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# NORTH WILLIAMS APARTMENTS - FAMILY HOUSING

## PERMIT/GMP SET

### VOLUME 1

OCTOBER 17, 2018



#### ARCHITECTURAL TEAM & CONSULTANTS UNDER ARCH

**ARCHITECTURAL**  
ANKROM MOISAN ARCHITECTS, INC.  
38 NORTHWEST DAVIS  
SUITE 300  
PORTLAND, OR 97209  
**ISAAC JOHNSON, PRINCIPAL**  
**ROBERT LECHER, PM**  
**JOHN BOYD, PA**

PH: (503) 245-7100  
FAX: (503) 245-7710  
WWW.AMAA.COM  
ISAACJ@ANKROMMOISAN.COM  
ROBERTL@ANKROMMOISAN.COM  
JOHNB@ANKROMMOISAN.COM  
(503) 952-1517

**STRUCTURAL**  
VALAR Consulting Engineering  
12042 SE Sunnyside Road #357  
Clackamas, Oregon 97015  
**Norm Faris PE SE, Principal**

PH: (503) 758-8092  
norm.faris@valarengineering.com

**CIVIL**  
SUMMIT ENGINEERING, LLC  
PO BOX 50322  
EUGENE, OR 97405  
**Jason Havelka, PE, LEED AP, CTSI**

PH: (971) 251-0194  
jason@summitengineeringllc.com  
(503) 997-2808

**MEP DESIGN ASSIST**  
INTERFACE ENGINEERING, INC.  
708 SW THIRD AVENUE  
SUITE 400  
PORTLAND, OREGON 97204  
**ANDREW LASSE, PRINCIPAL**

PH: (503) 382-2615  
ANDREW.L@INTERFACEENG.COM

**LANDSCAPE**  
ECOTONE  
5229 NE MLK BLVD  
Suite 101  
Portland, OR 97211  
**Bryan Bailey RLA, LEED AP**

PH: (503) 927-4180  
bryan@ecotone-env.com

**INTERIOR DESIGN**  
ANKROM MOISAN ARCHITECTS, INC.  
38 NORTHWEST DAVIS STREET  
SUITE 300  
PORTLAND, OREGON 97209  
**KATIE LYSLO**

PH: (503) 245-7100  
FAX: (503) 245-7710  
WWW.AMAA.COM  
KATIEL@ANKROMMOISAN.COM  
(503) 892-7312

**BUILDING ENVELOPE**  
MORRISON HERSHFELD  
5100 SW MACADAM AVENUE  
SUITE 500  
PORTLAND, OREGON 97239  
**JOHN DUNCAN**  
**ROBERT JACKSON**

FAX: (503) 595-9136  
JDUNCAN@MORRISONHERSFELD.COM  
RJACKSON@MORRISONHERSFELD.COM  
(503) 924-2518  
(971) 717-6114

#### OWNER TEAM & CONSULTANTS UNDER OWNER

**CLIENT**  
BRIDGE HOUSING  
38 NW DAVIS STREET  
SUITE 450  
PORTLAND, OREGON 97209  
**DESTIN FERDUN, SR PM**  
**TRINA WHITMAN, PM**

bridgehousing.com  
dferdun@bridgehousing.com  
twhitman@bridgehousing.com  
(503) 894-5727  
(503) 894-5725

**ENVIRONMENTAL**

**SUSTAINABILITY**  
EARTH ADVANTAGE, INC.  
623 SW OAK STREET  
SUITE 300  
PORTLAND, OREGON 97205  
**ERIC FOLEY**

PH: (503) 968-7160  
EFOLEY@EARTHADVANTAGE.ORG

**ENERGY MODELING**

**SURVEYOR**  
Westlake Consultants, Inc.  
15115 SW Sequoia Parkway, Suite 150  
Tigard, Oregon 97224  
**Gary Anderson, PLS**

503-684-0652

**ACCESSIBILITY CONSULTANT**  
KAREN BRAITMAYER  
2144 WESTLAKE AVENUE NORTH  
UNIT F  
SEATTLE, WASHINGTON 98109  
**KAREN BRAITMAYER**

PH: (206) 929-9799 EXT-2  
FAX: (206) 628-0386  
KAREN@BRAITMAYER.COM

**TRAFFIC ENGINEER**  
Nemariam Engineers & Associates LLC  
10976 NE IRONWOOD LANE  
PORTLAND, OREGON 97229  
**HAREGU NEMARIAM**

PH: (503) 746-4386  
HAREGU@NEMARIAM-ENGINEERS.COM  
(541) 680-3411

#### GENERAL CONTRACTOR & DELEGATED DESIGN

**CONTRACTOR**  
COLAS CONSTRUCTION, INC.  
19 NW 5TH AVENUE, SUITE 203  
PORTLAND, OREGON, 97209  
**ANDREW COLAS**  
**MARC WIATER**  
**KEVIN RABORG**

PH: (503) 292-4025  
FAX: (503) 292-4024  
ANDREW@COLASCONSTRUCTION.COM  
MWIATER@COLASCONSTRUCTION.COM  
KEVIN@COLASCONSTRUCTION.COM

**MECHANICAL**  
HUNTER-DAVISSON, INC.  
1800 SE PERSHING STREET  
PORTLAND, OREGON 97220  
**TARA WELLS**  
**GEOFFREY LEDBETTER**

FAX: (503) 236-1625  
TWELLS@HUNTERDAVISSON.COM  
GLEDBETTER@HUNTERDAVISSON.COM  
(503) 542-3608  
(503) 542-3650

**ELECTRICAL, FIRE ALARM, AND LOW VOLTAGE**  
AFFORDABLE ELECTRIC  
14942 SE 82ND DRIVE  
CLACKAMAS, OREGON 97015  
**JEAN-WIDLY MALARY**

PH: (503) 305-6967  
FAX: (503) 744-0240  
JMALARY@AFFOELECT.COM

**PLUMBING**  
TAPANI PLUMBING  
P.O. BOX 2350  
BATTLE GROUND, WASHINGTON 98604  
**BRIAN EK**

PH: (360) 687-3983  
FAX: (360) 687-4494  
BRIANE@TAPANIPLUMBING.COM

**FIRE SPRINKLER**  
CROWN FIRE SYSTEMS  
7402 JOHNSON CREEK BOULEVARD  
PORTLAND, OREGON 97206  
**BILL OFFINGA**

PH: (503) 777-5030  
BILL@CROWNFIRESYSTEMS.COM

NORTH WILLIAMS APARTMENTS - FAMILY HOUSING  
2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE
VOLUME 1 COVER SHEET		
PERMIT / GMP		
DATE 17 OCT 2018	PROJECT NUMBER 149000	
SHEET NUMBER	CS1	



## VOLUME 1

	NUMBER	NAME
ARCHITECTURAL	A0.11	EXTERIOR WALL ASSEMBLIES
	A0.21	INTERIOR WALL ASSEMBLIES
	A0.31	HORIZONTAL ASSEMBLIES
	A0.41	TYPICAL ASSEMBLY DETAILS
	A0.42	AIR BARRIER DIAGRAM
	A0.43	ENERGY CODE ELEVATIONS
	A0.44	ENERGY CODE ELEVATIONS
	A1.01	ARCHITECTURAL SITE PLAN
	A2.00	LEVEL 1 SLAB PLAN
	A2.01	LEVEL 1 OVERALL FLOOR PLAN
	A2.02	LEVEL 2 OVERALL FLOOR PLAN
	A2.03	LEVEL 3 OVERALL FLOOR PLAN
	A2.04	LEVEL 4 OVERALL FLOOR PLAN
	A2.05	LEVEL 5 OVERALL FLOOR PLAN
	A2.06	ROOF PLAN
	A3.11	BUILDING ELEVATIONS
	A3.12	BUILDING ELEVATIONS
	A3.13	BUILDING ELEVATIONS
	A4.01	BUILDING SECTIONS
	A4.51	WALL SECTIONS
	A5.01	LEVEL 1 NORTH ENLARGED FLOOR PLAN
	A5.02	LEVEL 1 SOUTH ENLARGED FLOOR PLAN
	A5.03	LEVEL 2 NORTH ENLARGED FLOOR PLAN
	A5.04	LEVEL 2 SOUTH ENLARGED FLOOR PLAN
	A5.05	LEVEL 3 NORTH ENLARGED FLOOR PLAN
	A5.06	LEVEL 3 SOUTH ENLARGED FLOOR PLAN
	A5.07	LEVEL 4 NORTH ENLARGED FLOOR PLAN
	A5.08	LEVEL 4 SOUTH ENLARGED FLOOR PLAN
	A5.09	LEVEL 5 NORTH ENLARGED FLOOR PLAN
	A5.10	LEVEL 5 SOUTH ENLARGED FLOOR PLAN
A5.12	TRASH.RECYCLING CHUTE SECTION	
A6.01	STAIR 1 PLANS AND SECTIONS	
A6.02	STAIR 2 PLANS AND SECTIONS	
A6.03	STAIR DETAILS	
A6.21	ELEVATOR PLANS AND SECTIONS	
A6.22	ELEVATOR DETAILS	

Legend for symbols used in the drawing:

- GRID: A circle with the letter 'A' inside, with a dashed line extending to the left.
- DOOR TAG: A circle with the number '101' inside.
- KEYNOTE: A hexagon with the number '05' inside.
- WINDOW TAG: A diamond with the number '10' inside.
- REVISION TAG: A circle with a horizontal line through the center.
- NORTH ARROWS: A square with a circle inside, containing a right-pointing arrow.

Labels on the right side of the legend:

- LETTERS HORIZONTAL
- NUMBERS VERTICAL
- DOOR NUMBER
- KEYNOTE NUMBER
- WINDOW TYPE
- REVISION NUMBER
- NORTH DIRECTION

Diagram illustrating the components of a room schedule tag:

- CEILING TAG**: Points to the top of the tag.
- ROOM NAME**: Points to the room name field.
- ROOM NUMBER**: Points to the room number field.
- ROOM AREA**: Points to the room area field.
- VIEW NAME**: Points to the view name field.
- DRAWING SCALE**: Points to the drawing scale field.
- DRAWING NUMBER**: Points to the drawing number field.

VOLUME 2

REVISION	DATE	REASON FOR ISSUE

SHEET INDEX & SYMBOLS LEGEND	
PERMIT / GMP	
DATE 17 OCT 2018	PROJECT NUMBER 149000
SHEET NUMBER <b>G0.01</b>	



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ABBREVIATIONS

ABBREVIATIONS	
ABBREVIATION	TERM
A/V	AUDIO VISUAL
AB	ANCHOR BOLT
AC	AIR CONDITIONING
ACDN	ACCORDION
ACP	ACOUSTICAL CEILING PANEL
ACST	ACOUSTICAL
ACT	ACOUSTICAL CEILING TILE
AD	AREA DRAIN
ADJ	ADJUST, ADJUSTABLE
AESS	ARCHITECTURALLY EXPOSED STRUCTURAL STEEL
AFF	ABOVE FINISH FLOOR
ALUM	ALUMINUM
AP	ASPHALTIC PAVING
APP	APPROXIMATELY
ARCH	ARCHITECTURAL
ASPH	ASPHALT
AUTO	AUTOMATIC
B #	BASE
BALC	BALCONY
BD	BOARD
BDRM	BEDROOM
BITUM	BITUMINOUS
BKR	BACKER
BL	BLINDS
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BLKT	BLANKET
BLT IN	BUILT-IN
BM	BEAM
BOC	BOTTOM OF CURB
BOT/BTM	BOTTOM
BOW	BOTTOM OF WALL
BRK	BRICK
BSMT	BASEMENT
BTR	BETTER
BU	BUILT-UP
BUR	BUILT-UP BITUMINOUS ROOFING
BW	BUILDING WRAP
C #	CARPET
C/W	CURTAIN WALL
CAB	CABINET
CB	CATCH BASIN
CC	CUBICLE CURTAIN
CEM	CEMENT, CEMENTITIOUS
CG	CORNER GUARD
CI	CAST IRON
CIP	CAST IN PLACE
CJ	CONTROL JOINT
CK TP	COOK TOP
CL	CENTER LINE
CLG	CEILING
CLO	CLOSER
CLOS	CLOSET
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CNTR	COUNTER
COILG	COILING
COL	COLUMN
COMP	COMPOSITE, COMPENSATION
CONC	CONCRETE
COND	CONDITION
CONSTR	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
CORR	CORRIDOR
CPT	CARPET
CSMU	CALCIUM SILICATE MASONRY UNIT
CTG	COATING
CTR	CENTER
CTRL	CONTROL
CTSK	COUNTERSINK
CTV	CABLE TV
CU	CUBIC
CLST	CUSTOM
CWK	CASEWORK
D/W	DISHWASHER
DAAC	DIRECT-APPLIED ACOUSTICAL CEILING
DBL	DOUBLE
DEC	DECORATIVE
DEFL	DEFLECTION
DEMO	DEMOLITION
DEPT	DEPARTMENT
DET	DETAIL
DIM	DIMENSION
DIMP	DIMPLED PLASTIC
DKG	DECKING
DMFG	DAMP-PROOFING
DS	DOWNSPOUT
DWG	DRAWING
DWR	DRAWER
(E)	EXISTING
EA	EACH
EF	EPOXY FLOORING, EACH FACE
EFS	EXTERIOR FINISH SYSTEM
EIFS	EXTERIOR INSULATED FINISH SYSTEM
EIC	EXPANSION JOINT COVER
ELEC	ELECTRICAL
ELEV	ELEVATOR
EMER	EMERGENCY
ENCL	ENCLOSURE

CAR PARKING INFORMATION

MIN. PARKING REQ: PER CITY CODE STANDARD 33.266.110.D, WHERE THERE ARE 51 OR MORE DWELLING UNITS ON THE SITE, THE MIN. NUMBER OF REQUIRED PARKING SPACES IS 0.33 SPACES PER DWELLING UNIT. [ 61 X.33 = 20.13]

30 PARKING SPACES PROVIDED, **COMPLIES**

1 REGULAR ADA SPACE PROVIDED  
1 VAN ADA SPACE PROVIDED

1 LOADING ZONE WITH A MIN. 9'X18' SPACE PROVIDED

BICYCLE PARKING INFORMATION

**LONG TERM BIKE PARKING - COVERED AND MONITORED**

LONG TERM = 1.1 PER DWELLING UNIT OR 61\*.1 = 67.1 OR 68 SPACES;

68 SPACES ARE CURRENTLY DIVIDED AS FOLLOWS:

- (34) EXTERIOR COVERED AND MONITORED BIKE SPACES
- (34) SPACES RESIDENTIAL USE
  - (2) SPACES COMMUNITY SERVICE USES

(32) INTERIOR BIKE SPACES TO BE DISTRIBUTED WITHIN BUILDING. SEE SITE PLAN AND FLOOR PLANS FOR MORE INFORMATION.

**SHORT-TERM BIKE PARKING**

REQUIRED SHORT TERM = 1 PER 20 UNITS, 61/20 = 3.05 OR 4 SPACES; TO BE LOCATED BY MAIN ENTRY OUTSIDE OF ROW

PROVIDED SHORT-TERM: PROJECT WILL PROVIDE THE FOLLOWING

- (6) SHORT-TERM BIKE PARKING SPACES:
- (4) SPACES RESIDENTIAL USE
- (2) SPACES COMMUNITY SERVICE USES

PROJECT NOTES

- GENERAL**
- THESE DRAWINGS AND THE ACCOMPANYING SPECIFICATIONS ARE THE PROPERTY OF ANKROM MOISAN ARCHITECTS AND SHALL NOT BE COPIED OR REUSED FOR ANY OTHER PROJECT.
  - CONSTRUCTION DRAWINGS AND SPECIFICATIONS ARE COMPLEMENTARY, AND WHAT IS CALLED FOR BY EITHER WILL BE BINDING AS IF CALLED FOR BY ALL. PROVIDE WORK SHOWN OR REFERRED TO ON ONE SET OF DRAWINGS AS THOUGH SHOWN ON ALL RELATED DRAWINGS.
  - THE SPECIFICATIONS CONTAIN PERTINENT DETAILED INFORMATION ABOUT EACH BUILDING COMPONENT; THEY ARE A PART OF THE CONTRACT DOCUMENTS AND MUST BE USED IN CONJUNCTION WITH THE DRAWINGS.
  - ABSOLUTELY NO BUILDING COMPONENT SHOWN ON THESE DRAWINGS SHALL BE INCORPORATED INTO THE WORK UNTIL SHOP DRAWINGS, SAMPLES, BROCHURES OR OTHER SUBMITTALS CALLED FOR IN THE SPECIFICATIONS HAVE BEEN REVIEWED AND APPROVED BY THE ARCHITECT.
  - VERIFY SITE CONDITIONS AND REPORT ANY DISCREPANCIES TO THE ARCHITECT BEFORE PROCEEDING WITH CONSTRUCTION.
  - COORDINATE THE WORK OF DELEGATED DESIGNERS WITH THE WORK OF OTHER TRADES
  - WOOD IN CONTACT WITH CONCRETE SHALL BE PRESERVATIVE-TREATED.
  - CONCEALED WOOD USED IN TYPE I AND TYPE II CONSTRUCTION SHALL BE FIRE RETARDANT TREATED
  - FASTENERS IN CONTACT WITH TREATED WOOD SHALL BE CORROSION RESISTANT.
  - PROVIDE BLOCKING OR OTHER CONCEALED SUPPORTS WITHIN WALLS AS REQUIRED FOR HANDRAILS, CASEWORK, GRAB BARS, ART WORK, SHELVING, AND OTHER APPLIED WALL MOUNTED FIXTURES, FINISHES OR EQUIPMENT.
  - REFER TO MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR ACCESS DOOR LOCATIONS.

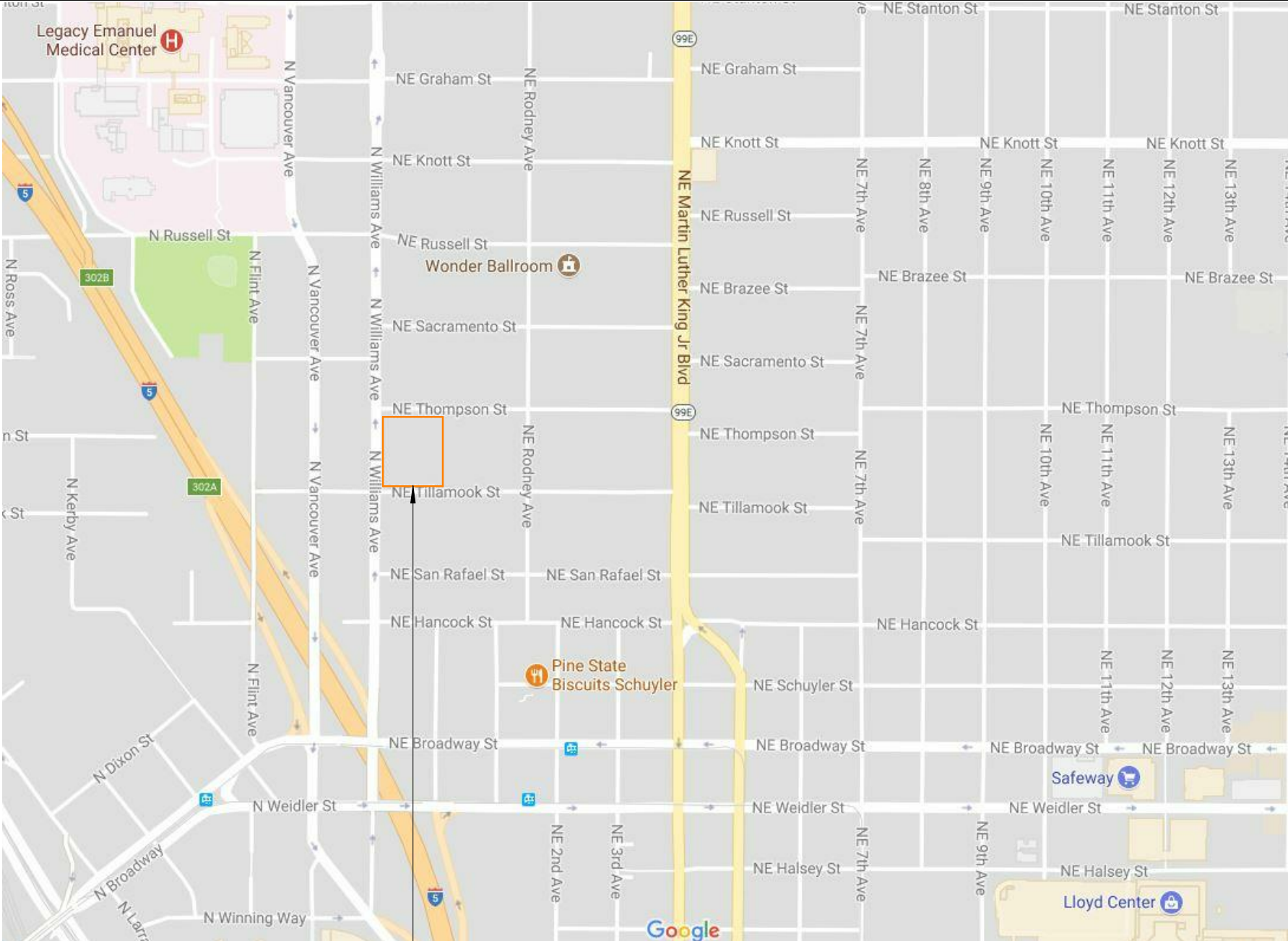
- DIMENSIONS**
- DO NOT SCALE THE DRAWINGS. WRITTEN DIMENSIONS GOVERN.
  - DO NOT ADJUST CLEAR DIMENSIONS WITHOUT APPROVAL OF THE ARCHITECT.
  - DIMENSIONS ARE MEASURED FROM GRID LINES, PROPERTY LINES, FACE OF CONCRETE, FACE OF MASONRY, FACE OF STUD OR CENTERLINE OF THE AIR GAP (AT DOUBLE STUD ROW WALLS) UNLESS OTHERWISE NOTED.
  - DIMENSIONS NOTED AS 'CLEAR' OR 'INSIDE CLEAR' ARE MEASURED FROM THE FACE OF THE DEEPEST PROTRUSION FROM THE WALL SURFACE (CASEWORK, FIXTURE, BASE, HANDRAIL, WAINSCOT, TRIM, ETC.)
  - NOTES TO 'ALIGN' REFER TO FINISHED FACE OF INDICATED SURFACES.
  - LOCATE FACE OF HINGE SIDE DOOR JAMBS 4" AWAY FROM ADJACENT WALL UNLESS NOTED OTHERWISE
  - 'FLOOR LINE' 'FLOOR' OR 'FLOOR LEVEL' REFER TO TOP OF CONCRETE SLAB OR TOP OF CEMENTITIOUS UNDERLAYMENT; FINISH FLOORING IS INSTALLED ABOVE THE FLOOR LINE.
  - 'FINISH FLOOR' REFERS TO THE TOP OF FLOORING.
  - REFER TO SLAB PLANS FOR LOCATION OF SLAB EDGES, BLOCKOUTS, DEPRESSIONS, SLOPES, CURBS AND CONCRETE WALLS.
  - ALIGN CENTER OF CLOSET DOORS WITH THE CENTER OF CLOSET WALL IN WHICH THEY OCCUR, UNLESS NOTED OTHERWISE.
  - ALL RESIDENTIAL CLOSETS ARE 24" MAXIMUM DEPTH UNLESS NOTED OTHERWISE. WING WALLS ADJACENT TO CASEWORK SHALL BE 2'-2" LONG, UNLESS NOTED OTHERWISE.

- ACCESSIBILITY**
- REFER TO SHEETS STARTING AT A5.01 FOR SPECIFIC ACCESSIBILITY REQUIREMENTS PERTAINING TO OUTLET LOCATIONS AND HEIGHTS, SWITCH LOCATIONS AND HEIGHTS, GRAB BARS, WALL BLOCKING, FLOOR CLEARANCES, COUNTERTOP HEIGHTS, LOCATION OF PLUMBING CONTROLS, ETC.
  - REFER TO DRAWING **60.02** FOR SCHEDULE OF ACCESSIBLE UNITS, TYPE A UNITS AND TYPE B UNITS; REFER TO DRAWING **65.02** FOR SPECIFIC REQUIREMENTS FOR EACH UNIT TYPE.
  - CHANGES IN FINISH FLOOR ELEVATION IN EXCESS OF 1/4" MEASURED FROM LOWEST POINT ON EITHER SIDE OF THRESHOLD TO HIGHEST POINT ON THRESHOLD SHALL BE BEVELED AT 1:2. IN NO CASE SHALL FLOOR TRANSITIONS AND CHANGES IN LEVEL IN FLOOR SURFACE BE MORE THAN 1/4" MAX IN VERTICAL HEIGHT.

- SIGNAGE**
- PROVIDE DIRECTIONAL SIGNAGE AT EACH ELEVATOR LANDING, EXIT ACCESS DOORWAY AND AT EXIT DISCHARGE IN ACCORDANCE WITH BUILDING CODE SECTION 1007.10 AND ICC/ANSI 117.7 A.
  - PROVIDE CODE-REQUIRED 'IN CASE OF FIRE...' SIGNAGE AT ELEVATOR CALL STATIONS.
  - IDENTIFY ALL FIRE-RATED ENCLOSURES CONCEALED ABOVE CEILINGS USING MIN. 3" HIGH RED LETTERING READING: 'FIRE AND/OR SMOKE BARRIER - PROTECT ALL OPENINGS'.
  - AT ROOMS WITH AN OCCUPANT LOAD OF 50 OR GREATER, SIGNAGE WITH THE MAXIMUM ALLOWABLE OCCUPANT LOAD SHALL BE POSTED AT THE MAIN ENTRANCE TO THE ROOM.
  - PROVIDE SIGNAGE IN EXIT STAIRWAYS AS FOLLOWS:
    - AT EACH FLOOR LANDING IN BUILDING GREATER THAN 3 STORIES
    - A SIGN INDICATING IF THE STAIR PROVIDES ROOF ACCESS
    - AT LANDINGS OF STAIRS WITH MULTIPLE DOORS, INDICATE ANY DOOR WITH DIRECT ACCESS TO AN ENCLOSED ELEVATOR LOBBY
  - PROVIDE ACCESSIBILITY SIGNAGE IN ACCORDANCE WITH SECTION 1110.1 AND AS REQUIRED BY ADA 2010 OR ANSI A117.1.

- HORIZONTAL AND VERTICAL ASSEMBLIES**
- REFER TO STRUCTURAL DRAWINGS FOR LOCATIONS OF, AND ADDITIONAL REQUIREMENTS FOR LOAD-BEARING AND SHEAR WALLS.
  - STUD SIZE AND CORE THICKNESSES ARE INDICATED ON THE ASSEMBLY TYPE TAGS ON THE DRAWINGS; REFER TO THE TAG LEGEND ON SHEET A0.01.
  - ALL GYPSUM WALLBOARD IS 5/8" TYPE 'X' UNLESS NOTED OTHERWISE.
  - WEATHER-RESISTIVE BARRIERS AND/OR VAPOR RETARDERS DESIGNATED AS "AB" ALSO FUNCTION AS AIR BARRIERS. SEAL ALL EDGES, INTERSECTIONS AND LAPS, TO CREATE AN AIR-TIGHT ENCLOSURE
  - FIRE RATED ASSEMBLIES: SEAL ALL EDGES AND INTERSECTIONS WITH FIRE CAULKING; COVER ALL RECESSED DEVICES WITH FIRE PROTECTIVE COVERINGS TO MEET THE REQUIREMENTS OF THE LISTING SOURCE AND AUTHORITY HAVING JURISDICTION (AHL). INSTALL ALL MATERIALS IN STRICT ACCORDANCE WITH THE PUBLISHED REQUIREMENTS OF THE LISTING SOURCE, INCLUDING BUT NOT LIMITED TO: STUD GAGE AND SPACING, FASTENER SIZE AND SPACING, ORIENTATION OF GYPSUM WALLBOARD, OFFSETS OF JOINTS BETWEEN ADJACENT LAYERS OR OPPOSITE SIDES OF WALL, BRIDGING AND CROSS BRACING.
  - FIRE RATING AGENCY REQUIREMENTS INDICATE THE MINIMUM NEEDED TO ACHIEVE FIRE RATING; ADDITIONAL LAYERS, OR THICKER LAYERS, OF GYPSUM WALLBOARD OR SHEATHING MAY BE SHOWN TO MEET OTHER PROJECT REQUIREMENTS.
  - SEAL AND OTHERWISE PROTECT PENETRATIONS THROUGH FIRE-RATED CONSTRUCTION USING APPROVED FIRESTOPPING SYSTEMS TO MAINTAIN THE FIRE RATING OF THE ASSEMBLY BEING PENETRATED.
  - USE ACOUSTICALLY RATED FIRE SEALANT WHEREVER FIRE RATED CONSTRUCTION IS ALSO ACOUSTICALLY RATED.
  - SEAL PENETRATIONS THROUGH ACOUSTICALLY-RATED CONSTRUCTION TO MAINTAIN THE ACOUSTICAL RATING OF THE ASSEMBLY BEING PENETRATED.
  - SEAL PENETRATIONS IN ACOUSTICALLY RATED WALLS. WRAP BACKS OF ALL RECESSED DEVICES WITH ACOUSTIC PADS RATED FOR THE ASSEMBLY.
  - PROVIDE WATERSTOPS AT COLD JOINTS IN ALL BELOW GRADE CONCRETE ASSEMBLIES AT THE EXTERIOR WALLS OF THE BUILDING.
  - PROVIDE DEFLECTION COMPENSATION AT TOP OF WALLS SECURED TO THE UNDERSIDE OF CONCRETE SLABS OR METAL DECK.
  - CONSTRUCT WALLS AND PARTITIONS SEPARATING DWELLING UNITS FROM EACH OTHER OR FROM PUBLIC AND SERVICE AREAS TO MEET STC 50 OR GREATER, REFER TO DRAWING A0.13 FOR ADDITIONAL REQUIREMENTS.
  - CONSTRUCT FLOOR/CEILING ASSEMBLIES SEPARATING DWELLING UNITS FROM EACH OTHER OF FROM PUBLIC AND SERVICE AREAS TO MEET STC 50 AND IIC 50 OR GREATER. REFER TO DRAWINGS A0.12 FOR ADDITIONAL REQUIREMENTS.

- MISCELLANEOUS**
- PROVIDE TWO WAY COMMUNICATION DEVICE AT EVERY ELEVATOR LANDING OTHER THAN THE LEVEL OF EXIT DISCHARGE IN ACCORDANCE WITH BUILDING CODE SECTION 1007.8 AND ALL SUBSECTIONS.









CODE SUMMARY

APPLICABLE CODES

DISCIPLINE	CODE TITLE	EDITION
BUILDING	OREGON STRUCTURAL SPECIALTY CODE (OSSC) BASED ON THE 2012 INTERNATIONAL BUILDING CODE (IBC)	2014
MECHANICAL	OREGON MECHANICAL SPECIALTY CODE (OMSC) BASED ON THE 2012 INTERNATIONAL MECHANICAL CODE (IMC)	2014
PLUMBING	OREGON PLUMBING SPECIALTY CODE (OPSC) BASED ON THE 2017 UNIFORM PLUMBING CODE (UPC)	2017
ELECTRICAL	NATIONAL ELECTRICAL CODE (NEC) BASED ON THE 2017 NFPA 70 NATIONAL ELECTRIC CODE	2017
ENERGY	OREGON ENERGY EFFICIENCY SPECIALTY CODE (OEESS) BASED ON THE 2009 INTERNATIONAL ENERGY EFFICIENCY CODE (IEEC)	2014
FIRE	PORTLAND FIRE CODE BASED ON THE 2012 INTERNATIONAL FIRE CODE (IFC) AND THE 2014 OREGON FIRE CODE (OFC)	2016
ACCESSIBILITY	OREGON STRUCTURAL SPECIALTY CODE (OSSC) BASED ON THE 2012 INTERNATIONAL BUILDING CODE (IBC) & 2009 ANSI A117.1 SAFE HARBOR: 1998 FAIR HOUSING ACCESSIBILITY DESIGN MANUAL. PROJECT FUNDING SOURCES TRIGGER COMPLIANCE WITH HUD SECTION 504	2014

ADMINISTRATIVE REQUIREMENTS

CONSTRUCTION DOCUMENTS	LOCATION IN CONSTRUCTION DOCUMENTS
MEANS OF EGRESS (107.2.3) INDICATE LOCATION, CONSTRUCTION, SIZE AND CHARACTER OF ALL PORTIONS OF MEANS OF EGRESS.	62.05 THRU 62.09
EXTERIOR WALL ENVELOPE (107.2.4) DESCRIBE THE WALL ENVELOPE IN SUFFICIENT DETAIL TO DETERMINE COMPLIANCE WITH THE CODE	A0.11, A0.11, & A0.42
SITE PLAN (107.2.5) INDICATE SIZE AND LOCATION OF NEW CONSTRUCTION RELATIVE TO LOT LINES, STREET GRADES, FINISHED GRADES AND, IF APPLICABLE, FLOOD PLANES OR ZONES. INCLUDE EXCAVATION AND FILL AS WELL AS DRAINAGE	A1.01
DEFERRED SUBMITTALS (107.3.4.2)	LOCATION IN CONSTRUCTION DOCUMENTS
WHEN APPROVED BY THE BUILDING OFFICIAL, DEFERRED SUBMITTALS SHALL BE REVIEWED BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE.	62.08
INSPECTIONS ARE REQUIRED AT VARIOUS STAGES OF CONSTRUCTION AND WORK MAY NOT BE COVERED UNTIL APPROVED. REFER TO SECTION 110.3.5.5 FOR SPECIAL INSPECTIONS	S1.12

CONSTRUCTION TYPE, HEIGHT AND EXTERIOR WALL FIRE RESISTANCE REQUIREMENTS

SPECIAL PROVISIONS (FORCE ALL APPLICABLE)	500-2	500-3	500-4	500-5	500-6	500-7	500-8	500-9
GRADE PLANE (BASE POINT 1)	146.35							
CONSTRUCTION TYPES (602) (CIRCLE ALL THAT APPLY)	IA	IB	IIA	IIIB	IIIA	IIIB	IV	VA
BUILDING HEIGHT (503)	ALLOWED: 55 + 20 FT	4 STORIES + 1		PROPOSED:	57.15 FT			5 STORIES
SPRINKLERS USED TO INCREASE STORIES (504.2)	YES	NO						

FIRE RESISTIVE REQUIREMENTS BASED ON CONSTRUCTION TYPE (TABLE 601)	TYPE IIB
RATING REQUIRED	RATING PROVIDED
PRIMARY STRUCTURAL FRAME	0 0
BEARING WALLS - EXTERIOR	2 2
BEARING WALLS - INTERIOR	0 0
FLOOR CONSTRUCTION	0 0
ROOF CONSTRUCTION	0 0

EXTERIOR WALL FIRE RESISTANCE BASED ON FIRE SEPARATION DISTANCE (TABLE 602)	PROTECTED (NOT USED)	UNPROTECTED
SEE SHEETS 62.02 THRU 62.03 AND 64.01 FOR LOCATIONS OF EXTERIOR RATED WALLS AND PERCENTAGE OF OPENINGS PROVIDED.		

OCCUPANCY CLASSIFICATION (302)

USE AND OCCUPANCY CLASSIFICATIONS (HIGHLIGHT ALL THAT APPLY)	A-1	A-2	A-3	A-4	A-5	B	E	F-1	F-2	H-1	NEW MIXED USE BUILDING: 3 STORIES - TYPE IIB - RESIDENTIAL APARTMENTS - MIXED USES INCLUDE RESIDENCE LOBBY, AMENITY SPACE, AND SERVICES
	A-1	H-3	H-4	H-5	I-1	I-2	I-3	I-4	M	R-1	
	H-2	H-3	H-4	S-1	S-2	U	DR-1	DR-2	DR-3	DR-4	

MIXED OCCUPANCIES AND SEPARATIONS (508)

DOS BUILDING QUALIFY FOR NON-SEPARATED OCCUPANCIES (508.3.1)	IIB
OCCUPANCY SEPARATION RATINGS REQUIRED (508.4.1) (E.G. B TO A-3 = 2 + HRS)	NO FIRST FLOOR ACCESSORY USES EXCEED 10% OF STORY. SEPARATED USES APPLIES PER 508.4.2. SEE PROPOSED BUILDING AREA TABLE

ALLOWABLE BUILDING AREA AND INCREASES (503, 503 AND 509)

ALLOWABLE AREA AND AREA MODIFICATIONS	TYPE IIB					
	OCCUPANCY (A-3)	OCCUPANCY (B)	OCCUPANCY (B-2)	OCCUPANCY (S-1)	OCCUPANCY (S-2)	
TABULAR FLOOR AREA FOR EACH OCCUPANCY (A) (TABLE 503)	9,500	19,000	12,000	17,500	26,000	
FRONTAGE INCREASE (I) (506.2) F = (F/P - 0.25) X W/30 F = BUILDING PERIMETER FRONTING ON PUBLIC WAY P = PERIMETER OF ENTIRE BUILDING W = WIDTH OF PUBLIC WAY	0.00	0.00	0.00	0.00	0.00	NOTE: BUILDING FRONTS ON TWO PUBLIC STREETS. FRONTAGE INCREASE AVAILABLE, NOT USED
FIRE SPRINKLER SYSTEM INCREASE (I) (506.3) ADDITIONAL 200% FOR BUILDINGS WITH MORE THAN ONE STORY ABOVE GRADE PLANE OR AN ADDITIONAL 800% FOR BUILDINGS WITH NOT MORE THAN ONE STORY ABOVE GRADE PLANE	2	2	2	2	2	
AREA MODIFICATION: ALLOWABLE AREA PER STORY (506.1) $A_1 = A_c + (A_c \times I_1) + (A_c \times I_2)$	28,500	57,000	36,000	52,500	78,000	
TOTAL ALLOWABLE BUILDING AREA: (A <sub>1</sub> ) X # OF STORIES ABOVE GRADE PLANE AS LISTED BELOW (506.4): 1. BUILDINGS WITH TWO STORIES ABOVE GRADE PLANE, X <sub>2</sub> 2. BUILDINGS WITH THREE OR MORE STORIES ABOVE GRADE PLANE, X <sub>3</sub> NO STORY SHALL EXCEED THE ALLOWABLE AREA PER STORY (A <sub>1</sub> ) AS DETERMINED IN 506.1, FOR THE OCCUPANCIES OF THAT STORY.	85,500	171,000	108,000	157,500	234,000	MAXIMUM ALLOWABLE BUILDING AREA = 96,000 SF

PROPOSED BUILDING AREA

PROPOSED AREAS	STORY TOTAL GSF	OCCUPANCY (A-3)	OCCUPANCY (B)	OCCUPANCY (B-2)	OCCUPANCY (S-1)	OCCUPANCY (S-2)	SUM AREA OF RATIOS
FIRST FLOOR	14,203	1,114	783	11,500	393	331	0.386
SECOND FLOOR	14,203	0	0	14,148	53	0	0.394
THIRD FLOOR	14,203	0	0	14,148	53	0	0.394
FOURTH FLOOR	14,203	0	0	14,148	53	0	0.394
FIFTH FLOOR	14,203	0	0	14,148	53	0	0.394
ROOF FINTHOUSE (UNOCCUPIED ROOF)	189	0	0	189	0	0	0.005
OCCUPANCY USE GROUP SUBTOTAL:		1,114	783	68,361	605	331	
TOTAL PROPOSED BUILDING AREA				71,194			PROPOSED AREA LESS THAN MAX ALLOWABLE

\*OUTSIDE FACILITIES ARE NOT INCLUDED IN BUILDING AREA.  
Building area is the area included within surrounding exterior walls (or exterior walls and fire walls) exclusive of vent shafts and courts. Areas of the building not provided with surrounding walls shall be included in the building area if such areas are included within the horizontal projection of the roof or floor above

FIRE-RESISTIVE RATED CONSTRUCTION REQUIREMENTS

FIRE BARRIERS FIRE-RESISTIVE RATINGS (707.3)	REQUIRED RATINGS	RATING PROVIDED
LOCATION		
SHAFT ENCLOSURES (707.3.1)	2	2
EXIT ENCLOSURES (707.3.1)	2	2
EXIT PASSAGEWAY (707.3.4)	2	N/A
HORIZONTAL EXIT (707.3.5)	1	1
SEPARATED OCCUPANCIES (707.3.9)	1	1
FIRE AREAS (TABLE 707.3.10)	2	N/A

FIRE PARTITIONS FIRE-RESISTIVE RATINGS (709.3)	REQUIRED RATINGS	RATING PROVIDED
LOCATION		
WALLS SEPARATING DWELLING UNITS	1	1
WALLS SEPARATING SLEEPING UNITS	N/A	N/A
WALLS SEPARATING TENANT SPACES	N/A	N/A
CORRIDOR WALLS	0.5	1
ELEVATOR LOBBY WALLS	N/A	N/A
NOTE: ELEVATOR LOBBY NOT ENCLOSED AS ALLOWED PER 2014 OSSC 713.14.1, EXCEPTION 4. BUILDING EQUIPPED WITH AUTOMATIC SPRINKLER SYSTEM		

HORIZONTAL ASSEMBLIES FIRE-RESISTIVE RATINGS (712.3)	REQUIRED RATINGS	RATING PROVIDED
REQUIREMENT		
BUILDING SEPARATION ALLOWANCE (508.2)	3	3
TYPE OF CONSTRUCTION (TABLE 602)	1	1
SEPARATING OCCUPANCIES (508.4)	1	1
SEPARATING FIRE AREAS (707.3.9)	N/A	N/A
DWELLING OR SLEEPING UNITS	1	1

SHAFT ENCLOSURES (713)

REFUSE AND LAUNDRY CHUTES (713)	REQUIREMENT	PROPOSED
COMPONENT	WALLS / FLOOR	WALLS / FLOOR
REFUSE CHUTE	2-4HR	1.5
REFUSE CHUTE ACCESS ROOM	2-4HR	0.75
REFUSE CHUTE TERMINATION ROOM	2-4HR	1.5

PENETRATIONS (714)

PENETRATIONS SHALL PROTECTED AS REQUIRED PER SECTION 714.1

FIRESTOPPING (715)

THE GENERAL CONTRACTOR SHALL SCHEDULE A FIRESTOPPING MEETING WITH THE BUILDING INSPECTOR AND ALL SUBCONTRACTORS THAT WILL BE INSTALLING FIRESTOPPING MATERIALS.  
EACH SUBCONTRACTOR SHALL PROVIDE A LIST OF FIRESTOP MATERIALS/ ASSEMBLIES WHICH WILL BE USED INCLUDING THE TYPE OF PENETRATIONS WHERE EACH MATERIAL / ASSEMBLY WILL BE USED AND THE LISTING AND APPROVAL INFORMATION (E. UL, ICC AND/ OR OTHER APPROVED REPORTING) LISTING NUMBERS). THIS INFORMATION MUST BE SUBMITTED TO AND APPROVED BY THE BUILDING INSPECTOR PRIOR TO ANY INSTALLATION.

OPENING PROTECTION (716)

FIRE DOOR AND SHUTTER FIRE PROTECTION RATINGS (TABLE 716.5)	TYPE OF ASSEMBLY	REQUIRED ASSEMBLY RATING (HOURS)	MIN. DOOR / SHUTTER RATING (HOURS)	DOOR / SHUTTER RATING PROVIDED
FIRE WALLS & BARRIERS GREATER THAN 3-HOUR		4	3	N/A
		3	3	N/A
		2	1.5	1.5
		1.5	1.5	N/A
FIRE BARRIERS RATED 1-HOUR:				
SHAFT, EXIT ENCLOSURES, EXIT PASSAGEWAYS	1	1	N/A	
OTHER FIRE BARRIERS	1	0.75	0.75	
FIRE PARTITIONS:				
CORRIDOR WALLS	1	0.33	N/A	
	0.5	0.33	0.33	
OTHER FIRE PARTITIONS	1	0.75	0.75	
	0.5	0.33	0.33	
EXTERIOR WALLS:	3	1.5	N/A	
	2	1.5	N/A	
	1	0.75	N/A	
SMOKE BARRIERS	1	0.33	N/A	

FIRE WINDOW FIRE PROTECTION RATINGS (TABLE 716.6)	TYPE OF ASSEMBLY	REQUIRED ASSEMBLY RATING (HOURS)	MIN. FIRE WINDOW RATING (HOURS)	FIRE WINDOW RATING PROVIDED
INTERIOR WALLS:	FIRE WALLS	ALL	NOT PERMITTED	N/A
	FIRE BARRIERS	1	NOT PERMITTED	N/A
	SMOKE BARRIERS	1	0.75	N/A
	FIRE PARTITIONS	1	0.75	N/A
		0.5	0.33	0.33
		>1	1.5	N/A
EXTERIOR WALLS		1	0.75	0.75*
PARTY WALLS	ALL	NOT PERMITTED	N/A	

\*NOTE: WINDOWS ADJACENT TO FIRE WALL PROTECTED. SEE EXTERIOR ELEVATION.

MEANS OF EGRESS

EGRESS COMPONENT	FACTOR (INCHES/OCCUPANT)*	NO. OF OCCUPANTS	REQUIRED WIDTH (INCHES)	NARROWEST WIDTH PROVIDED (INCHES)
OTHER EGRESS COMPONENTS	0.2	SEE FLS	SEE FLS	52"
STAIRS	0.3	SEE FLS	SEE FLS	48"
EXIT PASSAGEWAY	N/A			
*EXCEPTIONS ALLOWED PER SECTION 1005.3.1, 1005.3.2				

EXIT ACCESS (104)	WITH SPRINKLERS (FEET)	PROVIDED (FEET)
COMMON PATH OF EGRESS TRAVEL (TABLE 104.4.3)		
B-5	100	SEE FLS
B-2	125	SEE FLS
ALL OTHERS	75	SEE FLS

EXIT ACCESS TRAVEL DISTANCE (TABLE 104.6.1)	WITH SPRINKLERS (FEET)	PROVIDED (FEET)
OCCUPANCY		
A, M, R, S-1	200	SEE FLS
B	300	SEE FLS
S-2	400	SEE FLS

CORRIDOR FIRE-RESISTANCE RATING (TABLE 1038.1)	WITH SPRINKLERS (RATING IN HOURS)	PROVIDED (RATING IN HOURS)
OCCUPANCY		
R (GREATER THAN 10 OCCUPANTS)	0.5	1

NOTE: A MINIMUM OF ONE 2A10BC RATED PORTABLE FIRE EXTINGUISHER SHALL BE INSTALLED EVERY 75' LINEAR TRAVEL DISTANCE.

MEANS OF EGRESS

1000.1	EGRESS HEIGHT: HEIGHT SHALL BE GREATER THAN 7 FEET 6 INCHES.
1000.1	MEANS OF EGRESS SHALL BE ILLUMINATED AT ALL TIMES AND NOT LESS THAN 1 FC AT WALKING SURFACE. EMERGENCY LIGHTING SHALL BE AT LEAST AN AVERAGE OF 1 FC AND MINIMUM 0.1 FC MEASURED AT FLOOR LEVEL OF EGRESS PATH. EMERGENCY LIGHTING SHALL BE POWERED FOR DURATION OF NOT LESS THAN 90 MINUTES.
1000.3	EMERGENCY POWER VIA INVERTERS AND/OR BATTERY BACKUP SHALL BE PROVIDED (NOT LESS THAN 90 MINUTES) FOR ILLUMINATION AT CORRIDORS, EXIT STAIRWAYS, RAMPS AND PASSAGEWAYS.
1006.2	MEANS OF EGRESS ILLUMINATION SHALL BE NOT LESS THAN AN AVERAGE 1 FC MEASURED AT WALKWAY SURFACE AND MINIMUM 0.1 FC MEASURED AT FLOOR LEVEL ALONG PATH OF EGRESS.
1007.1	ACCESSIBLE MEANS OF EGRESS AND AREA OF REFUGE. IN ACCORDANCE WITH OSSC 1007.3, EXCEPTIONS 1, 2 AND 6 A 44" WIDE STAIR PROVIDED WITH NO ADDITIONAL AREA OF REFUGE.
	ACCESSIBLE MEANS OF EGRESS PROVIDED: LEVEL 1: EXITS DISCHARGE DIRECT TO BUILDING EXTERIOR AND CONNECT TO PUBLIC RIGHT OF WAY. LEVELS 2-5: R-2 OCCUPANCY - STAIRWAYS PROVIDE ACCESSIBLE MEANS OF EGRESS WITH 4 INCHES CLEAR BETWEEN HANDRAILS AS ALLOWED PER OSSC 1007.3 EXC 1. NO AREA OF REFUGE PROVIDED AS ALLOWED PER OSSC 1007.3 EXC 2 AND 6. ELEVATORS: STANDBY BATTERY POWER FOR RETURN TO LEVEL 1. ELEVATORS ARE NOT REQUIRED AS ACCESSIBLE MEANS OF EGRESS.
1007.8	TWO-WAY COMMUNICATION SYSTEM PROVIDED AT ELEVATOR LANDING FLOORS 2 - 5.
1008.1.1	EGRESS DOORS: MAXIMUM DOOR WIDTH = 48 INCHES. CLEAR WIDTH NOT LESS THAN 32 INCHES. HEIGHT OF DOOR OPENING NOT LESS THAN 80 INCHES.
1009.16	STAIR ACCESS PROVIDED TO MAIN BUILDING ROOF.
1013.8	OPERABLE WINDOWS PROVIDED IN R-2 UNITS. WINDOWS ARE EQUIPPED WITH OPENING CONTROL DEVICES LIMITING THE OPENING TO LESS THAN 4" CLEAR.
1018.4	DEAD END CORRIDOR - 50 FEET OR LESS IN R-2 OCC. WITH AUTOMATIC SPRINKLER SYSTEM. EXCEPTION 2
1021.2	STORIES ABOVE GRADE ARE PROVIDED WITH 2 EXITS - INTERIOR STAIRWAY
1029	EMERGENCY ESCAPE AND RESCUE WINDOWS NOT REQUIRED. STORIES ABOVE GRADE PROVIDED WITH (2) INTERIOR EXIT STAIRWAYS, PROVIDING MORE THAN ONE EXIT ACCESS FOR EACH STORY. BUILDING EQUIPPED WITH AUTOMATIC SPRINKLER SYSTEMS PER 903.3.1.1.

FIRE PROTECTION SYSTEMS (AUDIBLE AND VISUAL ALARMS)

CHAPTER 9	
UNDER SEPARATE PERMIT ISSUED FROM FIRE MARSHAL'S OFFICE	
901	FIRE SPRINKLER SYSTEM (NFPA 13)
907	SMOKE DETECTION AND ALARMS
908	CARBON MONOXIDE ALARMS IN UNITS AND COMMON AREAS
912	FIRE SMOKE DETECTION CLEARLY VISIBLE FROM STREET W/ 36" W X 36" D X 36" H ACCESS CLEARANCE
915	EMERGENCY RESPONDER RADIO COVERAGE PROVIDED AS REQUIRED BY FIRE MARSHAL (PERFORM 3RD PARTY TESTING)

PLUMBING FIXTURES

LEVELS 2-5 ARE DEDICATED TO RESIDENTIAL OCCUPANTS ONLY. WHEN RESIDENTS USE COMMON AREAS, THEY ARE EXPECTED TO RETURN TO THEIR INDIVIDUAL DWELLING UNITS FOR WC USE. LEVEL 1 CONTAINS LEASING OFFICES AND A RESIDENT SERVICE OFFICE FOR A TOTAL OF 783 SF LEVEL 1 COMMUNITY ROOM IS FOR RESIDENTS' USE ONLY. 1 UNISEX WC IS PROVIDED AT LEVEL 1, RM 1001 TO SUPPORT THE LEASING AND RESIDENT SERVICE STAFF.

DEFERRED SUBMITTALS (107.3.4.2)

ITEMS KNOWN TO REQUIRE FUTURE REVIEW AND SUBMITTAL TO THE AIA ARE LISTED BELOW:	
ARCHITECTURAL ITEMS	
PASSENGER ELEVATORS	TRASH CHUTE EQUIPMENT
ALUMINUM FRAME STOREFRONTS	FALL PREVENTION DEVICES (BY OTHERS)
STRUCTURAL ITEMS	
PREFABRICATED WOOD TRUSSES	ATS HOLD DOWN SYSTEM
MEP EQUIPMENT SEISMIC BRACING AND ANCHORAGE	STEEL WELDING PROCEDURES
MECHANICAL ITEMS	
SEISMIC ANCHORAGE OF ALL UNITS AND DUCTS EXCEEDING 4 SF IN CROSS-SECTIONAL AREA	RAILINGS, GUARDS
MECHANICAL SYSTEM TO BE SUBMITTED UNDER SEPARATE COVER	
PLUMBING ITEMS	
PLUMBING SYSTEM TO BE SUBMITTED UNDER SEPARATE COVER	
ELECTRICAL ITEMS	
ELECTRICAL SYSTEM TO BE SUBMITTED UNDER SEPARATE COVER	
LOW VOLTAGE ITEMS	

TO BE SUBMITTED AS SEPARATE PERMIT

*From the Fire Marshal's Office		
FIRE SPRINKLERS SYSTEM, NFPA13*	FIXED EXTINGUISHING SYSTEMS*	PV ARRAY
FIRE ALARM SYSTEMS*	EMERGENCY RESPONDER RADIO COVERAGE (DAS)*	
KNOX BOX*	PLUMBING	MECHANICAL
UNDERGROUND FIRE LINES*	ELECTRICAL	FIRESTOPPING*

Note that the Fire Alarm System is to be equipped with emergency voice/alarm communication (EVAC) due to means of egress capacity factor

Note that the Fire Alarm System is to be equipped with emergency voice/alarm communication (EVAC) due to means of egress capacity factor

APPEALS

1. NO DRINKING FOUNTAIN AT COMMUNITY ROOM
2. COMMERCIAL HOOD NOT REQUIRED AT COMMUNITY ROOM

SPRINKLER STANDPIPE REQUIREMENTS

OFC CHAPTER 33:	
IN BUILDINGS REQUIRED TO HAVE STANDPIPES BY SECTION 905.3.1, NOT LESS THAN ONE STANDPIPE SHALL BE PROVIDED FOR USE DURING CONSTRUCTION. SUCH STANDPIPES SHALL BE INSTALLED WHEN THE PROGRESS OF CONSTRUCTION IS NOT MORE THAN 40 FEET IN HEIGHT ABOVE THE LOWEST LEVEL OF FIRED DEPARTMENT VEHICLE ACCESS. SUCH STANDPIPE SHALL BE PROVIDED WITH FIRE DEPARTMENT HOSE CONNECTIONS AT ACCESSIBLE LOCATIONS ADJACENT TO USABLE STAIRS. SUCH STANDPIPE SHALL BE EXTENDED AS CONSTRUCTION PROGRESSES TO WITHIN ONE FLOOR OF THE HIGHEST POINT OF CONSTRUCTION HAVING SECURED DECKING OR FLOORING.	

OFC 905.4 PORTLAND DESIGN MANUAL:  
CLASS 1 STANDPIPE SHALL BE INSTALLED THROUGHOUT BUILDINGS WHERE THE FLOOR LEVEL OF THE HIGHEST STORY IS LOCATED MORE THAN 30 FEET ABOVE THE LOWEST LEVEL OF THE FIRE DEPARTMENT VEHICLE ACCESS. BUILDING REQUIRING STANDPIPES ARE REQUIRED TO HAVE AT LEAST ONE STANDPIPE THAT TERMINATES ON THE ROOF. UNLESS THERE ARE PORTIONS OF THE STRUCTURE OR ROOF MOUNTED EQUIPMENT FURTHER THAN 200 FEET FROM THE ONE REQUIRED ROOFTOP STANDPIPE, OTHER REQUIRED STANDPIPES MAY TERMINATE AT THE TOP STAIR LANDINGS. IN BUILDINGS WHERE MORE THAN ONE STANDPIPE IS PROVIDED, THE STANDPIPES SHALL BE INTERCONNECTED IN ACCORDANCE WITH NFPA 14. STAIR ENCLOSURE STANDPIPE HOSE CONNECTIONS AND VALVE INSTALLATIONS TO BE PROVIDED ON THE FLOOR LANDINGS, NOT THE INTERMEDIATE LANDINGS. HOSE CONNECTIONS TO BE ORIENTED TO ALLOW FOR EASE OF CONNECTING AND OPERATING FIRE HOSE.

DUCTS AND TRANSFER OPENINGS (717)

FIRE DAMPER RATINGS (TABLE 717.3.2.1)	MINIMUM RATING (HOURS)
TYPE OF PENETRATION	
LESS THAN 3-HOUR FIRE-RESISTANCE-RATED ASSEMBLIES	1.5
3-HOUR OR GREATER FIRE-RESISTANCE-RATED ASSEMBLIES	N/A

THROUGH PENETRATIONS OF HORIZONTAL ASSEMBLIES (717.6.1, EXCEPTION)	
A DUCT IS PERMITTED TO PENETRATE THREE FLOORS OR LESS WITHOUT A FIRE DAMPER AT EACH FLOOR PROVIDED SUCH DUCT MEETS ALL OF THE FOLLOWING REQUIREMENTS	
1	THE DUCT SHALL BE CONTAINED AND LOCATED WITHIN THE CAVITY OF A WALL AND SHALL BE CONSTRUCTED OF STEEL HAVING A MINIMUM WALL THICKNESS OF 0.187 INCHES (NO. 26 GAGE)
2	THE DUCT SHALL OPEN INTO ONLY ONE DWELLING UNIT OR SLEEPING UNIT AND THE DUCT SYSTEM SHALL BE CONTINUOUSLY FROM THE UNIT TO THE EXTERIOR OF THE BUILDING.
3	THE DUCT SHALL NOT EXCEED 4-INCH NOMINAL DIAMETER AND THE TOTAL AREA OF SUCH DUCTS SHALL NOT EXCEED 100 SQUARE INCHES IN ANY 100 SQUARE FEET OF GROSS FLOOR AREA
4	THE ANNULAR SPACE AROUND THE DUCT IS PROTECTED WITH MATERIALS THAT PREVENT THE PASSAGE OF FLAME AND HOT GASES SUFFICIENT TO IGNITE COTTON WASTE WHERE SUBJECTED TO ASTM E 119 OR UL 263 TIME-TEMPERATURE CONDITIONS UNDER A MINIMUM POSITIVE PRESSURE DIFFERENTIAL OF 0.01 INCH (2.49 PA) OF WATER AT THE LOCATION OF THE PENETRATION FOR THE TIME PERIOD EQUIVALENT TO THE FIRE-RESISTANCE RATING OF THE CONSTRUCTION PENETRATED.
5	GRILLE OPENINGS LOCATED IN A CEILING OF A FIRE-RESISTANCE-RATED FLOOR/CEILING ASSEMBLY SHALL BE PROTECTED WITH A LISTED CEILING RADIATION DAMPER INSTALLED IN ACCORDANCE WITH SECTION 717.6.2.1



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063

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NORTH WILLIAMS APARTMENTS - FAMILY HOUSING  
2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

CODE SUMMARY

PERMIT / GMP

DATE 17 OCT 2018	PROJECT NUMBER 149000
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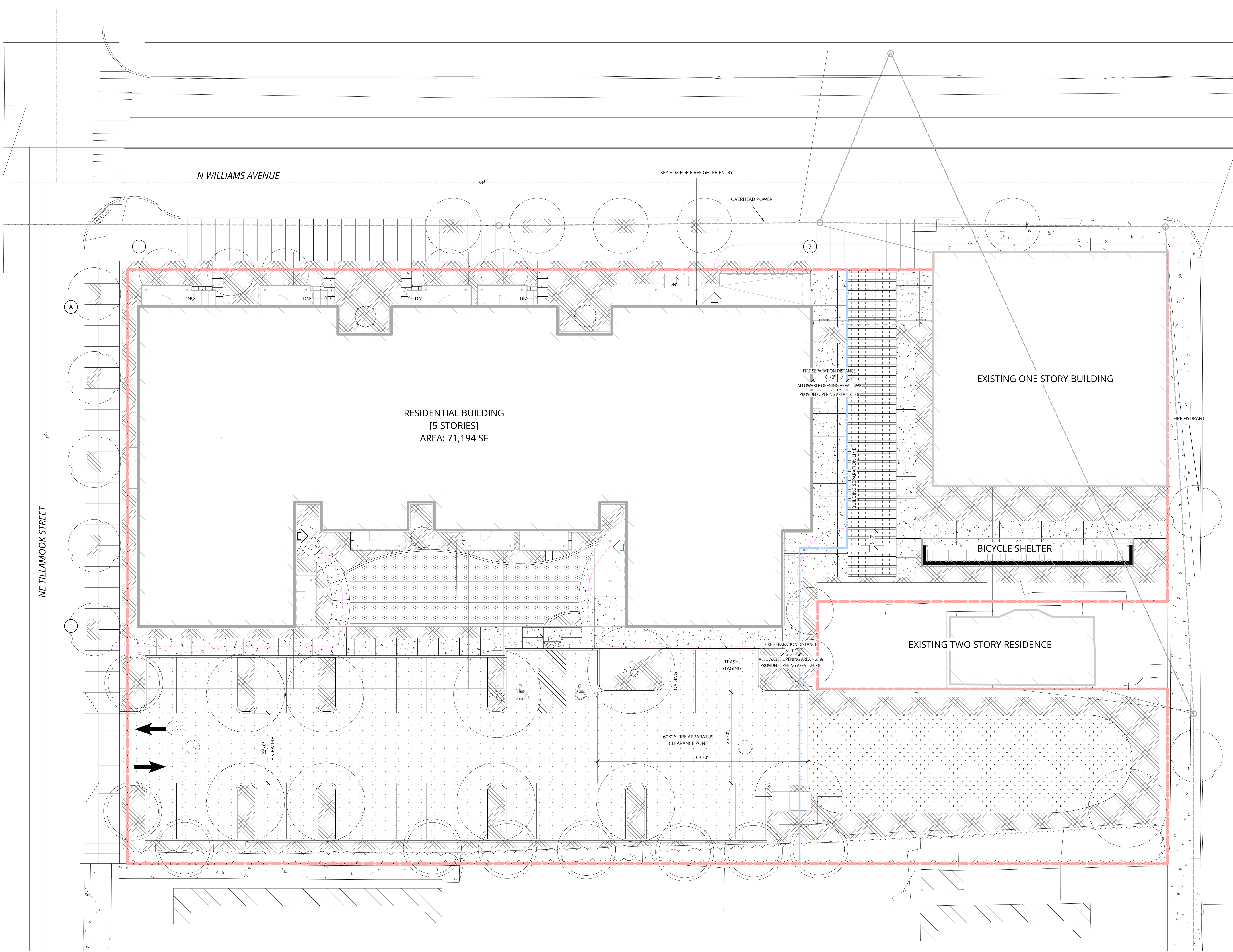
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# 1 SITE FLS PLAN

1" = 10'-0"



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100  
1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600  
1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063  
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## NORTH WILLIAMS APARTMENTS - FAMILY HOUSING

2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

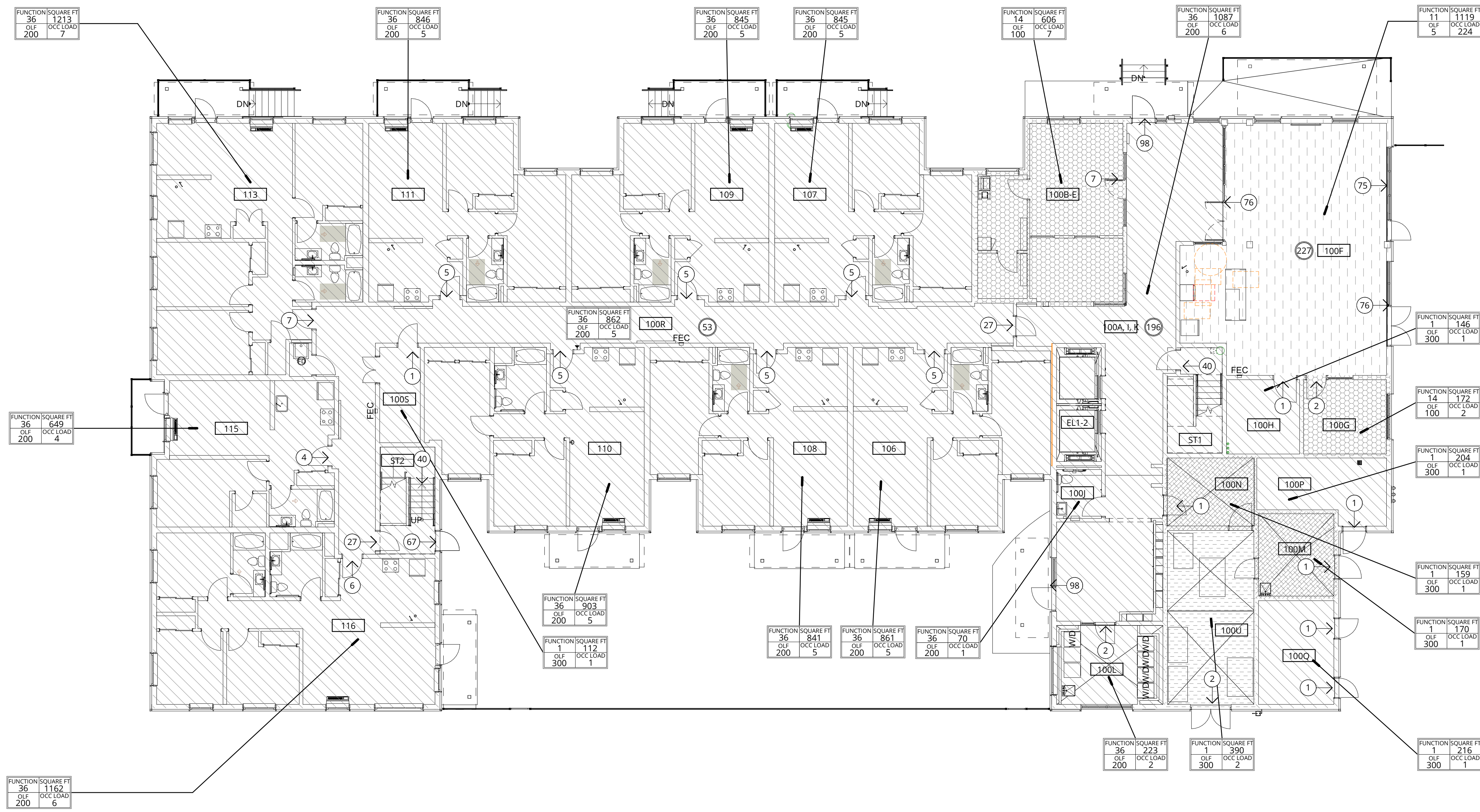
### SITE FLS PLAN

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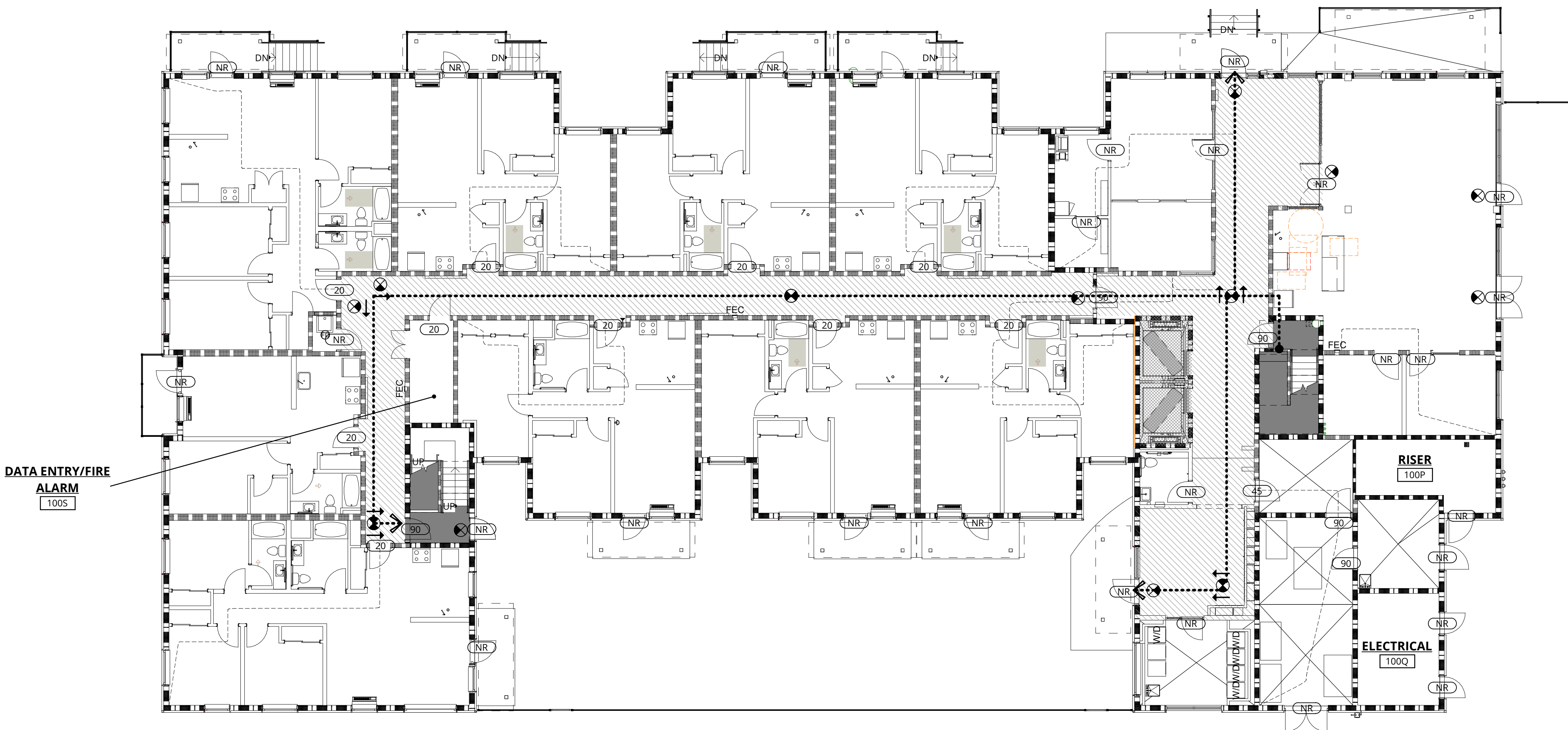
DATE 17 OCT 2018	PROJECT NUMBER 149000
SHEET NUMBER	

G2.01





2 LEVEL 1 OCCUPANCY PLAN  
1" = 10'-0"



1 LEVEL 1 EGRESS PLAN  
1" = 10'-0"

## FLS PLAN LEGEND

### ENCLOSING ELEMENTS

SMOKE PARTITION	
1-HR SMOKE BARRIER	
1-HR FIRE PARTITION	
1-HR FIRE BARRIER	
2-HR FIRE BARRIER	

### SYMBOLS & ELEMENTS

COMMON PATH OF EGRESS TRAVEL	
EXIT ACCESS TRAVEL DISTANCE	
SMOKE COMPARTMENT EXIT PATH	
DIRECTIONAL EXIT SIGN DOUBLE	
DIRECTIONAL EXIT SIGN SINGLE	
EXIT SIGN AT DOOR	
FIRE EXTINGUISHER CABINET	
FIRE EXTINGUISHER CABINET SEMI RECESSED	
OCCUPANT LOAD AT DOOR OPENING	
OCCUPANT LOAD TOTAL PER FLOOR	
LIFE SAFETY SUMMARY TAG	
OCCUPANT LOAD FACTOR OCCUPANT LOAD	
DOOR TAG, FIRE RATING IN MINUTES	

### ADDITIONAL REQUIREMENTS

- EGRESS PATH TO PUBLIC WAY SHALL BE ILLUMINATED TO A MINIMUM OF 1 FOOT CANDLE WITH BACKUP PROVIDED BY CENTRALIZED BATTERY BACKUP SYSTEM.

FLS SCHEDULE - LEVEL 1						
AREA NUMBER	AREA NAME	SF	TABLE 100A.1.2	OCCUPANT LOAD FACTOR	OCCUPANT LOAD	OCCUPANCY CLASSIFICATION
100A, L, K	LOBBY/CORRIDOR	1087 SF	36 RESIDENTIAL	200	6	R-2
100B-E	OFFICE SUITE	606 SF	14 BUSINESS AREAS	100	7	B
100F	COMMUNITY	1119 SF	11 ASSEMBLY WITHOUT FIXED SEATS: STANDING SPACE NET	5	224	A-3
100G	RESIDENT SERVICE OFFICE	172 SF	14 BUSINESS AREAS	100	2	B
100H	STORAGE	146 SF	1 ACCESSORY STORAGE AREAS, MECHANICAL EQUIPMENT ROOM	300	1	R-2
100I	TOILET	70 SF	36 RESIDENTIAL	200	1	R-2
100L	LAUNDRY	223 SF	36 RESIDENTIAL	200	2	R-2
100M	MAINTENANCE	170 SF	1 ACCESSORY STORAGE AREAS, MECHANICAL EQUIPMENT ROOM	300	1	S-2
100N	TRASH/RECYCLING	159 SF	1 ACCESSORY STORAGE AREAS, MECHANICAL EQUIPMENT ROOM	300	1	S-2
100P	WATER/FIRE RISER	204 SF	1 ACCESSORY STORAGE AREAS, MECHANICAL EQUIPMENT ROOM	300	1	R-2
100Q	MAIN ELECTRICAL	216 SF	1 ACCESSORY STORAGE AREAS, MECHANICAL EQUIPMENT ROOM	300	1	R-2
100R	CORRIDOR	862 SF	36 RESIDENTIAL	200	5	R-2
100S	DATA ENTRY/FIRE ALARM	112 SF	1 ACCESSORY STORAGE AREAS, MECHANICAL EQUIPMENT ROOM	300	1	R-2
100T	JANITOR CLOSET	25 SF	1 ACCESSORY STORAGE AREAS, MECHANICAL EQUIPMENT ROOM	300	1	R-2
100U	MAIN TRASH/RECYCLING	390 SF	1 ACCESSORY STORAGE AREAS, MECHANICAL EQUIPMENT ROOM	300	2	S-1
106	UNIT-2A	861 SF	36 RESIDENTIAL	200	5	R-2
107	UNIT-2A	845 SF	36 RESIDENTIAL	200	5	R-2
108	UNIT-2A	841 SF	36 RESIDENTIAL	200	5	R-2
109	UNIT-2A	845 SF	36 RESIDENTIAL	200	5	R-2
110	UNIT-2B-A	903 SF	36 RESIDENTIAL	200	5	R-2
111	UNIT-2A	846 SF	36 RESIDENTIAL	200	5	R-2
113	UNIT-3D	1213 SF	36 RESIDENTIAL	200	7	R-2
115	UNIT-1B	649 SF	36 RESIDENTIAL	200	4	R-2
116	UNIT-3C	1162 SF	36 RESIDENTIAL	200	6	R-2
EL1-2	ELEVATOR	140 SF	0 NO CLASSIFICATION APPLIES	0	0	R-2
ST1	STAIR 1	159 SF	0 NO CLASSIFICATION APPLIES	0	0	R-2
ST2	STAIR 2	176 SF	0 NO CLASSIFICATION APPLIES	0	0	R-2
14201 SF						

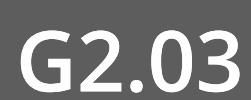
REGISTERED ARCHITECT  
SAC S. JOHNSON  
PORTLAND, OREGON  
STATE OF OREGON

Ankrom Moisan

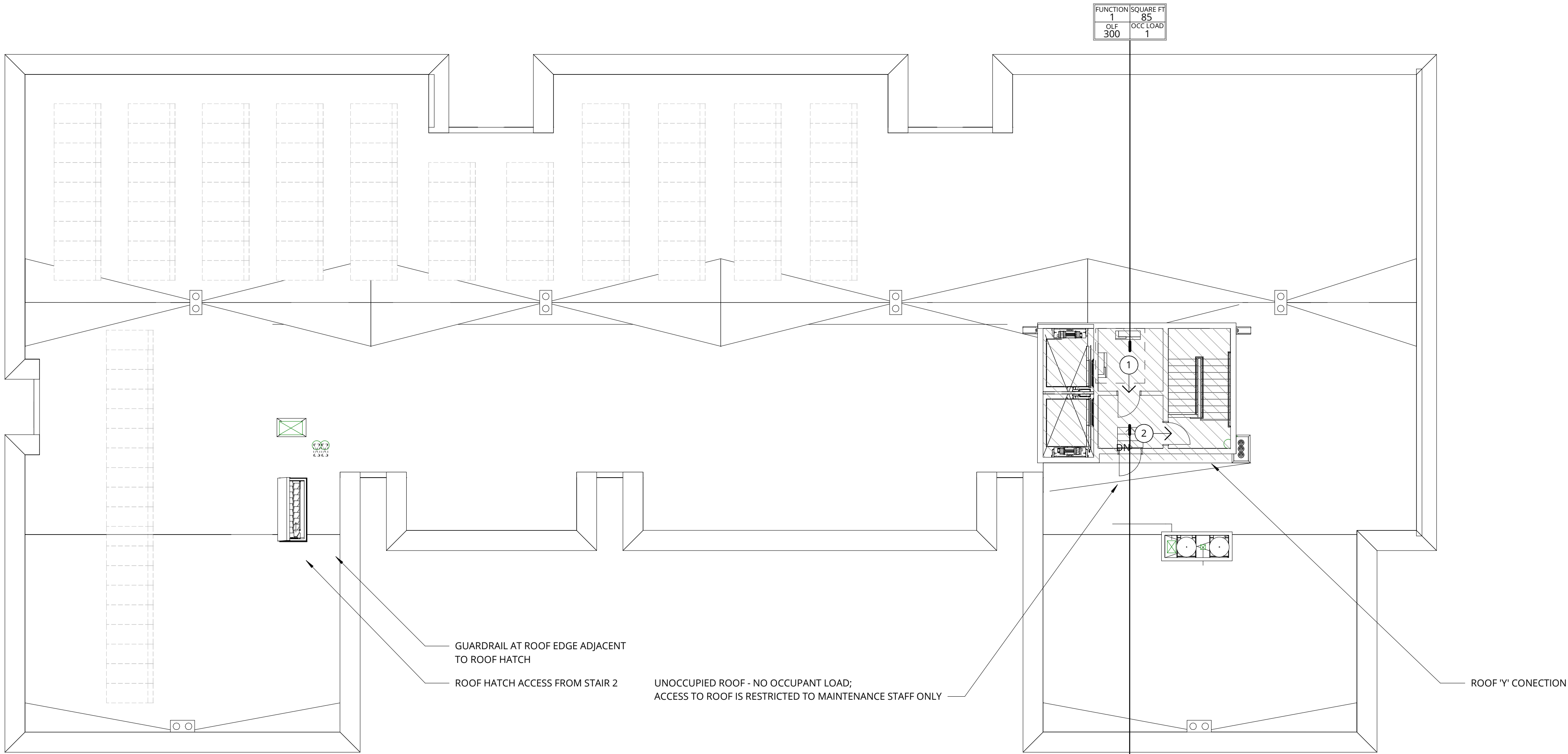
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PORTLAND, OR 97209  
T 503.245.7100  
1505 5TH AVE, SUITE 300  
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T 206.576.1600  
1014 HOWARD STREET  
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NORTH WILLIAMS APARTMENTS - FAMILY HOUSING



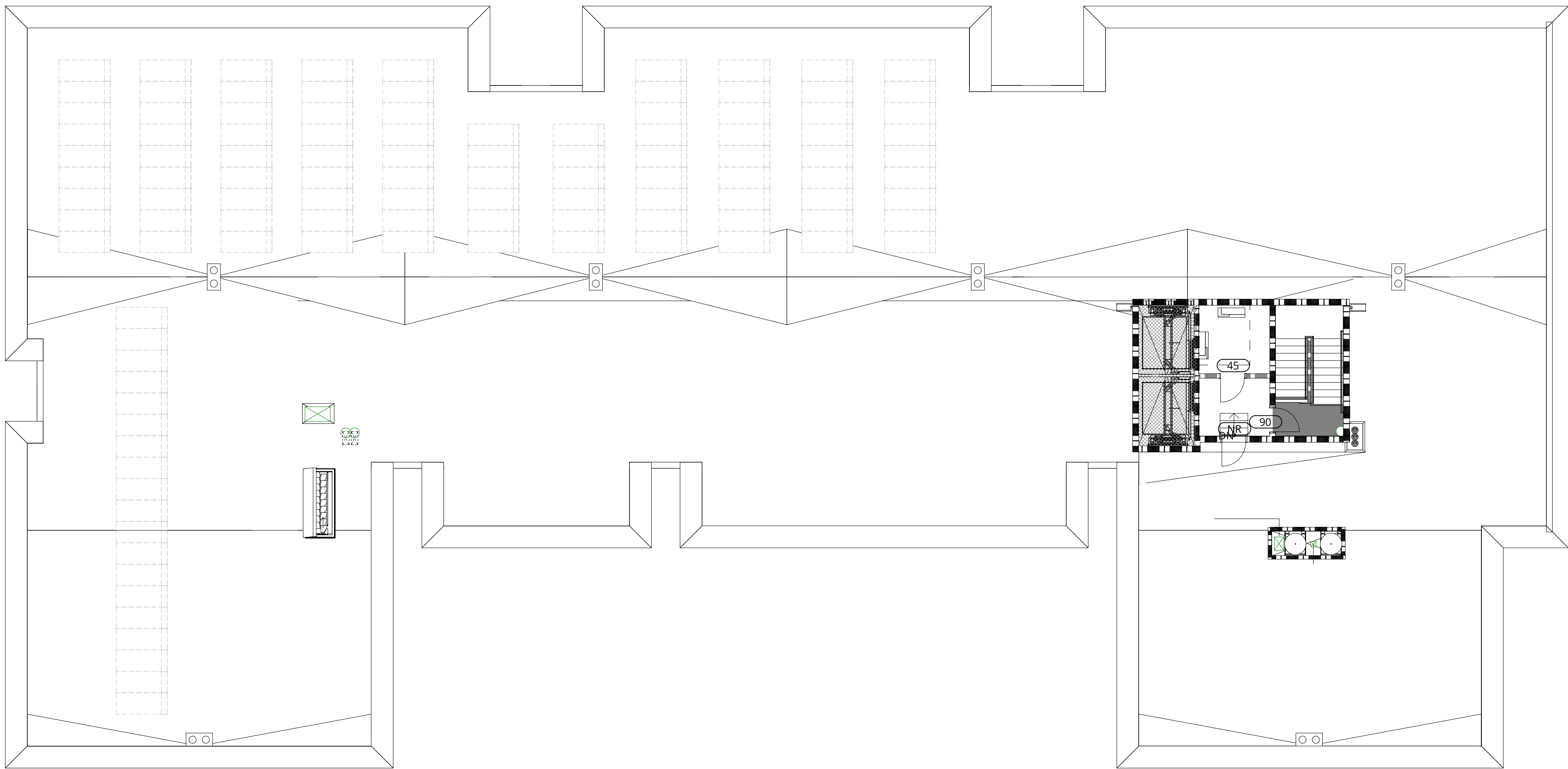






1 ROOF LEVEL OCCUPANCY PLAN

1" = 10'-0"



2 ROOF LEVEL EXITING PLAN

1" = 10'-0"

FLS PLAN LEGEND

ENCLOSING ELEMENTS

- SMOKE PARTITION
- 1-HR SMOKE BARRIER
- 1-HR FIRE PARTITION
- 1-HR FIRE BARRIER
- 2-HR FIRE BARRIER

SYMBOLS & ELEMENTS

- COMMON PATH OF EGRESS TRAVEL
- EXIT ACCESS TRAVEL DISTANCE
- SMOKE COMPARTMENT EXIT PATH
- DIRECTIONAL EXIT SIGN  
DOUBLE
- DIRECTIONAL EXIT SIGN  
SINGLE
- EXIT SIGN AT DOOR
- FIRE EXTINGUISHER CABINET
- FIRE EXTINGUISHER CABINET  
SEMI RECESSED
- OCCUPANT LOAD AT  
DOOR OPENING
- OCCUPANT LOAD  
TOTAL PER FLOOR
- LIFE SAFETY SUMMARY TAG
- OCCUPANT LOAD FACTOR
- OCCUPANT LOAD
- DOOR TAG, FIRE RATING IN MINUTES

ADDITIONAL REQUIREMENTS

1. EGRESS PATH TO PUBLIC WAY SHALL BE ILLUMINATED TO A MINIMUM OF 1 FOOT CANDLE WITH BACKUP PROVIDED BY CENTRALIZED BATTERY BACKUP SYSTEM.

FLS SCHEDULE - LEVEL ROOF

AREA NUMBER	AREA NAME	SF	TABLE 1004.1.2	OCCUPANT LOAD FACTOR	OCCUPANT LOAD	OCCUPANCY CLASSIFICATION
600	ELEVATOR MACHINE ROOM	85 SF	1. ACCESSORY STORAGE AREAS, MECHANICAL EQUIPMENT ROOM	300	1	R-2
601	MECHANICAL VESTIBULE	89 SF	36. RESIDENTIAL	200	1	R-2
EL1-2	ELEVATORS	128 SF	0. NO CLASSIFICATION APPLIES	0		R-2
ST1	STAIR 1	160 SF	0. NO CLASSIFICATION APPLIES	0		R-2
TOTAL		461 SF			2	



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063

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NORTH WILLIAMS APARTMENTS - FAMILY HOUSING

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BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

ROOF FLS PLAN

PERMIT / GMP

DATE 17 OCT 2018	PROJECT NUMBER 149000
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SHEET NUMBER

G2.04





1 OPENING PERCENTAGES - NORTH ELEVATION

1/8" = 1'-0"



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063

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NORTH WILLIAMS APARTMENTS - FAMILY HOUSING

2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

NORTH ELEVATION  
OPENING DIAGRAM

PERMIT / GMP

DATE 17 OCT 2018	PROJECT NUMBER 149000
SHEET NUMBER	

G4.01



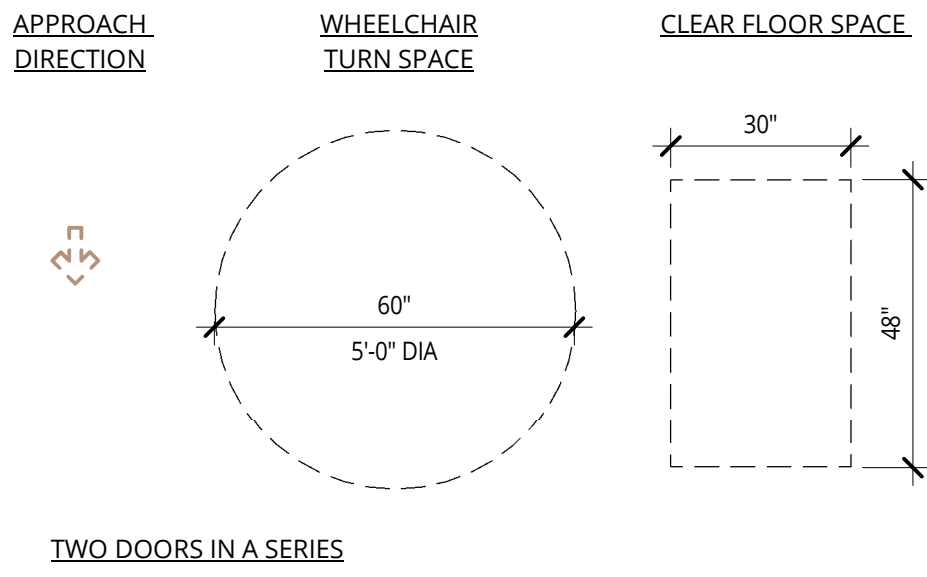
FIXTURE AND APPLIANCE DESIGN CRITERIA				
DESCRIPTION	LOCATION	FEATURES	CRITICAL DIMENSION	OTHER DIMENSION
APPLIANCES				
RANGE	TYPE B	SLIDE IN, FRONT CONTROL	28 1/2" MAX DEPTH TO FRONT OF CONTROL PANEL, PLUS 3/4" FOR BACKSPASH TO RUN CONTINUOUS BEHIND	30" WIDE
RANGE	TYPE A UNITS	SLIDE IN, FRONT CONTROL	28 1/2" MAX DEPTH TO FRONT OF CONTROL PANEL, PLUS 3/4" FOR BACKSPASH TO RUN CONTINUOUS BEHIND	30" WIDE, 34" HIGH COUNTER
REFRIGERATOR	TYPE B UNITS	TOP FREEZER	36" DEPTH (INCLUDING REQUIRED AIR SPACE BEHIND ACCOUNTING FOR ICE MAKER)	
REFRIGERATOR	TYPE A UNITS	BOTTOM FREEZER	36" DEPTH (INCLUDING REQUIRED AIR SPACE BEHIND ACCOUNTING FOR ICE MAKER)	
HOOD	TYPE A	REMOTE SWITCH		30" WIDE
MICROWAVE	TYPE A	COUNTERTOP		
MICRO/HOOD COMBO	TYPE B			30" WIDE
DISHWASHER	TYPE B		STANDARD HEIGHT	24" WIDE
DISHWASHER	TYPE A		FITS UNDER 34" HIGH COUNTER	24" WIDE
DISHWASHER	PUBLIC		FITS UNDER 34" HIGH COUNTER	24" WIDE
WASHER	ALL UNITS		29" CLEAR WIDTH, 39 1/2" CLEAR DEPTH	
DRYER	ALL UNITS	LONG VENT AS REQUIRED	TYPE B UNITS THE WASHER DIMENSIONS GOVERN, TYPE A THE WIDTH IS 29" CLEAR	
FIXTURES				
KITCHEN SINK	TYPE B UNITS	UNDERMOUNT		
KITCHEN SINK	TYPE A UNITS	OFFSET DRAIN	34" TO TOP OF COUNTER, 27" MIN KNEE CLEARANCE	
BATHROOM LAVATORY	ALL	UNDERMOUNT	34" MAX TO RIM OF SINK OR COUNTER AND 27" MIN KNEE CLEARANCE FOR FORWARD APPROACH	
WATER CLOSET	TYPE B	DUAL FLUSH	33" MAX DEPTH FROM WALL BEHIND TO FRONT RIM OF BOWL	
WATER CLOSET	TYPE A	CONTROLS ON OPEN SIDE	33" MAX DEPTH FROM WALL BEHIND TO FRONT RIM OF BOWL. SEAT OF HEIGHT IS 15" TO 19" AFF.	
WATER CLOSET	PUBLIC	CONTROLS ON OPEN SIDE	33" MAX DEPTH FROM WALL BEHIND TO FRONT RIM OF BOWL. SEAT OF HEIGHT IS 17" TO 19" AFF.	
SHOWER	TYPE B	FIBERGLASS	36" CLEAR BY 48" CLEAR	
SHOWER	TYPE A AND PUBLIC	FIBERGLASS	36" ABSOLUTE BY 36" ABSOLUTE FINISH TO FINISH	
BATHTUB/SHOWER	TYPE A AND PUBLIC		5' WIDE BY 32" DEEP TUB	

GENERAL NOTES - ACCESSIBILITY SHEETS

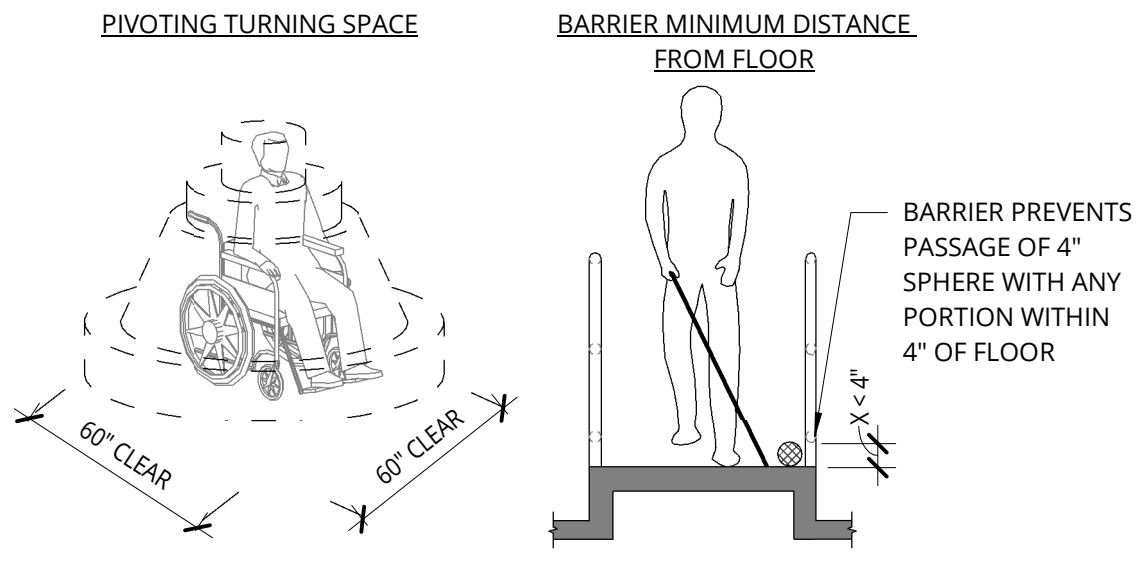
- THESE PICTOGRAPHS DO NOT DESCRIBE ALL CONDITIONS WHICH MAY BE ENCOUNTERED IN THE FIELD. VERIFY QUESTIONS WITH ARCHITECT.
- INFORMATION IN THESE DRAWINGS IS COMPLEMENTARY TO THE PLANS, SECTIONS, ELEVATIONS AND DETAILS, AND SHALL BE USED IN CONJUNCTION WITH THEM
- PROVIDE WORK SHOWN OR REFERRED TO HEREIN AS THOUGH SHOWN ON ALL OTHER ARCHITECTURAL DRAWINGS
- INFORMATION REGARDING THE LOCATION OF MECHANICAL, ELECTRICAL AND PLUMBING ITEMS IS PROVIDED AS DESIGN CRITERIA FOR THE CONVENIENCE OF THOSE DESIGNERS OF RECORD WHO SHALL BEAR RESPONSIBILITY FOR COMPLIANCE WITH THE APPLICABLE CODE STANDARDS ILLUSTRATED AND CITED HEREIN
- PROVIDE BLOCKING, AS ILLUSTRATED HEREIN, AT ALL GRAB BAR AND SHOWER SEAT LOCATIONS. DASHED GRAB BARS DELINEATE REQUIRED BLOCKING FOR FUTURE GRAB BARS
- PROVIDE GRAB BARS, AS ILLUSTRATED HEREIN, WITHIN PUBLIC SPACES, ICC ACCESSIBLE AND ADA UNITS
- COMPLY WITH MOUNTING HEIGHTS INDICATED HEREIN FOR WALL-MOUNTED ITEMS
- COMPLY WITH GENERAL BUILDING CLEARANCE REQUIREMENTS AS INDICATED HEREIN
- ENCROACHMENT INTO FLOOR CLEARANCE AREAS AT DOORS, CASEWORK, APPLIANCES OR EQUIPMENT IS NOT ALLOWED UNLESS OTHERWISE NOTED.
- NOTIFY THE ARCHITECT IMMEDIATELY IF CONFLICTS ARE DISCOVERED BETWEEN THE REQUIREMENTS ILLUSTRATED HEREIN AND THOSE ON OTHER DRAWINGS. THE SPACE BETWEEN THE GRAB BAR AND PROJECTING OBJECTS BELOW AND AT THE ENDS OF THE GRAB BAR SHALL BE 1 1/2" MIN. THE SPACE BETWEEN THE GRAB BAR AND PROJECTING OBJECTS ABOVE THE GRAB BAR SHALL BE 12" MIN. MOUNT DISPENSERS 48" MAX. AFF. TO THE HIGHEST OPERABLE PART UNLESS NOTED OTHERWISE.
- OPERABLE PARTS SHALL BE OPERATED WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE 5.0 POUNDS (22.2 N) MAXIMUM.

NOTE : FOR ACCESSIBLE UNIT/GUEST ROOMS:  
1. AT LEAST ONE BED SHALL BE PROVIDED WITH AN OPEN BED FRAME.  
2. IT IS BEST PRACTICE TO HAVE A BED 28" MAXIMUM IN HEIGHT IN THE ACCESSIBLE GUEST ROOM.

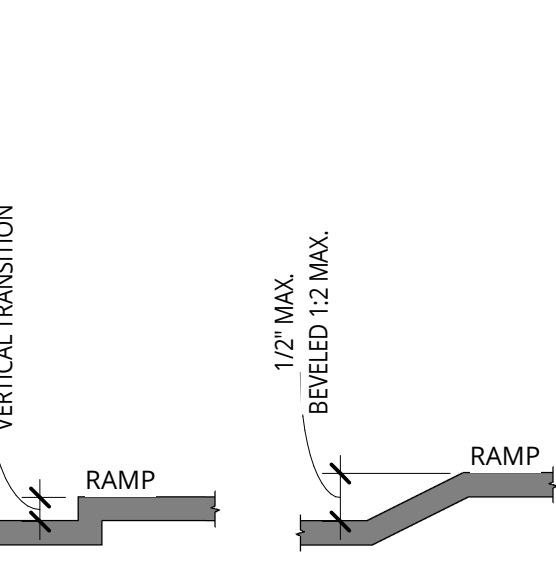
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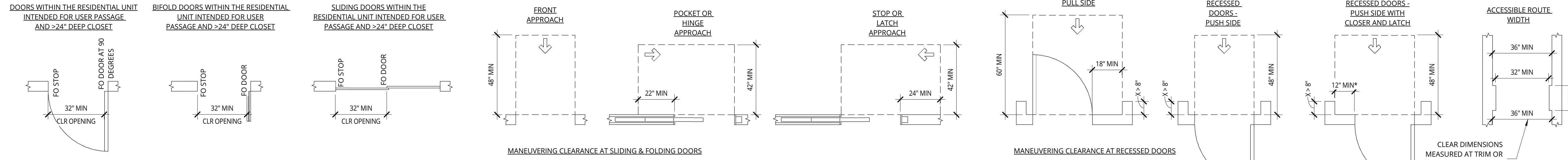
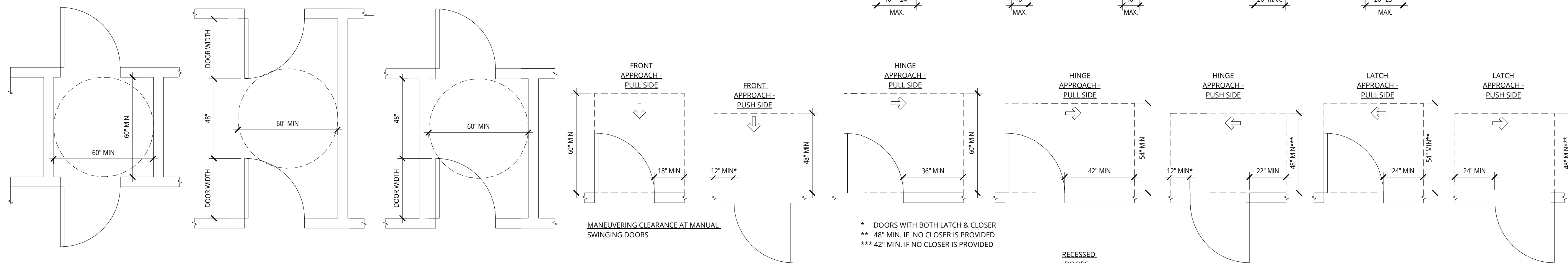
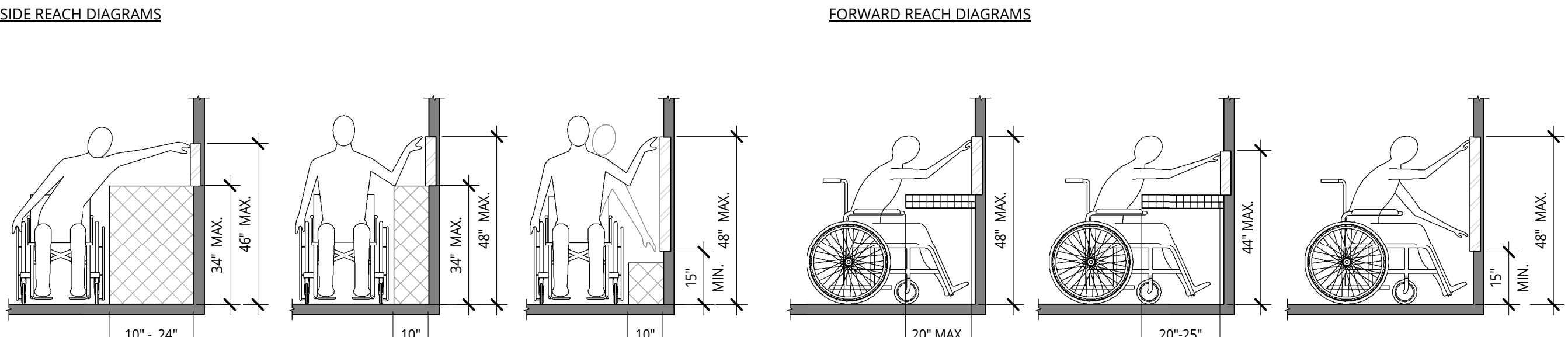
STANDARD REQUIREMENTS



ADA FLOOR LEVEL TRANSITIONS



REACH DIAGRAMS



1 BUILDING CLEARANCES LEGEND

REGISTERED ARCHITECT  
SAC S. JOHNSON  
5082  
SAC S. JOHNSON  
PORTLAND, OR  
STATE OF OREGON

M

Ankrom Moisan

38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100  
  
1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600  
  
1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063  
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BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

BUILDING  
CLEARANCES  
LEGEND

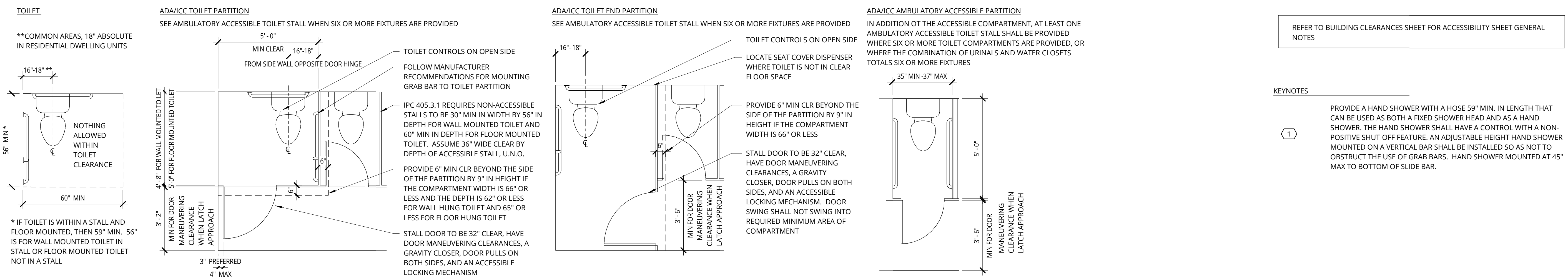
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DATE  
17 OCT 2018

PROJECT NUMBER  
149000

SHEET NUMBER  
G5.01

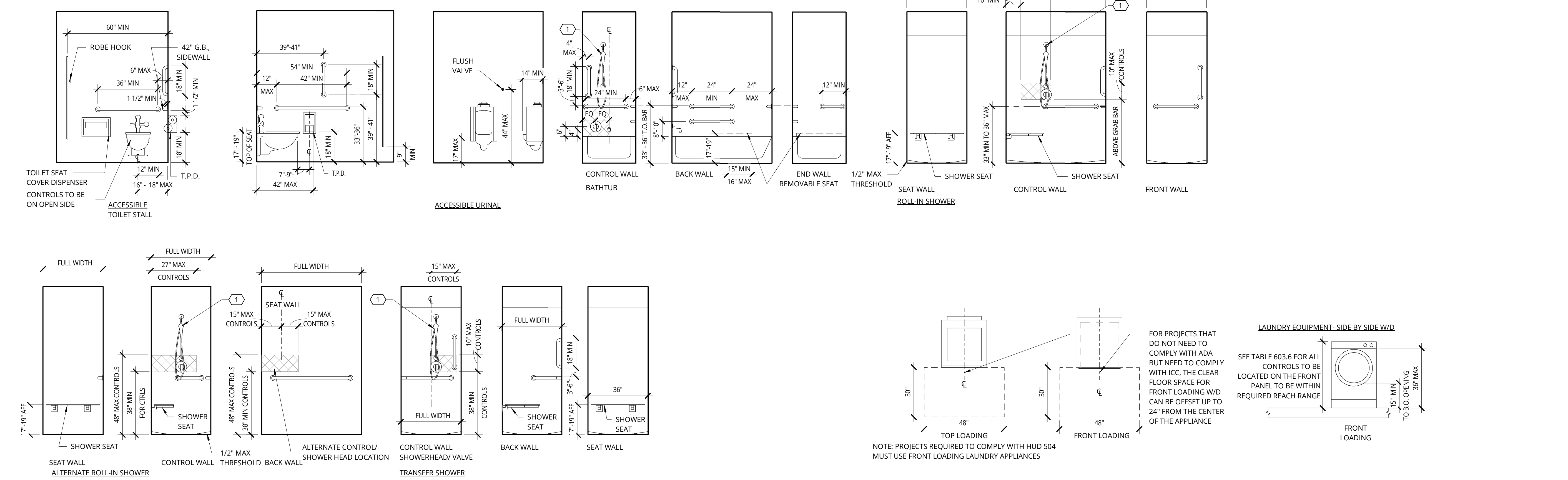
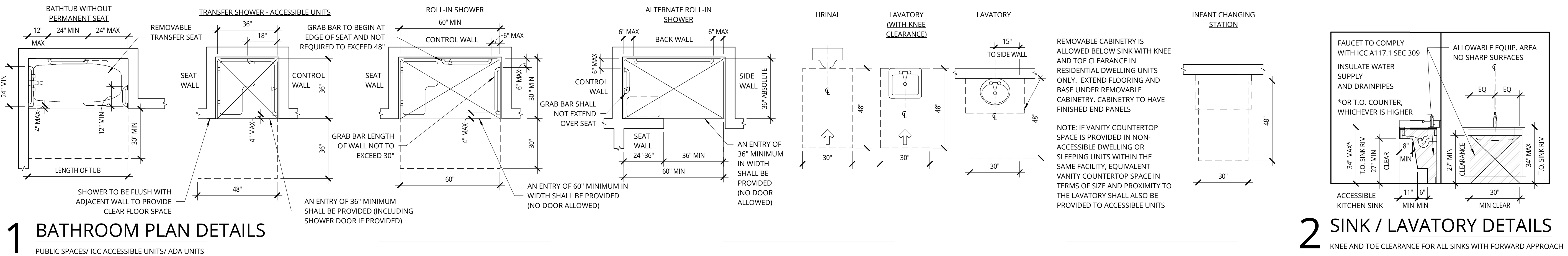




REFER TO BUILDING CLEARANCES SHEET FOR ACCESSIBILITY SHEET GENERAL NOTES

**KEYNOTES**

1 PROVIDE A HAND SHOWER WITH A HOSE 59" MIN. IN LENGTH THAT CAN BE USED AS BOTH A FIXED SHOWER HEAD AND AS A HAND SHOWER. THE HAND SHOWER SHALL HAVE A CONTROL WITH A NON-POSITIVE SHUT-OFF FEATURE. AN ADJUSTABLE HEIGHT HAND SHOWER MOUNTED ON A VERTICAL BAR SHALL BE INSTALLED SO AS NOT TO OBSTRUCT THE USE OF GRAB BARS. HAND SHOWER MOUNTED AT 45" MAX TO BOTTOM OF SLIDE BAR.



REGISTERED ARCHITECT  
SAC S. JOHNSON  
5082  
KARL JOHNSON  
PORTLAND, OR  
STATE OF OREGON

**Ankrom Moisan**

38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063

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BRIDGE HOUSING

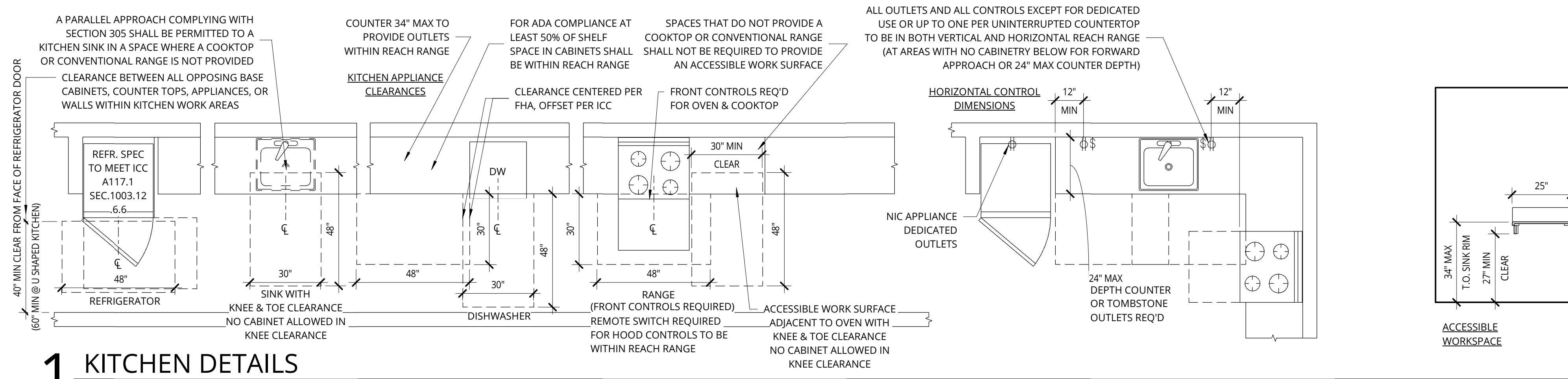
REVISION	DATE	REASON FOR ISSUE

**PUBLIC AND ADA/ACCESSIBLE UNITS**

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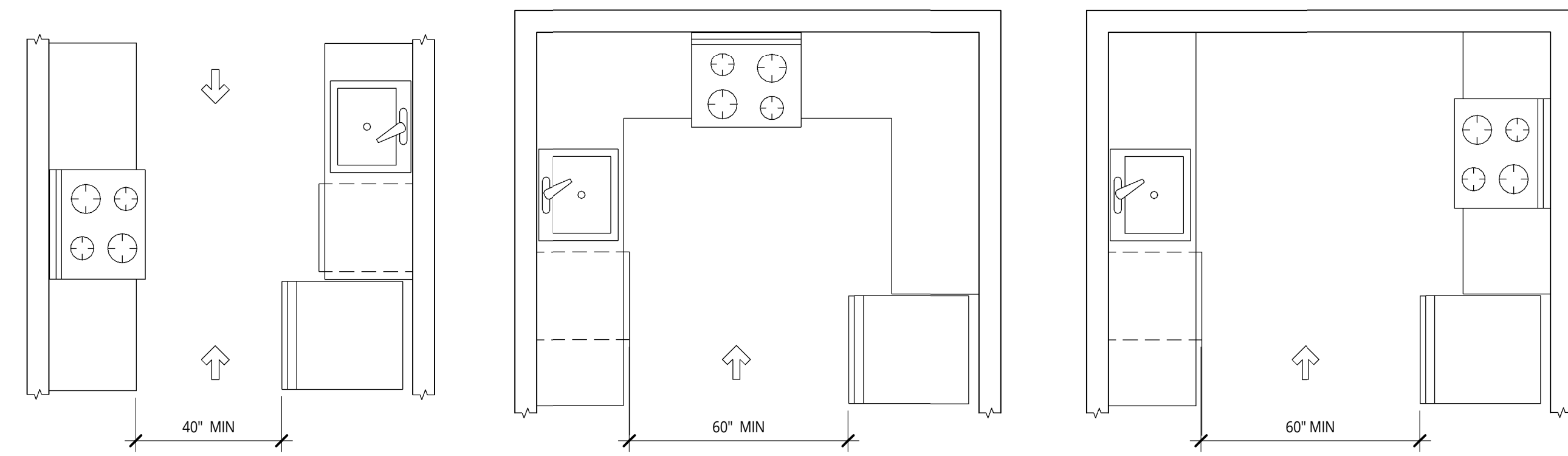
DATE 17 OCT 2018	PROJECT NUMBER 149000
SHEET NUMBER <b>G5.02</b>	





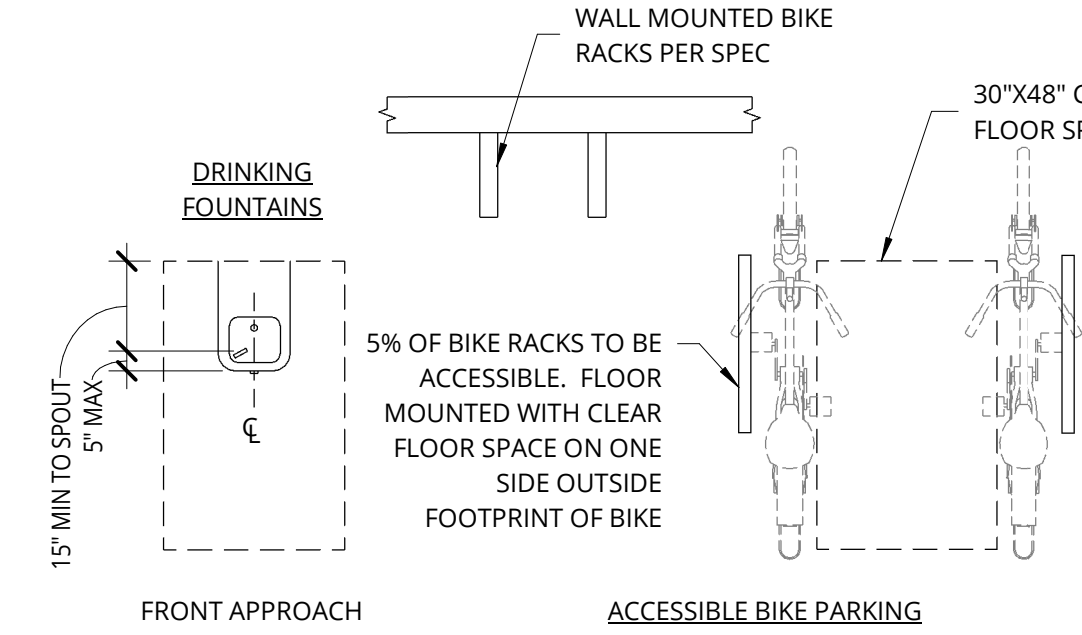
# 1 KITCHEN DETAILS

PUBLIC SPACES/ ICC ACCESSIBLE UNITS/ ADA UNITS



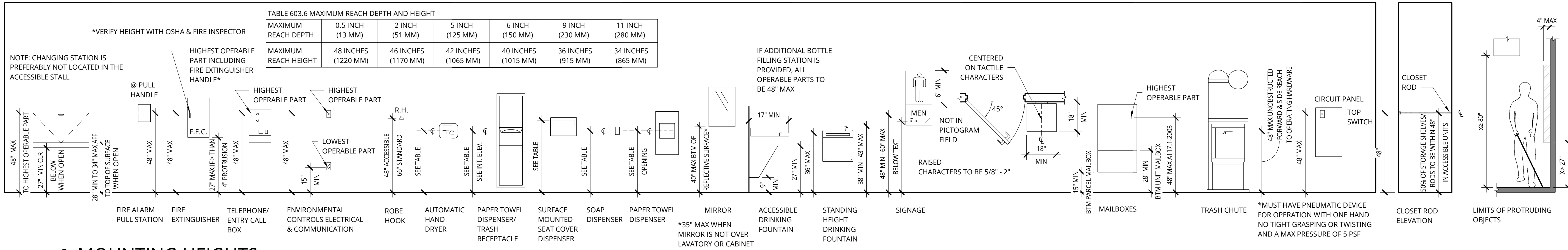
# 2 KITCHEN CLEARANCES

PUBLIC SPACES/ ICC ACCESSIBLE UNITS/ ADA UNITS



# 3 MISC. PLAN DETAILS

PUBLIC SPACES/ ICC ACCESSIBLE UNITS/ ADA UNITS



# 4 MOUNTING HEIGHTS

PUBLIC SPACES/ ICC ACCESSIBLE UNITS/ ADA UNITS

REVISION	DATE	REASON FOR ISSUE

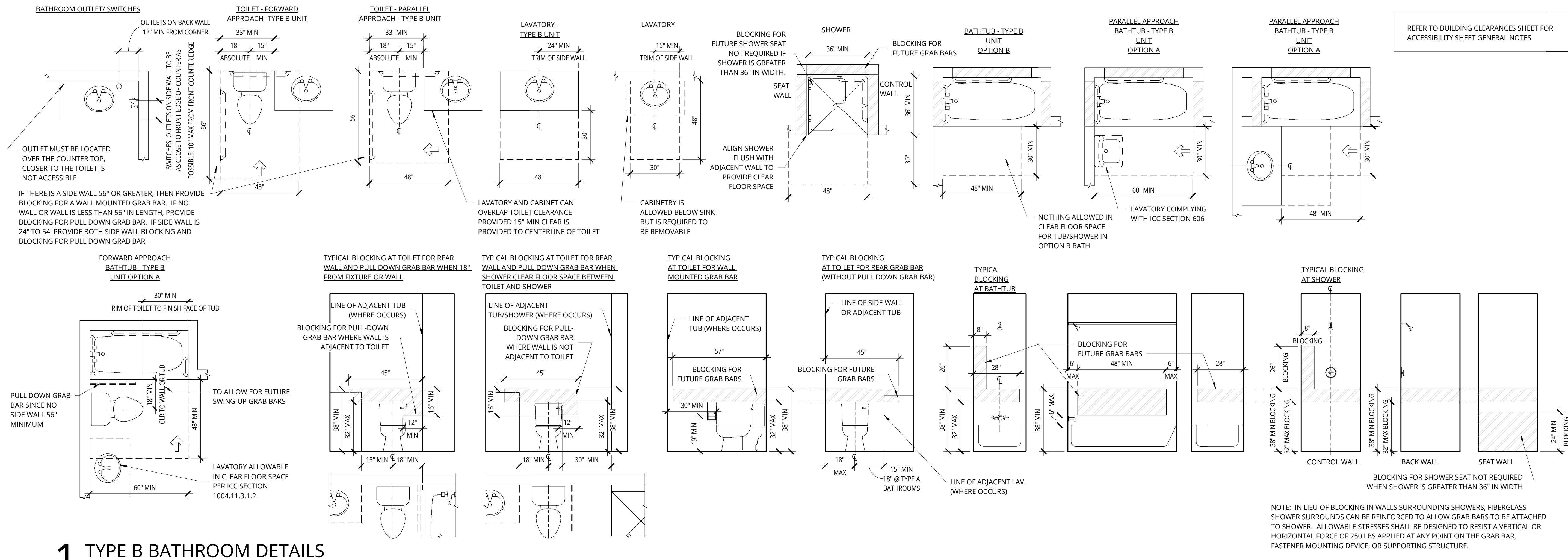
PUBLIC AND  
ADA/ACCESSIBLE  
UNITS

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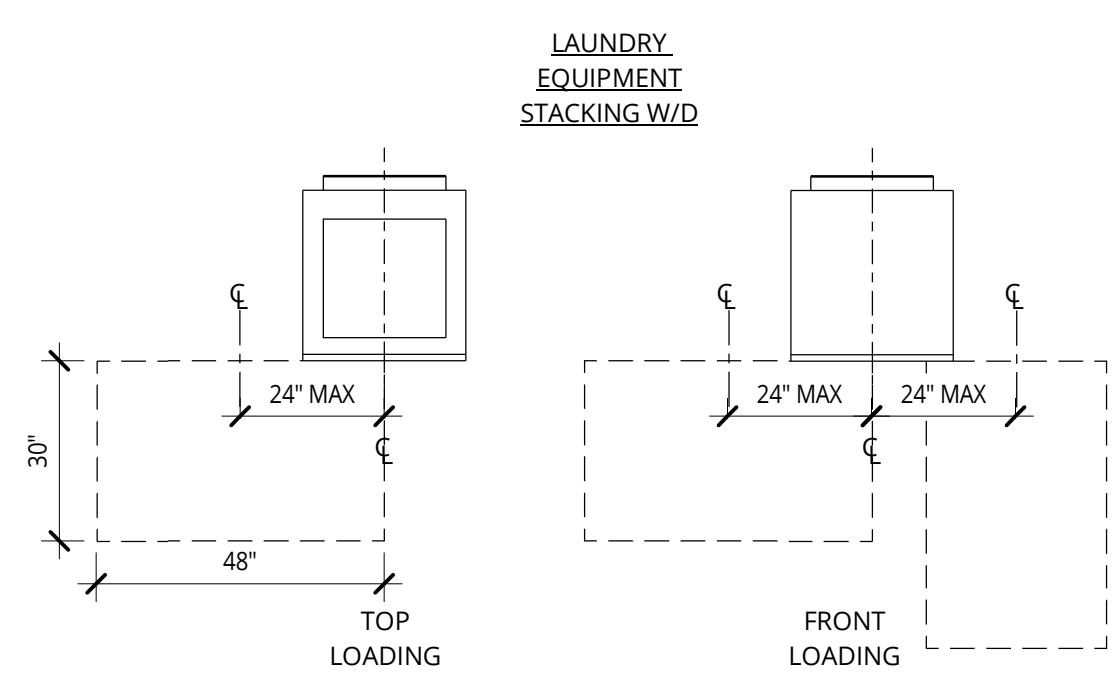
DATE 17 OCT 2018	PROJECT NUMBER 149000
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SHEET NUMBER  
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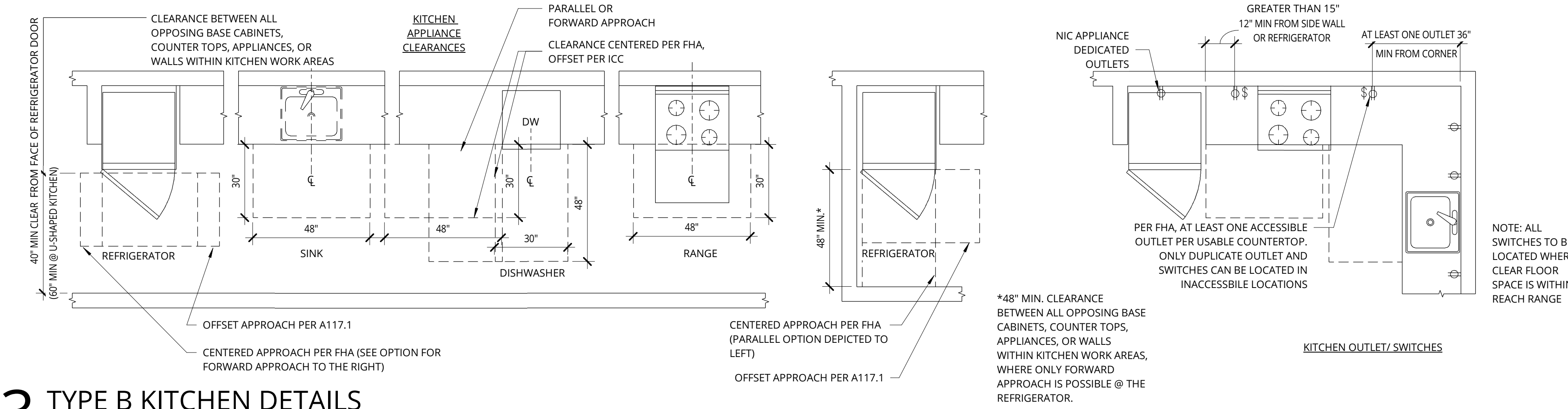




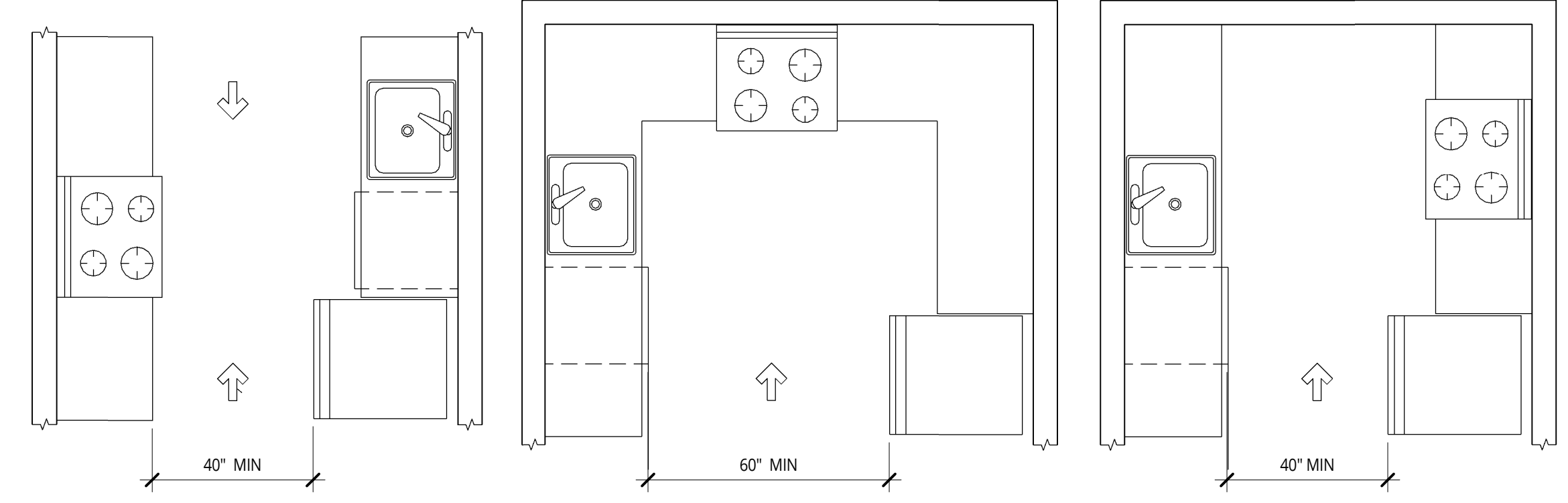
1 TYPE B BATHROOM DETAILS



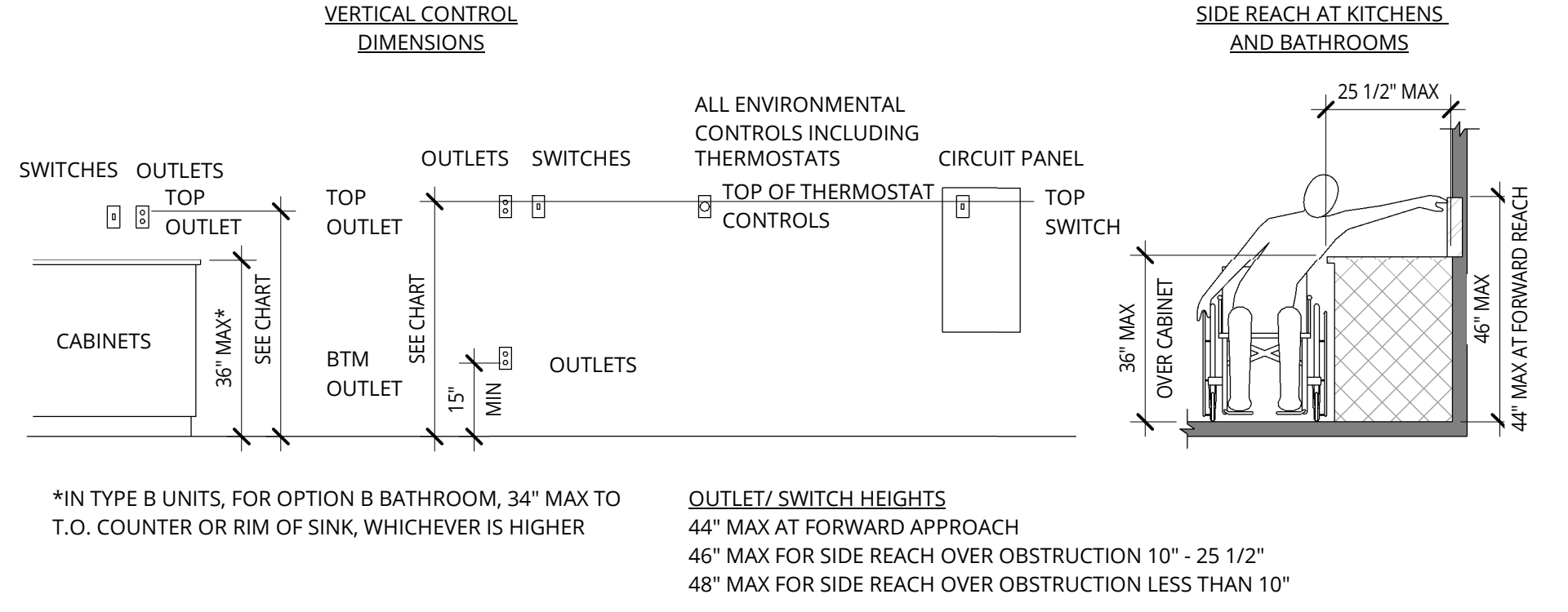
2 TYPE B LAUNDRY DETAILS



3 TYPE B KITCHEN DETAILS



4 TYPE B KITCHEN CLEARANCES



5 TYPE B UNITS MOUNTING HEIGHTS

REVISION	DATE	REASON FOR ISSUE

TYPE B UNIT  
ACCESSIBILITY CODE  
COMPLIANCE  
PERMIT / GMP

DATE 17 OCT 2018	PROJECT NUMBER 149000
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SHEET NUMBER






PERSPECTIVE: LOOKING NORTH ALONG N. WILLIAMS AVE



PERSPECTIVE: MAIN ENTRY ALONG N. WILLIAMS AVE

REGISTERED ARCHITECT  
ISAAC S. JOHNSON  
5082  
ISAAC JOHNSON  
PORTLAND, OR  
STATE OF OREGON

  
Ankrom Moisan

38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100  
1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600  
1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
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REVISION	DATE	REASON FOR ISSUE

RENDERINGS

PERMIT / GMP


DATE 17 OCT 2018	PROJECT NUMBER 149000
SHEET NUMBER	





PERSPECTIVE: EAST ELEVATION VIEW FROM BACK PARKING LOT AREA

REGISTERED ARCHITECT  
ISAAC S. JOHNSON  
5082  
ISAAC JOHNSON  
PORTLAND, OR  
STATE OF OREGON

  
Ankrom Moisan

38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100  
  
1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600  
  
1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063  
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PERMIT / GMP		
DATE 17 OCT 2018		PROJECT NUMBER 149000
SHEET NUMBER		G5.11



## ZONING NOTES

NO ZONING LETTER OR REPORT WAS PROVIDED TO WESTLAKE CONSULTANTS AT THE TIME OF PREPARATION OF THIS SURVEY. THE FOLLOWING ZONING INFORMATION IS PER THE CITY OF PORTLAND MUNICIPAL CODE.

ZONED: R-1, RESIDENTIAL 1,000  
R-2, RESIDENTIAL 2,000

SELECTED R-1 AND R-2 DEVELOPMENT STANDARDS PER CHAPTER 33.120

MAX DENSITY:  
R-1: 1 UNIT PER 1,000 SF OF SITE AREA  
R-2: 1 UNIT PER 2,000 SF OF SITE AREA

MIN DENSITY:  
R-1: 1 UNIT PER 1,450 SF OF SITE AREA  
R-2: 1 UNIT PER 2,500 SF OF SITE AREA

MIN SETBACKS  
R-1: 3 FEET  
SIDE/REAR: BASED ON AREA OF THE BUILDING WALL  
STREET: 3 FEET

MIN SETBACKS  
R-2: 10 FEET  
SIDE/REAR: BASED ON AREA OF THE BUILDING WALL  
STREET: 3 FEET

MAX BUILDING HT:  
R-1: 25 FT WITHIN 10' OF PROPERTY LINE  
45 FT OTHERWISE  
R-2: 40 FT

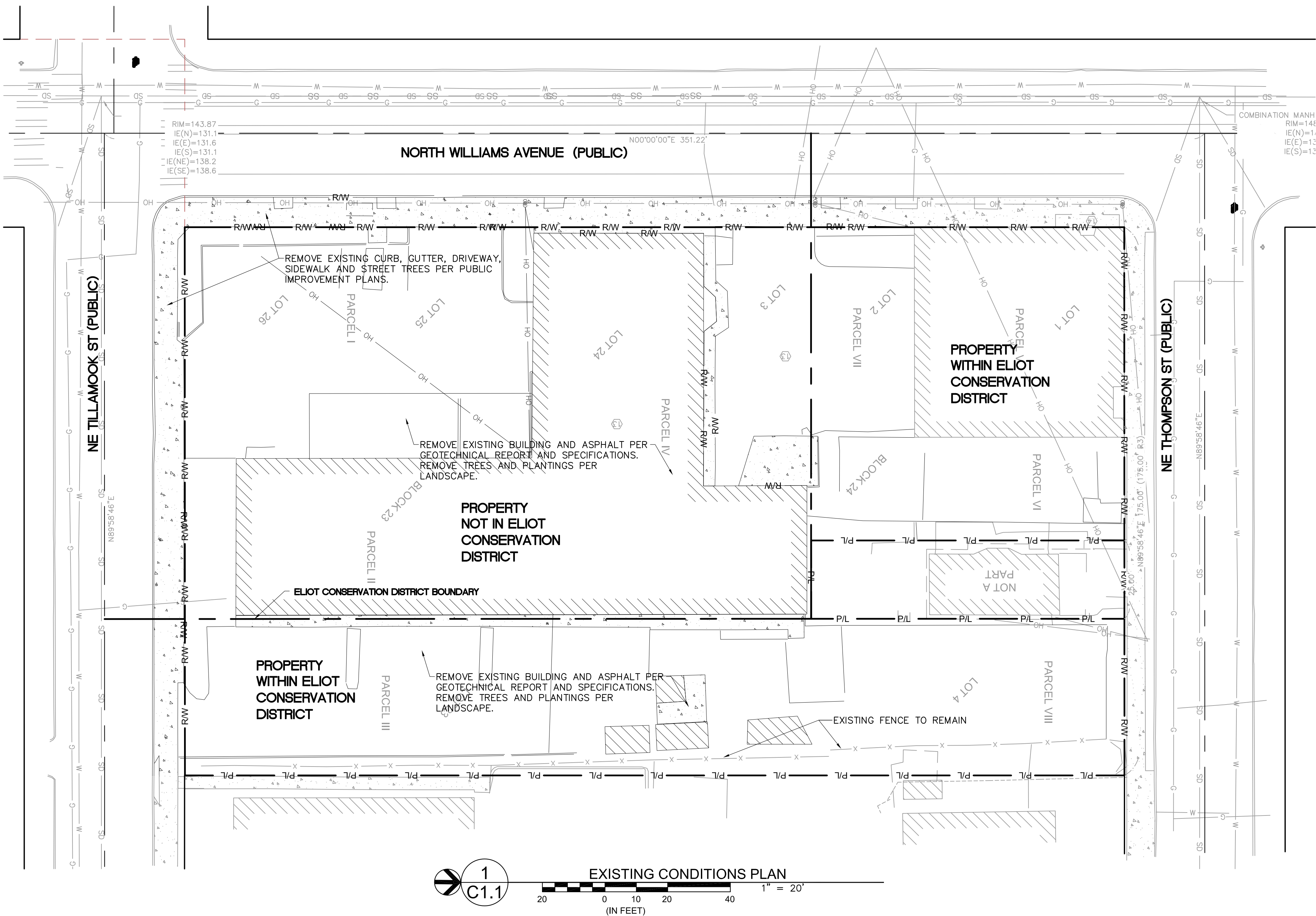
MAX BUILDING COVERAGE:  
R-1: 60%  
R-2: 50%

MIN LANDSCAPE:  
R-1: 20%  
R-2: 30%

MIN PARKING REQUIREMENTS FOR RESIDENTIAL  
1 PER UNIT

## LEGEND

- GUY WIRE
- POWER POLE
- ELECTRICAL VAULT
- STORM DRAIN MAN HOLE
- CATCH BASIN
- STAND PIPE
- SEWER MAN HOLE
- ELECTRIC METER
- FOUND MONUMENT AS SHOWN ON R3
- EASEMENT KEYNOTE NUMBER
- RECORD DIMENSION AND REFERENCE TO RECORD DATA
- IRON REBAR
- IRON PIPE
- MONUMENT
- CENTERLINE
- FOUND
- YPC YELLOW PLASTIC CAP
- FENCE
- BUILDING
- FINISHED FLOOR ELEVATION
- EDGE OF GRAVEL
- UNDERGROUND SEWER LINE
- UNDERGROUND STORM DRAIN LINE
- OVERHEAD POWER LINE
- APPROXIMATE LIMIT OF ZONE A
- BUILDING OUTLINE
- RIGHT OF WAY LINE
- EASEMENT LINE
- SECTION OR DLC LINE AS NOTED
- PROPERTY LINE
- CENTER LINE
- EDGE OF PAVEMENT



## LEGAL DESCRIPTION

PARCEL I

THE WEST 85 FEET OF LOTS 25 AND 26, AND THE SOUTH 10 FEET OF THE WEST 85 FEET OF LOT 24, BLOCK 23, ALBINA, IN THE CITY OF PORTLAND, COUNTY OF MULTNOMAH AND STATE OF OREGON.

PARCEL II

THAT PART OF LOTS 24, 25, AND 26, BLOCK 23, ALBINA, IN THE CITY OF PORTLAND, COUNTY OF MULTNOMAH AND STATE OF OREGON, DESCRIBED AS FOLLOWS, TO-WIT:

BEGINNING AT THE SOUTHEAST CORNER OF SAID LOT 26, AND THENCE RUNNING NORTHERLY ALONG THE EAST LINES OF SAID LOTS, 110 FEET; THENCE WESTERLY AND PARALLEL WITH THE SOUTH LINE OF SAID LOT 24, A DISTANCE OF 40 FEET; THENCE SOUTHERLY AND PARALLEL WITH THE EAST LINES OF SAID LOTS, 110 FEET TO THE SOUTH LINE OF SAID LOT 26; AND THENCE EASTERLY 40 FEET TO THE PLACE OF BEGINNING.

PARCEL III

LOT 23, BLOCK 23, ALBINA, IN THE CITY OF PORTLAND, COUNTY OF MULTNOMAH AND STATE OF OREGON.

PARCEL IV

LOT 3, BLOCK 24, AND THE NORTH 40 FEET OF LOT 24, BLOCK 23, ALBINA, IN THE CITY OF PORTLAND, COUNTY OF MULTNOMAH AND STATE OF OREGON.

PARCEL V

THE WEST 70 FEET OF LOT 1, AND THE NORTH 17 FEET OF THE WEST 70 FEET OF LOT 2, BLOCK 24, ALBINA, IN THE CITY OF PORTLAND, COUNTY OF MULTNOMAH AND STATE OF OREGON.

PARCEL VI

THE EAST 30 FEET AND THE WEST 100 FEET OF LOTS 1 AND 2, BLOCK 24, ALBINA, IN THE CITY OF PORTLAND, COUNTY OF MULTNOMAH AND STATE OF OREGON.

PARCEL VII

THE SOUTH 33 FEET OF THE WEST 70 FEET OF LOT 2, BLOCK 24, ALBINA, IN THE CITY OF PORTLAND, COUNTY OF MULTNOMAH AND STATE OF OREGON.

PARCEL VIII

LOT 4, BLOCK 24, ALBINA, IN THE CITY OF PORTLAND, COUNTY OF MULTNOMAH AND STATE OF OREGON.

## EASEMENT EXCEPTION NOTE

PLEASE SEE TITLE COMMITMENT CITED IN SURVEY NOTE NUMBER 1 FOR ITEMS CONCERNING TAXES, LIENS, AGREEMENTS, WAIVERS AND OTHER MATTERS. THE FOLLOWING ITEMS WERE LISTED IN THE TITLE COMMITMENT REFERENCED FOR THIS SURVEY AND ARE LISTED HERE WITH COMMENTS.

(13) PERTAINS TO AN EASEMENT AND EQUITABLE SERVITUDE AGREEMENT RECORDED MAY 14, 2005 AS DOCUMENT NO. 2005-093250. (AFFECTS PORTIONS OF BUILDING AND PARKING AREA)

(14) PERTAINS TO CC&R'S AS SET FORTH IN DOCUMENT RECORDED MARCH 15, 2012 AS DOCUMENT NO. 2012-030777. (AFFECTS PORTION OF BUILDING NEAR THE NORTHWEST PROPERTY CORNER AS PLOTTED HEREON)

## SURVEYORS NOTES

- THE SURVEY SHOWN WAS PREPARED REFERENCEING WFG NATIONAL TITLE INSURANCE COMPANY REPORT FILE NO. 16008566 WITH AN EFFECTIVE DATE OF MAY 31, 2016. THE PROPERTY DESCRIBED THEREIN IS THE SAME AS THE PROPERTY SHOWN ON THIS MAP.
- THE BEARINGS SHOWN HEREON ARE BASED ON THE CENTERLINE OF N WILLIAMS AVENUE BEING N00°00'00"W AS SHOWN ON SURVEY NO. 64372, MULTNOMAH COUNTY SURVEY RECORDS.
- THERE WAS NO EVIDENCE OF THE SITE BEING USED AS A SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL AT THE TIME OF THE SURVEY.
- WETLANDS WERE NOT IDENTIFIED OR DELINEATED IN THE FIELD AT THE TIME OF SURVEY AND ARE NOT PLOTTED HEREON.
- NO EVIDENCE WAS OBSERVED OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS DURING THE COURSE OF THE FIELD WORK.
- THE SUBJECT PROPERTY IS LOCATED WITHIN UNSHADED ZONE X, AREAS OF MINIMAL FLOODING, ACCORDING TO FEMA FLOOD INSURANCE RATE MAP (FIRM) FOR WASHINGTON COUNTY, OREGON, COMMUNITY-PANEL NUMBER 4101830091 E, EFFECTIVELY DATED OCTOBER 19, 2004.
- THE SUBJECT SITE CONTAINS 10 IDENTIFIABLE PARKING SPACES.
- ELEVATIONS SHOWN HEREON ARE BASED ON CITY OF PORTLAND BENCHMARK NO. 3827 AT THE NORTHEAST CORNER OF TILLAMOOK ST AND WILLIAMS AVE. ELEVATION=144.00'

## UTILITY STATEMENT

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN MAPPED FROM FIELD SURVEY INFORMATION, OBSERVED ABOVE GROUND EVIDENCE AND GROUND MARKINGS BY OTHERS, AND EXISTING DRAWINGS SUPPLIED BY OTHERS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

## MAP AND DEED REFERENCES

DEEDS  
# DOCUMENT NO. RECORDING DATE  
R1 2013-049724 04/11/2013  
R2 2013-131522 09/30/2013

PLATS AND SURVEYS  
# NAME/TITLE RECORDING REFERENCE  
R3 SURVEY SN 64372 ALBINA BOOK 1 PAGES 4-5  
R4 PLAT

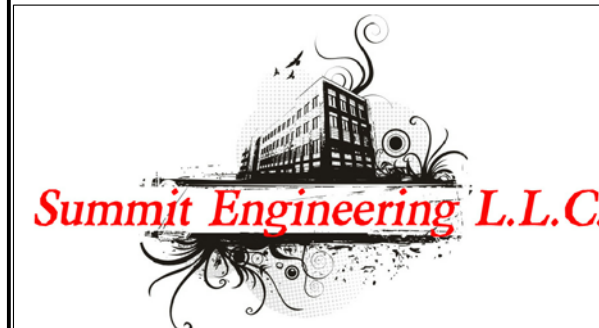
## SURVEYORS CERTIFICATE

TO BRIDGE HOUSING AND WFG NATIONAL TITLE INSURANCE COMPANY.

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 2, 3, 4, 6(a), 7(b)(1)(c), 8, 9, 11, 13, 14, 16, 17, 18, 19 AND 20 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON DECEMBER 14, 2016.

GANDERSON@WESTLAKECONSULTANTS.COM

WESTLAKE CONSULTANTS, INC. INITIAL RELEASE 1/17/2017



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100  
1505 5TH AVE, SUITE  
SEATTLE, WA 98101  
T 206.576.1600  
1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063  
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2156 N WILLIAMS AVE  
PORTLAND, OR 97227

BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

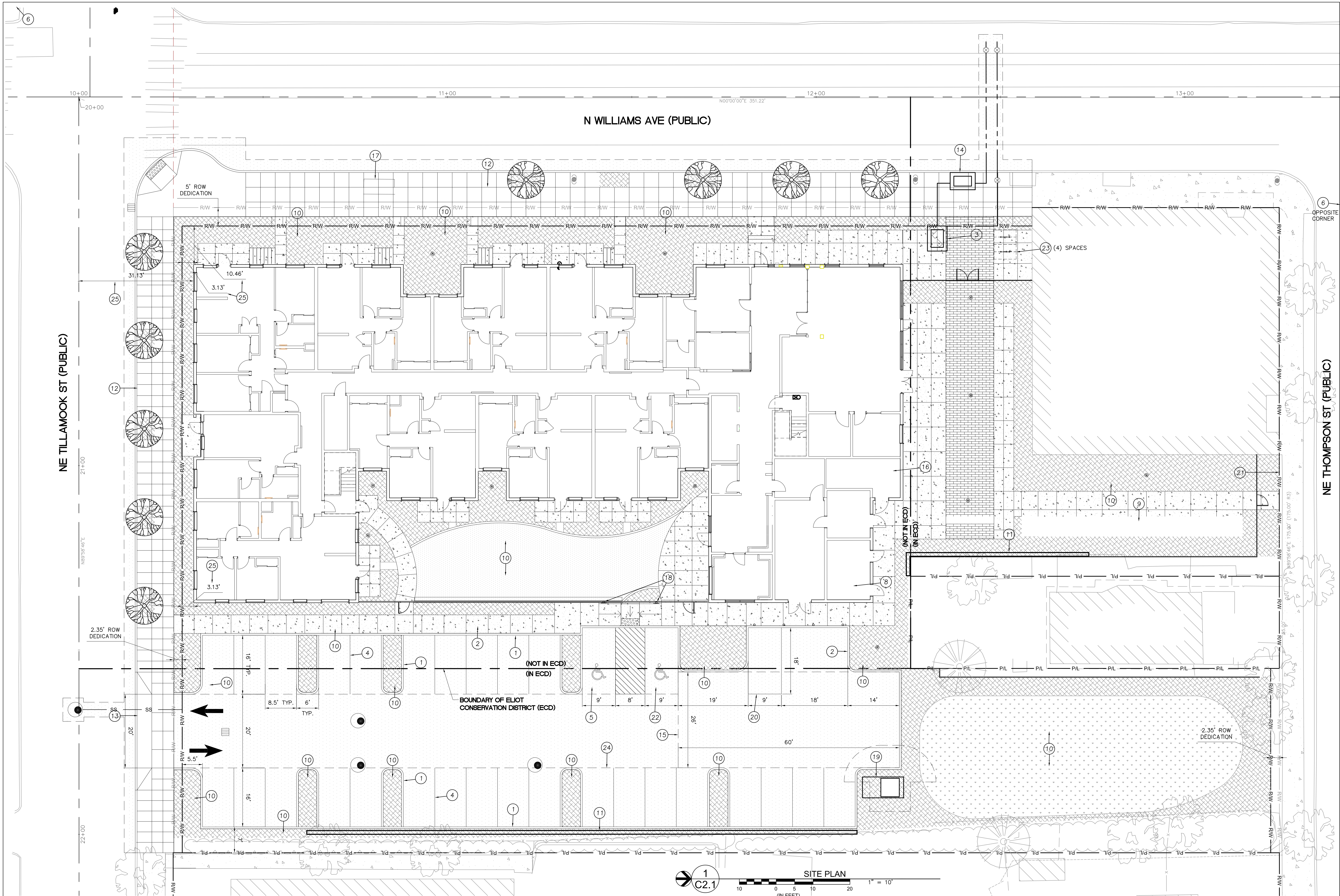
EXISTING  
CONDITIONS PLAN

GMP/PERMIT

DATE 10/09/2018 PROJECT NUMBER 149000  
SHEET NUMBER

C1.1



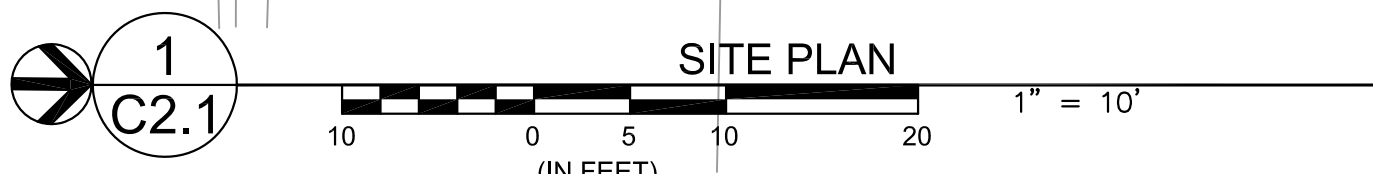


GENERAL NOTES

- ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF PORTLAND, THE CURRENT EDITION OF THE UNIFORM PLUMBING CODE, AND THE INTERNATIONAL BUILDING CODE. ALL WORK IN THE PUBLIC R.O.W. REQUIRES A PUBLIC WORKS PERMIT.
- EXCAVATION: EXCAVATE FOR SLABS, PAVING AND OTHER IMPROVEMENTS TO SIZES AND LEVELS SHOWN OR REQUIRED. ALLOW FOR FORM CLEARANCE AND FOR PROPER COMPACTION OF REQUIRED BACKFILLING MATERIAL. EXCAVATORS MUST COMPLY WITH ORS 757.541 THROUGH 757.571; EXCAVATORS SHALL NOTIFY ALL UTILITY COMPANIES FOR LINE LOCATIONS 72 HOURS (MINIMUM) PRIOR TO START OF WORK. DAMAGE TO UTILITIES SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- EFFECTIVE EROSION CONTROL IS REQUIRED. EROSION CONTROL DEVICES MUST BE INSTALLED AND MAINTAINED MEETING THE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ) STANDARDS. THE GOVERNING JURISDICTION SHALL, AT ANY TIME, ORDER CORRECTIVE ACTION AND STOPPAGE OF WORK TO ACCOMPLISH EFFECTIVE EROSION CONTROL.
- EFFECTIVE DRAINAGE CONTROL IS REQUIRED. DRAINAGE SHALL BE CONTROLLED WITHIN THE WORK SITE AND SHALL BE SO ROUTED THAT ADJACENT PRIVATE PROPERTY, PUBLIC PROPERTY, AND THE RECEIVING SYSTEM ARE NOT ADVERSELY IMPACTED. THE GOVERNING JURISDICTION MAY, AT ANY TIME, ORDER CORRECTIVE ACTION AND STOPPAGE OF WORK TO ACCOMPLISH EFFECTIVE DRAINAGE CONTROL.
- CONTRACTOR SHALL ADJUST ALL STRUCTURES IMPACTED BY CONSTRUCTION IMPROVEMENTS TO NEW FINISHED GRADES.
- CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES NOT SHOWN FOR REMOVAL. DAMAGE TO EXISTING STRUCTURES SHALL BE REPAIRED BY THE CONTRACTOR WITH CONTRACTOR'S OWN RESOURCES.
- THE BUILDING OUTLINE SHOWN ON THIS PLAN IS SHOWN FOR REFERENCE ONLY AND SHOULD NOT BE USED FOR CONSTRUCTION, WHETHER MEASURING, STAKING OR OTHERWISE. REFER TO ARCHITECTURAL DRAWINGS FOR ALL MEASUREMENTS, DIMENSIONS, OUTLINE AND FEATURES.
- REFER TO THE GEOTECHNICAL REPORTS BY XX FOR INFORMATION REGARDING PAVING, FOUNDATIONS, SITE PREPARATION, CLEARING, GRUBBING, SUBGRADE PREPARATION, ETC.

CONSTRUCTION NOTES

- CONCRETE VERTICAL CURB PER 5/C8.1
- CONCRETE SIDEWALK PER 6/C8.1
- FDC LOCATION TBD BY FIRE PROTECTION DESIGNER
- 4" PAINTED WHITE PARKING STRIPE
- ADA ACCESSIBLE PARKING PER 11/C8.1
- EXISTING PUBLIC FIRE HYDRANT
- SQUARE WING ACCESSIBLE RAMP PER 2/C8.1
- TRASH ROOM LOCATED IN BUILDING
- BIKE PARKING PER ARCH PLANS
- LANDSCAPE AREA, SEE LANDSCAPE PLANS
- MAX 36" HIGH MODULAR BLOCK RETAINING WALL
- CITY OF PORTLAND PUBLIC SIDEWALK, SEE PUBLIC IMPROVEMENT PLANS
- CITY OF PORTLAND DRIVEWAY, SEE PUBLIC IMPROVEMENT PLANS
- WATER METER IN VAULT PER UTILITY PLAN
- 26' X 60' FIRE APPARATUS CLEARANCE ZONE (W/ FIRE ACCESS PAVING)
- IRRIGATION POINT OF CONNECTION IN MECH. ROOM
- EXISTING BUS SHELTER. LOCATION TO BE COORDINATED WITH TRIMET.
- ADA SIGNAGE PER 10/C8.1
- PROPOSED TRANSFORMER LOCATION (CLEARANCES SHOWN DASHED)
- MINIMUM 9 FT X 18 FT STRIPED LOADING ZONE
- NO DEDICATION REQUIRED PER EARLY ASSISTANCE NOTES FROM PBOT DATED FEBRUARY 7, 2017, ITEM B.4.
- ADA ACCESSIBLE PARKING PER 11/C8.1 W/ VAN PARKING SIGN
- SHORT-TERM BIKE PARKING
- FIRE ACCESS PAVING IN 20' DRIVE AISLE
- DIMENSION SHOWN FOR REFERENCE ONLY. REFER TO ARCHITECTURAL PLANS FOR DIMENSION FROM ROW OR PROPERTY LINE TO GRID LINE.



LEGEND

- |  |  |
|--|--|
|  | RETAINING WALL                             |
|  | FIRE HYDRANT                               |
|  | ASPHALT PAVING PER GEOTECH. REPORT 8900 SF |
|  | DRIVEWAY, CONCRETE PADS AND SIDEWALK       |
|  | VERTICAL CURB W/ NO PARKING PER 14/C8.1    |
|  | VERTICAL CURB PER 5/C8.1                   |
|  | PROPERTY LINE                              |
|  | WATER METER VAULT OR DOUBLE CHECK VAULT    |
|  | MANHOLE OR ACCESS LID                      |
|  | ELECTRICAL METER BY OTHERS                 |
|  | FIRE HYDRANT                               |

**Summit Engineering L.L.C.**

**Ankrom Moisan**

38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100  
1505 5TH AVE, SUITE  
SEATTLE, WA 98101  
T 206.576.1600  
1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063  
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NORTH WILLIAMS APARTMENTS  
2156 N WILLIAMS AVE  
PORTLAND, OR 97227  
BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

SITE PLAN

GMP/PERMIT

DATE	PROJECT NUMBER
10/09/2018	149000
SHEET NUMBER	C2.1



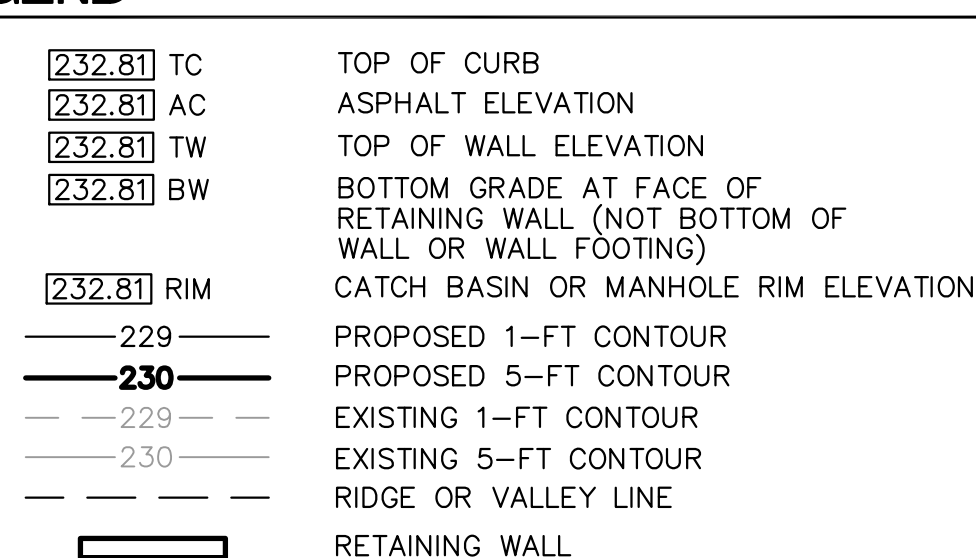


REGISTERED PROFESSIONAL  
ENGINEER  
78899  
OREGON  
JASON M HAVELKA  
Expires 06/30/2019

BRIDGE HOUSING

## GRADING PLAN

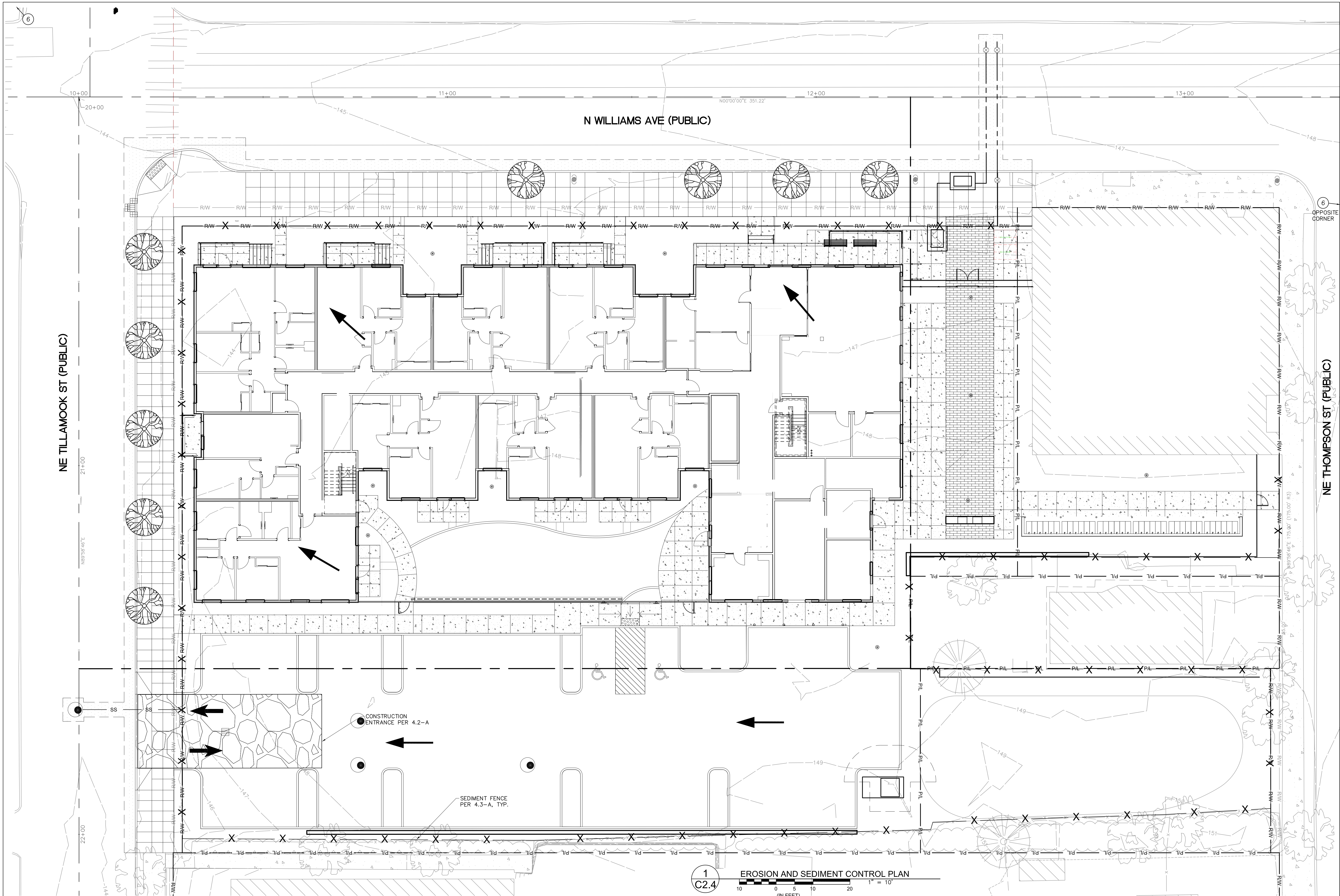
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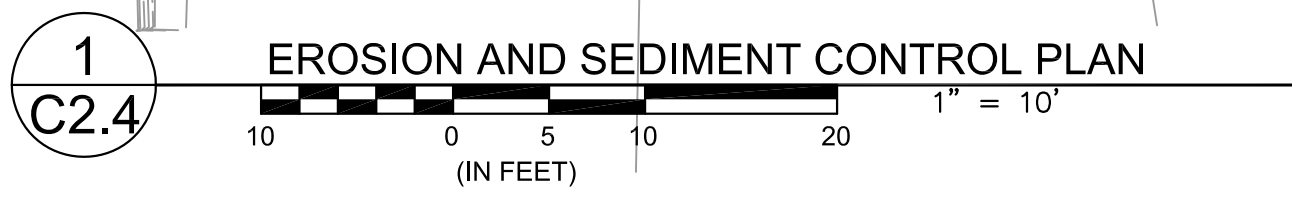
C2.3





**LEGEND**

	BIO-FILTER BAG
	INLET PROTECTION
	SEDIMENT FENCE
	FLOW DIRECTION ARROW



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Ankrom Moisan

38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100  
1505 5TH AVE, SUITE  
SEATTLE, WA 98101  
T 206.576.1600  
1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063  
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REGISTERED PROFESSIONAL ENGINEER  
78899  
JASON M. HAVELIN  
OREGON  
MEMBER 6 2019  
Expires 06/30/2019

NORTH WILLIAMS APARTMENTS  
2156 N WILLIAMS AVE  
PORTLAND, OR 97227  
BRIDGE HOUSING

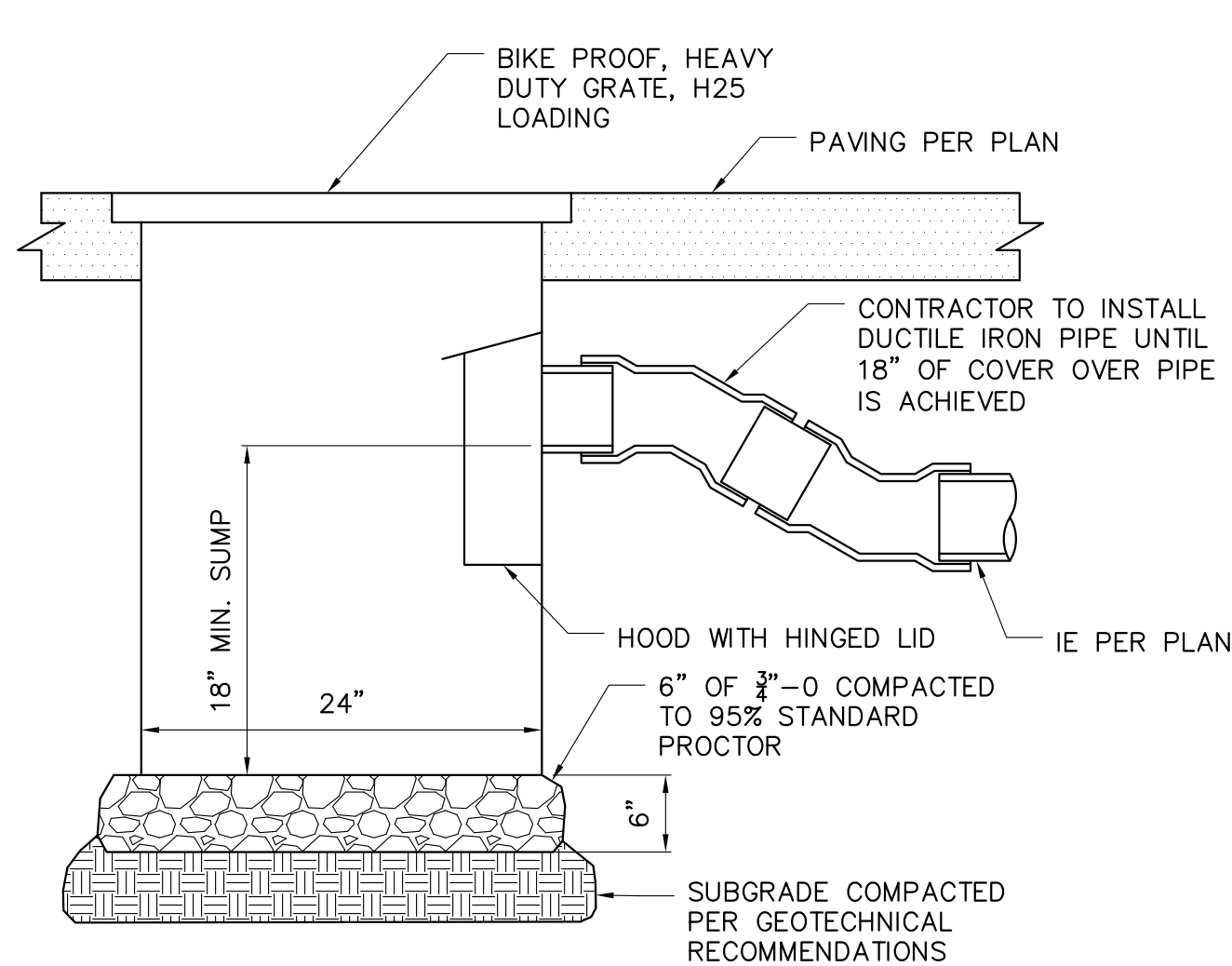
REVISION	DATE	REASON FOR ISSUE

EROSION AND SEDIMENT CONTROL PLAN

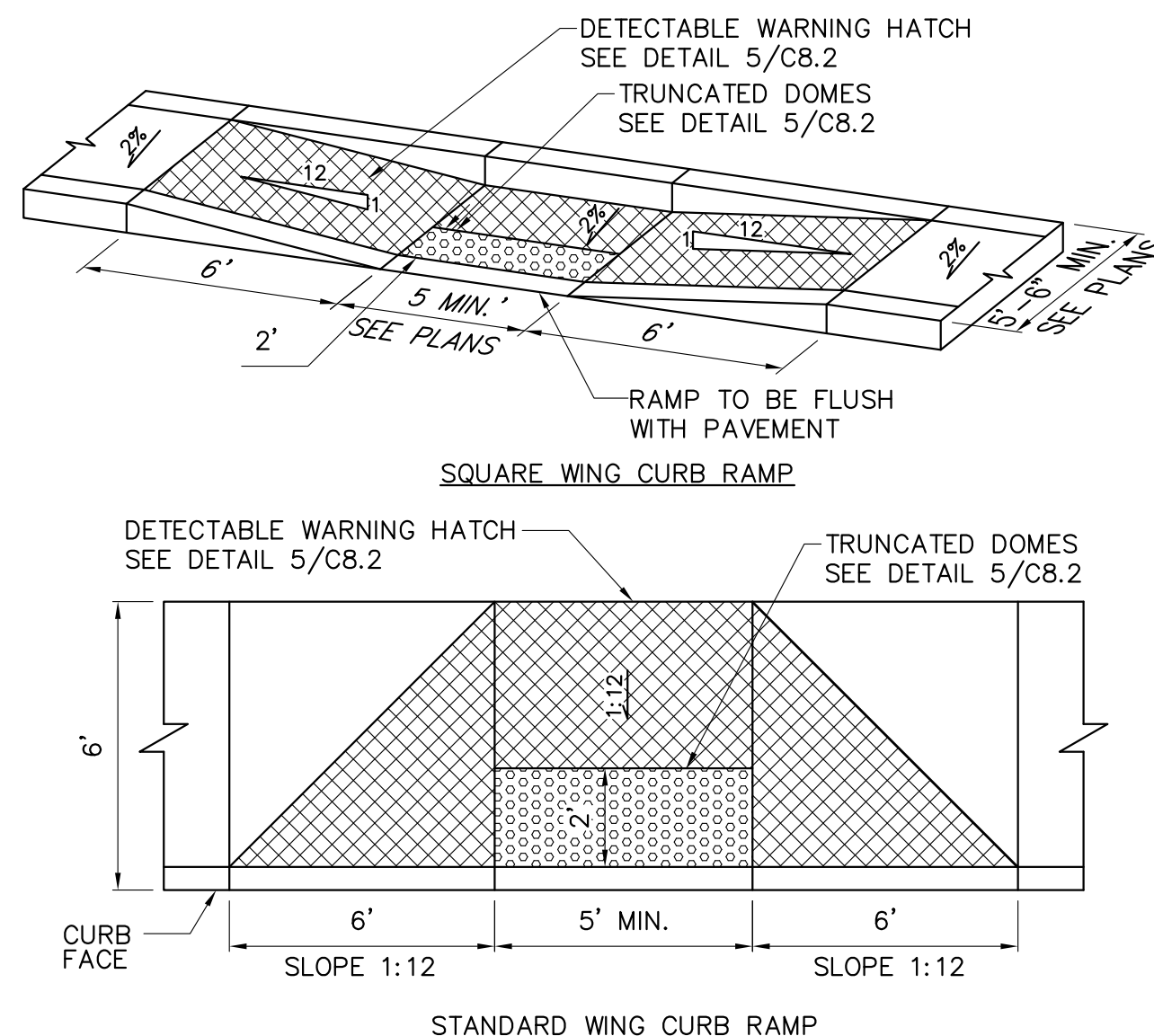
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DATE	PROJECT NUMBER
10/09/2018	149000
SHEET NUMBER	C2.4

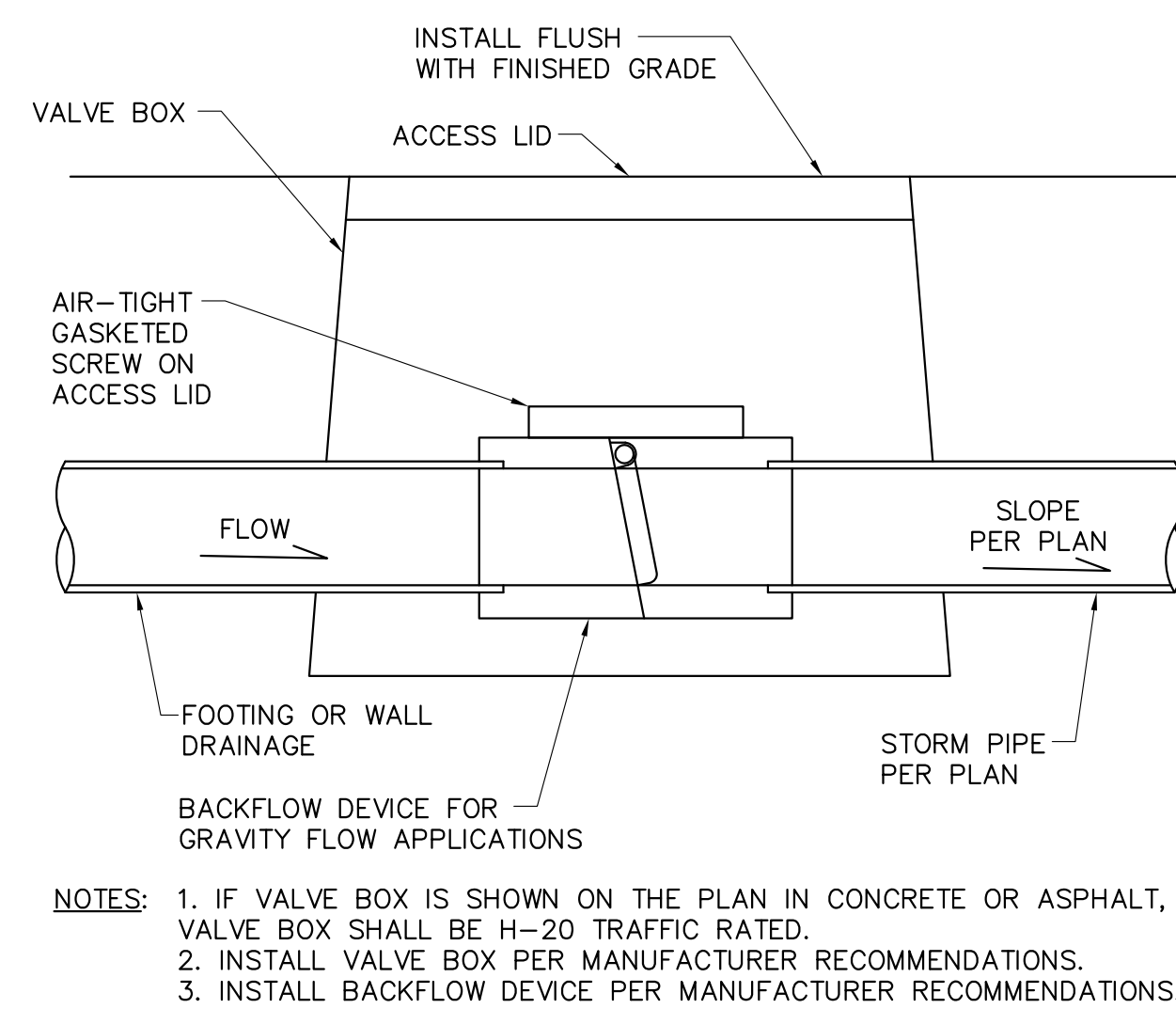




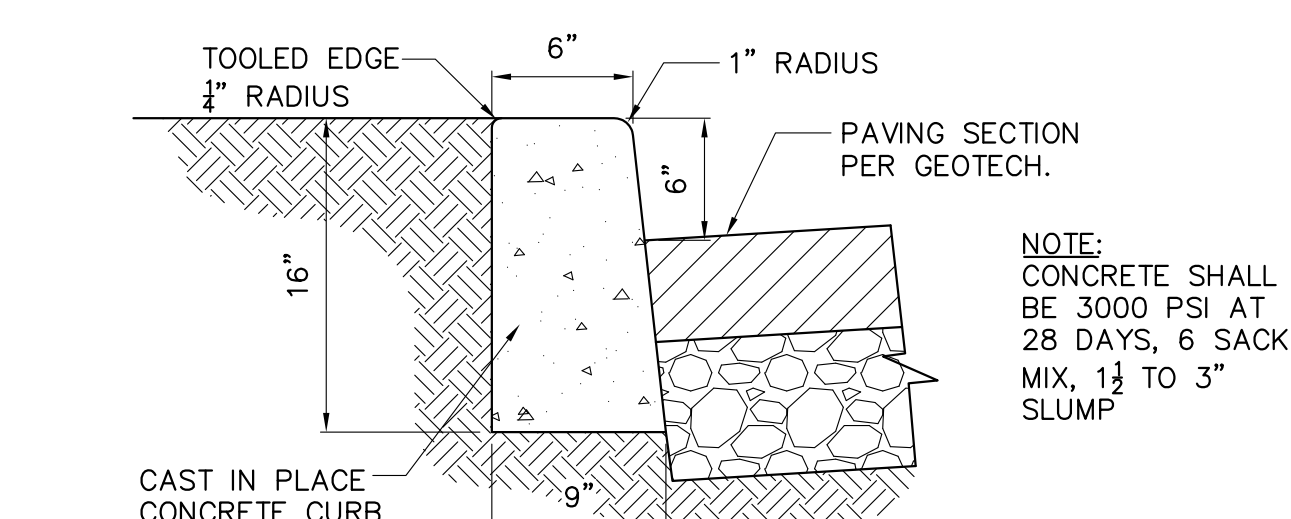
1  
C8.1 LYNCH STYLE CATCH BASIN  
N.T.S.



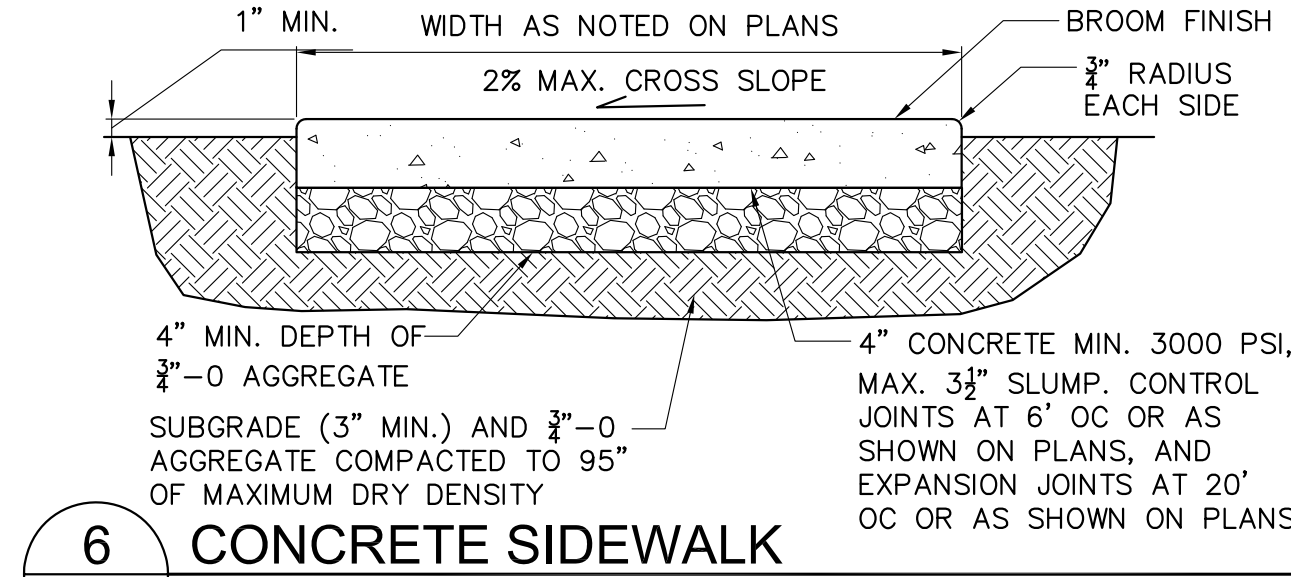
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C8.1 ADA ACCESSIBLE RAMP  
N.T.S.



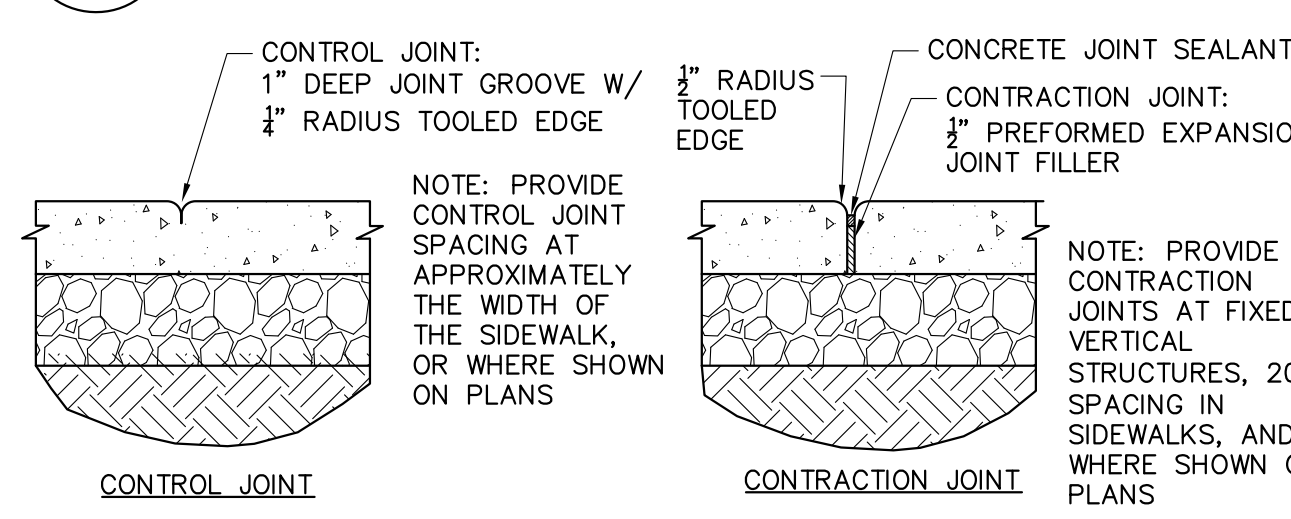
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C8.1 BACKFLOW PREVENTION  
N.T.S.



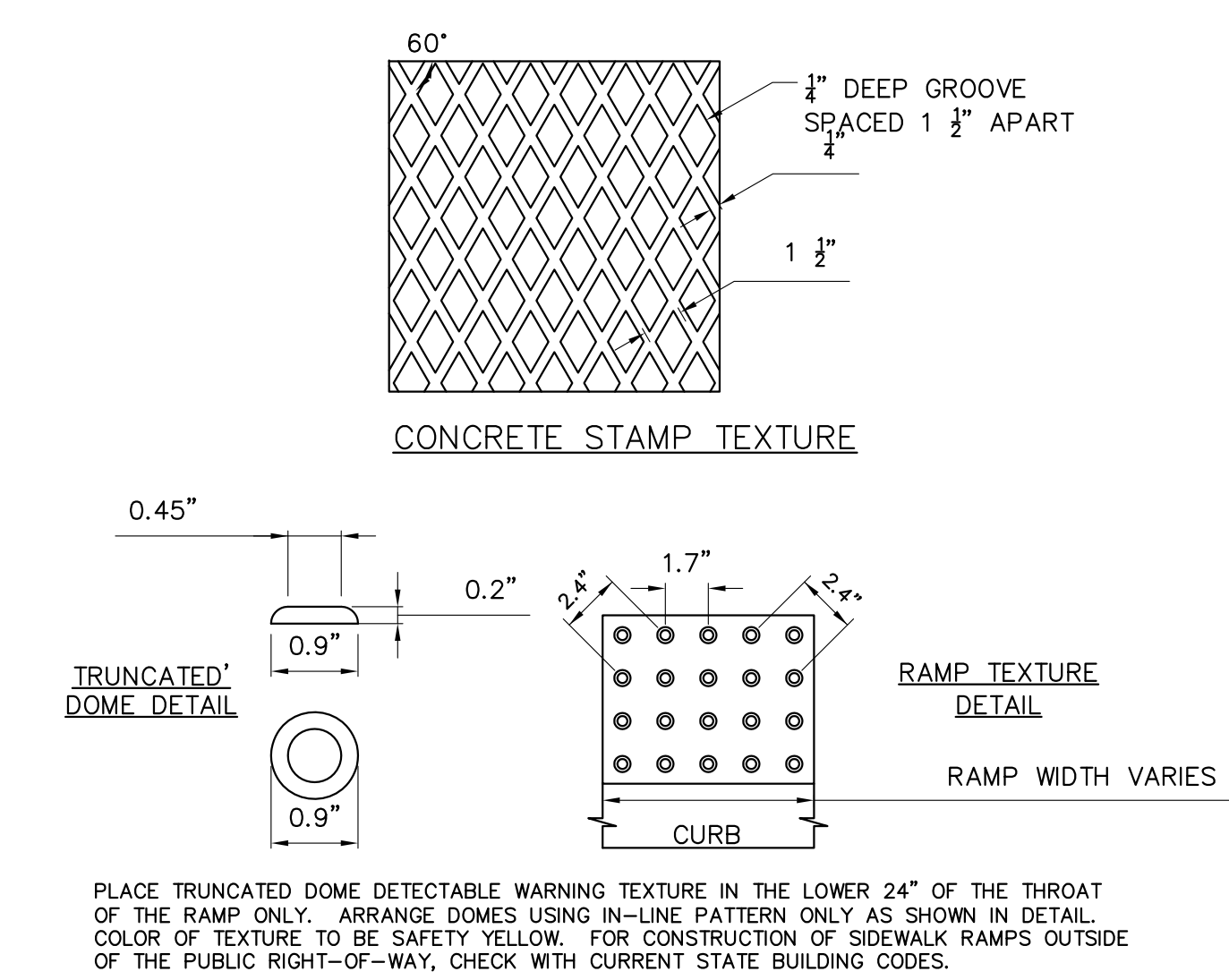
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C8.1 CONCRETE VERTICAL CURB  
N.T.S.



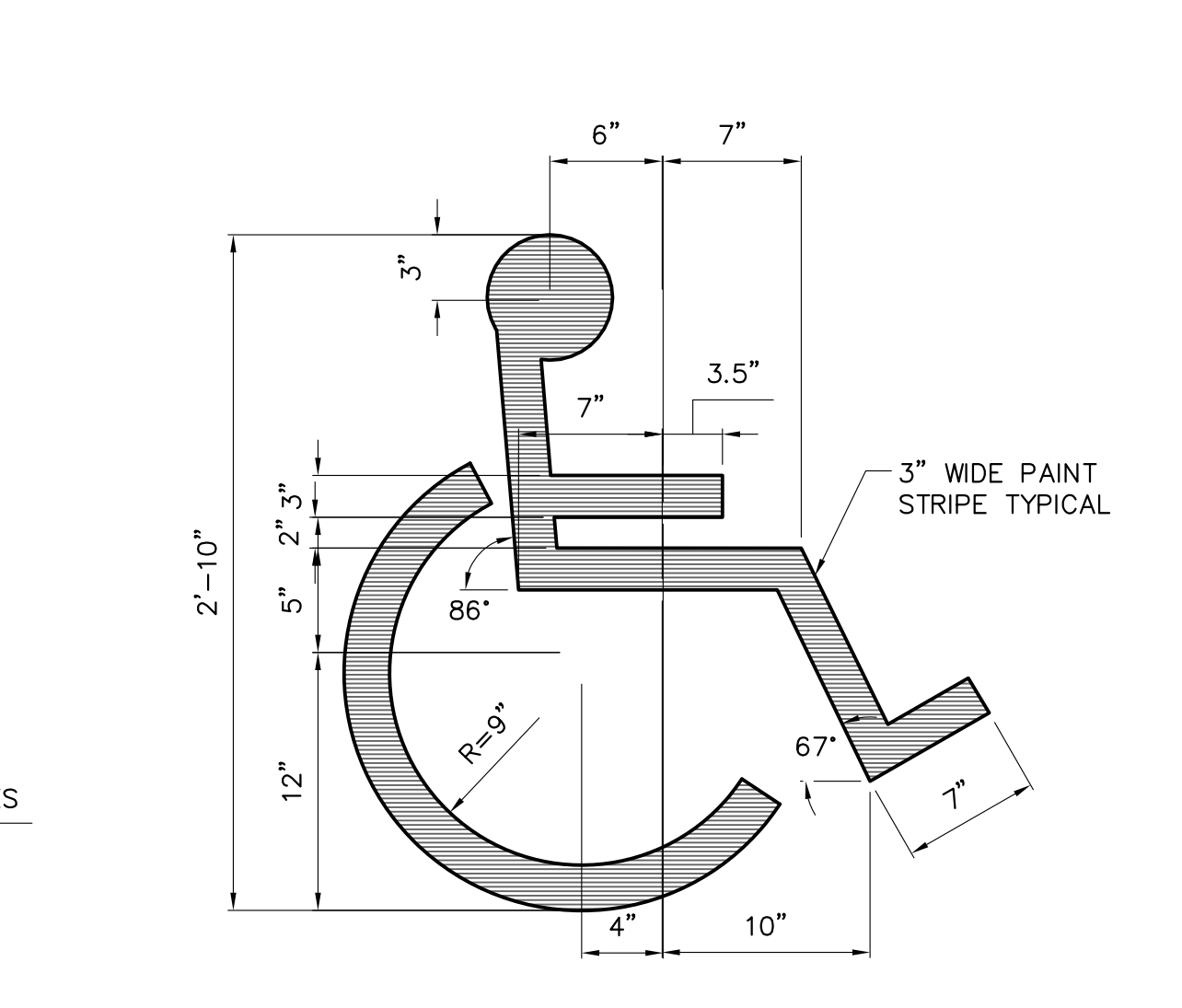
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C8.1 CONCRETE SIDEWALK  
N.T.S.



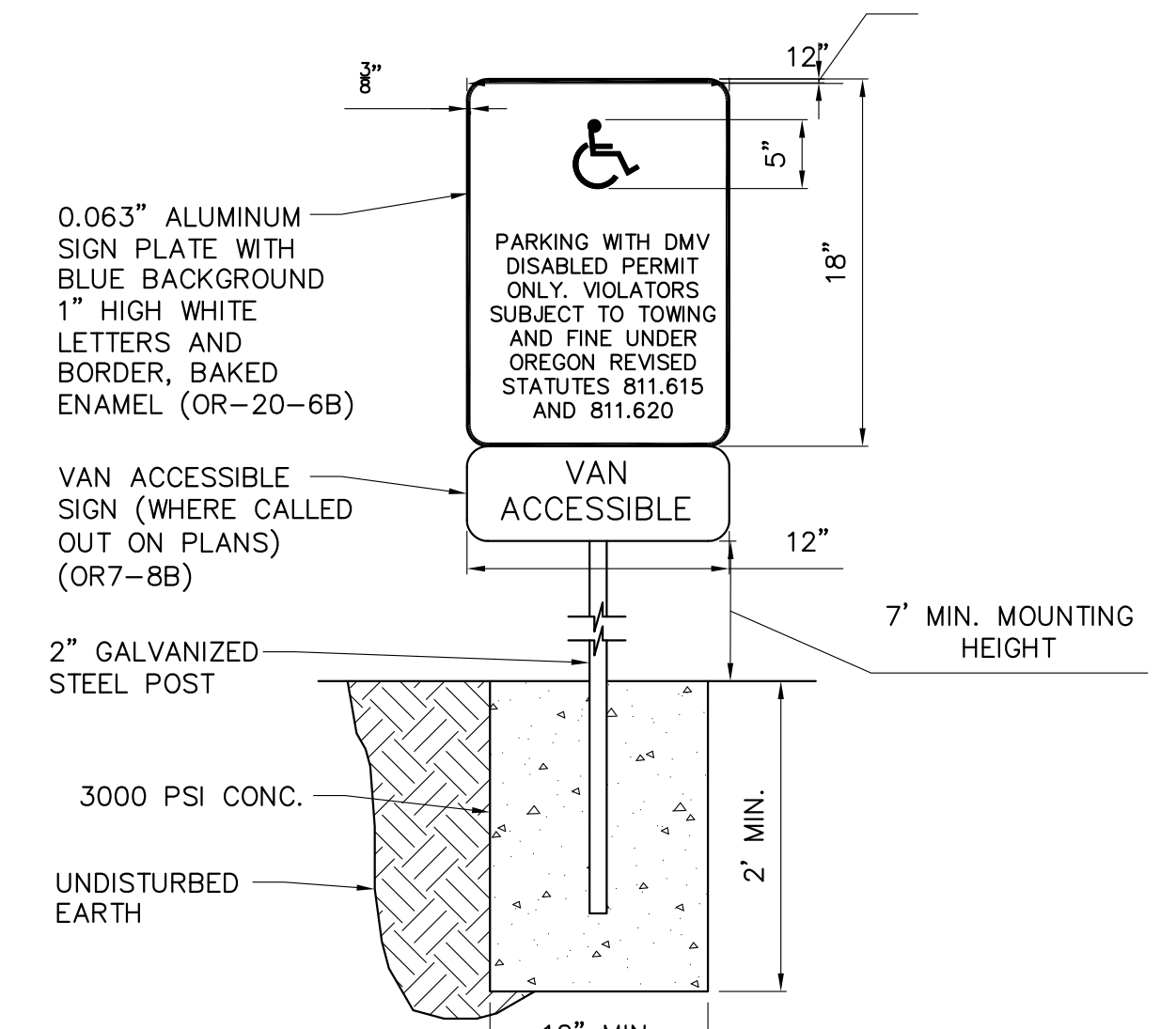
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C8.1 SIDEWALK JOINTS  
NTS



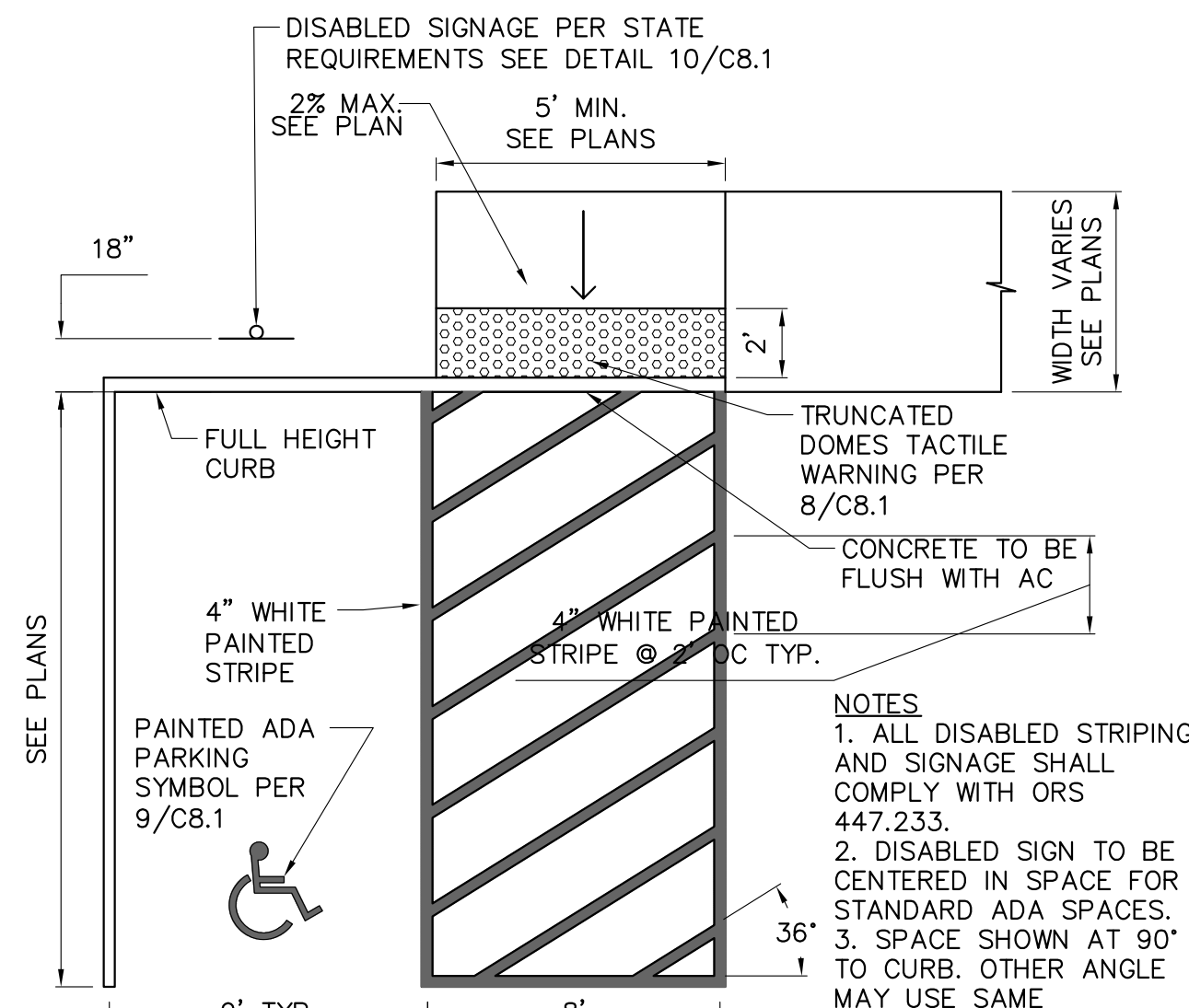
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C8.1 ADA DETECTABLE WARNING  
N.T.S.



9  
C8.1 ADA PARKING SYMBOL  
N.T.S.



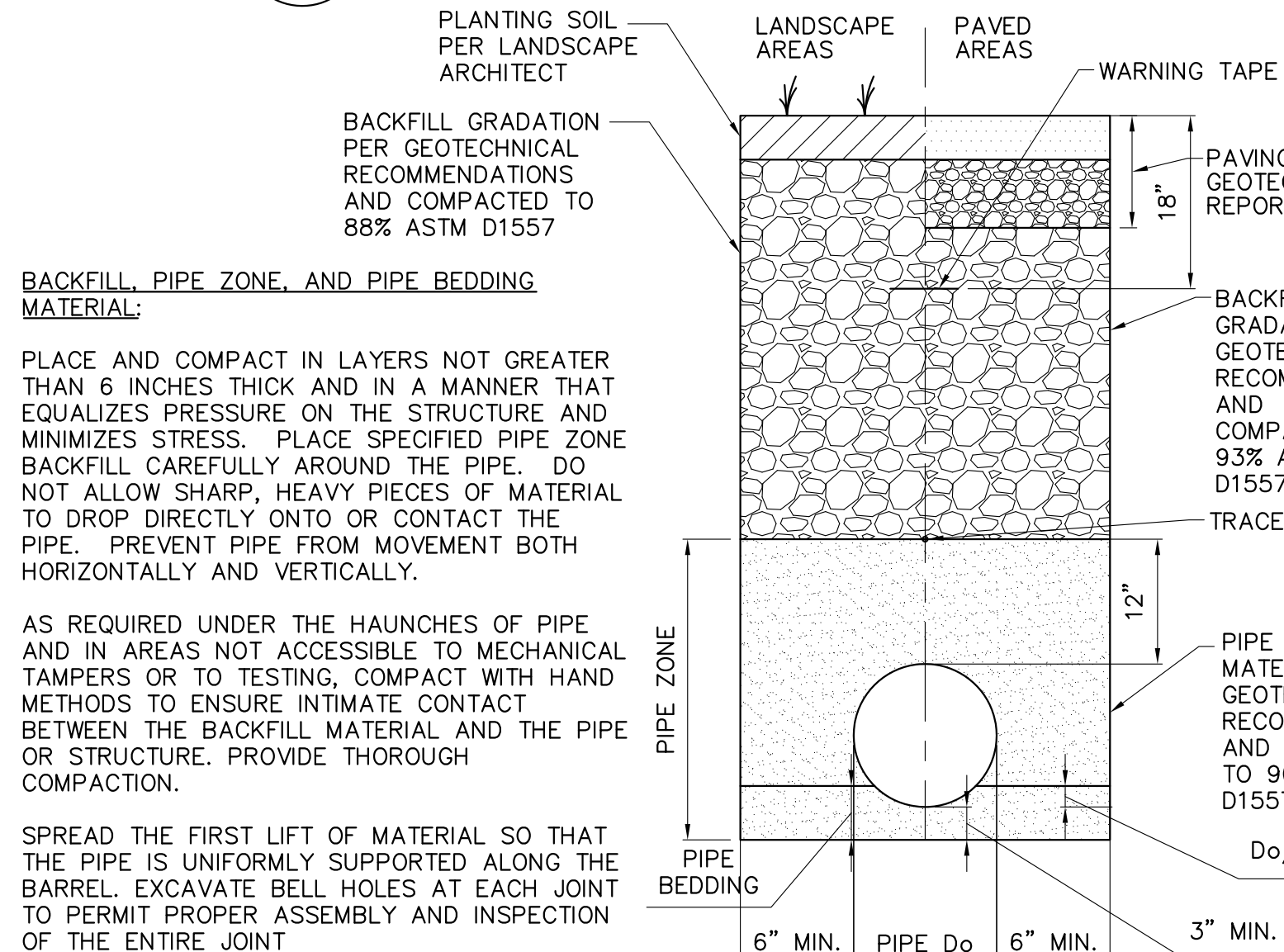
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C8.1 ADA PARKING SIGN  
N.T.S.



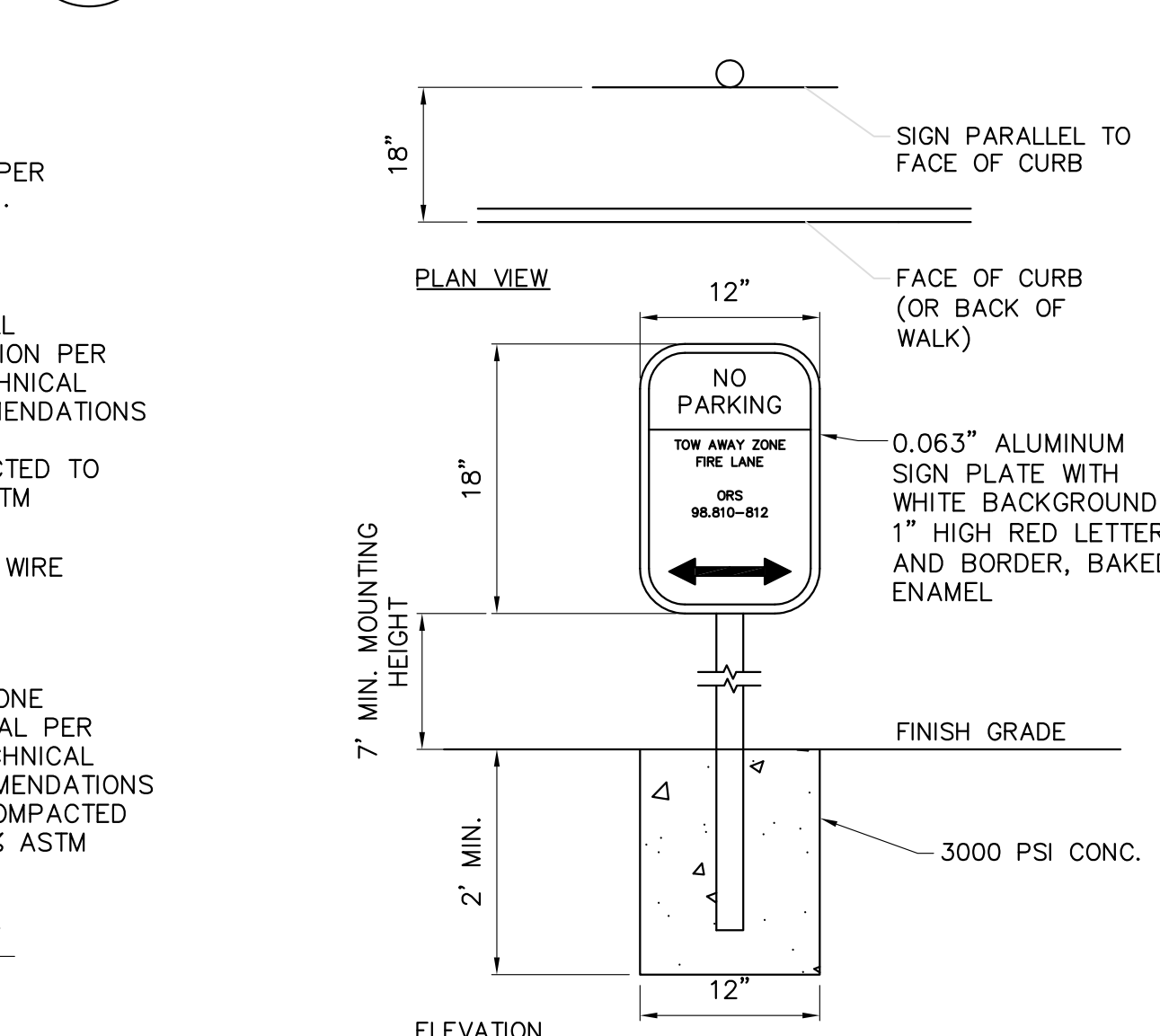
11  
C8.1 ADA ACCESSIBLE PARKING SPACE  
N.T.S.

1. THE MAXIMUM SLOPE OF ANY RAMP SHALL BE 8.33% (1 UNIT VERTICAL IN 12 UNITS HORIZONTAL).
2. THE CROSS SLOPE OF A RAMP SHALL NOT EXCEED 2% (1 UNIT VERTICAL IN 50 UNITS HORIZONTAL).
3. THE MINIMUM CLEAR WIDTH OF A RAMP SHALL BE NOT LESS THAN 36 INCHES (MEASURED BETWEEN WALLS EACH SIDE WITH RAIL ON TOP - 36 INCH CLEAR BETWEEN HANDRAILS IF HANDRAILS ARE MOUNTED ON INSIDE OF WALLS).
4. RAMP WITHIN THE ACCESSIBLE ROUTE SHALL HAVE LANDINGS TOP AND BOTTOM. LANDINGS SHALL BE LEVEL AND HAVE A MINIMUM DIMENSION MEASURED IN THE DIRECTION OF THE RAMP OF 60 INCHES. WHERE THE RAMP CHANGES DIRECTION AT A LANDING, THE LANDING SHALL NOT BE LESS THAN 60 INCHES BY 60 INCHES.
5. THE WIDTH OF ANY LANDING SHALL BE NOT LESS THAN THE WIDTH OF THE RAMP. THE SLOPE OF THE LANDING SHALL NOT EXCEED 2% (1 UNIT VERTICAL IN 50 UNITS HORIZONTAL) IN ANY DIRECTION.
6. RAMP HAVING SLOPES STEEPER THAN 5% (1 UNIT VERTICAL IN 20 UNITS HORIZONTAL), SHALL HAVE HANDRAILS BOTH SIDES, EXCEPT PER (9) BELOW.
7. HANDRAILS SHALL BE CONTINUOUS, EXCEPT THEY ARE NOT REQUIRED AT ANY ACCESS POINT ALONG THE RAMP.
8. HANDRAILS SHALL EXTEND AT LEAST 12 INCHES BEYOND THE TOP AND BOTTOM OF ANY RAMP SEGMENT.
9. RAMP HAVING A RISE LESS THAN OR EQUAL TO 6 INCHES OR A RUN LESS THAN OR EQUAL TO 72 INCHES NEED NOT HAVE HANDRAILS.
10. ANY PORTION OF THE EDGE OF A RAMP AND ITS ASSOCIATED LANDINGS THAT ARE MORE THAN 6 INCHES ABOVE THE ADJACENT GRADE OR FLOOR SHALL BE PROVIDED WITH EDGE PROTECTION BY ONE OF THE FOLLOWING:
  - CURBS - WHERE USED, CURBS SHALL BE CONTINUOUS AND AND BE NOT LESS THAN 2 INCHES IN HEIGHT ABOVE THE SURFACE OF THE RAMP OR LANDINGS.
  - WALLS - WHERE USED, WALLS SHALL BE CONTINUOUS.
  - GUARDRAILS - WHERE USED, GUARDRAILS SHALL BE PROVIDED WHEN THE ADJACENT GRADE IS 30 INCHES OR MORE BELOW THE SURFACE OF THE RAMP OR LANDING. GUARDRAILS AT RAMP LOCATIONS MAY BE THE HEIGHT OF THE HANDRAIL (34 TO 38 INCHES) - GUARDRAILS AT LANDING LOCATIONS SHALL BE 42 INCHES MINIMUM IN HEIGHT - GUARDRAILS SHALL HAVE BALUSTERS OR RAIL PATTERNS SUCH THAT A 4 INCH SPHERE CANNOT PASS THROUGH ANY OPENING.
  - HANDRAILS - WHERE USED, HANDRAILS TO HAVE AN INTERMEDIATE RAIL MOUNTED 17 INCHES TO 19 INCHES ABOVE THE RAMP OR LANDING SURFACE.
11. EXPOSED RAMP AND THEIR APPROACHES SHALL BE CONSTRUCTED TO PREVENT THE ACCUMULATION OF WATER ON WALKING SURFACES.
12. RAMP ON ACCESSIBLE ROUTES SHALL HAVE A SLIP-RESISTANT SURFACE.

8  
C8.2 GENERAL NOTES - RAMP CONSTRUCTION  
N.T.S.



12  
C8.1 UTILITY TRENCH W/ BACKFILL  
N.T.S.



13  
C8.1 FIRE LANE 'NO PARKING' SIGNAGE  
N.T.S.

**Summit Engineering L.L.C.**

**Ankrom Moisan**

38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100  
1505 5TH AVE, SUITE 500  
SEATTLE, WA 98101  
T 206.576.1600  
1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063  
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REGISTERED PROFESSIONAL ENGINEER  
7889997  
JASON M. HAYES  
OREGON  
MEMBER 6/2019  
Expires 06/30/2019

NORTH WILLIAMS APARTMENTS  
2156 N WILLIAMS AVE  
PORTLAND, OR 97227  
BRIDGE HOUSING

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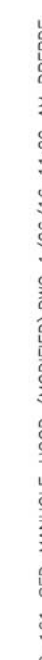
SITE DETAILS

GMP /PERMIT

DATE	PROJECT NUMBER
10/09/2018	149000
SHEET NUMBER	

C8.1







TREE DEMOLITION & PRESERVATION NOTES

1. TREE PRESERVATION REQUIREMENT

THERE ARE A TOTAL OF (8) EIGHT EXISTING TREES ON-SITE 12 INCHES DBH OR GREATER. NO EXISTING TREES ON THE SITE TOTAL (36) THIRTY-SIX INCHES DBH OR LARGER. (3) THREE OF THE EIGHT 12 INCH DBH OR LARGER TREES WILL BE PRESERVED AND RETAINED. MEETING THE 1/3 PRESERVATION REQUIREMENT.

2. EXISTING ON-SITE TREES

TREES 12 INCHES DBH OR GREATER..... 8  
TREES UNDER 12 INCHES DBH..... 11  
TOTAL EXISTING ON-SITE TREES..... 19

3. EXISTING ON-SITE TREE REMOVAL & PRESERVATION

TREES 12 INCHES DBH OR GREATER..... 8  
TREES 36 INCHES DBH OR GREATER..... 0  
TREES 12 INCHES DBH OR GREATER TO BE PRESERVED..... 3  
TREES 12 INCHES DBH OR GREATER TO BE REMOVED..... 5  
PERCENTAGE OF EXISTING TREES TO BE PRESERVED..... 37.5% (MEETING THE 1/3 PRESERVATION REQ)

4. EXISTING STREET TREES

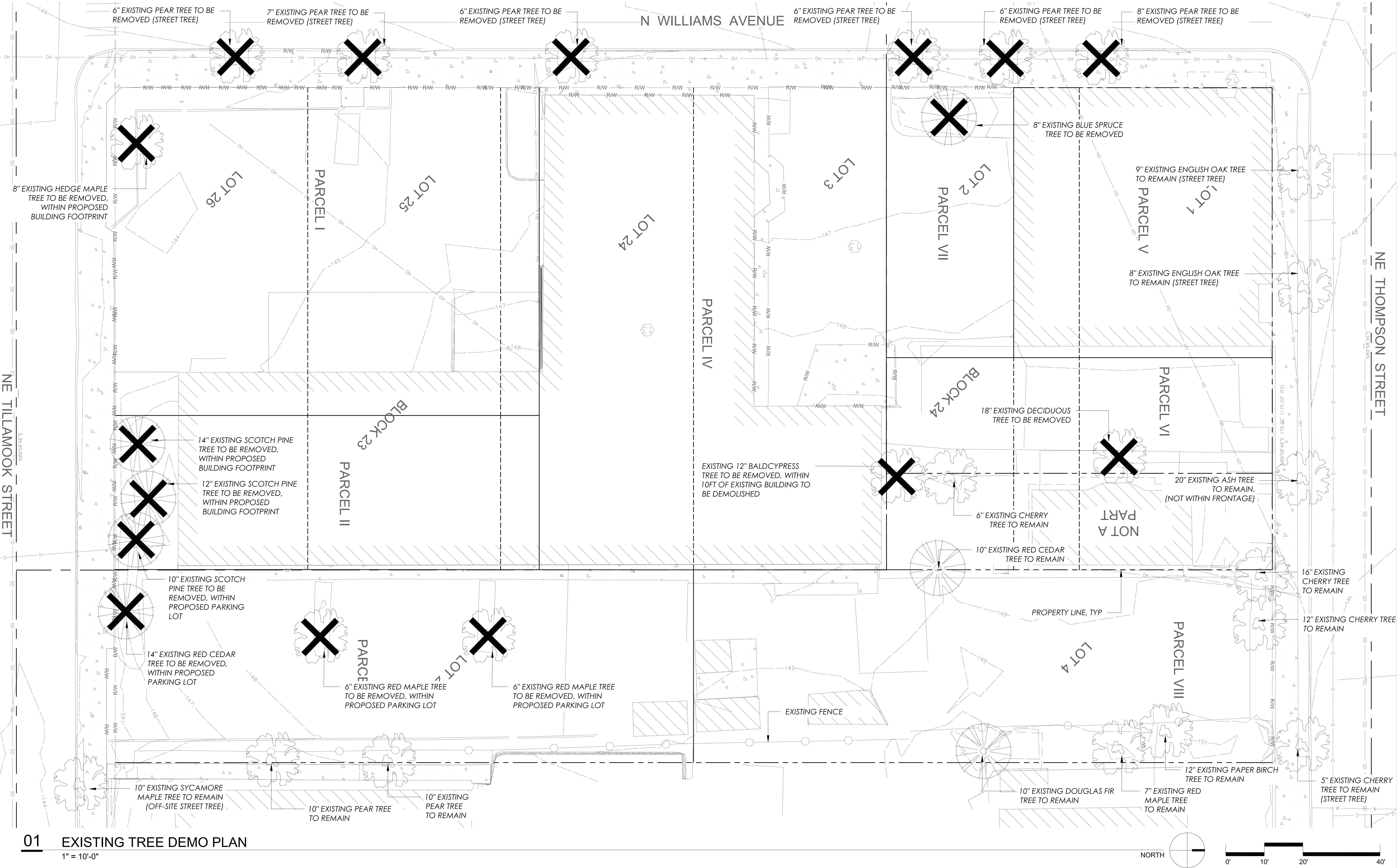
**NE THOMPSON STREET**  
1) ENGLISH OAK, 14 INCHES DBH..... PRESERVE  
2) ENGLISH OAK, 10.5 INCHES DBH..... PRESERVE  
3) CHERRY, 5 INCHES DBH..... PRESERVE

**N WILLIAMS AVENUE**  
1) PEAR, 8 INCHES DBH..... REMOVE & REPLACE 1 TO 1  
2) PEAR, 6 INCHES DBH..... REMOVE & REPLACE 1 TO 1  
3) PEAR, 6 INCHES DBH..... REMOVE & REPLACE 1 TO 1  
4) PEAR, 6 INCHES DBH..... REMOVE & REPLACE 1 TO 1  
5) PEAR, 7 INCHES DBH..... REMOVE & REPLACE 1 TO 1  
6) PEAR, 6 INCHES DBH..... REMOVE & REPLACE 1 TO 1

**NE TILLAMOOK STREET**  
NO EXISTING STREET TREES

5. SEE SHEET L1.2 FOR ADDITIONAL TREE PRESERVATION AND PROTECTION NOTES

6. THIS PLAN IS BASED ON A SURVEY BY WESTLAKE CONSULTANTS, INC. DATED 17 JANUARY 2017. NOTIFY OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES IDENTIFIED ON SITE RELATED TO SURVEY INFORMATION PRIOR TO INSTALLATION.



01 EXISTING TREE DEMO PLAN  
1" = 10'-0"

REGISTERED  
782  
BRYAN R. BAILEY  
OREGON  
11/09/2012  
LANDSCAPE ARCHITECT

M

Ankrom Moisan

38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100  
  
1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600  
  
1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063  
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ENVIRONMENTAL

522 N THOMPSON ST., SUITE 4 • PORTLAND, OREGON • 97227  
PHONE • 503.478.5338 • EMAIL • INFO@ECOTONE-ENV.COM

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2156 N WILLIAMS AVE  
PORTLAND, OR 97227  
  
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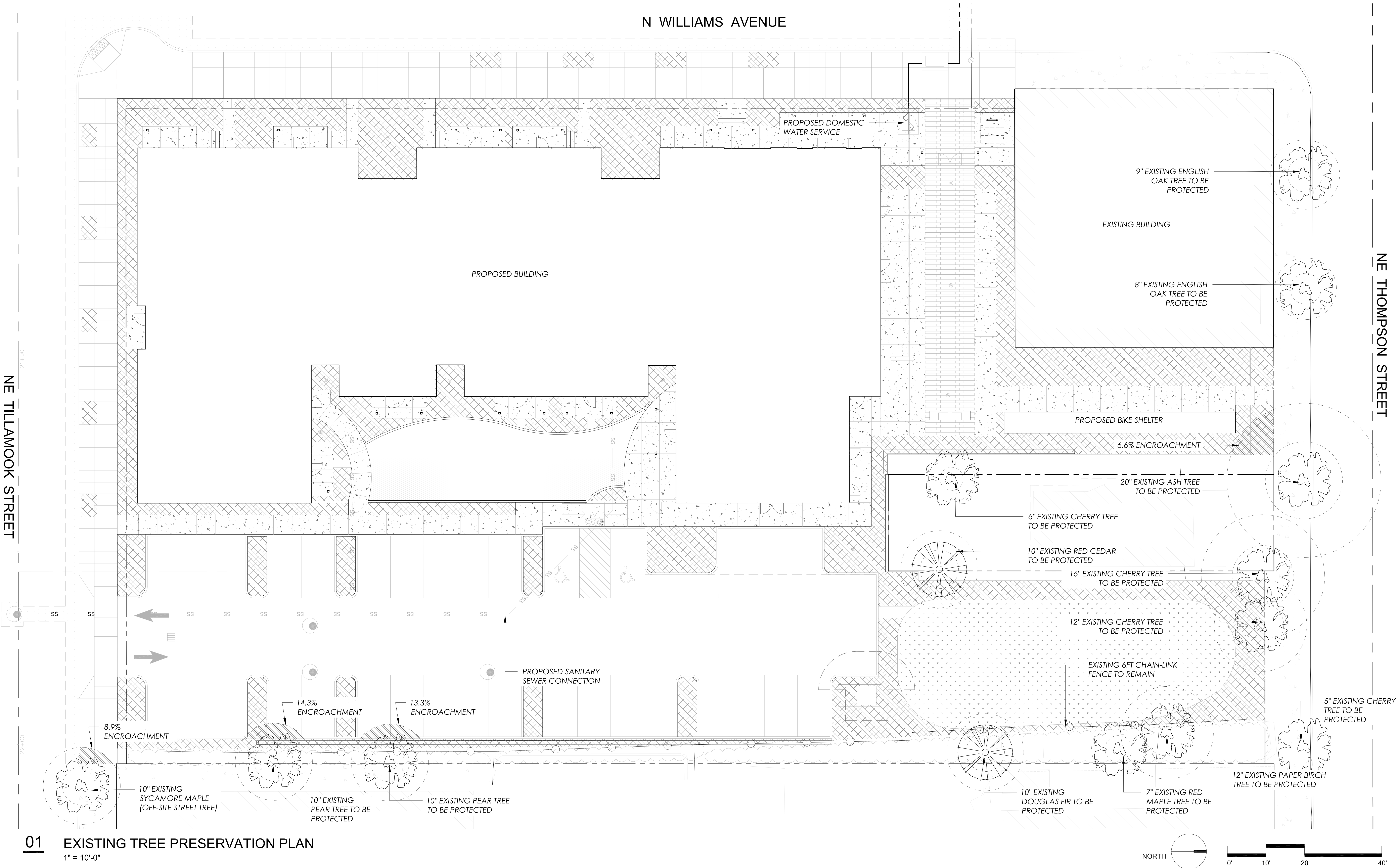
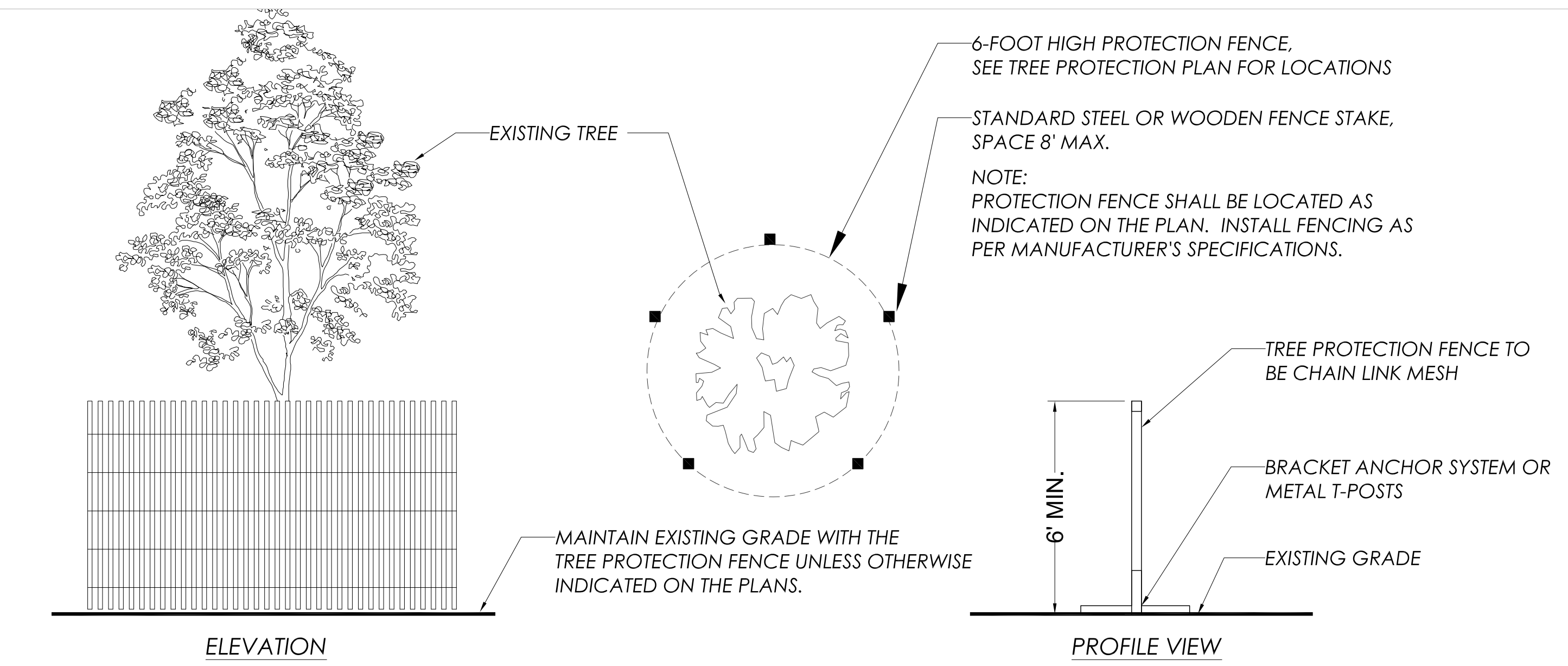
EXISTING TREE  
DEMO PLAN

GMP/PERMIT

DATE 01/09/2018	PROJECT NUMBER 149000
--------------------	--------------------------

SHEET NUMBER  
L1.01





01 EXISTING TREE PRESERVATION PLAN  
1" = 10'-0"

## TREE PRESERVATION LEGEND

### TREE PROTECTIVE FENCING

ROOT PROTECTION ZONE  
NO ENCROACHMENT ZONE

PROPOSED CONCRETE PAVING  
PROPOSED PLANTING AREA  
ROOT ZONE ENCROACHMENT

## TREE PROTECTION NOTES

1. A MINIMUM OF 1 FOOT RADIUS HAS BEEN PROVIDED (MEASURED HORIZONTALLY AWAY FROM THE FACE OF THE TREE TRUNK) FOR EACH INCH OF TREE DIAMETER.
2. ALL NEW ENCROACHMENTS INTO THE ROOT PROTECTION ZONE SHALL NOT OCCUPY NO MORE THAN 25% OF THE TOTAL AREA IN THE ROOT PROTECTION ZONE.
3. NO NEW ENCROACHMENT SHALL BE CLOSER THAN 1/2 THE REQUIRED RADIUS DISTANCE OF THE ROOT PROTECTION ZONE.
4. PROTECTION FENCING SHALL CONSIST OF A MINIMUM 6-FOOT HIGH METAL CHAIN LINK CONSTRUCTION FENCE, SECURED WITH 8-FOOT METAL POSTS ESTABLISHED AT THE EDGE OF THE ROOT PROTECTION ZONE AND ENCROACHMENT AREA SHOWN ON THE TREE PRESERVATION PLAN. EXISTING STRUCTURES AND/OR EXISTING SECURED FENCING AT LEAST 3.5 FEET TALL CAN SERVE AS THE REQUIRED PROTECTIVE FENCING.
5. SIGNAGE DESIGNATING THE PROTECTION ZONE AND PENALTIES FOR VIOLATIONS SHALL BE SECURED IN A PROMINENT LOCATION ON EACH PROTECTION FENCE.
6. THE FENCE SHALL BE INSTALLED BEFORE ANY GROUND DISTURBING ACTIVITIES INCLUDING CLEARING AND GRADING, OR CONSTRUCTION STARTS; AND SHALL REMAIN IN PLACE UNTIL FINAL INSPECTION.

REGISTERED  
782  
BRYAN R. BAILEY  
OREGON  
11/09/2012  
LANDSCAPE ARCHITECT

**Ankrom Moisan**  
38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100  
1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600  
1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063  
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**ecotone**  
ENVIRONMENTAL  
522 N THOMPSON ST., SUITE 4 - PORTLAND, OREGON - 97227  
PHONE - 503.478.2338 - EMAIL - INFO@ECOTONE-ENV.COM

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2156 N WILLIAMS AVE  
PORTLAND, OR 97227  
BRIDGE HOUSING

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EXISTING TREE  
PRESERVATION PLAN

GMP/PERMIT

DATE 010/09/2018	PROJECT NUMBER 149000
SHEET NUMBER	

L1.02



# SITE MATERIALS LEGEND

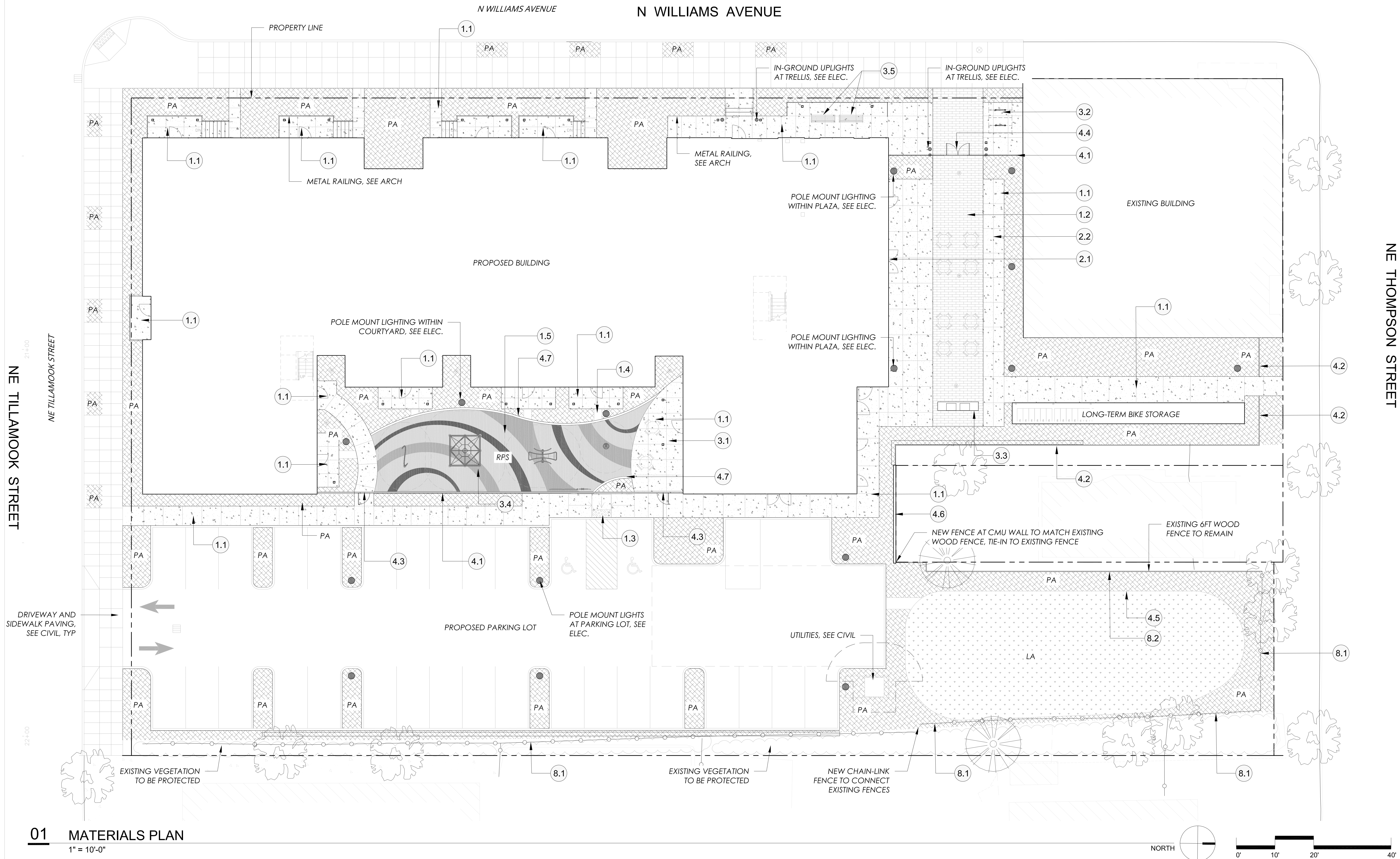
	EXISTING TREES TO REMAIN AND BE PRESERVED DURING CONSTRUCTION		UNIT PAVING
	TABLE SEATING, BY OWNER		
	BENCH SEATING, BY OWNER		
	BIKE RACKS		
	PROPERTY LINE		
	NEW PEDESTRIAN CONCRETE PAVING		
	PLANTING AREA		
	LAWN AREA		
	POURED-IN-PLACE PLAY SURFACING (ALTERNATE: SYNTHETIC LAWN)		

# SITE DETAIL KEYNOTES

1.0	PAVEMENTS, RAMPS, CURBS	DETAIL/SHEET	SPEC SECTION	4.0	BARRIERS, FENCING, GATES	DETAIL/SHEET	SPEC SECTION
1.1	CONCRETE PAVING	01/L5.01	32 13 13	4.1	3.5FT HIGH DECORATIVE FENCE	01/L5.02	32 31 19
1.2	PRECAST CONCRETE UNIT PAVING	06/L5.01	32 14 13	4.2	6FT HIGH WOOD FENCE	04/L5.02	06 16 53
1.3	CURB RAMP	SEE CIVIL		4.3	SINGLE SWING GATE	02/L5.02	32 31 19
1.4	DECOMPOSED GRANITE PATH	03/L5.01	32 15 40	4.4	DOUBLE SWING GATE	03/L5.02	32 31 19
1.5	PLAY SURFACE	07/L5.01	32 18 16.13	4.5	EDGING	04/L5.01	32 93 00
2.0	JOINTING			4.6	6FT HIGH MASONRY WALL	SEE ARCH	
2.1	EXPANSION JOINT	02/L5.01	32 13 13	4.7	CONCRETE CURB	07/L5.01	03 30 00
2.2	CONTROL JOINT	02/L5.01	32 13 13	7.0	PLANTING AND LANDSCAPE		
3.0	SITE FURNITURE				REFER TO PLANTING PLAN DRAWINGS		
3.1	TABLE SEATING	BY OWNER		8.0	EXISTING SITE FEATURES		
3.2	SHORT TERM BIKE RACK	05/L5.01	12 93 13	8.1	EXISTING 6FT CHAIN LINK FENCE		
3.3	OUTDOOR BBQ	11/L5.01	32 30 00	8.2	EXISTING 6FT WOOD FENCE		
3.4	PLAY EQUIPMENT	SEE SPECS	11 68 13				
3.5	BENCH SEATING	BY OWNER					

# SITE MATERIALS NOTES

- THIS PLAN IS BASED ON A SURVEY BY WESTLAKE CONSULTANTS, INC. DATED 17 JANUARY 2017. NOTIFY OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES IDENTIFIED ON SITE RELATED TO SURVEY INFORMATION PRIOR TO INSTALLATION.
- PROTECT EXISTING TREES TO REMAIN. SEE SHEETS L1.01-L1.02.
- SEE CIVIL DRAWINGS FOR NEW VEHICULAR PAVING, RIGHT OF WAY IMPROVEMENTS, AND LOCATIONS OF UTILITIES.
- ALL CONCRETE PAVING TO RECEIVE LIGHT BROOM FINISH PERPENDICULAR TO DIRECTION OF TRAVEL. SEE SPECIFICATIONS.
- SEE ELECTRICAL DRAWINGS FOR SITE LIGHTING AND ELECTRICAL UTILITIES.



REGISTERED  
782  
Bryan R. Bailey  
OREGON  
11/09/2012  
LANDSCAPE ARCHITECT

**Ankrom Moisan**  
38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063  
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**ecOTONE**  
ENVIRONMENTAL  
522 N THOMPSON ST., SUITE 4 - PORTLAND, OREGON - 97227  
PHONE - 503.478.2338 - EMAIL - INFO@ECOTONE-ENV.COM

**NORTH WILLIAMS APARTMENTS**  
2156 N WILLIAMS AVE  
PORTLAND, OR 97227  
BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

## MATERIALS PLAN

## GMP/PERMIT

DATE 10/09/2018	PROJECT NUMBER 149000
SHEET NUMBER L2.01	



# SITE MATERIALS LEGEND

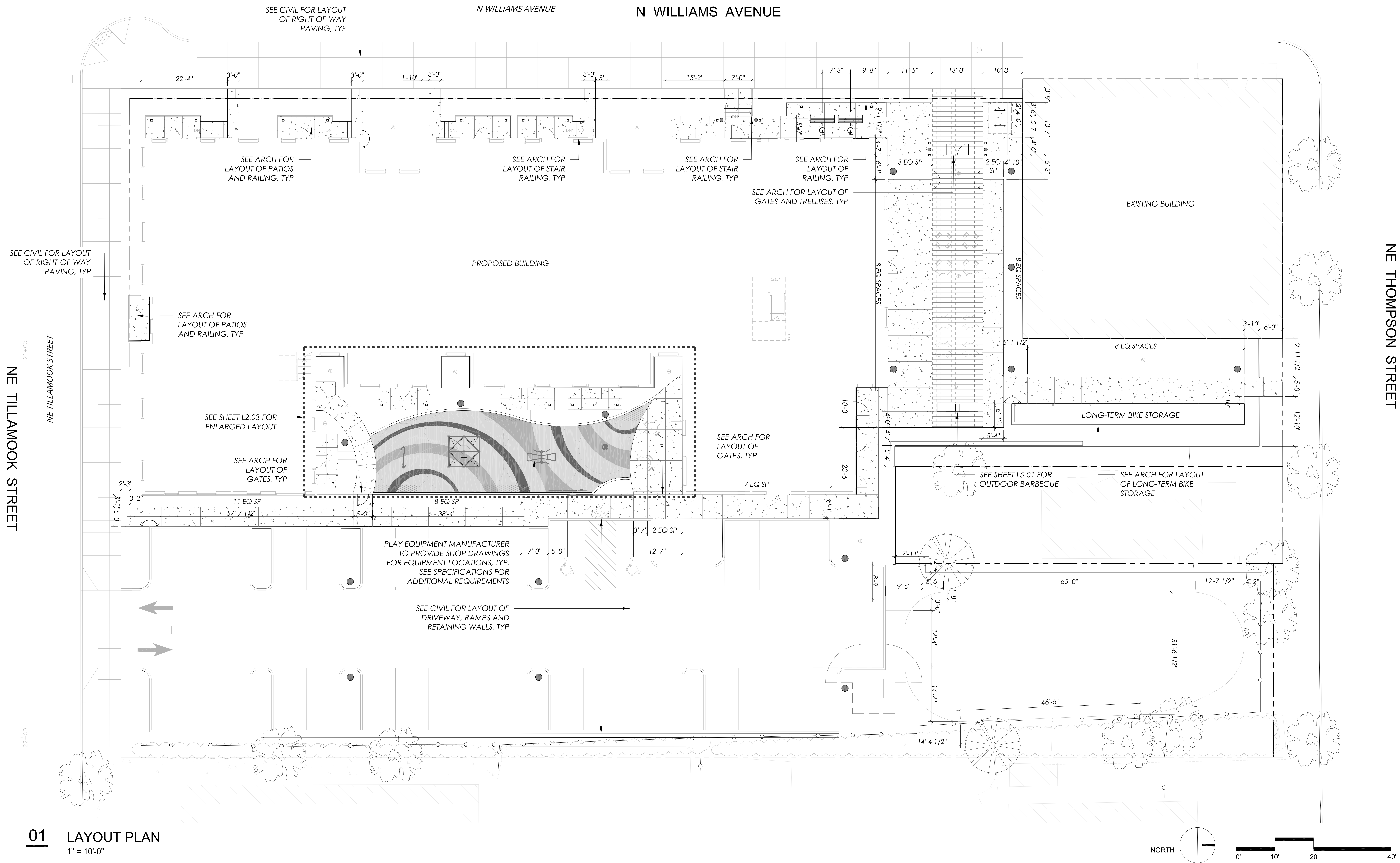
	EXISTING TREES TO REMAIN AND BE PRESERVED DURING CONSTRUCTION
	TABLE SEATING, BY OWNER
	BIKE RACKS, TYP
	SITE LIGHT, TYP
	PROPERTY LINE
	NEW PEDESTRIAN CONCRETE PAVING
	PLAY AREA POURED-IN-PLACE SURFACING
	ALIGN
	CENTER LINE

# SITE LAYOUT NOTES

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- PROTECT EXISTING TREES AND VEGETATION TO REMAIN. SEE SPECIFICATIONS FOR REQUIREMENTS.
- FOR DIMENSIONS WHERE INCHES ARE NOT GIVEN, ASSUME 0 INCHES - 1" = 1'-0".
- PAVING DIMENSIONS ARE TO FACE OF BUILDING, OR FACE OF CURB, UNLESS OTHERWISE NOTED.
- ALL CURVED WALLS AND WALKS SHALL HAVE A SMOOTH, CONTINUOUS CURVES AS INDICATED.
- CONTRACTOR TO REPORT LAYOUT DISCREPANCIES TO OWNER'S REP PRIOR TO PLACING FORMWORK.
- INSTALL EXPANSION JOINTS AND SEALANT WHERE CONCRETE PAVING ABUTS CONCRETE CURBS, INLETS, STRUCTURES, WALKS, OTHER FIXED OBJECTS, GRADE BREAKS, AND WHERE INDICATED. LOCATE EXPANSION JOINTS AT 30 FT INTERVALS.
- SEE CIVIL DRAWINGS FOR NEW VEHICULAR PAVING, R.O.W. PAVING, CURBS, STRIPING, AND DRAIN LOCATIONS.
- SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION RELATING TO SITE LIGHTING AND ELECTRICAL UTILITIES.

# ABBREVIATIONS

BOC	BACK OF CURB
CJ	CONTROL JOINT
DIA	DIAMETER
EQ	EQ
OC	ON CENTER
POT	POINT OF TANGENCY
R	RADIUS
SP	SPACES
TYP	TYPICAL



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063

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522 N THOMPSON ST., SUITE 4 - PORTLAND, OREGON - 97227  
PHONE - 503.478.5338 - EMAIL - INFO@ECOTONE-ENV.COM

**NORTH WILLIAMS APARTMENTS**  
2156 N WILLIAMS AVE  
PORTLAND, OR 97227

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REVISION	DATE	REASON FOR ISSUE

LAYOUT PLAN

GMP/PERMIT

DATE 10/09/2018	PROJECT NUMBER 149000
SHEET NUMBER	

L2.02



## SITE MATERIALS LEGEND

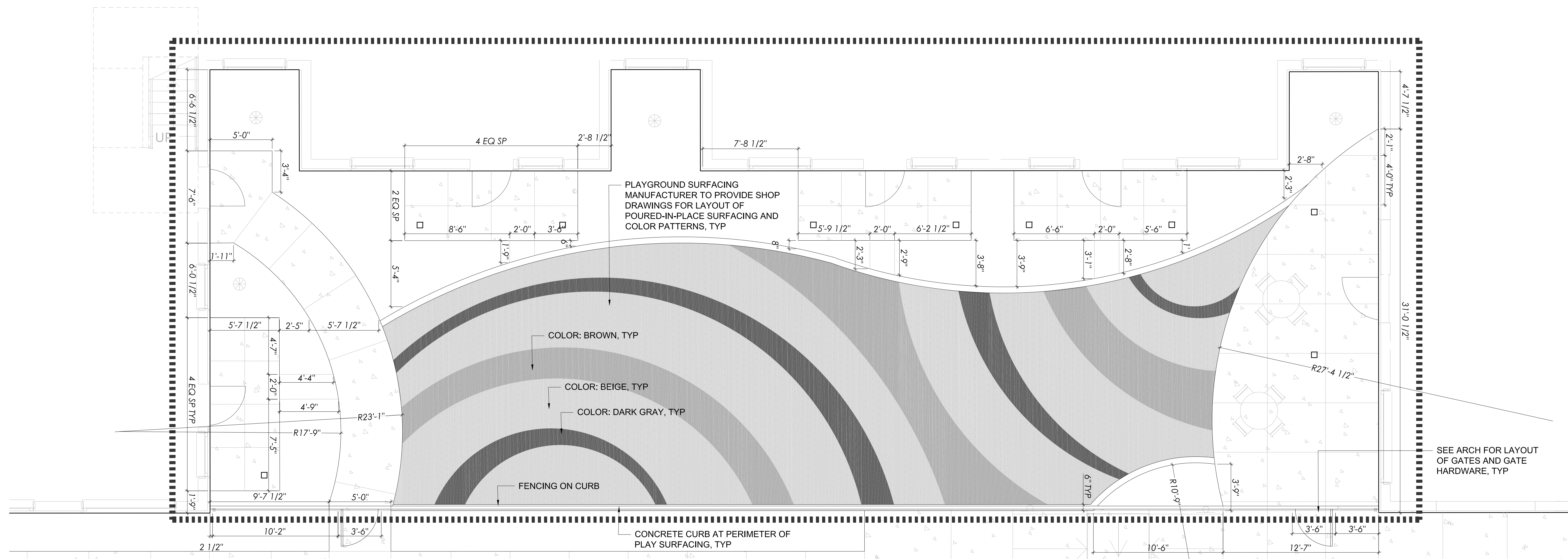
	EXISTING TREES TO REMAIN AND BE PRESERVED DURING CONSTRUCTION
	TABLE SEATING, BY OWNER
	BIKE RACKS, TYP
	SITE LIGHT, TYP
	PROPERTY LINE
	NEW PEDESTRIAN CONCRETE PAVING
	PLAY AREA POURED-IN-PLACE SURFACING
	ALIGN
	CENTER LINE

## SITE LAYOUT NOTES

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- CONTRACTOR TO REPORT LAYOUT DISCREPANCIES TO OWNER'S REP PRIOR TO PLACING FORMWORK.
- INSTALL EXPANSION JOINTS AND SEALANT WHERE CONCRETE PAVING ABUTS CONCRETE CURBS, INLETS, STRUCTURES, WALKS, OTHER FIXED OBJECTS, GRADE BREAKS, AND WHERE INDICATED. LOCATE EXPANSION JOINTS AT 30 FT INTERVALS.
- SEE CIVIL DRAWINGS FOR NEW VEHICULAR PAVING, R.O.W. PAVING, CURBS, STRIPING, AND DRAIN LOCATIONS.
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## ABBREVIATIONS

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R	RADIUS
SP	SPACES
TYP	TYPICAL



REVISION	DATE	REASON FOR ISSUE



CODE REQUIREMENTS

1. INTERIOR PARKING LOT LANDSCAPING

TOTAL UNCOVERED NEW PARKING STALLS.....	30 STALLS
REQUIRED 45 SF INTERIOR PLANTING PER STALL.....	1,350 SF
PROVIDED INTERIOR PLANTING.....	1,383 SF
REQUIRED 1 LARGE TREE PER 4 STALLS.....	8 TREES
PROVIDED TREES.....	6 ZELKOVA S. 'GREEN VASE' (LARGE TREE)
	2 UMBELLULARIA CAL. (EVERGREEN, LRG TREE)
REQUIRED 1.5 SHRUBS PER STALL.....	45 SHRUBS
PROVIDED SHRUBS.....	90 CORNUS SERICEA 'KELSEY'
	25 BUXUS 'GREEN VELVET'

2. PERIMETER PARKING LOT LANDSCAPING - EAST PROPERTY LINE

REQUIRED SCREENING.....	5' WIDE, L3 HIGH SCREEN
PROVIDED SCREENING.....	5' WIDE, L3 HIGH SCREEN
REQUIRED 1 MEDIUM TREE PER 22 LINEAR FT.....	198' = 9 TREES
PROVIDED TREES.....	7 QUERCUS FRINETTO 'FOREST GREEN' (MED)
	UTILIZING (2) EXISTING PEAR TREES
	TOTAL OF (9) TREES

3. PERIMETER PARKING LOT LANDSCAPING - SOUTH PROPERTY LINE

REQUIRED SCREENING.....	5' WIDE, L2 LOW SCREEN
PROVIDED SCREENING.....	5' WIDE, L2 LOW SCREEN
REQUIRED 1 MEDIUM TREE PER 22 LINEAR FT.....	36' = 2 TREES
PROVIDED TREES.....	2 QUERCUS FRINETTO 'FOREST GREEN' (MED)

PLANTING NOTES

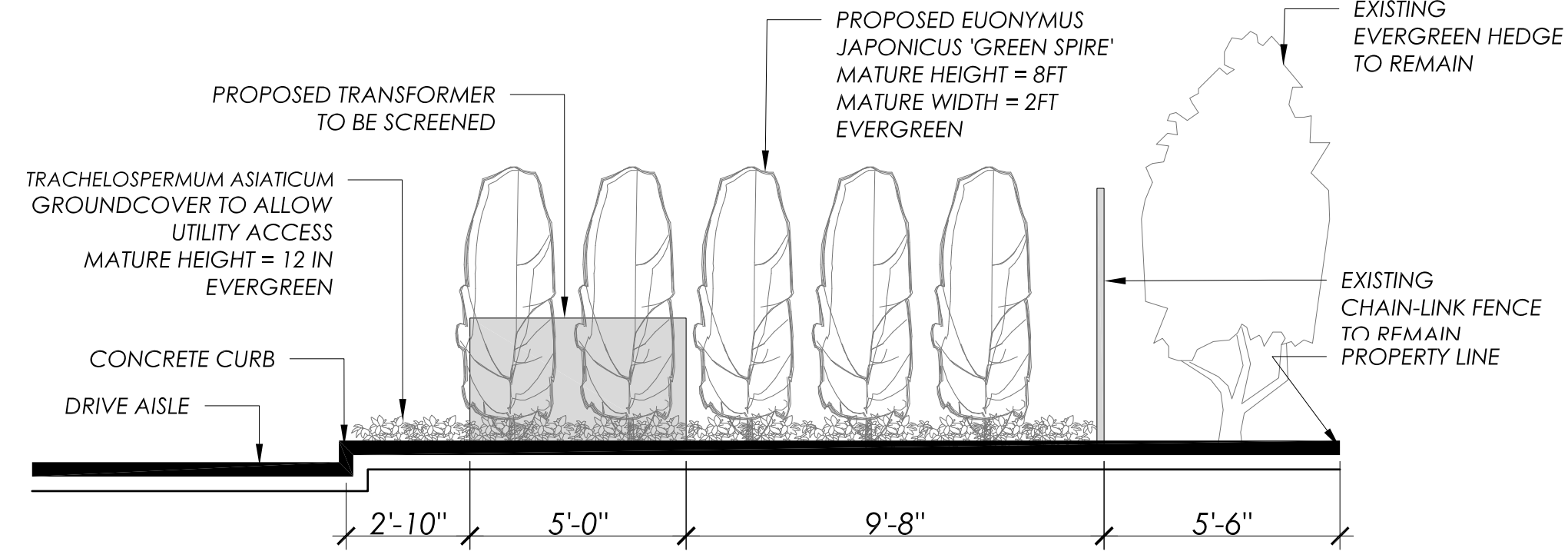
- A HIGHLY EFFICIENT AUTOMATIC IRRIGATION SYSTEM IS TO BE INSTALLED WITHIN ALL PLANTING AREAS PROVIDING FULL COVERAGE.
- ALL PROPOSED PLANTS ARE PROVEN TO BE DROUGHT-TOLERANT OR ADAPTABLE TO THE REGION. LOW LONG-TERM MAINTENANCE AND WATER USE HAS BEEN CONSIDERED IN THIS DESIGN.
- PROVIDE A MINIMUM OF 2% SLOPE AWAY FROM BUILDING WITHIN ALL PLANTING AREAS.
- LANDSCAPE ARCHITECT SHALL ADJUST ALL PLANT LOCATIONS IN THE FIELD PRIOR TO PLANTING.
- SEE SPECIFICATIONS FOR SOIL AMENDMENT INFORMATION.

TREE DENSITY REQUIREMENT

ON-SITE TREE DENSITY REQUIREMENT (40% OF SITE = 18,900 SQ FT)		
PROPOSED TREE PLANTING	EXISTING TREE CREDIT	
(9) LARGE TREES.....	(9) EXISTING TREES.....	6,000 SQ FT
(9) MEDIUM TREES.....		
(10) SMALL TREES.....		
SUB TOTAL.....	TOTAL PROPOSED TREE DENSITY.....	22,500 SQ FT

LEGEND

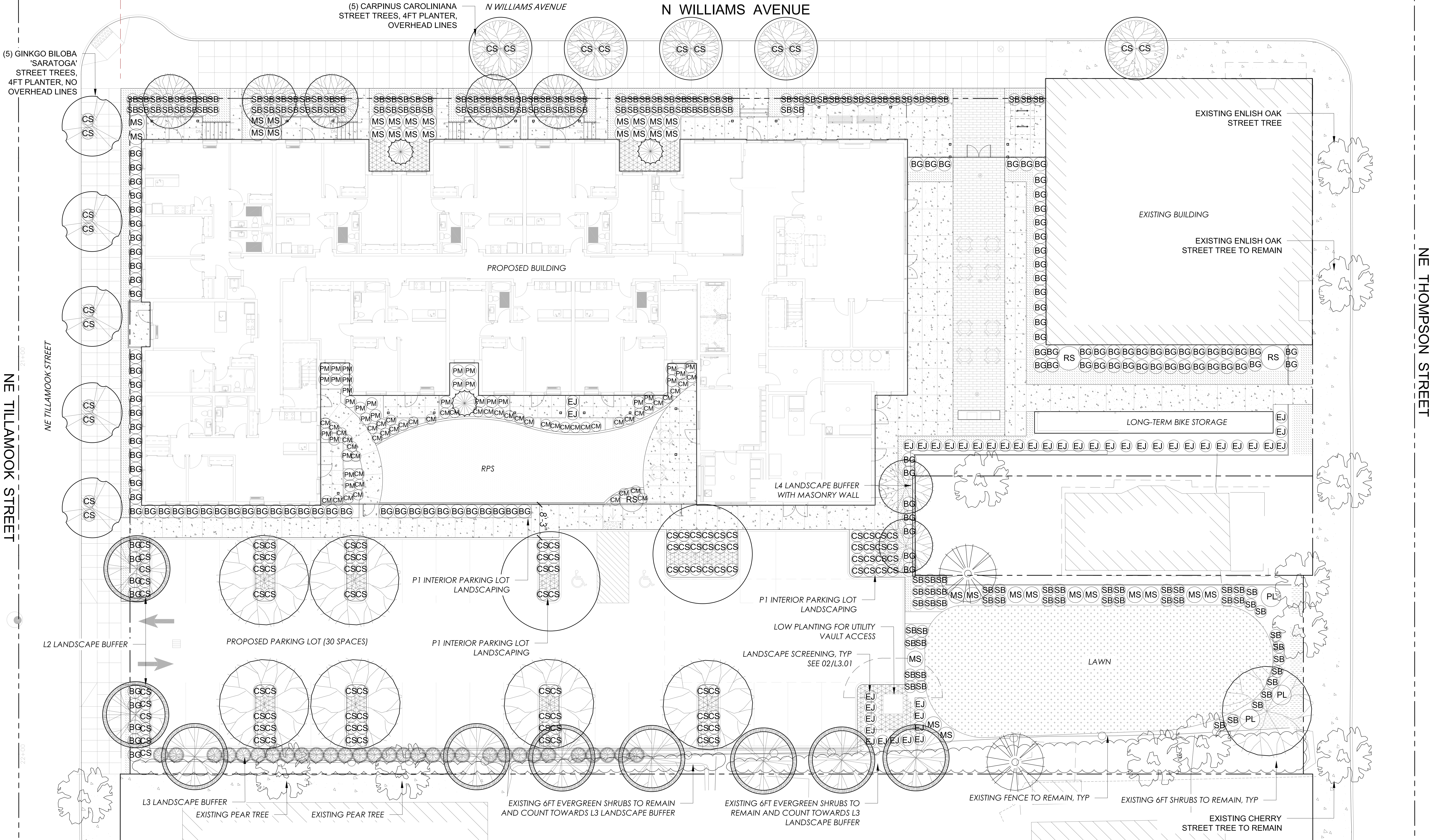
	EXISTING TREES TO REMAIN AND BE PRESERVED DURING CONSTRUCTION. SEE TREE PRESERVATION PLAN.
	SEATING, BY OWNER
	BIKE RACKS
	PROPERTY LINE
	NEW PEDESTRIAN CONCRETE PAVING
	P.I.P. RESILIENT PLAY SURFACING (ALTERNATE: SYNTHETIC LAWN)



02 TRANSFORMER SCREENING

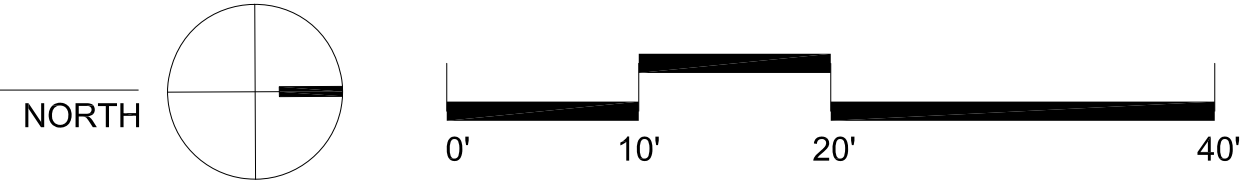
NOT TO SCALE

ELEVATION



01 PLANTING PLAN

1" = 10'-0"



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063

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2156 N WILLIAMS AVE  
PORTLAND, OR 97227  
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REVISION	DATE	REASON FOR ISSUE

PLANTING PLAN

GMP PROGRESS

DATE 08/24/2018	PROJECT NUMBER 149000
--------------------	--------------------------

SHEET NUMBER

L3.01



PLANT SCHEDULE																								
SYMBOL		BOTANICAL NAME	COMMON NAME	SIZE	SPACING	CONDITION	QTY						SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QTY						
TREES																		GRASSES AND GROUNDCOVER						
		ZELKOVA SERRATA 'GREEN VASE'	GREEN VASE ZELKOVA	3" CAL.	AS SHOWN	B&B	7											CM	CAREX MORROWI	SEDGE	1 GAL.	AS SHOWN	48	
		UMBELLULARIA CALILFORNICA		OREGON MYRTLE	3" CAL.	AS SHOWN	B&B	2												LIRIOPE MUSCARI 'BIG BLUE'	BIG BLUE LILYTURF	1 GAL.	12" O.C.	1,620
		QUERCUS FRAINETTO 'FOREST GREEN'		FOREST GREEN OAK	2" CAL.	AS SHOWN	B&B	9												MAHONIA REPENS	CREEPING OREGON GRAPE	1 GAL.	18" O.C.	75
				GINKGO BILOBA 'SARATOGA'		SARATOGA GINKGO	3" CAL.	AS SHOWN	B&B	5											MS	MISCANTHUS SINENSIS 'GRACILLIMUS'	MISCANTHUS	3 GAL.
		CARPINUS CAROLINIANA		AMERICAN HORNBEAM	3" CAL.	AS SHOWN	B&B	5											PM	POLYSTICHUM MUNITUM	SWORD FERN	2 GAL.	AS SHOWN	31
		CARPINUS BETULUS 'FASTIGIATA'		PYRAMIDAL HORNBEAM	2" CAL.	AS SHOWN	B&B	7												RUBUS CALYCINOIDES	CREEPING RASPBERRY	1 GAL.	18" O.C.	128
		CHAMAECYPARIS OBTUSA 'NANA GRACILIS'		SLENDER HINOKI FALSE CYPRESS (MATURE SIZE = 12' x 5', FULL SUN, EVERGREEN, MONROVIA.COM)	6-8 FT HEIGHT	AS SHOWN	B&B	3												TRACHELOSPERMUM ASIATICUM	CREEPING JASMINE	1 GAL.	18" O.C.	242
TALL EVERGREEN SHRUBS																								
		ABELIA x GRANDIFLORA	GLOSSY ABELIA (MATURE SIZE = 6' x 5', PARTIAL SUN, EVERGREEN, MONROVIA.COM)	3 FT HEIGHT	AS SHOWN	CONTAINER	29																	
SHRUBS																								
EJ	EUONYMUS JAPONICA 'GREEN SPIRE'		GREEN SPIRE EUONYMUS	5 GAL.	AS SHOWN	CONTAINER	42																	
	MATURE SIZE = 6-8' HEIGHT X 2' WIDE IN PARTIAL TO FULL SUN, EVERGREEN, MONROVIA.COM																							
CS	CORNUS SERICEA 'KELSEYI'		KELSEYI DOGWOOD	3 GAL.	AS SHOWN	CONTAINER	119																	
SB	SPIRAEA BETULIFOLIA		BIRCHLEAF SPIRAEA	3 GAL.	AS SHOWN	CONTAINER	152																	
RS	RIBES SANGUINIUM		RED-FLOWERING CURRANT	5 GAL.	AS SHOWN	CONTAINER	3																	
PL	PHILADELPHUS LEWISII		MOCK ORANGE	5 GAL.	AS SHOWN	CONTAINER	3																	
BG	BUXUS 'GREEN VELVET'		GREEN VELVET BOXWOOD	3 GAL.	AS SHOWN	CONTAINER	115																	
	MATURE SIZE = 3-4' HEIGHT X 3-4' WIDE IN PARTIAL TO FULL SUN, EVERGREEN, MONROVIA.COM																							

REGISTERED

782

OREGON

11/09/2012

LANDSCAPE ARCHITECT

Ankrom Moisan™

38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063

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PHONE • 503.478-2338 • EMAIL • INFO@ECOTONE-ENV.COM

NORTH WILLIAMS APARTMENTS

2156 N WILLIAMS AVE  
PORTLAND, OR 97227

BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

PLANTING SCHEDULE

GMP/PERMIT

DATE 010/09/2018	PROJECT NUMBER 149000
SHEET NUMBER L3.02	



IRRIGATION EQUIPMENT		
SYMBOL	NAME/MANUFACTURER	MODEL/REMARKS
	MASTER GATE VALVE (POC)	MODEL# ICV-101G
	SHUTOFF VALVES	SEE SPECS
	HUNTER MANUAL DRAIN VALVE	HIGH PRESSURE CAPABLE
	HUNTER CONTROL VALVE	MODEL ICV-101G (LAWN) ICZ-101 (DRIP KIT)
	HUNTER QUICK COUPLER	SEE SPECS
	IRRIGATION SLEEVING	SCHEDULE 40 PVC SLEEVES
	MAINLINE	1.5" SCHEDULE 40
	LATERAL LINE	SEE SPECS
	POINT OF CONNECTION	SEE DETAIL 01/L5.04
	HUNTER i-CORE CONTROLLER	MODEL # IC-1200-PL
	HUNTER SOLAR SYNC ET SENSOR	SOLAR SYNC BUILT IN
	HUNTER 'ROAM' REMOTE CONTROL	MODEL # ROAM-KIT

IRRIGATION SPRINKLER HEADS		
SYMBOL	NAME/MANUFACTURER	MODEL/REMARKS
	HUNTER ROOT ZONE WATERING	HUNTER RZWS-18 - 50 - CV
	HUNTER: PROS-06-PRS40-CV	MPCORNER / 45-105 8'-15' RADIUS
	HUNTER: PROS-06-PRS40-CV	MP1000-90 / 90-210 8'-15' RADIUS
	HUNTER: PROS-06-PRS40-CV	MP1000-210 / 210-270 8'-15' RADIUS
	HUNTER: PROS-06-PRS40-CV	MP1000-360 / 360 8'-15' RADIUS
	HUNTER: PROS-06-PRS40-CV	MP2000-90 / 90-210 13'-21'R
	HUNTER: PROS-06-PRS40-CV	MP2000-210 / 210-270 13'-21'R
	HUNTER: PROS-06-PRS40-CV	MP2000-360 / 360 13'-21'R

VALVE DIAGRAM		PIPE SIZING	
	VALVE GPM	PIPE SIZE	MAX. FLOW
	VALVE SIZE	3/4"	10 GPM
	VALVE NUMBER	1"	15 GPM
		1-1/4"	26 GPM
		1-1/2"	35 GPM
LEGEND			
	PLANTING AREA TO BE IRRIGATED WITH HUNTER - HDL-06-12-250-CV DRIPLINE TUBING		
	LAWN AREA TO BE IRRIGATED WITH HUNTER SPRINKLER HEADS (SEE CHART)		

- NOTES
1. PERFORM PRESSURE TEST AND VERIFY 54 PSI AT 40 GPM AT POINT OF CONNECTION. NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES PRIOR TO BEGINNING CONSTRUCTION.

2. VERIFY SITE DIMENSIONS AND LOCATIONS OF UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION.

3. COORDINATE IRRIGATION POINTS OF CONNECTION AND LOCATION OF REMOTE CONTROL VALVE ASSEMBLIES AND SLEEVES. COORDINATE ALL WORK WITH OTHER TRADES INVOLVED.

4. SLEEVING IS REQUIRED FOR ALL IRRIGATION AND CONTROL WIRE UNDER ALL PAVEMENTS, WALLS, ETC.. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF SIZE OF ALL SLEEVING REQUIRED FOR COMPLETE INSTALLATION OF WORK.

5. PLACE ALL VALVES IN LOCKING VALVE BOXES. MAINTAIN A MINIMUM OF 12 INCHES BETWEEN VALVE BOXES AND PAVEMENT.

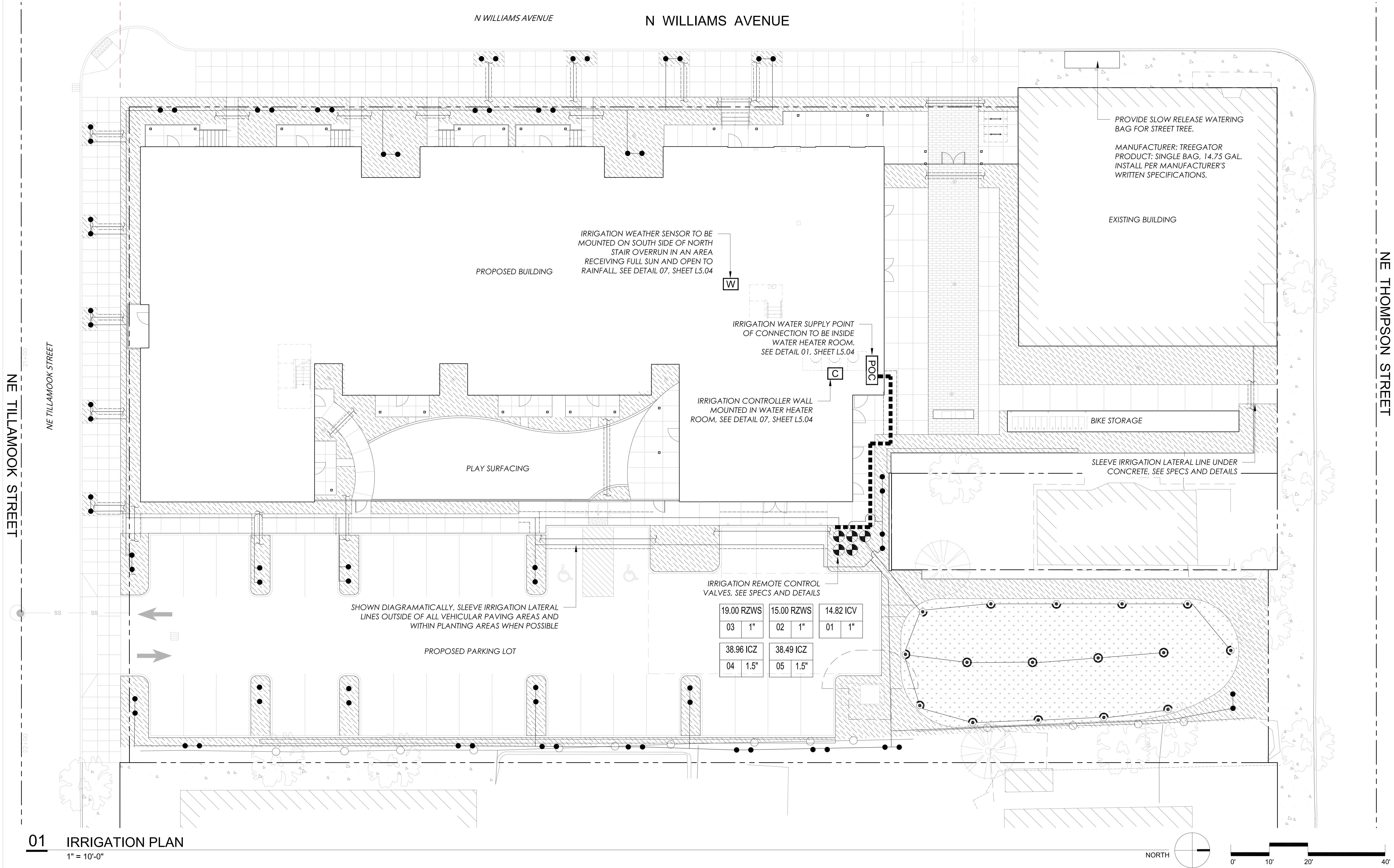
6. IRRIGATION PLANS ARE DIAGRAMMATIC. PLACE ALL IRRIGATION VALVES IN PLANTING AREAS. FIELD ADJUST LINES TO AVOID CONFLICT WITH UTILITIES.

7. DRAIN VALVES FOR LATERAL LINES REQUIRED FOR WEATHERIZATION.

8. ALL SPRAYHEADS AND ROTORS TO RECEIVE 6" POP-UPS UNLESS OTHERWISE NOTED.

10. INSTALL AND ADJUST ALL COMPONENTS OF IRRIGATION SYSTEM TO PROVIDE ADEQUATE COVERAGE. CONTRACTOR IS RESPONSIBLE FOR PROVIDING A COMPLETE WORKING SYSTEM.

