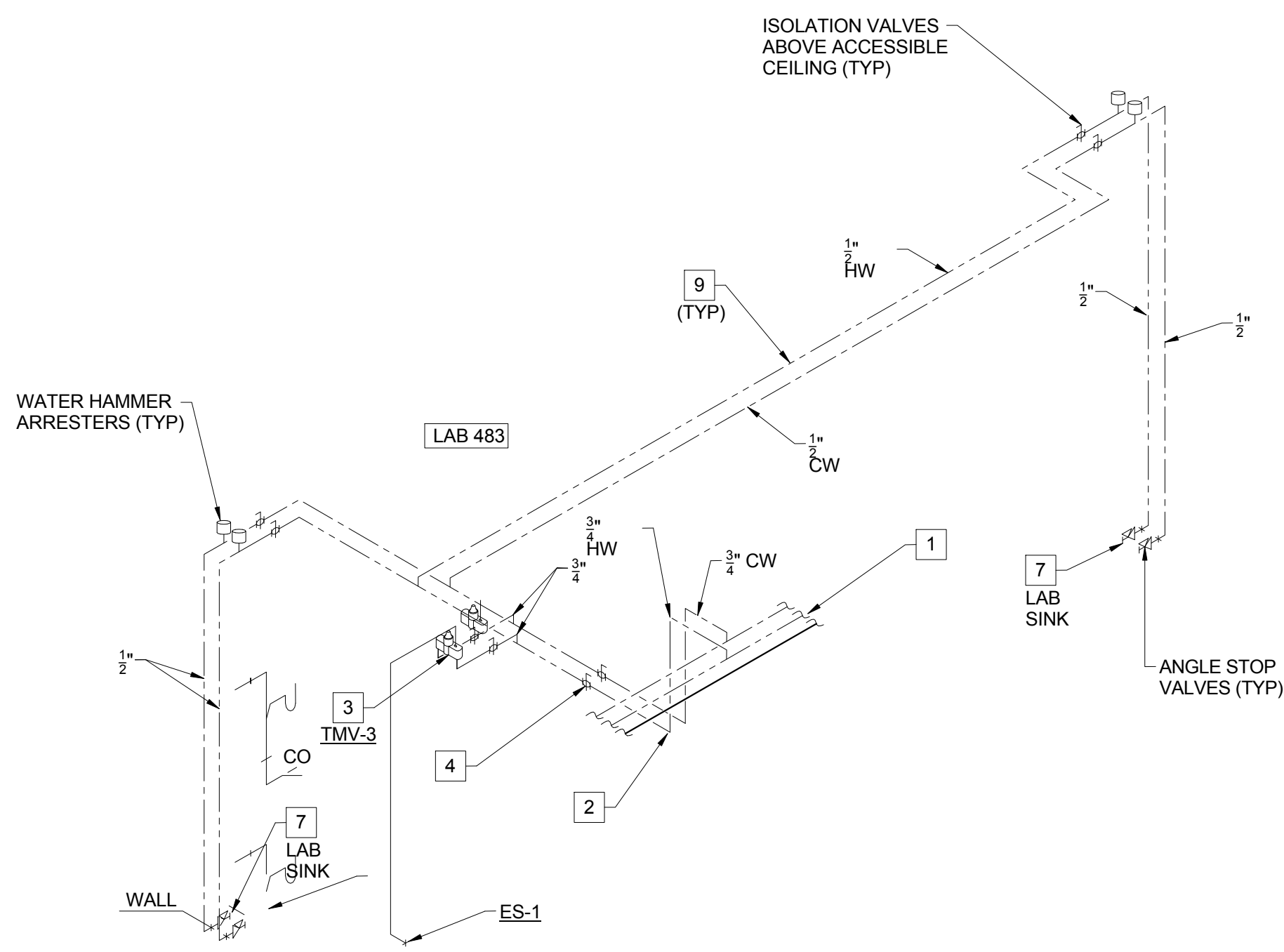
1-2 SANITARY WASTE AND VENT RISER - PREP 389 AND LAB 391



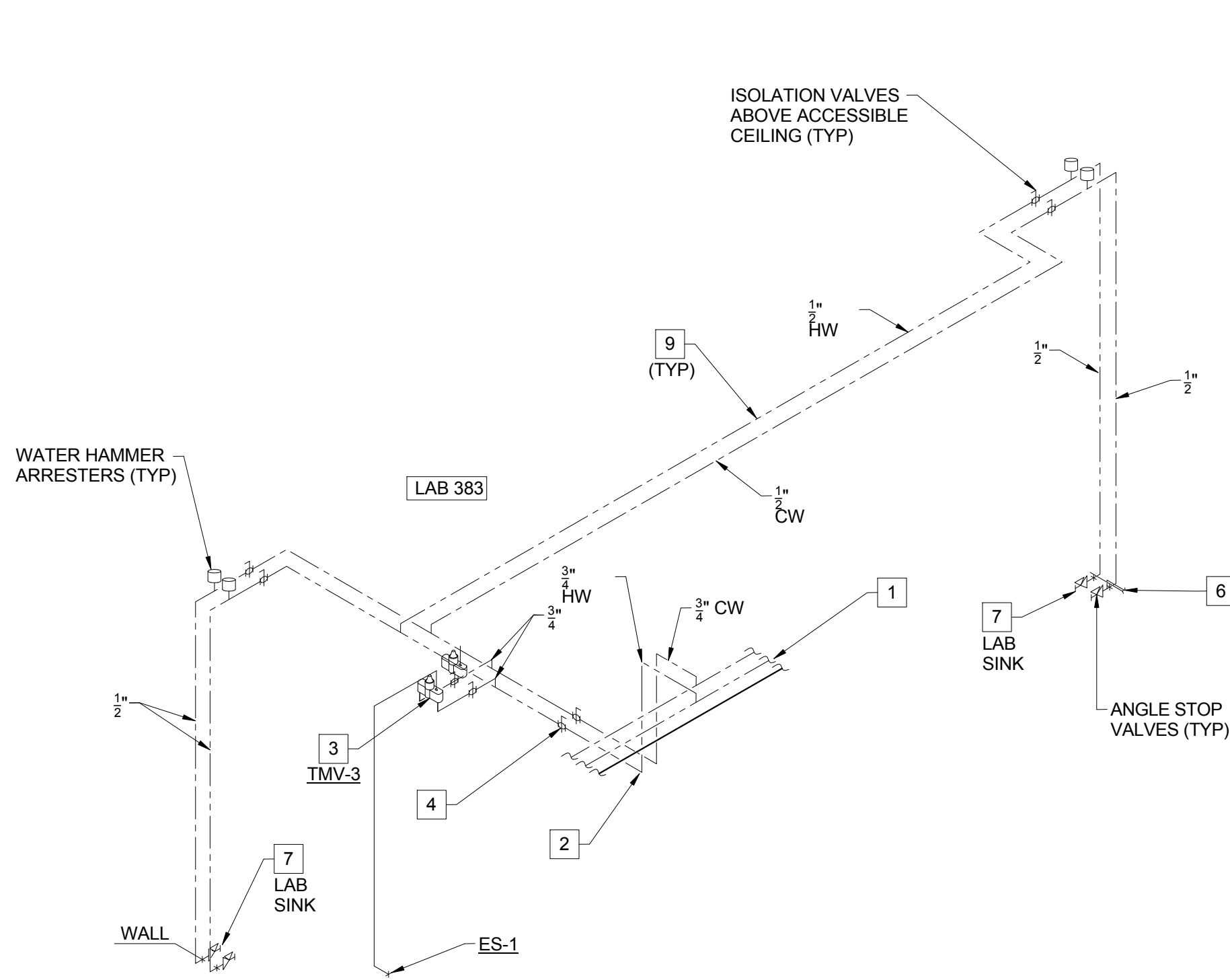
1-1 SANITARY WASTE AND VENT RISER - PREP 289A, PREP 289B AND LAB 291

PLUMBING WASTE AND VENT FOR PLUMBING RISER PR-1

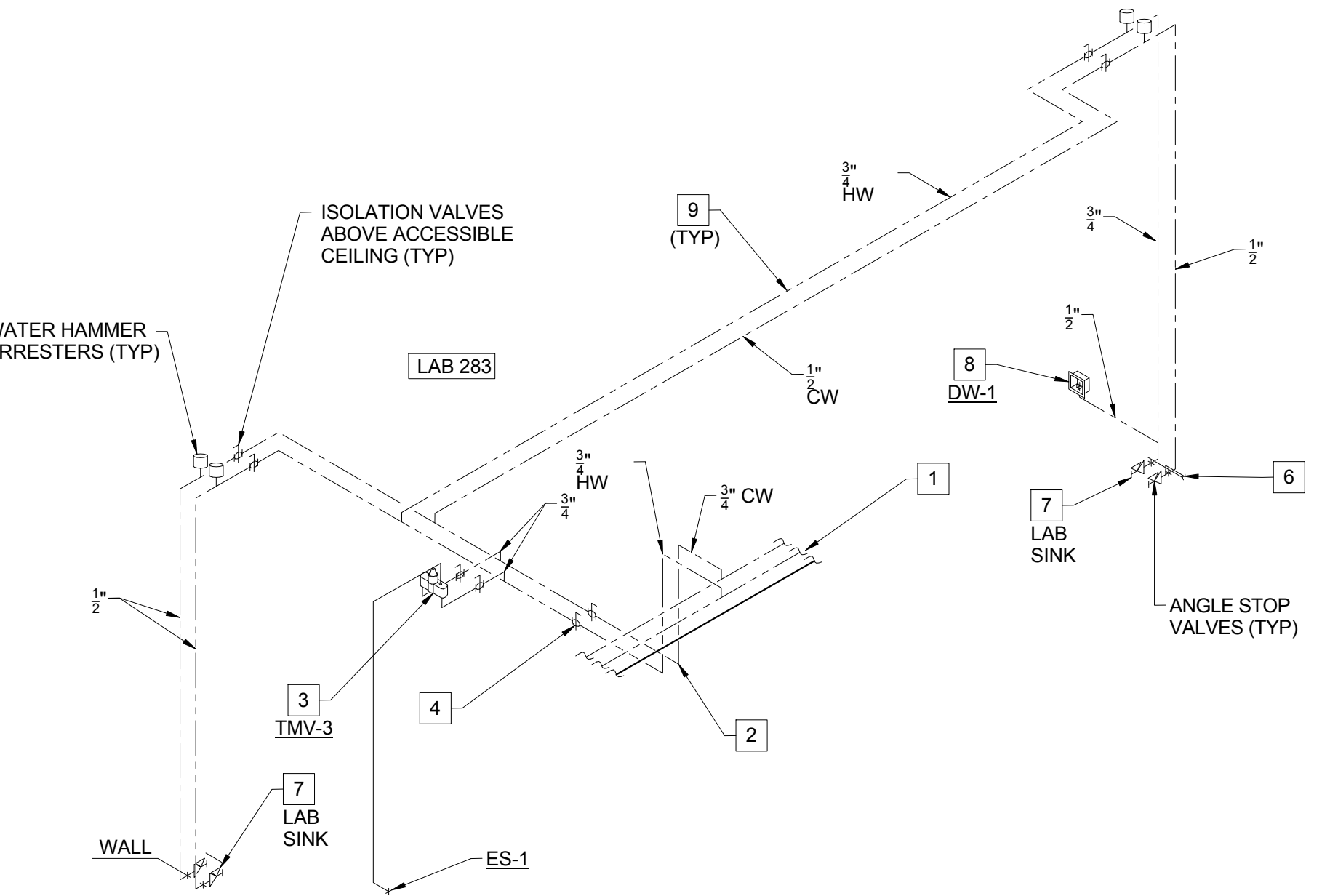
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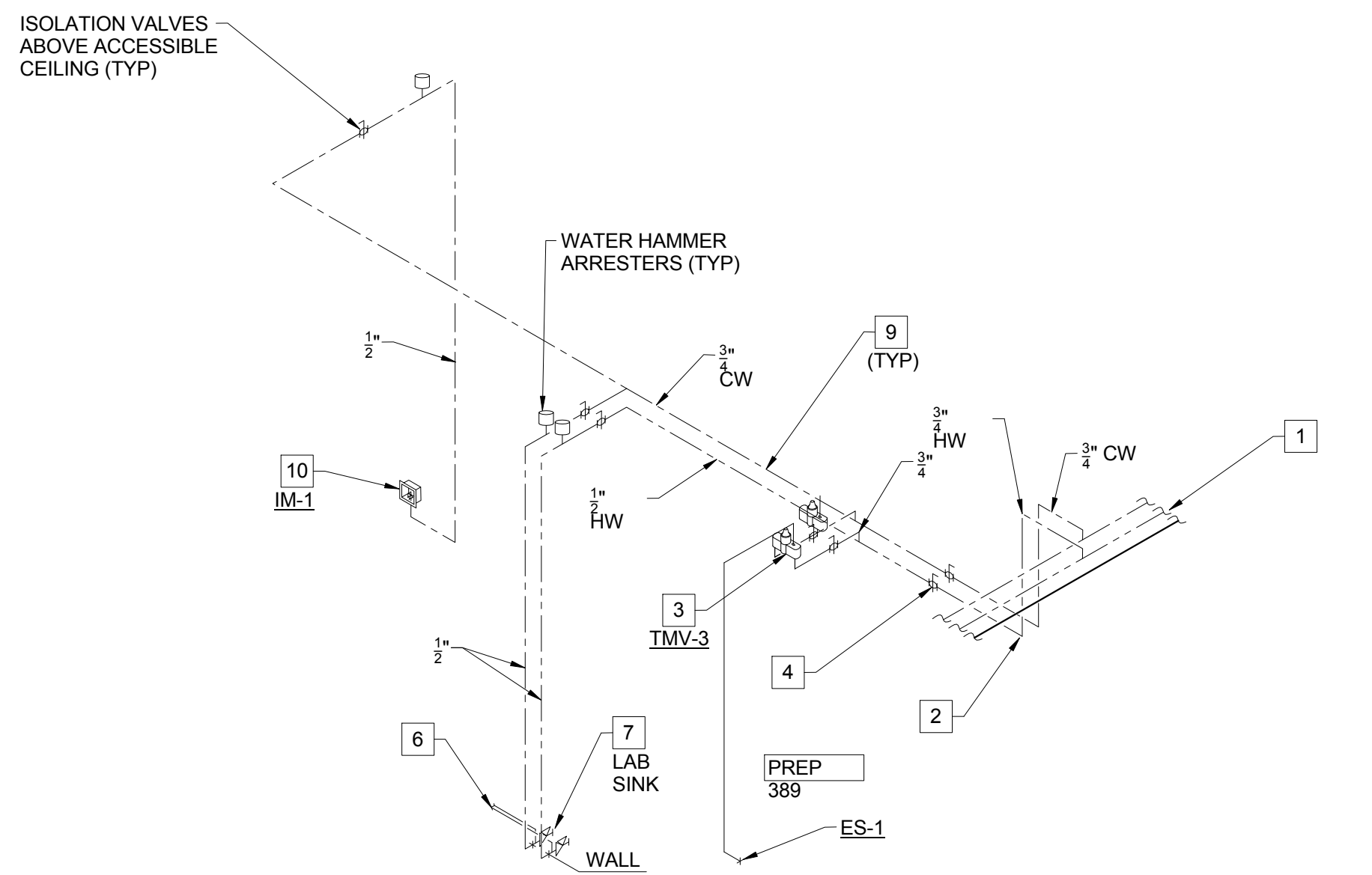
DOMESTIC WATER SUPPLY RISER - LAB 483



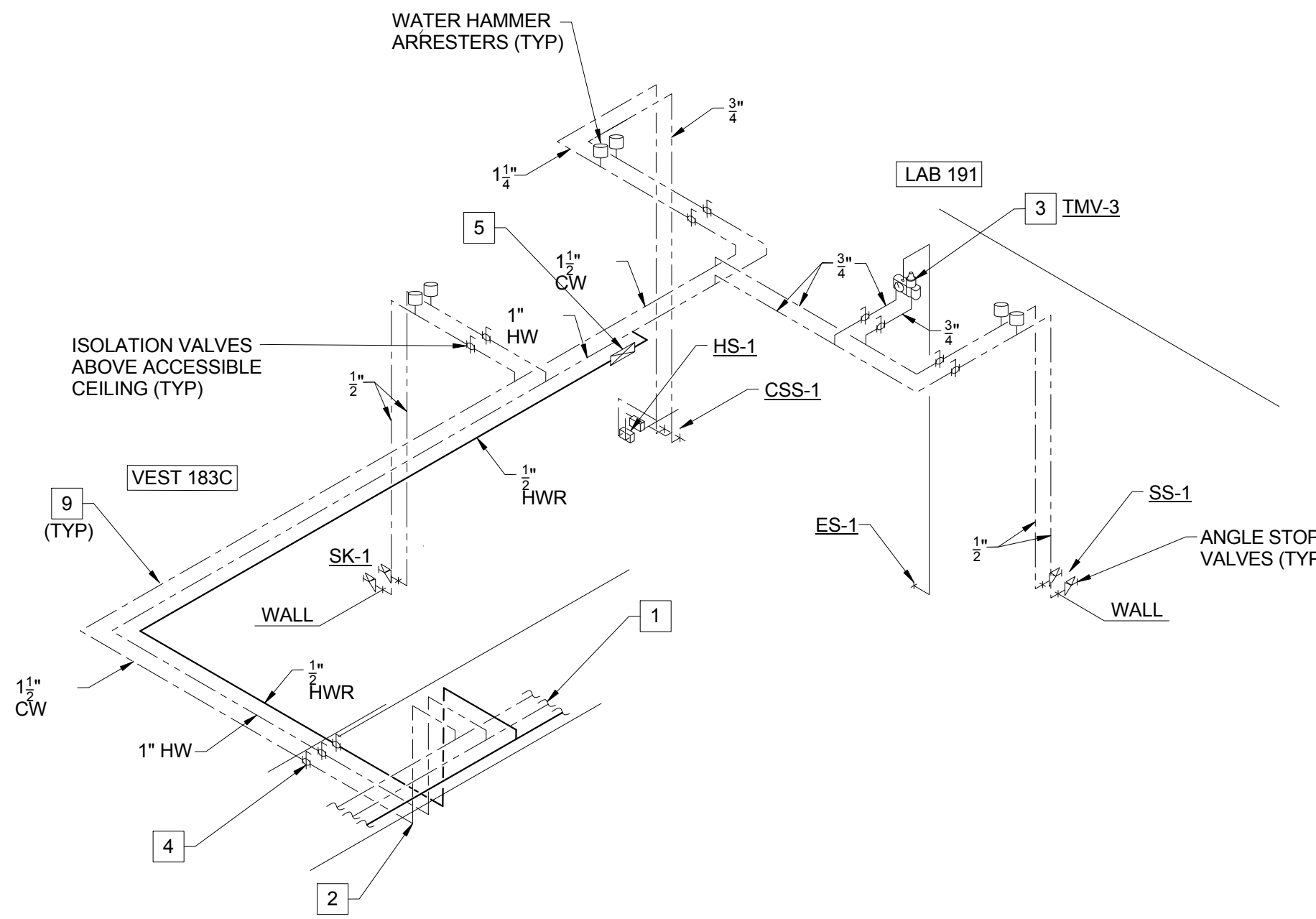
DOMESTIC WATER SUPPLY RISER - LAB 383



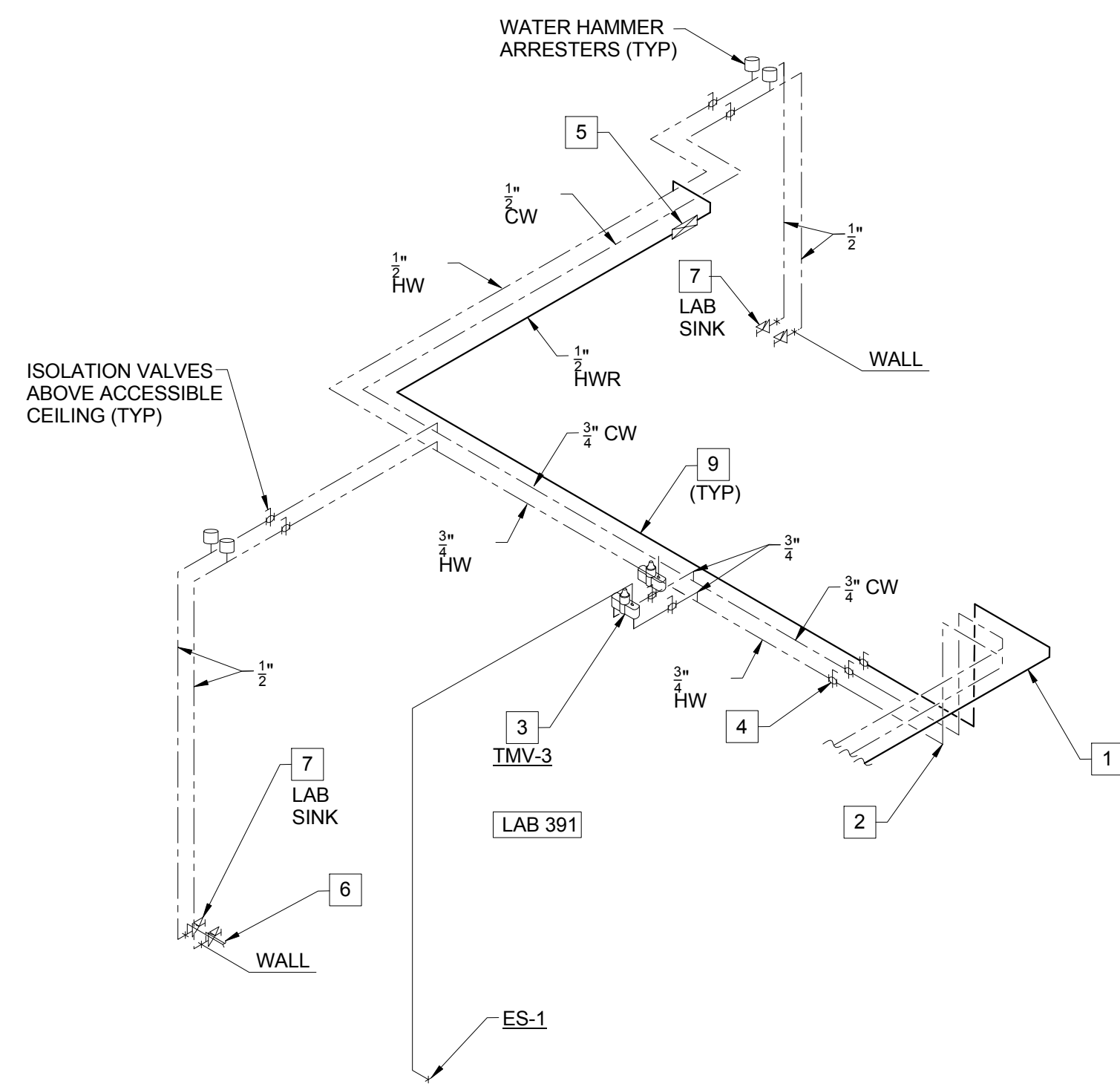
DOMESTIC WATER SUPPLY RISER - LAB 283



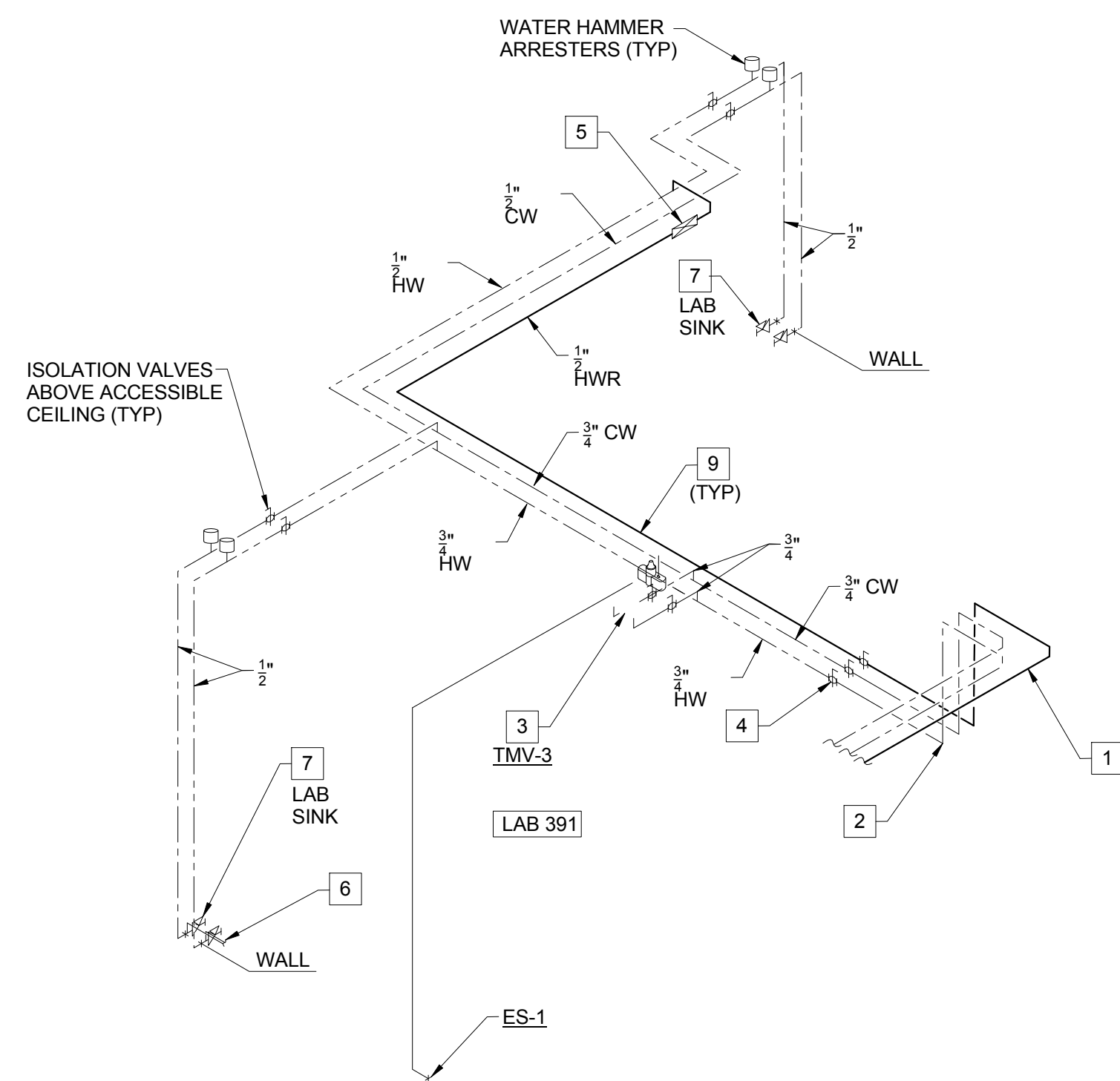
DOMESTIC WATER SUPPLY RISER - PREP 389



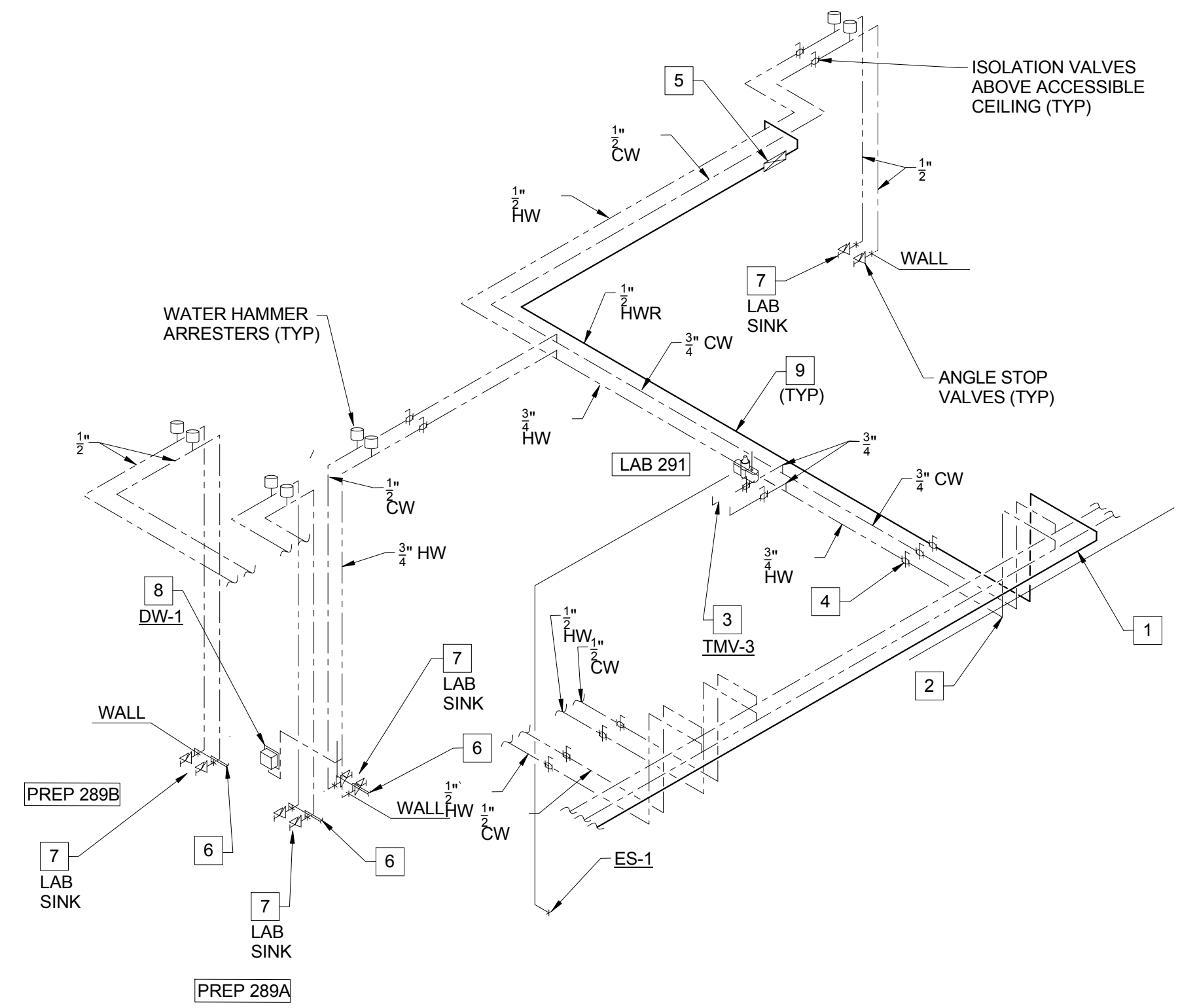
DOMESTIC WATER SUPPLY RISER - VESTIBULE 183C AND LAB 191



DOMESTIC WATER SUPPLY RISER - LAB 491



DOMESTIC WATER SUPPLY RISER - LAB 391



DOMESTIC WATER SUPPLY RISER - PREP 289A - PREP 289B AND LAB 291

KEYED NOTES (THIS SHEET ONLY)

- 1 DOMESTIC WATER PIPING IN THE CORRIDOR TO BE RUN AT THE BOTTOM OF THE STRUCTURAL CROSS MEMBERS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES ON THIS PROJECT.
- 2 DROP PIPING BELOW THE STRUCTURAL STEEL MEMBER. HOLD TIGHT TO BOTTOM OF STEEL.
- 3 THERMOSTATIC MIXING VALVE (TMV-2) SERVING THE EMERGENCY SHOWER TO BE LOCATED ABOVE THE ACCESSIBLE CEILING. REFER TO DRAWING P0403, DETAIL 3/P0403 FOR PIPING DIAGRAM OF EMERGENCY SHOWER. VERIFY LOCATION AND PIPING CONFIGURATION PRIOR TO ROUGH-IN.
- 4 PROVIDE SHUT-OFF VALVES AT THE ENTRY TO EACH ROOM.
- 5 REFER TO DRAWING P0502, DETAIL 11/P0502 FOR HOT WATER RETURN PIPING DIAGRAM.
- 6 WATER PIPING CONNECTION TO THERMOSTATIC MIXING VALVE (TMV-3) SERVING THE DECK MOUNTED EMERGENCY EYEWASH. REFER TO DRAWING P0403, DETAIL 4/P0403 FOR PIPING DIAGRAM OF EMERGENCY EYEWASH. VERIFY LOCATION AND PIPING CONFIGURATION PRIOR TO ROUGH-IN.
- 7 LAB SINK WITH LAB FAUCET TYPE 'LF-1'.
- 8 WATER CONNECTION FOR UNDER COUNTER GLASS WASHER. COORDINATE LOCATION AND INSTALLATION WITH EQUIPMENT AND CASEWORK.
- 9 DOMESTIC WATER PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS. COORDINATE INSTALLATION WITH OTHER TRADES ON THIS PROJECT PRIOR TO ROUGH-IN.
- 10 WATER CONNECTION FOR ICE MACHINE. COORDINATE LOCATION AND INSTALLATION WITH EQUIPMENT AND CASEWORK.

CONFORMED SET 01 JUL 2016

1 ADDENDUM 2-2 19 APR 2016
ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016
No. Description Date

Drawing Title:

RISERS - PLUMBING

Project No.: 04561.01

Checked by:

P0405

CONFORMED SET

01 JUL 2016

2	ADDENDUM 2-4	24 MAY 2016
1	ADDENDUM 2-2	19 APR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016
No.	Description	Date

Drawing Title:

RISERS - PLUMBING

Project No.: 04561.01

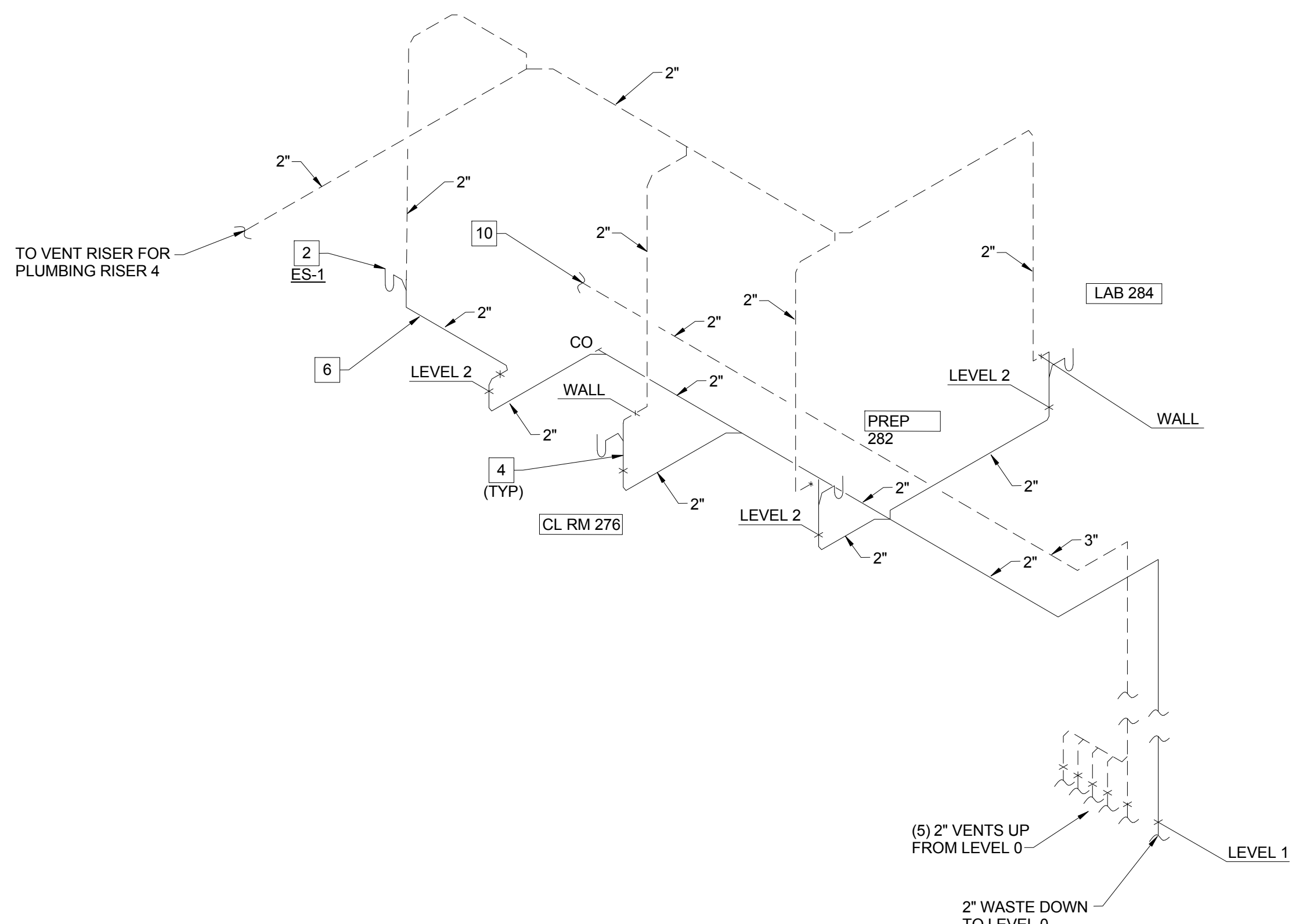
Checked by:

P0406

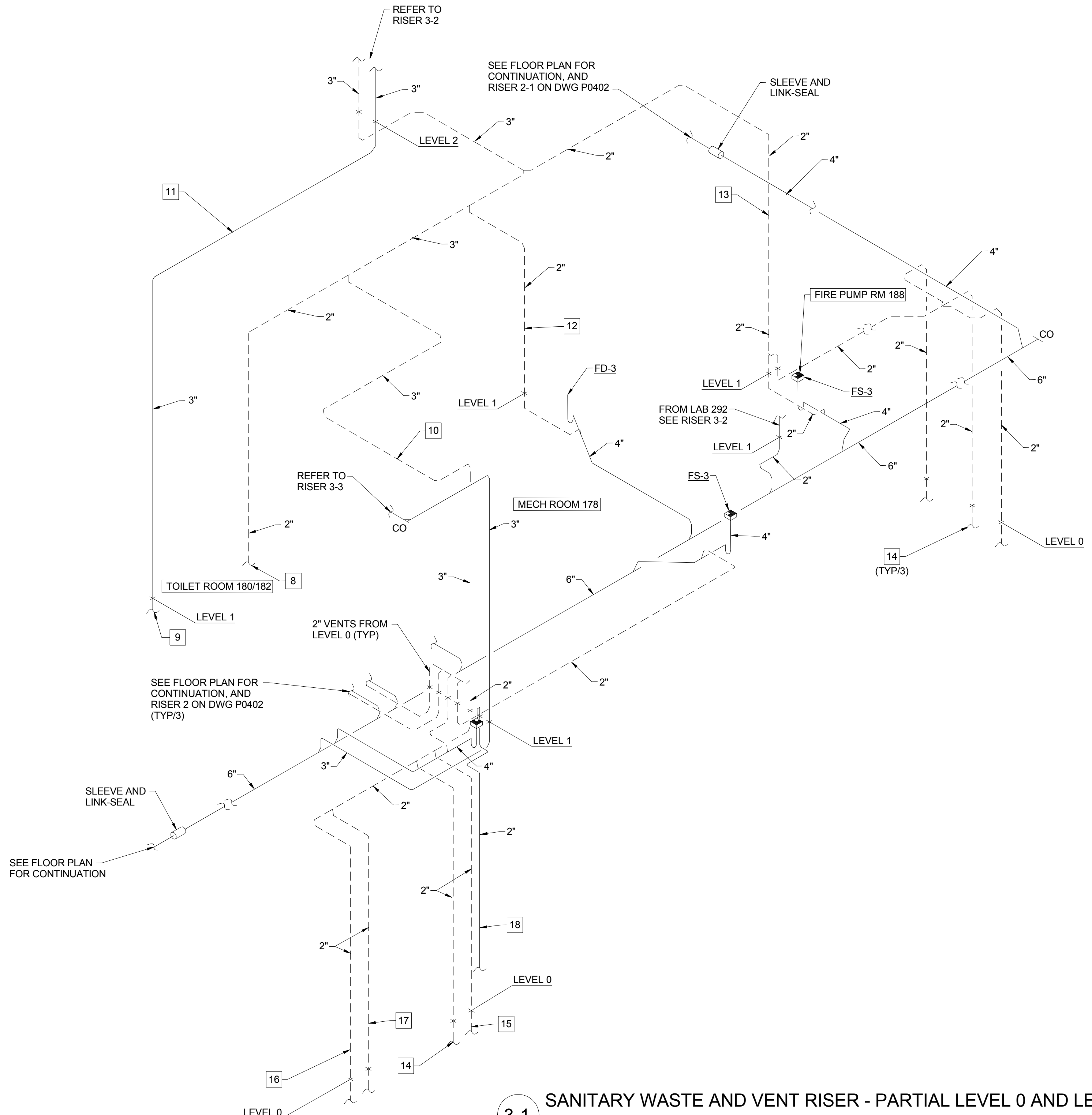
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KEYED NOTES (THIS SHEET ONLY)

- 1 REFER TO DRAWING P0503, DETAIL 2/P0503 FOR TYPICAL LAB SINK WASTE CONNECTION DETAIL.
- 2 REFER TO DRAWING P0403, DETAIL 3/P0403 FOR TYPICAL EMERGENCY SHOWER PIPING DIAGRAM. COORDINATE PENETRATION THROUGH THE FLOOR WITH THE STRUCTURE BELOW AND THE ARCHITECTURAL DRAWINGS, OFF-SET THE PIPING AS REQUIRED.
- 3 OFF-SET VENT PIPING INTO THE WALL CAVITY TO EXTEND ABOVE THE CEILING. TYPICAL FOR LAB SINKS OR WHERE APPLICABLE.
- 4 WASTE PIPING TO BE LOCATED IN THE UTILITY SPACE BETWEEN THE WALL AND BACK OF CASEWORK. COORDINATE PENETRATION THROUGH THE FLOOR WITH THE STRUCTURE BELOW AND THE ARCHITECTURAL DRAWINGS, OFF-SET PIPING AS REQUIRED. TYPICAL FOR LAB SINKS OR WHERE APPLICABLE.
- 5 COORDINATE ROUTING AND INSTALLATION OF THE WASTE AND VENT PIPING ABOVE THE CEILING WITH STRUCTURAL ELEMENTS AND OTHER TRADES ON THIS PROJECT. HOLD PIPING AS HIGH AS POSSIBLE, WHERE POSSIBLE. TYPICAL FOR ALL ABOVE THE CEILING PIPING.
- 6 EXTEND WASTE FROM EMERGENCY SHOWER HORIZONTAL IN WALL CAVITY TO AN AREA BEHIND THE LABORATORY CASE WORK. TURN PIPING OUT OF WALL WITHIN UTILITY SPACE BEHIND THE CASEWORK TO TURN DOWN THROUGH THE FLOOR. COORDINATE PENETRATION THROUGH THE FLOOR WITH THE STRUCTURE BELOW AND THE ARCHITECTURAL DRAWINGS, OFF-SET PIPING AS REQUIRED.
- 7 3" WASTE AND 3" VENT TO BE OFF-SET AT LEVEL 2 TO CONTINUE DOWN. COORDINATE INSTALLATION AND ROUTING WITH STRUCTURE AND BUILDING CONDITIONS.
- 8 2" VENT IN PLUMBING CHASE SERVING PLUMBING FIXTURE IN TOILET ROOMS 180 / 182.
- 9 3" WASTE DOWN TO LEVEL 0 IN PLUMBING CHASE OF TOILET ROOMS 180 / 182.
- 10 3" VENT EXTENDED HIGH IN SPACE.
- 11 3" WASTE TO BE OFF-SET AT LEVEL 1 TO CONTINUE DOWN. COORDINATE INSTALLATION AND ROUTING WITH STRUCTURE AND BUILDING CONDITIONS.
- 12 2" VENT UP FROM LEVEL 0 SERVING FLOOR DRAINS IN MECHANICAL ROOM 178.
- 13 2" VENT UP FROM LEVEL 0 SERVING FLOOR SINK IN FIRE PUMP ROOM 188, AND FLOOR DRAINS ON LEVEL 0.
- 14 2" VENT FROM LEVEL 0 FLOOR DRAINS
- 15 2" VENT FROM SUMP PUMP SP-3, ON LEVEL 0.
- 16 2" VENT FROM SUMP PUMPS SP-1 / SP-2 ON LEVEL 0.
- 17 2" VENT FROM SAND INTERCEPTOR ON LEVEL 0.
- 18 2" PUMP DISCHARGE FROM SUMP PUMP SP-3 ON LEVEL 0. TERMINATE INTO FLOOR SINK FS-3 ON LEVEL 1 AS AN INDIRECT WASTE.

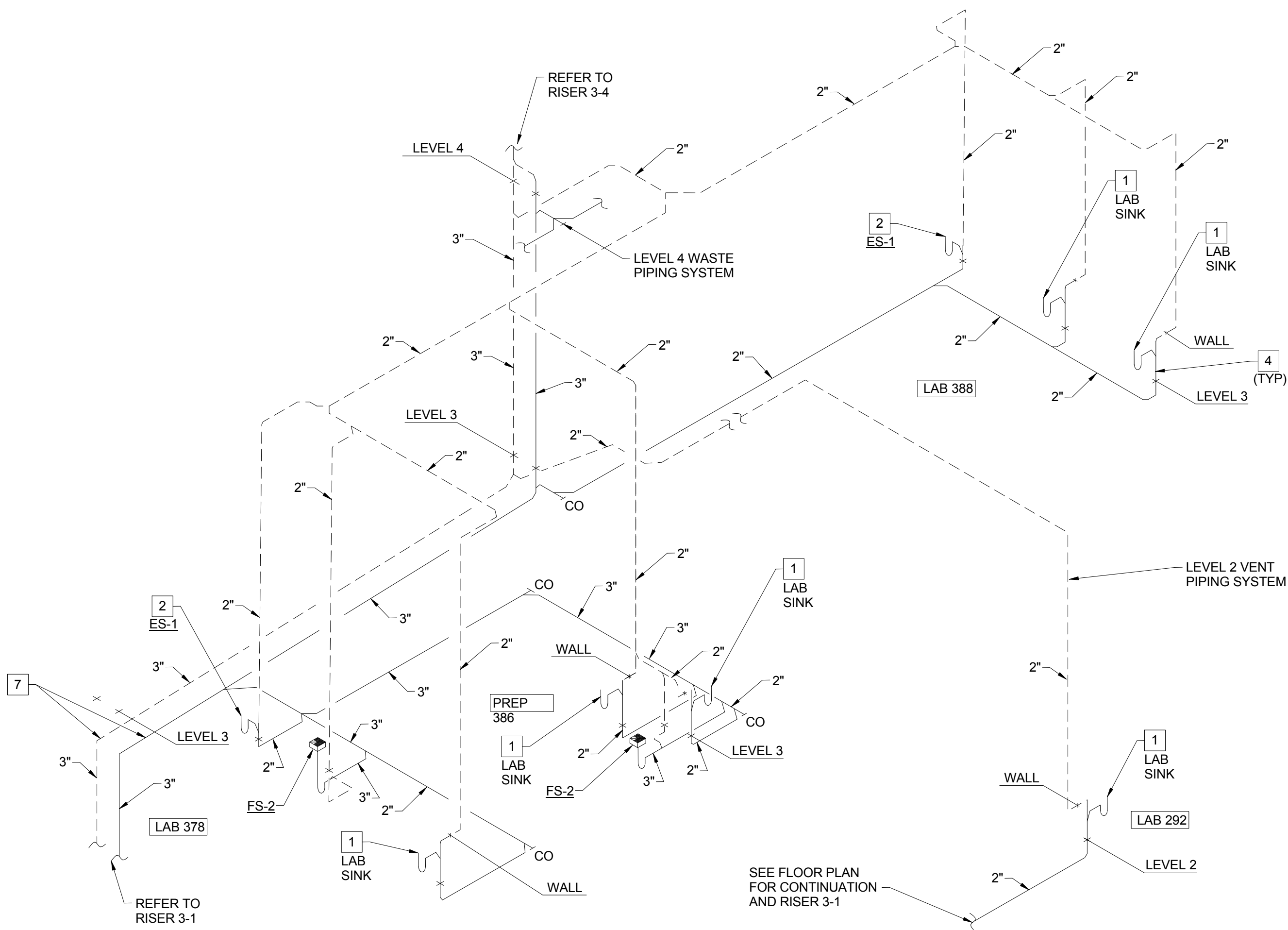


3-3 SANITARY WASTE AND VENT RISER - CLASS ROOM 276 AND PREP 282

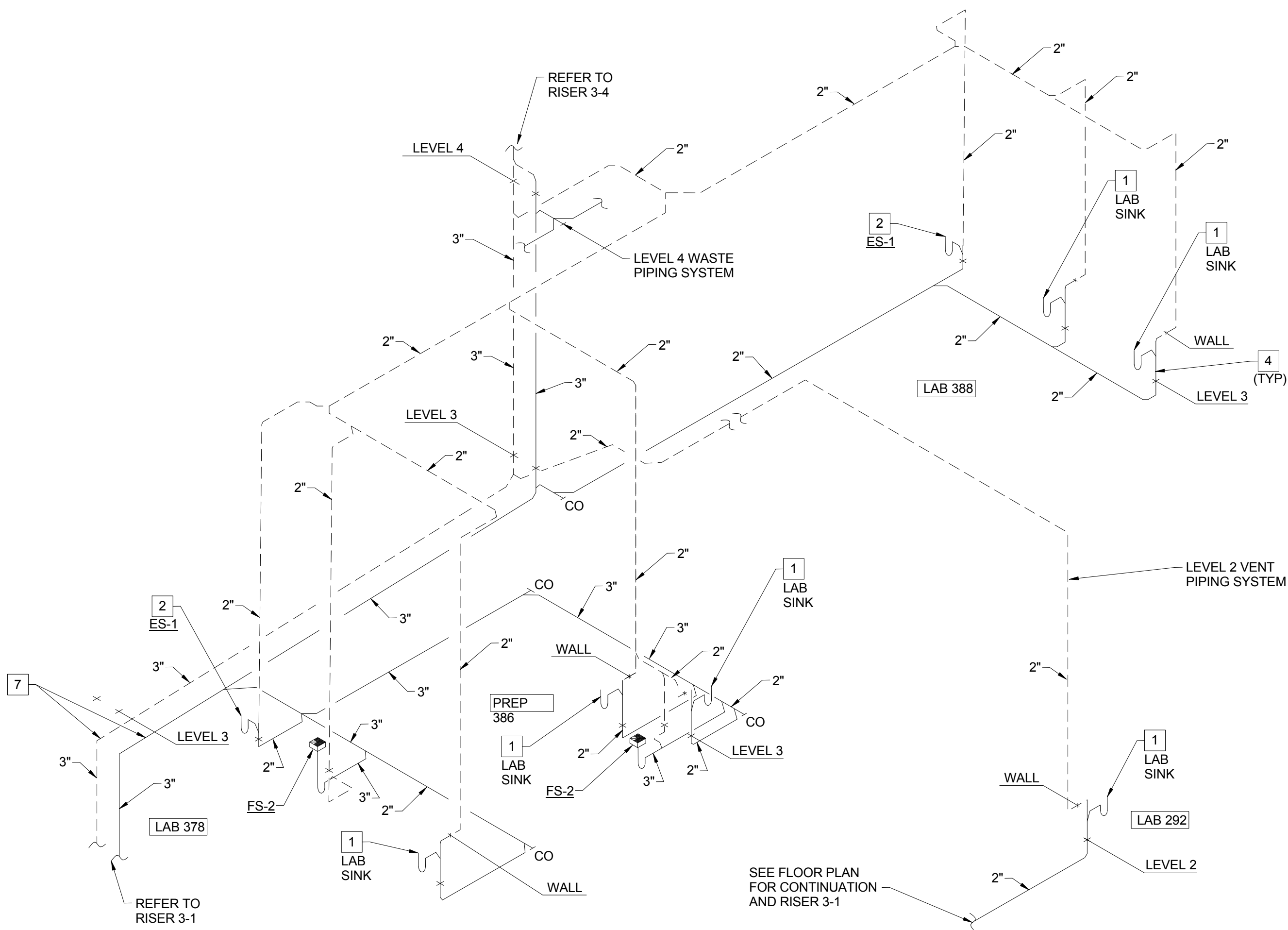


3-1 SANITARY WASTE AND VENT RISER - PARTIAL LEVEL 0 AND LEVEL 1

3-4 SANITARY WASTE AND VENT RISER - LAB 480 AND LAB 488

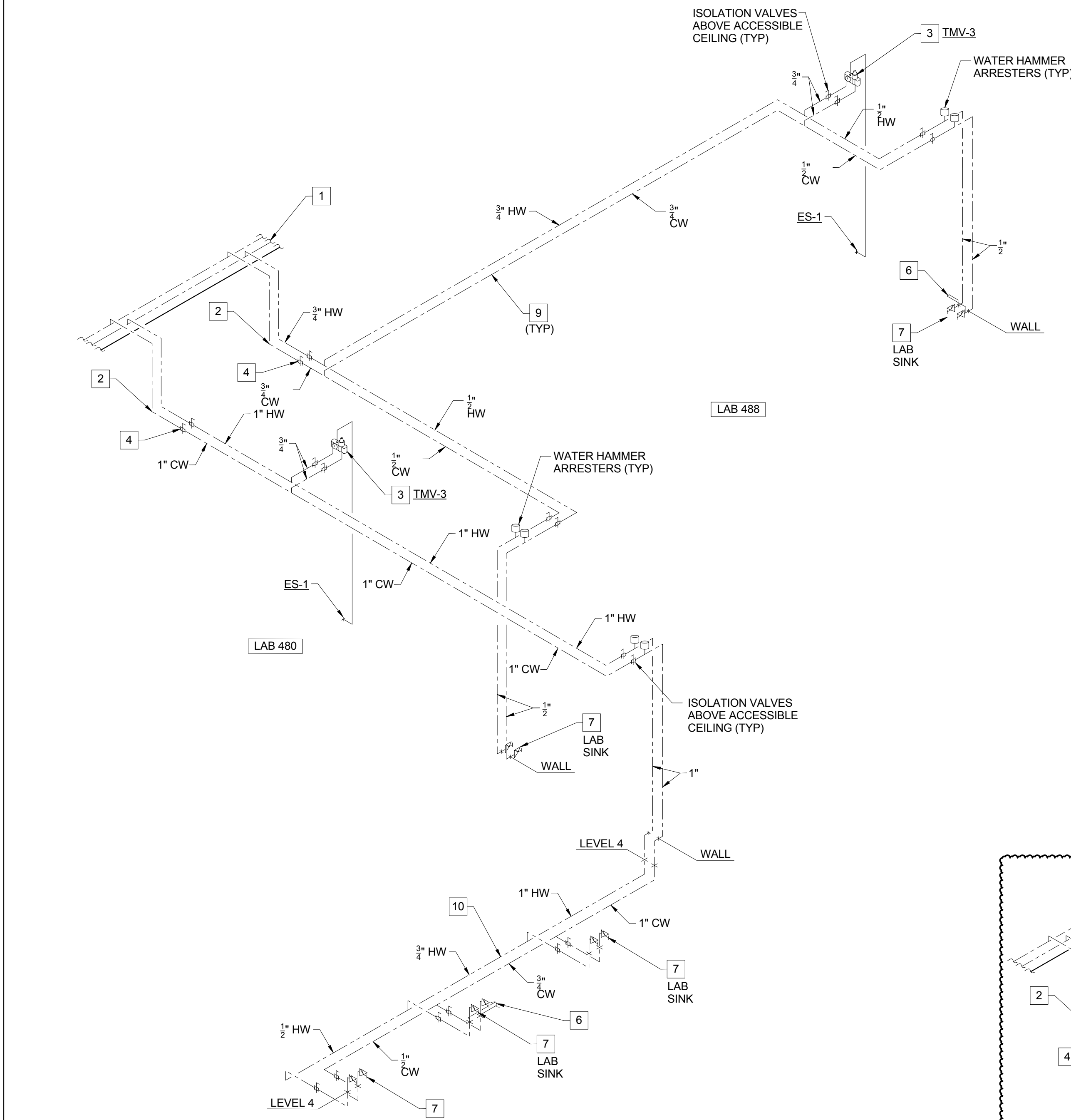


3-2 SANITARY WASTE AND VENT RISER - LAB 292, LAB 378, PREP 386 AND LAB 388

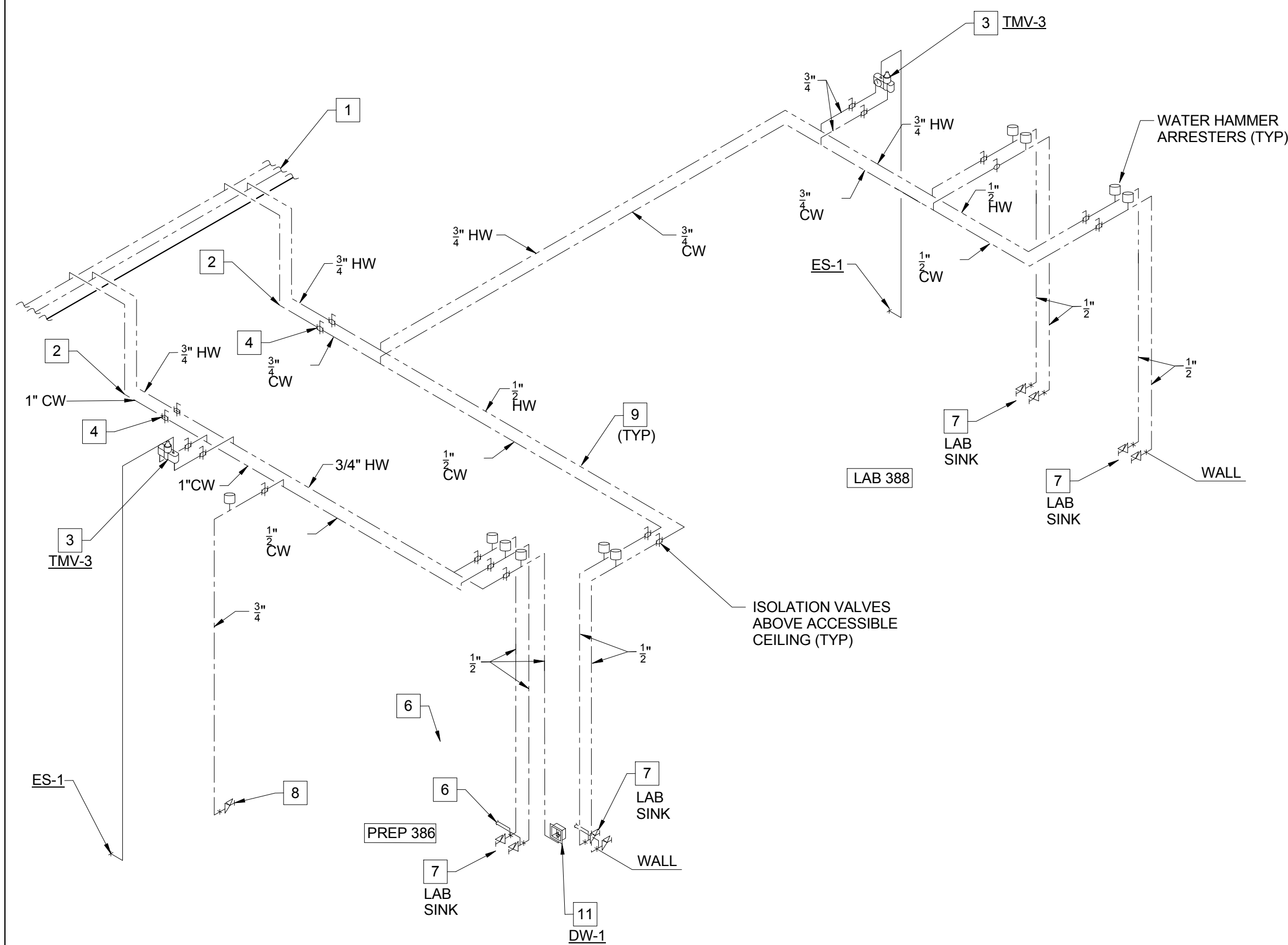


1 PLUMBING WASTE AND VENT RISERS FOR PLUMBING RISER PR-3
P0406 SCALE: N.T.S.

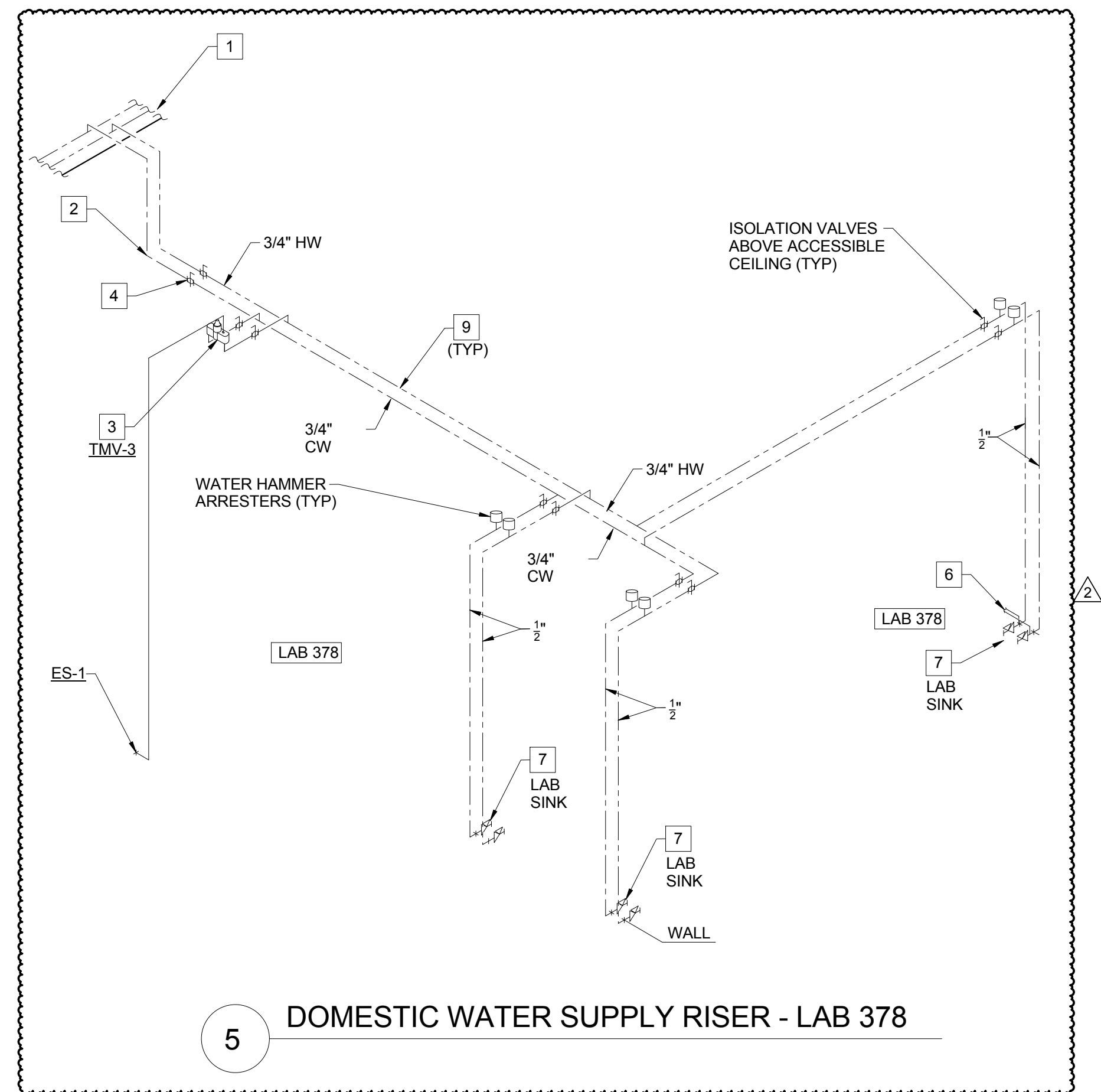
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2 DOMESTIC WATER SUPPLY RISER - LAB 480 AND LAB 488



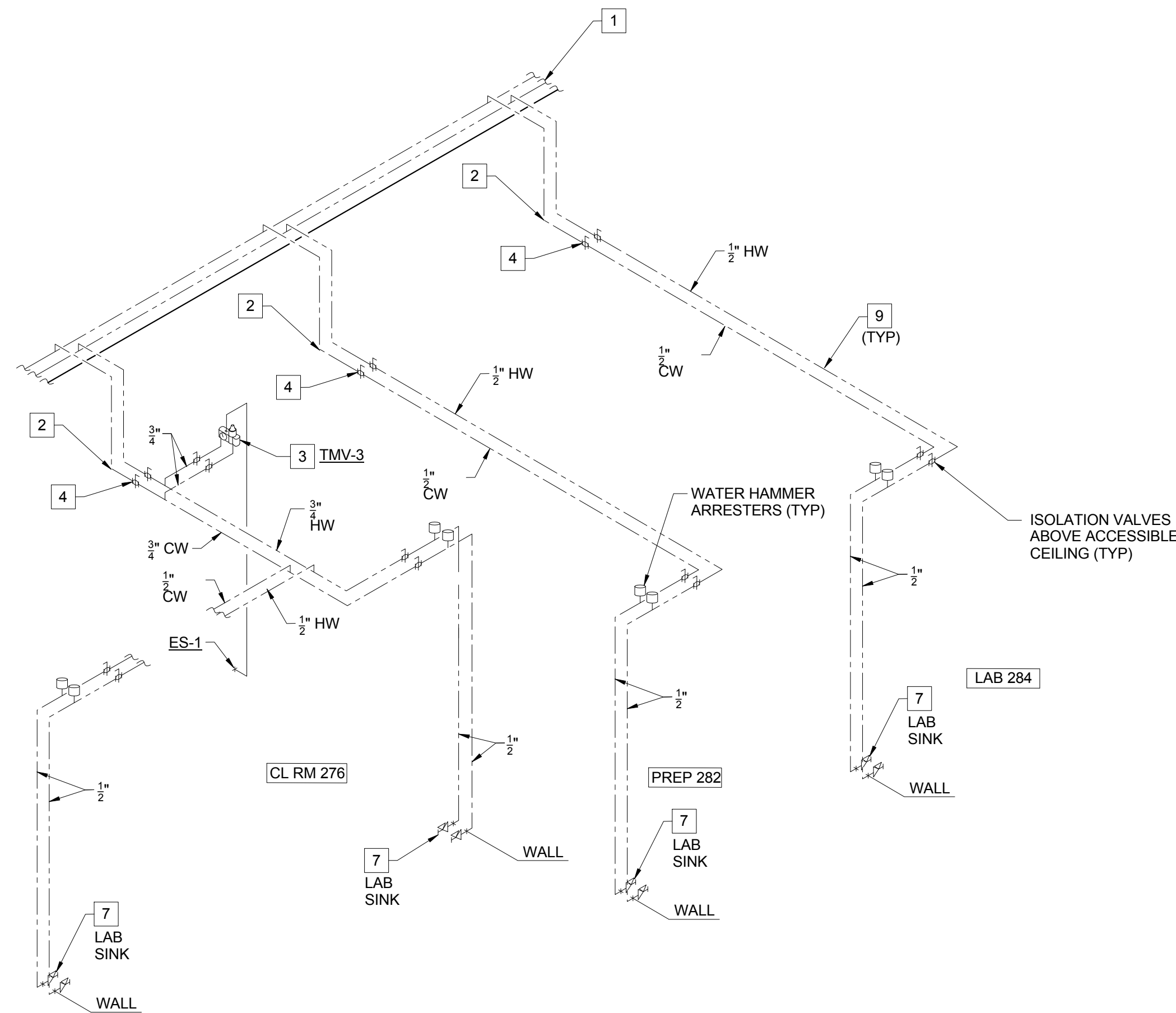
1 DOMESTIC WATER SUPPLY RISER - LAB 378, PREP 386 AND LAB 388



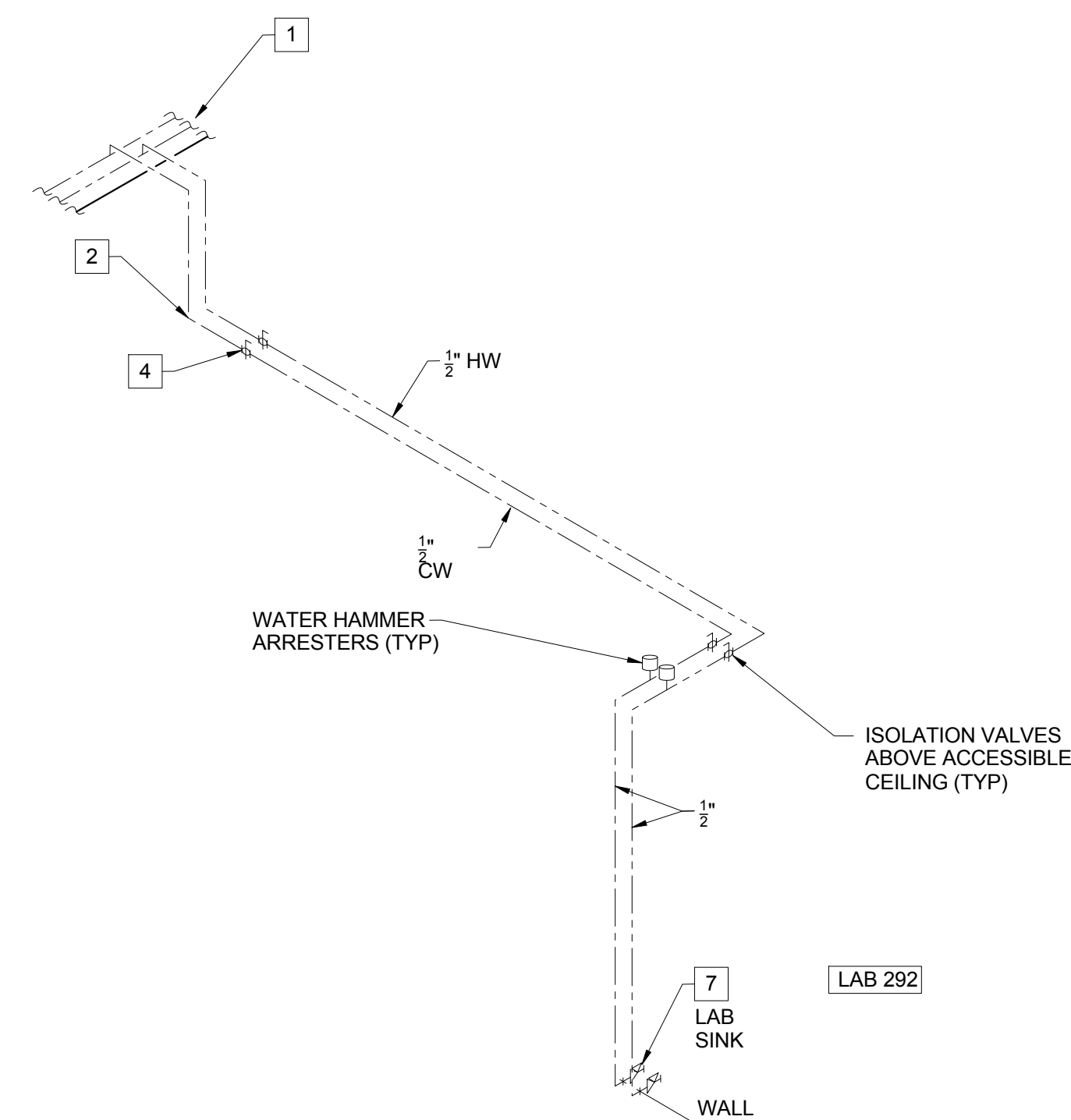
5 DOMESTIC WATER SUPPLY RISER - LAB 378

- KEYED NOTES (THIS SHEET ONLY)
- 1 DOMESTIC WATER PIPING IN THE CORRIDOR TO BE RUN AT THE BOTTOM OF THE STRUCTURAL CROSS MEMBERS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES ON THIS PROJECT.
 - 2 DROP PIPIDROP PIPING BELOW THE STRUCTURAL STEEL MEMBER. HOLD TIGHT TO BOTTOM OF STEEL.
 - 3 THERMOSTAT THERMOSTATIC MIXING VALVE (TMV-2) SERVING THE EMERGENCY SHOWER TO BE LOCATED ABOVE THE ACCESSIBLE CEILING. REFER TO DRAWING P0403, DETAIL 3/P0403 FOR PIPING DIAGRAM OF EMERGENCY SHOWER. VERIFY LOCATION AND PIPING CONFIGURATION PRIOR TO ROUGH-IN.
 - 4 PROVIDE SHUT-OFF VALVES AT THE ENTRY TO EACH ROOM.
 - 5 REFER TO DRAWING P0502, DETAIL 11/P0502 FOR HOT WATER RETURN PIPING DIAGRAM.
 - 6 WATER PIPING CONNECTION TO THERMOSTATIC MIXING VALVE (TMV-3) SERVING THE DECK MOUNTED EMERGENCY EYEWASH. REFER TO DRAWING P0403, DETAIL 4/P0403 FOR PIPING DIAGRAM OF EMERGENCY EYEWASH. VERIFY LOCATION AND PIPING CONFIGURATION PRIOR TO ROUGH-IN.
 - 7 LAB SINK WITH LAB FAUCET TYPE 'LF-1'.
 - 8 WATER CONNECTION FOR AUTOCLAVE. COORDINATE LOCATION AND INSTALLATION WITH EQUIPMENT AND CASEWORK. VERIFY EQUIPMENT CONNECTIONS AND LOCATION, PROVIDE FITTINGS AND FINAL CONNECTIONS AS REQUIRED COORDINATE INSTALLATION WITH EQUIPMENT.
 - 9 DOMESTIC WATER PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS. COORDINATE INSTALLATION WITH OTHER TRADES ON THIS PROJECT PRIOR TO ROUGH-IN.
 - 10 DOMESTIC WATER PIPING IN CEILING SPACE OF LEVEL 3 TO SERVE LAB SINKS ON LEVEL 4. COORDINATE ROUTING AND INSTALLATION WITH SPACE CONDITIONS.
 - 11 WATER CONNECTION FOR UNDER COUNTER GLASS WASHER. COORDINATE LOCATION AND INSTALLATION WITH EQUIPMENT AND CASEWORK.

1 DOMESTIC WATER SUPPLY RISER DIAGRAMS
SCALE: N.T.S.



4 DOMESTIC WATER SUPPLY RISER - CLASS ROOM 276, PREP 282 AND LAB 284



3 DOMESTIC WATER SUPPLY RISER - LAB 292

CONFORMED SET 01 JUL 2016

2	ADDENDUM 2-4	24 MAY 2016
1	ADDENDUM 2-2	19 APR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016
No.	Description	Date

Drawing Title:

RISERS - PLUMBING

Project No.: 04561.01 Checked by:

P0407

CONFORMED SET 01 JUL 2016

2	ADDENDUM 2-4	24 MAY 2016
1	ADDENDUM 2-2	19 APR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016
No.	Description	Date

Drawing Title:

RISERS - PLUMBING

Project No.: 04561.01 Checked by:

P0408

KEYED NOTES (THIS SHEET ONLY)

- 1 REFER TO DRAWING P0503, DETAIL 2/P0503 FOR TYPICAL LAB SINK WASTE CONNECTION DETAIL.
- 2 REFER TO DRAWING P0403, DETAIL 3/P0403 FOR TYPICAL EMERGENCY SHOWER PIPING DIAGRAM. COORDINATE PENETRATION THROUGH THE FLOOR WITH THE STRUCTURE BELOW AND THE ARCHITECTURAL DRAWINGS, OFF-SET THE PIPING AS REQUIRED.
- 3 OFF-SET VENT PIPING INTO THE WALL CAVITY TO EXTEND ABOVE THE CEILING. TYPICAL FOR LAB SINKS OR WHERE APPLICABLE.
- 4 WASTE PIPING TO BE LOCATED IN THE UTILITY SPACE BETWEEN THE WALL AND BACK OF CASEWORK. COORDINATE PENETRATION THROUGH THE FLOOR WITH THE STRUCTURE BELOW AND THE ARCHITECTURAL DRAWINGS, OFF-SET PIPING AS REQUIRED. TYPICAL FOR LAB SINKS OR WHERE APPLICABLE.
- 5 COORDINATE ROUTING AND INSTALLATION OF THE WASTE AND VENT PIPING ABOVE THE CEILING WITH STRUCTURAL ELEMENTS AND OTHER TRADES ON THIS PROJECT. HOLD PIPING AS HIGH AS POSSIBLE, WHERE POSSIBLE. TYPICAL FOR ALL ABOVE THE CEILING PIPING.
- 6 EXTEND WASTE FROM EMERGENCY SHOWER HORIZONTAL IN WALL CAVITY TO AN AREA BEHIND THE LABORATORY CASE WORK. TURN PIPING OUT OF WALL WITHIN UTILITY SPACE BEHIND THE CASEWORK TO TURN DOWN THROUGH THE FLOOR. COORDINATE PENETRATION THROUGH THE FLOOR WITH THE STRUCTURE BELOW AND THE ARCHITECTURAL DRAWINGS, OFF-SET PIPING AS REQUIRED.
- 7 3" WASTE AND 3" VENT TO BE OFF-SET AT LEVEL 2 TO CONTINUE DOWN. COORDINATE INSTALLATION AND ROUTING WITH STRUCTURE AND BUILDING CONDITIONS.
- 8 INTEGRAL BENCH TOP CUP SINK, ROUTE WASTE PIPING IN UTILITY CHASE IN CASEWORK. COORDINATE INSTALLATION WITH CASEWORK AND OTHER UTILITIES WITHIN THIS SOACE.
- 9 3" WASTE DOWN TO LEVEL 0.
- 10 3" WASTE TO BE OFF-SET AT LEVEL 1 TO CONTINUE DOWN. COORDINATE INSTALLATION AND ROUTING WITH STRUCTURE AND BUILDING CONDITIONS.
- 11 2" WASTE AND 2" VENT WITHIN CABINET BELOW LAB SINK. EXTEND THE VENT UP TO BELOW THE COUNTERTOP BEFORE DOWN. PROVIDE CLEANOUT TEES IN WASTE AND VENT PIPING. EXTEND AND CONNECT VENT RETURN TO THE UNDER FLOOR WASTE PIPING FIVE FEET DOWN-STREAM.
- 12 PROVIDE LAB SINK TAIL PIECE WITH SIDE CONNECTION FOR CONDENSATE WASTE. COORDINATE WITH MECHANICAL CONTRACTOR.
- 13 2" VENT FROM LOADING DOCK 172 FLOOR DRAINS.

4-3 SANITARY WASTE AND VENT RISER - PREP 478 AND LAB 480

5-3 SANITARY WASTE AND VENT RISER - PREP 472 AND LAB 478

5-2 SANITARY WASTE AND VENT RISER - LAB WASTE 372B, RESEARCH 374A AND COLD RM 376

5-1 SANITARY WASTE AND VENT RISER - CHEM STOCK 272, MIRCO 274 AND CLASSROOM 276

4-1 SANITARY WASTE AND VENT RISER - CLASSROOM 276

4-2 SANITARY WASTE AND VENT RISER - TISSUE CULTURE 374B AND LAB 378

PLUMBING WASTE AND VENT RISERS FOR PLUMBING RISER PR-4

PLUMBING WASTE AND VENT RISERS FOR PLUMBING RISER PR-5



-

DOMESTIC WATER SUPPLY RISER - PREP 472



CONFORMED SET 01 JUL 2016

1	ADDENDUM 2-2	19 APR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016
No.	Description	Date

Drawing Title:

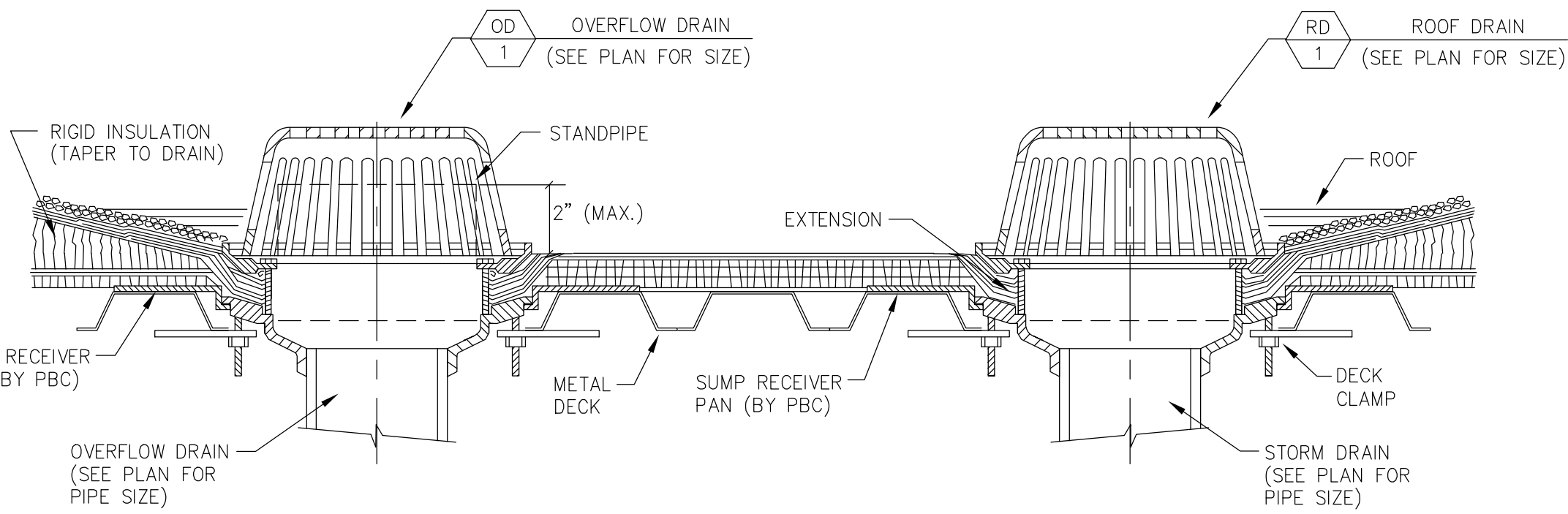
RISERS - PLUMBING

Project No.: 04561.01

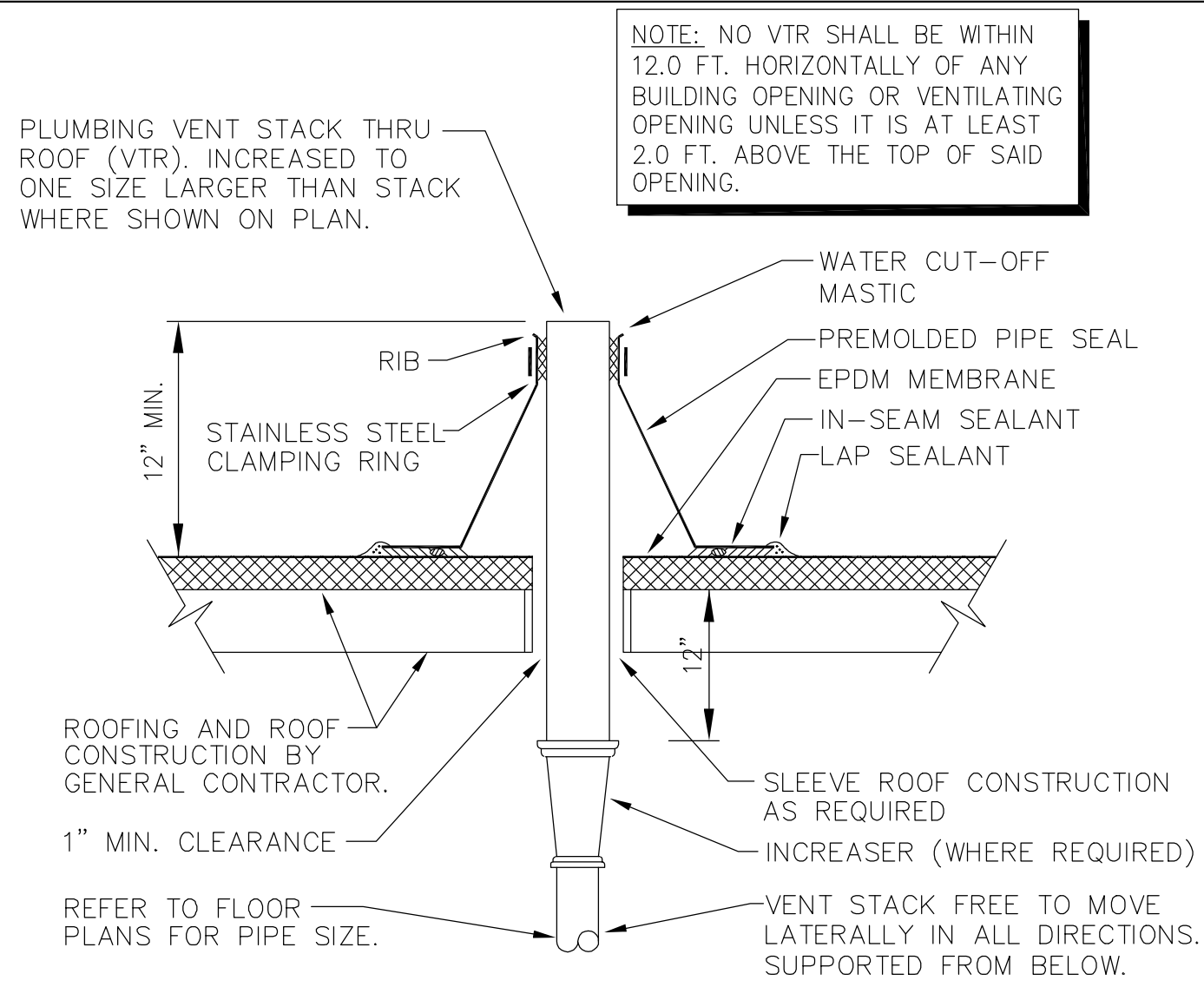
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P0409

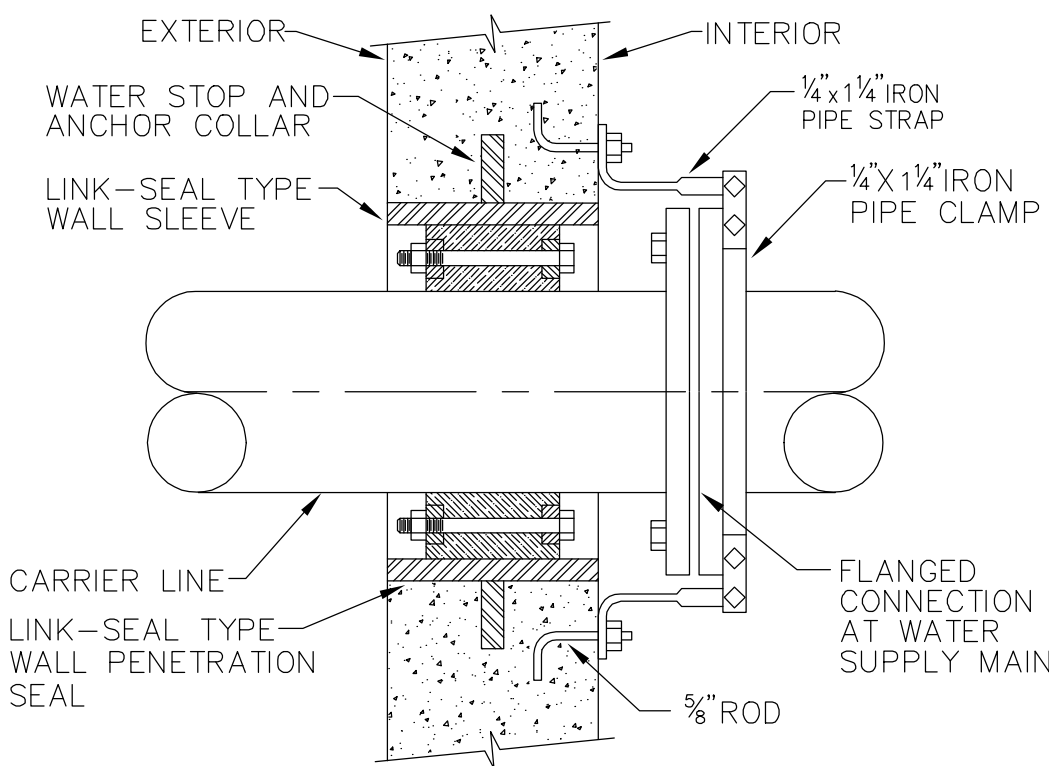
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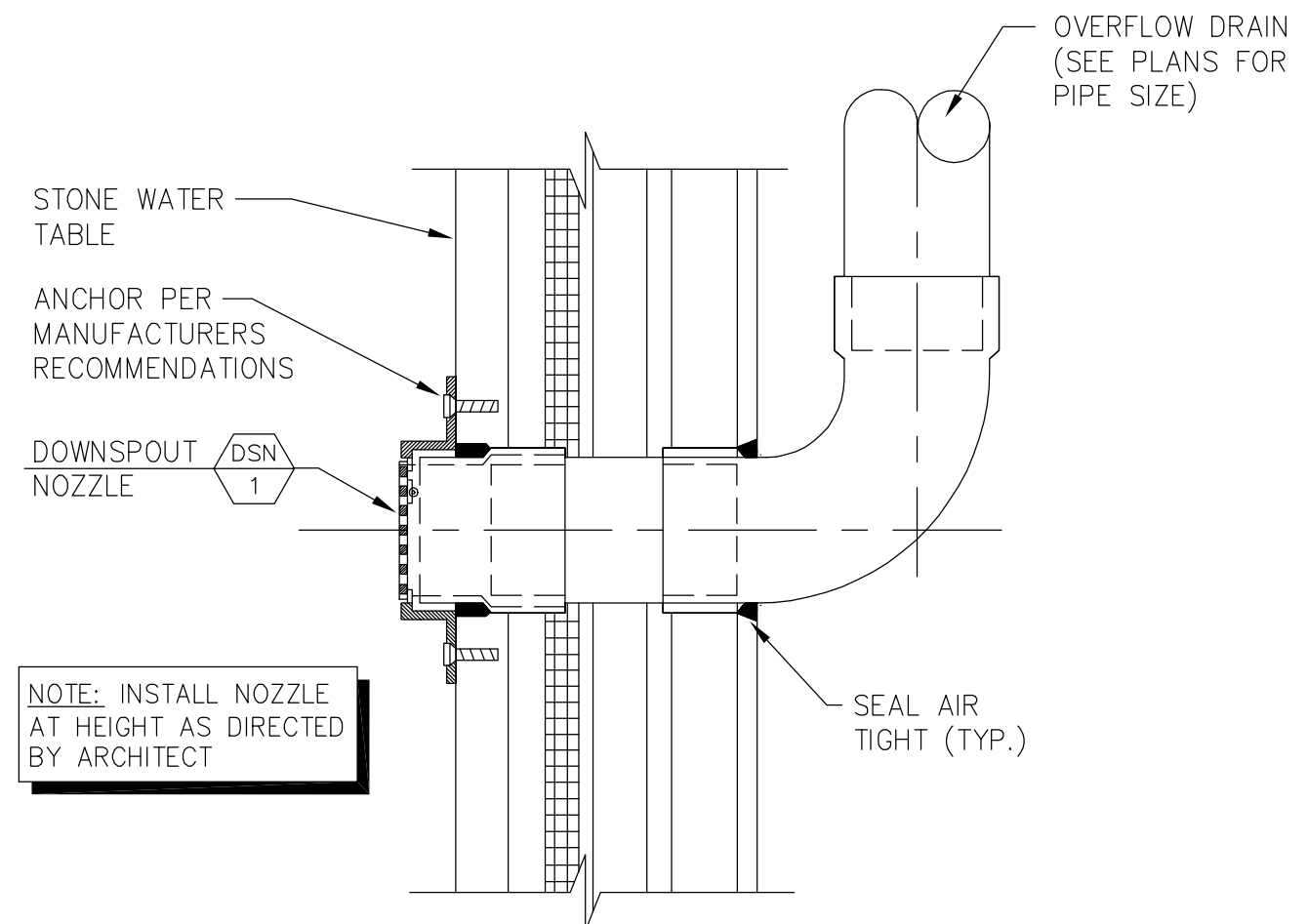
1 ROOF AND OVERFLOW DRAIN DETAIL
SCALE: N.T.S.



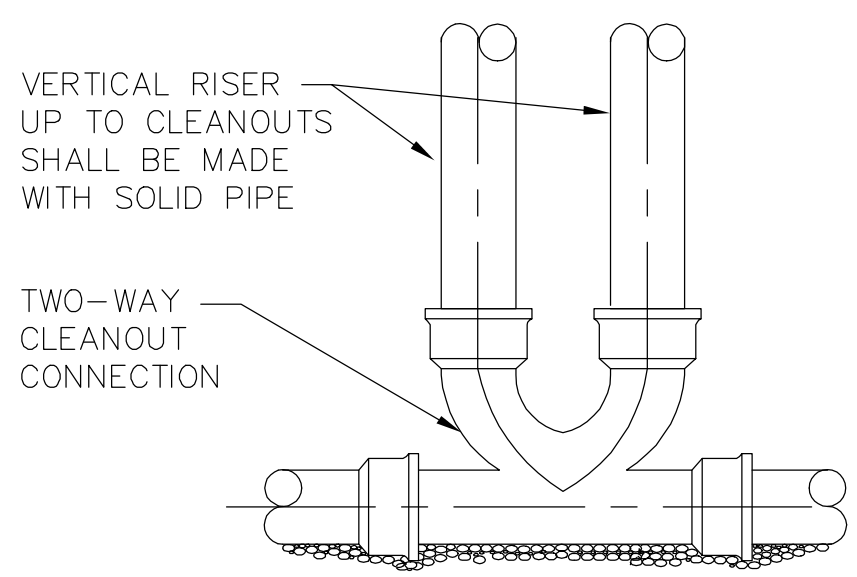
2 PLUMBING VENT THRU ROOF DETAIL
SCALE: N.T.S.



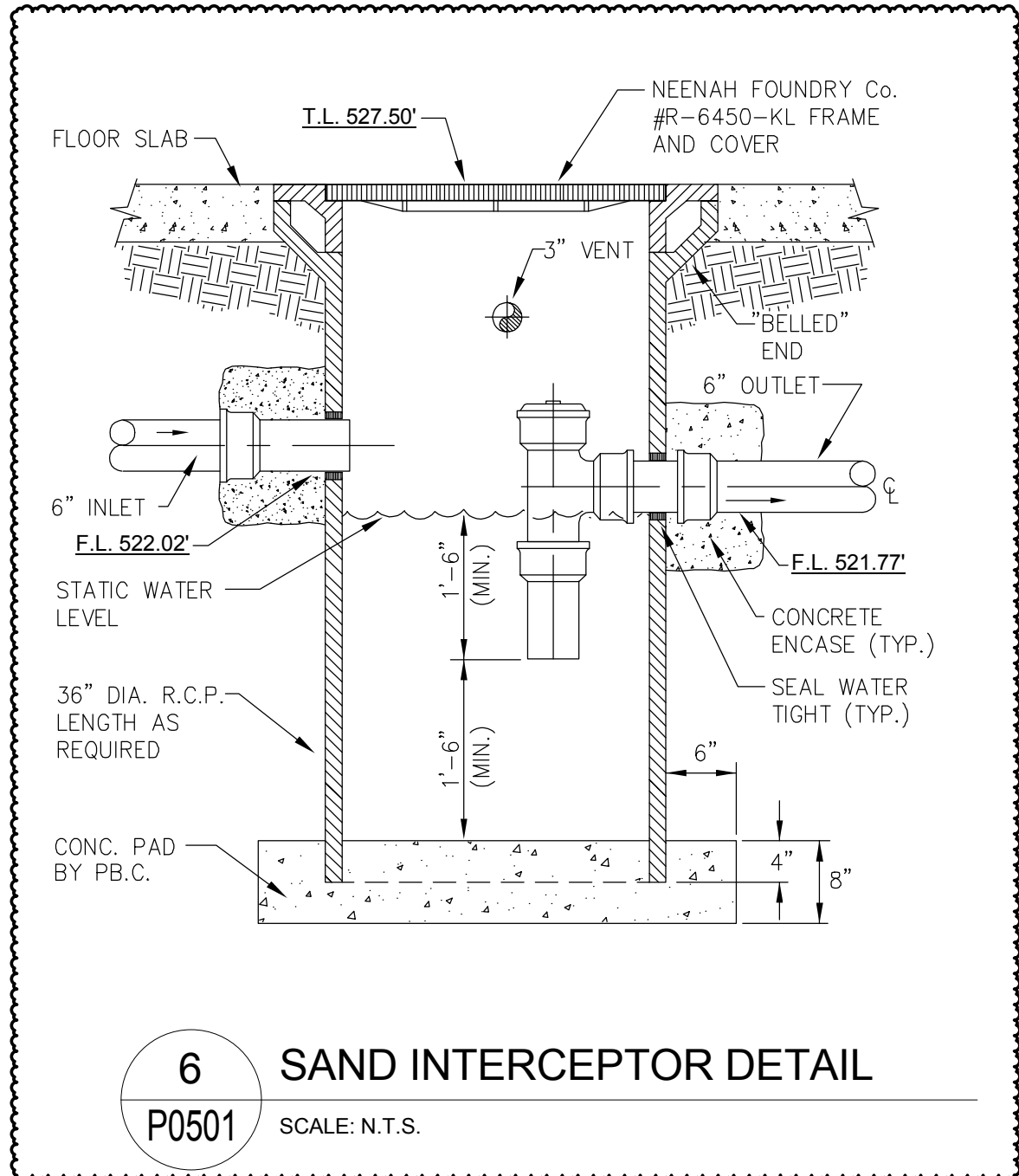
3 LINK-SEAL PIPE THRU WALL PENETRATION DETAIL
SCALE: N.T.S.



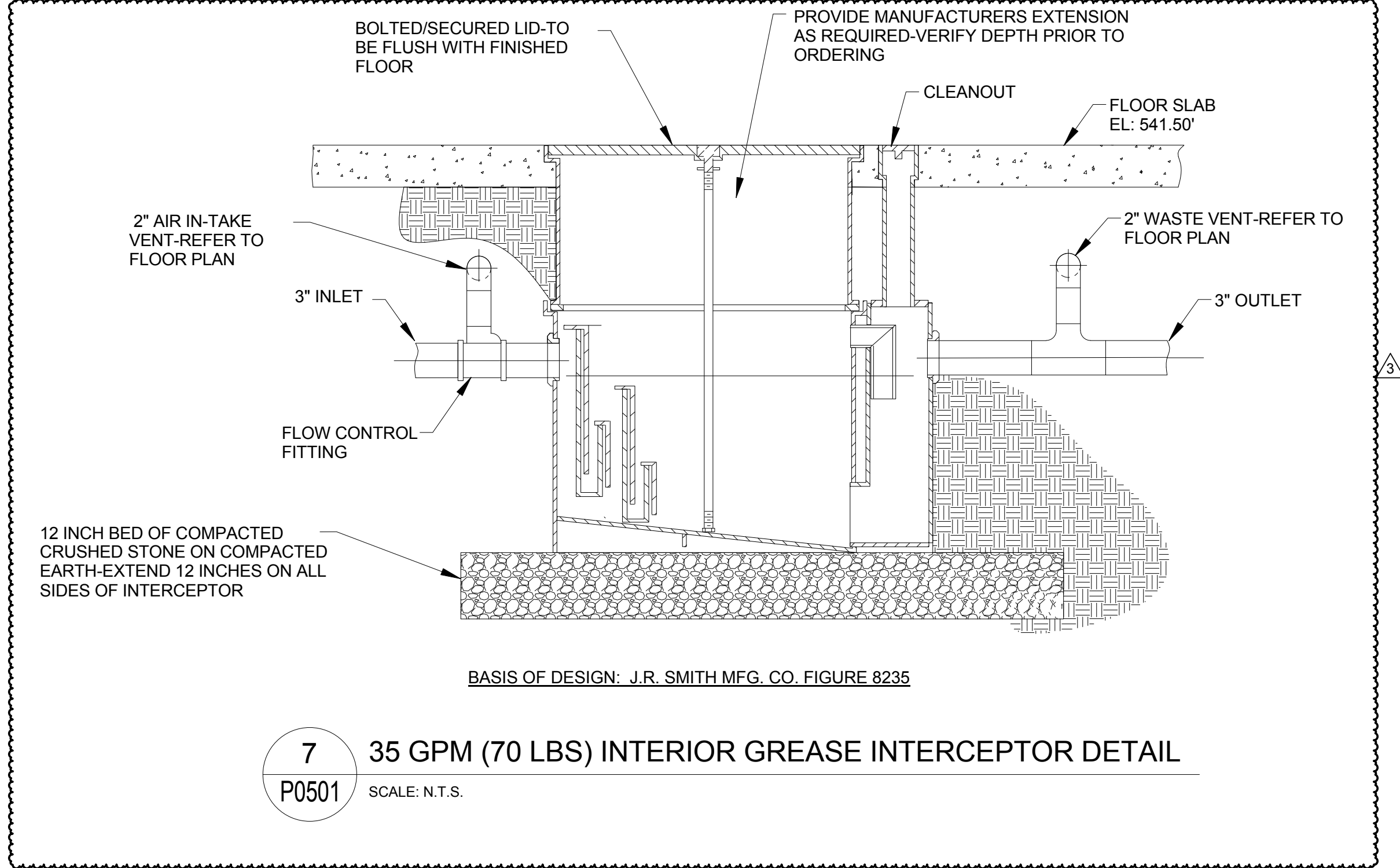
4 DOWNSPOUT NOZZLE DETAIL
SCALE: N.T.S.



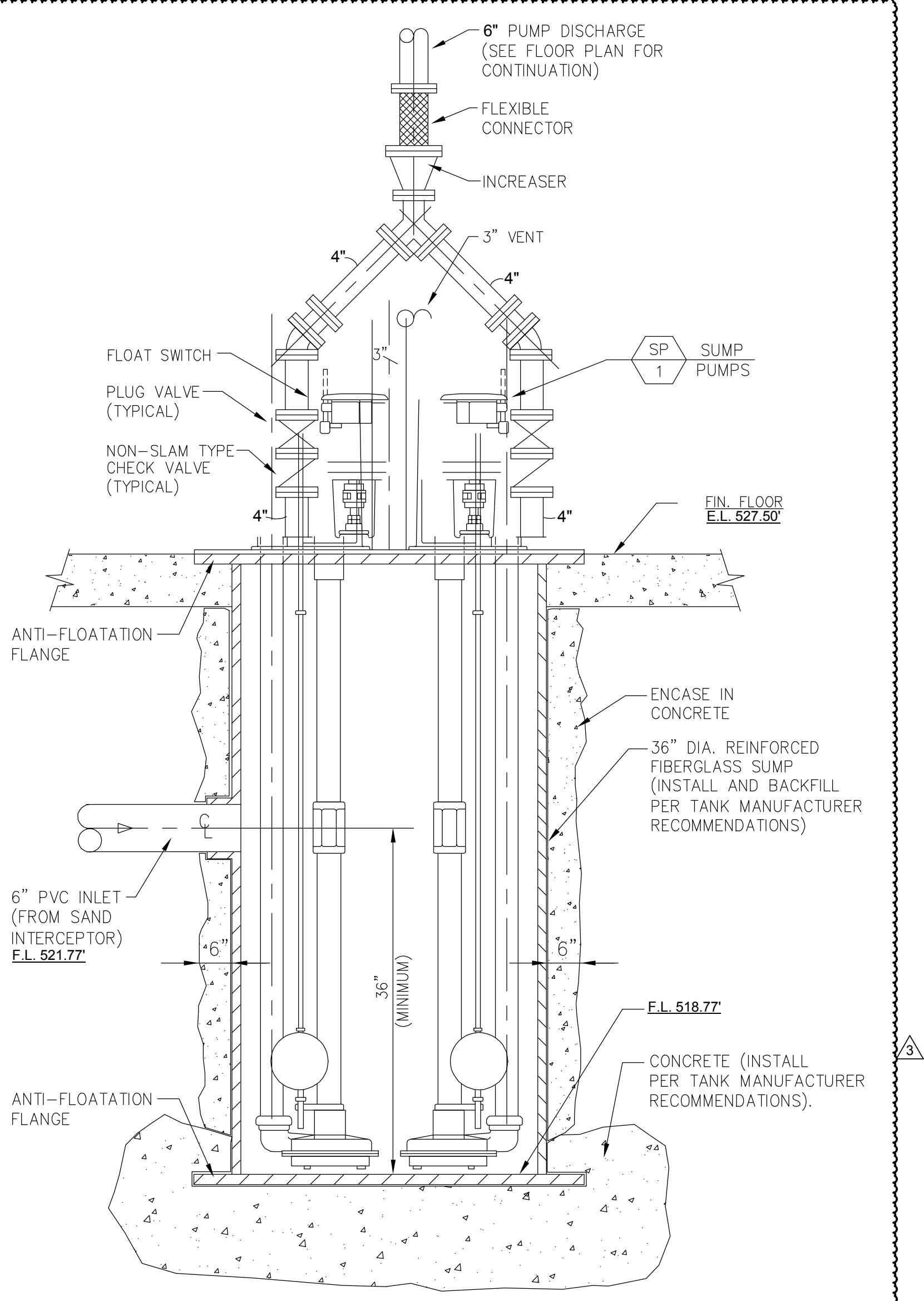
5 TWO-WAY SUB-SOIL DRAINAGE AND CLEANOUT DETAIL
SCALE: N.T.S.



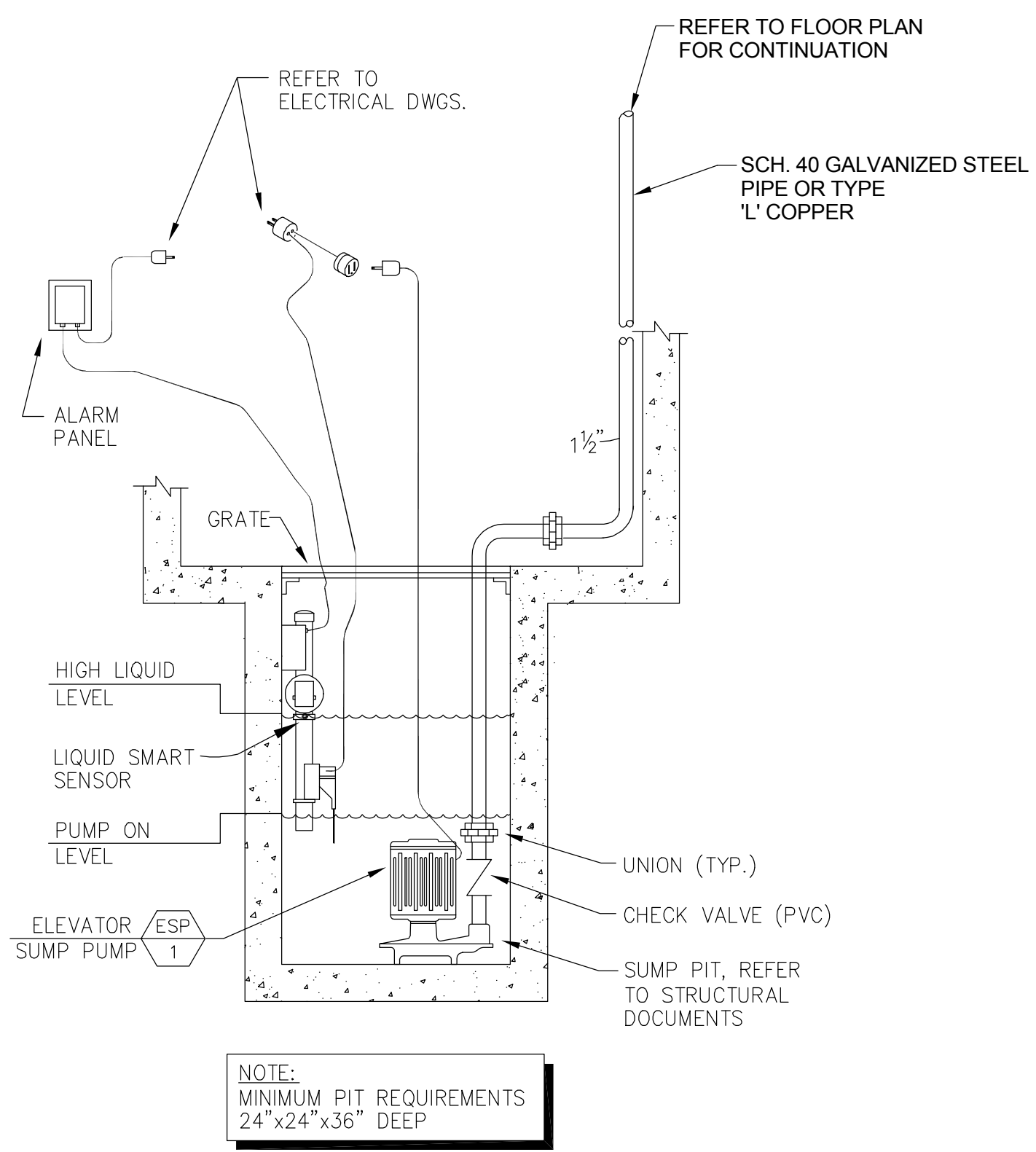
6 SAND INTERCEPTOR DETAIL
SCALE: N.T.S.



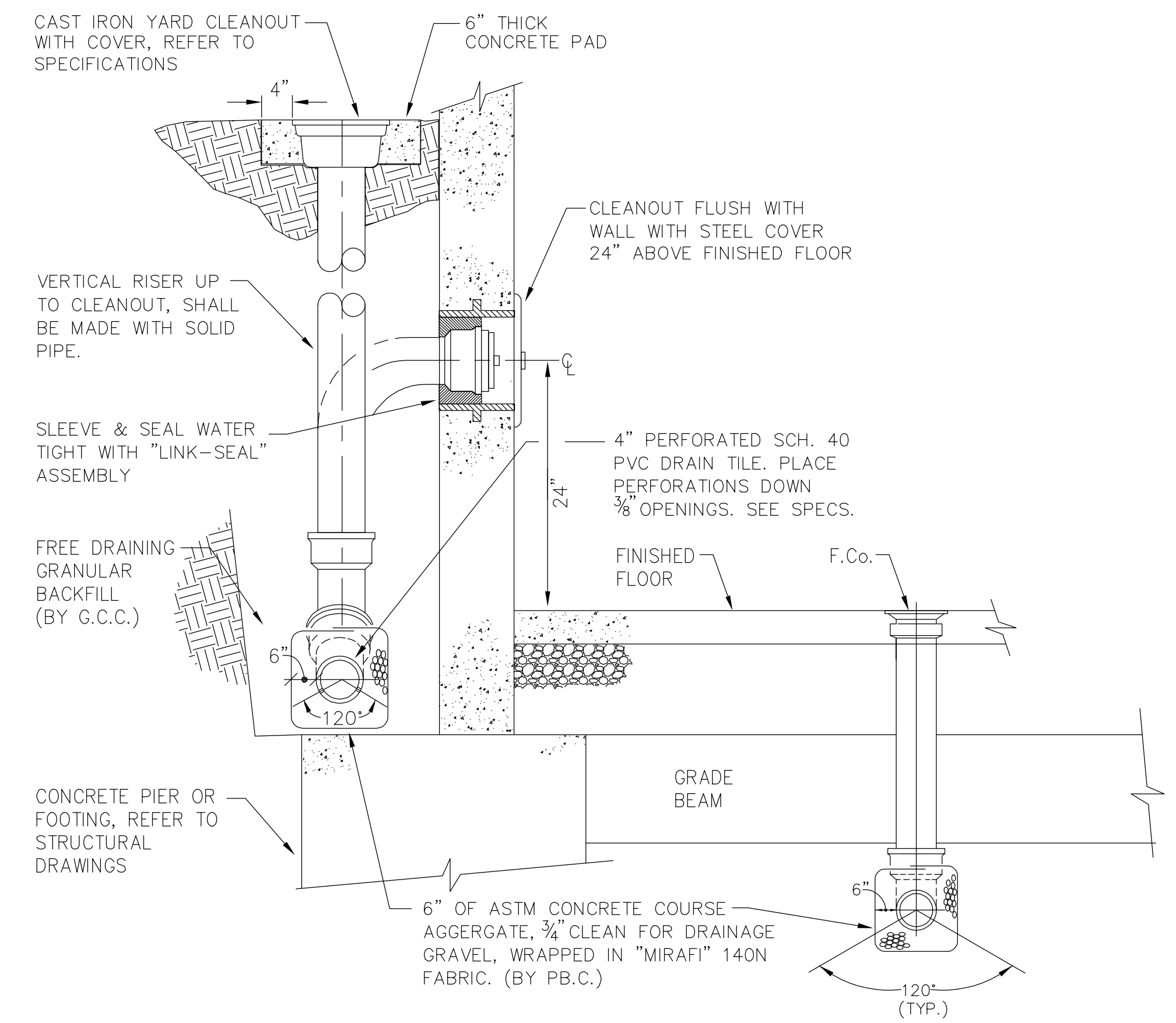
7 35 GPM (70 LBS) INTERIOR GREASE INTERCEPTOR DETAIL
SCALE: N.T.S.



8 DUPLEX SUMP PUMP DETAIL
SCALE: N.T.S.



9 ELEVATOR SUMP PUMP DETAIL
SCALE: N.T.S.



10 SUB-SOIL DRAINAGE AND CLEANOUT DETAIL
SCALE: N.T.S.

CONFORMED SET 01 JUL 2016

3	ADDENDUM 2-4	24 MAY 2016
2	ADDENDUM 2-2	19 APR 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016
No.	Description	Date

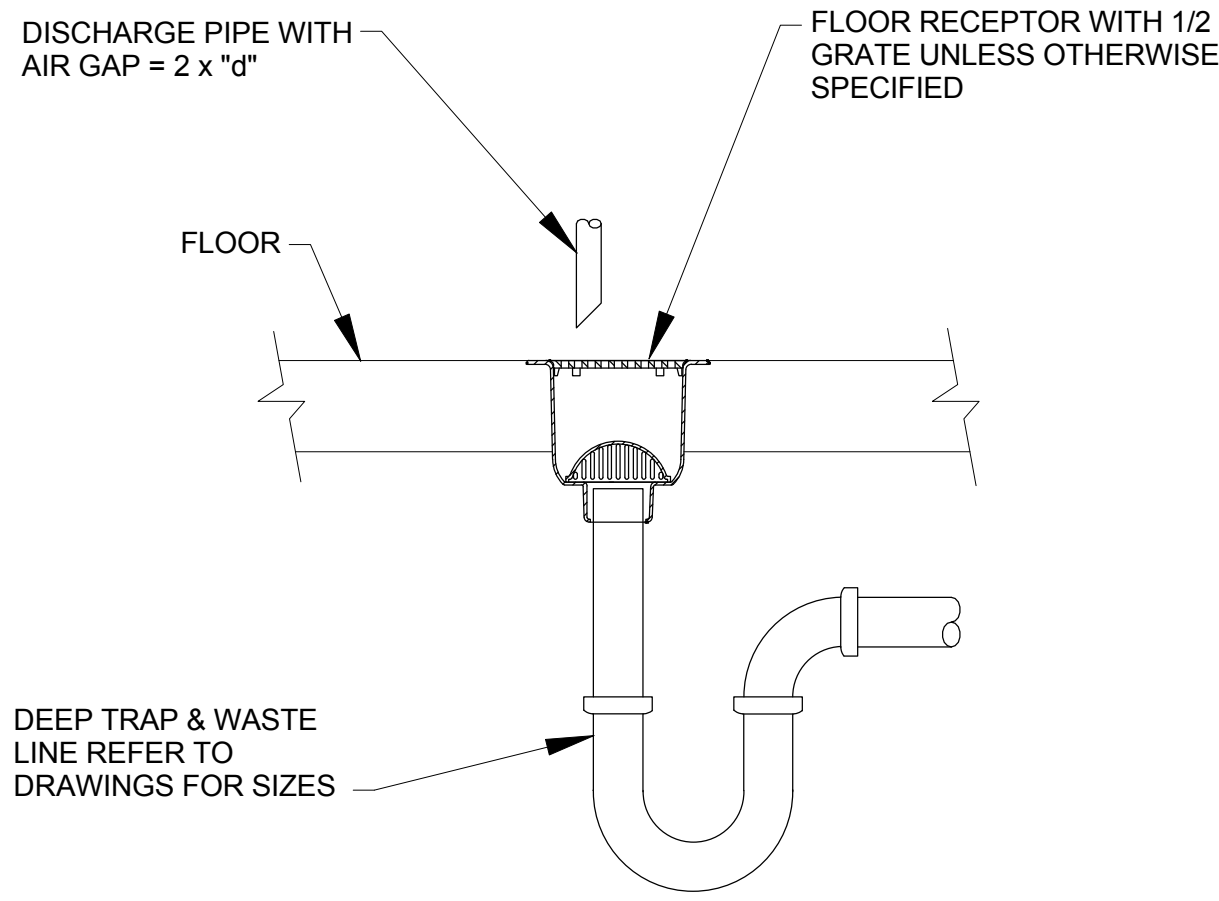
Drawing Title:

DETAILS - PLUMBING

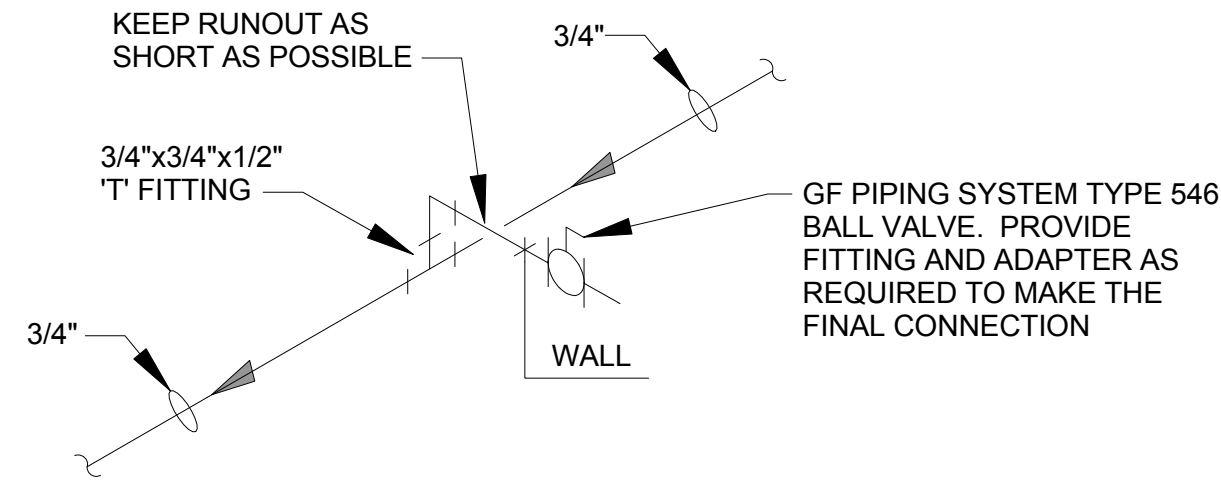
Project No.: 04561.01 Checked by:

P0501

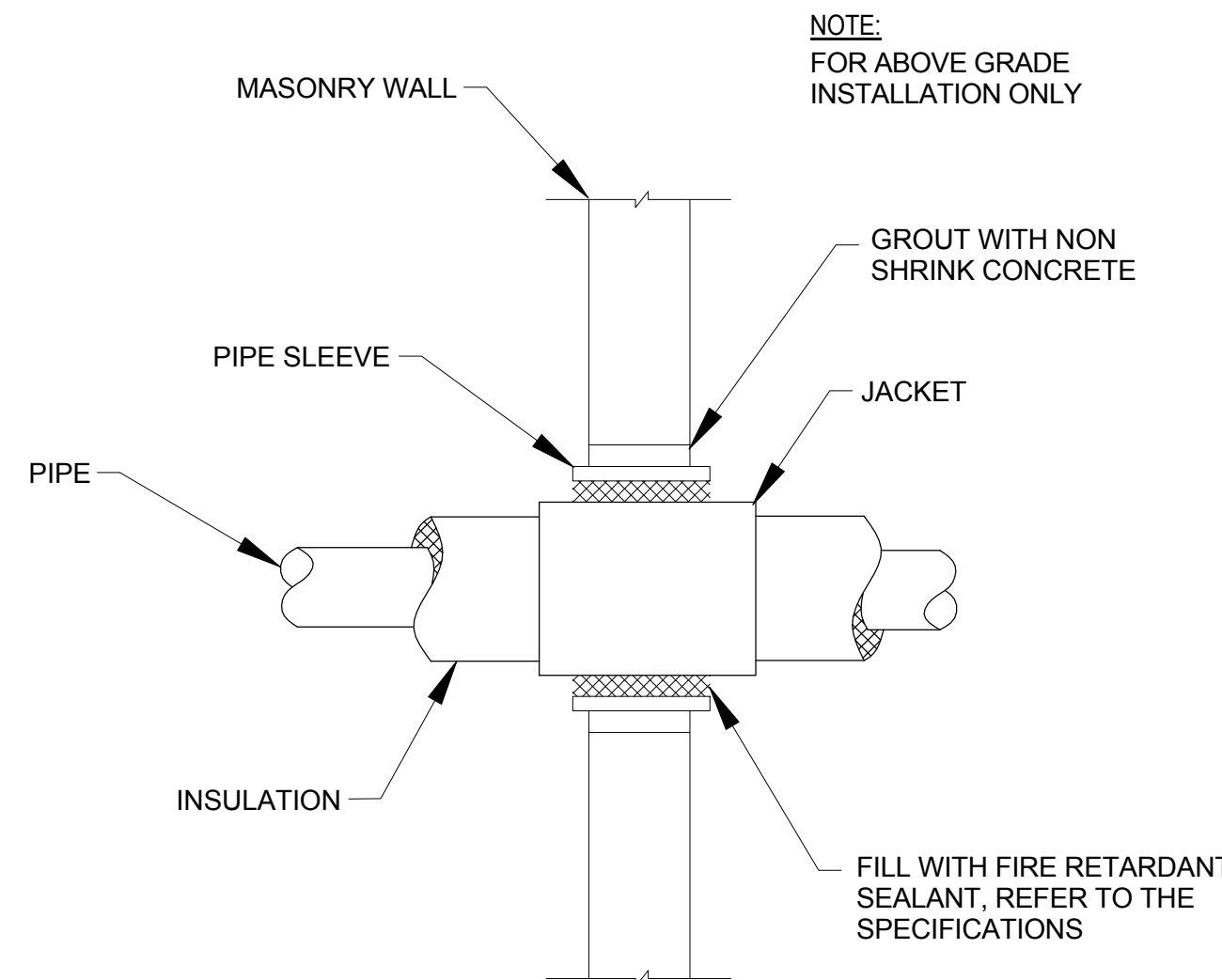
MSD P# 28874-01 MSD BASE MAP 23K3



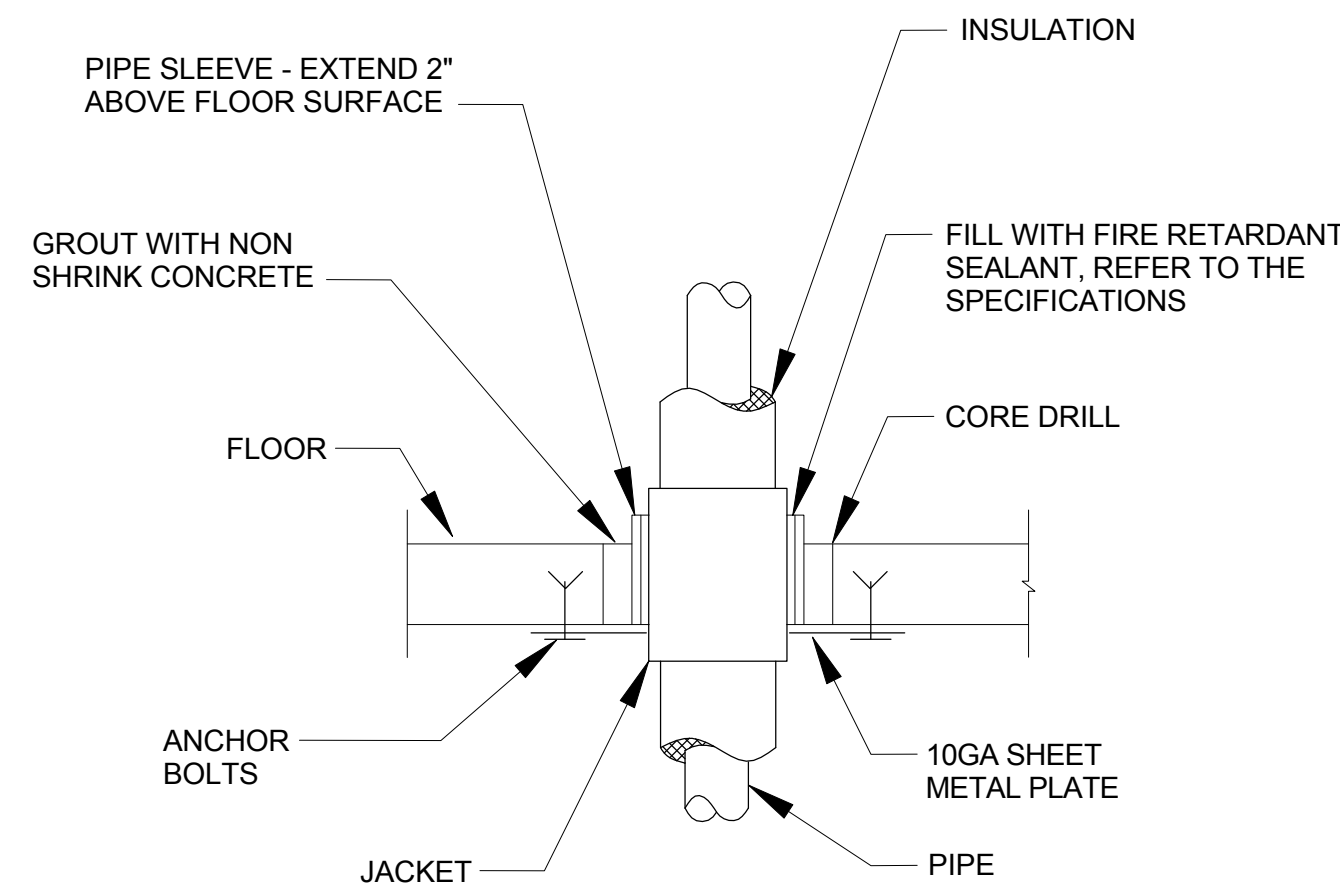
1 FLOOR RECEPTOR/SINK DETAIL
SCALE: N.T.S.



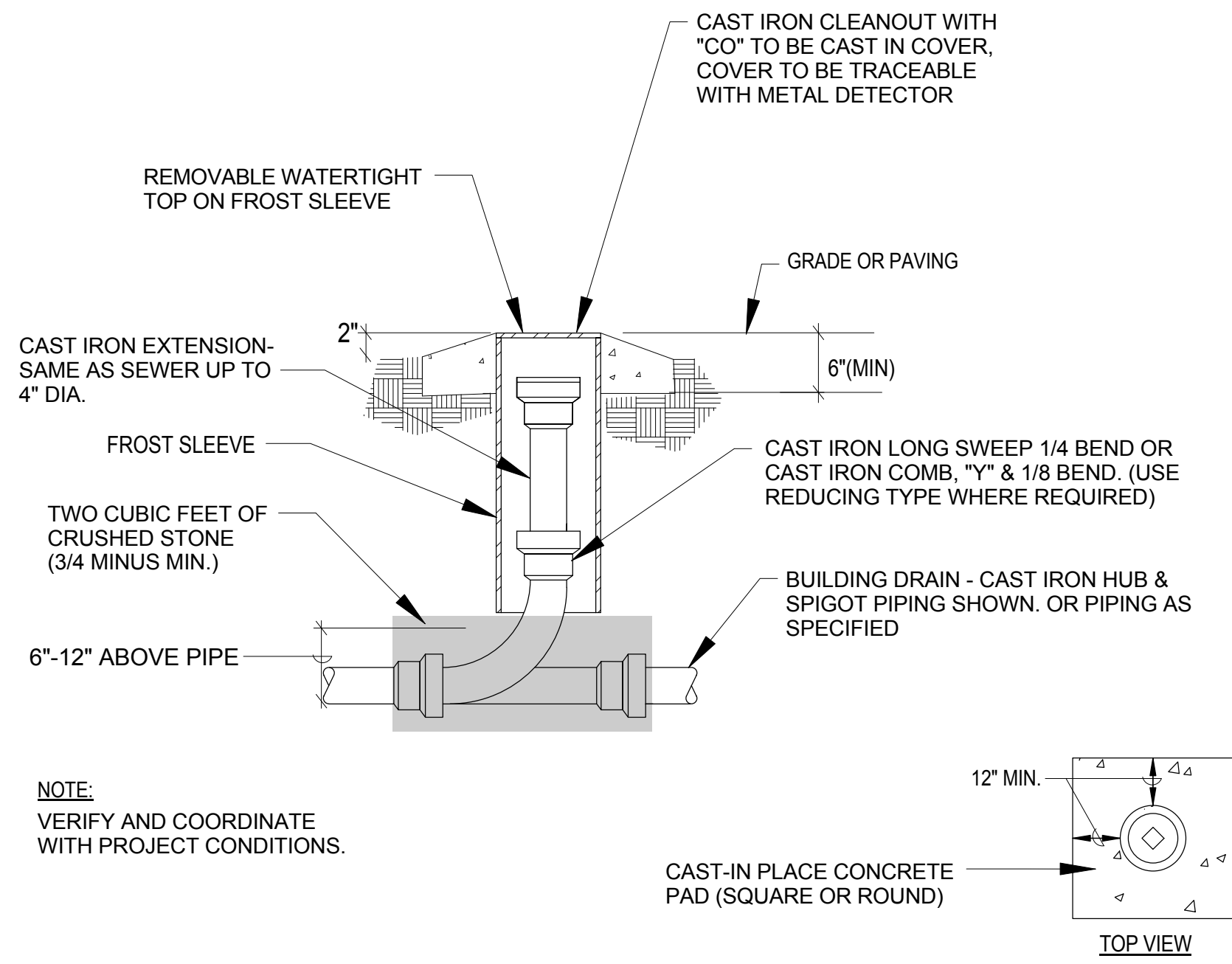
2 DI WATER RUNOUT CONNECTION
SCALE: N.T.S.



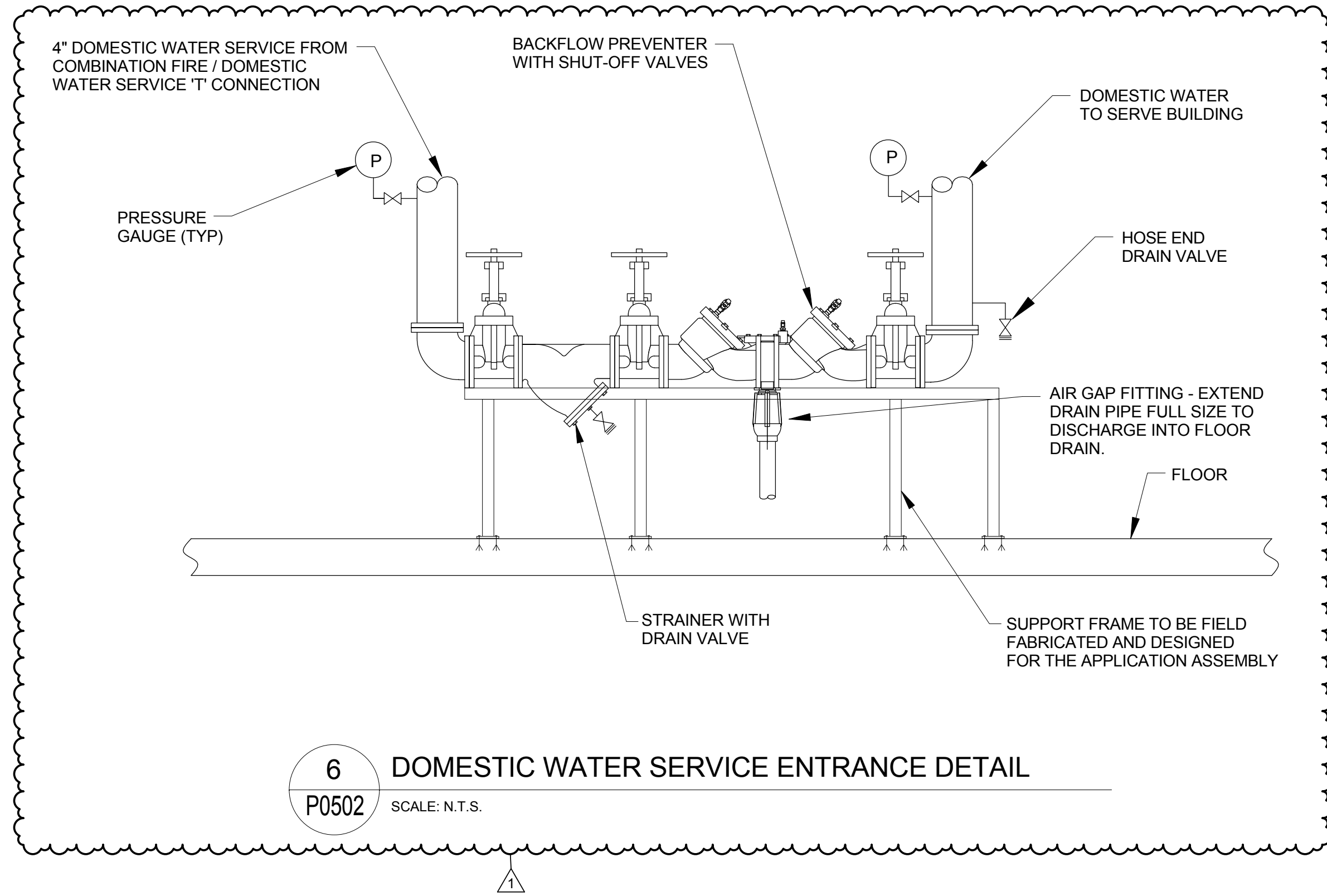
3 PIPING THROUGH MASONRY WALL
SCALE: N.T.S.



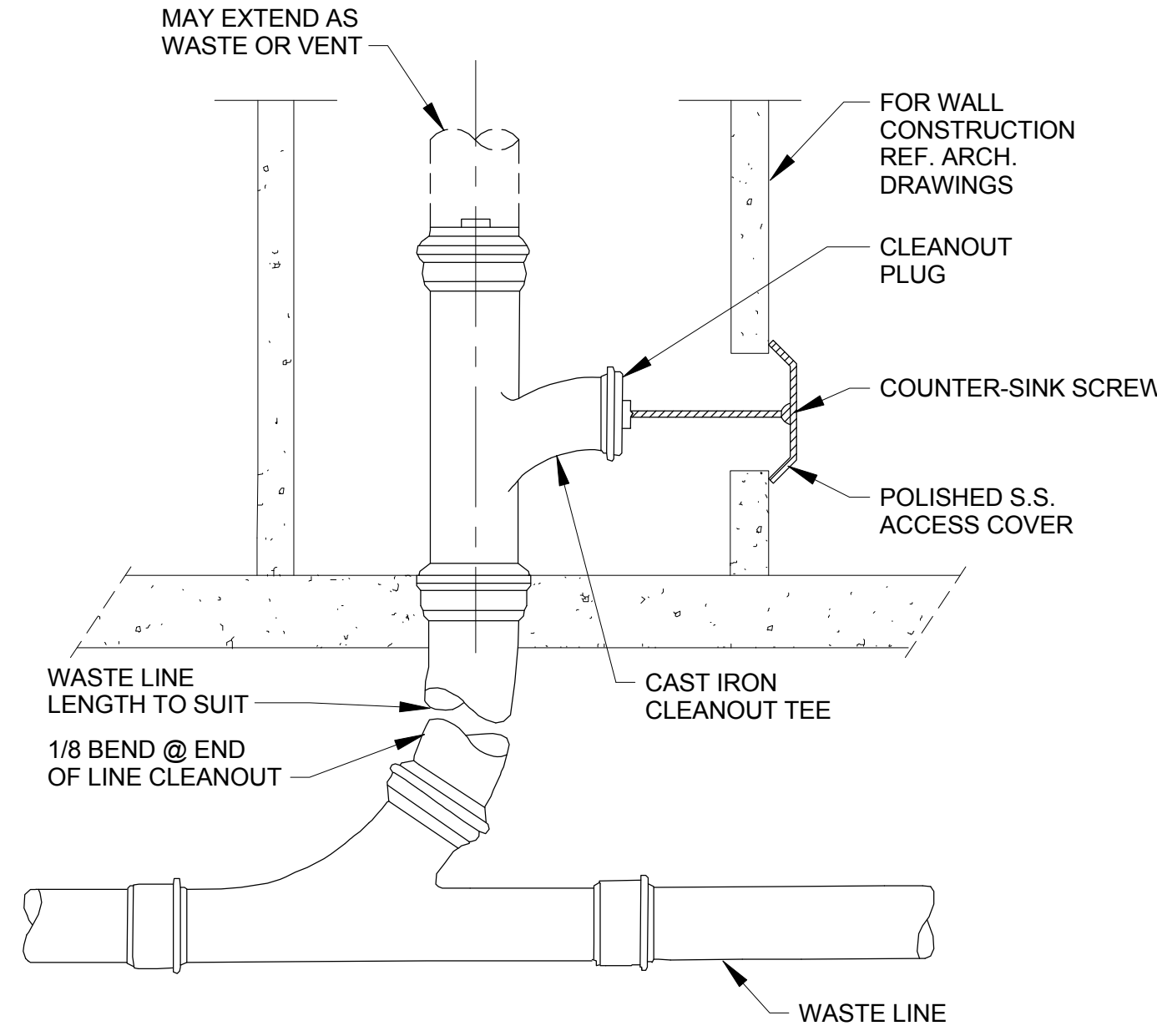
4 PIPING THROUGH CONCRETE FLOOR
SCALE: N.T.S.