11. SEE TREE PROTECTION SPECIFICATIONS FOR CONSTRUCTION ACTIVITIES WITHIN DRIPLINE OF EXISTING TREES.



01 IRRIGATION PLAN  
1" = 10'-0"

REGISTERED  
782  
BRYAN R. BAILEY  
OREGON  
11/09/2012  
LANDSCAPE ARCHITECT

Ankrom Moisan

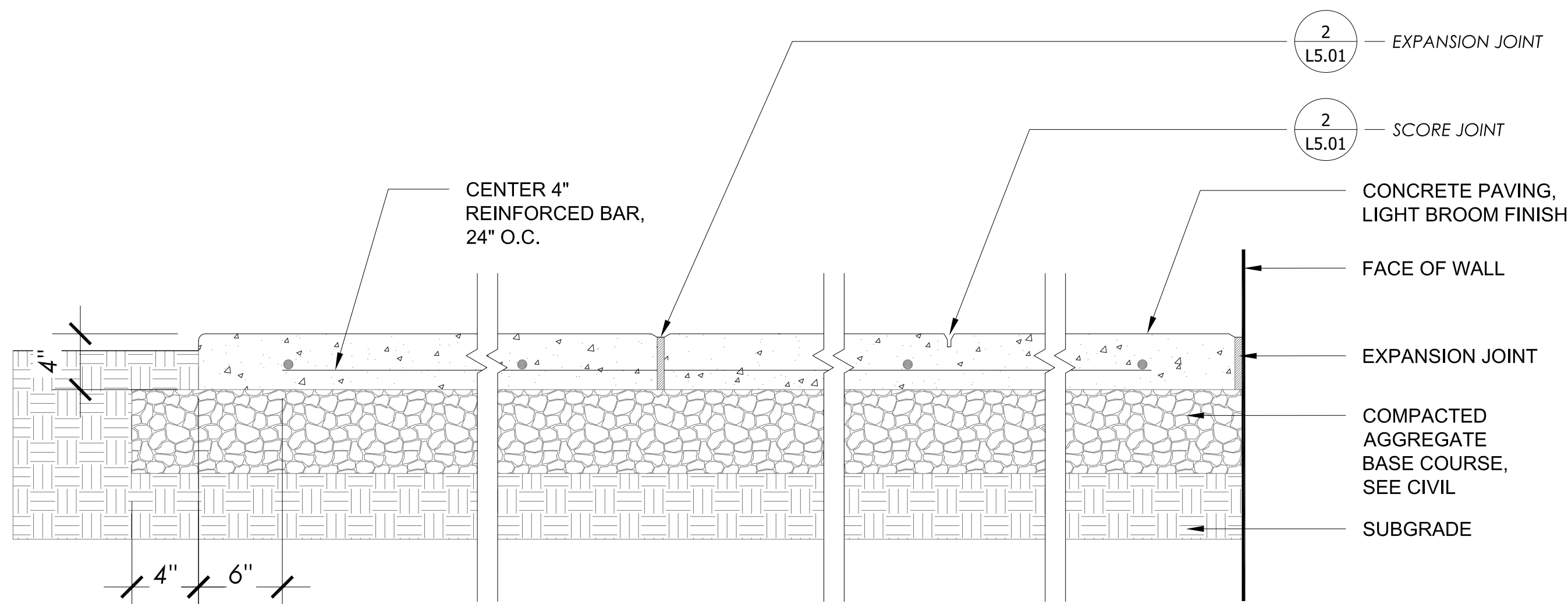
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PORTLAND, OR 97209  
T 503.245.7100  
  
1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600  
  
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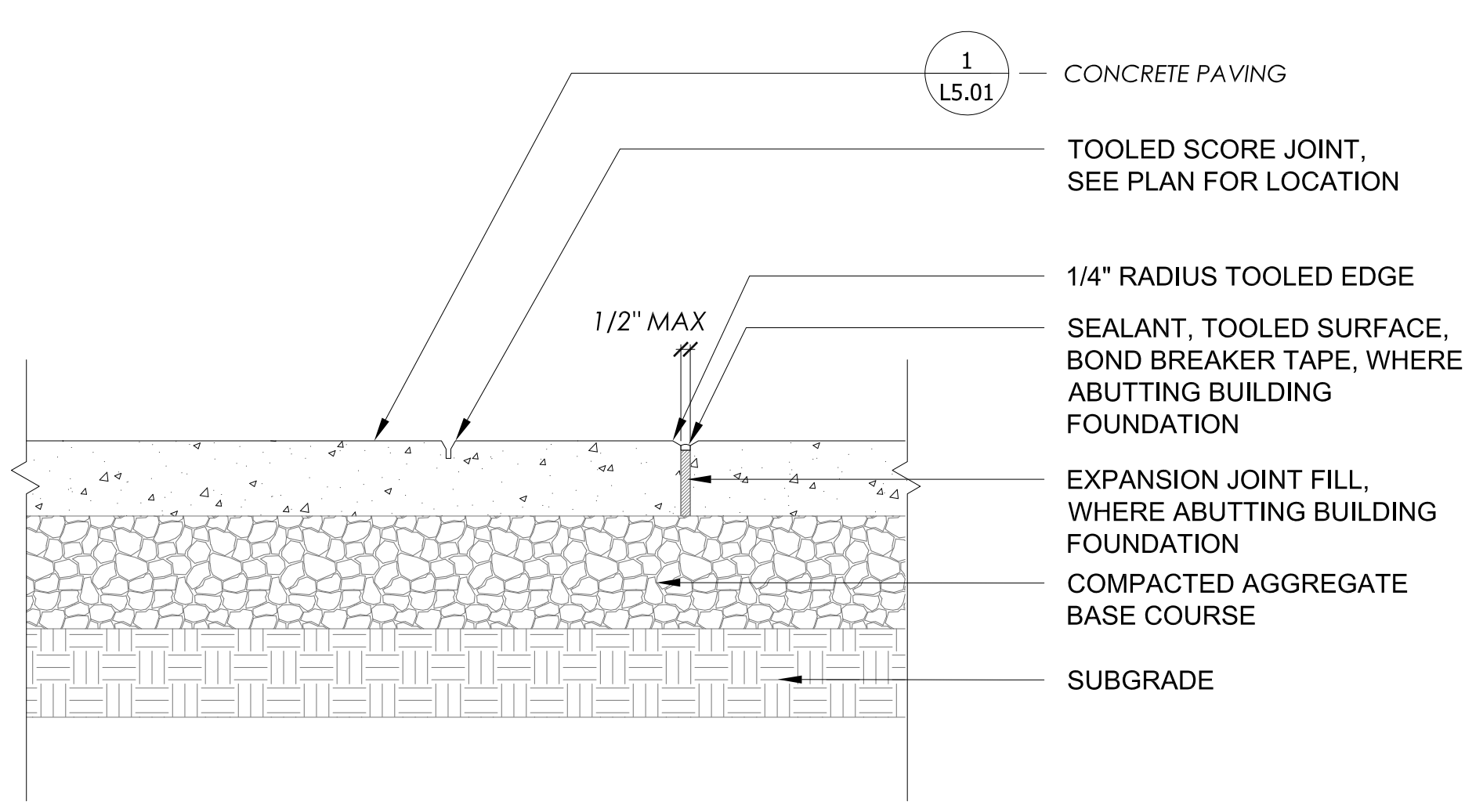
REVISION	DATE	REASON FOR ISSUE
IRRIGATION PLAN		
GMP/PERMIT		
DATE 10/09/2018	PROJECT NUMBER 149000	
SHEET NUMBER	L4.01	





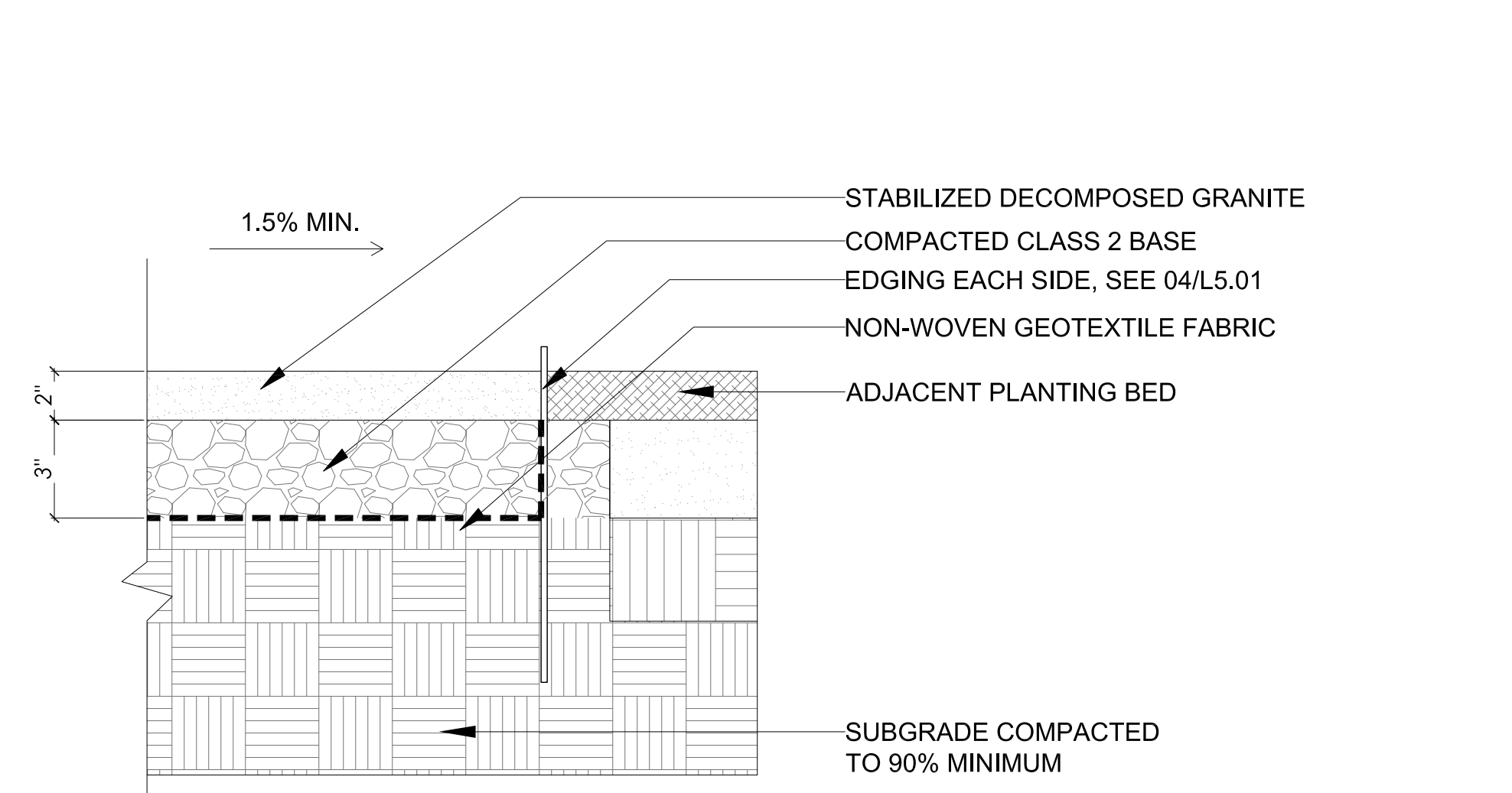
## 01 CONCRETE PAVING - PEDESTRIAN

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



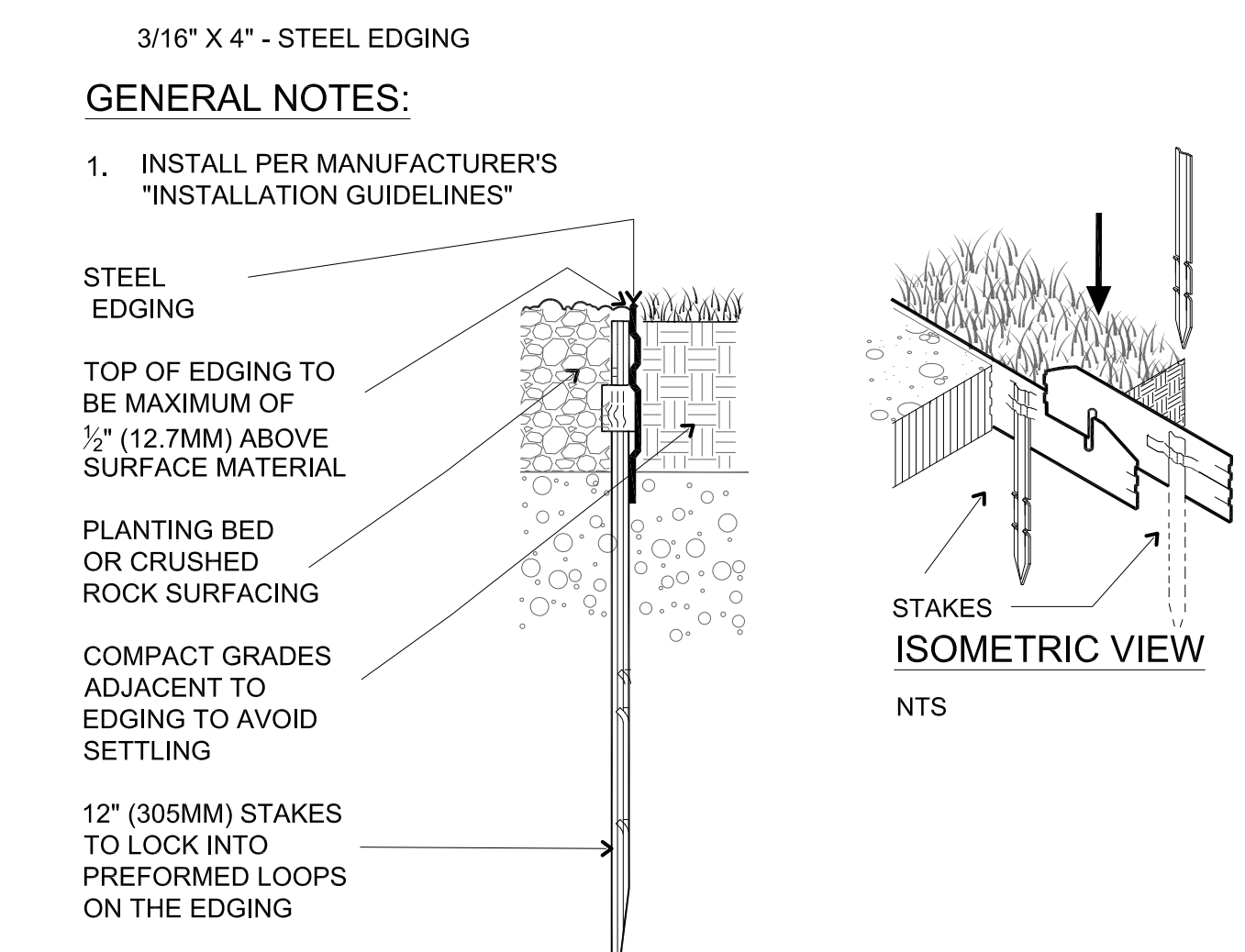
## 02 EXPANSION AND SCORE JOINT

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



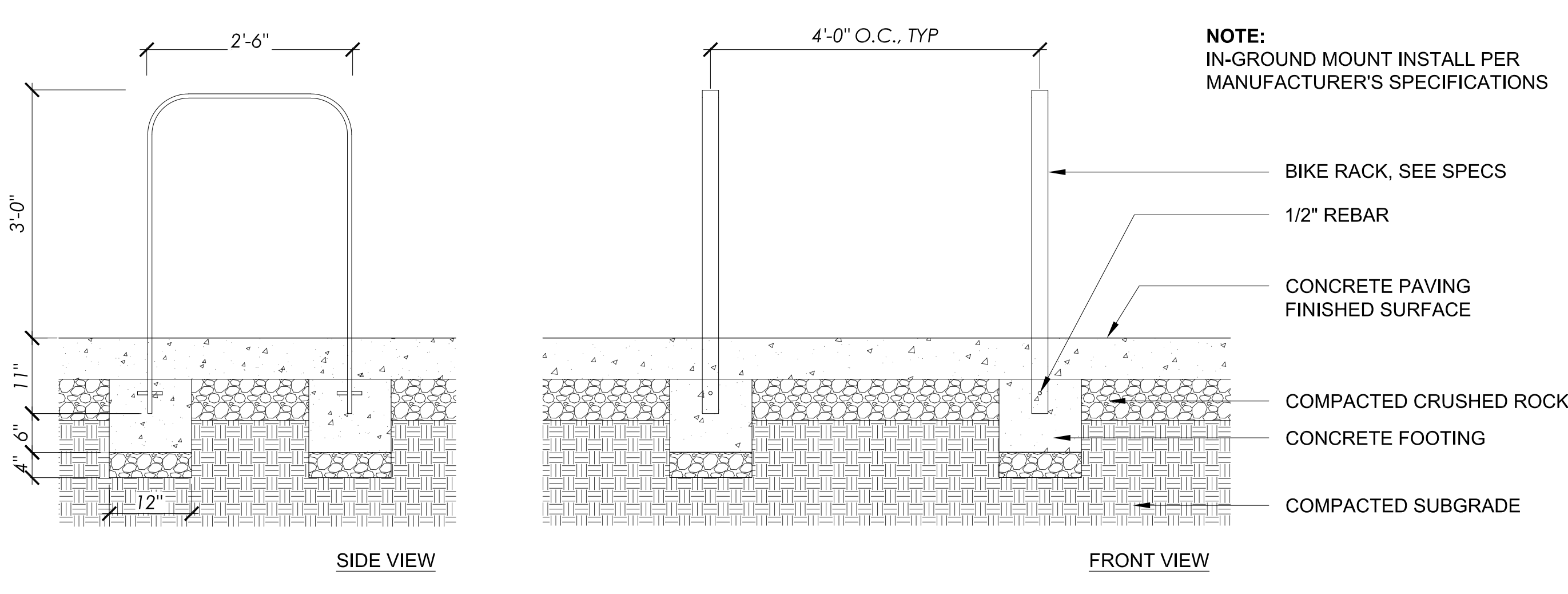
## 03 STABILIZED DECOMPOSED GRANITE PATH

1" = 1'-0" SECTION



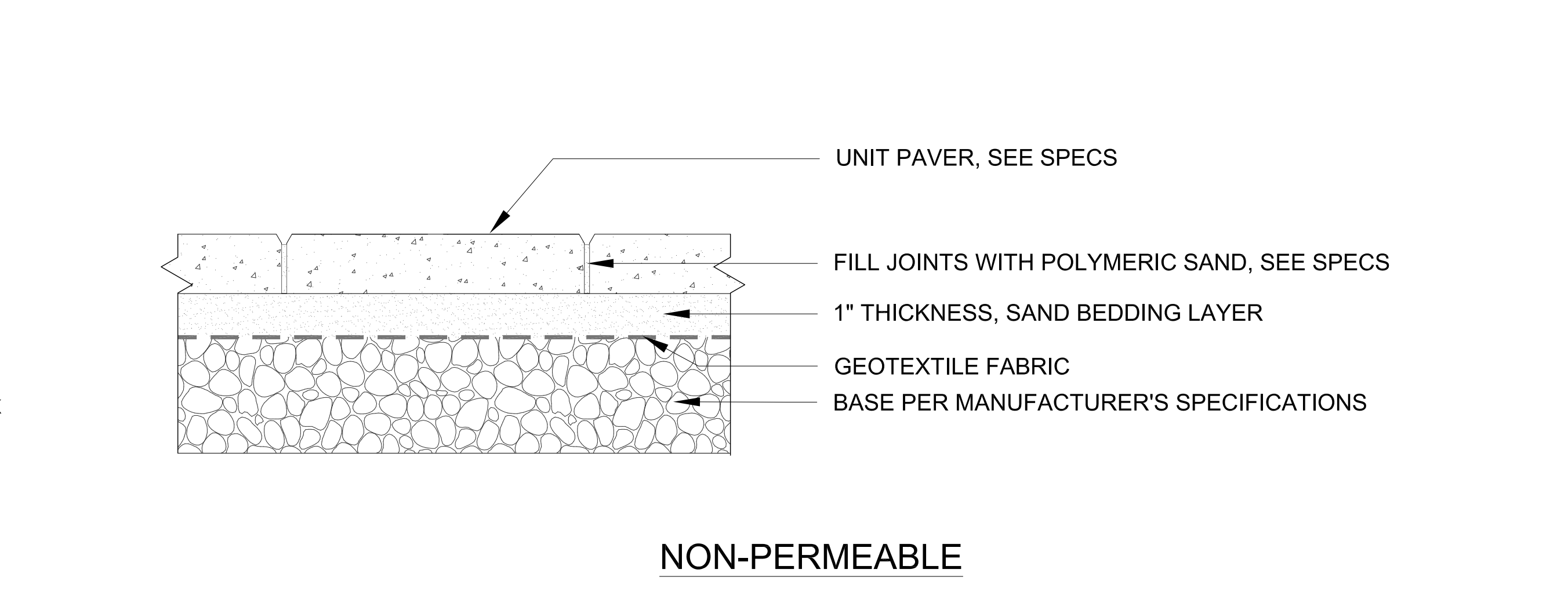
## 04 STEEL EDGING

3" = 1'-0" SECTION



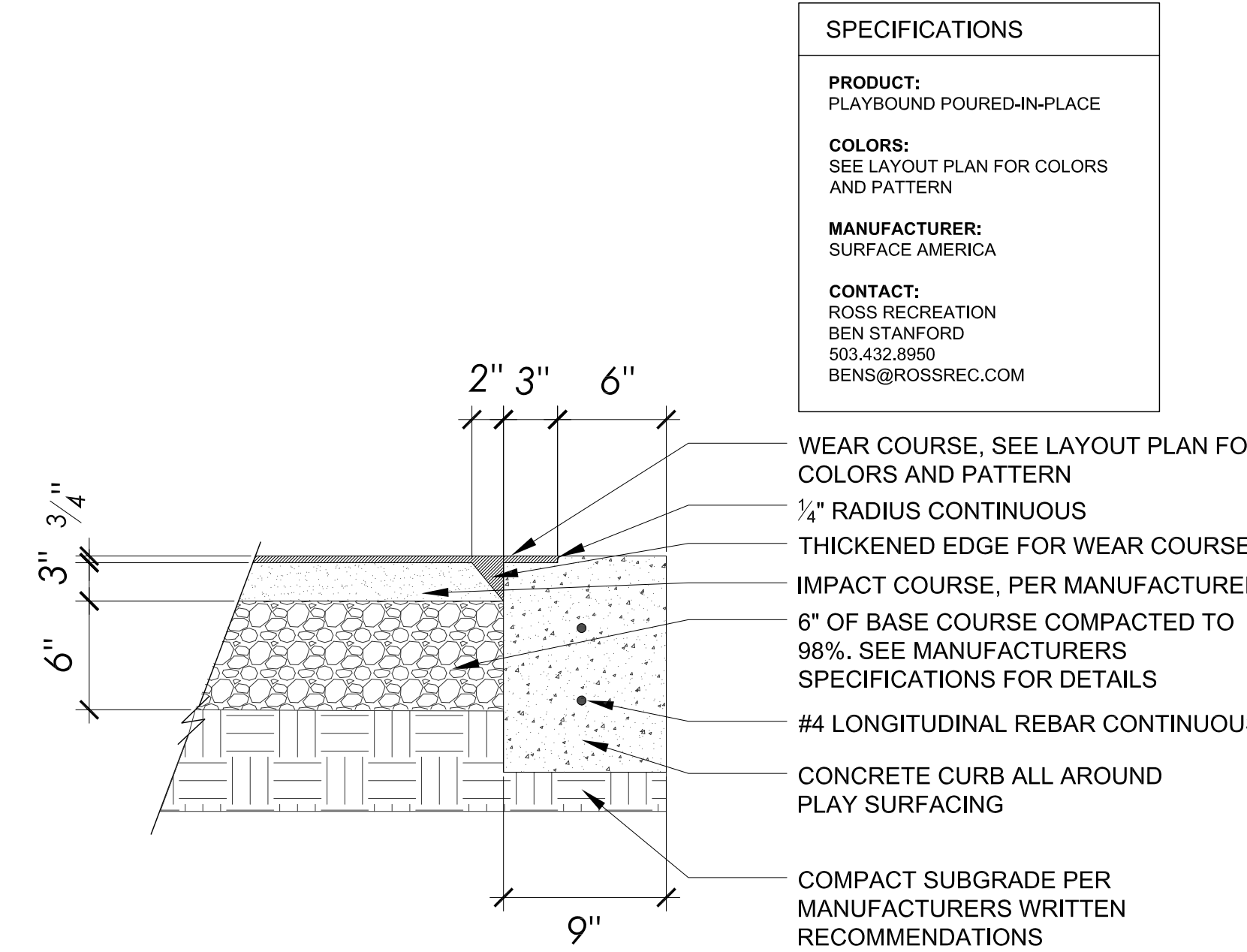
## 05 BIKE RACK

3/4" = 1'-0" SECTION



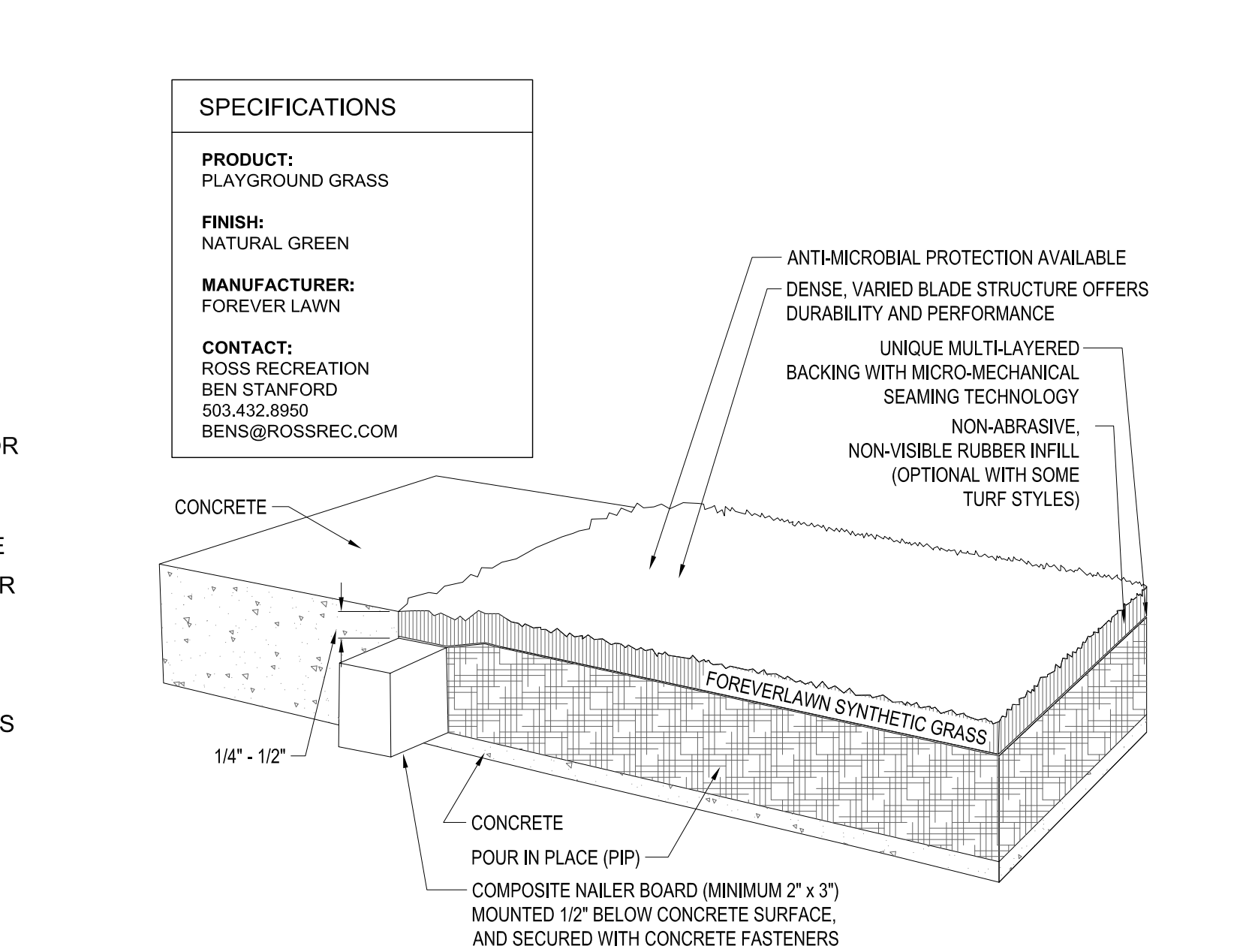
## 06 UNIT PAVING

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



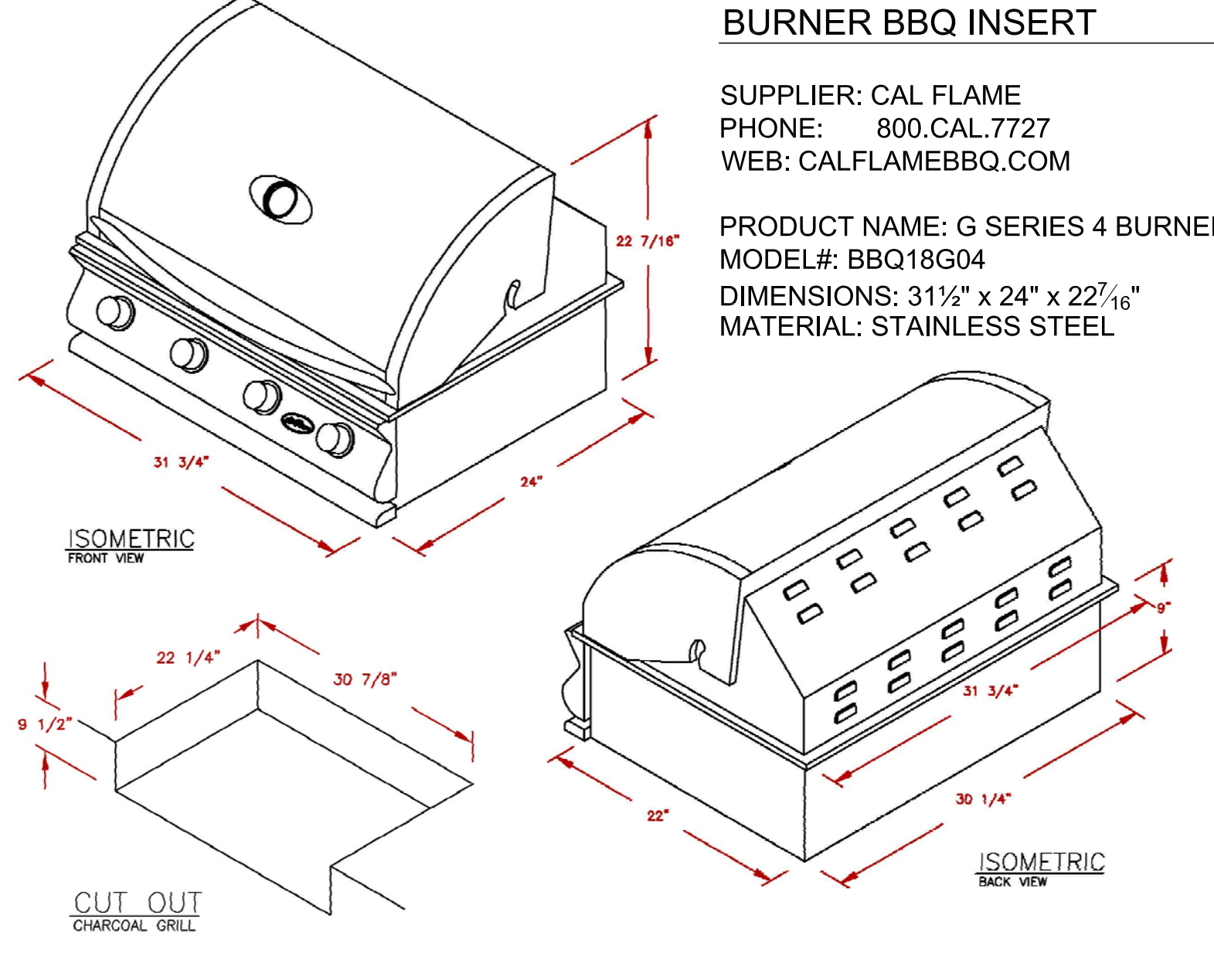
## 07 PLAY SURFACING AND CONCRETE CURB

NOT TO SCALE SECTION



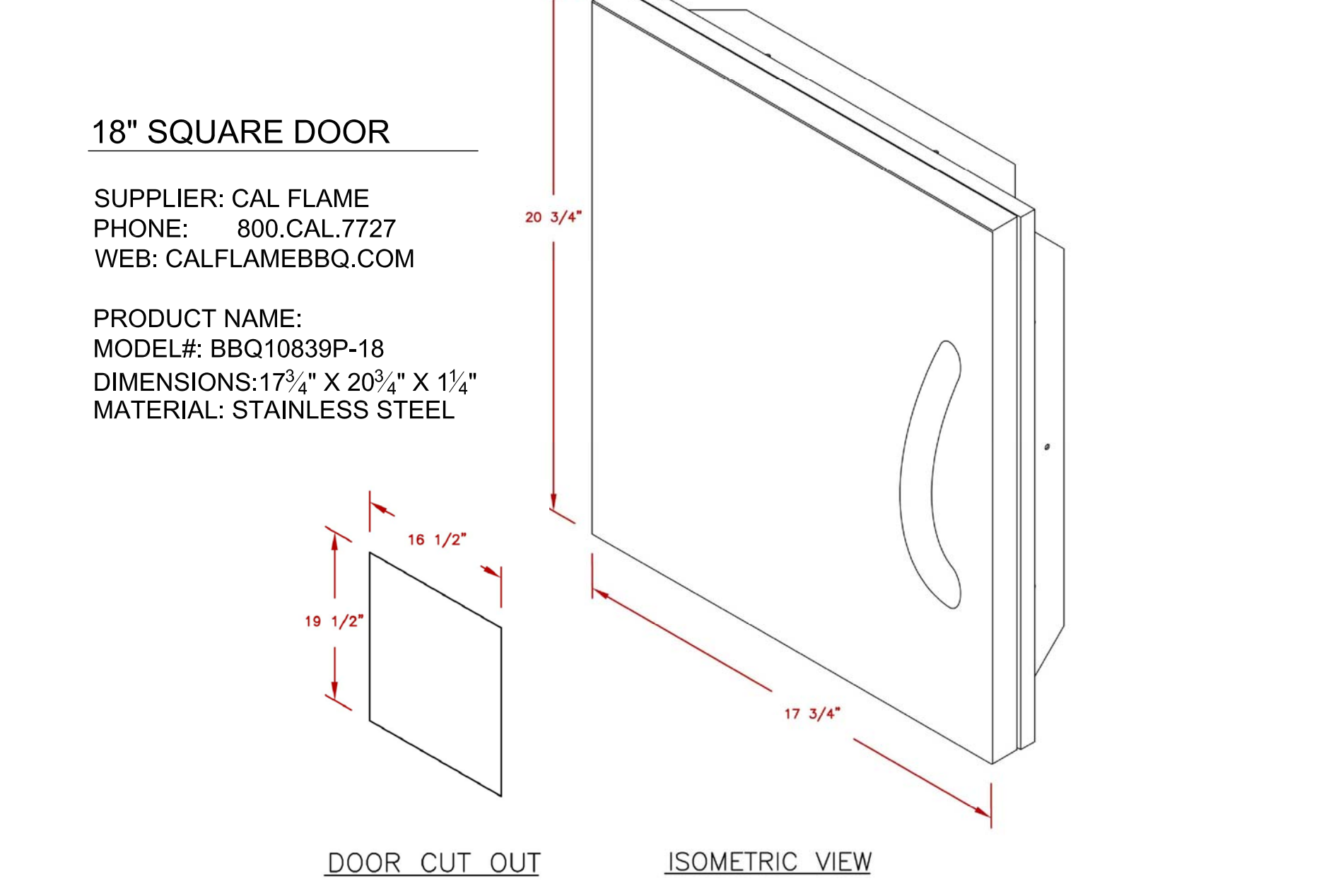
## 08 ALTERNATE SURFACE - SYNTHETIC TURF

NOT TO SCALE SECTION



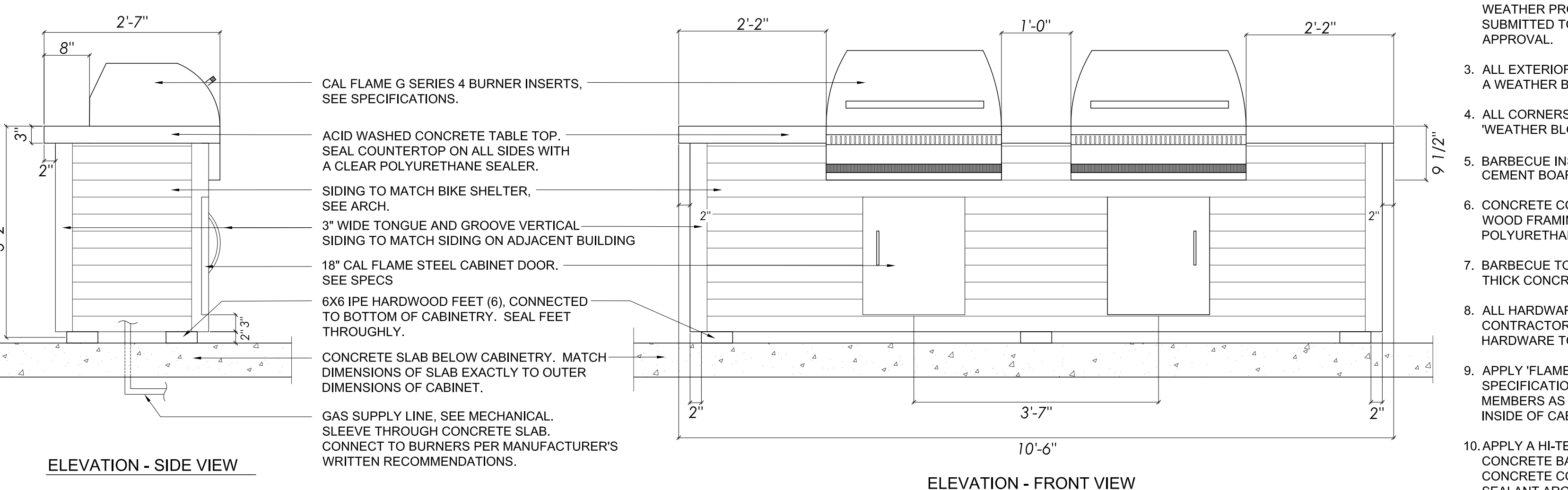
## 09 OUTDOOR BARBEQUE GRILL

NOT TO SCALE PRODUCT INFORMATION



## 10 OUTDOOR BARBEQUE CABINET DOOR

NOT TO SCALE PRODUCT INFORMATION



## 11 OUTDOOR BARBECUE ISLAND

3/4" = 1'-0" SECTION / ELEVATION / PLAN

REGISTERED  
782  
BRYAN R. BAILEY  
OREGON  
11/09/2012  
LANDSCAPE ARCHITECT

**Ankrom Moisan**  
38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100  
1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600  
1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063  
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**ecotone**  
ENVIRONMENTAL  
522 N THOMPSON ST., SUITE 4, PORTLAND, OREGON - 97227  
PHONE - 503.478.2338 - EMAIL - INFO@ECOTONE-ENV.COM

**NORTH WILLIAMS APARTMENTS**  
2156 N WILLIAMS AVE  
PORTLAND, OR 97227  
BRIDGE HOUSING

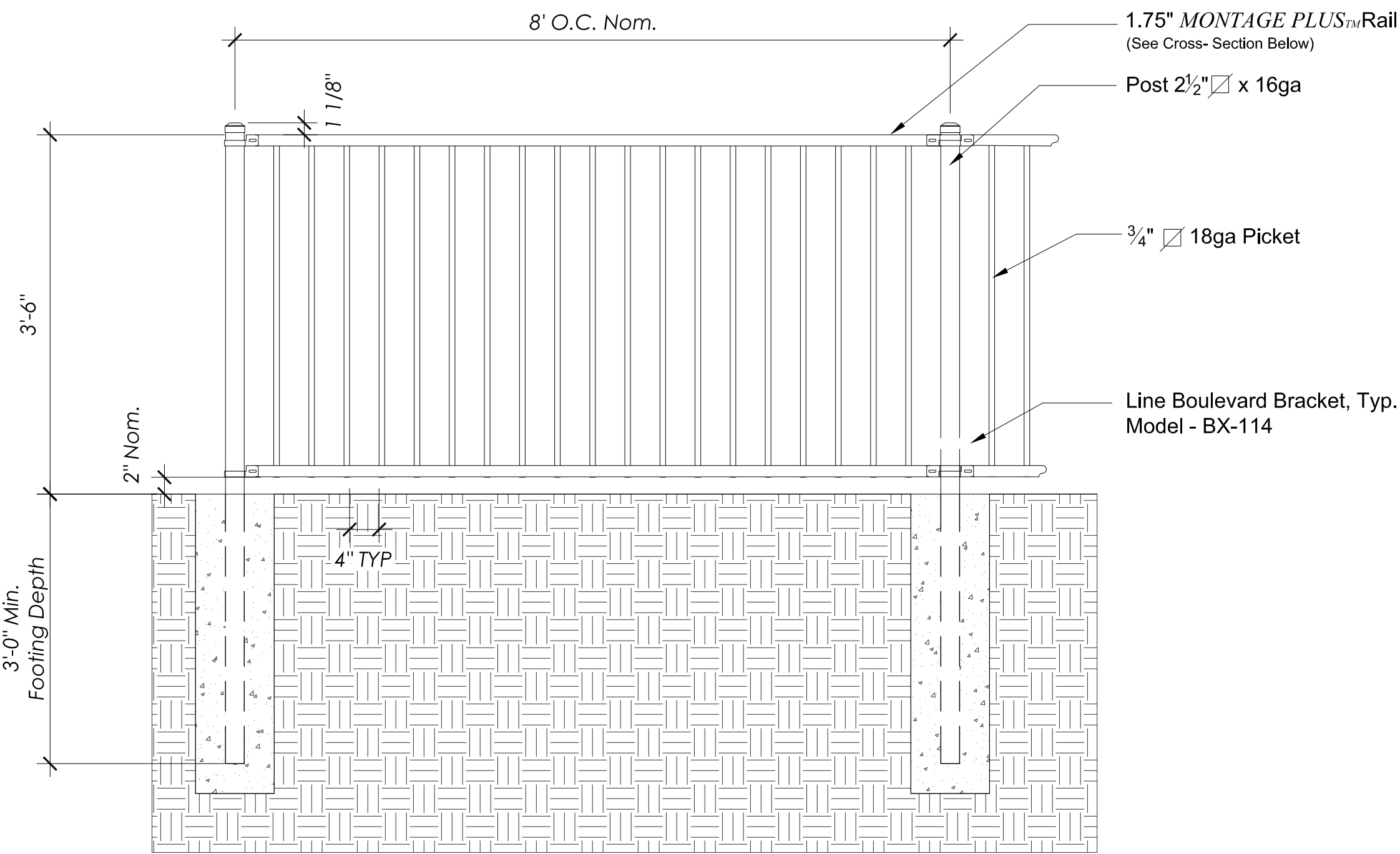
REVISION	DATE	REASON FOR ISSUE

## SITE DETAILS

## GMP/PERMIT

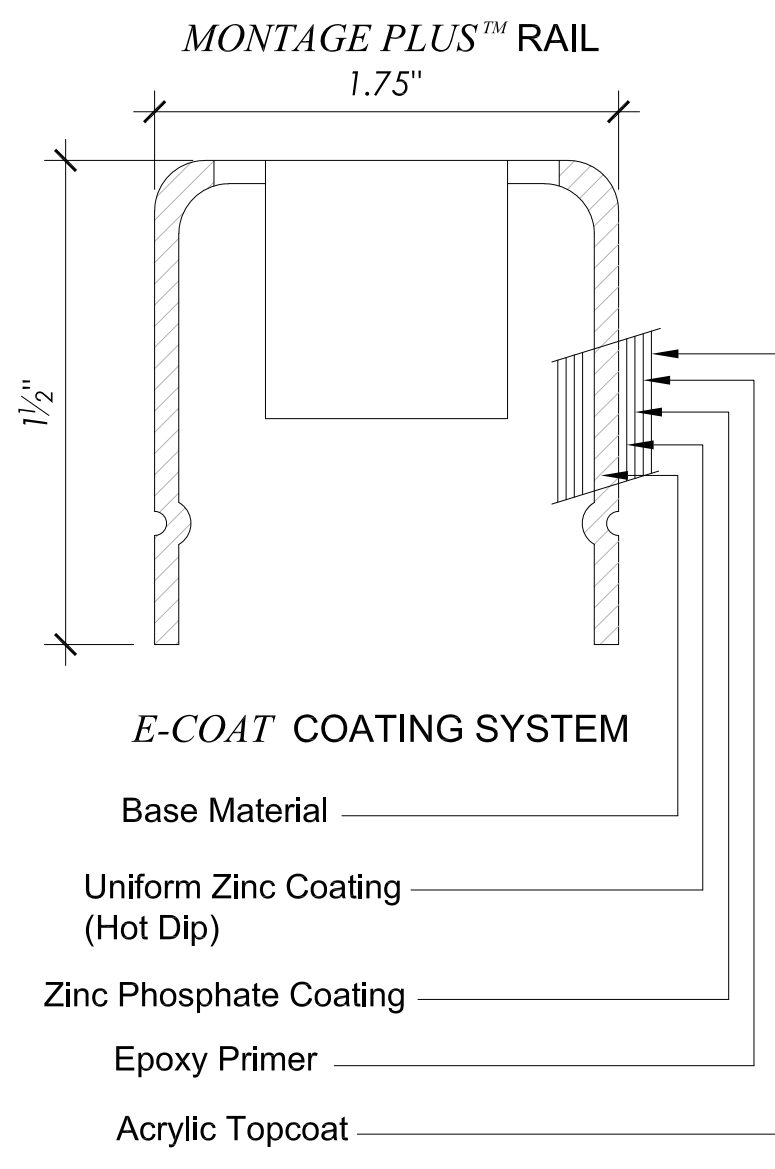
DATE 010/09/2018	PROJECT NUMBER 149000
SHEET NUMBER	



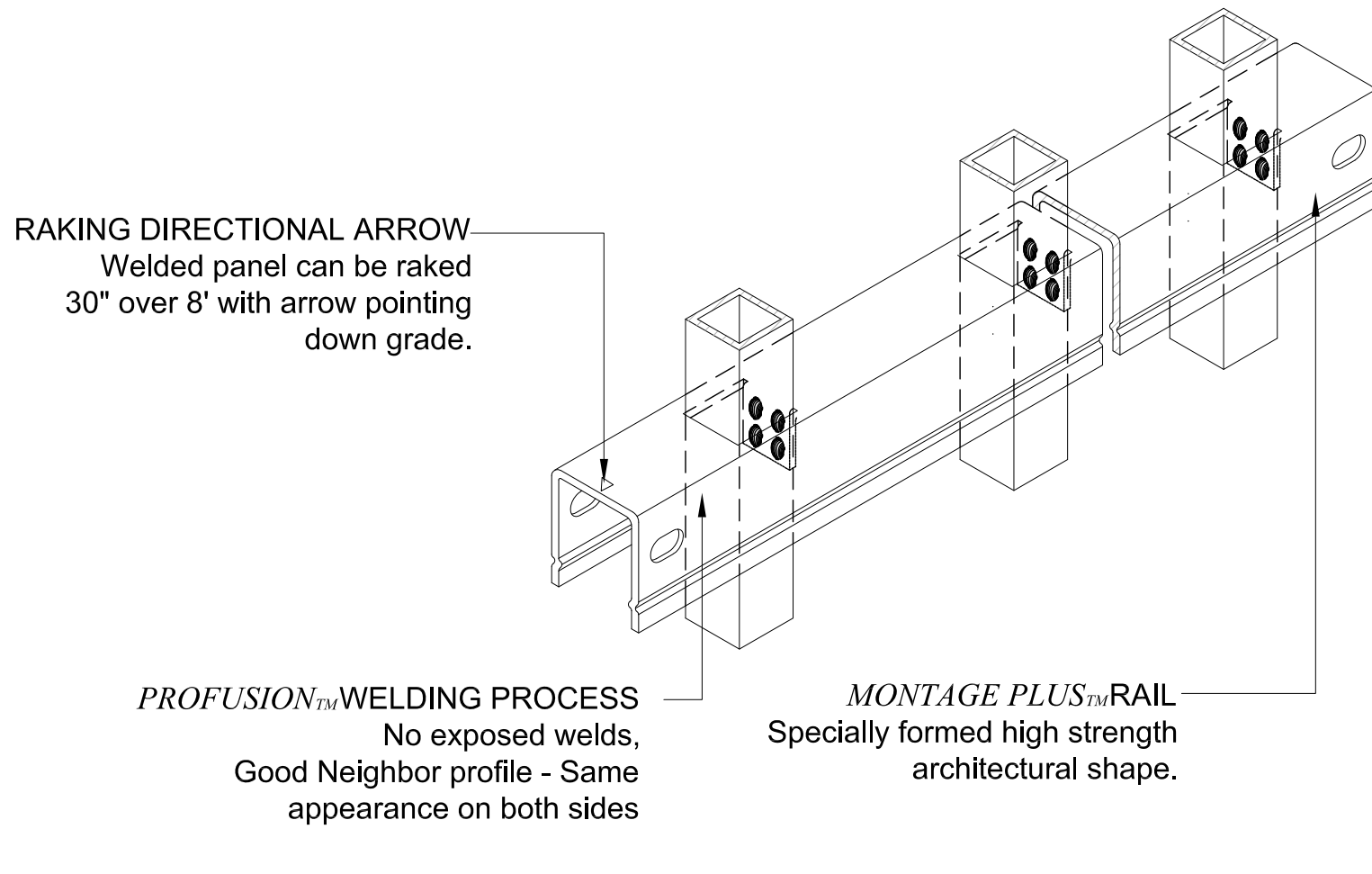


FENCE ELEVATION

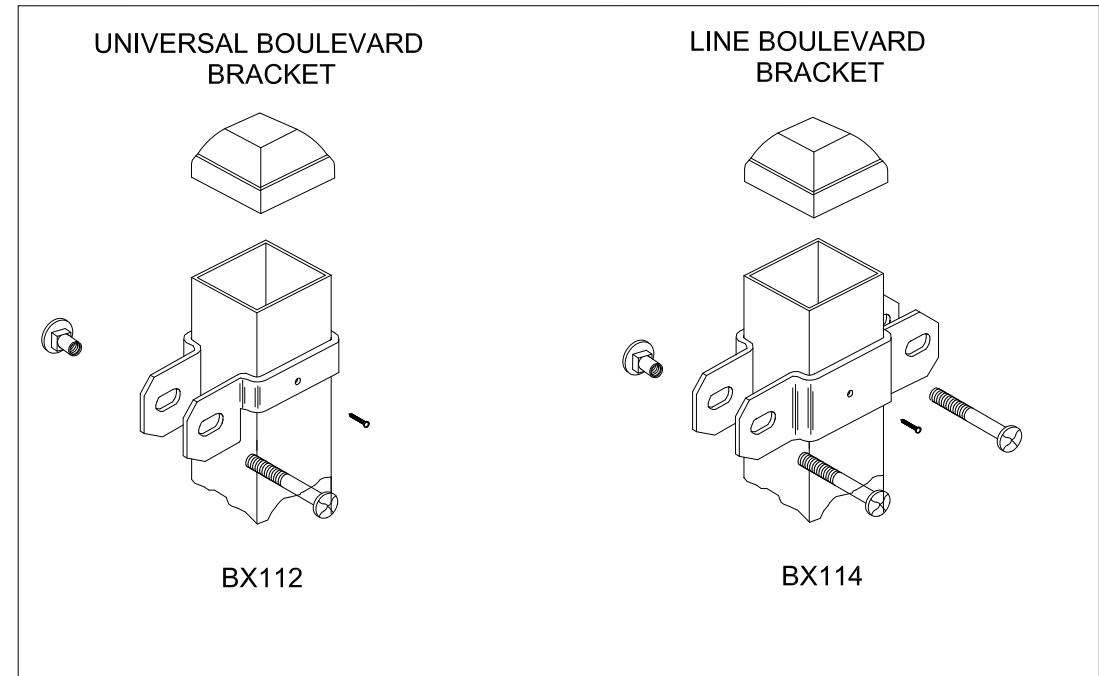
- NOTES:
- FOR STRUCTURAL SPECIFICATIONS OF FOOTINGS SEE AMERISTAR SPECIFICATIONS FOR RECOMMENDATIONS.
  - POWDER COAT ALL FENCE MEMBERS AND HARDWARE PER ARCH.
  - FOR GATE HARDWARE, SEE ARCH
- PRODUCT INFORMATION
- PRODUCT: MONTAGE PLUS FENCE AND GATE
- RAIL TYPE: 2 RAIL SYSTEM
- SUPPLIER: AMERISTAR FENCING
- PHONE: 888.333.3422



RAIL CROSS SECTION



RAIL AND PICKET ENLARGEMENT



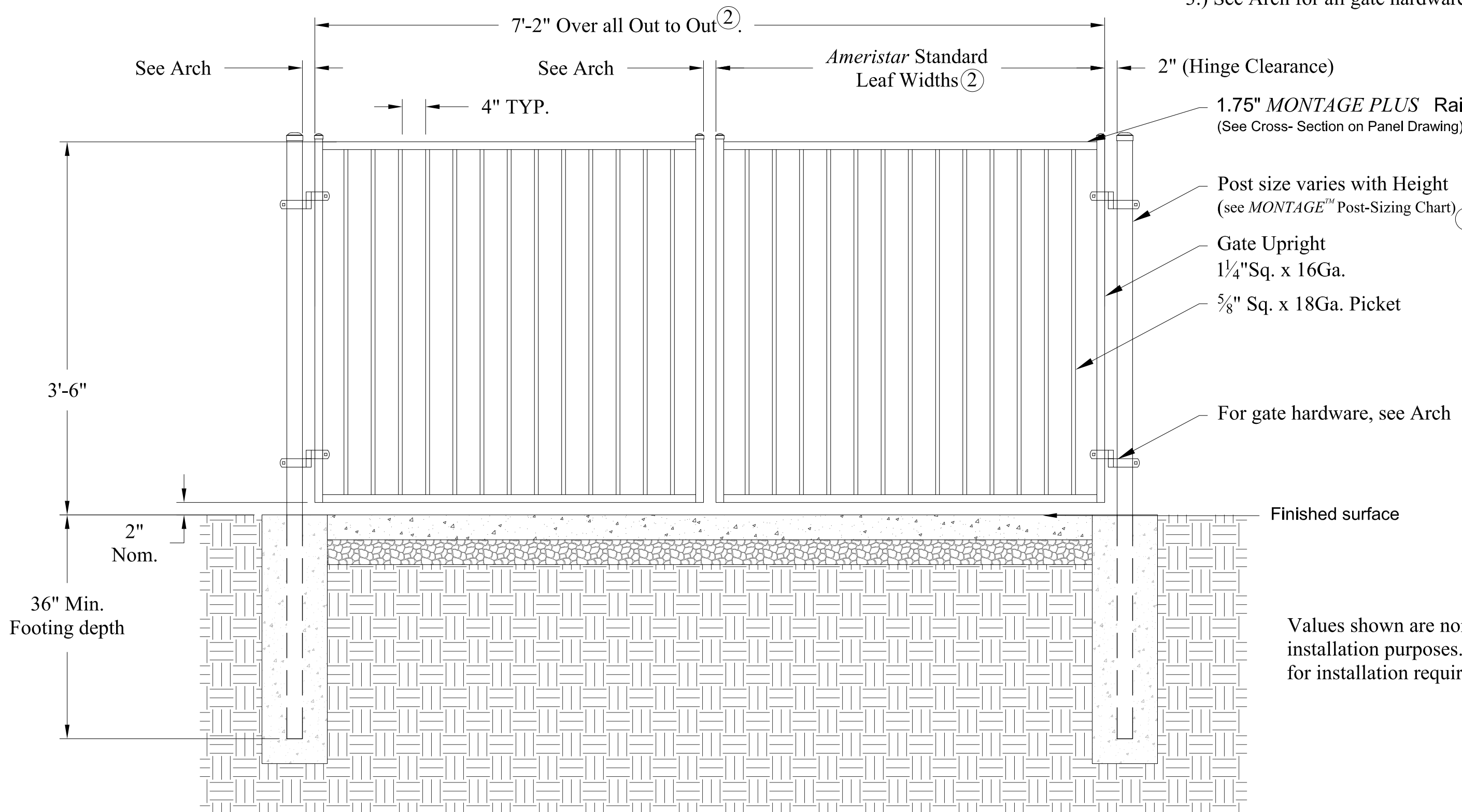
BRACKET ENLARGEMENTS

## 01 DECORATIVE METAL FENCE

3/4" = 1'-0"

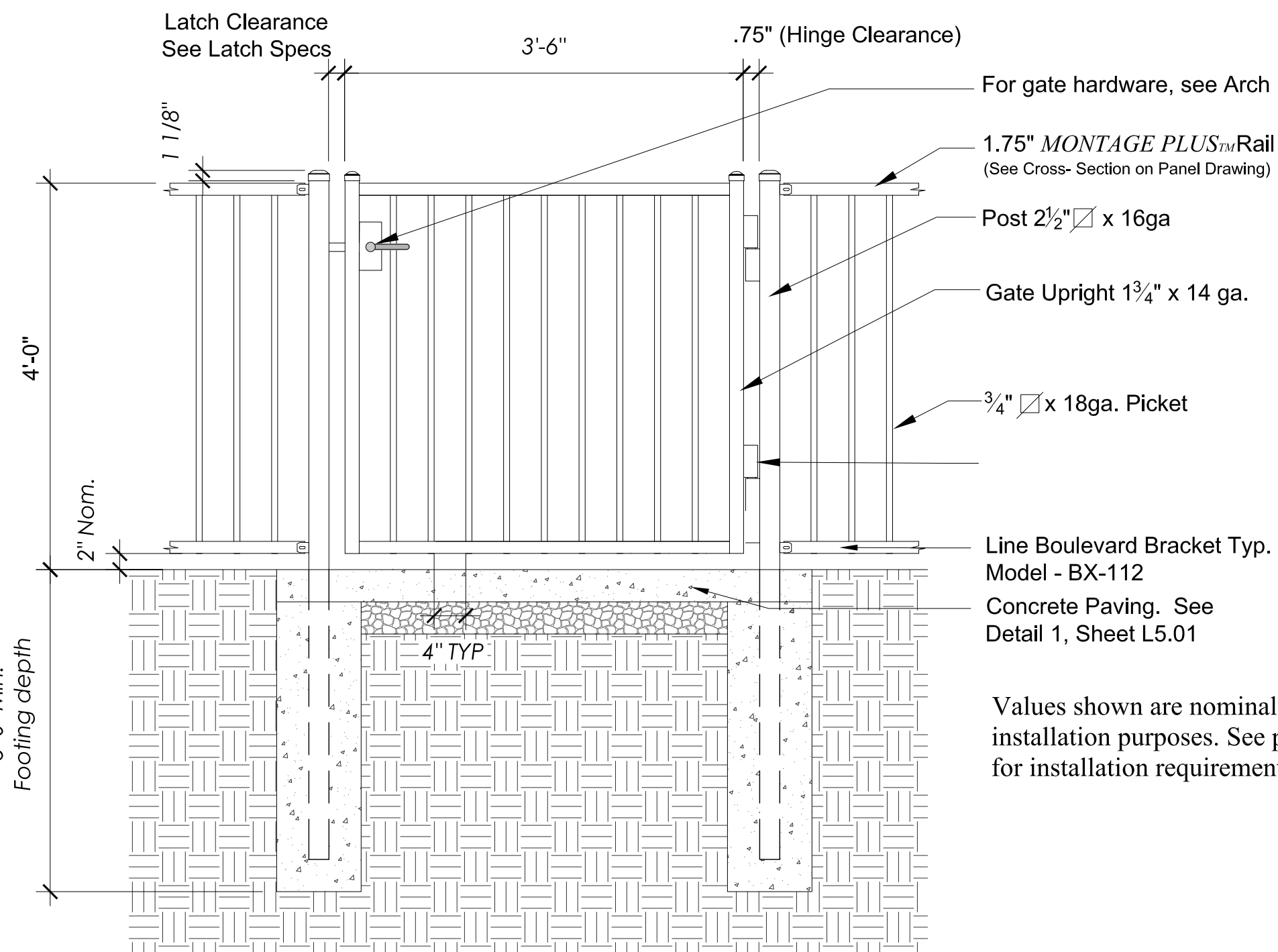
ELEVATION / SECTION / ENLARGEMENTS

- NOTES:
- Post size depends on fence height, weight and wind loads. See *MONTAGE PLUS* specifications for post sizing chart.
  - See *Ameristar* gate table for standard out to outs. Custom gate openings available for special out to out/leaf widths.
  - See Arch for all gate hardware, typ.



Double gate Arrangement

- NOTES:
- Post size depends on fence height, weight and wind loads. See *MONTAGE PLUS* specifications for post sizing chart.
  - See *Ameristar* gate table for standard out to outs. Custom gate openings available for special out to out/leaf widths.
  - See Arch for all gate hardware, typ.



## 02 DOUBLE SWING GATE

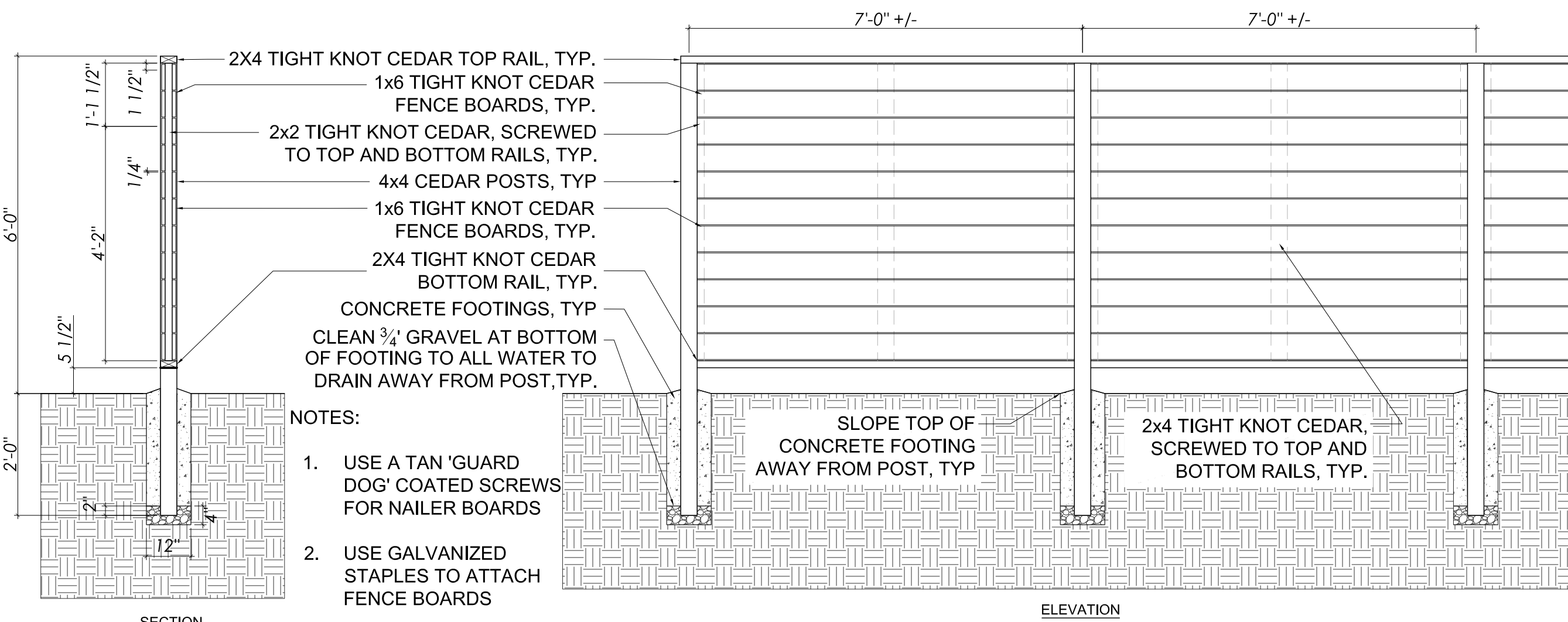
3/4" = 1'-0"

SECTION

## 03 SINGLE SWING GATE

3/4" = 1'-0"

SECTION



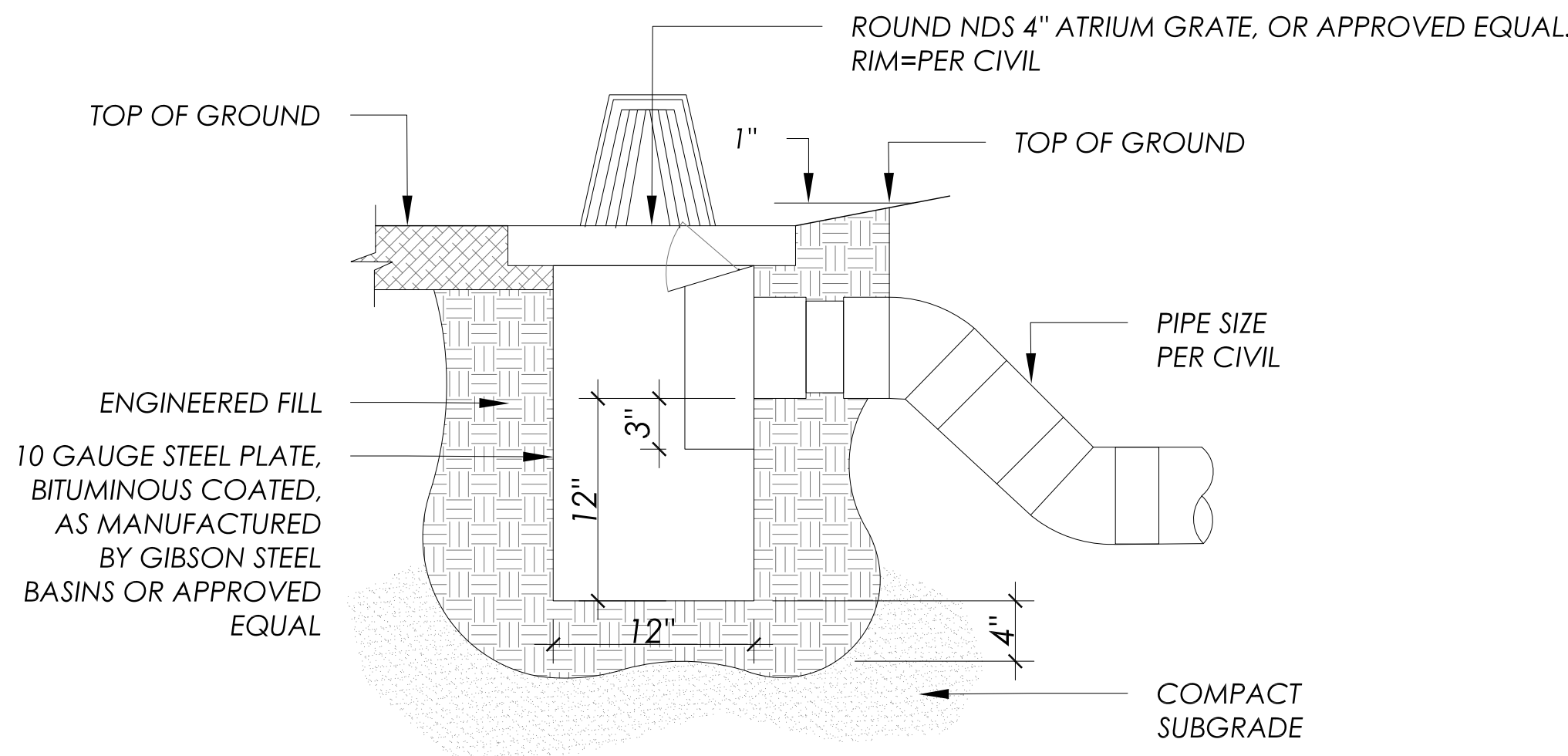
## 04 CEDAR FENCE - 100% SITE OBSCURING

1/2" = 1'-0"

SECTION/ELEVATION

## 05 AREA DRAIN

NTS



SECTION/ELEVATION

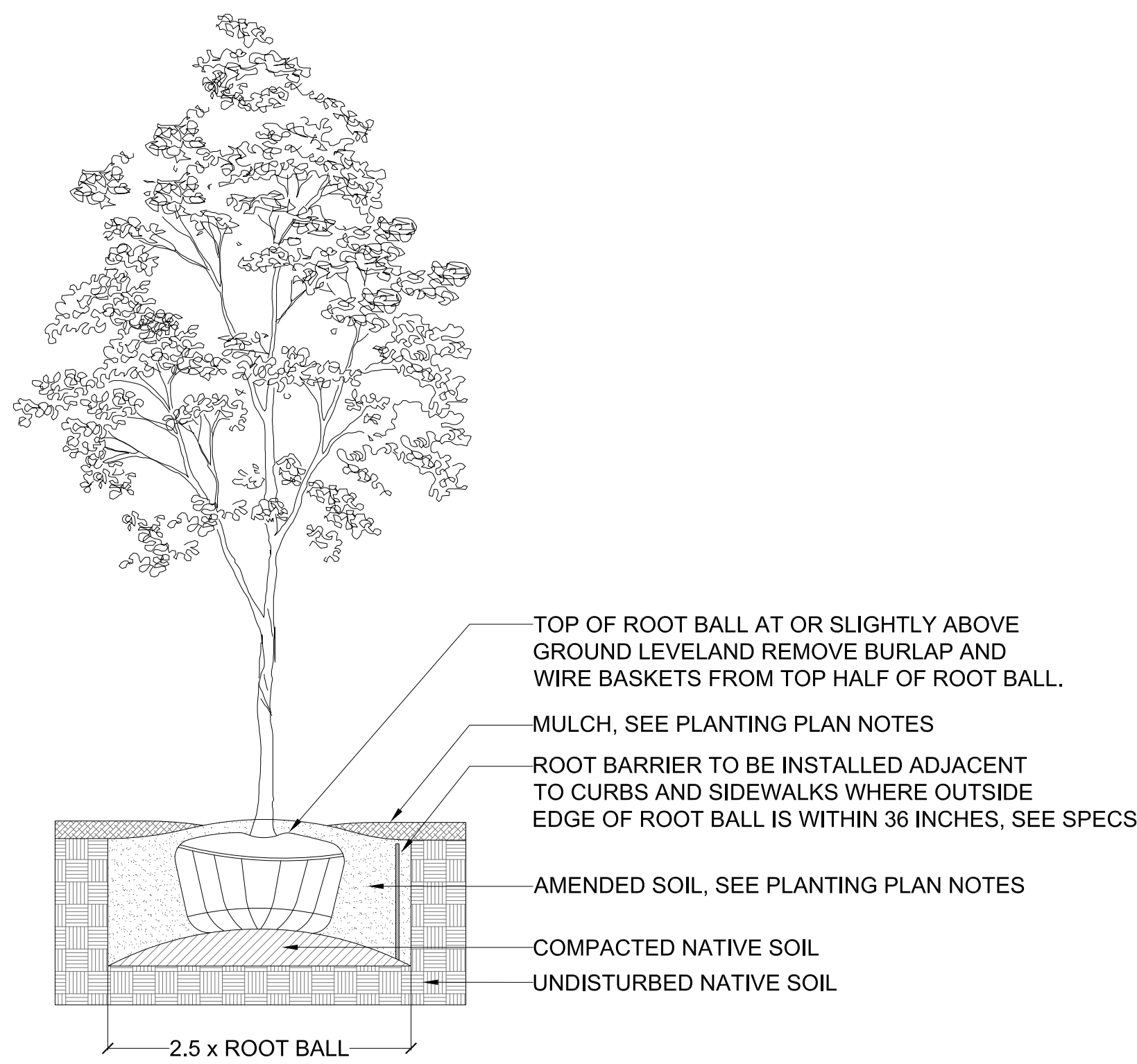
REVISION	DATE	REASON FOR ISSUE

### SITE DETAILS

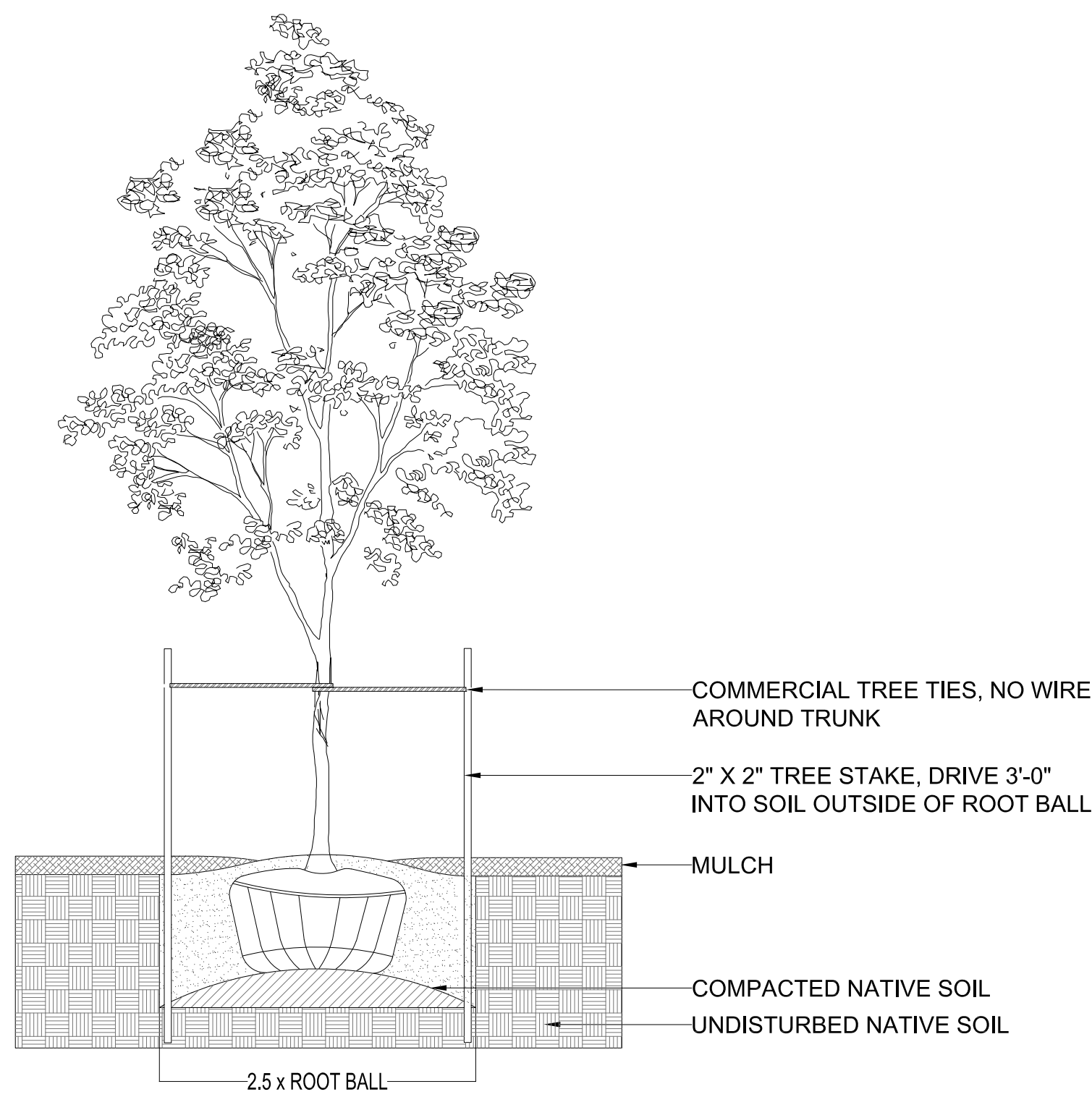
### GMP/PERMIT

DATE 010/09/2018	PROJECT NUMBER 149000
SHEET NUMBER	

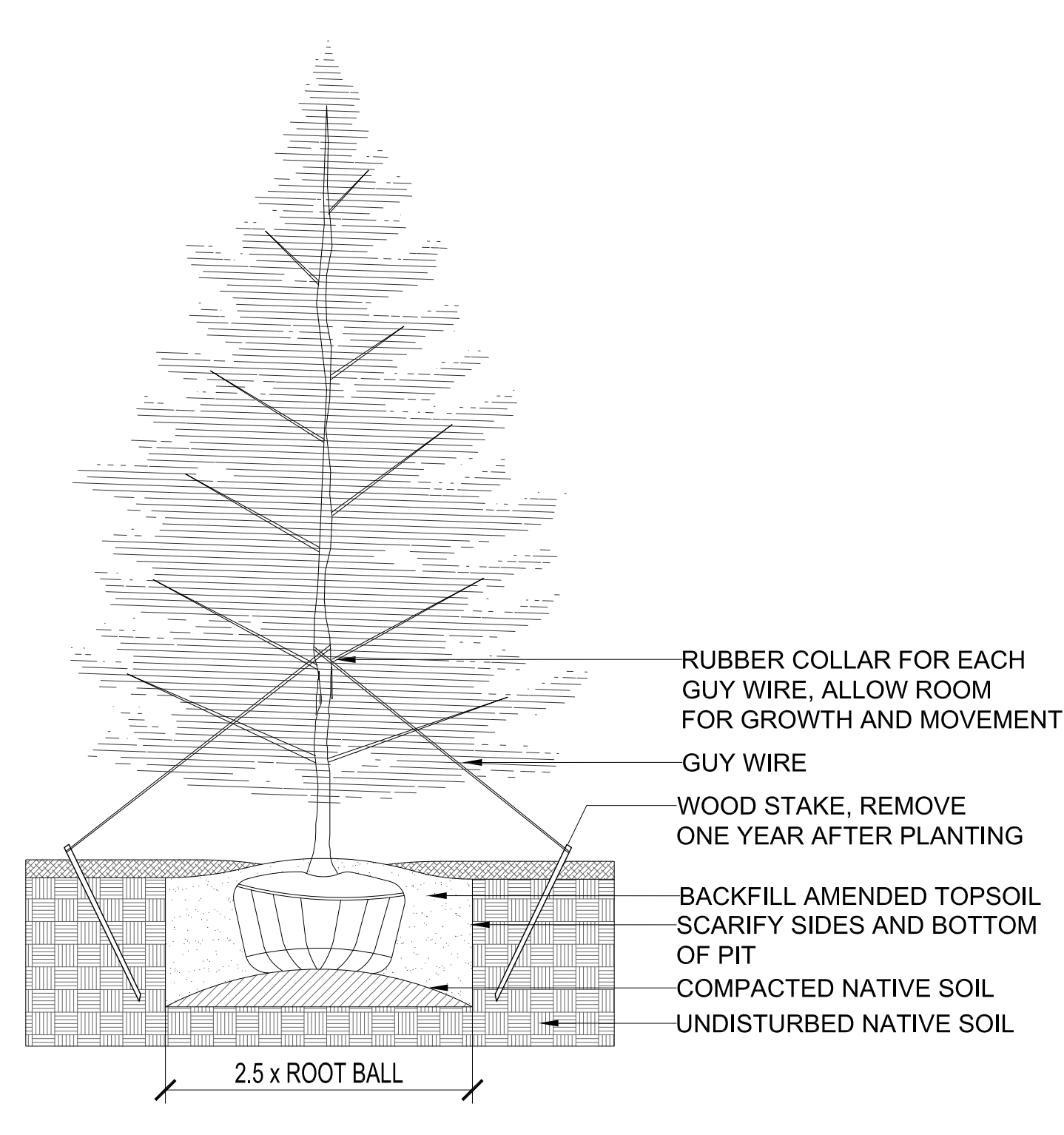




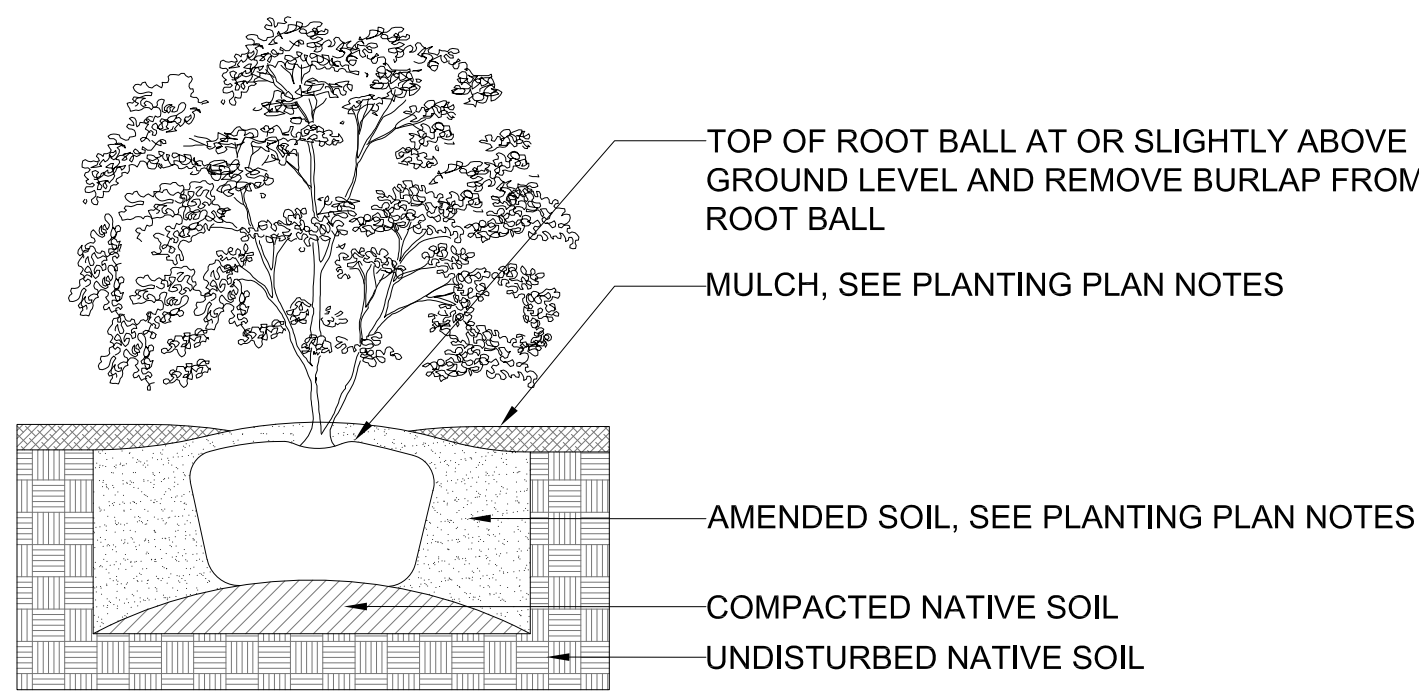
**01** DECIDUOUS TREE PLANTING  
NOT TO SCALE SECTION



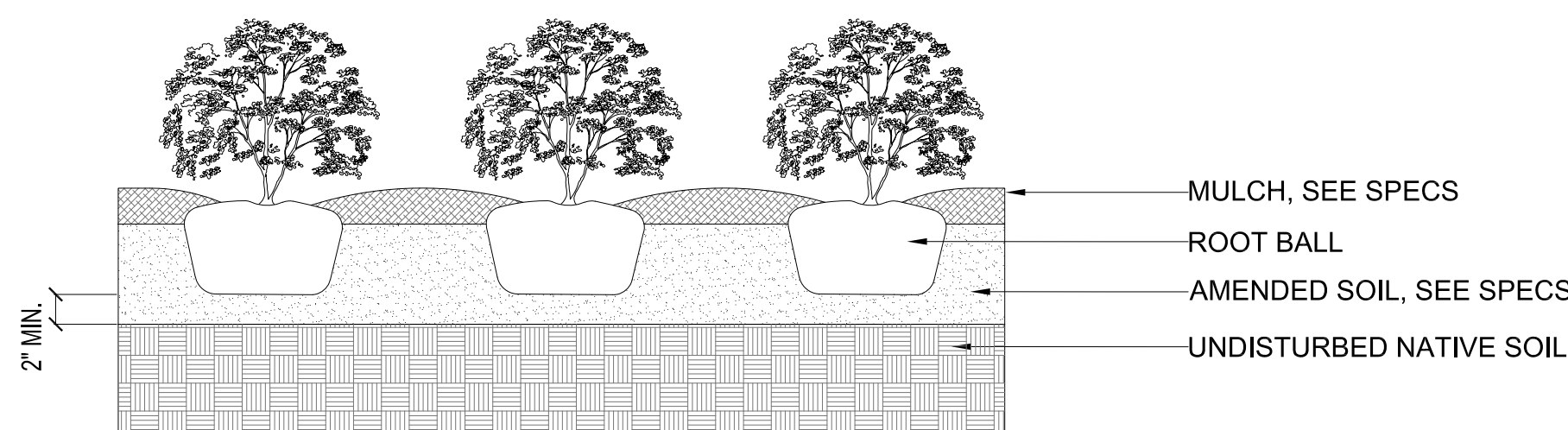
**02** DECIDUOUS TREE STAKING  
NOT TO SCALE SECTION



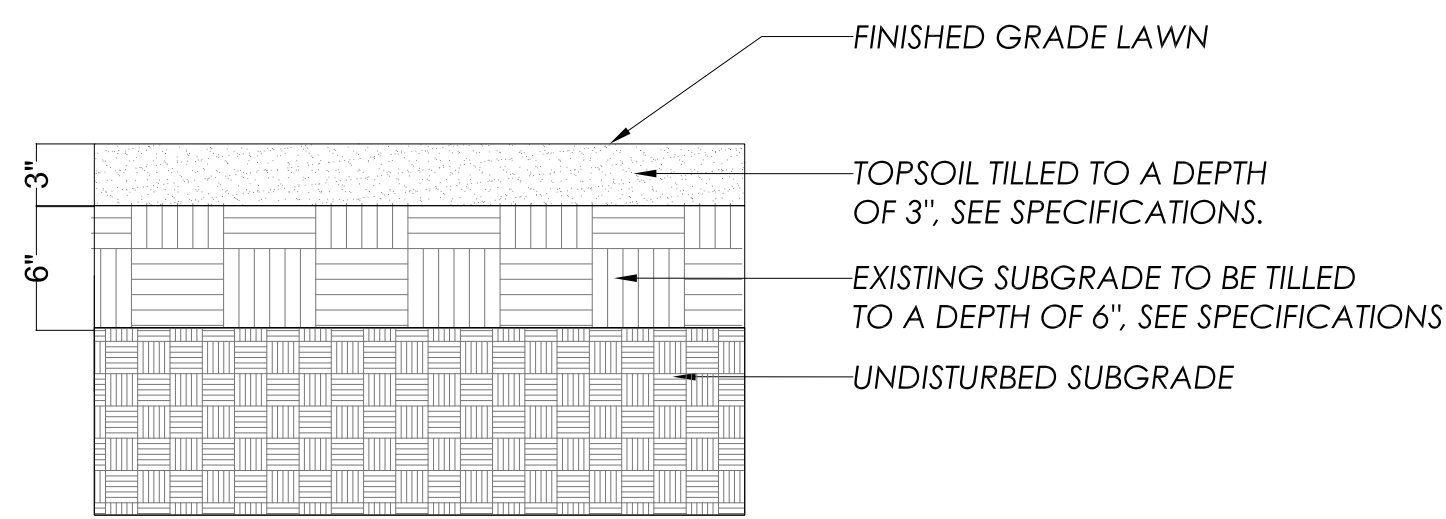
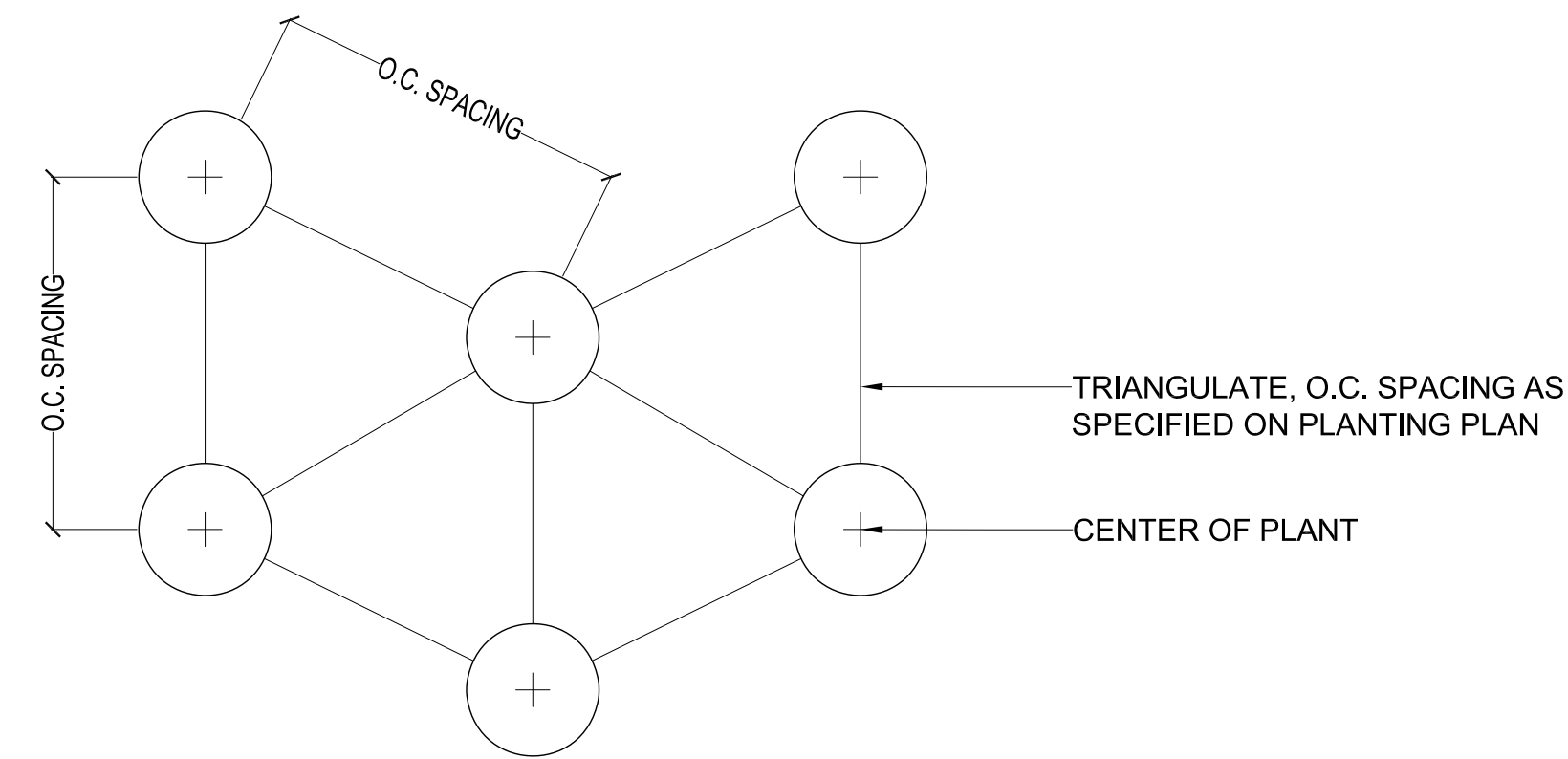
**03** CONIFEROUS TREE PLANTING  
NOT TO SCALE SECTION



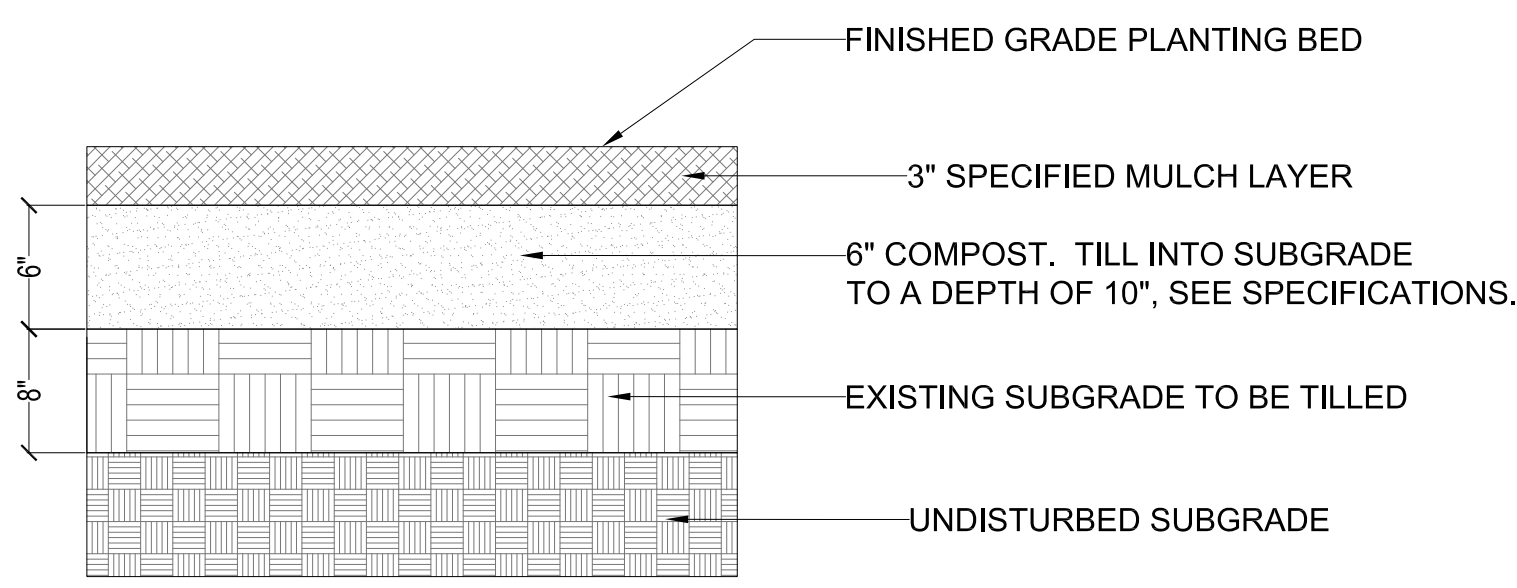
**04** SHRUB PLANTING  
NOT TO SCALE SECTION



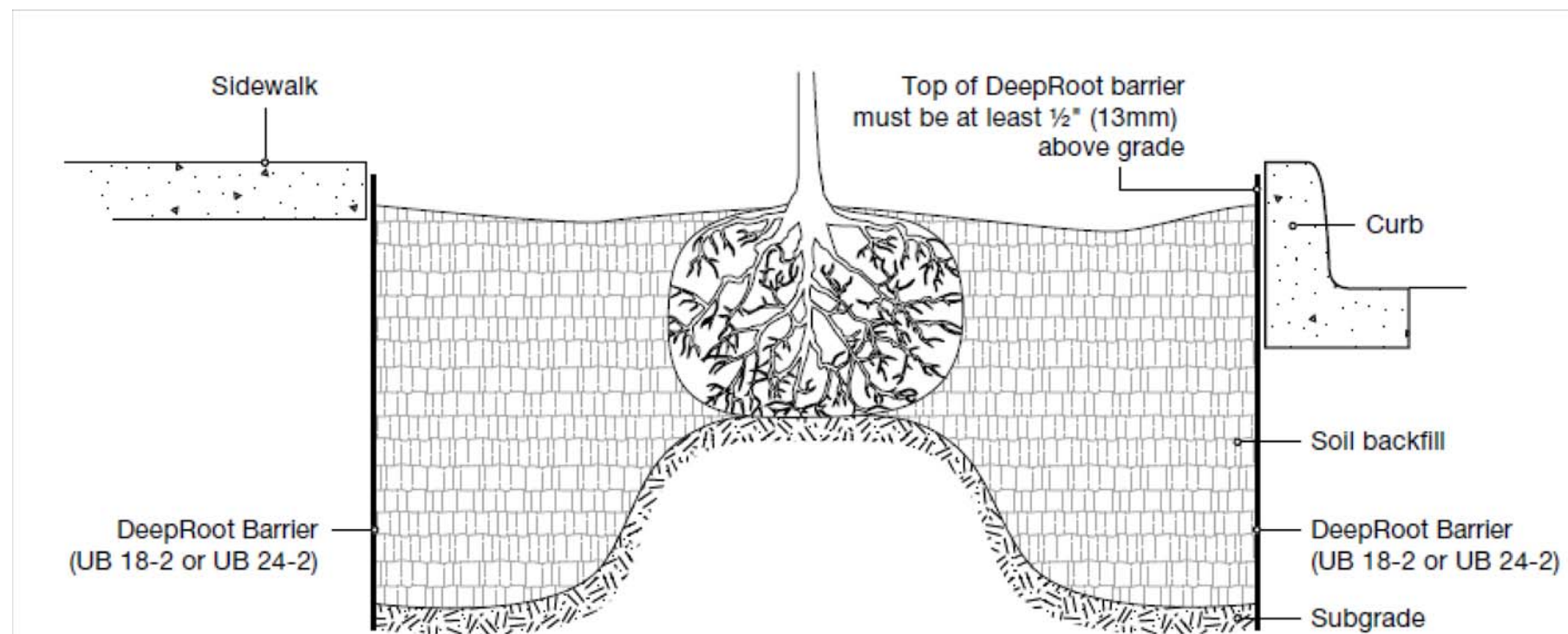
**05** GROUND COVER PLANTING  
NOT TO SCALE SECTION/PLAN



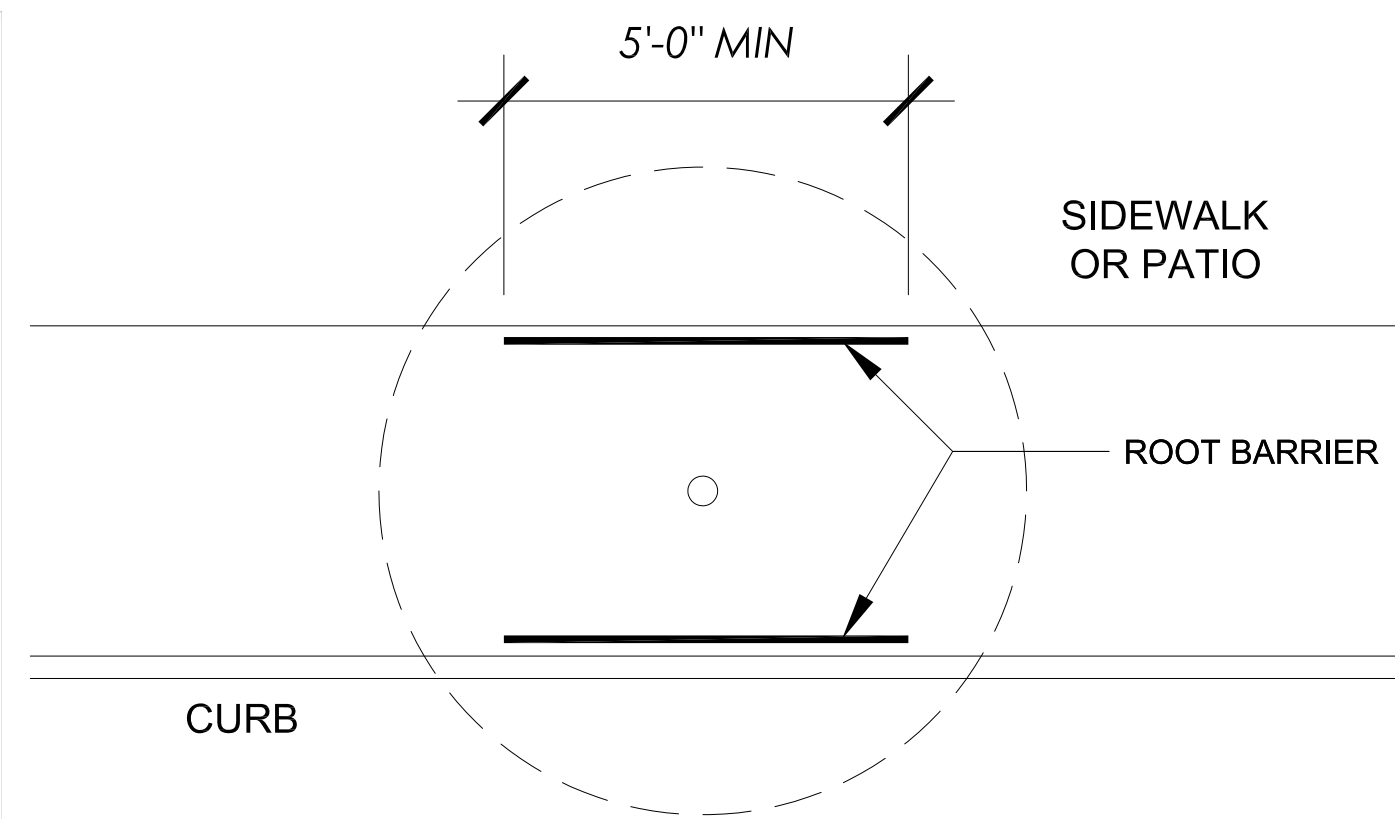
**06** LAWN SOIL PREPARATION  
NOT TO SCALE SECTION



**07** PLANTING BED SOIL PREPARATION  
NOT TO SCALE DETAIL



**08** ROOT BARRIER  
NOT TO SCALE DETAIL



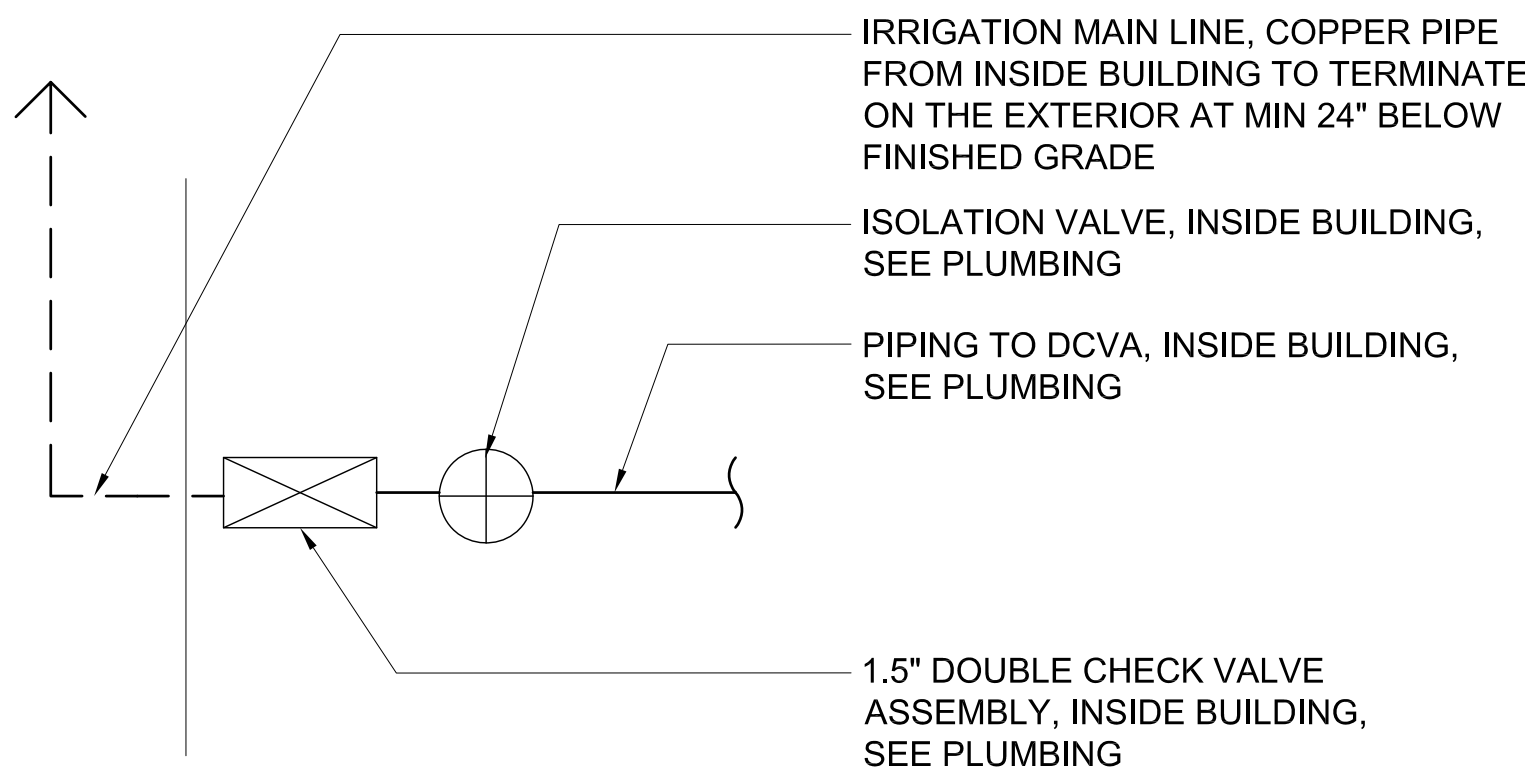
REVISION	DATE	REASON FOR ISSUE

PLANTING DETAILS

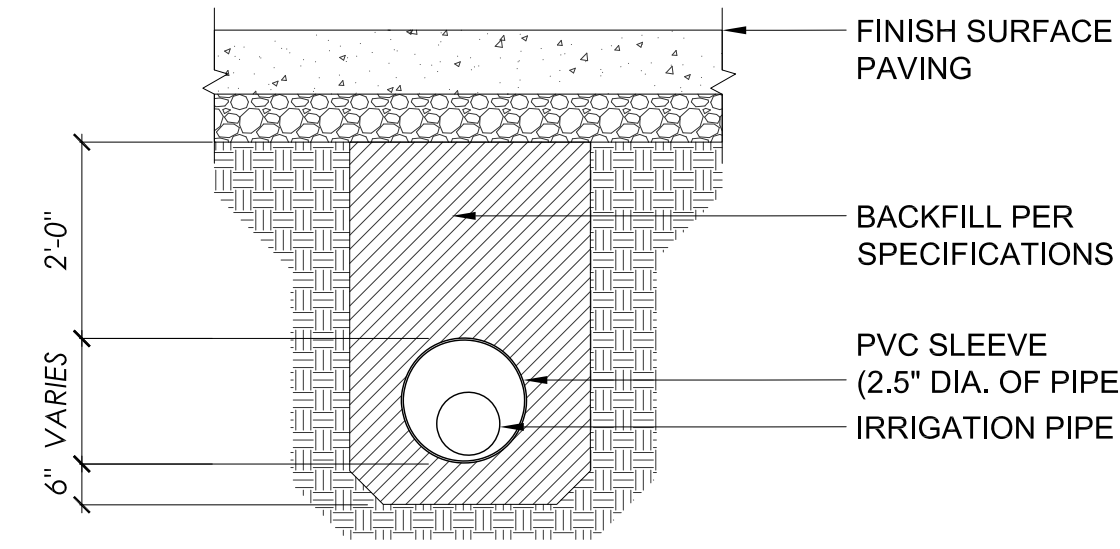
GMP/PERMIT

DATE 010/09/2018	PROJECT NUMBER 149000
SHEET NUMBER	

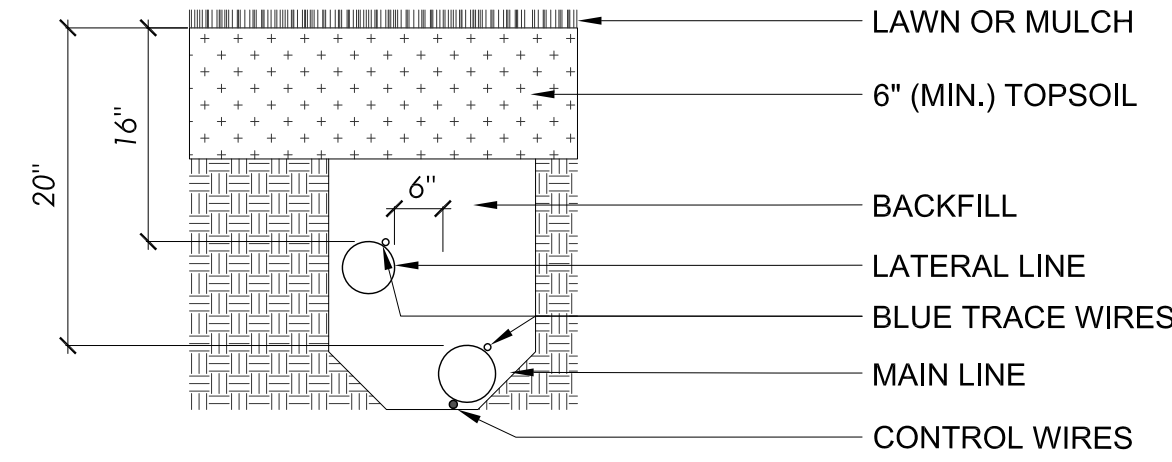




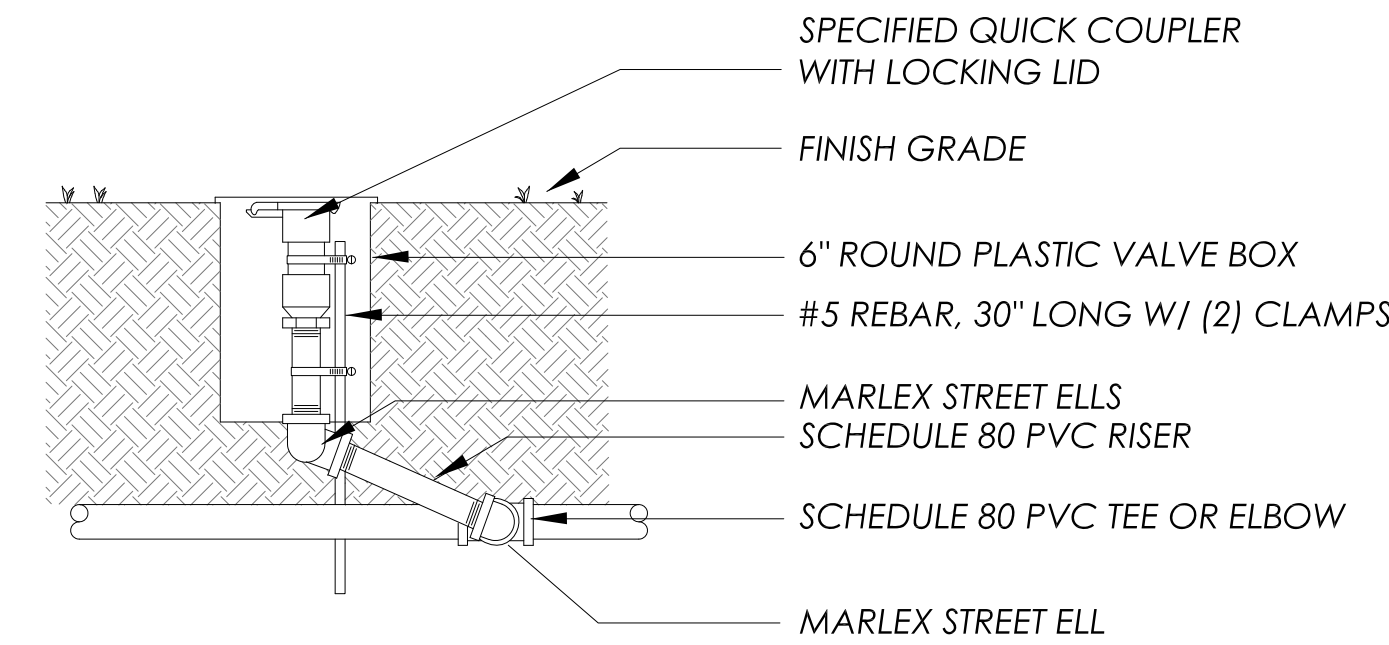
**01** IRRIGATION POINT OF CONNECTION  
NOT TO SCALE PLAN DIAGRAM



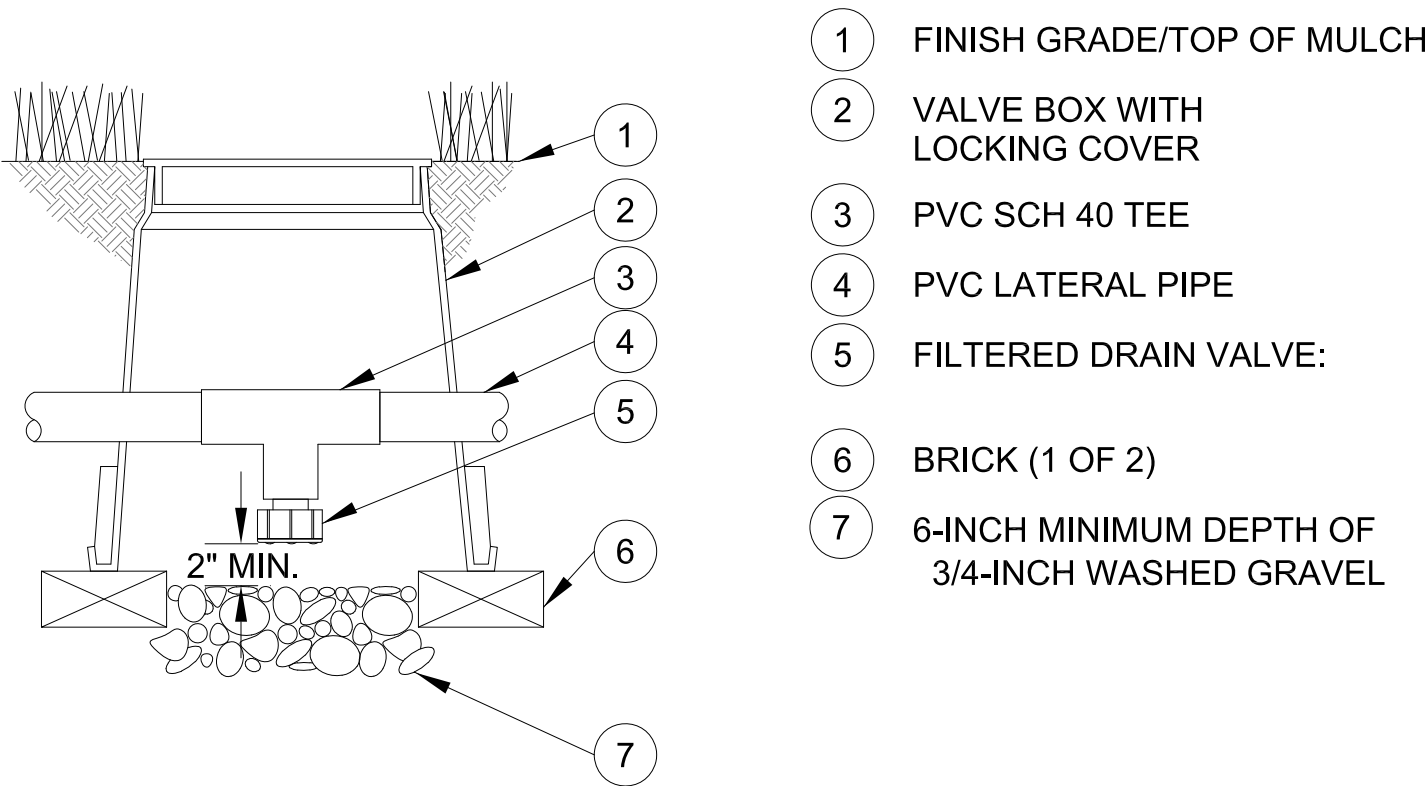
**02** IRRIGATION SLEEVING  
NOT TO SCALE SECTION



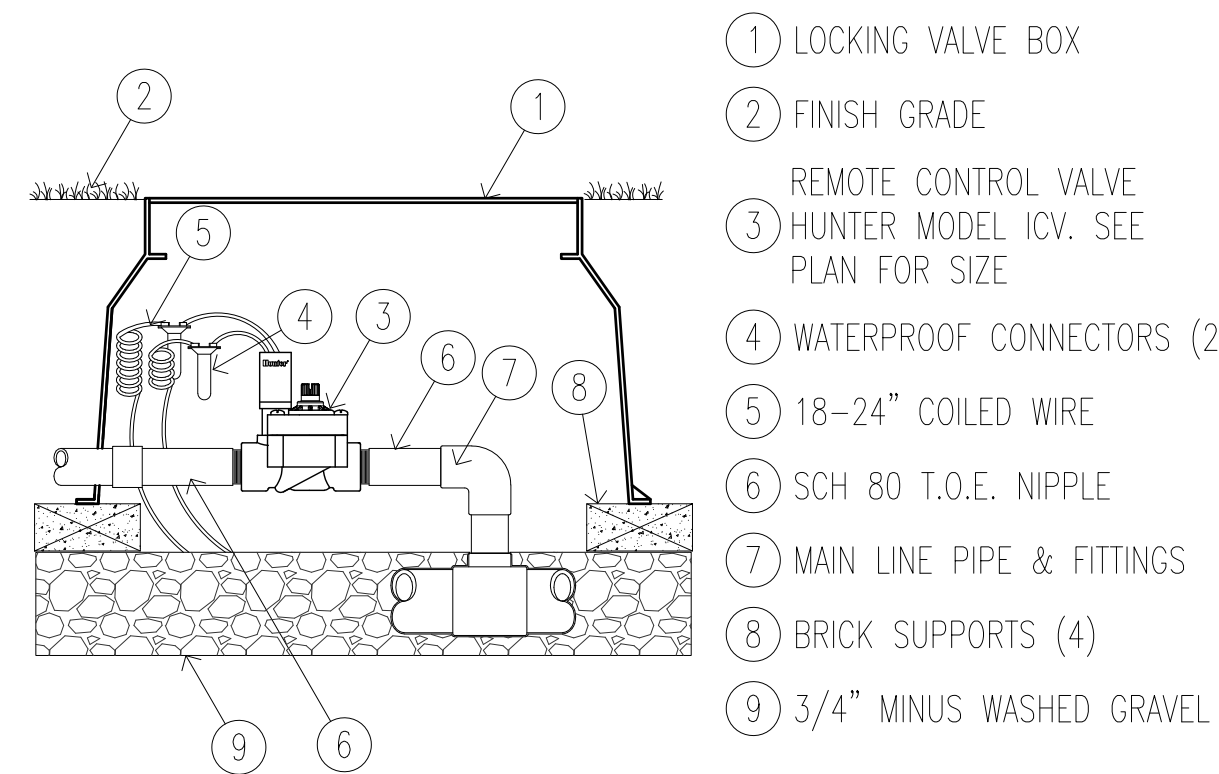
**03** IRRIGATION TRENCHING  
NOT TO SCALE SECTION



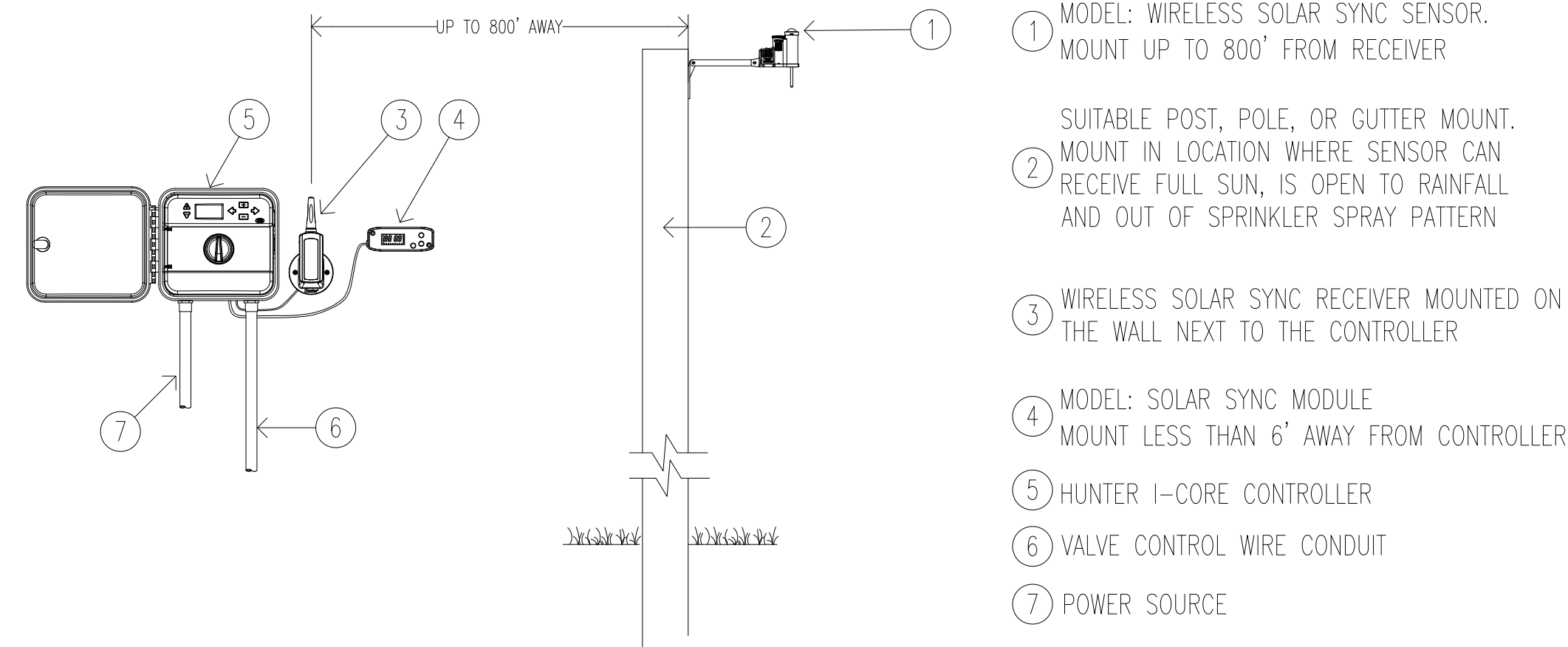
**04** QUICK COUPLER  
NOT TO SCALE SECTION



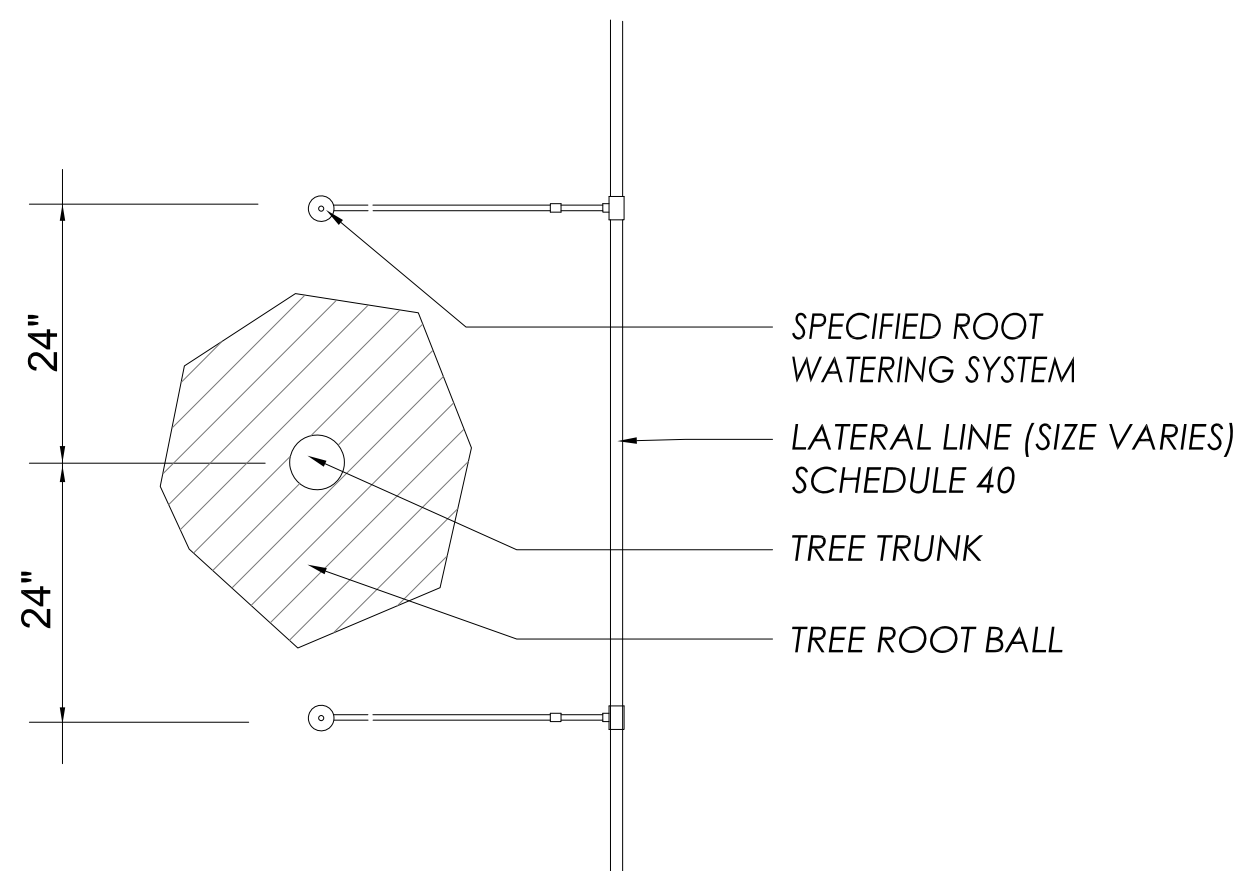
**05** DRAIN VALVE  
NOT TO SCALE SECTION



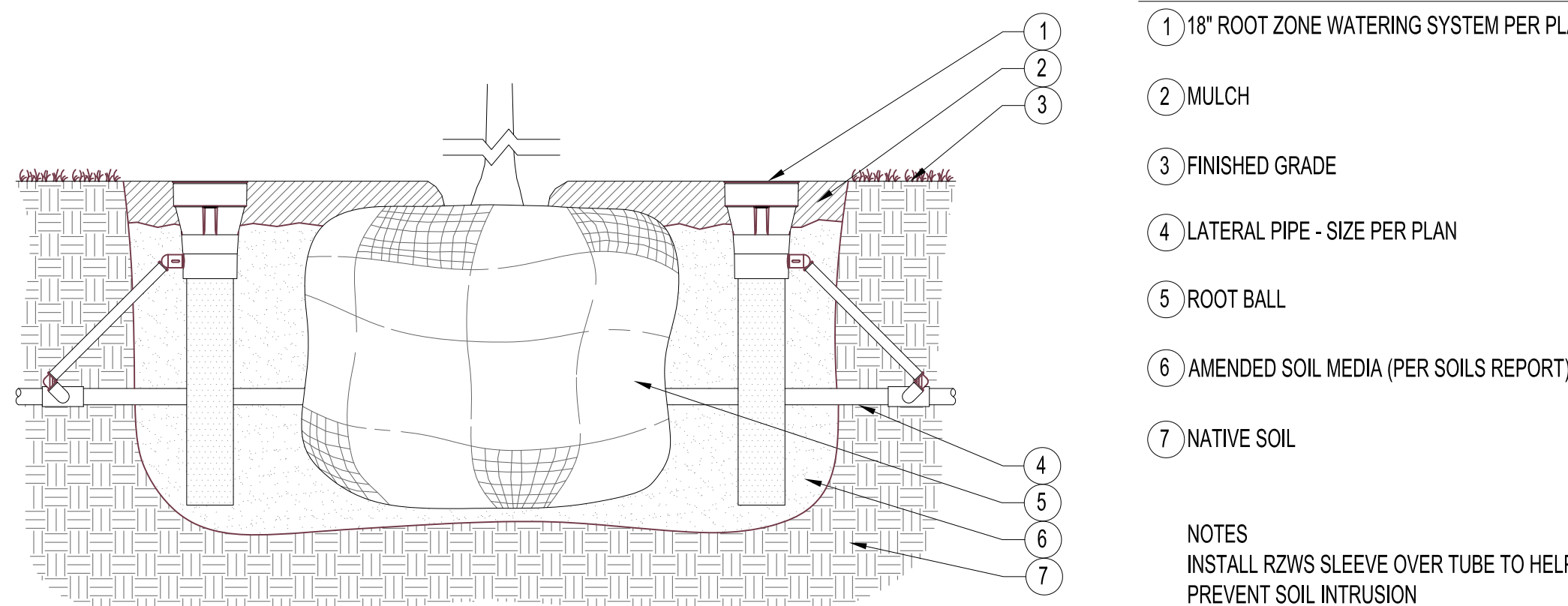
**06** CONTROL AND MASTER VALVE  
NOT TO SCALE SECTION



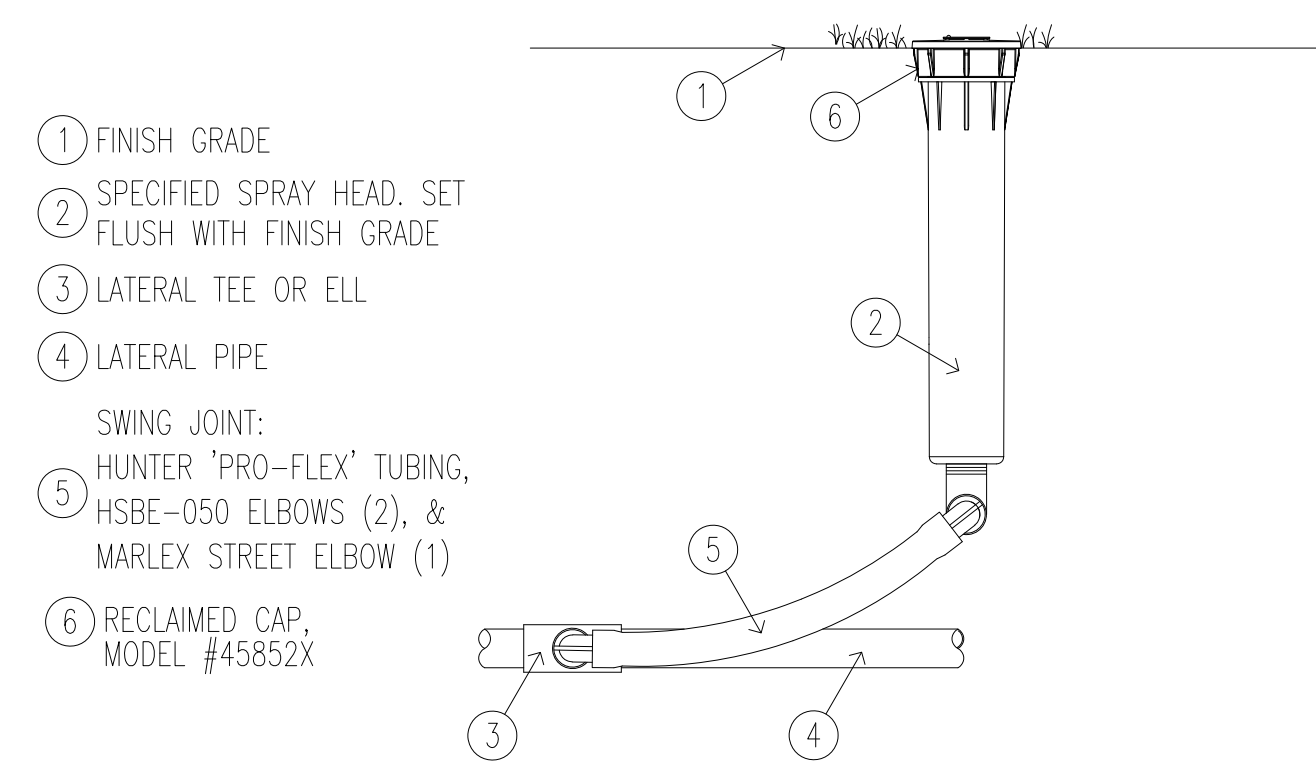
**07** IRRIGATION CONTROLLER  
NOT TO SCALE ELEVATION/SECTION



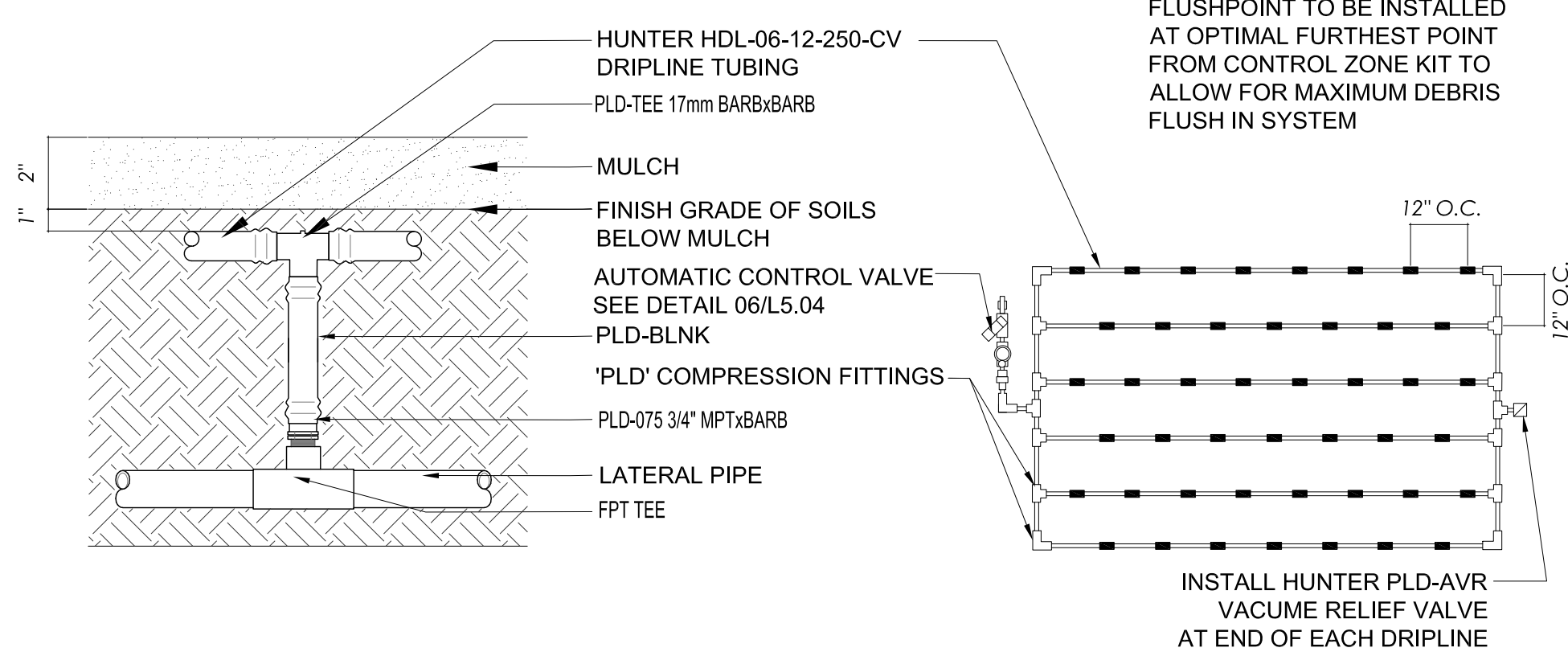
**08** TREE ROOT ZONE WATERING  
NOT TO SCALE PLAN



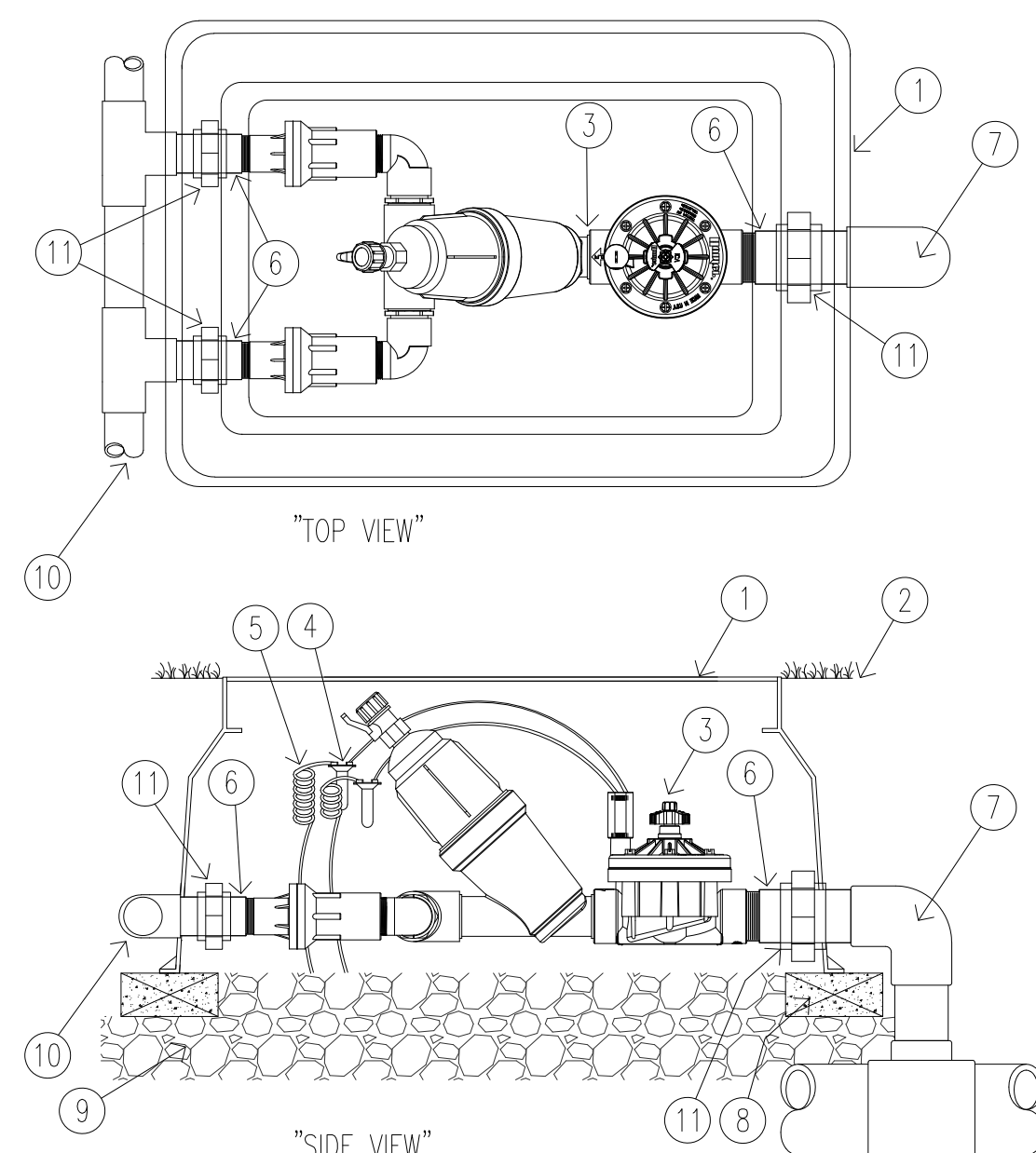
**09** TREE ROOT ZONE WATERING  
NOT TO SCALE SECTION



**10** SPRAY HEAD AT LAWN  
NOT TO SCALE SECTION



**11** SUB SURFACE DRIP LINE  
NOT TO SCALE PLAN



**12** DRIP CONTROL ZONE KIT  
NOT TO SCALE PLAN

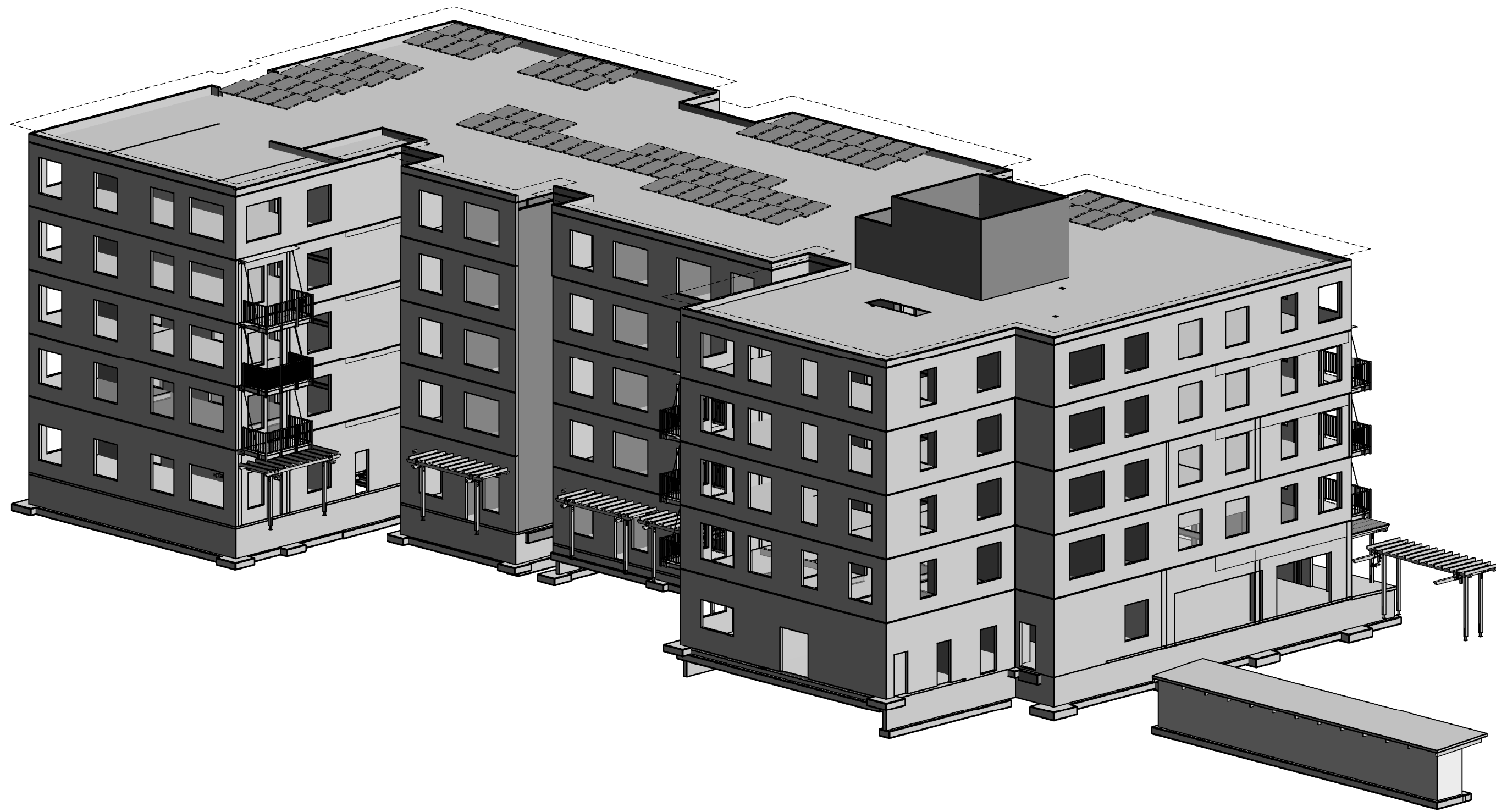
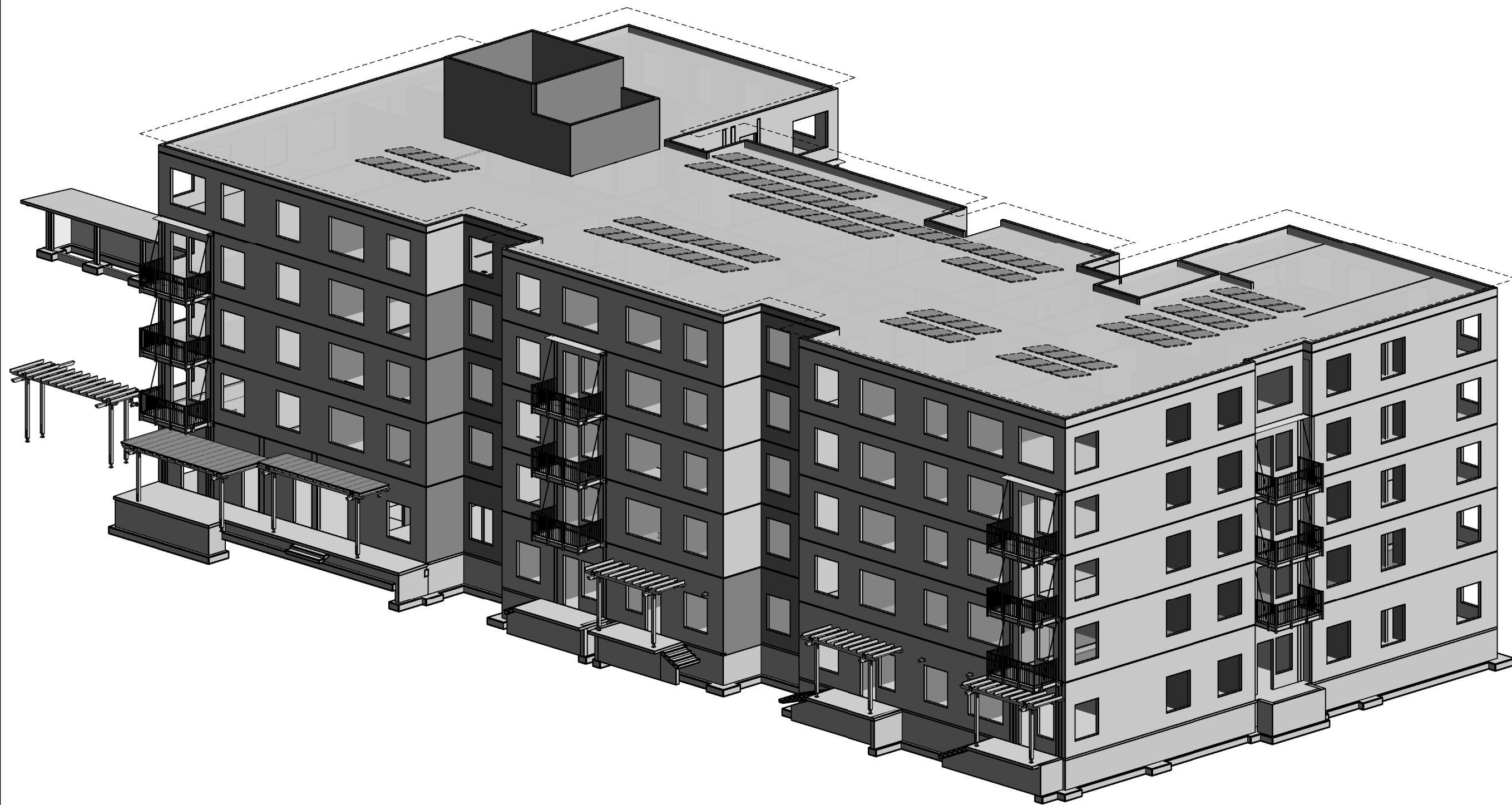
REVISION	DATE	REASON FOR ISSUE

IRRIGATION DETAILS

GMP/PERMIT

DATE 010/09/2018	PROJECT NUMBER 149000
SHEET NUMBER	





DRAWING INDEX		ISSUE LOG			
		Schematic Design	Design Development	50% Permit GMP Progress	Permit GMP Set
S0.01	DRAWING INDEX AND LIST OF ABBREVIATIONS	X	X	X	X
S1.10	GENERAL STRUCTURAL NOTES	X	X	X	X
S1.11	GENERAL STRUCTURAL NOTES CONT.	X	X	X	X
S1.12	SPECIAL INSPECTION PROGRAM	X	X	X	X
S1.13	LOADING DIAGRAMS	-	-	X	X
S2.01	GROUND FLOOR/ FOUNDATION PLAN	X	X	X	X
S2.02	SECOND FLOOR FRAMING PLAN	X	X	X	X
S2.03	THIRD THRU FIFTH FLOOR FRAMING PLAN	X	X	X	X
S2.06	ROOF PLAN	X	X	X	X
S5.01	CONCRETE DETAILS	X	X	X	X
S5.02	CONCRETE DETAILS	X	X	X	X
S6.01	WOOD DETAILS	X	X	X	X
S6.02	WOOD DETAILS	X	X	X	X
S6.03	WOOD DETAILS	X	X	X	X
S6.04	WOOD DETAILS	X	X	X	X
S6.05	WOOD DETAILS	X	X	X	X
S6.06	WOOD DETAILS	X	X	X	X
S6.07	WOOD DETAILS	X	X	X	X
S6.10	STAIR PARTIAL PLANS	-	X	X	X
S6.15	TYPICAL STAIR DETAILS	X	X	X	X
S8.01	BALCONY PLAN AND DETAILS	-	-	X	X
S9.01	SITE STRUCTURES	-	-	X	X
ISSUE LOG KEY: ' X ' ISSUED AS PART OF A SET ' - ' NOT A PART OF ISSUED SET ' * ' FOR INFORMATION ONLY		DATE	09/30/2017	06/08/2018	08/22/2018 10/09/2018

LIST OF ABBREVIATIONS

A.B.	ANCHOR BOLT	LVF	LOW VELOCITY FASTENER
ACI	AMERICAN CONCRETE INSTITUTE	MAX.	MAXIMUM
ADDL.	ADDITIONAL	MBMA	METAL BUILDING MANUFACTURERS ASSOCIATION
AESS	ARCHITECTURAL EXPOSED STRUCTURAL STEEL	MECH.	MECHANICAL
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION INCORPORATED	MFR.	MANUFACTURER
ALT.	ALTERNATE	MIN.	MINIMUM
ALUM.	ALUMINUM	MISC.	MISCELLANEOUS
ADR	ARCHITECT OF RECORD	MPH	MILES PER HOUR
ARCH.	ARCHITECT	MT	MAGNETIC PARTICLE TESTING
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS	(N)	NEW
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	N.I.C.	NOT IN CONTRACT
AWS	AMERICAN WELDING SOCIETY	NOM.	NOMINAL
BLDG.	BUILDING	NO.	NUMBER
BOT.	BOTTOM	N.T.S.	NOT TO SCALE
BRBF	BUCKLING RESTRAINED BRACED FRAME	OC	ON CENTER
C.G.	CENTER OF GRAVITY	O.D.	OUTSIDE DIAMETER
C.I.P.	CAST IN PLACE	OPP.	OPPOSITE
C.J.	CONTROL JOINT	OWJ	OPEN WEB JOIST
C.J.P.	COMPLETE JOINT PENETRATION	PAF	POWDER ACTUATED FASTENER
CL	CENTERLINE	PART.	PARTITION
CLR.	CLEAR	PVC	PRECAST
CMU	CONCRETE MASONRY UNIT	PCF	POUNDS PER CUBIC FOOT
COL.	COLUMN	PERIM.	PERIMETER
CONC.	CONCRETE	PL	PLATE
CONN.	CONNECTION	PP	PARTIAL PENETRATION
CONST.	CONSTRUCTION	PSF	POUNDS PER SQUARE FOOT
CONT.	CONTINUOUS	PSI	POUNDS PER SQUARE INCH
db	BAR DIAMETER	P/T	POST-TENSIONED
DBA	DEFORMED BAR ANCHOR	P.T.	PRESSURE TREATED
DET.	DETAIL	PVC	POLYVINYL CHLORIDE
DIA., Ø	DIAMETER	R, RAD.	RADIUS
DIAG.	DIAGONAL	RCSC	RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS
D.L.	DEAD LOAD	REF.	REFERENCE
DWG.	DRAWING	RET.	RETURN
ELEC.	ELECTRICAL	REINF.	REINFORCING
EL.	ELEVATION	REQD.	REQUIRED
EOR	ENGINEER OF RECORD	REQMTS.	REQUIREMENTS
EQ.	EQUAL	SCHED.	SCHEDULE
EXIST., (E)	EXISTING	S.C.	SLIP CRITICAL
EXP.	EXPANSION	SM.	SIMILAR
EXT.	EXTERIOR	SLRS	SEISMIC LOAD RESISTING SYSTEM
FDN.	FOUNDATION	S.O.G.	SLAB ON GRADE
FIN.	FINISH	SPEC.	SPECIFICATION
FLR.	FLOOR	SQ.	SQUARE
FT.	FOOT	SS	STAINLESS STEEL
FTG.	FOOTING	SSMA	STEEL STUD MANUFACTURERS ASSOCIATION
GA.	GAUGE	STD.	STANDARD
GALV.	GALVANIZED	STRUCT.	STRUCTURAL
GL	GLULAM	SYM.	SYMMETRICAL
HORIZ.	HORIZONTAL	THRU	THROUGH
HSS	HOLLOW STRUCTURAL STEEL	T & G	TONGUE AND GROOVE
IBC	INTERNATIONAL BUILDING CODE	TRANS.	TRANSVERSE
ICBO	INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS	TJ	TRUSS JOIST
I.D.	INSIDE DIAMETER	TS	LIGHT GAUGE TUBE STEEL
IN.	INCH	TYP.	TYPICAL
INT.	INTERIOR	U.N.O.	UNLESS NOTED OTHERWISE
K	KIPS	U.T.	ULTRASONIC TESTING
KSF	KIPS PER SQUARE FOOT	VERT.	VERTICAL
KSI	KIPS PER SQUARE INCH	V.I.F.	VERIFY IN FIELD
LB.	POUND	w/	WITH
L.L.	LIVE LOAD	WF	WIDE FLANGE
LLH	LONG LEG HORIZONTAL	w/o	WITHOUT
LLV	LONG LEG VERTICAL	W.P.	WORK POINT
LOC.	LOCATION	WPS	WELDING PROCEDURE SPECIFICATION
LONG.	LONGITUDINAL	WWF	WELDED WIRE FABRIC

STRUCTURAL  
REGISTERED PROFESSIONAL  
ENGINEER  
00048  
OREGON  
ANAKROM MOISAN  
J. TAYLOR  
EXPIRES: 12/31/19

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38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100  
1506 5TH AVE. SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600  
1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063  
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V

LLC

VALAR

VALAR CONSULTING ENGINEERING  
12042 SE SUNNYSIDE ROAD #357  
CLACKAMAS, OREGON 97015

NORTH WILLIAMS APARTMENTS - FAMILY HOUSING

2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

DRAWING INDEX  
AND LIST OF  
ABBREVIATIONS

PERMIT/GMP SET

DATE  
10/09/2018

PROJECT NUMBER  
17058

SHEET NUMBER  
S0.01



GENERAL STRUCTURAL NOTES

GR- GENERAL REQUIREMENTS

GR-1) AS USED IN THESE GENERAL NOTES, "DRAWINGS" MEANS THE LATEST STRUCTURAL DESIGN DRAWINGS, UNO. "SPECIFICATIONS" MEANS THE LATEST PROJECT SPECIFICATIONS, UNO. "CONTRACT DOCUMENTS" IS DEFINED AS THE DESIGN DRAWINGS AND THE SPECIFICATIONS "SER" BEING ISSUED AS THE STRUCTURAL ENGINEER OF RECORD FOR THE STRUCTURE IN ITS FINAL CONDITION. "DESIGN PROFESSIONALS" IS DEFINED AS THE OWNER'S ARCHITECT AND SER. "MEP" INCLUDES, BUT IS NOT LIMITED TO MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION. "CONTRACTOR" IS DEFINED TO INCLUDE ANY OF THE FOLLOWING: GENERAL CONTRACTOR AND THEIR SUBCONTRACTORS, CONSTRUCTION MANAGER AND THEIR SUBCONTRACTORS, STRUCTURAL STEEL FABRICATOR OR STRUCTURAL STEEL ERECTOR. "BASE BUILDING STRUCTURE" IS DEFINED AS THE STRUCTURAL FRAME.

\*STRUCTURE IN ITS FINAL CONDITION\* MEANS ALL STRUCTURAL ELEMENTS SHOWN ON THE STRUCTURAL CONTRACT DOCUMENTS ARE INSTALLED AND COMPLETELY CONNECTED AND INSPECTED WITH NO OUTSTANDING NON-COMPLIANCE ISSUES.

GR-2) THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF THE STRUCTURAL WORK WITH THE ARCHITECTURAL, CIVIL, MEP CONTRACT DOCUMENTS, AS WELL AS ANY OTHER APPLICABLE TRADES.

GR-3) THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE UNTIL THE CONSTRUCTION OF THE STRUCTURE REACHES ITS FINAL CONDITION.

GR-4) THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN, INSTALLATION, AND REMOVAL OF TEMPORARY BRACING AND CONSTRUCTION SUPPORTS, FOR NEW AND EXISTING STRUCTURES, AS NECESSARY TO COMPLETE THE PROJECT. NO PORTION OF THE PROJECT WHILE UNDER CONSTRUCTION IS INTENDED TO BE STABLE IN THE ABSENCE OF THE CONTRACTOR'S TEMPORARY SUPPORTS AND BRACES. CONTRACTOR SHALL RETAIN A STRUCTURAL ENGINEER LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED TO DESIGN TEMPORARY BRACING AND CONSTRUCTION SUPPORTS.

GR-5) LATERAL LOAD RESISTANCE AND STABILITY OF THE STRUCTURE IN ITS FINAL CONDITION IS PROVIDED BY BRACED WALL PANELS AND CONCRETE SHEARWALLS AND LATERAL STABILITY OF OTHER ELEMENTS IS PROVIDED THROUGH FLOOR.

GR-6) THE SPECIFICATIONS ARE AN INTEGRAL PART OF THE CONTRACT DOCUMENTS AND SHALL BE USED IN CONJUNCTION WITH THE STRUCTURAL DRAWINGS.

GR-7) THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS AND COORDINATE WITH THE STRUCTURAL DRAWINGS, ARCHITECTURAL DRAWINGS, DRAWINGS FROM OTHER CONSULTANTS, PROJECT SHOP DRAWINGS AND FIELD CONDITIONS.

GR-8) IN CASES OF CONFLICT BETWEEN DRAWINGS AND/OR SPECIFICATIONS AND OTHER DISCIPLINES OR EXISTING CONDITIONS, CONTRACTOR SHALL NOTIFY THE DESIGN PROFESSIONALS AND OBTAIN CLARIFICATION PRIOR TO BIDDING AND PROCEEDING WITH WORK.

GR-9) APPLY DETAILS, SECTIONS, AND NOTES ON THE DRAWINGS WHERE CONDITIONS ARE SIMILAR TO THOSE INDICATED BY DETAIL, DETAIL TITLE OR NOTE.

GR-10) ONLY USE DIMENSIONS INDICATED ON THE DRAWINGS. DO NOT SCALE DRAWINGS.

GR-11) ASSUME EQUAL SPACING BETWEEN ESTABLISHED DIMENSIONS, IF NOT INDICATED ON DRAWINGS.

GR-12) CENTERLINES OF COLUMNS AND FOUNDATIONS COINCIDE WITH GRID LINE INTERSECTIONS, UNO.

GR-13) CENTERLINES OF GRADE BEAMS AND WALLS COINCIDE WITH CENTERLINES OF FOUNDATIONS, UNO.

GR-14) CENTERLINES OF FRAMING MEMBERS COINCIDE WITH COLUMN CENTERLINES, UNO.

GR-15) THE CONTRACTOR SHALL PROTECT EXISTING FACILITIES, STRUCTURES AND UTILITIES FROM DAMAGE.

GR-16) THE CONTRACTOR SHALL VERIFY THAT CONSTRUCTION LOADS DO NOT EXCEED THE CAPACITY OF THE STRUCTURE AT THE TIME THE LOAD IS APPLIED.

GR-17) THE CONTRACTOR SHALL COORDINATE THE BOTTOM OF BASE PLATE ELEVATIONS WITH THE AS-BUILT TOP OF SUPPORT ELEVATIONS.

GR-18) THE CONTRACTOR SHALL VERIFY ALL OPENING SIZES AND LOCATIONS WITH OTHER DISCIPLINES. THE DRAWINGS DO NOT SHOW ALL OPENINGS REQUIRED. ADDITIONAL OPENINGS, BLOCK OUTS AND SLEEVES MAY BE REQUIRED BY OTHER DISCIPLINES AND SHALL BE CONSTRUCTED USING THE TYPICAL DETAILS AND/OR THE CRITERIA INDICATED ON THE DRAWINGS. OPENINGS REQUIRED BUT NOT SHOWN ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER.

GR-19) ELEVATIONS INDICATED ON STRUCTURAL DRAWINGS ARE BASED ON A PROJECT DATUM INDICATED ON THE ARCHITECTURAL DRAWINGS.

EC- EXISTING CONSTRUCTIONS

EC-1) WORK SHOWN IS NEW

CD- CODES AND DESIGN CRITERIA

CD-1) PERFORM ALL CONSTRUCTION IN CONFORMANCE WITH THE BUILDING AND DESIGN CODES REFERENCED WITHIN THESE DOCUMENTS. THE PROJECT DOCUMENTS REFER TO THE FOLLOWING CODES AND STANDARDS, UNO:

2014 OREGON STRUCTURAL SPECIALTY CODE MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, ASCE 7-10 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE ACI-318-11

CD-2) OCCUPANCY CATEGORY: II

CD-3) LOADING CRITERIA PER LOADING DIAGRAMS ON S1.13

CD-4) WIND LOAD DESIGN DATA:

MAIN WIND FORCE RESISTING SYSTEM	
BASIC WIND SPEED,	V= 120 MPH
EXPOSURE	B
WIND IMPORTANCE FACTOR (Iw)	1.0
BUILDING CATEGORY	II
CD-5) SEISMIC LOAD DESIGN DATA:	
SEISMIC IMPORTANCE FACTOR (Ib):	
Ss	1.0
S1	0.974 (SITE SPECIFIC)
SDS	0.418 (SITE SPECIFIC)
SD1	0.721
SDI	0.441
SITE CLASS	D
SEISMIC DESIGN CATEGORY	D
LATERAL SYSTEM DESCRIPTION	LIGHT FRAME WOOD BRACED WALL PANELS
RESPONSE MODIFICATION FACTOR (R)	
ANALYSIS PROCEDURE DESCRIPTION	6 1/2
EQUIVALENT LATERAL FORCE PER ASCE7-10	
SEISMIC RESPONSE COEFFICIENT (Cs)	
REDUNDANCY FACTOR (q)	0.10
	1.0
DESIGN BASE SHEAR (V) (ULTIMATE)	
BASE TOTAL	330K

CD-6) IN CASES WHERE THE CONTRACTOR DETERMINES THAT SUSPENDED OR FLOOR MOUNTED MEP EQUIPMENT LOADS EXIST WHICH EXCEED DESIGN LOADS INDICATED ON CONTRACT DOCUMENTS, CONTRACTOR SHALL SUBMIT LOAD DATA TO DESIGN PROFESSIONALS FOR REVIEW PRIOR TO PROCEEDING WITH WORK.

CD-7) DISTRIBUTE THE MAXIMUM LOAD HUNG FROM ANY STRUCTURAL MEMBER FOR MEP DUCTWORK, PIPING ETC OVER THE MEMBER'S TRIBUTARY AREA IN A WAY THAT THE DESIGN SUPERIMPOSED DEAD LOADS LISTED IN CONTRACT DOCUMENTS ARE NOT EXCEEDED. THE CONTRACTOR SHALL COORDINATE THE LOADS OF ALL TRADES AND PROVIDE ADDITIONAL SUPPORT OR DISTRIBUTION FRAMING AS REQUIRED TO ACHIEVE THE ALLOWABLE LOAD DISTRIBUTION.

CD-8) ELEVATOR GUIDE RAIL, SUPPORTS, MACHINE ROOMS, PITs, AND PENTHOUSES ARE BASED ON ELEVATOR TYPES INDICATED ON ARCHITECTURAL CONTRACT DOCUMENTS. CONTRACTOR SHALL SUBMIT FOR REVIEW ANY PLANNED CHANGE TO ELEVATORS TO DESIGN PROFESSIONALS PRIOR TO SUBMITTING CORRESPONDING STRUCTURAL SHOP DRAWINGS FOR ACTION.

CD-9) STRUCTURAL COMPONENTS ARE NOT DESIGNED FOR VIBRATING EQUIPMENT. MOUNT VIBRATING EQUIPMENT ON VIBRATION ISOLATORS.

CD-10) SERVICEABILITY LIVE LOAD DEFLECTION IS LESS THAN L/360 LONG-TERM TOTAL DEFLECTION IS LESS THAN L/360 EXTERIOR DECK EDGES HAVE BEEN DESIGNED TO LIMIT LIVE LOAD MID SPAN VERTICAL DEFLECTION TO L/480 OF THE SPAN OR 1/2", WHICHEVER IS LESS. LATERAL DRIFT DUE TO WIND LOADS IS LESS THAN OR EQUAL TO H/600 LATERAL STORY DRIFT DUE TO SEISMIC LOADS IS LESS THAN OR EQUAL TO 0.020IN.

DESIGN ELASTIC STORY DRIFT		
	E/W (IN)	N/S (IN)
LEVEL 5	1.25"	1.25"
LEVEL 4	1.25"	1.25"
LEVEL 3	1.50"	1.50"
LEVEL 2	1.50"	1.50"
GROUND	1.75"	1.75"

CD-11) CONNECTIONS OF SYSTEMS DESIGNED BY CONTRACTOR'S ENGINEER SUCH AS, BUT NOT LIMITED TO, CLADDING, ELEVATORS, AND MEP LOADS ARE ASSUMED TO IMPOSE VERTICAL AND/OR HORIZONTAL LOADS ON THE BASE BUILDING STRUCTURAL MEMBERS WITHOUT GENERATING TORSION IN THE SUPPORTING STRUCTURAL MEMBERS. CONTRACTOR IS RESPONSIBLE FOR FURNISHING AND INSTALLING ALL SUPPLEMENTARY BRACING MEMBERS AS REQUIRED TO PREVENT TORSION ON THE BASE BUILDING STRUCTURE.

SEISMIC LOAD RESISTING SYSTEM

THE SEISMIC LOAD RESISTING SYSTEM (SLSR) FOR THE COMPLETED STRUCTURE IS AS FOLLOWS: WOOD FRAMED DIAPHRAGMS AT EACH LEVEL, CONSISTING OF PLYWOOD SHEATHING OVER WOOD JOISTS SPANNING TO CONVENTIONAL WOOD FRAMED SHEAR WALL AS LOCATED ON PLAN. SHEAR WALLS COMPRISED OF PLYWOOD SHEATHING FASTENED TO STUDS AND TIED TO THE FOUNDATIONS WITH ANCHOR BOLTS AND CONTINUOUS HOLD DOWN ASSEMBLIES.

REFER TO THE GENERAL STRUCTURAL NOTES AND PROJECT SPECIFICATIONS FOR DETAILING, INSTALLATION, TESTING AND INSPECTION REQUIREMENTS FOR MEMBERS THAT ARE PART OF THE SEISMIC LOAD RESISTING SYSTEM (SLSR).

DESIGN AND DETAILING WAS BASED ON CRITERIA FOR SEISMIC DESIGN CATEGORY D.

FN- FOUNDATIONS

FN-1) THE FOUNDATION DESIGN IS BASED ON THE GEOTECHNICAL INVESTIGATION REPORT BY GEODESIGN IN THE REPORT DATED DECEMBER 13,2017

FN-2) FOUNDATIONS: SPREAD FOOTINGS: 3000 PSF TYPICAL

FOOTINGS SHALL BE ESTABLISHED ON UNDISTURBED NATIVE SOIL. STRUCTURAL FILL OR GRANULAR PADs UNDERLAIN BY FIRM, UNDISTURBED NATIVE SOIL AS REQUIRED BY GEOTECHNICAL ENGINEER.

SEE GEOTECHNICAL REPORT FOR ADDITIONAL REQUIREMENTS AND INFORMATION. DESIGN VALUES SHALL BE FIELD VERIFIED BY QUALIFIED GEOTECHNICAL CONSULTANT RETAINED BY THE OWNER.

FN-3) THE CONTRACTOR SHALL VERIFY FOUNDATION INSTALLATION AND CONSTRUCTION IS IN CONFORMANCE WITH THE RECOMMENDATIONS OUTLINED IN THE GEOTECHNICAL REPORT.

FN-4) CONTRACTOR SHALL BE RESPONSIBLE TO ADEQUATELY PROTECT ALL EXCAVATION, WHERE NECESSARY, SHEET AND SHORE THE EXCAVATION BY CONTRACTOR'S STRUCTURAL ENGINEER.

FN-5) PROVIDE BRACING FOR ALL ELEVATOR WALLS PRIOR TO BACKFILLING.

FN-6) DO NOT BACKFILL AGAINST CANTILEVER RETAINING WALLS UNTIL THE CONCRETE HAS ATTAINED 100 PERCENT OF ITS DESIGN STRENGTH.

FN-7) SEE GEOTECHNICAL REPORT FOR REQUIREMENTS DURING WET WEATHER.

FN-8) ALL SLABS ON GRADE SHALL BE PLACED ON 6" OF COMPACTED BASE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.

CM- CONCRETE

CM-1) CONCRETE STRENGTHS AND WEIGHT:

CONCRETE WORK SHALL CONFORM TO CHAPTER 19 OF THE OSGC. CONCRETE STRENGTHS SHALL BE VERIFIED BY STANDARD 28-DAY CYLINDER TESTS PER ASTM C39 AND SHALL BE AS FOLLOWS:

CONCRETE STRENGTHS			
f <sub>c</sub> (PSI)	ABSOLUTE WATER-CEMENT RATIO BY WEIGHT		USE
	NON-AIR-ENTRAINED	AIR-ENTRAINED	
4,000 CURBS	.50	.45	SLAB ON GRADE, FOOTINGS, STEM WALLS, AND USES UNLESS NOTED OTHERWISE

VERIFY WATER/CEMENT RATIO WITH FLOOR C<sub>0</sub>CONCRETE CONTENTYRER FOR CONCRETE FLOORS WITH MOISTURE SENSITIVE FLOOR COVERINGS

MINIMUM CEMENT CONTENT PER CUBIC YARD SHALL BE AS FOLLOWS:

f <sub>c</sub> (PSI)	MINIMUM CEMENT PER CUBIC YARD
4,000	500 LBS.

CM-2) ALL CONCRETE SHALL BE THOROUGHLY CONSOLIDATED.

CM-3) THE USE OF CALCIUM CHLORIDE AND OTHER CHLORIDE CONTAINING AGENTS IS PROHIBITED. THE USE OF RECYCLED CONCRETE IS PROHIBITED. PLACEMENT WITHIN AND CONTACT BETWEEN ALUMINUM ITEMS, INCLUDING ALUMINUM CONTAIN, AND CONCRETE IS PROHIBITED.

CM-4) ALL CAST-IN-PLACE CONCRETE WILL EXPERIENCE DIFFERING VARIATIONS OF CRACKING. ANY ELEMENT EXPOSED TO DIRECT WEATHER AND/OR TEMPERATURE VARIATIONS DURING CONSTRUCTION OR IN THE FINAL CONDITION IS TO BE TREATED AND REGULARLY MAINTAINED TO PREVENT PROPAGATION OF CRACKS AND WATER PENETRATION. THE CONTRACTOR SHALL DEVELOP A REGULAR MAINTENANCE PROGRAM AND SUBMIT IT TO THE OWNER.

CM-5) VERIFY WATER/CEMENT RATIO WITH FLOOR COVERING MANUFACTURER FOR CONCRETE FLOORS WITH MOISTURE SENSITIVE FLOOR COVERINGS.

CM-6) THE CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGNS ALONG WITH TEST DATA COMPLIANT WITH OSGC SECTION 1905 A MINIMUM OF TWO WEEKS PRIOR TO PLACING CONCRETE. NO WATER MAY BE ADDED TO CONCRETE IN THE FIELD UNLESS SPECIFICALLY APPROVED IN WRITING BY THE CONCRETE SUPPLIER IN CONJUNCTION WITH THE CONCRETE MIX DESIGN.

CM-7) A WATER-REDUCING ADMIXTURE CONFORMING TO ASTM C494 USED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS SHALL BE INCORPORATED IN CONCRETE DESIGN MIXES. A HIGH-RANGE WATER-REDUCING (HRWR) ADMIXTURE CONFORMING TO ASTM C494 TYPE F OR G MAY BE USED IN CONCRETE MIXES PROVIDING THAT THE SLUMP DOES NOT EXCEED 10". SLEEVES, OPENINGS, CONDUITS AND OTHER EMBEDDED ITEMS NOT SHOWN ON THE STRUCTURAL DRAWING SHALL BE APPROVED BY THE STRUCTURAL ENGINEER BEFORE PLACING CONCRETE.CONDUITS EMBEDDED IN SLABS SHALL NOT BE LARGER IN OUTSIDE DIMENSION THAN ONE THIRD THICKNESS OF THE SLAB AND SHALL NOT BE SPACED CLOSER THREE DIAMETERS ON CENTER.

CM-8) WHERE NEW CONCRETE IS PLACED AGAINST EXISTING CONCRETE, THE EXISTING CONCRETE SURFACE CHAMFERS ON ALL EXPOSED SHALL BE CLEANED AND ROUGHENED TO A MINIMUM 1/4" AMPLITUDE.

CM-9) PROVIDE 3/4" CHAMFER AT CONCRETE COLUMN EDGES, UNLESS NOTED OTHERWISE.

CM-10) VERIFY ALL BLOCKOUTS WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING REQUIREMENTS.

CM-11) AN AIR-ENTRAINING AGENT CONFORMING TO ASTM C260 SHALL BE USED IN CONCRETE MIXES FOR EXTERIOR HORIZONTAL SURFACES EXPOSED TO WEATHER. THE AMOUNT OF ENTRAINED AIR SHALL BE 6% + 1% BY VOLUME

RE - CONCRETE REINFORCEMENT

RE-1) ALL CONCRETE SHALL INCLUDE REINFORCEMENT. IF REINFORCEMENT IS NOT SPECIFICALLY INDICATED ON THE DRAWINGS, VERIFY WITH THE STRUCTURAL ENGINEER BEFORE PROCEEDING WITH WORK. BARS IN BEAMS AND SLABS SHALL BE SUPPORTED ON WELL-CURED CONCRETE BLOCKS OR APPROVED METAL CHAIRS, AS SPECIFIED BY THE CRS MANUAL OF STANDARD PRACTICE. MSP-1. REINFORCING STEEL SHALL BE DETAILD IN ACCORDANCE WITH THE ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES. ACI 315. SHOP DRAWINGS DRAWINGS SHALL INCLUDE ELEVATIONS OF ALL BEAMS, WALLS, AND COLUMNS SHOWING BAR LOCATIONS. LAP ALL REINFORCING BARS PER THE TYPICAL LAP SPLICE LENGTH SCHEDULES, EXCEPT AS NOTED ON DRAWINGS. USE LAP LENGTH FOR SMALLER BAR WHEN SPACING DIFFERENT BAR SIZES. MECHANICAL SPLICES NOTED ON THE PLANS SHALL BE DAYTON SUPERIOR BAR-LOCK (ICC ESR-2465) OR TAPER LOCK COUPLERS (ICC ESR-2451), OR APPROVED WITH A COURTESY (ICC APPROVAL REPORT.)

RE-2) REINFORCEMENT SHALL CONFORM TO THE FOLLOWING STANDARDS AND MATERIAL PROPERTIES: DEFORMED BARS: ASTM A615, GRADE 60, UNO WELDABLE DEFORMED BARS: ASTM A706, GRADE 60, UNO WELDED WIRE REINFORCEMENT: ASTM A185 WELDED BAR ANCHORS: NELSON D2L DEFORMED BAR ANCHORS (ICC-ES REPORT E8-5217)

RE-3) DETAIL REINFORCEMENT BASED ON THE PROJECT REQUIREMENTS, ACI-318 AND ACI-315, UNO.

RE-4) WHERE A 90-DEG, 135 -DEG OR 180-DEG HOOK IS GRAPHICALLY INDICATED, PROVIDE CORRESPONDING ACI STANDARD HOOKS PER 1/5S.1, UNO.

RE-5) DOWELS SHALL MATCH SIZE AND SPACING OF MAIN REINFORCEMENT, UNO.

RE-6) REINFORCEMENT SHALL HAVE CONCRETE PROTECTION (CLEAR COVER) PER ACI 318 UNLESS OTHERWISE INDICATED ON THE DRAWINGS.

LOCATION	COVER
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3"
CONCRETE EXPOSED TO EARTH OR WEATHER	
NO 5 BARS OR SMALLER	1 1/2"
NO 6 BARS AND LARGER	2"
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT W/ GROUND SLABS, WALLS, JOISTS	
NO 11 BARS OR SMALLER	3/4"
BEAMS AND COLUMNS	1 1/2"

RE-7) LAP REINFORCEMENT AS SPECIFICALLY DETAILED ON THE DRAWINGS. SEE REBAR OFFSET AND LAP SPLICE SCHEDULE BELOW

TYPICAL SPLICE LENGTH SCHEDULE (IN.)		
BAR SIZE	4000 P.S.I.	
	CASE 1	CASE 2
#3	18	16
#4	20	18
#5	28	24
#6	37	28
#7	60	40
#8	74	46
#9	90	57

NOTES:

- CASE 1 APPLIES TO BAR WITH CLEAR COVER < 1 1/2"  
CASE 2 APPLIES TO BAR WITH CLEAR COVER ≥ 1 1/2"
- FOR CENTER TO CENTER SPACING LESS THAN 4db MULTIPLY LAP LENGTHS ABOVE BY 1.3.
- FOR TOP BARS CAST ABOVE 12" OF CONCRETE MULTIPLY LAP LENGTHS ABOVE BY 1.3.

RE-8) CONCRETE REINFORCING DETAIL:

CONTINUE HORIZONTAL WALL BARS THROUGH PILASTERS, COLUMNS AND INTERSECTING WALLS. AT SLAB AND WALL OPENINGS PROVIDE A MINIMUM OF TWO 5 BARS OVER, UNDER AND AT THE SIDES OF THE OPENINGS. EXTEND THESE BARS LAP DISTANCE OR A MINIMUM OF 2-4" PAST THE OPENING. PROVIDE ONE #5 FOR SINGLE-LAYER REINFORCING AND TWO #5 FOR DOUBLE-LAYER REINFORCING. 2-4" LONG, DIAGONALLY AT EACH CORNER OF ALL OPENINGS. REFER TO TYPICAL DETAILS FOR DISPOSITION OF CORNER BARS AND BARS IN SMALL WALL SECTIONS. SLAB BARS SHALL BE HOOKED INTO WALLS, OR HOOKED DOWELS SHALL BE PROVIDED TO MATCH SLAB REINFORCING. PROVIDE TWO #4, 4-0" LONG DIAGONALLY AT EACH RE-ENTRANT CORNER IN SLABS. PROVIDE HOOKED DOWELS FROM FOOTINGS TO MATCH VERTICAL WALL REINFORCING.

RE-9) CONCRETE ACCESSORIES:

HEADED SHEAR STUDS SHALL BE NELSON HEADED ANCHORS WITH FLUXED ENDS (ICC ESR-2856) OR APPROVED. DEFORMED BAR ANCHORS (D.B.A.) SHALL BE NELSON, TYPE D2L (ICC ESR-2907), OR APPROVED. STUDS AND D.B.A. SHALL BE AUTOMATICALLY END-WELDED WITH THE MANUFACTURER'S STANDARD EQUIPMENT IN ACCORDANCE WITH THEIR RECOMMENDATIONS.

APPROVED POST INSTALLED ANCHORS		
ANCHORS	TYPE	ALTERNATE
EXPANSION	HLTI KWIK-BOLT T2 (ICC ESR- 1917)	OTHER MFR ACCEPTABLE w/ E.O.R. APPROVAL
CONCRETE SCREW	HLTI KWIK-HUS -E2 (ICC ESR-3027)	OTHER MFR ACCEPTABLE w/ EOR APPROVAL
EPOXY ADHESIVE	HLTI HI -R5 500 SD/ICC ESR-2322)	OTHER MFR ACCEPTABLE w/ EOR APPROVAL

ALL ANCHORS SHALL BE INSTALLED IN STRICT CONFORMANCE WITH MANUFACTURER'S RECOMMENDATIONS. DO NOT CUT REINFORCING IN NEW OR EXISTING CONCRETE DURING INSTALLATION. ANCHORS EXPOSED TO EARTH OR WEATHER SHALL BE PROTECTED FROM CORROSION BY HOT-DIP GALVANIZING OR USE OF STAINLESS STEEL.

RE-10) PERMANENTLY EXPOSED EMBEDDED PLATES AND ANGLES SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION, UNLESS OTHERWISE NOTED. NO LOADS OR WELDS SHALL BE PLACED ON EMBEDDED PLATES OR ANGLES FOR A MINIMUM OF 7 DAYS AFTER CASTING.

RE-11) PROVIDE LAP LOCATIONS AS FOLLOWS, UNO:

- GRADE BEAM / WALL (TOP HORIZONTAL REINFORCEMENT): AT CENTER OF SPAN
- GRADE BEAM / WALL (BOTTOM HORIZONTAL REINFORCEMENT): AT SUPPORTS
- WALL INSIDE FACE (VERTICAL REINFORCEMENT): AT SUPPORT
- WALL OUTSIDE FACE (VERTICAL REINFORCEMENT): AT MID HEIGHT OF WALL
- UNLESS OTHERWISE NOTED TERMINATE BARS AT DISCONTINUOUS ENDS WITH STANDARD HOOKS.

RE-12) TERMINATION OF REINFORCEMENT, UNO:

- TERMINATE ALL BARS IN LAPS, 90 DEGREE BENDS, OR WITH DOWELS INTO EXISTING CONCRETE.
- BEND TOP MAT OR FOOTING BARS DOWN TO BOTTOM BARS AT ENDS.
- BEND BOTTOM MAT OR FOOTING BARS UP WITH STANDARD 90 DEGREE BENDS.
- PROVIDE DOWELS FROM FOOTINGS AND SLABS INTO WALLS AND COLUMNS TO MATCH SIZE AND SPACING OF VERTICAL REINFORCEMENT.

CJ - CONCRETE CONSTRUCTION JOINTS

CJ-1) PROVIDE CONSTRUCTION JOINTS IN ACCORDANCE WITH ACI-318. SUBMIT SHOP DRAWINGS SHOWING PROPOSED CONSTRUCTION JOINT LOCATIONS, DETAILS AND THE PLACEMENT SEQUENCE FOR THE STRUCTURAL ENGINEER'S APPROVAL PRIOR TO PROCEEDING WITH WORK.

CJ-2) NO HORIZONTAL CONSTRUCTION JOINTS WILL BE PERMITTED IN BEAMS, UPRIGHTEN BEAMS, WALLS AND SLABS UNLESS SPECIFICALLY SHOWN ON THE DRAWINGS OR APPROVED IN WRITING BY THE DESIGN PROFESSIONALS PRIOR TO CONSTRUCTION.

CJ-3) PLACE VERTICAL CONSTRUCTION JOINTS IN WALLS TO PROVIDE A [40 FT] MAXIMUM LENGTH OF CONCRETE PLACEMENT AND LOCATE AS FOLLOWS:

- FOUNDATION WALLS: MINIMUM OF 18 FT) FROM ANY COLUMN LINE OR WALL OPENING
- GRADE BEAMS SUPPORTING FOUNDATION WALLS: AT CENTERLINES BETWEEN SUPPORTS

CJ-4) PROVIDE CONTINUOUS WATERSTOPPS AT ALL CONSTRUCTION JOINTS EXPOSED TO SOIL OR WATER, AS DESCRIBED IN THE SPECIFICATIONS.

M - MASONRY

M-1) REINFORCED CONCRETE MASONRY: CONCRETE MASONRY UNITS SHALL COMPLY WITH ASTM C90, SAMPLED AND TESTED IN ACCORDANCE W/ASTM C140. LINEAL SHRINKAGE FOR UNITS SHALL NOT EXCEED 0.065%. BLOCK COMPRESSIVE SHALL BE AS INDICATED IN BELOW TABLE. ASSEMBLIES SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (F<sub>m</sub>) AS INDICATED IN BELOW TABLE AS VERIFIED BY THE UNIT STRENGTH METHOD CONFORMING TO OSGC SECTION 2105. WALLS SHALL BE REINFORCED AS SHOWN THE PLANS AND DETAILS AND, IF NOT SHOWN, SHALL BE AS NOTED UNDER "MASONRY REINFORCING STEEL". PROVIDE VERTICAL EXPANSION JOINTS IN CONTINUOUS MASONRY SUCH THAT THE DISTANCE BETWEEN JOINTS DOES NOT EXCEED THE LESSER OF A HEIGHT-TO-HEIGHT RATIO OF 1.5 OR 25 FT. REF. ARCHITECTURAL DRAWINGS FOR LOCATIONS.

CONCRETE MASONRY ASSEMBLY STRENGTH			
f <sub>m</sub> (PSI)	BLOCK UNIT STRENGTH (PSI)	GROUT STRENGTH (PSI)	MORTAR
1,500	1,900	2,000	TYPE M OR S

M-2) MORTAR: MORTAR SHALL BE THE TYPE INDICATED IN THE PRECEDING TABLE, WITH A MINIMUM COMPRESSIVE AT 28 DAYS OF 1,800 PSI AND SHALL CONFORM TO OSGC SECTION 2013.

M-3) MASONRY GROUT: GROUT SHALL HAVE COMPRESSIVE STRENGTH AS NOKATED IN THE PRECEDING TABLE AND CONFORM TO OSGC SECTION 2013. GROUT SHALL CONSIST OF A MIXTURE OF CEMENTITIOUS MATERIALS AND AGGREGATE TO WHICH SUFFICIENT WATER HAS BEEN ADDED TO CAUSE THE MIXTURE TO FLOW WITHOUT SEGREGATION OF THE CONSTITUENTS. ALL CELLS CONTAINING VERTICAL BARS AND ALL BOND BEAMS SHALL BE FILLED WITH GROUT. FULLY GROUT WALLS BELOW GRADE WHERE INDICATED. MAXIMUM GROUT POUR HEIGHT SHALL BE 3'-0". CLEAN-OUTS ARE REQUIRED FOR ANY POUR HEIGHT GREATER THAN 5'-0". WHERE REQUIRED, CLEAN-OUTS LOCATED AT ALL CORES CONTAINING VERTICAL REINFORCEMENT AND AT A MAX. OF 3'-0" OG GROUT LIFTS GREATER THAN 5'-0" ARE LIMITED IN HEIGHT TO THE BOTTOM OF THE LOWEST BOND BEAM THAT IS MORE THAN 5'-0" ABOVE THE BOTTOM OF THE LIFT. PROVIDED THAT: 1) THE MASONRY HAS CURED FOR AT LEAST 4 HOURS; AND 2) THE GROUT SLUMP IS MAINTAINED BETWEEN 10 AND 11 INCHES, IF EITHER OF THESE 2 CONDITIONS ARE NOT MET, THEN THE MAX. LIFT HEIGHT SHALL BE 5'-0". REF. TYPICAL MASONRY DETAILS.

M-4) MASONRY REINFORCING STEEL: REINFORCING SHALL CONFORM TO OSGC SECTION 2013.13. DEFORMED BARS SHALL BE ASTM A615 GRADE 60, AND SHALL BE SECURELY PLACED IN ACCORDANCE WITH A01.530.1-68 SPECIFICATION SECTION 5.4. WELDED REINFORCEMENT SHALL CONFORM TO ASTM A706 GRADE 60, UNO. NOTED OTHERWISE ON THE PLANS. MIN. WALL REINFORCEMENT SHALL BE AS FOLLOWS:

RUNNING BOND PATTERN		
WALL THICKNESS	VERTICAL BARS	HORIZONTAL BARS (IN BOND BEAMS)
8"	#5@24"OC	(2) #5@32"OC

NOTES: BOND BEAMS WITH (2) #5 BARS HORIZONTALLY SHALL BE PROVIDED AT ALL FLOOR AND ROOF LINES AND AT THE TOP OF WALLS. STEP BOND BEAMS ARE REQUIRED TO MATCH ROOF SLOPES. PROVIDE A BOND BEAM WITH (2) #5 BARS HORIZONTALLY ABOVE AND BELOW ALL OPENINGS, AND EXTEND THESE BARS 2'-0" PAST THE OPENING AT EACH SIDE. PROVIDE (1) BAR, MATCHING VERTICAL BAR SIZE, FOR THE FULL HEIGHT OF WALL FOR EACH SIDE OF OPENINGS. WALL ENDS AND INTERSECTIONS: DOWELS TO MASONRY WALLS SHALL BE EMBEDDED A MIN. OF 1'-0" OR HOOKED INTO THE SUPPORTING STRUCTURE AND BE OF THE SAME SIZE AND SPACING AS WALL REINFORCING. PROVIDE CORNER BARS TO MATCH HORIZONTAL WALL REINFORCING AT WALL INTERSECTIONS. LAP ALL REINFORCING BARS AS FOLLOWS UNLESS NOTED OTHERWISE ON DRAWINGS:

TYPICAL LAP SPLICE LENGTH SCHEDULE (IN.)	
BAR	f <sub>m</sub> =1,500 PSI
#3	18
#4	24
#5	30

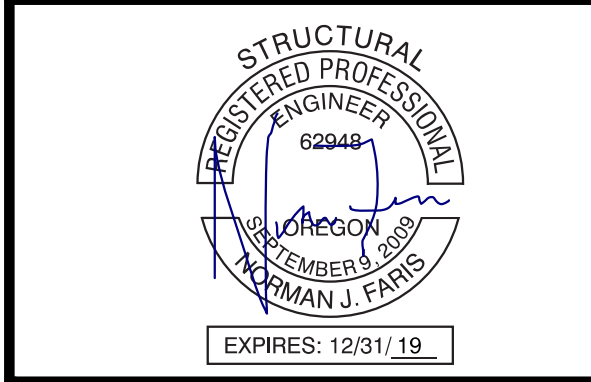
NOTES:

- FOR CENTER TO CENTER SPACING LESS THAN 5db, MULTIPLY LAP LENGTHS BY 5db AND DIVIDE BY THE SPACING BETWEEN BARS.
- FOR MASONRY CLEAR COVER LESS THAN 5db, MULTIPLY LAP LENGTHS BY 5db AND DIVIDE BY THE CLEAR COVER.
- NOTES 1 AND 2 SHALL NOT BE CONCURRENT. USE THE LARGER RESULTING LAP LENGTH OF THE TWO WHEN BOTH CONDITIONS OCCUR.

REINFORCING STEEL COVER		
USE	COVER	COVER
MASONRY FACE NOT EXPOSED TO EARTH OR WEATHER		1-1/2"
MASONRY FACE EXPOSED TO EARTH OR WEATHER	1-1/2" (#5 AND SMALLER)	2" (#6 AND LARGER)

M-6) MASONRY ACCESSORIES: ALL ANCHORS SHALL BE INSTALLED IN STRICT CONFORMANCE WITH MANUFACTURER'S RECOMMENDATIONS. REINFORCING IN NEW OR EXISTING MASONRY SHALL NOT BE CUT DURING INSTALLATION. ALL ANCHORS EXPOSED TO EARTH OR WEATHER SHALL BE PROTECTED FROM CORROSION BY HOT-DIP GALVANIZING OR USE STAINLESS STEEL.

MASONRY ANCHORS		
ANCHORS	TYPE	ALTERNATIVE
EXPANSION	HLTI KWIK-BOLT T3 (ICC ESR-1385)	OTHER MFR. ACCEPTABLE w/ E.O.R. APPROVAL
ADHESIVE	HLTI HT-HY 150 MAX (ICC ESR-1967)	OTHER MFR. ACCEPTABLE w/ E.O.R. APPROVAL





GENERAL STRUCTURAL NOTES CONT.

GL - GLUED LAMINATED MEMBERS:

GL-1) GLUED LAMINATED MEMBERS SHALL BE FABRICATED IN CONFORMANCE WITH ANSI STANDARD A190.1, AMERICAN NATIONAL STANDARD FOR STRUCTURAL GLUED LAMINATED TIMBER, OR OTHER CODE-APPROVED DESIGN, MANUFACTURING AND OR QUALITY ASSURANCE PROCEDURES. EACH MEMBER SHALL BEAR AN AITC APA-ENG IDENTIFICATION MARK OR BE ACCOMPANIED BY A CERTIFICATE OF CONFORMANCE. ONE COAT OF END SEALER SHALL BE APPLIED IMMEDIATELY AFTER TRIMMING IN EITHER SHOP OR FIELD. BEAMS SHALL BE WESTERN SPECIES INDUSTRIAL (HIDDEN), OR ARCHITECTURAL (EXPOSED) APPEARANCE CLASSIFICATION, AND OF THE STRENGTH INDICATED BELOW:

GLUED LAMINATED MEMBERS				
COMBINATION SYMBOL (SPECIES)	USE	FLEXURAL STRESS, Fb(Psi)	MODULUS OF ELASTICITY (Psi)	HORIZONTAL SHEAR STRESS, Fv (Psi)
24F-V4 (DFDF)	SIMPLE	2,400	1,800,000	240
24F-V8 (DFDF)	CONT. OR CANT.	2,400	1,800,000	240
L2D	COLUMN	2,000	1,900,000	295
30F-E2	BALCONY POSTS	3,000	2,100,000	300

GL-2) GLULAM HANGERS NOT SHOWN SHALL BE SIMPSON GLT OR AS APPROVED BY SER.

GL-3) ADHESIVE SHALL BE WET-USE EXTERIOR WATERPROOF GLUE.

GL-4) FIELD NOTCHING AND BORING OF BEAMS NOT ALLOWED UNLESS APPROVED BY SER.

SL - SAWN LUMBER:

SL-1) SAWN LUMBER SHALL CONFORM TO WEST COAST LUMBER INSPECTION BUREAU OR WESTERN WOOD PRODUCTS ASSOCIATION GRADING RULES. LUMBER SHALL BE KILN DRIED AND BE THE SPECIES AND GRADE NOTED BELOW:

SAWN LUMBER		
USE	SPECIES / GRADE	Fb (PSI) (BASE VALUE)
DWILL LUMBER 2" TO 4" THICK	DOUGLAS FIR - LARCH No.2	300
BEAMS 5"x8" AND GREATER	DOUGLAS FIR - LARCH No.1	1350
POST	DOUGLAS FIR - LARCH No.21	1200
1&6 DECKING	DOUGLAS FIR - LARCH SELECT DEK	1750

SL-2) ALL LUMBER IN CONTACT WITH CONCRETE OR CMU SHALL BE PRESSURE TREATED, UNLESS AN APPROVED MOISTURE BARRIER IS PROVIDED. FRAMING ACCESSORIES AND STRUCTURAL FASTENERS SHALL BE MANUFACTURED BY SIMPSON STRONG TIE (OR APPROVED EQUAL) AND OF THE SIZE AND TYPE SHOWN ON THE DRAWINGS. ALL NAIL HOLES SHALL BE FILLED WITH STRUCTURAL FASTENERS, UNLESS NOTED OTHERWISE ON THE DRAWINGS AND FASTENERS SHALL BE INSTALLED FOLLOWING ALL MANUFACTURERS REQUIREMENTS. IF A SUBSTITUTION IS MADE, A DOCUMENT SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL OUTLINING THE FRAMING ACCESSORIES BEING REPLACED AND THE SUBSTITUTED FRAMING ACCESSORIES. ALLOWABLE LOADS FOR THE SIMPSON ACCESSORIES SHALL BE TABULATED ALONG WITH ALLOWABLE LOADS FOR THE SUBSTITUTED ACCESSORIES, WHICH CLEARLY INDICATE THE SUBSTITUTED ACCESSORIES HAVING AN EQUAL OR GREATER CAPACITY. HANGERS NOT SHOWN SHALL BE SIMPSON U-TYPE OR B-TYPE OF SIZE RECOMMENDED FOR THE MEMBER.

SL-3) ALL FRAMING NAILS SHALL BE OF THE SIZE AND NUMBER INDICATED ON THE DRAWINGS AND CONFORM TO ASTM F 1667, "STANDARD SPECIFICATION OF DRIVEN FASTENERS: NAILS, SPIKES, AND STAPLES AND NER-272 "POWER-DRIVEN STAPLES AND NAILS FOR USE IN ALL TYPES OF BUILDING CONSTRUCTION". NAILS SHALL BE IDENTIFIED BY LABELS (ATTACHED TO THEIR CONTAINERS) THAT SHOW THE MANUFACTURERS NAME AND NES REPORT NUMBER, NAIL SHANK DIAMETER, AND LENGTH AND SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO FRAMING. NAILING NOT SHOWN SHALL BE AS INDICATED ON DSSC TABLE 2304.9.1 OR NER-272. THE FOLLOWING NAIL SIZES SHALL BE USED:

FRAMING NAILS		
NAIL TYPE	SHANK DIAMETER (IN.)	MIN. PENETRATION INTO FRAMING MEMBER (IN.)
6d	0.113	1.25
8d	0.131	1.5
10d	0.148	1.625
12d	0.148	1.625
14d	0.148	1.625

SL-4) BOLTS AND LAG SCREWS SHALL CONFORM TO ANSASMSE STANDARD B18.2.1-1981. ALL BOLTS AND LAG SCREWS SHALL BE INSTALLED WITH STANDARD CUT WASHERS. ALL A307 BOLTS SHALL HAVE CUT THREADS.

SL-5) CUTTING AND NOTCHING OF JOISTS AND STUDS SHALL CONFORM TO DSSC SECTIONS 2308.8.2, 2308.9.10 AND 2308.10.4.2.

SL-6) NAILS USED IN FLOOR SHEATHING SHALL BE RING SHANK

SL-7) FASTENERS IN PRESSURE TREATED LUMBER SHALL BE GALVANIZED OR STAINLESS STEEL AND COMPATABLE w/ MEMBER TREATMENT.

EL - ENGINEERED COMPOSITE LUMBER:

EL-1) ENGINEERED COMPOSITE WOOD PRODUCTS SUCH AS LAMINATED VENEER LUMBER (MICROLAM), PARALLEL STRAND LUMBER (PARALLAM), AND LAMINATED STRAND LUMBER (TIMBERSTRAND) SHALL BE OF THE SIZE AND TYPE SHOWN ON THE DRAWINGS. MANUFACTURED BY TRUS-JOIST OR AN APPROVED EQUAL. MEMBERS SHALL HAVE THE FOLLOWING MINIMUM DESIGN PROPERTIES:

ENGINEERED COMPOSITE LUMBER		
COMPOSITE LUMBER TYPE	MODULUS OF ELASTICITY (PSI)	STRESS
PSL	2,000,000	2,300
LVL	1,900,000	2,600
LSL	1,500,000	2,350

FLEXURAL STRESS NOTED ABOVE ARE FOR A 12-INCH MEMBER. DEEPER MEMBERS SHALL BE DESIGNED FOR REDUCED STRESSES PER THE MANUFACTURERS REQUIREMENTS.

PWJ - PREMANUFACTURED WOOD JOISTS:

PWJ-1) DESIGN OF THE PREMANUFACTURED JOIST SYSTEM SHALL BE THE CONTRACTORS RESPONSIBILITY. PREMANUFACTURED WOOD JOISTS SHALL BE OF THE SIZE AND TYPE SHOWN ON THE DRAWINGS. MANUFACTURED BY RED BUILT, OR AN APPROVED EQUAL, CONFORMING TO APA EWS STANDARD PPI-400, PERFORMANCE STANDARD FOR APA EWS JOISTS. ALTERNATES WILL BE CONSIDERED, PROVIDED THE ALTERNATE IS ICC APPROVED, IS COMPATIBLE WITH THE LOAD CAPACITY, DIMENSIONAL, AND FIRE RATING REQUIREMENTS OF THE PROJECT, AND HAS LVL FLANGES. PROVIDE BRIDGING IN CONFORMANCE WITH THE MANUFACTURERS RECOMMENDATIONS. ROOF JOISTS AND BRIDGING SHALL BE CAPABLE OF RESISTING THE WIND UPLIFT BELOW, UNLESS NOTED OTHERWISE ON THE DRAWINGS. THE JOIST MANUFACTURER SHALL VISIT THE JOB SITE AS REQUIRED TO VERIFY THE PROPER INSTALLATION IN WRITING, TO THE ARCHITECT. JOISTS SHALL BE DESIGNED FOR THE LOADS SPECIFIED BELOW AND THE SNOWPLOT AS SHOWN ON SHEET ST13. DESIGN SHALL ALSO CONFORM TO THE FOLLOWING MINIMUM DEFLECTION CRITERIA: L/800 (FLOOR LIVE LOAD), L/360 (FLOOR DEAD LOAD PLUS LIVE LOAD AND ROOF LIVE LOAD), AND L/240 (ROOF DEAD LOAD PLUS LIVE LOAD.)\* IN ADDITION TO SELF WEIGHT AND ADDITIONAL LOADS INDICATED ON THE PLANS, THE PREMANUFACTURED WOOD JOIST SYSTEM SHALL BE DESIGNED TO RESIST THE FOLLOWING MINIMUM LOADS:

PREMANUFACTURED WOOD JOISTS	
FLOOR DEAD LOAD	32 PSF
FLOOR LIVE LOAD	40 PSF
ROOF DEAD LOAD	22 PSF
ROOF LIVE LOAD	25 PSF
NET WIND UPLIFT	16 PSF

WSP - WOOD STRUCTURAL PANELS:

WSP-1) WOOD STRUCTURAL PANELS SHALL CONFORM TO THE REQUIREMENTS OF "U.S. PRODUCT STANDARD PS 1 FOR CONSTRUCTION AND INDUSTRIAL PLYWOOD", "U.S. PRODUCT STANDARD PS 2 PERFORMANCE STANDARD FOR WOOD-BASED STRUCTURAL-USE PANELS", OR "APA PRP-108 PERFORMANCE STANDARDS". UNLESS NOTED, PANELS SHALL BE APA RATED SHEATHING, EXPOSURE 1, OF THE THICKNESS AND SPAN RATING SHOWN ON THE DRAWINGS. OSB SHALL NOT BE USED FOR ANY EXTERIOR WALL, ROOF OR FLOOR SHEATHING.

WSP-2) WOOD STRUCTURAL PANEL INSTALLATION SHALL BE IN CONFORMANCE WITH APA RECOMMENDATIONS. ALLOW 1/8" SPACING AT PANEL ENDS AND EDGES, UNLESS OTHERWISE RECOMMENDED BY THE PANEL MANUFACTURER.

WSP-3) ALL ROOF SHEATHING AND SUB-FLOORING SHALL BE INSTALLED WITH FACE GRAIN PERPENDICULAR TO SUPPORTS, EXCEPT AS INDICATED ON THE DRAWINGS. SHEATHING SHALL BE BLOCKED. WHEN SHEATHING IS NAILED DIRECTLY TO BLOCKING, THE BLOCKING SHALL BE NAILED TO SUPPORT MEMBERS WITH A MINIMUM OF 16d NAILS AT 4' OC. SUB-FLOORING SHEATHING SHALL BE BLOCKED, EXCEPT AS INDICATED ON DRAWINGS. SUB-FLOOR PANELS SHALL BE FIELD GLUED TO THE FRAMING USING ADHESIVES MEETING APA SPECIFICATION AF6-01 OR ASTM D3489. TONGUE AND GROOVE PANELS SHALL ALSO BE GLUED AT THE T&G JOINT. SHEAR WALL SHEATHING SHALL BE INSTALLED EITHER HORIZONTALLY OR VERTICALLY AND BE BLOCKED WITH 2x FRAMING AT ALL PANEL EDGES. NAILING NOT SHOWN SHALL BE AS INDICATED ON DSSC TABLE 2304.9.1. ALL NAILS SHALL BE COMMON NAILS EXCEPT USE RING SHANK AT FLOOR AND ROOF.

WSP-4) SHEAR WALL SHEATHING TO BE PLYWOOD OR PANELS (OSB NOT ALLOWED) CONFORMING TO THE REQUIREMENTS FOR ITS TYPE. SPIRED IN DOC P51 OR PS2. SHEATHING SHALL BE APPLIED EIGHTER HORIZONTALLY OR VERTICALLY. SHEETS SIZE SHALL BE 4x8 UNLESS BOUNDARIES OR FRAMING CHANGES.

WPS-5) NAIL HEADS SHALL BE DRIVEN FLUSH WITH SHEATHING. DO NOT PENETRATE SURFACE PLY WITH NAIL HEADS. ALL UNDRIVEN NAILS SHALL BE SET FLUSH. OVERDRIVEN NAILS WILL BE REJECTED AND MUST BE REPLACED WITH FLUSH SET NAILS.

WPS-6) ALL SHEAR WALL PANEL SHEATHING EDGES SHALL BE BLOCKED. EDGE NAILS SHALL BE AT LEAST 3/8" FROM EDGES AND ENDS OF PANELS. STAGGER NAILING ON EDGES.

2" DFL CAR DECKING:

TG-1) TONGUE-AND- GROOVE DECK SHALL BE RANDOM LENGTH. LAID WITH WELL SCATTERED JOINTS. THE DISTANCE BETWEEN END JOINTS IN ADJACENT COURSES SHALL BE AT LEAST 2 FEET. JOINTS WITHIN 6 INCHES OF BEING IN LINE SHALL BE SEPARATED BY AT LEAST TWO INTERVENING COURSES. WHEN AN END JOINT OCCURS IN THE END BAY, THE NEXT PIECE IN THE SAME COURSE SHALL CONTINUE OVER THE FIRST INNER SUPPORT FOR AT LEAST 2 FEET. EACH BOARD SHALL BEAR ON AT LEAST ONE SUPPORT.

TG-2) DECKING SHALL BE INSTALLED WITH TONGUES UP ON SLOPED OR PITCHED ROOFS AND WITH PATTERN FACES DOWN. EACH PIECE SHALL BE TOE NAILED THROUGH THE TONGUE AT EACH SUPPORT WITH ONE 16d COMMON NAIL AND FACE NAILED AT EACH SUPPORT WITH ONE 16d COMMON NAIL. COURSES SHALL BE TOE NAILED TO EACH OTHER WITH 8d COMMON NAILS AT INTERVALS NOT EXCEEDING 30 INCHES AND WITH ONE NAIL AT A DISTANCE NOT EXCEEDING 12 INCHES FROM EACH END OF EACH PIECE.

3" AND 4" DFL CAR DECKING:

TG-3) TONGUE-AND-GROOVE DECK SHALL NOT HAVE JOINTS.

TG-4) DECKING SHALL BE CONTINUOUS AND INSTALLED WITH TONGUES UP AND PATTERN FACES DOWN. EACH PIECE SHALL BE TOE NAILED THRU THE TONGUE AT EACH SUPPORT WITH ONE 16d NAIL AND FACE NAILED AT EACH SUPPORT WITH ONE 8d COMMON NAIL. COURSES SHALL BE SPIKED TO EACH OTHER WITH 8" SPIKES AT INTERVALS NOT EXCEEDING 30 INCHES THRU PER-DRILLED EDGE HOLES AND ONE SPIKE AT A DISTANCE NOT EXCEEDING 10 INCHES FROM END TO EACH PIECE.

SS STRUCTURAL STEEL

SS-1) STEEL MATERIALS:

**SHAPE**  
WIDE FLANGES AND WTS  
MISC. PLATES  
CONTINUITY PLATES  
ANGLES AND CHANNELS  
RECTANGULAR HSS (TUBES)  
ROUND HSS  
BOLTS  
ANCHOR RODS  
THREADED RODS  
WELDING ELECTRODES REOMTS.  
WELDED STUDS

ASTM A992, GRADE 50  
ASTM A36  
ASTM A992, GRADE 50  
ASTM A36  
ASTM A500, GRADE B  
ASTM A500, GRADE B  
ASTM A325 N UNO  
ASTM F1554 Fy=36ksi UNO  
ASTM A36 F1554 Fy=36ksi  
E70, SEE SPECIFICATIONS FOR DYN  
ASTM A106 HEADED STUDS, TYPE D2L  
OR S2L BY NELSON OR EQUAL

SS-2) STRUCTURAL STEEL MEMBERS AND CONNECTIONS DENOTED "SLRS" SHALL SATISFY REQUIREMENTS FOR THE SEISMIC LOAD RESISTING SYSTEM IN SPECIFICATION SECTION 05 12 10.

SS-2) STRUCTURAL STEEL MEMBERS AND CONNECTIONS DENOTED "SLRS" SHALL SATISFY REQUIREMENTS FOR THE SEISMIC LOAD RESISTING SYSTEM IN SPECIFICATION SECTION 05 12 10.

SS-4) SPLICES SHALL BE ALLOWED ONLY AT LOCATIONS SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS UNLESS APPROVED OTHERWISE BY THE SER IN WRITING.

SS-5) FOR STEEL MEMBERS AND EMBEDMENTS EXPOSED TO WEATHER, PROVIDE HOT-DIPPED GALVANIZED FINISH

SS-6) PROVIDE HOLES IN ALL STEEL AS REQUIRED TO PREVENT ANY ACCUMULATION OF WATER. ALL PENETRATIONS THROUGH MAIN MEMBERS SHALL NOT EXCEED 1 1/8" AND SHALL BE GROUND SMOOTH. THESE DRAINS MUST BE KEPT CLEAN AND OPEN.

SS-7) SHOW ALL COPIES, HOLES, OPENINGS AND MODIFICATIONS REQUIRED IN STRUCTURAL STEEL MEMBERS FOR ERECTION OR THE WORK OF OTHER TRADES ON THE SHOP DRAWINGS FOR APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER.

SS-8) FIELD MODIFICATION OF STRUCTURAL STEEL IS PROHIBITED WITHOUT PRIOR APPROVAL OF THE ARCHITECT AND STRUCTURAL ENGINEER.

SS-9) THE CONTRACTOR SHALL SUBMIT A STEEL ERECTION PROCEDURE, PREPARED UNDER THE SUPERVISION OF A STRUCTURAL ENGINEER LICENSED IN THE STATE OF THE LOCATION OF THE PROJECT (THE CONTRACTORS ENGINEER FOR REVIEW BY THE STRUCTURAL ENGINEER OF RECORD, THIS PROCEDURE MUST INCLUDE THE PROPOSED SURVEY REQUIRED BY THE STEEL SPECIFICATIONS.

SS-10) PROVIDE WEEP HOLES AT ALL EXTERIOR CLOSED SECTIONS TO PREVENT MOISTURE.

SC STRUCTURAL STEEL CONNECTORS

SC-1) ALL WELDING SHALL CONFORM TO THE REQUIREMENTS OF THE STRUCTURAL WELDING CODE, ANSIAWS D1.1, LATEST EDITION. ALL WELD SIZES SHALL BE THE LARGER OF THE SIZE SHOWN, THE MINIMUM SIZE PER ANSIAWS D1.1, OR 3/16 INCH MINIMUM FILLET WELD UNO. ANY WELD SIZES SHOWN ON THE DESIGN DRAWINGS ARE CONSIDERED EFFECTIVE WELD SIZES AND SHALL BE INCREASED IN ACCORDANCE WITH AWS AS REQUIRED BY GAPS OR SKEWS BETWEEN COMPONENTS.

SC-2) WELDING EXPOSED TO LOW (OUTDOOR) TEMPERATURES IN SERVICE SHALL CONFORM TO AWS D1.5.

SC-3) WELDS SHALL BE MADE USING E70XX ELECTRODES, UNLESS NOTED OTHERWISE.

SC-4) WELDING SHALL BE BY AWS CERTIFIED WELDERS MEETING THE CITY OF PORTLAND STANDARDS.

RP - RIGID POLYSTYRENE

EPS GEOFOAM USED IN OVER-FRAMING APPLICATIONS SHALL CONFORM TO ASTM D6817 WITH THE FOLLOWING PROPERTIES:

AT TYPICAL FLOOR AREAS, USE GEOFOAM TYPE EPS19 WITH A MINIMUM COMPRESSIVE RESISTANCE OF 5.8 PSI AS 1% DEFORMATION.

AT LOADING DOCKS, SIDEWALKS AND OTHER HEAVILY LOADED AREAS, USE GEOFOAM TYPE EPS29 WITH A MINIMUM COMPRESSIVE RESISTANCE OF 10.9 PSI AT 1% DEFORMATION.

CONTINUOUS SHEARWALL TIE DOWN SYSTEM:

CT-1) CONTINUOUS THREADED ROD HOLDOWN SYSTEM SHALL BE A CONTINUOUS THREADED STEEL ROD SYSTEM WITH SCREW-TYPE TAKE-UP DEVICES, BEARING PLATES AND ISOLATOR NUTS AT EACH FLOOR.

CT-2) CONTINUOUS THREADED ROD HOLDOWN SHALL OCCUR AT EACH END OF SHEAR WALL AS NOTED.

CT-3) CONTINUOUS THREADED ROD HOLDOWN SYSTEM SHALL BE INSTALLED PER MANUFACTURER SPECIFICATIONS.

CT-4) SEE CONTINUOUS THREADED ROD HOLDOWN SCHEDULE, DETAILS 286-11/56.06 FOR TYPICAL CONTINUOUS THREADED ROD HOLDOWN INSTALLATION REQUIREMENTS.

CT-5) EMBEDDED BOLTS SHALL BE LOCATED IN THE FORMS AND TIED SUFFICIENTLY TO PREVENT DISPLACEMENT DURING CONCRETE PLACEMENT. DO NOT HAND SET OR WET SET.

(5) EMBEDDED BOLTS SHALL NOT BE IN CONTACT W/ PRESERVATIVE TREATED (P.T.) WOOD. P.T. WOOD PLS SHALL HAVE OVERSIZED HOLES 1/4" MIN 3/8" MAX, LARGER THAN BOLT SIZE. AS AN ALTERNATIVE, THE ANCHOR MAY BE SLEEVED WITH AN INSULATOR BUSHING OR GALVANIZED IN ACCORDANCE W/ ASTM A653.

CT-7) THE HOLDOWN SYSTEM SHALL HAVE A CURRENT INTERNATIONAL INSPECTION COUNCIL ICC-ES EVALUATION REPORT COMPLIANT WITH THE CURRENT BUILDING CODE & ICC-ES ACCEPTANCE CRITERIA AC308.

CT-8) THE DEFLECTION OF THE OVERTURNING ANCHORAGE (INCLUDING ROD ELONGATION, BEARING PL CRUSHING, BEARING PL BENDING, DEVICE ELONGATION, ETC) SHALL NOT EXCEED 0.20 INCHES PER FLOOR.

CT-9) THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ARCHITECT AND ENGINEER OF RECORD (EOR) INCLUDING THE FOLLOWING INFORMATION:

- CONTINUOUS THREADED ROD MATERIAL TYPE.
- CONTINUOUS THREADED ROD SIZE.
- CONTINUOUS THREADED ROD LENGTH.
- CONTINUOUS THREADED ROD EMBEDMENT INTO FOOTING.
- CONTINUOUS THREADED ROD PROJECTION FOR HOLDOWN TYPE (INCLUDING SUFFICIENT PROJECTION AND THREADS TO ALLOW FOR A MINIMUM OF 2" FIELD TOLERANCE)
- DIMENSIONED CONTINUOUS THREADED ROD LAYOUT DRAWINGS SHOWING LOCATION OF ALL HOLDOWN BOLTS.
- DIMENSIONED CONTINUOUS THREADED ROD LAYOUT DRAWINGS SHOWING LOCATION, SIZE, TYPE, AND QUANTITY OF HOLDOWN POST OR BUILT-UP MEMBER.
- CONTINUOUS THREADED ROD HOLDOWN TYPE.
- ALL ACCESSORIES (INCLUDING PLATE WASHERS, DOUBLE NUTS, COUPLING TAKE-UP DEVICES, BEARING PLATES, ISOLATOR NUTS, ETC.) AND LOCATIONS OF SUCH.

FIRE DESIGN REQUIREMENTS OF WOOD MEMBERS

THE PRIMARY GRAVITY SUPPORT SYSTEM FOR THE STRUCTURE SHALL MEET A 2 HOUR FIRE RATING, AND THEREFORE ALL EXPOSED FRAMING, WITHOUT COMBINED GYPSUM COVERING HAS BEEN CONSIDERED FOR AN EFFECTIVE CHAR RATING OF 1.58 IN/HR, AND TOTAL FIRE ENDURANCE OF 2 HOURS. DEL CAR DECKING AT THE CORRIDORS HAS BEEN CONSIDERED FOR AN EFFECTIVE CHAR RATING OF 1.80IN/HR, FOR A TOTAL FIRE ENDURANCE OF 1 HOUR. PERMETER FRAMING, STAIRS, ELEVATOR AND RATED MECHANICAL SHAFTS HAVE BEEN DETAILED WITH A FULL DEPTH BLOCKING OR CONTINUOUS RIM HAVING A THICKNESS TO MATCH THE WALL AND DEPTH TO MATCH JOISTS IN LINE WITH THE FLOOR CAVITY. REFERENCE ARCHITECTURAL AND SPECIFICATIONS FOR ALL OTHER REQUIREMENTS NOTE NOTED.

SU SUBMITTALS

SU-1) TWENTY WORKING DAYS PRIOR TO SUBMITTING SHOP DRAWINGS, THE CONTRACTOR SHALL SUBMIT FOR STRUCTURAL ENGINEER'S REVIEW A SCHEDULE WHICH DETAILS THE ESTIMATED QUANTITY OF SHOP DRAWINGS AND THE DATE THE SHOP DRAWINGS WILL BE RECEIVED BY THE STRUCTURAL ENGINEER. THE STRUCTURAL ENGINEER SHALL HAVE THE OPPORTUNITY TO REVIEW THE PROPOSED SCHEDULE AND SUBMIT COMMENTS TO THE CONTRACTOR. THE FINAL SHOP DRAWING SCHEDULE SHALL BE DEVELOPED AND SUBMITTED TO THE STRUCTURAL ENGINEER, IN ACCORDANCE WITH THE SHOP DRAWING SCHEDULE. THE STRUCTURAL ENGINEER WILL RETURN THE SHOP DRAWING ITEMS WITHIN TEN WORKING DAYS AFTER HAVING RECEIVED THE REPRODUCIBLE SHOP DRAWING.

SU-2) THE CONTRACTOR IS TO REVIEW EACH SUBMITTAL PRIOR TO FORWARDING TO ARCHITECT AND STRUCTURAL ENGINEER. THE CONTRACTOR IS TO STAMP EACH SUBMITTAL VERIFYING THAT THE FOLLOWING IS ADDRESSED:

- THE SHOP DRAWING IS REQUESTED.
- THE SHOP DRAWING IS BASED ON THE LATEST DESIGN.
- THE ARCHITECT'S AND STRUCTURAL ENGINEER'S COMMENTS FROM ANY PREVIOUS SUBMITTALS ARE ADDRESSED.
- THE WORK IS COORDINATED AMONG ALL CONSTRUCTION TRADES.
- REVISIONS FROM PREVIOUS SUBMITTALS ARE CLEARLY MARKED BY CIRCLING OR CLOUDS.
- SUBMITTAL IS COMPLETE.
- SUBMITTAL DOES NOT INCLUDE SUBSTITUTION REQUEST
- SUBMITTAL SHALL INCLUDE A STAMP INDICATING PROJECT NAME AND LOCATION, SUBMITTAL NUMBER, SPECIFICATION SECTION NUMBER

THE STRUCTURAL ENGINEER SHALL RETURN, WITHOUT COMMENT, SUBMITTALS WHICH THE CONTRACTOR HAS NOT STAMPED OR WHICH DO NOT MEET THE ABOVE REQUIREMENTS. THE STRUCTURAL ENGINEER'S REVIEW OF SUBMITTALS SHALL BE FOR GENERAL CONFORMANCE WITH THE DESIGN INTENT, NO WORK SHALL BE STARTED WITHOUT SUCH REVIEW.

SU-3) FOR COMPONENTS THAT REQUIRE ENGINEERING BY THE CONTRACTOR, PROVIDE A NOTE ON EACH SHOP DRAWING, WRITTEN AND SIGNED BY THE SUPPLIER'S ENGINEER, INDICATING THAT THE SHOP DRAWING IS IN CONFORMANCE WITH THE CALCULATIONS OF THE CONTRACTOR'S ENGINEER.

SU-4) THE FOLLOWING ITEMS REQUIRE SUBMITTALS FOR STRUCTURAL REVIEW AS OUTLINED IN THE SPECIFICATIONS.

SUBMITTALS:  
SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO FABRICATION AND CONSTRUCTION OF ALL STRUCTURAL ITEMS, INCLUDING THE FOLLOWING:

SUBMITTALS			
ITEMS	SUBMITTAL (1,4)	DEFERRED SUBMITTAL (2,4)	COMMENTS:
CONCRETE MIX DESIGN	X		
CONCRETE REINFORCEMENT	X		
MASONRY REINFORCEMENT	X		
CONCRETE ANCHORAGE	X		
EMBEDDED STEEL ITEMS	X		
STRUCTURAL STEEL	X		
STEEL WELDING PROCEDURES	X	X	
STEEL DECKING	X		(6)
WOOD PRODUCTS, INCLUDING SHEATHING	X		(6)
GLUE LAMINATED MEMBER	X		
PREMANUFACTURED WOOD FLOOR JOISTS	X	X	
PREMANUFACTURED WOOD ROOF JOISTS	X	X	
CONTINUOUS SHEAR WALL TIE DOWN SYSTEM	X	X	REF. S6.06 FOR INFO
CURTAIN WALL WINDOW WALL AND OTHER	X	X	(5)
GLAZING SYSTEMS	X	X	
RAILINGS	X	X	
MEP EQUIPMENT ANCHORAGE AND BRACING	X	X	REF. NOTES
PHOTOVOLTAIC ARRAY	X	X	

FOOTNOTES:

- SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO FABRICATION AND CONSTRUCTION OF STRUCTURAL ITEMS. IF THE SHOP DRAWINGS DIFFER FROM OR ADD TO THE DESIGN OF THE STRUCTURAL DRAWINGS, THEY SHALL BEAR THE SEAL AND SIGNATURE OF A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF OREGON. ANY CHANGES TO THE STRUCTURAL DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT AND ARE SUBJECT TO REVIEW AND ACCEPTANCE OF THE STRUCTURAL ENGINEER.
- DESIGN DRAWINGS, SHOP DRAWINGS, AND CALCULATIONS FOR THE DESIGN AND FABRICATION OF ITEMS THAT ARE DESIGNED BY OTHERS SHALL BEAR THE SEAL AND SIGNATURE OF A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF OREGON, AND SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO FABRICATION. CALCULATIONS SHALL BE INCLUDED FOR ALL CONNECTIONS TO THE STRUCTURE, CONSIDERING LOCALIZED EFFECTS ON STRUCTURAL ELEMENTS INDUCED BY THE CONNECTION LOADS. DESIGN SHALL BE BASED ON THE REQUIREMENTS OF THE DSSC AND AS NOTED UNDER "DESIGN CRITERIA".
- THE CONTRACTOR SHALL COORDINATE SEISMIC RESTRAINTS OF MECHANICAL, PLUMBING, AND ELECTRICAL EQUIPMENT, MACHINERY, AND ASSOCIATED PIPING WITH THE STRUCTURE. CONNECTIONS TO STRUCTURE SHALL CONFORM TO ASCE 7-10 CHAPTER 13, BE DESIGNED BY AN ENGINEER REGISTERED IN THE STATE OF OREGON, AND SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO FABRICATION.
- FIELD ENGINEER DETAILS DEVELOPED BY THE CONTRACTOR THAT DIFFER FROM OR ADD TO THE STRUCTURAL DRAWINGS SHALL BEAR THE SEAL AND SIGNATURE OF A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF OREGON AND SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO CONSTRUCTION.
- MANUFACTURED WINDOWS LESS THAN 6'-0" x 6'-8" OR 40 SQ FT. DO NOT REQUIRE A COMPREHENSIVE DEFERRED SUBMITTAL GIVEN WINDOWS HAVE BEEN APPROVED BY ARCHITECT AND MEET MINIMUM INDUSTRY STANDARDS FOR GIVEN APPLICATION.
- INCLUDE CONVENTIONAL PRODUCTS, ALL ENGINEERED PRODUCTS AND SHEATHING SUBMITTALS SHALL IDENTIFY SPECIES, GRADE, MOISTURE CONTENT AND ALL APPLICABLE CODE REPORTS.

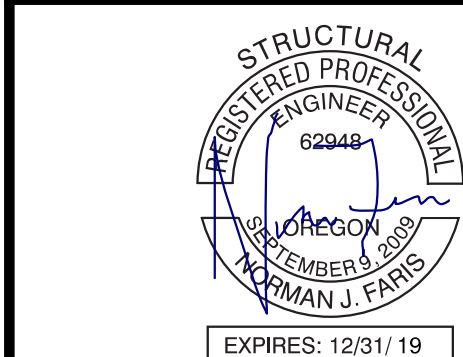
S0 - STRUCTURAL OBSERVATION:

S0-1) THE STRUCTURAL ENGINEER OF RECORD (SER) WILL PERFORM STRUCTURAL OBSERVATION BASED ON THE REQUIREMENTS OF THE DSSC AT THE STAGES OF CONSTRUCTION LISTED BELOW. CONTRACTOR SHALL PROVIDE SUFFICIENT NOTICE AND ACCESS FOR THE SER TO PERFORM THESE OBSERVATIONS.

STRUCTURAL OBSERVATION			
ITEM	OBSERVED BY (2)		COMMENTS
	AOR	SER	
PRIOR TO FOUNDATION POUR	X		
PRIOR TO FIRST CONCRETE POUR		X	REF. NOTES 1.3.4.5
PRIOR TO FIRST CONCRETE S.O.G. POUR	X	X	REF. NOTES 1.3.4.5
DURING ADVANCEMENT OF WOOD FRAMING		X	REF. NOTES 1.3.4
AS NEEDED TO ADDRESS STRUCTURAL ISSUES		X	REF. NOTES 1.3.4

FOOTNOTES:

- CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE SER IN ADVANCE.
- SER-STRUCTURAL ENGINEER OF RECORD, AOR-ARCHITECT OF RECORD.
- A FIELD REPORT WILL BE SUBMITTED TO THE BUILDING DEPARTMENT FOLLOWING EACH SITE VISIT.
- STRUCTURAL OBSERVATION IS FOR THE GENERAL CONFORMANCE OF THE STRUCTURAL DRAWING. SPECIAL INSPECTION IS STILL REQUIRED.
- AFTER REINFORCING STEEL HAS BEEN INSTALLED.



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.575.1600

1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063

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12042 SE SUNNYSIDE ROAD #357  
CLACKAMAS, OREGON 97015

NORTH WILLIAMS APARTMENTS - FAMILY HOUSING

2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

GENERAL  
STRUCTURAL  
NOTES CONT.

PERMIT/GMP SET

DATE 10/09/2018	PROJECT NUMBER 17058
--------------------	-------------------------

SHEET NUMBER

S1.11



TABLE 1 - REQUIRED GEOTECHNICAL SPECIAL INSPECTION					
SYSTEM OR MATERIAL	INSPECTION				REMARKS
	OSSC CODE REFERENCE	CODES OR STANDARDS CONTINUOUS PERIODIC	FREQUENCY (NOTE 5)		
SOILS					
VERIFY MATERIALS BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING BY CAPACITY	1704.07	GEOTECH REPORT		X	BY THE GEOTECHNICAL ENGINEER
VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL				X	
PERFORM CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS				X	
VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF CONTROLLED FILL			X		
PRIOR TO PLACEMENT OF CONTROLLED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY				X	

TABLE 2 - REQUIRED STRUCTURAL SPECIAL INSPECTION					
SYSTEM OR MATERIAL	INSPECTION				
	OSSC CODE REFERENCE	CODES OR STANDARDS	FREQUENCY (NOTE 5) CONTINUOUS	PERIODIC	REMARKS
SHOP FABRICATION					
					WHERE FABRICATION OF STRUCTURAL LOAD-BEARING MEMBERS AND ASSEMBLIES IS BEING PERFORMED ON THE PREMISES OF A FABRICATOR'S SHOP, SPECIAL INSPECTION OF THE FABRICATED ITEMS SHALL BE REQUIRED BY TABLE 2 AND AS REQUIRED ELSEWHERE IN THE SPECIAL INSPECTION PROGRAM. REFERENCE SECTION 1704.2.2 FOR APPROVED FABRICATOR EXCEPTION
SHOP FABRICATION	1704.2		X		
CONCRETE					
REINFORCING STEEL	1704.4 1907.5 1913.4	ACI 318 1.3.2.C ACI 318 3.5 ACI 318 7.1 TO 7.7		X	TOLERANCE AND REINFORCING PLACEMENT PER ACI 7.5
WELDING REINFORCING STEEL	1704.3.1 1903.1	ACI 318 3.5.2 AWS D1.4B SECT. 7			REFER TO STEEL FOR ADDITIONAL WELDING REQUIREMENTS. MATERIAL VERIFICATION OF REINFORCING STEEL FOR WELDING (CERTIFIED MILL TEST REPORTS), VERIFICATION OF WELD FILLER METALS, USE OF PROPER WPSS AND WELDER QUALIFICATIONS.
1. VERIFICATION OF WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A706	1704.4	AWS D1.4 ACI 318 SECT. 3.5.2		X	
3. SHEAR REINFORCEMENT		AWS D1.4	X		
4. OTHER REINFORCING STEEL	1704.4	AWS D1.4 ACI 318 SECT. 3.5.2		X	
PLACEMENT OF CAST-IN-PLACE ANCHOR BOLTS	1704.4	ACI 318 SECT. 1.3.2.C	X		ALL BOLTS VISUALLY INSPECTED
VERIFYING USE OF REQUIRED MIX DESIGN(S)	1704.4 1904, 1905.2-4 1913.2, 1913.3	ACI 318 1.3.2.A ACI 318, CHPT. 4 ACI 318 5.2-5.4		X	
CONCRETE PLACEMENT NON-SHRINK GROUT	1704.4 1905.9-10	ACI 318 SECT. 1.3.2.D ACI 318 5.11-5.13		X	
CONCRETE CURING	1704.4 1905.11-13 1913.9	ACI 318 1.3.2.D ACI 318 5.11-5.13		X	

TABLE 2 - REQUIRED STRUCTURAL SPECIAL INSPECTION CONT.					
SYSTEM OR MATERIAL	INSPECTION				REMARKS
	OSSC CODE REFERENCE	CODES OR STANDARDS REFERENCE	FREQUENCY (NOTE 5)	PERIODIC	
MASONRY					
COMPLIANCE WITH REQ'D INSPECTION PROVISIONS OF THE CONSTRUCTION DOCUMENTS AND THE APPROVED VERIFICATION OF AND PRIOR TO CONSTRUCTION EXCEPT WHERE SPECIFICALLY EXEMPTED BY CODE		TMS 602-1.5		X	
VERIFICATION OF SLUMP FLOW AND VSI AS DELIVERED TO THE SITE FOR SELF-CONSOLIDATING GROUT		TMS 502-1.4B		X	
		TMS 502-1.5B	X		
AS CONSTRUCTION BEGINS, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE:					
A) VERIFICATION OF SITE-PROPORTIONED MORTAR		TMS 602-2.8A		X	
B) LOCATION OF REINFORCEMENT AND CONNECTORS		TMS 602-3.4 3.6a		X	
C) CONSTRUCTION OF MORTAR JOINTS		TMS 602-3.8B		X	
DURING CONSTRUCTION, THE INSPECTION PROGRAM SHALL VERIFY					
A) SIZE AND LOCATION OF STRUCTURAL ELEMENTS		TMS 602-3.3F		X	
B) ANCHORAGE OF MASONRY TO FRAMES, STRUCTURAL MEMBERS AND DIAPHRAGMS		TMS 402-1.16.1 TMS 402-1.12.2(e) TMS 402-2.1.4 TMS 402-3.16		X	
C) SPECIFIED SIZE, GRADE AND TYPE OF REINFORCEMENT, ANCHOR BOLTS, PRESTRESSING TENDONS AND ANCHORAGE		TMS 402-1.15 TMS 602-2.4 TMS 602-3.4		X	
D) WELDING REINFORCING STEEL		TMS 402-2.9.7.2 TMS 402-3.3.3.4			ALL WELDS VISUALLY INSPECTED PER AWS D1.4.7.5 REFER TO STEEL FOR WELDING REQ'TS.
PREPARATION, CONSTRUCTION AND PROTECTION DURING COLD WEATHER (TEMP. BELOW 40 DEG. F) AND HOT WEATHER (TEMP. ABOVE 90 DEG. F) APPLICATION AND MEASUREMENT OF PRESTRESSING FORCES	2104.3 2104.4	TMS 602-1.8C TMS 602-1.8D  TMS 602-3.6B	X		
PRIOR TO GROUTING, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE:					
VERIFYING GROUT SPACE IS CLEAN PRIOR TO GROUTING		TMS 502-3.2D		X	
PLACEMENT OF REINFORCEMENT AND CONNECTORS		TMS 402-1.13 TMS 502-3.4		X	
CONSTRUCTION OF MORTAR JOINTS		TMS 502-3.8B		X	
GROUT PLACEMENT SHALL BE VERIFIED TO ENSURE COMPLIANCE		TMS 602-3.5	X		
REPARATION OF ANY REQUIRED GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS SHALL BE OBSERVED		TMS 602-1.4		X	
POST-INSTALLED CONCRETE ANCHORS					
EXPANSION ANCHORS INSTALLED IN HARDENED AND COMPLETED MASONRY	1703.4.2 1701.15	ICC EVALUATION REPORT ACI 318.308.21.1.8	X	X	INSPECTION REQ'D. PER ICC EVALUATION REPORT
EPXDY ANCHORS INSTALLED IN HARDENED AND COMPLETED MASONRY	1912.1		X		INSPECTION REQ'D. PER ICC EVALUATION REPORT
STEEL					
FABRICATION OF STRUCTURAL ELEMENTS	1704.07	GEOTECH REPORT		X	REFER TO INSPECTION OF SHOP FABRICATION
MATERIAL VERIFICATION OF STRUCTURAL STEEL AND COLD FORMED STEEL DECK	1704.2 2203.1	ASTM A6 AISC 360 A3.1, A3.5		X	CERTIFIED MILL TEST REPORTS MANUFACTURER'S CERTIFIED TEST REPORTS
MATERIAL VERIFICATION OF ANCHOR BOLTS AND THREADED RODS	1704.3	AISC 360 A3.4		X	MANUFACTURER'S CERTIFIED TEST REPORTS
MATERIAL VERIFICATION OF WELD FILLER METALS	1704.3.1	AISC 360 A3.5		X	COPY OF WELDING PROCEDURE SPECS. COPY OF QUALIFICATION CARDS
VERIFYING USE OF PROPER WPSS				X	
VERIFYING WELDER				X	
COMPLETE AND PARTIAL JOINT PENETRATION GROOVE WELDS				X	
MULTI-PASS FILLET WELDS	1704.3.1	AWS D1.1 SECTION 6		X	ALL WELDS VISUALLY INSPECTED PER AWS D1.16.9
SINGLE PASS FILLET WELDS GREATER THAN 5/16"	1704.4			X	
FLUG AND SLOT WELDS				X	
SINGLE PASS FILLET WELDS LESS THAN 5/16"				X	
INSTALLATION OF COMPOSITE SLAB DECKING	1707.3	ICC EVALUATION REPORT		X	SPECIAL INSPECTIONS APPLY TO DECKING TYPE, DEPTH, GAUGE AND FASTENING
WELDING STUDS EXCEPT AS NOTED OTHERWISE	1704.3	AWS D1.1 SECTION 7		X	ALL WELDS VISUALLY INSPECTED PER AWS D1.17.8
WELDING STAIR AND RAILING SYSTEM		AWS D1.1 SECTION 6	X		ALL WELDS VISUALLY INSPECTED PER AWS D1.16.9
WELDING REINFORCING	1704.3	ACI 318 3.5.2 AWS D1.4 SECTION 7		X	REFER TO CONCRETE FOR WELDING REQ'TS.
FLOOR AND DECK WELDS	1704.3	AWS D1.3 SECTION 7	X		ALL WELDS INSPECTED PER AWS D1.3.7.1
INSTALLATION OF ROOF DECKING	1704.3	ICC EVALUATION REPORT		X	
COLD-FORMED STEEL FRAMING					
MATERIAL VERIFICATION OF WELD FILLER METALS	1704.3.12 1704.3.2	AWS D1.3 SECTION 7		X	MANUFACTURERS CERTIFICATE
VERIFYING USE OF PROPER WPSS				X	COPY OF WELDING PROCEDURE SPECIFICATIONS
WELDED FRAMING CONNECTIONS	1704.3.2	AWS D1.3 SECTION 7		X	COPY OF QUALIFICATIONS CARDS
VERIFYING WELDERS QUALIFICATIONS				X	ALL WELDS INSPECTED PER AWS D1.3.7.1
WELDED FRAMING CONNECTIONS	1704.3.2	AWS D1.3 SECTION 7		X	ALL WELDS INSPECTED PER AWS D1.3.7.1
COLD-FORMED STEEL TRUSSES SPANNING 60 FT OR GREATER	1704.3.2 1704.3.4			X	LOAD BEARING & EXTN WALL FRAMING
				X	VERIFY TEMPORARY INSTALLATION OF RESTRAINT/BRACES AND PERMANENT INDIVIDUAL TRUSS MEMBERS. RESTRAINT BRACES ARE INSTALLED IN ACCORDANCE WITH APPROVED DEFERRED SUBMITTAL

SI- SPECIAL INSPECTION AND TESTING

SPECIAL INSPECTION WILL BE PROVIDED BY THE OWNER BASED ON THE REQUIREMENTS OF THE OSSC AS SUMMARIZED IN THE SPEGAL INSPECTION AND TESTING PROGRAM BELOW. CONTRACTOR SHALL PROVIDE SUFFICIENT NOTICE AND ACCESS FOR THE SPECIAL INSPECTOR TO PERFORM THESE INSPECTIONS.

SI-STATEMENT OF SPECIAL INSPECTION NOTES:

SP-1) SPECIAL INSPECTION SHALL CONFORM TO SECTION 1704 OF THE 2014 OSSC. REFER TO TABLES 1-5 FOR SPECIAL INSPECTION AND TABLES 6-7 PERIODIC INSPECTION: THE PART-TIME OR INTERMITTENT OBSERVATION OF WORK REQUIRING SPECIAL INSPECTIONS BE APPROVED SPECIAL INSPECTOR FOR TESTING REQUIREMENTS. SHALL SUBMIT A FINAL REPORT STATING THAT THE WORK REQUIRING SPECIAL INSPECTION WAS INSPECTED.

SI-2) SPECIAL INSPECTIONS AND ASSOCIATED TESTING SHALL BE PERFORMED BY AN APPROVED ACCREDITED INDEPENDENT AGENCY MEETING THE REQUIREMENTS OF ASTM E239 (MATERIALS), ASTM D3740 (SOILS), ASTM C1077 (CONCRETE), ASTM A880 (STEEL), AND ASTM E543 (NON-DESTRUCTIVE). THE INSPECTION AND TESTING AGENCY SHALL FURNISH TO THE STRUCTURAL ENGINEER/ARCHITECT A COPY OF THEIR SCOPE OF ACCREDITATION. SPECIAL INSPECTORS SHALL BE CERTIFIED BY THE BUILDING OFFICIAL. WELDING INSPECTORS SHALL BE QUALIFIED PER SECTION 6.1.4.1.1 OF AWS D1.1.

SI-3) THE SPECIAL INSPECTOR SHALL OBSERVE THE INDICATED WORK FOR COMPLIANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTOR FOR CORRECTION AND NOTED IN THE INSPECTION REPORTS.

SI-4) THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS FOR EACH INSPECTION TO THE BUILDING OFFICIAL, STRUCTURAL ENGINEER, ARCHITECT, CONTRACTOR, AND OWNER. THE SPECIAL INSPECTION AGENCY AND IS IN CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS AND THAT ALL DISCREPANCIES NOTED IN THE INSPECTION REPORTS HAVE BEEN CORRECTED.

SI-5) CONTINUOUS INSPECTION: THE FULL-TIME OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED.

SI-6) PERIODIC INSPECTION: THE PART-TIME OR INTERMITTENT OBSERVATION OF WORK REQUIRING SPECIAL INSPECTIONS BE APPROVED SPECIAL INSPECTOR FOR TESTING REQUIREMENTS. SHALL SUBMIT A FINAL REPORT STATING THAT THE WORK REQUIRING SPECIAL INSPECTION WAS INSPECTED.

SI-7) WHERE PERIODIC INSPECTION IS ALLOWED IN ACCORDANCE WITH AN EXPANSION ANCHORS ICC EVALUATION REPORT, INSPECTION SHALL BE AS FOLLOWS: FOR ALL ANCHORS, PRIOR TO CONCEALMENT, VERIFY ANCHOR TYPE, ANCHOR DIMENSIONS, ANCHOR SPACING AND EDGE DISTANCES.

A. FOR EACH ANCHOR TYPE AND SIZE, INSPECTOR SHALL BE ON-SITE TO CONTINUOUSLY INSPECT A MINIMUM OF THE FIRST 10 ANCHORS INSTALLED BY EACH INSTALLER FOR CONFORMANCE W/ ICC EVALUATION REPORT, PROVIDED ALL ANCHORS ARE INSTALLED CORRECTLY PER MANUFACTURES INSTRUCTIONS. PROVIDE PERIODIC INSPECTION ON A MINIMUM OF 10% OF THE NEXT 1000 ANCHORS BY EACH INSTALLER AND A MINIMUM OF 5% OF THE REMAINING ANCHORS BY EACH INSTALLER. INSPECTIONS SHALL OCCUR AT A MINIMUM OF ONCE PER WEEK AT A RANDOM TIME WHILE ANCHOR INSTALLATION IS ONGOING. IF ANCHOR INSTALLATION IS ONGOING, ANY NON-COMPLIANCE ISSUE SHALL RESET INSPECTION REQUIREMENTS TO TEN (10) CONTINUOUS INSPECTIONS. NON-COMPLIANT ANCHORS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD FOR REVIEW AND SHALL BE BROUGHT INTO COMPLIANCE BY EITHER TESTING OF RE-INSTALLATION.

B. INSPECTION REPORTS SHALL IDENTIFY NAMES OF INSTALLERS.

C. SPECIAL INSPECTOR SHALL PROVIDE DOCUMENTATION AT THE END OF ANCHOR INSTALLATION STATING THAT THE MINIMUM OF ANCHORS WERE INSPECTED.


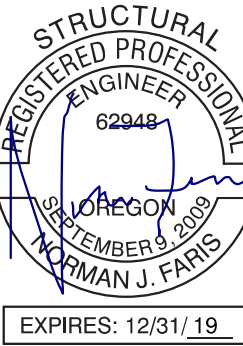
TABLE 4 - REQUIRED STRUCTURAL SPECIAL INSPECTION FOR SEISMIC RESISTANCE				
SYSTEM OR MATERIAL	INSPECTION			
	OSSC CODE REFERENCE	CODES OR STANDARDS REFERENCE	FREQUENCY (NOTE 5) CONTINUOUS PERIODIC	REMARKS
CONCRETE				
MATERIAL VERIFICATION OF REINFORCING STEEL IN SHEAR WALL BOUNDARY ELEMENTS	1708.3		X	CERTIFIED MILL TEST REPORT

TABLE 6 - REQUIRED TESTING FOR SPECIAL INSPECTIONS					
SYSTEM OR MATERIAL	INSPECTION				REMARKS
	OSSC CODE REFERENCE	CODES OR STANDARDS REFERENCE	FREQUENCY (NOTE 5)		
			CONTINUOUS	PERIODIC	
GEOTECHNICAL					
FILL IN-PLACE DENSITY OR PREPARED SUBGRADE DENSITY	1704.7	VARIES: MIN. PER OSSC APPENDIX J107.5		X	BY THE GEOTECHNICAL ENGINEER
STEEL IN SHEAR WALL BOUNDARY MATERIAL VERIFICATION		VARIES: CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIAL		X	BY THE GEOTECHNICAL ENGINEER
CONCRETE					
CONCRETE STRENGTH	1903	ASTM C39	EACH 150 CY OR LESS		FABRICATE SPECIMENS AT TIME FRESH
CONCRETE SLUMP	1704.4	ASTM C143	EACH 5000 SF OF SLAB		CONCRETE IS PLACED
CONCRETE AIR CONTENT	1905.6	ASTM C231	OR WALL PLACED		
CONCRETE TEMPERATURE		ASTM C1064	EACH DAY		
MASONRY					
UNIT STRENGTH METHOD	2105.2.2.1	ASTM C551, ASTM C52 ASTM C90, ASTM C216 ASTM C476, ASTM C682			
PRISM TEST METHOD	2105.2.2.2	ASTM C1314			ALL C.J.P. WELDS REQUIRE UT TESTING
STEEL					
MAGNETIC PARTICAL (MT) AND ULTRASONIC (UT) TESTING OF WELDS		MT-AWS D1.6.14.4 UT-AWS D.16.13 AND 6.14.3			

TABLE 7 - REQUIRED TESTING FOR SEISMIC RESISTANCE SPECIAL INSPECTION			
SYSTEM OR MATERIAL	INSPECTION		
	OSSC CODE REFERENCE	CODES OR STANDARDS REFERENCE	REMARKS
CONCRETE REINFORCEMENT			
TEST A615 REINFORCEMENT FOR WELD-ABILITY WHEN SUCH REINFORCEMENT IS TO BE WELDED		ACI 318.3.5.2	

TABLE N1 - REQUIRED ARCHITECTURAL SPECIAL INSPECTION				
SYSTEM OR MATERIAL	INSPECTION			REMARKS
	OSSC CODE REFERENCE	CODES OR STANDARDS REFERENCE	FREQUENCY (NOTE 5) CONTINUOUS PERIODIC	
SPRAYED FIRE-RESISTANT MATERIALS AND INTUMESCENT FIRE-RESISTIVE COATINGS				
SURFACE CONDITIONS	1704.10 1704.11	ICC EVALUATION REPORT	X	SPECIAL INSPECTIONS APPLY TO CLEANLINESS OF STEEL, PRODUCT NAME AND TYPE, MATERIAL EXPIR. DATE, AMBIENT CONDITIONS, APPLICATION PROCEDURES, AND MATERIAL THICKNESS, DENSITY AND BOND STRENGTH.
APPLICATION				
EXTERIOR INSULATION AND FINISH SYSTEMS				
INSTALLATION	1704.12		X	
SMOKE CONTROL SYSTEM				
INSTALLATION	1704.14		X	

TABLE N3 - NON-STRUCTURAL TESTING				
SYSTEM OR MATERIAL	INSPECTION			
	OSSC COD REFERENCE	CODES OR STANDARDS REFERENCE	FREQUENCY	REMARKS
SPRAYED FIRE-RESISTANT MATERIALS				
THICKNESS AT FLOOR, ROOF AND WALL ASSEMBLIES	1704.10	ASTM E605	NOT LESS THAN (4) MEASUREMENTS FOR EACH 1000 SF OF SPRAYED AREA EACH FLOOR LEVEL	REFERENCE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION
THICKNESS AT STRUCTURAL FRAMING MEMBERS	1704.10.3.2		TEST MIN. OF 25% OF THE STRUCTURAL MEMBERS AT EACH LEVEL	
DENSITY	1704.10.4			
BOND STRENGTH AT FLOOR, ROOF, AND WALL ASSEMBLIES	1704.10.5.1	ASTM E736	EACH 10,000 SF OF SPRAYED AREA EACH FLOOR AREA EACH FLOOR LEVEL	
BOND STRENGTH AT FLOOR, ROOF, AND	1704.12.6		EACH TYPE OF STRUCT. MEMBERS FOR EACH 10,000 SF OF FLOOR AREA EACH FLOOR LEVEL	
INTUMESCENT FIRE-RESISTIVE COATINGS				
THICKNESS	1704.11	AWCI TECHNICAL MANUAL 12-8	EACH 10,000 SF OF COATED AREA EACH FLOOR LEVEL	
SMOKE CONTROL SYSTEMS				
LEAKAGE, PRESSURE DIFFERENTIAL FLOW MEASUREMENT AND DETECTION AND CONTROL VERIFICATION	1704.14.1		DETERMINED BY JURISDICTION	



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1506 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063

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VALAR CONSULTING ENGINEERING

12042 SE SUNNYSIDE ROAD #357  
CLACKAMAS, OREGON 97015

NORTH WILLIAMS APARTMENTS - FAMILY HOUSING

2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

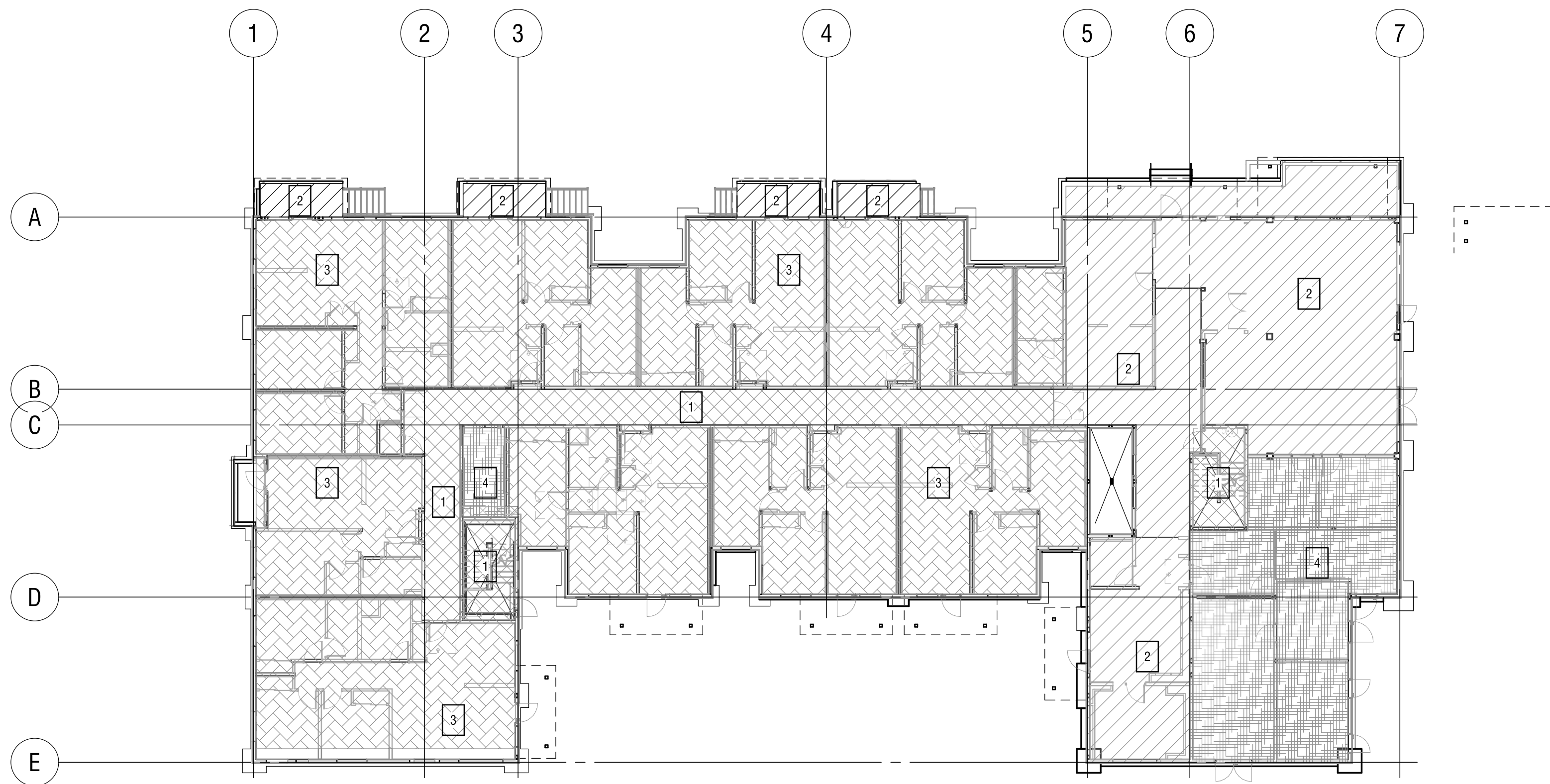
REVISION	DATE	REASON FOR ISSUE

SPECIAL INSPECTION PROGRAM

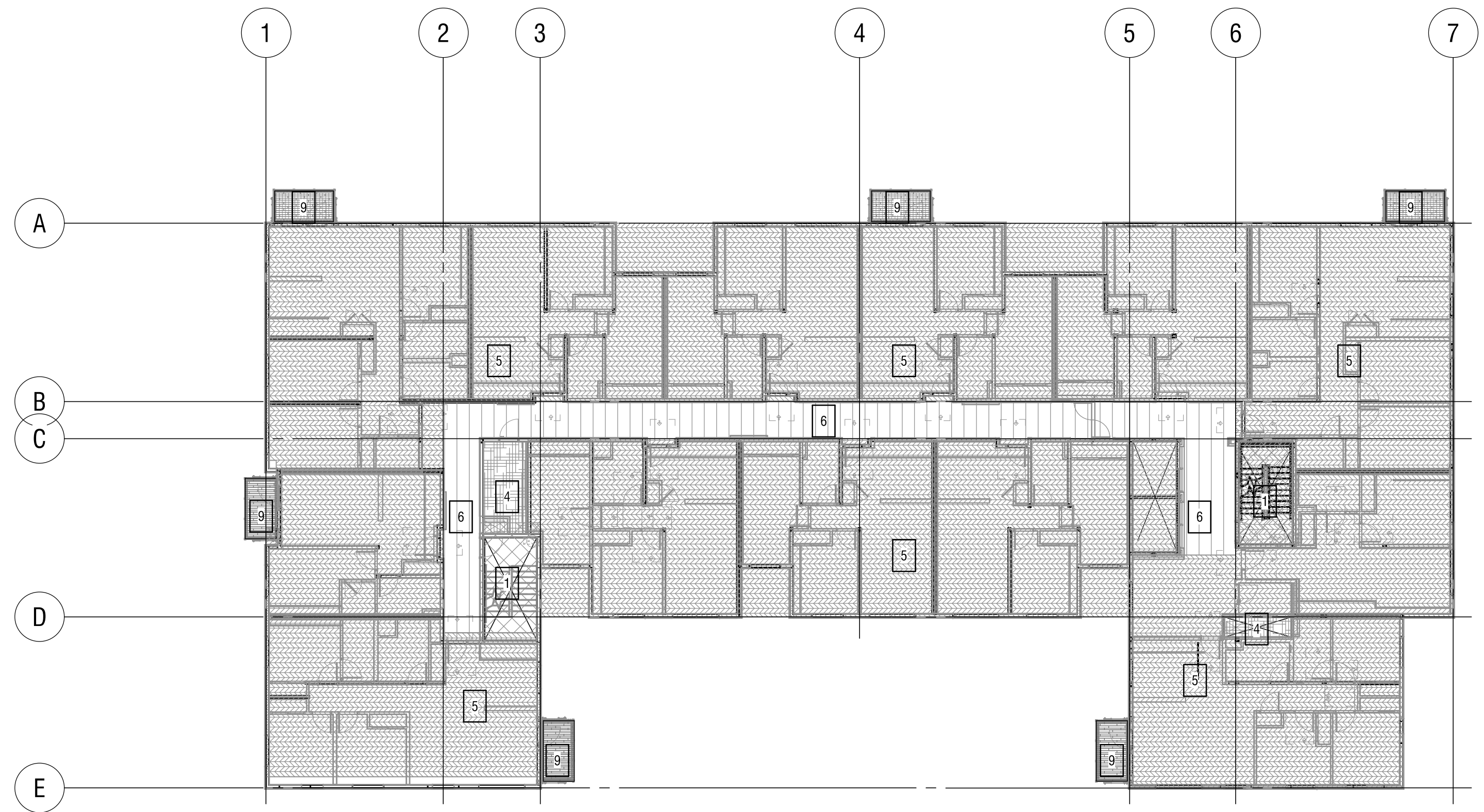
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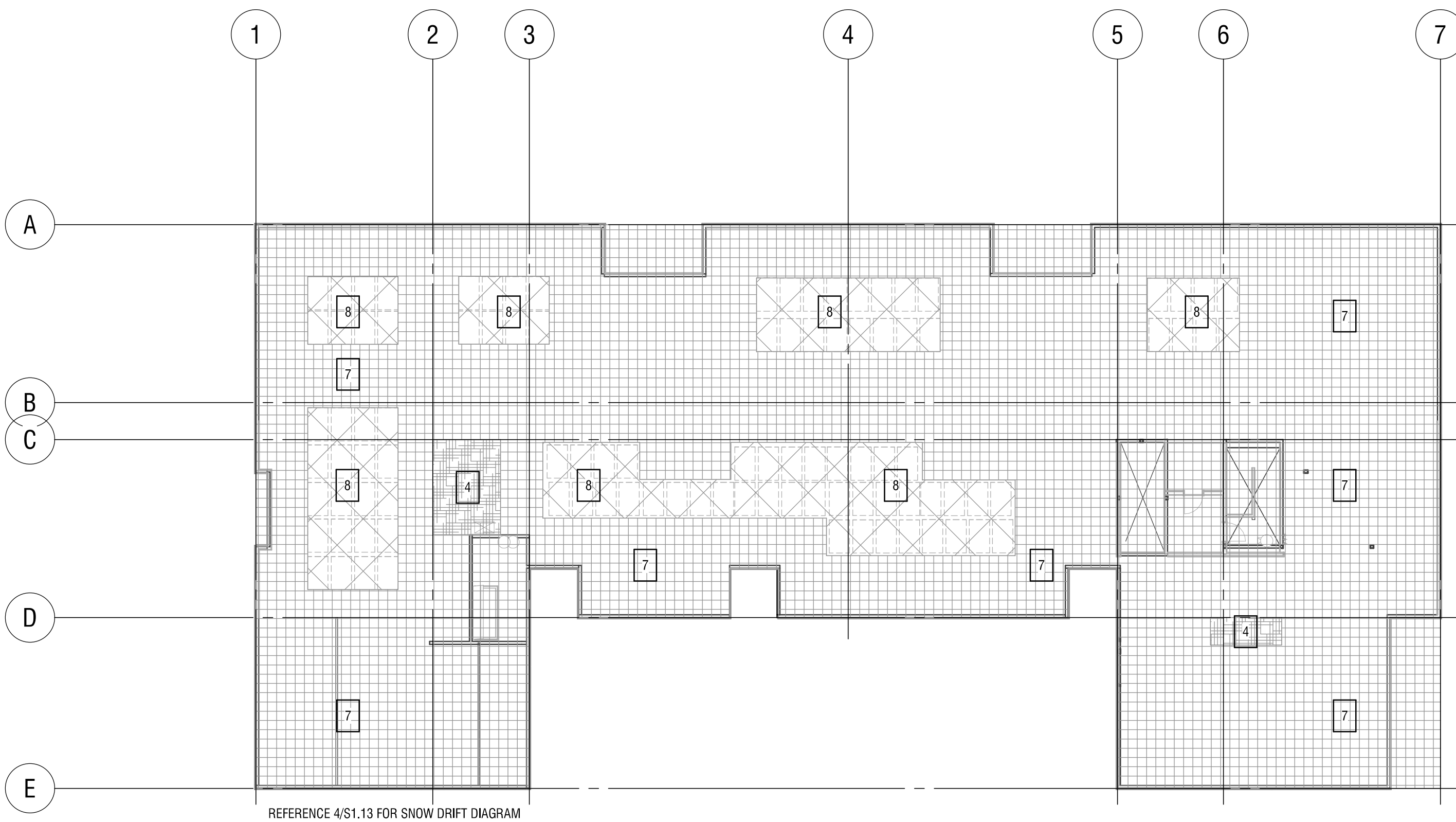
1 LOADING DIAGRAM - GROUND FLOOR PLAN  
1/16" = 1'-0"



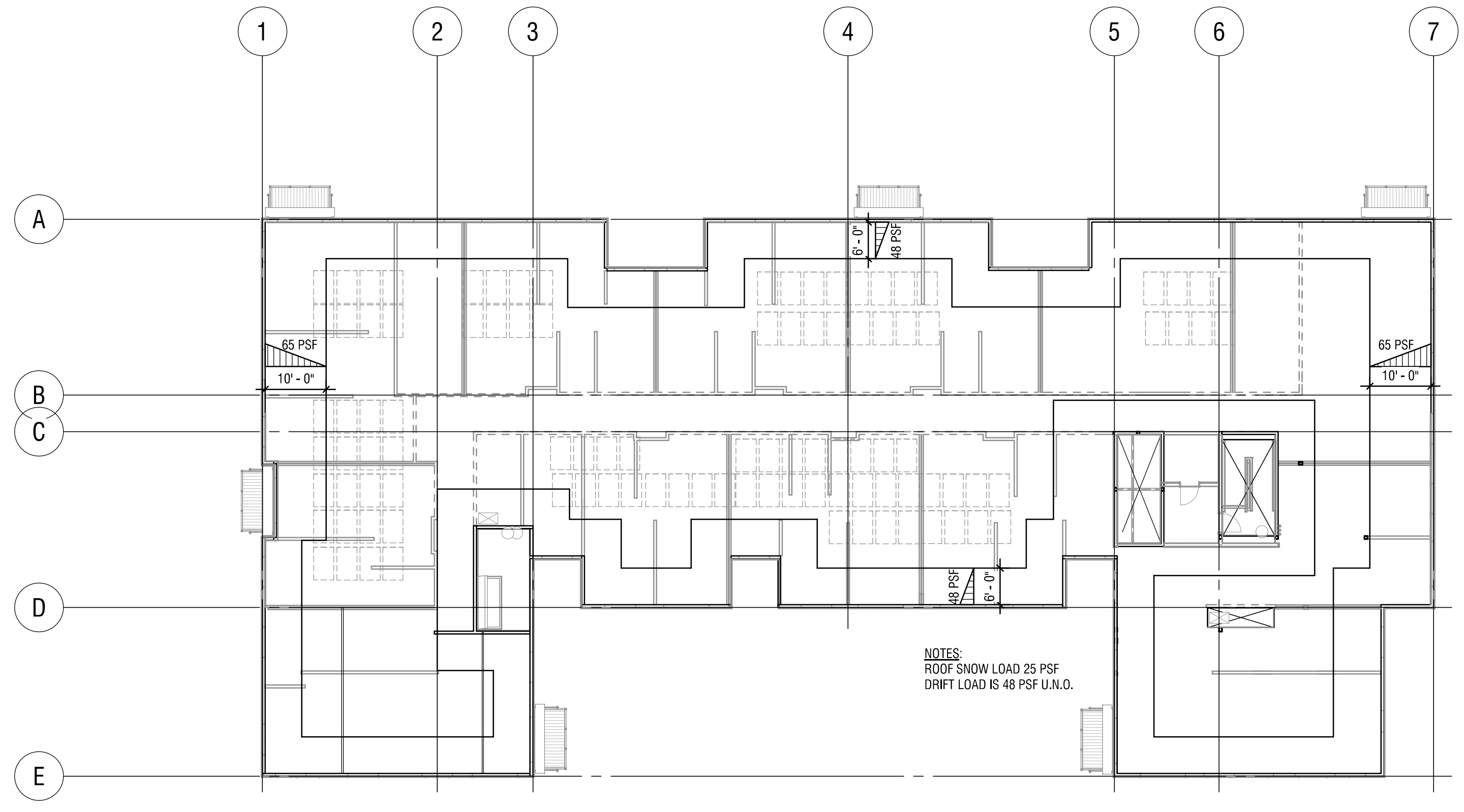
2 LOADING DIAGRAM - LEVELS 2-5 PLAN  
1/16" = 1'-0"

DESIGN LOAD SCHEDULE			
AREA	MARK	SUPERIMPOSED DEAD LOAD <sup>1</sup>	LIVE LOADING
PUBLIC/CORRIDOR/STAIR	1	10	100
PUBLIC ROOM	2	28	100
RESIDENTIAL GROUND	3	10/28(SIM)	40
M.E.P. ROOMS	4	10	125
RESIDENTIAL L2-L5	5	10/28(SIM)	40
RESIDENTIAL CORRIDORS	6	10	100
ROOF TYPICAL	7	15	25
ROOF MECHANICAL	8	23	25
ATTACHED BALCONY	9	10	60

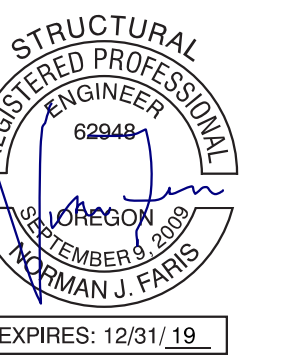
- NOTES:
- SUPERIMPOSED LOADING INCLUDES FINISH AND PARTITIONS ONLY.
  - SLAB ON GRADE UNIFORM LIVE LOAD AND 3000 LB CONCENTRATED LOAD. (NOT CONCURRENT, ACTING ON A 4.5'x4.5' AREA)
  - CONTINUOUS OCCUPIED / NON OCCUPIED AREAS, RESPECTIVELY.
  - INDICATES 2,250 LB MAXIMUM ROOF TOP MECHANICAL EQUIPMENT LOADING.



3 LOADING DIAGRAM - ROOF PLAN  
1/16" = 1'-0"



4 SNOW LOADS - ROOF PLAN  
1/16" = 1'-0"



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100  
1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600  
1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063

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VALAR CONSULTING ENGINEERING  
12042 SE SUNNYSIDE ROAD #357  
CLACKAMAS, OREGON 97015

NORTH WILLIAMS APARTMENTS - FAMILY HOUSING

2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

LOADING DIAGRAMS

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DATE  
10/09/2018

PROJECT NUMBER  
17058

SHEET NUMBER

S1.13



REVISION	DATE	REASON FOR ISSUE

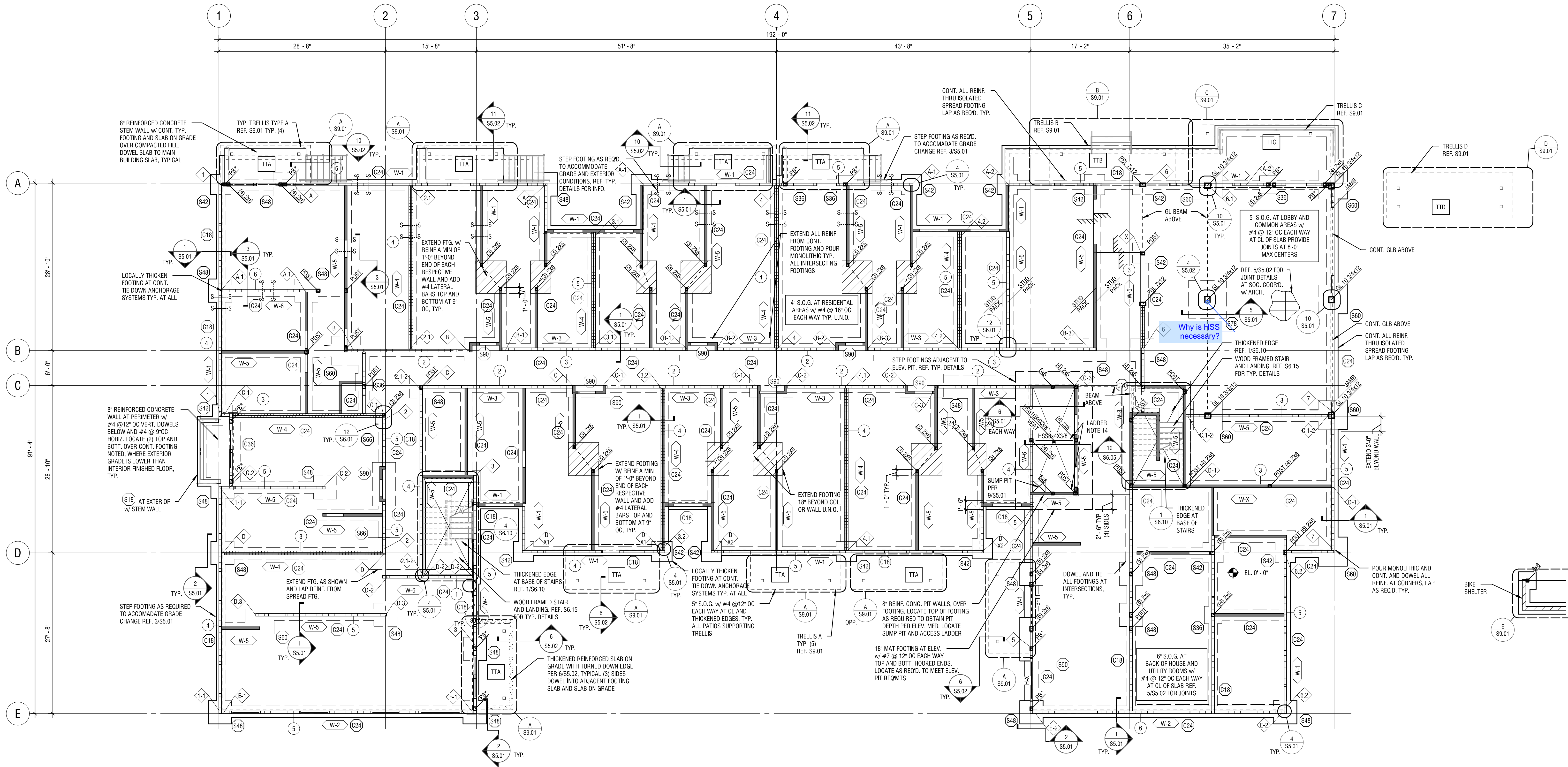
**GROUND FLOOR/  
FOUNDATION PLAN**

PERMIT/GMP SET

DATE	PROJECT NUMBER
10/09/2018	17058

SHEET NUMBER

**S2.01**



**GROUND FLOOR/ FOUNDATION PLAN**  
1/8" = 1'-0"

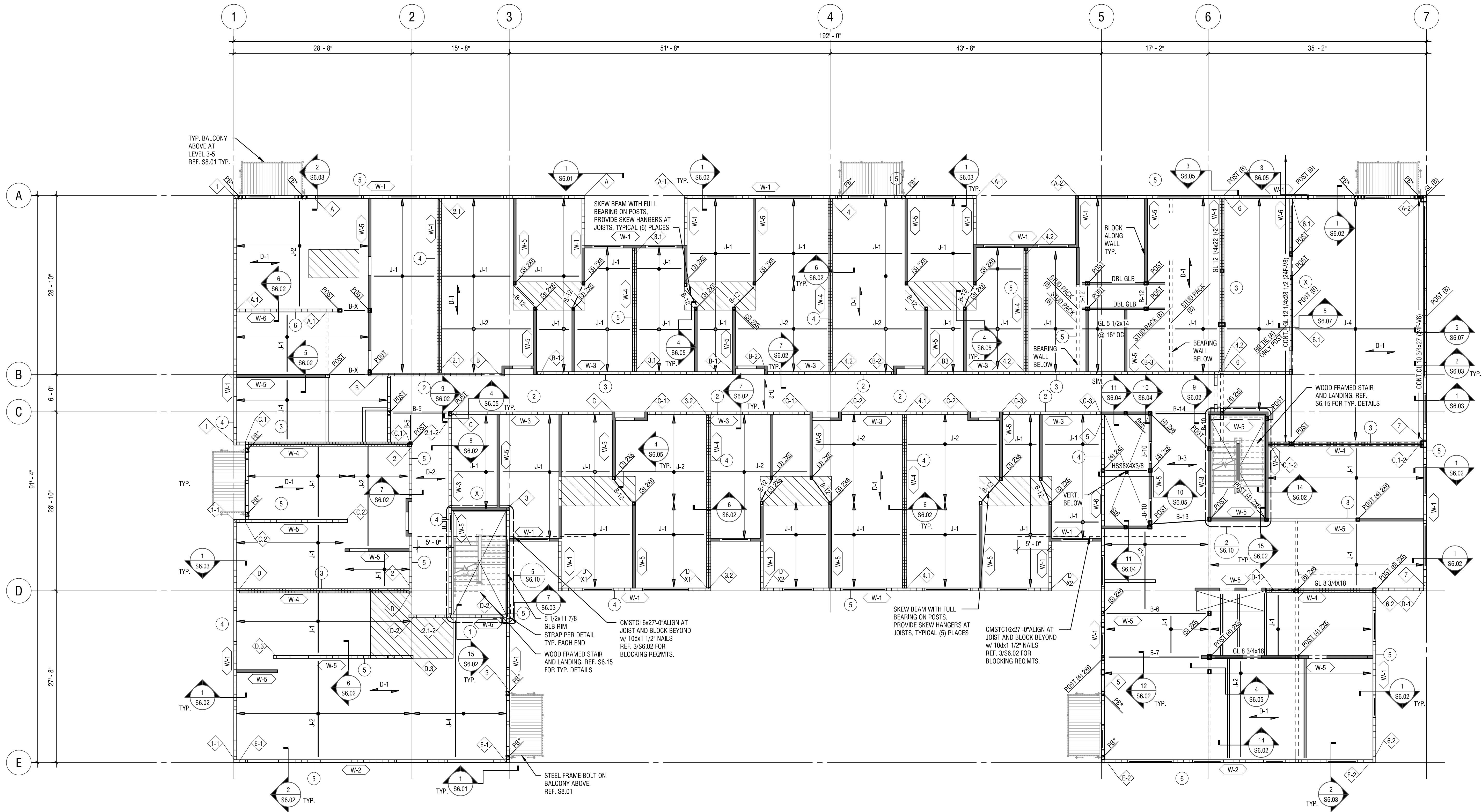
**FOUNDATION PLAN NOTES**

- INDICATES CONVENTIONAL SPREAD FOOTING TYPE. REFERENCE 1/S5.01 FOR SIZE AND ADDITIONAL INFORMATION.  
  
ALL FOUNDATIONS SHALL BE REVIEWED, MONITORED AND APPROVED BY THE GEOTECHNICAL ENGINEER FOR FULL COMPLIANCE OF PERFORMANCE REQUIREMENTS AND LOADING DEMANDS.  
  
REFERENCE CONCRETE DETAILS FOR TOP REINFORCING AT ENDS OF SHEAR WALLS FOR UPLIFT LOADING.
- INDICATES TO EXTEND ADJOINING FOOTING w/ REINF. A MIN OF 1'-0" BEYOND END OF EACH RESPECTIVE WALL AND ADD #4 LATERAL (N/S) BARS TOP AND BOTTOM AT 9" OC, TYPICAL.
- INDICATES BOTTOM OF FOOTING ELEVATION. LOCATE MINIMUM 18" BELOW ADJACENT GRADE U.N.O. 24" AT EXTERIOR.
- SLAB CONSTRUCTION JOINTS SHALL BE APPROVED BY THE ARCHITECT PRIOR TO CASTING S.O.G.
- REFERENCE ARCHITECTURAL AND MEP FOR SLEEVES, BLOCKOUTS AND OTHER ITEMS TO BE COORDINATED WITH THE FOUNDATIONS.
- REFERENCE DRAWING A2.01 FOR DIMENSIONS.
- INDICATES TOP OF SLAB ELEVATION.
- INDICATES POINT ELEVATION AT TOP OF CONCRETE.
- INDICATES STEP IN ELEVATION.
- INDICATES SLOPE IN SLAB.
- REFERENCE S5.01-S5.02 FOR TYPICAL CONCRETE DETAILS.
- COORDINATE ANCHOR BOLT PLACEMENT FOR SHEAR WALLS AND ALL BEARING WALL PER WOOD DETAILS AND SCHEDULE. CONTINUOUS SHEARWALL TIE DOWN SYSTEM TO BE DESIGNED BY MFR.
- REF. ARCH. FOR ELEVATOR PIT LADDER COORDINATE w/ FRAMING AND SEPARATOR BEAM.
- INDICATES STEP IN FOOTING. REF. 3/S5.01

**LEVEL 1 FRAMING PLAN NOTES**

- INDICATES 2x SHEAR WALL WITH 15/32" SHEATHING TYPE. REF. 1/S6.06. PLYWOOD SHEATHING EXTENDS FROM HOLDDOWN TO HOLDDOWN.
- INDICATES BEARING WALL TYPE. REF. SCHEDULE
- TYPE A, B, C, D, AND E INDICATE CONTINUOUS TIE DOWN SYSTEM LOCATION. CONTINUOUS TIE DOWN SYSTEM TO BE DESIGNED BY MANUFACTURER. REF. 2/S6.06 FOR SCHEDULE OF THE TIE DOWN LOADS.
- INDICATES BEAM TYPE RESPECTIVELY REF. SCHEDULE ON 1/S6.01 TYPICAL EXTERIOR HEADER TO BE GL 5 1/2 x12 U.N.O.  
  
UNLESS OTHERWISE NOTED, ALL HEADERS ARE TO BE: OPENINGS LESS THAN 5'-0" SHALL BE A GL 5 1/2 x12 w/ (2) TRIMMER AND (1) KING STUD. OPENINGS LESS THAN 8'-0" SHALL BE GL 5 1/2 x12 w/ (3) 2x6 TRIMMERS AND (2) 2x6 KING STUDS
- REFERENCE S6.01 THRU S6.07 FOR TYPICAL WOOD DETAILS.
- ALL OTHER WALLS NOT NOTED SHALL BE NON-LOAD BEARING PER ARCHITECTURAL REQUIREMENTS. ALLOCATE FOR CONNECTION TOP AND BOTTOM.  
NOTE: NOT ALL ARCHITECTURAL WALLS ARE SHOWN ON THE STRUCTURAL PLAN DRAWINGS.
- REFERENCE ARCHITECTURAL AND MEP DRAWINGS FOR SLEEVES, BLOCKOUTS AND OTHER ITEMS TO BE COORDINATED WITH THE FRAMING.
- REFERENCE ARCHITECTURAL DRAWINGS FOR DIMENSIONS.
- COORDINATE LOCATIONS OF MECHANICAL PENETRATIONS, FLOOR DEPRESSIONS, OPENINGS, DRAINS OR STEPS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
- REF. DETAIL S66/S6.01 FOR NOTCH AND HOLES ALLOWANCES AT STUDS, JOISTS, AND WALL PLATES.
- REF. DETAIL 1&2/S6.05 FOR NON-BEARING PARTITION WALL DETAILS AT FLOOR AND ROOF.
- INDICATES BALCONY POST IN-LINE w/ SUPPORT. REF. S8.01 FOR INFO., SIZE, AND DETAILS.
- INDICATED TRELLIS TYPE ABOVE COORDINATE FOUNDATION, FRAMING AND INFORMATION ON S9.01
- INDICATES POST LOCATION. REF. SCHEDULE ON 1/S6.01 FOR TYPE U.N.O.

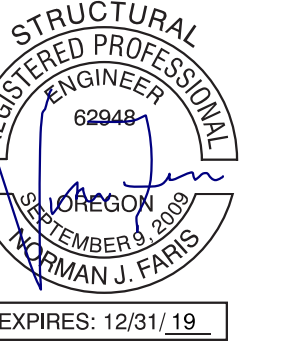




**LEVEL 2**  
1/8" = 1'-0"

**LEVEL 2 FRAMING PLAN NOTES**

- INDICATES 2x SHEAR WALL WITH 15/32" SHEATHING TYPE. REF. 1/S6.06. PLYWOOD SHEATHING EXTENDS FROM HOLDOWN TO HOLDOWN.
- INDICATES BEARING WALL TYPE. REF. SCHEDULE. ALL OTHER WALLS NOT NOTED SHALL BE NON-LOAD BEARING PER ARCHITECTURAL REQUIREMENTS. ALLOCATE FOR CONNECTION TOP AND BOTTOM.  
**NOTE:** NOT ALL ARCHITECTURAL WALLS SHOWN ON STRUCTURAL PLAN DRAWINGS.
- TYPE A, B, C, D, AND E INDICATE CONTINUOUS TIE DOWN SYSTEM LOCATION. CONTINUOUS TIE DOWN SYSTEM TO BE DESIGNED BY MANUFACTURER. REF. 2/S6.06 FOR SCHEDULE OF THE DOWN LOADS.
- INDICATES FLOOR JOIST TYPE AND SPACING w/ TOP FLANGE HANGERS  
J-1 11 7/8" I-JOIST @18" OC (REBUILT I-45 OR EQUIVALENT)  
J-2 11 7/8" I-JOIST @18" OC (REBUILT I-45 OR EQUIVALENT)  
J-3 11 7/8" I-JOIST @18" OC (REBUILT I-90 OR EQUIVALENT)  
J-4 11 7/8" I-JOIST @12" OC (REBUILT I-90S OR EQUIVALENT)  
TYPICAL JOIST SHALL BE J-1 WHERE NOT NOTED
- INDICATES SPAN DIRECTION OF 23/32" T&G SHEATHING. BLOCKED, GLUE AND FASTEN w/10d RING SHANK NAILS @4" OC @ EDGES AND 12" OC INTERIOR. REF. 4/S6.07.
- INDICATES SPAN DIRECTION OF 2x6 DFL CAR DECKING w/ CONTINUOUS D-1 SHEATHING OVER, BEAR ON WALL/RIM JOIST. REF. 3/S6.05.
- INDICATES SPAN DIRECTION OF 4x6 DFL CAR DECKING w/ CONTINUOUS D-1 SHEATHING.
- INDICATES BEAM REF. SCHEDULE ON 1/S6.01 TYPICAL EXTERIOR HEADER TO BE GL 5 1/2 x 12 U.L.O.
- UNLESS OTHERWISE NOTED, ALL HEADERS ARE TO BE:  
OPENINGS LESS THAN 5'-0" SHALL BE A BL 5 1/2x12 w/ (1) TRIMMER AND (1) KING STUD.  
OPENINGS 8'-0" SHALL BE GL 5 1/2x12 w/ (2) 2x6 TRIMMERS AND (2) 2x6 KING STUDS
- REFERENCE S6.01 THRU S6.07 FOR TYPICAL WOOD DETAILS.
- ALL FLOORS TO BE TOPPED w/ 1" MAXIMUM GYP. CONCRETE TOPPING.
- ALL OTHER WALLS NOT NOTED SHALL BE NON-LOAD BEARING PER ARCHITECTURAL REQUIREMENTS. ALLOCATE FOR CONNECTION TOP AND BOTTOM.  
**NOTE:** NOT ALL ARCHITECTURAL WALLS ARE SHOWN ON THE STRUCTURAL PLAN DRAWINGS.
- REFERENCE ARCHITECTURAL AND MEP DRAWINGS FOR SLEEVES, BLOCKOUTS AND OTHER ITEMS TO BE COORDINATED WITH THE FRAMING. REF. S6.02 FOR SHAFT DETAILS.
- REFERENCE ARCHITECTURAL DRAWINGS FOR DIMENSIONS.
- PROVIDE DIAPHRAGM EDGE NAILING TO ALL JOISTS, PLATES OR BLOCKING IN LINE OR CONNECTED TO SHEAR WALLS.
- COORDINATE LOCATIONS OF MECHANICAL PENETRATIONS, FLOOR DEPRESSIONS, OPENINGS, DRAWS OR STEPS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
- REF. DETAIL 3 & 4/S6.01 FOR NOTCH AND HOLES ALLOWANCES AT STUDS, JOISTS, AND WALL PLATES.
- REF. DETAIL 1&2/S6.05 FOR NON-BEARING PARTITION WALL DETAILS AT FLOOR AND ROOF.
- REF. 6/S6.01 FOR THE TYPICAL HANGER SCHEDULE (U.L.O. ON PLANS).
- PROVIDE DIAPHRAGM EDGE NAILING TO ALL JOISTS, PLATES OR BLOCKING IN LINE OR CONNECTED TO SHEAR WALLS.
- INDICATES TO PROVIDE FULL DEPTH BLOCKING @24" OC (2) JOIST BAYS EACH SIDE OF CORNER. EXTEND 4'-0" EACH SIDE OF CORNER.
- INDICATES POST LOCATION REF. SCHEDULE ON 1/S6.01 FOR TYPE U.L.O.
- INDICATES BALCONY IN-LINE SUPPORT. REF. S8.01 FOR INFO, SIZE AND DETAILS.



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063

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VALAR CONSULTING ENGINEERING  
12042 SE SUNNYSIDE ROAD #357  
CLACKAMAS, OREGON 97015

**NORTH WILLIAMS APARTMENTS - FAMILY HOUSING**

2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

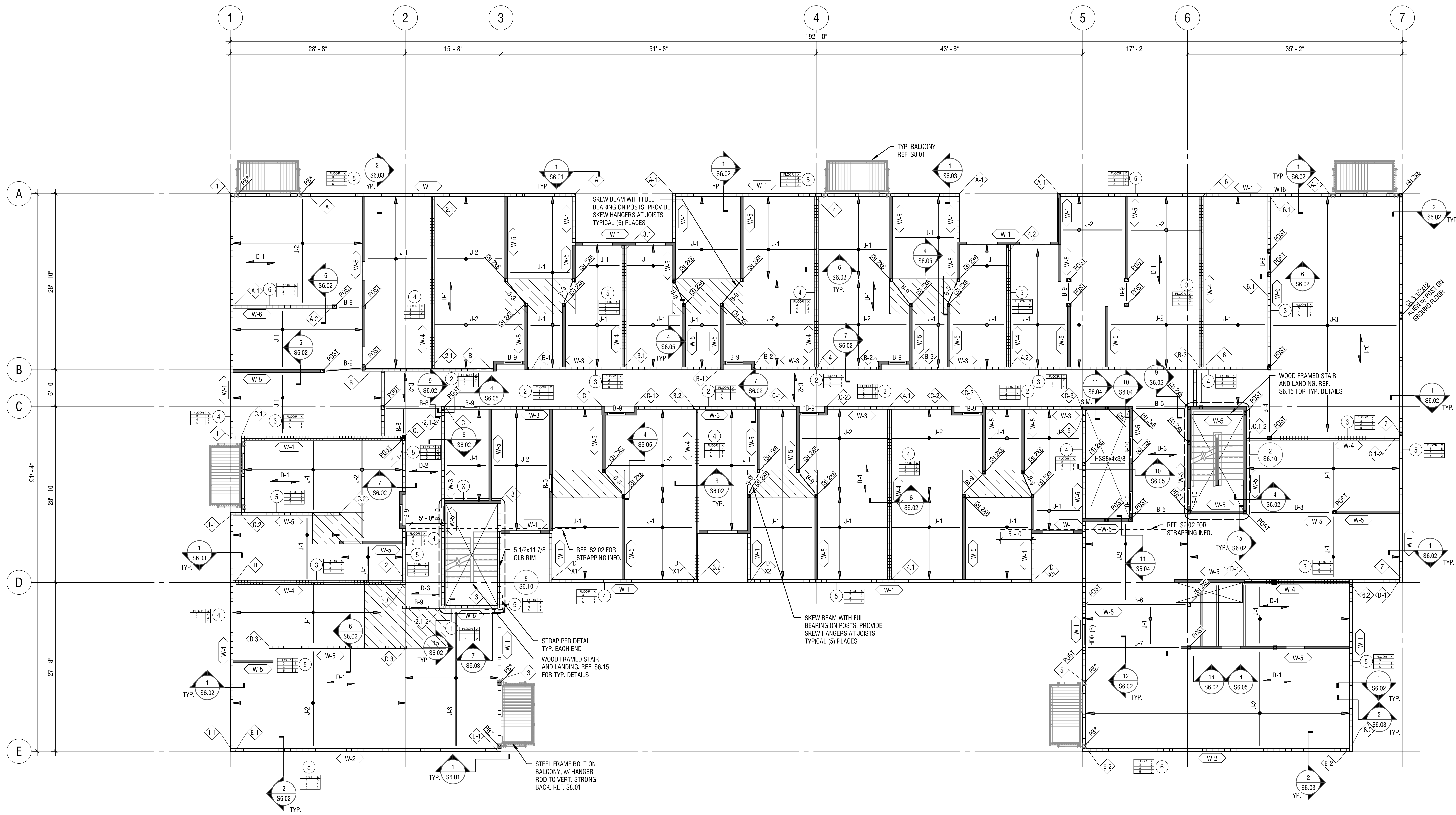
**SECOND FLOOR  
FRAMING PLAN**

**PERMIT/GMP SET**

DATE 10/09/2018	PROJECT NUMBER 17058
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SHEET NUMBER  
**S2.02**





**1** THIRD THRU FIFTH FLOOR FRAMING PLAN  
1/8" = 1'-0"

**LEVEL 3 THRU 5 FRAMING PLAN NOTES**

- INDICATES 2x SHEAR WALL WITH 15/32" SHEATHING TYPE. REF. 1/S6.06. PLYWOOD SHEATHING EXTENDS FROM HOLLOW TO HOLLOW.
- INDICATES BEARING WALL TYPE. REF. SCHEDULE. ALL OTHER WALLS NOT NOTES SHALL BE NON-LOAD BEARING PER ARCHITECTURAL REQUIREMENTS. ALLOCATE FOR CONNECTION TOP AND BOTTOM.  
**NOTE:** NOT ALL ARCHITECTURAL WALLS SHOWN ON STRUCTURAL PLAN DRAWINGS.
- TYPE A, B, C, D, AND E INDICATE CONTINUOUS TIE DOWN SYSTEM LOCATION. CONTINUOUS TIE DOWN SYSTEM TO BE DESIGNED BY MANUFACTURER. REF. 7/S6.06 FOR SCHEDULE OF THE DOWN LOADS.
- INDICATES FLOOR JOIST TYPE AND SPACING w/ TOP FLANGE HANGERS  
J-1 11 7/8" I-JOIST @16" OC (REDBUILT L-45 OR EQUIVALENT)  
J-2 11 7/8" I-JOIST @16" OC (REDBUILT L-45 OR EQUIVALENT)  
J-3 11 7/8" I-JOIST @16" OC (REDBUILT L-45 OR EQUIVALENT)  
TYPICAL JOIST SHALL BE J-1 WHERE NOT NOTED
- INDICATES SPAN DIRECTION OF 23/32" T&G SHEATHING, BLOCKED, GLUE AND FASTEN w/ 10D RING SHANK NAILS @4" OC @ EDGES AND 12" OC INTERIOR. REF. 4/S6.07.
- INDICATES SPAN DIRECTION OF 3x6 DFL CAR DECKING w/ CONTINUOUS D-1 SHEATHING OVER. BEAR OR WALL/RIM JOIST. REF. 3/S6.05.
- INDICATES SPAN DIRECTION OF 4x6 DFL CAR DECKING w/ CONTINUOUS D-1 SHEATHING.
- INDICATES BEAM TYPE REF. SCHEDULE ON 1/S6.01  
  
UNLESS OTHERWISE NOTED ALL HEADERS ARE TO BE: OPENINGS LESS THAN 5'-0" SHALL BE A GL 5 1/2x12 w/ (1) 2x6 TRIMMER AND (1) 2x6 KING STUD. OPENINGS LESS THAN 8'-0" SHALL BE GL 5 1/2x12 w/ (2) 2x6 TRIMMERS AND (2) 2x6 KING STUD.
- REFERENCE S6.01 THRU S6.07 FOR TYPICAL WOOD DETAILS.
- ALL FLOORS TO BE TOPPED w/ 1" MAXIMUM GYP. CONCRETE TOPPING.
- ALL OTHER WALLS NOT NOTED SHALL BE NON-LOAD BEARING PER ARCHITECTURAL REQUIREMENTS. ALLOCATE FOR CONNECTION TOP AND BOTTOM.  
**NOTE:** NOT ALL ARCHITECTURAL WALLS ARE SHOWN ON THE STRUCTURAL PLAN DRAWINGS.
- REFERENCE ARCHITECTURAL AND MEP DRAWINGS FOR SLEEVES, BLOCKOUTS AND OTHER ITEMS TO BE COORDINATED WITH THE FRAMING. REF. S6.02 FOR SHAFT DETAILS.
- REFERENCE ARCHITECTURAL DRAWINGS FOR DIMENSIONS.
- PROVIDE DIAPHRAGM EDGE NAILING TO ALL JOISTS, PLATES OR BLOCKING IN LINE OR CONNECTED TO SHEAR WALLS.
- COORDINATE LOCATIONS OF MECHANICAL PENETRATIONS, FLOOR DEPRESSIONS, OPENINGS, DRAINS OR STEPS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
- REF. DETAIL 3&4/S6.01 FOR NOTCH AND HOLES ALLOWANCES AT STUDS, JOISTS, AND WALL PLS.
- REF. DETAIL 1&2/S6.05 FOR NON-BEARING PARTITION WALL DETAILS AT FLOOR AND ROOF.
- REF. S6.01 FOR THE TYPICAL HANGER SCHEDULE (U.N.O. ON PLANS).
- PROVIDE DIAPHRAGM EDGE NAILING TO ALL JOISTS, PLATES OR BLOCKING IN LINE OR CONNECTED TO SHEAR WALLS.
- INDICATES TO PROVIDE FULL DEPTH BLOCKING @24" OC (2) JOIST BAYS EACH SIDE OF CORNER. EXTEND 4'-0" EACH SIDE OF CORNER.
- INDICATES POST LOCATION REF. SCHEDULE ON S6.01 FOR TYPE U.N.O.
- INDICATES BALCONY IN-LINE w/ SUPPORT . REF. S.801 FOR INFO, SEE AND DETAILS.

ANKROM MOISAN ARCHITECTS, INC.

VALAR CONSULTING ENGINEERING

38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.575.1600

1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063

156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

REVISION | DATE | REASON FOR ISSUE


THIRD THRU FIFTH FLOOR FRAMING PLAN

PERMIT/GMP SET

DATE 10/09/2018 PROJECT NUMBER 17058

SHEET NUMBER S2.03



REVISION	DATE	REASON FOR ISSUE


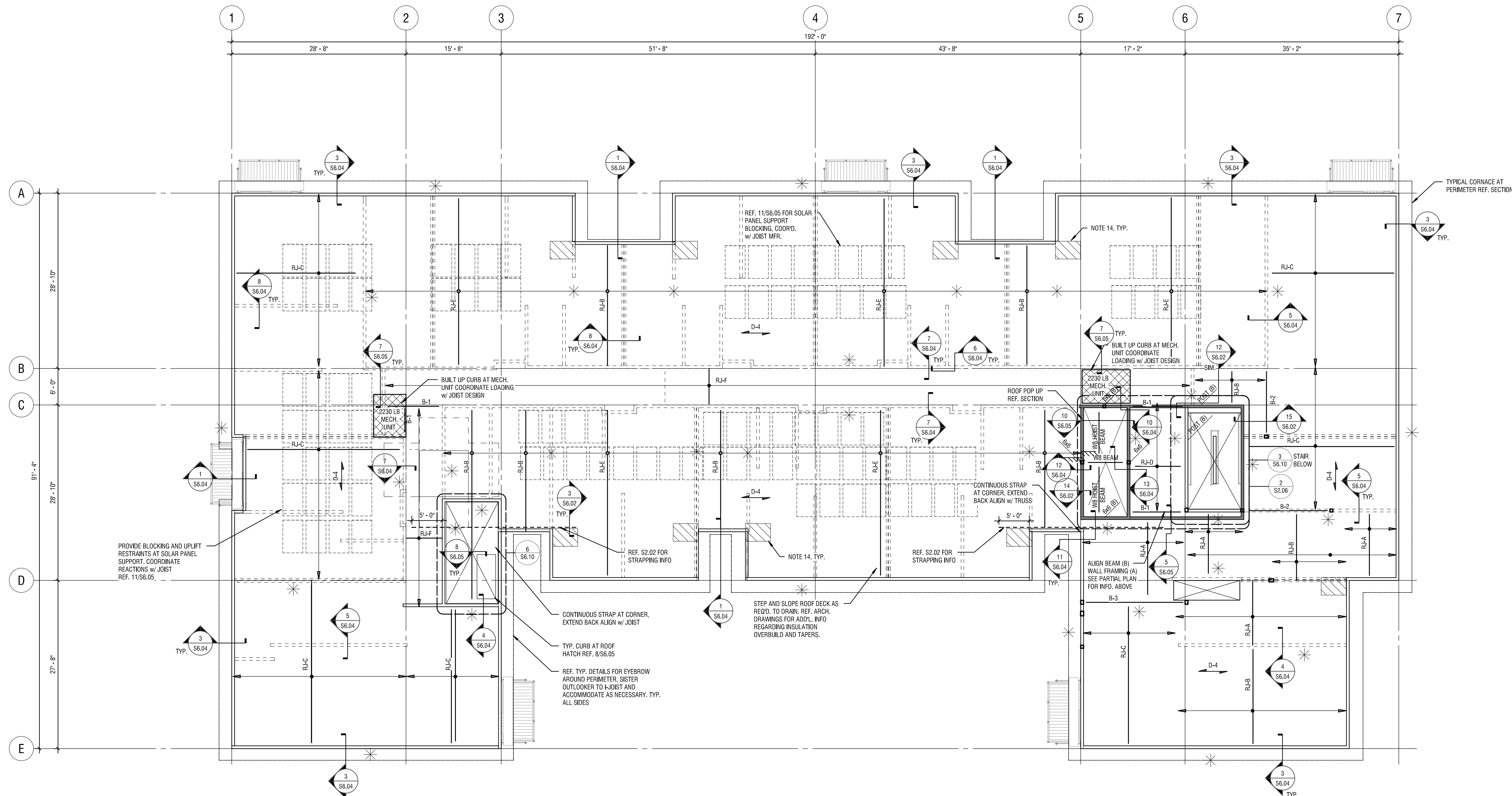
## ROOF PLAN

## PERMIT/GMP SET

DATE 10/09/2018	PROJECT NUMBER 17058
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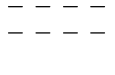




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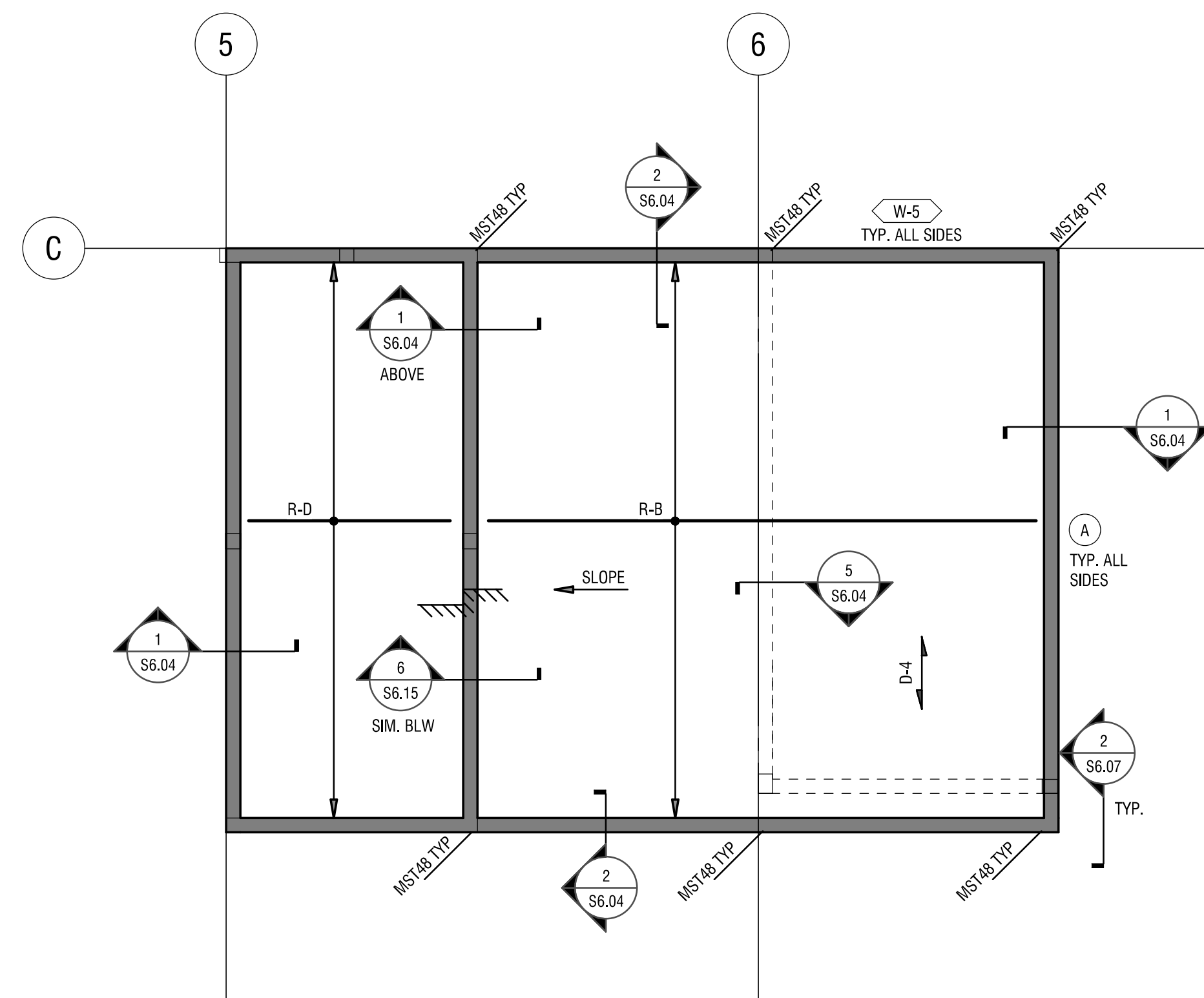
S2.06



ROOF PLAN  
1/8" = 1'-0"

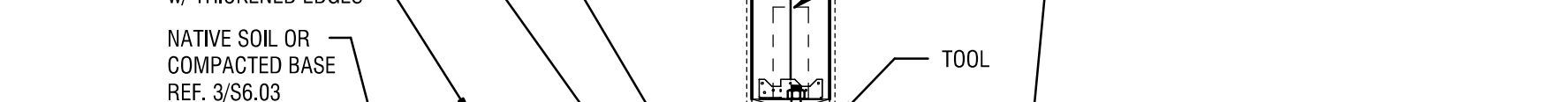
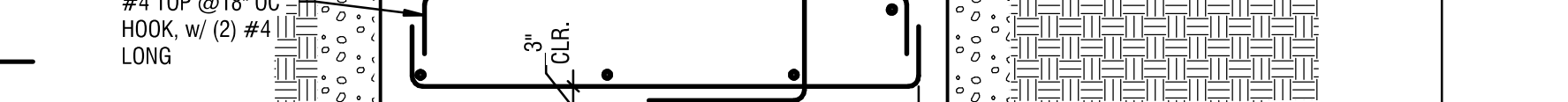
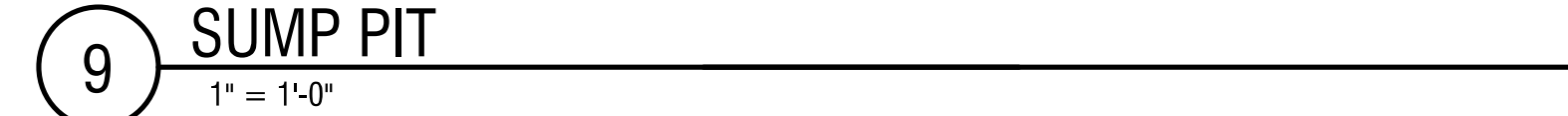
### ROOF PLAN NOTES

- |     |   |  |
|-----|---|--|
| 1.  | R-14 RD REBUILT T-45<br>R-14 RD REBUILT T-45<br>R-14 RD REBUILT T-40<br>R-14 DBL REBUILT T-90 | INDICATES SPAN DIRECTION OF 14" ENGINEERED ROOF JOIST AS INDICATED @ 24" O.C. JOIST. REF. ARCH. FOR JOIST LAYOUT.<br>DOUBLE JOIST @ 24" OC WITH IV 6"x6" OF PARALLEL WALL.   |
| 2.  | R-10<br>R-14 F  | INDICATES 2x10 @ 16" OC w/ #210 FULL NAIL HANGERS.<br>INDICATES 2x6 @ 24" OC w/ #28 HANGERS ALONG RIM OVER CORRIDOR  |
| 3.  |   | NOTE PLANS FOR LOADING INFO. REFERENCE TYPICAL FLOOR FRAMING FOR LOCATION OF WOOD BEARING BELOW. REFERENCE SCHEDULES ON LOWER FLOOR FRAMING PLAN FOR INFORMATION, COORDINATE BLOCKING AND CURB REQMENTS. AT ALL SOLAR PANELS, MECH. EQUIPMENT, ROOF HATCHES, AND OF SKYLIGHTS. |
| 4.  | B-X   | INDICATES BEAM OVER OPENING W/ SUPPORT POSTS TO ALIGN FULL HEIGHT TO BELOW.  |
| 5.  |            | INDICATES WOOD BEARING WALL BELOW. REFERENCE FRAMING PLANS FOR INFORMATION.  |
| 6.  | D-4<br>    | INDICATES SPAN DIRECTION OF 2332" PLYWOOD ROOF SHEATHING. FASTEN W/ #8 NAILS @4" OC AT INTERIORS AND 12" OC AT INTERIORS. ALL EDGES SHOULD BE BLOCKED OR PLY CLIPPED. ALTERNATIVELY SHEATHING MAY BE T&G.  |
| 7.  |   | REF. S2.04 FOR TYPICAL PLAN NOTES AND INFORMATION NOT SHOWN.   |
| 8.  |   | REFERENCE S6.01 THRU S6.07 FOR TYPICAL WOOD DETAILS.   |
| 9.  |   | ALL OTHER WALLS NOT NOTED SHALL BE NON-LOAD BEARING PER ARCHITECTURAL REQUIREMENTS. ALLOCATE FOR CONNECTION REF. 2356.05   |
| 10. |   | REFERENCE ARCHITECTURAL DRAWINGS FOR DIMENSIONS.   |
| 11. |            | INDICATES ROOF TIE OFF FOR WINDOW WASHING AND MAINTENANCE. REF. 1056.05 FOR DETAILS. FIELD COORD. LOCATIONS W/ JOIST DESIGN INFR. REF. ARCH. FOR FINAL LOCATIONS.  |
| 12. |            | INDICATES SLOPE DIRECTION. REF. ARCH. FOR ELEVATION AND INFO.  |
| 13. |            | INDICATES LEVEL OVERBUILD FRAMING REF. 9/86.05   |
| 14. |   | INDICATES TO PROVIDE FULL DEPTH BLOCKING @2x4 OC (2) JOIST BAYS EACH SIDE OF CORNER EXTEND 4'-0" EACH SIDE OF CORNER   |

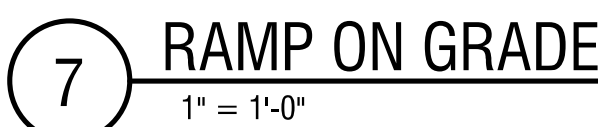


 2 PENTHOUSE STAIR PARTIAL PLAN  
1/4" = 1'-0"



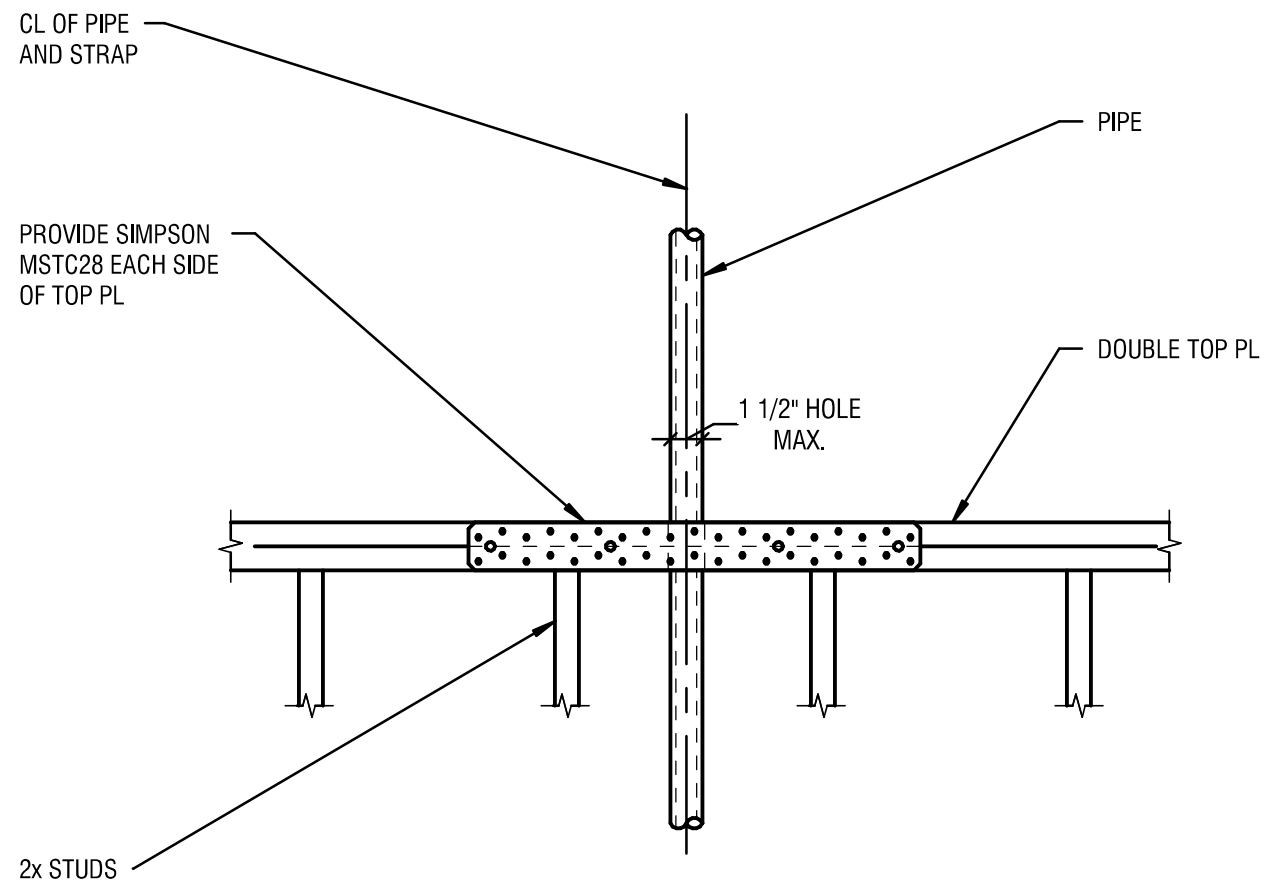








WOOD BEARING WALL SCHEDULE			
WALL SYMBOL	LEVEL	STUD	COMMENT
W-1	1	(2) 2x6	SPACING = 16" OC EXTERIOR 2x6 BEARING WALLS FIRE TREATED LUMBER REQ'D. EDGE NAIL SHEATHING w/ 0.131"Ø NAILS @ 6" OC
	2	2x6	
	3	2x6	
	4	2x6	
	5	2x6	
W-2	1	(2) 2x6	SPACING = 16" O.C. EXTERIOR 2x6 BEARING WALLS FIRE TREATED LUMBER REQ'D. EDGE NAIL SHEATHING w/ 0.131"Ø NAILS @ 6" OC
	2	(2) 2x6	
	3	2x6	
	4	2x6	
	5	2x6	
W-3	1	(2) 2x6	SPACING = 16" OC CORRIDOR WALLS
	2	2x6	
	3	2x6	
	4	2x6	
	5	2x6	
W-4	1	(2) 2x4	SPACING = 16" OC DOUBLE 2x4 WALL w/ EACH WALL HAVING SPACING NOTED w/ 1" AIRSPACE w/ 2x4 BLOCKING AT FULL HEIGHT. (ACCEPTABLE TO OMIT BLOCKING ONLY ON SIDE PL WOOD SHAEATHING PROVIDED).
	2	(2) 2x4	
	3	2x4	
	4	2x4	
	5	2x4	
W-5	1	(2) 2x6	SPACING = 16" OC INTERIOR BEARING WALL
	2	2x6	
	3	2x6	
	4	2x6	
	5	2x6	
W-6	1	(2) 2x6	SPACING = 16" OC INTERIOR BEARING WALL
	2	(2) 2x6	
	3	2x6	
	4	2x6	
	5	2x6	

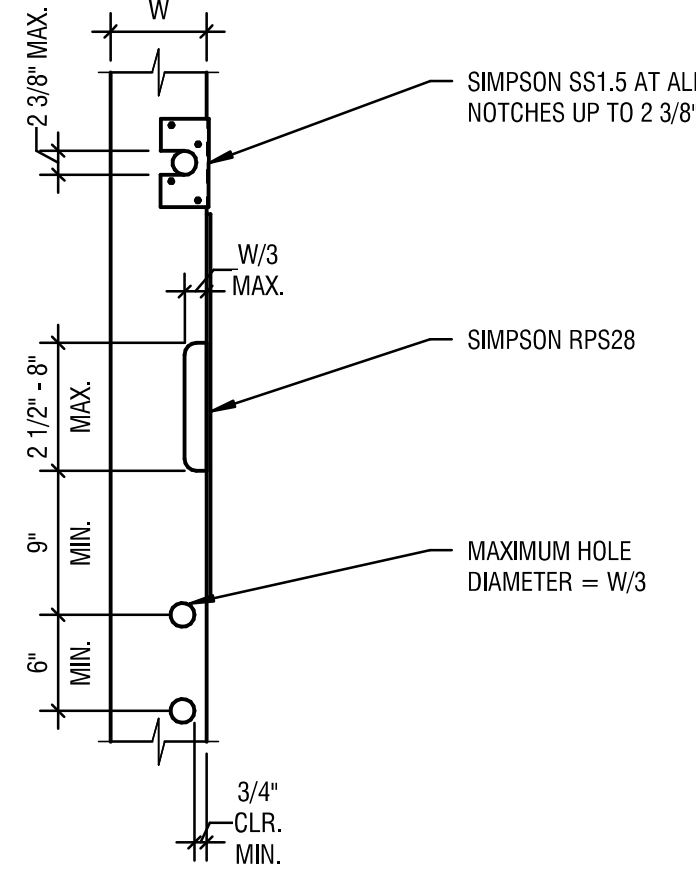


NOTES:

1. "W" DENOTES WIDTH OF WOOD MEMBER.
2. ALL HOLES TO DRILLED, NOT SAWN.
3. ALL NOTCHES TO HAVE CORNERS PREDRILLED.

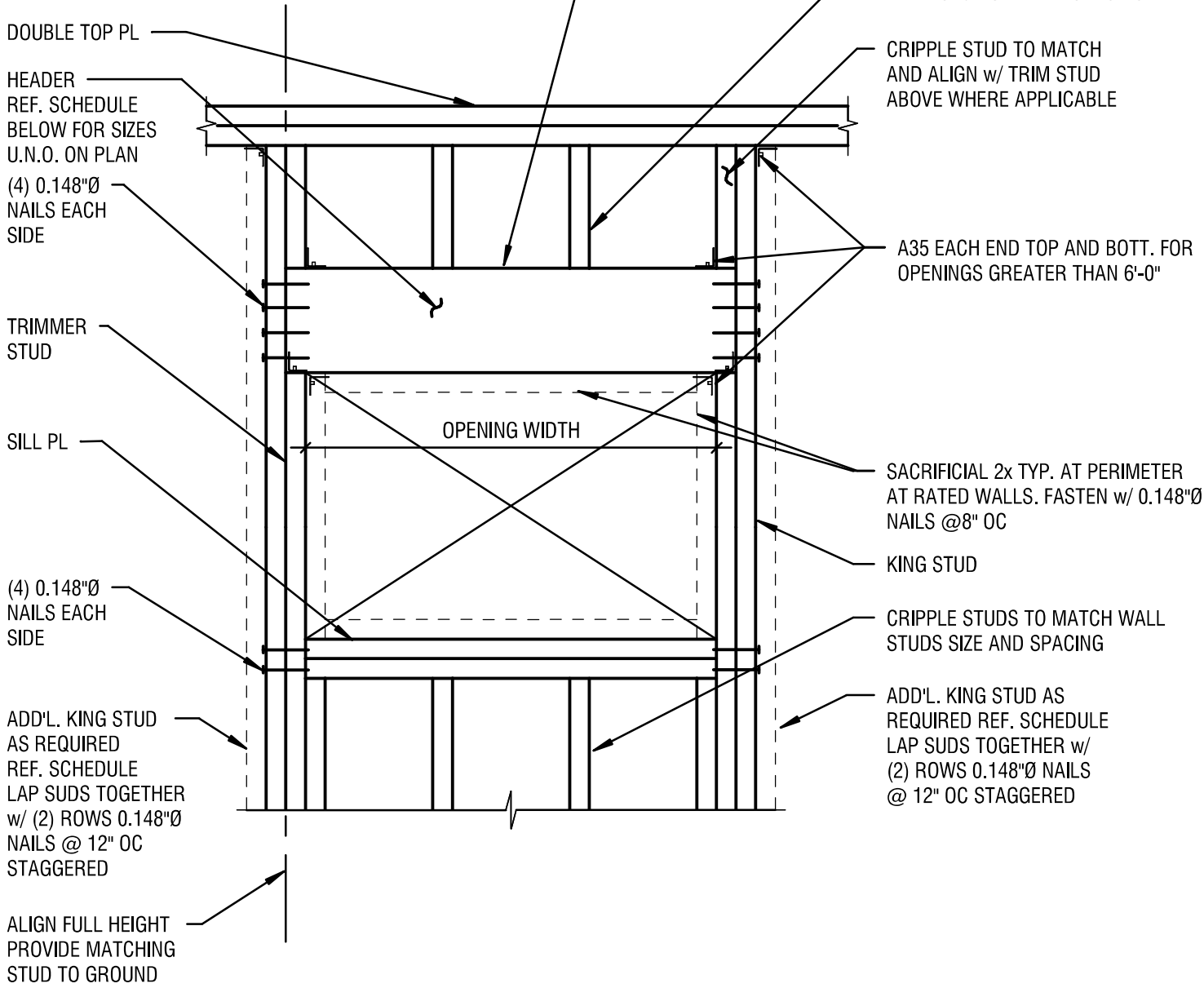
DRILLED HOLE SCHEDULE	
MEMBER	MAX. HOLE Ø
JOIST	W/8
TOP PL, SILL AND SOLE PL	W/3

STUD ELEVATION



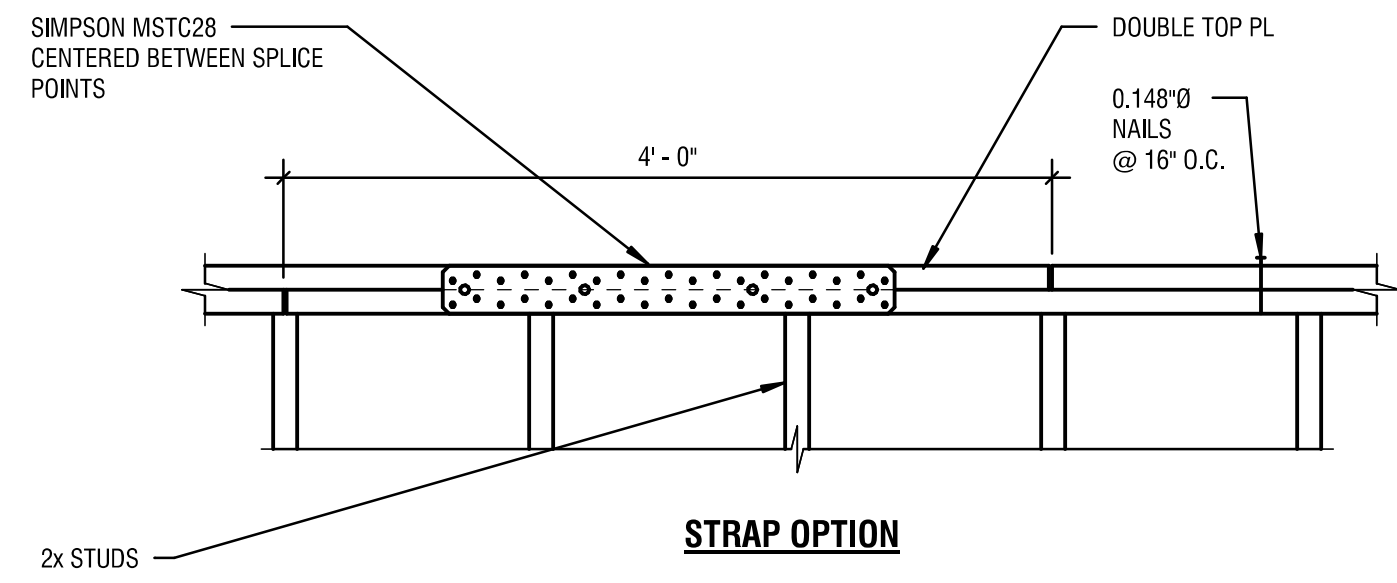
OPTIONAL FOR EXTERIOR WALL AND RATED PARTIONS  
REQUIRING BLOCKING TO ALIGN HEADER AT BOTTOM OF  
PLATE AND PROVIDE 2X AT TOP OF WINDOW. USE  
DOUBLE 2X AT EXTERIOR OPENINGS GREATER THAN  
6'-0". REFERENCE TYPICAL DETAILS AND  
ARCHITECTURAL FOR LOCATIONS/RATING REQUIRED.

NOTE:  
JOIN MULTIPLE STUDS WITH 0.148"Ø  
NAILS STAGGERED @ 12" OC TYP.  
FILLER STUDS AS REQ'D. TO MATCH  
WALL STUD SEE AND SPACING



## WOOD BEARING WALL SCHEDULE

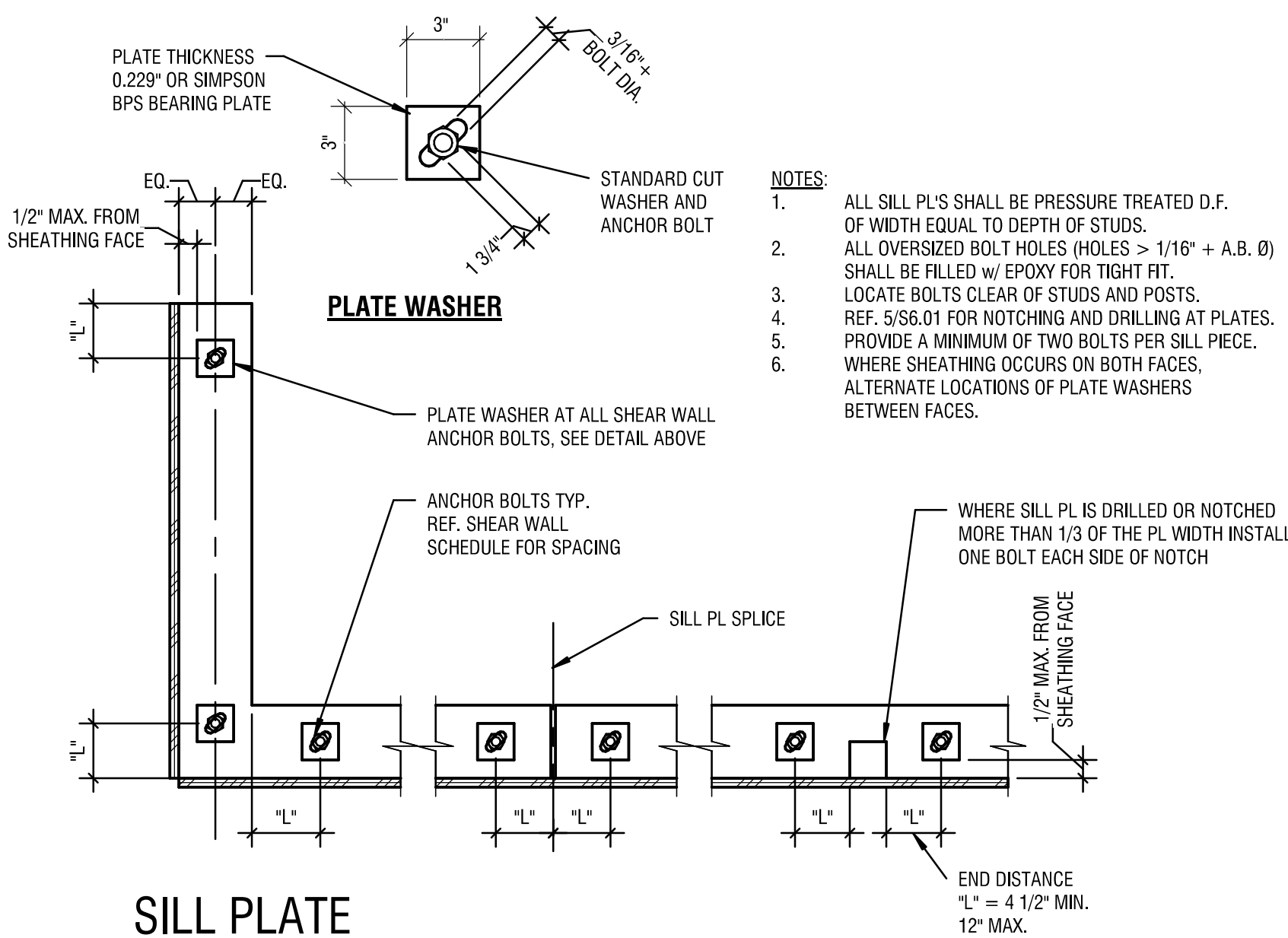
1" = 1'-0"



NOTE:  
1. SPLICE SHALL OCCUR OVER A STUD.

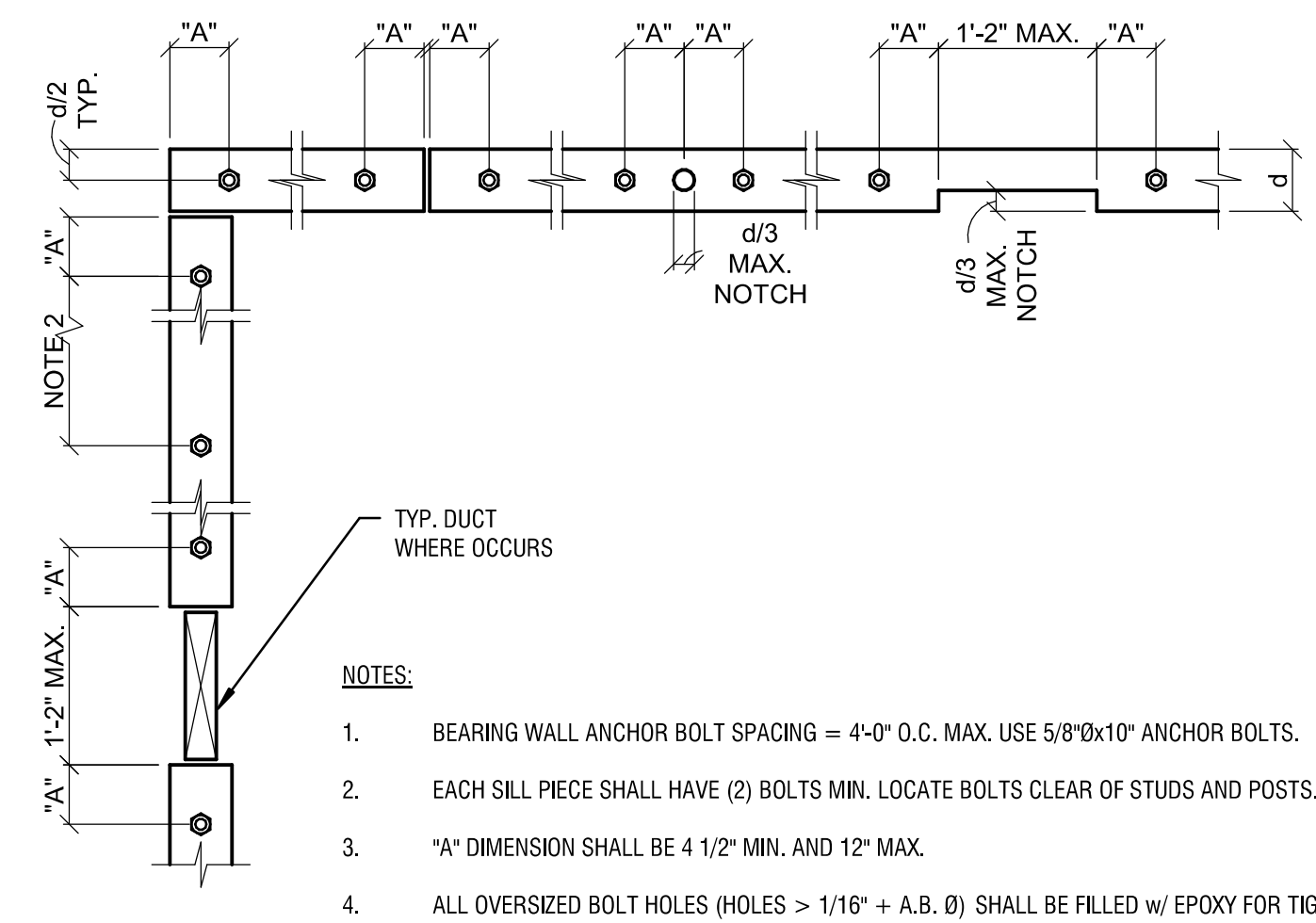
## WOOD TOP PLATE SPLICE DETAIL

1" = 1'-0"



## SILL PLATE BOLT BOLTING - SHEAR WALLS

1" = 1'-0"

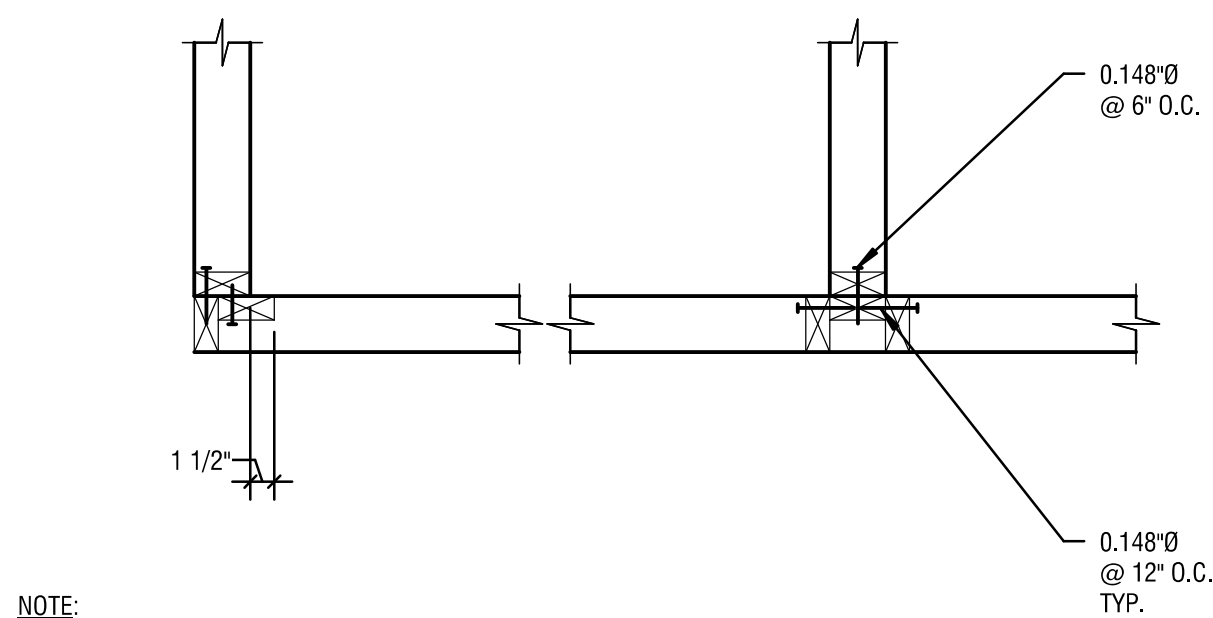
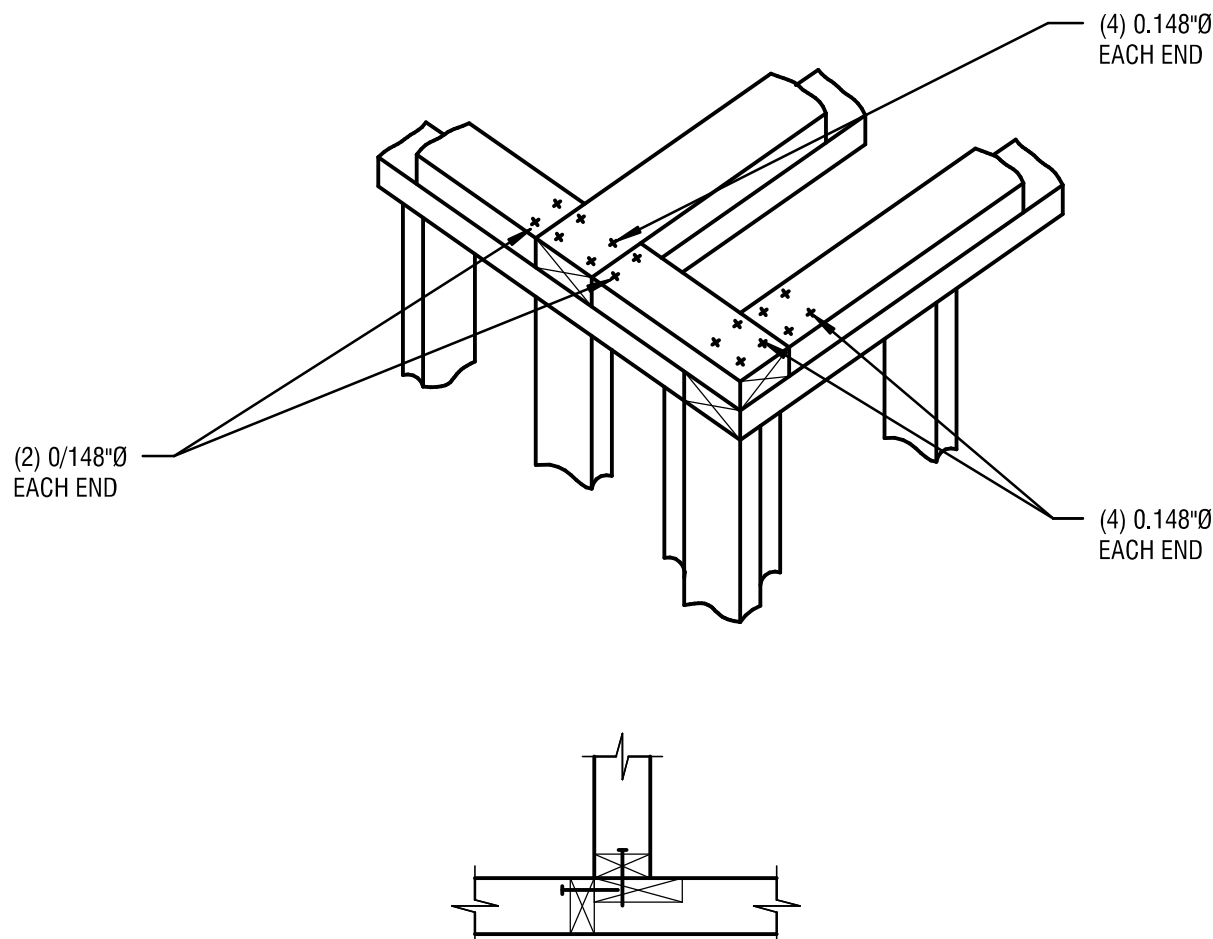


## SILL PLATE BOLT BOLTING - BEARING WALLS

1" = 1'-0"

## PIPE PENETRATION AT TOP PLATES

1" = 1'-0"



## TYPICAL WALL CORNERS

1" = 1'-0"

HANGER SCHEDULE		
CONNECTION TYPE	SIMPSON HANGER TYPE - FACE MOUNT	SIMPSON HANGER TYPE - TOP FLANGE
**1-JOIST TO HEADER/BEAM**	NOTE 4	NOTE 4
**1-JOIST BLOCKING TO I-JOIST**	N/A	NOTE 4
**2x MEMBER TO HEADER/BEAM**	**LUS**	**PF24**
**2x6 - 2x12**	**LUS**	**JB**
**4x MEMBER TO HEADER/BEAM**	**LUS**	**HUT**
**4x4**	**LUS**	**HUSTE**
**4x6**	**LUS**	**BA**
**4x8 - 4x12**	**LUS**	**BA**
**6x MEMBER TO HEADER/BEAM**	**LUS**	**HUT**
**6x6**	**LUS**	**HUSTE**
**6x8 - 6x12**	**LUS**	**BA**
**3 1/8 OR 3 1/2 GLULAM TO HEADER/BEAM**	**LUS**	**GB**
**UP TO 12\"	**LUS**	**GB**
**GREATER THAN 12**	**REF. PLANS**	**GB**
**5 1/8\"	**LUS**	**GB**
**UP TO 12\"	**LUS**	**GB**
**GREATER THAN 12**	**REF. PLANS**	**GB**
**6 3/4\"	**LUS**	**GB**
**UP TO 12\"	**LUS**	**GB**
**GREATER THAN 12**	**REF. PLANS**	**GB**
**8 3/4\"	**LUS**	**GB**
**UP TO 12\"	**LUS**	**GB**
**GREATER THAN 12**	**REF. PLANS**	**GB**

NOTES:

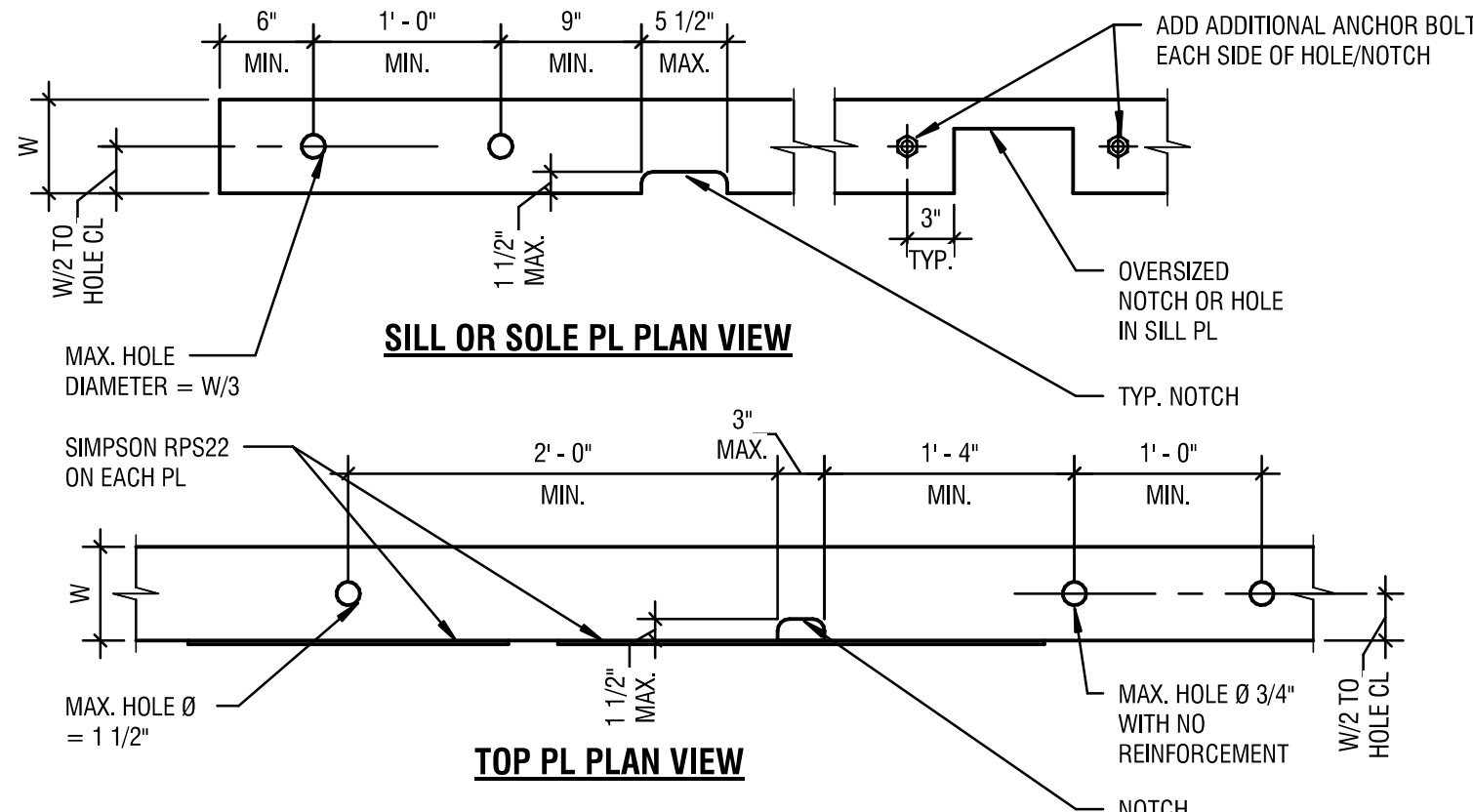
1. FOLLOW MANUFACTURERS' INSTRUCTIONS FOR ALL HANGERS.
2. SUBSTITUTIONS ACCEPTABLE ONLY WITH ENGINEERS' WRITTEN APPROVAL.
3. HANGERS SPECIFIED IN ALL OTHER DETAILS TAKE PRECEDENCE OVER THIS SCHEDULE
4. ALL I-JOIST HANGERS TO BE BY JOIST DESIGNER.

## HANGER SCHEDULE

1" = 1'-0"

## HOLES AND NOTCHES AT STUDS

1" = 1'-0"

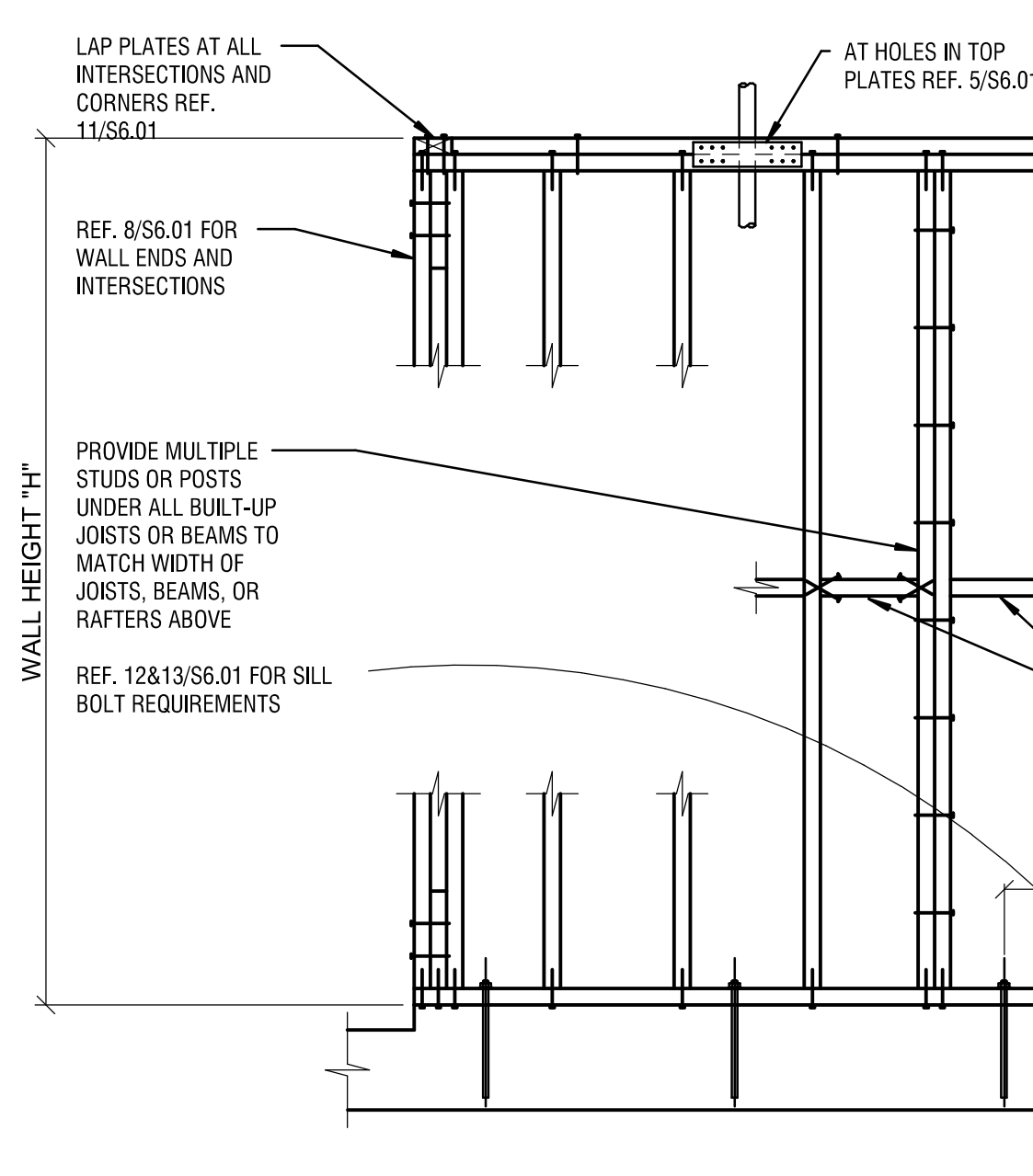


NOTES:

1. "W" DENOTES WIDTH OF WOOD MEMBER.
2. SILL PL NOTES:  
A. WHERE NOTCH IS GREATER THAN NOTED, PROVIDE ADDITIONAL ANCHOR BOLT EACH SIDE OF NOTCH.  
B. WHERE BOLT IS LESS THAN 1" CLR. FROM EDGE, PROVIDE ADDITIONAL ANCHOR BOLT.  
C. ALL OVERSIZED BOLT HOLES (HOLES GREATER THAN 1/16" + ANCHOR BOLT Ø) SHALL BE FILLED w/ EPOXY FOR TIGHT FIT.
3. WHERE NOTCHED OR DRILLED HOLE IN TOP PLATE EXCEEDS ALLOWABLE CONTACT VALAR CONSULTING ENGINEERS.
4. ALL HOLES TO DRILLED, NOT SAWN.
5. ALL NOTCHES TO HAVE CORNERS PREDRILLED.

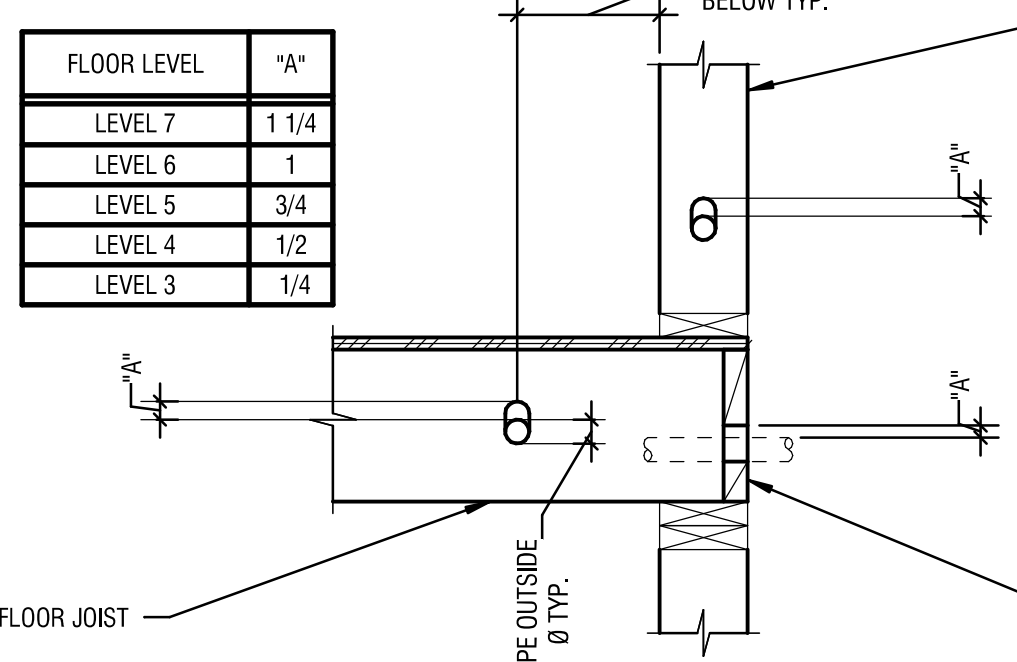
## HOLES AND NOTCHES AT WALL PLATES

1" = 1'-0"



## TYPICAL WALL ELEVATION

1" = 1'-0"



NOTES:

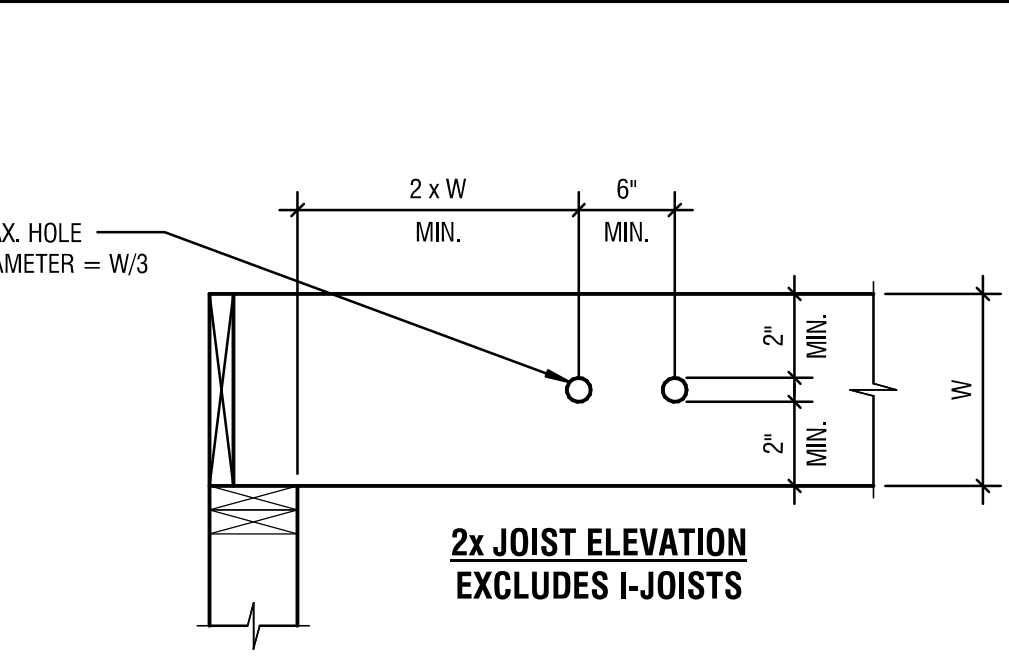
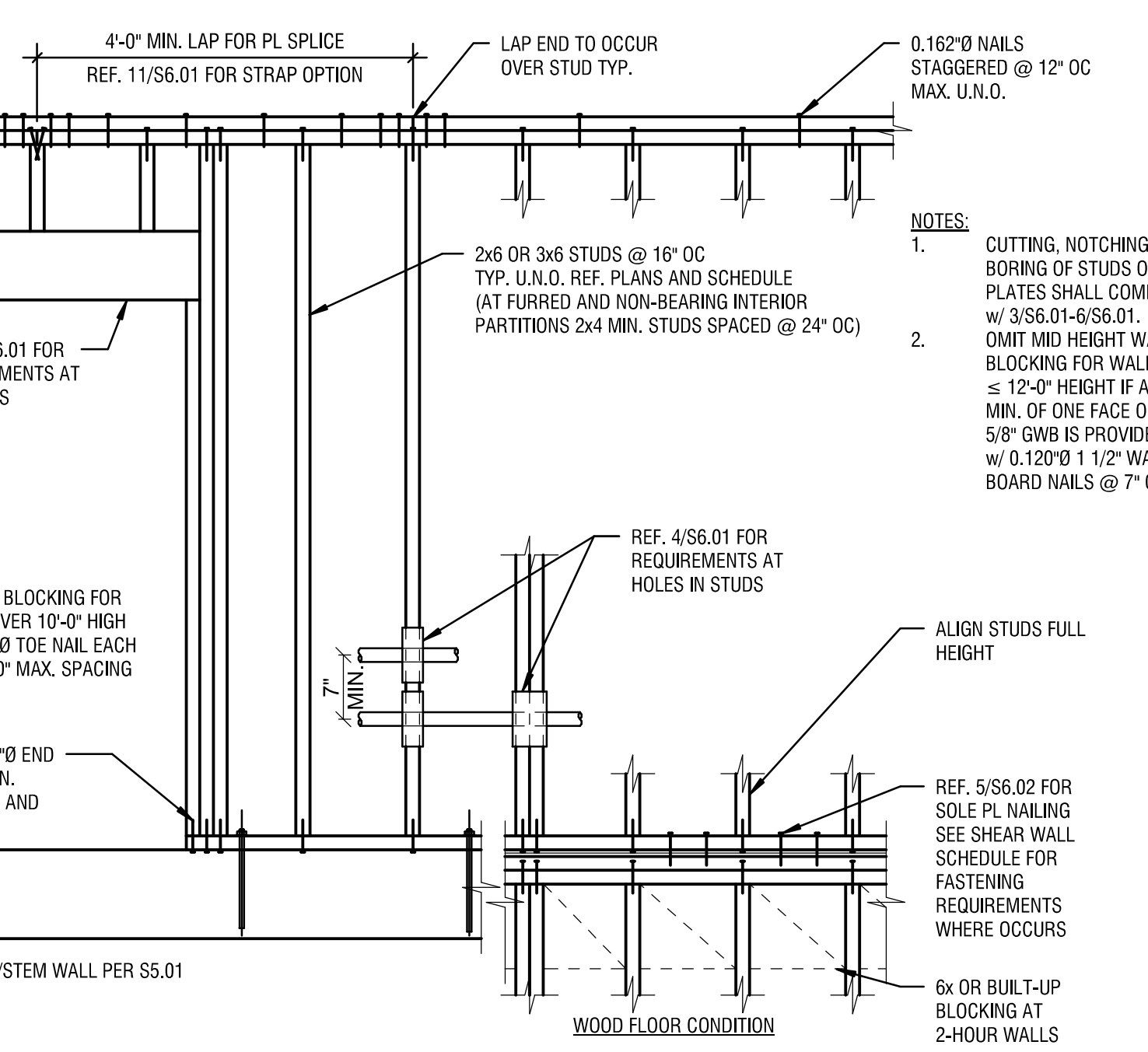
1. "A" DENOTES REQUIRED CLEAR DISTANCE FROM TOP OF PIPE TO TOP OF OPENING.
2. DEPTH "A" IS BASED UPON A MAX. MOISTURE CONTENT OF 19% AT TIME OF INSTALLATION OF PLUMBING.
3. HOLE Ø + "A" SHALL NOT EXCEED ALLOWABLE HOLE SIZES IN STRUCTURAL MEMBERS SHOWN IN 3/S6.01 AND 4/S6.01.
4. INSTALL PIPE AT BOTTOM OF SLOTTED HOLE.
5. LOCATION OF HOLES IN STRUCTURAL MEMBERS (STUDS, JOIST, PLATES, ETC.) SHALL BE PER 3-5 AND 7/S6.01 AND GENERAL STRUCTURAL NOTES.

## OVERSIZED HOLES IN WOOD MEMBERS FOR SHRINKAGE

1" = 1'-0"

## TYPICAL OPENING DETAIL

1" = 1'-0"

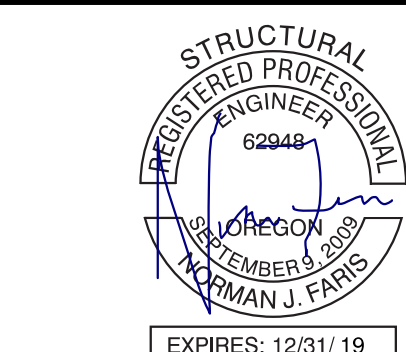


NOTES:

1. "W" DENOTES WIDTH OF WOOD MEMBER.
2. ALL HOLES TO DRILLED, NOT SAWN.
3. NOTCHING OF JOISTS NOT PERMITTED.
4. HOLES TO BE LOCATED IN MIDDLE 1/3 OF DEPTH "W".
5. FOR I-JOISTS FOLLOW MANUFACTURERS' REQUIREMENTS.

## HOLES AND NOTCHES AT SOLID SAWN JOISTS

1" = 1'-0"



**Ankrom Moisan**

38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.575.1600

1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063

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**VALAR** LLC  
VALAR CONSULTING ENGINEERING  
12042 SE SUNNYSIDE ROAD #357  
CLACKAMAS, OREGON 97015

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REVISION	DATE	REASON FOR ISSUE

## WOOD DETAILS

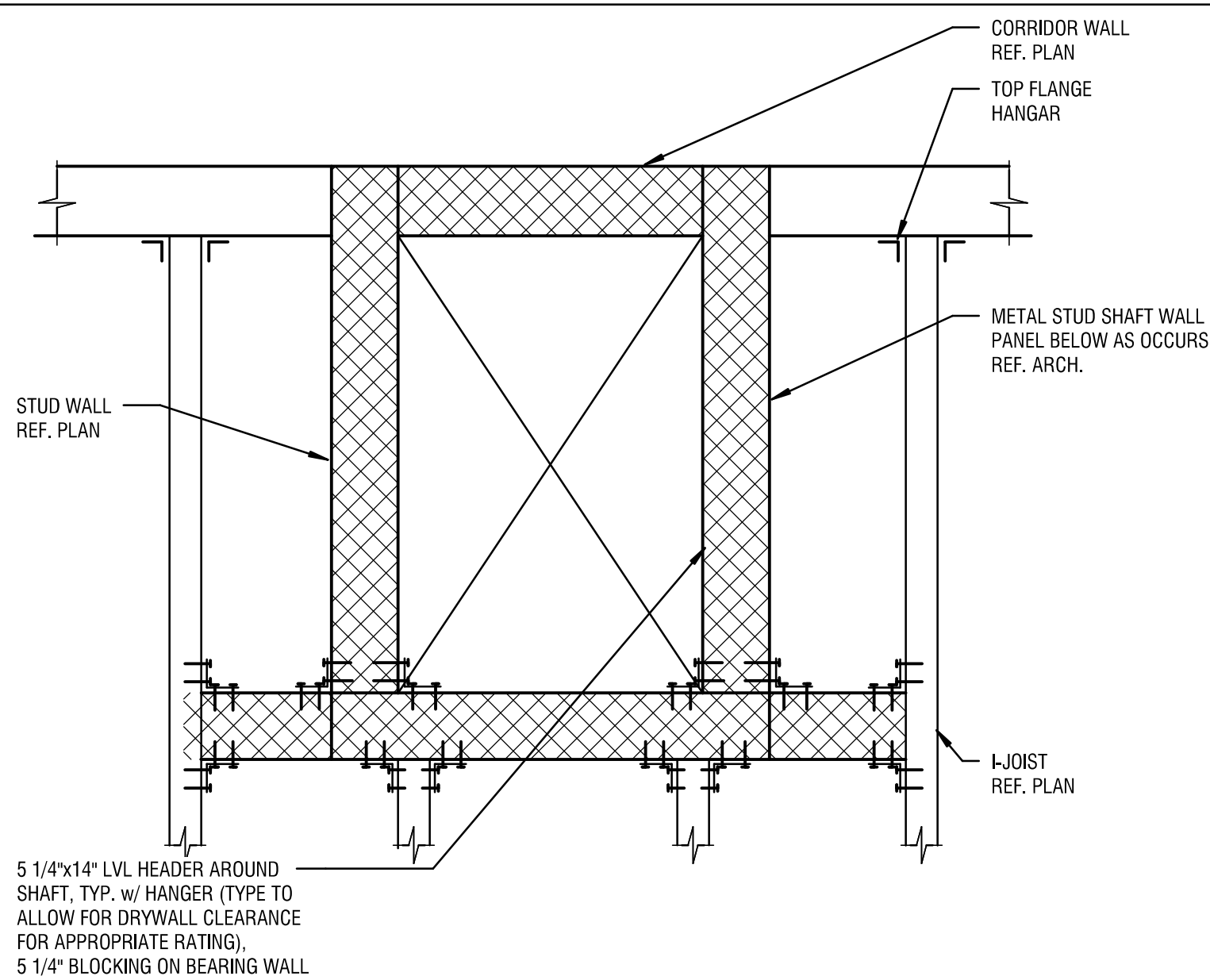
## PERMIT/GMP SET

DATE	PROJECT NUMBER
10/09/2018	17058

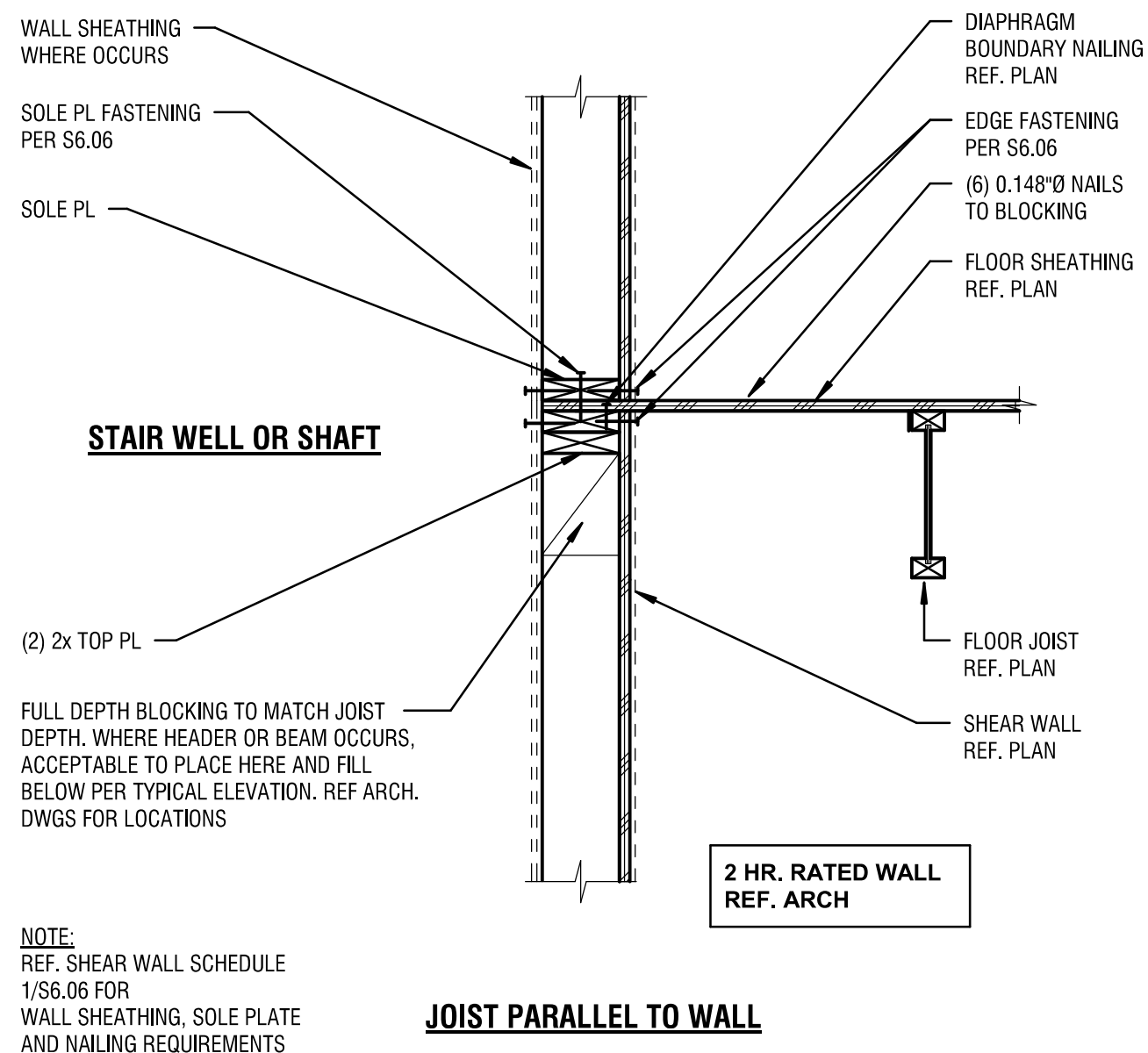
SHEET NUMBER

S6.01

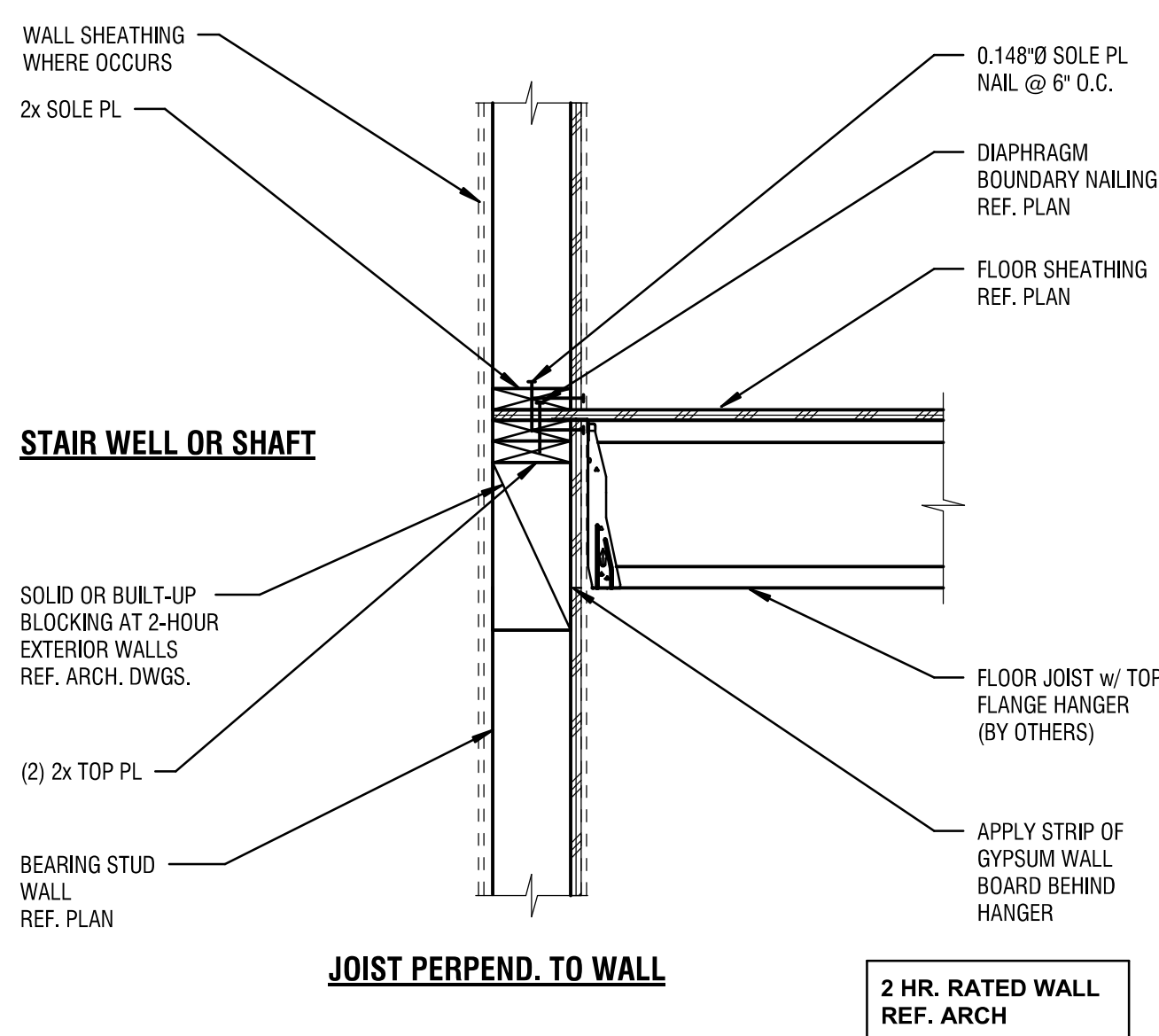




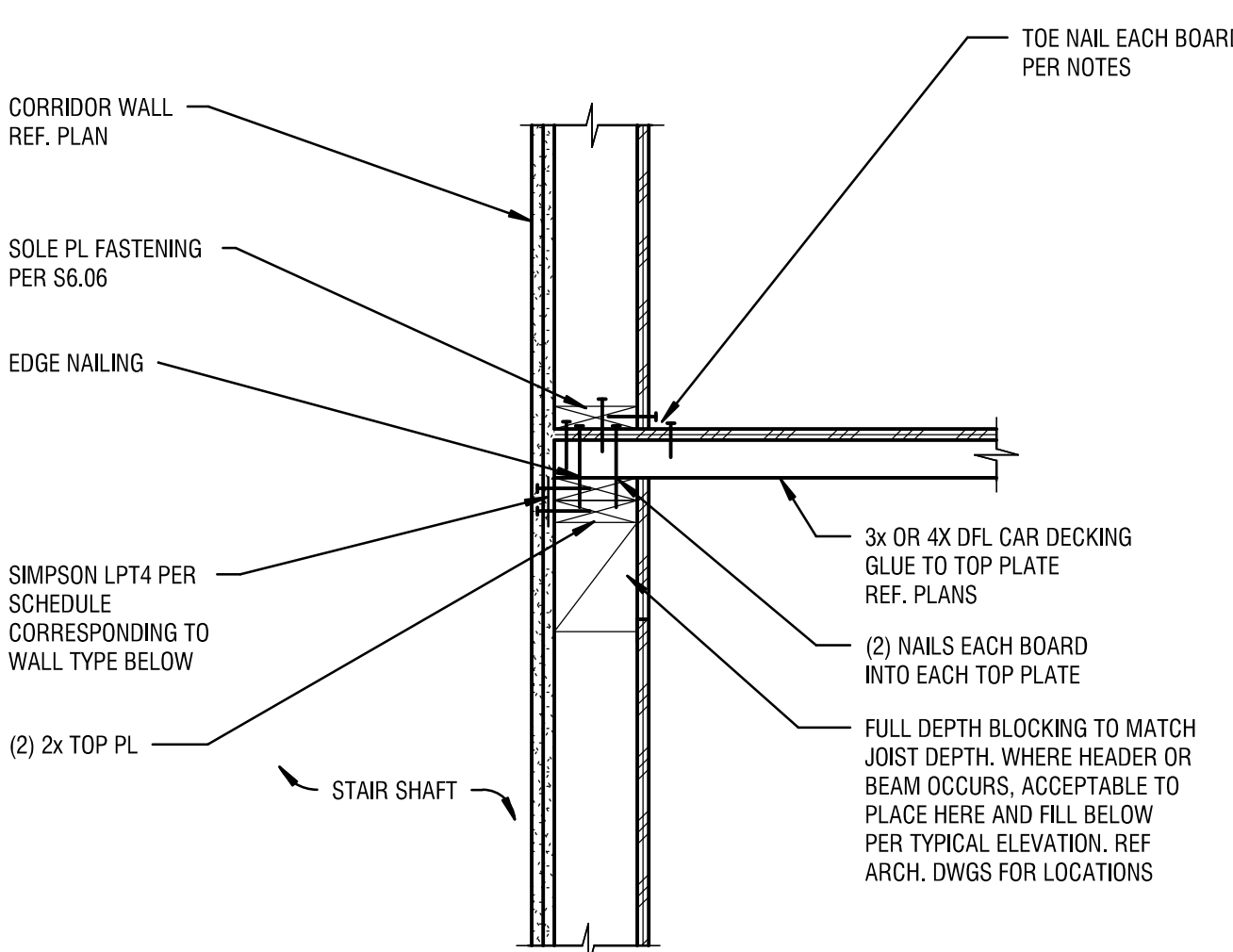
**13** SHAFT FRAMING LAYOUT  
1" = 1'-0"



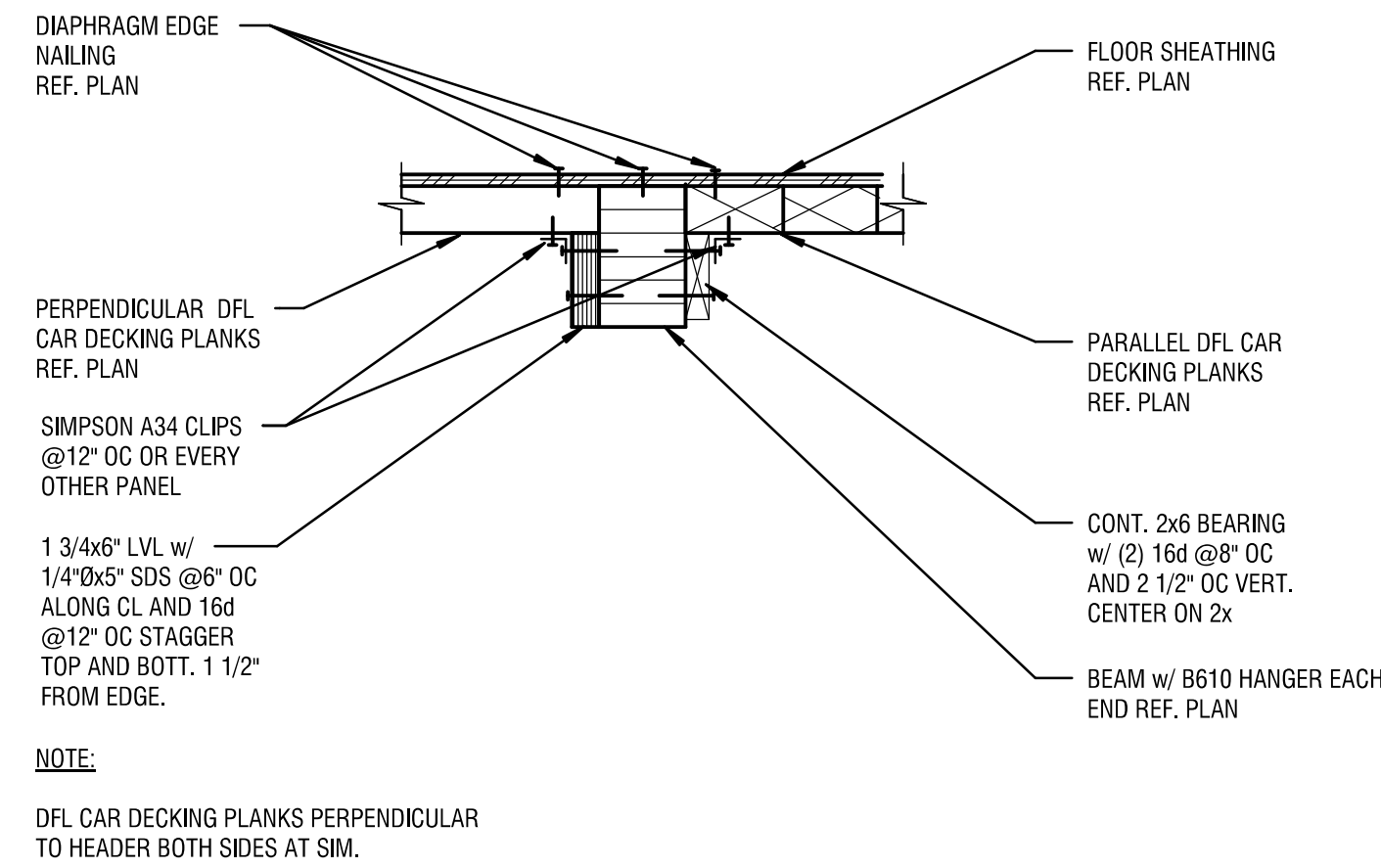
**14** INTERIOR RATED NON-BEARING WALL  
1" = 1'-0"



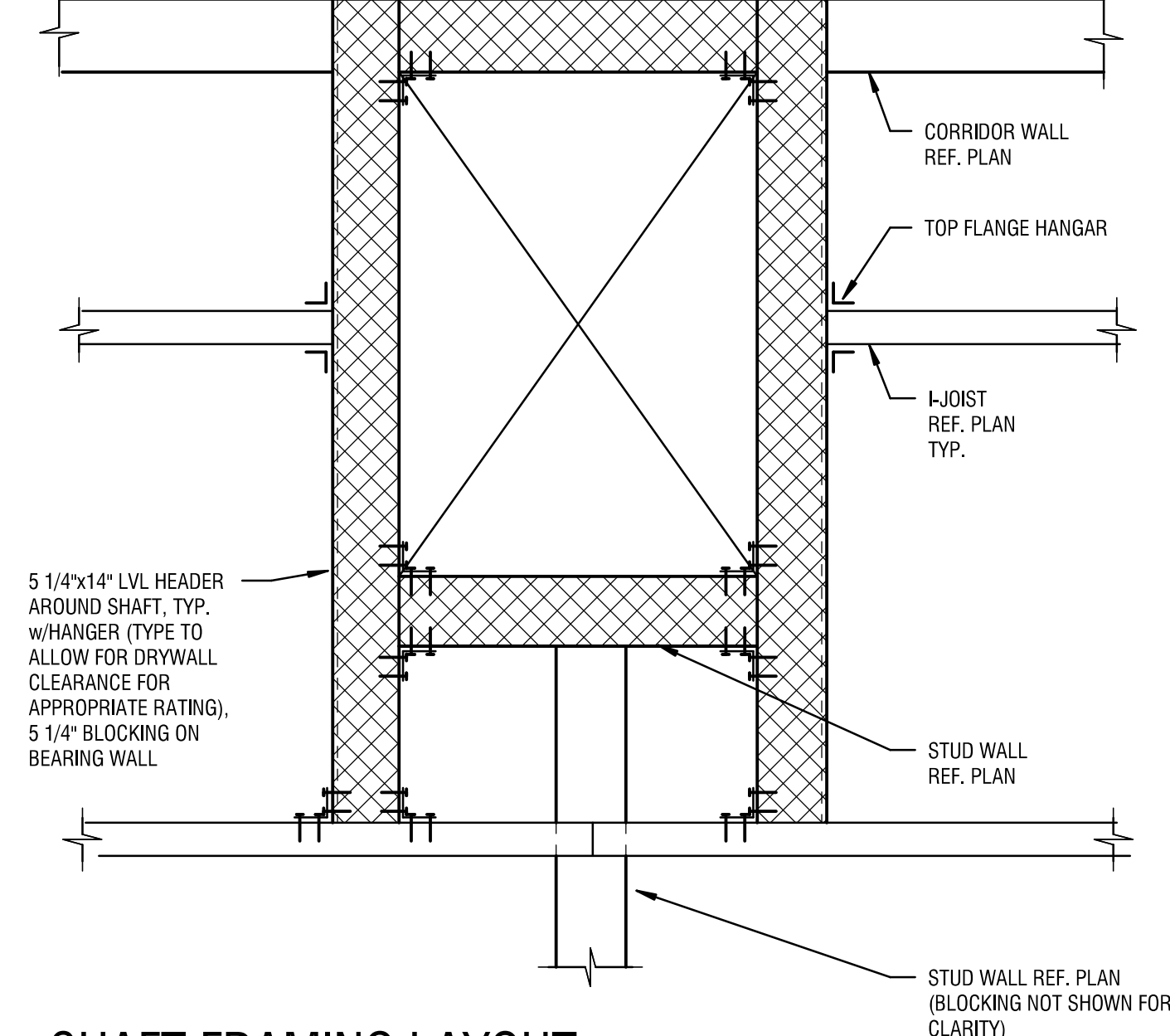
**15** INTERIOR RATED BEARING WALL  
1" = 1'-0"



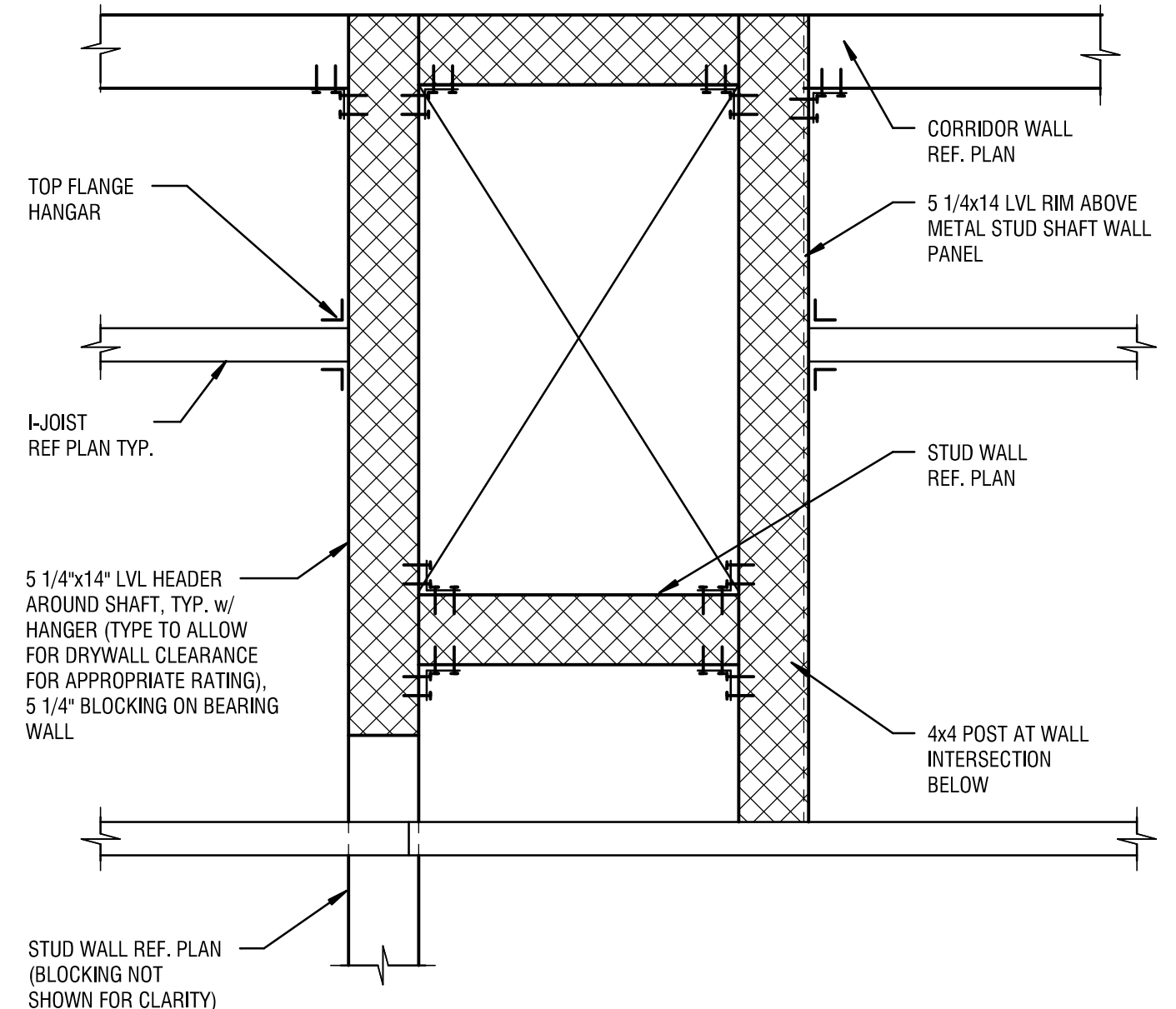
**16** CORRIDOR AT RATED WALL  
1" = 1'-0"



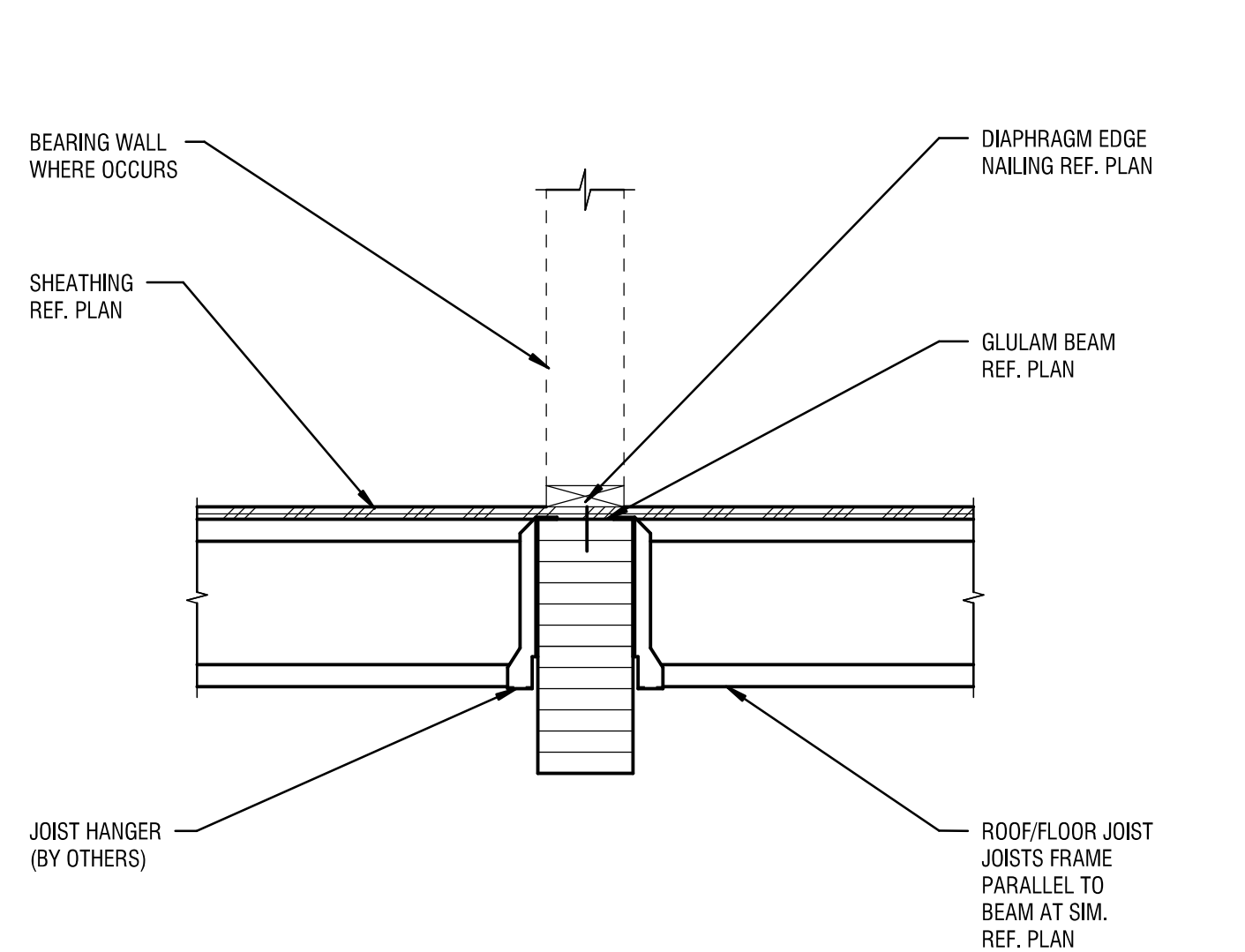
**9** CORRIDOR 3x DECKING AT PARALLEL BEAM  
1" = 1'-0"



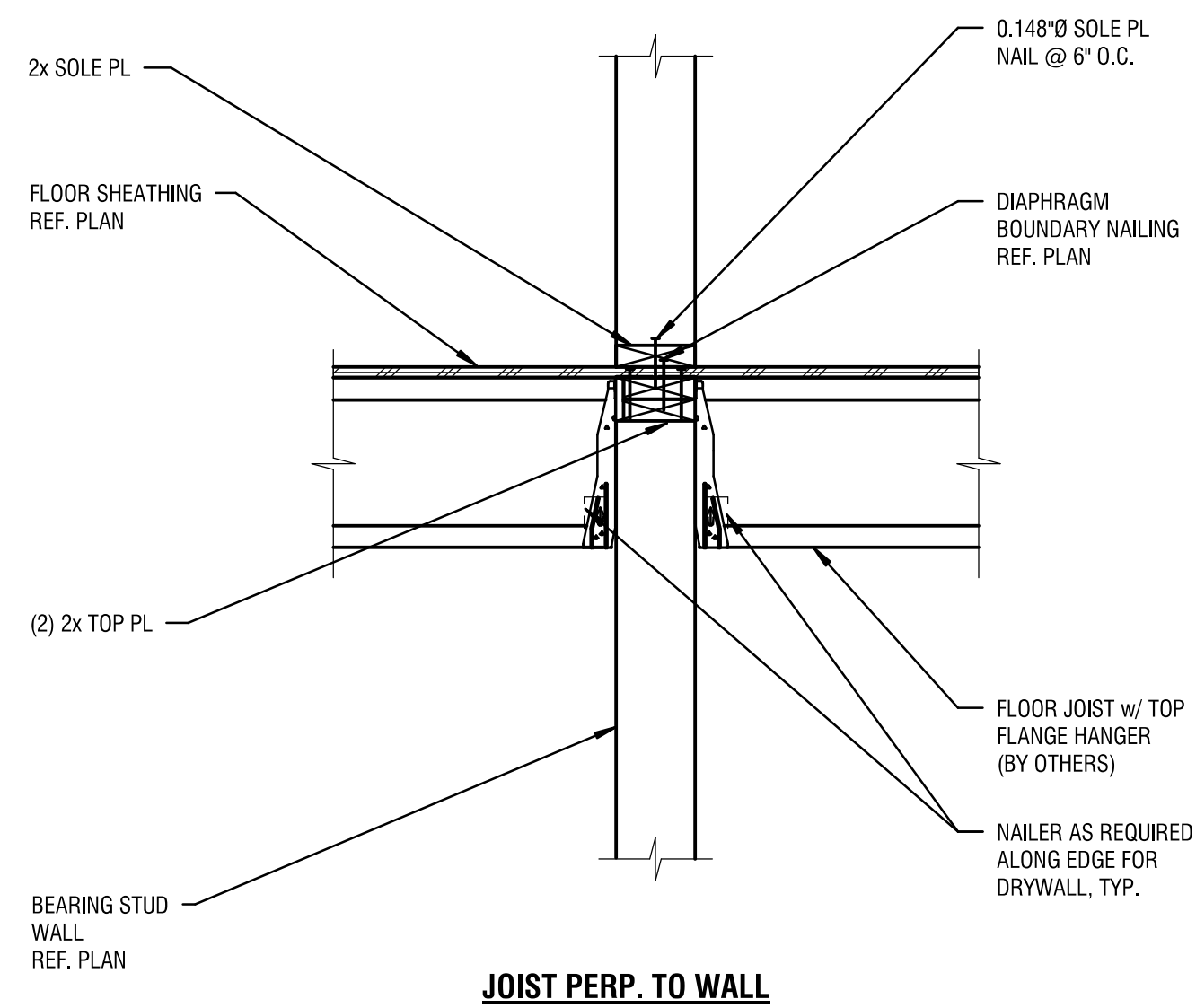
**10** SHAFT FRAMING LAYOUT  
1" = 1'-0"



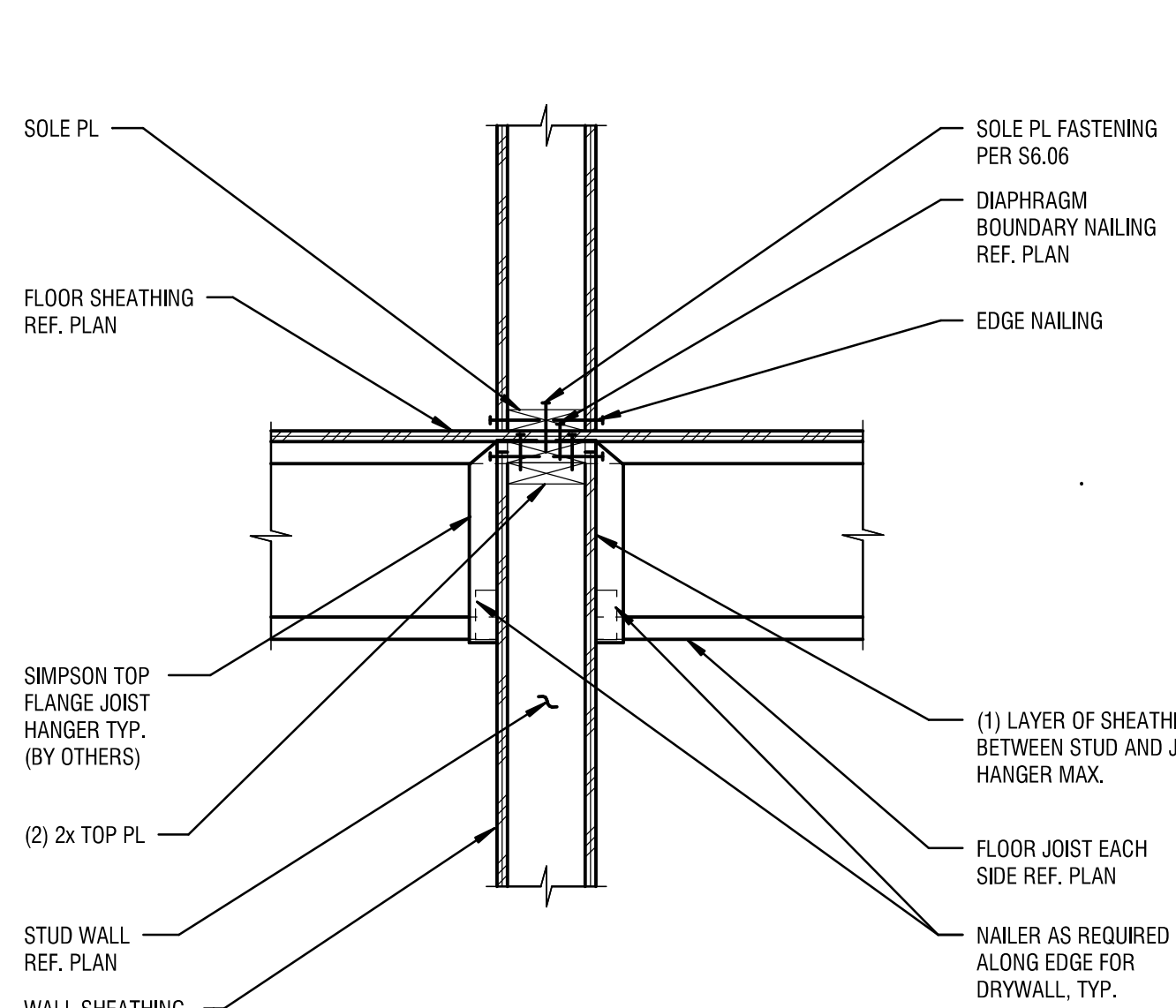
**11** SHAFT FRAMING LAYOUT  
1" = 1'-0"



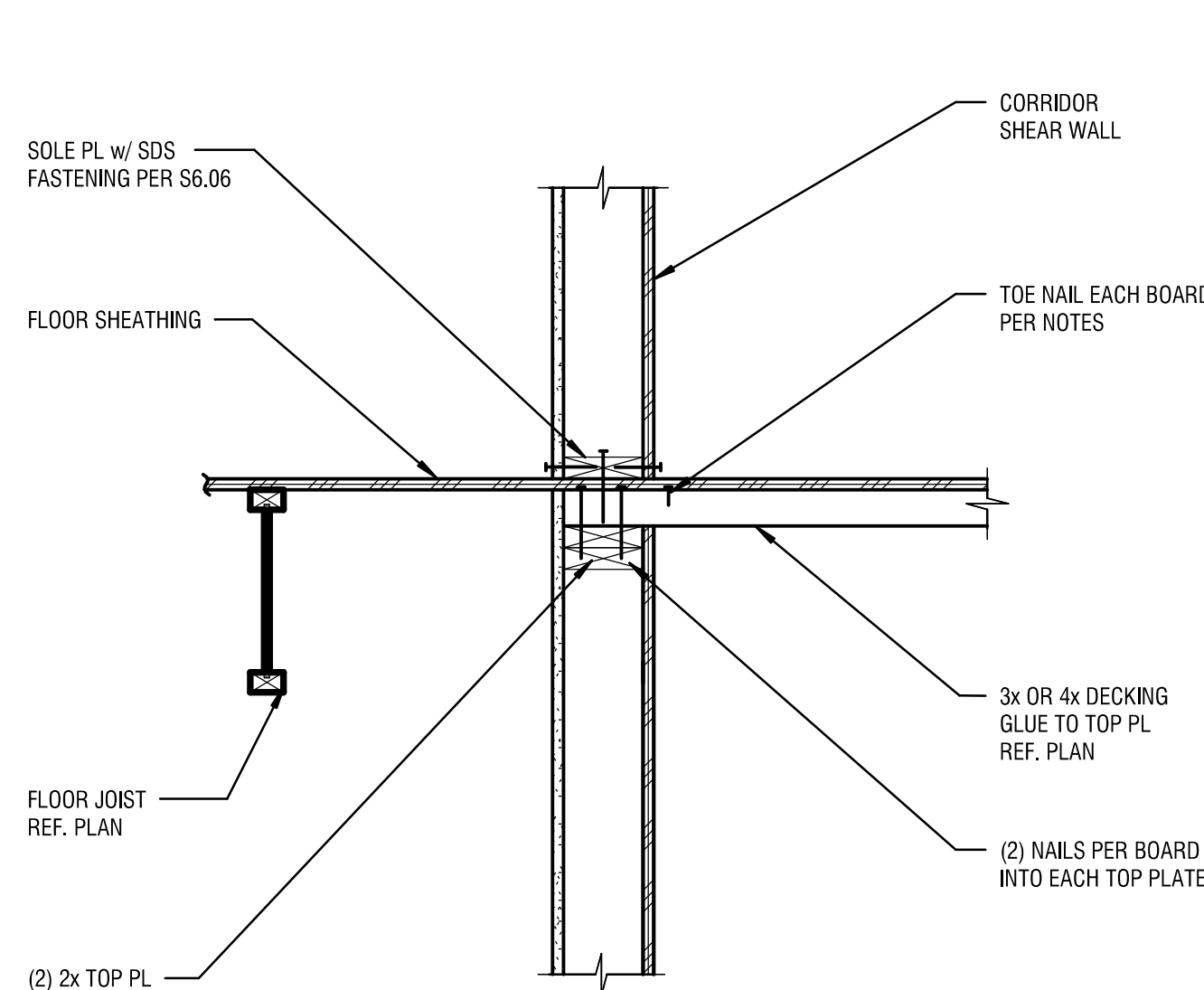
**12** JOIST CONNECTION TO WOOD BEAM  
1" = 1'-0"



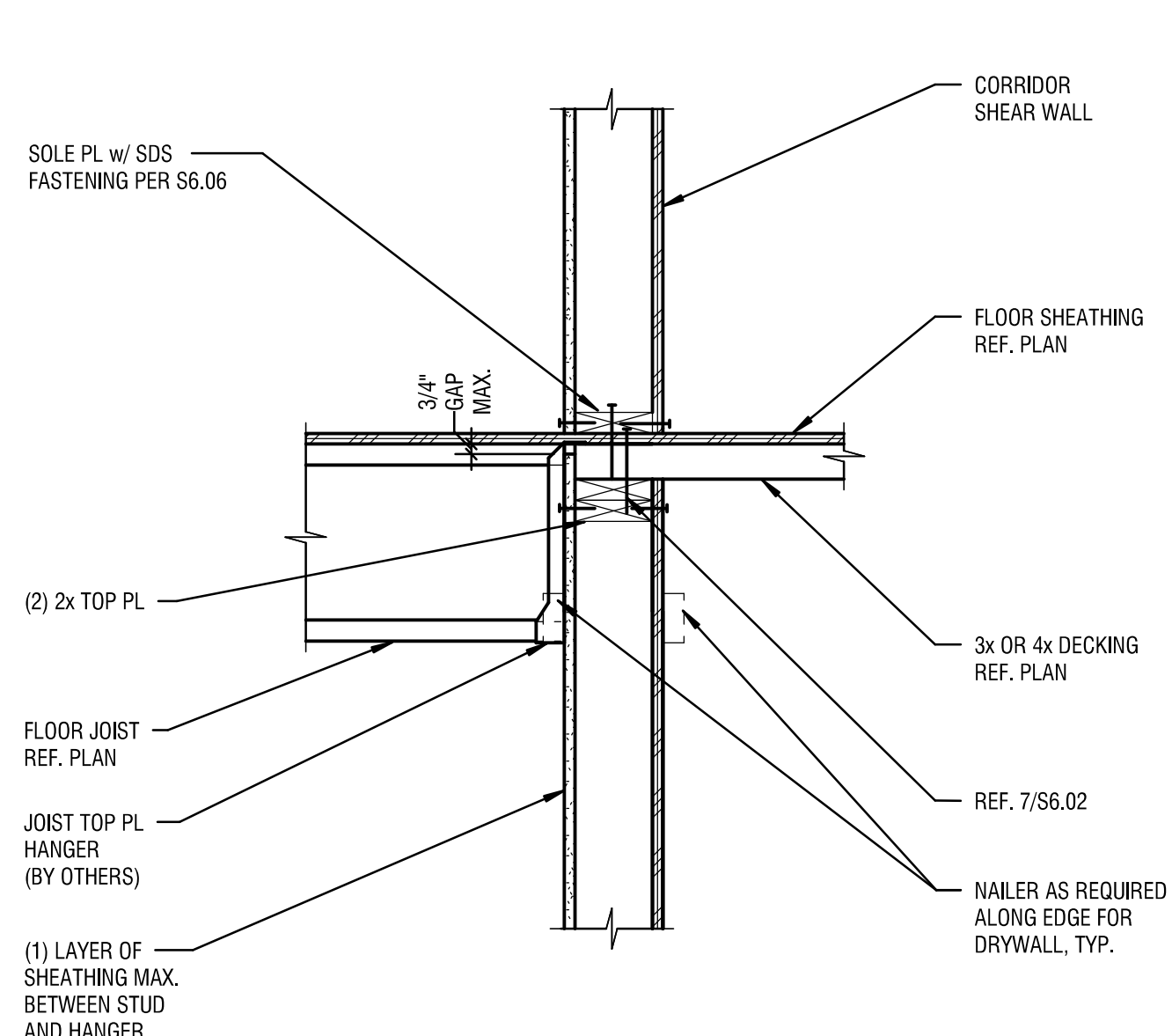
**5** INTERIOR WALL AT FLOOR JOIST  
1" = 1'-0"



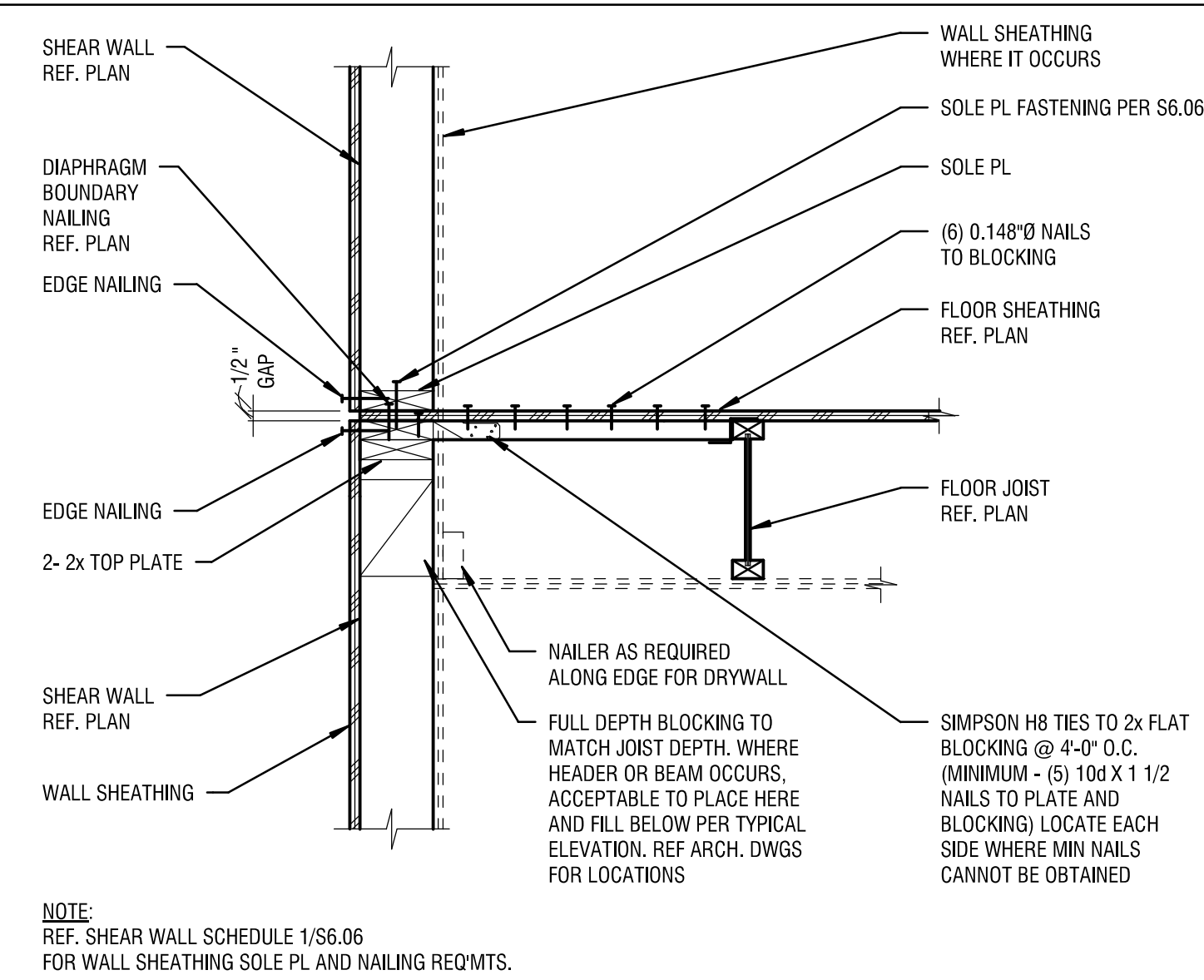
**6** SHEAR WALL AT FLOOR  
1" = 1'-0"



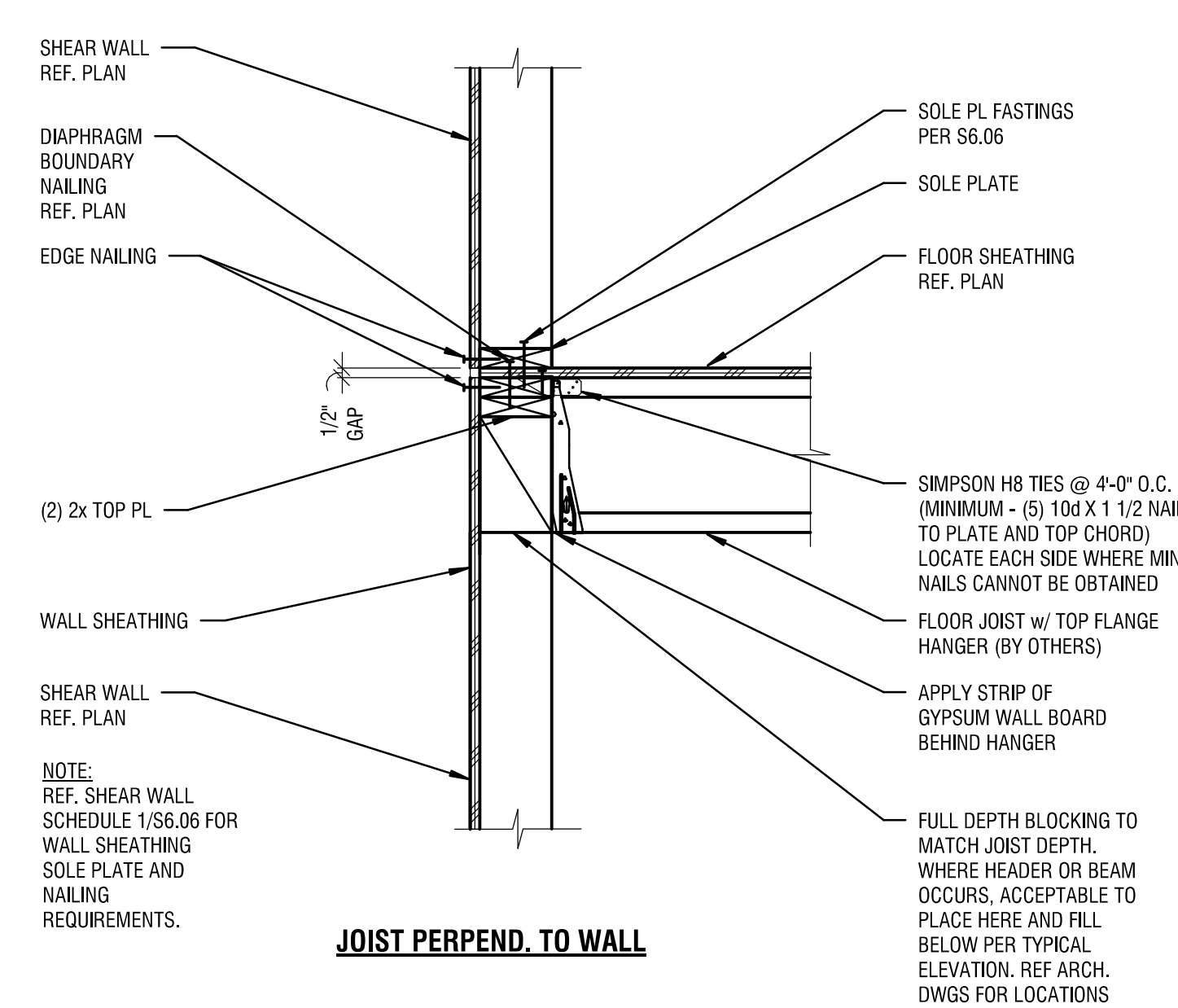
**7** CORRIDOR WALL AT FLOOR JOISTS  
1" = 1'-0"



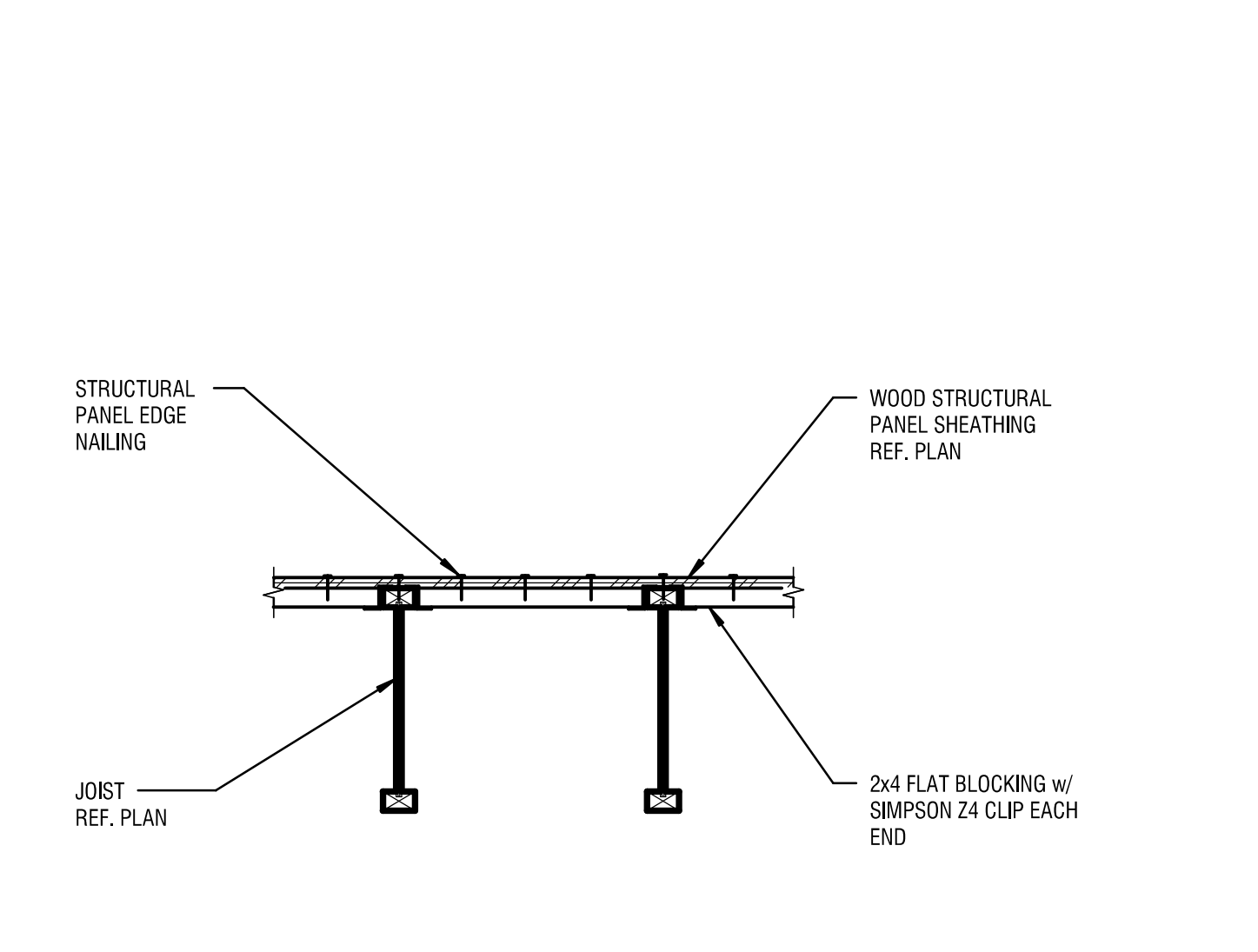
**8** CORRIDOR WALL AT FLOOR JOISTS  
1" = 1'-0"



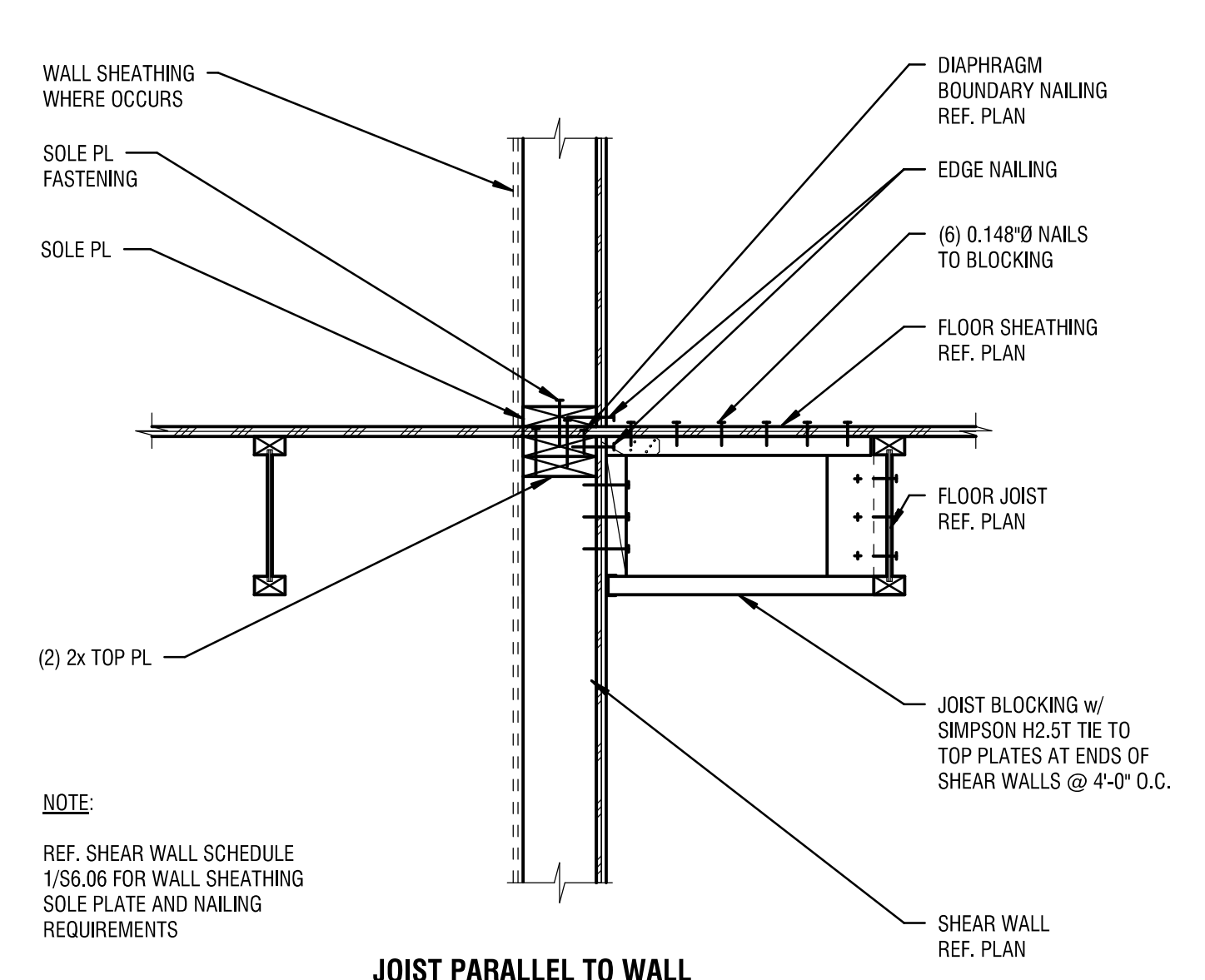
**1** EXTERIOR WALL AT FLOOR JOIST  
1" = 1'-0"



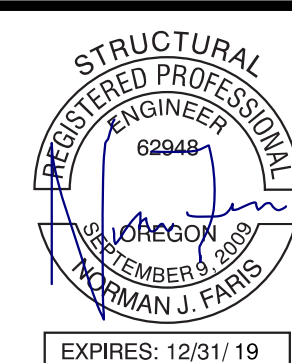
**2** EXTERIOR WALL AT FLOOR JOIST  
1" = 1'-0"



**3** WOOD DIAPHRAGM BLOCKING DETAIL  
1" = 1'-0"



**4** SHEAR WALL AT FLOOR JOIST  
1" = 1'-0"



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE. SUITE 300  
SEATTLE, WA 98101  
T 206.575.1600

1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063

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CLACKAMAS, OREGON 97015

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WOOD DETAILS

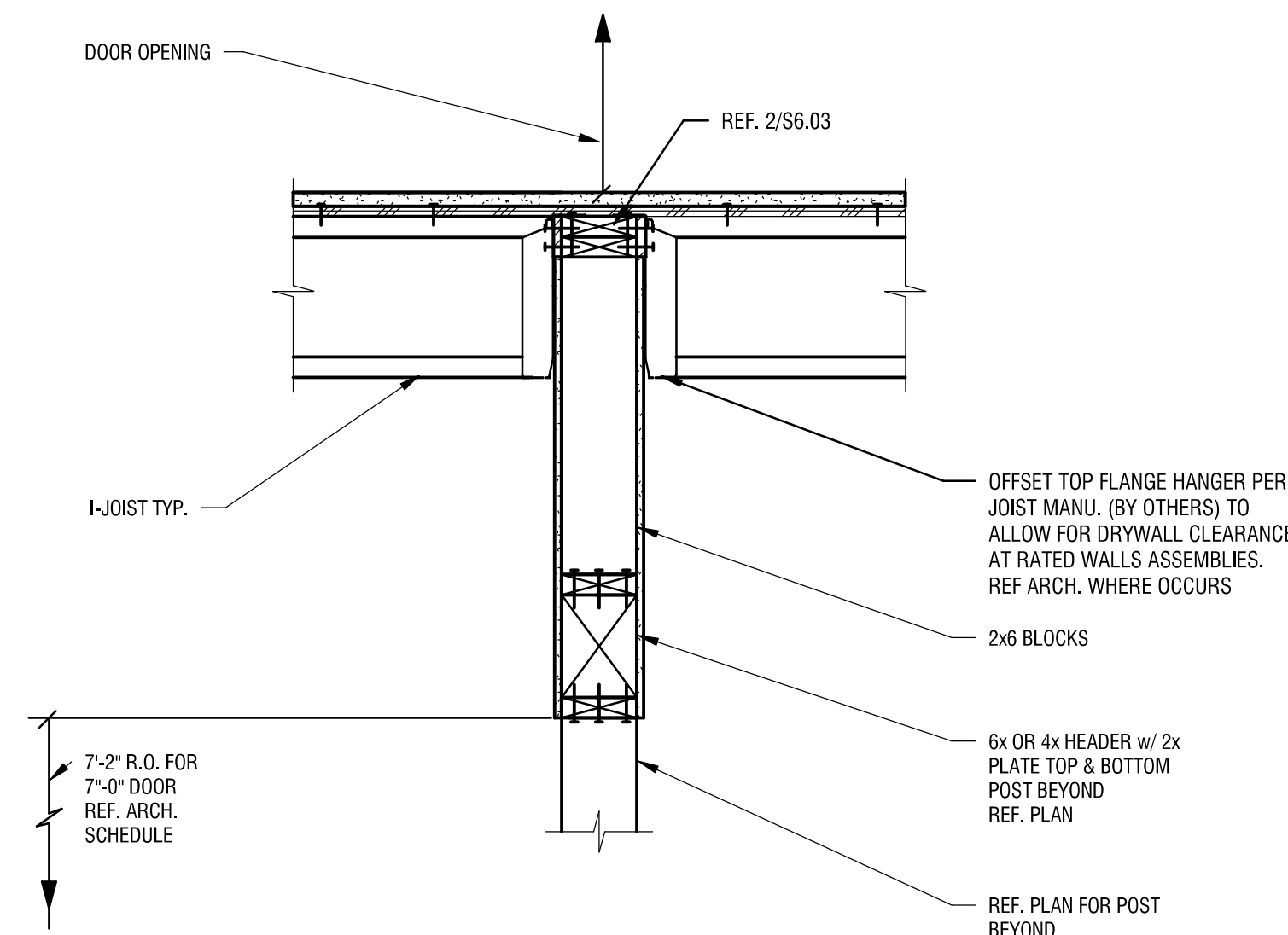
PERMIT/GMP SET

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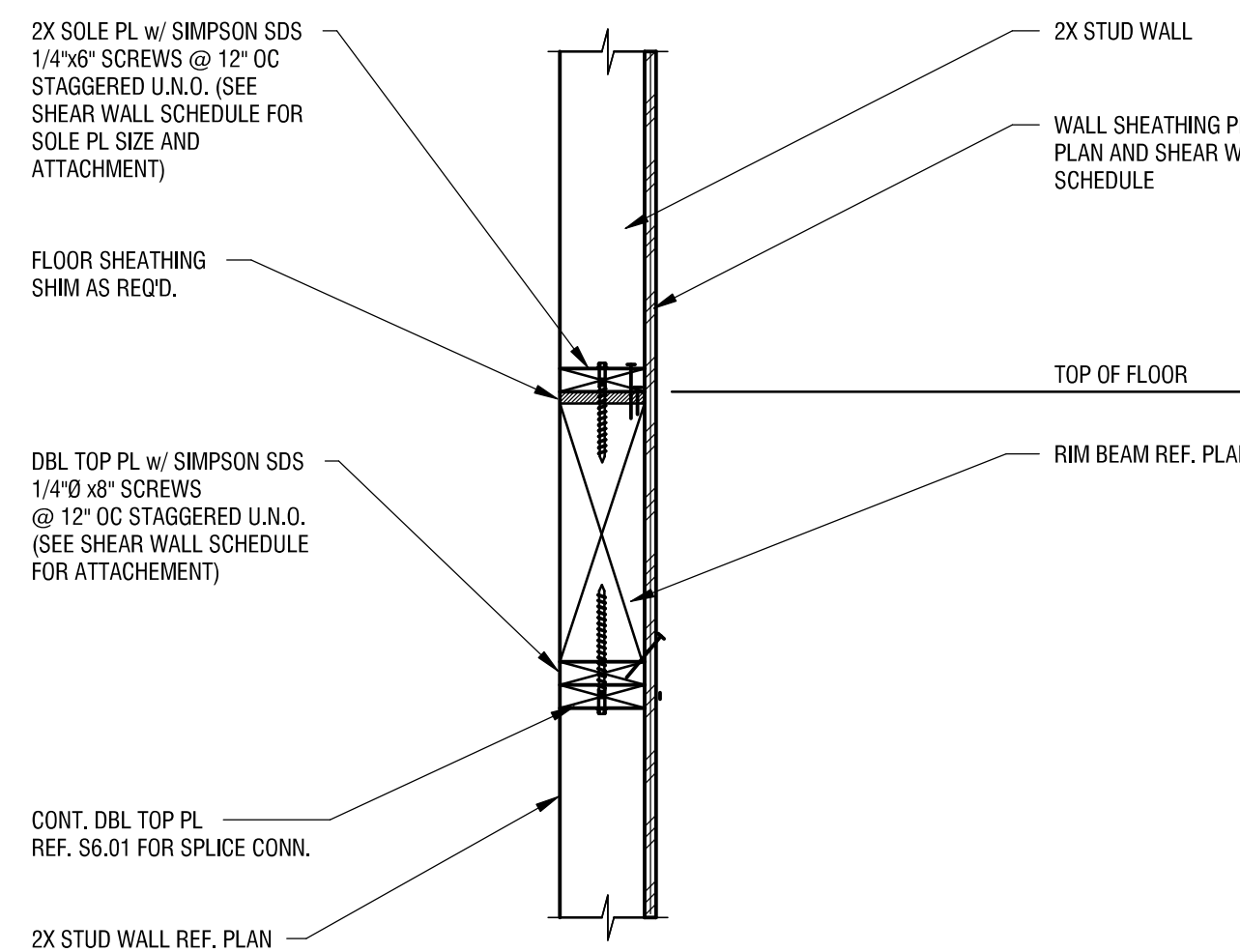
SHEET NUMBER

S6.02

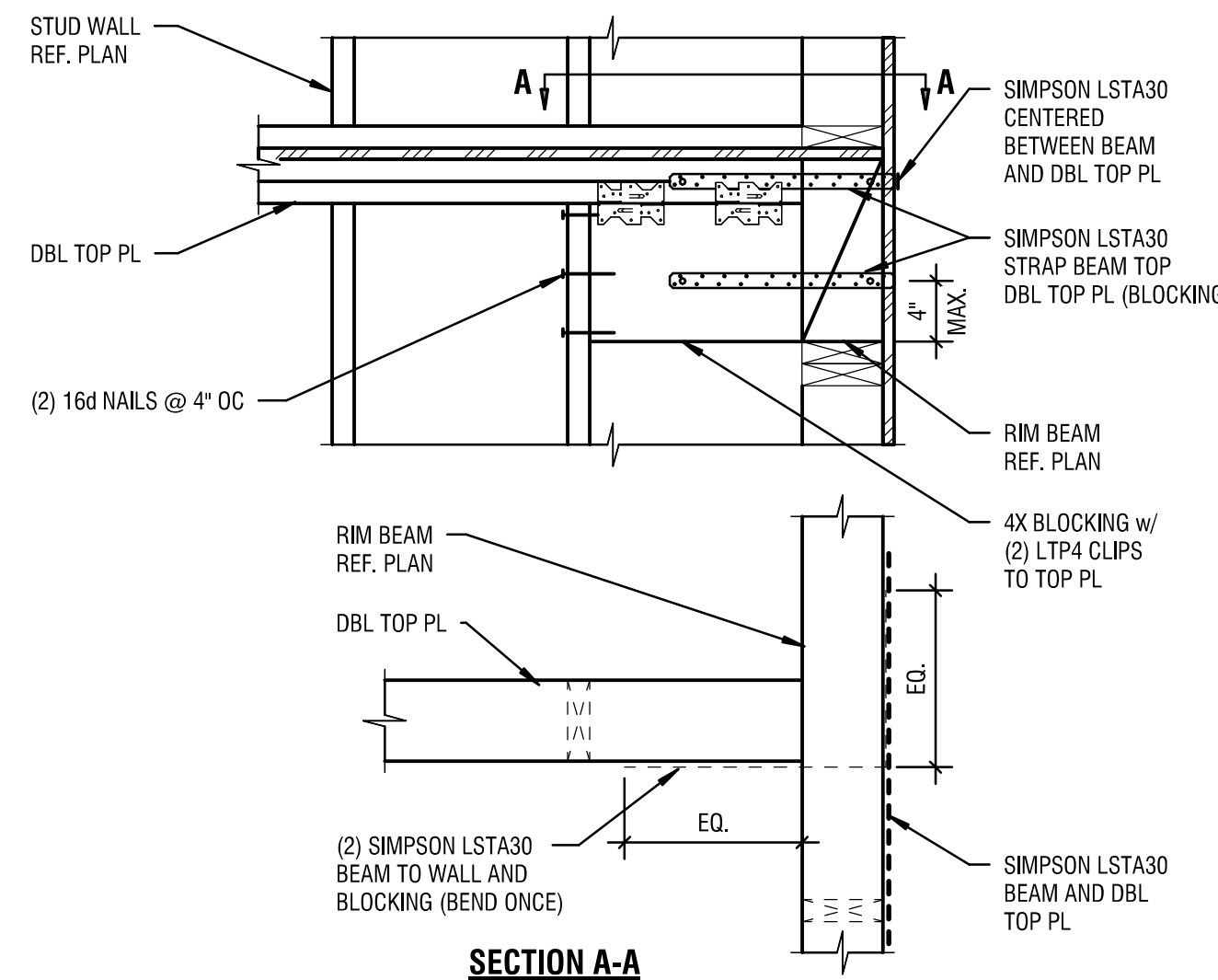




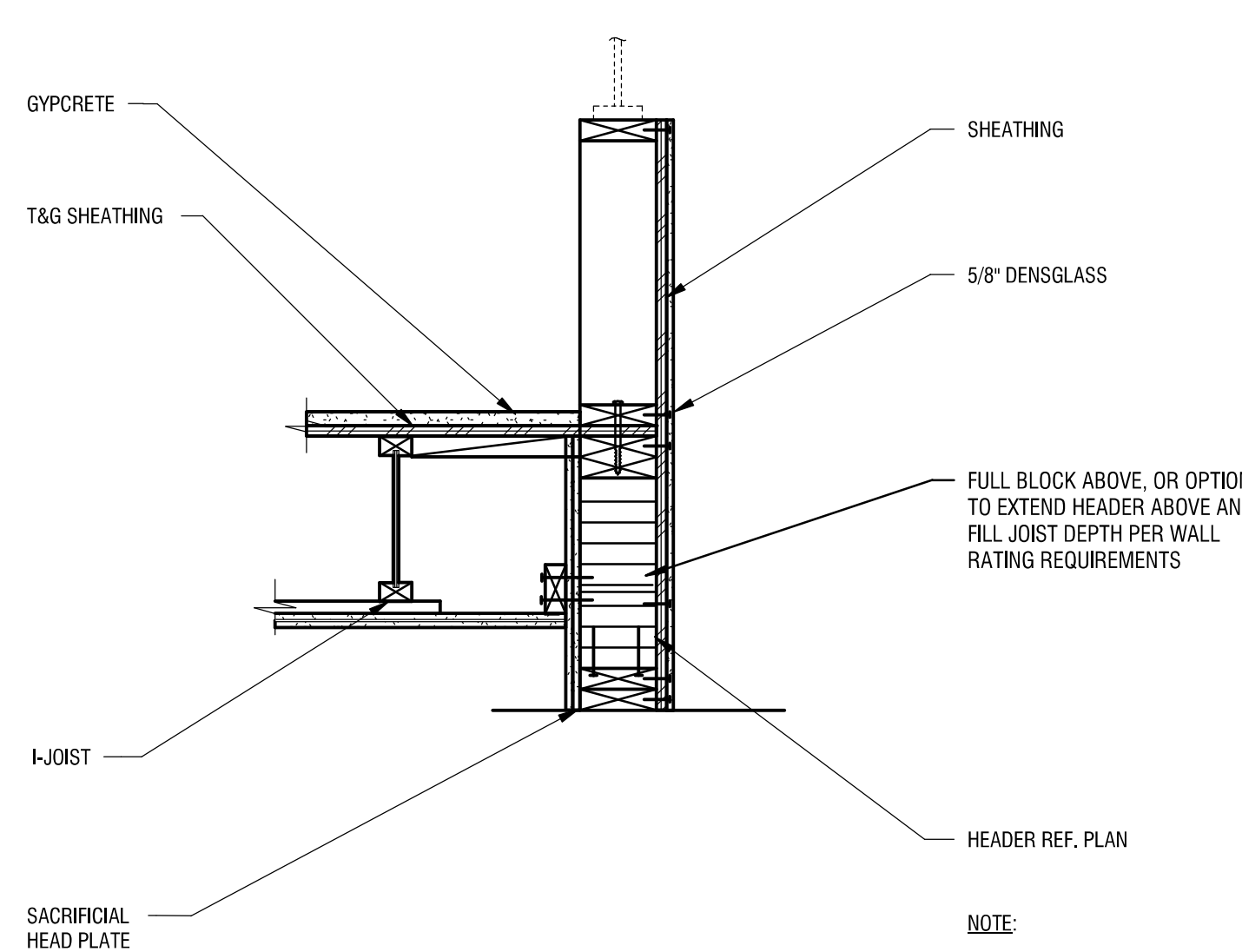
5 INTERIOR BEARING WALL HEADER  
1" = 1'-0"



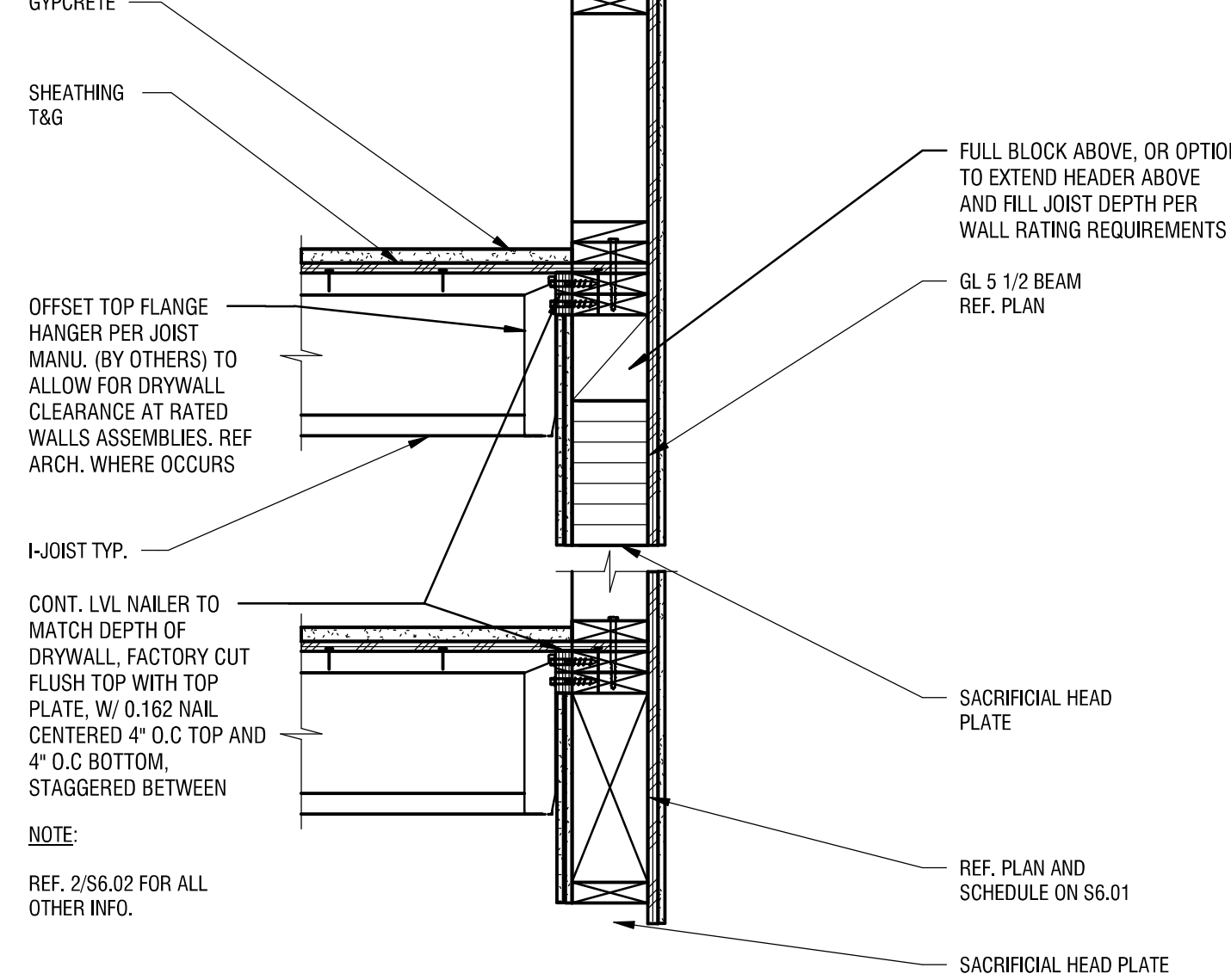
6 RIM BEAM AT STAIR  
1" = 1'-0"



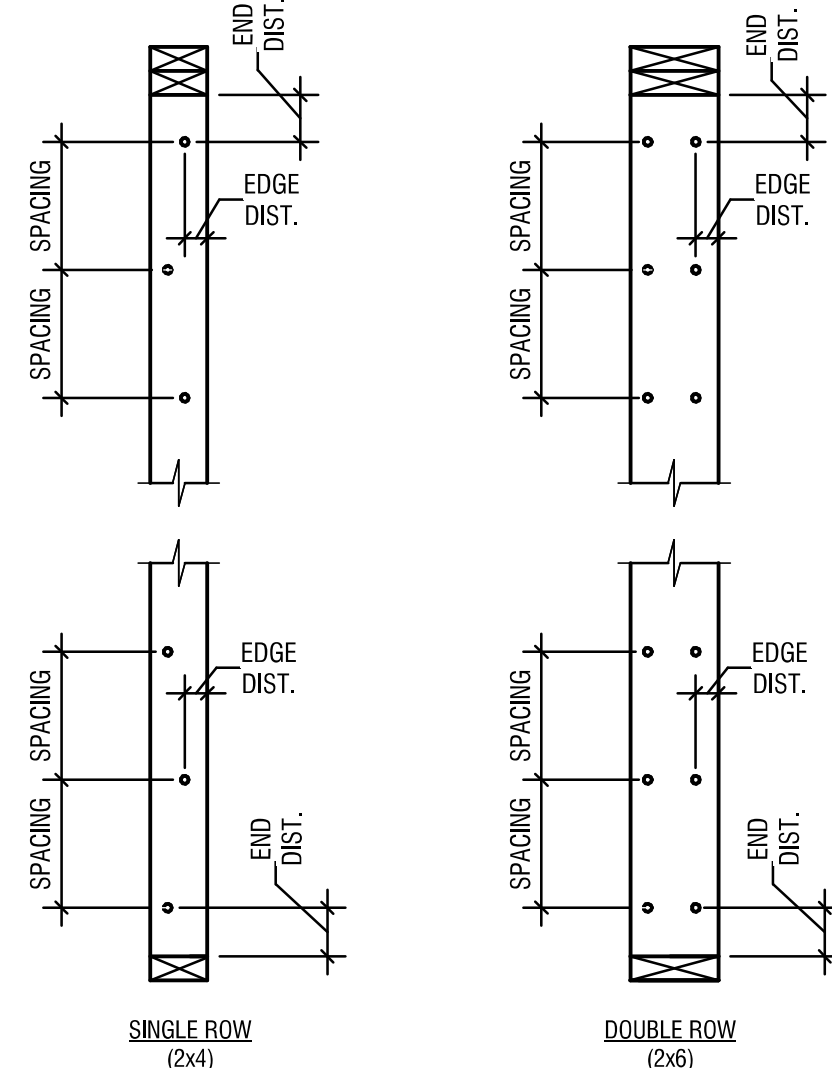
7 RIM BEAM TO WALL  
1" = 1'-0"



1 WINDOW SILL/HEAD PARALLEL TO JOISTS  
1" = 1'-0"



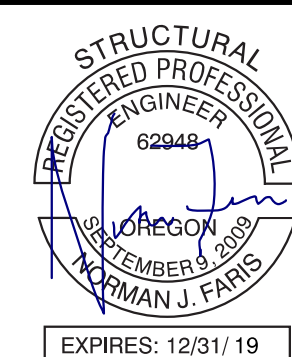
2 LOAD BEARING EXTERIOR WINDOW HEADERS  
1" = 1'-0"



BUILT-UP MEMBER	FASTENER SIZE	FASTENER SPACING	FASTENER END DIST	FASTENER EDGE DIST	ROWS OF FASTENERS
(2) 2x4	0.146"x3" NAIL	8"	2.5"	1"-1.5"	1-STAGGERED
(3) 2x4	0.146"x4 1/2" NAIL	8"	2.5"	1"-1.5"	1-STAGGERED
(4) OR MORE 2x4	1/2"Ø BOLT	9"	4"	1.5"	1-STAGGERED
(2) 2x6	0.146"x3" NAIL	8"	2.5"	1"-1.5"	2
(3) 2x6	0.146"x4 1/2" NAIL	8"	2.5"	1"-1.5"	2
(4) OR MORE 2x6	1/2"Ø BOLT	9"	4"	1.25"	2

- NOTES:
- PLYWOOD SHEATHING OR GYP BOARD FASTENERS SHALL BE STAGGERED TO EACH STUD IN BUILT-UP MEMBER.
  - NAILS AND SCREWS SHALL BE STAGGERED EACH SIDE OF BUILT-UP MEMBER.
  - BOLTS SHALL HAVE STANDARD PL WASHERS BETWEEN WOOD AND BOLT HEAD AND NUT HEAD.
  - NUTS TO BE TIGHTENED TO INSURE ALL WOOD LAMS ARE IN CONTACT.
  - 1/4"Ø SDS SCREWS OF SAME LENGTH MAY BE SUBSTITUTED FOR NAILS w/ 9" SPACING AND 4" END DIST.

4 POST BUILT UP  
1" = 1'-0"



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.575.1600

1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063

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CLACKAMAS, OREGON 97015

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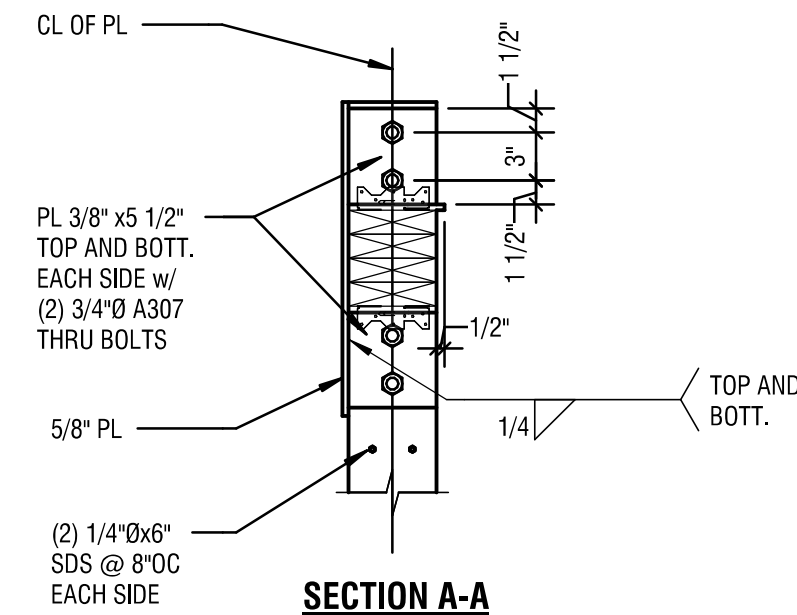
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SHEET NUMBER

S6.03

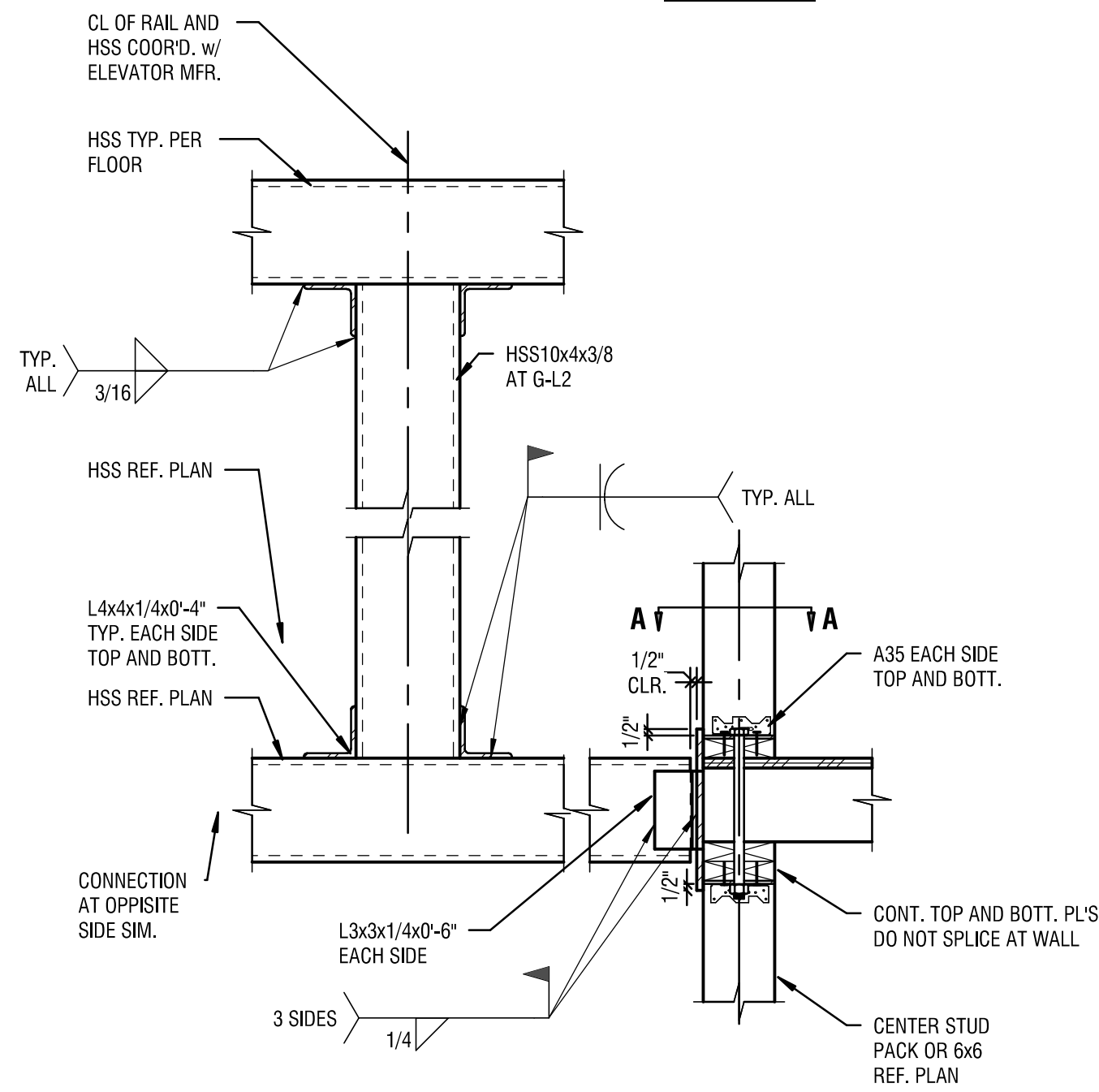




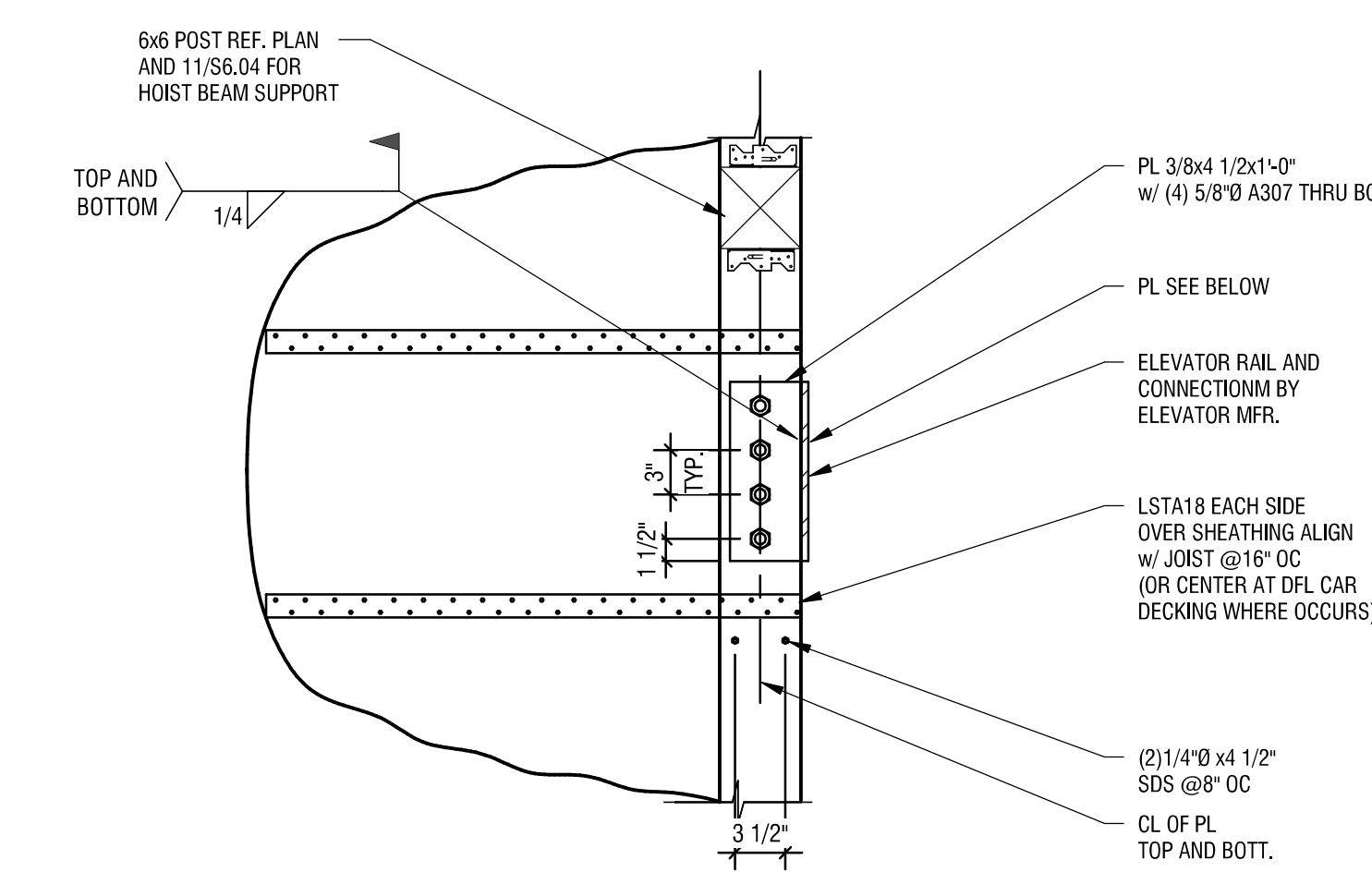
9 INTERIOR SHEAR WALL AT ROOF  
1" = 1'-0"

5 SHEAR WALL AT ROOF I-JOIST  
1" = 1'-0"

1 ROOF I-JOIST AT EDGE  
1" = 1'-0"

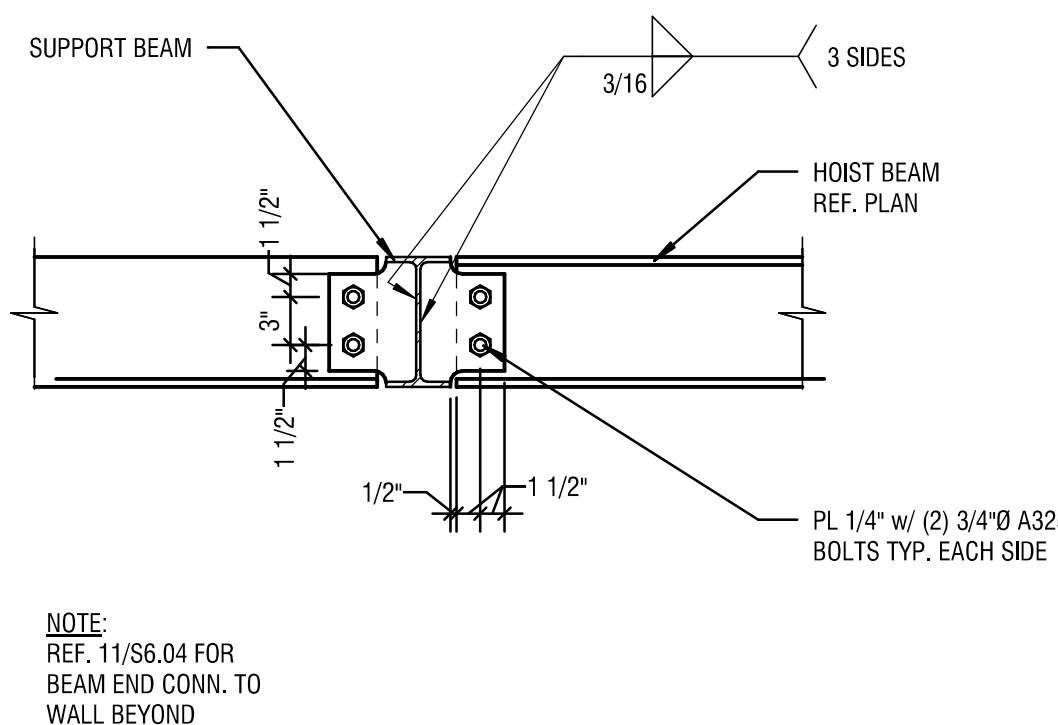


12 HSS AT ELEVATOR SUPPORT  
1" = 1'-0"



6 BLOCKING OVER SHEARWALL DETAIL  
1" = 1'-0"

2 ROOF I-JOIST AT EDGE  
1" = 1'-0"

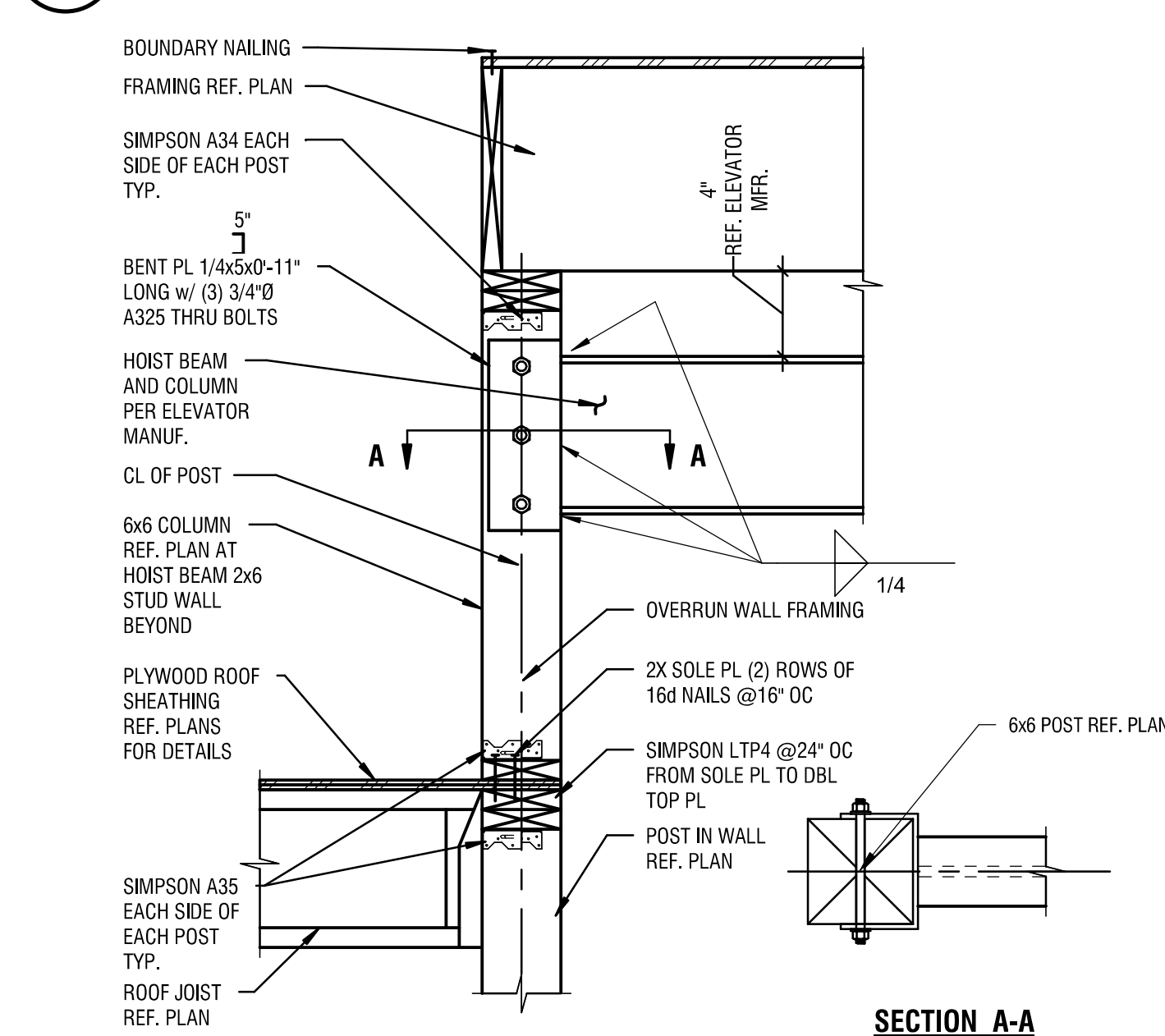


13 HOIST BEAM TO SUPPORT  
1" = 1'-0"

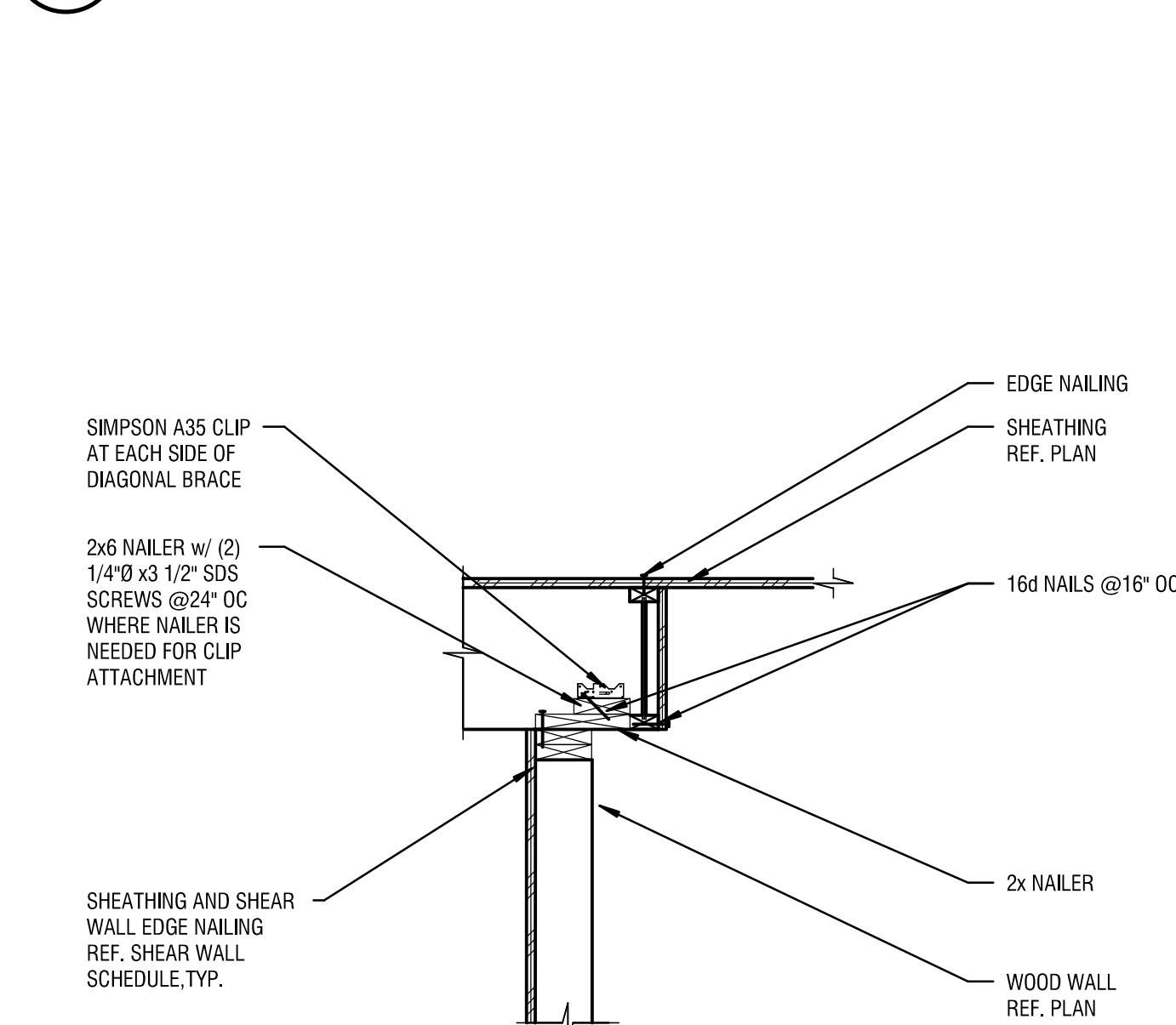
10 ELEVATOR RAIL TO FRAMING  
1" = 1'-0"

7 SHEARWALL FRAMING AT CORRIDOR  
1" = 1'-0"

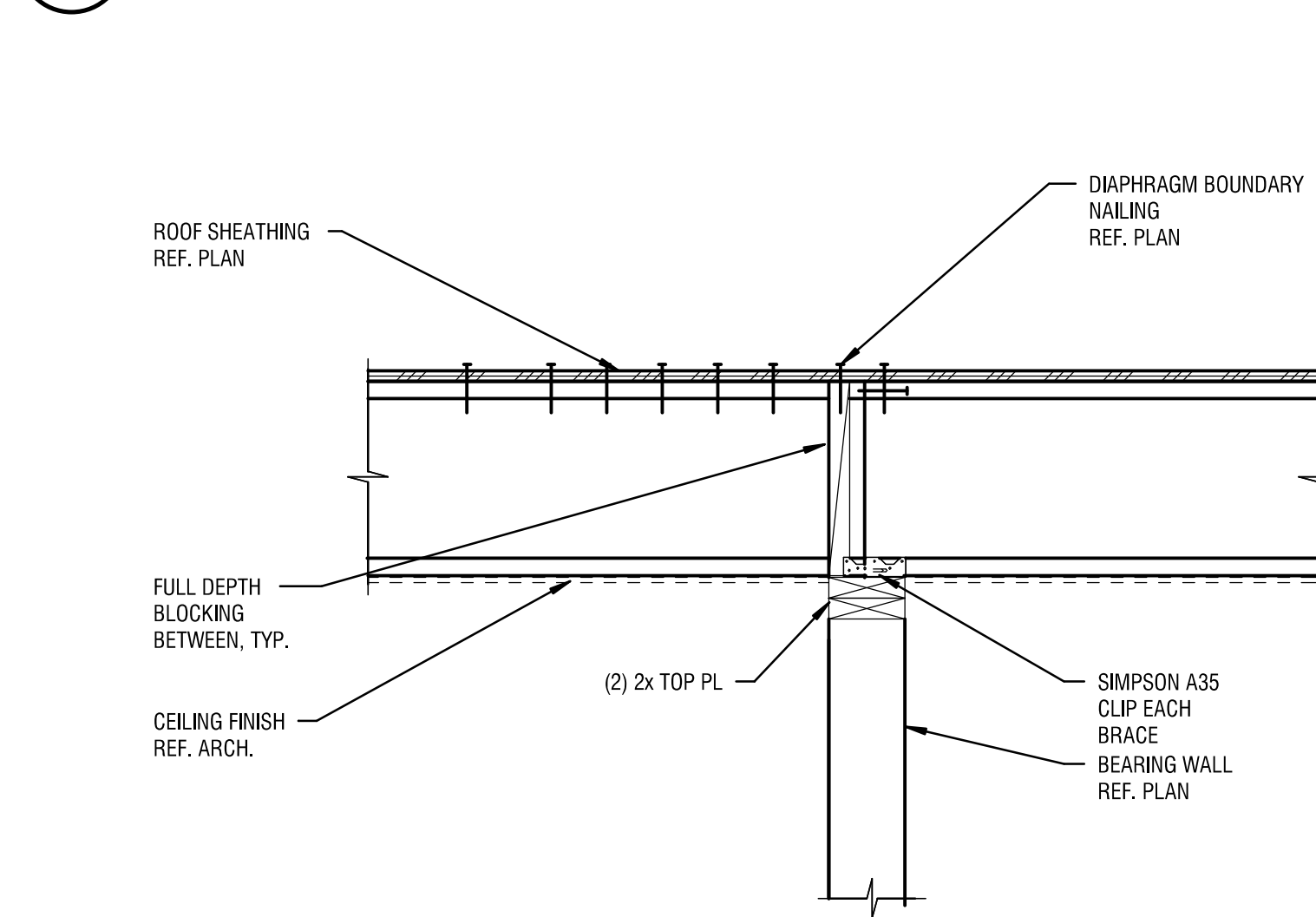
3 CORNICE AND ROOF EDGE  
1" = 1'-0"



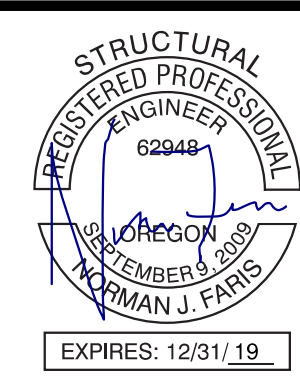
11 ELEVATOR HOIST BEAM  
1" = 1'-0"



8 TRUSS TO SHEAR WALL OFFSET  
3/4" = 1'-0"



4 HSS AT ELEVATOR SUPPORT  
1" = 1'-0"



**Ankrom Moisan**

38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063

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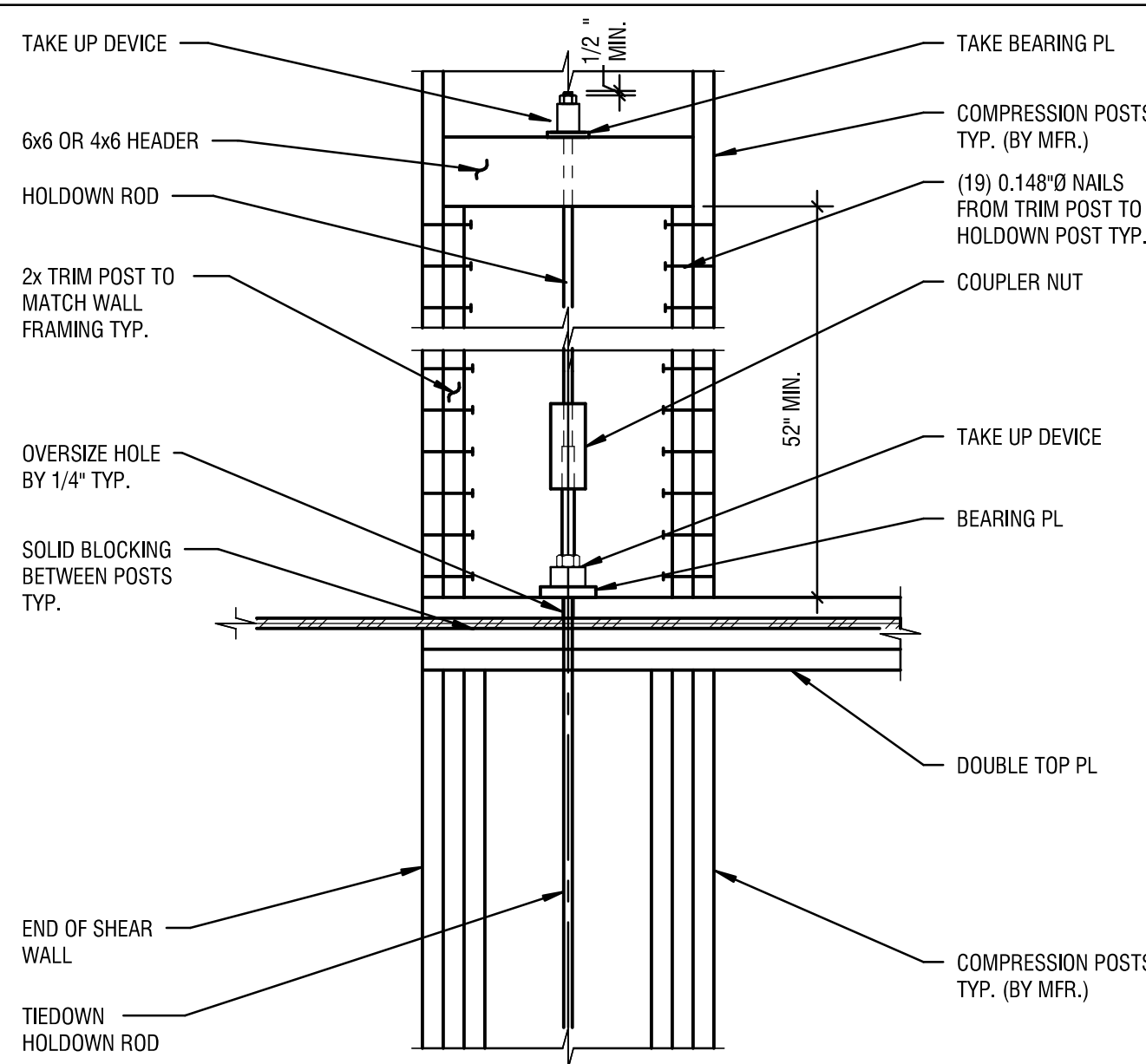
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S6.04

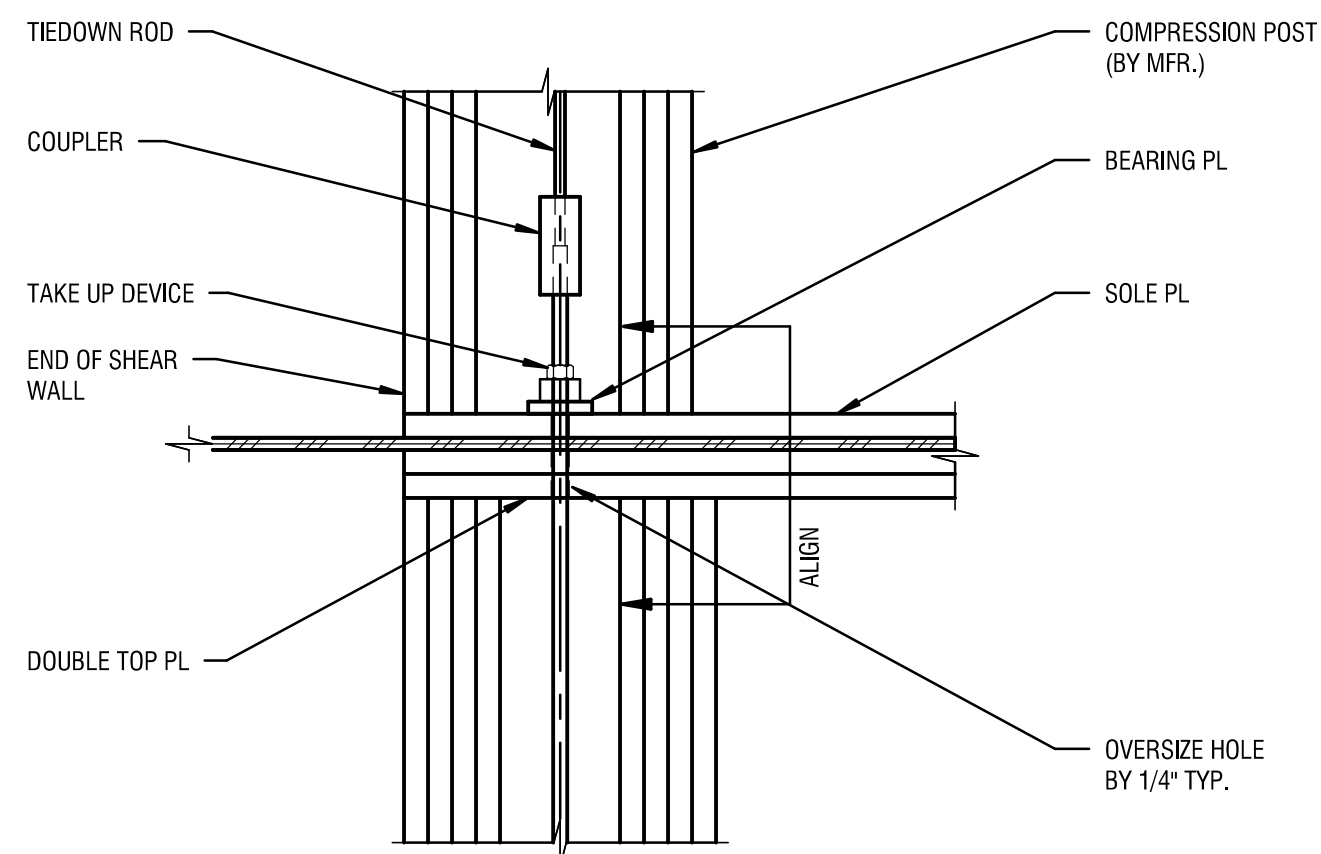




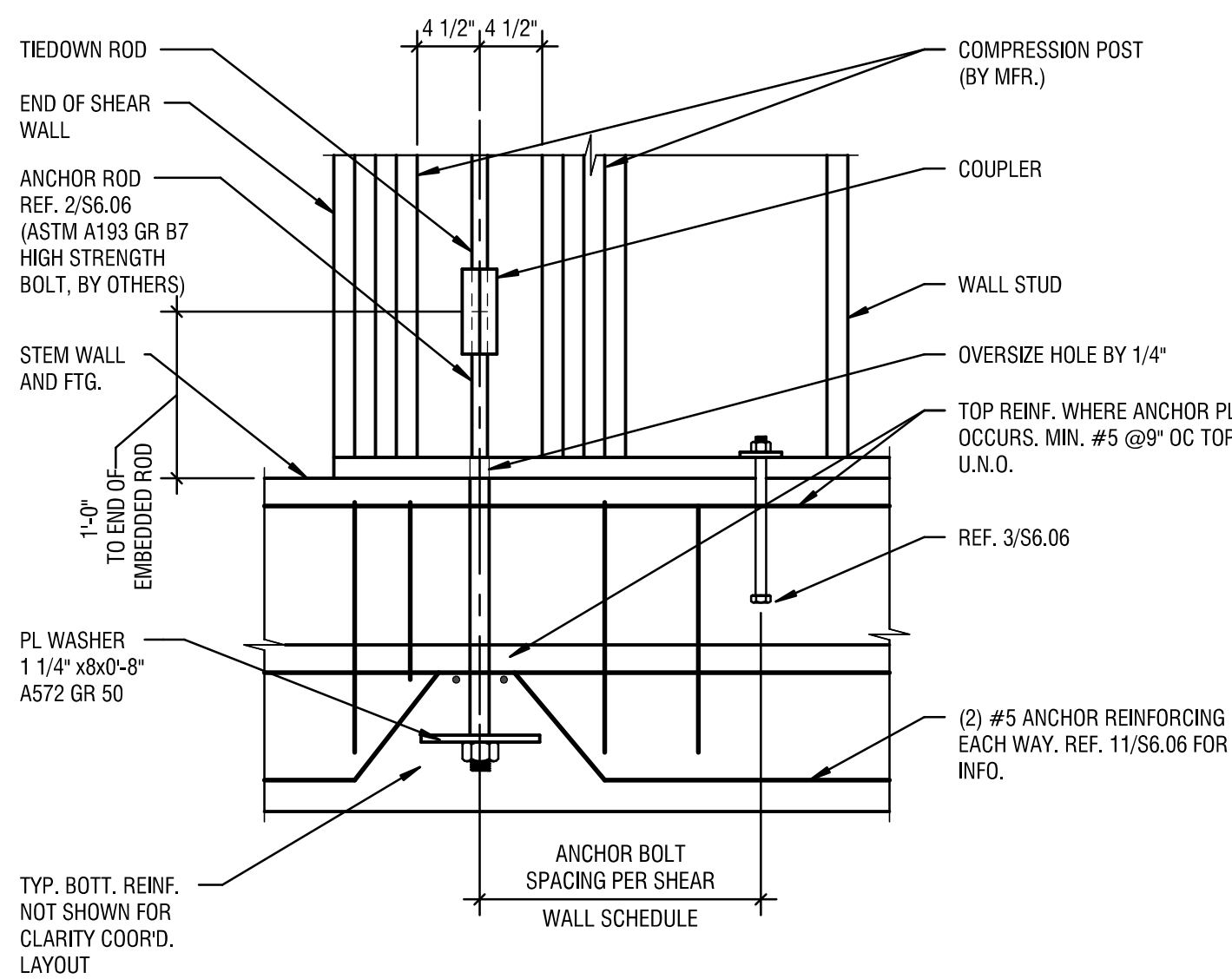




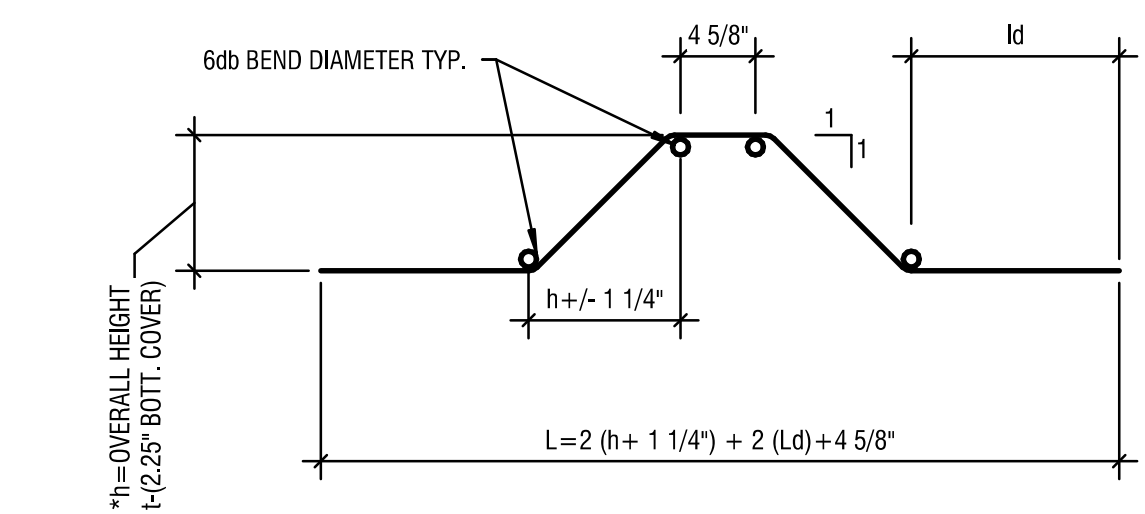
7 SHEAR WALL TIEDOWN DETAIL  
1" = 1'-0"



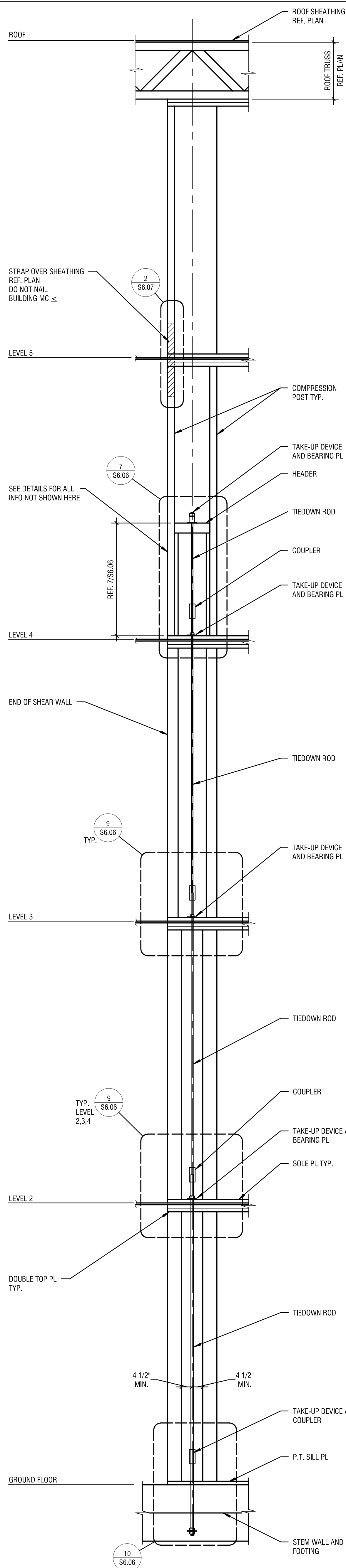
9 SHEAR WALL TIEDOWN DETAIL  
1" = 1'-0"



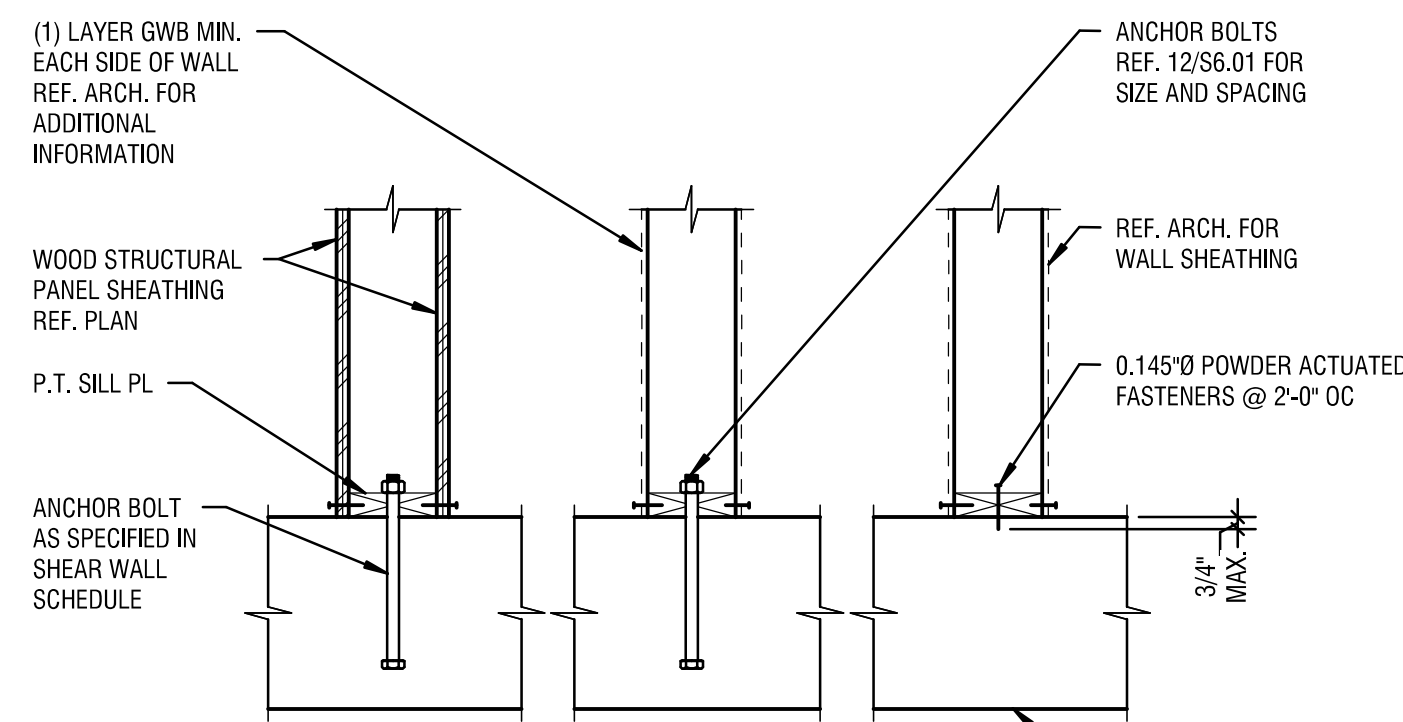
10 SHEAR WALL  
TIEDOWN DETAIL AT FOOTING  
1" = 1'-0"



11 ANCHOR REINFORCING DETAIL



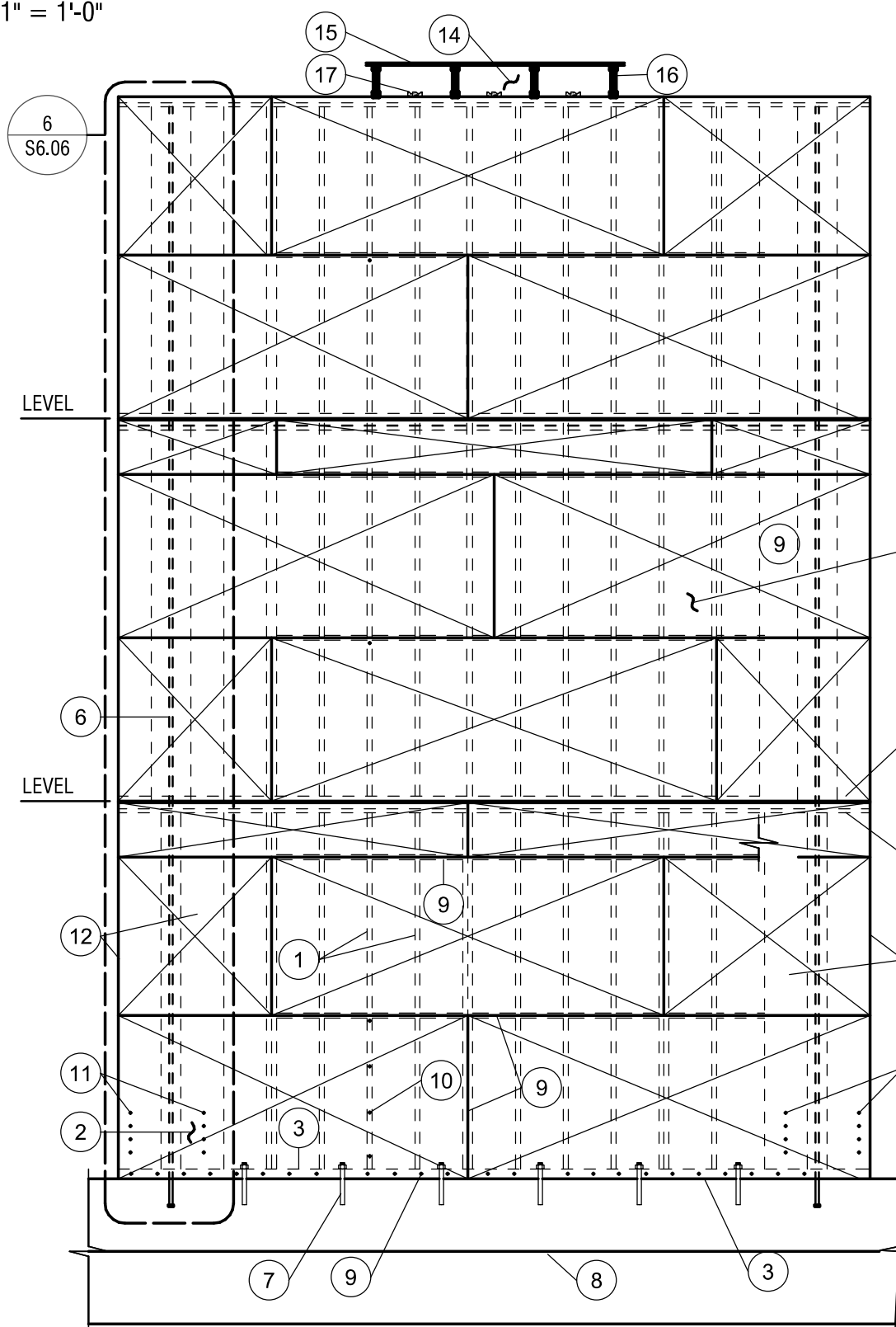
6 SHEAR WALL HOLDOWN ELEVATION  
1/2" = 1'-0"



SHEAR WALL                      NON-SHEAR BEARING WALL

**NOTE:**  
AS AN ALTERNATE TO THE PLATE SHOWN AT BASE  
OF SLAB, SIMPSON ABL OR SIMILAR MAY BE USED.

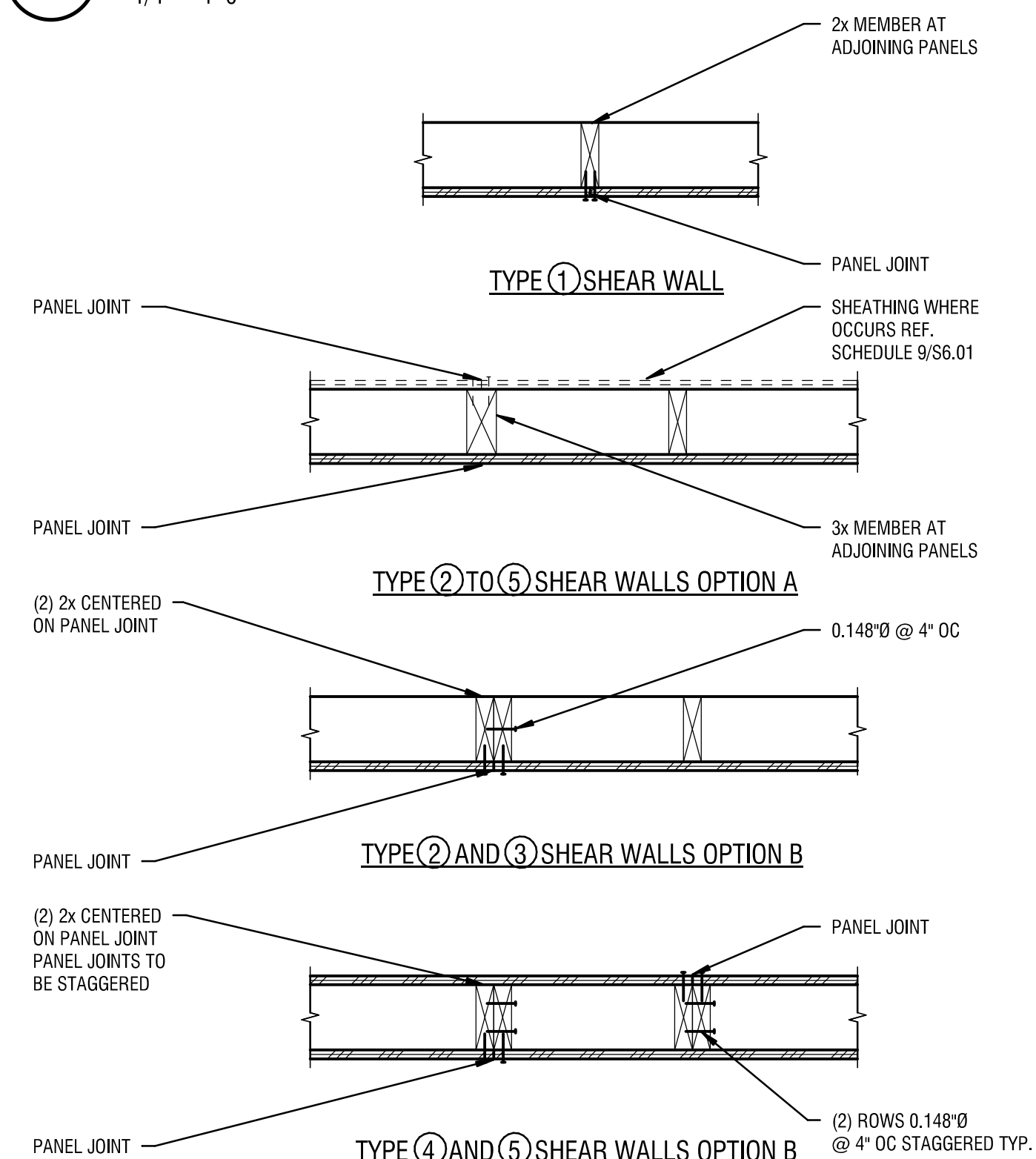
### 3 WALL ANCHORAGE AT SLAB



SHEAR WALL ELEVATION NOTES:

- |    |   |     |   |
|----|---|-----|---|
| 1. | WALL STUDS  | 10. | INTERMEDIATE SUPPORT NAILING  |
| 2. | WOOD STRUCTURAL PANEL SHEATHING, LAY HORIZ. OR VERT REF. SHEAR WALL SCHEDULE FOR ADD'L. REQ'D/MTS | 11. | PROVIDE EDGE NAILING TO EACH HOLDOWN POST. WHERE HOLDOWN POST CONSISTS OF BUILT UP MEMBERS, PROVIDE STAGGERED NAILING TO EACH PIECE |
| 3. | P.T. SILL PLATE   | 12. | HOLDOWN POSTS. REF. 6"/6.06 AND 1/6.07  |
| 4. | SOLE PLATE  | 13. | ALL SHEATHING EDGES ARE TO BE BLOCKED   |
| 5. | DOUBLE TOP PLATE  | 14. | TRUSS BLOCKING PANEL BY TRUSS MANUFACTURER  |
| 6. | HOLDOWN ROD BY MFR.   | 15. | ROOF SHEATHING  |
| 7. | ANCHOR BOLTS  | 16. | ROOF TRUSSES  |
| 8. | STEM WALL AND FOOTING   | 17. | "SHEAR CLIPS" AS NOTED IN SHEAR WALL SCHEDULE   |
| 9. | EDGE NAILING, REF. SHEAR WALL SCHEDULE  |     |   |

4 SHEAR WALL ELEVATION - MULTIPLE STORY  
1/4" = 1'-0"



5 ADJOINING SHEAR WALL EDGES  
1" = 1'-0"

WOOD SHEAR WALL SCHEDULE								
WALL SYMBOL	WOOD STRUCTURAL PANEL SHEATHING	EDGE NAILING	FRAMING THICKNESS AT ADJOINING PANEL EDGES	SOLE PLATE FASTENING	SILL PLATE THICKNESS	SILL PLATE FASTENING	SHEAR CLIPS	SEISMIC CAPACITY (PLF)
①	15/32"	10d @ 6" OC	2x	16d @ 6" OC	2x	5/8" A.B. @ 4'-0" OC	A35 @ 24" OC MIN. (1) PER BAY	310
②	15/32"	10d @ 4" OC	3x	(2) ROWS OF 1/4"x8d SDS @18" OC	3x	5/8" A.B. @ 2'-8" OC	A35 @ 18" OC MIN. (1) PER BAY	460
③	15/32"	10d @ 3" OC	3x	(2) ROWS OF 1/4"x8d SDS @16" OC	3x	5/8" A.B. @ 1'-4" OC	A35 @ 12" OC MIN. (1) PER BAY	600
④	15/32" EACH SIDE	10d @ 4" OC	3x	(2) ROWS OF 1/4"x8d SDS @10" OC	3x	5/8" A.B. @ 1'-4" OC	REF. DETAIL	920
⑤	15/32" EACH SIDE	10d @ 3" OC	3x	(2) ROWS OF 1/4"x8d SDS @8" OC	3x	5/8" A.B. @ 1'-4" OC	REF. DETAIL	1200
⑥	15/32" EACH SIDE	10d @ 2" OC	3x	(2) ROWS OF 1/4"x8d SDS @6" OC	3x	5/8" A.B. @ 1'-4" OC	REF. DETAIL	1540

SHEAR WALL SCHEDULE NOTES:

1. ALL PANEL EDGES SHALL BE BACKED WITH 2" NOMINAL OR WIDER FRAMING. PANELS SHALL BE INSTALLED EITHER HORIZONTALLY OR VERTICALLY. SPACE NAILS @12" OC ALONG INTERMEDIATE FRAMING MEMBERS.
2. FOUNDATION SILL PLATES, SOLE PLATES AND ALL FRAMING MEMBERS RECEIVING EDGE NAILING FROM ADJUTING PANELS OR FROM (2) SIDES SHALL NOT BE LESS THAN A SINGLE 3" NOMINAL MEMBER U.N.D. NAILS SHALL BE STAGGERED, PROVIDE 1/2" EDGE DISTANCE AT EDGE NAILING.
3. AT ALL ANCHOR BOLT LOCATIONS, PROVIDE SIMPSON IPS BEARING PLATES. REF. 12,G56.01
4. A MINIMAL NAIL PENETRATION OF 1 1/2" INTO THE MAIN MEMBER IS REQUIRED FOR 10d NAILS.
5. PREDRILL NAIL HOLES TO PREVENT SPLITTING OF FRAMING AS REQUIRED AND STAGGER NAILS WHEN POSSIBLE.
6. ALL FASTENERS IN CONTACT WITH PRESSURE TREATED SILL PLATES SHALL BE GALVANIZED.
7. FOR SHEAR WALL ELEVATIONS, REF. 4,G56.01
8. FOR SOLE PLATE THICKNESS REF. NOTE 2.

1 SHEAR WALL SCHEDULE - HIGH RISE  
1" = 1'-0"

CONTINUOUS TIE DOWN SYSTEM SCHEDULE

TIE DOWN SYSTEM LOADS																
wall ID	Cumulative Tension Load (kips)					Cumulative compression load (kips)					Minimum compression post area (in²)					
	5th	4th	3rd	2nd	1st	5th	4th	3rd	2nd	1st	5th	4th	3rd	2nd	1st	
	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
1	NI	NI	NI	NI	2.3	5.8	14.1	18.4	23.4	29.0	35.7	30	30	41	52	63
1.1	0.9	2.3	4.4	7.0	9.6	3.0	7.0	11.6	16.8	22.0	16.5	17	30	30	30	41
2	3.2	8.0	14.6	22.7	33.3	6.6	15.5	26.2	38.3	53.0	16.5	30	52	63	85	118
2.1	0.1	1.5	4.4	8.4	14.4	11.2	15.5	26.1	37.1	50.6	30	52	74	96	129	149
2.2	0.7	2.7	6.2	10.8	17.4	9.8	25.3	41.8	59.7	79.6	16.5	41	74	96	129	149
3	1.8	4.8	9.1	14.3	21.4	5.6	13.0	21.7	31.3	42.8	16.5	30	41	52	74	96
3.1	3.1	8.2	15.8	24.5	36.7	9.7	22.5	37.5	54.2	74.0	16.5	41	63	96	118	149
3.2	0.1	2.5	4.4	8.4	14.4	11.2	15.5	26.1	37.1	50.6	30	52	74	96	129	149
4	NI	NI	NI	2.5	6.5	12.5	11.5	26.1	42.1	59.3	78.6	30	52	74	96	129
4.1	0.1	1.5	4.4	8.4	14.4	11.5	26.1	42.1	59.3	78.6	30	52	74	96	129	149
4.2	2.4	6.5	12.5	19.9	30.1	9.0	20.8	34.5	49.6	67.4	16.5	41	63	85	118	149
5	2.1	5.5	10.5	16.5	24.7	6.6	15.2	25.3	38.6	49.9	16.5	30	41	63	85	118
6	NI	NI	NI	3.4	10.9	17.3	11.2	25.3	41.4	57.9	30	41	74	96	129	149
6.1	NI	NI	NI	NI	2.1	6.3	15.9	31.4	50.2	70.1	91.8	30	52	85	118	149
6.2	1.2	3.1	5.6	8.6	12.7	2.4	5.6	9.5	14.0	19.4	8	16.5	17	30	30	41
7	3.7	8.9	16.0	24.4	35.4	3.7	7.8	14.1	21.9	32.1	16.5	30	30	41	52	74
7.1	NI	NI	NI	2.1	5.1	11.1	10.1	13.3	16.8	23.0	30	30	41	52	74	96
A.1	NI	NI	NI	2.7	NI	NI	17.7	20.4	23.6	27.7	30.8	30	41	52	52	63
A.2	NI	NI	NI	1.0	3.7	6.5	12.2	15.1	18.6	22.7	26.8	30	30	41	41	52
A.3	7.1	15.7	22.7	42.3	57.1	8.4	25.5	45.9	68.9	92.1	16.5	36	52	36	36	36
B	0.1	2.6	6.0	10.1	16.5	7.1	11.0	15.7	21.1	27.8	16.5	36	36	36	36	36
B.1	NI	0.7	4.2	8.6	13.0	13.1	18.3	24.5	31.6	38.7	30	30	41	52	63	85
B.2	NI	2.2	5.5	9.5	13.6	8.0	11.9	16.7	22.2	27.8	16.5	30	30	41	52	63
C	NI	NI	NI	3.1	7.3	13.0	4.6	11.0	18.9	28.1	39.7	16	30	41	52	74
C.1	0.1	2.1	5.0	8.3	13.1	6.1	9.5	14.0	19.4	25.0	16.5	17	30	30	30	41
C.2	NI	1.9	5.5	9.9	15.7	9.9	14.9	19.9	26.2	34.0	16.5	30	41	52	52	63
C.3	0.5	3.2	7.0	11.4	17.4	8.8	10.6	15.5	21.1	28.2	16.5	30	30	41	52	63
C.4	1.0	2.7	5.2	8.2	12.4	3.8	8.7	14.3	20.6	28.0	16.5	30	30	30	41	52
C.5	5.8	11.6	20.0	30.0	44.3	19.9	34.8	50.0	65.9	84.4	16.5	41	63	96	129	149
C.6	NI	NI	NI	0.6	2.7	5.8	10.6	24.0	38.4	53.6	68.9	30	41	63	85	118
C.1.2	NI	1.0	3.0	5.8	10.2	3.0	6.6	19.4	31.3	44.0	58.3	16.5	41	52	74	96
D	NI	NI	NI	0.8	2.9	5.1	10.6	24.1	38.5	53.9	69.3	30	41	63	96	118
D.ew.1	NI	NI	NI	NI	NI	NI	9.3	11.5	13.6	16.1	19.0	16.5	30	30	30	41
D.ew.2	NI	NI	NI	NI	NI	NI	17.7	21.7	26.2	31.0	35.9	30	41	52	52	63
D.1	NI	NI	NI	0.8	2.9	5.1	10.6	24.1	38.5	53.9	69.3	30	41	63	96	118
D.2	NI	NI	NI	NI	0.8	2.4	5.7	13.0	20.7	28.9	37.8	17	30	41	52	63
D.3	NI	NI	NI	NI	1.7	5.0	10.9	24.5	39.2	54.6	71.6	17	41	63	85	118
E	NI	NI	NI	NI	NI	NI	15.4	24.5	44.5	64.5	85.1	30	63	85	107	129
E.2	NI	NI	NI	NI	NI	NI	15.4	34.5	54.5	75.2	97.1	30	63	85	107	129

NOTES  
1. NT  
2.

INDICATES NO NET TENSION  
USE 100% OF THE LARGER LOAD + 30% OF THE SMALLER  
WHERE TIE DOWN DESIGNATION SHARES LOCATION IN CORNER  
OR INTERSECTION REF. S6.07 FOR DETAILS.

## 2 CONTINUOUS TIE DOWN SYSTEM SCHEDULE

CONTINUOUS TIE DOWN SYSTEM TO BE  
DESIGNED BY OTHERS. REFERENCE  
DEFERRED SUBMITTAL REQUIREMENTS  
ON GENERAL NOTES  
ALL LOADS IN TABLE ARE NET  
ALLOWABLE LOADS.  
SEE DETAILS 6-11/\$6.06  
FOR ALL OTHER INFO.

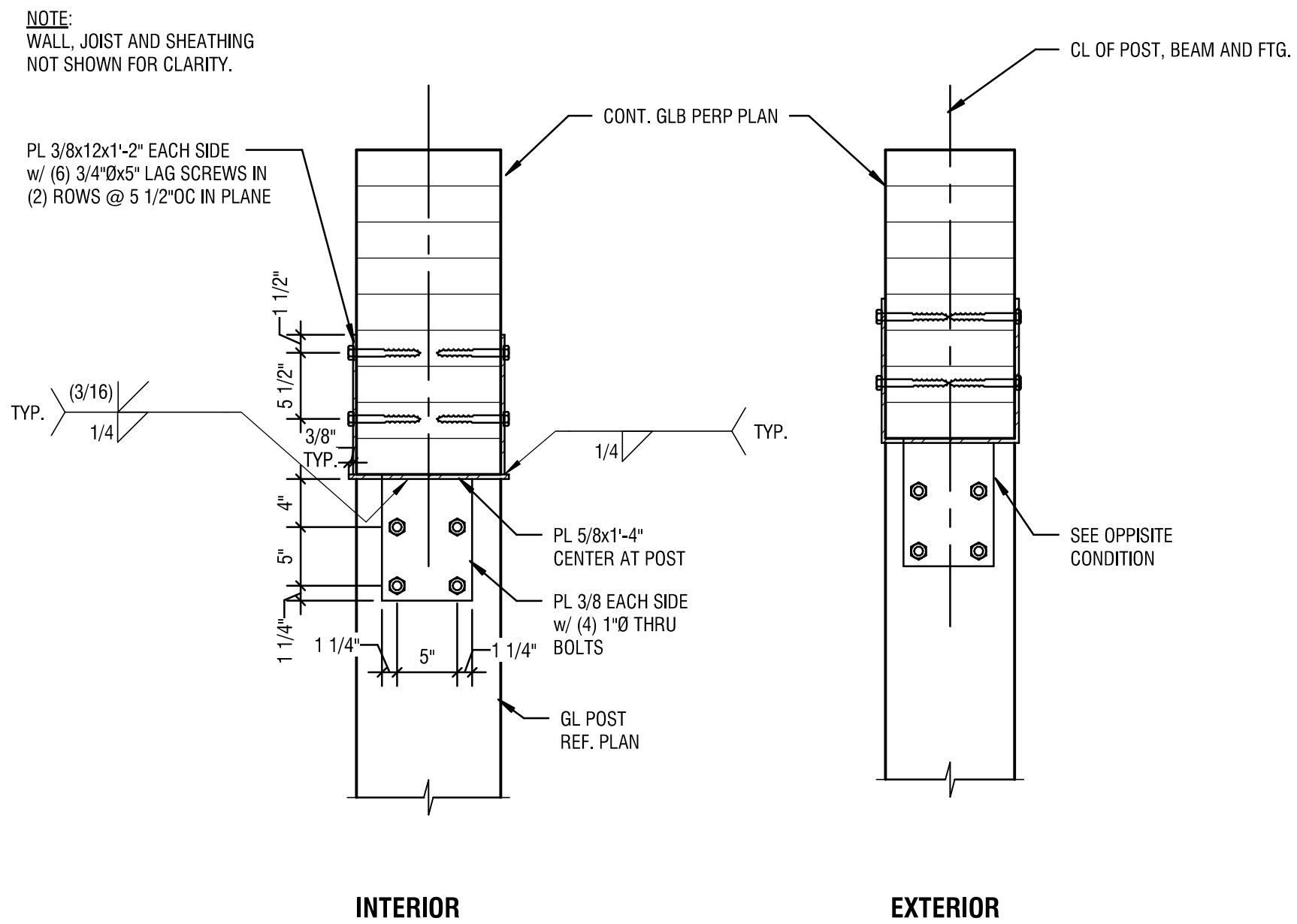
REVISION	DATE	REASON FOR ISSUE

## WOOD DETAILS

## PERMIT/GMP SET

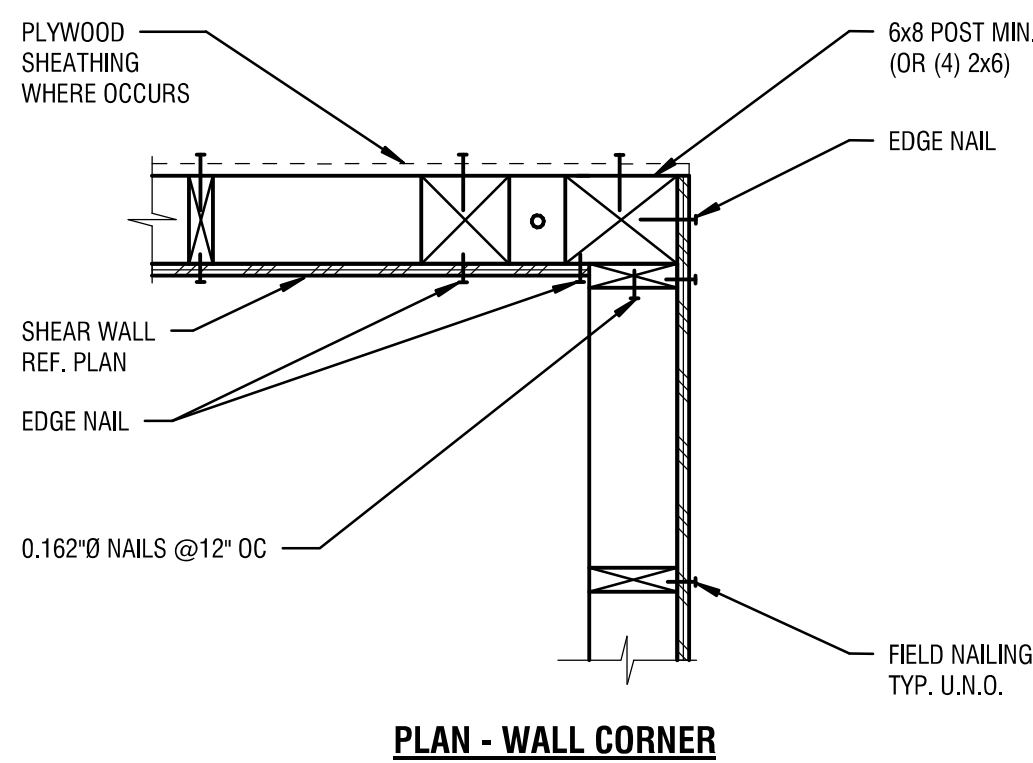
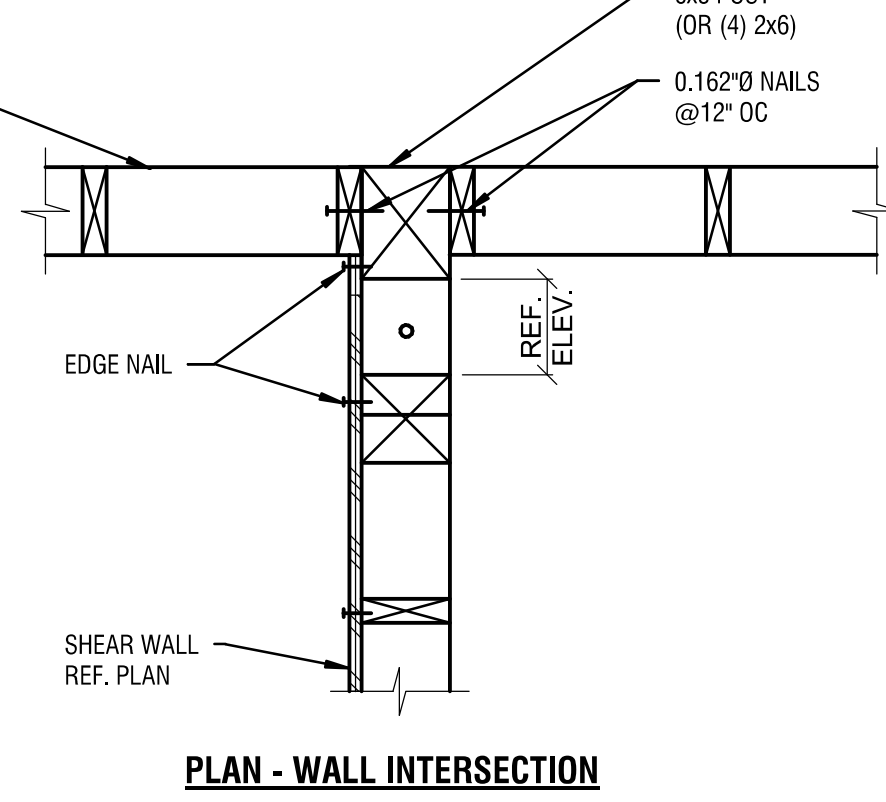
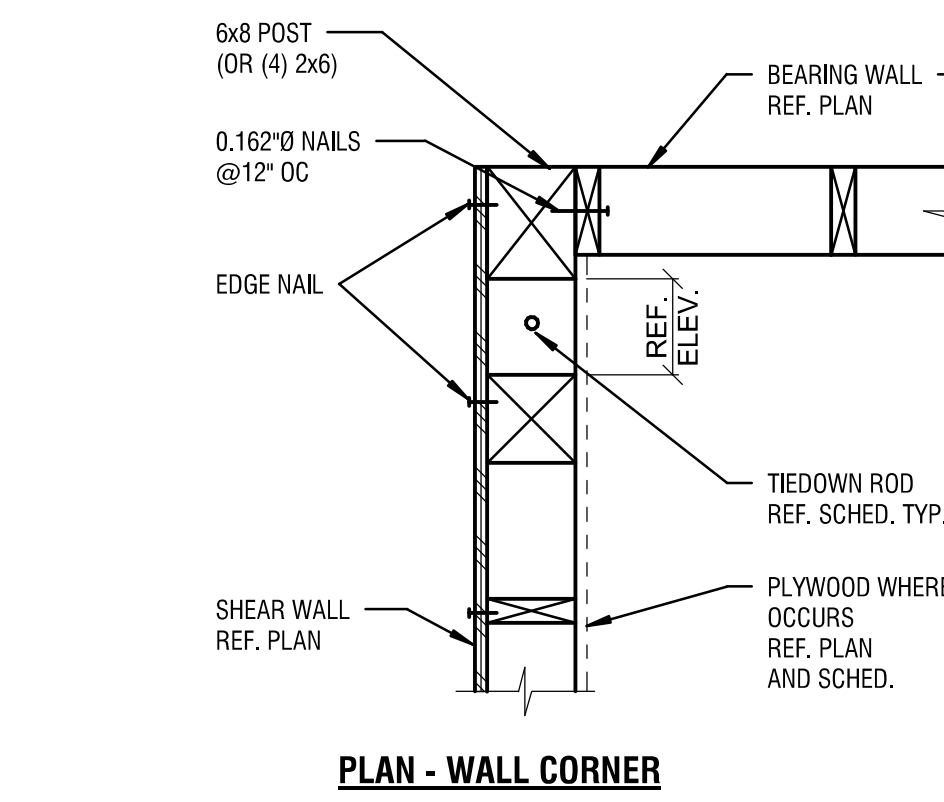
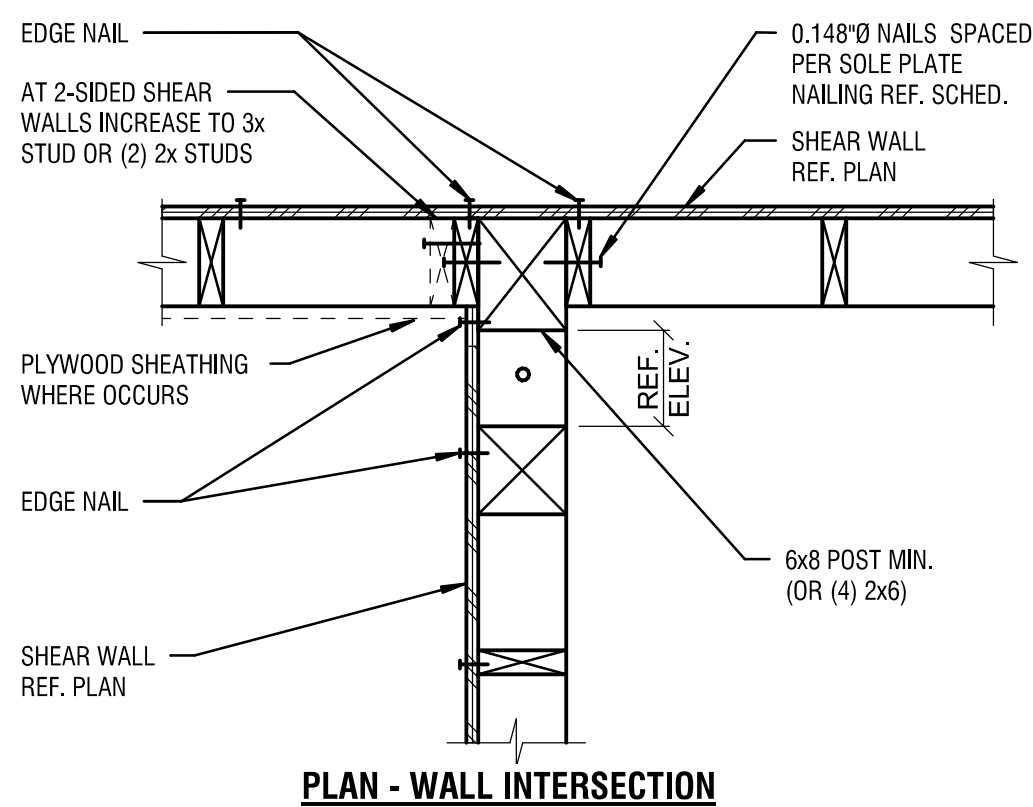
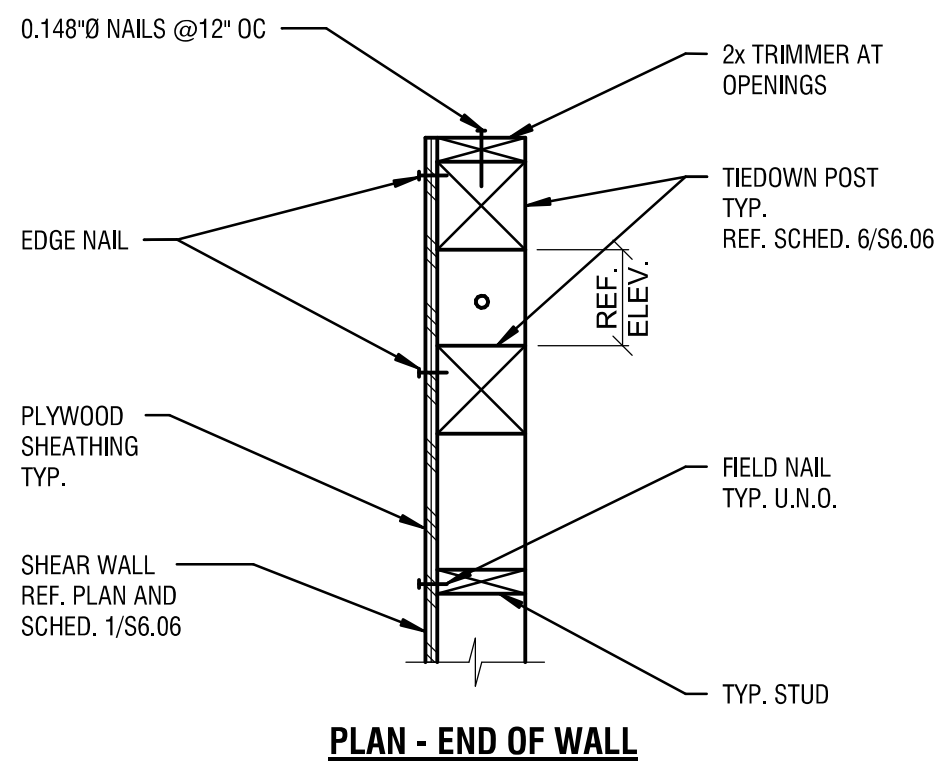
DATE 10/09/2018	PROJECT NUMBER 17058
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5 BEAM TO COLUMN CAP

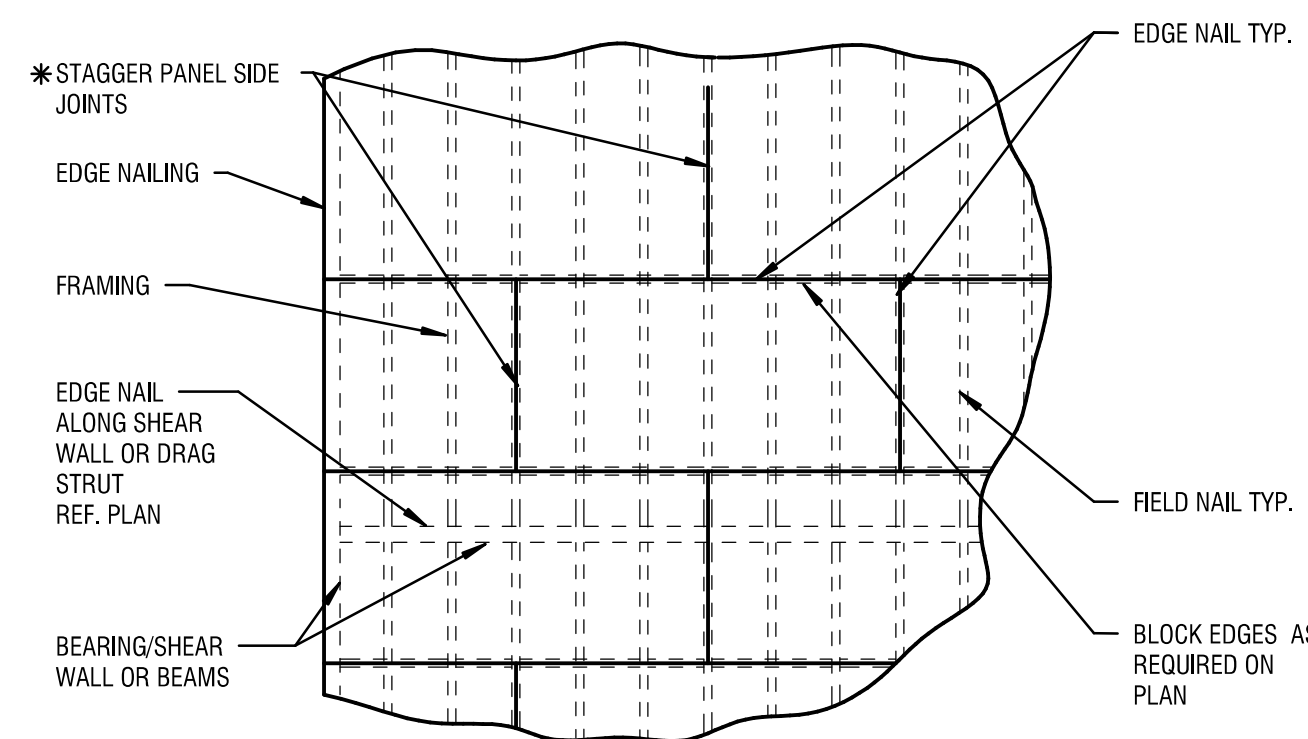
1" = 1'-0"



NOTE:  
FOR REQUIREMENTS AT SHEAR WALL PANEL EDGES REF. SCHEDULE  
1/S6.06 AND DETAIL 4/S6.06

1 SHEAR WALL HOLDOWN DETAILS

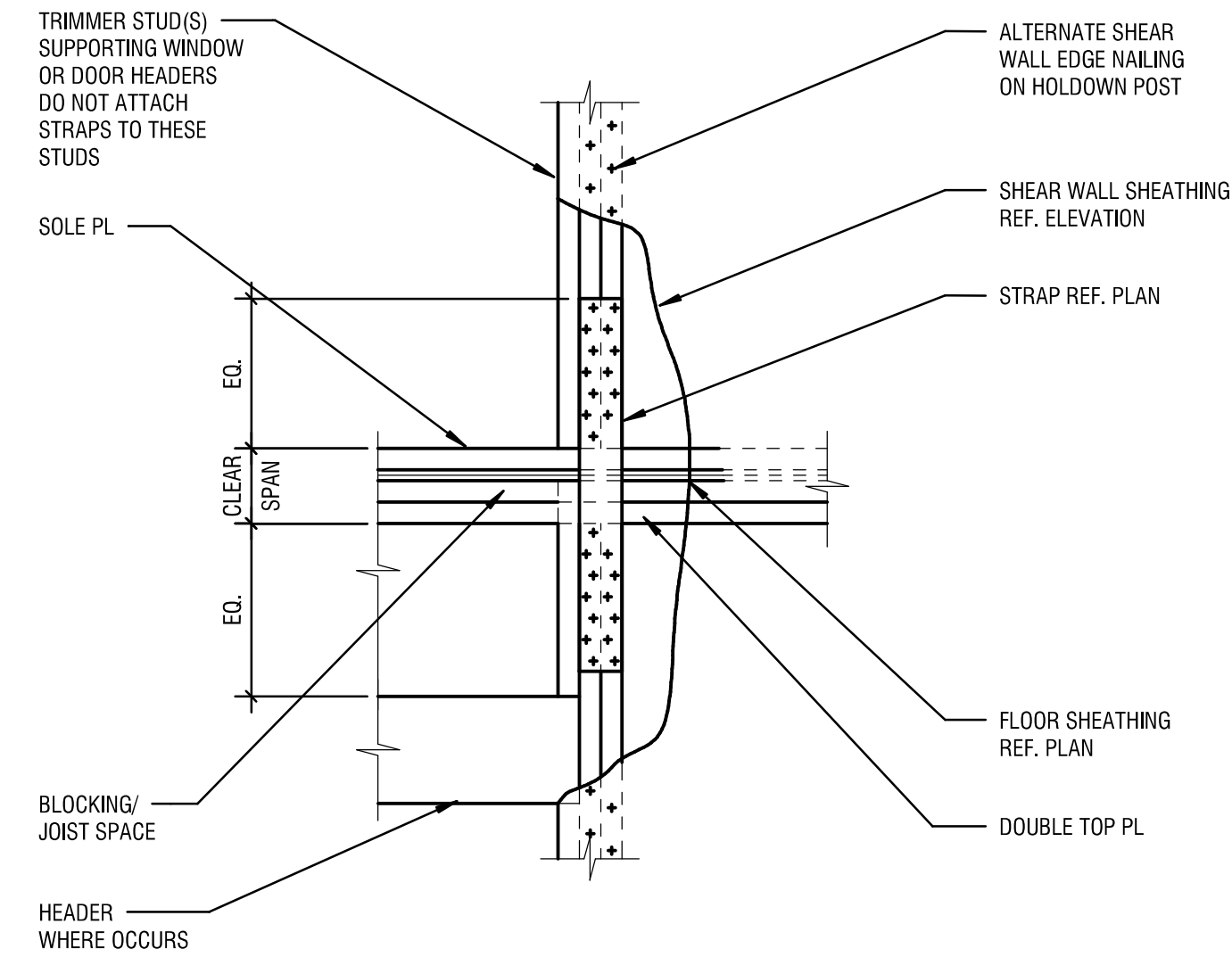
1" = 1'-0"



- NOTES:
1. PROVIDE 1/8" GAP AT ALL PANEL JOINTS. REF. GENERAL STRUCTURAL NOTES FOR ADDITIONAL INFORMATION.
  2. \* PANELS SHALL NOT BE LESS THAN 4'-0"x8'-0" EXCEPT AT BOUNDARIES AND CHANGES IN FRAMING WHERE MINIMUM PANEL DIMENSION SHALL BE 2'4" UNLESS ALL EDGES OF UNDERSIZED PANELS ARE SUPPORTED BY AND FASTENED TO FRAMING MEMBERS OR BLOCKING.
  3. NAILS SHALL BE LOCATED AT LEAST 3/8" FROM THE EDGES OF PANELS.
  4. OSB IS NOT PERMITTED TO BE USED FOR ROOFS.
  5. REF. DETAIL 3/S6.02 FOR BLOCKING DETAIL WHERE APPLICABLE.
  6. FLOOR SHEATHING SHALL BE GLUED AND NAILED USING RING SHANK W/ SIZE PER PLAN.

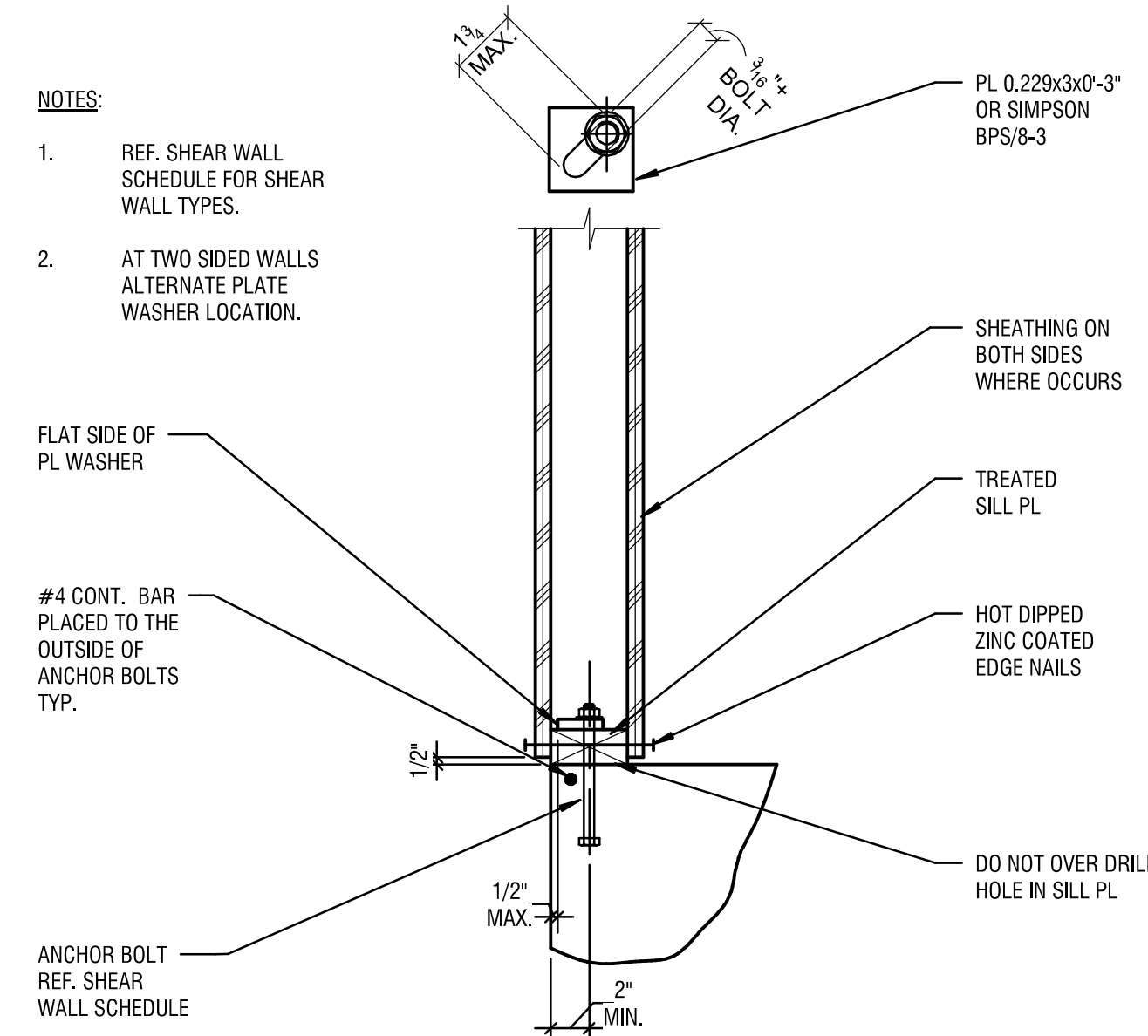
4 WOOD DIAPHRAGM SCHEDULE

1" = 1'-0"



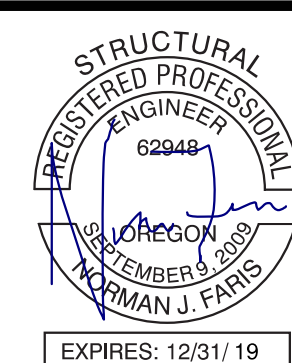
2 HOLDOWN STRAP ELEVATION

1" = 1'-0"



3 TYP. SILL PLATE AT SHEAR WALLS

1" = 1'-0"



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PORTLAND, OR 97209  
T 503.245.7100

1506 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063

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BRIDGE HOUSING

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WOOD DETAILS

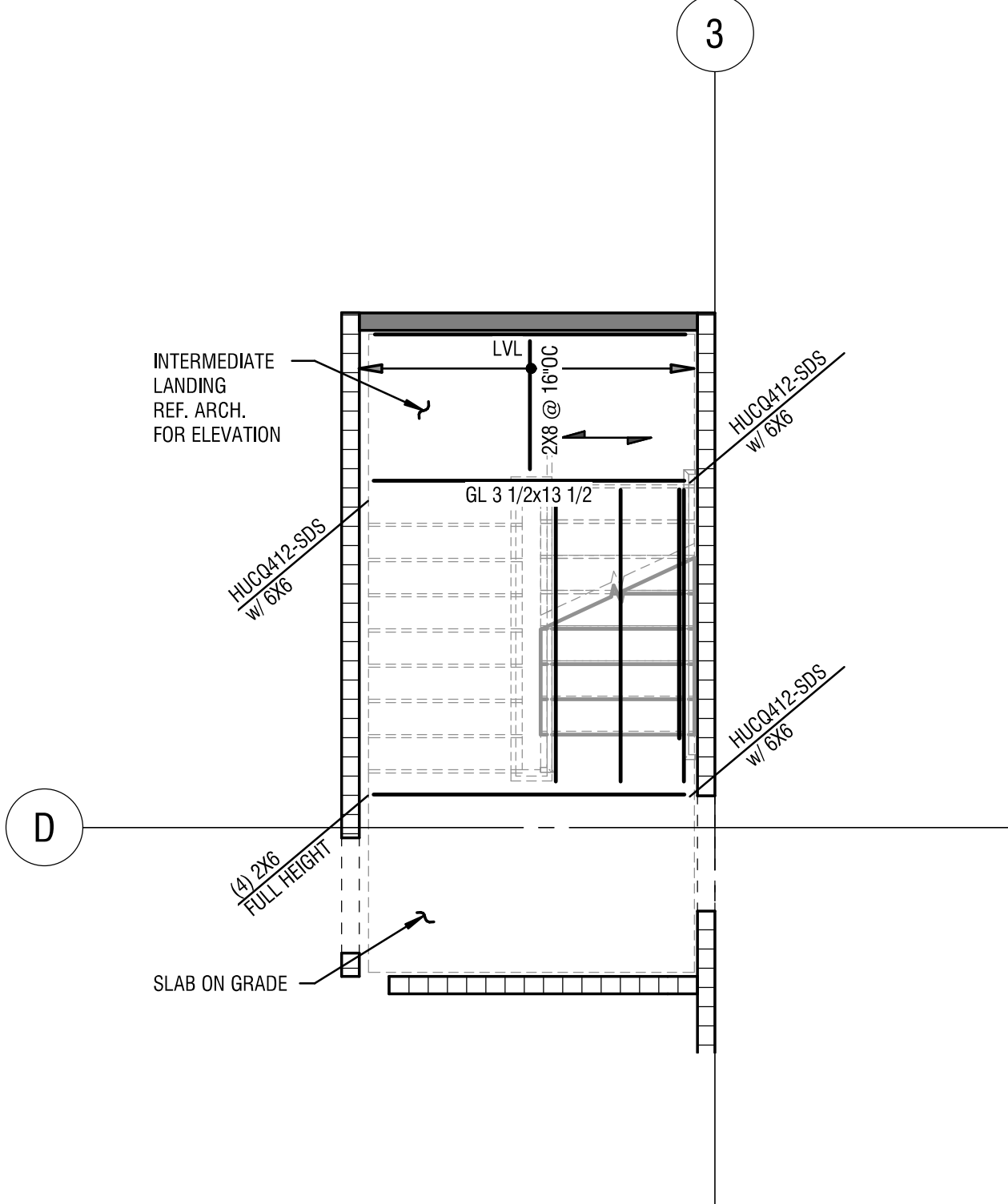
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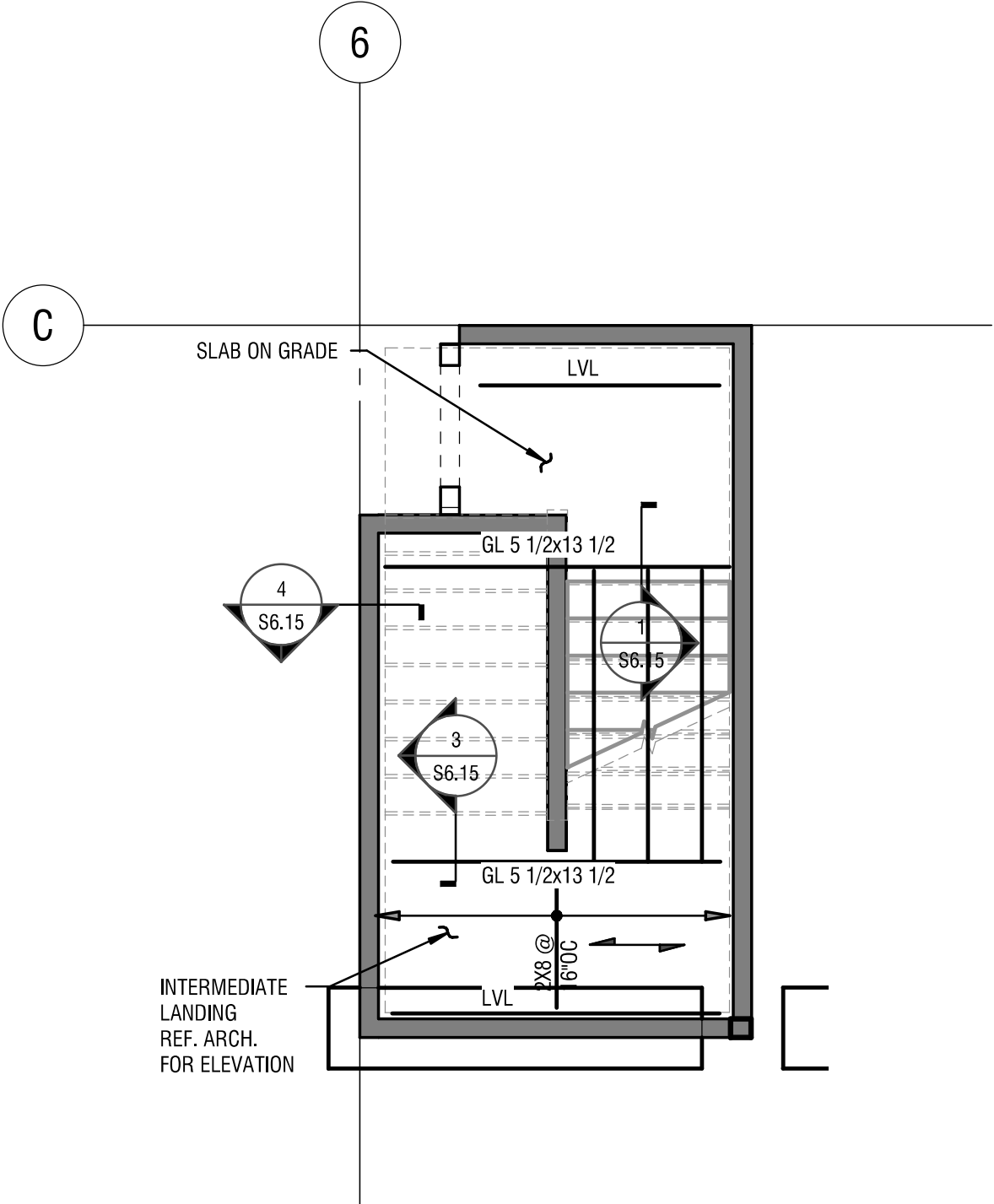
SHEET NUMBER

S6.07

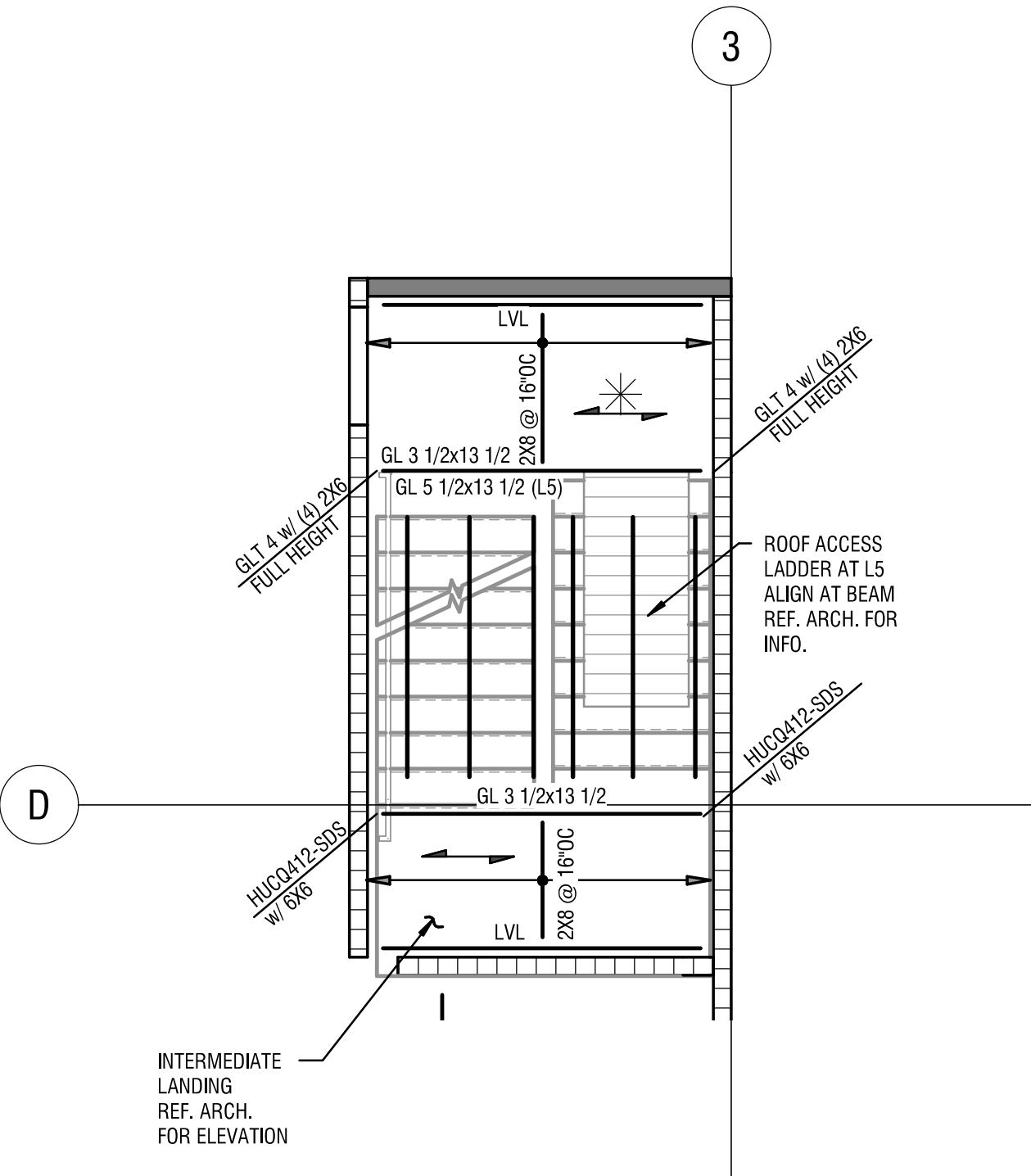




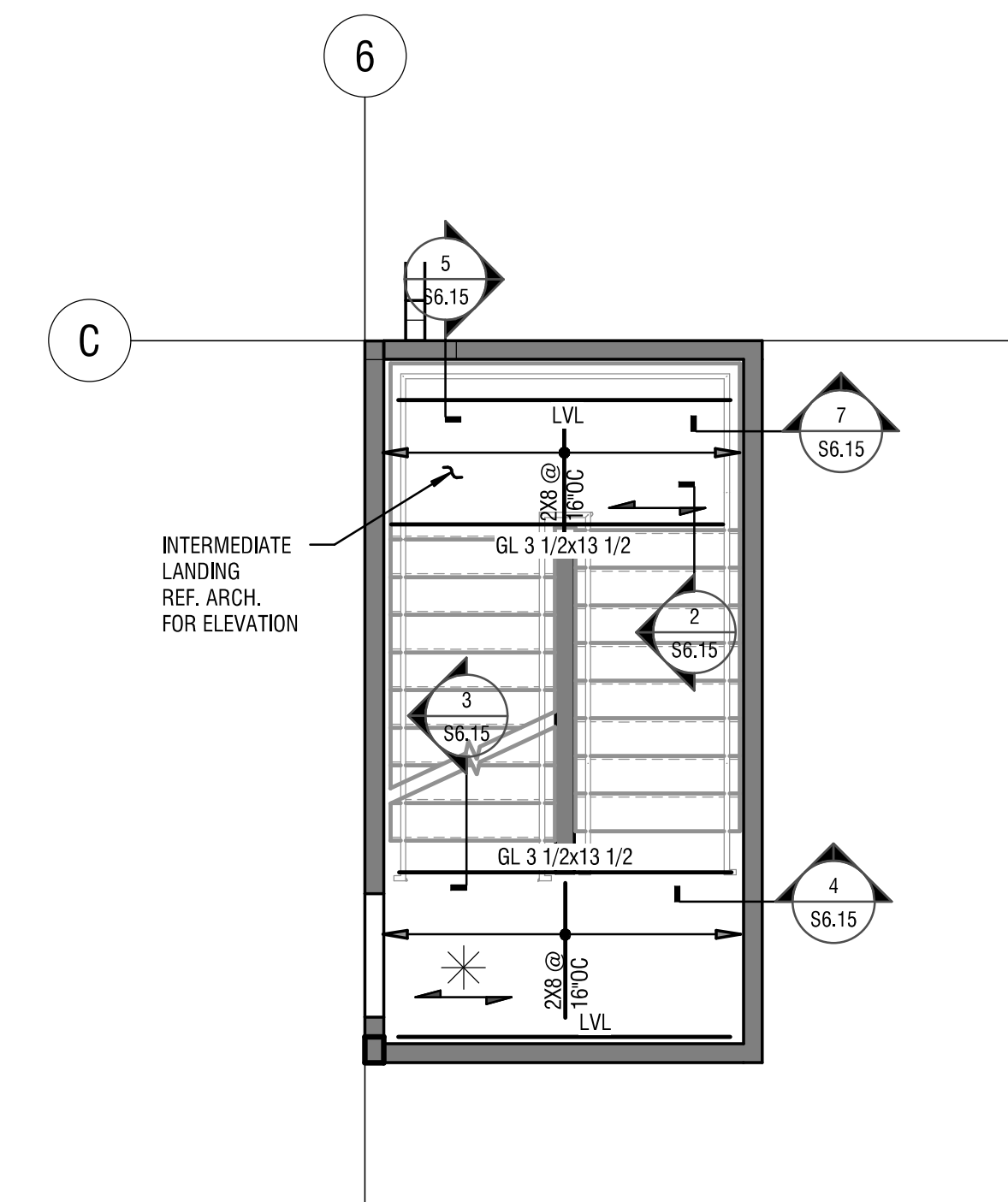
4 STAIR 2 GROUND LEVEL PARTIAL PLAN  
1/4" = 1'-0"



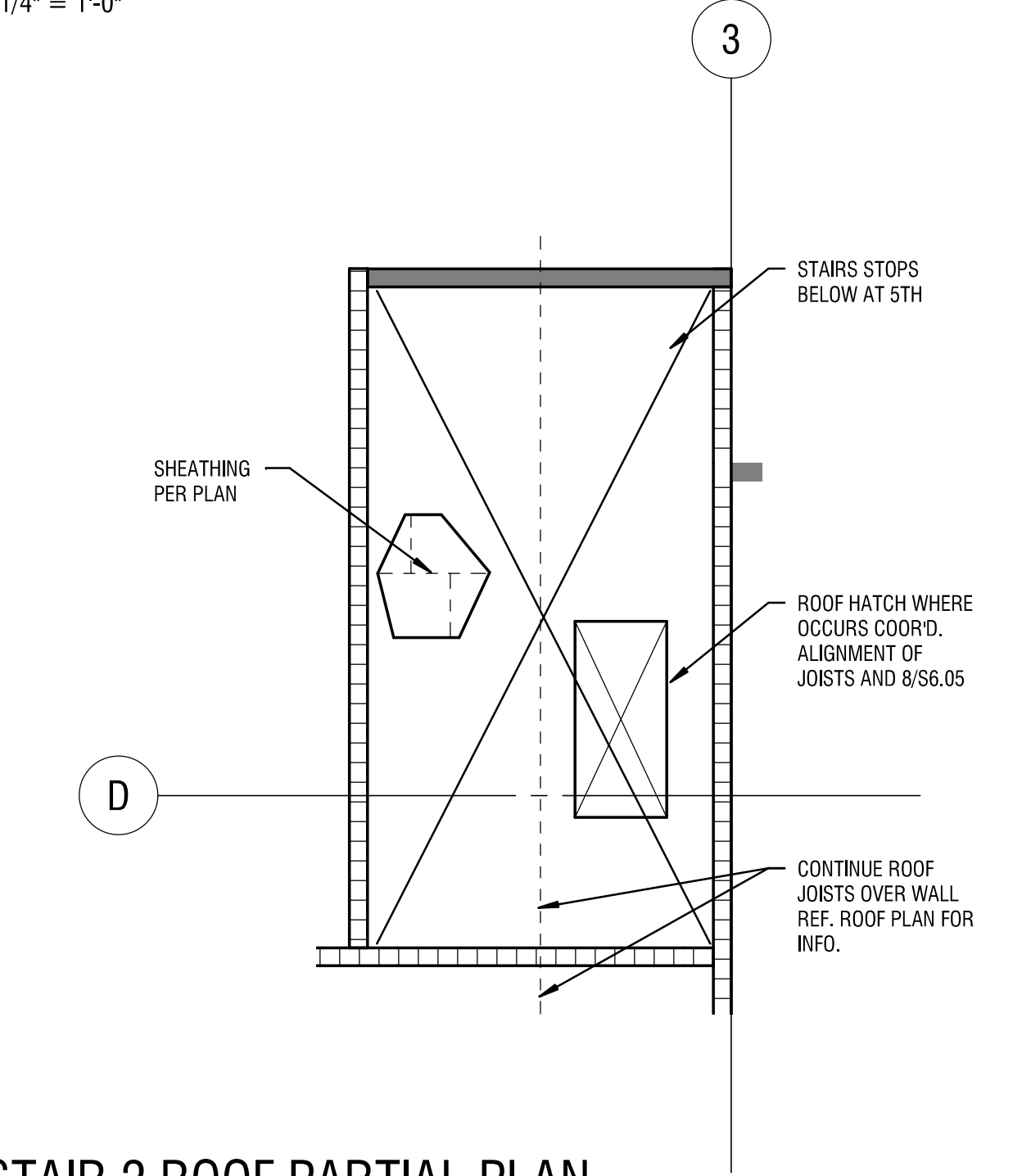
1 STAIR 1 GROUND LEVEL PLAN  
1/4" = 1'-0"



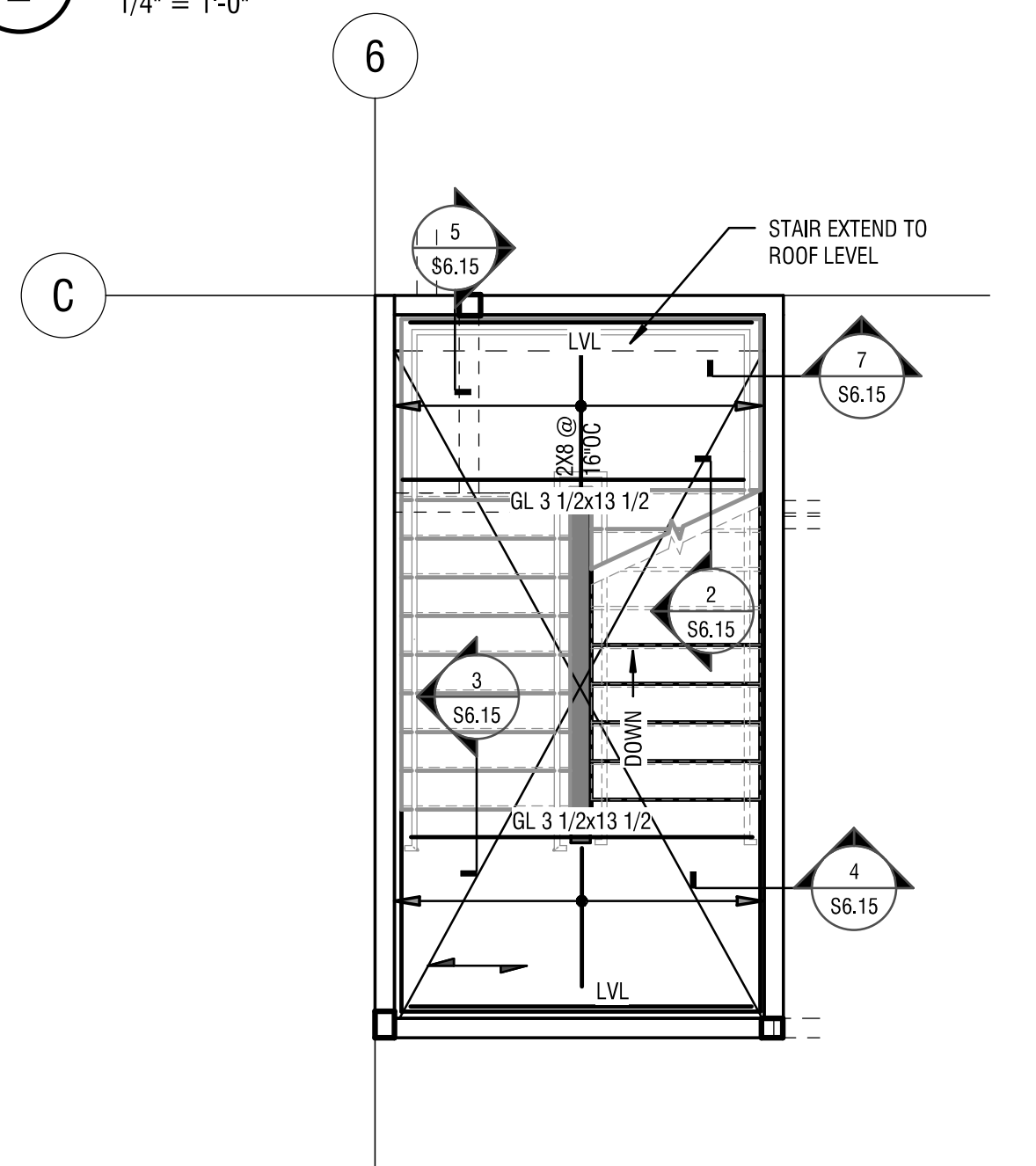
5 STAIR 2 LEVELS 2-5 PARTIAL PLAN  
1/4" = 1'-0"



2 STAIR 1 LEVELS 2-5 PARTIAL PLAN  
1/4" = 1'-0"



6 STAIR 2 ROOF PARTIAL PLAN  
1/4" = 1'-0"



3 STAIR 1 ROOF PARTIAL PLAN  
1/4" = 1'-0"

STAIR PARTIAL PLAN NOTES:

- INDICATES SPAN DIRECTION OF 23/32" TAG SHEATHING. GLUE w/ 10d RING SHANK NAILS @ 4" OC ALONG EDGES AND 12" OC IN FIELD.
- INDICATES TO CONTINUE TYP. FLOOR SHEATHING THROUGH STAIRS.
- REFERENCE S6.15 FOR TYPICAL DETAILS.
- REFERENCE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS AND ADDITIONAL INFORMATION TO BE COORDINATED INCLUDING TOPPING COMPOUND AND FINISHES.