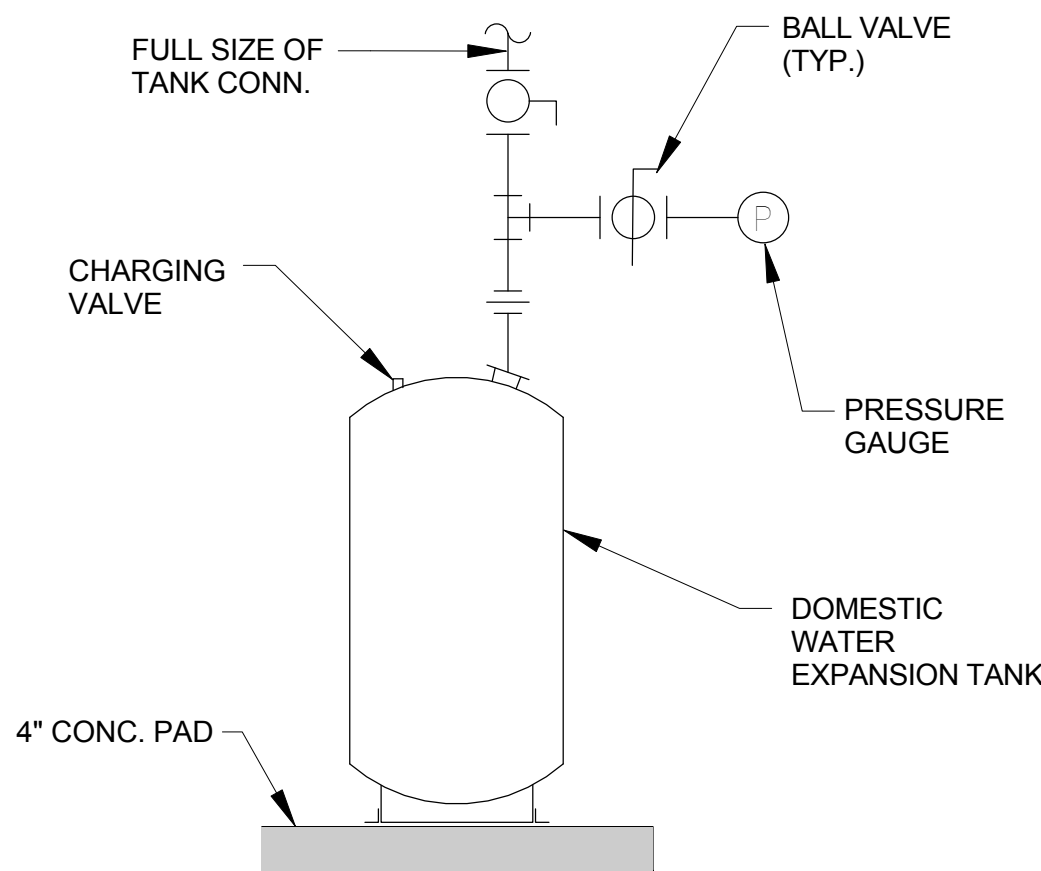
5 TYPICAL GRADE CLEANOUT DETAIL
SCALE: N.T.S.



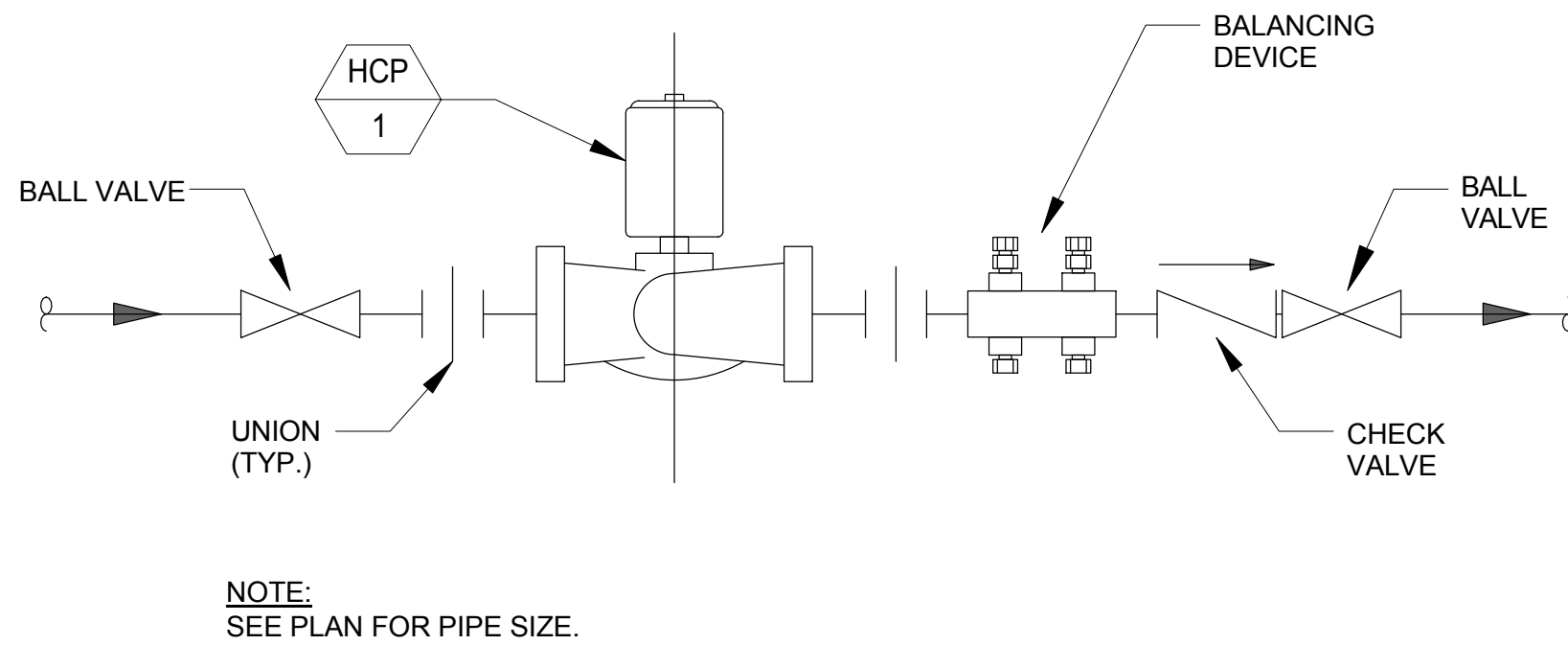
6 DOMESTIC WATER SERVICE ENTRANCE DETAIL
SCALE: N.T.S.



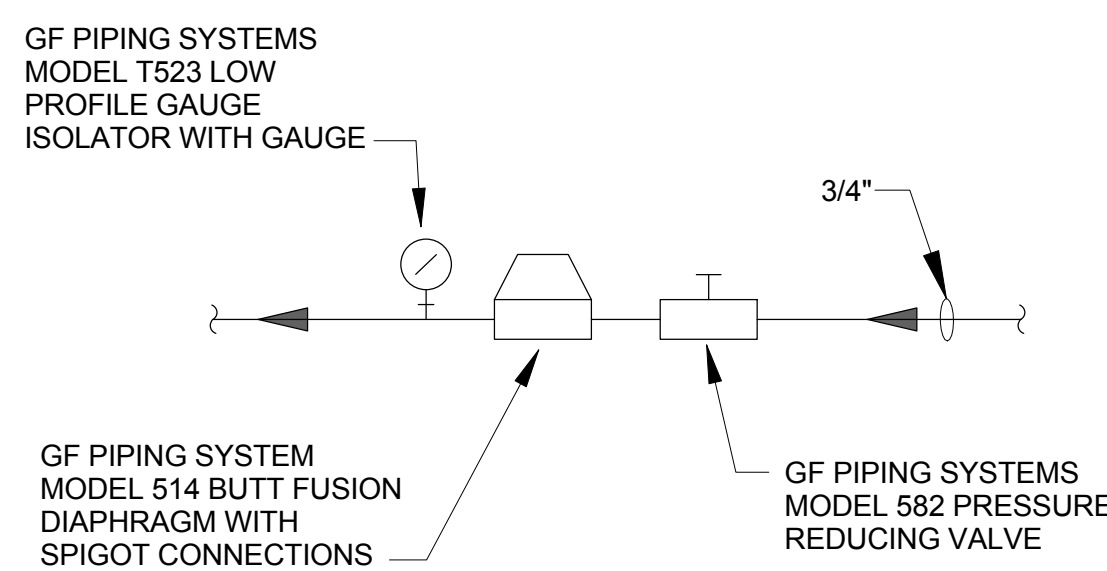
7 WALL CLEANOUT DETAIL
SCALE: N.T.S.



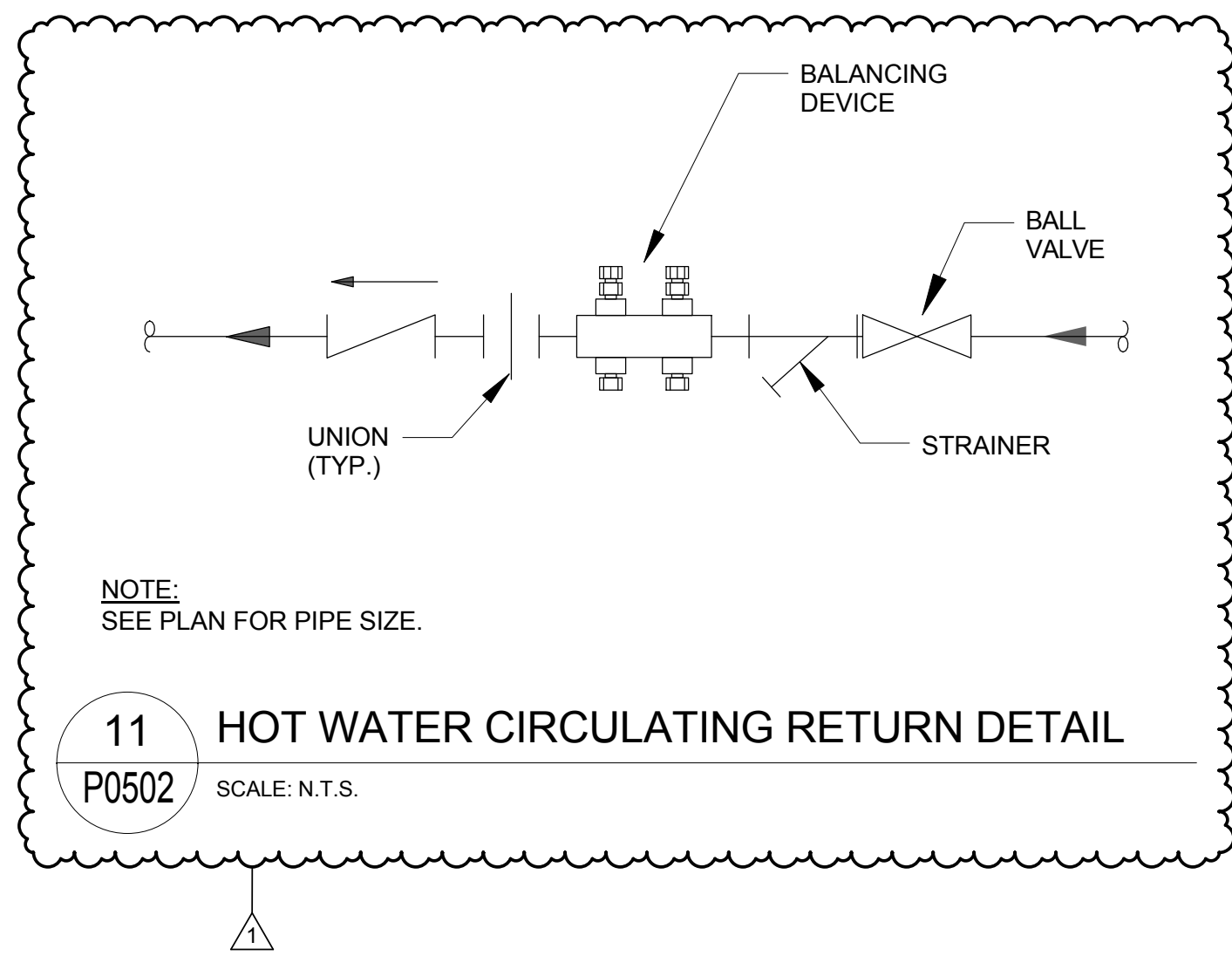
8 DOMESTIC WATER EXPANSION TANK DETAIL
SCALE: N.T.S.



9 HOT WATER CIRCULATING PUMP DETAIL
SCALE: N.T.S.



10 GF PIPING SYSTEM DETAIL
SCALE: N.T.S.



11 HOT WATER CIRCULATING RETURN DETAIL
SCALE: N.T.S.

PLUMBING FIXTURE CONNECTION SCHEDULE									
ITEM NO.	EQUIPMENT DESCRIPTION	WATER SUPPLY		WASTE		VENT	REMARKS		
		HW	CW	DIRECT	INDIRECT				
WC-1	WATER CLOSET	-	1-1/4"	4"	-	2"	WALL HUNG, BACK OUTLET STANDARD MOUNTING HEIGHT		
WC-2	WATER CLOSET (ADA)	-	1-1/4"	4"	-	2"	WALL HUNG, BACK OUTLET STANDARD ADA MOUNTING HEIGHT		
U-1	URINAL	-	1"	2"	-	2"	WALL HUNG, BACK OUTLET STANDARD MOUNTING HEIGHT		
LAV-1	LAVATORY	1/2"	1/2"	2"	-	2"	COUNTERTOP MOUNTED WITH UNDER-COUNTER ADA INSULATION KIT		
LAV-2	LAVATORY	1/2"	1/2"	2"	-	2"	WALL HUNG, ADA MOUNTING HEIGHT WITH UNDER-COUNTER ADA INSULATION KIT		
CSS-1	CLINICAL SERVICE SINK	1/2"	1-1/4"/1/2"	4"	-	2"	FLUSH VALVE, CW & HW FAUCET, HOSE SPRAY		
SS-1	SURGICAL SCRUB SINK	1/2"	1/2"	2"	-	2"	WALL HUNG, AUTOMATIC SENSOR DECK MOUNTED FAUCET		
SK-1	SINGLE COMPARTMENT SINK	1/2"	1/2"	2"	-	2"	STAFF BREAK ROOM - COUNTERTOP MOUNTED, TO INCLUDE FIXTURE TYPE 'GD-1'.		
SK-2	SINGLE COMPARTMENT SINK	1/2"	1/2"	2"	-	2"	NURSING MOCK EXAM ROOM - COUNTERTOP MOUNTED		
SK-3	SINGLE COMPARTMENT SINK	1/2"	1/2"	2"	-	2"	NURSING CLASSROOM / LAB - COUNTERTOP MOUNTED		
MS-1	MOP SINK	1/2"	1/2"	3"	-	2"			
EW-C-1	BI-LEVEL ELECTRIC WATER COOLER	-	1/2"	2"	-	2"	WALL HUNG, WITH MANUFACTURERS WALL BRACKETS		
SP-1	DUPLEX SUMP PUMP	-	-	-	3"	-	DUPLEX SUMP PUMP - SUB-SURFACE DRAIN AND DRAIN TILE		
SP-1	ELEVATOR SUMP PUMP	-	-	-	2"	-	ELEVATOR SUMP PUMP - EXTEND PIPING AND DISCHARGE INTO FD-3 ON SUB-LEVEL		
SP-2	ELEVATOR SUMP PUMP	-	-	-	2"	-	ELEVATOR SUMP PUMP - EXTEND PIPING AND DISCHARGE INTO FD-3 ON SUB-LEVEL		
EW-1	EMERGENCY EYEWASH	1/2"	1/2"	-	-	-	COUNTERTOP MOUNTED, WITH TMV-3 BELOW IN BASE CABINET		
ES-1	EMERGENCY SHOWER	3/4"	3/4"	-	-	-	WALL RECESSED, WITH TMV-2 ABOVE THE CEILING		
WH-1	WALL HYDRANT, FREEZE PROOF	-	3/4"	-	-	-	TO INCLUDE WALL CLAMP AND BACKFLOW DEVICE, SLEEVE TO SUIT WALL DEPTH		
CM-1	COFFEE MAKER OUTLET BOX	-	1/2"	-	-	-			
IM-1	ICE MAKER OUTLET BOX	-	1/2"	-	-	-			
LF-1	LABORATORY FAUCET	1/2"	1/2"	-	-	-			
LF-2	LABORATORY FAUCET	-	1/2"	-	-	-			
DE-1	DEIONIZED WATER FAUCET	-	-	-	-	-	DECK MOUNTED FAUCET, SERVED FROM THE DEIONIZED WATER SYSTEM ONLY		
UD-1	UNDER COUNTER DISHWASHER	1/2"							

REFER TO PLUMBING FIXTURES SCHEDULE AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. VERIFY FINAL EQUIPMENT SELECTION REQUIREMENTS PRIOR TO ROUGH-IN AND CONNECTIONS.

KITCHEN FIXTURE CONNECTION SCHEDULE									
ITEM	EQUIPMENT DESCRIPTION	WATER SUPPLY		WASTE		VENT	REMARKS		
		HW	CW	DIRECT	INDIRECT				
KS-1	SINGLE BOWL STAINLESS STEEL SINK	1/2"	1/2"	2"	-	2"			
KS-2	DOUBLE BOWL STAINLESS STEEL SINK	1/2"	1/2"	2"	-	2"	WITH GARBAGE DISPOSER		
KS-3	SINGLE BOWL STAINLESS STEEL	1/2"	1/2"	2"	-	2"			
DW-1	UNDERCOUNTER DISHWASHER	3/4"	-	-	-	-	EXTEND MANUFACTURERS FURNISHED FLEXIBLE HOSE TO FLOOR SINK.		
IM-1	UNDERCOUNTER ICE MAKER	-	1/2"	-	-	3/4"	WITH WATER FILTER		
IM-1	REFRIGERATOR ICE MAKER	-	1/2"	-	-	-	EXTEND DRAIN TO FLOOR SINK		

NOTES:
1. REFER TO FOOD SERVICE CONSULTANTS DRAWINGS AND SPECIFICATIONS FOR ROUGH-IN INFORMATION AND EQUIPMENT DATA.

WATER HAMMER ARRESTER SCHEDULE					
ITEM NO.	MANUFACTURER	MODEL NUMBER	CONNECTION SIZE	FIXTURE UNIT RATING	REMARKS
"A"	J.R. SMITH	5005	3/4"	1-11	THREADED NIPPLE CONNECTION
"B"	J.R. SMITH	5010	1"	12-32	THREADED NIPPLE CONNECTION
"C"	J.R. SMITH	5020	1"	33-60	THREADED NIPPLE CONNECTION
"D"	J.R. SMITH	5030	1"	61-113	THREADED NIPPLE CONNECTION
"E"	J.R. SMITH	5040	1"	114-154	THREADED NIPPLE CONNECTION
"F"	J.R. SMITH	5050	1"	155-330	THREADED NIPPLE CONNECTION

RULE 1:
THE PREFERRED PLACEMENT LOCATION IS AT THE END OF THE BRANCH LINE BETWEEN THE LAST TWO FIXTURES IN A BRANCH LESS THEN 20 FEET.

RULE 2:
IN BRANCHES THAT EXCEED 20 FEET IN LENGTH THE SUM OF THE FIXTURE UNIT RATINGS OF UNITS (X) & (Y) SHALL BE EQUAL TO OR GREATER THAN THE DEMAND OF BRANCH.

NOTES:
A. INSTALL PER MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS. PROVIDE WATER HAMMER ARRESTERS AT ALL QUICK CLOSING VALVES.
B. ALL ARRESTERS MUST BE INSTALLED IN A VERTICAL (UPRIGHT) POSITION TO INSURE PROPER OPERATION OF THE INTERNAL BELLLOWS.
C. WHEN INSTALLING, PLACE WRENCH ON NIPPLE ONLY. NEVER TIGHTEN BY GRIPPING THE SHELL.
D. SHOCK ABSORBERS MUST BE STAINLESS STEEL, PRE-CHARGED AND PERMANENTLY SEALED AT THE FACTORY. ALL SHOCK ABSORBERS SHELL MEET ASSE 1010 AND FDI-WH201 STANDARDS. SIOUX ABSORBERS ARE NOT TO BE INSTALLED.



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DOMESTIC GAS FIRED HOT WATER HEATER SCHEDULE

PLAN MARK	MANUFACTURER	MODEL NUMBER	LOCATION	FUEL	INPUT (BTU/H)	REQ'D. GAS PRESSURE		THERMAL EFFICIENCY	STORAGE CAPACITY/GALS.	RECOVERY RATE GALS. @100'	PIPING CONNECTIONS			VENT, INCHES	ASME RATED TANK	WORKING PRESSURE LBS.	ASME T&P VALVE	OPERATING VOLTAGE	SHIPPING WEIGHT, LBS.	REMARKS
						MIN. " W.C.	MAX. " W.C.				WATER		GAS							
											INLET	OUTLET								
DWH-1	RHEEM	GHE 100ES-400(A)	MECH. ROOM	NATURAL GAS	400,000	5.3	10.5	94%	100	445	2"	2"	3/4"	XX	YES	160	YES	120	835	-
DWH-2	RHEEM	GHE 100ES-400(A)	MECH. ROOM	NATURAL GAS	400,000	5.3	10.5	94%	100	445	2"	2"	3/4"	XX	YES	160	YES	120	835	-
DWH-2	RHEEM	GHE 100ES-400(A)	MECH. ROOM	NATURAL GAS	400,000	5.3	10.5	94%	100	445	2"	2"	3/4"	XX	YES	160	YES	120	835	-
NOTES:																				
1. SET ON 4" HIGH CONCRETE HOUSEKEEPING PAD.																				

DOMESTIC WATER BACKFLOW PREVENTER SCHEDULE

PLAN MARK	MANUFACTURER	SERIES	MODEL NUMBER	LOCATION	USE	TYPE/STYLE	SIZE	SHUT-OFF/SERVICE VALVES	MAXIMUM WORKING PRESSURE, PSI	WATER PIPING CONNECTIONS, INCHES		LEAD FREE	STRAINER	AIR GAP FITTING	DRAIN SIZE	SHIPPING WEIGHT, LBS.	REMARKS
										INLET	OUTLET						
BFP-1	WATTS REGULATOR	LF909	LF909-QT-FAD-NRS-S	MECH. ROOM	DOMESTIC SERVICE	RPZA	4"	NON-RISING STEM	175	FLANGED	FLANGED	YES	YES	909AG-K	3" IPS	418	NOTE 1 AND NOTE 2
BFP-2	WATTS REGULATOR	LF909	LF909-QT-S	LEVEL 3 (RM 375)	MAKE-UP WATER	RPZA	3/4"	QUARTER TURN BALL	175	THREADED	THREADED	YES	YES	909AG-C	1" IPS	18.0	NOTE 2 AND NOTE 3
BFP-3	WATTS REGULATOR	LF909	LF909-QT-S	LEVEL 0	DEIONIZED WATER	RPZA	1"	QUARTER TURN BALL	175	THREADED	THREADED	YES	YES	909AG-C	1" IPS	19.0	NOTE 2 AND NOTE 3
BFP-4	WATTS REGULATOR	LF909	LF909-QT-S	LEVEL 0	MAKE-UP WATER	RPZA	1-1/4"	QUARTER TURN BALL	175	THREADED	THREADED	YES	YES	909AG-F	2" IPS	46.0	NOTE 2 AND NOTE 3

NOTES:
1. SET ON 4" HIGH CONCRETE HOUSEKEEPING PAD - PROVIDE PIPE STANDS AS REQUIRED TO SUPPORT ASSEMBLY.
2. EXTEND DISCHARGE PIPE TO RECEPTOR - TERMINATE WITH AIR-GAP.
3. SUPPORT ASSEMBLY FROM STRUCTURE. DO NOT SUPPORT FROM PIPING.

LABORATORY CENTRAL AIR COMPRESSOR

PLAN MARK	MANUFACTURER	SYSTEM MODEL NUMBER	LOCATION	USE	HP	SYSTEM CAPACITY 145 PSIG	SYSTEM BTU/HK	RECEIVER GALLONS	NOISE LEVEL db (A)	ELECTRICAL DATA			SYSTEM WEIGHT LBS.	DIMSIONS (INCHES)			REMARKS
										VOLTS	PHASE	FLA		LENGTH	WIDTH	HGT.	
AC-1	BEACON MEDAEs	LAS07T-120V-T	MECH. ROOM	LABORATORY	(3) @ 7.5	51.0	51,536	120	77	480	3	30.9	1997	62.00	66.00	81.9	SEE NOTES

NOTES:
1. SET UNIT ON 4" HIGH CONCRETE HOUSEKEEPING PAD.
2. REFER TO SPECIFICATION SECTION 226113 - 'COMPRESSED-AIR EQUIPMENT FOR LABORATORY FACILITIES'.
3. EXTEND COPPER DRAIN FULL SIZE TO RECEPTOR.

LABORATORY CENTRAL VACUUM

PLAN MARK	MANUFACTURER	SYSTEM MODEL NUMBER	LOCATION	USE	HP	NOMINAL PUMPING SPEED (SCFM/PUMP)	CAPACITY 20" HgV (SCFM/SYSTEM)	CAPACITY 25" HgV (SCFM/SYSTEM)	END PRESSURE " Hg (TORR)	NOISE LEVEL db (A)	RECEIVER GALLONS	ELECTRICAL DATA			DIMSIONS (INCHES)			CONNECTIONS (INCHES)				SYSTEM WEIGHT LBS.	REMARKS
												VOLTS	PHASE	FLA	LENGTH	WIDTH	HGT.	INLET (FNPT)	OUTLET (FNPT)	TANK DRAIN (NPT)	AIR CONN. (NPT)		
VU-1	BEACON MEDAEs	LVHT04D-200H-D	MECH. ROOM	LABORATORY	(2) @ 5	79.0	52.0	26.6	28.4	79	200	480	3	14.5	73.00	45.5	67.00	1.50	2.00	1/4	1/4	1809	SEE NOTES

NOTES:
1. SET UNIT ON 4" HIGH CONCRETE HOUSEKEEPING PAD.
2. REFER TO SPECIFICATION SECTION 226219 - 'VACUUM EQUIPMENT FOR LABORATORY FACILITIES'.
3. EXTEND COPPER DRAIN FULL SIZE TO RECEPTOR.
4. PROVIDE MUFFLER AS RECOMMENDED BY THE MANUFACTURER.

CONFORMED SET

01 JUL 2016

1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016
No.	Description	Date

Drawing Title:

SCHEDULES - PLUMBING

Project No.: 04561.01

Checked by:

P0602

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SEISMIC CODE BLOCK FOR MECHANICAL SYSTEMS EQUIPMENT AND COMPONENT ANCHORAGE AND SWAY BRACING EARTHQUAKE LOAD RESISTANCE											
OCCUPANCY CATEGORY II						SEISMIC DESIGN CATEGORY C					
EQUIPMENT AND SYSTEM COMPONENTS		SEISMIC ANCHORAGE TO FLOORS, ROOFS, ETC.		SEISMIC SWAY BRACING		LOCATION OF THE PROFESSIONALLY SEALED ANCHORAGE AND SWAY BRACING DETAILS		OTHER PROVISIONS (SEE NOTES)		COMMENTS	
ITEM	IMPORTANCE FACTOR	NOT PROVIDED FOR PROJECT	PROVIDED FOR PROJECT	NOT PROVIDED FOR PROJECT	PROVIDED FOR PROJECT	ON CONSTRUCTION DOCUMENTS	SUBSEQUENT SUBMITTAL			IBC SECTION THAT EXEMPTS SEISMIC REQUIREMENTS	
HAZARDOUS EQUIPMENT AND SYSTEM COMPONENTS											
NATURAL GAS PIPING (EXTERIOR) - DUCTILE PIPING <= 2"	1.5	X		X					6,24	ASCE 7-05 SECTION 13.6.8.2.B	
NATURAL GAS PIPING (EXTERIOR) <= 2 PSI - DUCTILE AND NON-DUCTILE PIPING (ALL SIZES)	1.5	X		X					5	N/A	
NATURAL GAS PIPING (INTERIOR) - DUCTILE PIPING <= 2"	1.5	X		X					6,14,24	ASCE 7-05 SECTION 13.6.8.2.B	
NATURAL GAS PIPING (INTERIOR) - DUCTILE PIPING > 2" OR NON-DUCTILE PIPING (ALL SIZES)	1.5	X			X		X		14		
KITCHEN GREASE EXHAUST FAN - ROOF MOUNTED	1.5		X	X			X		11		
LABORATORY EXHAUST FAN - ROOF MOUNTED	1.5		X	X			X		11		
LABORATORY EXHAUST DUCTWORK	1.5	X			X		X				
OTHER GENERAL EQUIPMENT AND SYSTEM COMPONENTS											
ROOF MOUNTED EQUIPMENT/ COMPONENTS											
FAN	1.0	X		X					23	ASCE 7-05 SECTION 13.1.4.3	
CONDENSERS/ CONDENSING UNITS	1.0	X		X					23	ASCE 7-05 SECTION 13.1.4.3	
FLOOR MOUNTED EQUIPMENT/ COMPONENTS											
AIR HANDLING UNIT (AHU, VAV, MAU, HRU) - BASE MOUNTED	1.0	X		X					23	ASCE 7-05 SECTION 13.1.4.3	
BOILER	1.0	X		X					23	ASCE 7-05 SECTION 13.1.4.3	
HEAT EXCHANGER	1.0	X		X					23	ASCE 7-05 SECTION 13.1.4.3	
PUMP - BASE-MOUNTED	1.0	X		X					23	ASCE 7-05 SECTION 13.1.4.3	
EXPANSION TANK	1.0	X		X					23	ASCE 7-05 SECTION 13.1.4.3	
AIR SEPARATOR	1.0	X		X					23	ASCE 7-05 SECTION 13.1.4.3	
FINNED TUBE RADIATION	1.0	X		X					23	ASCE 7-05 SECTION 13.1.4.3	
EQUIPMENT/ COMPONENTS SUSPENDED FROM STRUCTURE											
BOILER FLUE	1.0	X		X					23	ASCE 7-05 SECTION 13.1.4.3	
UNIT HEATER	1.0	X		X					23	ASCE 7-05 SECTION 13.1.4.3	
AIR SEPARATOR	1.0	X		X					23	ASCE 7-05 SECTION 13.1.4.3	
EXPANSION TANK	1.0	X		X					23	ASCE 7-05 SECTION 13.1.4.3	
FAN COIL UNIT	1.0	X		X					23	ASCE 7-05 SECTION 13.1.4.3	
FINNED TUBE RADIATION	1.0	X		X					23	ASCE 7-05 SECTION 13.1.4.3	
PUMP - INLINE	1.0	X		X					23	ASCE 7-05 SECTION 13.1.4.3	
PIPING	1.0	X		X					23	ASCE 7-05 SECTION 13.1.4.3	
WALL MOUNTED EQUIPMENT/ COMPONENTS											
FAN COIL UNITS	1.0	X		X					23	ASCE 7-05 SECTION 13.1.4.3	
UNIT HEATER	1.0	X		X					23	ASCE 7-05 SECTION 13.1.4.3	
FINNED TUBE RADIATION	1.0	X		X					23	ASCE 7-05 SECTION 13.1.4.3	
SIDEWALL FAN	1.0	X		X					23	ASCE 7-05 SECTION 13.1.4.3	
LOUVERS AND PLENUMS	1.0	X		X					23	ASCE 7-05 SECTION 13.1.4.3	
VARIABLE FREQUENCY DRIVE (VFD)	1.0	X		X					23	ASCE 7-05 SECTION 13.1.4.3	
CONTROL PANELS	1.0	X		X					23	ASCE 7-05 SECTION 13.1.4.3	
INLINE EQUIPMENT/ COMPONENTS											
FAN	1.0	X		X					23	ASCE 7-05 SECTION 13.1.4.3	
AIR TERMINAL UNIT	1.0	X		X					23	ASCE 7-05 SECTION 13.1.4.3	
CEILING-MOUNTED EQUIPMENT/ COMPONENTS											
AIR DEVICES < 20 LBS.	1.0	X		X					23		
AIR DEVICES >= 20 LBS. < 56 LBS.	1.0	X		X					23		
AIR DEVICES > 56 LBS.	1.0	X		X					23		
EXHAUST FAN < 20 LBS.	1.0	X		X					23		
HVAC DUCTWORK	1.0	X		X						ASCE 7-05 SECTION 13.1.4.3	

MECHANICAL SYSTEMS NOTES:

- INLINE EQUIPMENT WEIGHING MORE THAN 20 LBS. MUST HAVE SEISMIC RESTRAINT EVEN IF DUCTWORK DOES NOT REQUIRE SEISMIC RESTRAINTS.
- DUCTILE PIPING: STEEL AND COPPER PIPING AND TUBING JOINED BY WELDING, OR BRAZING/SOLDERING OR BY BOLTED STEEL FLANGES.
- COMPONENT/ELEMENTS SHALL BE ANCHORED TO EQUIPMENT CURB/RAIL AND THE CURB ANCHORED TO THE STRUCTURAL ELEMENTS OF THE ROOF IN SUCH A MANNER TO RESIST AND TRANSFER THE EARTHQUAKE LOADS INTO THE STRUCTURAL ELEMENTS OF THE ROOF.
- ATTACHMENTS EMBEDDED IN CONCRETE SHALL BE SUITABLE FOR CYCLIC LOADS.
- MEP COMPONENTS/ELEMENTS IN SEISMIC DESIGN CATEGORY C, WHEN THE IP=1.0 FOR THE COMPONENT/ELEMENT.
- DUCTILE PIPING 2" OR LESS WHEN PROVISIONS ARE MADE TO PROTECT THE PIPING FROM IMPACT OR TO AVOID THE IMPACT OF LARGER PIPING OR OTHER MECHANICAL EQUIPMENT.

COMPONENTS WITH AN IMPORTANCE FACTOR = 1.5 SHALL BE PROVIDED WITH A SEISMIC CERTIFICATE OF COMPLIANCE.
REFER TO SPECIFICATION SECTIONS 230500, 232400, 260500 AND 262400.

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SEISMIC CODE BLOCK FOR ELECTRICAL SYSTEMS EQUIPMENT AND COMPONENT ANCHORAGE AND SWAY BRACING EARTHQUAKE LOAD RESISTANCE											
OCCUPANCY CATEGORY II								SEISMIC DESIGN CATEGORY C			
LISTING OF EQUIPMENT AND SYSTEM COMPONENTS	COMPONENT IMPORTANCE FACTOR = 1.0	COMPONENT IMPORTANCE FACTOR = 1.5	SEISMIC ANCHORAGE TO FLOORS, ROOFS, ETC.		SEISMIC SWAY BRACING		LOCATION OF THE PROFESSIONALLY SEALED ANCHORAGE AND SWAY BRACING DETAILS			OTHER PROVISIONS (SEE NOTES)	IBC SECTION THAT EXEMPTS SEISMIC REQUIREMENTS
			PROVIDED	NOT PROVIDED	PROVIDED	NOT PROVIDED	ON CONSTRUCTION DOCUMENTS	SUBSEQUENT SUBMITTAL			
							DRAWING NO. OR SPECIFICATION SECTION	SHOP DRAWING	SEPARATE PERMIT AND PLANS		
BACK-UP POWER											
GENERATORS GREATER THAN 400 LBS	X		X			X		X		5	
GENERATORS FOR LIFE SAFETY EQUIPMENT		X	X			X		X		5	
GENERATOR DAY TANK	X			X		X				1.5	ASCE 7-05 SECTION 13.1.4.3
GENERATOR DAY TANK FOR LIFE SAFETY EQUIPMENT		X	X			X		X		5	
LIGHTING											
LIGHTING, RECESSED FIXTURE	X			X		X				1.5	ASCE 7-05 SECTION 13.1.4.3
LIGHTING RECESSED FIXTURE FOR LIFE SAFETY		X	X			X		X		5	
LIGHTING PENDANT STYLE FOR NON-LIFE SAFETY W/ NO OBSTRUCTIONS WITHIN 45 DEGREES	X			X		X				1,2,4,6	ASCE 7-05 SECTION 13.1.4.3
LIGHTING PENDANT STYLE FOR LIFE SAFETY W/ NO OBSTRUCTIONS WITHIN 45 DEGREES		X		X	X			X		2	
LIGHTING PENDANT STYLE FOR NON-LIFE SAFETY W/ OBSTRUCTIONS WITHIN 45 DEGREES	X			X	X			X		2	
LIGHTING PENDANT STYLE FOR LIFE SAFETY W/ OBSTRUCTIONS WITHIN 45 DEGREES		X		X	X			X		2	
LIGHTING, SURFACE MOUNTED	X			X		X				1.5	ASCE 7-05 SECTION 13.1.4.3
LIGHTING SURFACE MOUNTED FOR LIFE SAFETY		X	X			X		X		5	
MISC. LIFE SAFETY SYSTEMS											
CONTROL PANEL FOR LIFE SAFETY EQUIPMENT		X	X			X		X		5	
FIRE ALARM PANEL		X	X			X		X		5	
LIFE SAFETY EMERGENCY SYSTEM DEVICES AND COMPONENTS, FLOOR OR WALL MOUNTED		X	X			X		X		5	
MISC. POWER DISTRIBUTION											
CONTROL PANEL	X			X		X				1.5	ASCE 7-05 SECTION 13.1.4.3
ELECTRICAL PANELBOARD, FLOOR OR WALL MOUNTED	X			X		X				1.5	ASCE 7-05 SECTION 13.1.4.3
ELECTRICAL PANELBOARD, FLOOR OR WALL MOUNTED, FOR LIFE SAFETY EQUIPMENT		X	X			X		X		5	
SWITCHGEAR, FLOOR MOUNTED	X			X		X				1.5	ASCE 7-05 SECTION 13.1.4.3
SWITCHGEAR, FLOOR MOUNTED, FOR LIFE SAFETY SYSTEMS		X	X			X		X		5	
TRANSFER SWITCH, AUTOMATIC, FOR NON-LIFE SAFETY, WALL MOUNTED	X			X		X				1.5	ASCE 7-05 SECTION 13.1.4.3
TRANSFER SWITCH, AUTOMATIC, FOR LIFE SAFETY, WALL MOUNTED		X	X			X		X		5	
UNIT SUBSTATIONS, FLOOR MOUNTED	X			X		X				1.5	ASCE 7-05 SECTION 13.1.4.3
HOUSEKEEPING PADS	X			X		X				1.5	ASCE 7-05 SECTION 13.1.4.4
HOUSEKEEPING PADS		X	X			X		X		5	
MOTOR CONTROLLERS											
VARIABLE FREQUENCY DRIVE, WALL MOUNTED	X			X		X				1.5	ASCE 7-05 SECTION 13.1.4.3
VARIABLE FREQUENCY DRIVE, WALL MOUNTED, FOR LIFE SAFETY SYSTEM		X	X			X		X		5	
MOTOR CONTROL DEVICES FOR NON-LIFE SAFETY SYSTEM	X			X		X				1.5	ASCE 7-05 SECTION 13.1.4.3
MOTOR CONTROL DEVICES FOR LIFE SAFETY SYSTEM		X	X			X		X		5	
RACEWAY											
CONDUIT ANY SIZE, ANY MATERIAL FOR NON-LIFE SAFETY EQUIPMENT	X			X		X				1.4	ASCE 7-05 SECTION 13.1.4.3
CONDUIT ANY SIZE, ANY MATERIAL FOR LIFE SAFETY EQUIPMENT		X	X			X		X		5	
SURFACE MOUNTED RACEWAY FOR NON-LIFE SAFETY (WIRE MOLD)	X			X		X				1.5	ASCE 7-05 SECTION 13.1.4.3
TRANSFORMERS											
TRANSFORMER, FLOOR MOUNTED, FOR NON-LIFE SAFETY SYSTEMS	X			X		X				1.5	ASCE 7-05 SECTION 13.1.4.3
TRANSFORMER, FLOOR MOUNTED, FOR LIFE SAFETY SYSTEMS		X	X			X		X		5	
OTHER ITEMS, OCCUPANCY CATEGORY IV											
ALL ITEMS UNDER OCCUPANCY CATEGORY IV		X	X		X			X			NO EXEMPTION FOR ITEMS IN OCCUPANCY CATEGORY IV

ELECTRICAL SYSTEMS NOTES:

- REFERENCE ASCE OR COUNTY GUIDELINE SECTION THAT EXEMPTS THE SEISMIC REQUIREMENT.
- IF EQUIPMENT IS SUSPENDED, ANCHORAGE TO FLOOR, ROOF, ETC. IS NOT APPLICABLE.
- TO BE EXEMPT FROM THE SEISMIC RESTRAINT REQUIREMENTS, FLEXIBLE CONNECTIONS MUST BE PROVIDED BETWEEN COMPONENTS AND ASSOCIATED PIPING AND CONDUIT. FLEXIBLE CONNECTIONS ARE NOT REQUIRED FOR CONNECTIONS TO APPLIANCES OR ELECTRICAL FIXTURES THAT ARE MOUNTED TO WALLS OR FLOORS.
- IF EQUIPMENT IS FLOOR, ROOF OR WALL MOUNTED, SWAY BRACING IS NOT APPLICABLE. ANCHORAGE TO RESIST SEISMIC LOADS ONLY IS ADDRESSED HEREIN. ANCHORAGE MAY BE NEEDED TO RESIST WIND, GRAVITY, AND VIBRATIONAL LOADS REGARDLESS OF SEISMIC REQUIREMENTS.
- PENDULUM/PENDANT STYLE LIGHT FIXTURES DO NOT REQUIRE SWAY BRACING AS LONG AS THEY CAN SWING TO AN ANGLE OF 45 DEGREES FROM VERTICAL AND NOT COLLIDE WITH OTHER OBJECTS.



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CONFORMED SET 01 JUL 2016

ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016
No. Description Date

Drawing Title:

MECHANICAL AND ELECTRICAL SEISMIC CODE BLOCK

Project No.: 04561.01 Checked by:

ME0001

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CONFORMED SET

01 JUL 2016

- ISSUED FOR CONSTRUCTION (BP2)		01 MAR 2016
No.	Description	Date

Drawing Title:

STANDARD MECHANICAL AND ELECTRICAL SYMBOLS SHEET

Project No.: 04561.01

Checked by:

ME0002

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EQUIPMENT DATA SCHEDULE															
	MARK		KW HP MCA	VOLTAGE PHASE SPEED	EQUIPMENT LOCATION	CONTROLLER DATA			PANEL DESIGNATION	BRANCH CIRCUIT DATA			GROUND	CONDUIT SIZE	NOTES
	ID	TAG #				ACCESORIES (1)	CONTROLLER TYPE (2)	CONTROLLER SIZE		TYPE (3)	SIZE	PHASE			
CENTRAL AIR COMPRESSOR	AC	1	(3) 7.5 HP	480/3/1	LEVEL 01 AREA A		PWCP	-	1NH2	CB	70A/3P	6	10	3/4"	
AIR COOLED CONDENSING UNIT	ACCU	1	16 MCA	208/1/1	LEVEL 0 MECH RM	-	PWCP	-	BNL1	CB	25A/2P	10	10	3/4"	4
AIR COOLED CONDENSING UNIT	ACCU	2	16 MCA	208/1/1	LEVEL 0 MECH RM	-	PWCP	-	BNL1	CB	25A/2P	10	10	3/4"	4
AIR COOLED CONDENSING UNIT	ACCU	3	16 MCA	208/1/1	ROOF	-	PWCP	-	4NL1	CB	25A/2P	10	10	3/4"	4
AIR COOLED CONDENSING UNIT	ACCU	4	16 MCA	208/1/1	ROOF	-	PWCP	-	4NL1	CB	25A/2P	10	10	3/4"	4
AIR COOLED CONDENSING UNIT	ACCU	5	26 MCA	208/1/1	LEVEL 0 MECH RM	-	PWCP	-	BNL1	CB	40A/2P	8	10	3/4"	4
AIR HANDLING UNIT	AHU	1	100 MCA	480/3/VAR	LEVEL 0 MECH RM	-	VFD	-	BNH1	CB	180A/3P	3/0	6	2"	3, 6, 7
AIR HANDLING UNIT	AHU	2	100 MCA	480/3/VAR	LEVEL 0 MECH RM	-	VFD	-	BNH1	CB	180A/3P	3/0	6	2"	3, 6, 7
AIR HANDLING UNIT	AHU	3	6 MCA	480/3/VAR	LEVEL 0 MECH RM	-	VFD	-	1SH1	CB	15A/3P	12	12	3/4"	2, 6
AIR HANDLING UNIT	AHU	4	6 MCA	480/3/VAR	LOWER LEVEL	-	VFD	-	1SH1	CB	15A/3P	12	12	3/4"	2, 6
AIR HANDLING UNIT	AHU	5	10.47 MCA	480/3/VAR	LEVEL 01 - ELECTRICAL RM	-	VFD		1NH2	CB	15A/3P	12	12	3/4"	6
BOILER	B	1	10.2 MCA	120/1/1	LEVEL 01 AREA A	-	PWCP	-	1SL1	CB	20A/1P	12	12	3/4"	2, 4
BOILER	B	2	10.2 MCA	120/1/1	LEVEL 01 AREA A	-	PWCP	-	1SL1	CB	20A/1P	12	12	3/4"	2, 4
CHILLED WATER PUMP	CP	1	25 HP	480/3/VAR	LEVEL 0 MECH RM	-	VFD	-	BNH1	CB	70A/3P	6	10	3/4"	6
CHILLED WATER PUMP	CP	2	25 HP	480/3/VAR	LEVEL 0 MECH RM	-	VFD	-	BNH1	CB	70A/3P	6	10	3/4"	6
CHILLED WATER PUMP	CP	3	2 HP	480/3/1	LEVEL 01 AREA A	HOA-P	COMB	1	1NH2	CB	15A/3P	12	12	3/4"	
CHILLED WATER PUMP	CP	4A	1/6 HP	120/1/1	LEVEL 04 - LAB 489	P	MS	0	4LL2	CB	20A/1P	12	12	3/4"	
CHILLED WATER PUMP	CP	4B	1/6 HP	120/1/1	LEVEL 04 - LAB 489	SAME AS CP-4A	SAME AS CP-4A	SAME AS CP-4A	4LL2	CB	20A/1P	12	12	3/4"	
CONDENSING UNIT	CU	1	46 MCA	480/3/1	ON GRADE	-	PWCP	-	1SH1	CB	60A/3P	6	10	3/4"	2, 4
CONDENSING UNIT	CU	2	46 MCA	480/3/1	ON GRADE	-	PWCP	-	1SH1	CB	60A/3P	6	10	3/4"	2, 4
CABINET UNIT HEATER	CUH	101	40 WATT	120/1/1	LEVEL 01 - VEST C153	-	PWCP	-	1NL1	CB	15A/1P	12	12	3/4"	1, 4
CABINET UNIT HEATER	CUH	102	40 WATT	120/1/1	LEVEL 01 STAIR 2-1	-	PWCP	-	1NL2	CB	15A/1P	12	12	3/4"	1, 4
CABINET UNIT HEATER	CUH	201	40 WATT	120/1/1	LEVEL 02 - VEST C250A	-	PWCP	-	2NL1	CB	15A/1P	12	12	3/4"	1, 4
CABINET UNIT HEATER	CUH	202	40 WATT	120/1/1	LEVEL 02 - VEST C230A	-	PWCP	-	2NL1	CB	15A/1P	12	12	3/4"	1, 4
CABINET UNIT HEATER	CUH	203	40 WATT	120/1/1	LEVEL 02 - C270A EAB CONNECTOR	-	PWCP	-	2NL1	CB	15A/1P	12	12	3/4"	1, 4
CABINET UNIT HEATER	CUH	204	40 WATT	120/1/1	LEVEL 02 - C270A EAB CONNECTOR	-	PWCP	-	2NL1	CB	15A/1P	12	12	3/4"	1, 4
D.I. WATER SYSTEM	DI	1	5 HP	480/3/VAR	LEVEL 00 AREA A	-	PWCP	-	BNH1	CB	15A/3P	12	12	3/4"	
EXHAUST FAN	EF	1	3 HP	480/3/1	ROOF	HOA-P	COMB	1	4SH1	CB	15A/3P	12	12	3/4"	1, 2
EXHAUST/RELIEF FAN	EF	2	7.5 HP	480/3/VAR	ROOF	-	VFD	-	4NH1	CB	20A/3P	12	12	3/4"	1, 6
EXHAUST FAN	EF	3	3 HP	480/3/VAR	ROOF	-	VFD	-	4NH1	CB	15A/3P	12	12	3/4"	1, 6
EXHAUST FAN	EF	4	1/2 HP	120/1/1	ROOF	-	MS	0	4NL1	CB	20A/1P	12	12	3/4"	
ELEVATOR SUMP PUMP	ESP	1	.72 KW	120/1/1	ELEVATOR PIT 1	-	-	-	1NL1	CB	20A/1P	12	12	3/4"	
ELEVATOR SUMP PUMP	ESP	2	.72 KW	120/1/1	ELEVATOR PIT 2	-	-	-	BNL1	CB	20A/1P	12	12	3/4"	
ELECTRIC WATER COOLER	EWC	1	.37 KW	120/1/1	LEVEL 01 AREA A	-	-	-	1NL1	CB	20A/1P	12	12	3/4"	
ELECTRIC WATER COOLER	EWC	2	.37 KW	120/1/1	LEVEL 02 AREA A	-	-	-	2NL1	CB	20A/1P	12	12	3/4"	
ELECTRIC WATER COOLER	EWC	3	.37 KW	120/1/1	LEVEL 03 AREA A	-	-	-	3NL1	CB	20A/1P	12	12	3/4"	
ELECTRIC WATER COOLER	EWC	4	.37 KW	120/1/1	LEVEL 04 AREA A	-	-	-	4NL1	CB	20A/1P	12	12	3/4"	
FAN COIL UNIT	FCU	1	0.1 kW	208/1/1	LEVEL 01 - DATA CLOSET	-	PWCP	-	1NL1	CB	15A/2P	12	12	3/4"	4, 8
FAN COIL UNIT	FCU	2	0.1 kW	208/1/1	LEVEL 02 - DATA CLOSET	-	PWCP	-	2NL1	CB	15A/2P	12	12	3/4"	4, 8
FAN COIL UNIT	FCU	3	0.1 kW	208/1/1	LEVEL 03 - DATA CLOSET	-	PWCP	-	3NL1	CB	15A/2P	12	12	3/4"	4, 8
FAN COIL UNIT	FCU	4	0.1 kW	208/1/1	LEVEL 04 - DATA CLOSET	-	PWCP	-	4NL1	CB	15A/2P	12	12	3/4"	12
FAN COIL UNIT	FCU	5A	0.1 kW	208/1/1	LEVEL 01 - MDF ROOM	-	PWCP	-	1NL2	CB	15A/2P	12	12	3/4"	4, 8, 10
FAN COIL UNIT	FCU	5B	0.1 kW	208/1/1	LEVEL 01 - MDF ROOM	-	PWCP	-	1NL2	CB	15A/2P	12	12	3/4"	4, 8, 10
FAN COIL UNIT	FCU	5C	0.1 kW	208/1/1	LEVEL 01 - MDF ROOM	-	PWCP	-	1NL2	CB	15A/2P	12	12	3/4"	4, 8, 10

- (1) CONTROLLER DATA ACCESSORIES**
HOA - HAND-OFF-AUTO SWITCH MAINTAINED
HLOA - HIGH-LOW-OFF AUTO SELECTOR SWITCH OR PUSHBUTTON
P () - PILOT LIGHT (QUANTITY) - SEE SPECIFICATION FOR COLOR OF LIGHTS
- SS - START-STOP PUSHBUTTON MAINTAINED CONTACT SELECTOR SWITCH OR PUSHBUTTON
SSM - START-STOP MOMENTARY CONTACT
TDR - TIME DELAY RELAY
SPEC - SEE SPECIFICATION SECTION 235000
- (2) CONTROLLER DATA TYPE (DIVISION 26 UNLESS OTHERWISE NOTED)**
VFD - VARIABLE FREQUENCY DRIVE
COMB - COMBINATION FVNR STARTER WITH FUSIBLE DISCONNECT SWITCH
CONTR - CONTACTOR
PF - PLUG FUSE SWITCH
MS - MANUAL STARTER
TSS - TWO-SPEED STARTER
FVNR - FULL VOLTAGE NON-REVERSING STARTER
FVR - FULL VOLTAGE REVERSING STARTER
RVNS - REDUCED VOLTAGE NON-REVERSING STARTER
SSS - SOLID-STATE STARTER
PWCP - PRE-WIRED CONTROL PANEL (FURNISHED WITH DIVISION 23 EQUIPMENT)
- (3) BRANCH CIRCUIT DEVICE TYPE**
CB - CIRCUIT BREAKER
FS - FUSIBLE SWITCH

- GENERAL NOTE:
OVER CURRENT PROTECTION BASED ON ENERGY EFFICIENT MOTOR DATA FOR HORSEPOWER THROUGH 40 HORSEPOWER UNLESS OTHERWISE NOTED.
- KEYED NOTES:
- EQUIPMENT FURNISHED WITH INTEGRAL DISCONNECT SWITCH.
 - EMERGENCY POWER REQUIRED.
 - MULTIPLE MOTORS ON ONE DRIVE. DRIVE PROVIDED AND WIRED ON THE LOAD SIDE BY THE EQUIPMENT MANUFACTURER.
 - SEE SPECIFICATIONS FOR CONTROLLER REQUIREMENTS.
 - EQUIPMENT FURNISHED WITH CORD AND PLUG. 20 AMP CIRCUIT REQUIRED.
 - VARIABLE FREQUENCY DRIVE BY DIVISION 23.
 - EQUIPMENT FURNISHED WITH INTEGRAL LIGHT FIXTURES FURNISHED AND MOUNTED BY DIVISION 23. DIVISION 26 TO PROVIDE ALL BRANCH CIRCUIT WIRING AND CONDUIT FOR CONNECTION OF FIXTURES AND LIGHT SWITCH AT ENTRY TO UNIT. REFER TO DIVISION 23 DRAWINGS AND SPECIFICATIONS FOR FIXTURE TYPES.
 - FAN COIL AIR CONDITIONERS FOR IT-DATA CLOSETS AND MDF ROOM. FAN COIL UNITS (FCU) SHALL BE WIRED BACK TO ASSOCIATED AIR-COOLED CONDENSING UNIT (ACCU).
 - VENTILATION FAN FOR ELEVATOR MACHINE ROOM.
 - MULTIPLE PIECES OF EQUIPMENT ON THE SAME CIRCUIT BREAKER/DISCONNECT SWITCH.
 - MULTIPLE POWER CONNECTIONS FOR AN INDIVIDUAL PIECE OF EQUIPMENT.

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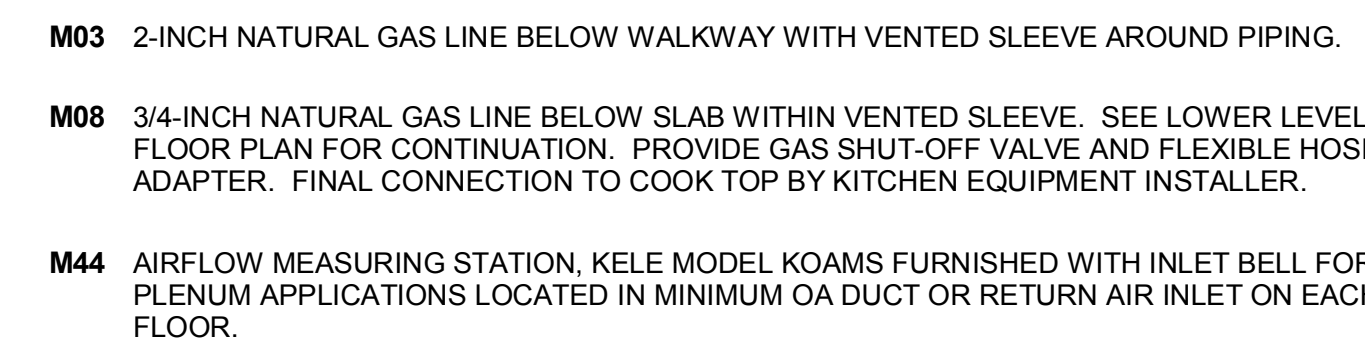
2	ADDENDUM 2-2	19 APRIL 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016
No.	Description	Date

Drawing Title:

EQUIPMENT DATA SCHEDULE

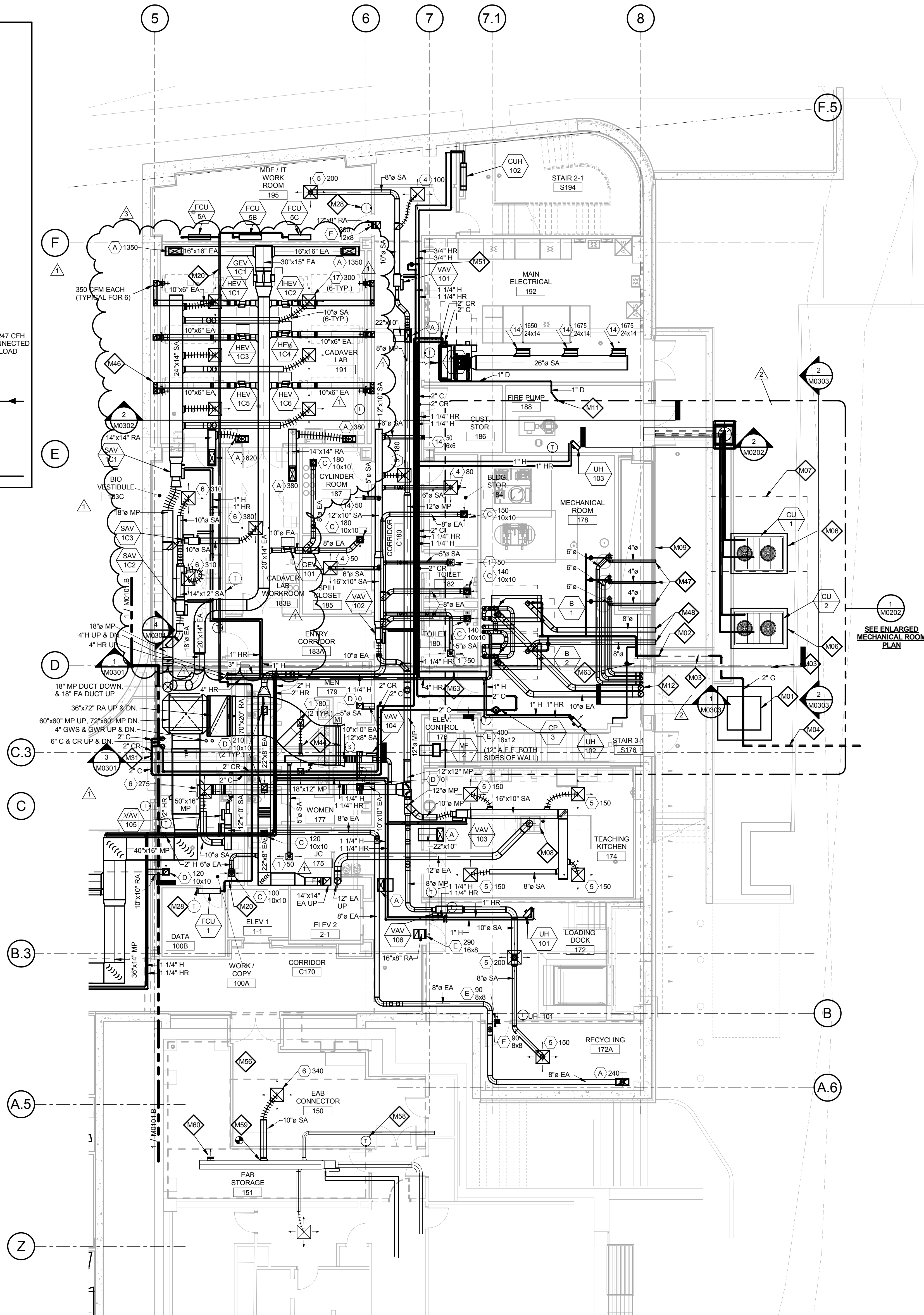
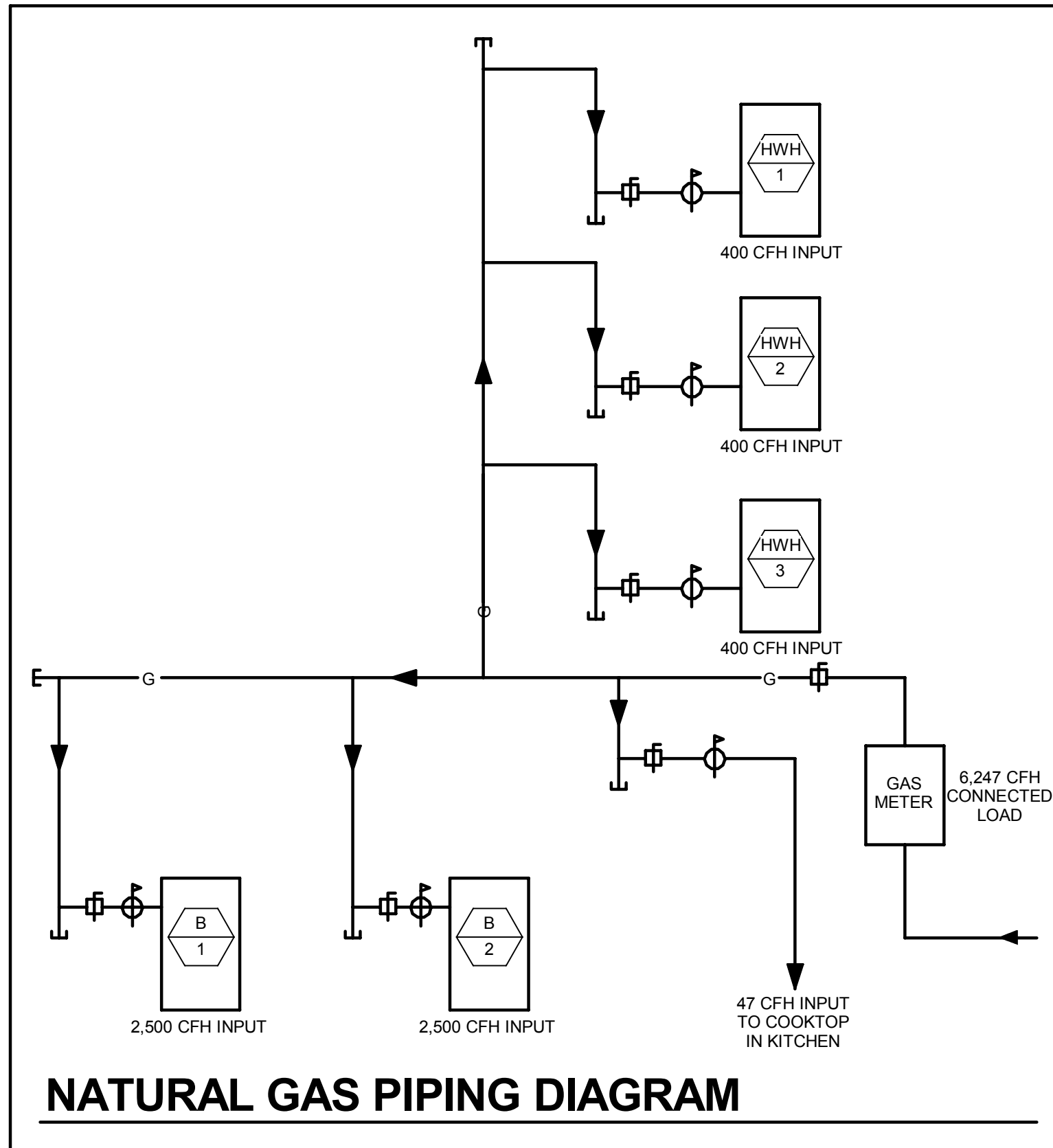
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M0001



1 LEVEL 01 - AREA A - MECHANICAL PLAN
1/8" = 1'-0"

GENERAL NOTES:

- Because of the limited space available to install all of the mechanical work, coordination between the various trades is of the utmost importance. This contractor shall coordinate with all other trades prior to the fabrication and installation of any work.
- Refer to the reflected ceiling plans for ceiling construction, ceiling grid layout, ceiling mounted devices, and coordinate exact location and mounting type of all air devices.
- All ductwork upstream of terminal units shall be Medium Pressure (MP). All ductwork downstream of terminal units shall be Low Pressure (LP). Refer to specifications.
- All ductwork dimensions indicated on plans are sheet metal sizes. All medium pressure ductwork shall be unlined, externally insulated. All low pressure ductwork shall be lined. See specifications.
- All mitered 90° rectangular elbows shall be furnished with turning vanes having maximum $c = 0.12$. All smooth radius rectangular elbows shall have a throat radius greater than one half the duct width, unless furnished with splitter vanes. Under no circumstances shall the throat radius be less than one third the duct width. Unless otherwise noted or specified.
- Contractor shall furnish and install volume dampers for each duct take-off unless otherwise noted. See detail.
- Maximum length of Low Pressure (LP) flexible ductwork shall be 8'-0". Round LP duct of lengths greater than 8'-0" shall be rigid round. Flexible duct sizes on plans shall be neck size of diffusers or as indicated. See specifications.
- Maximum length of Medium Pressure (MP) flexible ductwork shall be 2'-0". Round MP duct of lengths greater than 2'-0" shall be rigid round. Flexible duct sizes on plans shall be air Terminal Unit inlet size or as indicated. See specifications.
- All ductwork runouts to Air Terminal Units and diffusers shall be the connection size unless otherwise noted.
- Piping runouts to terminal units shall be 3/4" unless otherwise noted. Refer to reheat box schedule.
- Verify exact location of thermostats, humidistats, BAS sensors, and other exposed control sensors with architectural elevations and drawings before installation.
- Schedule systems or equipment shut downs required for new construction with owner two weeks in advance. Some premium time work may be required.
- Refer to piping details for final connections to equipment.
- Provide service shut-off valves in major piping branch lines. All connections to risers and each building wing, A & B.

KEYED NOTES

- M01 PROPOSED GAS METER LOCATION: COORDINATE WITH LOCAL NATURAL GAS UTILITY COMPANY FOR METER SET SIZED FOR A TOTAL CONNECTED LOAD OF 6,247-CFH WITH A DELIVERY PRESSURE OF 2-PSIG. PROVIDE CONCRETE METER PAD PER THE LOCAL GAS COMPANY'S REQUIREMENTS AND SIZE.
- M02 2-INCH MAIN BUILDING NATURAL GAS LINE ABOVE GRADE WITH SHUT-OFF VALVE.
- M03 2-INCH NATURAL GAS LINE IN OPEN TRENCH WITH STEEL GRATING. SEE CIVIL DRAWINGS. SUPPORT PIPING WITH STAINLESS STEEL UNISTRUT FRAMING, MINIMUM 2-INCHES ABOVE TRENCH FLOOR.
- M04 NATURAL GAS MAIN EXTENSION BELOW GRADE BY LOCAL GAS COMPANY.
- M06 CONCRETE BASE FOR MECHANICAL EQUIPMENT, SEE CIVIL DRAWINGS. VERIFY SIZE WITH APPROVED SHOP DRAWINGS.
- M07 DASHED LINES INDICATE RECOMMENDED SERVICE, COIL PULLING SPACE, FILTER REMOVAL SPACE, AND/OR AIRFLOW CLEARANCES.
- M08 3/4-INCH NATURAL GAS LINE BELOW SLAB WITHIN VENTED SLEEVE. SEE LOWER LEVEL FLOOR PLAN FOR CONTINUATION. PROVIDE GAS SHUT-OFF VALVE AND FLEXIBLE HOSE ADAPTER. FINAL CONNECTION TO COOK TOP BY KITCHEN EQUIPMENT INSTALLER.
- M09 OUTSIDE AIR INTAKE LOUVER, SEE ARCHITECTURAL DRAWINGS.
- M11 TERMINATE COOLING COIL DRAIN LINE OVER NEAREST FLOOR DRAIN OR INDIRECT WASTE. PROVIDE TRAP AS INDICATED ON PIPING DETAIL.
- M12 BOILER AND DOMESTIC WATER HEATER FLUES UP THROUGH ROOF.
- M20 REFRIGERANT LIQUID AND SUCTION PIPING BETWEEN DX COOLING COILS AND CONDENSING UNITS. COORDINATE PIPE SIZES WITH MANUFACTURER.
- M28 BAS TEMPERATURE SENSOR TO MONITOR IT/TCOM SPACES. FCU CONTROLLED BY UNIT MOUNTED THERMOSTAT.
- M31 3-WAY CONTROL VALVE, SEE CHILLED WATER PIPING DIAGRAM.
- M44 AIRFLOW MEASURING STATION, KELE MODEL KOAMS FURNISHED WITH INLET BELL FOR PLENUM APPLICATIONS LOCATED IN MINIMUM OA DUCT OR RETURN AIR INLET ON EACH FLOOR.
- M46 EXHAUST DUCT DOWN THROUGH CHASE FOR DOWNDRAFT TABLE. VERIFY DUCT CONNECTION SIZE AND LOCATION. PROVIDE MANUAL DAMPER AND CONNECTION ADAPTER TO TABLE.
- M47 DOMESTIC WATER HEATER COMBUSTION AIR DUCT THROUGH EXTERIOR WALL ABOVE LOUVER. PROVIDE VENT/RAIN CAP OR ELBOW WITH BIRDSCREEN.
- M48 HEATING HOT WATER BOILER COMBUSTION AIR DUCT. PROVIDE VENT/RAIN CAP OR ELBOW WITH BIRDSCREEN.
- M51 1" HEATING HOT WATER BYPASS WITH BACKPRESSURE CONTROL VALVE (5 GPM).
- M56 MODIFY EXISTING LOW PRESSURE SUPPLY DUCTWORK IN THIS AREA FOR NEW WALLS. REMOVE EXISTING DUCT MOUNTED AIR DEVICES AND PATCH DUCTWORK AIR-TIGHT. INSTALL NEW CEILING DIFFUSERS AND RETURN AIR GRILLE AS SHOWN AND AS REQUIRED FOR NEW CEILINGS.
- M57 REMOVE EXISTING DUCT MOUNTED AIR DEVICE AND CAP WITH SHEETMETAL. SEAL AIR-TIGHT.
- M58 NEW LOCATION FOR EXISTING TEMPERATURE SENSOR.
- M59 NEW CONNECTION TO EXISTING DUCTWORK.
- M60 EXISTING AIR DEVICE TO REMAIN. BALANCE TO 60-CFM.
- M61 RELOCATION EXISTING TEMPERATURE SENSOR.
- M63 INSTALL BOILER SAFETY SWITCH AND SIGN. COORDINATE LOCATION WITH OWNER, ARCHITECT, AND ALL OTHER TRADES.

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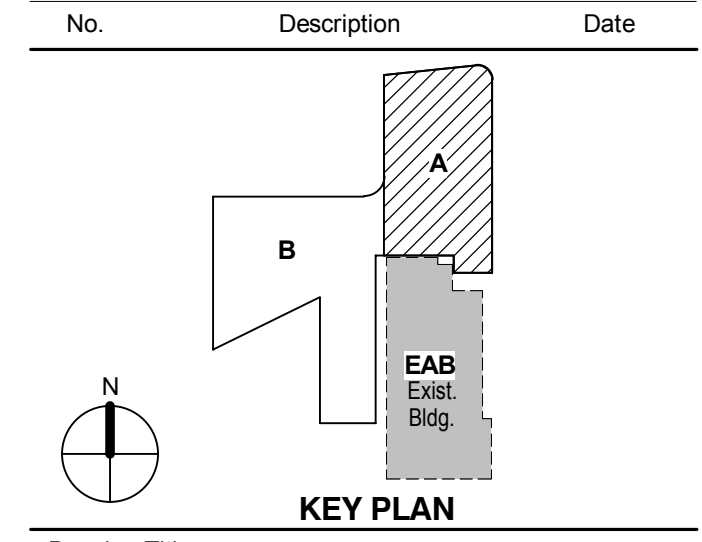
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3	ADDENDUM 2-4	24 MAY 2016
2	ADDENDUM 2-2	19 APRIL 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016



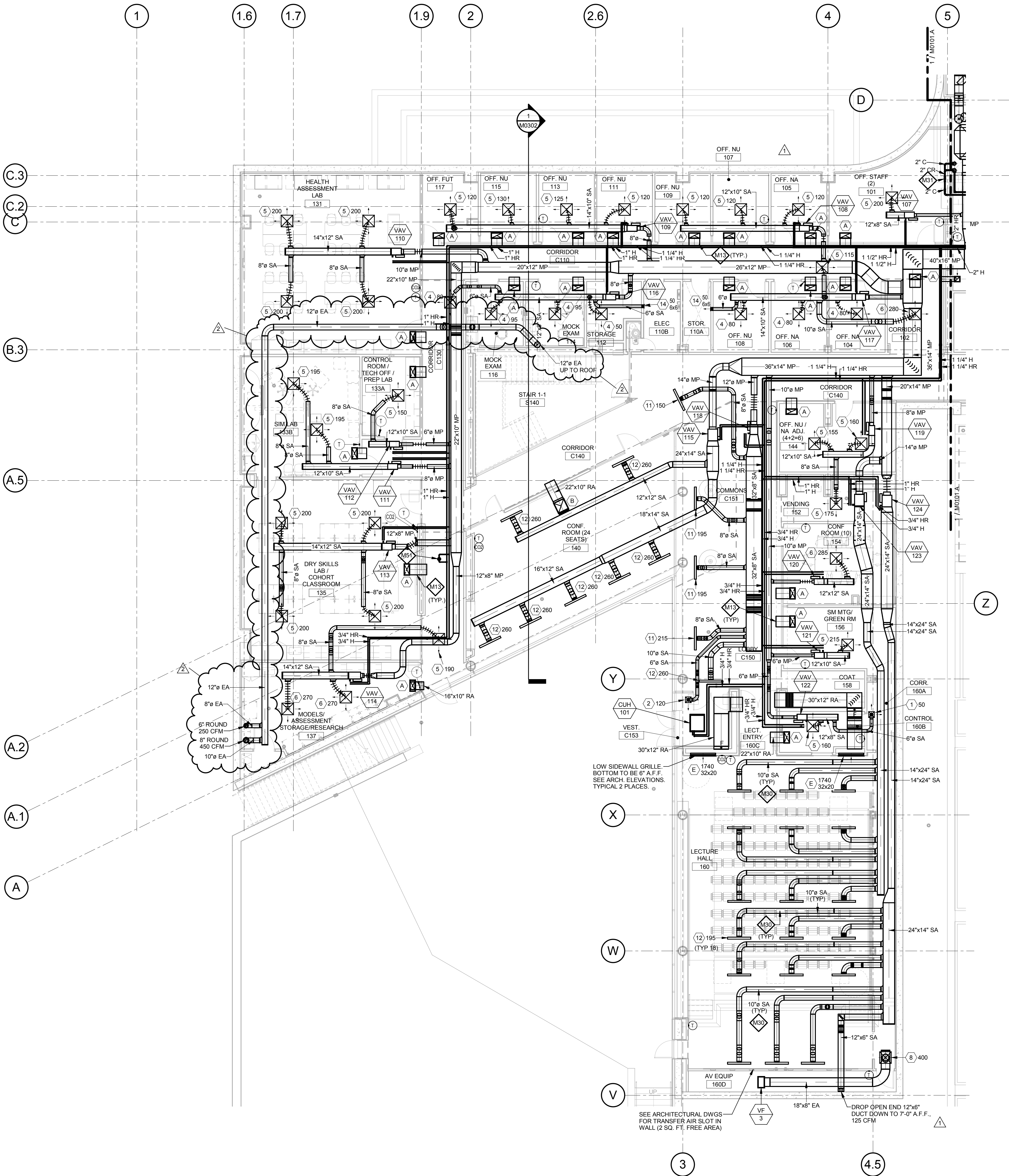
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LEVEL 01 AREA A FLOOR PLAN - MECHANICAL

Project No.: 04561.01 Checked by:

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1 LEVEL 01 - AREA B - MECHANICAL PLAN
1/8" = 1'-0"

GENERAL NOTES:

- Because of the limited space available to install all of the mechanical work, coordination between the various trades is of the utmost importance. This contractor shall coordinate with all other trades prior to the fabrication and installation of any work. Refer to the reflected ceiling plans for ceiling construction, ceiling grid layout, ceiling mounted devices, and coordinate exact location and mounting type of all air devices.
- All ductwork upstream of terminal units shall be Medium Pressure (MP). All ductwork downstream of terminal units shall be Low Pressure (LP). Refer to specifications.
- All ductwork dimensions indicated on plans are sheet metal sizes. All medium pressure ductwork shall be unlined, externally insulated. All low pressure ductwork shall be lined. See specifications.
- All mitered 90° rectangular elbows shall be furnished with turning vanes having maximum $c + 0.12$. All smooth radius rectangular elbows shall have a throat radius greater than one half the duct width, unless furnished with splitter vanes. Under no circumstances shall the throat radius be less than one third the duct width. Unless otherwise noted or specified.
- Contractor shall furnish and install volume dampers for each duct take-off unless otherwise noted. See detail.
- Maximum length of Low Pressure (LP) flexible ductwork shall be 8'-0". Round LP duct of lengths greater than 8'-0" shall be rigid round. Flexible duct sizes on plans shall be neck size of diffusers or as indicated. See specifications.
- Maximum length of Medium Pressure (MP) flexible ductwork shall be 2'-0". Round MP duct of lengths greater than 2'-0" shall be rigid round. Flexible duct sizes on plans shall be air Terminal Unit inlet size or as indicated. See specifications.
- All ductwork runouts to Air Terminal Units and diffusers shall be the connection size unless otherwise noted.
- Piping runouts to terminal units shall be 3/4" unless otherwise noted. Refer to reheat box schedule.
- Verify exact location of thermostats, humidistats, BAS sensors, and other exposed control sensors with architectural elevations and drawings before installation.
- Schedule systems or equipment shut downs required for new construction with owner two weeks in advance. Some premium time work may be required.
- Refer to piping details for final connections to equipment.
- Provide service shut-off valves in major piping branch lines. All connections to risers and each building wing, A & B.

KEYED NOTES

- M13** LINED RETURN AIR TRANSFER DUCT, 22x10 TYPICAL UNLESS NOTED OTHERWISE.
- M28** BAS TEMPERATURE SENSOR TO MONITOR IT/TCOM SPACES. FCU CONTROLLED BY UNIT MOUNTED THERMOSTAT.
- M30** 10-INCH BRANCH ROUND DUCTS TO AIR DEVICES IN AUDITORIUM SHALL HAVE 1/2" LINER.
- M31** 3-WAY CONTROL VALVE, SEE CHILLED WATER PIPING DIAGRAM.
- M51** 1" HEATING HOT WATER BYPASS WITH BACKPRESSURE CONTROL VALVE (5 GPM).

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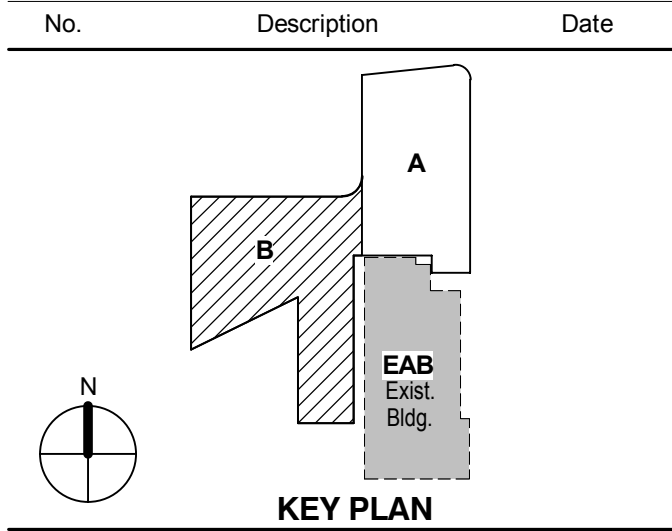
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CONFORMED SET 01 JUL 2016

2 ADDENDUM 2-2 19 APRIL 2016
1 ADDENDUM 2-1 17 MAR 2016
- ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016



Drawing Title:

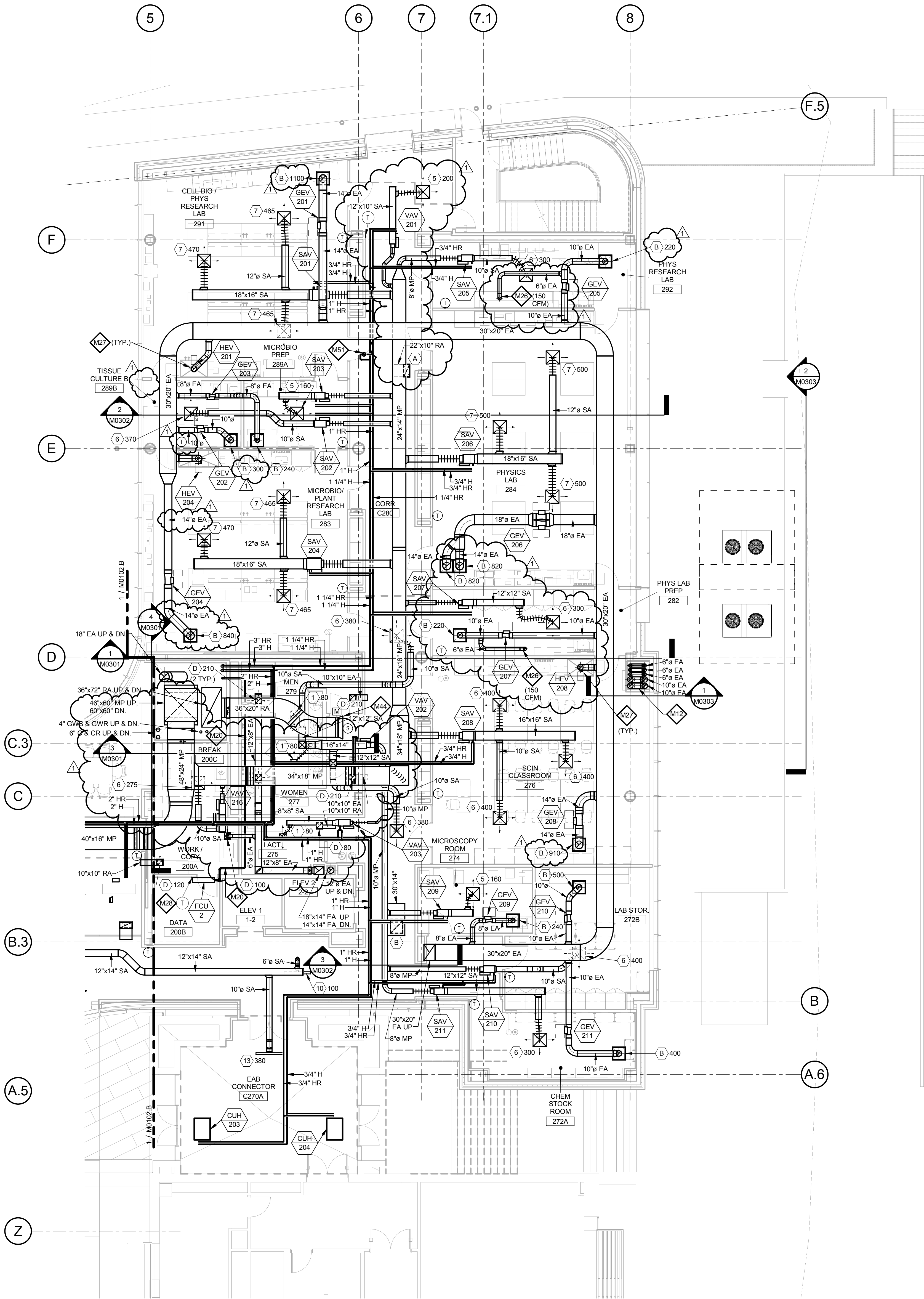
**LEVEL 01 AREA B FLOOR
PLAN - MECHANICAL**

Project No.: 04561.01 Checked by:

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1 LEVEL 02 - AREA A - MECHANICAL PLAN
1/8" = 1'-0"

GENERAL NOTES:

- Because of the limited space available to install all of the mechanical work, coordination between the various trades is of the utmost importance. This contractor shall coordinate with all other trades prior to the fabrication and installation of any work.
- Refer to the reflected ceiling plans for ceiling construction, ceiling grid layout, ceiling mounted devices, and coordinate exact location and mounting type of all air devices.
- All ductwork upstream of terminal units shall be Medium Pressure (MP). All ductwork downstream of terminal units shall be Low Pressure (LP). Refer to specifications.
- All ductwork dimensions indicated on plans are sheet metal sizes. All medium pressure ductwork shall be unlined, externally insulated. All low pressure ductwork shall be lined. See specifications.
- All mitered 90° rectangular elbows shall be furnished with turning vanes having maximum $c = 0.12$. All smooth radius rectangular elbows shall have a throat radius greater than one half the duct width, unless furnished with splitter vanes. Under no circumstances shall the throat radius be less than one third the duct width. Unless otherwise noted or specified.
- Contractor shall furnish and install volume dampers for each duct take-off unless otherwise noted. See detail.
- Maximum length of Low Pressure (LP) flexible ductwork shall be 8'-0". Round LP duct of lengths greater than 8'-0" shall be rigid round. Flexible duct sizes on plans shall be neck size of diffusers or as indicated. See specifications.
- Maximum length of Medium Pressure (MP) flexible ductwork shall be 2'-0". Round MP duct of lengths greater than 2'-0" shall be rigid round. Flexible duct sizes on plans shall be air Terminal Unit inlet size or as indicated. See specifications.
- All ductwork runouts to Air Terminal Units and diffusers shall be the connection size unless otherwise noted.
- Piping runouts to terminal units shall be 3/4" unless otherwise noted. Refer to reheat box schedule.
- Verify exact location of thermostats, humidistats, BAS sensors, and other exposed control sensors with architectural elevations and drawings before installation.
- Schedule systems or equipment shut downs required for new construction with owner two weeks in advance. Some premium time work may be required.
- Refer to piping details for final connections to equipment.
- Provide service shut-off valves in major piping branch lines. All connections to risers and each building wing; A & B.

KEYED NOTES

- BOILER AND DOMESTIC WATER HEATER FLUES UP THROUGH ROOF.
- REFRIGERANT LIQUID AND SUCTION PIPING BETWEEN DX COOLING COILS AND CONDENSING UNITS. COORDINATE PIPE SIZES WITH MANUFACTURER.
- 6-INCH ROUND EXHAUST DUCT FOR SNORKEL EXHAUST. COORDINATE FINAL CONNECTION TO SNORKEL WITH ARCHITECTURAL DRAWINGS.
- INSTALL HOOD EXHAUST VALVE IN VERTICAL POSITION NEAR HOOD. ELBOWS SHALL HAVE 1.5 DIAMETER RADIUS, USE 1.0 DIAMETER RADIUS ELBOWS ONLY WHERE NECESSARY.
- BAS TEMPERATURE SENSOR TO MONITOR IT/TCOM SPACES. FCU CONTROLLED BY UNIT MOUNTED THERMOSTAT.
- AIRFLOW MEASURING STATION, KELE MODEL KOAMS FURNISHED WITH INLET BELL FOR PLENUM APPLICATIONS LOCATED IN MINIMUM OA DUCT OR RETURN AIR INLET ON EACH FLOOR.
- 1" HEATING HOT WATER BYPASS WITH BACKPRESSURE CONTROL VALVE (5 GPM).

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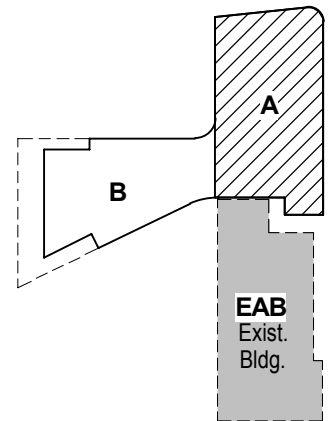
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No.	Description	Date
1	ADDENDUM 2-1	17 MAR 2016
2	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016



KEY PLAN

LEVEL 02 AREA A FLOOR
PLAN - MECHANICAL

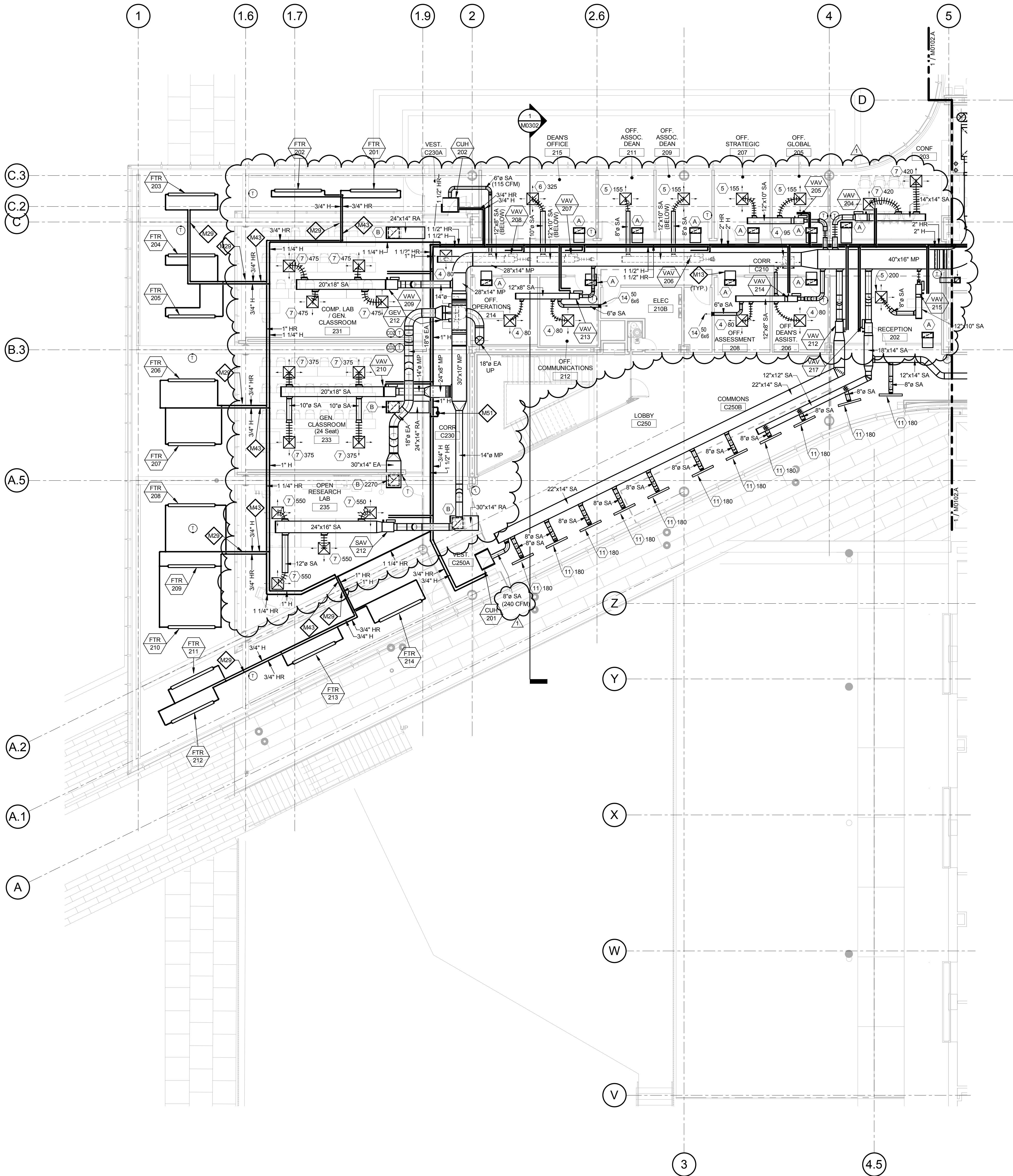
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1 LEVEL 02 - AREA B - MECHANICAL PLAN
1/8" = 1'-0"

GENERAL NOTES:

- A. Because of the limited space available to install all of the mechanical work, coordination between the various trades is of the utmost importance. This contractor shall coordinate with all other trades prior to the fabrication and installation of any work.
- B. Refer to the reflected ceiling plans for ceiling construction, ceiling grid layout, ceiling mounted devices, and coordinate exact location and mounting type of all air devices.
- C. All ductwork upstream of terminal units shall be Medium Pressure (MP). All ductwork downstream of terminal units shall be Low Pressure (LP). Refer to specifications.
- D. All ductwork dimensions indicated on plans are sheet metal sizes. All medium pressure ductwork shall be unlined, externally insulated. All low pressure ductwork shall be lined. See specifications.
- E. All mitered 90° rectangular elbows shall be furnished with turning vanes having maximum c = 0.12. All smooth radius rectangular elbows shall have a throat radius greater than one half the duct width, unless furnished with splitter vanes. Under no circumstances shall the throat radius be less than one third the duct width. Unless otherwise noted or specified.
- F. Contractor shall furnish and install volume dampers for each duct take-off unless otherwise noted. See detail.
- G. Maximum length of Low Pressure (LP) flexible ductwork shall be 8'-0". Round LP duct of lengths greater than 8'-0" shall be rigid round. Flexible duct sizes on plans shall be neck size of diffusers or as indicated. See specifications.
- H. Maximum length of Medium Pressure (MP) flexible ductwork shall be 2'-0". Round MP duct of lengths greater than 2'-0" shall be rigid round. Flexible duct sizes on plans shall be air Terminal Unit inlet size or as indicated. See specifications.
- I. All ductwork runouts to Air Terminal Units and diffusers shall be the connection size unless otherwise noted.
- J. Piping runouts to terminal units shall be 3/4" unless otherwise noted. Refer to reheat box schedule.
- K. Verify exact location of thermostats, humidistats, BAS sensors, and other exposed control sensors with architectural elevations and drawings before installation.
- L. Schedule systems or equipment shut downs required for new construction with owner two weeks in advance. Some premium time work may be required.
- M. Refer to piping details for final connections to equipment.
- N. Provide service shut-off valves in major piping branch lines. All connections to risers and each building wing, A & B.

KEYED NOTES

- M13 LINED RETURN AIR TRANSFER DUCT, 22x10 TYPICAL UNLESS NOTED OTHERWISE.
- M28 BAS TEMPERATURE SENSOR TO MONITOR IT/TCOM SPACES. FCU CONTROLLED BY UNIT MOUNTED THERMOSTAT.
- M29 PIPING THROUGH HOLE IN BEAM. COORDINATE WITH STRUCTURAL DRAWINGS.
- M43 INSTALL CONTROL VALVES AND SERVICE SHUT-OFF VALVES ABOVE ACCESSIBLE CEILING. PROVIDE FLOW MEASURING AND BALANCING VALVE AT EACH FTR ELEMENT. BALANCE WATER FLOW BEFORE OVERHANG ENCLOSURE IS INSTALLED.
- M51 1" HEATING HOT WATER BYPASS WITH BACKPRESSURE CONTROL VALVE (5 GPM).

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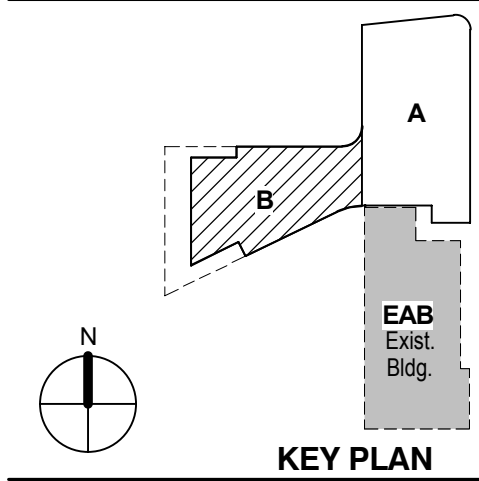
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1 ADDENDUM 2-1 17 MAR 2016
ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016
No. Description Date



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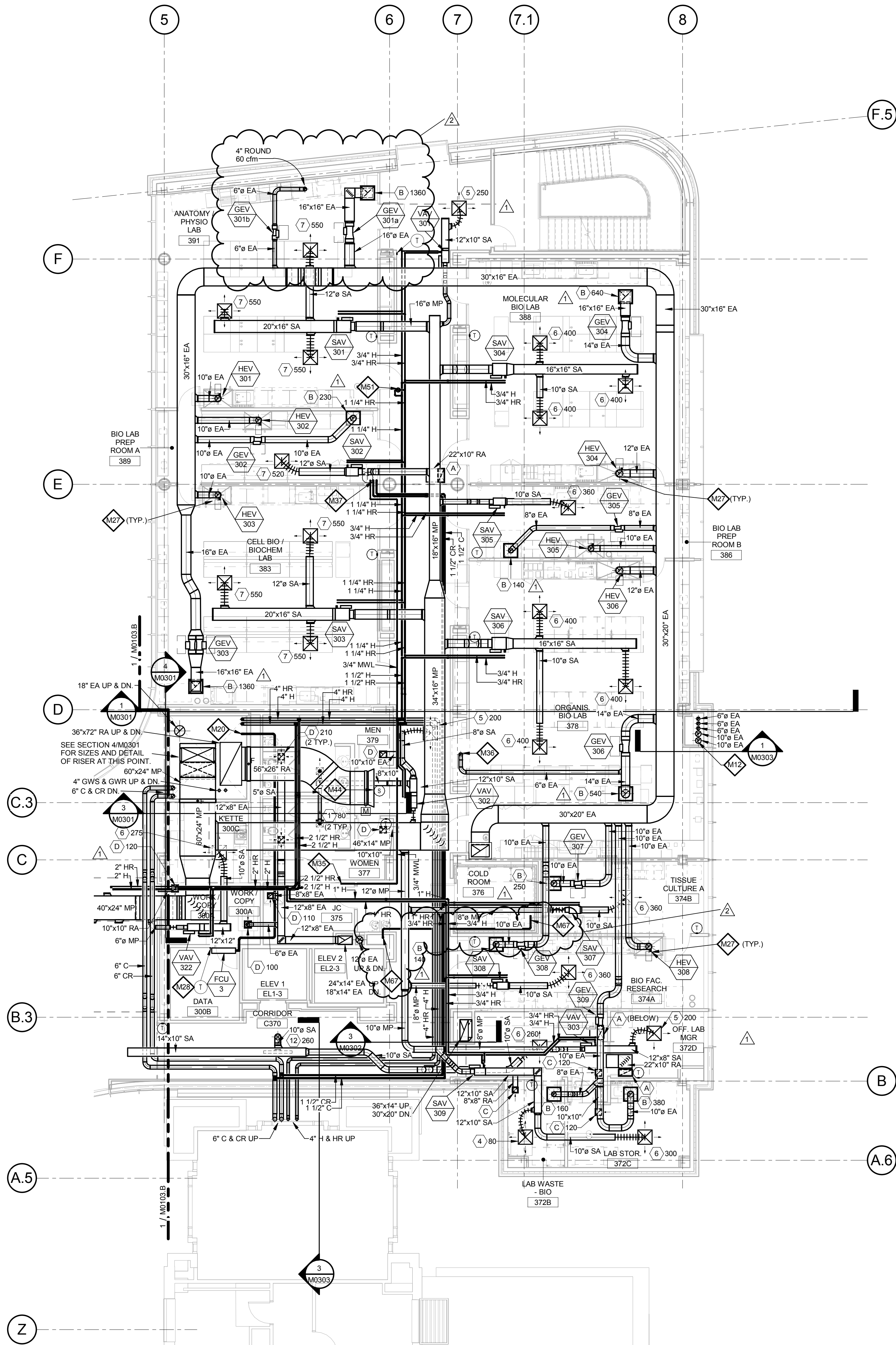
LEVEL 02 AREA B FLOOR
PLAN - MECHANICAL

Project No.: 04561.01 Checked by:

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1 LEVEL 03 - AREA A - MECHANICAL PLAN
1/8" = 1'-0"



GENERAL NOTES:

- Because of the limited space available to install all of the mechanical work, coordination between the various trades is of the utmost importance. This contractor shall coordinate with all other trades prior to the fabrication and installation of any work. Refer to the reflected ceiling plans for ceiling construction, ceiling grid layout, ceiling mounted devices, and coordinate exact location and mounting type of all air devices.
- All ductwork upstream of terminal units shall be Medium Pressure (MP). All ductwork downstream of terminal units shall be Low Pressure (LP). Refer to specifications.
- All ductwork dimensions indicated on plans are sheet metal sizes. All medium pressure ductwork shall be unlined, externally insulated. All low pressure ductwork shall be lined. See specifications.
- All mitered 90° rectangular elbows shall be furnished with turning vanes having maximum $c = 0.12$. All smooth radius rectangular elbows shall have a throat radius greater than one half the duct width, unless furnished with splitter vanes. Under no circumstances shall the throat radius be less than one third the duct width. Unless otherwise noted or specified.
- Contractor shall furnish and install volume dampers for each duct take-off unless otherwise noted. See detail.
- Maximum length of Low Pressure (LP) flexible ductwork shall be 8'-0". Round LP duct of lengths greater than 8'-0" shall be rigid round. Flexible duct sizes on plans shall be neck size of diffusers or as indicated. See specifications.
- Maximum length of Medium Pressure (MP) flexible ductwork shall be 2'-0". Round MP duct of lengths greater than 2'-0" shall be rigid round. Flexible duct sizes on plans shall be air Terminal Unit inlet size or as indicated. See specifications.
- All ductwork runouts to Air Terminal Units and diffusers shall be the connection size unless otherwise noted.
- Piping runouts to terminal units shall be 3/4" unless otherwise noted. Refer to reheat box schedule.
- Verify exact location of thermostats, humidistats, BAS sensors, and other exposed control sensors with architectural elevations and drawings before installation.
- Schedule systems or equipment shut downs required for new construction with owner two weeks in advance. Some premium time work may be required.
- Refer to piping details for final connections to equipment.
- Provide service shut-off valves in major piping branch lines. All connections to risers and each building wing: A & B.

KEYED NOTES

- BOILER AND DOMESTIC WATER HEATER FLUES UP THROUGH ROOF.
- REFRIGERANT LIQUID AND SUCTION PIPING BETWEEN DX COOLING COILS AND CONDENSING UNITS. COORDINATE PIPE SIZES WITH MANUFACTURER.
- INSTALL HOOD EXHAUST VALVE IN VERTICAL POSITION NEAR HOOD. ELBOWS SHALL HAVE 1.5 DIAMETER RADIUS. USE 1.0 DIAMETER RADIUS ELBOWS ONLY WHERE NECESSARY.
- BAS TEMPERATURE SENSOR TO MONITOR IT/TCOM SPACES. FCU CONTROLLED BY UNIT MOUNTED THERMOSTAT.
- 3/4" MWL CONNECTED TO BACKFLOW DEVICE IN JANITOR'S CLOSET. SEE PLUMBING DRAWINGS. ROUTE TO LEVEL 04 FOR PROCESS COOLING SYSTEM.
- 6" ROUND DUCT FOR AQUARIUM SPACE. BALANCE AIRFLOW TO 100 CFM. TERMINATE OPEN END AS HIGH AS POSSIBLE.
- 1-1/2" C & CR, AND 3/4" MWL UP TO LEVEL 04.
- AIRFLOW MEASURING STATION, KELE MODEL KOAMS FURNISHED WITH INLET BELL FOR PLENUM APPLICATIONS LOCATED IN MINIMUM OA DUCT OR RETURN AIR INLET ON EACH FLOOR.

M54 HEATING HOT WATER BY P&S WITH BACK PRESSURE CONTROL VALVE (5 GPM)

M67 LOCATION FOR REFRIGERANT PIPING FOR COOLER, SEE ARCHITECTURAL SPECIFICATIONS AND DRAWINGS. PIPING SHALL BE INSTALLED PER COOLER SUPPLIERS REQUIREMENTS.

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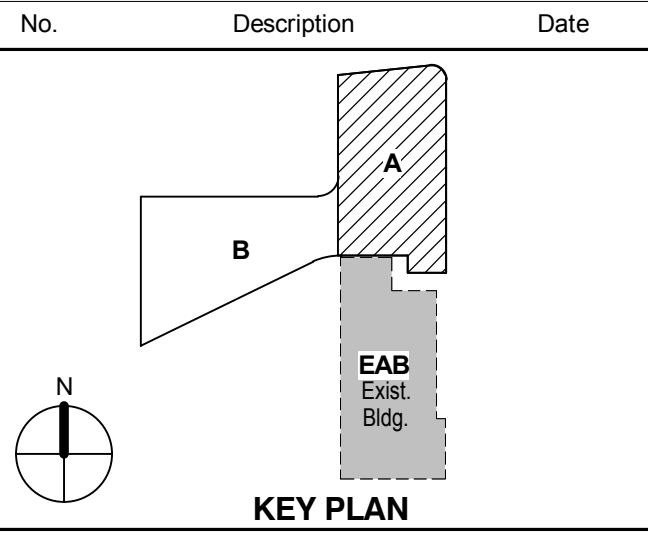
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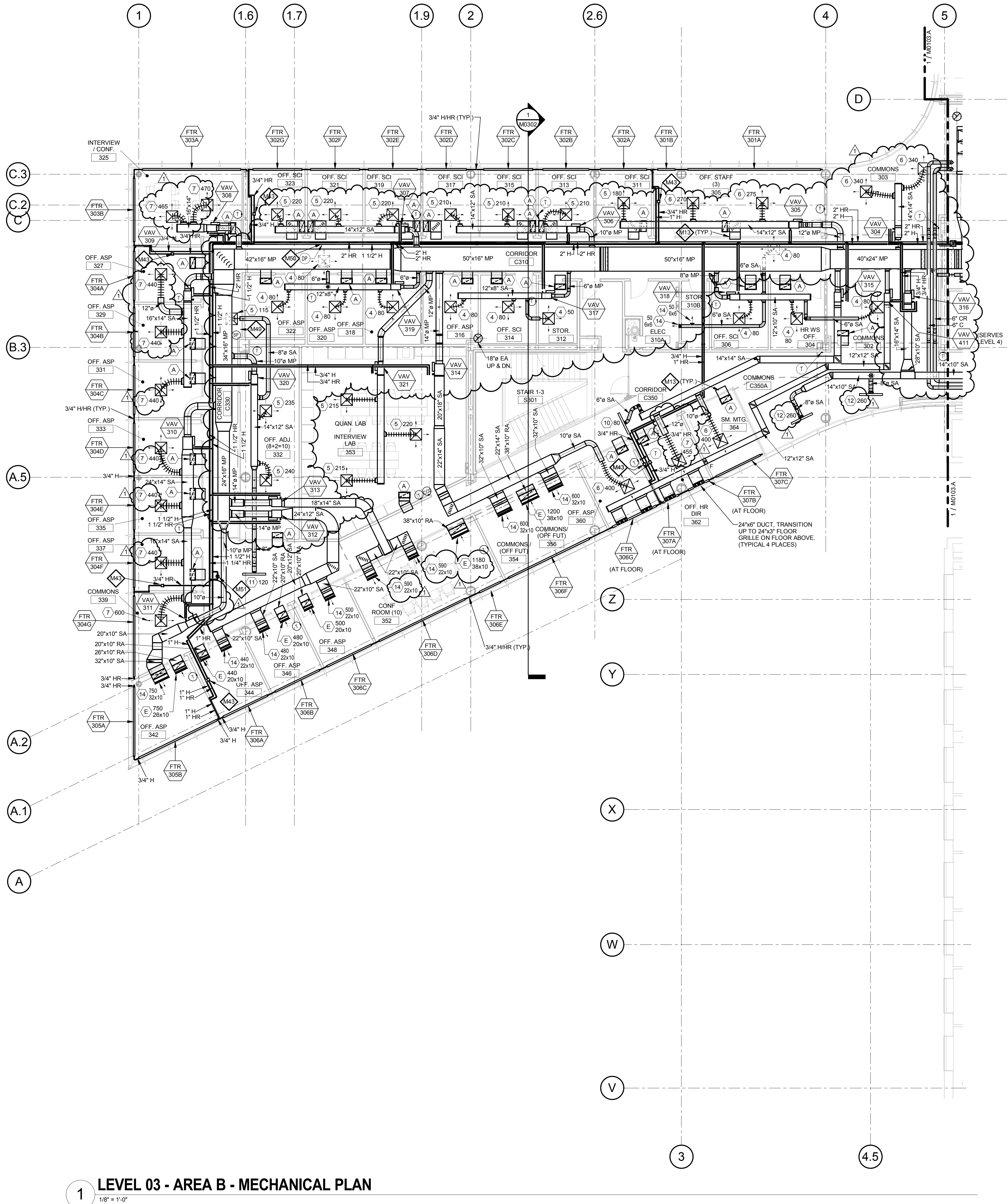
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LEVEL 03 AREA A FLOOR
PLAN - MECHANICAL

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1 LEVEL 03 - AREA B - MECHANICAL PLAN
1/8" = 1'-0"

GENERAL NOTES:

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KEYED NOTES

- M13 LINED RETURN AIR TRANSFER DUCT, 22x10 TYPICAL UNLESS NOTED OTHERWISE.
- M20 REFRIGERANT LIQUID AND SUCTION PIPING BETWEEN DX COOLING COILS AND CONDENSING UNITS. COORDINATE PIPE SIZES WITH MANUFACTURER.
- M28 BAS TEMPERATURE SENSOR TO MONITOR IT/TCOM SPACES. FCU CONTROLLED BY UNIT MOUNTED THERMOSTAT.
- M43 INSTALL CONTROL VALVES AND SERVICE SHUT-OFF VALVES ABOVE ACCESSIBLE CEILING. PROVIDE FLOW MEASURING AND BALANCING VALVE AT EACH FTR ELEMENT. BALANCE WATER FLOW BEFORE OVERHANG ENCLOSURE IS INSTALLED.
- M49 DUCT STATIC PRESSURE SENSOR.
- M50 PIPING DIFFERENTIAL PRESSURE SENSOR.
- M51 1" HEATING HOT WATER BYPASS WITH BACKPRESSURE CONTROL VALVE (5 GPM).

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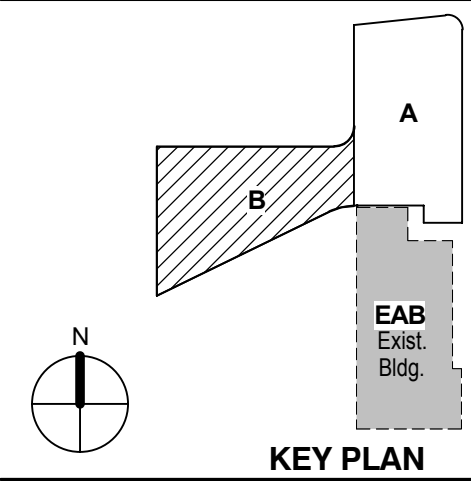
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CONFORMED SET 01 JUL 2016

1 ADDENDUM 2-1 17 MAR 2016
ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016
No. Description Date



KEY PLAN

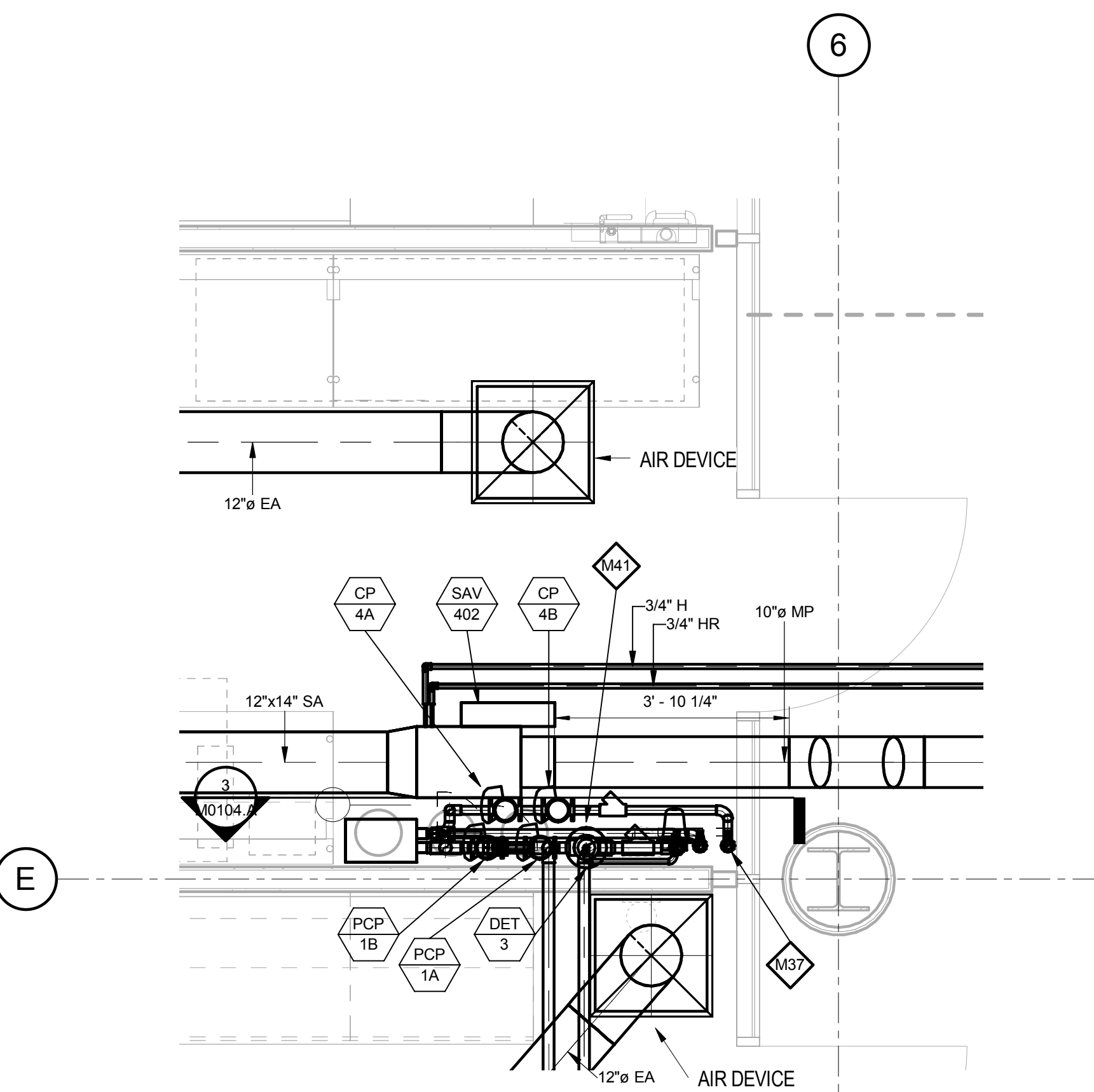
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LEVEL 03 AREA B FLOOR PLAN - MECHANICAL

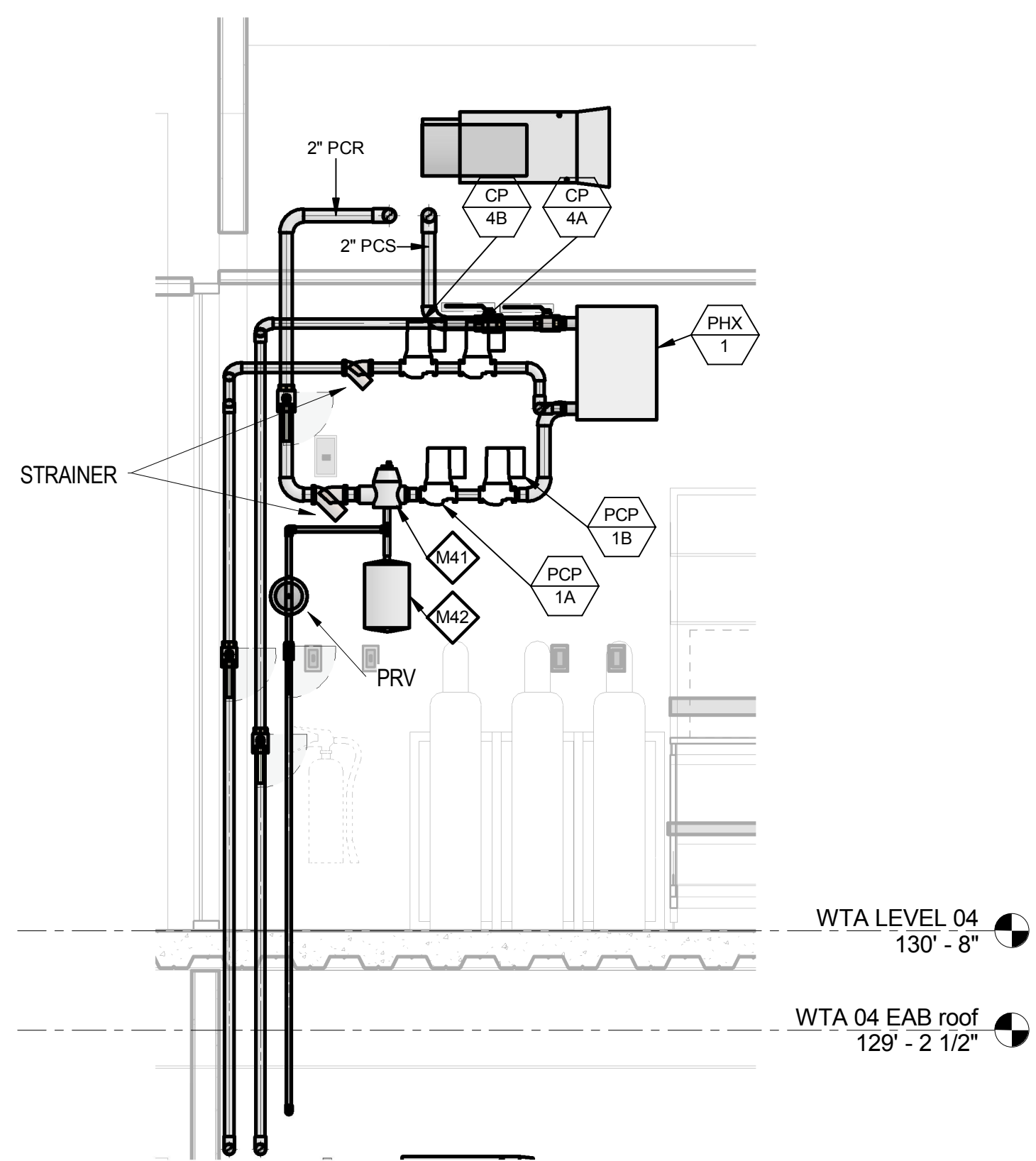
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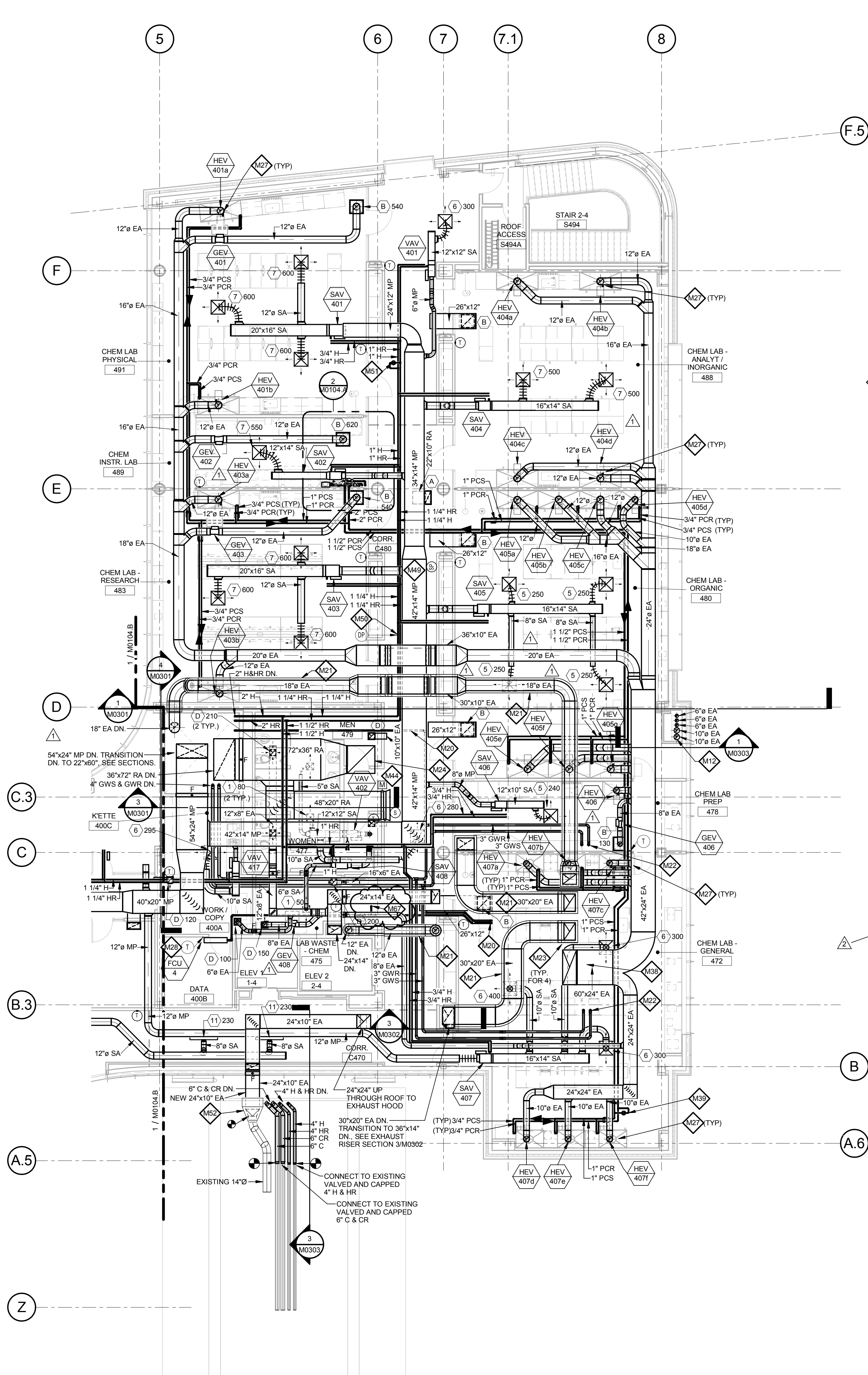
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2 PARTIAL LEVEL 04 - PROCESS CHILLED WATER PLAN
1/2" = 1'-0"



3 L04 - SECTION AT PROCESS CHILLED WATER SYSTEM
1/2" = 1'-0"



1 LEVEL 04 - AREA A - MECHANICAL PLAN
1/8" = 1'-0"

GENERAL NOTES:

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- Contractor shall furnish and install volume dampers for each duct take-off unless otherwise noted. See detail.
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- Maximum length of Medium Pressure (MP) flexible ductwork shall be 2'-0". Round MP duct of lengths greater than 2'-0" shall be rigid round. Flexible duct sizes on plans shall be air Terminal Unit inlet size or as indicated. See specifications.
- All ductwork runouts to Air Terminal Units and diffusers shall be the connection size unless otherwise noted.
- Piping runouts to terminal units shall be 3/4" unless otherwise noted. Refer to reheat box schedule.
- Verify exact location of thermostats, humidistats, BAS sensors, and other exposed control sensors with architectural elevations and drawings before installation.
- Schedule systems or equipment shut downs required for new construction with owner two weeks in advance. Some premium time work may be required.
- Refer to piping details for final connections to equipment.
- Provide service shut-off valves in major piping branch lines. All connections to risers and each building wing: A & B.

KEYED NOTES

- M12 BOILER AND DOMESTIC WATER HEATER FLUES UP THROUGH ROOF.
- M20 REFRIGERANT LIQUID AND SUCTION PIPING BETWEEN DX COOLING COILS AND CONDENSING UNITS. COORDINATE PIPE SIZES WITH MANUFACTURER.
- M21 PROVIDE FIRE WRAP AROUND LAB EXHAUST DUCTWORK FROM RATED CHASE PENETRATION TO ROOF.
- M22 GLYCOL WATER SUPPLY & RETURN PIPING UP THROUGH ROOF TO HEAT RECOVERY COILS. PROVIDE ROOF PENETRATION CURB/SEAL.
- M23 EXHAUST DUCT UP THROUGH ROOF.
- M24 RELIEF AIR DUCT UP THRU ROOF TO RELIEF AIR FAN.
- M27 INSTALL HOOD EXHAUST VALVE IN VERTICAL POSITION NEAR HOOD. ELBOWS SHALL HAVE 1.5 DIAMETER RADIUS, USE 1.0 DIAMETER RADIUS ELBOWS ONLY WHERE NECESSARY.
- M28 BAS TEMPERATURE SENSOR TO MONITOR IT/TCOM SPACES. FCU CONTROLLED BY UNIT MOUNTED THERMOSTAT.
- M37 1-1/2" C & CR, AND 3/4" MWL UP TO LEVEL 04.
- M38 PROVIDE ELBOW SOUND ATTENUATOR, KINETICS MODEL 24KCES-P/5.5 - 60x24x60-6/30, 60" WIDE BY 24" HIGH BY 60" LONG, ELBOW CONFIGURATION, 20,000-CFM AT 0.48" PD, DYNAMIC INSERTION LOSS (H₂/dB): 634, 1257, 2501/1, 500/19, 1000/18, 2000/18, 4000/20, 8000/16.
- M39 1" BACKPRESSURE REGULATING VALVE (5 GPM) FOR PROCESS CHILLED WATER MINIMUM PUMP FLOW.
- M41 2-INCH AIR SEPARATOR, SEE PIPING DIAGRAM.
- M42 DIAPHRAGM EXPANSION TANK, SEE PIPING DIAGRAM AND SCHEDULE.
- M44 AIRFLOW MEASURING STATION, KELE MODEL KOAMS FURNISHED WITH INLET BELL FOR PLENUM APPLICATIONS LOCATED IN MINIMUM OA DUCT OR RETURN AIR INLET ON EACH FLOOR.
- M49 DUCT STATIC PRESSURE SENSOR.
- M50 PIPING DIFFERENTIAL PRESSURE SENSOR
- M51 1" HEATING HOT WATER BYPASS WITH BACKPRESSURE CONTROL VALVE (5 GPM).
- M52 REMOVE EXISTING RELIEF LOUVER AND PORTION OF EXISTING DUCT. ROUTE NEW DUCT THROUGH EXISTING OPENING.
- M67 LOCATION FOR REFRIGERANT PIPING FOR COOLER. SEE ARCHITECTURAL SPECIFICATIONS AND DRAWINGS. PIPING SHALL BE INSTALLED PER COOLER SUPPLIERS REQUIREMENTS.

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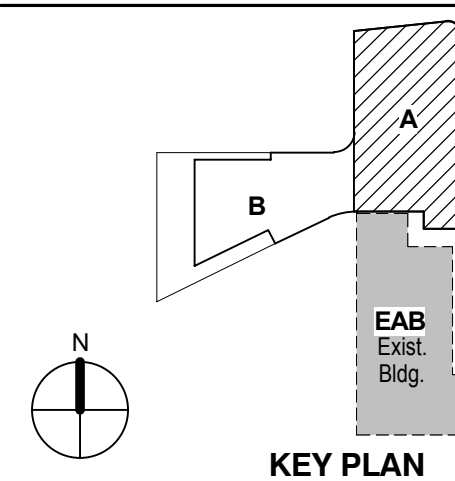
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CONFORMED SET 01 JUL 2016

2	ADDENDUM 2-2	19 APRIL 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016
No.	Description	Date



KEY PLAN

LEVEL 04 AREA A FLOOR
PLAN - MECHANICAL

Project No.: 04561.01 Checked by:

M0104.A



M0104.B

GENERAL NOTES:

- A. Because of the limited space available to install all of the mechanical work, coordination between the various trades is of the utmost importance. This contractor shall coordinate with all other trades prior to the fabrication and installation of any work.
- B. Refer to the reflected ceiling plans for ceiling construction, ceiling grid layout, ceiling mounted devices, and coordinate exact location and mounting type of all air devices.
- C. All ductwork upstream of terminal units shall be Medium Pressure (MP). All ductwork downstream of terminal units shall be Low Pressure (LP). Refer to specifications.
- D. All ductwork dimensions indicated on plans are sheet metal sizes. All medium pressure ductwork shall be unlined, externally insulated. All low pressure ductwork shall be lined. See specifications.
- E. All mitered 90° rectangular elbows shall be furnished with turning vanes having maximum c = 0.12. All smooth radius rectangular elbows shall have a throat radius greater than one half the duct width, unless furnished with splitter vanes. Under no circumstances shall the throat radius be less than one third the duct width. Unless otherwise noted or specified.
- F. Contractor shall furnish and install volume dampers for each duct take-off unless otherwise noted. See detail.
- G. Maximum length of Low Pressure (LP) flexible ductwork shall be 8'-0". Round LP duct of lengths greater than 8'-0" shall be rigid round. Flexible duct sizes on plans shall be neck size of diffusers or as indicated. See specifications.
- H. Maximum length of Medium Pressure (MP) flexible ductwork shall be 2'-0". Round MP duct of lengths greater than 2'-0" shall be rigid round. Flexible duct sizes on plans shall be air Terminal Unit inlet size or as indicated. See specifications.
- I. All ductwork runouts to Air Terminal Units and diffusers shall be the connection size unless otherwise noted.
- J. Piping runouts to terminal units shall be 3/4" unless otherwise noted. Refer to reheat box schedule.
- K. Verify exact location of thermostats, humidistats, BAS sensors, and other exposed control sensors with architectural elevations and drawings before installation.
- L. Schedule systems or equipment shut downs required for new construction with owner two weeks in advance. Some premium time work may be required.
- M. Refer to piping details for final connections to equipment.
- N. Provide service shut-off valves in major piping branch lines. All connections to risers and each building wing: A & B.

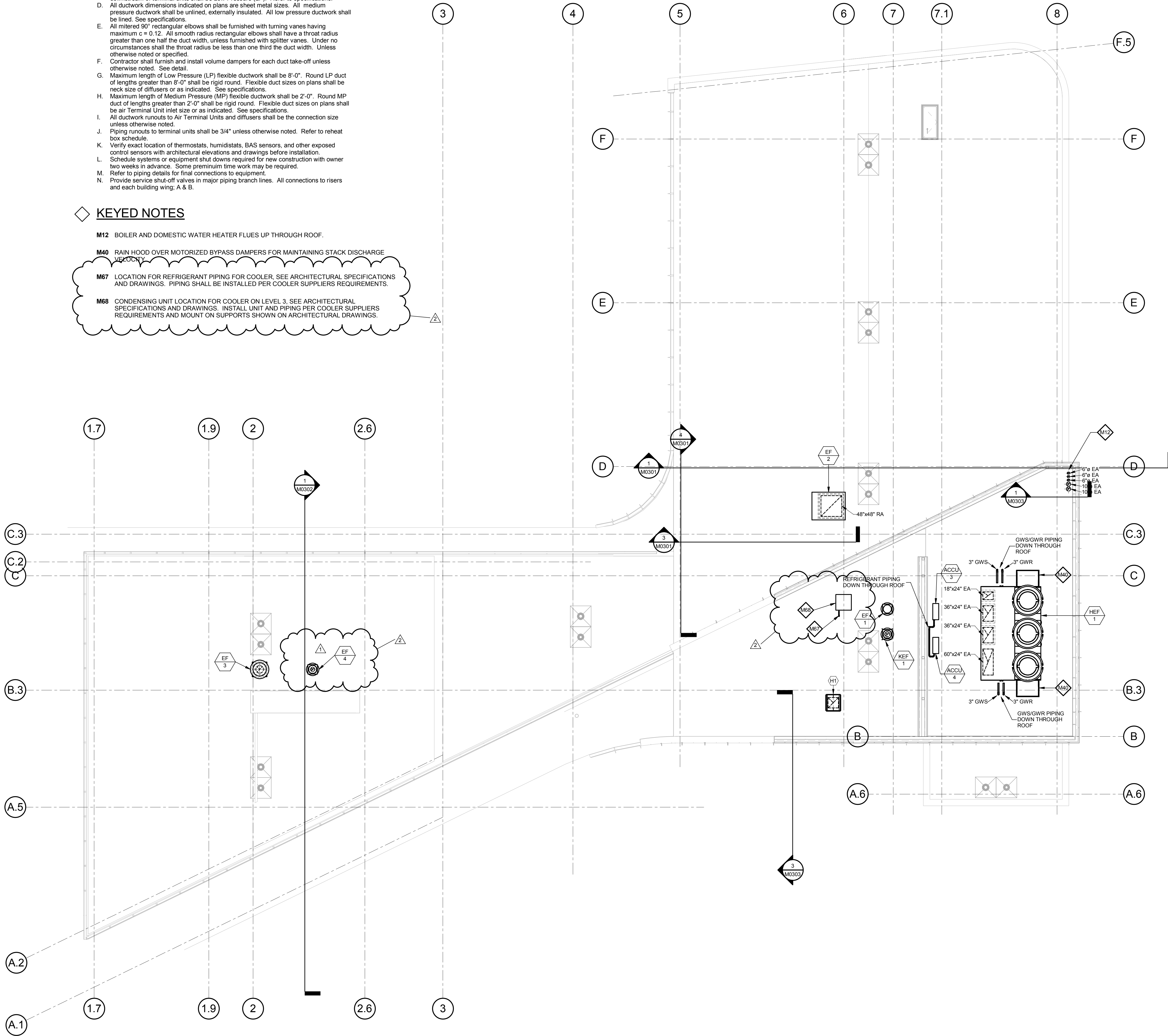
KEYED NOTES

M12 BOILER AND DOMESTIC WATER HEATER FLUES UP THROUGH ROOF.

M40 RAIN HOOD OVER MOTORIZED BYPASS DAMPERS FOR MAINTAINING STACK DISCHARGE VELOCITY.

M67 LOCATION FOR REFRIGERANT PIPING FOR COOLER, SEE ARCHITECTURAL SPECIFICATIONS AND DRAWINGS. PIPING SHALL BE INSTALLED PER COOLER SUPPLIERS REQUIREMENTS.

M68 CONDENSING UNIT LOCATION FOR COOLER ON LEVEL 3, SEE ARCHITECTURAL SPECIFICATIONS AND DRAWINGS. INSTALL UNIT AND PIPING PER COOLER SUPPLIERS REQUIREMENTS AND MOUNT ON SUPPORTS SHOWN ON ARCHITECTURAL DRAWINGS.



2 ROOF LEVEL - MECHANICAL

1/8" = 1'-0"

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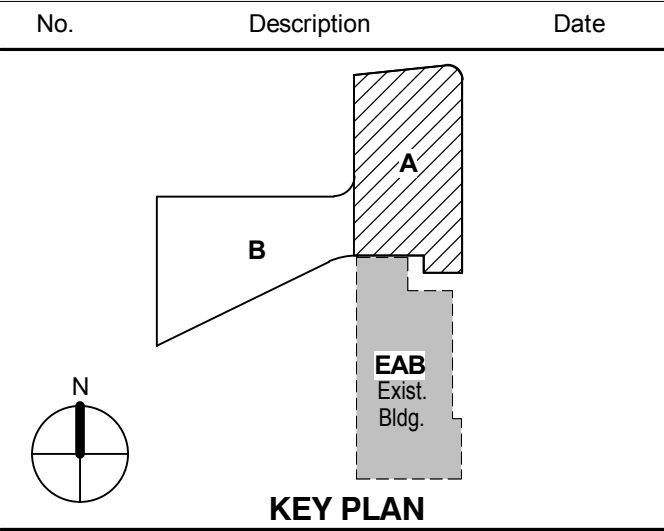
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Drawing Title:

ROOF PLAN -
MECHANICAL

Project No.: 04561.01

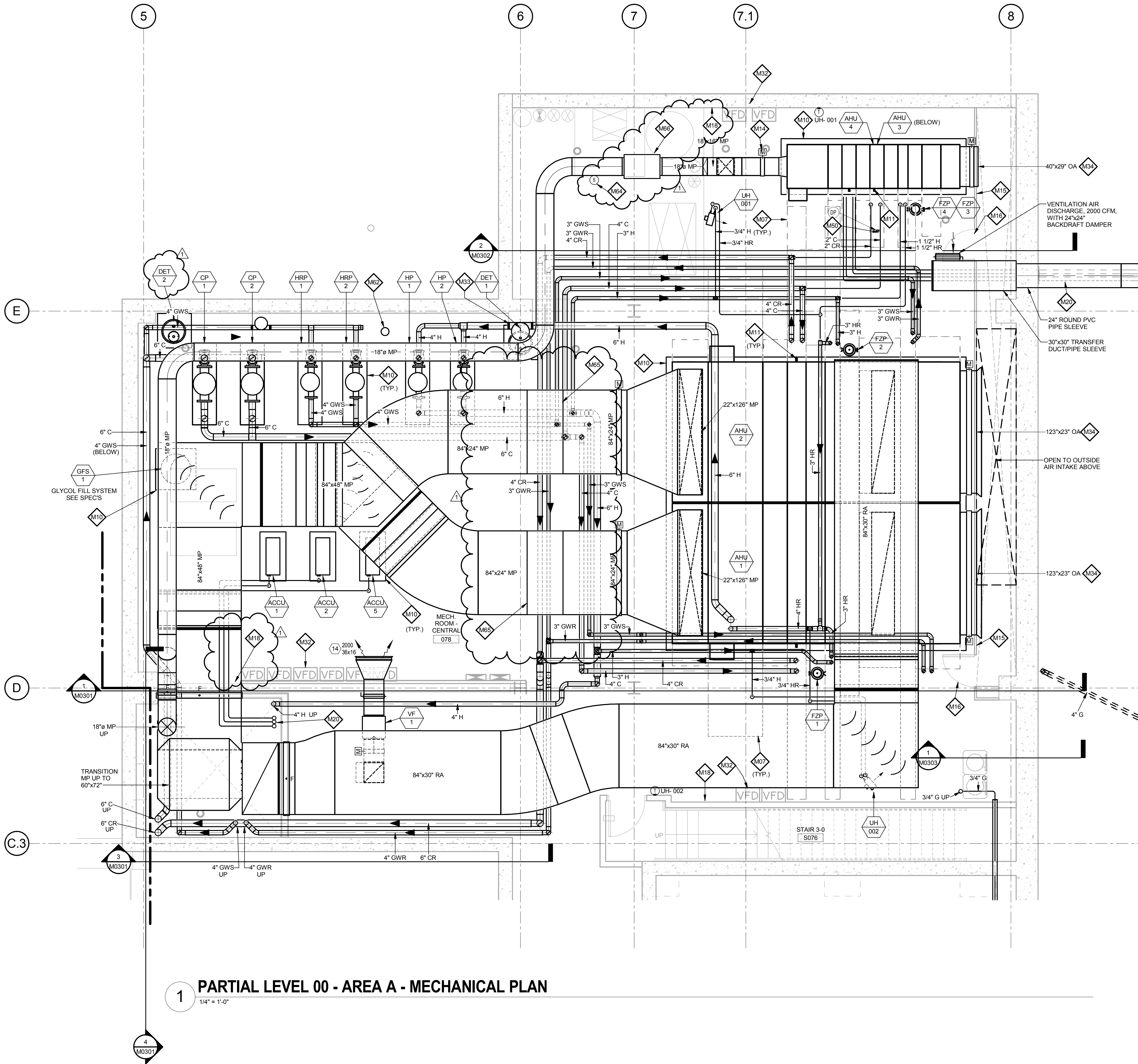
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1 PARTIAL LEVEL 00 - AREA A - MECHANICAL PLAN
1/4" = 1'-0"

GENERAL NOTES:

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- All ductwork upstream of terminal units shall be Medium Pressure (MP). All ductwork downstream of terminal units shall be Low Pressure (LP). Refer to specifications.
- All ductwork dimensions indicated on plans are sheet metal sizes. All medium pressure ductwork shall be unlined, externally insulated. All low pressure ductwork shall be lined. See specifications.
- All mitered 90° rectangular elbows shall be furnished with turning vanes having maximum $c = 0.12$. All smooth radius rectangular elbows shall have a throat radius greater than one half the duct width, unless furnished with splitter vanes. Under no circumstances shall the throat radius be less than one third the duct width. Unless otherwise noted or specified.
- Contractor shall furnish and install volume dampers for each duct take-off unless otherwise noted. See detail.
- Maximum length of Low Pressure (LP) flexible ductwork shall be 8'-0". Round LP duct of lengths greater than 8'-0" shall be rigid round. Flexible duct sizes on plans shall be neck size of diffusers or as indicated. See specifications.
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- Verify exact location of thermostats, humidistats, BAS sensors, and other exposed control sensors with architectural elevations and drawings before installation.
- Schedule systems or equipment shut downs required for new construction with owner two weeks in advance. Some premium time work may be required.
- Refer to piping details for final connections to equipment.
- Provide service shut-off valves in major piping branch lines. All connections to risers and each building wing: A & B.