STRUCTURAL  
REGISTERED PROFESSIONAL  
ENGINEER  
OREGON  
JAMES  
KIMMAN J. TAYLOR  
EXPIRES: 12/31/19

™

Ankrom Moisan

38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100  
1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.575.1600  
1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063  
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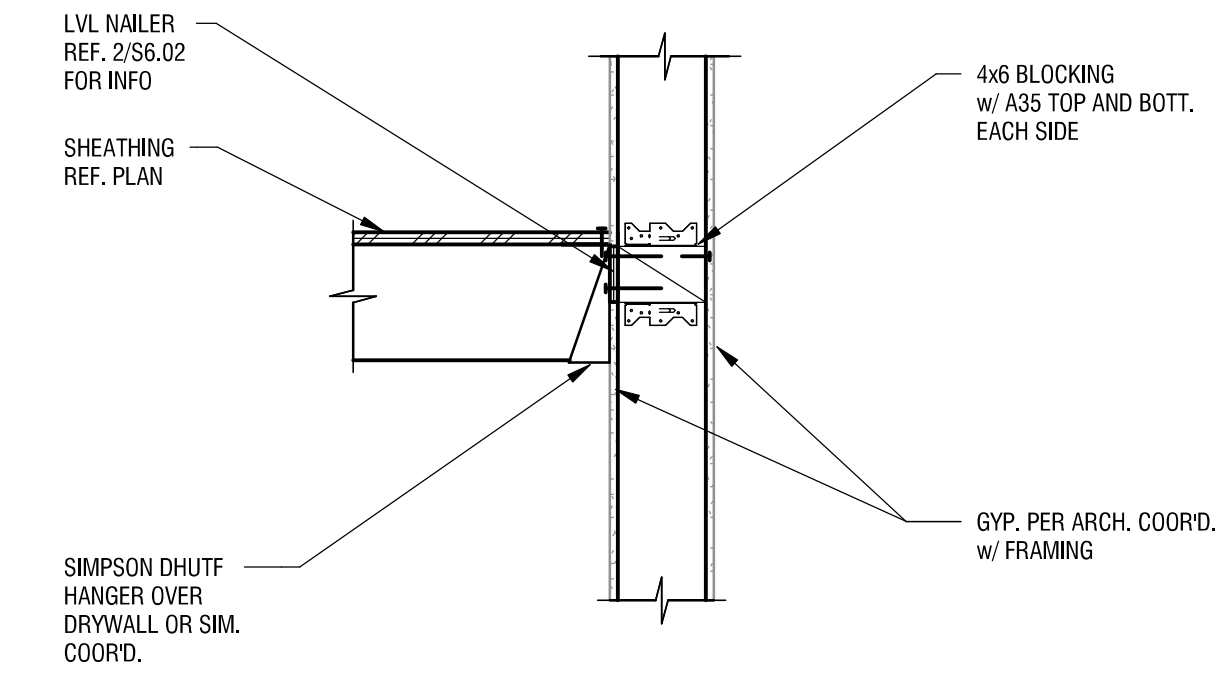
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STAIR PARTIAL  
PLANS

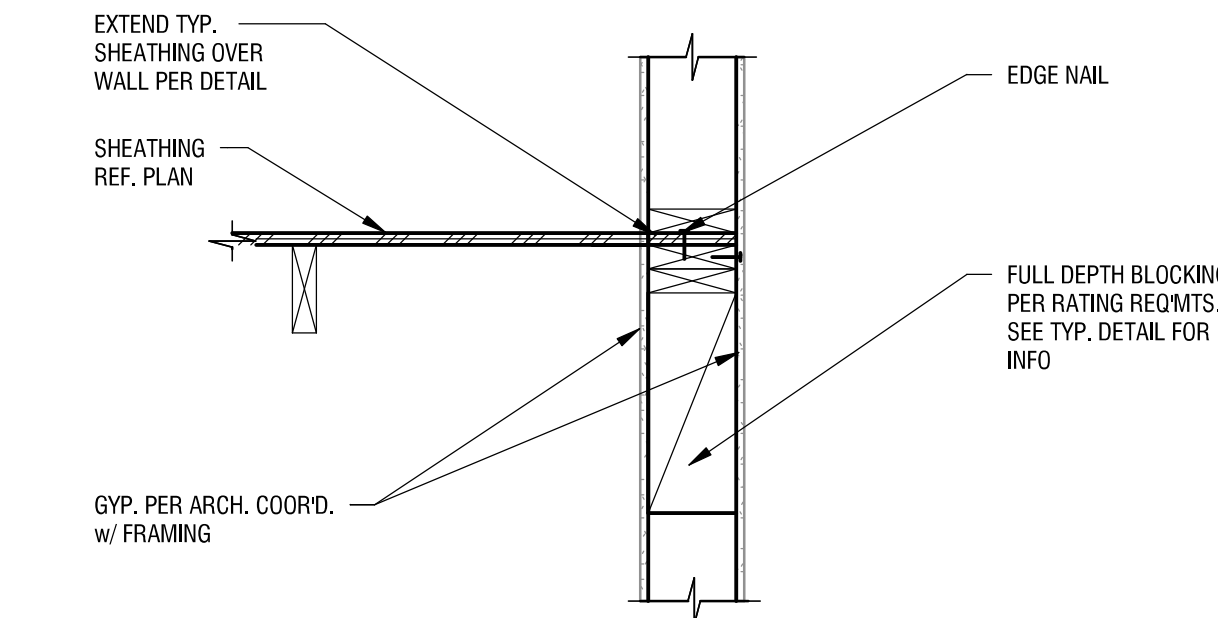
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DATE 10/09/2018	PROJECT NUMBER 17058
SHEET NUMBER S6.10	

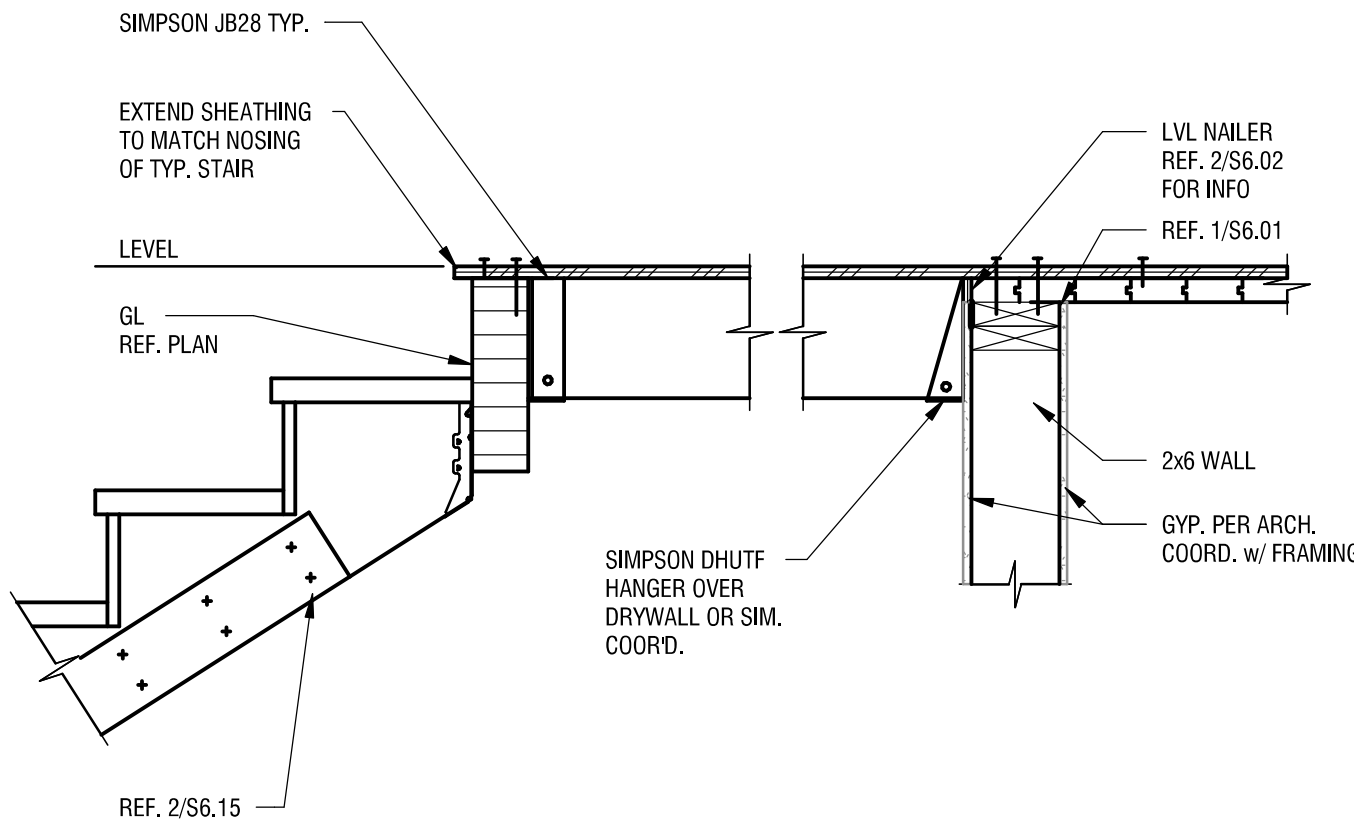




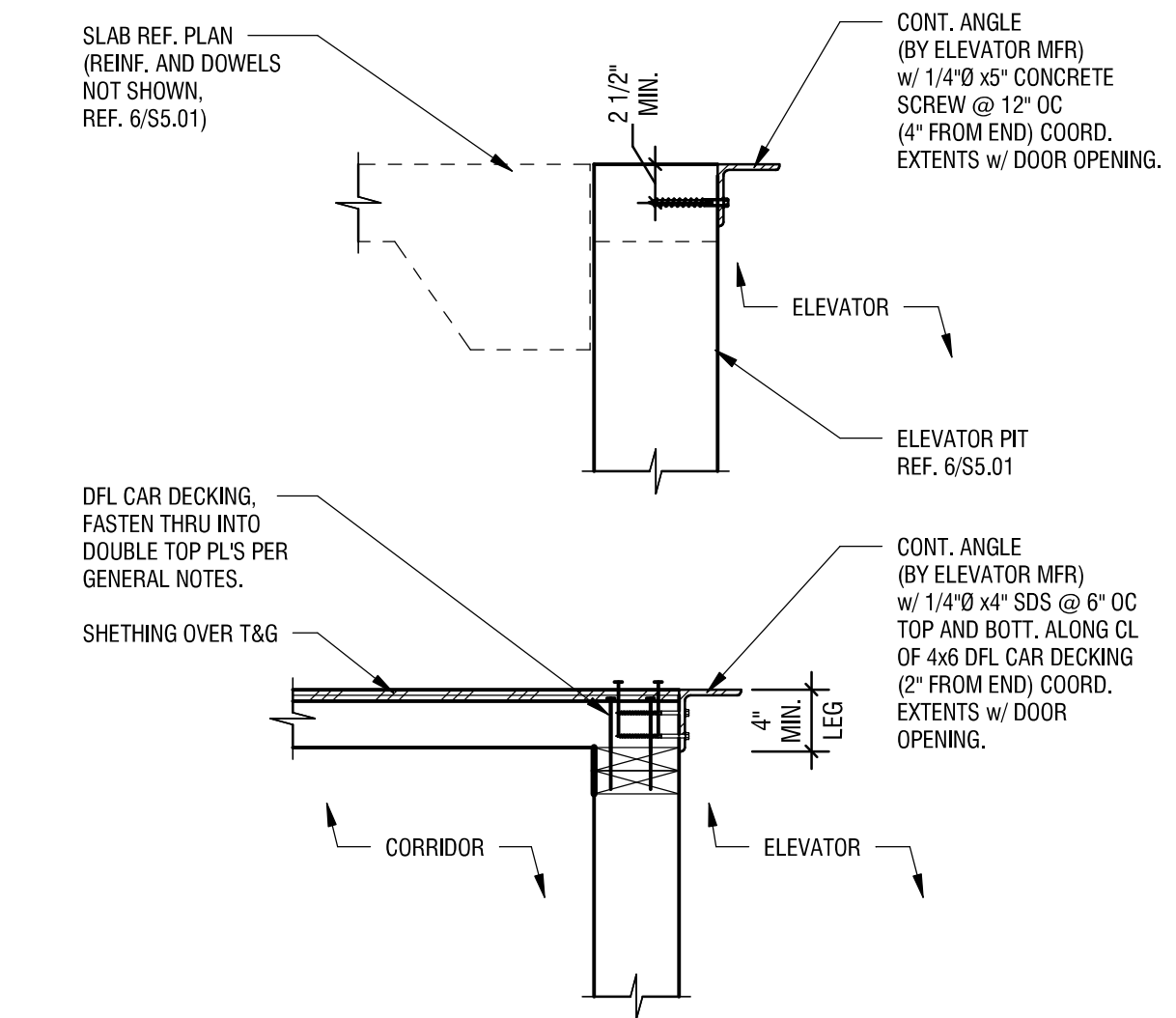
5 TYPICAL INTERMEDIATE STAIR LANDING  
1" = 1'-0"



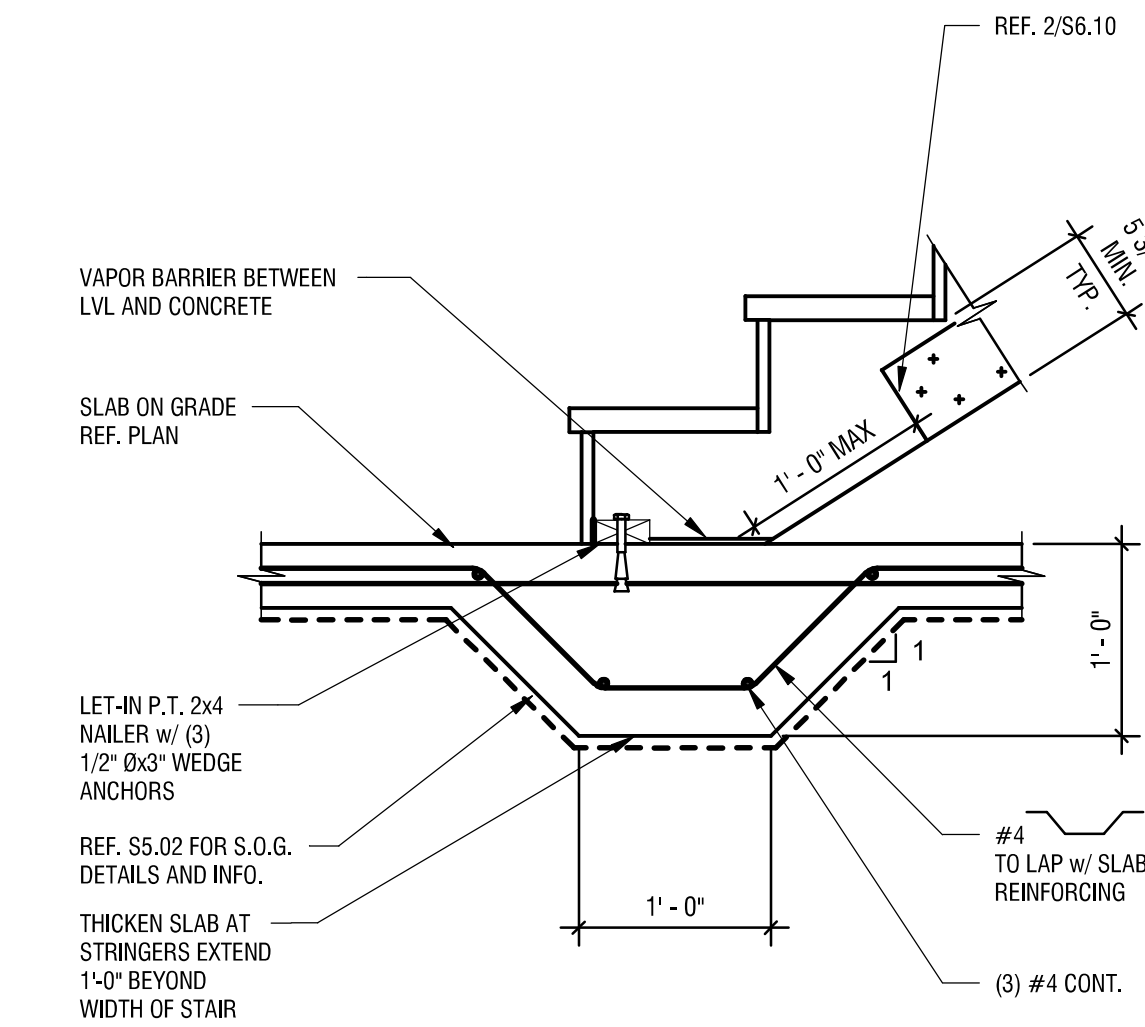
6 TYPICAL LANDING TO WALL CONNECTION  
1" = 1'-0"



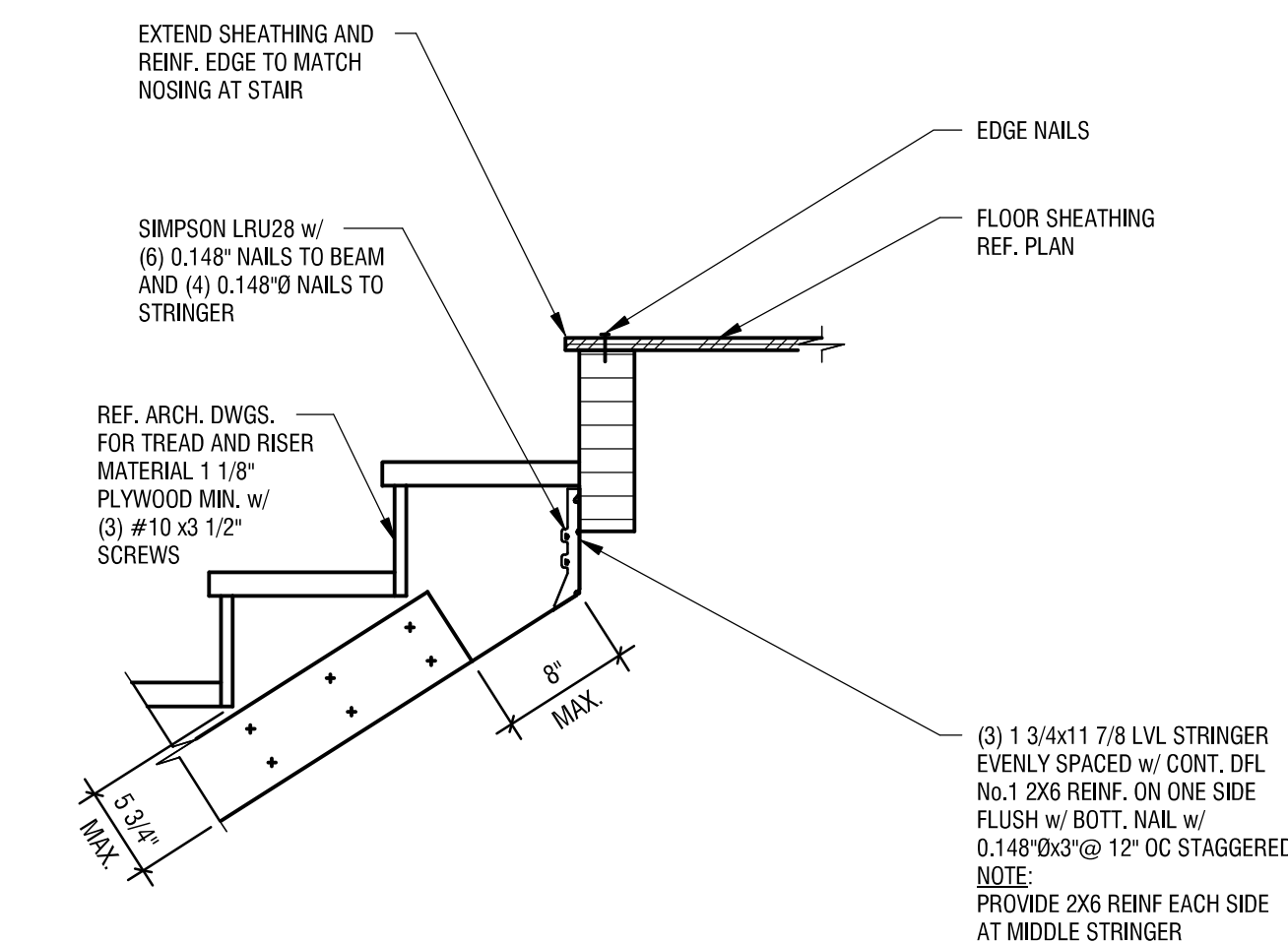
7 TYP. FLOOR LEVEL LANDING  
1" = 1'-0"



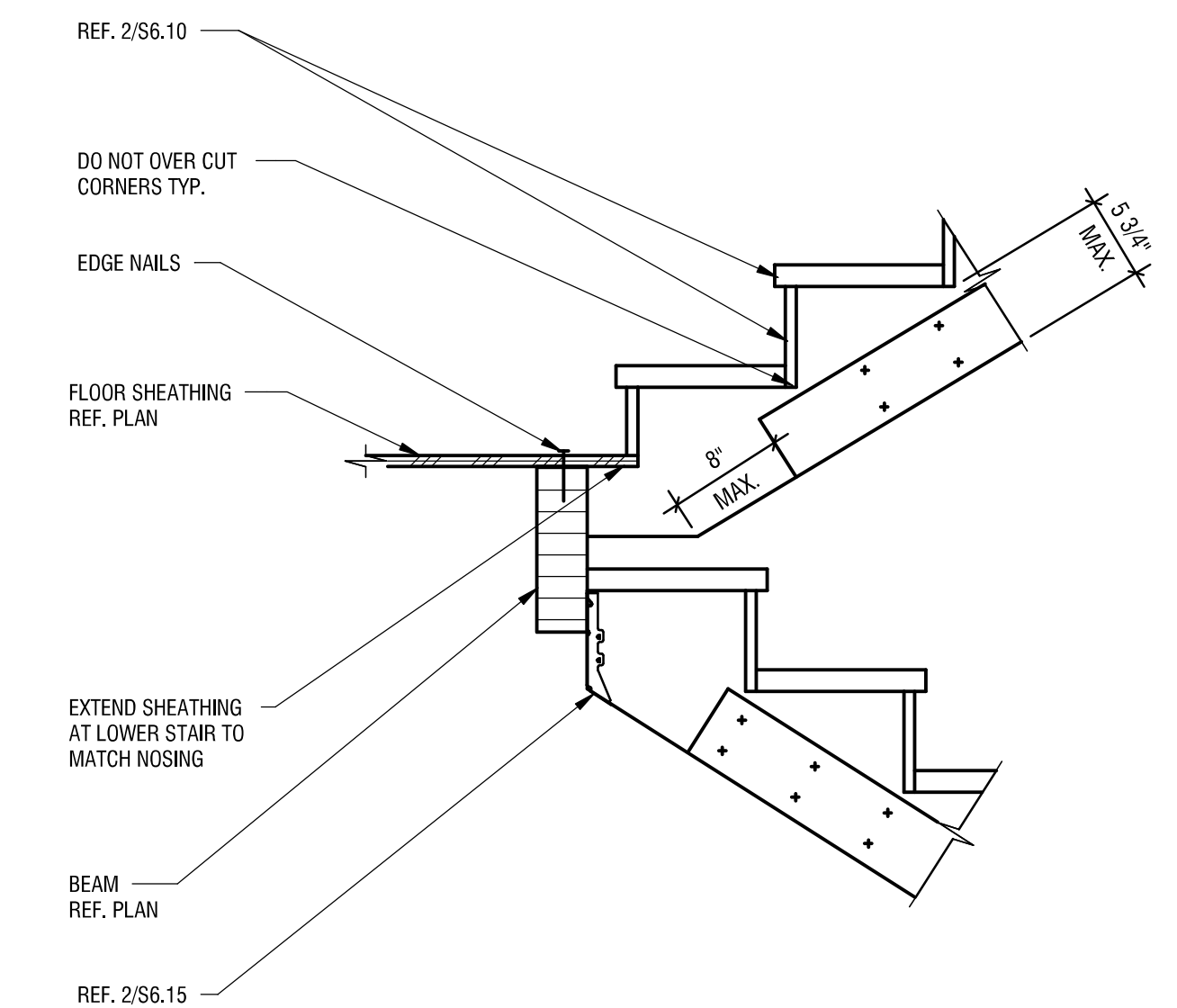
8 ELEVATOR SILL AT OPENING  
1" = 1'-0"



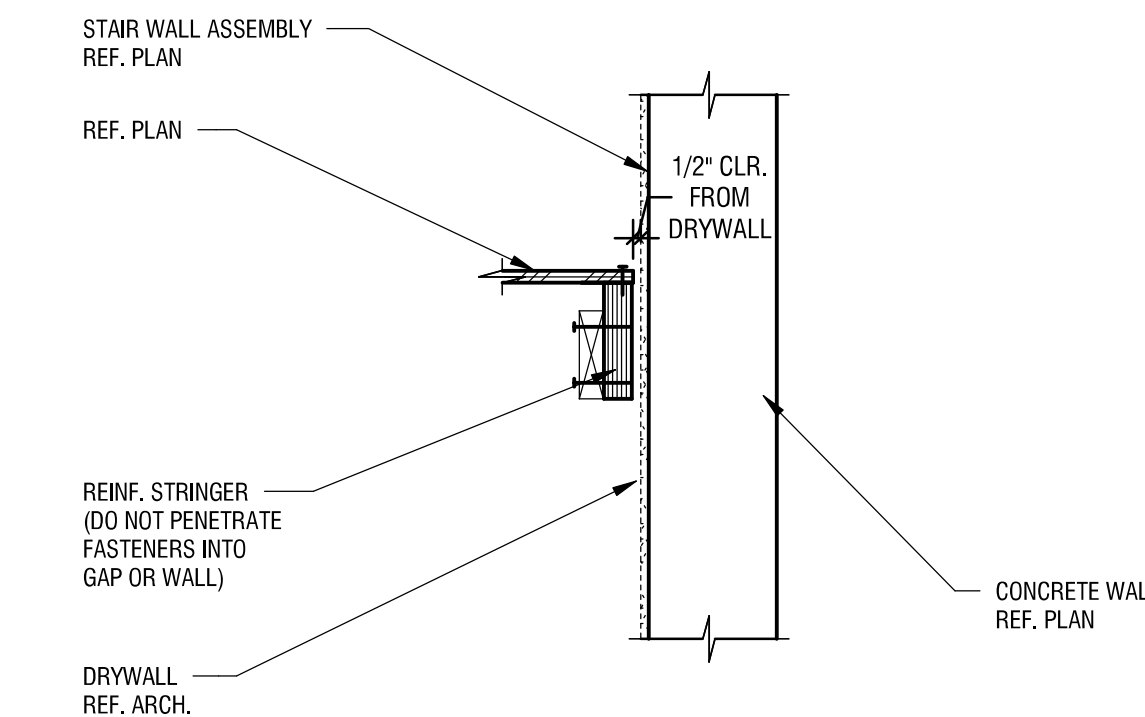
1 WOOD STRINGER TO SLAB ON GRADE  
1" = 1'-0"



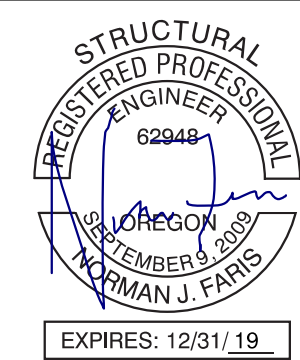
2 WOOD STRINGER AT BEAM  
1" = 1'-0"



3 WOOD STRINGER CONNECTION TO BEAM  
1" = 1'-0"



4 STRINGER ALONG WALL  
1" = 1'-0"



38 NW DAVIS STREET, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100  
1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600  
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BRIDGE HOUSING

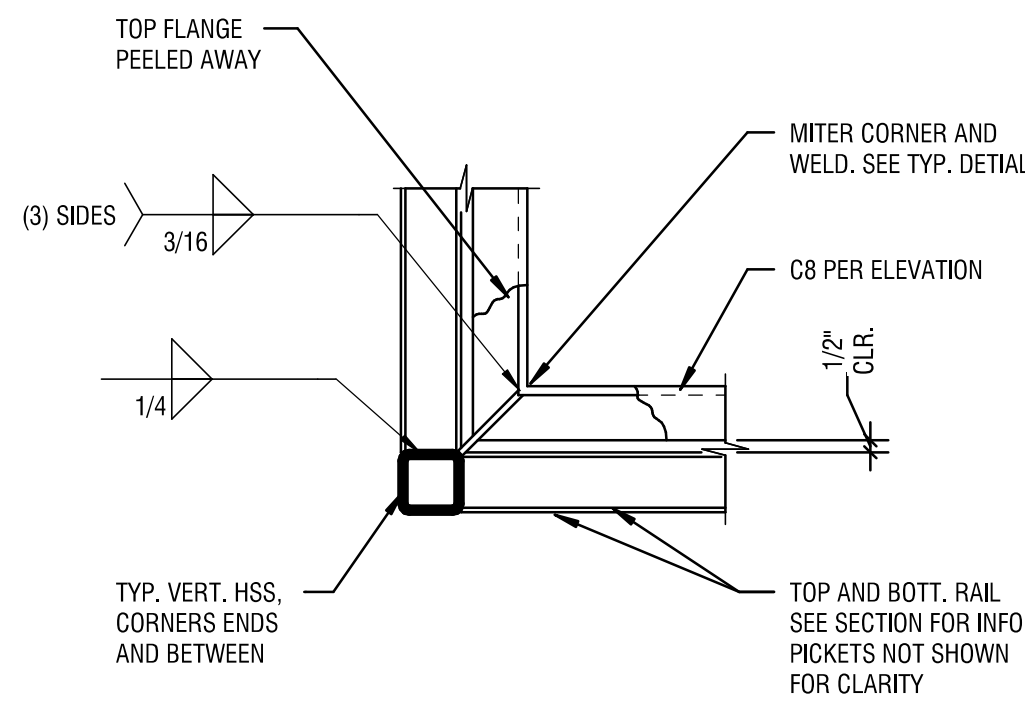
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TYPICAL STAIR  
DETAILS

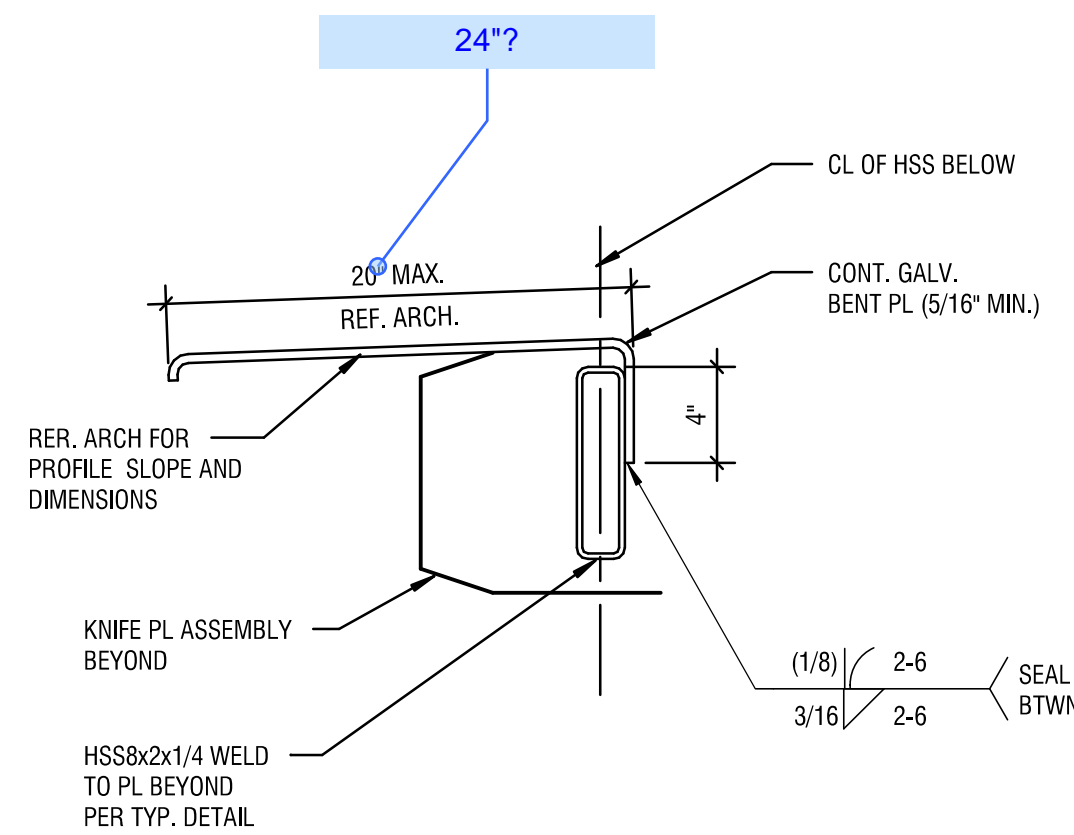
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PROJECT NUMBER 17058	SHEET NUMBER
SCALE	S6.15

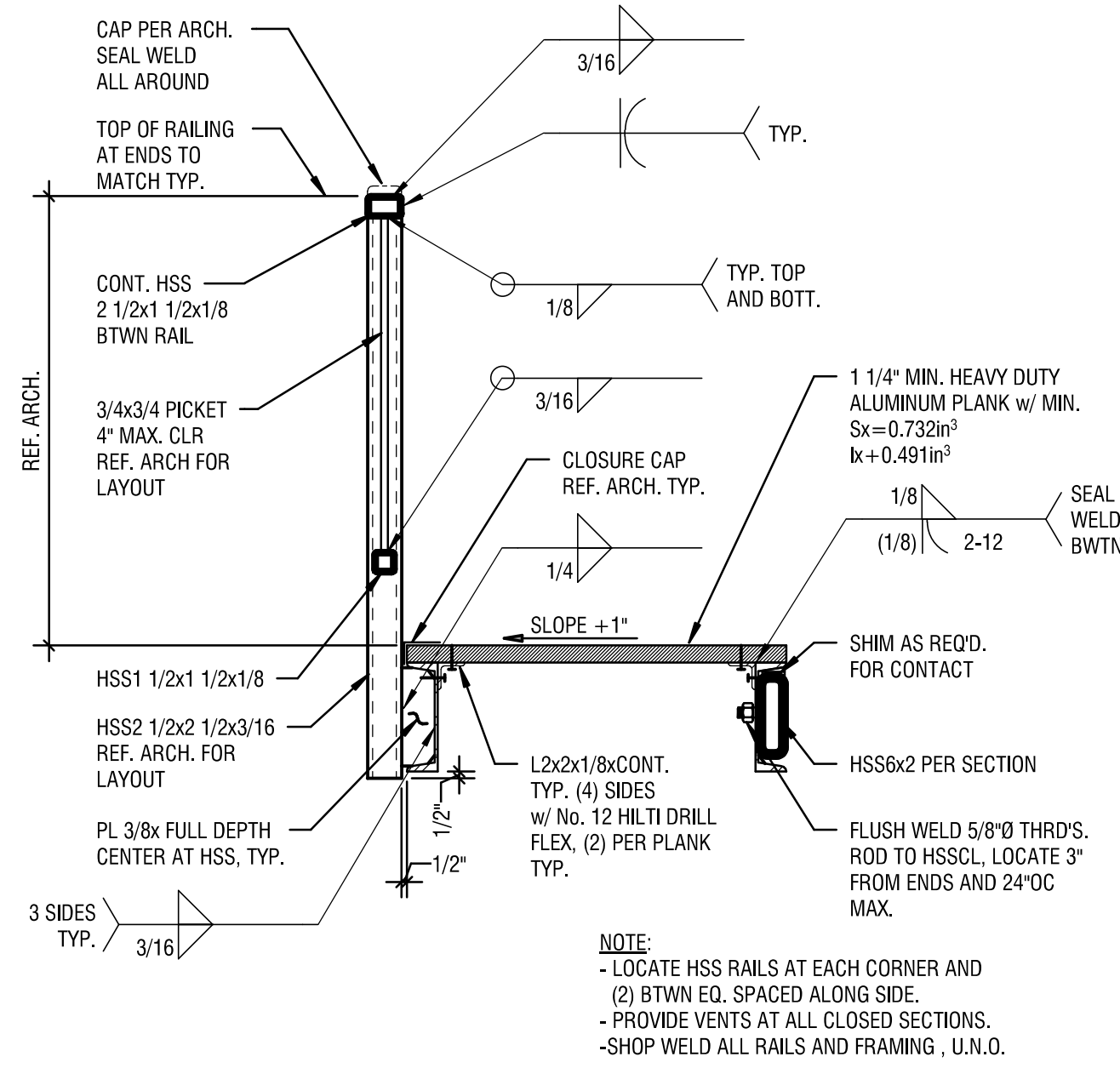




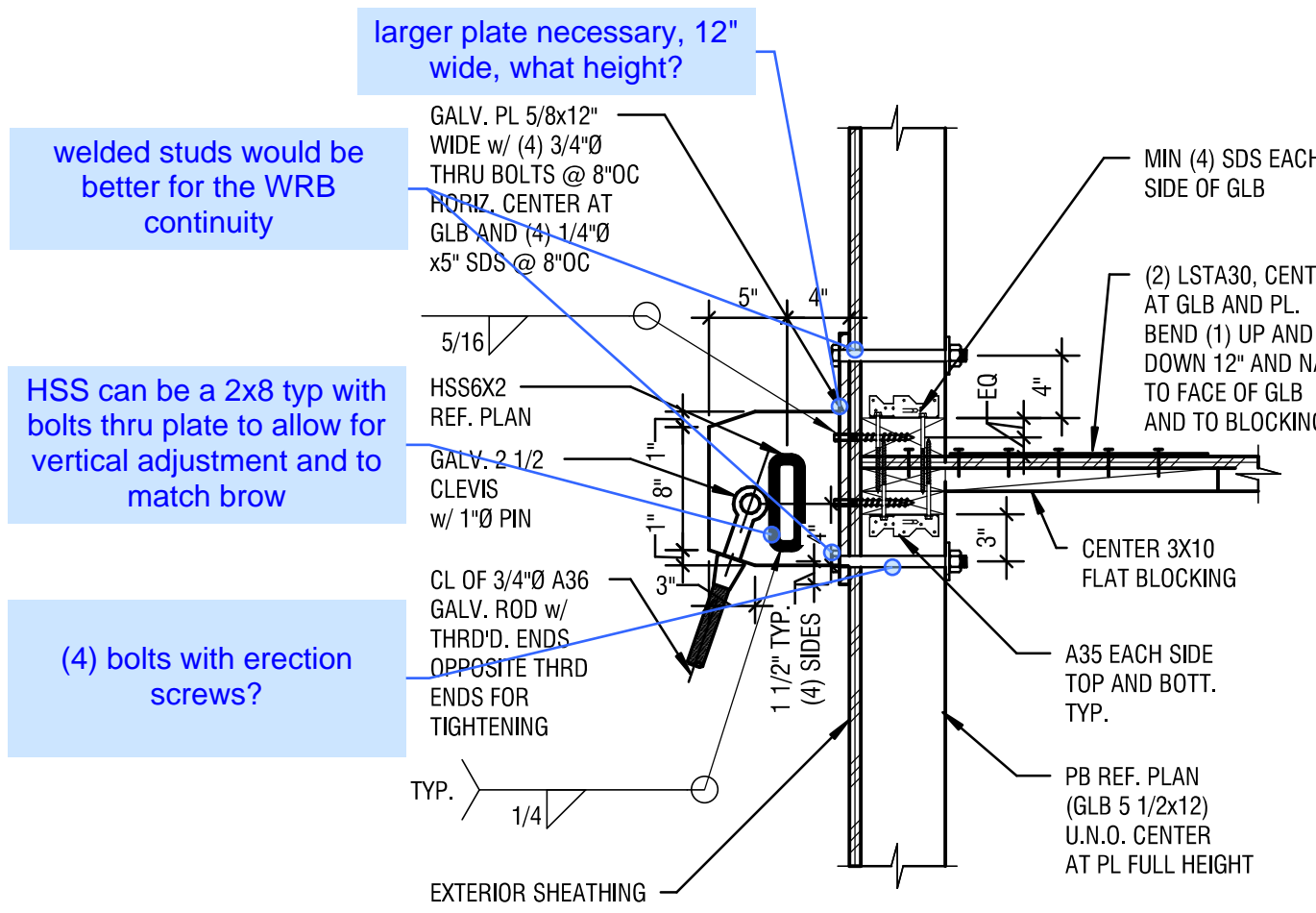
6 RAIL CONNECTION  
1 1/2" = 1'-0"



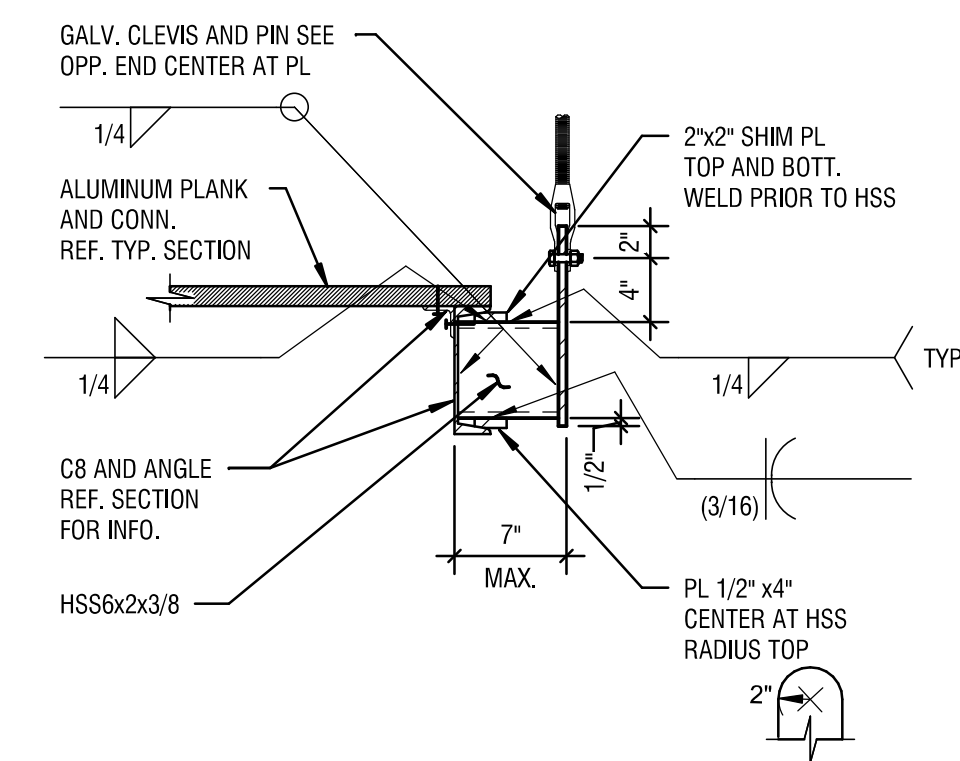
7 TYPICAL BRICK LEDGER  
1 1/2" = 1'-0"



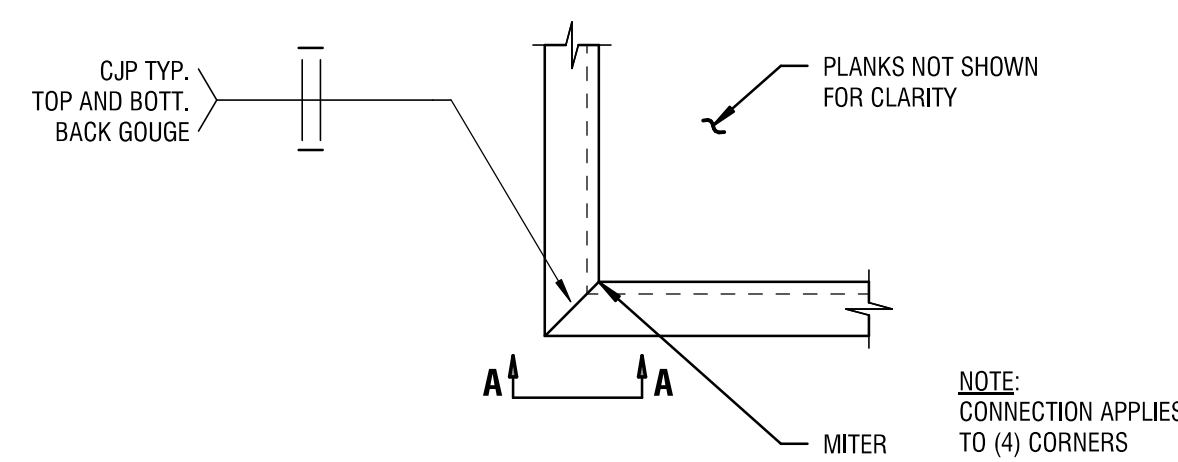
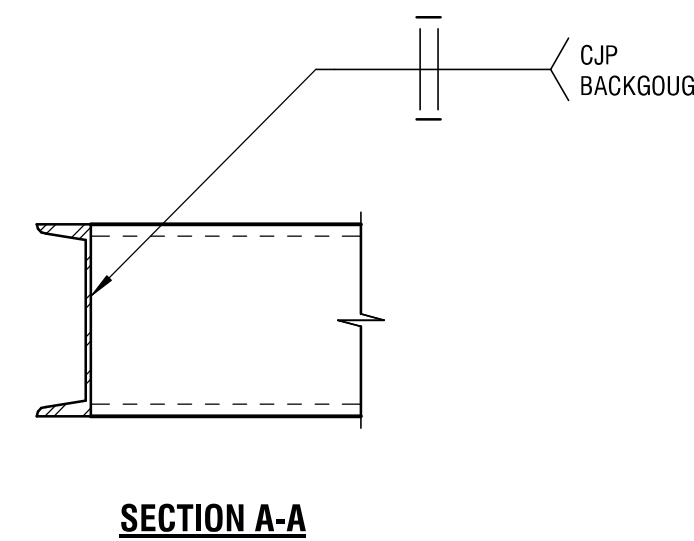
2 SECTION AT BALCONY  
1" = 1'-0"



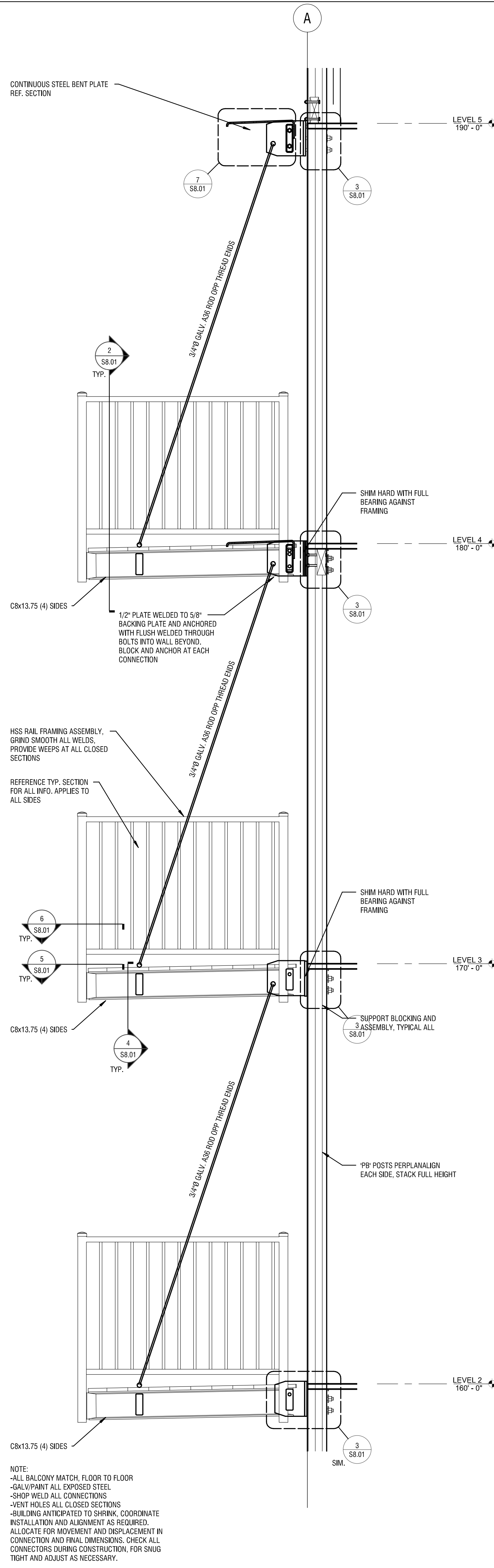
3 TYP. BALCONY CONNECTION  
1" = 1'-0"



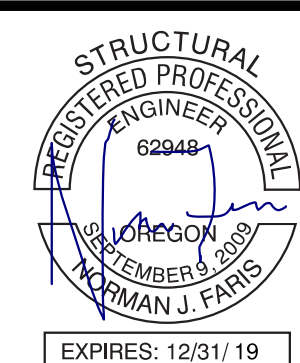
4 DETAIL HANGER TO BALCONY  
1" = 1'-0"



5 C8 TO C8 CONNECTION  
1 1/2" = 1'-0"



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



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PORTLAND, OR 97209  
T 503.245.7100  
1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600  
1014 HOWARD STREET  
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T 415.252.7063

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BALCONY PLAN AND DETAILS

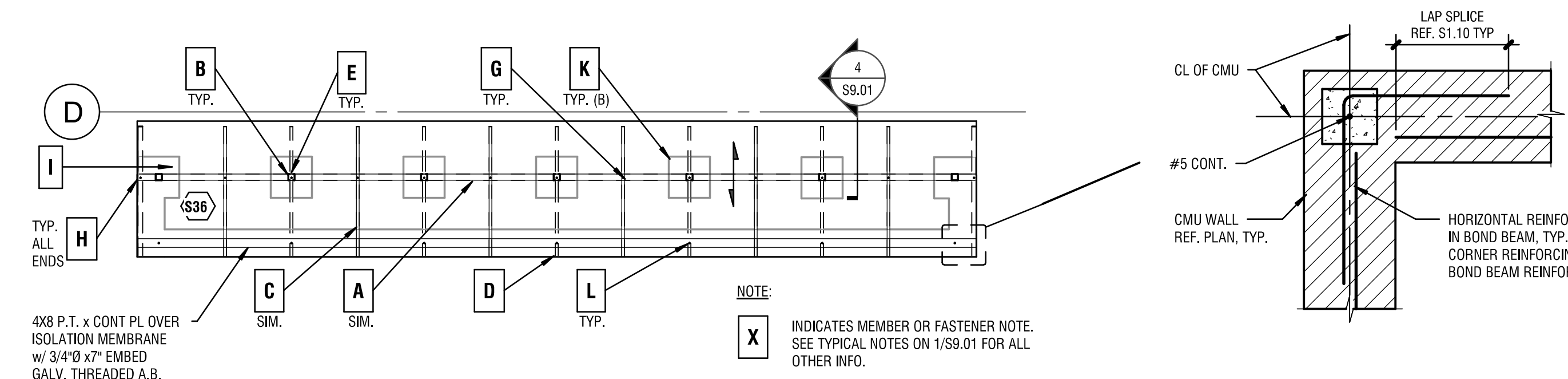
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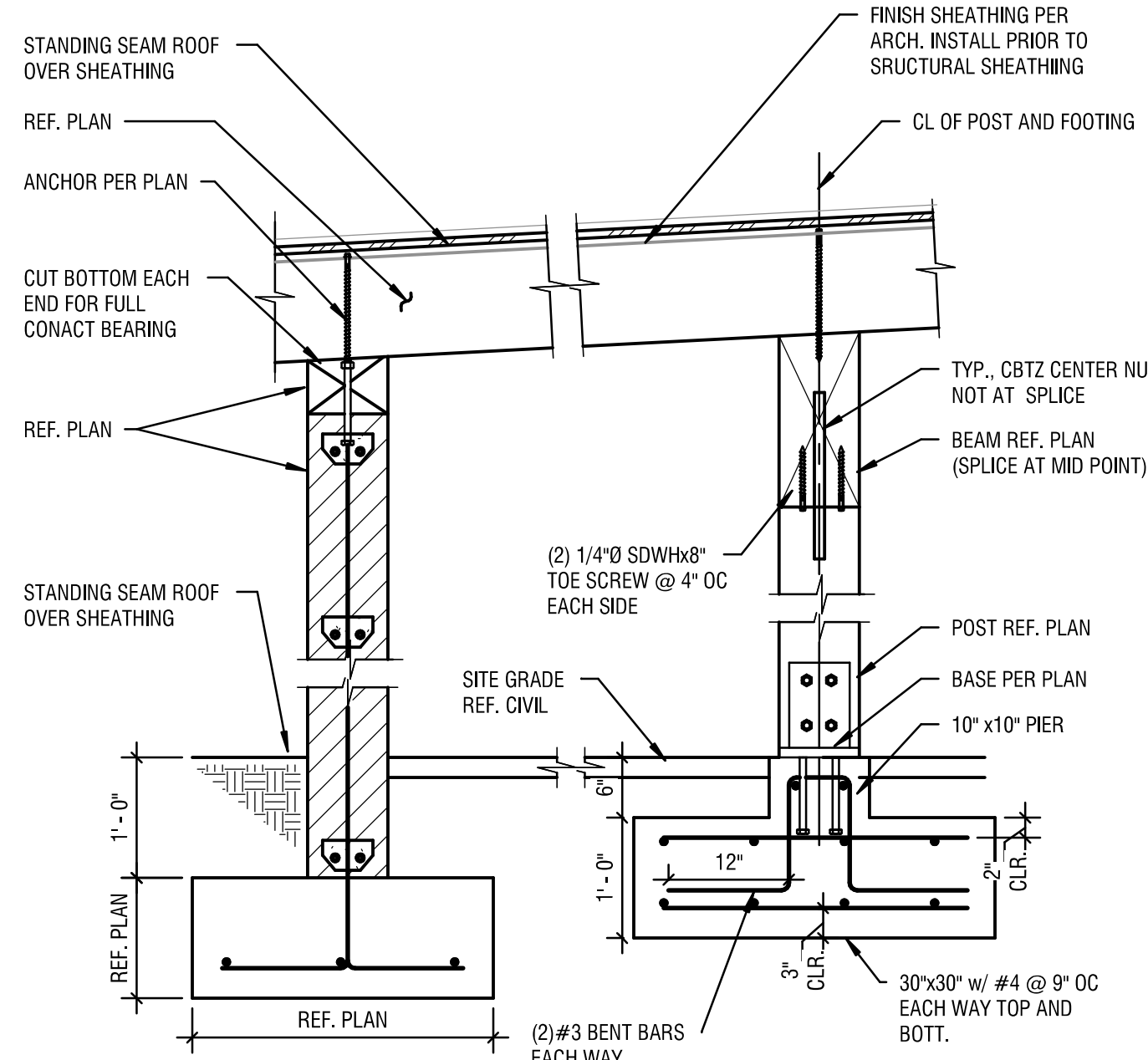
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S8.01





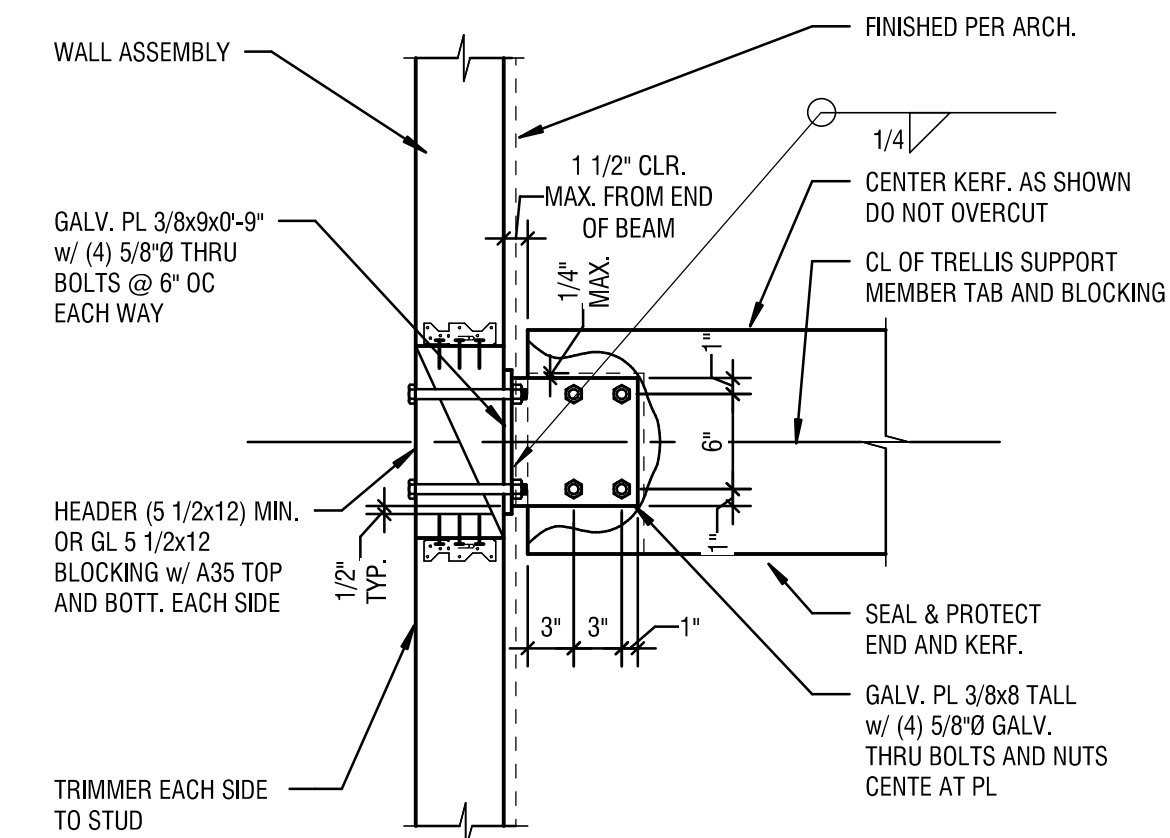
**E BIKE SHELTER PLAN**  
1/8" = 1'-0"



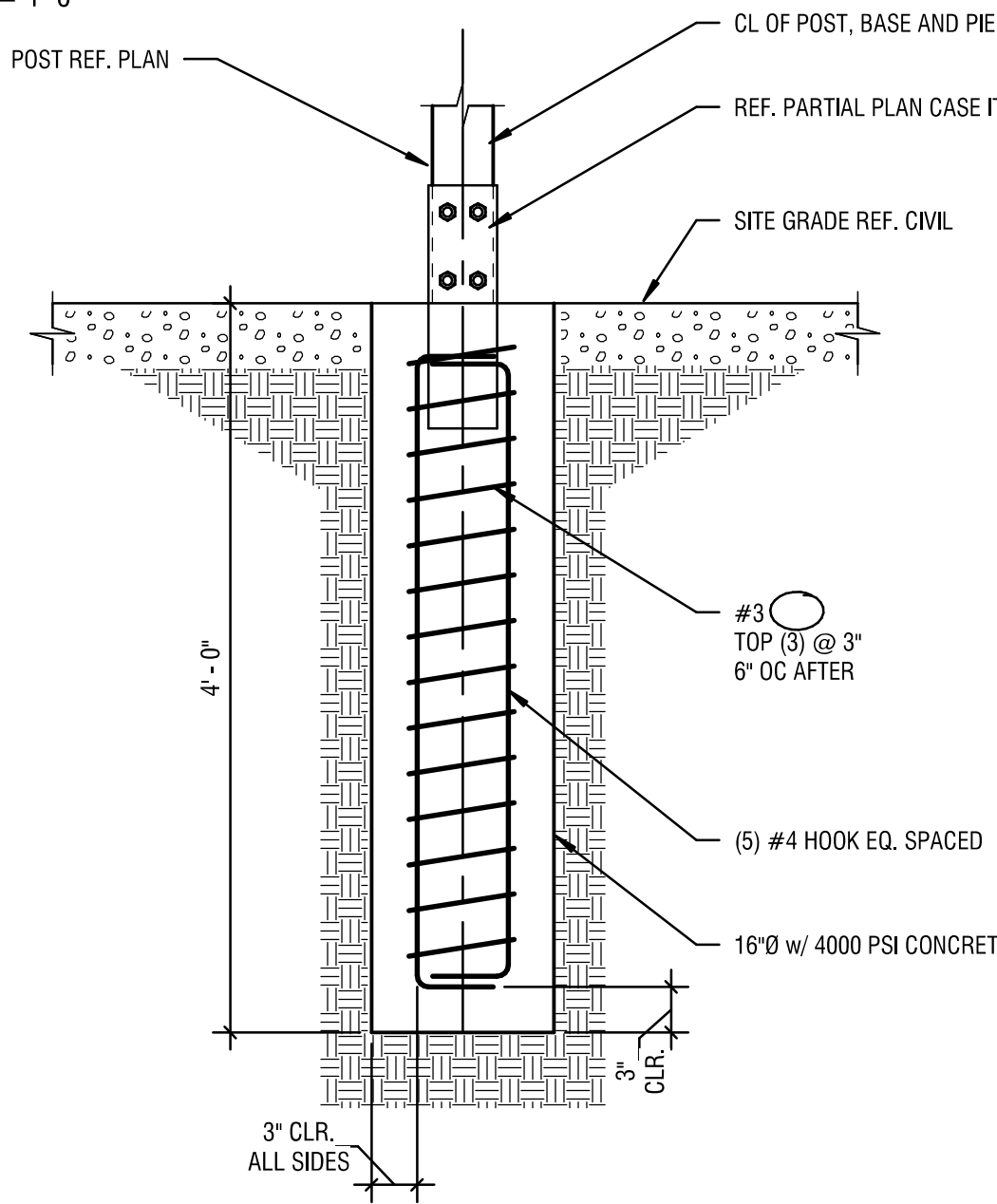
**4 SECTION AT BIKE SHELTER**  
3/4" = 1'-0"

A	CONTINUOUS 6X14, SPLICE ONLY AT SIM CONDITION.
B	6X6 POST
C	3X8 TAPER CUT X PER FOOT TO SLOPE (6" MIN. DEPTH) WITH EQUAL SPACING NOT EXCEEDING 16" O.C. MAX. LOCATE 1" MEMBER 4" FROM EACH EDGE. REF. ARCH. FOR DETAILED LAYOUTS.
D	STEEL TAB SUPPORT CONNECTION LAG TO BLOCKING AT BUILDING. REF. 2/S9.01
E	SIMPSON CBT42 TOP, CENTERED, AND SIMPSON CPT66Z BOT. SEAL ENDS, AND HOLES PER SPECIFICATIONS PRIOR TO INSTALLATION OF ALL TIES AND FASTENERS.
F	(2) SIMPSON APA6, (1) EACH SIDE W/ (4) SD10112DBB FOR BEAM TO BEAM. CENTER ALONG LOWER BEAM.
G	SDWS210000B CENTERED ALONG EACH MEMBER EACH WAY, PREDRILL W/ 3" MINIMUM PENETRATION INTO BEAM BELOW
H	SEAL TREAT AND CAP ALL ENDS PER ARCH.
I	STANDING SEAM ROOF AND MEMBRANE PER ARCH, OVER (2) LAYERS OF 23/32" CDX SHEATHING OVER FINISHED SOFFIT SHEATHING PER ARCH. OVER CEDAR SUPPORT. FASTEN STRUCTURAL SHEATHING W/ #8 FASTENERS AT 6" O.C. THROUGH ARCH. EXPOSED SHEATHING FROM BELOW. ALIGN JOINTS AT MEMBERS. SLOPE TO DRAIN. SEAL ALL ENDS OF EXPOSED SHEATHING.
J	SIMPSON MPB266Z, CENTERED IN 16" DIA. X 48" DEEP REINF. CONCRETE PIER REF. 3/S9.01 FOR ADDITIONAL INFO.
K	SIMPSON CPT66Z BOT WITH GALV. A.B.S INTO 30"x30" FOOTING WITH PLYNTH, REF. 4/S9.01 FOR ADDITIONAL INFO.
L	SDWS2210000B CENTERED EACH MEMBER EACH WAY, PREDRILL W/ 3" MINIMUM PENETRATION INTO PLATE BELOW. REF. 4/S9.01 FOR ADDITIONAL INFO.
GENERAL NOTES	
1	ALL WOOD ASSEMBLIES SHALL BE SELECT GRADE FULL SAWN WESTERN CEDAR W/ Fb=975 PSI
2	ALL FASTENERS AND CONNECTORS SHALL BE EXTERIOR RATED FOR SERVICE LIFE OF STRUCTURE.
3	SIMPSON HARDWARE NOTED. EQUAL ALTERNATIVE HAVING SIMILAR PROFILE, STRENGTH AND AESTHETIC ACCEPTABLE WITH ARCHITECT/EOB APPROVAL
4	COORDINATE FRAMING REQUIREMENTS INTO BUILDING AND FOUNDATIONS. REF. ARCH. FOR ADDITIONAL INFORMATION

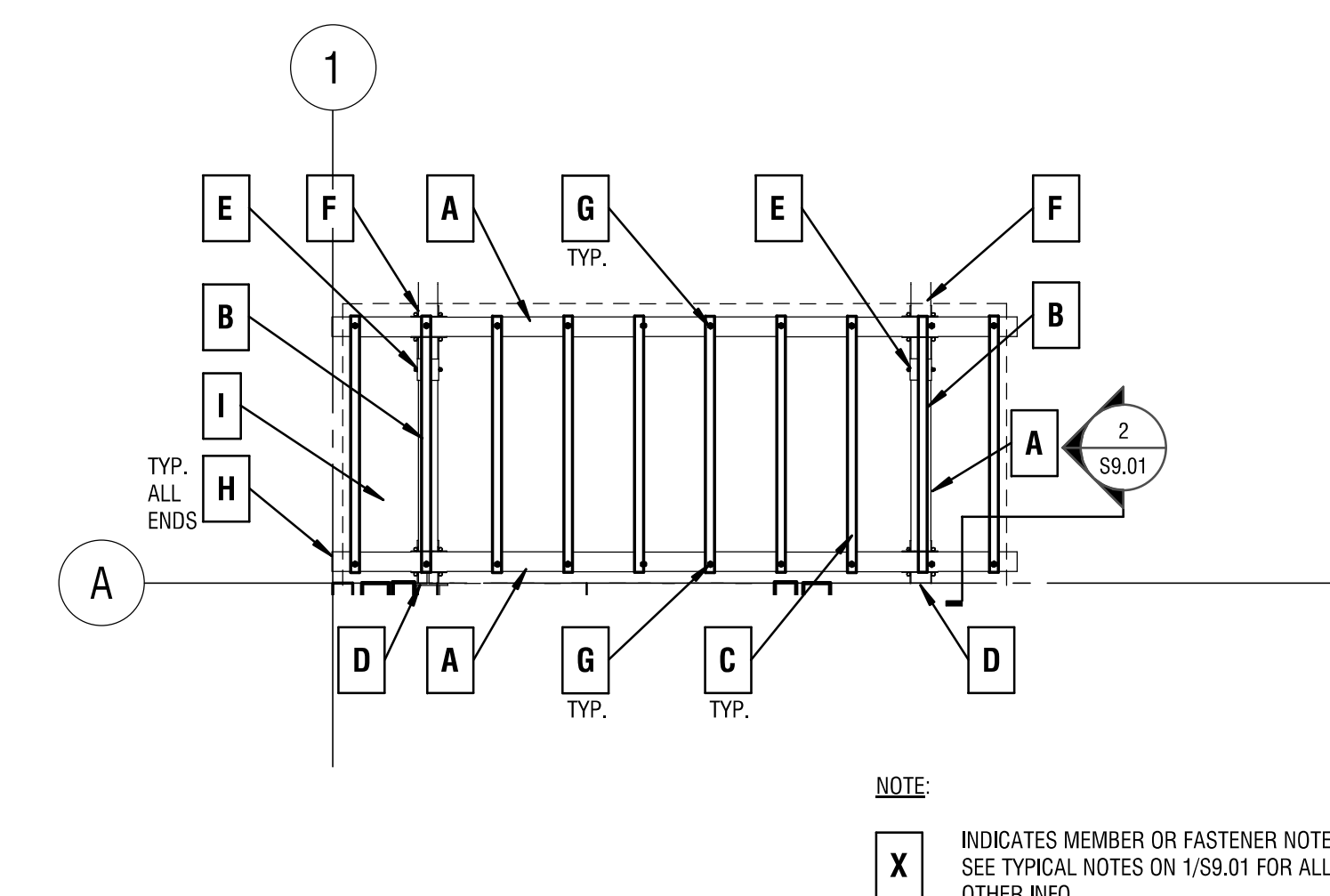
**1 TRELLIS NOTES**  
1" = 1'-0"



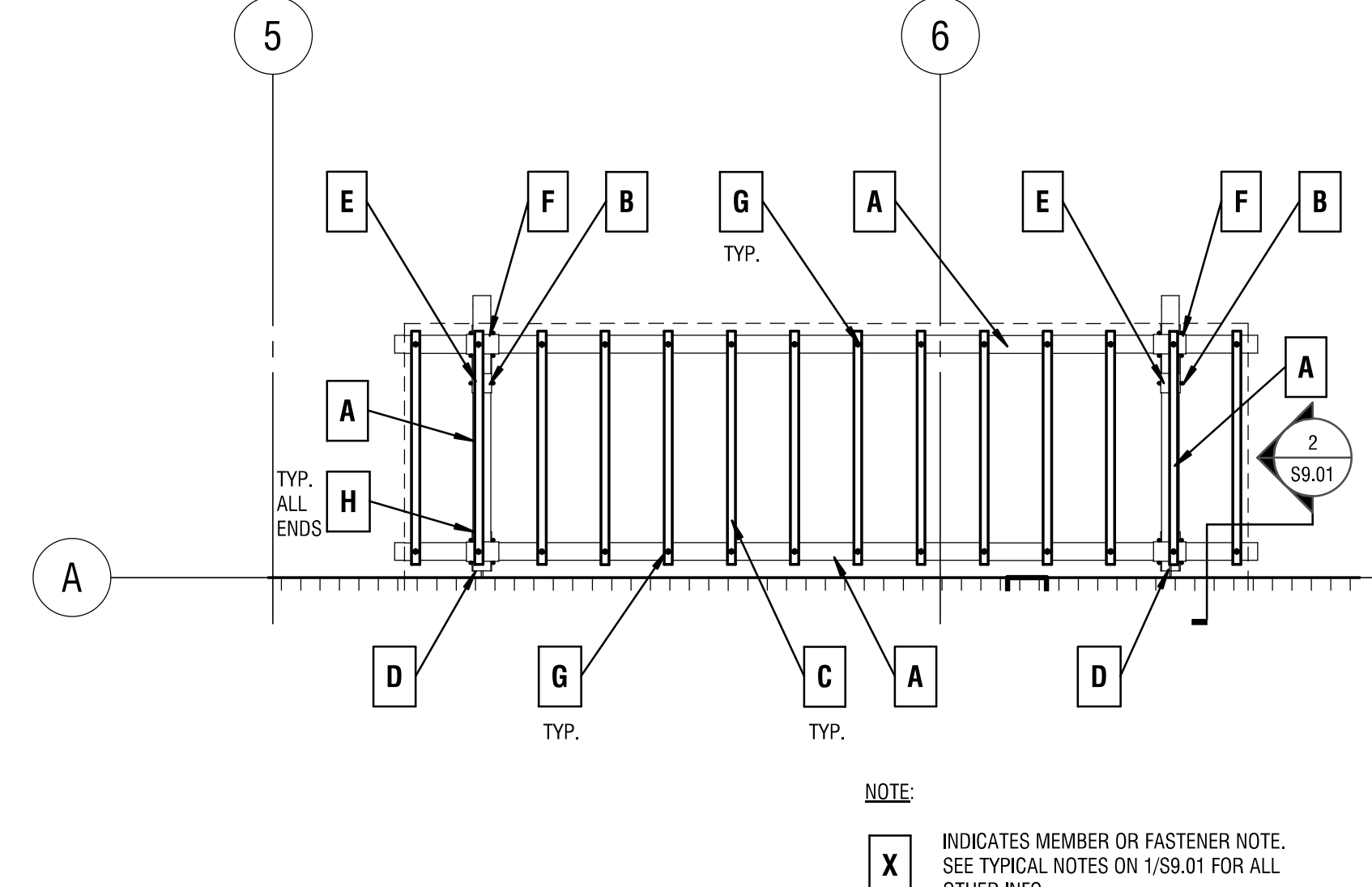
**2 TRELLIS AT BUILDING**  
1" = 1'-0"



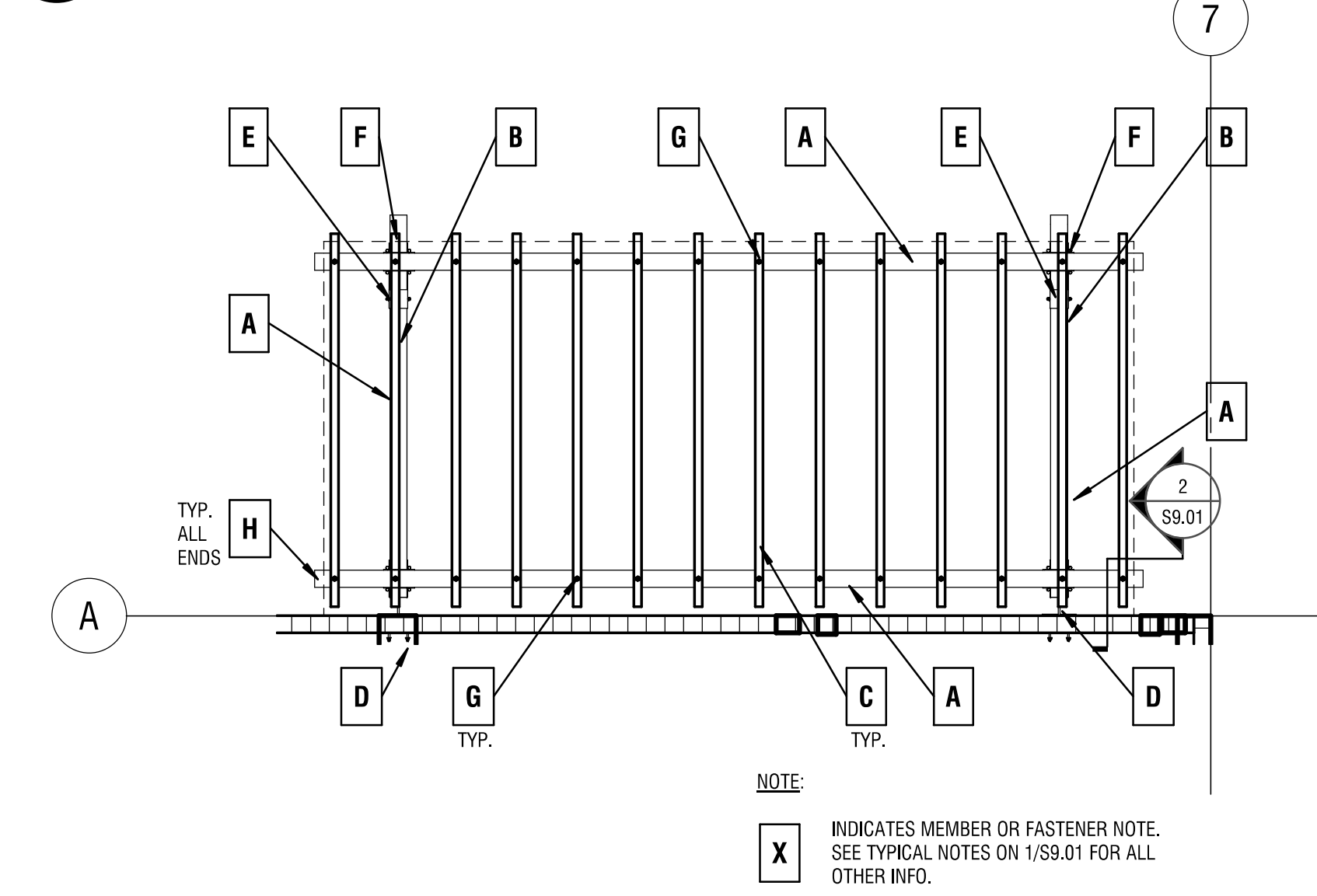
**3 PIER AT STAND ALONE TRELLIS**  
1" = 1'-0"



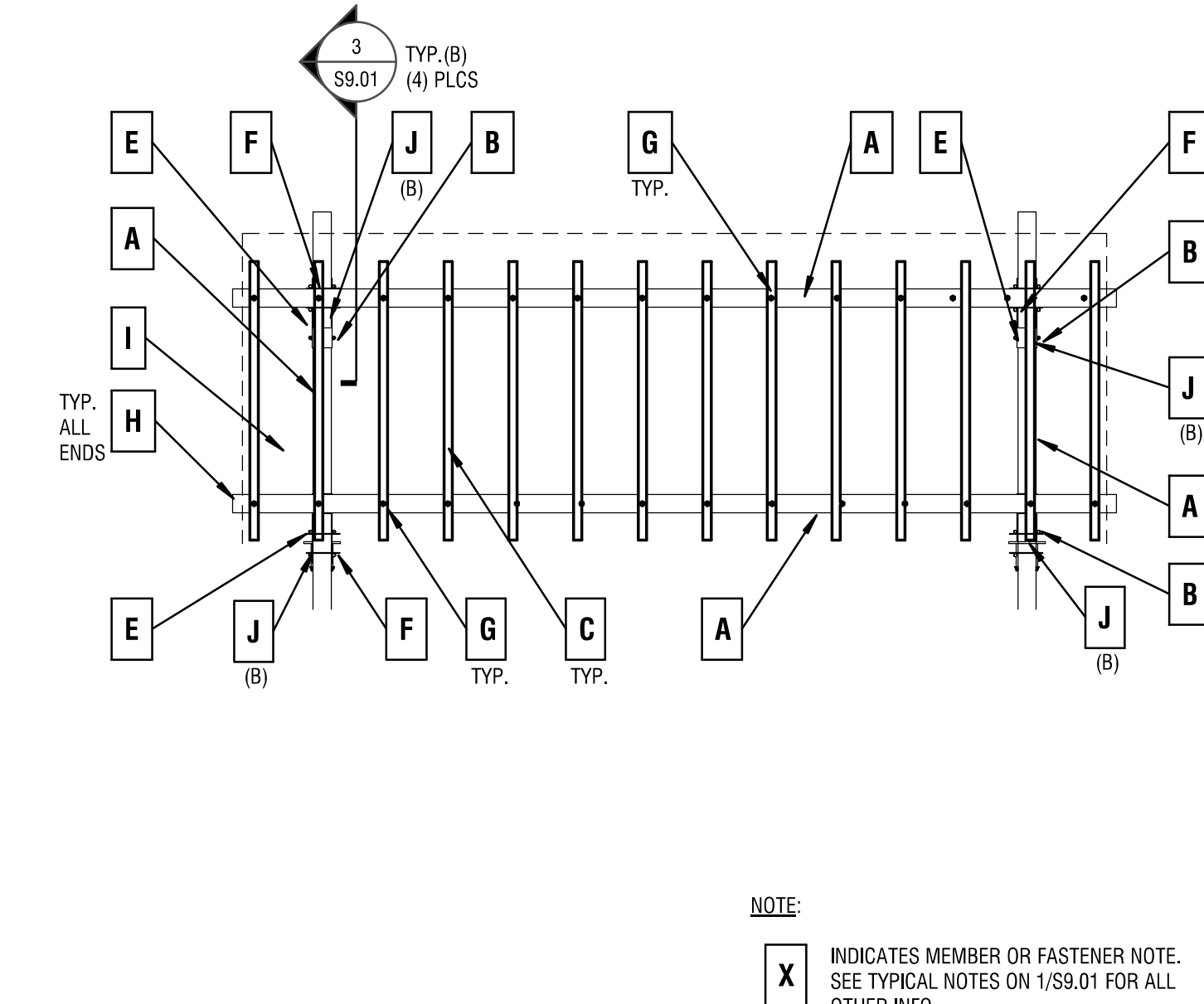
**A TYPE A TRELLIS**  
1/4" = 1'-0"



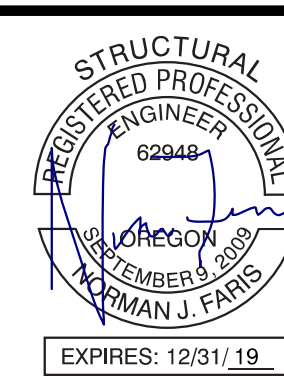
**B TYPE B TRELLIS**  
1/4" = 1'-0"



**C TYPE C TRELLIS**  
1/4" = 1'-0"



**D TYPE D TRELLIS**  
1/4" = 1'-0"



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100  
1506 5TH AVE. SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600  
1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
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CLACKAMAS, OREGON 97015

**NORTH WILLIAMS APARTMENTS - FAMILY HOUSING**  
2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

**SITE STRUCTURES**

**PERMIT/GMP SET**

DATE 10/09/2018	PROJECT NUMBER 17058
--------------------	-------------------------

SHEET NUMBER

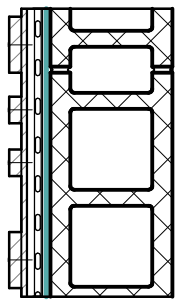
**S9.01**



CONCRETE - 03

NOT USED

MASONRY - 03



3/4" FIBER CEMENT TRIM - VARIED WIDTH VERT BATTENS (SEE LAYOUT SHEET A7.12)  
5/16" FIBER CEMENT PANEL  
1" HORIZONTAL GALVALUME Z-FURRING WITH WEEPS  
FULLY GROUTED CONCRETE MASONRY UNITS  
EXTERIOR PAINT

CMU WALL AT BIKE SHELTER

4Y.1

FIRE RATING / SOURCE: 0 HOUR

STC RATING / SOURCE:

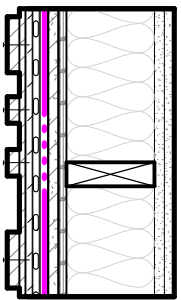
CLEAR R-VALUE:

CLEAR U-VALUE:

METAL - 05

NOT USED

WOOD - 06



3/4" FIBER CEMENT TRIM - VARIED WIDTH VERT BATTENS (SEE LAYOUT SHEET A7.12)  
5/16" FIBER CEMENT PANEL  
1" HORIZONTAL GALVALUME Z-FURRING WITH WEEPS  
BUILDING WRAP WEATHER BARRIER (AIR BARRIER)  
5/8" MOISTURE RESISTANT SHEATHING  
PLYWOOD SHEAR; SEE STRUCTURAL PLANS  
R21 GLASS FIBER INSULATION  
WOOD STUDS PER STRUCTURAL PLANS  
SHEET VAPOR RETARDER  
(2) LAYERS 5/8" GYPSUM WALLBOARD

FIBER CEMENT BOARD TYPE = FCP-1

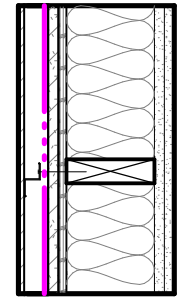
K6.1

FIRE RATING / SOURCE: 2 HOUR / PORTLAND TYPE III CODE GUIDE

STC RATING / SOURCE:

CLEAR R-VALUE: 21

CLEAR U-VALUE: .062



5/16" FIBER CEMENT LAP SIDING WITH WOODTONE FINISH; REPEATING EXPOSURE: 7" | 5" | 5"  
1" VERTICAL GALVALUME Z-FURRING 16" O.C.  
BUILDING WRAP WEATHER BARRIER (AIR BARRIER)  
5/8" MOISTURE RESISTANT SHEATHING  
PLYWOOD SHEAR; SEE STRUCTURAL PLANS  
R21 GLASS FIBER INSULATION  
WOOD STUDS PER STRUCTURAL PLANS  
SHEET VAPOR RETARDER  
(2) LAYERS 5/8" GYPSUM WALLBOARD

FIBER CEMENT PANEL BOARD = FCP-2

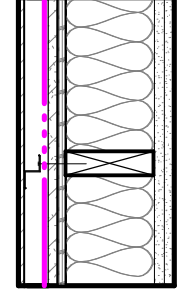
K6.2

FIRE RATING / SOURCE: 2 HOUR / PORTLAND TYPE III CODE GUIDE

STC RATING / SOURCE:

CLEAR R-VALUE: 21

CLEAR U-VALUE: .062



5/16" FIBER CEMENT LAP SIDING W/ 7" EXPOSURE  
1" VERTICAL GALVALUME Z-FURRING 16" O.C.  
BUILDING WRAP WEATHER BARRIER (AIR BARRIER)  
5/8" MOISTURE RESISTANT SHEATHING  
PLYWOOD SHEAR; SEE STRUCTURAL PLANS  
WOOD STUDS; SEE STRUCTURAL PLANS  
R21 GLASS FIBER INSULATION  
SHEET VAPOR RETARDER  
(2) LAYERS 5/8" GYPSUM WALLBOARD

FIBER CEMENT BOARD TYPE = FCP-3

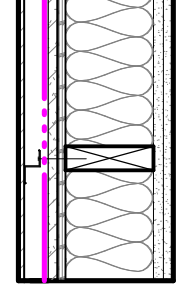
K6.3

FIRE RATING / SOURCE: 2 HOUR / PORTLAND TYPE III CODE GUIDE

STC RATING / SOURCE:

CLEAR R-VALUE: 21

CLEAR U-VALUE: .062



5/16" FIBER CEMENT PANEL  
1" VERTICAL GALVALUME Z-FURRING 16" O.C.  
BUILDING WRAP WEATHER BARRIER (AIR BARRIER)  
5/8" MOISTURE RESISTANT SHEATHING  
PLYWOOD SHEAR; SEE STRUCTURAL PLANS  
R21 GLASS FIBER INSULATION  
WOOD STUDS; SEE STRUCTURAL PLANS  
SHEET VAPOR RETARDER  
(2) LAYERS 5/8" GYPSUM WALLBOARD

FIBER CEMENT BOARD TYPE = FCP-4

K6.4

FIRE RATING / SOURCE: 2 HOUR / PORTLAND TYPE III CODE GUIDE



STC RATING / SOURCE:

CLEAR R-VALUE: 21

CLEAR U-VALUE: .062

GENERAL NOTES

- REFER TO SHEET G0.02 FOR 'PROJECT NOTES' APPLICABLE TO ALL PORTIONS OF THE WORK.
- REFERENCE SLAB PLANS FOR CONCRETE WALL, CURB LOCATIONS. COORDINATE WITH STRUCTURAL DRAWINGS.
- SEE SHEET A0.41 FOR TYPICAL FRAMING AND ACOUSTICAL DETAILS.
- SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.
- REFER TO STRUCTURAL DRAWINGS FOR COLUMNS, SHEAR WALL AND BEAM SIZES.



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
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BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

EXTERIOR WALL ASSEMBLIES

PERMIT / GMP

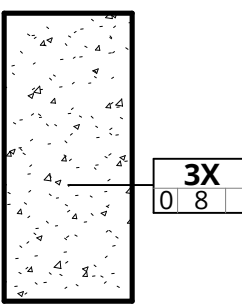
DATE	PROJECT NUMBER
17 OCT 2018	149000

SHEET NUMBER

A0.11



CONCRETE - 03



CONCRETE

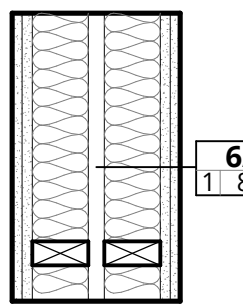
3X

FIRE RATING / SOURCE: 0 HOUR

STC RATING / SOURCE:

CLEAR R-VALUE:                      CLEAR U-VALUE:

WOOD - 06



2 LAYERS GYPSUM WALLBOARD - X  
WOOD STUDS WITH INSULATION  
1" AIR SPACE  
WOOD STUDS BRACED AT MID-HEIGHT WITH INSULATION AND FRESAFING @ 10'-0" O.C.  
2 LAYERS GYPSUM WALLBOARD - X

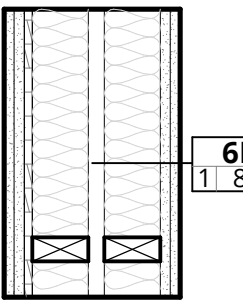
DEMISING WALL - NON-SHEAR

6A

FIRE RATING / SOURCE: 1 HOUR / GA WP-5512

STC RATING / SOURCE: 55-59 STC / NGC 3056

CLEAR R-VALUE:                      CLEAR U-VALUE:



2 LAYERS GYPSUM WALLBOARD - X  
PLYWOOD SHEATHING  
WOOD STUDS BRACED AT MID-HEIGHT WITH INSULATION AND FRESAFING @ 10'-0" O.C.  
1" AIR SPACE  
WOOD STUDS WITH INSULATION  
2 LAYERS GYPSUM WALLBOARD - X

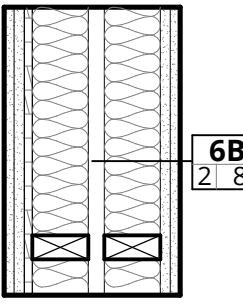
DEMISING WALL - SHEAR

6B

FIRE RATING / SOURCE: 1 HOUR / GA WP-5512

STC RATING / SOURCE: 55-59 STC / NGC 3056

CLEAR R-VALUE:                      CLEAR U-VALUE:



2 LAYERS GYPSUM WALLBOARD - X  
PLYWOOD SHEATHING  
WOOD STUDS BRACED AT MID-HEIGHT WITH INSULATION AND FRESAFING @ 10'-0" O.C.  
1" AIR SPACE  
WOOD STUDS WITH INSULATION  
2 LAYERS GYPSUM WALLBOARD - X

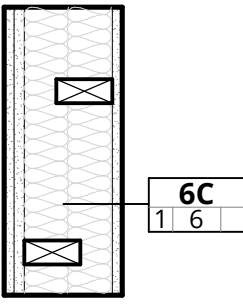
DEMISING WALL - SHEAR

6B.1

FIRE RATING / SOURCE: 2 HOUR / GA WP-5520

STC RATING / SOURCE: 55-59 STC / NGC 3056

CLEAR R-VALUE:                      CLEAR U-VALUE:



2 LAYERS GYPSUM WALLBOARD - X  
2X4 WOOD STUDS STAGGERD ON 2X6 PLATE  
2 LAYERS OF 3" MINERAL FIBER OR GLASS BATT INSULATION  
GYPSUM WALLBOARD - X

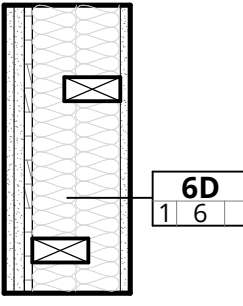
CORRIDOR WALL - NON-SHEAR

6C

FIRE RATING / SOURCE: 1 HOUR / GA WP-3910

STC RATING / SOURCE: 50-54 STC / NGC 2377

CLEAR R-VALUE:                      CLEAR U-VALUE:



2 LAYERS GYPSUM WALLBOARD - X  
PLYWOOD SHEATHING  
2X4 WOOD STUDS STAGGERD ON 2X6 PLATE  
2 LAYERS OF 3" MINERAL FIBER OR GLASS BATT INSULATION  
GYPSUM WALLBOARD - X

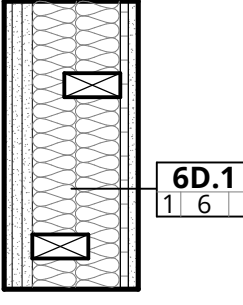
CORRIDOR WALL - SHEAR

6D

FIRE RATING / SOURCE: 1 HOUR / GA WP-3910

STC RATING / SOURCE: 50-54 STC / NGC 2377

CLEAR R-VALUE:                      CLEAR U-VALUE:



1/2" GYPSUM WALLBOARD  
2 LAYERS GYPSUM WALLBOARD - X  
2X4 WOOD STUDS STAGGERD ON 2X6 PLATE  
2 LAYERS OF 3" MINERAL FIBER OR GLASS BATT INSULATION  
PLYWOOD SHEATHING  
GYPSUM WALLBOARD - X

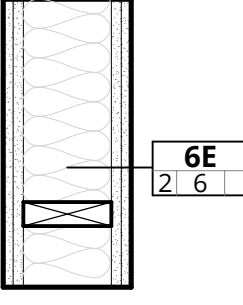
CORRIDOR WALL - SHEAR

6D.1

FIRE RATING / SOURCE: 1 HOUR / GA WP-3910

STC RATING / SOURCE: 50-54 STC / NGC 2377

CLEAR R-VALUE:                      CLEAR U-VALUE:



2 LAYERS GYPSUM WALLBOARD - X  
WOOD STUDS WITH INSULATION  
2 LAYERS GYPSUM WALLBOARD - X

SHAFT WALL

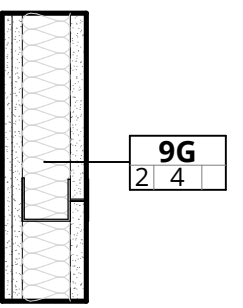
6E

FIRE RATING / SOURCE: 2 HOUR / GA WP-4135

STC RATING / SOURCE: 40-44 STC / NGC 2363

CLEAR R-VALUE:                      CLEAR U-VALUE:

METAL - 09



2 LAYERS GYPSUM WALLBOARD - X  
CH STUD  
1" SHAFTLINER

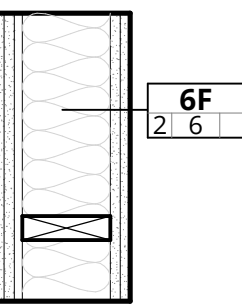
SHAFT WALL

9G

FIRE RATING / SOURCE: 2 HOUR / GA WP-7054

STC RATING / SOURCE: 50-54 STC / RAL TL09-358

CLEAR R-VALUE:                      CLEAR U-VALUE:



2 LAYERS GYPSUM WALLBOARD - X  
PLYWOOD SHEATHING  
WOOD STUDS WITH INSULATION  
2 LAYERS GYPSUM WALLBOARD - X

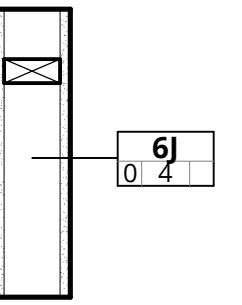
SHAFT WALL

6F

FIRE RATING / SOURCE: 2 HOUR / GA WP-4135

STC RATING / SOURCE: 40-44 STC / NGC 2363

CLEAR R-VALUE:                      CLEAR U-VALUE:



GYPSUM WALLBOARD  
WOOD STUDS  
GYPSUM WALLBOARD

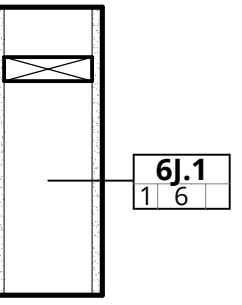
WALL PARTITION

6J

FIRE RATING / SOURCE: 0 HOUR

STC RATING / SOURCE:

CLEAR R-VALUE:                      CLEAR U-VALUE:



GYPSUM WALLBOARD X  
WOOD STUDS  
GYPSUM WALLBOARD X

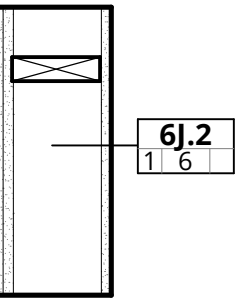
WALL PARTITION - BEARING

6J.1

FIRE RATING / SOURCE: 1 HOUR / GA WP-3510

STC RATING / SOURCE: 35-39 STC / NGC 2404

CLEAR R-VALUE:                      CLEAR U-VALUE:



2 LAYERS GYPSUM WALLBOARD - X  
WOOD STUDS  
GYPSUM WALLBOARD X

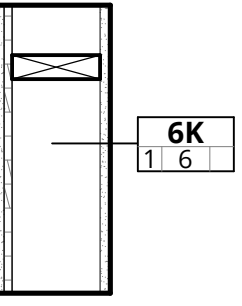
WALL PARTITION - BEARING

6J.2

FIRE RATING / SOURCE: 1 HOUR / GA WP-3510

STC RATING / SOURCE: 35-39 STC / NGC 2404

CLEAR R-VALUE:                      CLEAR U-VALUE:



GYPSUM WALLBOARD - X  
PLYWOOD SHEATHING  
WOOD STUDS  
GYPSUM WALLBOARD - X

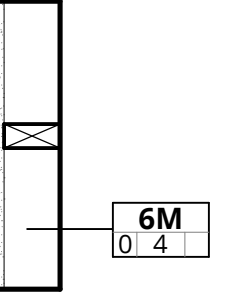
WALL PARTITION - BEARING / SHEAR

6K

FIRE RATING / SOURCE: 1 HOUR / TABLE 721.1(2); 14-13

STC RATING / SOURCE:

CLEAR R-VALUE:                      CLEAR U-VALUE:



GYPSUM WALLBOARD  
CONTRACTOR'S OPTION: METAL OR WOOD STUDS

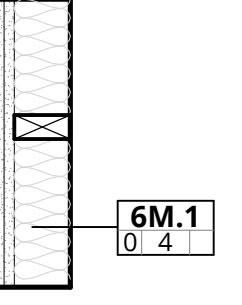
FURRING WALL

6M

FIRE RATING / SOURCE: 0 HOUR

STC RATING / SOURCE:

CLEAR R-VALUE:                      CLEAR U-VALUE:



2 LAYERS GYPSUM WALLBOARD  
CONTRACTOR'S OPTION: METAL OR WOOD STUDS WITH INSULATION

ACOUSTICAL FURRING WALL

6M.1

FIRE RATING / SOURCE: 0 HOUR

STC RATING / SOURCE:

CLEAR R-VALUE:                      CLEAR U-VALUE:

GENERAL NOTES

1. REFER TO SHEET G0.02 FOR 'PROJECT NOTES' APPLICABLE TO ALL PORTIONS OF THE WORK.
2. PRIOR TO FRAMING VERIFY THAT FINAL APPLIANCE AND PLUMBING FIXTURE SIZES/CLEARANCES MATCH THOSE USED AS BASIS OF DESIGN SHOWN ON DRAWING G5.01.
3. REFERENCE SLAB PLANS FOR CONCRETE CURB LOCATIONS. COORDINATE WITH STRUCTURAL DRAWINGS.
4. SEE SHEET A0.41 FOR TYPICAL FRAMING AND ACOUSTICAL DETAILS.
5. SEE FIRE/LIFE SAFETY SHEETS BEGINNING ON G2.00 FOR LOCATIONS OF FIRE EXTINGUISHER CABINETS.
6. SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.
7. REFER TO STRUCTURAL DRAWINGS FOR COLUMNS, SHEAR WALL AND BEAM SIZES.



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

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T 415.252.7063

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NORTH WILLIAMS APARTMENTS - FAMILY HOUSING

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BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

INTERIOR WALL  
ASSEMBLIES

PERMIT / GMP

DATE 17 OCT 2018	PROJECT NUMBER 149000
---------------------	--------------------------

SHEET NUMBER

A0.21



# FLOORS

METAL - 05

WOOD - 06

1. REFER TO SHEET G0.02 FOR "PROJECT NOTES" APPLICABLE TO ALL PORTIONS OF THE WORK.
2. PRIOR TO FRAMING VERIFY THAT FINAL APPLIANCE AND PLUMBING FIXTURE SIZES/CLEARANCES MATCH THOSE USED AS BASIS OF DESIGN SHOWN ON DRAWING G5.01.
3. REFERENCE SLAB PLANS FOR CONCRETE WALL LOCATIONS, UNO, COORDINATE WITH STRUCTURAL DRAWINGS.
4. SEE SHEETS A0.11 & A0.21 FOR WALL ASSEMBLIES.
5. SEE SHEET A0.41 FOR TYPICAL FRAMING AND ACOUSTICAL DETAILS.
6. SEE FIRE/LIFE SAFETY SHEETS BEGINNING ON G2.00 FOR LOCATIONS OF FIRE EXTINGUISHER CABINETS.
7. SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.
8. REFER TO STRUCTURAL DRAWINGS FOR COLUMNS, SHEAR WALL AND BEAM SIZES.




1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063

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BRIDGE HOUSING

	<p>1" GYPCRETE PLYWOOD SHEATHING, SEE STRUCTURAL PLANS 4X6 DFL CAR DECKING; SEE STRUCTURAL PLANS</p>								
<p>CORRIDOR FLOOR FRAMING</p>									
<p><b>6H.1</b></p>	<table border="1"> <tr> <td><b>FIRE RATING / SOURCE:</b></td> <td>1 HOUR / CALC OSSC 722.1 EXPOSED WD</td> </tr> <tr> <td><b>STC RATING / SOURCE:</b></td> <td></td> </tr> <tr> <td><b>IIC RATING / SOURCE:</b></td> <td></td> </tr> <tr> <td><b>INSULATION:</b></td> <td>N</td> </tr> </table>	<b>FIRE RATING / SOURCE:</b>	1 HOUR / CALC OSSC 722.1 EXPOSED WD	<b>STC RATING / SOURCE:</b>		<b>IIC RATING / SOURCE:</b>		<b>INSULATION:</b>	N
<b>FIRE RATING / SOURCE:</b>	1 HOUR / CALC OSSC 722.1 EXPOSED WD								
<b>STC RATING / SOURCE:</b>									
<b>IIC RATING / SOURCE:</b>									
<b>INSULATION:</b>	N								

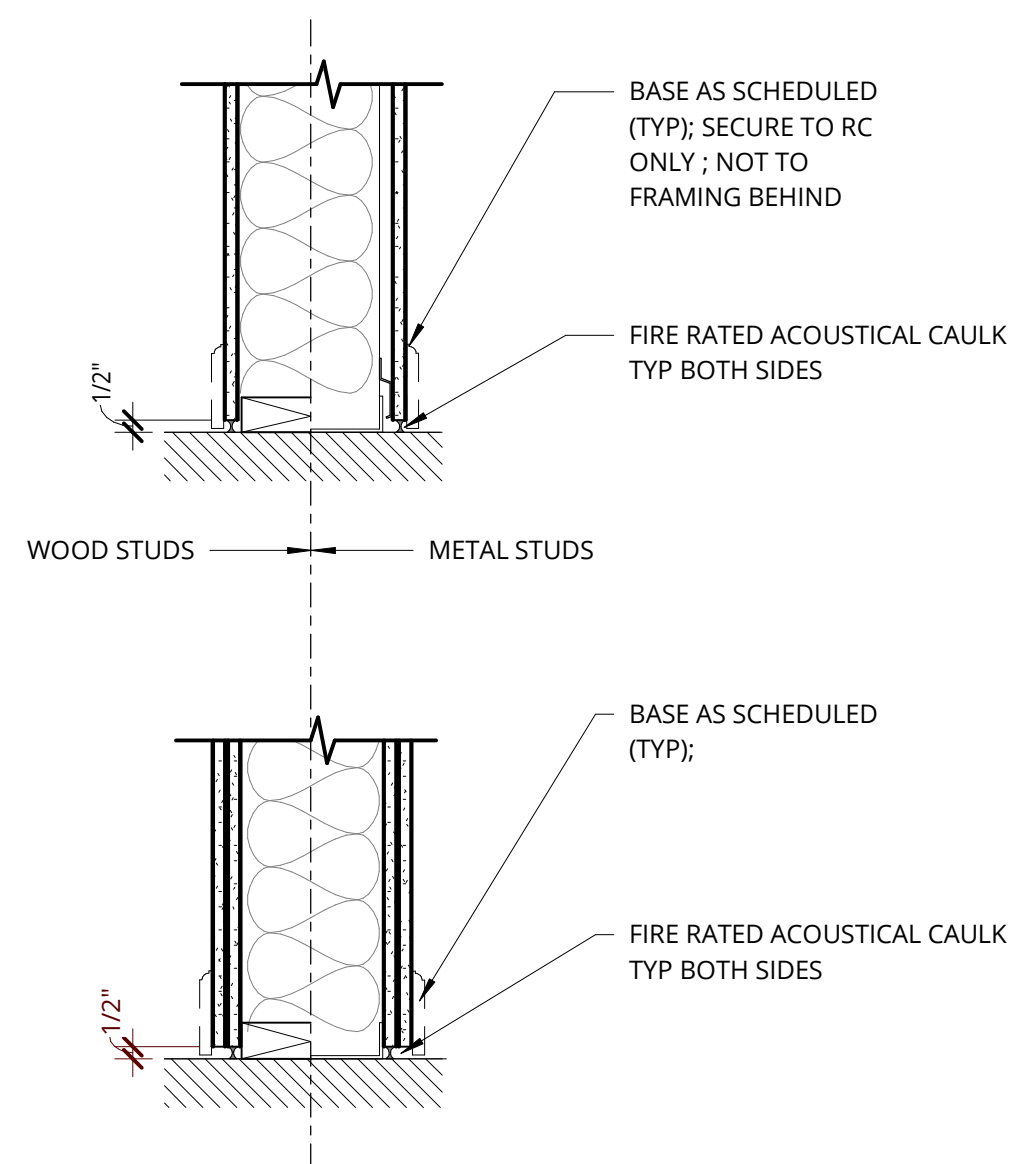
REVISION	DATE	REASON FOR ISSUE

## PERMIT / GMP

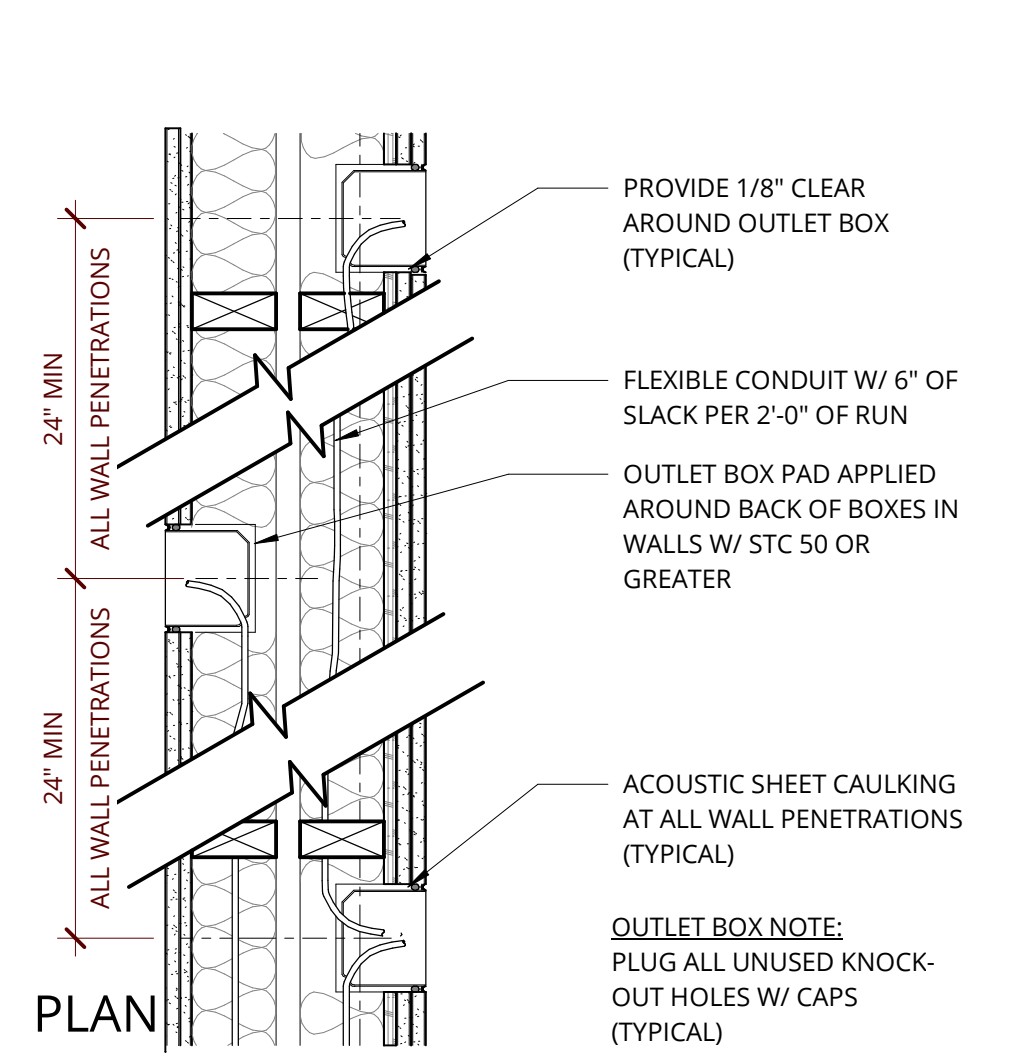
DATE 17 OCT 2018	PROJECT NUMBER 149000
SHEET NUMBER	

# A0.31

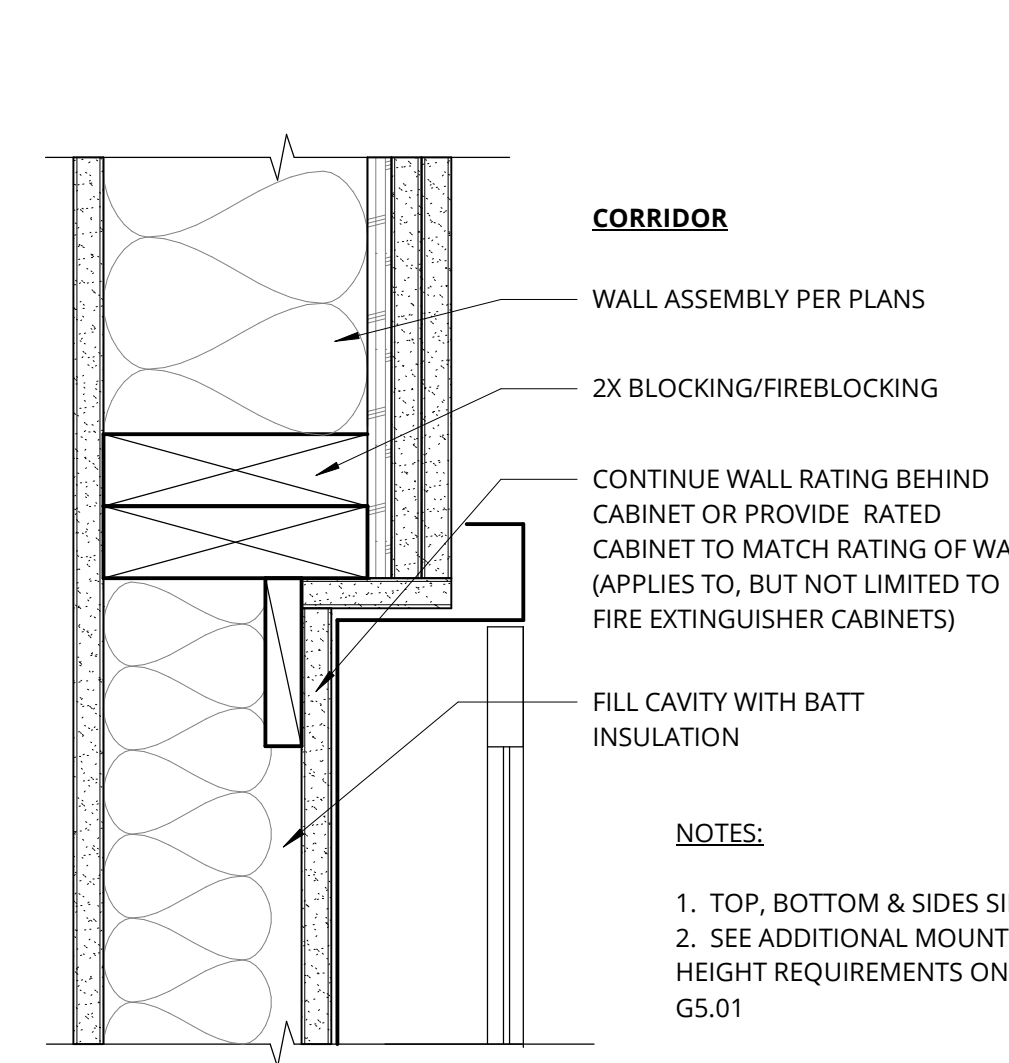




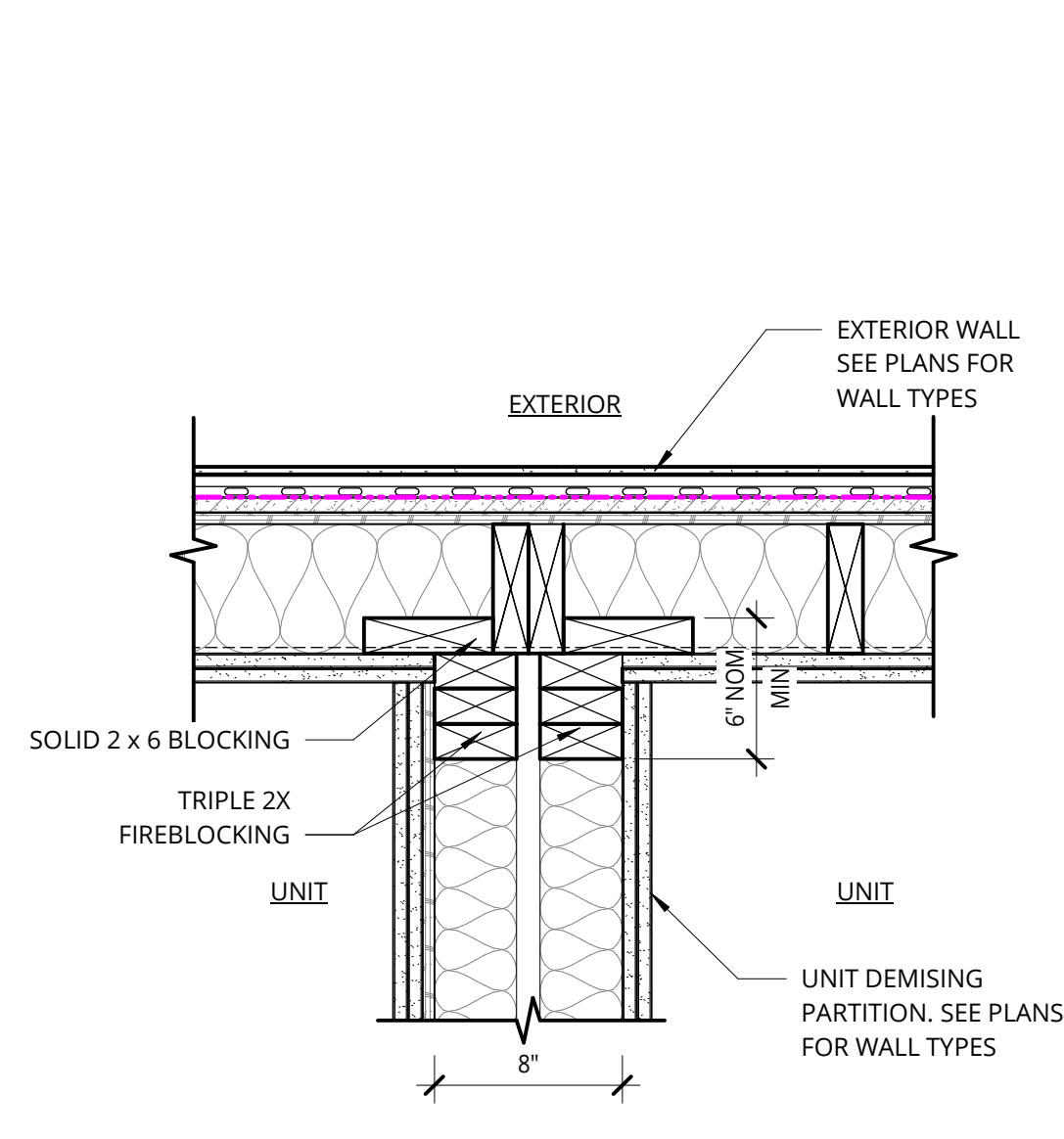
**2 WALL BASE @ RATED WALL**  
1 1/2" = 1'-0"



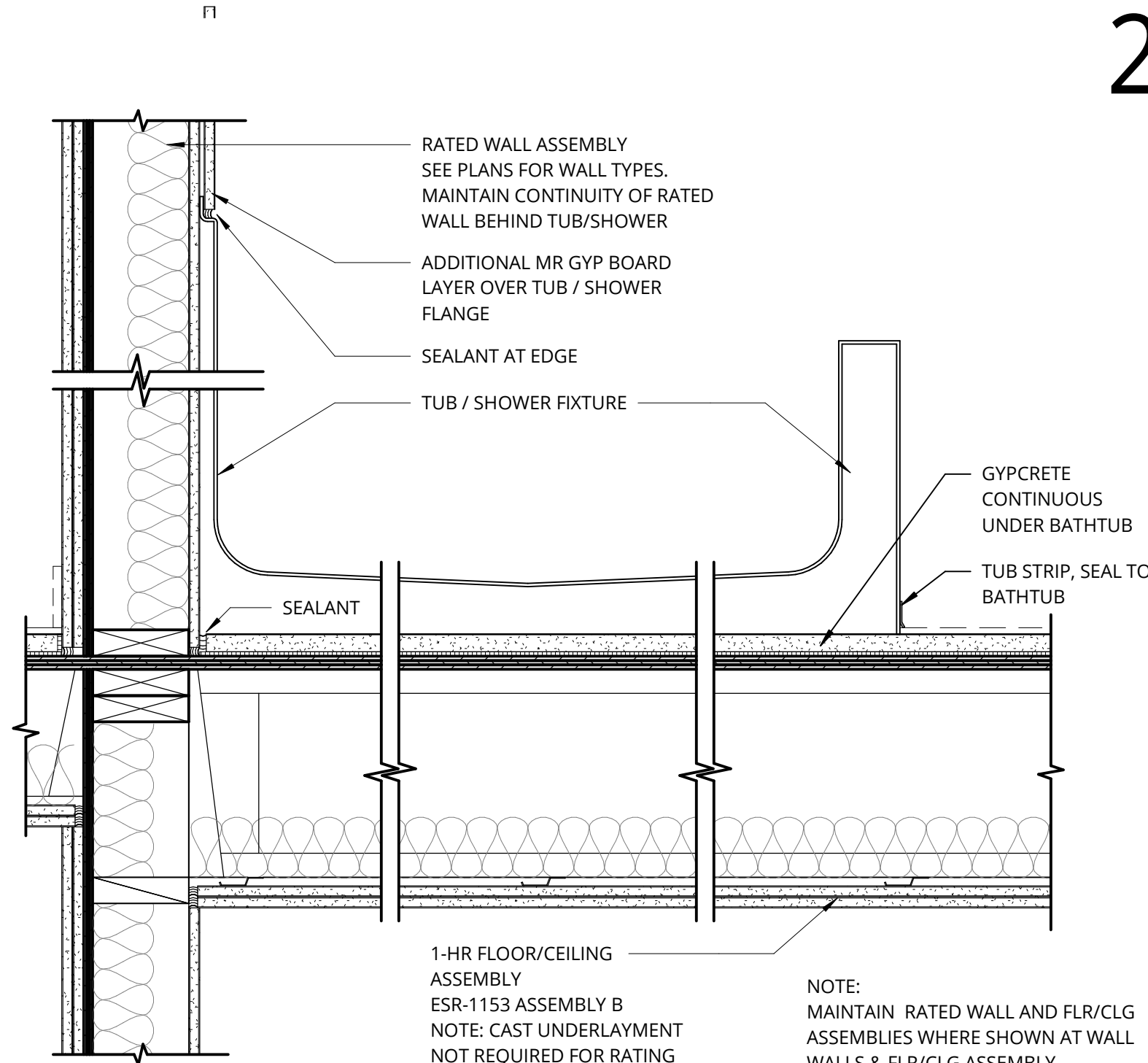
**3 PENETRATION @ DEMISING WALL**  
1 1/2" = 1'-0"



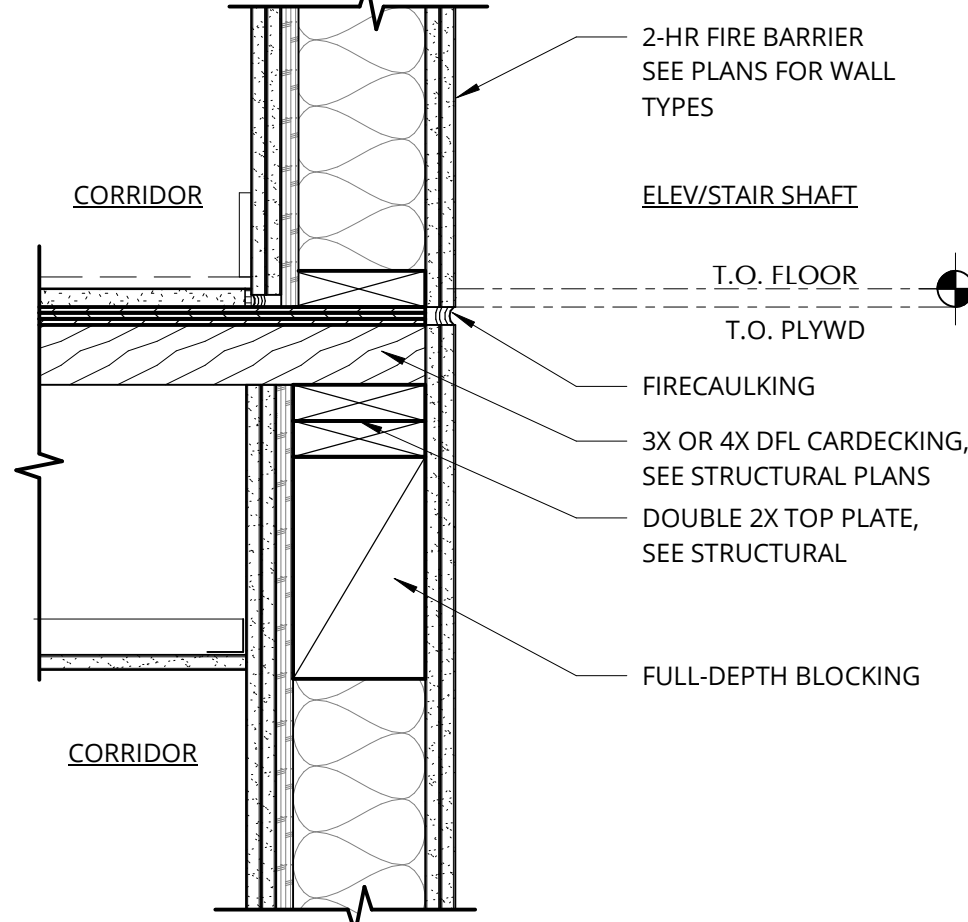
**4 CABINET @ RATED WALL**  
3" = 1'-0"



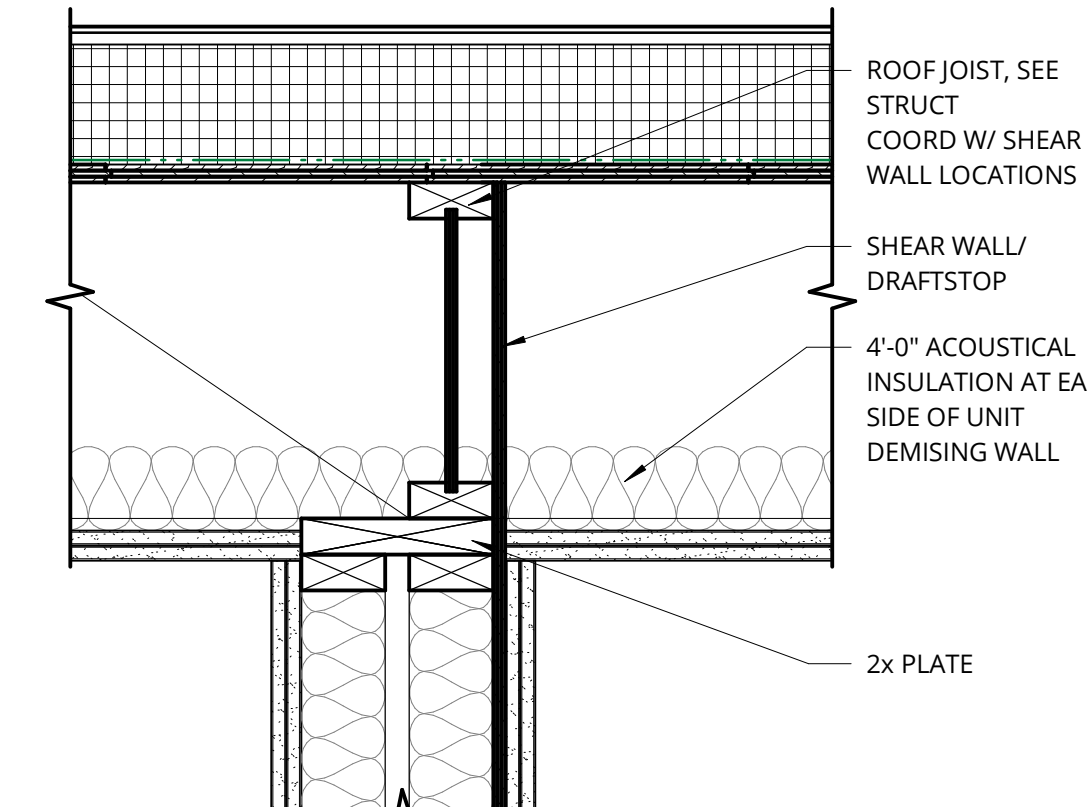
**5 DEMISING WALL @ EXTERIOR**  
1 1/2" = 1'-0"



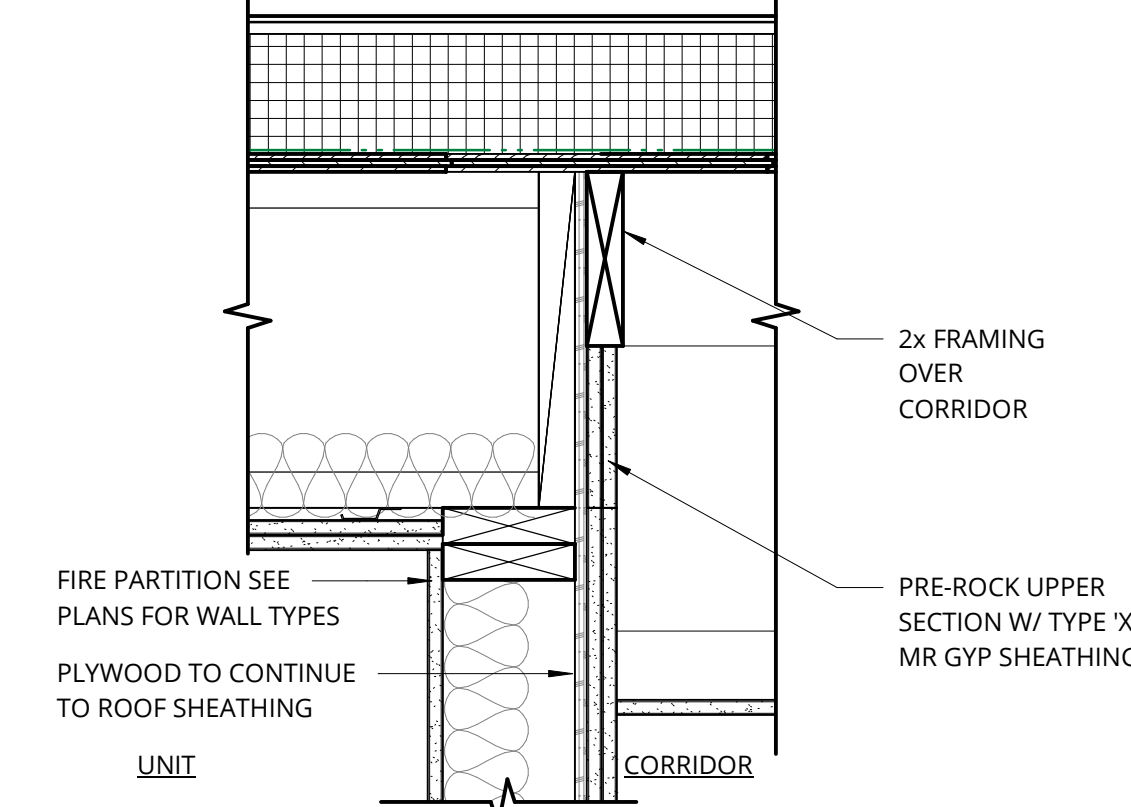
**6 1-HR FIRE PARTITION @ TUB/ShOWER**  
1 1/2" = 1'-0"



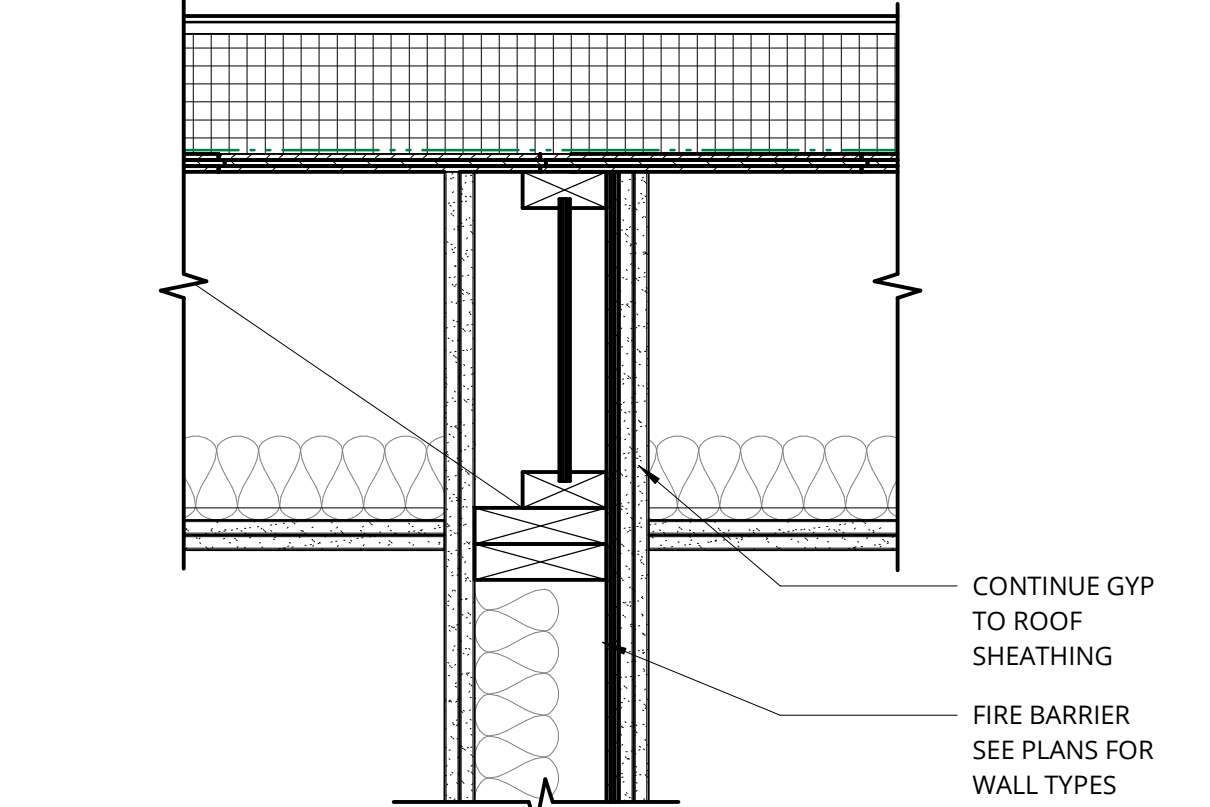
**7 FIRE BARRIER ELEV/STAIR SHAFT @ CORRIDOR**  
1 1/2" = 1'-0"



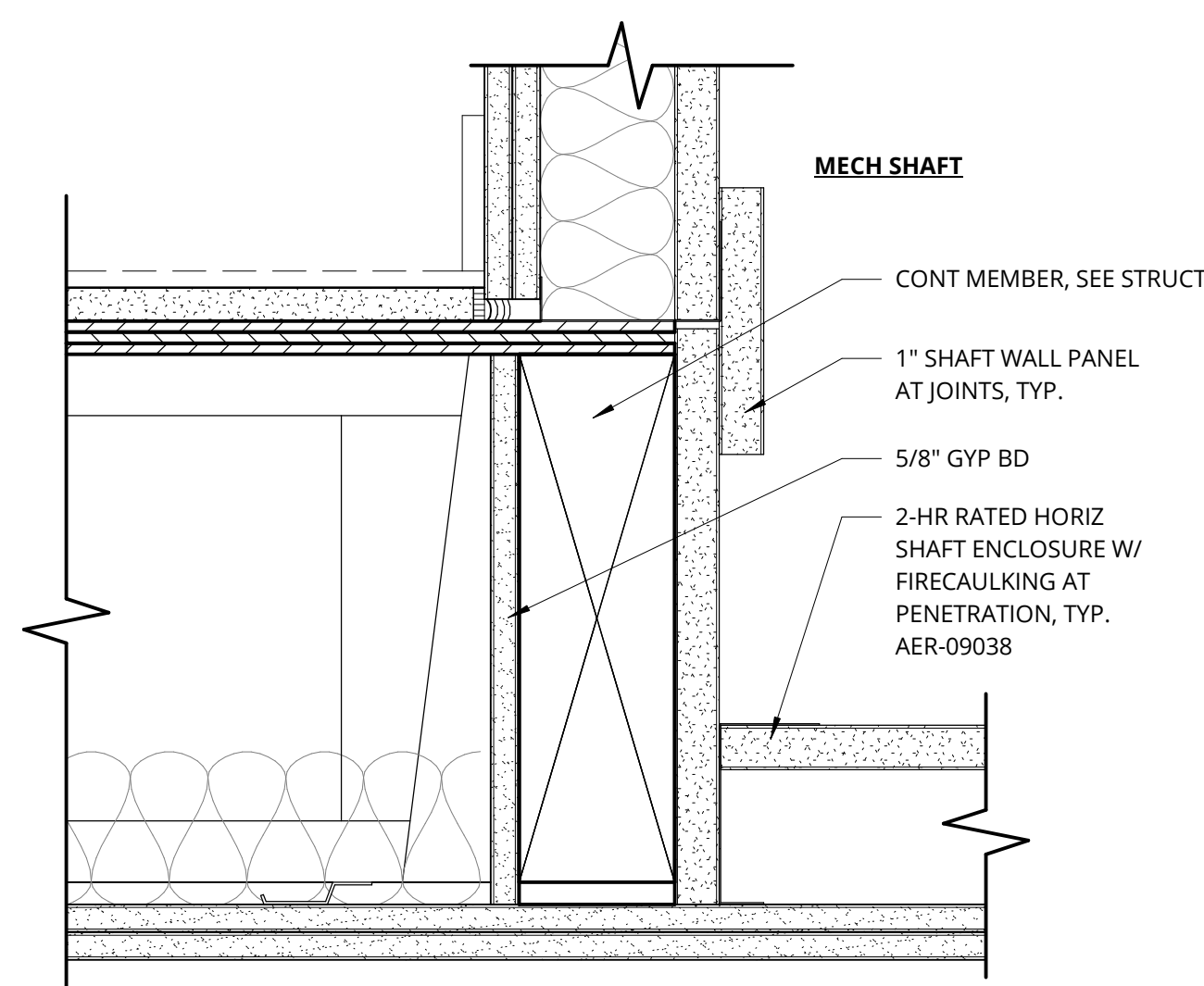
**8 FIRE PARTITION/UNIT DEMISING @ ROOF/CEILING**  
1 1/2" = 1'-0"



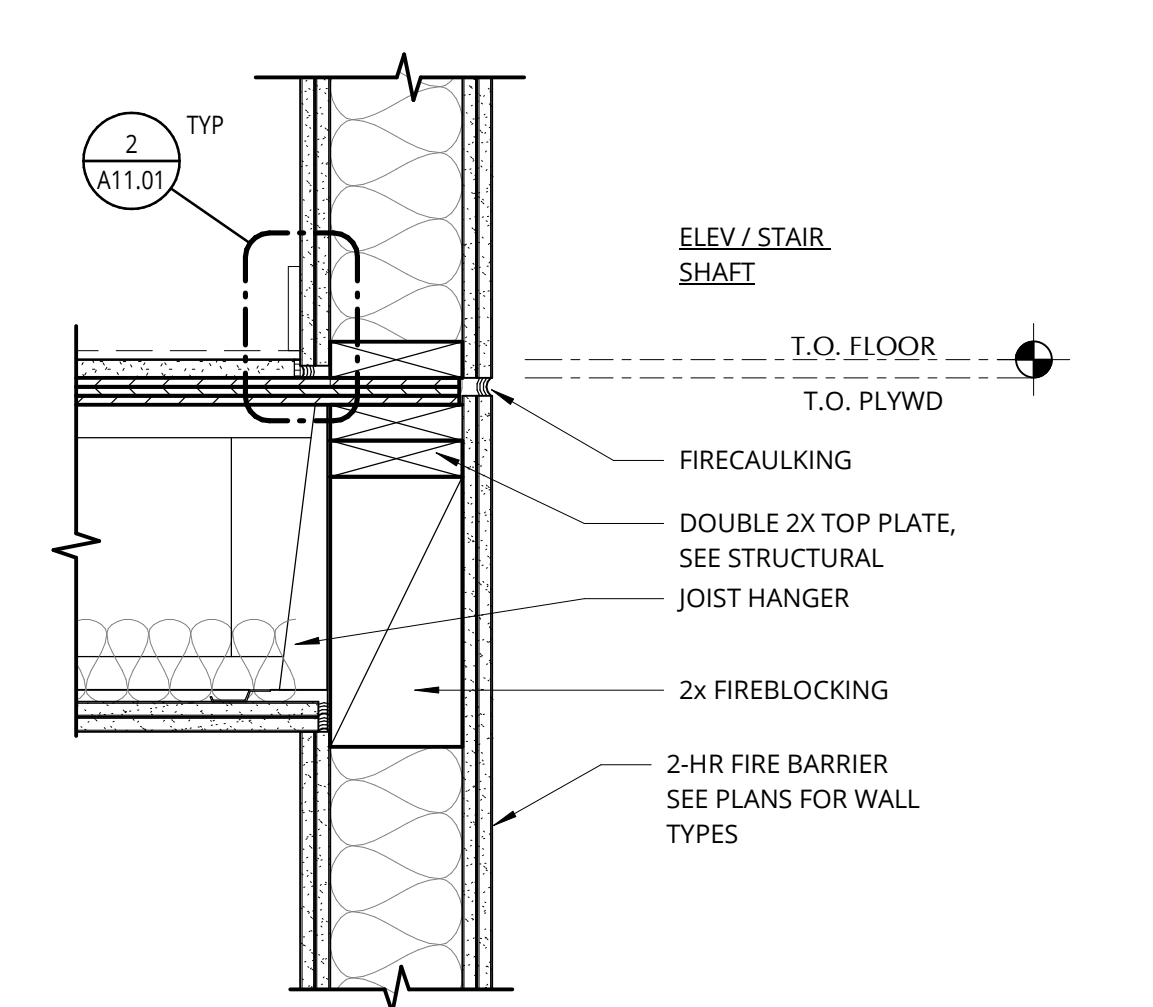
**9 FIRE PARTITION/CORRIDOR @ ROOF/CEILING**  
1 1/2" = 1'-0"



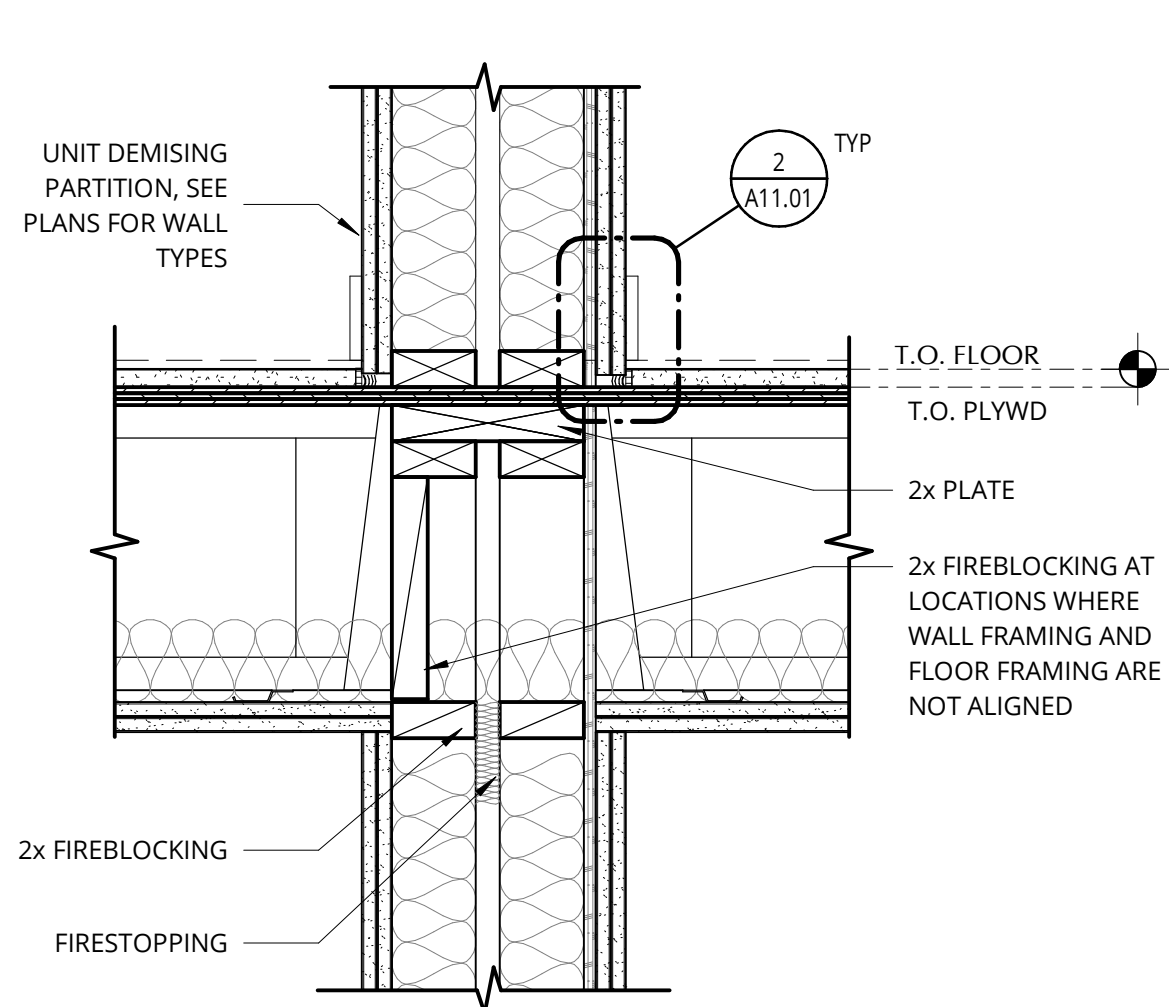
**10 FIRE BARRIER/SHAFT @ ROOF/CEILING**  
1 1/2" = 1'-0"



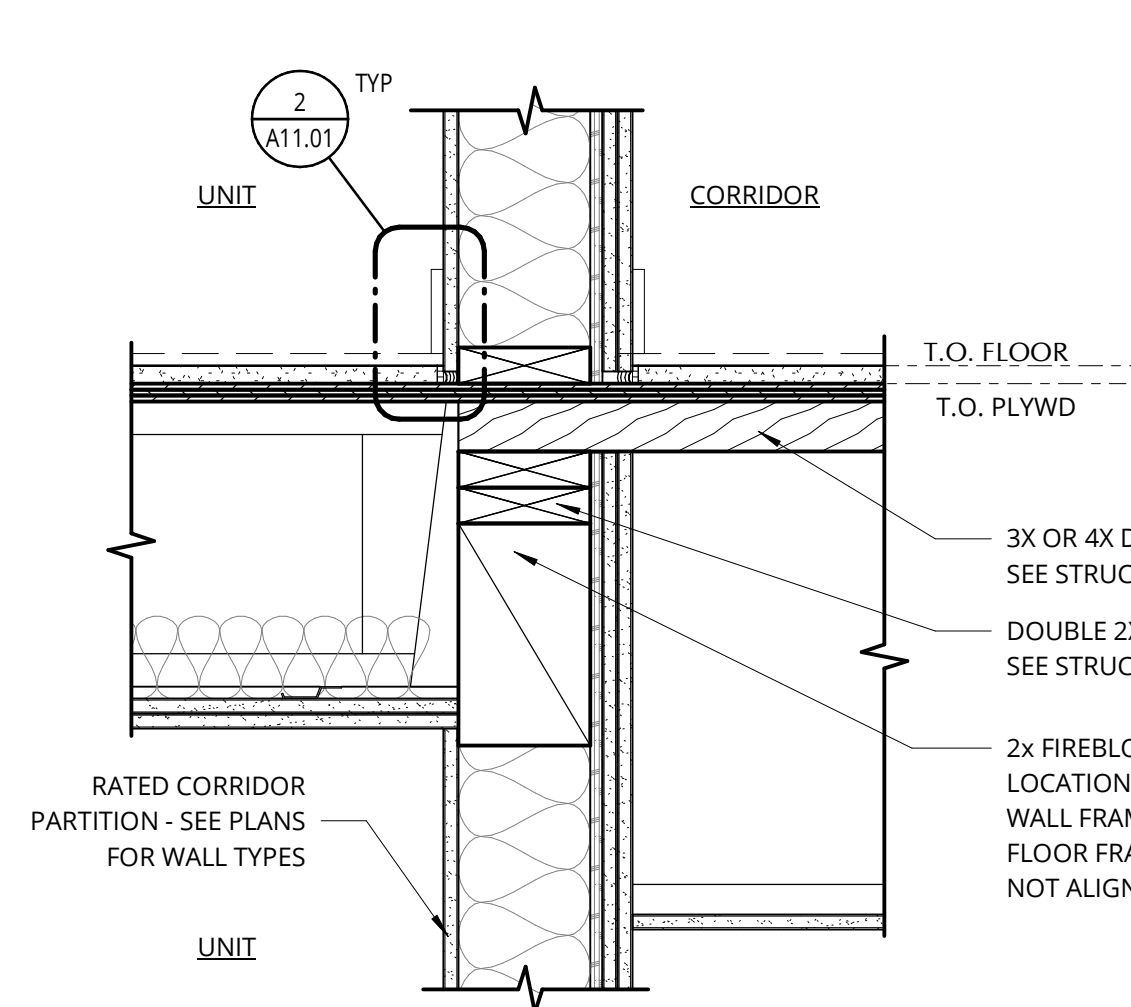
**11 FLOOR/CEILING @ MECH SHAFT**  
3" = 1'-0"



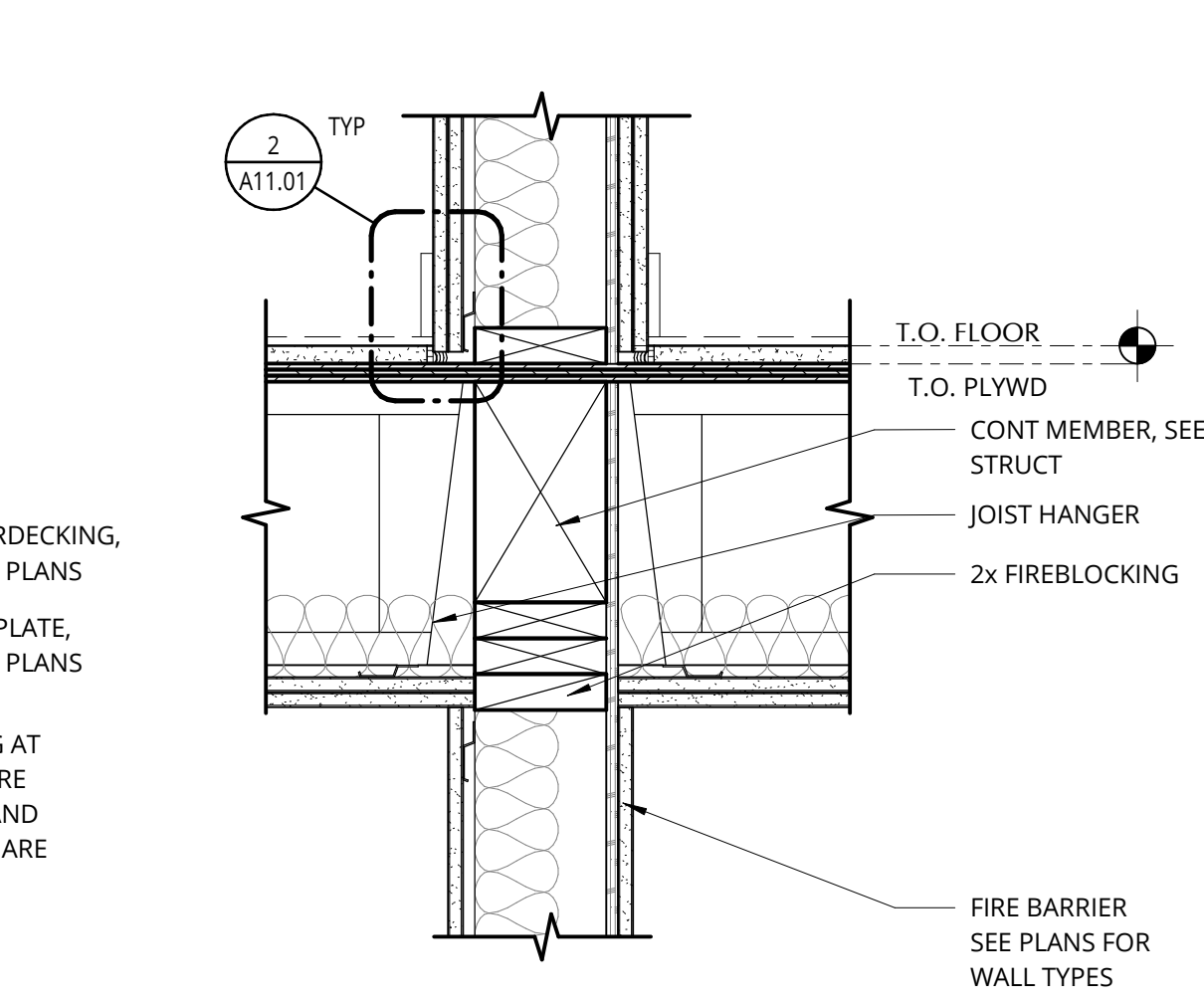
**12 FIRE BARRIER/SHAFT @ FLOOR/CEILING**  
1 1/2" = 1'-0"



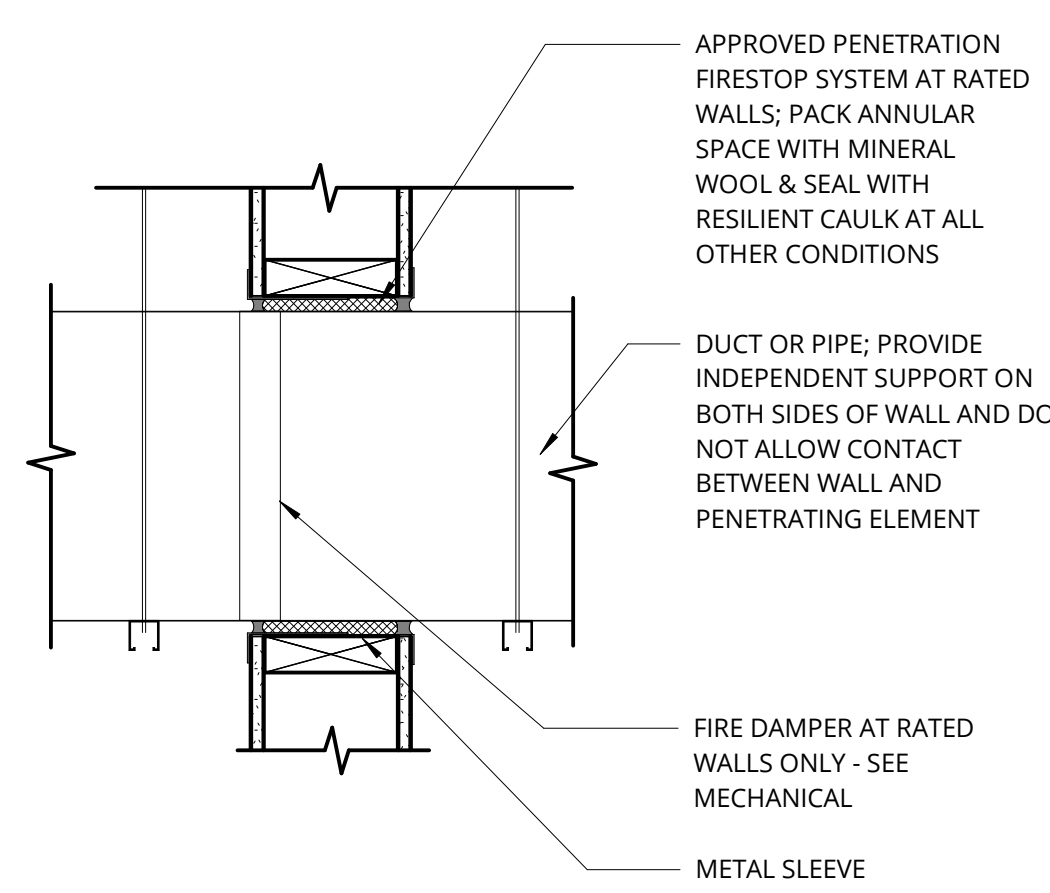
**13 FIRE PARTITION/UNIT DEMISING @ FLOOR/CEILING**  
1 1/2" = 1'-0"



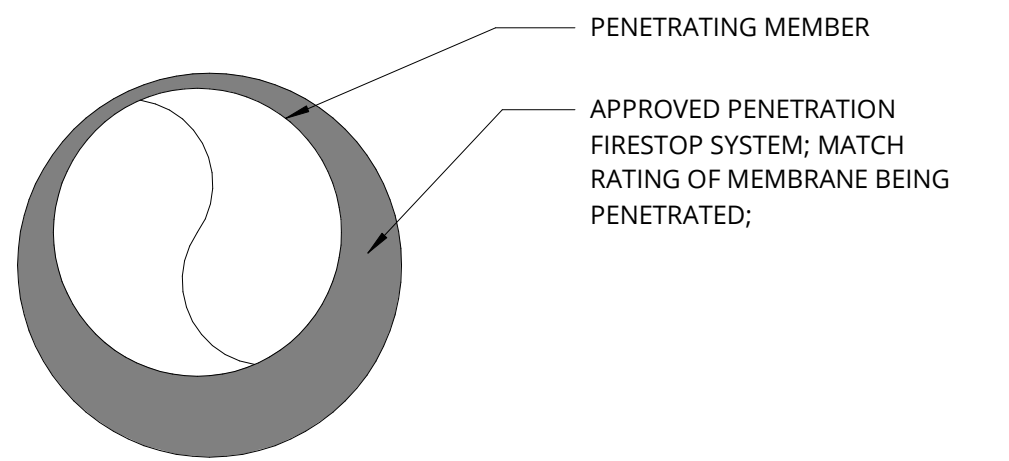
**14 FIRE PARTITION/CORRIDOR @ FLOOR/CEILING**  
1 1/2" = 1'-0"



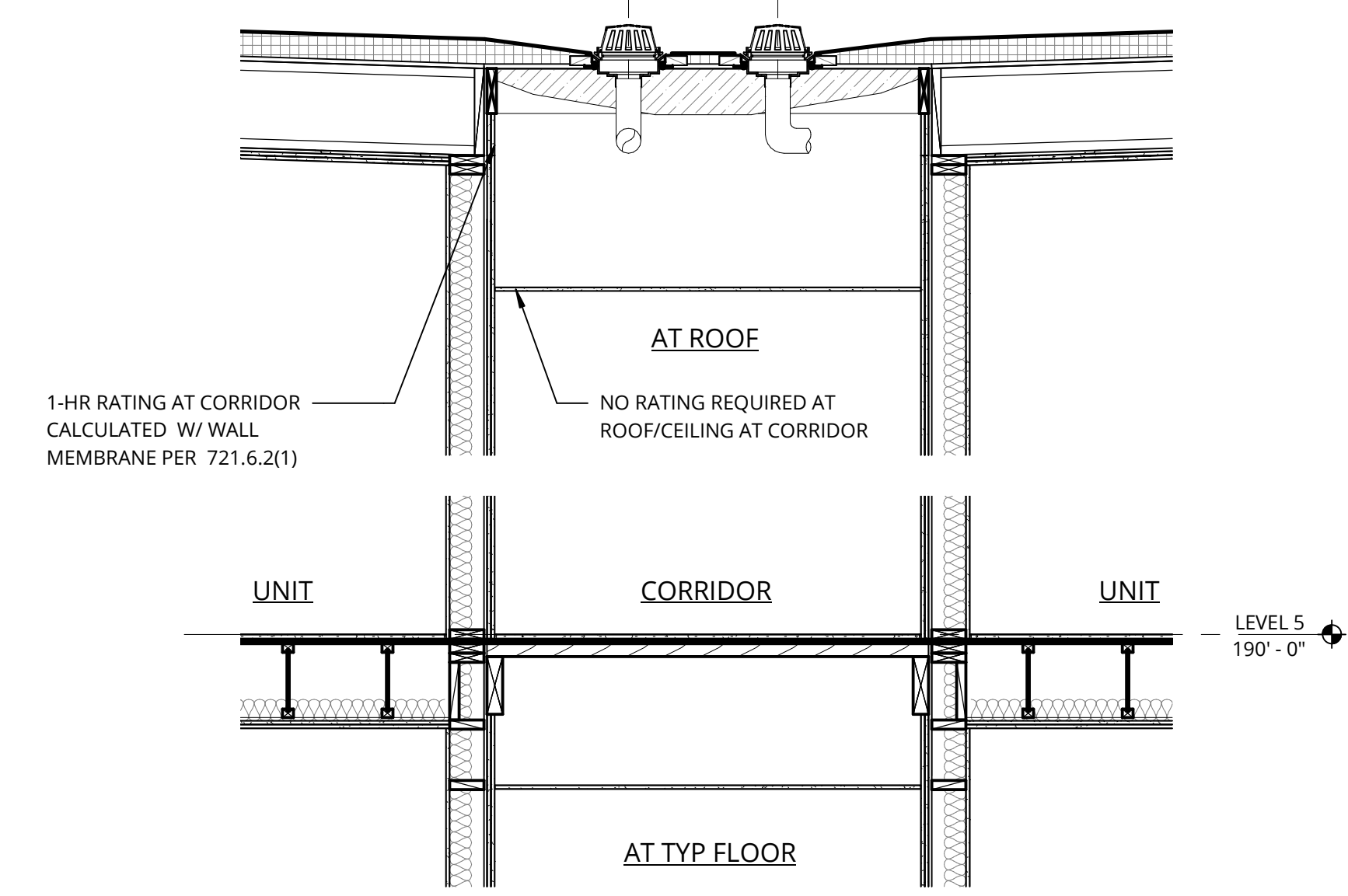
**15 FIRE BARRIER @ FLOOR/CEILING**  
1 1/2" = 1'-0"



**17 DUCT PENETRATION @ RATED WALL**  
1 1/2" = 1'-0"



**18 PENETRATION FIRESTOP DETAIL**  
3" = 1'-0"



**19 SECTION @ CORRIDOR**  
1/2" = 1'-0"

REVISION	DATE	REASON FOR ISSUE

TYPICAL ASSEMBLY  
DETAILS

PERMIT / GMP

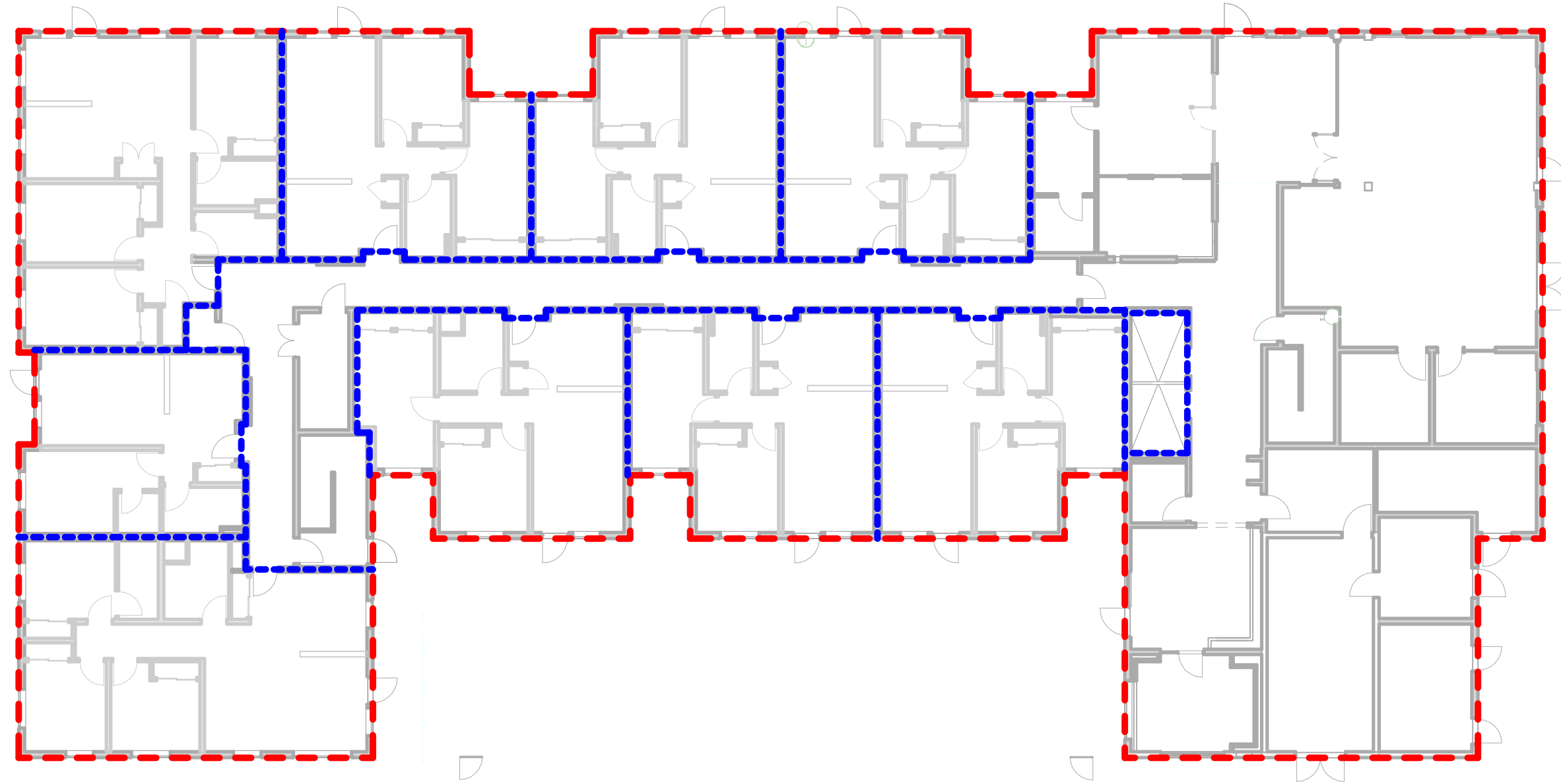
DATE 17 OCT 2018	PROJECT NUMBER 149000
SHEET NUMBER	

A0.41



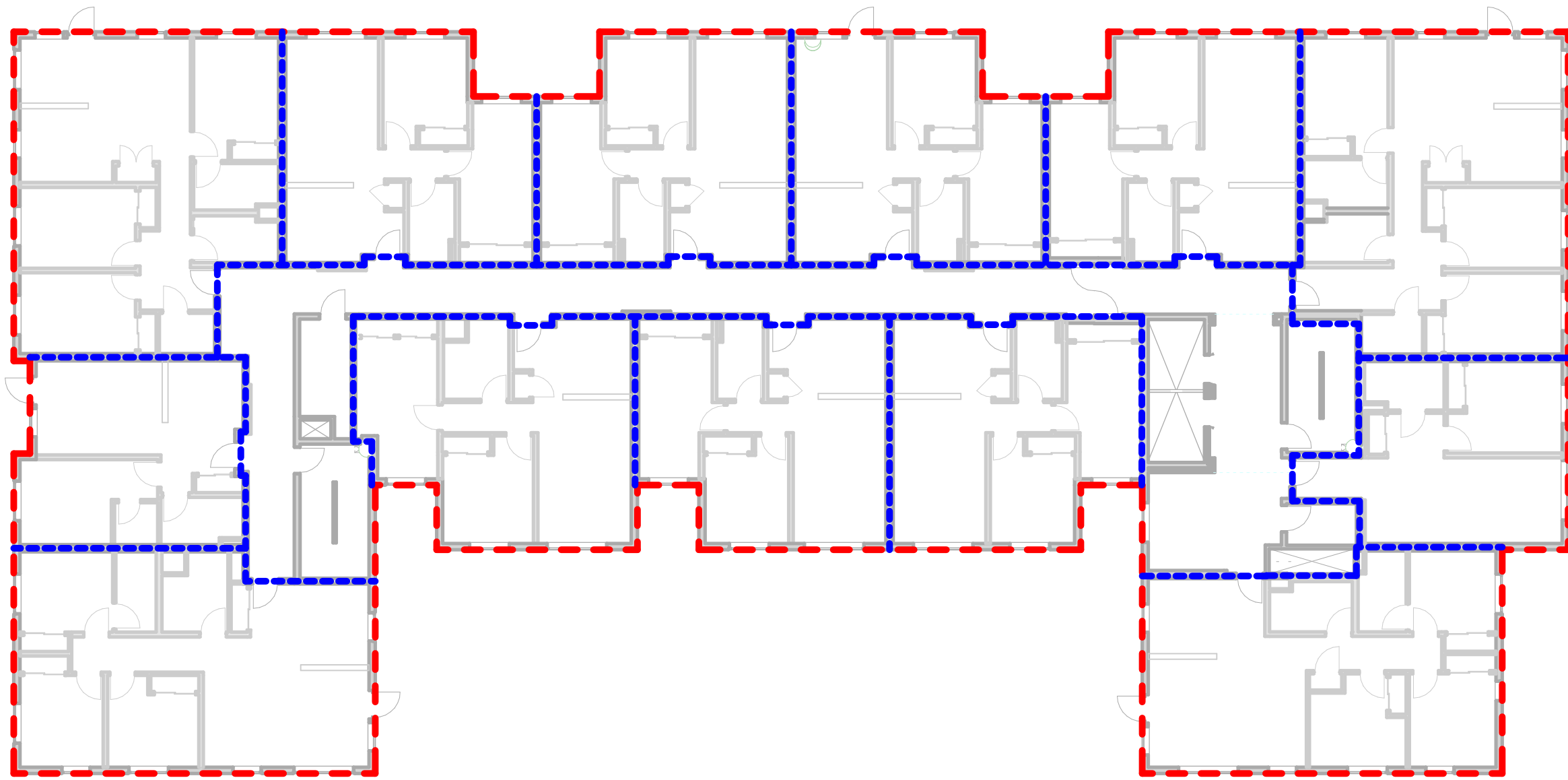
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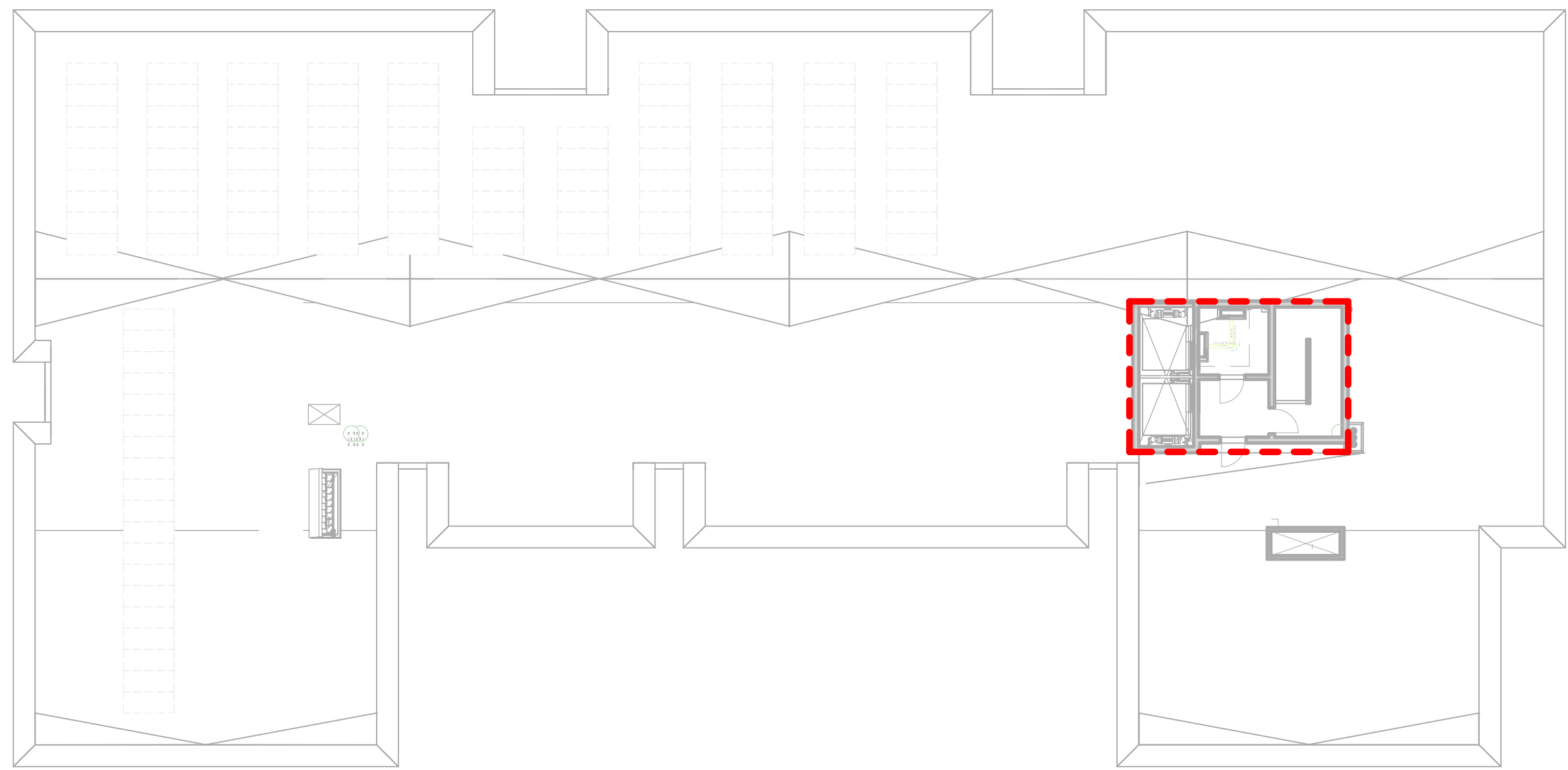
6 LEVEL 1 AIR BARRIER DIAGRAM

1/16" = 1'-0"



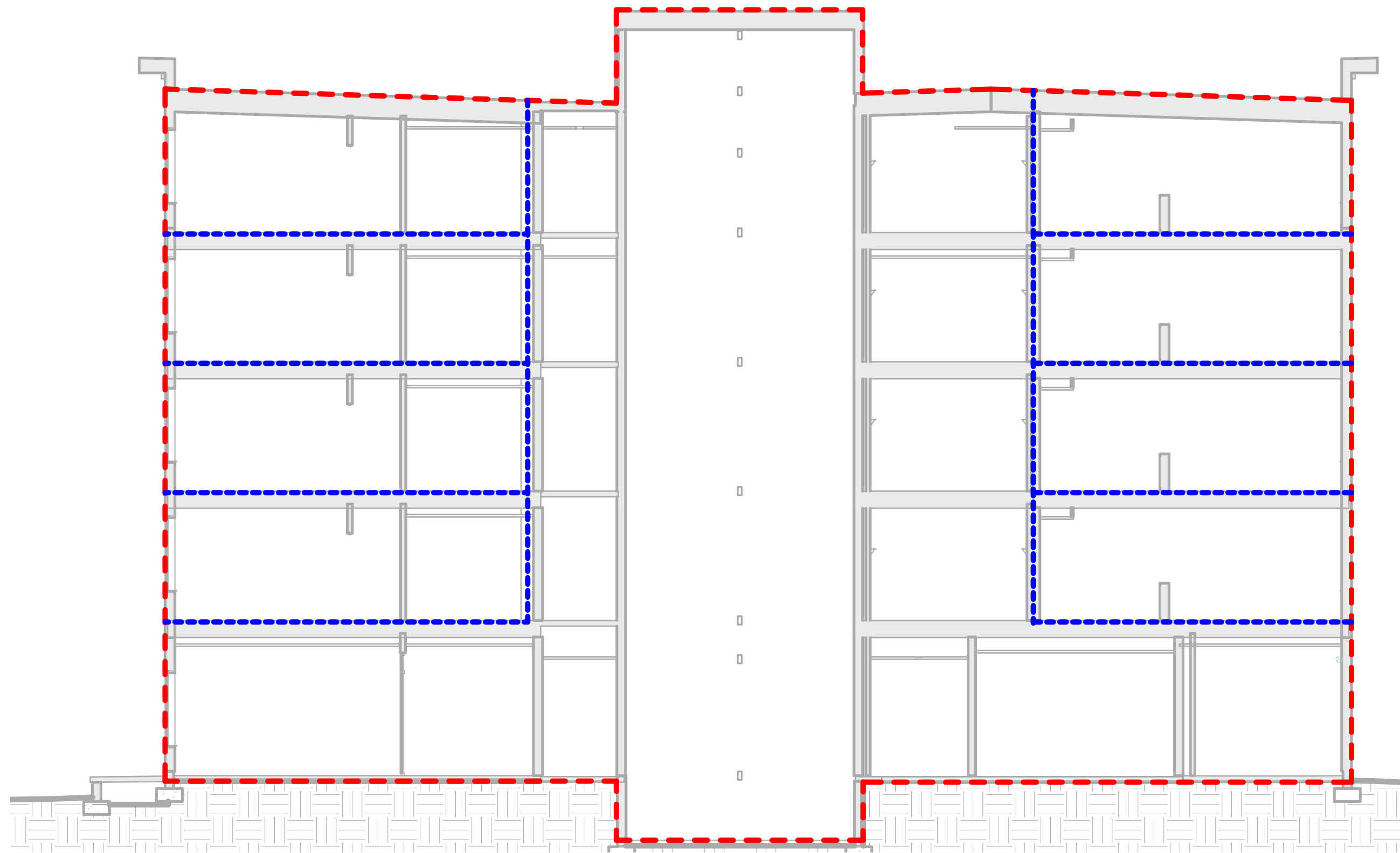
9 LEVEL 2 AIR BARRIER DIAGRAM

1/16" = 1'-0"



11 ROOF AIR BARRIER DIAGRAM

1/16" = 1'-0"



14 SECTION AIR BARRIER DIAGRAM

1/8" = 1'-0"



16 SECTION AIR BARRIER DIAGRAM

1/8" = 1'-0"

LEGEND

--- EXTERIOR THERMAL ENVELOPE AIR BARRIER

THE RED DASHED LINE INDICATES THE PLANE OF THE BUILDING ENVELOPE, SEPARATING INTERIOR CONDITIONED AND EXTERIOR NON-CONDITIONED SPACE. ALL ASSEMBLIES AND INTERFACES ALONG THE PLANE OF THE BUILDING ENVELOPE MUST PREVENT OR LIMIT RAIN WATER PENETRATION, AIR LEAKAGE, VAPOR DIFFUSION, AND THERMAL TRANSFER.

--- INTERIOR COMPARTMENTALIZATION AIR BARRIER



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PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

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BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

AIR BARRIER  
DIAGRAM

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DATE 17 OCT 2018	PROJECT NUMBER 149000
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SHEET NUMBER

A0.42



10/17/2018 10:27:03 AM

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WALL:  
7483.28 SF

WINDOW:  
2432.98 SF

DOOR:  
353.60 SF

STOREFRONT:  
FIXED: 103.96 SF  
OPERABLE: 31.00 SF

CURB:  
58.08 SF



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

4 SOUTH BAY - WEST  
1/8" = 1'-0"

WALL:  
7801.85 SF

WINDOW:  
2379.56 SF

HM DOOR:  
73.73 SF

DOOR:  
81.52 SF

CURB:  
57.13 SF

STOREFRONT:  
121.84 SF

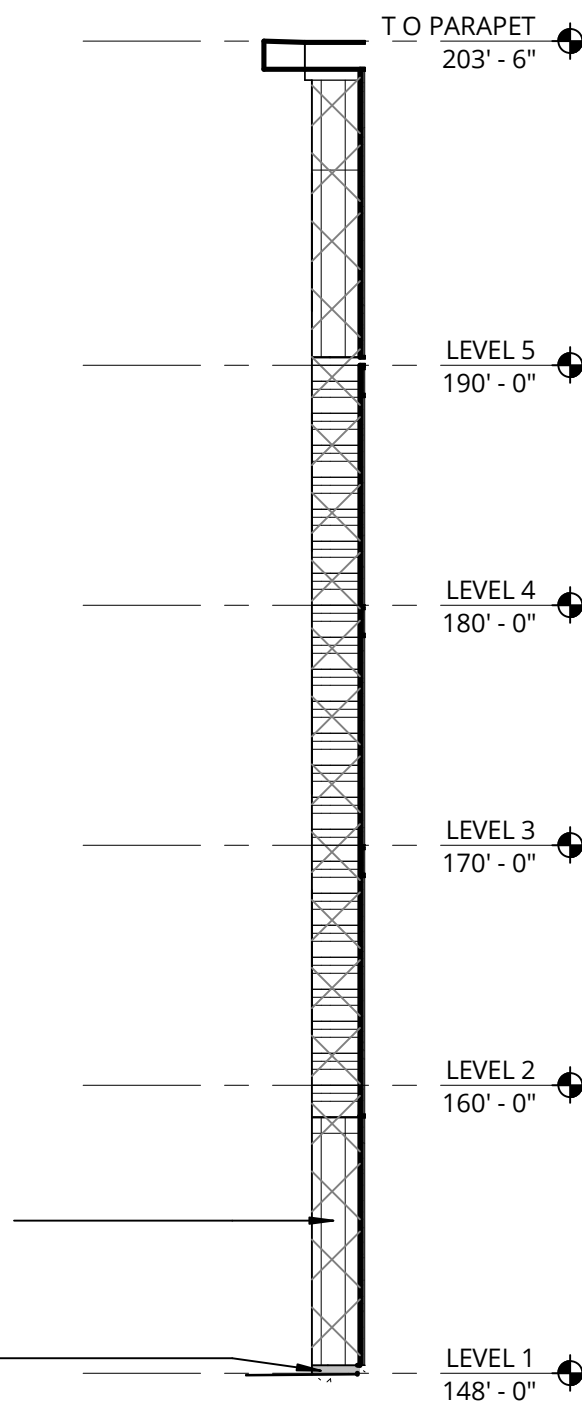


2 EAST ELEVATION  
1/8" = 1'-0"

3 SOUTH BAY - EAST  
1/8" = 1'-0"

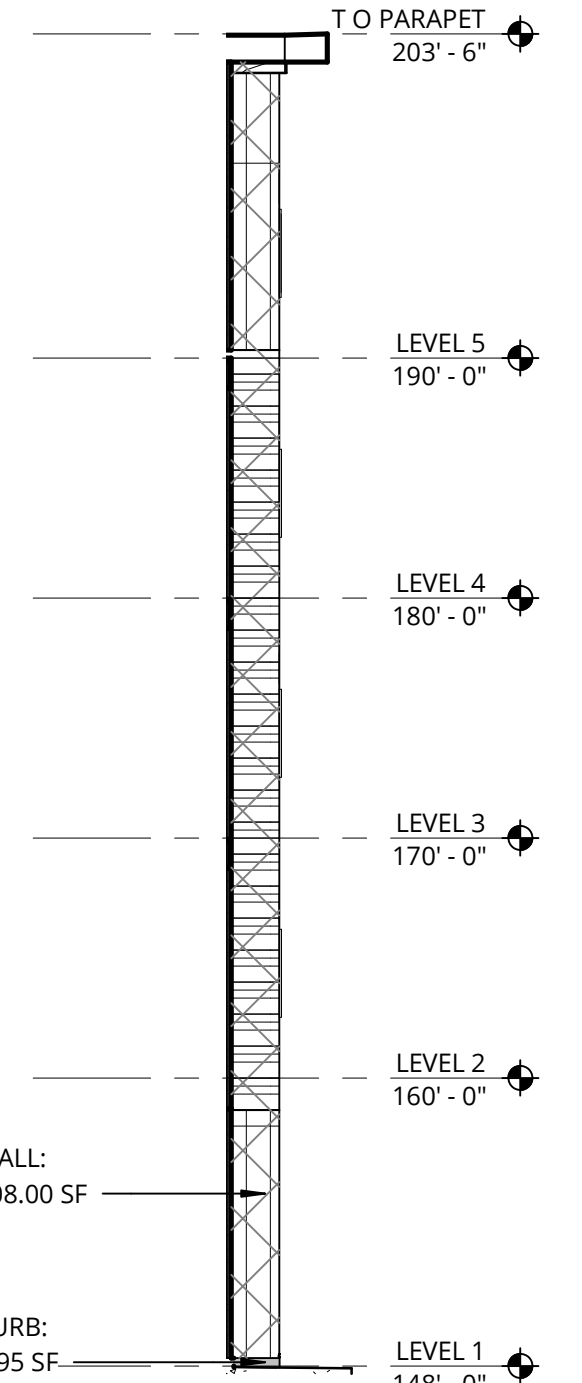
WALL:  
108.00 SF

CURB:  
0.95 SF

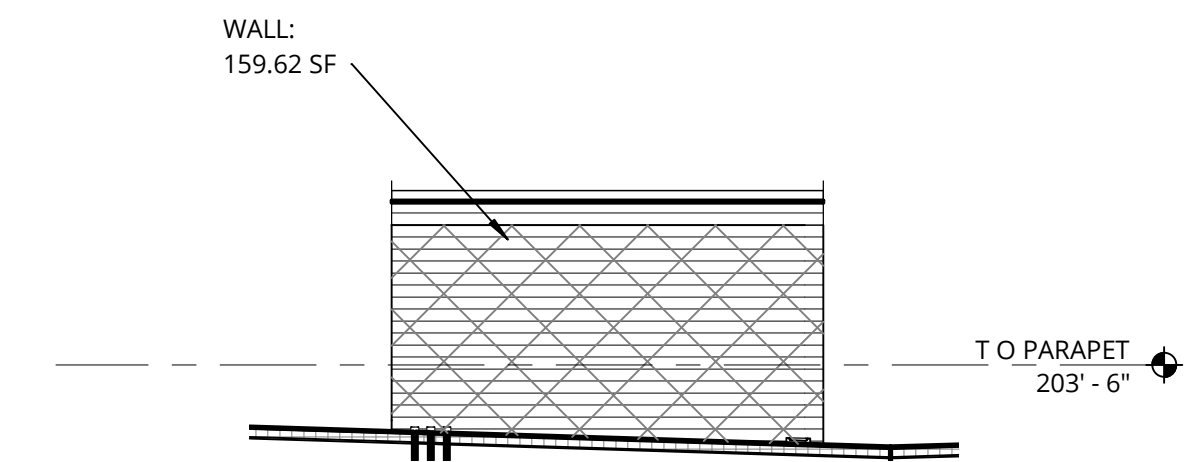


WALL:  
108.00 SF

CURB:  
0.95 SF



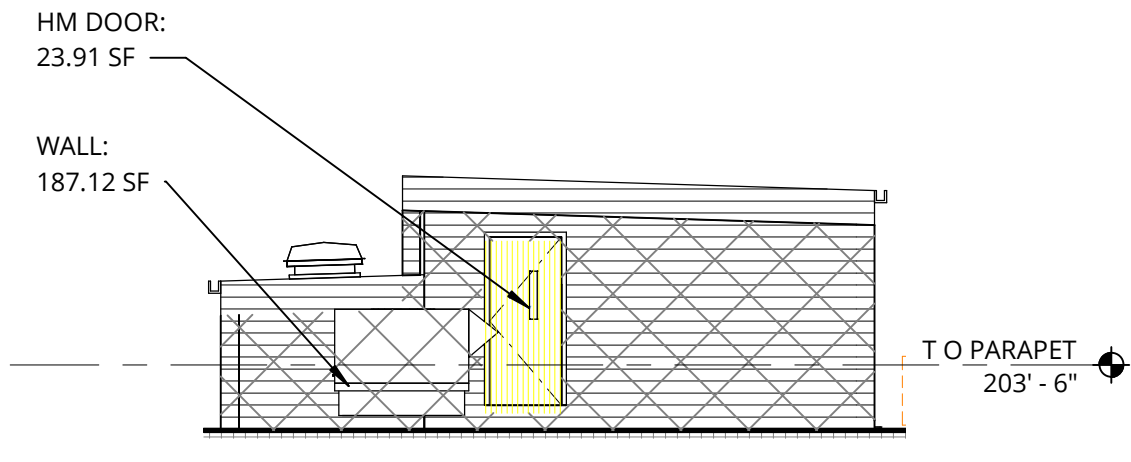
WALL:  
159.62 SF



16 STAIR-1 PENTHOUSE - NORTH  
1/8" = 1'-0"

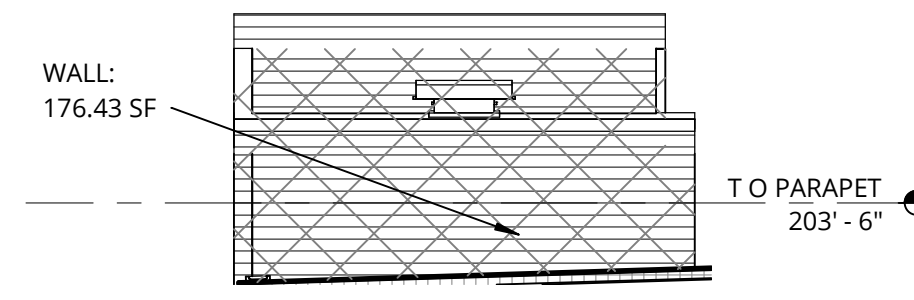
HM DOOR:  
23.91 SF

WALL:  
187.12 SF



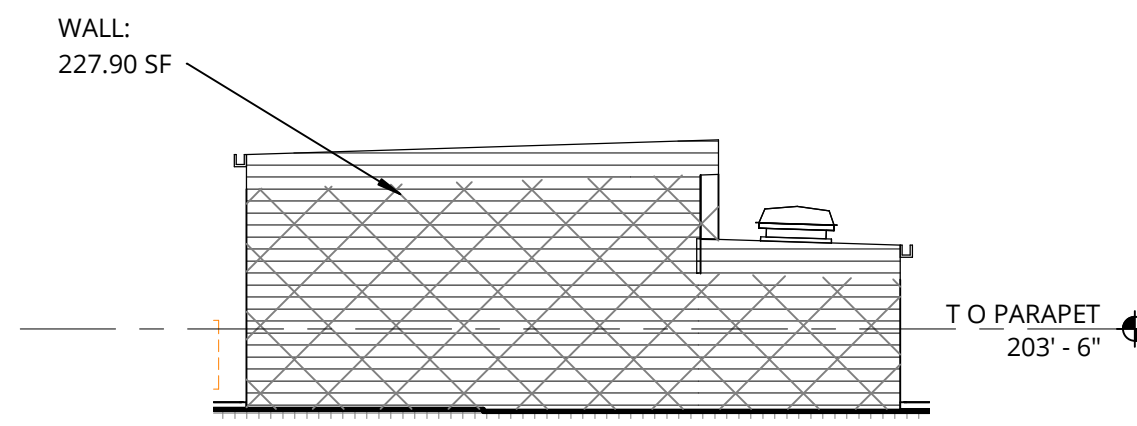
17 STAIR-1+ELEV PENTHOUSE - EAST  
1/8" = 1'-0"

WALL:  
176.43 SF



18 ELEVATOR PH - SOUTH  
1/8" = 1'-0"

WALL:  
227.90 SF



20 STAIR-1+ELEV PENTHOUSE WEST  
1/8" = 1'-0"



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PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
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REVISION	DATE	REASON FOR ISSUE

ENERGY CODE  
ELEVATIONS

PERMIT / GMP

DATE  
17 OCT 2018

PROJECT NUMBER  
149000

SHEET NUMBER

A0.43

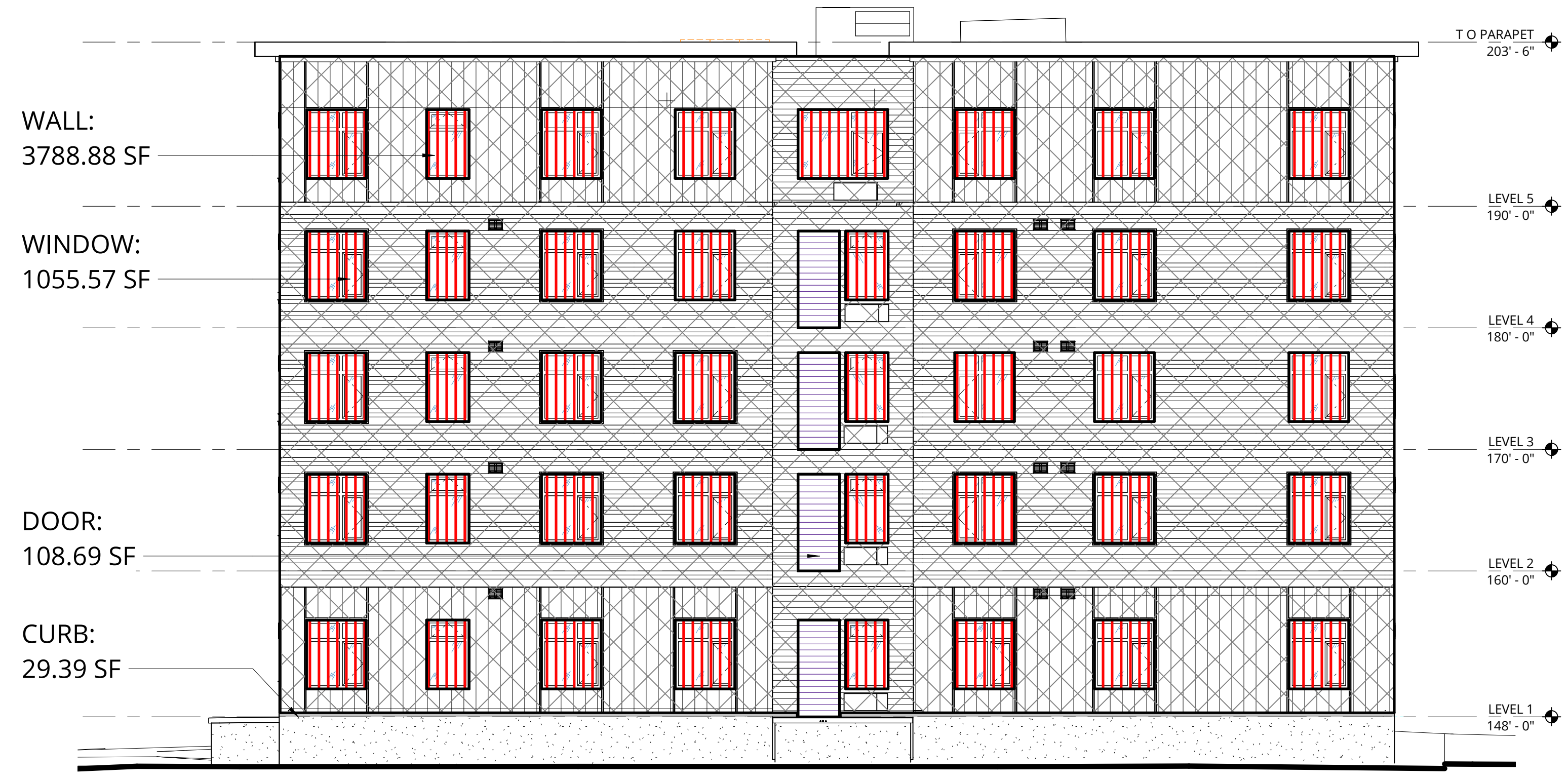


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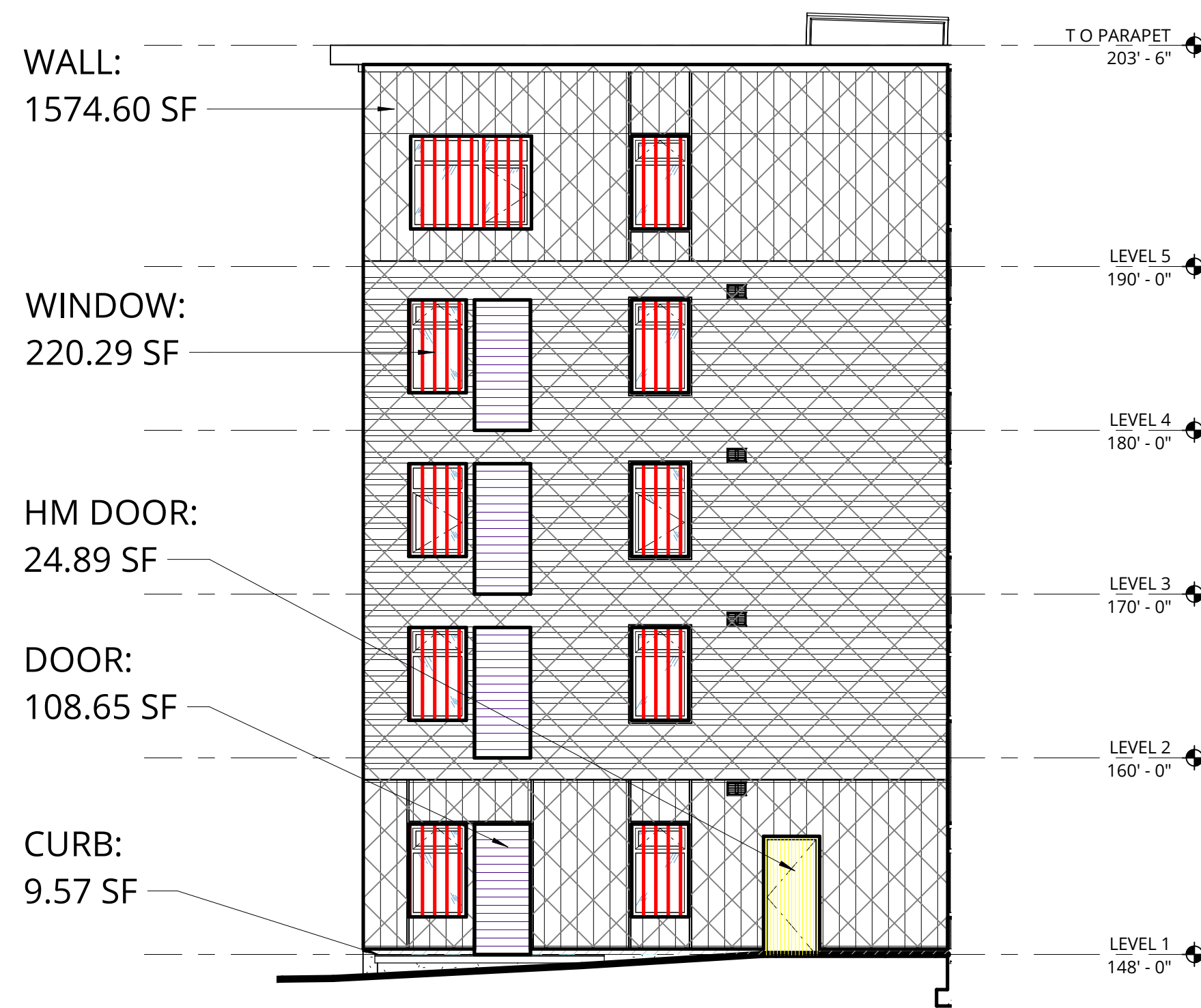
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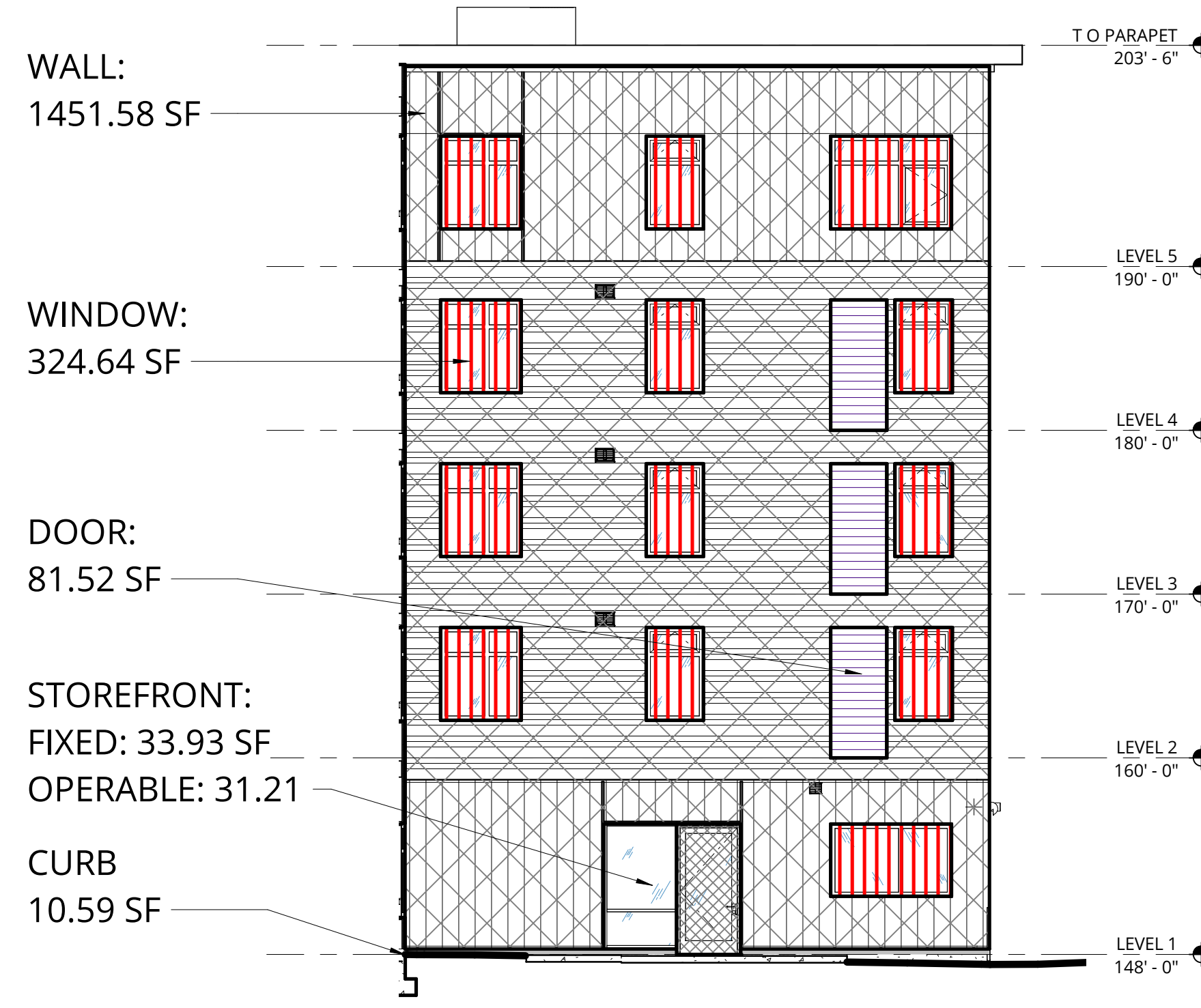
1 NORTH ELEVATION  
1/8" = 1'-0"



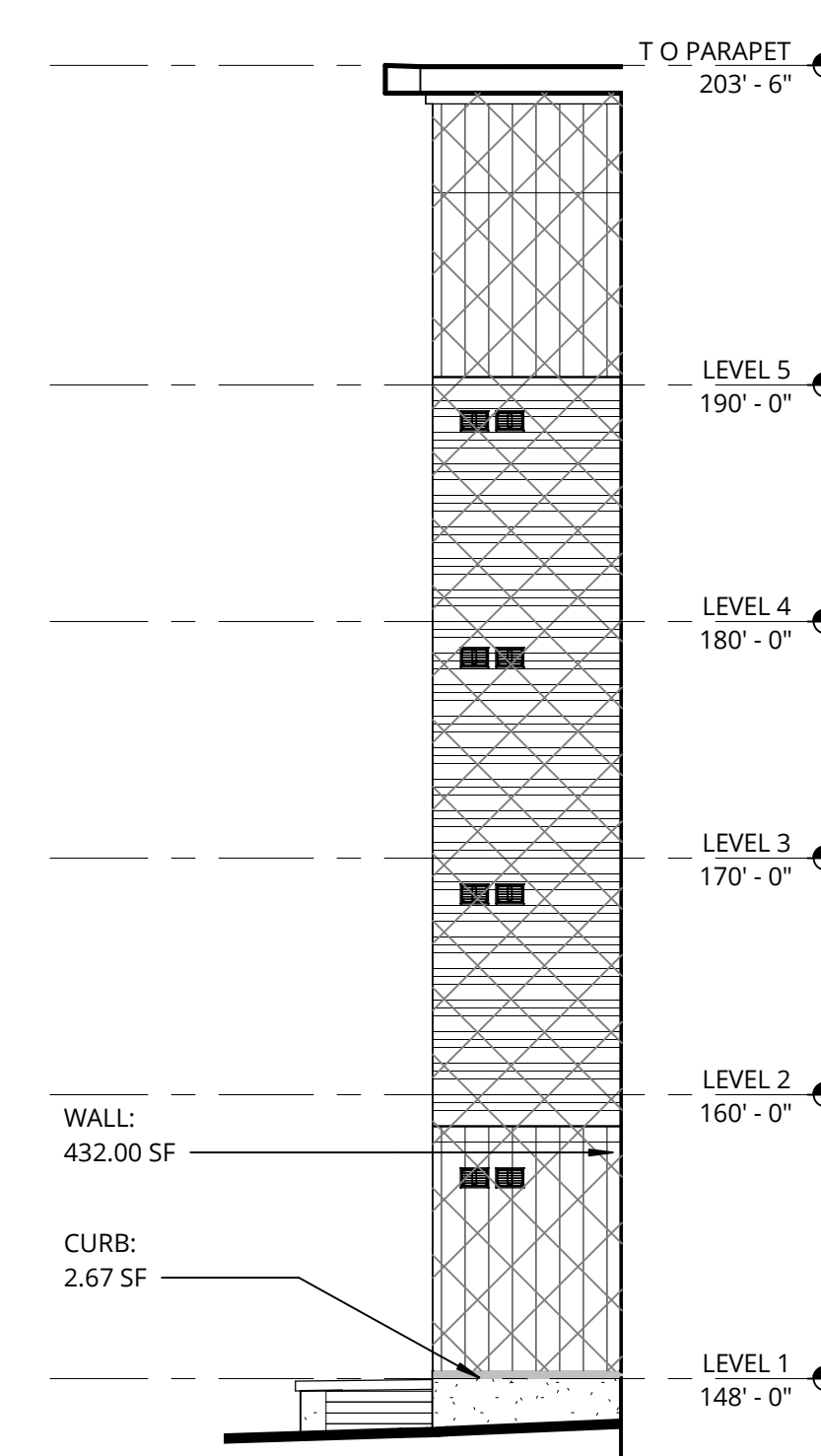
2 SOUTH ELEVATION  
1/8" = 1'-0"



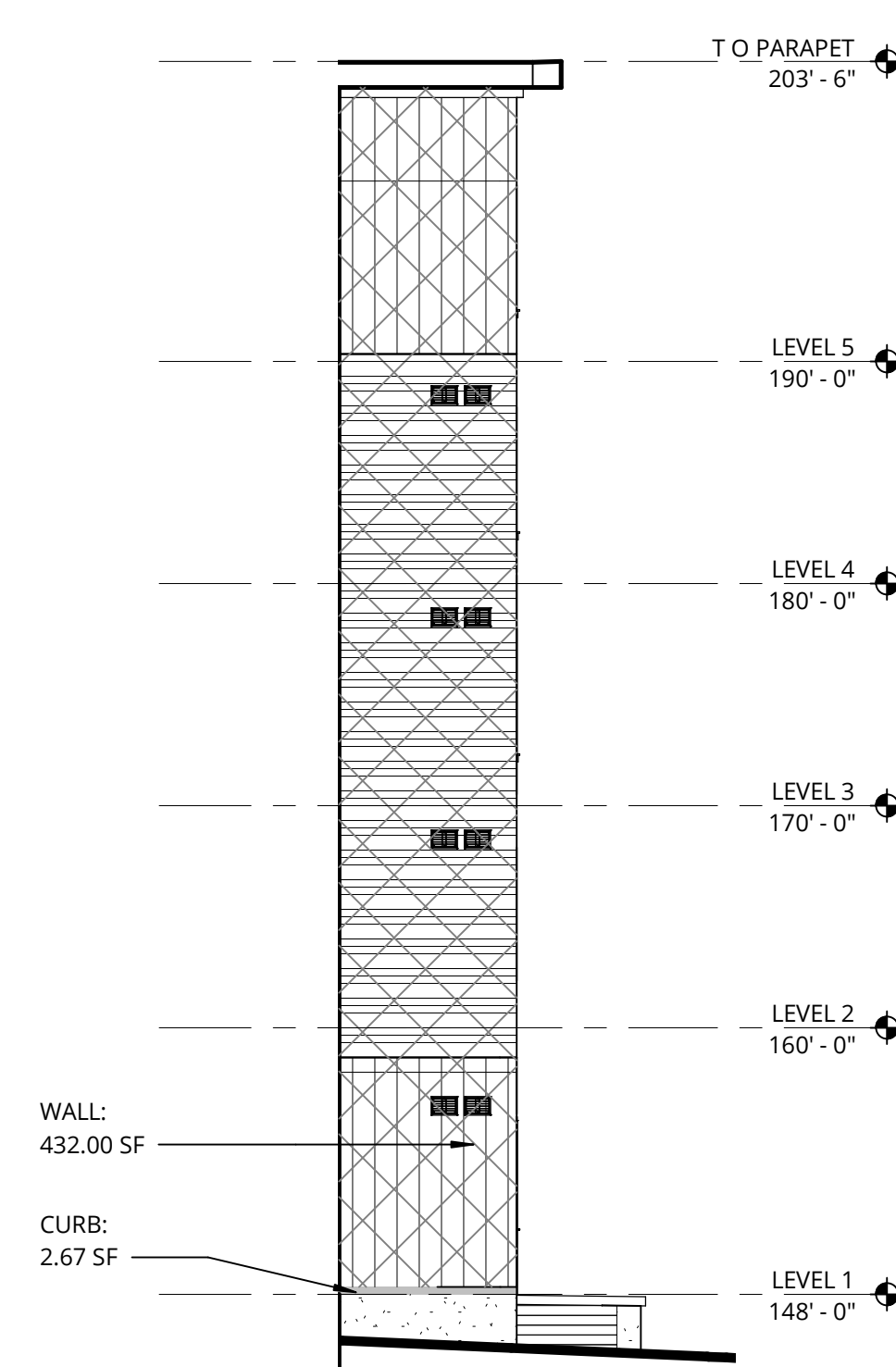
3 COURTYARD - SOUTH  
1/8" = 1'-0"



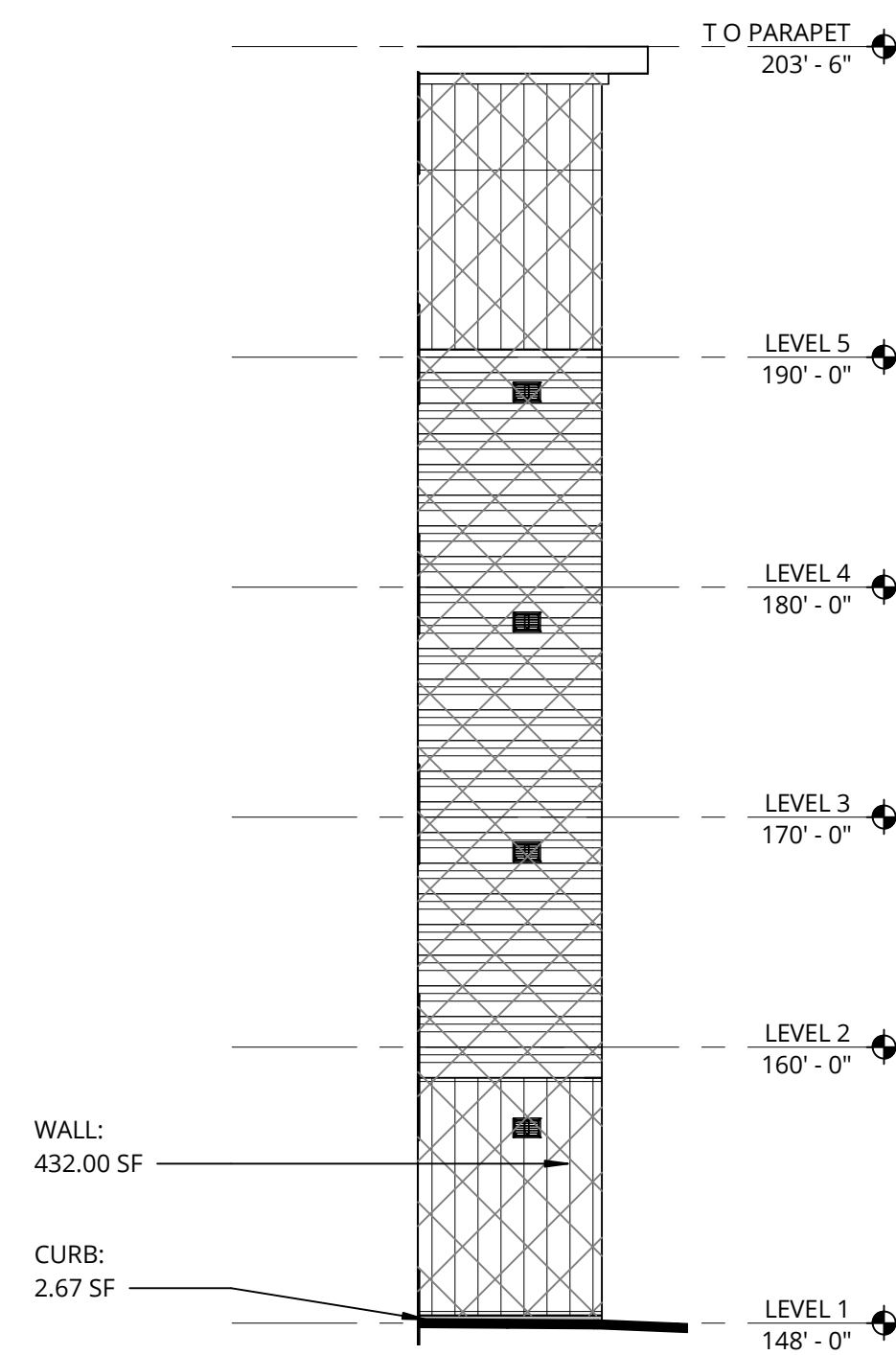
8 COURTYARD - NORTH  
1/8" = 1'-0"



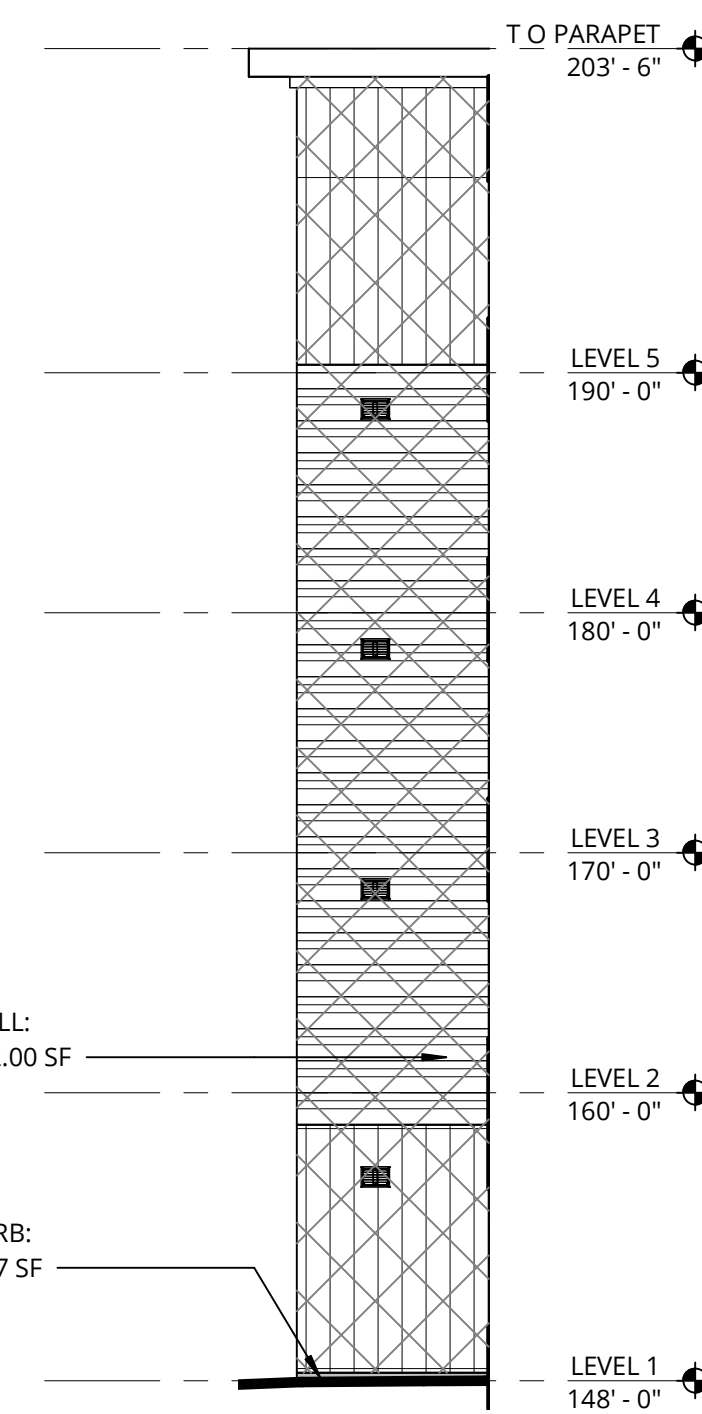
11 SOUTHWEST BAY - NORTH  
1/8" = 1'-0"



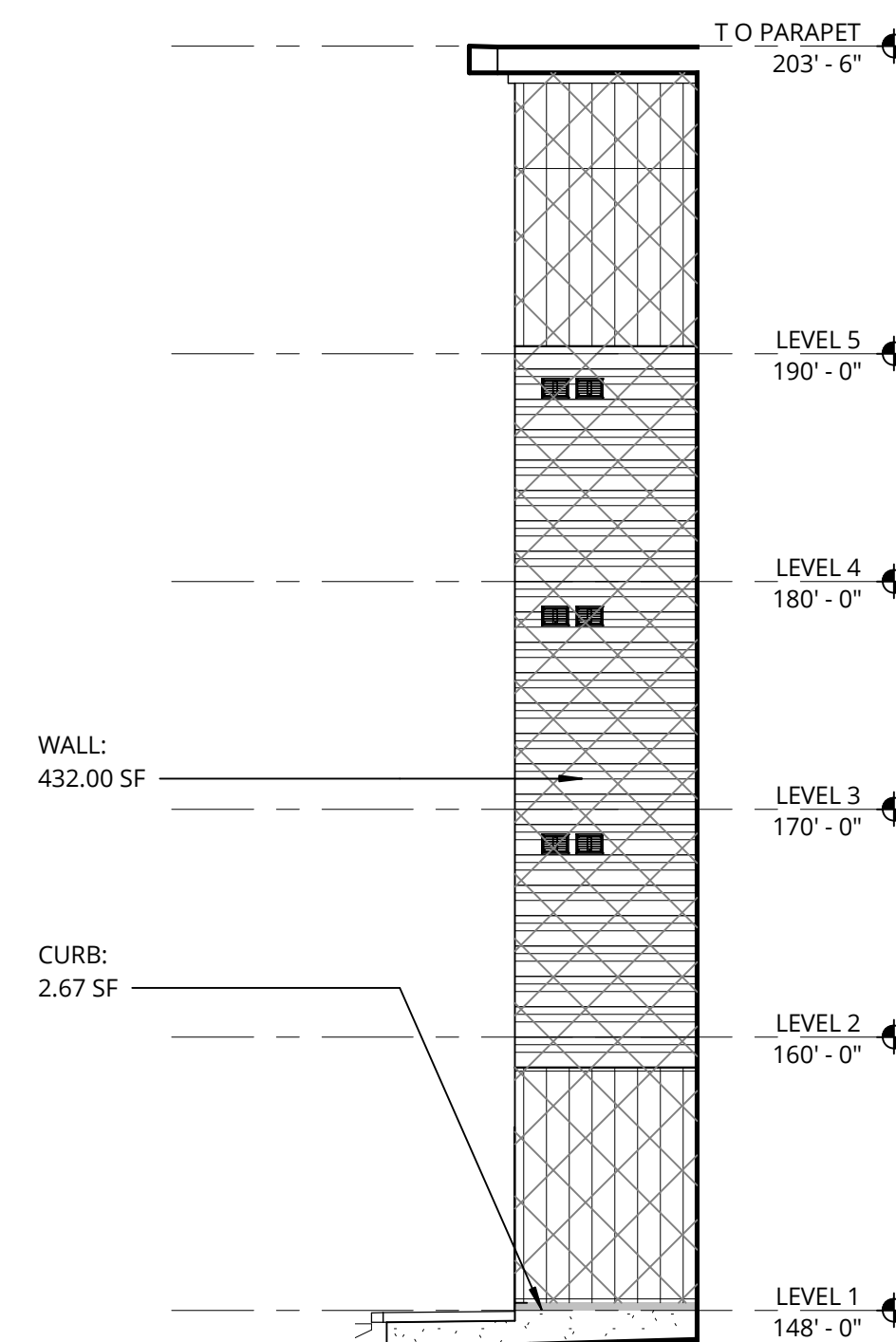
12 SOUTHWEST BAY - SOUTH  
1/8" = 1'-0"



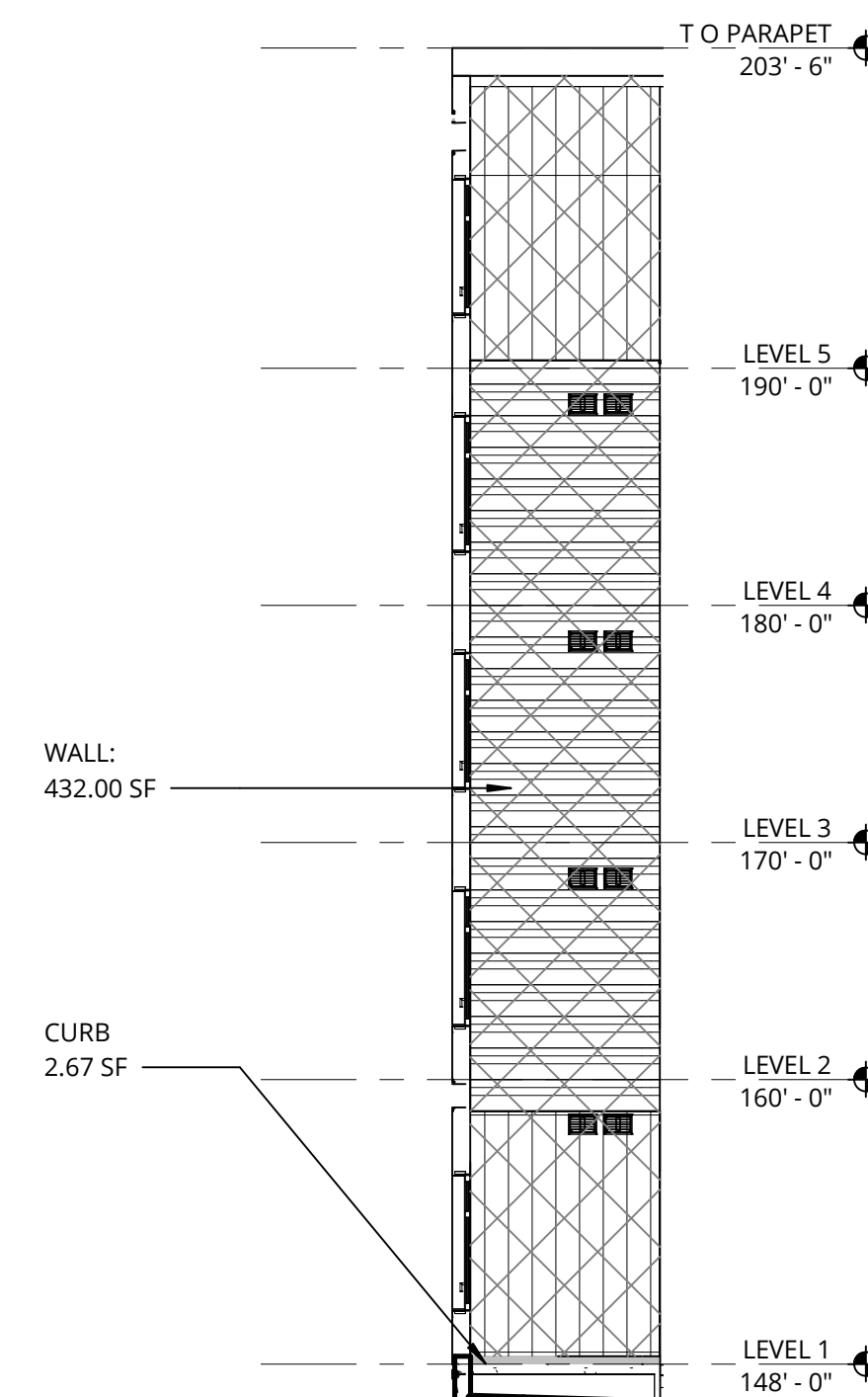
4 COURTYARD CENTRAL BAY - NORTH  
1/8" = 1'-0"



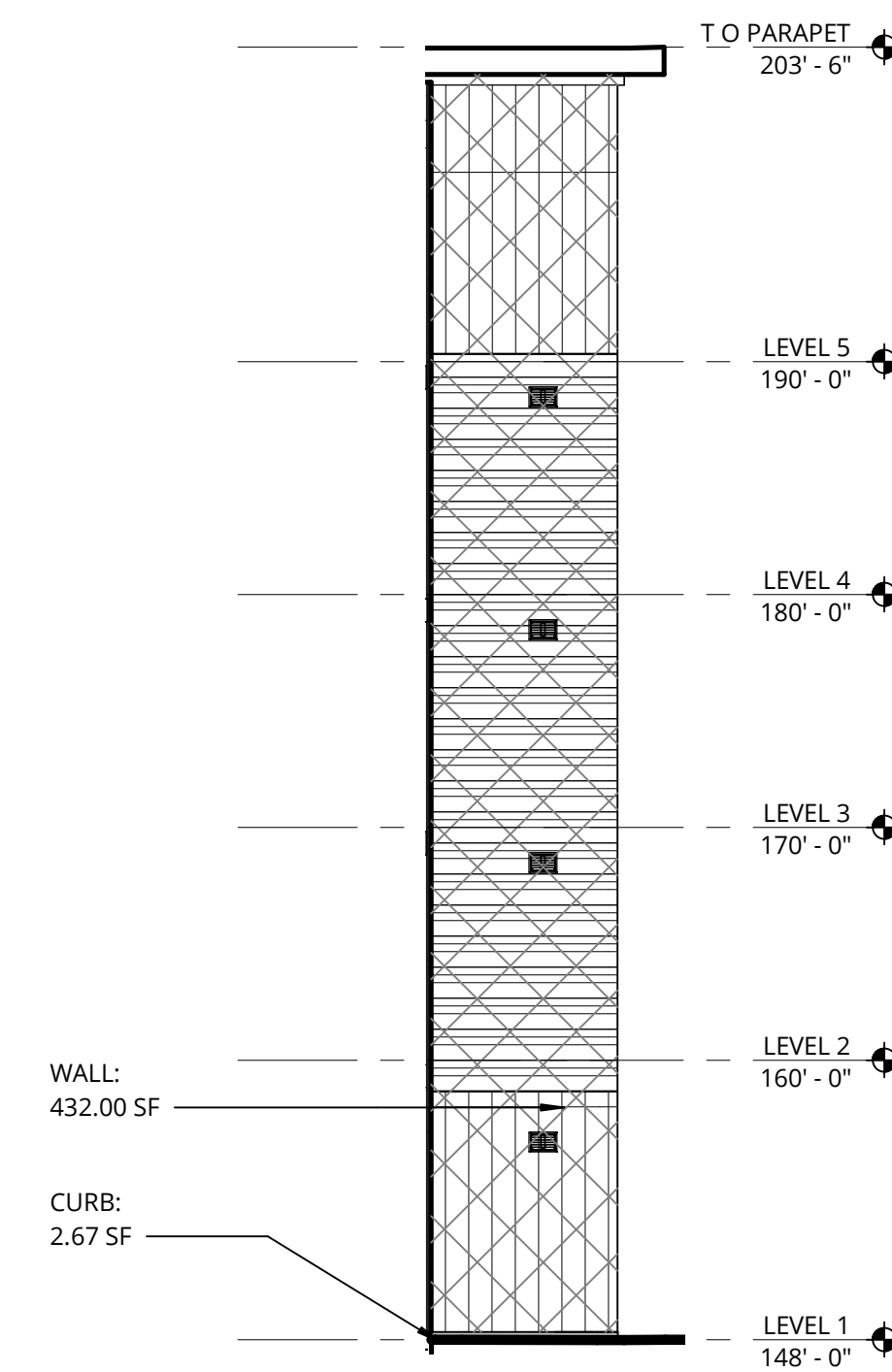
5 COURTYARD CENTRAL BAY - SOUTH  
1/8" = 1'-0"



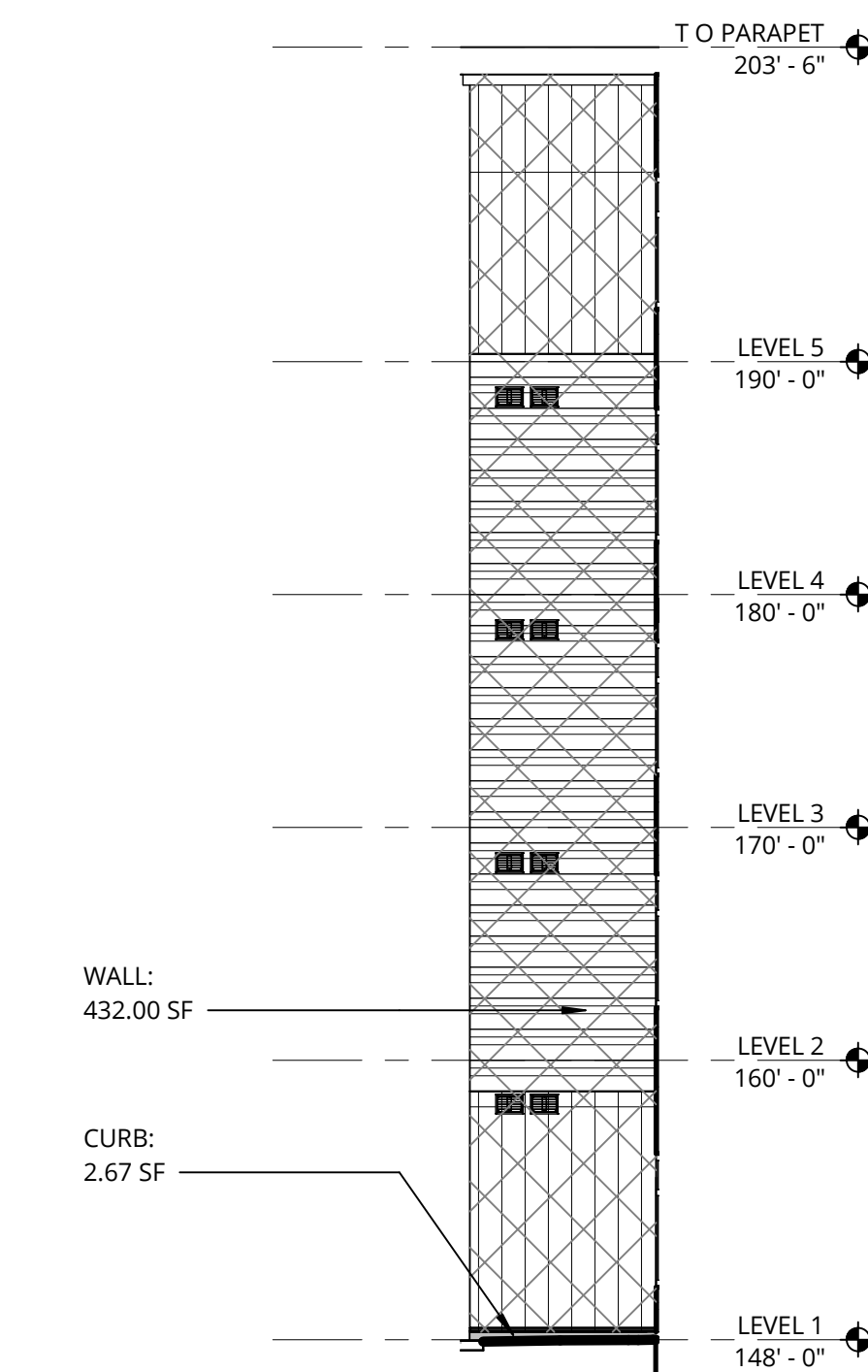
9 NORTHWEST BAY - NORTH  
1/8" = 1'-0"



10 NORTHWEST BAY - SOUTH  
1/8" = 1'-0"



6 COURTYARD END BAY - NORTH  
1/8" = 1'-0"



7 COURTYARD END BAY - SOUTH  
1/8" = 1'-0"



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PORTLAND, OR 97209  
T 503.245.7100  
1505 5TH AVE, SUITE 300  
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BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

ENERGY CODE  
ELEVATIONS

PERMIT / GMP

DATE 17 OCT 2018	PROJECT NUMBER 149000
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SHEET NUMBER  
A0.44



GENERAL NOTES

1. REFER TO SHEET G0.02 FOR PROJECT NOTES APPLICABLE TO ALL PORTIONS OF THE WORK.



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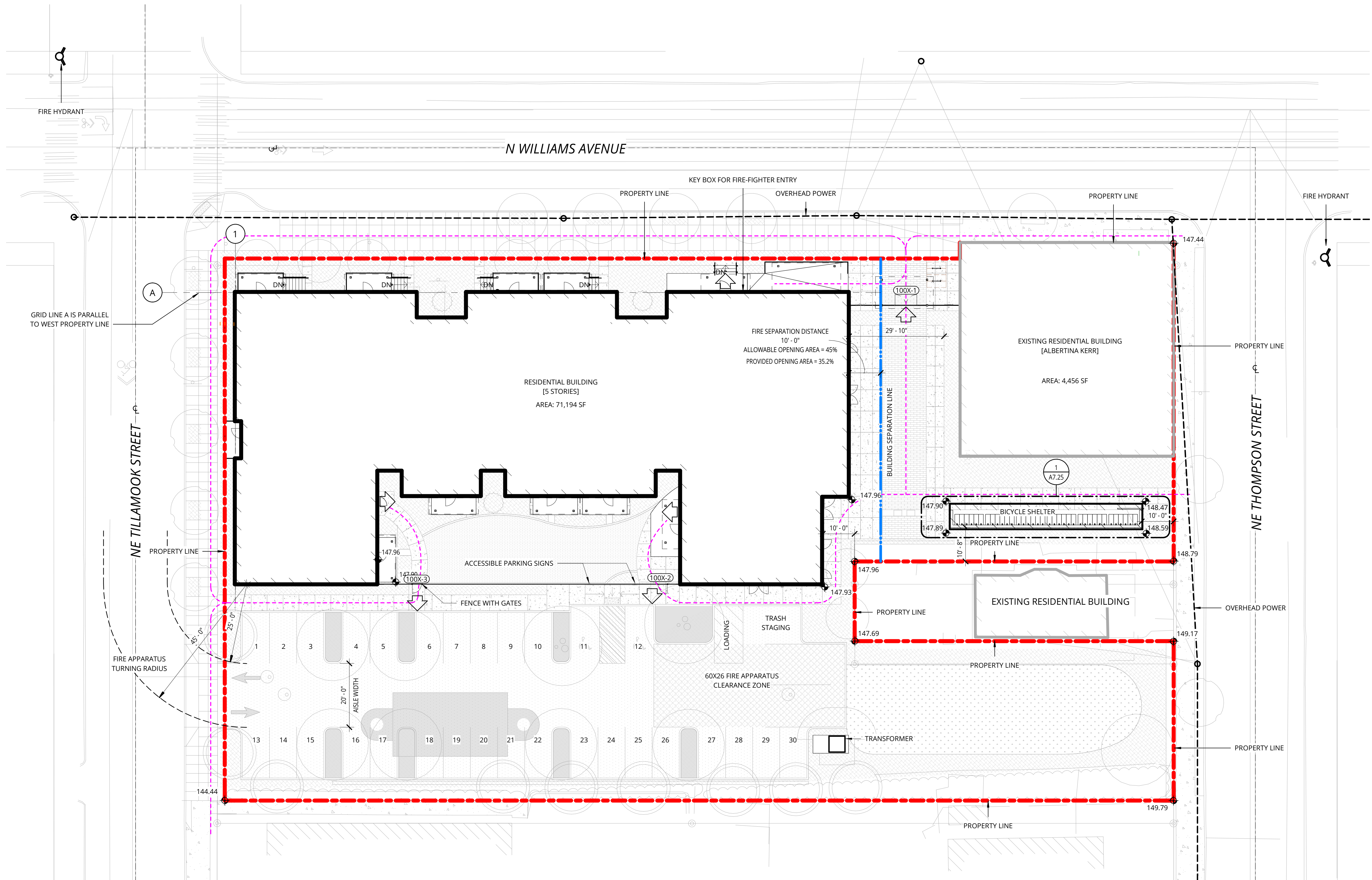
REVISION	DATE	REASON FOR ISSUE

ARCHITECTURAL SITE PLAN

PERMIT / GMP

DATE 17 OCT 2018	PROJECT NUMBER 149000
SHEET NUMBER	

A1.01

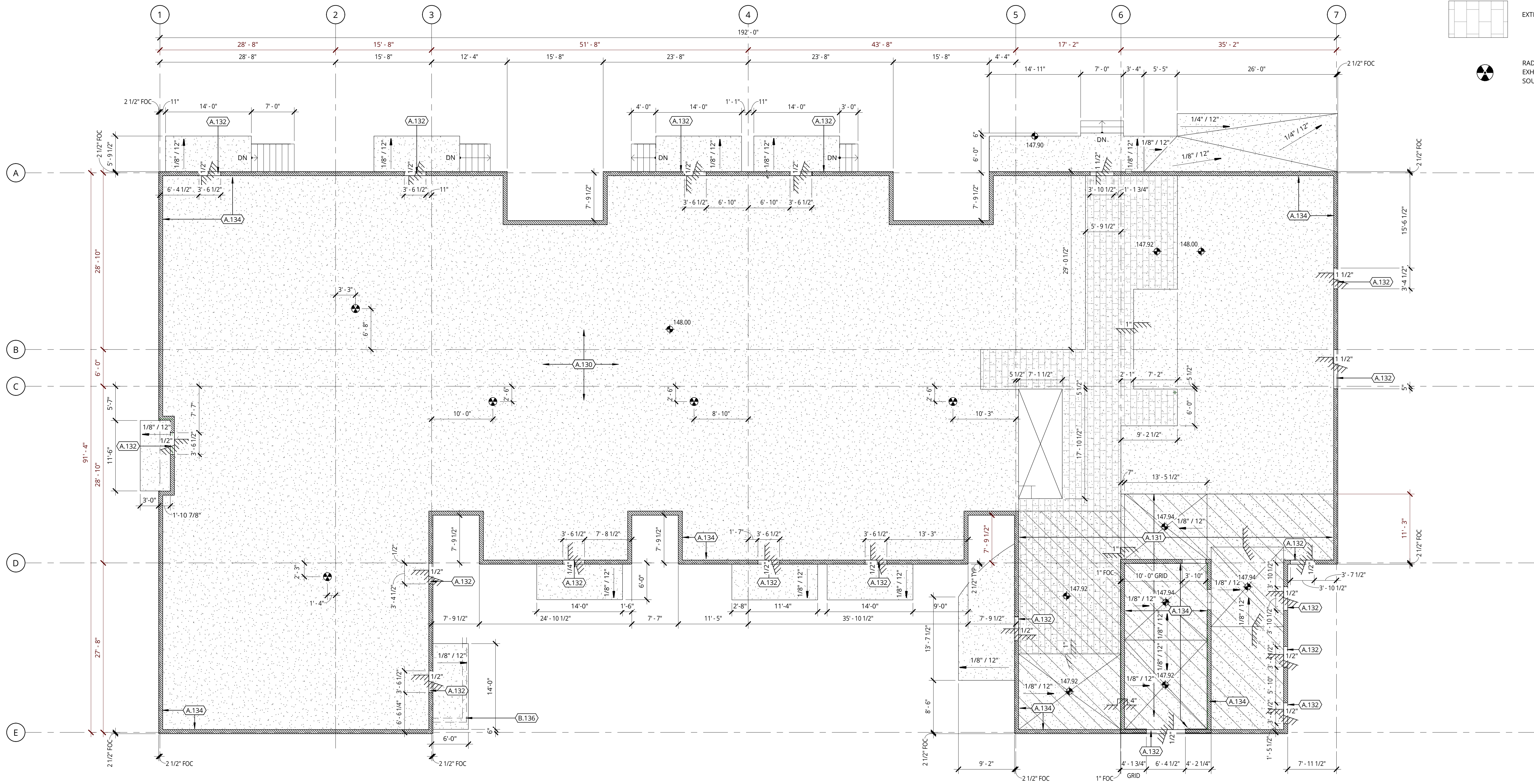


1 ARCHITECTURAL SITE PLAN

1/16" = 1'-0"







1 LEVEL 1 SLAB PLAN  
1/8" = 1'-0"

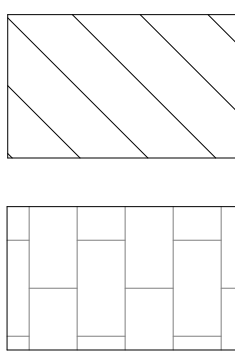
GENERAL NOTES

1. REFER TO SHEET G0.02 FOR 'PROJECT NOTES' APPLICABLE TO ALL PORTIONS OF THE WORK.
2. PRIOR TO FRAMING VERIFY THAT FINAL APPLIANCE AND PLUMBING FIXTURE SIZES/CLEARANCES MATCH THOSE USED AS BASIS OF DESIGN SHOWN ON DRAWING G5.01.
3. REFERENCE SLAB PLANS FOR CONCRETE WALL LOCATIONS, UNO. COORDINATE WITH STRUCTURAL DRAWINGS.
4. SEE SHEETS A0.11 & A0.21 FOR WALL ASSEMBLIES.
5. SEE SHEET A0.41 FOR TYPICAL FRAMING AND ACOUSTICAL DETAILS.
6. SEE FIRE/LIFE SAFETY SHEETS BEGINNING ON G2.00 FOR LOCATIONS OF FIRE EXTINGUISHER CABINETS.
7. SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.
8. REFER TO STRUCTURAL DRAWINGS FOR COLUMNS, SHEAR WALL AND BEAM SIZES.

KEYED NOTES

- A.130 5" SLAB ON GRADE, TYP UON. SEE ASSEMBLY 3A/A0.31  
A.131 6" SLAB ON GRADE, SEE ASSEMBLY 3A/A0.31  
A.132 1/2" CONCRETE RECESS AT DOOR  
A.134 8"W X 4"H CONCRETE CURB  
B.136 STEM WALL W/ FOOTING AT CONCRETE SLAB ABOVE GRADE

LEGEND



RADON REDUCTION SYSTEM. PROVIDE SUBSLAB SOIL EXHAUST SYSTEM DUCTS PER OSSC 1811 WITH POWER SOURCE AT EA ROOF TERMINATION.



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PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

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LEVEL 1 SLAB PLAN

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A2.00





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REVISION	DATE	REASON FOR ISSUE

LEVEL 1 OVERALL  
FLOOR PLAN

PERMIT / GMP

DATE 17 OCT 2018	PROJECT NUMBER 149000
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SHEET NUMBER

A2.01

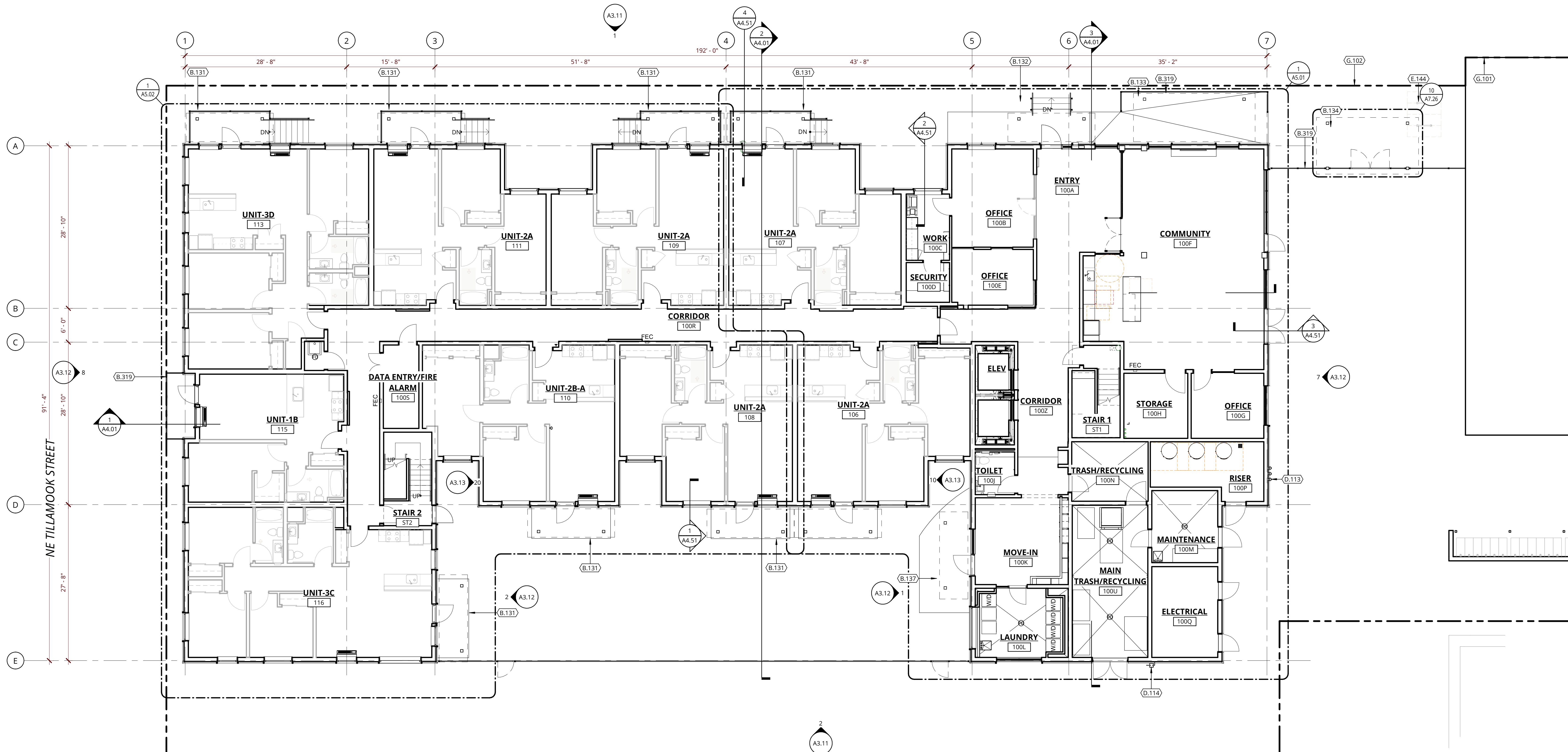
GENERAL NOTES

- REFER TO SHEET G0.01 AND G0.02 FOR GENERAL NOTES APPLICABLE TO ALL PORTIONS OF THE WORK.
- SEE SHEETS A0.11 & A0.21 FOR WALL ASSEMBLIES.
- SEE SHEET A0.31 FOR FLOOR/CEILING AND ROOF ASSEMBLIES.
- SEE SHEET A0.41 FOR TYPICAL FRAMING AND ACOUSTICAL DETAILS.
- SEE SHEET A0.42 FOR AIR BARRIER CONTINUITY DIAGRAM
- SEE FIRE/LIFE SAFETY SHEETS BEGINNING ON G2.02 FOR LOCATIONS OF FIRE EXTINGUISHER CABINETS.
- SEE ENLARGED PLANS BEGINNING ON A5.01 FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.
- PRIOR TO FRAMING VERIFY THAT FINAL APPLIANCE AND PLUMBING FIXTURE SIZES/CLEARANCES MATCH THOSE USED AS BASIS OF DESIGN SHOWN ON DRAWING A10.10.
- REFERENCE SLAB PLANS FOR CONCRETE WALL CURB LOCATIONS, UNO. COORDINATE WITH STRUCTURAL DRAWINGS.
- REFER TO STRUCTURAL DRAWINGS FOR COLUMNS, SHEAR WALL AND BEAM SIZES.

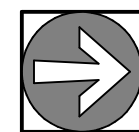
KEYED NOTES

- B.131 TRELLIS TYPE A (11/A7.26)  
B.132 TRELLIS TYPE B (4/A7.26)  
B.133 TRELLIS TYPE C (7/A7.26)  
B.134 TRELLIS TYPE D (10/A7.26)  
B.137 TRELLIS TYPE A-R (10/A7.26)  
B.319 DECORATIVE METAL FENCES AND GATES (32 31 19)  
D.113 WATER HEATER VENT  
D.114 GAS METER  
E.144 BICYCLE RACKS  
G.101 EXISTING BUILDING TO REMAIN  
G.102 PROPERTY LINE

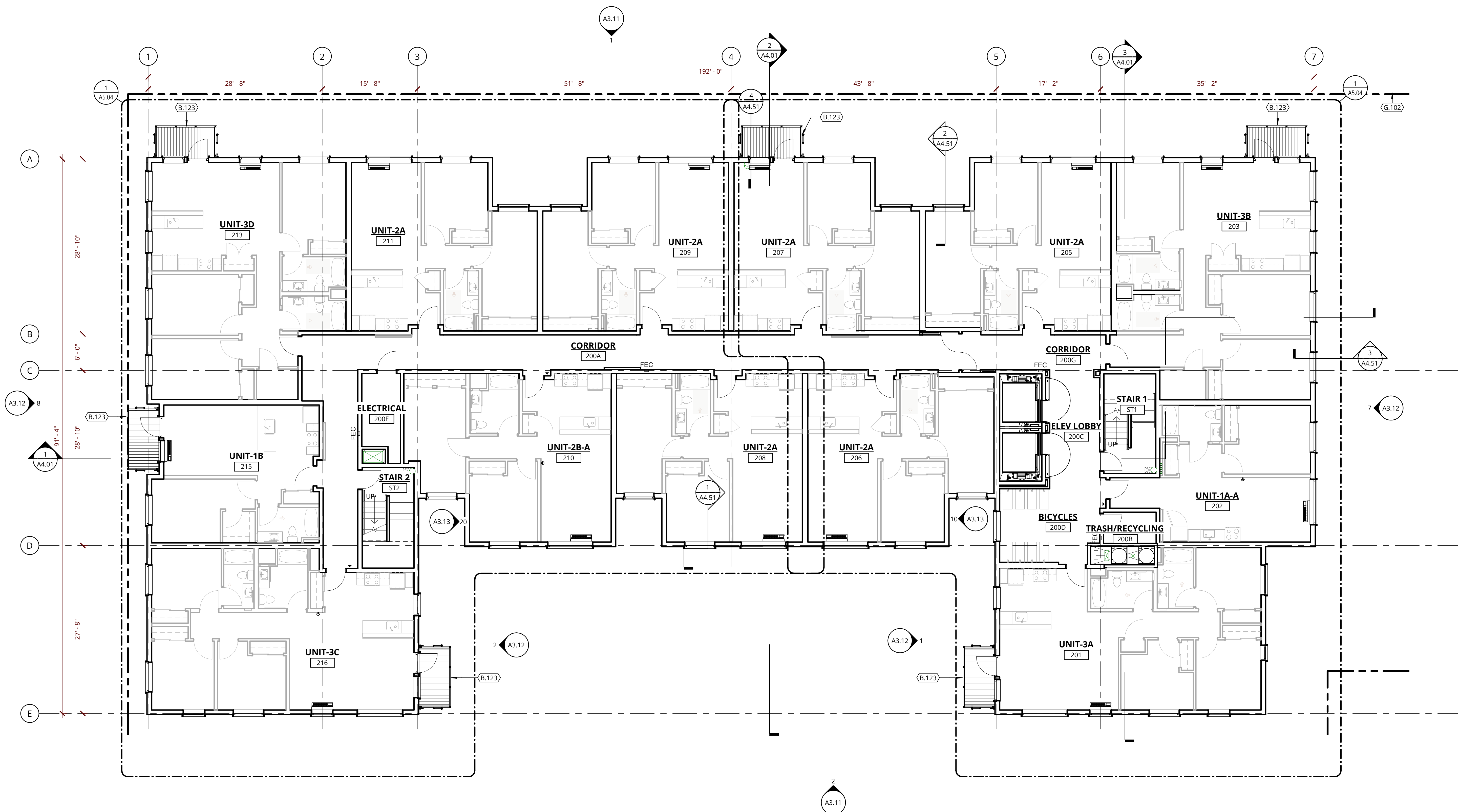
N WILLIAMS AVENUE



1 LEVEL 1 OVERALL FLOOR PLAN  
1/8" = 1'-0"







**1** LEVEL 2 OVERALL FLOOR PLAN  
1/8" = 1'-0"

GENERAL NOTES

1. REFER TO SHEET G0.01 AND G0.02 FOR GENERAL NOTES APPLICABLE TO ALL PORTIONS OF THE WORK.
2. SEE SHEETS A0.11 & A0.21 FOR WALL ASSEMBLIES.
3. SEE SHEET A0.31 FOR FLOOR/CEILING AND ROOF ASSEMBLIES.
4. SEE SHEET A0.41 FOR TYPICAL FRAMING AND ACOUSTICAL DETAILS.
5. SEE SHEET A0.42 FOR AIR BARRIER CONTINUITY DIAGRAM
6. SEE FIRE/LIFE SAFETY SHEETS BEGINNING ON G2.02 FOR LOCATIONS OF FIRE EXTINGUISHER CABINETS.
7. SEE ENLARGED PLANS BEGINNING ON A5.01 FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.
8. PRIOR TO FRAMING VERIFY THAT FINAL APPLIANCE AND PLUMBING FIXTURE SIZES/CLEARANCES MATCH THOSE USED AS BASIS OF DESIGN SHOWN ON DRAWING A10.10.
9. REFERENCE SLAB PLANS FOR CONCRETE WALL CURB LOCATIONS, UNO. COORDINATE WITH STRUCTURAL DRAWINGS.
10. REFER TO STRUCTURAL DRAWINGS FOR COLUMNS, SHEAR WALL AND BEAM SIZES.

KEYED NOTES

- B.123 BALCONY WITH STL PICKET GUARDRAIL AND ALUM DECK (A7.23)  
G.102 PROPERTY LINE



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

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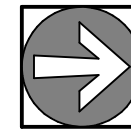
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LEVEL 2 OVERALL  
FLOOR PLAN

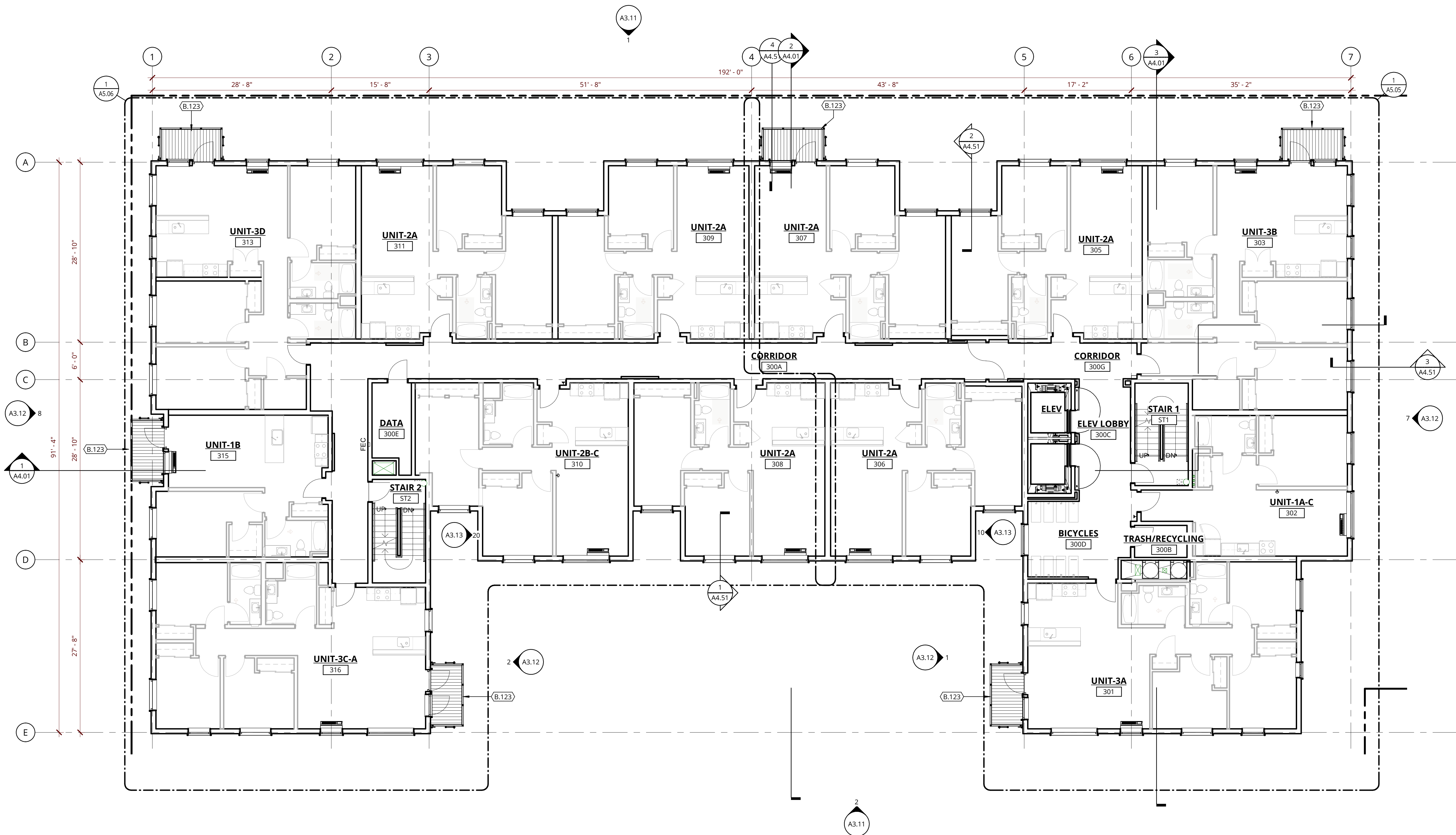
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DATE 17 OCT 2018	PROJECT NUMBER 149000
SHEET NUMBER	

**A2.02**







**1** LEVEL 3 OVERALL FLOOR PLAN  
1/8" = 1'-0"

GENERAL NOTES

1. REFER TO SHEET G0.01 AND G0.02 FOR GENERAL NOTES APPLICABLE TO ALL PORTIONS OF THE WORK.
2. SEE SHEETS A0.11 & A0.21 FOR WALL ASSEMBLIES.
3. SEE SHEET A0.31 FOR FLOOR/CEILING AND ROOF ASSEMBLIES.
4. SEE SHEET A0.41 FOR TYPICAL FRAMING AND ACOUSTICAL DETAILS.
5. SEE SHEET A0.42 FOR AIR BARRIER CONTINUITY DIAGRAM
6. SEE FIRE/LIFE SAFETY SHEETS BEGINNING ON G2.02 FOR LOCATIONS OF FIRE EXTINGUISHER CABINETS.
7. SEE ENLARGED PLANS BEGINNING ON A5.01 FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.
8. PRIOR TO FRAMING VERIFY THAT FINAL APPLIANCE AND PLUMBING FIXTURE SIZES/CLEARANCES MATCH THOSE USED AS BASIS OF DESIGN SHOWN ON DRAWING A10.10.
9. REFERENCE SLAB PLANS FOR CONCRETE WALL CURB LOCATIONS, UNO. COORDINATE WITH STRUCTURAL DRAWINGS.
10. REFER TO STRUCTURAL DRAWINGS FOR COLUMNS, SHEAR WALL AND BEAM SIZES.

KEYED NOTES

- B.123 BALCONY WITH STL PICKET GUARDRAIL AND ALUM DECK (A7.23)



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

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SAN FRANCISCO, CA 94103  
T 415.252.7063

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**NORTH WILLIAMS APARTMENTS - FAMILY HOUSING**

2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

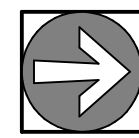
REVISION	DATE	REASON FOR ISSUE

LEVEL 3 OVERALL  
FLOOR PLAN

PERMIT / GMP

DATE 17 OCT 2018	PROJECT NUMBER 149000
SHEET NUMBER	

**A2.03**







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LEVEL 4 OVERALL  
FLOOR PLAN

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17 OCT 2018

PROJECT NUMBER	149000
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SHEET NUMBER

## A2.04

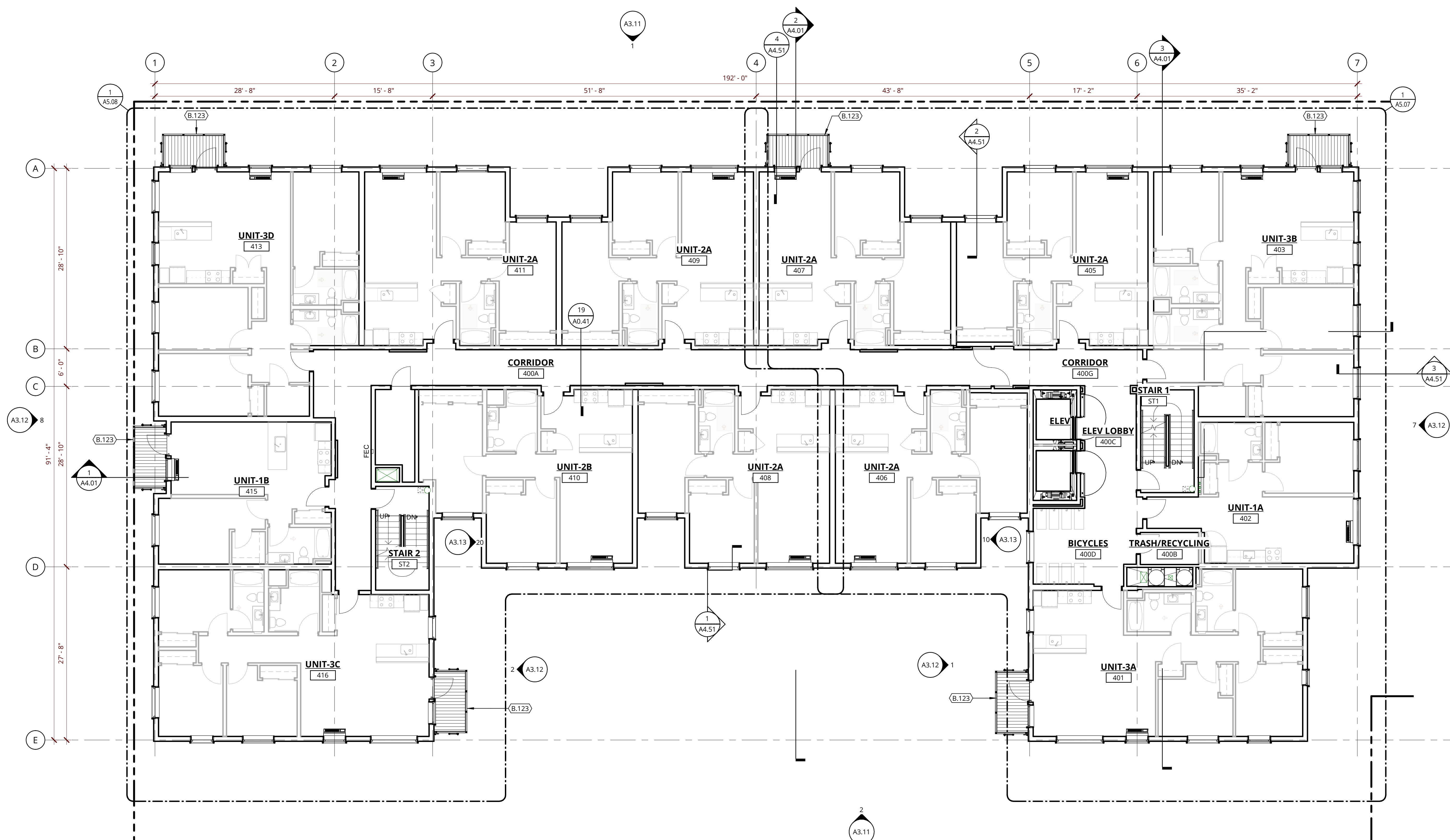


## GENERAL NOTES

1. REFER TO SHEET GQ.01 AND GQ.02 FOR GENERAL NOTES APPLICABLE TO ALL PORTIONS OF THE WORK.
2. SEE SHEETS A0.11 & A0.21 FOR WALL ASSEMBLIES.
3. SEE SHEET A0.31 FOR FLOOR/CEILING AND ROOF ASSEMBLIES.
4. SEE SHEET A0.41 FOR TYPICAL FRAMING AND ACOUSTICAL DETAILS.
5. SEE SHEET A0.42 FOR AIR BARRIER CONTINUITY DIAGRAM
6. SEE FIRE/LIFE SAFETY SHEETS BEGINNING ON G2.02 FOR LOCATIONS OF FIRE EXTINGUISHER CABINETS.
7. SEE ENLARGED PLANS BEGINNING ON A5.01 FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.
8. PRIOR TO FRAMING VERIFY THAT FINAL APPLIANCE AND PLUMBING FIXTURE SIZES/CLEARANCES MATCH THOSE USED AS BASIS OF DESIGN SHOWN ON DRAWING A10.10.
9. REFERENCE SLAB PLANS FOR CONCRETE WALL CURB LOCATIONS, UNO, COORDINATE WITH STRUCTURAL DRAWINGS.
10. REFER TO STRUCTURAL DRAWINGS FOR COLUMNS, SHEAR WALL AND BEAM SIZES.

## KEYED NOTES

- B.123 BALCONY WITH STL PICKET  
GUARDRAIL AND ALUM DECK (A7.23)



## 1 LEVEL 4 OVERALL FLOOR PLAN

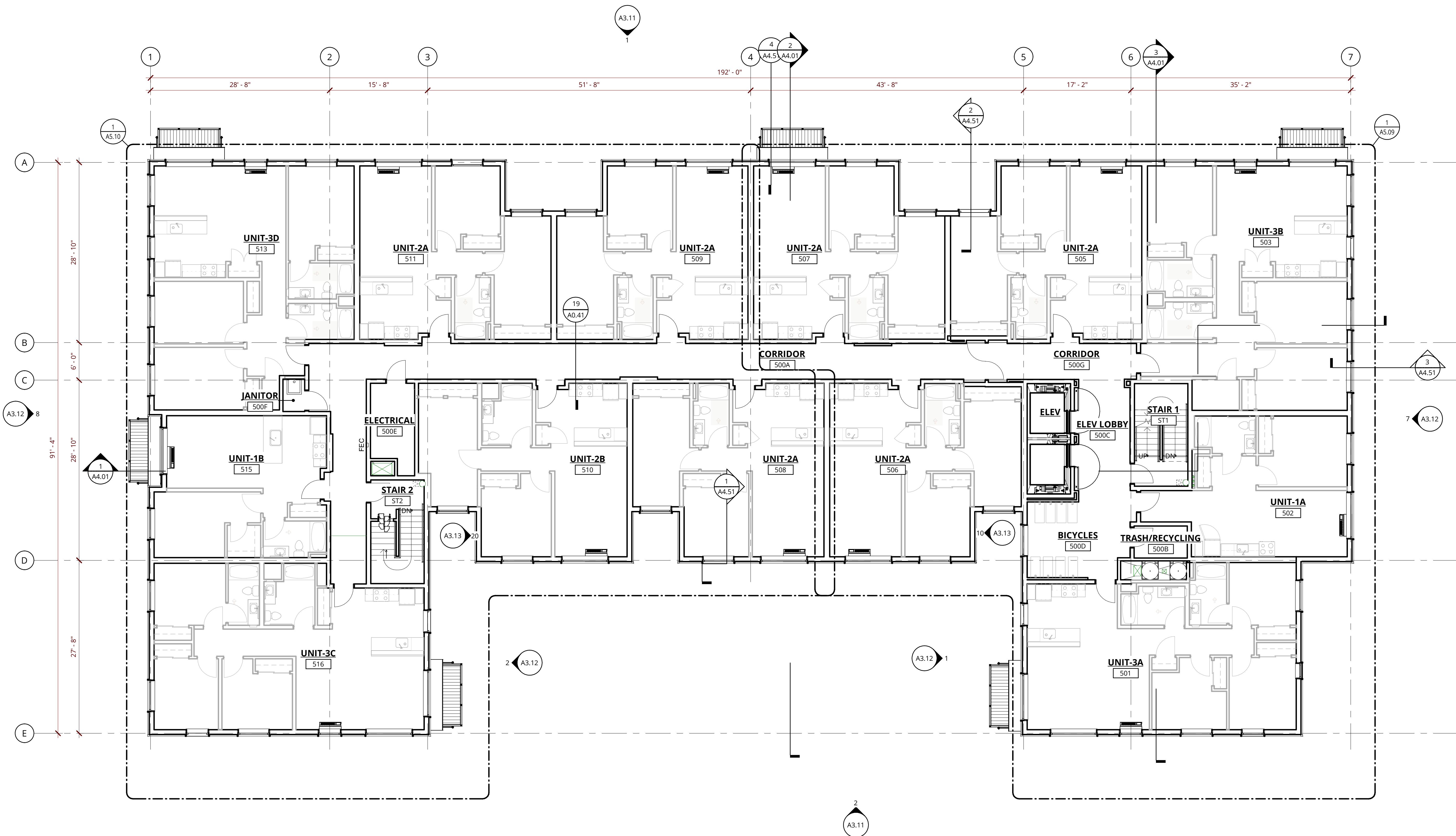
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1/8" = 1':0



10/17/2018 10:27:44 AM

C:\Revt Projects\149000-18 North Williams Arch. Central\149000-18 North Williams Arch. plan\Rev000.rvt



1 LEVEL 5 OVERALL FLOOR PLAN  
1/8" = 1'-0"

GENERAL NOTES

1. REFER TO SHEET G0.01 AND G0.02 FOR GENERAL NOTES APPLICABLE TO ALL PORTIONS OF THE WORK.
2. SEE SHEETS A0.11 & A0.21 FOR WALL ASSEMBLIES.
3. SEE SHEET A0.31 FOR FLOOR/CEILING AND ROOF ASSEMBLIES.
4. SEE SHEET A0.41 FOR TYPICAL FRAMING AND ACOUSTICAL DETAILS.
5. SEE SHEET A0.42 FOR AIR BARRIER CONTINUITY DIAGRAM
6. SEE FIRE/LIFE SAFETY SHEETS BEGINNING ON G2.02 FOR LOCATIONS OF FIRE EXTINGUISHER CABINETS.
7. SEE ENLARGED PLANS BEGINNING ON A5.01 FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.
8. PRIOR TO FRAMING VERIFY THAT FINAL APPLIANCE AND PLUMBING FIXTURE SIZES/CLEARANCES MATCH THOSE USED AS BASIS OF DESIGN SHOWN ON DRAWING A10.10.
9. REFERENCE SLAB PLANS FOR CONCRETE WALL CURB LOCATIONS, UNO. COORDINATE WITH STRUCTURAL DRAWINGS.
10. REFER TO STRUCTURAL DRAWINGS FOR COLUMNS, SHEAR WALL AND BEAM SIZES.



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PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
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BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

LEVEL 5 OVERALL  
FLOOR PLAN

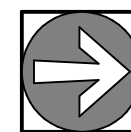
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DATE  
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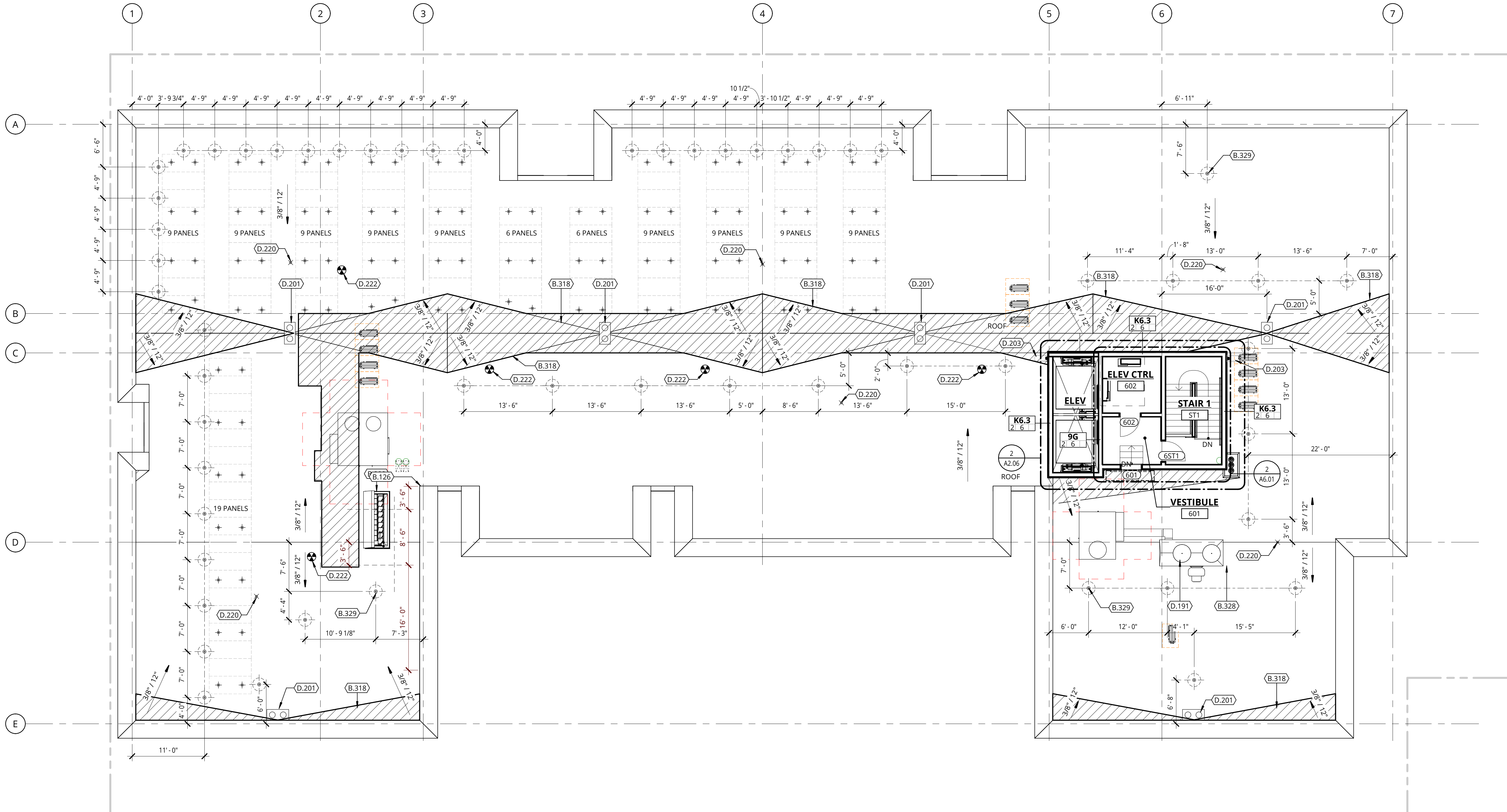
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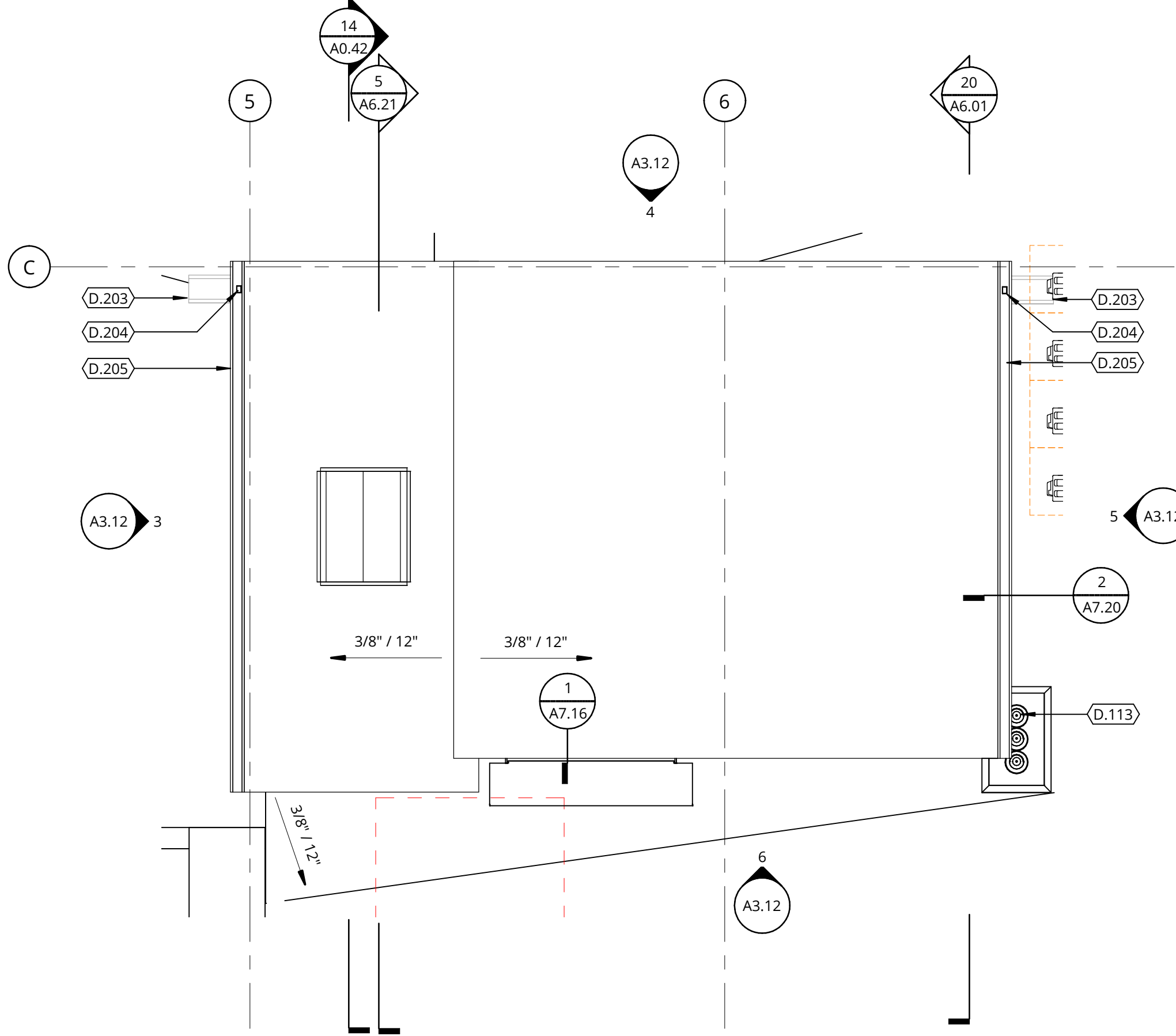
A2.05







1 ROOF PLAN  
1/8" = 1'-0"



2 STAIR 1 ROOF PLAN  
1/4" = 1'-0"

GENERAL NOTES

1. REFER TO SHEET G0.02 FOR 'PROJECT NOTES' APPLICABLE TO ALL PORTIONS OF THE WORK.
2. SEE SHEETS A0.11 & A0.21 FOR WALL ASSEMBLIES.
3. SEE SHEET A0.41 FOR TYPICAL FRAMING AND ACOUSTICAL DETAILS.
4. REFER TO STRUCTURAL DRAWINGS FOR COLUMNS, SHEAR WALL AND BEAM SIZES.

KEYED NOTES

- B.126 GUARDRAIL (50 52 13)
- B.318 EXTENT OF TAPERED INSULATION/CRICKET
- B.322 ROOF HATCH (PER OSSC 1019.16.1 AND COP OSSC/6/#4)
- B.328 PREFABRICATED SHEET METAL CHASE CAP WITH RAIN SKIRT AND DRAW BANDS PER SMACNA FIG 8-8A
- B.329 FALL PROTECTION ANCHOR
- D.113 WATER HEATER VENT
- D.191 TRASH/RECYCLING CHUTE
- D.201 ROOF DRAIN AND OVERFLOW DRAIN
- D.203 SPLASH BLOCK
- D.204 SHEET METAL DOWNSPOUT (07 62 00)
- D.205 SHEET METAL GUTTER (07 62 00)
- D.220 PLUMBING VENT PENETRATION
- D.222 RADON REDUCTION SYSTEM. PROVIDE SUBSLAB SOIL EXHAUST SYSTEM DUCTS PER OSSC 1811 WITH POWER SOURCE AT EA ROOF TERMINATION

ROOF PLAN MATERIAL LEGEND

- FALL PROTECTION ANCHOR
- ROOF ANCHORS (BASE BID) INSTALL FOR FUTURE SOLAR PHOTOVOLTAIC PANELS
- BUILT-UP TAPERED INSULATION ROOF CRICKETS
- PLUMBING VENT PENETRATION
- RADON REDUCTION SYSTEM TERMINATION



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
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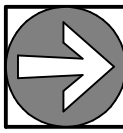
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ROOF PLAN

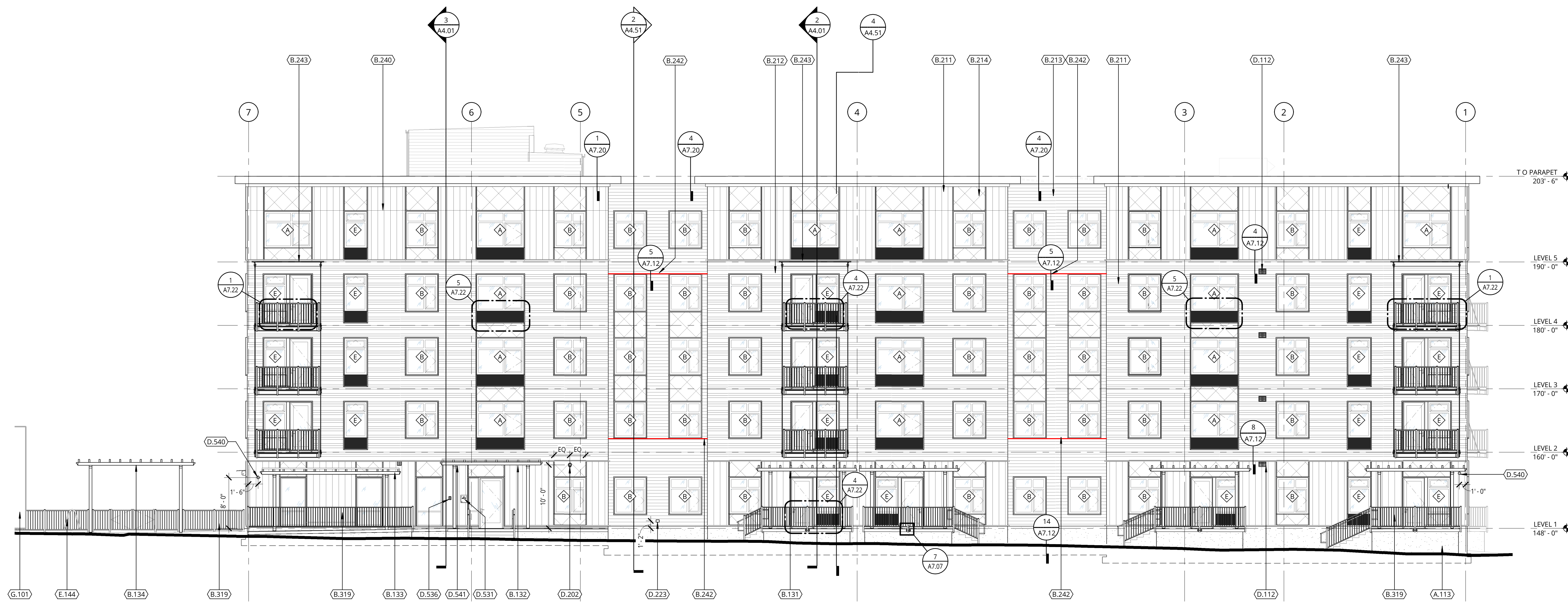
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SHEET NUMBER	

A2.06

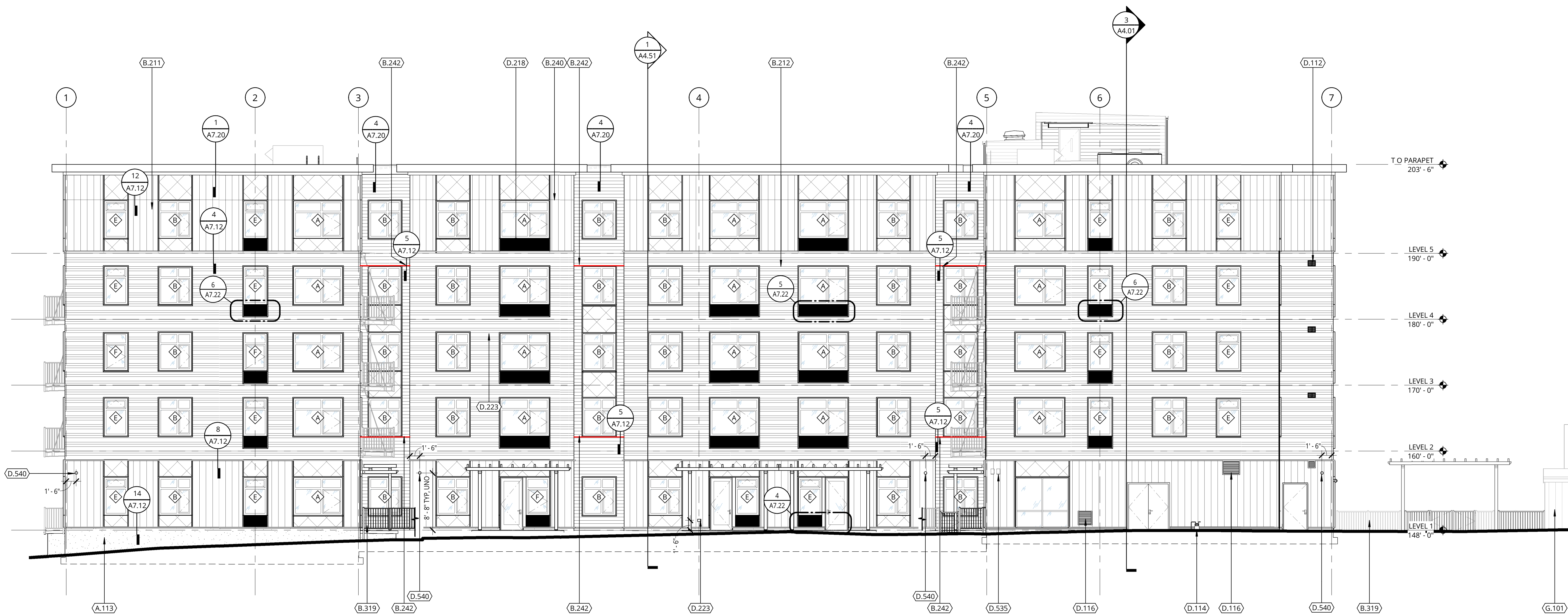






# 1 WEST ELEVATION

1/8" = 1'-0"



# 2 EAST ELEVATION

1/8" = 1'-0"

## GENERAL NOTES

- REFER TO SHEET **60.02** FOR 'PROJECT NOTES' APPLICABLE TO ALL PORTIONS OF THE WORK.
- REFERENCE SLAB PLANS FOR CONCRETE WALL LOCATIONS, UNO. COORDINATE WITH STRUCTURAL DRAWINGS.
- SEE SHEETS **A0.11** & **A0.21** FOR WALL ASSEMBLIES.
- SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.
- REFER TO STRUCTURAL DRAWINGS FOR COLUMNS, SHEAR WALL AND BEAM SIZES.

## KEYED NOTES

- A.113 CONCRETE STEM WALL/CURB  
 B.131 TRELLIS TYPE A (1/A7.26)  
 B.132 TRELLIS TYPE B (4/A7.26)  
 B.133 TRELLIS TYPE C (7/A7.26)  
 B.134 TRELLIS TYPE D (10/A7.26)  
 B.211 FIBER CEMENT PANEL SIDING TYPE FCP-1  
 B.212 FIBER CEMENT PANEL SIDING TYPE FCP-2  
 B.213 FIBER CEMENT PANEL SIDING TYPE FCP-3  
 B.214 FIBER CEMENT PANEL SIDING TYPE FCP-4  
 B.240 JOINT AT FCP-1, ALIGN WITH WINDOW HEAD, TYP  
 B.242 SHEET METAL THRU-WALL FLASHING (07 62 00)  
 B.243 BROW OVERHANG AT LEVEL 4 BALCONY, TYP  
 B.319 DECORATIVE METAL FENCES AND GATES (32 31 19)  
 D.112 EXHAUST VENT, ALIGN VERTICALLY, TYP  
 D.114 GAS METER  
 D.116 LOUVER, SEE MECHANICAL  
 D.202 OVERFLOW SPOUT  
 D.218 ARCHITECTURAL GRILLE  
 D.223 HOSE BIBB LOCATION, SEE PLUMBING PLANS  
 D.531 TWO-WAY COMMUNICATION DEVICE  
 D.535 DRYER EXHAUST VENT  
 D.536 KNOX BOX, (FIREFIGHTER KEY BOX)  
 D.540 WALL-MOUNTED CAMERA LOCATION, SEE TECHNOLOGY PLANS  
 D.541 SOFFIT-MOUNTED CAMERA LOCATION, SEE TECHNOLOGY PLANS  
 E.144 BICYCLE RACKS  
 G.101 EXISTING BUILDING TO REMAIN

## LEGEND

- FCP-1:** FIBER CEMENT PANEL WITH VARIED VERTICAL BATTEN TRIM BOARD  
**FCP-2:** FIBER CEMENT LAP SIDING WITH VARIED WIDTH LAP BOARDS  
**FCP-3:** FIBER CEMENT LAP SIDING WITH NON VARIED LAP SIDING  
**FCP-4:** FIBER CEMENT PANEL

## NORTH WILLIAMS APARTMENTS - FAMILY HOUSING

2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

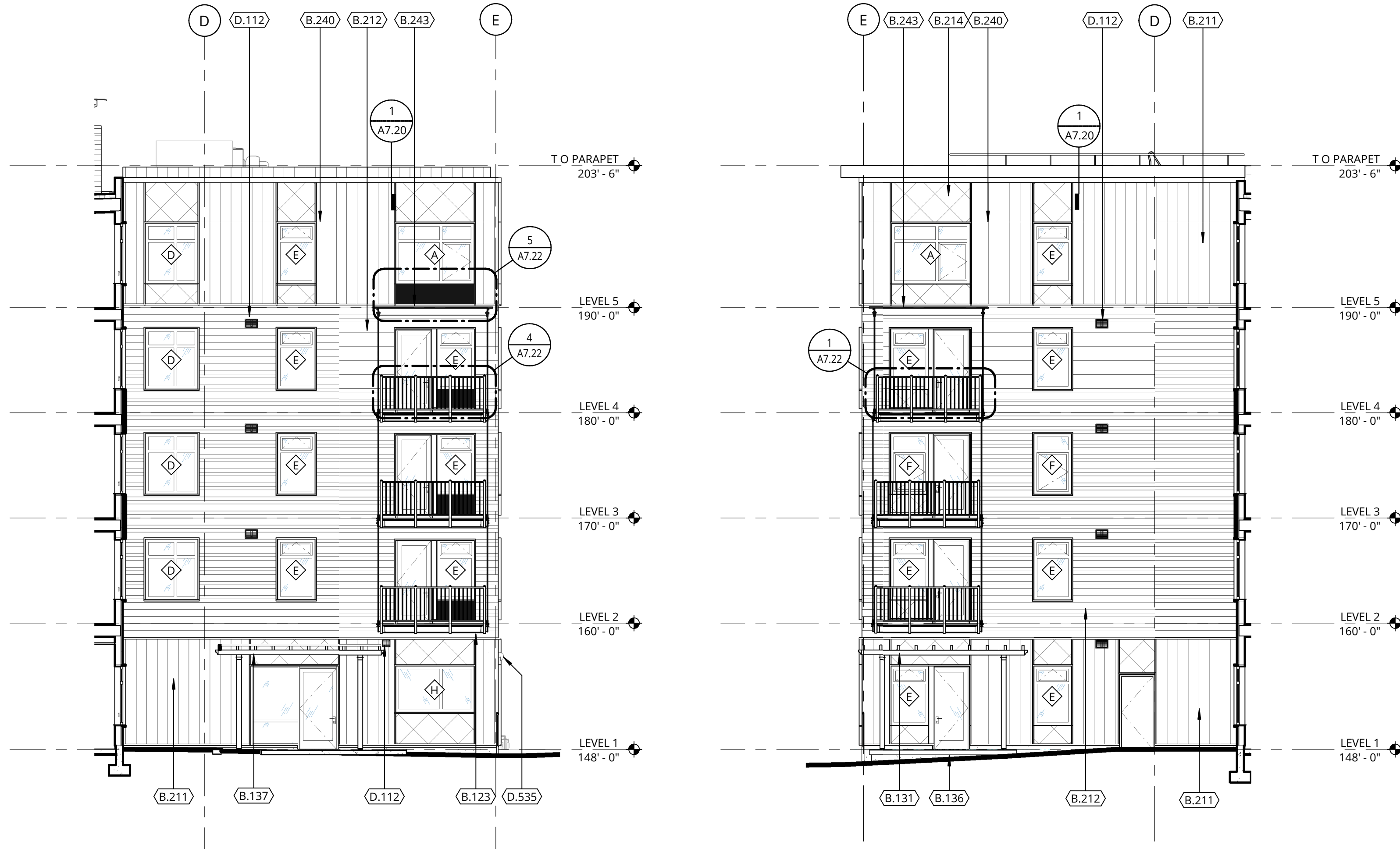
## BUILDING ELEVATIONS

## PERMIT / GMP

DATE	PROJECT NUMBER
17 OCT 2018	149000
SHEET NUMBER	

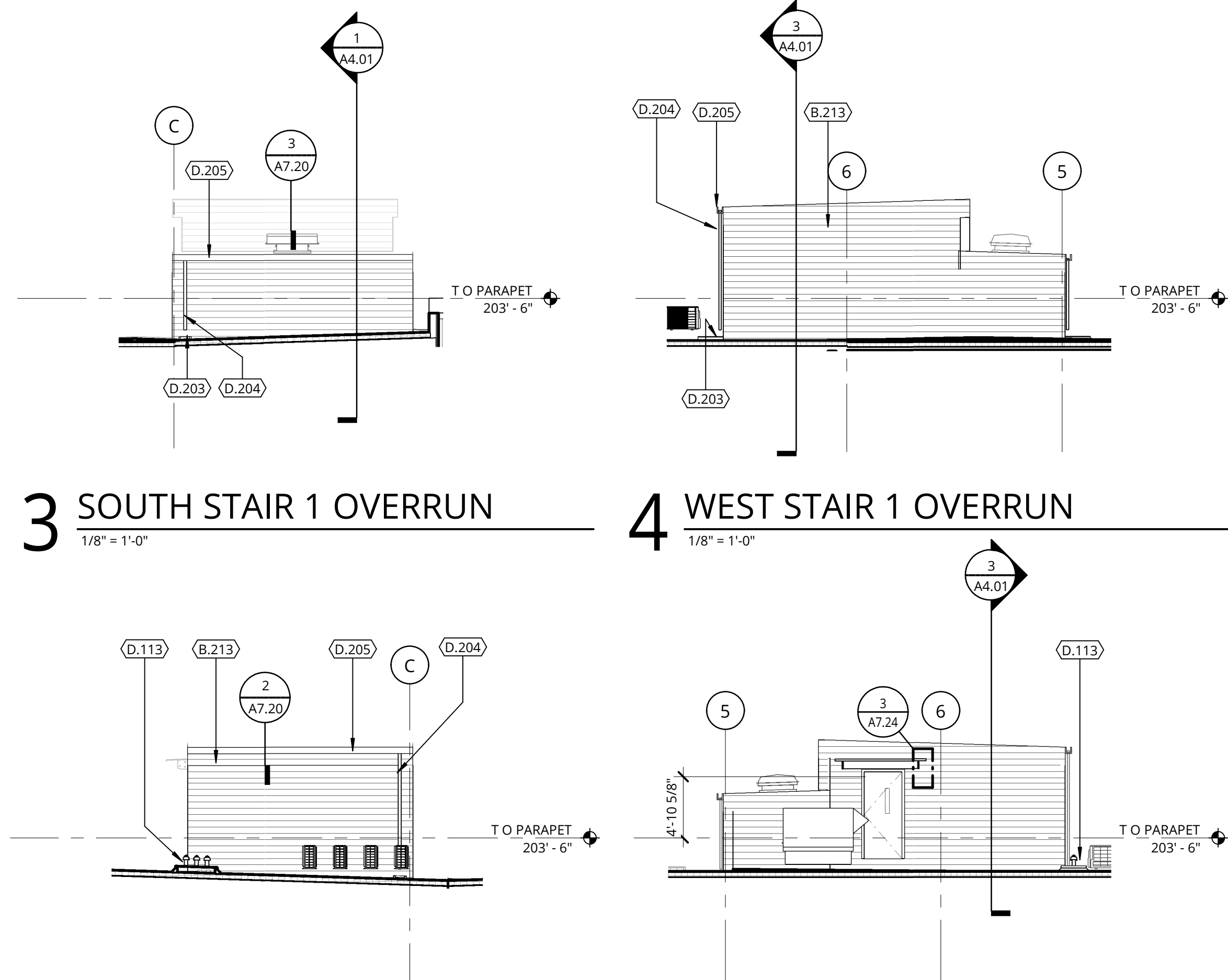
A3.11





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

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



3 SOUTH STAIR 1 OVERRUN  
1/8" = 1'-0"

4 WEST STAIR 1 OVERRUN  
1/8" = 1'-0"

5 NORTH STAIR 1 OVERRUN  
1/8" = 1'-0"

6 EAST STAIR 1 OVERRUN  
1/8" = 1'-0"

GENERAL NOTES

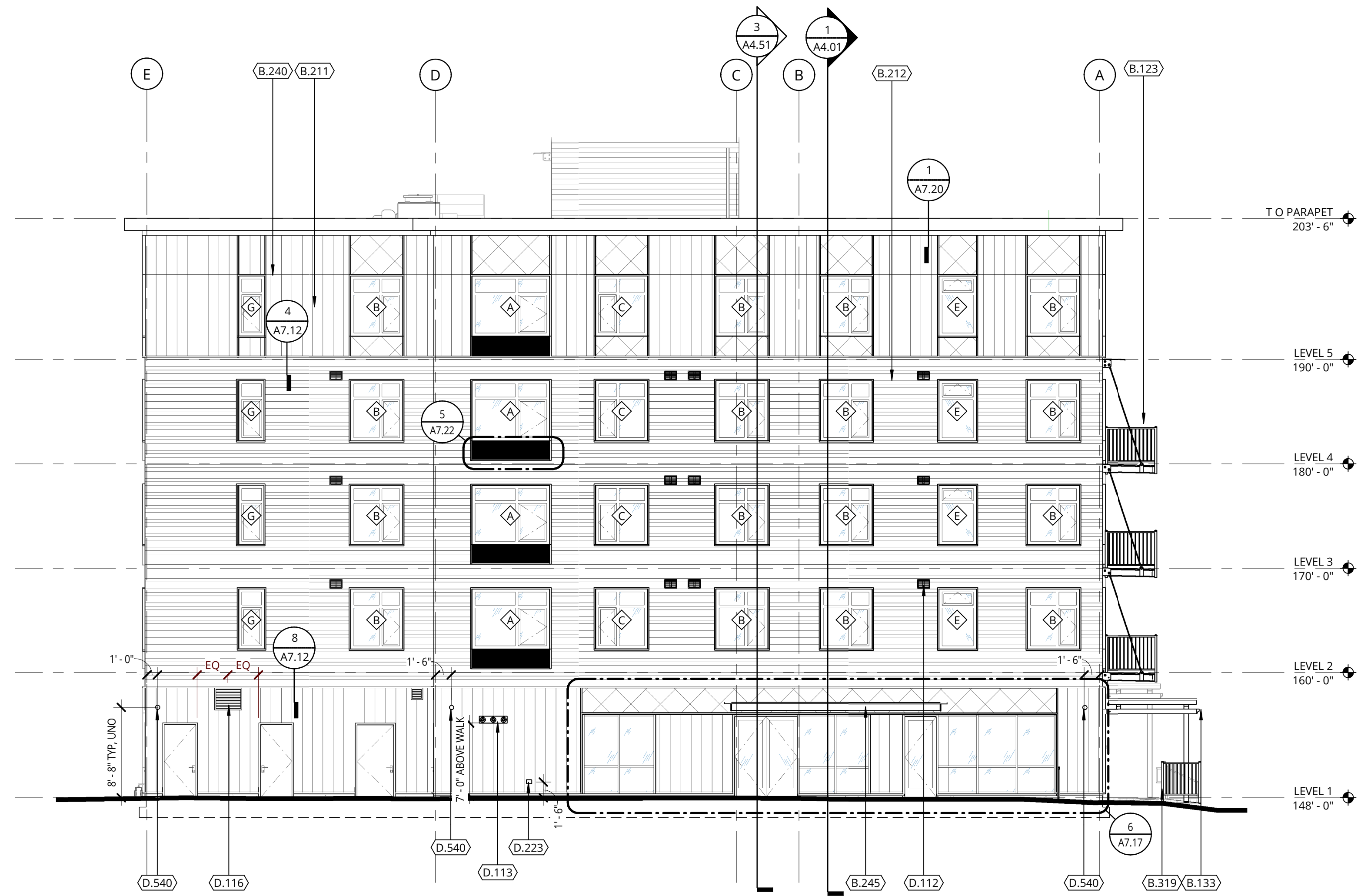
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- REFERENCE SLAB PLANS FOR CONCRETE WALL LOCATIONS, UNO, COORDINATE WITH STRUCTURAL DRAWINGS.
- SEE SHEETS **A0.11 & A0.21** FOR WALL ASSEMBLIES.
- SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.
- REFER TO STRUCTURAL DRAWINGS FOR COLUMNS, SHEAR WALL AND BEAM SIZES.

KEYED NOTES

- A.113 CONCRETE STEM WALL/CURB  
B.123 BALCONY WITH STL PICKET GUARDRAIL AND ALUM DECK (A7.23)  
B.131 TRELLIS TYPE A (7/A7.26)  
B.133 TRELLIS TYPE C (7/A7.26)  
B.136 STEM WALL W/ FOOTING AT CONCRETE SLAB ABOVE GRADE  
B.137 TRELLIS TYPE A+R (10/A7.26)  
B.211 FIBER CEMENT PANEL SIDING TYPE FCP-1  
B.212 FIBER CEMENT PANEL SIDING TYPE FCP-2  
B.213 FIBER CEMENT PANEL SIDING TYPE FCP-3  
B.214 FIBER CEMENT PANEL SIDING TYPE FCP-4  
B.240 JOINT AT FCP-1, ALIGN WITH WINDOW HEAD, TYP  
B.243 BROW OVERHANG AT LEVEL 4 BALCONY, TYP  
B.245 STL BROW OVERHANG  
B.311 ALIGN RAILING POSTS VERTICALLY, TYP  
B.319 DECORATIVE METAL FENCES AND GATES (32 31 19)  
D.112 EXHAUST VENT, ALIGN VERTICALLY, TYP  
D.113 WATER HEATER VENT  
D.116 LOUVER, SEE MECHANICAL  
D.203 SPLASH BLOCK  
D.204 SHEET METAL DOWNSPOUT (07 62 00)  
D.205 SHEET METAL GUTTER (07 62 00)  
D.223 HOSE BIBB LOCATION, SEE PLUMBING PLANS  
D.224 HOSE BIBB LOCATION, SEE PLUMBING PLANS, GC TO COORDINATE  
FIXTURE EMBED AND ROUTING THROUGH CONCRETE STEM WALL  
D.535 DRYER EXHAUST VENT  
D.540 WALL-MOUNTED CAMERA LOCATION, SEE TECHNOLOGY PLANS

LEGEND

- FCP-1: FIBER CEMENT PANEL WITH  
VARIED VERTICAL BATTEN TRIM  
BOARD  
FCP-2: FIBER CEMENT LAP SIDING  
WITH VARIED WIDTH LAP BOARDS  
FCP-3: FIBER CEMENT LAP SIDING  
WITH NON VARIED LAP SIDING  
FCP-4: FIBER CEMENT PANEL



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



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

NORTH WILLIAMS APARTMENTS - FAMILY HOUSING

2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

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DATE 17 OCT 2018	PROJECT NUMBER 149000
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SHEET NUMBER

A3.12

REGISTERED ARCHITECT  
SAC S. JOHNSON  
5082  
KARL JOHNSON  
PORTLAND, OR  
STATE OF OREGON

Ankrom Moisan

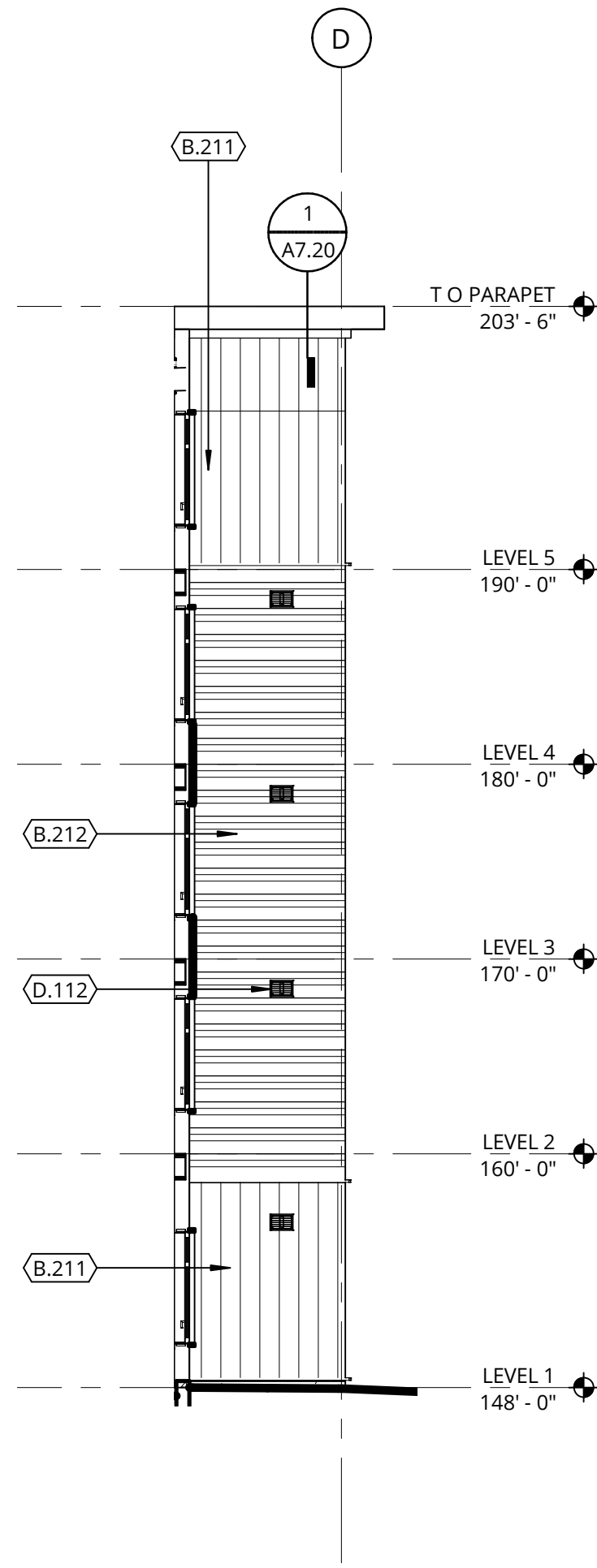
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T 206.576.1600

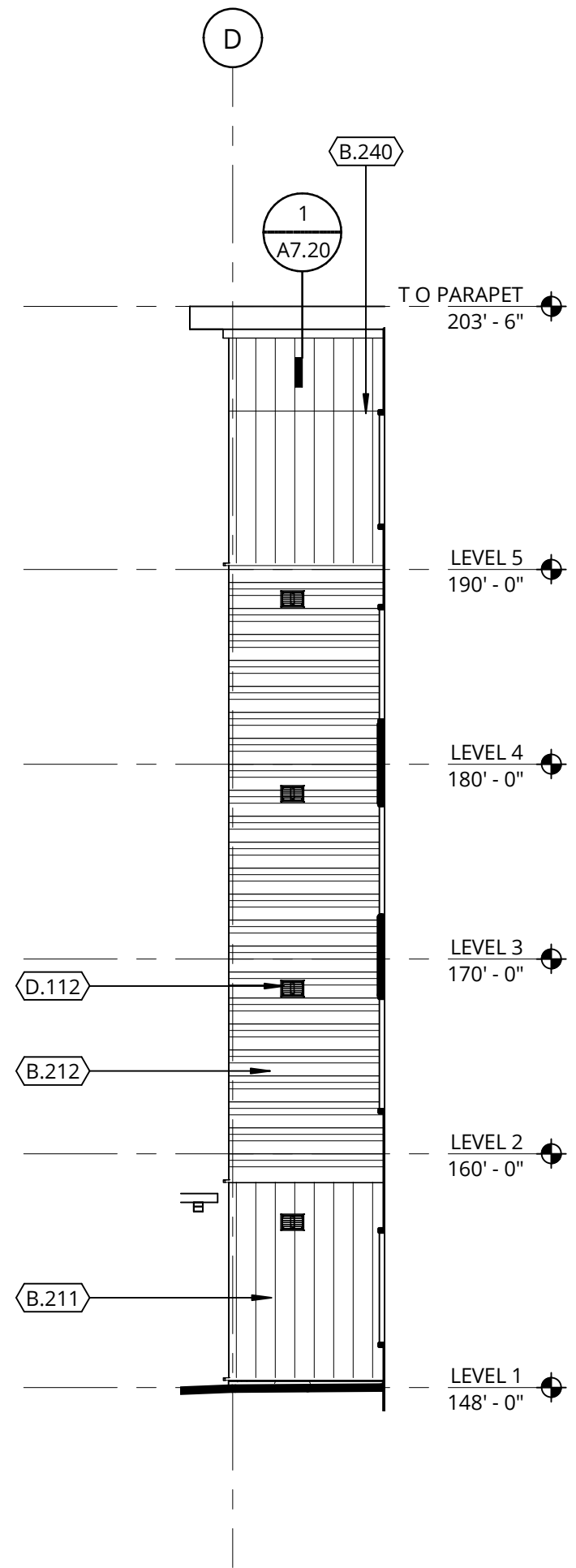
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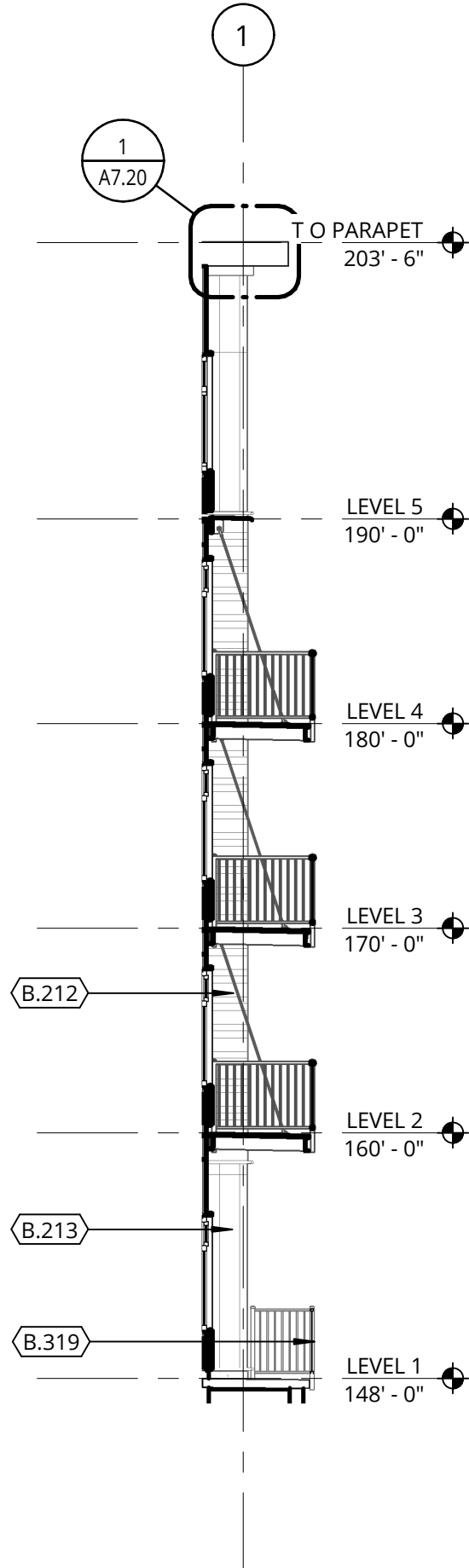




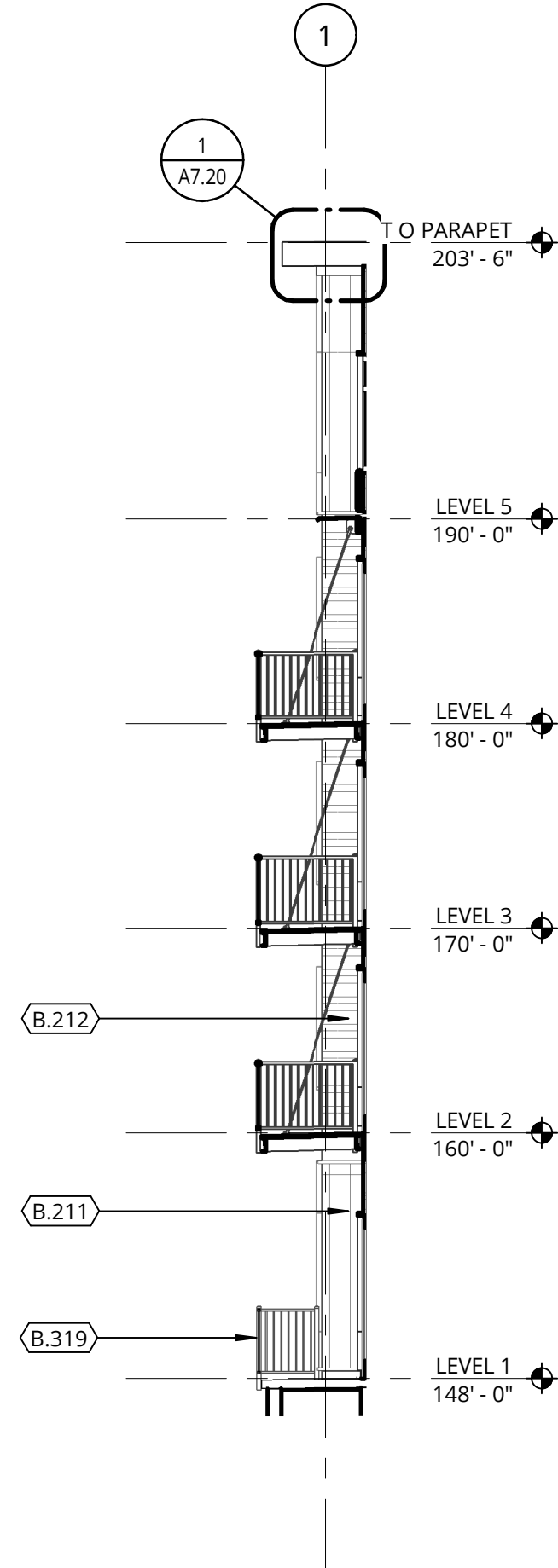
6 ELEVATION GRID 3.8 & D  
1/8" = 1'-0"



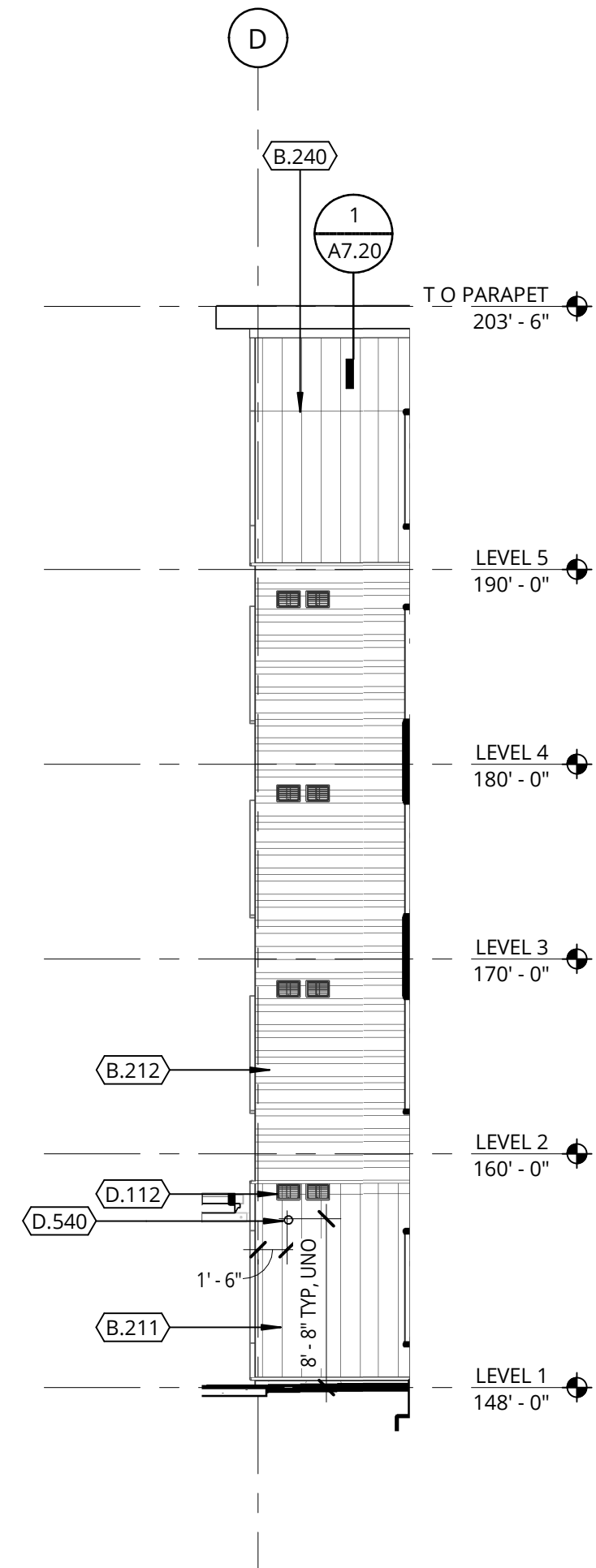
7 ELEVATION GRID 3.6 & D  
1/8" = 1'-0"



8 ELEVATION GRID C.2 & 1  
1/8" = 1'-0"



9 ELEVATION GRID C.6 & 1  
1/8" = 1'-0"



10 ELEVATION GRID 4.8 & D  
1/8" = 1'-0"

GENERAL NOTES

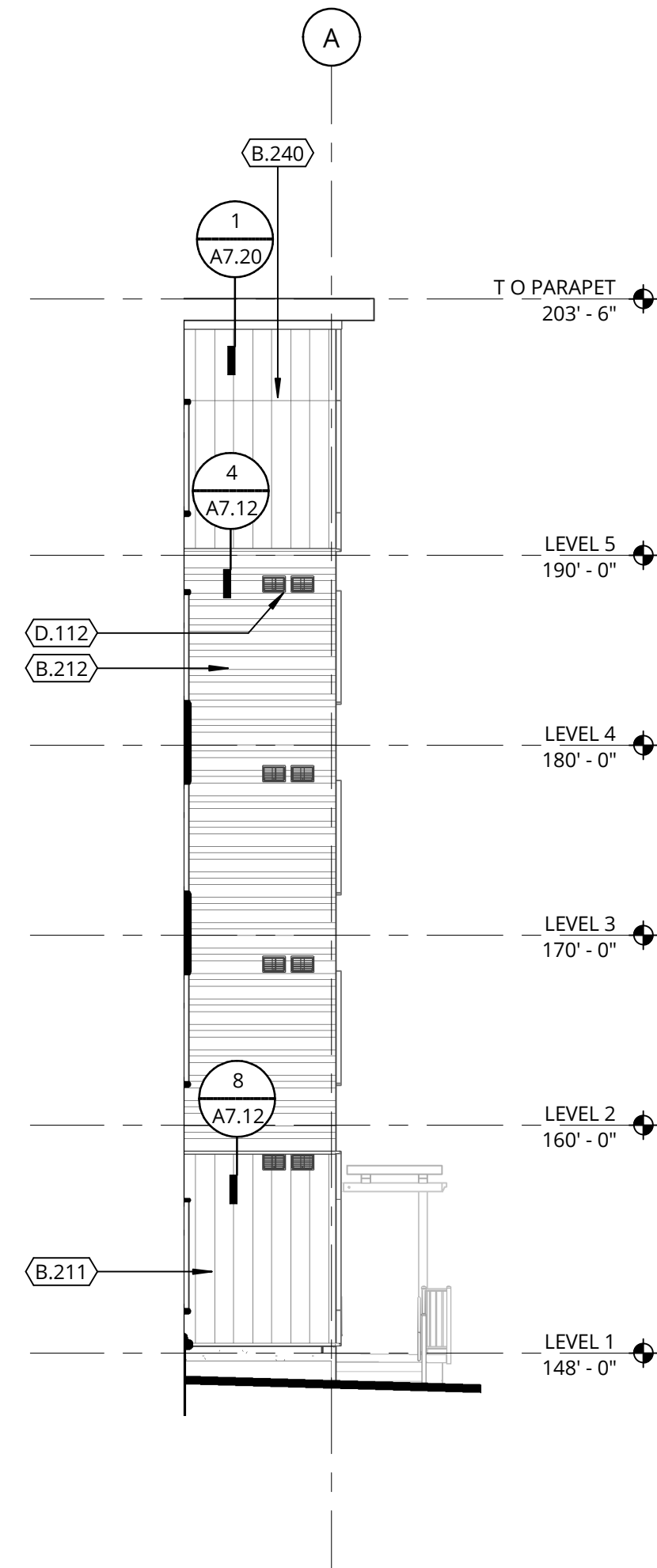
- REFER TO SHEET **60.02** FOR 'PROJECT NOTES' APPLICABLE TO ALL PORTIONS OF THE WORK.
- REFERENCE SLAB PLANS FOR CONCRETE WALL LOCATIONS, UNO. COORDINATE WITH STRUCTURAL DRAWINGS.
- SEE SHEETS **A0.11** & **A0.21** FOR WALL ASSEMBLIES.
- SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.
- REFER TO STRUCTURAL DRAWINGS FOR COLUMNS, SHEAR WALL AND BEAM SIZES.

KEYED NOTES

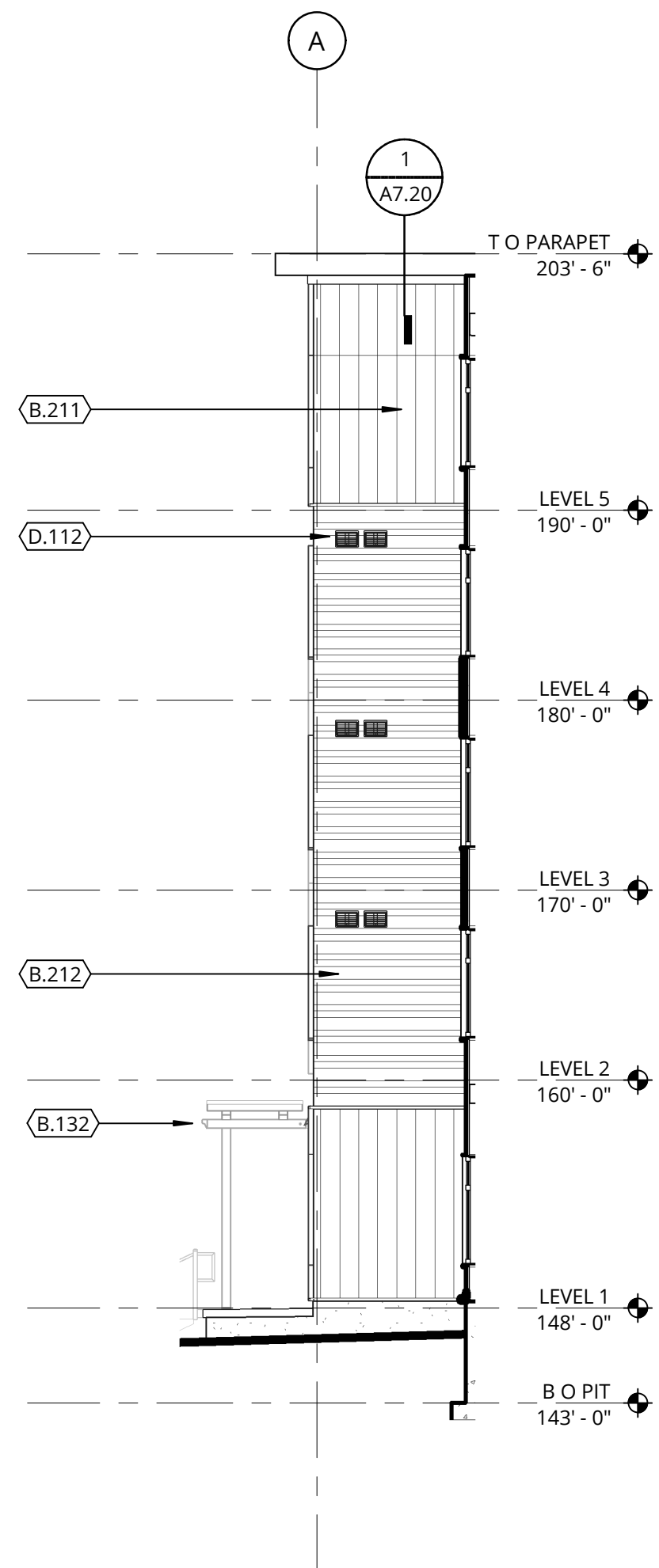
- B.131 TRELLIS TYPE A (1/A7.26)  
B.132 TRELLIS TYPE B (4/A7.26)  
B.211 FIBER CEMENT PANEL SIDING TYPE FCP-1  
B.212 FIBER CEMENT PANEL SIDING TYPE FCP-2  
B.213 FIBER CEMENT PANEL SIDING TYPE FCP-3  
B.240 JOINT AT FCP-1, ALIGN WITH WINDOW HEAD, TYP  
B.319 DECORATIVE METAL FENCES AND GATES (32 31 19)  
D.112 EXHAUST VENT, ALIGN VERTICALLY, TYP  
D.540 WALL-MOUNTED CAMERA LOCATION, SEE TECHNOLOGY PLANS

LEGEND

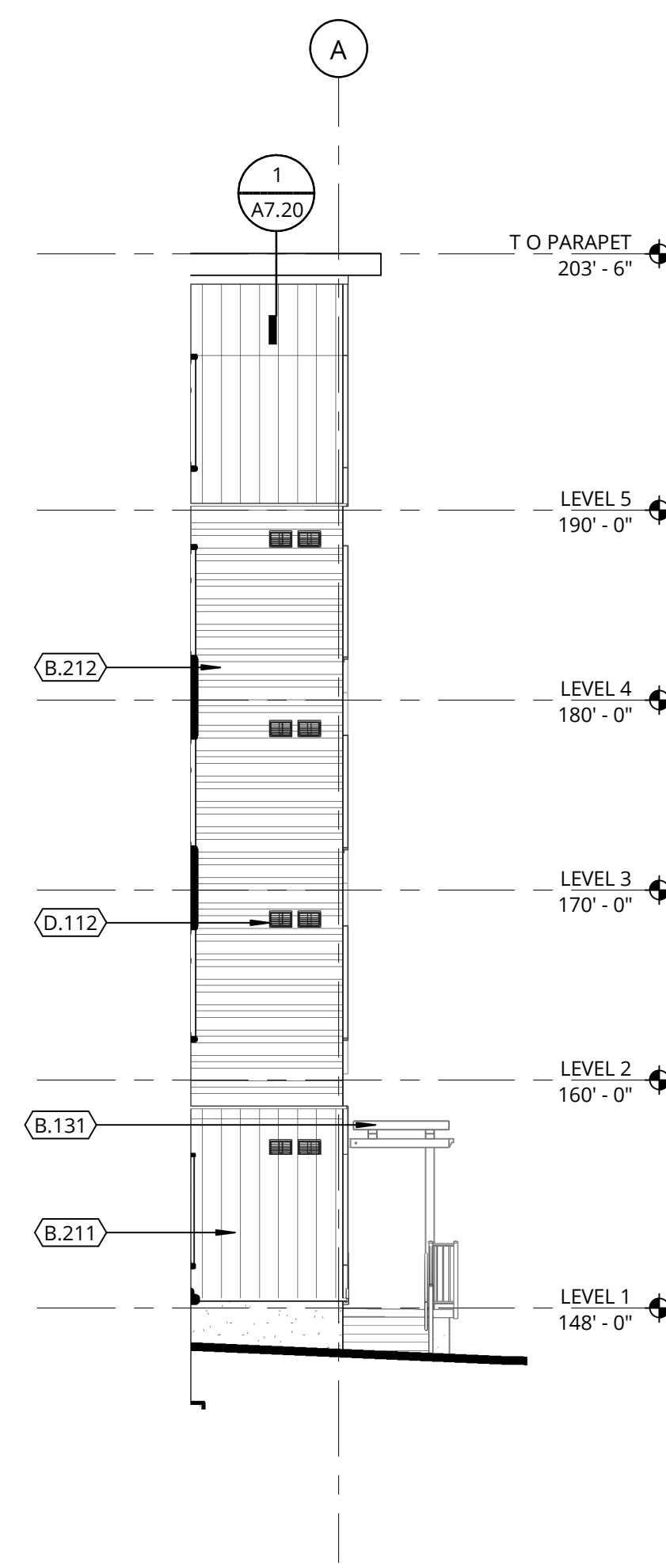
- FCP-1: FIBER CEMENT PANEL WITH VARIED VERTICAL BATTEN TRIM BOARD  
FCP-2: FIBER CEMENT LAP SIDING WITH VARIED WIDTH LAP BOARDS  
FCP-3: FIBER CEMENT LAP SIDING WITH NON VARIED LAP SIDING  
FCP-4: FIBER CEMENT PANEL



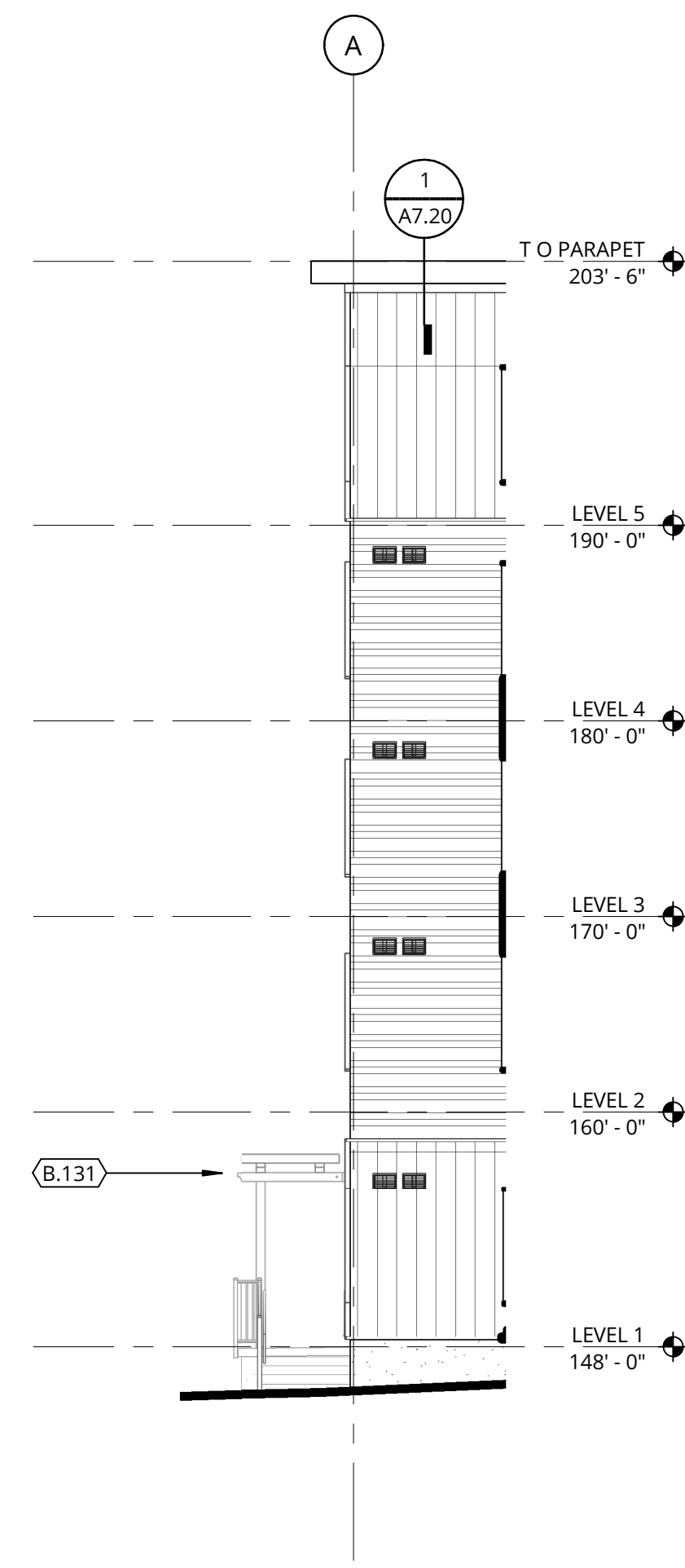
16 ELEVATION GRID 4.5 & A  
1/8" = 1'-0"



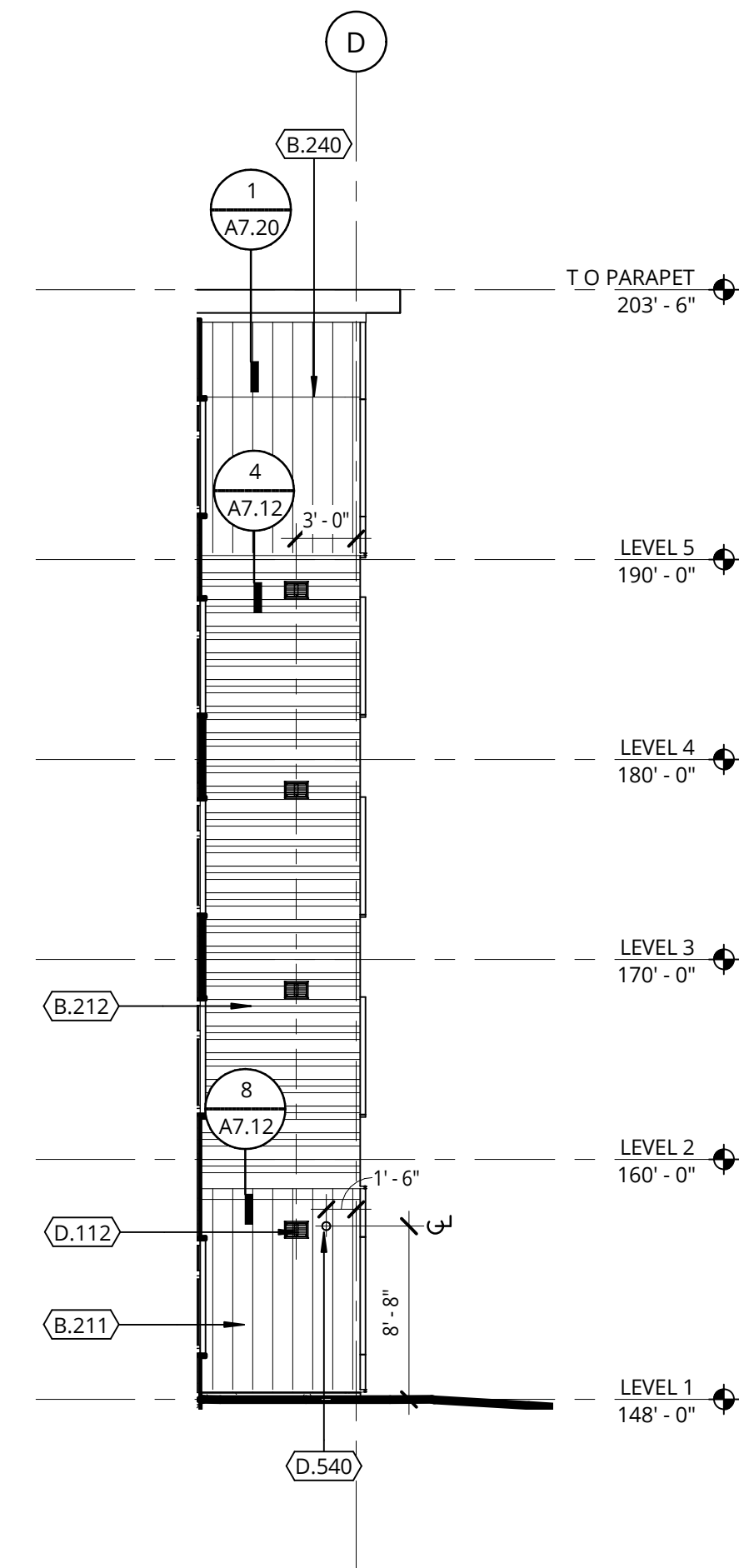
17 ELEVATION GRID 4.9 & A  
1/8" = 1'-0"



18 ELEVATION GRID 3.3 & A  
1/8" = 1'-0"



19 ELEVATION GRID 3.5 & A  
1/8" = 1'-0"



20 ELEVATION GRID 3.2 & D  
1/8" = 1'-0"



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PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

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SAN FRANCISCO, CA 94103  
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BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

BUILDING  
ELEVATIONS

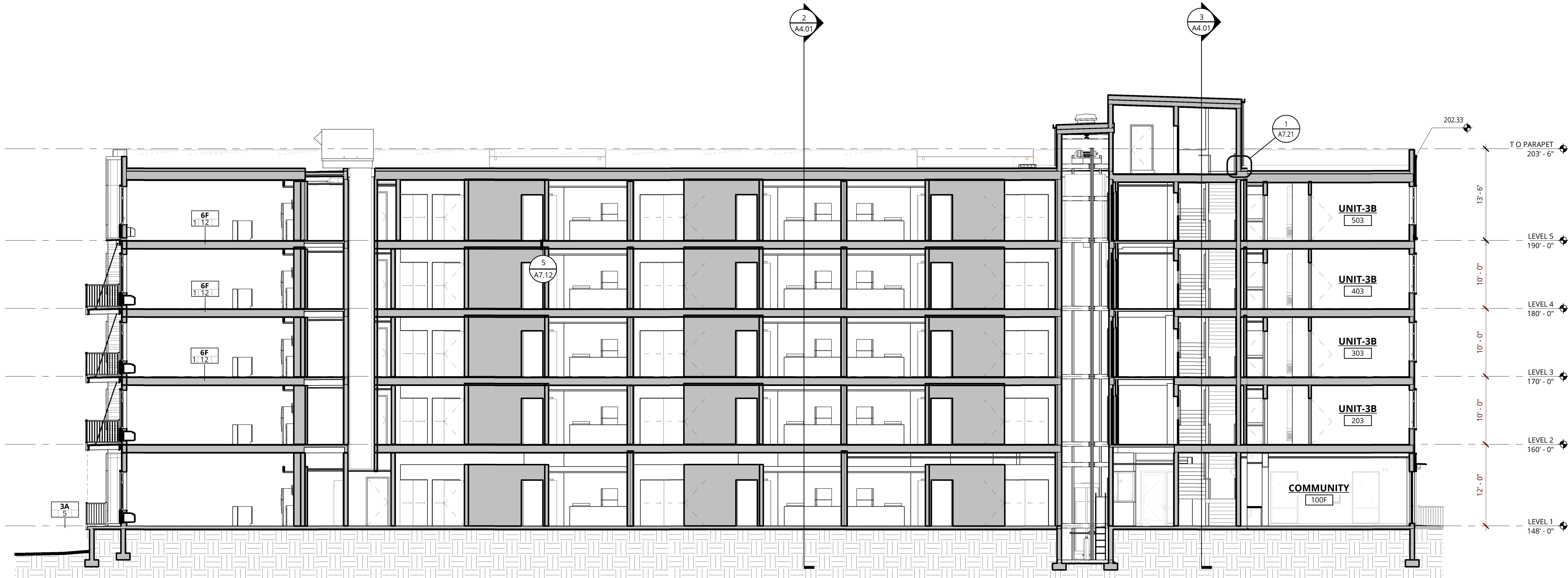
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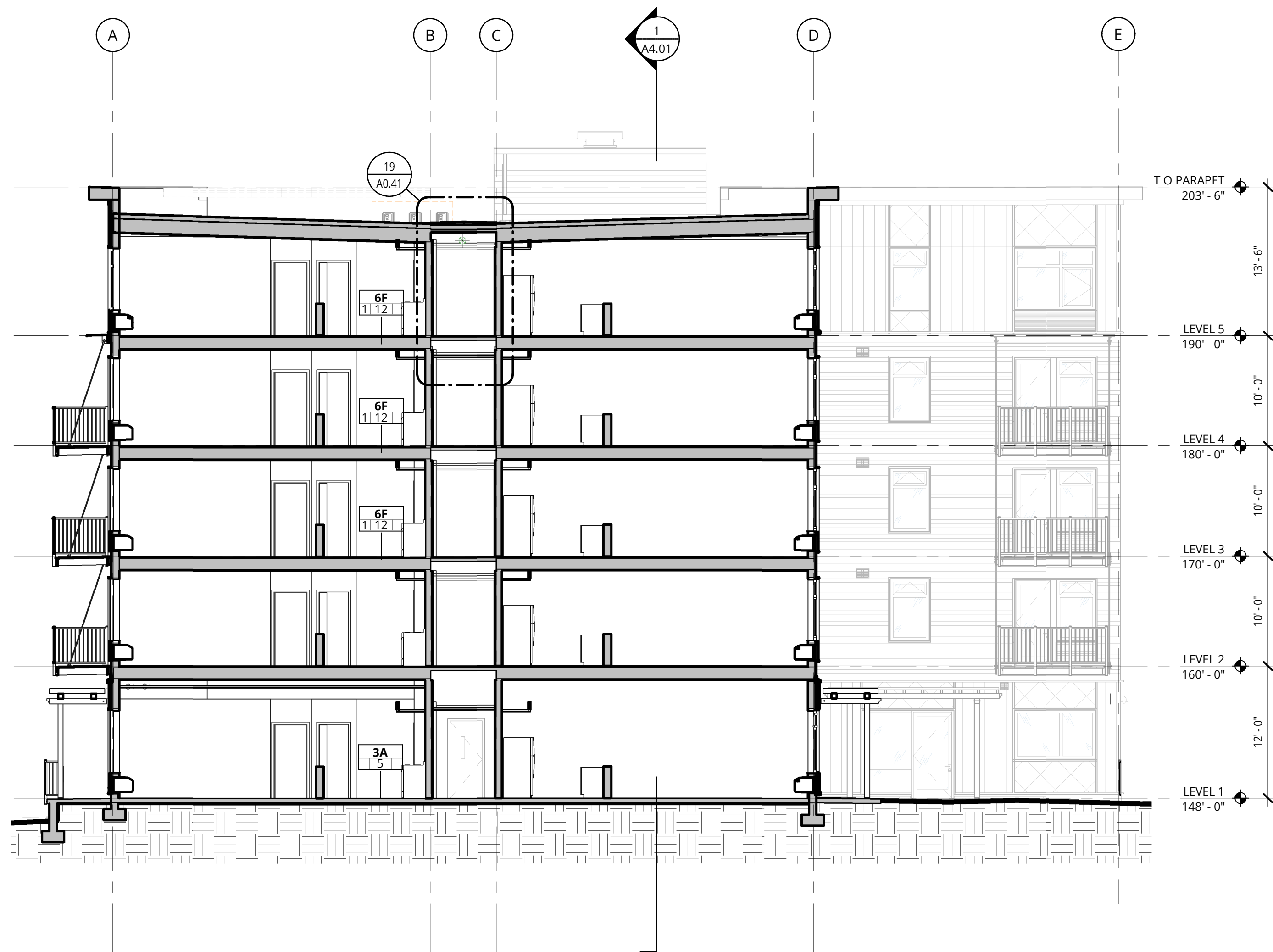
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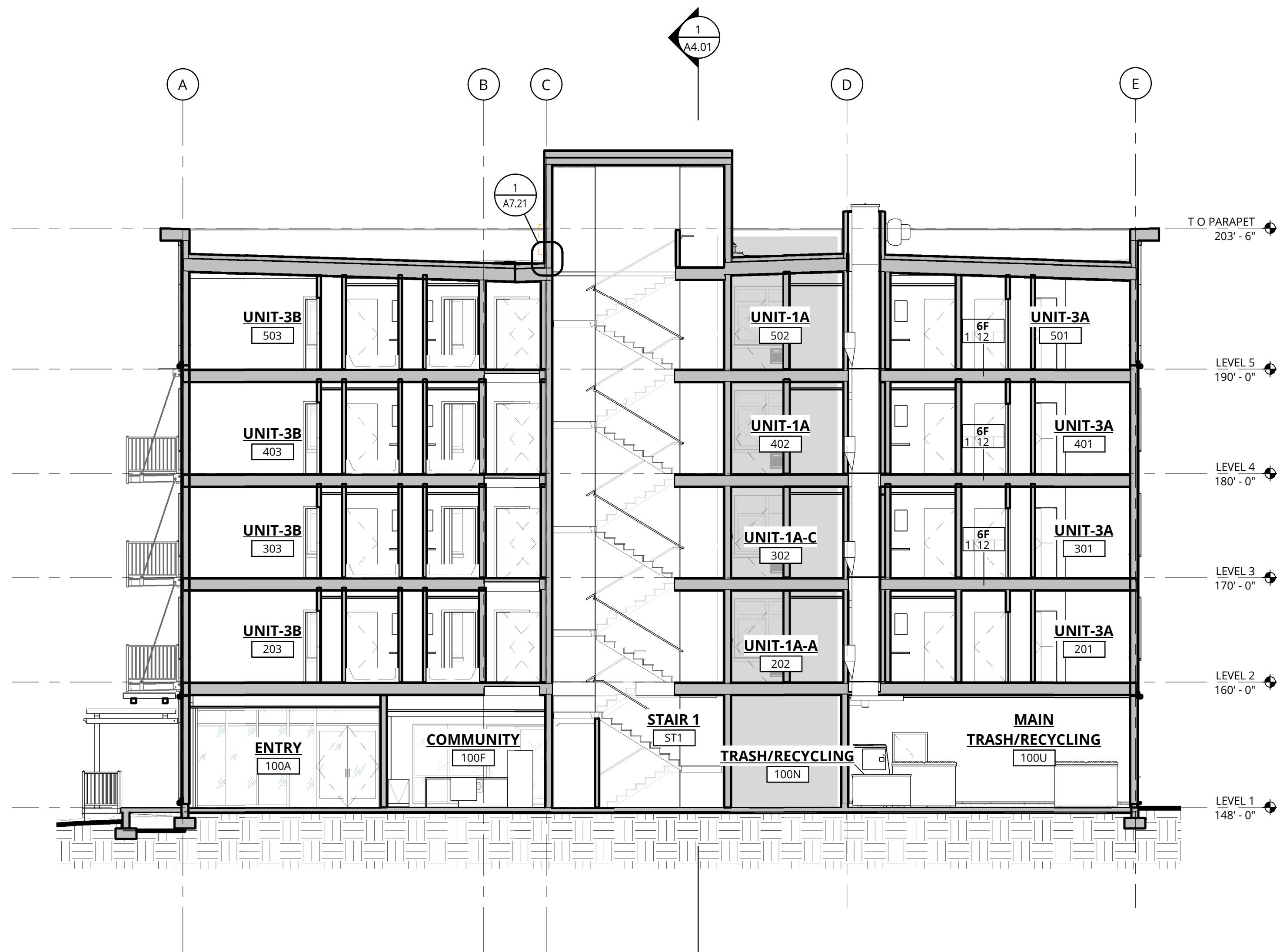




1 BUILDING SECTION  
1/8" = 1'-0"



2 BUILDING SECTION  
1/8" = 1'-0"



3 BUILDING SECTION  
1/8" = 1'-0"

#### GENERAL NOTES

1. REFER TO SHEET G0.02 FOR 'PROJECT NOTES' APPLICABLE TO ALL PORTIONS OF THE WORK.
2. REFERENCE SLAB PLANS FOR CONCRETE WALL LOCATIONS, UNO. COORDINATE WITH STRUCTURAL DRAWINGS.
3. SEE SHEETS A0.11 & A0.21 FOR WALL ASSEMBLIES.
4. SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.
5. REFER TO STRUCTURAL DRAWINGS FOR COLUMNS, SHEAR WALL AND BEAM SIZES.



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#### NORTH WILLIAMS APARTMENTS - FAMILY HOUSING

2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

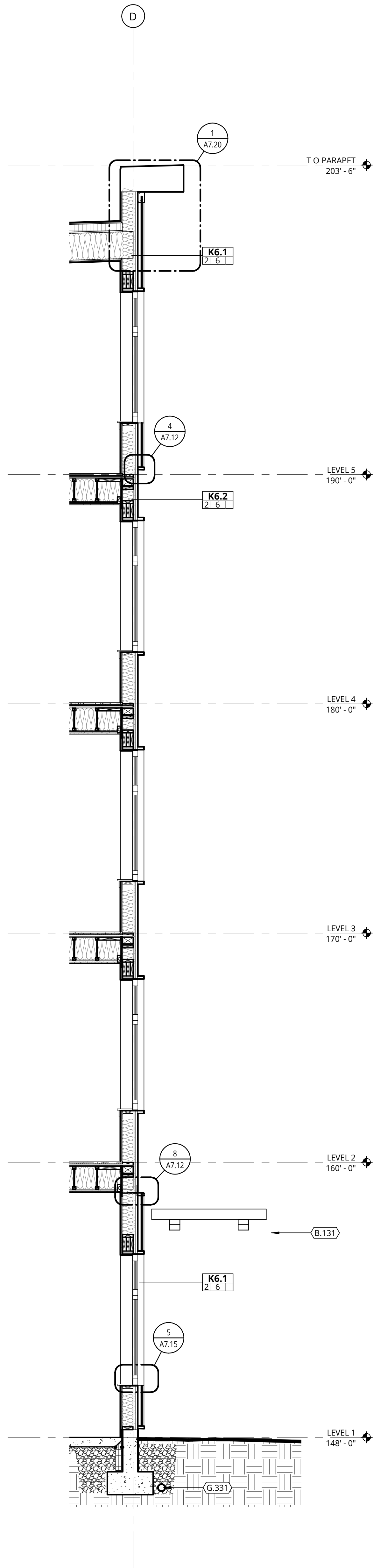
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#### PERMIT / GMP

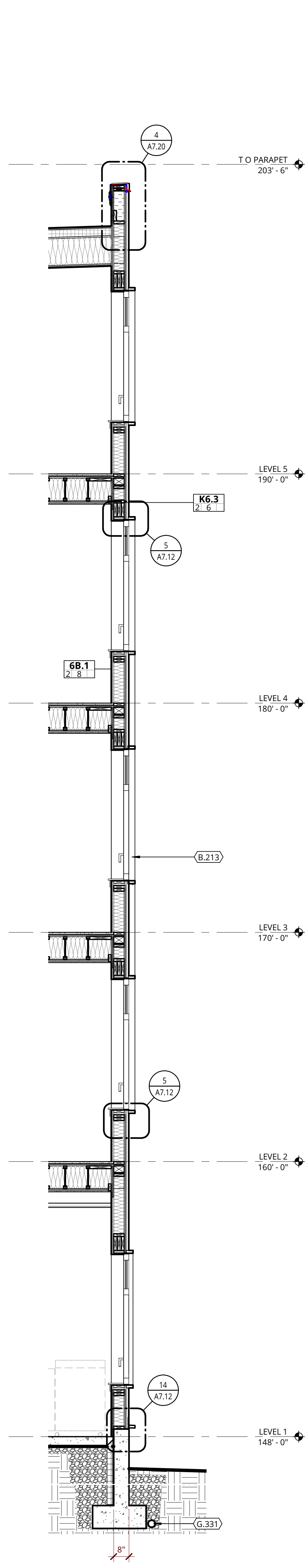
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SHEET NUMBER	

A4.01

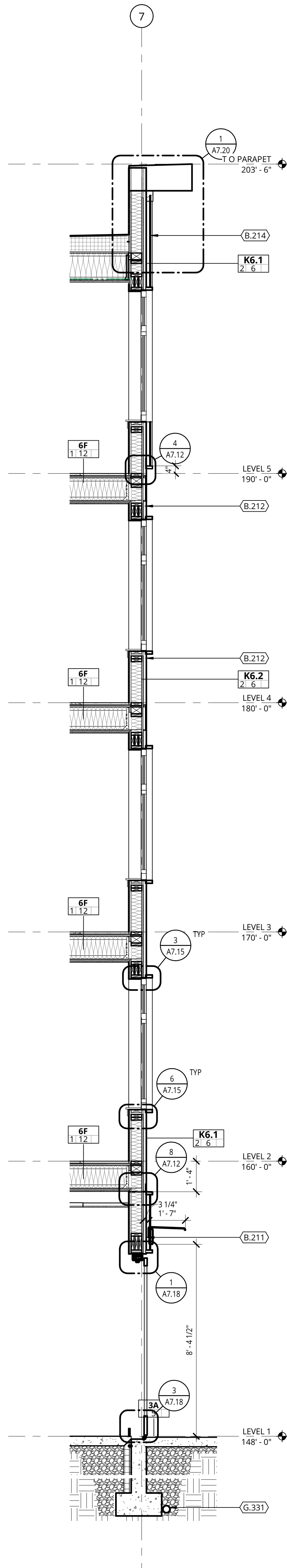




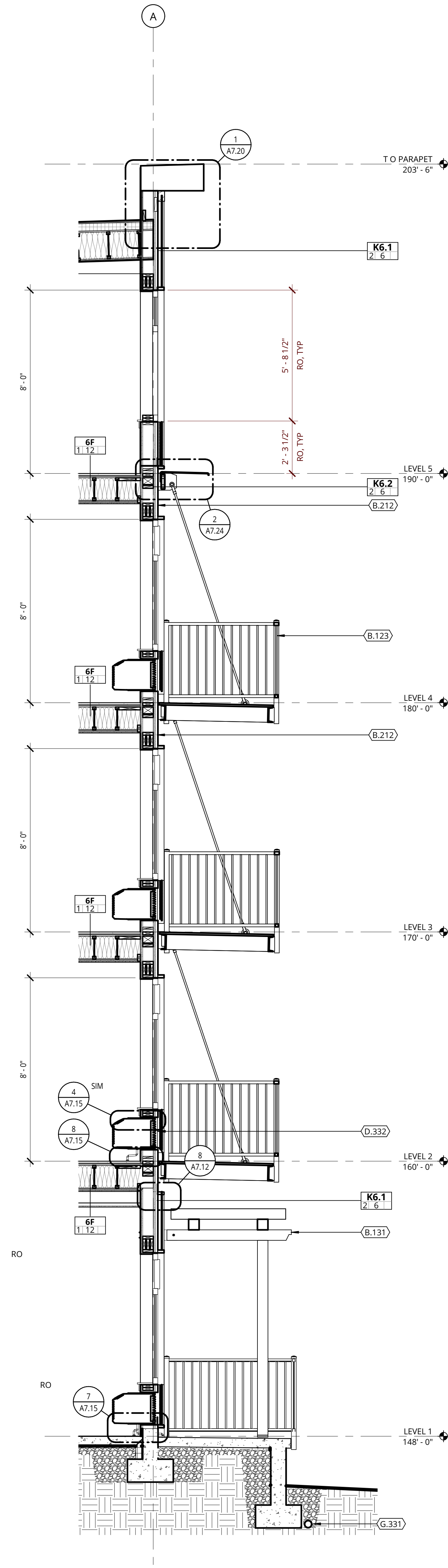
1 WALL SECTION  
3/8" = 1'-0" | 1/A2.00



2 WALL SECTION  
3/8" = 1'-0" | 1/A2.00



3 WALL SECTION  
3/8" = 1'-0" | 1/A2.00



4 WALL SECTION  
3/8" = 1'-0" | 1/A2.00

GENERAL NOTES

1. REFER TO SHEET G0.01 AND G0.02 FOR GENERAL NOTES APPLICABLE TO ALL PORTIONS OF THE WORK.
2. SEE SHEETS A0.11 & A0.21 FOR WALL ASSEMBLIES.
3. SEE SHEET A0.31 FOR FLOOR/CEILING AND ROOF ASSEMBLIES.
4. SEE SHEET A0.41 FOR TYPICAL FRAMING AND ACOUSTICAL DETAILS.
5. SEE SHEET A0.42 FOR AIR BARRIER CONTINUITY DIAGRAM
6. SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.
7. REFER TO STRUCTURAL DRAWINGS FOR COLUMNS, SHEAR WALL AND BEAM SIZES.

KEYED NOTES

- B.123 BALCONY WITH STL PICKET GUARDRAIL AND ALUM DECK (A7.23)  
B.131 TRELLIS TYPE A (1/A7.26)  
B.211 FIBER CEMENT PANEL SIDING TYPE FCP-1  
B.212 FIBER CEMENT PANEL SIDING TYPE FCP-2  
B.213 FIBER CEMENT PANEL SIDING TYPE FCP-3  
B.214 FIBER CEMENT PANEL SIDING TYPE FCP-4  
D.332 PTAC UNIT  
G.331 FOUNDATION PERIMETER DRAIN

REGISTERED ARCHITECT  
SAC S. JOHNSON  
502  
KARL JOHNSON  
PORTLAND, OR  
STATE OF OREGON

Ankrom Moisan

38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

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SAN FRANCISCO, CA 94103  
T 415.252.7063

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BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

WALL SECTIONS

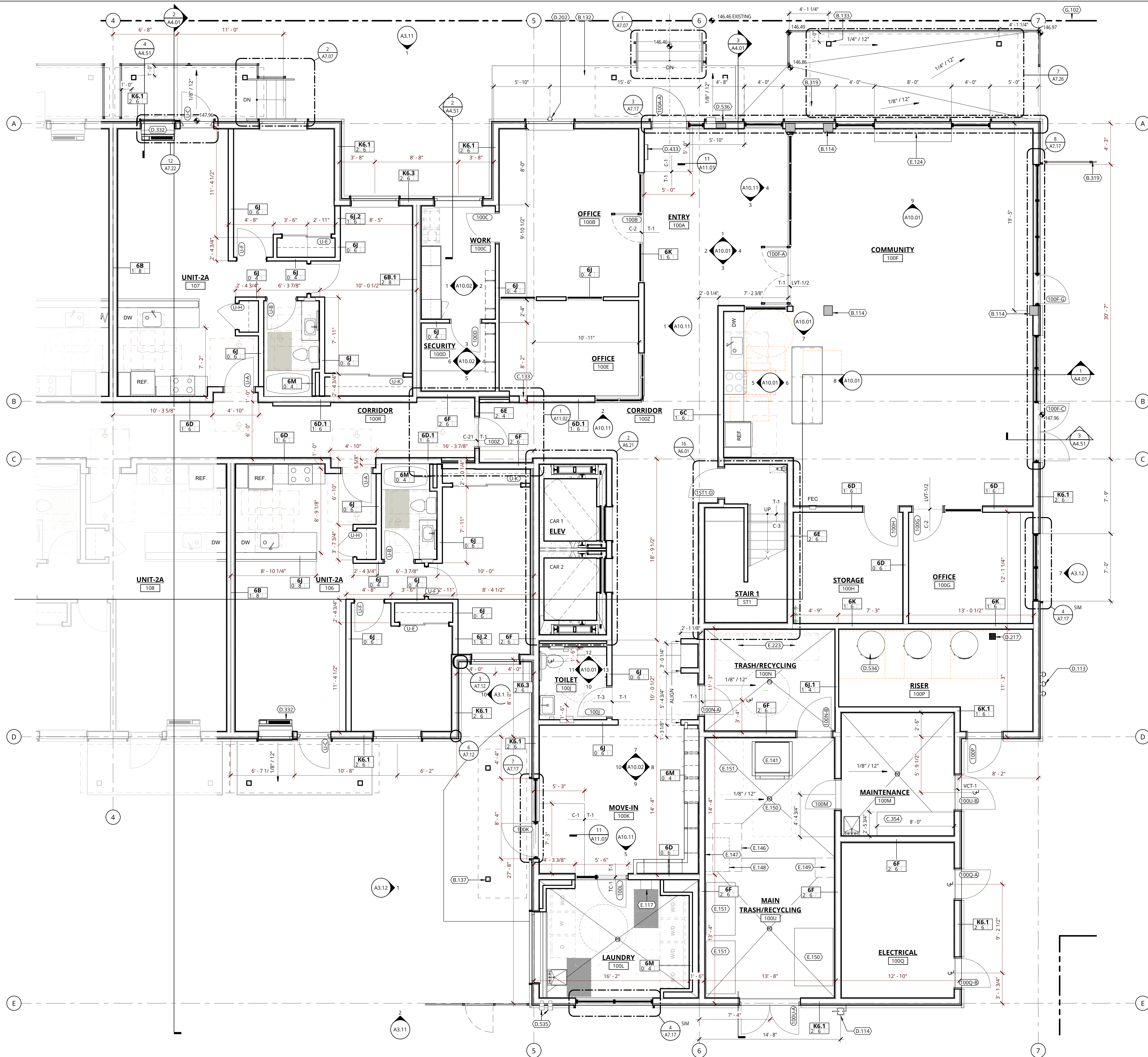
PERMIT / GMP

DATE 17 OCT 2018	PROJECT NUMBER 149000
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SHEET NUMBER

A4.51





# 1 LEVEL 1 NORTH ENLARGED FLOOR PLAN

1/4" = 1'-0"

## GENERAL NOTES

- REFER TO SHEET G0.02 FOR "PROJECT NOTES" APPLICABLE TO ALL PORTIONS OF THE WORK.
- PRIOR TO FRAMING VERIFY THAT FINAL APPLIANCE AND PLUMBING FIXTURE SIZES/CLEARANCES MATCH THOSE USED AS BASIS OF DESIGN SHOWN ON SHEET **G5.01**.
- REINFORCING FOR FUTURE GRAB BARS SHALL BE INSTALLED IN ALL BATHROOM FACILITIES THAT ARE NOT REQUIRED TO BE ACCESSIBLE AT TIME OF CONSTRUCTION COMPLETION. SEE SHEET G5.04 FOR BACKING REINFORCEMENT REQUIREMENTS.
- REFERENCE SLAB PLANS FOR CONCRETE WALL LOCATIONS, UNO. COORDINATE WITH STRUCTURAL DRAWINGS.
- SEE SHEETS **A0.11** & **A0.21** FOR WALL ASSEMBLIES.
- SEE FIRE/LIFE SAFETY SHEETS BEGINNING ON **G2.01** FOR LOCATIONS OF FIRE EXTINGUISHER CABINETS.
- SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.
- REFER TO STRUCTURAL DRAWINGS FOR COLUMNS, SHEAR WALL AND BEAM SIZES.

## KEYED NOTES

- B.114 GLULAM COLUMN 10 3/4 X 12. SEE STRUCTURAL
- B.132 TRELLIS TYPE B (4/A7.26)
- B.133 TRELLIS TYPE C (7/A7.26)
- B.137 TRELLIS TYPE A+R (10/A7.26)
- B.319 DECORATIVE METAL FENCES AND GATES (32 31 19)
- C.133 MAIL SLOT
- C.354 WORKBENCH WITH UNDER-COUNTER DRAWERS
- D.113 WATER HEATER VENT
- D.114 GAS METER
- D.202 OVERFLOW SPOUT
- D.217 FLOOR DRAIN
- D.332 PTAC UNIT
- D.433 FIRE ALARM CONTROL PANEL
- D.534 WATER HEATER
- D.535 DRYER EXHAUST VENT
- D.536 KNOX BOX, (FIREFIGHTER KEY BOX)
- E.117 ADD VALUE MACHINE
- E.124 CEILING MOUNTED MECHANIZED PROJECTOR SCREEN
- E.141 TRASH/RECYCLING COMPACTOR
- E.146 CONTAINER DOLLY
- E.147 CONTAINER DOLLY CHARGER
- E.148 COMPRESSOR UNIT ON SHELF 7'-0" AFF
- E.149 REMOTE POWER UNIT 18" AFF
- E.150 TRASH COMPACTION CONTAINER
- E.151 RECYCLING CONTAINER
- E.223 TRASH/RECYCLING BIN
- G.102 PROPERTY LINE

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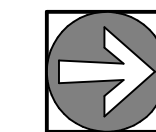
BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

LEVEL 1 NORTH  
ENLARGED FLOOR  
PLAN  
PERMIT / GMP

DATE 17 OCT 2018	PROJECT NUMBER 149000
SHEET NUMBER	

A5.01



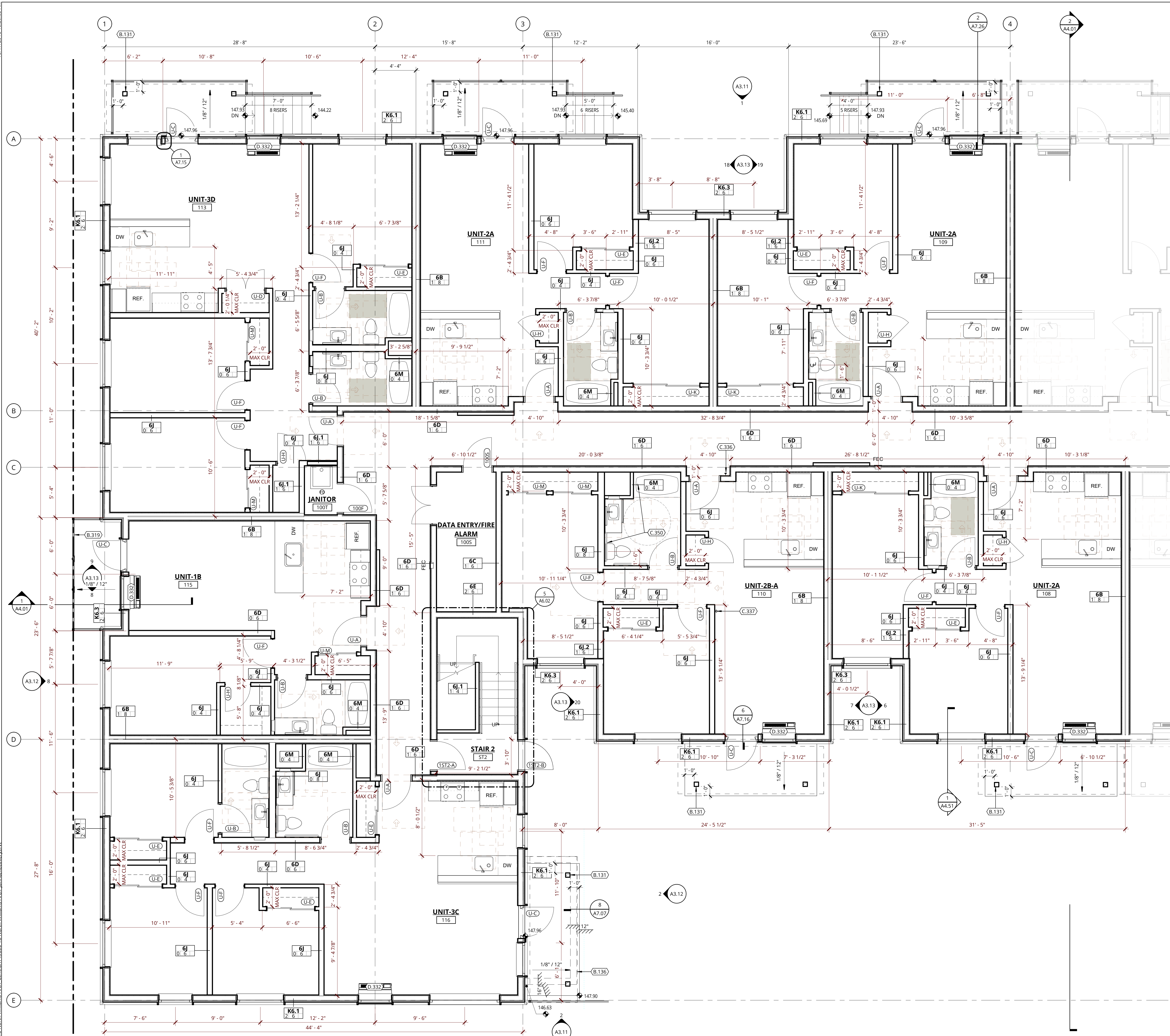
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PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

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SAN FRANCISCO, CA 94103  
T 415.252.7063

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## GENERAL NOTES

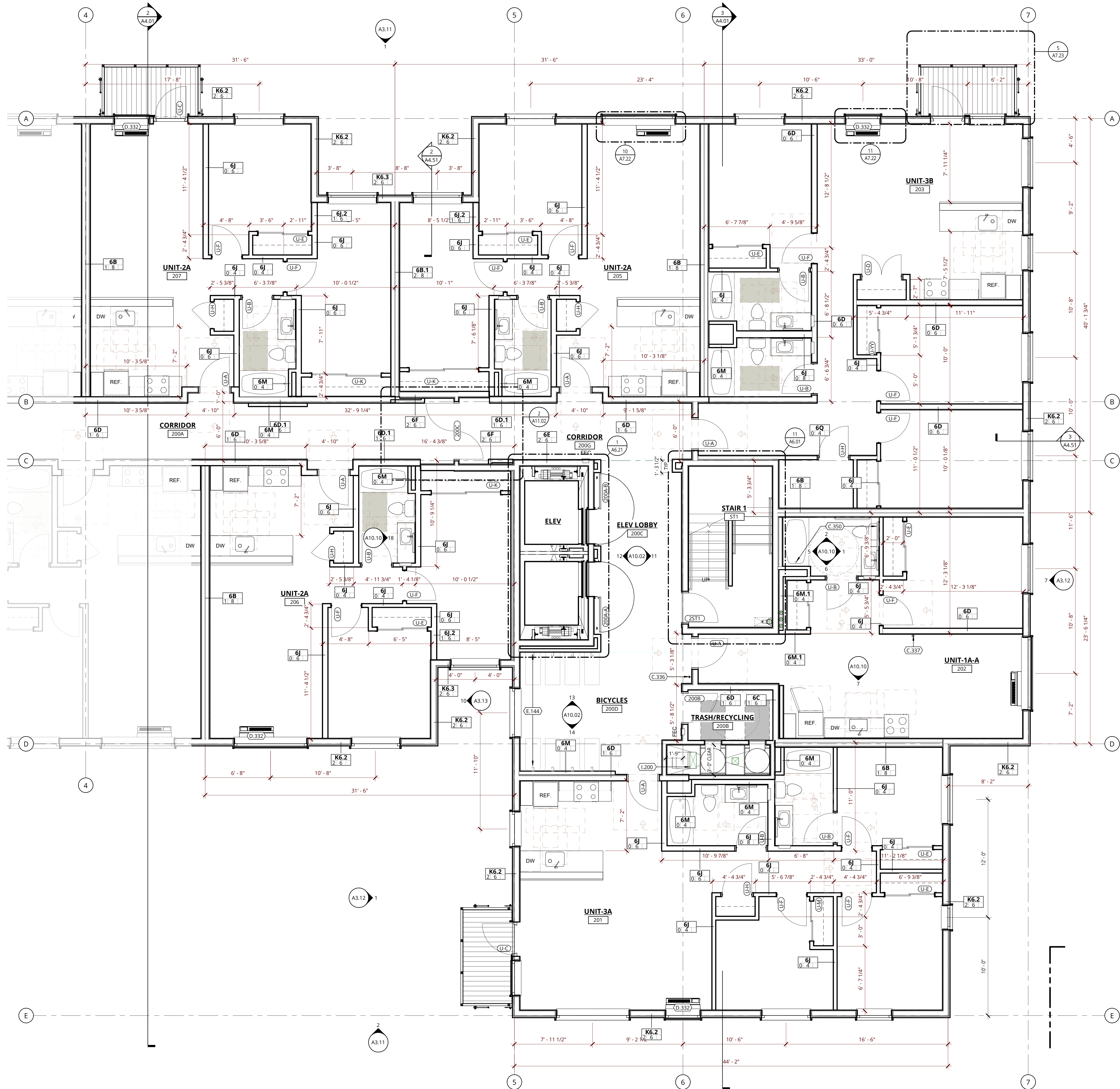
1. REFER TO SHEET G0.02 FOR "PROJECT NOTES" APPLICABLE TO ALL PORTIONS OF THE WORK.
2. PRIOR TO FRAMING VERIFY THAT FINAL APPLIANCE AND PLUMBING FIXTURE SIZES/CLEARANCES MATCH THOSE USED AS BASIS OF DESIGN SHOWN ON SHEET G5.01.
3. REINFORCING FOR FUTURE GRAB BARS SHALL BE INSTALLED IN ALL BATHROOM FACILITIES THAT ARE NOT REQUIRED TO BE ACCESSIBLE AT TIME OF CONSTRUCTION COMPLETION. SEE SHEET G5.04 FOR BACKUP REINFORCEMENT REQUIREMENTS.
4. REFERENCE SLAB PLANS FOR CONCRETE WALL LOCATIONS, UNO. COORDINATE WITH STRUCTURAL DRAWINGS.
5. SEE SHEETS A0.11 & A0.21 FOR WALL ASSEMBLIES.
6. SEE LIFESAVE SAFETY SHEETS BEGINNING ON G2.01 FOR LOCATIONS OF FIRE EXTINGUISHER CABINETS.
7. SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.
8. REFER TO STRUCTURAL DRAWINGS FOR COLUMNS, SHEAR WALL AND BEAM SIZES.

## KEYED NOTES

- B.131 TRELLIS TYPE A (1/7.26)  
B.136 STEM WALL W/ FOOTING AT CONCRETE SLAB ABOVE GRADE  
B.319 DECORATIVE METAL FENCES AND GATES (32 31 19)  
C.336 HARDWIRED DOORBELL BUTTON  
C.337 HARDWIRED DOORBELL AUDIBLE AND VISUAL SIGNAL  
C.350 ACCESSIBLE BATHROOM, SEE G5.02; PROVIDE GRAB BARS AND  
REMOVABLE TUB SEAT  
D.332 PTAC UNIT

## 1 LEVEL 1 SOUTH ENLARGED FLOOR PLAN





1 LEVEL 2 NORTH ENLARGED FLOOR PLAN

1/4" = 1'-0"

GENERAL NOTES

- REFER TO SHEET G0.02 FOR "PROJECT NOTES" APPLICABLE TO ALL PORTIONS OF THE WORK.
- PRIOR TO FRAMING VERIFY THAT FINAL APPLIANCE AND PLUMBING FIXTURE SIZES/CLEARANCES MATCH THOSE USED AS BASIS OF DESIGN SHOWN ON SHEET G5.01.
- REINFORCING FOR FUTURE GRAB BARS SHALL BE INSTALLED IN ALL BATHROOM FACILITIES THAT ARE NOT REQUIRED TO BE ACCESSIBLE AT TIME OF CONSTRUCTION COMPLETION. SEE SHEET G5.04 FOR BACKING REINFORCEMENT REQUIREMENTS.
- REFERENCE SLAB PLANS FOR CONCRETE WALL LOCATIONS, UNO. COORDINATE WITH STRUCTURAL DRAWINGS.
- SEE SHEETS A0.11 & A0.21 FOR WALL ASSEMBLIES.
- SEE FIRE/LIFE SAFETY SHEETS BEGINNING ON G2.01 FOR LOCATIONS OF FIRE EXTINGUISHER CABINETS.
- SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.
- REFER TO STRUCTURAL DRAWINGS FOR COLUMNS, SHEAR WALL AND BEAM SIZES.

KEYED NOTES

- C.336 HARDWIRED DOORBELL BUTTON  
C.337 HARDWIRED DOORBELL AUDIBLE AND VISUAL SIGNAL  
C.350 ACCESSIBLE BATHROOM, SEE G5.02; PROVIDE GRAB BARS AND REMOVABLE TUB SEAT  
D.332 PTAC UNIT  
E.144 BICYCLE RACKS  
L.200 REFER TO MECHANICAL FOR DUCT SIZES



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063

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BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

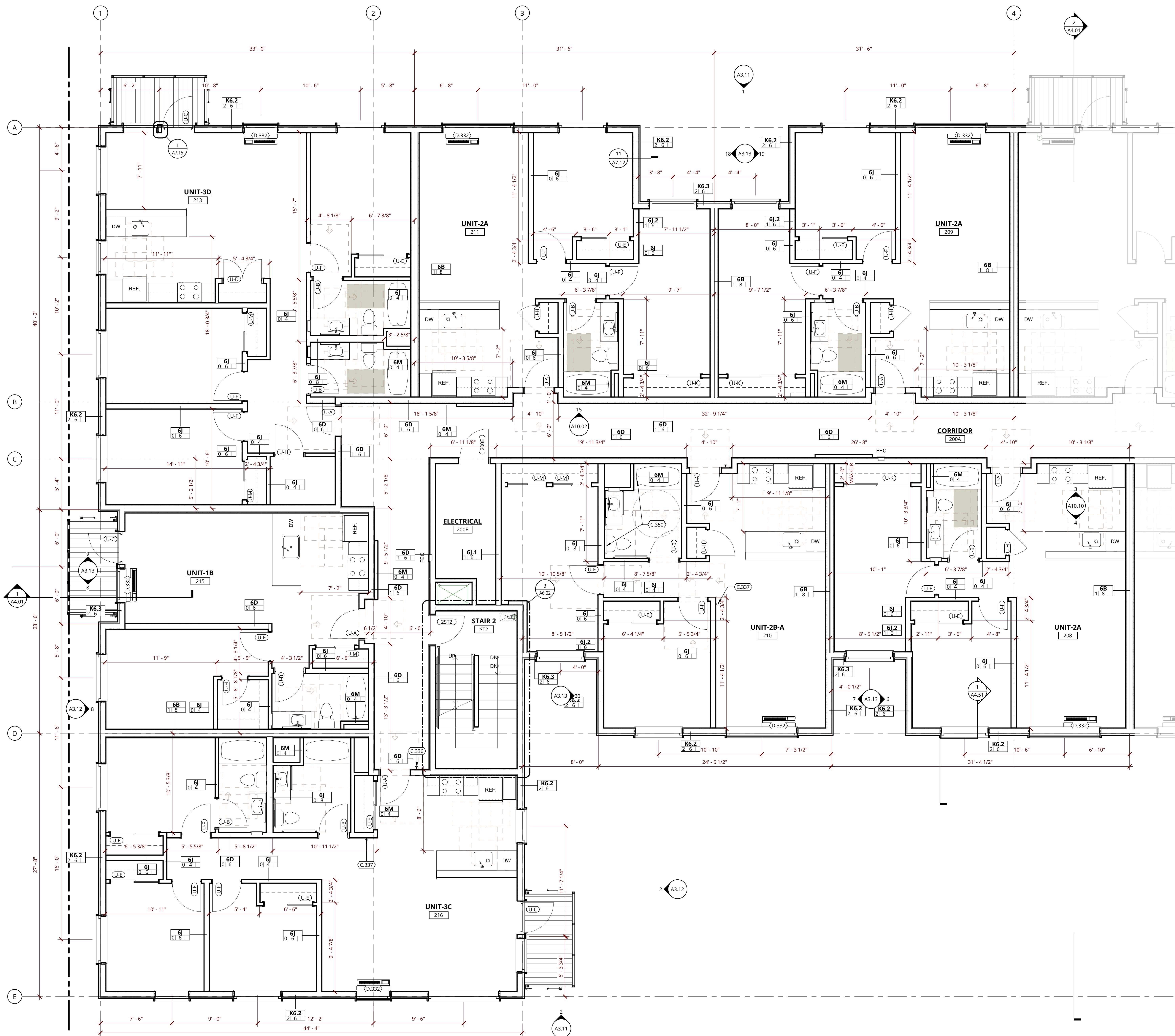
LEVEL 2 NORTH  
ENLARGED FLOOR  
PLAN  
PERMIT / GMP

DATE  
17 OCT 2018  
PROJECT NUMBER  
149000

SHEET NUMBER

A5.03





## GENERAL NOTES

1. REFER TO SHEET G0.02 FOR "PROJECT NOTES" APPLICABLE TO ALL PORTIONS OF THE WORK.
2. PRIOR TO FRAMING VERIFY THAT FINAL APPLIANCE AND PLUMBING FIXTURE SIZES/CLEARANCES MATCH THOSE USED AS BASIS OF DESIGN SHOWN ON SHEET **G5.01**.
3. REINFORCING FOR FUTURE BARR SALLS SHALL BE INSTALLED IN ALL BATHING FACILITIES THAT ARE NOT REQUIRED TO BE ACCESSIBLE AT TIME OF CONSTRUCTION COMPLETION. SEE SHEET G5.04 FOR BACKING REINFORCEMENT REQUIREMENTS.
4. REFERENCE SLAB PLANS FOR CONCRETE WALL LOCATIONS, UNO. COORDINATE WITH STRUCTURAL DRAWINGS.
5. SEE SHEETS **A0.11** & **A0.21** FOR WALL ASSEMBLIES.
6. SEE LIFESAFE SAFETY SHEETS BEGINNING ON **G2.01** FOR LOCATIONS OF FIRE EXTINGUISHER CABINETS.
7. SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.
8. REFER TO STRUCTURAL DRAWINGS FOR COLUMNS, SHEAR WALL AND BEAM SIZES.

## KEYED NOTES

- C.336 HARDWIRED DOORBELL BUTTON
- C.337 HARDWIRED DOORBELL AUDIBLE AND VISUAL SIGNAL
- C.350 ACCESSIBLE BATHROOM, SEE G5.02; PROVIDE GRAB BARS AND REMOVABLE TUB SEAT
- D.332 PTAC UNIT

**NORTH WILLIAMS APARTMENTS - FAMILY HOUSING**

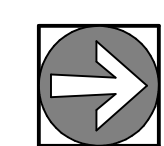
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BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

LEVEL 2 SOUTH ENLARGED FLOOR PLAN
PERMIT / GMP

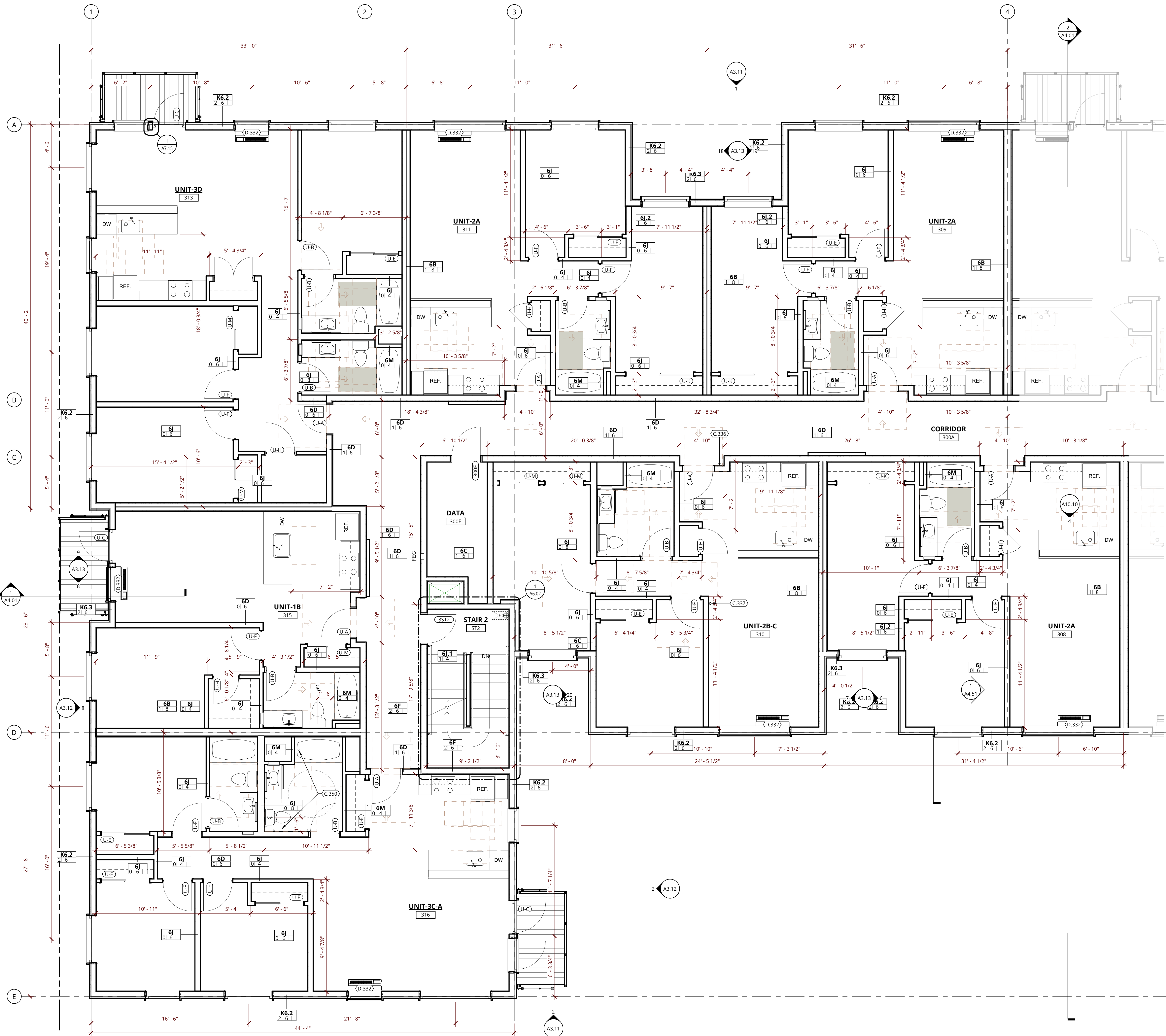
DATE 17 OCT 2018	PROJECT NUMBER 149000
SHEET NUMBER	











GENERAL NOTES

- REFER TO SHEET G0.02 FOR 'PROJECT NOTES' APPLICABLE TO ALL PORTIONS OF THE WORK.
- PRIOR TO FRAMING VERIFY THAT FINAL APPLIANCE AND PLUMBING FIXTURE SIZES/CLEARANCES MATCH THOSE USED AS BASIS OF DESIGN SHOWN ON SHEET **G5.01**.
- REINFORCING FOR FUTURE GRAB BARS SHALL BE INSTALLED IN ALL BATHROOM FACILITIES THAT ARE NOT REQUIRED TO BE ACCESSIBLE AT TIME OF CONSTRUCTION COMPLETION. SEE SHEET G5.04 FOR BACKING REINFORCEMENT REQUIREMENTS.
- REFERENCE SLAB PLANS FOR CONCRETE WALL LOCATIONS, UNO. COORDINATE WITH STRUCTURAL DRAWINGS.
- SEE SHEETS **A0.11** & **A0.21** FOR WALL ASSEMBLIES.
- SEE FIRE/LIFE SAFETY SHEETS BEGINNING ON **G2.01** FOR LOCATIONS OF FIRE EXTINGUISHER CABINETS.
- SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.
- REFER TO STRUCTURAL DRAWINGS FOR COLUMNS, SHEAR WALL AND BEAM SIZES.

KEYED NOTES

- C.336 HARDWIRED DOORBELL BUTTON  
C.337 HARDWIRED DOORBELL AUDIBLE AND VISUAL SIGNAL  
C.350 ACCESSIBLE BATHROOM, SEE G5.02; PROVIDE GRAB BARS AND REMOVABLE TUB SEAT  
D.332 PTAC UNIT



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063

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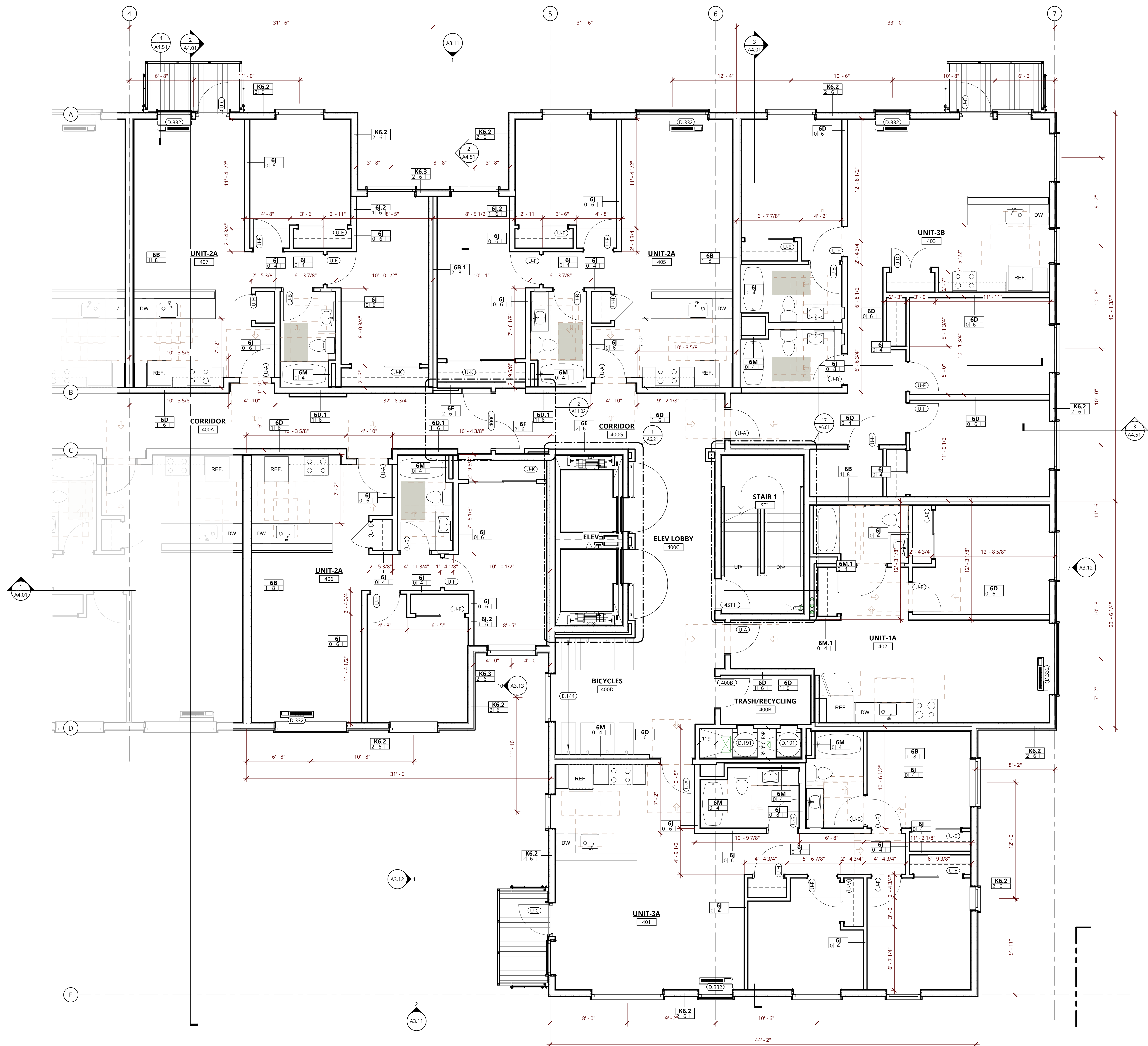
LEVEL 3 SOUTH  
ENLARGED FLOOR  
PLAN

PERMIT / GMP

DATE 17 OCT 2018	PROJECT NUMBER 149000
SHEET NUMBER	

A5.06





## GENERAL NOTES

2. REFER TO SHEET 62.02 FOR "PROJECT NOTES" APPLICABLE TO ALL PORTIONS OF THE WORK.
3. PRIOR TO FRAMING VERIFY THAT FINAL APPLIANCE AND PLUMBING FIXTURE SIZES/CLEARANCES MATCH THOSE USED AS BASIS OF DESIGN SHOWN ON SHEET **65.01**.
4. REINFORCING FOR FUTURE GRAB BARS SHALL BE INSTALLED IN ALL BATHROOM FACILITIES THAT ARE NOT REQUIRED TO BE ACCESSIBLE AT TIME OF CONSTRUCTION COMPLETION. SEE SHEET 65.04 FOR BACKING REINFORCEMENT REQUIREMENTS.
5. REFERENCE SLAB PLANS FOR CONCRETE WALL LOCATIONS, UNO. COORDINATE WITH STRUCTURAL DRAWINGS.
6. SEE SHEETS **60.11** & **60.21** FOR WALL ASSEMBLIES.
7. SEE FIRE/LIFE SAFETY SHEETS BEGINNING ON **62.01** FOR LOCATIONS OF FIRE EXTINGUISHER CABINETS.
8. SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.
9. REFER TO STRUCTURAL DRAWINGS FOR COLUMNS, SHEAR WALL AND BEAM SIZES.

## KEYED NOTES

- D.191 TRASH/RECYCLING CHUTE  
D.332 PTAC UNIT  
E.144 BICYCLE RACKS



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
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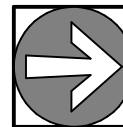
REVISION	DATE	REASON FOR ISSUE

LEVEL 4 NORTH  
ENLARGED FLOOR  
PLAN

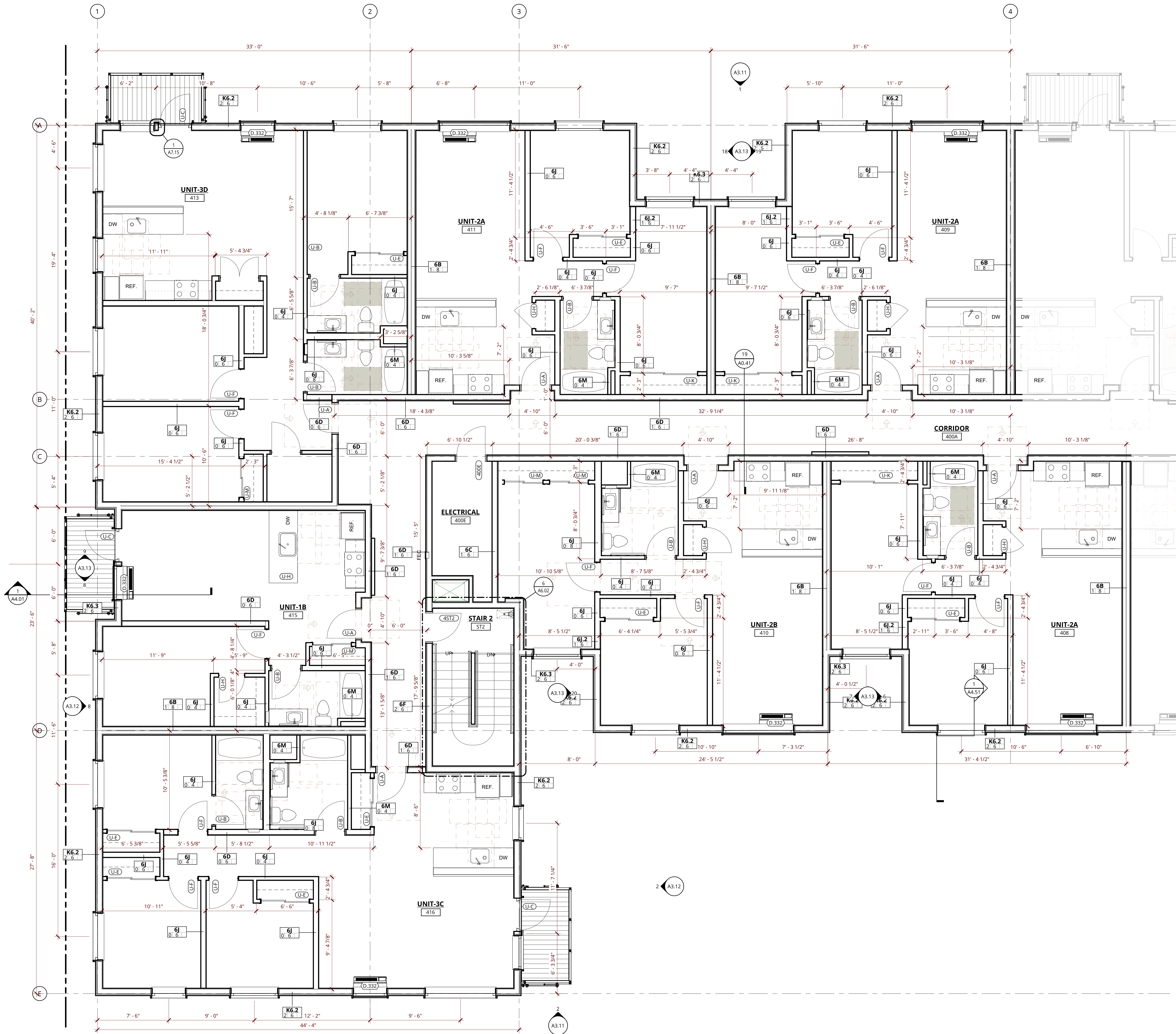
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DATE 17 OCT 2018	PROJECT NUMBER 149000
SHEET NUMBER	

A5.07







GENERAL NOTES

1. REFER TO SHEET G0.02 FOR 'PROJECT NOTES' APPLICABLE TO ALL PORTIONS OF THE WORK.
2. PRIOR TO FRAMING VERIFY THAT FINAL APPLIANCE AND PLUMBING FIXTURE SIZES/CLEARANCES MATCH THOSE USED AS BASIS OF DESIGN SHOWN ON SHEET **G5.01**.
3. REINFORCING FOR FUTURE GRAB BARS SHALL BE INSTALLED IN ALL BATHROOM FACILITIES THAT ARE NOT REQUIRED TO BE ACCESSIBLE AT TIME OF CONSTRUCTION COMPLETION. SEE SHEET G5.04 FOR BACKING REINFORCEMENT REQUIREMENTS.
4. REFERENCE SLAB PLANS FOR CONCRETE WALL LOCATIONS, UNO. COORDINATE WITH STRUCTURAL DRAWINGS.
5. SEE SHEETS **A0.11** & **A0.21** FOR WALL ASSEMBLIES.
6. SEE FIRE/LIFE SAFETY SHEETS BEGINNING ON **G2.01** FOR LOCATIONS OF FIRE EXTINGUISHER CABINETS.
7. SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.
8. REFER TO STRUCTURAL DRAWINGS FOR COLUMNS, SHEAR WALL AND BEAM SIZES.

KEYED NOTES

D.332 PTAC UNIT



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100  
  
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SAN FRANCISCO, CA 94103  
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BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

LEVEL 4 SOUTH  
ENLARGED FLOOR  
PLAN  
PERMIT / GMP

DATE 17 OCT 2018	PROJECT NUMBER 149000
SHEET NUMBER	

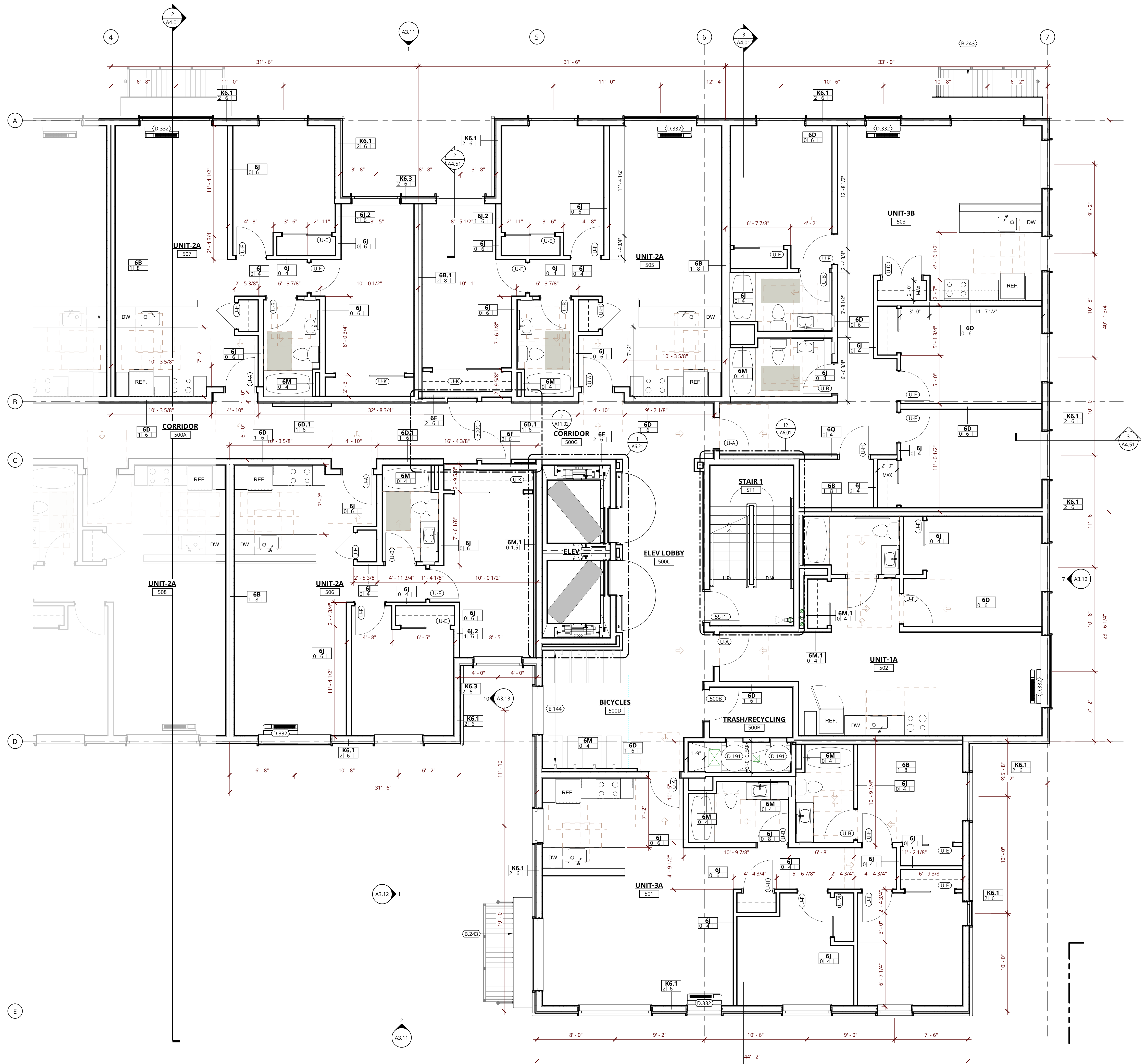
A5.08

1 LEVEL 4 SOUTH ENLARGED FLOOR PLAN  
1/4" = 1'-0"



10/17/2018 10:29:57 AM

C:\Revt Projects\149000-18 North Williams Arch. Central\149000-18 North Williams Arch. plan\Rev\Revised.dwg



**1** LEVEL 5 NORTH ENLARGED FLOOR PLAN  
1/4" = 1'-0"

## GENERAL NOTES

- REFER TO SHEET G0.02 FOR 'PROJECT NOTES' APPLICABLE TO ALL PORTIONS OF THE WORK.
- PRIOR TO FRAMING VERIFY THAT FINAL APPLIANCE AND PLUMBING FIXTURE SIZES/CLEARANCES MATCH THOSE USED AS BASIS OF DESIGN SHOWN ON SHEET **G5.01**.
- REINFORCING FOR FUTURE GRAB BARS SHALL BE INSTALLED IN ALL BATHROOM FACILITIES THAT ARE NOT REQUIRED TO BE ACCESSIBLE AT TIME OF CONSTRUCTION COMPLETION. SEE SHEET G5.04 FOR BACKING REINFORCEMENT REQUIREMENTS.
- REFERENCE SLAB PLANS FOR CONCRETE WALL LOCATIONS, UNO, COORDINATE WITH STRUCTURAL DRAWINGS.
- SEE SHEETS **A0.11** & **A0.21** FOR WALL ASSEMBLIES.
- SEE FIRE/LIFE SAFETY SHEETS BEGINNING ON **G2.01** FOR LOCATIONS OF FIRE EXTINGUISHER CABINETS.
- SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.
- REFER TO STRUCTURAL DRAWINGS FOR COLUMNS, SHEAR WALL AND BEAM SIZES.

## KEYED NOTES

- B.243 BROW OVERHANG AT LEVEL 4 BALCONY, TYP  
D.191 TRASH/RECYCLING CHUTE  
D.332 PTAC UNIT  
E.144 BICYCLE RACKS



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063

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## NORTH WILLIAMS APARTMENTS - FAMILY HOUSING

2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

LEVEL 5 NORTH  
ENLARGED FLOOR  
PLAN

PERMIT / GMP

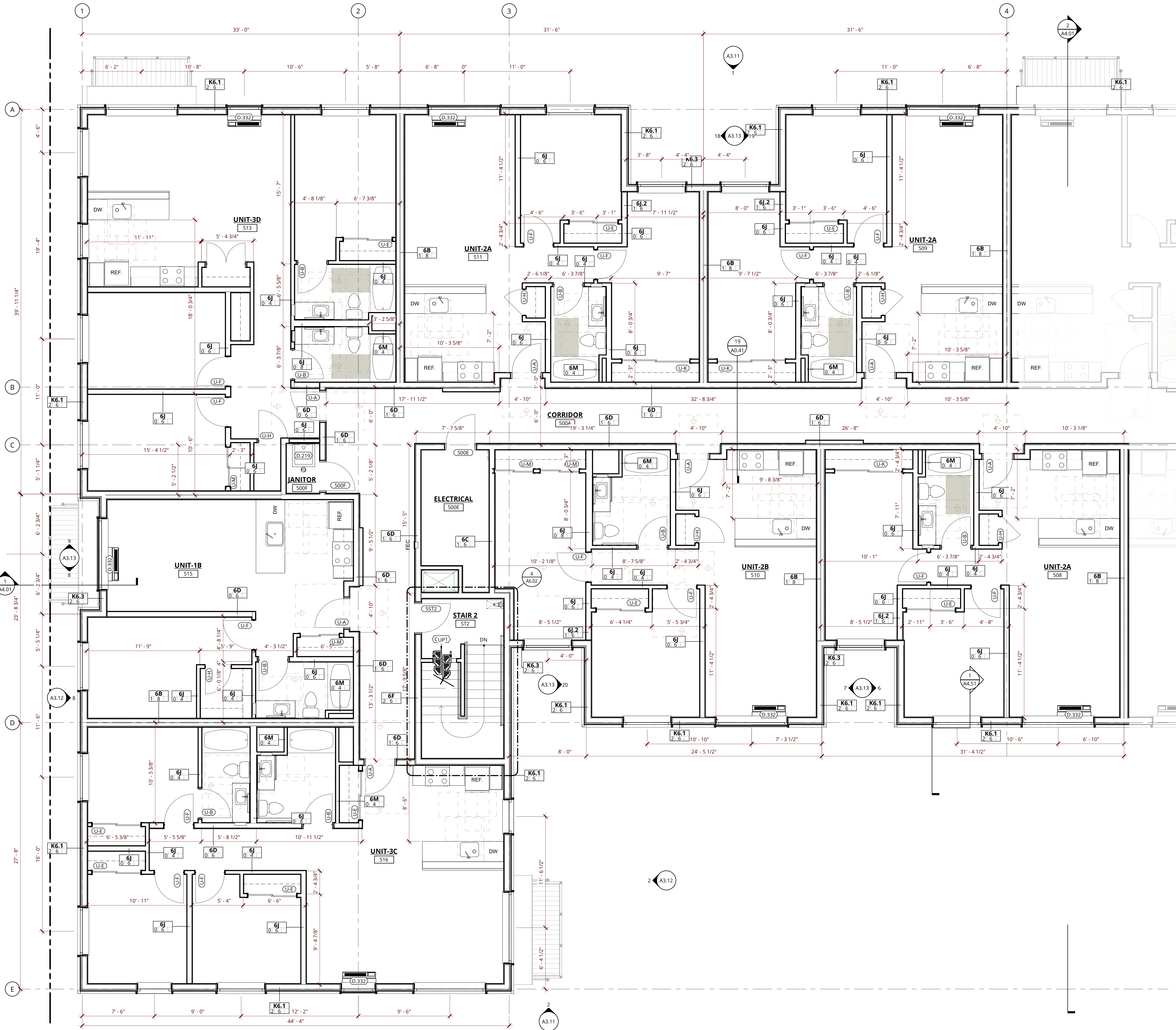
DATE  
17 OCT 2018

PROJECT NUMBER  
149000

SHEET NUMBER

**A5.09**





1 LEVEL 5 SOUTH ENLARGED FLOOR PLAN  
1/4" = 1'-0"

GENERAL NOTES

- REFER TO SHEET G0.02 FOR 'PROJECT NOTES' APPLICABLE TO ALL PORTIONS OF THE WORK.
- PRIOR TO FRAMING VERIFY THAT FINAL APPLIANCE AND PLUMBING FIXTURE SIZES/CLEARANCES MATCH THOSE USED AS BASIS OF DESIGN SHOWN ON SHEET G5.01.
- REINFORCING FOR FUTURE GRAB BARS SHALL BE INSTALLED IN ALL BATHROOM FACILITIES THAT ARE NOT REQUIRED TO BE ACCESSIBLE AT TIME OF CONSTRUCTION COMPLETION. SEE SHEET G5.04 FOR BACKING REINFORCEMENT REQUIREMENTS.
- REFERENCE SLAB PLANS FOR CONCRETE WALL LOCATIONS, UNO, COORDINATE WITH STRUCTURAL DRAWINGS.
- SEE SHEETS A0.11 & A0.21 FOR WALL ASSEMBLIES.
- SEE FIRE/LIFE SAFETY SHEETS BEGINNING ON G2.01 FOR LOCATIONS OF FIRE EXTINGUISHER CABINETS.
- SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.
- REFER TO STRUCTURAL DRAWINGS FOR COLUMNS, SHEAR WALL AND BEAM SIZES.

KEYED NOTES

- C.351 PREFABRICATED SHIP LADDER  
D.219 MOP SINK  
D.332 PTAC UNIT



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

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T 415.252.7063

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BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

LEVEL 5 SOUTH  
ENLARGED FLOOR  
PLAN  
PERMIT / GMP

DATE 17 OCT 2018	PROJECT NUMBER 149000
SHEET NUMBER	

A5.10





A.134	8"W X 4"H CONCRETE CURB
B.328	PREFABRICATED SHEET METAL CHASE CAP WITH RAIN SKIRT AND DRAW BANDS PER SMACNA FIG 8-8A
D.191	TRASH/RECYCLING CHUTE
D.193	TRASH/RECYCLING CHUTE DISCHARGE FIRE DAMPER
E.141	TRASH/RECYCLING COMPACTOR
E.151	RECYCLING CONTAINER

2156 N WILLIAMS AVENUE, PORTLAND, OREGON

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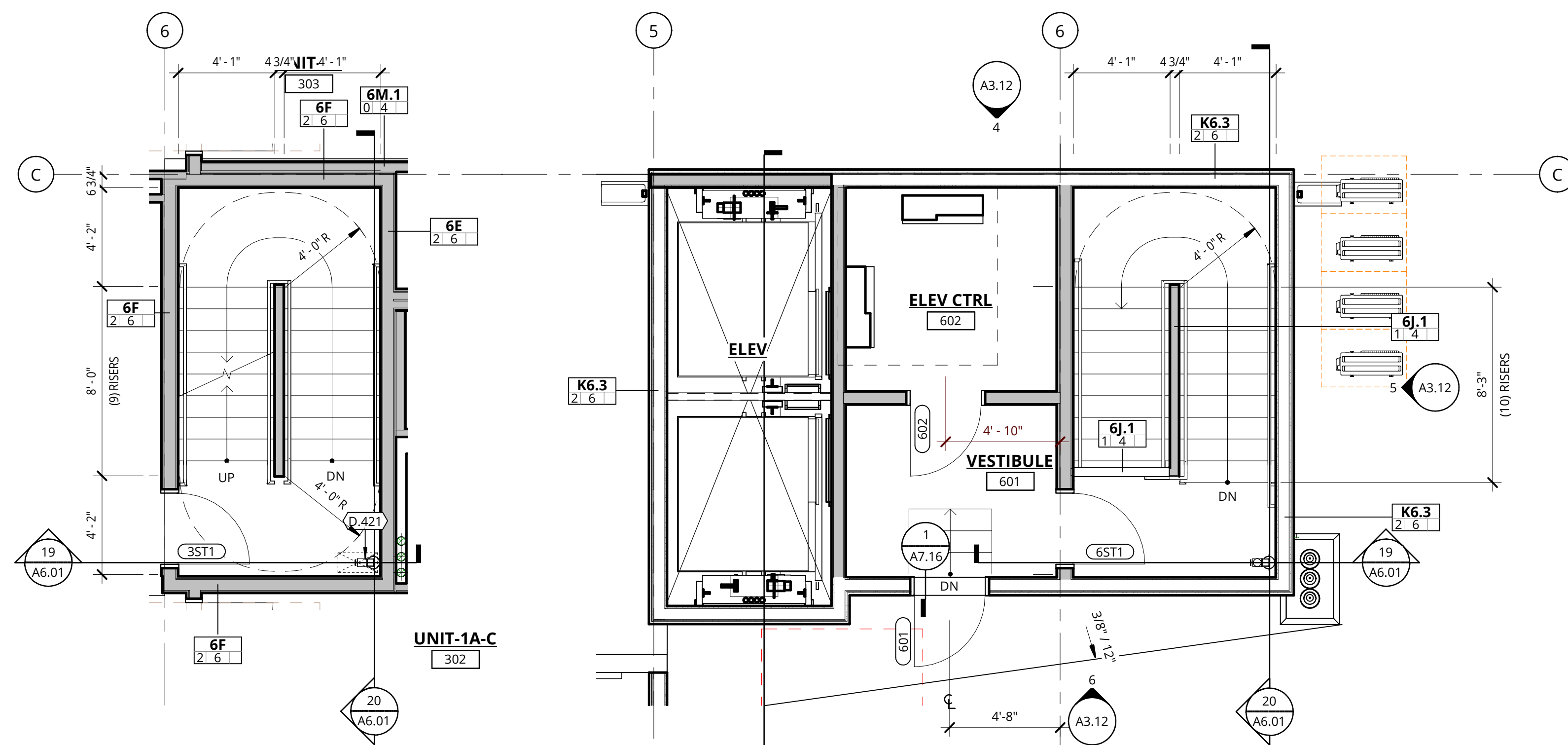
REVISION	DATE	REASON FOR ISSUE

TRASH/RECYCLING  
CHUTE SECTION

PERMIT / GMP

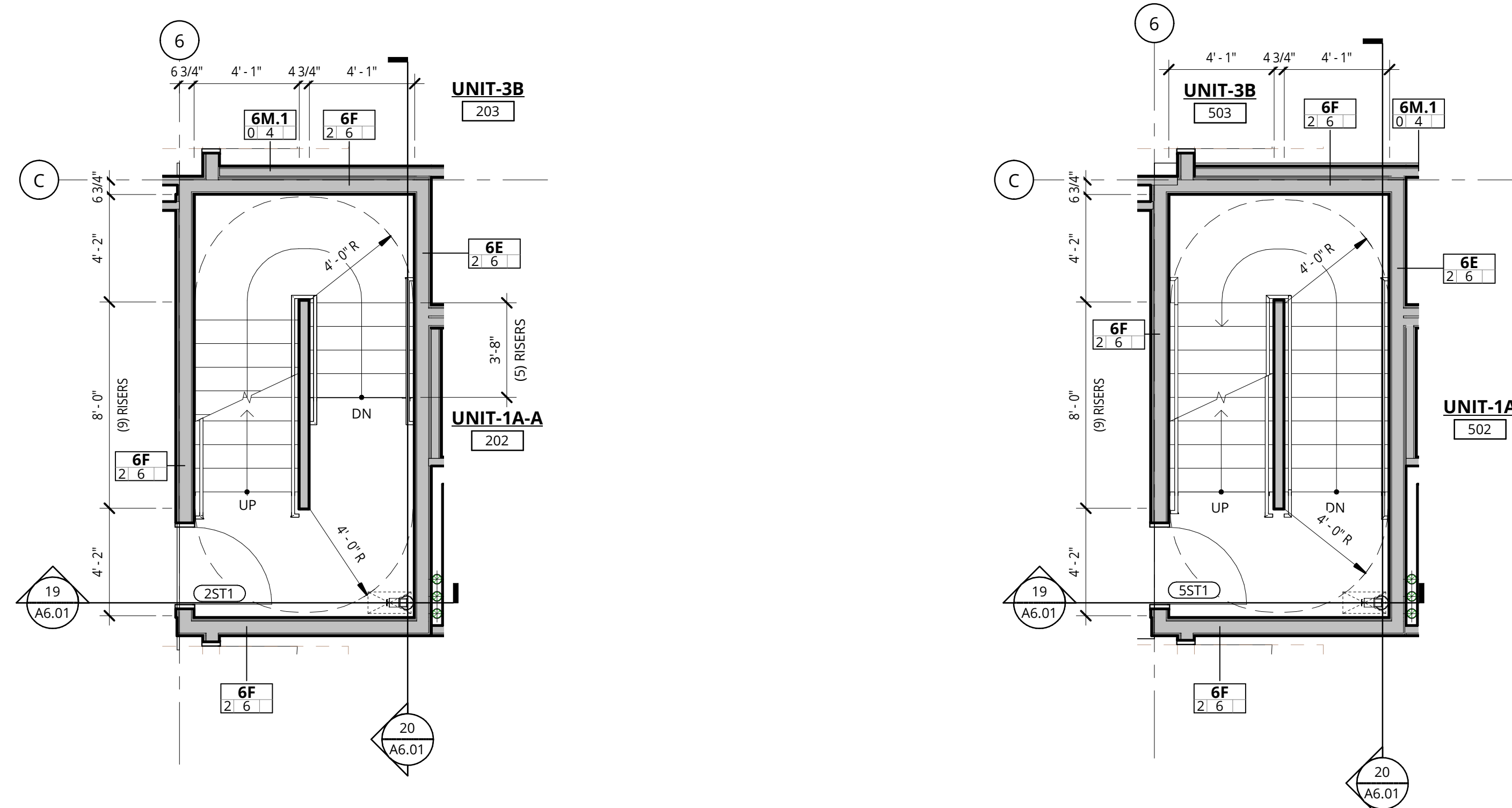
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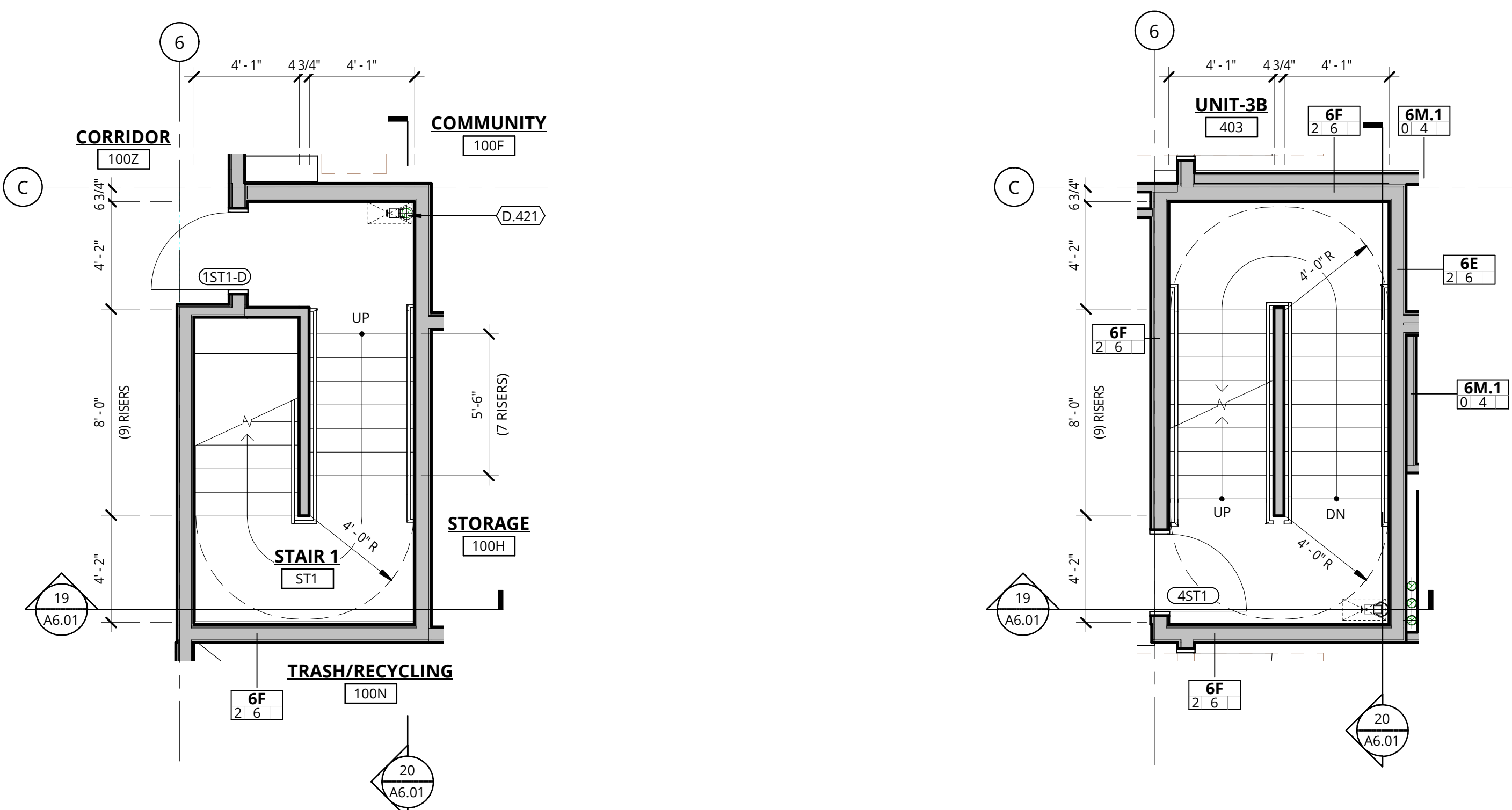
**1** STAIR 1 LEVEL 3 FLOOR PLAN  
1/4" = 1'-0"

**2** STAIR 1 LEVEL ROOF FLOOR PLAN  
1/4" = 1'-0"



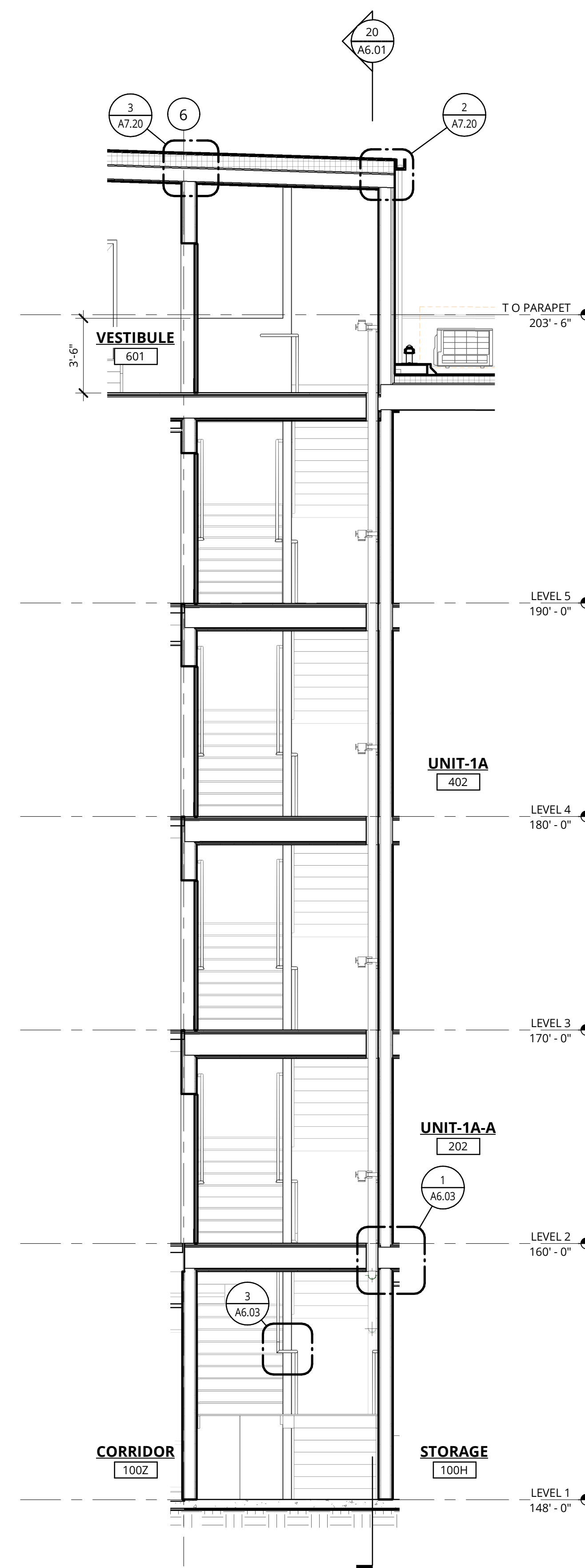
**11** STAIR 1 LEVEL 2 FLOOR PLAN  
1/4" = 1'-0"

**12** STAIR 1 LEVEL 5 FLOOR PLAN  
1/4" = 1'-0"

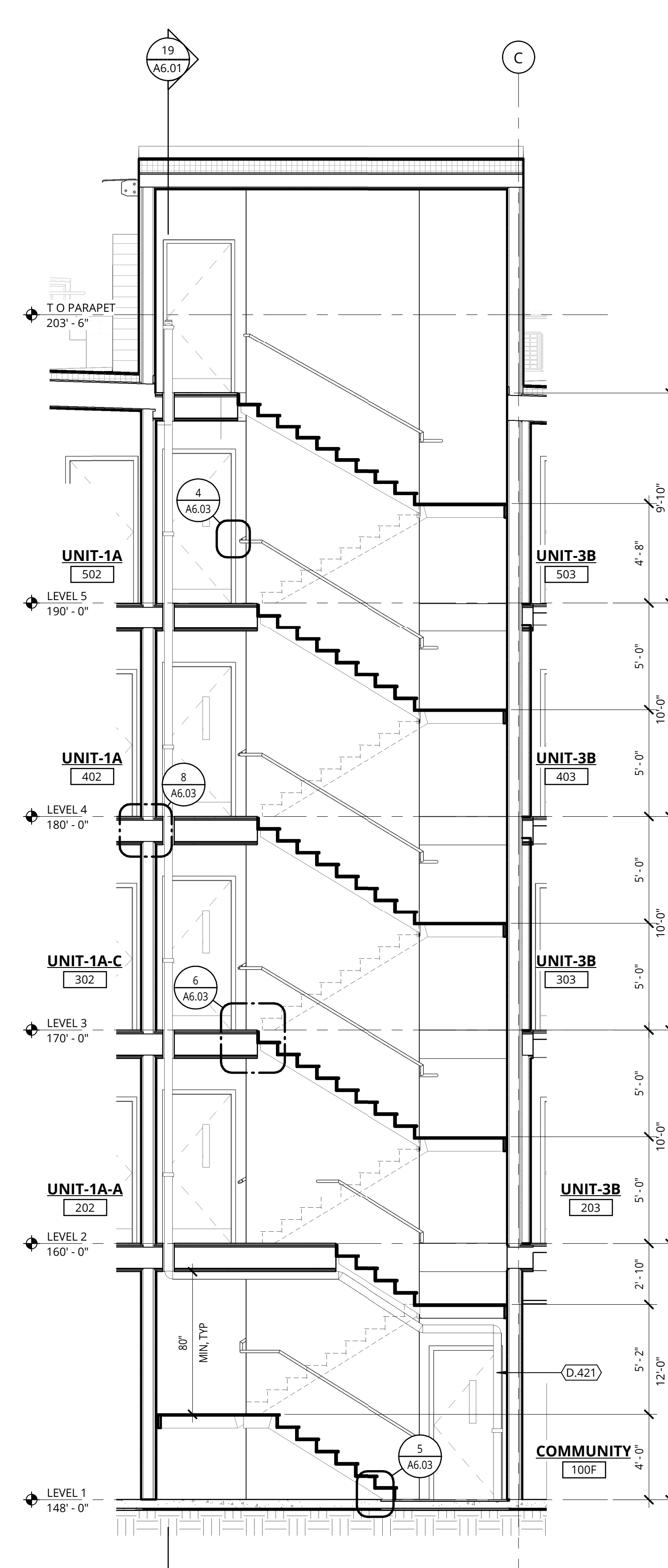


**16** STAIR 1 LEVEL 1 FLOOR PLAN  
1/4" = 1'-0" | 1/A0.43

**17** STAIR 1 LEVEL 4 FLOOR PLAN  
1/4" = 1'-0"



**19** STAIR 1 SECTION  
1/4" = 1'-0"



**20** STAIR 1 SECTION  
1/4" = 1'-0"

## GENERAL NOTES

1. REFER TO SHEET **A0.01** FOR 'PROJECT NOTES' APPLICABLE TO ALL PORTIONS OF THE WORK.
2. PRIOR TO FRAMING VERIFY THAT FINAL APPLIANCE AND PLUMBING FIXTURE SIZES/CLEARANCES MATCH THOSE USED AS BASIS OF DESIGN SHOWN ON SHEET **65.01**.
3. REFERENCE SLAB PLANS FOR CONCRETE WALL LOCATIONS, UNO. COORDINATE WITH STRUCTURAL DRAWINGS.
4. SEE SHEETS **A0.21 & A0.31** FOR WALL ASSEMBLIES.
5. SEE FIRE/LIFE SAFETY SHEETS BEGINNING ON **62.01** FOR LOCATIONS OF FIRE EXTINGUISHER CABINETS.
6. SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.
7. REFER TO STRUCTURAL DRAWINGS FOR COLUMNS, SHEAR WALL AND BEAM SIZES.

## KEYED NOTES

D.421 WET STANDPIPE



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063

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## NORTH WILLIAMS APARTMENTS - FAMILY HOUSING

2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

STAIR 1 PLANS AND SECTIONS

PERMIT / GMP

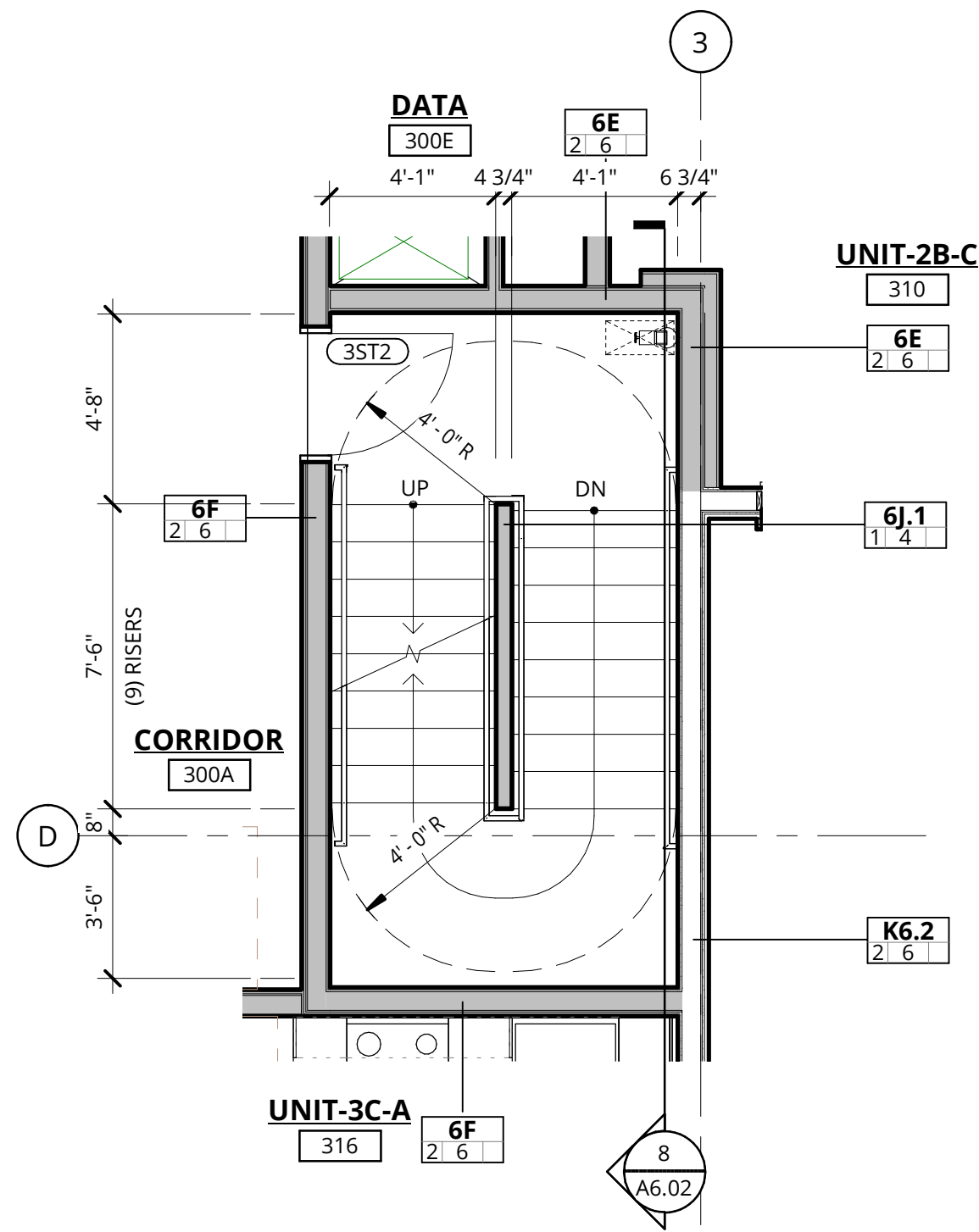
DATE  
17 OCT 2018

PROJECT NUMBER  
149000

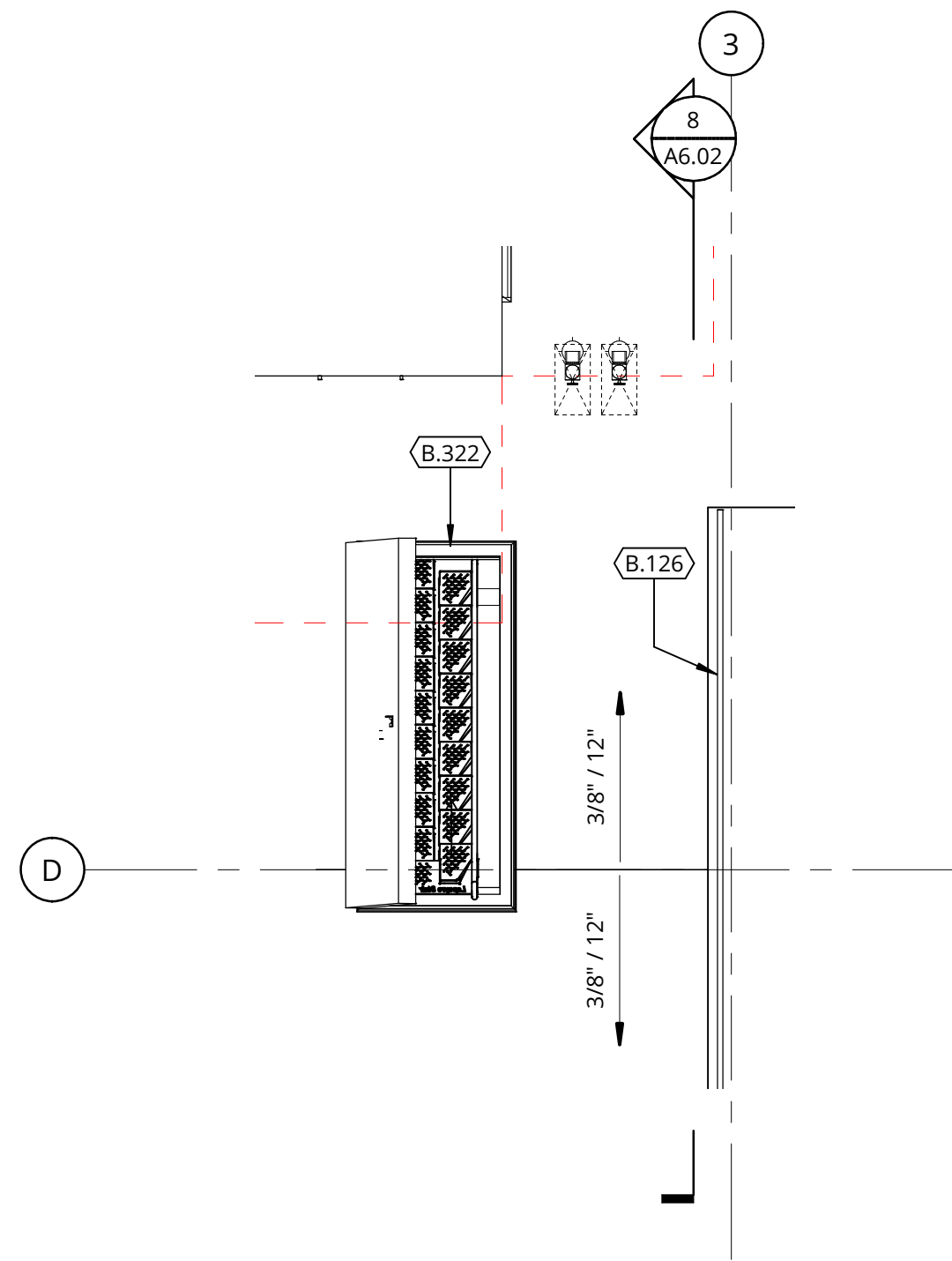
SHEET NUMBER

**A6.01**

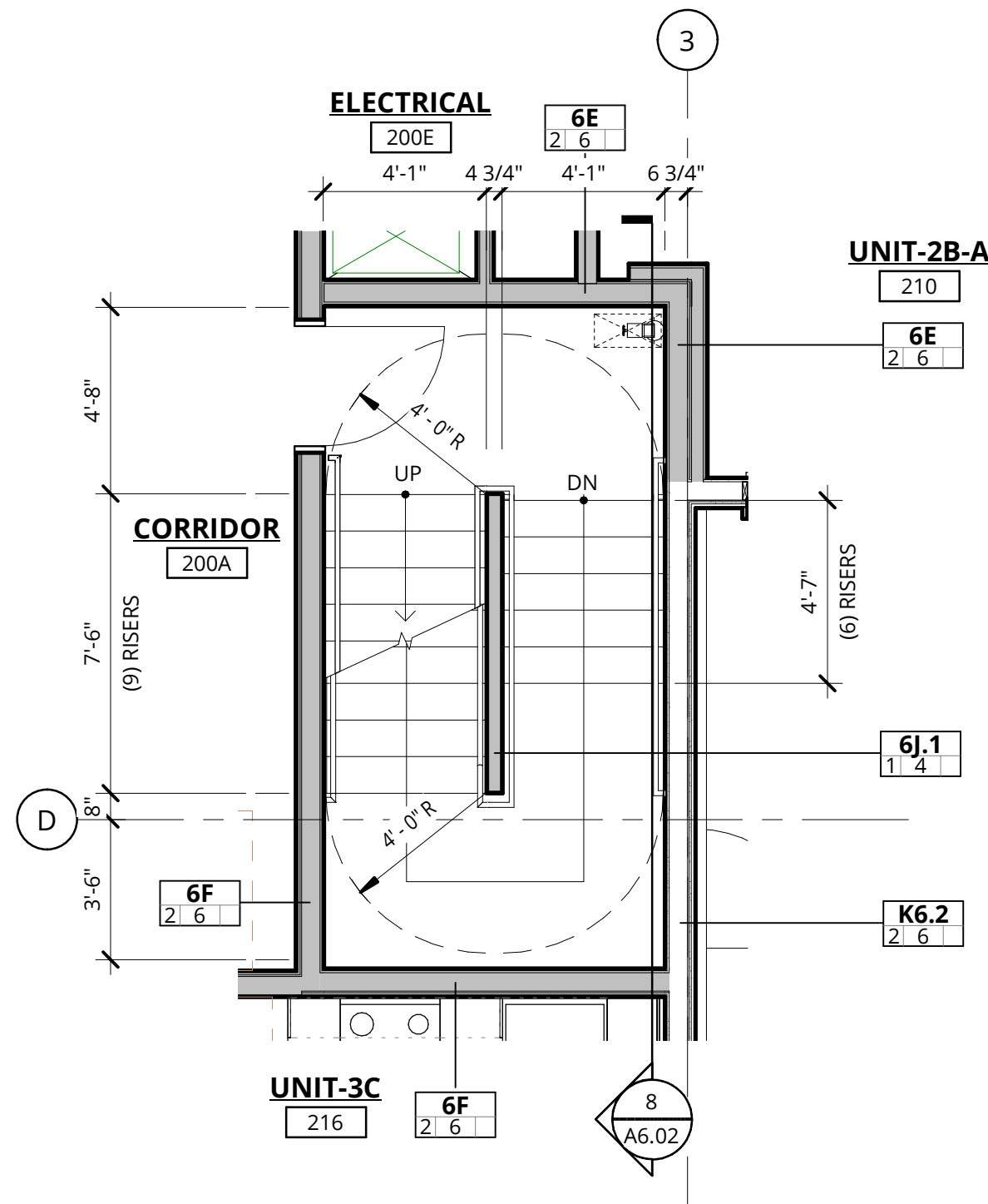




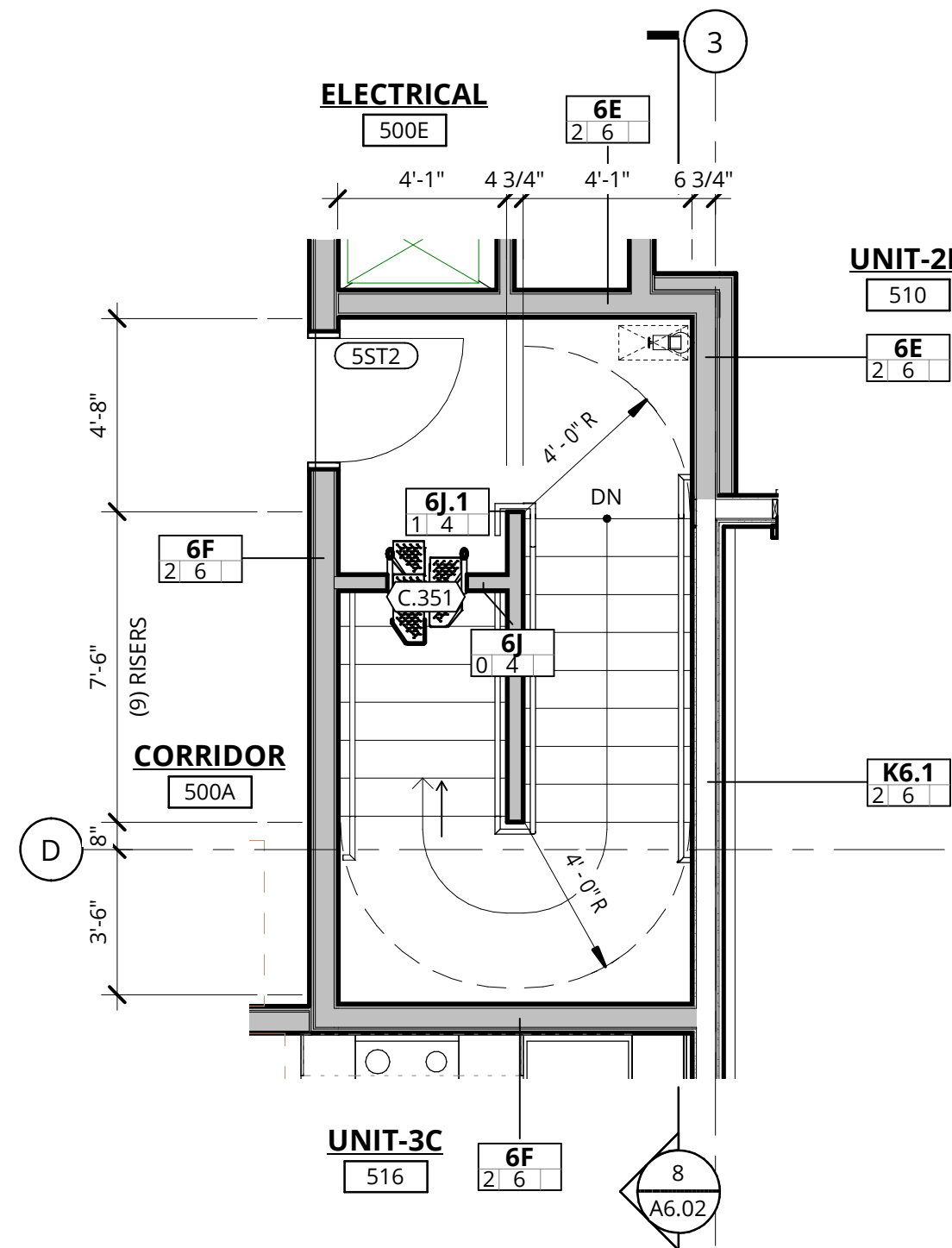
1 STAIR 2 LEVEL 3 FLOOR PLAN  
1/4" = 1'-0"



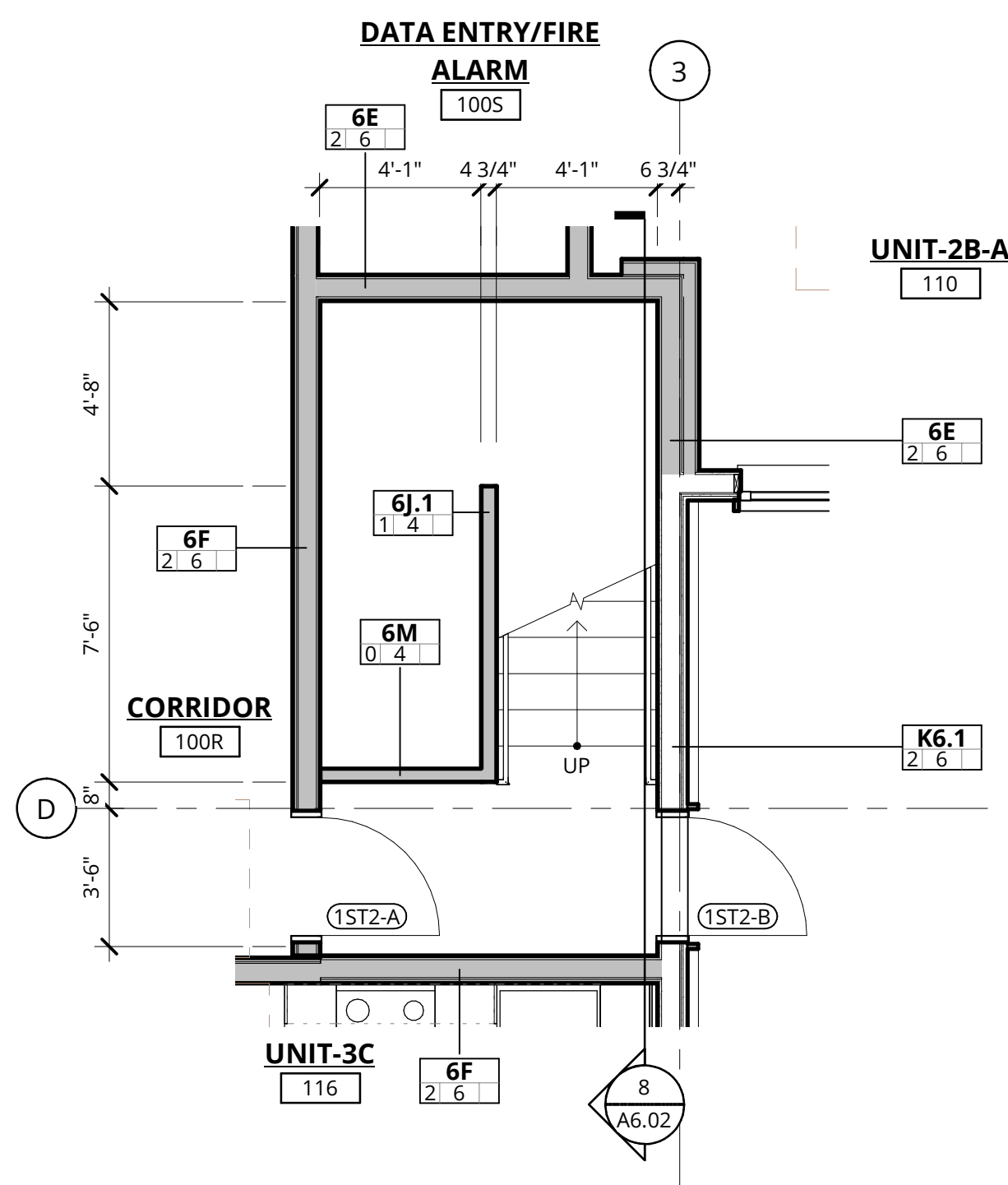
2 STAIR 2 LEVEL ROOF FLOOR PLAN  
1/4" = 1'-0"



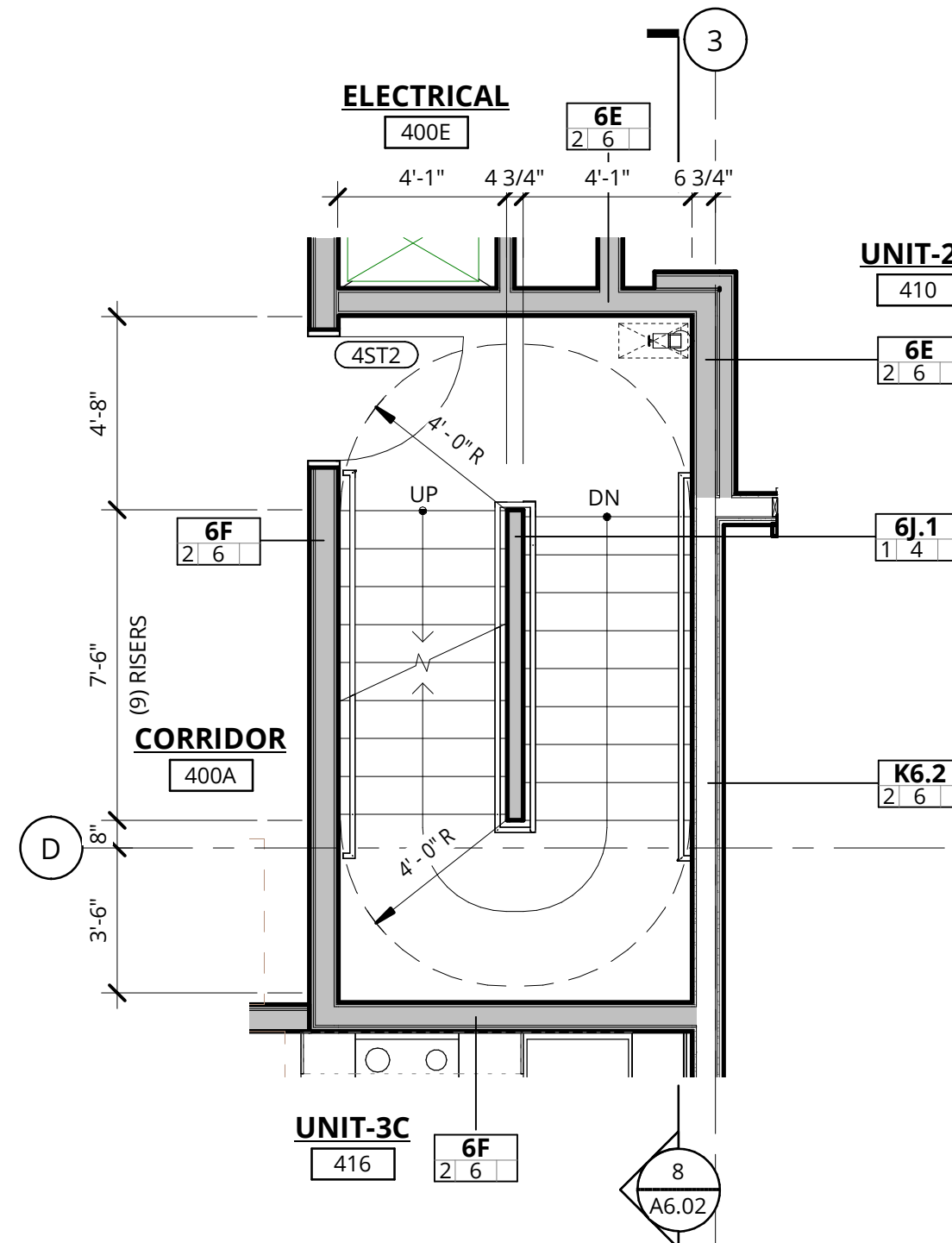
3 STAIR 2 LEVEL 2 FLOOR PLAN  
1/4" = 1'-0"



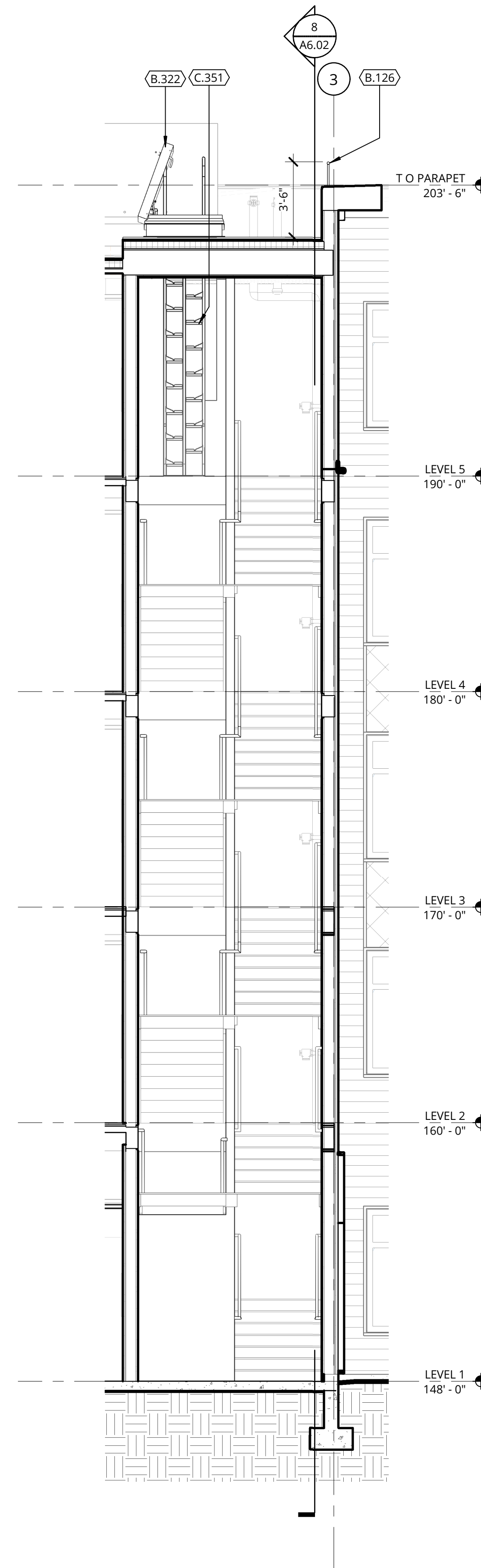
4 STAIR 2 LEVEL 5 FLOOR PLAN  
1/4" = 1'-0"



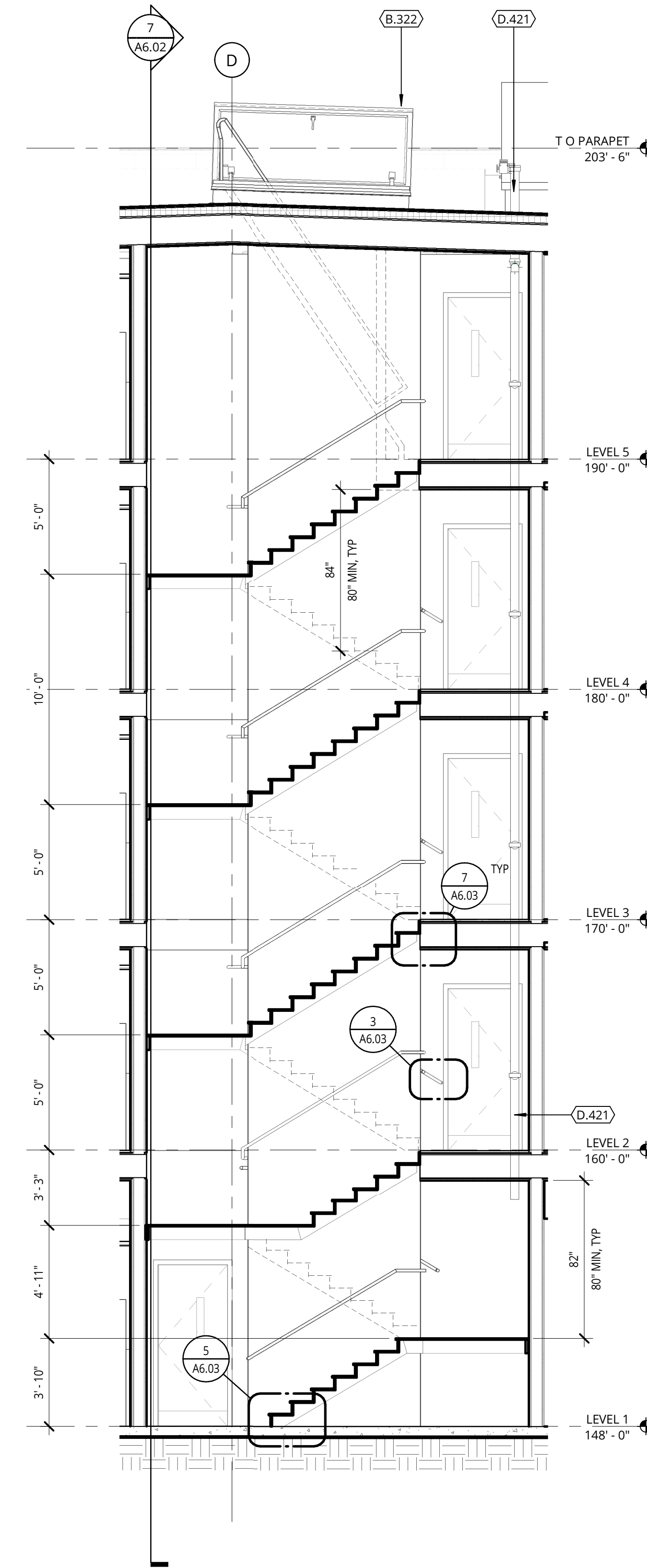
5 STAIR 2 LEVEL 1 FLOOR PLAN  
1/4" = 1'-0"



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



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



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

GENERAL NOTES

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3. REFERENCE SLAB PLANS FOR CONCRETE WALL LOCATIONS, UNO. COORDINATE WITH STRUCTURAL DRAWINGS.
4. SEE SHEETS **A0.21 & A0.31** FOR WALL ASSEMBLIES.
5. SEE FIRE/LIFE SAFETY SHEETS BEGINNING ON **62.01** FOR LOCATIONS OF FIRE EXTINGUISHER CABINETS.
6. SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.
7. REFER TO STRUCTURAL DRAWINGS FOR COLUMNS, SHEAR WALL AND BEAM SIZES.

KEYED NOTES

- B.126 GUARDRAIL (50 52 13)  
B.322 ROOF HATCH (PER OSSC 1019.16.1 AND COP OSSC/6/#4)  
C.351 PREFABRICATED SHIP LADDER  
D.421 WET STANDPIPE



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063

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NORTH WILLIAMS APARTMENTS - FAMILY HOUSING

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BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

STAIR 2 PLANS AND SECTIONS

PERMIT / GMP

DATE	PROJECT NUMBER
17 OCT 2018	149000

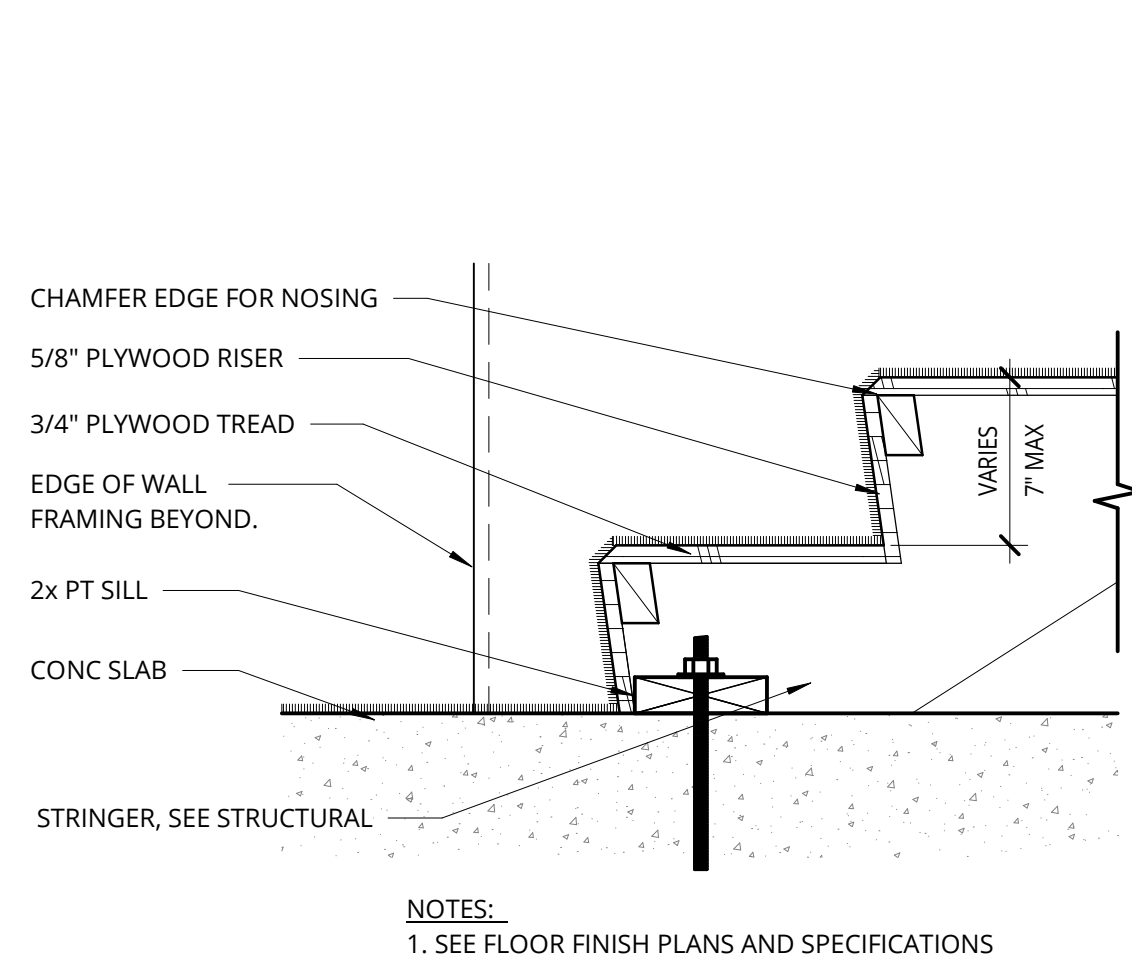
SHEET NUMBER

A6.02



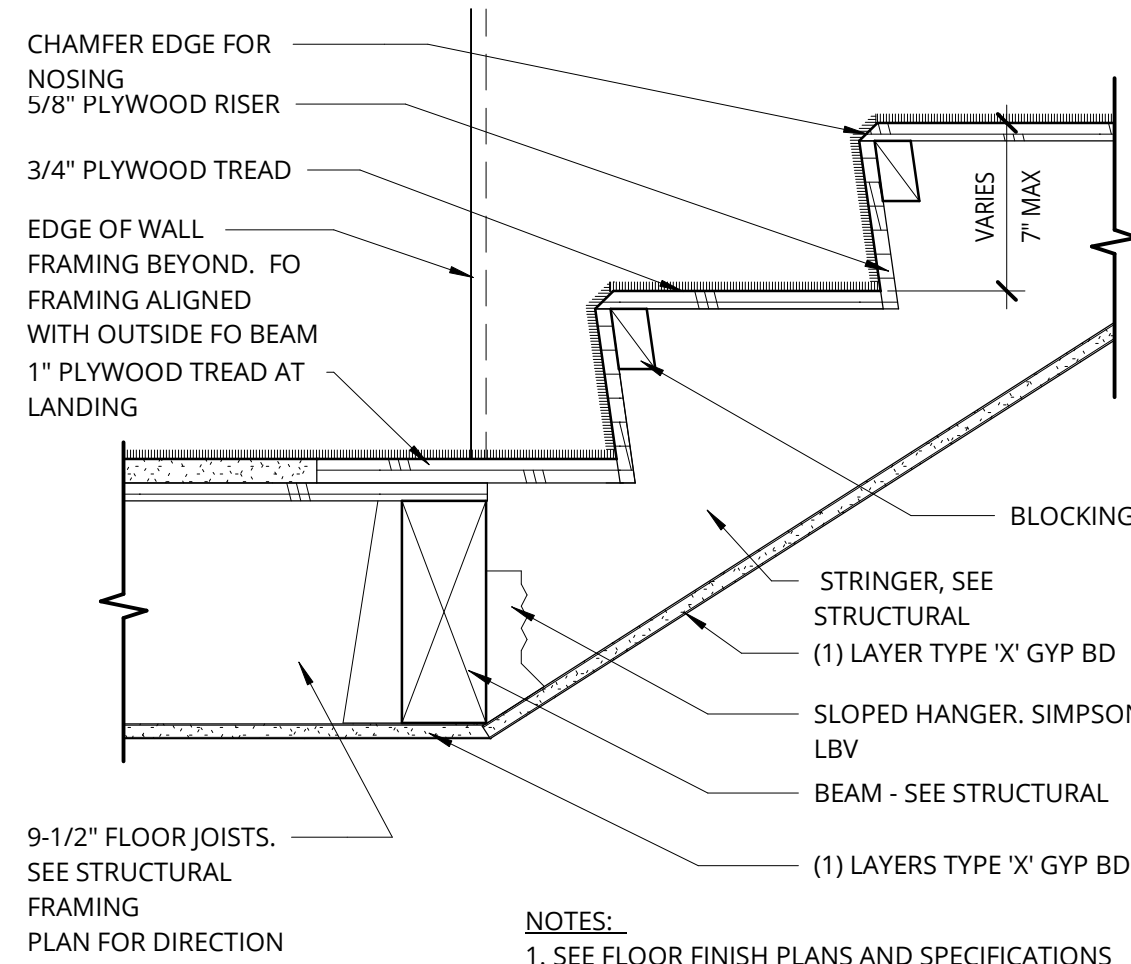
## 5 STAIR @ CONC LANDING

1 1/2" = 1'-0" | 20/A6.01



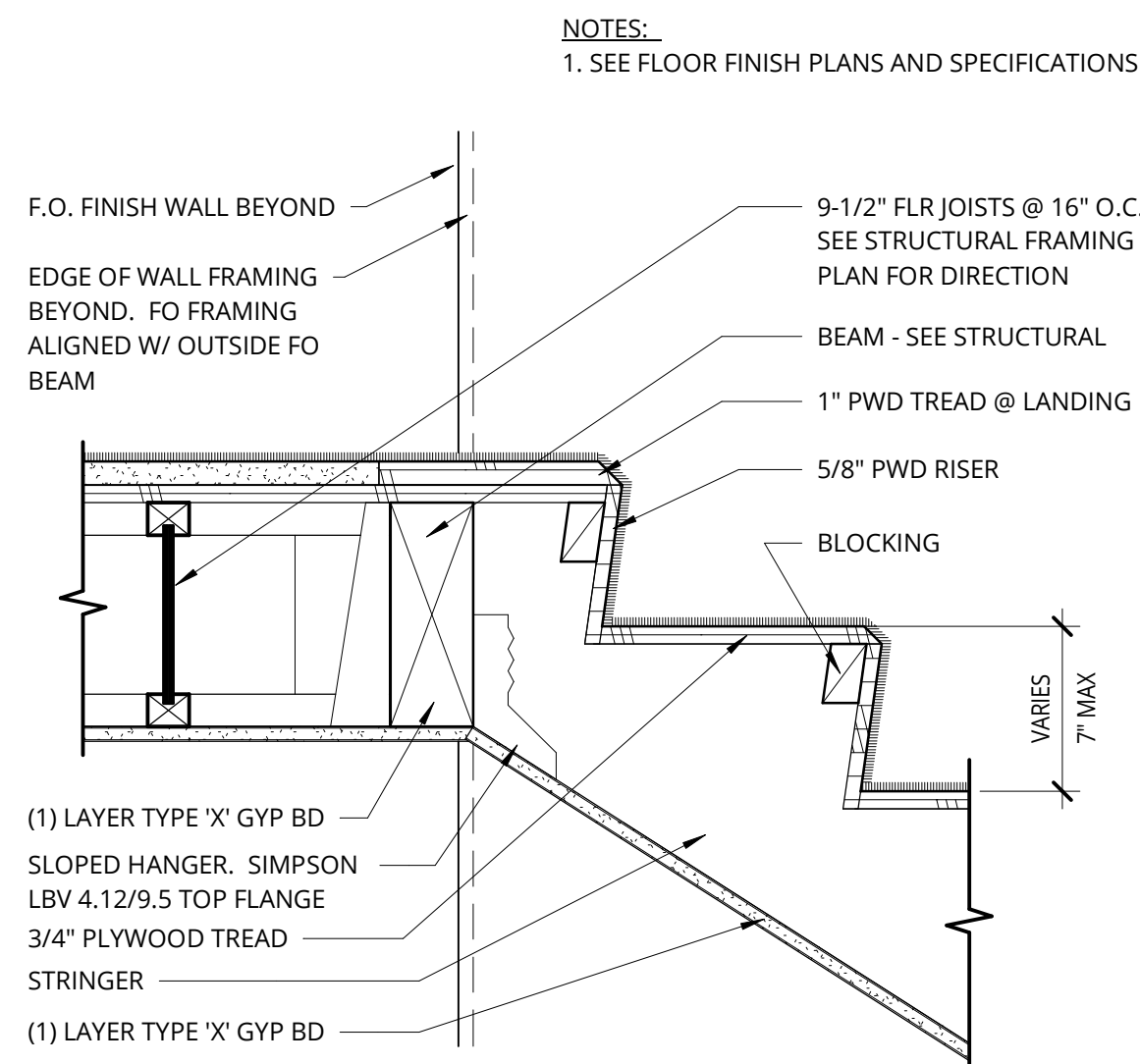
## 6 STAIR @ LANDING 01

1 1/2" = 1'-0" | 20/A6.01



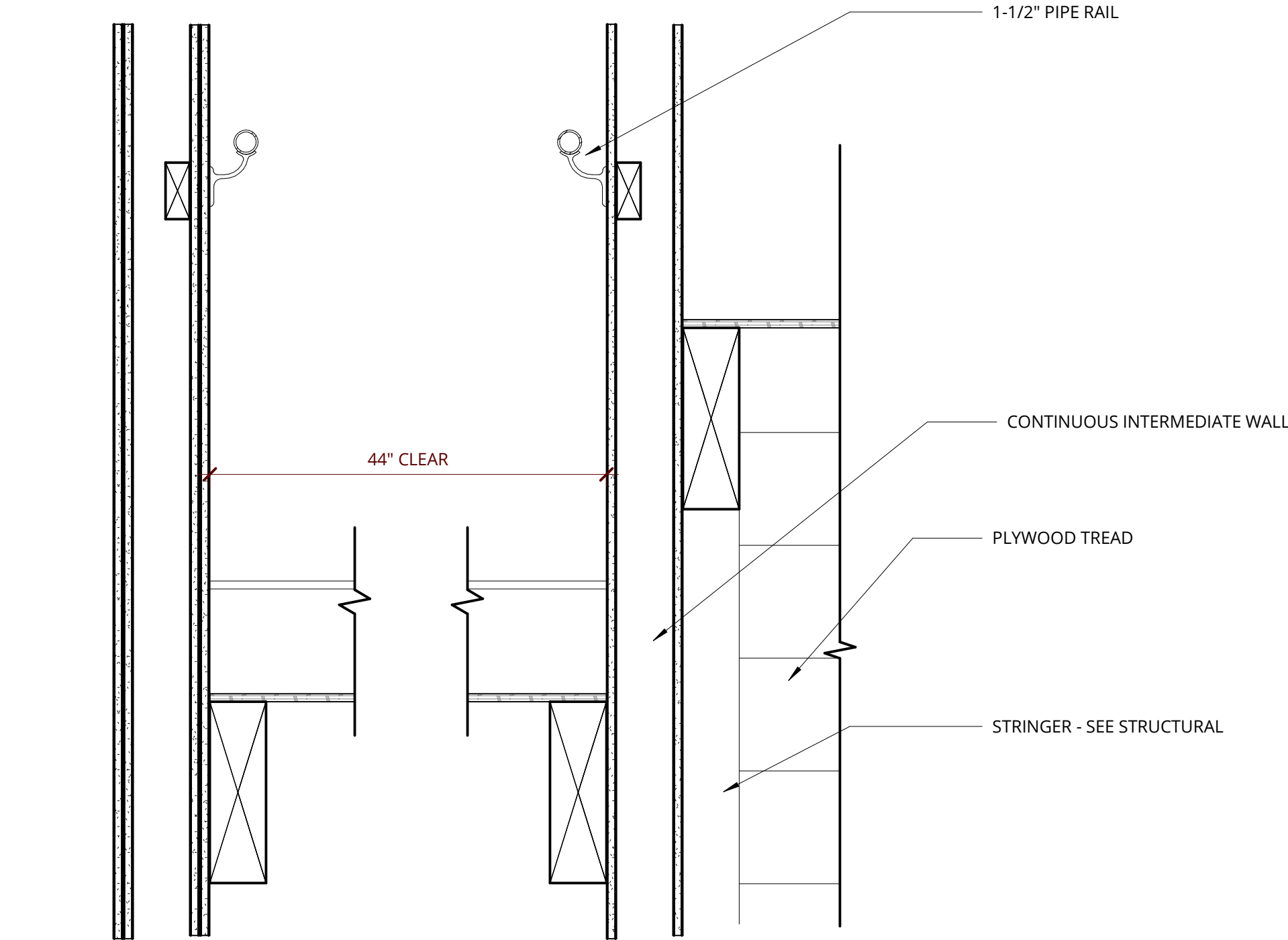
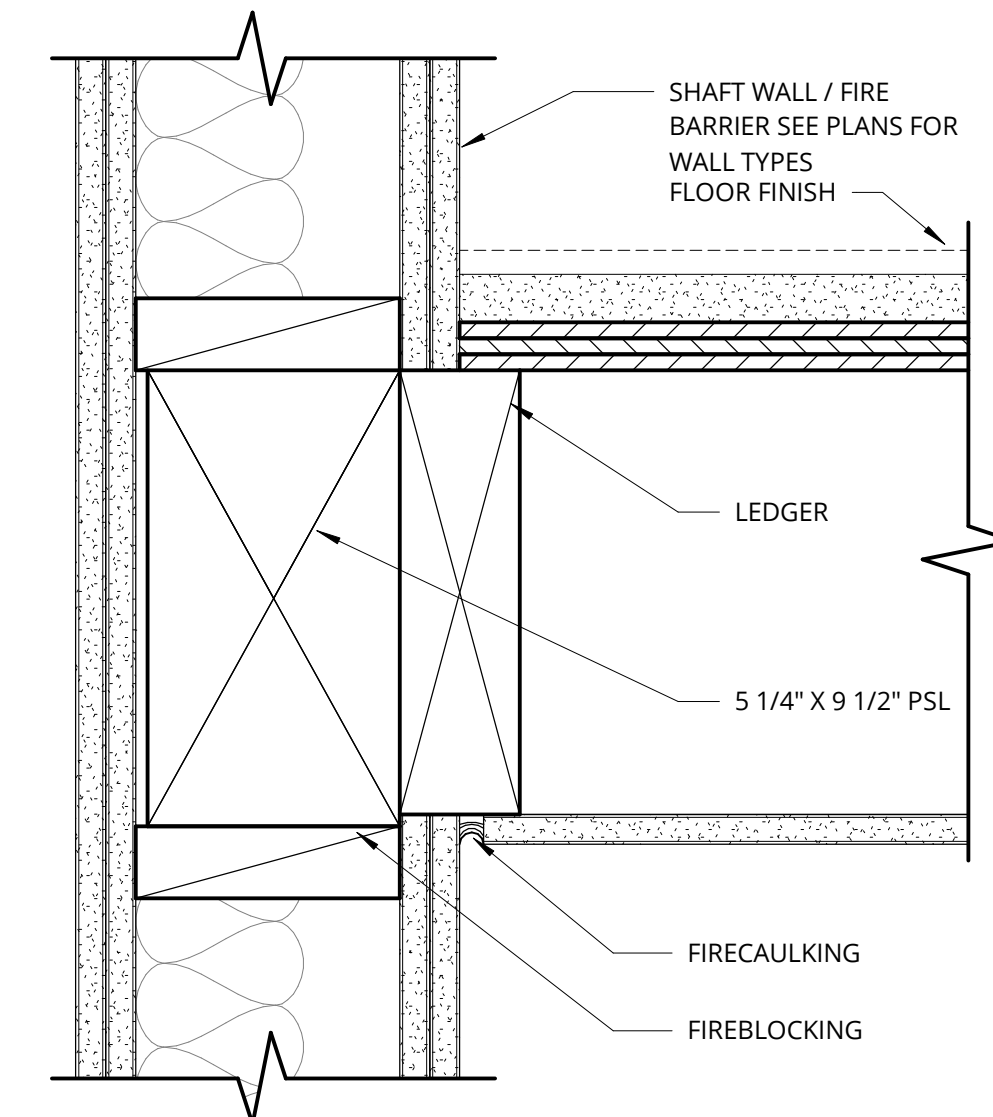
## 7 STAIR @ LANDING 02

1 1/2" = 1'-0" | 8/A6.02



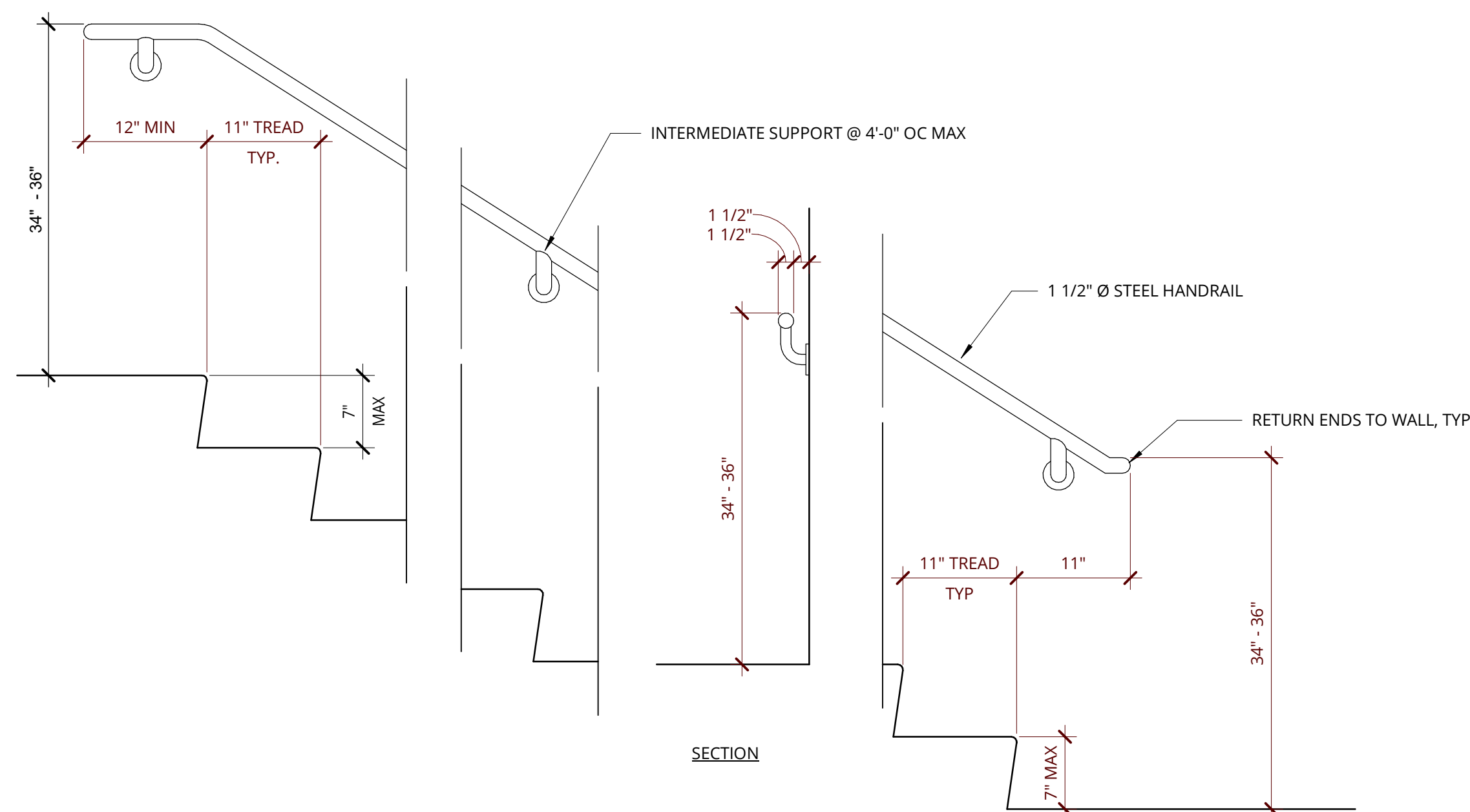
## 8 STAIR MID-LANDING

3" = 1'-0" | 20/A6.01



## 1 STAIR CROSS SECTION - WOOD

1 1/2" = 1'-0" | 19/A6.01

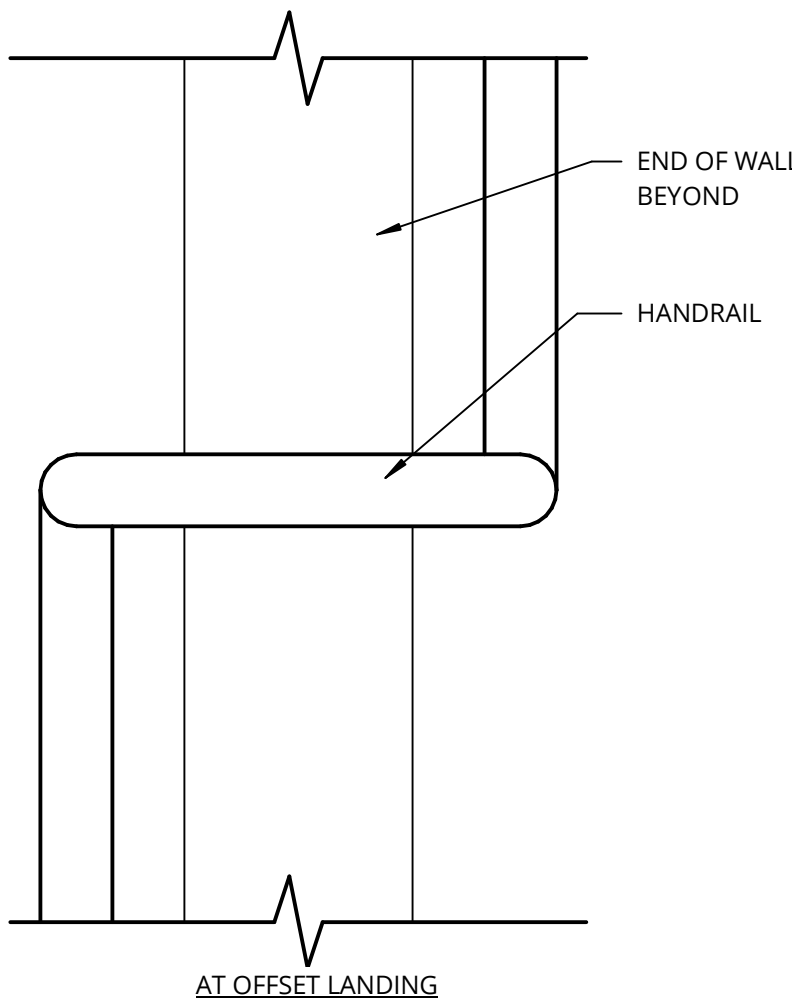


## 4 HANDRAIL @ WALL

1" = 1'-0" | 20/A6.01

## 3 HANDRAIL AT WALL END

3" = 1'-0" | 19/A6.01



REVISION	DATE	REASON FOR ISSUE

### STAIR DETAILS

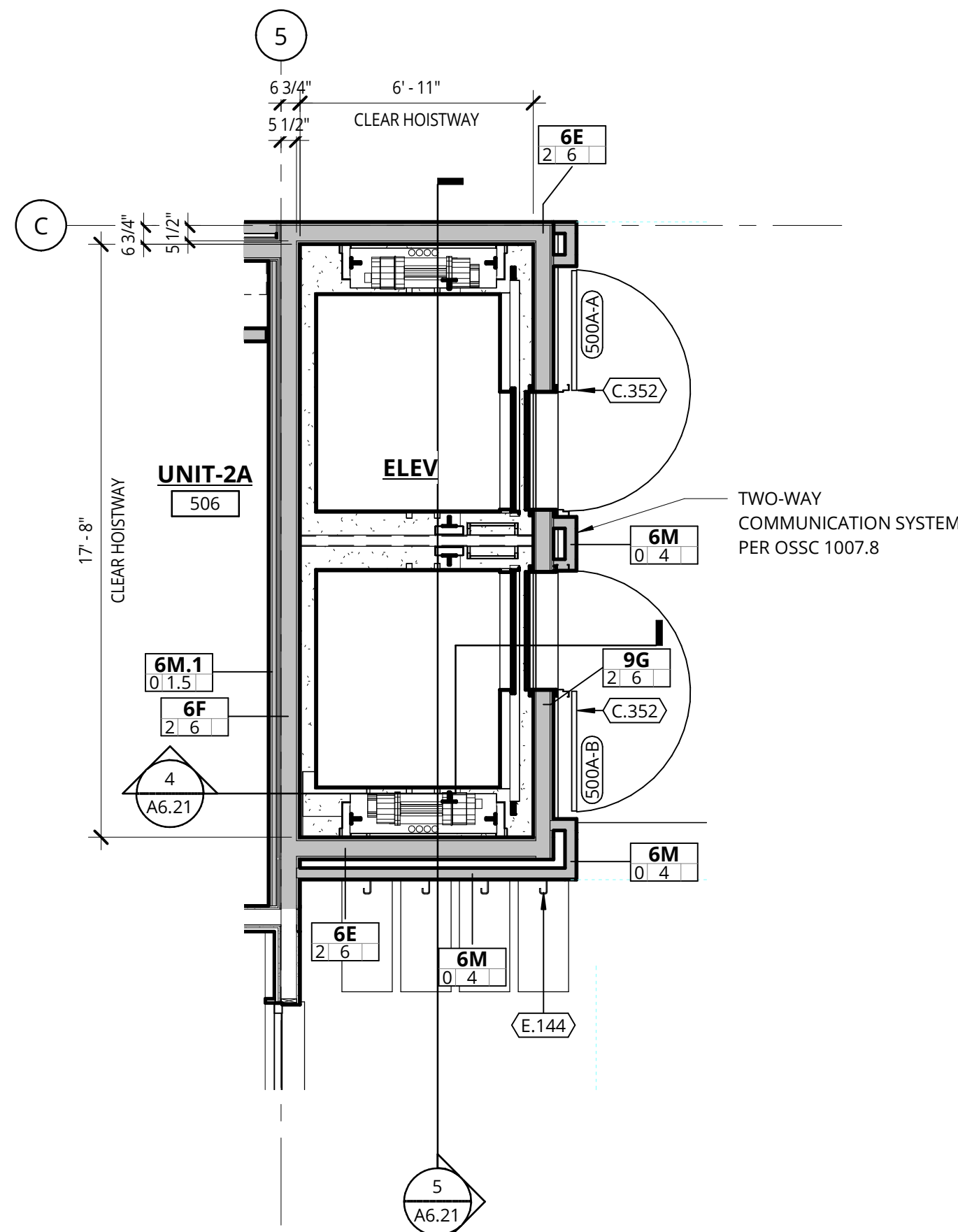
### PERMIT / GMP

DATE	PROJECT NUMBER
17 OCT 2018	149000

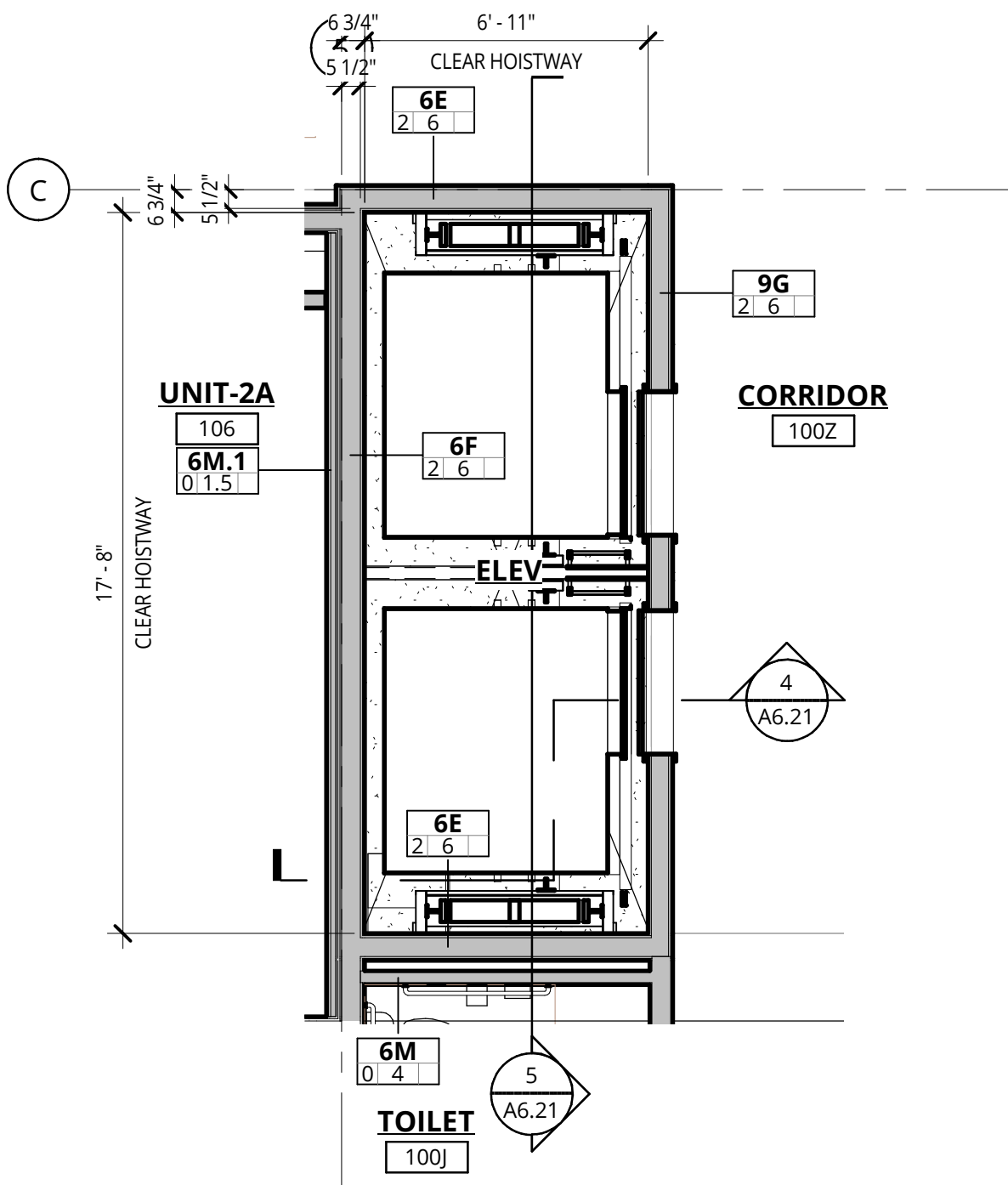
SHEET NUMBER

A6.03

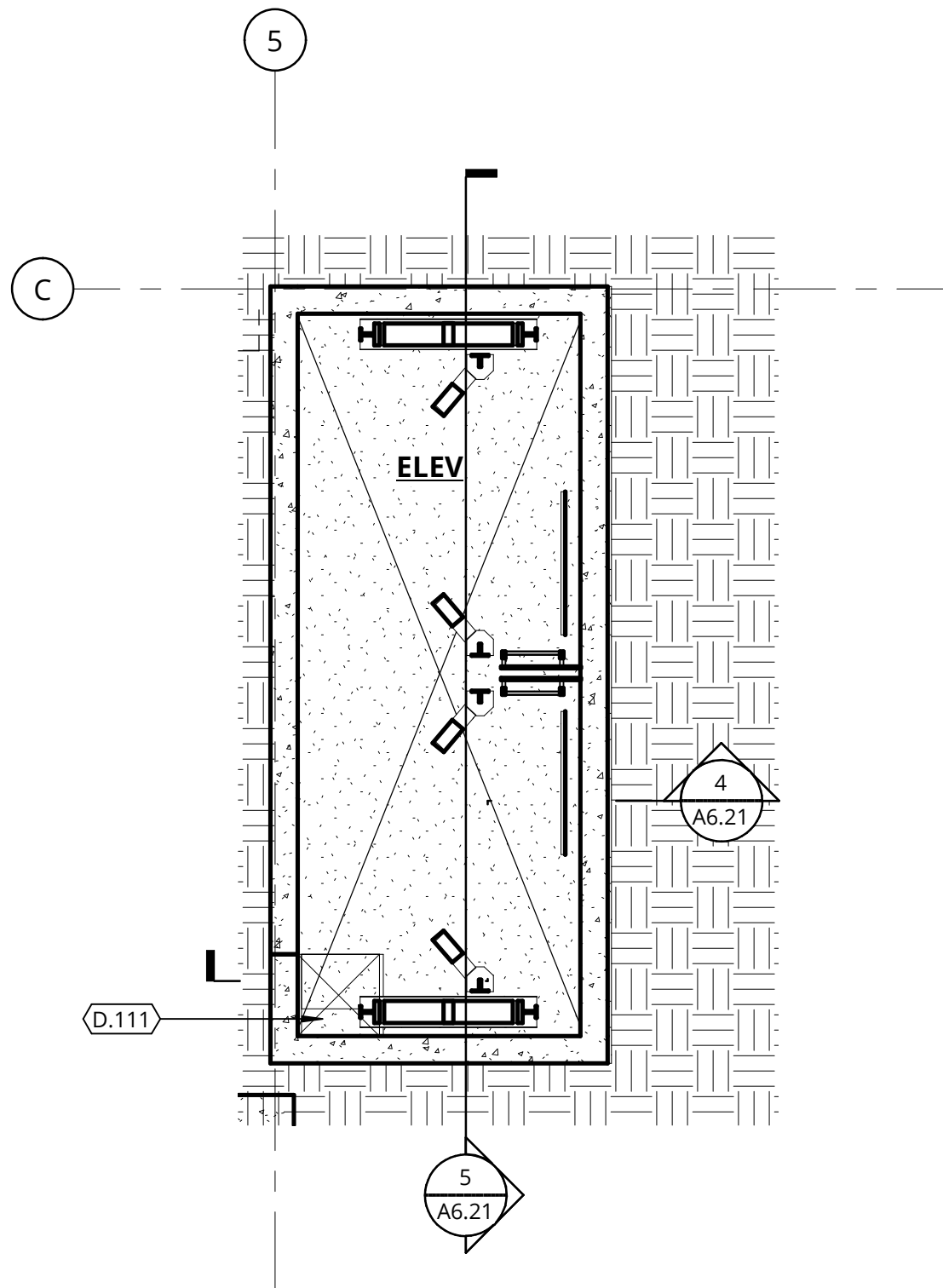




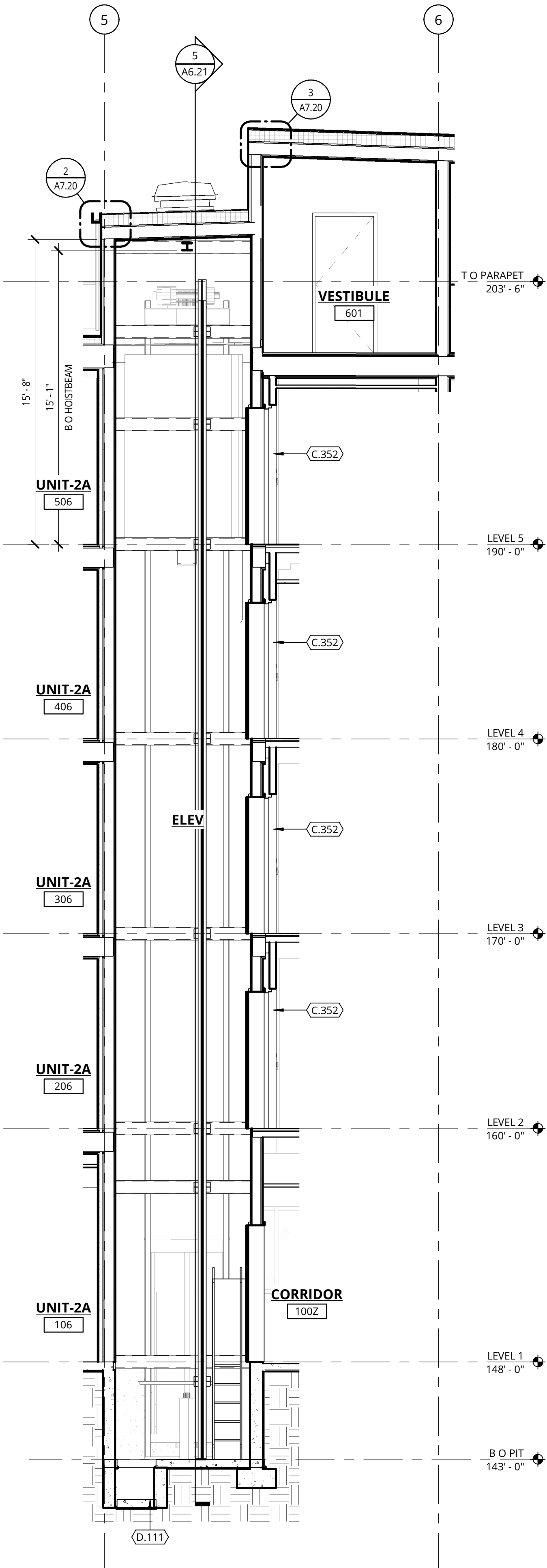
1 ELEVATOR LEVELS 2 THRU 5 FLOOR PLAN  
1/4" = 1'-0" | 1/A5.03



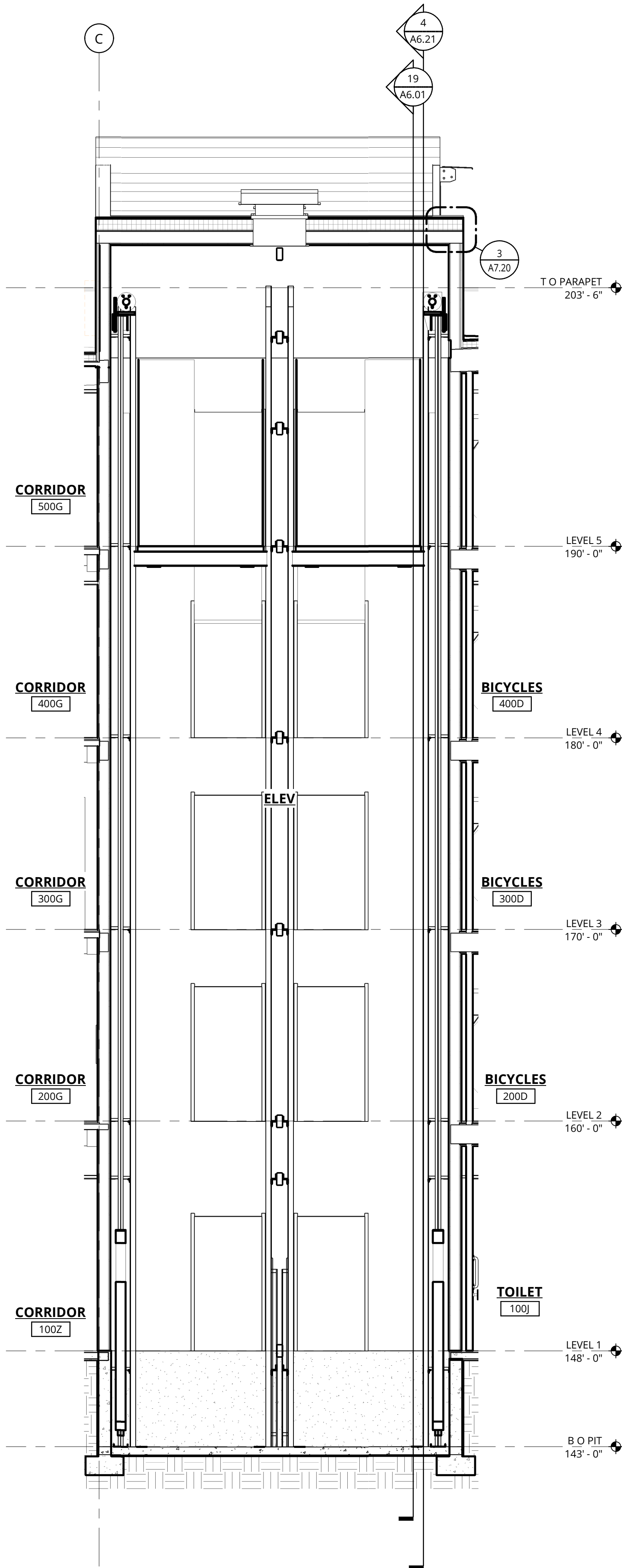
2 ELEVATOR LEVEL 1 FLOOR PLAN  
1/4" = 1'-0"



3 ELEVATOR PIT FLOOR PLAN  
1/4" = 1'-0"



4 ELEVATOR SECTION  
1/4" = 1'-0"



5 ELEVATOR SECTION  
1/4" = 1'-0"

GENERAL NOTES

1. REFER TO SHEET A0.01 FOR 'PROJECT NOTES' APPLICABLE TO ALL PORTIONS OF THE WORK.
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3. REFER TO STRUCTURAL DRAWINGS FOR COLUMNS, SHEAR WALL AND BEAM SIZES.

KEYED NOTES

- C.352 SMOKE DOOR ON MAGNETIC HOLD-OPEN  
D.111 2'X2'X2" SUMP WITH GRATE  
E.144 BICYCLE RACKS

REGISTERED ARCHITECT  
SAC S. JOHNSON  
502  
ISAAC JOHNSON  
PORTLAND, OR  
STATE OF OREGON

Ankrom Moisan

38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

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SAN FRANCISCO, CA 94103  
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REVISION	DATE	REASON FOR ISSUE

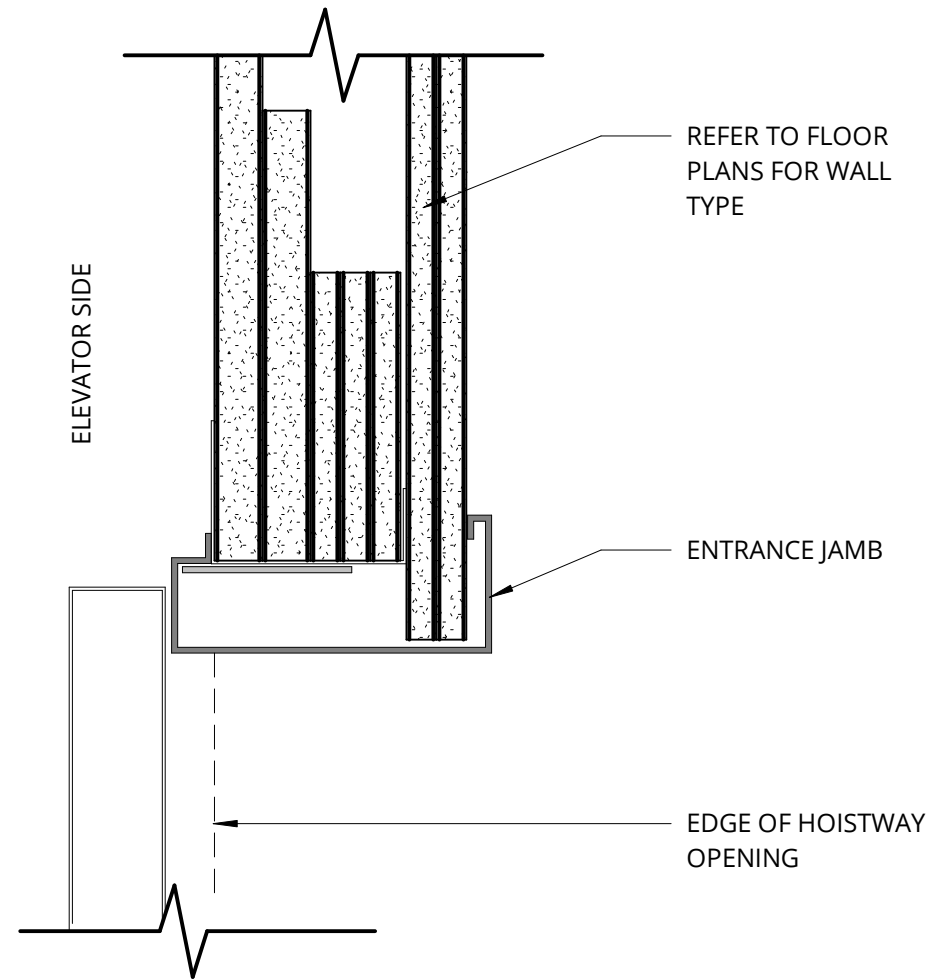
ELEVATOR PLANS  
AND SECTIONS

PERMIT / GMP

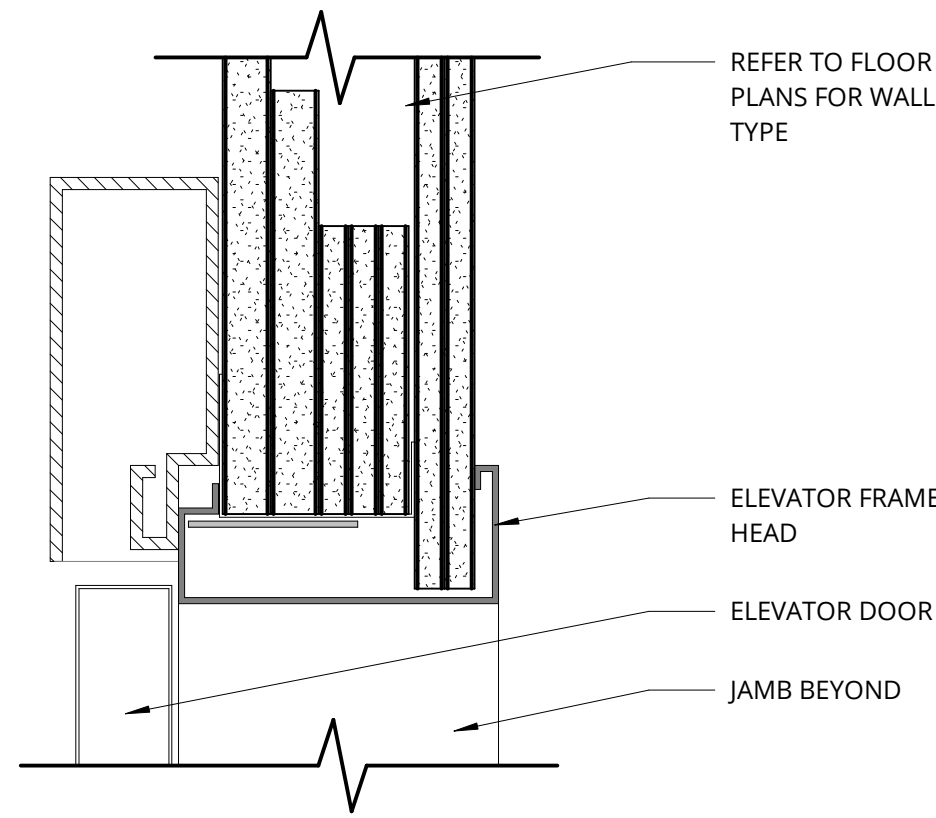
DATE 17 OCT 2018	PROJECT NUMBER 149000
SHEET NUMBER	A6.21



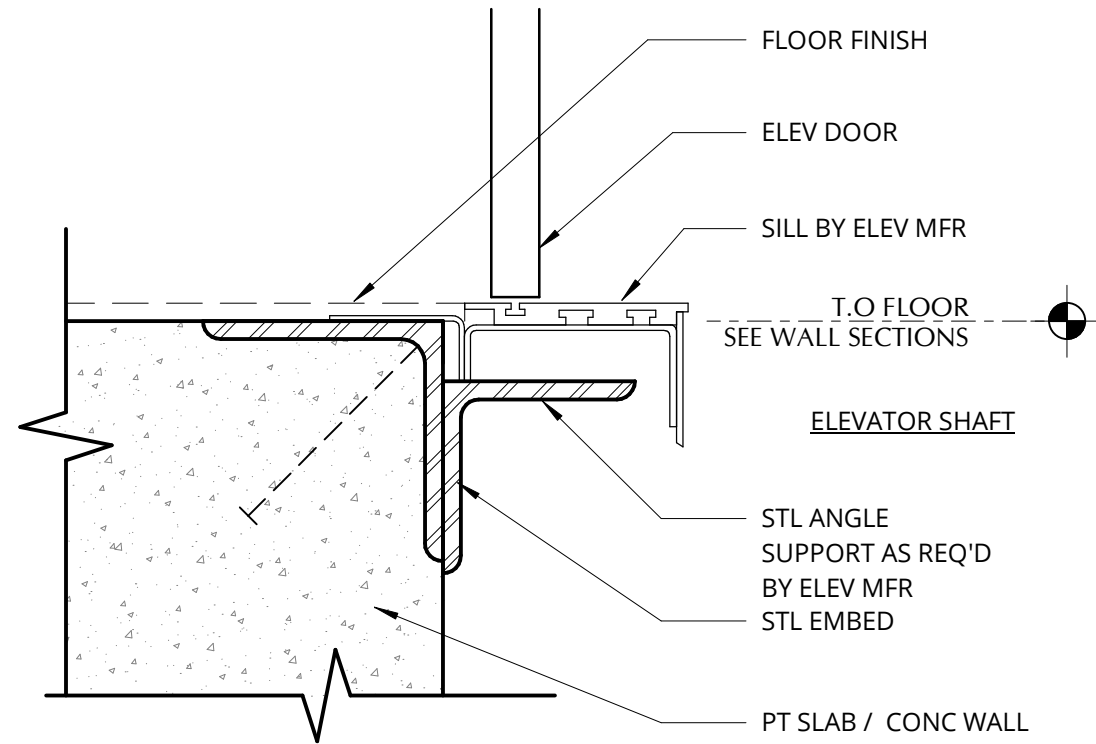
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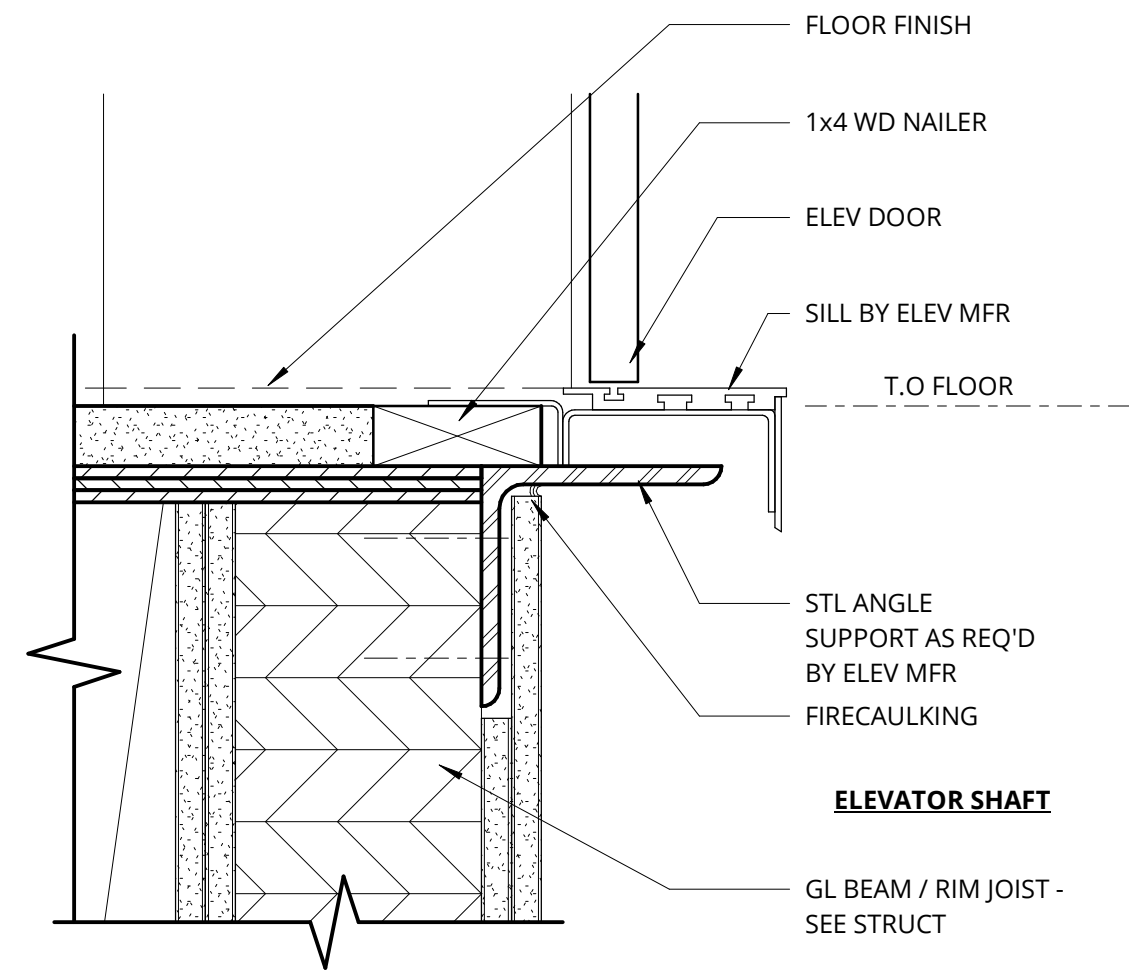
1 ELEVATOR ENTRANCE JAMB  
3" = 1'-0" | 5/A11.02



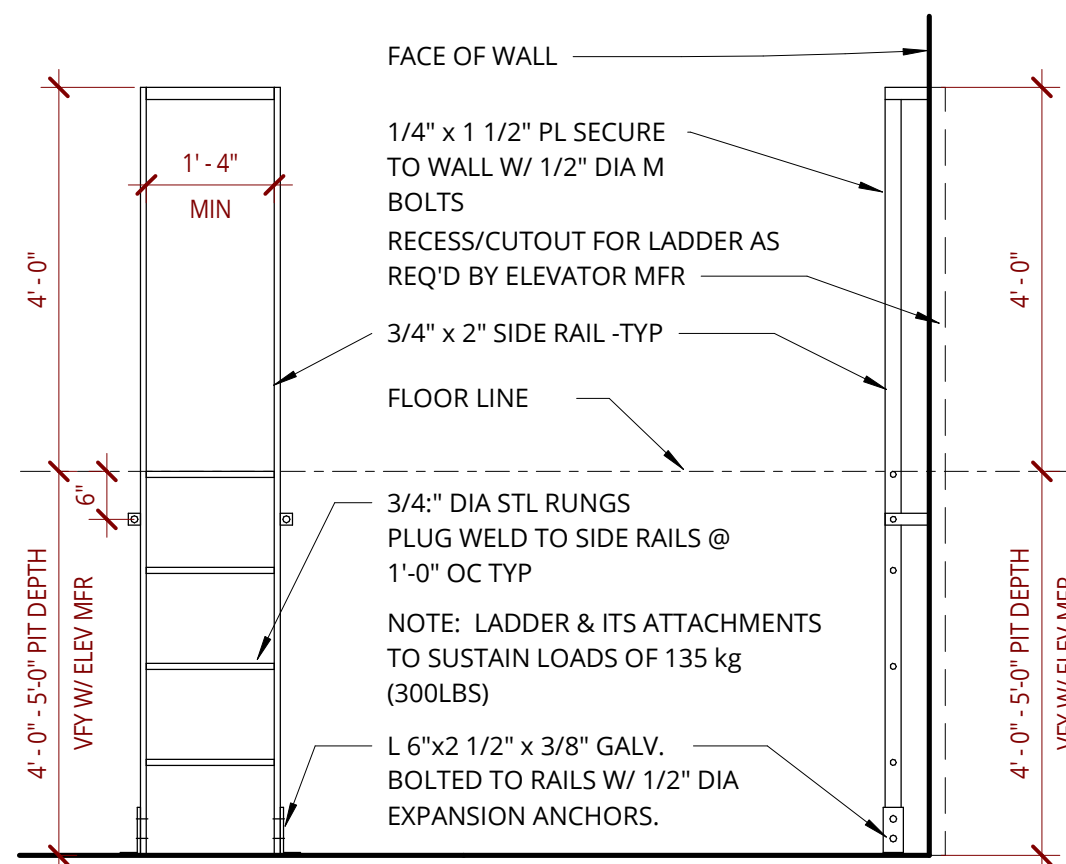
2 ELEVATOR ENTRANCE HEAD  
3" = 1'-0"



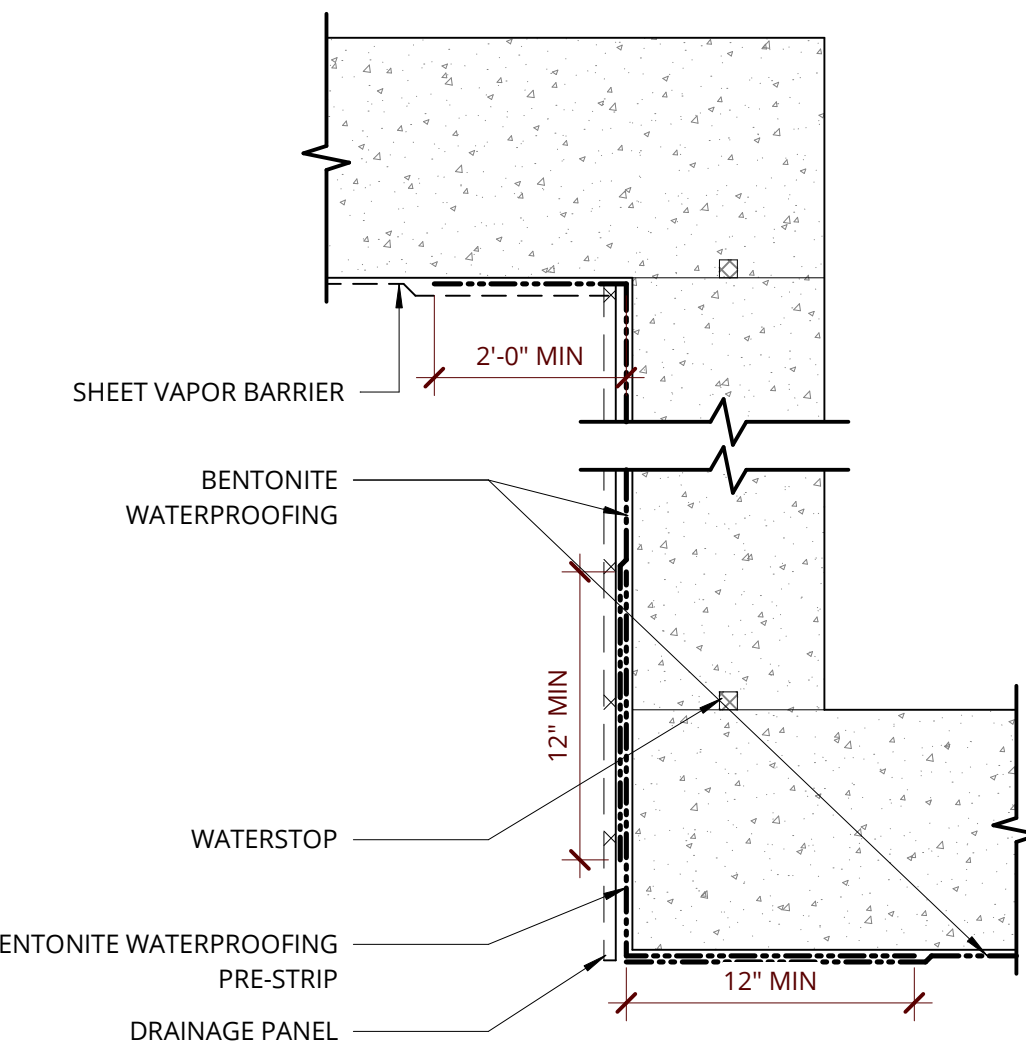
3 ELEV SILL @ CONCRETE SLAB  
3" = 1'-0"



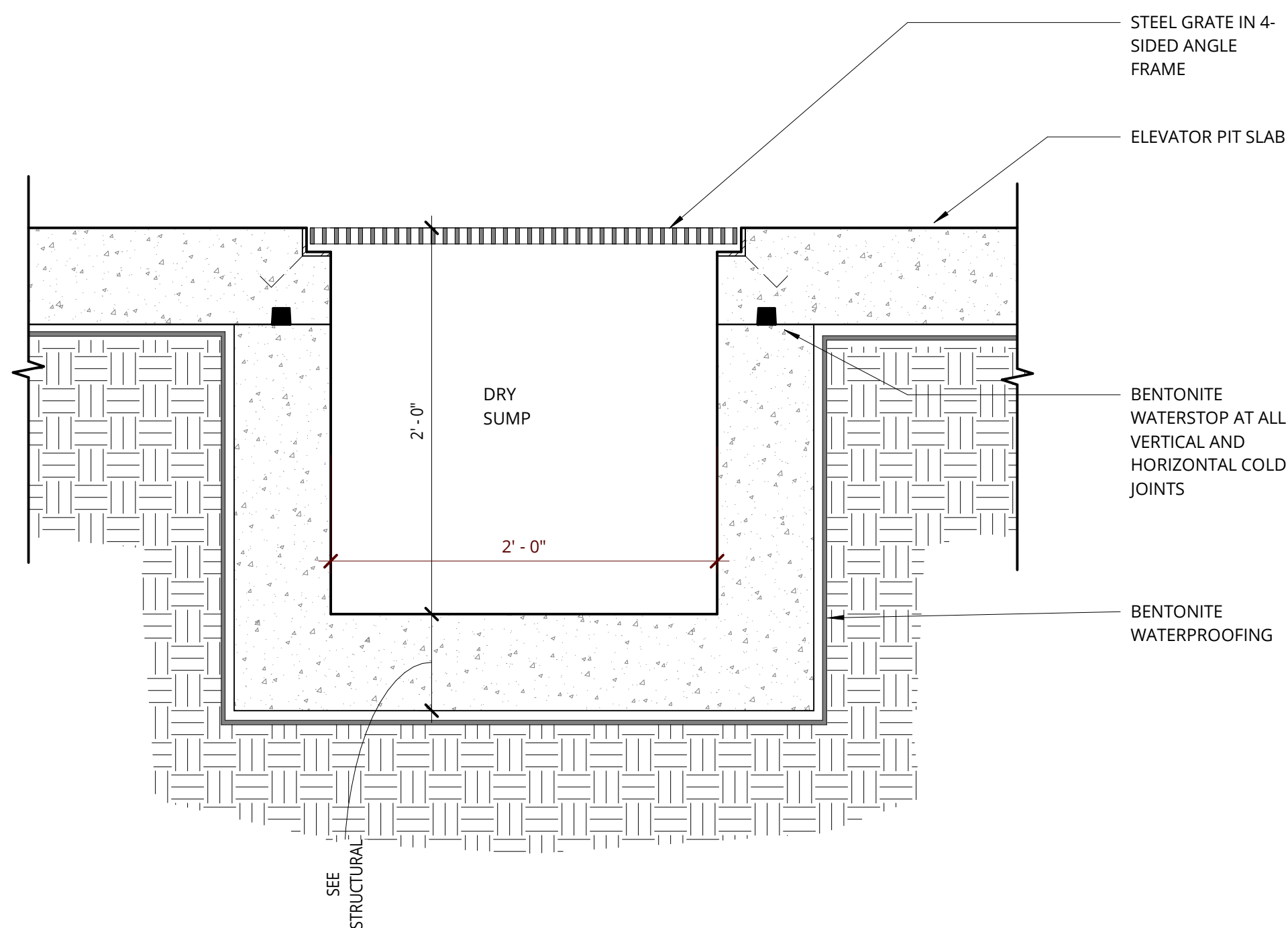
4 ELEV SILL @ WD FRAMING  
3" = 1'-0" | 5/A11.02



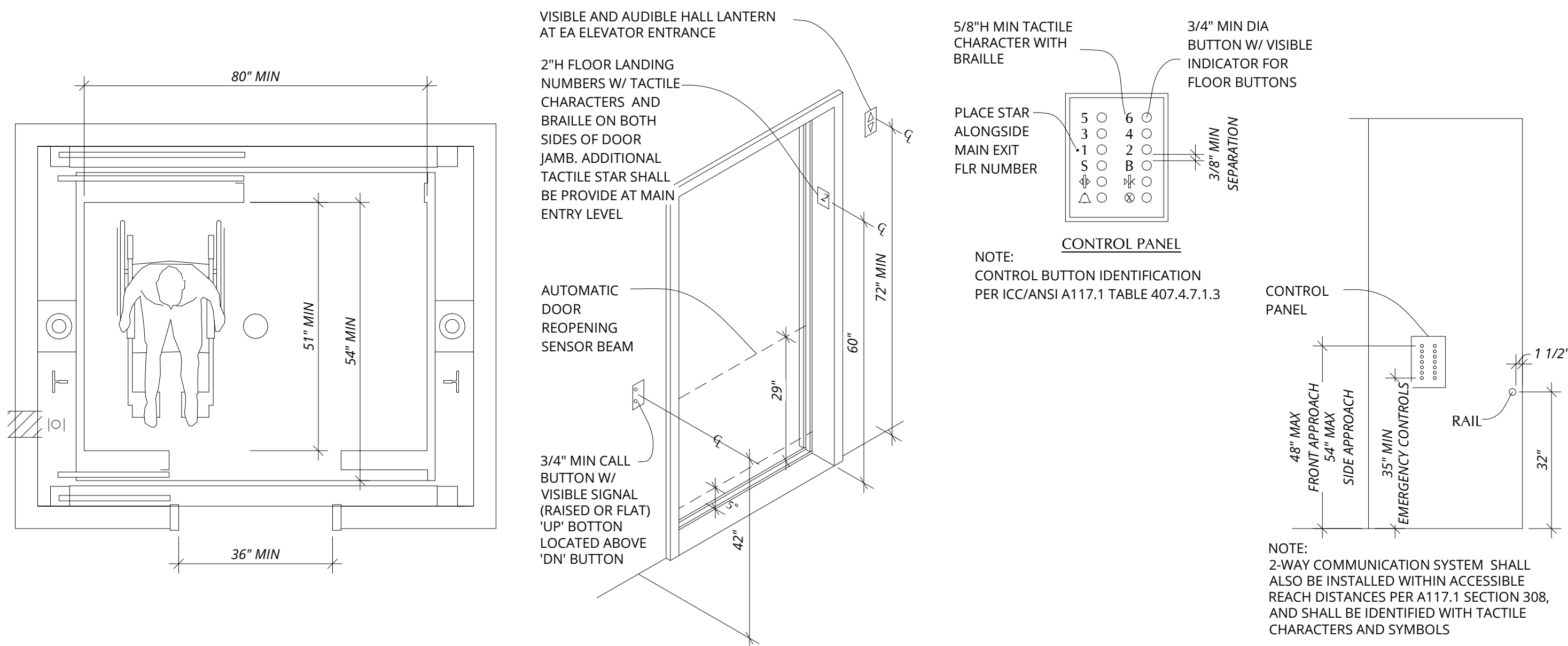
5 ELEVATOR PIT LADDER  
1/2" = 1'-0"



6 ELEV PIT SECTION  
1 1/2" = 1'-0"



7 ELEV SUMP PIT  
1 1/2" = 1'-0"



8 ADA REQUIREMENTS FOR ELEVATORS  
1/2" = 1'-0"



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063

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BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

ELEVATOR DETAILS

PERMIT / GMP

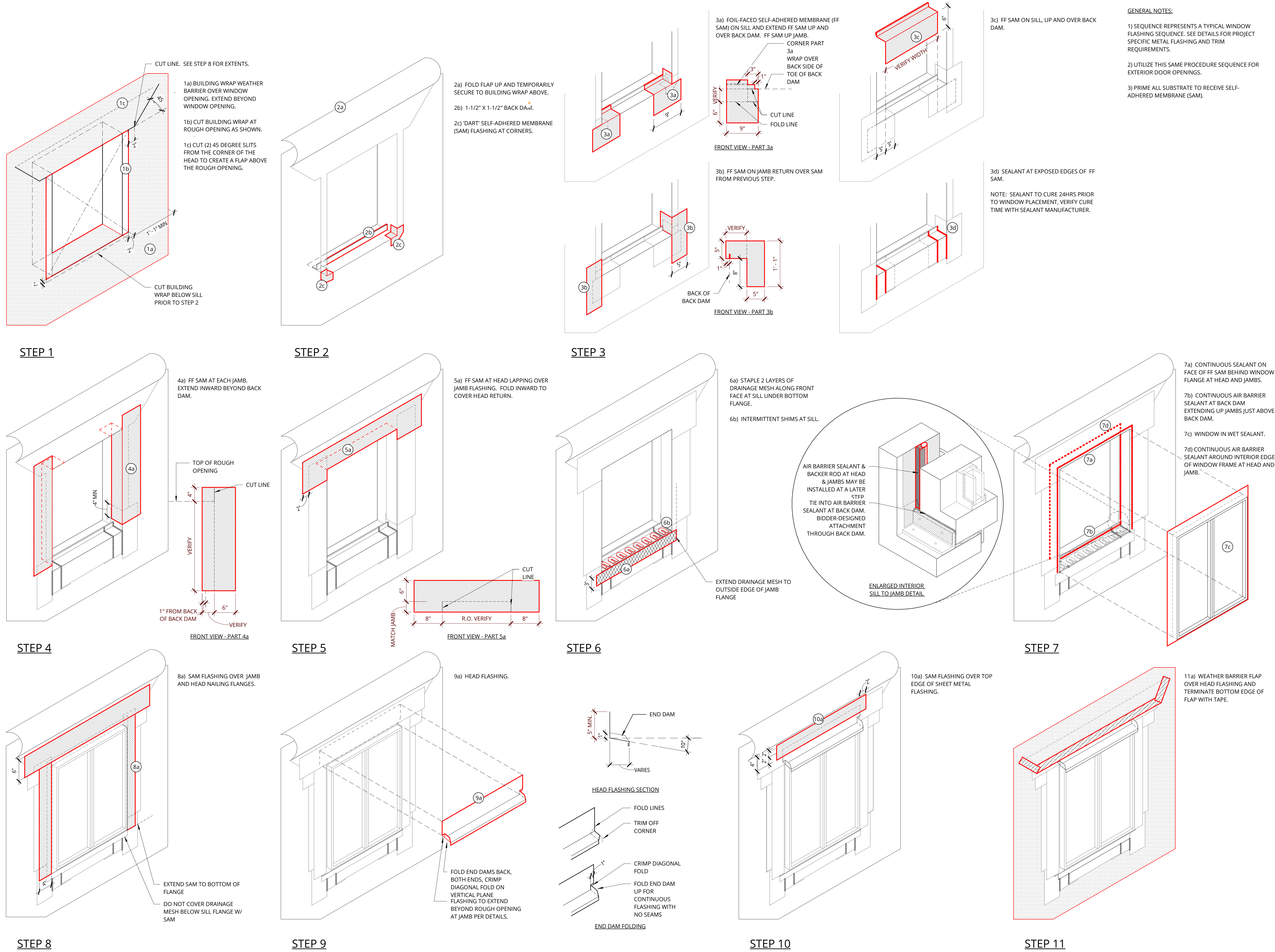
DATE 17 OCT 2018	PROJECT NUMBER 149000
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SHEET NUMBER

A6.22

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REGISTERED ARCHITECT  
SAC S. JOHNSON  
502  
KANE JOHNSON  
PORTLAND, OR  
STATE OF OREGON

**Ankrom Moisan**

38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063

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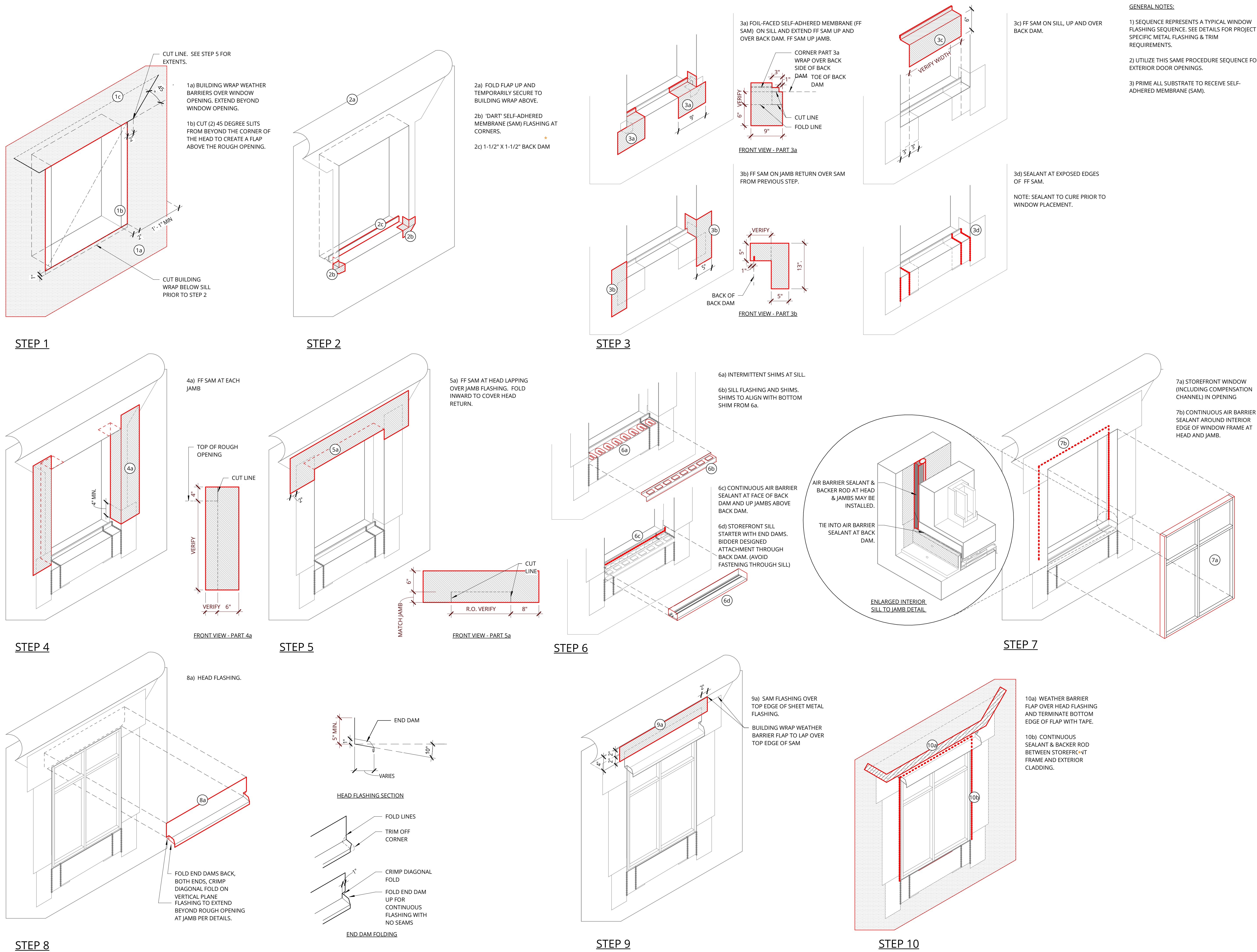
REVISION	DATE	REASON FOR ISSUE

**WINDOW WRAP SEQUENCE**

**PERMIT / GMP**

DATE 17 OCT 2018	PROJECT NUMBER 149000
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REGISTERED ARCHITECT  
SAC S. JOHNSON  
502  
KANE JOHNSON  
PORTLAND, OR  
STATE OF OREGON

Ankrom Moisan

38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100  
  
1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600  
  
1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063  
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REVISION	DATE	REASON FOR ISSUE

STOREFRONT WRAP SEQUENCE

PERMIT / GMP

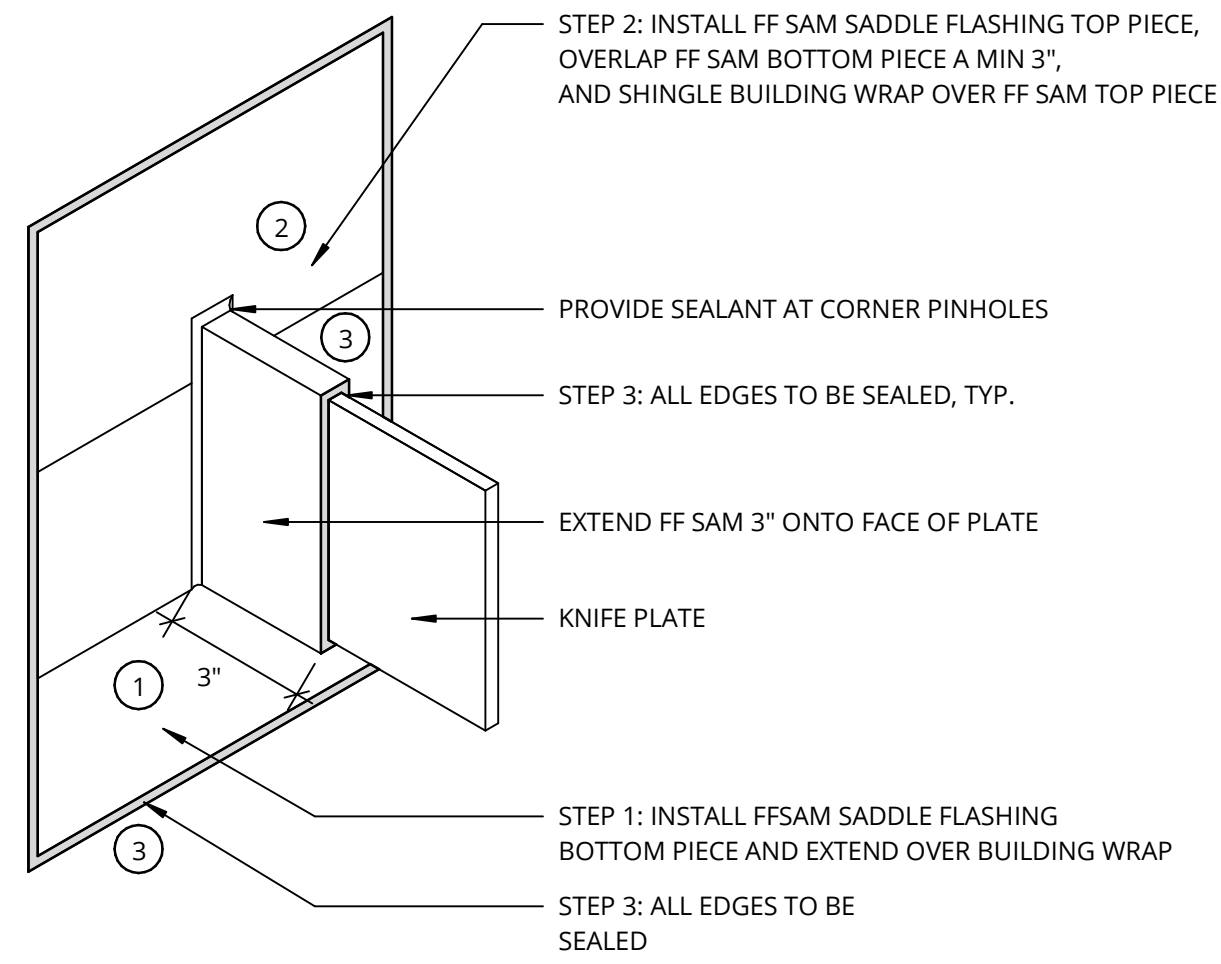
DATE 17 OCT 2018	PROJECT NUMBER 149000
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SHEET NUMBER  
A7.02



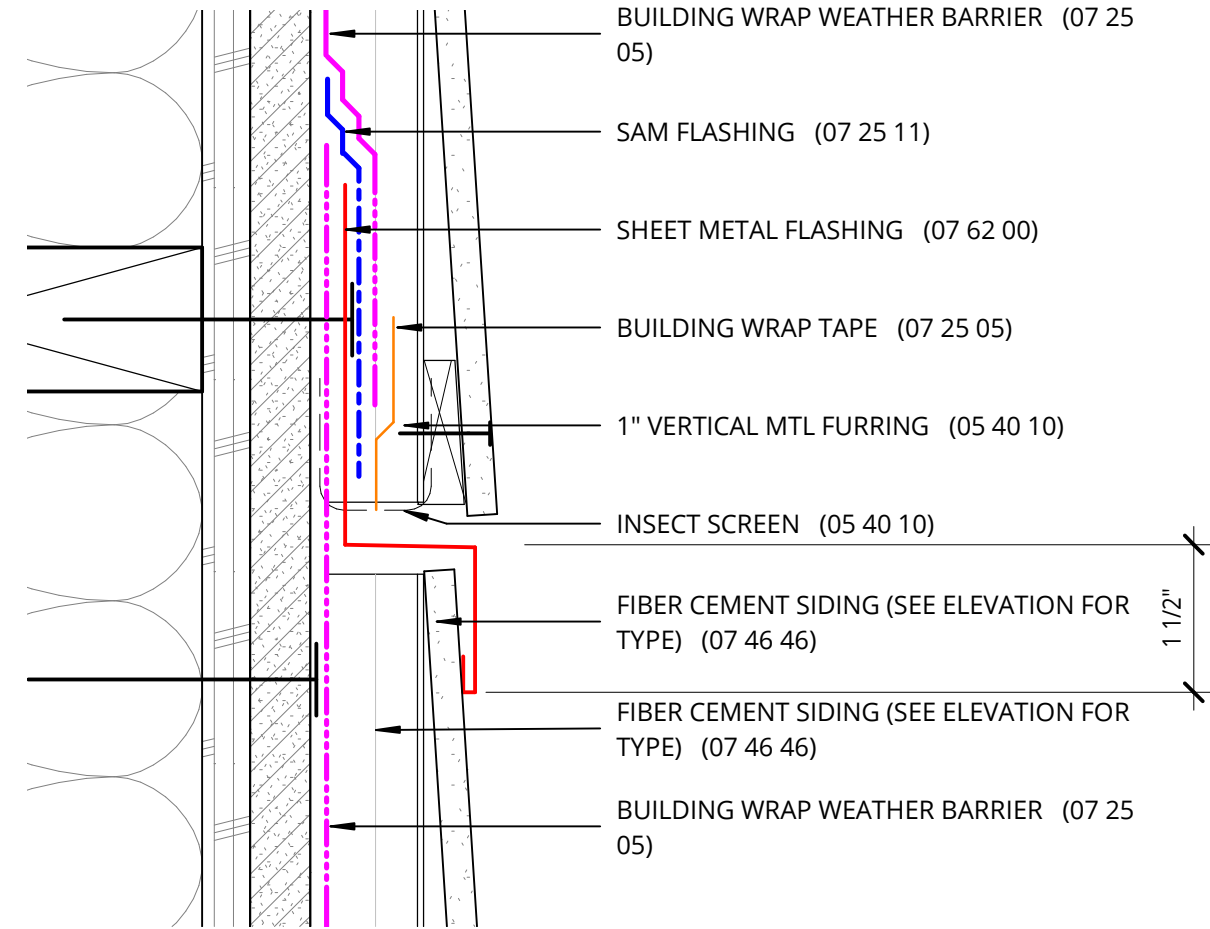






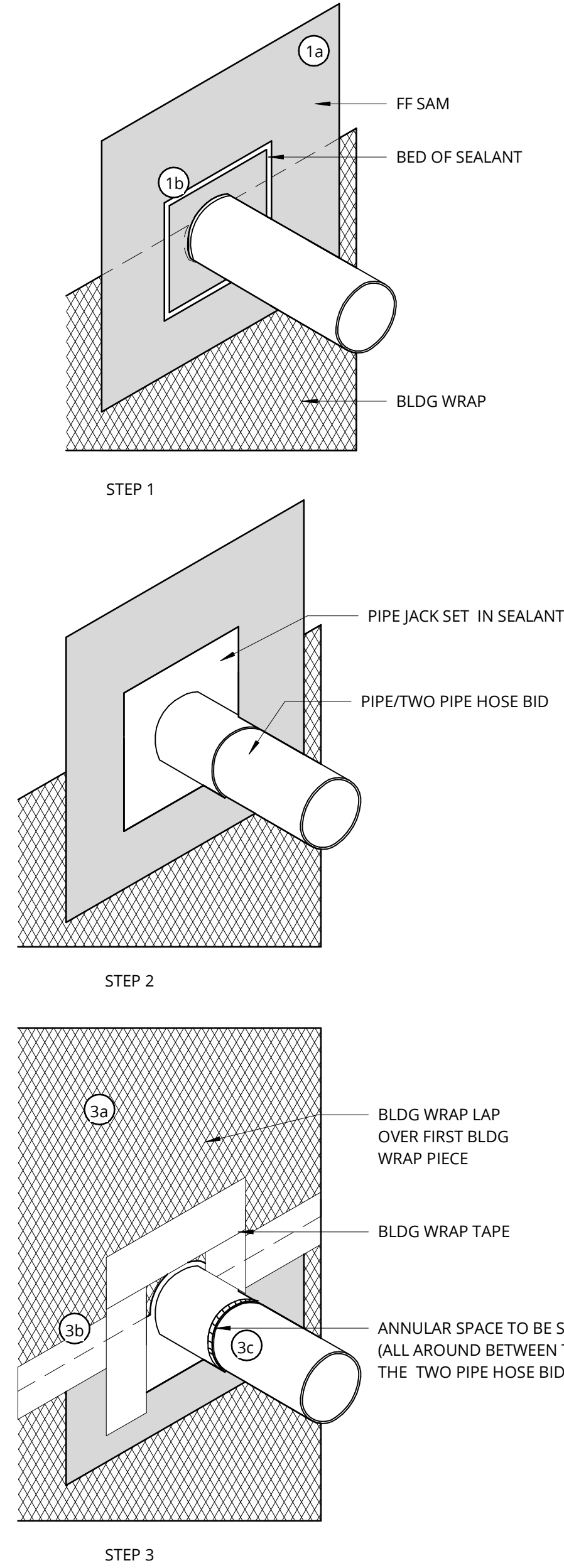
## 1 KNIFE PLATE FLASHING

3" = 1'-0" | 2/A7.24



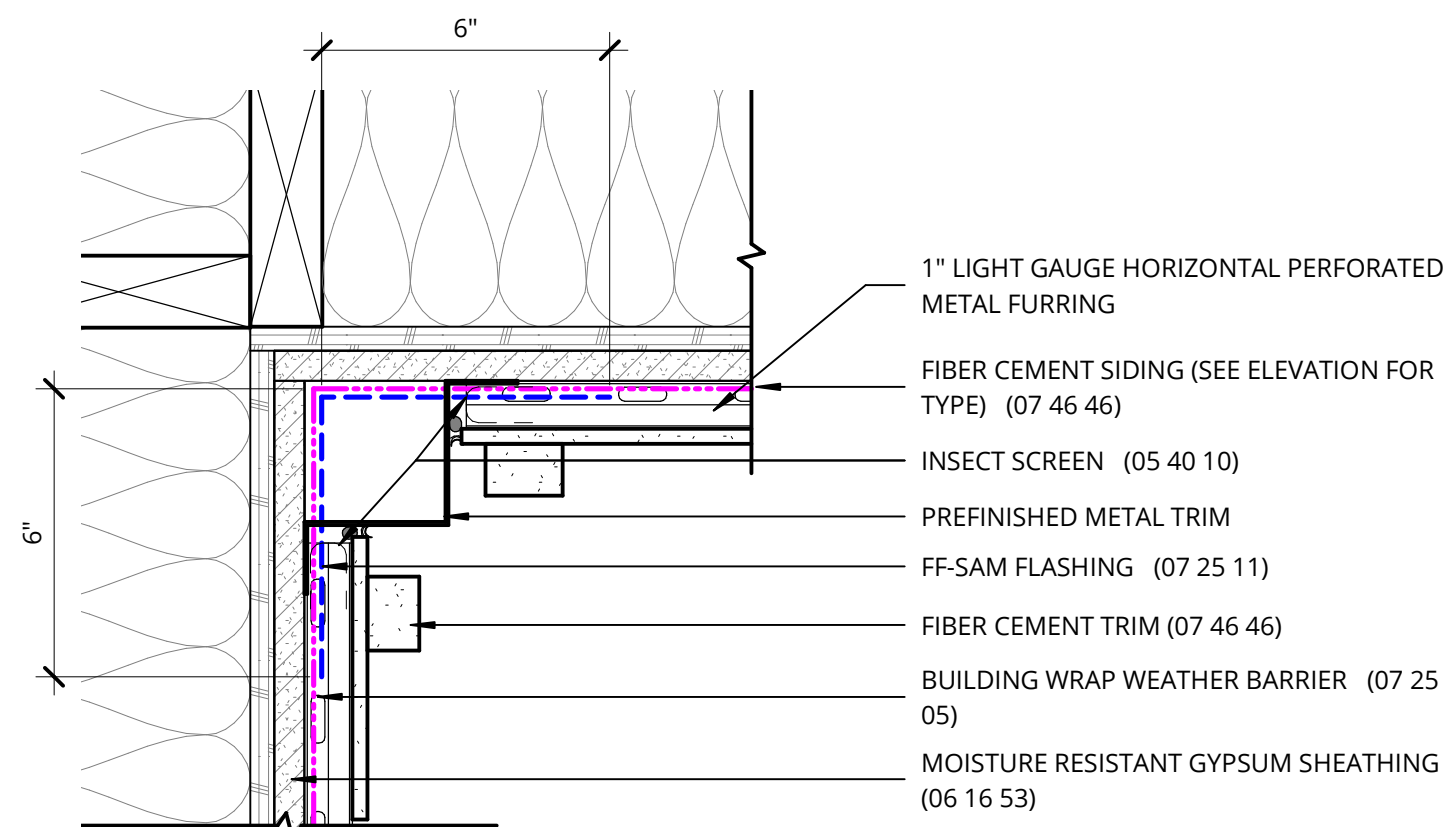
## 5 THROUGH-WALL FLASHING

6" = 1'-0"



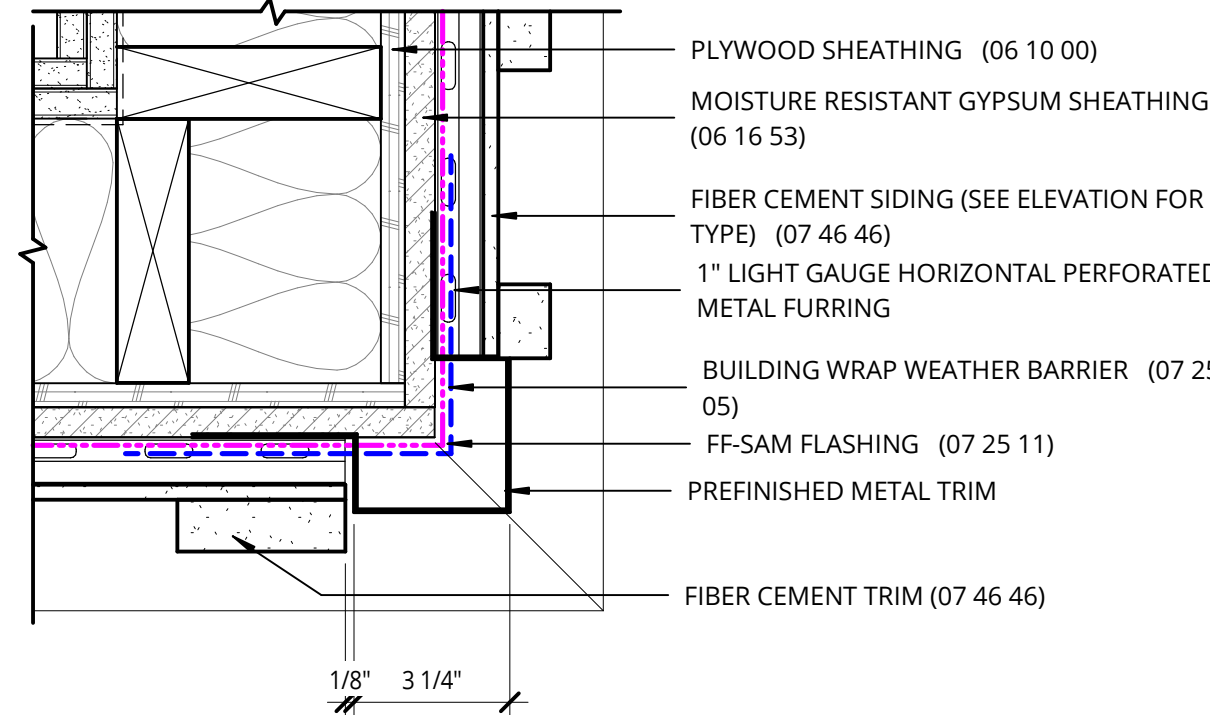
## 9 PIPE PENETRATION FLASHING SEQUENCE

1" = 1'-0"



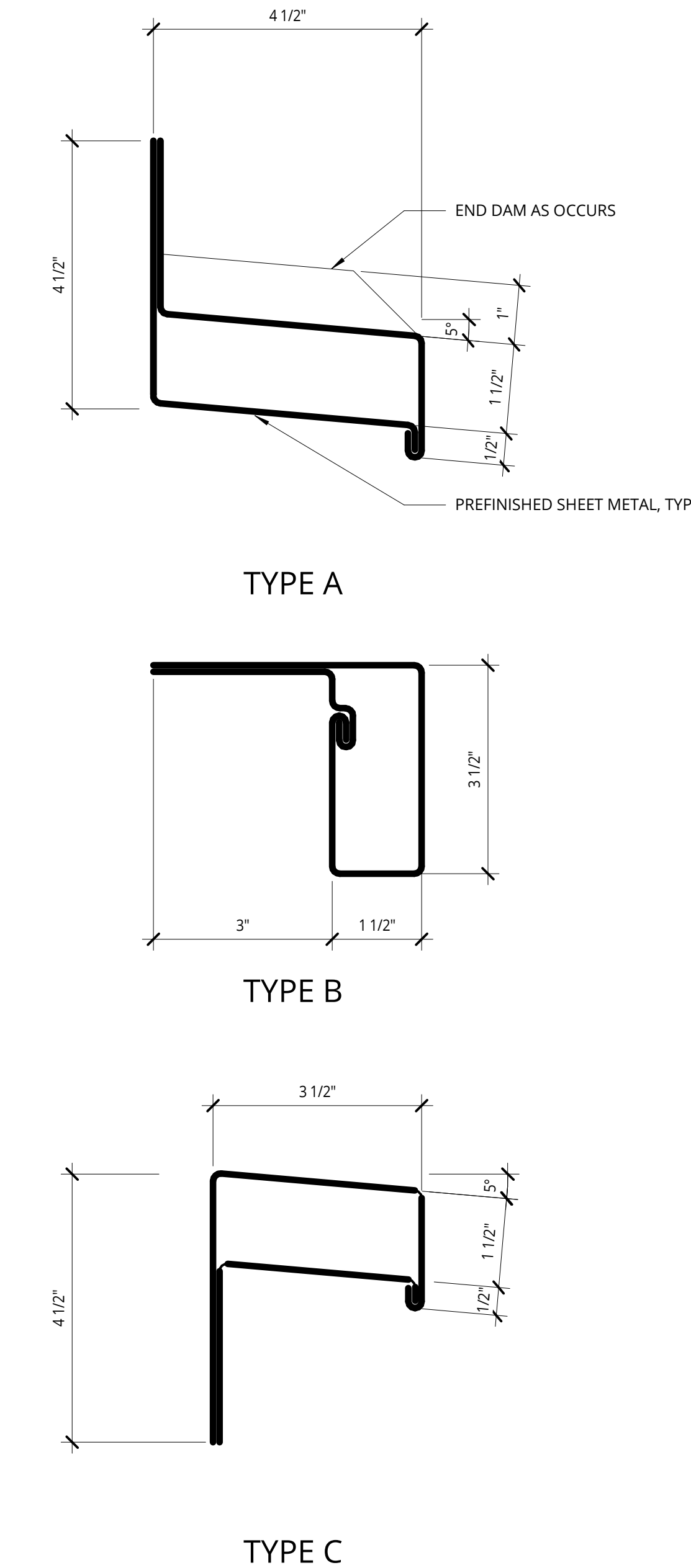
## 2 FCP-1 AT INSIDE CORNER

3" = 1'-0" | 1/A5.01



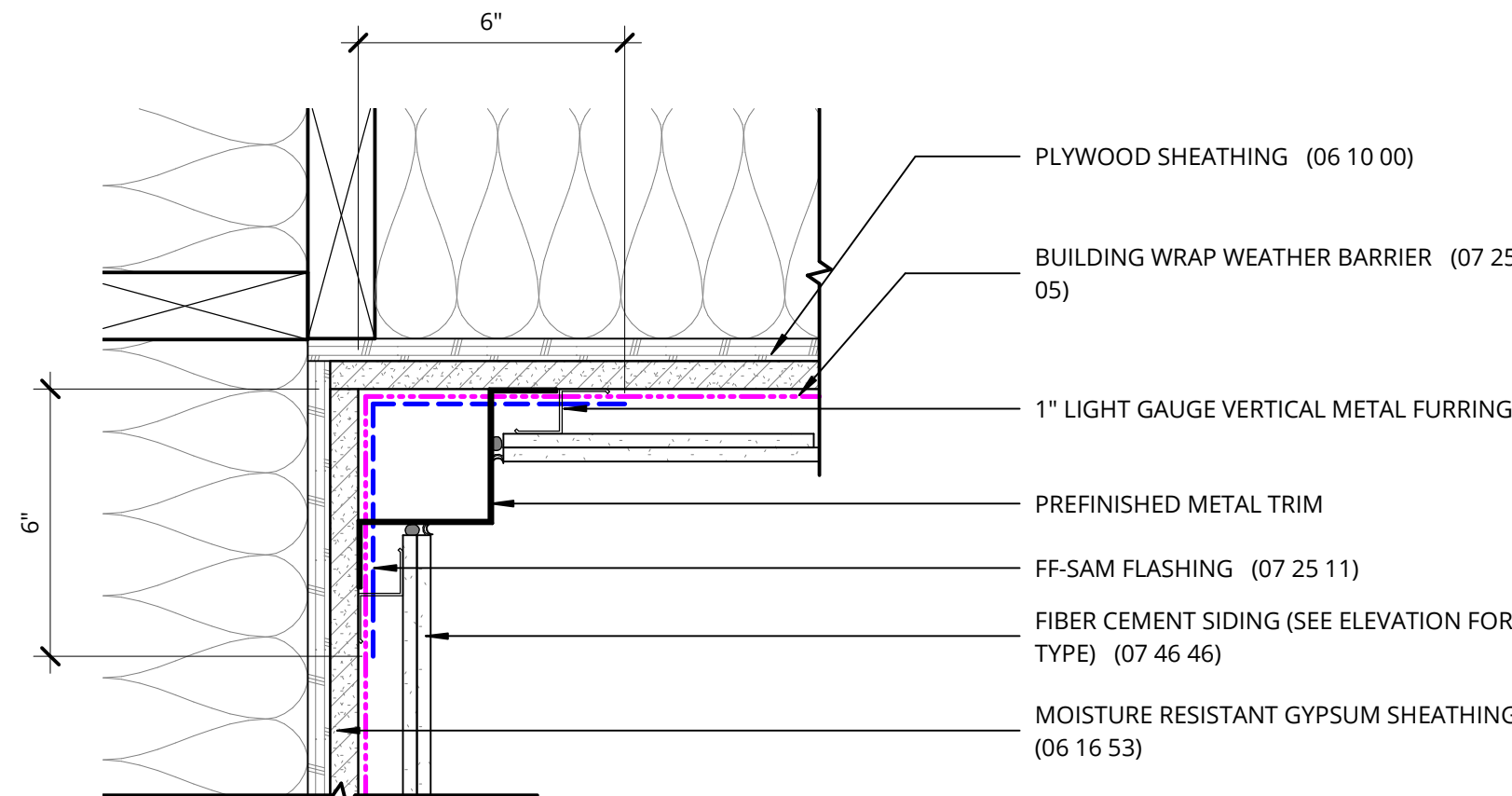
## 6 FCP-1 OUTSIDE CORNER

3" = 1'-0" | 1/A5.01



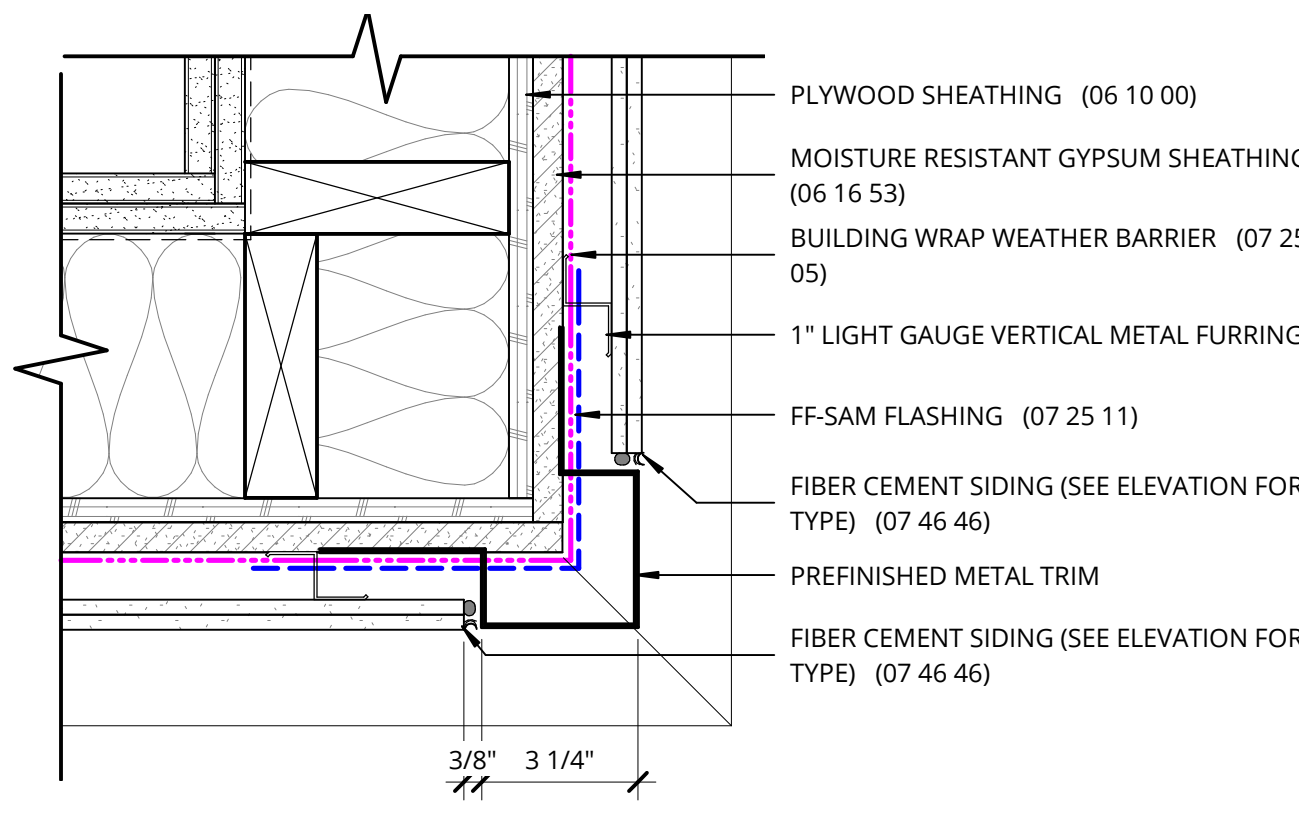
## 10 METAL TRIM PROFILES

6" = 1'-0"