KEYED NOTES

- M03** 2-INCH NATURAL GAS LINE BELOW WALKWAY WITH VENTED SLEEVE AROUND PIPING.
- M07** DASHED LINES INDICATE RECOMMENDED SERVICE, COIL PULLING SPACE, FILTER REMOVAL SPACE, AND/OR AIRFLOW CLEARANCES.
- M08** 3/4-INCH NATURAL GAS LINE BELOW SLAB WITHIN VENTED SLEEVE. SEE LOWER LEVEL FLOOR PLAN FOR CONTINUATION. PROVIDE GAS SHUT-OFF VALVE AND FLEXIBLE HOSE ADAPTER. FINAL CONNECTION TO COOK TOP BY KITCHEN EQUIPMENT INSTALLER.
- M10** 4-INCH HIGH CONCRETE HOUSEKEEPING PAD BELOW EQUIPMENT. PAD SIZE SHALL BE COORDINATED WITH APPROVED SHOP DRAWING AND SHALL BE A MINIMUM OF 6-INCHES LARGER ON ALL SIDES.
- M11** TERMINATE COOLING COIL DRAIN LINE OVER NEAREST FLOOR DRAIN OR INDIRECT WASTE. PROVIDE TRAP AS INDICATED ON PIPING DETAIL.
- M14** MOTORIZED CONTROL DAMPER, COORDINATE WITH TEMPERATURE CONTROL DAMPER.
- M15** 2-INCH THICK DOUBLE-WALL SHEET METAL OUTSIDE AIR INTAKE PLENUM WALLS ENCLOSURE. PROVIDE 4-INCH HIGH CONCRETE CURB AT PLENUM WALL BASE AND SEAL BOTTOM. PROVIDE PLENUM WALLS AROUND LEVEL 01 FLOOR SLAB OPENING AND SEAL TO BOTTOM OF LEVEL 01 SLAB. PROVIDE PLENUM TOP BEYOND FLOOR OPENING.
- M16** 24x48, 2-INCH THICK DOUBLE-WALL ACCESS DOOR WITH CONTINUOUS HINGE, EDGE SEALS, AND DOOR HARDWARE FOR ACCESS TO OUTSIDE AIR PLENUM.
- M18** SPACE AVAILABLE FOR BAS TEMPERATURE CONTROL PANELS, (2) 24x36 PANELS.
- M19** H & HR PIPING UP THROUGH FLOOR.
- M20** REFRIGERANT LIQUID AND SUCTION PIPING BETWEEN DX COOLING COILS AND CONDENSING UNITS. COORDINATE PIPE SIZES WITH MANUFACTURER.
- M32** VARIABLE FREQUENCY DRIVES FOR MECHANICAL EQUIPMENT.
- M33** SEE PLUMBING DRAWINGS FOR 1-1/4-INCH BACKFLOW DEVICE. CONNECT TO HEATING WATER SYSTEM AS SHOWN ON PIPING DETAILS.
- M34** OUTSIDE AIR INTAKE WITH MOTORIZED ISOLATION DAMPER.
- M50** PIPING DIFFERENTIAL PRESSURE SENSOR.
- M62** FRESH AIR WATER THERMAL PIPING FEEDER.
- M64** DUCT SMOKE DETECTOR BY ELECTRICAL CONTRACTOR.
- M65** PROVIDE RECTANGULAR DUCT SOUND ATTENUATOR BY KINETICS OR EQUAL FOR 32,000-CFM, 84" WIDE BY 24" HIGH BY 36" LONG, MAX 0.25" PD, DYNAMIC INSERTION LOSS (Hz/dB): 63/4, 125/6, 250/11, 500/13, 1000/14, 2000/12, 4000/11, 8000/8.
- M66** PROVIDE ROUND DUCT SOUND ATTENUATOR BY KINETICS OR EQUAL FOR 2,800-CFM, 18"-ROUND BY 36" LONG, MAX 0.25" PD, DYNAMIC INSERTION LOSS (Hz/dB): 63/4, 125/6, 250/11, 500/13, 1000/14, 2000/12, 4000/11, 8000/8.

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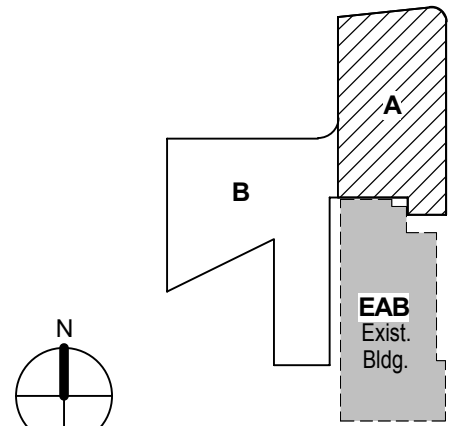
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KEY PLAN

**ENLARGED PLANS -
MECHANICAL**

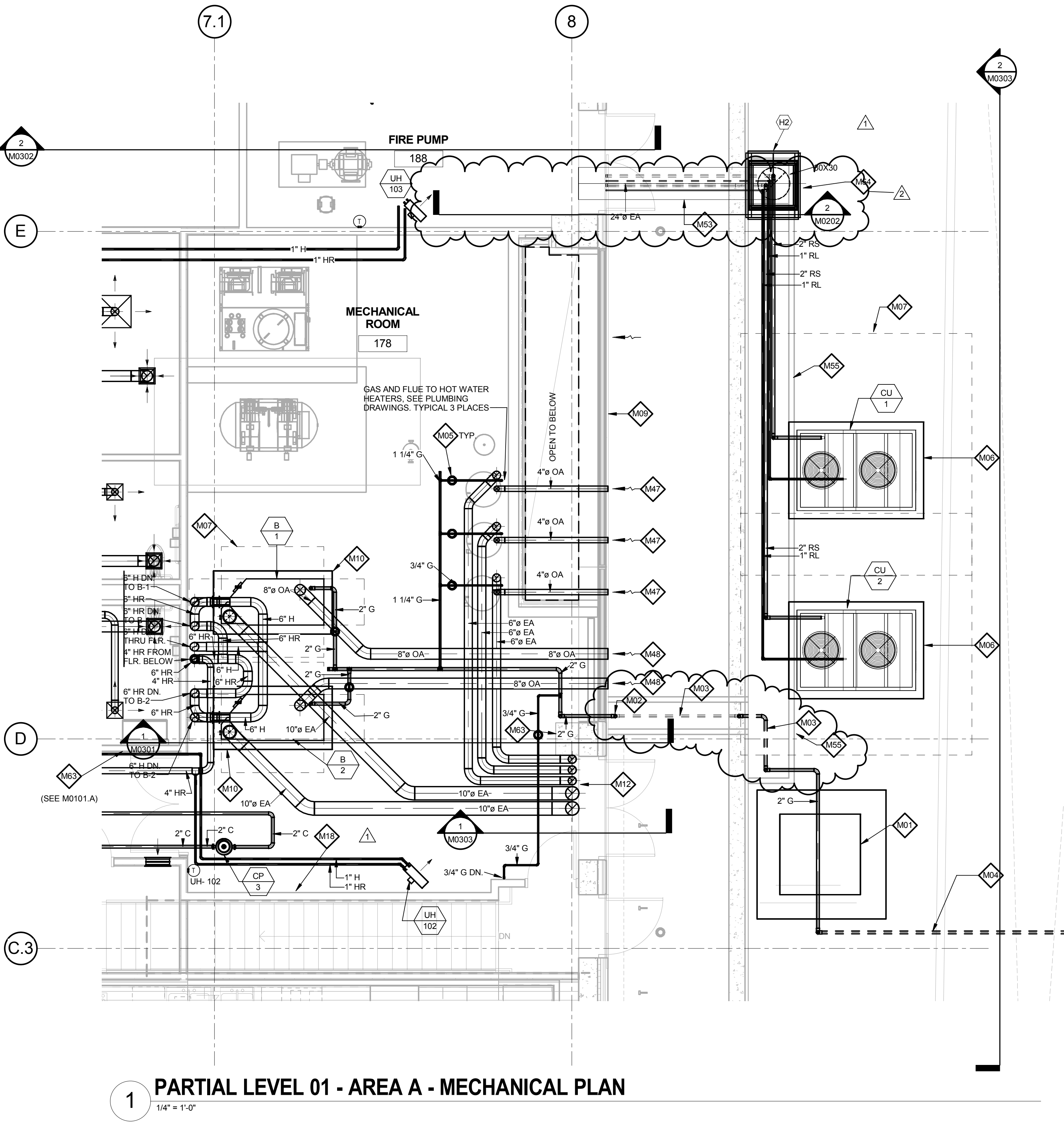
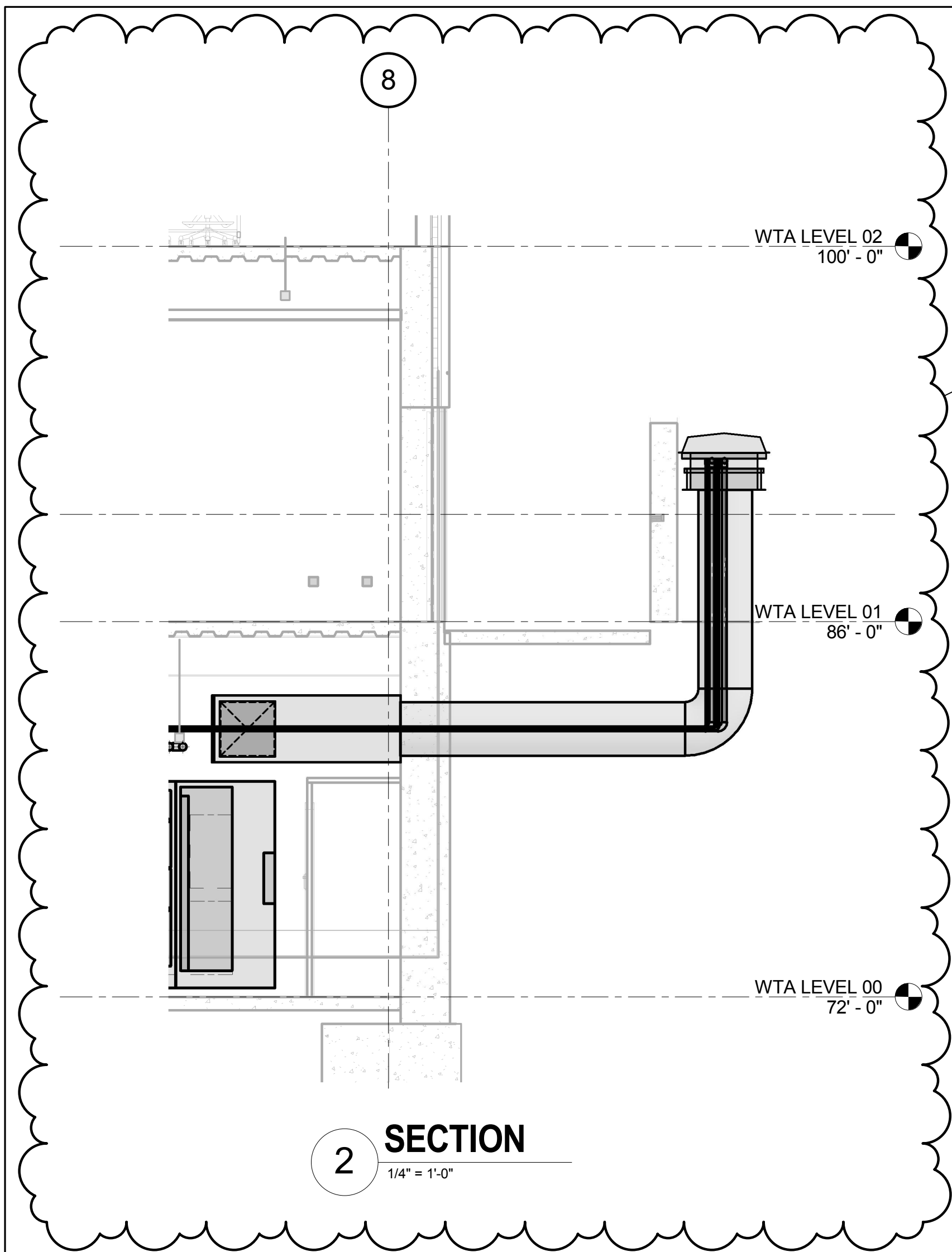
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GENERAL NOTES:

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KEYED NOTES

- M01** PROPOSED GAS METER LOCATION: COORDINATE WITH LOCAL NATURAL GAS UTILITY COMPANY FOR METER SET SIZED FOR A TOTAL CONNECTED LOAD OF 6.247-CFH WITH A DELIVERY PRESSURE OF 2-PSIG. PROVIDE CONCRETE METER PAD PER THE LOCAL GAS COMPANY'S REQUIREMENTS AND SIZE.
- M02** 2-INCH MAIN BUILDING NATURAL GAS LINE ABOVE GRADE WITH SHUT-OFF VALVE.
- M03** 2-INCH NATURAL GAS LINE IN OPEN TRENCH WITH STEEL GRATING. SEE CIVIL DRAWINGS. SUPPORT PIPING WITH STAINLESS STEEL UNISTRUT FRAMING. MINIMUM 2-INCHES ABOVE TRENCH FLOOR.
- M04** NATURAL GAS MAIN EXTENSION BELOW GRADE BY LOCAL GAS COMPANY.
- M05** POUNDS TO INCHES GAS PRESSURE REGULATOR SIZED FOR EQUIPMENT CONNECTED LOAD AND INLET PRESSURE REQUIREMENTS.
- M06** CONCRETE BASE FOR MECHANICAL EQUIPMENT; SEE CIVIL DRAWINGS. VERIFY SIZE WITH APPROVED SHOP DRAWINGS.
- M07** DASHED LINES INDICATE RECOMMENDED SERVICE, COIL PULLING SPACE, FILTER REMOVAL SPACE, AND/OR AIRFLOW CLEARANCES.
- M09** OUTSIDE AIR INTAKE LOUVER, SEE ARCHITECTURAL DRAWINGS.
- M10** 4-INCH HIGH CONCRETE HOUSEKEEPING PAD BELOW EQUIPMENT. PAD SIZE SHALL BE COORDINATED WITH APPROVED SHOP DRAWING AND SHALL BE A MINIMUM OF 6-INCHES LARGER ON ALL SIDES.
- M12** BOILER AND DOMESTIC WATER HEATER FLUES UP THROUGH ROOF.
- M18** SPACE AVAILABLE FOR BAS TEMPERATURE CONTROL PANELS, (2) 24x36 PANELS.
- M47** DOMESTIC WATER HEATER COMBUSTION AIR DUCT THROUGH EXTERIOR WALL ABOVE LOUVER. PROVIDE VENT/RAIN CAP OR ELBOW WITH BIRDSCREEN.
- M48** HEATING HOT WATER BOILER COMBUSTION AIR DUCT. PROVIDE VENT/RAIN CAP OR ELBOW WITH BIRDSCREEN.
- M53** (2)SETS OF 2" RS/1" RL THRU 24" ROUND PVC PIPE SLEEVE BELOW GRADE FROM LOWER LEVEL MECHANICAL ROOM TO VENTILATION DISCHARGE.
- M54** 30"x30" CONCRETE VENTILATION DISCHARGE MANHOLE WITH RAIN HOOD AND GRAVEL FLOOR. PROVIDE 30" WIDE CONCRETE TRENCH WITH REMOVABLE GRATING FOR REFRIGERANT PIPING.
- M55** 30" WIDE PIPE TRENCH WITH REMOVABLE METAL GRATING. SEE CIVIL DRAWINGS.
- M63** INSTALL BOILER SAFETY SWITCH AND SIGN. COORDINATE LOCATION WITH OWNER, ARCHITECT, AND ALL OTHER TRADES.

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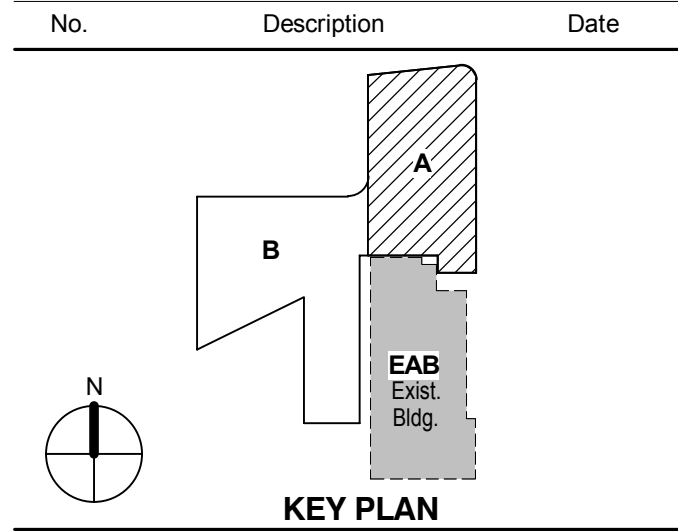
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ENLARGED PLANS - MECHANICAL

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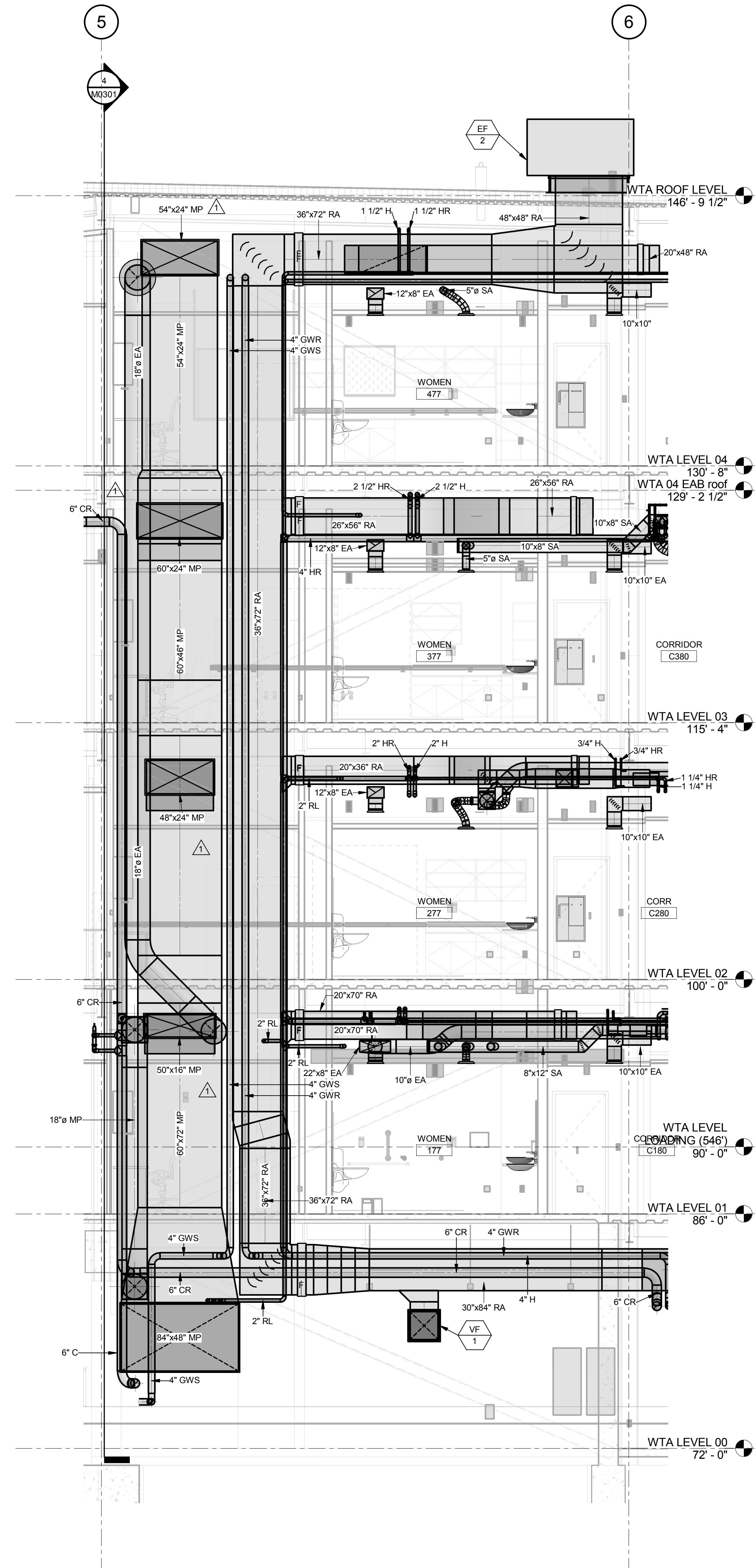
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1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016
No.	Description	Date

Drawing Title:

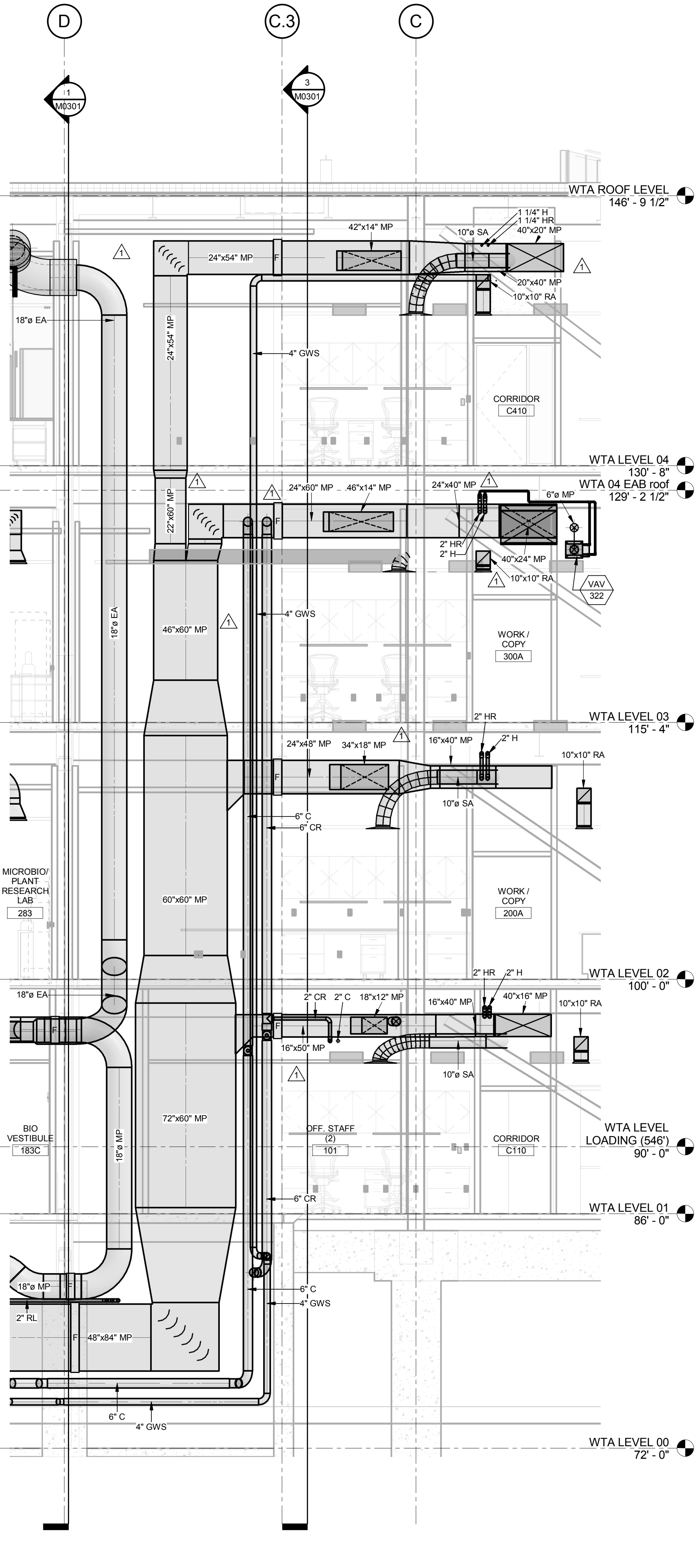
SECTIONS & ELEVATIONS

Project No.: 04561.01 Checked by:

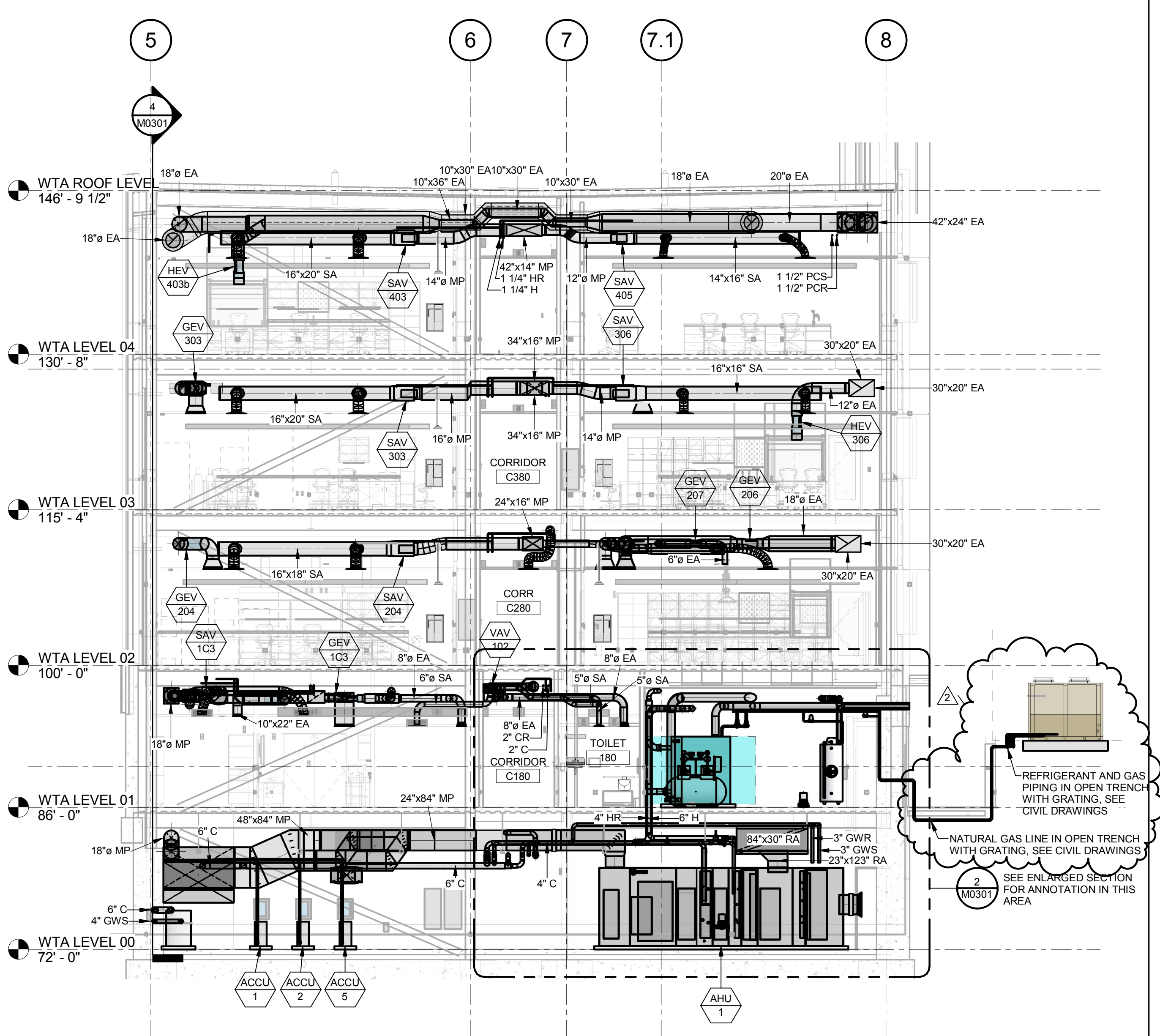
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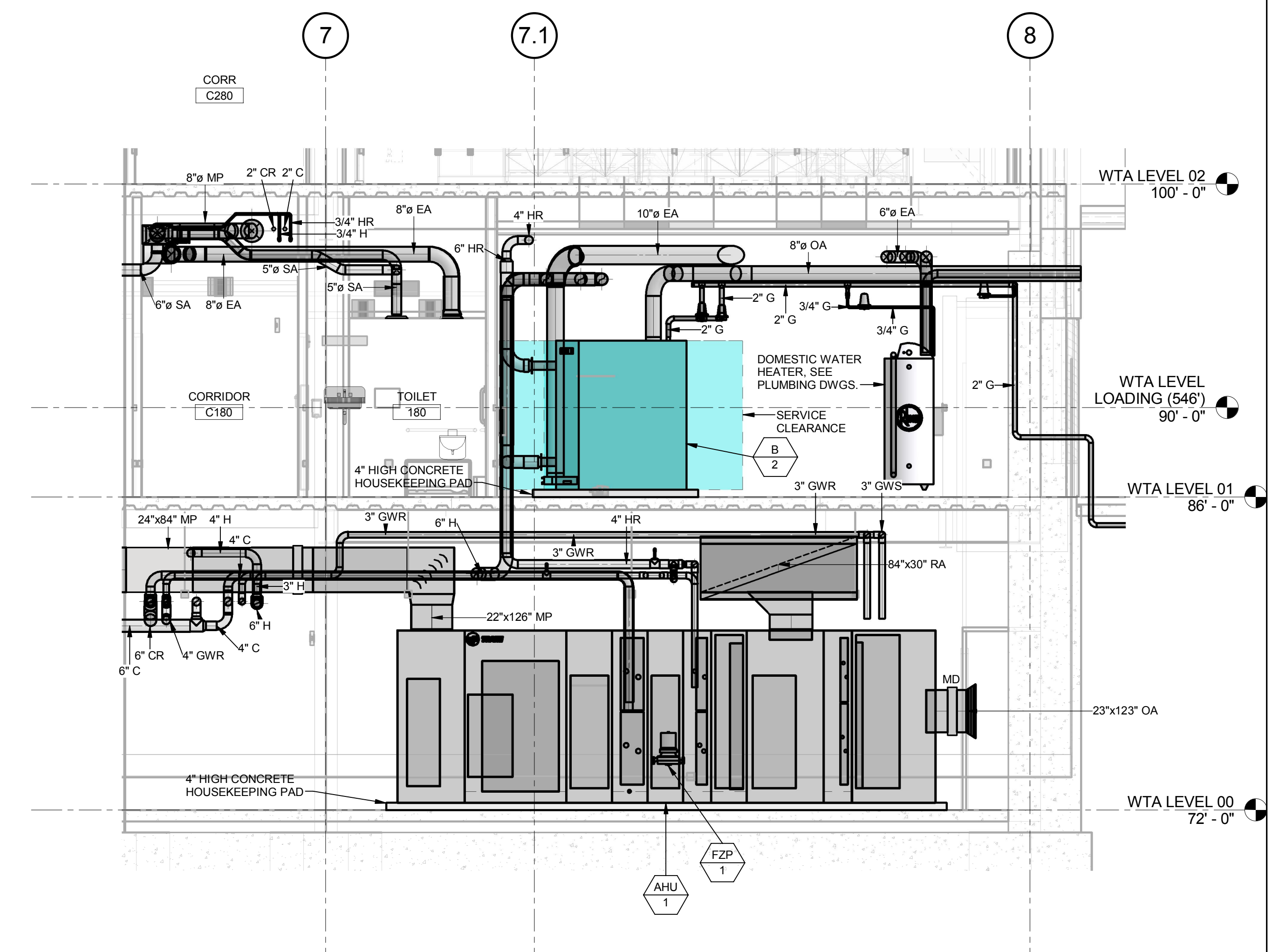
3 MECHANICAL CHASE (LOOKING NORTH)
1/4" = 1'-0"



4 MECHANICAL CHASE (LOOKING EAST)
1/4" = 1'-0"



1 AREA A SECTION - (LOOKING NORTH)
1/8" = 1'-0"



2 EAST WING SECTION (NORTH) - AHU-1
1/4" = 1'-0"

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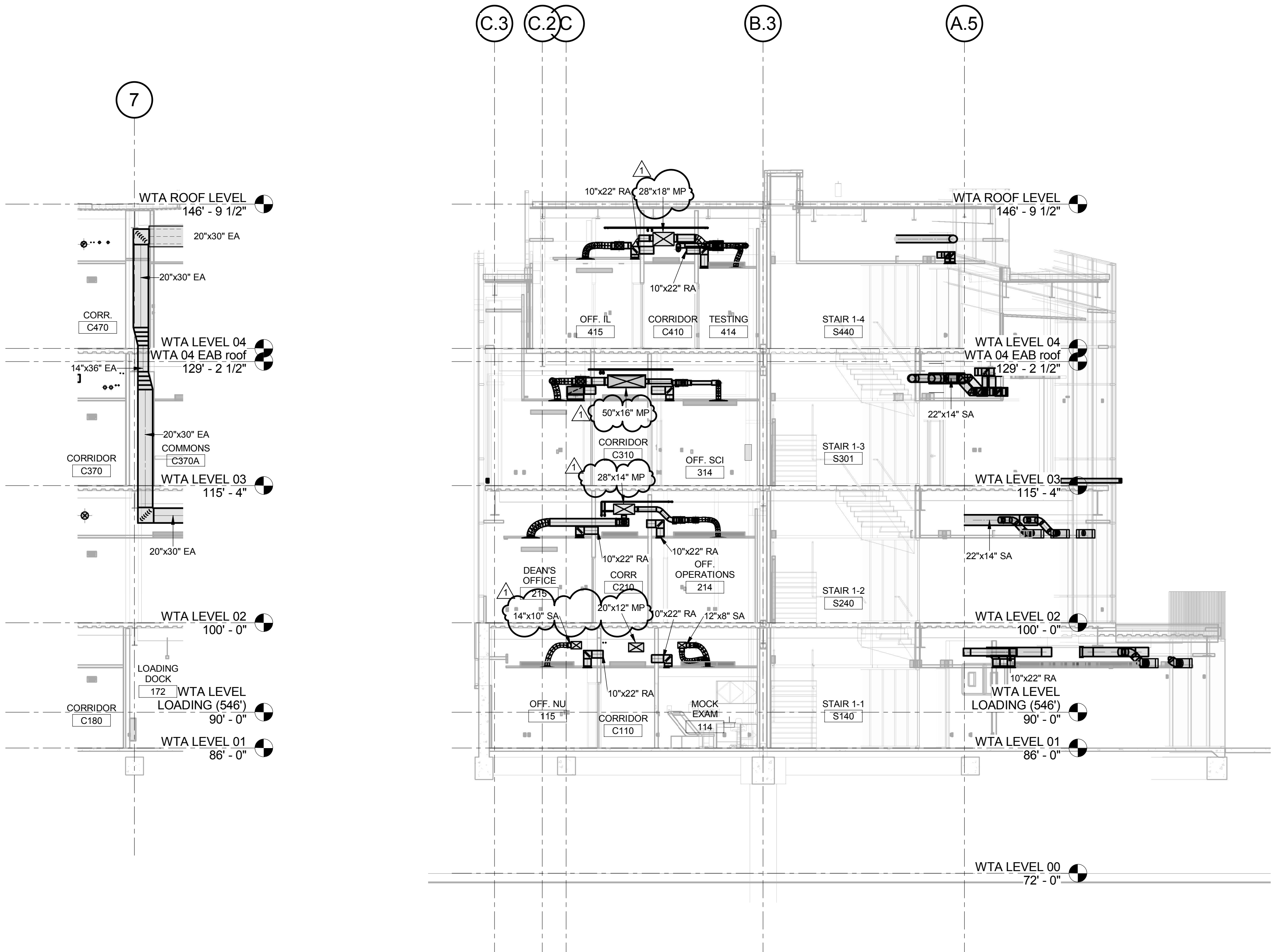
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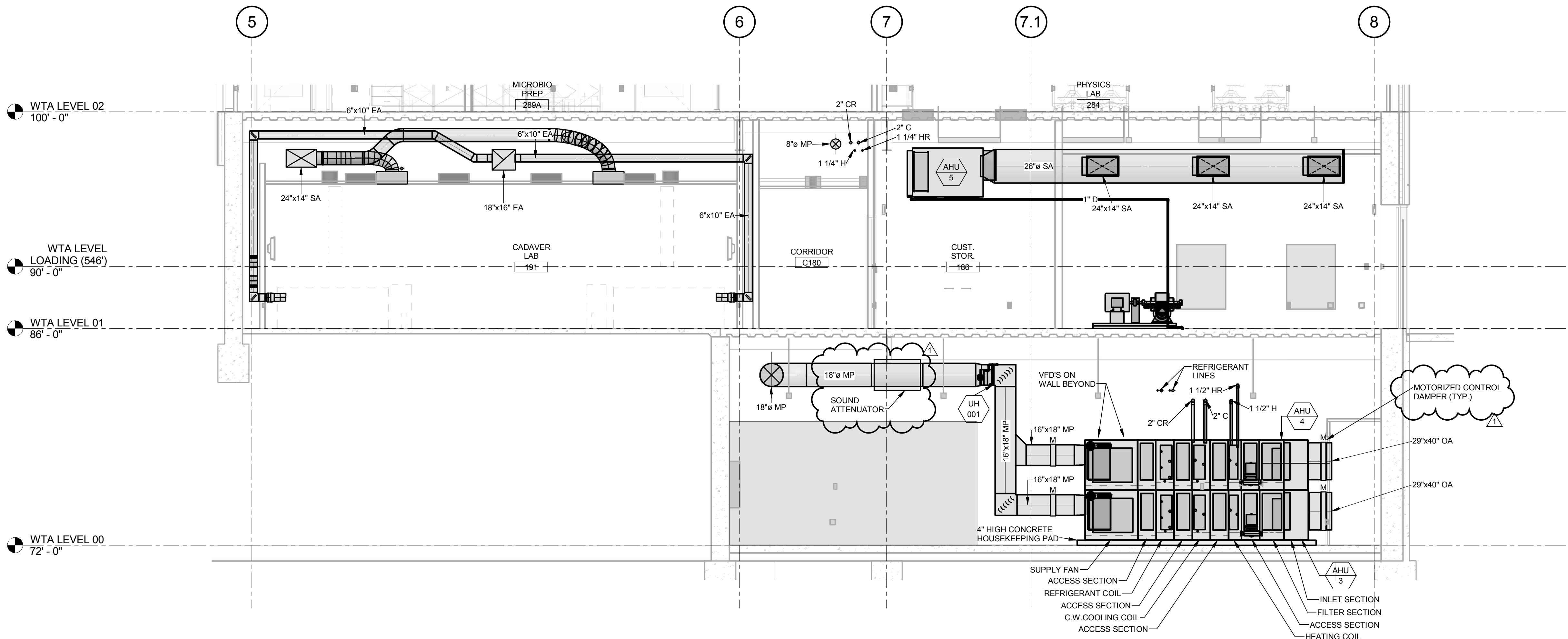
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3 EXHAUST RISER LOOKING NORTH
1/8" = 1'-0"

1 AREA B - (LOOKING EAST)
1/8" = 1'-0"



2 AHU-3 & 4 - (LOOKING NORTH)
1/4" = 1'-0"

CONFORMED SET 01 JUL 2016

1 ADDENDUM 2-1 17 MAR 2016
ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016
No. Description Date

Drawing Title:

SECTIONS & ELEVATIONS

Project No.: 04561.01 Checked by:

M0302

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CONFORMED SET

01 JUL 2016

1 ADDENDUM 2-1 17 MAR 2016
- ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016
No. Description Date

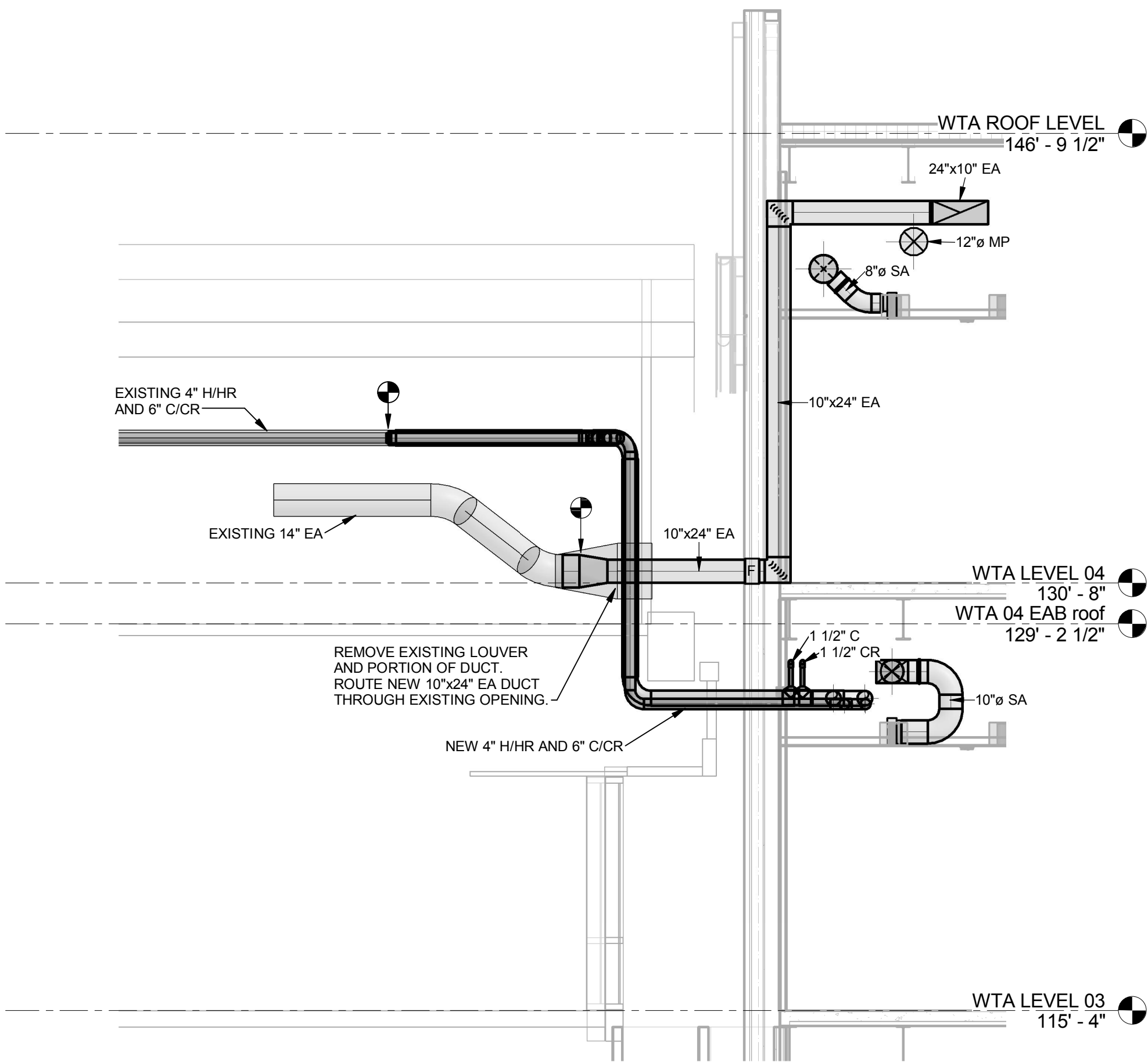
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SECTIONS & ELEVATIONS

Project No.: 04561.01 Checked by:

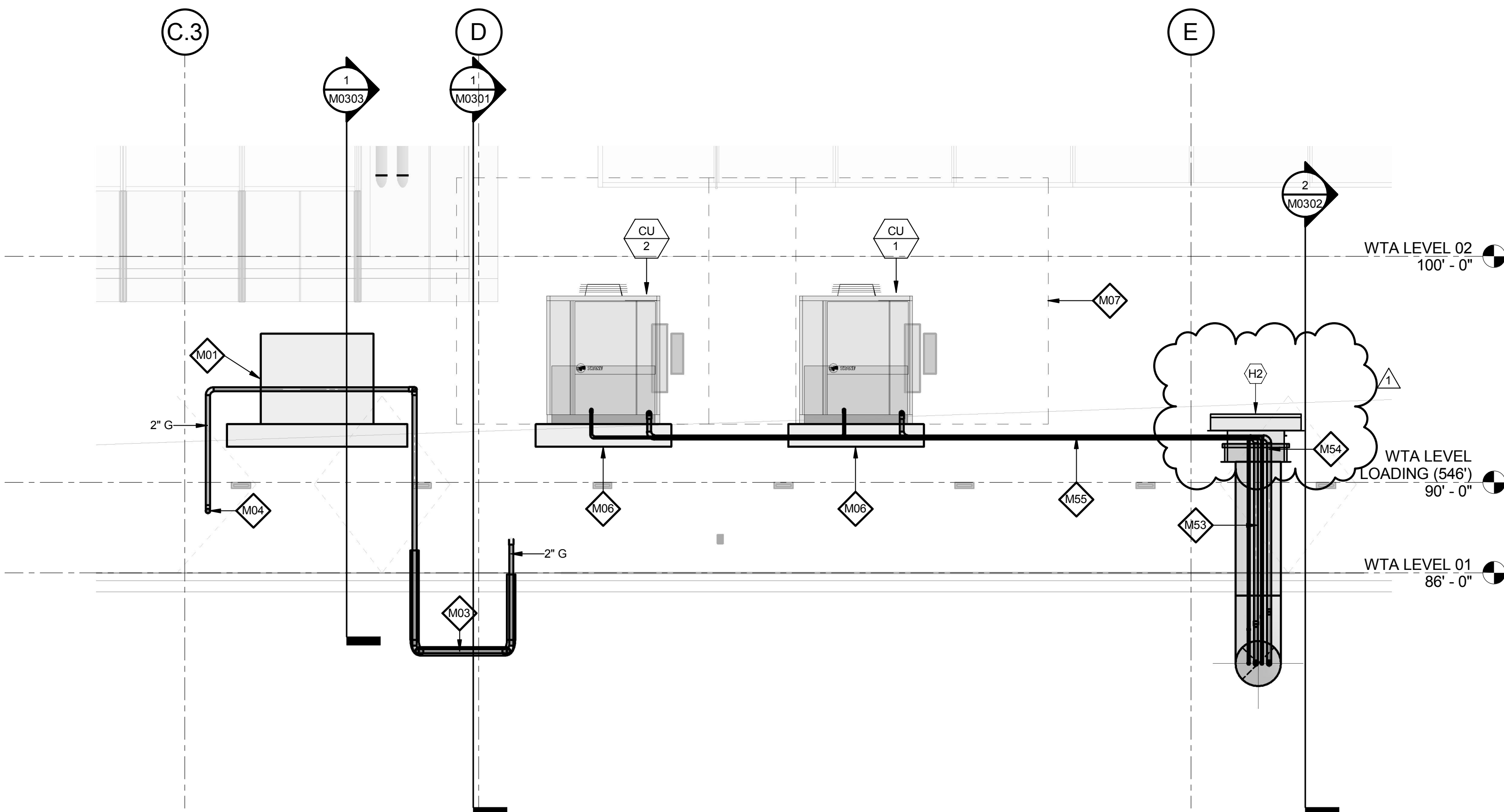
M0303

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3 SECTION THROUGH EAB ATTIC

1/4" = 1'-0"



2 SECTION AT CONDENSING UNITS

1/4" = 1'-0"

KEYED NOTES

M01 PROPOSED GAS METER LOCATION. COORDINATE WITH LOCAL NATURAL GAS UTILITY COMPANY FOR METER SET SIZED FOR A TOTAL CONNECTED LOAD OF 6,247-GPH WITH A DELIVERY PRESSURE OF 2-PSIG. PROVIDE CONCRETE METER PAD PER THE LOCAL GAS COMPANY'S REQUIREMENTS AND SIZE.

M03 2-INCH NATURAL GAS LINE BELOW WALKWAY WITH VENTED SLEEVE AROUND PIPING.

M04 NATURAL GAS MAIN EXTENSION BELOW GRADE BY LOCAL GAS COMPANY.

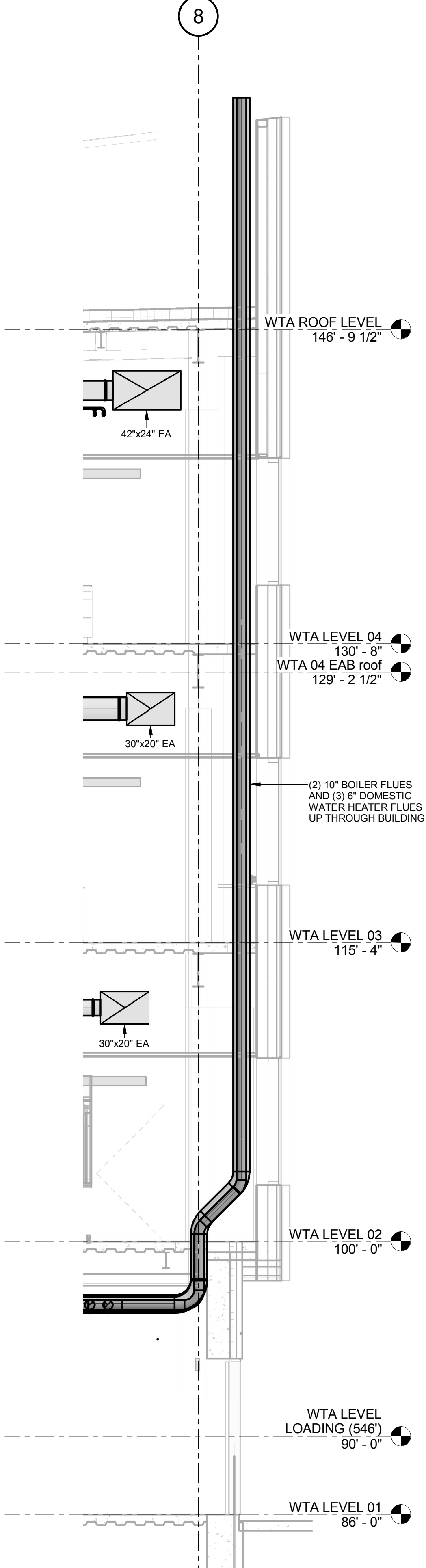
M06 CONCRETE BASE FOR MECHANICAL EQUIPMENT, SEE CIVIL DRAWINGS. VERIFY SIZE WITH APPROVED SHOP DRAWINGS.

M07 DASHED LINES INDICATE RECOMMENDED SERVICE, COIL PULLING SPACE, FILTER REMOVAL SPACE, AND/OR AIRFLOW CLEARANCES.

M53 (2)SETS OF 2" RS/1" RL THRU 34" ROUND PVC PIPE SLEEVE BELOW GRADE FROM LOWER LEVEL MECHANICAL ROOM TO VENTILATION DISCHARGE

M54 30"x30" CONCRETE VENTILATION DISCHARGE MANHOLE WITH RAIN HOOD AND GRAVEL FLOOR. PROVIDE 30" WIDE CONCRETE TRENCH WITH REMOVABLE GRATING FOR REFRIGERANT PIPING.

M55 30" WIDE PIPE TRENCH WITH REMOVABLE METAL GRATING, SEE CIVIL DRAWINGS.



1 SECTION AT BOILER FLUES

1/4" = 1'-0"

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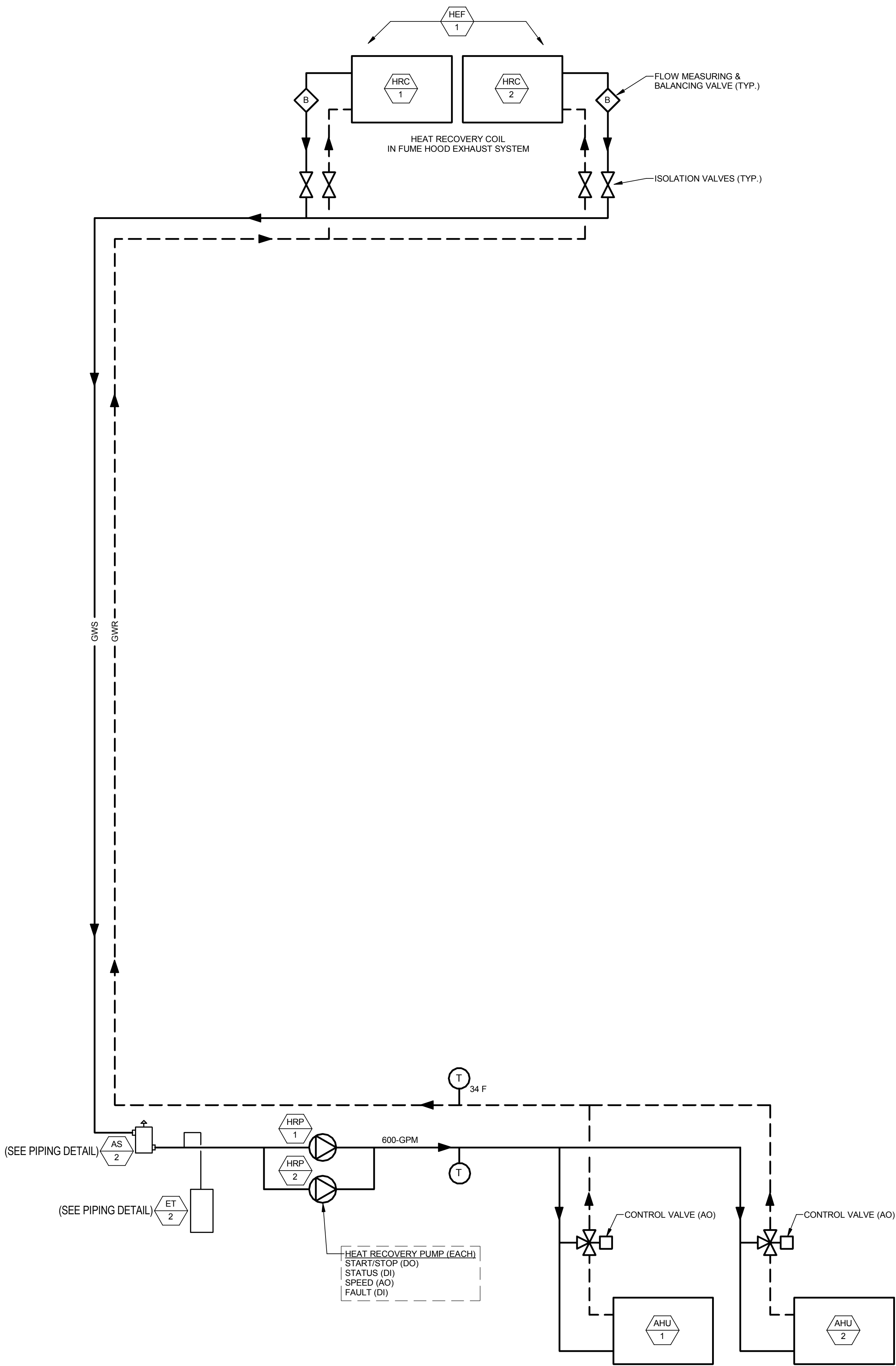
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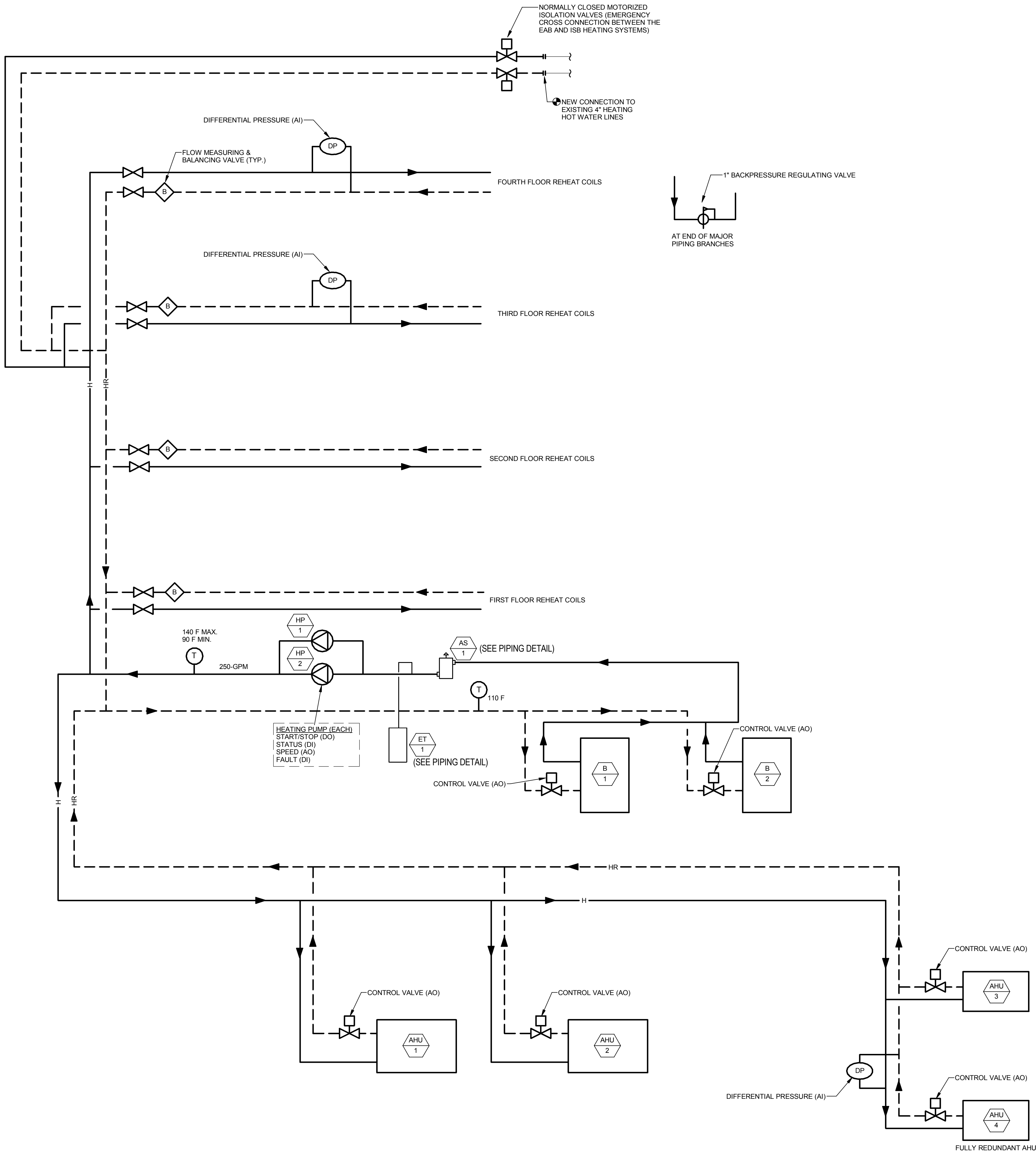
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HEAT RECOVERY WATER FLOW AND AUTOMATION DIAGRAM



HEATING WATER FLOW AND AUTOMATION DIAGRAM

CONFORMED SET 01 JUL 2016

ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016

Drawing Title:

DIAGRAMS - MECHANICAL

Project No.: 04561.01 Checked by:

M0402

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1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016
No.	Description	Date

Drawing Title:

DIAGRAMS - MECHANICAL

Project No.: 04561.01

Checked by:

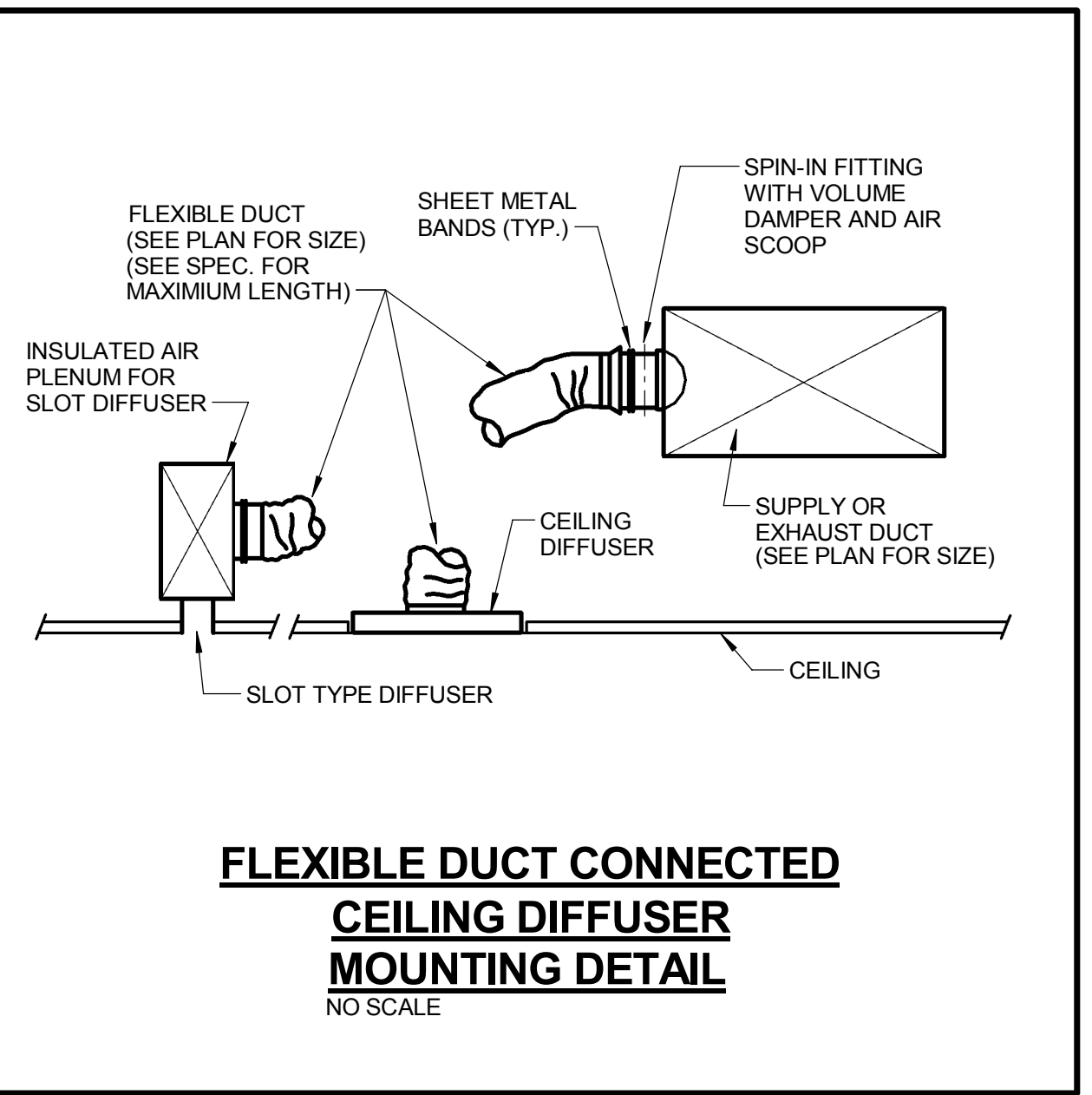
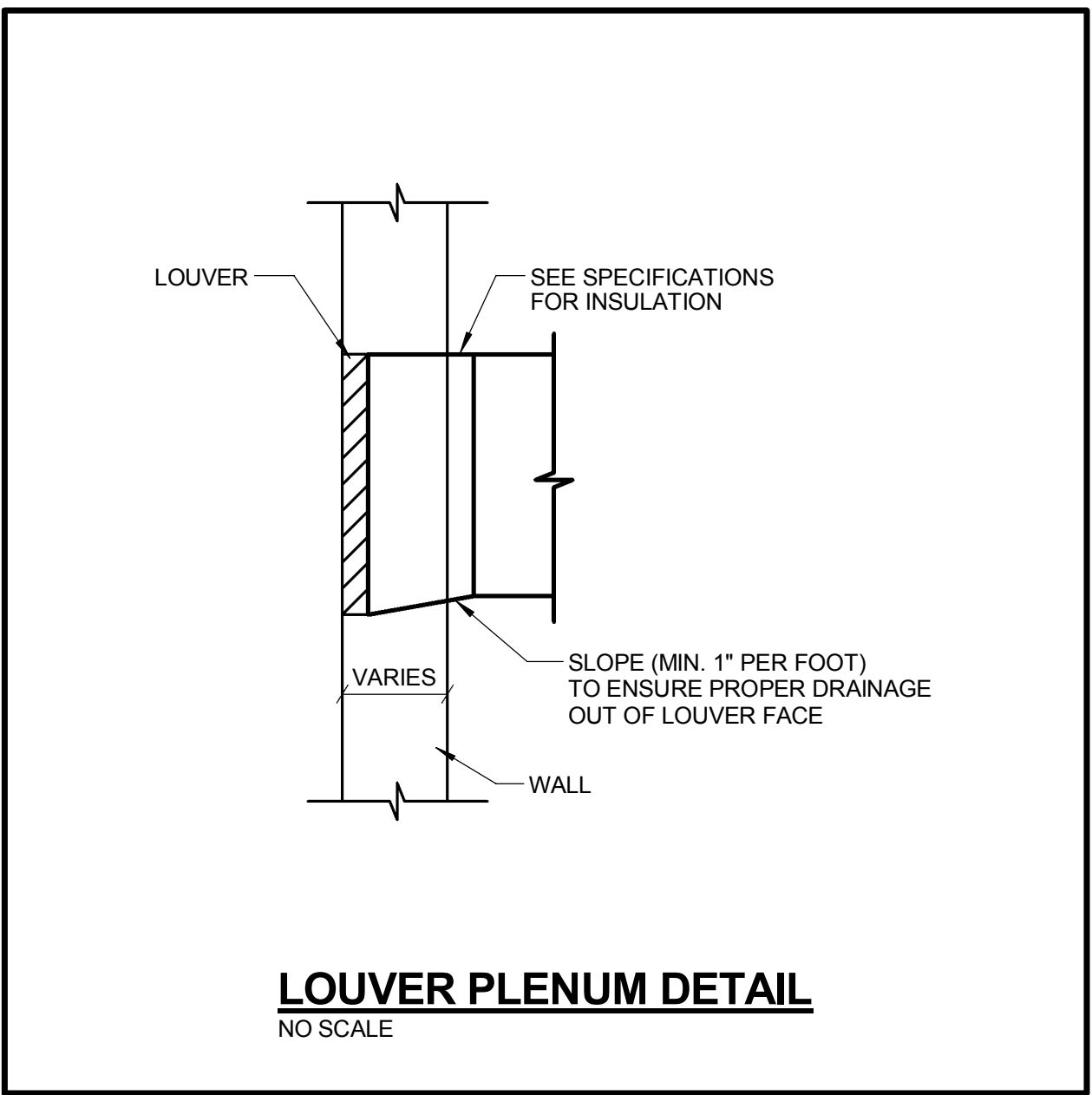
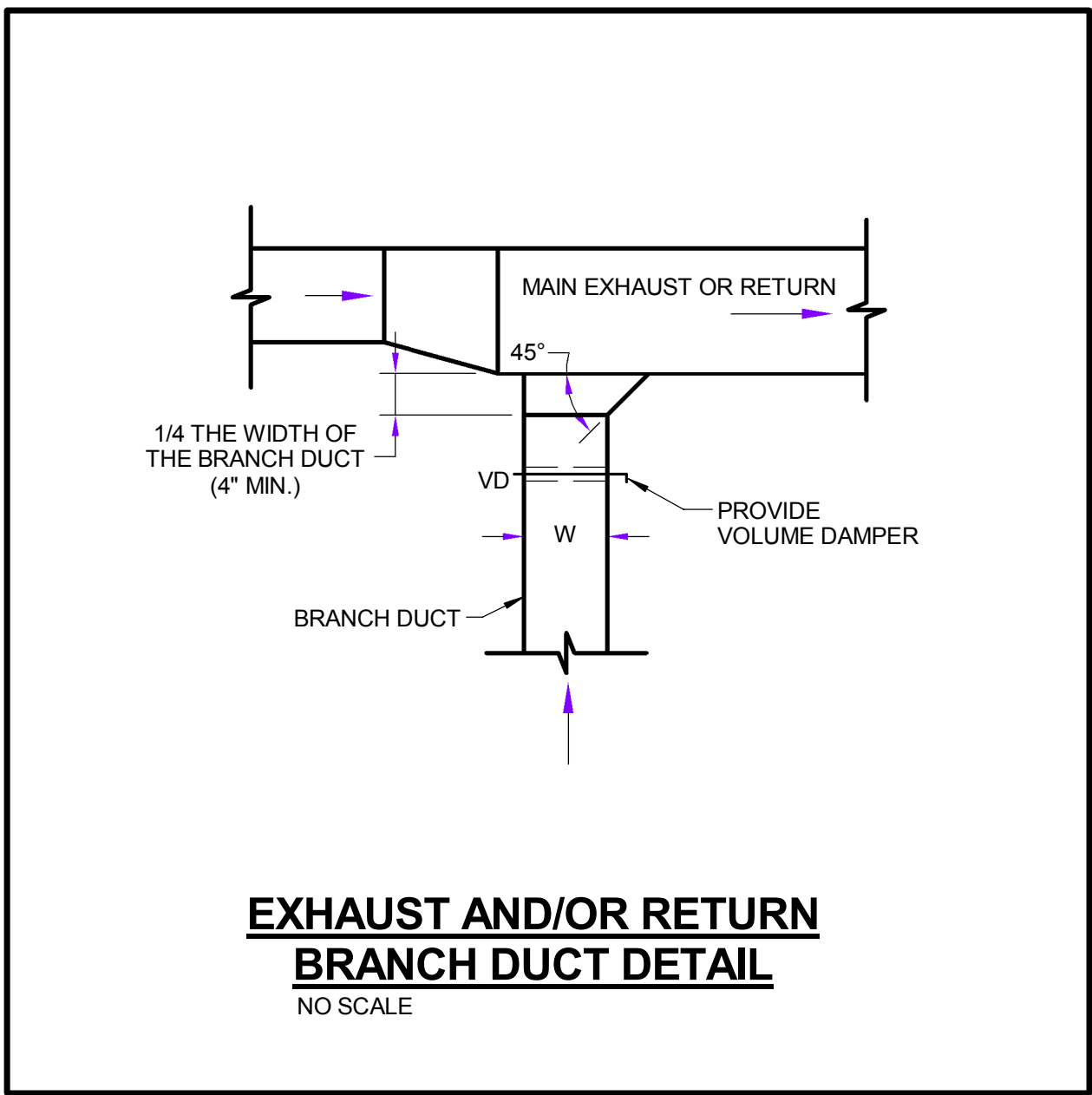
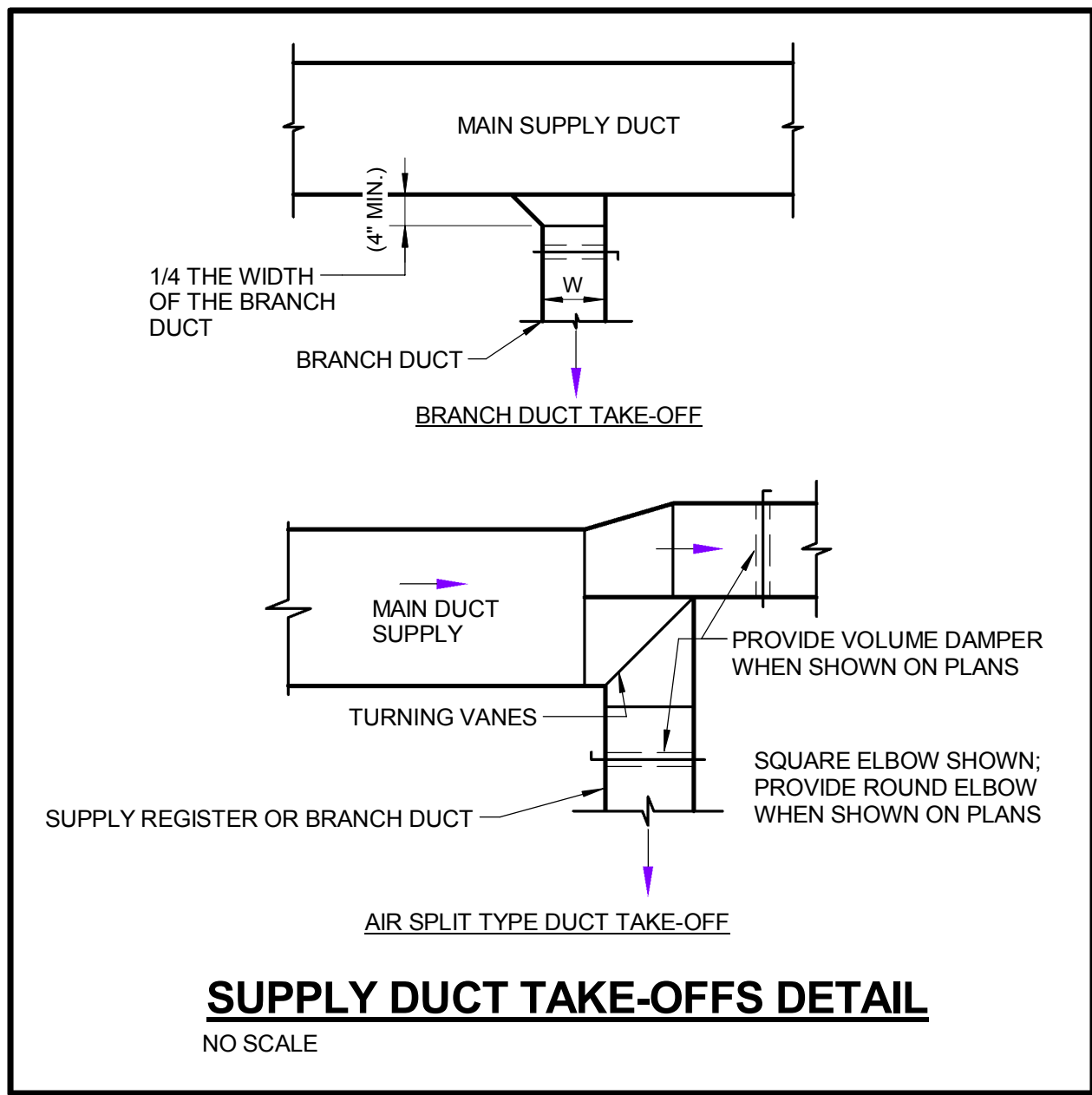
M0403

BUILDING AIR SYSTEM (AHU-3 AND AHU-4)

AHU-3 AND AHU-4 ARE FULLY REDUNDANT SYSTEM - ONLY ONE SYSTEM OPERATES AT A TIME

BUILDING AIR SYSTEM (AHU-1 AND AHU-2)

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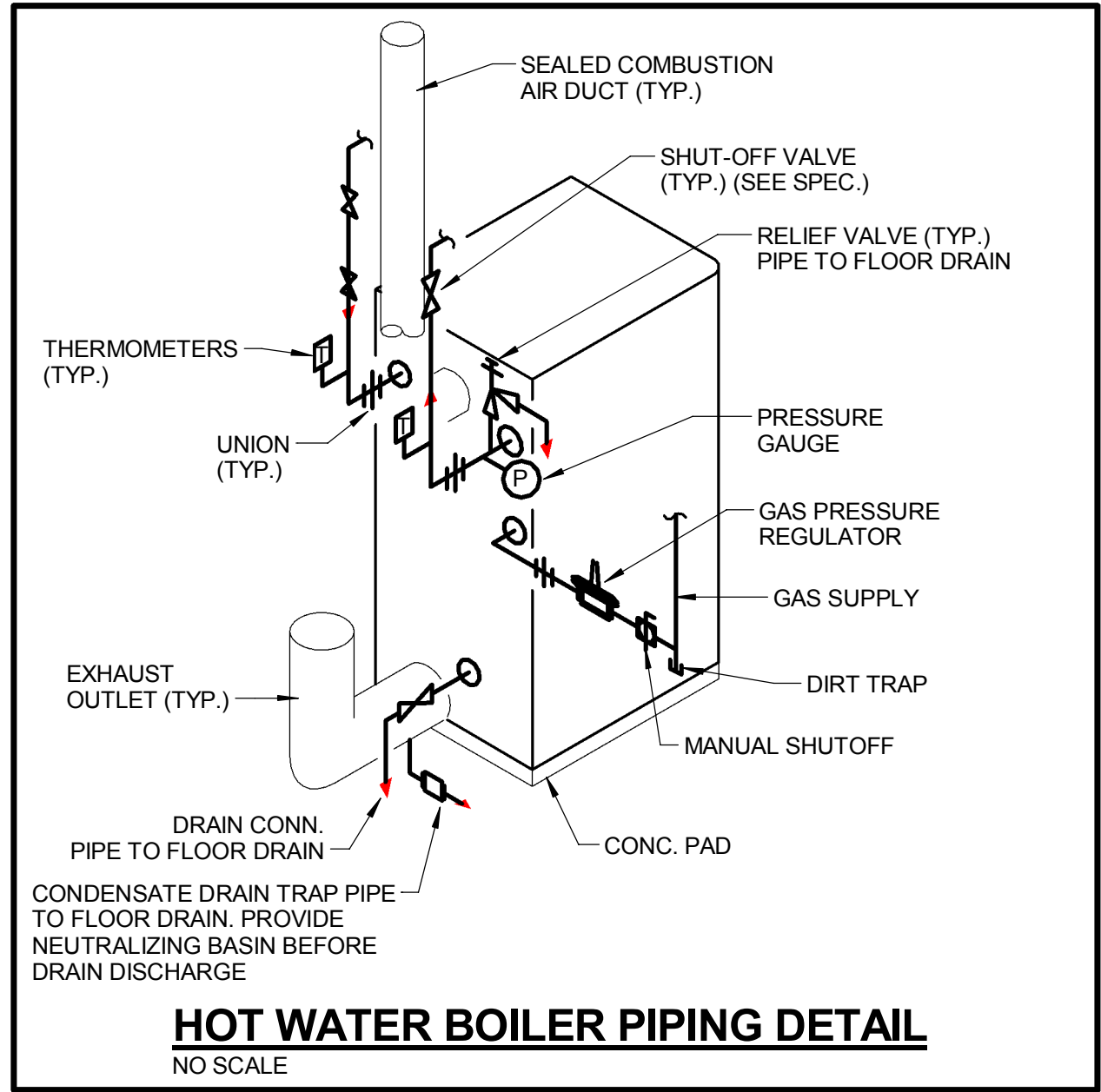
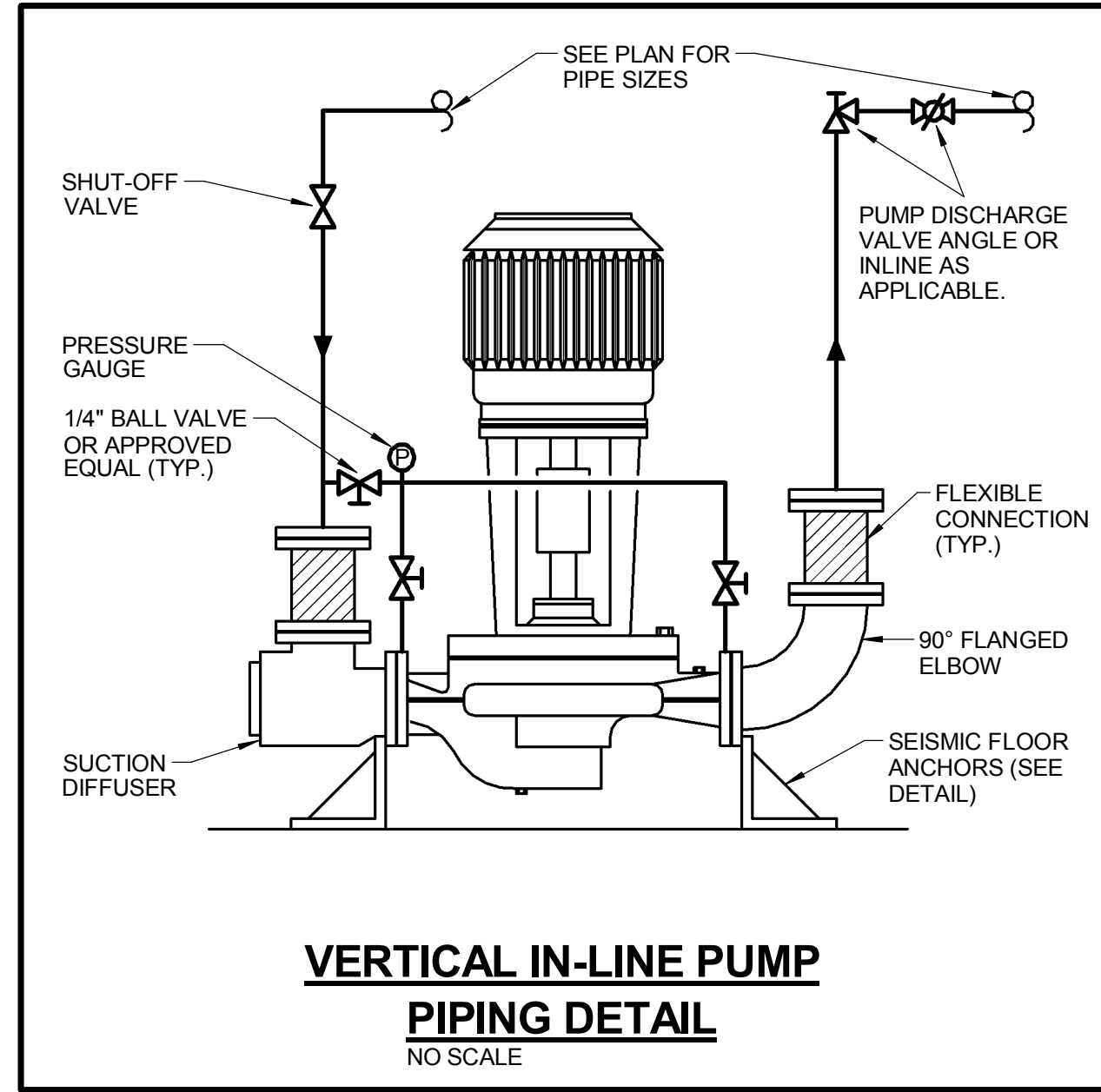
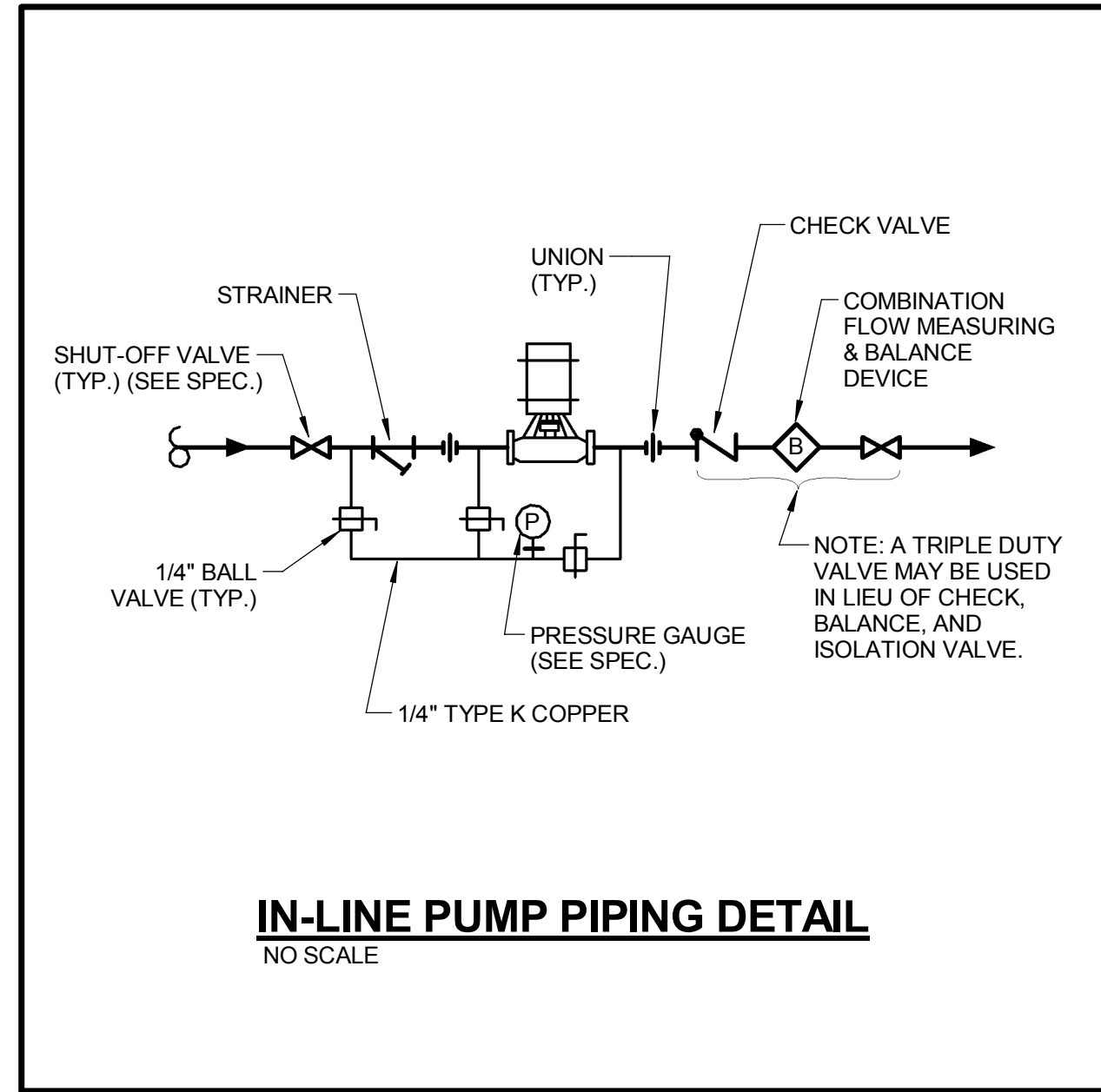
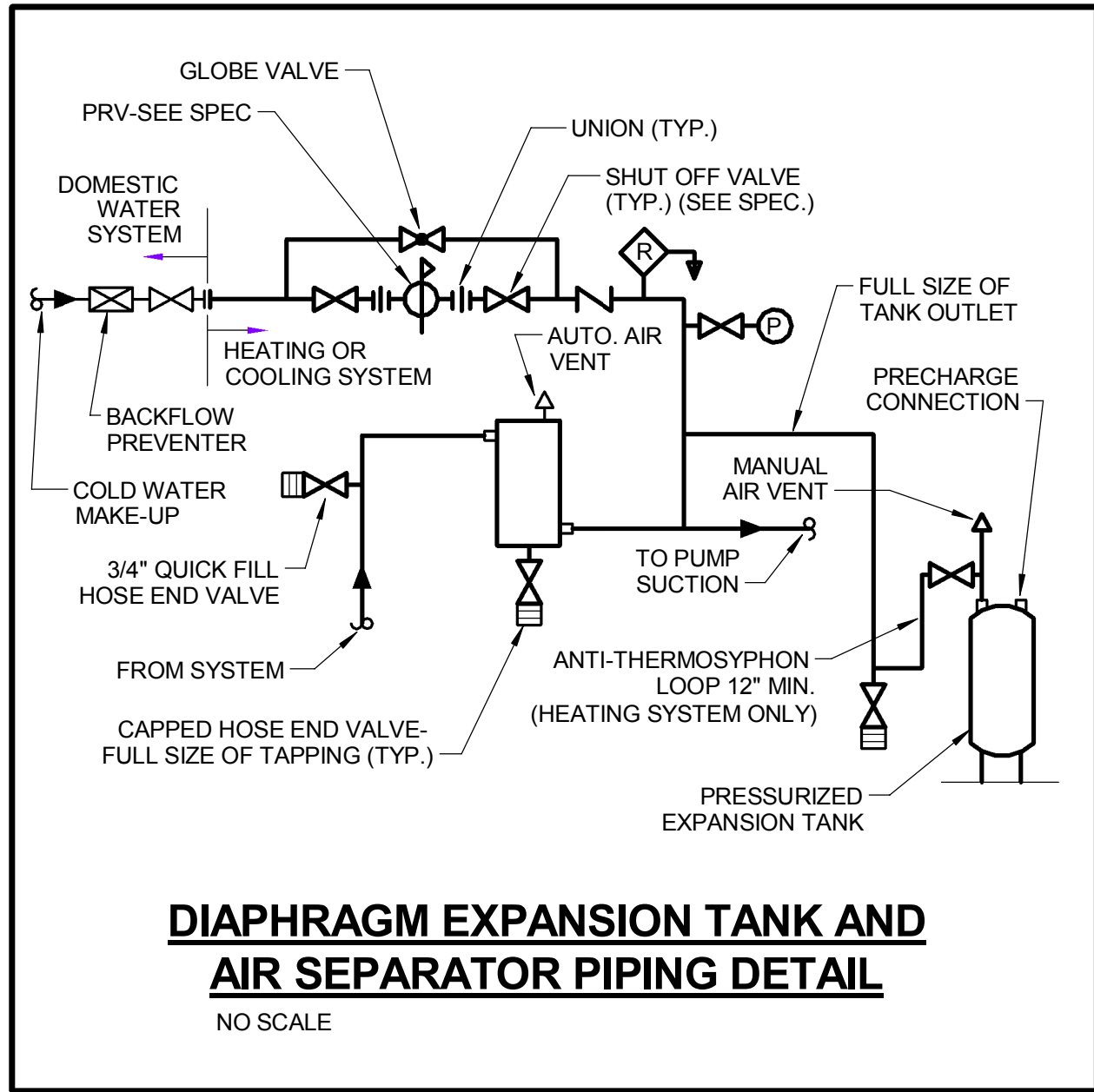
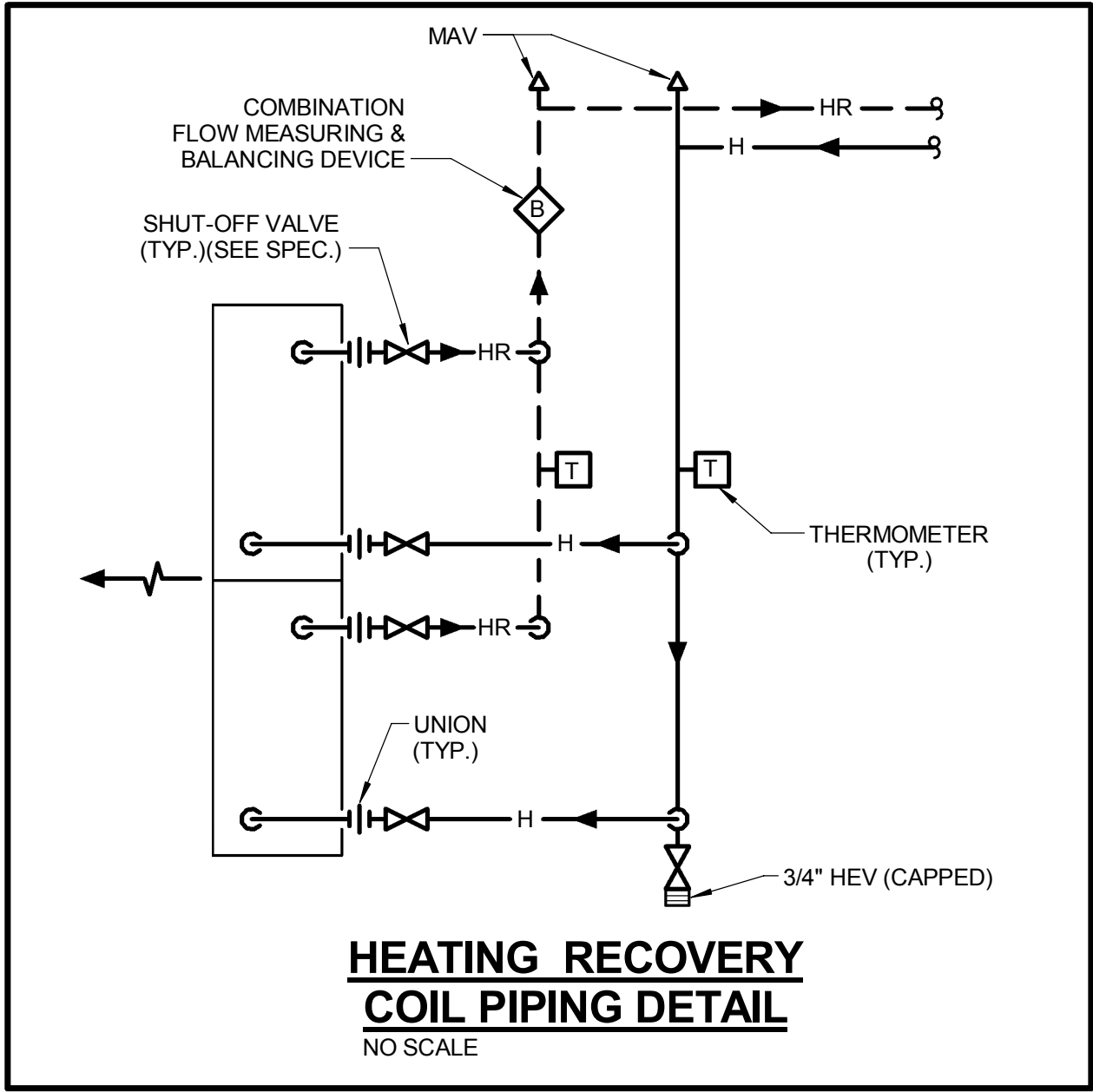
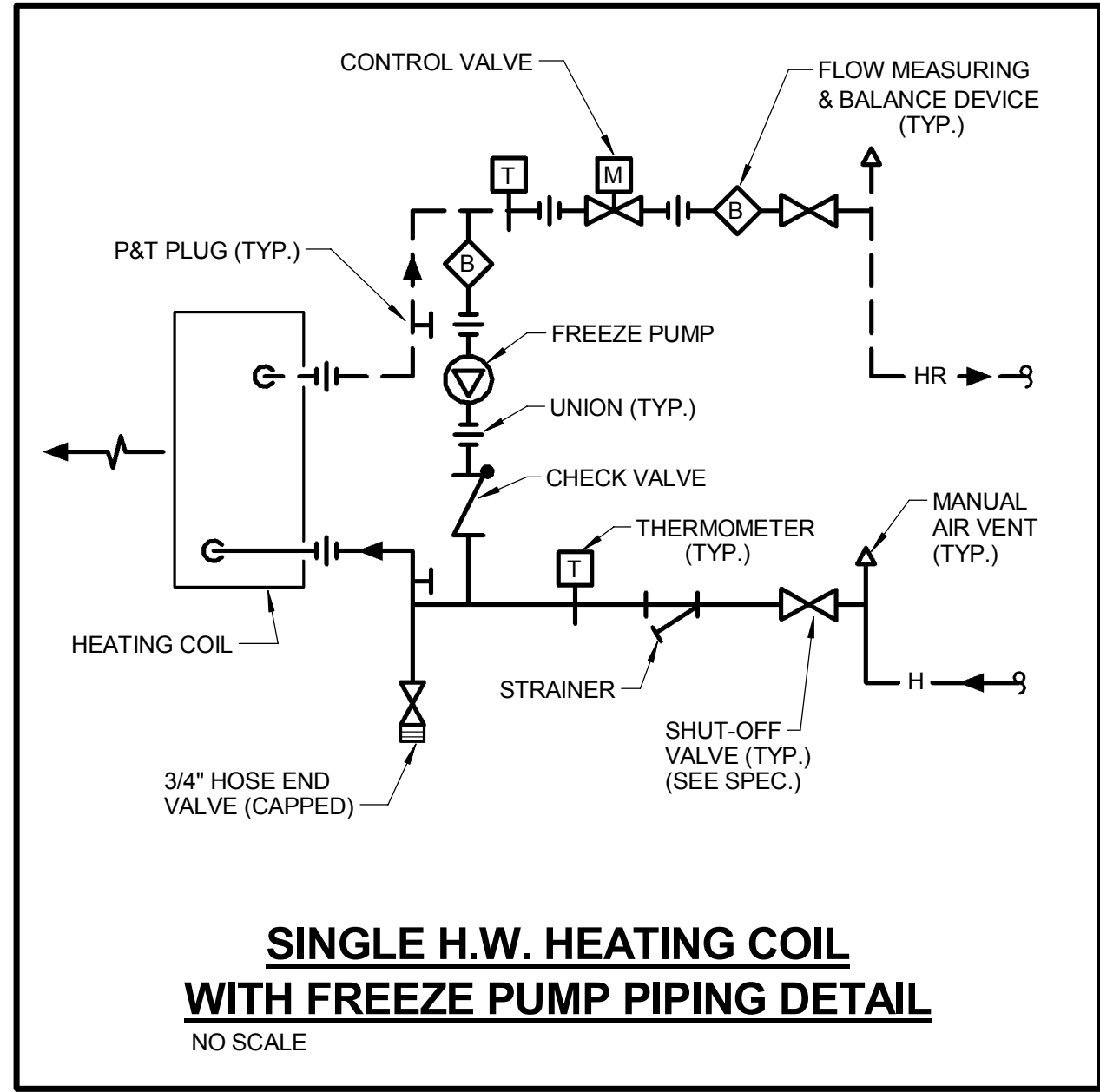
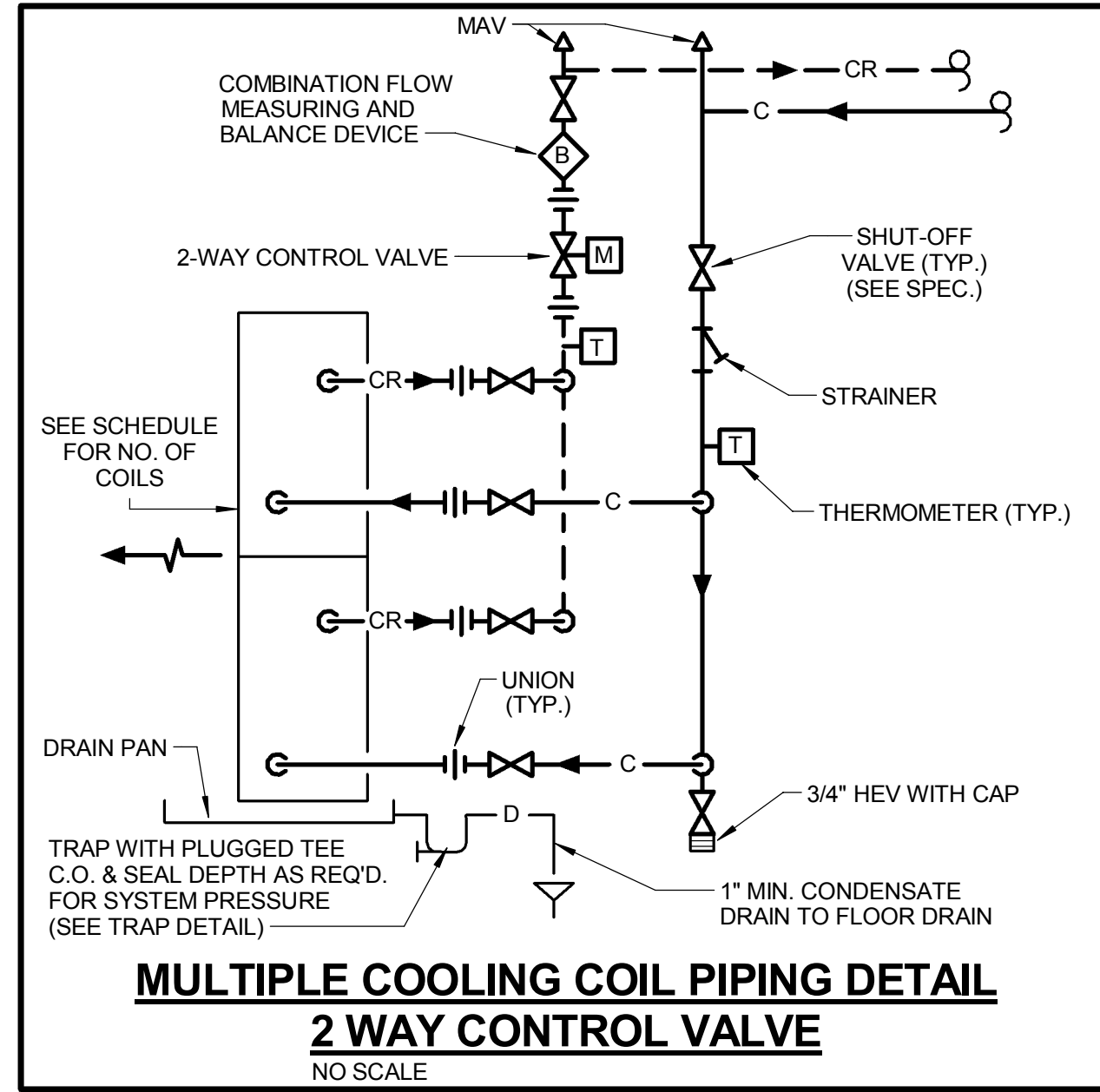
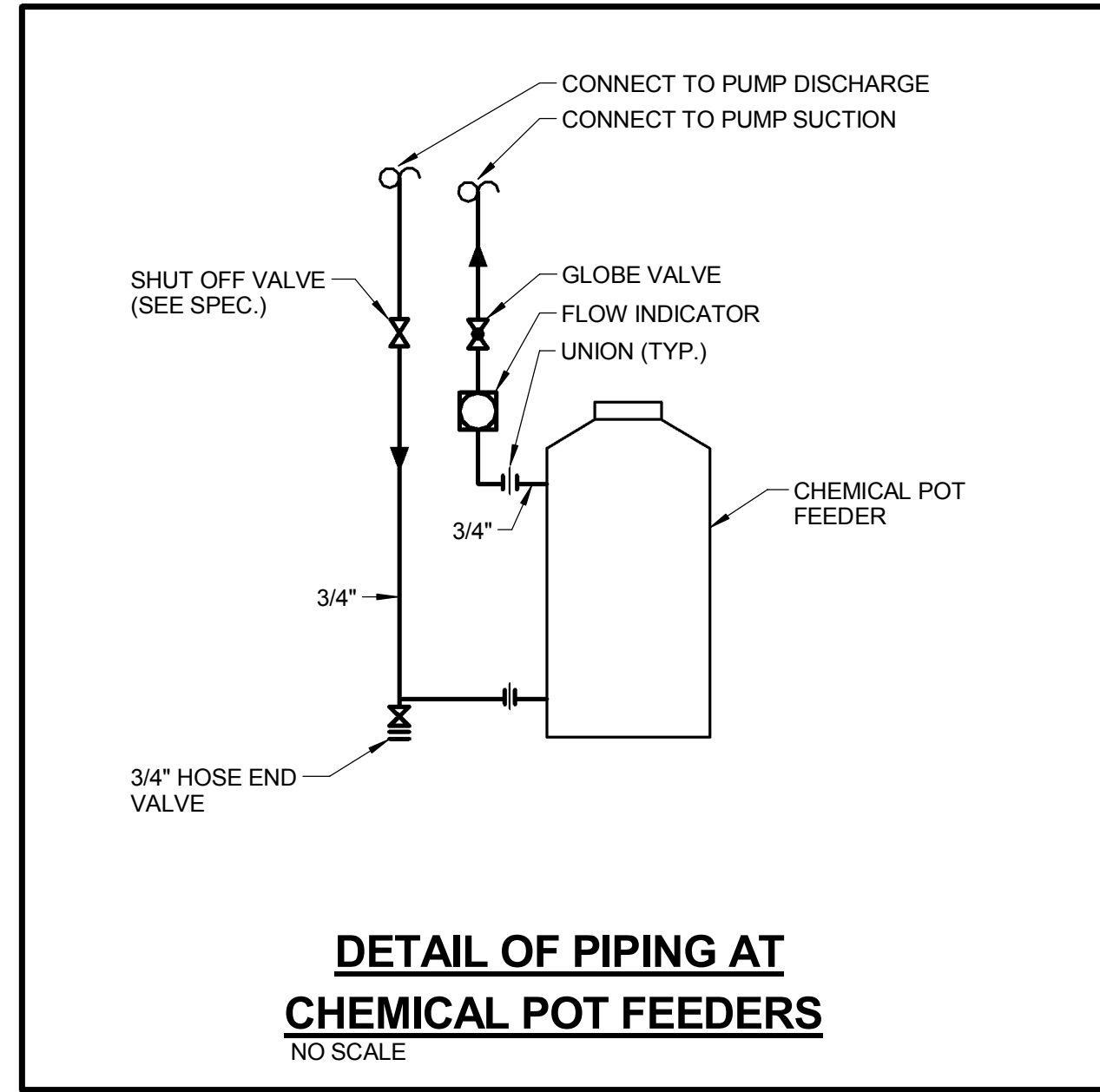
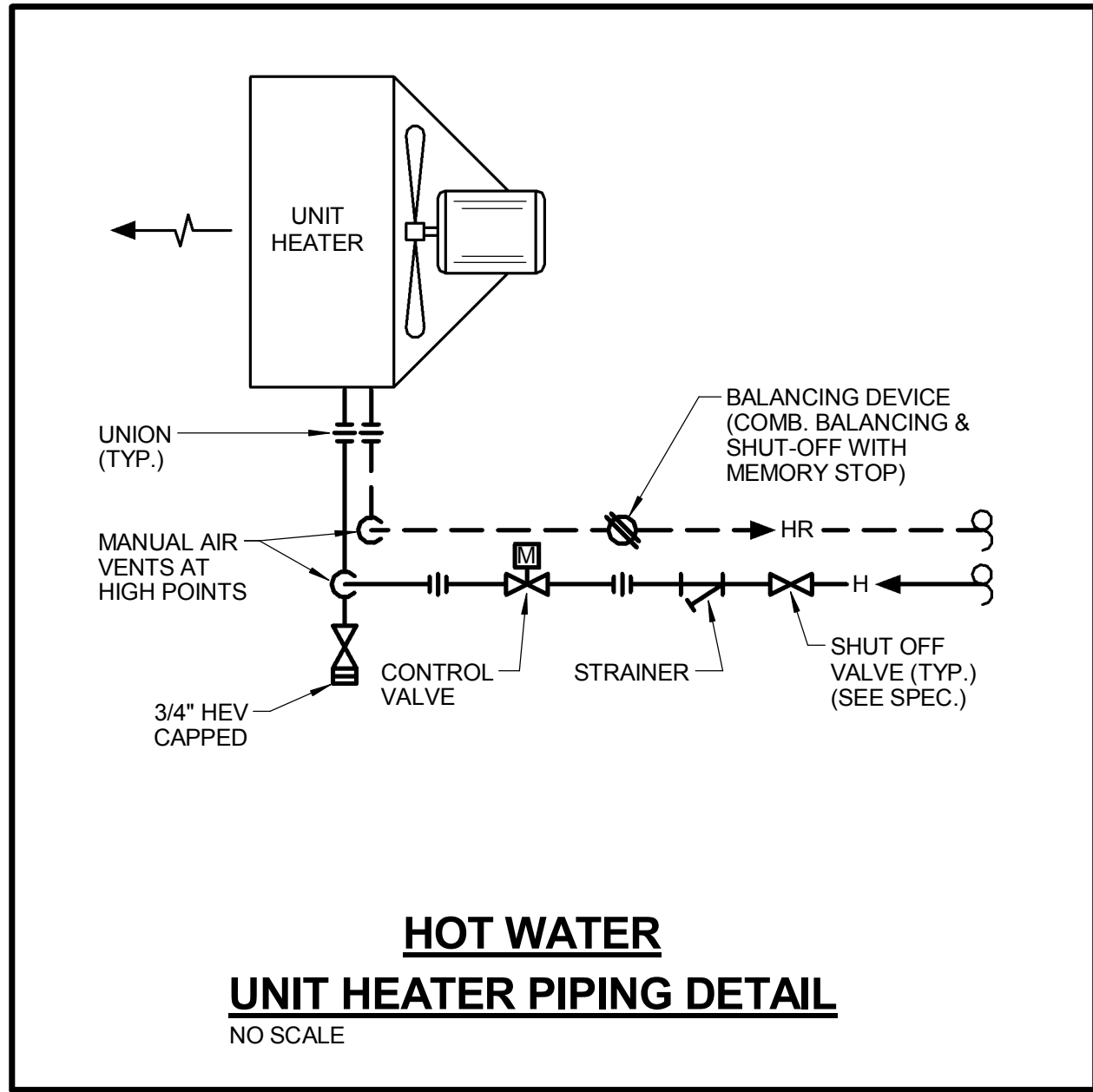
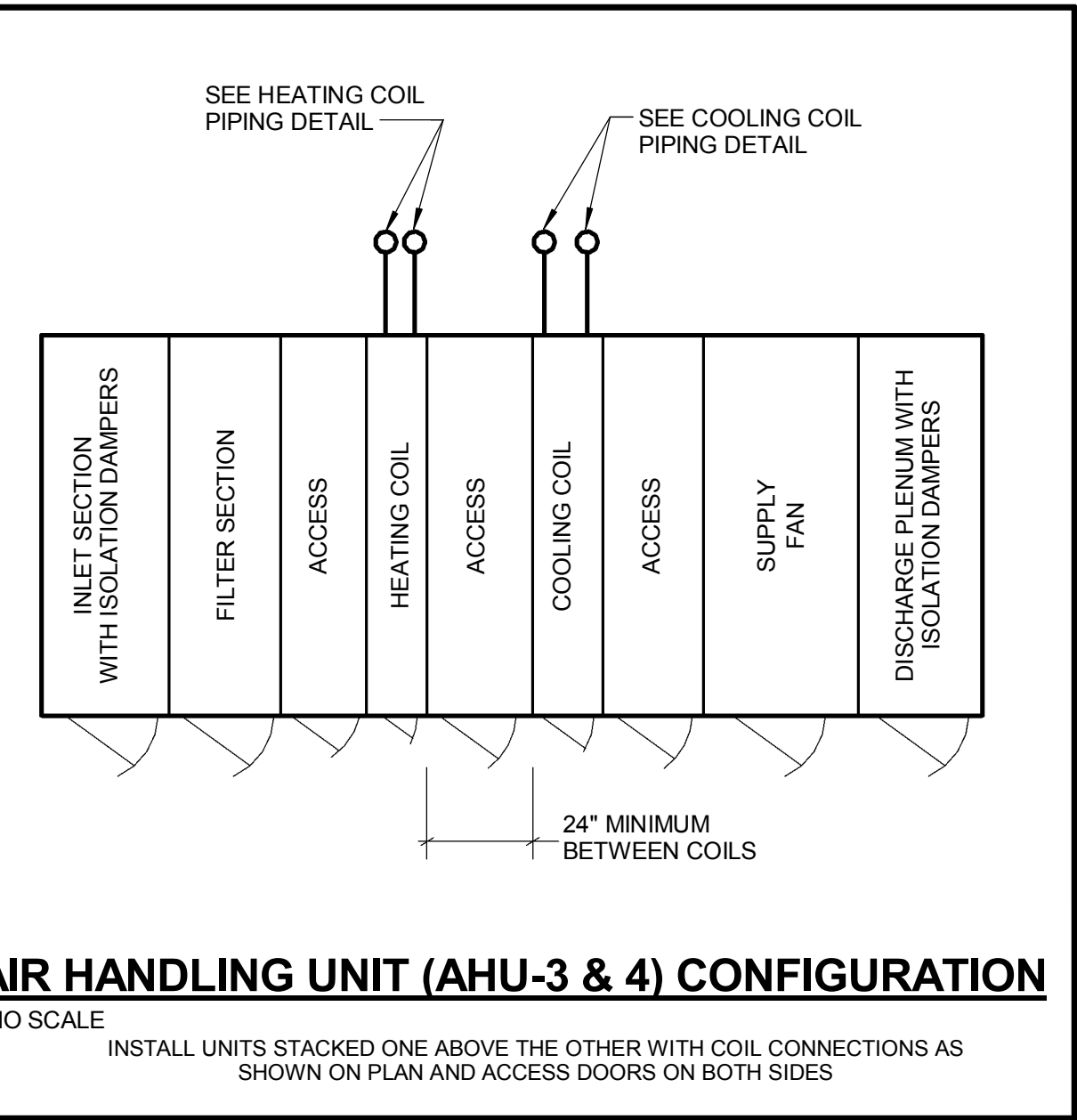
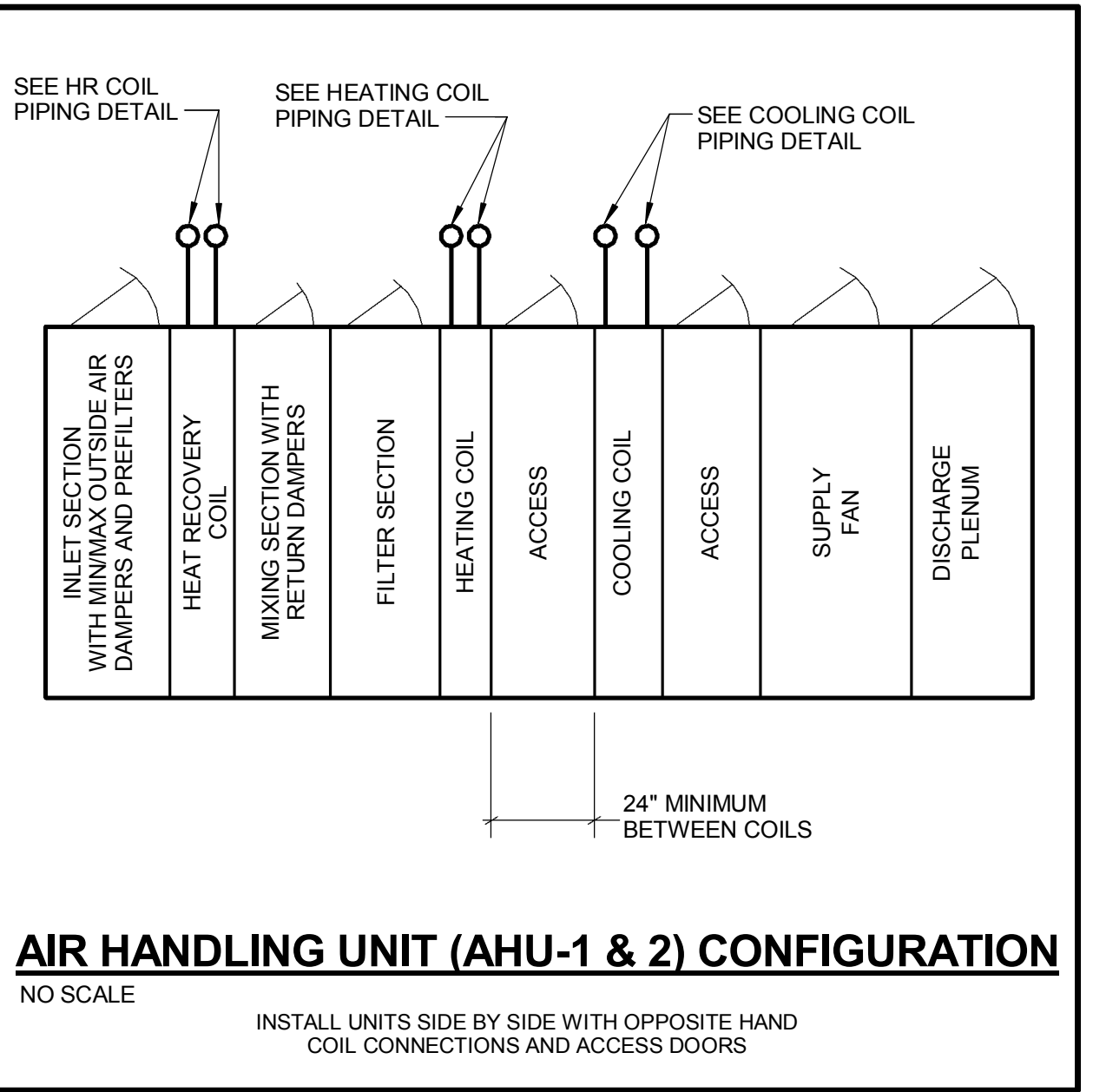
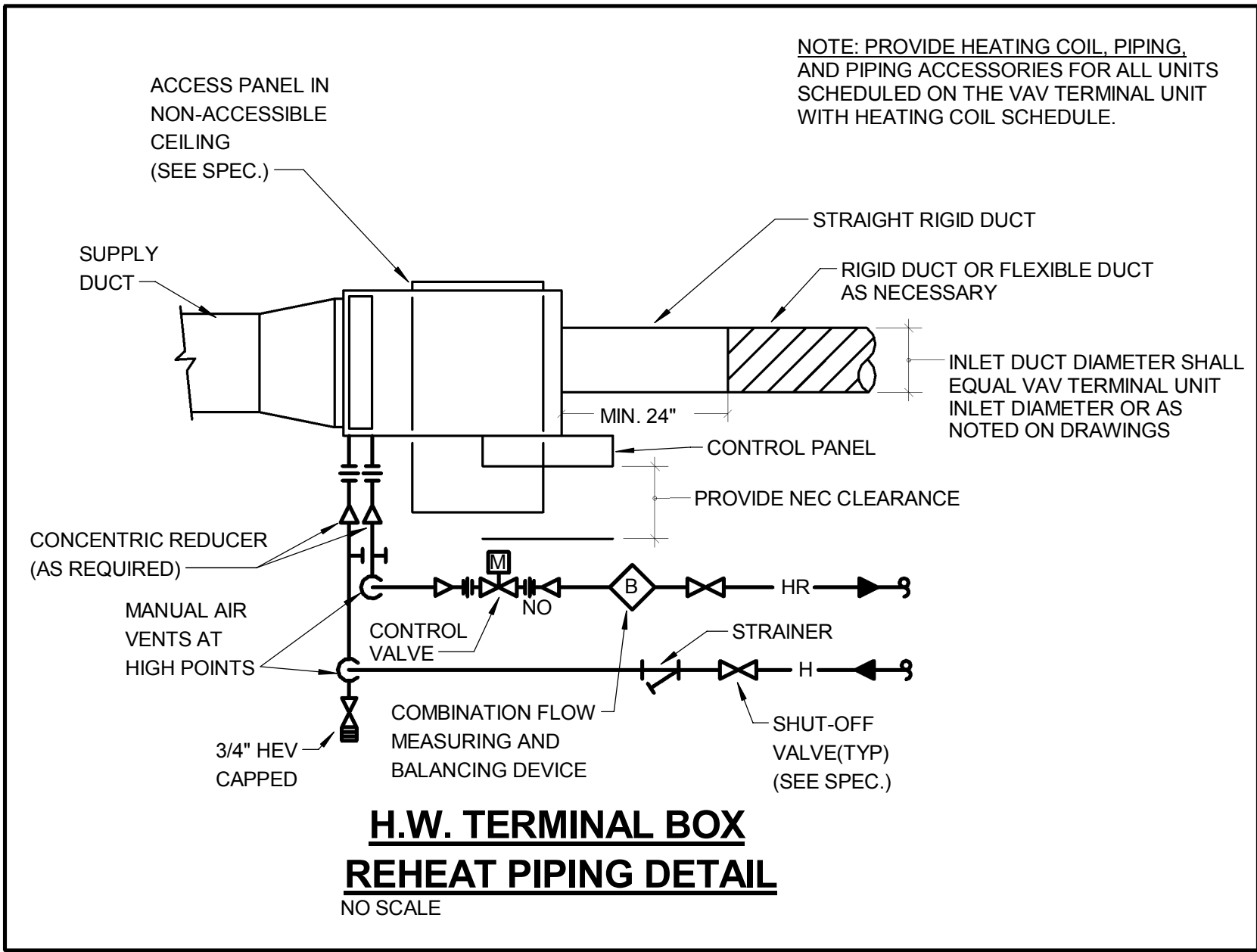
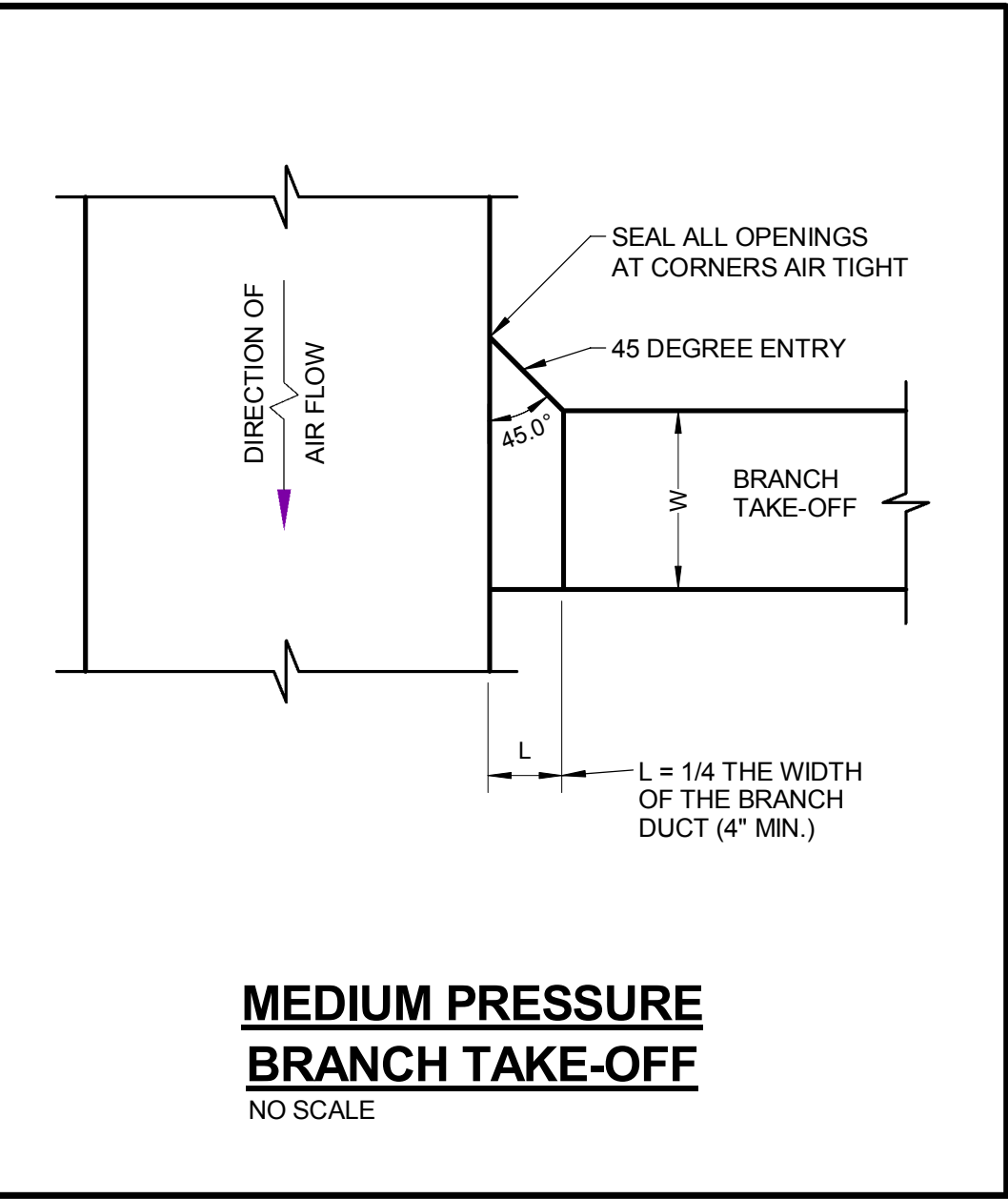
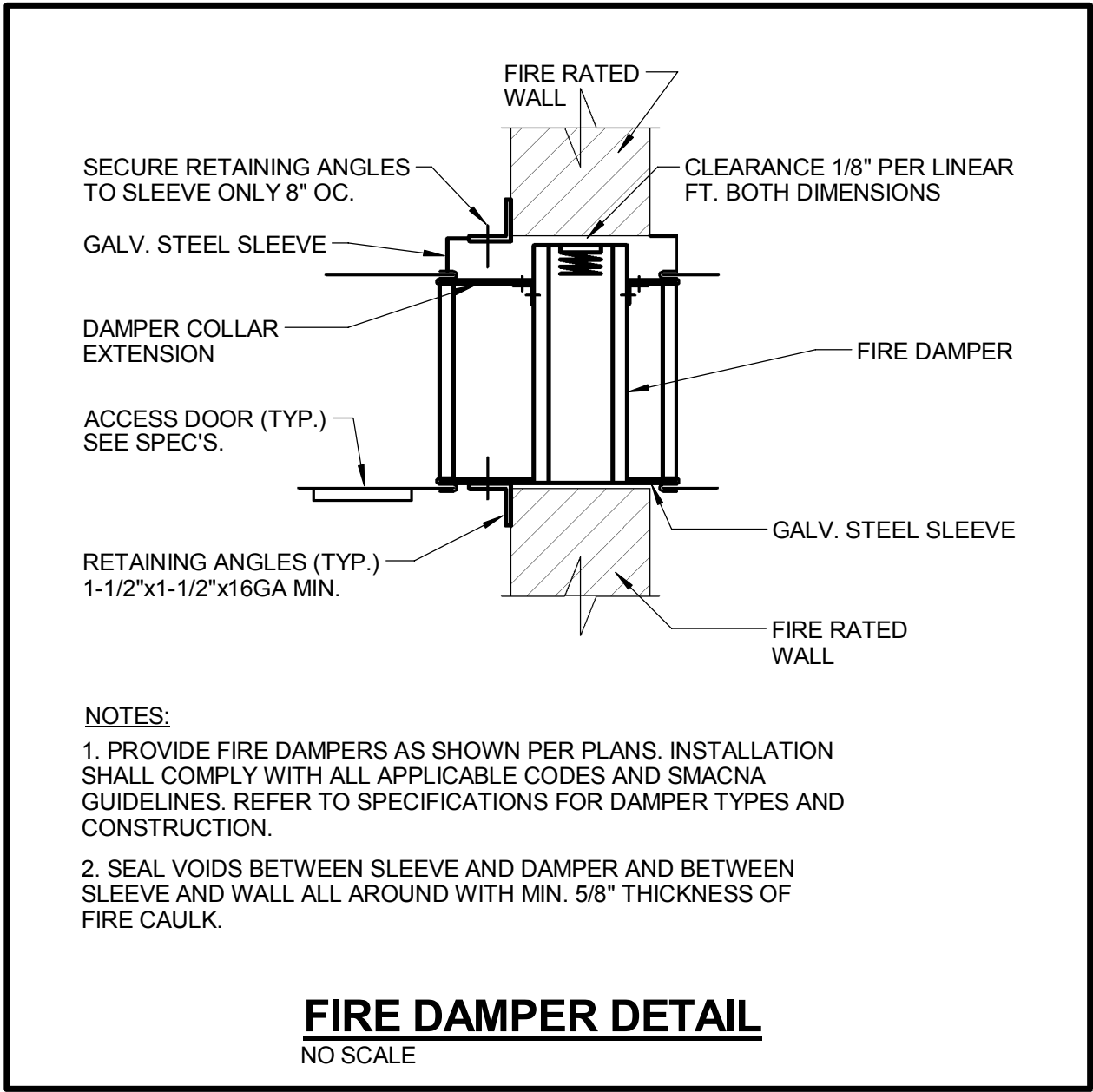
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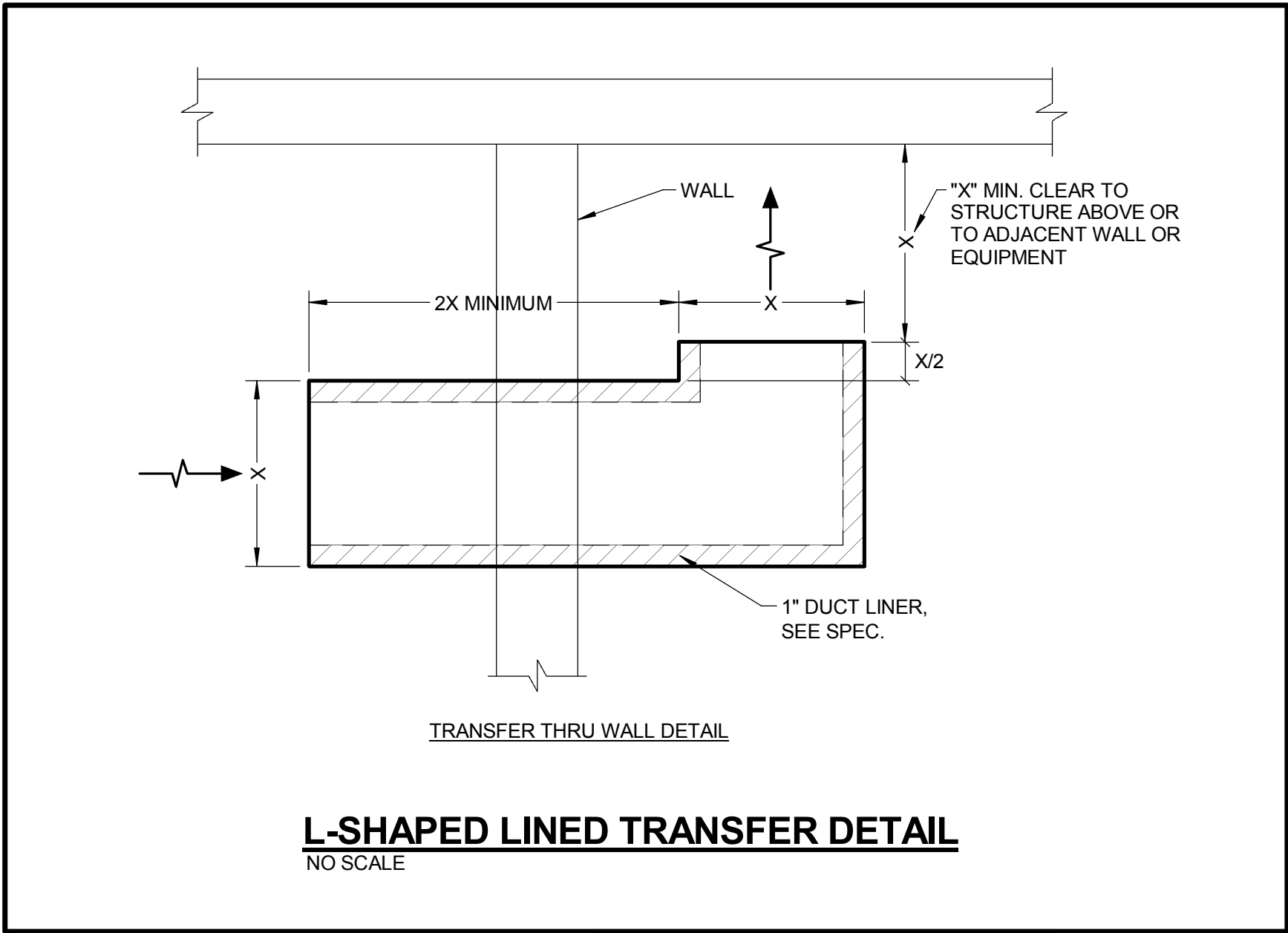
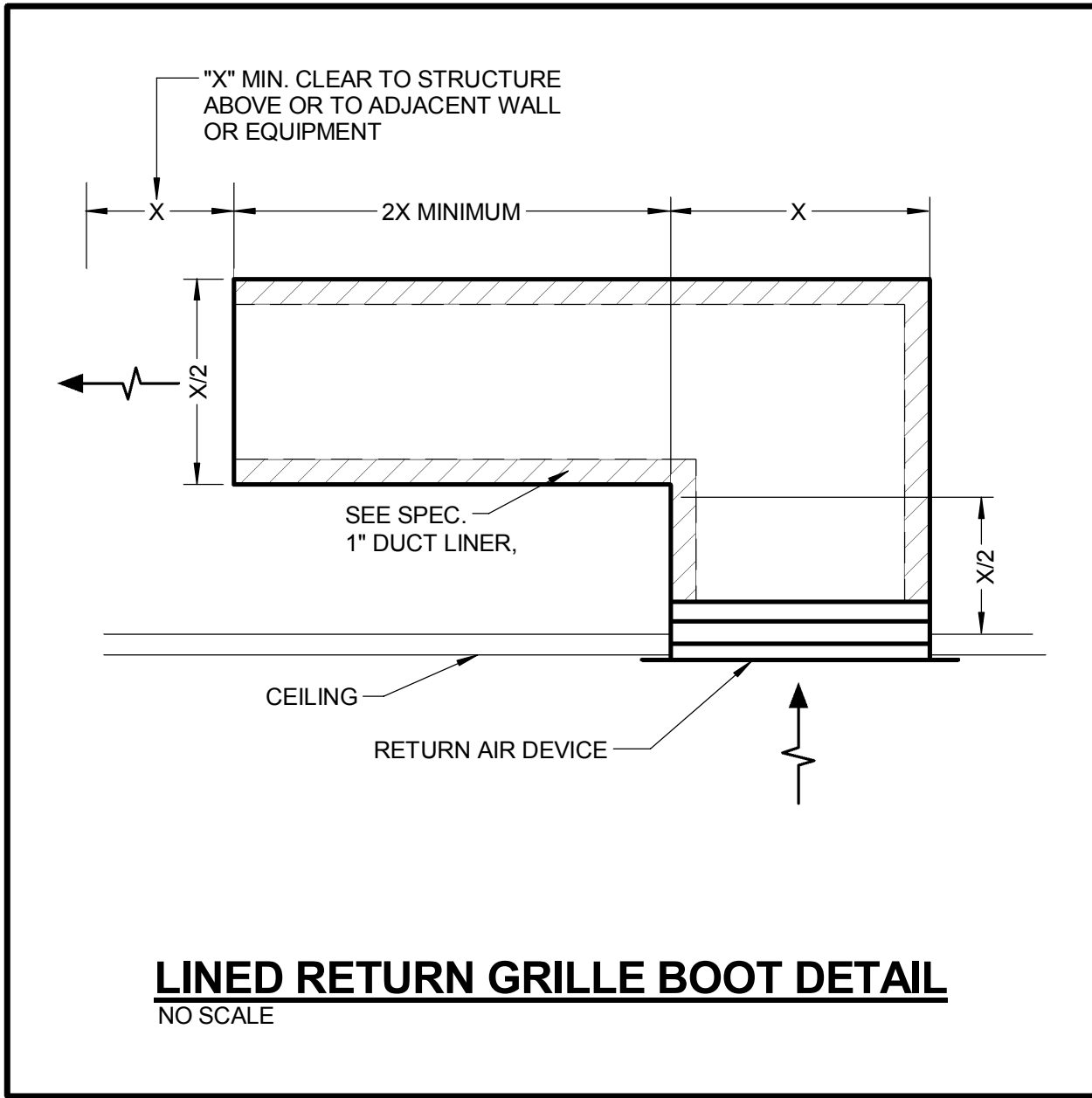
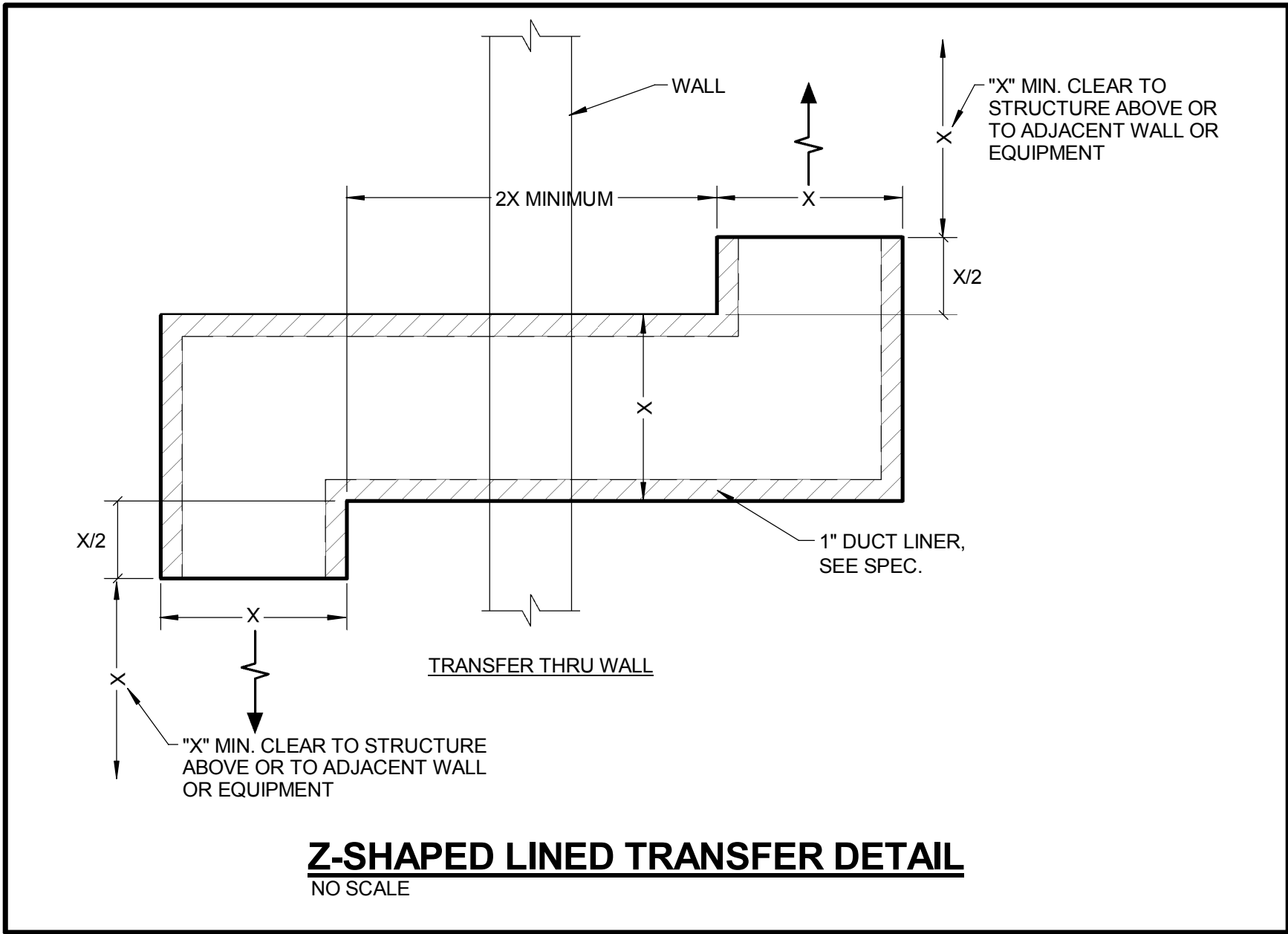
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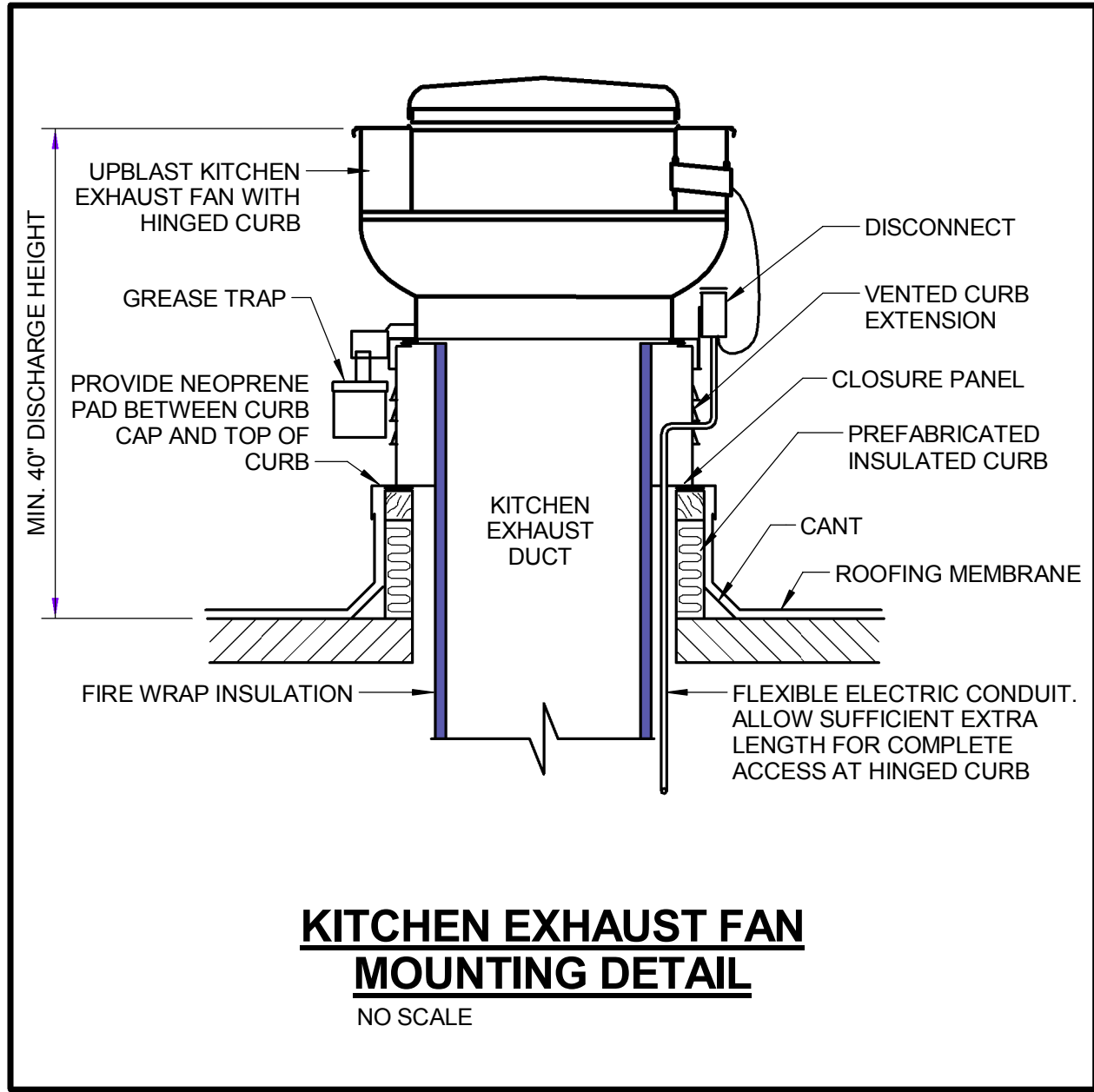
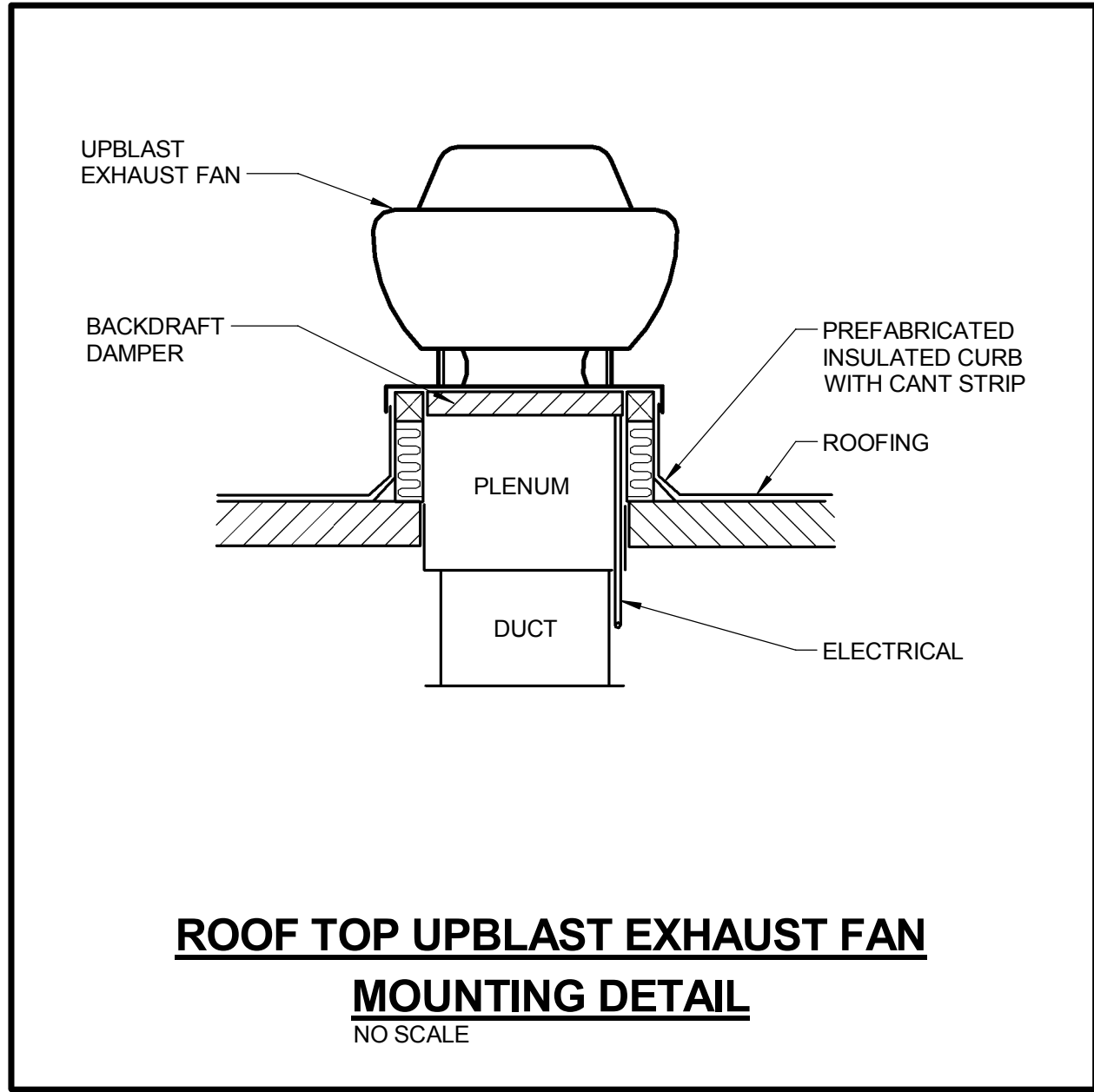
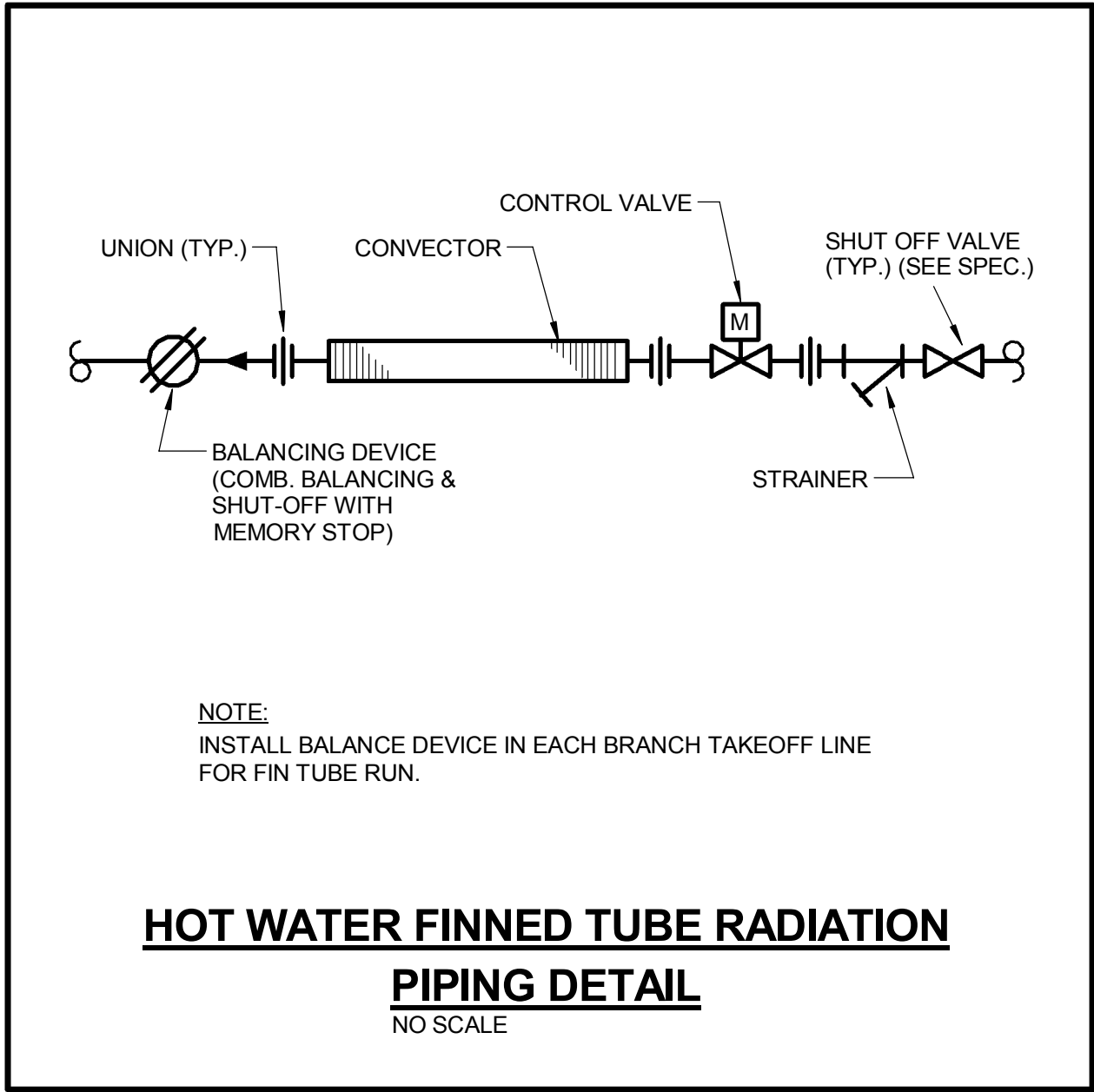
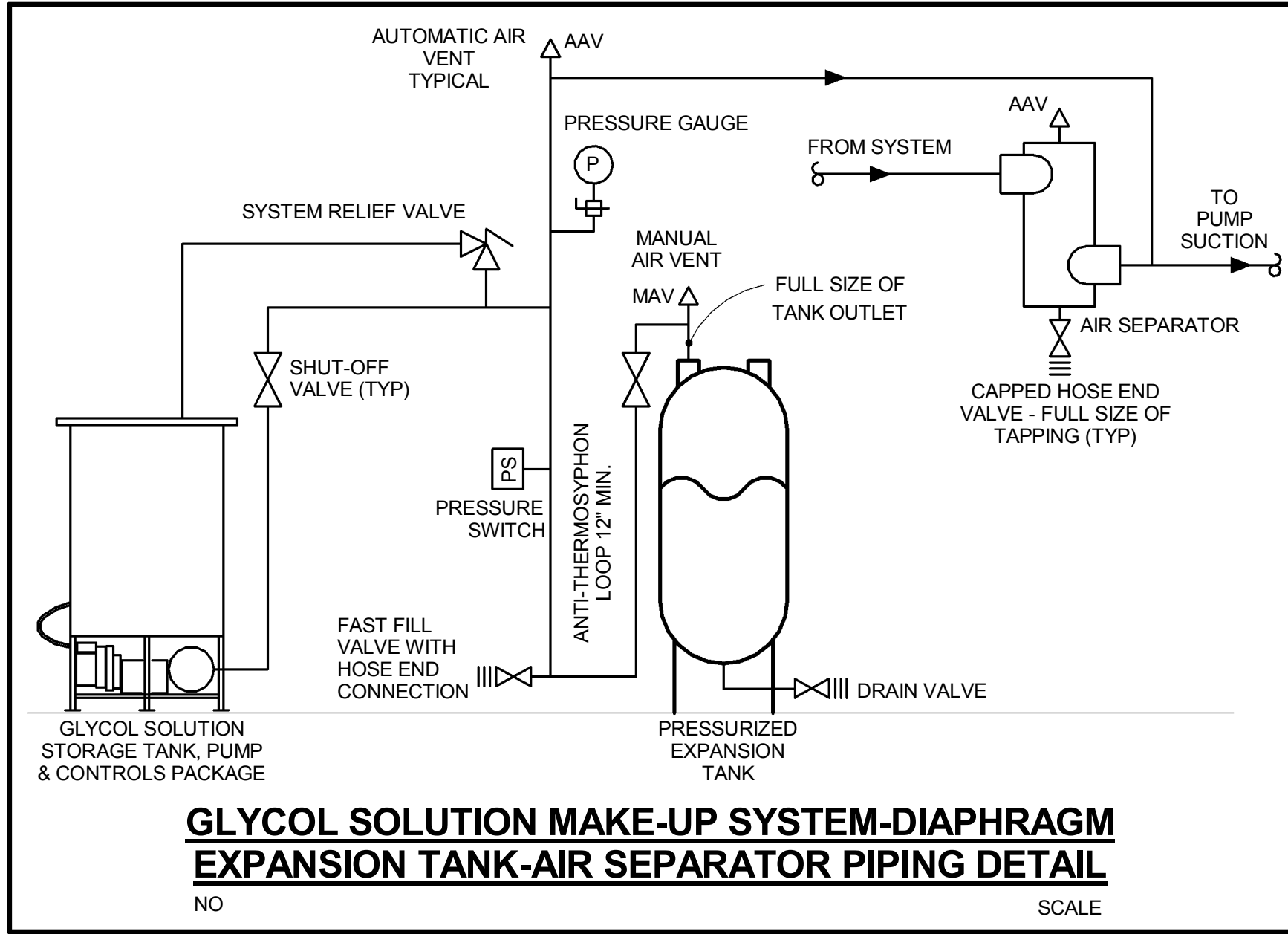
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AIR HANDLING UNIT (AHU) SCHEDULE