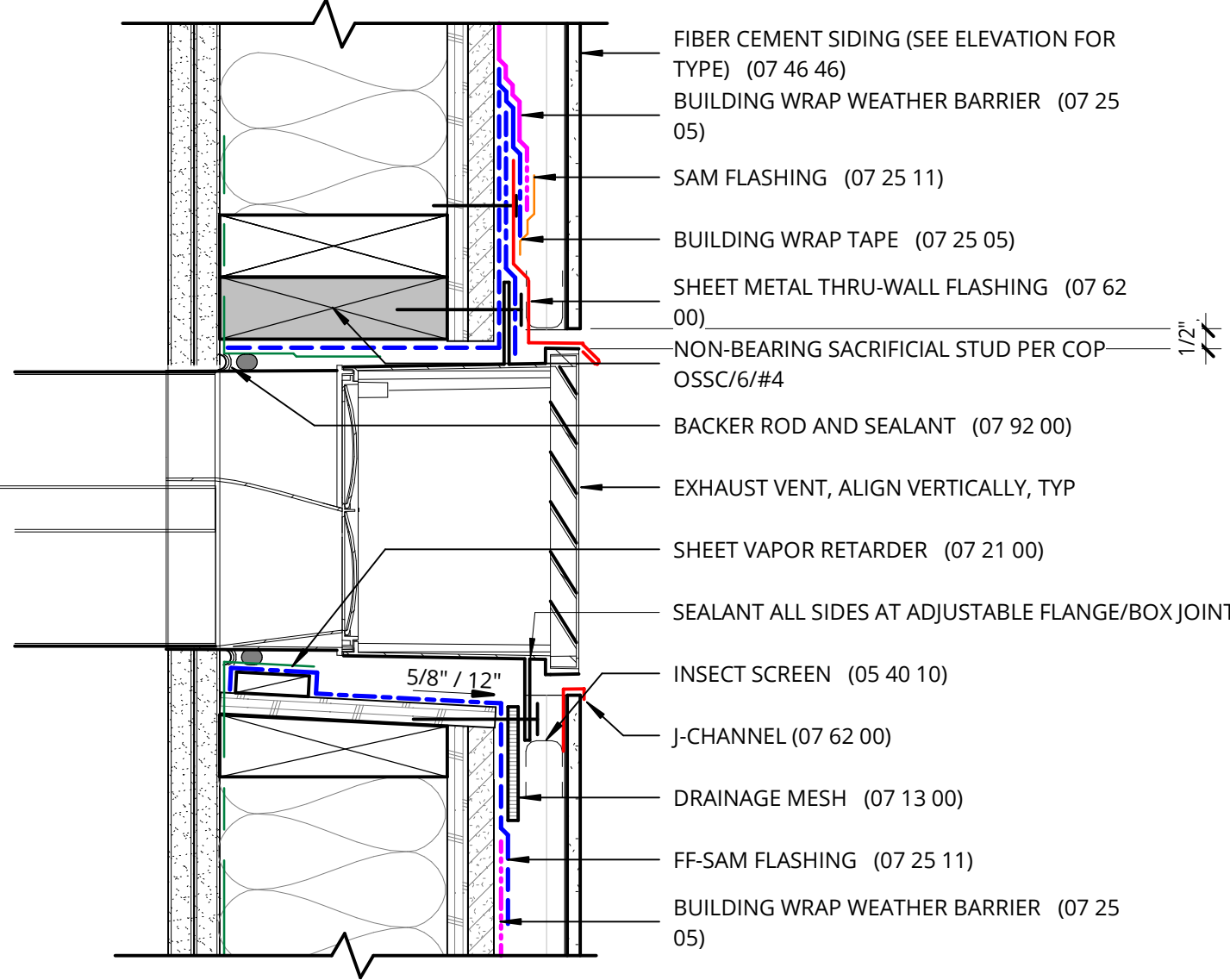
## 3 FCP-2 AT INSIDE CORNER

3" = 1'-0" | 1/A5.01



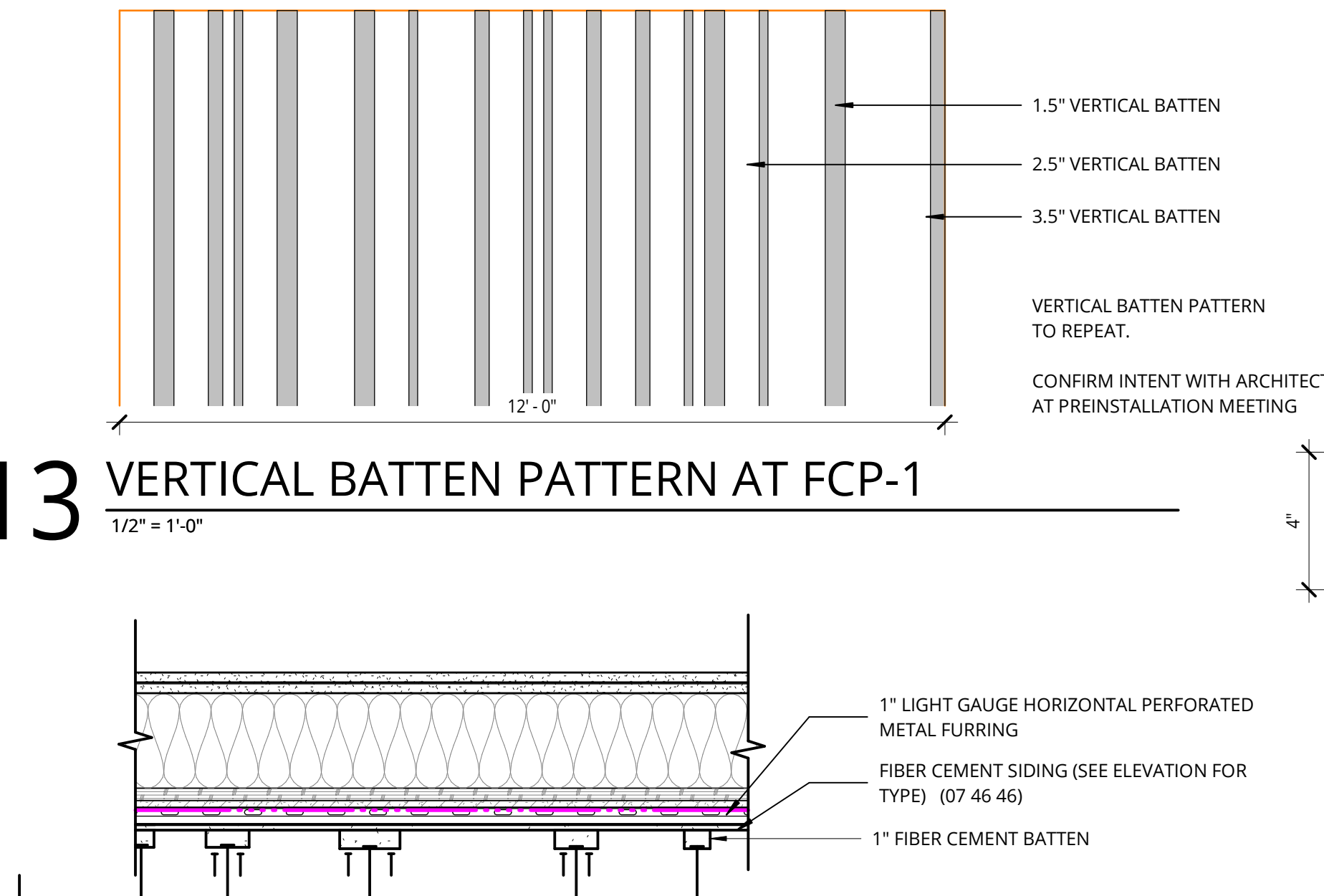
## 7 FCP-2 OUTSIDE CORNER

3" = 1'-0" | 1/A5.05



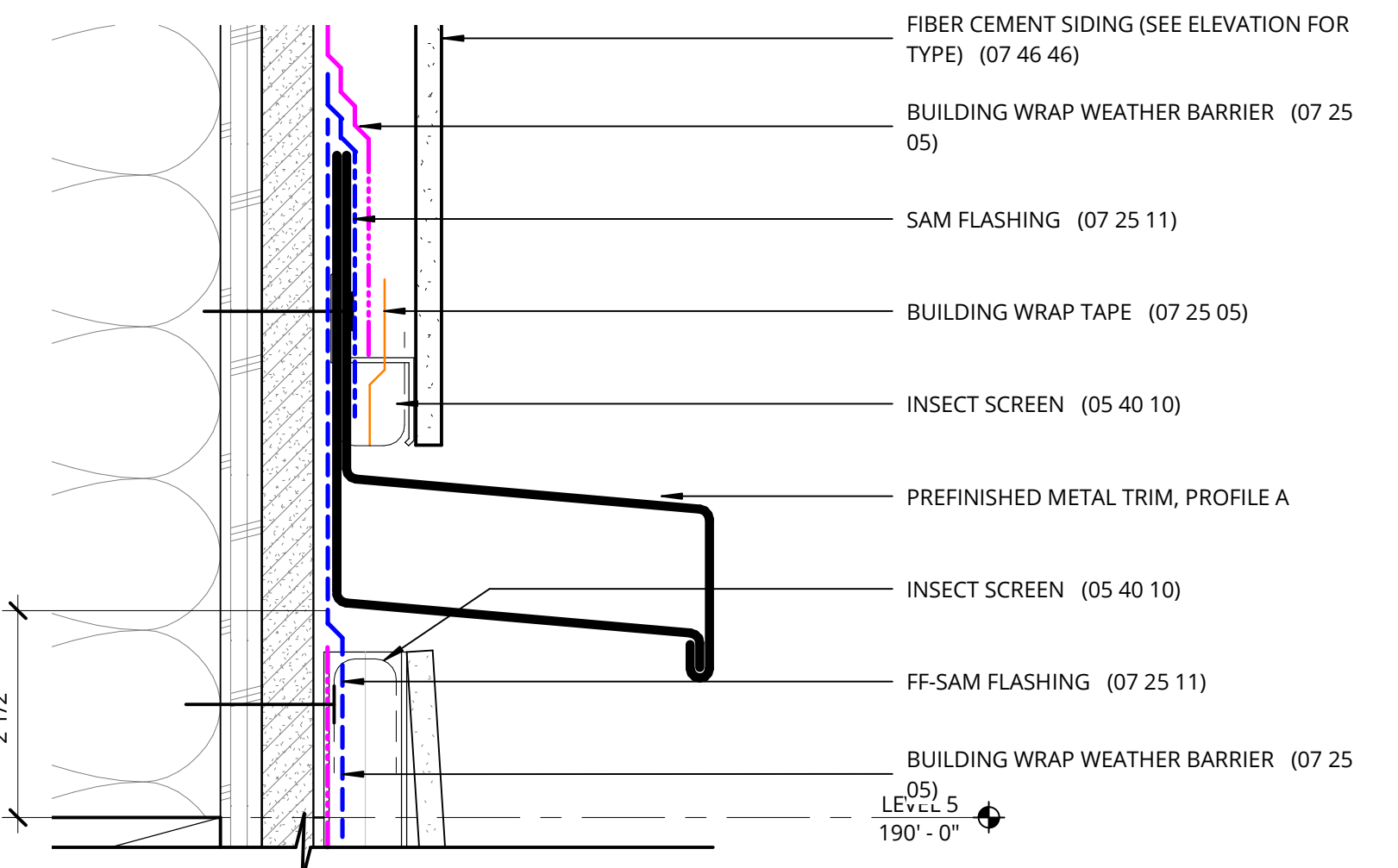
## 11 DOUBLE HORIZONTAL EXHAUST BOX

3" = 1'-0" | 1/A5.04



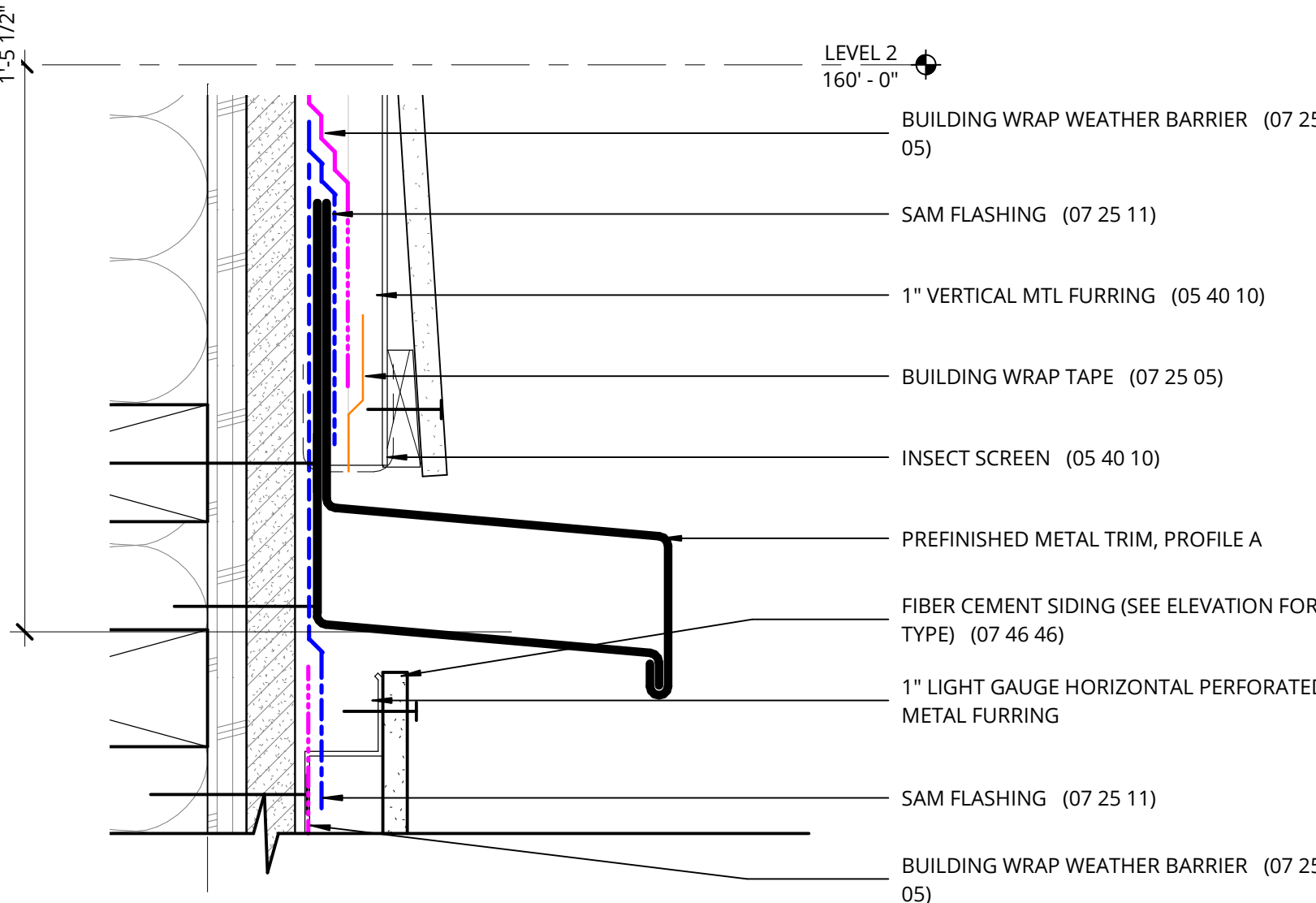
## 15 VERTICAL BATTEN SECTION AT FCP-1

1 1/2" = 1'-0"



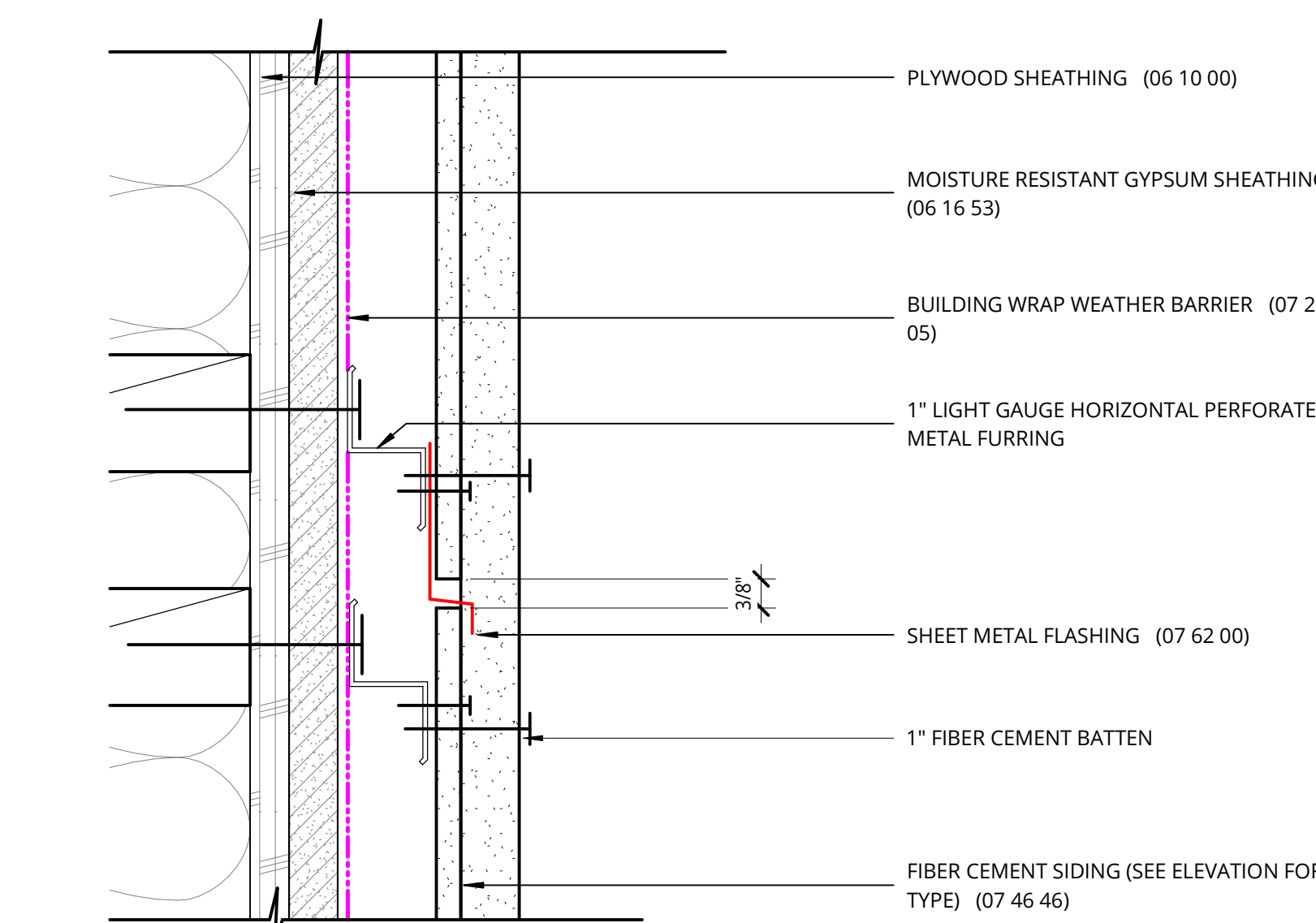
## 4 LEVEL 5 TRIM BAND DETAIL

6" = 1'-0" | 1/A3.11



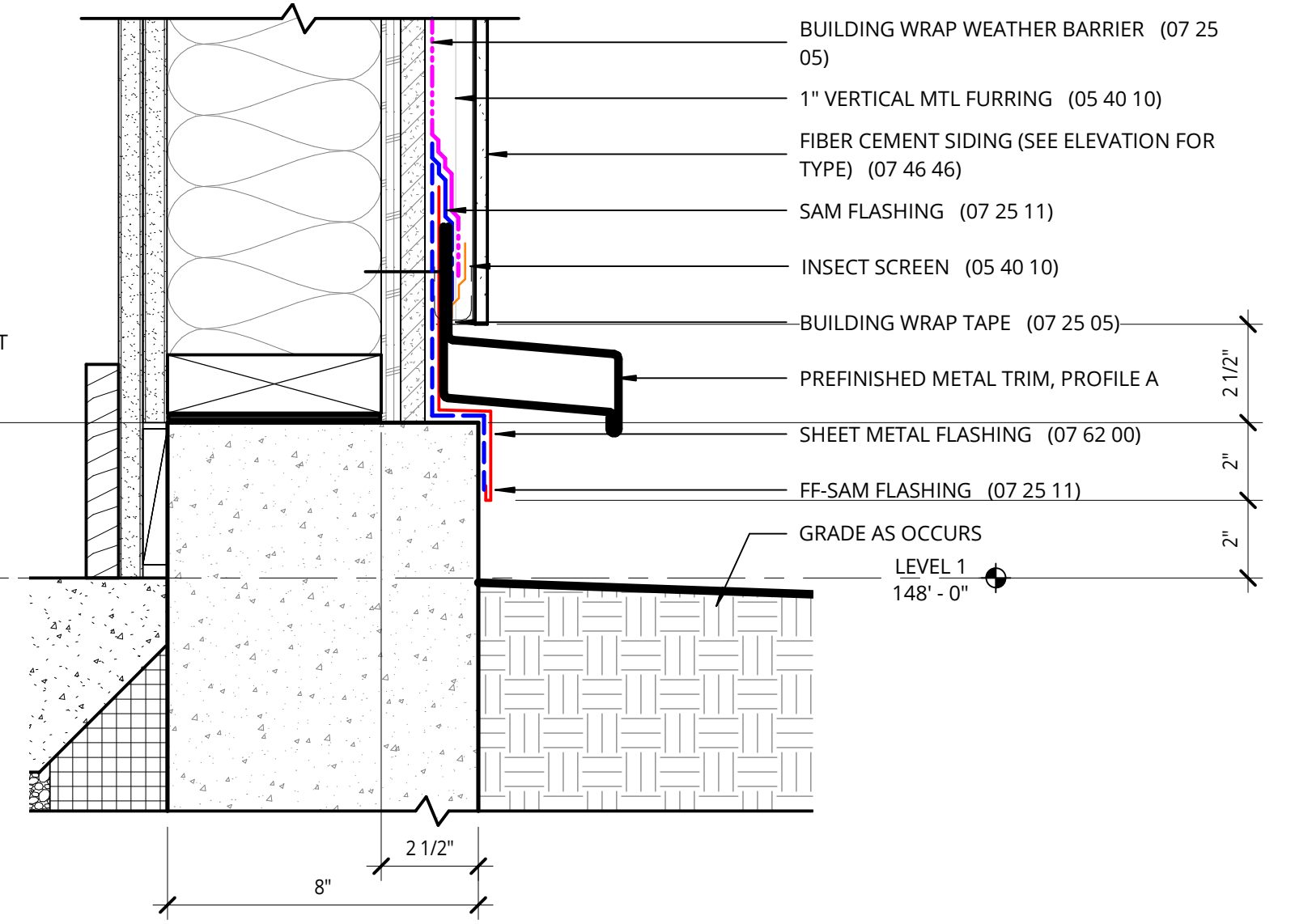
## 8 LEVEL 2 TRIM BAND DETAIL

6" = 1'-0" | 1/A3.11



## 12 FCP-1 JOINT

6" = 1'-0" | 2/A3.11



## 14 BASE OF WALL, TYP

3" = 1'-0" | 1/A3.11

REVISION	DATE	REASON FOR ISSUE

## EXTERIOR WALL DETAILS

## PERMIT / GMP

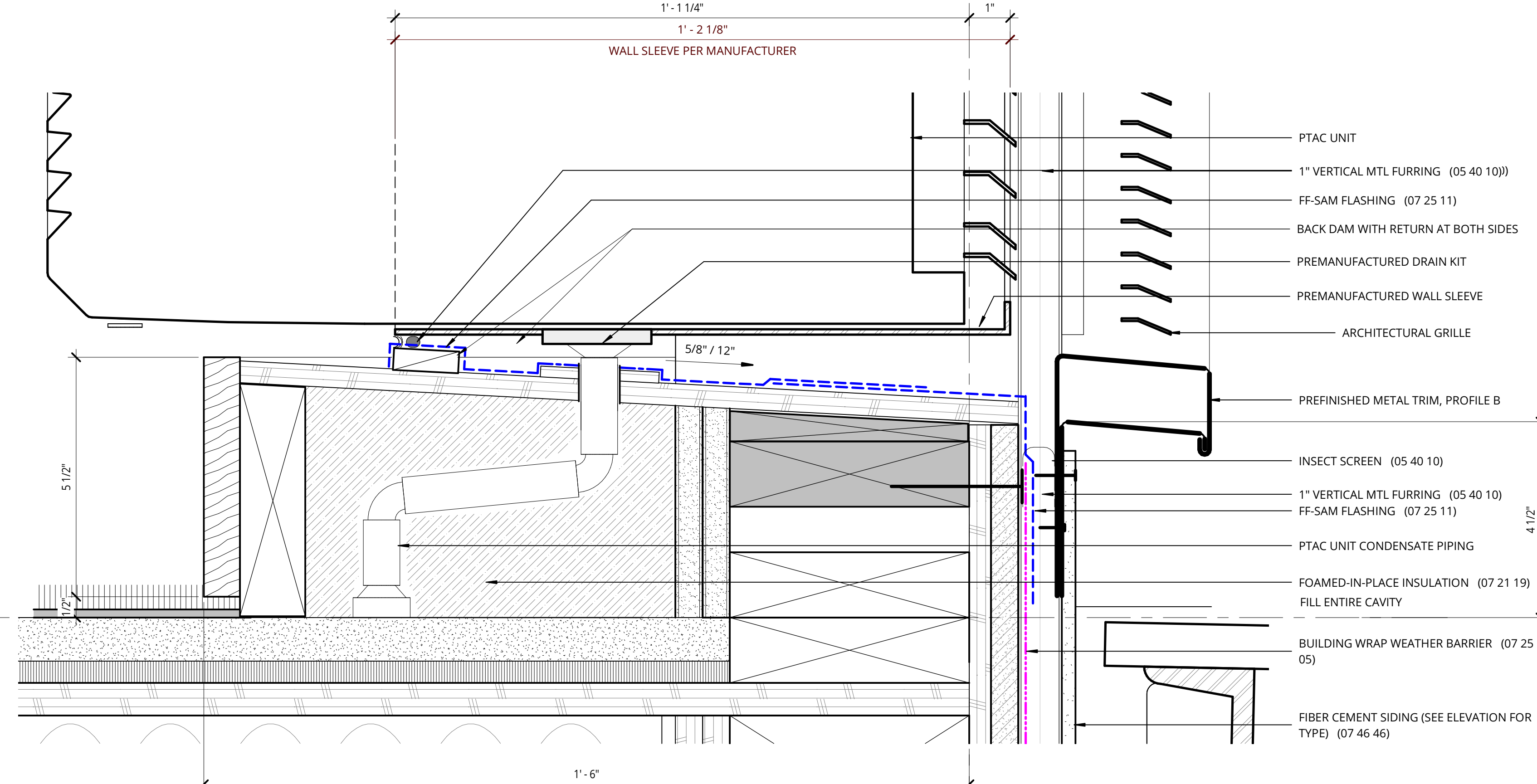
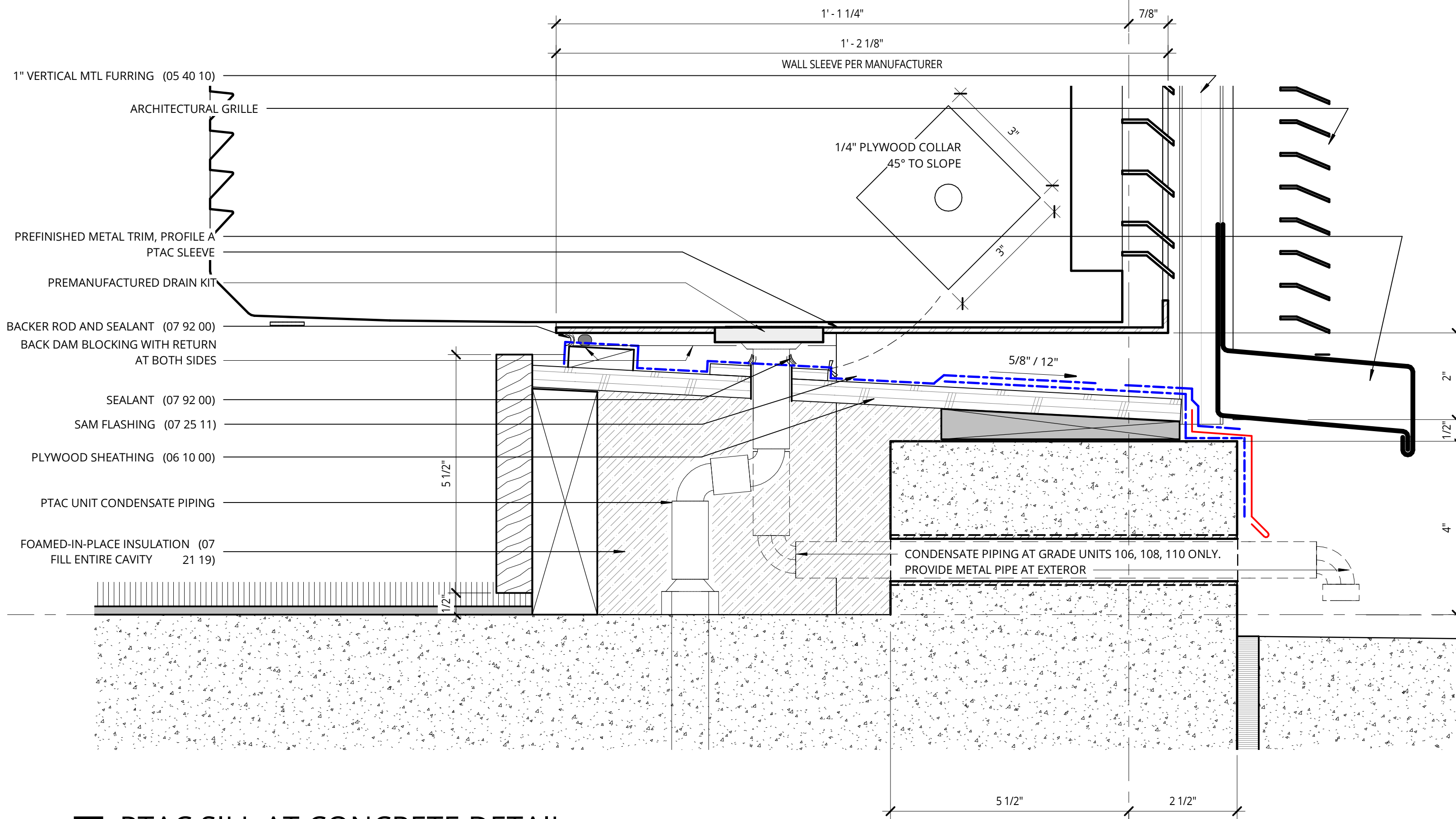
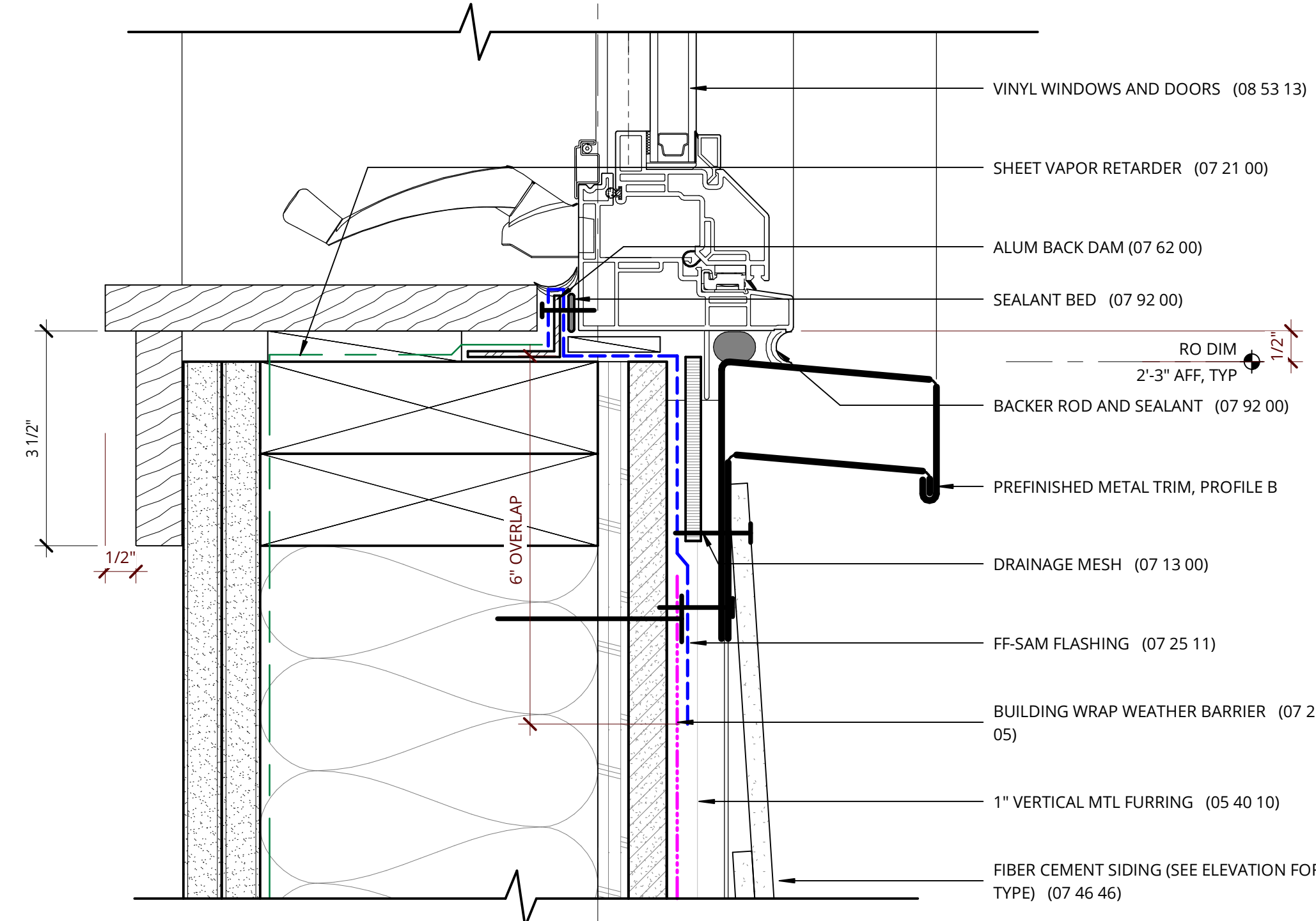
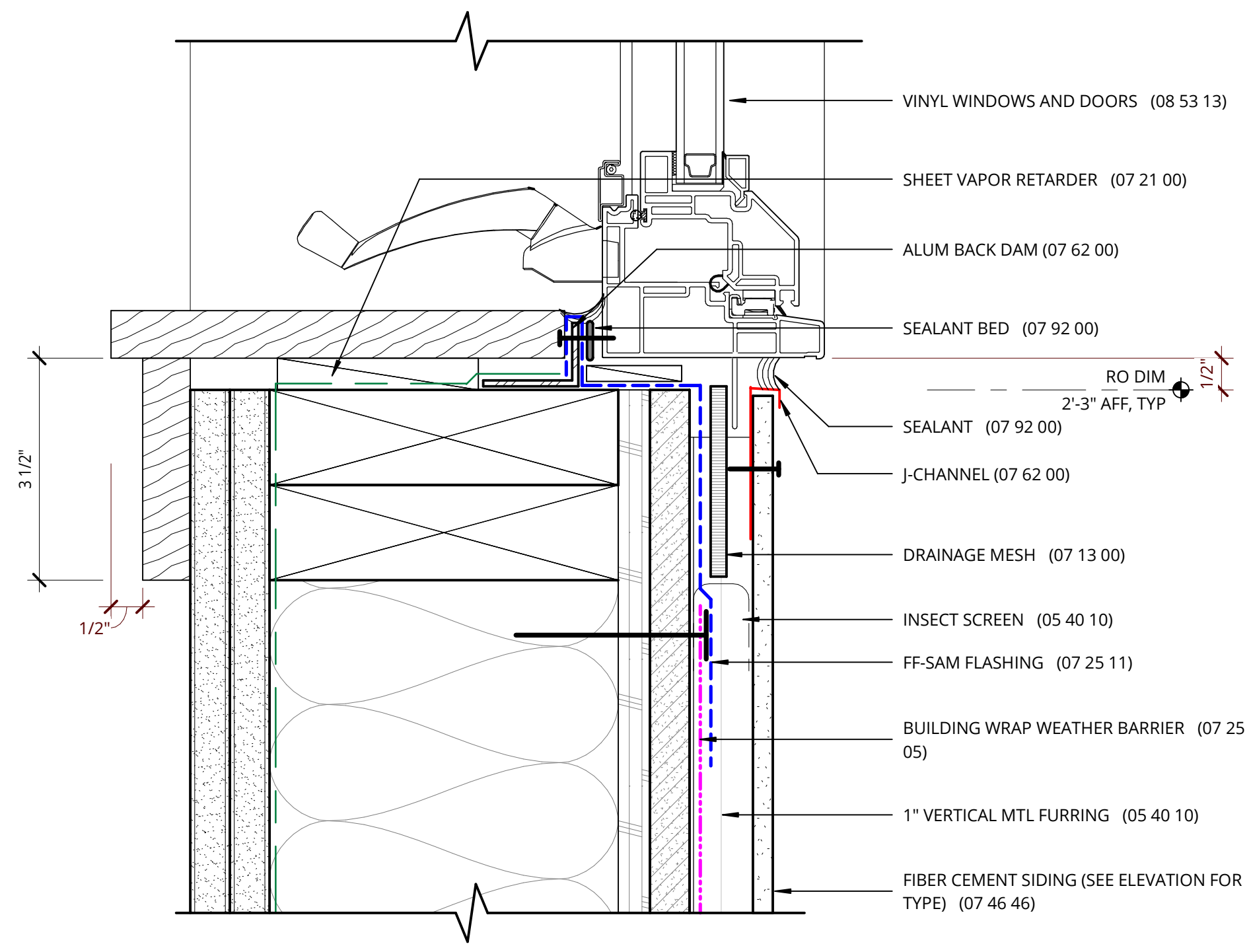
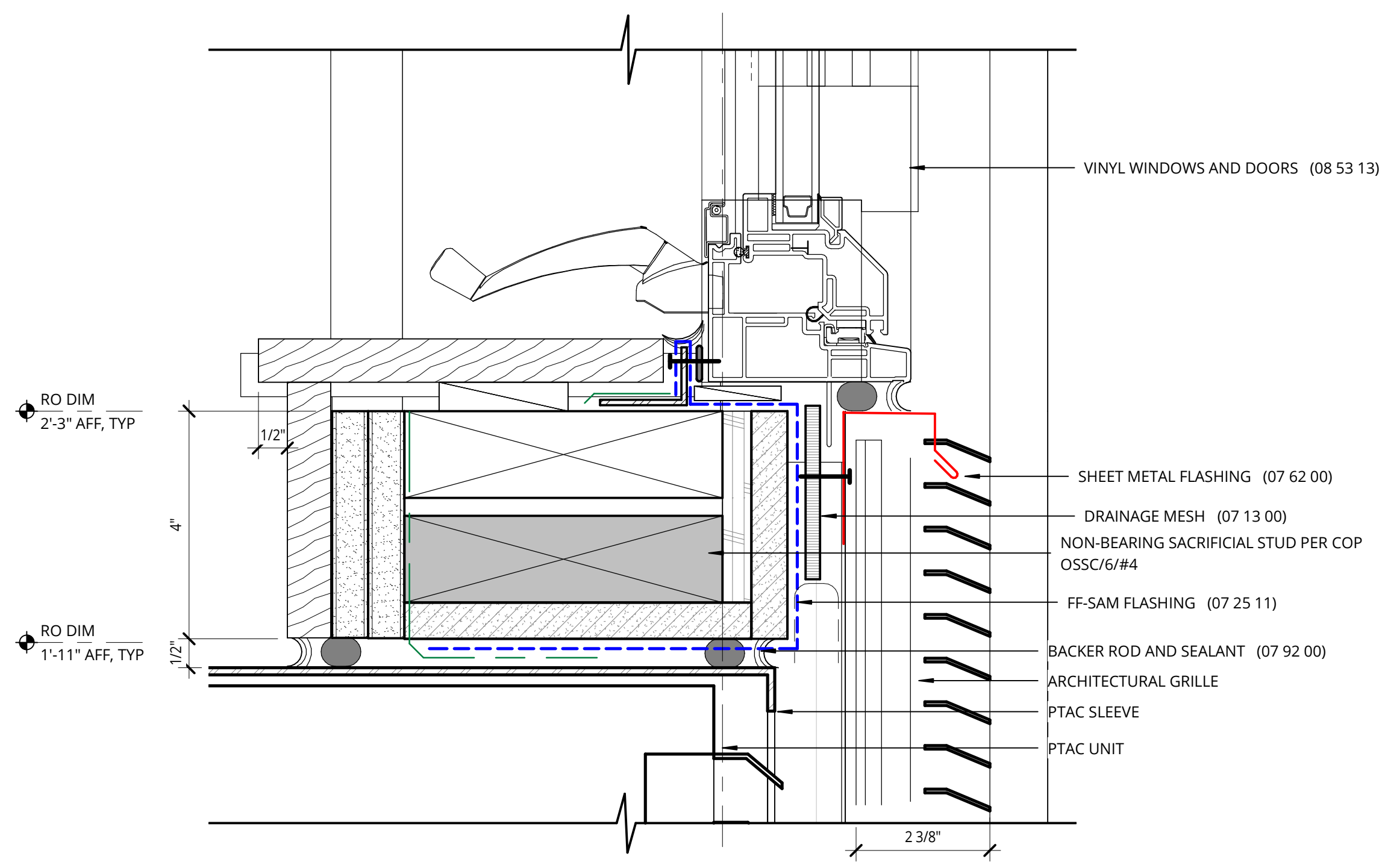
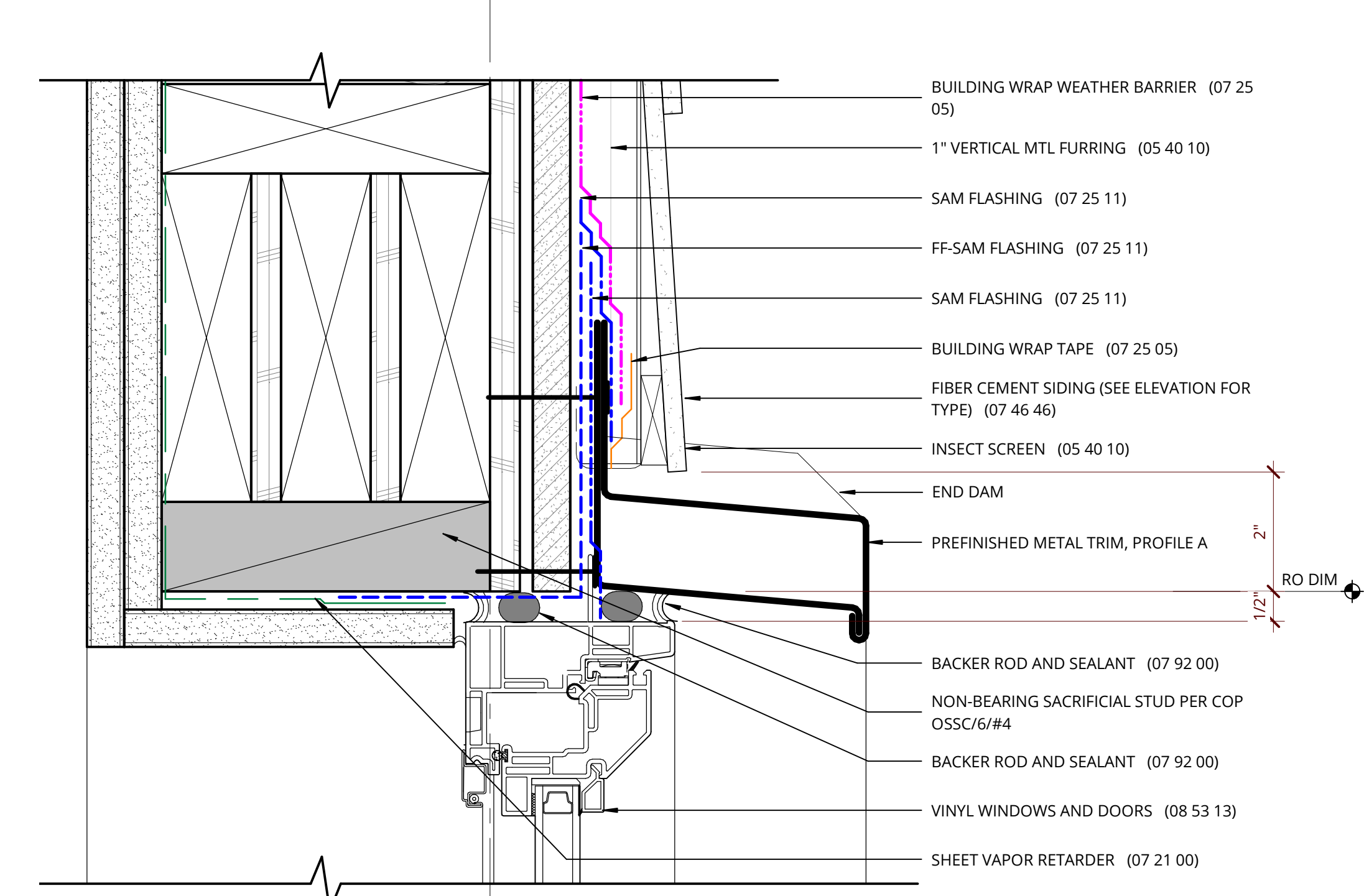
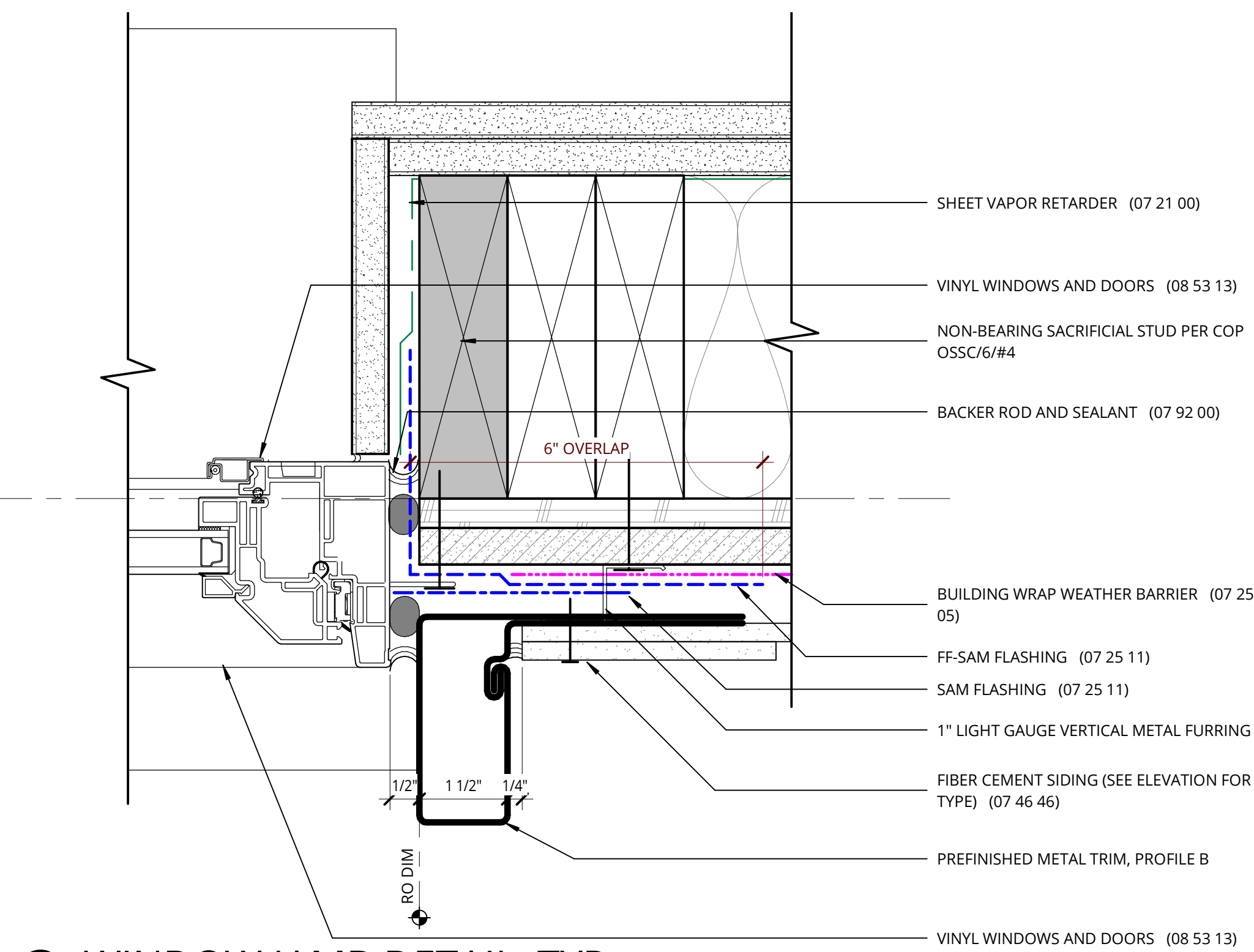
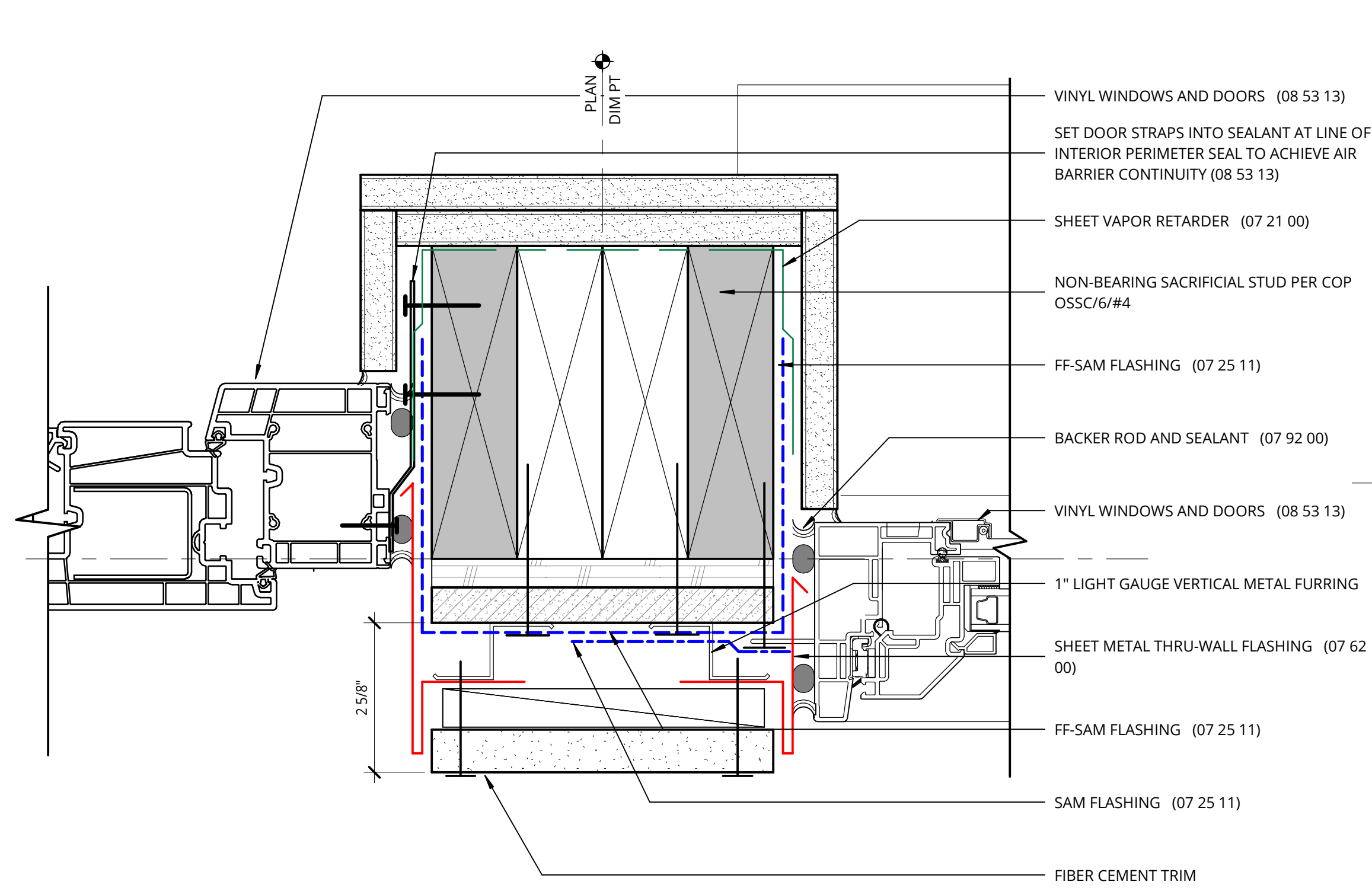
DATE	PROJECT NUMBER
17 OCT 2018	149000

SHEET NUMBER



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REGISTERED ARCHITECT  
SAC S. JOHNSON  
508  
PORTLAND, OR  
STATE OF OREGON

Ankrom Moisan

38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100  
1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600  
1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063  
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REVISION	DATE	REASON FOR ISSUE

EXTERIOR WINDOW  
& PTAC DETAILS

PERMIT / GMP

DATE	PROJECT NUMBER
17 OCT 2018	149000

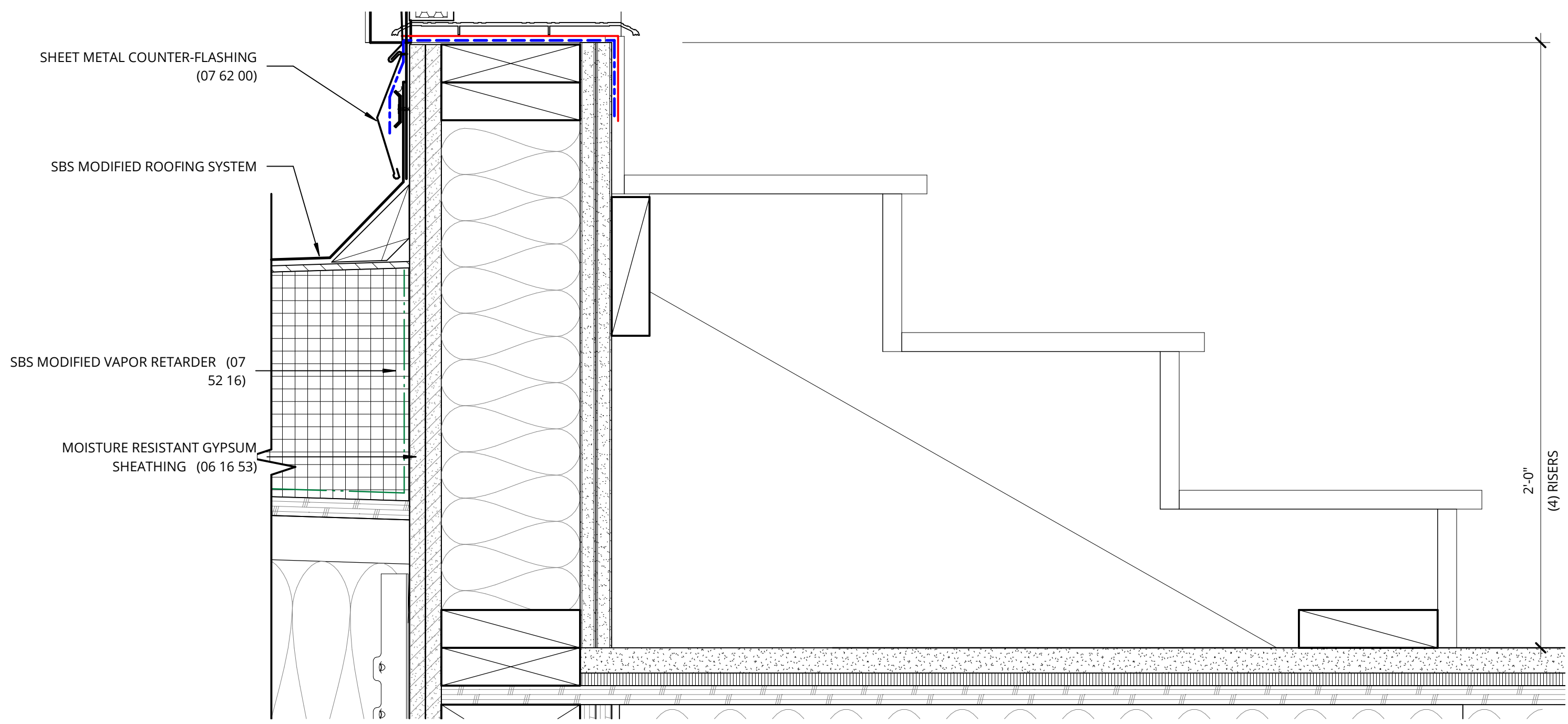
SHEET NUMBER

A7.15

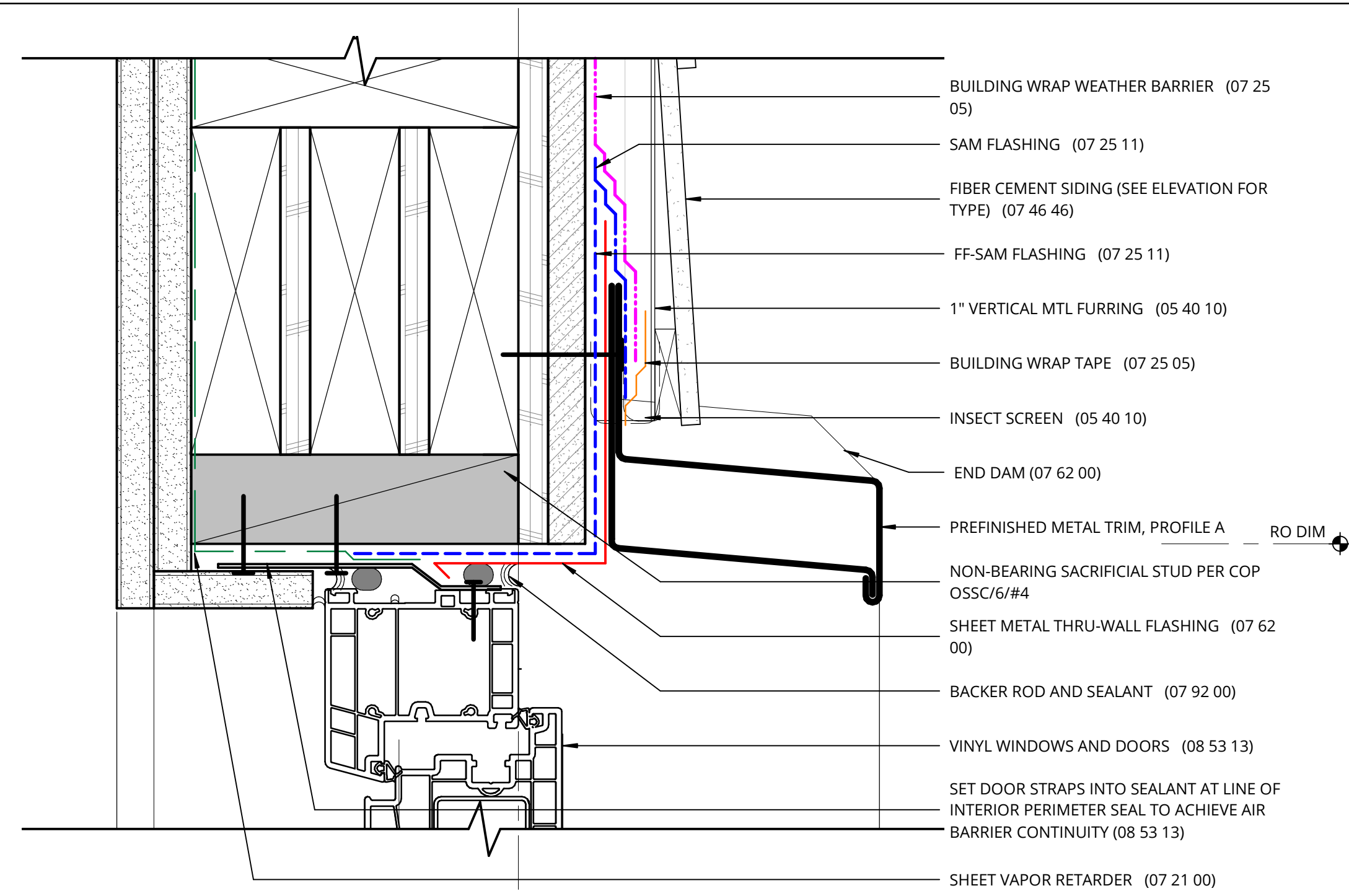


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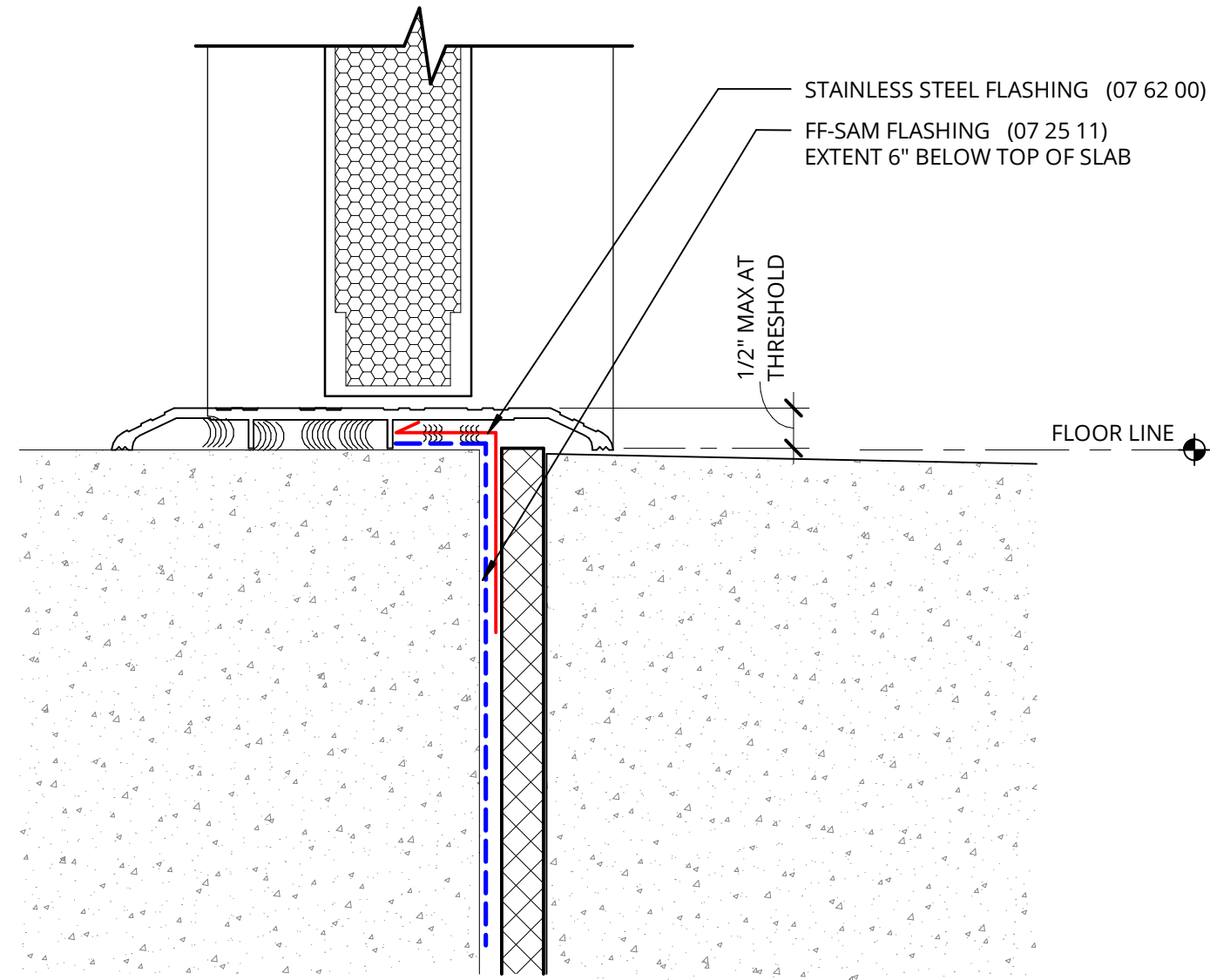
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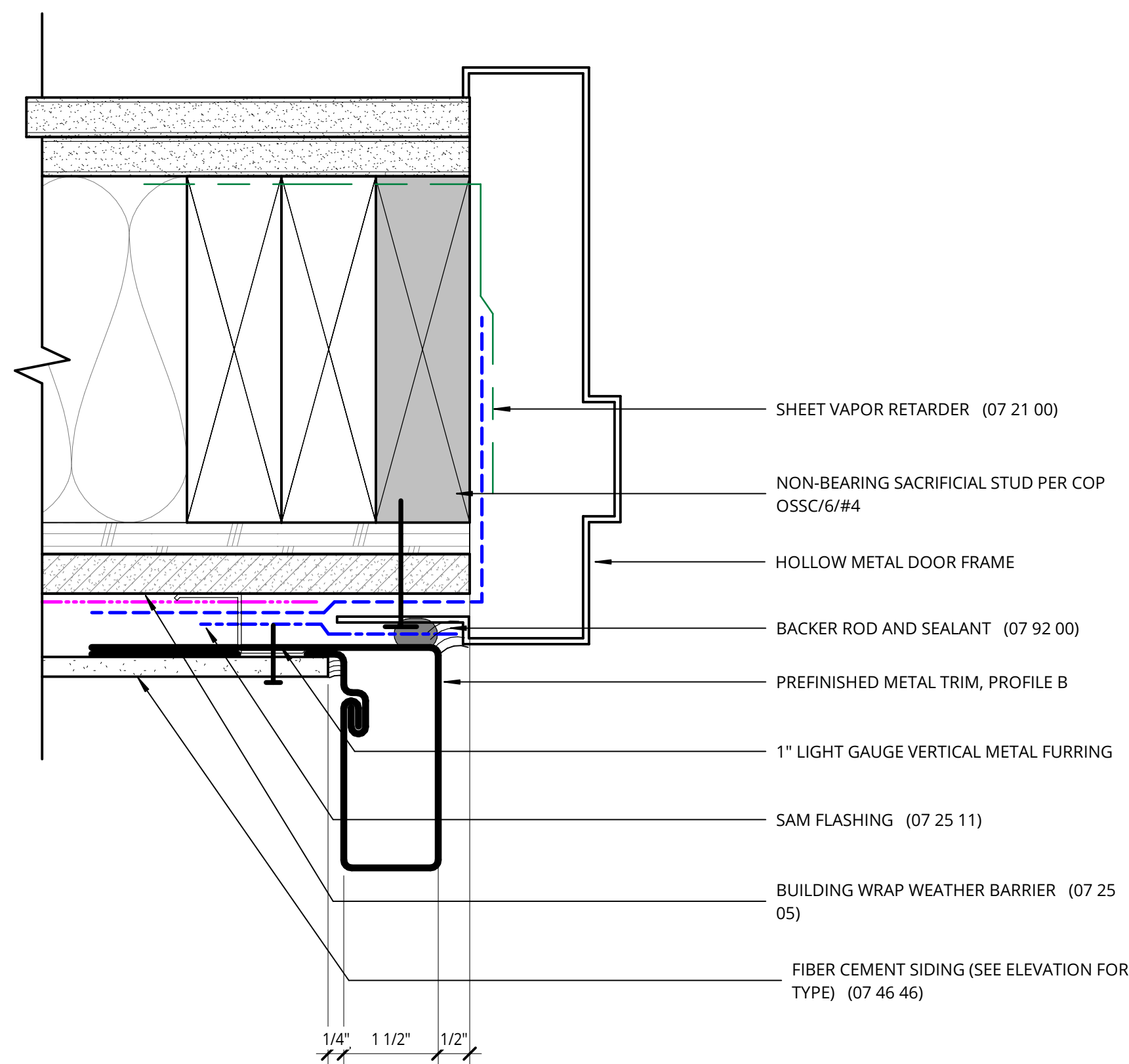
1 DOOR SILL AT ROOF  
3" = 1'-0"



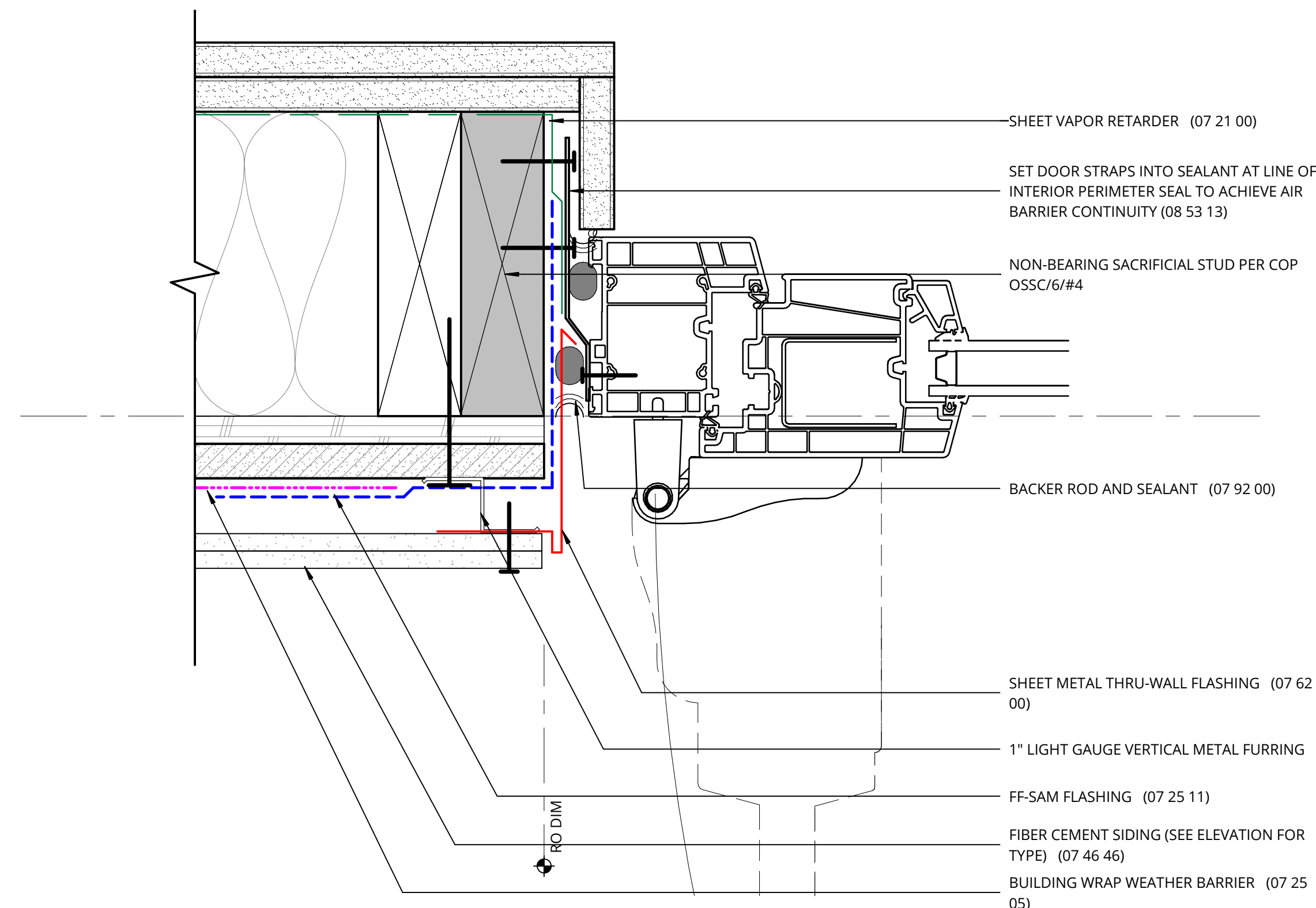
2 BALCONY DOOR HEAD DETAIL  
6" = 1'-0" | 1/A12.01



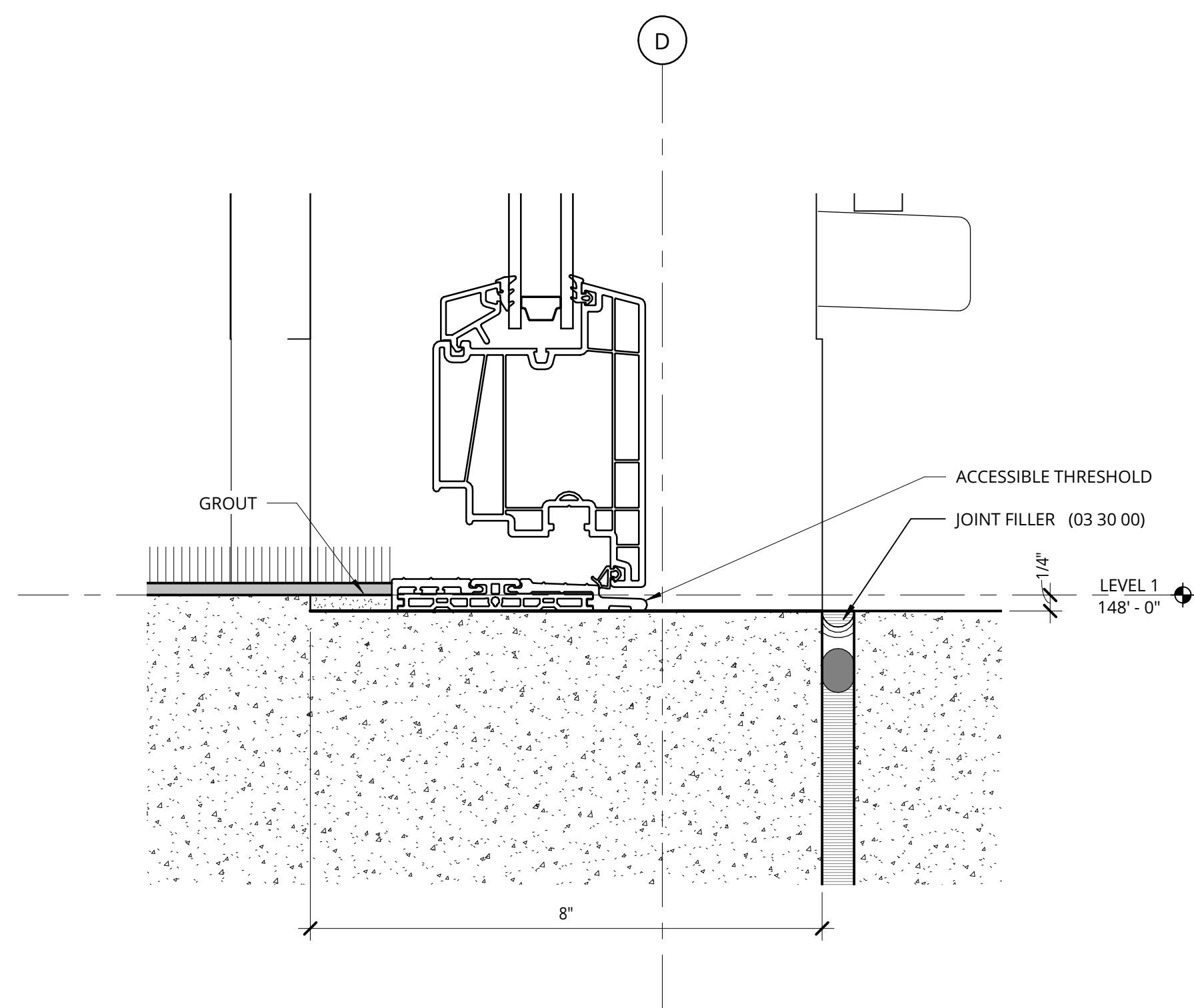
3 HM DOOR SILL  
6" = 1'-0" | 1/A12.01



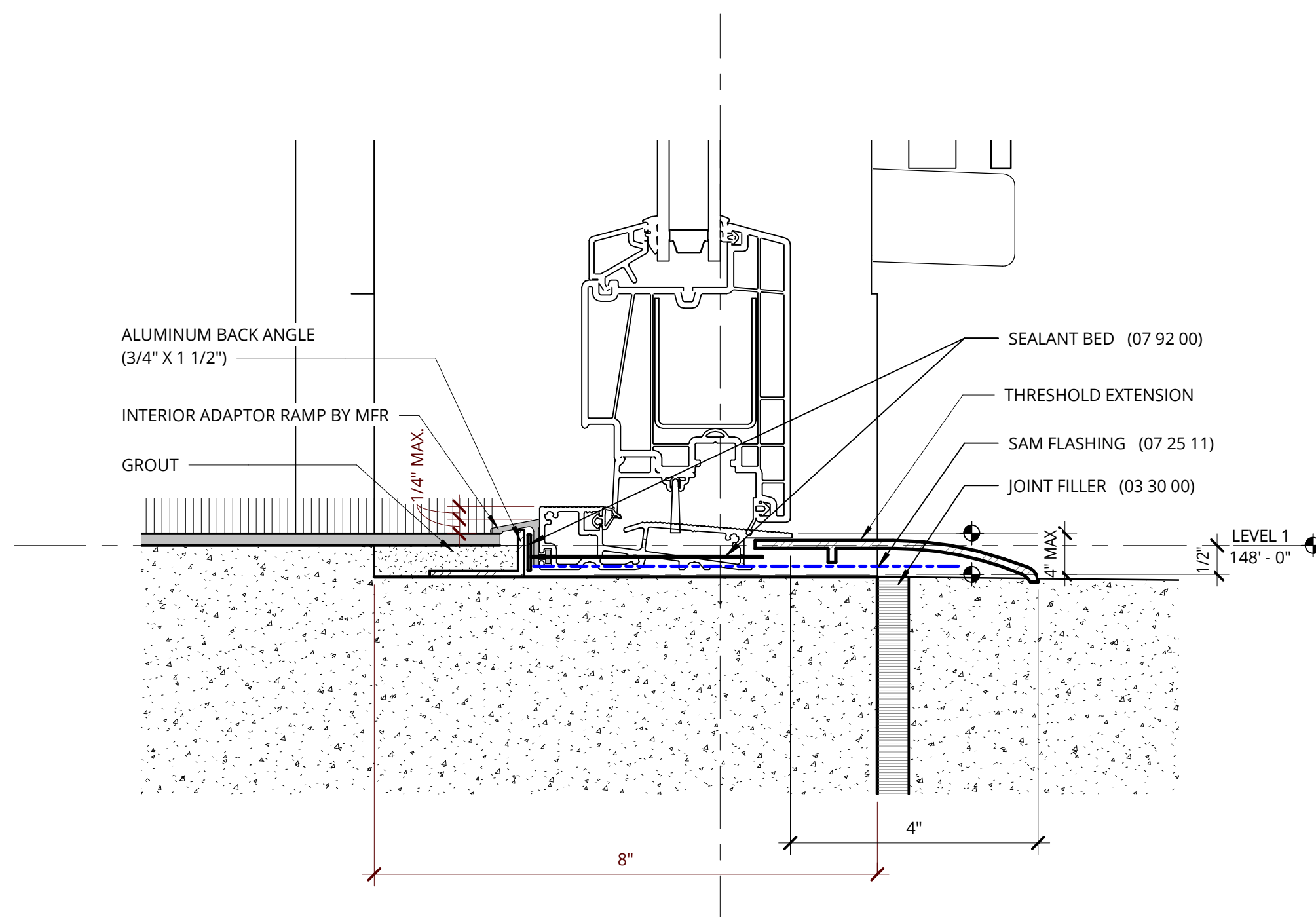
4 HM DOOR JAMB  
6" = 1'-0" | 1/A12.01



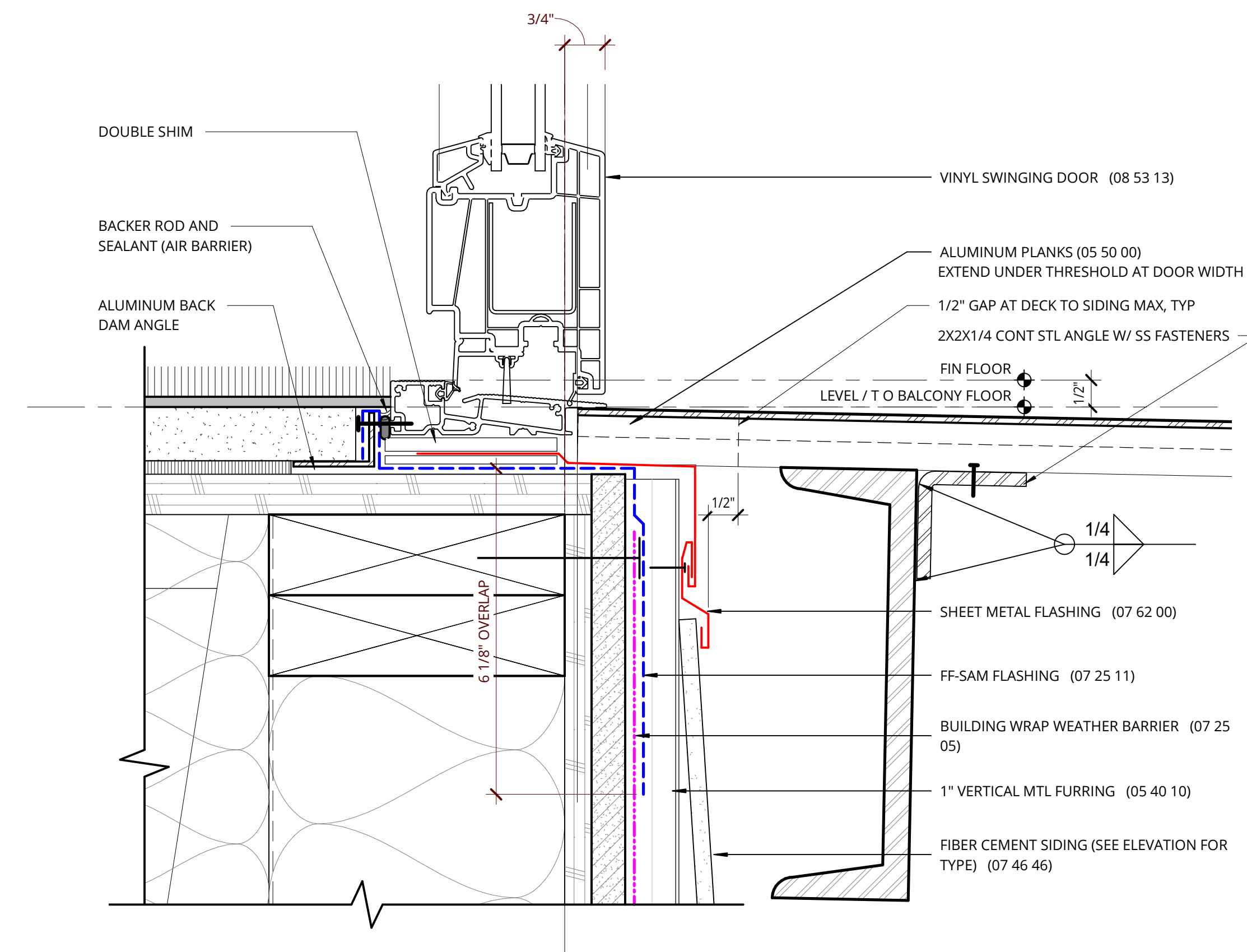
5 BALCONY DOOR JAMB DETAIL, TYP  
6" = 1'-0" | 5/A7.23



6 UNIT 110 BALCONY DOOR SILL DETAIL  
6" = 1'-0" | 1/A5.02



7 LEVEL 1 BALCONY DOOR SILL DETAIL, TYP  
6" = 1'-0" | 1/A12.01



8 BALCONY THRESHOLD DETAIL, TYP  
6" = 1'-0" | 2/A7.23



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100  
1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600  
1014 HOWARD STREET  
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REVISION	DATE	REASON FOR ISSUE

EXTERIOR DOOR  
DETAILS

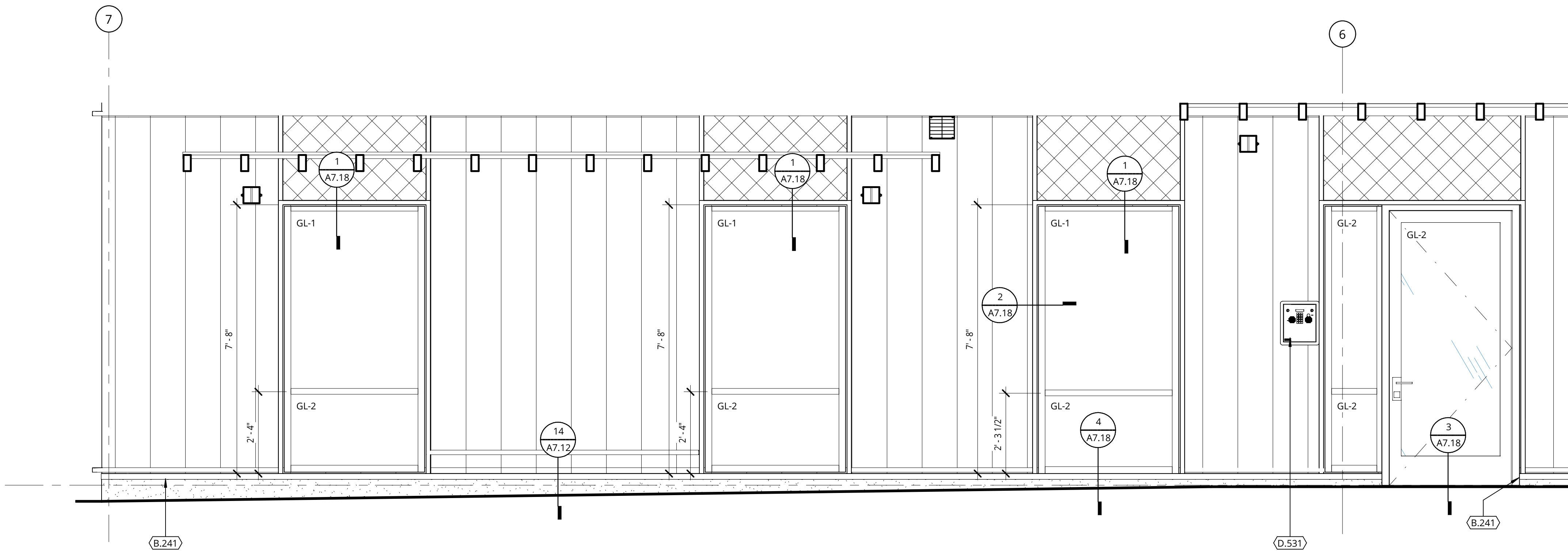
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DATE	PROJECT NUMBER
17 OCT 2018	149000

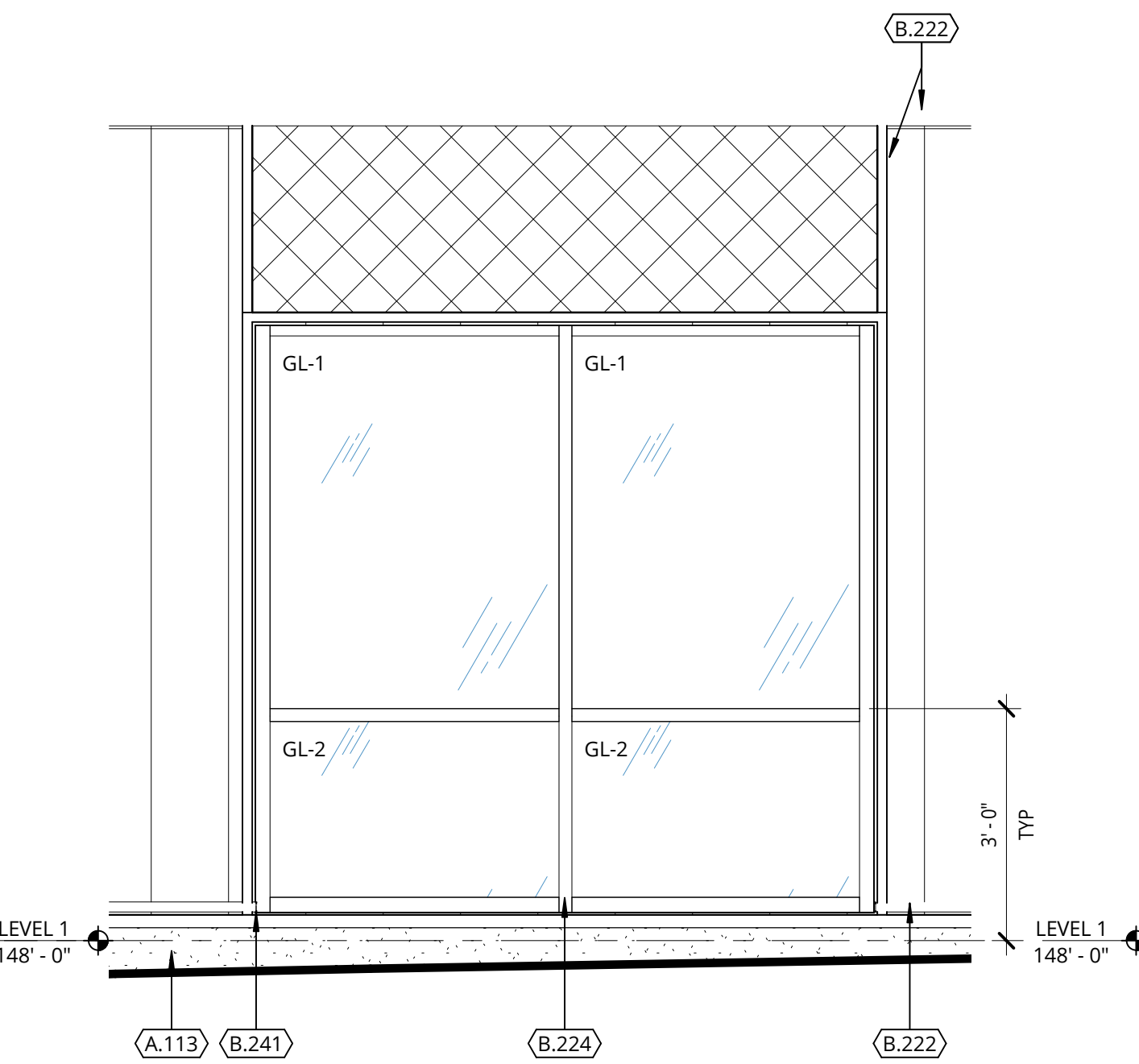
SHEET NUMBER

A7.16

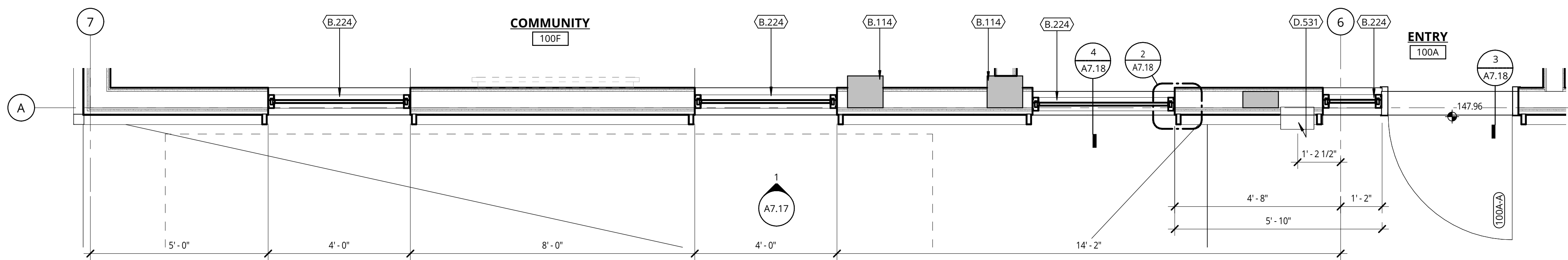




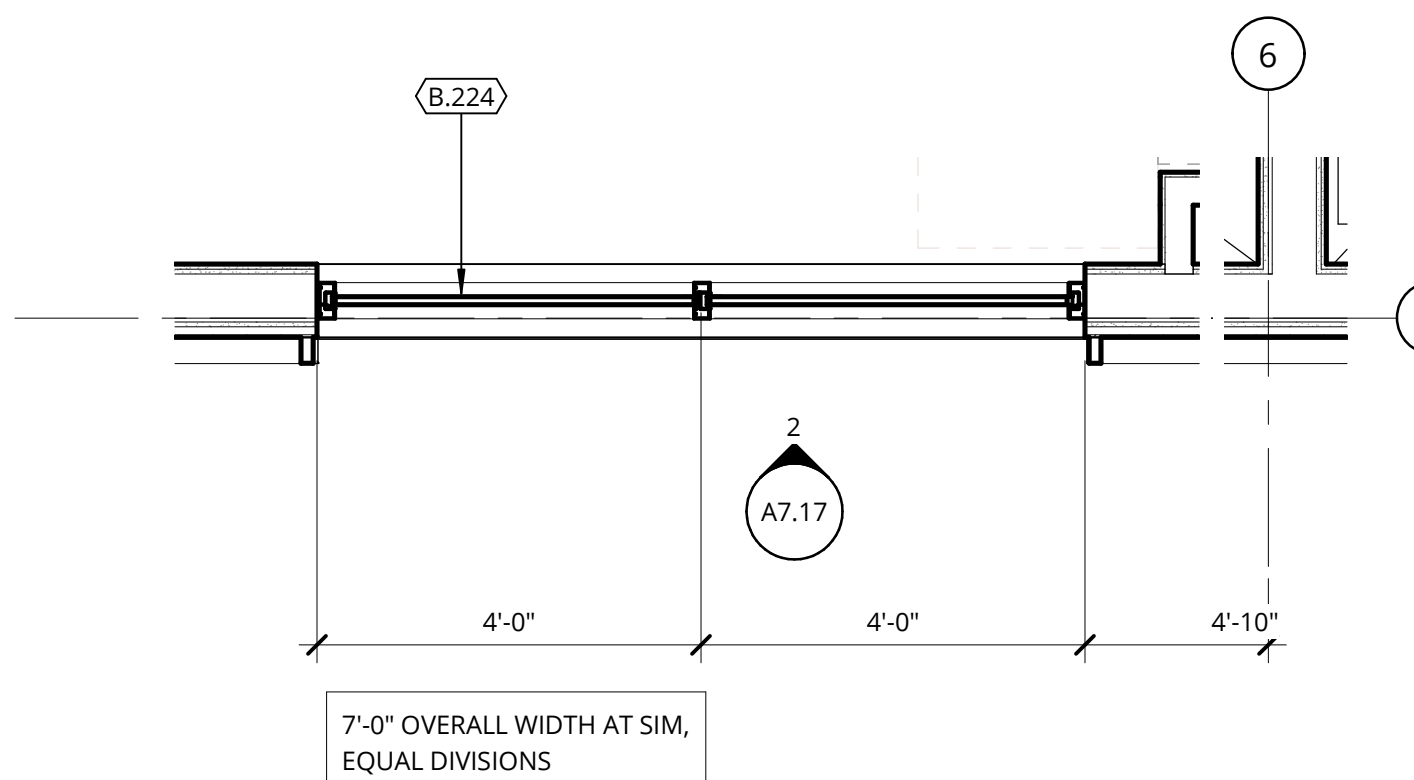
1 STOREFRONT ELEVATION  
1/2" = 1'-0" | 3/A7.17



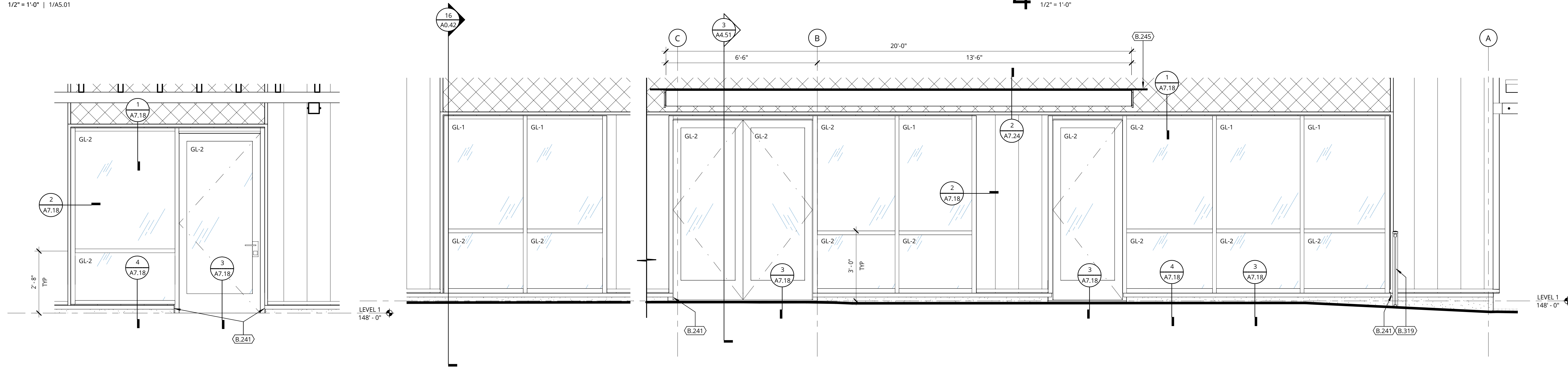
2 STOREFRONT ELEVATION  
1/2" = 1'-0"



3 STOREFRONT PLAN DETAIL  
1/2" = 1'-0" | 1/A5.01

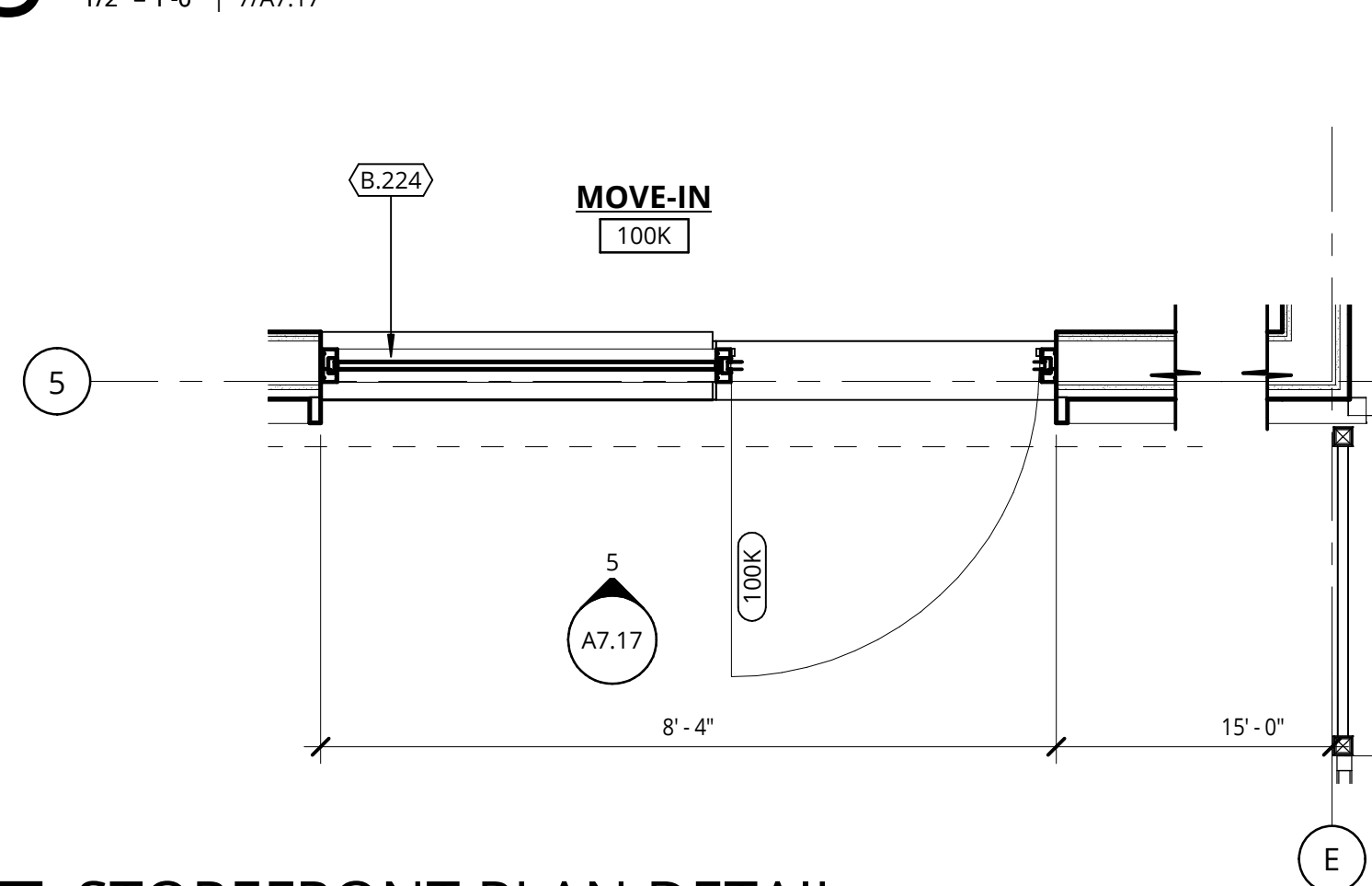


4 STOREFRONT PLAN DETAIL  
1/2" = 1'-0"

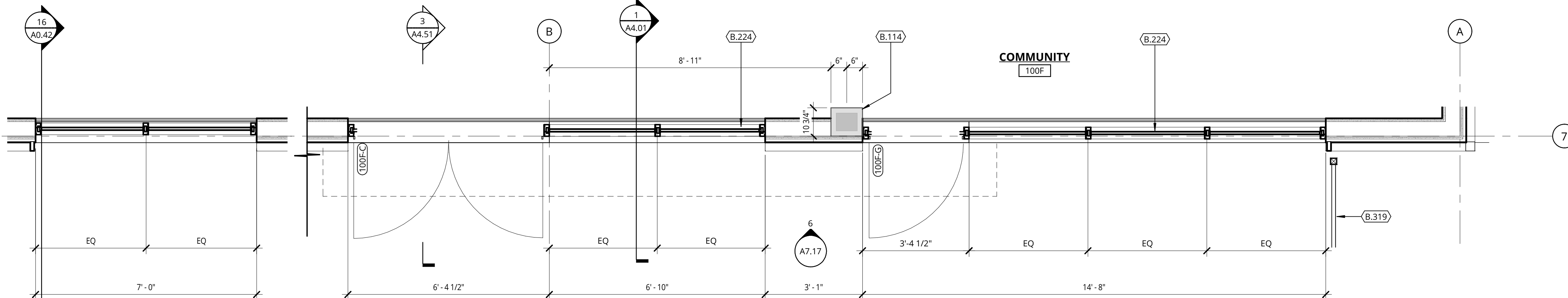


5 STOREFRONT ELEVATION  
1/2" = 1'-0" | 7/A7.17

6 STOREFRONT ELEVATION  
1/2" = 1'-0" | 7/A3.12



7 STOREFRONT PLAN DETAIL  
1/2" = 1'-0" | 1/A5.01



8 STOREFRONT PLAN DETAIL  
1/2" = 1'-0" | 1/A5.01

## GENERAL NOTES

1. REFER TO SHEET **60.02** FOR 'PROJECT NOTES' APPLICABLE TO ALL PORTIONS OF THE WORK.
2. PRIOR TO FRAMING VERIFY THAT FINAL APPLIANCE AND PLUMBING, FIXTURE SIZES/CLEARANCES MATCH THOSE USED AS BASIS OF DESIGN SHOWN ON DRAWING **65.01**.
3. REFERENCE SLAB PLANS FOR CONCRETE WALL LOCATIONS, UNO, COORDINATE WITH STRUCTURAL DRAWINGS.
4. SEE SHEETS **A0.21 & A0.31** FOR WALL ASSEMBLIES.
5. REFER TO STRUCTURAL DRAWINGS FOR COLUMNS, SHEAR WALL AND BEAM SIZES.

## KEYED NOTES

- A.113 CONCRETE STEM WALL/CURB  
B.114 GLULAM COLUMN 10 3/4 X 12. SEE STRUCTURAL  
B.222 PREFINISHED METAL TRIM, SEE DETAIL FOR PROFILE TYPE  
B.224 ALUMINUM STOREFRONT SYSTEM  
B.241 RETURN SHEET METAL FLASHING INTO CURB OPENING, TYP  
B.245 STL BROW OVERHANG  
B.319 DECORATIVE METAL FENCES AND GATES (32 31 19)  
D.531 TWO-WAY COMMUNICATION DEVICE

REVISION	DATE	REASON FOR ISSUE

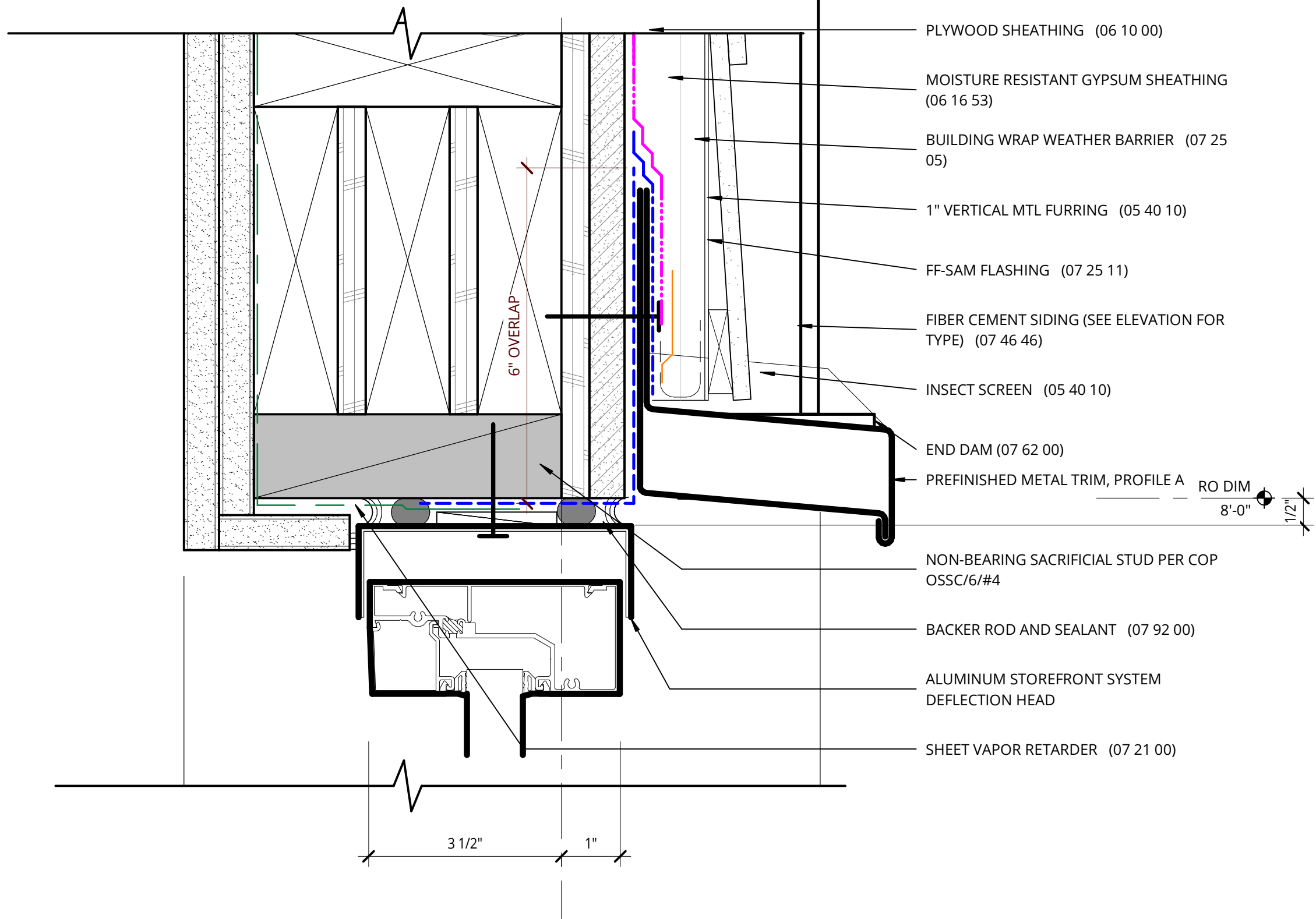
EXT STOREFRONT  
GLAZING SYSTEM  
PLANS & ELEVS  
PERMIT / GMP

DATE	PROJECT NUMBER
17 OCT 2018	149000

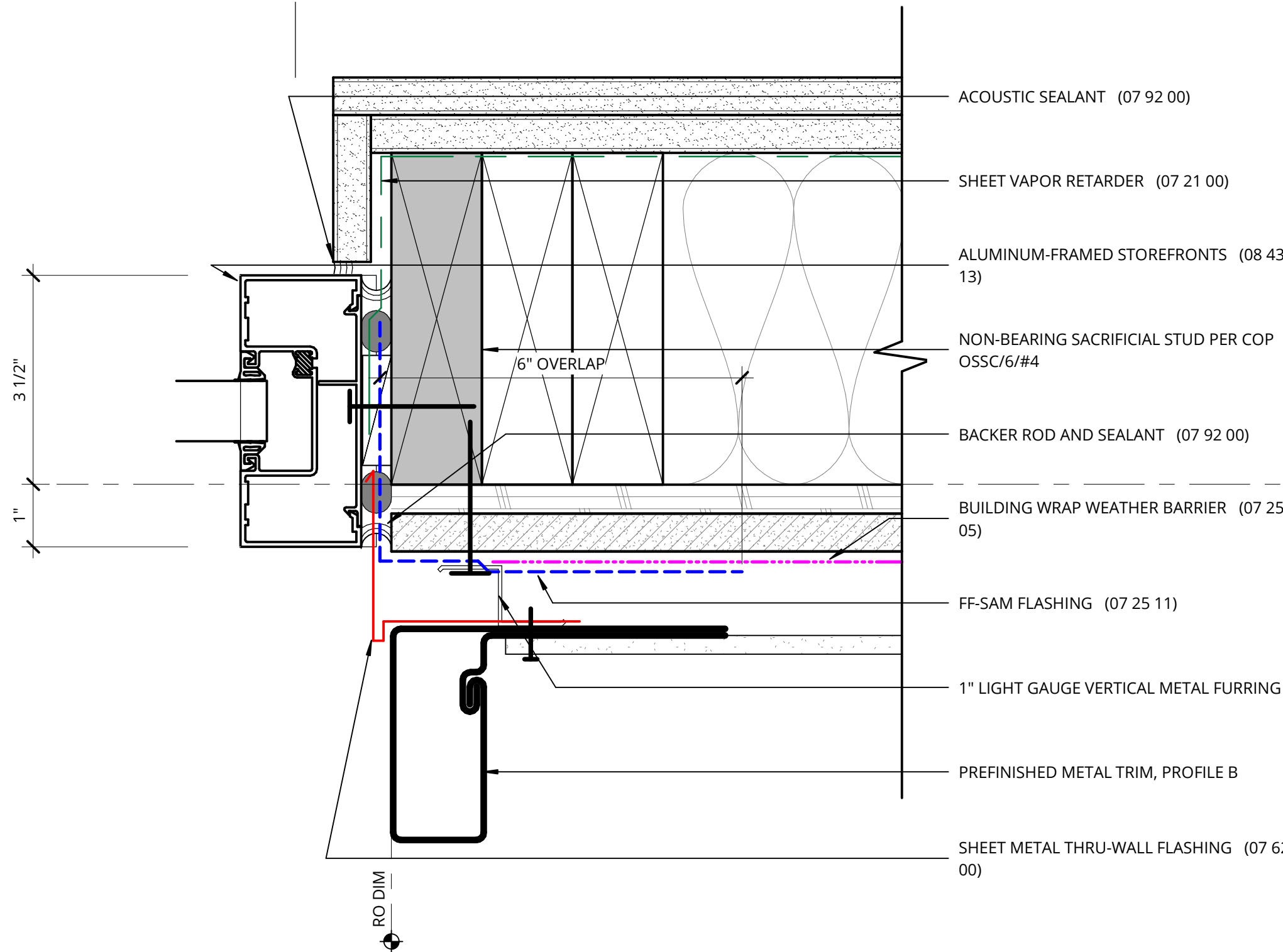
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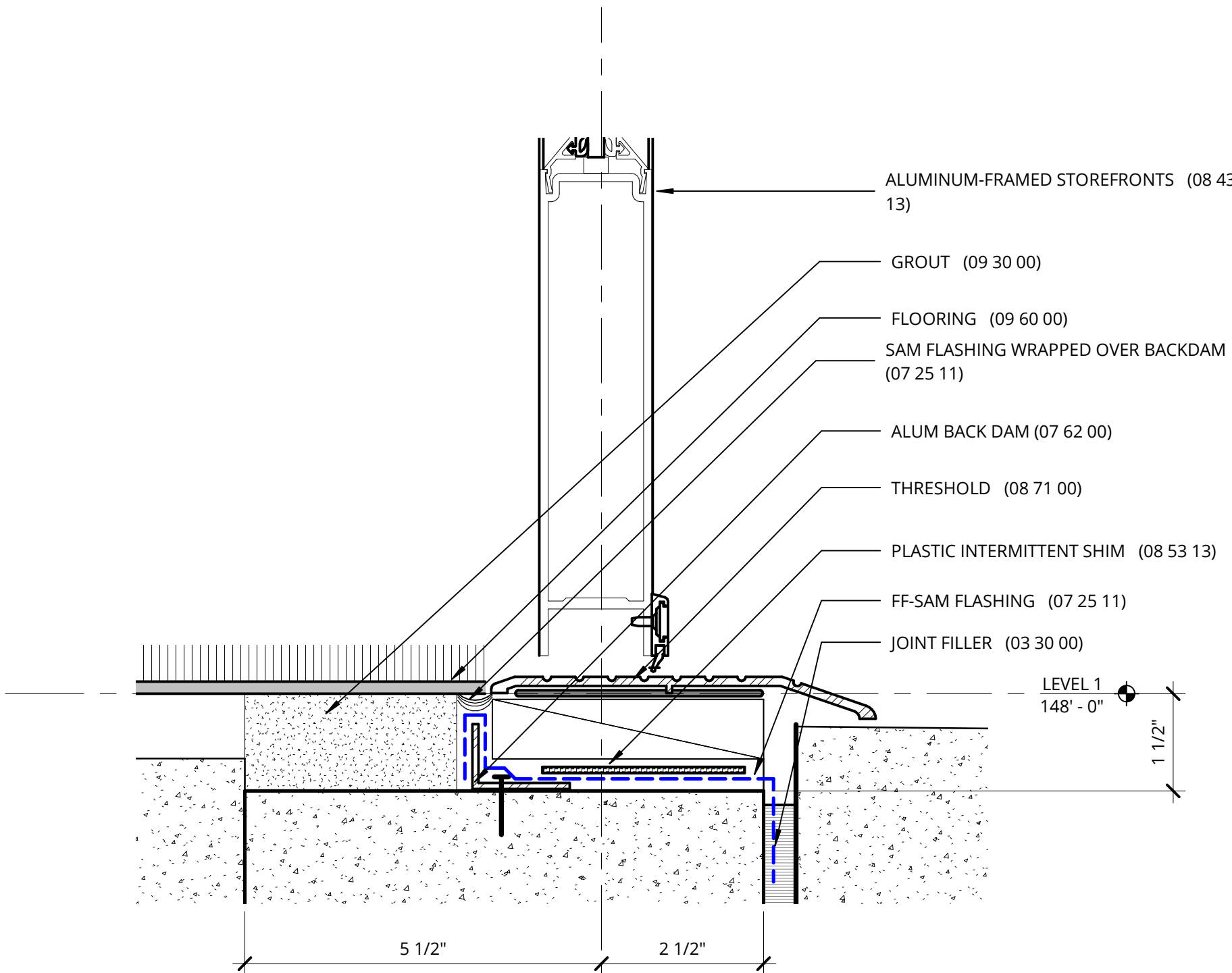




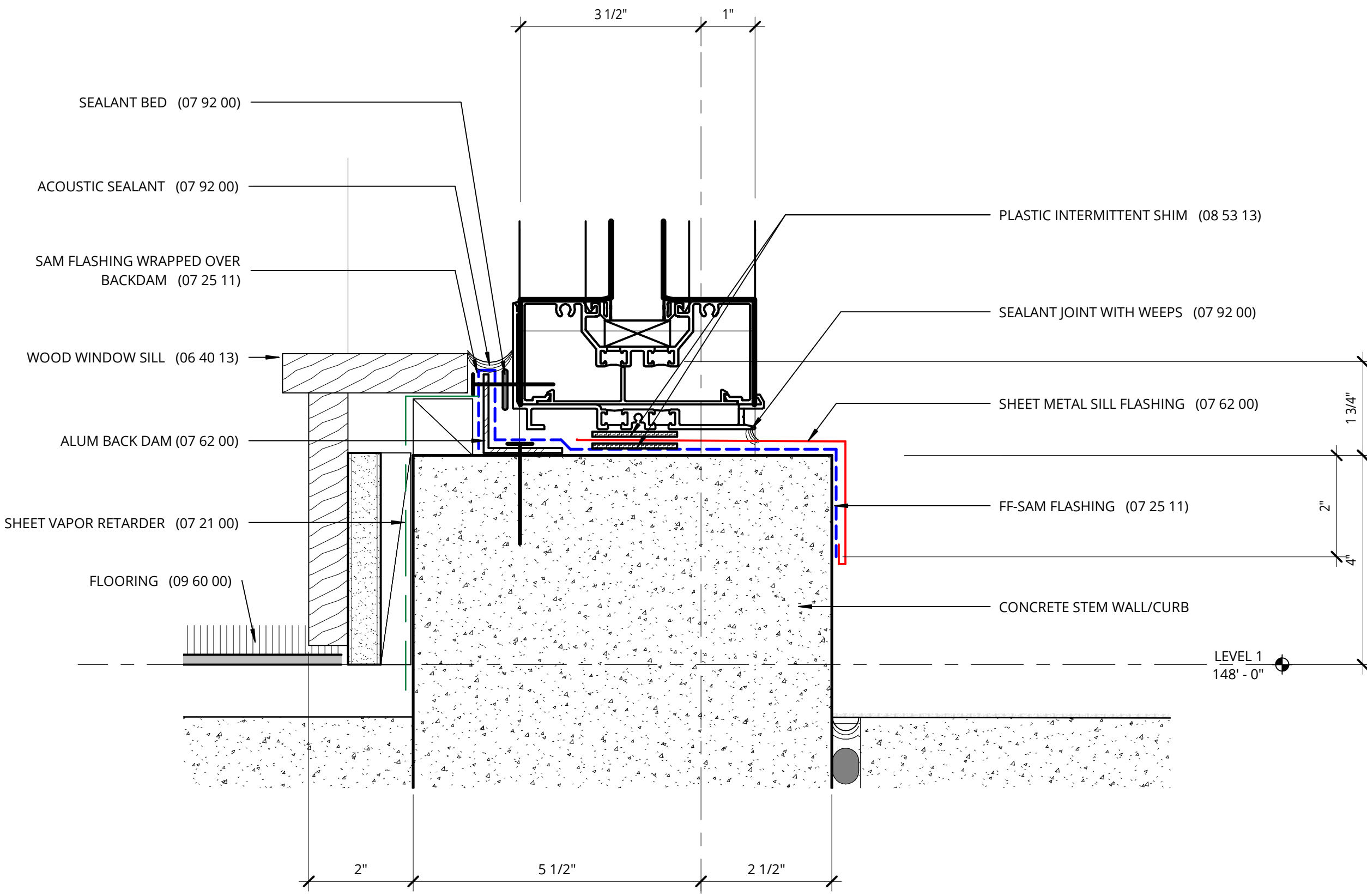
1 STOREFRONT HEAD  
6" = 1'-0"



2 STOREFRONT JAMB DETAIL  
6" = 1'-0" | 1/A7.17



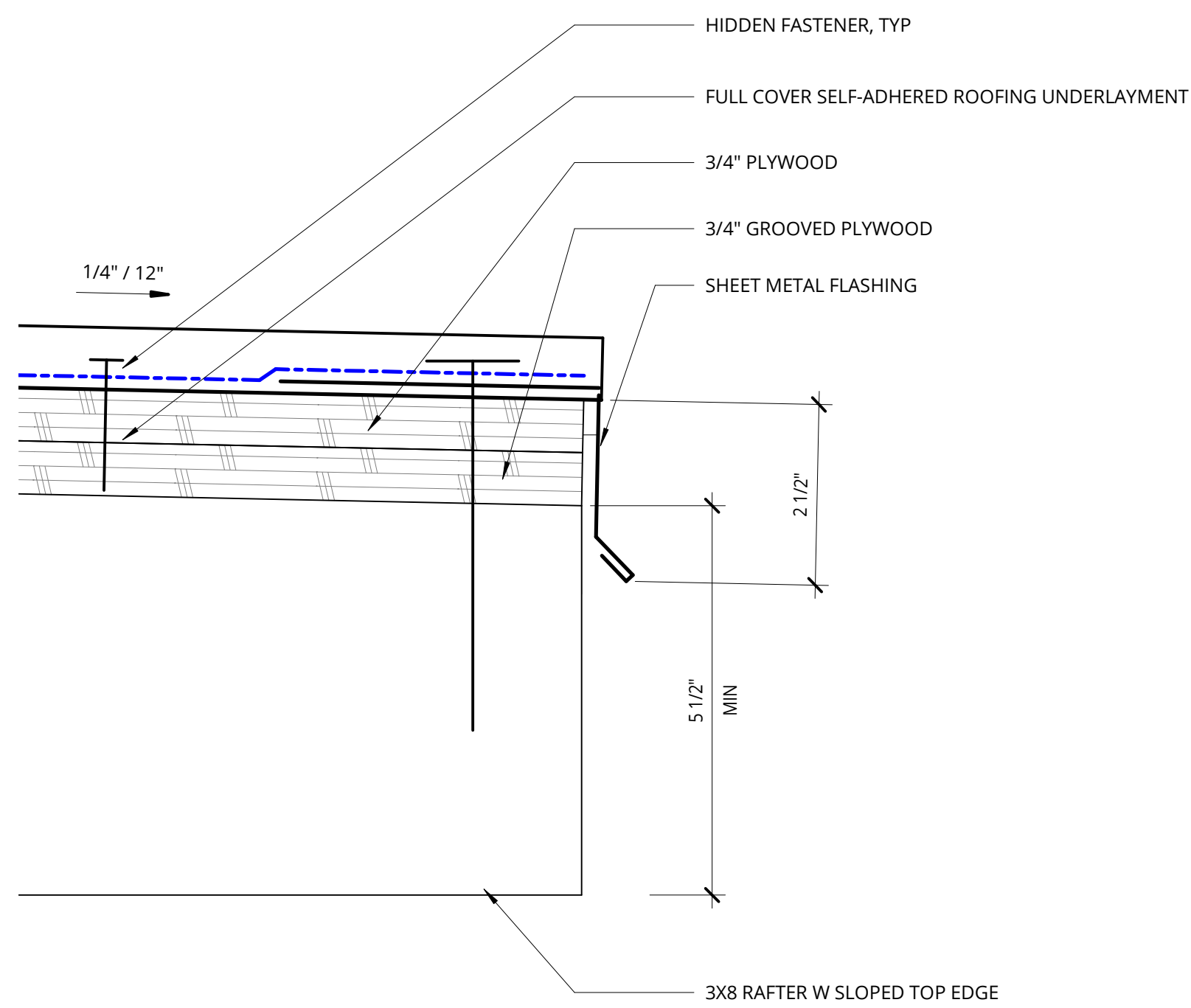
3 STOREFRONT DOOR SILL  
6" = 1'-0" | 3/A4.51



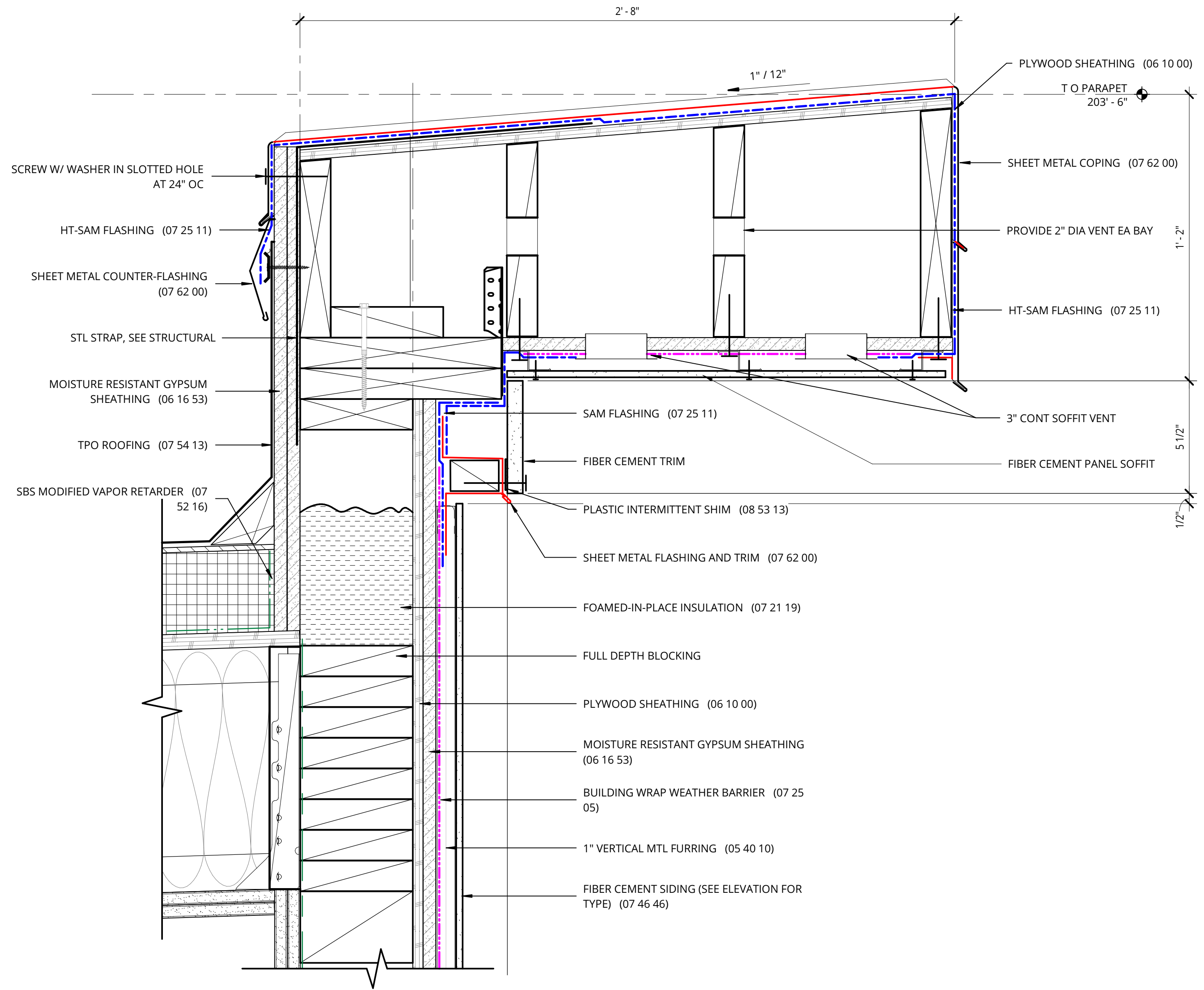
4 STOREFRONT SILL  
6" = 1'-0" | 1/A7.17

REVISION	DATE	REASON FOR ISSUE

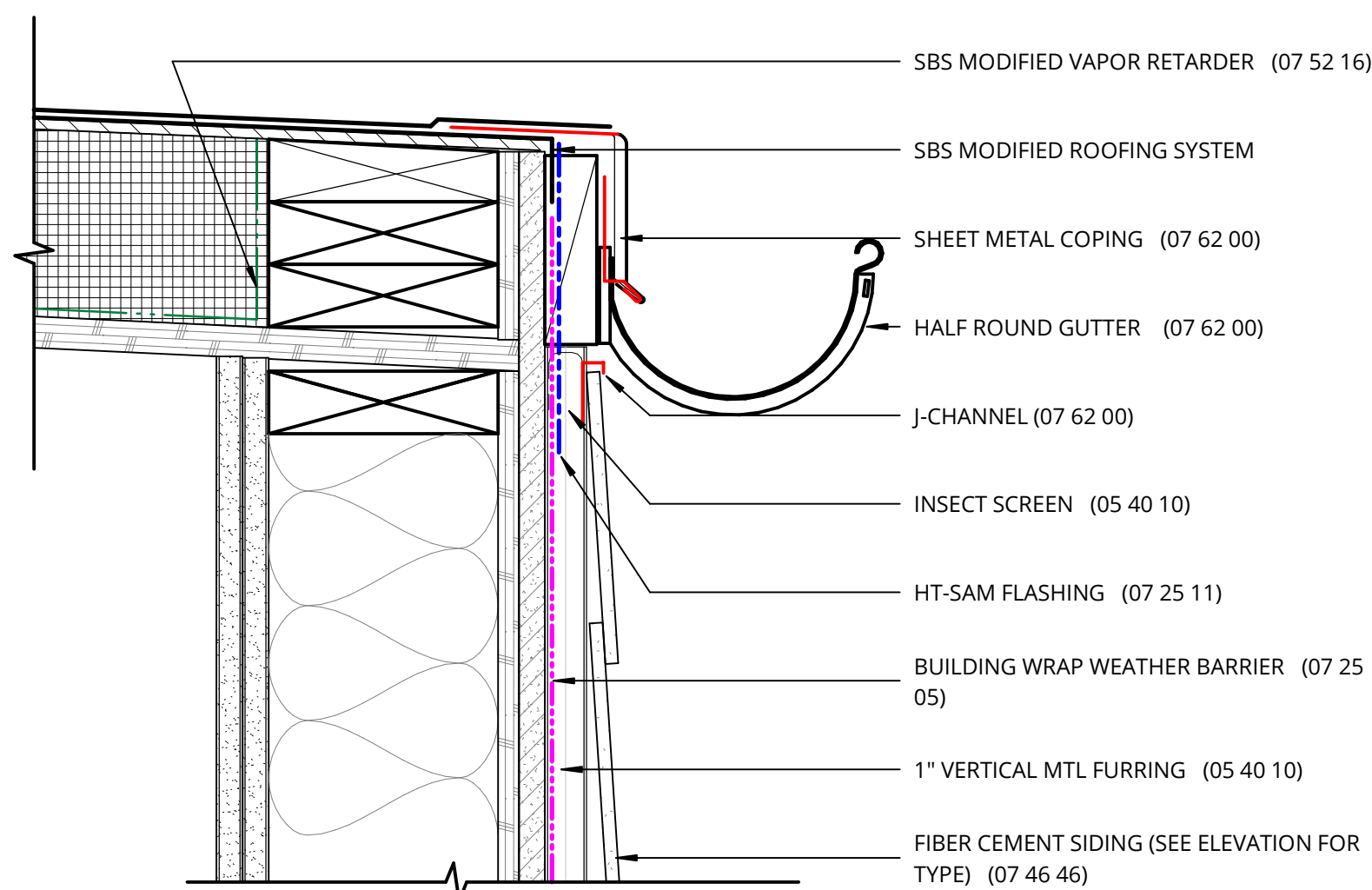




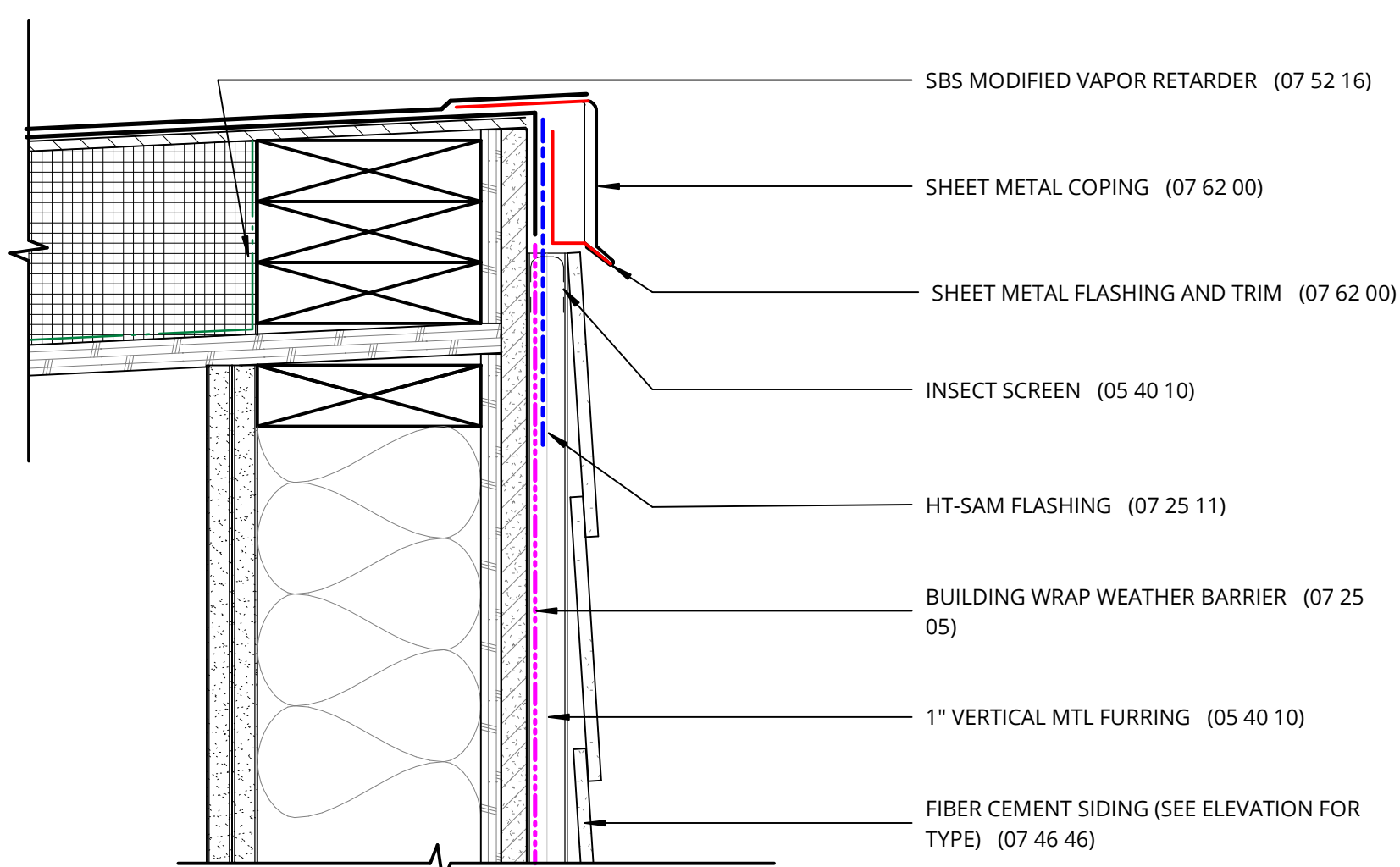
5 TRELLIS ROOF EDGE  
6\"/>



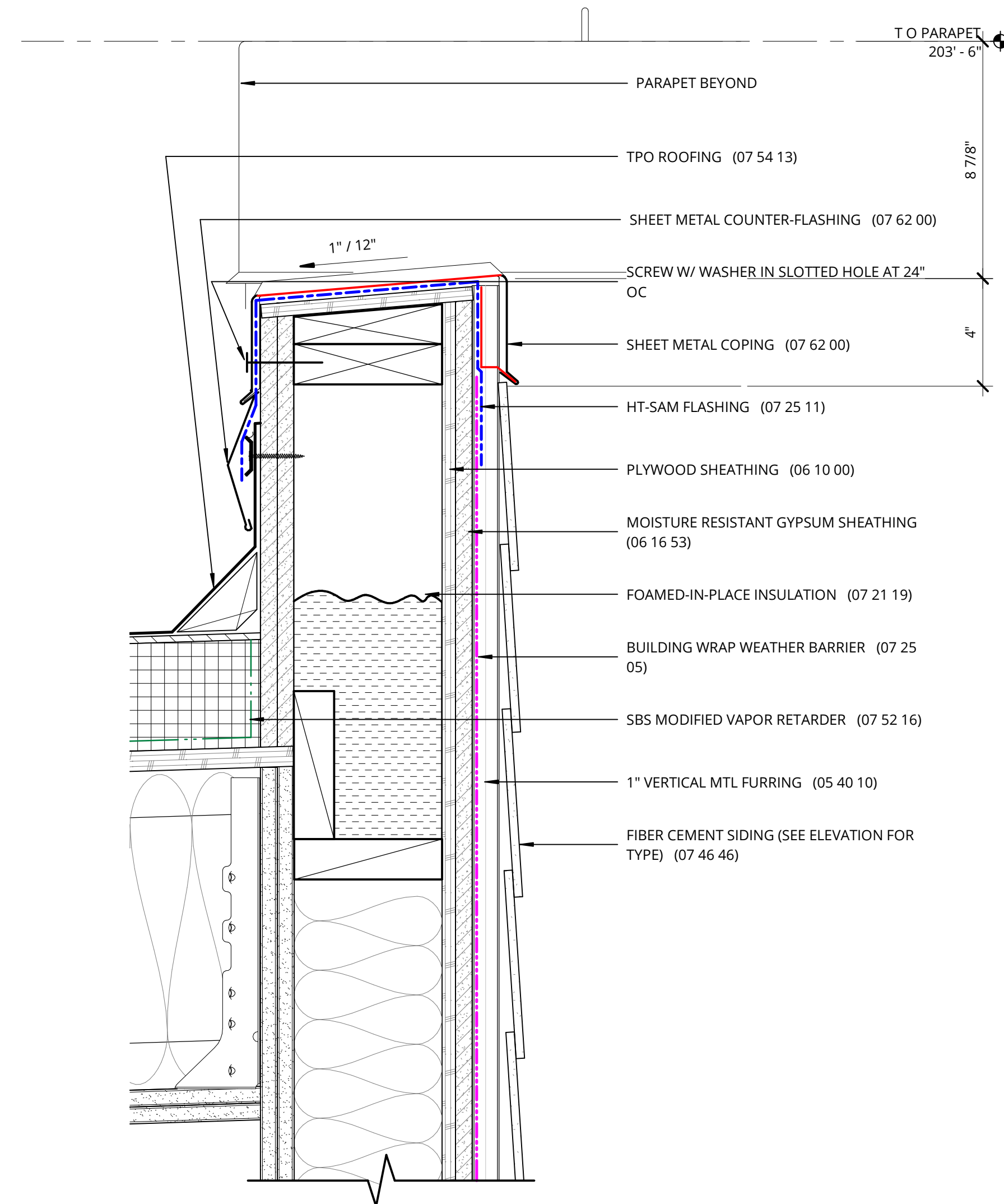
1 CORNICE DETAIL  
3\"/>



2 LOW EDGE AT STAIR 1 ROOF  
3\"/>



3 HIGH EDGE AT STAIR 1, RAKE SIM  
3\"/>



4 CORNICE DETAIL  
3\"/>

REVISION	DATE	REASON FOR ISSUE

ROOF DETAILS

PERMIT / GMP

DATE 17 OCT 2018	PROJECT NUMBER 149000
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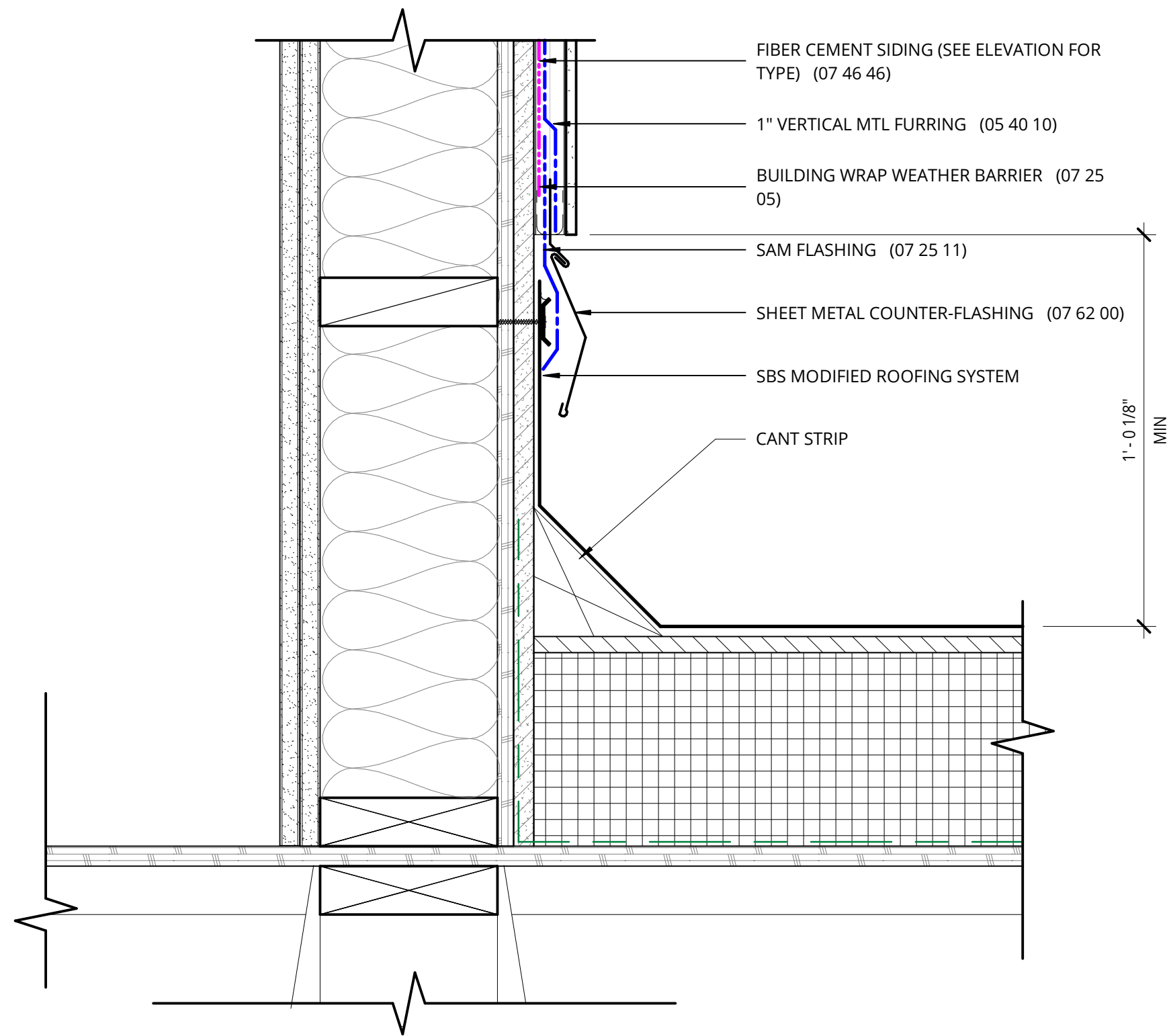
SHEET NUMBER

A7.20

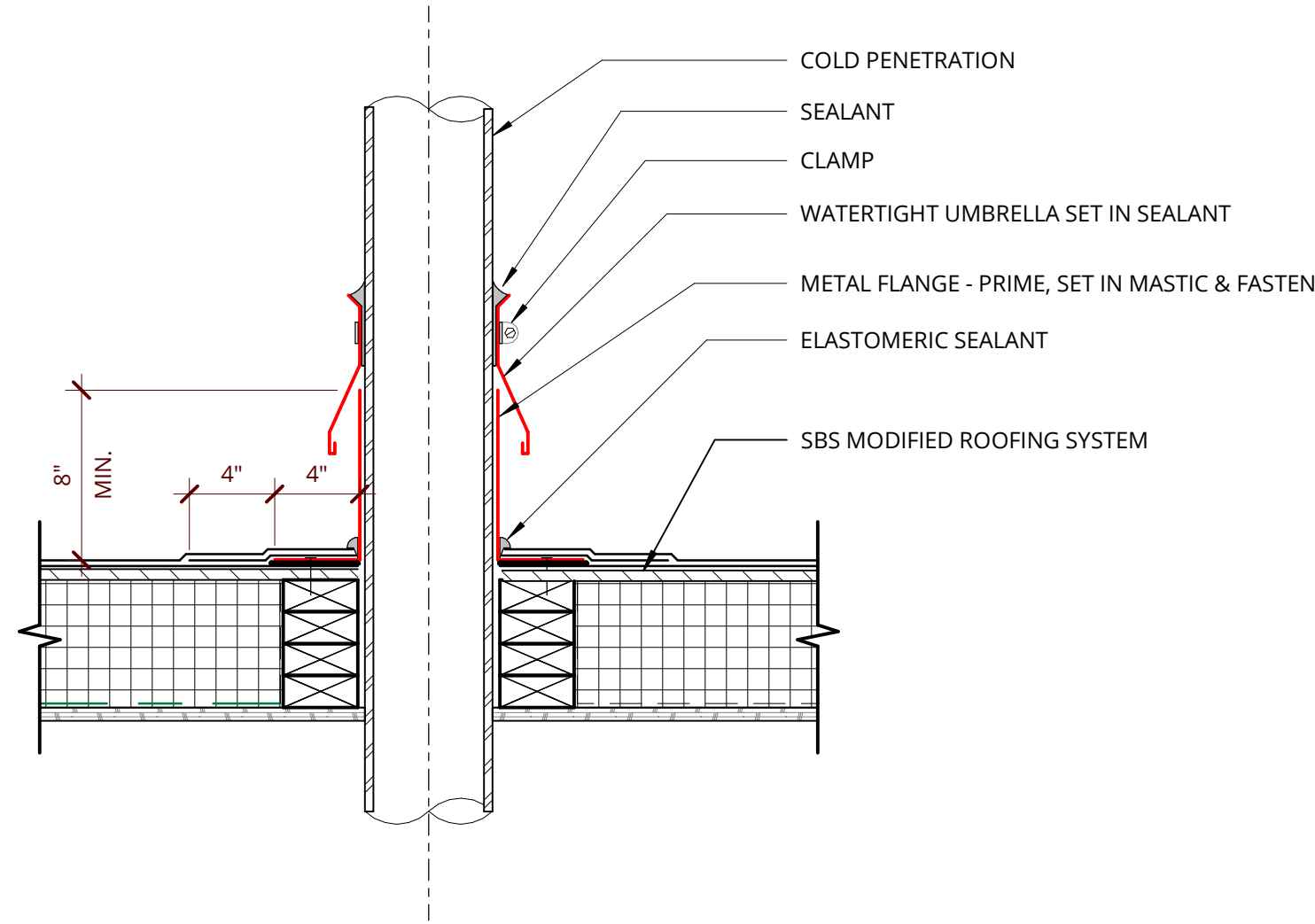


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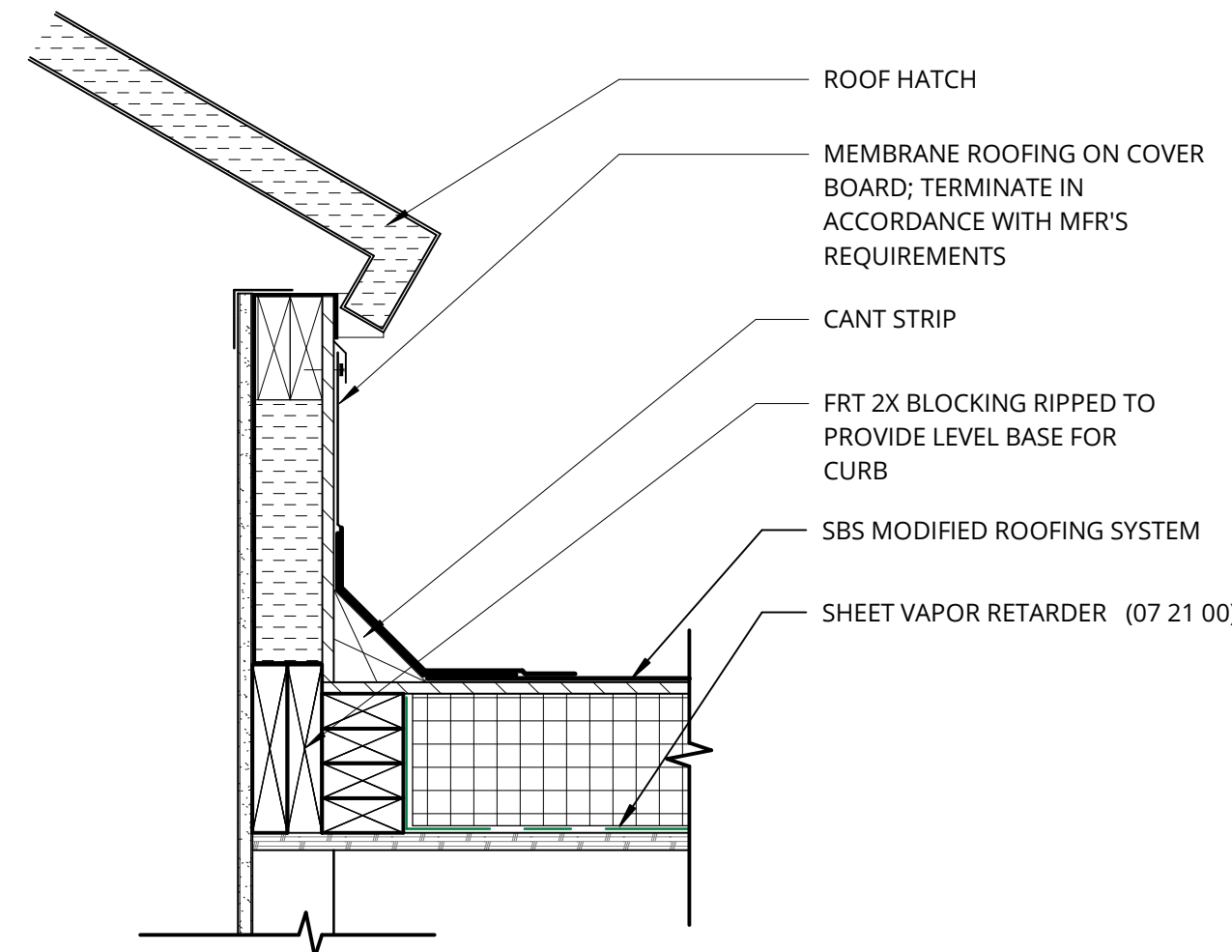
C:\Revit Projects\149000-18 North Williams Arch. Central\149000-18 North Williams Arch. Detail\RoofDetail.dwg



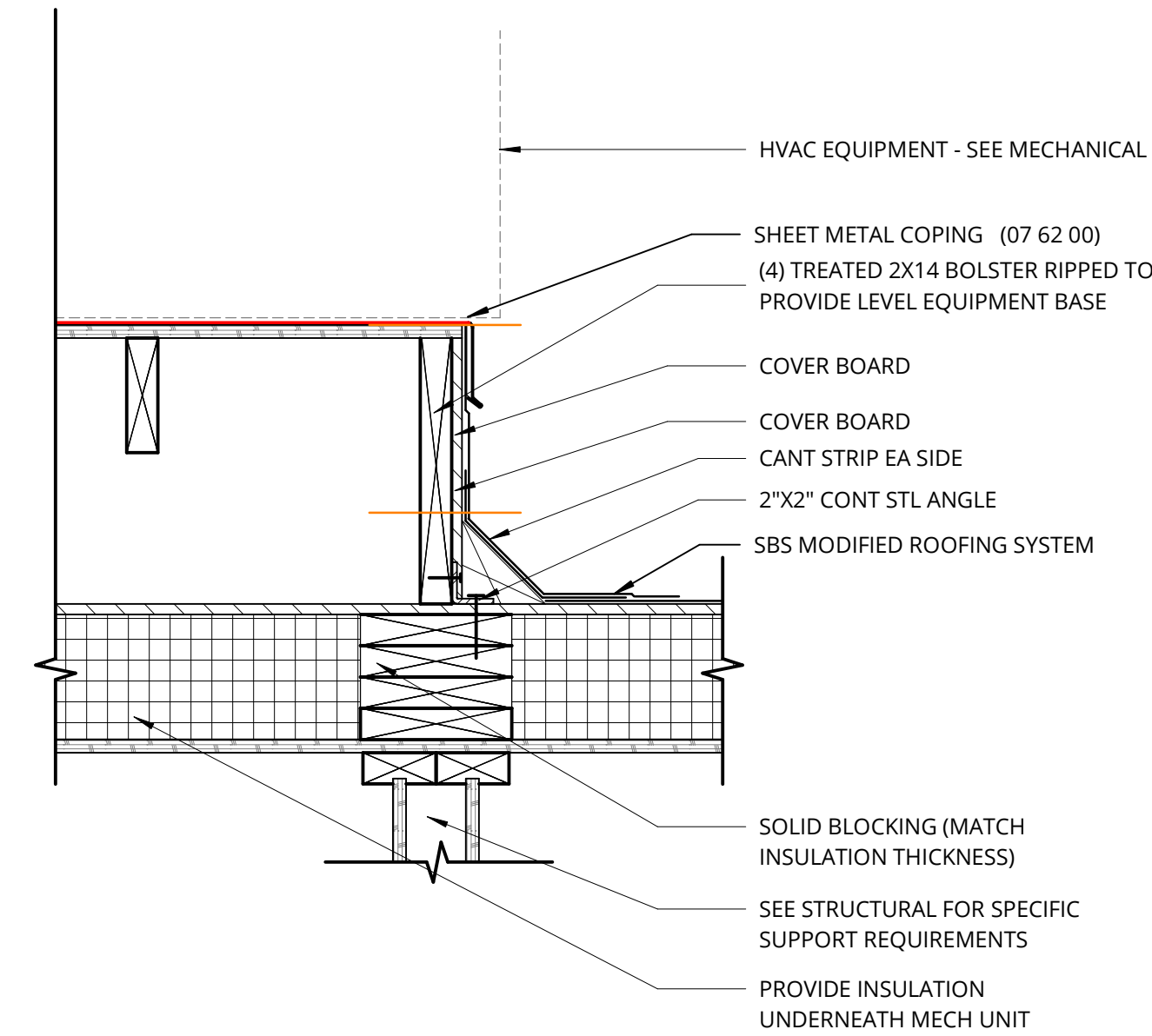
1 BASE OF WALL AT ROOF  
3" = 1'-0" | 1/A4.01



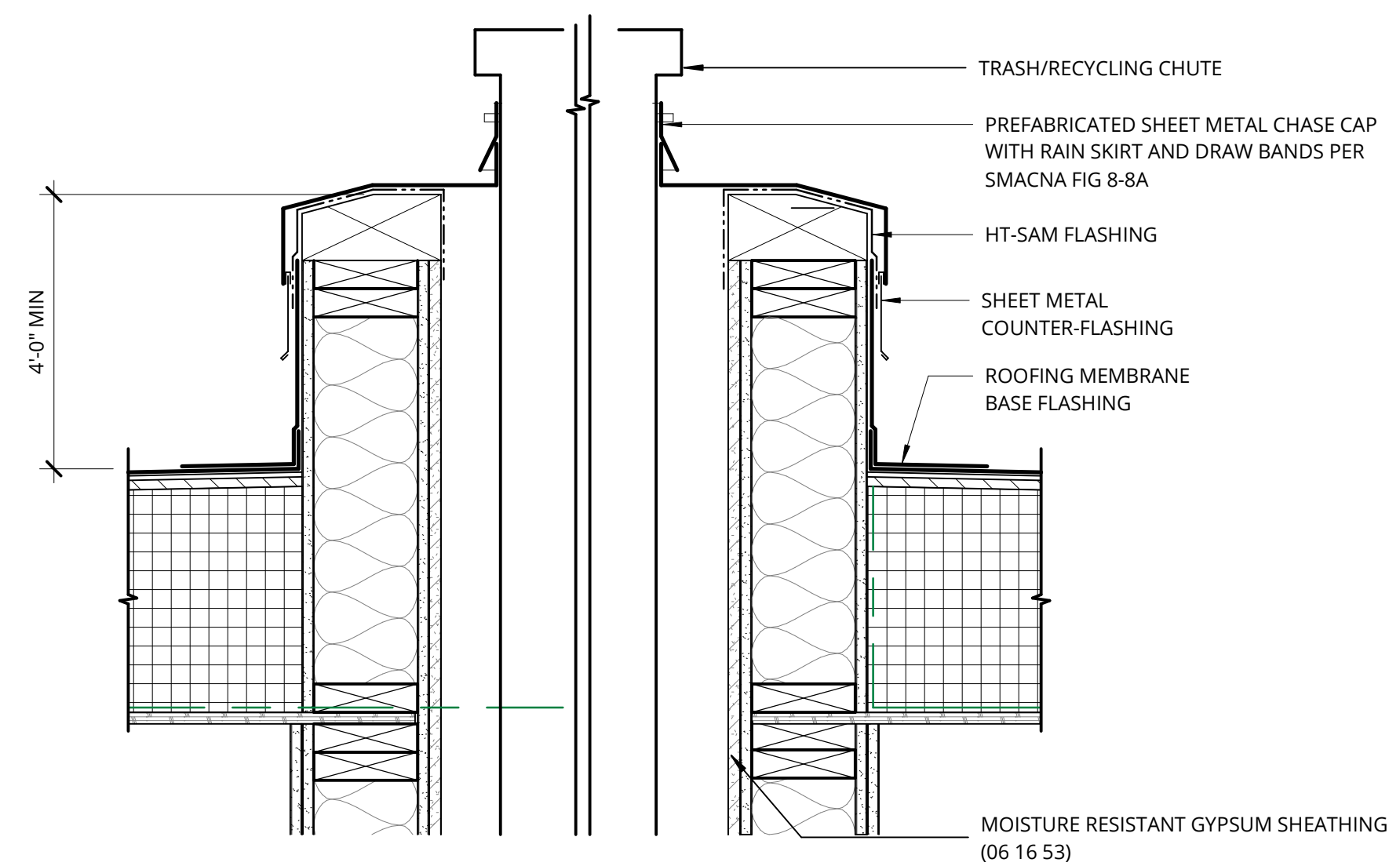
2 TYPICAL COLD PENETRATION  
1 1/2" = 1'-0"



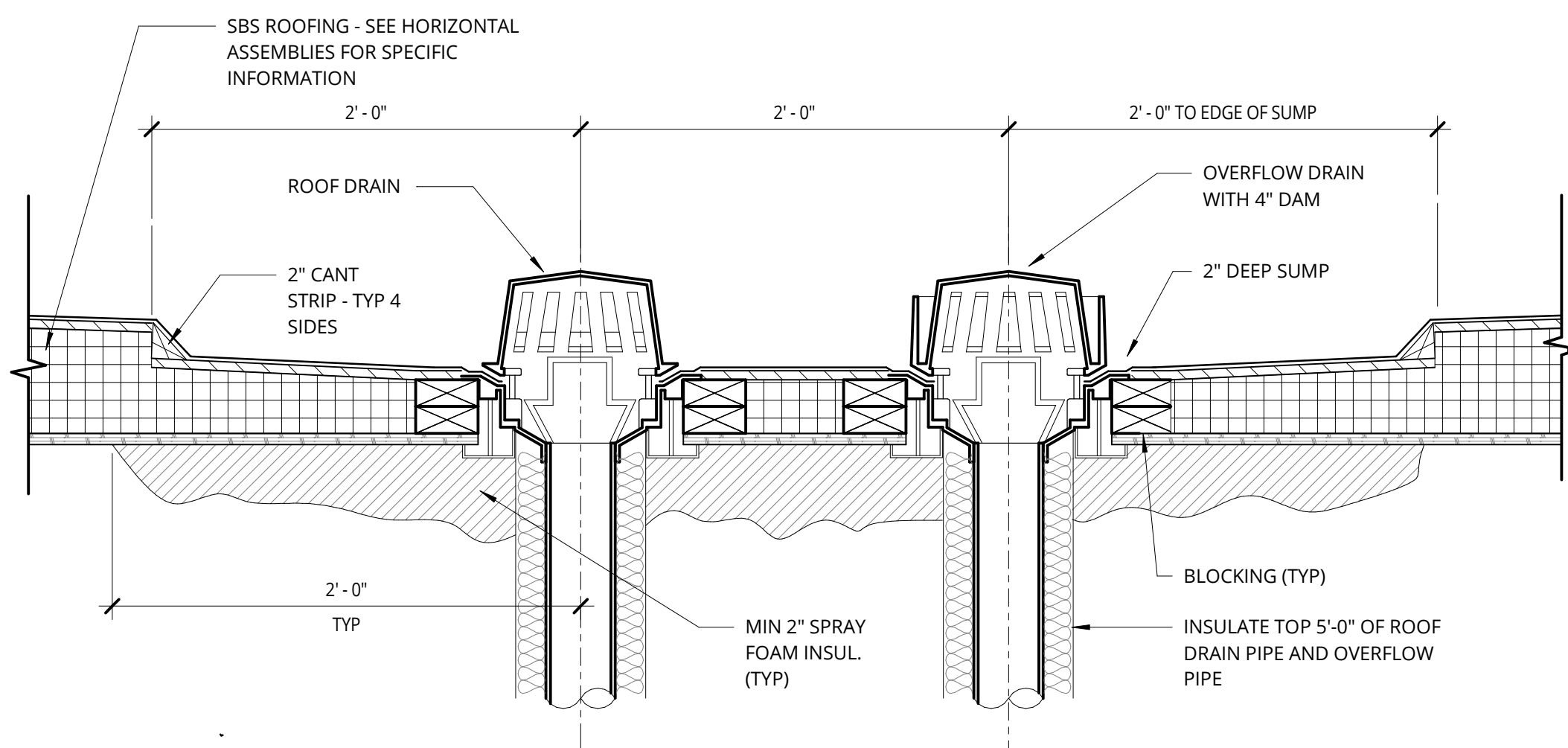
3 ROOF HATCH  
1 1/2" = 1'-0"



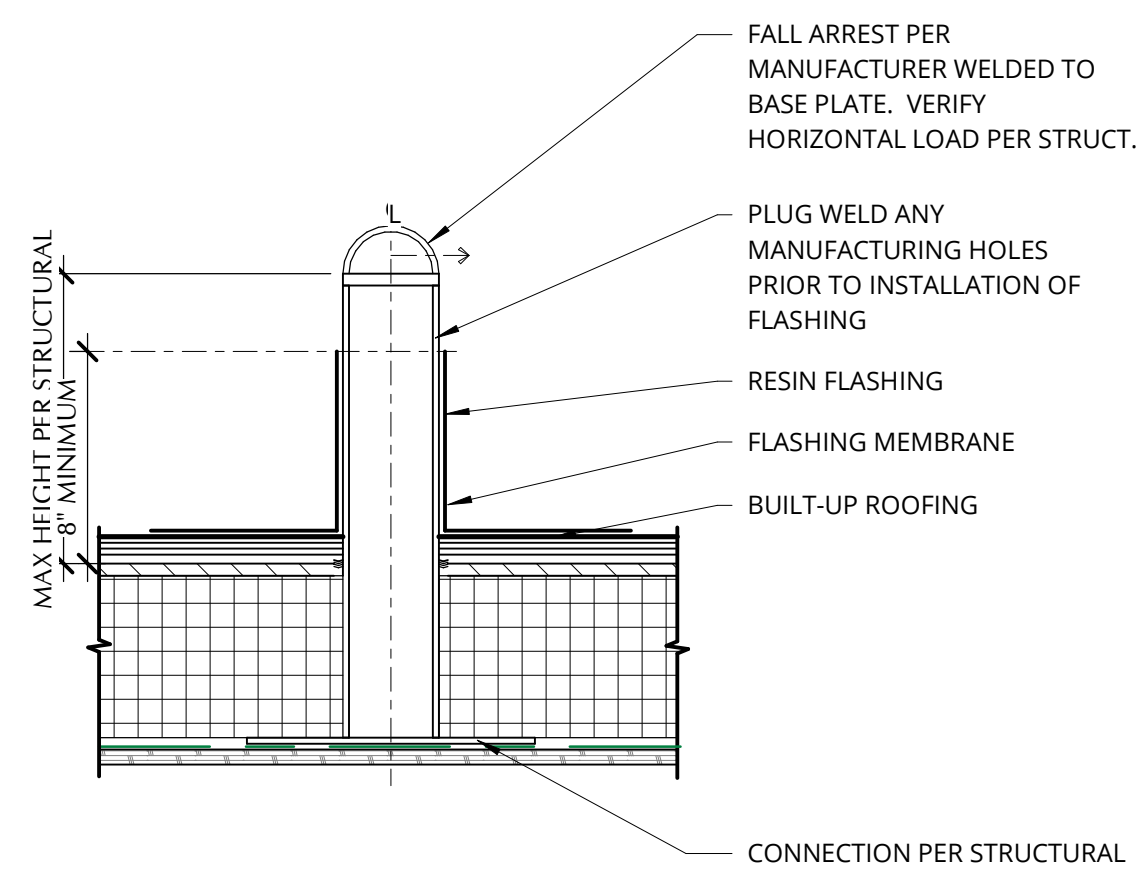
4 EQUIPMENT BOLSTER  
1 1/2" = 1'-0"



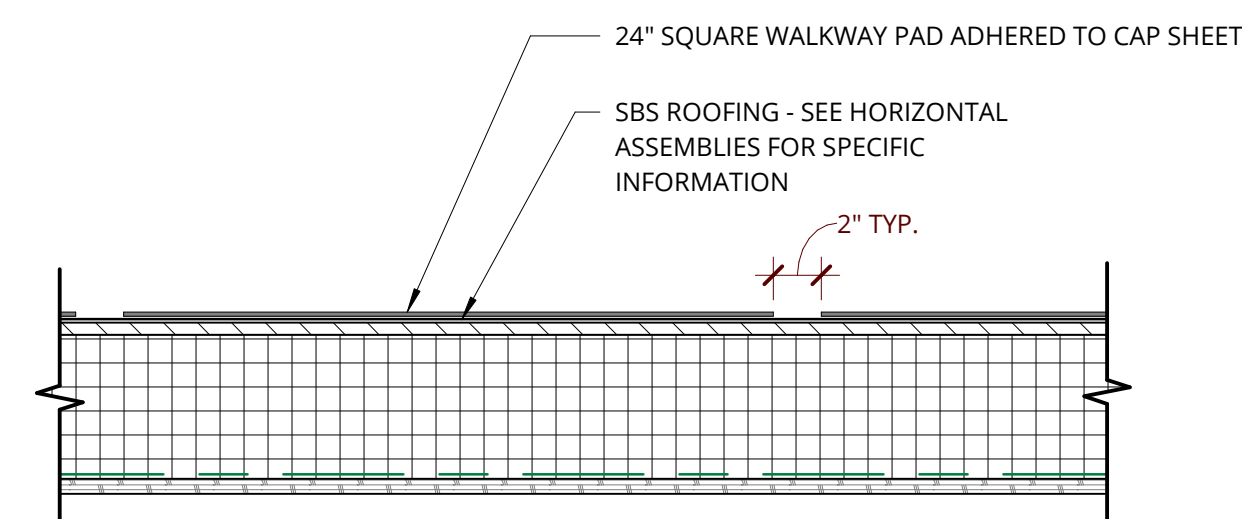
6 CHASE CAP  
1 1/2" = 1'-0"



7 ROOF DRAIN WITH OVERFLOW  
1 1/2" = 1'-0"



8 ROOF ANCHOR  
1 1/2" = 1'-0"



9 WALKWAY PAD  
1 1/2" = 1'-0"



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PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

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NORTH WILLIAMS APARTMENTS - FAMILY HOUSING

2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

ROOF DETAILS

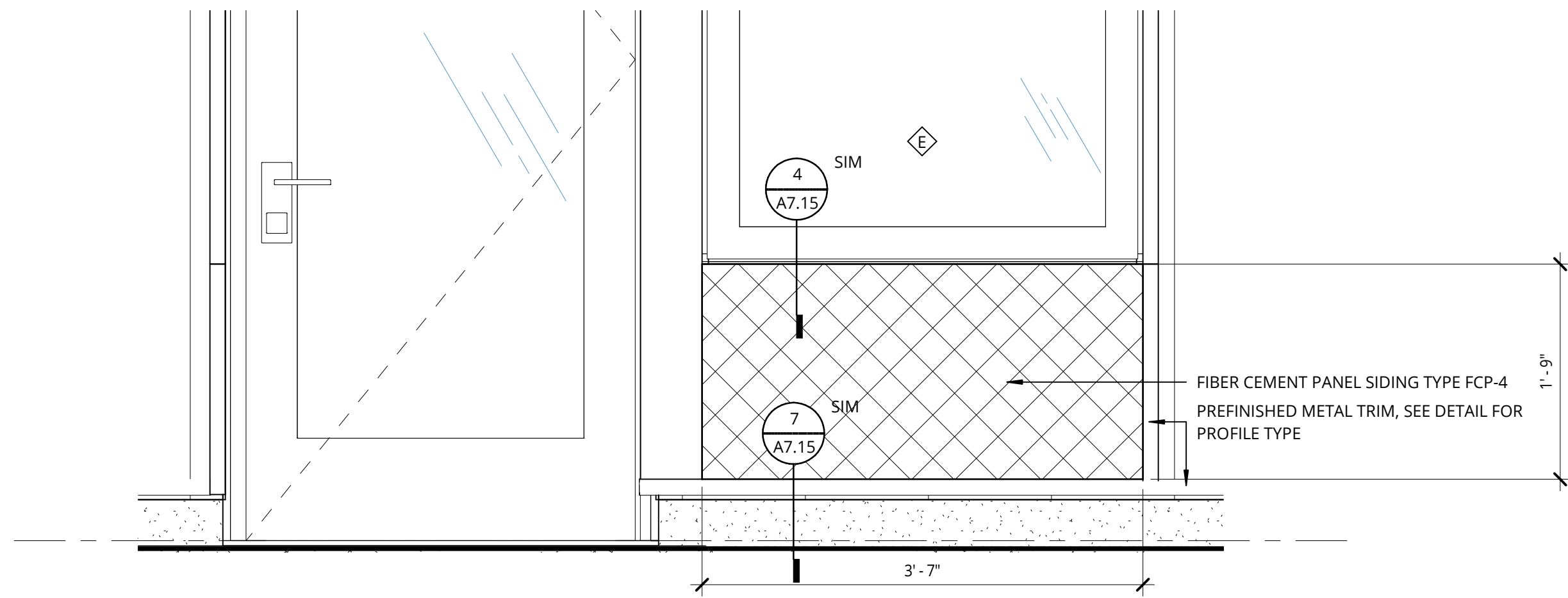
PERMIT / GMP

DATE 17 OCT 2018	PROJECT NUMBER 149000
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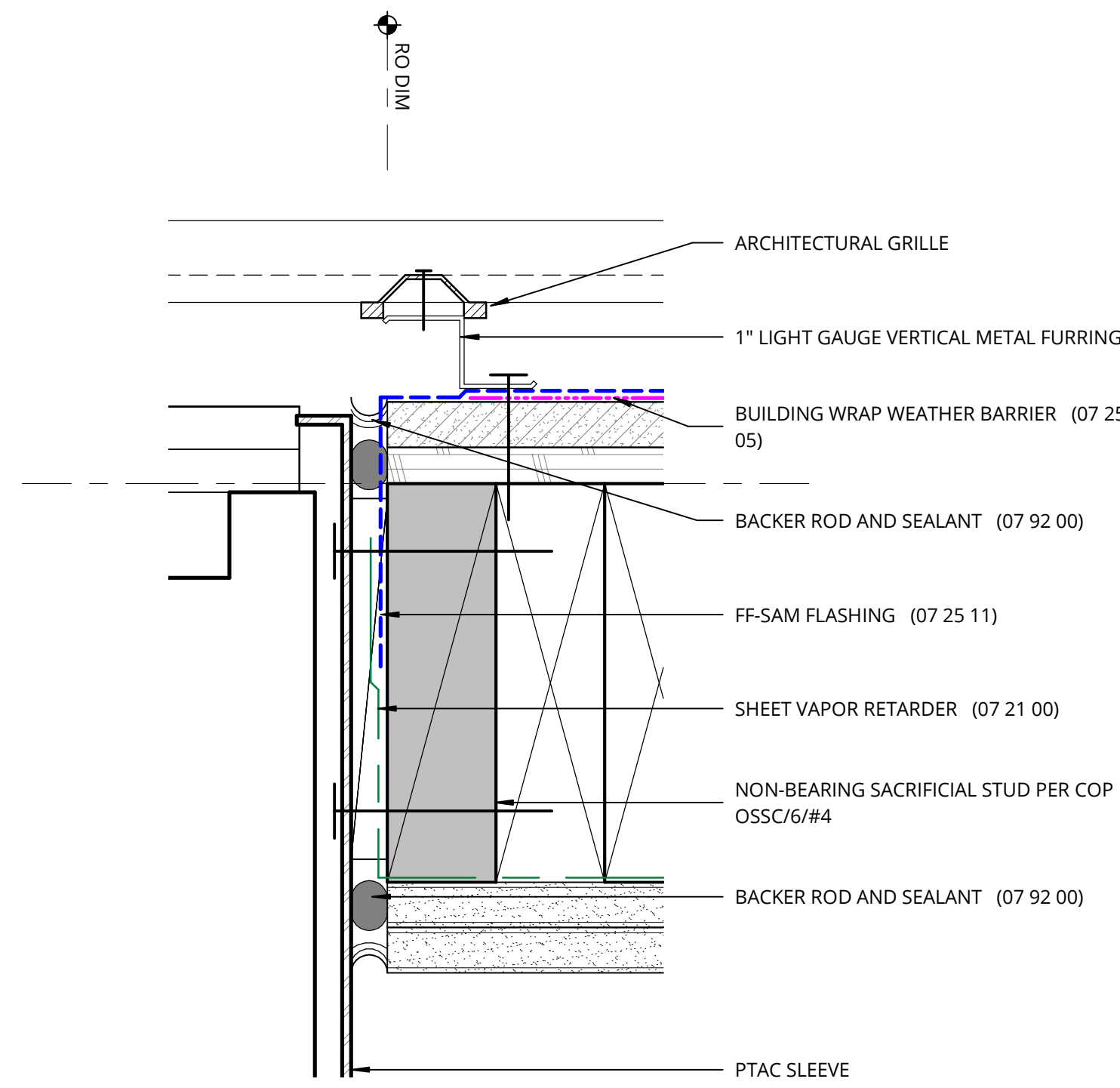
SHEET NUMBER

A7.21

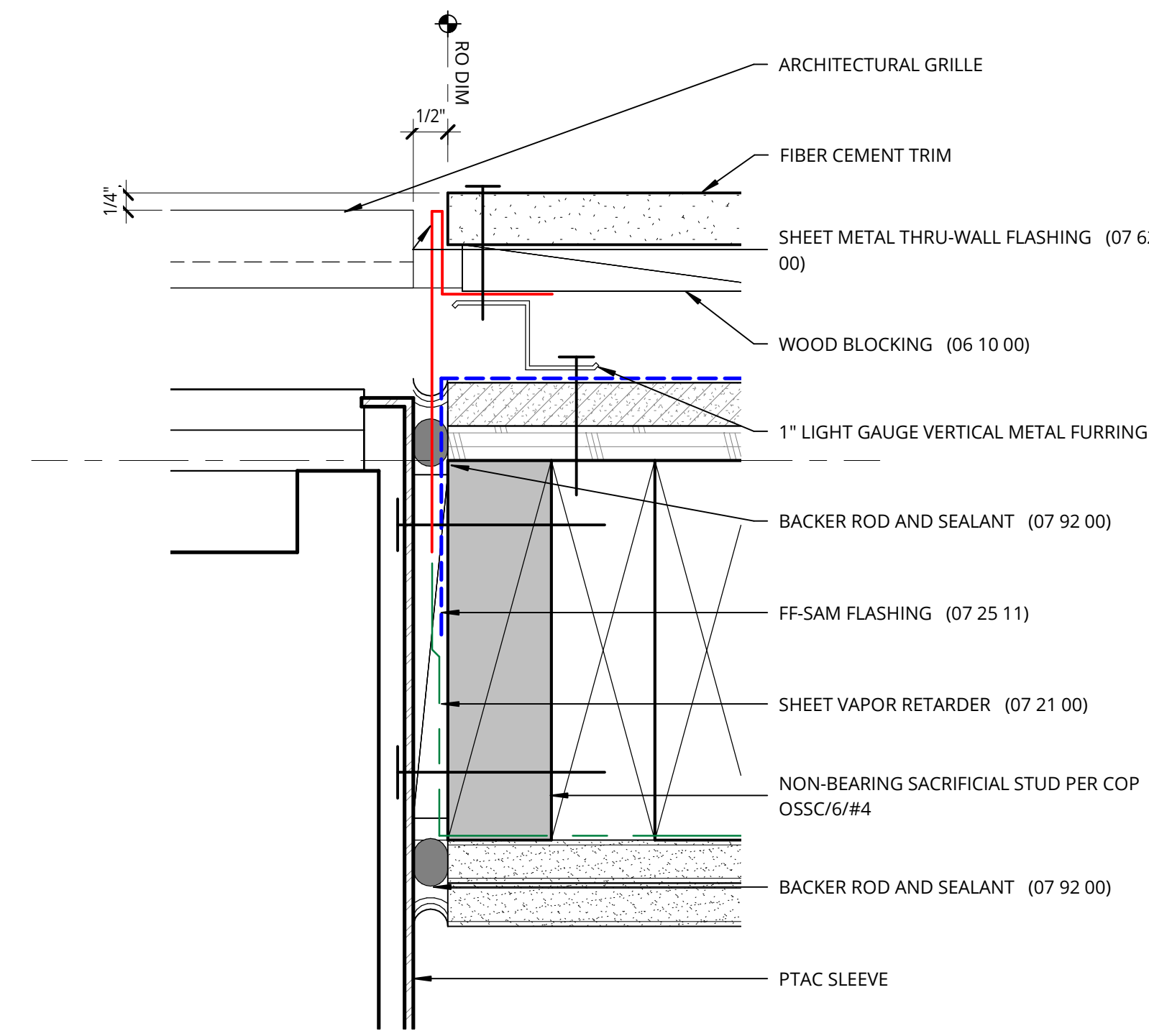




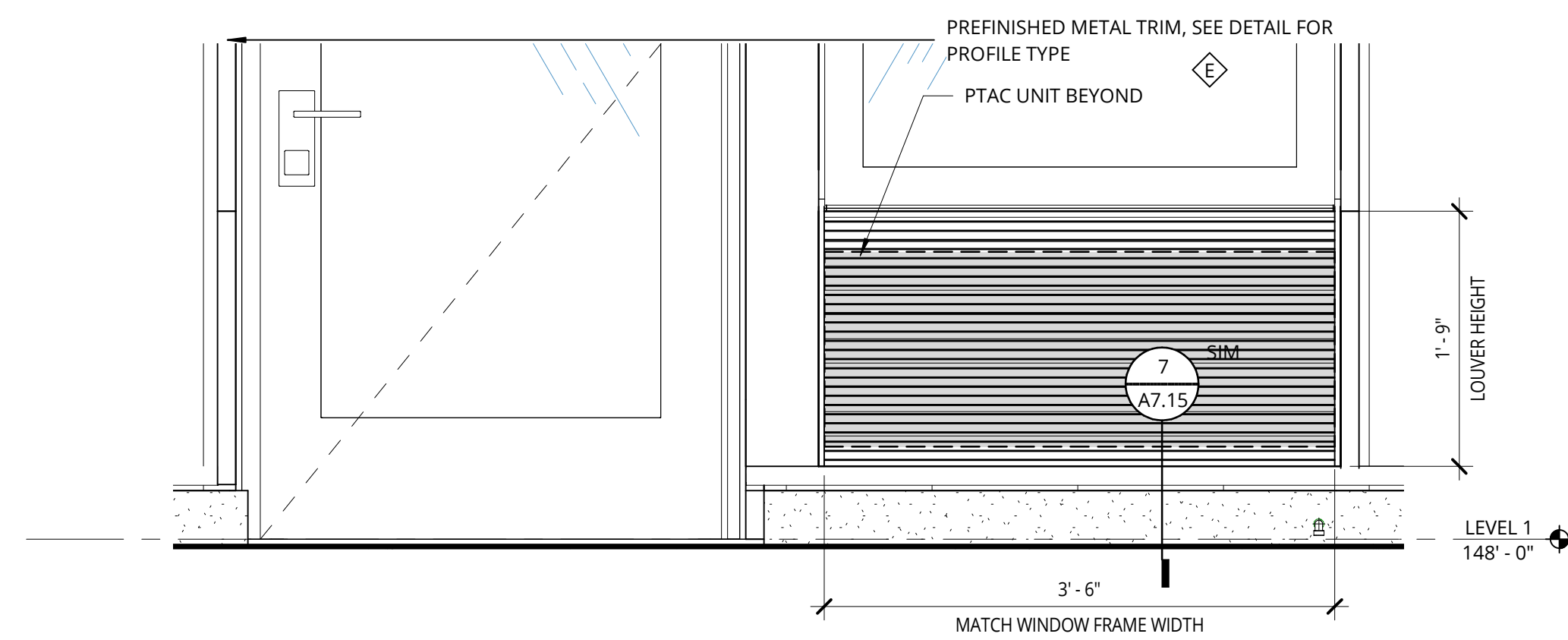
**1 WINDOW TYPE E EXTERIOR ELEVATION W/O PTAC**  
1" = 1'-0" | 1/A3.11



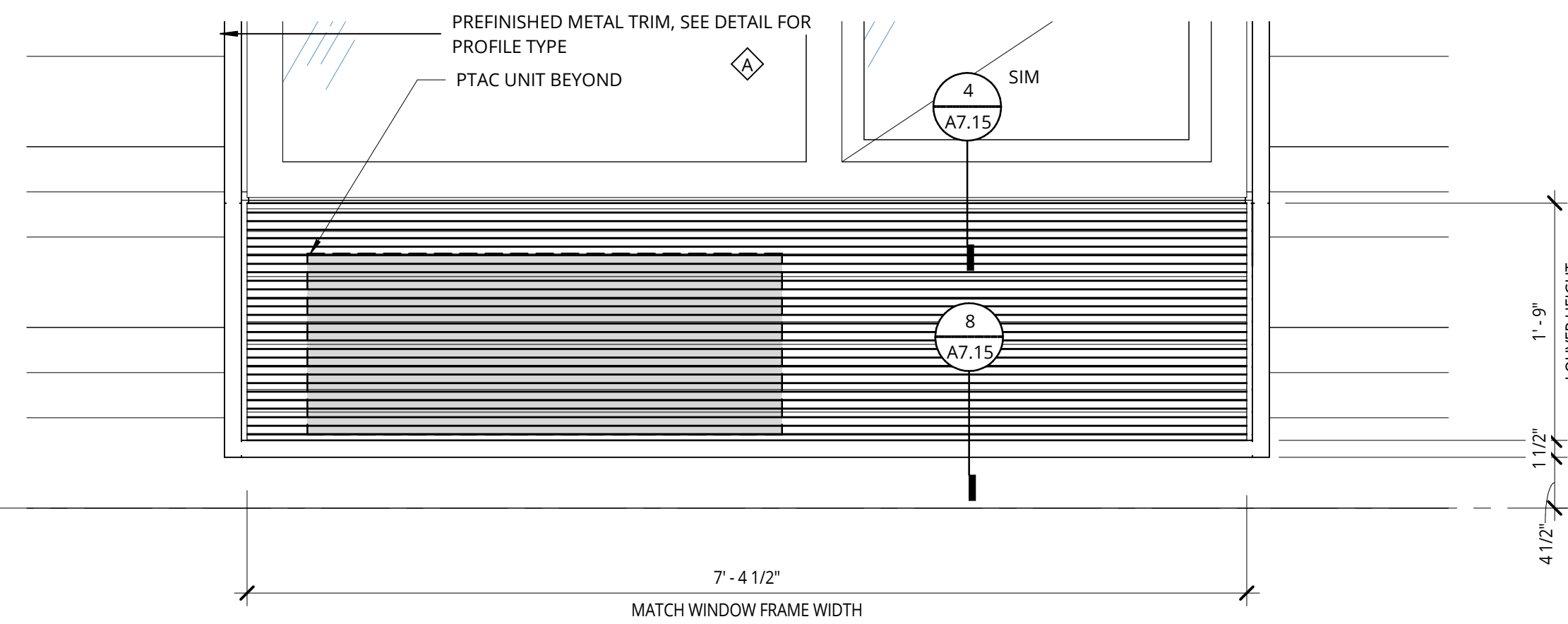
**2 WINDOW TYPES A, B & C PTAC JAMB DETAIL**  
6" = 1'-0" | 10/A7.22



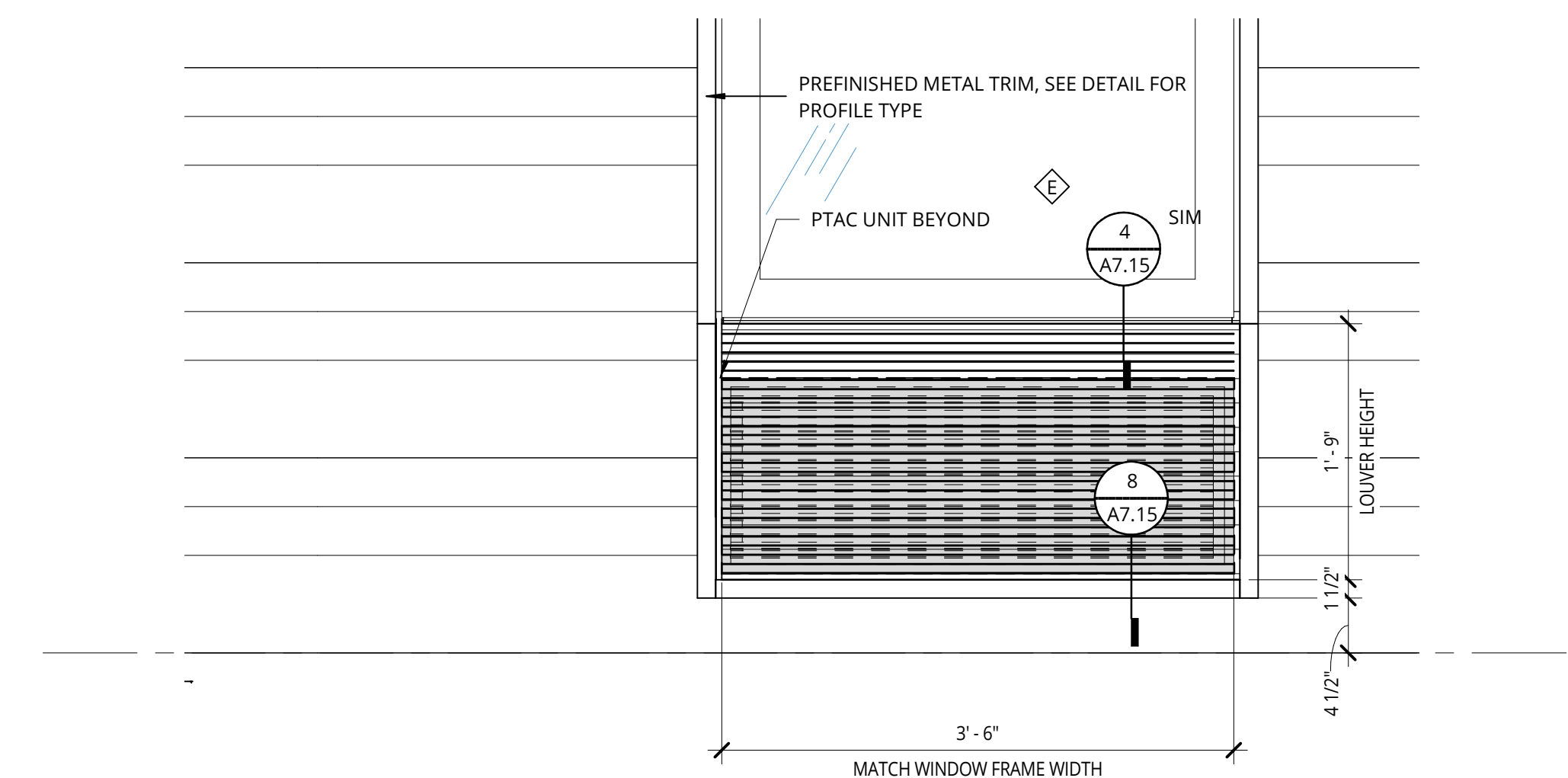
**3 WINDOW TYPE D PTAC JAMB DETAIL**  
6" = 1'-0" | 12/A7.22



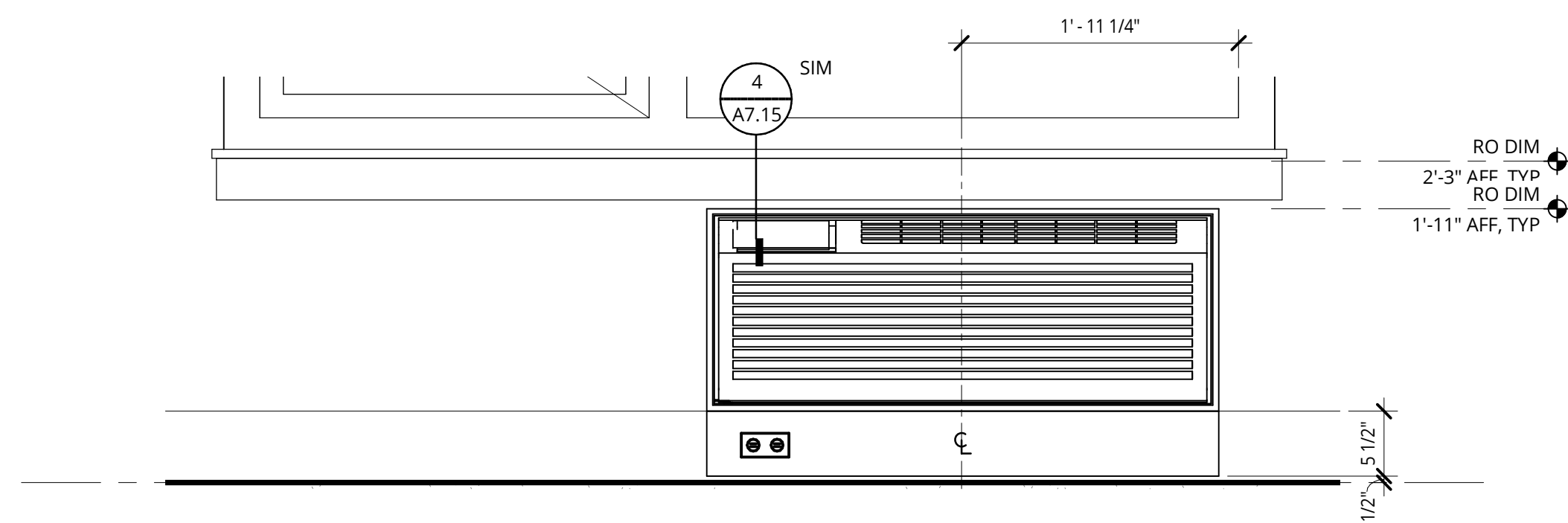
**4 WINDOW TYPE E AT DOOR PTAC EXTERIOR ELEVATION**  
1" = 1'-0" | 1/A3.11



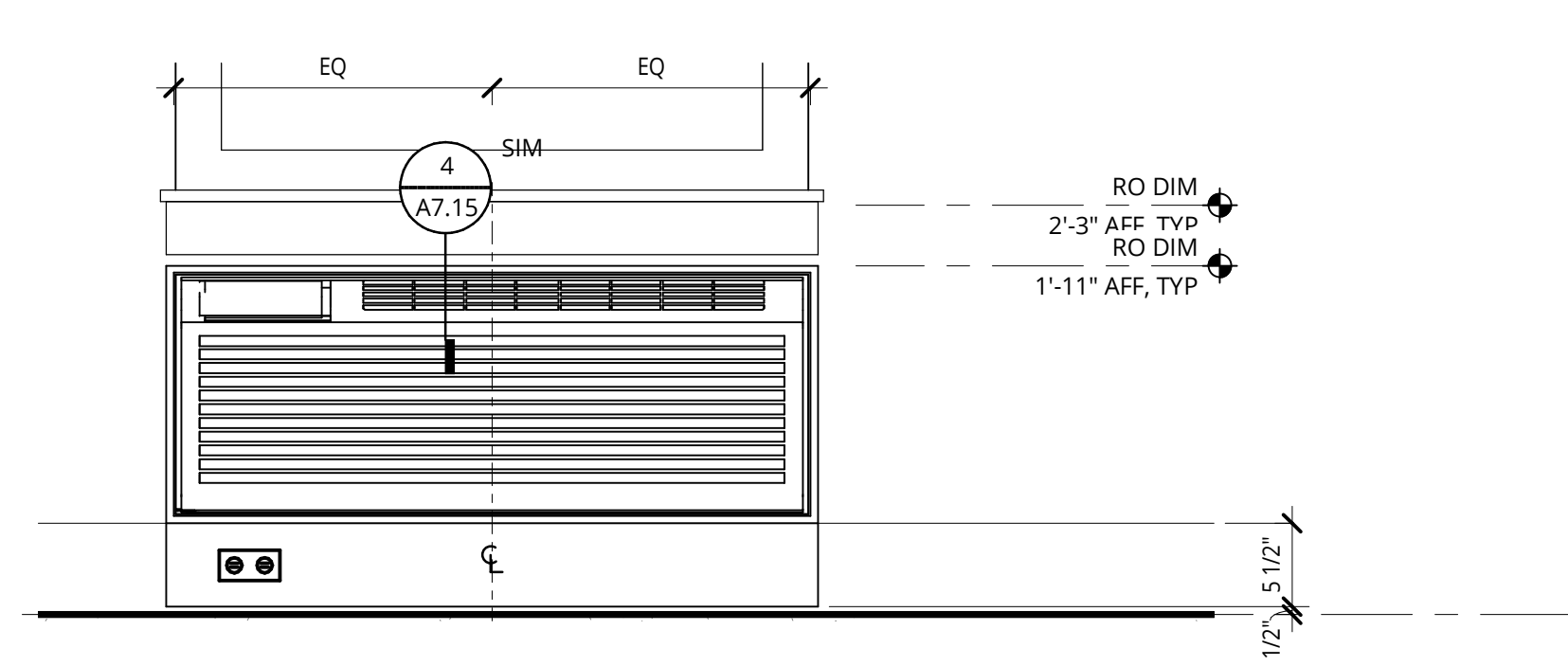
**5 WINDOW TYPE A PTAC EXTERIOR ELEVATION**  
1" = 1'-0" | 1/A3.11



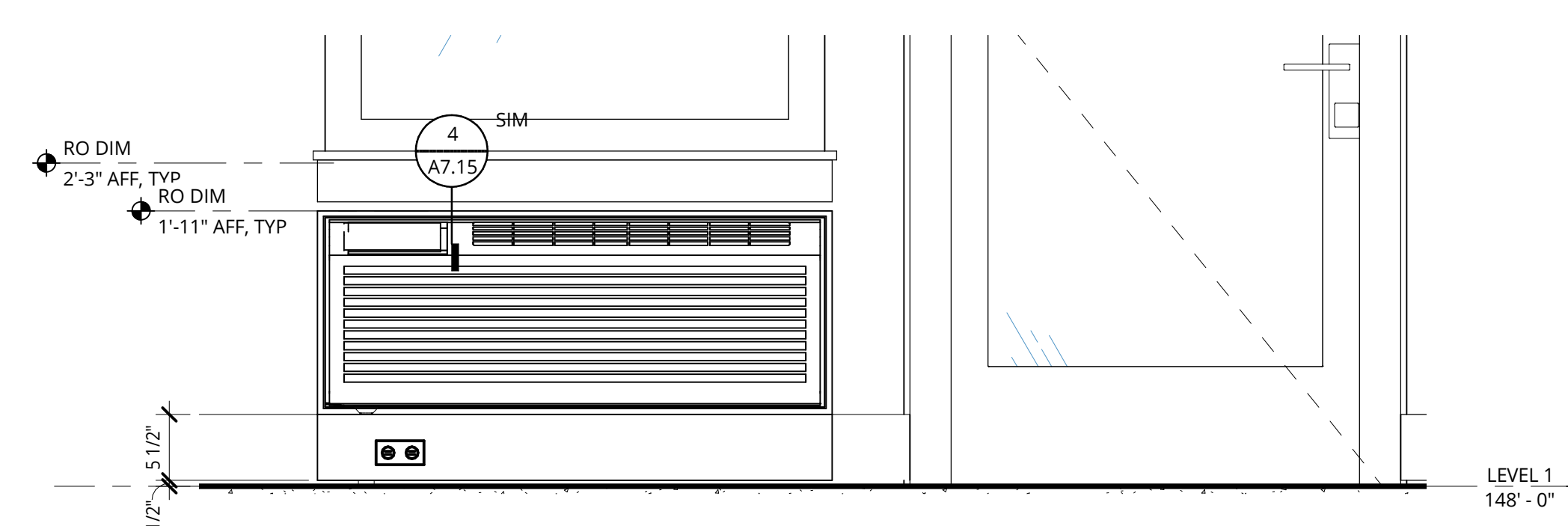
**6 WINDOW TYPE E PTAC EXTERIOR ELEVATION**  
1" = 1'-0" | 2/A3.11



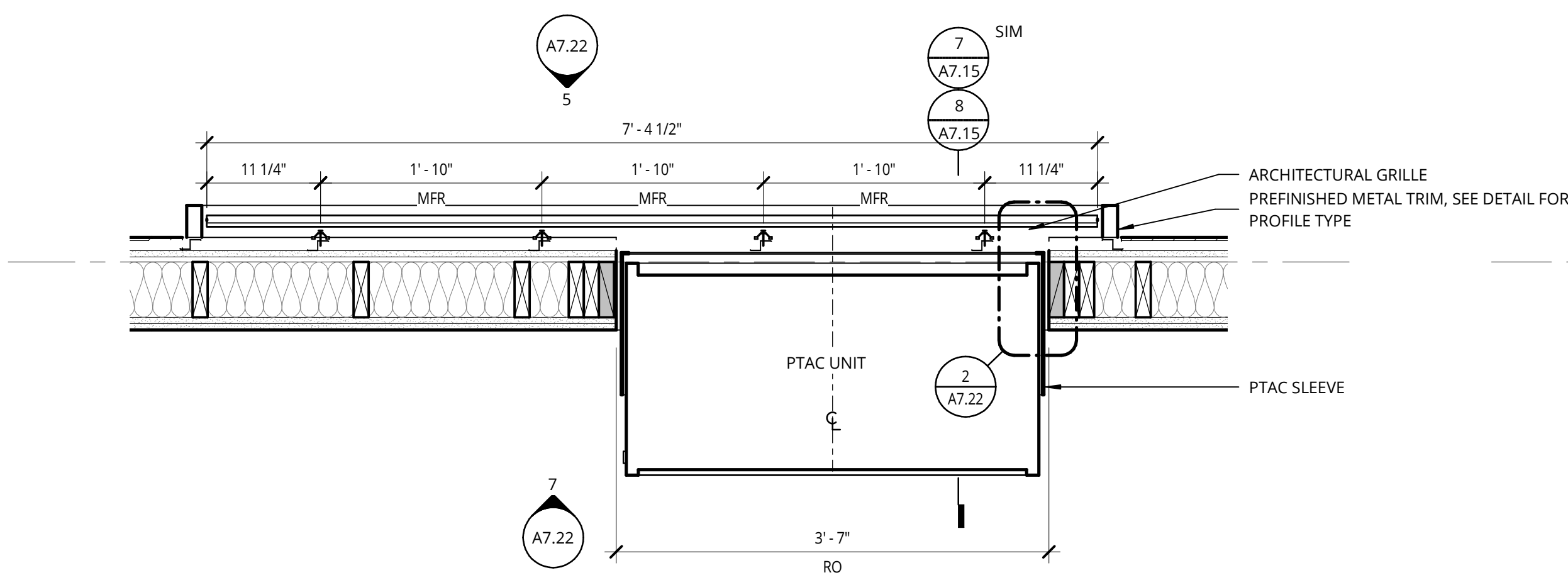
**7 WINDOW TYPE A PTAC INTERIOR ELEVATION**  
1" = 1'-0" | 10/A7.22



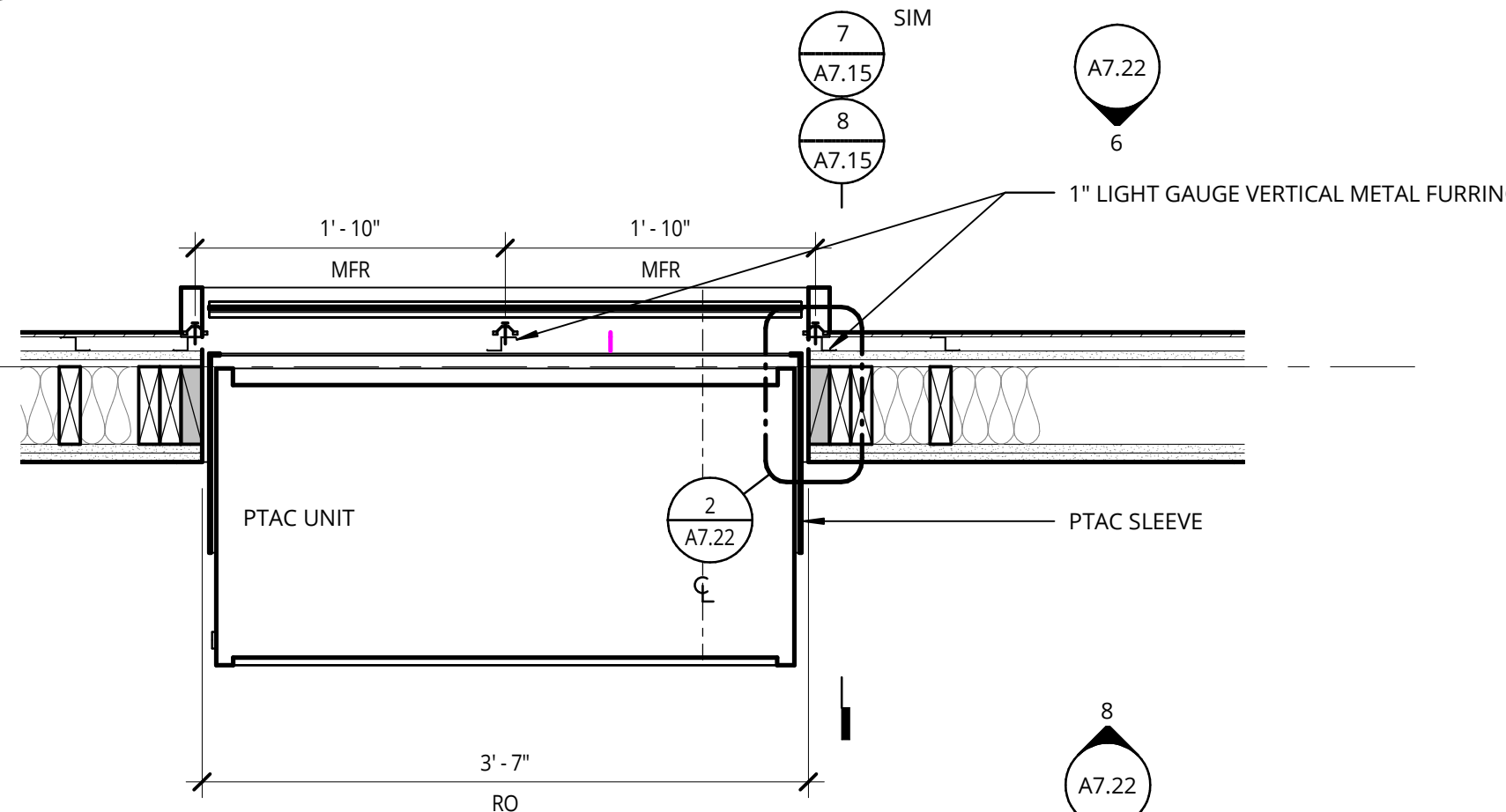
**8 WINDOW TYPE E PTAC INTERIOR ELEVATIONN**  
1" = 1'-0" | 11/A7.22



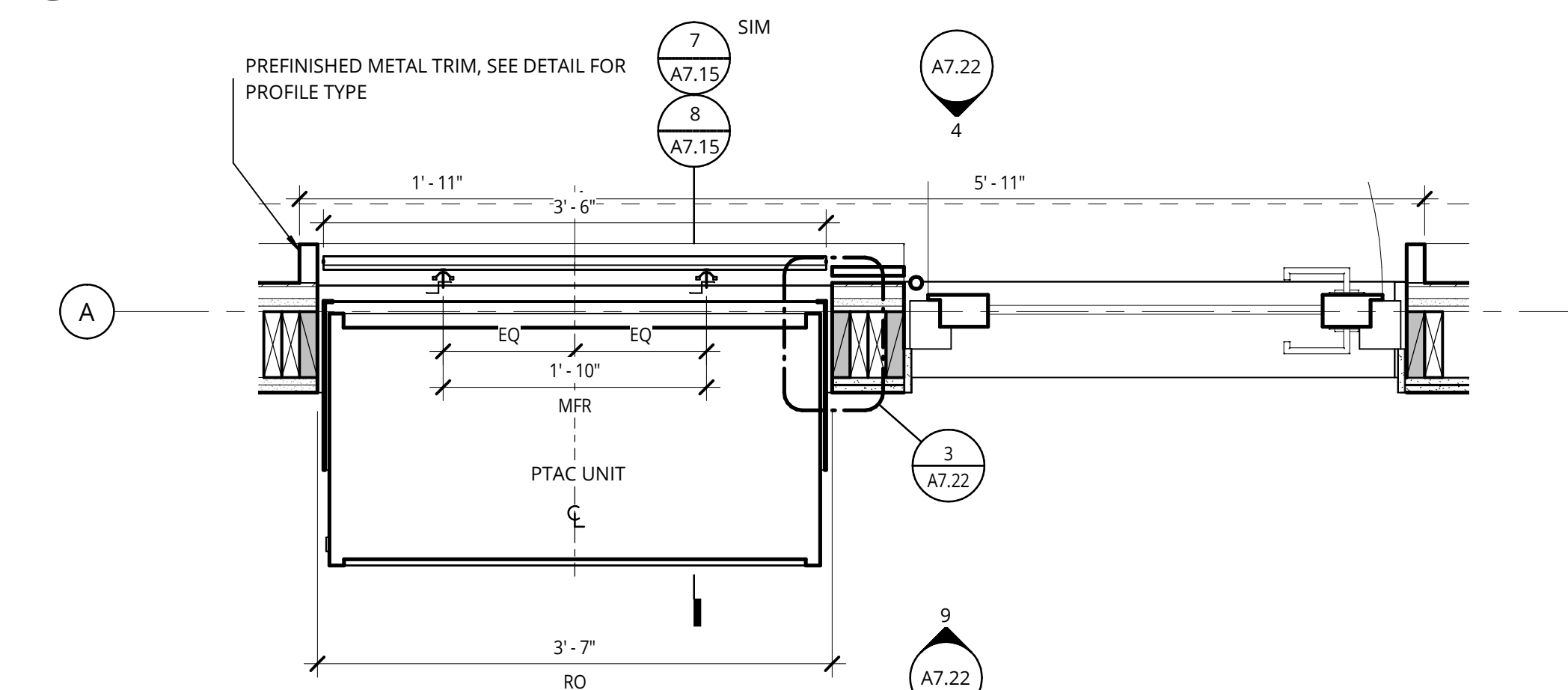
**9 WINDOW TYPE E AT DOOR PTAC INTERIOR ELEVATION**  
1" = 1'-0" | 12/A7.22



**10 WINDOW TYPE A PTAC PLAN DETAIL**  
1" = 1'-0" | 1/A5.03



**11 WINDOW TYPES E PTAC PLAN DETAIL**  
1" = 1'-0" | 1/A5.03



**12 WINDOW TYPE E AT DOOR PTAC PLAN DETAIL**  
1" = 1'-0" | 1/A5.01

REVISION	DATE	REASON FOR ISSUE

PTAC DETAILS,  
ENLARGED  
ELEVATIONS  
PERMIT / GMP

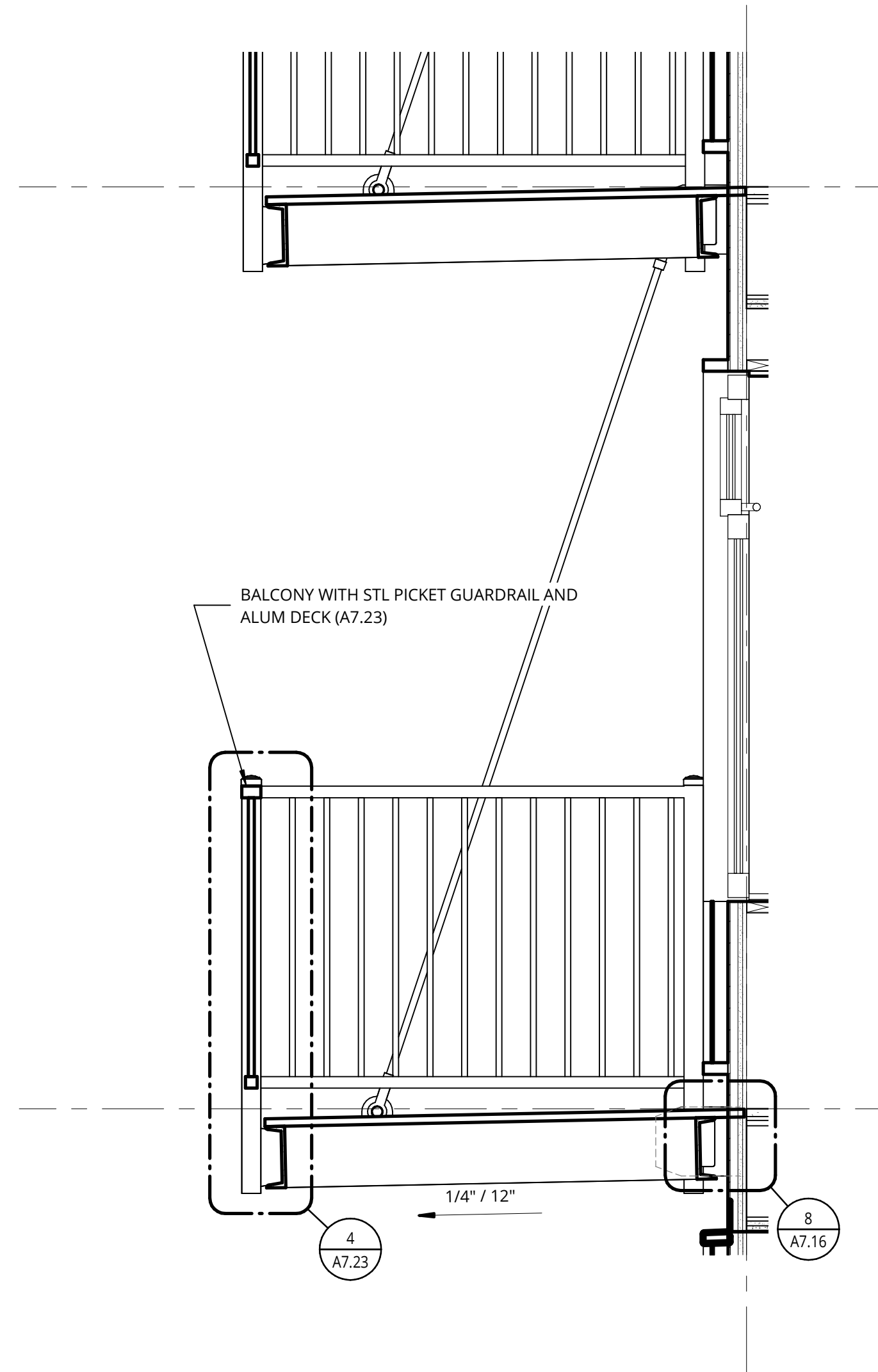
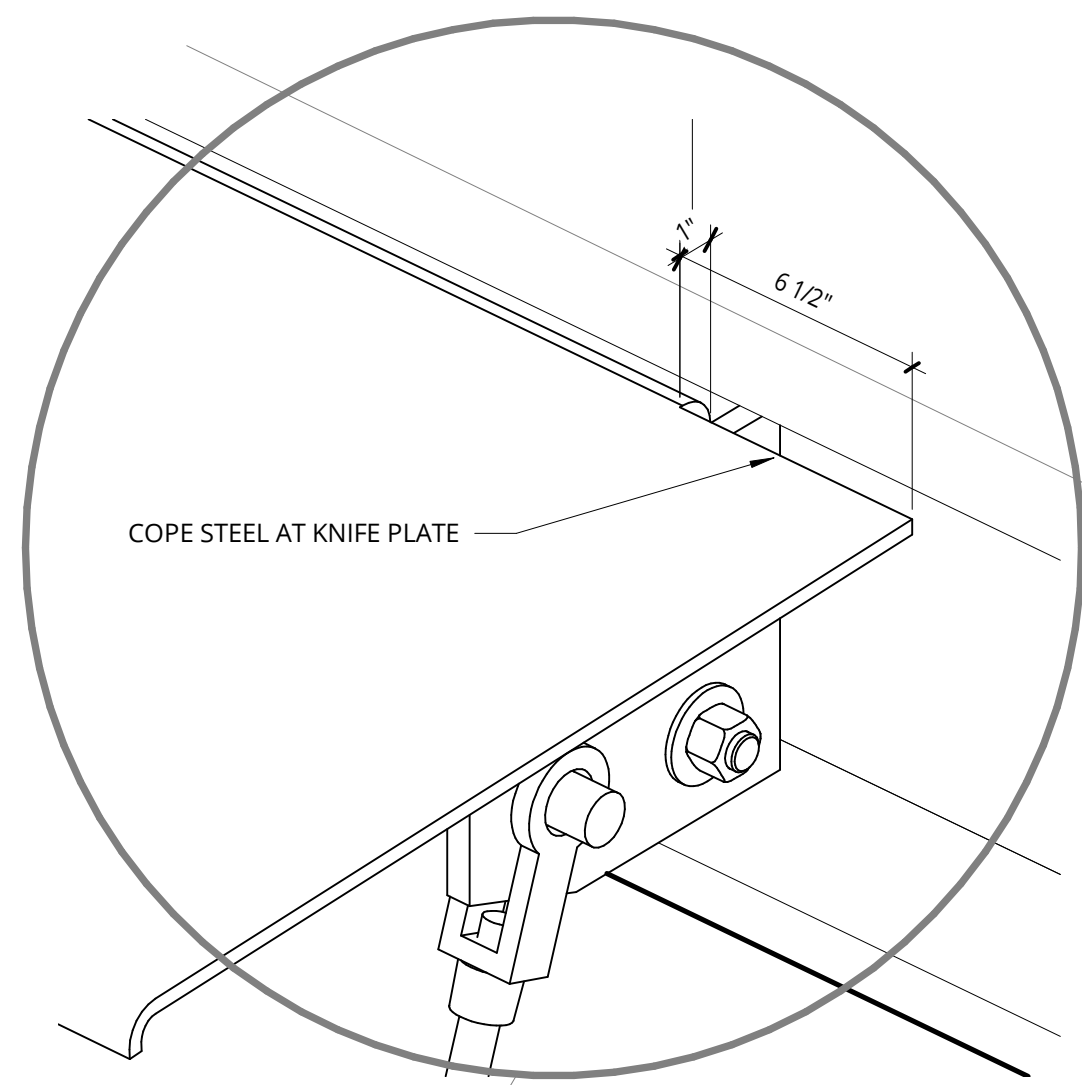
DATE 17 OCT 2018	PROJECT NUMBER 149000
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SHEET NUMBER  
**A7.22**

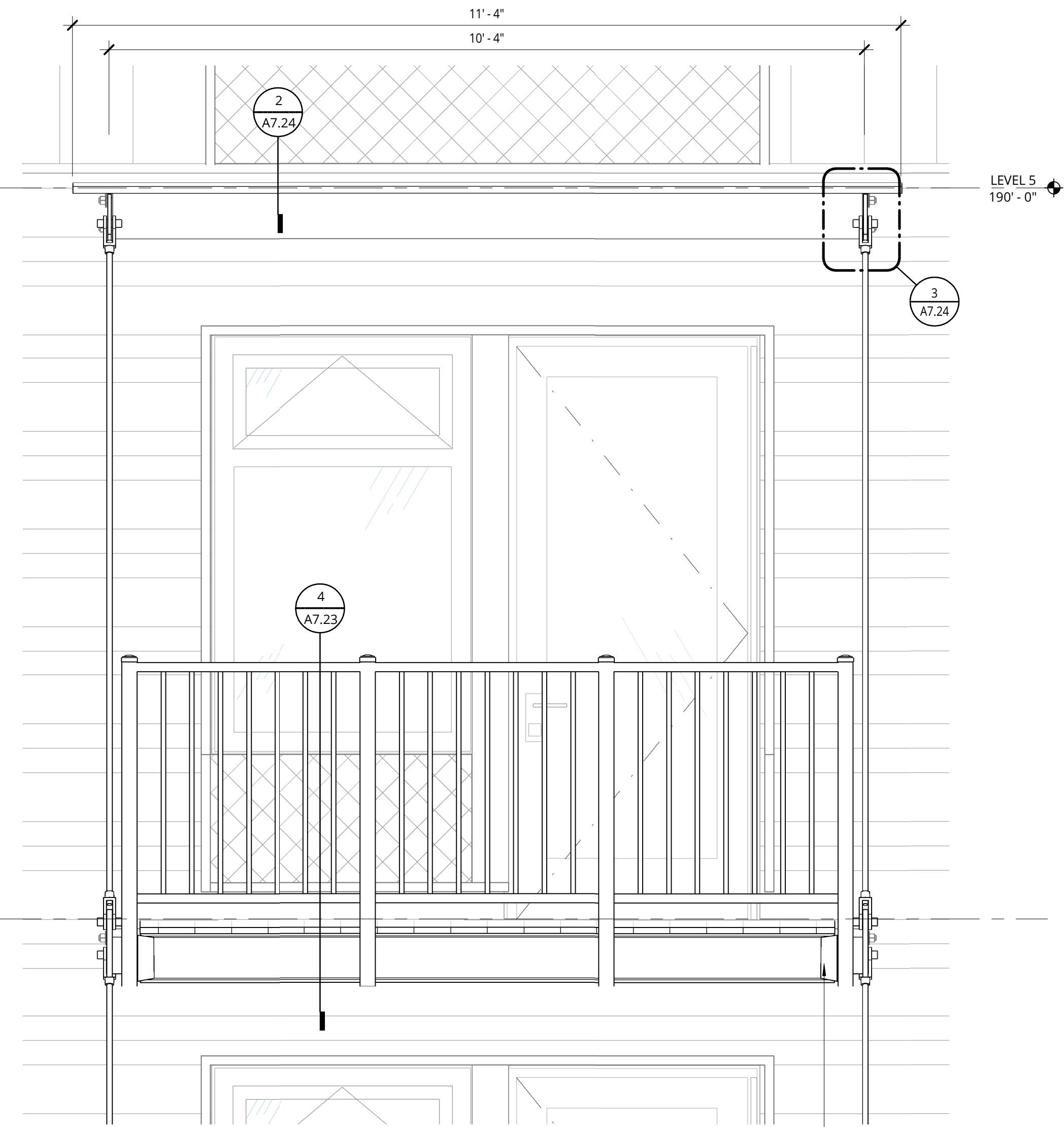




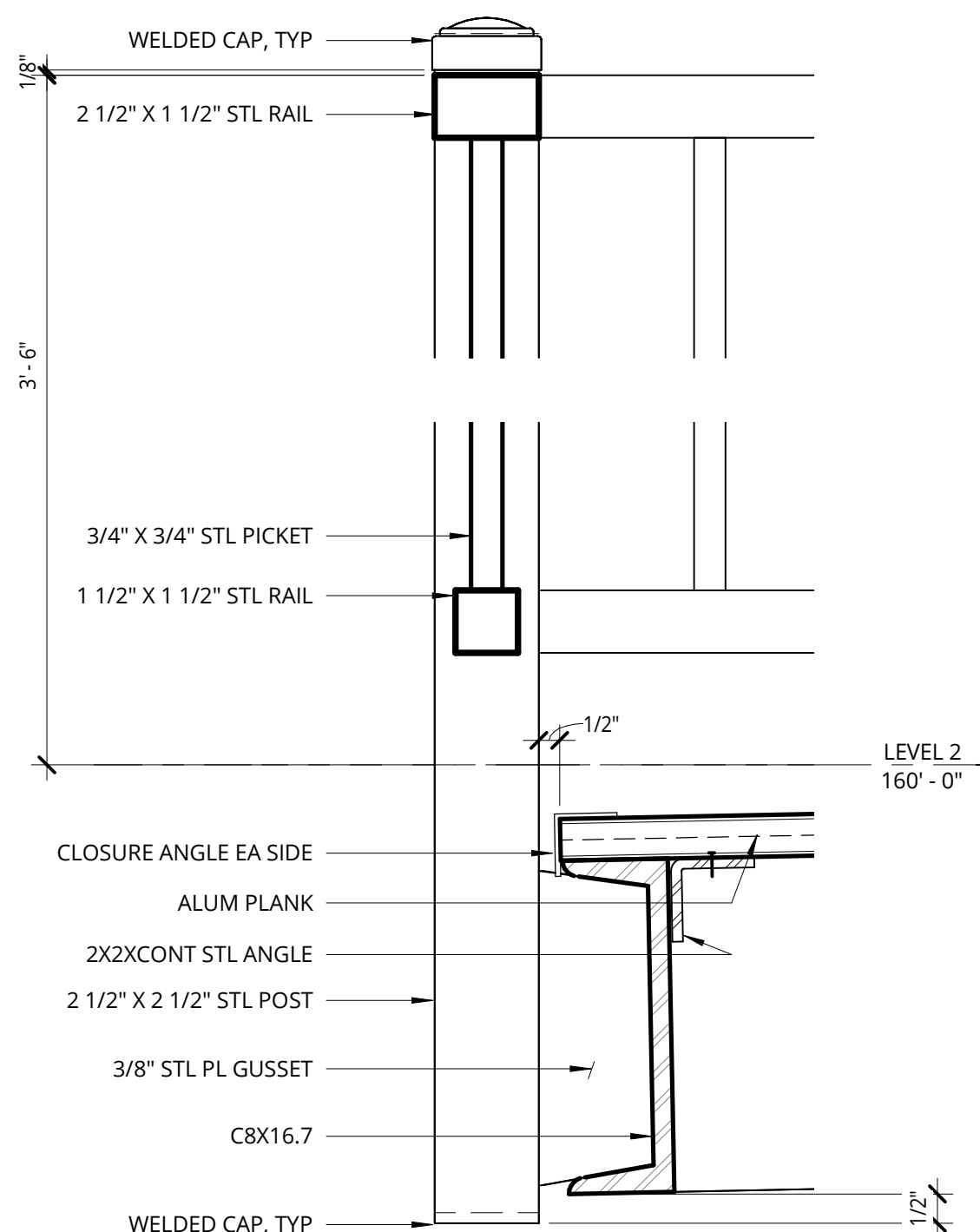
1 BALCONY SKETCH



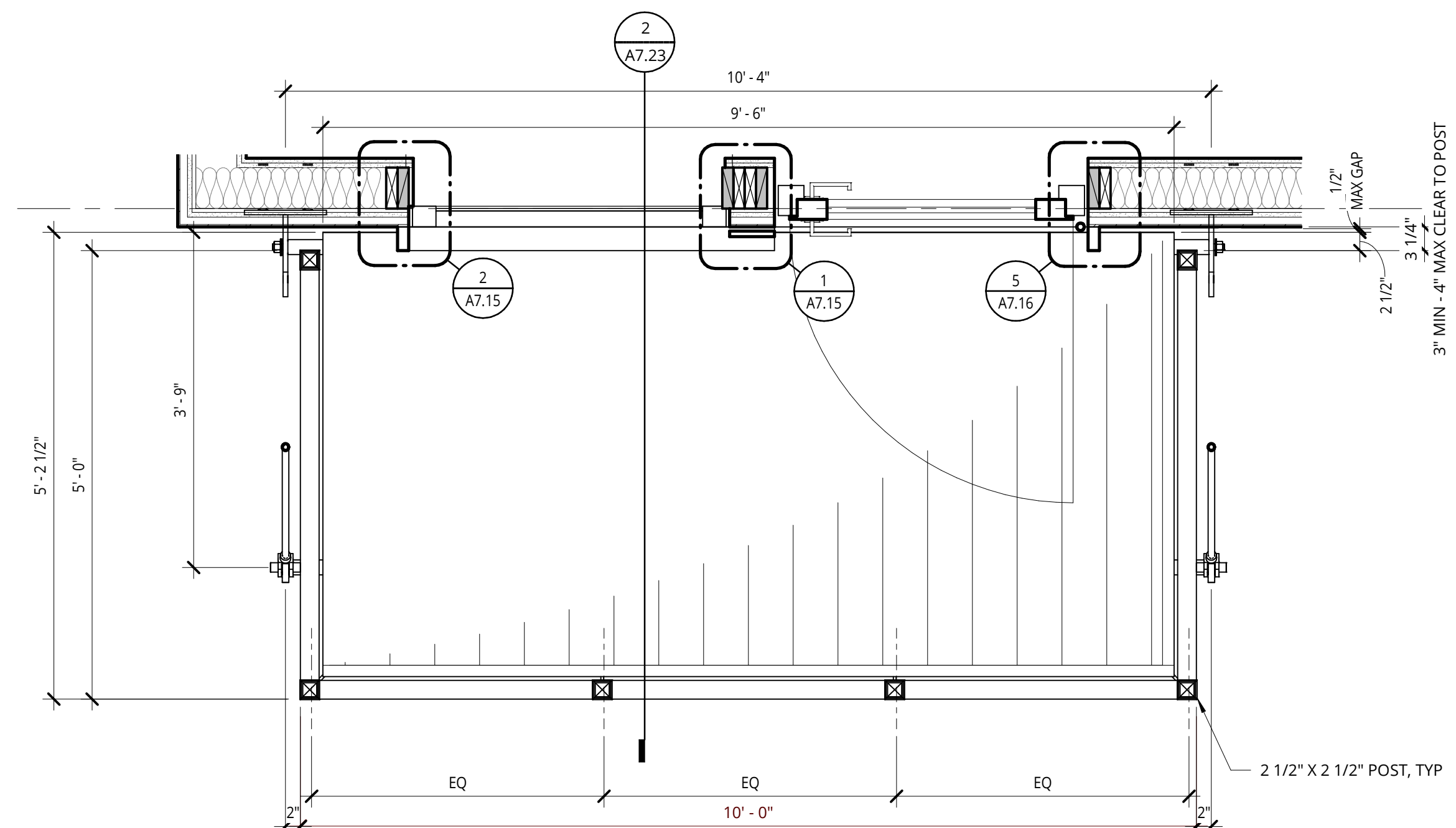
2 BALCONY SECTION



3 BALCONY ELEVATION



4 BALCONY RAIL DETAIL



5 ENLARGED BALCONY FLOOR PLAN

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BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

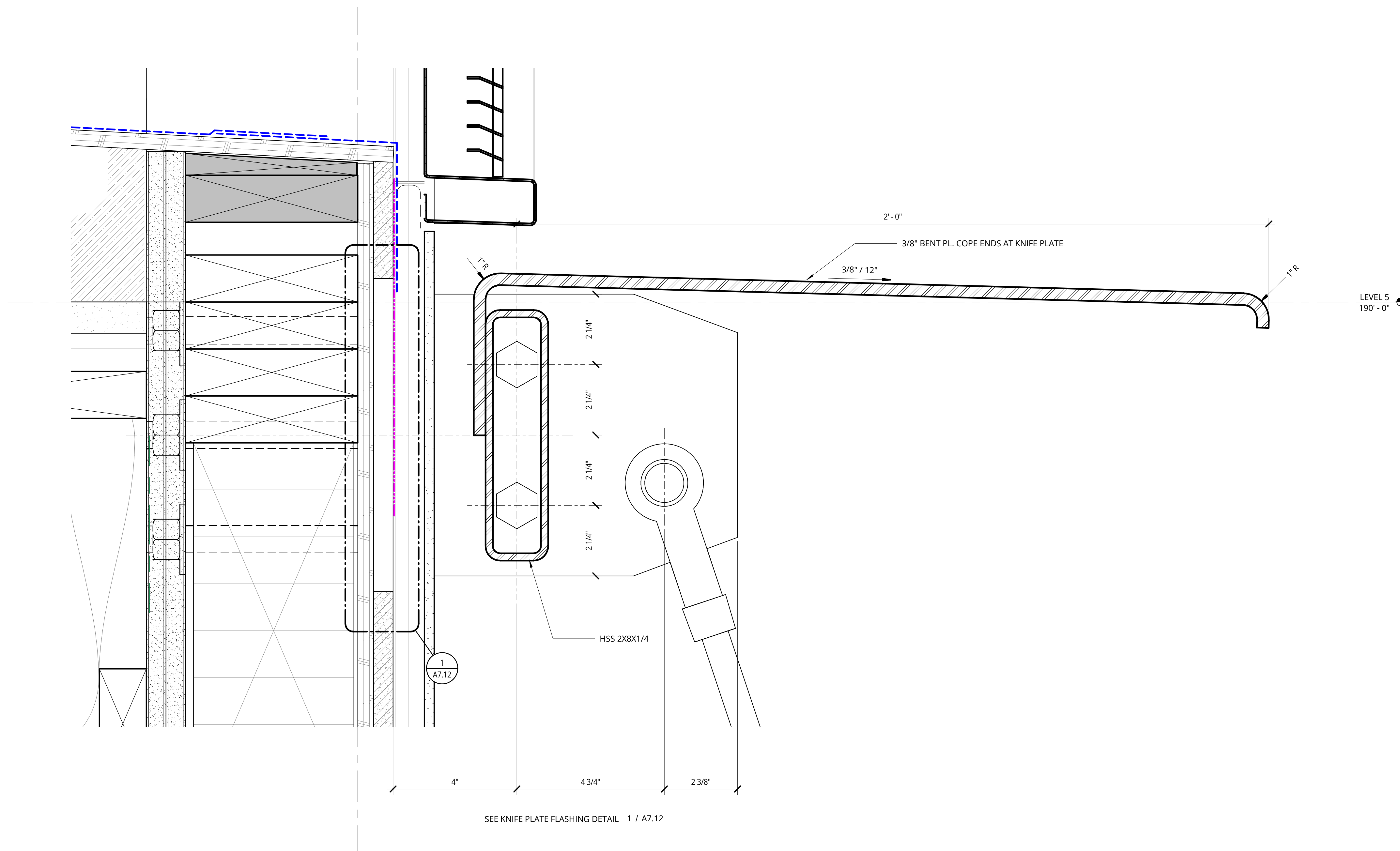
BALCONY PLAN,  
SECTION AND  
ELEVATION  
PERMIT / GMP

DATE 17 OCT 2018	PROJECT NUMBER 149000
---------------------	--------------------------

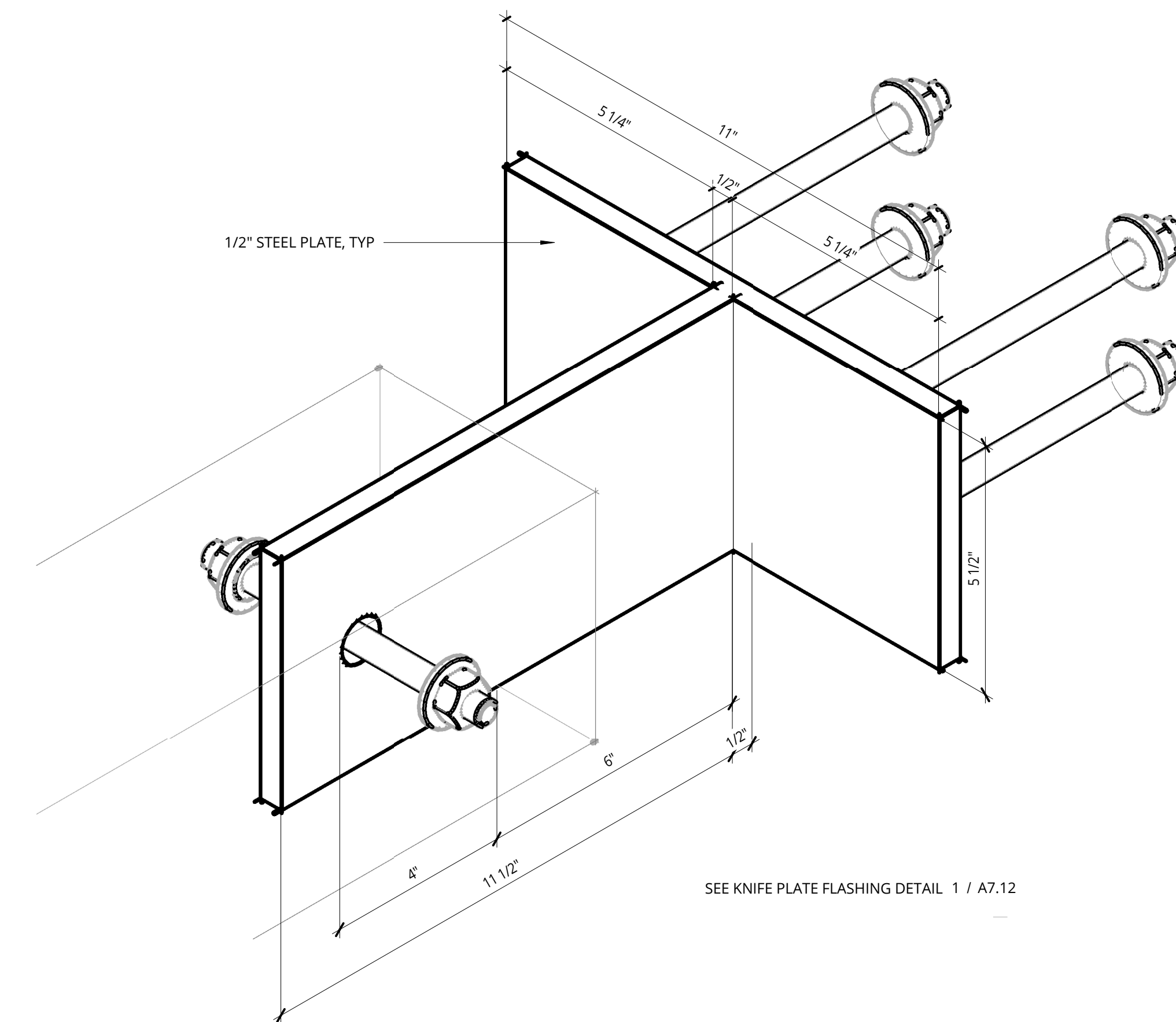
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A7.23

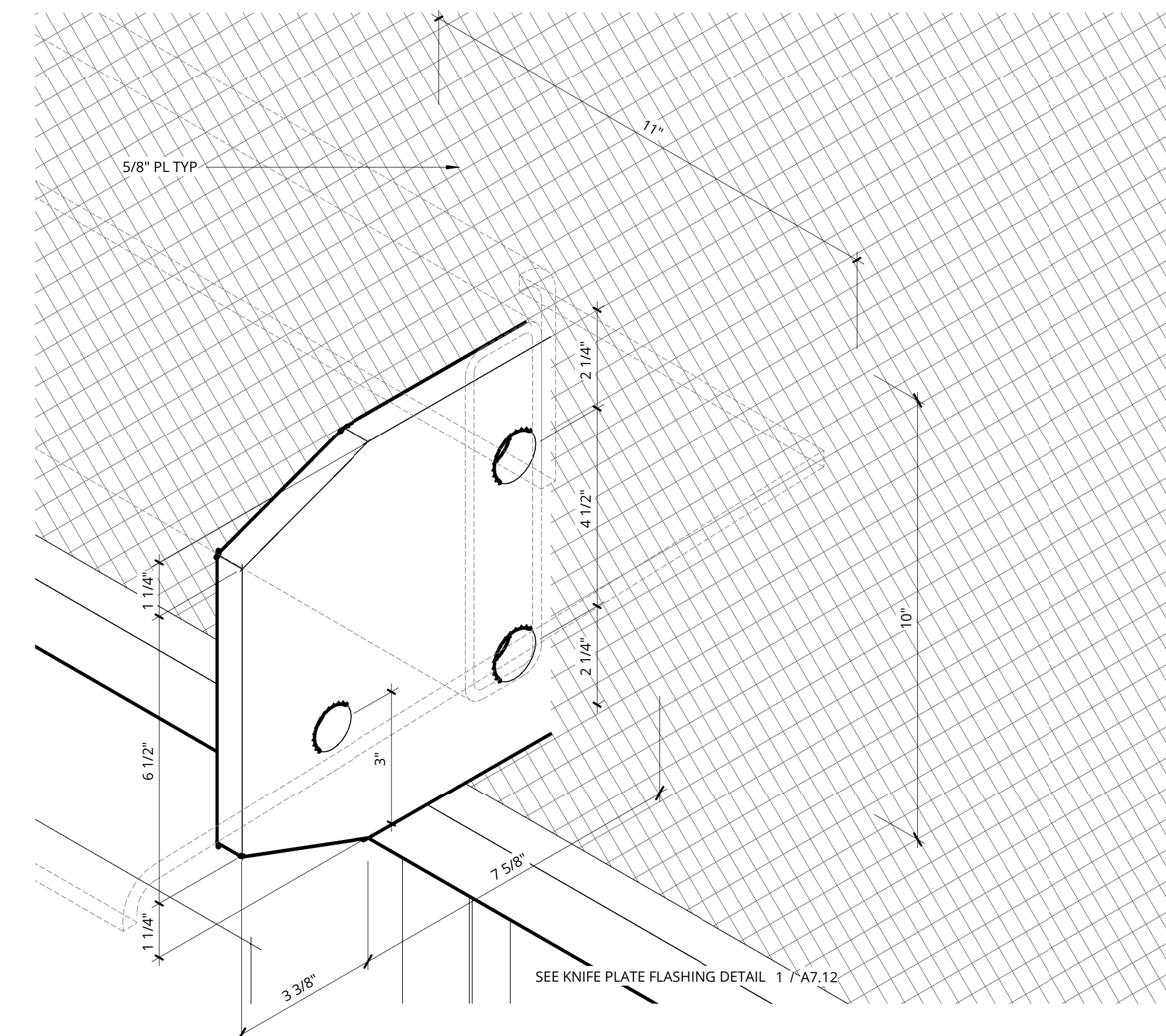




## 2 BROW DETAIL



## 1 TRELLIS KNIFE PLATE CONNECTION



### 3 KNIFE PLATE, TYP



# Ankrom Moisan

38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063

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REVISION	DATE	REASON FOR ISSUE

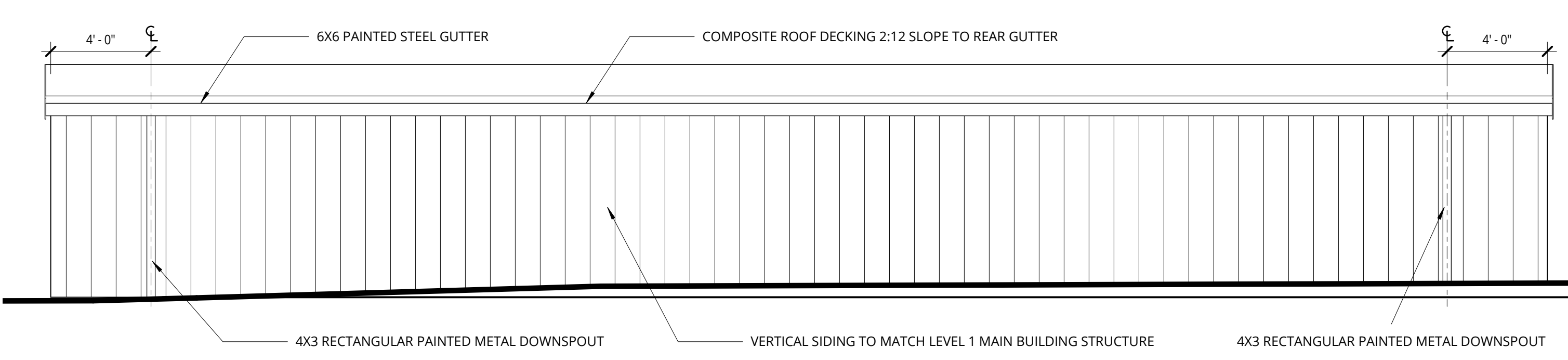
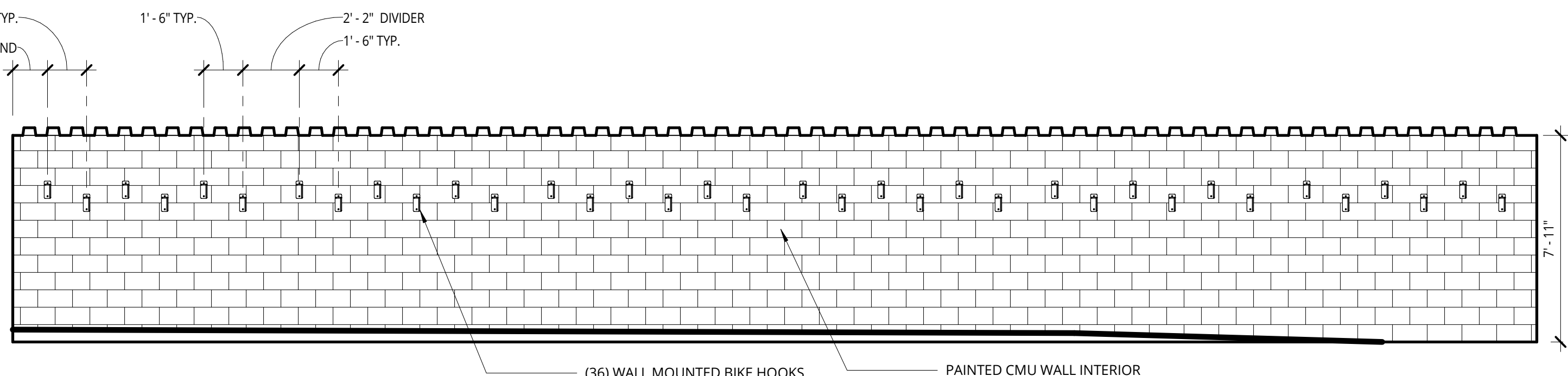
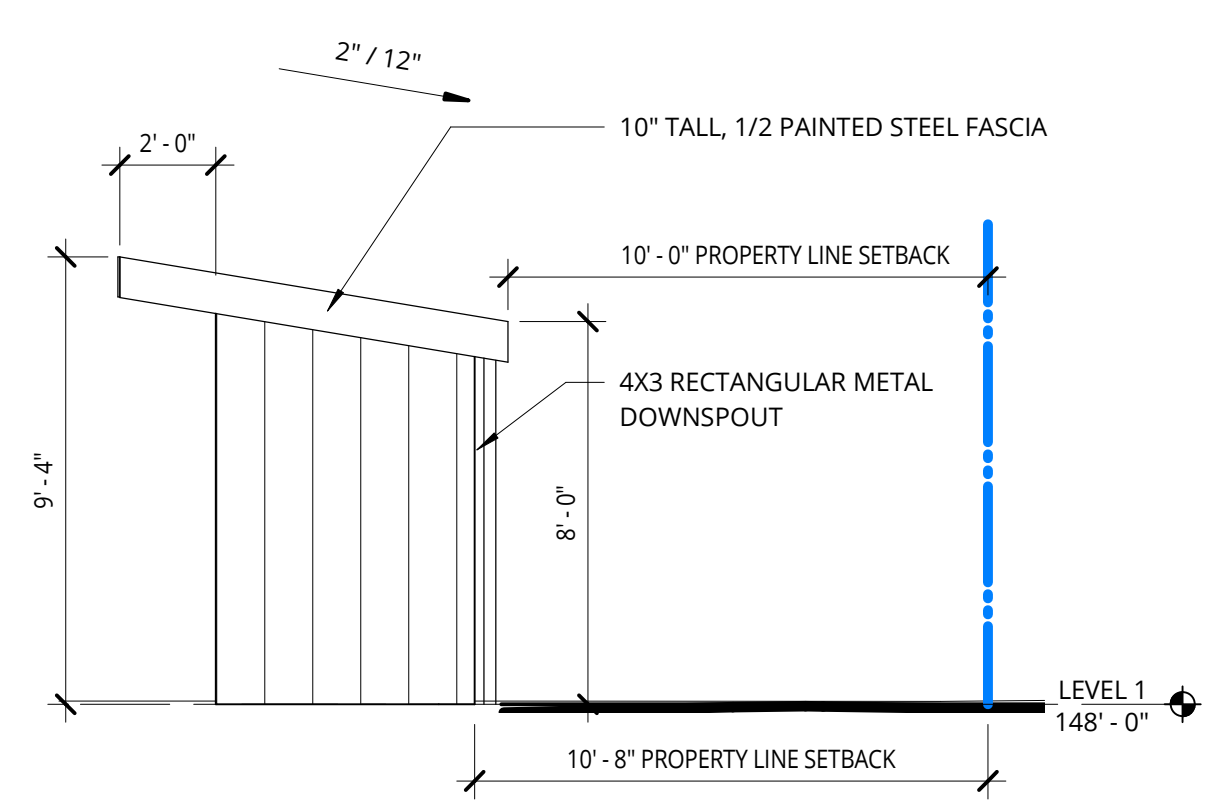
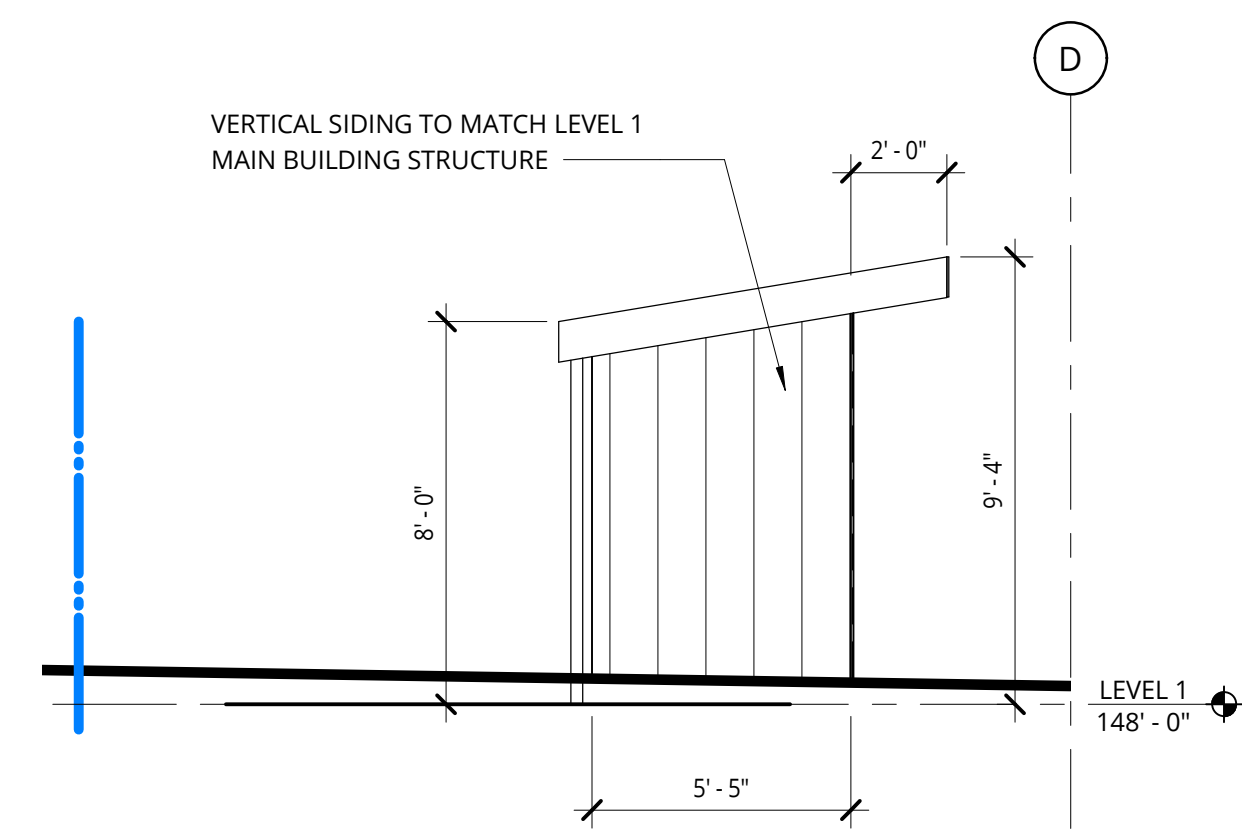
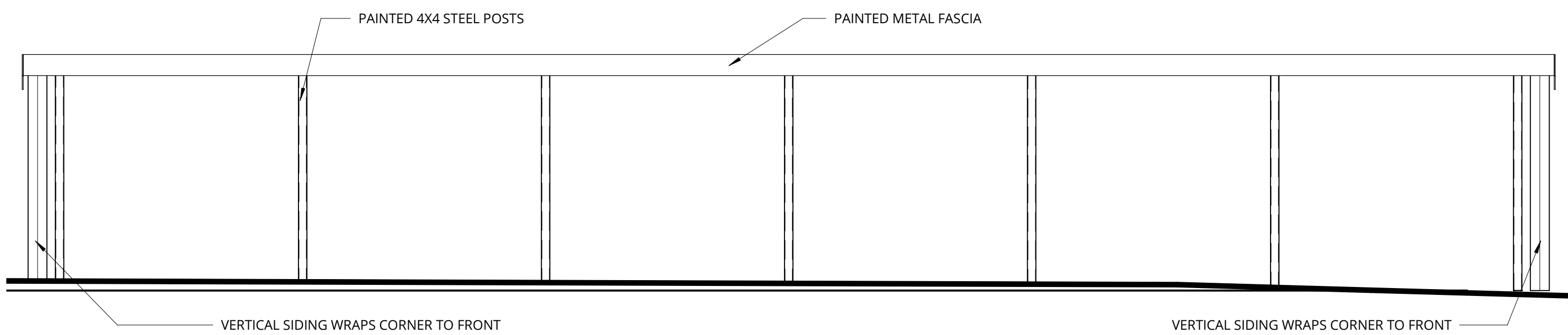
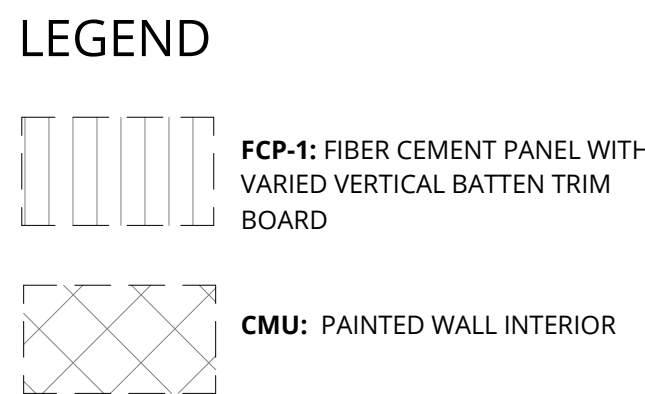
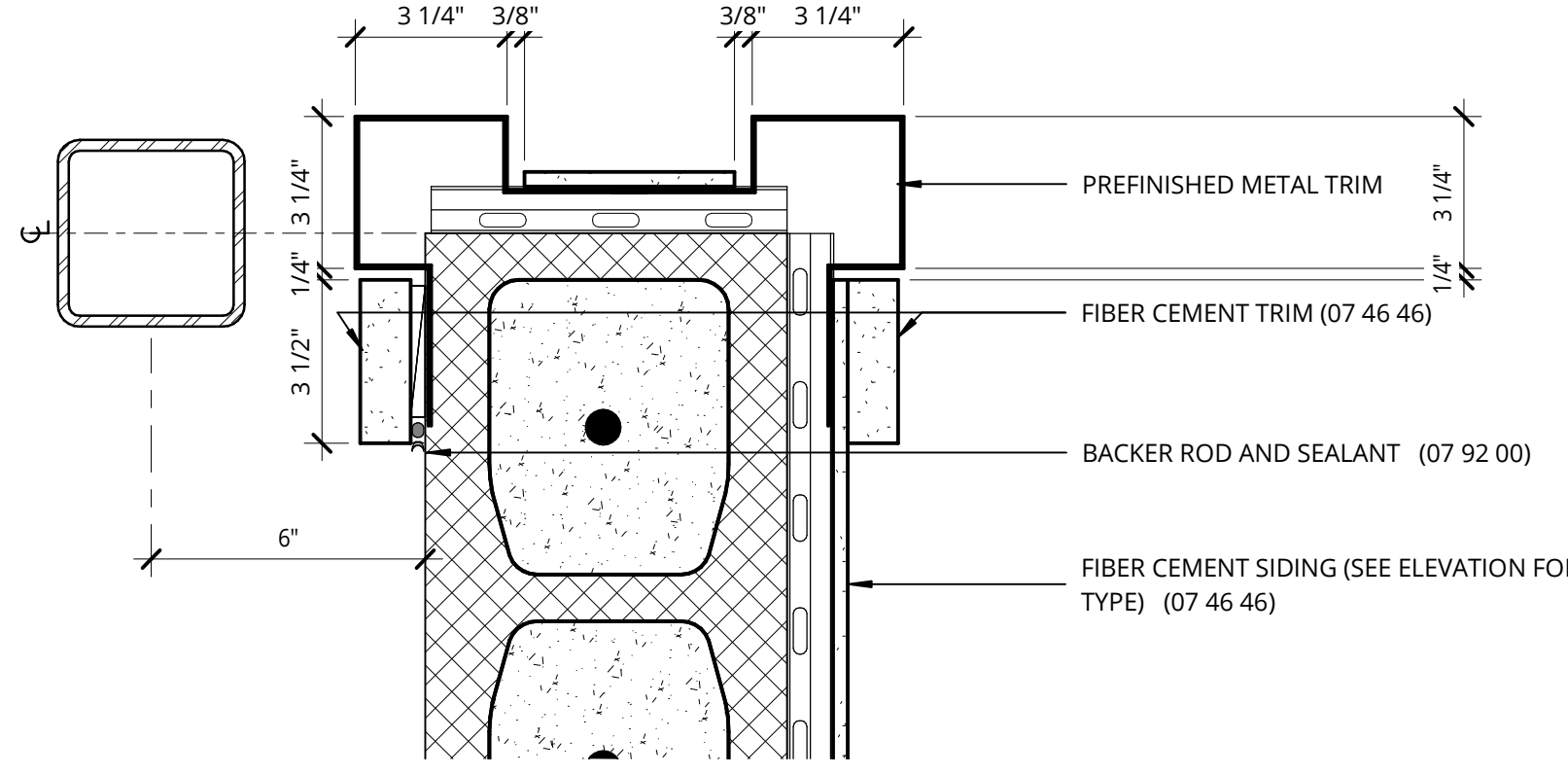
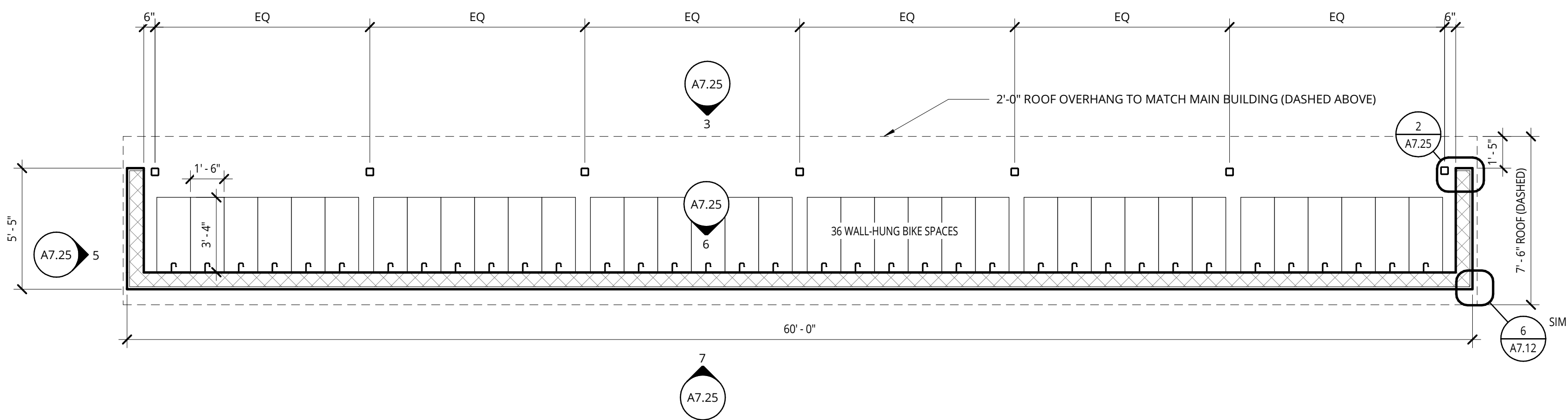
## STL BROW & CONNECTOR DETAILS

PERMIT / GMP

DATE 17 OCT 2018	PROJECT NUMBER 149000
SHEET NUMBER	

A7.24





REGISTERED ARCHITECT  
ISAAC S. JOHNSON  
5082  
ISAAC JOHNSON  
PORTLAND, OR  
STATE OF OREGON

**Ankrom Moisan**

38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

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SAN FRANCISCO, CA 94103  
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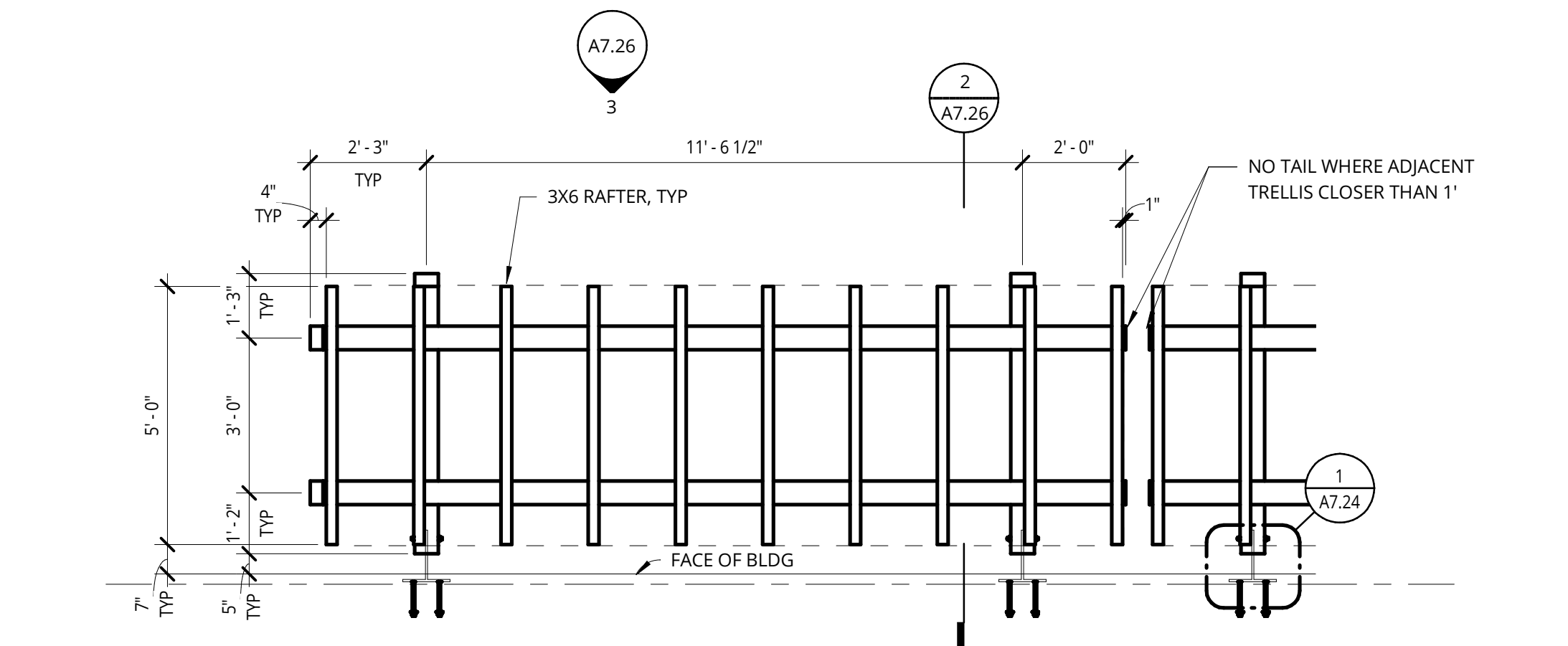
REVISION	DATE	REASON FOR ISSUE

**BICYCLE SHELTER & FENCE DETAILS**

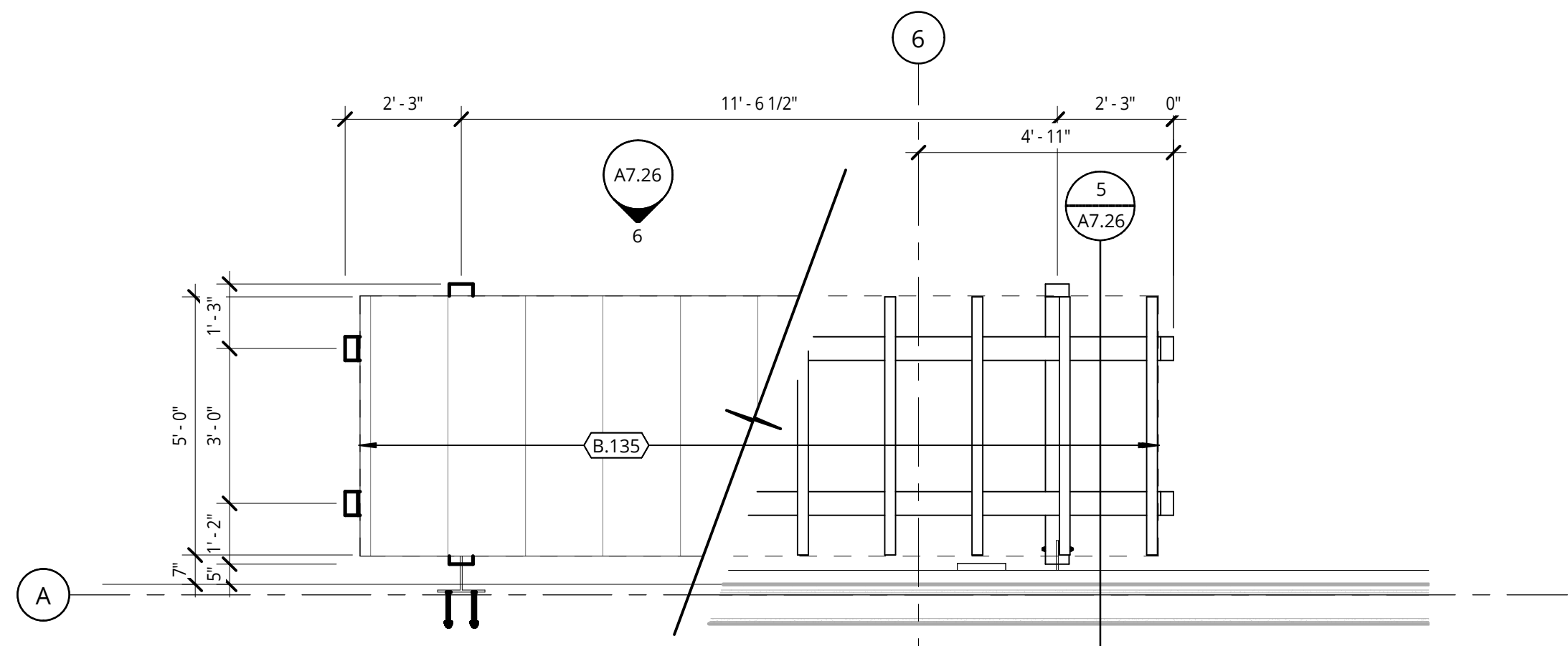
**PERMIT / GMP**

DATE 17 OCT 2018	PROJECT NUMBER 149000
SHEET NUMBER <b>A7.25</b>	

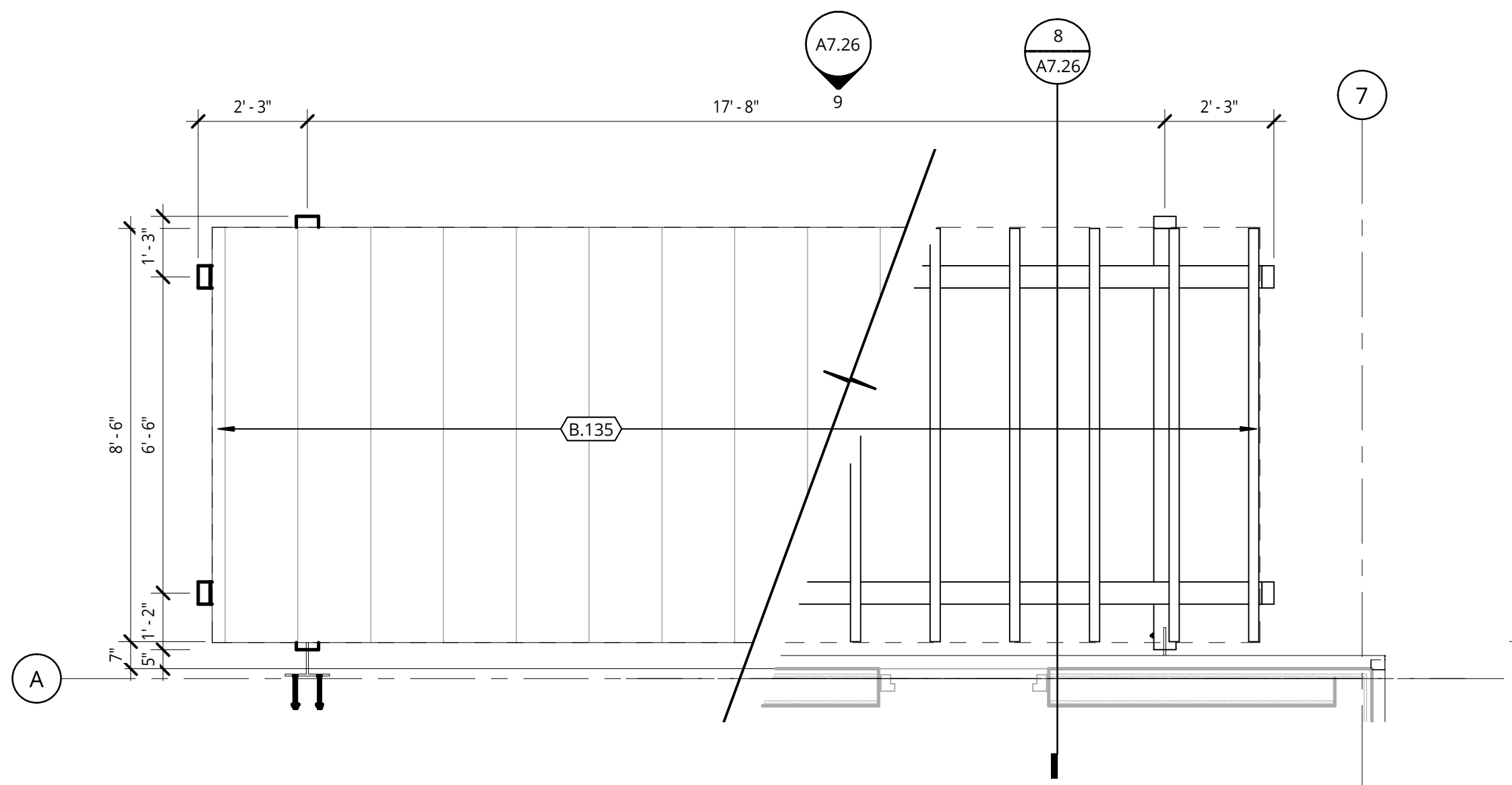




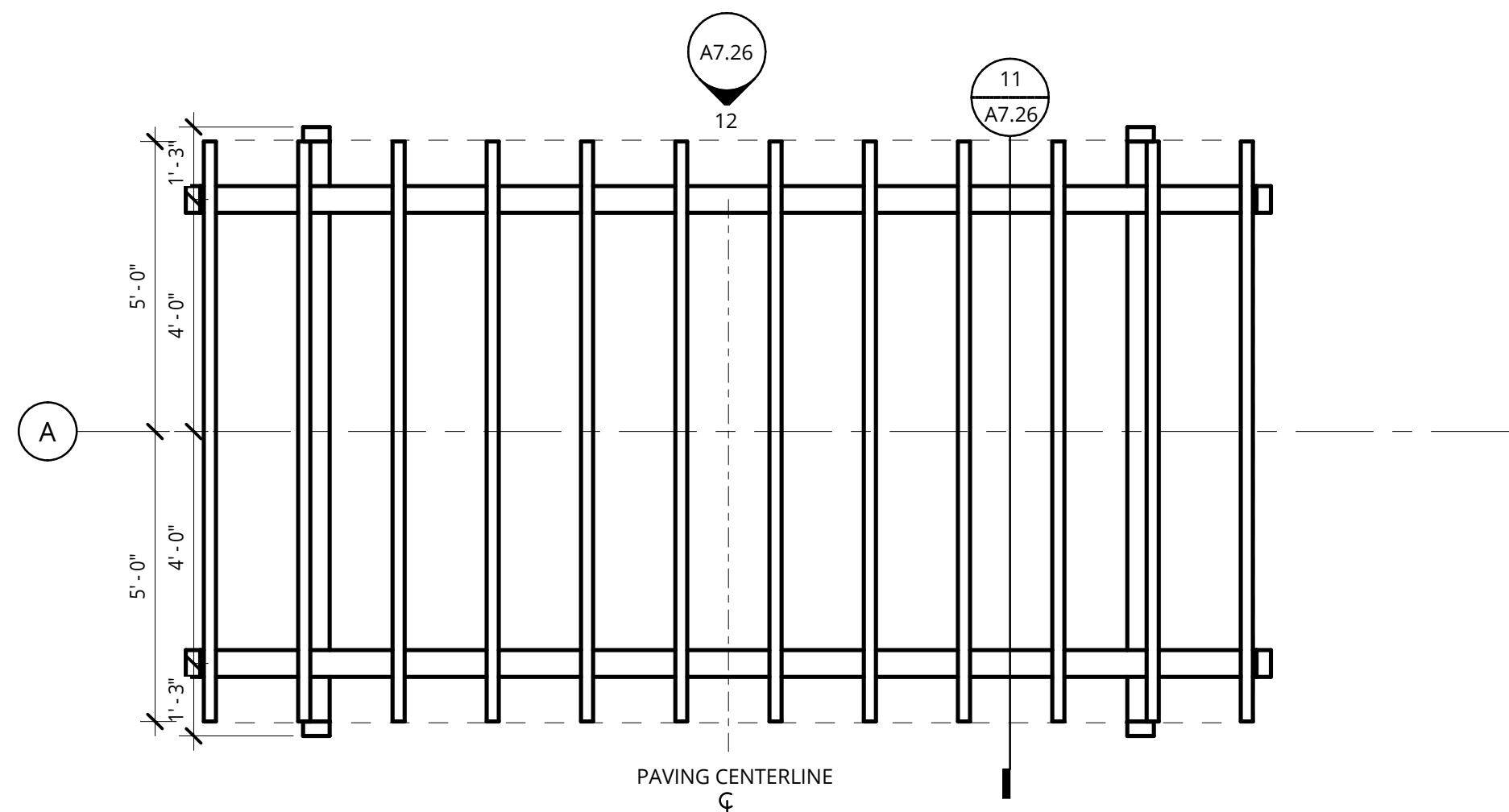
1 TRELLIS TYPE A AND TYPE A-R PLAN  
3/8" = 1'-0"



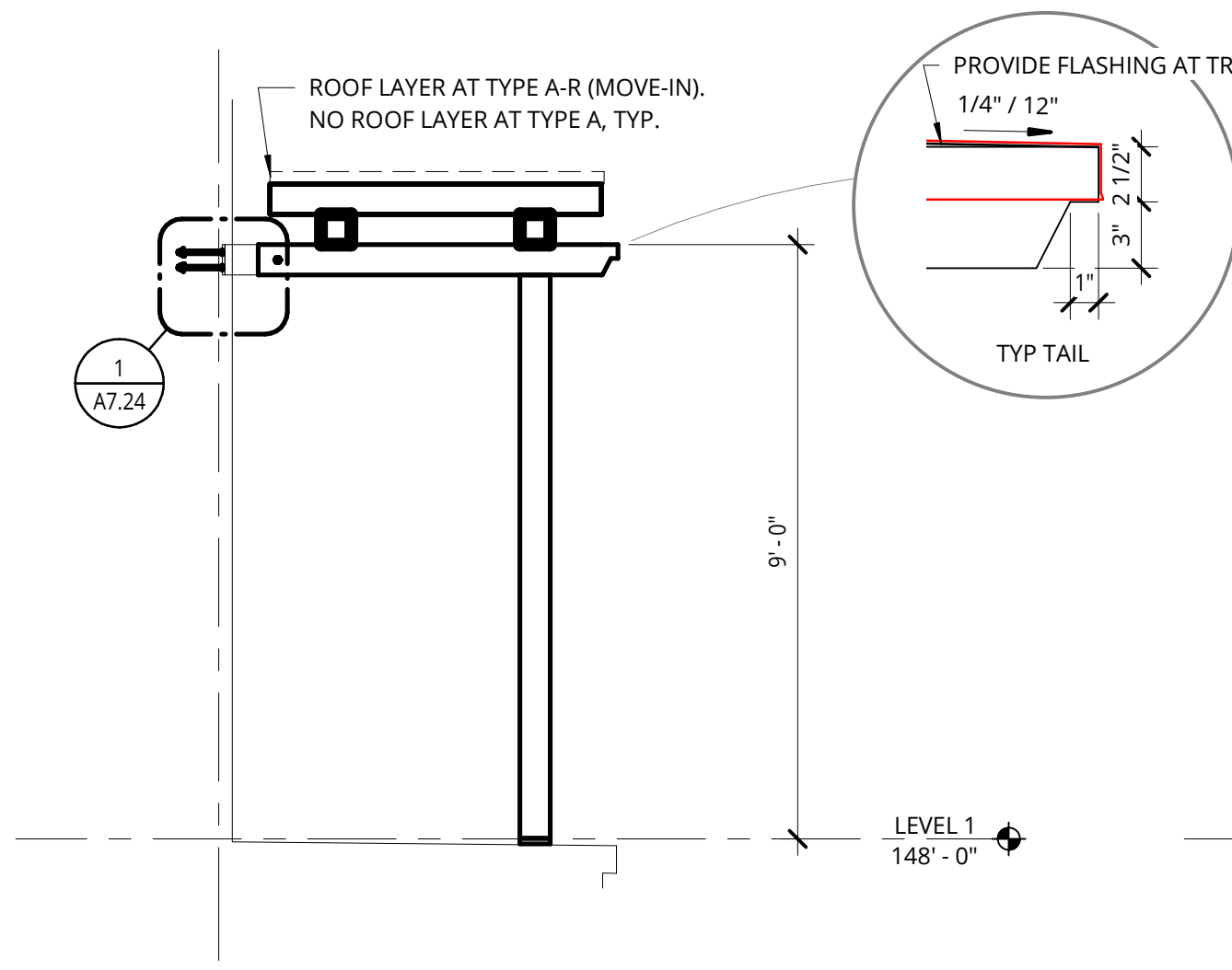
4 TRELLIS TYPE B PLAN  
3/8" = 1'-0"



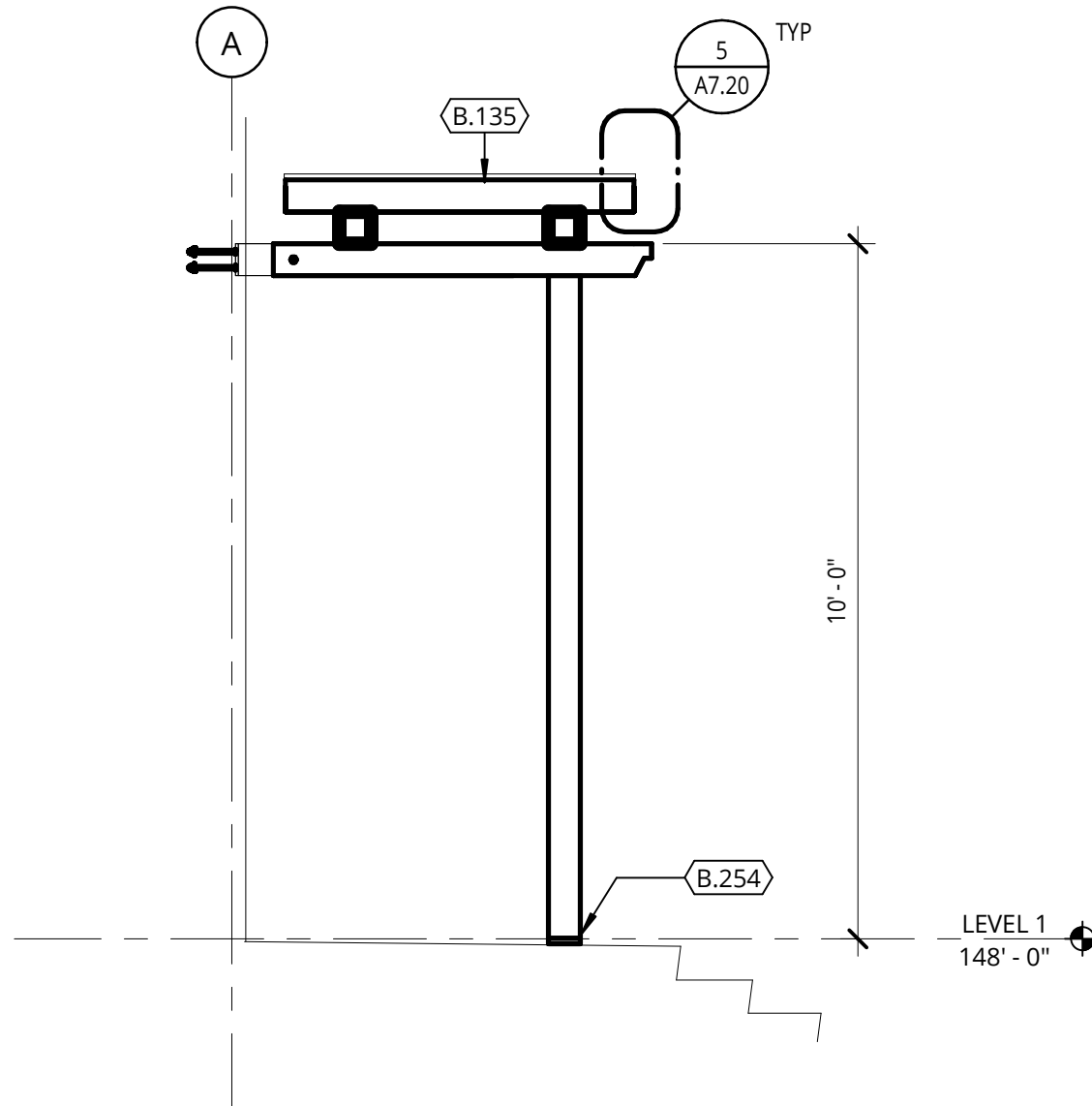
7 TRELLIS TYPE C PLAN  
3/8" = 1'-0"



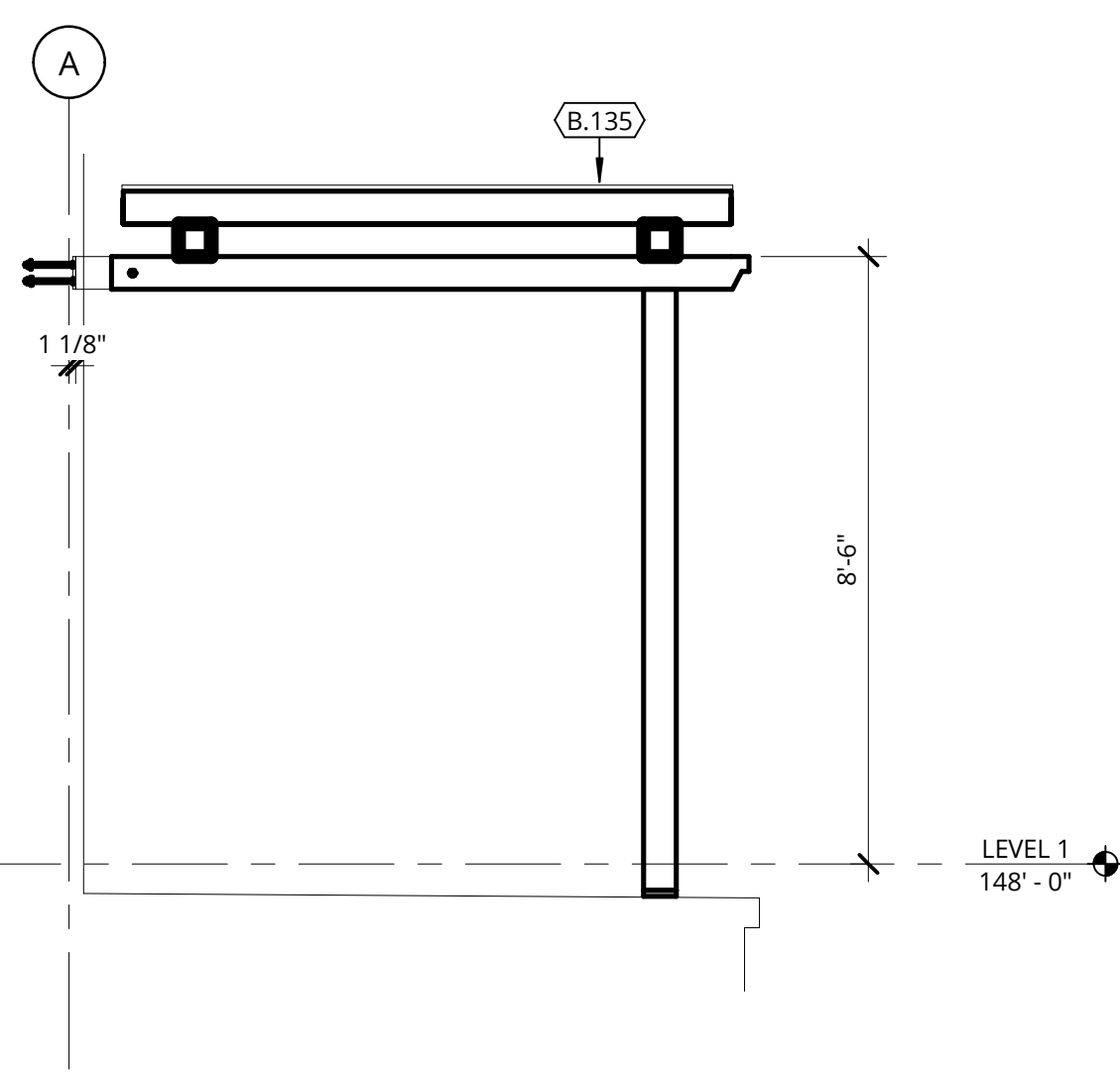
10 TRELLIS TYPE D PLAN  
3/8" = 1'-0"



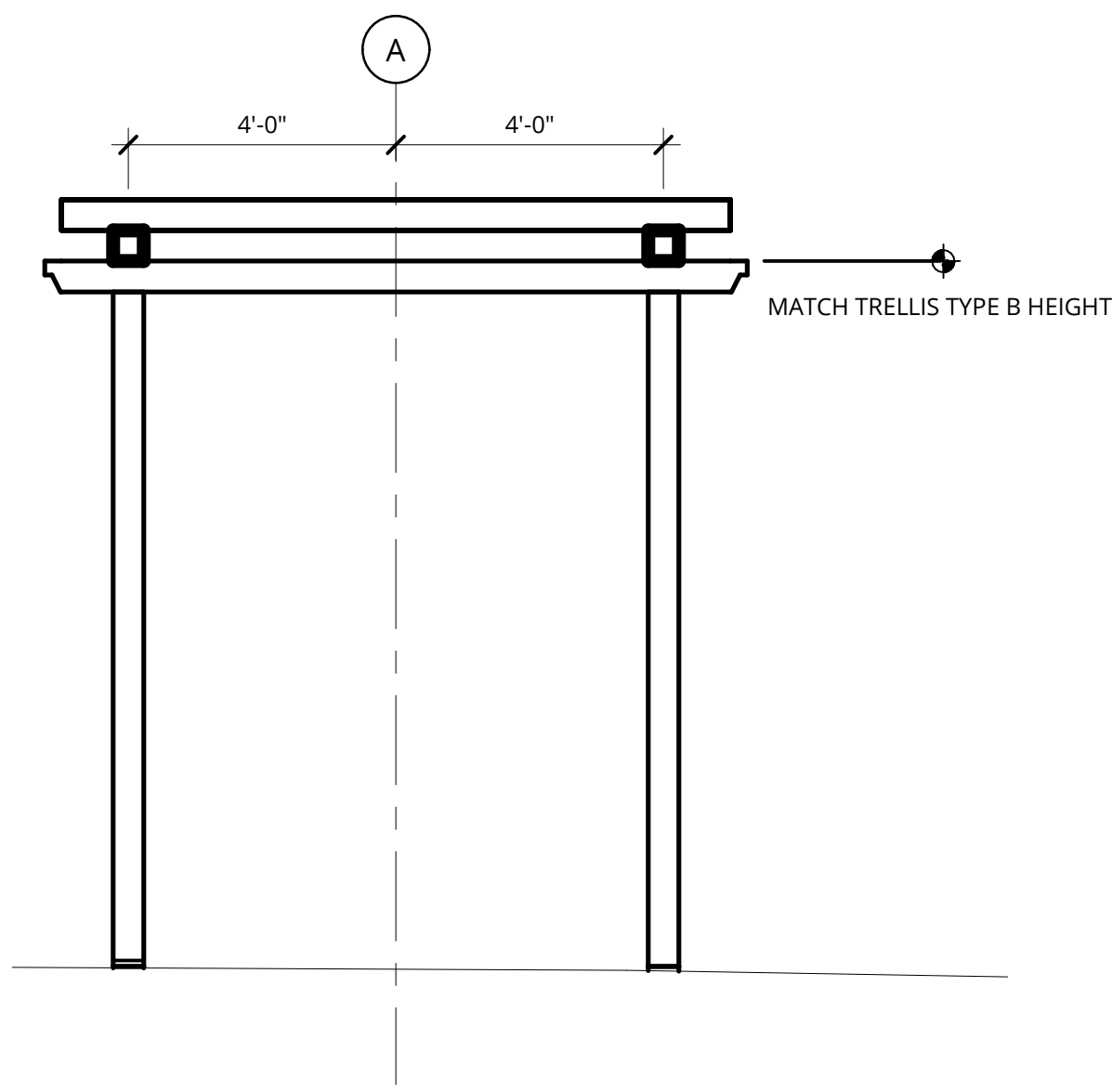
2 TRELLIS TYPE A SECTION  
3/8" = 1'-0"



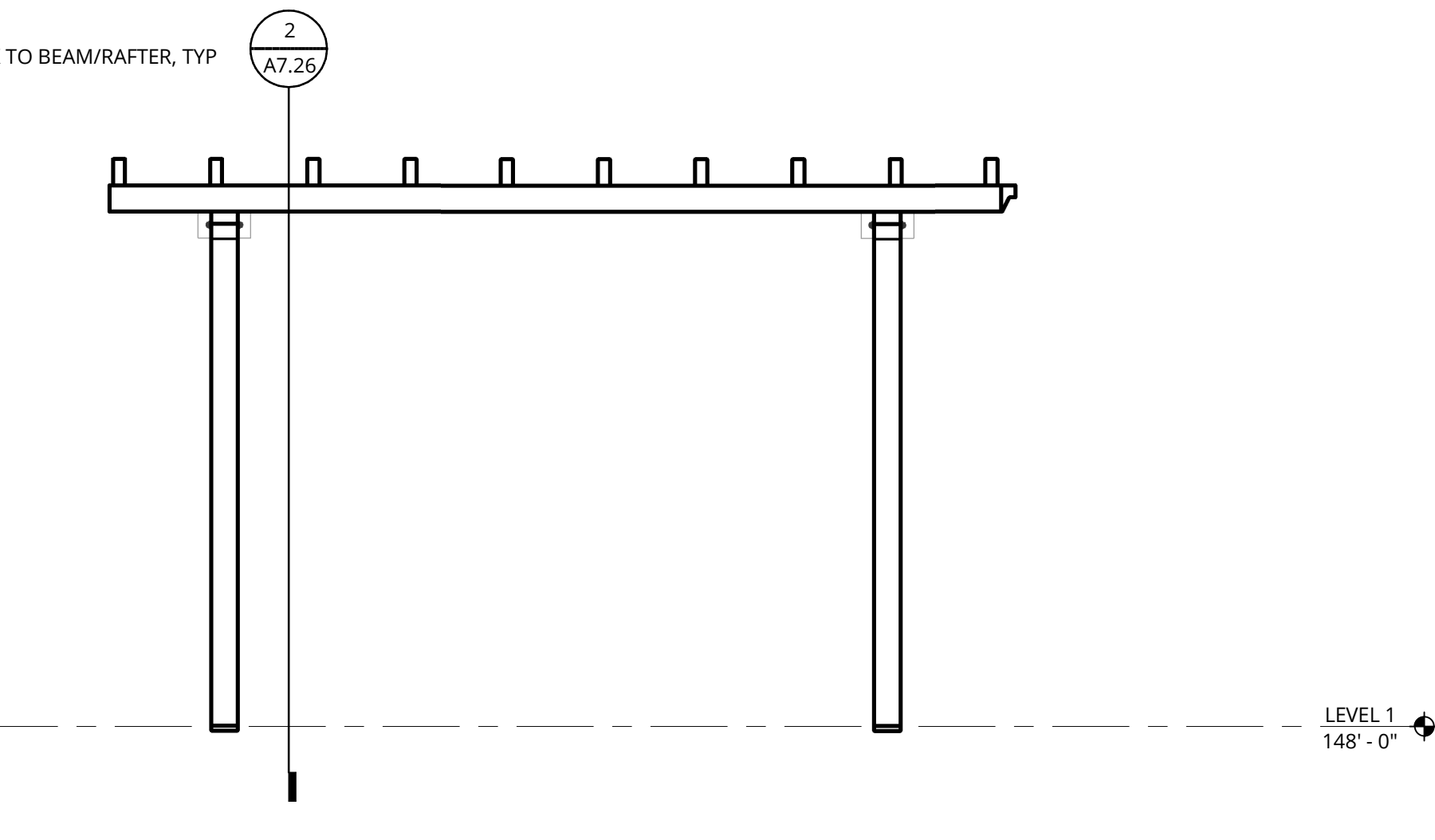
5 TRELLIS TYPE B SECTION  
3/8" = 1'-0"



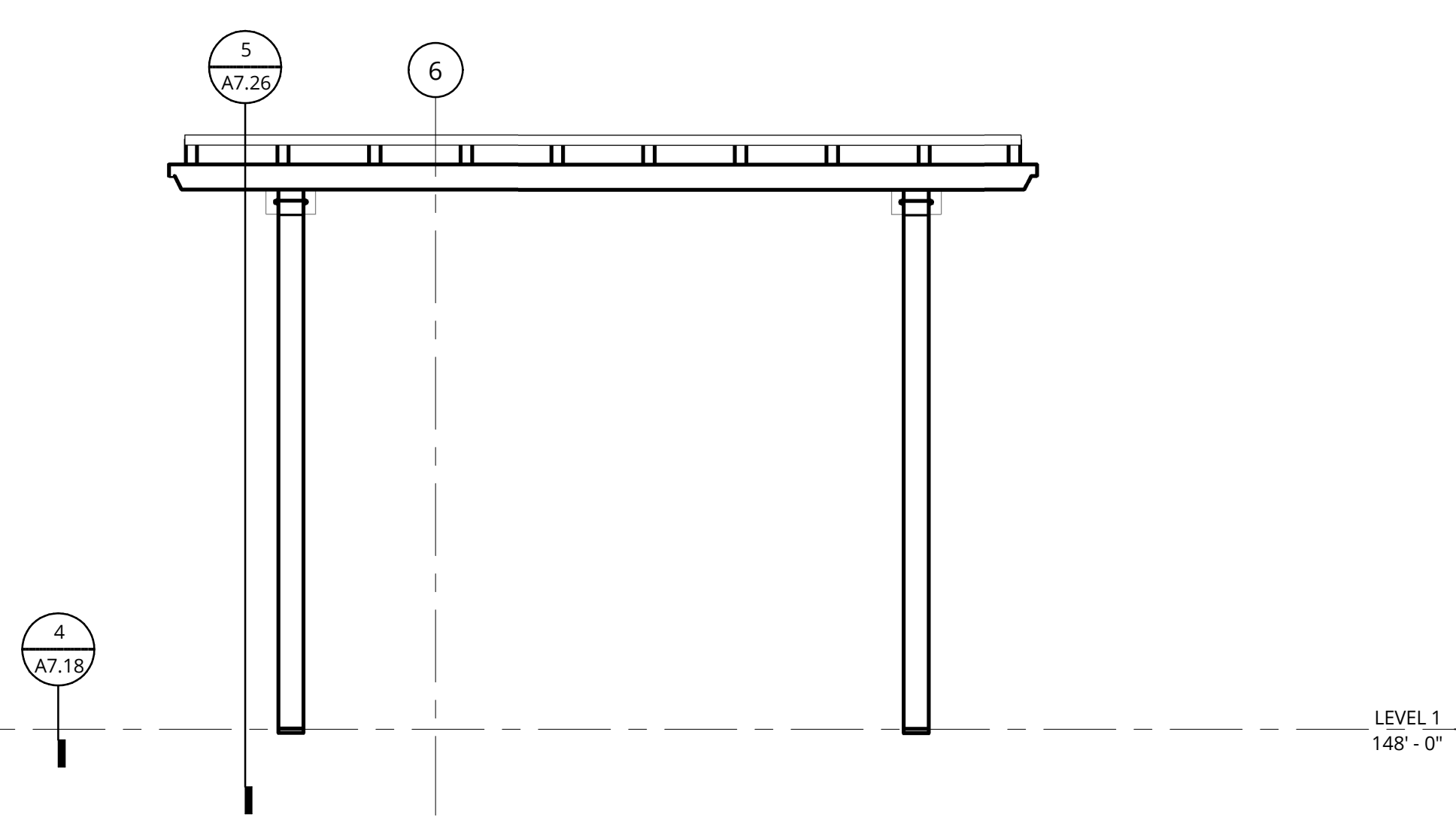
8 TRELLIS TYPE C SECTION  
3/8" = 1'-0"



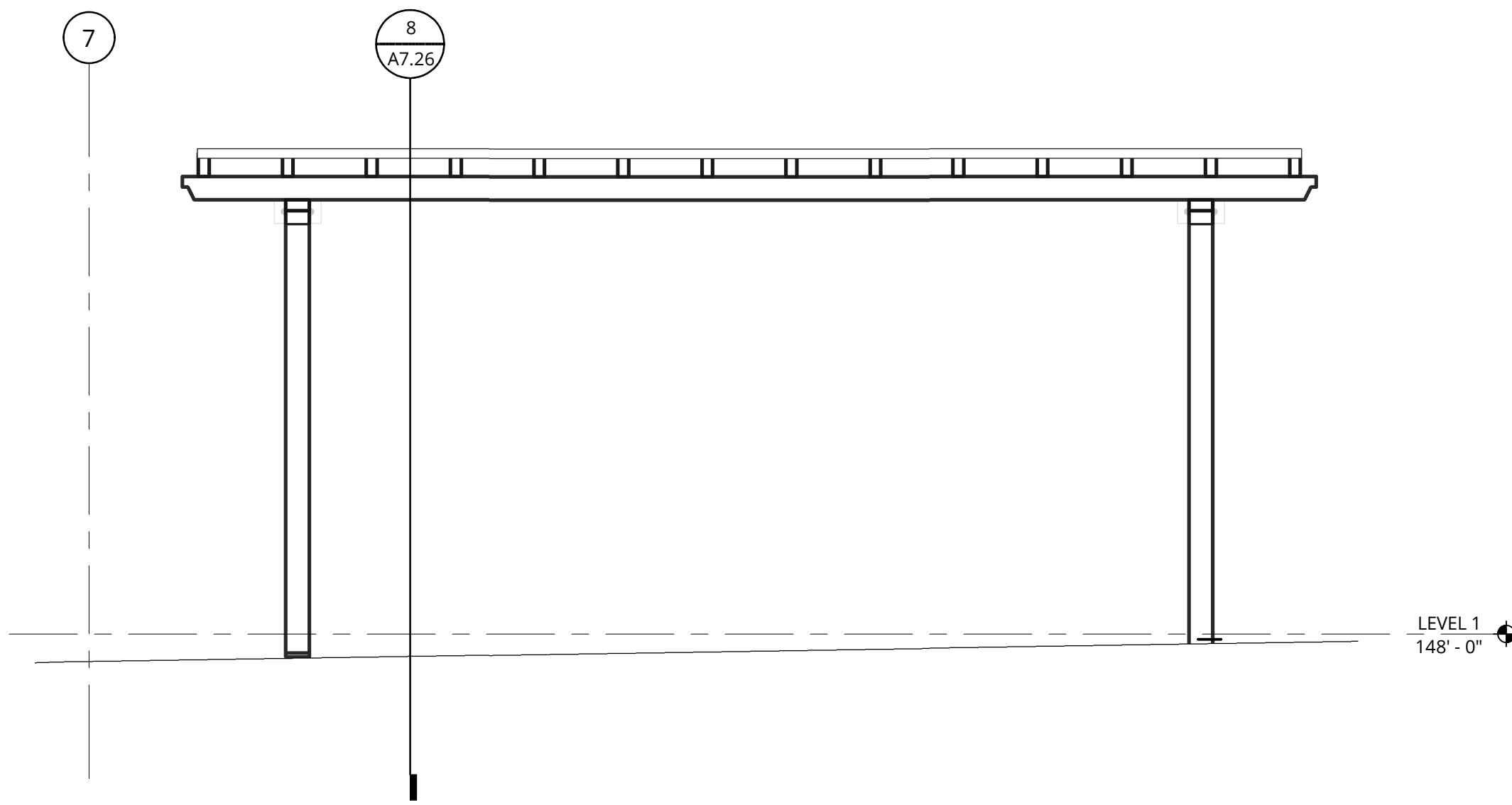
11 TRELLIS TYPE D SECTION  
3/8" = 1'-0"



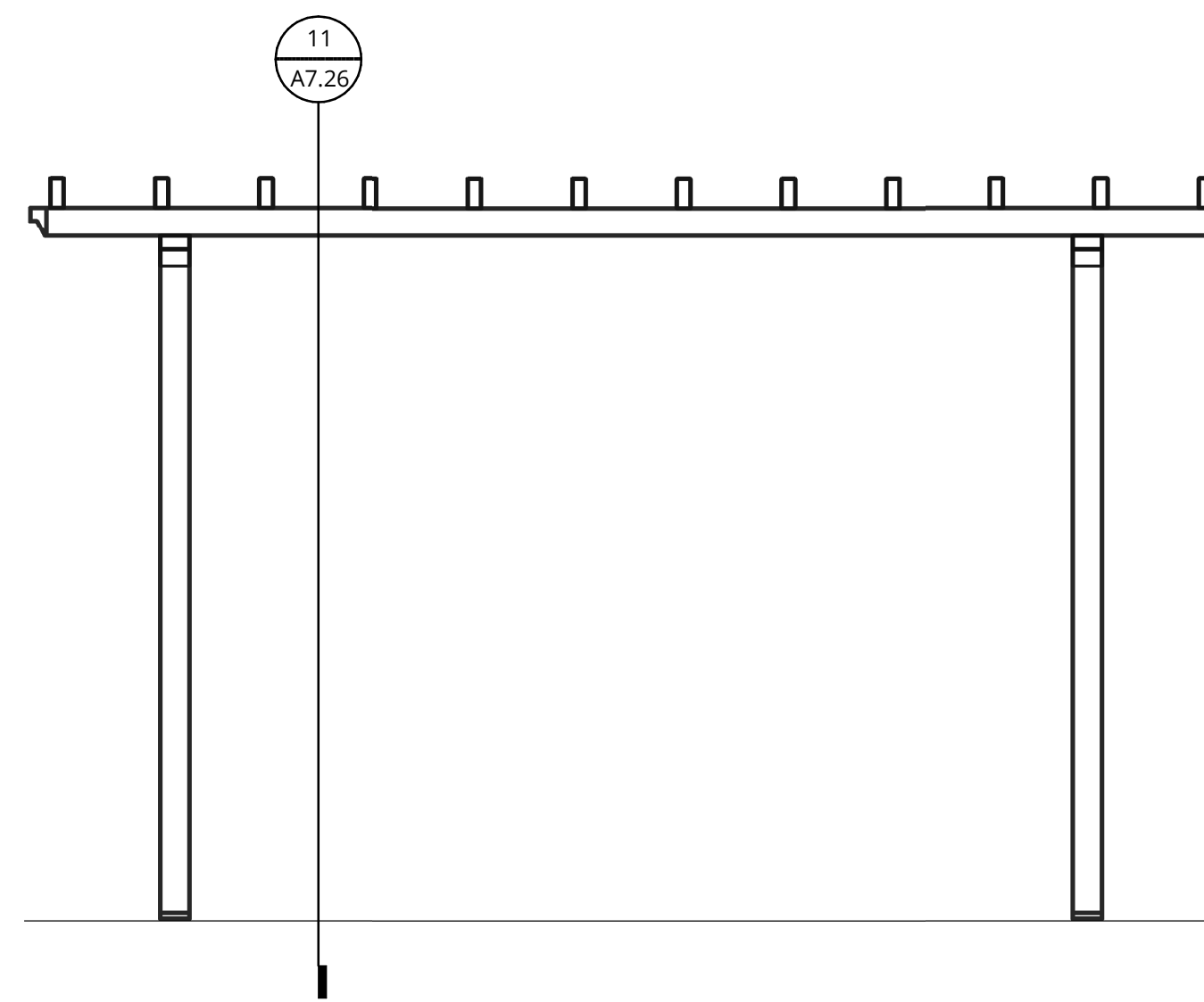
3 TRELLIS TYPE A ELEVATION  
3/8" = 1'-0"



6 TRELLIS TYPE B ELEVATION  
3/8" = 1'-0"



9 TRELLIS TYPE C ELEVATION  
3/8" = 1'-0"



12 TRELLIS TYPE D ELEVATION  
3/8" = 1'-0"

GENERAL NOTES

1. REFER TO SHEET G0.02 FOR 'PROJECT NOTES' APPLICABLE TO ALL PORTIONS OF THE WORK.
2. PRIOR TO FRAMING VERIFY THAT FINAL APPLIANCE AND PLUMBING FIXTURE SIZES/CLEARANCES MATCH THOSE USED AS BASIS OF DESIGN SHOWN ON DRAWING G5.01.
3. REFERENCE SLAB PLANS FOR CONCRETE WALL LOCATIONS, UNO. COORDINATE WITH STRUCTURAL DRAWINGS.
4. SEE SHEETS A0.11 & A0.21 FOR WALL ASSEMBLIES.
5. SEE SHEET A0.41 FOR TYPICAL FRAMING AND ACOUSTICAL DETAILS.
6. SEE FIRE/LIFE SAFETY SHEETS BEGINNING ON G2.00 FOR LOCATIONS OF FIRE EXTINGUISHER CABINETS.
7. SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.
8. REFER TO STRUCTURAL DRAWINGS FOR COLUMNS, SHEAR WALL AND BEAM SIZES.

KEYED NOTES

- B.135 STANDING SEAM METAL ROOF  
B.254 CPTZ CONCEALED POST TIE BASE, TYP



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063

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BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

TRELLIS PLANS,  
SECTIONS &  
ELEVATIONS  
PERMIT / GMP

DATE 17 OCT 2018	PROJECT NUMBER 149000
SHEET NUMBER	

A7.26



10/17/2018 10:32:10 AM

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GENERAL NOTES

1. REFER TO SHEET **A0.01** FOR 'PROJECT NOTES' APPLICABLE TO ALL PORTIONS OF THE WORK.
2. PRIOR TO FRAMING VERIFY THAT FINAL APPLIANCE AND PLUMBING FIXTURE SIZES/CLEARANCES MATCH THOSE USED AS BASIS OF DESIGN SHOWN ON SHEET **65.01**.
3. SEE SHEETS **A0.11** & **A0.21** FOR WALL ASSEMBLIES.
4. SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.

LEGEND

CEILING:

- FLAT DRYWALL  
SUSPENSION GYP CEILING
- ACP-1 CEILING
- AWC-1 CEILING
- P-22
- P-23
- P-24

LIGHTING:

- CEILING FAN / LIGHT COMBO
- ACCENT CORRIDOR
- UNIT ENTRY SCENCE
- WALL SCENCE
- UNIT LED FLUSH ROUND
- LED PUCK
- BATHROOM EXHAUST FAN
- OFFICE PENDENT LIGHT
- 2X2 DIRECT/INDIRECT
- BACK OF HOUSE LINEAR

REGISTERED ARCHITECT  
SAC S. JOHNSON  
508  
KARL JOHNSON  
PORTLAND, OR  
STATE OF OREGON

Ankrom Moisan

38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

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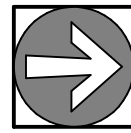
NORTH WILLIAMS APARTMENTS - FAMILY HOUSING  
2156 N WILLIAMS AVENUE, PORTLAND, OREGON  
BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

LEVEL 1 NORTH  
REFLECTED CEILING  
PLAN  
PERMIT / GMP

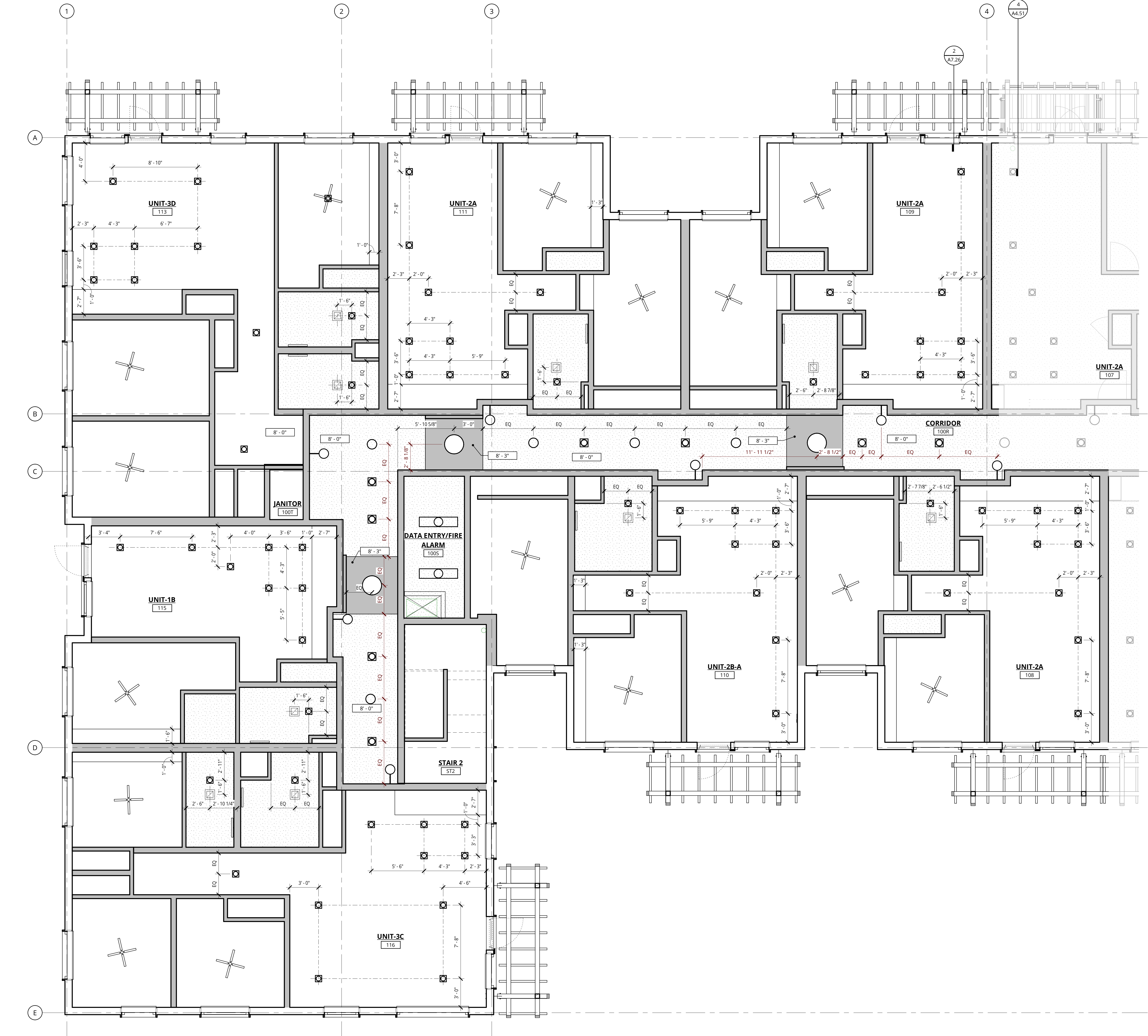
DATE 17 OCT 2018	PROJECT NUMBER 149000
SHEET NUMBER	

A8.01



1 LEVEL 1 NORTH REFLECTED CEILING PLAN  
1/4" = 1'-0"





GENERAL NOTES

1. REFER TO SHEET **A0.01** FOR 'PROJECT NOTES' APPLICABLE TO ALL PORTIONS OF THE WORK.
2. PRIOR TO FRAMING VERIFY THAT FINAL APPLIANCE AND PLUMBING FIXTURE SIZES/CLEARANCES MATCH THOSE USED AS BASIS OF DESIGN SHOWN ON SHEET **65.01**.
3. SEE SHEETS **A0.11 & A0.21** FOR WALL ASSEMBLIES.
4. SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.

LEGEND

CEILING:

- FLAT DRYWALL  
SUSPENSION GYP CEILING
- ACP-1 CEILING
- AWC-1 CEILING
- P-22
- P-23
- P-24

LIGHTING:

- CEILING FAN / LIGHT COMBO
- ACCENT CORRIDOR
- UNIT ENTRY SCENCE
- WALL SCENCE
- UNIT LED FLUSH ROUND
- LED PUCK
- BATHROOM EXHAUST FAN
- OFFICE PENDENT LIGHT
- 2X2 DIRECT/INDIRECT
- BACK OF HOUSE LINEAR

**1** LEVEL 1 SOUTH REFLECTED CEILING PLAN

1/4" = 1'-0"



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PORTLAND, OR 97209  
T 503.245.7100

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REVISION	DATE	REASON FOR ISSUE

**LEVEL 1 SOUTH  
REFLECTED CEILING  
PLAN**

**PERMIT / GMP**

DATE 17 OCT 2018	PROJECT NUMBER 149000
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SHEET NUMBER

**A8.02**



10/17/2018 10:32:20 AM

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GENERAL NOTES

1. REFER TO SHEET **00.01** FOR 'PROJECT NOTES' APPLICABLE TO ALL PORTIONS OF THE WORK.
2. PRIOR TO FRAMING VERIFY THAT FINAL APPLIANCE AND PLUMBING FIXTURE SIZES/CLEARANCES MATCH THOSE USED AS BASIS OF DESIGN SHOWN ON SHEET **65.01**.
3. SEE SHEETS **00.11 & 00.21** FOR WALL ASSEMBLIES.
4. SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.

LEGEND

CEILINGS:

- FLAT DRYWALL  
SUSPENSION GYP CEILING
- ACP-1 CEILING
- AWC-1 CEILING
- P-22
- P-23
- P-24

LIGHTING:

- CEILING FAN / LIGHT COMBO
- ACCENT CORRIDOR
- UNIT ENTRY SCENCE
- WALL SCENCE
- UNIT LED FLUSH ROUND
- LED PUCK
- BATHROOM EXHAUST FAN
- OFFICE PENDENT LIGHT
- 2X2 DIRECT/INDIRECT
- BACK OF HOUSE LINEAR



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PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
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T 206.576.1600

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SAN FRANCISCO, CA 94103  
T 415.252.7063

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REVISION	DATE	REASON FOR ISSUE

LEVEL 2 NORTH  
REFLECTED CEILING  
PLAN

PERMIT / GMP

DATE  
17 OCT 2018

PROJECT NUMBER  
149000

SHEET NUMBER

A8.03

1 LEVEL 2 NORTH REFLECTED CEILING PLAN

1/4" = 1'-0"





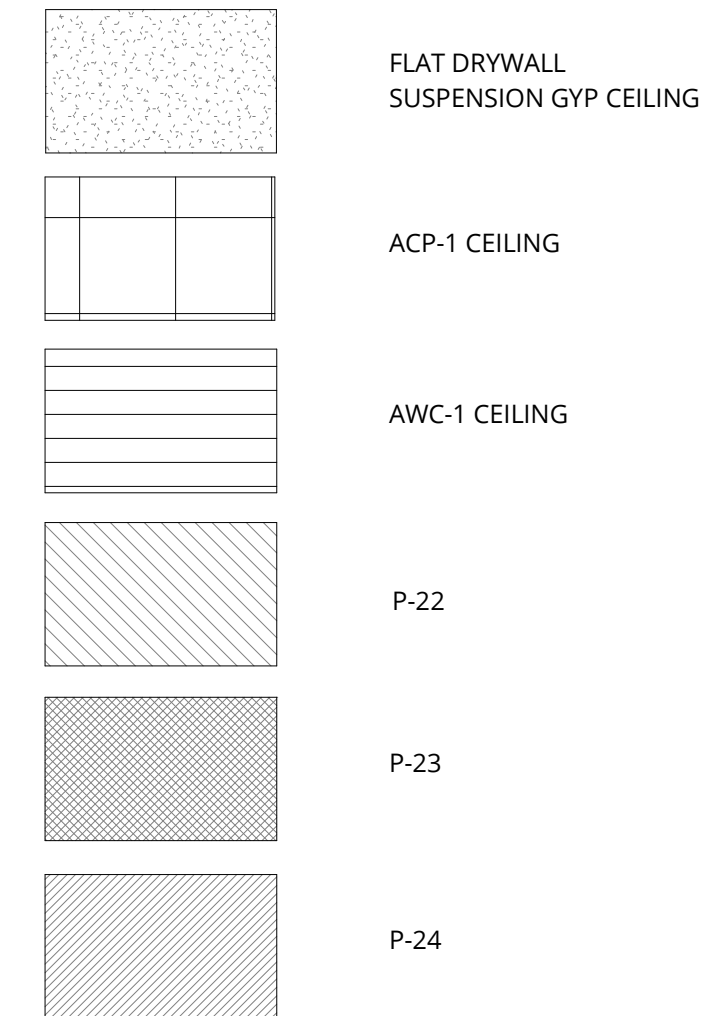


## GENERAL NOTES

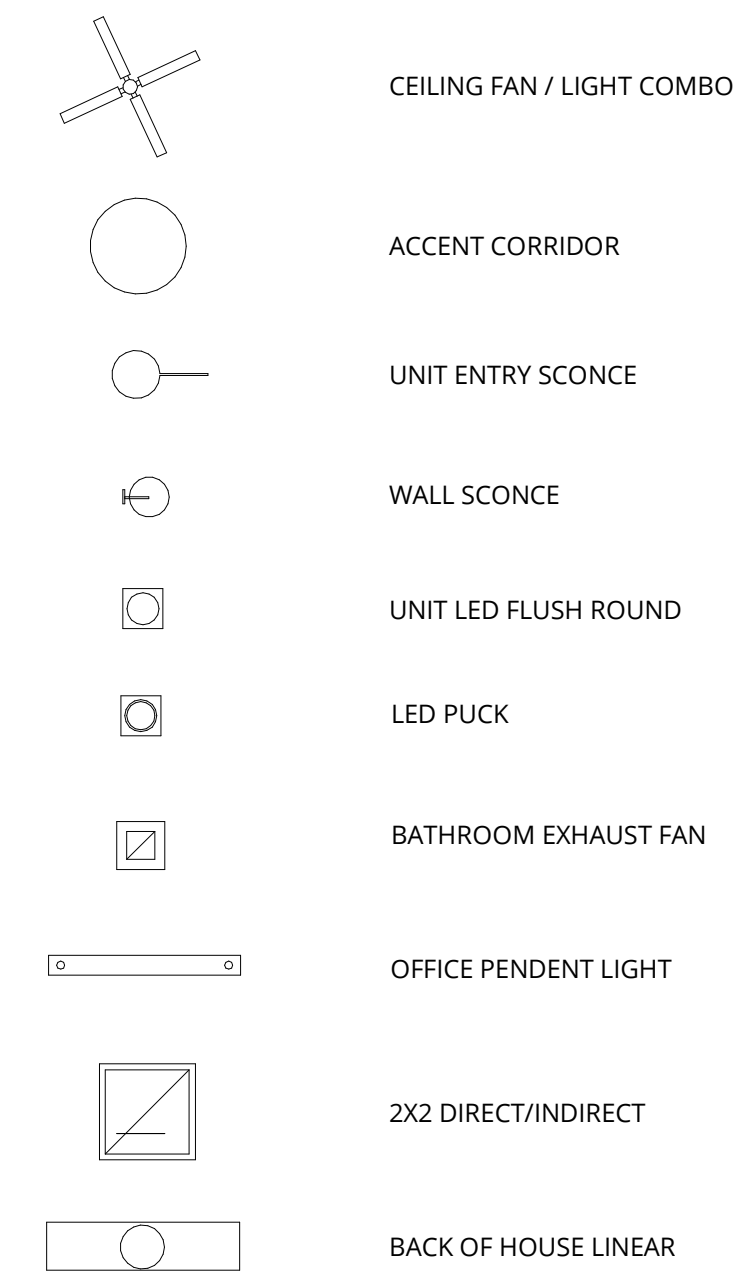
1. REFER TO SHEET **A0.01** FOR 'PROJECT NOTES' APPLICABLE TO ALL PORTIONS OF THE WORK.
2. PRIOR TO FRAMING VERIFY THAT FINAL APPLIANCE AND PLUMBING FIXTURE SIZES/CLEARANCES MATCH THOSE USED AS BASIS OF DESIGN SHOWN ON SHEET **G5.01**.
3. SEE SHEETS **A0.11** & **A0.21** FOR WALL ASSEMBLIES.
4. SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.

## LEGEND

CEILINGS:



LIGHTING:



REGISTERED ARCHITECT  
ISAAC S. JOHNSON  
5062  
ISAAC JOHNSON  
PORTLAND, OR  
STATE OF OREGON



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
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BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

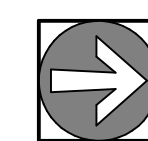
LEVEL 2 SOUTH  
REFLECTED CEILING  
PLAN

PERMIT / GMP

DATE 17 OCT 2018	PROJECT NUMBER 149000
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SHEET NUMBER

## A8.04





10/17/2018 10:32:31 AM

C:\Revel Projects\149000-18 North Williams Arch. Central\49000-18 North Williams Arch. plan\Recovery.dwg



GENERAL NOTES

1. REFER TO SHEET **A8.01** FOR 'PROJECT NOTES' APPLICABLE TO ALL PORTIONS OF THE WORK.
2. PRIOR TO FRAMING VERIFY THAT FINAL APPLIANCE AND PLUMBING FIXTURE SIZES/CLEARANCES MATCH THOSE USED AS BASIS OF DESIGN SHOWN ON SHEET **GS.01**.
3. SEE SHEETS **A8.11** & **A8.21** FOR WALL ASSEMBLIES.
4. SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.

LEGEND

CEILINGS:

- FLAT DRYWALL  
SUSPENSION GYP CEILING
- ACP-1 CEILING
- AWC-1 CEILING
- P-22
- P-23
- P-24

LIGHTING:

- CEILING FAN / LIGHT COMBO
- ACCENT CORRIDOR
- UNIT ENTRY SCONCE
- WALL SCONCE
- UNIT LED FLUSH ROUND
- LED PUCK
- BATHROOM EXHAUST FAN
- OFFICE PENDENT LIGHT
- 2X2 DIRECT/INDIRECT
- BACK-OF-HOUSE LINEAR

1 LEVEL 3 NORTH REFLECTED CEILING PLAN

1/4" = 1'-0"



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T 503.245.7100

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NORTH WILLIAMS APARTMENTS - FAMILY HOUSING

2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

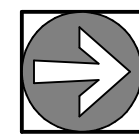
LEVEL 3 NORTH  
REFLECTED CEILING  
PLAN

PERMIT / GMP

DATE	PROJECT NUMBER
17 OCT 2018	149000

SHEET NUMBER

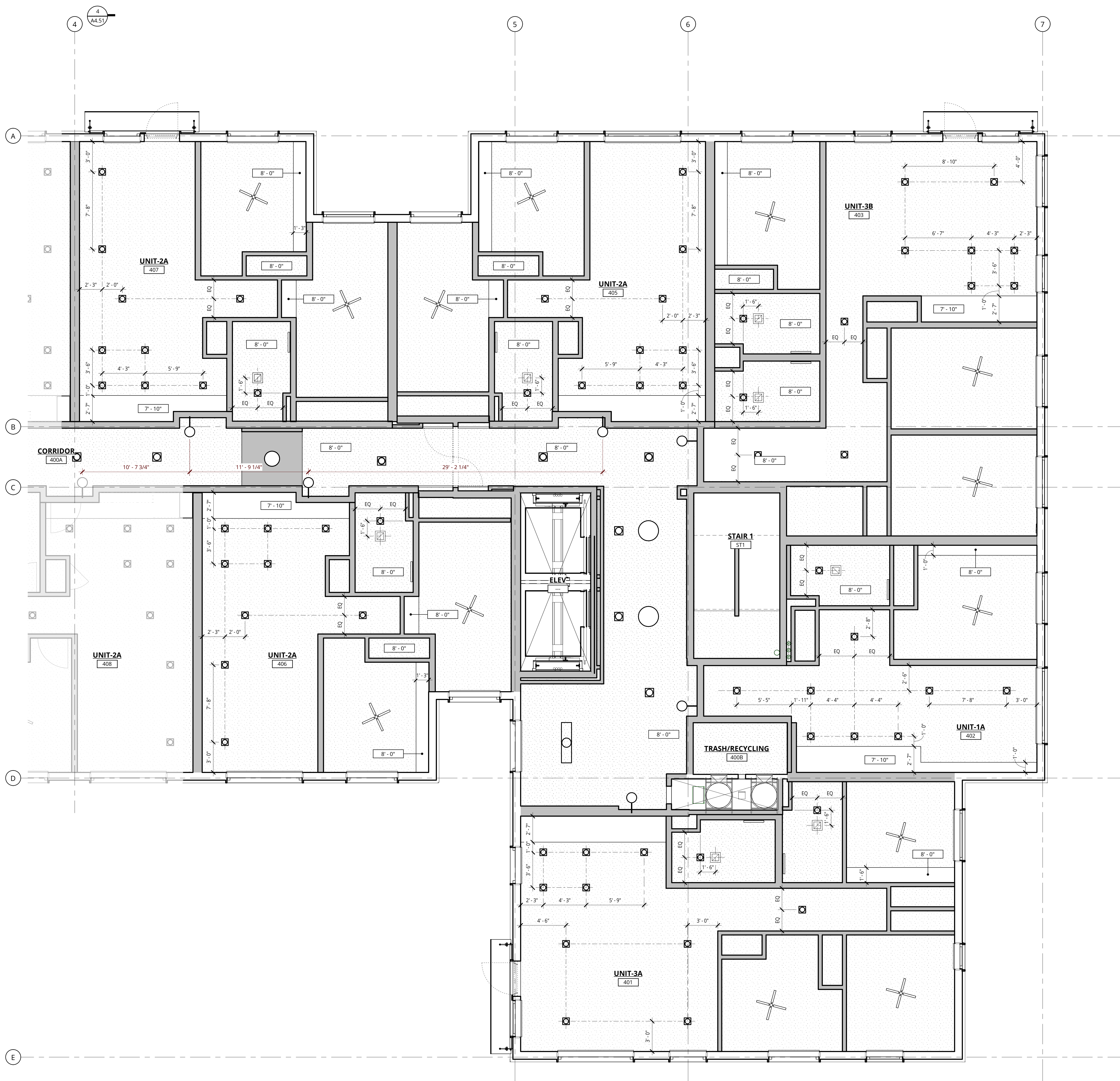
A8.05











## GENERAL NOTES

1. REFER TO SHEET **A0.01** FOR 'PROJECT NOTES' APPLICABLE TO ALL PORTIONS OF THE WORK.
2. PRIOR TO FRAMING VERIFY THAT FINAL APPLIANCE AND PLUMBING FIXTURE SIZES/CLEARANCES MATCH THOSE USED AS BASIS OF DESIGN SHOWN ON SHEET **65.01**.
3. SEE SHEETS **A0.11 & A0.21** FOR WALL ASSEMBLIES.
4. SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.

## LEGEND

## CEILINGS:

	FLAT DRYWALL
	SUSPENSION GYP CEILING
	ACP-1 CEILING
	AWC-1 CEILING
	P-22
	P-23
	P-24

## LIGHTING:

	CEILING FAN / LIGHT COMBO
	ACCENT CORRIDOR
	UNIT ENTRY SCONCE
	WALL SCONCE
	UNIT LED FLUSH ROUND
	LED PUCK
	BATHROOM EXHAUST FAN
	OFFICE PENDENT LIGHT
	2X2 DIRECT/INDIRECT
	BACK OF HOUSE LINEAR

## NORTH WILLIAMS APARTMENTS - FAMILY HOUSING

2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

LEVEL 4 NORTH  
REFLECTED CEILING  
PLAN

PERMIT / GMP

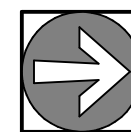
DATE  
17 OCT 2018PROJECT NUMBER  
149000

SHEET NUMBER

A8.07

## 1 LEVEL 4 NORTH REFLECTED CEILING PLAN

1/4" = 1'-0"







## GENERAL NOTES

1. REFER TO SHEET **A0.01** FOR 'PROJECT NOTES' APPLICABLE TO ALL PORTIONS OF THE WORK.
2. PRIOR TO FRAMING VERIFY THAT FINAL APPLIANCE AND PLUMBING FIXTURE SIZES/CLEARANCES MATCH THOSE USED AS BASIS OF DESIGN SHOWN ON SHEET **65.01**.
3. SEE SHEETS **A0.11** & **A0.21** FOR WALL ASSEMBLIES.
4. SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.

## LEGEND

## CEILING:

- FLAT DRYWALL  
SUSPENSION GYP CEILING
- ACP-1 CEILING
- AWC-1 CEILING
- P-22
- P-23
- P-24

## LIGHTING:

- CEILING FAN / LIGHT COMBO
- ACCENT CORRIDOR
- UNIT ENTRY SCENCE
- WALL SCENCE
- UNIT LED FLUSH ROUND
- LED PUCK
- BATHROOM EXHAUST FAN
- OFFICE PENDENT LIGHT
- 2X2 DIRECT/INDIRECT
- BACK OF HOUSE LINEAR

## NORTH WILLIAMS APARTMENTS - FAMILY HOUSING

2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

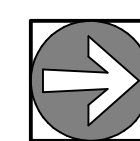
LEVEL 4 SOUTH  
REFLECTED CEILING  
PLAN

PERMIT / GMP

DATE	PROJECT NUMBER
17 OCT 2018	149000

SHEET NUMBER

A8.08



## 1 LEVEL 4 SOUTH REFLECTED CEILING PLAN

1/4" = 1'-0"





## GENERAL NOTES

1. REFER TO SHEET **A0.01** FOR 'PROJECT NOTES' APPLICABLE TO ALL PORTIONS OF THE WORK.
2. PRIOR TO FRAMING VERIFY THAT FINAL APPLIANCE AND PLUMBING FIXTURE SIZES/CLEARANCES MATCH THOSE USED AS BASIS OF DESIGN SHOWN ON SHEET **65.01**.
3. SEE SHEETS **A0.11** & **A0.21** FOR WALL ASSEMBLIES.
4. SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.

## LEGEND

## CEILING:

	FLAT DRYWALL
	SUSPENSION GYP CEILING
	ACP-1 CEILING
	AWC-1 CEILING
	P-22
	P-23
	P-24

## LIGHTING:

	CEILING FAN / LIGHT COMBO
	ACCENT CORRIDOR
	UNIT ENTRY SCNCE
	WALL SCNCE
	UNIT LED FLUSH ROUND
	LED PUCK
	BATHROOM EXHAUST FAN
	OFFICE PENDENT LIGHT
	2X2 DIRECT/INDIRECT
	BACK OF HOUSE LINEAR



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
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2156 N WILLIAMS AVENUE, PORTLAND, OREGON

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REVISION	DATE	REASON FOR ISSUE

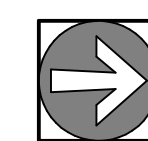
LEVEL 5 NORTH  
REFLECTED CEILING  
PLAN

PERMIT / GMP

DATE 17 OCT 2018	PROJECT NUMBER 149000
---------------------	--------------------------

SHEET NUMBER

A8.09



# 1 LEVEL 5 NORTH REFLECTED CEILING PLAN

1/4" = 1'-0"





## GENERAL NOTES

1. REFER TO SHEET **A0.01** FOR 'PROJECT NOTES' APPLICABLE TO ALL PORTIONS OF THE WORK.
2. PRIOR TO FRAMING VERIFY THAT FINAL APPLIANCE AND PLUMBING FIXTURE SIZES/CLEARANCES MATCH THOSE USED AS BASIS OF DESIGN SHOWN ON SHEET **65.01**.
3. SEE SHEETS **A0.11** & **A0.21** FOR WALL ASSEMBLIES.
4. SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.

## LEGEND

## CEILING:

- FLAT DRYWALL  
SUSPENSION GYP CEILING
- ACP-1 CEILING
- AWC-1 CEILING
- P-22
- P-23
- P-24

## LIGHTING:

- CEILING FAN / LIGHT COMBO
- ACCENT CORRIDOR
- UNIT ENTRY SCONCE
- WALL SCONCE
- UNIT LED FLUSH ROUND
- LED PUCK
- BATHROOM EXHAUST FAN
- OFFICE PENDENT LIGHT
- 2X2 DIRECT/INDIRECT
- BACK OF HOUSE LINEAR



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T 503.245.7100

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BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

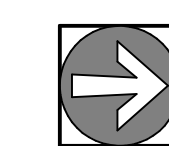
LEVEL 5 SOUTH  
REFLECTED CEILING  
PLAN

PERMIT / GMP

DATE	PROJECT NUMBER
17 OCT 2018	149000

SHEET NUMBER

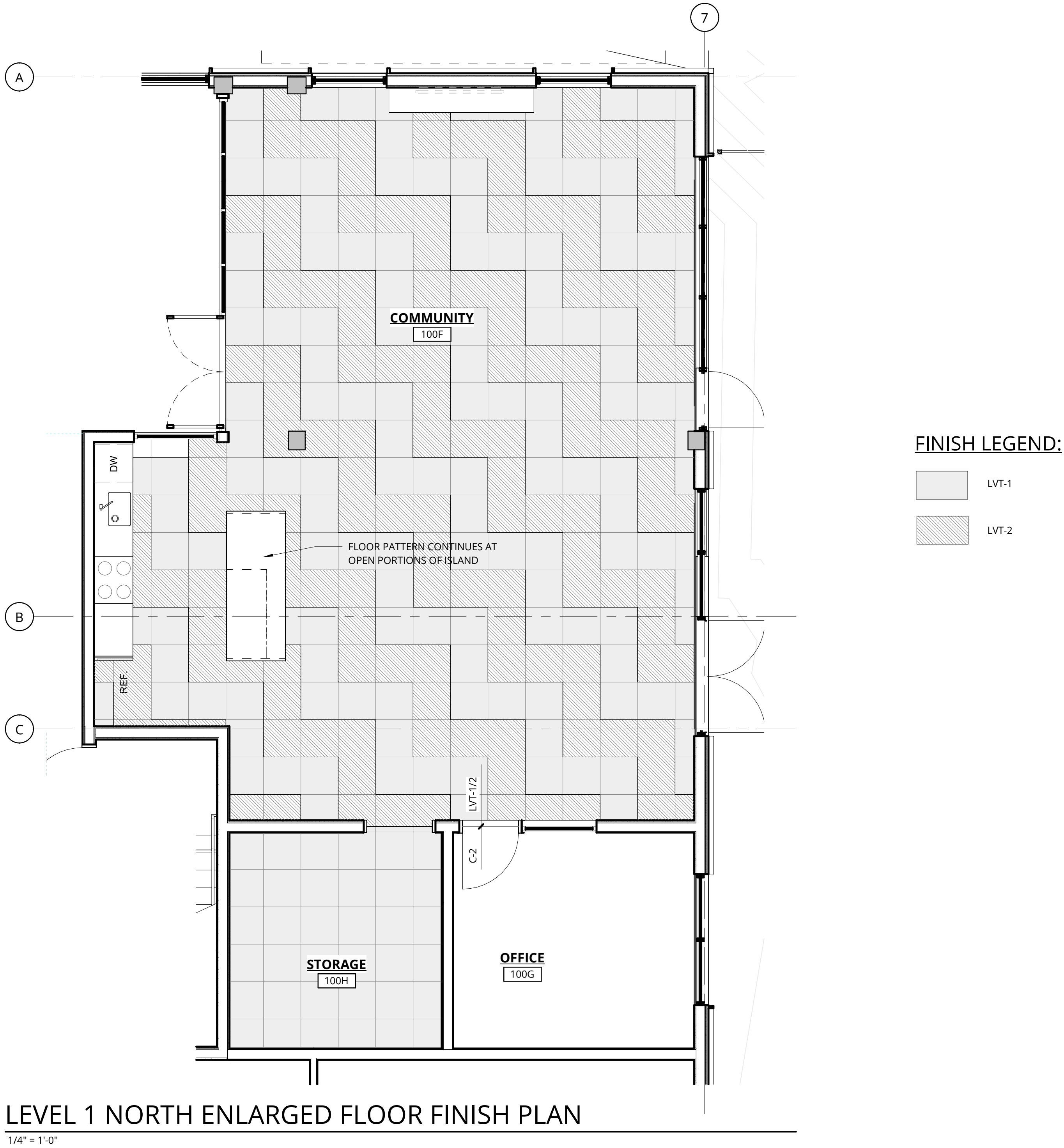
A8.10



# 1 LEVEL 5 SOUTH REFLECTED CEILING PLAN

1/4" = 1'-0"





1 LEVEL 1 NORTH ENLARGED FLOOR FINISH PLAN  
1/4" = 1'-0"



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BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

FINISH PLAN

PERMIT / GMP

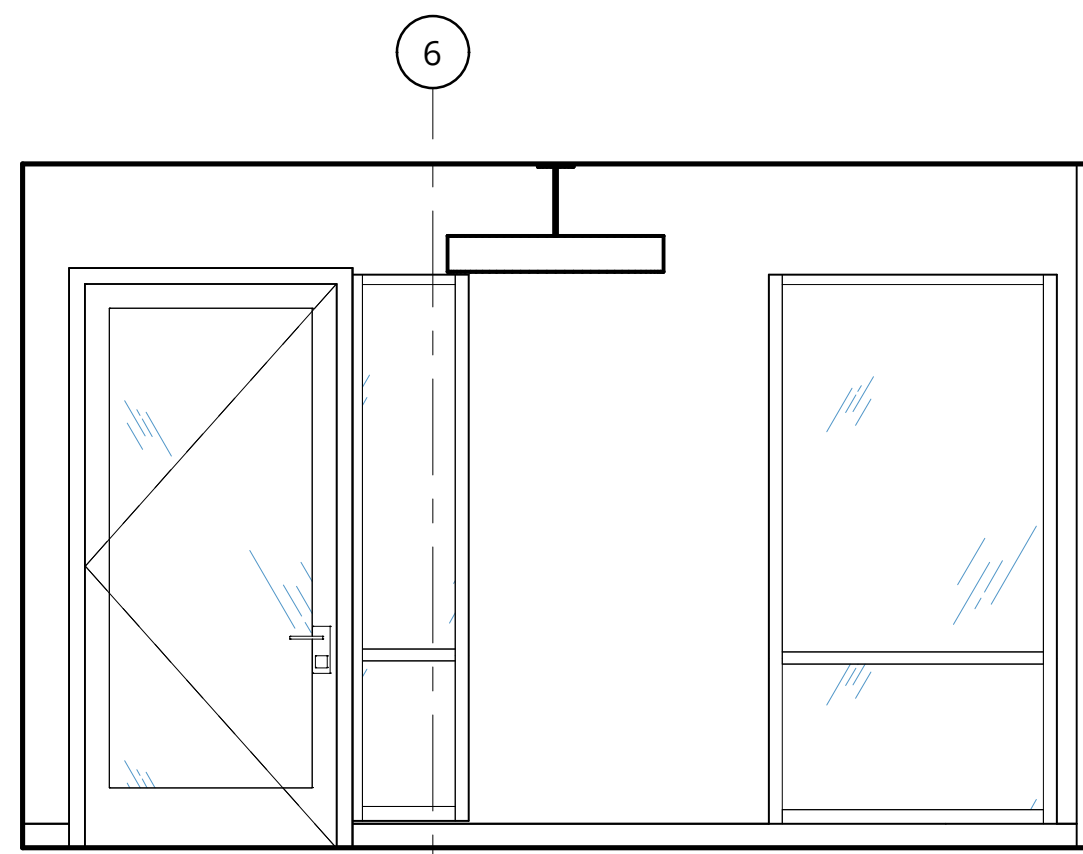
DATE 17 OCT 2018	PROJECT NUMBER 149000
SHEET NUMBER	

A9.01

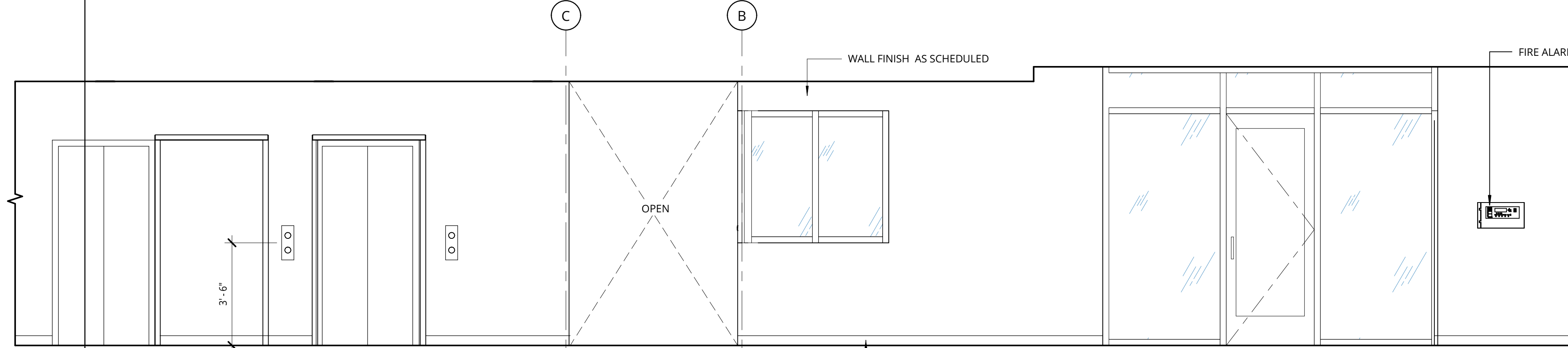


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1 ENTRY 100A  
3/8" = 1'-0"



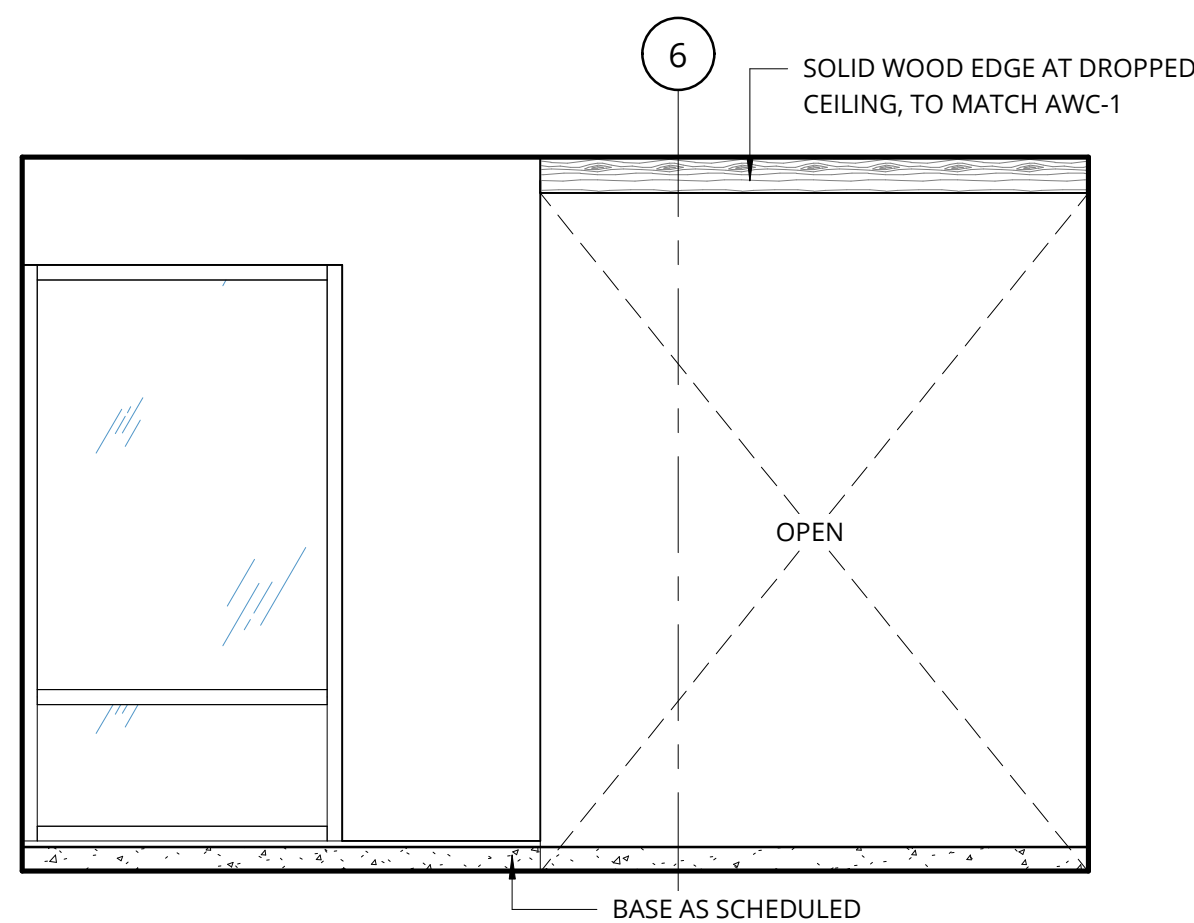
2 ENTRY 100A/ CORRIDOR 100z  
3/8" = 1'-0"

### GENERAL NOTES

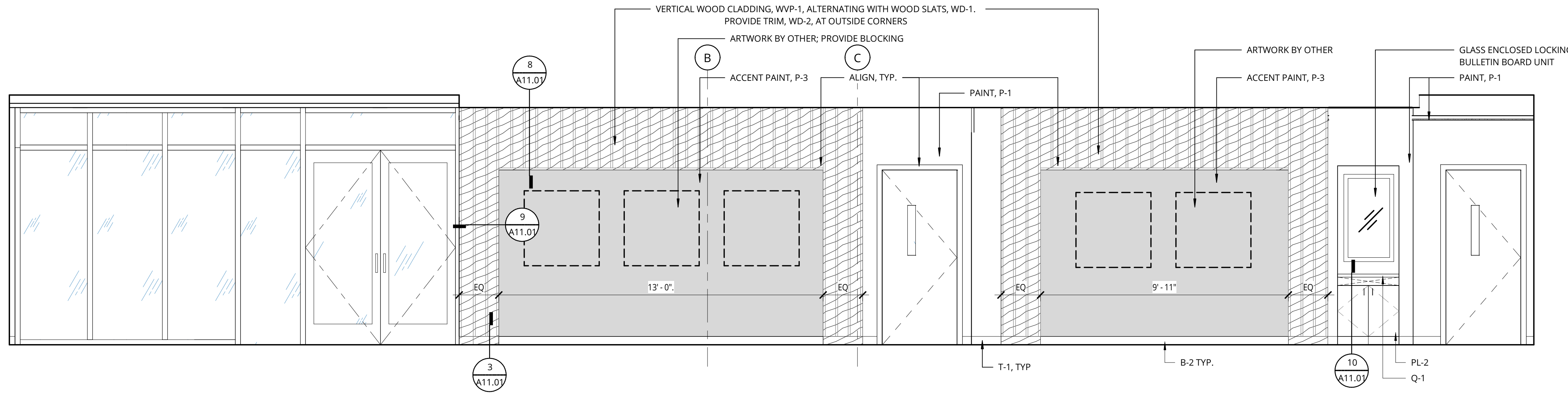
1. REFER TO SHEET G0.02 FOR 'PROJECT NOTES' APPLICABLE TO ALL PORTIONS OF THE WORK.
2. REFERENCE SLAB PLANS FOR CONCRETE WALL LOCATIONS, UNO. COORDINATE WITH STRUCTURAL DRAWINGS.
3. SEE SHEETS A0.11 & A0.21 FOR WALL ASSEMBLIES.
4. SEE ENLARGED PLANS FOR DETAILED DIMENSIONS, WALL TAGS AND DOOR TAGS.
5. REFER TO STRUCTURAL DRAWINGS FOR COLUMNS, SHEAR WALL AND BEAM SIZES.

### KEYED NOTES

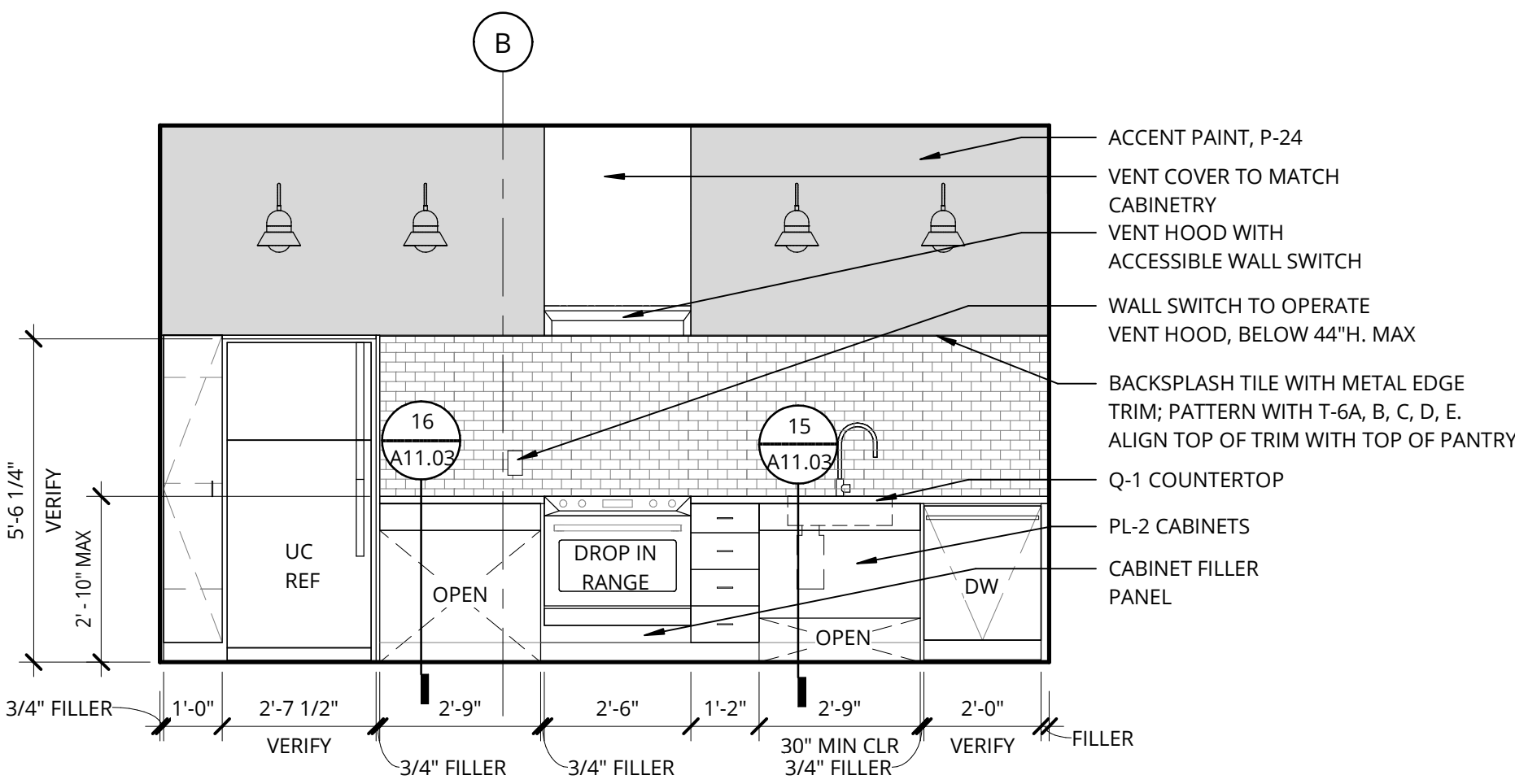
D.433 FIRE ALARM CONTROL PANEL



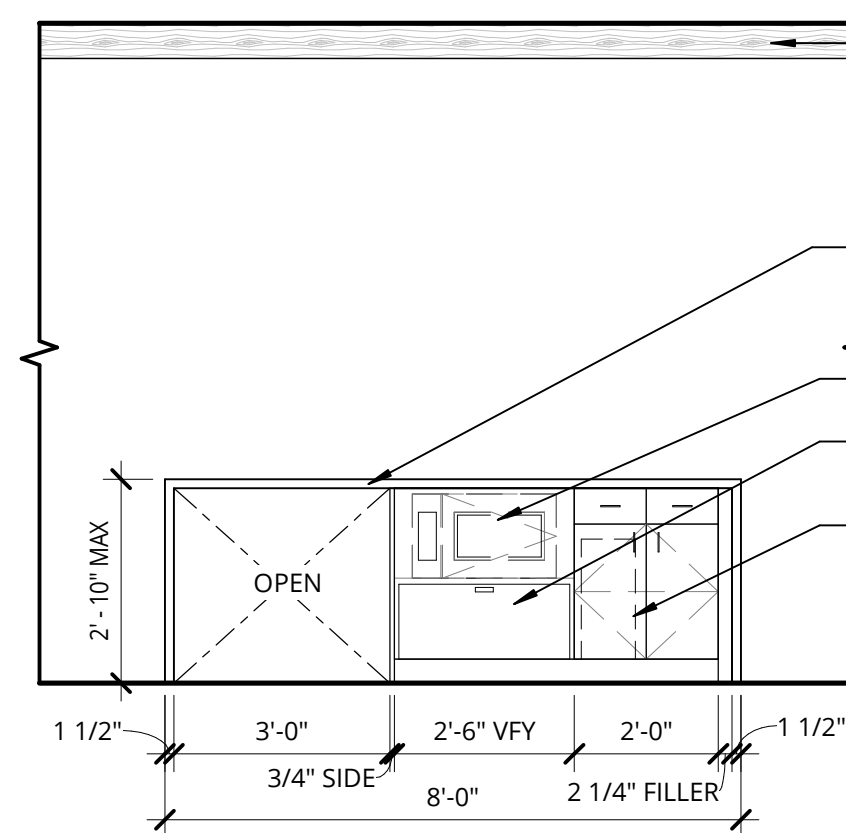
3 ENTRY 100A  
3/8" = 1'-0"



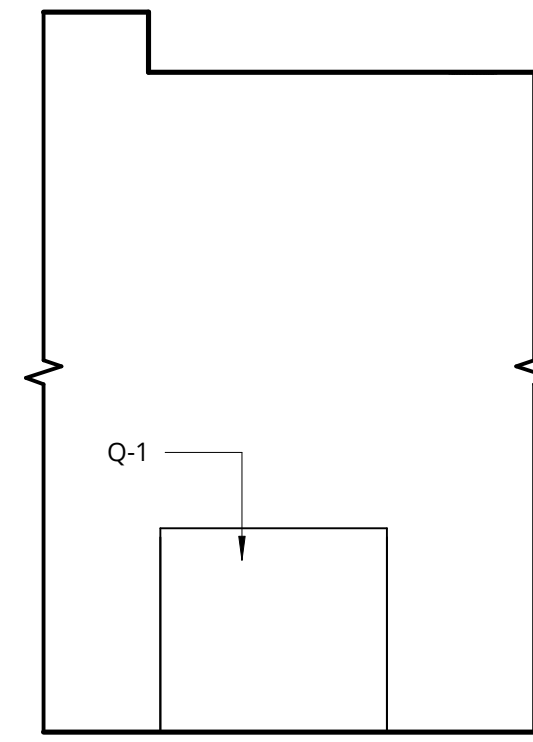
4 ENTRY 100A/ CORRIDOR 100z  
3/8" = 1'-0"



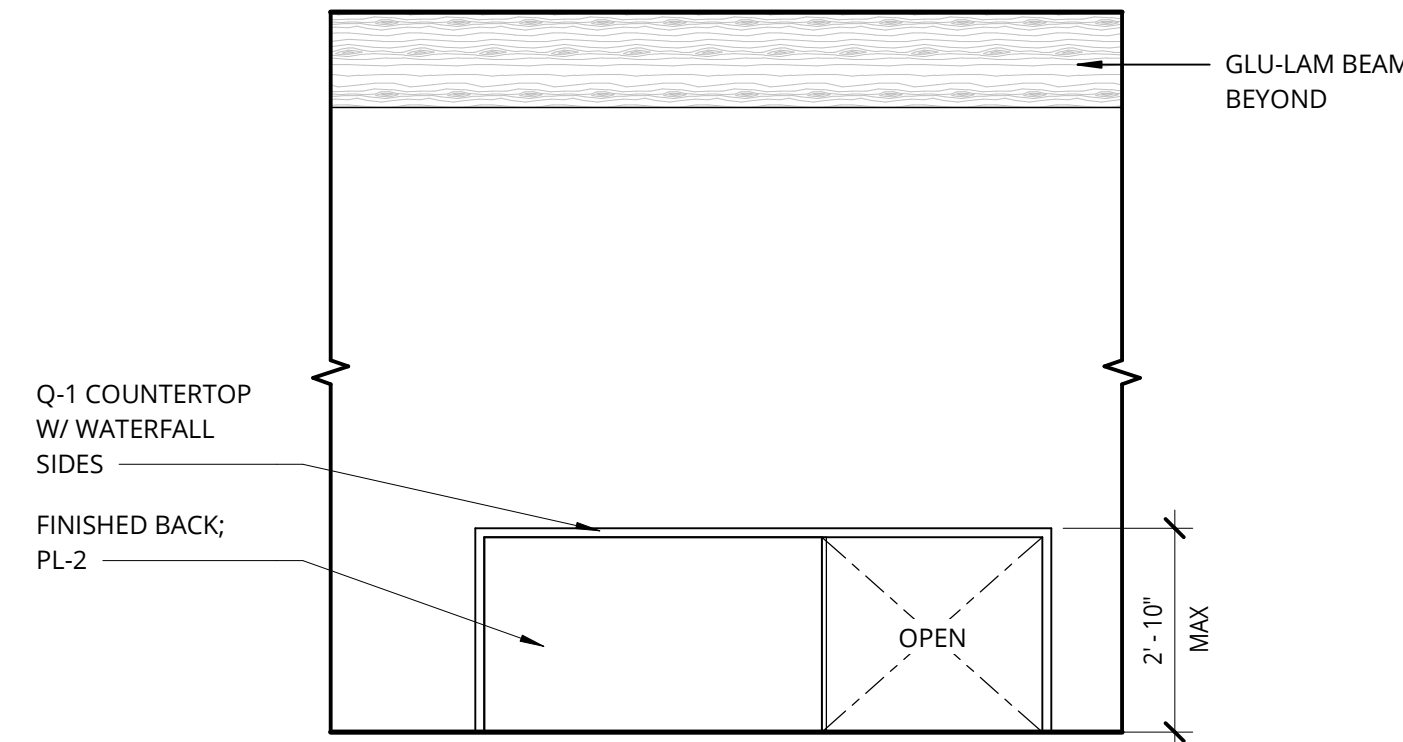
5 COMMUNITY 100F  
3/8" = 1'-0"



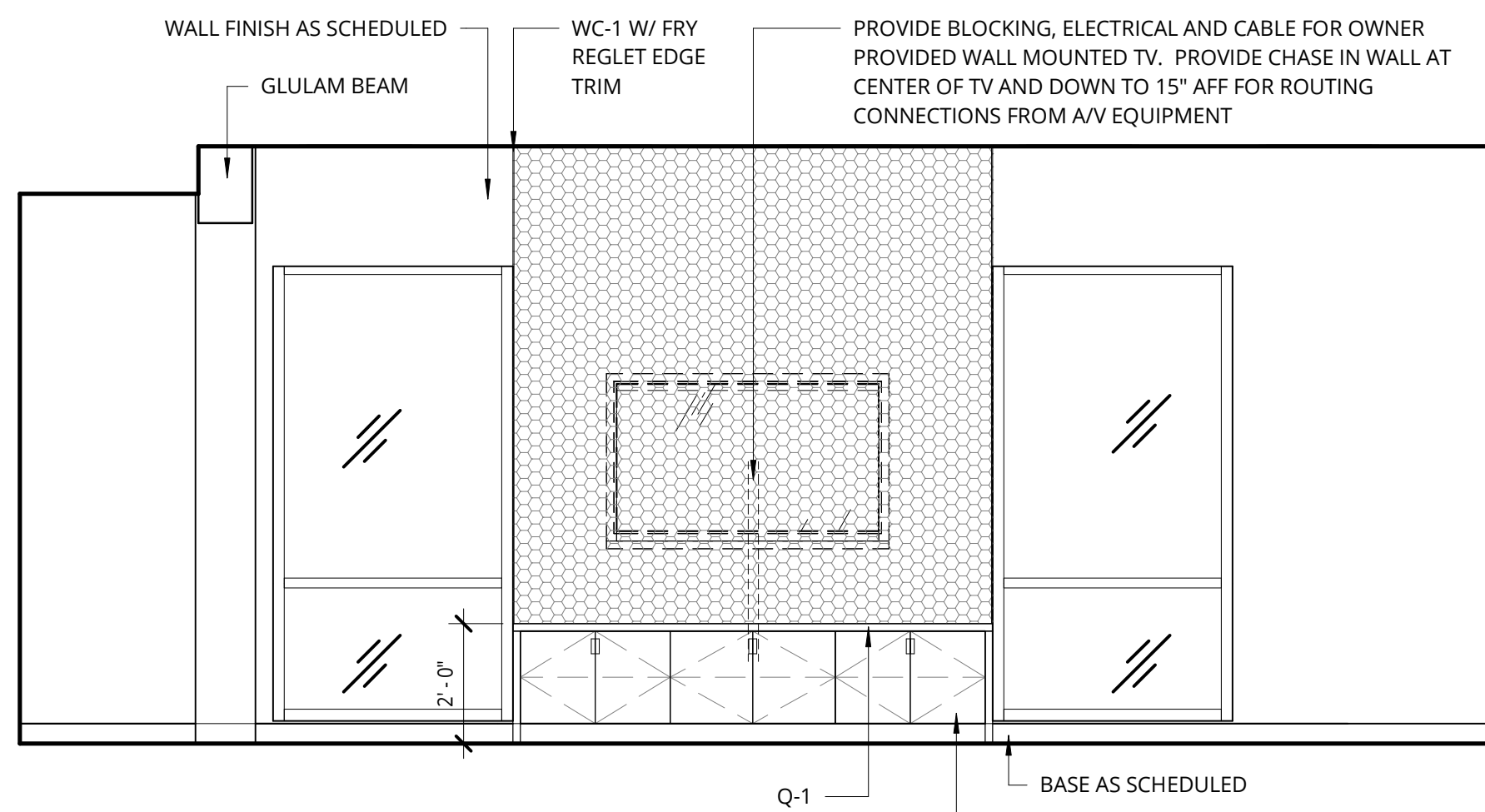
6 COMMUNITY 100F  
3/8" = 1'-0"



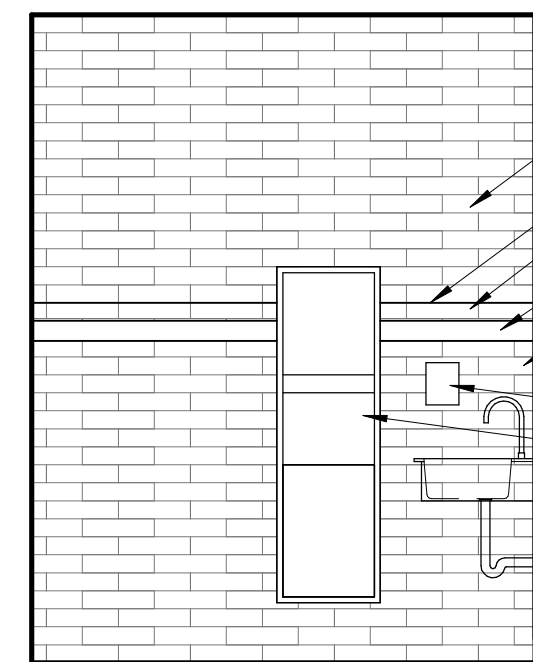
7 COMMUNITY 100F  
3/8" = 1'-0"



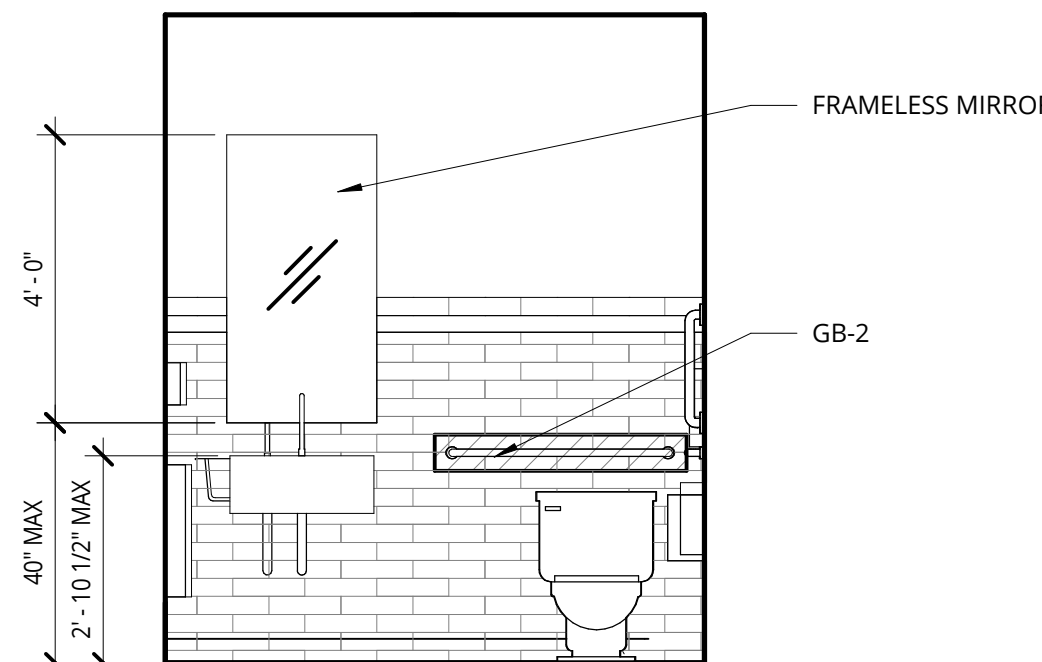
8 COMMUNITY 100F  
3/8" = 1'-0"



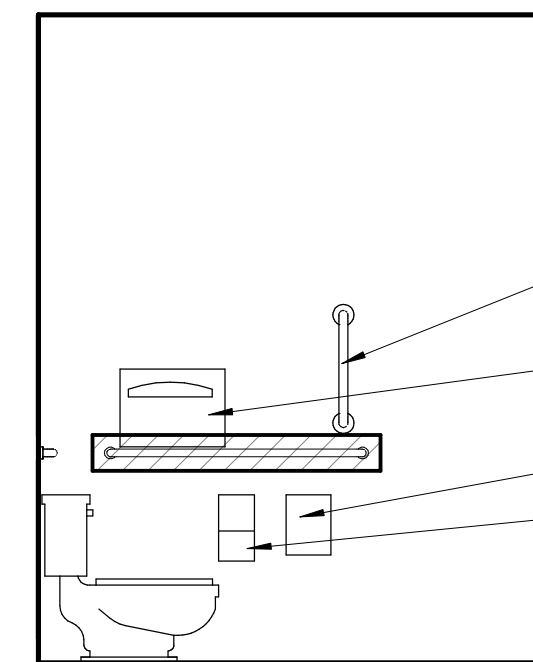
9 COMMUNITY ROOM TV WALL  
3/8" = 1'-0"



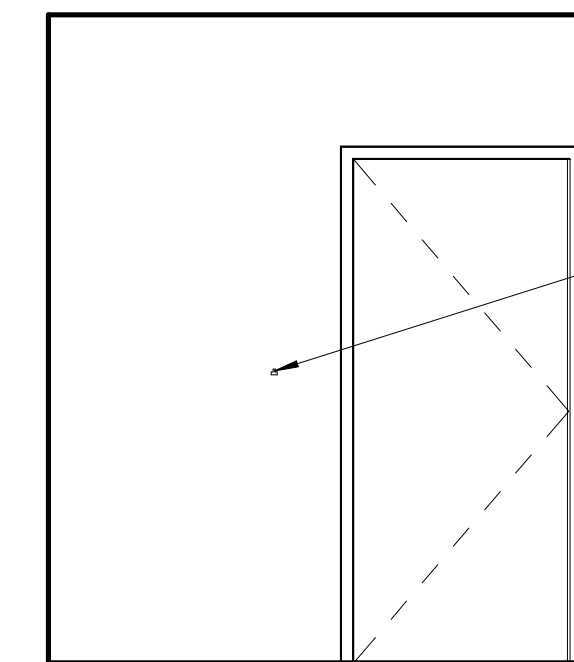
10 TOILET 100J  
3/8" = 1'-0"



11 TOILET 100J  
3/8" = 1'-0"



12 TOILET 100J  
3/8" = 1'-0"



13 TOILET 100J  
3/8" = 1'-0"



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T 503.245.7100

1505 5TH AVE, SUITE 300  
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NORTH WILLIAMS APARTMENTS - FAMILY HOUSING

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BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

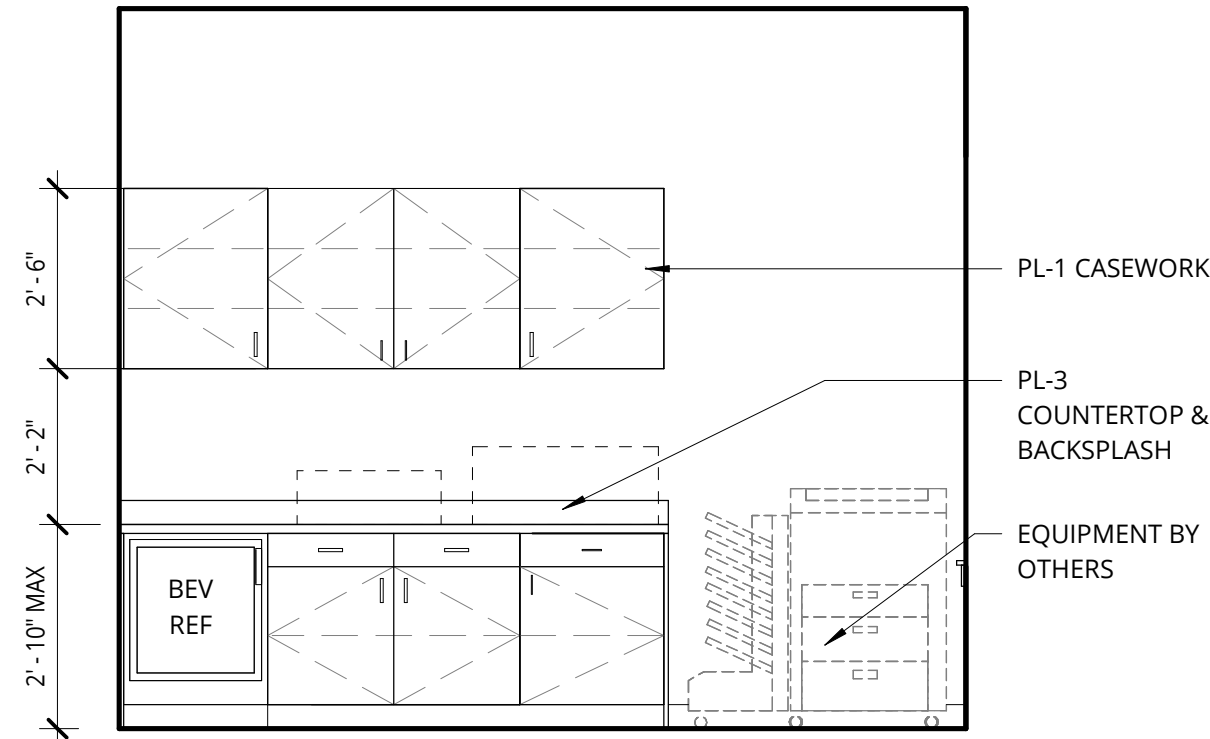
INTERIOR  
ELEVATIONS -  
PUBLIC  
PERMIT / GMP

DATE	PROJECT NUMBER
17 OCT 2018	149000

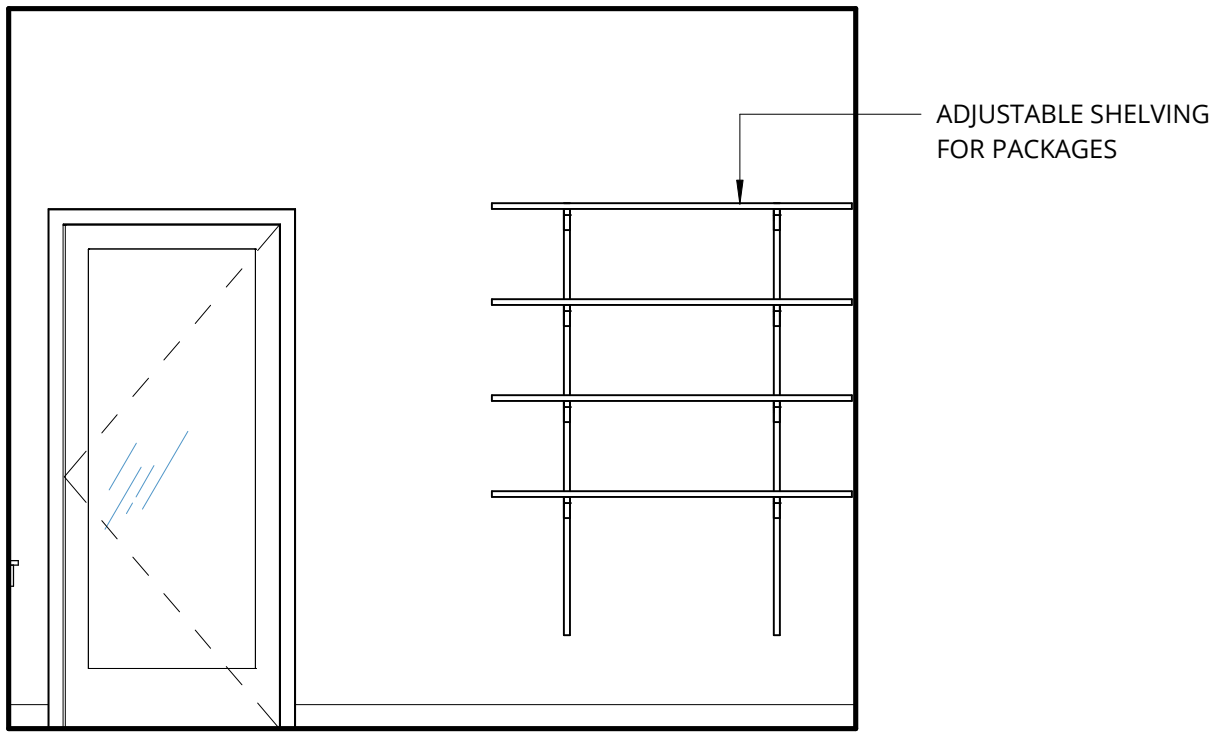
SHEET NUMBER

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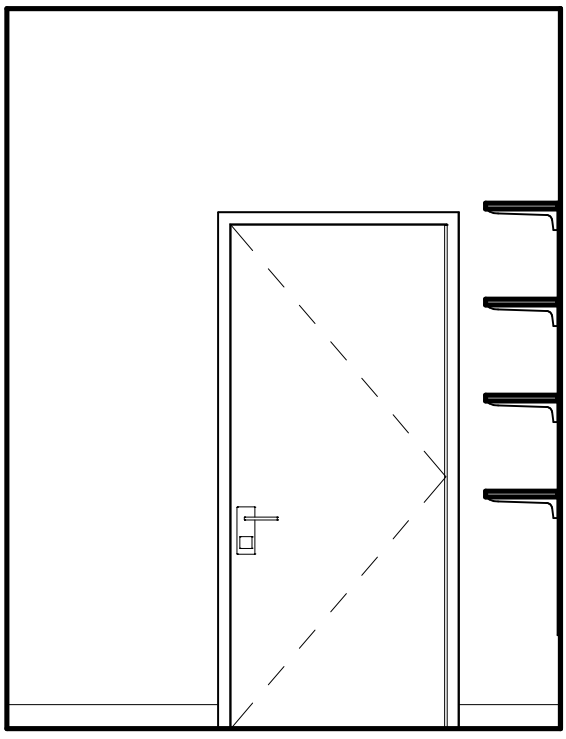




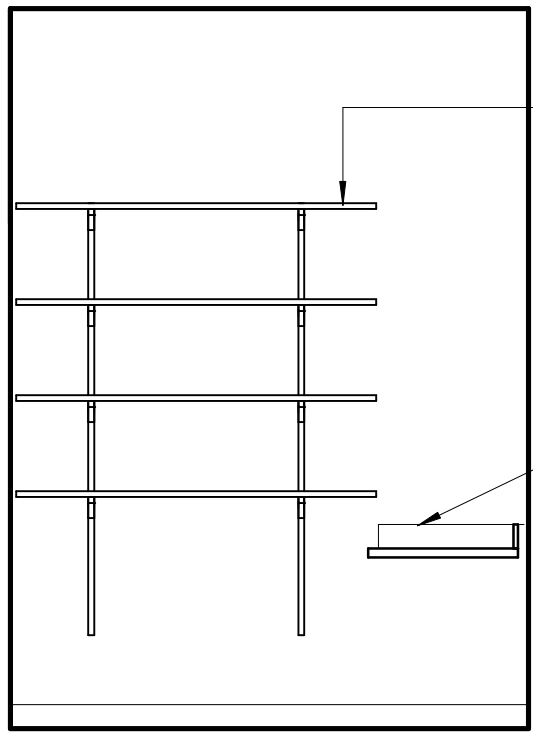
1 WORK 100C  
3/8" = 1'-0"



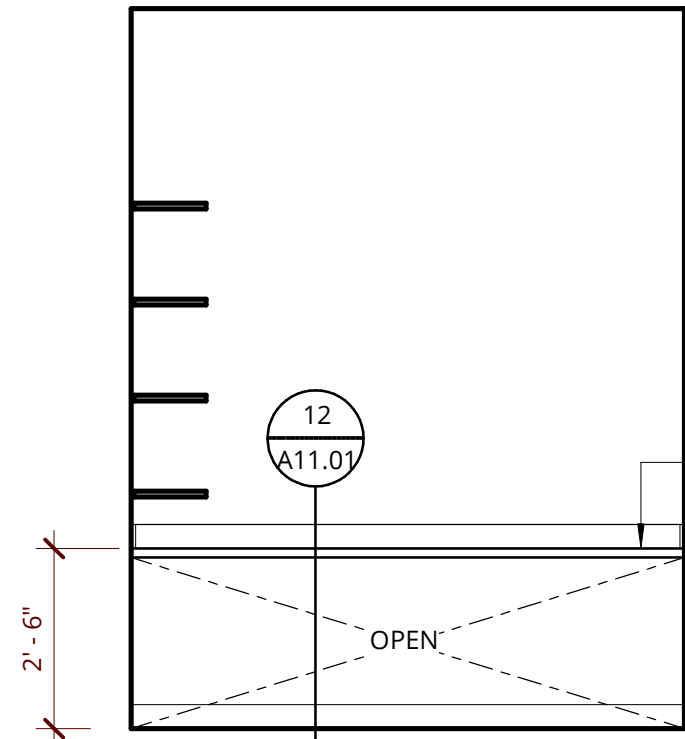
2 WORK 100C  
3/8" = 1'-0"



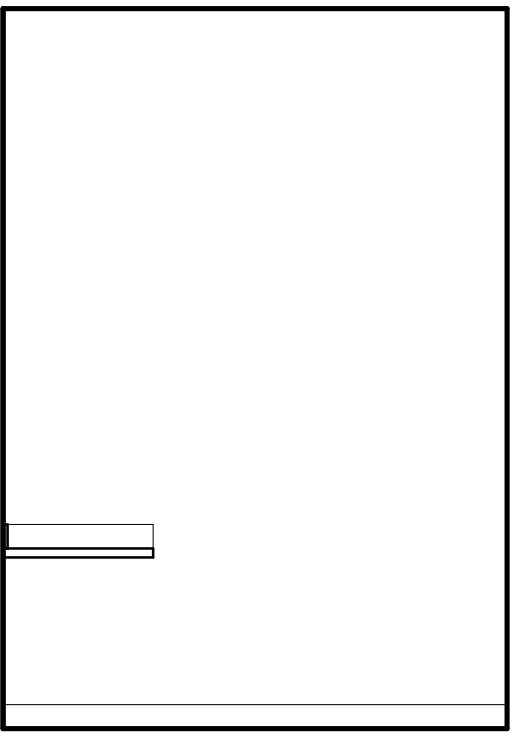
3 SECURITY 100D  
3/8" = 1'-0"



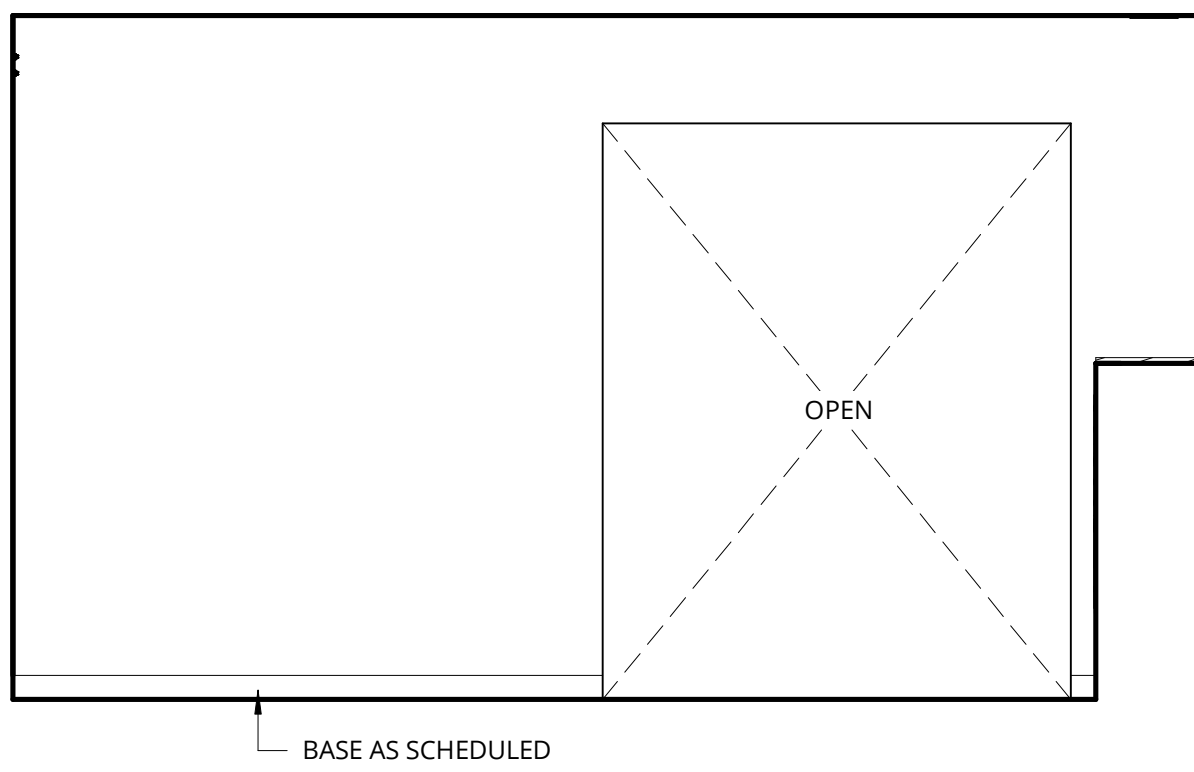
4 SECURITY 100D  
3/8" = 1'-0"



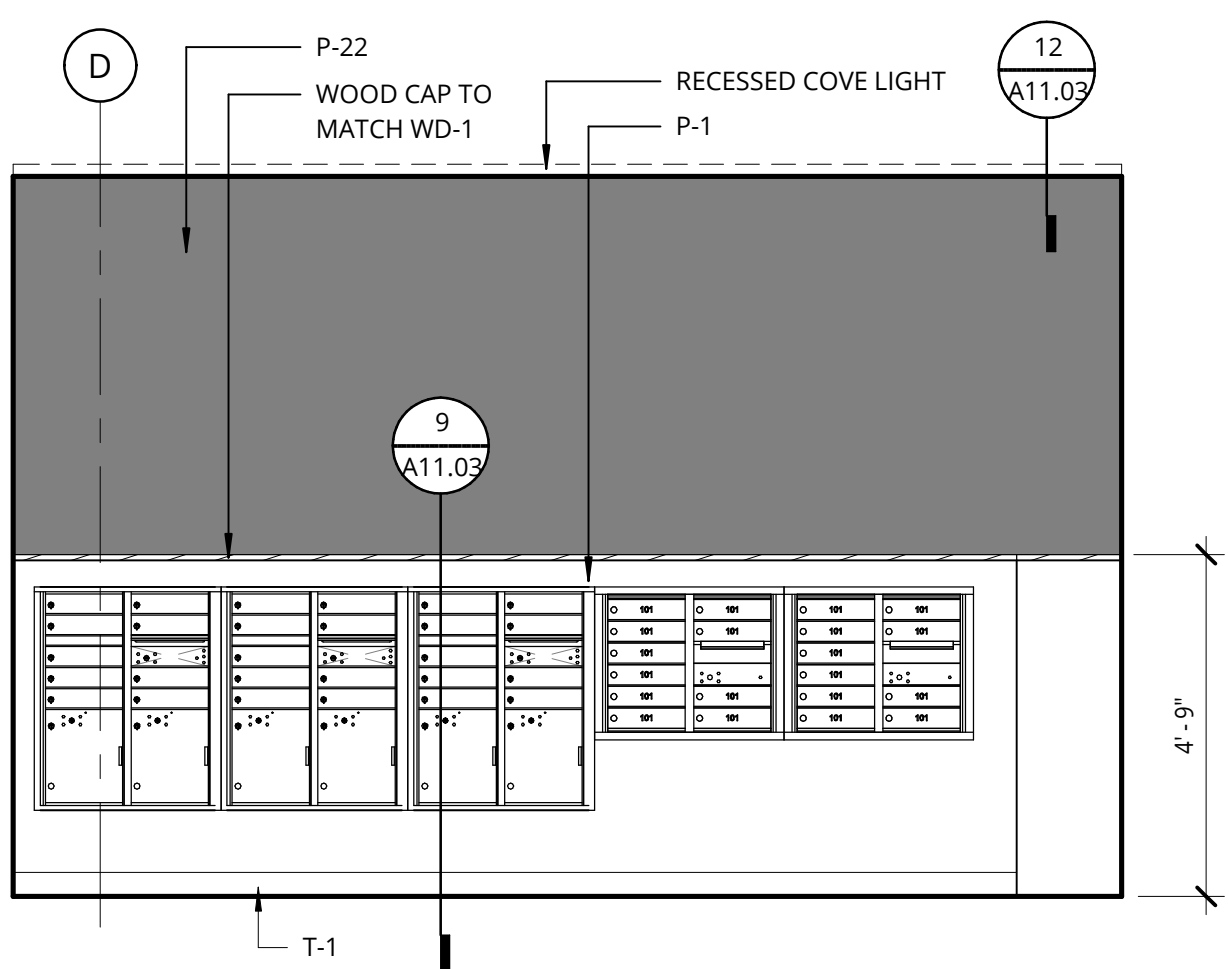
5 SECURITY 100D  
3/8" = 1'-0"



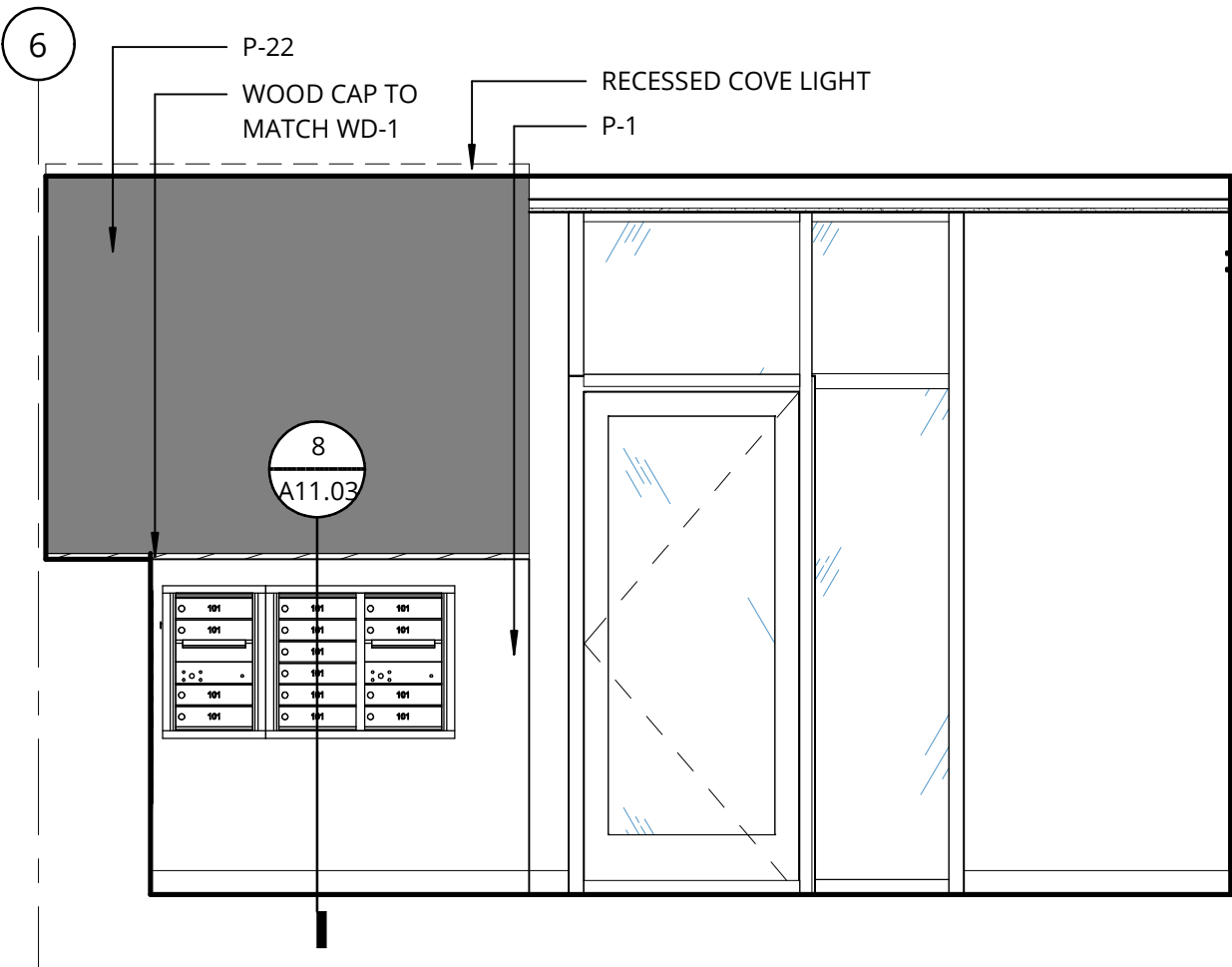
6 SECURITY 100D  
3/8" = 1'-0"



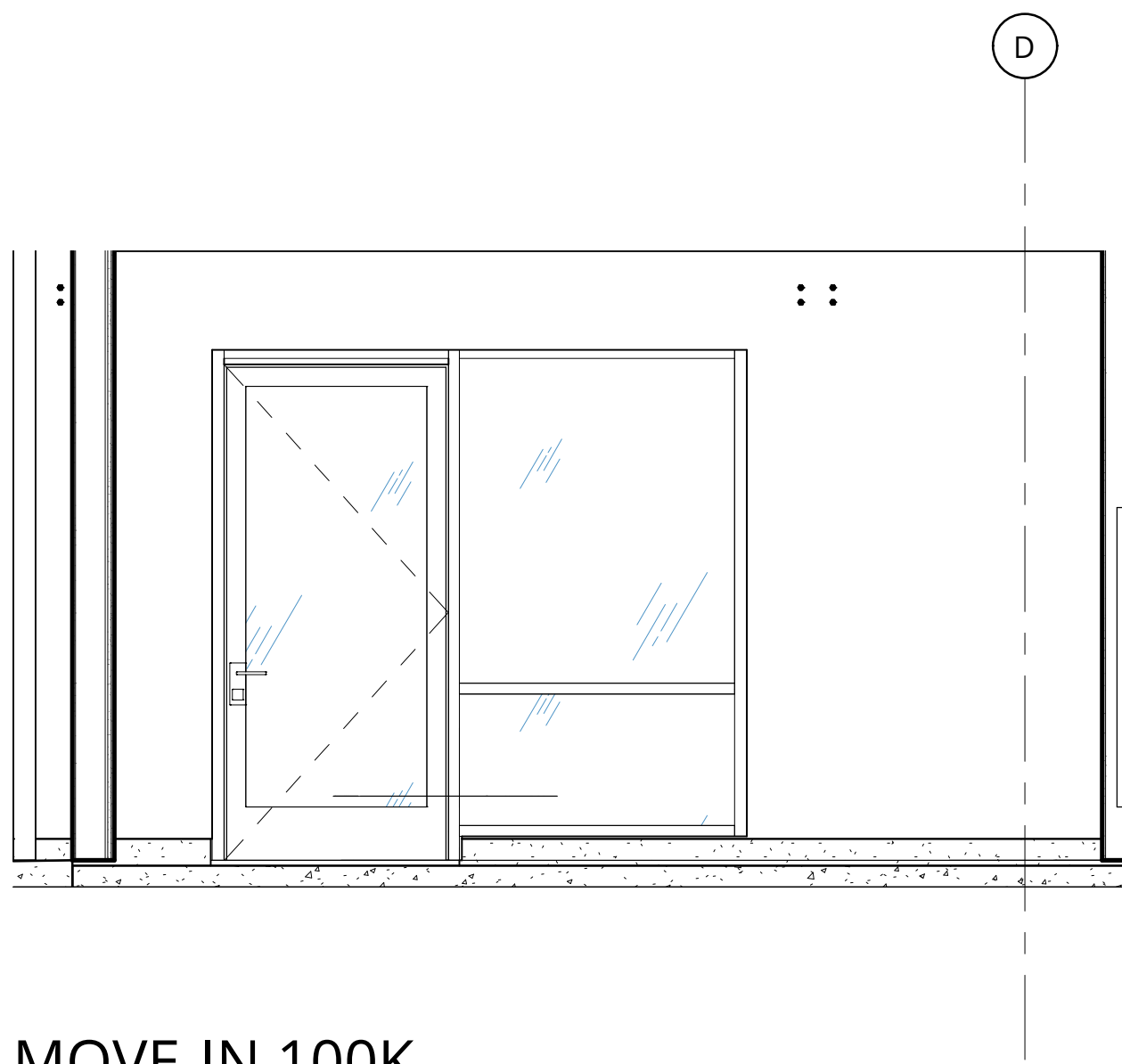
7 MOVE-IN 100K  
3/8" = 1'-0"



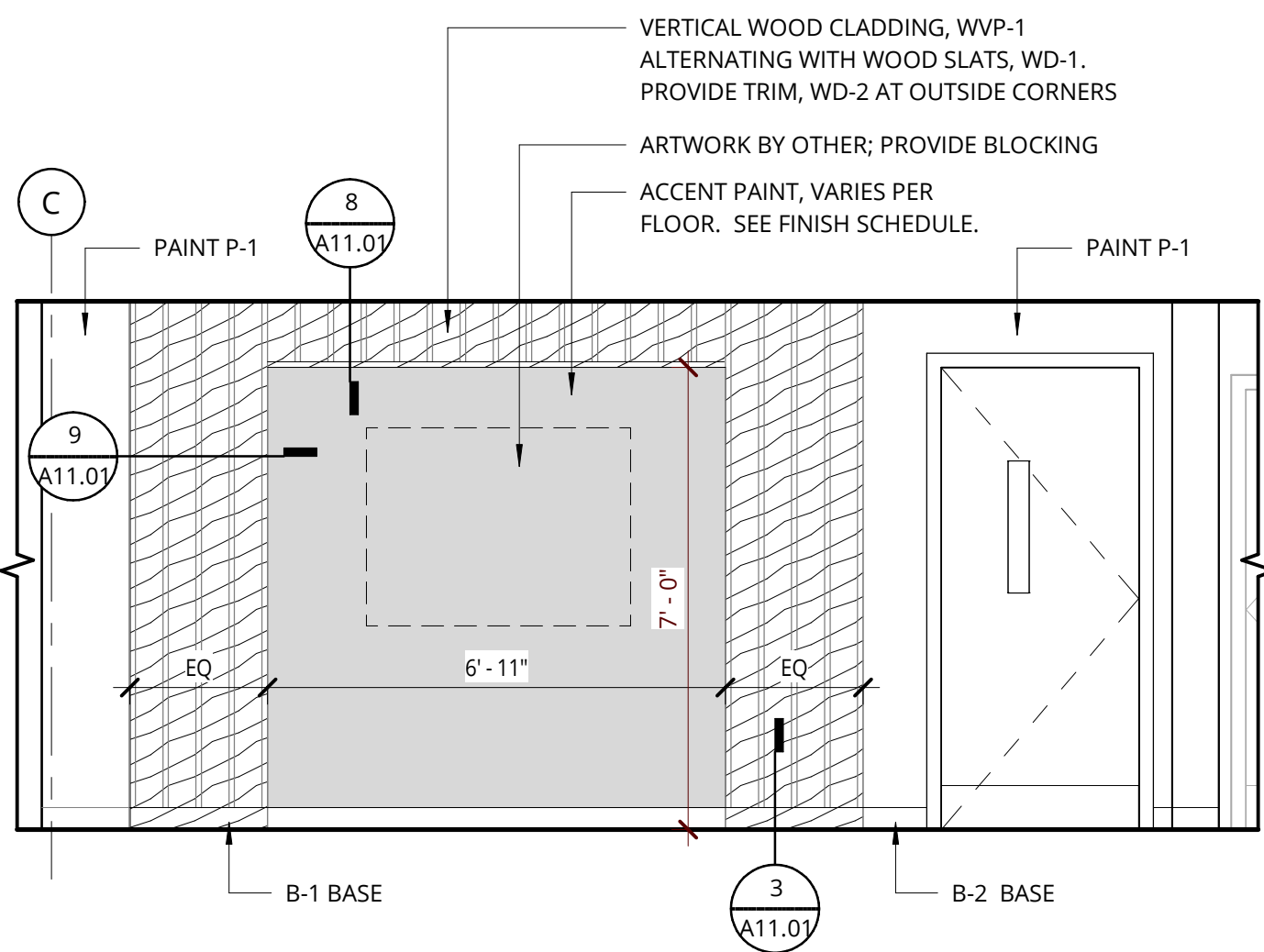
8 MOVE-IN 100K  
3/8" = 1'-0"



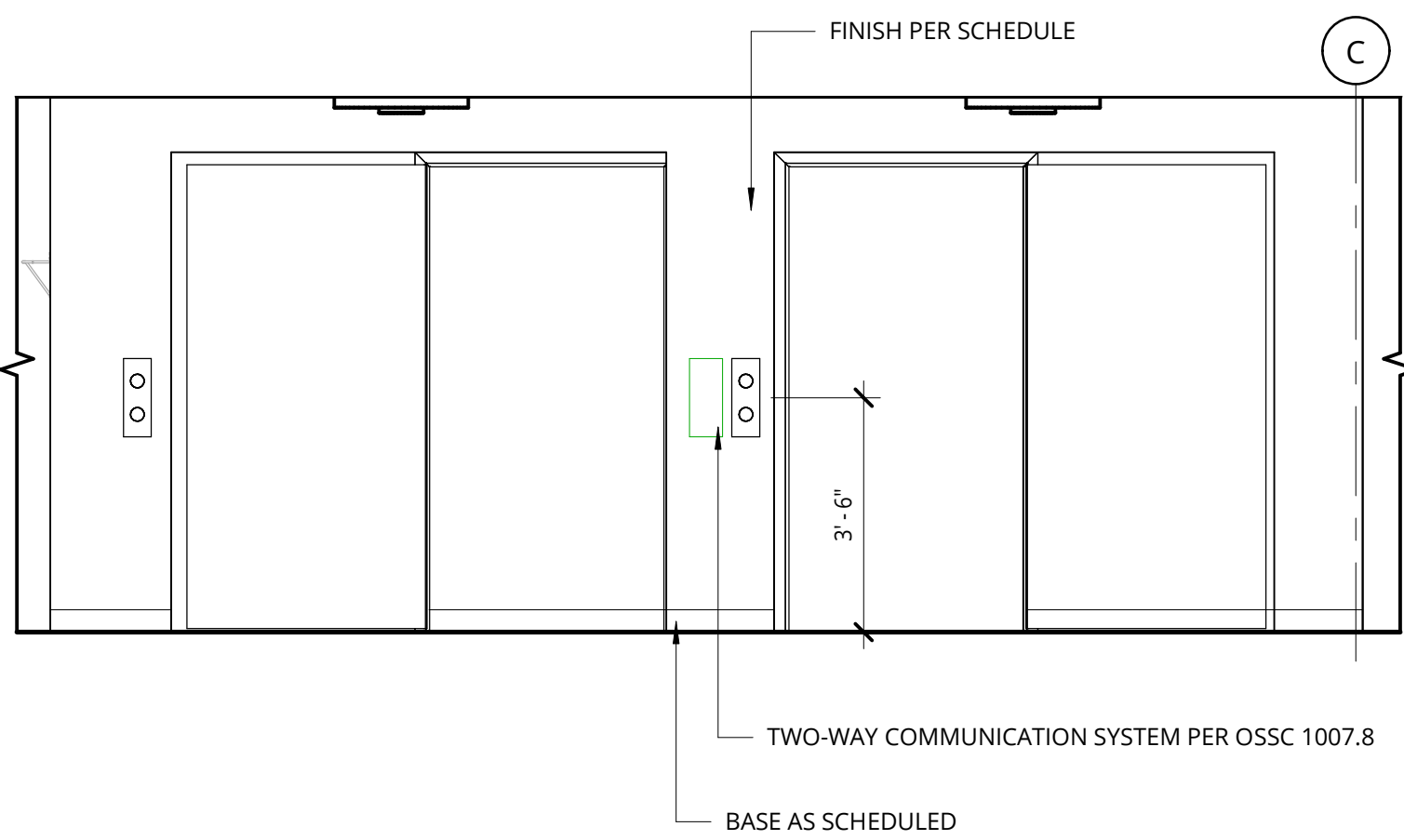
9 MOVE-IN 100K  
3/8" = 1'-0"



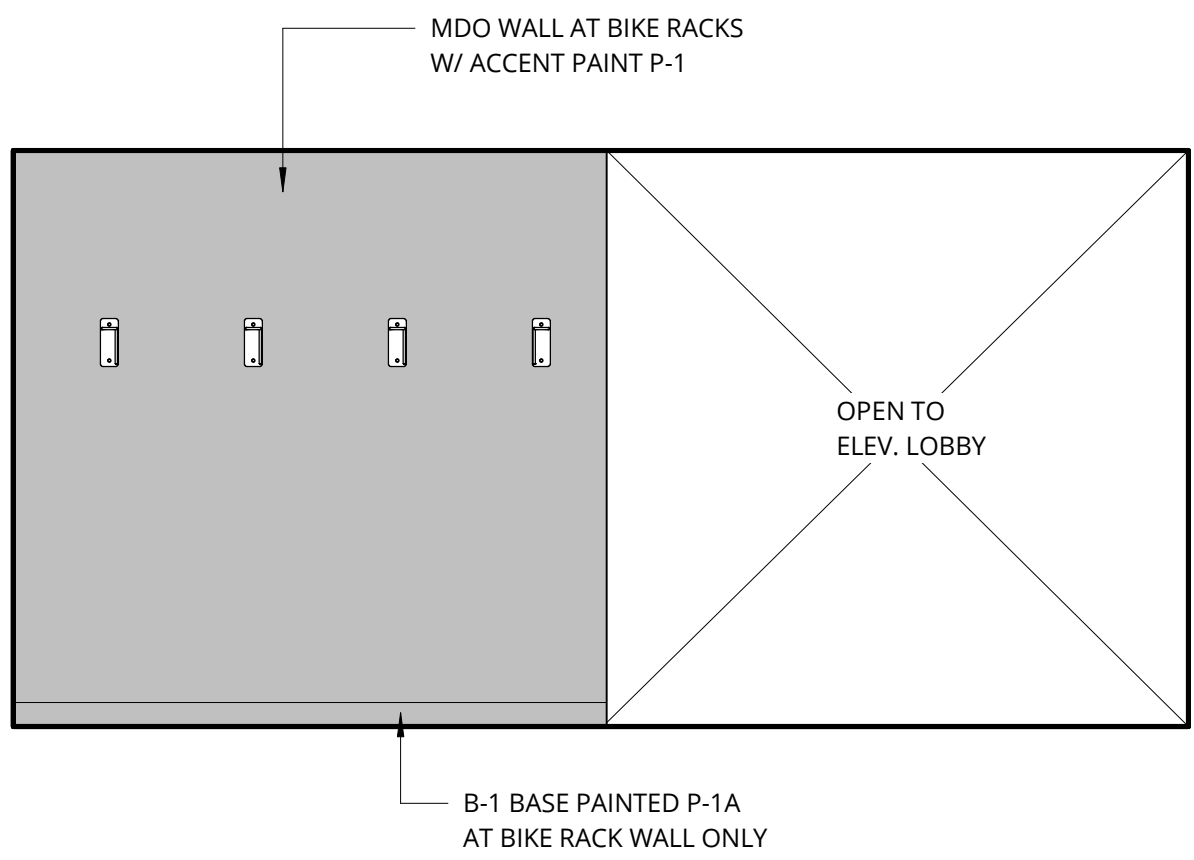
10 MOVE-IN 100K  
3/8" = 1'-0"



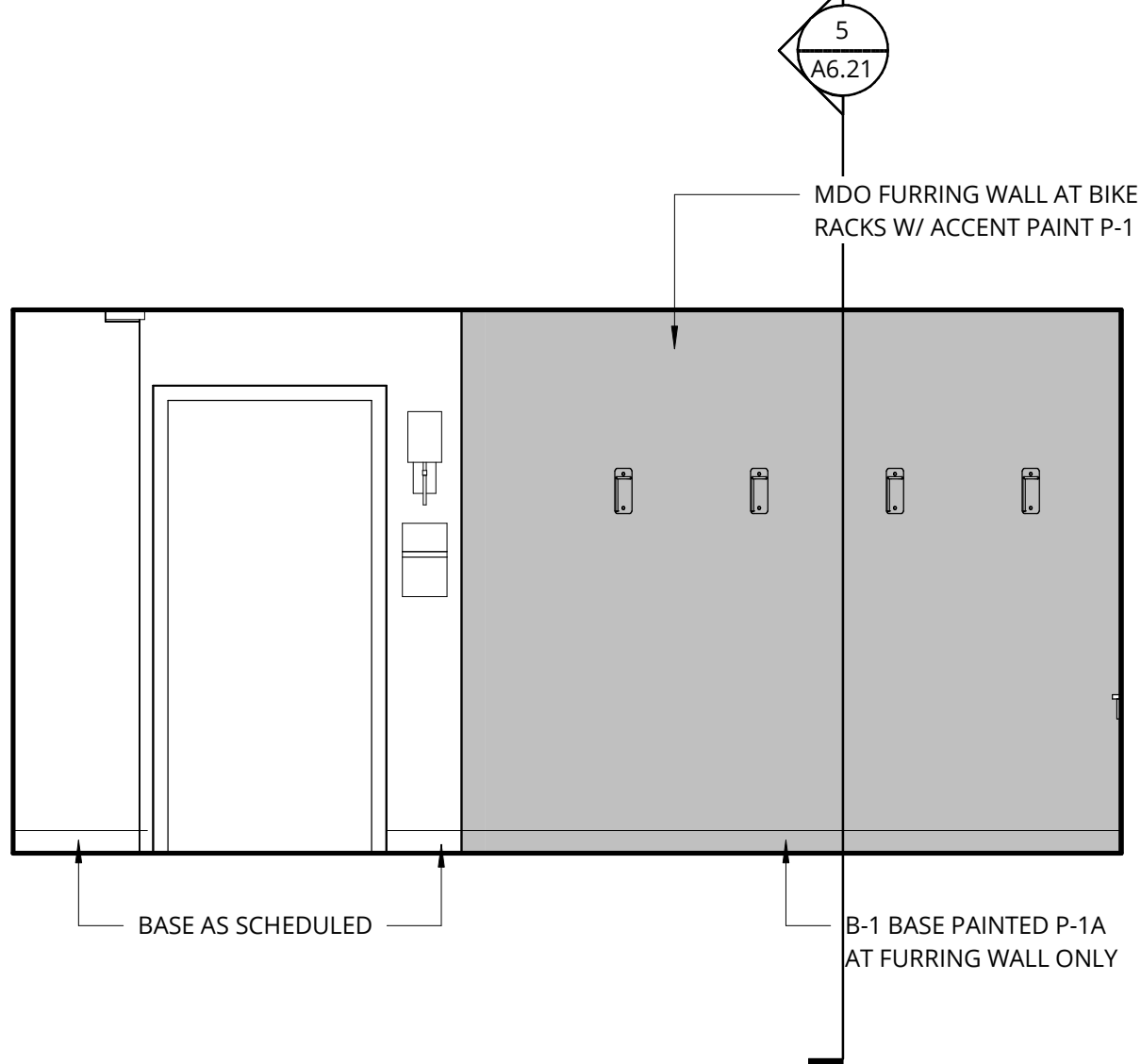
11 TYP. ELEV. LOBBY  
3/8" = 1'-0"



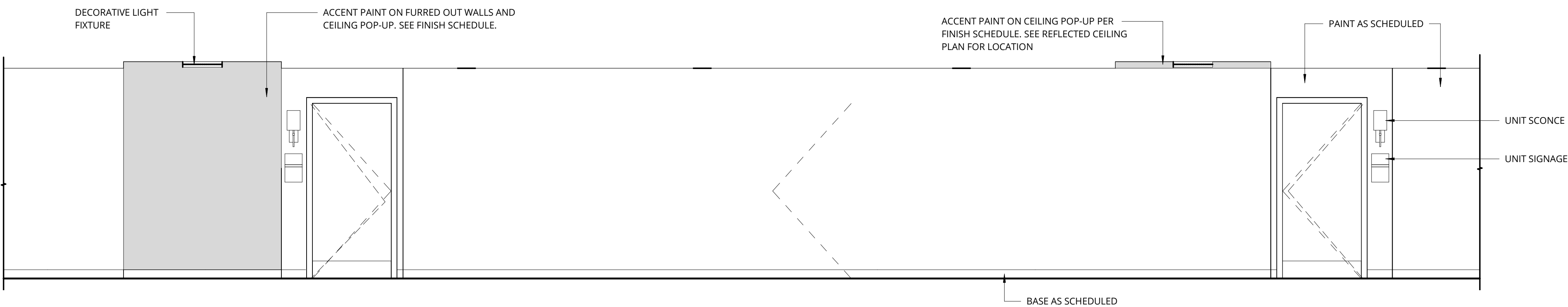
12 TYP. ELEV LOBBY  
3/8" = 1'-0"



13 TYP. BIKE AREA  
3/8" = 1'-0"



14 TYP. BIKE AREA  
3/8" = 1'-0"



15 TYPICAL CORRIDOR ELEVATION - PARTIAL  
3/8" = 1'-0"

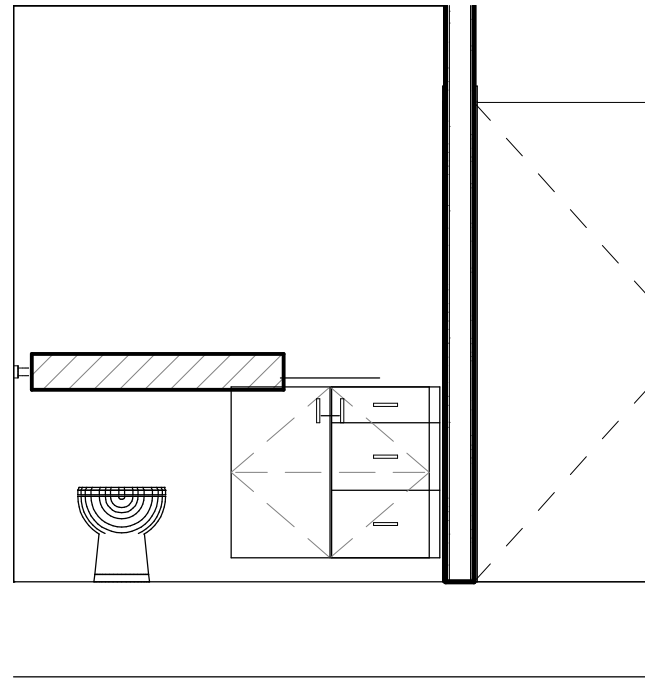
REVISION	DATE	REASON FOR ISSUE

INTERIOR  
ELEVATIONS -  
PUBLIC  
PERMIT / GMP

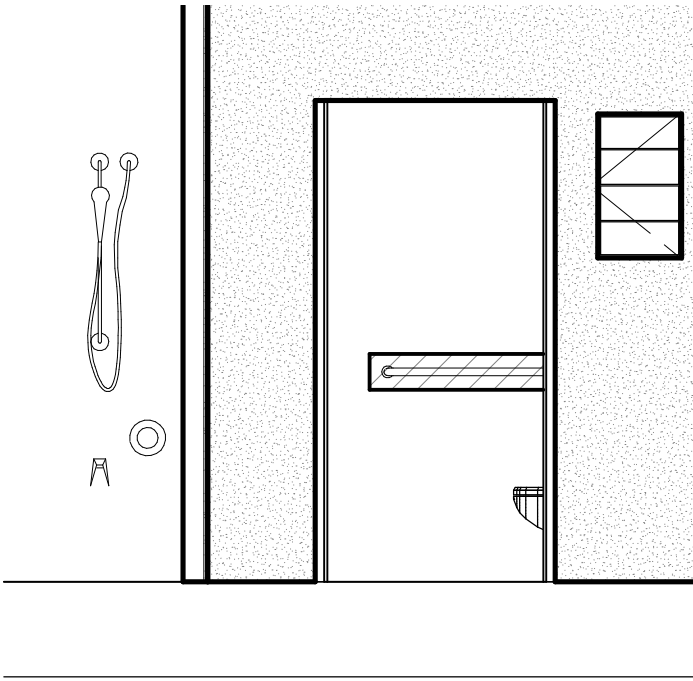
DATE 17 OCT 2018	PROJECT NUMBER 149000
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SHEET NUMBER  
A10.02

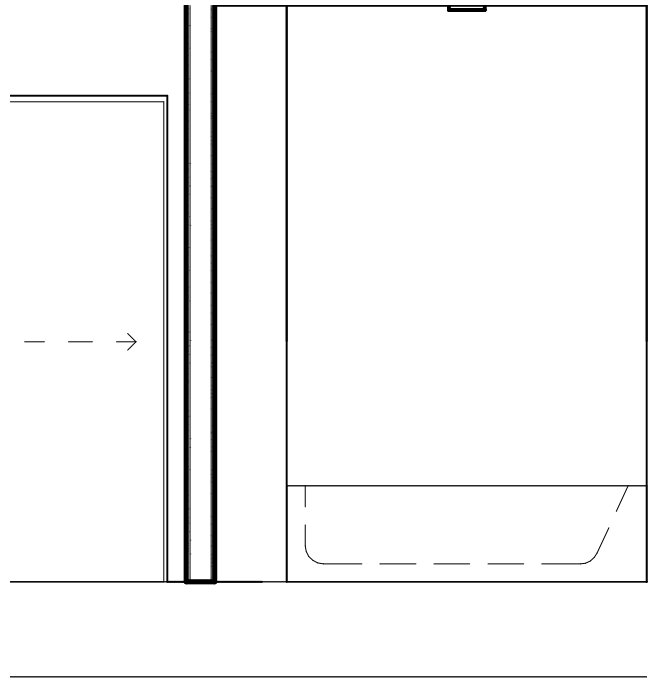




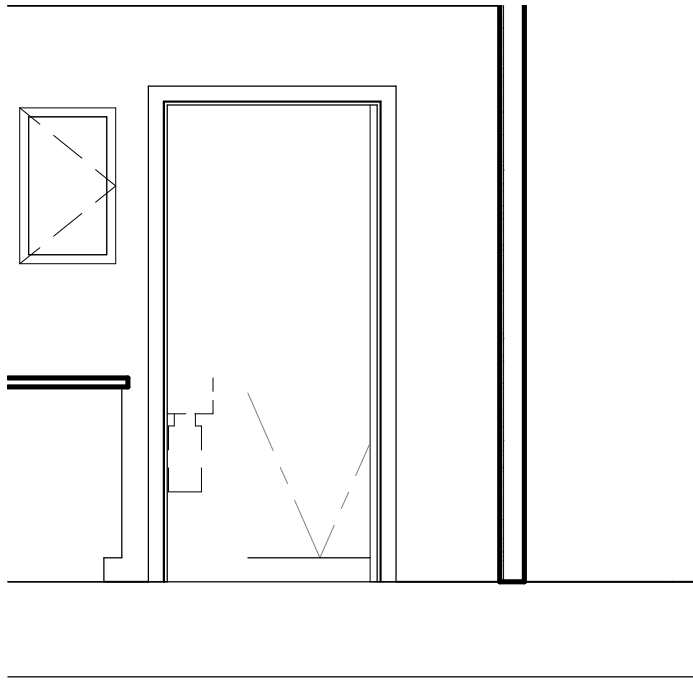
1 UNIT 202 - BATH NORTH  
3/8" = 1'-0"



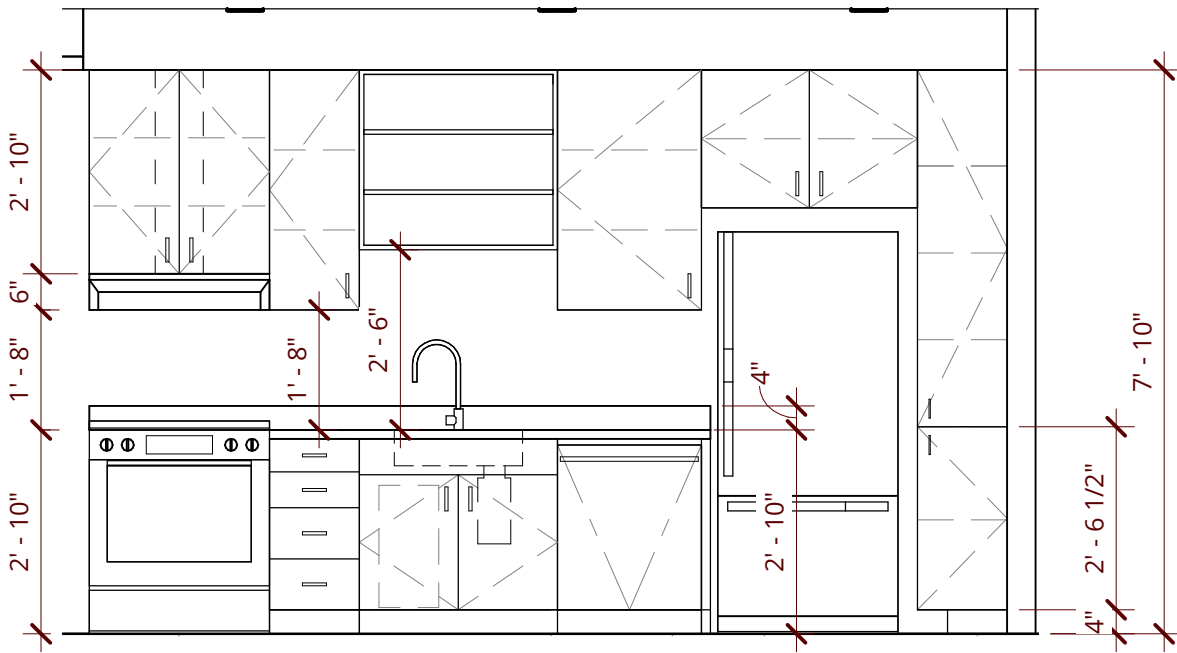
2 UNIT 202 - BATH EAST  
3/8" = 1'-0"



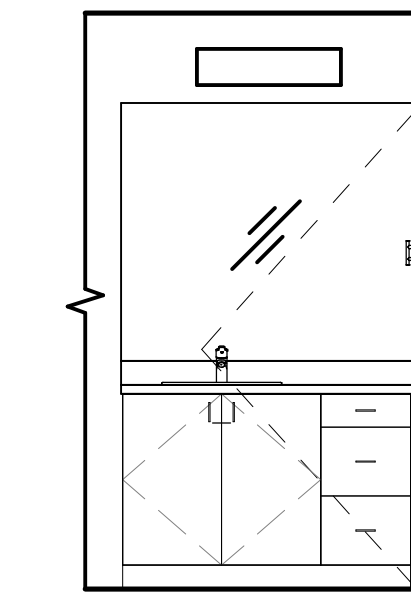
5 UNIT 202 - BATH SOUTH  
3/8" = 1'-0"



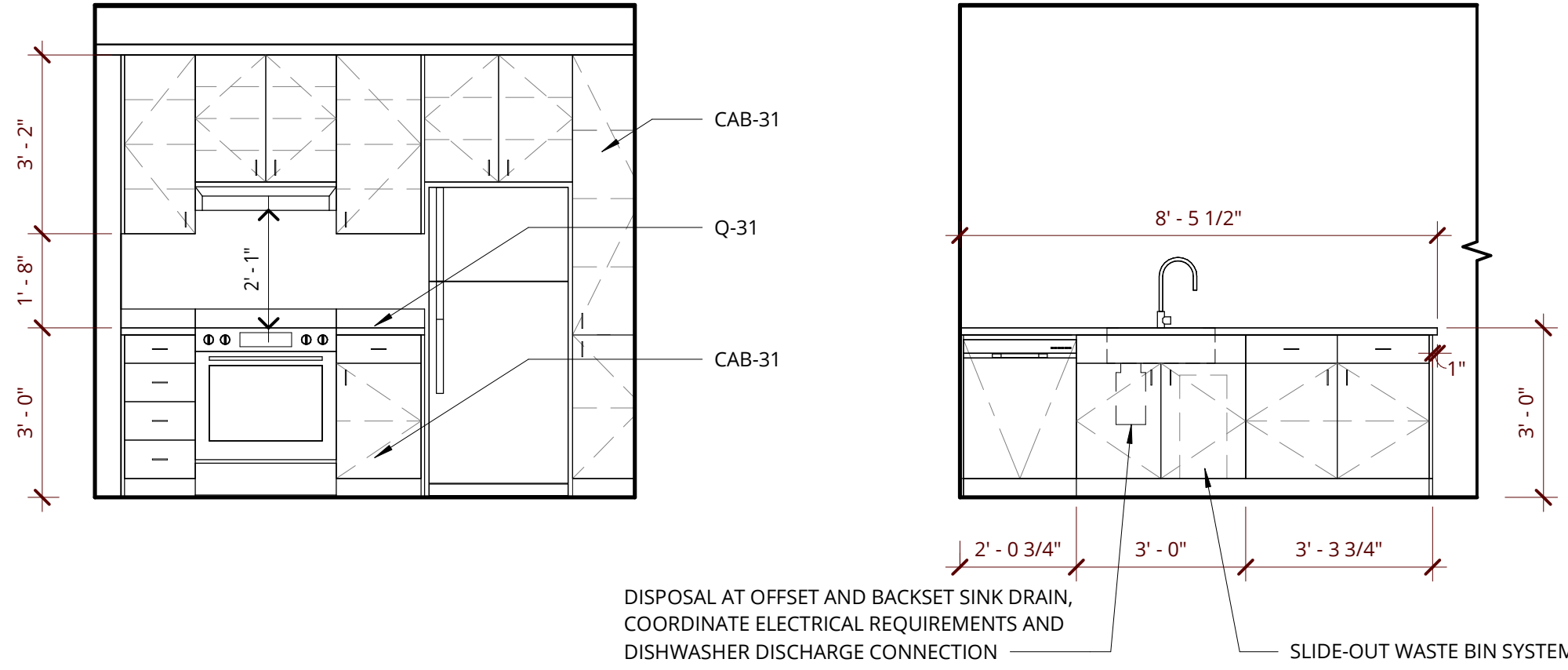
6 UNIT 202 - BATH WEST  
3/8" = 1'-0"



7 UNIT 202 - KITCHEN  
3/8" = 1'-0"



18 UNIT VANITY  
3/8" = 1'-0"



3 UNIT KITCHEN - SHORT  
3/8" = 1'-0"

4 UNIT KITCHEN - SHORT  
3/8" = 1'-0"

REGISTERED ARCHITECT  
ISAAC S. JOHNSON  
5082  
ISAAC JOHNSON  
PORTLAND, OR  
STATE OF OREGON

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PORTLAND, OR 97209  
T 503.245.7100  
1505 5TH AVE, SUITE 300  
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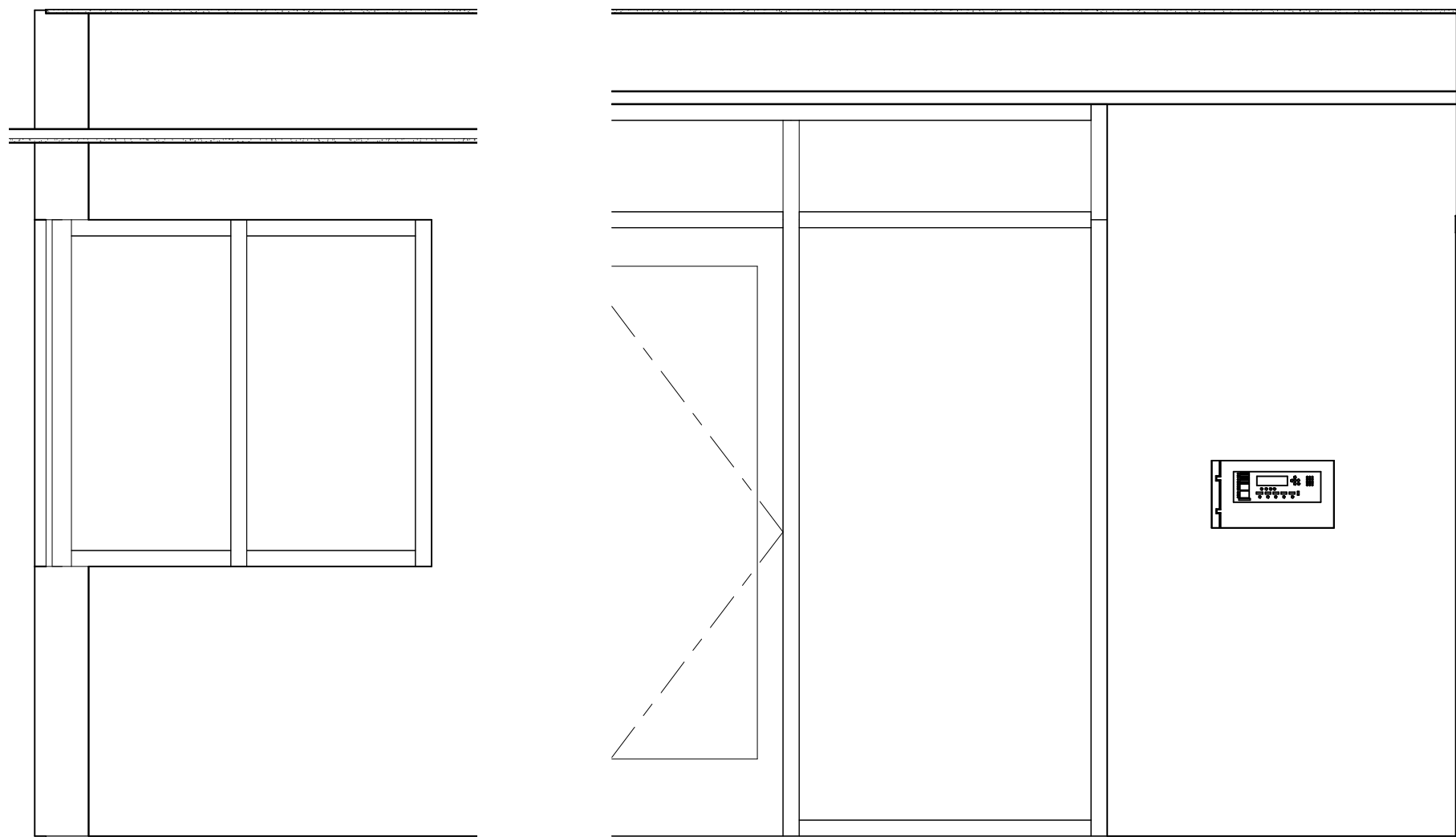
NORTH WILLIAMS APARTMENTS - FAMILY HOUSING  
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BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

INTERIOR  
ELEVATIONS - UNIT  
KITCHEN AND BATH  
PERMIT / GMP

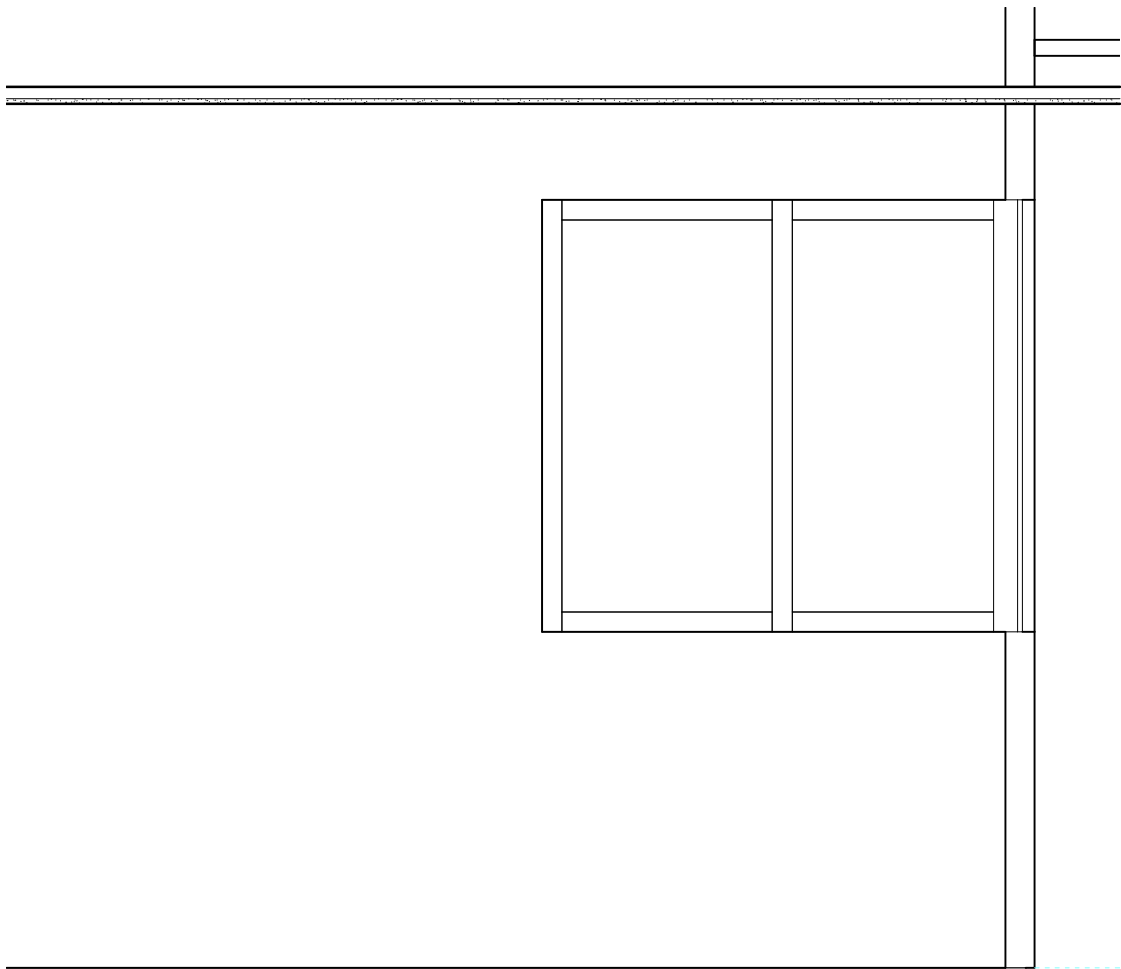
DATE 17 OCT 2018	PROJECT NUMBER 149000
SHEET NUMBER	





1 ELEVATION - OFFICE NORTH

1/2" = 1'-0"



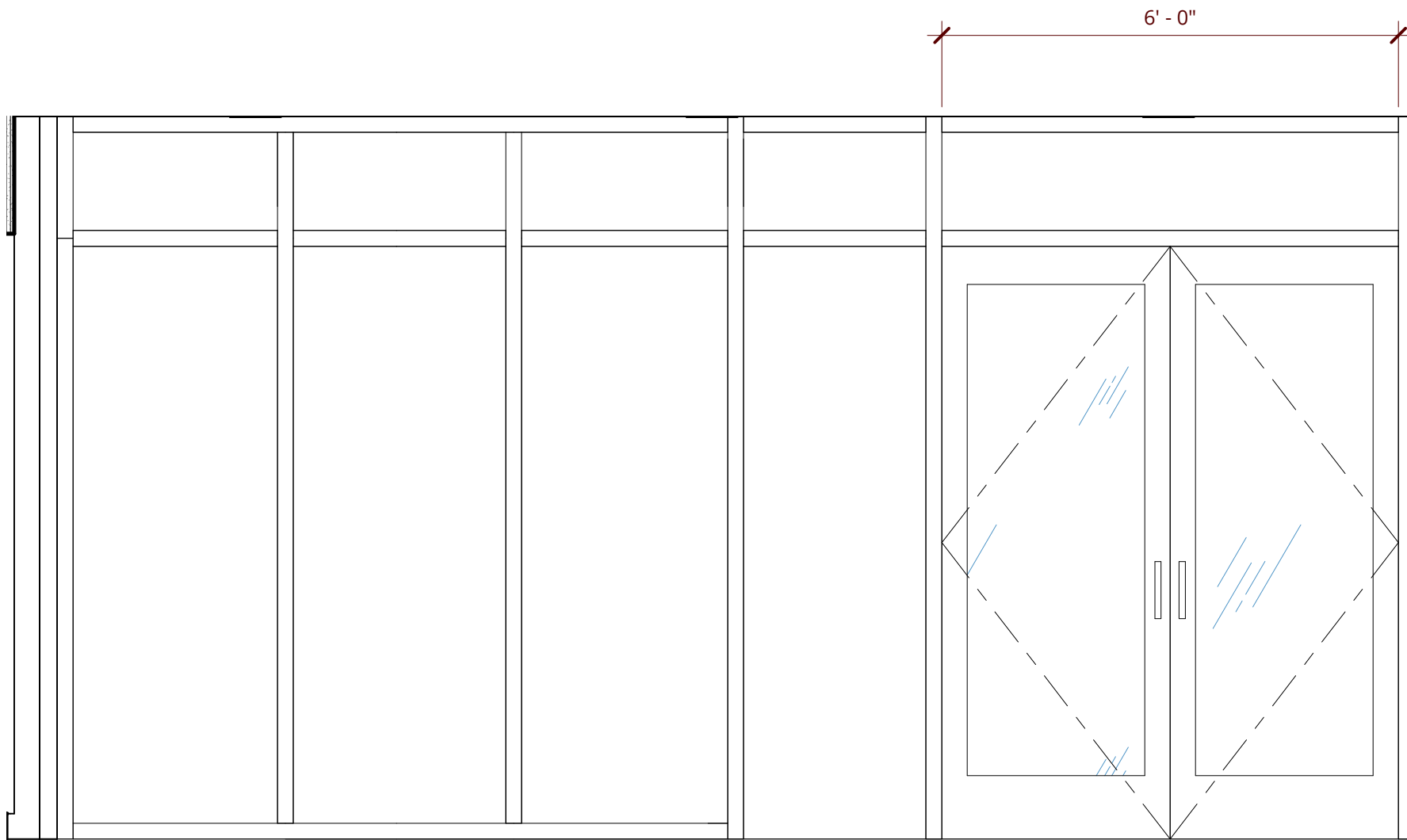
2 ELEVATION - OFFICE EAST

1/2" = 1'-0"



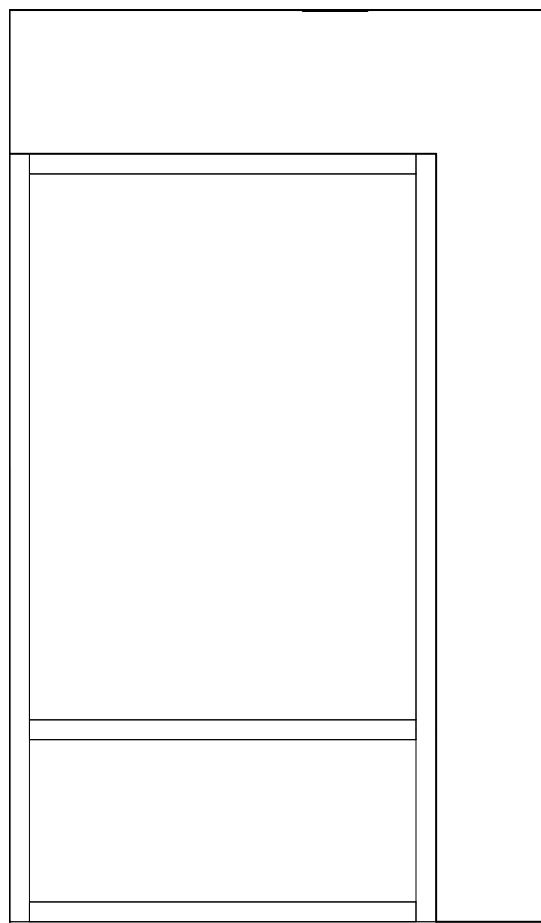
5 ELEVATION - LAUNDRY WEST

1/2" = 1'-0"



4 ELEVATION - COMMUNITY SOUTH

1/2" = 1'-0"



3 ELEVATION - COMMUNITY WEST

1/2" = 1'-0"



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PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063

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NORTH WILLIAMS APARTMENTS - FAMILY HOUSING

2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

INTERIOR GLAZING  
ELEVATIONS

PERMIT / GMP

DATE  
17 OCT 2018

PROJECT NUMBER  
149000

SHEET NUMBER

A10.11



C:\Beet Projects\149000-18 North Williams Arch. Central\49000-18 North Williams Arch. plan\BldgSchedule.dwg 10/17/2018 10:33:26 AM

FINISH SCHEDULE											
ROOM NO.	ROOM NAME	FLOOR FINISH	BASE FINISH	WALL FINISH				CASEWORK FINISH	COUNTERTOP FINISH	CEILING FINISH	COMMENTS
				N	E	S	W				
B O PIT											
---	ELEV	T-1									
LEVEL 1											
100A	ENTRY	T-1	T-1	P-20	P-20	P-20	P-20			P-20	2, 12
100B	OFFICE	C-2	RB-2	P-20	P-20	P-20	P-20			ACT-1	2
100C	WORK	C-2	RB-2	P-20	P-20	P-20	P-20	PL-1	PL-3	ACT-1	2
100D	SECURITY	C-2	RB-2	P-20	P-20	P-20	P-20	PL-1	PL-3	ACT-1	
100E	OFFICE	C-2	RB-2	P-20	P-20	P-20	P-20			ACT-1	
100F	COMMUNITY	LVT-1/2	B-1/P-20A	P-20	P-20	P-20, T-6, T-7, T-8, T-9, T-10, P-24	P-20, WC-1	PL-2	Q-1	ACT-1/P-20/AWC-1	2, 4, 13
100G	OFFICE	C-2	RB-2	P-20	P-20	P-20	P-20			ACT-1	2
100H	STORAGE	LVT-1/2	RB-2	P-20	P-20	P-20	P-20			P-20	
100J	TOILET	T-3	T-4	T-4/T-5/P-5A	T-4/T-5/P-5A	T-4/T-5/P-5A	T-4/T-5/P-5A			P-20A	1
100K	MOVE-IN	T-1	T-1	P-20/P-22	P-20/P-22	P-20	P-20			P-20	9, 12
100L	LAUNDRY	TC-1	RB-2	P-20A	P-20A	P-20A	P-20A		PL-21	P-20A	
100M	MAINTENANCE	TC-1	RB-2	FRP-1/P-20	P-20	FRP-1/P-20	P-20			P-20	
100N	TRASH/RECYCLING	TC-1	RB-2	FRP-1/P-20B	FRP-1/P-20B	FRP-1/P-20B	FRP-1/P-20B			P-20B	10
100P	RISER	SC	RB-2	P-20	P-20	P-20	P-20			P-20	
100Q	ELECTRICAL	SC	RB-2	P-20	P-20	P-20	P-20			P-20	
100R	CORRIDOR	C-21	B-1/P-20A	P-20/P-22	P-20/P-22	P-20/P-22	P-20/P-22			P-20/P-22	5
100S	DATA ENTRY/FIRE ALARM	LN-1	RB-2	P-20	P-20	P-20	P-20			P-20	
100T	JANITOR	LN-1	RB-2	FRP-1/P-20	FRP-1/P-20	FRP-1/P-20	FRP-1/P-20			P-20	3
100U	MAIN TRASH/RECYCLING	SC	RB-2	FRP-1/P-20B	FRP-1/P-20B	FRP-1/P-20B	FRP-1/P-20B			P-20B	11
100Z	CORRIDOR	T-1	T-1	WVP-1/P-20/P-3	P-20	P-20	P-20			AWC-1/P-20	13
ST1	STAIR 1	C-3	RB-2	P-20	P-20	P-20	P-20			P-20	8
ST2	STAIR 2	C-3	RB-2	P-20	P-20	P-20	P-23			P-20	8
LEVEL 2											
200A	CORRIDOR	C-21	B-1/P-20A	P-20/P-23	P-20/P-23	P-20/P-23	P-20/P-23			P-20/P-23	6
200B	TRASH/RECYCLING	LN-1	RB-1	FRP-1/P-20B	FRP-1/P-20B	FRP-1/P-20B	FRP-1/P-20B			P-1B	11
200C	ELEV LOBBY	LVT-3	B-2/B-1/P-20A	WVP-1/WC-23	P-20	P-20	FRP-1/P-20B			P-20	6
200D	BICYCLES	LVT-3	B-1/P-20A	P-20	P-2/P-20	P-20	P-2			P-20	10
200E	ELECTRICAL	LN-1	RB-1	P-20	P-20	P-20	P-20			P-20	
200G	CORRIDOR	C-21	B-1/P-20A	P-20/P-23	P-20/P-23	P-20/P-23	P-20/P-23			P-20/P-23	6
LEVEL 3											
300A	CORRIDOR	C-21	B-1/P-20A	P-20/P-24	P-20/P-24	P-20/P-24	P-20/P-24			P-20/P-24	7
300B	TRASH/RECYCLING	LN-1	RB-1	FRP-1/P-20B	FRP-1/P-20B	FRP-1/P-20B	FRP-1/P-20B			P-7	11
300C	ELEV LOBBY	LVT-3	B-2/B-1/P-20A	WVP-1/WC-24	P-20	P-20	FRP-1/P-20B			P-20	7
300D	BICYCLES	LVT-3	B-1/P-20A	P-20	P-2/P-20	P-20	P-2			P-20	10
300E	DATA	LN-1	RB-1	P-20	P-20	P-20	P-20			P-20	
300G	CORRIDOR	C-21	B-1/P-20A	P-20/P-24	P-20/P-24	P-20/P-24	P-20/P-24			P-20/P-24	7
LEVEL 4											
400A	CORRIDOR	C-21	B-1/P-20A	P-20/P-22	P-20/P-22	P-20/P-22	P-20/P-22			P-20/P-22	5
400B	TRASH/RECYCLING	LN-1	RB-1	FRP-1/P-20B	FRP-1/P-20B	FRP-1/P-20B	FRP-1/P-20B			P-7	11
400C	ELEV LOBBY	LVT-3	B-2/B-1/P-20A	WVP-1/WC-22	P-20	P-20	P-20			P-20	5
400D	BICYCLES	LVT-3	B-1/P-20A	P-20	P-2/P-20	P-20	P-2			P-20	10
400E	ELECTRICAL	LN-1	RB-1	P-20	P-20	P-20	P-20			P-20	
400G	CORRIDOR	C-21	B-1/P-20A	P-20/P-22	P-20/P-22	P-20/P-22	P-20/P-22			P-20/P-22	5
LEVEL 5											
500A	CORRIDOR	C-21	B-1/P-20A	P-20/P-23	P-20/P-23	P-20/P-23	P-20/P-23			P-20/P-23	6
500B	TRASH/RECYCLING	LN-1	RB-1	FRP-1/P-20B	FRP-1/P-20B	FRP-1/P-20B	FRP-1/P-20B			P-1B	11
500C	ELEV LOBBY	LVT-3	B-2/B-1/P-20A	WVP-1/WC-23	P-20	P-20	P-20			P-20	6
500D	BICYCLES	LVT-3	B-1/P-20A	P-20	P-2/P-20	P-20	P-2			P-20	10
500E	ELECTRICAL	LN-1	RB-1	P-20	P-20	P-20	P-20			P-20	
500F	JANITOR	LN-1	RB-1	FRP-1/P-20	FRP-1/P-20	FRP-1/P-20	FRP-1/P-20			P-20	3
500G	CORRIDOR	C-21	B-1/P-20A	P-20/P-23	P-20/P-23	P-20/P-23	P-20/P-23			P-20/P-23	6
T O PLATE											
601	VESTIBULE	LN-1	RB-1	P-20	P-20	P-20	P-20			P-20	
602	ELEV CTRL	LN-1	RB-1	P-20	P-20	P-20	P-20			P-20	

FINISH SCHEDULE NOTES - PUBLIC

1.

PROVIDE WALL TILE, T-4 AND T-5, TO 5'-0" AFF, PAINT ABOVE.
2.

PROVIDE MANUAL ROLLER SHADES, RS-1, ON ALL EXTERIOR WINDOWS IN THIS ROOM.
3.

PROVIDE FRP TO 6' FROM INSIDE CORNER OF MOP SINK ON WALLS AS INDICATED. FRP TO 5'-0" AFF AND PAINT ABOVE.
4.

PROVIDE TILE BACKSPLASH & ACCENT PAINT, SEE ELEVATION.
5.

GENERAL CEILING PAINT TO BE P-20. ACCENT PAINT P-22 ON FURRED OUT WALLS IN CORRIDORS, PER ELEVATION, TYP. CONTINUE ACCENT PAINT TO GYP CEILING RECESS ABOVE. WC-22 AT ELEVATOR LOBBY PER ELEVATION.
6.

GENERAL CEILING PAINT TO BE P-20. ACCENT PAINT P-23 ON FURRED OUT WALLS IN CORRIDORS, PER ELEVATION, TYP. CONTINUE ACCENT PAINT TO GYP CEILING RECESS ABOVE. WC-23 AT ELEVATOR LOBBY PER ELEVATION
7.

GENERAL CEILING PAINT TO BE P-20. ACCENT PAINT P-24 ON FURRED OUT WALLS IN CORRIDORS, PER ELEVATION, TYP. CONTINUE ACCENT PAINT TO GYP CEILING RECESS ABOVE. WC-24 AT ELEVATOR LOBBY PER ELEVATION
8.

PROVIDE (1) ACCENT WALL IN STAIRWAY AT ALL LEVELS.
9.

PROVIDE WALL CAP TO MATCH WD-1 AT TOP OF MAILBOX WALLS.
10.

PROVIDE 1/2" PAINTED MDO PLYWOOD FROM FLOOR TO CEILING ALONG WALLS WITH BIKE RACKS WITH BLOCKING BEHIND AS REQUIRED.
11.

PROVIDE FRP TO 5'- 0" AFF AND PAINT ABOVE, AS INDICATED.
12.

WALK OFF MAT AT ENTRY DOOR; C-1
13.

SEE REFLECTED CEILING PLAN FOR AWC-1 LAYOUT.

FINISH SCHEDULE - UNITS											
UNIT TYPE	TYPICAL UNLESS NOTED				KITCHEN		BATHROOM				COMMENTS
	FLOOR FINISH	BASE FINISH	CEILING FINISH	WALL FINISH	CABINET FINISH	COUNTERTOP	FLOOR FINISH	BASE FINISH	CABINET FINISH	COUNTERTOP	
UNIT-1A	LVT-31	B-1/P-31A	P-31	P-31	CAB-31	Q-31	SV-31	RB-31	CAB-31	Q-31	1, 2, 3, 4
UNIT-1A-A	LVT-31	B-1/P-31A	P-31	P-31	CAB-31	Q-31	SV-31	RB-31	CAB-31	Q-31	1, 2, 3, 4
UNIT-1A-C	LVT-31	B-1/P-31A	P-31	P-31	CAB-31	Q-31	SV-31	RB-31	CAB-31	Q-31	1, 2, 3, 4
UNIT-1B	LVT-31	B-1/P-31A	P-31	P-31	CAB-31	Q-31	SV-31	RB-31	CAB-31	Q-31	1, 2, 3, 4
UNIT-2A	LVT-31	B-1/P-31A	P-31	P-31	CAB-31	Q-31	SV-31	RB-31	CAB-31	Q-31	1, 2, 3, 4
UNIT-2B	LVT-31	B-1/P-31A	P-31	P-31	CAB-31	Q-31	SV-31	RB-31	CAB-31	Q-31	1, 2, 3, 4
UNIT-2B-A	LVT-31	B-1/P-31A	P-31	P-31	CAB-31	Q-31	SV-31	RB-31	CAB-31	Q-31	1, 2, 3, 4
UNIT-2B-C	LVT-31	B-1/P-31A	P-31	P-31	CAB-31	Q-31	SV-31	RB-31	CAB-31	Q-31	1, 2, 3, 4
UNIT-3A	LVT-31	B-1/P-31A	P-31	P-31	CAB-31	Q-31	SV-31	RB-31	CAB-31	Q-31	1, 2, 3, 4
UNIT-3B	LVT-31	B-1/P-31A	P-31	P-31	CAB-31	Q-31	SV-31	RB-31	CAB-31	Q-31	1, 2, 3, 4
UNIT-3C	LVT-31	B-1/P-31A	P-31	P-31	CAB-31	Q-31	SV-31	RB-31	CAB-31	Q-31	1, 2, 3, 4
UNIT-3C-A	LVT-31	B-1/P-31A	P-31	P-31	CAB-31	Q-31	SV-31	RB-31	CAB-31	Q-31	1, 2, 3, 4
UNIT-3D	LVT-31	B-1/P-31A	P-31	P-31	CAB-31	Q-31	SV-31	RB-31	CAB-31	Q-31	1, 2, 3, 4

FINISH SCHEDULE NOTES - UNITS

1.

6" HIGH BACKSPLASH AT KITCHEN AND 4" HIGH AT BATHROOM TO MATCH COUNTERTOP MATERIAL.
2.

UNIT INTERIOR DOORS AND FRAMES PAINTED P-31.
3.

UNIT ENTRY DOOR AND FRAME PAINTED P-21 ON CORRIDOR SIDE, PAINTED P-31 ON UNIT SIDE.
4.

PROVIDE MANUAL BLINDS; BL-1, ON ALL EXTERIOR UNIT WINDOWS.



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PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

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SAN FRANCISCO, CA 94103  
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BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

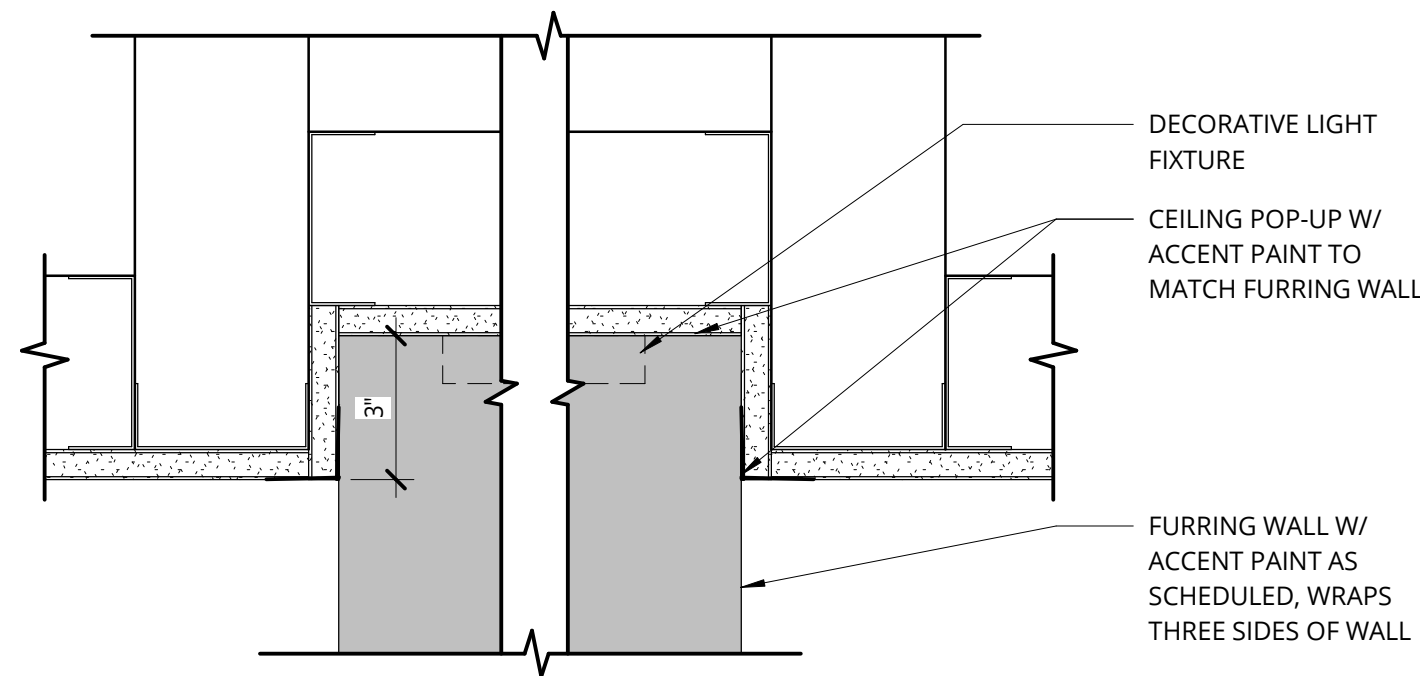
FINISH SCHEDULE

PERMIT / GMP

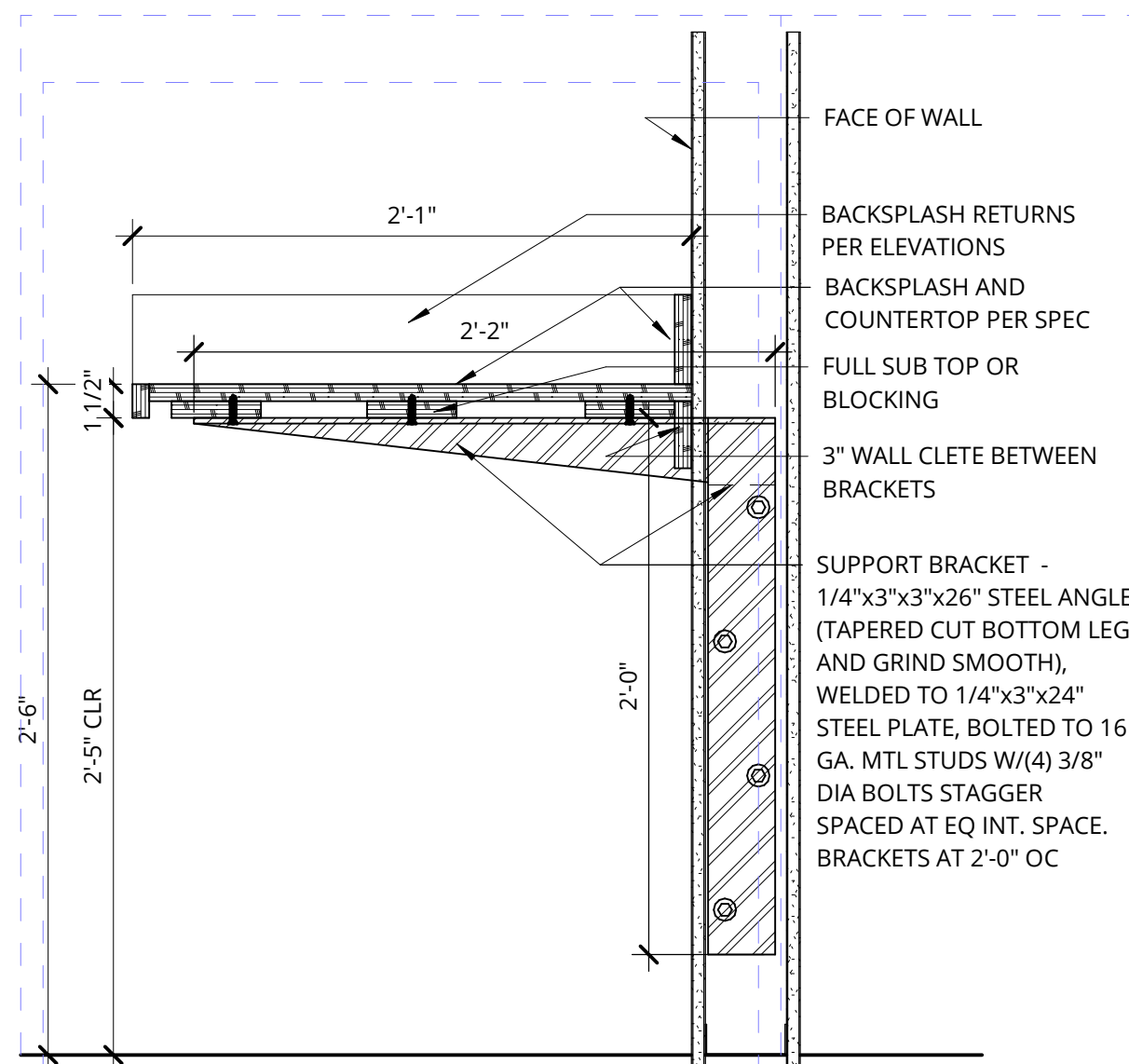
DATE	PROJECT NUMBER
17 OCT 2018	149000
SHEET NUMBER	

A10.12

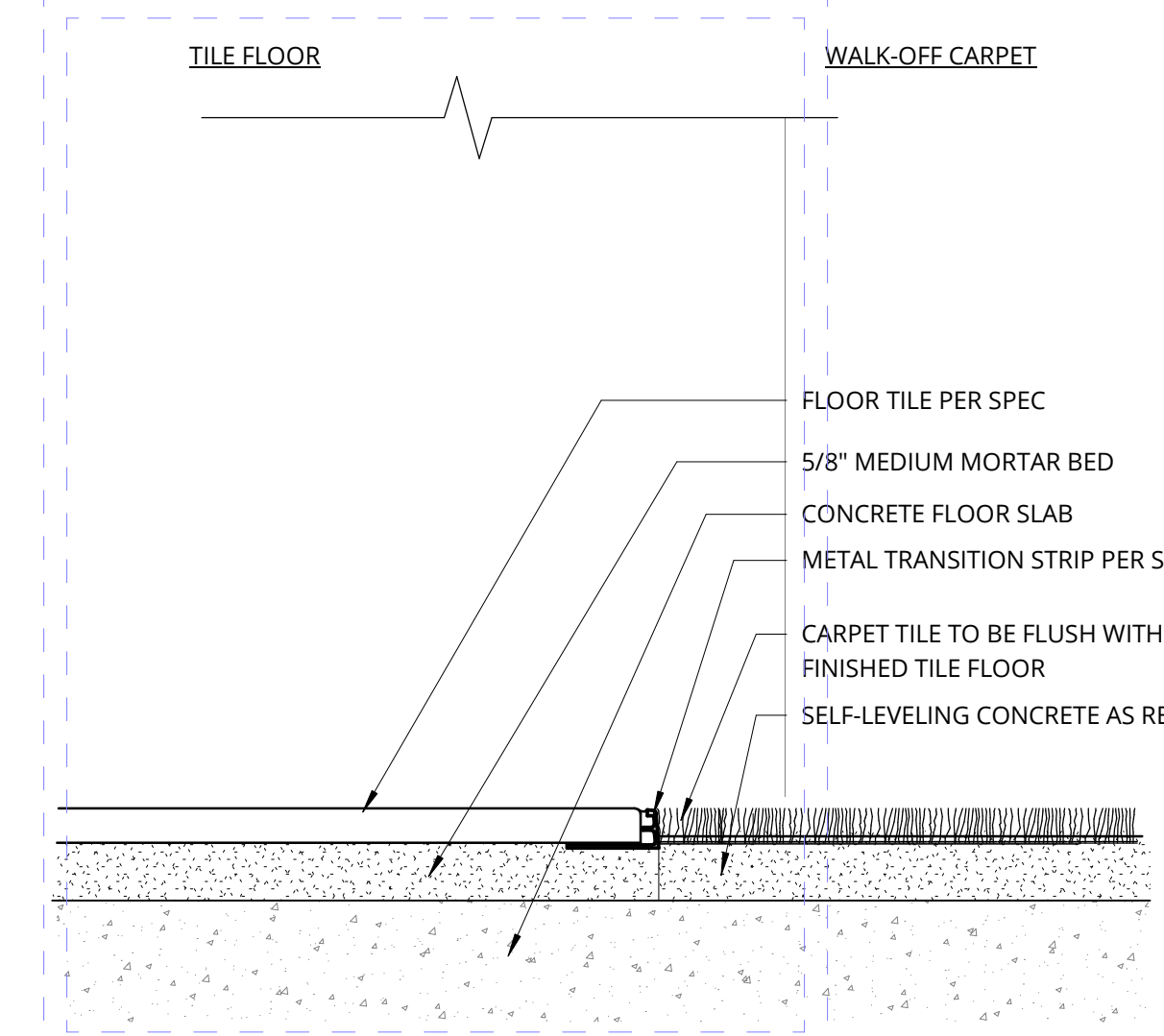




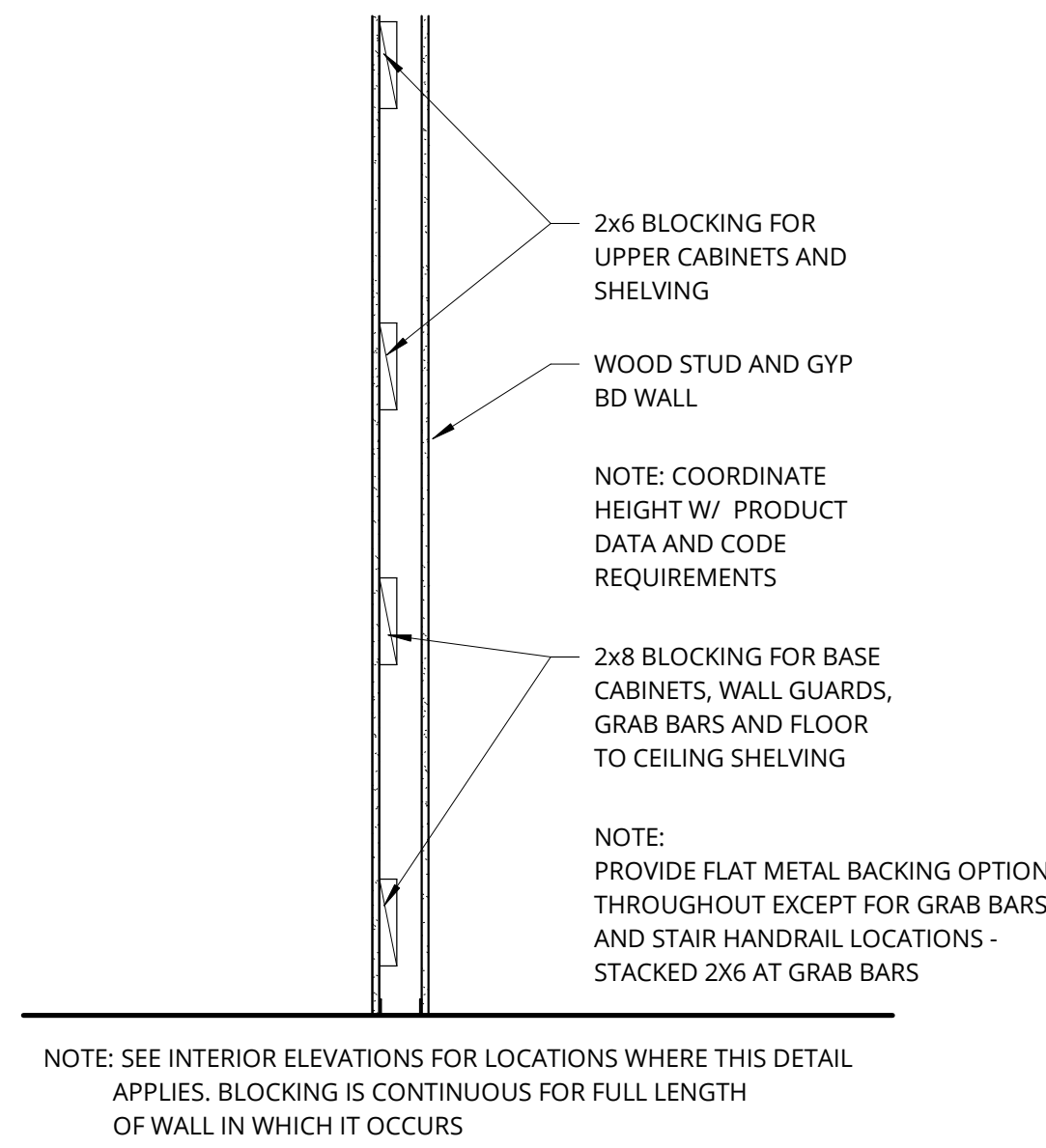
13 CORRIDOR CEILING POP-UP  
3" = 1'-0"



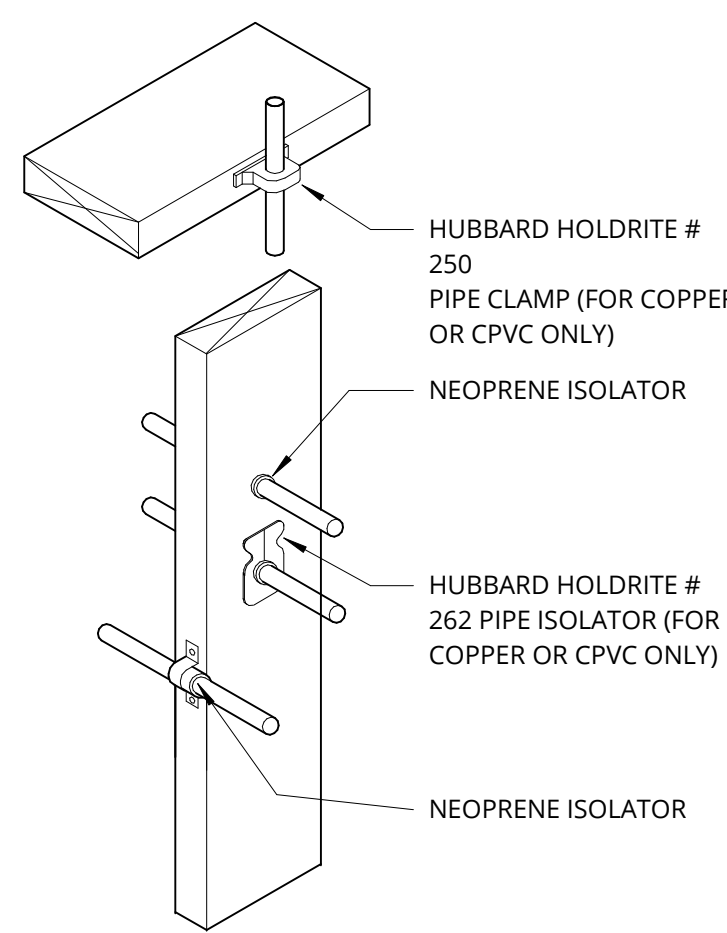
12 COUNTER TOP WITH SUPPORT  
1 1/2" = 1'-0"



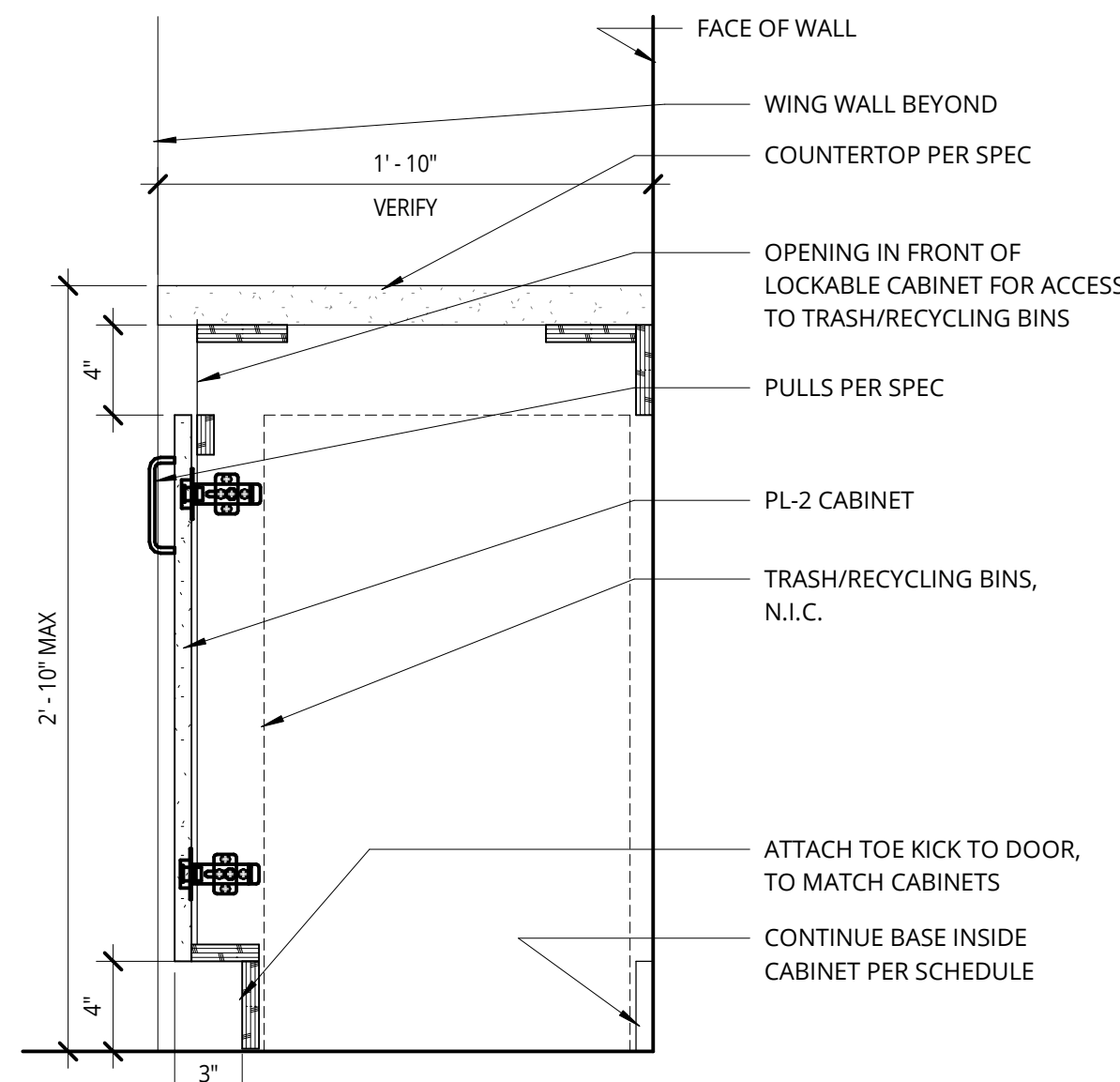
11 TILE TO WALK-OFF CARPET  
6" = 1'-0"



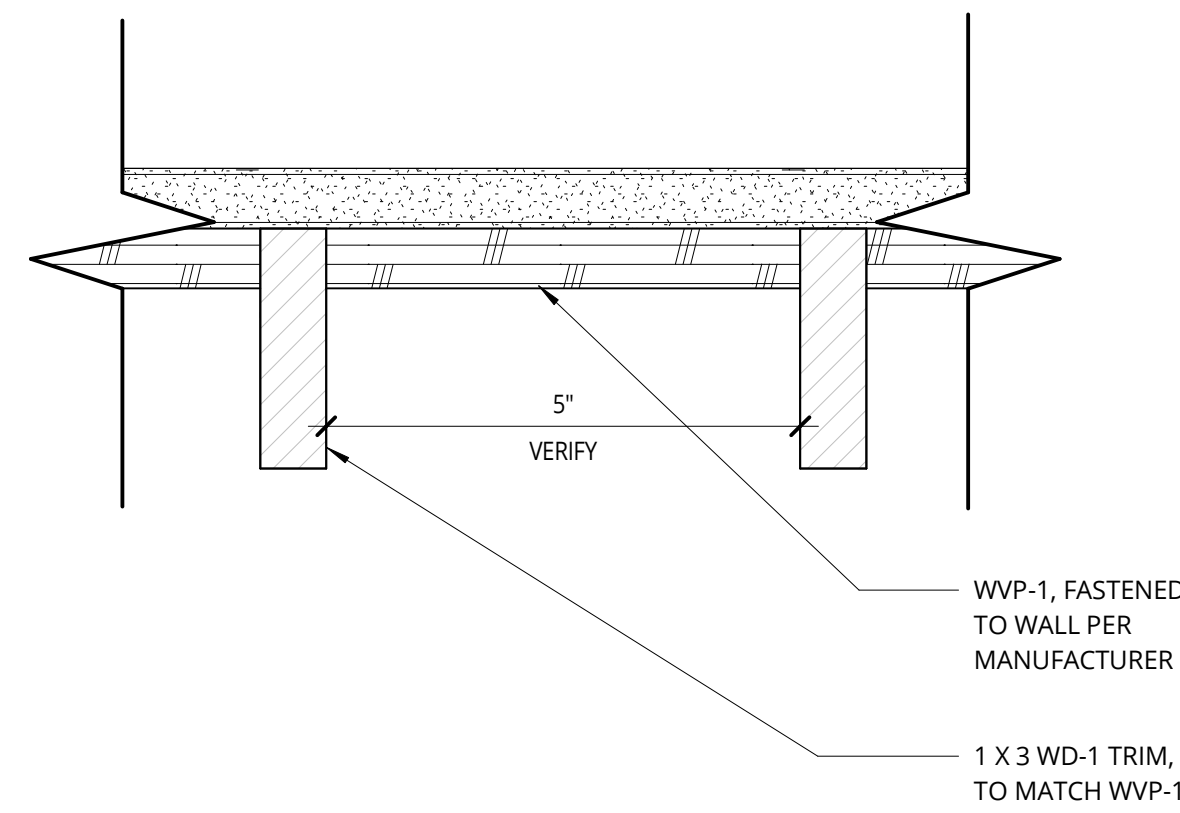
1 BACKING PLATES  
3/4" = 1'-0"



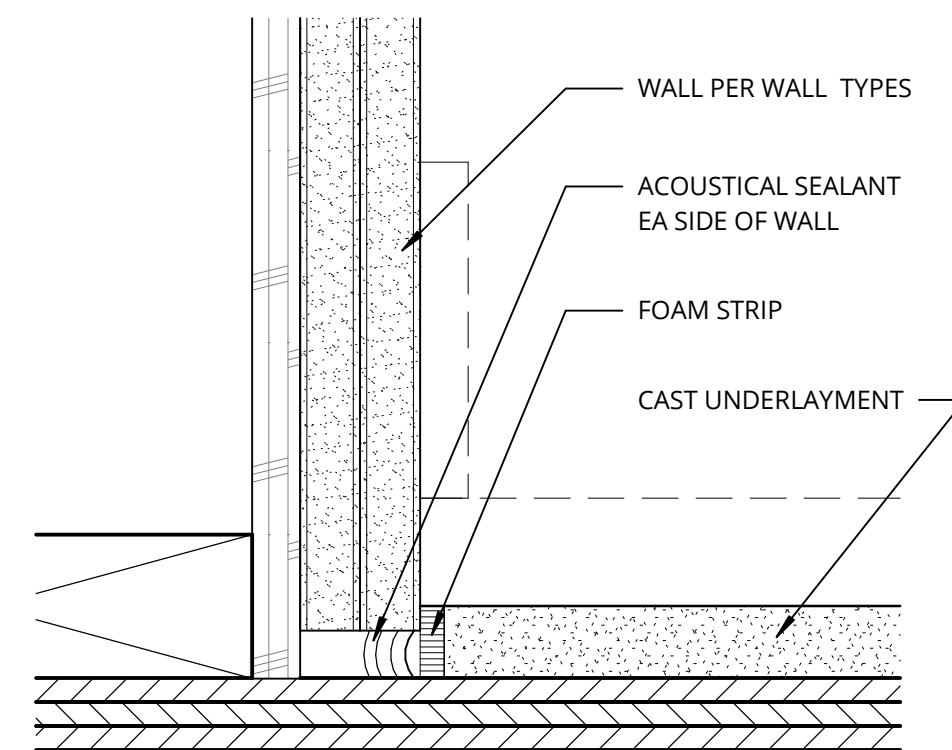
4 WATER SUPPLY PIPING ISOLATION  
1 1/2" = 1'-0"



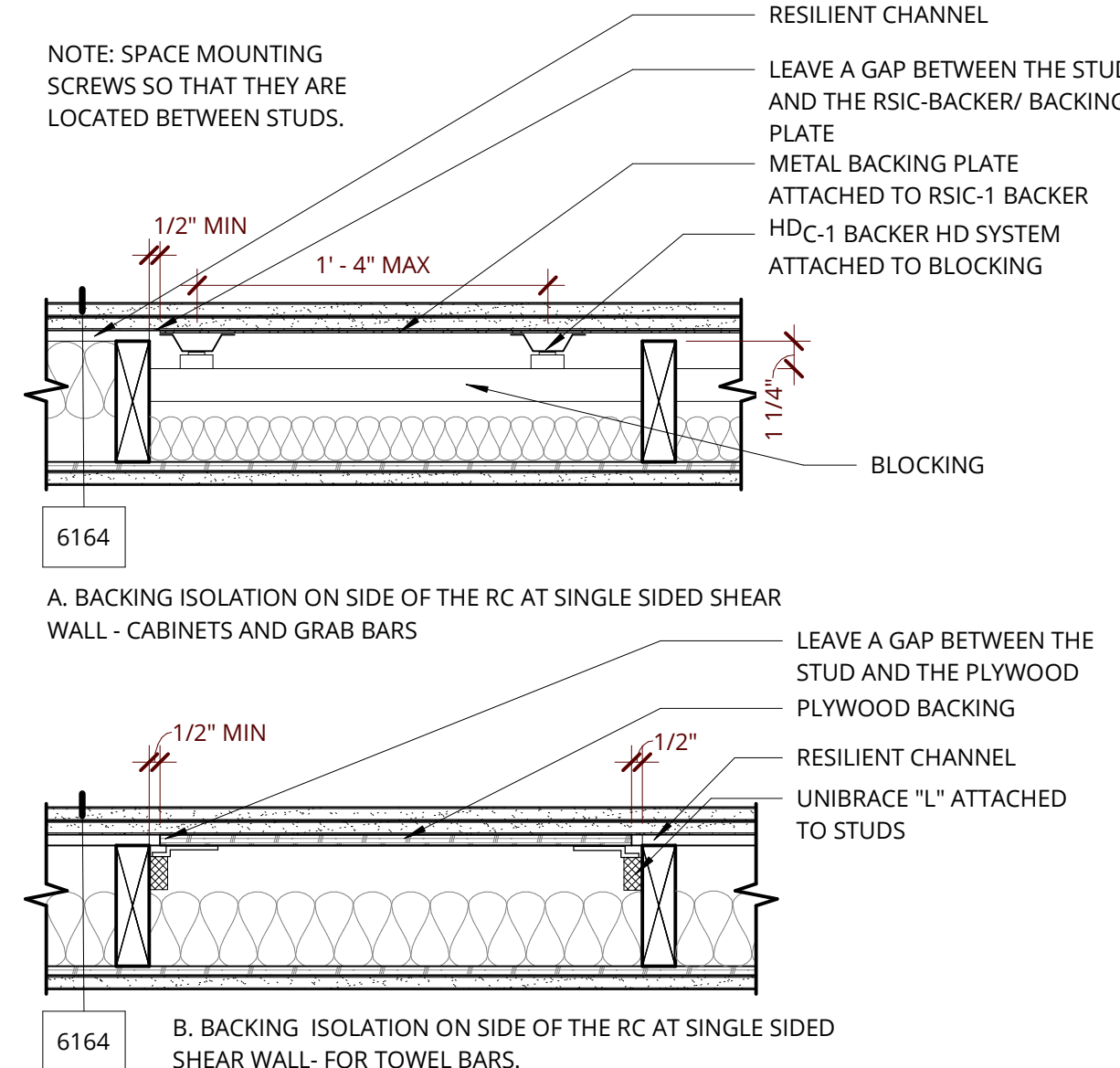
10 LOWER CABINET W/ AT RECYCLE  
1 1/2" = 1'-0"



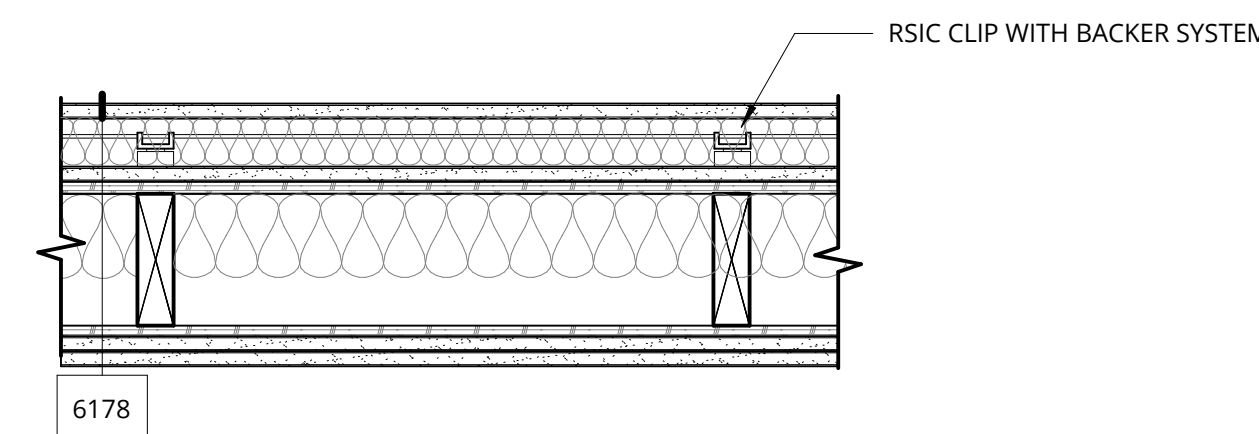
9 HORIZ SECTION AT WVP-1 PANEL  
6" = 1'-0"



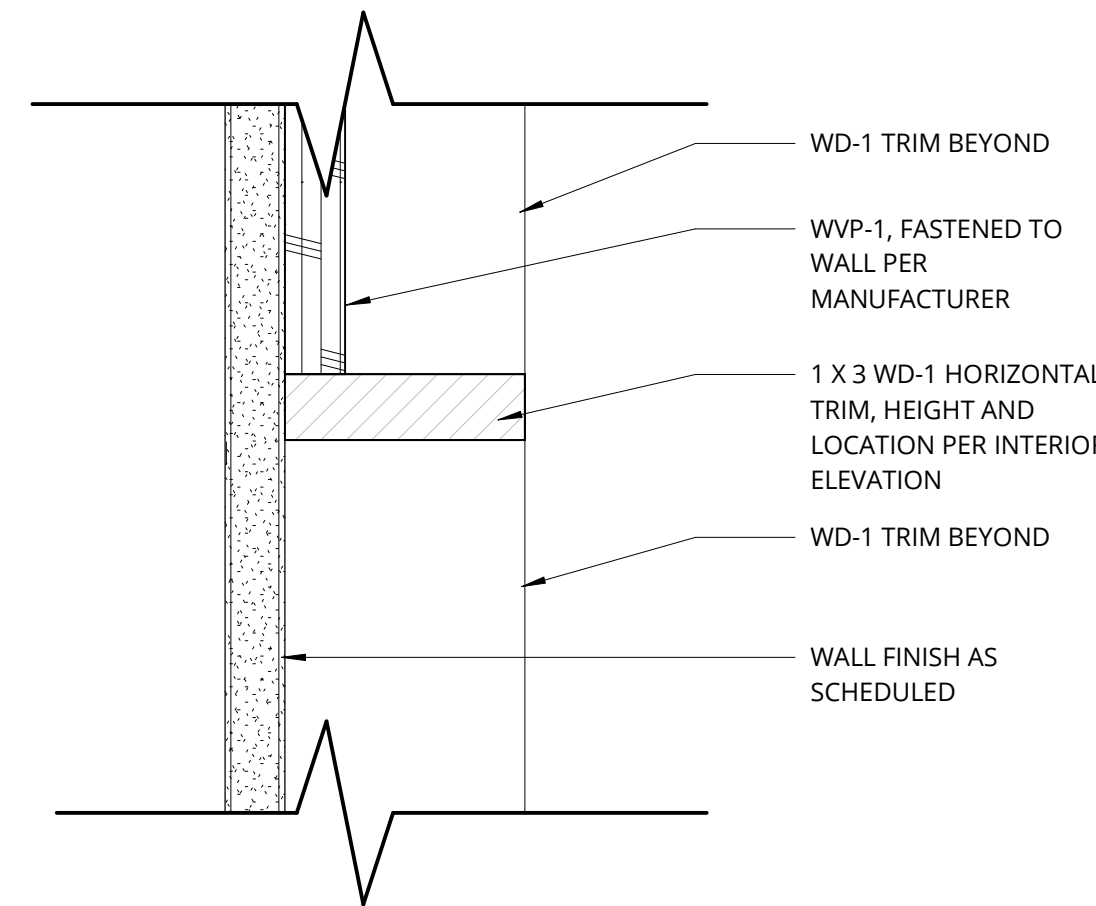
2 TYP BASE OF WALL  
6" = 1'-0"



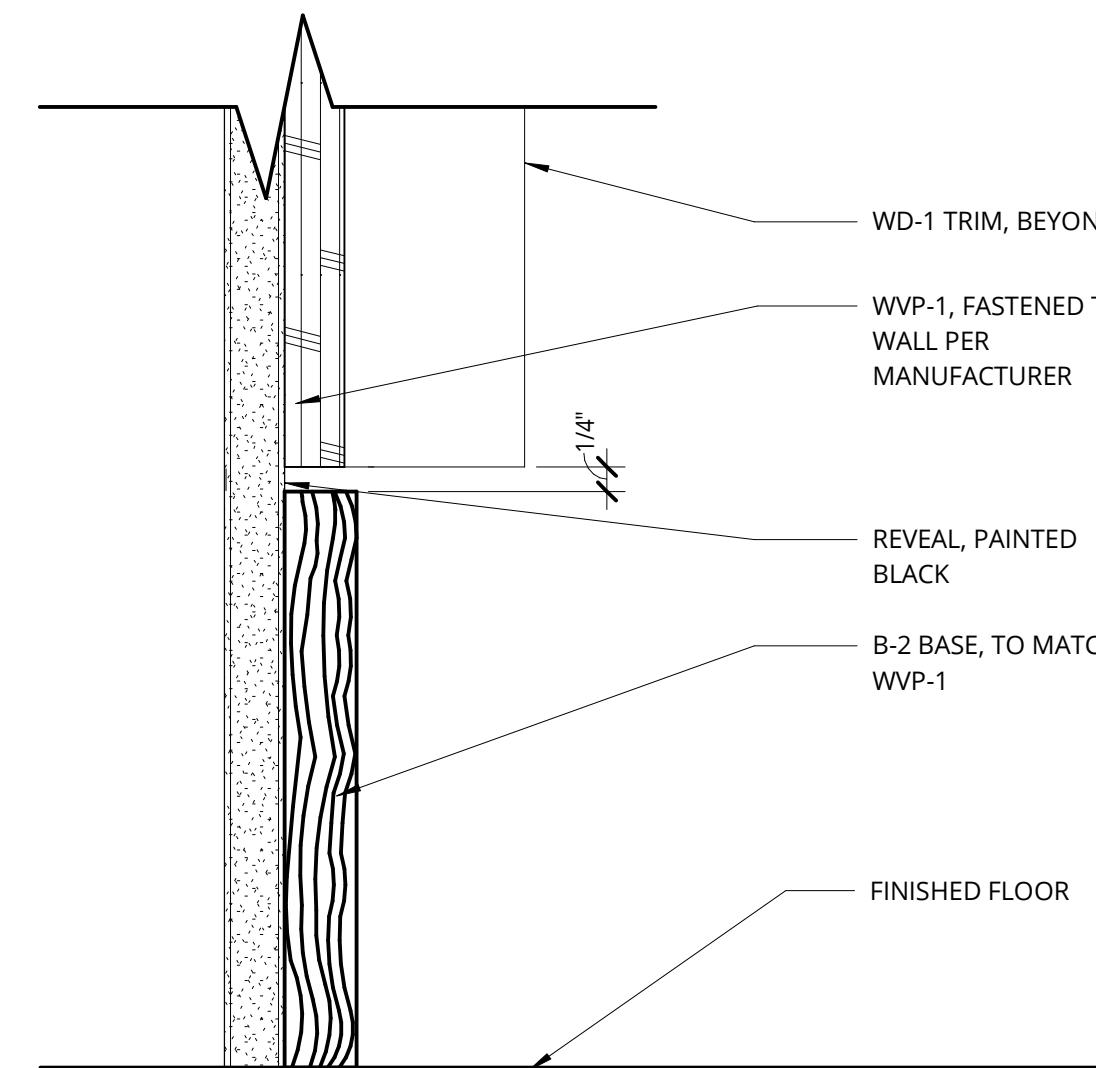
5 BACKING ISOLATION AT DEMISING WALL  
1 1/2" = 1'-0"



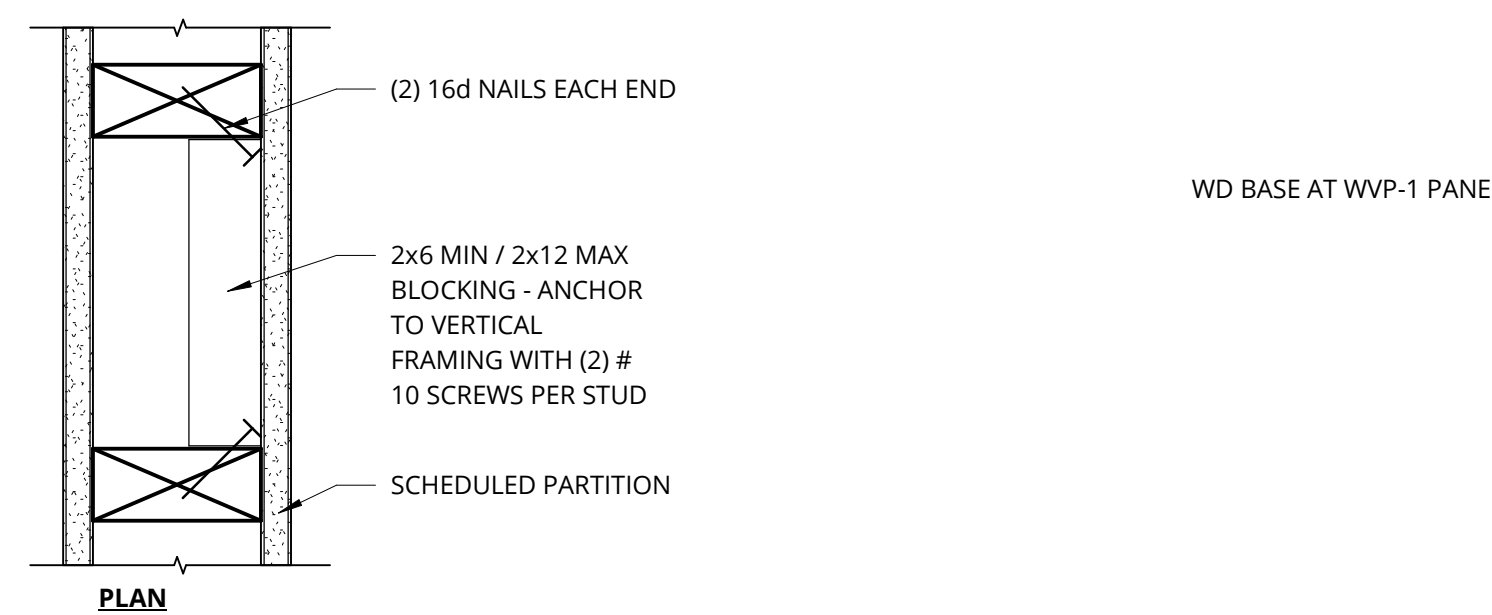
6 BACKING ISOLATION AT DEMISING WALL DOUBLE SHEAR  
1 1/2" = 1'-0"



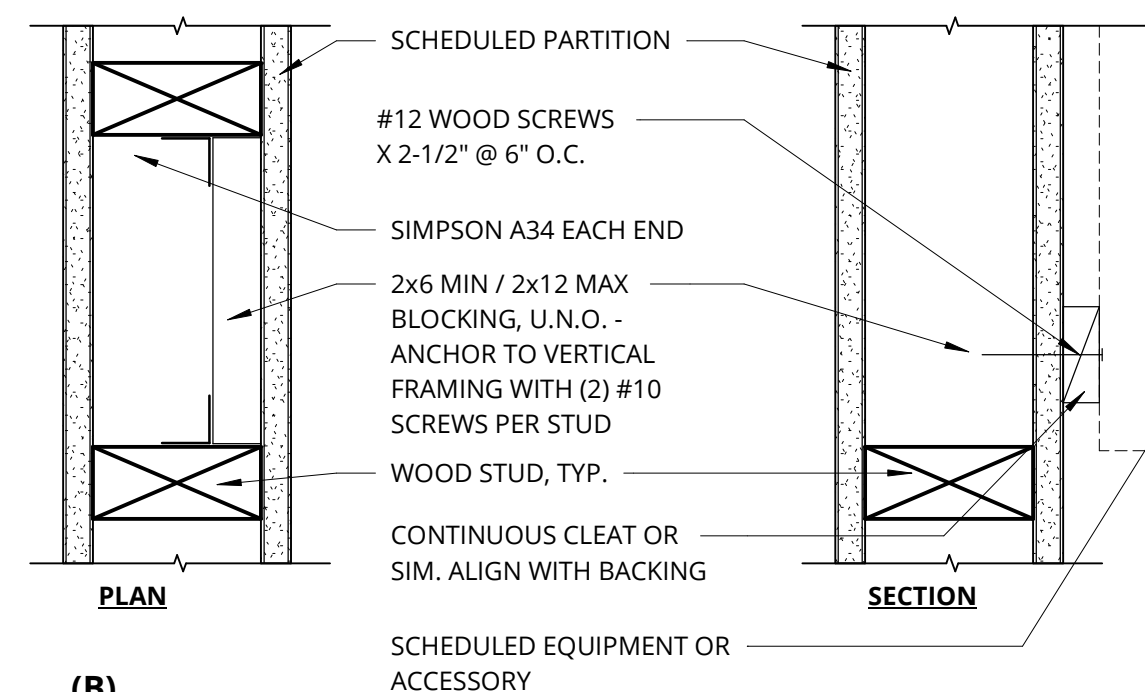
8 HORIZ TRIM AT WVP-1 PANEL  
6" = 1'-0"



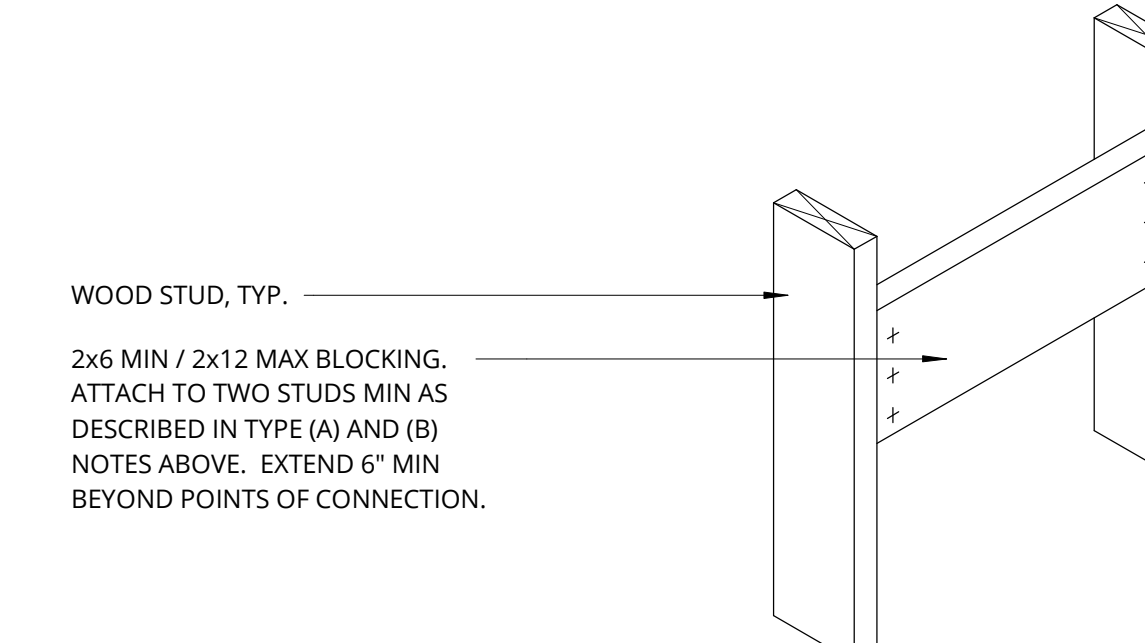
3 FLUSH WD BASE AT WVP-1 PANEL  
6" = 1'-0"



(A) TYPICAL WALL BACKING FOR OBJECTS WITH MAXIMUM VERTICAL LOAD OF 50 LBS/ LINEAL FT. OR 100 LBS POINT LOAD



(B) TYPICAL WALL BACKING FOR OBJECTS WITH MAXIMUM VERTICAL LOAD OF 200 LBS/ LINEAL FT. OR 395 LBS POINT LOAD



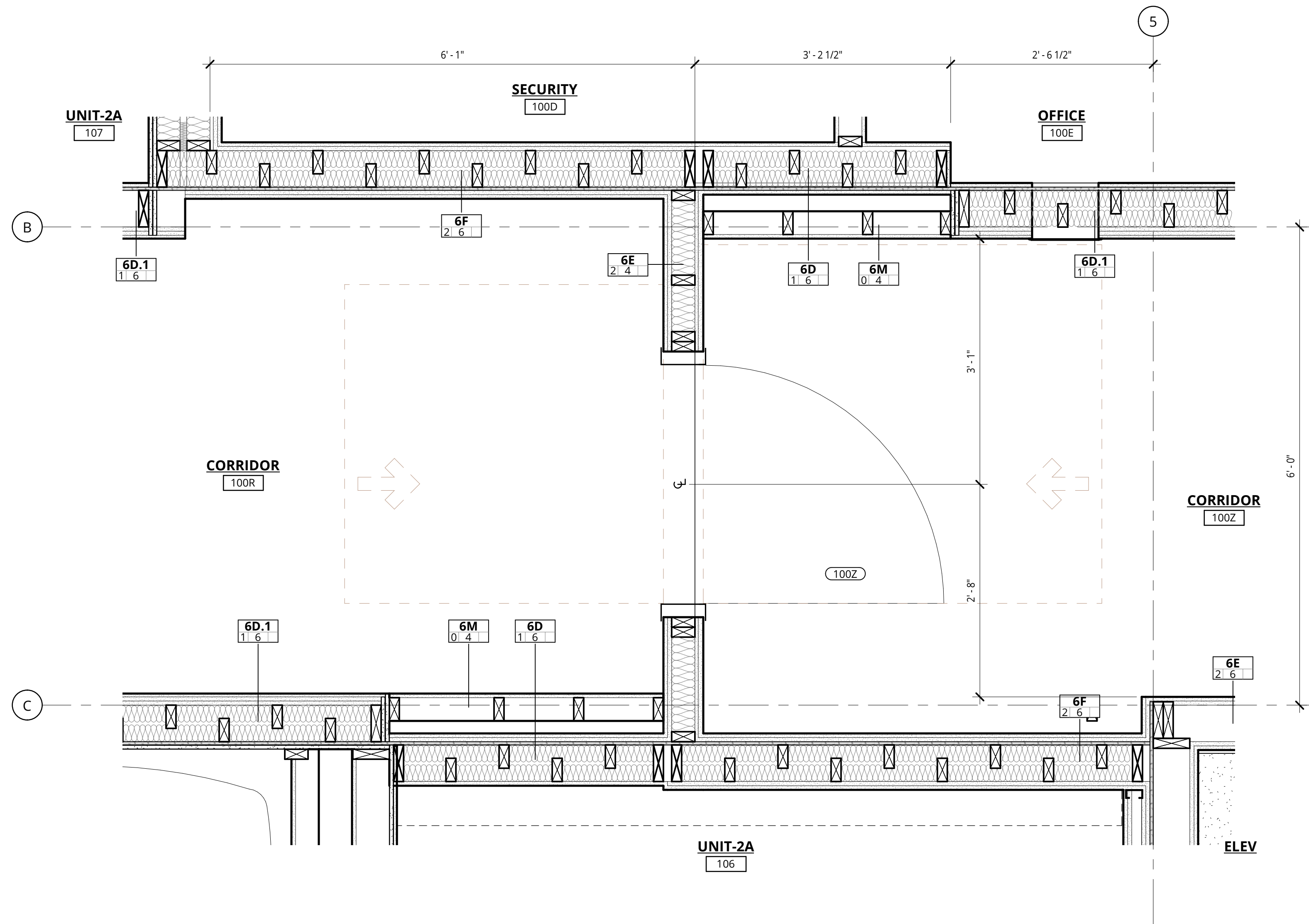
NOTE:  
1. COORDINATE BACKING LOCATION WITH ACCESSORY MANUFACTURER MOUNTING INSTRUCTIONS.  
2. UNITS HEAVIER THAN 200 LBS/LINEAL FT. OR 395 LBS POINT LOAD ARE NOT TO BE WALL MOUNTED.  
3. PROVIDE BACKING AT ITEMS SUCH AS SHELVING, MILLWORK, RESTROOM FIXTURES, HANDRAILS, GRAB BARS, SIGNAGE AND TOILET ACCESSORY ANCHORAGES, ETC. AS REQUIRED FOR PROPER ATTACHMENT AND AS REQUIRED BY THE G.C.

REVISION	DATE	REASON FOR ISSUE

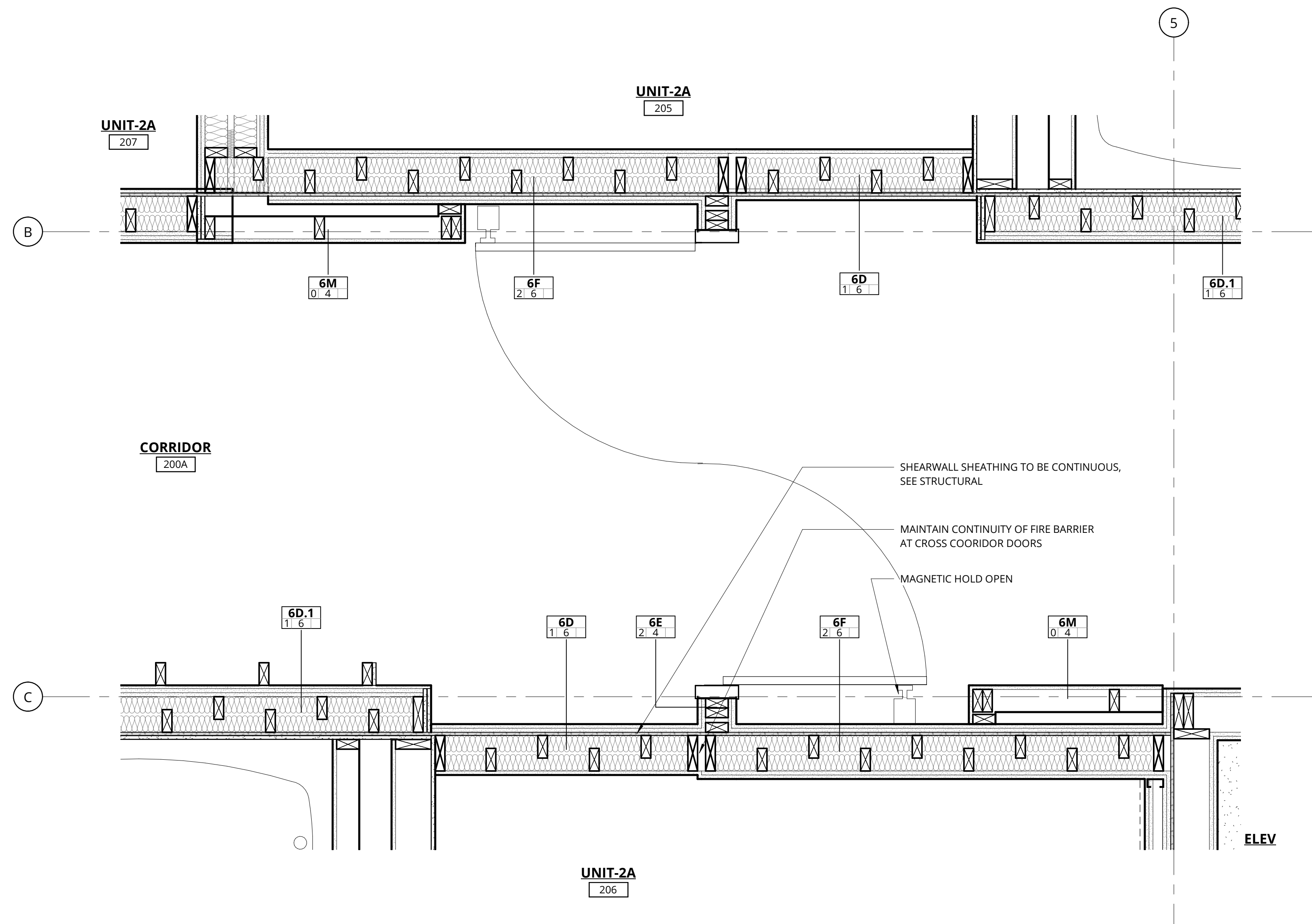


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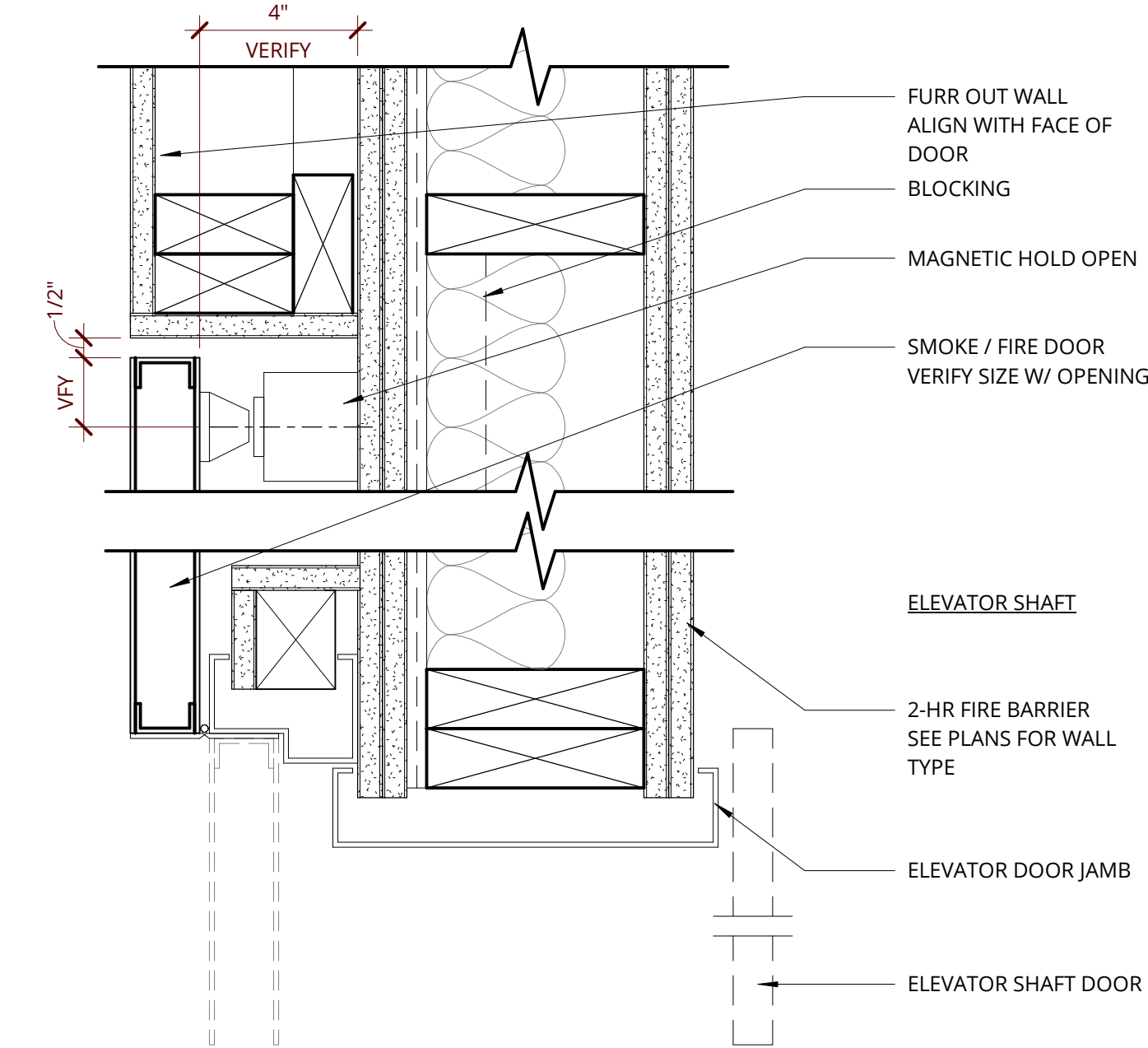
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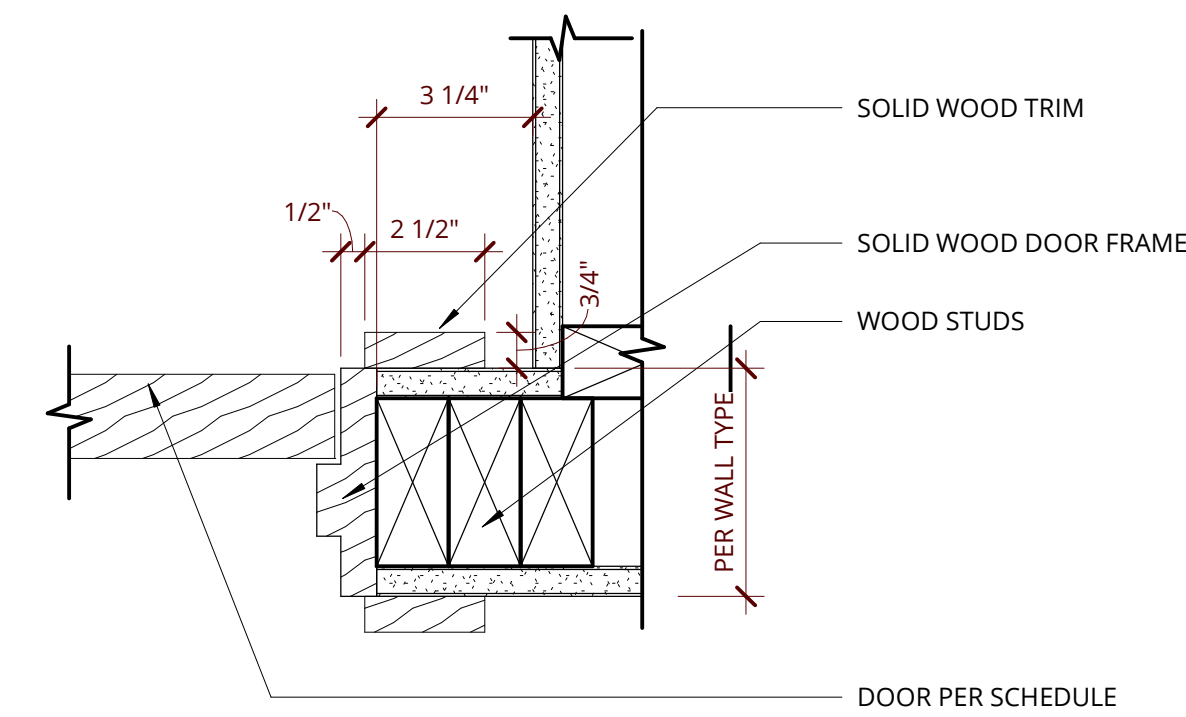
1 LEVEL 1 HORIZONTAL EXIT DOOR  
1" = 1'-0" | 1/A5.01



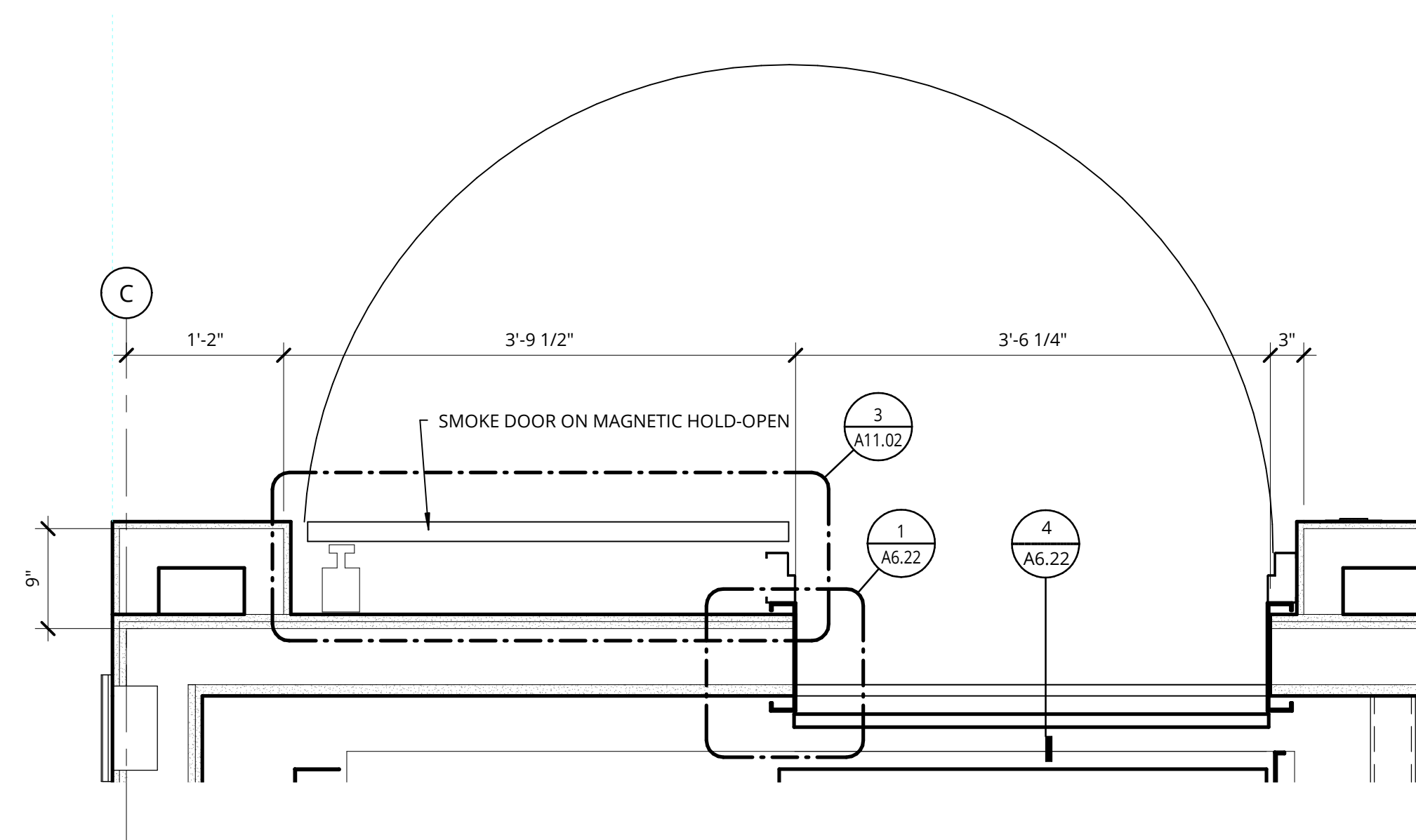
2 LEVELS 2,3, 4 & 5 HORIZONTAL EXIT DOOR  
1" = 1'-0" | 1/A5.03



3 SMOKE DOOR PLAN  
3" = 1'-0"



4 TYPICAL DOOR JAMB - HINGE SIDE  
3" = 1'-0"



5 ELEVATOR DOOR PLAN DETAIL  
1" = 1'-0"



38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100  
1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
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BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

INTERIOR DOOR  
DETAILS

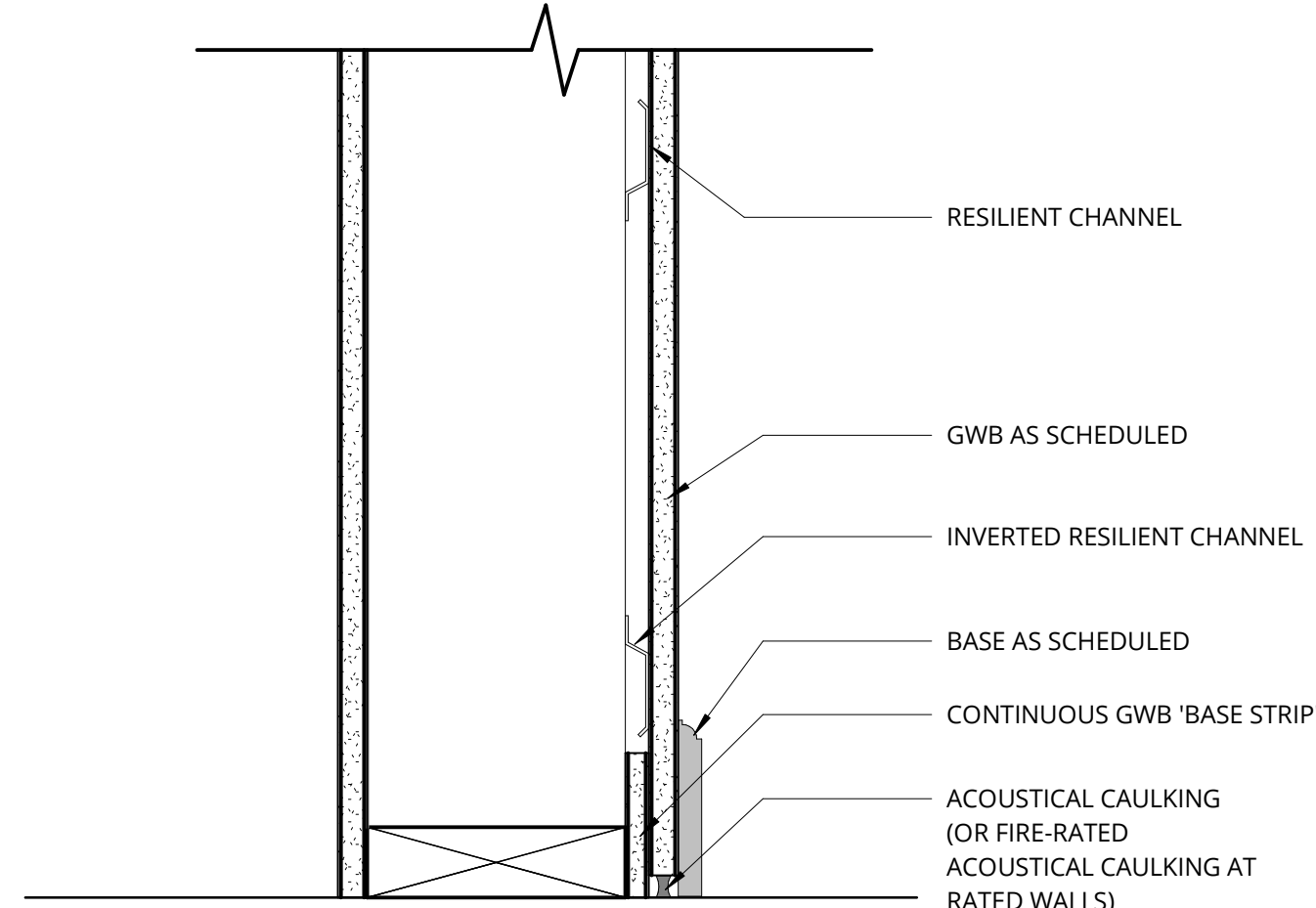
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DATE 17 OCT 2018	PROJECT NUMBER 149000
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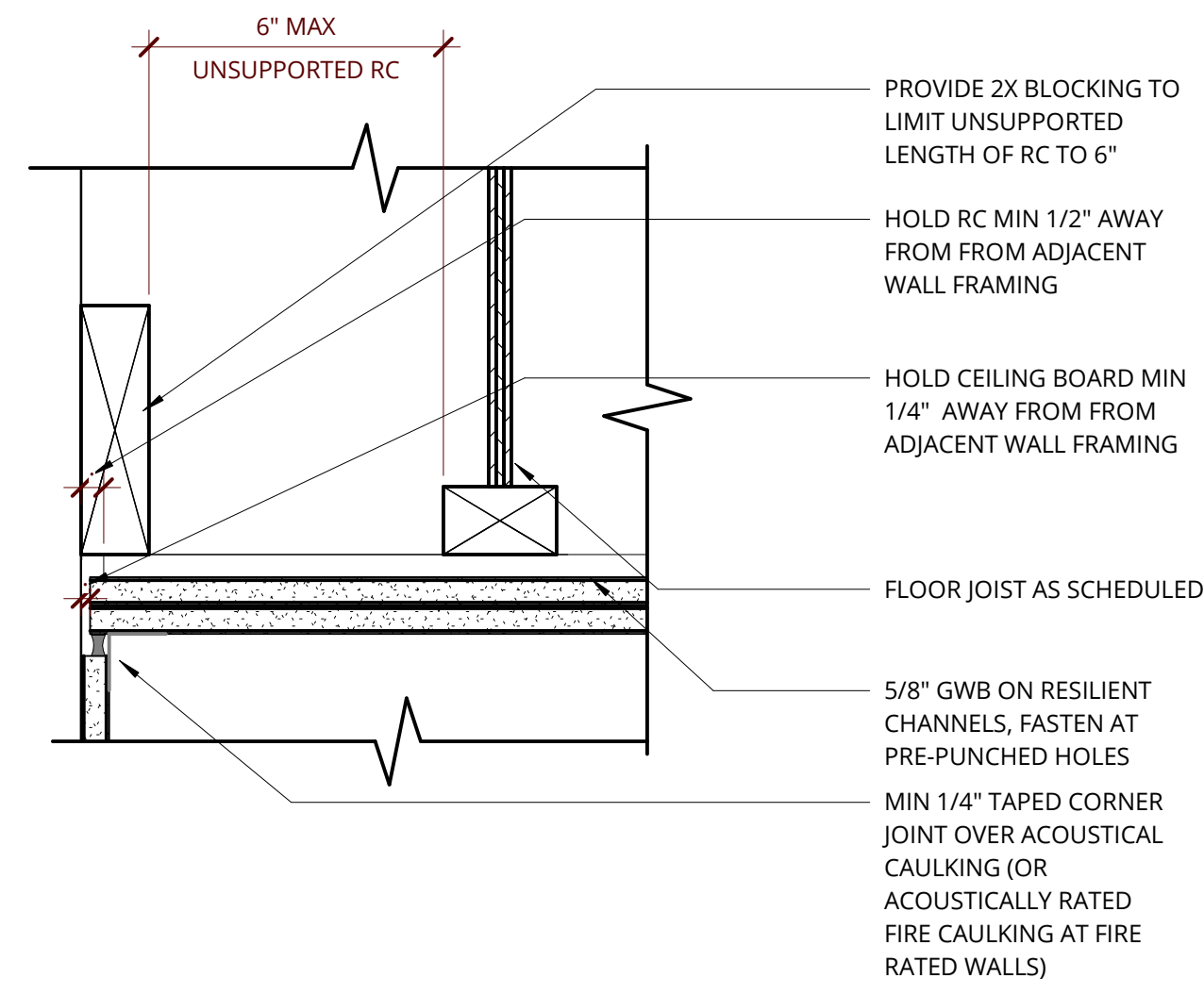
SHEET NUMBER

A11.02

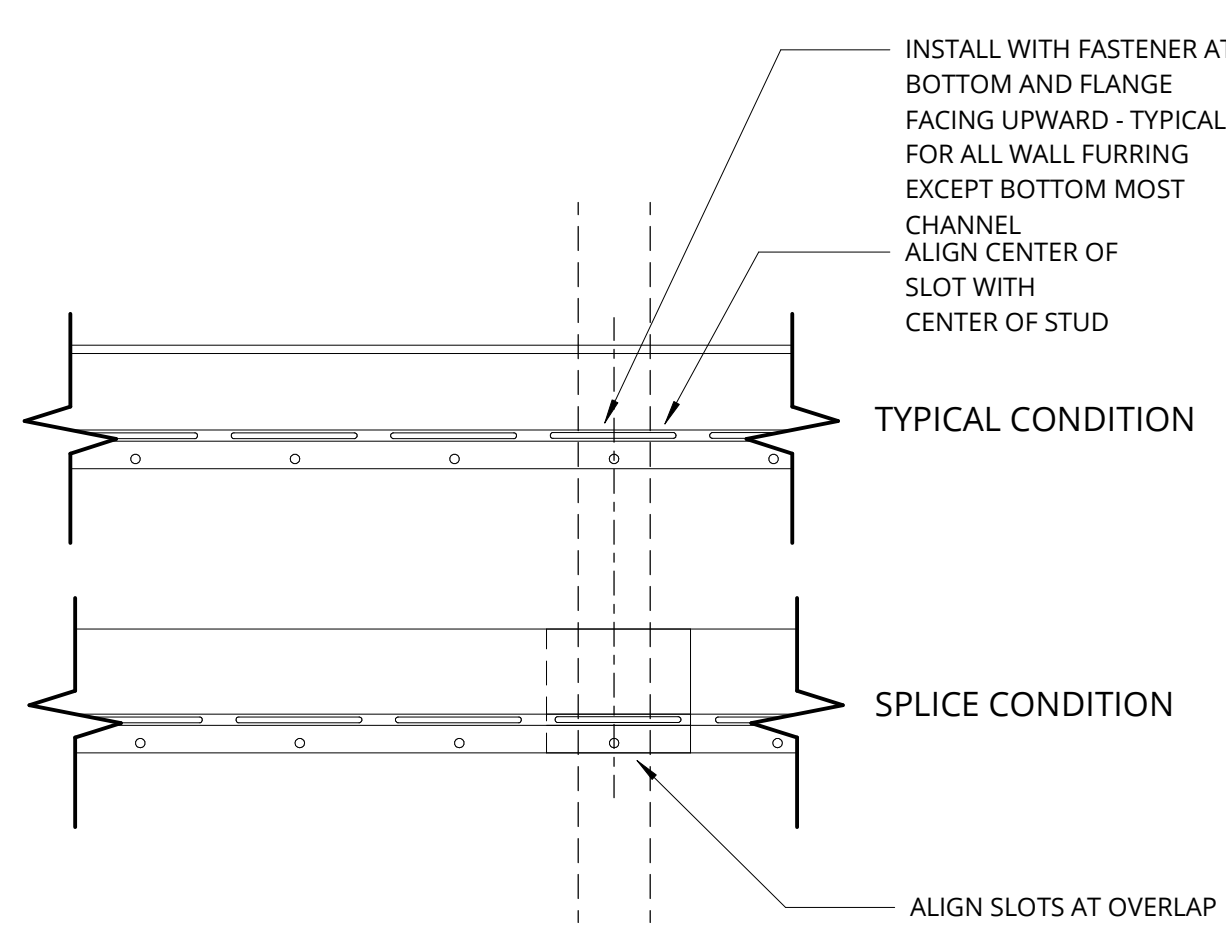


**1** RC AT BASE OF WALL

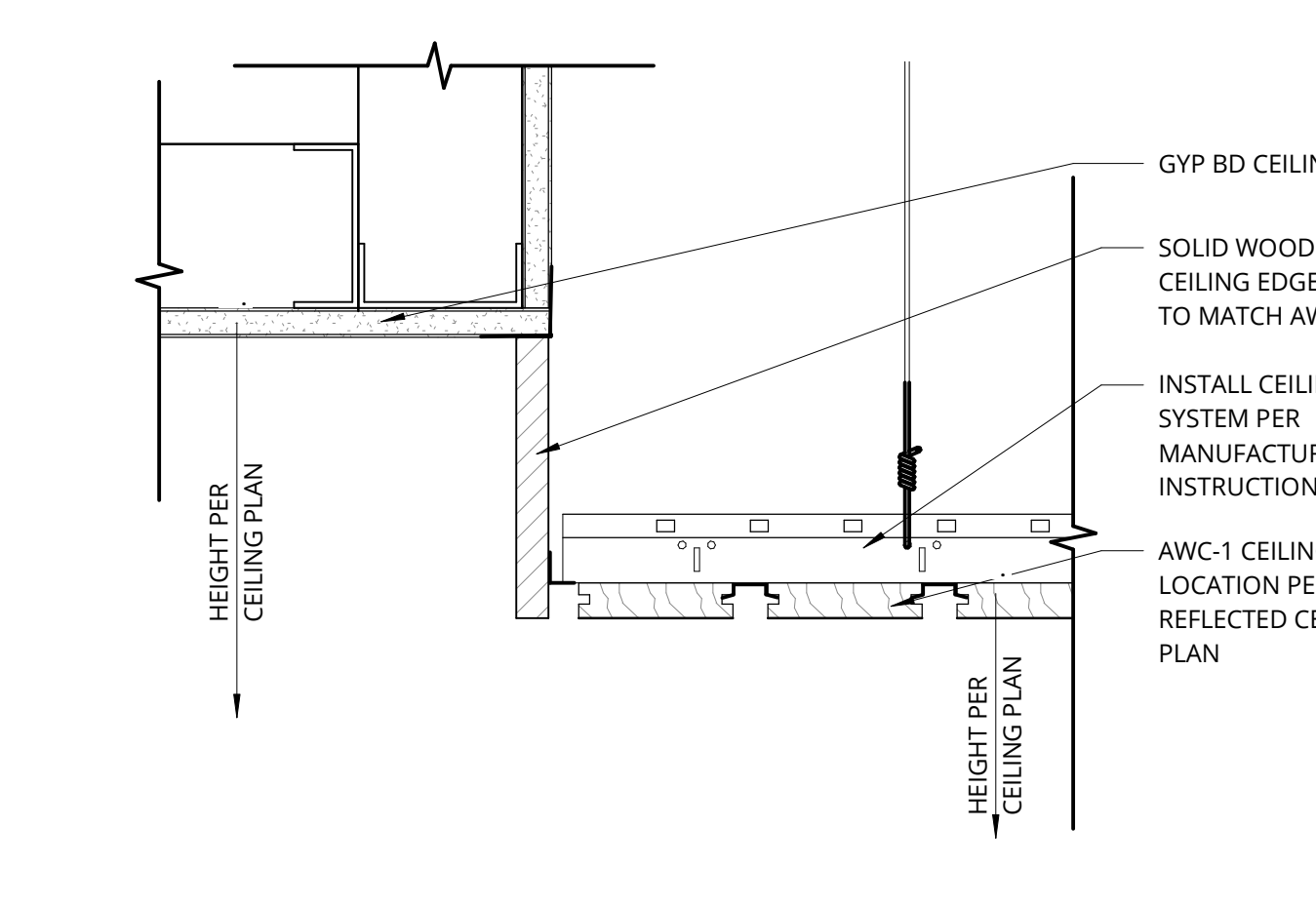
3" = 1'-0"

**2** RC AT WALL/CEILING

3" = 1'-0"

**3** RC ATTACHMENT

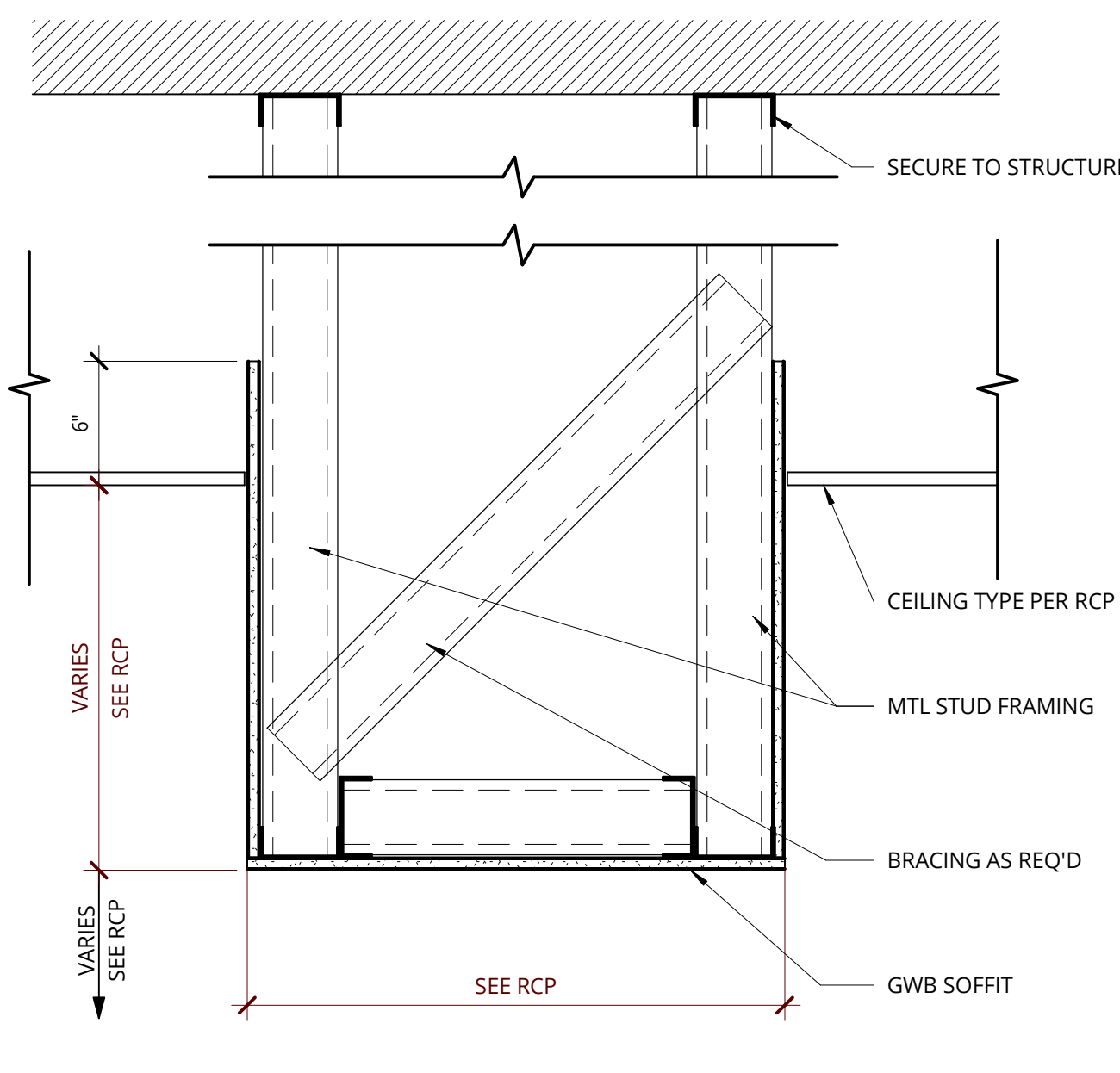
3" = 1'-0"

**17** SUSPENDED WOOD CEILING DETAIL

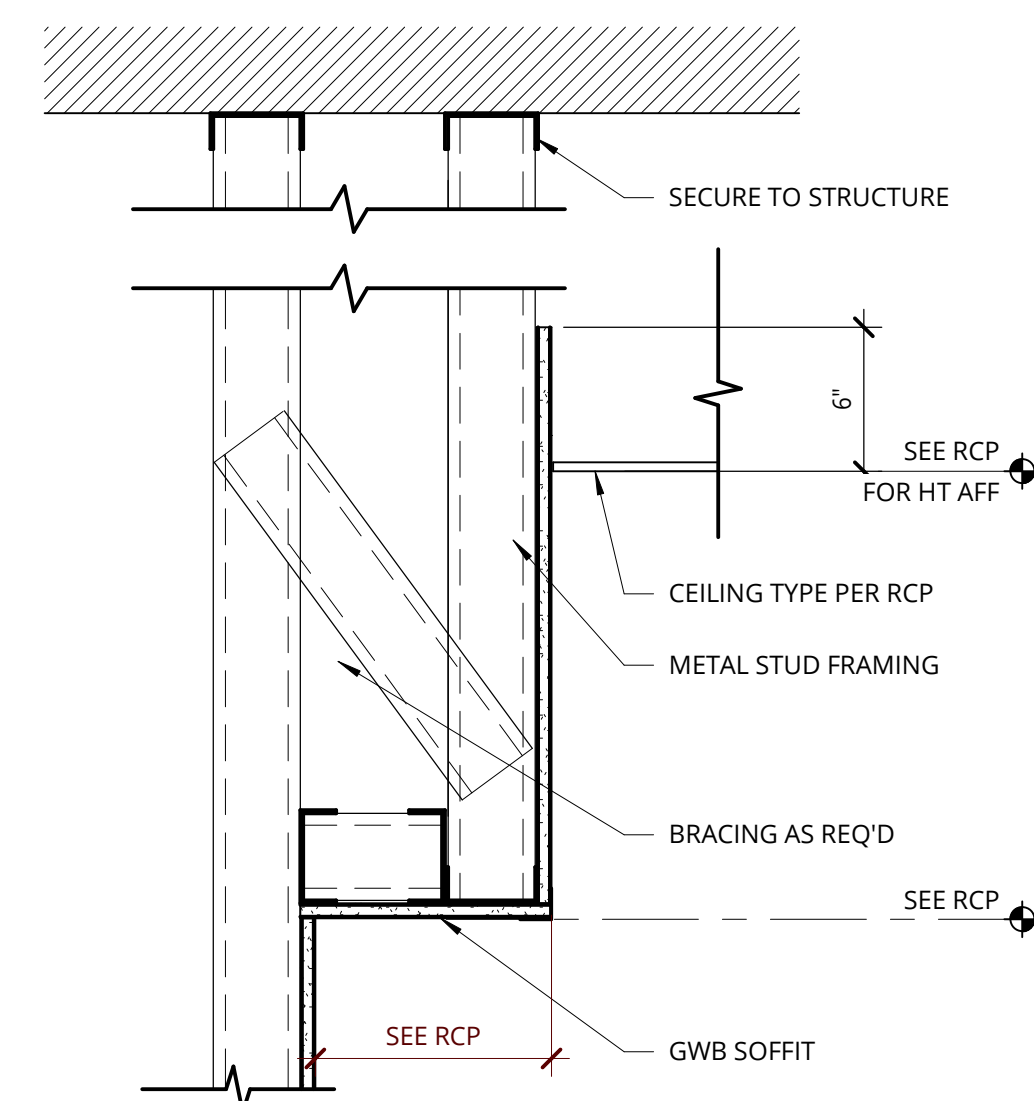
3" = 1'-0"

**RESILIENT CHANNEL NOTES**

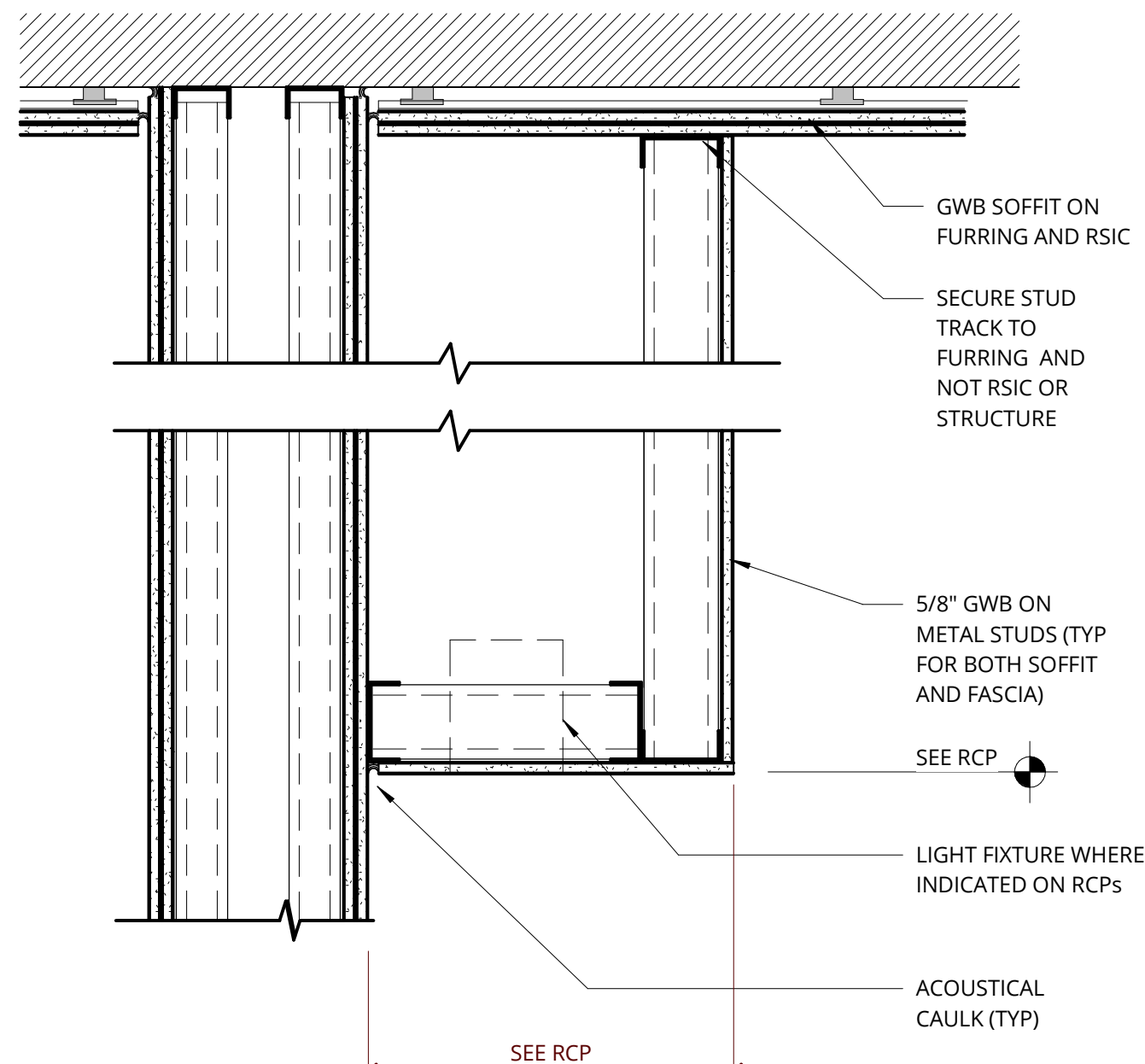
1. INSTALL RESILIENT CHANNELS PERPENDICULAR TO FRAMING MEMBERS AND PARALLEL TO EACH OTHER.
2. CEILING ASSEMBLIES: INSTALL RESILIENT CHANNELS FACING IN THE SAME DIRECTION
3. WALL ASSEMBLIES: INSTALL RESILIENT CHANNELS FACING UPWARD (SCREW FLANGE AT THE BOTTOM) EXCEPT FOR THE BOTTOM MOST CHANNEL INSTALLED FACING DOWNWARD (SCREW FLANGE AT THE TOP)
4. OVERLAP ADJACENT PIECES OF RESILIENT CHANNEL AT THE POINT OF ATTACHMENT WITH FRAMING
5. SECURE GWB TO RESILIENT CHANNELS ONLY. SIZE FASTENERS SUCH THAT NO SCREWS CAN PENETRATE FRAMING MEMBERS.
6. MAINTAIN MINIMUM 1/2" GAP BETWEEN ENDS OR SIDES OF RESILIENT CHANNELS AND ADJACENT FRAMING TO ALLOW FOR FREE MOVEMENT OF THE CHANNELS.
7. INSTALL CEILING PANELS PRIOR TO WALL PANELS. MAINTAIN 1/4" GAP BETWEEN TOP OF WALL PANELS AND BOTTOM OF CEILING PANELS.
8. MAINTAIN 1/4" GAP BETWEEN CEILING GWB AND FACE OF ADJACENT WALL FRAMING.
9. HOLD THE BOTTOM OF GWB 1/4" ABOVE THE TOP OF THE UNDERLAYMENT (WHEN CEMENTITIOUS UNDERLAYMENT IS PLACED DIRECTLY AGAINST THE GWB). ACOUSTICAL CAULKING AT JOINT MAY BE OMITTED IN SUCH INSTANCES.
10. HOLD THE BOTTOM OF GWB 1/4" ABOVE THE TOP OF THE FLOOR SHEATHING (WHEN CEMENTITIOUS UNDERLAYMENT IS PLACED DIRECTLY AGAINST THE GWB). ACOUSTICAL CAULKING AT JOINT MAY BE OMITTED IN SUCH INSTANCES.
11. DO NOT MAKE FIELD SUBSTITUTIONS FOR RESILIENT CHANNELS; USE ONLY THOSE RESILIENT CHANNELS SPECIFIED IN SECTION 092116.
12. DO NOT APPLY RESILIENT CHANNELS OVER PLYWOOD SHEATHING OR OTHER SOLID SHEETS
13. DO NOT SECURE CASEWORK OR OTHER WALL-MOUNTED ITEMS TO RESILIENT CHANNELS; USE TOGGLE BOLTS THROUGH THE GWB INSTEAD

**4** SOFFIT DETAIL

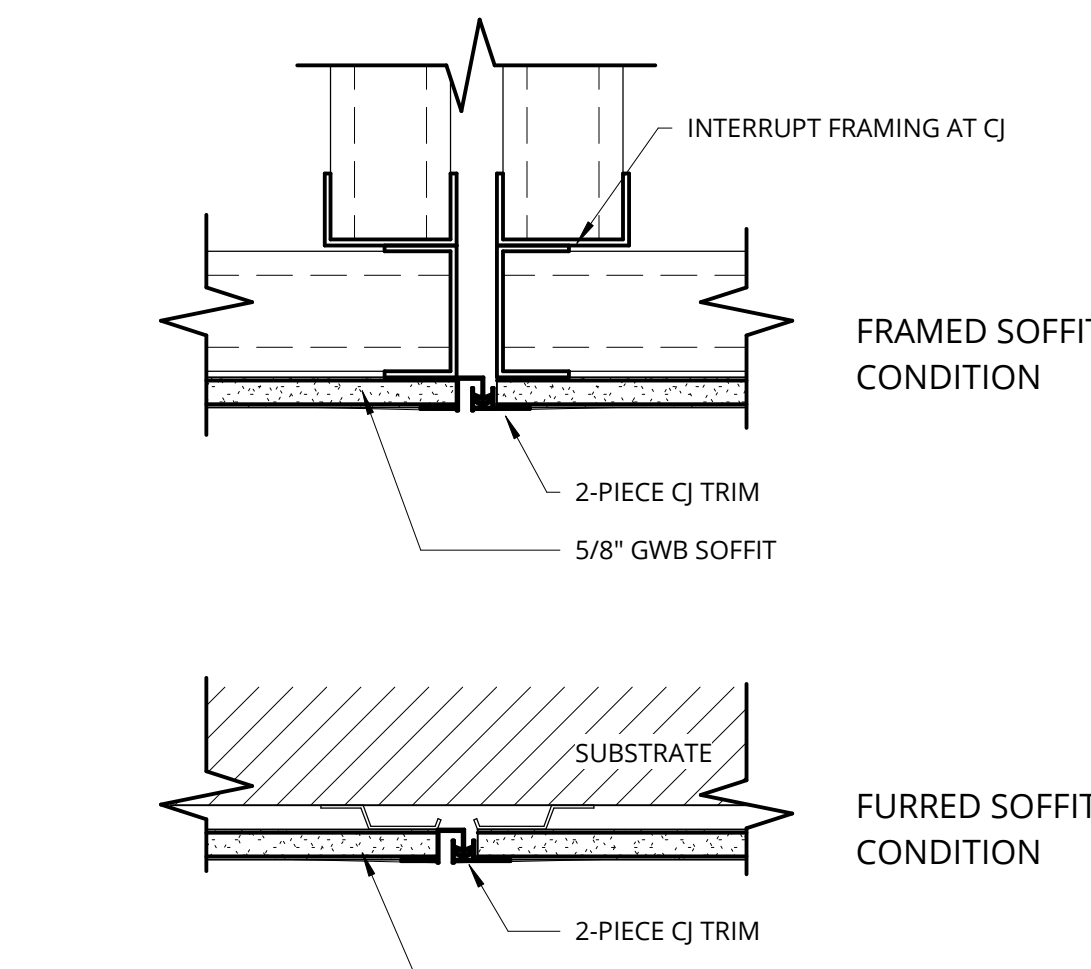
1 1/2" = 1'-0"

**5** SOFFIT DETAIL

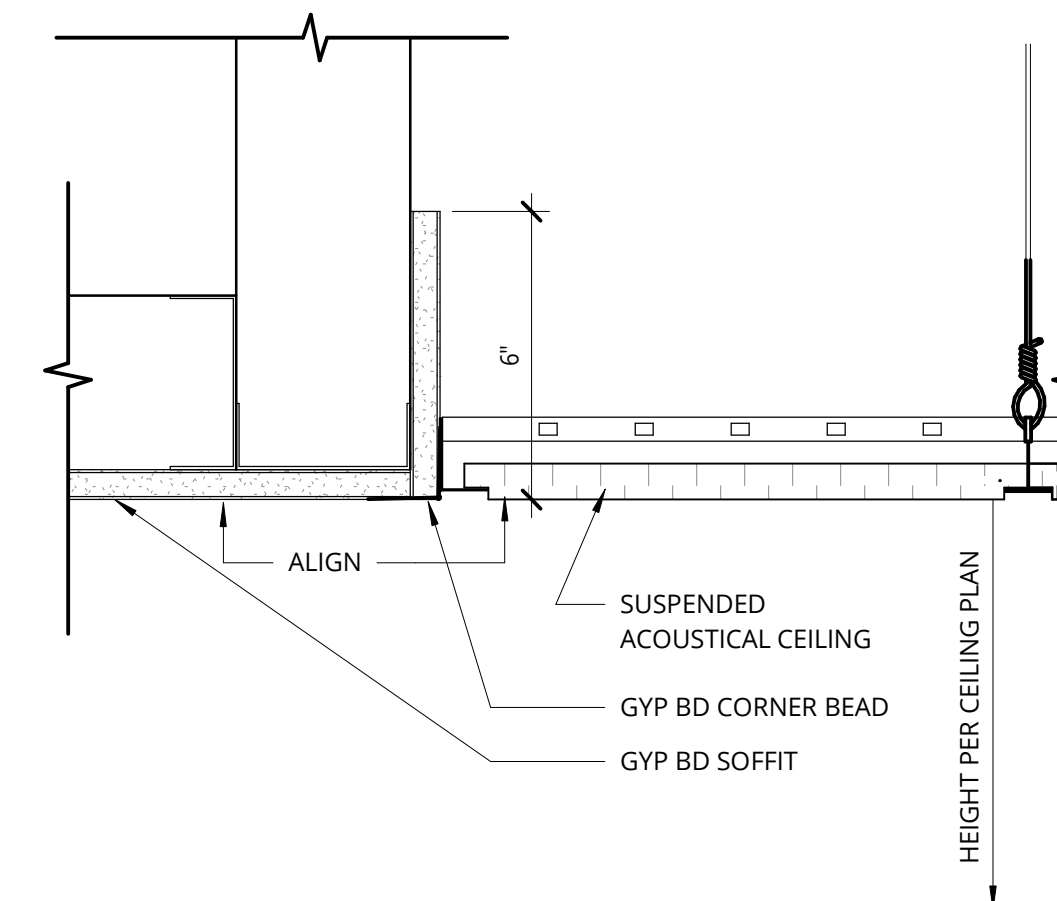
1 1/2" = 1'-0"

**6** SOFFIT DETAIL

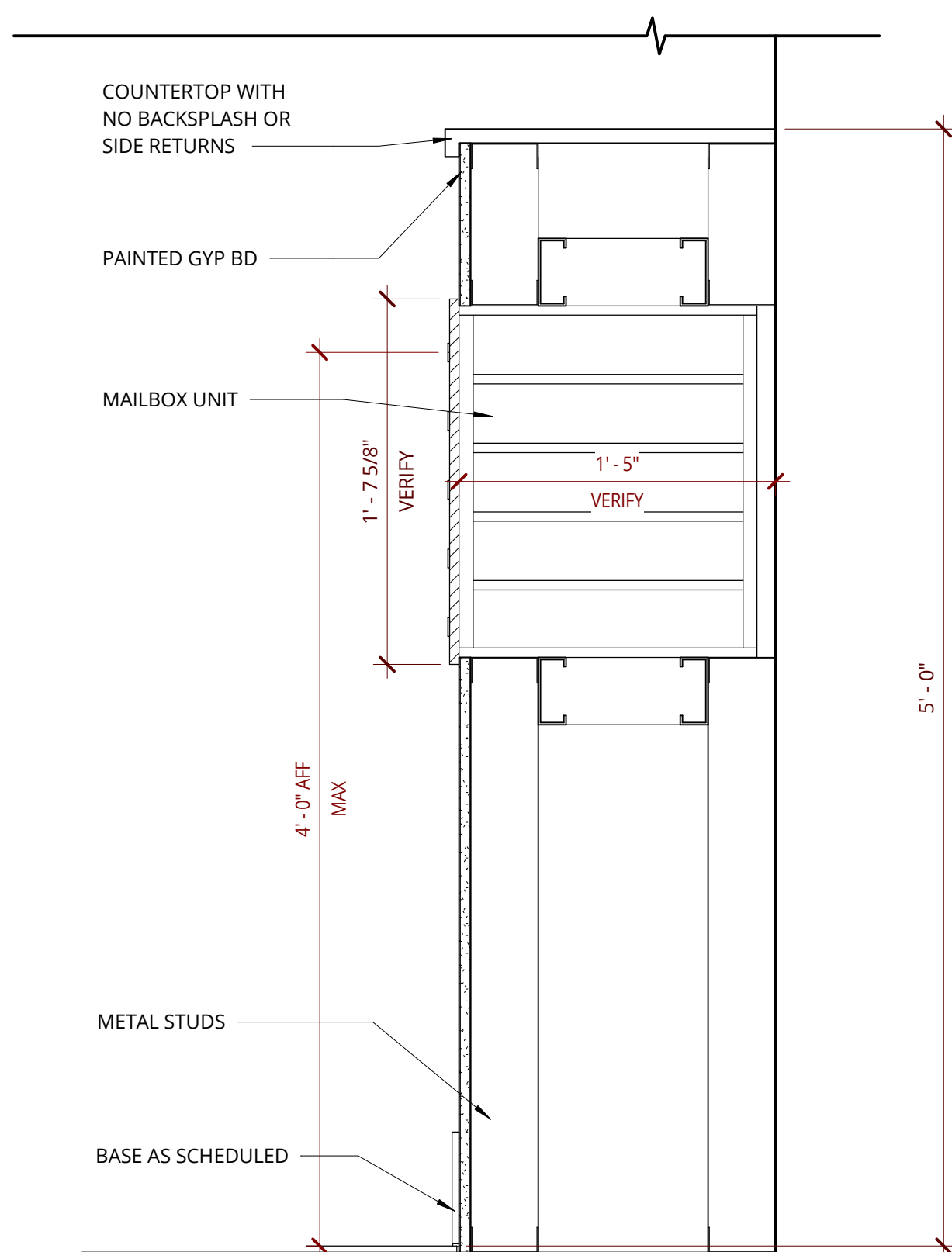
1 1/2" = 1'-0"

**7** GWB SOFFIT CONTROL JOINT DETAIL

3" = 1'-0"

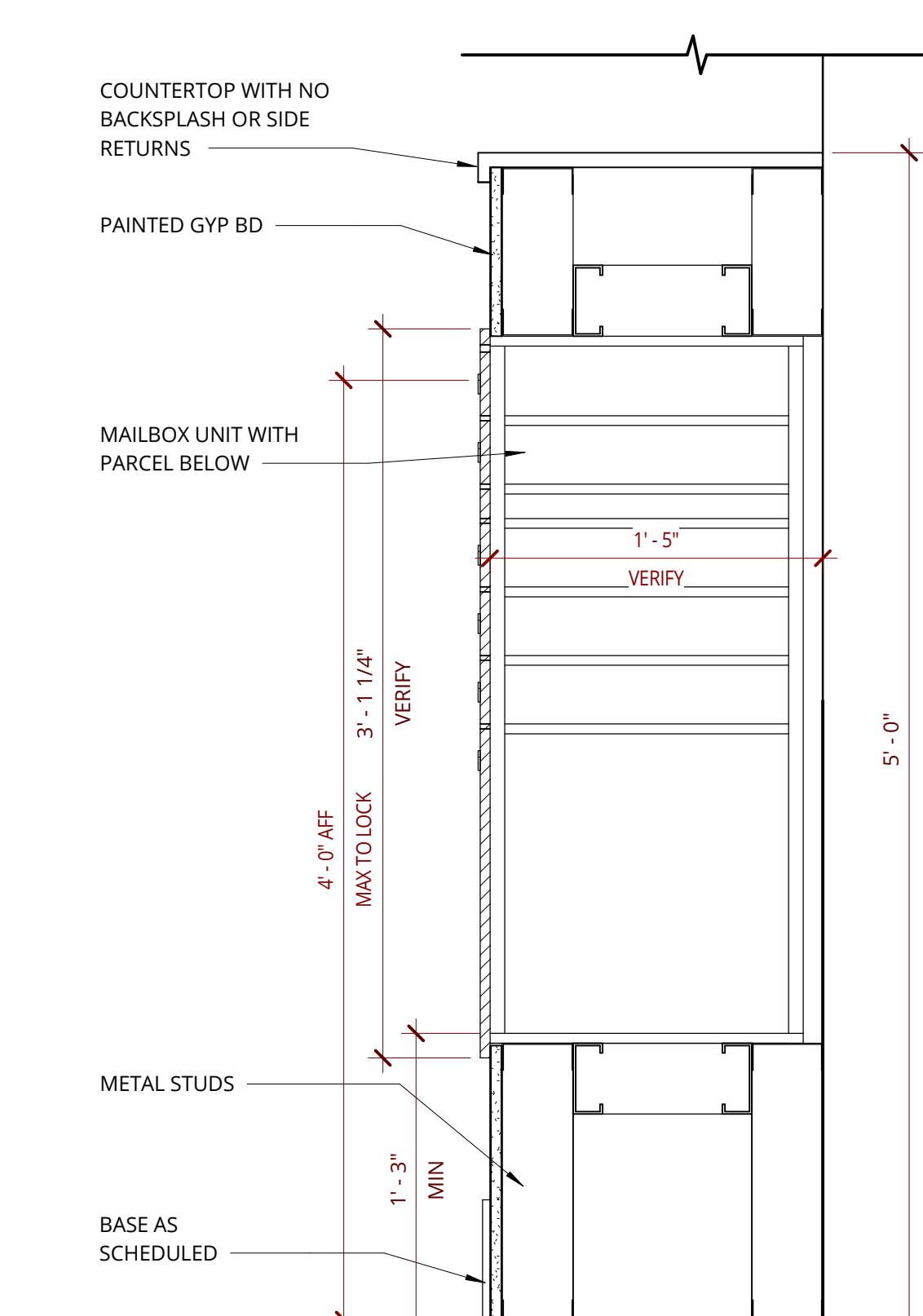
**18** CLG GYP TO FLUSH ACT

3" = 1'-0"

**8** MAILBOX SECTION 48

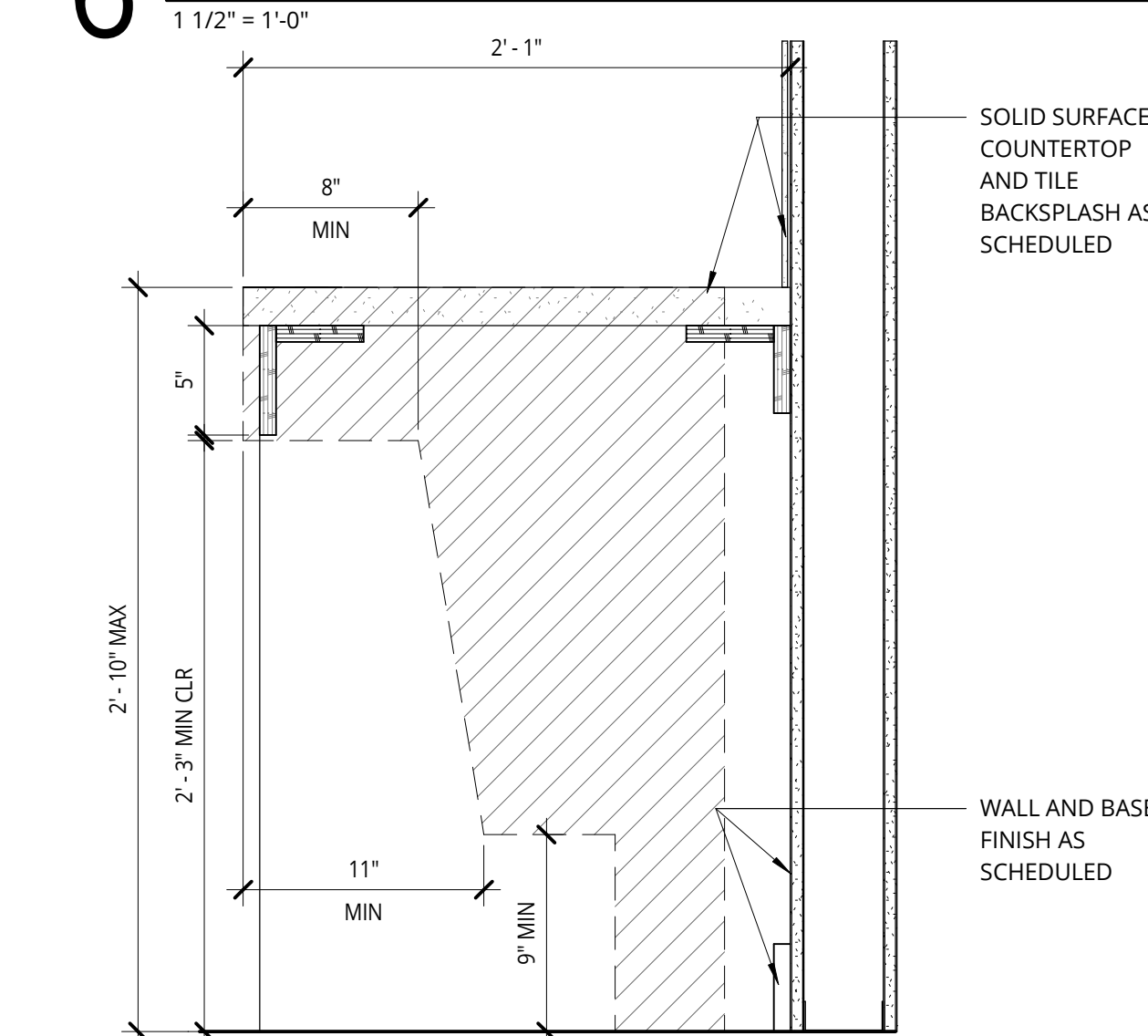
MAILBOX SECTION\_48 5-HIGH

1 1/2" = 1'-0"

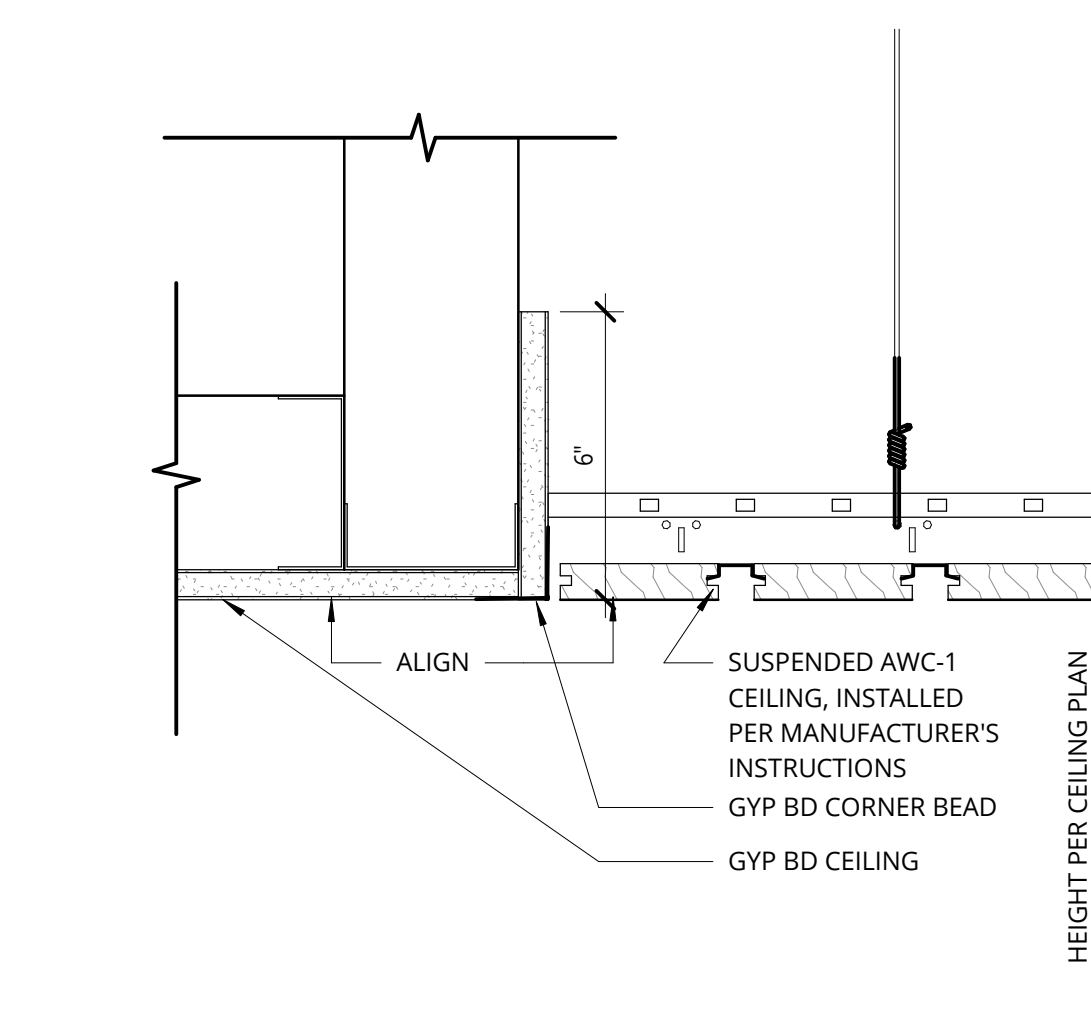
**9** MAILBOX SECTION 48 - PARCEL

MAILBOX SECTION\_48 5-HIGH-PARCEL

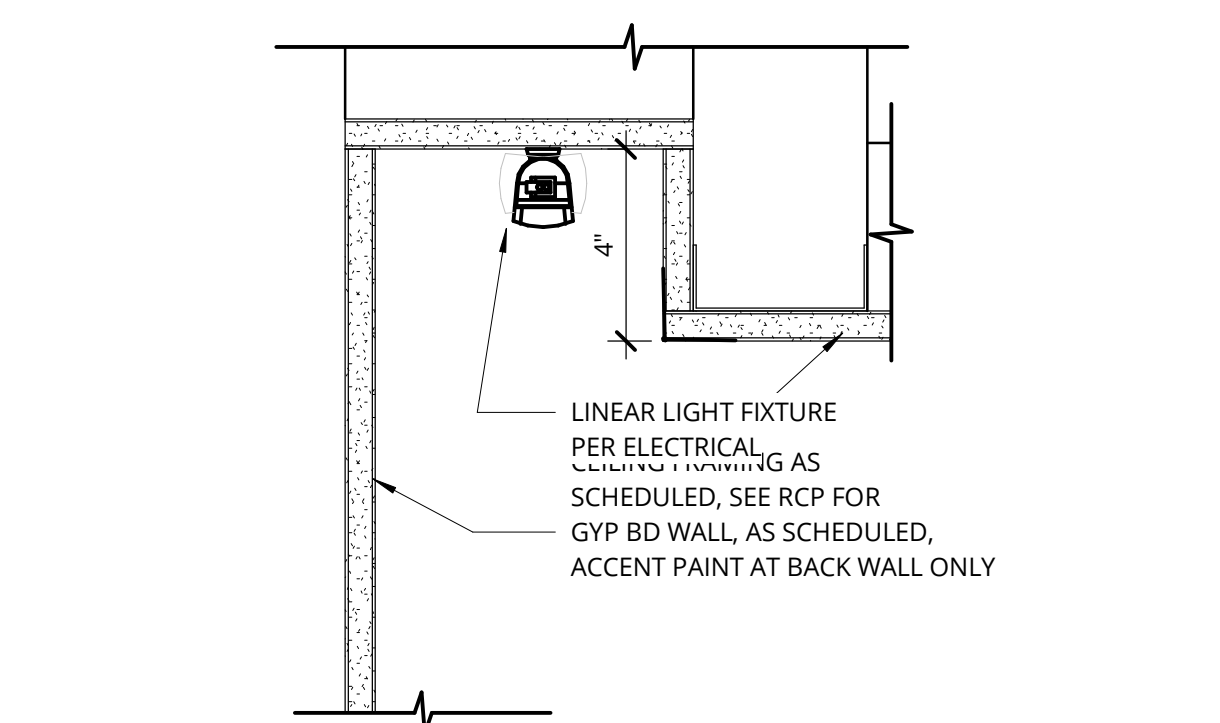
1 1/2" = 1'-0"

**16** TYP. PUBLIC APRON

1 1/2" = 1'-0"

**19** CLG GYP TO FLUSH AWC

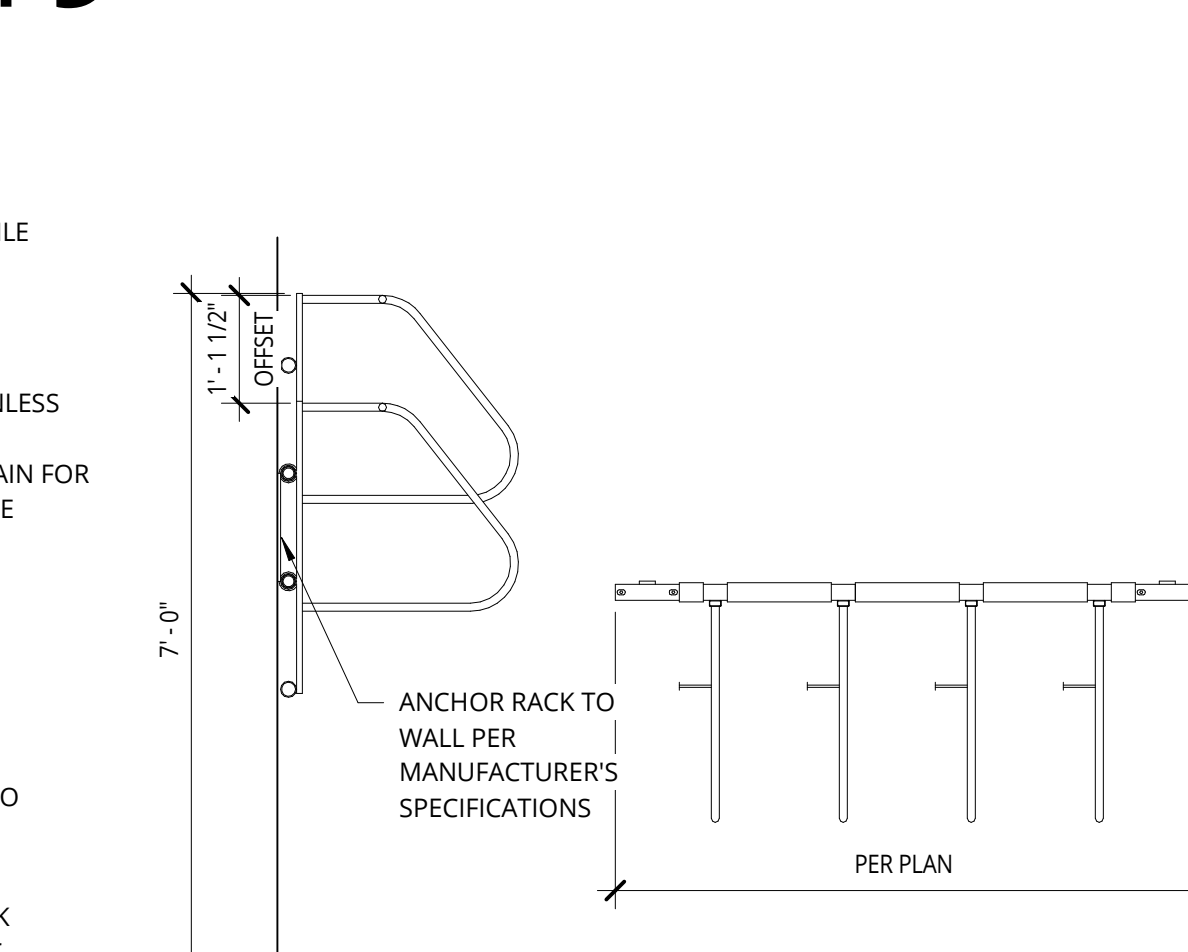
3" = 1'-0"

**12** RECESSED COVE LIGHT DETAIL

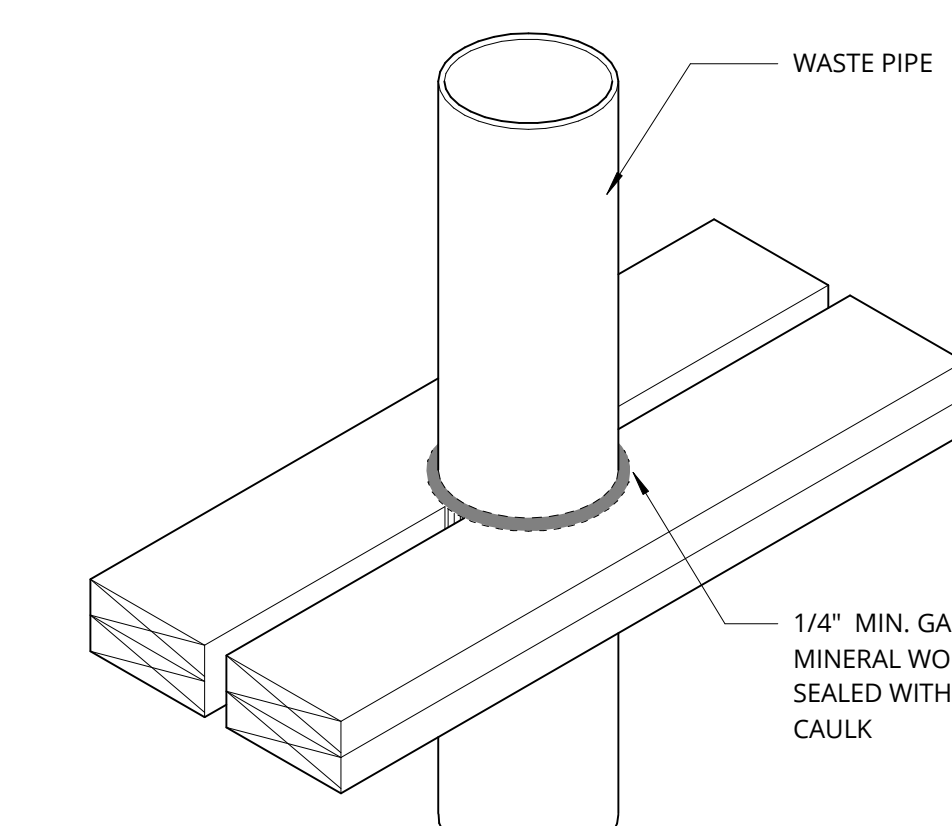
3" = 1'-0"

**15** TYP. PUBLIC SINK

1 1/2" = 1'-0"

**10** WALL MOUNTED BIKE RACK

1 1/2" = 1'-0"

**WASTE PIPE ISOLATION DETAIL****11** - WOOD

1 1/2" = 1'-0"

REVISION	DATE	REASON FOR ISSUE

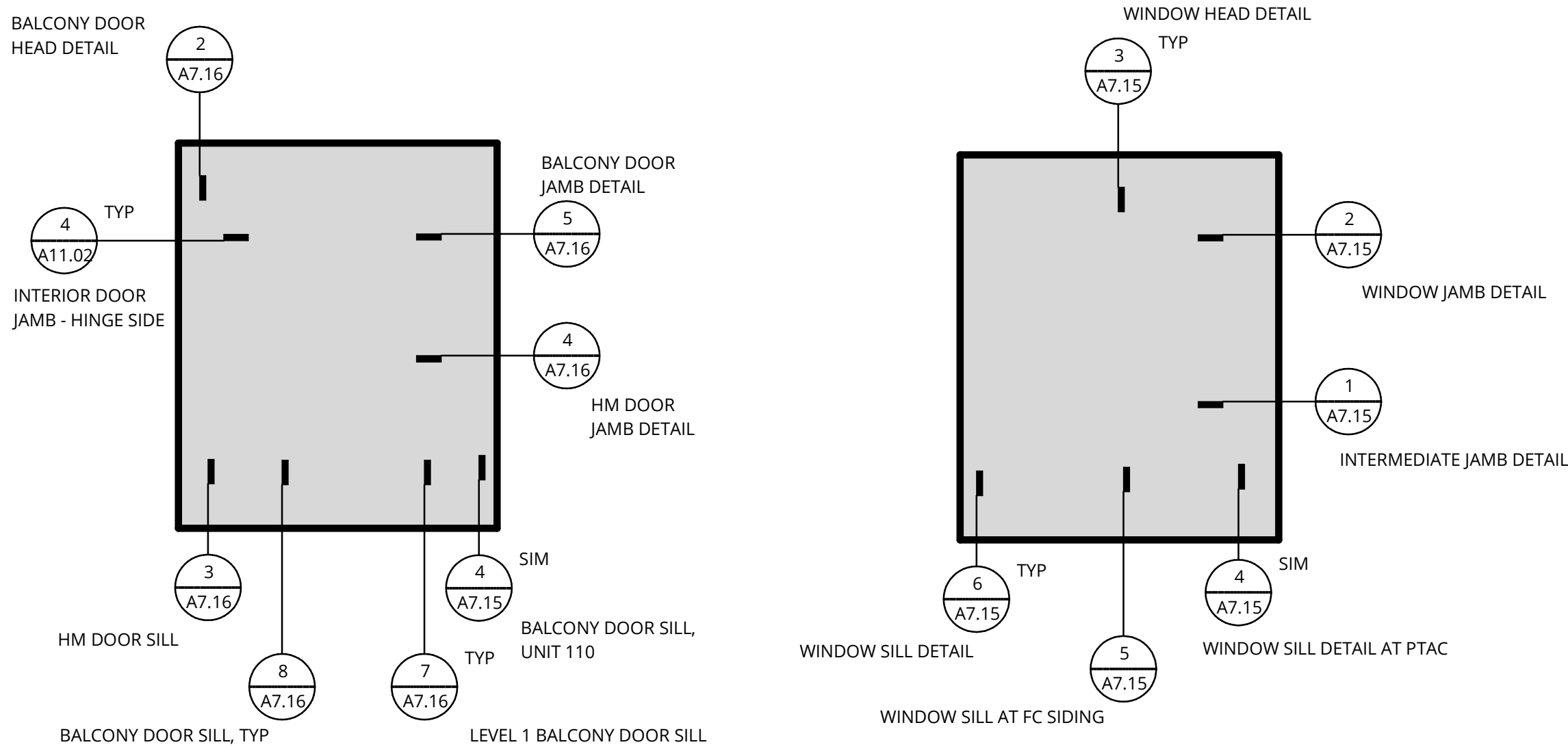
**INTERIOR DETAILS****PERMIT / GMP**

DATE	PROJECT NUMBER
17 OCT 2018	149000

SHEET NUMBER

**A11.03**



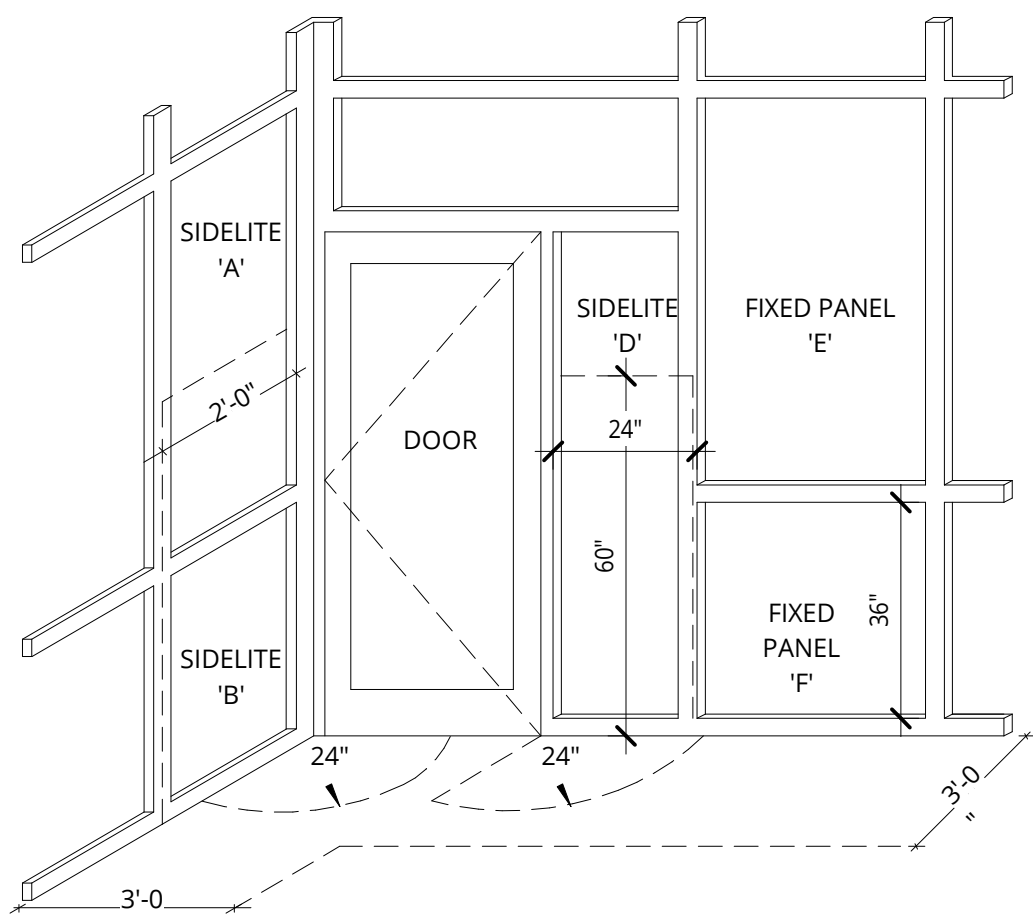


# DOOR DETAIL KEY

1/2" = 1'-0"

# WINDOW DETAIL KEY

1/2" = 1'-0"

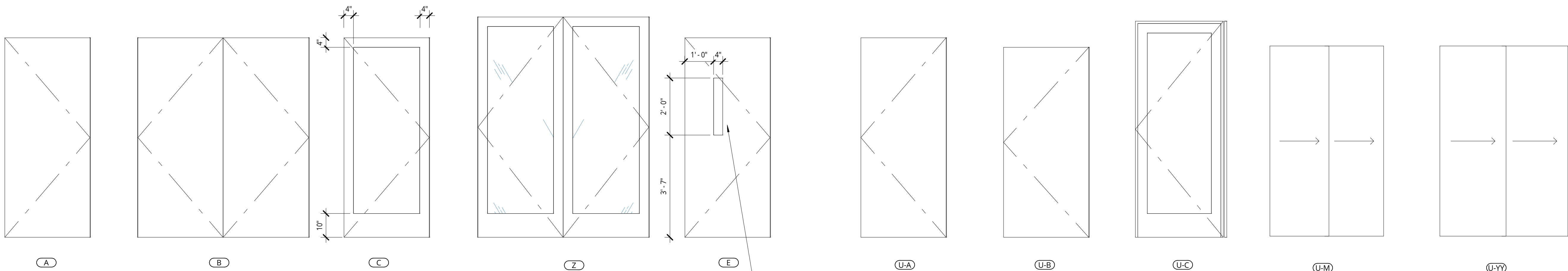


## PROVIDE SAFETY GLAZING

- AT DOORS, TYPICAL; AND
- FIXED PANELS THAT FALL WITHIN A 24" ARC OF ANY DOOR AND WITHIN 60" OF THE FLOOR (SHOWN AS SIDELITES 'A', 'B', & 'D'), AND
- FIXED PANELS WITH AN EXPOSURE OF MORE THAN OF 9 SQ. FT. WHEN THE BOTTOM EDGE IS WITHIN 18" OF THE FLOOR, WHEN THE TOP EDGE OF THE GLAZING IS MORE THAN 36" ABOVE THE FLOOR; AND WHEN ONE OR MORE WALKING SURFACES ARE WITHIN 36" (MEASURED HORIZONTALLY) OF THE PLANE OF THE GLAZING (SHOWN AS FIXED PANELS 'E' & 'F')

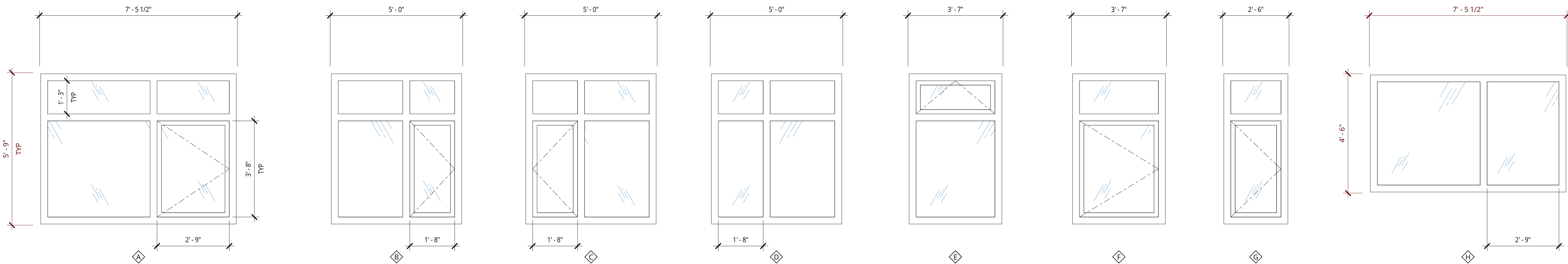
# SAFETY GLAZING LOCATIONS

3/8" = 1'-0"



# DOOR TYPES

1/2" = 1'-0"



# WINDOW TYPES

1/2" = 1'-0"

NOTE: ROUGH OPENING DIMENSIONS SHOWN, TYP

## DOOR SCHEDULE

		DOOR						GLAZING TYPE	FRAME		FIRE RESISTANCE RATING (MIN)	HARDWARE	EXIT DEVICE	ELECTRIC LOCK	CLOSER	HOLD OPEN	POSITION INDICATOR
		NO.	ROOM	TYPE	WIDTH	HEIGHT	THICKNESS		MAT'L	FINISH							
LEVEL 1																	
1ST1-D	STAIR 1	E	3'-0"	7'-0"	1 3/4"	SCWD	P-20	G-4	P-20A	HM	90	07	X	X	X		
1ST2-A	STAR 2	E	3'-0"	7'-0"	1 3/4"	SCWD	P-20	G-4	P-20A	HM	90	08	X		X		
1ST2-B	STAR 2	A	3'-0"	7'-0"	1 3/4"	HM	P-20	-	P-20A	HM	NR	09	X		X		X
100A-A	ENTRY	H	3'-6"	7'-10"	1 3/4"	ALUM	FF-BLK	G-2	FF-BLK	ALUM	NR	11		X	X		
100B	OFFICE	C	3'-0"	7'-10 3/4"	1 3/4"	ALUM	FF-CLR	G-5	FF-CLR	ALUM	NR						
100C	WORK	C	3'-0"	7'-0"	1 3/4"	SCWD	P-20	G-5	P-20A	KDHM	NR	14					
100D	SECURITY	A	3'-0"	7'-0"	1 3/4"	SCWD	P-20	-	P-20A	KDHM	NR	15					
100F	JANITOR	A	3'-0"	7'-0"	1 3/4"	HM	P-20	-	P-20A	HM	NR	24			X		
100G	OFFICE	F	3'-0"	7'-0"	1 3/4"	SCWD	P-20	G-5	P-20A	KDHM	NR	16					
100H	STORAGE	A	3'-6"	7'-0"	1 3/4"	SCWD	P-20	-	P-20A	KDHM	NR	15			X		
100J	TOILET	A	3'-0"	7'-0"	1 3/4"	SCWD	P-20	-	P-20A	HM	NR	17			X		
100K	MOVE-IN	C	3'-6"	7'-8 3/4"	1 3/4"	ALUM	FF-BLK	G-2	FF-BLK	ALUM	NR	18					
100L	LAUNDRY	C	3'-0"	7'-0"	1 3/4"	ALUM	FF-CLR	G-5	FF-CLR	ALUM	NR	19					
100M	MAINTENANCE	A	3'-0"	7'-0"	1 3/4"	HM	P-20	-	P-20A	HM	90	20			X		
100N-A	TRASH/RECYCLING	E	3'-0"	7'-0"	1 3/4"	HM	P-20	G-4	P-20A	HM	45	21			X		
100N-B	MAIN TRASH/RECYCLING	A	3'-6"	7'-0"	1 3/4"	HM	P-20	-	P-20A	HM	90	21			X		X
100P	RISER	A	3'-6"	7'-0"	1 3/4"	HM	P-20	-	P-20A	HM	NR	22			X		X
100Q-A	ELECTRICAL	A	3'-0"	7'-0"	1 3/4"	HM	P-20	-	P-20A	HM	NR	23	X		X		X
100Q-B	ELECTRICAL	A	3'-0"	7'-0"	1 3/4"	HM	P-20	-	P-20A	HM	NR	23	X		X		X
100S	DATA ENTRY/FIRE ALARM	A	3'-0"	7'-0"	1 3/4"	HM	P-20	-	P-20A	KDHM	NR	24			X		
100U-A	MAIN TRASH/RECYCLING	B	6'-0"	7'-0"	1 3/4"	HM	P-20	-	P-20A	HM	20	25			X		X
100U-B	MAINTENANCE	A	3'-6"	7'-0"	1 3/4"	HM	P-20	-	P-20A	HM	NR	09			X		X
100X-1		J		3'-7 1/4"	2"	STL	FF-BLK	-	FF-BLK	STL	NR						
100X-2		J		3'-7 1/4"	2"	STL	FF-BLK	-	FF-BLK	STL	NR						
100X-3		J		3'-7 1/4"	2"	STL	FF-BLK	-	FF-BLK	STL	NR						
100Z	CORRIDOR	E	3'-0"	7'-0"	1 3/4"	SCWD	P-20	-	P-20A	HM	90	26	X	X	X		X

LEVEL 2																	
2ST1	STAIR 1	E	3'-0"	7'-0"	1 3/4"	SCWD	P-20	G-4	P-20A	HM	90	08			X		
2ST2	STAIR 2	E	3'-0"	7'-0"	1 3/4"	SCWD	P-20	G-4	P-20A	HM	90	08			X		
200B	TRASH/RECYCLING	E	3'-0"	7'-0"	1 3/4"	HM	P-20	G-4	P-20A	HM	45	21		X			
200C	CORRIDOR	B	5'-8 1/2"	7'-10"	1 3/4"	HM	P-20	-	P-20A	HM	90	12	X		X	X	
200E	ELECTRICAL	A	3'-0"	7'-0"	1 3/4"	HM	P-20	-	P-20A	KDHM	20	28			X		

LEVEL 3																	
3ST1	STAIR 1	E	3'-0"	7'-0"	1 3/4"	SCWD	P-20	G-4	P-20A	HM	90	08			X		
3ST2	STAIR 2	E	3'-0"	7'-0"	1 3/4"	SCWD	P-20	G-4	P-20A	HM	90	08			X		
300B	TRASH/RECYCLING	E	3'-0"	7'-0"	1 3/4"	HM	P-20	G-4	P-20A	HM	45	21		X			
300C	CORRIDOR	B	5'-8 1/2"	7'-10"	1 3/4"	HM	P-20	-	P-20A	HM	90	12	X		X	X	
300E	DATA	A	3'-0"	7'-0"	1 3/4"	HM	P-20	-	P-20A	KDHM	NR	24			X		

LEVEL 4																	
4ST1	STAIR 1	E	3'-0"	7'-0"	1 3/4"	SCWD	P-20	G-4	P-20A	HM	90	08			X		
4ST2	STAIR 2	E	3'-0"	7'-0"	1 3/4"	SCWD	P-20	G-4	P-20A	HM	90	08			X		
400B	TRASH/RECYCLING	E	3'-0"	7'-0"	1 3/4"	HM	P-20	G-4	P-20A	HM	45	21		X			
400C	CORRIDOR	B	5'-8 1/2"	7'-10"	1 3/4"	HM	P-20	-	P-20A	HM	90	12	X		X	X	
400E	ELECTRICAL	A	3'-0"	7'-0"	1 3/4"	HM	P-20	-	P-20A	KDHM	NR	28			X		

LEVEL 5																	
5ST1	STAIR 1	E	3'-0"	7'-0"	1 3/4"	SCWD	P-20	G-4	P-20A	HM	90	08			X		
5ST2	STAIR 2	E	3'-0"	7'-0"	1 3/4"	SCWD	P-20	G-4	P-20A	HM	90	08			X		
500B	TRASH/RECYCLING	E	3'-0"	7'-0"	1 3/4"	HM	P-20	G-4	P-20A	HM	45	21		X			
500C	CORRIDOR	B	5'-8 1/2"	7'-10"	1 3/4"	HM	P-20	-	P-20A	HM	90	12	X		X	X	
500E	ELECTRICAL	A	3'-0"	7'-0"	1 3/4"	HM	P-20	-	P-20A	KDHM	NR	28			X		
500F	JANITOR	A	3'-0"	7'-0"	1 3/4"	HM	P-20	-	P-20A	KDHM	NR	28			X		

T O PLATE																	
6ST1	VESTIBULE	A	3'-0"	7'-0"	1 3/4"	HM	P-20	-	P-20A	HM	90				X		X
601	VESTIBULE	E	3'-0"	7'-0"	1 3/4"	HM	P-20	G-2	P-20A	HM	NR			X		X	
602	ELEV CTRL	A	3'-0"	7'-0"	1 3/4"	HM	P-20	-	P-20A	HM	45			X			

## GENERAL NOTES

- REFER TO SHEET A0.01 FOR 'PROJECT NOTES' APPLICABLE TO ALL PORTIONS OF THE WORK.