SUPPLY FAN											HEAT RECOVERY COILS						COOLING COIL						HEATING COIL						FILTERS															
TAG ID	TAG NO	MANUFACTURER & MODEL NO.	MIN OUTSIDE AIR (CFM)	AIRFLOW	WHEEL		MIN FAN EFF. (%)			SUMMER PERFORMANCE (°F)			WINTER PERFORMANCE (°F)			MAX FACE VELOCITY (FPM)	MAX AIR PD (IN. W.C.)	AIR TEMP. (°F)		CIRCULATING FLUID		MAX WATER PD (FT)	TOTAL MBH	SENSIBLE MBH	ROWS	MAX FACE VELOCITY (FPM)	MAX AIR PD (IN. W.C.)	AIR TEMP. (°F)		CIRCULATING FLUID		MBH	MERV	TYPE	SPD (W.G.) @ 500FPM			NOTES						
					TYPE	DIA.	TSP "W.C." in-wg	ESP "W.C." in-wg	BHP	DRIVE	EAT (°F) DB/WB	LAT (°F) DB/WB	EXH LAT (°F) DB/WB	EAT (°F) DB/WB	LAT (°F) DB/WB			EXH LAT (°F) DB/WB	EAT (°F) DB/WB	LAT (°F) DB/WB	EXH LAT (°F) DB/WB							EAT (°F) DB/WB	LAT (°F) DB/WB	EXH LAT (°F) DB/WB	EAT (°F) DB/WB				LAT (°F) DB/WB	EXH LAT (°F) DB/WB	EAT (°F) DB/WB		LAT (°F) DB/WB	EXH LAT (°F) DB/WB	EAT (°F) DB/WB	LAT (°F) DB/WB	EXH LAT (°F) DB/WB	INITIAL
AHU	1	TRANE CSAA SIZE 66	16000 CFM	32000 CFM	PLENUM	(4) 20"	6.85 in-wg	4.00 in-wg	57.25	DIRECT	60	0.75 in-wg	95/78	85.6/75.6	86/66.7	4/0	37.7/24.3	38.7/30.3	500 FPM	1.00 in-wg	80/67	53.5/53	210 GPM	42 °F	58 °F	10	1,655.2	949.8	8	750 FPM	0.25 in-wg	36 °F	75 °F	68 GPM	140 °F	100 °F	2	1,346.5	14	4" CARTRIDGE	0.50 in-wg	1.50 in-wg	1.25 in-wg	1 to 12
AHU	2	TRANE CSAA SIZE 66	16000 CFM	32000 CFM	PLENUM	(4) 20"	6.85 in-wg	4.00 in-wg	57.25	DIRECT	60	0.75 in-wg	95/78	85.6/75.6	86/66.7	4/0	37.7/24.3	38.7/30.3	500 FPM	1.00 in-wg	80/67	53.5/53	210 GPM	42 °F	58 °F	10	1,655.2	949.8	8	750 FPM	0.25 in-wg	36 °F	75 °F	68 GPM	140 °F	100 °F	2	1,346.5	14	4" CARTRIDGE	0.50 in-wg	1.50 in-wg	1.25 in-wg	1 to 12
AHU	3	TRANE CSAA SIZE 06	2800 CFM	2800 CFM	PLENUM	15"	5.44 in-wg	2.00 in-wg	3.46	DIRECT	65	0.75 in-wg	-	-	-	-	-	-	500 FPM	1.00 in-wg	97/76	50.5/50	30 GPM	42 °F	58 °F	10	240.8	142.8	6	750 FPM	0.25 in-wg	0 °F	75 °F	12 GPM	140 °F	100 °F	2	227.7	14	4" CARTRIDGE	0.50 in-wg	1.50 in-wg	1.25 in-wg	1 to 10
AHU	4	TRANE CSAA SIZE 06	2800 CFM	2800 CFM	PLENUM	15"	5.44 in-wg	2.00 in-wg	3.46	DIRECT	65	0.75 in-wg	-	-	-	-	-	-	500 FPM	1.00 in-wg	97/76	50.5/50	30 GPM	42 °F	58 °F	10	240.8	142.8	6	750 FPM	0.25 in-wg	0 °F	75 °F	12 GPM	140 °F	100 °F	2	227.7	14	4" CARTRIDGE	0.50 in-wg	1.50 in-wg	1.25 in-wg	1 to 10
AHU	5	TRANE UCCAG SIZE 10	0 CFM	5000 CFM	PLENUM	-	2.10 in-wg	1.50 in-wg	3.15	DIRECT	50	0.00 in-wg	-	-	-	-	-	-	550 FPM	0.75 in-wg	85/60	60/50	37 GPM	56 °F	63 °F	10	136.56	136.6	6	0 FPM	0.00 in-wg	0 °F	HEATING COIL NOT REQUIRED	0 °F	-	-	8	2" THROW AWAY	0.25 in-wg	1.50 in-wg	1.25 in-wg	1 to 10		
PLAN DESIGNATION: X 1 TAG ID TAG NUMBER																																												
NOTES: 1. PROVIDE TRANE PERFORMANCE CLIMATE CHANGER AIR HANDLING UNITS WITH SIZES, CAPACITIES AND CONFIGURATIONS AS SCHEDULED. 2. 2" FOAM INJECTED R-13 INSULATION. 3. AIR LEAKAGE LESS THAN 1% AND L240 DEFLECTION AT +/- 8" W.G. PRESSURE. 4. COOLING COILS WITH STAINLESS STEEL DRAIN PAN COIL HEADERS AND CASING. 5. PROVIDE SERVICE PANELS FOR COIL ACCESS, REMOVAL AND MAINTENANCE. 6. ACCESS DOORS SHALL BE AS SHOWN ON MECHANICAL DRAWINGS. 7. UNIT TO BE COMPLETE THERMAL BREAK CONSTRUCTION INCLUDING ALL ACCESS DOORS. 8. UNIT MOUNTED RUSKIN AMCA CERTIFIED LOW LEAK DAMPERS. 9. VFD'S ARE WALL MOUNTED. PROVIDE FACTORY MOTORS WITH SHAFT GROUNDING RING WIRED TO A JUNCTION BOX WITH TERMINALS FOR CONNECTION TO VFD. AT CONTRACTOR'S OPTION, PROVIDE FACTORY MOUNTED SUPPLY FAN VFD WITH SHAFT GROUNDING RING AND FACTORY INVERTER BALANCE TESTING. 10. SOUND DATA SHALL NOT EXCEED SPECIFIED VALUES AND SHALL BE AHR260 CERTIFIED FOR THE COMPLETELY ASSEMBLED UNIT. AMCA BARE FAN SOUND DATA NOT ACCEPTABLE. 11. UNIT SHALL BE SHIPPED IN SECTIONS TO FIT THROUGH A FLOOR SLAB OPENING 7'-4" WIDE X 16'-0" LONG. 12. PROVIDE MARINE GRADE LIGHT FIXTURES AND LIGHT SWITCHES AT ALL ACCESS SECTIONS AND ONE RECEPTACLE ON EXTERIOR ACCESS SIDE. SEE ELECTRICAL DRAWINGS FOR 120V POWER. HEAT RECOVERY COIL SHALL BE 8-ROW, 54" HIGH BY 130" LONG, 16,000-CFM, 110-GPM.																																												

SPLIT SYSTEM FAN COIL AND AIR-COOLED CONDENSING UNIT (FCU) (ACCU) SCHEDULE

TAG ID	TAG NUMBER	MANUFACTURER & MODEL NO.	ARRANGEMENT	SERVICE	AIRFLOW	AMBIENT TEMP (°F)	SEER	NET CAPACITY (MBH)	NOMINAL CAPACITY (TONS)	REFRIGERANT TYPE	RS/RL SIZES (IN.)	NOTES
FCU	1	TRANE 4MYW5624A1/4TYK6524A1	WALL MOUNTED	DATA CLOSET	590	95	16	24	2-TON	R410A	1/2" / 1/4"	1, 2
FCU	2	TRANE 4MYW5624A1/4TYK6524A1	WALL MOUNTED	DATA CLOSET	590	95	16	24	2-TON	R410A	1/2" / 1/4"	1, 2
FCU	3	TRANE 4MYW5624A1/4TYK6524A1	WALL MOUNTED	DATA CLOSET	590	95	16	24	2-TON	R410A	1/2" / 1/4"	1, 2, 3
FCU	4	TRANE 4MYW5624A1/4TYK6524A1	WALL MOUNTED	DATA CLOSET	590	95	16	24	2-TON	R410A	1/2" / 1/4"	1, 2, 3
FCU	5A	TRANE 4MYW5624A1/4TXM6542A1	WALL MOUNTED	MDF/IT WORK ROOM	590	95	16	24	2-TON	R410A	3/8" / 5/8"	1, 2, 4
FCU	5B	TRANE 4MYW5624A1/4TXM6542A1	WALL MOUNTED	MDF/IT WORK ROOM	590	95	16	24	2-TON	R410A	3/8" / 5/8"	1, 2, 4
FCU	5C	TRANE 4MYW5624A1/4TXM6542A1	WALL MOUNTED	MDF/IT WORK ROOM	590	95	16	24	2-TON	R410A	3/8" / 5/8"	1, 2, 4
PLAN DESIGNATION: X TAG ID 1 TAG NUMBER NOTES: 1. PROVIDE WALL MOUNTING KIT AND SPACE TEMPERATURE CONTROLS FOR FAN COIL UNIT. 2. PROVIDE REFRIGERANT PIPING AS REQUIRED BY MANUFACTURE. VERIFY SIZE AND EXACT LENGTH OF PIPING. 3. PROVIDE ROOF CURB RAIL SUPPORTS FOR CONDENSING UNITS ON ROOF. PROVIDE LOW AMBIENT CONTROL DOWN TO 0°F. 4. SINGLE CONDENSING UNIT WITH MULTIPLE ZONES COOLING FAN COIL UNITS. ⚠												

AIR DEVICE SCHEDULE SUPPLY

TAG ID	MANUFACTURE & MODEL	TYPE	NECK SIZE	ACCESSORIES	FINISH	MATERIAL	MAX SP DROP	MAX NC	100 FPM THROW	MAX FLOW	NOTES
1	PRICE SPD	12x12	5" ROUND	PC	BWE	ST	0.1	20	4 FT.	80	
2	PRICE SPD	12x12	6" ROUND	PC	BWE	ST	0.1	20	4 FT.	120	
3	PRICE SPD	12x12	8" ROUND	PC	BWE	ST	0.1	20	5 FT.	270	
4	PRICE SPD	24x24 LAY-IN	6" ROUND	PC	BWE	ST	0.1	20	3 FT.	120	
5	PRICE SPD	24x24 LAY-IN	8" ROUND	PC	BWE	ST	0.1	20	5 FT.	250	
6	PRICE SPD	24x24 LAY-IN	10" ROUND	PC	BWE	ST	0.1	20	6 FT.	430	
7	PRICE SPD	24x24 LAY-IN	12" ROUND	PC	BWE	ST	0.1	20	8 FT.	630	
8	PRICE SPD	24x24 LAY-IN	14" ROUND	PC	BWE	ST	0.1	20	10 FT.	850	
9	PRICE SPD	24x24 LAY-IN	15" ROUND	PC	BWE	ST	0.1	20	11 FT.	980	
10	PRICE SDB1100	48"L (1) 1" SLOTS	5" ROUND	AP	BWE	ST/AL	0.15	22	12 FT.	120	
11	PRICE SDB1100	48"L (2) 1" SLOTS	7" ROUND	AP	BWE	ST/AL	0.11	23	17 FT.	220	
12	PRICE SDB1100	48"L (3) 1" SLOTS	10" ROUND	AP	BWE	ST/AL	0.08	25	18 FT.	260	
13	PRICE SDB1100	48"L (4) 1" SLOTS	10" ROUND	AP	BWE	ST/AL	0.1	25	23 FT.	400	
14	PRICE 520D	3/4" SPACING, DBL. DEFL.	SEE PLAN	VC,PC	BWE	ST	0.1	20	-	-	SIDEWALL
15	PRICE 620D	3/4" SPACING, DBL. DEFL.	SEE PLAN	VC,PC	BWE	AL	0.1	20	-	-	SIDEWALL
16	PRICE LBMH26C	EXTRA HEAVY MANDREL PENCIL PROOF 15 DEG. DEFL.	SEE PLAN	VC	CC	AL	0.05	20	13 FT.	-	FLOOR
17	PRICE FRFDA	FLUSH FACE RADIAL DIFFUSER	10" ROUND	PC,RC	BWE	AL	0.10	25	5	400 CFM	
PLAN DESIGNATION CFM NECK SIZE (IF REQ'D) ACCESSORIES RC - REMOVABLE CORE VC - VOLUME CONTROL PC - PATTERN CONTROL AP - AIR PLENUM (LINED) EQ - EQUALIZING GRID FINISH BWE - BAKED WHITE ENAMEL STD - STANDARD ENL - BAKED ENAMEL COLOR SELECTED BY ARCHITECT PGE - PRIME GRAY MATERIAL ST - STEEL AL - ALUMINUM SS - STAINLESS STEEL PL - PLASTIC SP - SPECIAL NOTES 1. 2-WAY AIRFLOW PATTERN, UNLESS NOTED OTHERWISE BY FLOW ARROWS. 2. 4-WAY AIRFLOW PATTERN, UNLESS NOTED OTHERWISE BY FLOW ARROWS. 3. PROVIDE LINED SOUND BOOT FOR RETURN AIR DEVICES. SEE DETAIL. 4. LISTED THROW IS FOR 0° DEFLECTION. 5. PROVIDE DIRECTIONAL BLADES FOR 45° DEFLECTION. 6. PROVIDE ALUMINUM DAMPER. 7. PROVIDE HEAVY DUTY FLOOR MOUNTING FRAME. 8. PROVIDE FRAME AND BORDER WITH CONCEALED FASTENING. 9. PROVIDE CONCEALED BORDER. 10. PROVIDE WITH FACE OPERATED VOLUME DAMPER.											

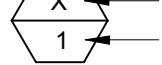
AIR DEVICE SCHEDULE RETURN

TAG ID	MANUFACTURER & MODEL	TYPE	NECK SIZE	ACCESSORIES	FINISH	MATERIAL	MAX SP DROP	MAX NC	MAX FLOW	NOTES
A	PRICE 81	EGGCRATE	22x10	-	BWE	AL	0.10	20	1,100	1
B	PRICE 81	EGGCRATE	22x22	-	BWE	AL	0.10	20	2,400	1
C	PRICE 530D	3/4" 45 DEG. BLADES	SEE PLAN	VC	BWE	ST	0.10	20	-	
D	PRICE 630D	3/4" 45 DEG. BLADES	SEE PLAN	VC	BWE	AL	0.10	20	-	
E	PRICE 530D	3/4" 45 DEG. BLADES	SEE PLAN	VC	BWE	ST	0.10	20	-	SIDEWALL
F	PRICE 530D	3/4" 45 DEG. BLADES	SEE PLAN	VC	BWE	AL	0.10	20	-	SIDEWALL
H1	GREENHECK FGR	ROOF EXHAUST HOOD	24x24	BD,RFC	STD	AL	0.15	-	1200	ROOF HOOD
H2	GREENHECK FGR	RAIN EXHAUST HOOD	30x30	RFC	STD	AL	0.15	-	2000	RAIN HOOD
PLAN DESIGNATION CPM NECK SIZE (IF REDD) FINISH RC - REMOVABLE CORE VC - VOLUME CONTROL PC - PATTERN CONTROL AP - AIR PLENUM (LINED) EQ - EQUALIZING GRID RFC - ROOF CURB BD - BACKDRAFT DAMPER ACCESSORIES MATERIAL NOTES										

FAN (**) SCHEDULE

TAG ID	TAG NUMBER	MANUFACTURER & MODEL NO.	SERVICE	LOCATION	AIRFLOW CFM	WHEEL		STATIC PRESSURE (W'C)	BHP	DRIVE	ACCESSORIES	NOTES
						TYPE	DIAMETER					
VF	1	GREENHECK SQ-140-A	MECH RM VENTILATION	LEVEL 0	2,000	INLINE	14"	1.5 in-wg	0.99	DIRECT	DS	
VF	2	GREENHECK SP-A700	ELEV. CONTROL RM VENTILATION	LEVEL 01	400	CEILING	7"	0.8 in-wg	0.18	DIRECT	BD,DS,GRILLE	
VF	3	GREENHECK SP-A700	AV EQUIP 106D VENTILATION	LEVEL 01	400	CEILING	7"	0.8 in-wg	0.18	DIRECT	BD,DS,GRILLE	
EF	1	GREENHECK CUBE 180HP	TOILET EXHAUST	ROOF	3,000	BI	18"	2.0 in-wg	1.8	BELT	BD,DS,BS,PC	
EF	2	GREENHECK LBP-54	BLDG. RELIEF	ROOF	31,000	BI	54"	0.5 in-wg	6.72	BELT	BD,DS,BS,PC	△
EF	3	GREENHECK CUBE 240XP	LAB EXHAUST	ROOF	2,270	BI	24"	3.0 in-wg	2.1	BELT	BD,DS,BS,PC	
EF	4	GREENHECK CUE 141HP-VG	VENTED CABINET EXH.	ROOF	700	BI	14"	1.5 in-wg	0.34	DIRECT	BD,DS,BS,PC	
HEF	1	STROBIC M48 1x3	LAB EXHAUST	ROOF	28,000	MIXED FLOW	48"	5.0 in-wg	22	DIRECT	SEE NOTES	
KEF	1	GREENHECK CUE 141HP-VG	KITCHEN HOOD	ROOF	1,200	BI	14"	1.5 in-wg	0.60	DIRECT	DS,SD,PC	2
PLAN DESIGNATION: TAG ID TAG NUMBER ACCESSORIES BD - BACK DRAFT DAMPER BG - BELT GUARD BS - BIRDSCREEN DS - DISCONNECT SWITCH PC - PREFABRICATED CURB FG - FAN GUARD SD - SCROLL DRAIN WPH - WEATHERPROOF HOUSING TYPE FC - FORWARD CURVE BI - BACK INCLINE AF - AIR FOIL PR - PROPELLER NOTES: 1. FAN SYSTEM INCLUDES (3) THREE MIXED FLOW LAB FANS ON A COMMON PLENUM WITH BYPASS DAMPERS AND RAIN HOOD. PROVIDE (2) TWO 48" HIGH BY 84" LONG HEAT RECOVERY COILS. SUMMER ENTERING AIR-15°F DB/51°F WB. WINTER ENTERING AIR-15°F DB/56°F WB, 14,000-CFM, 8-ROW, 110-GPM EACH. FANS SHALL INCLUDE STACK SILENCER NOZZLE. SOUND DATA SHALL NOT EXCEED SPECIFIED VALUES AND SHALL BE AHR260 CERTIFIED FOR THE COMPLETELY ASSEMBLED UNIT. AMCA BARE FAN SOUND DATA NOT ACCEPTABLE. 2. KITCHEN EXHAUST FAN SHALL INCLUDE VENTED EXTENDED ROOF CURB AND GREASE DRAIN/TRAP.												

PUMP (**) SCHEDULE

TAG ID	TAG NUMBER	MANUFACTURER & MODEL NO.	SERVICE	LOCATION	PUMP TYPE	SIZE	PUMP INLET	PUMP DISCHARGE	GPM	HEAD FT.	NPSH FT.	RPM	MIN EFF.	NOTES
CP	1	BELL & GOSSETT e-80SC	CHILLED WATER	LEVEL 0 MECH RM	IN-LINE	6x6x11B	6"	6"	520	75	6.9	1750	72%	1, 2
CP	2	BELL & GOSSETT e-80SC	CHILLED WATER	LEVEL 0 MECH RM	IN-LINE	6x6x11B	6"	6"	520	75	6.9	1750	72%	1, 2
CP	3	BELL & GOSSETT PL-36	CHILLED WATER	LEVEL 01	IN-LINE	1.5" AB	1.5"	1.5"	40	35	3.1	1725	63%	2
CP	4A	BELL & GOSSETT PL-36	CHILLED WATER	LEVEL 04	IN-LINE	PL-36	1.5"	1.5"	13.1	25	-	3300	-	-
CP	4B	BELL & GOSSETT PL-36	CHILLED WATER	LEVEL 04	IN-LINE	PL-36	1.5"	1.5"	13.1	25	-	3300	-	4
FZP	1	BELL & GOSSETT SERIES 60	FREEZE PROTECTION	LEVEL 0 MECH RM	IN-LINE	2x2x25	2	2	50	20	5.2	1750	60%	-
FZP	2	BELL & GOSSETT SERIES 60	FREEZE PROTECTION	LEVEL 0 MECH RM	IN-LINE	2x2x25	2	2	50	20	5.2	1750	60%	-
FZP	3	BELL & GOSSETT PL-36	FREEZE PROTECTION	LEVEL 0 MECH RM	IN-LINE	PL-36	1.25"	1.25"	10	20	-	3300	-	-
FZP	4	BELL & GOSSETT PL-36	FREEZE PROTECTION	LEVEL 0 MECH RM	IN-LINE	PL-36	1.25"	1.25"	10	20	-	3300	-	-
HP	1	BELL & GOSSETT e-80SC	HEATING WATER	LEVEL 0 MECH RM	IN-LINE	4x4x11B	4"	4"	350	65	4.0	1750	71%	1, 2
HP	2	BELL & GOSSETT e-80SC	HEATING WATER	LEVEL 0 MECH RM	IN-LINE	4x4x11B	4"	4"	350	65	4.0	1750	71%	1, 2
HRP	1	BELL & GOSSETT e-80SC	HEAT RECOVERY	LEVEL 0 MECH RM	IN-LINE	3x3x7C	3"	3"	220	95	10.2	3550	62%	1, 2, 3
HRP	2	BELL & GOSSETT e-80SC	HEAT RECOVERY	LEVEL 0 MECH RM	IN-LINE	3x3x7C	3"	3"	220	95	10.2	3550	62%	1, 2, 3
PCP	1A	BELL & GOSSETT PL-55	PROCESS CHILLED WATER	LEVEL 04	IN-LINE	PL-55	1.5"	1.5"	25	30	-	3250	-	4
PCP	1B	BELL & GOSSETT PL-55	PROCESS CHILLED WATER	LEVEL 04	IN-LINE	PL-55	1.5"	1.5"	25	30	-	3250	-	4
PLAN DESIGNATION:		TAG ID:	NOTES:											
		TAG ID	1. BASE BID SHALL INCLUDE WALL MOUNTING VFD. SEE SPECIFICATIONS AT CONTRACTOR'S OPTION. PROVIDE PUMP WITH INTEGRATED MOTOR-VEH AND CONTROLS.											
		TAG NUMBER	2. PROVIDE BASE FLANGED SUPPORT FOR FLOOR MOUNTING.											
			3. HEAT RECOVERY SYSTEM INCLUDE 30% PROPYLENE GLYCOL.											
			4. PUMPS ARE CONNECTED IN SERIES.											

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SUPPLY AIR VALVE WITH HOT WATER (SAV) SCHEDULE																
TAG ID	TAG NO	MANUFACTURER & MODEL NO.	INLET SIZE (INCHES)	COOLING CFM				HEATING COIL								NOTES
				MIN	MAX	MAX NC	CFM	AIR TEMP. (F°)		WATER TEMP. (F°)		MAX WATER PD (FT)	COIL CAPACITY (MBH)	MAX AIR PD (IN W.G.)		
								EAT	LAT	GPM	EWT				LWT	
SAV	1C1	PHOENIX MAV	24x12	540 CFM	1800 CFM	30	1800 CFM	78.5	4.5	140	100	2	55.7	0.35	1 to 8	
SAV	1C2	PHOENIX MAV	12"	115 CFM	380 CFM	25	380 CFM	87.8	2.0	140	100	2	25.8	0.35	1 to 8	
SAV	1C3	PHOENIX MAV	8"	115 CFM	380 CFM	25	380 CFM	86.9	1.5	140	100	2	15.2	0.35	1 to 8	
WTA LEVEL 01: 3																
SAV	201	PHOENIX MAV	14"	420 CFM	1400 CFM	25	1400 CFM	55	79.8	2.9	140	100	2	38.2	0.35	1 to 7
SAV	202	PHOENIX MAV	8"	115 CFM	370 CFM	25	370 CFM	55	79.5	0.8	140	100	2	10.0	0.35	1 to 7
SAV	203	PHOENIX MAV	8"	65 CFM	160 CFM	25	160 CFM	50	72.0	0.5	140	100	2	3.0	0.35	1 to 7
SAV	204	PHOENIX MAV	14"	420 CFM	1400 CFM	25	1400 CFM	55	78.8	2.8	140	100	2	36.6	0.35	1 to 7
SAV	205	PHOENIX MAV	8"	95 CFM	300 CFM	25	300 CFM	55	79.0	0.6	140	100	2	7.9	0.35	1 to 7
SAV	206	PHOENIX MAV	12"	605 CFM	1500 CFM	25	1500 CFM	50	78.5	2.9	140	100	2	38.7	0.35	1 to 7
SAV	207	PHOENIX MAV	8"	120 CFM	300 CFM	25	300 CFM	55	77.9	0.6	140	100	2	7.6	0.35	1 to 7
SAV	208	PHOENIX MAV	12"	600 CFM	1200 CFM	25	1200 CFM	50	77.5	2.2	140	100	2	29.8	0.35	1 to 7
SAV	209	PHOENIX MAV	8"	65 CFM	160 CFM	25	160 CFM	55	72.0	0.5	140	100	2	3.0	0.35	1 to 7
SAV	210	PHOENIX MAV	8"	120 CFM	400 CFM	25	400 CFM	55	82.2	0.9	140	100	2	12.0	0.35	1 to 7
SAV	211	PHOENIX MAV	8"	90 CFM	300 CFM	25	300 CFM	50	84.2	0.7	140	100	2	9.7	0.35	1 to 7
SAV	212	PHOENIX MAV	24x12	660 CFM	2200 CFM	30	2200 CFM	50	86.9	6.1	140	100	2	76.1	0.35	1 to 7
WTA LEVEL 02: 12																
SAV	301	PHOENIX MAV	24x12	495 CFM	1650 CFM	30	1650 CFM	50	79.3	3.3	140	100	2	44.1	0.35	1 to 7
SAV	302	PHOENIX MAV	10"	160 CFM	520 CFM	25	520 CFM	55	78.7	1.0	140	100	2	13.6	0.35	1 to 7
SAV	303	PHOENIX MAV	24x12	495 CFM	1650 CFM	30	1650 CFM	50	78.2	3.15	140	100	2	42.2	0.35	1 to 7
SAV	304	PHOENIX MAV	14"	480 CFM	1200 CFM	25	1200 CFM	55	77.8	2.25	140	100	2	30.1	0.35	1 to 7
SAV	305	PHOENIX MAV	8"	110 CFM	360 CFM	25	360 CFM	55	78.7	0.7	140	100	2	9.4	0.35	1 to 7
SAV	306	PHOENIX MAV	14"	610 CFM	1200 CFM	25	1200 CFM	55	79.2	2.4	140	100	2	31.9	0.35	1 to 7
SAV	307	PHOENIX MAV	8"	110 CFM	360 CFM	25	360 CFM	50	78.0	0.7	140	100	2	9.1	0.35	1 to 7
SAV	308	PHOENIX MAV	8"	110 CFM	360 CFM	25	360 CFM	50	78.6	0.7	140	100	2	9.4	0.35	1 to 7
SAV	309	PHOENIX MAV	8"	100 CFM	380 CFM	25	380 CFM	50	86.9	1.0	140	100	2	13.2	0.35	1 to 7
WTA LEVEL 03: 9																
SAV	401	PHOENIX MAV	24x12	540 CFM	1800 CFM	30	1800 CFM	55	79.7	3.7	140	100	2	49.0	0.35	1 to 7
SAV	402	PHOENIX MAV	10"	165 CFM	550 CFM	25	550 CFM	55	79.4	1.1	140	100	2	14.7	0.35	1 to 7
SAV	403	PHOENIX MAV	24x12	540 CFM	1800 CFM	30	1800 CFM	55	78.6	3.5	140	100	2	46.8	0.35	1 to 7
SAV	404	PHOENIX MAV	12"	500 CFM	1000 CFM	25	1000 CFM	55	78.8	2.0	140	100	2	26.2	0.35	1 to 7
SAV	405	PHOENIX MAV	12"	600 CFM	1000 CFM	25	1000 CFM	50	80.0	2.1	140	100	2	27.5	0.35	1 to 7
SAV	406	PHOENIX MAV	8"	120 CFM	240 CFM	25	240 CFM	55	80.9	0.5	140	100	2	6.8	0.35	1 to 7
SAV	407	PHOENIX MAV	12"	700 CFM	1000 CFM	25	1000 CFM	55	82.0	2.2	140	100	2	29.7	0.35	1 to 7
SAV	408	PHOENIX MAV	8"	45 CFM	50 CFM	25	50 CFM	55	78.8	0.5	140	100	2	1.1	0.35	1 to 7
WTA LEVEL 04: 8																
Grand total: 32				10100 CFM	27610 CFM		27610 CFM									
PLAN DESIGNATION: SAV TAG ID 101 FLOOR/TAG NUMBER																
NOTES: 1. HEATING COIL SIZES SHALL INCLUDE 25% ADDITIONAL CAPACITY GREATER THAN LISTED IN ABOVE VALUES AT AIRFLOW AND WATER FLOWS LISTED. 2. PROVIDE AND INSTALL DUCT MOUNTED HEATING COIL. REHEAT COIL SHALL BE 2 ROW MINIMUM. 3. H & HR RUNOUTS TO REHEAT COILS SHALL BE 3/4" UNLESS OTHERWISE NOTED. 4. BOX AIR PRESSURE DROP (APD) INCLUDES COIL APD AT SCHEDULED MAXIMUM AIR FLOW RATE. 5. SUPPLY VALVES SHALL TRACK WITH THE EXHAUST AND HOOD VALVES TO CONTROL SPACE PRESSURE. 6. PROVIDE DISCHARGE SOUND ATTENUATOR. 7. VALVES SHALL BE LOW PRESSURE TYPE WITH OPERATING PRESSURES BETWEEN 0.3" AND 3.0" W.C. 8. ENTERING AIR TEMPERATURE IS 50 DEG. F.																

LABORATORY FUME HOOD / SPACE PRESSURIZATION SYSTEM SCHEDULE																			
ROOM NO.	HOOD EXHAUST VALVE (HEV)					SUPPLY AIR VALVE (SAV)					GENERAL EXHAUST VALVE (GEV)					ROOM OFFSET (CFM)	ROOM PRESSURE		
	MARK	AIRFLOW (CFM)			MARK	AIRFLOW (CFM)			MARK	AIRFLOW (CFM)									
		UNOCCUPIED MIN	OCCUPIED MIN	MAX		UNOCCUPIED MIN	OCCUPIED MIN	MAX		UNOCCUPIED MIN	OCCUPIED MIN	MAX							
191	-	0	0	0	SAV-1C1	540		900	1800	GEV-1C1	540		900	2700	0	-			
191	HEV-1C1	0	0	450											0	-			
191	HEV-1C2	0	0	450											0	-			
191	HEV-1C3	0	0	450											0	-			
191	HEV-1C4	0	450	0											0	-			
191	HEV-1C5	0	0	450											0	-			
191	HEV-1C6	0	0	450											0	-			
183C	-	0	0	0	SAV-1C2	190		280	620	GEV-1C2	190		280	650	0	-			
183B	-	0	0	0	SAV-1C3	115		150	380	GEV-1C3	115		150	440	0	-			
SUBTOTAL		0		270		945		1240	2900		945		1240	2900					
291	HEV-201	0	200	430	SAV-201	200	420	1400	GEV-201	340	360	1110	140	-					
289B	-	0	0	0	SAV-202	240	240	370	GEV-202	130	130	300	110	+					
289A	-	0	0	0	SAV-203	40	65	160	GEV-203	110	135	240	70	-					
283	HEV-204	0	250	700	SAV-204	200	420	1400	GEV-204	340	310	840	140	-					
292	-	0	0	0	SAV-205	60	95	300	GEV-205	130	165	370	70	-					
284	-	0	0	0	SAV-206	240	605	1500	GEV-206	380	745	1640	140	-					
282	-	0	0	0	SAV-207	60	120	300	GEV-207	130	190	370	70	-					
276	HEV-208	0	200	430	SAV-208	200	600	1200	GEV-208	340	540	910	140	-					
274	-	0	0	0	SAV-209	40	65	160	GEV-209	110	135	240	70	-					
272B	-	0	0	0	SAV-210	60	120	400	GEV-210	130	190	500	70	-					
272A	-	0	0	0	SAV-211	100	100	300	GEV-211	200	200	400	100	-					
235	-	0	0	0	SAV-212	660	660	2200	GEV-212	730	730	2270	70	-					
	HEV-301	0	200	430	SAV-301	200	600	1650	GEV-301a	280	480	1300							
391	-	0	0	0					GEV-301b	60	60	60							
SUBTOTAL		0	200	430		200	600	1650		340	540	1360	140	-					
389	HEV-302	0	200	430	SAV-302	60	160	520	GEV-302	130	30	230	70	-					
383	HEV-303	0	200	430	SAV-303	200	495	1650	GEV-303	340	435	1360	140	-					
388	HEV-304	0	250	700	SAV-304	80	480	1200	GEV-304	220	370	640	140	-					
386	HEV-305	0	200	430	SAV-305	60	270	360	GEV-305	130	140	0	70	-					
378	HEV-306	0	250	700	SAV-306	240	610	1200	GEV-306	380	500	640	140	-					
374B	-	0	0	0	SAV-307	240	240	360	GEV-307	130	130	250	110	+					
374A	HEV-308	0	200	430	SAV-308	60	270	360	GEV-308	130	140	0	70	-					
372B/C	-	0	0	0	SAV-309	100	100	380	GEV-309	260	260	540	160	-					
491	HEV-401a	0	250	700	SAV-401	200	540	1800	GEV-401	340	180	540							
SUBTOTAL		0	500	1400		200	540	1800		340	180	540	140	-					
489	-	0	0	0	SAV-402	60	165	550	GEV-402	130	235	620	70	-					
	HEV-403a	0	250	700	SAV-403	200	540	1800	GEV-403	340	180	540							
483	HEV-403b	0	250	700															
SUBTOTAL		0	500	1400		200	540	1800		340	180	540	140	-					
	HEV-404a	0	250	700	SAV-404	200	800	1000		0	0	0							
	HEV-404b	0	250	700															
	HEV-404c	0	250	700															
488	HEV-404d	0	250	700															
SUBTOTAL		0	1000	2800		200	800	1000		0	0	0	140	-					
	HEV-405a	0	250	700	SAV-405	200	600	1000											
	HEV-405b	0	250	700															
	HEV-405c	0	250	700															
	HEV-405d	0	200	430															
	HEV-405e	0	250	700															
	HEV-405f	0	250	700															
480	HEV-405g	0	250	700															
SUBTOTAL		0	1700	4630		200	600	1000		0	0	0	140	-					
478	HEV-406	0	200	430	SAV-406	60	240	240	GEV-406	130	110	0	70	-					
	HEV-407a	0	200	430	SAV-407	700	1000												
	HEV-407b	0	200	430															
	HEV-407c	0	200	430															
	HEV-407d	0	430	430															
	HEV-407e	0	200	430															
472	HEV-407f	0	200	430															
SUBTOTAL		0	1400	3010		200	700	1000		0	0	0	140	-					
475	-	0	0	0	SAV-408	50	50	50	GEV-408	150	150	150	100	-					

VARIABLE AIR VOLUME BOX WITH HOT WATER (VAV) SCHEDULE																		
#	TAG NO	MANUFACTURER & MODEL NO.	INLET SIZE (INCHES)	COOLING CFM			DISCH. MAX NO.	CFM	AIR TEMP. (F°)			HEATING COIL WATER TEMP. (F°)			MAX WATER FLOW (GPM)	COIL CAPACITY (MBH)	MAX AIR PD (IN W.G.)	NOTES
				MIN	MAX				EAT	LAT	GPM	EWT	LWT					
VAV	101	PRICE SDV	6"	90 CFM	300 CFM	25	135 CFM	55	86.9	0.5	140	100	2	4.8	0.35	1, 2, 3, 4		
VAV	102	PRICE SDV	8"	230 CFM	460 CFM	25	280 CFM	55	77.0	0.5	140	100	2	6.8	0.35	1, 3, 4		
VAV	103	PRICE SDV	9"	180 CFM	600 CFM	25	280 CFM	55	86.9	0.8	140	100	2	9.8	0.35	1, 2, 3, 4		
VAV	104	PRICE SDV	6"	65 CFM	210 CFM	25	105 CFM	55	75.0	0.5	140	100	2	2.3	0.35	1, 3, 4		
VAV	105	PRICE SDV	6"	70 CFM	275 CFM	25	95 CFM	55	74.0	0.5	140	100	2	1.9	0.35	1, 3, 4		
VAV	106	PRICE SDV	7"	105 CFM	350 CFM	25	350 CFM	55	93.0	1.1	140	100	2	14.6	0.35	1, 2, 3, 4		
VAV	107	PRICE SDV	6"	65 CFM	200 CFM	25	170 CFM	55	86.9	0.5	140	100	2	6.0	0.35	1, 2, 3, 4		
VAV	108	PRICE SDV	7"	110 CFM	360 CFM	25	360 CFM	55	95.0	1.4	140	100	2	18.7	0.35	1, 2, 3, 4		
VAV	109	PRICE SDV	8"	170 CFM	495 CFM	25	490 CFM	55	95.0	2.0	140	100	2	26.6	0.35	1, 2, 3, 4		
VAV	110	PRICE SDV	10"	480 CFM	800 CFM	25	600 CFM	55	83.2	1.4	140	100	2	18.6	0.35	1, 2, 3, 4		
VAV	111	PRICE SDV	7"	120 CFM	380 CFM	25	230 CFM	55	86.9	0.6	140	100	2	8.1	0.35	1, 2, 3, 4		
VAV	112	PRICE SDV	6"	50 CFM	150 CFM	25	75 CFM	55	73.5	0.5	140	100	2	1.2	0.35	1, 3, 4		
VAV	113	PRICE SDV	10"	480 CFM	800 CFM	25	500 CFM	55	86.9	1.3	140	100	2	17.6	0.35	1, 2, 3, 4		
VAV	114	PRICE SDV	9"	190 CFM	730 CFM	25	730 CFM	55	86.9	2.0	140	100	2	26.0	0.35	1, 2, 3, 4		
VAV	115	PRICE SDV	14"	600 CFM	1820 CFM	25	1130 CFM	55	86.9	2.9	140	100	2	39.8	0.35	1, 2, 3, 4		
VAV	116	PRICE SDV	7"	125 CFM	370 CFM	25	280 CFM	55	77.0	0.5	140	100	2	6.7	0.35	1, 3, 4		
VAV	117	PRICE SDV	9"	225 CFM	685 CFM	25	550 CFM	55	76.5	0.9	140	100	2	12.8	0.35	1, 2, 3, 4		
VAV	118	PRICE SDV	12"	270 CFM	1135 CFM	25	1135 CFM	50	89.0	3.2	140	100	2	42.4	0.35	1, 2, 3, 4		
VAV	119	PRICE SDV	8"	175 CFM	490 CFM	25	320 CFM	55	86.9	0.9	140	100	2	11.2	0.35	1, 2, 3, 4		
VAV	120	PRICE SDV	6"	100 CFM	285 CFM	25	225 CFM	55	86.9	0.6	140	100	2	7.9	0.35	1, 2, 3, 4		
VAV	121	PRICE SDV	6"	60 CFM	215 CFM	25	165 CFM	55	86.9	0.5	140	100	2	6.5	0.35	1, 2, 3, 4		
VAV	122	PRICE SDV	6"	60 CFM	210 CFM	25	160 CFM	55	86.9	0.5	140	100	2	5.6	0.35	1, 2, 3, 4		
VAV	123	PRICE SDV	14"	700 CFM	1955 CFM	25	1085 CFM	55	86.9	2.9	140	100	2	38.2	0.35	1, 2, 3, 4		
VAV	124	PRICE SDV	14"	700 CFM	1955 CFM	25	1085 CFM	55	86.9	2.9	140	100	2	38.2	0.35	1, 2, 3, 4		
WTA LEVEL 01: 24				5420 CFM	15240 CFM		10555 CFM											
VAV	201	PRICE SDV	6"	65 CFM	200 CFM	25	200 CFM	55	93.4	0.7	140	100	2	8.4	0.35	1, 2, 3, 4		
VAV	202	PRICE SDV	10"	280 CFM	920 CFM	25	555 CFM	55	75.5	1.0	140	100	2	12.4	0.35	1, 2, 3, 4		
VAV	203	PRICE SDV	4"	45 CFM	80 CFM	25	80 CFM	55	86.9	0.5	140	100	2	1.6	0.35	1, 3, 4		
VAV	204	PRICE SDV	10"	180 CFM	840 CFM	25	505 CFM	55	84.0	1.2	140	100	2	16.0	0.35	1, 2, 3, 4		
VAV	205	PRICE SDV	6"	85 CFM	310 CFM	25	310 CFM	55	86.9	0.8	140	100	2	10.8	0.35	1, 2, 3, 4		
VAV	206	PRICE SDV	6"	85 CFM	310 CFM	25	310 CFM	55	86.9	0.8	140	100	2	10.7	0.35	1, 2, 3, 4		
VAV	207	PRICE SDV	7"	85 CFM	325 CFM	25	325 CFM	55	86.9	0.9	140	100	2	11.2	0.35	1, 2, 3, 4		
VAV	208	PRICE SDV	6"	195 CFM	195 CFM	25	195 CFM	55	86.9	0.5	140	100	2	6.8	0.35	1, 2, 3, 4		
VAV	209	PRICE SDV	14"	480 CFM	1900 CFM	25	990 CFM	55	86.9	2.6	140	100	2	34.7	0.35	1, 2, 3, 4		
VAV	210	PRICE SDV	14"	420 CFM	1500 CFM	25	600 CFM	55	84.0	1.5	140	100	2	19.1	0.35	1, 2, 3, 4		
VAV	212	PRICE SDV	12"	450 CFM	1500 CFM	25	1470 CFM	55	86.9	3.9	140	100	2	51.8	0.35	1, 2, 3, 4		
VAV	213	PRICE SDV	6"	50 CFM	210 CFM	25	140 CFM	55	75.5	0.5	140	100	2	3.1	0.35	1, 3, 4		
VAV	214	PRICE SDV	7"	105 CFM	305 CFM	25	155 CFM	55	75.5	0.5	140	100	2	3.5	0.35	1, 3, 4		
VAV	215	PRICE SDV	5"	65 CFM	200 CFM	25	120 CFM	55	75.5	0.5	140	100	2	2.4	0.35	1, 3, 4		
VAV	216	PRICE SDV	6"	70 CFM	275 CFM	25	95 CFM	55	75.5	0.5	140	100	2	1.9	0.35	1, 3, 4		
VAV	217	PRICE SDV	12"	360 CFM	1200 CFM	25	640 CFM	50	86.9	1.8	140	100	2	23.8	0.35	1, 2, 3, 4		
WTA LEVEL 02: 16				3020 CFM	10270 CFM		6690 CFM											
VAV	301	PRICE SDV	6"	65 CFM	200 CFM	25	250 CFM	55	89.6	0.7	140	100	2	9.5	0.35	1, 2, 3, 4		
VAV	302	PRICE SDV	6"	110 CFM	360 CFM	25	270 CFM	55	82.0	0.6	140	100	2	8.0	0.35	1, 2, 3, 4		
VAV	303	PRICE SDV	6"	65 CFM	200 CFM	25	110 CFM	55	86.9	0.5	140	100	2	3.9	0.35	1, 2, 3, 4		
VAV	304	PRICE SDV	10"	260 CFM	680 CFM	25	475 CFM	55	86.9	1.3	140	100	2	16.6	0.35	1, 2, 3, 4		
VAV	305	PRICE SDV	10"	200 CFM	735 CFM	25	80 CFM	55	95.5	1.6	140	100	2	21.4	0.35	1, 2, 3, 4		
VAV	306	PRICE SDV	9"	165 CFM	630 CFM	25	540 CFM	55	90.5	1.6	140	100	2	21.2	0.35	1, 2, 3, 4		
VAV	307	PRICE SDV	10"	165 CFM	660 CFM	25	0 CFM	55	93.0	1.7	140	100	2	22.6	0.35	1, 2, 3, 4		
VAV	308	PRICE SDV	10"	240 CFM	935 CFM	25	690 CFM	55	86.9	1.8	140	100	2	24.3	0.35	1, 2, 3, 4		
VAV	309	PRICE SDV	12"	360 CFM	1320 CFM	25	660 CFM	55	86.9	1.8	140	100	2	23.2	0.35	1, 2, 3, 4		
VAV	310	PRICE SDV	14"	540 CFM	1920 CFM	25	975 CFM	55	86.9	2.6	140	100	2	34.3	0.35	1, 2, 3, 4		
VAV	311	PRICE SDV	10"	225 CFM	750 CFM	25	600 CFM	55	86.9	1.6	140	100	2	21.1	0.35	1, 2, 3, 4		
VAV	312	PRICE SDV	12"	430 CFM	1420 CFM	25	810 CFM	50	86.9	2.1	140	100	2	28.4	0.35	1, 2, 3, 4		
VAV	313	PRICE SDV	12"	300 CFM	1180 CFM	25	540 CFM	55	86.9	1.4	140	100	2	18.9	0.35	1, 2, 3, 4		
VAV	314	PRICE SDV	14"	480 CFM	1600 CFM	25	1040 CFM	55	86.3	2.7	140	100	2	36.4	0.35	1, 2, 3, 4		
VAV	315	PRICE SDV	10"	265 CFM	935 CFM	25	795 CFM	55	85.3	2.3	140	100	2	30.8	0.35	1, 2, 3, 4		
VAV	316	PRICE SDV	12"	265 CFM	1040 CFM	25	680 CFM	55	90.0	1.8	140	100	2	23.9	0.35	1, 2, 3, 4		
VAV	317	PRICE SDV	6"	65 CFM	210 CFM	25	205 CFM	55	86.9	0.5	140	100	2	4.1	0.35	1, 3, 4		
VAV	318	PRICE SDV	7"	110 CFM	390 CFM	25	295 CFM	55	75.0	0.5	140	100	2	6.3	0.35	1, 3, 4		
VAV	319	PRICE SDV	6"	75 CFM	320 CFM	25	180 CFM	55	75.0	0.5	140	100	2	6.3	0.35	1, 3, 4		
VAV	320	PRICE SDV	10"	120 CFM	710 CFM	25	215 CFM	55	86.9	0.5	140	100	2	7.6	0.35	1, 2, 3, 4		
VAV	321	PRICE SDV	9"	455 CFM	650 CFM	25	455 CFM	55	86.9	0.6	140	100	2	9.1	0.35	1, 3, 4		
VAV	322	PRICE SDV	6"	70 CFM	275 CFM	25	70 CFM	55	74.0	0.7	140	100	2	1.4	0.35	1, 3, 4		
VAV	411	PRICE SDV	8"	165 CFM	540 CFM	25	325 CFM	50	86.9	0.9	140	100	2	11.3	0.35	1, 2, 3, 4		
WTA LEVEL 03: 23				5195 CFM	17710 CFM		10260 CFM											
VAV	401	PRICE SDV	6"	90 CFM	300 CFM	25	240 CFM	55	86.9	0.8	140	100	2	8.4	0.35	1, 2, 3, 4		
VAV	402	PRICE SDV	7"	135 CFM	440 CFM	25	440 CFM	55	89.0	1.2	140	100	2	16.4	0.35	1, 2, 3, 4		
VAV	403	PRICE SDV	10"	215 CFM	720 CFM	25	665 CFM	55	86.9	1.8	140	100	2	23.4	0.35	1, 2, 3, 4		
VAV	404	PRICE SDV	9"	180 CFM	610 CFM	25	545 CFM	55	86.9	1.5	140	100	2	19.2	0.35	1, 2, 3, 4		
VAV	405	PRICE SDV	8"	130 CFM	420 CFM	25	355 CFM	55	86.9	1.0	140	100	2	12.5	0.35	1, 2, 3, 4		
VAV	406	PRICE SDV	10"	255 CFM	850 CFM	25	510 CFM	55	86.9	1.4	140	100	2	18.0	0.35	1, 2, 3, 4		
VAV	407	PRICE SDV	10"	300 CFM	1000 CFM	25	480 CFM	55	86.9	1.3	140	100	2	16.9	0.35	1, 2, 3, 4		
VAV	408	PRICE SDV	10"	200 CFM	670 CFM	25	325 CFM	55	86.9	0.9	140	100	2	11.3	0.35	1, 2, 3, 4		
VAV	409	PRICE SDV	8"	150 CFM	500 CFM	25	385 CFM	50	86.9	1.0	140	100	2	13.5	0.35	1, 2, 3, 4		
VAV	410	PRICE SDV	9"	165 CFM	550 CFM	25	440 CFM	55	86.8	1.2								

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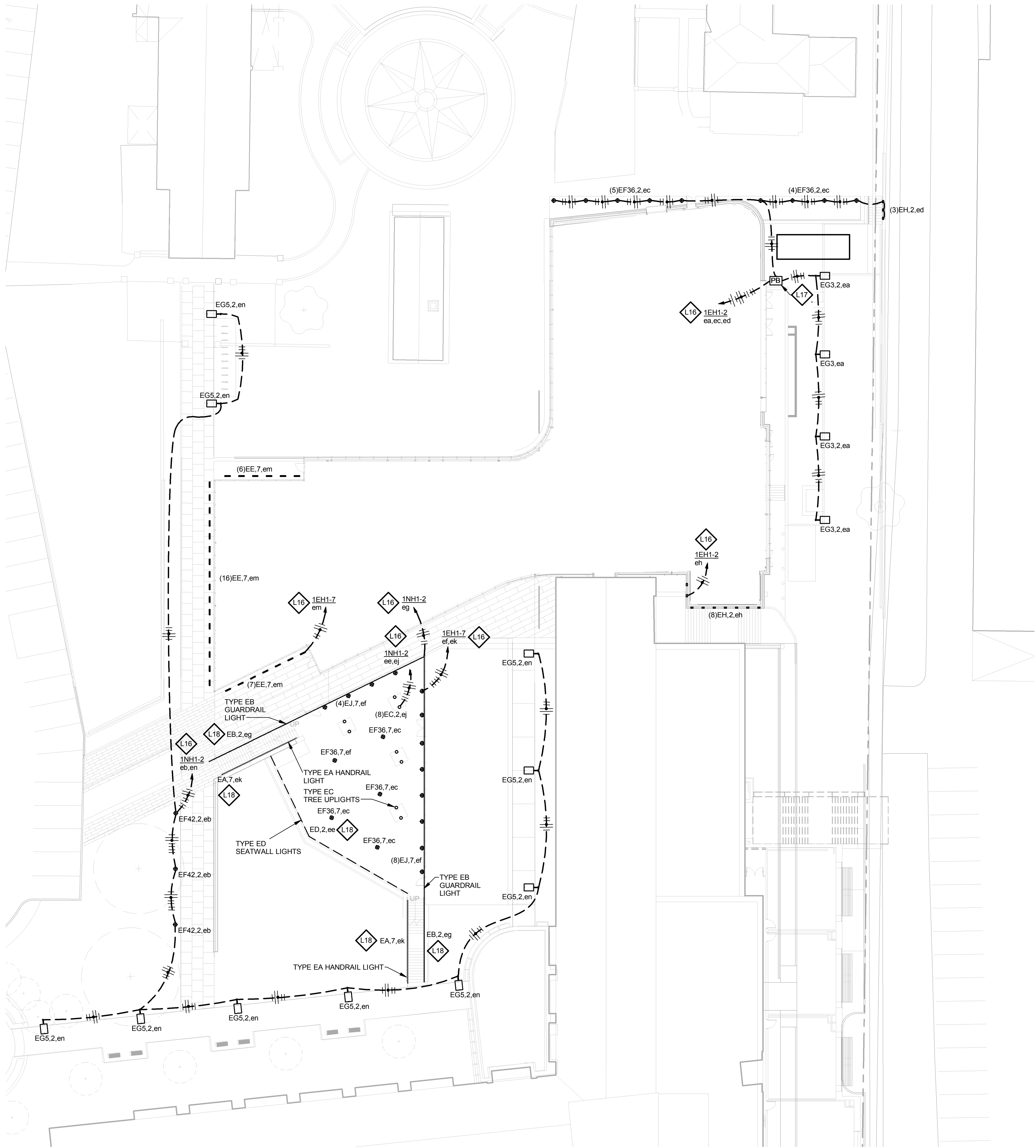
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GENERAL NOTES:

- DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR LOCATION AND ORIENTATION OF DEVICES. WHERE LOCATIONS ARE NOT INDICATED ON ARCHITECTURAL DRAWINGS, COORDINATE LOCATION AND ORIENTATION OF DEVICES IN FIELD WITH ARCHITECT PRIOR TO ROUGH-IN.
- CONTRACTOR SHALL VISIT PRIOR TO BID SUBMITTALS TO DETERMINE SITE CONDITIONS EFFECTING THE EXECUTION OF WORK. FAILURE TO BE ACQUAINTED WITH EXISTING CONDITIONS WILL NOT BE JUSTIFICATION FOR ADDITIONAL SERVICES.
- PROVIDE FACE PLATES ON ALL J-BOXES ABANDONED IN FINISHED FLOOR, WALL OR CEILINGS. COORDINATE COLOR AND FINISH WITH ARCHITECT. CONTRACTOR TO VERIFY QUANTITY IN THE FIELD.
- WHERE EXPOSED CONDUIT IS NOTED, CONTRACTOR SHALL IDENTIFY ROUTING IN FIELD AND OBTAIN ARCHITECT'S APPROVAL OF ROUTING PRIOR TO ROUGH-IN. EXPOSED CONDUIT SHALL BE ROUTED TIGHT TO STRUCTURE.
- MINIMUM 0-10V CONTROL WIRE SIZE SHALL BE #18 (#16 FOR RUNS LONGER THAN 400').
- ALL SINGLE PHASE BRANCH CIRCUITS SHOWN WITH COMMON NEUTRAL SHALL HAVE INDIVIDUAL 20A-1P CIRCUIT BREAKER. CONTRACTOR TO PROVIDE HANDLE TIES TO MEET NEC SECTION 210.4 MULTI-WIRE BRANCH CIRCUIT REQUIREMENTS. REFER TO DRAWINGS FOR CIRCUITS WITH DEDICATED NEUTRALS.
- SHADED FIXTURES AND FIXTURES NOTED WITH AN "E" ARE FOR EMERGENCY EGRESS. CONNECT FIXTURES TO LIFE SAFETY PANEL 1EH1 UNLESS OTHERWISE NOTED.
- FIXTURES NOTED WITH "NL" ARE UN-SWITCHED NIGHT LIGHTS AND SHALL BE LEFT ON AFTER HOURS FOR WAY FINDING.
- ALL EXTERIOR LIGHTING SHALL BE CONNECTED TO THE BUILDING AUTOMATION LIGHTING CONTROL SYSTEM.

KEYED NOTES

- L16** ROUTE CIRCUIT(S) VIA LIGHTING CONTROL SYSTEM. FOR EACH DIMMABLE SWITCH LEG, PROVIDE BOTH POWER AND CONTROL WIRING TO FIXTURES.
- L17** PROVIDE QUAZITE 22,500 LB. RATED, POLYMER CONCRETE 13"Lx24"Wx18"D HANDHOLE (PG1324HA00ELEC COVER WITH PG1324BA18BOX) OR APPROVED EQUAL.
- L18** LOCATE REMOTE DRIVERS WITHIN BUILDING. COORDINATE LOCATION WITH ENGINEER PRIOR TO ROUGH-IN. WIRING SHALL NOT EXCEED MANUFACTURER'S REMOTING DISTANCE LIMITATION.



3 ELECTRICAL SITE PLAN
1" = 20'-0"

CONFORMED SET 01 JUL 2016

ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016
No. Description Date

Drawing Title:

ELECTRICAL SITE PLAN

Project No.: 04561.01 Checked by:

E0001

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GENERAL NOTES:

- DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR LOCATION AND ORIENTATION OF DEVICES. WHERE LOCATIONS ARE NOT INDICATED ON ARCHITECTURAL DRAWINGS, COORDINATE LOCATION AND ORIENTATION OF DEVICES IN FIELD WITH ARCHITECT PRIOR TO ROUGH-IN.
- CONTRACTOR SHALL VISIT PRIOR TO BID SUBMITTALS TO DETERMINE SITE CONDITIONS EFFECTING THE EXECUTION OF WORK. FAILURE TO BE ACQUAINTED WITH EXISTING CONDITIONS WILL NOT BE JUSTIFICATION FOR ADDITIONAL SERVICES.
- EXISTING DEVICES TO REMAIN ARE INDICATED WITH A THIN SOLID LINE WEIGHT (AND SUBSCRIPT "EX").
- CONTRACTOR SHALL REMOVE ALL ELECTRICAL DEVICES INCLUDING BUT NOT LIMITED TO LIGHTING, POWER, FIRE ALARM, AND AUXILIARY DEVICES FROM PARTITIONS AND CEILINGS INDICATED FOR DEMOLITION ON THE ARCHITECTURAL PLANS UNLESS NOTED OTHERWISE.
- FOR ANY DEVICES BEING REMOVED, REMOVE ASSOCIATED BOXES, CONDUIT, AND WIRE BACK TO NEAREST DEVICE REMAINING OR TO SOURCE UNLESS NOTED OTHERWISE.
- REMOVE ALL ABANDONED CONDUITS, JUNCTION BOXES, SUPPORTS, AND CABLES FROM ABOVE ACCESSIBLE CEILINGS INCLUDING, BUT NOT LIMITED TO, FIRE ALARM, TELECOMMUNICATIONS, CONTROL, AND POWER WIRING.
- CONTRACTOR TO MAINTAIN CONTINUITY OF CIRCUITS FEEDING DEVICES INDICATED TO REMAIN AND ANY CIRCUITS SERVICING DEVICES OUTSIDE THE PROJECT BOUNDARY.
- PROVIDE COVER PLATES WHERE MISSING ON EXISTING JUNCTION BOXES. CONTRACTOR TO VERIFY QUANTITY IN THE FIELD.
- PROVIDE FACE PLATES ON ALL J-BOXES ABANDONED IN FINISHED FLOORS, WALLS, OR CEILING. COORDINATE COLOR AND FINISH WITH ARCHITECT. CONTRACTOR TO VERIFY QUANTITY IN THE FIELD.

KEYED NOTES

- L23** EXISTING FIXTURE TO REMAIN. INTERCEPT AND CONNECT FIXTURE TO EXISTING CIRCUIT SERVING NEAR BY PARKING LOT LIGHTS.
- L24** DISCONNECT AND REMOVE EXISTING SITE LIGHTING FIXTURE AND ASSOCIATED RACEWAY, BOXES, WIRE, AND CONCRETE BASE.
- L25** EXISTING FIXTURE TO REMAIN. MAINTAIN CONTINUITY OF CIRCUIT TO FIXTURE. MODIFY AND EXTEND EXISTING CIRCUIT AS REQUIRED.
- L26** EXISTING CIRCUITING SHOWN FOR REFERENCE. CONTRACTOR SHALL CONFIRM EXISTING CIRCUIT ROUTING AND LOCATION PRIOR TO DEMOLITION.
- L29** PROVIDE QUAZITE 22,500 LB. RATED, POLYMER CONCRETE 12"x12"Wx18"D HANDHOLE (PG1212HA00ELEC COVER WITH PG1212BA18BOX) OR APPROVED EQUAL.



1 SITE PLAN - ELECTRICAL - DEMOLITION
1" = 20'-0"

CONFORMED SET 01 JUL 2016

ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016
No. Description Date

Drawing Title:

ELECTRICAL SITE PLAN - DEMOLITION

Project No.: 04561.01 Checked by:

E0002

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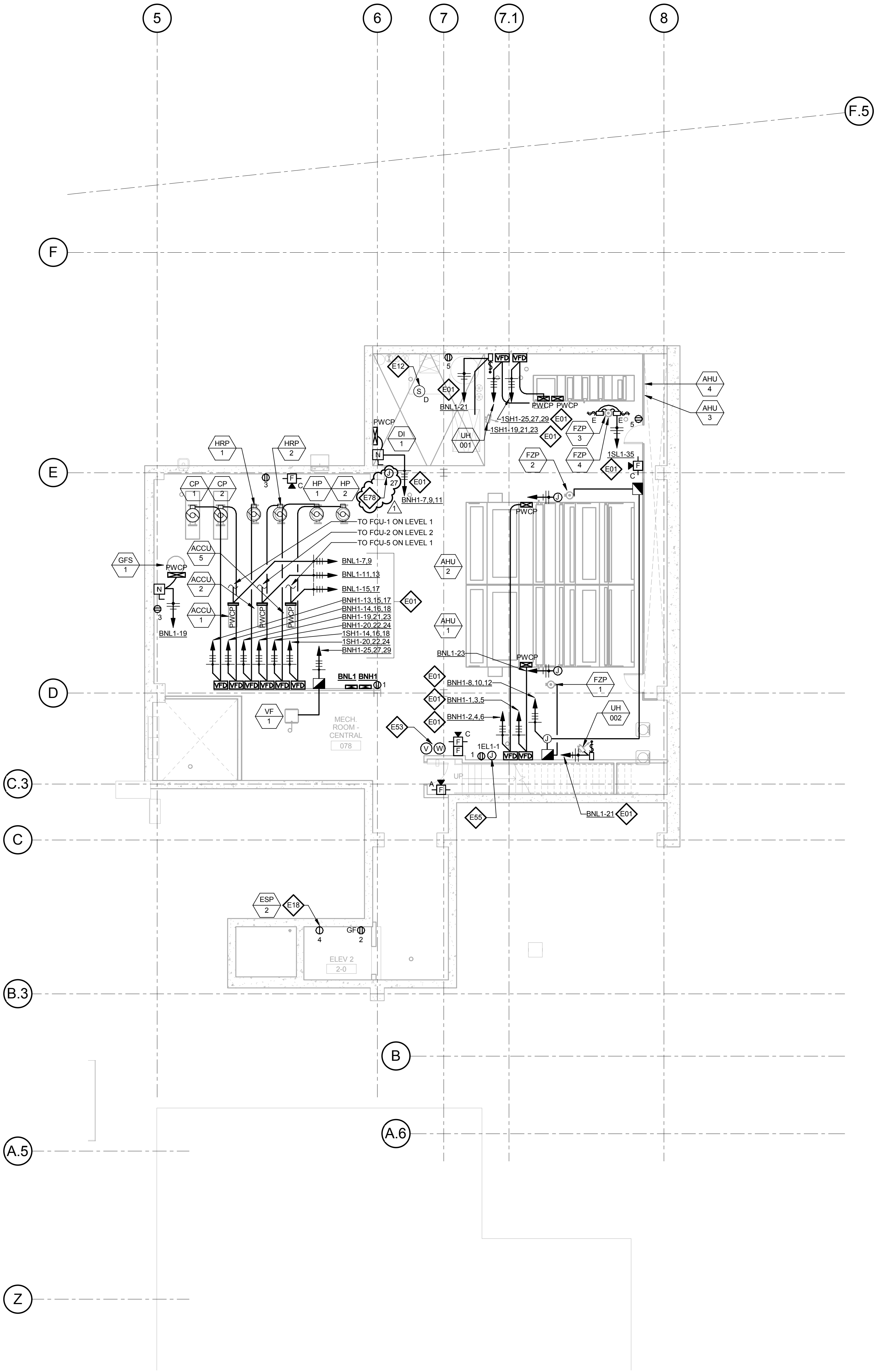
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GENERAL NOTES:

- DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR LOCATION AND ORIENTATION OF DEVICES. WHERE LOCATIONS ARE NOT INDICATED ON ARCHITECTURAL DRAWINGS, COORDINATE LOCATION AND ORIENTATION OF DEVICES IN FIELD WITH ARCHITECT PRIOR TO ROUGH-IN.
- ALL DEVICES SHOWN ARE NEW UNLESS NOTED OTHERWISE.
- ALL DEVICES TO REMAIN ARE INDICATED WITH A THIN SOLID LINE WEIGHT AND SUBSCRIPT "EX".
- CONTRACTOR SHALL VISIT PRIOR TO BID SUBMITTALS TO DETERMINE SITE CONDITIONS EFFECTING THE EXECUTION OF WORK. FAILURE TO BE ACQUAINTED WITH EXISTING CONDITIONS WILL NOT BE JUSTIFICATION FOR ADDITIONAL SERVICES.
- PROVIDE FACE PLATES ON ALL J-BOXES ABANDONED IN FINISHED FLOOR, WALL OR CEILINGS. COORDINATE COLOR AND FINISH WITH ARCHITECT. CONTRACTOR TO VERIFY QUANTITY IN THE FIELD.
- WHERE EXPOSED CONDUIT IS NOTED, CONTRACTOR SHALL IDENTIFY ROUTING IN FIELD AND OBTAIN ARCHITECT'S APPROVAL OF ROUTING PRIOR TO ROUGH-IN. EXPOSED CONDUIT SHALL BE ROUTED TIGHT TO STRUCTURE.
- ALL SINGLE PHASE BRANCH CIRCUITS SHOWN SHALL HAVE DEDICATED NEUTRALS TO MEET NEC SECTION 210.4 MULTI-WIRE BRANCH CIRCUIT REQUIREMENTS.
- REFER TO TECHNOLOGY DRAWINGS FOR CONDUIT ROUGH-IN OIDATA, VOICE AND A/V.
- ALL 120V BRANCH CIRCUITS ON THIS SHEET SHALL BE FED FROM PANEL BNL1 UNLESS NOTED OTHERWISE.

KEYED NOTES

- E01** REFER TO EQUIPMENT DATA SCHEDULE FOR BRANCH CIRCUIT INFORMATION.
- E12** PROVIDE A DUCT MOUNTED SMOKE DETECTOR IN THE COMBINED SUPPLY DUCT OF AHU-3 & AHU-4. BOTH AIR HANDLING UNITS SHALL SHUT DOWN UPON ACTIVATION OF THE DUCT MOUNTED SMOKE DETECTOR.
- E18** PROVIDE POWER AND FINAL CONNECTION TO ELEVATOR SUMP PUMP. COORDINATE EXACT LOCATION WITH PLUMBING CONTRACTOR PRIOR TO ROUGH-IN.
- E53** COORDINATE QUANTITY AND LOCATION OF TAMPER AND FLOW SWITCHES WITH FIRE PROTECTION CONTRACTOR.
- E55** PROVIDE POWER TO BUILDING AUTOMATION SYSTEM PANEL. COORDINATE LOCATION WITH AUTOMATION CONTRACTOR.
- E78** PROVIDE POWER TO ELECTRONIC TRAP PRIMER FOR A COMPLETE INSTALLATION, REFER TO PLUMBING DRAWINGS FOR EXACT LOCATION.

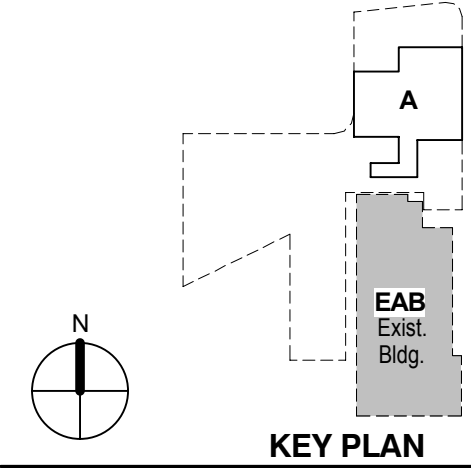


LEVEL 00 - AREA A - ELECTRICAL POWER PLAN

1/8" = 1'-0"

CONFORMED SET 01 JUL 2016

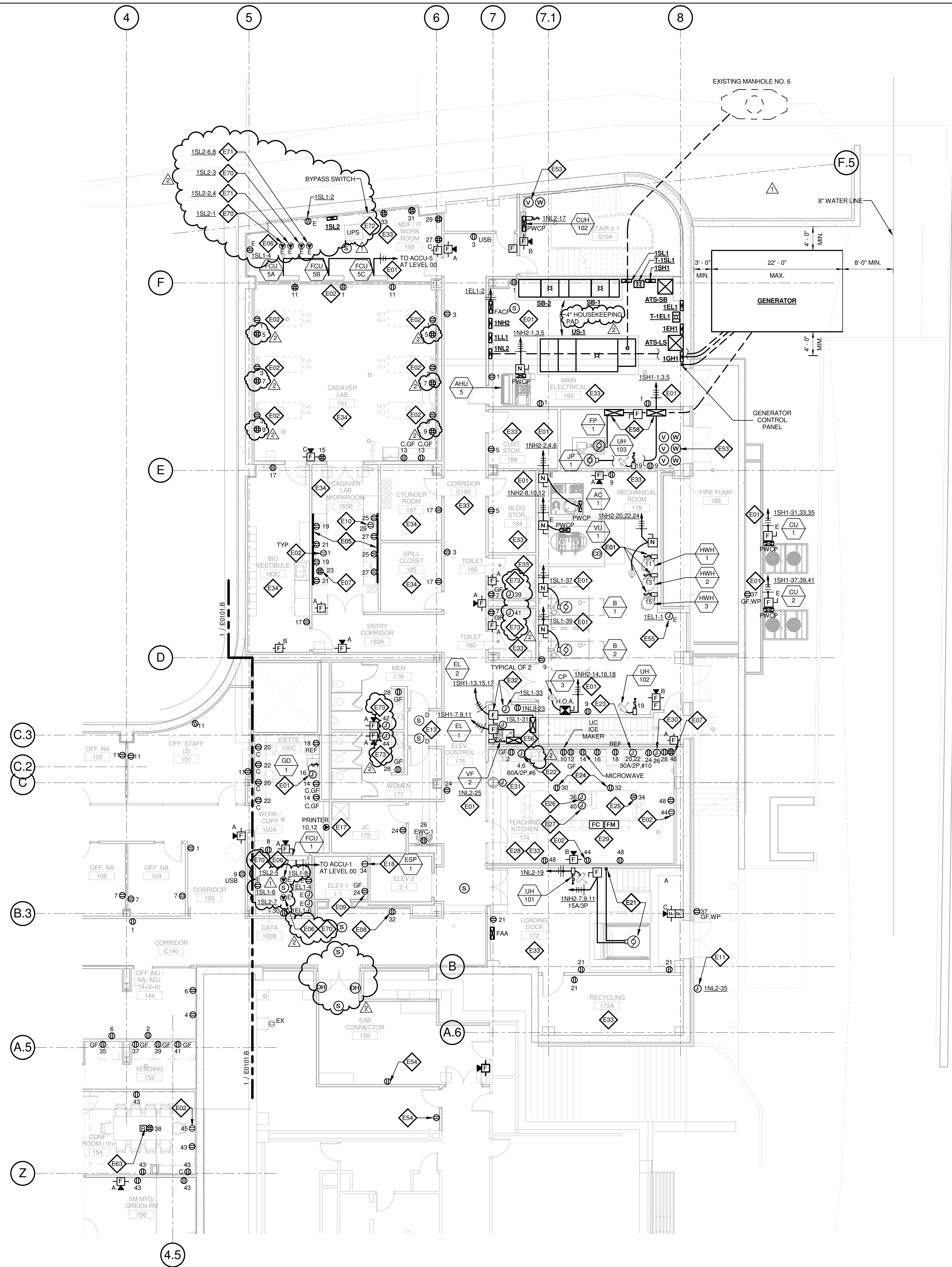
No.	Description	Date
1	ADDENDUM 2-4	24 MAY 2016
2	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016



LEVEL 0 FLOOR PLAN - ELECTRICAL

Project No.: 04561.01 Checked by:

E0100



1 LEVEL 01 - AREA A - FLOOR PLAN - POWER AND AUXILIARY
1/8" = 1'-0"

GENERAL NOTES:

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- ALL DEVICES SHOWN ARE NEW UNLESS NOTED OTHERWISE.
- ALL DEVICES TO REMAIN ARE INDICATED WITH A THIN SOLID LINE WEIGHT AND SUBSCRIPT "EX".
- CONTRACTOR SHALL VISIT PRIOR TO BID SUBMITTALS TO DETERMINE SITE CONDITIONS EFFECTING THE EXECUTION OF WORK. FAILURE TO BE ACQUAINTED WITH EXISTING CONDITIONS WILL NOT BE JUSTIFICATION FOR ADDITIONAL SERVICES.
- PROVIDE FACE PLATES ON ALL J-BOXES ABANDONED IN FINISHED FLOOR, WALL OR CEILING. COORDINATE COLOR AND FINISH WITH ARCHITECT. CONTRACTOR TO VERIFY QUANTITY IN THE FIELD.
- WHERE EXPOSED CONDUIT IS NOTED, CONTRACTOR SHALL IDENTIFY ROUTING IN FIELD AND OBTAIN ARCHITECT'S APPROVAL OF ROUTING PRIOR TO ROUGH-IN. EXPOSED CONDUIT SHALL BE ROUTED TIGHT TO STRUCTURE.
- ALL SINGLE PHASE BRANCH CIRCUITS SHOWN SHALL HAVE DEDICATED NEUTRALS TO MEET NEC SECTION 210.4 MULTI-WIRE BRANCH CIRCUIT REQUIREMENTS.
- REFER TO TECHNOLOGY DRAWINGS FOR CONDUIT ROUGH-IN OIDATA, VOICE AND A/V.
- ALL 120V BRANCH CIRCUITS ON THIS SHEET SHALL BE FED FROM PANEL 1N1.1 UNLESS NOTED OTHERWISE.

KEYED NOTES

- REFER TO EQUIPMENT DATA SCHEDULE FOR BRANCH CIRCUIT INFORMATION.
- PROVIDE NEW RECEPTACLE FOR MONITOR. COORDINATE MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS AND TECHNOLOGY PLANS.
- PROVIDE NEW TWO SECTION ALUMINUM RACEWAY, WIREMOLD AL4320 WITH RECEPTACLES MOUNTED 24" ON CENTER UNLESS NOTED OR SHOWN OTHERWISE. PROVIDE ALL ACCESSORIES FOR A COMPLETE INSTALLATION. REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT AND LENGTH. SEE DETAILS ON SHEET E402.
- OUTLET SHALL BE MOUNTED TO THE BACK SIDE OF THE TELECOMMUNICATION RACK AND FED FROM ABOVE. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH TELECOMMUNICATIONS CONTRACTOR PRIOR TO INSTALLATION.
- OUTLET FOR RACK MOUNTED A/V EQUIPMENT. COORDINATE MOUNTING HEIGHT AND EXACT LOCATION WITH ARCHITECTURAL ELEVATIONS AND A/V DRAWINGS.
- OUTLET FOR DIGITAL SIGNAGE. COORDINATE MOUNTING HEIGHT AND EXACT LOCATION WITH ARCHITECTURAL ELEVATIONS AND A/V DRAWINGS.
- MOUNT RECEPTACLE IN ELEVATOR PIT. COORDINATE EXACT LOCATION WITH ELEVATOR CONTRACTOR.
- UNDERCOUNTER REFRIGERATOR. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECTURAL PLANS AND ELEVATIONS.
- PROVIDE POWER AND FINAL CONNECTION TO WALL MOUNTED BLUE LIGHT EMERGENCY INTERCOM STATION.
- PROVIDE A DUCT MOUNTED SMOKE DETECTOR(S) AT RETURN AIR GRILLE OF AHU-1 & AHU-2. BOTH AIR HANDLING UNITS SHALL SHUT DOWN UPON ACTIVATION OF THE DUCT MOUNTED SMOKE DETECTOR(S). PROVIDE REMOTE INDICATOR LIGHT(S) IN CEILING BELOW.
- PROVIDE NEMA 6-30R, 30A-208V RECEPTACLE FOR PRINTER. CONTRACTOR SHALL VERIFY PRINTER PLUG TYPE WITH OWNERS REPRESENTATIVE PRIOR TO ROUGH-IN.
- PROVIDE POWER AND FINAL CONNECTION TO ELEVATOR SUMP PUMP. COORDINATE EXACT LOCATION WITH PLUMBING CONTRACTOR PRIOR TO ROUGH-IN.
- PROVIDE POWER AND FINAL CONNECTION TO DOCK LEVELER AND CONTROLS PER MANUFACTURERS WRITTEN INSTRUCTIONS. COORDINATE CONTROL AND DISCONNECT LOCATION WITH DOCK LEVELER INSTALLER PRIOR TO INSTALLATION.
- PROVIDE POWER AND FINAL CONNECTION TO DISH WASHER. REFER TO KITCHEN EQUIPMENT DRAWINGS FOR ADDITIONAL INFORMATION.
- PROVIDE POWER AND FINAL CONNECTION TO DOUBLE OVEN. REFER TO KITCHEN EQUIPMENT DRAWINGS FOR ADDITIONAL INFORMATION.
- RECEPTACLE MOUNTED IN COUNTER APRON. REFER TO ARCHITECTURAL DRAWINGS AND ELEVATIONS FOR EXACT LOCATION.
- RECEPTACLE MOUNTED INSIDE CABINET FOR COMPUTER. REFER TO ARCHITECTURAL DRAWINGS AND ELEVATIONS FOR EXACT LOCATION.
- PROVIDE POWER AND FINAL CONNECTION TO DROP IN COOK TOP. REFER TO KITCHEN EQUIPMENT DRAWINGS FOR ADDITIONAL INFORMATION.
- PROVIDE POWER AND FINAL CONNECTION TO ISLAND HOOD. REFER TO KITCHEN EQUIPMENT DRAWINGS FOR ADDITIONAL INFORMATION.
- REFER TO KITCHEN EQUIPMENT DRAWINGS FOR MOUNTING HEIGHTS OF ALL ELECTRICAL DEVICES IN THIS ROOM AND FOR POWER REQUIREMENTS PRIOR TO ROUGH-IN.
- PROVIDE FIRE ALARM MONITOR MODULE AND CONTROL MODULE CONNECTED TO FIRE ALARM SYSTEM AT HOOD. PROVIDE WIRING BETWEEN HOOD AND FIRE SUPPRESSION SYSTEM. REFER TO KITCHEN HOOD EXTINGUISHING SYSTEM WIRING DIAGRAM, ON SHEET E0402.
- PROVIDE POWER FOR HOOD FIRE PROTECTION SYSTEM. INTERCONNECT EXHAUST FANS AND MAKE-UP AIR FANS TO MICRO SWITCH IN FIRE PROTECTION CABINET. REFER TO KITCHEN HOOD EXTINGUISHING SYSTEM WIRING DIAGRAM.
- PROVIDE J-BOX AND CONDUIT IN WALL FOR REMOTE MANUAL PULL STATION. REFER TO KITCHEN EQUIPMENT DRAWINGS FOR ADDITIONAL INFORMATION.
- PROVIDE POWER MODULE SWITCH FOR ELEVATOR AND A JUNCTION BOX WITH A 120V/20A CIRCUIT FOR CONNECTION OF ELEVATOR CONTROLS. PROVIDE ALL FINAL CONNECTIONS TO ELEVATOR CONTROLLER AND ELEVATOR CAB PER MANUFACTURERS WRITTEN INSTRUCTIONS. REFER TO ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
- ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 1N1.2.
- ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 1L1.1.
- COORDINATE QUANTITY AND LOCATION OF TAMPER AND FLOW SWITCHES WITH FIRE PROTECTION CONTRACTOR.
- EXTEND CIRCUIT FROM EXISTING RECEPTACLES SERVING THIS AREA.
- PROVIDE POWER TO BUILDING AUTOMATION SYSTEM PANEL. COORDINATE LOCATION WITH AUTOMATION CONTRACTOR.
- SEE ELEVATOR DETAIL ON SHEET E0402 FOR ADDITIONAL POWER & FIRE ALARM REQUIREMENTS.
- FIRE PUMP CONTROLLER AND JOCKEY PUMP CONTROLLER SEE ONE LINE DIAGRAM FOR FEEDER INFORMATION.
- PROVIDE A 2HR FIRE CLASSIFIED 4-GANG MULTI-SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RFB45-FC WITH A BRASS FLANGED COVER CAT. NO. RFBTCBS-NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (2) 20A DUPLEX RECEPTACLE, (1) GANG - DATA/VOICE (SEE TECHNOLOGY DRAWINGS FOR DEVICE TYPE), (1) GANG - A/V (SEE A/V DRAWINGS FOR DEVICE TYPES). THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR.
- PROVIDE NEMA L5-20R, 20A-120V TWIST LOCK RECEPTACLE FOR RACK MOUNTED PDU. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH TECHNOLOGY CONTRACTOR.
- PROVIDE NEMA L5-20R, 30A-208V TWIST LOCK RECEPTACLE FOR RACK MOUNTED PDU. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH TECHNOLOGY CONTRACTOR.
- UPS AND EXTERNAL BYPASS SWITCH FURNISHED BY OWNER AND INSTALLED BY CONTRACTOR. REFER TO TECHNOLOGY DRAWINGS AND ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
- PROVIDE POWER AND FINAL CONNECTIONS FOR ELECTRIC HAND DRYER.

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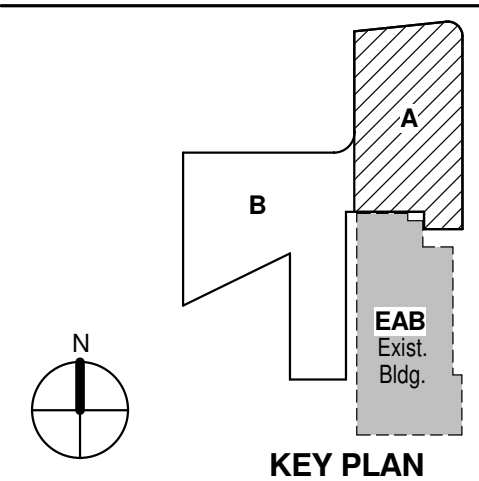
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CONFORMED SET 01 JUL 2016

2	ADDENDUM 2-2	19 APRIL 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016
No.	Description	Date



KEY PLAN

Drawing Title:

**LEVEL 01 AREA A FLOOR
PLAN - ELECTRICAL &
AUXILIARY**

Project No.: 04561.01 Checked by:

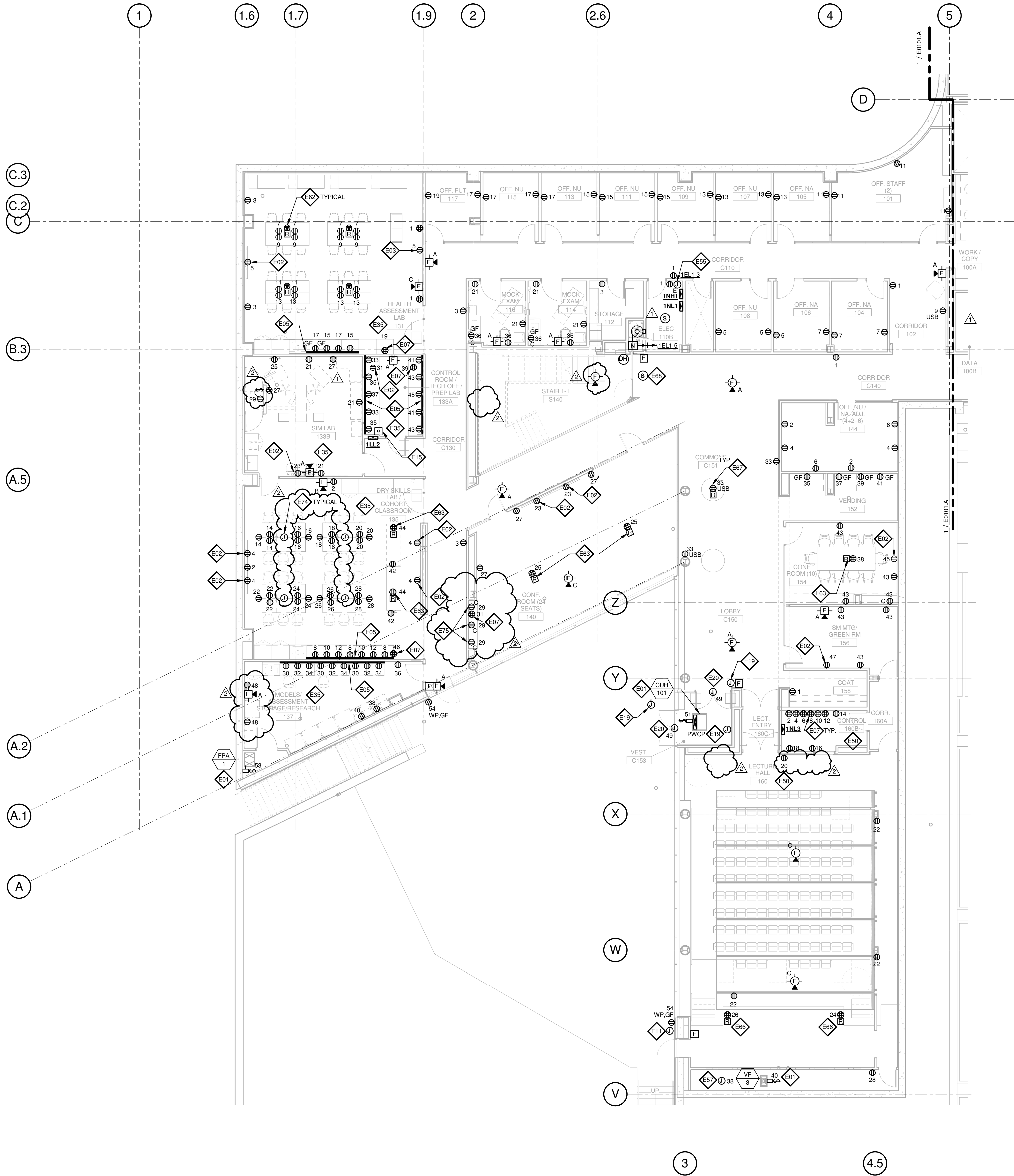
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LEVEL 01 - AREA B - FLOOR PLAN - POWER AND AUXILIARY

1/8" = 1'-0"



GENERAL NOTES:

- A. DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR LOCATION AND ORIENTATION OF DEVICES. WHERE LOCATIONS ARE NOT INDICATED ON ARCHITECTURAL DRAWINGS, COORDINATE LOCATION AND ORIENTATION OF DEVICES IN FIELD WITH ARCHITECT PRIOR TO ROUGH-IN.
- B. ALL DEVICES SHOWN ARE NEW UNLESS NOTED OTHERWISE.
- C. ALL DEVICES TO REMAIN ARE INDICATED WITH A THIN SOLID LINE WEIGHT AND SUBSCRIPT "EX".
- D. CONTRACTOR SHALL VISIT PRIOR TO BID SUBMITTALS TO DETERMINE SITE CONDITIONS EFFECTING THE EXECUTION OF WORK. FAILURE TO BE ACQUAINTED WITH EXISTING CONDITIONS WILL NOT BE JUSTIFICATION FOR ADDITIONAL SERVICES.
- E. PROVIDE FACE PLATES ON ALL J-BOXES ABANDONED IN FINISHED FLOOR, WALL OR CEILINGS. COORDINATE COLOR AND FINISH WITH ARCHITECT. CONTRACTOR TO VERIFY QUANTITY IN THE FIELD.
- F. WHERE EXPOSED CONDUIT IS NOTED, CONTRACTOR SHALL IDENTIFY ROUTING IN FIELD AND OBTAIN ARCHITECT'S APPROVAL OF ROUTING PRIOR TO ROUGH-IN. EXPOSED CONDUIT SHALL BE ROUTED TIGHT TO STRUCTURE.
- G. ALL SINGLE PHASE BRANCH CIRCUITS SHOWN SHALL HAVE DEDICATED NEUTRALS. TO MEET NEC SECTION 210.4 MULTI-WIRE BRANCH CIRCUIT REQUIREMENTS.
- H. REFER TO TECHNOLOGY DRAWINGS FOR CONDUIT ROUGH-IN OD/DA, VOICE AND A/V.
- I. ALL 120V BRANCH CIRCUITS ON THIS SHEET SHALL BE FED FROM PANEL 1N1 UNLESS NOTED OTHERWISE.

KEYED NOTES

- E01 REFER TO EQUIPMENT DATA SCHEDULE FOR BRANCH CIRCUIT INFORMATION.
- E02 PROVIDE NEW RECEPTACLE FOR MONITOR, COORDINATE MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS AND TECHNOLOGY PLANS.
- E03 PROVIDE NEW RECEPTACLE FOR WALL MOUNTED PROJECTOR, VERIFY EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS AND A/V DRAWINGS.
- E05 PROVIDE NEW TWO SECTION ALUMINUM RACEWAY, WIREMOLD AL4320 WITH RECEPTACLES MOUNTED 24" ON CENTER UNLESS NOTED OR SHOWN OTHERWISE, PROVIDE ALL ACCESSORIES FOR A COMPLETE INSTALLATION. REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT AND LENGTH. SEE DETAILS ON SHEET E402.
- E06 OUTLET SHALL BE MOUNTED TO THE BACK SIDE OF THE TELECOMMUNICATION RACK AND FED FROM ABOVE. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH TELECOMMUNICATIONS CONTRACTOR PRIOR TO INSTALLATION.
- E07 OUTLET FOR RACK MOUNTED A/V EQUIPMENT, COORDINATE MOUNTING HEIGHT AND EXACT LOCATION WITH ARCHITECTURAL ELEVATIONS AND A/V DRAWINGS.
- E11 PROVIDE POWER AND FINAL CONNECTION TO WALL MOUNTED BLUE LIGHT EMERGENCY INTERCOM STATION.
- E15 PROVIDE MUSHROOM HEAD PUSH BUTTON SWITCH AND 6 POLE CONTACTOR, PUSH BUTTON SHALL DEACTIVATE POWER TO CONTACTOR AND ASSOCIATED CIRCUITS. VERIFY WHICH RECEPTACLES IN THIS ROOM SHALL BE CONTROLLED WITH OWNERS REPRESENTATIVE. ALL RECEPTACLES AND COVER PLATES FED THROUGH CONTACTOR SHALL BE RED IN COLOR AND SHALL BE LABELED "NOT ON GENERATOR."
- E19 PROVIDE POWER AND FINAL CONNECTION TO ELECTRIC DOOR OPENER. COORDINATE POWER REQUIREMENTS WITH DOOR INSTALLER PRIOR TO ROUGH-IN.
- E20 PROVIDE POWER AND FINAL CONNECTION TO ELECTRIC DOOR OPENER CONTROLS. COORDINATE EXACT LOCATION WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN.
- E35 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 1LL2.
- E50 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 1N1L3.
- E55 PROVIDE POWER TO BUILDING AUTOMATION SYSTEM PANEL. COORDINATE LOCATION WITH AUTOMATION CONTRACTOR.
- E57 PROVIDE POWER TO SUBWOOFER, COORDINATE LOCATION WITH A/V DRAWINGS.
- E62 PROVIDE A 2HR FIRE CLASSIFIED 2-GANG MULTI-SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RFB2S-FC WITH A BRASS FLANGED COVER CAT. NO. FFBTCBS-NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (2) 20A DUPLEX RECEPTACLE, (1) GANG - DATA/VOICE (SEE TECHNOLOGY DRAWINGS FOR DEVICE TYPE), (1) GANG - A/V (SEE A/V DRAWINGS FOR DEVICE TYPES). THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR.
- E63 PROVIDE A 2HR FIRE CLASSIFIED 4-GANG MULTI-SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RFB4S-FC WITH A BRASS FLANGED COVER CAT. NO. FFBTCBS-NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (2) 20A DUPLEX RECEPTACLE, (1) GANG - DATA/VOICE (SEE TECHNOLOGY DRAWINGS FOR DEVICE TYPE), (1) GANG - A/V (SEE A/V DRAWINGS FOR DEVICE TYPES). THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR.
- E66 PROVIDE A 2HR FIRE CLASSIFIED 6-GANG MULTI-SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RFB6S-FC WITH A BRASS FLUSH COVER CAT. NO. FFBTCBS-NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (2) 20A DUPLEX RECEPTACLE, (1) GANG - DATA/VOICE (SEE TECHNOLOGY DRAWINGS FOR DEVICE TYPE), (3) GANG - A/V (SEE A/V DRAWINGS FOR DEVICE TYPES). THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR.
- E67 PROVIDE A 2HR FIRE CLASSIFIED 2-GANG MULTI-SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RFB2S-FC WITH A BRASS FLANGED COVER CAT. NO. FFBTCBS-NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (2) 20A DUPLEX RECEPTACLES WITH USB PORTS. THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR.
- E68 PROVIDE FIRE ALARM CONTROL MODULE TO RELEASE POWER TO ELECTRICALLY HELD OPEN FIRE DOOR UPON ACTIVATION OF ASSOCIATED SMOKE DETECTOR.
- E70 PROVIDE NEMA L5-20R, 20A-120V TWIST LOCK RECEPTACLE FOR RACK MOUNTED PDU. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH TELECOMMUNICATIONS CONTRACTOR.
- E74 FEED FIXED FURNITURE FROM BELOW AND MAKE ALL FINAL CONNECTIONS TO RECEPTACLES.
- E75 RECEPTACLES SHALL BE MOUNTED HORIZONTALLY, REFER TO ARCHITECTURAL PLANS AND ELEVATIONS.

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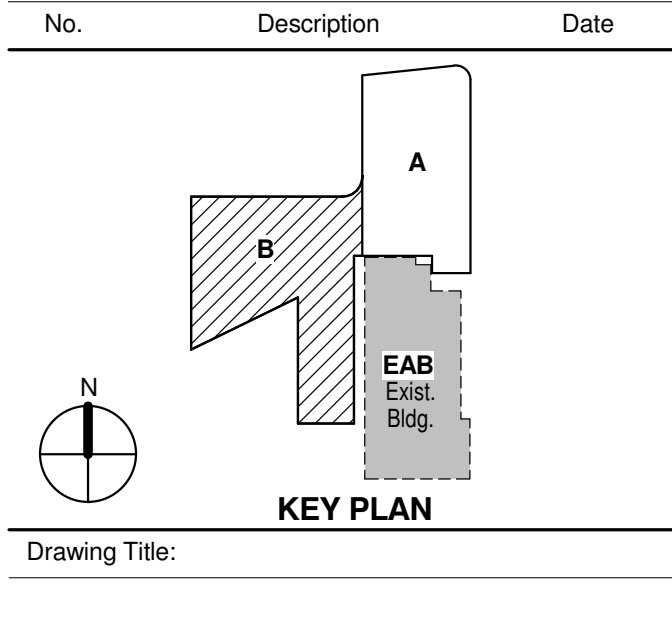
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CONFORMED SET

01 JUL 2016

2	ADDENDUM 2-2	19 APRIL 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016



Drawing Title:

LEVEL 01 AREA B FLOOR
PLAN - ELECTRICAL &
AUXILIARY

Project No.: 04561.01

Checked by:

E0101.B

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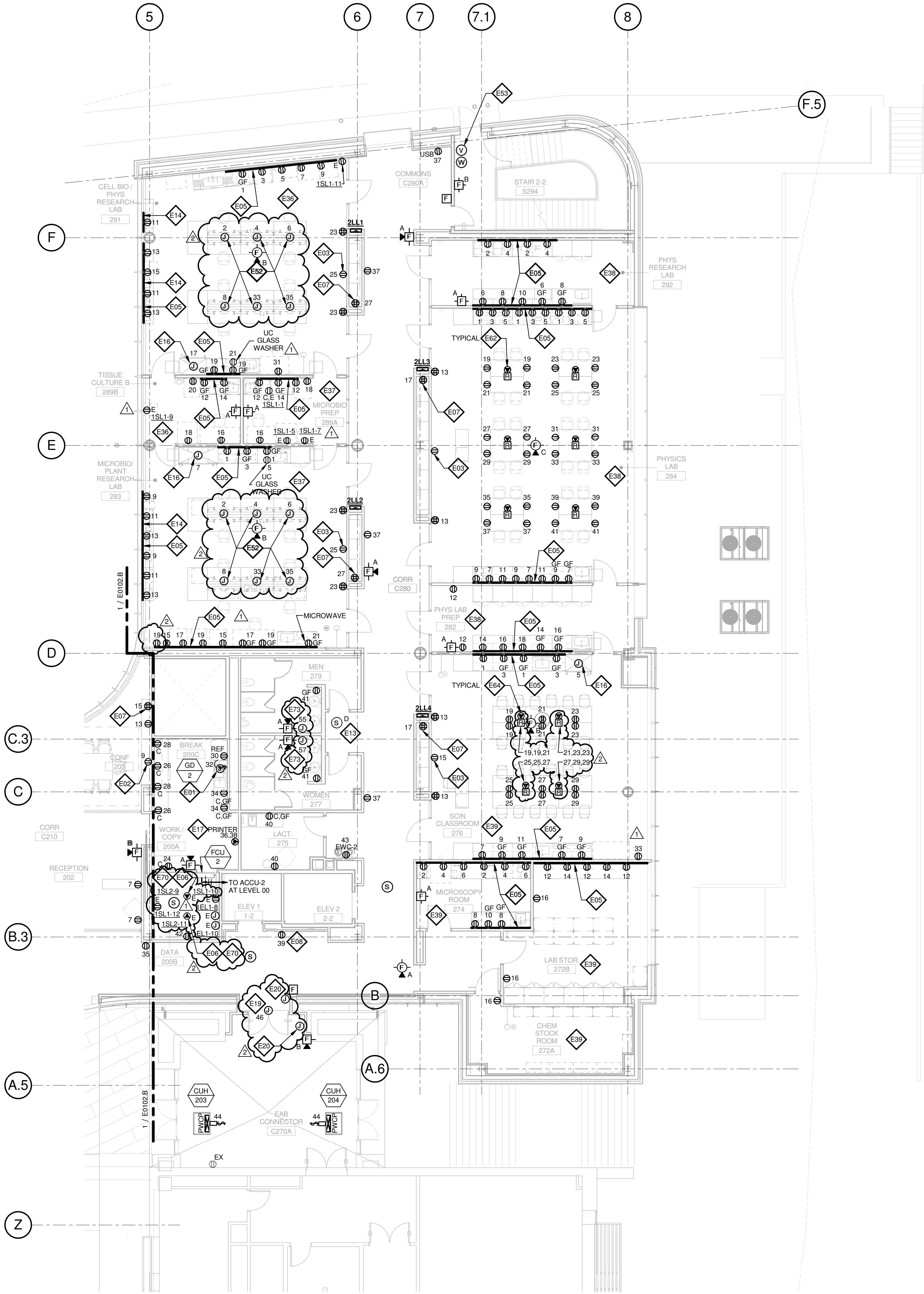
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314.588.0600

GENERAL NOTES:

- A. DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR LOCATION AND ORIENTATION OF DEVICES. WHERE LOCATIONS ARE NOT INDICATED ON ARCHITECTURAL DRAWINGS, COORDINATE LOCATION AND ORIENTATION OF DEVICES IN FIELD WITH ARCHITECT PRIOR TO ROUGH-IN.
- B. ALL DEVICES SHOWN ARE NEW UNLESS NOTED OTHERWISE.
- C. ALL DEVICES TO REMAIN ARE INDICATED WITH A THIN SOLID LINE WEIGHT AND SUBSCRIPT "EX".
- D. CONTRACTOR SHALL VISIT PRIOR TO BID SUBMITTALS TO DETERMINE SITE CONDITIONS EFFECTING THE EXECUTION OF WORK. FAILURE TO BE ACQUAINTED WITH EXISTING CONDITIONS WILL NOT BE JUSTIFICATION FOR ADDITIONAL SERVICES.
- E. PROVIDE FACE PLATES ON ALL J-BOXES ABANDONED IN FINISHED FLOOR, WALL OR CEILINGS. COORDINATE COLOR AND FINISH WITH ARCHITECT. CONTRACTOR TO VERIFY QUANTITY IN THE FIELD.
- F. WHERE EXPOSED CONDUIT IS NOTED, CONTRACTOR SHALL IDENTIFY ROUTING IN FIELD AND OBTAIN ARCHITECT'S APPROVAL OF ROUTING PRIOR TO ROUGH-IN. EXPOSED CONDUIT SHALL BE ROUTED TIGHT TO STRUCTURE.
- G. ALL SINGLE PHASE BRANCH CIRCUITS SHOWN SHALL HAVE DEDICATED NEUTRALS. TO MEET NEC SECTION 210.4 MULTI-WIRE BRANCH CIRCUIT REQUIREMENTS.
- H. REFER TO TECHNOLOGY DRAWINGS FOR CONDUIT ROUGH-IN OIDA, VOICE AND A/V.
- I. ALL 120V BRANCH CIRCUITS ON THIS SHEET SHALL BE FED FROM PANEL 2N1.1 UNLESS NOTED OTHERWISE.

KEYED NOTES

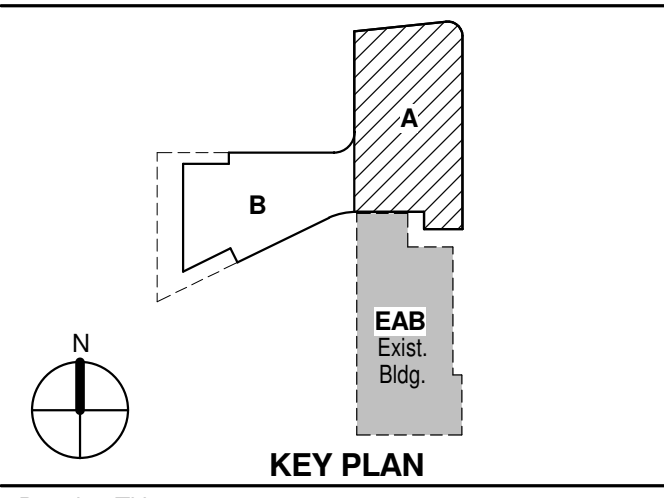
- E01 REFER TO EQUIPMENT DATA SCHEDULE FOR BRANCH CIRCUIT INFORMATION.
- E02 PROVIDE NEW RECEPTACLE FOR MONITOR, COORDINATE MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS AND TECHNOLOGY PLANS.
- E03 PROVIDE NEW RECEPTACLE FOR WALL MOUNTED PROJECTOR. VERIFY EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS AND A/V DRAWINGS.
- E05 PROVIDE NEW TWO SECTION ALUMINUM RACEWAY, WIREMOLD AL4320 WITH RECEPTACLES MOUNTED 24" ON CENTER UNLESS NOTED OR SHOWN OTHERWISE. PROVIDE ALL ACCESSORIES FOR A COMPLETE INSTALLATION. REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT AND LENGTH. SEE DETAILS ON SHEET E402.
- E06 OUTLET SHALL BE MOUNTED TO THE BACK SIDE OF THE TELECOMMUNICATION RACK AND FED FROM ABOVE. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH TELECOMMUNICATIONS CONTRACTOR PRIOR TO INSTALLATION.
- E07 OUTLET FOR RACK MOUNTED A/V EQUIPMENT. COORDINATE MOUNTING HEIGHT AND EXACT LOCATION WITH ARCHITECTURAL ELEVATIONS AND A/V DRAWINGS.
- E08 OUTLET FOR DIGITAL SIGNAGE. COORDINATE MOUNTING HEIGHT AND EXACT LOCATION WITH ARCHITECTURAL ELEVATIONS AND A/V DRAWINGS.
- E13 PROVIDE A DUCT MOUNTED SMOKE DETECTOR(S) AT RETURN AIR GRILLE OF AHU-1 & AHU-2. BOTH AIR HANDLING UNITS SHALL SHUT DOWN UPON ACTIVATION OF THE DUCT MOUNTED SMOKE DETECTOR(S). PROVIDE REMOTE INDUCTOR LIGHT(S) IN CEILING BELOW.
- E14 SURFACE RACEWAY AT EXTERIOR WINDOWS SHALL BE FED FROM BELOW OR FROM ADJACENT WALL OR COLUMN.
- E16 PROVIDE POWER AND FINAL CONNECTIONS TO FUME HOOD.
- E17 PROVIDE NEMA 6-30R, 30A-208V RECEPTACLE FOR PRINTER. CONTRACTOR SHALL VERIFY PRINTER PLUG TYPE WITH OWNERS REPRESENTATIVE PRIOR TO ROUGH-IN.
- E19 PROVIDE POWER AND FINAL CONNECTION TO ELECTRIC DOOR OPENER. COORDINATE POWER REQUIREMENTS WITH DOOR INSTALLER PRIOR TO ROUGH-IN.
- E20 PROVIDE POWER AND FINAL CONNECTION TO ELECTRIC DOOR OPENER CONTROLS. COORDINATE EXACT LOCATION WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN.
- E36 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 2L1.1.
- E37 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 2L2.
- E38 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 2L3.
- E39 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 2L4.
- E52 PROVIDE POWER AND FINAL CONNECTIONS TO OVERHEAD SERVICE CARRIER. REFER TO LIGHTING PLANS FOR LIGHTING CIRCUITS. COORDINATE WITH ARCHITECTURAL PLANS AND ELEVATIONS.
- E53 COORDINATE QUANTITY AND LOCATION OF TAMPER AND FLOW SWITCHES WITH FIRE PROTECTION CONTRACTOR.
- E62 PROVIDE A 2HR FIRE CLASSIFIED 2-GANG MULTI-SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RFB2S-FC WITH A BRASS FLANGED COVER CAT. NO. FPBTCBS-NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (2) 20A DUPLEX RECEPTACLES, NEMA L5-20R. THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR.
- E63 PROVIDE A 2HR FIRE CLASSIFIED 4-GANG MULTI-SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RFB4S-FC WITH A BRASS FLANGED COVER CAT. NO. FPBTCBS-NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (2) 20A DUPLEX RECEPTACLES, NEMA L5-20R. THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR.
- E64 PROVIDE A 2HR FIRE CLASSIFIED 4-GANG MULTI-SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RFB2S-FC WITH A BRASS FLANGED COVER CAT. NO. FPBTCBS-NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (3) 20A TWIST-LOCK RECEPTACLES, NEMA L5-20R. (1) GANG BLANK. THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR.
- E70 PROVIDE NEMA L5-20R, 20A-120V TWIST LOCK RECEPTACLE FOR RACK MOUNTED PDU. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH TECHNOLOGY CONTRACTOR.
- E73 PROVIDE POWER AND FINAL CONNECTIONS FOR ELECTRIC HAND DRYER.



1 LEVEL 02 - AREA A - FLOOR PLAN - POWER AND AUXILLARY
1/8" = 1'-0"

CONFORMED SET 01 JUL 2016

2	ADDENDUM 2-2	19 APRIL 2016
1	ADDENDUM 2-1	17 MAR 2016
1	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016



LEVEL 02 AREA A FLOOR PLAN - ELECTRICAL & AUXILIARY

Project No.: 04561.01 Checked by:

E0102.A

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GENERAL NOTES:

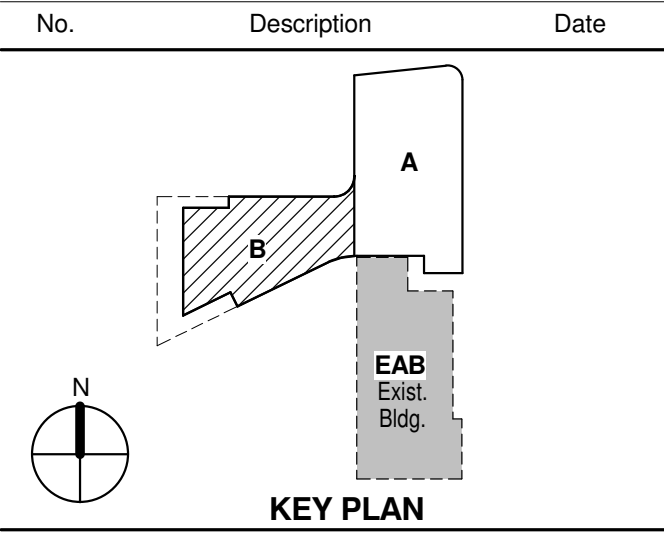
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- ALL DEVICES SHOWN ARE NEW UNLESS NOTED OTHERWISE.
- ALL DEVICES TO REMAIN ARE INDICATED WITH A THIN SOLID LINE WEIGHT AND SUBSCRIPT "EX".
- CONTRACTOR SHALL VISIT PRIOR TO BID SUBMITTALS TO DETERMINE SITE CONDITIONS EFFECTING THE EXECUTION OF WORK. FAILURE TO BE ACQUAINTED WITH EXISTING CONDITIONS WILL NOT BE JUSTIFICATION FOR ADDITIONAL SERVICES.
- PROVIDE FACE PLATES ON ALL J-BOXES ABANDONED IN FINISHED FLOOR, WALL OR CEILINGS. COORDINATE COLOR AND FINISH WITH ARCHITECT. CONTRACTOR TO VERIFY QUANTITY IN THE FIELD.
- WHERE EXPOSED CONDUIT IS NOTED. CONTRACTOR SHALL IDENTIFY ROUTING IN FIELD AND OBTAIN ARCHITECT'S APPROVAL OF ROUTING PRIOR TO ROUGH-IN. EXPOSED CONDUIT SHALL BE ROUTED TIGHT TO STRUCTURE.
- ALL SINGLE PHASE BRANCH CIRCUITS SHOWN SHALL HAVE DEDICATED NEUTRALS. TO MEET NEC SECTION 210.4 MULTI-WIRE BRANCH CIRCUIT REQUIREMENTS.
- REFER TO TECHNOLOGY DRAWINGS FOR CONDUIT ROUGH-IN OIDATA, VOICE AND A/V.
- ALL 120V BRANCH CIRCUITS ON THIS SHEET SHALL BE FED FROM PANEL 2N1, UNLESS NOTED OTHERWISE.

KEYED NOTES

- E01 REFER TO EQUIPMENT DATA SCHEDULE FOR BRANCH CIRCUIT INFORMATION.
- E02 PROVIDE NEW RECEPTACLE FOR MONITOR, COORDINATE MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS AND TECHNOLOGY PLANS.
- E04 PROVIDE CONNECTION TO MOTORIZED PROJECTION SCREEN AND UP/DOWN CONTROLS.
- E06 OUTLET SHALL BE MOUNTED TO THE BACK SIDE OF THE TELECOMMUNICATION RACK AND FED FROM ABOVE. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH TELECOMMUNICATIONS CONTRACTOR PRIOR TO INSTALLATION.
- E07 OUTLET FOR RACK MOUNTED A/V EQUIPMENT. COORDINATE MOUNTING HEIGHT AND EXACT LOCATION WITH ARCHITECTURAL ELEVATIONS AND A/V DRAWINGS.
- E17 PROVIDE NEMA 6-30R, 30A-208V RECEPTACLE FOR PRINTER. CONTRACTOR SHALL VERIFY PRINTER PLUG TYPE WITH OWNERS REPRESENTATIVE PRIOR TO ROUGH-IN.
- E19 PROVIDE POWER AND FINAL CONNECTION TO ELECTRIC DOOR OPENER. COORDINATE POWER REQUIREMENTS WITH DOOR INSTALLER PRIOR TO ROUGH-IN.
- E20 PROVIDE POWER AND FINAL CONNECTION TO ELECTRIC DOOR OPENER CONTROLS. COORDINATE EXACT LOCATION WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN.
- E55 PROVIDE POWER TO BUILDING AUTOMATION SYSTEM PANEL. COORDINATE LOCATION WITH AUTOMATION CONTRACTOR.
- E59 PROVIDE NEW QUAD RECEPTACLE FLUSH MOUNTED IN CEILING FOR PROJECTOR. VERIFY EXACT LOCATION WITH ARCHITECTURAL AND A/V DRAWINGS.
- E61 PROVIDE A 2HR FIRE CLASSIFIED 2-GANG MULTI-SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RFB25-FC WITH A BRASS FLANGED COVER CAT. NO. FFBTCBS-NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (1) 20A DUPLEX RECEPTACLE, (1) GANG - DATA/VOICE (SEE TECHNOLOGY DRAWINGS FOR DEVICE TYPE), THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR.
- E63 PROVIDE A 2HR FIRE CLASSIFIED 4-GANG MULTI-SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RFB45-FC WITH A BRASS FLANGED COVER CAT. NO. FFBTCBS-NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (2) 20A DUPLEX RECEPTACLE, (1) GANG - DATA/VOICE (SEE TECHNOLOGY DRAWINGS FOR DEVICE TYPE), (1) GANG - A/V (SEE A/V DRAWINGS FOR DEVICE TYPES). THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR.
- E68 PROVIDE FIRE ALARM CONTROL MODULE TO RELEASE POWER TO ELECTRICALLY HELD OPEN FIRE DOOR UPON ACTIVATION OF ASSOCIATED SMOKE DETECTOR.
- E69 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 2LL5.
- E70 PROVIDE NEMA L5-20R, 20A-120V TWIST LOCK RECEPTACLE FOR RACK MOUNTED PDU. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH TECHNOLOGY CONTRACTOR.
- E76 PROVIDE A 2HR FIRE CLASSIFIED 4-GANG MULTI-SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RFB25-FC WITH A BRASS FLANGED COVER CAT. NO. FFBTCBS-NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (3) 20A TWIST LOCK RECEPTACLES, NEMA L5-20R, (1) GANG - DATA/VOICE (SEE TECHNOLOGY DRAWINGS FOR DEVICE TYPE), THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR.

CONFORMED SET 01 JUL 2016

2	ADDENDUM 2-2	19 APRIL 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016



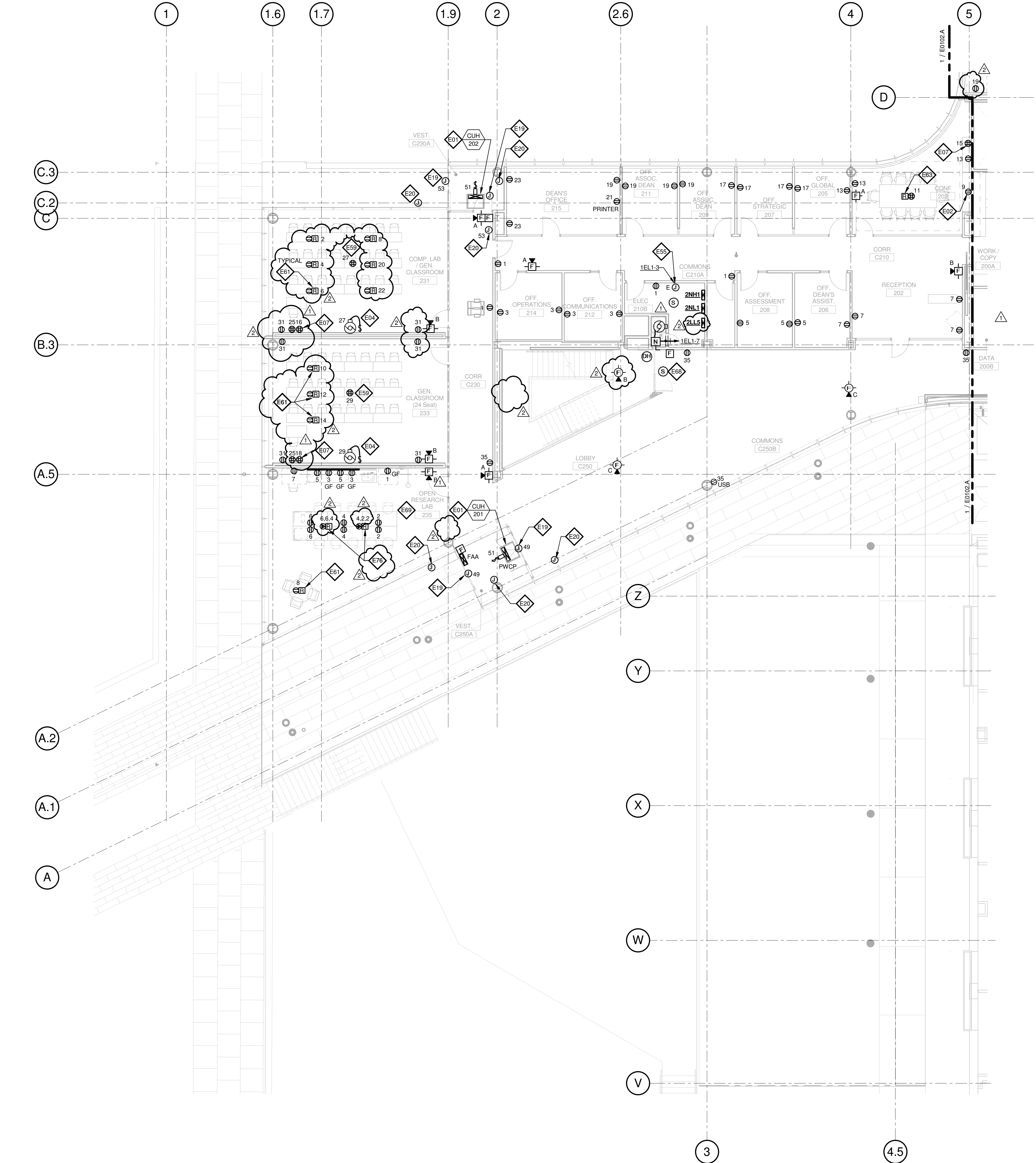
KEY PLAN

LEVEL 02 AREA B FLOOR
PLAN - ELECTRICAL &
AUXILIARY

Project No.: 04561.01 Checked by:

E0102.B

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1 LEVEL 02 - AREA B - FLOOR PLAN - POWER AND AUXILIARY

1/8" = 1'-0"

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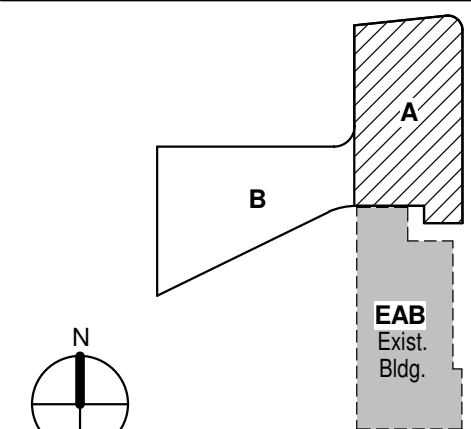
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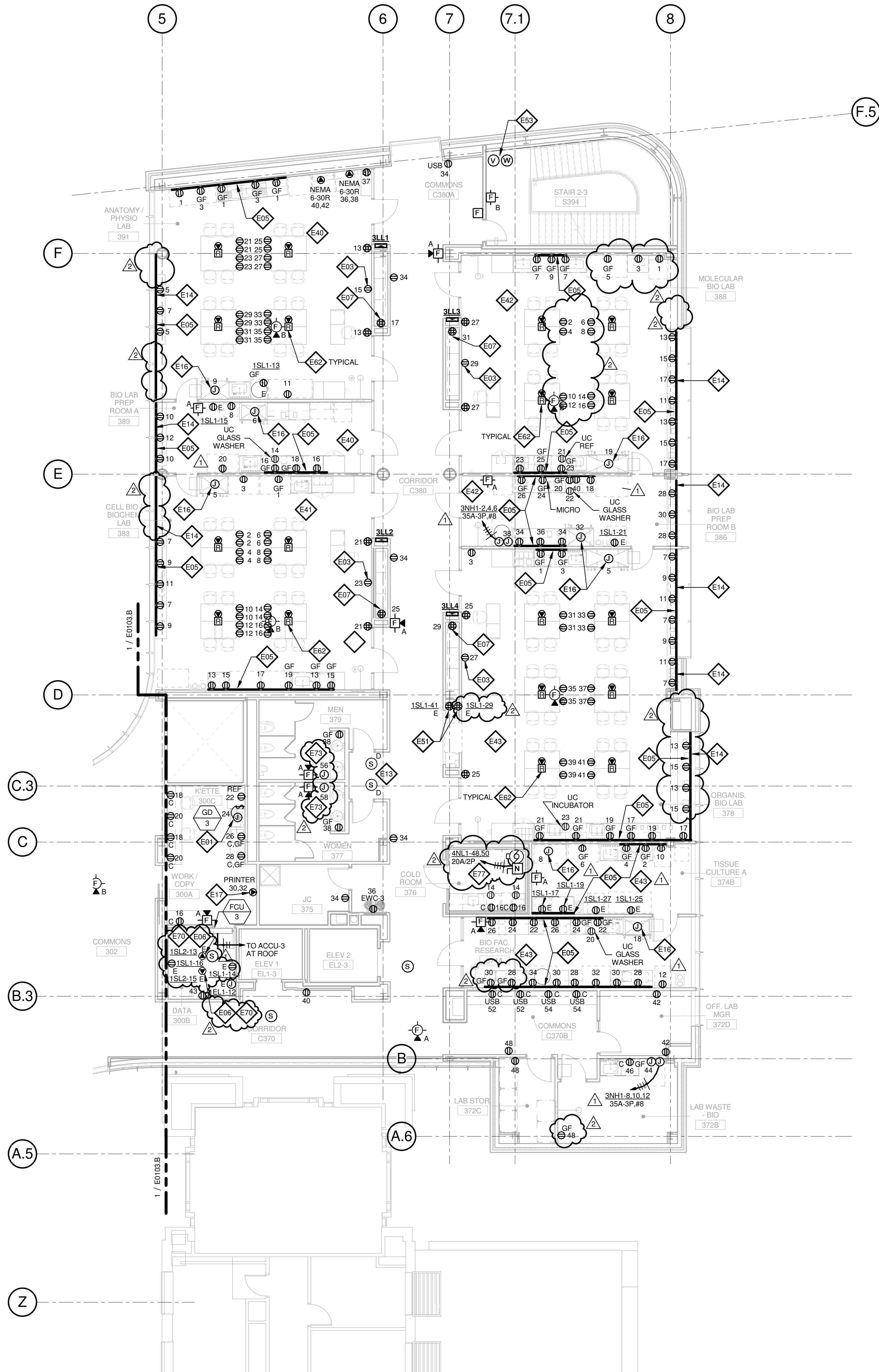
2	ADDENDUM 2-2	19 APRIL 2016
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-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016
No.	Description	Date



LEVEL 03 AREA A FLOOR PLAN - ELECTRICAL & AUXILIARY

E0103.A

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- A. DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELAVATIONS FOR LOCATION AND ORIENTATION OF DEVICES. WHERE LOCATION IS NOT INDICATED ON ARCHITECTURAL DRAWINGS, COORDINATE LOCATION AND ORIENTATION OF DEVICES IN FIELD WITH ARCHITECT PRIOR TO ROUGH-IN.
- B. ALL DEVICES SHOWN ARE NEW UNLESS NOTED OTHERWISE.
- C. ALL DEVICES TO REMAIN ARE INDICATED WITH A THIN SOLID LINE WEIGHT AND SUBSCRIPT "EX".
- D. CONTRACTOR SHALL VISIT PRIOR TO BID SUBMITTALS TO DETERMINE SITE CONDITIONS EFFECTING THE EXECUTION OF WORK. FAILURE TO BE ACQUAINTED WITH EXISTING CONDITIONS WILL NOT BE JUSTIFICATION FOR ADDITIONAL SERVICES.
- E. PROVIDE FACE PLATES ON ALL J-BOXES ABANDONED IN FINISHED FLOOR, WALL OR CEILINGS. COORDINATE COLOR AND FINISH WITH ARCHITECT. CONTRACTOR TO VERIFY QUANTITY IN THE FIELD.
- F. WHERE EXPOSED CONDUIT IS NOTED, CONTRACTOR SHALL IDENTIFY ROUTING IN FIELD AND OBTAIN ARCHITECT'S APPROVAL. OF ROUTING PRIOR TO ROUGH-IN. EXPOSED CONDUIT SHALL BE ROUTED TIGHT TO STRUCTURE.
- G. ALL SINGLE PHASE BRANCH CIRCUITS SHOWN SHALL HAVE DEDICATED NEUTRALS TO MEET NEC SECTION 210.4 MULTI-WIRE BRANCH CIRCUIT REQUIREMENTS.
- H. REFER TO TECHNOLOGY DRAWINGS FOR CONDUIT ROUGH-IN, ODDATA, VOICE AND A/V.
- I. ALL 120V BRANCH CIRCUITS ON THIS SHEET SHALL BE FED FROM PANEL 3N1, UNLESS NOTED OTHERWISE.

E01 REFER TO EQUIPMENT DATA SCHEDULE FOR BRANCH CIRCUIT INFORMATION.

E03 PROVIDE NEW RECEPTACLE FOR WALL MOUNTED PROJECTOR. VERIFY EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS AND AV DRAWINGS.

E05 PROVIDE NEW TWO SECTION ALUMINUM RACEWAY, WIREMOLD AL4320 WITH RECEPTACLE MOUNTED 24" ON CENTER UNLESS NOTED OR SHOWN OTHERWISE. PROVIDE ALL ACCESSORIES FOR A COMPLETE INSTALLATION. REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT AND LENGTH. SEE DETAILS ON SHEET E402.

E06 OUTLET SHALL BE MOUNTED TO THE BACK SIDE OF THE TELECOMMUNICATION RACK AND FED FROM ABOVE. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH TELECOMMUNICATIONS CONTRACTOR PRIOR TO INSTALLATION.

E07 OUTLET FOR RACK MOUNTED A/V EQUIPMENT. COORDINATE MOUNTING HEIGHT AND EXACT LOCATION WITH ARCHITECTURAL ELEVATIONS AND AV DRAWINGS.

E13 PROVIDE A DUCT MOUNTED SMOKE DETECTOR(S) AT RETURN AIR GRILLE OF AHU-1 & AHU-2. BOTH AIR HANDLING UNITS SHALL SHUT DOWN UPON ACTIVATION OF THE DUCT MOUNTED SMOKE DETECTOR(S). PROVIDE REMOTE INDICATOR LIGHT(S) IN CEILING BELOW.

E14 SURFACE RACEWAY AT EXTERIOR WINDOWS SHALL BE FED FROM BELOW OR FROM ADJACENT WALL OR COLUMN.

E16 PROVIDE POWER AND FINAL CONNECTIONS TO FUME HOOD.

E17 PROVIDE NEMA 6-30R, 30A-208V RECEPTACLE FOR PRINTER. CONTRACTOR SHALL VERIFY PRINTER PLUG TYPE WITH OWNERS REPRESENTATIVE PRIOR TO ROUGH-IN.

E40 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 3LL1.

E41 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 3LL2.

E42 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 3LL3.

E43 ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 3LL4.

E51 PROVIDE 20A GFCI QUAD RECEPTACLE WITH AUDIBLE ALARM ON EMERGENCY CIRCUIT FOR FISH TANK. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS AND ELEVATIONS.

E53 COORDINATE QUANTITY AND LOCATION OF TAMPER AND FLOW SWITCHES WITH FIRE PROTECTION CONTRACTOR.

E62 PROVIDE A 2HR FIRE CLASSIFIED 2-GANG MULTI-SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RFB5C-F WITH A BRASS FLANGED COVER CAT. NO. FFBTCBS-NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (2) 20A TWIST-LOCK RECEPTACLES. NEMA 15-20R. THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR.

E70 PROVIDE NEMA 15-20R, 20A-120V TWIST LOCK RECEPTACLE FOR RACK MOUNTED PDU. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH TECHNOLOGY CONTRACTOR.

E73 PROVIDE POWER AND FINAL CONNECTIONS FOR ELECTRIC HAND DRYER.

E77 PROVIDE POWER TO EVAPORATOR COIL, LIGHTS, CONTROLS ETC. FOR A COMPLETE INSTALLATION OF WALK-IN COOLER.

$$1/8'' = 1'-0''$$

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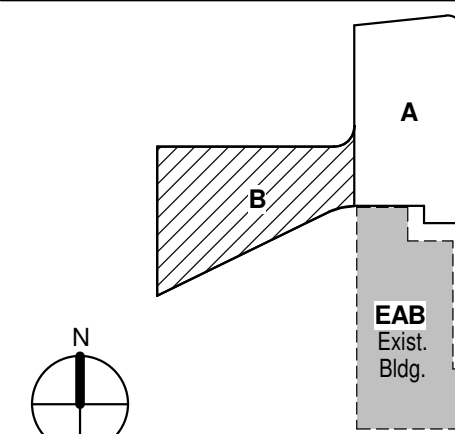
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KEY PLAN

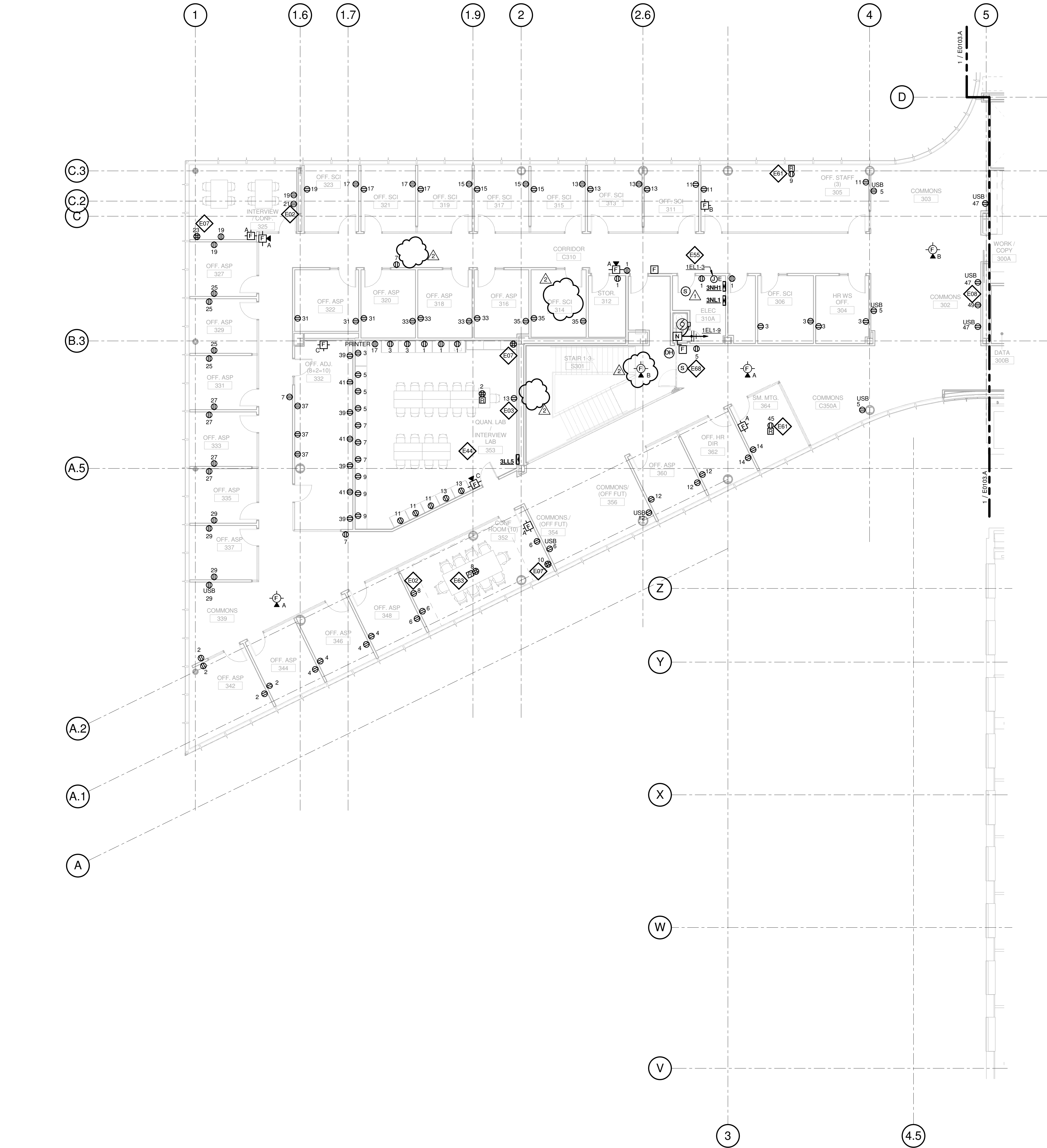
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**LEVEL 03 AREA B FLOOR
PLAN - ELECTRICAL &
AUXILIARY**

Project No.: 04561.01 Checked by:

E0103.B

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GENERAL NOTES:

- DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR LOCATION AND ORIENTATION OF DEVICES. WHERE LOCATIONS ARE NOT INDICATED ON ARCHITECTURAL DRAWINGS, COORDINATE LOCATION AND ORIENTATION OF DEVICES IN FIELD WITH ARCHITECT PRIOR TO ROUGH-IN.
- ALL DEVICES SHOWN ARE NEW UNLESS NOTED OTHERWISE.
- ALL DEVICES TO REMAIN ARE INDICATED WITH A THIN SOLID LINE WEIGHT AND SUBSCRIPT "EX".
- CONTRACTOR SHALL VISIT PRIOR TO BID SUBMITTALS TO DETERMINE SITE CONDITIONS EFFECTING THE EXECUTION OF WORK. FAILURE TO BE ACQUAINTED WITH EXISTING CONDITIONS WILL NOT BE JUSTIFICATION FOR ADDITIONAL SERVICES.
- PROVIDE FACE PLATES ON ALL J-BOXES ABANDONED IN FINISHED FLOOR, WALL OR CEILINGS. COORDINATE COLOR AND FINISH WITH ARCHITECT. CONTRACTOR TO VERIFY QUANTITY IN THE FIELD.
- WHERE EXPOSED CONDUIT IS NOTED, CONTRACTOR SHALL IDENTIFY ROUTING IN FIELD AND OBTAIN ARCHITECT'S APPROVAL OF ROUTING PRIOR TO ROUGH-IN. EXPOSED CONDUIT SHALL BE ROUTED TIGHT TO STRUCTURE.
- ALL SINGLE PHASE BRANCH CIRCUITS SHOWN SHALL HAVE DEDICATED NEUTRALS TO MEET NEC SECTION 210.4 MULTI-WIRE BRANCH CIRCUIT REQUIREMENTS.
- REFER TO TECHNOLOGY DRAWINGS FOR CONDUIT ROUGH-IN ODATA, VOICE AND A/V.
- ALL 120V BRANCH CIRCUITS ON THIS SHEET SHALL BE FED FROM PANEL 3N11 UNLESS NOTED OTHERWISE.

KEYED NOTES

- E01** REFER TO EQUIPMENT DATA SCHEDULE FOR BRANCH CIRCUIT INFORMATION.
- E02** PROVIDE NEW RECEPTACLE FOR MONITOR. COORDINATE MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS AND TECHNOLOGY PLANS.
- E03** PROVIDE NEW RECEPTACLE FOR WALL MOUNTED PROJECTOR. VERIFY EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS AND A/V DRAWINGS.
- E06** OUTLET SHALL BE MOUNTED TO THE BACK SIDE OF THE TELECOMMUNICATION RACK AND FED FROM ABOVE. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH TELECOMMUNICATIONS CONTRACTOR PRIOR TO INSTALLATION.
- E07** OUTLET FOR RACK MOUNTED A/V EQUIPMENT. COORDINATE MOUNTING HEIGHT AND EXACT LOCATION WITH ARCHITECTURAL ELEVATIONS AND A/V DRAWINGS.
- E08** OUTLET FOR DIGITAL SIGNAGE. COORDINATE MOUNTING HEIGHT AND EXACT LOCATION WITH ARCHITECTURAL ELEVATIONS AND A/V DRAWINGS.
- E17** PROVIDE NEMA 6-30R, 30A-208V RECEPTACLE FOR PRINTER. CONTRACTOR SHALL VERIFY PRINTER PLUG TYPE WITH OWNERS REPRESENTATIVE PRIOR TO ROUGH-IN.
- E44** ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 3LL5.
- E55** PROVIDE POWER TO BUILDING AUTOMATION SYSTEM PANEL. COORDINATE LOCATION WITH AUTOMATION CONTRACTOR.
- E61** PROVIDE A 2HR FIRE CLASSIFIED 2-GANG MULTI-SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RFB2S-FC WITH A BRASS FLANGED COVER CAT. NO. RFBTCBS-NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (1) 20A DUPLEX RECEPTACLE, (1) GANG - DATA/VOICE (SEE TECHNOLOGY DRAWINGS FOR DEVICE TYPE), (1) GANG - A/V (SEE A/V DRAWINGS FOR DEVICE TYPES). THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR.
- E63** PROVIDE A 2HR FIRE CLASSIFIED 4-GANG MULTI-SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RFB4S-FC WITH A BRASS FLANGED COVER CAT. NO. RFBTCBS-NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (2) 20A DUPLEX RECEPTACLE, (1) GANG - DATA/VOICE (SEE TECHNOLOGY DRAWINGS FOR DEVICE TYPE), (1) GANG - A/V (SEE A/V DRAWINGS FOR DEVICE TYPES). THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR.
- E68** PROVIDE FIRE ALARM CONTROL MODULE TO RELEASE POWER TO ELECTRICALLY HELD OPEN FIRE DOOR UPON ACTIVATION OF ASSOCIATED SMOKE DETECTOR.
- E70** PROVIDE NEMA L5-20R, 20A-120V TWIST LOCK RECEPTACLE FOR RACK MOUNTED PDU. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH TECHNOLOGY CONTRACTOR.

1 LEVEL 03 - AREA B - FLOOR PLAN - POWER AND AUXILIARY

1/8" = 1'-0"

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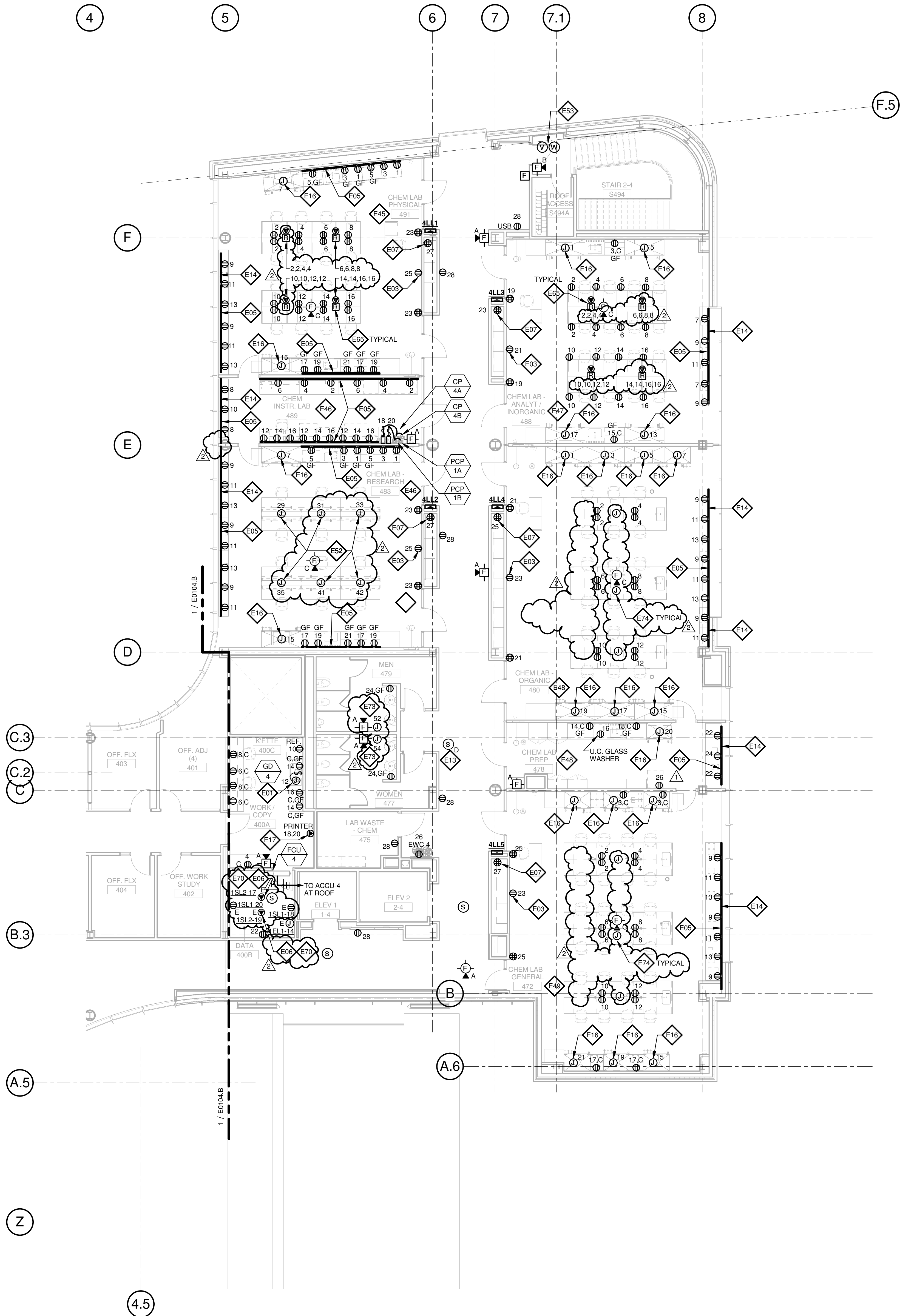
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- ALL DEVICES SHOWN ARE NEW UNLESS NOTED OTHERWISE.
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- PROVIDE FACE PLATES ON ALL J-BOXES ABANDONED IN FINISHED FLOOR, WALL OR CEILINGS. COORDINATE COLOR AND FINISH WITH ARCHITECT. CONTRACTOR TO VERIFY QUANTITY IN THE FIELD.
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- ALL SINGLE PHASE BRANCH CIRCUITS SHOWN SHALL HAVE DEDICATED NEUTRALS TO MEET NEC SECTION 210.4 MULTI-WIRE BRANCH CIRCUIT REQUIREMENTS.
- REFER TO TECHNOLOGY DRAWINGS FOR CONDUIT ROUGH-IN OIDATA, VOICE AND AV.
- ALL 120V BRANCH CIRCUITS ON THIS SHEET SHALL BE FED FROM PANEL 4NLL1 UNLESS NOTED OTHERWISE.

KEYED NOTES

- E001** REFER TO EQUIPMENT DATA SCHEDULE FOR BRANCH CIRCUIT INFORMATION.
- E003** PROVIDE NEW RECEPTACLE FOR WALL MOUNTED PROJECTOR. VERIFY EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS AND AV DRAWINGS.
- E005** PROVIDE NEW TWO SECTION ALUMINUM RACEWAY, WIREMOLD AL4320 WITH RECEPTACLES MOUNTED 24" ON CENTER UNLESS NOTED OR SHOWN OTHERWISE. PROVIDE ALL ACCESSORIES FOR A COMPLETE INSTALLATION. REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT AND LENGTH. SEE DETAILS ON SHEET E402.
- E006** OUTLET SHALL BE MOUNTED TO THE BACK SIDE OF THE TELECOMMUNICATION RACK AND FED FROM ABOVE. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH TELECOMMUNICATIONS CONTRACTOR PRIOR TO INSTALLATION.
- E007** OUTLET FOR RACK MOUNTED AV EQUIPMENT. COORDINATE MOUNTING HEIGHT AND EXACT LOCATION WITH ARCHITECTURAL ELEVATIONS AND AV DRAWINGS.
- E13** PROVIDE A DUCT MOUNTED SMOKE DETECTOR(S) AT RETURN AIR GRILLE OF AHU-1 & AHU-2. BOTH AIR HANDLING UNITS SHALL SHUT DOWN UPON ACTIVATION OF THE DUCT MOUNTED SMOKE DETECTOR(S). PROVIDE REMOTE INDICATOR LIGHT(S) IN CEILING BELOW.
- E14** SURFACE RACEWAY AT EXTERIOR WINDOWS SHALL BE FED FROM BELOW OR FROM ADJACENT WALL OR COLUMN.
- E16** PROVIDE POWER AND FINAL CONNECTIONS TO FUME HOOD.
- E17** PROVIDE NEMA 6-30R, 30A-208V RECEPTACLE FOR PRINTER. CONTRACTOR SHALL VERIFY PRINTER PLUG TYPE WITH OWNERS REPRESENTATIVE PRIOR TO ROUGH-IN.
- E45** ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 4LL1.
- E46** ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 4LL2.
- E47** ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 4LL3.
- E48** ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 4LL4.

- E49** ALL 120V BRANCH CIRCUITS IN THIS ROOM SHALL BE FED FROM PANEL 4LL5.
- E52** PROVIDE POWER AND FINAL CONNECTIONS TO OVERHEAD SERVICE CARRIER. REFER TO LIGHTING PLANS FOR LIGHTING CIRCUITS. COORDINATE WITH ARCHITECTURAL PLANS AND ELEVATIONS.
- E53** COORDINATE QUANTITY AND LOCATION OF TAMPER AND FLOW SWITCHES WITH FIRE PROTECTION CONTRACTOR.
- E55** PROVIDE A 2HR FIRE CLASSIFIED LONG MULTISERVICE STEEL RECESSIBLE FLOOR BOX EQUAL TO WIREMOLD CAT. NO. FB255 WITH A BRASS FLANGED COVER AND NO FPB/CBS-NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (4) 20A TWIST-LOCK RECEPTACLES, NEMA L5-20R. THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR.
- E70** PROVIDE NEMA L5-20R, 20A-120V TWIST LOCK RECEPTACLE FOR RACK MOUNTED PDU. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH TECHNOLOGY CONTRACTOR.
- E73** PROVIDE POWER AND FINAL CONNECTIONS FOR ELECTRIC HAND DRYER.
- E74** FEED FIXED FURNITURE FROM BELOW AND MAKE ALL FINAL CONNECTIONS TO RECEPTACLES.



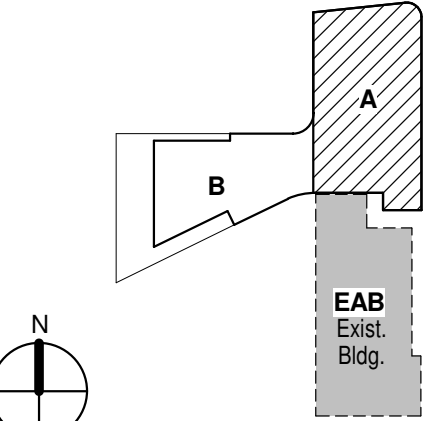
1 LEVEL 04 - AREA A - FLOOR PLAN - POWER AND AUXILLARY

1/8" = 1'-0"

CONFORMED SET 01 JUL 2016

2 ADDENDUM 2-2 19 APRIL 2016
1 ADDENDUM 2-1 17 MAR 2016
- ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016

No.	Description	Date
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KEY PLAN

Drawing Title:

**LEVEL 04 AREA A FLOOR
PLAN - ELECTRICAL &
AUXILIARY**

Project No.: 04561.01 Checked by:

E0104.A

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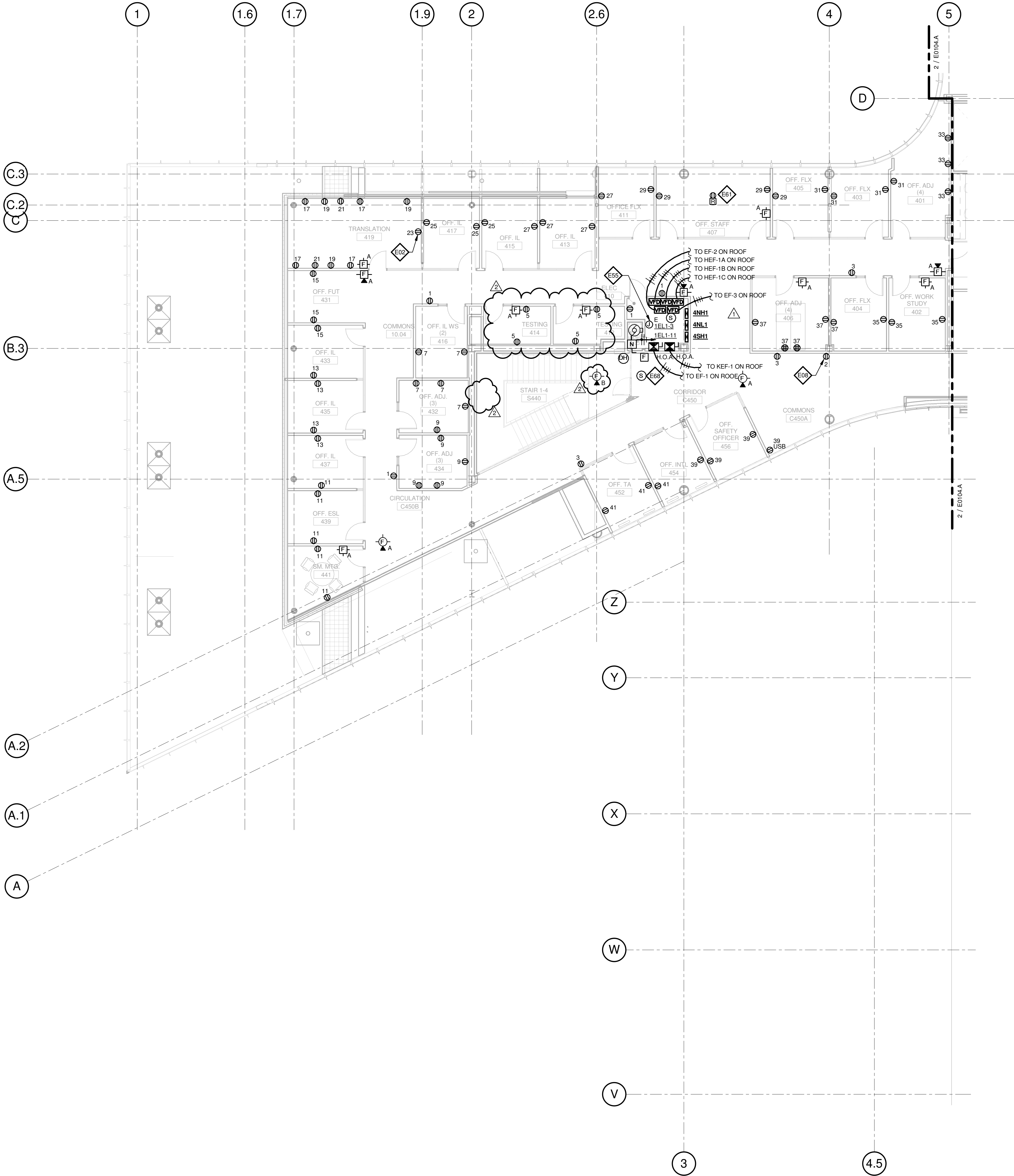
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KEYED NOTES

- E02 PROVIDE NEW RECEPTACLE FOR MONITOR. COORDINATE MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS AND TECHNOLOGY PLANS.
- E06 OUTLET SHALL BE MOUNTED TO THE BACK SIDE OF THE TELECOMMUNICATION RACK AND FED FROM ABOVE. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH TELECOMMUNICATIONS CONTRACTOR PRIOR TO INSTALLATION.
- E08 OUTLET FOR DIGITAL SIGNAGE. COORDINATE MOUNTING HEIGHT AND EXACT LOCATION WITH ARCHITECTURAL ELEVATIONS AND A/V DRAWINGS.
- E55 PROVIDE POWER TO BUILDING AUTOMATION SYSTEM PANEL. COORDINATE LOCATION WITH AUTOMATION CONTRACTOR.
- E61 PROVIDE A 2HR FIRE CLASSIFIED 2-GANG MULTI-SERVICE STEEL RECESSED FLOOR BOX EQUAL TO WIREMOLD CAT. NO. RF82S-FC WITH A BRASS FLANGED COVER CAT. NO. FPBTCBS-NA. THE FLOOR BOX SHALL HAVE ALL NECESSARY MOUNTING BRACKETS FOR (1) 20A DUPLEX RECEPTACLE, (1) GANG - DATA/VOICE (SEE TECHNOLOGY DRAWINGS FOR DEVICE TYPE). THE BOX SHALL BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS SO THAT THE COVER IS FLUSH WITH THE FLOOR.
- E68 PROVIDE FIRE ALARM CONTROL MODULE TO RELEASE POWER TO ELECTRICALLY HELD OPEN FIRE DOOR UPON ACTIVATION OF ASSOCIATED SMOKE DETECTOR.



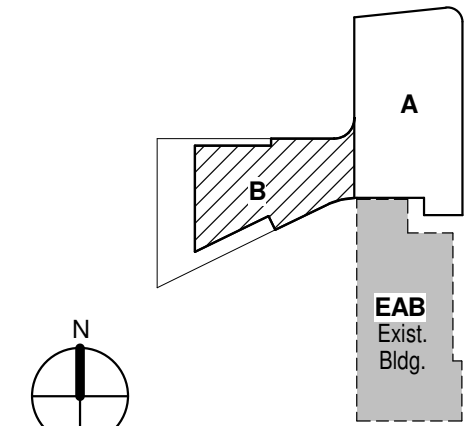
1 LEVEL 04 - AREA B - FLOOR PLAN - POWER AND AUXILLARY

1/8" = 1'-0"

CONFORMED SET 01 JUL 2016

2 ADDENDUM 2-2 19 APRIL 2016
1 ADDENDUM 2-1 17 MAR 2016
- ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016

No.	Description	Date
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KEY PLAN

Drawing Title:

LEVEL 04 AREA B FLOOR
PLAN - ELECTRICAL &
AUXILIARY

Project No.: 04561.01 Checked by:

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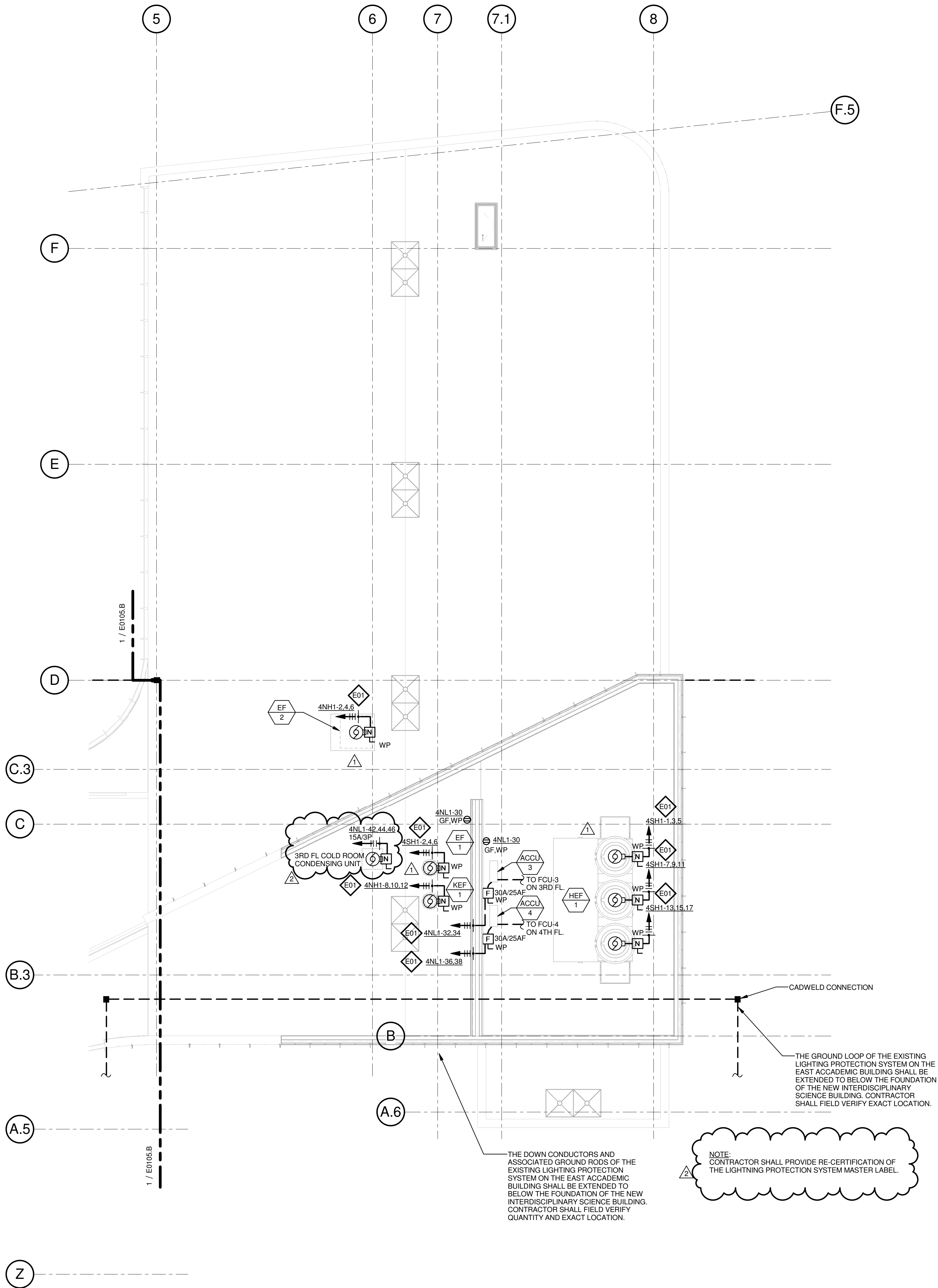
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- REFER TO TECHNOLOGY DRAWINGS FOR CONDUIT ROUGH-IN ODATA, VOICE AND AV.

KEYED NOTES

E01 REFER TO EQUIPMENT DATA SCHEDULE FOR BRANCH CIRCUIT INFORMATION.

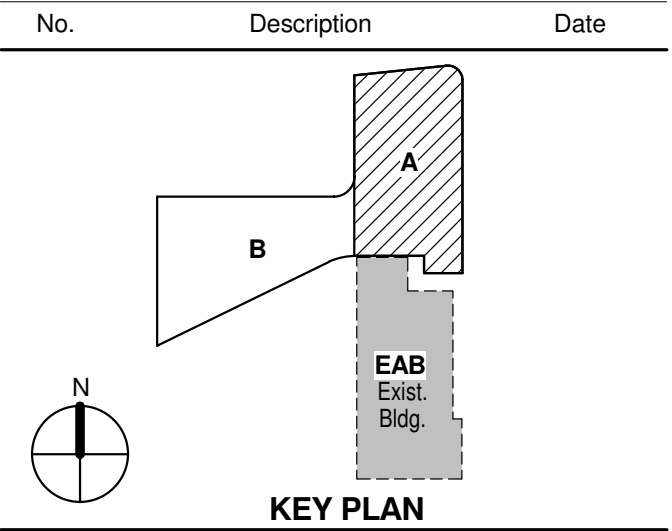


1 ROOF LEVEL - AREA A - ELECTRICAL POWER PLAN

1/8" = 1'-0"

CONFORMED SET 01 JUL 2016

2	ADDENDUM 2-2	19 APRIL 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016



KEY PLAN

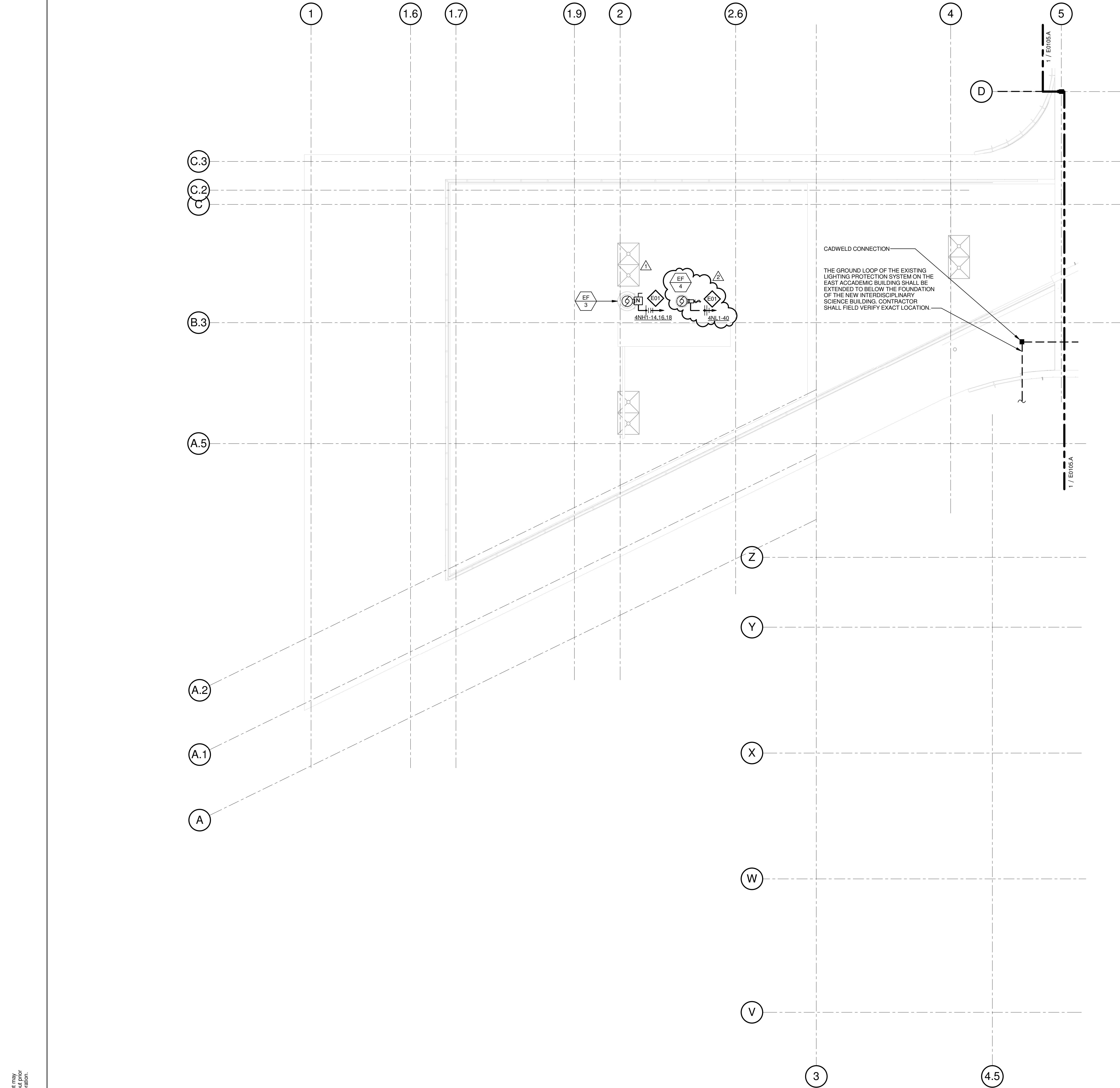
ROOF PLAN - AREA A -
ELECTRICAL & AUXILIARY

Project No.: 04561.01 Checked by:

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- G. ALL SINGLE PHASE BRANCH CIRCUITS SHOWN SHALL HAVE DEDICATED NEUTRALS. TO MEET NEC SECTION 210.4 MULTI-WIRE BRANCH CIRCUIT REQUIREMENTS.
- H. REFER TO TECHNOLOGY DRAWINGS FOR CONDUIT ROUGH-IN ODATA, VOICE AND A/V.



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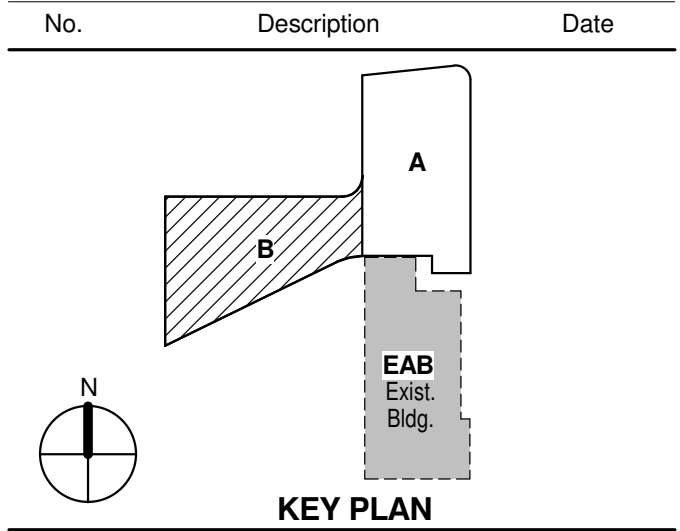
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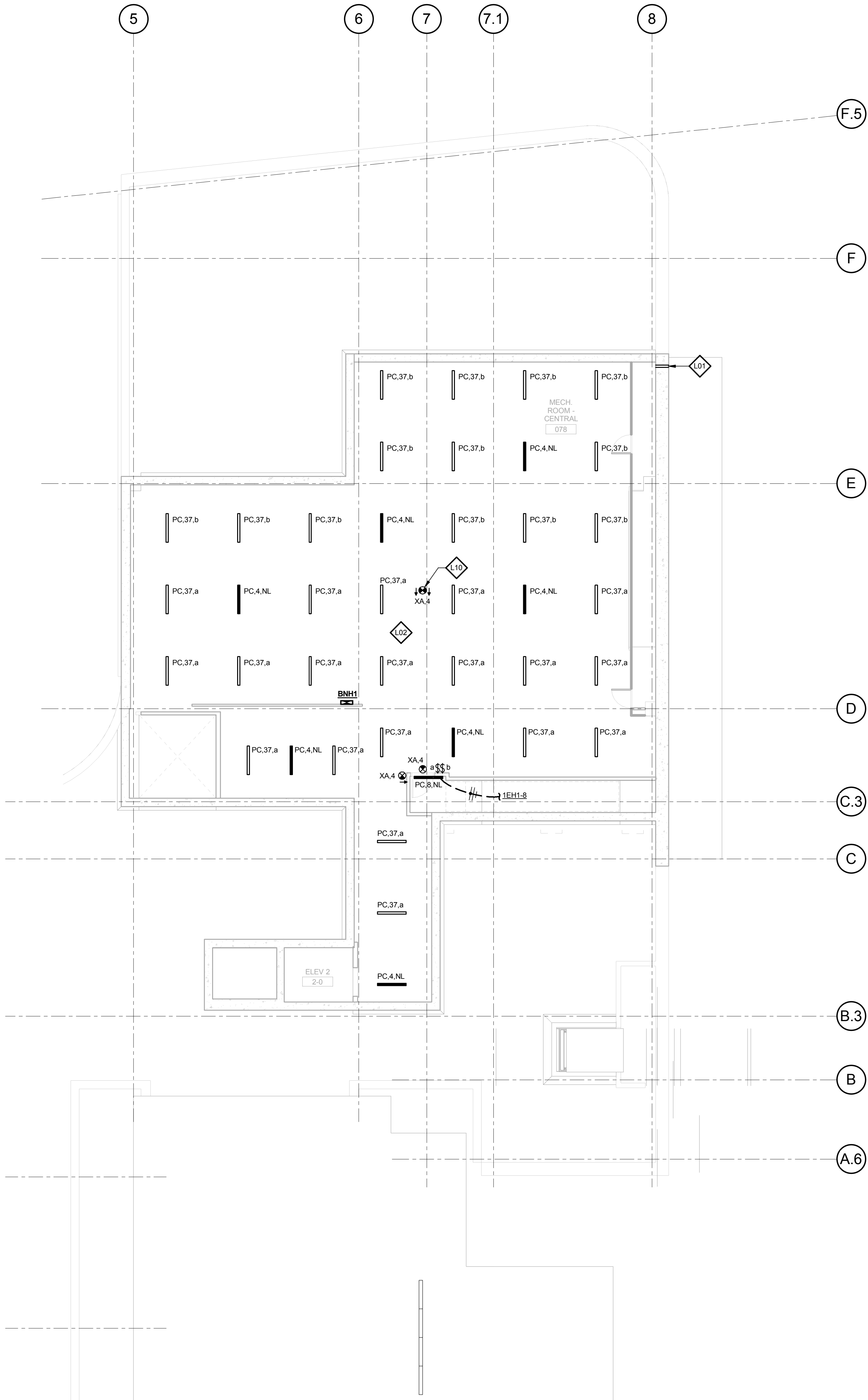
ROOF PLAN - AREA B - ELECTRICAL & AUXILIARY

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1 LEVEL 00 - AREA A - LIGHTING PLAN
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- CONTRACTOR SHALL VISIT PRIOR TO BID SUBMITTALS TO DETERMINE SITE CONDITIONS EFFECTING THE EXECUTION OF WORK. FAILURE TO BE ACQUAINTED WITH EXISTING CONDITIONS WILL NOT BE JUSTIFICATION FOR ADDITIONAL SERVICES.
- PROVIDE FACE PLATES ON ALL J-BOXES ABANDONED IN FINISHED FLOOR, WALL OR CEILINGS. COORDINATE COLOR AND FINISH WITH ARCHITECT. CONTRACTOR TO VERIFY QUANTITY IN THE FIELD.
- WHERE EXPOSED CONDUIT IS NOTED, CONTRACTOR SHALL IDENTIFY ROUTING IN FIELD AND OBTAIN ARCHITECT'S APPROVAL OF ROUTING PRIOR TO ROUGH-IN. EXPOSED CONDUIT SHALL BE ROUTED TIGHT TO STRUCTURE.
- MINIMUM 0-10V CONTROL WIRE SIZE SHALL BE #18 (#16 FOR RUNS LONGER THAN 400').
- ALL SINGLE PHASE BRANCH CIRCUITS SHOWN WITH COMMON NEUTRAL SHALL HAVE INDIVIDUAL 20A-1P CIRCUIT BREAKER. CONTRACTOR TO PROVIDE HANDLE TIES TO MEET NEC SECTION 210.4 MULTI-WIRE BRANCH CIRCUIT REQUIREMENTS. REFER TO DRAWINGS FOR CIRCUITS WITH DEDICATED NEUTRALS.
- SHADED FIXTURES AND FIXTURES NOTED WITH AN "E" ARE FOR EMERGENCY EGRESS. CONNECT FIXTURES TO LIFE SAFETY PANEL 1EH1.
- FIXTURES NOTED WITH "NL" ARE UN-SWITCHED NIGHT LIGHTS AND SHALL BE LEFT ON AFTER HOURS FOR WAY FINDING.
- CONNECT NON-EMERGENCY 277V LIGHTING ON THIS FLOOR TO PANEL BNH1.

KEYED NOTES

- L01** PROVIDE CONDUIT (SLEEVE(S) IN FOUNDATION WALL FOR WATER TIGHT SEAL OF ELECTRICAL SITE LIGHTING CONDUIT(S).
- L02** COORDINATE LOCATION OF PENDANT MOUNTED LIGHTS WITH OTHER TRADES, TO AVOID PIPING, DUCTWORK, AND OTHER EQUIPMENT.
- L10** PENDANT MOUNT EXIT SIGN.

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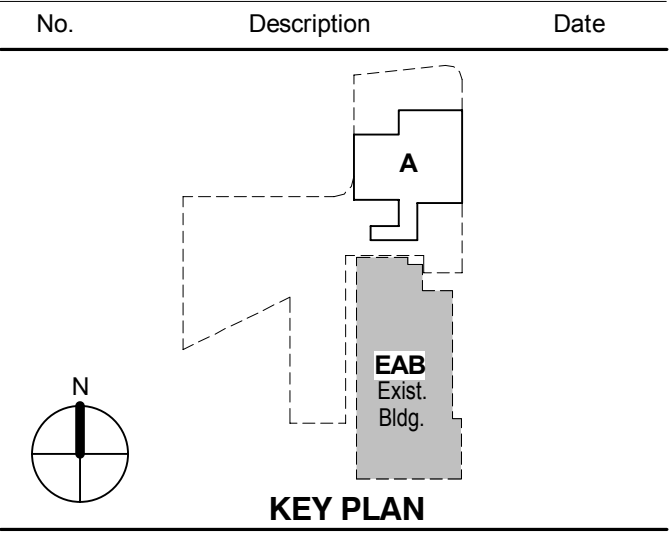
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KEY PLAN

**LEVEL 00 FLOOR PLAN -
LIGHTING**

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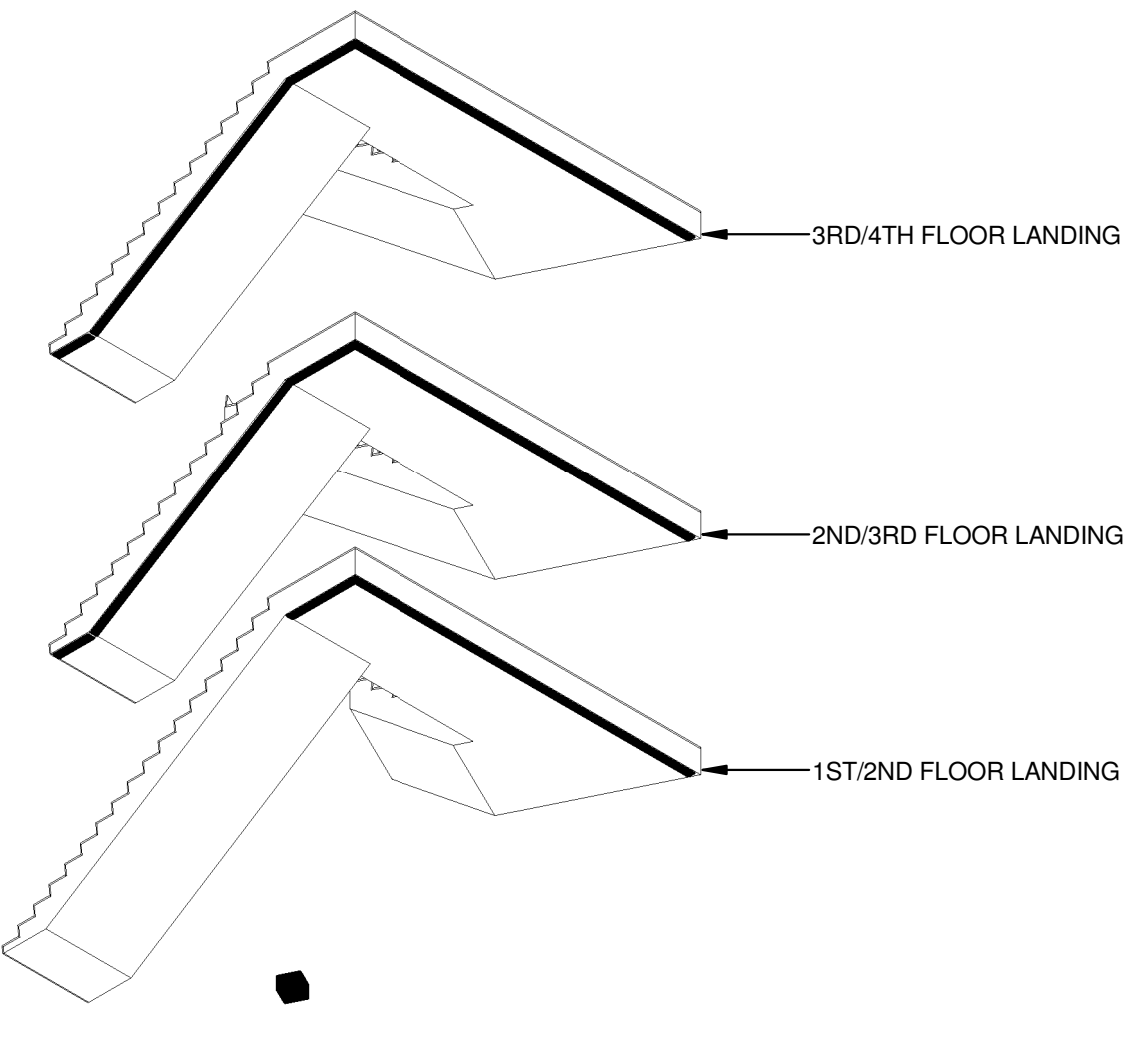
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GENERAL NOTES:

- A. DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR LOCATION AND ORIENTATION OF DEVICES. WHERE LOCATIONS ARE NOT INDICATED ON ARCHITECTURAL DRAWINGS, COORDINATE LOCATION AND ORIENTATION OF DEVICES IN FIELD WITH ARCHITECT PRIOR TO ROUGH-IN.
- B. CONTRACTOR SHALL VISIT PRIOR TO BID SUBMITTALS TO DETERMINE SITE CONDITIONS EFFECTING THE EXECUTION OF WORK. FAILURE TO BE ACQUAINTED WITH EXISTING CONDITIONS WILL NOT BE JUSTIFICATION FOR ADDITIONAL SERVICES.
- C. PROVIDE FACE PLATES ON ALL J-BOXES ABANDONED IN FINISHED FLOOR, WALL OR CEILING. COORDINATE COLOR AND FINISH WITH ARCHITECT. CONTRACTOR TO VERIFY QUANTITY IN THE FIELD.
- D. WHERE EXPOSED CONDUIT IS NOTED, CONTRACTOR SHALL IDENTIFY ROUTING IN FIELD AND OBTAIN ARCHITECT'S APPROVAL OF ROUTING PRIOR TO ROUGH-IN. EXPOSED CONDUIT SHALL BE ROUTED TO THE STRUCTURE.
- E. MINIMUM 0-10V CONTROL WIRE SIZE SHALL BE #18 (#16 FOR RUNS LONGER THAN 400') DO NOT MIX 0-10V LOW VOLTAGE AND LINE VOLTAGE WIRING UNLESS APPROVED BY CONTROLS MANUFACTURER.
- F. ALL SINGLE PHASE BRANCH CIRCUITS SHOWN WITH COMMON NEUTRAL SHALL HAVE INDIVIDUAL 20A-1P CIRCUIT BREAKER. CONTRACTOR TO PROVIDE HANDLE TIES TO MEET NEC SECTION 210.4 MULTI-WIRE BRANCH CIRCUIT REQUIREMENTS. REFER TO DRAWINGS FOR CIRCUITS WITH DEDICATED NEUTRALS.
- G. SHADED FIXTURES AND FIXTURES NOTED WITH AN "E" ARE FOR EMERGENCY EGRESS. CONNECT FIXTURES TO LIFE SAFETY PANEL 1EH1.
- H. FIXTURES NOTED WITH "NL" ARE UN-SWITCHED NIGHT LIGHTS AND SHALL BE LEFT ON AFTER HOURS FOR WAY FINDING.
- I. WHERE A SWITCH WITH A "D" IS CALLED OUT, PROVIDE LUTRON DIVA 0-10V WALLBOX DIMMER WITH INTEGRAL RELAY. COORDINATE DIMMER VOLTAGE WITH CIRCUIT. WHERE A "3D" IS CALLED OUT, CONFIGURE DIMMER FOR 3-WAY DIMMING.
- J. CONNECT NON-EMERGENCY 277V LIGHTING ON THIS FLOOR TO PANEL 1NH1. CONNECT SHADES TO NEAREST 120V PANEL.

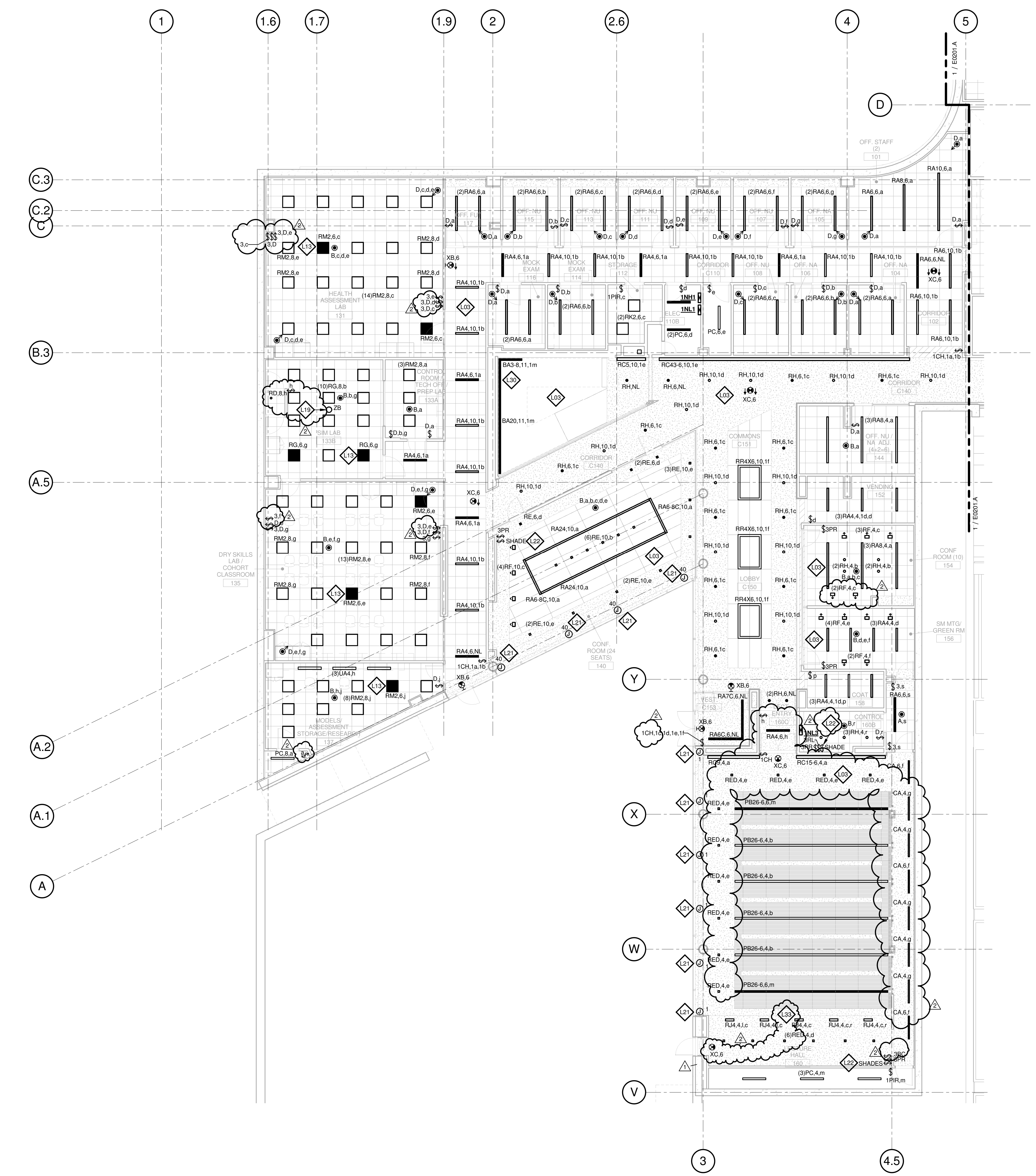
KEYED NOTES

- L03 THE LIGHTING CONTROLS IN THIS ROOM ARE CONNECTED TO THE BUILDING LIGHTING CONTROL SYSTEM.
- L13 PROVIDE SQUARE-D AUTOMATIC LOAD CONTROL RELAY (OR APPROVED EQUAL) TO CONTROL SWITCHED LIFE SAFETY LIGHTS IN THIS ROOM. CONFIGURE RELAY TO ENSURE LIGHTS ENERGIZE UPON LOSS OF NORMAL POWER. PROVIDE DIMMING RELAY WHERE A DIMMER CONTROLS THE LIGHTS.
- L19 OWNER FURNISHED, CONTRACTOR INSTALLED EXAM LIGHTS. SEE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DETAILS FOR MOUNTING STRUCTURE.
- L21 PROVIDE 120 VOLT CIRCUIT FOR MOTORIZED SHADES. COORDINATE WIRING REQUIREMENTS AND LOCATIONS WITH SHADE VENDOR.
- L22 PROVIDE MOTORIZED SHADE SYSTEM CONTROL KEYPAD AND CONFIGURE TO OPERATE MOTORIZED SHADES. REFER TO APPROVED SHOP DRAWINGS FOR SYSTEM WIRING.
- L30 REFER TO SHEET A0501.B FOR STAIR DETAILS. LOCATE REMOTE DRIVERS FOR STAIRWELL FIXTURES IN AN ACCESSIBLE LOCATION. COORDINATE REMOTING DISTANCE WITH MANUFACTURER.
- L33 AIM ADJUSTABLE LIGHTING UNDER THE DIRECTION OF THE ENGINEER.



REFER TO ARCHITECTURAL STAIR SECTIONS FOR FIXTURE MOUNTING.

2 STAIRWELL LIGHTING CONCEPT

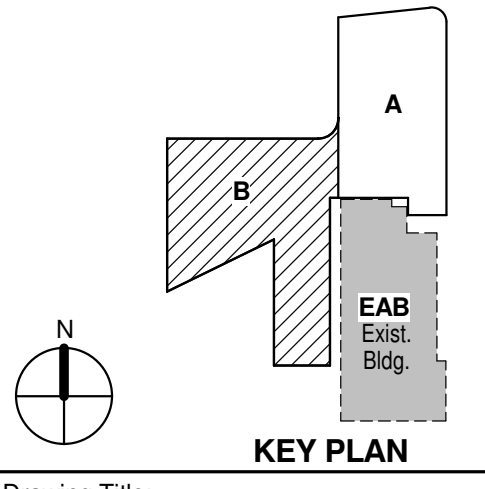


1 LEVEL 01 - AREA B - LIGHTING PLAN
1/8" = 1'-0"

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LEVEL 01 AREA B FLOOR PLAN - LIGHTING

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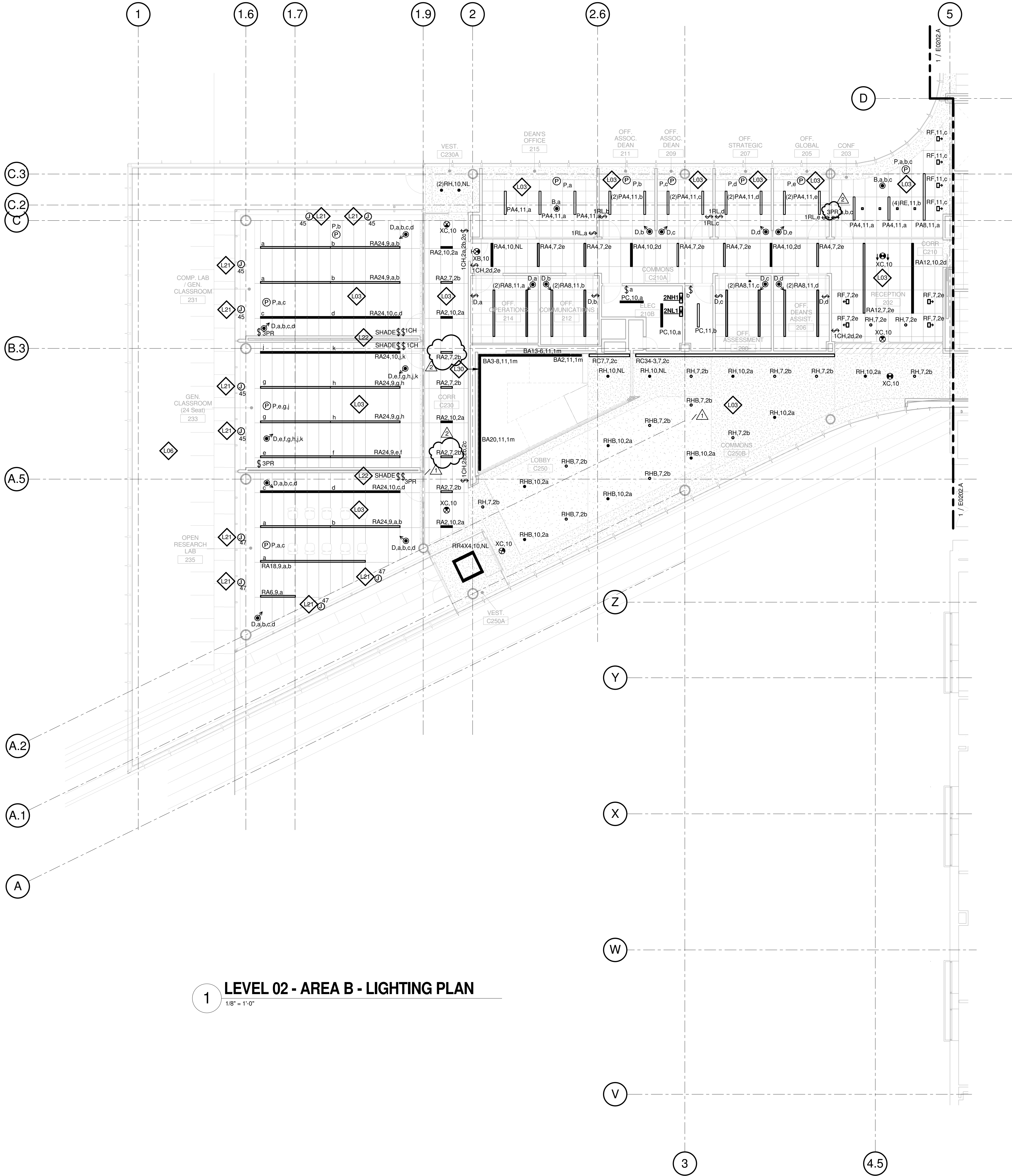
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- L03** THE LIGHTING CONTROLS IN THIS ROOM ARE CONNECTED TO THE BUILDING LIGHTING CONTROL SYSTEM.
- L13** PROVIDE SQUARE-D AUTOMATIC LOAD CONTROL RELAY (OR APPROVED EQUAL) TO CONTROL SWITCHED LIFE SAFETY LIGHTS IN THIS ROOM. CONFIGURE RELAY TO ENSURE LIGHTS ENERGIZE UPON LOSS OF NORMAL POWER. PROVIDE DIMMING RELAY WHERE A DIMMER CONTROLS THE LIGHTS.
- L20** CONNECT 120 VOLT, TYPE UB4, MAGNETICALLY MOUNTED UNDERCABINET LIGHTING TO DEDICATED LIGHTING CIRCUIT IN OVERHEAD CARRIER, ROUTE CIRCUIT VIA LIGHTING CONTROL SYSTEM. COORDINATE REMOTE DRIVER LOCATION WITH FURNITURE, PROVIDE ONE REMOTE DRIVER PER MOVABLE TABLE.
- L21** PROVIDE 120 VOLT CIRCUIT FOR MOTORIZED SHADES. COORDINATE WIRING REQUIREMENTS AND LOCATIONS WITH SHADE VENDOR.
- L22** PROVIDE MOTORIZED SHADE SYSTEM CONTROL KEYPAD AND CONFIGURE TO OPERATE MOTORIZED SHADES. REFER TO APPROVED SHOP DRAWINGS FOR SYSTEM WIRING.



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1 LEVEL 02 - AREA B - LIGHTING PLAN
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GENERAL NOTES:

- A. DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR LOCATION AND ORIENTATION OF DEVICES. WHERE LOCATIONS ARE NOT INDICATED ON ARCHITECTURAL DRAWINGS, COORDINATE LOCATION AND ORIENTATION OF DEVICES IN FIELD WITH ARCHITECT PRIOR TO ROUGH-IN.
- B. CONTRACTOR SHALL VISIT PRIOR TO BID SUBMITTALS TO DETERMINE SITE CONDITIONS AFFECTING THE EXECUTION OF WORK. FAILURE TO BE ACQUAINTED WITH EXISTING CONDITIONS WILL NOT BE JUSTIFICATION FOR ADDITIONAL SERVICES.
- C. PROVIDE FACE PLATES ON ALL J-BOXES ABANDONED IN FINISHED FLOOR, WALL OR CEILINGS. COORDINATE COLOR AND FINISH WITH ARCHITECT. CONTRACTOR TO VERIFY QUANTITY IN THE FIELD.
- D. WHERE EXPOSED CONDUIT IS NOTED, CONTRACTOR SHALL IDENTIFY ROUTING IN FIELD AND OBTAIN ARCHITECT'S APPROVAL OF ROUTING PRIOR TO ROUGH-IN. EXPOSED CONDUIT SHALL BE ROUTED TIGHT TO STRUCTURE.
- E. MINIMUM 0-10V CONTROL WIRE SIZE SHALL BE #18 (#16 FOR RUNS LONGER THAN 400'). DO NOT MIX 0-10V LOW VOLTAGE AND LINE VOLTAGE WIRING UNLESS APPROVED BY CONTROLS MANUFACTURER.
- F. ALL SINGLE PHASE BRANCH CIRCUITS SHOWN WITH COMMON NEUTRAL SHALL HAVE INDIVIDUAL 20A-1P CIRCUIT BREAKER. CONTRACTOR TO PROVIDE HANDLE TIES TO MEET NEC SECTION 210.4 MULTI-WIRE BRANCH CIRCUIT REQUIREMENTS. REFER TO DRAWINGS FOR CIRCUITS WITH DEDICATED NEUTRALS.
- G. SHADED FIXTURES AND FIXTURES NOTED WITH AN "E" ARE FOR EMERGENCY EGRESS. CONNECT FIXTURES TO LIFE SAFETY PANEL 1EH1.
- H. FIXTURES NOTED WITH "NL" ARE UN-SWITCHED NIGHT LIGHTS AND SHALL BE LEFT ON AFTER HOURS FOR WAY FINDING.
- I. WHERE A SWITCH WITH A "D" IS CALLED OUT, PROVIDE LUTRON DIVA 0-10V WALLBOX DIMMER WITH INTEGRAL RELAY. COORDINATE DIMMER VOLTAGE WITH CIRCUIT. WHERE A "3D" IS CALLED OUT, CONFIGURE DIMMER FOR 3-WAY DIMMING.
- J. CONNECT NON-EMERGENCY 277V LIGHTING ON THIS FLOOR TO PANEL 2NH1. CONNECT SHADES TO 120V PANEL SERVING LAB.

KEYED NOTES

- L03 THE LIGHTING CONTROLS IN THIS ROOM ARE CONNECTED TO THE BUILDING LIGHTING CONTROL SYSTEM.
- L06 SEE SITE PLAN FOR ADDITIONAL LIGHTING OUTSIDE OF BUILDING.
- L20 CONNECT 120 VOLT, TYPE UB4, MAGNETICALLY MOUNTED UNDERCABINET LIGHTING TO DEDICATED LIGHTING CIRCUIT IN OVERHEAD CARRIER. ROUTE CIRCUIT VIA LIGHTING CONTROL SYSTEM. COORDINATE REMOTE DRIVER LOCATION WITH FURNITURE. PROVIDE ONE REMOTE DRIVER PER MOVABLE TABLE.
- L21 PROVIDE 120 VOLT CIRCUIT FOR MOTORIZED SHADES. COORDINATE WIRING REQUIREMENTS AND LOCATIONS WITH SHADE VENDOR.
- L22 PROVIDE MOTORIZED SHADE SYSTEM CONTROL KEYPAD AND CONFIGURE TO OPERATE MOTORIZED SHADES. REFER TO APPROVED SHOP DRAWINGS FOR SYSTEM WIRING.
- L30 REFER TO SHEET A0501.B FOR STAIR DETAILS. LOCATE REMOTE DRIVERS FOR STAIRWELL FIXTURES IN AN ACCESSIBLE LOCATION. COORDINATE REMOTING DISTANCE WITH MANUFACTURER.

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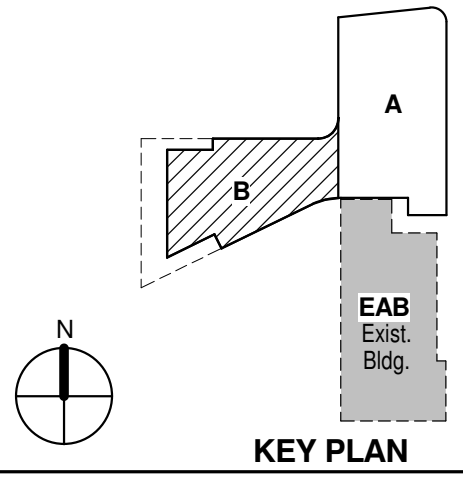
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1	ADDENDUM 2-1	17 MAR 2016
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LEVEL 02 AREA B FLOOR
PLAN - LIGHTING

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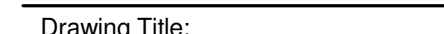
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- B. CONTRACTOR SHALL VISIT PRIOR TO BIG SUBMITTALS TO DETERMINE SITE CONDITIONS BEFORE INITIATING THE EXECUTION OF WORK. FAILURE TO BE ACQUAINTED WITH EXISTING CONDITIONS WILL NOT BE JUSTIFICATION FOR ADDITIONAL SERVICES.
- C. PROVIDE FACE PLATES ON ALL J-BOXES ABANDONED IN FINISHED FLOOR, WALLS OR CEILINGS. COORDINATE COLOR AND FINISH WITH ARCHITECT. CONTRACTOR TO VERIFY QUANTITY IN THE FIELD.
- D. WHERE EXPOSED CONDUIT IS NOTED, CONTRACTOR SHALL IDENTIFY ROUTING IN FIELD AND OBTAIN ARCHITECT'S APPROVAL OF ROUTING PRIOR TO ROUGH-IN. EXPOSED CONDUIT SHALL BE ROUTED TIGHT TO STRUCTURE.
- E. MINIMUM 0-10V CONTROL WIRE SIZE SHALL BE #18 (#16 FOR RUNS LONGER THAN 400'). DO NOT MIX 0-10V LOW VOLTAGE AND LINE VOLTAGE WIRING UNLESS APPROVED BY CONTROLS MANUFACTURER.
- F. ALL SINGLE PHASE BRANCH CIRCUITS SHOWN WITH COMMON NEUTRAL SHALL HAVE INDIVIDUAL 20A-1P CIRCUIT BREAKER. CONTRACTOR TO PROVIDE HALLWAY TEST POINT DET NEC SECTION 210.4 MULTI-WIRE BRANCH CIRCUIT REQUIREMENTS. REFER TO DRAWINGS FOR CIRCUITS WITH DEDICATED NEUTRALS.
- G. SHADED FIXTURES AND FIXTURES NOTED ON AN "E" ARE FOR EMERGENCY EGRESS. CONNECT FIXTURES TO LIFE SAFETY PANEL 1EH1.
- H. FIXTURES NOTED WITH "NL" ARE ON UN-SWITCHED NIGHT LIGHTS AND SHALL BE TEST ONLY POWER POINTS FOR EMERGENCY FIXTURES.

WHERE A SWITCH WITH A "D" IS CALLED OUT, PROVIDE LUTRON DIVA 0-10V WALL DIMMER. PROVIDE INTEGRAL RELAY. COORDINATE DIMMER VOLTAGE WITH CIRCUIT. WHERE A "3D" IS CALLED OUT, CONFIGURE DIMMER FOR 3-WAY DIMMING.
- I. CONNECT NON-EMERGENCY 277V LIGHTING ON THIS FLOOR TO PANEL 2BH1.
CONNECT SHADES TO 120V PANEL SERVING LAB.

- L03 THE LIGHTING CONTROLS IN THIS ROOM ARE CONNECTED TO THE BUILDING LIGHTING CONTROL SYSTEM.**
- L12 COORDINATE EXACT LOCATION OF ALL UNDERCABINET LIGHTS WITH CABINETS, COUNTER EQUIPMENT, AND ARCHITECT/ENGINEER. CONNECT TO STAND ALONE OCCUPANCY SENSOR OR BUILDING LIGHTING CONTROL SYSTEM SERVING ROOM.**
- L13 PROVIDE SQUARE-D AUTOMATIC LOAD CONTROL RELAY (OR APPROVED EQUAL) TO CONTROL SWITCHED LIFE SAFETY LIGHTS IN THIS ROOM. CONFIGURE RELAY TO ENSURE LIGHTS ENERGIZE UPON LOSS OF NORMAL POWER. PROVIDE DIMMING RELAY WHERE A DIMMER CONTROLS THE LIGHTS.**
- L15 IN COLD ROOM, CONNECT LIGHTING TO PILOT LIGHT SWITCH SERVING ROOM.**
- L21 PROVIDE 120 VOLT CIRCUIT FOR MOTORIZED SHADES. COORDINATE WIRING REQUIREMENTS AND LOCATIONS WITH SHADE VENDOR.**
- L22 PROVIDE MOTORIZED SHADE SYSTEM CONTROL KEYPAD AND CONFIGURE TO OPERATE MOTORIZED SHADES. REFER TO APPROVED SHOP DRAWINGS FOR SYSTEM WIRING.**



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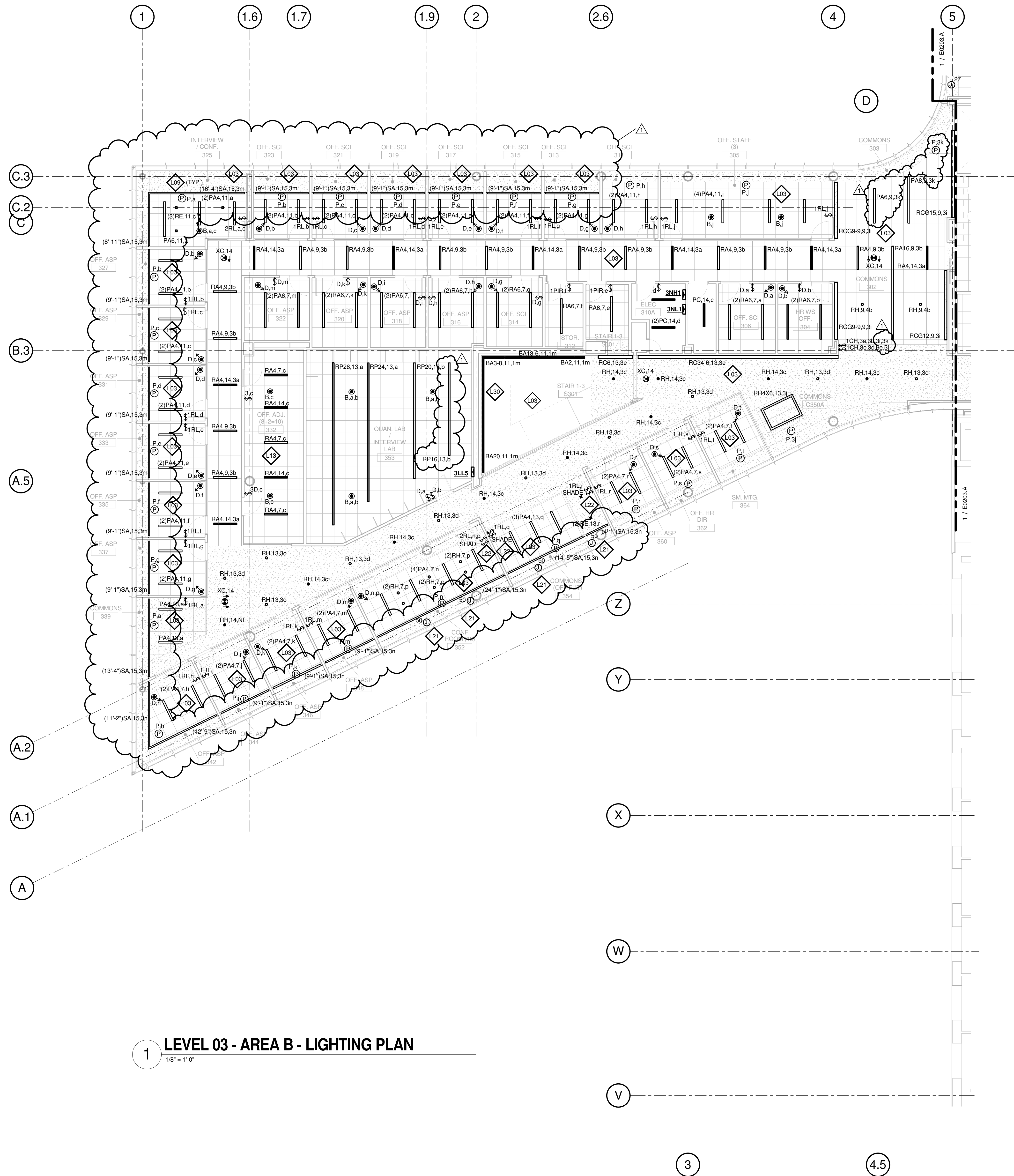
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1 LEVEL 03 - AREA B - LIGHTING PLAN
1/8" = 1'-0"

GENERAL NOTES:

- A. DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR LOCATION AND ORIENTATION OF DEVICES. WHERE LOCATIONS ARE NOT INDICATED ON ARCHITECTURAL DRAWINGS, COORDINATE LOCATION AND ORIENTATION OF DEVICES IN FIELD WITH ARCHITECT PRIOR TO ROUGH-IN.
- B. CONTRACTOR SHALL VISIT PRIOR TO BID SUBMITTALS TO DETERMINE SITE CONDITIONS EFFECTING THE EXECUTION OF WORK. FAILURE TO BE ACQUAINTED WITH EXISTING CONDITIONS WILL NOT BE JUSTIFICATION FOR ADDITIONAL SERVICES.
- C. PROVIDE FACE PLATES ON ALL J-BOXES ABANDONED IN FINISHED FLOOR, WALL OR CEILINGS. COORDINATE COLOR AND FINISH WITH ARCHITECT. CONTRACTOR TO VERIFY QUANTITY IN THE FIELD.
- D. WHERE EXPOSED CONDUIT IS NOTED, CONTRACTOR SHALL IDENTIFY ROUTING IN FIELD AND OBTAIN ARCHITECT'S APPROVAL OF ROUTING PRIOR TO ROUGH-IN. EXPOSED CONDUIT SHALL BE ROUTED RIGHT TO STRUCTURE.
- E. MINIMUM 0-10V CONTROL WIRE SIZE SHALL BE #18 (#16 FOR RUNS LONGER THAN 400'). DO NOT MIX 0-10V LOW VOLTAGE AND LINE VOLTAGE WIRING UNLESS APPROVED BY CONTROLS MANUFACTURER.
- F. ALL SINGLE PHASE BRANCH CIRCUITS SHOWN WITH COMMON NEUTRAL SHALL HAVE INDIVIDUAL 20A-1P CIRCUIT BREAKER. CONTRACTOR TO PROVIDE HANDLE TIES TO MEET NEC SECTION 210.4 MULTI-WIRE BRANCH CIRCUIT REQUIREMENTS. REFER TO DRAWINGS FOR CIRCUITS WITH DEDICATED NEUTRALS.
- G. SHADED FIXTURES AND FIXTURES NOTED WITH AN "E" ARE FOR EMERGENCY EGRESS. CONNECT FIXTURES TO LIFE SAFETY PANEL 1EH1.
- H. FIXTURES NOTED WITH "NL" ARE UN-SWITCHED NIGHT LIGHTS AND SHALL BE LEFT ON AFTER HOURS FOR WAY FINDING.
- I. WHERE A SWITCH WITH A "D" IS CALLED OUT, PROVIDE LUTRON DIVA 0-10V WALLBOX DIMMER WITH INTEGRAL RELAY. COORDINATE DIMMER VOLTAGE WITH CIRCUIT. WHERE A "3D" IS CALLED OUT, CONFIGURE DIMMER FOR 3-WAY DIMMING.
- J. CONNECT EMERGENCY 277V LIGHTING IN THIS FLOOR TO PANEL 2N1A. CONNECT SHADES TO 120V PANEL SERVING LAB.

KEYED NOTES

- L03 THE LIGHTING CONTROLS IN THIS ROOM ARE CONNECTED TO THE BUILDING LIGHTING CONTROL SYSTEM.
- L09 PROVIDE SEPARATELY CONTROLLED TYPE SA LINEAR LED FIXTURE, MOUNTED TO AN ARCHITECTURAL CHANNEL WITHIN WINDOW NICHE. LIGHTING FEATURE SHALL EXTEND FROM 3RD FLOOR TO FOURTH FLOOR. SEE THIRD AND FOURTH FLOOR PLANS FOR CONTINUATION. PRELIMINARY OVERALL LENGTHS ARE INDICATED IN PARENTHESIS. COORDINATE FINAL LENGTHS WITH BUILT ROOM DIMENSIONS AND PROVIDE A CONTINUOUS FIXTURE FROM WALL TO WALL. ALLOW A 3" GAP BETWEEN WALL AND START/END OF FIXTURE. REFER TO DETAIL 1 ON SHEET A0841 FOR MOUNTING CONFIGURATION.
- L13 PROVIDE SQUARE D AUTOMATIC LOAD CONTROL RELAY (OR APPROVED EQUAL) TO CONTROL SWITCHED LIFE SAFETY LIGHTS IN THIS ROOM. CONFIGURE RELAY TO ENSURE LIGHTS ENERGIZE UPON LOSS OF NORMAL POWER. PROVIDE DIMMING RELAY WHERE A DIMMER CONTROLS THE LIGHTS.
- L21 PROVIDE 120 VOLT CIRCUIT FOR MOTORIZED SHADES. COORDINATE WIRING REQUIREMENTS AND LOCATIONS WITH SHADE VENDOR.
- L22 PROVIDE MOTORIZED SHADE SYSTEM CONTROL KEYPAD AND CONFIGURE TO OPERATE MOTORIZED SHADES. REFER TO APPROVED SHOP DRAWINGS FOR SYSTEM WIRING.
- L30 REFER TO SHEET A0501.B FOR STAIR DETAILS. LOCATE REMOTE DRIVERS FOR STAIRWELL FIXTURES IN AN ACCESSIBLE LOCATION. COORDINATE REMOTING DISTANCE WITH MANUFACTURER.

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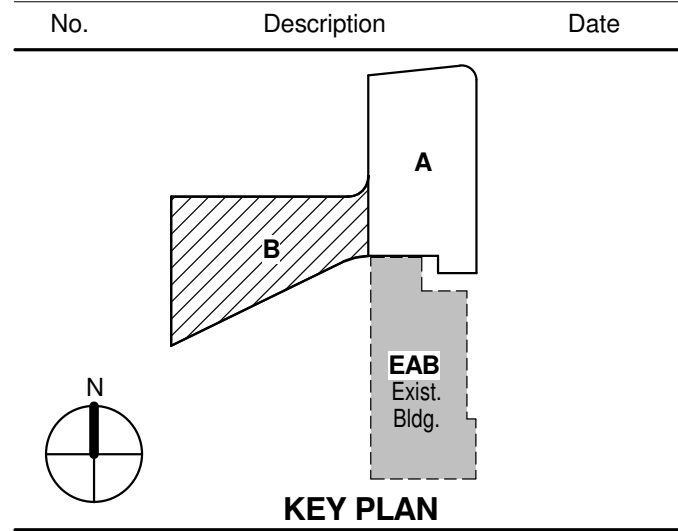
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1 ADDENDUM 2-2 19 APRIL 2016
ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016



Drawing Title:

LEVEL 03 AREA B FLOOR
PLAN - LIGHTING

Project No.: 04561.01 Checked by:

E0203.B

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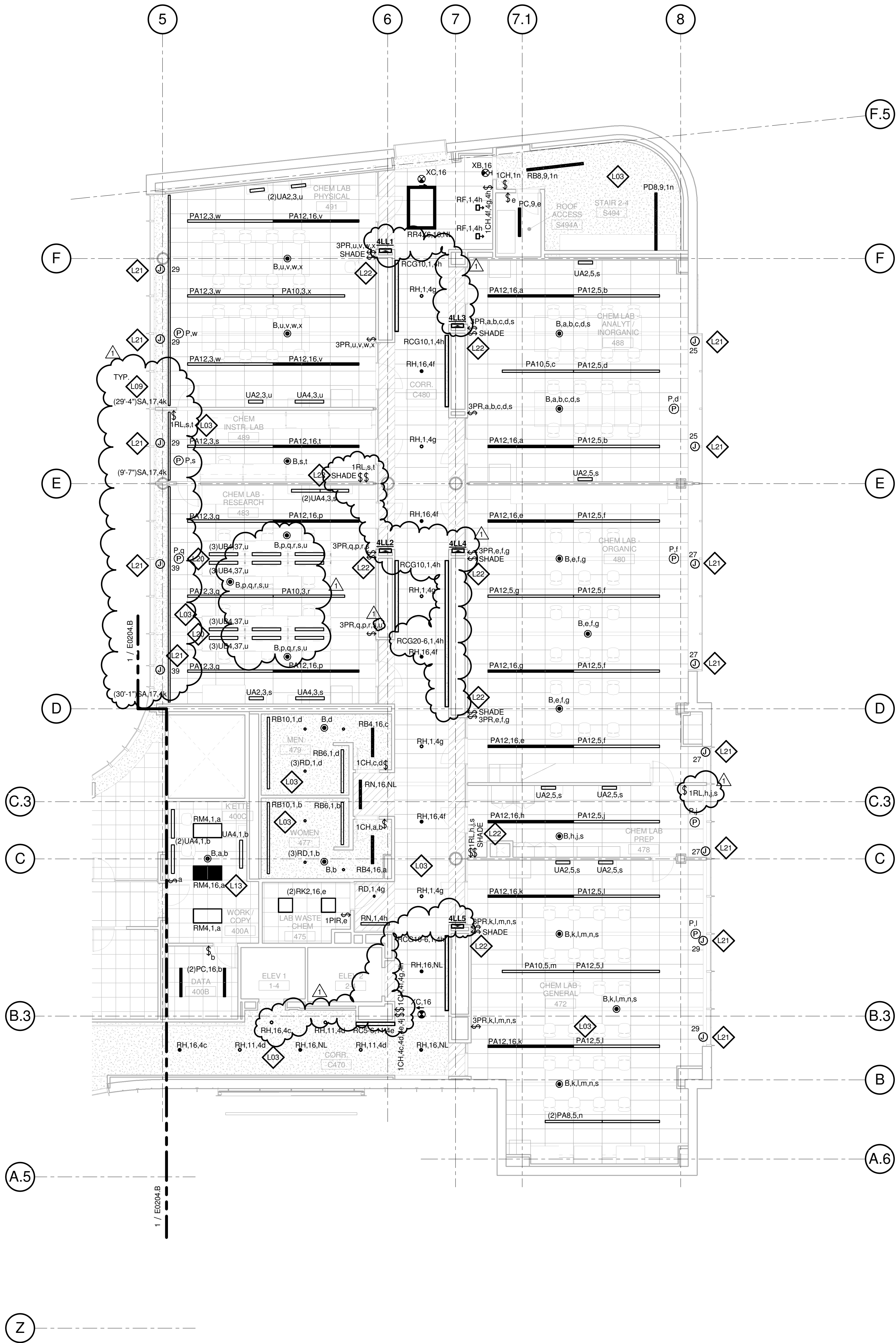
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GENERAL NOTES:

- DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR LOCATION AND ORIENTATION OF DEVICES. WHERE LOCATIONS ARE NOT INDICATED ON ARCHITECTURAL DRAWINGS, COORDINATE LOCATION AND ORIENTATION OF DEVICES IN FIELD WITH ARCHITECT PRIOR TO ROUGH-IN.
- CONTRACTOR SHALL VISIT PRIOR TO BID SUBMITTALS TO DETERMINE SITE CONDITIONS EFFECTING THE EXECUTION OF WORK. FAILURE TO BE ACQUAINTED WITH EXISTING CONDITIONS WILL NOT BE JUSTIFICATION FOR ADDITIONAL SERVICES.
- PROVIDE FACE PLATES ON ALL J-BOXES ABANDONED IN FINISHED FLOOR, WALL OR CEILINGS. COORDINATE COLOR AND FINISH WITH ARCHITECT. CONTRACTOR TO VERIFY QUANTITY IN THE FIELD.
- WHERE EXPOSED CONDUIT IS NOTED, CONTRACTOR SHALL IDENTIFY ROUTING IN FIELD AND OBTAIN ARCHITECT'S APPROVAL OF ROUTING PRIOR TO ROUGH-IN. EXPOSED CONDUIT SHALL BE ROUTED RIGHT TO STRUCTURE.
- MINIMUM 0-10V CONTROL WIRE SIZE SHALL BE #18 (#16 FOR RUNS LONGER THAN 400'). DO NOT MIX 0-10V LOW VOLTAGE AND LINE VOLTAGE WIRING UNLESS APPROVED BY CONTROLS MANUFACTURER.
- ALL SINGLE PHASE BRANCH CIRCUITS SHOWN WITH COMMON NEUTRAL SHALL HAVE INDIVIDUAL 20A-1P CIRCUIT BREAKER. CONTRACTOR TO PROVIDE HANDLE TIES TO MEET NEC SECTION 210.4 MULTI-WIRE BRANCH CIRCUIT REQUIREMENTS. REFER TO DRAWINGS FOR CIRCUITS WITH DEDICATED NEUTRALS.
- SHADED FIXTURES AND FIXTURES NOTED WITH AN "E" ARE FOR EMERGENCY EGRESS. CONNECT FIXTURES TO LIFE SAFETY PANEL 1EH1.
- FIXTURES NOTED WITH "NL" ARE UN-SWITCHED NIGHT LIGHTS AND SHALL BE LEFT ON AFTER HOURS FOR WAY FINDING.
- WHERE A SWITCH WITH A "D" IS CALLED OUT, PROVIDE LUTRON DIVA 0-10V WALLBOX DIMMER WITH INTEGRAL RELAY. COORDINATE DIMMER VOLTAGE WITH CIRCUIT. WHERE A "3D" IS CALLED OUT, CONFIGURE DIMMER FOR 3-WAY DIMMING.
- CONNECT NON-EMERGENCY 277V LIGHTING ON THIS FLOOR TO PANEL 4NH1. CONNECT SHADES TO 120V PANEL SERVING LAB.

KEYED NOTES

- L03** THE LIGHTING CONTROLS IN THIS ROOM ARE CONNECTED TO THE BUILDING LIGHTING CONTROL SYSTEM.
- L09** PROVIDE SEPARATELY CONTROLLED TYPE SA LINEAR LED FIXTURE, MOUNTED TO AN ARCHITECTURAL CHANNEL WITHIN WINDOW NICHE. LIGHTING FEATURE SHALL EXTEND FROM 3RD FLOOR TO FOURTH FLOOR. SEE THIRD AND FOURTH FLOOR PLANS FOR CONTINUATION. PRELIMINARY GENERAL LENGTHS ARE INDICATED IN PARENTHESES. COORDINATE LUMEN LEVELS WITH BUILDING DIMENSIONS AND PROVIDE A CONTINUOUS FIXTURE FROM WALL TO WALL. ALLOW A 3" GAP BETWEEN WALL AND START/END OF FIXTURE. REFER TO DETAIL 1 ON SHEET A0841 FOR MOUNTING CONFIGURATION.
- L13** PROVIDE SQUARE-D AUTOMATIC LOAD CONTROL RELAY (OR APPROVED EQUAL) TO CONTROL SWITCHED LIFE SAFETY LIGHTS IN THIS ROOM. CONFIGURE RELAY TO ENSURE LIGHTS ENERGIZE UPON LOSS OF NORMAL POWER. PROVIDE DIMMING RELAY WHERE A DIMMER CONTROLS THE LIGHTS.
- L20** CONNECT 120 VOLT, TYPE UB4, MAGNETICALLY MOUNTED UNDERCABINET LIGHTING TO DEDICATED LIGHTING CIRCUIT IN OVERHEAD CARRIER. ROUTE CIRCUIT VIA LIGHTING CONTROL SYSTEM. COORDINATE REMOTE DRIVER LOCATION WITH FURNITURE. PROVIDE ONE REMOTE DRIVER PER MOVABLE TABLE.
- L21** PROVIDE 120 VOLT CIRCUIT FOR MOTORIZED SHADES. COORDINATE WIRING REQUIREMENTS AND LOCATIONS WITH SHADE VENDOR.
- L22** PROVIDE MOTORIZED SHADE SYSTEM CONTROL KEYPAD AND CONFIGURE TO OPERATE MOTORIZED SHADES. REFER TO APPROVED SHOP DRAWINGS FOR SYSTEM WIRING.



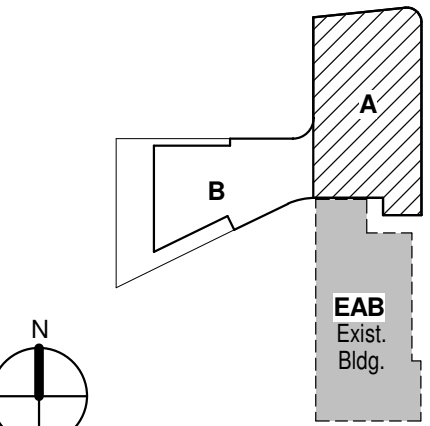
1 LEVEL 04 - AREA A - LIGHTING PLAN

1/8" = 1'-0"

CONFORMED SET 01 JUL 2016

1 ADDENDUM 2-2 19 APRIL 2016
ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016

No.	Description	Date
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KEY PLAN

Drawing Title:

LEVEL 04 AREA A FLOOR
PLAN - LIGHTING

Project No.: 04561.01

Checked by:

E0204.A

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[illegible]

- A. DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR LOCATION AND ORIENTATION OF DEVICES. WHERE LOCATIONS ARE NOT INDICATED ON ARCHITECTURAL DRAWINGS, COORDINATE LOCATION AND ORIENTATION OF DEVICES IN FIELD WITH ARCHITECT PRIOR TO ROUGH-IN.
- B. CONTRACTOR SHALL VISIT PRIOR TO BID SUBMITTALS TO DETERMINE SITE CONDITIONS EFFECTING THE EXECUTION OF WORK. FAILURE TO BE ACQUAINTED WITH EXISTING CONDITIONS WILL NOT BE JUSTIFICATION FOR ADDITIONAL SERVICES.
- C. PROVIDE FACE PLATES ON ALL BOXES ABANDONED IN FINISHED FLOOR, WALL OR CEILINGS. COORDINATE COLOR AND FINISH WITH ARCHITECT. CONTRACTOR TO VERIFY QUANTITY IN THE FIELD.
- D. WHERE EXPOSED CONDUIT IS NOTED, CONTRACTOR SHALL IDENTIFY ROUTING IN FIELD AND OBTAIN ARCHITECT'S APPROVAL OF ROUTING PRIOR TO ROUGH-IN. EXPOSED CONDUIT SHALL BE ROUTED TO LIGHT FIXTURES.
- E. MINIMUM 0-10V CONTROL WIRE SIZE SHALL BE #16 (1/8" FOR RUNS LONGER THAN 400'). DO NOT MIX 0-10V LOW VOLTAGE AND LINE VOLTAGE WIRING UNLESS APPROVED BY CONTROLS MANUFACTURER.
- F. ALL SINGLE PHASE BRANCH CIRCUITS SHOWN WITH COMMON NEUTRAL SHALL HAVE INDIVIDUAL 20A-1P CIRCUIT BREAKER. CONTRACTOR TO PROVIDE HANDLE WRITTEN NOTICE TO THE OWNER AND MULTIPLE WIRE BRANCH CIRCUIT REQUIREMENTS. REFER TO DRAWINGS FOR CIRCUITS WITH DEDICATED NEUTRALS.
- G. SHADED FIXTURES AND FIXTURES NOTED WITH AN "E" ARE FOR EMERGENCY EGRESS. CONNECT FIXTURES TO LIFE SAFETY PANEL 1EH.
- H. FIXTURES NOTED WITH "NL" ARE UN-SWITCHED NIGHT LIGHTS AND SHALL BE LEFT ON AT ALL TIMES FOR WAY FINDING.
- I. WHERE A SWITCH WITH A "D" IS CALLED OUT, PROVIDE LUTRON DIVA 0-10V WALLBOX DIMMER WITH INTEGRAL RELAY. COORDINATE DIMMER VOLTAGE WITH WALLBOX. WHERE A "3D" IS CALLED OUT, CONFIGURE DIMMER FOR 3-WAY DIMMING.
- J. CONNECT NON-EMERGENCY 277V LIGHTING ON THIS FLOOR TO PANEL 4NH1. CONNECT SHADES TO 120V PANEL SERVING LAB.

L03 THE LIGHTING CONTROLS IN THIS ROOM ARE CONNECTED TO THE BUILDING LIGHTING CONTROL SYSTEM.

L09 PROVIDE SEPARATELY CONTROLLED TYPE SA LINEAR LED FIXTURE, MOUNTED TO AN ARCHITECTURAL CHANNEL WITHIN WINDOW NICHE. LIGHTING FEATURE SHALL EXTEND FROM 3RD FLOOR TO FOURTH FLOOR. SEE THIRD AND FOURTH FLOOR PLANS FOR CONTINUATION. PRELIMINARY OVERALL LENGTHS ARE INDICATED IN PARENTHESES. COORDINATE FINAL LENGTHS WITH BUILT ROOM DIMENSIONS AND PROVIDE A CONTINUOUS FIXTURE FROM WALL TO WALL. ALLOW A 3" GAP BETWEEN WALL AND START/END OF FIXTURE. REFER TO DETAIL 1 ON SHEET A0841 FOR MOUNTING CONFIGURATION.

L20 CONNECT 120 VOLT, TYPE U84, MAGNETICALLY MOUNTED UNDERCABINET LIGHTING TO DESIGNATED LIGHTING OUTLET ON OVERHEAD CARRIED ROUTE OFFICE VIA LIGHTING CONTROL SYSTEM. COORDINATE REMOTE DRIVER LOCATION WITH FURNITURE. PROVIDE ONE REMOTE DRIVER PER MOVABLE TABLE.

L21 PROVIDE 120 VOLT CIRCUIT FOR MOTORIZED SHADES. COORDINATE WIRING REQUIREMENTS AND LOCATION WITH SHADE VENDOR.

L30 REFER TO SHEET A0501, B FOR STAIR DETAILS. LOCATE REMOTE DRIVERS FOR STAIRWELL FIXTURES IN AN ACCESSIBLE LOCATION. COORDINATE REMOTING DISTANCE WITH MANUFACTURER.

L32 WHERE TYPE SA LIGHTS ARE LOCATED ON A CURVED WALL. PROVIDE FIXTURE SEGMENTS TO APPROXIMATE THE CURVE.

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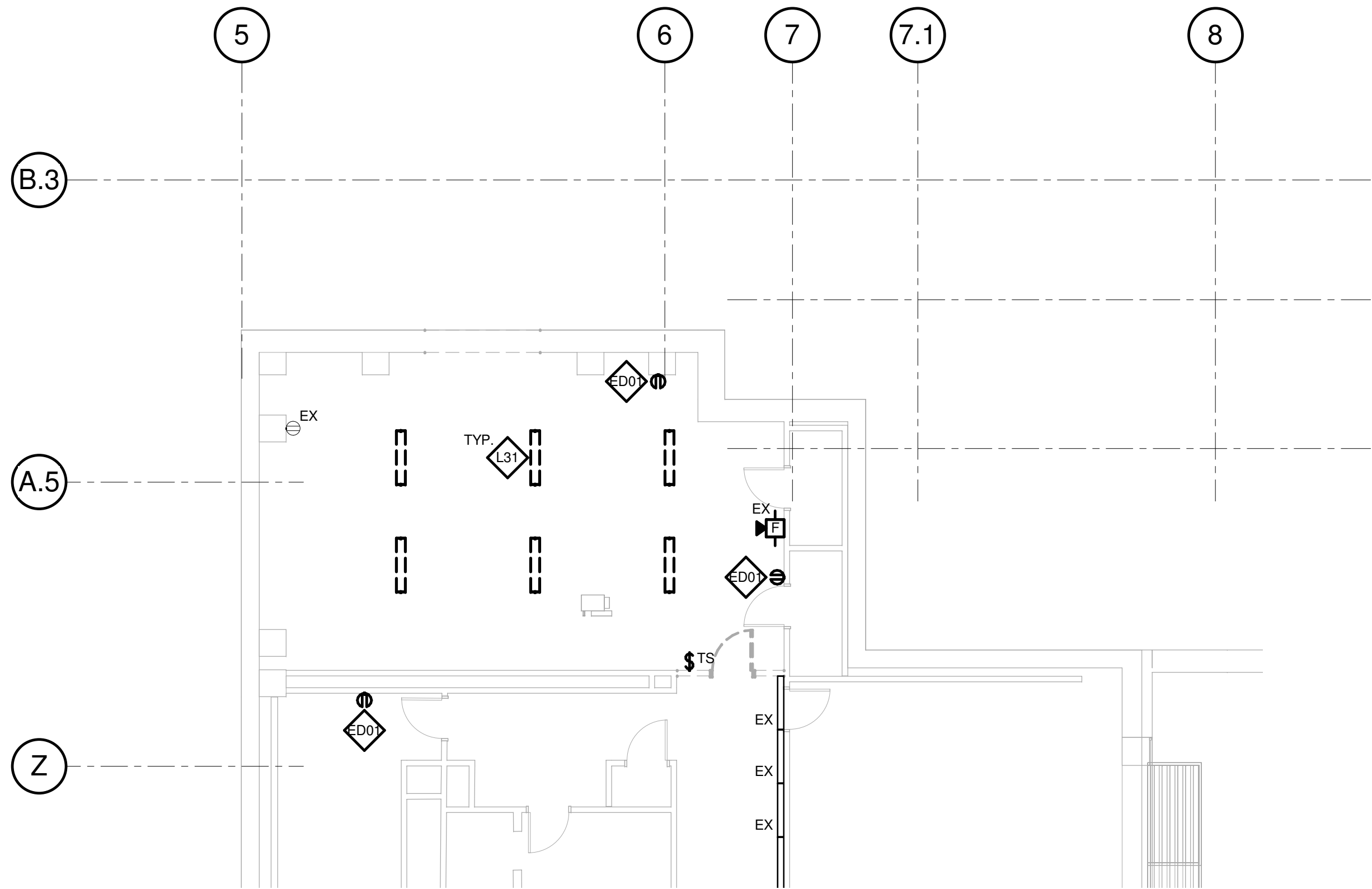
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GENERAL NOTES:

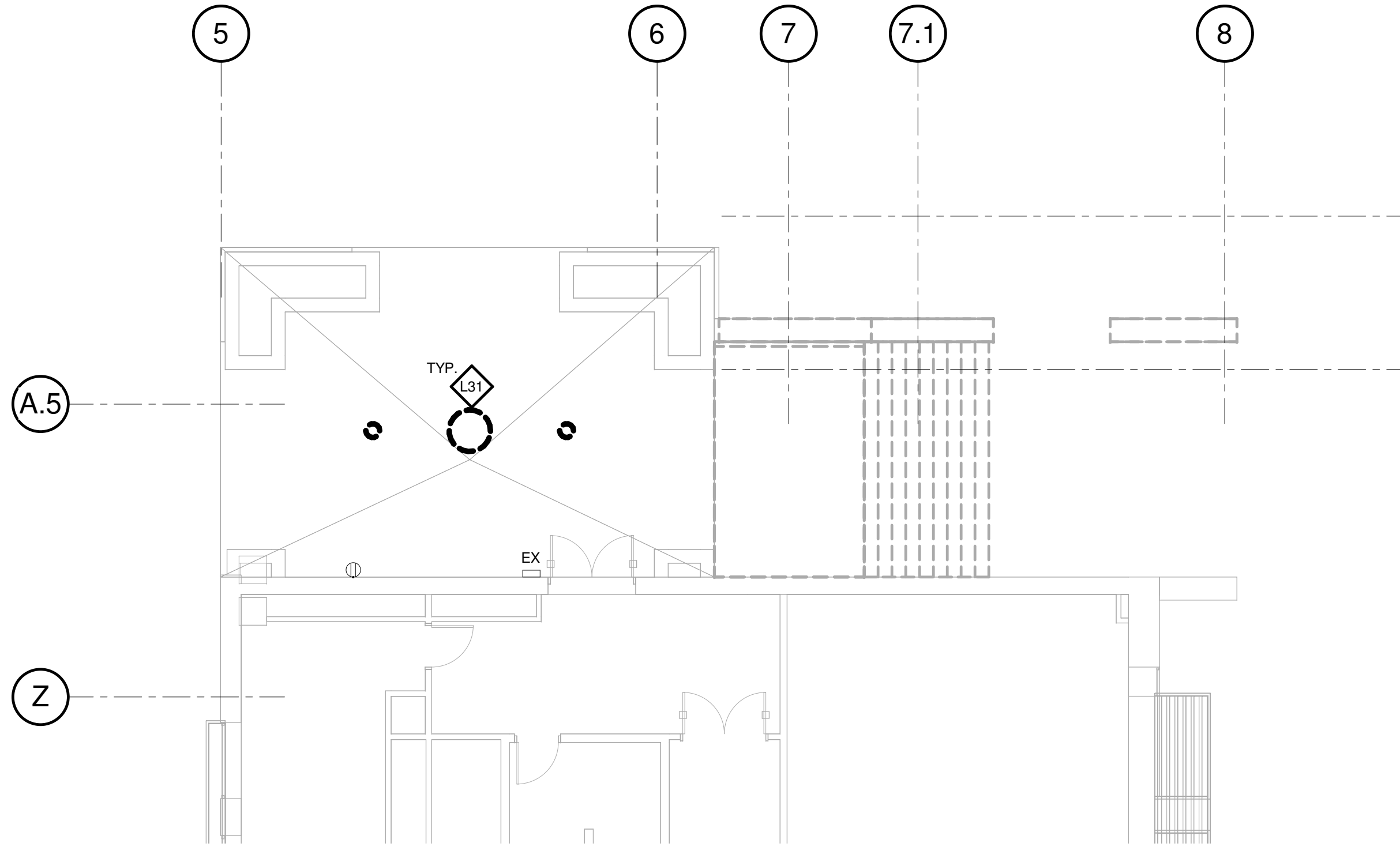
- CONTRACTOR TO COMPLY WITH ALL GOVERNING CODES AND REGULATIONS AND TO PERFORM ALL WORK IN A WORKMANSHIP-LIKE MANNER.
- CONTRACTOR TO OBTAIN REQUIRED PERMITS FROM AUTHORITIES HAVING JURISDICTION PRIOR TO COMMENCING WORK. CONTRACTOR TO INCLUDE ALL ASSOCIATED FEES IN BID.
- DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR LOCATION AND ORIENTATION OF DEVICES. WHERE LOCATIONS ARE NOT INDICATED ON ARCHITECTURAL DRAWINGS, COORDINATE LOCATION AND ORIENTATION OF DEVICES IN FIELD WITH ARCHITECT PRIOR TO ROUGH-IN.
- EXISTING DEVICES TO REMAIN ARE INDICATED WITH A THIN SOLID WEIGHT (AND SUBSCRIPT "EX").
- EXISTING DEVICES TO BE REMOVED OR RELOCATED ARE DENOTED WITH A HEAVY DASHED LINE WEIGHT.
- CONTRACTOR SHALL REMOVE ALL ELECTRICAL DEVICES INCLUDING BUT NOT LIMITED TO LIGHTING, POWER, FIRE ALARM AND AUXILIARY DEVICES FROM PARTITIONS AND CEILINGS INDICATED FOR DEMOLITION ON THE ARCHITECTURAL PLANS, UNLESS NOTED OTHERWISE.
- FOR ANY DEVICES BEING REMOVED, REMOVE ASSOCIATED BOXES, CONDUITS AND WIRE BACK TO NEAREST DEVICE REMAINING OR TO SOURCE, UNLESS NOTED OTHERWISE.
- REMOVE ALL ABANDONED CONDUITS, JUNCTION BOXES, SUPPORTS AND CABLES FROM ABOVE ACCESSIBLE CEILING INCLUDING, BUT NOT LIMITED TO FIRE ALARM, TELECOMMUNICATIONS, CONTROLS AND POWER WIRING.
- CONTRACTOR TO MAINTAIN CONTINUITY OF CIRCUITS FEEDING DEVICES INDICATED TO REMAIN AND ANY CIRCUITS SERVICING DEVICES OUTSIDE THE PROJECT BOUNDARY.
- CONTRACTOR SHALL VISIT PRIOR TO BID SUBMITTALS TO DETERMINE SITE CONDITIONS EFFECTING THE EXECUTION OF WORK. FAILURE TO BE ACQUAINTED WITH EXISTING CONDITIONS WILL NOT BE JUSTIFICATION FOR ADDITIONAL SERVICES.
- COORDINATE ANY INTERRUPTIONS IN UTILITY SERVICES WITH OWNER PRIOR TO SCHEDULING SHUT DOWN.
- ANY INTERRUPTION IN UTILITY SERVICE WITHIN OR OUTSIDE PROJECT BOUNDARY SHALL BE PERFORMED OUTSIDE NORMAL BUSINESS HOURS. COORDINATE TIME AND DURATION WITH OWNER.
- THE OWNER SHALL HAVE FIRST SALVAGE RIGHTS OF ALL EQUIPMENT BEING REMOVED. CONTRACTOR SHALL TURN OVER ALL ITEMS REQUESTED BY THE OWNER AND STORE SUCH ITEMS IN AN AREA DESIGNATED BY THE OWNER. CONTRACTOR SHALL DISPOSE OF ALL OTHER REMOVED OR SCRAP MATERIAL FROM THE SITE.
- PROVIDE COVER PLATES WHERE MISSING ON EXISTING JUNCTION BOXES. CONTRACTOR TO VERIFY QUANTITY IN THE FIELD.
- PROVIDE FACE PLATES ON ALL J-BOXES ABANDONED IN FINISHED FLOOR, WALL OR CEILINGS. COORDINATE COLOR AND FINISH WITH ARCHITECT. CONTRACTOR TO VERIFY QUANTITY IN THE FIELD.
- CONTRACTORS SHALL PROVIDE ALL CUTTING AND PATCHING AS NEEDED FOR EXECUTION OF DEMOLITION WORK AND INSTALLATION OF NEW WORK. CONTRACTOR PATCHING TO MATCH FINISH AND CONSTRUCTION AS SPECIFIED BY ARCHITECT.

KEYED NOTES

- ED01** REMOVE EXISTING RECEPTACLE INCLUDING ALL ASSOCIATED BRANCH CIRCUIT WIRING AND RACEWAY BACK TO SOURCE.
- L31** REMOVE EXISTING LIGHT FIXTURE AND ASSOCIATED CONDUIT AND WIRE BACK TO PANEL OR NEAREST DEVICE TO REMAIN.



1 LEVEL 01 - EAB BUILDING - ELECTRICAL DEMOLITION
1/8" = 1'-0"



2 LEVEL 02 - EAB BUILDING - ELECTRICAL DEMOLITION
1/8" = 1'-0"

CONFORMED SET 01 JUL 2016

1	ADDENDUM 2-2	19 APRIL 2016
1	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016
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Drawing Title:

PARTIAL EAB FLOOR
PLANS - ELECTRICAL
DEMOLITION

Project No.: 04561.01 Checked by:

E0301

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DETAILS - ELECTRICAL

E0401

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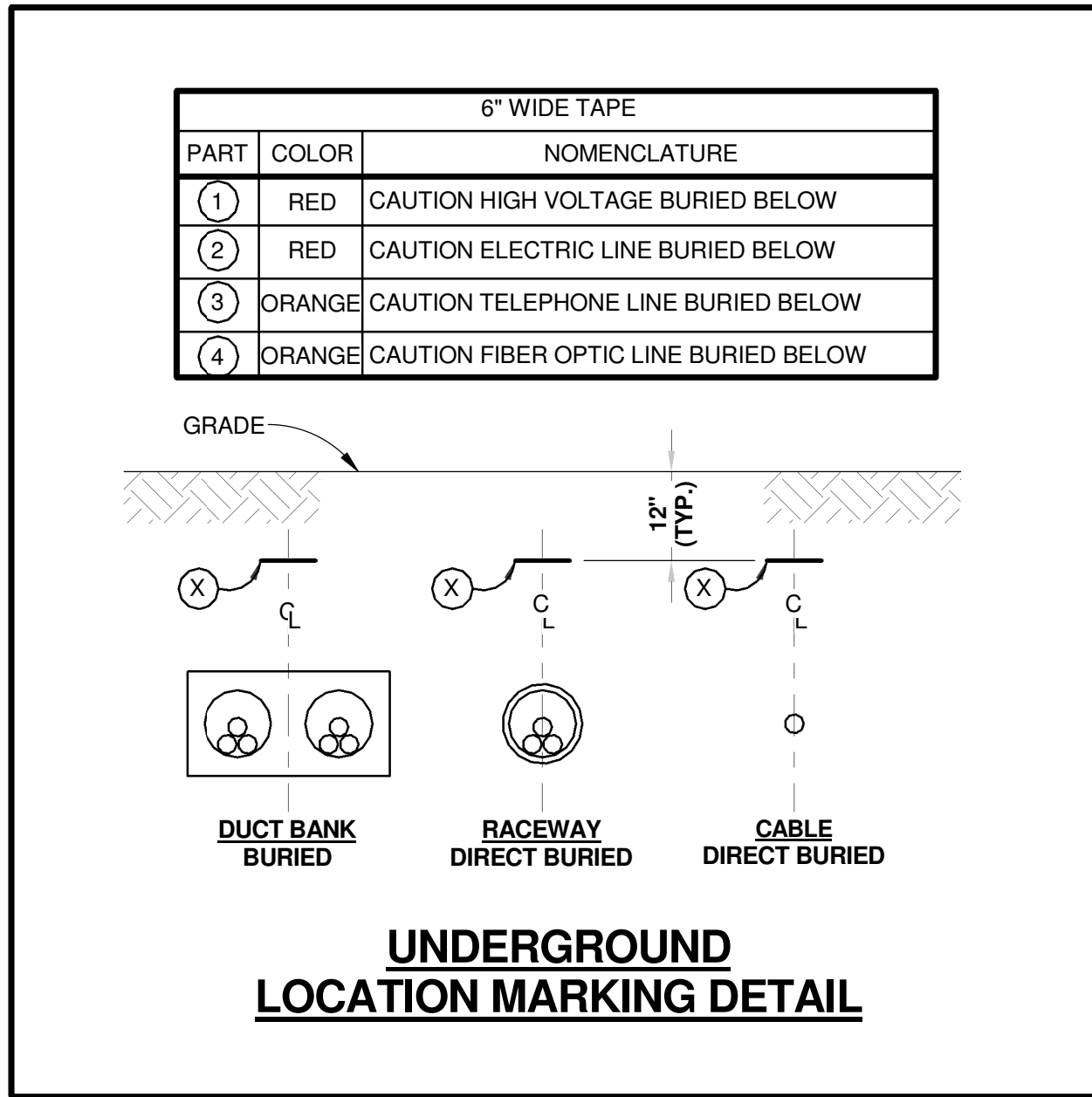
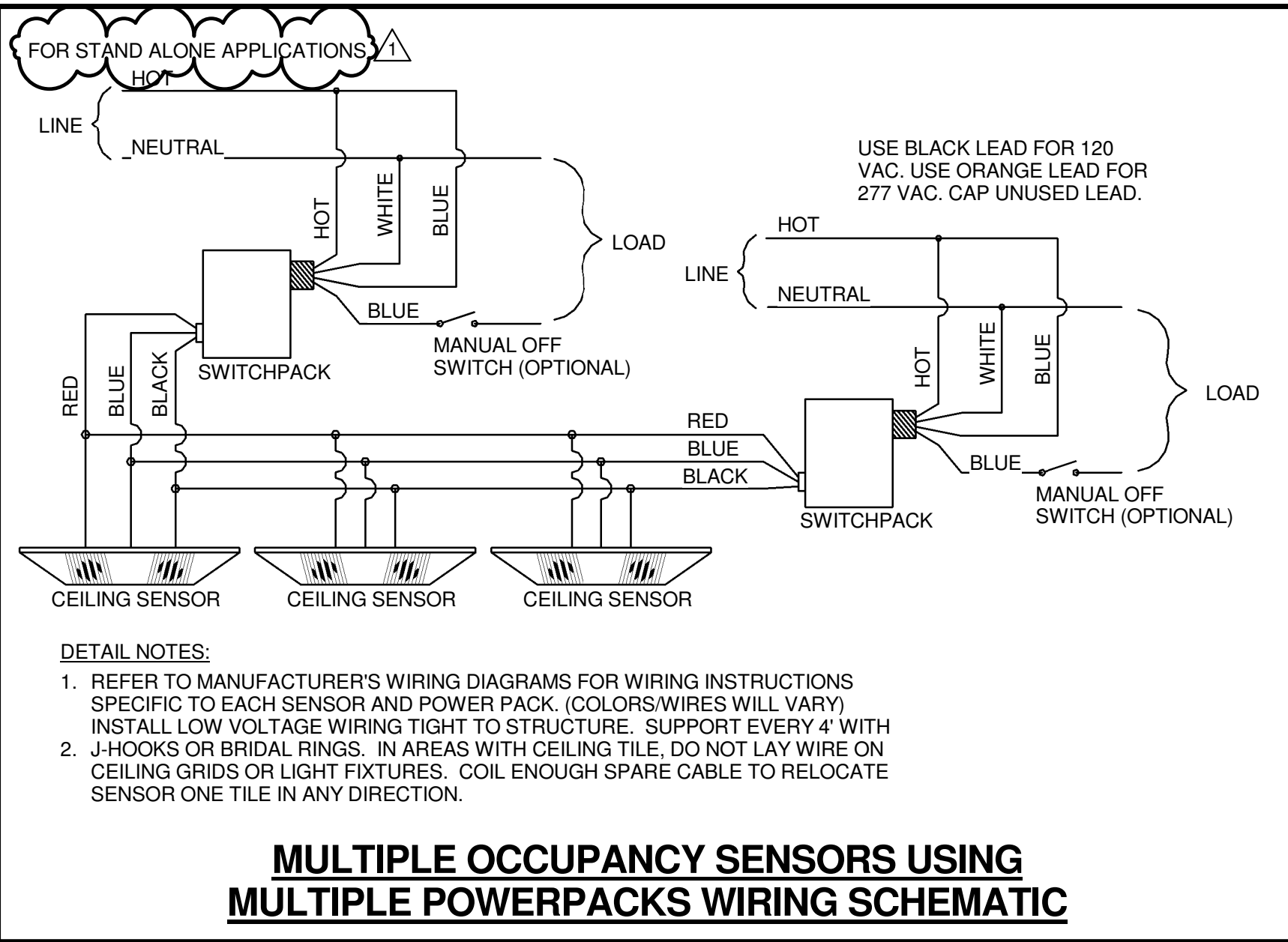
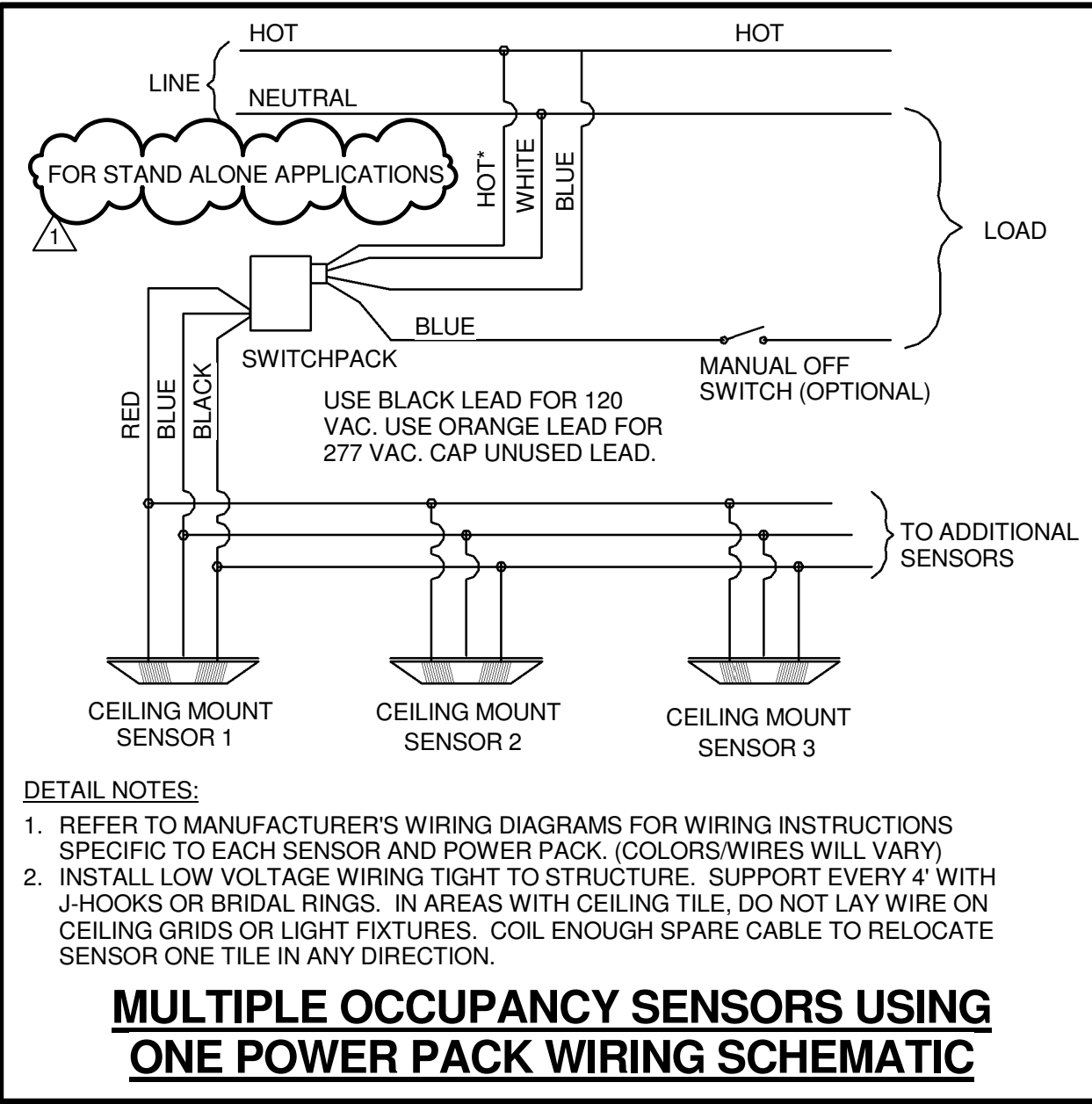
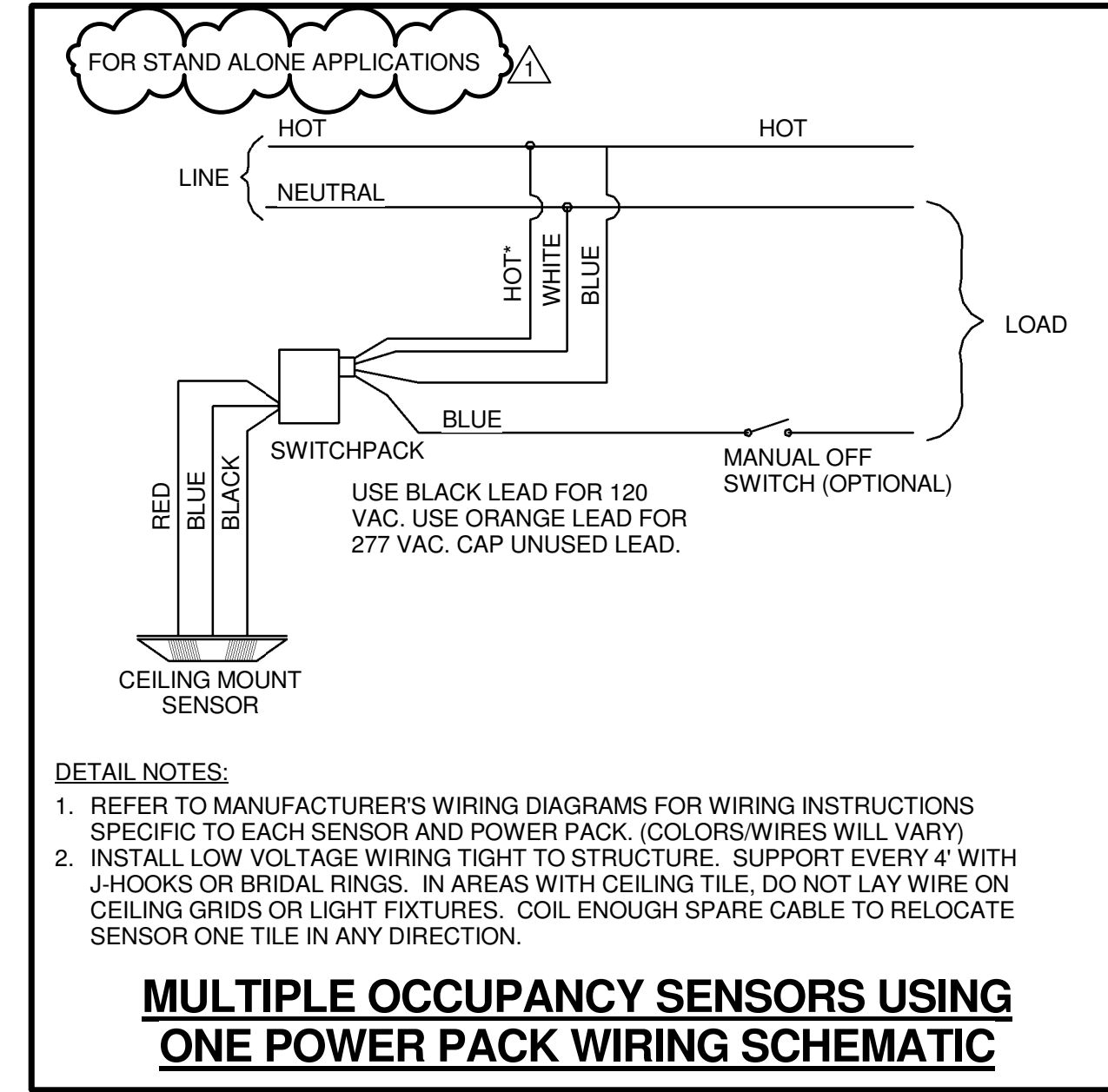
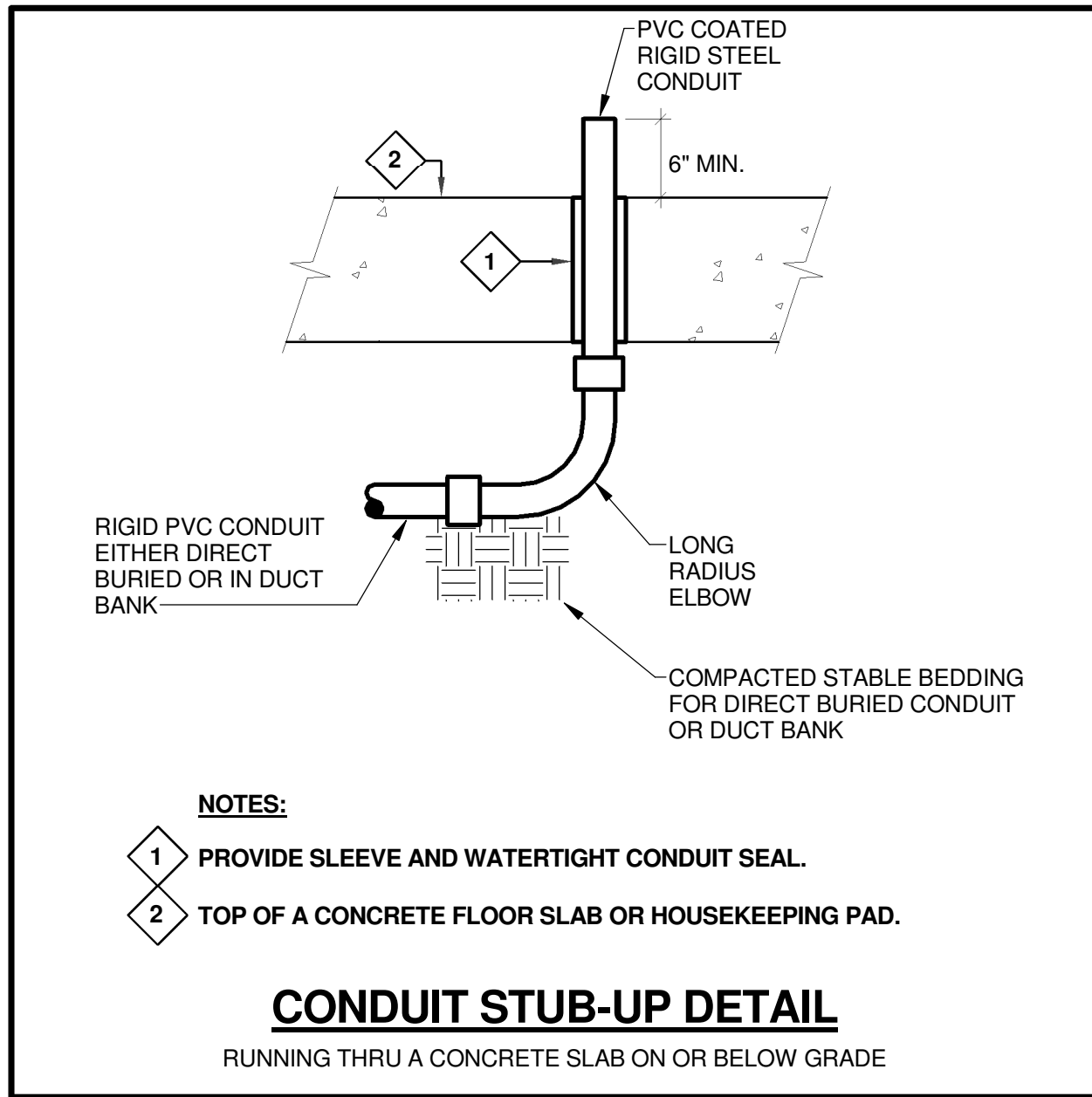
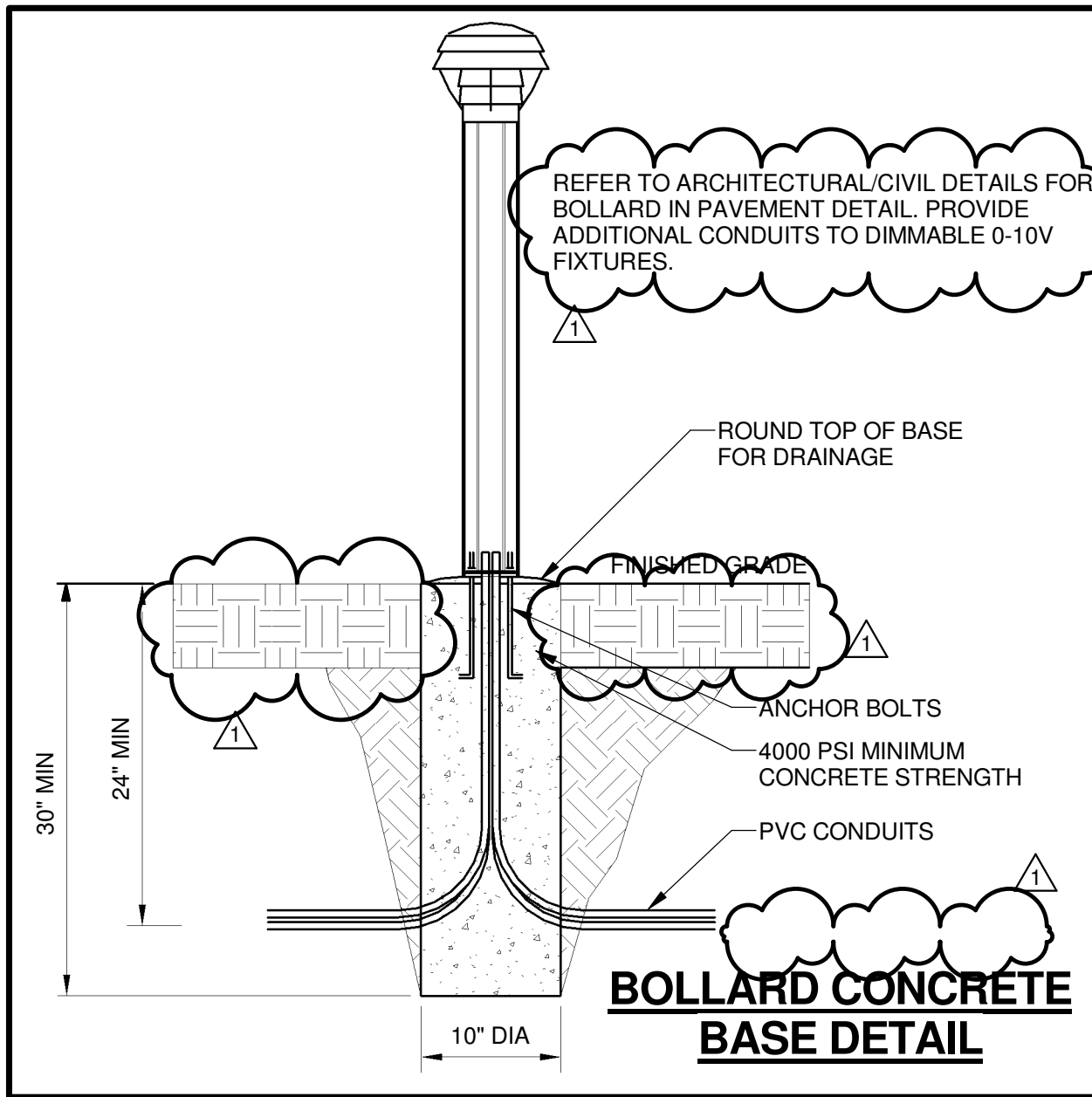
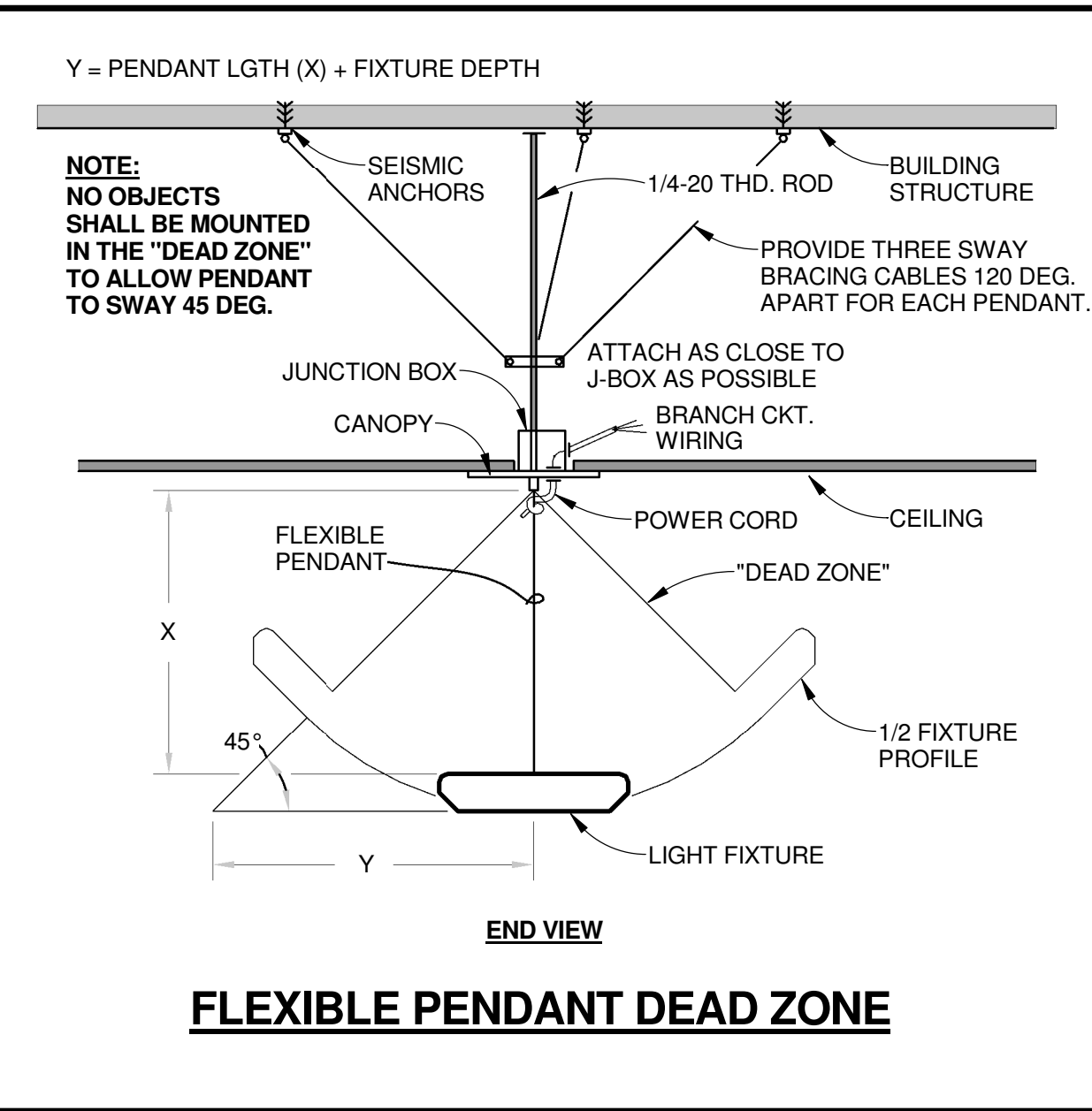
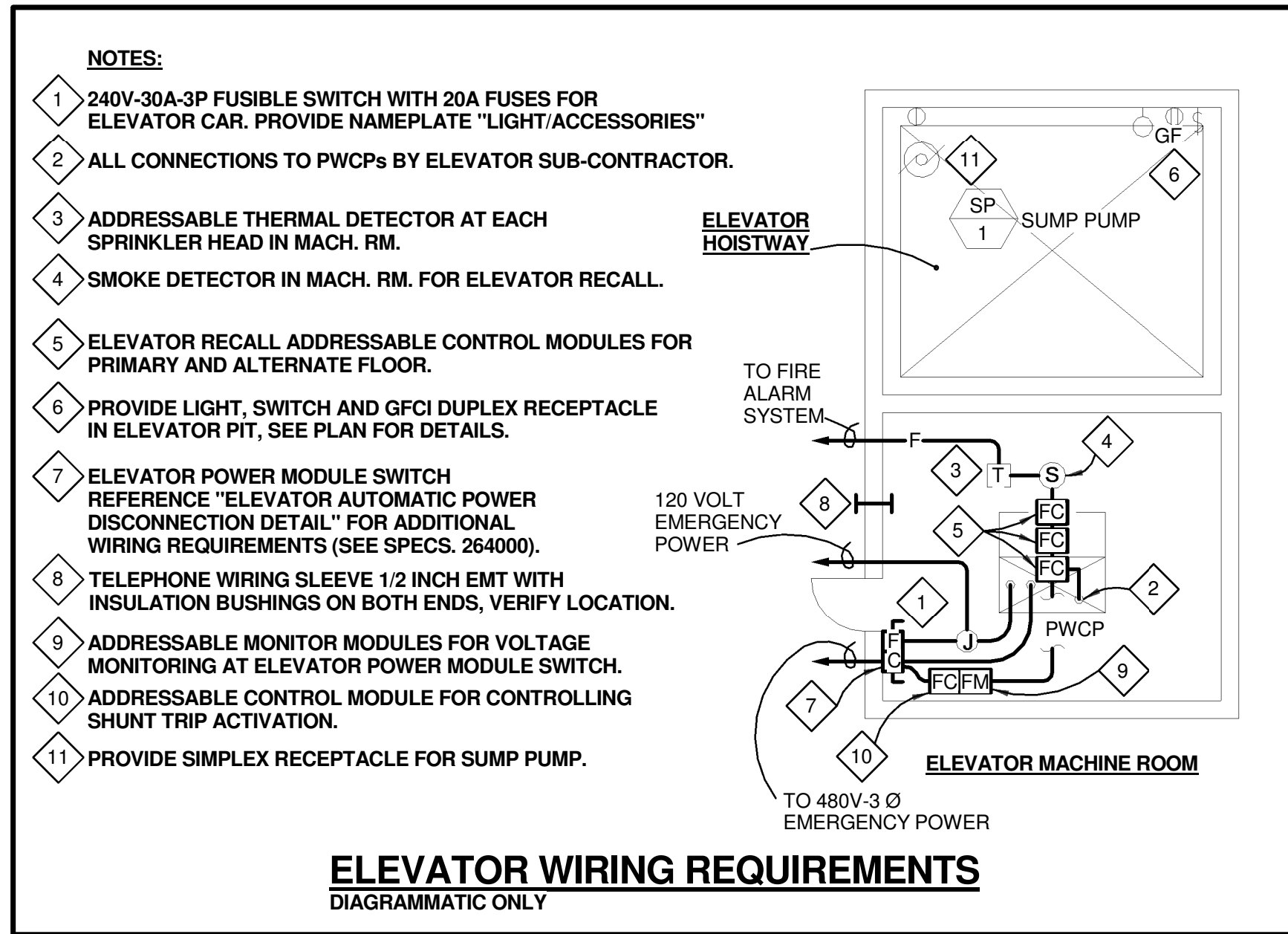
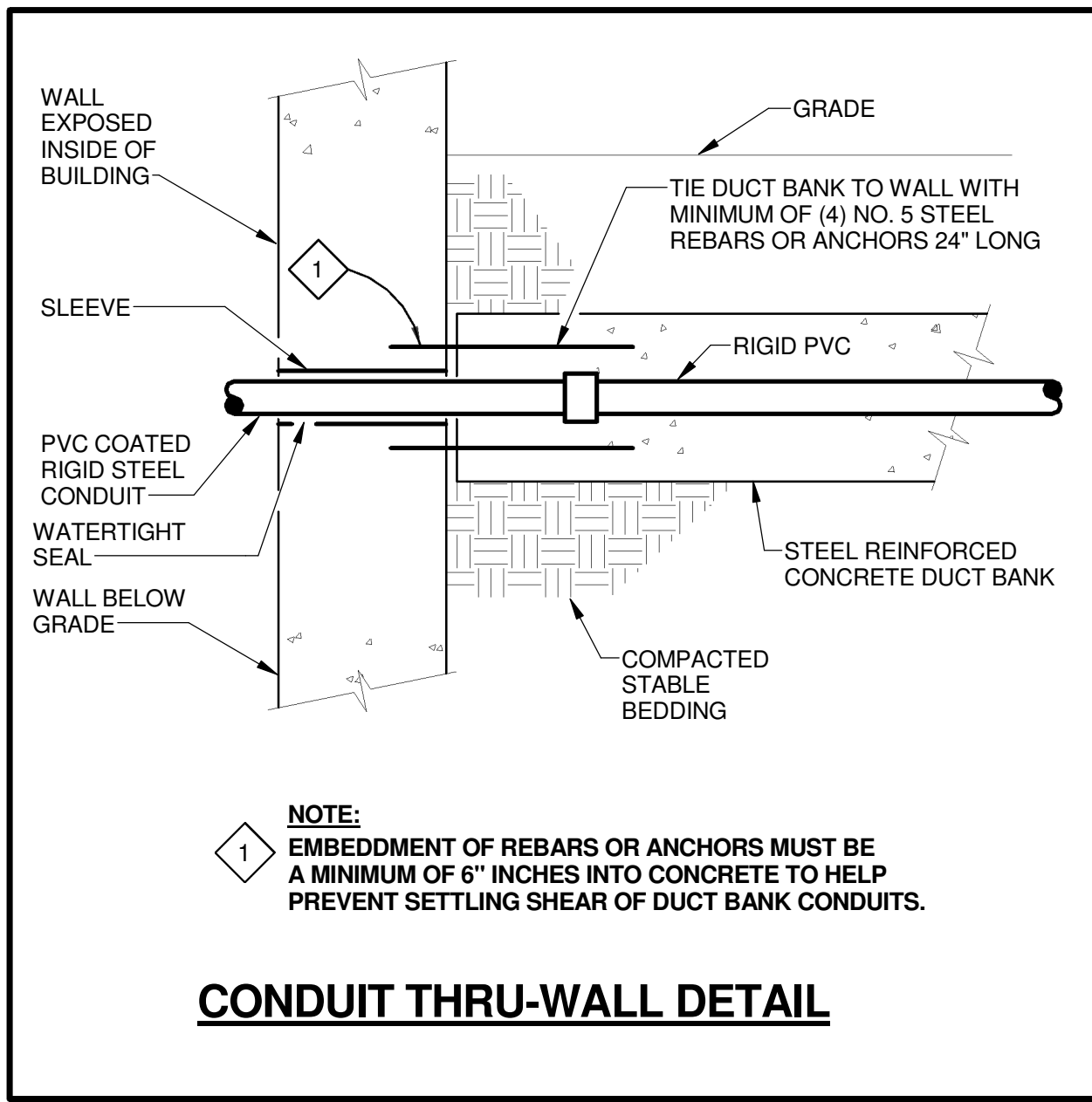
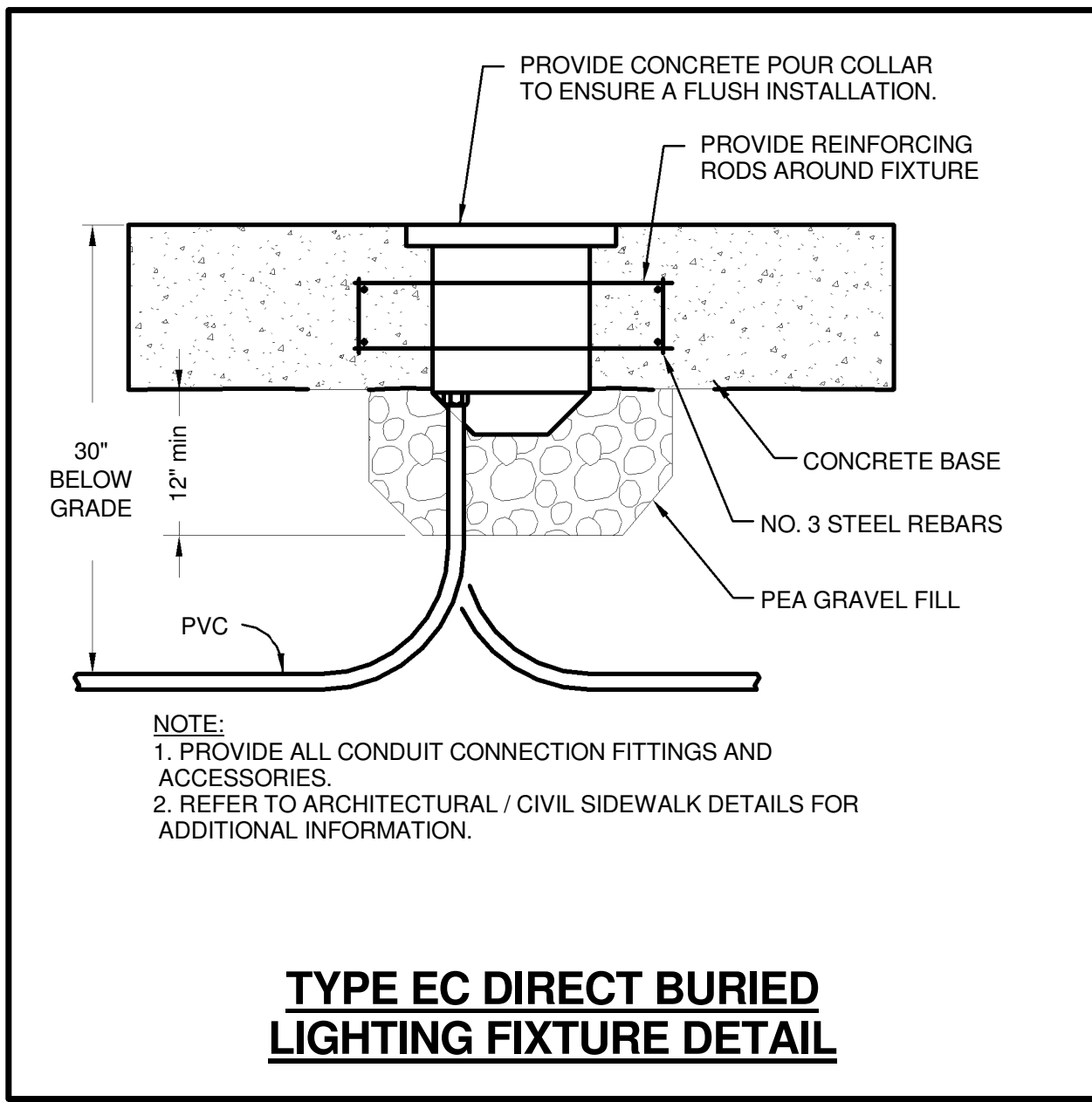
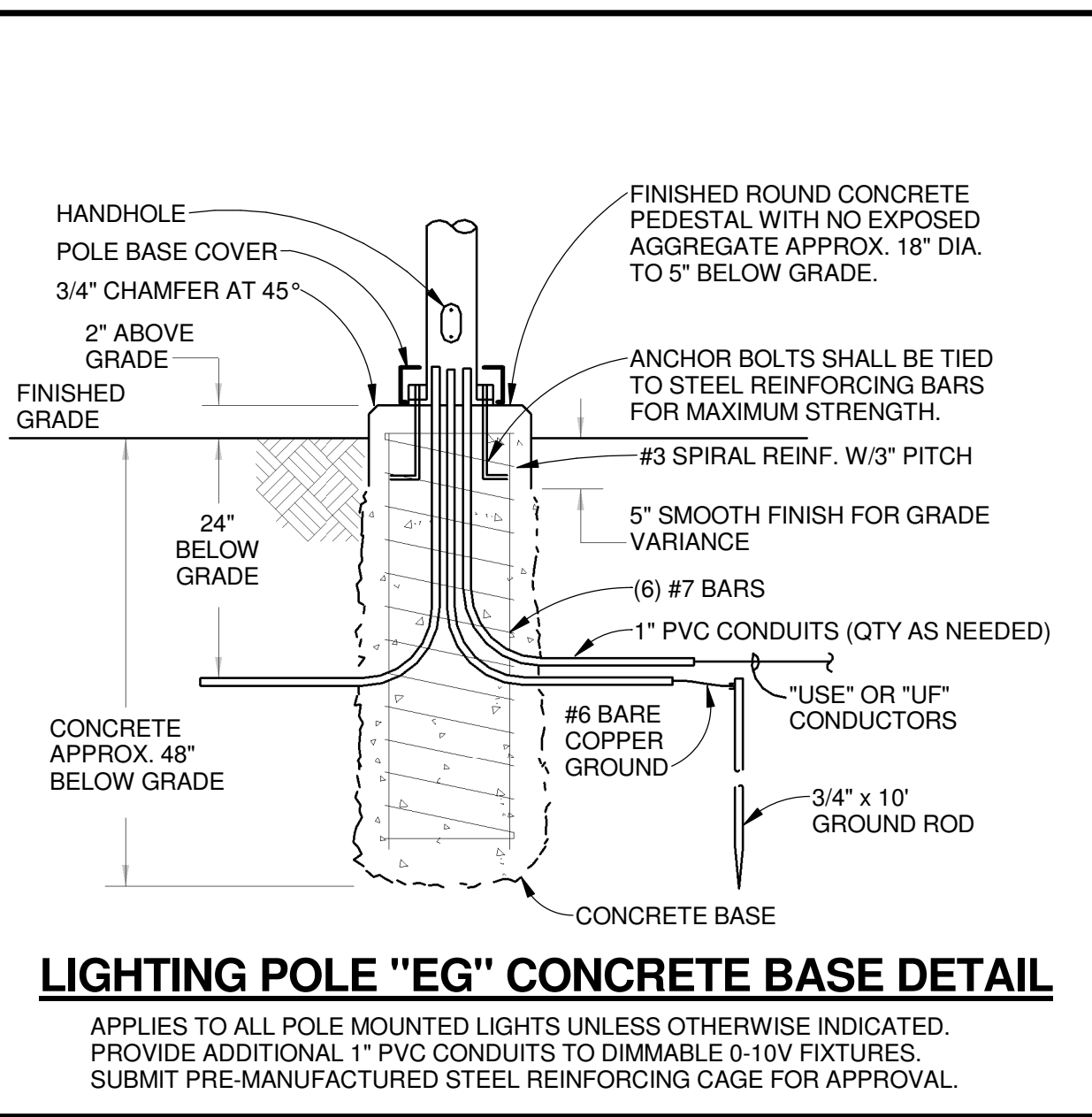
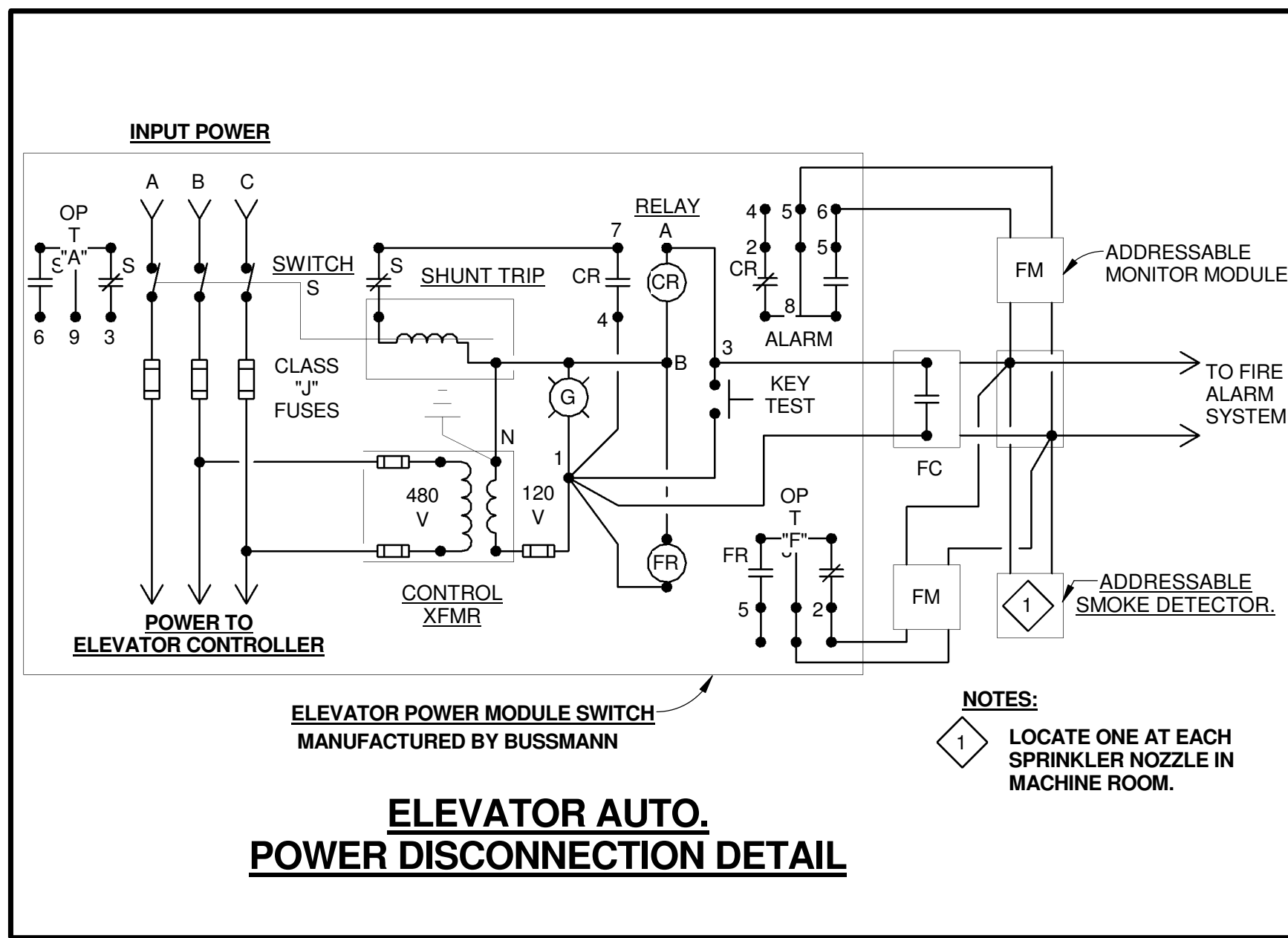
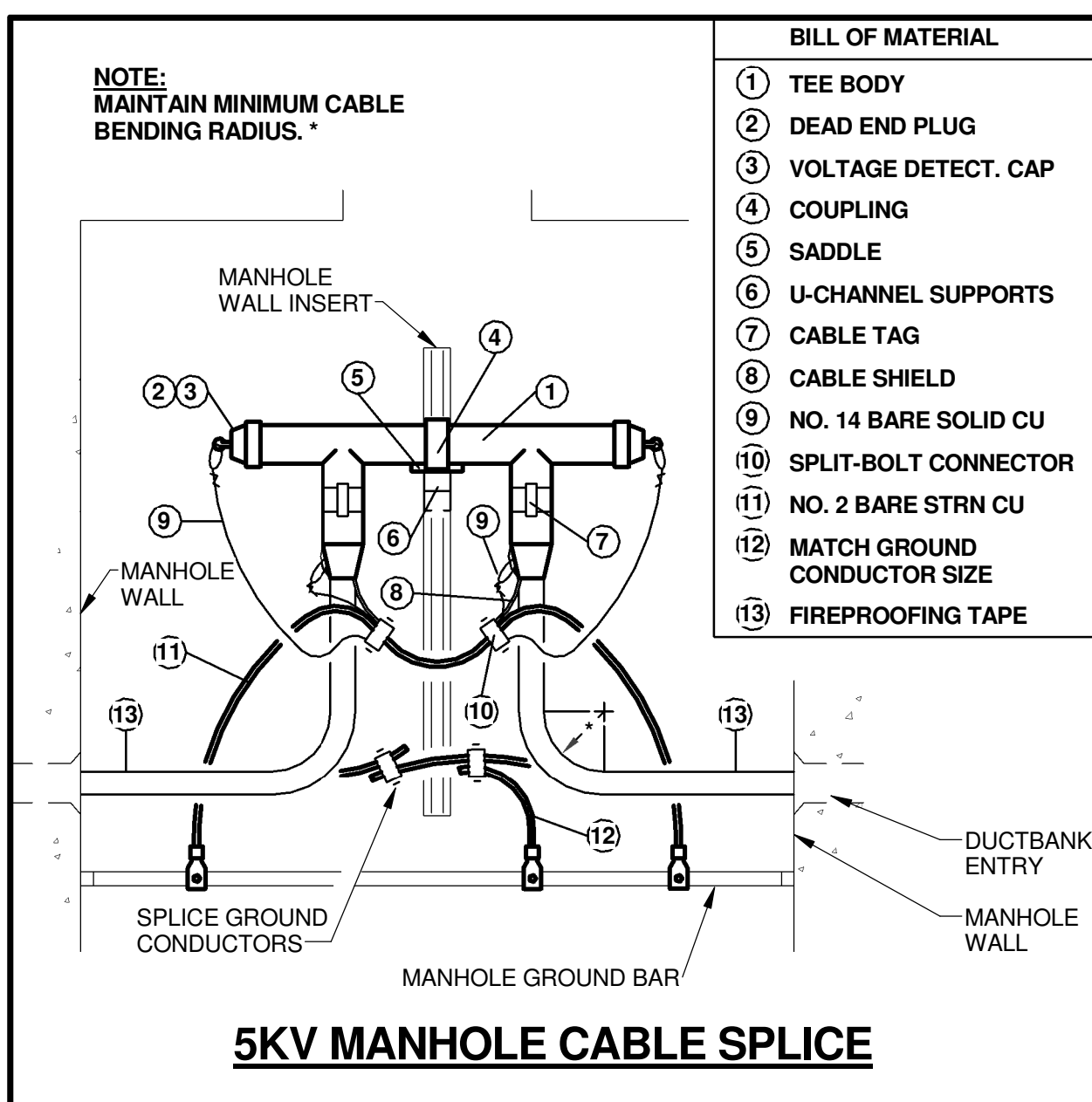
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1	ADDENDUM 2-2	19 APRIL 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016
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DETAILS - ELECTRICAL

E0402

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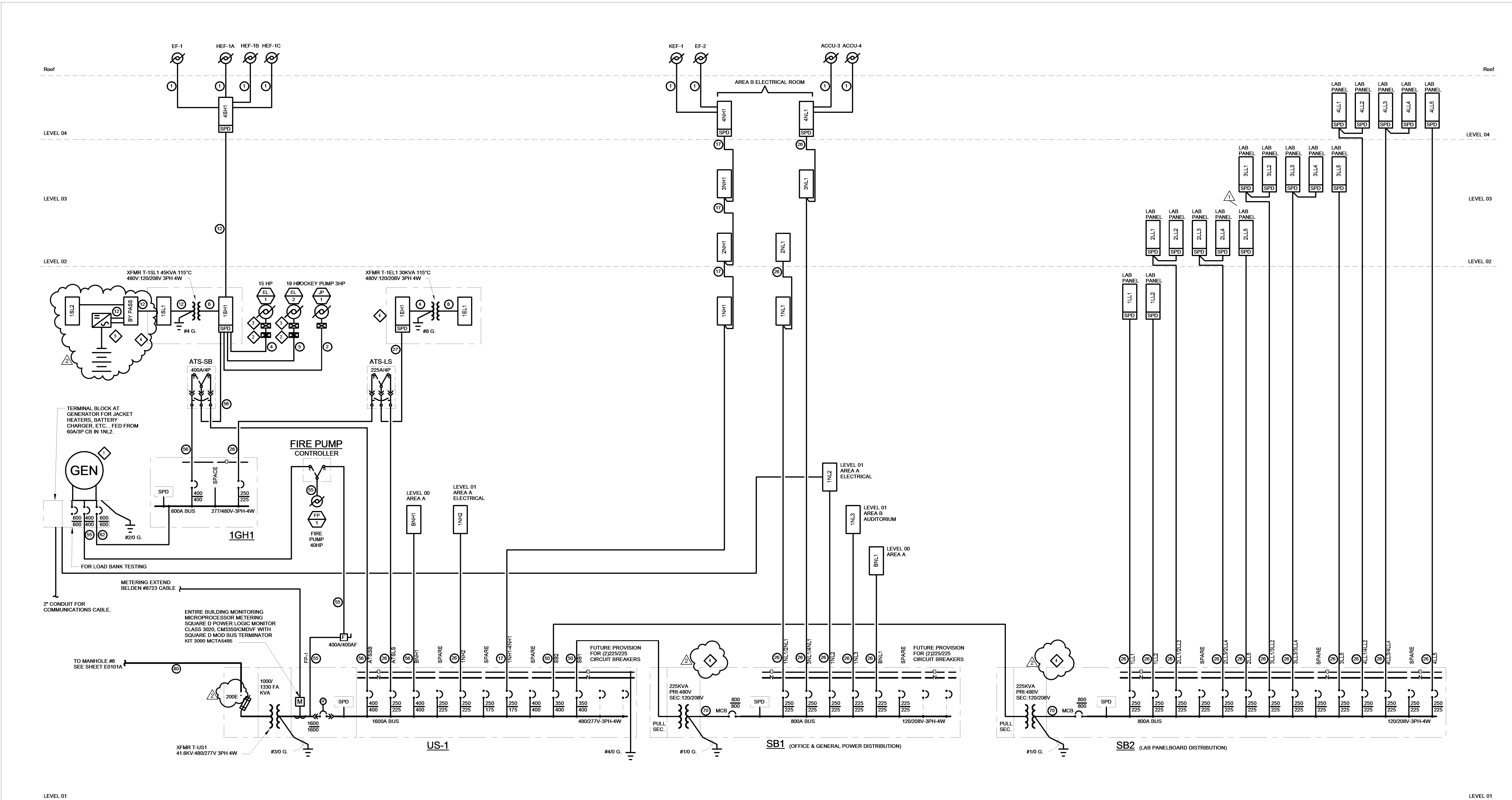
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3	25, 30	3#10, 1#10G, 3/4" C
4	35, 40, 45	3#8, 1#8G, 3/4" C
5	50, 60	3#6, 1#10G, 1" C
6	70, 80	3#4, 1#8G, 1-1/4" C
7	90, 100	3#3, 1#6G, 1-1/4" C
8	100	4#3, 1#8G, 1-1/4" C
9	110	3#2, 1#6G, 1-1/4" C
10	125	3#1, 1#6G, 1-1/2" C
11	150	3#1/0, 1#6G, 1-1/2" C
12	150	4#1/0, 1#6G, 2" C
13	175	3#2/0, 1#6G, 2" C
14	175	4#2/0, 1#6G, 2" C
15	175	4#2/0, 1#6G, 2-1/2" C OVERSIZED CONDUIT
16	200	3#3/0, 1#6G, 2-1/2" C

FEEDER SCHEDULE		
CODE NO.	OVERCURRENT PROTECTION	FEEDER SIZES
16	200	4#3/0, 1#6G, 2-1/2" C
17	200	5#3/0, 1#6G, 2-1/2" C (200% N)
18	225	3#4/0, 1#4G, 2" C
19	225	4#4/0, 1#4G, 2-1/2" C
20	225	5#4/0, 1#4G, 2-1/2" C (200% N)
21	250	3#250kcmil, 1#4G, 2-1/2" C
22	250	4#250kcmil, 1#4G, 2-1/2" C
23	250	5#250kcmil, 1#4G, 3" C (200% N)
24	300	3#350kcmil, 1#4G, 2-1/2" C
25	300	4#350kcmil, 1#4G, 3" C
26	300	5#350kcmil, 1#4G, 3" C (200% N)
27	350	2 SETS OF 3#2/0, 1#3G, 2" C EACH
28	350	2 SETS OF 4#2/0, 1#3G, 2" C EACH
29	350	2 SETS OF 5#2/0, 1#3G, 2-1/2" C EACH (200% N)
30	350	3#500kcmil, 1#3G, 3" C
31	350	4#500kcmil, 1#3G, 4" C

FEEDER SCHEDULE		
CODE NO.	OVERCURRENT PROTECTION	FEEDER SIZES
32	400	2 SETS OF 3#3/0, 1#3G, 2" C EACH
33	400	2 SETS OF 4#3/0, 1#3G, 2-1/2" C EACH
34	400	2 SETS OF 5#3/0, 1#3G, 2-1/2" C EACH (200% N)
35	600	2 SETS OF 3#250kcmil, 1#1G, 3" C EACH
36	600	2 SETS OF 4#250kcmil, 1#1G, 3" C EACH
37	600	2 SETS OF 5#250kcmil, 1#1G, 3-1/2" C EACH (200% N)
38	800	3 SETS OF 3#250kcmil, 1#1/0G, 2-1/2" C EACH
39	800	3 SETS OF 4#250kcmil, 1#1/0G, 3" C EACH
40	1000	3 SETS OF 4#400kcmil, 1#2/0G, 3-1/2" C EACH
41	1200	3 SETS OF 4#600kcmil, 1#3/0G, 3-1/2" C EACH
42	1200	4 SETS OF 4#600kcmil, 1#3/0G, 3" C EACH
43	1600	4 SETS OF 3#600kcmil, 1#4/0G, 3" C EACH
44	4.16kV	(3)#2/0 SHLD., (1)#4G, (1)5" C., (1)5" C. SPARE (SEE SPEC)

GENERAL NOTES

A. ALL FEEDERS AND PANEL BUSSING TO BE COPPER.

KEYED NOTES

1 PROVIDE NEW 450kW, 277/480V 3PH, 4W, DIESEL FUEL, STANDBY/LIFE SAFETY GENERATOR WITH OUTDOOR CUSTOM SOUND ENCLOSURE (SEE SPECIFICATIONS) AND FUEL TANK.

2 BUSSMANN POWER MODULE SWITCH ELEVATOR DISCONNECT, PS SERIES, 60A, 480 VOLT, 3 PHASE. COORDINATE EXACT SIZE WITH FINAL ELEVATOR MANUFACTURER'S SELECTION.

3 INTEGRATED UNIT CONSISTING OF TRANSFORMER AND PANEL(S) EQUAL TO EATON INTEGRATED FACILITY SYSTEM (IFS).

4 UPS AND AND EXTERNAL BY-PASS FURNISHED BY OWNER INSTALLED BY CONTRACTOR. CONTRACTOR SHALL INSTALL PER WRITTEN MANUFACTURER INSTRUCTIONS FOR A COMPLETE FUNCTIONING INSTALLATION.

CONFORMED SET 01 JUL 2016

2 ADDENDUM 2-2 19 APRIL 2016
1 ADDENDUM 2-1 17 MAR 2016
- ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016
No. Description Date

Drawing Title:

ONE - LINE DIAGRAM

Project No.: 04561.01 Checked by:

E0501

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ELECTRICAL DISTRIBUTION EQUIPMENT SCHEDULE

PANELBOARD		ROOM NUMBER	PANELBOARD		MAIN (2)		BRANCH CIRCUIT DATA				ENCLOSURE DATA			SPECIAL FEATURES (7)
DESIGNATION	LOCATION		VOLT-PH-W	SHORT CIRCUIT RATING (1)	TYPE (3)	SIZE (Amps)	LOCATION	DEVICE TYPE (4)	(QUAN.) Amp Size - Poles	TOTAL NO. OF POLES	MTG	CRITICAL MAX DIM	CONSTR. TYPE (6)	
US-1	MAIN ELECTRICAL	192	480/277-3-4	35,000	MCB	1600 A	BOTTOM	CB	SEE ONE-LINE DIAGRAM	SEE ONE-LINE DIAGRAM	FS	16'-0"L x 5'-6"W	1	1, 2
SB-1	MAIN ELECTRICAL	192	208/120-3-4	22,000	MCB	800 A	TOP	CB	SEE ONE-LINE DIAGRAM	SEE ONE-LINE DIAGRAM	FS	8'-6"L x 3'-0"W	1	1, 2
SB-2	MAIN ELECTRICAL	192	208/120-3-4	22,000	MCB	800 A	TOP	CB	SEE ONE-LINE DIAGRAM	SEE ONE-LINE DIAGRAM	FS	8'-6"L x 3'-0"W	1	1, 2
1EL1	MECHANICAL ROOM CENTRAL	078	208/120-3-4	10,000	MCB	100 A	BOTTOM	CB	SEE PANEL SCHEDULES	30	S	20	2	1
BNH1	MECHANICAL ROOM CENTRAL	078	480/277-3-4	22,000	MCB	400 A	TOP	CB	SEE PANEL SCHEDULES	42	S	20	2	1
BNL1	MECHANICAL ROOM CENTRAL	078	208/120-3-4	10,000	MCB	225 A	TOP	CB	SEE PANEL SCHEDULES	42	S	20	2	1
1EH1	MAIN ELECTRICAL	192	480/277-3-4	22,000	MCB	225 A	TOP	CB	SEE PANEL SCHEDULES	42	S	20	2	1, 2
1GH1	MAIN ELECTRICAL	192	480/277-3-4	22,000	MLO	600 A	BOTTOM	CB	SEE ONE-LINE DIAGRAM	SEE ONE-LINE DIAGRAM	S	20	2	1, 2
1SH1	MAIN ELECTRICAL	192	480/277-3-4	22,000	MCB	400 A	TOP	CB	SEE PANEL SCHEDULES	42	S	20	2	1, 2
1SL1	MAIN ELECTRICAL	192	208/120-3-4	10,000	MCB	150 A	BOTTOM	CB	SEE PANEL SCHEDULES	42	S	20	2	1
1SL2	DATA IT WORK ROOM	195	208/120-3-4	10,000	MCB	150 A	TOP	CB	SEE PANEL SCHEDULES	42	S	20	2	1
1NH1	ELECTRICAL	110B	480/277-3-4	22,000	MCB/SFL	175 A	TOP	CB	SEE PANEL SCHEDULES	42	S	20	2	1
1NH2	MAIN ELECTRICAL	192	480/277-3-4	22,000	MLO	225 A	TOP	CB	SEE PANEL SCHEDULES	60	S	20	2	1
1NL1	ELECTRICAL	110B	208/120-3-4	10,000	MCB/SFL	225 A	TOP	CB	SEE PANEL SCHEDULES	60	S	20	2	1
1NL2	MAIN ELECTRICAL	192	208/120-3-4	10,000	MLO	225 A	TOP	CB	SEE PANEL SCHEDULES	54	S	20	2	1
1NL3	CONTROL	160B	208/120-3-4	10,000	MCB	225 A	TOP	CB	SEE PANEL SCHEDULES	42	S	20	2	1
1LL1	MAIN ELECTRICAL	192	208/120-3-4	10,000	MLO	225 A	TOP	CB	SEE PANEL SCHEDULES	42	S	20	2	1, 2
1LL2	CORRIDOR	C130	208/120-3-4	10,000	MCB	225 A	TOP	CB	SEE PANEL SCHEDULES	54	F	20	2	1, 2
2NH1	ELECTRICAL	210B	480/277-3-4	22,000	MCB/SFL	175 A	BOTTOM	CB	SEE PANEL SCHEDULES	42	S	20	2	1
2NL1	ELECTRICAL	210B	208/120-3-4	10,000	MCB	225 A	BOTTOM	CB	SEE PANEL SCHEDULES	60	S	20	2	1
2LL1	CORRIDOR	C280	208/120-3-4	10,000	MCB/SFL	225 A	BOTTOM	CB	SEE PANEL SCHEDULES	42	S	20	2	1, 2
2LL2	CORRIDOR	C280	208/120-3-4	10,000	MCB	225 A	TOP	CB	SEE PANEL SCHEDULES	42	S	20	2	1, 2
2LL3	CORRIDOR	C280	208/120-3-4	10,000	MCB/SFL	225 A	BOTTOM	CB	SEE PANEL SCHEDULES	42	S	20	2	1, 2
2LL4	CORRIDOR	C280	208/120-3-4	10,000	MCB	225 A	TOP	CB	SEE PANEL SCHEDULES	42	S	20	2	1, 2
2LL5	ELECTRICAL	210B	208/120-3-4	10,000	MCB	225 A	TOP	CB	SEE PANEL SCHEDULES	42	S	20	2	1, 2
3NH1	ELECTRICAL	310A	480/277-3-4	22,000	MCB/SFL	175 A	BOTTOM	CB	SEE PANEL SCHEDULES	42	S	20	2	1
3NL1	ELECTRICAL	310A	208/120-3-4	10,000	MCB/SFL	225 A	BOTTOM	CB	SEE PANEL SCHEDULES	60	S	20	2	1
3LL1	CORRIDOR	C380	208/120-3-4	10,000	MCB/SFL	225 A	BOTTOM	CB	SEE PANEL SCHEDULES	42	S	20	2	1, 2
3LL2	CORRIDOR	C380	208/120-3-4	10,000	MCB	225 A	TOP	CB	SEE PANEL SCHEDULES	42	S	20	2	1, 2
3LL3	CORRIDOR	C380	208/120-3-4	10,000	MCB/SFL	225 A	BOTTOM	CB	SEE PANEL SCHEDULES	42	S	20	2	1, 2
3LL4	CORRIDOR	C380	208/120-3-4	10,000	MCB	225 A	TOP	CB	SEE PANEL SCHEDULES	42	S	20	2	1, 2
3LL5	CORRIDOR	C350	208/120-3-4	10,000	MCB	225 A	BOTTOM	CB	SEE PANEL SCHEDULES	42	F	20	2	1, 2
4SH1	ELECTRICAL	410	480/277-3-4	22,000	MCB	150 A	BOTTOM	CB	SEE PANEL SCHEDULES	30	S	20	2	1, 2
4NH1	ELECTRICAL	410	480/277-3-4	22,000	MCB	225 A	BOTTOM	CB	SEE PANEL SCHEDULES	42	S	20	2	1, 2
4NL1	ELECTRICAL	410	208/120-3-4	10,000	MCB	225 A	BOTTOM	CB	SEE PANEL SCHEDULES	54	S	20	2	1, 2
4LL1	CORRIDOR	C480	208/120-3-4	10,000	MCB/SFL	225 A	BOTTOM	CB	SEE PANEL SCHEDULES	42	S	20	2	1, 2
4LL2	CORRIDOR	C480	208/120-3-4	10,000	MCB	225 A	TOP	CB	SEE PANEL SCHEDULES	42	S	20	2	1, 2
4LL3	CORRIDOR	C480	208/120-3-4	10,000	MCB/SFL	225 A	BOTTOM	CB	SEE PANEL SCHEDULES	42	S	20	2	1, 2
4LL4	CORRIDOR	C480	208/120-3-4	10,000	MCB	225 A	TOP	CB	SEE PANEL SCHEDULES	42	S	20	2	1, 2
4LL5	GENERAL CHEMISTRY LAB	C480	208/120-3-4	10,000	MCB	225 A	BOTTOM	CB	SEE PANEL SCHEDULES	42	S	20	2	1, 2

1. INTERRUPTING CAPACITY
UNLESS OTHERWISE NOTED, ALL 120/208 VOLT
PANELS SHALL BE BRACED FOR 10,000 AMPS RMS
SYM AND ALL 277/480 VOLT PANELS SHALL BE
BRACED FOR 14,000 AMPS RMS SYM

2. PANELBOARD MAIN
SEE RISER DIAGRAM FOR FEEDER CABLE SIZES
AND PROVIDE APPROPRIATE LUGS

3. PANELBOARD MAIN TYPES
MCB - MAIN CIRCUIT BREAKER
MFS - MAIN FUSIBLE SWITCH
MC - MAIN CONTACTOR
MLO - MAIN LUGS ONLY
SFL - SUB FEED LUGS
DL - DOUBLE LUGS

4. BRANCH CIRCUIT BREAKER TYPE
FS - FUSIBLE SWITCH
CB - CIRCUIT BREAKER
(ST) - SHUNT TRIP REQUIRES 1 POLE SPACE

5. MOUNTING
F - FUSE
S - SURFACE
FS - FREESTANDING

6. ENCLOSURE CONSTR. TYPE
1 TRIM WITHOUT DOOR
2 TRIM WITH HINGED DOOR AND LOCK
3 DOUBLE SECTION PANEL WITH TWO SEPARATE
TRIMS, HINGED DOORS AND LOCKS
4 THREE SECTION PANEL WITH THREE SEPARATE
TRIMS, HINGED DOORS AND LOCKS
5 WEATHERPROOF ENCLOSURES

7. SPECIAL FEATURES
1 EQUIPMENT GROUND BUS
2 INTERNAL SURGE PROTECTION DEVICE
3 EXTERNAL SURGE PROTECTION DEVICE

Panel: 1SL2

Location: MDF / IT WORK ROOM-1...
Supply From: 1SL1
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10,000
Mains Type: MCB
Mains Rating: 150 A
MCB Rating:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT
1	MDF Room 195 - Rack	20 A	1	500	1000					2
3	MDF Room 195 - Rack	20 A	1		500	1000				4
5	Data 100B - Rack	20 A	1				500	1000		6
7	Data 100B - Rack	20 A	1	500	1000					8
9	Data 200B - Rack	20 A	1		500	0				10
11	Data 200B - Rack	20 A	1			500	0			12
13	Data 300B - Rack	20 A	1	500	0					14
15	Data 300B - Rack	20 A	1		500	0				16
17	Data 400B - Rack	20 A	1			500	0			18
19	Data 400B - Rack	20 A	1	500	0					20
21					0					22
23						0				24
25				0						26
27					0					28
29						0				30
Total Load:				4000 VA	2500 VA	2500 VA				
Total Amps:				33 A	21 A	21 A				

Notes:

CONFORMED SET

01 JUL 2016

2 ADDENDUM 2-2 19 APRIL 2016
1 ADDENDUM 2-1 17 MAR 2016
- ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016

No.	Description	Date
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Drawing Title:

ELECTRICAL
DISTRIBUTION
EQUIPMENT SCHEDULE

Project No.: 04561.01

Checked by:

E0502

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CONFORMED SET

01 JUL 2016

3 ADDENDUM 2-4 24 MAY 2016
2 ADDENDUM 2-2 19 APRIL 2016
1 ADDENDUM 2-1 17 MAR 2016
- ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016

No.	Description	Date
-----	-------------	------

Drawing Title:

PANEL SCHEDULES

Project No.: 04561.01

Checked by:

E0503

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Panel: BNH1

Location: MAIN ELECTRICAL 192
Supply From: US-1
Mounting: S
Enclosure: Type 1

Volts: 480/277 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 22,000
Mains Type: MCB
Mains Rating: 400 A
MCB Rating:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT
1	AHU-1	180 A	3	22160	22160			180 A	AHU-2	2
3					22160	22160				4
5						22160	22160			6
7				2105	886					8
9	DI-1	15 A	3		2105	886		15 A	FZP-1 & FZP-2	10
11						2105	886			12
13				9418	0					14
15	CP-1	70 A	3		9418	0		70 A	CP-2 (NON SIMULTANEOUS LOAD)	16
17						9418	0			18
19				5817	0					20
21	HRP-1	45 A	3		5817	0		45 A	HRP-2 (NON SIMULTANEOUS LOAD)	22
23										24
25				582	0				Space	26
27	VF-1	15 A	3		582	0			Space	28
29									Space	30
31	Space	--	--	0	0				Space	32
33	Space	--	--		0	0			Space	34
35	Space	--	--			0	0		Space	36
37	Mech Room - Central 078 (Lighting)	20 A	1	1216	0				Space	38
39	Space	20 A	1			0	0		Space	40
41	Space	20 A	1				0	0	Space	42
Total Load:				64344 VA	63128 VA	63128 VA				
Total Amps:				232 A	228 A	228 A				

Notes:

Panel: 1EL1

Location: MAIN ELECTRICAL 192
Supply From: T-1EL1
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10,000
Mains Type: MCB
Mains Rating: 100 A
MCB Rating:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT
1	MECHANICAL ROOM 078 - BAS	20 A	1	360	100			20 A	MAIN ELECTRICAL 192 - FACP	2
3	110B, 210B, 310A, 410 - BAS	20 A	1		1060	180		20 A	DATA 100B - SECURITY EQUIPMENT	4
5	Elec 110B - Fire Door	15 A	1			1176	180	15 A	DATA 100B - SECURITY EQUIPMENT	6
7	Elec 210B - Fire Door	15 A	1	1176	180			15 A	DATA 200B - SECURITY EQUIPMENT	8
9	Elec 310A - Fire Door	15 A	1		1176	180		15 A	DATA 200B - SECURITY EQUIPMENT	10
11	Elec 410 - Fire Door	15 A	1			1176	180	15 A	DATA 300B - SECURITY EQUIPMENT	12
13	Spare	20 A	1	0	180			20 A	DATA 400B - SECURITY EQUIPMENT	14
15	Spare	20 A	1		0	0		20 A	Spare	16
17	Spare	20 A	1			0	0	20 A	Spare	18
19	Spare	20 A	1	0	0			20 A	Spare	20
21	Spare	20 A	1		0	0		20 A	Spare	22
23	Spare	20 A	1			0	0	20 A	Spare	24
25	Space	--	--	0	0			--	Space	26
27	Space	--	--		0	0		--	Space	28
29	Space	--	--			0	0	--	Space	30
Total Load:				1996 VA	2596 VA	2712 VA				
Total Amps:				17 A	22 A	23 A				

Notes:

Panel: 2LL5

Location: ELEC 210B
Supply From: SB-2
Mounting: S
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10,000
Mains Type: MCB
Mains Rating: 225 A
MCB Rating:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT
1	Open Research Lab 235 - Enviro. Chamber	20 A	1	1000	360			20 A	Open Research Lab 235 - Desk	2
3	Open Research Lab 235 - Surface Raceway	20 A	1		360	360		20 A	Open Research Lab 235 - Desk	4
5	Open Research Lab 235 - Surface Raceway	20 A	1			360	360	20 A	Open Research Lab 235 - Desk	6
7	Open Research Lab 235 - BSC	20 A	1	180	180			20 A	Open Research Lab 235 - Floor Box	8
9	Spare	20 A	1		0	0		20 A	Spare	10
11	Spare	20 A	1			0	0	20 A	Spare	12
13	Spare	20 A	1	0	0			20 A	Spare	14
15	Spare	20 A	1			0	0	20 A	Spare	16
17	Spare	20 A	1			0	0	20 A	Spare	18
19	Spare	20 A	1	0	0			20 A	Spare	20
21	Spare	20 A	1		0	0		20 A	Spare	22
23	Spare	20 A	1			0	0	20 A	Spare	24
25	Space	20 A	1	0	0			20 A	Spare	26
27	Spare	20 A	1			0	0	20 A	Spare	28
29	Spare	20 A	1			0	0	20 A	Spare	30
31	Spare	20 A	1	0	0			20 A	Spare	32
33	Spare	20 A	1			0	0	20 A	Spare	34
35	Spare	20 A	1			0	0	20 A	Spare	36
37	Spare	20 A	1	0	0			20 A	Spare	38
39	Spare	20 A	1			0	0	20 A	Spare	40
41	Spare	20 A	1			0	0	20 A	Spare	42
Total Load:				1720 VA	720 VA	720 VA				
Total Amps:				14 A	6 A	6 A				

Notes:

Panel: 1GH1

Location: MAIN ELECTRICAL 192
Supply From: MLO
Mounting: Surface
Enclosure: Type 1

Volts: 480/277 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 22,000
Mains Type: MCB
Mains Rating: 600 A
MCB Rating:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT
1	ATS-LS	225 A	3	6312	68314			400 A	ATS-SB	2
3					6512	65365				4
5				0	0				Space	6
7	Space	--	--						Space	8
9	Space	--	--			0	0		Space	10
11	Space	--	--				0	0	Space	12
13	Space	--	--	0	0				Space	14
15	Space	--	--			0	0		Space	16
17	Space	--	--				0	0	Space	18
19	Space	--	--	0	0				Space	20
21	Space	--	--			0	0		Space	22
23	Space	--	--				0	0	Space	24
25	Space	--	--	0	0				Space	26
27	Space	--	--			0	0		Space	28
29	Space	--	--				0	0	Space	30
Total Load:				74626 VA	71677 VA	72580 VA				
Total Amps:				270 A	259 A	262 A				

Notes:

Panel: 1EH1

Location: MAIN ELECTRICAL 192
Supply From: ATS-LS
Mounting: S
Enclosure: Type 1

Volts: 480/277 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 22,000
Mains Type: MCB
Mains Rating: 225 A
MCB Rating:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT		
1				1996	555			1	20 A	Exterior Site Lighting	2	
3	T-1EL1, 1EL1	45 A	3		2596	278		1	20 A	Mech Room - Central 078 (Lighting)	4	
5						2712	1785	1	20 A	1st Floor West Emerg. Lighting	6	
7	West Exterior Emerg. Lighting	20 A	1	445	1705			1	20 A	1st Floor East Emerg. Lighting	8	
9	North Stair Lighting	20 A	1		531	1434		1	20 A	2nd Floor West Emerg. Lighting	10	
11	West Stair Lighting	20 A	1			532	2870	1	20 A	2nd Floor East Emerg. Lighting	12	
13	Spare	20 A	1	0	2987			1	20 A	3rd Floor Emerg. Lighting	14	
15	Spare	20 A	1		0	3097		1	20 A	4th Floor Emerg. Lighting	16	
17	Spare	20 A	1				0	0	1	20 A	Spare	18
19	Spare	20 A	1	0	0			1	20 A	Spare	20	
21	Spare	20 A	1			0	0	1	20 A	Spare	22	
23	Spare	20 A	1				0	0	1	20 A	Spare	24
25	Spare	20 A	1	0	0			1	20 A	Spare	26	
27	Spare	20 A	1			0	0	1	20 A	Spare	28	
29	Spare	20 A	1				0	0	1	20 A	Spare	30
31	Space	--	--	0	0			--	--	Space	32	
33	Space	--	--			0	0	--	--	Space	34	
35	Space	--	--				0	0	--	Space	36	
37	Space	--	--	0	0			--	--	Space	38	
39	Space	--	--			0	0	--	--	Space	40	
41	Space	--	--				0	0	--	Space	42	
Total Amps:				28 A	29 A	29 A						
Total Loads:				7688 VA	7936 VA	7900 VA						

Notes:

Panel: BNL1

Location: MCB
Supply From: SB-1
Mounting: S
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10,000
Mains Type: MCB
Mains Rating: 225 A
MCB Rating:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT	
1	Mech Room Central 079 - Receptacle	20 A	1	360	180		1	20 A	Elevator 2 Pit - Receptacle	2	
3	Mech Room Central 079 - Receptacle	20 A	1		360	180	1	20 A	Elevator 2 Pit - ESP-2	4	
5	Mech Room Central 079 - Receptacle	20 A	1			360	0	1	20 A	Spare	6
7	Mech Room Central 078 - ACCU-1	25 A	2	1664	0		1	20 A	Spare	8	
9					1664	0	1	20 A	Spare	10	
11	Mech Room Central 078 - ACCU-2	25 A	2	1664	0	1664	0	1	20 A	Spare	12
13							1	20 A	Spare	14	
15	Mech Room Central 078 - ACCU-5	25 A	2		1664	0	1	20 A	Spare	16	
17	Mech Room Central 078 - GFS-1	30 A	1	1656	0		1	20 A	Spare	18	
19	Mech Room Central 078 - UH-001, UH-002	15 A	1		32	0		20 A	Spare	20	
21	Mech Room Central 078 - AHU-1 Lights/Rec	20 A	1			400	0	1	20 A	Spare	22
23	Mech Room Central 078 - AHU-1 Lights/Rec	20 A	1	400	0		1	20 A	Spare	24	
25	Mech Room Central 078 - Elec. Train Primer	20 A	1		100	0		20 A	Spare	26	
27	Mech Room Central 078 - Elec. Train Primer	20 A	1			0	0	1	20 A	Spare	28
29	Spare	--	--	0	0		--	--	Spare	30	32
31	Space	--	--	0	0	0	--	--	Space	34	36
33	Space	--	--		0	0	--	--	Space	38	40
35	Space	--	--			0	0	--	Space	42	44
37	Space	--	--	0	0		--	--	Space	46	48
39	Space	--	--		0	0	--	--	Space	50	52
41	Space	--	--			0	0	--	Space	54	56
Total Load:				5924 VA	4000 VA	4086 VA					

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Panel: 1NL2

Location: MAIN ELECTRICAL 192
Supply From: SB-1
Mounting: S
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10,000
Main Type: MLO
Mains Rating: 225 A
MCB Rating:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT
1	Main Electrical 192 - Receptacles	20 A	1	720	180			1	20 A Teaching Kitchen 174 - Counter	2
3	Corridor C180 - Receptacles	20 A	1			540	4118		20 A Teaching Kitchen 174 - Dish Washing	4
5	Bldg. Stor. 184, Cust. Stor. 186 - Receptacles	20 A	1						20 A Spare	6
7	Toilet 180, 182 - Receptacles	20 A	1	360	0			1	20 A Teaching Kitchen 174 - Ice Machine	8
9	Mechanical Room 178 - Receptacles	20 A	1			720	1800		20 A Teaching Kitchen 174 - Counter	10
11	Mechanical Room 178 - HHW-1	20 A	1					720	180	12
13	Mechanical Room 178 - HHW-2	20 A	1	720	1500				20 A Teaching Kitchen 174 - Microwave	14
15	Mechanical Room 178 - HHW-3	20 A	1			720	180		1	16
17	Stair 2-1 - CUH-102	15 A	1					40	1000	18
19	Dock 172 - UH-101, Mech Rm 178 UH-102	15 A	1	48	2700					20
21	Loading Dock 172 - Recycling 172A - ...	20 A	1			720	2700			22
23	Elevator Control Room - Receptacle	20 A	1					180	180	24
25	Elevator Control Room - VF-2	15 A	1	350	180					26
27	MDF Room - Receptacles	20 A	1			360	180			28
29	MDF Room - Receptacles	20 A	1					360	180	30
31	MDF Room - Receptacles	20 A	1	360	180					32
33	MDF Room - Receptacles	20 A	1			360	180			34
35	BLUE LIGHT EMERGENCY STATION	20 A	1					180	600	36
37	Shunt Trip	20 A	1	360	0					38
39	Toilet 182 - Electric Hand Dryer	20 A	1			1490	1800			40
41	Toilet 180 - Electric Hand Dryer	20 A	1					1490	0	42
43	Spare	20 A	1	0	360					44
45	Spare	20 A	1			0	360			46
47	Spare	20 A	1					0	540	48
49	Spare	20 A	1	0	0					50
51	Spare	20 A	1			0	0			52
53	Spare	20 A	1					0	0	54
Total Load:				8018 VA	16228 VA	10128 VA				
Total Amps:				67 A	138 A	87 A				

Notes:

Panel: 1NL1

Location: ELEC 110B
Supply From: SB-1
Mounting: S
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10,000
Main Type: MCB/SFL
Mains Rating: 225 A
MCB Rating:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT
1	Power Elec 11.08.1	20 A	1	900 VA 360 VA				1	20 A Office NUNNA ADJ 144 - Receptacles	2
3	Power Mock Beds Stor. 7.10	20 A	1		540 VA 360 VA			1	20 A Office NUNNA ADJ 144 - Receptacles	4
5	Power Nursing 7.03.3	20 A	1			540 VA 360 VA		1	20 A Office NUNNA ADJ 144 - Receptacles	6
7	Power Anesthesia 6.08.3	20 A	1	540 VA 180 VA				1	20 A Work/Copy 100A - Counter	8
9	Power Corridor 102 USB	20 A	1		180 VA 180 VA			2	30 A Work/Copy 100A - Printer	10
11	Power Staff (2) 9.06.1	20 A	1			720 VA 180 VA		1	20 A K'tette 100C - Counter	12
13	Power Anesthesia 6.08.2	20 A	1	720 VA 360 VA				1	20 A K'tette 100C - GD-1	14
15	Power Nursing 7.03.2	20 A	1		720 VA 1656...			1	20 A K'tette 100C - Refrigerator	16
17	Power Nursing 7.03.4	20 A	1			720 VA 1000...		1	20 A K'tette 100C - Desk	18
19	Power Nursing 7.03.6	20 A	1	180 VA 360 VA				1	20 A K'tette 100C - Desk	20
21	Power Mock Beds 7.10	20 A	1		720 VA 360 VA			1	20 A Elev 1 - ESP-1	22
23	Power Conf Rm 24 Seats 10.06 Monitor	20 A	1			360 VA 540 VA		1	20 A Elev 1 Pit, JC 175, Corridor C180	24
25	Power Conference Room 24 Seats 10.06	20 A	1	360 VA 370 VA				1	20 A Power Rm 154	26
27	Power Conference Room 24 Seats 10.06	20 A	1		540 VA 360 VA			1	20 A Women 177 - Men 179	28
29	Power Conference Room 24 Seats 10.06	20 A	1		540 VA 180 VA			1	20 A Data - 100B	30
31	Power Conference Room 24 Seats 10.06	20 A	1	360 VA 180 VA				1	20 A Corridor C140 - Digital Signage	32
33	Power Commons-2 10.04-2	20 A	1		540 VA 180 VA			1	20 A Elev 1 - ESP-1	34
35	Power Vending 11.28	20 A	1			180 VA 720 VA		1	20 A Power Rm 114.116	36
37	Power Vending 11.28	20 A	1		180 VA 180 VA			1	20 A Power Rm 154	38
39	Power Vending 11.28	20 A	1			180 VA 720 VA		1	20 A Power Conference Room 24 Seats - Shades	40
41	Power Vending 11.28	20 A	1			180 VA 1490...		1	20 A Men 179 - Electric Hand Dryer	42
43	Power Conf Rm 154	20 A	1	1260... 1490...				1	20 A Women 177 - Electric Hand Dryer	44
45	Power Conf Rm 154 Monitor	20 A	1		180 VA 0 VA			1	20 A Spare	46
47	Power Sin Mfg Green Rm 156 Monitor	20 A	1			180 VA 0 VA		1	20 A Spare	48
49	Vest C153 - Elev Door Opener	20 A	1	360 VA 0 VA				1	20 A Spare	50
51	Vest C153 - CUH-101	15 A	1		40 VA 0 VA			1	20 A Spare	52
53	Fire Protection Rm 157A - ...	15 A	1		225 VA 360 VA			1	20 A External Receptacle	54
55	Spare	20 A	1	0 VA 0 VA				1	20 A Spare	56
57	Spare	20 A	1		0 VA 0 VA			1	20 A Spare	58
59	Spare	20 A	1		0 VA 0 VA			1	20 A Spare	60
Total Load:				8340 VA	7456 VA	8778 VA				
Total Amps:				71 A	62 A	74 A				

Notes:

Panel: 1LL1

Location: MAIN ELECTRICAL 192
Supply From: SB-2
Mounting: S
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10,000
Main Type: MLO
Mains Rating: 225 A
MCB Rating:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT
1	Cadaver Lab 191 - Projector / Motorized Screen	20 A	1	720	0			1	20 A Spare	2
3	Cadaver Lab 191 - Monitors	20 A	1		720	0		1	20 A Spare	4
5	Cadaver Lab 191 - Tables	20 A	1			720	0	1	20 A Spare	6
7	Cadaver Lab 191 - Tables	20 A	1	720	0			1	20 A Spare	8
9	Cadaver Lab 191 - Tables	20 A	1		720	0		1	20 A Spare	10
11	Cadaver Lab 191 - Teacher	20 A	1			540	0	1	20 A Spare	12
13	Cadaver Lab 191 - Counter	20 A	1	360	0			1	20 A Spare	14
15	Power CADAVIER LAB 191	20 A	1		360	0		1	20 A Spare	16
17	185, 187, 193C - Receptacles	20 A	1			720	0	1	20 A Spare	18
19	Cadaver Lab Workroom 183B - Surface...	20 A	1	360	0			1	20 A Spare	20
21	Cadaver Lab Workroom 183B - Surface...	20 A	1		360	0		1	20 A Spare	22
23	Cadaver Lab Workroom 183B - A/V Cabinet	20 A	1			180	0	1	20 A Spare	24
25	Cadaver Lab Workroom 183B - Surface...	20 A	1	360	0			1	20 A Spare	26
27	Cadaver Lab Workroom 183B - Surface...	20 A	1		360	0		1	20 A Spare	28
29	Cadaver Lab Workroom 183B - UC Refrigerator	20 A	1			500	0	1	20 A Spare	30
31		20 A	1		0			1	20 A Spare	32
33		20 A	1		0			1	20 A Spare	34
35	Spare	20 A	1			0	0	1	20 A Spare	36
37	Spare	20 A	1	0	0			1	20 A Spare	38
39	Spare	20 A	1		0	0		1	20 A Spare	40
41	Spare	20 A	1			0	0	1	20 A Spare	42
Total Load:				2520 VA	2520 VA	2660 VA				
Total Amps:				21 A	21 A	22 A				

Notes:

Panel: 1NH2

Location: MAIN ELECTRICAL 192
Supply From: US-1
Mounting: S
Enclosure: Type 1

Volts: 480/277 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 22,000
Main Type: MLO
Mains Rating: 225 A
MCB Rating:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT
1	Main Electrical 192 - AHU-5	15 A	3	2900	9141					2
3					2900	9141				4
5				2105	4210			2900	9141	6
7						2105	4210			8
9	Loading Dock 172 - Dock Leveler	15 A	3							10
11						2105	4210			12
13	Space	--	--	0	942					14
15	Space	--	--		0	942				16
17	Space	--	--			0	942			18
19	Space	--	--	0	831					20
21	Space	--	--		0	831				22
23	Space	--	--				0	831		24
25	Space	--	--	0	0					26
27	Space	--	--		0	0				28
29	Space	--	--			0	0			30
Total Load:				20129 VA	20129 VA	20129 VA				
Total Amps:				73 A	73 A	73 A				

Notes:

Panel: 1NL3

Location: CONTROL 160B
Supply From: SB-1
Mounting: S
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10,000
Main Type: MCB
Mains Rating: 225 A
MCB Rating:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT	
1	Power Lecture Hall 10.09 - Shades	20 A	1	1080	360			1	Control 160B - A/V Cabinet	2	
3	Spare	20 A	1		0	360		1	Control 160B - A/V Cabinet	4	
5	Spare	20 A	1			0	360	1	Control 160B - A/V Cabinet	6	
7	Spare	20 A	1	0	360			1	Control 160B - A/V Cabinet	8	
9	Spare	20 A	1		0	360		1	Control 160B - A/V Cabinet	10	
11	Spare	20 A	1			0	360	1	Control 160B - A/V Cabinet	12	
13	Spare	20 A	1	0	180			1	Control 160B - Receptacle	14	
15	Spare	20 A	1		0	180		1	Control 160B - Receptacle	16	
17	Spare	20 A	1			0	180	1	Control 160B - Receptacle	18	
19	Spare	20 A	1	0	180			1	Lecture Hall 160 - Receptacle	20	
21	Spare	20 A	1		0	540		1	Lecture Hall 160 - Receptacle	22	
23	Spare	20 A	1			0	180	1	Lecture Hall 160 - Stage Floor Box	24	
25	Spare	20 A	1	0	180			1	Lecture Hall 160 - Stage Floor Box	26	
27	Spare	20 A	1		0	180		1	Lecture Hall Storage - Receptacle	28	
29	Spare	20 A	1			0	0	1	Spare	30	
31	Spare	20 A	1	0	0			1	Spare	32	
33	Spare	20 A	1		0	0		1	Spare	34	
35	Spare	20 A	1			0	0	1	Spare	36	
37	Spare	20 A	1	0	180			1	Lecture Hall 160 - Subwoofer	38	
39	Spare	20 A	1		0	350		1	Lecture Hall 160 - VF-3	40	
41	Spare	20 A	1				0	0	1	Spare	42
Total Load:		22 A		2520 VA	1970 VA	9 A					
Total Amps:				22 A	18 A	9 A					

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CONFORMED SET

01 JUL 2016

2 ADDENDUM 2-2 19 APRIL 2016
1 ADDENDUM 2-1 17 MAR 2016
- ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016

No.	Description	Date
-----	-------------	------

Drawing Title:

PANEL SCHEDULES

Project No.: 04561.01

Checked by:

E0505

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Panel: 2LL4

Location: CORR-1 C280-1
Supply From: SB-2
Mounting: S
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10,000
Main Type: MCB
Mains Rating: 225 A
MCB Rating:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT
1	Science Classroom 276 - Surface Raceway	20 A	1	360	360			1	20 A Microscopy Room 274 - Surface Raceway	2
3	Science Classroom 276 - Surface Raceway	20 A	1		360	360		1	20 A Microscopy Room 274 - Surface Raceway	4
5	Science Classroom 276 - Fume Hood	20 A	1			180	360	1	20 A Microscopy Room 274 - Surface Raceway	6
7	Science Classroom 276 - Surface Raceway	20 A	1	360	360			1	20 A Microscopy Room 274 - Surface Raceway	8
9	Science Classroom 276 - Surface Raceway	20 A	1		360	180		1	20 A Microscopy Room 274 - Surface Raceway	10
11	Science Classroom 276 - Surface Raceway	20 A	1			180	540	1	20 A Lab Storage 272B - Surface Raceway	12
13	Science Classroom 276 - Teacher	20 A	1	720	360			1	20 A Lab Storage 272B - Surface Raceway	14
15	Science Classroom 276 - Projector	20 A	1		500	540		1	20 A Lab Stor 272B / Chem Stock Rm 272A - ...	16
17	Science Classroom 276 - A/V Cabinet	20 A	1			360	0	1	20 A Spare	18
19	Science Classroom 276 - Desk	20 A	1	360	0			1	20 A Spare	20
21	Science Classroom 276 - Desk	20 A	1		360	0		1	20 A Spare	22
23	Science Classroom 276 - Desk	20 A	1			360	0	1	20 A Spare	24
25	Science Classroom 276 - Desk	20 A	1	360	0			1	20 A Spare	26
27	Science Classroom 276 - Desk	20 A	1		360	0		1	20 A Spare	28
29	Science Classroom 276 - Desk	20 A	1			360	0	1	20 A Spare	30
31	Science Classroom 276 - Shades	20 A	1	540	0			1	20 A Spare	32
33	Science Classroom 276 - Plant Growth lamp	20 A	1		180	0		1	20 A Spare	34
35	Spare	20 A	1			0	0	1	20 A Spare	36
37	Spare	20 A	1	0	0			1	20 A Spare	38
39	Spare	20 A	1		0	0		1	20 A Spare	40
41	Spare	20 A	1			0	0	1	20 A Spare	42
Total Load:				3780 VA	3200 VA	2340 VA				
Total Amps:				33 A	28 A	20 A				

Notes:

Panel: 2LL3

Location: CORR-2 C280-2
Supply From: SB-2
Mounting: S
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10,000
Main Type: MCB/SFL
Mains Rating: 225 A
MCB Rating:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT
1	Physics Lab 284 - Surface Raceway	20 A	1	540	360			1	20 A Phys Research Lab 282 - Surface Raceway	2
3	Physics Lab 284 - Surface Raceway	20 A	1		540	360		1	20 A Phys Research Lab 282 - Surface Raceway	4
5	Physics Lab 284 - Surface Raceway	20 A	1			540	360	1	20 A Phys Research Lab 282 - Surface Raceway	6
7	Physics Lab 284 - Surface Raceway	20 A	1	540	360			1	20 A Phys Research Lab 282 - Surface Raceway	8
9	Physics Lab 284 - Surface Raceway	20 A	1		540	180		1	20 A Phys Research Lab 282 - Surface Raceway	10
11	Physics Lab 284 - Surface Raceway	20 A	1			360	360	1	20 A Phys Lab Prep 282 - Surface Raceway	12
13	Physics Lab 284 - Teacher	20 A	1	720	360			1	20 A Phys Lab Prep 282 - Surface Raceway	14
15	Physics Lab 284 - Projector	20 A	1		500	360		1	20 A Phys Lab Prep 282 - Surface Raceway	16
17	Physics Lab 284 - A/V Cabinet	20 A	1			360	180	1	20 A Phys Lab Prep 282 - Surface Raceway	18
19	Physics Lab 284 - Desk	20 A	1	360	540			1	20 A Physics Lab 284 - Shades	20
21	Physics Lab 284 - Desk	20 A	1		360	0		1	20 A Spare	22
23	Physics Lab 284 - Desk	20 A	1			360	0	1	20 A Spare	24
25	Physics Lab 284 - Desk	20 A	1	360	0			1	20 A Spare	26
27	Physics Lab 284 - Desk	20 A	1		360	0		1	20 A Spare	28
29	Physics Lab 284 - Desk	20 A	1			360	0	1	20 A Spare	30
31	Physics Lab 284 - Desk	20 A	1	360	0			1	20 A Spare	32
33	Physics Lab 284 - Desk	20 A	1		360	0		1	20 A Spare	34
35	Physics Lab 284 - Desk	20 A	1			360	0	1	20 A Spare	36
37	Physics Lab 284 - Desk	20 A	1	360	0			1	20 A Spare	38
39	Physics Lab 284 - Desk	20 A	1		360	0		1	20 A Spare	40
41	Physics Lab 284 - Desk	20 A	1			360	0	1	20 A Spare	42
Total Load:				4860 VA	3920 VA	3600 VA				
Total Amps:				41 A	33 A	30 A				

Notes:

Panel: 2LL2

Location: CORR-2 C280-2
Supply From: SB-2
Mounting: S
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10,000
Main Type: MCB
Mains Rating: 225 A
MCB Rating:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT
1	Microbio/Plant Research Lab 283 - Surface...	20 A	1	360	180			1	20 A Microbio/Plant Research Lab 283 - Desk	2
3	Microbio/Plant Research Lab 283 - Surface...	20 A	1		180	180		1	20 A Microbio/Plant Research Lab 283 - Desk	4
5	Microbio/Plant Research Lab 283 - UC Glass...	20 A	1			180	180	1	20 A Microbio/Plant Research Lab 283 - Desk	6
7	Microbio/Plant Research Lab 283 - Fume Hood	20 A	1	500	180			1	20 A Microbio/Plant Research Lab 283 - Desk	8
9	Microbio/Plant Research Lab 283 - Surface...	20 A	1		360	144		1	20 A Microbio/Plant Research Lab 283 - ...	10
11	Microbio/Plant Research Lab 283 - Surface...	20 A	1			360	360	1	20 A Microbio Prep 289A - Surface Raceway	12
13	Microbio/Plant Research Lab 283 - Surface...	20 A	1	360	180			1	20 A Microbio Prep 289A - Surface Raceway	14
15	Microbio/Plant Research Lab 283 - Surface...	20 A	1		360	180		1	20 A Microbio Prep 289A - Receptacle	16
17	Microbio/Plant Research Lab 283 - Surface...	20 A	1			360	1000	1	20 A Microbio Prep 289A - Refrigerator	18
19	Microbio/Plant Research Lab 283 - Surface...	20 A	1	540	0			1	20 A Spare	20
21	Microbio/Plant Research Lab 283 - Microwave	20 A	1		1500	0		1	20 A Spare	22
23	Microbio/Plant Research Lab 283 - Teacher	20 A	1			720	0	1	20 A Spare	24
25	Microbio/Plant Research Lab 283 - Projector	20 A	1	500	0			1	20 A Spare	26
27	Microbio/Plant Research Lab 283 - A/V Cabinet	20 A	1		360	0		1	20 A Spare	28
29	Spare	20 A	1			0	0	1	20 A Spare	30
31	Microbio/Plant Research Lab 283 - Shades	20 A	1	540	0			1	20 A Spare	32
33	Microbio/Plant Research Lab 283 - Desk	20 A	1		180	0		1	20 A Spare	34
35	Microbio/Plant Research Lab 283 - Desk	20 A	1			180	0	1	20 A Spare	36
37	Spare	20 A	1	0	0			1	20 A Spare	38
39	Spare	20 A	1		0	0		1	20 A Spare	40
41	Spare	20 A	1			0	0	1	20 A Spare	42
Total Load:				3340 VA	3444 VA	3340 VA				
Total Amps:				28 A	29 A	28 A				

Notes:

Panel: 3LL1

Location: CORRIDOR-1 C380-1
Supply From: SB-2
Mounting: S
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10,000
Main Type: MCB/SFL
Mains Rating: 225 A
MCB Rating:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT
1	Anatomy/Physio Lab 391 - Surface Raceway	20 A	1	540	180			1	20 A Bio Lab Prep Room A 389 - Receptacle	2
3	Anatomy/Physio Lab 391 - Surface Raceway	20 A	1		360	180		1	20 A Bio Lab Prep Room A 389 - Receptacle	4
5	Anatomy/Physio Lab 391 - Surface Raceway	20 A	1			360	180	1	20 A Bio Lab Prep Room A 389 - Fume Hood	6
7	Anatomy/Physio Lab 391 - Surface Raceway	20 A	1	180	180			1	20 A Bio Lab Prep Room A 389 - Receptacle	8
9	Anatomy/Physio Lab 391 - Fume Hood	20 A	1		500	360		1	20 A Bio Lab Prep Room A 389 - Surface Raceway	10
11	Anatomy/Physio Lab 391 - Receptacle	20 A	1			180	180	1	20 A Bio Lab Prep Room A 389 - Surface Raceway	12
13	Anatomy/Physio Lab 391 - Teacher	20 A	1	720	180			1	20 A Bio Lab Prep Room A 389 - UC Glass Washer	14
15	Anatomy/Physio Lab 391 - Projector	20 A	1		500	360		1	20 A Bio Lab Prep Room A 389 - Surface Raceway	16
17	Anatomy/Physio Lab 391 - A/V Rack	20 A	1			360	180	1	20 A Bio Lab Prep Room A 389 - Surface Raceway	18
19	Anatomy/Physio Lab 391/389 - Shades	20 A	1	540	1080			1	20 A Bio Lab Prep Room A 389 - Dell Cabinet	20
21	Anatomy/Physio Lab 391 - Desk	20 A	1		360	0		1	20 A Spare	22
23	Anatomy/Physio Lab 391 - Desk	20 A	1			360	0	1	20 A Spare	24
25	Anatomy/Physio Lab 391 - Desk	20 A	1	360	0			1	20 A Spare	26
27	Anatomy/Physio Lab 391 - Desk	20 A	1		360	1700		2	30 A Bio Lab Prep Room A 389 - Sorvall Centrifuge	28
29	Anatomy/Physio Lab 391 - Desk	20 A	1			360	1700	2	30 A Bio Lab Prep Room A 389 - Sorvall Centrifuge	30
31	Anatomy/Physio Lab 391 - Desk	20 A	1	360	1700			2	30 A Bio Lab Prep Room A 389 - Ultra Centrifuge	32
33	Anatomy/Physio Lab 391 - Desk	20 A	1		360	1700		2	30 A Bio Lab Prep Room A 389 - Ultra Centrifuge	34
35	Anatomy/Physio Lab 391 - Desk	20 A	1			360	1700	2	30 A Anatomy/Physio Lab 391 - Sorvall Centrifuge	36
37	Anatomy/Physio Lab 391 - Display Case	20 A	1	180	1700			2	30 A Anatomy/Physio Lab 391 - Sorvall Centrifuge	38
39	Spare	20 A	1		0	1700		2	30 A Anatomy/Physio Lab 391 - Ultra Centrifuge	40
41	Spare	20 A	1			0	1700	2	30 A Anatomy/Physio Lab 391 - Ultra Centrifuge	42
Total Load:				7900 VA	8440 VA	7620 VA				
Total Amps:				66 A	71 A	64 A				

Notes:

Panel: 3NL1

Location: ELEC 310A
Supply From: SB-1
Mounting: S
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10,000
Main Type: MCB/SFL
Mains Rating: 225 A
MCB Rating:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT
1	Power Rm. C310, 310A, 312	20 A	1	720 VA/720 VA			1	20 A	Power Rm. 342,344	2
3	Power Rm. 304, 306	20 A	1		720 VA/720 VA		1	20 A	Power Rm. 344, 346, 348	4
5	Power Rm. 302, C350A, 303	20 A	1			720 VA/720 VA	1	20 A	Power Rm. 346, 352,354	6
7	Power Rm. C310, 339	20 A	1	540 VA/360 VA			1	20 A	Power Rm. 352	8
9	Power Rm. 305	20 A	1		180 VA/360 VA		1	20 A	Power Rm. 352	10
11	Power Rm. 305, 311	20 A	1			540 VA/720 VA	1	20 A	Power Rm. 356, 360, 362	12
13	Power Rm. 311, 313, 315	20 A	1	720 VA/360 VA			1	20 A	Power Rm. 362, 364	14
15	Power Rm. 315, 317, 319	20 A	1		720 VA/180 VA		1	20 A	Work/Copy 300A - Counter	16
17	Power Rm. 319, 321, 323	20 A	1			720 VA/360 VA	1	20 A	Kettle 300C - Desk	18
19	Power Rm. 323, 325, 327	20 A	1	720 VA/360 VA			1	20 A	Kettle 300C - Desk	20
21	Power Rm. 325	20 A	1		180 VA/1000...		1	20 A	Kettle 300C - Refrigerator	22
23	Power Rm. 325	20 A	1			360 VA/1656...	1	20 A	Kettle 300C - SD-3	24
25	Power Rm. 327, 329, 331	20 A	1	720 VA/180 VA			1	20 A	Kettle 300C - Counter	26
27	Power Rm. 331, 333, 335	20 A	1		720 VA/180 VA		1	20 A	Kettle 300C - Counter	28
29	Power Rm. 335, 337, 339	20 A	1			720 VA/180 VA	2	20 A	Work/ Copy 300A - Printer	30
31	Power Rm. 320, 322	20 A	1	540 VA/180 VA			1	20 A	Jan Closet 375, Corridor C380	32
33	Power Rm. 316, 318, 320	20 A	1		720 VA/900 VA		1	20 A	EWG -	34
35	Power Rm. 312, 314	20 A	1			540 VA/370 VA	1	20 A	Women 377, Men 379	36
37	Power Rm. 332	20 A	1	540 VA/360 VA			1	20 A	Corridor C370 - Digital Signage	40
39	Power Rm. 332	20 A	1		720 VA/180 VA		1	20 A	Office Lab Mgr 372D - Receptacles	42
41	Power Rm. 332	20 A	1	180 VA/180 VA		540 VA/360 VA	1	20 A	Lab Storage 372C - Autoclave Controls	44
43	Data 300B - Wall	20 A	1	180 VA/180 VA			1	20 A	Lab Storage 372C - Counter	46
45	Power Rm. 364	20 A	1		180 VA/180 VA	540 VA/540 VA	1	20 A	Commons C370B, Lab Waste 372B, Lab...	48
47	Power Rm. 302, 303	20 A	1				1	20 A	Rm. 382 - Shades	50
49	Power COMMONS 302	20 A	1	180 VA/720 VA			1	20 A	Power Commons 370B USB Receptacle	52
51	Spare	20 A	1		0 VA/360 VA		1	20 A	Power Commons 370B USB Receptacle	54
53	Spare	20 A	1		0 VA/1490...	0 VA/330 VA	1	20 A	Men 379 - Electric Hand Dryer	56
55	Spare	20 A	1			0 VA/1490...	1	20 A	Women 377 - Electric Hand Dryer	58
57	Spare	20 A	1			0 VA/0 VA	1	20 A	Spare	60
59	Spare			Total Load:	9770 VA	9690 VA				

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CONFORMED SET 01 JUL 2016

2 ADDENDUM 2-2 19 APRIL 2016
1 ADDENDUM 2-1 17 MAR 2016
- ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016

No.	Description	Date
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Drawing Title:

PANEL SCHEDULES

Project No.: 04561.01 Checked by:

E0506

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Panel: 4NH1

Location: ELEC 410
Supply From: US-1
Mounting: S
Enclosure: Type 1

Volts: 480/277 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 22,000
Main Type: MCB
Mains Rating: 225 A
MCB Rating:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT
1	Lighting Circulation-2 10.43-2	20 A	1	1130	3047					2
3	Lighting Physical Chemistry Lab 8.17	20 A	1		1476	3047			EF-2	4
5	Lighting Analytical/Inorganic Chemistry Lab...	20 A	1			2406	3047			6
7	Lighting Circulation 10.36	20 A	1	475	443					8
9	Lighting Work Study Student 3.06	20 A	1		855	443			KEF-1	10
11	Lighting Commons-9 10.04-9	20 A	1			953	443			12
13	Lighting Circulation 10.36	20 A	1	1872	1329				EF-3	14
15	Spare	20 A	1							16
17	Lighting 4th Floor Perimeter Cove	20 A	1			1360	1329			18
19	Spare	20 A	1	0	0				Space	20
21	Spare	20 A	1		0				Space	22
23	Spare	20 A	1			0	0		Space	24
25	Spare	20 A	1	0	0				Space	26
27	Spare	20 A	1		0	0			Space	28
29	Spare	20 A	1			0	0		Space	30
31	Spare	20 A	1	0	0				Space	32
33	Spare	20 A	1		0	0			Space	34
35	Spare	20 A	1			0	0		Space	36
37	Spare	20 A	1	0	0				Space	38
39	Spare	20 A	1		0	0			Space	40
41	Spare	20 A	1			0	0		Space	42
Total Load:				8296 VA	7150 VA	9539 VA				
Total Amps:				31 A	26 A	35 A				

Notes:

Panel: 4LL2

Location: CORR, C480-1
Supply From: SB-2
Mounting: S
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10,000
Main Type: MCB
Mains Rating: 225 A
MCB Rating:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT
1	Chem Lab Research 483 - Surface Raceway	20 A	1	360	360			1	20 A Chem Instr Lab 489 - Surface Raceway	2
3	Chem Lab Research 483 - Surface Raceway	20 A	1		360	360		1	20 A Chem Instr Lab 489 - Surface Raceway	4
5	Chem Lab Research 483 - Surface Raceway	20 A	1			360	360	1	20 A Chem Instr Lab 489 - Surface Raceway	6
7	Chem Lab Research 483 - Fume Hood	20 A	1	500	360			1	20 A Chem Instr Lab 489 - Surface Raceway	8
9	Chem Lab Research 483 - Surface Raceway	20 A	1		540	180		1	20 A Chem Instr Lab 489 - Surface Raceway	10
11	Chem Lab Research 483 - Surface Raceway	20 A	1			540	540	1	20 A Chem Instr Lab 489 - Surface Raceway	12
13	Chem Lab Research 483 - Surface Raceway	20 A	1	360	540			1	20 A Chem Instr Lab 489 - Surface Raceway	14
15	Chem Lab Research 483 - Fume Hood	20 A	1		500	540		1	20 A Chem Instr Lab 489 - Surface Raceway	16
17	Chem Lab Research 483 - Surface Raceway	20 A	1			360	1296	1	20 A Chem Instr Lab 489 - PCP-1A & PCP-1B	18
19	Chem Lab Research 483 - Surface Raceway	20 A	1	360	1056			1	20 A Chem Instr Lab 489 - CP-4A & CP-4B	20
21	Chem Lab Research 483 - Surface Raceway	20 A	1		180	0		1	20 A Spare	22
23	Chem Lab Research 483 - Teacher	20 A	1			720	0	1	20 A Spare	24
25	Chem Lab Research 483 - Projector	20 A	1	500	0			1	20 A Spare	26
27	Chem Lab Research 483 - A/V Cabinet	20 A	1		360	0		1	20 A Spare	28
29	Chem Lab Research 483 - Overhead Carrier	20 A	1			180	0	1	20 A Spare	30
31	Chem Lab Research 483 - Overhead Carrier	20 A	1	180	0			1	20 A Spare	32
33	Chem Lab Research 483 - Overhead Carrier	20 A	1		180	0		1	20 A Spare	34
35	Chem Lab Research 483 - Overhead Carrier	20 A	1			180	0	1	20 A Spare	36
37	Chem Lab Research 483 - Undercounter Ltg	20 A	1	144	0			1	20 A Spare	38
39	Chem Lab Research 483 - Shades	20 A	1		360	0		1	20 A Spare	40
41	Chem Lab Research 483 - Overhead Carrier	20 A	1			180	180	1	20 A Chem Lab Research 483 - Overhead Carrier	42
Total Load:				4720 VA	3560 VA	4896 VA				
Total Amps:				41 A	30 A	42 A				

Notes:

Panel: 4LL5

Location: CORR, C480-1
Supply From: SB-2
Mounting: S
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10,000
Main Type: MCB
Mains Rating: 225 A
MCB Rating:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT
1	Chem Lab General 472 - Fume Hood	20 A	1	500	360			1	20 A Chem Lab General 472 - Desk	2
3	Chem Lab General 472 - Counter	20 A	1		360	360		1	20 A Chem Lab General 472 - Desk	4
5	Chem Lab General 472 - Fume Hood	20 A	1			500	360	1	20 A Chem Lab General 472 - Desk	6
7	Chem Lab General 472 - Fume Hood	20 A	1	500	360			1	20 A Chem Lab General 472 - Desk	8
9	Chem Lab General 472 - Surface Raceway	20 A	1		540	360		1	20 A Chem Lab General 472 - Desk	10
11	Chem Lab General 472 - Surface Raceway	20 A	1			360	360	1	20 A Chem Lab General 472 - Desk	12
13	Chem Lab General 472 - Surface Raceway	20 A	1	360	0			1	20 A Spare	14
15	Chem Lab General 472 - Fume Hood	20 A	1		500	0		1	20 A Spare	16
17	Chem Lab General 472 - Counter	20 A	1			360	0	1	20 A Spare	18
19	Chem Lab General 472 - Fume Hood	20 A	1	500	0			1	20 A Spare	20
21	Chem Lab General 472 - Fume Hood	20 A	1		500	0		1	20 A Spare	22
23	Chem Lab General 472 - Projector	20 A	1			500	0	1	20 A Spare	24
25	Chem Lab General 472 - Teacher	20 A	1	720	0			1	20 A Spare	26
27	Chem Lab General 472 - A/V Cabinet	20 A	1		360	0		1	20 A Spare	28
29	Chem Lab General 472 - Shades	20 A	1			360	0	1	20 A Spare	30
31	Spare	20 A	1	0	0			1	20 A Spare	32
33	Spare	20 A	1		0	0		1	20 A Spare	34
35	Spare	20 A	1			0	0	1	20 A Spare	36
37	Spare	20 A	1	0	0			1	20 A Spare	38
39	Spare	20 A	1		0	0		1	20 A Spare	40
41	Spare	20 A	1			0	0	1	20 A Spare	42
Total Load:				3300 VA	2980 VA	2800 VA				
Total Amps:				28 A	25 A	23 A				

Notes:

Panel: 4SH1

Location: ELEC 410
Supply From: MCB
Mounting: Surface
Enclosure: Type 1

Volts: 480/277 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 22,000
Main Type: MCB
Mains Rating: 150 A
MCB Rating:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT
1		70 A	3	9418	1330			3	15 A EF-1	2
3	HEF-1A				9418	1330				4
5				9418	0			--	--	6
7					9418	0		--	--	8
9	HEF-1B					9418	0	--	--	10
11								--	--	12
13				9418	0			--	--	14
15	HEF-1C				9418	0		--	--	16
17						9418	0	--	--	18
19	Space	--	--	0	0			--	--	20
21	Space	--	--		0	0		--	--	22
23	Space	--	--			0	0	--	--	24
25	Space	--	--	0	0			--	--	26
27	Space	--	--		0	0		--	--	28
29	Space	--	--			0	0	--	--	30
Total Load:				29584 VA	29584 VA	29584 VA				
Total Amps:				107 A	107 A	107 A				

Notes:

Panel: 4LL1

Location: CORR, C480-2
Supply From: SB-2
Mounting: S
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10,000
Main Type: MCB/SFL
Mains Rating: 225 A
MCB Rating:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT
1	Chem Lab Physical 491 - Surface Raceway	20 A	1	360	360			1	20 A Chem Lab Physical 491 - Desk	2
3	Chem Lab Physical 491 - Surface Raceway	20 A	1		360	360		1	20 A Chem Lab Physical 491 - Desk	4
5	Chem Lab Physical 491 - Surface Raceway	20 A	1			360	360	1	20 A Chem Lab Physical 491 - Desk	6
7	Chem Lab Physical 491 - Fume Hood	20 A	1	500	360			1	20 A Chem Lab Physical 491 - Desk	8
9	Chem Lab Physical 491 - Surface Raceway	20 A	1		360	360		1	20 A Chem Lab Physical 491 - Desk	10
11	Chem Lab Physical 491 - Surface Raceway	20 A	1			360	360	1	20 A Chem Lab Physical 491 - Desk	12
13	Chem Lab Physical 491 - Surface Raceway	20 A	1	360	360			1	20 A Chem Lab Physical 491 - Desk	14
15	Chem Lab Physical 491 - Fume Hood	20 A	1		500	360		1	20 A Chem Lab Physical 491 - Desk	16
17	Chem Lab Physical 491 - Surface Raceway	20 A	1			360	0	1	20 A Spare	18
19	Chem Lab Physical 491 - Surface Raceway	20 A	1	360	0			1	20 A Spare	20
21	Chem Lab Physical 491 - Surface Raceway	20 A	1		180	0		1	20 A Spare	22
23	Chem Lab Physical 491 - Teacher	20 A	1			720	0	1	20 A Spare	24
25	Chem Lab Physical 491 - Projector	20 A	1	500	0			1	20 A Spare	26
27	Chem Lab Physical 491 - A/V Cabinet	20 A	1		360	0		1	20 A Spare	28
29	Chem Lab Physical 491 - Shades	20 A	1			540	0	1	20 A Spare	30
31	Spare	20 A	1	0	0			1	20 A Spare	32
33	Spare	20 A	1		0	0		1	20 A Spare	34
35	Spare	20 A	1			0	0	1	20 A Spare	36
37	Spare	20 A	1	0	0			1	20 A Spare	38
39	Spare	20 A	1		0	0		1	20 A Spare	40
41	Spare	20 A	1			0	0	1	20 A Spare	42
Total Load:				3160 VA	2840 VA	3060 VA				
Total Amps:				27 A	24 A	26 A				

Notes:

Panel: 4LL4

Location: CORR, C480-1
Supply From: SB-2
Mounting: S
Enclosure: Type 1

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LIGHTING FIXTURE SCHEDULE 1 OF 3											
TYPE (I)	GENERAL DESCRIPTION, ACCESSORIES, AND APPLICATION	LIGHT SOURCE DATA			DRIVER/BALLAST			FIXTURE VOLTAGE	INPUT POWER	MANUFACTURER AND CATALOG NUMBER SERIES (V)	NOTES (VI)
		TYPE (II)	QTY X WATTS/ LAMP	LAMP CODE /LED MODULE	LED DELIVERED LUMENS	LED L70 RATED LIFE	CONTROL TYPE (III)				
									0 W		
BA2	WALL MOUNTED, 4.75" WIDE X 5.5" DEEP X 2' LONG, 3000K LINEAR LED FIXTURE WITH DIRECT DISTRIBUTION, FLUSH OPAL LENS, AND REMOTE DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	1,000	50,000	0-10V DIM	10%	277	9 W	2,4,11
BA3-8	WALL MOUNTED, 4.75" WIDE X 5.5" DEEP X 3'-8" LONG, 3000K LINEAR LED FIXTURE WITH DIRECT DISTRIBUTION, FLUSH OPAL LENS, AND REMOTE DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	1,875	50,000	0-10V DIM	10%	277	16 W	2,4,11
BA13-6	WALL MOUNTED, 4.75" WIDE X 5.5" DEEP X 13'-6" LONG, 3000K LINEAR LED FIXTURE WITH DIRECT DISTRIBUTION, FLUSH OPAL LENS, AND REMOTE DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	6,750	50,000	0-10V DIM	10%	277	58 W	2,4,11
BA20	WALL MOUNTED, 4.75" WIDE X 5.5" DEEP X 20' LONG, 3000K LINEAR LED FIXTURE WITH DIRECT DISTRIBUTION, FLUSH OPAL LENS, AND REMOTE DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	10,000	50,000	0-10V DIM	10%	277	86 W	2,4,11
BB2	WALL MOUNTED, DECORATIVE LED SCONCE WITH ACRYLIC SHADES AND INTEGRAL 0-10V DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	1,200	50,000	0-10V DIM	10%	277	20 W	1
BC15	WALL MOUNTED, 4.75" WIDE X 5.5" DEEP X 15' LONG, 3000K LINEAR LED FIXTURE WITH INDIRECT/DIRECT DISTRIBUTION, FLUSH OPAL LENS, AND REMOTE DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	15,000	50,000	0-10V DIM	10%	277	133 W	2,4
CA	CEILING SURFACE MOUNTED, LOW PROFILE 1.5" WIDE X 3" TALL, 4" LONG LED LUMINAIRE WITH ACRYLIC LENS AND INTEGRAL 0-10V DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	1,600	50,000+	0-10V DIM	1%	277	18 W	1
CB	CEILING SURFACE MOUNTED, 4" LONG, VAPORTIGHT ENCLOSED AND VENTILATED, WET LOCATION RATED, 3,500K LED LUMINAIRE WITH INTEGRAL DRIVER.	LED	NA	FURNISHED WITH FIXTURE	4,728	60,000+	0-10V DIM	10%	277	61 W	
EA	1.5" DIAMETER, STAINLESS STEEL, 3,000K LED HANDRAIL WITH ASYMMETRIC DISTRIBUTION AND REMOTE CLASS II DIMMING DRIVER(S).	LED	NA	FURNISHED WITH FIXTURE	205 LM/FT	50,000	0-10V DIM	10%	277	78 W	1,8,12, 16
EB	EPOXY POTTED, IP67, 3,000K LED TAPE LIGHT, MOUNTED WITHIN ALUMINUM CHANNEL, WITH 60 DEGREE OPTICS, 45 DEGREE MOUNTING CLIPS, AND REMOTE CLASS II DIMMING DRIVERS.	LED	NA	FURNISHED WITH FIXTURE	360 LM/FT	50,000	0-10V DIM	10%	277	200 W	4,7,12
EC	POWER PIPE MOUNTED, IP66, 3,000K LED SPOTLIGHT, WITH 0-10V DIM DISTRIBUTION, SOFT FOCUS LENS, HONEYCOMB Baffle, FLUSH CAP, AND PIPE MOUNTED DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	1,300	50,000	0-10V DIM	10%	277	18 W	1,10
ED	EPOXY POTTED, IP67, 3,000K LED TAPE LIGHT, MOUNTED WITHIN ALUMINUM CHANNEL, WITH 90 DEGREE OPTICS, 45 DEGREE MOUNTING CLIPS, AND REMOTE CLASS II DIMMING DRIVERS.	LED	NA	FURNISHED WITH FIXTURE	142 LM/FT	50,000	0-10V DIM	10%	277	365 W	4,7,12
EE	INGROUND, 2' LONG, IP68, WALK OVER RATED, 3,000K LED UPLIGHT, WITH ALUMINUM OPTICAL CHAMBER, PVC BLOCKOUT HOUSING, DIRECT VIEW OPTICS, AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE		75,000	0-10V DIM	10%	277	10 W	1
EF36	36" TALL, 4" DIAMETER, 4,000K LED CAST ALUMINUM BOLLARD WITH TYPE III DISTRIBUTION, AND INTEGRAL DRIVER.	LED	NA	FURNISHED WITH FIXTURE	1,944	100,000+	0-10V DIM	10%	277	34 W	1,12
EF42	42" TALL, 4" DIAMETER, 4,000K LED CAST ALUMINUM BOLLARD WITH TYPE III DISTRIBUTION, AND INTEGRAL DRIVER.	LED	NA	FURNISHED WITH FIXTURE	1,944	100,000+	0-10V DIM	10%	277	34 W	1,12
EG3	CUSTOM ARM MOUNTED, DECORATIVE AREA LIGHTING, 3,500K LED LUMINAIRE WITH TYPE III OPTICS, AND INTEGRAL DIMMING DRIVER MOUNTED ON 12" TALL, 5" DIAMETER, ROUND STRAIGHT ALUMINUM POLE WITH CONCRETE BASE.	LED	NA	FURNISHED WITH FIXTURE	4,800	50,000	0-10V DIM	10%	277	66 W	1,12
EG5	CUSTOM ARM MOUNTED, DECORATIVE AREA LIGHTING, 3,500K LED LUMINAIRE WITH TYPE 5 OPTICS, AND INTEGRAL DIMMING DRIVER MOUNTED ON 12" TALL, 5" DIAMETER, ROUND STRAIGHT ALUMINUM POLE WITH CONCRETE BASE.	LED	NA	FURNISHED WITH FIXTURE	4,800	50,000	0-10V DIM	10%	277	66 W	1,12
FH	RECESSED, 9" WIDE X 5" HIGH, IP66, 3,000K LED STRIPLIGHT WITH INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	396	50,000	0-10V DIM	10%	277	11 W	1
EJ	15" TALL, 5" DIAMETER, 3,200K LED BOLLARD WITH 180 DEGREE DISTRIBUTION AND INTEGRAL DRIVER.	LED	NA	FURNISHED WITH FIXTURE	320	50,000	0-10V DIM	10%	277	11 W	1
EK	MULLION MOUNTED, 2.5" TALL, 3.5" WIDE, 4' LONG, 3000K LED SCONCE WITH INTEGRAL DRIVER, UL LISTED FOR WET LOCATIONS.	LED	NA	FURNISHED WITH FIXTURE	2,400	50,000	0-10V DIM	10%	277	20 W	2,9
PA4	AIRCRAFT CABLE SUSPENDED, 4" WIDE X 5.5" TALL X 4' LONG, 3,000K LED LINEAR PENDANT, WITH ASYMMETRIC 40% UP / 60% DOWN DISTRIBUTION AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	5,000	60,000+	0-10V DIM	10%	277	52 W	1,5
PA6	AIRCRAFT CABLE SUSPENDED, 4" WIDE X 5.5" TALL X 6' LONG, 3,000K LED LINEAR PENDANT, WITH ASYMMETRIC 40% UP / 60% DOWN DISTRIBUTION AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	7,500	60,000+	0-10V DIM	10%	277	78 W	1,5
PA8	AIRCRAFT CABLE SUSPENDED, 4" WIDE X 5.5" TALL X 8' LONG, 3,000K LED LINEAR PENDANT, WITH ASYMMETRIC 40% UP / 60% DOWN DISTRIBUTION AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	10,000	60,000+	0-10V DIM	10%	277	104 W	1,5
PA10	AIRCRAFT CABLE SUSPENDED, 4" WIDE X 5.5" TALL X 10' LONG, 3,000K LED LINEAR PENDANT, WITH ASYMMETRIC 40% UP / 60% DOWN DISTRIBUTION AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	12,500	60,000+	0-10V DIM	10%	277	130 W	1,5
PA12	AIRCRAFT CABLE SUSPENDED, 4" WIDE X 5.5" TALL X 12' LONG, 3,000K LED LINEAR PENDANT, WITH ASYMMETRIC 40% UP / 60% DOWN DISTRIBUTION AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	15,000	60,000+	0-10V DIM	10%	277	156 W	1,5
PB26-6	AIRCRAFT CABLE MOUNTED, 4" WIDE X 5" TALL X 26'-6" LONG, 3,000K LED DIRECT PENDANT, HIGH OUTPUT, FLUSH DIFFUSING LENS, AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	16,900	100,000+	0-10V DIM	1%	277	249 W	2,8
PC	CHAIN MOUNTED, 3,500K LED STRIPLIGHT, WITH DIFFUSING LENS AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	5,000	50,000	0-10V DIM	10%	277	38 W	
PD8	AIRCRAFT CABLE SUSPENDED, 4" WIDE X 5.5" TALL X 8' LONG, 3,000K LED LINEAR PENDANT, WITH ASYMMETRIC 60% UP / 40% DOWN DISTRIBUTION AND INTEGRAL DIMMING DRIVER, END MOUNTED ON ONE SIDE.	LED	NA	FURNISHED WITH FIXTURE	8,000	50,000	0-10V DIM	10%	277	71 W	1,8,11
RA2	RECESSED 4" WIDE X 5" DEEP X 2' LONG, 3,000K LED DIRECT LUMINAIRE, HIGH OUTPUT, GRID CEILING, FLUSH DIFFUSING LENS, AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	1,278	50,000+	0-10V DIM	10%	277	19 W	
RA3	RECESSED 4" WIDE X 5" DEEP X 3' LONG, 3,000K LED DIRECT LUMINAIRE, HIGH OUTPUT, GRID CEILING, FLUSH DIFFUSING LENS, AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	1,920	50,000+	0-10V DIM	10%	277	28 W	
RA4	RECESSED 4" WIDE X 5" DEEP X 4' LONG, 3,000K LED DIRECT LUMINAIRE, HIGH OUTPUT, GRID CEILING, FLUSH DIFFUSING LENS, AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	2,556	50,000+	0-10V DIM	10%	277	37 W	
RA6	RECESSED 4" WIDE X 5" DEEP X 6' LONG, 3,000K LED DIRECT LUMINAIRE, HIGH OUTPUT, GRID CEILING, FLUSH DIFFUSING LENS, AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	3,834	50,000+	0-10V DIM	10%	277	56 W	
RA6-8C	RECESSED 4" WIDE X 5" DEEP X 6'-8" LONG, 3,000K LED DIRECT LUMINAIRE, HIGH OUTPUT, GRID CEILING, FLUSH DIFFUSING LENS, AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	4,260	50,000+	0-10V DIM	10%	277	63 W	11,15
RA6C	RECESSED 4" WIDE X 5" DEEP X 6' LONG, 3,000K LED DIRECT LUMINAIRE, HIGH OUTPUT, GRID CEILING, FLUSH DIFFUSING LENS, AND INTEGRAL DIMMING DRIVER. REFER TO PLANS FOR CORNER CONFIGURATION.	LED	NA	FURNISHED WITH FIXTURE	3,834	50,000+	0-10V DIM	10%	277	56 W	11,15
RA7C	RECESSED 4" WIDE X 5" DEEP X 7' LONG, 3,000K LED DIRECT LUMINAIRE, HIGH OUTPUT, GRID CEILING, FLUSH DIFFUSING LENS, AND INTEGRAL DIMMING DRIVER. REFER TO PLANS FOR CORNER CONFIGURATION.	LED	NA	FURNISHED WITH FIXTURE	4,473	50,000+	0-10V DIM	10%	277	65 W	11,15
RA8	RECESSED 4" WIDE X 5" DEEP X 8' LONG, 3,000K LED DIRECT LUMINAIRE, HIGH OUTPUT, GRID CEILING, FLUSH DIFFUSING LENS, AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	5,112	50,000+	0-10V DIM	10%	277	74 W	

LIGHTING FIXTURE SCHEDULE 2 OF 3												
TYPE (I)	GENERAL DESCRIPTION, ACCESSORIES, AND APPLICATION	LIGHT SOURCE DATA				DRIVER/BALLAST		FIXTURE VOLTAGE	INPUT POWER	MANUFACTURER AND CATALOG NUMBER SERIES (V)	NOTES (VI)	
		TYPE (II)	QTY X WATTS/ LAMP	LAMP CODE / LED MODULE	LED DELIVERED LUMENS	LED L70 RATED LIFE	CONTROL TYPE (III)					DIMMING ENABLED TO
RA9-4C	RECESSED 4" WIDE X 5" DEEP X 9'-4" LONG, 3,000K LED DIRECT LUMINAIRE, HIGH OUTPUT, GRID CEILING, FLUSH DIFFUSING LENS, AND INTEGRAL DIMMING DRIVER. REFER TO PLANS FOR CORNER CONFIGURATION.	LED	NA	FURNISHED WITH FIXTURE	5,962	50,000+	0-10V DIM	10%	277	87 W	FINELITE HP-4R-9' 4"-HO-3000K-277V-SC-GRID-DIM-CORNER AXIS, PINNACLE, MARK	11,15
RA10	RECESSED 4" WIDE X 5" DEEP X 10' LONG, 3,000K LED DIRECT LUMINAIRE, HIGH OUTPUT, GRID CEILING, FLUSH DIFFUSING LENS, AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	6,390	50,000+	0-10V DIM	10%	277	94 W	FINELITE HP-4R-10'-HO-3000K-277V-SC-GRID-DIM AXIS, PINNACLE, MARK	
RA12	RECESSED 4" WIDE X 5" DEEP X 12' LONG, 3,000K LED DIRECT LUMINAIRE, HIGH OUTPUT, GRID CEILING, FLUSH DIFFUSING LENS, AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	7,668	50,000+	0-10V DIM	10%	277	112 W	FINELITE HP-4R-12'-HO-3000K-277V-SC-GRID-DIM AXIS, PINNACLE, MARK	
RA12C	RECESSED 4" WIDE X 5" DEEP X 12' LONG, 3,000K LED DIRECT LUMINAIRE, HIGH OUTPUT, GRID CEILING, FLUSH DIFFUSING LENS, AND INTEGRAL DIMMING DRIVER. REFER TO PLANS FOR CORNER CONFIGURATION.	LED	NA	FURNISHED WITH FIXTURE	7,668	50,000+	0-10V DIM	10%	277	112 W	FINELITE HP-4R-12'-HO-3000K-277V-SC-GRID-DIM-CORNER AXIS, PINNACLE, MARK	11,15
RA16	RECESSED 4" WIDE X 5" DEEP X 16' LONG, 3,000K LED DIRECT LUMINAIRE, HIGH OUTPUT, GRID CEILING, FLUSH DIFFUSING LENS, AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	10,224	50,000+	0-10V DIM	10%	277	150 W	FINELITE HP-4R-16'-HO-3000K-277V-SC-GRID-DIM AXIS, PINNACLE, MARK	
RA18	RECESSED 4" WIDE X 5" DEEP X 18' LONG, 3,000K LED DIRECT LUMINAIRE, HIGH OUTPUT, GRID CEILING, FLUSH DIFFUSING LENS, AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	11,502	50,000+	0-10V DIM	10%	277	168 W	FINELITE HP-4R-18'-HO-3000K-277V-SC-GRID-DIM AXIS, PINNACLE, MARK	
RA24	RECESSED 4" WIDE X 5" DEEP X 24' LONG, 3,000K LED DIRECT LUMINAIRE, HIGH OUTPUT, GRID CEILING, FLUSH DIFFUSING LENS, AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	15,336	50,000+	0-10V DIM	10%	277	224 W	FINELITE HP-4R-24'-HO-3000K-277V-SC-GRID-DIM AXIS, PINNACLE, MARK	
RA24C	RECESSED 4" WIDE X 5" DEEP X 24' LONG, 3,000K LED DIRECT LUMINAIRE, HIGH OUTPUT, GRID CEILING, FLUSH DIFFUSING LENS, AND INTEGRAL DIMMING DRIVER. REFER TO PLANS FOR CORNER CONFIGURATION.	LED	NA	FURNISHED WITH FIXTURE	15,336	50,000+	0-10V DIM	10%	277	224 W	FINELITE HP-4R-24'-HO-3000K-277V-SC-GRID-DIM-CORNER AXIS, PINNACLE, MARK	11,15
RB4	RECESSED 4" WIDE X 5" DEEP X 4' LONG, 3,000K LED DIRECT LUMINAIRE, HIGH OUTPUT, SPACKLE FLANGE FOR DRYWALL CEILING, FLUSH DIFFUSING LENS, AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	2,556	50,000+	0-10V DIM	10%	277	37 W	FINELITE HP-4R-4'-HO-3000K-277V-SC-SF-DIM AXIS, PINNACLE, MARK	3
RB6	RECESSED 4" WIDE X 5" DEEP X 6' LONG, 3,000K LED DIRECT LUMINAIRE, HIGH OUTPUT, SPACKLE FLANGE FOR DRYWALL CEILING, FLUSH DIFFUSING LENS, AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	3,834	50,000+	0-10V DIM	10%	277	56 W	FINELITE HP-4R-6'-HO-3000K-277V-SC-SF-DIM AXIS, PINNACLE, MARK	3
RB8	RECESSED 4" WIDE X 5" DEEP X 8' LONG, 3,000K LED DIRECT LUMINAIRE, HIGH OUTPUT, SPACKLE FLANGE FOR DRYWALL CEILING, FLUSH DIFFUSING LENS, AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	5,120	50,000+	0-10V DIM	10%	277	75 W	FINELITE HP-4R-8'-HO-3000K-277V-SC-SF-DIM AXIS, PINNACLE, MARK	3
RB10	RECESSED 4" WIDE X 5" DEEP X 10' LONG, 3,000K LED DIRECT LUMINAIRE, HIGH OUTPUT, SPACKLE FLANGE FOR DRYWALL CEILING, FLUSH DIFFUSING LENS, AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	6,390	50,000+	0-10V DIM	10%	277	94 W	FINELITE HP-4R-10'-HO-3000K-277V-SC-SF-DIM AXIS, PINNACLE, MARK	3
RB17	RECESSED 4" WIDE X 5" DEEP X 17'-6" LONG, 3,000K LED DIRECT LUMINAIRE, HIGH OUTPUT, SPACKLE FLANGE FOR DRYWALL CEILING, FLUSH DIFFUSING LENS, AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	11,182	50,000+	0-10V DIM	10%	277	172 W	FINELITE HP-4R-17'-6"-HO-3000K-277V-SC-SF-DIM AXIS, PINNACLE, MARK	3
RC4-7	RECESSED 6" APERTURE, 4'-7" LONG, 3,000K LED WALL GRAZER, WITH MUD TRIM AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	2,000	60,000	0-10V DIM	10%	277	34 W	GAMMALUX GPRG6B-ISOLED30-277-ZTV-4'-7"-N-REC/PR/GMR-OP-WH PINNACLE, PRUDENTIAL	3,6,15
RC5	RECESSED 6" APERTURE, 5' LONG, 3,000K LED WALL GRAZER, WITH MUD TRIM AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	2,180	60,000	0-10V DIM	10%	277	38 W	GAMMALUX GPRG6B-ISOLED30-277-ZTV-5'-N-REC/PR/GMR-OP-WH PINNACLE, PRUDENTIAL	3,6,15
RC5-6	RECESSED 6" APERTURE, 5'-6" LONG, 3,000K LED WALL GRAZER, WITH MUD TRIM AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	2,398	60,000	0-10V DIM	10%	277	41 W	GAMMALUX GPRG6B-ISOLED30-277-ZTV-5'-6"-N-REC/PR/GMR-OP-WH PINNACLE, PRUDENTIAL	3,6,15
RC6	RECESSED 6" APERTURE, 6' LONG, 3,000K LED WALL GRAZER, WITH MUD TRIM AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	2,616	60,000	0-10V DIM	10%	277	45 W	GAMMALUX GPRG6B-ISOLED30-277-ZTV-6'-N-REC/PR/GMR-OP-WH PINNACLE, PRUDENTIAL	3,6,15
RC7	RECESSED 6" APERTURE, 7' LONG, 3,000K LED WALL GRAZER, WITH MUD TRIM AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	3,052	60,000	0-10V DIM	10%	277	53 W	GAMMALUX GPRG6B-ISOLED30-277-ZTV-7'-N-REC/PR/GMR-OP-WH PINNACLE, PRUDENTIAL	3,6,15
RC8	RECESSED 6" APERTURE, 8' LONG, 3,000K LED WALL GRAZER, WITH MUD TRIM AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	3,488	60,000	0-10V DIM	10%	277	60 W	GAMMALUX GPRG6B-ISOLED30-277-ZTV-8'-N-REC/PR/GMR-OP-WH PINNACLE, PRUDENTIAL	3,6,15
RC9	RECESSED 6" APERTURE, 9' LONG, 3,000K LED WALL GRAZER, WITH MUD TRIM AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	3,924	60,000	0-10V DIM	10%	277	68 W	GAMMALUX GPRG6B-ISOLED30-277-ZTV-9'-N-REC/PR/GMR-OP-WH PINNACLE, PRUDENTIAL	3,6,15
RC10	RECESSED 6" APERTURE, 10' LONG, 3,000K LED WALL GRAZER, WITH MUD TRIM AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	4,360	60,000	0-10V DIM	10%	277	75 W	GAMMALUX GPRG6B-ISOLED30-277-ZTV-10'-N-REC/PR/GMR-OP-WH PINNACLE, PRUDENTIAL	3,6,15
RC10-6	RECESSED 6" APERTURE, 10'-6" LONG, 3,000K LED WALL GRAZER, WITH MUD TRIM AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	4,578	60,000	0-10V DIM	10%	277	79 W	GAMMALUX GPRG6B-ISOLED30-277-ZTV-10'-6"-N-REC/PR/GMR-OP-WH PINNACLE, PRUDENTIAL	3,6,15
RC12	RECESSED 6" APERTURE, 12' LONG, 3,000K LED WALL GRAZER, WITH MUD TRIM AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	5,232	60,000	0-10V DIM	10%	277	90 W	GAMMALUX GPRG6B-ISOLED30-277-ZTV-12'-N-REC/PR/GMR-OP-WH PINNACLE, PRUDENTIAL	3,6,15
RC12-6	RECESSED 6" APERTURE, 12'-6" LONG, 3,000K LED WALL GRAZER, WITH MUD TRIM AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	5,450	60,000	0-10V DIM	10%	277	94 W	GAMMALUX GPRG6B-ISOLED30-277-ZTV-12'-6"-N-REC/PR/GMR-OP-WH PINNACLE, PRUDENTIAL	3,6,15
RC15-6	RECESSED 6" APERTURE, 15'-6" LONG, 3,000K LED WALL GRAZER, WITH MUD TRIM AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	6,758	60,000	0-10V DIM	10%	277	116 W	GAMMALUX GPRG6B-ISOLED30-277-ZTV-15'-6"-N-REC/PR/GMR-OP-WH PINNACLE, PRUDENTIAL	3,6,15
RC18-6	RECESSED 6" APERTURE, 18'-6" LONG, 3,000K LED WALL GRAZER, WITH MUD TRIM AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	8,066	60,000	0-10V DIM	10%	277	139 W	GAMMALUX GPRG6B-ISOLED30-277-ZTV-18'-6"-N-REC/PR/GMR-OP-WH PINNACLE, PRUDENTIAL	3,6,15
RC34-3	RECESSED 6" APERTURE, 34'-3" LONG, 3,000K LED WALL GRAZER, WITH MUD TRIM AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	14,900	60,000	0-10V DIM	10%	277	257 W	GAMMALUX GPRG6B-ISOLED30-277-ZTV-34'-3"-N-REC/PR/GMR-OP-WH PINNACLE, PRUDENTIAL	3,6,15
RC34-6	RECESSED 6" APERTURE, 34'-6" LONG, 3,000K LED WALL GRAZER, WITH MUD TRIM AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	15,000	60,000	0-10V DIM	10%	277	259 W	GAMMALUX GPRG6B-ISOLED30-277-ZTV-34'-6"-N-REC/PR/GMR-OP-WH PINNACLE, PRUDENTIAL	3,6,15
RC43-6	RECESSED 6" APERTURE, 43'-6" LONG, 3,000K LED WALL GRAZER, WITH MUD TRIM AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	18,966	60,000	0-10V DIM	10%	277	326 W	GAMMALUX GPRG6B-ISOLED30-277-ZTV-43'-6"-N-REC/PR/GMR-OP-WH PINNACLE, PRUDENTIAL	3,6,15
RC45-8	RECESSED 6" APERTURE, 43'-8" LONG, 3,000K LED WALL GRAZER, WITH MUD TRIM AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	20,000	60,000	0-10V DIM	10%	277	343 W	GAMMALUX GPRG6B-ISOLED30-277-ZTV-43'-8"-N-REC/PR/GMR-OP-WH PINNACLE, PRUDENTIAL	3,6,15
RCG6	RECESSED 6" APERTURE, 6'-3" LONG, 3,000K LED WALL GRAZER, GRID FLANGED, WITH INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	2,726	60,000	0-10V DIM	10%	277	47 W	GAMMALUX GPRG6B-ISOLED30-277-ZTV-6'-3"-N-REC/PR/GFW-OP-WH PINNACLE, PRUDENTIAL	3,6,15
RCG8-9	RECESSED 6" APERTURE, 9'-9" LONG, 3,000K LED WALL GRAZER, GRID FLANGED, WITH INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	4,251	60,000	0-10V DIM	10%	277	73 W	GAMMALUX GPRG6B-ISOLED30-277-ZTV-9'-9"-N-REC/PR/GFW-OP-WH PINNACLE, PRUDENTIAL	3,6,15
RCG10	RECESSED 6" APERTURE, 10' LONG, 3,000K LED WALL GRAZER, GRID FLANGED, WITH INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	4,362	60,000	0-10V DIM	10%	277	75 W	GAMMALUX GPRG6B-ISOLED30-277-ZTV-10'-N-REC/PR/GFW-OP-WH PINNACLE, PRUDENTIAL	3,6,15
RCG10-6	RECESSED 6" APERTURE, 10'-6" LONG, 3,000K LED WALL GRAZER, GRID FLANGED, WITH INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	4,580	60,000	0-10V DIM	10%	277	79 W	GAMMALUX GPRG6B-ISOLED30-277-ZTV-10'-6"-N-REC/PR/GFW-OP-WH PINNACLE, PRUDENTIAL	3,6,15
RCG12	RECESSED 6" APERTURE, 12' LONG, 3,000K LED WALL GRAZER, GRID FLANGED, WITH INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	5,232	60,000	0-10V DIM	10%	277	90 W	GAMMALUX GPRG6B-ISOLED30-277-ZTV-12'-N-REC/PR/GFW-OP-WH PINNACLE, PRUDENTIAL	3,6,15
RCG15	RECESSED 6" APERTURE, 15' LONG, 3,000K LED WALL GRAZER, GRID FLANGED, WITH INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	6,540	60,000	0-10V DIM	10%	277	105 W	GAMMALUX GPRG6B-ISOLED30-277-ZTV-15'-N-REC/PR/GMR-OP-WH PINNACLE, PRUDENTIAL	3,6,15
RCG18-8	RECESSED 6" APERTURE, 18'-8" LONG, 3,000K LED WALL GRAZER, GRID FLANGED, WITH INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	8,142	60,000	0-10V DIM	10%	277	139 W	GAMMALUX GPRG6B-ISOLED30-277-ZTV-18'-8"-N-REC/PR/GFW-OP-WH PINNACLE, PRUDENTIAL	3,6,15
RCG20-6	RECESSED 6" APERTURE, 20'-6" LONG, 3,000K LED WALL GRAZER, GRID FLANGED, WITH INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	8,938	60,000	0-10V DIM	10%	277	154 W	GAMMALUX GPRG6B-ISOLED30-277-ZTV-20'-6"-N-REC/PR/GFW-OP-WH PINNACLE, PRUDENTIAL	3,6,15
RCG31	RECESSED 6" APERTURE, 31' LONG, 3,000K LED WALL GRAZER, GRID FLANGED, WITH INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	13,516	60,000	0-10V DIM	10%	277	233 W	GAMMALUX GPRG6B-ISOLED30-277-ZTV-31'-N-REC/PR/GFW-OP-WH PINNACLE, PRUDENTIAL	3,6,15

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LIGHTING FIXTURE SCHEDULE 3 OF 3												
TYPE (I)	GENERAL DESCRIPTION, ACCESSORIES, AND APPLICATION	LIGHT SOURCE DATA				DRIVER/BALLAST		FIXTURE VOLTAGE	INPUT POWER	MANUFACTURER AND CATALOG NUMBER SERIES (V)	NOTES (VI)	
		TYPE (II)	QTY X WATTS/ LAMP	LAMP CODE / LED MODULE	LED DELIVERED LUMENS	LED L70 RATED LIFE	CONTROL TYPE (III)					DIMMING ENABLED TO
RD	RECESSED 4" DIAMETER ROUND, SELF-FLANGED, 3,000K LED FIXED DOWNLIGHT, WITH INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	1,300	50,000	0-10V DIM	10%	277	22 W	PORTFOLIO LD4A-13-D010TE-ERM4A13-30-4LM1-H PRESCOLITE, AMERLUX	3
RE	RECESSED 4" SQUARE, SELF-FLANGED, 3,000K LED ADJUSTABLE DOWNLIGHT, WITH INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	1,075	50,000	0-10V DIM	10%	277	16 W	USA13131-B1-S-10-AL30F-LSTA4-8416-C3-30KH-25-NC-277-DIML2 PRESCOLITE, AMERLUX	
RED	RECESSED 4" SQUARE, MUD-IN TRIM, 3,000K LED DOWNLIGHT, WITH INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	1,075	50,000	0-10V DIM	1%	277	16 W	USA1 1011-B1-10-LSLD4-8020-M2-30KS-50-NC5M-277-DIML6A PRESCOLITE, AMERLUX	3
RF	RECESSED 8" LONG X 5" WIDE X 5" HIGH, 3,000K LED LENSED WALLWASHER WITH INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	877	50,000	0-10V DIM	10%	277	17 W	ELLIPTIPAR S-222-M007-L-02-M-0-30-2X	3
RG	RECESSED 2" WIDE X 2" LONG, X 5" DEEP, 3,500K LED TROFFER, WITH STAINLESS STEEL DOORFRAME, DOORFRAME GASKET, GRID CEILING, DIFFUSING FILM, AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	6,747	80,000	0-10V DIM	10%	277	74 W	KENALL CSEDO-22-67L35K-277-5F-2H KURTZON, NEW STAR	18
RH	RECESSED 4" DIAMETER ROUND, SELF-FLANGED, 3,000K LED FIXED DOWNLIGHT, WITH WIDE DISTRIBUTION AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	1,800	50,000	0-10V DIM	10%	277	32 W	PORTFOLIO LD4A-18-D010TE-ERW4A18-30-4LW1-H PRESCOLITE, AMERLUX	3
RHB	RECESSED 4" DIAMETER ROUND, SELF-FLANGED, 3,000K LED FIXED DOWNLIGHT, SUITABLE FOR 2.75" THICK BASWAPHON CEILING, WITH WIDE DISTRIBUTION AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	1,800	50,000	0-10V DIM	10%	277	32 W	PORTFOLIO LD4A-18-D010TE-ERW4A18-30-4LW1-H- 2.75" CEILING PRESCOLITE, AMERLUX	3
RJ4	SEMI-RECESSED COMBOLIGHT, WITH FOUR 3,000K ADJUSTABLE LED SPOT LIGHTS WITH FLOOD DISTRIBUTION, 45X360 DEGREE ADJUSTABILITY, MUD-IN FLANGE, AND INTEGRAL 1% DIMMING DRIVERS, CONFIGURED FOR TWO CIRCUIT CONTROL.	LED	NA	FURNISHED WITH FIXTURE	4,800	50,000	0-10V DIM	1%	277	64 W	AMERLUX HORNET-HP-SRTLX-FRAME-4-LED-277-0-10V/HORNET-HP-SRTLX-FRAME-4-16-LED-WT-120-277-FL-F-L-FL-FL-3000-0-10V-2-CKT MOD) CONTECH RDA4L	1,3
RK2	RECESSED 2" WIDE X 2" LONG X 5" DEEP, 3,500K LED TROFFER, WITH REGRESSED ALUMINUM DOORFRAME, GRID CEILING, SATIN WHITE LENS, AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	3,300	70,000+	0-10V DIM	10%	277	36 W	LITHONIA 2GTL-2-23L-RW-SWL-EZ1-LP835 SPOOPER, COLUMBIA	
RL	RECESSED 4" DIAMETER ROUND, SELF-FLANGED, 3,000K LED ADJUSTABLE DOWNLIGHT, WITH INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	1,300	50,000	0-10V DIM	10%	277	23 W	PORTFOLIO LD4A-13-D010TE-LAR35FL-4LA1-W-WF AMERLUX, PRESCOLITE	3
RM2	RECESSED 2" WIDE X 2" LONG X 4" DEEP, 3,000K LED ARCHITECTURAL TROFFER, GRID CEILING, SATIN WHITE LENS, AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	3,000	50,000	0-10V DIM	5%	277	29 W	AXIS DIALED-22-B3-3000-80-30-VL-W-277-D-1-GRID PINNACLE, JUNO, LUMENWERX	
RM4	RECESSED 2" WIDE X 4" LONG X 4" DEEP, 3,000K LED ARCHITECTURAL TROFFER, GRID CEILING, SATIN WHITE LENS, AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	4,500	50,000	0-10V DIM	5%	277	38 W	AXIS DIALED-24-B3-3500-80-30-VL-W-277-D-1-GRID PINNACLE, JUNO, LUMENWERX	
RN	RECESSED 4" WIDE X 5" DEEP X 4" LONG, 3,000K LED DIRECT LUMINAIRE, HIGH OUTPUT, WOOD CEILING, FLUSH DIFFUSING LENS, AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	2,500	50,000+	0-10V DIM	10%	277	37 W	FINELITE HP-4R-LENGTH-30-3000K-277V-SC-WOOD-DIM AXIS, PRUDENTIAL, MARK, PINNACLE	3
RP16	RECESSED 4" WIDE X 5" DEEP X 16" LONG, 3,000K LED DIRECT LUMINAIRE, GRID CEILING, REGRESSED DIFFUSING LENS, AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	12,000	50,000+	0-10V DIM	10%	277	112 W	AXIS BBRLED-B3-MF-750-80-30-RG-LENGTH-W-277-D-1-GRID FOCALPOINT, PINNACLE, MARK, PRUDENTIAL	
RP20	RECESSED 4" WIDE X 5" DEEP X 20" LONG, 3,000K LED DIRECT LUMINAIRE, GRID CEILING, REGRESSED DIFFUSING LENS, AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	15,000	50,000+	0-10V DIM	10%	277	140 W	AXIS BBRLED-B3-MF-750-80-30-RG-LENGTH-W-277-D-1-GRID FOCALPOINT, PINNACLE, MARK, PRUDENTIAL	
RP24	RECESSED 4" WIDE X 5" DEEP X 24" LONG, 3,000K LED DIRECT LUMINAIRE, GRID CEILING, REGRESSED DIFFUSING LENS, AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	18,000	50,000+	0-10V DIM	10%	277	168 W	AXIS BBRLED-B3-MF-750-80-30-RG-LENGTH-W-277-D-1-GRID FOCALPOINT, PINNACLE, MARK, PRUDENTIAL	
RP28	RECESSED 4" WIDE X 5" DEEP X 28" LONG, 3,000K LED DIRECT LUMINAIRE, GRID CEILING, REGRESSED DIFFUSING LENS, AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	21,000	50,000+	0-10V DIM	10%	277	196 W	AXIS BBRLED-B3-MF-750-80-30-RG-LENGTH-W-277-D-1-GRID FOCALPOINT, PINNACLE, MARK, PRUDENTIAL	
RQ	RECESSED 8" WIDE PERIMETER TROFFER SYSTEM, WITH SINGLE LAMP SPACING, SHADOWLINE ANGLE, AND INTEGRAL EMERGENCY BALLAST (WHERE SHADED ON PLANS), FIXTURE TO MATCH EXISTING EAB FIXTURES.	F	1X28	PHILIPS F28T5/835	NA	NA	NA	NA	277	33 W	LINEAR LIGHTING WW4-D1ET5-XX-SN-R-XX NO EQUAL	14
RR4X4	RECESSED LINEAR 4" APERTURE, 4'X4' GRID MOUNTED, STANDARD OUTPUT, 3,000K LED	LED	NA	FURNISHED WITH FIXTURE	4,836	100,000+	0-10V DIM	10%	277	66 W	FINELITE HP-4R-14'-8"-SO-3000K-277V-SC-GRID-DIM AXIS, PRUDENTIAL, PINNACLE, MARK	11,16
RR4X6	RECESSED LINEAR 4" APERTURE, 4'X6' GRID MOUNTED, STANDARD OUTPUT, 3,000K LED	LED	NA	FURNISHED WITH FIXTURE	6,155	100,000+	0-10V DIM	10%	277	83 W	FINELITE HP-4R-18'-8"-SO-3000K-277V-SC-GRID-DIM AXIS, PRUDENTIAL, PINNACLE, MARK	11,16
RR6X8	RECESSED LINEAR 4" APERTURE, 6'X8' GRID MOUNTED, STANDARD OUTPUT, 3,000K LED	LED	NA	FURNISHED WITH FIXTURE	8,793	100,000+	0-10V DIM	10%	277	208 W	FINELITE HP-R4-26'-8"-SO-3000K-277V-SC-GRID-DIM AXIS, PRUDENTIAL, PINNACLE, MARK	11,16
RS8	RECESSED 4" WIDE X 5" DEEP X 8" LONG, 3,000K LED DIRECT LUMINAIRE, HIGH OUTPUT, GRID CEILING, FLUSH DIFFUSING LENS, AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	5,100	50,000	0-10V DIM	.1%	277	74 W	FINELITE HP-4R-8'-HO-3000K-277V-SC-GRID-DIM-.1% AXIS, PINNACLE, MARK	
SA	3,000K LED TAPELIGHT MOUNTED WITHIN A 3/4" WIDE X 1" TALL ALUMINUM CHANNEL, WITH DIFFUSING LENS AND REMOTE CLASS II DIMMING DRIVERS.	LED	NA	FURNISHED WITH FIXTURE	750 LM/FT	40,000+	0-10V DIM	10%	277	80 W	LEDLINEAR HYDRA-LD25-W830/LENGTH-DL-003-ROUND COVER-IP40-ADJ-FEET-0/10V	1,7,13
UA2	NOMINAL 2' LONG, EXTRUDED ALUMINUM, 3,000K LED UNDERCABINET LIGHT WITH 100% DR IMPACT RESISTANT ACRYLIC, INTEGRAL SWITCH, AND INTEGRAL DRIVER.	LED	NA	FURNISHED WITH FIXTURE	700	120,000+	SWITCHED	NA	277	11 W	KENALL AUCLCD-I-FINISH-11L30K-24"-120V-MS-SW	1
UA4	NOMINAL 4' LONG, EXTRUDED ALUMINUM, 3,000K LED UNDERCABINET LIGHT WITH 100% DR IMPACT RESISTANT ACRYLIC, INTEGRAL SWITCH, AND INTEGRAL DRIVER.	LED	NA	FURNISHED WITH FIXTURE	1,287	120,000+	SWITCHED	NA	277	20 W	KENALL AUCLCD-I-FINISH-20L30K-48"-120V-MS-SW	1
UB4	NOMINAL 4' LONG, EXTRUDED ALUMINUM, 3,000K LED UNDERCABINET LIGHT WITH INTEGRAL SWITCH, MAGNETIC MOUNTING CLIPS, REMOTE DRIVER, AND CORD AND PLUG CONNECTION.	LED	NA	FURNISHED WITH FIXTURE	760	50,000	SWITCHED	NA	120	12 W	FINELITE UC-E-45'-FINISH-PS-21W-MAGNETICMOUNT	1,4
WA	RECESSED 4" WIDE X 5" DEEP X 4" LONG, WALL MOUNTED, 3,000K LED DIRECT LUMINAIRE, STANDARD OUTPUT, FLUSH DIFFUSING LENS, AND INTEGRAL DIMMING DRIVER.	LED	NA	FURNISHED WITH FIXTURE	1,348	168,000	0-10V DIM	10%	277	18 W	FINELITE HP-4R-SO-3000K-277V-SC-SF	1,3
XA	UNIVERSAL MOUNTED, SINGLE OR DOUBLE FACED, AC POWERED, THERMOPLASTIC EXIT SIGN WITH WHITE HOUSING AND RED LETTERING.	LED	NA	FURNISHED WITH FIXTURE	NA	NA	NA	NA	277	4 W	LITHONIA LQM-S-W-3-R-120/277 SURELITES, DUAL-LITE	1
XB	WALL/BACK MOUNTED, EDGE-LIT, AC POWERED, SINGLE FACED, LED EXIT SIGN WITH EXTRUDED ALUMINUM BODY AND RED LETTERING.	LED	NA	FURNISHED WITH FIXTURE	NA	NA	NA	NA	277	4 W	LITHONIA LRP-1-RC-120/277 SURELITES, DUAL-LITE	1
XC	CEILING MOUNTED, EDGE-LIT, AC POWERED, SINGLE OR DOUBLE FACED, LED EXIT SIGN WITH EXTRUDED ALUMINUM BODY AND RED LETTERING. REFER TO PLANS FOR SINGLE OR DOUBLE FACED CONFIGURATION.	LED	NA	FURNISHED WITH FIXTURE	NA	NA	NA	NA	277	4 W	LITHONIA LRP-FACES-LETTERS/BACKGROUND-120/277 SURELITES, DUAL-LITE	1
YA	SURFACE MOUNTED, "IN USE" CUSTOM SIGNAGE LIGHT WITH INTEGRAL DRIVER.	LED	NA	FURNISHED WITH FIXTURE	NA	NA	SWITCHED	NA	277	18 W	DUALITE LE-W-S-G-FINISH-AC-SW3 ISOLITE	
ZB	OWNER FURNISHED, CONTRACTOR INSTALLED OR LIGHT.								120	500 W		17

DESIGNATION METHOD (I)

FIRST CHARACTER DESIGNATES MOUNTING OR TYPE.

SECOND CHARACTER IS SEQUENTIAL LETTERING TO IDENTIFY DIFFERENT FIXTURE SERIES FOR SIMILAR MOUNTING TYPES.

NUMBERED SUFFIX DIFFERENTIATES SPECIAL VARIATIONS OF SIMILAR FIXTURES USED IN THE PROJECT.

MOUNTING OR TYPE

B = WALL BRACKET OR WALL SURFACE

C = COVE OR NICHE MOUNTED

E = EXTERIOR

P = PENDANT

R = RECESSED IN CEILING

S = SURFACE CEILING MOUNTED

W = WALL RECESSED

X = EXIT

Y = BATTERY

Z = SPECIAL

LAMP CODE (II)

C = FLUORESCENT/STRAIGHT

I = INCANDESCENT

M = METAL HALIDE

P = COMPACT FLUORESCENT

LED = LIGHT EMITTING DIODE

CONTROL TYPE (III)

ON/OFF = SINGLELEVEL, ON/OFF CONTROL

2 CKT = TWO ELECTRICAL FEEDS SERVING LUMINAIRE

STEP DIM = 100% OUTPUT, REDUCED OUTPUT, AND OFF

0 - 10V = 0-10 VOLT DIMMING CONTROL

DIM = DIGITALLY ADDRESSABLE LIGHTING INTERFACE

DUAL DIM = DIGITALLY ADDRESSABLE DIMMING (LUTRON)

ECO DIM = 2-WIRE, POWERLINE, FORWARD PHASE

INC DIM = DIMMING

ELV DIM = 2-WIRE, POWERLINE, REVERSE PHASE DIMMING

SW DIM = 3-WIRE, HOT + NEUTRAL + DIMMED HOT

OTHER = REFER TO GENERAL DESCRIPTION FOR DETAILS

WATTS PER FIXTURE (IV)

TOTAL INPUT WATTS PER FIXTURE INCLUDING

ALL LAMPS AND BALLASTS

MANUFACTURER AND CATALOG NUMBER SERIES (V)

A THE LISTED MANUFACTURER NUMBERS MAY NOT BE COMPLETE. THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING FIXTURES WHICH COMPLY WITH THE MANUFACTURER NUMBER INDICATED AS WELL AS ALL OTHER CRITERIA NOTED IN THE FIXTURE SCHEDULE, THE FIXTURE SCHEDULE NOTES AND DIVISION 28 SPECIFICATIONS. THE CONTRACTOR/MANUFACTURER SHALL CONTACT ENGINEER PRIOR TO BID, REGARDING ANY CONFLICTS BETWEEN THE CATALOG NUMBER, FIXTURE SCHEDULE OR SPECIFICATION. ANY MEASURES REQUIRED TO RECTIFY SCHEDULE CONFLICTS NOT IDENTIFIED BY THE CONTRACTOR PRIOR TO BIDDING, SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST.

B THE FIRST-NAMED MANUFACTURER AND CATALOG NUMBER LISTED FOR EACH FIXTURE TYPE IDENTIFIES THE STANDARDS OF PERFORMANCE, FABRICATION AND AESTHETICS REQUIRED. PRODUCTS OF EQUAL OR SUPERIOR PERFORMANCE, FABRICATION AND AESTHETICS BY SECOND AND THIRD-NAMED MANUFACTURERS SHALL BE CONSIDERED EQUAL AND MAY BE SUBMITTED FOR REVIEW IN ACCORDANCE WITH THE REQUIREMENTS FOR SHOP DRAWING SUBMITTALS DETAILED IN SPECIFICATION SECTION 285100.

C IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE APPROPRIATE MODEL AND SERIES OF THE PRODUCT TO BE SUBMITTED BY SECOND AND THIRD-NAMED MANUFACTURERS LISTED. THE ENGINEER RESERVES THE RIGHT TO REJECT ANY PRODUCT WHICH DOES NOT MEET OR EXCEED THE ATTRIBUTES OF THE FIRST-NAMED MANUFACTURER.

D THE PRODUCTS OF ANY MANUFACTURER NOT LISTED ON THE FIXTURE SCHEDULE SHALL BE CONSIDERED A SUBSTITUTION. ANY SUBSTITUTIONS MUST BE SUBMITTED TO THE ENGINEER BY THE CONTRACTOR FOR REVIEW PRIOR TO BID SUBMITTALS IN ACCORDANCE WITH SPECIFICATION SECTION 285100. THE ENGINEER RESERVES THE RIGHT TO REJECT ANY SUBSTITUTION SUBMITTAL AFTER AWARD OF CONTRACT REQUESTS FOR SUBSTITUTION WILL BE REJECTED UNLESS DIRECTED AND APPROVED BY OWNER AS ADDITIONAL SERVICE.

E WHERE ONLY ONE MANUFACTURER IS LISTED AND "NO EQUAL" IS CALLED OUT IN THE SCHEDULE, THE ENGINEER WILL REJECT ANY ALTERNATIVE FIXTURES SUBMITTED. THE ANTICIPATED DISTRIBUTOR COST FOR THE SPECIFIED FIXTURE WILL BE ON FILE WITH THE ENGINEER.

F TO ENSURE THE SHOP DRAWING PREPARER HAS ALL NECESSARY INFORMATION, CONTRACTOR SHALL SUBMIT SHOP DRAWING IN ACCORDANCE WITH SPECIFICATIONS INCLUDING THE FOLLOWING: ONE FULL SIZE COPY OF THE LIGHTING FIXTURE SCHEDULE SIGNED BY THE DISTRIBUTOR OR FIXTURE REPRESENTATIVE WHO PREPARED THE SUBMITTAL.

G LAMP AND BALLAST/DRIVER MANUFACTURER CUT SHEETS SHALL BE INCLUDED WITH SHOP DRAWING SUBMITTAL FOR EACH FIXTURE TYPE.

H WHILE MANUFACTURER GENERIC DRIVER DESIGNATIONS ARE USED, CONTRACTOR SHALL PROVIDE DRIVER MAKES AND MODELS WHICH COMPLY WITH THE DIMMING REQUIREMENTS IDENTIFIED ON THE LIGHT FIXTURE SCHEDULE.

LIGHTING FIXTURE SCHEDULE NOTES (VI)

GENERAL NOTES

- A CONTRACTOR AND FIXTURE MANUFACTURER SHALL BE RESPONSIBLE FOR COMPLYING WITH DIVISION 28 SEISMIC REQUIREMENTS AND SPECIFICATION SECTION 28240 - VIBRATIONS AND SEISMIC CONTROLS.
- B ALL FIXTURES SHALL BE PAINTED AFTER FABRICATION.
- C SEE PLANS FOR MOUNTING HEIGHTS AND SUSPENSION HEIGHTS NOT LISTED HERE.
- D ALL RECESSED AND SURFACE-MOUNTED TROFFERS SHALL HAVE SPRING-LOADED CAM LATCHES AND T-HINGS ON DOOR FRAMES.
- E ALL PRISMATIC TROFFERS SHALL BE PROVIDED WITH REGRESSED WHITE, ALUMINUM DOOR FRAME.
- F ALL "E" DESIGNATION EXTERIOR FIXTURE SHALL BE UL LISTED FOR WET LOCATIONS (OR DAMP LOCATION UNDER EXTERIOR SOFFITS).
- G CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING THE CORRECT EXIT SIGN FIXTURE ORIENTATION, APPROPRIATE MOUNTING BRACKETS, ILLUMINATED FACES, AND DIRECTIONAL CHEVRONS AS INDICATED ON PLANS.
- H ALL FLUORESCENTS BALLASTS AND LED DRIVERS SHALL BE INTEGRAL TO FIXTURE UNLESS OTHERWISE NOTED.
- I CONTRACTOR SHALL NOT USE ELECTRICAL DRAWINGS FOR EXACT LIGHT FIXTURE ROUGH-IN LOCATIONS. REFER TO ARCHITECTURAL PLANS.

KEYED NOTES

- 1 COORDINATE STANDARD COLOR FINISH WITH ARCHITECT.
- 2 COORDINATE CUSTOM COLOR FINISH WITH ARCHITECT.
- 3 DRIVER SHALL BE ACCESSIBLE AND REMOVABLE THROUGH CEILING OPENING.
- 4 PROVIDE REMOTE BALLAST(S)/DRIVER(S) LOCATED IN AN ACCESSIBLE LOCATION.
- 5 PENDANT LENGTHS VARY. BOTTOM OF FIXTURE TO BE A 8'-0" AFF.
- 6 REFER TO ARCHITECTURAL PLANS FOR COVE LENGTHS. FIXTURE LENGTHS INDICATED ARE APPROXIMATE. PROVIDE FIXTURE QUANTITIES AND LENGTHS AS REQUIRED FOR FIXTURES TO RUN CONTINUOUS ALONG ENTIRE LENGTH OF COVE.
- 7 CONTRACTOR SHALL PROVIDE ALL MISCELLANEOUS LOW VOLTAGE AND LINE VOLTAGE LIGHTING, ACCESSORIES, AND HARDWARE TO SUPPORT, POWER, AND CONTROL FIXTURE AS PER SPECIFIC INSTALLATION AND AS RECOMMENDED BY THE MANUFACTURER. SEE PLANS FOR LENGTHS, LAYOUTS AND CIRCUITING.
- 8 REFER TO ELECTRICAL PLANS, ARCHITECTURAL PLANS AND SECTIONS FOR MOUNTING INFORMATION.
- 9 FINISH/COLOR CHIPS SHALL BE FURNISHED WITH SHOP DRAWINGS FOR SELECTION AND APPROVAL BY OWNER/ARCHITECT/ENGINEER.
- 10 PROVIDE FIXTURE EQUIPPED WITH HONEYCOMB LOUVER AND SNOOT.
- 11 MANUFACTURER SHALL SUPPLY TWO SETS OF CUSTOM SHOP DRAWINGS. FIRST, CONCEPT DRAWINGS WILL BE SUBMITTED FOR APPROVAL BY ARCHITECT/ENGINEER. SECOND, ONE DETAILED SET OF SHOP DRAWINGS SHALL BE SUBMITTED FOR FINAL REVIEW. DETAILED SHOP DRAWING SHALL INCLUDE PROJECT SPECIFIC SCHEMATIC DRAWINGS.
- 12 SUBMIT POINT BY POINT CALCULATION SHOWING MAINTAINED LIGHT LEVELS ON THE GROUND FOR ALL LEVEL SURFACES. POINTS SHALL BE SPACED A MAXIMUM OF 10' O.C. LIGHT LEVELS SHALL NOT FALL BELOW .25 FC.
- 13 PROVIDE FIXTURE LENGTHS AND QUANTITIES AS REQUIRED FOR A CONTINUOUS INSTALLATION FROM WALL TO WALL. LOCATE START/END OF FIXTURES WITHIN 6" OF WALL.
- 14 COORDINATE INSTALLATION OF NEW FIXTURES WITH MANUFACTURER AND EXISTING FIXTURES, TO ACHIEVE A SEAMLESS CONTINUATION OF THE EXISTING COVE.
- 15 REFER TO PLANS FOR FIXTURE LENGTHS AND CONFIGURATIONS.
- 16 REFER TO ARCHITECTURAL PLANS AND DETAILS FOR FIXTURE CONFIGURATIONS.
- 17 COORDINATE ALL MOUNTING AND POWER REQUIREMENTS WITH OWNER.
- 18 PROVIDE "RF" RADIO FREQUENCY FILTER TO FIXTURES IN SIMULATION LAB.



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CONFORMED SET

01 JUL 2016

3	ADDENDUM 2-4	24 MAY 2016
2	ADDENDUM 2-2	19 APRIL 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016

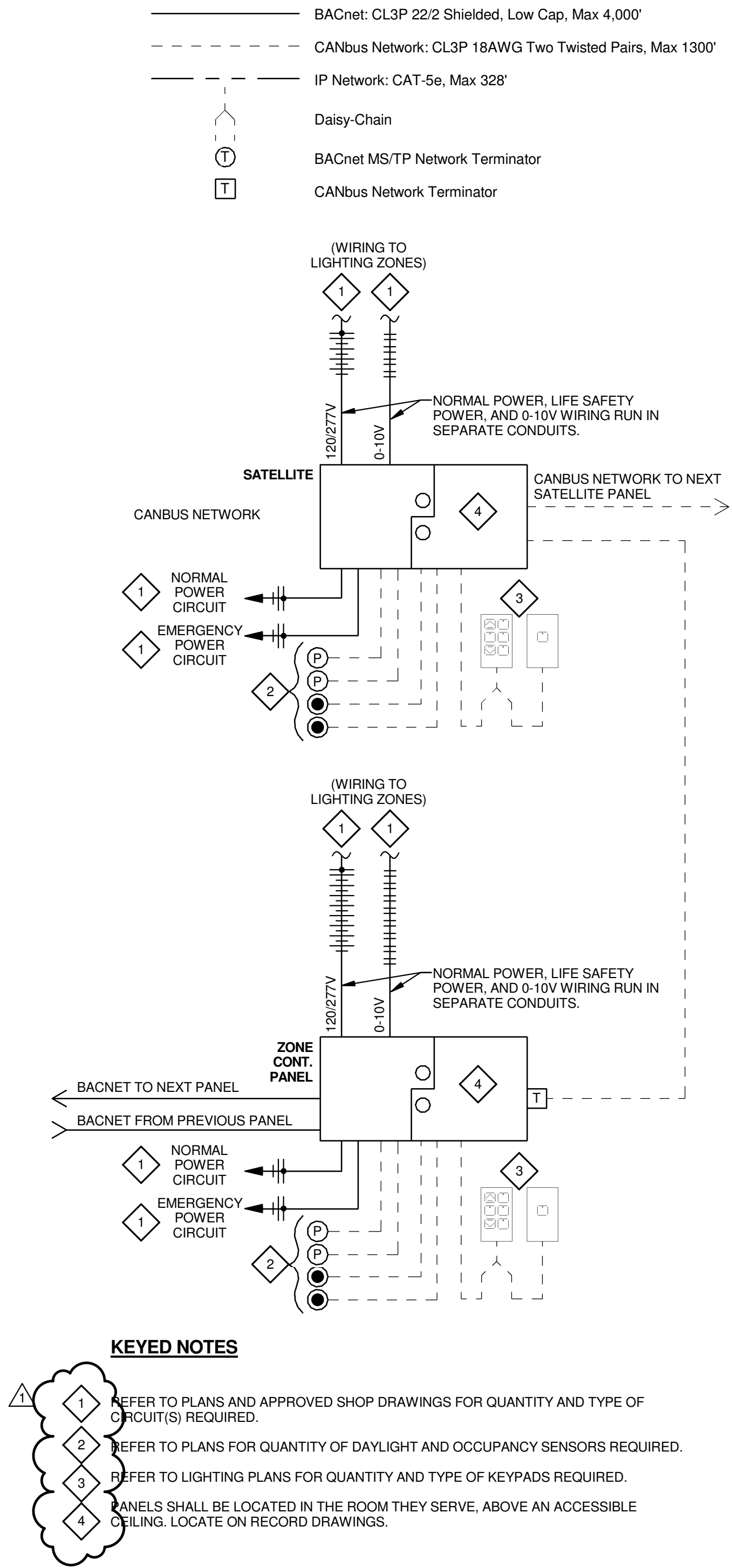
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Drawing Title:		
LIGHT FIXTURE SCHEDULE		
Project No.: 04561.01		
Checked by:		

E0702

WEBSTER ISB EXTERIOR - BUILDING LIGHTING CONTROL SYSTEM SCHEDULE							
RELAY NUMBER	AREA CONTROLLED (ROOM / LOAD DESCRIPTION)	SWITCH(ES) CONTROLLING RELAY	DAYLIGHT SENSOR INPUT	POWER SOURCE (PANEL-CKT)	VOLTS	REMARKS	NOTES
ea	EAST ROAD - AREA LIGHTING		YES	1EH1-2	277	0-10V DIM	a,b
eb	WEST PATHWAY BOLLARDS		YES	1NH1-2	277	0-10V DIM	a
ec	NORTH PATHWAY BOLLARDS		YES	1EH1-2	277	0-10V DIM	a,b
ed	NORTHEAST STAIR STEPLIGHTS		YES	1EH1-2	277		b
ee	COURTYARD SEATWALL		YES	1NH1-2	277	0-10V DIM	a
ef	COURTYARD BOLLARDS		YES	1EH1-7	277	0-10V DIM	a,b
eg	COURTYARD GUARDRAIL LIGHTS		YES	1NH1-2	277	0-10V DIM	a
eh	SOUTH STAIR STEPLIGHTS		YES	1EH1-2	277		b
ej	TREE UP-LIGHTS		YES	1NH1-2	277	0-10V DIM	a
ek	COURTYARD STAIR HANDRAIL LIGHTS		YES	1EH1-7	277	0-10V DIM	a,b
em	BUILDING RECESSED WEST WALL PATH LIGHTS		YES	1EH1-7	277	0-10V DIM	a,b
en	COURTYARD PATHWAY POLE LIGHTS		YES	1NH1-2	277	0-10V DIM	a
ep	EAST SERVICE WALL RECESSED LIGHTS		YES	1EH1-2	277	0-10V DIM	a,b

REFER TO SPECIFICATION SECTION 265700 FOR ADDITIONAL BUILDING LIGHTING CONTROL SYSTEM INFORMATION.
PROVIDE DISTRIBUTED ZONE CONTROL, SATELLITE, AND RELAY PANELS TO SERVE LOADS.

SCHEDULE NOTES:
a. 0-10 VOLT DIMMABLE CIRCUIT - PROVIDE LOW VOLTAGE WIRING TO LIGHT FIXTURES.
b. EMERGENCY CIRCUIT. COORDINATE BARRIERS TO ISOLATE EMERGENCY LOADS. PROVIDE UL924 LISTED CONTROL DEVICE.



1 ZONE CONTROL PANEL WIRING SCHEMATIC

SCHEMATIC IS SHOWN FOR DESIGN INTENT. REFER TO PLANS, SPECIFICATIONS, SCHEDULES, SEQUENCE OF OPERATIONS, AND APPROVED SHOP DRAWINGS FOR ADDITIONAL INFORMATION.

ROOF

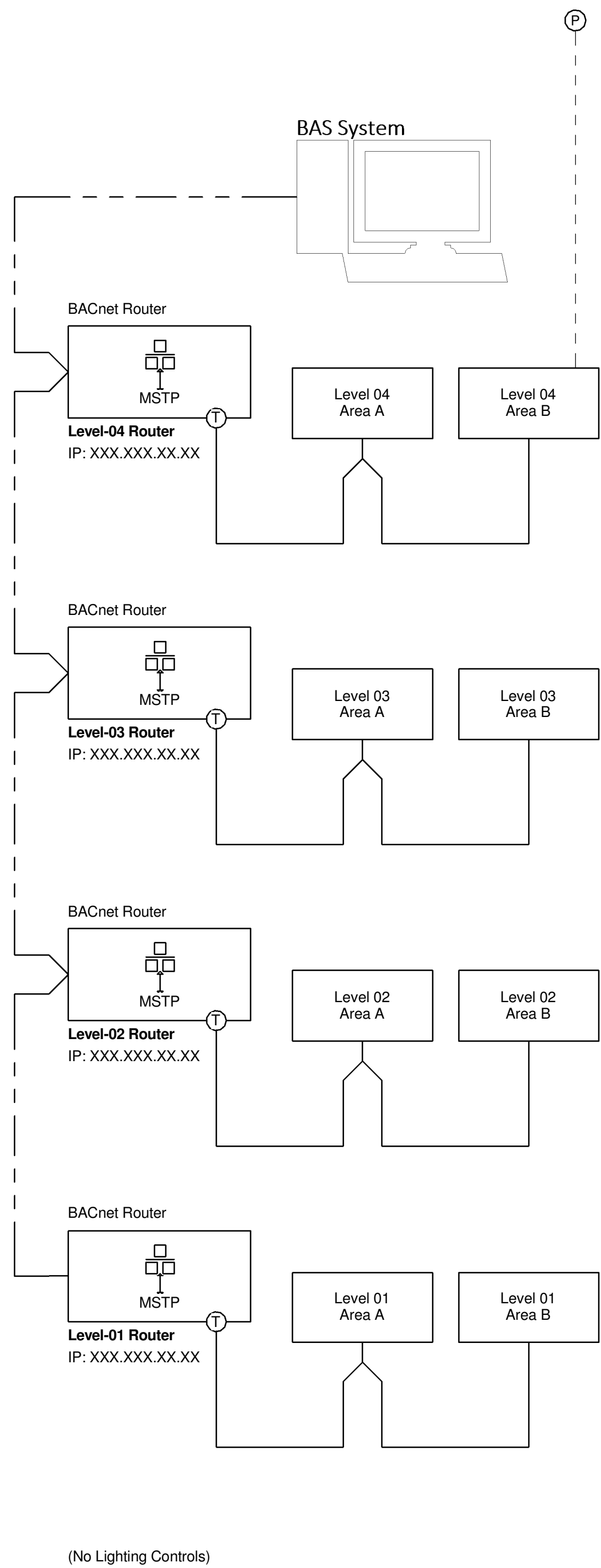
Level-04

Level-03

Level-02

Level-01

Level-00



2 LIGHTING CONTROL DIAGRAM - RISER MAP

COORDINATE LIGHTING CONTROL SYSTEM INSTALLATION WITH BAS SYSTEM CONTROLS CONTRACTOR.
LOCATE EXTERIOR RATED PHOTOCELL ON ROOF FACING NORTH FOR CONTROL OF EXTERIOR LIGHTING. SENSOR SHALL HAVE AN UNOBSTRUCTED VIEW OF THE SKY. COORDINATE LOCATION WITH ENGINEER.

WEBSTER ISB INTERIOR CIRCULATION AREA - BUILDING LIGHTING CONTROL SYSTEM SCHEDULE							
RELAY NUMBER	AREA CONTROLLED (ROOM / LOAD DESCRIPTION)	SWITCH(ES) CONTROLLING RELAY	DAYLIGHT SENSOR INPUT	POWER SOURCE (PANEL-CKT)	VOLTS	REMARKS	NOTES
1a	1ST FLOOR - AREA B - CORRIDOR EMERGENCY 4" SLOT LIGHTS			1EH1-2	277	0-10V DIM	a,b
1b	1ST FLOOR - AREA B - CORRIDOR 4" SLOT LIGHTS			1NH1-10	277	0-10V DIM	a
1c	1ST FLOOR - AREA B - CORRIDOR EMERGENCY DOWNLIGHTS			1EH1-2	277	0-10V DIM	a,b
1d	1ST FLOOR - AREA B - CORRIDORS DOWNLIGHTS			1NH1-10	277	0-10V DIM	a
1e	1ST FLOOR - AREA B - CORRIDOR WALL WASHERS			1NH1-10	277	0-10V DIM	a
1f	1ST FLOOR COMMONS RECESSED 4"x6"			1NH1-10	277	0-10V DIM	a
1g	1ST FLOOR - AREA A - CORRIDOR DOWNLIGHTS		YES	1NH1-16	277	0-10V DIM	a
1h	1ST FLOOR - AREA A - CORRIDOR EMERGENCY DOWNLIGHTS		YES	1EH1-4	277	0-10V DIM	a,b
1j	1ST FLOOR - AREA A - CORRIDOR WALL WASHERS			1NH1-16	277	0-10V DIM	a
1k	AREA A - STAIR			1EH1-9	277	0-10V DIM	a
1m	AREA B - STAIR			1EH1-11	277	0-10V DIM	a
2a	2ND FLOOR - AREA B - CORRIDOR EMERGENCY DOWNLIGHTS			1EH1-10	277	0-10V DIM	a,b
2b	2ND FLOOR - AREA B - CORRIDOR DOWNLIGHTS			2NH1-7	277	0-10V DIM	a
2c	2ND FLOOR - AREA B - COMMONS WALLWASHERS			2NH1-7	277	0-10V DIM	a
2d	2ND FLOOR - AREA B - CORRIDOR EMERGENCY 4" SLOT LIGHTS			1EH1-10	277	0-10V DIM	a,b
2e	2ND FLOOR - AREA B - CORRIDOR 4" SLOT LIGHTS			2NH1-7	277	0-10V DIM	a
2f	2ND FLOOR - AREA A - CORRIDOR EMERGENCY DOWNLIGHTS			1EH1-12	277	0-10V DIM	a,b
2g	2ND FLOOR - AREA A - CORRIDOR DOWNLIGHTS			2NH1-1	277	0-10V DIM	a
2h	2ND FLOOR - AREA A - CORRIDOR WALL WASHERS			2NH1-1	277	0-10V DIM	a
2j	EAB CONNECTOR RECESSED DOWNLIGHTS			1EH1-12	277	0-10V DIM	a
2k	EAB CONNECTOR RECTANGULAR LIGHT			2NH1-7	277	0-10V DIM	a
3a	3RD FLOOR - AREA B - CORRIDOR EMERGENCY 4" SLOT LIGHTS			1EH1-14	277	0-10V DIM	a,b
3b	3RD FLOOR - AREA B - CORRIDOR 4" SLOT LIGHTS			3NH1-9	277	0-10V DIM	a
3c	3RD FLOOR - AREA B - CORRIDOR EMERGENCY DOWNLIGHTS			1EH1-14	277	0-10V DIM	a,b
3d	3RD FLOOR - AREA B - CORRIDOR DOWNLIGHTS			3NH1-13	277	0-10V DIM	a
3e	3RD FLOOR - AREA B - CORRIDOR WALL WASHERS			3NH1-13	277	0-10V DIM	a
3f	3RD FLOOR - AREA A - CORRIDOR EMERGENCY DOWNLIGHTS			1EH1-14	277	0-10V DIM	a,b
3g	3RD FLOOR - AREA A - CORRIDOR DOWNLIGHTS			3NH1-1	277	0-10V DIM	a
3h	3RD FLOOR - AREA A - CORRIDOR WALL WASHERS			3NH1-1	277	0-10V DIM	a
3i	3RD FLOOR - AREA B - WALL WASHERS			3NH1-13	277	0-10V DIM	a
3j	3RD FLOOR - PERIMETER SKYLIGHT DAYLIGHT HARVESTING	YES		3NH1-16	277	0-10V DIM	a
3k	3RD FLOOR - AREA B - COMMONS 303 - DAYLIGHT HARVESTING	YES		3NH1-13	277	0-10V DIM	a
3m	3RD FLOOR - AREA B - PERIMETER COVE LIGHTING	YES		3NH1-15	277	0-10V DIM	a
3n	3RD FLOOR - AREA B - PERIMETER COVE LIGHTING	YES		3NH1-15	277	0-10V DIM	a
4a	4TH FLOOR - AREA B - CORRIDOR EMERGENCY 4" SLOT LIGHTS			1EH1-16	277	0-10V DIM	a,b
4b	4TH FLOOR - AREA B - CORRIDOR 4" SLOT LIGHTS			4NH1-7	277	0-10V DIM	a
4c	4TH FLOOR - AREA B - CORRIDOR EMERGENCY DOWNLIGHTS			1EH1-16	277	0-10V DIM	a,b
4d	4TH FLOOR - AREA B - CORRIDOR DOWNLIGHTS			4NH1-11	277	0-10V DIM	a
4e	4TH FLOOR - AREA B - CORRIDOR WALL WASHERS			4NH1-11	277	0-10V DIM	a
4f	4TH FLOOR - AREA A - CORRIDOR EMERGENCY DOWNLIGHTS			1EH1-16	277	0-10V DIM	a,b
4g	4TH FLOOR - AREA A - CORRIDOR DOWNLIGHTS			4NH1-1	277	0-10V DIM	a
4h	4TH FLOOR - AREA A - CORRIDOR WALL WASHERS			4NH1-1	277	0-10V DIM	a
4i	4TH FLOOR - AREA B - SKYLIGHT		YES	4NH1-11	277	0-10V DIM	a
4j	4TH FLOOR - AREA B - DAYLIGHT HARVESTING	YES		4NH1-16	277	0-10V DIM	a
4k	4TH FLOOR - PERIMETER COVE LIGHTING	YES		4NH1-16	277	0-10V DIM	a

WEBSTER ISB INTERIOR - BUILDING LIGHTING CONTROL SYSTEM SCHEDULE							
RELAY NUMBER	AREA CONTROLLED (ROOM / LOAD DESCRIPTION)	SWITCH(ES) CONTROLLING RELAY	DAYLIGHT SENSORS INPUT	POWER SOURCE (PANEL-CKT)	VOLTS	REMARKS	NOTES
REFER TO LIGHTING PLANS FOR INTERIOR CONTROL ZONES.							

REFER TO SPECIFICATION SECTION 265700 FOR ADDITIONAL BUILDING LIGHTING CONTROL SYSTEM INFORMATION.
PROVIDE DISTRIBUTED ZONE CONTROL, SATELLITE, AND RELAY PANELS TO SERVE LOADS.

SCHEDULE NOTES:
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CONFORMED SET 01 JUL 2016

1 ADDENDUM 2-2 19 APRIL 2016
ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016
No. Description Date

Drawing Title:

LIGHTING CONTROL
SCHEDULE

Project No.: 04561.01 Checked by:

E0703

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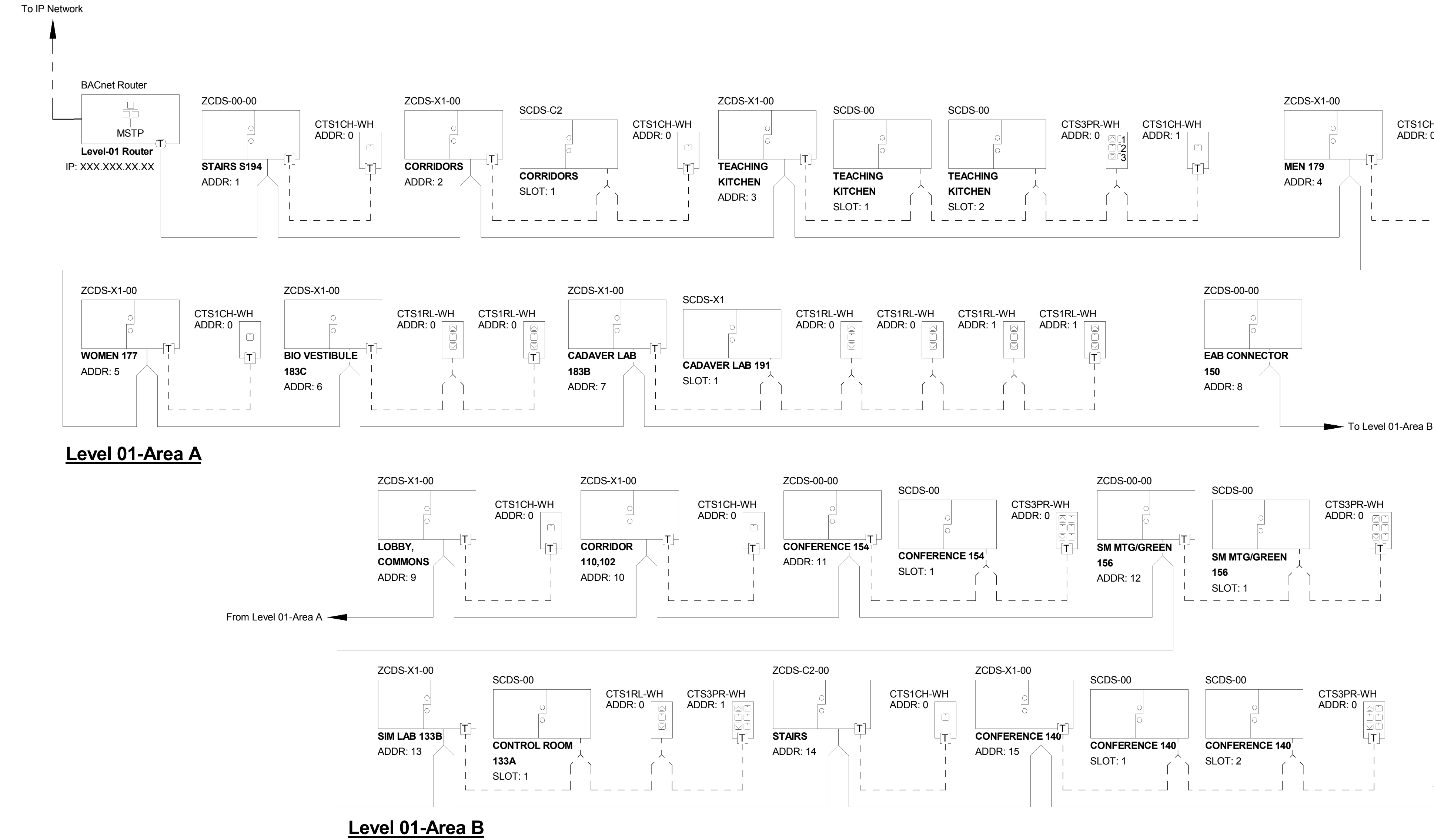
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Drawing Title:

LIGHTING CONTROL
DIAGRAM - LEVELS 1 & 2

Project No.: 04561.01 Checked by:

E0704



PRELIMINARY UNIFIED LIGHTING CONTROL SYSTEM SCHEMATIC DIAGRAM

- COORDINATE SYSTEM INSTALLATION WITH BAS CONTROLS CONTRACTOR AND APPROVED SHOP DRAWINGS.
- NOT ALL SYSTEM DEVICES ARE SHOWN, REFER TO PLANS, SCHEDULES, AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.

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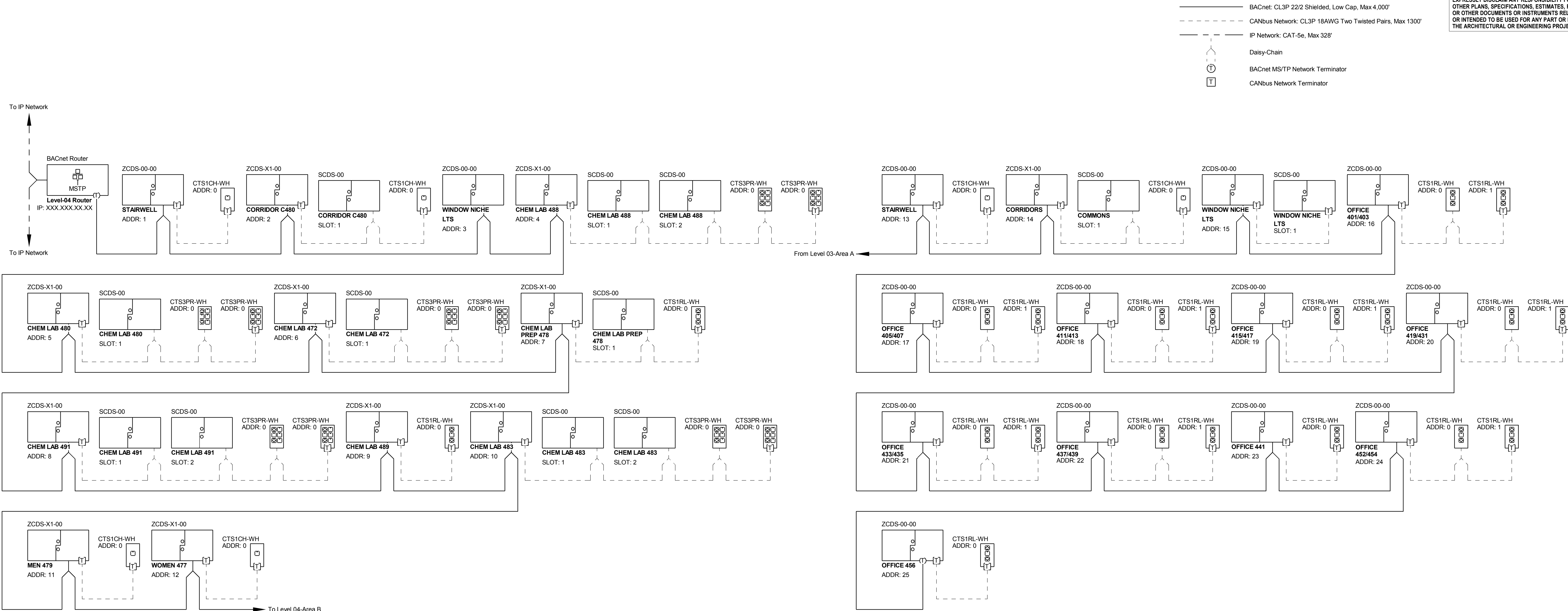
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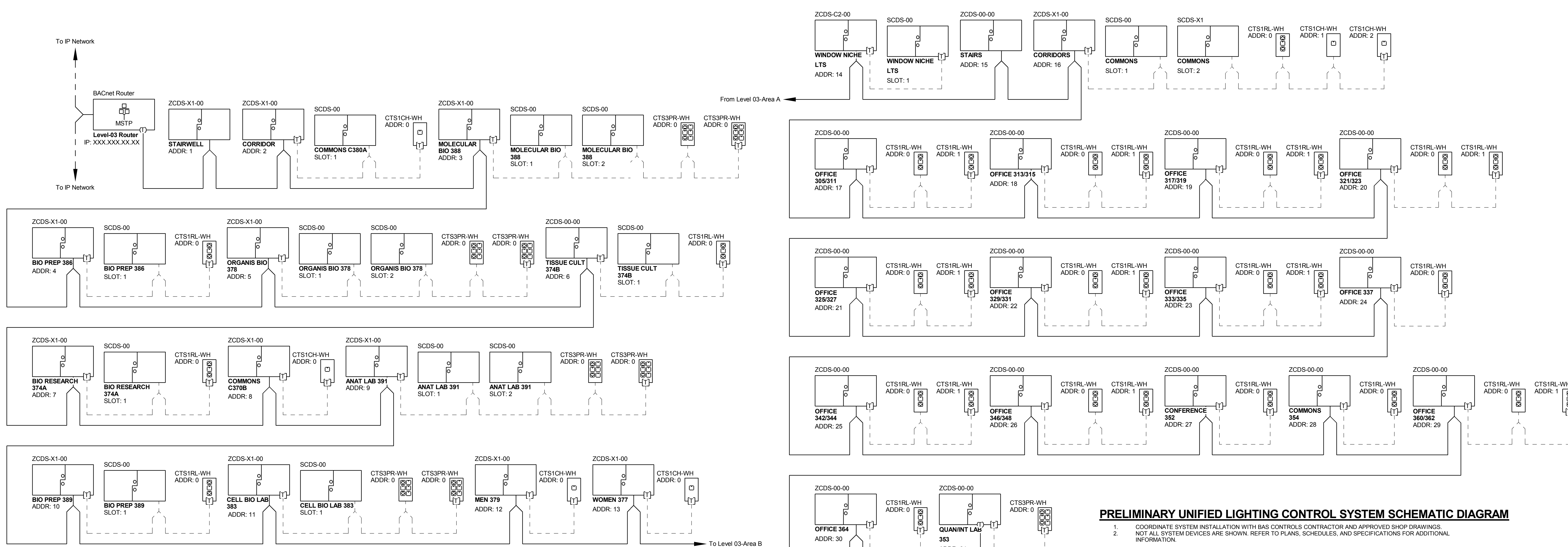
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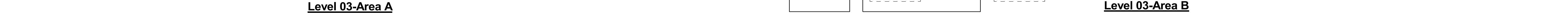
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Level 04-Area A



Level 04-Area B



Level 03-Area A



Level 03-Area B

PRELIMINARY UNIFIED LIGHTING CONTROL SYSTEM SCHEMATIC DIAGRAM

- COORDINATE SYSTEM INSTALLATION WITH BAS CONTROLS CONTRACTOR AND APPROVED SHOP DRAWINGS.
- NOT ALL SYSTEM DEVICES ARE SHOWN. REFER TO PLANS, SCHEDULES, AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.

CONFORMED SET 01 JUL 2016

ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016
No. Description Date

Drawing Title:

**LIGHTING CONTROL
DIAGRAMS - LEVELS 3 & 4**

Project No.: 04561.01 Checked by:

E0705

ABBREVIATIONS

A.C.S.	-	ACCESS CONTROL SYSTEM
A.F.F.	-	ABOVE FINISHED FLOOR
AHJ	-	AUTHORITY HAVING JURISDICTION
AV	-	AUDIO / VISUAL
BAS	-	BUILDING AUTOMATION SYSTEM
B.C.	-	BELOW CEILING
C	-	CONDUIT
CAM	-	CAMERA
CB	-	CIRCUIT BREAKER
DN	-	DOWN
DWG	-	DRAWING
EAB	-	EAST ACADEMIC BUILDING
EF	-	ENTRANCE FACILITY
ELEC	-	ELECTRIC OR ELECTRICAL
EMT	-	ELECTRICAL METALLIC TUBING
ER	-	EXISTING RELOCATED
ETR	-	EXISTING TO REMAIN
FA	-	FIRE ALARM
FO	-	FIBER OPTIC
FS	-	FUSIBLE SWITCH
G.C.	-	GENERAL CONTRACTOR
GF	-	GROUND FAULT
GFCl	-	GROUND FAULT CIRCUIT INTERRUPTER
GNd	-	GROUND
HH	-	HANDHOLE
IDF	-	INTERMEDIATE DISTRIBUTION FRAME
IMC	-	INTERMEDIATE METAL CONDUIT
IP	-	INTERNET PROTOCOL
IPS	-	IMAGES PER SECOND
IO	-	INPUT/OUTPUT
IS	-	INFORMATION SYSTEMS
LAN	-	LOCAL AREA NETWORK
LCD	-	LIQUID CRYSTAL DISPLAY
LED	-	LIGHT EMITTING DIODE
MATV	-	MASTER ANTENNA TELEVISION
MC	-	METAL CLAD
MCC	-	MOTOR CONTROL CENTER
MCP	-	MOTOR CONTROL PANEL
MDF	-	MAIN DISTRIBUTION FRAME
MH	-	MANHOLE
MMFO	-	MULTIMODE FIBER OPTIC
MTR	-	MAIN TELECOM ROOM
MT	-	EMPTY CONDUIT
NC	-	NOT IN CONTRACT
OSP	-	OUTSIDE PLANT
OFVI	-	OWNER FURNISHED VENDOR INSTALLED
PA	-	PUBLIC ADDRESS
POE	-	POWER OVER ETHERNET
PP	-	PATCH PANEL
PR	-	PAIR
PDS	-	PREMISE DISTRIBUTION SYSTEM
PVC	-	POLYVINYL CHLORIDE CONDUIT
R	-	RECESSED
RMU	-	RACK MOUNTING UNIT
SHLD	-	SHIELDED (AS IN CABLE)
SMFO	-	SINGLEMODE FIBER OPTIC
STR	-	STRAND
T	-	TELEPHONE
TTB	-	TELEPHONE TERMINAL BOARD
TVSS	-	TRANSIENT VOLTAGE SURGE SUPPRESSOR
TYP.	-	TYPICAL
U.G.	-	UNDERGROUND
UNG	-	UNGROUND
UPS	-	UNINTERRUPTIBLE POWER SUPPLY
UTP	-	UNSHIELDED TWISTED PAIR
U.O.N.	-	UNLESS OTHERWISE NOTED
VOIP	-	VOICE OVER INTERNET PROTOCOL
VSS	-	VIDEO SURVEILLANCE SYSTEM
VT	-	VOLTAGE TRANSFORMER
WT	-	WATERTIGHT
XP	-	EXPLOSION PROOF
WAP	-	WIRELESS ACCESS POINT
WP	-	WEATHER-PROOF

WIRING PLANS

	CONDUIT RUN CONCEALED IN CEILING OR WALL CONSTRUCTION
	CONDUIT RUN IN FLOOR CONSTRUCTION OR UNDERGROUND
	CONDUIT RUN EXPOSED
	CONDUIT TURNING UP
	CONDUIT TURNING DOWN
	CONDUIT STUB
	BASKET TRAY
BOBT: X-X" = BOTTOM OF BASKET TRAY ELEVATION ABOVE FINISH FLOOR	

JUNCTION AND PULL BOXES

	JUNCTION BOX
	WALL MOUNTED AUDIO VISUAL RACK BOX. PROVIDE A 4-11/16" X 2-1/8" DEEP BOX WITH A 2-GANG RING (VERTICAL) AND 1" CONDUIT STUBBED INTO ACCESSIBLE CEILING SPACE, UNLESS OTHERWISE NOTED ON PLANS.
	WALL MOUNTED AUDIO VISUAL BACK BOX. PROVIDE A HUBBELL 3-GANG LARGE CAPACITY BOX (#HBL263) WITH A 3-GANG RING AND (2) 1 1/2" CONDUITS STUBBED INTO ACCESSIBLE CEILING SPACE, UNLESS OTHERWISE NOTED ON THE PLANS.
	WALL MOUNTED IPAD DOCK BOX. PROVIDE A 4-11/16" SQUARE X 2-1/8" DEEP BOX WITH A 2-GANG RING (VERTICAL) AND 1" CONDUIT STUBBED INTO ACCESSIBLE CEILING SPACE.
	WALL MOUNTED MONITOR BOX. PROVIDE A 4-11/16" SQUARE X 2-1/8" DEEP BOX WITH A SINGLE RING (VERTICAL) AND 1" CONDUIT STUBBED INTO ACCESSIBLE CEILING SPACE, UNLESS OTHERWISE NOTED ON PLANS.
	WALL MOUNTED MONITOR BOX. PROVIDE A 4-11/16" SQUARE X 2-1/8" DEEP BOX WITH A SINGLE RING (VERTICAL) AND 1" CONDUIT STUBBED INTO ACCESSIBLE CEILING SPACE, UNLESS OTHERWISE NOTED ON PLANS.
	PULL BOX
	WALL MOUNTED PROJECTOR BOX. PROVIDE A 4-11/16" SQUARE X 2-1/8" DEEP BOX WITH A SINGLE RING (VERTICAL) AND 1" CONDUIT STUBBED INTO ACCESSIBLE CEILING SPACE, UNLESS OTHERWISE NOTED ON PLANS. COORDINATE HEIGHT AND LOCATION WITH PROJECTOR INSTALLER

ACCESS CONTROL SYSTEM

	MAGNETIC STRIPE TYPE CARD READER. MOUNT AT 48" A.F.F.
	MAGNETIC STRIPE TYPE CARD READER. MULLION MOUNT AT 48" A.F.F.
	ACCESS CONTROL PANEL
	DOOR INTERFACE BOX
	DOOR CONTACT SWITCH
	POWER SUPPLY
	ELECTRIC STRIKE
	ELECTRIFIED PANIC BAR

TELECOM GROUNDING

	TELECOM MAIN GROUND BUS BAR
	TELECOM GROUND BUS BAR

DRAWING REFERENCES

	DETAIL NUMBER
	PLAN DETAIL REFERENCE TITLE
	DRAWING NUMBER
	KEYED NOTE DESIGNATION
	SECTION NUMBER
	SECTION REFERENCE TITLE
	DRAWING NUMBER
	SECURED DOOR DETAIL REFERENCE
	X - DOOR DETAIL
	Y - DOOR DETAIL SHEET NUMBER
	Z - DOOR NUMBER

SECURITY CAMERAS

SECURITY CAMERA DETAIL REFERENCE	
A- RECESSED, ACCESSIBLE CEILING	
B- RECESSED, INACCESSIBLE CEILING	
C- OUTDOOR, WALL MOUNTED SEE DETAIL ON SHEET T0802	
	FIXED CAMERA
	CAM 1-1 = CAMERA TAG
	PAN-TILT-ZOOM CAMERA
	CAM 1-1 = CAMERA TAG

AUDIO/ISUAL CAMERAS

	FIXED CAMERA
	PAN-TILT-ZOOM CAMERA

TELECOMMUNICATIONS SYSTEM

	WALL MOUNTED COMMUNICATIONS OUTLET. MOUNT 18" A.F.F. PROVIDE 4 11/16" SQUARE X 3" DEEP BOX WITH 1 GANG RING (VERTICAL) AND 1" CONDUIT STUBBED INTO ACCESSIBLE CEILING SPACE, UNLESS NOTED OTHERWISE ON PLANS. PROVIDE INDICATED QUANTITY OF CATEGORY 6A CABLES TO DATA ROOM IDENTIFIED ON PLANS.
	CEILING MOUNTED COMMUNICATIONS OUTLET. FLUSH MOUNT FACING DOWN, UNLESS NOTED OTHERWISE ON PLANS. PROVIDE 4 11/16" SQUARE X 3" DEEP BOX WITH 1 GANG RING AND 1" CONDUIT STUBBED INTO ACCESSIBLE CEILING SPACE. UNLESS NOTED OTHERWISE ON PLANS, PROVIDE INDICATED QUANTITY OF CATEGORY 6A CABLES TO DATA ROOM IDENTIFIED ON PLANS.
	FLOOR MOUNTED COMMUNICATIONS OUTLET. PROVIDE INDICATED QUANTITY OF CATEGORY 6A CABLES TO DATA ROOM IDENTIFIED ON PLANS. PROVIDE DATA OUTLET FACEPLATES THAT ARE COMPATIBLE WITH THE SPECIFIED FLOOR BOXES OR POKE THROUGH FITTINGS.
TELECOMMUNICATIONS OUTLET IDENTIFIERS	
# - CABLE QUANTITY (NO NUMBER DENOTES QUANTITY OF 1)	
C - MOUNT BOTTOM OF OUTLET BOX 1" ABOVE HIGHEST ELEMENT OF COUNTER (IE: BACKSPLASH, OR COUNTERTOP IF NO BACKSPLASH)	
W - WALL MOUNT AT 48" A.F.F.	
F - MOUNT IN BASE OF SYSTEMS FURNITURE PANEL	
KP - KEYPAD DOOR LOCK	
SIGN - DYNAMIC SIGN	
FO - FIBER OPTIC CABLE (REFER TO PLANS FOR CABLE TYPE)	
PA - VOICE OVER INTERNET PROTOCOL SPEAKER	
WAP - WIRELESS ACCESS POINT CONNECTION. PROVIDE 2-PORT OUTLET ABOVE ACCESSIBLE CEILING. PROVIDE (2) CAT6A CABLES TO DATA ROOM IDENTIFIED ON PLANS.	
AV - AUDIO/VISUAL CAMERA CONNECTION. PROVIDE 1-PORT OUTLET ON CEILING. PROVIDE (1) CAT6A CABLE TO DATA ROOM IDENTIFIED ON PLANS.	
	TV OUTLET - CEILING MOUNT COMBINATION F-TYPE MODULE AND DUPLEX/RECEPTACLE OUTLET UNDER A COMMON COVERPLATE.
	PROVIDE ONE (1)RG-6/U COAXIAL TO LOCATION IDENTIFIED ON DRAWINGS.

PUBLIC ADDRESS SYSTEM

	PUBLIC ADDRESS SYSTEM SPEAKER
	FLUSH VOLUME CONTROL - 48" A.F.F.

INTERCOM SYSTEM

	WALL MOUNT EMERGENCY INTERCOM STATION WITH BLUE LIGHT /STROBE

GENERAL NOTES

- THE DRAWINGS HAVE BEEN PREPARED UTILIZING EXISTING DRAWINGS AND BUILDING OBSERVATIONS AND MAY NOT SHOW ALL CONDITIONS. CONTRACTOR SHALL VISIT THE BUILDING AND SITE PRIOR TO BID SUBMISSION AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS. CONTRACTOR WILL NOT BE ALLOWED ADDITIONAL FUNDS OR TIME DUE TO THE CONTRACTOR'S FAILURE TO BECOME FAMILIAR WITH ALL EXISTING CONDITIONS.
- ACCEPTANCE OF CONTRACT MEANS INSTALLER ACCEPTS EXISTING CONDITIONS.
- COORDINATE INSTALLATION WITH EXISTING CONDITIONS. FIELD VERIFY EXISTING CONDITIONS.
- ALL PENETRATIONS THROUGH CONCRETE OR MASONRY WALLS AND FLOOR SLABS SHALL BE CORE DRILLED. AFTER CONDUITS HAVE BEEN INSTALLED, SEAL WALL AROUND CONDUIT TO MAINTAIN FIRE RATING OF FLOOR OR WALL USING UL LISTED METHODS AND MATERIALS. EXTERIOR WALLS SHALL BE SEALED WATERTIGHT.
- PROVIDE ELECTRICAL METALLIC TUBING (EMT) SLEEVES WITH INSULATED BUSHINGS ON EACH END FOR ALL CABLES PASSING THROUGH WALLS AND FLOORS. ALL PENETRATIONS THROUGH RATED WALLS AND FLOORS SHALL BE FIRESTOPPED. SEAL AROUND OUTSIDE OF CONDUITS AND SEAL INSIDE OF CONDUIT SLEEVES. REFER TO PLANS FOR ADDITIONAL FIRESTOPPING DEVICES AND REQUIREMENT, AND SPECIFICATION SECTION 078413.
- CABLING TO BE LOCATED INSIDE BUILDINGS SHALL BE CONCEALED AND SHALL BE INSTALLED AS FOLLOWS: CABLES CONCEALED INSIDE HOLLOW WALL CONSTRUCTION SHALL BE INSTALLED IN CONDUITS STUBBED INTO ACCESSIBLE CEILING CAVITIES. CABLES INSTALLED IN ACCESSIBLE CEILING CAVITIES SHALL BE SUPPORTED WITH CATEGORY 6 RATED 1" HOOK SUPPORTS LOCATED AT A MAXIMUM OF 4'-0" ON CENTER. CABLES LOCATED IN ROOMS WITH AN EXPOSED CEILING STRUCTURE SHALL BE INSTALLED IN CONDUIT. CABLES INSTALLED ABOVE DRYWALL CEILING SHALL BE INSTALLED IN CONDUIT. ROUTE CONDUIT AND CABLES TO SUIT FIELD CONDITIONS, PROVIDE INSULATED BUSHING ON CONDUITS STUBBED INTO CEILING CAVITY.
- CONTRACTOR SHALL COORDINATE ALL CONDUIT AND CABLE ROUTING WITH EXISTING CONDITIONS PRIOR TO INSTALLATION.
- CONTRACTOR SHALL TERMINATE AND TEST ALL TELECOMMUNICATIONS SYSTEM CABLES, INCLUDING FIBER OPTIC CABLES, PER THE LATEST VERSION OF THE TIA/EIA-568 STANDARD. PROVIDE TEST RESULTS TO ENGINEER FOR FINAL ACCEPTANCE. CABLES NOTED AS SPARE OR FUTURE SHALL BE TERMINATED, TESTED, LABELED AND LEFT PROTECTED FOR FUTURE USE. SEE SPECIFICATION FOR ADDITIONAL INFORMATION.
- CATEGORY 6A CABLE TOTAL CABLE LENGTH SHALL NOT EXCEED 90 METERS (290 FEET) PER EIA/TIA STANDARDS. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY LOCATION THAT EXCEEDS THIS LENGTH PRIOR TO THE INSTALLATION OF CONDUIT OR CABLE. INSTALLATION OF CONDUIT OR CABLE THAT EXCEEDS 90 METERS SHALL BE REMOVED AND REPLACED WITH FIBER OPTIC CABLE OR RE-ROUTED TO A DISTANCE LESS THAN 90 METERS (290 FEET) BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL LABEL ALL CABLES AND CONNECTORS (OUTLETS, PATCH PANELS AND PUNCHDOWNS) PER SPECIFICATIONS AND OWNER STANDARDS. ALL CABLES SHALL BE LABELED WITH A PERMANENT, SELF-ADHERING LABELING SYSTEM. LABEL MUST BE APPLIED TO BOTH ENDS OF THE CABLE AND SHALL BE VISIBLE AFTER FINAL INSTALLATION. ALL LABELING SHALL ADHERE TO OWNER'S LABELING STANDARDS.
- CONDUIT AND BOX LABELS SHALL BE HEAVY-DUTY PRE-PRINTED LABELS SUITABLE FOR THE ENVIRONMENT THE LABEL WILL RESIDE WITHIN. HAND-WRITTEN LABELS WILL NOT BE ALLOWED.
- CONTRACTOR SHALL INSTALL AND MOUNT ALL EQUIPMENT CABINETS PER MANUFACTURERS REQUIREMENTS.
- ALL EXPOSED CONDUIT, BOXES, SUPPORTING HARDWARE, ETC. LOCATED IN FINISHED AREAS WITH AN EXPOSED CEILING STRUCTURE SHALL BE PAINTED TO MATCH CEILING STRUCTURE. COORDINATE WITH ARCHITECT.
- PROVIDE WORK SPECIFIED BUT NOT SHOWN ON DRAWINGS, AND WORK SHOWN ON DRAWINGS BUT NOT SPECIFIED, AS THOUGH EXPRESSLY REQUIRED BY BOTH.
- DO NOT ROUTE CONDUITS CONCEALED IN ABOVE GRADE CONCRETE SLABS. CONDUITS SHALL BE ROUTED EXPOSED TO UNDERSIDE OF THE SLAB AND STUBBED UP THROUGH THE SLAB TO THE EQUIPMENT BEING SERVED.
- CONTRACTOR SHALL REFER TO "ARCHITECTURAL REFLECTED CEILING PLANS" FOR PLACEMENT OF ALL CEILING MOUNTED EQUIPMENT. COORDINATE INSTALLATION WITH THE WORK OF OTHER TRADES THAT AFFECT THE PLACEMENT OF CEILING MOUNTED EQUIPMENT.
- CONTRACTOR SHALL PROVIDE PULL STRINGS IN ALL EMPTY OR SPARE CONDUITS.
- CABLING INSTALLED IN MECHANICAL AND ELECTRICAL ROOMS, ELEVATOR ROOMS AND VAULTS SHE BE INSTALLED IN CONDUIT FOR THE ENTIRE RUN INSIDE THE ROOM.
- AV SYSTEM, INFRASTRUCTURE CABLING, AND BOXES ARE SHOWN ON THE DRAWINGS. CONTRACTOR SHALL COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF ROUGH-IN WITH THE AV EQUIPMENT INSTALLER PRIOR TO INSTALLATION.
- FLOOR BOXES ARE SPECIFIED ON THE ELECTRICAL DRAWINGS UNLESS OTHERWISE NOTED.
- THE ELECTRICAL DRAWING SPECIFY 2 CHANNEL (POWER AND COMMUNICATIONS) SURFACE RACEWAY IN SEVERAL LOCATIONS. PROVIDE A 1" CONDUIT FROM THE COMMUNICATIONS CHANNEL STUBBED INTO ACCESSIBLE CEILING SPACE IN ALL RACEWAY LOCATIONS.
- WIRELESS ACCESS POINTS SHALL BE FURNISHED BY OWNER, INSTALLED BY CONTRACTOR.
- PUBLIC ADDRESS SPEAKERS SHALL BE FURNISHED BY OWNER, INSTALLED BY CONTRACTOR.

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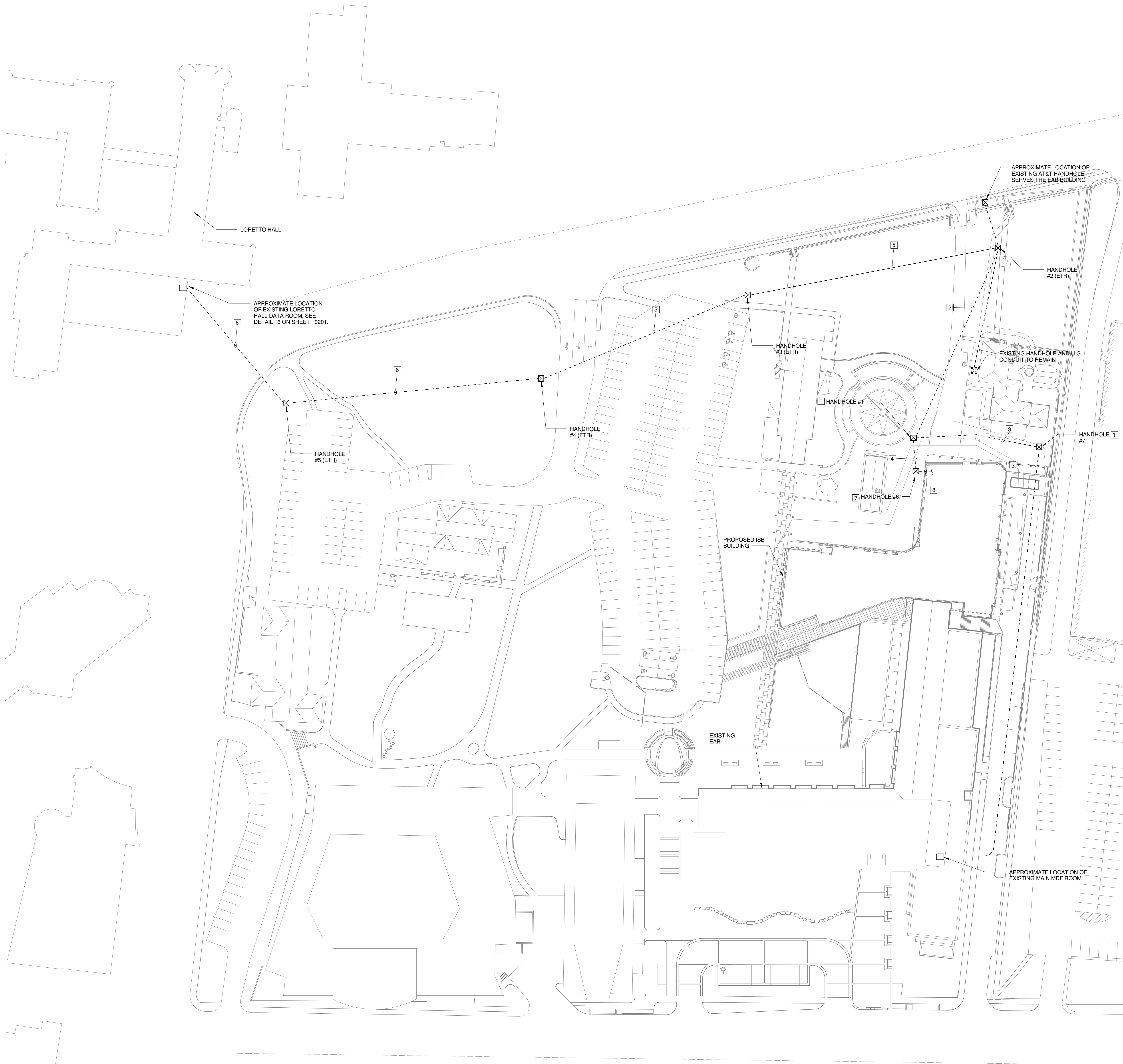
1	ADDENDUM 2-2	19 APR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016
No.	Description	Date

Drawing Title:

SYMBOLS AND ABBREVIATIONS

Project No.: 04561.01 Checked by:

T0001



1 TECHNOLOGY SITE PLAN
1" = 40'-0"

GENERAL NOTES:

1. SEE "PDS BACKBONE CABLING DIAGRAM" ON SHEET T0801 FOR F.O. CABLE INFORMATION FROM LORETTO HALL TO THE ISB.
2. FIBER OPTIC AND COPPER BACKBONE CABLING SHALL BE OUTDOOR RATED WHEN INSTALLED IN UNDERGROUND CONDUITS. SEE DIVISION 27 SPECIFICATIONS FOR MORE INFORMATION.
3. PROVIDE A MINIMUM OF 25 FEET SERVICE LOOP IN ALL HANDHOLES.
4. SPLICE ENCLOSURES INSTALLED IN HANDHOLES SHALL BE RATED FOR INSTALLATION IN UNDERGROUND HANDHOLES.
5. PROVIDE LARGE RADIUS SWEEPS AT ALL CONDUIT BENDS NO LESS THAN 36" RADIUS. PULLING ELBOWS SHALL NOT BE USED.
6. COORDINATE ALL BELOW GRADE UTILITY WORK WITH EXISTING UTILITIES AND THE WORK OF OTHER TRADES PRIOR TO ROUGH-IN.

KEYED NOTES:

THIS SHEET ONLY

- 1 PROVIDE A STRONGWELL QUAZITE 24" X 36" X 18" DEEP OPEN BOTTOM HANDHOLE #PG2436BA18 WITH COVER #PG2436CA00 AND LOGO TO READ "COMMUNICATION".
- 2 STUB EXISTING 4" UNDERGROUND PVC CONDUITS AND INNERDUCTS UP INSIDE HANDHOLE #1 NEW LOCATION. PULL EXISTING INNERDUCTS AND F.O. CABLES INDICATED IN KEYED NOTE #8 ON SHEET T00100 THROUGH CONDUIT AND INTO HANDHOLE #1. SPLICE EXISTING F.O. CABLE TO F.O. SERVING THE EAB. SEE KEYED NOTE 3. INSTALL THE 24 STRAND F.O. CABLE FROM THE ISB TO THE LORETTO HALL DATA ROOM IN THE EXISTING SPARE INNERDUCT.
- 3 PROVIDE UNDERGROUND 4" PVC CONDUIT WITH (3) 1 1/4" INNERDUCTS, ONE FOR THE F.O. CABLE TO THE EAB, ONE FOR AT&T'S F.O. CABLES TO THE EAB, AND ONE SPARE. COORDINATE AT&T F.O. CABLE INSTALLATION WITH AT&T. PROVIDE PULL ROPE IN SPARE INNERDUCT.
- 4 PROVIDE AN UNDERGROUND 4" PVC CONDUIT WITH (3) 1 1/4" INNERDUCTS TO THE ISB MDF, ONE FOR THE F.O. CABLES TO THE ISB, ONE FOR THE COPPER CABLE TO THE ISB AND ONE SPARE. PROVIDE PULL ROPES IN SPARE INNERDUCTS.
- 5 INSTALL F.O. CABLE FROM THE ISB TO LORETTO HALL DATA ROOM IN EXISTING SPARE INNERDUCT.
- 6 EXISTING UNDERGROUND 4" PVC CONDUIT WITH (1) EXISTING INNERDUCT (WITH EXISTING F.O. CABLE INSTALLED). INSTALL (2) 1 1/4" INNERDUCTS WITH PULL STRINGS IN EXISTING 4" PVC CONDUIT. INSTALL F.O. CABLE FROM THE ISB TO THE LORETTO HALL DATA ROOM IN ONE OF THE INNERDUCTS. PROVIDE PULL ROPE IN SPARE INNERDUCT.
- 7 SEE "ENLARGED MDF/IT WORKROOM FLOOR PLAN" AND "HANDHOLE #6 DETAIL" ON SHEET T0201.
- 8 UNDERGROUND PVC CONDUITS TO THE LEVEL 01 MDF, SEE KEYED NOTE #4 ON SHEET T0201.



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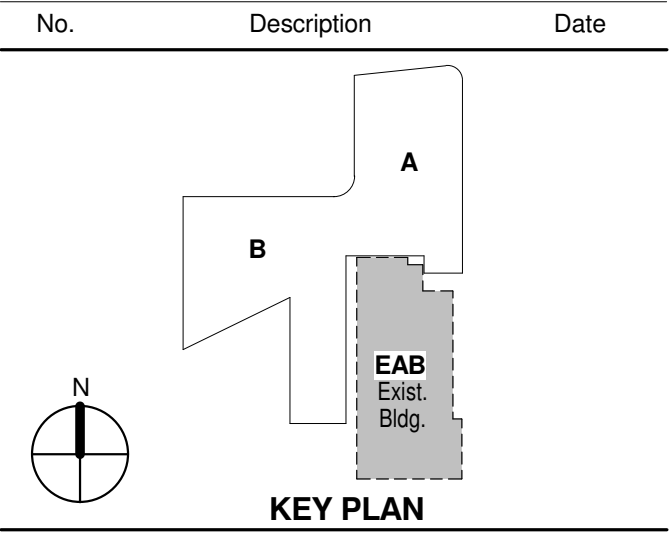
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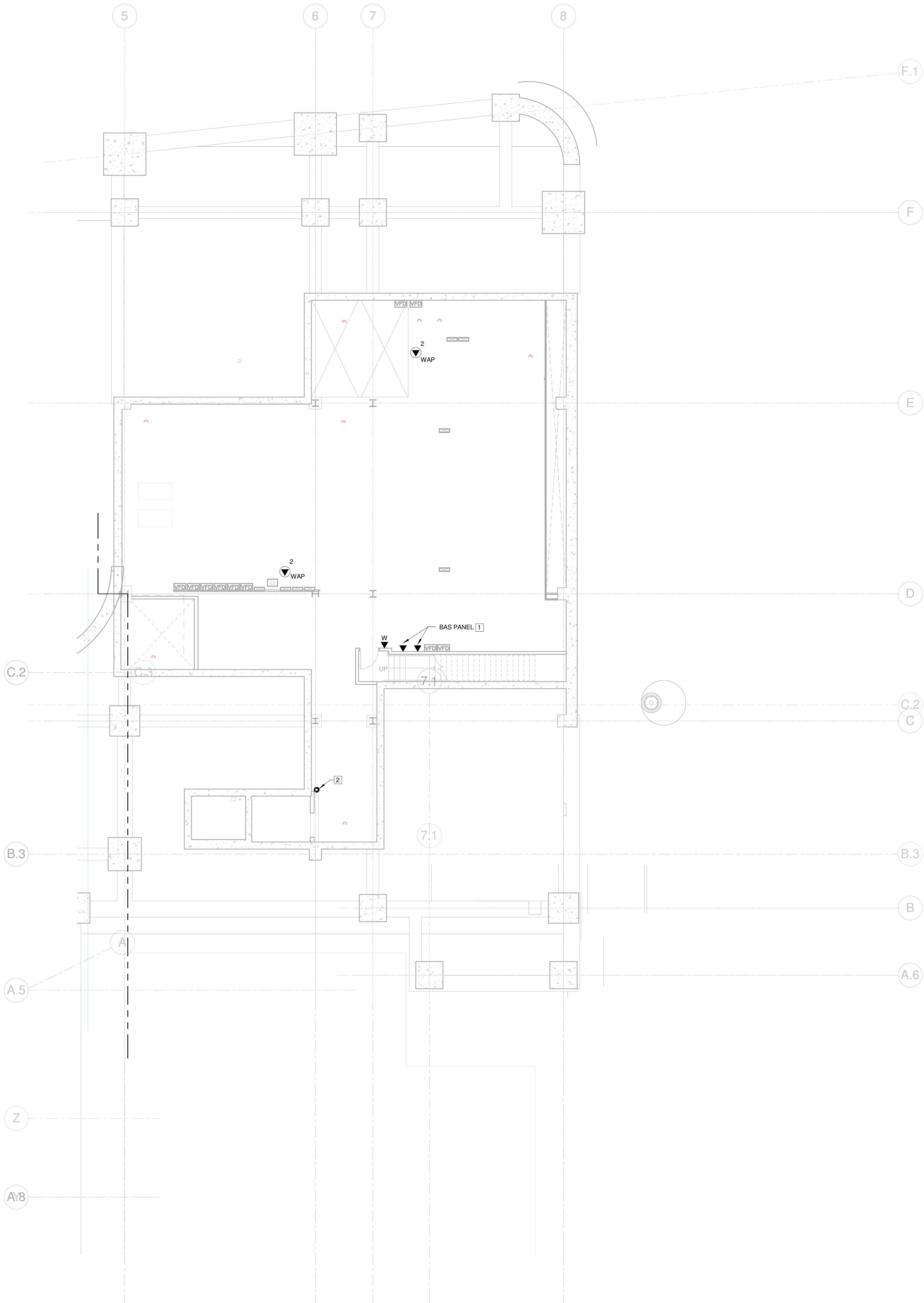


TECHNOLOGY SITE PLAN

Project No.: 04561.01 Checked by:

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GENERAL NOTES: THIS SHEET ONLY

1. TELECOMMUNICATIONS CABLING ON THIS FLOOR SHALL BE RUN TO LEVEL 01 DATA ROOM 100B.

KEYED NOTES: THIS SHEET ONLY

- [1] CONFIRM EXACT LOCATION AND TERMINATION REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
[2] FIRE RATED CABLE PATHWAY LOCATION, SEE KEYED NOTE 6 ON SHEET T0101.A.

1 LEVEL 00 - AREA A
1/8" = 1'-0"



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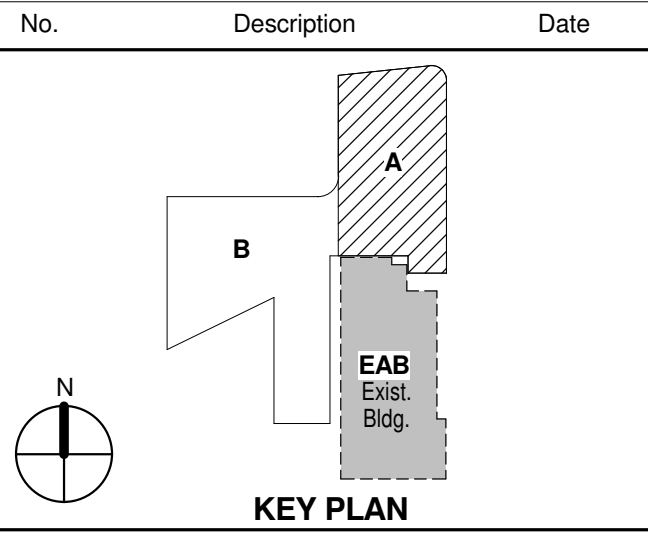
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KEY PLAN

**LEVEL 0 FLOOR PLAN -
AREA A**

Project No.: 04561.01 Checked by:

T0100.A

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1 LEVEL 01 - AREA A
1/8" = 1'-0"



GENERAL NOTES:

THIS SHEET ONLY

1. DATA OUTLETS IN OFFICE SHALL BE LOCATED ADJACENT TO AND AT THE SAME MOUNTING HEIGHT AS THE POWER RECEPTACLES UNLESS OTHERWISE NOTED. COORDINATE LOCATION WITH THE ELECTRICAL CONTRACTOR.
2. SEE TELECOMMUNICATIONS CABLING DEMARCATION LINE ON THIS SHEET FOR ROUTING OF CABLING TO SPECIFIC DATA ROOMS.

KEYED NOTES:

THIS SHEET ONLY

1. CABINET MOUNTED AV EQUIPMENT (OFV).
2. CONFIRM EXACT LOCATION OF DATA OUTLET AND MONITOR BOX WITH AV VENDOR PRIOR TO INSTALLATION.
3. WALL MOUNT BLUE LIGHT EMERGENCY INTERCOM STATION WITH WIRELESS RADIO COMMUNICATION. SHALL BE FURNISHED BY OWNER AND INSTALLED BY SECURITY CONTRACTOR. UNIT SHALL BE MOUNTED SO INTERCOM STATION IS 48" ABOVE GRADE. SEE ELECTRICAL DRAWINGS FOR POWER REQUIREMENTS.
4. INSTALL COMMUNICATION OUTLET IN THE COMMUNICATIONS SIDE OF THE 2-CHANNEL RACEWAY. SEE ELECTRICAL DRAWINGS FOR RACEWAY INFORMATION.
5. CONFIRM EXACT LOCATION AND TERMINATION REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO INSTALLATION.
6. PROVIDE A 4" FIRE RATED CABLE PATHWAY THROUGH FLOOR FOR TELECOM CABLING TO LEVEL 0. SEE SPECIFICATION SECTION 078413 FOR PATHWAY INFORMATION.
7. PROVIDE A 4 11/16" SQUARE 2 1/8" DEEP WALL MOUNTED BOX FOR PTZ CAMERA WITH A 1" CONDUIT WITH PULL STRING STUBBED INTO ACCESSIBLE CEILING SPACE. COORDINATE MOUNTING HEIGHT AND LOCATION WITH PTZ CAMERA INSTALLER.
8. MOUNT AV ROUGH-IN TO THE COOKING HOOD, FIELD COORDINATE MOUNTING LOCATION AND MOUNTING HARDWARE.
9. CONFIRM EXACT LOCATION AND TERMINATION REQUIREMENTS WITH ELEVATOR EQUIPMENT INSTALLER PRIOR TO INSTALLATION.
10. PROVIDE A 1" CONDUIT IN SLAB FROM FLOOR BOX TO AV EQUIPMENT CABINET. VERIFY STUB-UP LOCATION.
11. DATA OUTLET FOR LAPTOP, COORDINATE FLOOR BOX LOCATION WITH CASEWORK INSTALLER PRIOR TO ROUGH-IN. SEE ELECTRICAL DRAWINGS FOR FLOOR BOX INFORMATION.
12. PROVIDE (1) 1" PVC CONDUIT IN THE SLAB, STUB-UP INSIDE WALL CAVITY TO ABOVE ACCESSIBLE CEILING.
13. COORDINATE HEIGHT AND LOCATION WITH PA SPEAKER INSTALLER.



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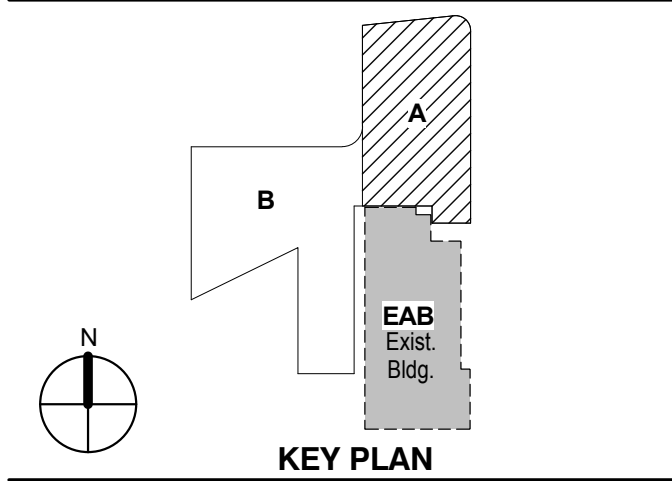
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1 ADDENDUM 2-2 19 APR 2016
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KEY PLAN

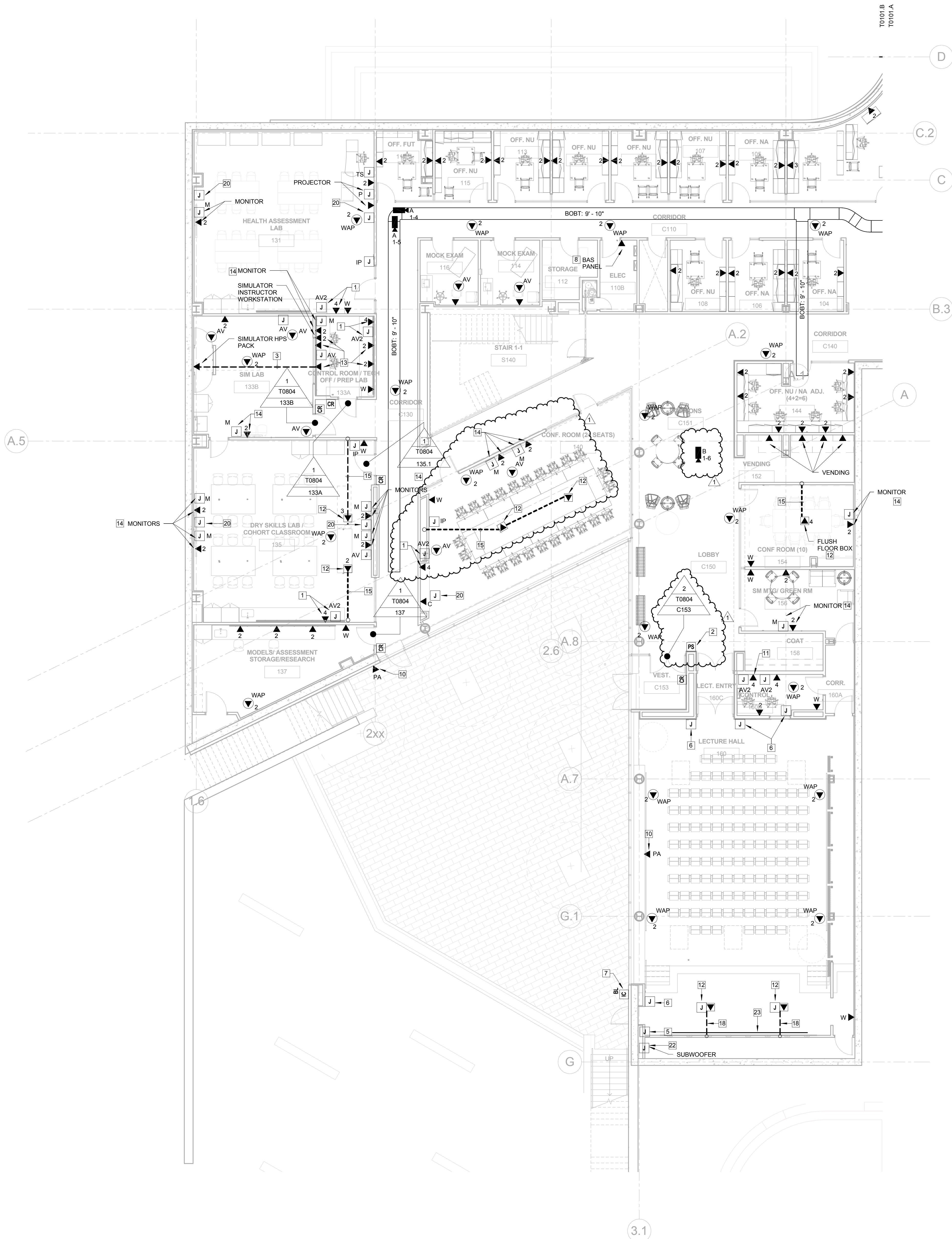
LEVEL 01 FLOOR PLAN - AREA A

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1 LEVEL 01 - AREA B
1/8" = 1'-0"



GENERAL NOTES:

THIS SHEET ONLY

1. DATA OUTLETS IN OFFICES SHALL BE LOCATED ADJACENT TO AND AT THE SAME MOUNTING HEIGHT AS THE POWER RECEPTACLES, COORDINATE LOCATION WITH THE ELECTRICAL CONTRACTOR.
2. TELECOMMUNICATION CABLEING ON THIS SHEET SHALL BE RUN TO LEVEL 01 DATA ROOM 100B.
3. FLOOR BOXES ARE SPECIFIED ON THE ELECTRICAL DRAWINGS UNLESS OTHERWISE NOTED.

KEYED NOTES:

THIS SHEET ONLY

1. CABINET MOUNTED AV EQUIPMENT (OFVI), COORDINATE DEVICE LOCATION WITH CABINET AND AV EQUIPMENT INSTALLER.
2. LOCAL DOOR LOCK POWER SUPPLY.
3. PROVIDE (1) CAT 6A CABLE IN 1" PVC CONDUIT IN SLAB. COORDINATE TERMINATION REQUIREMENTS WITH SIMULATOR EQUIPMENT INSTALLER.
4. PROVIDE A FLUSH MOUNTED WALL BOX (HUBBELL HBL260) WITH A SINGLE GANG RING FOR AV CABLES. STUB A 2" CONDUIT INTO ACCESSIBLE CEILING SPACE.
5. PROVIDE A 4-11/16" SQUARE X 2-1/8" DEEP BOX WITH A SINGLE RING (VERTICAL) AND A 1" CONDUIT STUBBED INTO ACCESSIBLE CEILING SPACE FOR THE AC SYSTEM TOUCH SCREEN CONTROLLER.
6. PROVIDE A 4-11/16" SQUARE X 2-1/8" DEEP BOX WITH 2-GANG RING (VERTICAL) AND (1) 1 1/2" CONDUIT STUBBED INTO ACCESSIBLE CEILING.
7. WALL MOUNT BLUE LIGHT EMERGENCY INTERCOM STATION WITH WIRELESS RAPID COMMUNICATION. SHALL BE FURNISHED BY OWNER AND INSTALLED BY ELECTRICAL CONTRACTOR. STATION SHALL BE MOUNTED SO INTERCOM IS 48" ABOVE GRADE. SEE ELECTRICAL DRAWINGS FOR POWER REQUIREMENTS.
8. CONFIRM EXACT LOCATION AND TERMINATION REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
9. NOT USED
10. COORDINATE HEIGHT AND LOCATION WITH PA SPEAKER INSTALLER.
11. PROVIDE A 24" W X 4" H VERTICAL WALL MOUNTED BASKET TRAY FROM THE AV EQUIPMENT RACK UP INTO THE ACCESSIBLE CEILING SPACE FOR AV CABLEING. COORDINATE EXACT LOCATION WITH AV EQUIPMENT INSTALLER.
12. SEE ELECTRICAL DRAWINGS FOR FLOOR BOX INFORMATION.
13. INSTALL COMMUNICATION OUTLET IN THE COMMUNICATIONS SIDE OF THE 2-CHANNEL RACEWAY. SEE ELECTRICAL DRAWINGS FOR RACEWAY INFORMATION.
14. CONFIRM EXACT LOCATION OF DATA OUTLET AND MONITOR BOX WITH AV VENDOR PRIOR TO INSTALLATION.
15. PROVIDE (2) 1" CONDUITS IN SLAB FOR DATA AND AV CABLES. STUB CONDUIT UP THROUGH WALL CAVITY TO ACCESSIBLE CEILING SPACE.
16. NOT USED
17. NOT USED
18. PROVIDE (1) 1 1/2" CONDUIT FOR AV AND (1) 1" CONDUIT FOR DATA IN SLAB. STUB UP INTO ACCESSIBLE CEILING SPACE.
19. NOT USED
20. PROVIDE A 4-11/16" SQUARE X 2-1/8" DEEP WALL MOUNTED BOX FOR PTZ CAMERA WITH A 1" CONDUIT WITH PULL STRING STUBBED INTO ACCESSIBLE CEILING SPACE. COORDINATE MOUNTING HEIGHT AND LOCATION WITH PTZ CAMERA INSTALLER.
21. NOT USED
22. PROVIDE A 2-GANG J-BOX UNDER THE STAGE WITH A 1" CONDUIT STUBBED INTO ACCESSIBLE CEILING SPACE ABOVE THE CONTROL ROOM FOR THE SUBWOOFER.
23. PROVIDE (8) HUBBELL LARGE CAPACITY WALL BOXES (HBL260) WITH (1) 1 1/2" CONDUIT EACH STUBBED INTO ACCESSIBLE CEILING SPACE IN THE AV EQUIPMENT ROOM FOR THE VIDEO WALL MONITORS. COORDINATE BOX MOUNTING HEIGHT AND LOCATION WITH VIDEO WALL INSTALLER.



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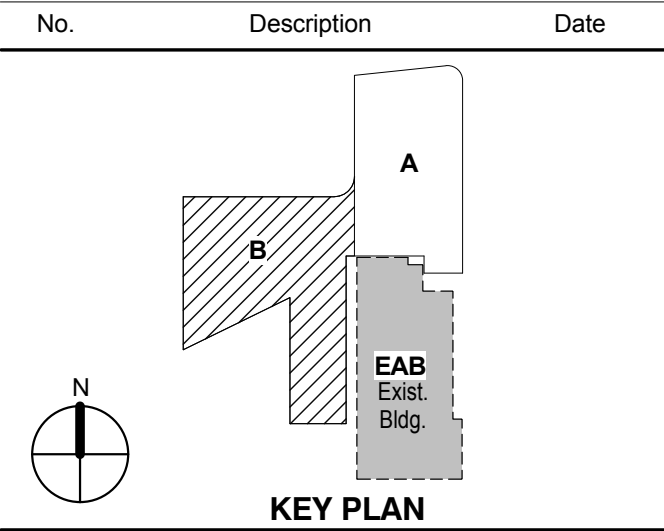
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CONFORMED SET 01 JUL 2016

1 ADDENDUM 2-2 19 APR 2016
ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016



KEY PLAN

LEVEL 01 FLOOR PLAN - AREA B

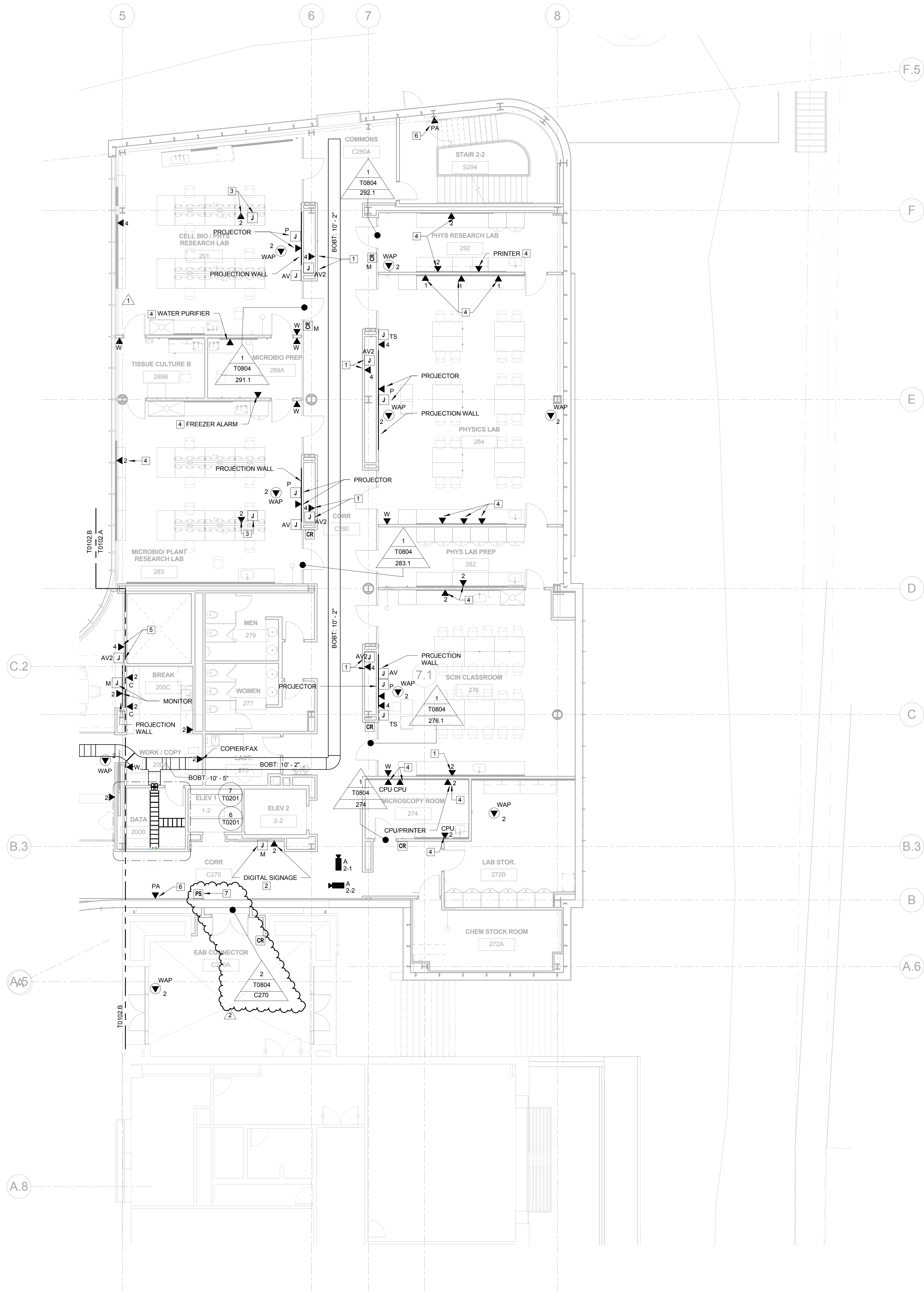
Project No.: 04561.01 Checked by:

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1 LEVEL 02 - AREA A
1/8" = 1'-0"



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2. TELECOMMUNICATIONS CABLING ON THIS SHEET SHALL BE RUN TO LEVEL 02 DATA ROOM 200B.

KEYED NOTES:

THIS SHEET ONLY

- 1 CABINET MOUNTED AV EQUIPMENT (OFVI)
- 2 CONFIRM EXACT LOCATION OF DATA OUTLET AND MONITOR BOX WITH AV VENDOR PRIOR TO INSTALLATION.
- 3 MOUNT DEVICES IN THE OVERHEAD SERVICE CARRIER SYSTEM. PROVIDE AN EMPTY 1" CONDUIT WITH PULL STRING FROM CEILING SPACE. COORDINATE DEVICE LOCATION AND MOUNTING REQUIREMENTS WITH CARRIER SYSTEM INSTALLER.
- 4 MOUNT IN COMMUNICATION CHANNEL OF 2 SECTION RACEWAY. SEE ELECTRICAL DRAWINGS FOR RACEWAY INFORMATION.
- 5 AV EQUIPMENT (OFVI) MOUNTED INSIDE CREDENZA. FIELD COORDINATE DEVICE LOCATION WITH CREDENZA LOCATION.
- 6 COORDINATE HEIGHT AND SPEAKER LOCATION WITH PA SPEAKER INSTALLER.
- 7 LOCAL DOOR LOCK POWER SUPPLY.



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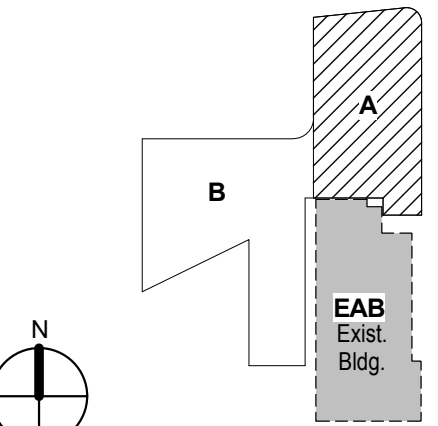
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2	ADDENDUM 2-2	19 APR 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016

No.	Description	Date
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KEY PLAN

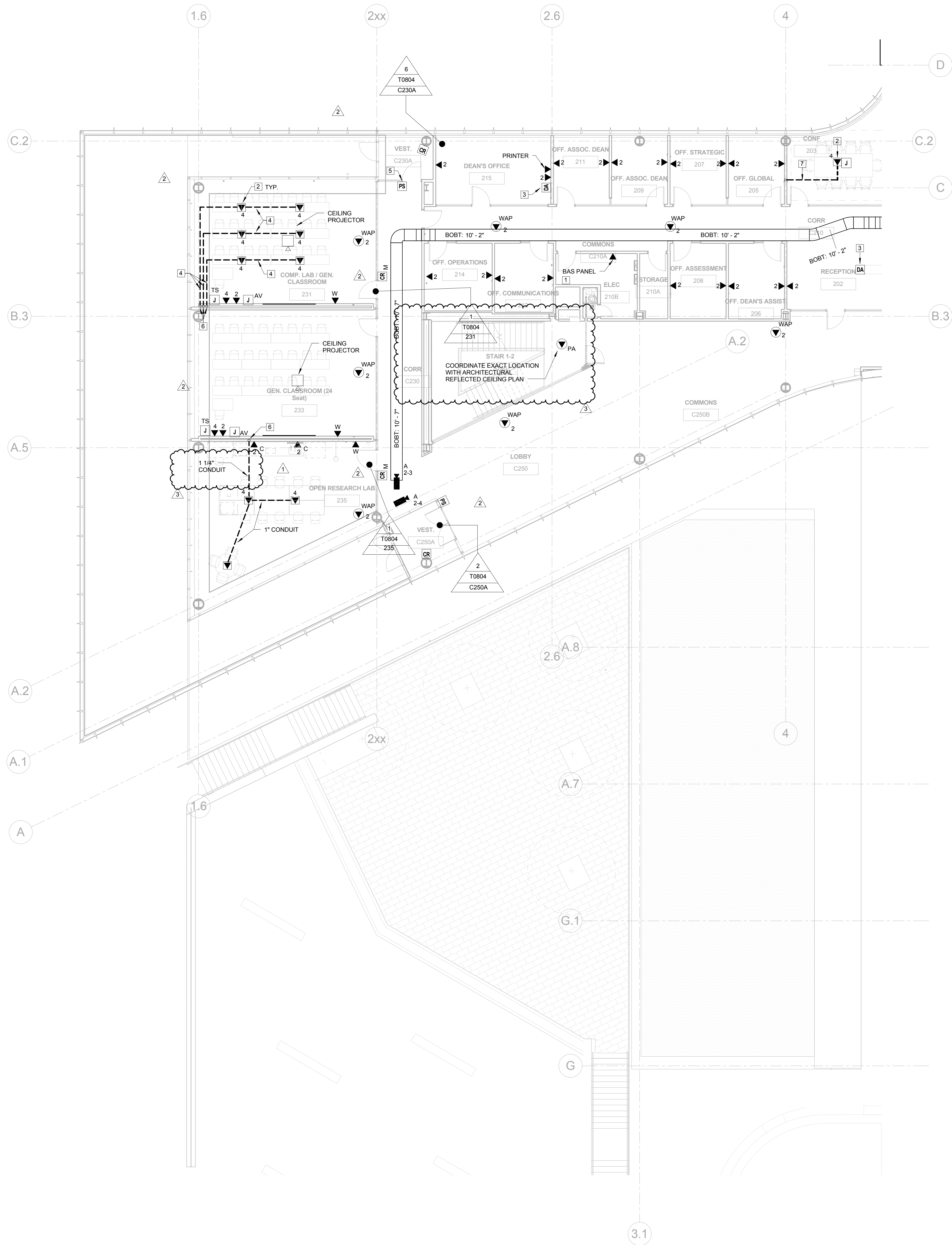
Drawing Title:

**LEVEL 02 FLOOR PLAN -
AREA A**

Project No.: 04561.01 Checked by:

T0102.A

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2. TELECOMMUNICATIONS CABLEING ON THIS SHEET SHALL BE RUN TO LEVEL 02 DATA ROOM 200B

KEYED NOTES: THIS SHEET ONLY

1. CONFIRM EXACT LOCATION AND TERMINATION REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
2. SEE ELECTRICAL DRAWINGS FOR FLOOR BOX INFORMATION.
3. SECURITY SYSTEM DURESS ALARM. INSTALL ON THE BOTTOM SIDE OF THE DESK SURFACE. COORDINATE EXACT LOCATION WITH FURNITURE INSTALLER. COORDINATE WIRING REQUIREMENTS WITH THE SECURITY SYSTEM INSTALLER.
4. PROVIDE A 1-1/4" PVC CONDUIT IN SLAB FOR NETWORK CABLING SERVING DESKTOP COMPUTERS.
5. DOOR LOCK POWER SUPPLY.
6. STUB CONCEALED CONDUITS UP INTO ACCESSIBLE CEILING SPACE.
7. PROVIDE (2) 1" CONDUITS IN SLAB FOR AV AND DATA CABLES. STUB UP IN WALL CAVITY TO ACCESSIBLE CEILING SPACE.



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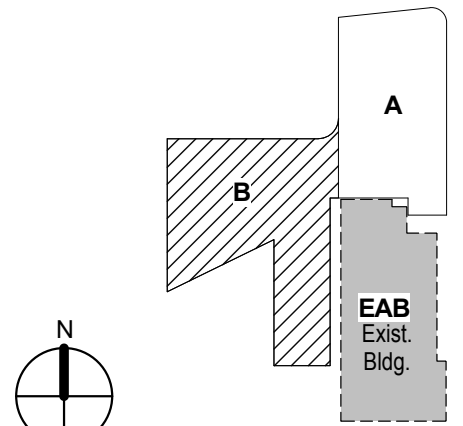
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3. ADDENDUM 2-4 24 MAY 2016
2. ADDENDUM 2-2 19 APR 2016
1. ADDENDUM 2-1 17 MAR 2016
- ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016

No.	Description	Date
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KEY PLAN

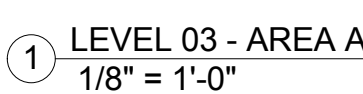
Drawing Title:

LEVEL 02 FLOOR PLAN -
AREA B

Project No.: 04561.01 Checked by:

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2. TELECOMMUNICATION CABLING ON THIS SHEET SHALL BE RUN TO LEVEL 003 DATA ROOM 003B.

KEYED NOTES: THIS SHEET ONLY

- 1 CABINET MOUNTED AV EQUIPMENT (OFVI)
- 2 CONFIRM EXACT LOCATION AND TERMINATION REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
- 3 SEE ELECTRICAL DRAWINGS FOR FLOOR BOX INFORMATION.
- 4 PROVIDE A 4 11/16" X 2 1/8" DEEP WALL MOUNTED BOX FOR PTZ CAMERA WITH A 1" CONDUIT WITH PULL STRING STUBBED INTO ACCESSIBLE CEILING SPACE, COORDINATE MOUNTING HEIGHT AND LOCATION WITH PTZ CAMERA INSTALLER.
- 5 PROVIDE (2) 1" CONDUITS IN SLAB FOR AV AND DATA CABLES, SUB-UP INTO ACCESSIBLE CEILING SPACE.



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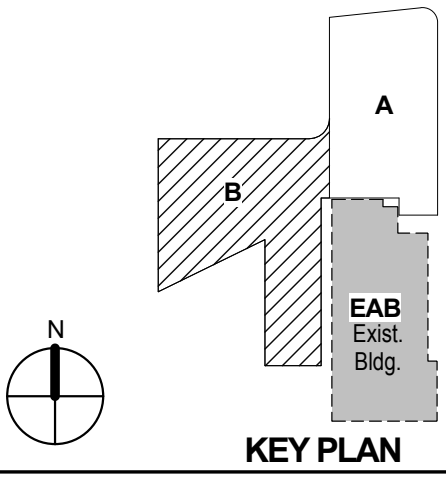
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1	ADDENDUM 2-4	24 MAY 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016
No.	Description	Date



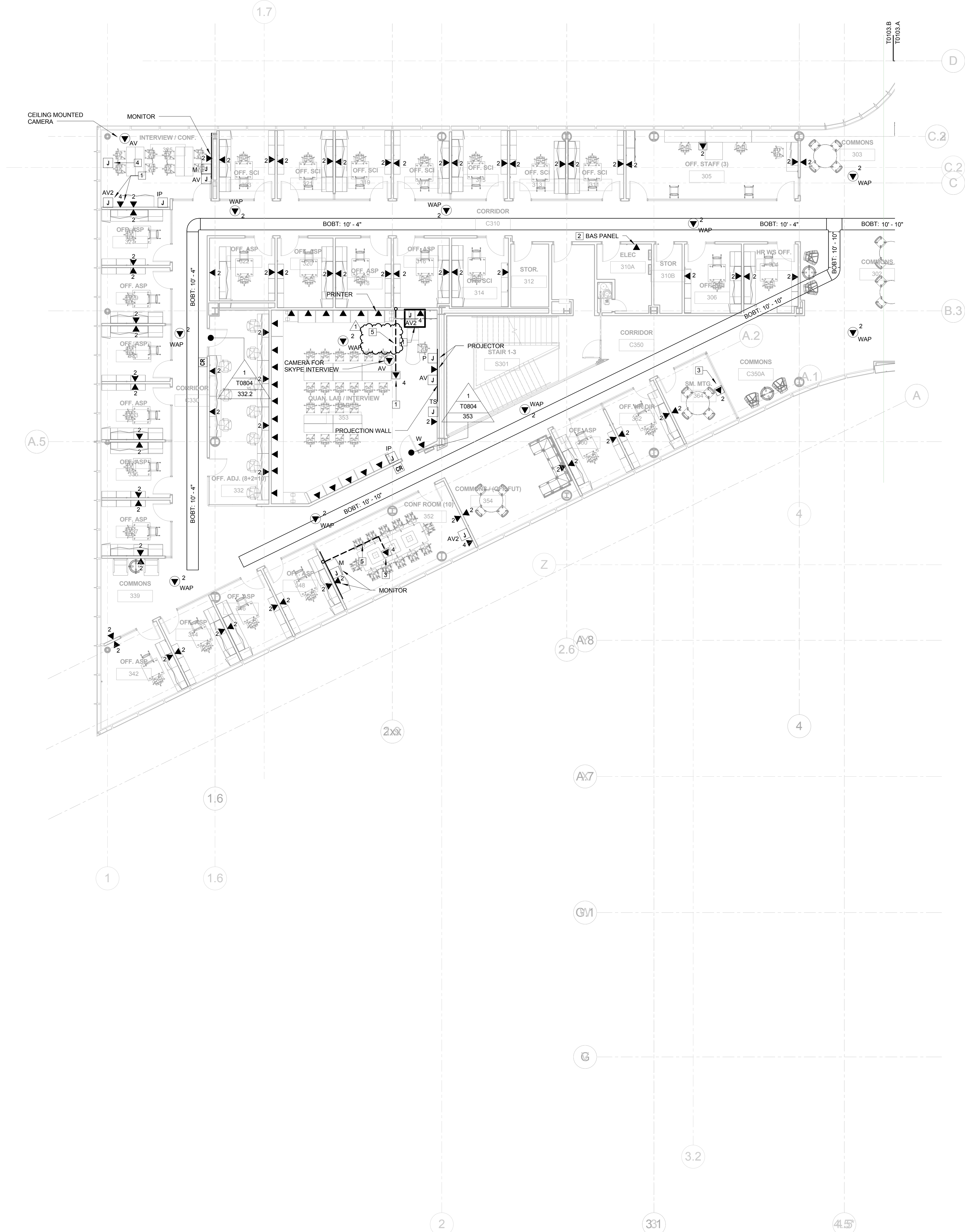
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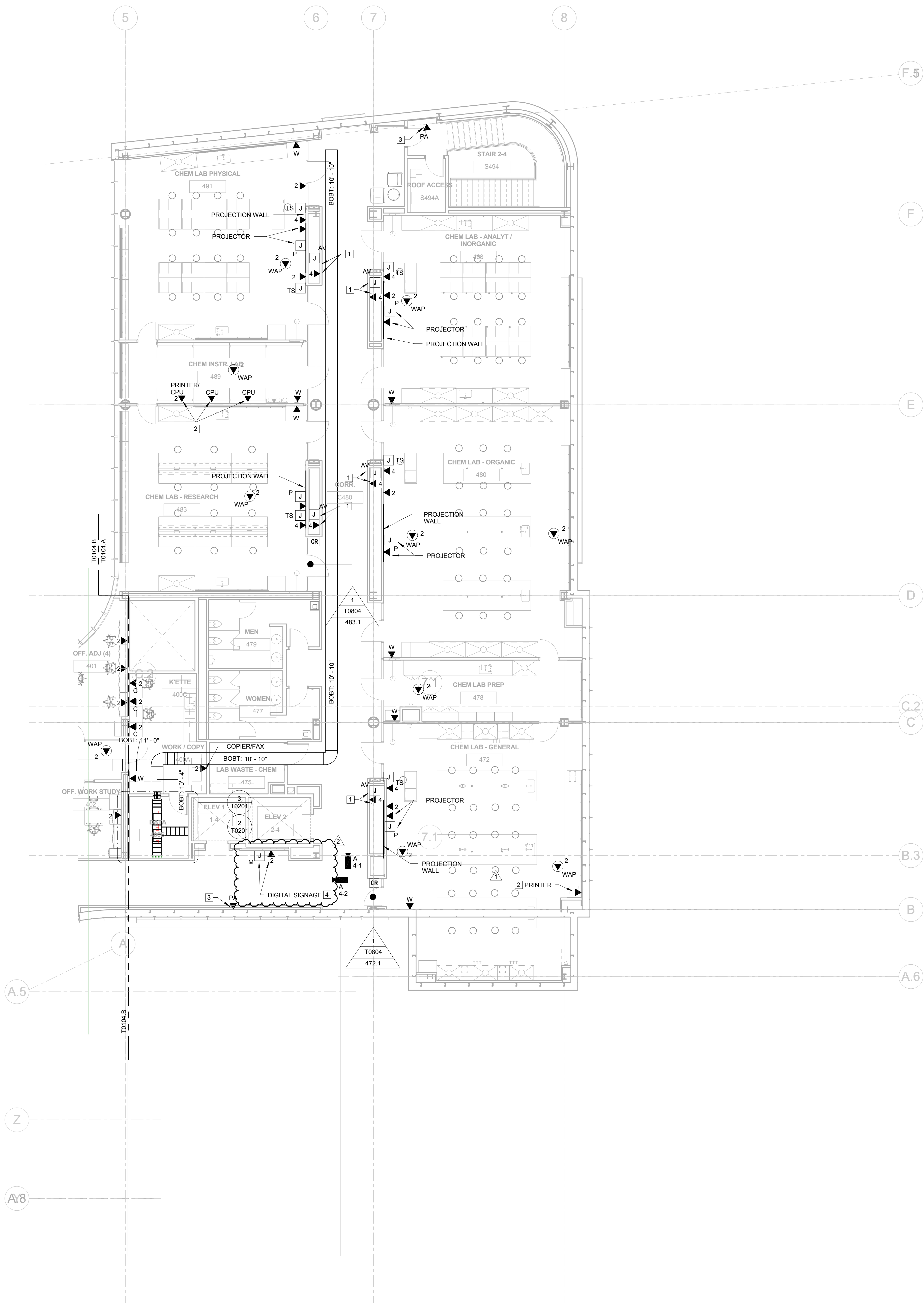
LEVEL 03 FLOOR PLAN -
AREA B

Project No.: 04561.01 Checked by:

T0103.B

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2. TELECOMMUNICATION CABLEING ON THIS SHEET SHALL BE RUN TO LEVEL 04 DATA ROOM 400B.

KEYED NOTES: THIS SHEET ONLY

1. CABINET MOUNTED AV EQUIPMENT (OPVI)
2. INSTALL COMMUNICATION OUTLET IN THE COMMUNICATION SIDE OF THE 2 CHANNEL RACEWAY. SEE ELECTRICAL DRAWINGS FOR INFORMATION.
3. COORDINATE HEIGHT AND LOCATION WITH PA SPEAKER INSTALLER
4. CONFIRM EXACT LOCATION OF DATA OUTLET AND MONITOR WITH AV VENDOR PRIOR TO INSTALLATION.



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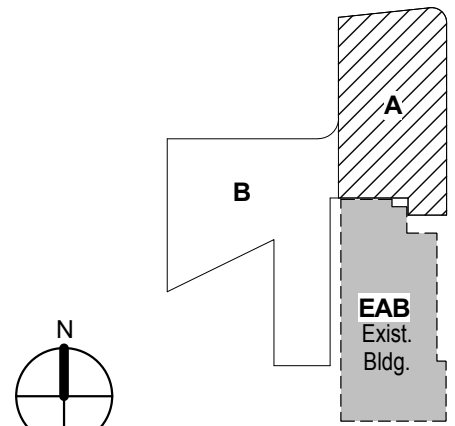
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2	ADDENDUM 2-4	24 MAY 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016

No.	Description	Date
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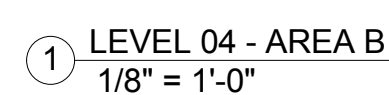
KEY PLAN

Drawing Title:

LEVEL 04 FLOOR PLAN -
AREA A

Project No.: 04561.01 Checked by:

T0104.A



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- 1

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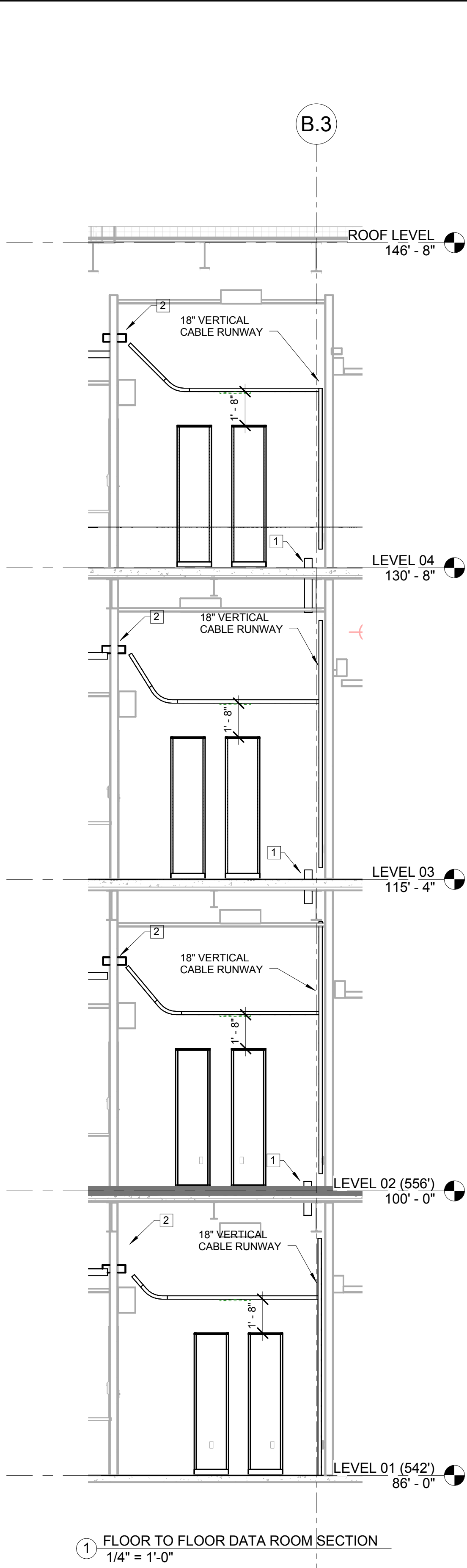
**LEVEL 04 FLOOR PLAN -
AREA B**

Project No.: 04561.01
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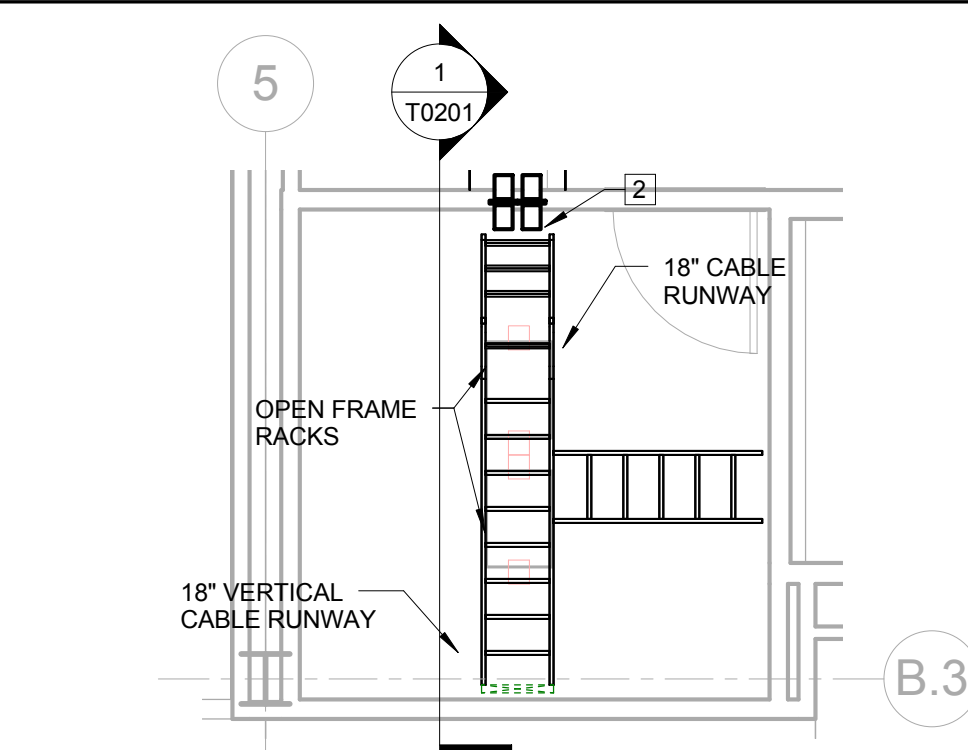
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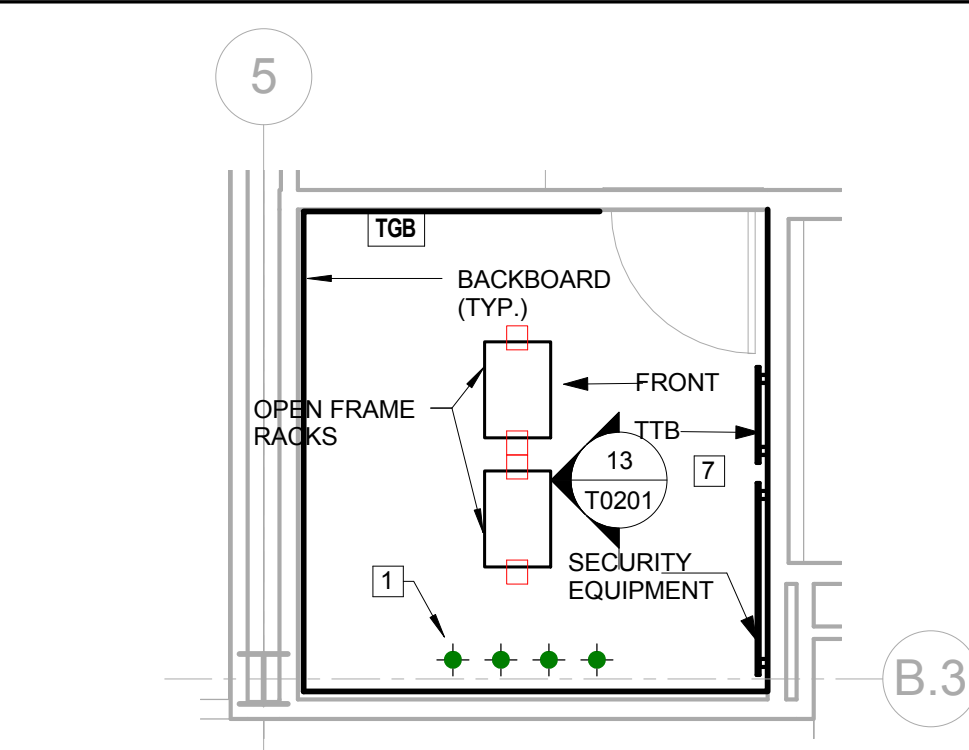
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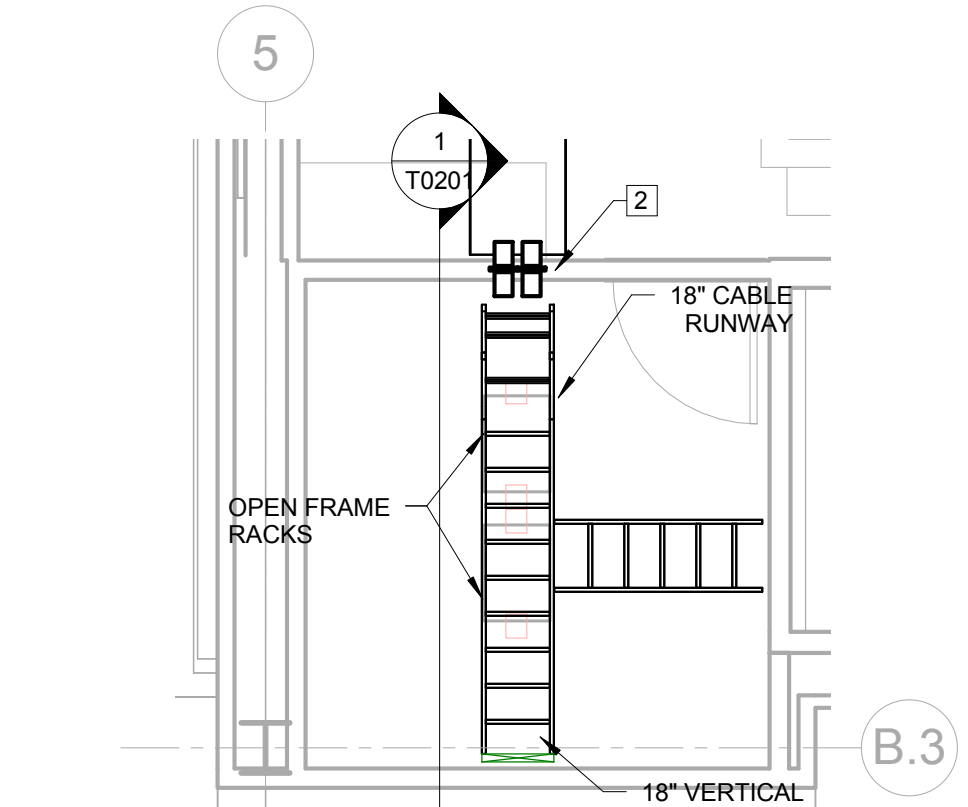
1 FLOOR TO FLOOR DATA ROOM SECTION
1/4" = 1'-0"



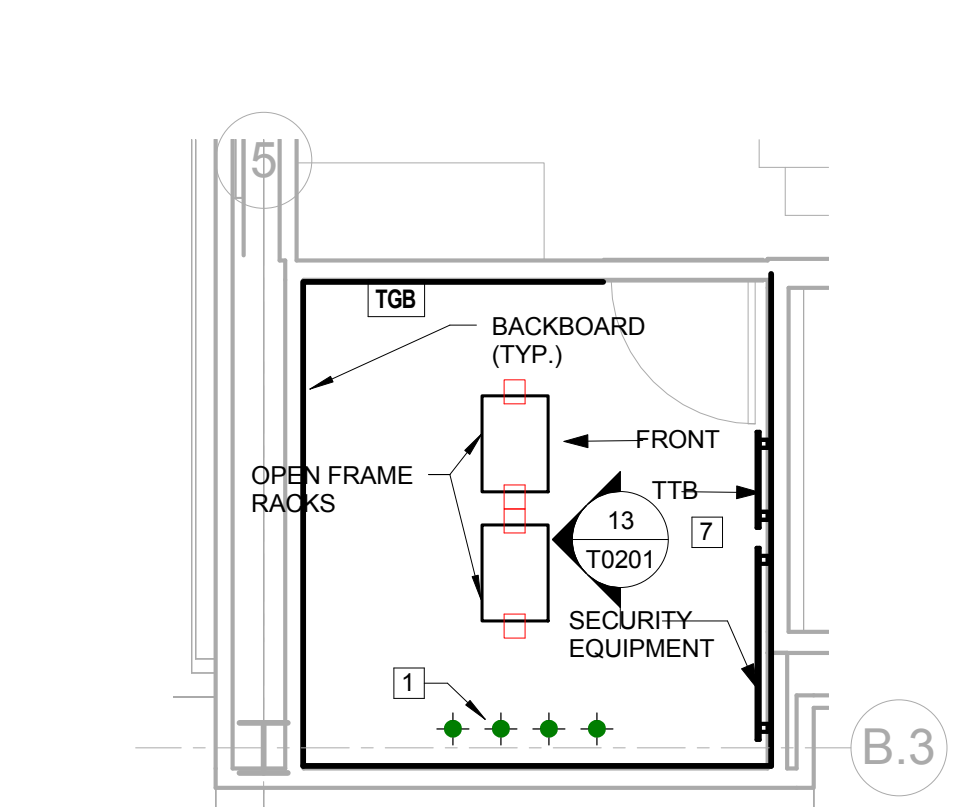
2 ENLARGED DATA ROOM 400B CEILING PLAN
1/4" = 1'-0"



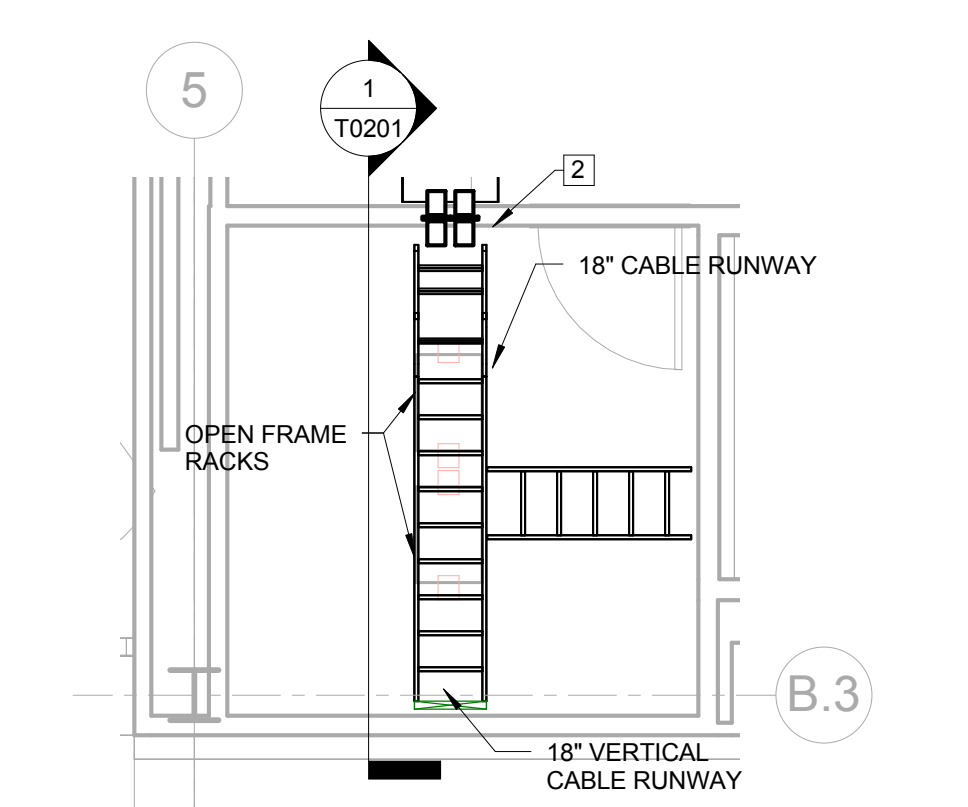
3 ENLARGED DATA ROOM 400B FLOOR PLAN
1/4" = 1'-0"



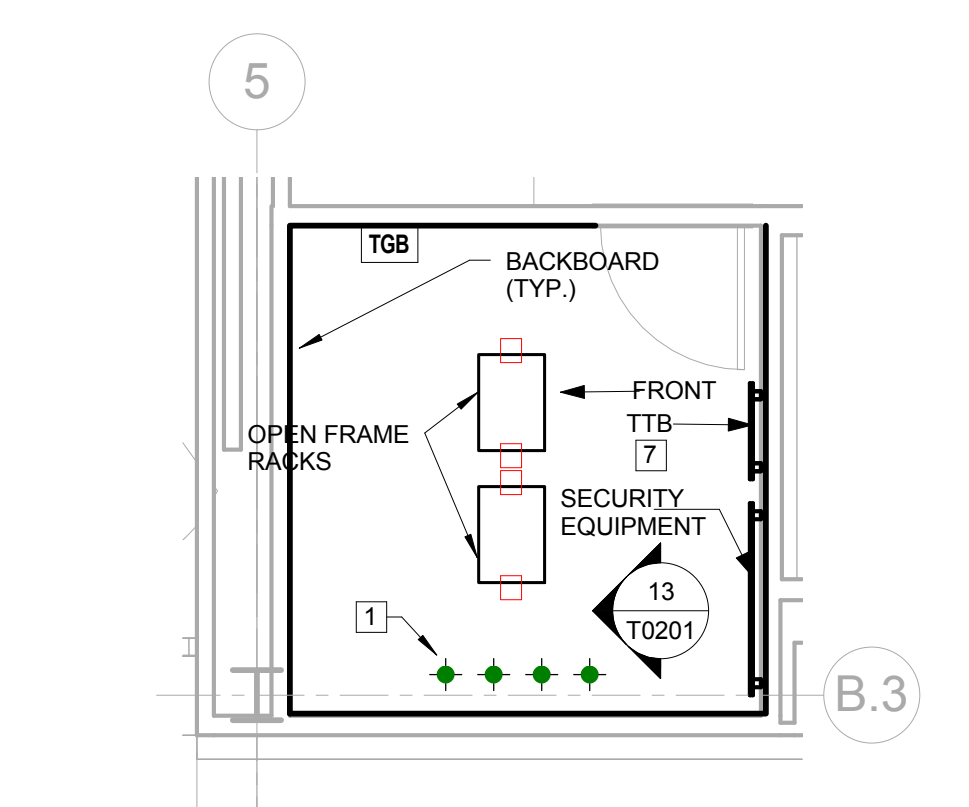
4 ENLARGED DATA ROOM 300B CEILING PLAN
1/4" = 1'-0"



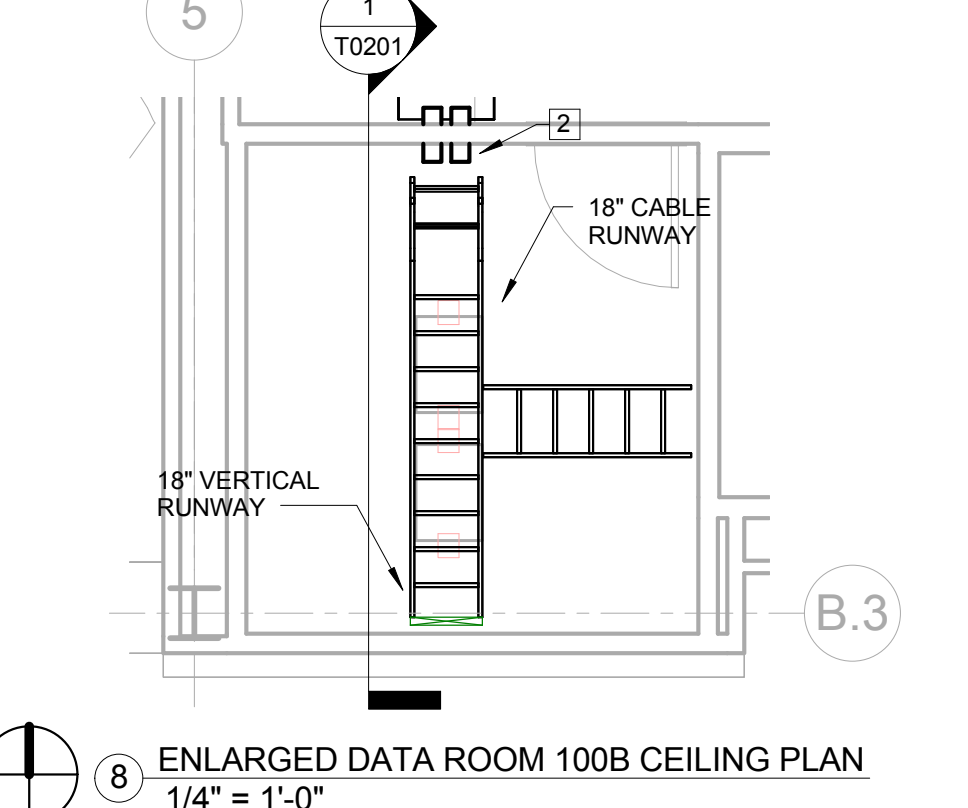
5 ENLARGED DATA ROOM 300B FLOOR PLAN
1/4" = 1'-0"



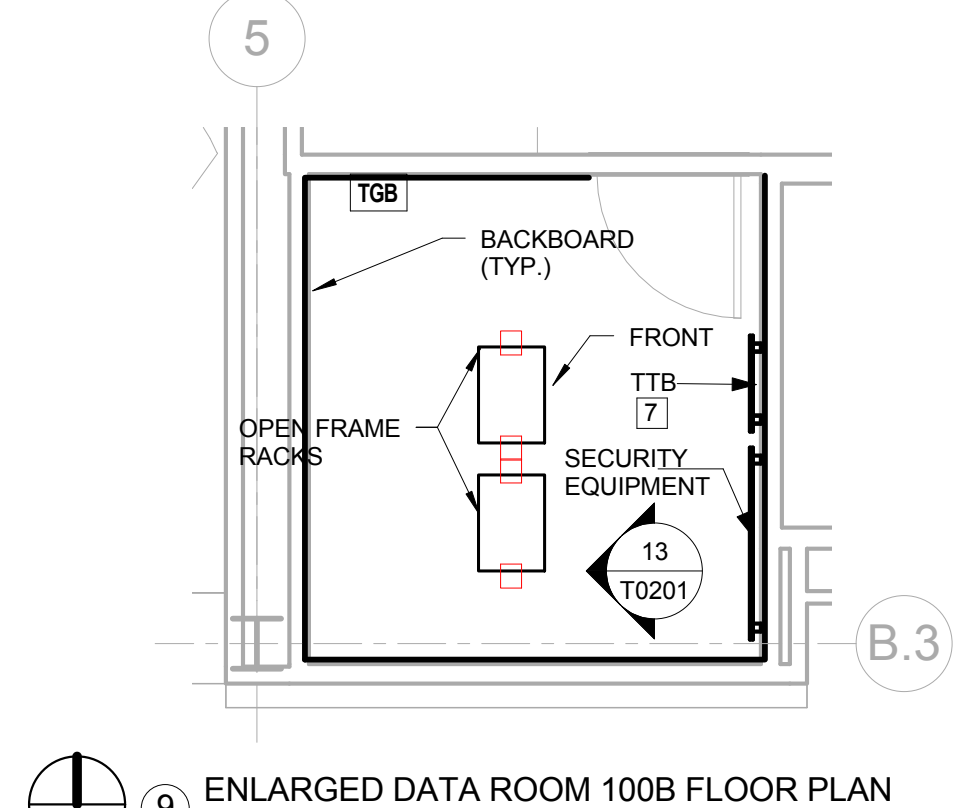
6 ENLARGED DATA ROOM 200B CEILING PLAN
1/4" = 1'-0"



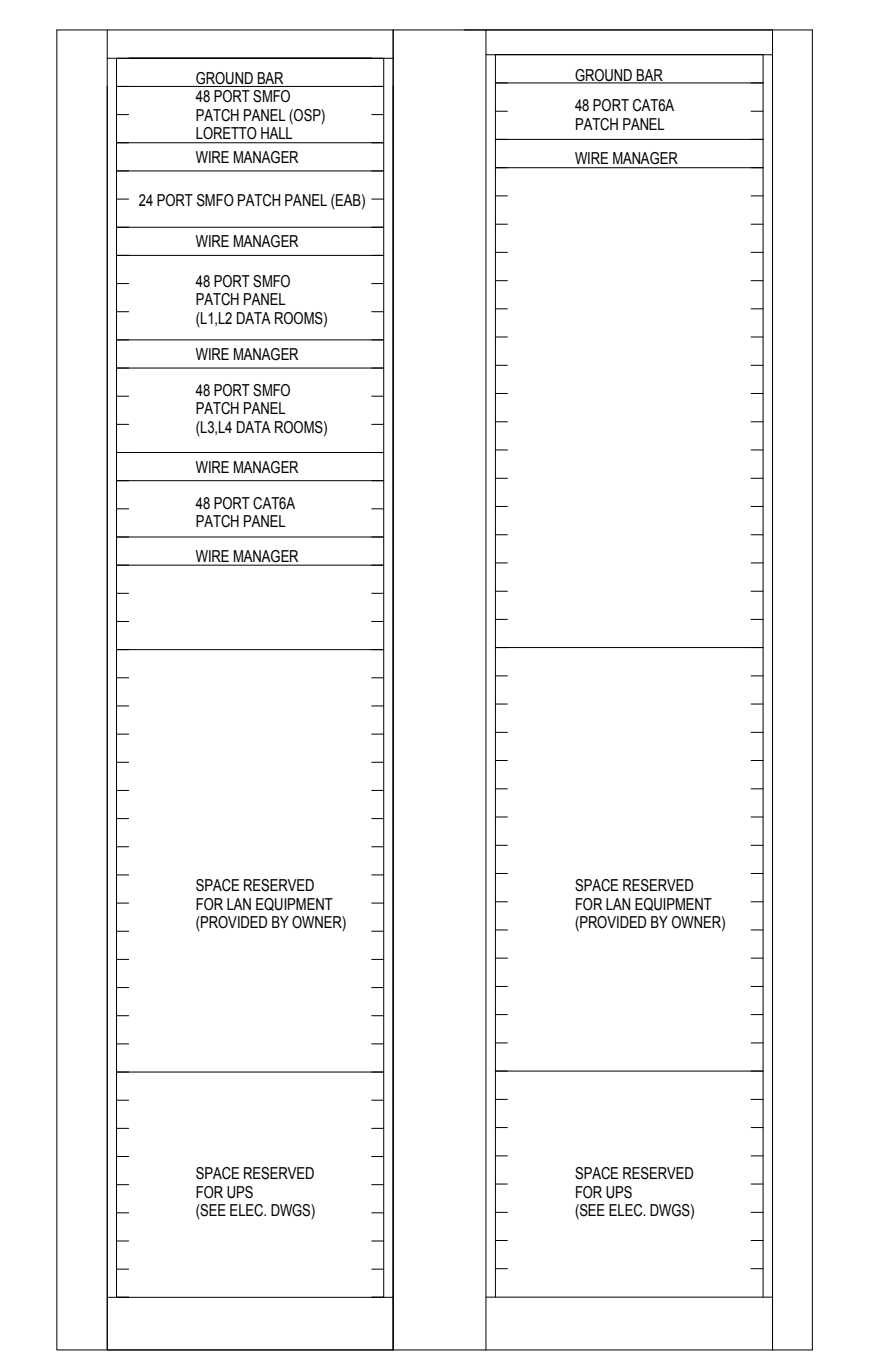
7 ENLARGED DATA ROOM 200B FLOOR PLAN
1/4" = 1'-0"



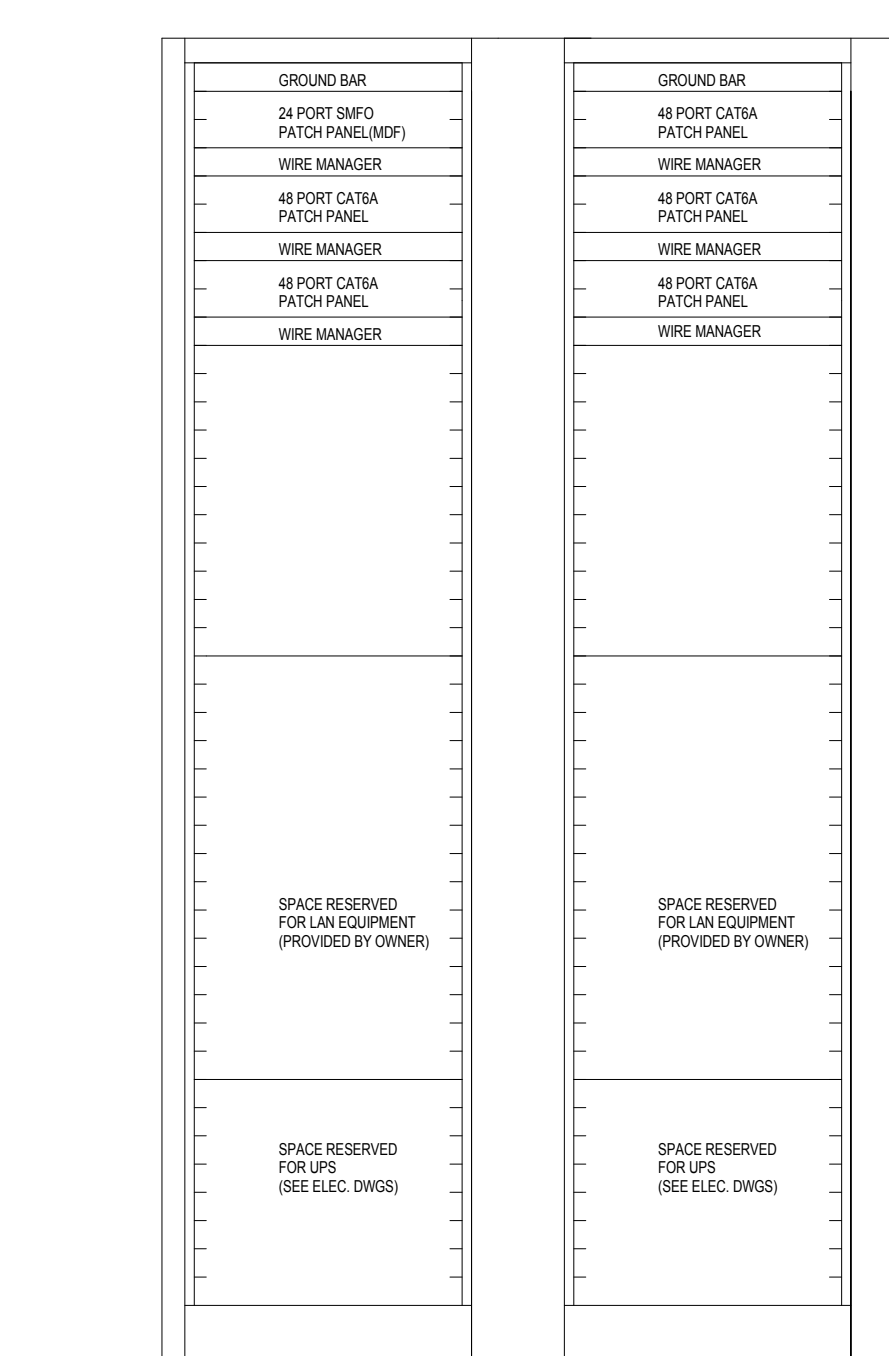
8 ENLARGED DATA ROOM 100B CEILING PLAN
1/4" = 1'-0"



9 ENLARGED DATA ROOM 100B FLOOR PLAN
1/4" = 1'-0"



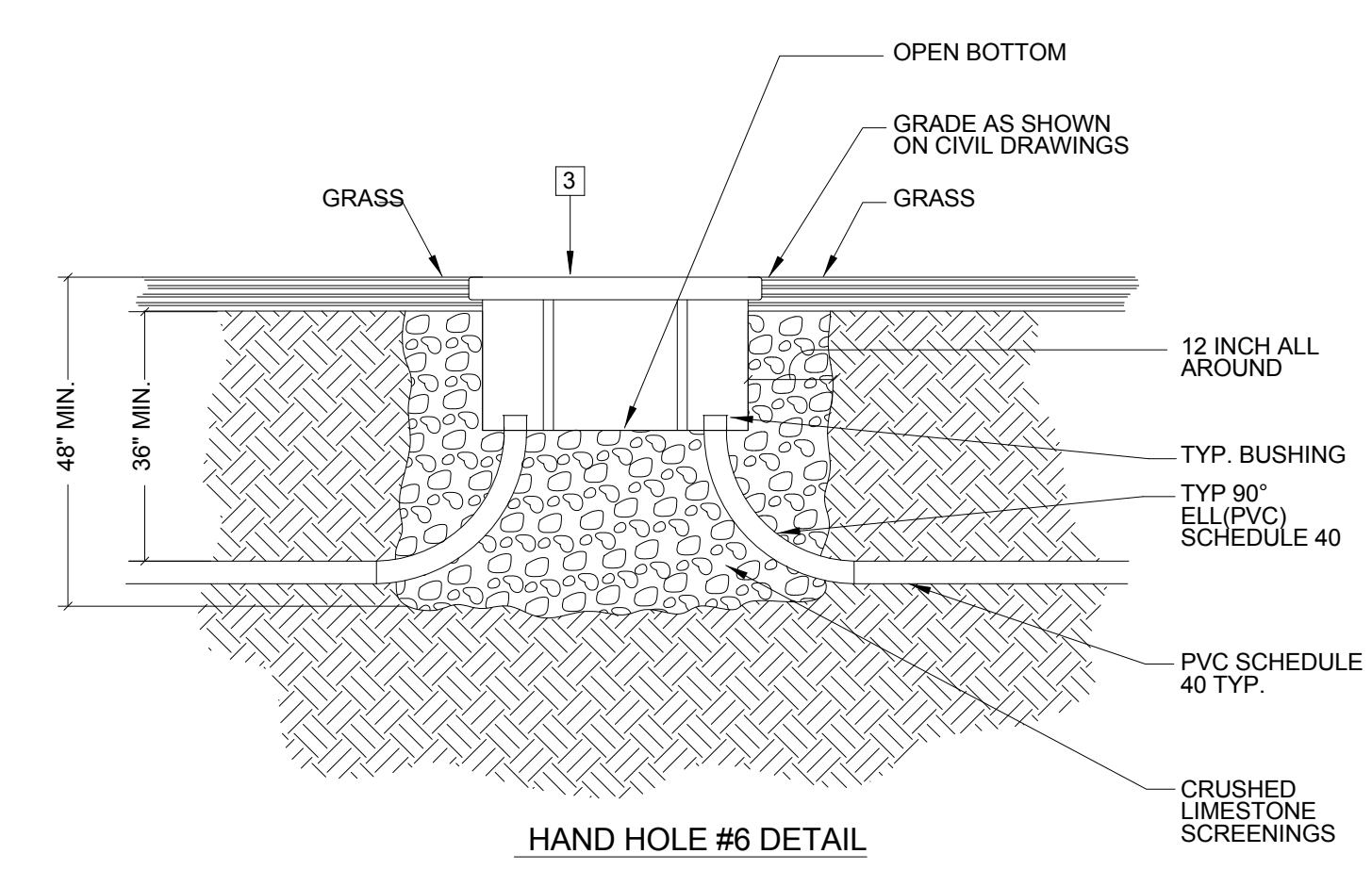
12 MAIN MDF ROOM RACK ELEVATIONS - WEST
NOT TO SCALE



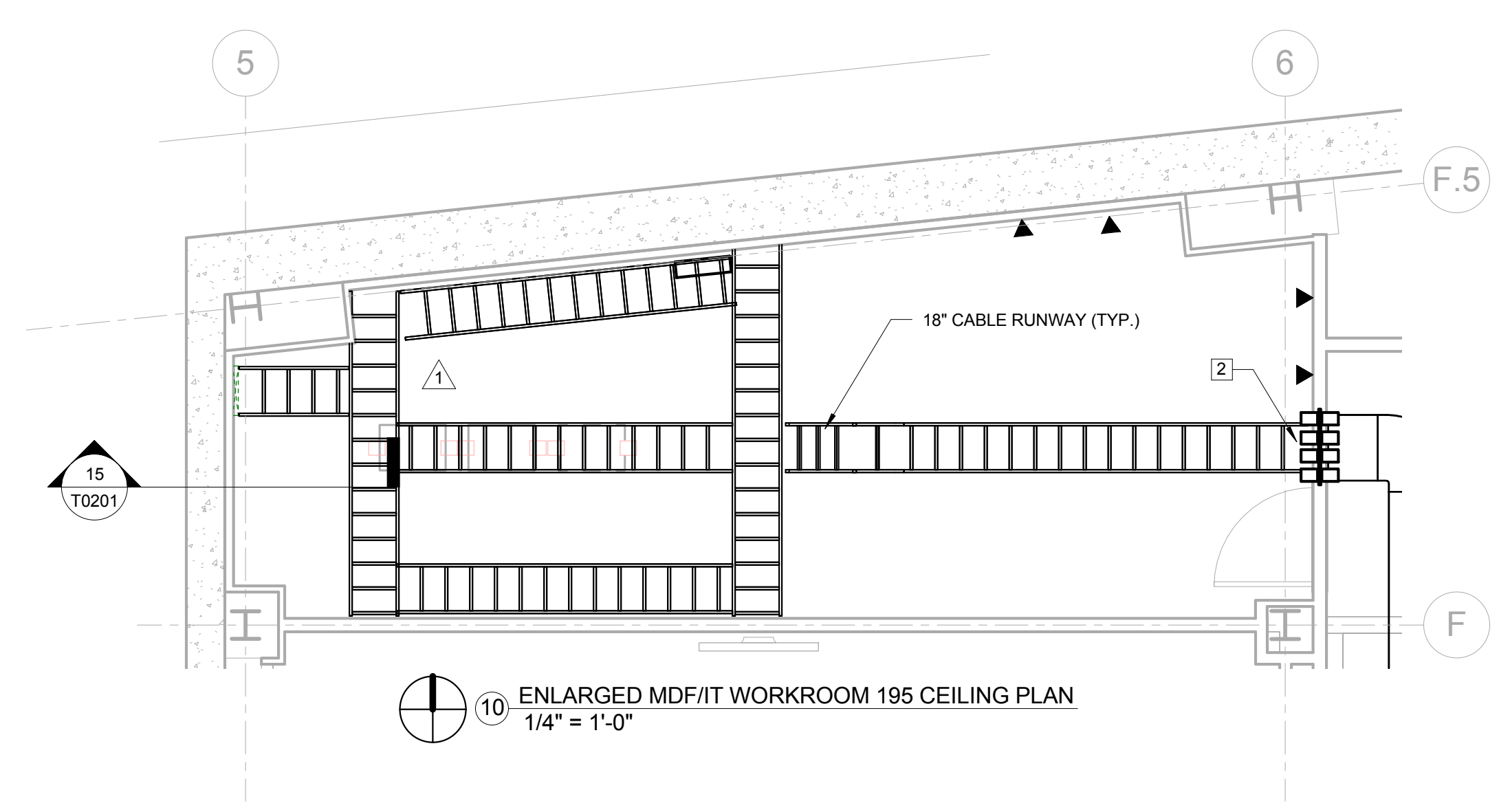
13 TYPICAL DATA ROOM RACK ELEVATIONS
NOT TO SCALE

- GENERAL NOTES:** THIS SHEET ONLY
- CONFIRM LOCATION OF ALL COPPER AND FIBER PATCH PANELS WITH WEBSTER UNIVERSITY IT DEPARTMENT PRIOR TO INSTALLATION.
 - PROVIDE 3/4" THICK FIRE RATED PLYWOOD BACKBOARDS ON ALL WALLS OF THE MDF ROOM AND DATA ROOMS. BACKBOARD SHALL STAND 6" A.F.F. AND EXTEND 8'-0" HIGH. PAINT ALL SIX (6) SIDES BACKBOARD WITH WHITE FIRE RETARDANT PAINT LEAVING FIRE RATED LABELS EXPOSED.

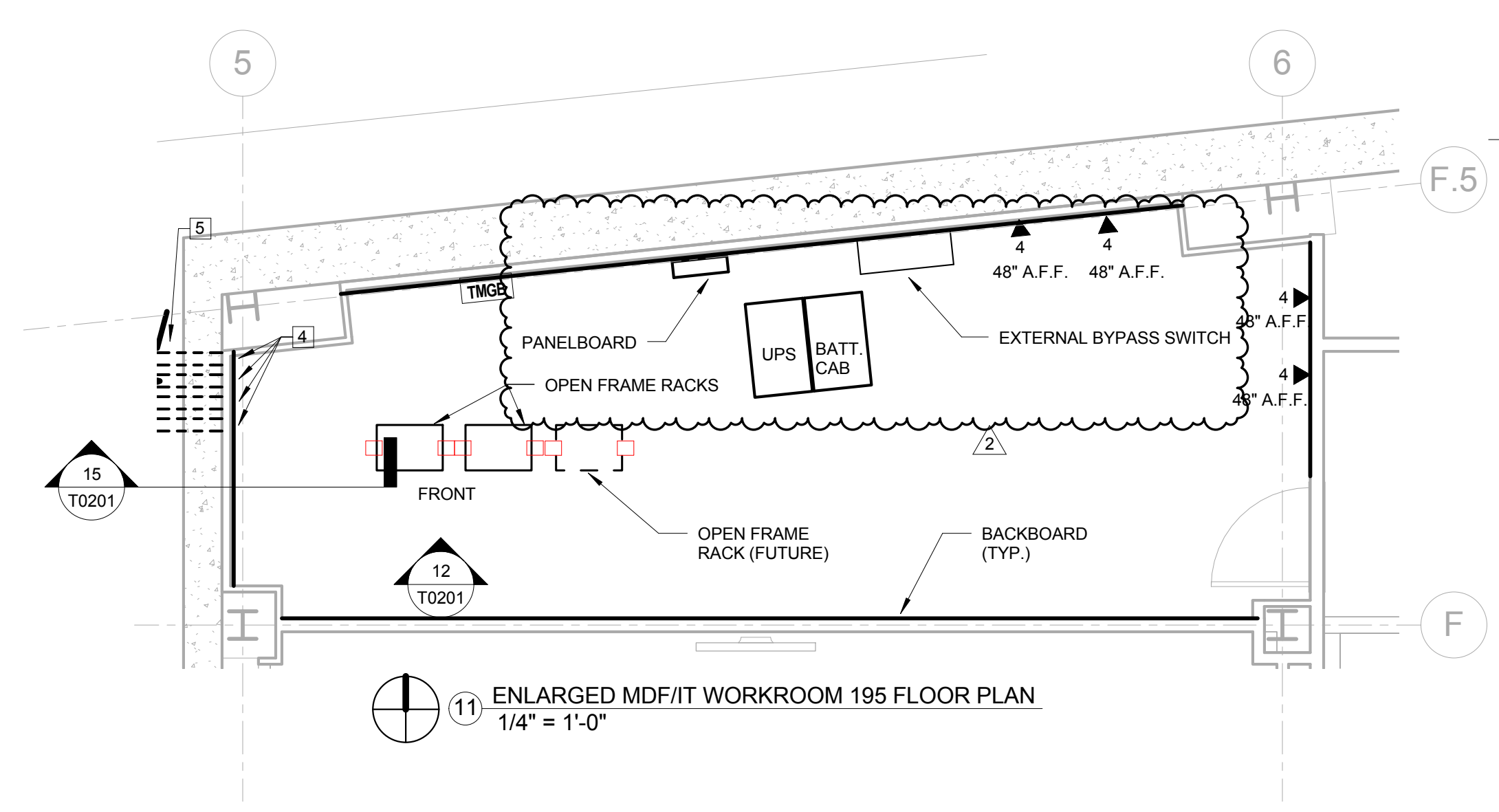
- KEYED NOTES:** THIS SHEET ONLY
- PROVIDE FLOOR MOUNTED FIRE RATED PATHWAYS. SEE SPECIFICATION SECTION 078413 FOR MORE INFORMATION.
 - PROVIDE WALL MOUNTED FIRE RATED PATHWAYS. SEE SPECIFICATION SECTION 078413 FOR MORE INFORMATION.
 - PROVIDE QUAZITE #PG3636A36 (TIER 22) HAND HOLE WITH A #PG3636HA00 HEAVY DUTY COVER. LOGO SHALL READ "COMMUNICATION".
 - PROVIDE (4) 4" SCHEDULE 40 PVC CONDUITS. PROVIDE STEEL SLEEVES FOR EACH CONDUIT PENETRATION THROUGH THE WALL. PROVIDE WATER TIGHT SEAL. PROVIDE (3) 1 1/4" INNERDUCTS WITH PULL STRINGS IN ONE OF THE CONDUITS. PROVIDE PULL STRINGS IN THE REMAINING (3) CONDUITS.
 - TO HANDHOLE #6. SEE SHEETS T0100 AND T0201 FOR MORE INFORMATION.
 - PROVIDE 48 PORT SMO WALL MOUNT PATCH PANEL (SEE "PDS BACKBONE CABLING DIAGRAM" ON SHEET T0801). ATTACH TO THE EXISTING PLYWOOD BACKBOARD. THE OWNER SHALL BE RESPONSIBLE FOR REMOVING ABANDONED WALL MOUNTED EQUIPMENT TO MAKE ROOM FOR THE PATCH PANEL. SECURE CABLE TO EXISTING PLYWOOD BACKBOARD EVERY 48" O.C. WITH VELCRO STRAPS. SEE DETAIL #3 ON SHEET T0801.
 - PROVIDE 50 PAIR 66M PUNCHDOWN BLOCK FOR TERMINATION OF ANALOG COPPER BACKBONE CABLING.
 - EXISTING 4" UNDERGROUND CONDUIT UP TO HANDHOLE #5. SEE SHEET T0100.



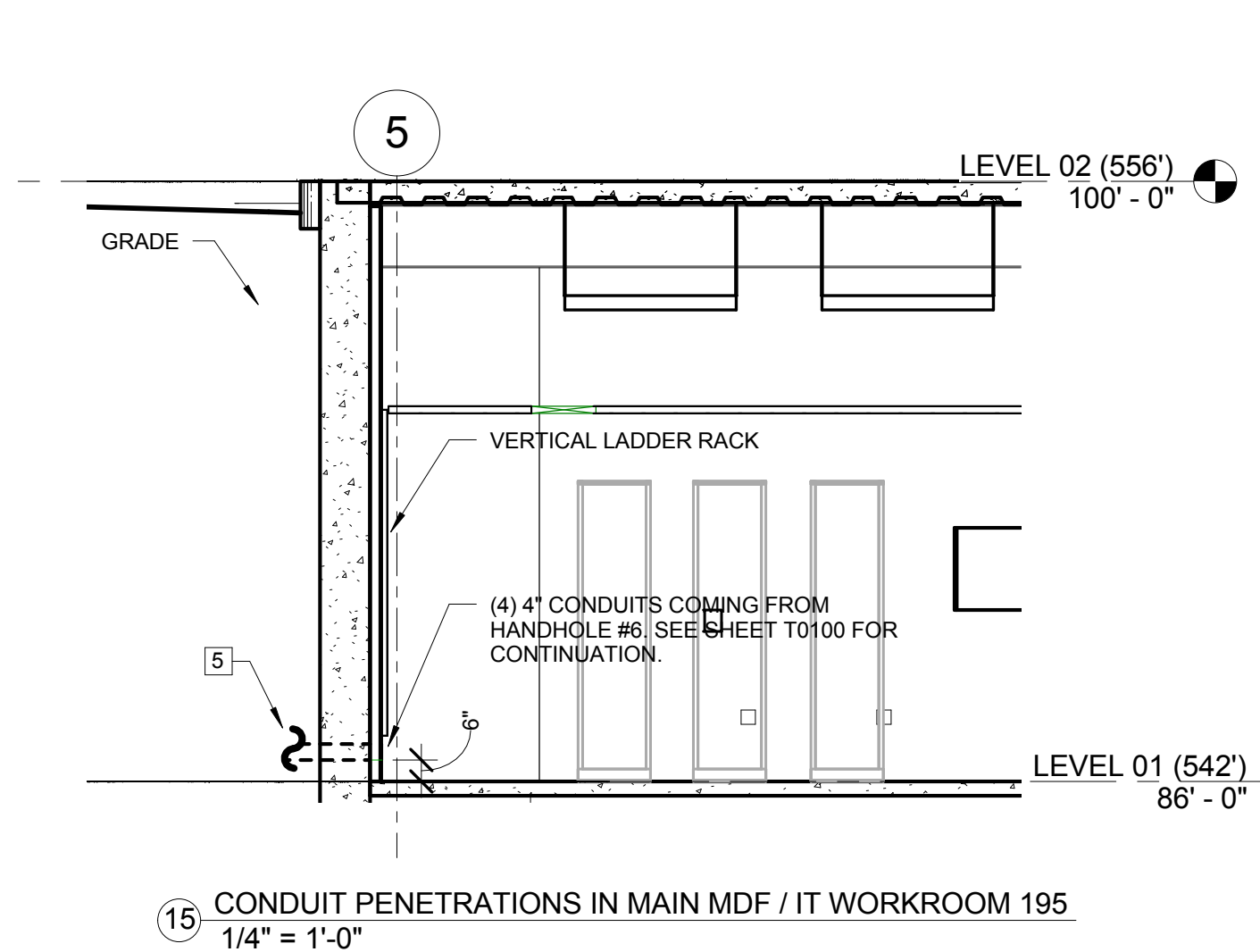
HAND HOLE #6 DETAIL



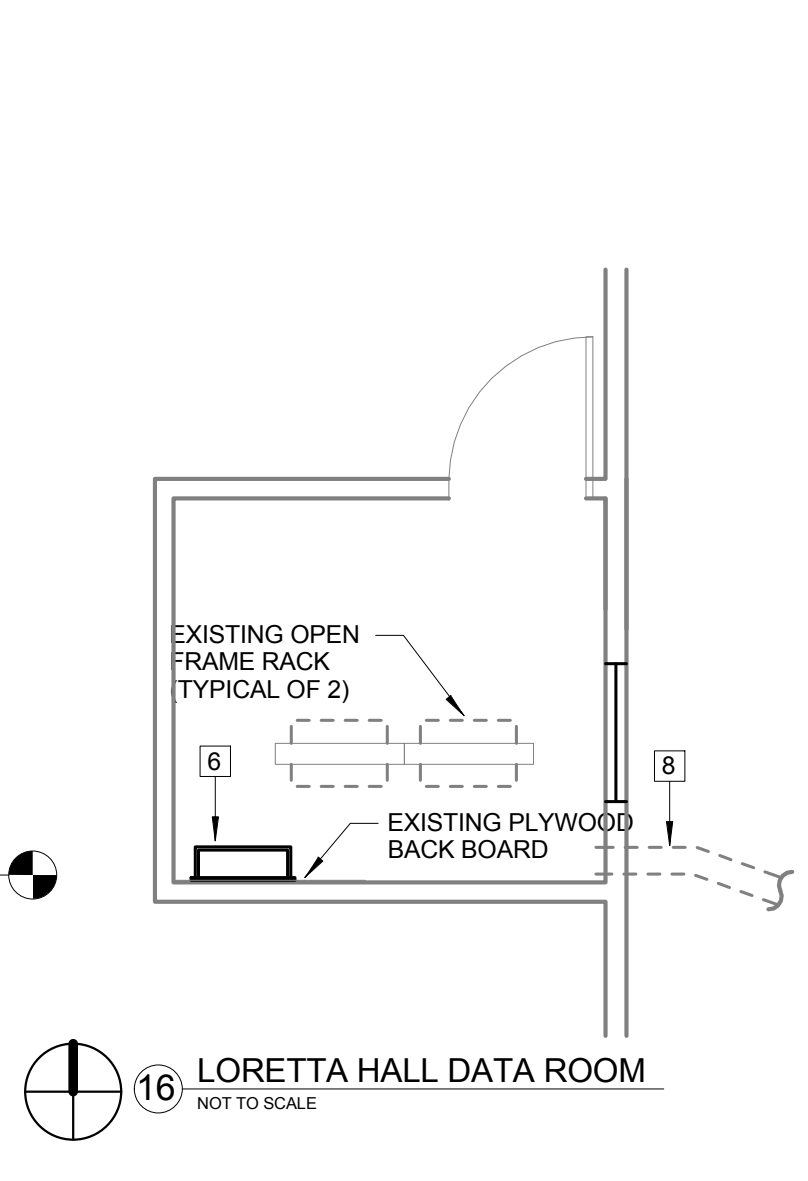
10 ENLARGED MDF/IT WORKROOM 195 CEILING PLAN
1/4" = 1'-0"



11 ENLARGED MDF/IT WORKROOM 195 FLOOR PLAN
1/4" = 1'-0"



15 CONDUIT PENETRATIONS IN MAIN MDF / IT WORKROOM 195
1/4" = 1'-0"



16 LORETTA HALL DATA ROOM
NOT TO SCALE



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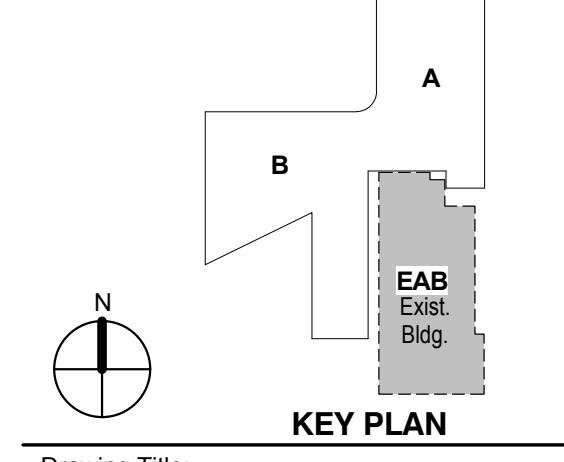
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CONFORMED SET 01 JUL 2016

2	ADDENDUM 2-2	19 APR 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016
No.	Description	Date



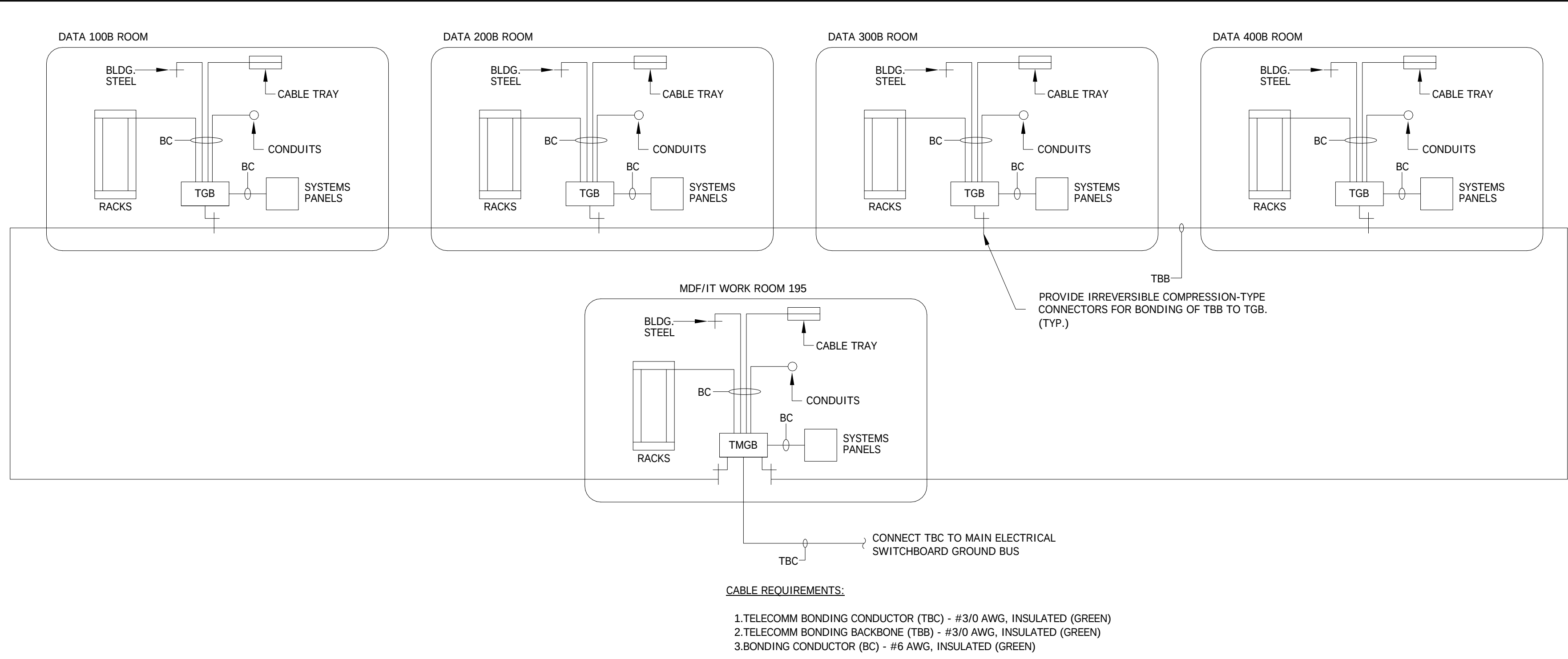
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ENLARGED TECHNOLOGY FLOOR PLANS & RACK ELEVATIONS

Project No.: 04561.01

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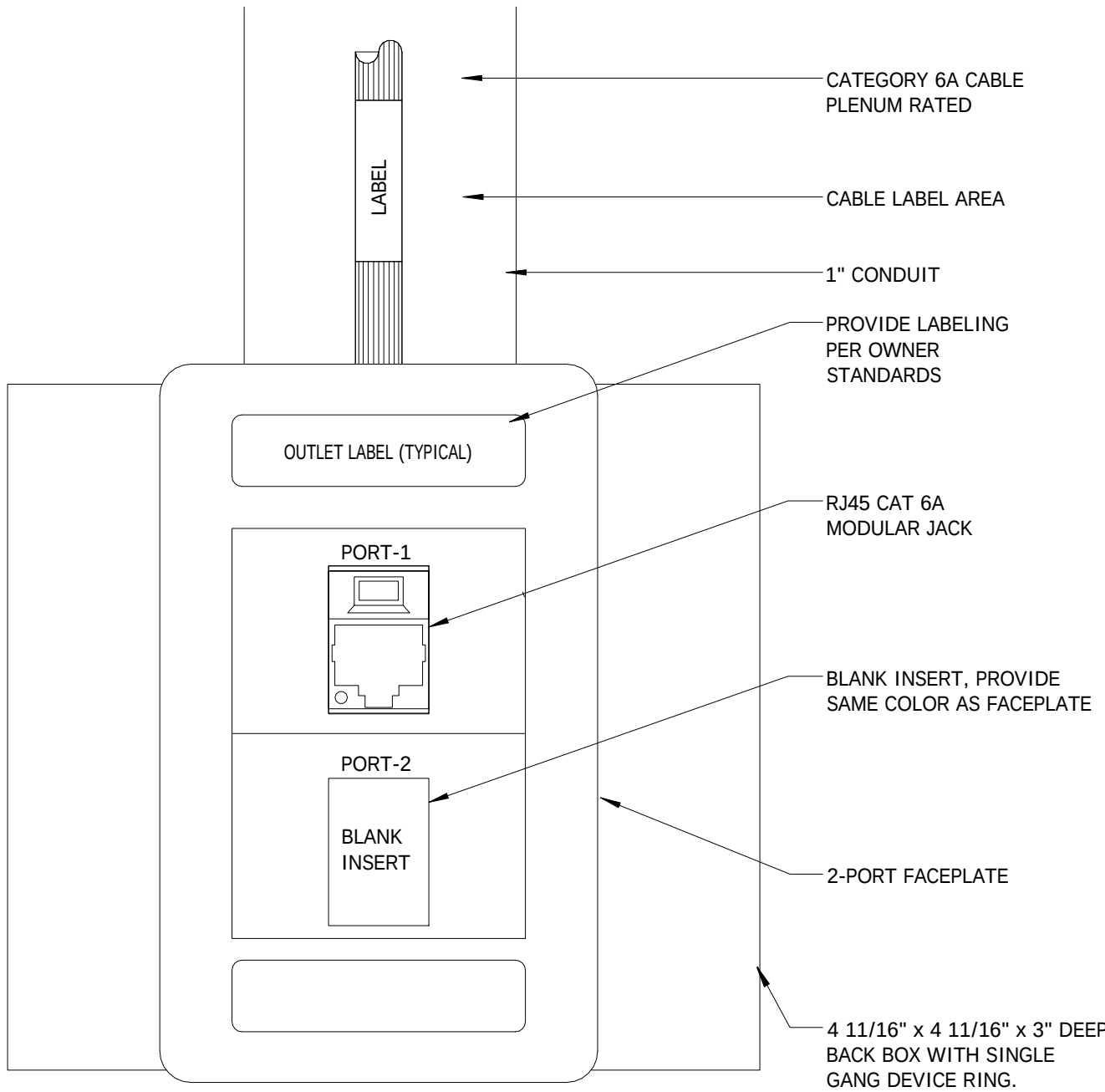
T0201



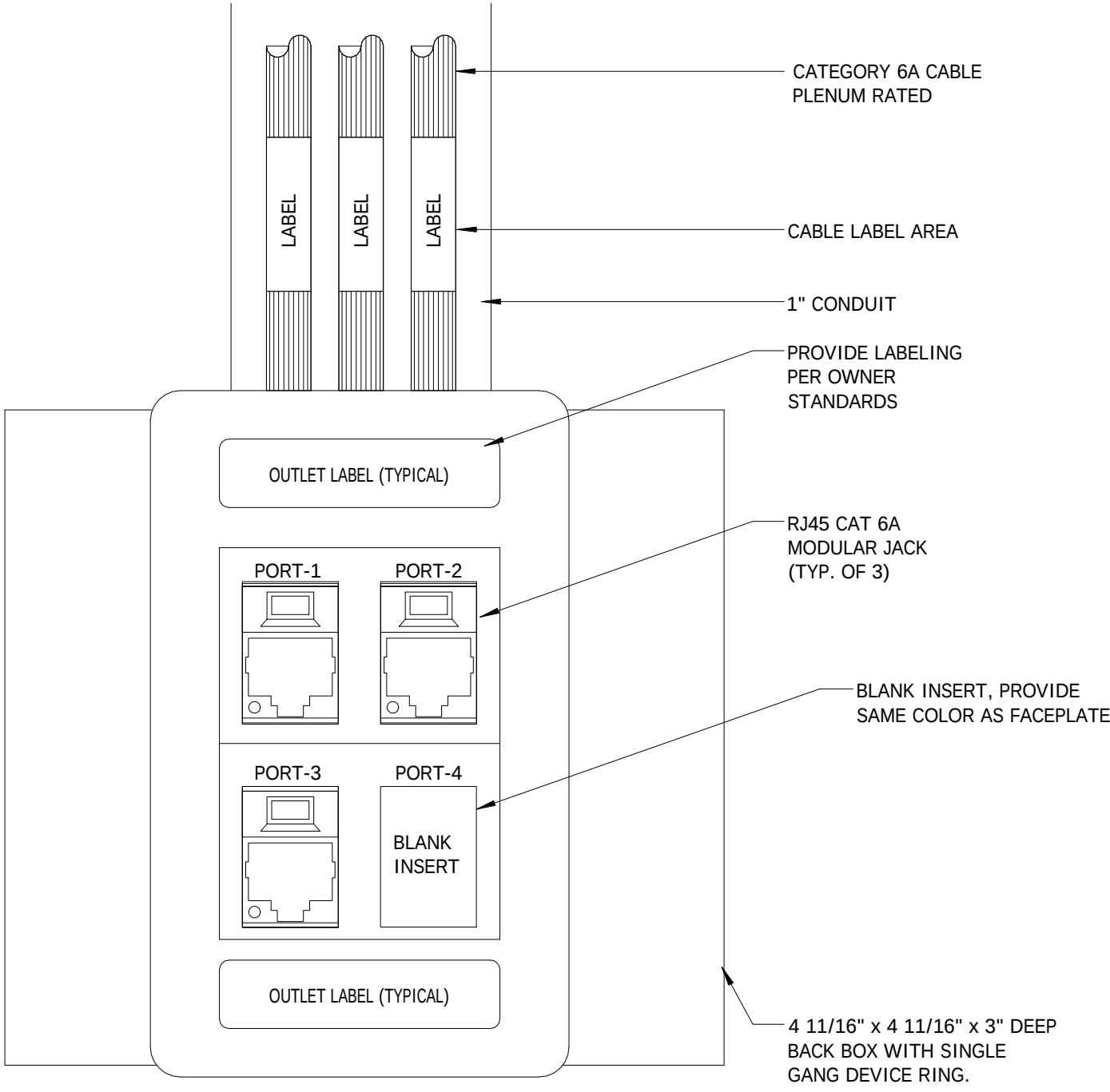
TELECOMM GROUND BAR (TGB) DETAIL
SCALE: NONE

GROUND CONDUCTOR/
BAR CONNECTION
SCALE: NONE

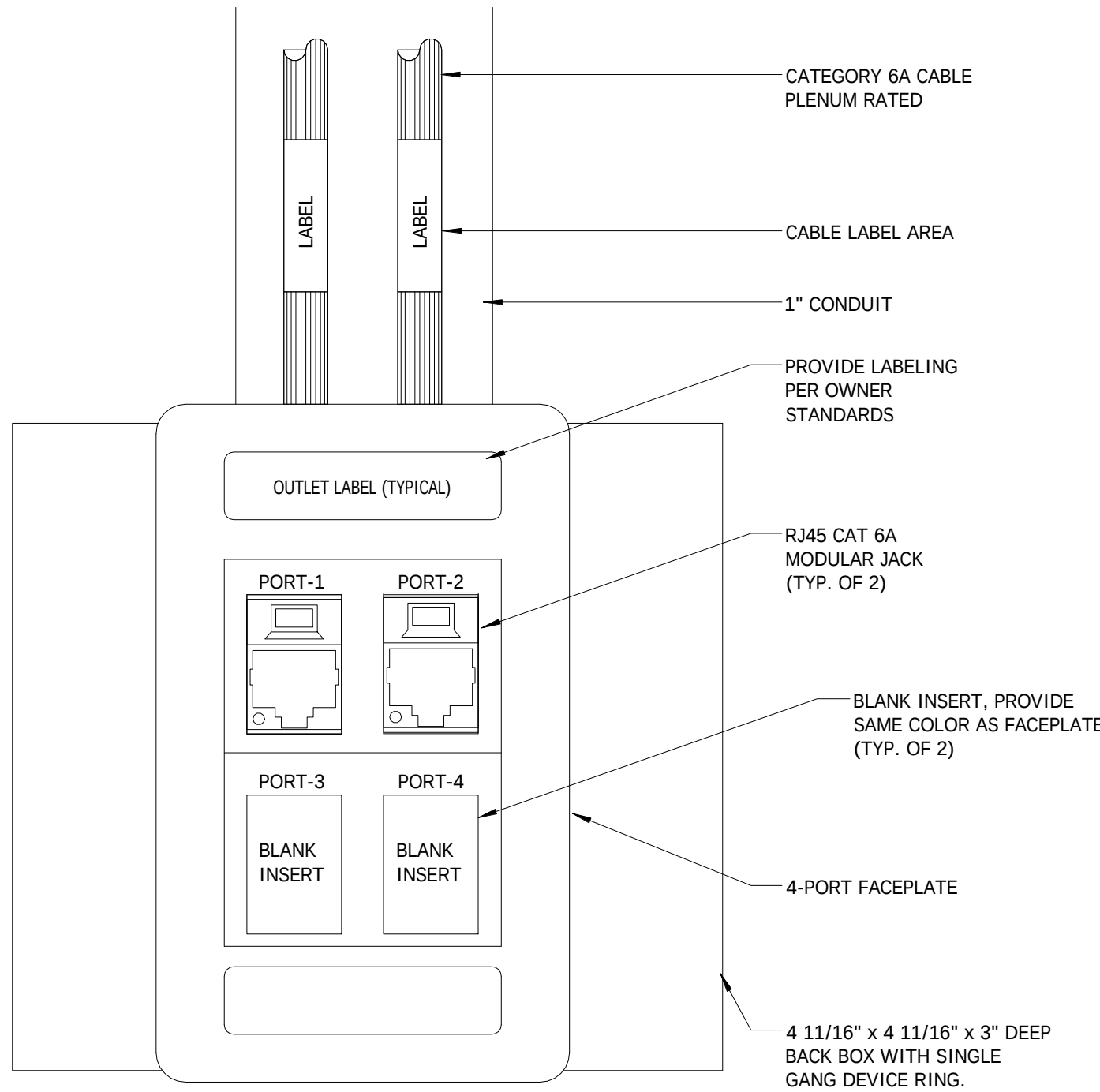
4 TELECOM GROUNDING DETAILS



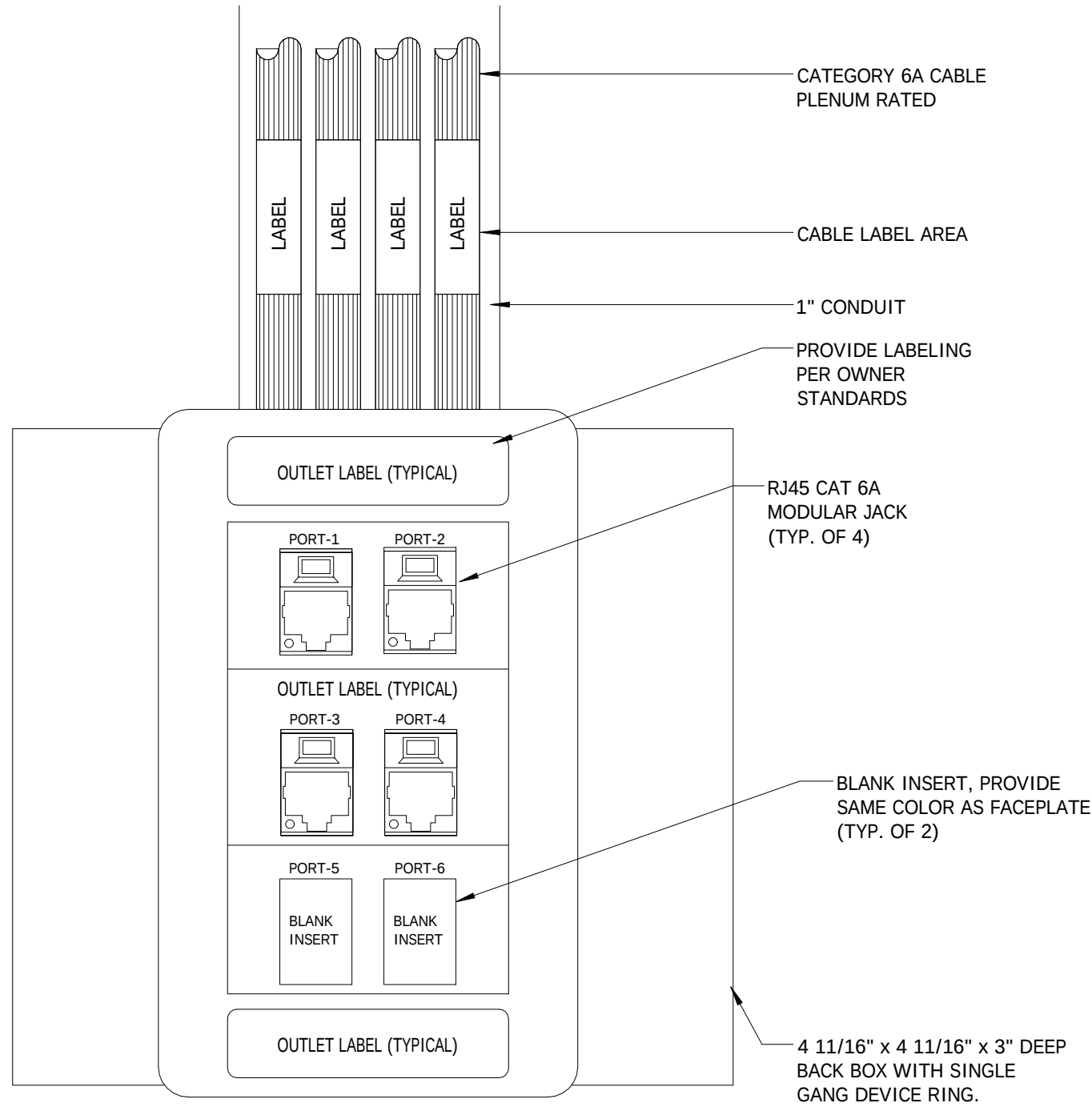
5 TYPICAL 1 PORT FACEPLATE DETAIL



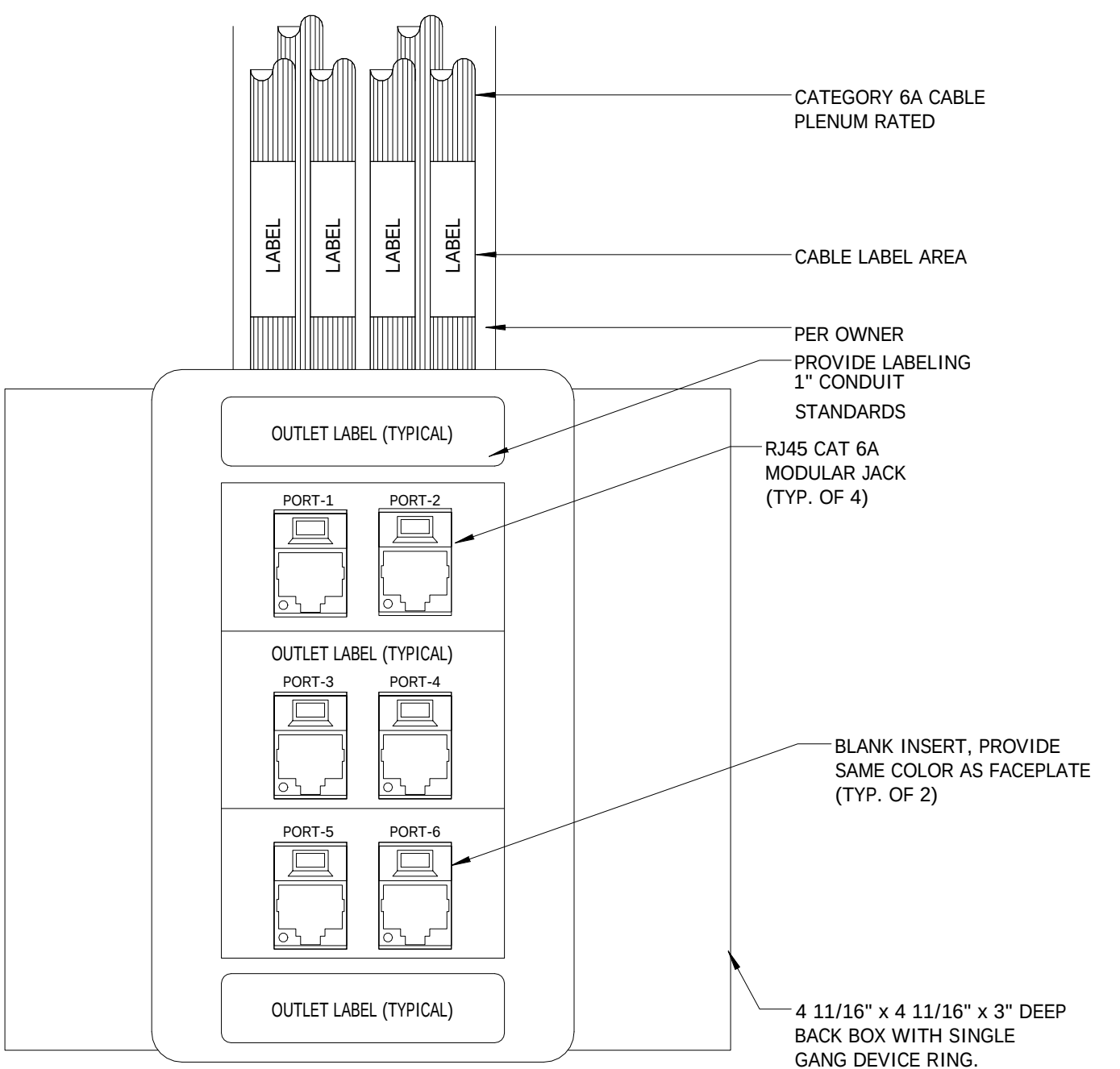
7 TYPICAL 3 PORT FACEPLATE DETAIL



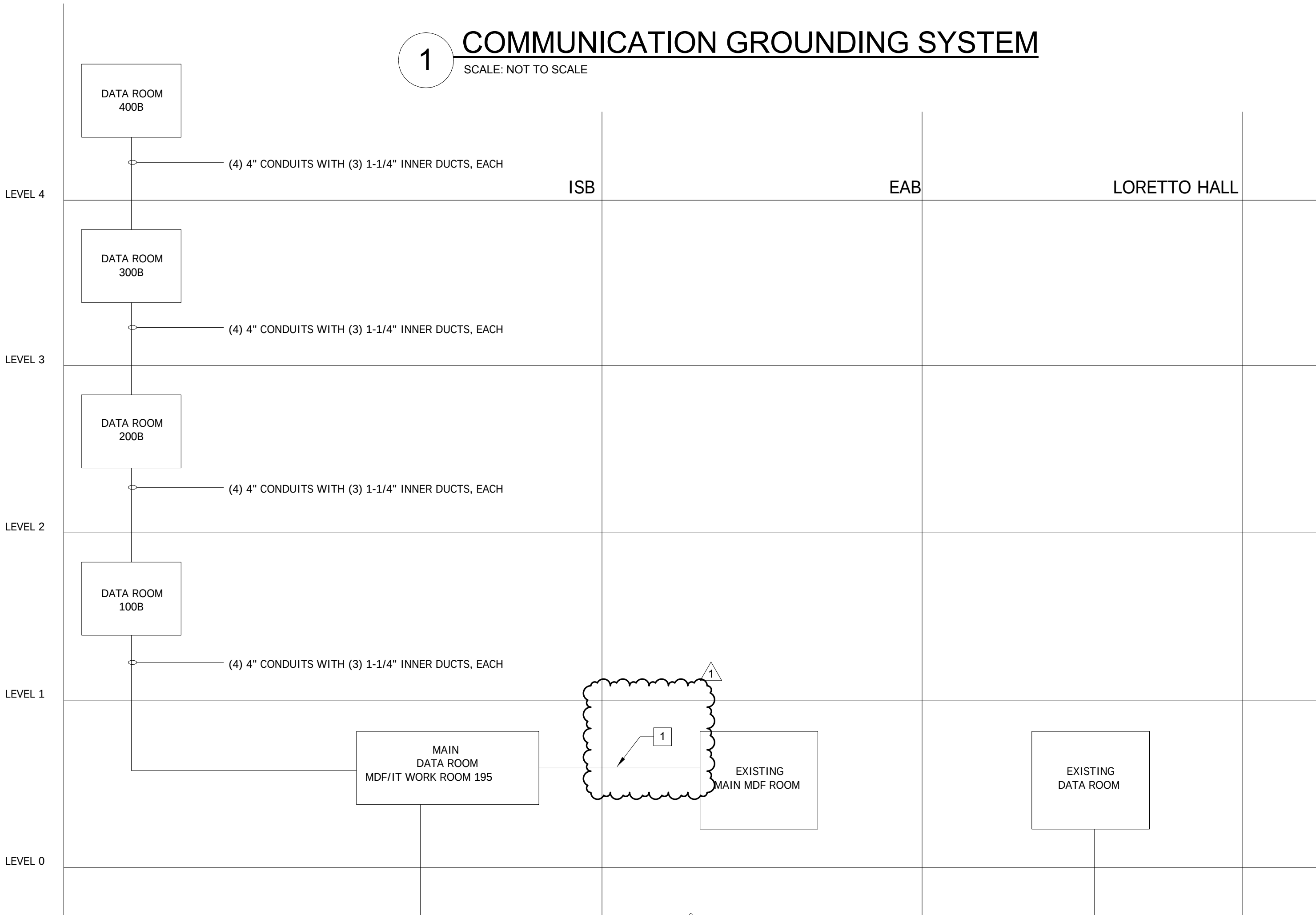
6 TYPICAL 2 PORT FACEPLATE DETAIL



8 TYPICAL 4 PORT FACEPLATE DETAIL



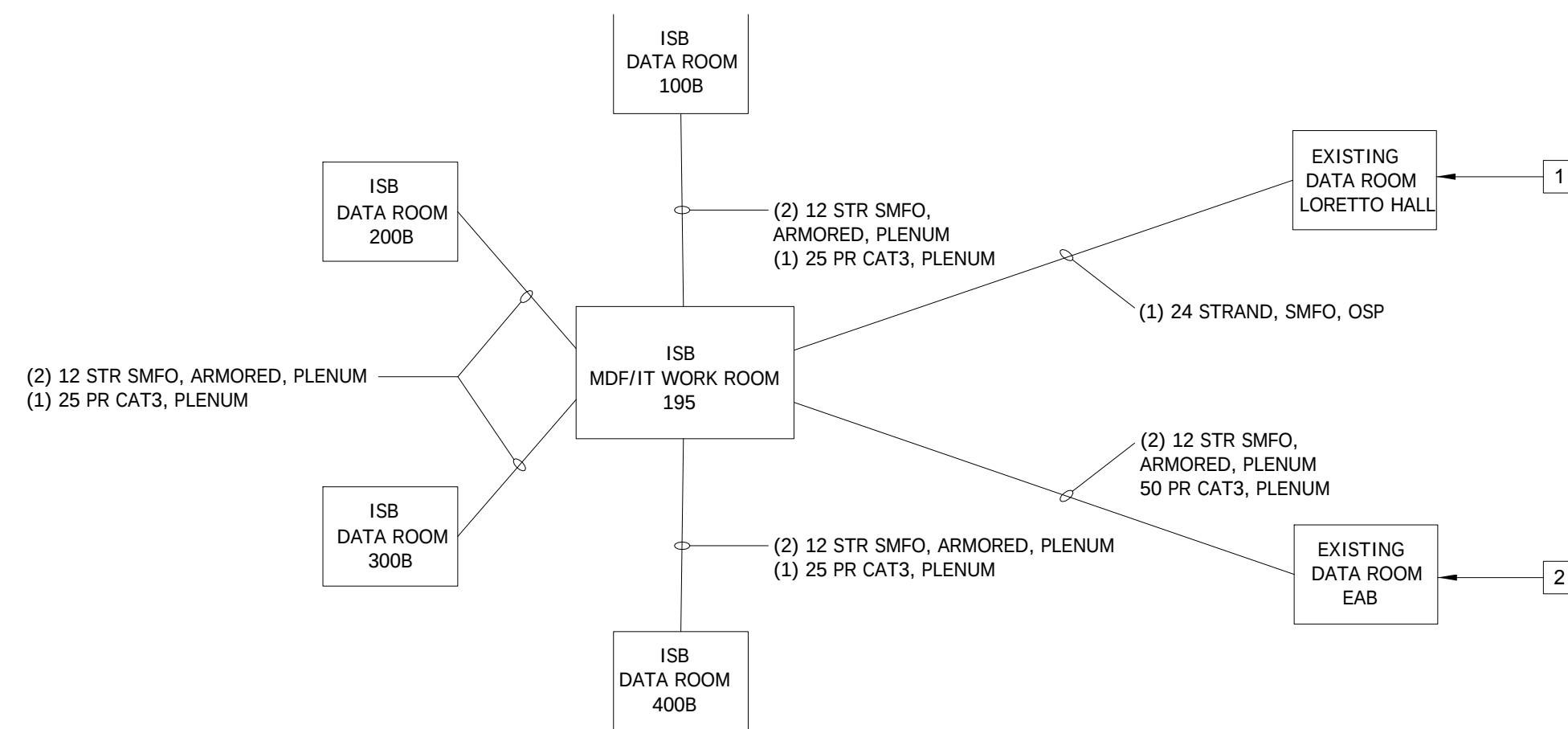
9 TYPICAL 6 PORT FACEPLATE DETAIL



KEYED NOTES

1 CABLES SHALL BE ROUTED CONCEALED THROUGH THE EAB AND ISB IN CABLE TRAY WHERE CABLE TRAY EXISTS AND AS SHOWN ON THE ISB DRAWINGS, BETWEEN CABLE TRAY, INSTALL IN J-HOOKS.

2 TELECOM CONDUIT RISER DIAGRAM

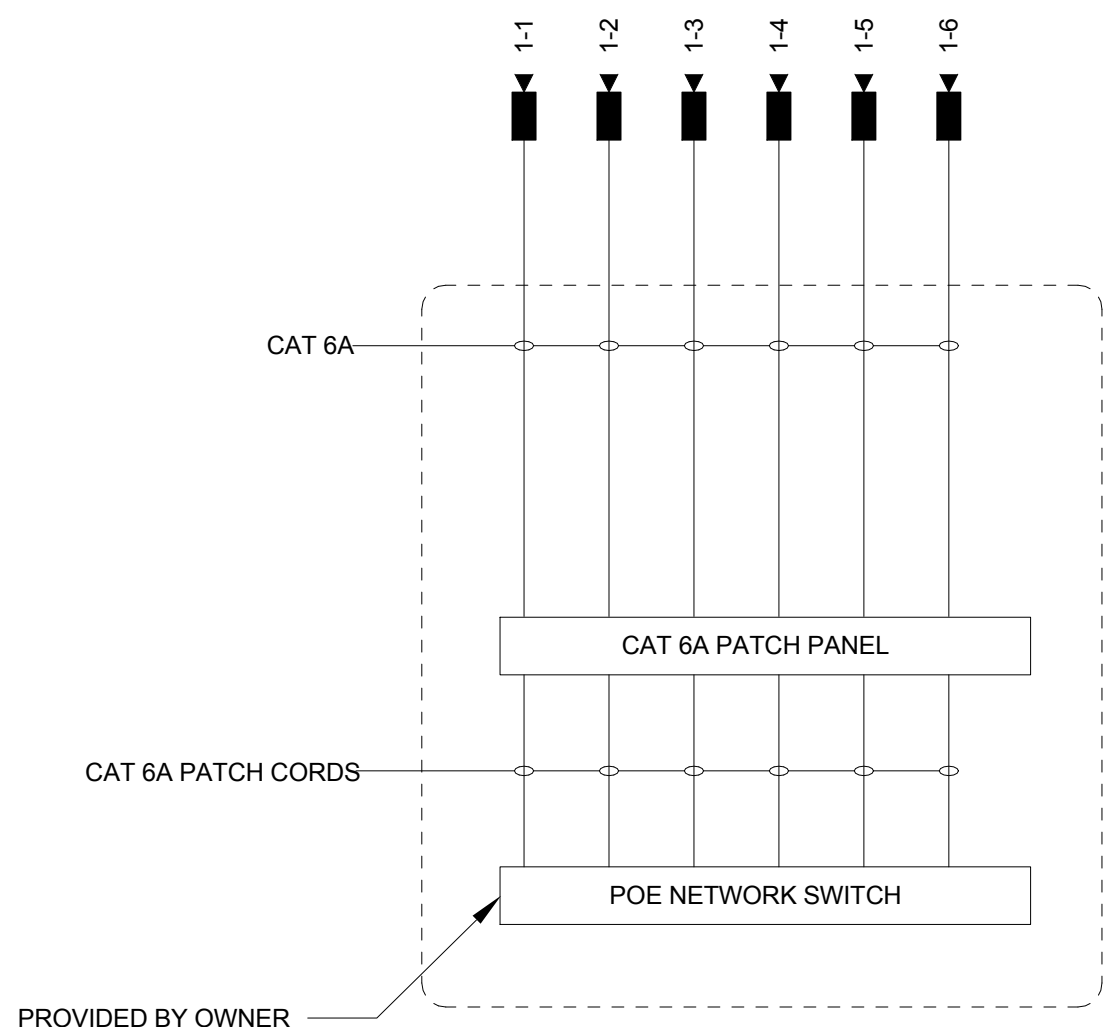


KEYED NOTES

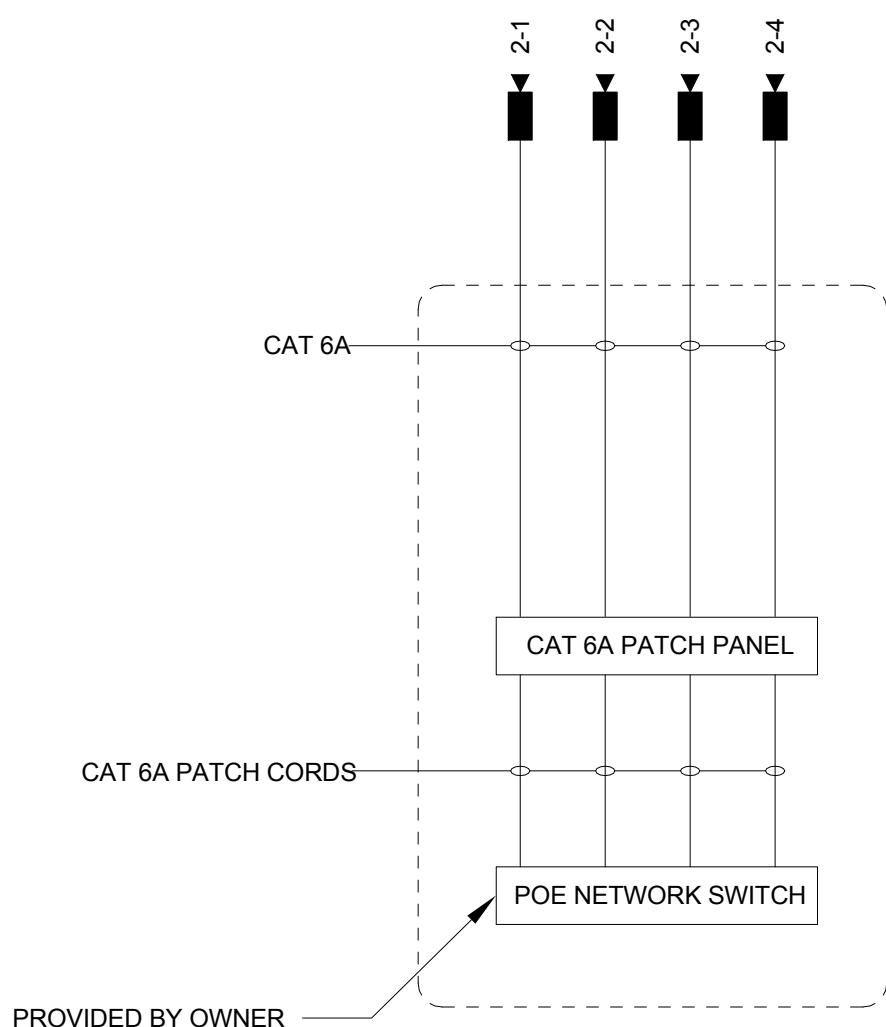
1 PROVIDE A 48 PORT SMFO WALL MOUNT PATCH PANEL INSIDE THE DATA ROOM. CONFIRM EXACT LOCATION WITH WEBSTER UNIVERSITY IT DEPARTMENT PRIOR TO INSTALLATION. SEE DETAIL #16 ON SHEET T0201.

2 PROVIDE A 48 PORT SMFO RACK MOUNT PATCH PANEL IN EXISTING RACK. PROVIDE 50 PAIR M66 PUNCH DOWN BLOCK NEXT TO EXISTING PUNCH DOWN BLOCKS. TERMINATE, TEST AND LABEL ALL CABLES PER STANDARDS.

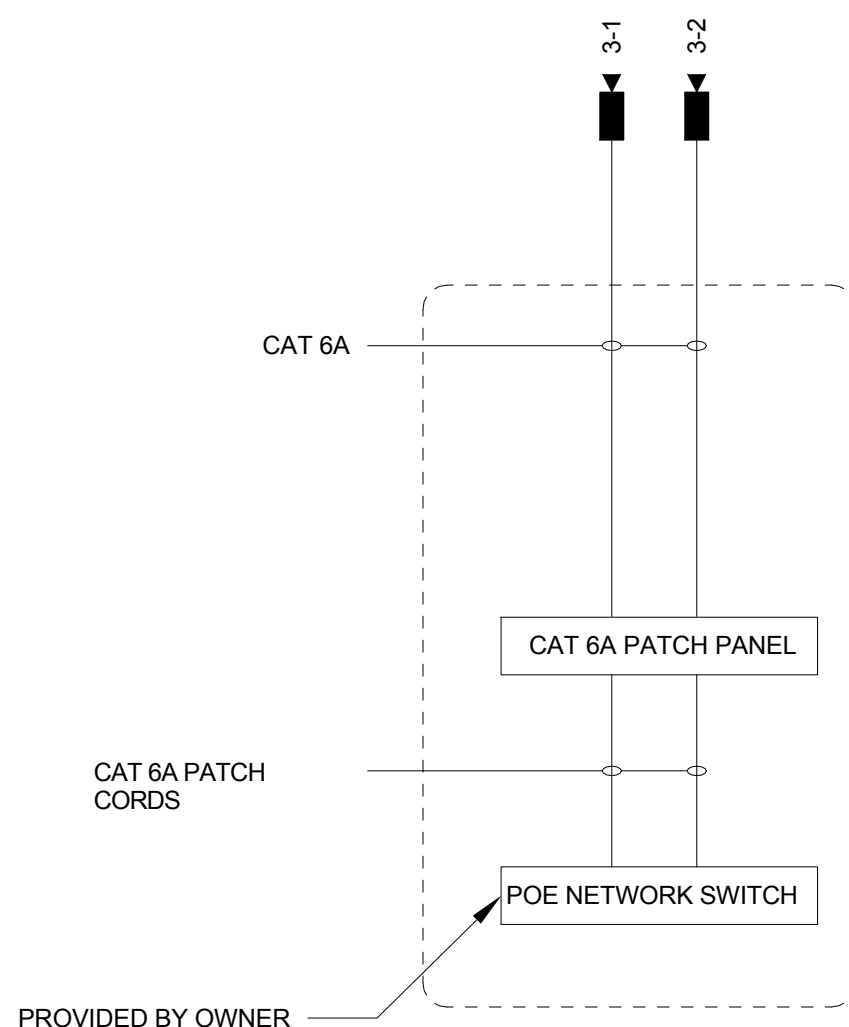
3 PDS BACKBONE CABLING DIAGRAM



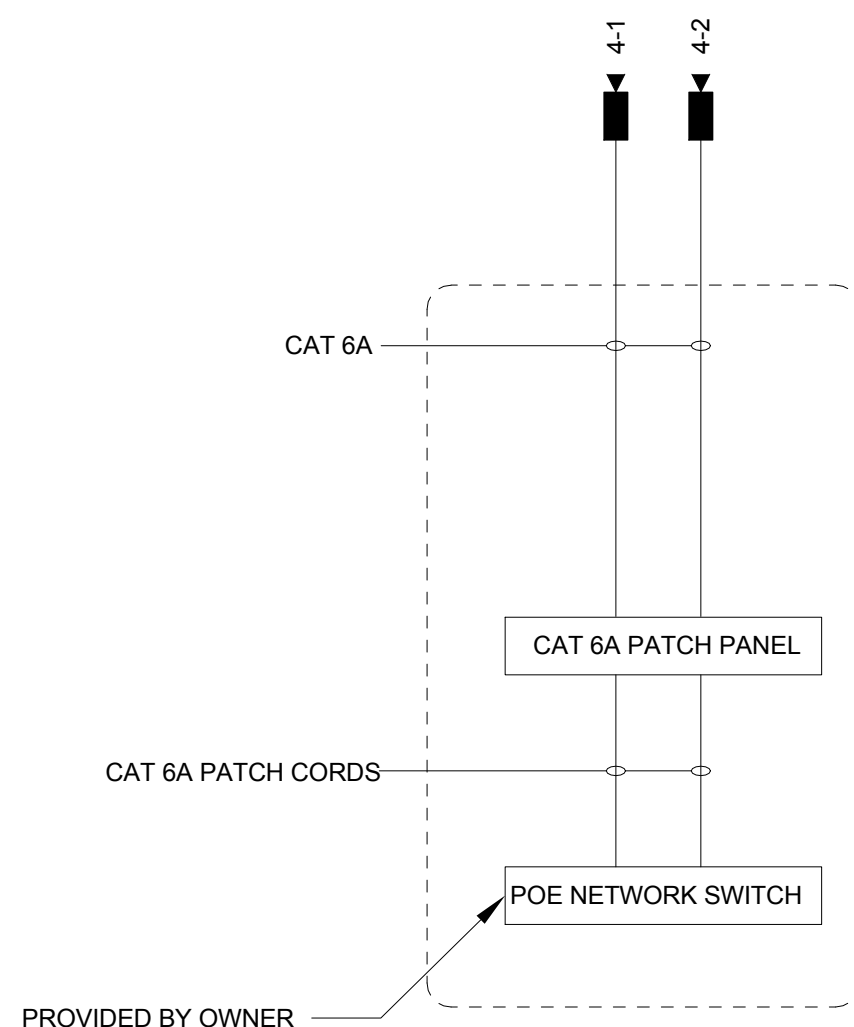
DATA 100B ROOM



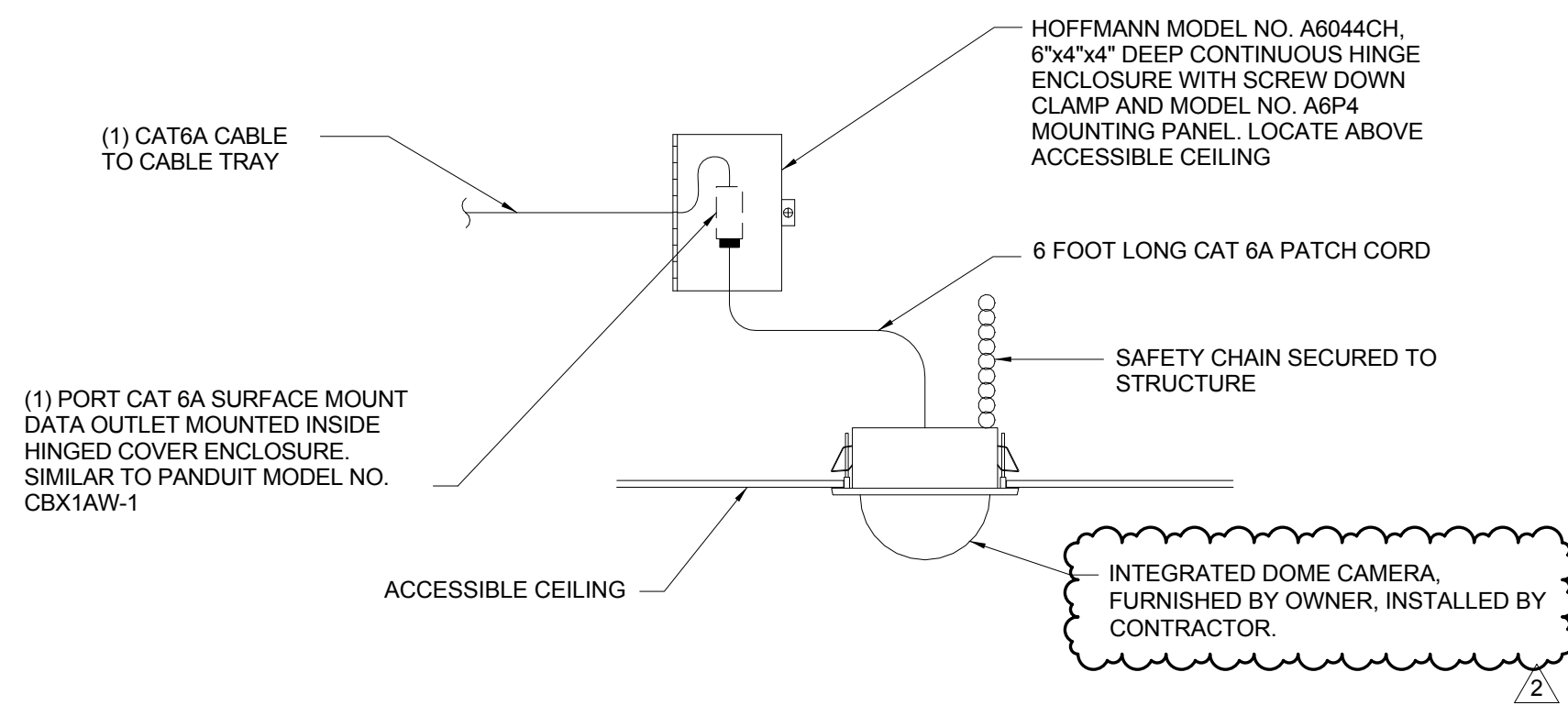
DATA 200B ROOM



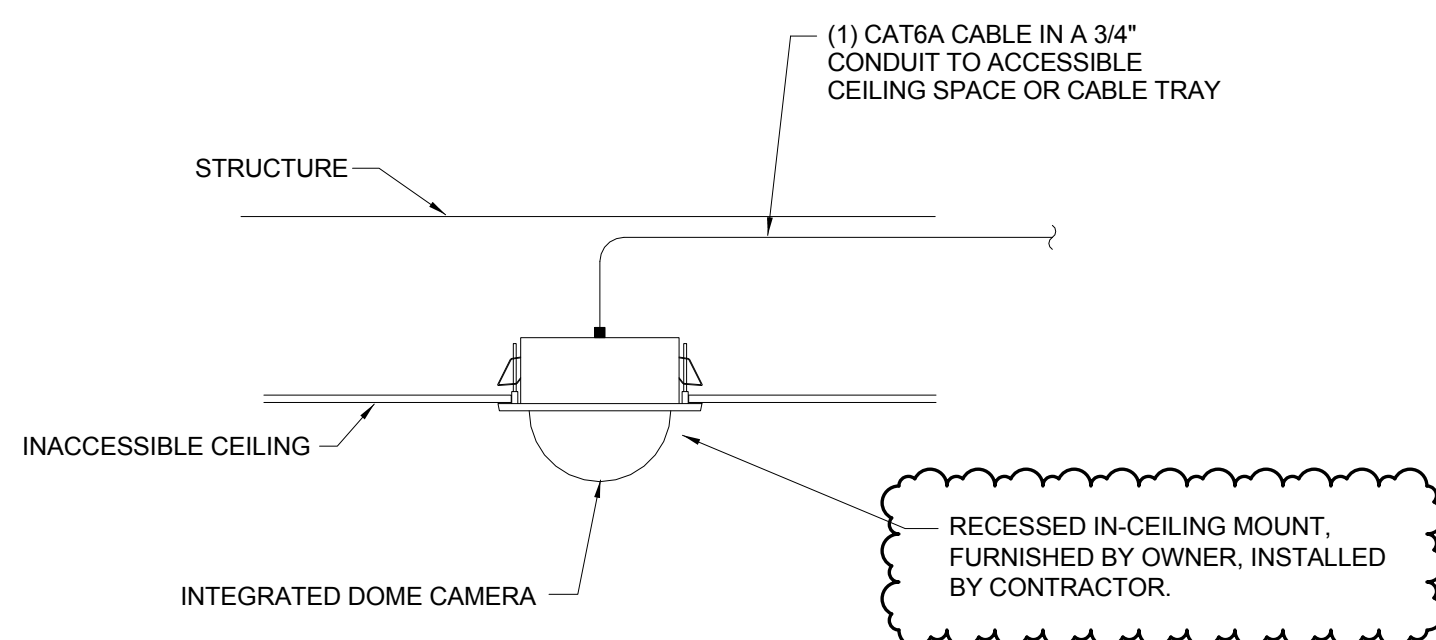
DATA 300B ROOM



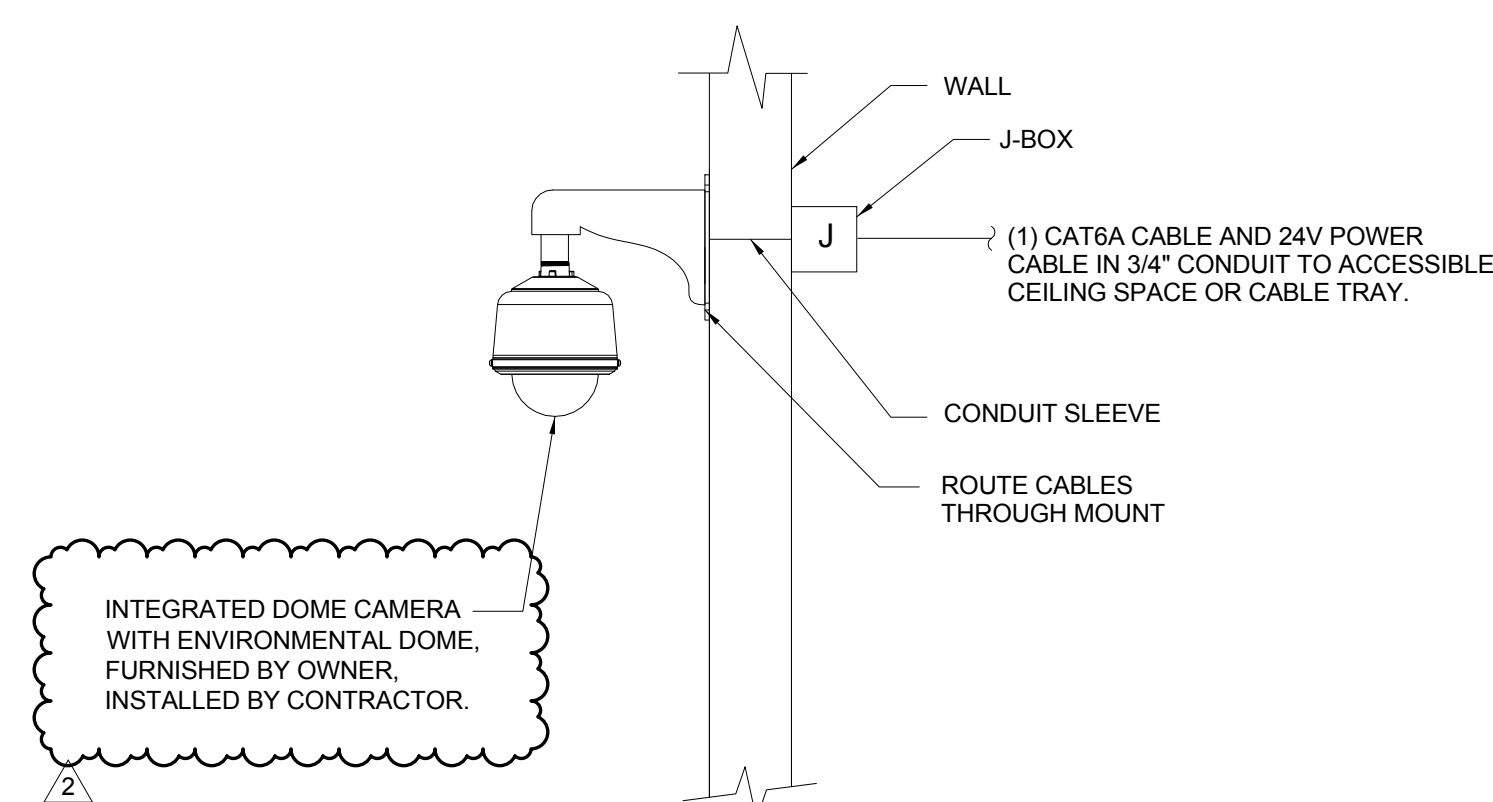
DATA 400B ROOM



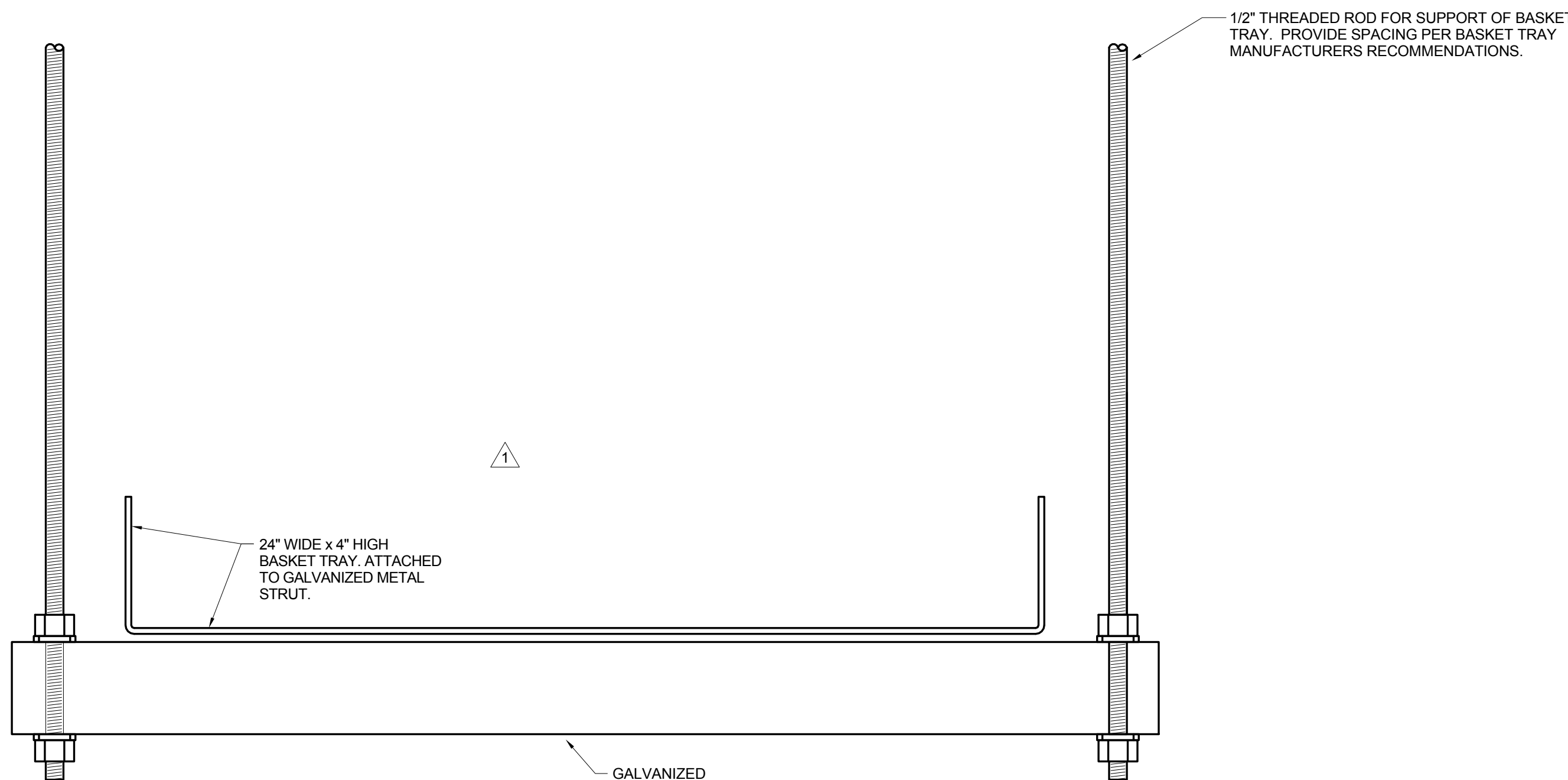
A RECESSED CAMERA - ACCESSIBLE CEILING
NOT TO SCALE
ROUGH IN ONLY WITH CONDUIT AND CABLING. CAMERA INSTALLATION BY OTHERS



B RECESSED CAMERA - INACCESSIBLE CEILING
NOT TO SCALE
ROUGH IN ONLY WITH CONDUIT AND CABLING. CAMERA INSTALLATION BY OTHERS

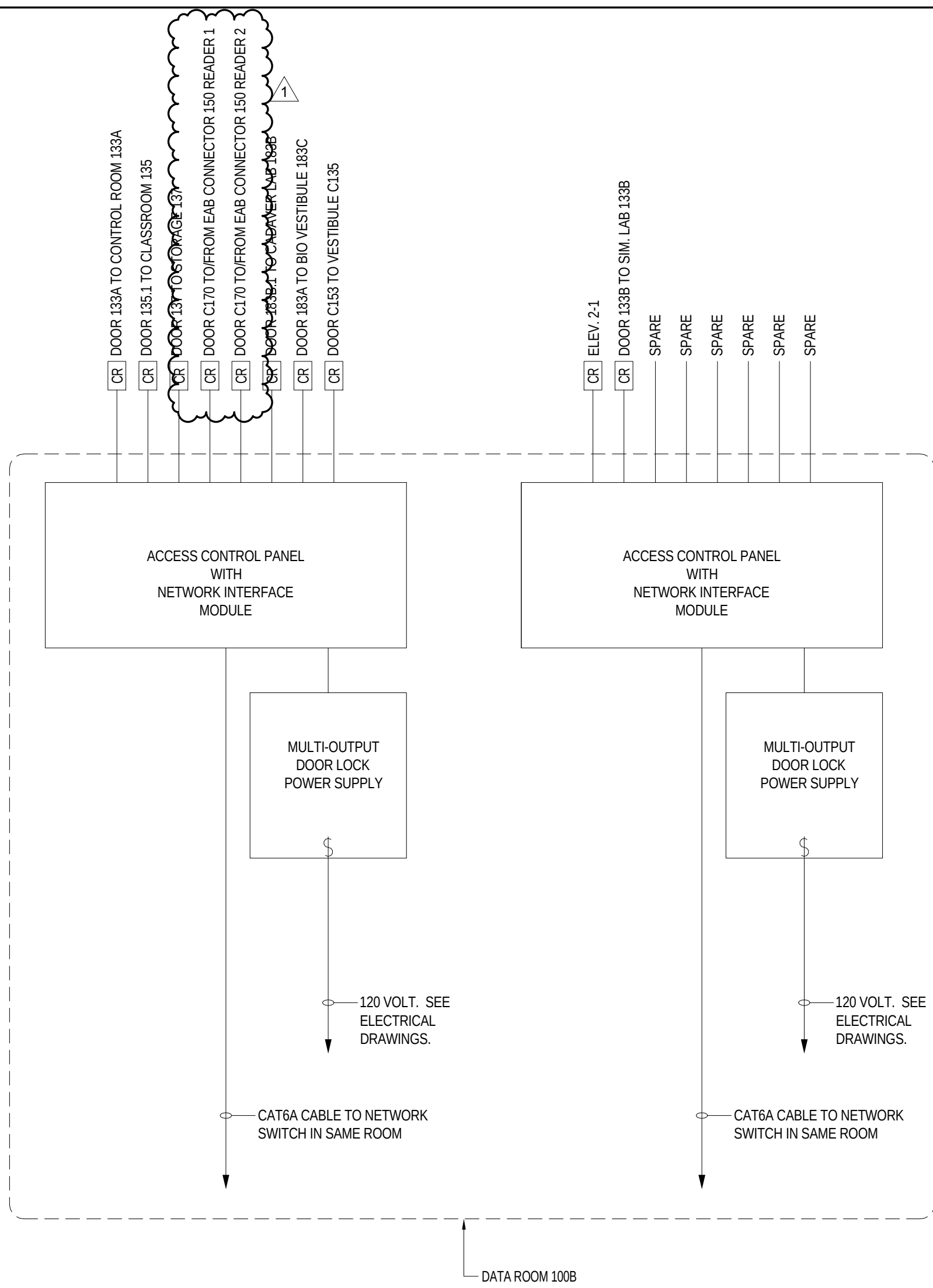


C OUTDOOR WALL MOUNT CAMERA DETAIL
NOT TO SCALE
ROUGH IN ONLY WITH CONDUIT AND CABLING. CAMERA INSTALLATION BY OTHERS

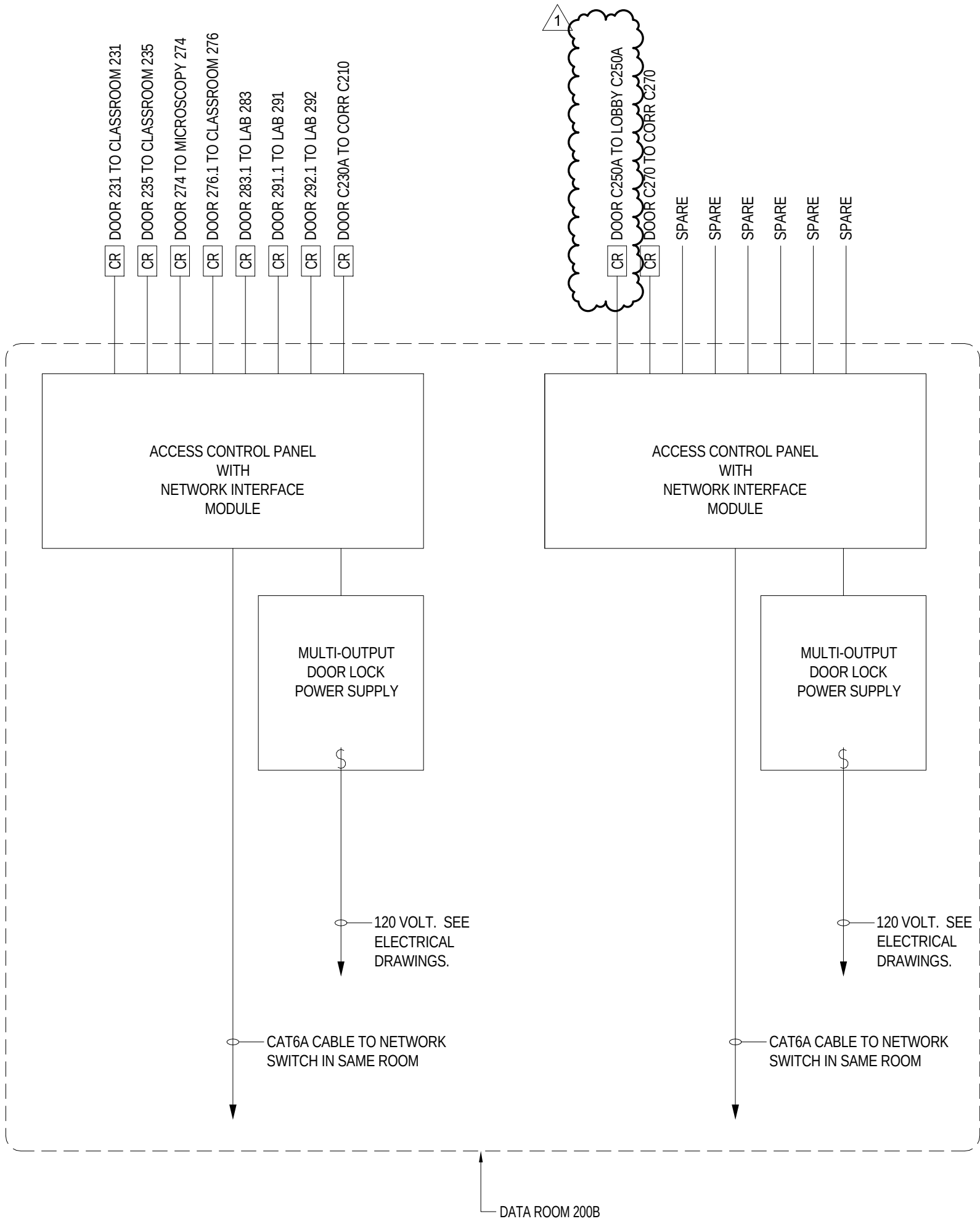


BASKET TRAY INSTALLATION DETAIL

SCALE: NONE

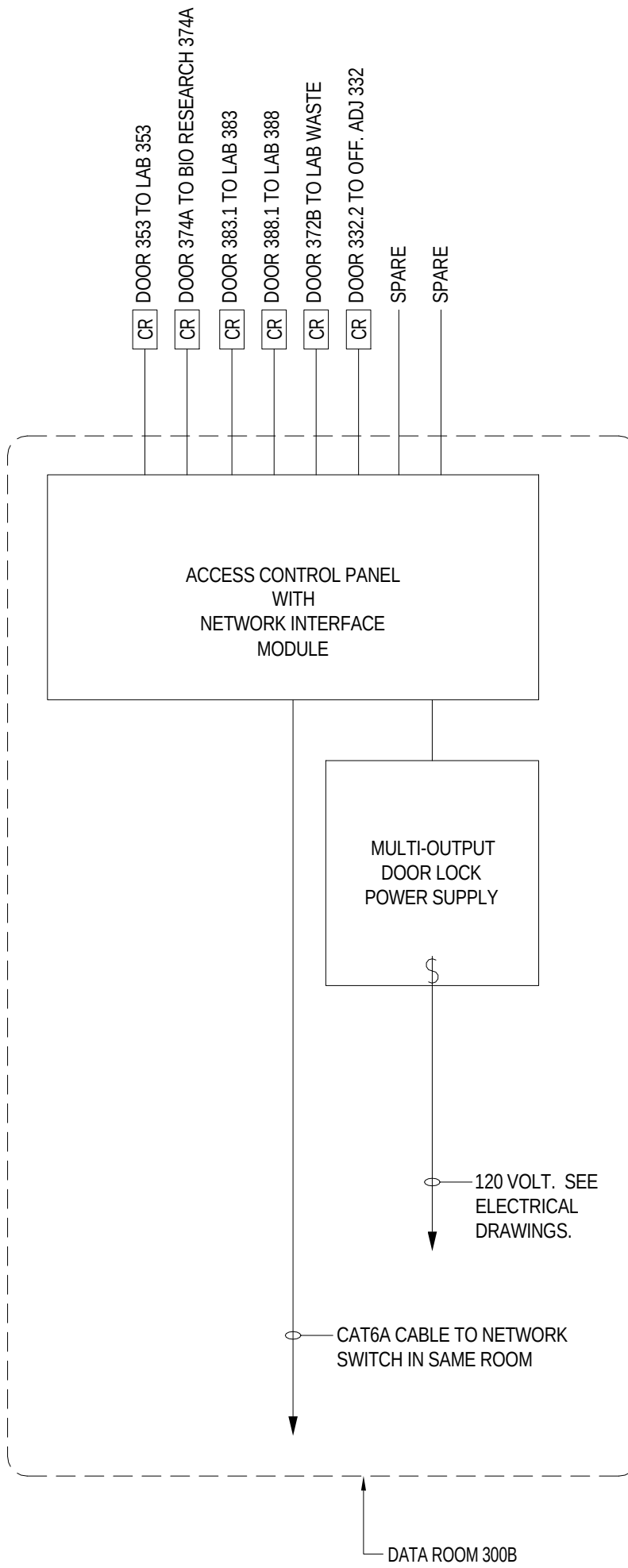
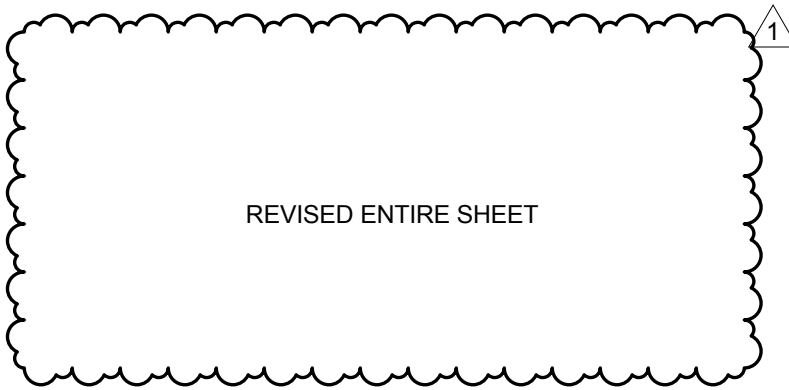


ACCESS CONTROL SYSTEM DIAGRAM-LEVEL 1
SCALE: NONE

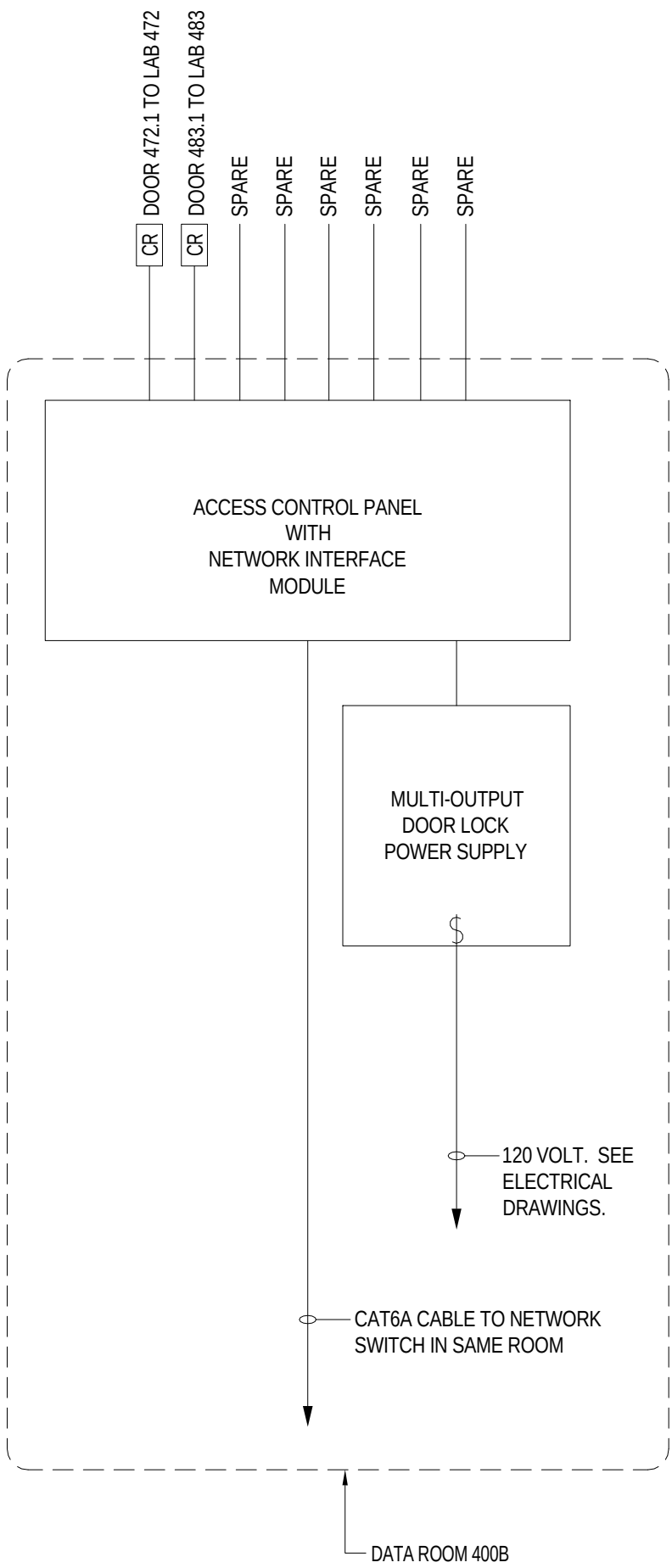


ACCESS CONTROL SYSTEM DIAGRAM-LEVEL 2
SCALE: NONE

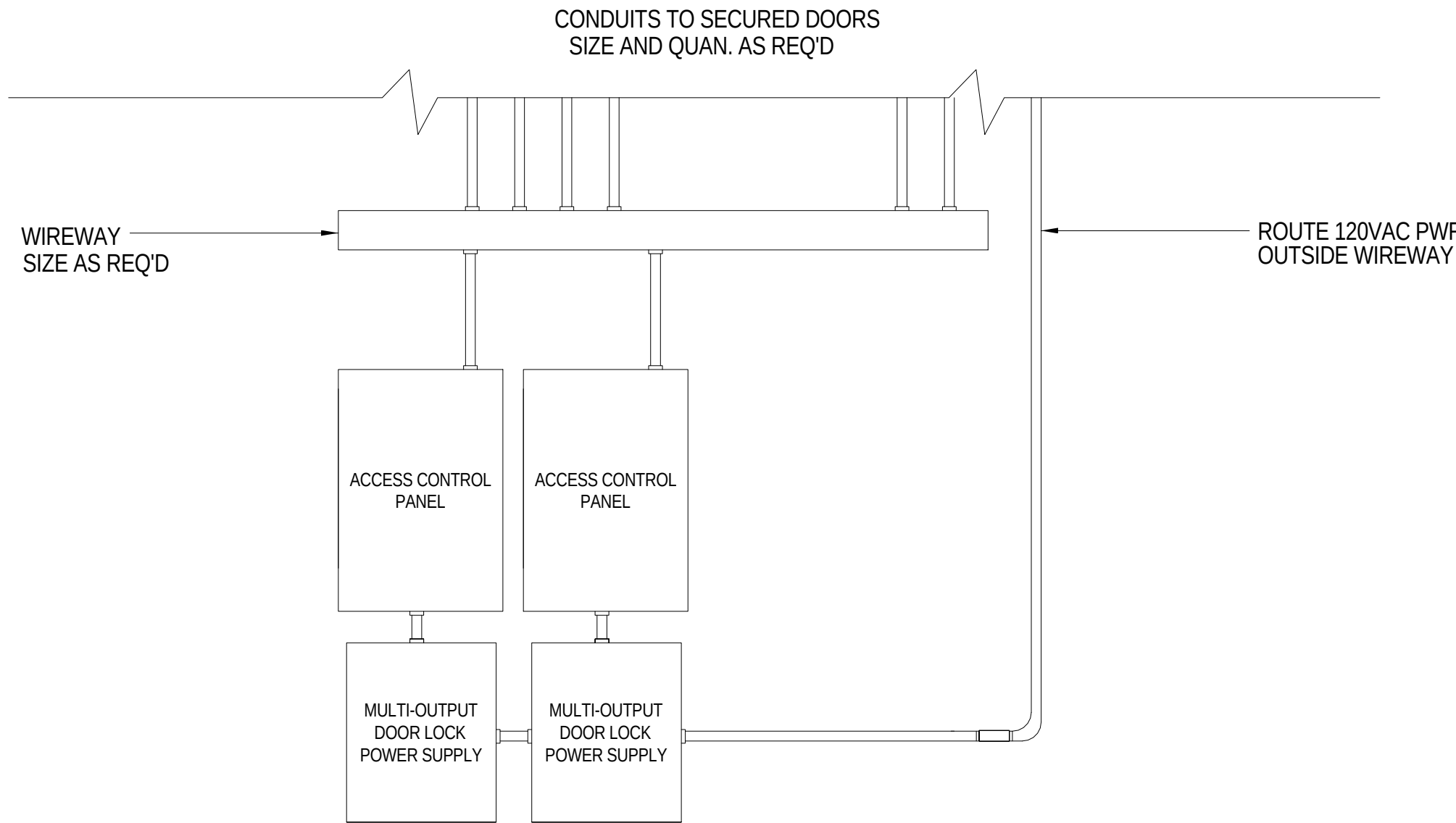
GENERAL NOTES:
1. DOOR INTERFACE BOX (DIB) NOT SHOWN FOR CLARITY. SEE TYPICAL SECURED DOOR WIRING DIAGRAM ON SHEET T0804.



ACCESS CONTROL SYSTEM DIAGRAM-LEVEL 3
SCALE: NONE



ACCESS CONTROL SYSTEM DIAGRAM-LEVEL 4
SCALE: NONE



TYPICAL SECURITY EQUIPMENT ELEVATION
SCALE: NONE



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CONFORMED SET 01 JUL 2016

1 ADDENDUM 2-2 19 APR 2016
ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016
No. Description Date

Drawing Title:

ACCESS CONTROL
BLOCK DIAGRAMS

Project No.: 04561.01 Checked by:

T0803

GENERAL NOTES:

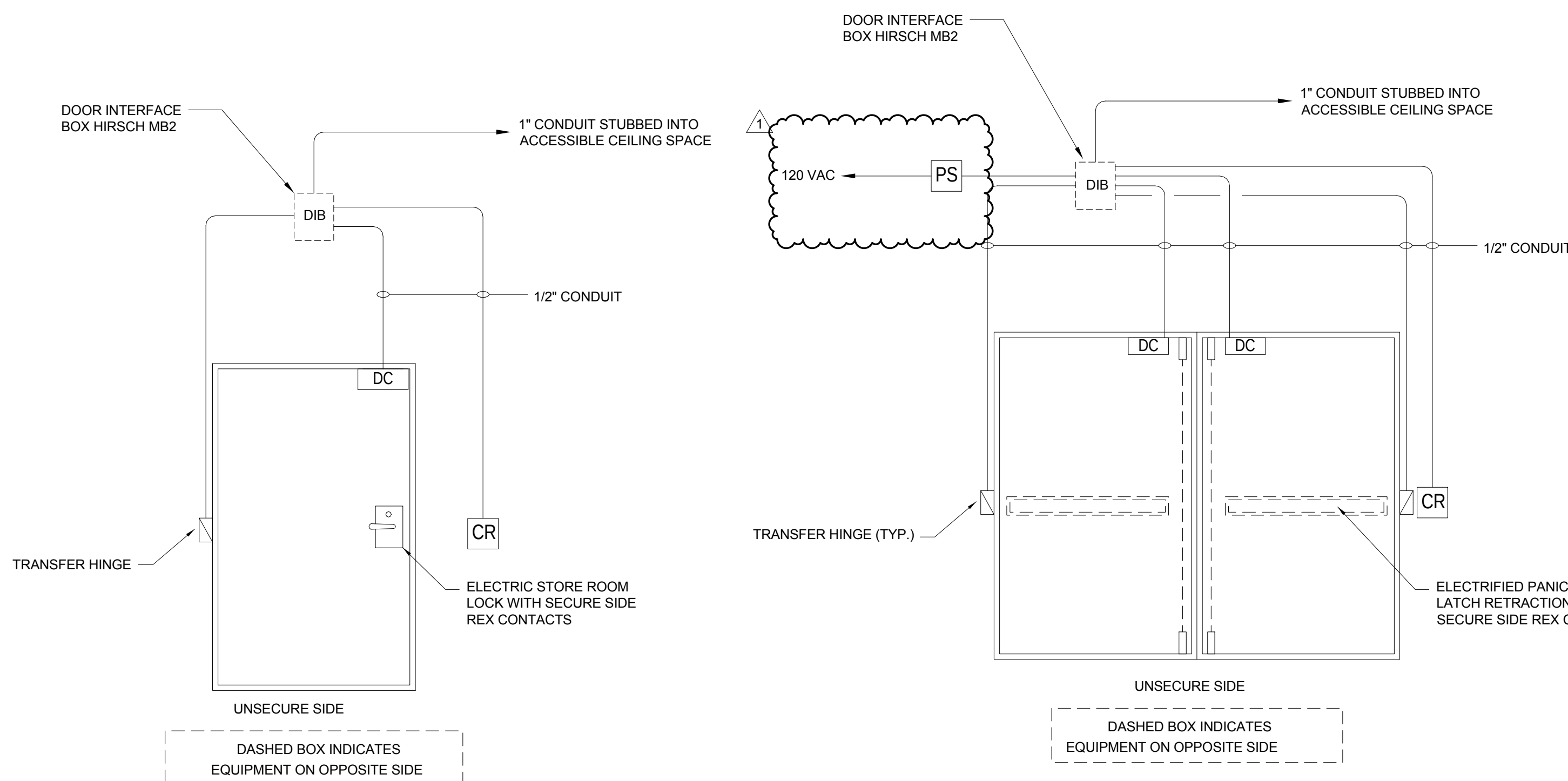
THIS SHEET ONLY

- SECURITY CONTRACTOR SHALL PROGRAM EACH SECURED DOOR TO LOCK/UNLOCK ON A TIMED SCHEDULE. SECURITY CONTRACTOR SHALL MEET WITH OWNER FOR SCHEDULING OF EACH SECURED DOOR.
- SECURITY CONTRACTOR SHALL PROVIDE ALL REQUIRED PROGRAMMING OF EXISTING ACS AS REQUIRED TO ACCEPT, CONTROL AND MONITOR SECURED DOORS PROVIDED UNDER THIS PROJECT.
- SECURITY CONTRACTOR SHALL MEET WITH ELEVATOR CONTRACTOR FOR CONNECTION OF CARD READER CABLING INSTALLED IN TRAVELING CABLE AND PROGRAMMING OF ELEVATOR FLOOR CONTROLS.
- ELECTRICAL CONTRACTOR SHALL MEET WITH SECURITY CONTRACTOR AND CONFIRM FINAL LOCATION OF ALL EQUIPMENT PRIOR TO INSTALLATION. SEE SECURITY SYSTEM RESPONSIBILITY MATRIX, THIS SHEET.
- COMMUNICATION AND DATA CABLING MAY BE RUN IN THE CABLE TRAY. 24V POWER FOR ACCESS CONTROL PANEL AND DOOR LOCKS SHALL BE RUN ON DEDICATED J-HOOKS. DO NOT RUN IN CABLE TRAY OR ON DATA COMMUNICATION J-HOOKS.
- SEE ELECTRICAL DRAWINGS 120VAC POWER CIRCUITING.

SECURITY EQUIPMENT RESPONSIBILITY MATRIX

EQUIPMENT	FURNISHED BY	INSTALLED BY	TERMINATIONS BY
CONDUITS & BACKBOXES	ELEC	ELEC	N/A
LV POWER CABLING	ELEC	ELEC	SEC
COMM CABLING	ELEC	ELEC	SEC
ELEV CARD READER CABLE	GEN	GEN	ELEC
120V POWER	ELEC	ELEC	ELEC
DOOR I/F BOX (DIB)	OWNER	ELEC	SEC
ACCESS CONTROL PANEL	OWNER	ELEC	SEC
CARD READER	OWNER	ELEC	SEC
MULTI O/P DOOR LOCK PS	ELEC	ELEC	SEC
LOCAL DOOR LOCK PS	GEN	ELEC	SEC
DOOR HARDWARE	GEN	GEN	ELEC
DOOR CONTACT	OWNER	GEN	SEC
TRANSFER HINGE	GEN	GEN	ELEC

GEN - GENERAL CONTRACTOR
ELEC - ELECTRICAL CONTRACTOR
SEC - SECURITY CONTRACTOR

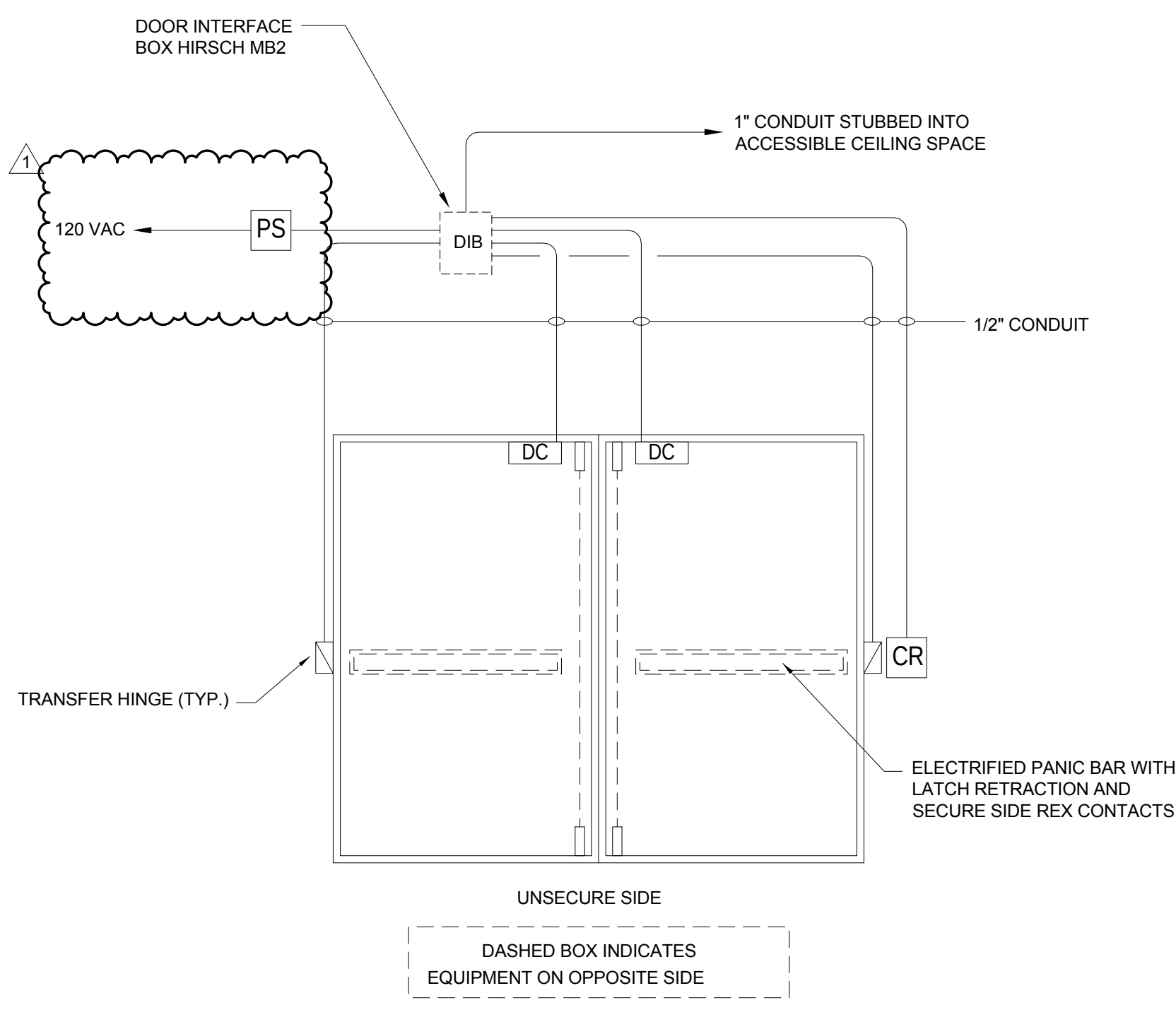


NOTES:

- ACS SHALL UNLOCK DOOR UPON VALID CARD READ.
- LEVER SET ALLOWS FREE EGRESS FROM SECURE SIDE.
- SECURE SIDE REX CONTACTS SHALL PROVIDE INPUT TO ACS TO SHUNT ALARM.

1 SECURE DOOR - SINGLE

SCALE: NONE

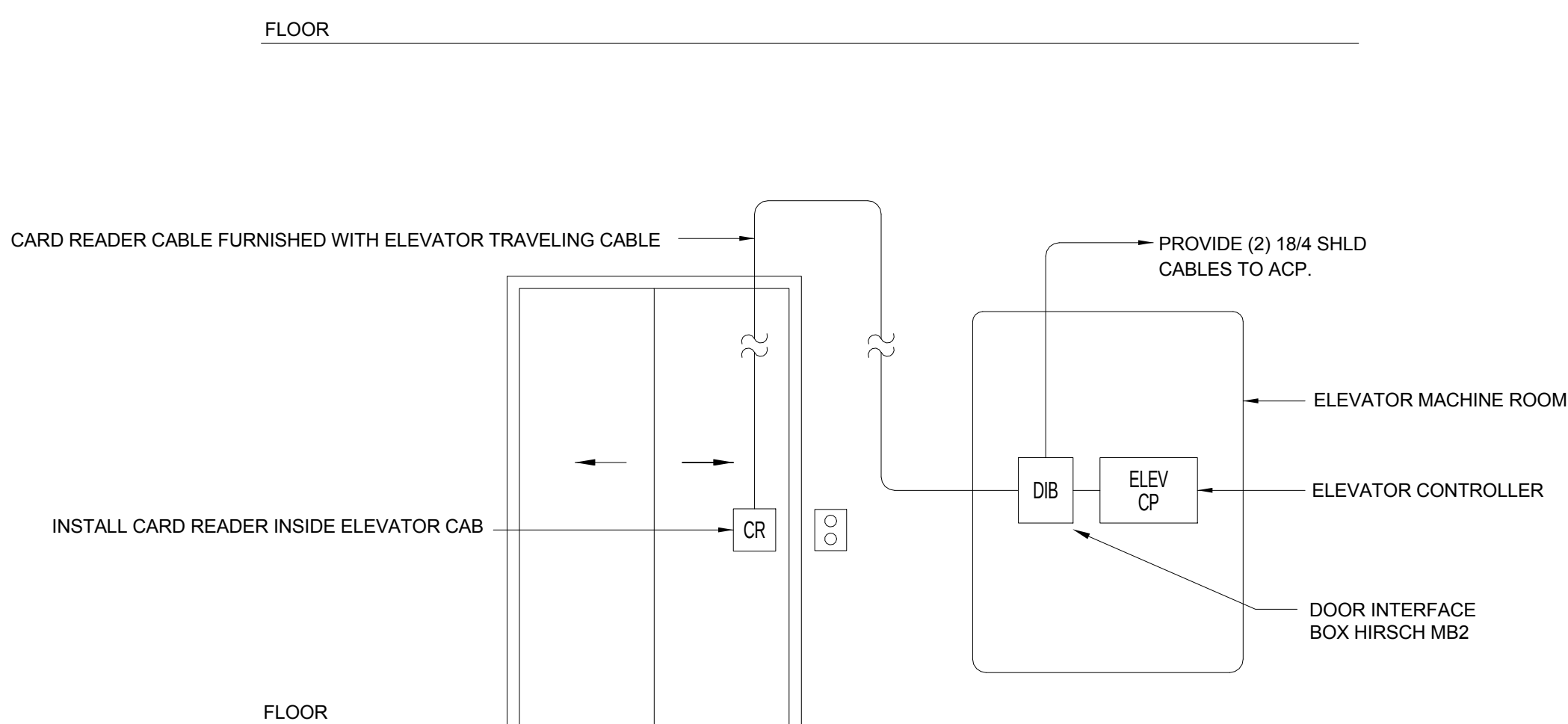


NOTES:

- ACS SHALL RETRACT LATCH RODS AND UNLOCK DOOR UPON VALID CARD READ.
- PANIC BAR ALLOWS FREE EGRESS FROM SECURE SIDE.
- SECURE SIDE REX CONTACTS SHALL PROVIDE INPUT TO ACS TO SHUNT ALARM.

2 SECURE DOOR - DOUBLE

SCALE: NONE

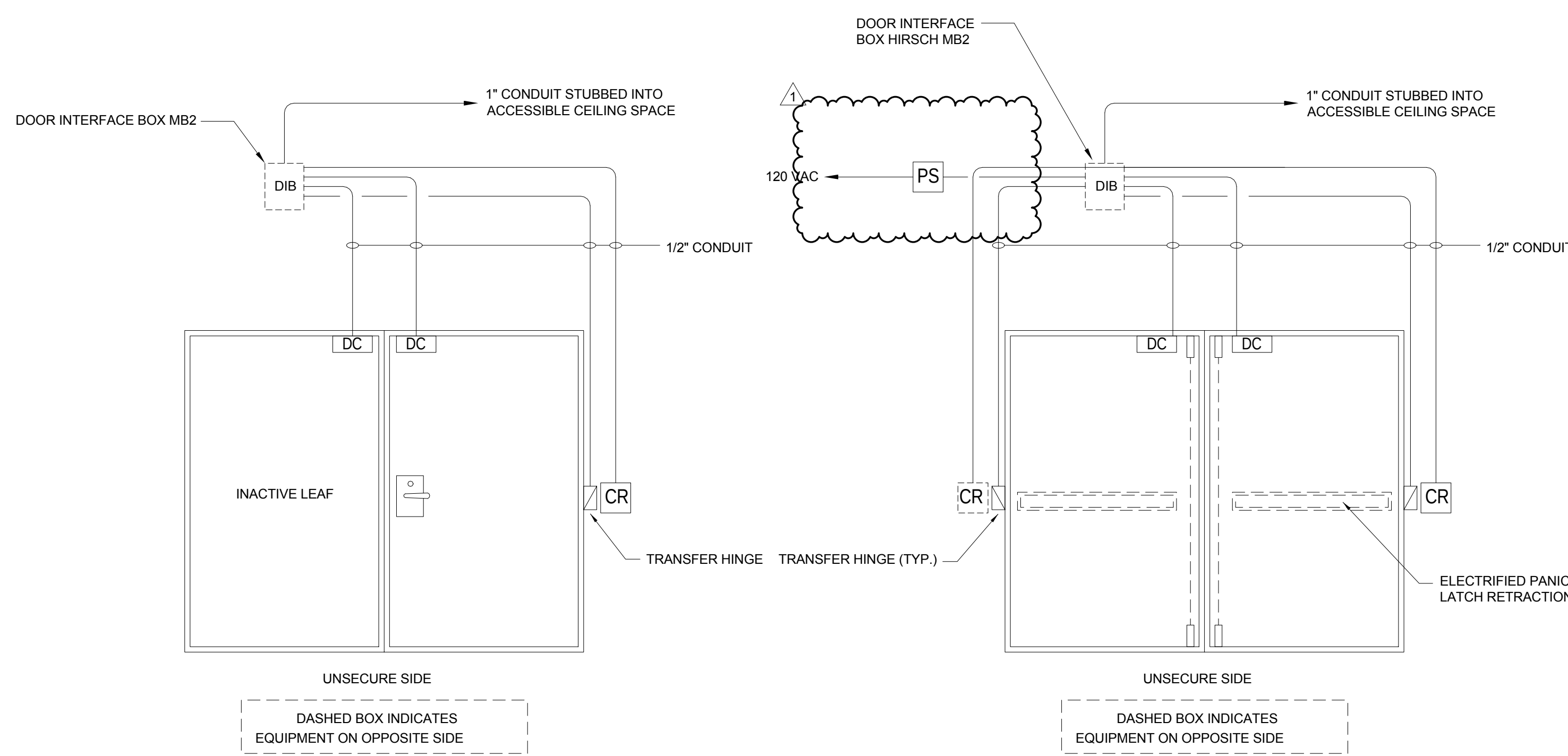


NOTES:

- UPON A VALID CARD READ THE ACS SHALL ENABLE SPECIFIC ELEVATOR FLOOR BUTTONS INSIDE ELEVATOR CAB FOR A USER (DEFINED) TIME PERIOD. ACS SHALL SECURE ACCESS TO LEVEL 0.

3 ELEVATOR

SCALE: NONE

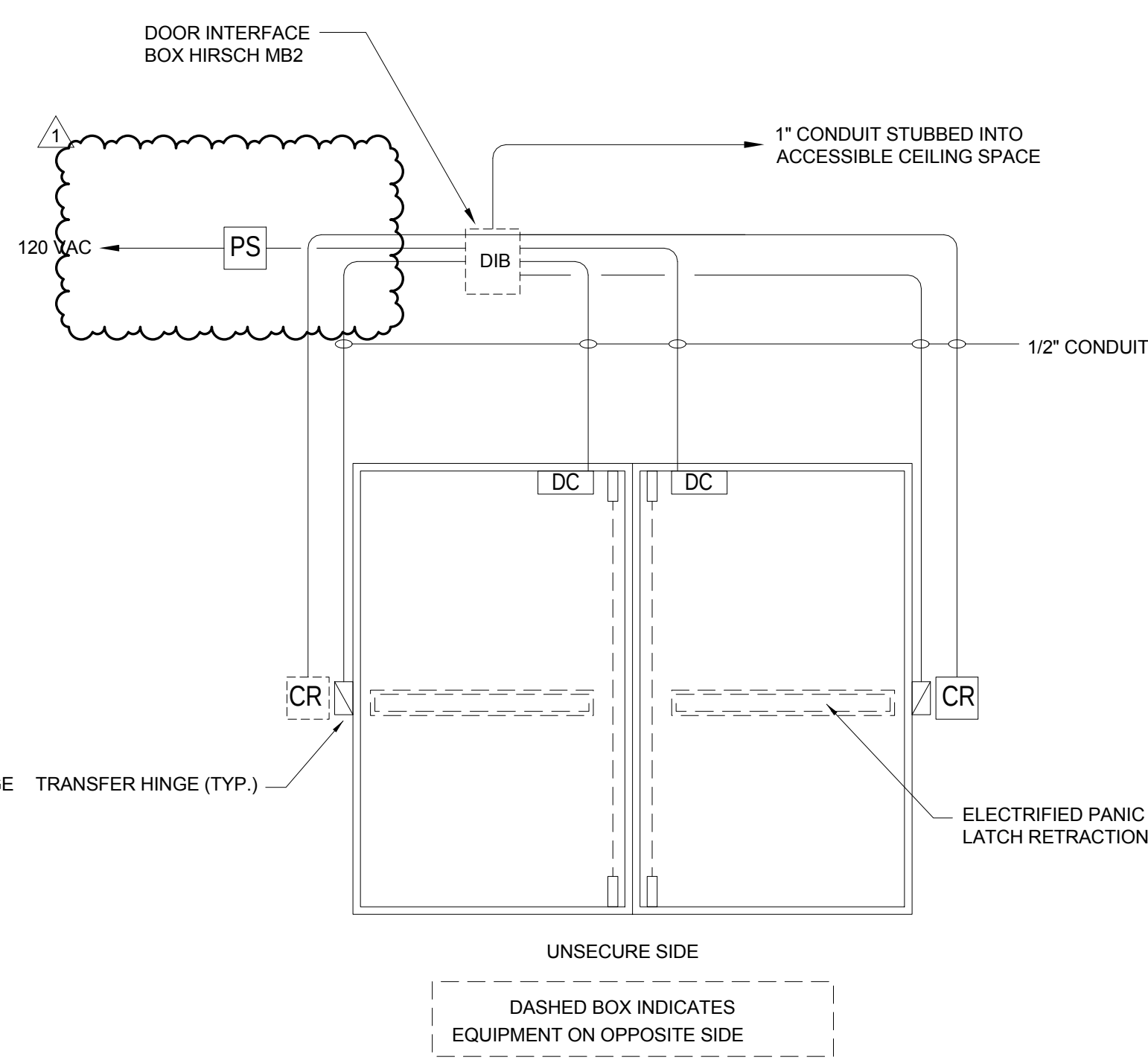


NOTES:

- ACS SHALL UNLOCK DOOR UPON VALID CARD READ.
- LEVER SET ALLOWS FREE EGRESS FROM SECURE SIDE.
- SECURE SIDE REX CONTACTS SHALL PROVIDE INPUT TO ACS TO SHUNT ALARM.

4 SECURE DOOR - DOUBLE

SCALE: NONE

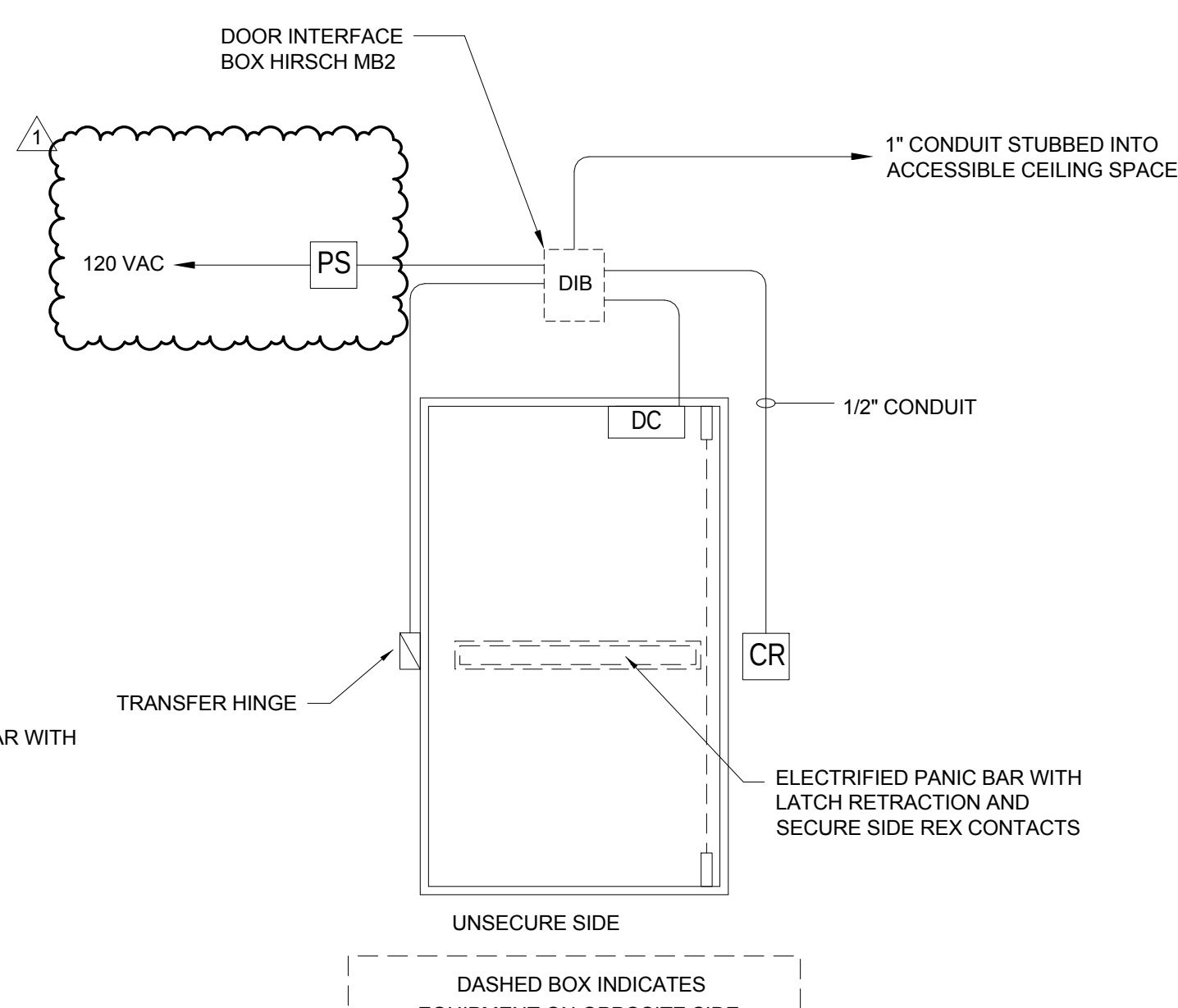


NOTES:

- ACS SHALL RETRACT LATCH RODS AND UNLOCK DOOR UPON VALID CARD READ.

5 SECURE DOOR - DOUBLE

SCALE: NONE

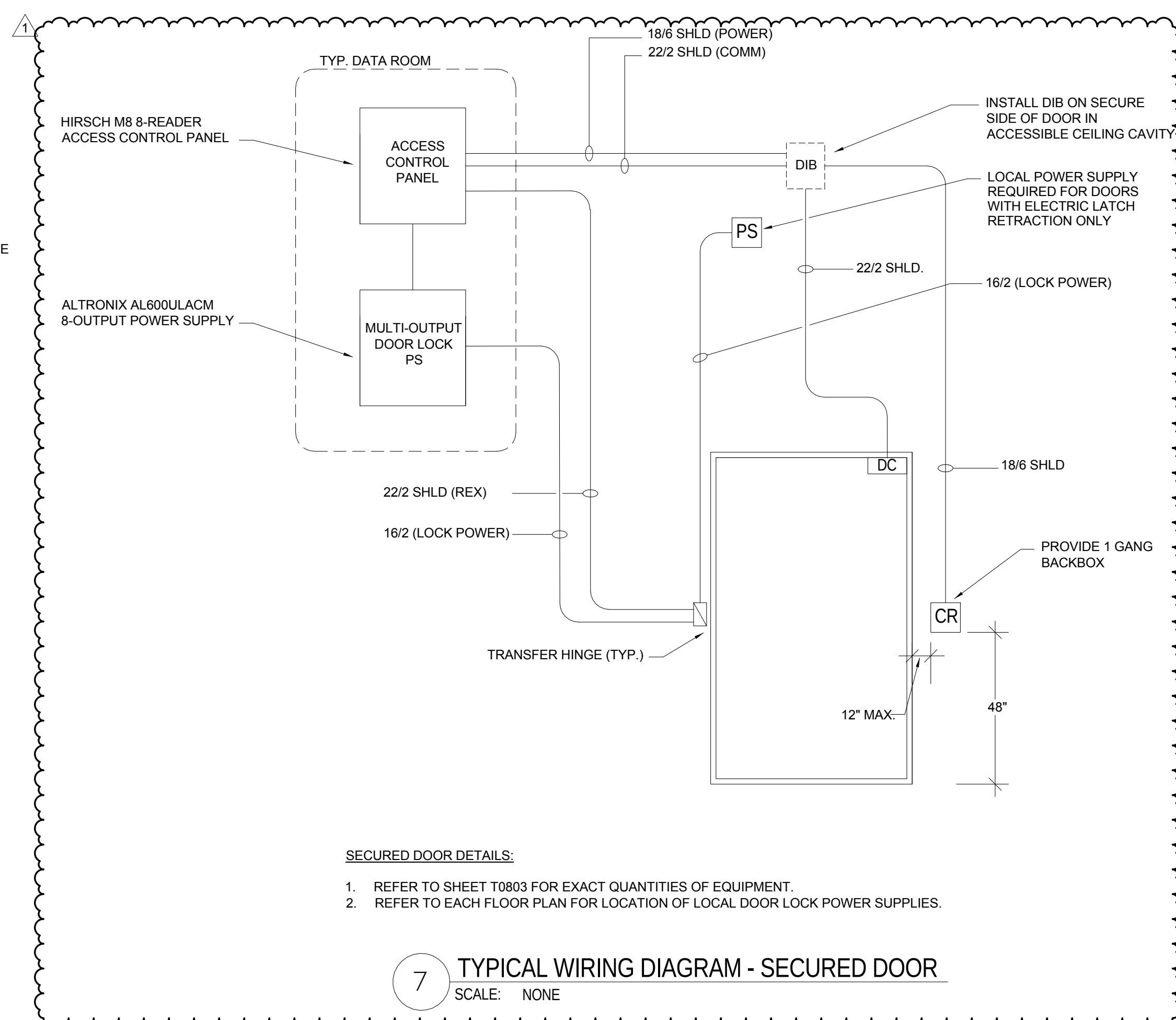


NOTES:

- ACS SHALL RETRACT LATCH RODS AND UNLOCK DOOR UPON VALID CARD READ.
- PANIC BAR ALLOWS FREE EGRESS FROM SECURE SIDE.
- SECURE SIDE REX CONTACTS SHALL PROVIDE INPUT TO ACS TO SHUNT ALARM.

6 SECURE DOOR - SINGLE

SCALE: NONE



SECURED DOOR DETAILS:

- REFER TO SHEET T0803 FOR EXACT QUANTITIES OF EQUIPMENT.
- REFER TO EACH FLOOR PLAN FOR LOCATION OF LOCAL DOOR LOCK POWER SUPPLIES.

7 TYPICAL WIRING DIAGRAM - SECURED DOOR

SCALE: NONE

CONFORMED SET

01 JUL 2016

1	ADDENDUM 2-2	19 APR 2016
2	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016
No.	Description	Date

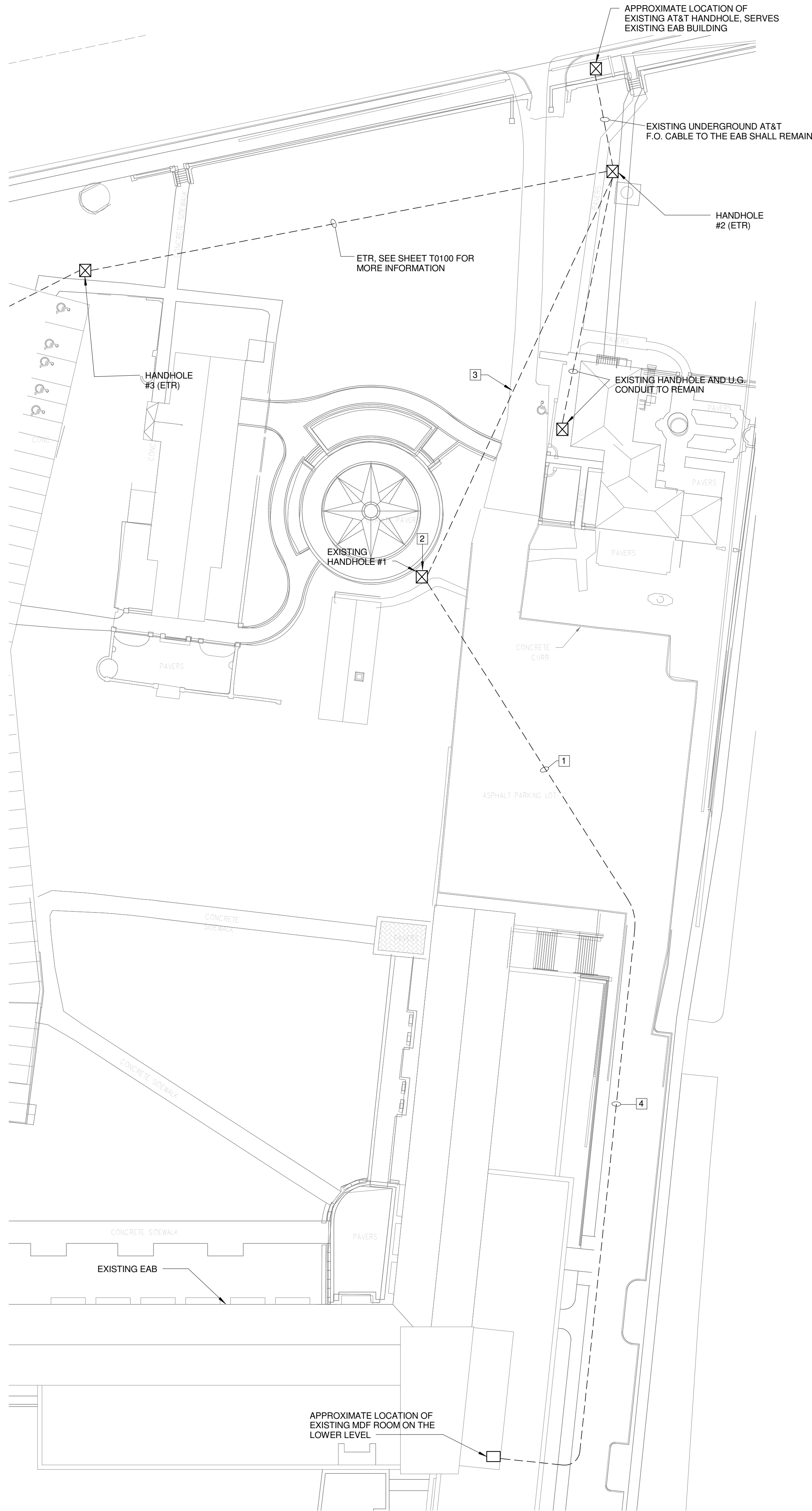
Drawing Title:

ACCESS CONTROL
DETAILS

Project No.: 04561.01

Checked by:

T0804



1 TECHNOLOGY SITE PLAN - DEMOLITION
1" = 30'-0"

GENERAL NOTES:

1. LOCATIONS SHOWN FOR UNDERGROUND CONDUITS ARE APPROXIMATE. CONTRACTOR SHALL LOCATE ALL UNDERGROUND CONDUITS PRIOR TO EXCAVATION.
2. ALL NETWORK AND TELEPHONE SYSTEM OUTAGES SHALL OCCUR ON WEEKENDS. COORDINATE AND SCHEDULE ALL OUTAGES WITH WEBSTER UNIVERSITY WITH A MINIMUM OF TWO WEEKS NOTICE PRIOR TO AN OUTAGE.

KEY NOTES:

THIS SHEET ONLY

1. THERE ARE (2) 4" UNDERGROUND PVC CONDUITS FROM EXISTING HANDHOLE # 1 TO THE EXISTING MDF ROOM LOCATED ON THE LOWER LEVEL OF THE EAST ACADEMIC BUILDING (EAB). CONDUIT #1 CONTAINS (3) 1-1/4" INNERDUCTS, ONE OF THESE INNERDUCTS CONTAINS THE AT&T F.O. CABLE. THE OTHER TWO INNERDUCTS ARE SPARES WITH PULL STRINGS. CONDUIT #2 CONTAINS (1) 1-1/4" INNERDUCT WITH (2) F.O. CABLES FROM LORETTO HALL TO THE EAB MDF. DISCONNECT AND REMOVE THE F.O. CABLES FROM THE EXISTING HANDHOLE # 1 TO THE EAB MDF. REMOVE THE PORTION OF THE CONDUITS THAT INTERFERE WITH THE ISB BUILDING. SEE SHEET T0100 FOR SPLICING AND EXTENSION OF THE F.O. CABLES AROUND THE ISB.
2. DISCONNECT AND REMOVE EXISTING HANDHOLE #1 TO AVOID CONFLICT WITH PROPOSED MANHOLE. SEE SHEET C400 OF BID PACKAGE #1 FOR MANHOLE LOCATION AND T0100 FOR MANHOLE #1 LOCATION.
3. EXISTING UNDERGROUND 4" PVC CONDUIT CONSISTS OF (1) 1 1/4" INNERDUCT WITH F.O. CABLE TO THE EXISTING EAB; (1) 1 1/4" INNERDUCT WITH TWO AT&T F.O. CABLES TO THE EAB; AND (1) 1 1/4" SPARE INNERDUCT. INNERDUCTS AND CABLES SHALL BE PULLED BACK TO THE NORTH UNTIL HANDHOLE #1 IS INSTALLED IN NEW LOCATION. STUB CONDUIT/ INNERDUCTS/ F.O. CABLE UP INTO HANDHOLE #1. SEE SHEET T0100 FOR HANDHOLE #1 NEW LOCATION. ALL NETWORK OUTAGES ASSOCIATED WITH THIS WORK SHALL OCCUR DURING WEEKEND HOURS. COORDINATE DATE AND TIME WITH WEBSTER UNIVERSITY. PROTECT ALL CONDUIT AND CABLES FROM MOISTURE AND DAMAGE. CONTRACTOR SHALL MEET WITH WEBSTER UNIVERSITY IT DEPARTMENT TO SCHEDULE DISCONNECTION OF EXISTING FIBER OPTIC CABLE PRIOR TO THE START OF WORK.
4. THE EXISTING UNDERGROUND CONDUITS AND INNERDUCTS ON THE EAST SIDE OF THE EAB SHALL REMAIN AND SHALL BE EXTENDED TO HANDHOLE #7. SEE SHEET T0100 FOR HANDHOLE #7 LOCATION.



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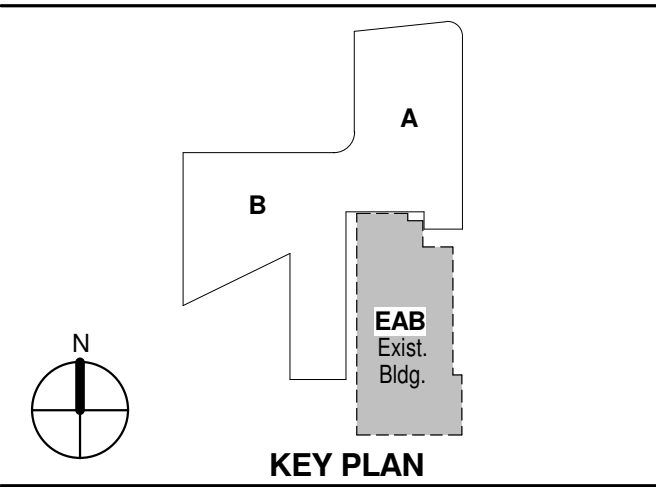
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CONFORMED SET

01 JUL 2016

ISSUED FOR CONSTRUCTION (BP2) 01 MAR 2016

No.	Description	Date
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KEY PLAN

**TECHNOLOGY
DEMOLITION SITE PLAN**

Project No.: 04561.01

Checked by:

TD0100