## DOOR ABBREVIATIONS

FG	FULL GLAZING
VP	VISION PANEL

ALUM	ALUMINUM
HCWD	HOLLOW CORE WOOD
HM	HOLLOW METAL
KDHM	KNOCK DOWN HOLLOW METAL
SCWD	SOLID CORE WOOD
WD	WOOD

## DOOR SCHEDULE - UNITS

TYPE	ROOM	DOOR				FRAME		FIRE RATING	HARDWARE SET		
		WIDTH	HEIGHT	THICKNESS	FINISH	FINISH	MAT'L				
U-A	ENTRY	3'-0"	6'-8"	1 3/4"	P-20/P-31	P-20A/P-31A	WD	20	01		
U-B	BATH	3'-0"	6'-8"	1 3/8"	P-31	P-31A	WD	NR	03		
U-C	BALCONY	3'-0"	7'-8"	1 3/4"	P-31	P-31A	VINYL	NR	06		
U-D	CLOSET	4'-0"	6'-8"	1 3/8"	P-31	P-31A	WD	NR	05		
U-E	CLOSET	5'-0"	6'-8"	1 3/8"	P-31	P-31A	WD	NR	04		
U-F	BED	3'-0"	6'-8"	1 3/8"	P-31	P-31A	WD	NR	03		
U-H	CLOSET		6'-8"	1 3/8"	P-31	P-31A	WD	NR	02		
U-K	CLOSET	7'-0"	6'-8"	1 3/8"	P-31	P-31A	WD	NR	04		
U-M	CLOSET	4'-0"	6'-8"	1 3/8"	P-31	P-31A	WD	NR	04		
U-YY	CLOSET	5'-6"	6'-8"	1 3/8"	P-31	P-31A	WD	NR	04		

## NORTH WILLIAMS APARTMENTS - FAMILY HOUSING

2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

## DOOR AND WINDOW TYPES AND SCHEDULE

PERMIT / GMP

DATE	PROJECT NUMBER
17 OCT 2018	149000
SHEET NUMBER	

A12.01



# NORTH WILLIAMS APARTMENTS - FAMILY HOUSING

## PERMIT/GMP SET

# VOLUME 2

OCTOBER 17, 2018



## ARCHITECTURAL TEAM &amp; CONSULTANTS UNDER ARCH

<p><b>ARCHITECTURAL</b>  <b>ANKROM MOISAN ARCHITECTS, INC.</b>  38 NORTHWEST DAVIS  SUITE 300  PORTLAND, OR 97209</p> <p><b>ISAAC JOHNSON, PRINCIPAL</b>  ISAAC@ANKROMMOISAN.COM  (503) 977-5274</p> <p><b>ROBERT LECHER, PM</b>  ROBERTL@ANKROMMOISAN.COM  (503) 952-1556</p> <p><b>JOHN BOYD, PA</b>  JOHNB@ANKROMMOISAN.COM  (503) 952-1517</p>	<p><b>STRUCTURAL</b>  <b>VALARE Consulting Engineering</b>  12042 SE Sunnyside Road #357  Clackamas, Oregon 97015</p> <p><b>Norm Faris PE SE, Principal</b>  norm.faris@valareengineering.com</p>
<p><b>CIVIL</b>  <b>SUMMIT ENGINEERING, LLC</b>  PO BOX 50322  EUGENE, OR 97405</p> <p><b>Jason Havelka, PE, LEED AP, CTSI</b>  jason@summitengineeringllc.com  (503) 997-2808</p>	<p><b>MFP DESIGN ASSIST</b>  <b>INTERFACE ENGINEERING, INC.</b>  708 SW THIRD AVENUE  SUITE 400  PORTLAND, OREGON 97204</p> <p><b>ANDREW LASSE, PRINCIPAL</b>  ANDREWLI@INTERFACEENG.COM</p>
<p><b>LANDSCAPE</b>  <b>ECOTONE</b>  5229 NE MLK BLVD  Suite 101  Portland, OR 97211</p> <p><b>Bryan Bailey RLA, LEED AP</b>  bryan@ecotone-env.com</p>	<p><b>INTERIOR DESIGN</b>  <b>ANKROM MOISAN ARCHITECTS, INC.</b>  38 NORTHWEST DAVIS STREET  SUITE 300  PORTLAND, OREGON 97209</p> <p><b>KATIE LYSLIO</b>  KATIEL@ANKROMMOISAN.COM  (503) 892-7312</p>
<p><b>BUILDING ENVELOPE</b>  <b>MORRISON HERSHFIELD</b>  5100 SW MACADAM AVENUE  SUITE 500  PORTLAND, OREGON 97239</p> <p><b>JOHN DUNCAN</b>  JDUNCAN@MORRISONHERSHFIELD.COM  (503) 924-2518</p> <p><b>ROBERT JACKSON</b>  RJACKSON@MORRISONHERSHFIELD.COM  (971) 717-6114</p>	

## OWNER TEAM & CONSULTANTS UNDER OWNER

<p><b><u>C U E N T</u></b>  <b><u>BRIDGE HOUSING</u></b>  38 NW DAVIS STREET  SUITE 450  PORTLAND, OREGON 97209</p> <p><b>DESTIN FERDUN, SR PM</b>  <b>TRINA WHITMAN, PM</b></p>	<p><b><u>ENVIRONMENTAL</u></b></p>
<p><b><u>GEOTECHNICAL ENGINEER</u></b>  GeoDesign, Inc.  9450 SW Commerce Circle – Suite 300  Wilsonville, OR 97070</p>	<p><b><u>SUSTAINABILITY</u></b>  <b><u>EARTH ADVANTAGE, INC.</u></b>  623 SW OAK STREET  SUITE 300  PORTLAND, OREGON 97205</p> <p><b>ERIC FOLEY</b></p>
<p><b><u>SURVEYOR</u></b>  Westlake Consultants, Inc.  15115 SW Sequoia Parkway, Suite 150  Tigard, Oregon 97224</p> <p><b>Gary Anderson, PLS</b></p>	<p>PH: (503) 968-7160  EFOLEY@EARTHADVANTAGE.ORG</p>
<p>PH: 503.968.8787  www.geodesigninc.com</p>	<p><b><u>ENERGY MODELING</u></b></p>
<p><b><u>ACCESSIBILITY CONSULTANT</u></b>  <b><u>KAREN BRAITMAYER</u></b>  2144 WESTLAKE AVENUE NORTH  UNIT F  SEATTLE, WASHINGTON 98109</p> <p><b>KAREN BRAITMAYER</b></p>	<p><b><u>TRAFFIC ENGINEER</u></b>  <b><u>Nemariam Engineers &amp; Associates LLC</u></b>  10976 NE IRONWOOD LANE  PORTLAND, OREGON 97229</p> <p><b>HAREGU NEMARIAM</b></p>
<p>PH: (206) 929-9799 EXT-2  FAX: (206) 628-0386</p> <p>KAREN@BRAITMAYER.COM</p>	<p>PH: (503) 746-4386  HAREGU@NEMARIAM-ENGINEERS.COM  (541) 680-3411</p>

## GENERAL CONTRACTOR & DELEGATED DESIGN

**CONTRACTOR**  
**COLAS CONSTRUCTION, INC.**  
19 NW 5TH AVENUE, SUITE 203  
PORTLAND, OREGON 97209

PH: (503) 292-4025  
FAX: (503) 292-4024

**ANDREW COLAS**

ANDREW@COLASCONSTRUCTION.COM

**MARC WIATER**

MWIATER@COLASCONSTRUCTION.COM

**KEVIN RABORG**

KEVIN@COLASCONSTRUCTION.COM

**MECHANICAL**  
**HUNTER DAVISSON, INC.**  
1800 SE PERSHING STREET  
PORTLAND, OREGON 97220

FAX: (503) 236-1625

**TARA WELLS**

TWELLS@HUNTERDAVISSON.COM  
(503) 542-3608

**GEOFFREY LEDBETTER**

GLEDDBETTER@HUNTERDAVISSON.COM  
(503) 542-3650

**ELECTRICAL FIRE ALARM, AND LOW VOLTAGE**  
**AFFORDABLE ELECTRIC**  
14942 SE 82ND DRIVE  
CLACKAMAS, OREGON 97015

PH: (503) 305-6967  
FAX: (503) 744-0240

**JEAN-WILLY MALARY**

JMALARY@AFFOELECT.COM

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**TAPANI PLUMBING**  
P.O. BOX 2350  
BATTLE GROUND, WASHINGTON 98604

PH: (360) 687-3983  
FAX: (360) 687-4494

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PORTLAND, OREGON 97206

PH: (503) 777-5030

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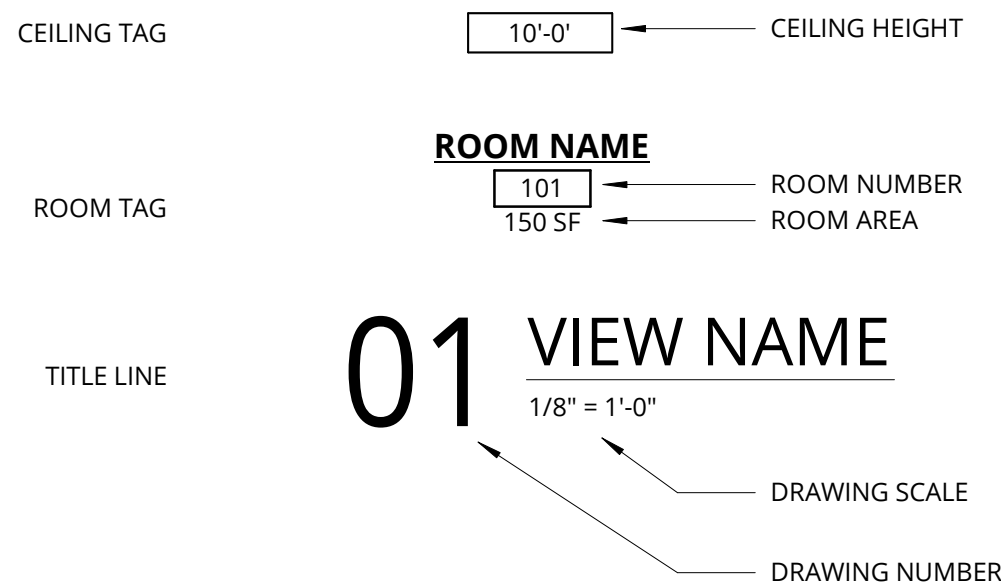
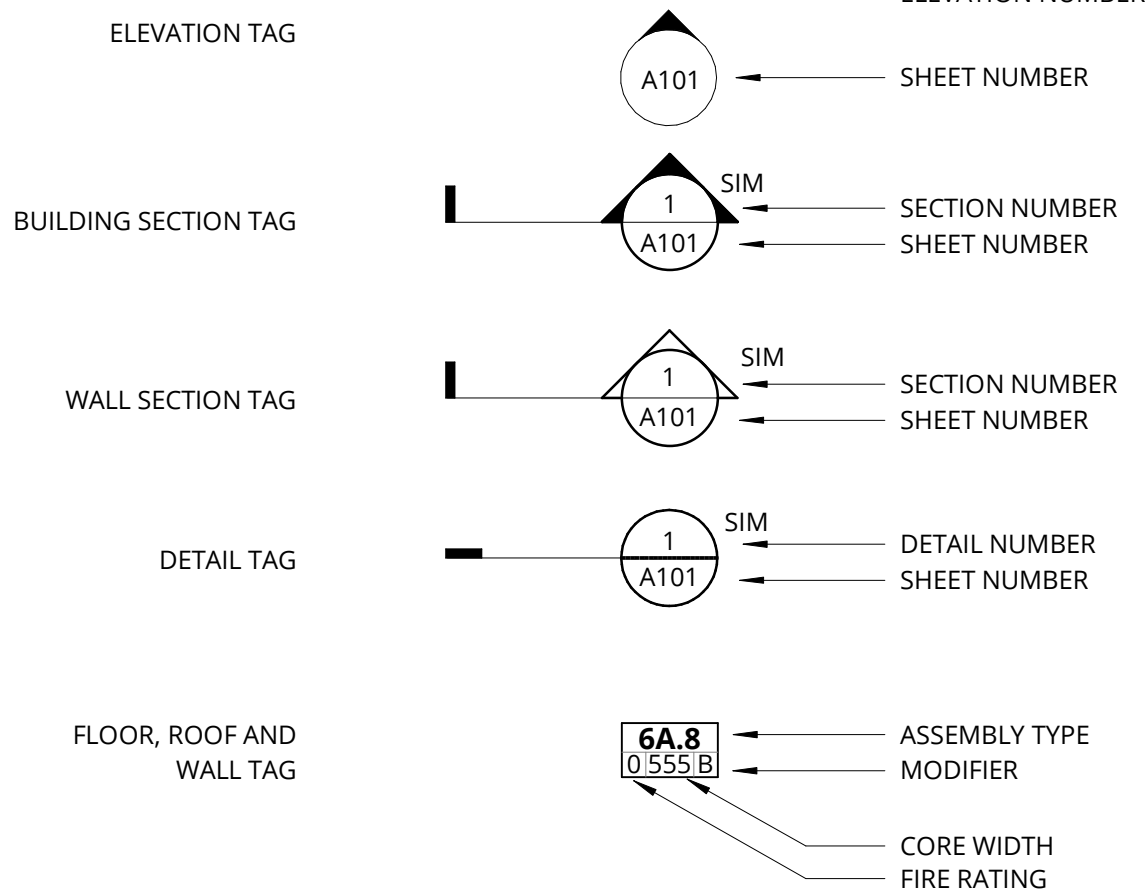
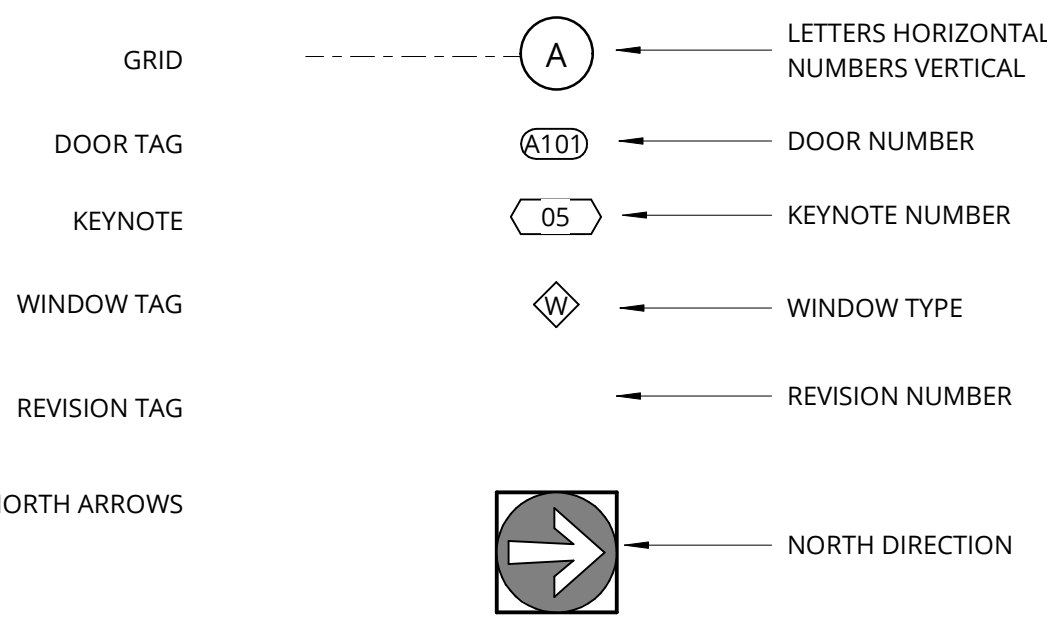
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SHEET INDEX

VOLUME 1

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	G0.02	GENERAL NOTES & INFORMATION		A0.31	HORIZONTAL ASSEMBLIES
	G0.03	SURVEY		A0.41	TYPICAL ASSEMBLY DETAILS
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	G2.01	SITE FLS PLAN		A0.43	ENERGY CODE ELEVATIONS
	G2.02	LEVEL 1 FLS PLANS		A0.44	ENERGY CODE ELEVATIONS
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STRUCTURAL	S0.01	DRAWING INDEX AND LIST OF ABBREVIATIONS		A6.22	ELEVATOR DETAILS
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SYMBOLS LEGEND



MECHANICAL, ELECTRICAL, PUMBING, FIRE ALARM, FIRE PROTECTION AND TECHNOLOGY SUBMITTED UNDER SEPARATE PERMIT

VOLUME 2

NUMBER NAME			NUMBER NAME		
GENERAL	CS2	COVER SHEET - VOLUME 2	MECHANICAL	M2.01	LEVEL 1 OVERALL HVAC FLOOR PLAN
	G0.01	SHEET INDEX & SYMBOLS LEGEND		M2.02	LEVEL 2 OVERALL HVAC FLOOR PLAN
	M2.03	LEVEL 3 OVERALL HVAC FLOOR PLAN		M2.04	LEVEL 4 OVERALL HVAC FLOOR PLAN
	M2.05	LEVEL 5 OVERALL HVAC FLOOR PLAN		M2.06	HVAC ROOF PLAN
	M5.01	LEVEL 1 NORTH ENLARGED HVAC FLOOR PLAN		M5.02	LEVEL 1 SOUTH ENLARGED HVAC FLOOR PLAN
	M5.03	LEVEL 2 NORTH ENLARGED HVAC FLOOR PLAN		M5.04	LEVEL 2 SOUTH ENLARGED HVAC FLOOR PLAN
	M5.05	LEVEL 3 NORTH ENLARGED HVAC FLOOR PLAN		M5.06	LEVEL 3 SOUTH ENLARGED HVAC FLOOR PLAN
	M5.07	LEVEL 4 NORTH ENLARGED HVAC FLOOR PLAN		M5.08	LEVEL 4 SOUTH ENLARGED HVAC FLOOR PLAN
	M5.09	LEVEL 5 NORTH ENLARGED HVAC FLOOR PLAN		M5.10	LEVEL 5 SOUTH ENLARGED HVAC FLOOR PLAN
	M6.01	MECHANICAL DETAILS		M7.01	MECHANICAL SCHEDULES
ELECTRICAL	E0.01	ELECTRICAL LEGEND AND DETAILS		E0.02	ONE LINE DIAGRAM
	E0.03	ELECTRICAL CALCULATIONS		E3.01	LEVEL 1 NORTH ENLARGED FLOOR PLAN - ELECTRICAL
	E3.02	LEVEL 1 SOUTH ENLARGED FLOOR PLAN - ELECTRICAL		E3.03	LEVEL 2 NORTH ENLARGED FLOOR PLAN - ELECTRICAL
	E3.04	LEVEL 2 SOUTH ENLARGED FLOOR PLAN - ELECTRICAL		E3.05	LEVEL 3 NORTH ENLARGED FLOOR PLAN - ELECTRICAL
	E3.06	LEVEL 3 SOUTH ENLARGED FLOOR PLAN - ELECTRICAL		E3.07	LEVEL 4 NORTH ENLARGED FLOOR PLAN - ELECTRICAL
	E3.08	LEVEL 4 SOUTH ENLARGED FLOOR PLAN - ELECTRICAL		E3.09	LEVEL 5 NORTH ENLARGED FLOOR PLAN - ELECTRICAL
	E3.10	LEVEL 5 SOUTH ENLARGED FLOOR PLAN - ELECTRICAL		E3.11	ROOF PLAN - ELECTRICAL
PLUMBING	P2.00	COVER SHEET - PLUMBING		P2.01	LEVEL 1 FLOOR - PLAN - PLUMBING BELOW GRADE
	P2.01A	LEVEL 1 FLOOR - PLAN - PLUMBING ABOVE GRADE		P2.02	LEVEL 2 FLOOR PLAN - PLUMBING
	P2.03	LEVEL 3 FLOOR PLAN - PLUMBING		P2.04	LEVEL 4 FLOOR PLAN - PLUMBING
	P2.05	LEVEL 5 FLOOR PLAN - PLUMBING		P2.06	ROOF PLAN - PLUMBING
	P3.00	RISER DIAGRAM - PLUMBING	FIRE ALARM	FA001	LEVEL ONE FIRE ALARM
				FA002	RISER DIAGRAM FIRE ALARM
				FA101	LEVEL ONE FIRE ALARM
				FA102	LEVEL TWO FIRE ALARM
				FA103	LEVEL THREE FIRE ALARM
				FA104	LEVEL FOUR FIRE ALARM
FIRE SPRINKLER		LEVEL 1 FIRE SPRINKLER PLAN		FA105	LEVEL FIVE FIRE ALARM
		LEVEL 2 FIRE SPRINKLER PLAN	TECHNOLOGY	T0.01	COVER SHEET TECHNOLOGY
		LEVEL 3 FIRE SPRINKLER PLAN		T1.01	SITE PLAN -TECHNOLOGY
		LEVEL 4 FIRE SPRINKLER PLAN		T2.01	FLOOR PLAN -LEVEL 1 -TECHNOLOGY
		LEVEL 5 FIRE SPRINKLER PLAN		T2.02	FLOOR PLAN -LEVEL 2 -TECHNOLOGY
				T2.03	FLOOR PLAN -LEVEL 3 -TECHNOLOGY
				T2.04	FLOOR PLAN -LEVEL 4 -TECHNOLOGY
				T2.05	FLOOR PLAN -LEVEL 5 -TECHNOLOGY
				T6.01	DETAILS -TECHNOLOGY
				T6.02	DETAILS -TECHNOLOGY
				T6.03	DETAILS -TECHNOLOGY

REGISTERED ARCHITECT  
ISAAC S. JOHNSON  
5082  
ISAAC JOHNSON  
PORTLAND, OR  
STATE OF OREGON

M

Ankrom Moisan

38 NORTHWEST DAVIS, SUITE 300  
PORTLAND, OR 97209  
T 503.245.7100

1505 5TH AVE, SUITE 300  
SEATTLE, WA 98101  
T 206.576.1600

1014 HOWARD STREET  
SAN FRANCISCO, CA 94103  
T 415.252.7063

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NORTH WILLIAMS APARTMENTS - FAMILY HOUSING

2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE
SHEET INDEX & SYMBOLS LEGEND		
PERMIT / GMP		
DATE 17 OCT 2018	PROJECT NUMBER 149000	
SHEET NUMBER G0.01		



GENERAL NOTES

1. NEW / REMODEL CONSTRUCTION CUTTING & PATCHING BY GENERAL CONTRACTOR.
2. INSTALLATION WILL COMPLY WITH 2014 OREGON MECHANICAL SPECIALTY CODE (OMSC), 2014 OREGON STRUCTURAL SPECIALTY CODE (OSSC), 2014 OREGON ENERGY EFFICIENCY SPECIALTY CODE (OEESC) AND ASHRAE STANDARDS.
3. LOAD CALCULATIONS WERE PERFORMED WITH AN APPROVED EQUIVALENT COMPUTATION PROCEDURE AND EQUIPMENT SIZING AND CAPACITY DOES NOT EXCEED THE LOADS CALCULATED AS PER SECTION 503.2 OF THE OEESC.
4. SUPPLY & RETURN AIR DUCTWORK TO BE LINED WITH 1" - 1-1/2" SA INSULATION FOR AT LEAST 10' FROM AIR HANDLING EQUIPMENT, UNLESS NOTED OTHERWISE (INDOOR VS. OUTDOOR).
5. NEW DUCTWORK TO BE INSTALLED USING SHEET METAL RUN OUTS IN ACCORDANCE WITH SMACNA STANDARDS.
6. INSULATE & SEAL DUCTS AND PLENUMS PER OEESC 503.2.7 & OSMC 603.9. TERMINAL CONNECTIONS WILL USE NOT MORE THAN 8' OF FLEXIBLE DUCTWORK. INSTALLATION OF FLEX DUCT WILL BE HUNG PROPERLY TO PROVIDE PROPER AIRFLOW WITHOUT RESTRICTIONS. ALL SUPPLY AND RETURN AIR DUCTS AND PLENUMS SHALL BE INSULATED WITH A MINIMUM OF R-5 INSULATION WHEN LOCATED IN UNCONDITIONED SPACES (CEILINGS AND ATTICS) AND A MINIMUM OF R-8 INSULATION WHEN LOCATED OUTSIDE THE BUILDING. EXCEPTION: WHEN THE DESIGN TEMPERATURE DIFFERENCE BETWEEN THE INTERIOR AND EXTERIOR OF THE DUCT OR PLENUM DOES NOT EXCEED 15 DEG. F. (RETURN DUCTS ABOVE CEILINGS). DUCT RUN OUTS IN A CONDITIONED SPACE & EXHAUST DUCTS SHOULD BE UNINSULATED.
7. VOLUME DAMPERS OR OTHER MEANS OF SUPPLY AIR ADJUSTMENT SHALL BE PROVIDED IN THE BRANCH DUCTS OR AT EACH INDIVIDUAL DUCT REGISTER, GRILLE OR DIFFUSER. IN ADDITION EACH VOLUME DAMPER OR OTHER MEANS OF SUPPLY AIR ADJUSTMENT USED IN BALANCING SHALL BE PROVIDED WITH ACCESS IN ACCORDANCE WITH SECTION 603.17 OF THE OMSC.
8. SUPPLY AIR ECONOMIZERS SHALL BE PROVIDED ON EACH COOLING SYSTEM AND SHALL BE CAPABLE OF OPERATING AT 100 PERCENT OUTSIDE AIR, EVEN IF ADDITIONAL MECHANICAL COOLING IS REQUIRED TO MEET THE COOLING LOAD OF THE BUILDING. EXCEPTIONS: 1. COOLING EQUIPMENT LESS THAN 54 MBH TOTAL COOLING CAPACITY. THE TOTAL CAPACITY OF ALL SUCH UNITS WITH ECONOMIZERS SHALL NOT EXCEED 240 MBH PER BUILDING AREA SERVED BY ONE UTILITY METER OR SERVICE, OR 10 PERCENT OF ITS TOTAL INSTALLED COOLING CAPACITY, WHICHEVER IS GREATER. 2. SYSTEMS WHERE INTERNAL / EXTERNAL ZONE HEAT RECOVERY IS USED. 3. SYSTEMS USED TO COOL DEDICATED COMPUTER SERVER ROOMS, ELECTRONIC EQUIPMENT ROOM OR TELECOM ROOM HAVING A WATER ECONOMIZER SYSTEM CAPABLE OF COOLING AIR BY DIRECT AND/OR INDIRECT EVAPORATION AND PROVIDING 100 PERCENT OF THE EXPECTED SYSTEMS COOLING LOAD AT OUTSIDE AIR TEMPERATURES OF 45°F DRY BULB AND 40°F WET BULB AND BELOW. 4. ECONOMIZER COOLING IS NOT REQUIRED FOR NEW COOLING SYSTEMS SERVING AN EXISTING DEDICATED COMPUTER SERVING ROOM, ELECTRONIC EQUIPMENT ROOM OR TELECOM ROOM IN EXISTING BUILDINGS UP TO A TOTAL OF 600 MBH OF COOLING. 5. ECONOMIZER COOLING IS NOT REQUIRED FOR NEW COOLING SYSTEMS SERVING A NEW DEDICATED COMPUTER SERVING ROOM, ELECTRONIC EQUIPMENT ROOM OR TELECOM ROOM IN EXISTING BUILDINGS UP TO A TOTAL OF 240 MBH OF COOLING. 6. SYSTEMS USING CONDENSER HEAT RECOVERY, UP TO THE COOLING CAPACITY USED TO PROVIDE CONDENSER HEAT RECOVERY.
9. FORCED AIR UNIT AND PACKAGED ELECTRIC EQUIPMENT WITH A TOTAL HEATING CAPACITY GREATER THAN 20 MBH SHALL HAVE A HEAT PUMP AS THE PRIMARY HEATING SOURCE.
10. HEAT PUMPS HAVING SUPPLEMENTAL ELECTRIC RESISTANCE HEAT SHALL HAVE CONTROLS THAT, EXCEPT DURING DEFROST, PREVENT SUPPLEMENTARY HEAT OPERATION WHEN THE HEAT PUMP CAN MEET THE HEATING LOAD.
11. SHEET METAL DUCT JOINTS SHALL BE SEALED WITH MASTIC. WHERE MASTIC IS USED TO SEAL OPENINGS GREATER THAN 1/4", A COMBINATION OF MASTIC AND MESH SHALL BE USED.
12. REPLACE EXISTING DUCTWORK IF THE TERMINAL CONNECTION USES MORE THAN 20' OF FLEXIBLE DUCTWORK.
13. ALL MATERIALS & PRODUCTS USED WILL BE NEW UNLESS OTHERWISE DIRECTED BY THE OWNER. ALL EXISTING DUCTWORK, GRILLES & DIFFUSERS TO REMAIN, UNLESS OTHERWISE DIRECTED BY THE OWNER.
14. COORDINATE DEMOLITION OF EXISTING HVAC SYSTEMS WITH GENERAL CONTRACTOR. DEMOLITION TO BE COMPLETED BY THE GENERAL CONTRACTOR.
15. ROOF CURBS TO BE FURNISHED AND SPOTTED BY HUNTER-DAVISSON. LEVELING AND ROOFING BY THE GENERAL CONTRACTOR.
16. STRUCTURAL CALCULATIONS FOR NEW ROOFTOP EQUIPMENT BY LICENSED STRUCTURAL ENGINEER.
17. NEW LAY-IN CEILING SUPPLY DIFFUSERS TO BE TITUS PCS (PERFORATED, ADJUSTABLE CURVED BLADE CORE) OR EQUAL.
18. PROGRAMMABLE ROOM THERMOSTATS TO BE MOUNTED 48" ABOVE FINISHED FLOOR. PER SECTION 503.2.4 OF THE OEESC THERMOSTATS SHALL BE CAPABLE OF CONTROLLING THE TEMPERATURE BETWEEN 55°F AND 85°F WITH A DEADBAND OF 5°F. OFF-HOUR CONTROLS SHALL BE ACCOMPLISHED USING A PROGRAMMABLE THERMOSTAT OR TIMECLOCK. OPTIMUM START CONTROLS SHALL BE ABLE TO VARY THE START-UP TIME OF THE SYSTEM TO JUST MEET THE TEMPERATURE SET POINT AT THE TIME OF OCCUPANCY. PROVIDE A VANDLE PROOF GUARD FOR THERMOSTATS LOCATED IN PUBLIC AREAS AS REQUIRED.
19. PROVIDE MOTORIZED DAMPERS FOR OUTDOOR AIR SUPPLY AND EXHAUST SYSTEMS IN EXCESS OF 300 CFM PER OEESC 503.2.4.5. EXCEPTIONS INCLUDE COMBUSTION AIR INTAKES, TYPE 1 KITCHEN HOODS, COOLING EQUIPMENT RATED LESS THAN 54,000 BTU/Hr AND HOOD VENTS WITH GRAVITY DAMPERS IN BUILDINGS LESS THAN 3 STORIES IN HEIGHT.
20. OUTSIDE AIR DAMPERS SHALL HAVE A MAXIMUM LEAKAGE RATE OF 20 CFM/SQ.FT. @ 1.0" W.G.
21. OPERATION AND MAINTENANCE MANUAL(S) SHALL BE PROVIDED TO THE BUILDING OWNER BY THE MECHANICAL CONTRACTOR IN ACCORDANCE WITH SECTION 503.2.9.3 OF THE OEESC.

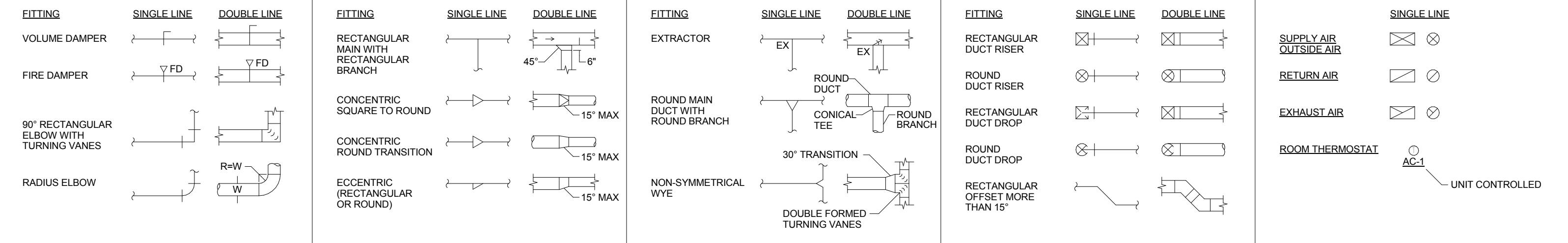
SCOPE OF WORK

1. FURNISH AND INSTALL TWO (2) DAIKIN DEDICATED OUTSIDE AIR UNITS WITH GAS HEAT AND DX COOLING.
2. FURNISH AND INSTALL SIX (6) DAIKIN SPLIT SYSTEM HEAT PUMPS TO SERVE FIRST FLOOR AMENITY SPACES AND OFFICES, OUTDOOR HEAT PUMP UNITS TO BE MOUNTED ON ROOF. INCLUDING ALL NECESSARY REFRIGERANT PIPING FOR SPLIT SYSTEMS, CONDENSATE DRAIN PIPING, THERMOSTATS, AND DISTRIBUTION DUCTWORK AND DIFFUSERS.
3. FURNISH AND INSTALL SEVEN (7) SPLIT SYSTEM AIR CONDITIONING SYSTEMS TO SERVE SECURITY, DATA ENTRY/FIRE ALARM, ELECTRICAL, DATA, AND ELEVATOR CONTROL ROOMS. OUTDOOR CONDENSING UNITS TO BE MOUNTED ON ROOF, INCLUDING ALL NECESSARY REFRIGERANT PIPING, CONDENSATE DRAIN PIPING, AND THERMOSTATS.
4. FURNISH AND INSTALL THREE (3) CEILING CABINET EXHAUST FANS WITH ASSOCIATED EXHAUST DUCTWORK AND EXTERIOR LOUVERS FOR FIRST FLOOR RESTROOM AND JANITOR CLOSETS ON FIRST FLOOR AND FIFTH FLOOR.
5. FURNISH AND INSTALL ONE (1) INLINE SUPPLY FAN AND ONE (1) ELECTRIC DUCT HEATER TO PROVIDE VENTILATION AND PRESSURIZATION OF MAINTENANCE ROOM 100M, INCLUDING ASSOCIATED DUCTWORK AND EXTERIOR LOUVER.
6. FURNISH AND INSTALL ONE (1) THERMOSTATICALLY-CONTROLLED INLINE EXHAUST FAN TO SERVE MAIN ELECTRICAL ROOM 100Q, INCLUDING ASSOCIATED EXHAUST DUCTWORK, EXHAUST GRILLES, AND EXTERIOR LOUVER.
7. FURNISH AND INSTALL ONE (1) SIDEWALL EXHAUST FAN TO SERVE MAIN TRASH/RECYCLING 100U, INCLUDING ASSOCIATED EXHAUST DUCTWORK, GRILLES, AND EXTERIOR LOUVER.
8. FURNISH SEVEN (7) ELECTRIC WALL HEATERS TO SERVE FIRST FLOOR SPACES AND STAIRWELLS. INSTALLATION BY OTHERS.
9. FURNISH AND INSTALL SIXTY-ONE (61) AMANA PTHP UNITS TO SERVE RESIDENTIAL UNITS WITH WALL-MOUNTED THERMOSTATS. CONDENSATE DRAIN TO TERMINATE AT CONDENSATE RISER SERVING EACH STACK OF UNITS. RISER AND FINAL CONNECTION TO DRAIN PLUG BY PLUMBING CONTRACTOR.
10. FURNISH AND INSTALL SEVENTY-NINE (79) PANASONIC WHPSRGREEN CEILING CABINET EXHAUST FANS FOR RESIDENT BATHROOMS, INCLUDING 4" ROUND EXHAUST DUCT ROUTED TO EXTERIOR AND EXTERIOR TERMINATION.
11. FURNISH AND INSTALL 6" RANGE EXHAUST DUCT FOR SIXTY-ONE (61) RESIDENTIAL UNITS INCLUDING EXTERIOR TERMINATION.
12. FURNISH AND INSTALL ONE (1) ELECTRIC UNIT HEATER TO SERVE MAIN TRASH/RECYCLING 100U.
13. FURNISH AND INSTALL ONE (1) MAKE-UP AIR LOUVER AND CONTROL DAMPER FOR LAUNDRY ROOM. INTERLOCKING OF DAMPER WITH DRYERS IS BY OTHERS.
14. FURNISH AND INSTALL 4" DRYER EXHAUST DUCTWORK INCLUDING EXTERIOR LOUVER.
15. FURNISH AND INSTALL ONE (1) ELEVATOR RELIEF HOOD INCLUDING ASSOCIATED DAMPER.

ABBREVIATIONS

A/C	AIR CONDITION (ED)	CD	CONDENSATE DRAIN	EQUIP	EQUIPMENT	IN	INCHES	OSA	OUTSIDE AIR	TYP	TYPICAL
AD	ACCESS DOOR	CFM	CUBIC FEET PER MINUTE	ERV	ENERGY RECOVERY VENTILATOR	LAT	LEAVING AIR TEMPERATURE	PSI	POUNDS PER SQUARE INCH	V	VOLT
AFE	ABOVE FINISHED FLOOR	SLG	CEILING	ESP	EXTERNAL STATIC PRESSURE	LF	LINEAR FEET	QTY	QUANTITY	VD	VOLUME DAMPER (HAND OPERATOR)
ALT	ALTERNATIVE	CND	CONDENSATE DRAIN	EXH	EXHAUST	MA	MIXED AIR	RA	RETURN AIR	VFD	VARIABLE FREQUENCY DRIVE
AL	ALUMINUM	CONC	CONCRETE	EXIST	EXISTING	MAX	MAXIMUM	RET	RETURN	VRV	VARIABLE REFRIGERANT VOLUME
ARD	AIR PRESSURE DROP	CONT	CONTINUOUS (QUALITY)	EXP	EXPANSION	MBH	THOUSAND BTU PER HOUR	REV	REVISION	W	WITH
APPROX	APPROXIMATELY	Q	QUANTITY	F	DEGREES FAHRENHEIT	MD	MOTORIZED DAMPER	RL	RELATIVE HUMIDITY	WB	WET BULB
ARCH	ARCHITECTURAL	DDC	DIRECT DIGITAL CONTROL	FC	FLEXIBLE CONNECTOR	MECH	MECHANICAL	RPM	REVOLUTIONS PER MINUTE	WC	WATER COLUMN
AUTO	AUTOMATIC	DEFL	DEFLECTION	FD	FIRE DAMPER	MFG	MANUFACTURER	SA	SUPPLY AIR	W/O	WITHOUT
BDD	BACKDRIFT DAMPER	DN	DOWN	FPM	FEET PER MINUTE	MH	MOUNTING HEIGHT	SF	SQUARE FEET	WPD	WATER PRESSURE DROP
BHP	BRAKE HORSE POWER	DWG	DRAWING	FSD	FIRE SMOKE DAMPER	MIN	MINIMUM	SH	SENSIBLE HEAT	W	WATT
BLDG	BUILDING	EAT	ENTERING AIR TEMPERATURE	FT	FEET	N/A	NOT APPLICABLE	SP	STATIC PRESSURE		
BOT	BOTTOM OF DUCT	EF	EXHAUST FAN	FV	FACE VELOCITY	NC	NOISE CRITERIA	SPEC	SPECIFICATION		
BOF	BOTTOM OF PIPE	EFF	EFFICIENCY	GA	GAUGE / GAUGE	NC	NORMALLY CLOSED	SS	STAINLESS STEEL		
BSMT	BASEMENT	ELEC	ELECTRICAL	GALV	GALVANIZED	NO	NORMALLY OPEN	TD	TEMPERATURE DIFFERENCE		
BTUH	BRITISH THERMAL UNIT PER HOUR	ELEV	ELEVATION	HP	HORSE POWER	NTS	NOT TO SCALE	TEMP	TEMPERATURE		
CD	CEILING DIFFUSER	EQ	EQUAL	ID	INTERNAL DIAMETER	OD	OUTSIDE DIAMETER	TP	TOTAL PRESSURE		

HVAC DUCT SYMBOLS



DESIGN CONDITIONS - PORTLAND, OREGON

SPACE	WINTER		SUMMER	
	TEMPERATURE	HUMIDITY	TEMPERATURE	HUMIDITY
INDOOR	70°F ± 2°F DB	NOT CONTROLLED	75°F ± 2°F DB	NOT CONTROLLED
OUTDOOR	25.2°F DB	N/A	91.4°F DB/67.3°F MCWB	28.1% RH
NOTES:				
1. OUTDOOR CONDITIONS BASED ON ASHRAE FUNDAMENTALS 2013, 99.6% & 0.4% DATE				

MINIMUM INSULATION R-VALUE FOR HVAC DUCT SYSTEMS (OREGON)

DUCT LOCATION (3)	DUCT TYPE			
	OUTSIDE AIR	RETURN AIR	COOLING SUPPLY	HEATING SUPPLY
EXTERIOR OF BUILDING	-	8.0	8.0	8.0
VENTED SPACES (*)	-	8.0	8.0	8.0
UNCONDITIONED SPACES & PLENUMS (*)	5.0	5.0	5.0	5.0
FULLY CONDITIONED SPACES	8.0	-	-	-

ADJUSTABLE IS IN ACCORDANCE WITH THE 2014 OREGON ENERGY EFFICIENCY SPECIALTY CODE, 503.2.2. INCLUDES UNCONDITIONED SPACES (ATTICS, CRAWL SPACES, VENTED MECHANICAL ROOMS) OUTSIDE THE BUILDING 1. BODIES UNCONDITIONED, UNVENTED SPACES SUCH AS UNVENTED MECH. ROOMS, SHAFTS, OR PLENUMS IN THE 2. BUILDING 3. DEMOLITION IS NOT REQUIRED IF THE DESIGN TEMPERATURE DIFFERENCE BETWEEN THE INTERIOR AND EXTERIOR OF THE 3. DUCT/PLENUM DOES NOT EXCEED 15°F OWENS CORNING SOFT-R DUCTWRAP FRK WITH A THICKNESS OF 2.2" HAS AN INSTALLED RATING OF R-6.0 OWENS CORNING SOFT-R DUCTWRAP FRK WITH A THICKNESS OF 3" HAS AN INSTALLED RATING OF R-8.3



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2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

REVISIO N	DATE	REASON FOR ISSUE

SCOPE & LEGEND

GMP/PERMIT

DATE 17 OCT 2018	PROJECT 149000
SHEET NUMBER	

M0.02

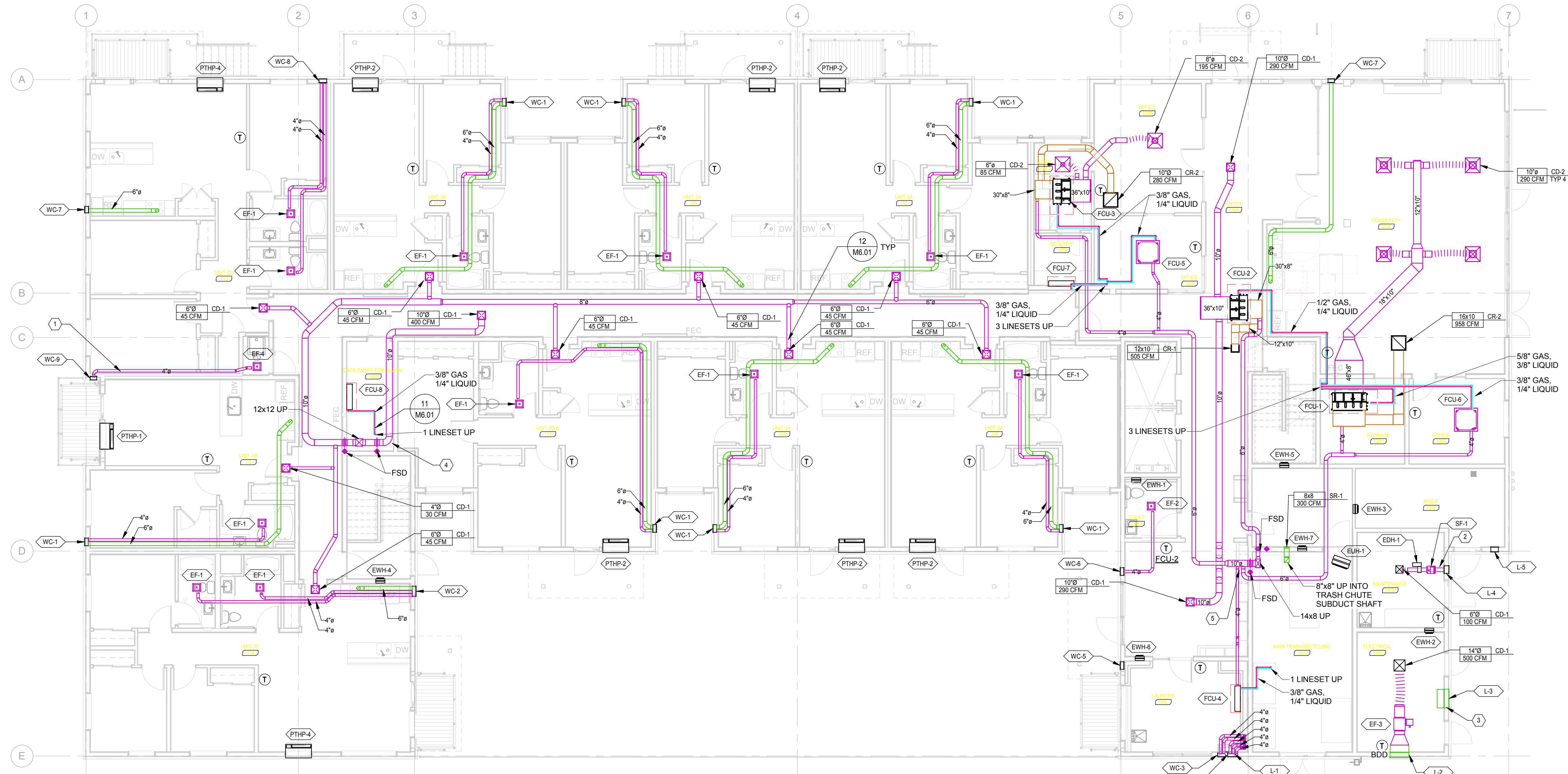


GENERAL NOTES:

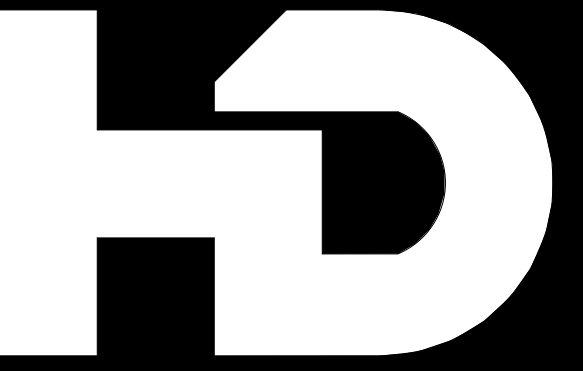
1. UNIT EXHAUST TO TERMINATE IN PRE-FABRICATED COMBI-VENT WITH BACKDRAFT DAMPER FOR DRYER DUCT AND BIRDSCREEN FOR KITCHEN AND BATH DUCTS.
2. ELECTRIC HEAT IN BEDROOMS BY ELECTRICAL CONTRACTOR.
3. PTHP CONDENSATE DRAIN TO TERMINATE AT CONDENSATE RISER SERVING EACH STACK OF UNITS. RISER AND FINAL CONNECTION TO DRAIN PLUG BY PLUMBING CONTRACTOR.
4. OSA DUCT TO TERMINATE WITHIN 12" OF UNIT RETURN.
5. DRYER DUCT MATERIAL SHALL HAVE A SMOOTH INTERIOR FINISH AND SHALL BE 0.016" THICK. RIVET OR SCREEN PENETRATIONS IN DUCT WALL IS NOT ACCEPTABLE. DRYER DUCT SHALL BE SUPPORTED EVERY 4 FEET.
6. ROUTE FAN COIL CONDENSATE DRAIN PIPING TO NEAREST HUB DRAIN OR SINK.
7. SEE DETAIL 6/M.01 FOR CORRIDOR WALL PENETRATION DETAIL.

KEY NOTES:

1. EXHAUST DUCT IS LOCATED IN A FIRE-RATED SHAFT ENCLOSURE, REFER TO ARCHITECTURAL PLANS.
2. WRAP DUCT WITH R-8 INSULATION UPSTREAM OF EDH.
3. MOTORIZED DAMPER INTERLOCKED WITH EF-3. DAMPER OPENS WHEN THERMOSTAT CALLS FOR EF-3 OPERATION.
4. SEE DETAIL 1/M6.02 FOR SECTION OF SHAFT RISER.
5. SEE DETAIL 2/M6.02 FOR SECTION OF SHAFT RISER.



1 LEVEL 1 OVERALL HVAC FLOOR PLAN  
1/8" = 1'-0"



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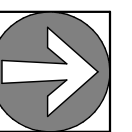
REVISION	DATE	REASON FOR ISSUE

LEVEL 1 OVERALL  
HVAC FLOOR PLAN

GMP/PERMIT

DATE 17 OCT 2018	PROJECT 149000
SHEET NUMBER	

M2.01



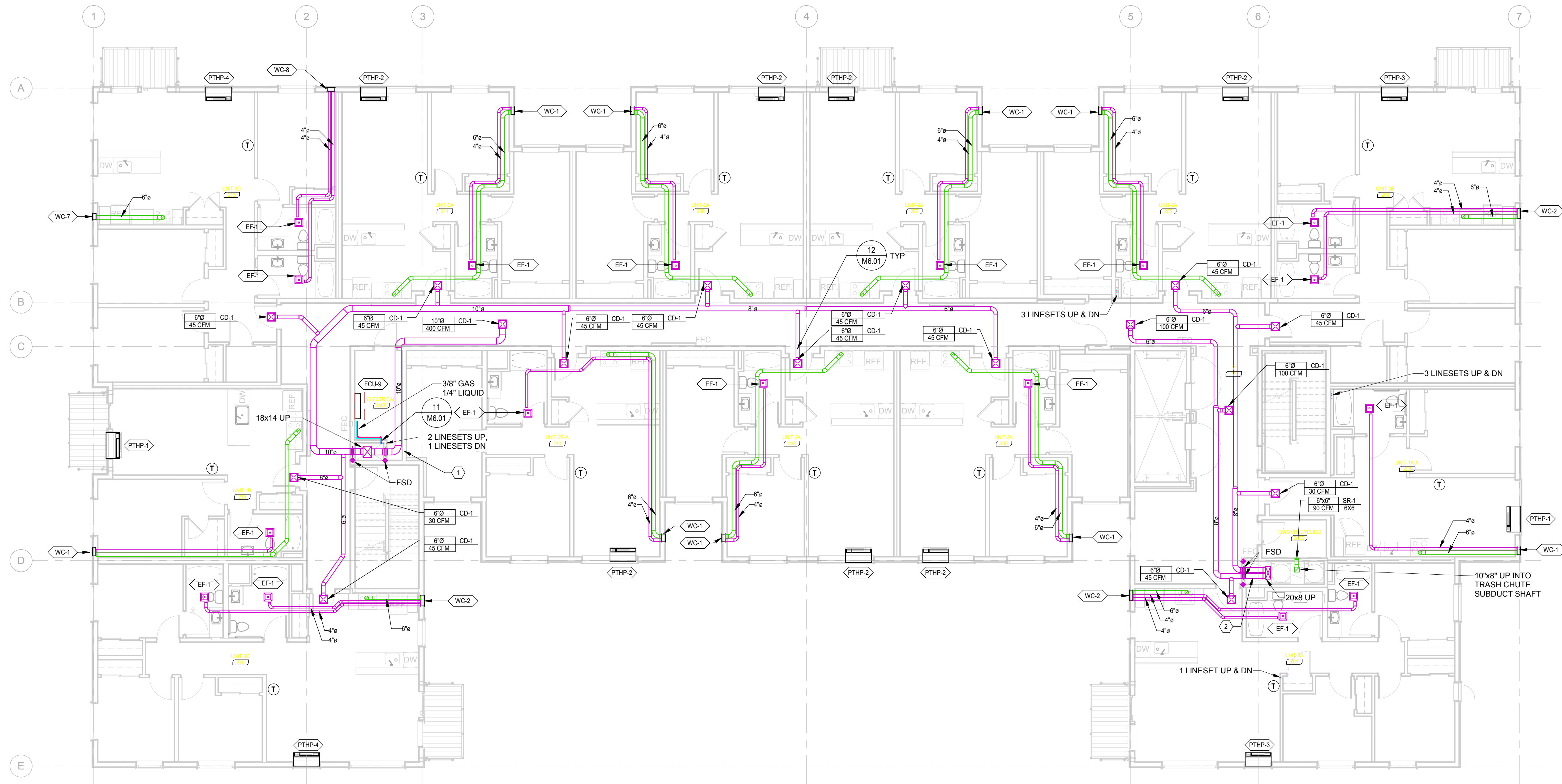


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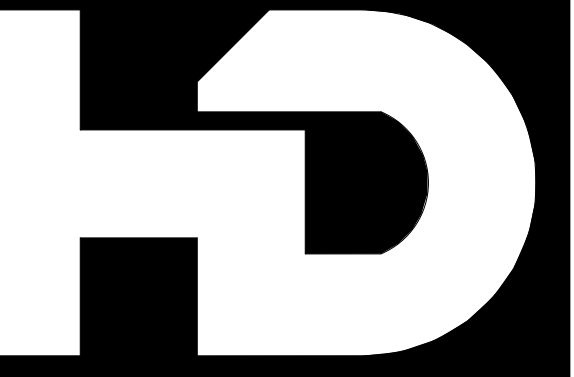
1. UNIT EXHAUST TO TERMINATE IN PRE-FABRICATED COMBI-VENT WITH BIRDSCREEN FOR KITCHEN AND BATH DUCTS.
2. ELECTRIC HEAT IN BEDROOMS BY ELECTRICAL CONTRACTOR.
3. PTHP CONDENSATE DRAIN TO TERMINATE AT CONDENSATE RISER SERVING EACH STACK OF UNITS. RISER AND FINAL CONNECTION TO DRAIN PLUG BY PLUMBING CONTRACTOR.
4. SEE DETAIL 6/M.01 FOR CORRIDOR WALL PENETRATION DETAIL.

KEY NOTES:

1. SEE DETAIL 1/M6.02 FOR SECTION OF SHAFT RISER.
2. SEE DETAIL 2/M6.02 FOR SECTION OF SHAFT RISER.



1 LEVEL 2 OVERALL HVAC FLOOR PLAN  
1/8" = 1'-0"



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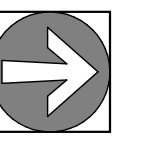
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LEVEL 2 OVERALL  
HVAC FLOOR PLAN

GMP/PERMIT

DATE 17 OCT 2018	PROJECT 149000
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SHEET NUMBER  
M2.02



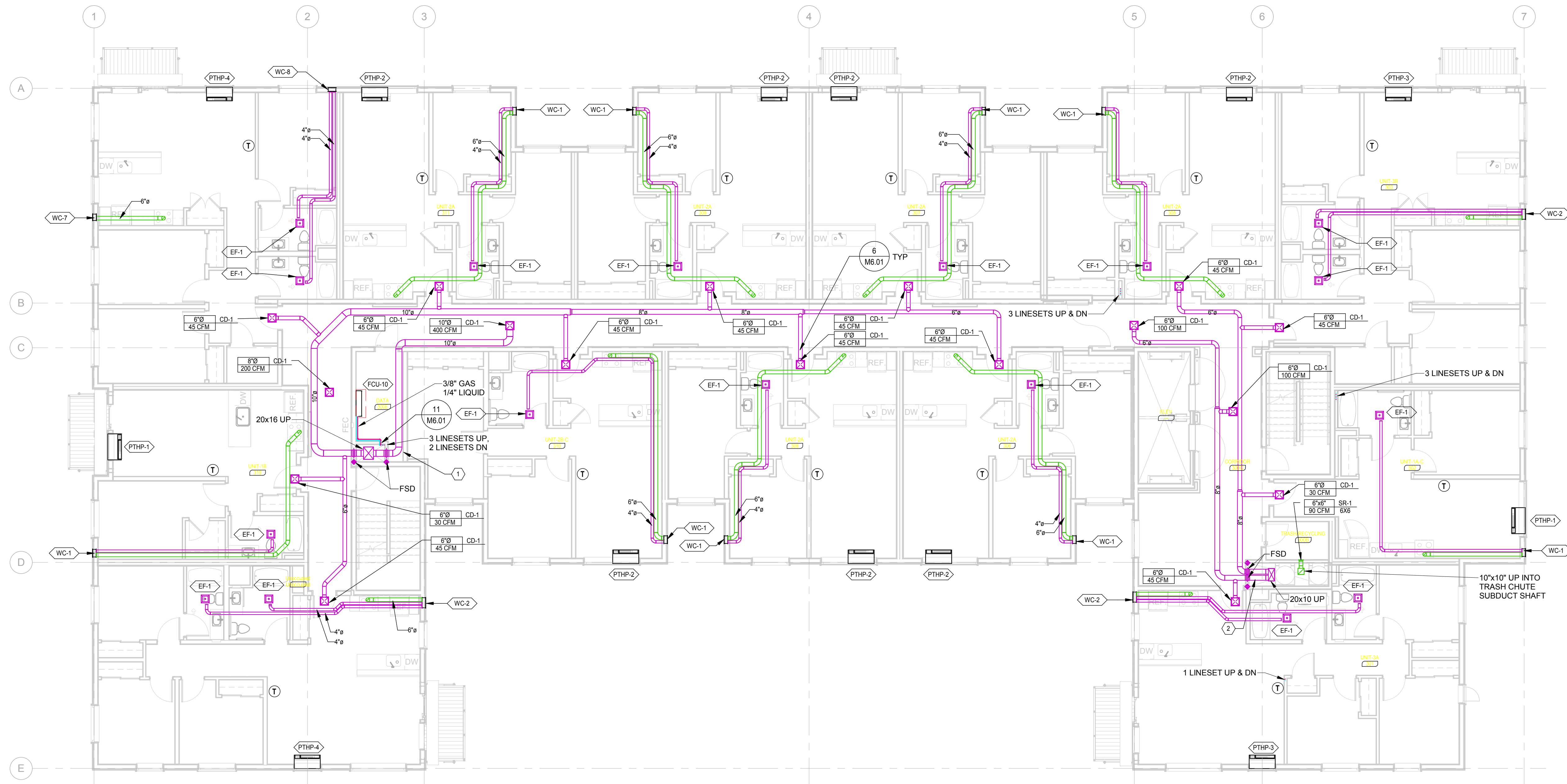


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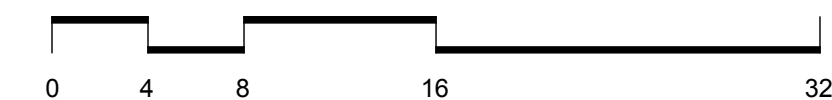
1. UNIT EXHAUST TO TERMINATE IN PRE-FABRICATED COMBI-VENT WITH BIRDSCREEN FOR KITCHEN AND BATH DUCTS.
2. ELECTRIC HEAT IN BEDROOMS BY ELECTRICAL CONTRACTOR.
3. PTHP CONDENSATE DRAIN TO TERMINATE AT CONDENSATE RISER SERVING EACH STACK OF UNITS. RISER AND FINAL CONNECTION TO DRAIN PLUG BY PLUMBING CONTRACTOR.
4. SEE DETAIL 6/M.01 FOR CORRIDOR WALL PENETRATION DETAIL.

KEY NOTES:

1. SEE DETAIL 1/M6.02 FOR SECTION OF SHAFT RISER.
2. SEE DETAIL 2/M6.02 FOR SECTION OF SHAFT RISER.



1 LEVEL 3 OVERALL HVAC FLOOR PLAN  
1/8" = 1'-0"



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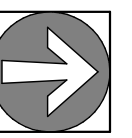
REVISION	DATE	REASON FOR ISSUE

LEVEL 3 OVERALL  
HVAC FLOOR PLAN

GMP/PERMIT

DATE 17 OCT 2018	PROJECT 149000
SHEET NUMBER	

M2.03



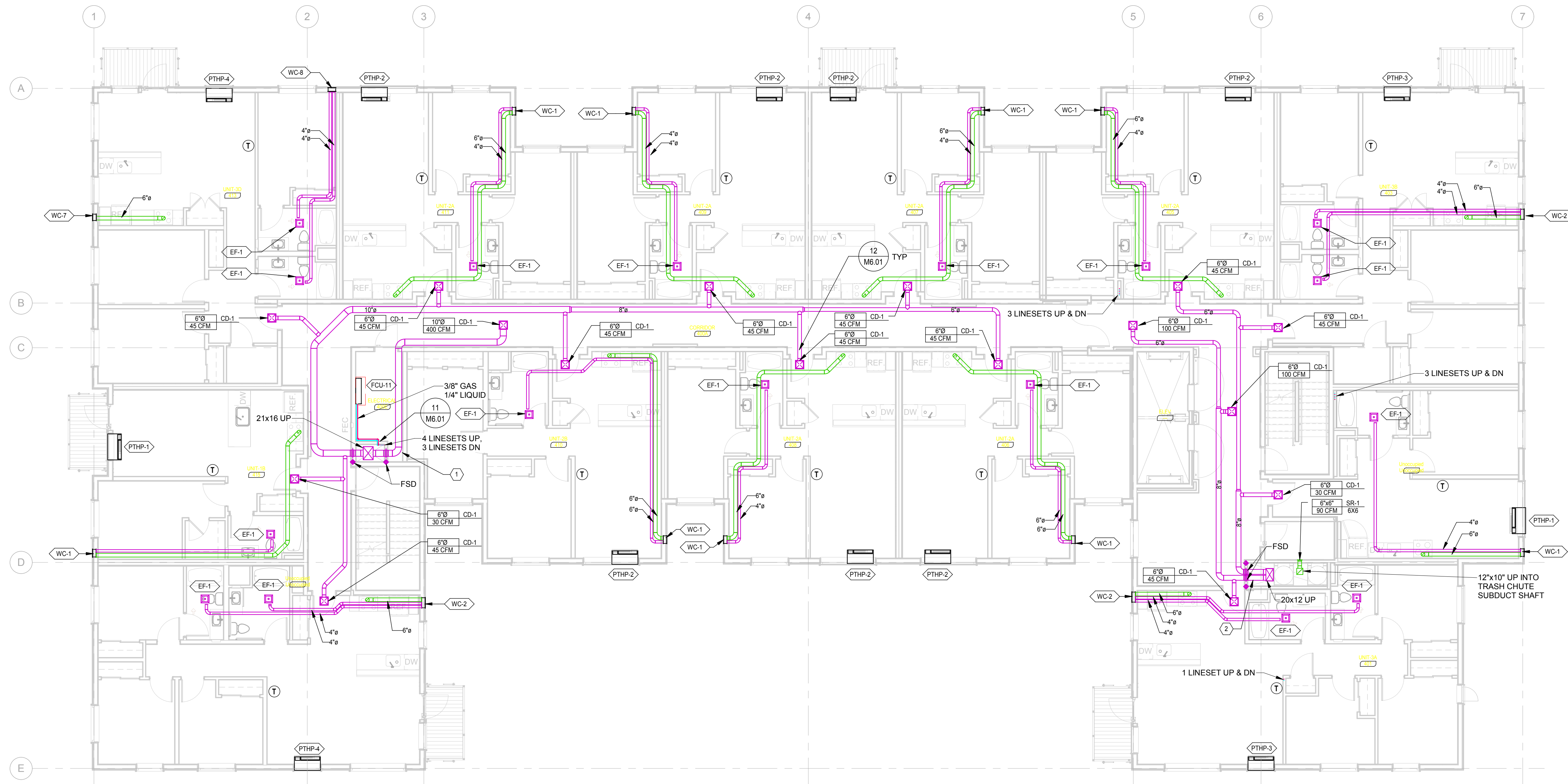


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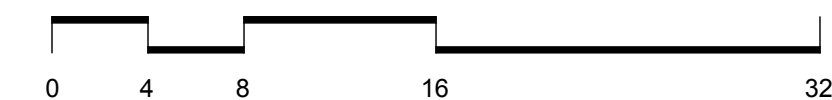
1. UNIT EXHAUST TO TERMINATE IN PRE-FABRICATED COMBI-VENT WITH BIRDSCREEN FOR KITCHEN AND BATH DUCTS.
2. ELECTRIC HEAT IN BEDROOMS BY ELECTRICAL CONTRACTOR.
3. PTHP CONDENSATE DRAIN TO TERMINATE AT CONDENSATE RISER SERVING EACH STACK OF UNITS. RISER AND FINAL CONNECTION TO DRAIN PLUG BY PLUMBING CONTRACTOR.
4. SEE DETAIL 6/M.01 FOR CORRIDOR WALL PENETRATION DETAIL.

KEY NOTES:

1. SEE DETAIL 1/M6.02 FOR SECTION OF SHAFT RISER.
2. SEE DETAIL 2/M6.02 FOR SECTION OF SHAFT RISER.



1 LEVEL 4 OVERALL HVAC FLOOR PLAN  
1/8" = 1'-0"



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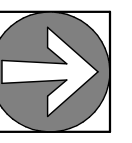
REVISION	DATE	REASON FOR ISSUE

LEVEL 4 OVERALL  
HVAC FLOOR PLAN

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DATE 17 OCT 2018	PROJECT 149000
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SHEET NUMBER  
M2.04



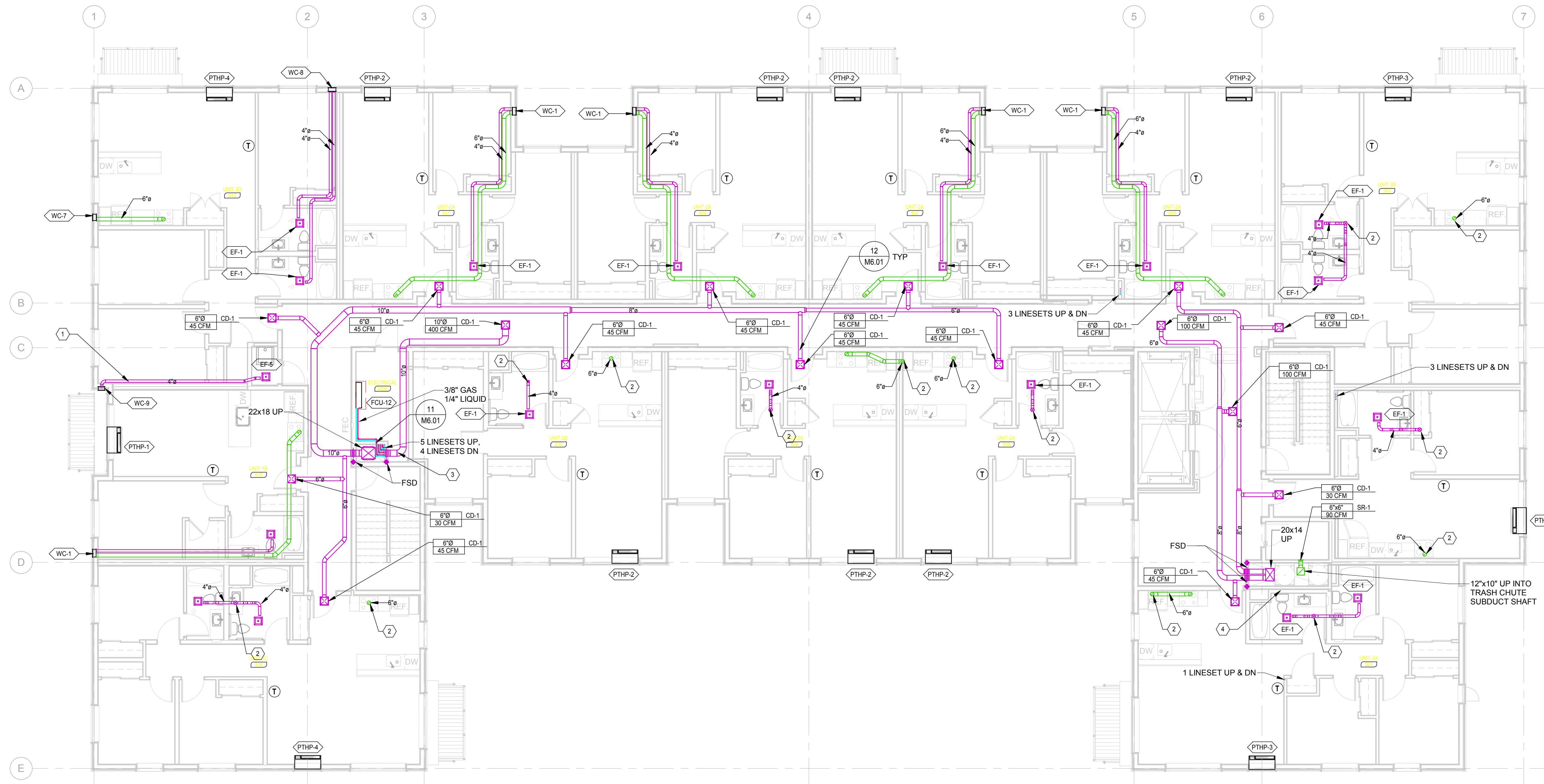


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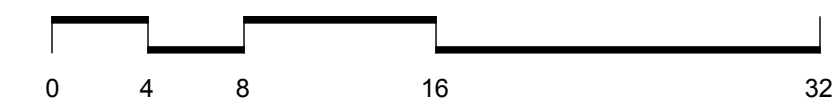
1. UNIT EXHAUST TO TERMINATE IN PRE-FABRICATED COMBI-VENT WITH BIRDSCREEN FOR KITCHEN AND BATH DUCTS.
2. ELECTRIC HEAT IN BEDROOMS BY ELECTRICAL CONTRACTOR.
3. PTHP CONDENSATE DRAIN TO TERMINATE AT CONDENSATE RISER SERVING EACH STACK OF UNITS. RISER AND FINAL CONNECTION TO DRAIN PLUG BY PLUMBING CONTRACTOR.
4. SEE DETAIL 6/M.01 FOR CORRIDOR WALL PENETRATION DETAIL.

KEY NOTES:

1. EXHAUST DUCT IS LOCATED IN A FIRE-RATED SHAFT ENCLOSURE, REFER TO ARCHITECTURAL PLANS.
2. VERTICAL EXHAUST DISCHARGE UP TO ROOF CAP.
3. SEE DETAIL 1/M6.02 FOR SECTION OF SHAFT RISER.
4. SEE DETAIL 2/M6.02 FOR SECTION OF SHAFT RISER.



1 LEVEL 5 OVERALL HVAC FLOOR PLAN  
1/8" = 1'-0"



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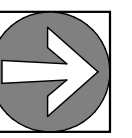
REVISIO N	DATE	REASON FOR ISSUE

LEVEL 5 OVERALL  
HVAC FLOOR PLAN

GMP/PERMIT

DATE 17 OCT 2018	PROJECT 149000
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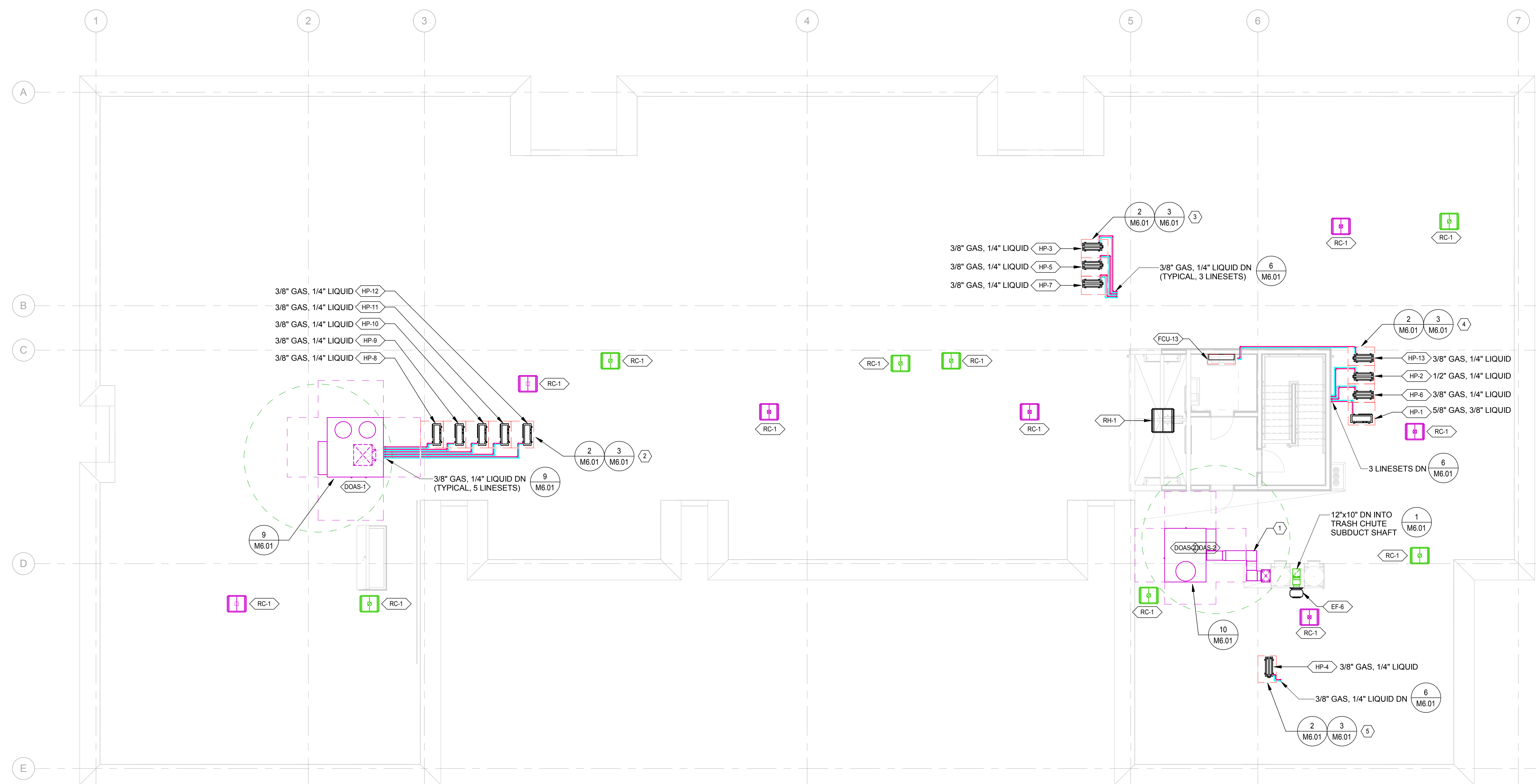
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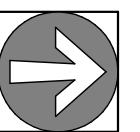
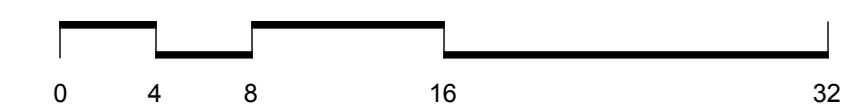


1. MAINTAIN MINIMUM 10'-0" CLEARANCE BETWEEN DOAS OSA INTAKE AND ANY EXHAUST.

1. DUCTWORK SHALL BE INSULATED WITH A MINIMUM OF R-8 INSULATION.
2. CURB DIMENSION OF 15.5'X3.5'.
3. CURB DIMENSION OF 7.5'X3.5'.
4. CURB DIMENSION OF 10.5'X3.5'.
5. CURB DIMENSION OF 3.5'X3.5'.



# 1 HVAC ROOF PLAN



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2130 N WILLIAMS AVENUE, FORT LAND, OREGON

BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

HVAC ROOF PLAN

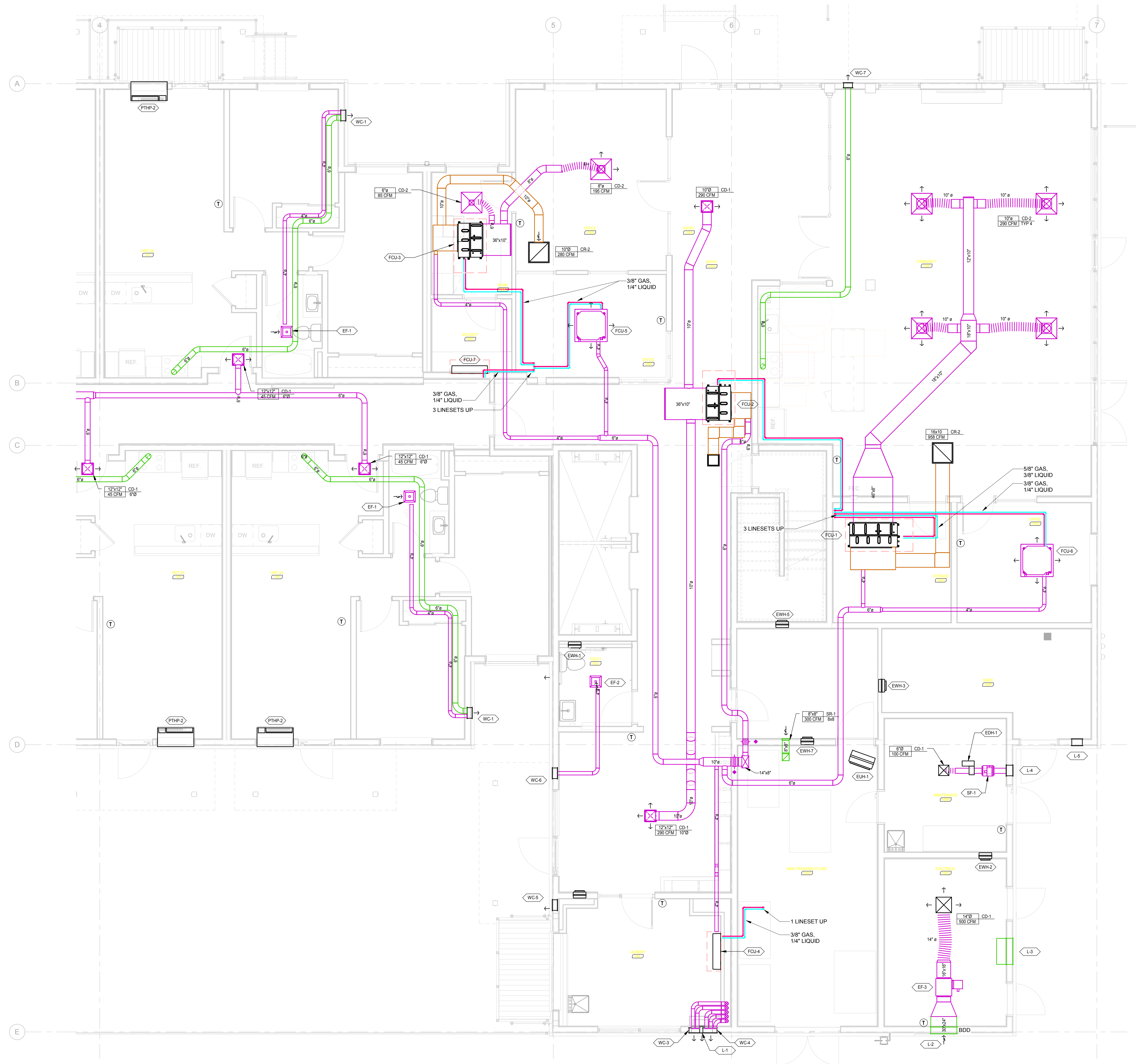
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DATE 17 OCT 2018	PROJECT 149000
SHEET NUMBER	

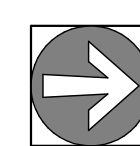
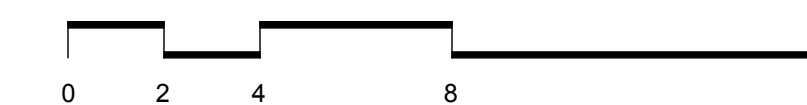
M2.06



1. SEE SHEET M2.01 FOR  
FLOOR PLAN NOTES.



# 1 LEVEL 1 NORTH ENLARGED HVAC FLOOR PLAN



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2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

LEVEL 1 NORTH  
ENLARGED HVAC  
FLOOR PLAN

GMP/PERMIT
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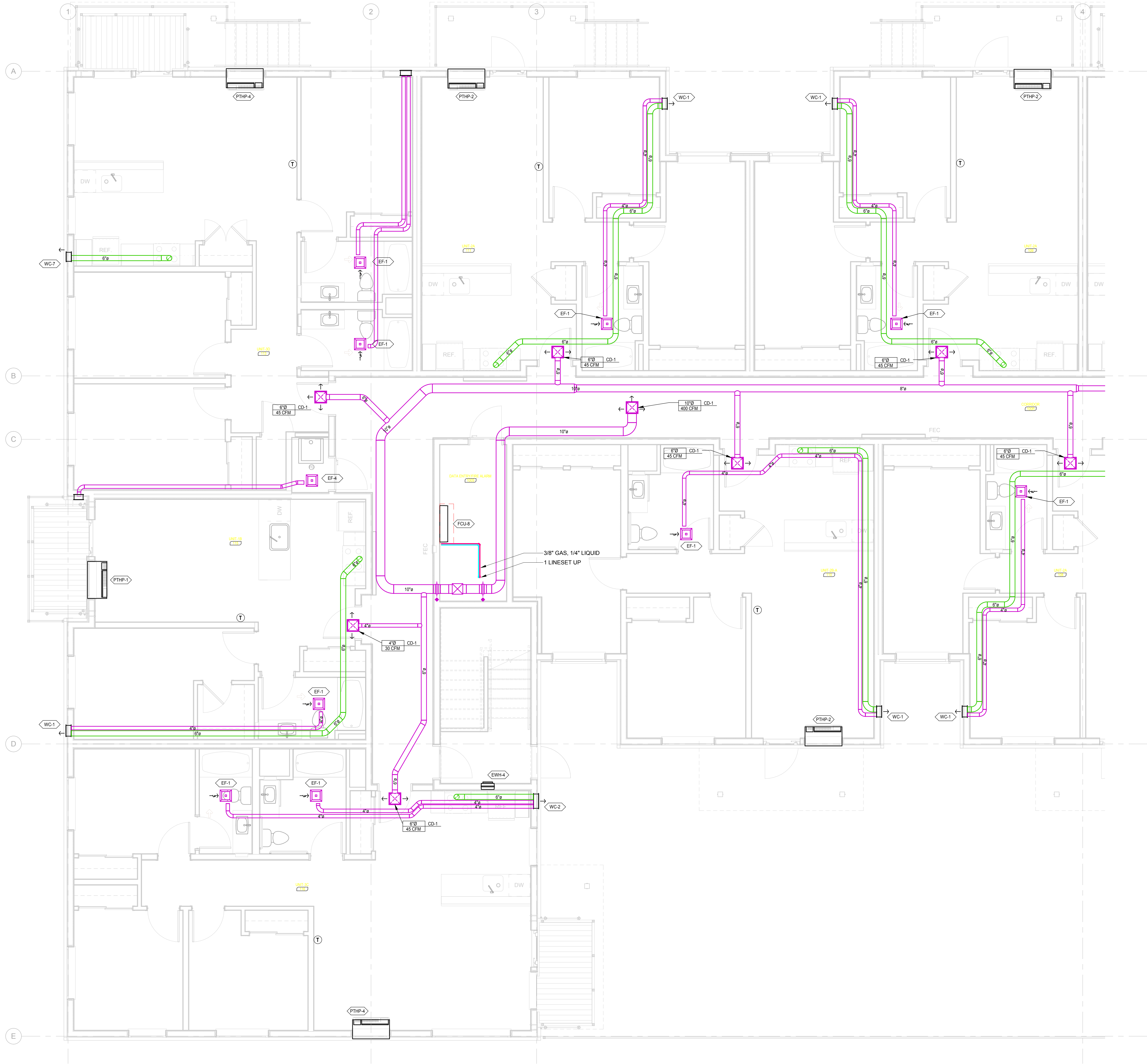
DATE 17 OCT 2018	PROJECT 149000
SHEET NUMBER	

M5.01



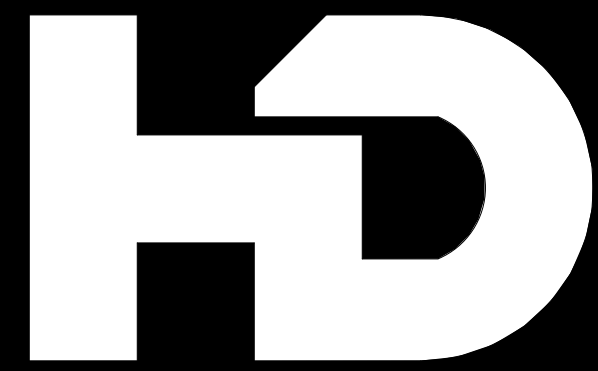
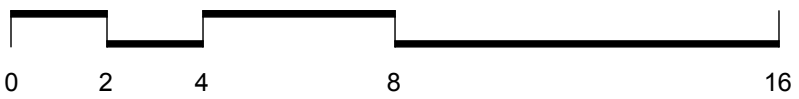
GENERAL NOTES:

1. SEE SHEET M2.01 FOR FLOOR PLAN NOTES.



1 LEVEL 1 SOUTH ENLARGED HVAC FLOOR PLAN

1/4" = 1'-0"



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BRIDGE HOUSING

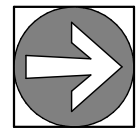
REVISIO N	DATE	REASON FOR ISSUE

LEVEL 1 SOUTH  
ENLARGED HVAC  
FLOOR PLAN

GMP/PERMIT

DATE 17 OCT 2018	PROJECT 149000
SHEET NUMBER	

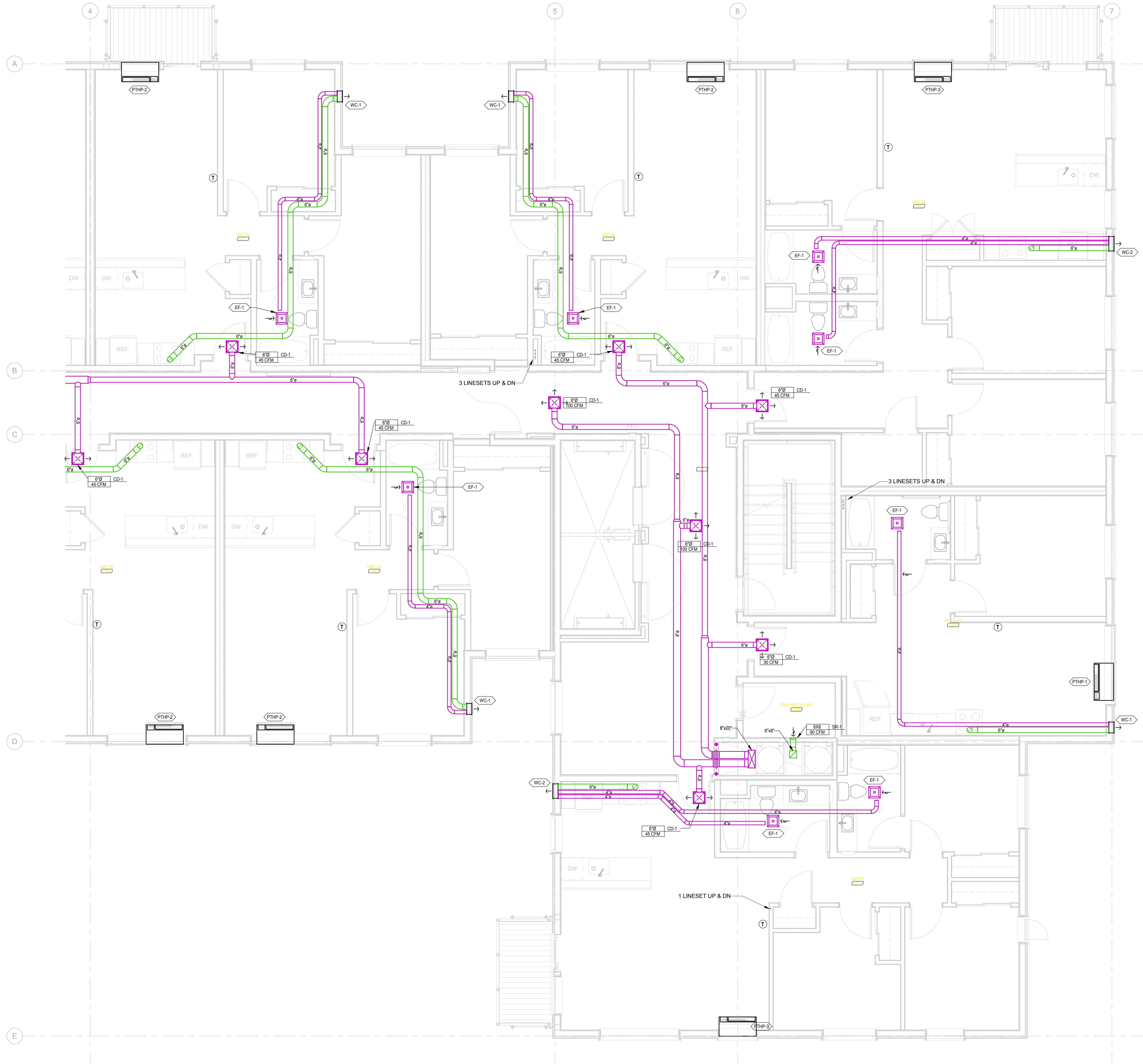
M5.02





GENERAL NOTES:

1. SEE SHEET M2.02 FOR FLOOR PLAN NOTES.



1 LEVEL 2 NORTH ENLARGED HVAC FLOOR PLAN

1/4" = 1'-0"



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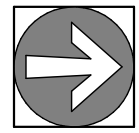
REVISION	DATE	REASON FOR ISSUE

LEVEL 2 NORTH  
ENLARGED HVAC  
FLOOR PLAN

GMP/PERMIT

DATE 17 OCT 2018	PROJECT 149000
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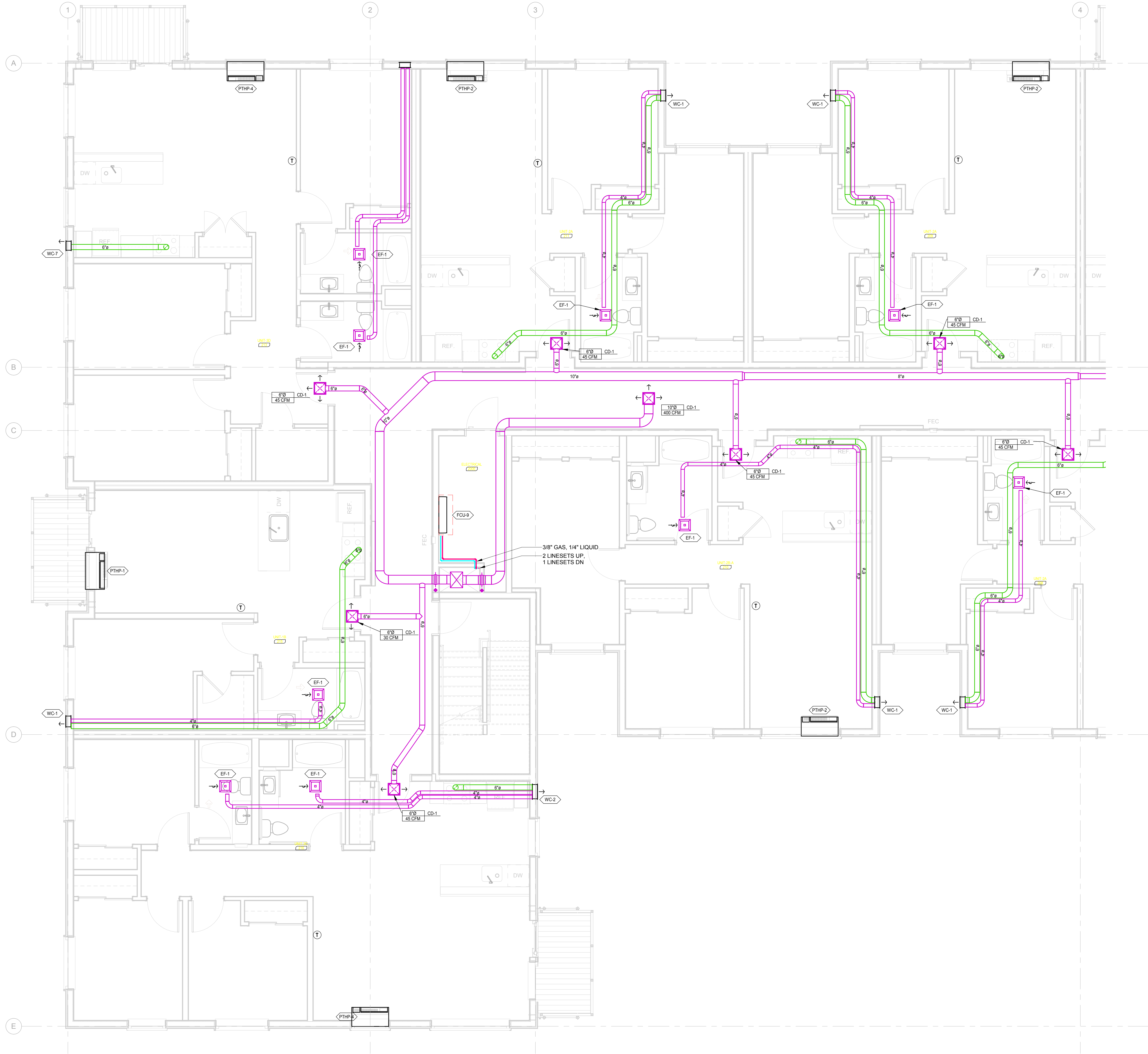
SHEET NUMBER  
**M5.03**





GENERAL NOTES:

1. SEE SHEET M2.02 FOR FLOOR PLAN NOTES.



1 LEVEL 2 SOUTH ENLARGED HVAC FLOOR PLAN

1/4" = 1'-0"



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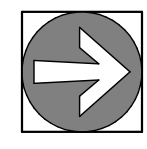
REVISION	DATE	REASON FOR ISSUE

LEVEL 2 SOUTH  
ENLARGED HVAC  
FLOOR PLAN

GMP/PERMIT

DATE 17 OCT 2018	PROJECT 149000
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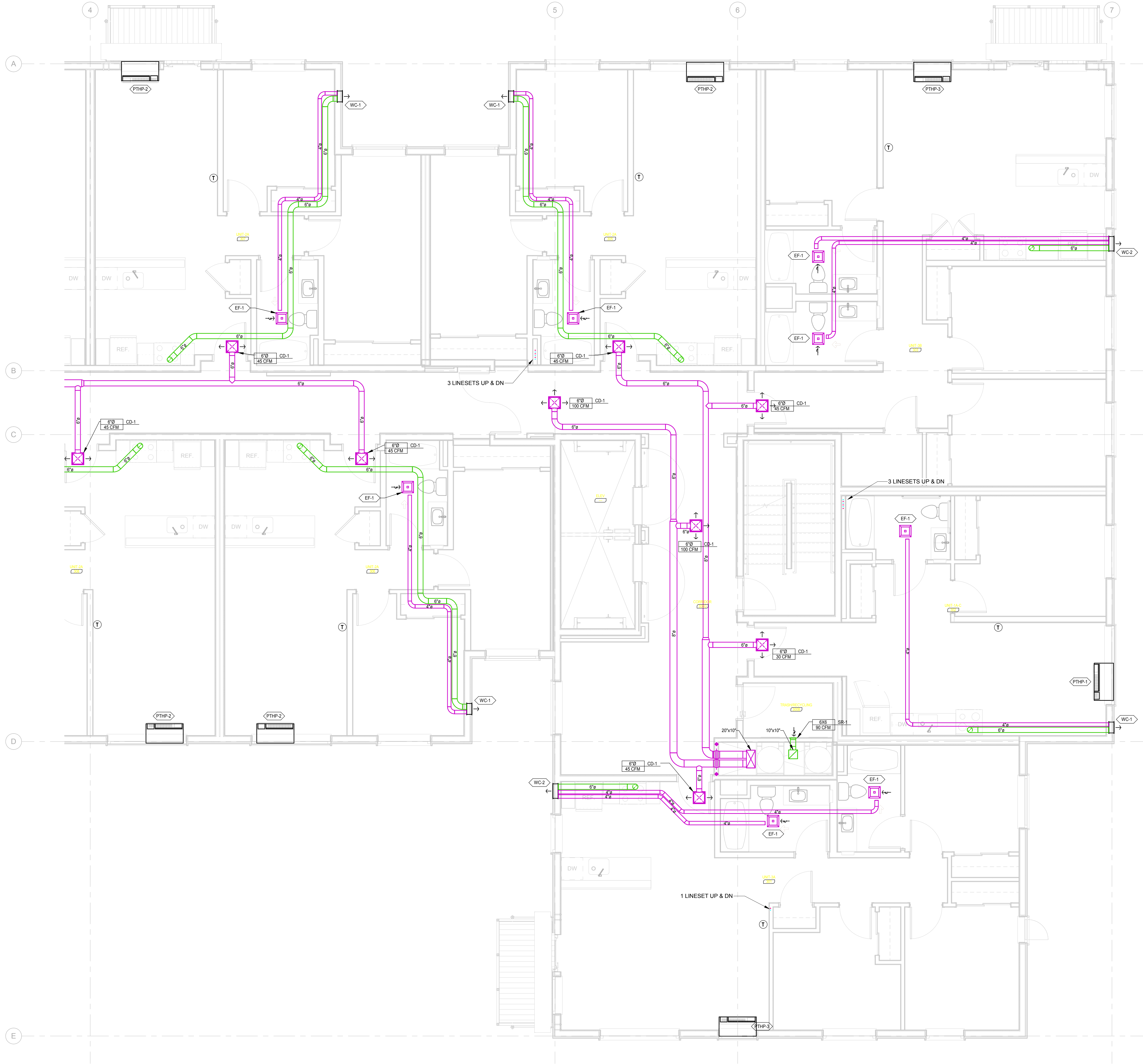
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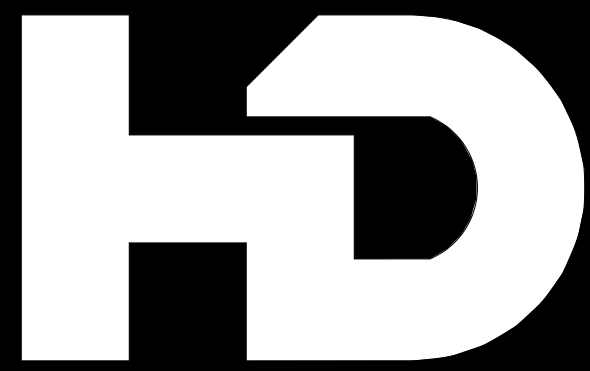
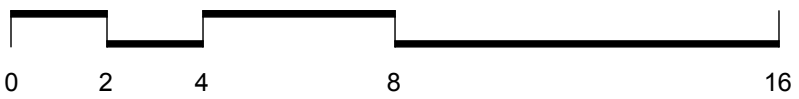
GENERAL NOTES:

1. SEE SHEET M2.03 FOR FLOOR PLAN NOTES.



1 LEVEL 3 NORTH ENLARGED HVAC FLOOR PLAN

1/4" = 1'-0"



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REVISIO N	DATE	REASON FOR ISSUE

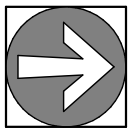
LEVEL 3 NORTH  
ENLARGED HVAC  
FLOOR PLAN

GMP/PERMIT

DATE  
17 OCT 2018

PROJECT  
149000

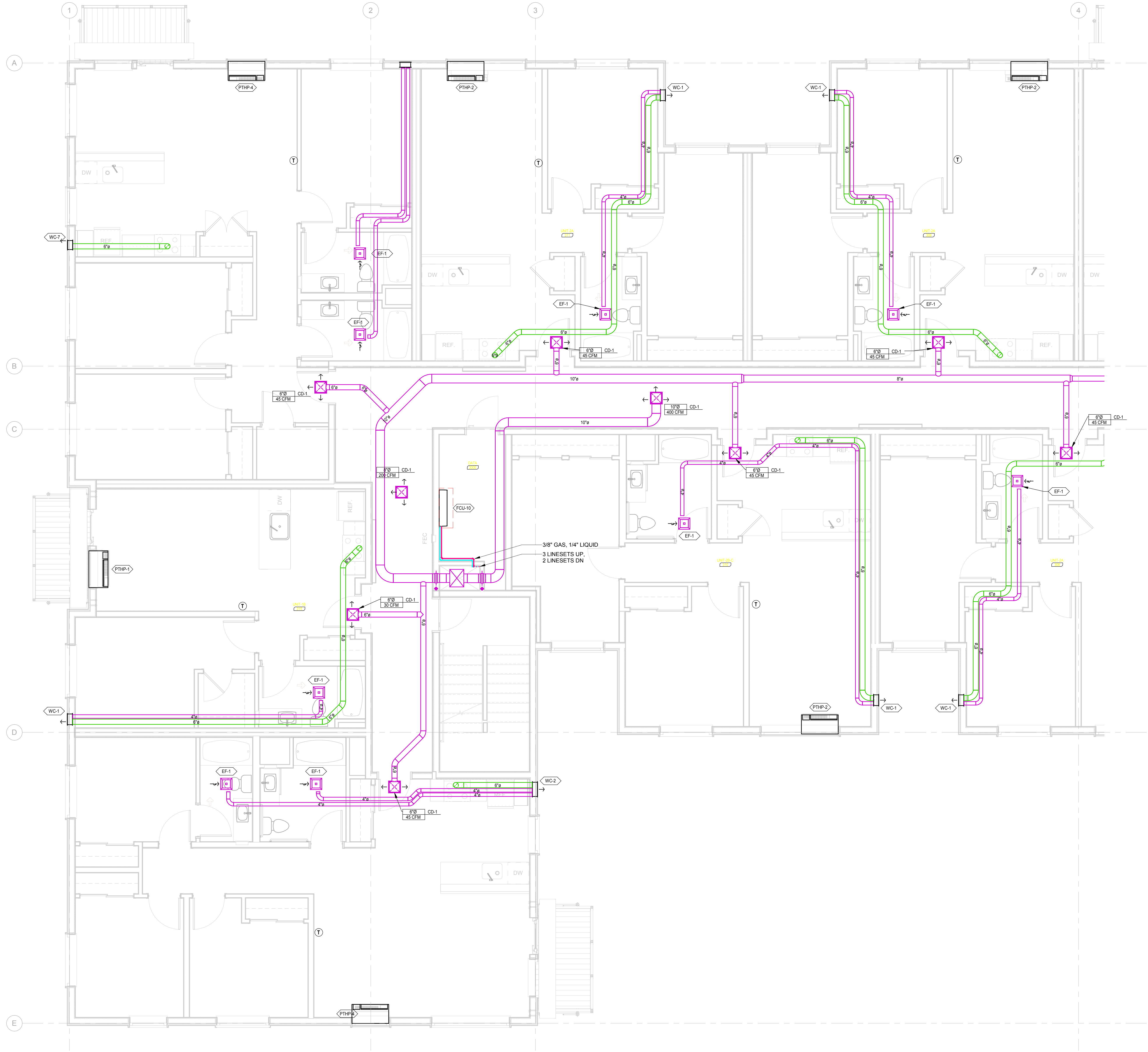
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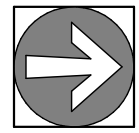
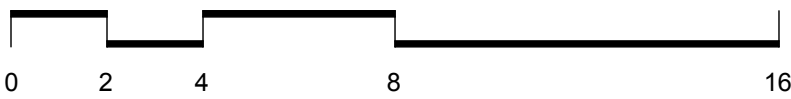


GENERAL NOTES:

1. SEE SHEET M2.03 FOR FLOOR PLAN NOTES.



1 LEVEL 3 SOUTH ENLARGED HVAC FLOOR PLAN  
1/4" = 1'-0"





EXPIRES: 06/30/2020



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BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

LEVEL 3 SOUTH ENLARGED HVAC FLOOR PLAN

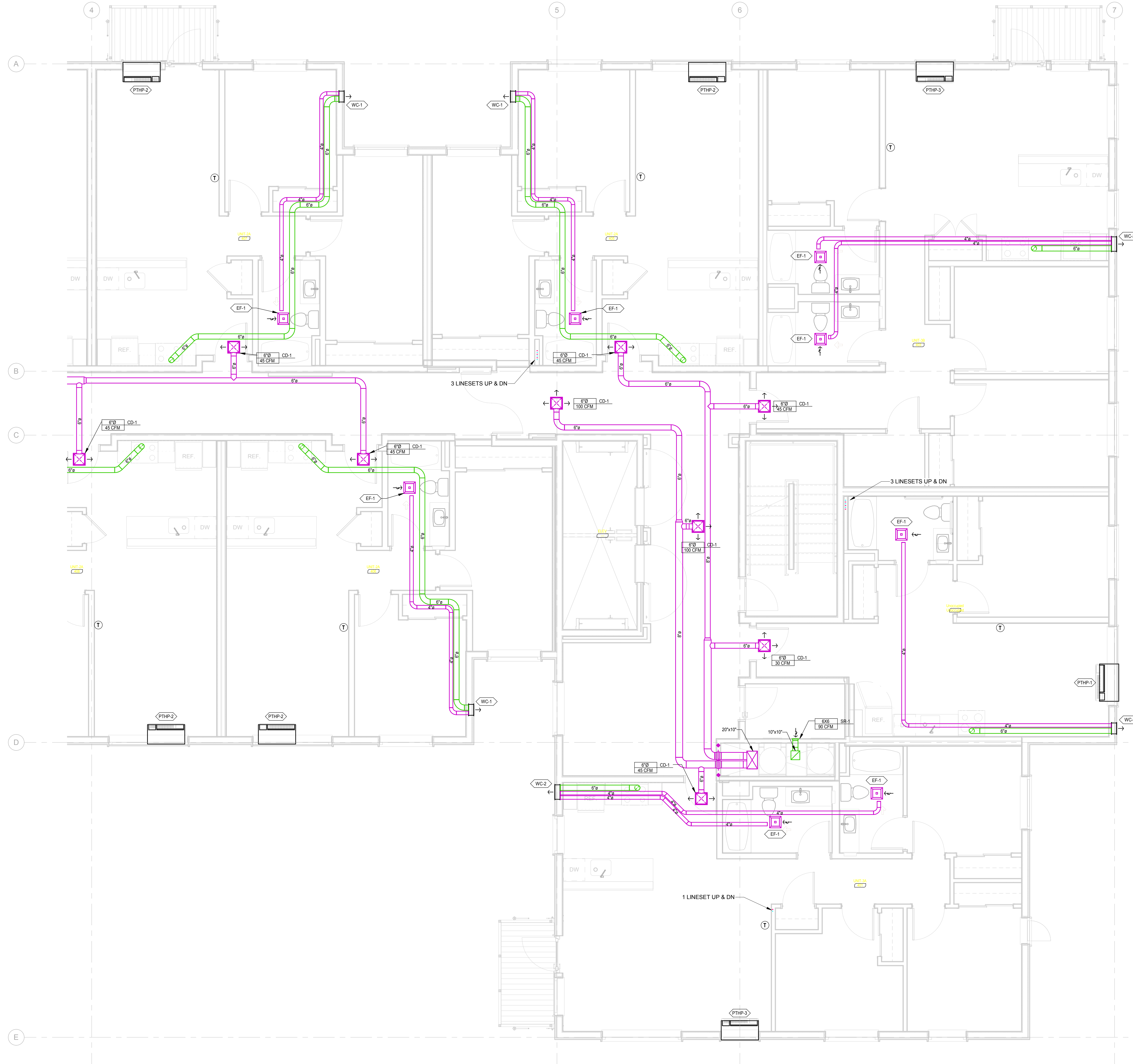
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DATE 17 OCT 2018	PROJECT 149000
SHEET NUMBER <b>M5.06</b>	

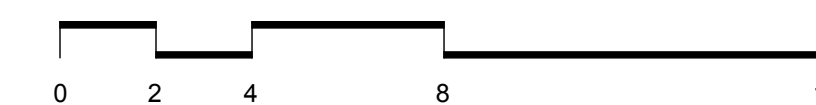


GENERAL NOTES:

1. SEE SHEET M2.04 FOR FLOOR PLAN NOTES.



1 LEVEL 4 NORTH ENLARGED HVAC FLOOR PLAN  
1/4" = 1'-0"



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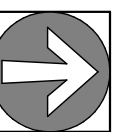
REVISION	DATE	REASON FOR ISSUE

LEVEL 4 NORTH  
ENLARGED HVAC  
FLOOR PLAN

GMP/PERMIT

DATE: 17 OCT 2018 PROJECT: 149000

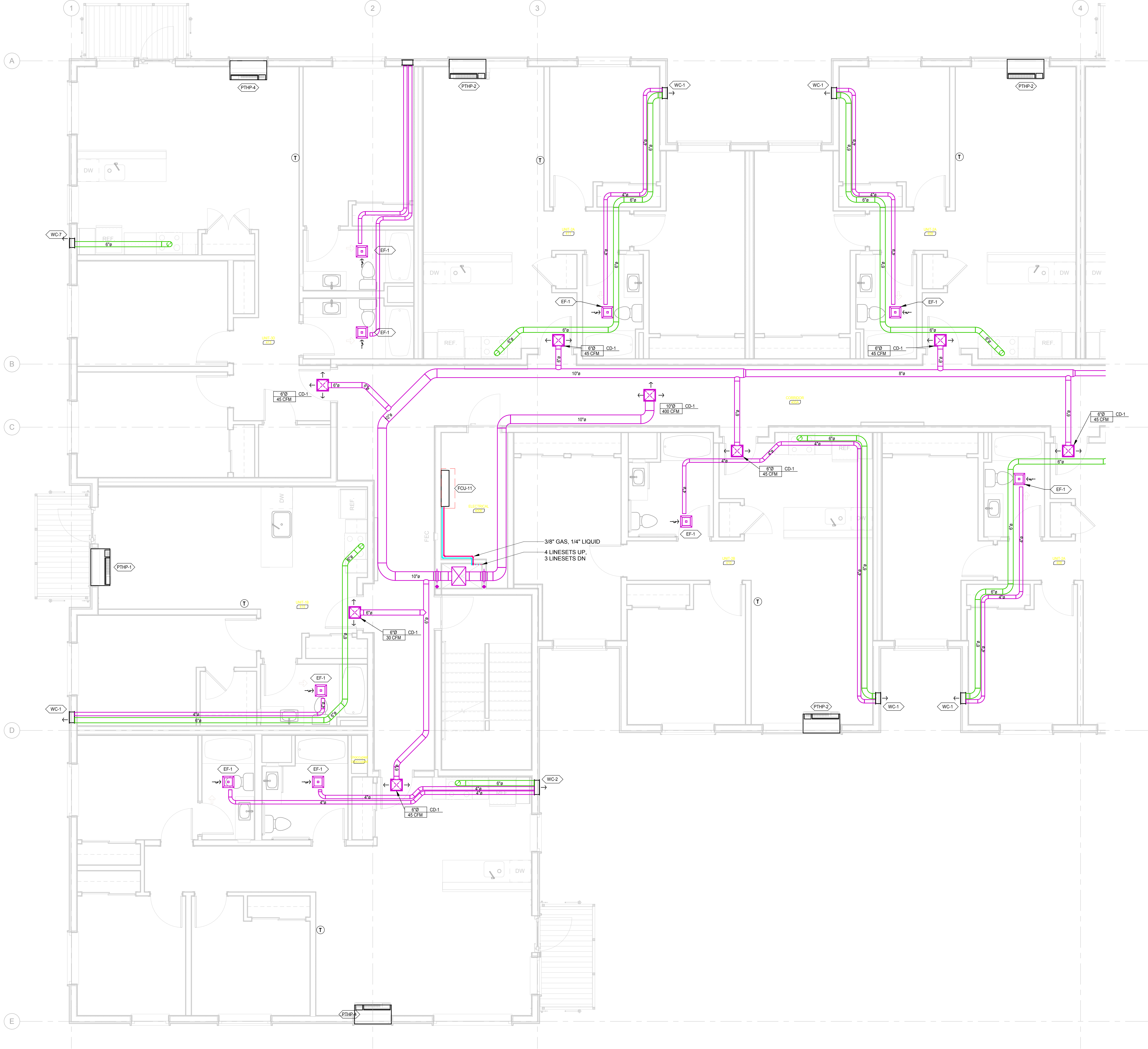
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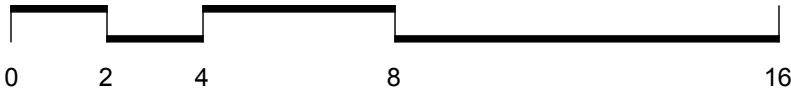


GENERAL NOTES:

1. SEE SHEET M2.04 FOR FLOOR PLAN NOTES.



1 LEVEL 4 SOUTH ENLARGED HVAC FLOOR PLAN  
1/4" = 1'-0"



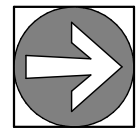
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**NORTH WILLIAMS APARTMENTS - FAMILY HOUSING**  
2156 N WILLIAMS AVENUE, PORTLAND, OREGON  
BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

LEVEL 4 SOUTH  
ENLARGED HVAC  
FLOOR PLAN  
GMP/PERMIT

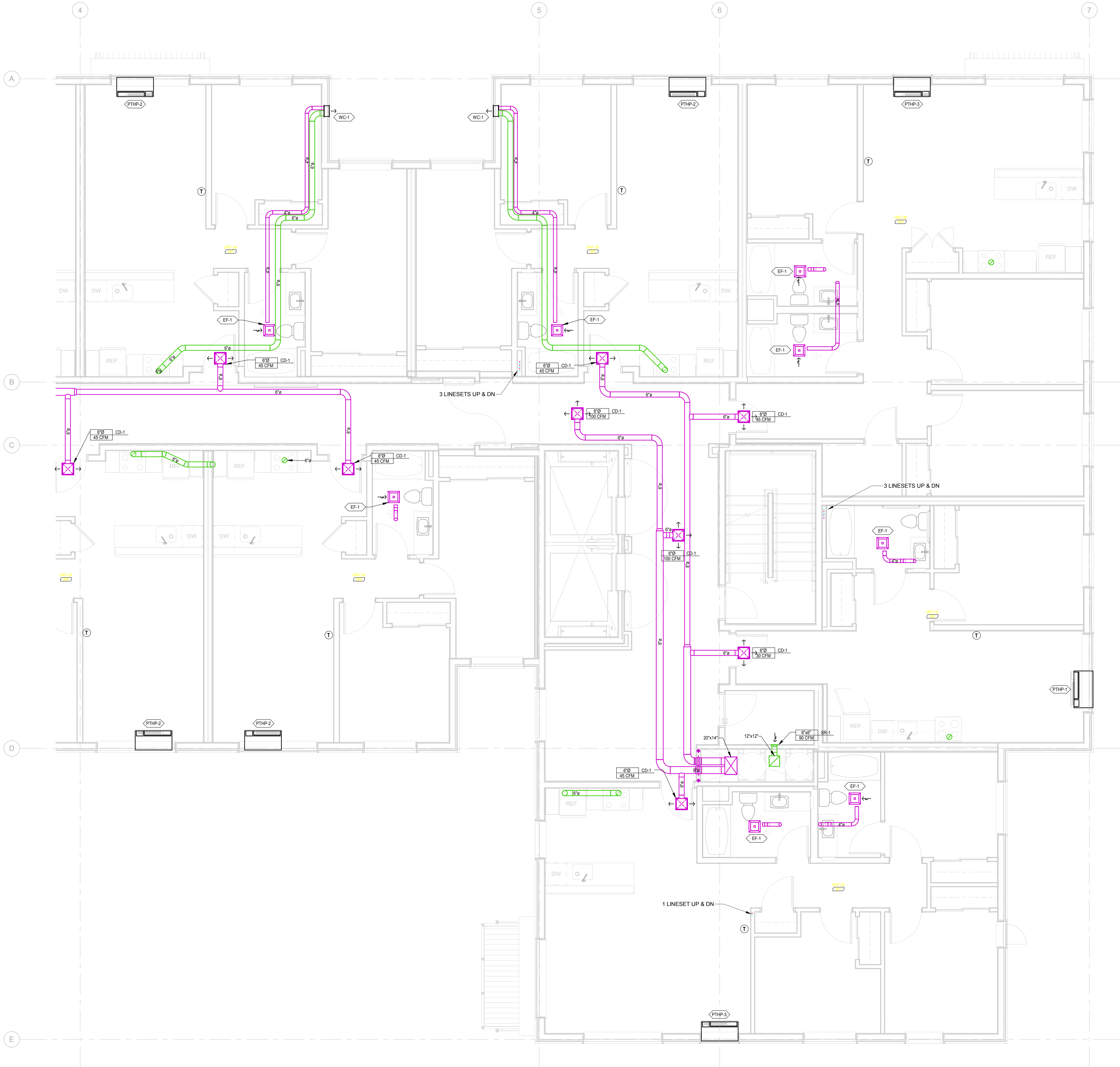
DATE 17 OCT 2018	PROJECT 149000
SHEET NUMBER	M5.08



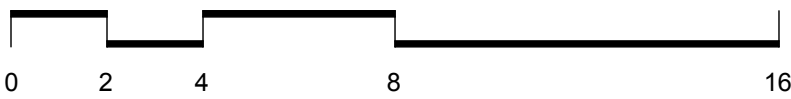


GENERAL NOTES:

1. SEE SHEET M2.05 FOR FLOOR PLAN NOTES.



1 LEVEL 5 NORTH ENLARGED HVAC FLOOR PLAN  
1/4" = 1'-0"



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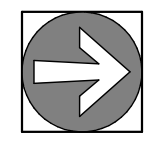
REVISION	DATE	REASON FOR ISSUE

LEVEL 5 NORTH ENLARGED HVAC FLOOR PLAN

GMP/PERMIT

DATE 17 OCT 2018	PROJECT 149000
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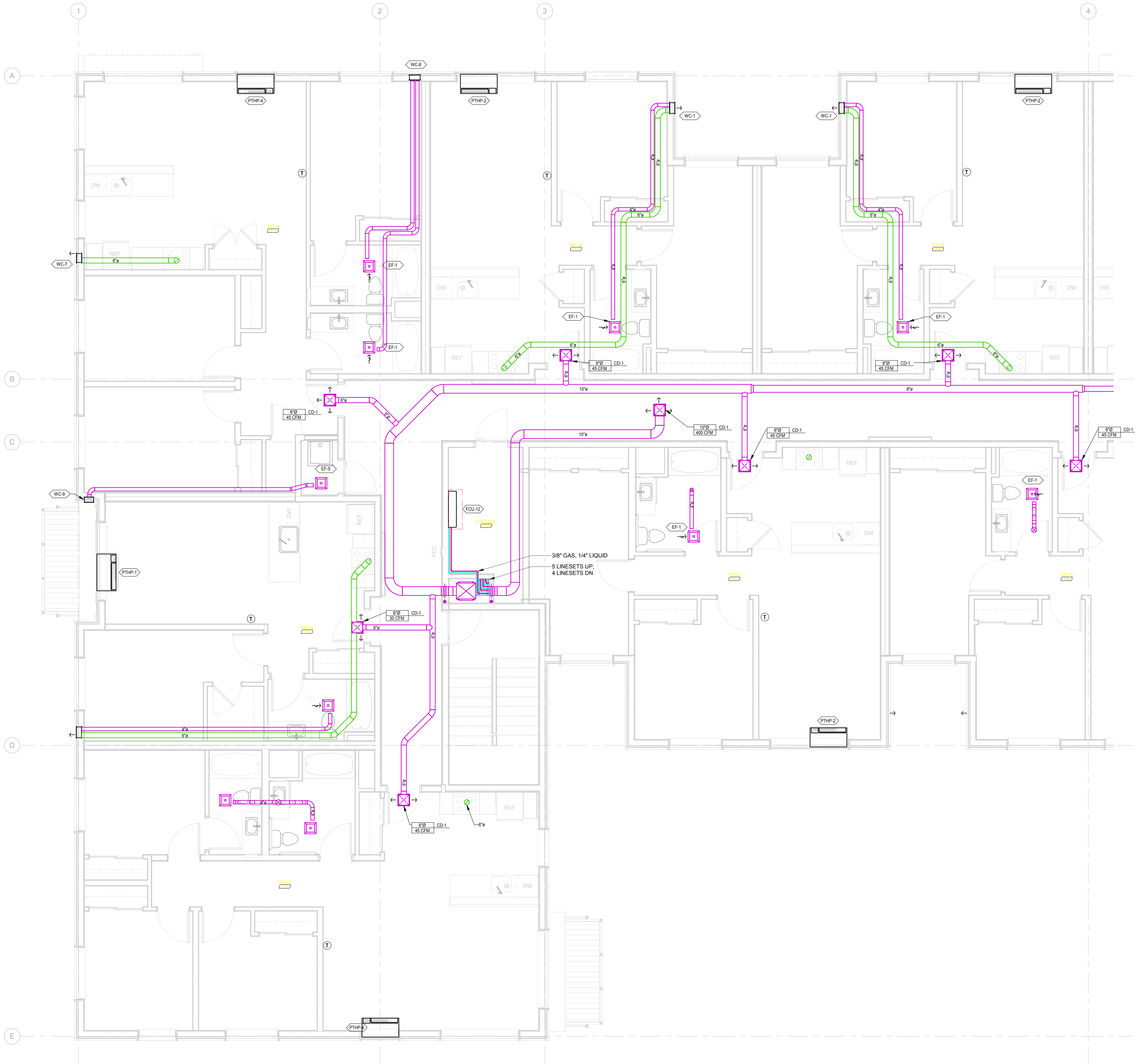
SHEET NUMBER  
**M5.09**



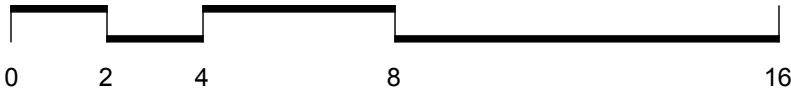


GENERAL NOTES:

1. SEE SHEET M2.05 FOR FLOOR PLAN NOTES.



1 LEVEL 5 SOUTH ENLARGED HVAC FLOOR PLAN  
1/4" = 1'-0"



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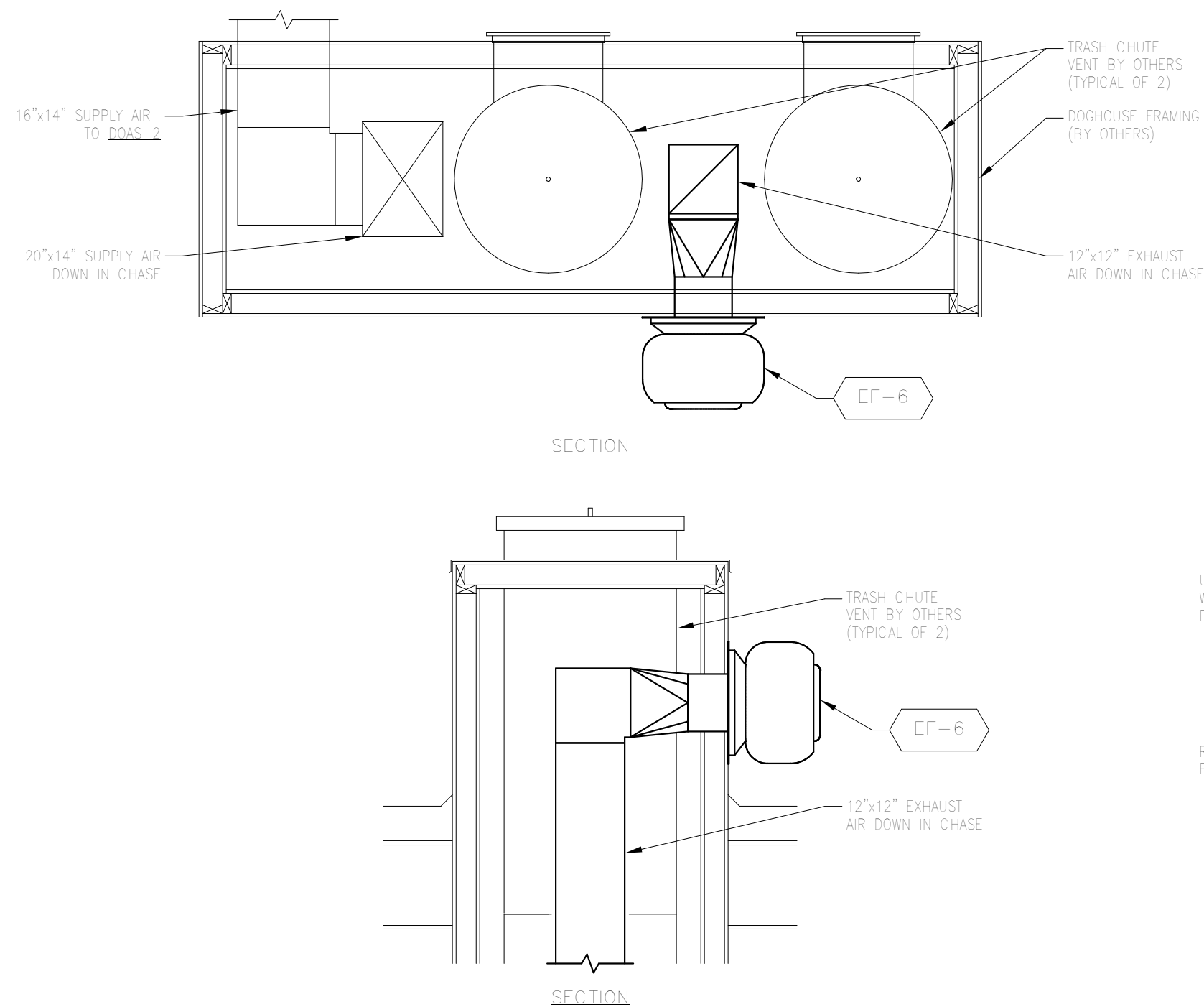
REVISION	DATE	REASON FOR ISSUE

LEVEL 5 SOUTH ENLARGED HVAC FLOOR PLAN

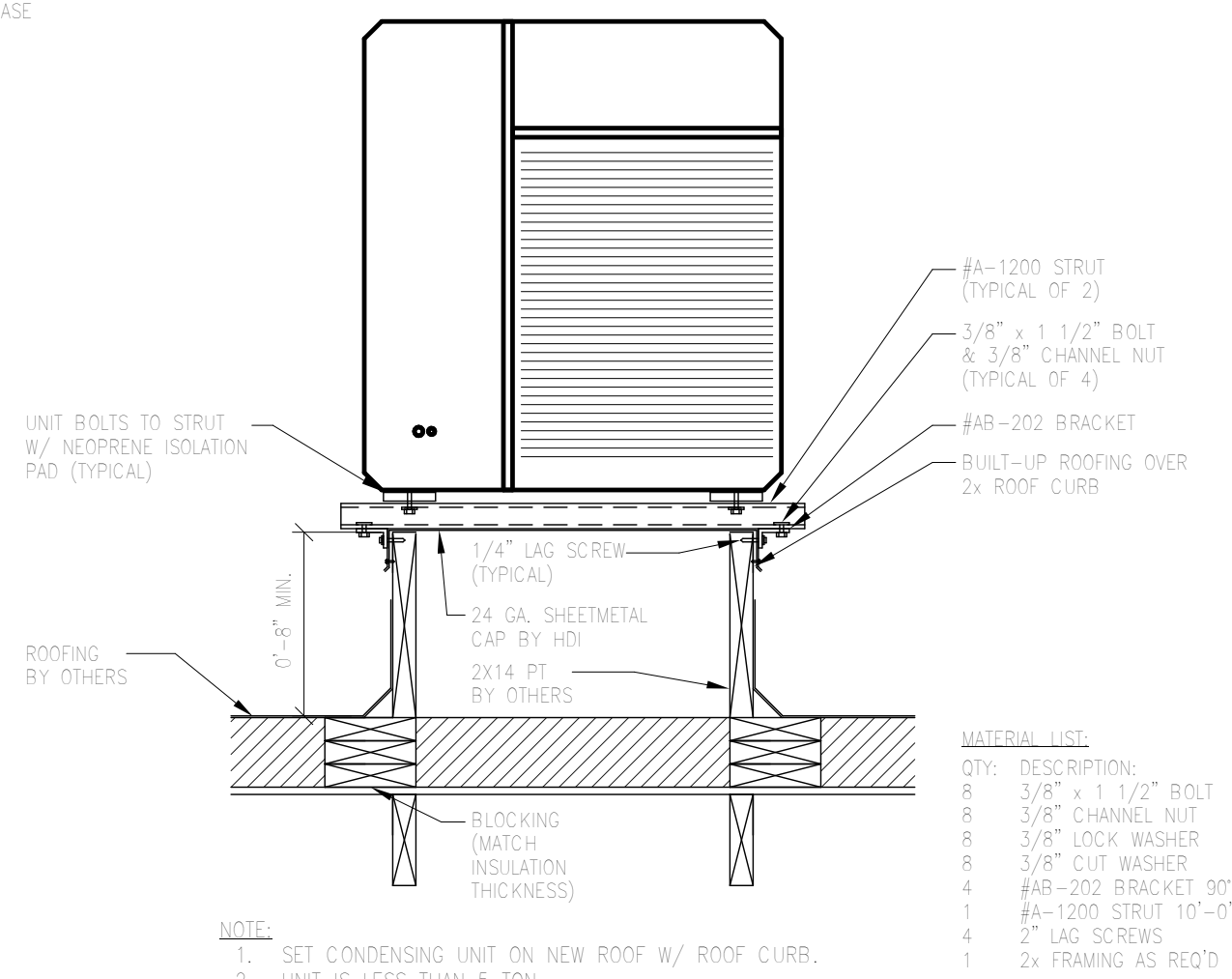
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DATE 17 OCT 2018	PROJECT 149000
SHEET NUMBER M5.10	

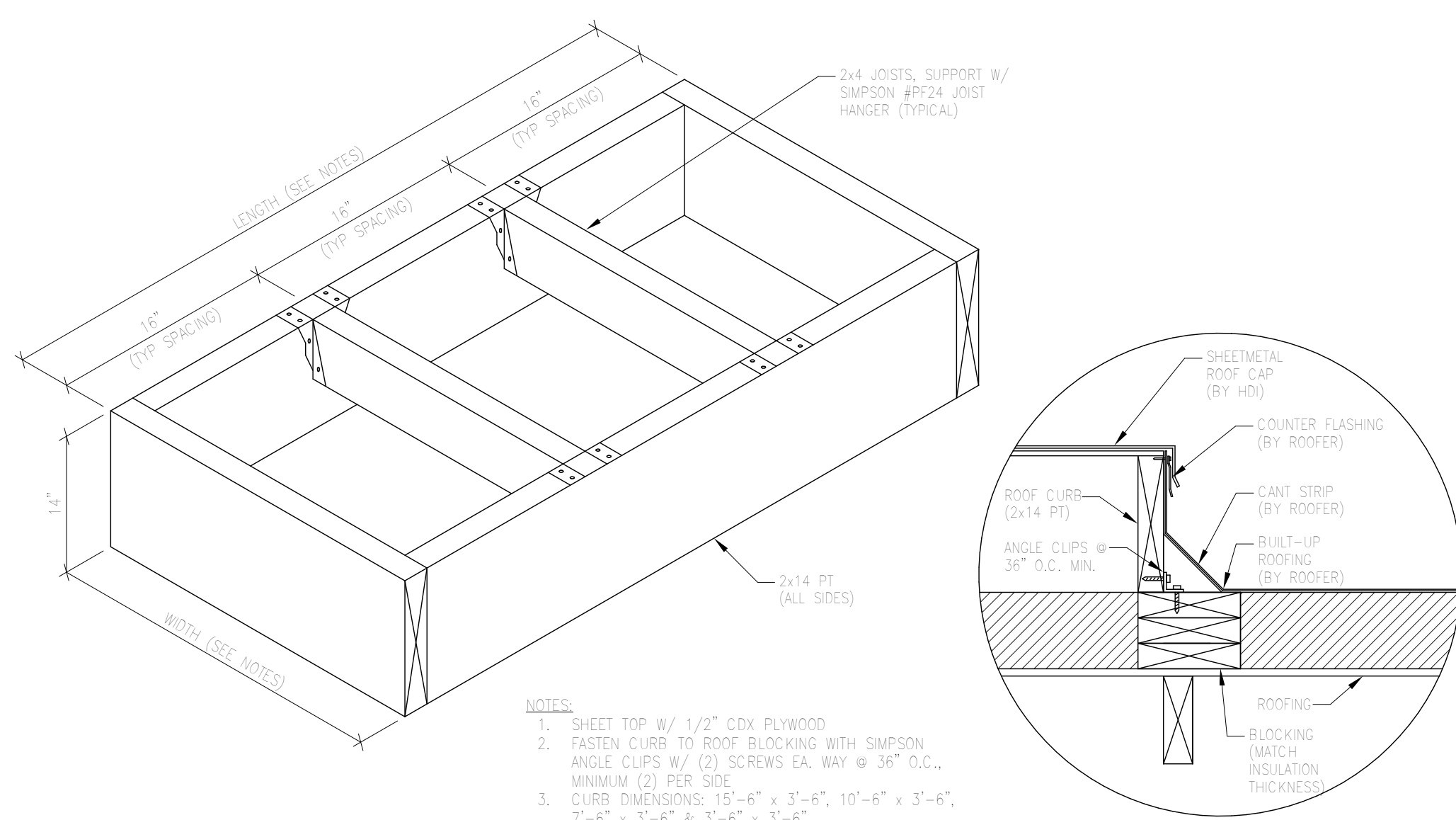




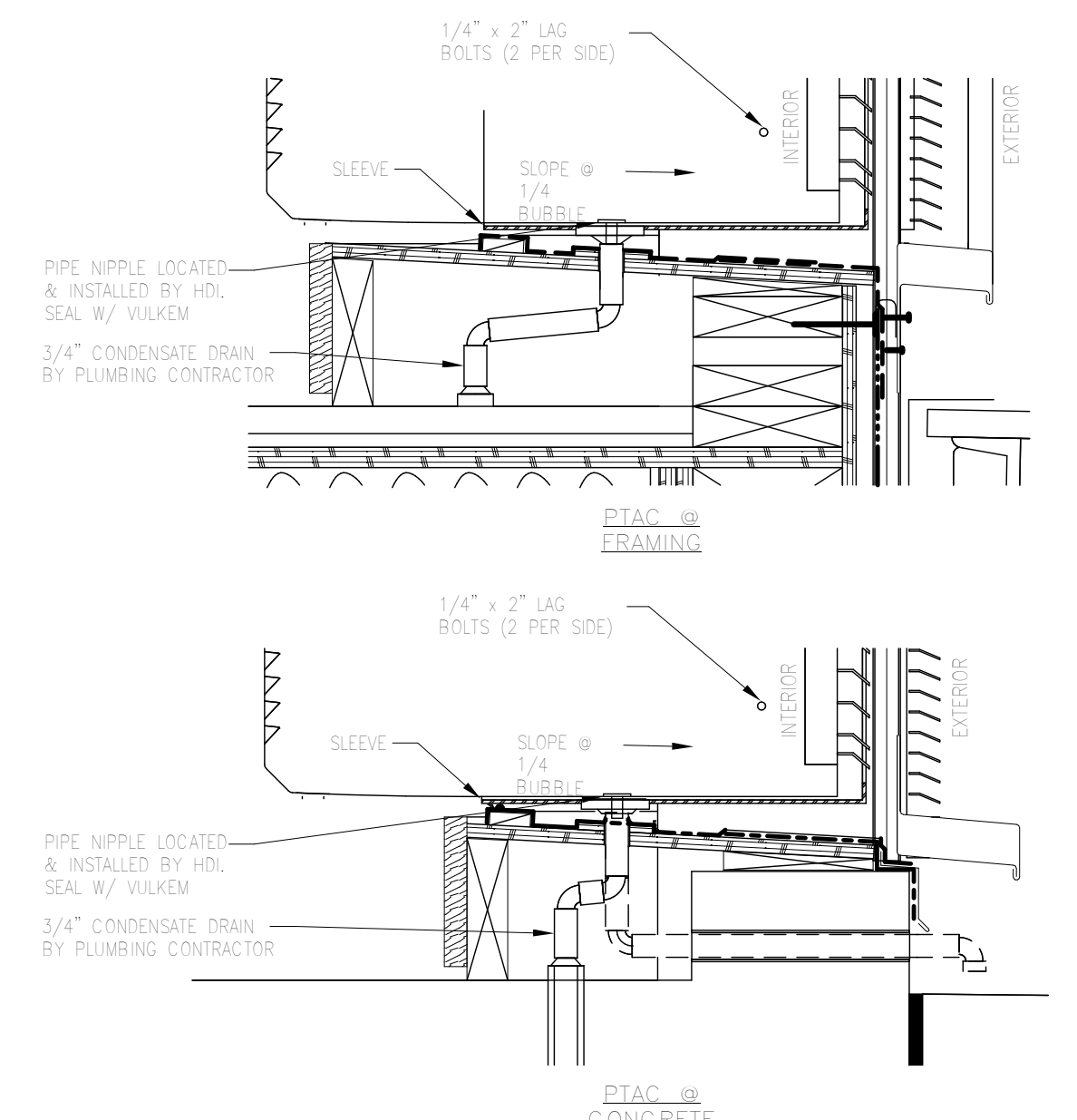
1 SHAFT EXHAUST FAN DETAILS



2 CONDENSING UNIT DETAIL



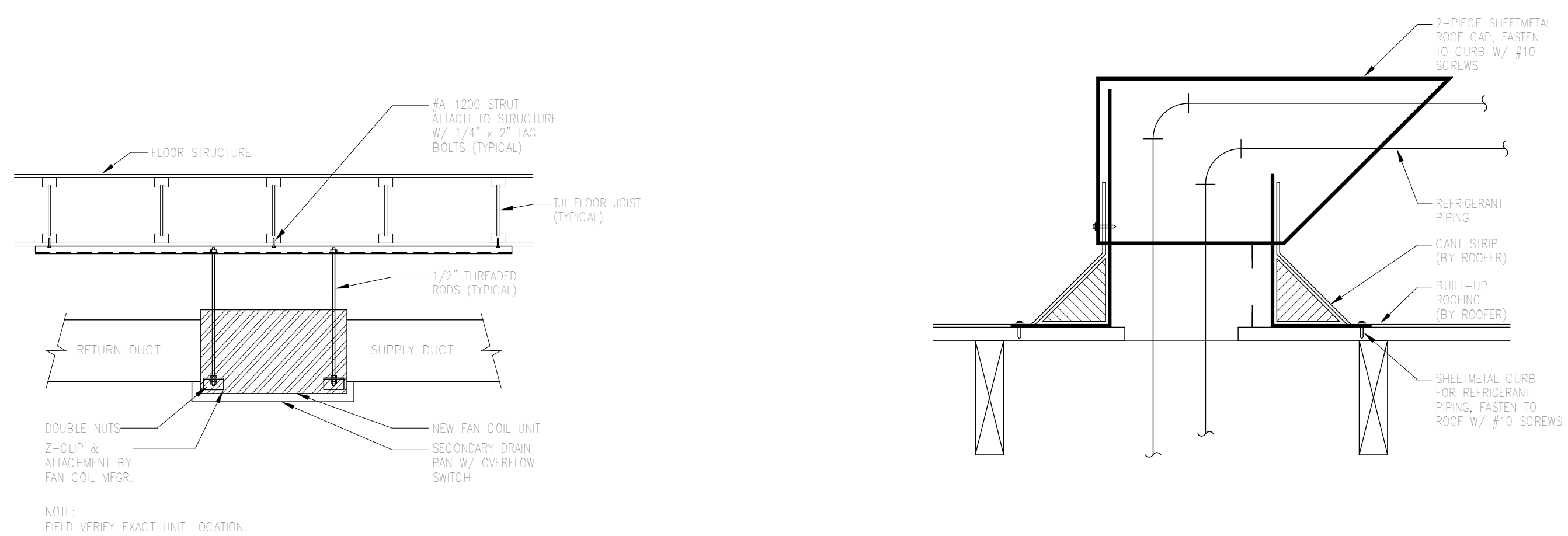
3 CONDENSING UNIT ROOF CURB FRAMING DETAIL  
M6.01 NOT TO SCALE



4 PTAC SLEEVE DETAIL

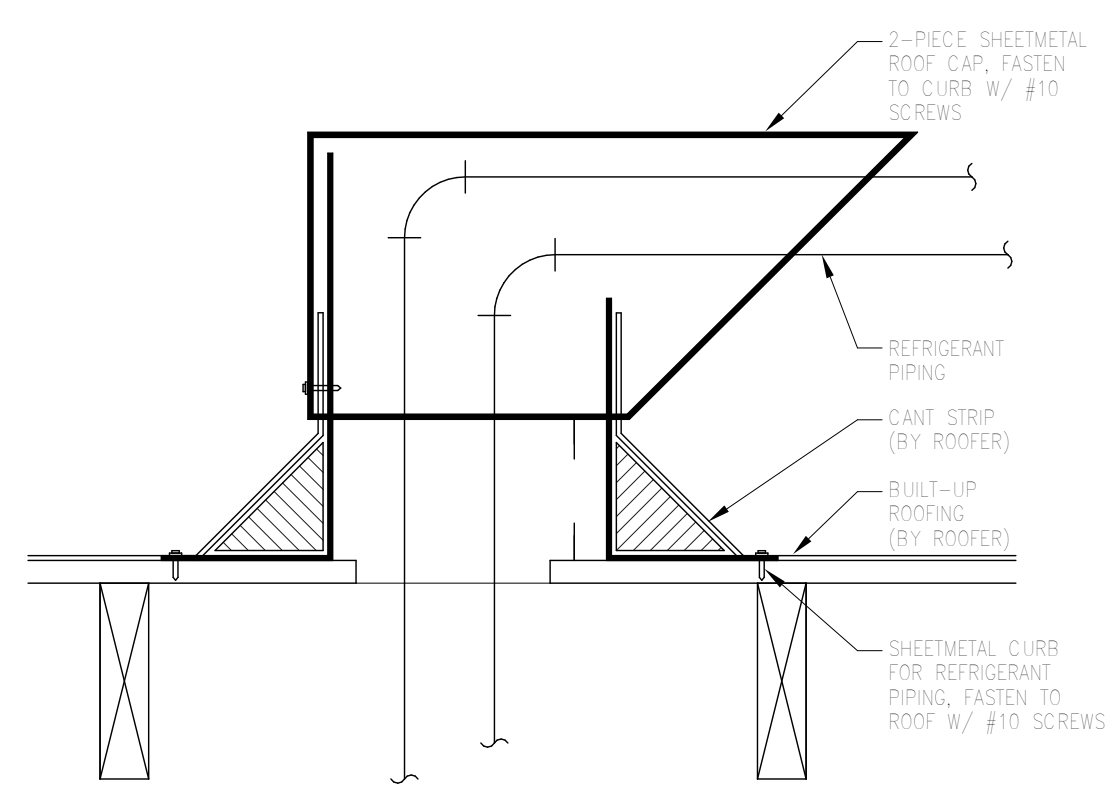
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NOT TO SCALE

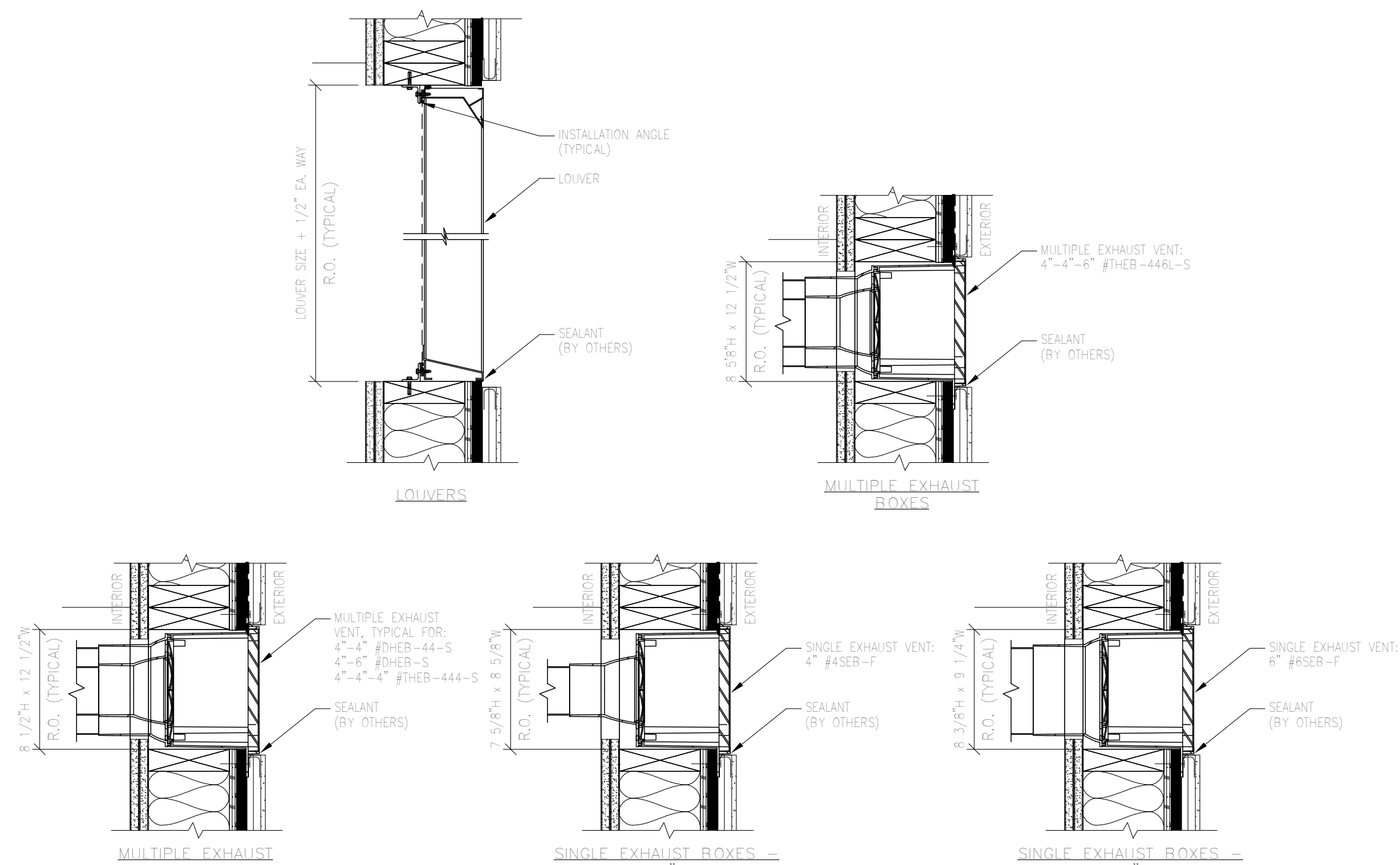


5 FAN COIL SUPPORT DETAIL

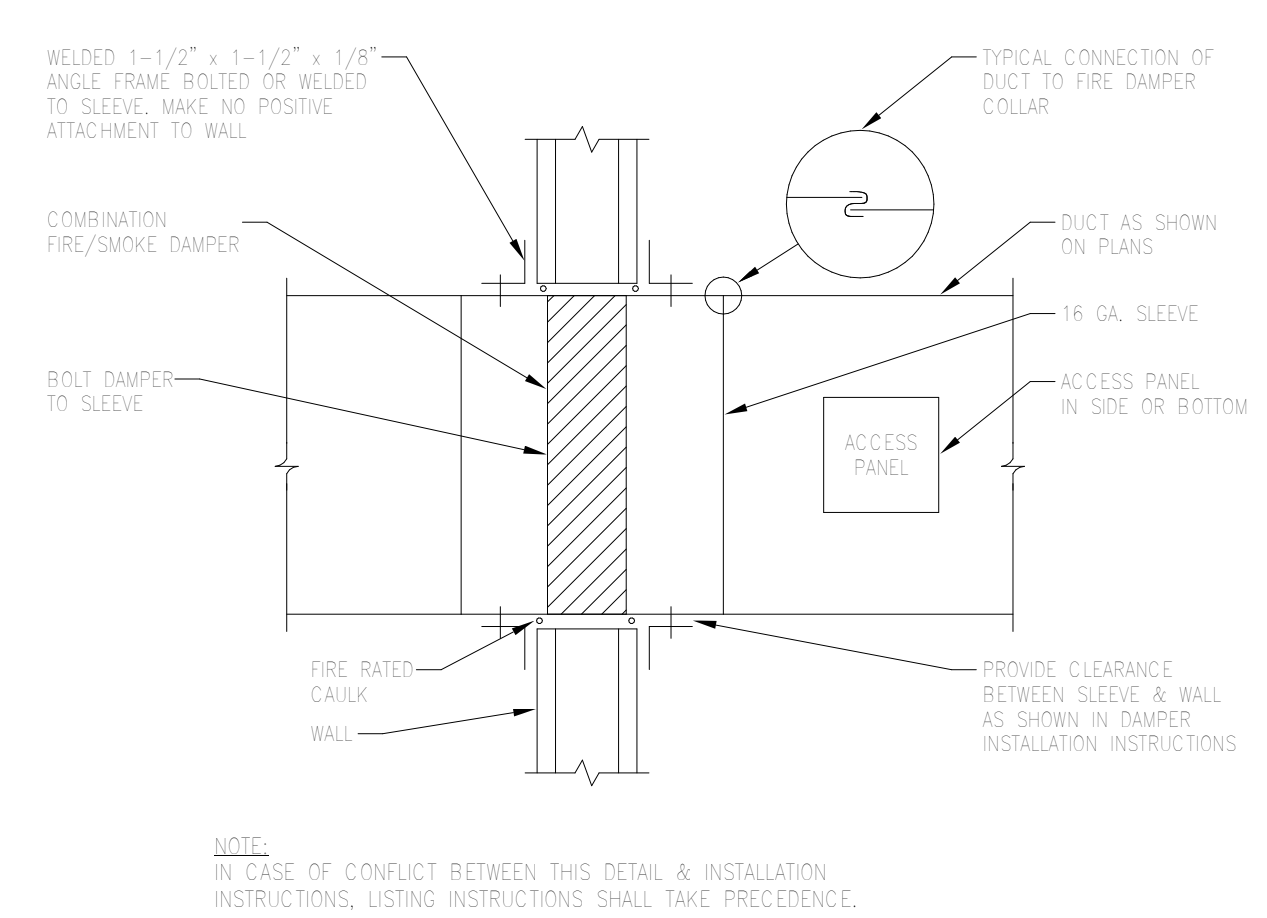
M6.01 NOT TO SCALE



6 REFRIGERANT PIPING ROOF PENETRATION DETAIL NOT TO SCALE

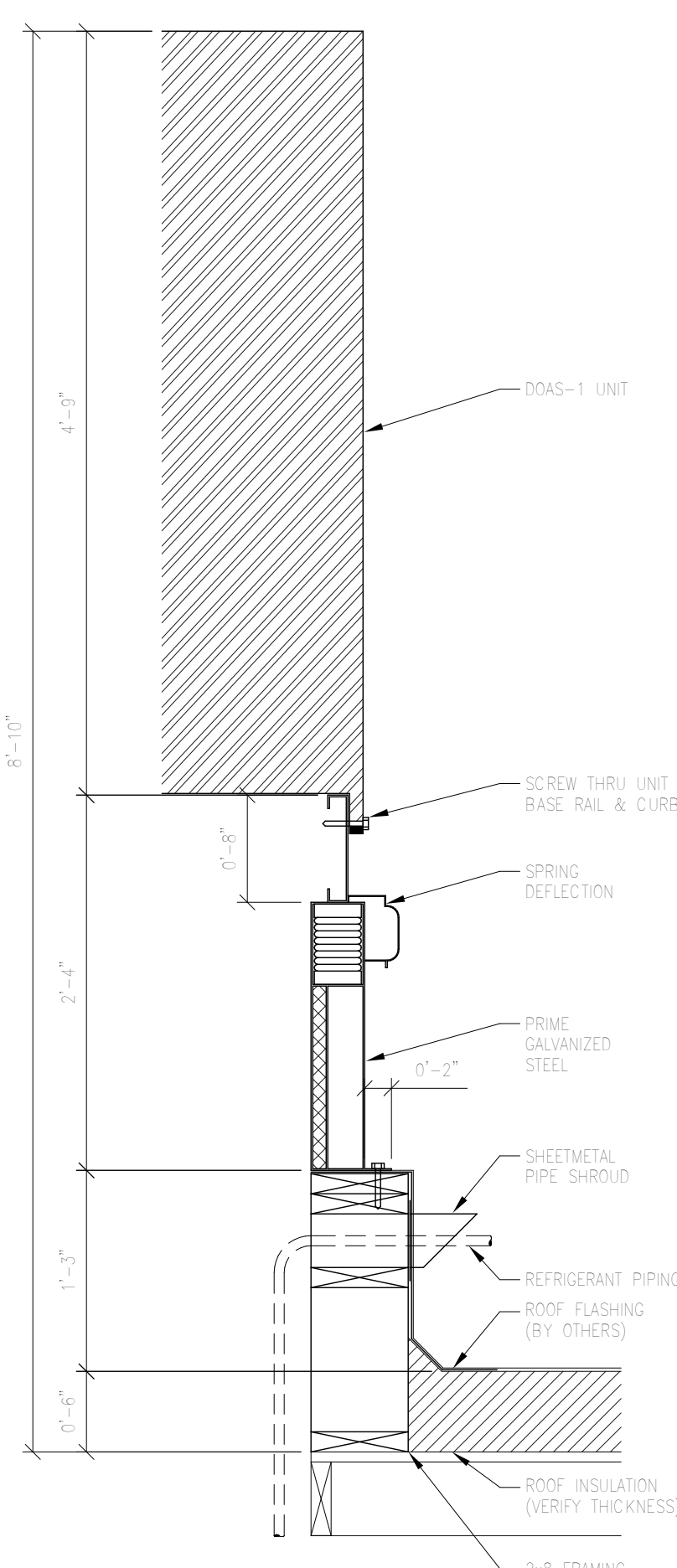


7 TYPICAL WALL PENETRATION DETAILS

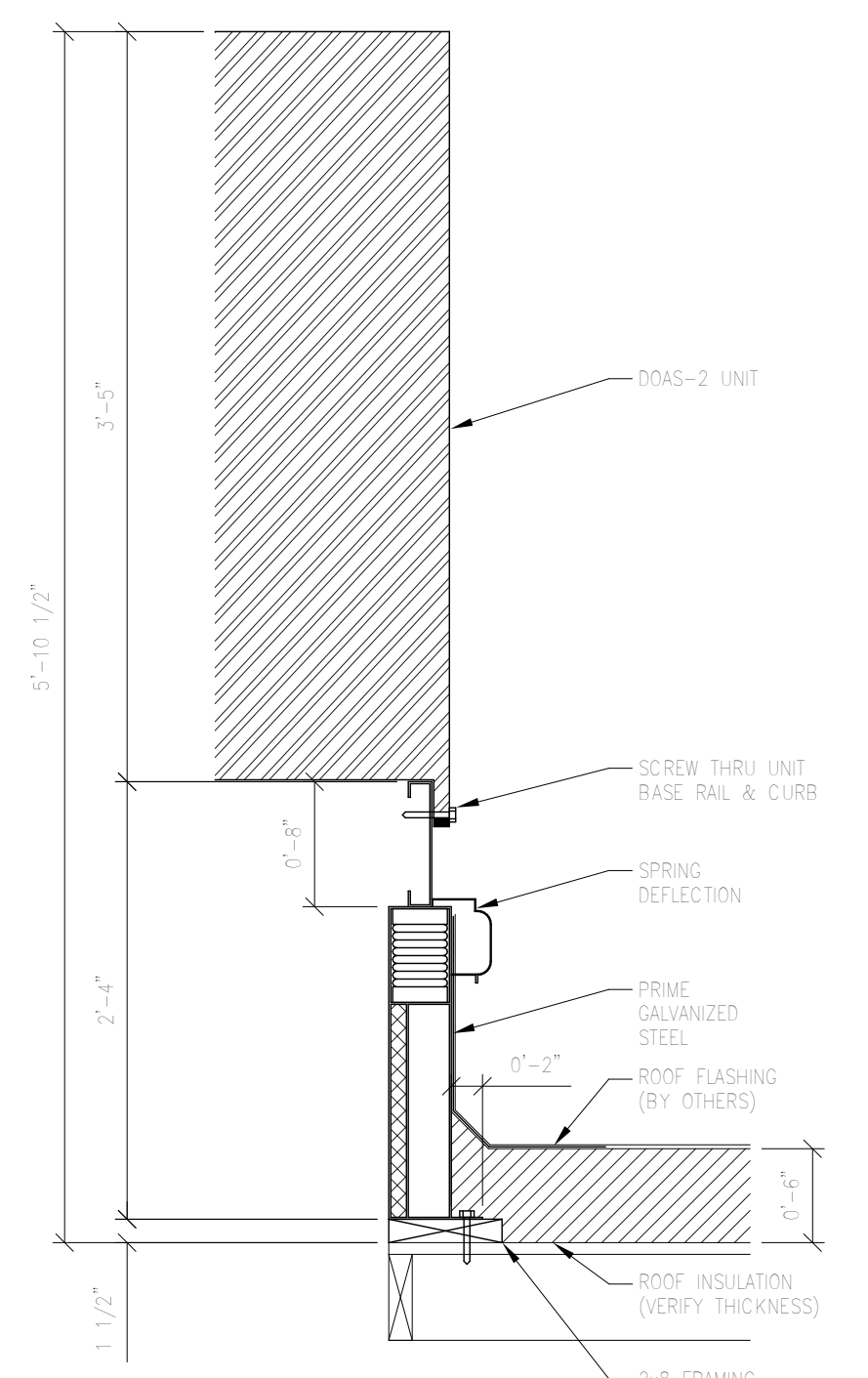


8 FIRE DAMPER INSTALLATION DETAIL

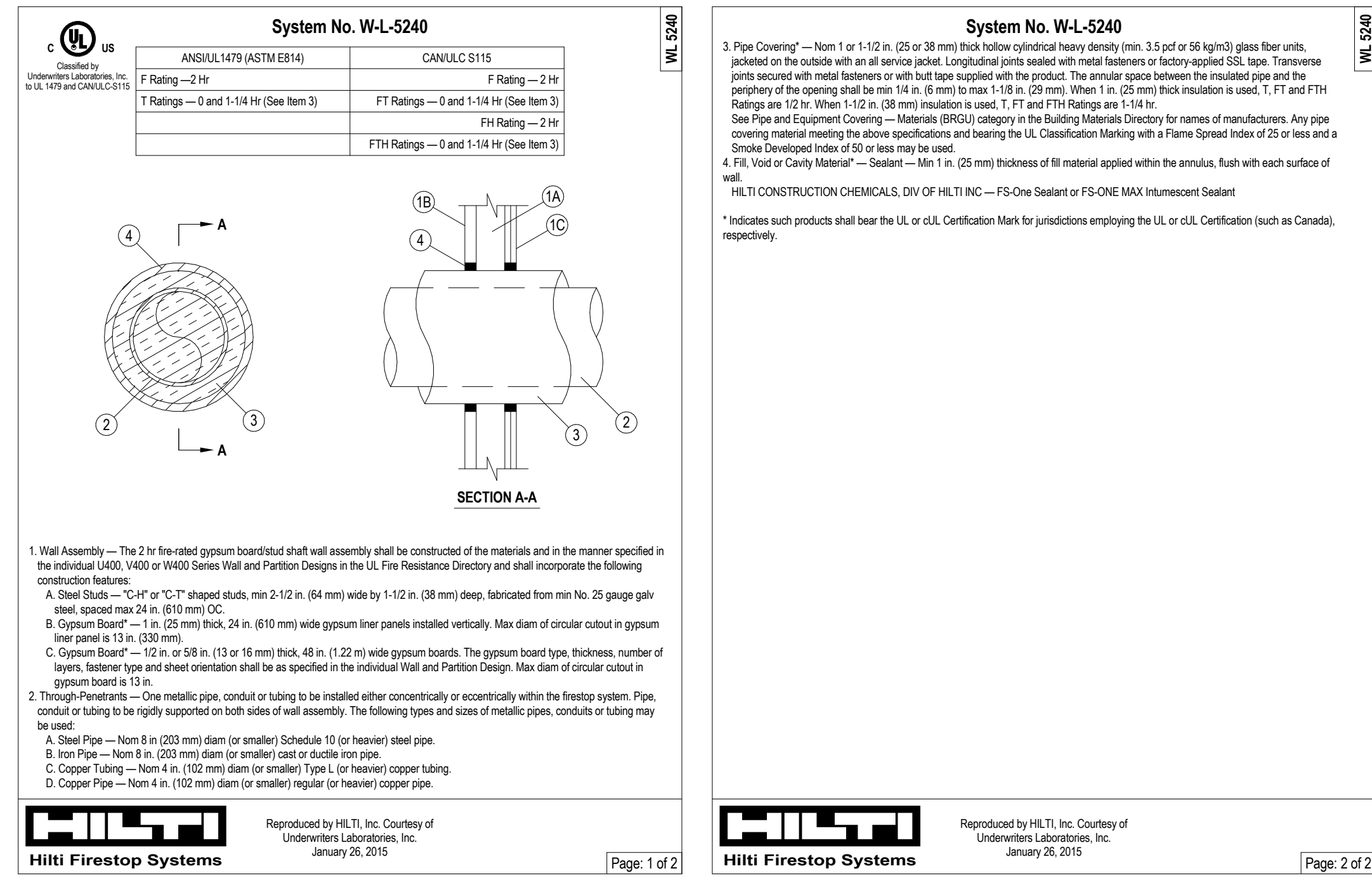
M6.01 NOT TO SCALE



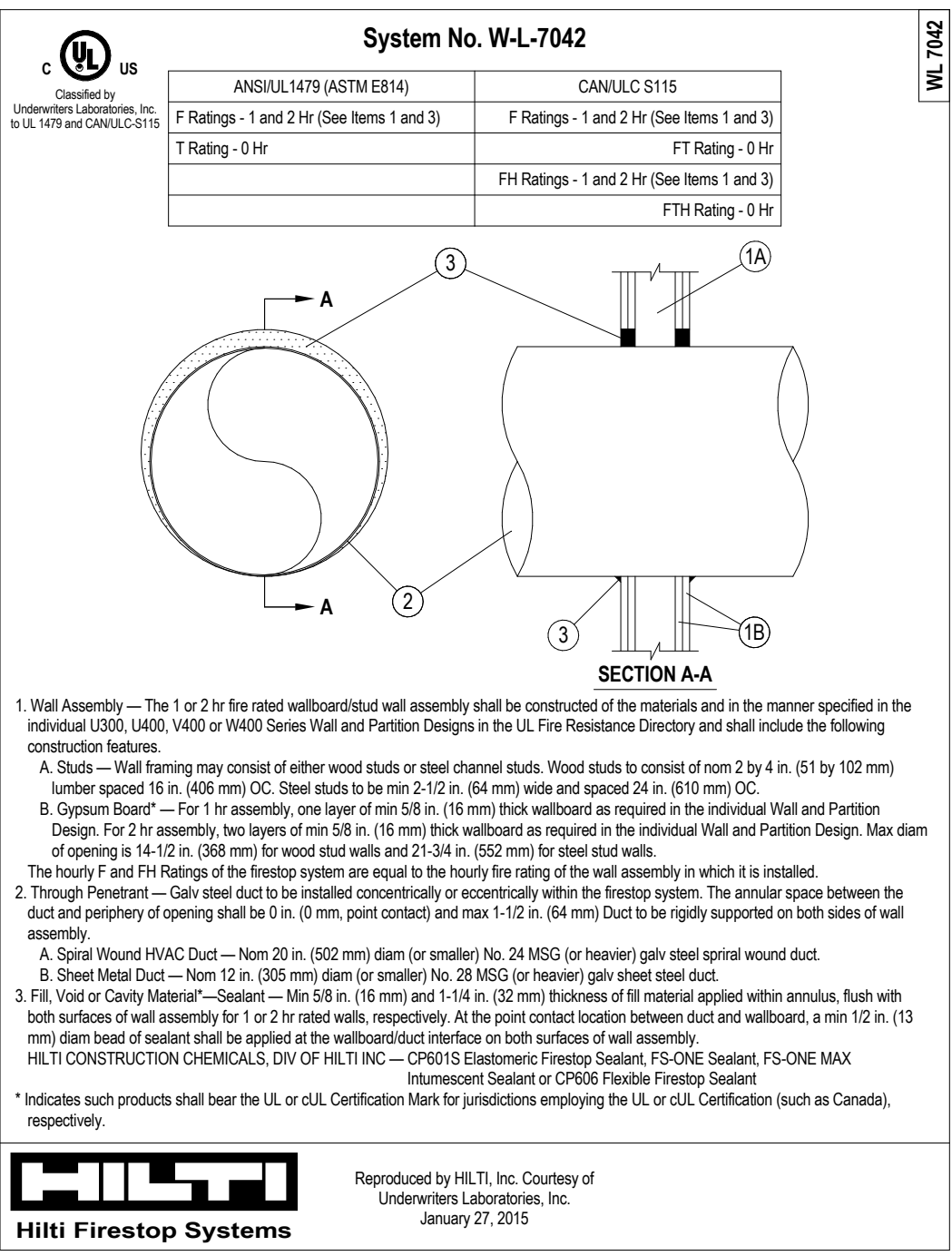
9 DOAS-1 CURB DETAIL



DOAS-2 CURB DETAIL

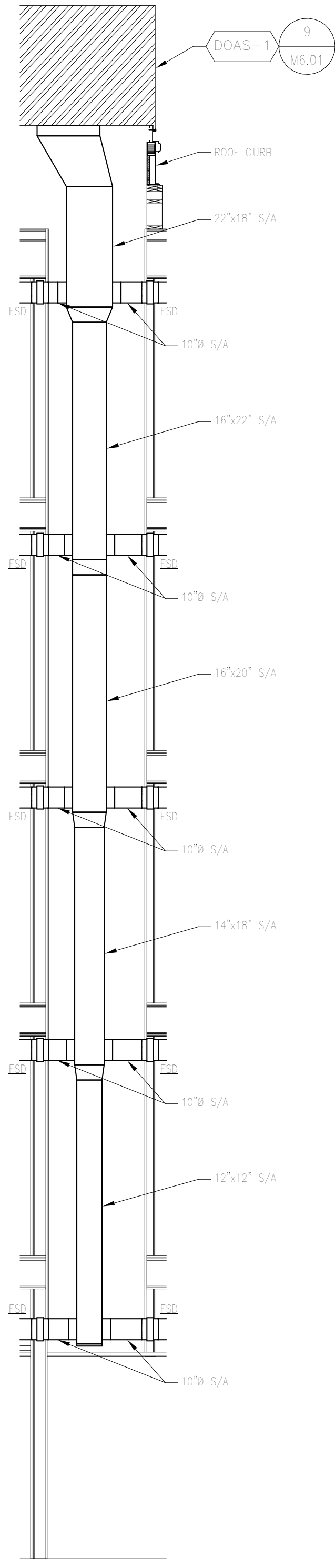


11 SHAFT WALL PIPING PENETRATION DETAIL  
M6.01 NOT TO SCALE

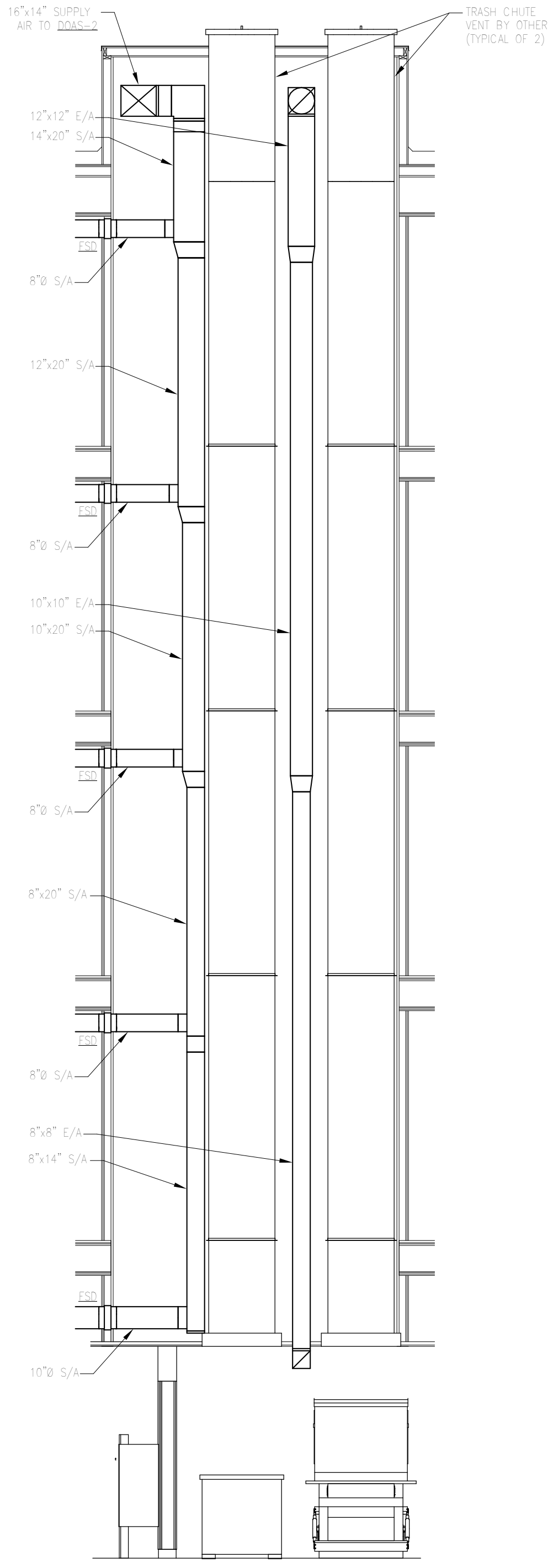


12 CORRIDOR WALL PENETRATION DETAIL  
M6.01 NOT TO SCALE

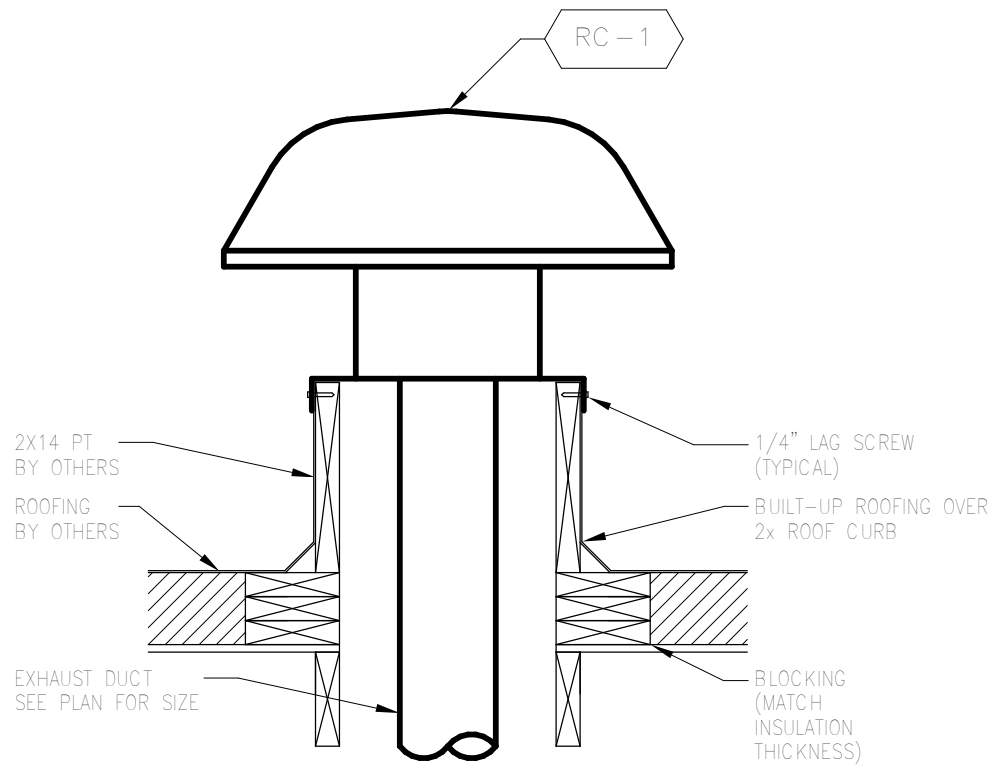




1 SECTION @ DOAS-1 DUCT CHASE  
M6.02 1/4" = 1'-0"



2 SECTION @ DOAS-2 & EF-6 DUCT CHASE  
M6.02 1/4" = 1'-0"



3 ROOF CAP DETAIL  
M6.02 NOT TO SCALE



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MECHANICAL  
DETAILS

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SHEET NUMBER  
M6.02



RELIEF HOODS									
SYMBOL	TYPE	CFM	FUNCTION		DAMPER		THROAT AREA SQ. FT.	STATIC PD	DESIGN BASIS/ REMARKS
			INTAKE	RELIEF	BACK- DRAFT	MOTOR- OPERATED			
RH-1	ELEVATOR RELIEF	-		*	*		6 SF	-	COOK 30X30 GR
RC-1	KITCHEN, BATHROOM EXHAUST			*	*		0.25 SF		COOK 6X6 GR
NOTES: 1. DAMPER TO BE POWER CLOSED, SPRING OPEN. DAMPER TO OPEN AUTOMATICALLY UPON DETECTION OF SMOKE IN THE ELEVATOR LOBBY OR HOISTWAY, UPON POWER FAILURE AND ACTIVATION OF A MANUAL OVERRIDE CONTROL.									

DEDICATED OUTSIDE AIR UNIT (DX COOLING, GAS HEATING)																									
TAG	MFG. & MODEL	LOCATION	SERVING	OSA CFM	REF	OSA DESIGN COND.		AMB TEMP <sup>1</sup>	COOLING				HEATING		SUPPLY FAN				ELECTRICAL			OPERATING WEIGHT (LBS)	NOTES		
						SUM DB / WB	WINTER DB		TOTAL (MBH)	SENS (MBH)	EDB / EWB	LDB / LWB	INPUT (MBH)	OUTPUT (MBH)	EDB / LDB	CFM	ESP	RPM	BHP	HP	VOLTAGE			MCA	MOCP
DOAS-1	DAIKIN DPS012A	ROOF - SOUTH	RESIDENTIAL UNITS AND CORRIDORS	4,000 (100%)	R410A	92 / 67°F	22°F	95°F	160	160	95.0 / 70.0°F	58.3 / 57.7°F	300	240	20.0 / 69.2°F	4,000	2.3	1,299	1.36	4.0	460 / 60 / 3	20.2	30	2,229	1, 3
DOAS-2	DAIKIN DPS006A	ROOF - NORTH	RESIDENTIAL UNITS AND CORRIDORS	2,100 (100%)	R410A	92 / 67°F	20°F	95°F	80.2	80.2	95.0 / 70.0°F	60.0 / 58.4°F	160	128	20.2 / 76.2°F	2,100	2.8	2,421	1.67	2.3	460 / 60 / 3	11.7	15	1,349	2, 3
<b>Notes:</b> 1. DOWN DISCHARGE UNIT. 2. HORIZONTAL DISCHARGE UNIT. 3. PROVIDE WITH DISCHARGE AIR TEMPERATURE SENSOR FOR CONTROLS.																									

VENTILATION CALCULATIONS													
ZONE NAME	ROOM NAME	ROOM NUMBER	FLOOR AREA, A <sub>z</sub>	OUTDOOR AIR PER AREA, R <sub>a</sub>	OCCUPANT DENSITY	MIN. OCCUPANCY DENSITY	NUMBER OF OCCUPANTS, P <sub>z</sub>	OUTDOOR AIR PER PERSON, R <sub>p</sub>	BREATHING ZONE, V <sub>bz</sub>	EXHAUST		FRESH AIR SOURCE	NOTES
			[SF]	[CFM/SF]	[#/1000 SF]			[CFM/PERSON]	[CFM]	REQUIRED [CFM]	PROVIDED [CFM]		
DOAS-2	COMMUNITY ROOM	100F	1094	0.06	50	2.5	27.4	5	202	-	-	DOAS-2	
	ENTRY / CORRIDOR	100A	1016	0.06	5	2.5	2.5	5	74	-	-		
	OFFICE	100B	255	0.06	5	2.5	0.6	5	18	-	-		
	OFFICE	100E	145	0.06	5	2.5	0.4	5	11	-	-		
	WORK	100C	95	0.06	5	2.5	0.2	5	7	-	-		
	OFFICE	100G	150	0.06	5	2.5	0.4	5	11	-	-		
SF-1	LAUNDRY	100L	205	0.06	20	10	2.1	7.5	28	-	-	SF-1	
	MAINTENANCE	100M	165	0.06	5	2.5	0.4	5	12	-	-		
minimum OSA:									350				
NOTES:													

DIFFUSER, REGISTER AND GRILLE SCHEDULE					
TAG	DESCRIPTION	FACE	FINISH	BASIS OF DESIGN (OR EQUAL)	NOTES
CD-1	CEILING SUPPLY DIFFUSER	LOUVERED PERFORATED	WHITE	TITUS TDC ; PRICE SMD	HARD-LID CEILING W/ OBD LAY-IN CEILING
CD-2	CEILING SUPPLY DIFFUSER	LOUVERED PERFORATED	WHITE	TITUS PCS ; PRICE PDC	
CR-1	CEILING RETURN/EXHAUST	EGGCRATE PERFORATED	WHITE	TITUS 50F ; PRICE 80	HARD LID CEILING W/ OBD; SEE NOTE 6 LAY-IN CEILING; SEE NOTE 6
CR-2	CEILING RETURN/EXHAUST	EGGCRATE PERFORATED	WHITE	TITUS PAR ; PRICE PDDR	
SR-1	SIDEWALL RETURN/EXHAUST	35" SINGLE DEFLECTION	WHITE	TITUS 350RS/RL ; PRICE 530	3/4" BLADE SPACING W OBD; SEE NOTE 2
NOTES: 1. ALUMINUM GRILLES IN WET ENVIRONMENTS (i.e. DISHWASHER ROOM, TOILETS WITH SHOWERS OR BATHTUBS) 2. ALL SIDEWALL RETURN GRILLES TO HAVE HORIZONTAL BLADES. PAINT INSIDE OF DUCT BLACK IF VISIBLE FROM ROOM. PROVIDE 1" FILTER WHEN SHOWN ON DWGS. 3. VERIFY FINISH AND COLOR WITH ARCH AND RCP DRAWINGS. 4. EQUIVALENT PRODUCTS/MANUFACTURERS ARE ACCEPTABLE. 5. PROVIDE SQUARE-TO-ROUND ADAPTER FOR SQUARE NECK GRILLES, UNLESS SHOWN WITH A RECTANGULAR DUCT CONNECTION. 6. PROVIDE 1" FILTER WHEN SHOWN ON DWGS.					

ELECTRIC HEATERS						
SYMBOL	CAPACITY WATTS	LOCATION	MOUNTING TYPE	VOLTS / PH	DESIGN BASIS/ REMARKS	NOTES
EWH-1	500	TOILET 100J	SURFACE	208 / 1	MARKEL F30522T2DWB	4, 5
EWH-2	1750	ELECTRICAL 100Q	SURFACE	208 / 1	MARKEL F30522T2DWB	1, 5
EWH-3	1500	RISER 100P	SURFACE	208 / 1	MARKEL F30522T2DWB	1, 5
EWH-4	2250	STAIR 1	SURFACE	208 / 1	MARKEL F30522T2DWB	2, 5
EWH-5	2250	STAIR 2	SURFACE	208 / 1	MARKEL F30522T2DWB	2, 5
EWH-6	2000	CORRIDOR 100I	SURFACE	208 / 1	MARKEL F30522T2DWB	4, 5
EWH-7	1200	TRASH/RECYCLING	SURFACE	208 / 1	MARKEL F30522T2DWB	2, 5
EUH-1	3000	MAIN TRASH/RECYCLING	CEILING	208 / 1	MARKEL F1F5103N	1
EDH-1	1750	MAINTENANCE 100M	DUCT	208 / 1	NEPTRONIC DF CF00H	3
NOTES: 1. SETPOINT TEMPERATURE IS 40 DEG F. 2. SETPOINT TEMPERATURE IS 55 DEG F. 3. SETPOINT TEMPERATURE IS 60 DEG F. 4. SETPOINT TEMPERATURE IS 70 DEG F. 5. INSTALLATION BY OTHERS. 6. PROVIDE WITH INTEGRAL THERMOSTAT.						

LOUVER SCHEDULE									
SYMBOL	QTY	MANF	MODEL	AREA SERVED	AIRFLOW [CFM]	SIZE			NOTES
						WIDTH [IN]	HEIGHT [IN]	FREE AREA [SQ FT]	
L-1	1	RUSKIN	ELF375DX	LAUNDRY	1320	24	24	1.91	
L-2	1	RUSKIN	ELF375DX	ELECTRICAL	1500	30	24	2.45	
L-3	1	RUSKIN	ELF375DX	ELECTRICAL	1500	30	24	2.45	
L-4	1	RUSKIN	ELF375DX	MAINTENANCE	150	12	12	0.26	
L-5	1	RUSKIN	ELF375DX	RISER	50	12	12	0.26	
NOTES:									

SUPPLY FANS													
SYMBOL	SYSTEM SERVED	TYPE	DISCHARGE	CFM	MIN SP INCHES	FAN RPM	MOTOR				OPER WEIGHT LBS	DESIGN BASIS	NOTES
							BHP	HP	V/PH	RPM			
SF-1	MAINTENANCE 100M	INLINE	DUCTED	100	0.20	3000	-	-	120 / 1	1585	-	FANTECH FG 5	1
NOTES: 1. RUNS CONTINUOUSLY.													

FAN COIL UNIT SCHEDULE																	
SYMBOL	QTY	OUTDOOR UNIT	MFR	MODEL	TYPE	AREA SERVED	CAPACITY			AIR FLOW			ELECTRICAL			OPER WEIGHT [LBS]	NOTES
							COOLING [TONS]	HEATING [MBH]		SUPPLY [CFM]	RETURN [CFM]	OSA [CFM]	VOLTS / PH	MCA	MOCP		
FCU-1	1	HP-1	DAIKIN	FXMQ48PBVJU	DUCTED CONCEALED CEILING	COMMUNITY 100F	4	48	54	1160	958	202	208 / 1	3.4	15	102	
FCU-2	1	HP-2	DAIKIN	FBQ18PVJU	DUCTED CONCEALED CEILING	ENTRY 100A	1.5	18	20	580	505	75	208 / 1	1.6	15	80	
FCU-3	1	HP-3	DAIKIN	FDXS12LVJU	DUCTED CONCEALED CEILING	OFFICE 100B / WORK 100C	1	11.5	11.5	280	255	25	208 / 1	-	15	47	
FCU-4	1	HP-4	DAIKIN	FTX09NMVJU	WALL-MOUNT	LAUNDRY 100L	0.75	9	10	297	267	30	208 / 1	-	15	18	
FCU-5	1	HP-5	DAIKIN	FFQ09Q2VJU	CEILING-SUSPENDED CASSETTE	OFFICE 100E	0.75	9	10	339	329	10	208 / 1	-	15	36	
FCU-6	1	HP-6	DAIKIN	FFQ09Q2VJU	CEILING-SUSPENDED CASSETTE	OFFICE 100G	0.75	9	10	339	329	10	208 / 1	-	15	36	
FCU-7	1	HP-7	DAIKIN	FTX12NMVJU	WALL-MOUNT	SECURITY 100D	1	10.9	13.5	311	311	0	208 / 1	12.2	15	18	
FCU-8	1	HP-8	DAIKIN	FTX12NMVJU	WALL-MOUNT	DATA ENTRY / FIRE ALARM 100S	1	10.9	13.5	311	311	0	208 / 1	12.2	15	18	
FCU-9	1	HP-9	DAIKIN	FTX12NMVJU	WALL-MOUNT	ELECTRICAL 200E	1	10.9	13.5	311	311	0	208 / 1	12.2	15	18	
FCU-10	1	HP-10	DAIKIN	FTX12NMVJU	WALL-MOUNT	DATA 300E	1	10.9	13.5	311	311	0	208 / 1	12.2	15	18	
FCU-11	1	HP-11	DAIKIN	FTX12NMVJU	WALL-MOUNT	ELECTRICAL 400E	1	10.9	13.5	311	311	0	208 / 1	12.2	15	18	
FCU-12	1	HP-12	DAIKIN	FTX12NMVJU	WALL-MOUNT	ELECTRICAL 500E	1	10.9	13.5	311	311	0	208 / 1	12.2	15	18	
FCU-13	1	HP-13	DAIKIN	FTX12NMVJU	WALL-MOUNT	ELEVATOR CONTROL	1	10.9	13.5	311	311	0	208 / 1	12.2	15	18	
						total:	9.75	169.9									
NOTES:																	

HEAT PUMP SCHEDULE															
SYMBOL	QTY	INDOOR UNIT	MFR	MODEL	LOCATION	UNIT SIZE (TONS)	EFFICIENCIES				ELECTRICAL			OPER WEIGHT (LBS)	NOTES
							EER	SEER	HSPF	COP	VOLTS / PH	MCA	MOCP		
HP-1	1	FCU-1	DAIKIN	RXTQ48TAVJU	ROOF	4	9.4	16.0	9.0	-	208 / 1	29.1	35	176	1
HP-2	1	FCU-2	DAIKIN	RZQ18PVJU8	ROOF	1.5	13.00	17.5	10.6	-	208 / 1	16.5	20	150	1
HP-3	1	FCU-3	DAIKIN	RXS12LVJU	ROOF	1	9.1	15.5	10.4	3.51	208 / 1	8.8	15	75	1
HP-4	1	FCU-4	DAIKIN	RX09NMVJU	ROOF	0.75	12.5	19.0	9.0	4.1	208 / 1	12.1	15	55	1
HP-5	1	FCU-5	DAIKIN	RX09RMVJU	ROOF	0.75	13.0	20.9	11.7	4.58	208 / 1	9.0	15	60	1
HP-6	1	FCU-6	DAIKIN	RX09RMVJU	ROOF	0.75	13.0	20.9	11.7	4.58	208 / 1	9.0	15	60	1
HP-7	1	FCU-7	DAIKIN	RX12NMVJU	ROOF	1	12.5	19	9.0	3.8	208 / 1	12.2	15	60	1
HP-8	1	FCU-8	DAIKIN	RX12NMVJU	ROOF	1	12.5	19	9.0	3.8	208 / 1	12.2	15	60	1
HP-9	1	FCU-9	DAIKIN	RX12NMVJU	ROOF	1	12.5	19	9.0	3.8	208 / 1	12.2	15	60	1
HP-10	1	FCU-10	DAIKIN	RX12NMVJU	ROOF	1	12.5	19	9.0	3.8	208 / 1	12.2	15	60	1
HP-11	1	FCU-11	DAIKIN	RX12NMVJU	ROOF	1	12.5	19	9.0	3.8	208 / 1	12.2	15	60	1
HP-12	1	FCU-12	DAIKIN	RX12NMVJU	ROOF	1	12.5	19	9.0	3.8	208 / 1	12.2	15	60	1
HP-13	1	FCU-13	DAIKIN	RX12NMVJU	ROOF	1	12.5	19	9.0	3.8	208 / 1	12.2	15	60	1
NOTES: 1. DISCONNECT BY E.C.															



1 ELECTRICAL SYMBOL SCHEDULE

SYMBOLS	SWITCHES	NOTES
\$	SINGLE POLE LIGHT SWITCH	+48" AFF
\$3	THREE WAY LIGHT SWITCH	+48" AFF
\$D	DIMMER SWITCH (1000W)	
\$OS	SWITCH OCCUPANCY SENSOR	
OS	OCCUPANCY SENSOR	
OS	OCCUPANCY SENSOR	
PE	PHOTO ELECTRIC SWITCH	

SYMBOLS	FIRE ALARM	NOTES
SD	DWELLING UNIT COMBINATION SMOKE DETECTOR WITH AUDIBLE ALARM	
CO	DWELLING UNIT COMBINATION SMOKE/CO2 DETECTOR	
SD	SMOKE DAMPER	
B	EXTERIOR FIRE ALARM BELL (120 VOLTS)	
ES	EXTERIOR FIRE ALARM BELL FLOW SWITCH	

SYMBOLS	RACEWAYS	NOTES
	BRANCH CIRCUIT INSTALLED CONCEALED FROM FINISH SPACES. PROVIDE GROUND CONDUCTOR AS INDICATED IN PANEL SCHEDULE. GROUND CONDUCTOR NOT INCLUDED IN HASH MARK INDICATION.	
	BRANCH CIRCUIT INSTALLED IN OR BELOW FLOOR. PROVIDE GROUND CONDUCTOR AS INDICATED IN PANEL SCHEDULE. GROUND CONDUCTOR NOT INCLUDED IN HASH MARK INDICATION.	
PNL-1,3,5	BRANCH CIRCUIT HOME RUN TO PANEL, HASH MARKS INDICATES NUMBER OF CONDUCTORS. PROVIDE GROUND CONDUCTOR AS INDICATED IN PANEL SCHEDULE. GROUND CONDUCTOR NOT INCLUDED IN HASH MARK INDICATION.	
	JUNCTION BOX, 4" SQUARE UNLESS OTHERWISE NOTED	
	2" CONDUIT SLEEVE WITH BUSHINGS AT BOTH ENDS. LOCATE AT 6" ABOVE ACCESSIBLE CEILING. FIRESTOP WITH UL APPROVED SYSTEM.	
	CONDUIT STUB-OUT. CAP & MARK WITH APPROVED MARKER	
	CONDUIT, UP	
	CONDUIT, DOWN	
	MULTI-OUTLET SURFACE RACEWAY, OUTLETS 6 INCHES ON CENTER	

SYMBOLS	POWER DISTRIBUTION	NOTES
	LIGHTING AND APPLIANCE PANELBOARD	
	SWITCHGEAR	
	SUB-DISTRIBUTION PANELBOARD OR SWITCHBOARD	
	MISCELLANEOUS PANEL AS NOTED	
LVS	LOW VOLTAGE SYSTEM CABINET	

SYMBOLS	MOTOR CONTROLS	NOTES
	MOTOR	
	NON-FUSED DISCONNECT SWITCH	
	FUSED DISCONNECT SWITCH (FUSES SIZED PER EQUIPMENT MANUFACTURERS RECOMMENDATIONS UNO)	
	COMBINATION FUSED DISCONNECT SWITCH AND MOTOR CONTROLLER	
	MOTOR STARTER	
	MANUAL MOTOR STARTER	
\$M	SINGLE PHASE HORSEPOWER RATED MOTOR DISCONNECT	

SYMBOLS	RECEPTACLES/DEVICES	NOTES
	DUPLEX CONVENIENCE OUTLET	+18" AFF
CW	CLOTHES WASHER OUTLET, 20 AMP, 120 VOLT, 3 WIRE	+36" AFF
D	DEDICATED RECEPTACLE	
DR	DINING ROOM RECEPTACLE	+18" AFF
GR	GAS RANGE	
HT	TRAP HEAT TAPE OUTLET, CEILING MOUNT UNO (GFI)	
DW	DISHWASHER	
MW	BUILT IN MICROWAVE HOOD	
	FLUSH FLOOR OUTLET	
GD/DW	SPLIT RECEPTACLE, GARBAGE DISPOSAL OUTLET, SWITCHED FROM WALL SWITCH ABOVE COUNTER / DISHWASHER	+24" UNDER-SINK
RH	RANGEHOOD	
RF	REFRIGERATOR OUTLET, 20 AMP, 120 VOLT, 3 WIRE	+54" AFF
	DOUBLE DUPLEX CONVENIENCE OUTLET	
	GFI DUPLEX CONVENIENCE OUTLET	+18" AFF
-6"	LOCATED 6" BELOW COUNTER TOP	
	SWITCHED DUPLEX OUTLET	+18" AFF
	DUPLEX CONVENIENCE OUTLET (+6" ABOVE COUNTER TOP)	
	GFI DUPLEX CONVENIENCE OUTLET (+6" ABOVE COUNTER TOP OR SINK)	
GR	GAS RANGE	
R	ELECTRIC RANGE OUTLET, 50 AMP 120/240 VOLT, 3 WIRE	
CD	ELECTRIC CLOTHES DRYER, 30 AMP, 120/240 VOLT, 3 WIRE	+42" AFF
WD	CLOTHES WASHER/DRYER COMBINATION, 30 AMP, 120/240 VOLT VOLT, 3 WIRE RECEPTACLE AND 20 AMP, 120 VOLT 3 WIRE RECEPTACLE	
TL	GROUND MOUNTED RECEPTACLE AT BASE OF TREE FOR LIGHTS, WEATHERPROOF GFI. COORDINATE WITH TREE LOCATION	
F	CEILING FAN J-BOX	
MDU	MEDIA DISTRIBUTION UNIT	
500W	SPACE HEATER (500W, 750W OR 1000W)	
	THERMOSTAT	
	ELECTRICAL SLEEVE	

SYMBOLS	ONELINE DIAGRAM	NOTES
	METER, TYPE AS NOTED	
	GROUND	
	MOLDED CASE CIRCUIT BREAKER	

SYMBOLS	LIGHT FIXTURES	NOTES
T	WHEN ADDED TO LIGHT FIXTURE SYMBOL, INDICATES WALL OR BRACKET MOUNTED LIGHT FIXTURE	
C	LIGHT FIXTURE OUTLET (NUMBER INDICATES CIRCUIT, CAPITAL LETTER INDICATES FIXTURE TYPE, LOWER CASE LETTER INDICATES SWITCHING CONTROL, TYPICAL FOR ALL LIGHT FIXTURES)	
	RECESSED CEILING LIGHT FIXTURE	
	LIGHT FIXTURE	
	STRIP LIGHT FIXTURE	
	LIGHTING TRACK WITH LIGHTING FIXTURES	
	SINGLE FACE EXIT SIGN WITH NUMBER OF DIRECTIONAL ARROWS AS SHOWN, CEILING MOUNTED. SOLID QUADRANT INDICATES FACE.	
	DOUBLE FACE EXIT SIGN WITH NUMBER OF DIRECTIONAL ARROWS AS SHOWN, CEILING MOUNTED. SOLID QUADRANTS INDICATES FACES	
	LIGHT FIXTURES WITH INTEGRAL BATTERY BACKUP	
	SURFACE MOUNTED LIGHT FIXTURE	
	SUSPENDED PENDANT LIGHT FIXTURE	
	WALL WASHER, UNSHADED SIDE INDICATES DIRECTION OF WALL WASHING	
	ACCENT LIGHT FIXTURE	
NL	NIGHT LIGHT - UNSWITCHED	

SYMBOLS	FIRE ALARM	NOTES
SD	DWELLING UNIT COMBINATION SMOKE DETECTOR WITH AUDIBLE ALARM	
CO	DWELLING UNIT COMBINATION SMOKE/CO2 DETECTOR	
SD	SMOKE DAMPER	
B	EXTERIOR FIRE ALARM BELL (120 VOLTS)	
ES	EXTERIOR FIRE ALARM BELL FLOW SWITCH	

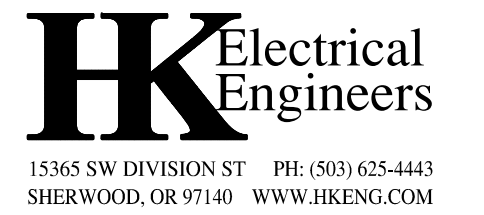
SYMBOLS	ABBREVIATIONS	NOTES
AFF	ABOVE FINISHED FLOOR	
AFTB	ABOVE FINISHED FLOOR TO BOTTOM	
AFTT	ABOVE FINISHED FLOOR TO TOP	
AMP	AMPERE	
C	CONDUIT	
EC	ELECTRICAL CONTRACTOR	
ELEC	ELECTRICAL	
EM	EMERGENCY	
FA	FIRE ALARM	
FAAP	FIRE ALARM ANNUNCIATOR PANEL	
FACP	FIRE ALARM CONTROL PANEL	
G, GND	GROUND	
ø PH	PHASE	
PNL	PANEL	
PWR	POWER	
SYS	SYSTEM	
T	TELEPHONE	
TTB	TELEPHONE TERMINAL BOARD	
TYP	TYPICAL	
UNO	UNLESS NOTED OTHERWISE	
V	VOLT	
VP	VANDAL PROOF	
W	WATT	
WP	WEATHERPROOF TYPE	

ONELINE TAG NUMBER	CIRCUIT AMPS	Num Sets	COPPER (THHN, XHHW)							Num Sets	ALUMINUM (THHN, XHHW)						
			CONDUCTORS AND CONDUIT PER SET (OR MC CABLE)								CONDUCTORS AND CONDUIT PER SET (OR MC CABLE)						
			PHASE WIRES	NEUTRAL WIRE	GROUND WIRE	CONDUIT 3W	CONDUIT 4W		PHASE WIRE		NEUTRAL WIRE	GROUND WIRE	CONDUIT 3W	CONDUIT 4W			
60	60	1	#6	#6	#8	3/4"	1"	1	#4	#4	#8	1"	1"				
70	70	1	#4	#4	#8	1"	1"	1	#3	#3	#6	1"	1-1/4"				
100	100	1	#3	#3	#8	1"	1-1/4"	1	#1	#1	#6	1-1/4"	1-1/2"				
125	125	1	#1	#1	#6	1-1/4"	1-1/2"	1	#2/O	#2/O	#4	1-1/2"	2"				
150	150	1	#1/O	#1/O	#6	1-1/2"	1-1/2"	1	#3/O	#3/O	#4	2"	2"				
175	175	1	#2/O	#2/O	#6	1-1/2"	2"	1	#4/O	#4/O	#6	2"	2-1/2"				
200	200	1	#3/O	#3/O	#6	2"	2"	1	#250 MCM	#250 MCM	#4	2"	2-1/2"				
225	225	1	#4/O	#4/O	#3	2"	2-1/2"	1	#300 MCM	#300 MCM	#1	2-1/2"	2-1/2"				
250	250	1	#250 MCM	#250 MCM	#3	2"	2-1/2"	1	#350 MCM	#350 MCM	#1	2-1/2"	2-1/2"				
300	300	1	#350 MCM	#350 MCM	#3	2-1/2"	2-1/2"	1	#500 MCM	#500 MCM	#1	2-1/2"	3"				
350	350	1	#500 MCM	#500 MCM	#3	2-1/2"	3"	2	#4/O	#4/O	#1	2"	2-1/2"				
400	400	2	#3/O	#3/O	#3	2"	2"	2	#250 MCM	#250 MCM	#1	2-1/2"	2-1/2"				
450	450	2	#4/O	#4/O	#1	2-1/2"	2-1/2"	2	#300 MCM	#300 MCM	#2/O	2-1/2"	2-1/2"				
500	500	2	#250 MCM	#250 MCM	#1	2-1/2"	2-1/2"	2	#350 MCM	#350 MCM	#2/O	2-1/2"	2-1/2"				
600	600	2	#350 MCM	#350 MCM	#1	2-1/2"	2-1/2"	3	#250 MCM	#250 MCM	#2/O	2-1/2"	2-1/2"				
600	600							2	#500 MCM	#500 MCM	#2/O	2-1/2"	3"				
700	700	2	#500 MCM	#500 MCM	#1/O	2-1/2"	3"	3	#350 MCM	#350 MCM	#3/O	2-1/2"	3"				
750	750	2	#500 MCM	#500 MCM	#1/O	2-1/2"	3"	3	#350 MCM	#350 MCM	#3/O	2-1/2"	3"				
800	800	3	#300 MCM	#300 MCM	#1/O	2-1/2"	2-1/2"	3	#400 MCM	#400 MCM	#3/O	2-1/2"	3"				
1000	1000	3	#400 MCM	#400 MCM	#2/O	2-1/2"	3"	4	#350 MCM	#350 MCM	#4/O	2-1/2"	3"				
1000	1000							3	#600 MCM	#600 MCM	#4/O	3"	3-1/2"				
1200	1200	4	#350 MCM	#350 MCM	#3/O	2-1/2"	3"	4	#500 MCM	#500 MCM	#250 MCM	3"	3"				

2 ELECTRICAL FEEDER SCHEDULE

REFERENCED NOTES

- 1 DETERMINE POWER REQUIREMENTS OF OWNER'S FINAL SELECTED EQUIPMENT OR APPLIANCE PRIOR TO INSTALLING ITS BRANCH CIRCUIT.
- 2 MOUNTING HEIGHTS AND LOCATIONS PER ADA AND FHA.
- 3 SEE ARCHITECTURAL RCP DRAWINGS FOR EXACT LIGHT FIXTURE LOCATIONS.
- 4 GFI CIRCUIT BREAKER PROTECTED RECEPTACLE (20A WASHER).
- 5 DWELLING UNIT PANELBOARDS TO BE INSTALLED +48" TO TOP CIRCUIT BREAKER.
- 6 EQUIPMENT GFI OUTLET.
- 7 TO BE CIRCUITED WITH KITCHEN APPLIANCE CIRCUIT. NEC 210.62 B(1).
- 8 SMOKE DETECTOR SHOULD BE PLACED A MINIMUM OF 3' FROM ANY AIR CURRENT SOURCE, INCLUDING SUPPLY/RETRUN DUCTS AND CEILING FANS.



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NORTH WILLIAMS APARTMENTS - FAMILY HOUSING

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BRIDGE HOUSING

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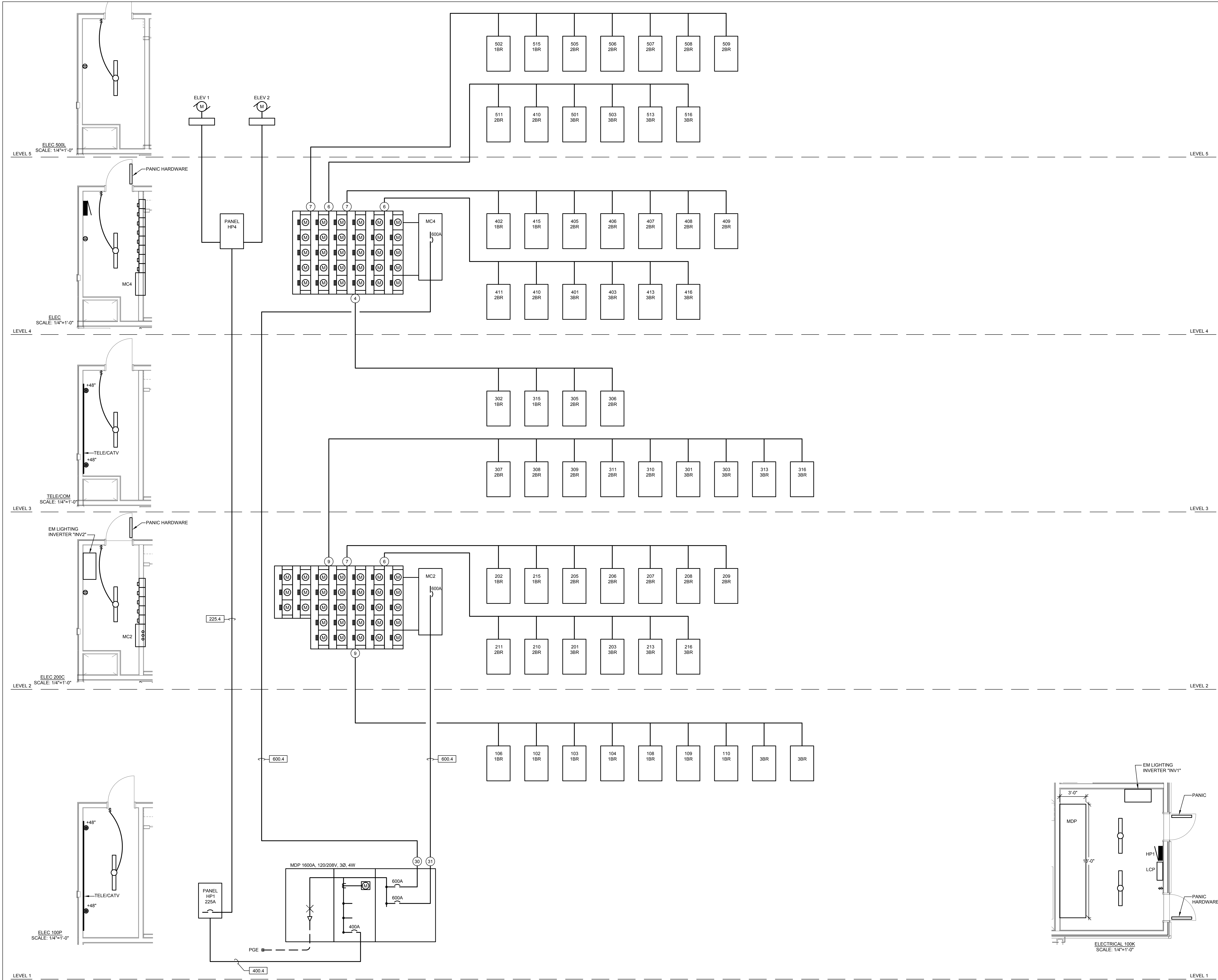
ELECTRICAL LEGEND AND DETAILS

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ONE LINE DIAGRAM

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**ELECTRICAL CALCULATIONS**

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DATE 17 OCT 2018	PROJECT NUMBER 149000
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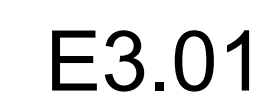
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Service- Load Calculations		31	Dwelling Units	Last Revised		8/21/18
Unit Designations	1 Bedroom		2 Bedroom		3 Bedroom	
General Lighting and Receptacles	VA/SF 3	Sq.Ft 700	VA 2,100	VA/SF 3	Sq.Ft 900	VA 2,700
2 Kitchen Circuits (2 at 1,500 VA)	Watts	Diversity	3,000	Watts	Diversity	3,000
Laundry Circuit			0			0
Clothes Dryer 5000W (240v on 208V)			0			0
Disposal (1/3 hp)			0			0
Dishwasher			1,200			1,200
Water Heater (Central Gas)			0			0
Range			8,000			8,000
Microwave (Built-in)			1,000			1,000
Sub-Total			15,300			16,800
First 10kw	100%	10,000	100%	10,000	100%	10,000
Remainder	40%	2,120	40%	2,360	40%	2,720
PTHP	2900	65%	1,885	2900	65%	1,885
Bedroom Heaters	750	65%	488	1500	65%	975
			0			0
			0			0
			0			0
Calculated Load	VA	14,493	VA	15,220	VA	14,780
Voltage	Volts	208	Volts	208	Volts	208
Calculated Amps	Amps	70	Amps	73	Amps	71
Min Service Breaker & Panelboard Amps	Amps	90	Amps	90	Amps	90
Feeder Size (75 Deg C.)	#2 AL	NOTE 1	#2 AL	NOTE 1	#2 AL	NOTE 1
NOTE 1: PROVIDE #1 AL SIZE IF FEEDER WILL BE IN CONTACT WITH THERMAL OR SOUND INSULATION.						
Electrical Load Calculations - Service						
Loads		VA		VA		VA
General Lighting and Receptacles		2,100		2,700		3,600
2 Kitchen Circuits (2 at 1,500 VA)		3,000		3,000		3,000
Laundry Circuit		0		0		0
Clothes Dryer 5000W (240v on 208V)		0		0		0
Disposal (1/3 hp)		0		0		0
Dishwasher		1,200		1,200		1,200
Water Heater (Central Gas)		0		0		0
Range		8,000		8,000		8,000
Microwave (Built-in)		1,200		1,200		1,200
Water Heater (Central Gas)		0		0		0
Range		8,000		8,000		8,000
Microwave (Built-in)		1,000		1,000		1,000
PTHP		2,900		2,900		2,900
Bedroom Heaters		750		1,500		2,250
		0		0		0
		0		0		0
		0		0		0
Sub-Total		18,950		20,300		21,950
Number of Units		15		28		18
Total for Number of Units		284,250		568,400		395,100
Dwellings						
Total Dwelling	VA	1,247,750				
NEC Diversity Factor	61	Units	24%			
Total Dwelling Diversified	VA	299,460				
Calculated (120/208 - 3 Phase)	Amps	832				
House Loads (AT 208 volts)						
Elevators ( 2 Traction Passenger at 15 HP )			30,000			
Lighting	SF	W/SF				
Parking	0	0.25	0			
Common	10,000	0.58	5,800			
Circulation	0	0.58	0			
Site			4,000			
HVAC			56,000			
Car Chargers (2) Level 2)			12,000			
Space Heaters			14,000			
Exhaust Fans			5,000			
Miscellaneous			10,000			
Calculated (120/208 Volt - 3 Phase)		Amps	136,800			
House Service Size		Amps	380			
		Amps	400			
Total Service						
Residential			299,460			
House			136,800			
			436,260			
Calculated (120/208 Volt - 3 Phase)		Amps	1,212			
Service Size		Amps	1,600			

MC4 - Load Calculations		31	Dwelling Units	Last Revised		8/21/18
Unit Designations	1 Bedroom		2 Bedroom		3 Bedroom	
General Lighting and Receptacles	VA/SF 3	Sq.Ft 700	VA 2,100	VA/SF 3	Sq.Ft 900	VA 2,700
2 Kitchen Circuits (2 at 1,500 VA)	Watts	Diversity	3,000	Watts	Diversity	3,000
Laundry Circuit			0			0
Clothes Dryer 5000W (240v on 208V)			0			0
Disposal (1/3 hp)			0			0
Dishwasher			1,200			1,200
Water Heater (Central Gas)			0			0
Range			8,000			8,000
Microwave (Built-in)			1,000			1,000
Sub-Total			15,300			16,800
First 10kw	100%	10,000	100%	10,000	100%	10,000
Remainder	40%	2,120	40%	2,360	40%	2,720
PTHP	2900	65%	1,885	2900	65%	1,885
Bedroom Heaters	750	65%	488	1500	65%	975
			0			0
			0			0
			0			0
Calculated Load	VA	14,493	VA	15,220	VA	14,780
Voltage	Volts	208	Volts	208	Volts	208
Calculated Amps	Amps	70	Amps	73	Amps	71
Min Service Breaker & Panelboard Amps	Amps	90	Amps	90	Amps	90
Feeder Size (75 Deg C.)	#2 AL	NOTE 1	#2 AL	NOTE 1	#2 AL	NOTE 1
NOTE 1: PROVIDE #1 AL SIZE IF FEEDER WILL BE IN CONTACT WITH THERMAL OR SOUND INSULATION.						
Electrical Load Calculations - Service						
Loads		VA		VA		VA
General Lighting and Receptacles		2,100		2,700		3,600
2 Kitchen Circuits (2 at 1,500 VA)		3,000		3,000		3,000
Laundry Circuit		0		0		0
Clothes Dryer 5000W (240v on 208V)		0		0		0
Disposal (1/3 hp)		0		0		0
Dishwasher		1,200		1,200		1,200
Water Heater (Central Gas)		0		0		0
Range		8,000		8,000		8,000
Microwave (Built-in)		1,000		1,000		1,000
PTHP		2,900		2,900		2,900
Bedroom Heaters		750		1,500		2,250
		0		0		0
		0		0		0
		0		0		0
Sub-Total		18,950		20,300		21,950
Number of Units		6		16		8
Total for Number of Units		113,700		324,800		175,600
Dwellings						
Total Dwelling	VA	614,100				
NEC Diversity Factor	30	Units	33%			
Total Dwelling Diversified	VA	202,653				
Calculated (120/208 - 3 Phase)	Amps	563				

MC2 - Load Calculations		31	Dwelling Units	Last Revised		8/21/18
Unit Designations	1 Bedroom		2 Bedroom		3 Bedroom	
General Lighting and Receptacles	VA/SF 3	Sq.Ft 700	VA 2,100	VA/SF 3	Sq.Ft 900	VA 2,700
2 Kitchen Circuits (2 at 1,500 VA)	Watts	Diversity	3,000	Watts	Diversity	3,000
Laundry Circuit			0			0
Clothes Dryer 5000W (240v on 208V)			0			0
Disposal (1/3 hp)			0			0
Dishwasher			1,200			1,200
Water Heater (Central Gas)			0			0
Range			8,000			8,000
Microwave (Built-in)			1,000			1,000
Sub-Total			15,300			16,800
First 10kw	100%	10,000	100%	10,000	100%	10,000
Remainder	40%	2,120	40%	2,360	40%	2,720
PTHP	2900	65%	1,885	2900	65%	1,885
Bedroom Heaters	750	65%	488	1500	65%	975
			0			0
			0			0
			0			0
Calculated Load	VA	14,493	VA	15,220	VA	14,780
Voltage	Volts	208	Volts	208	Volts	208
Calculated Amps	Amps	70	Amps	73	Amps	71
Min Service Breaker & Panelboard Amps	Amps	90	Amps	90	Amps	90
Feeder Size (75 Deg C.)	#2 AL	NOTE 1	#2 AL	NOTE 1	#2 AL	NOTE 1
NOTE 1: PROVIDE #1 AL SIZE IF FEEDER WILL BE IN CONTACT WITH THERMAL OR SOUND INSULATION.						
Electrical Load Calculations - Service						
Loads		VA		VA		VA
General Lighting and Receptacles		2,100		2,700		3,600
2 Kitchen Circuits (2 at 1,500 VA)		3,000		3,000		3,000
Laundry Circuit		0		0		0
Clothes Dryer 5000W (240v on 208V)		0		0		0
Disposal (1/3 hp)		0		0		0
Dishwasher		1,200		1,200		1,200
Water Heater (Central Gas)		0		0		0
Range		8,000		8,000		8,000
Microwave (Built-in)		1,000		1,000		1,000
PTHP		2,900		2,900		2,900
Bedroom Heaters		750		1,500		2,250
		0		0		0
		0		0		0
		0		0		0
Sub-Total		18,950		20,300		21,950
Number of Units		9		12		10
Total for Number of Units		170,550		243,600		219,500
Dwellings						
Total Dwelling	VA	633,650				
NEC Diversity Factor	31	Units	32%			
Total Dwelling Diversified	VA	202,768				
Calculated (120/208 - 3 Phase)	Amps	563				













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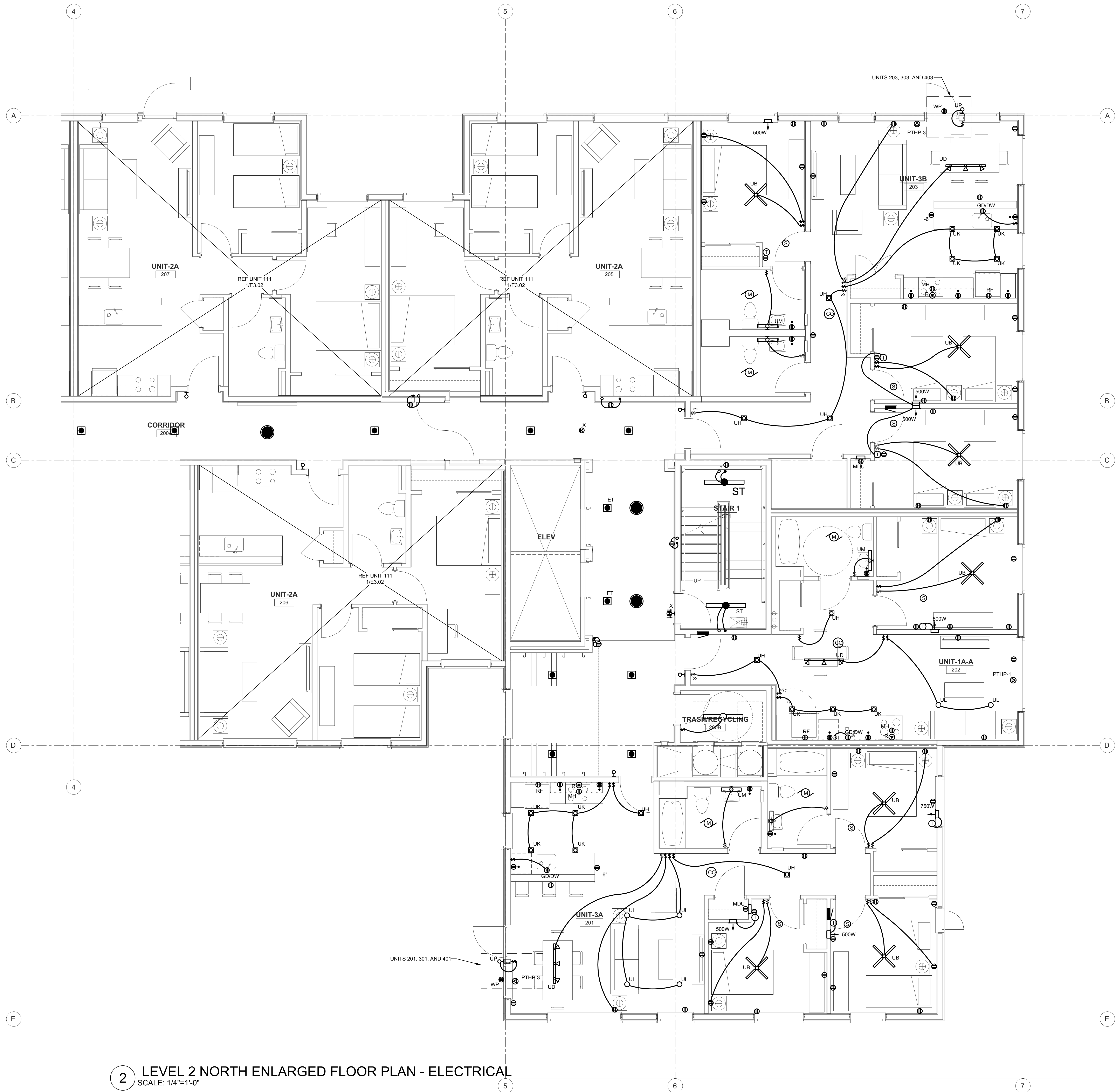
REVISION	DATE	REASON FOR ISSUE
N		

LEVEL 2 NORTH  
ENLARGED FLOOR  
PLAN - ELECTRICAL

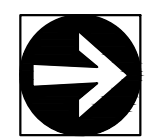
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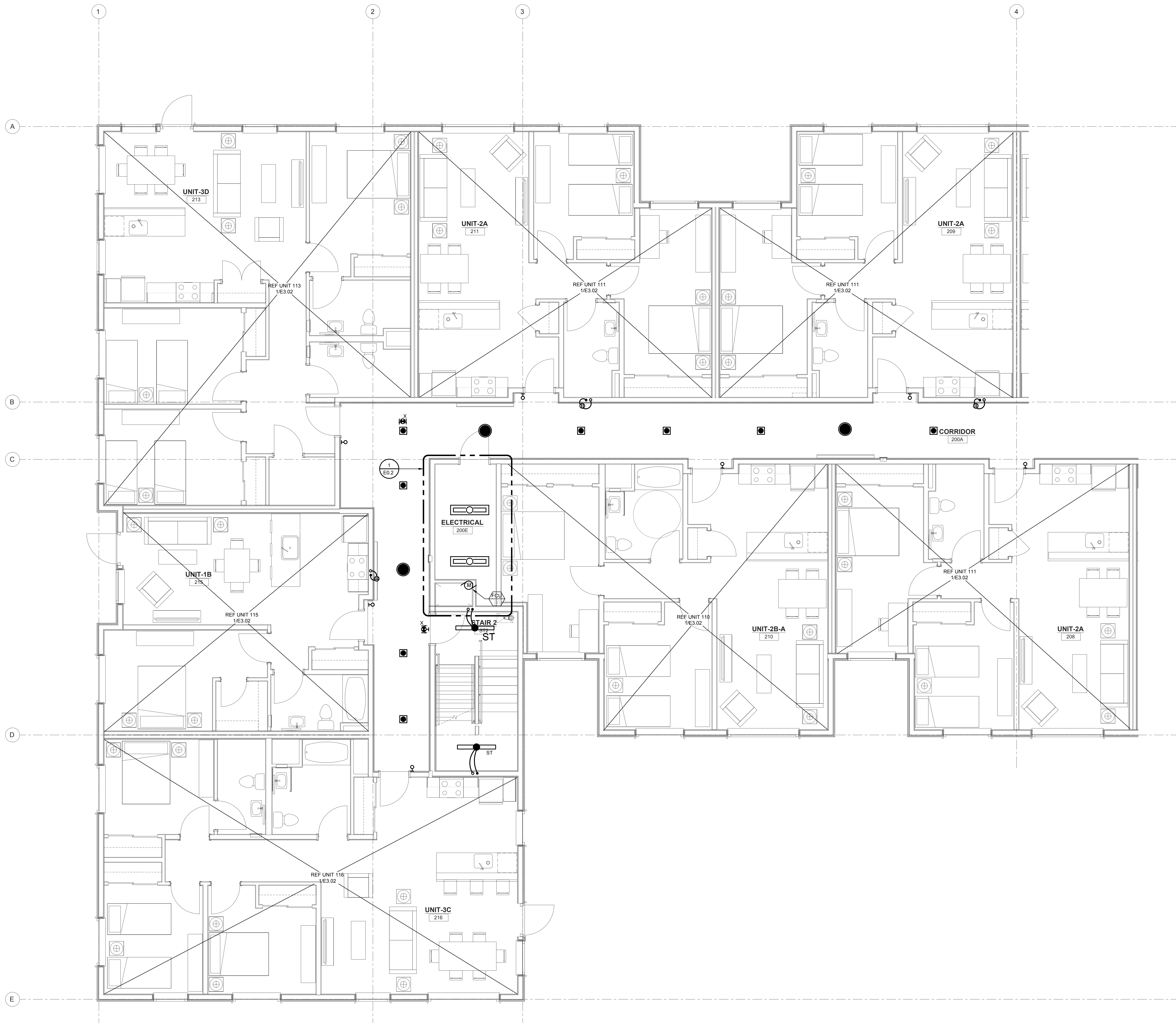
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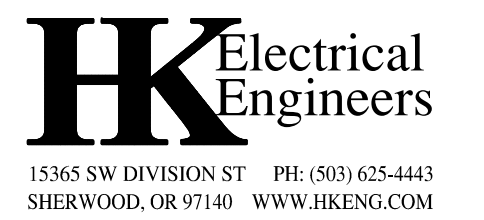
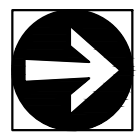
**2** LEVEL 2 NORTH ENLARGED FLOOR PLAN - ELECTRICAL  
SCALE: 1/4"=1'-0"







2 LEVEL 2 SOUTH ENLARGED FLOOR PLAN - ELECTRICAL  
SCALE: 1/4"=1'-0"



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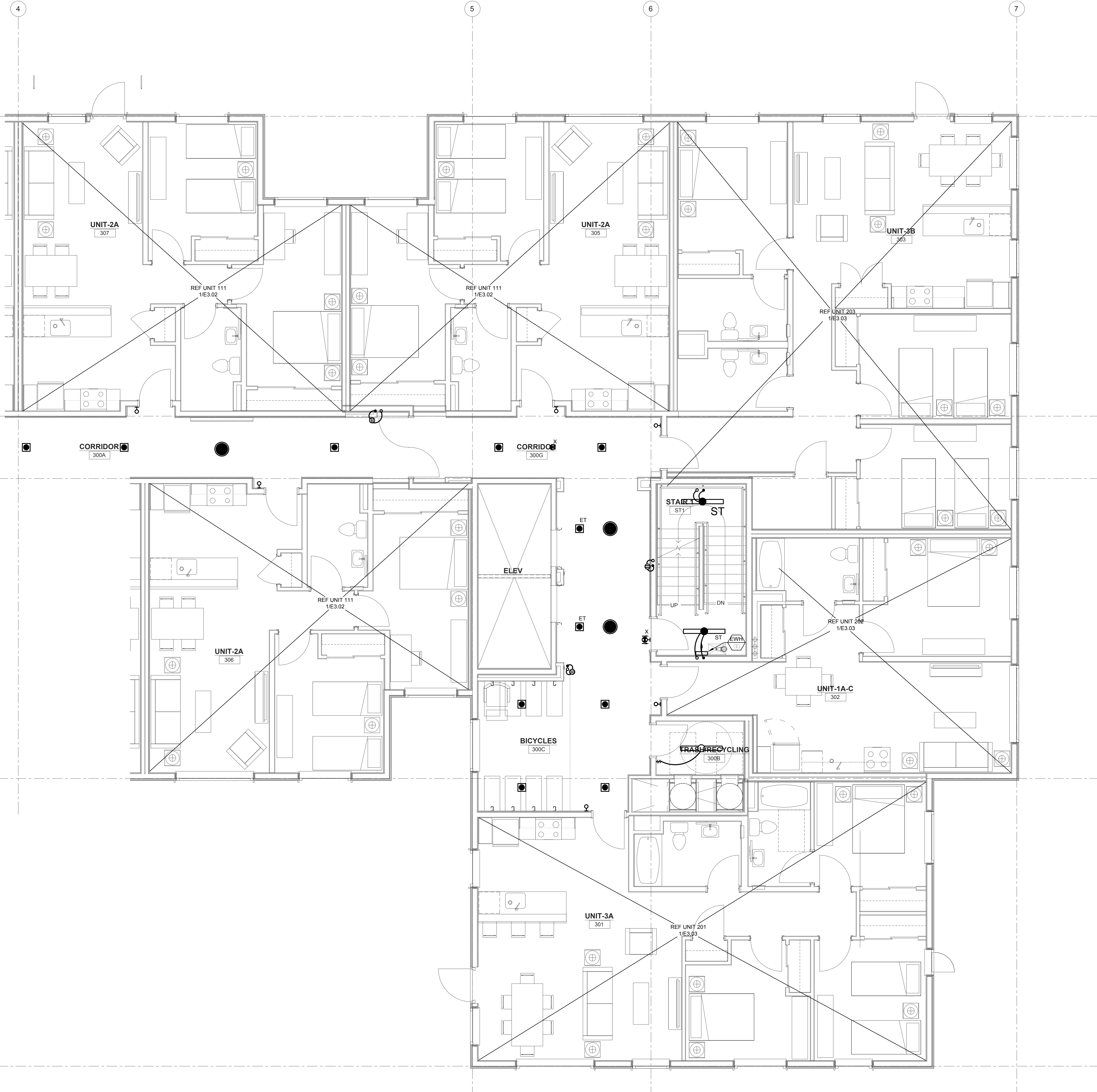
LEVEL 2 SOUTH  
ENLARGED FLOOR  
PLAN - ELECTRICAL

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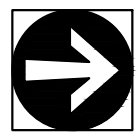
DATE 17 OCT 2018	PROJECT NUMBER 149000
SHEET NUMBER	

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1 LEVEL 3 NORTH ENLARGED FLOOR PLAN - ELECTRICAL  
SCALE: 1/4"=1'-0"



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LEVEL 3 NORTH  
ENLARGED FLOOR  
PLAN - ELECTRICAL

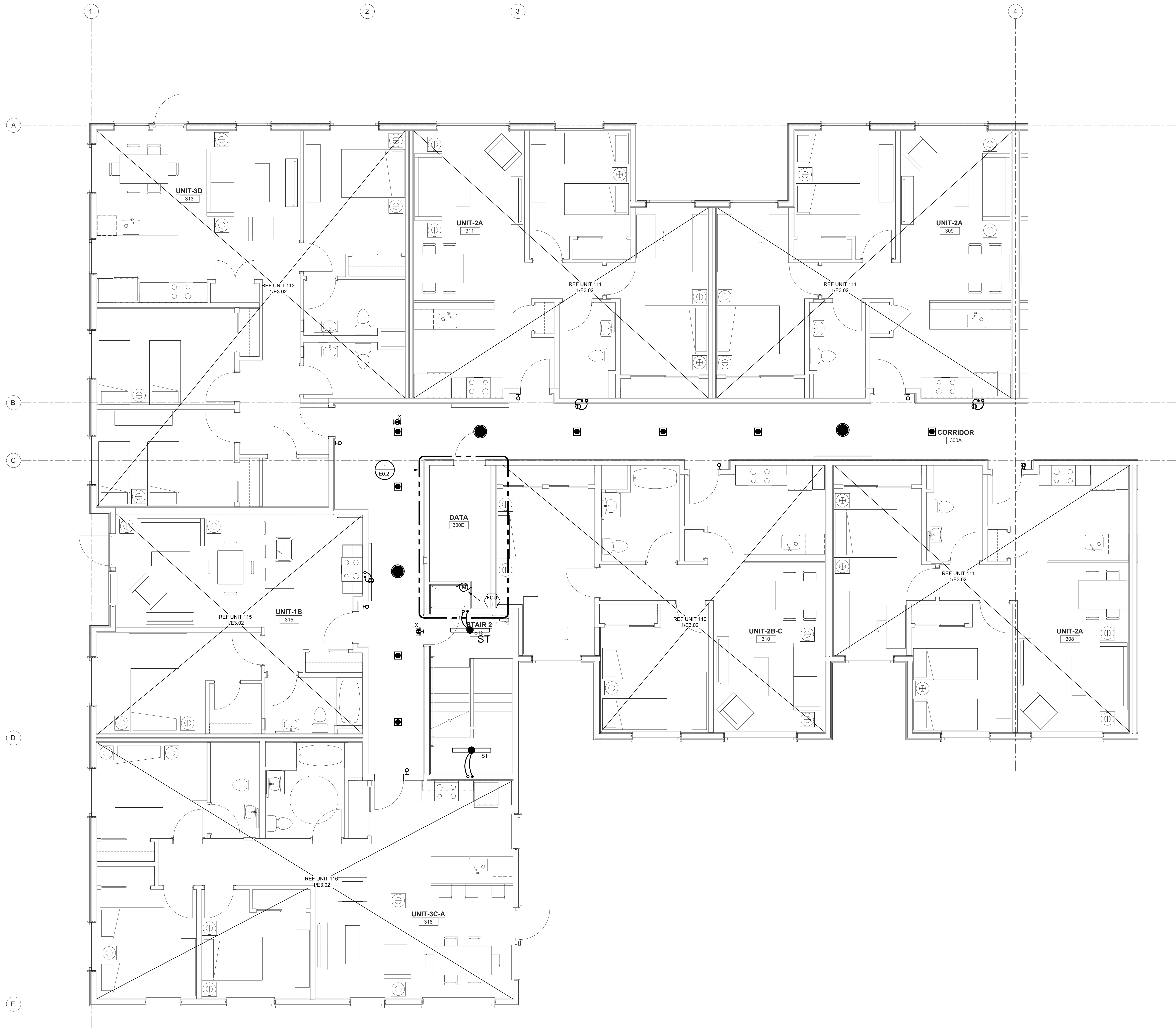
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DATE 17 OCT 2018	PROJECT NUMBER 149000
SHEET NUMBER	

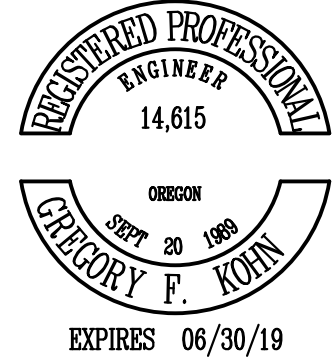
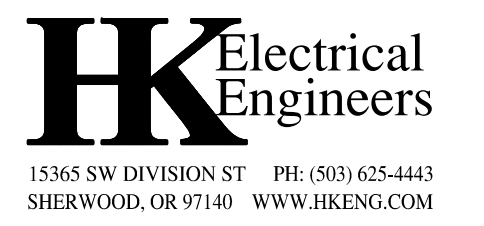
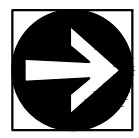
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1 LEVEL 3 SOUTH ENLARGED FLOOR PLAN - ELECTRICAL  
SCALE: 1/4"=1'-0"



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BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

LEVEL 3 SOUTH  
ENLARGED FLOOR  
PLAN - ELECTRICAL

GMP/PERMIT

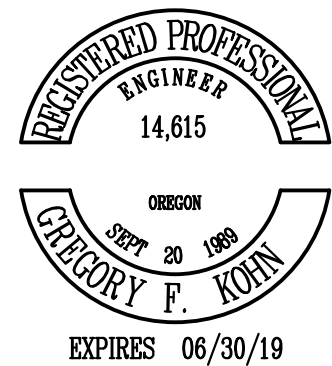
DATE 17 OCT 2018	PROJECT NUMBER 149000
SHEET NUMBER	

E3.06





**HK** Electrical Engineers  
15365 SW DIVISION ST. PH. (503) 625-4443  
SHERWOOD, OR 97140 WWW.HKEENG.COM



**NORTH WILLIAMS APARTMENTS - FAMILY HOUSING**

2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

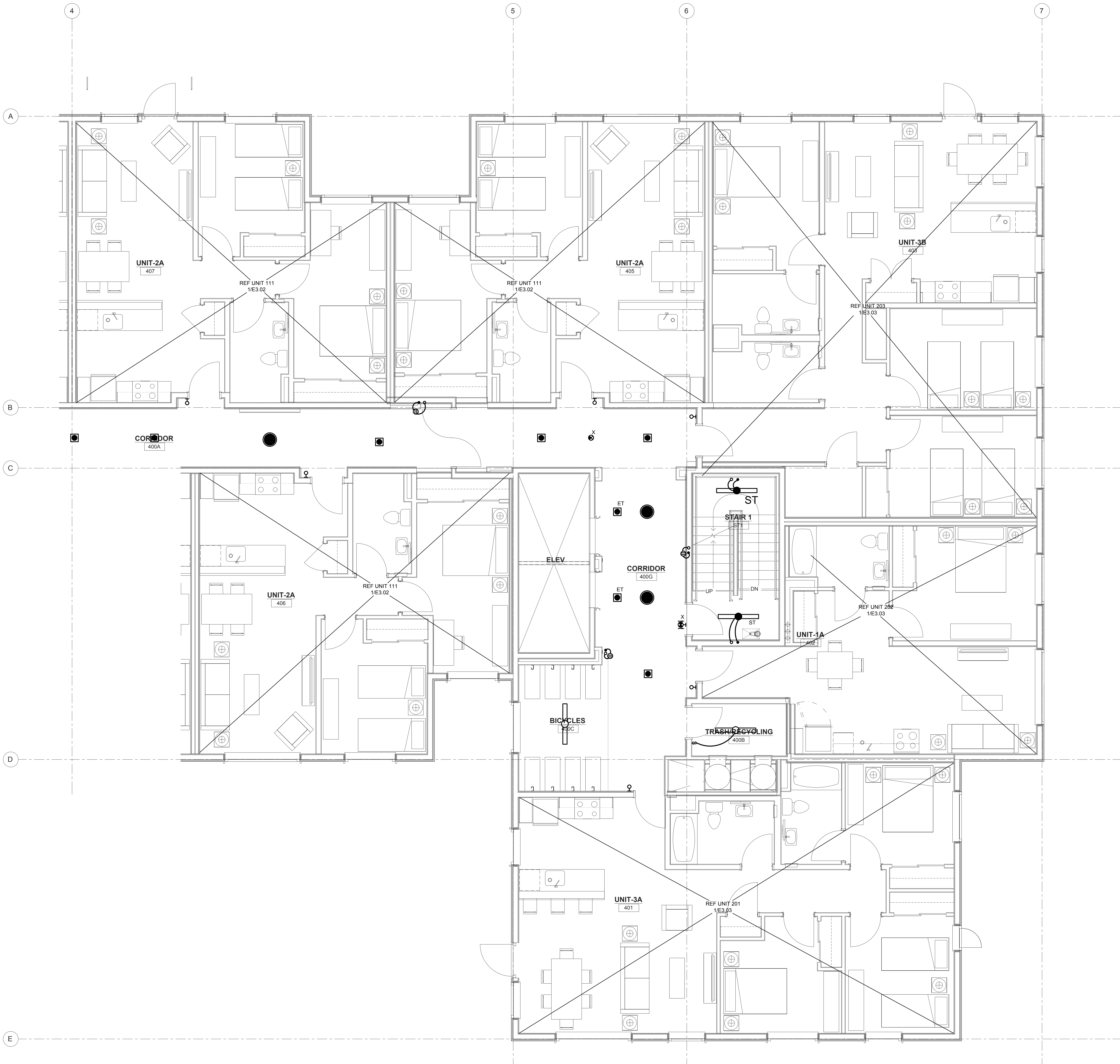
REVISION	DATE	REASON FOR ISSUE

LEVEL 4 NORTH  
ENLARGED FLOOR  
PLAN - ELECTRICAL

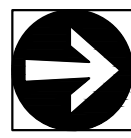
GMP/PERMIT

DATE 17 OCT 2018	PROJECT NUMBER 149000
SHEET NUMBER	

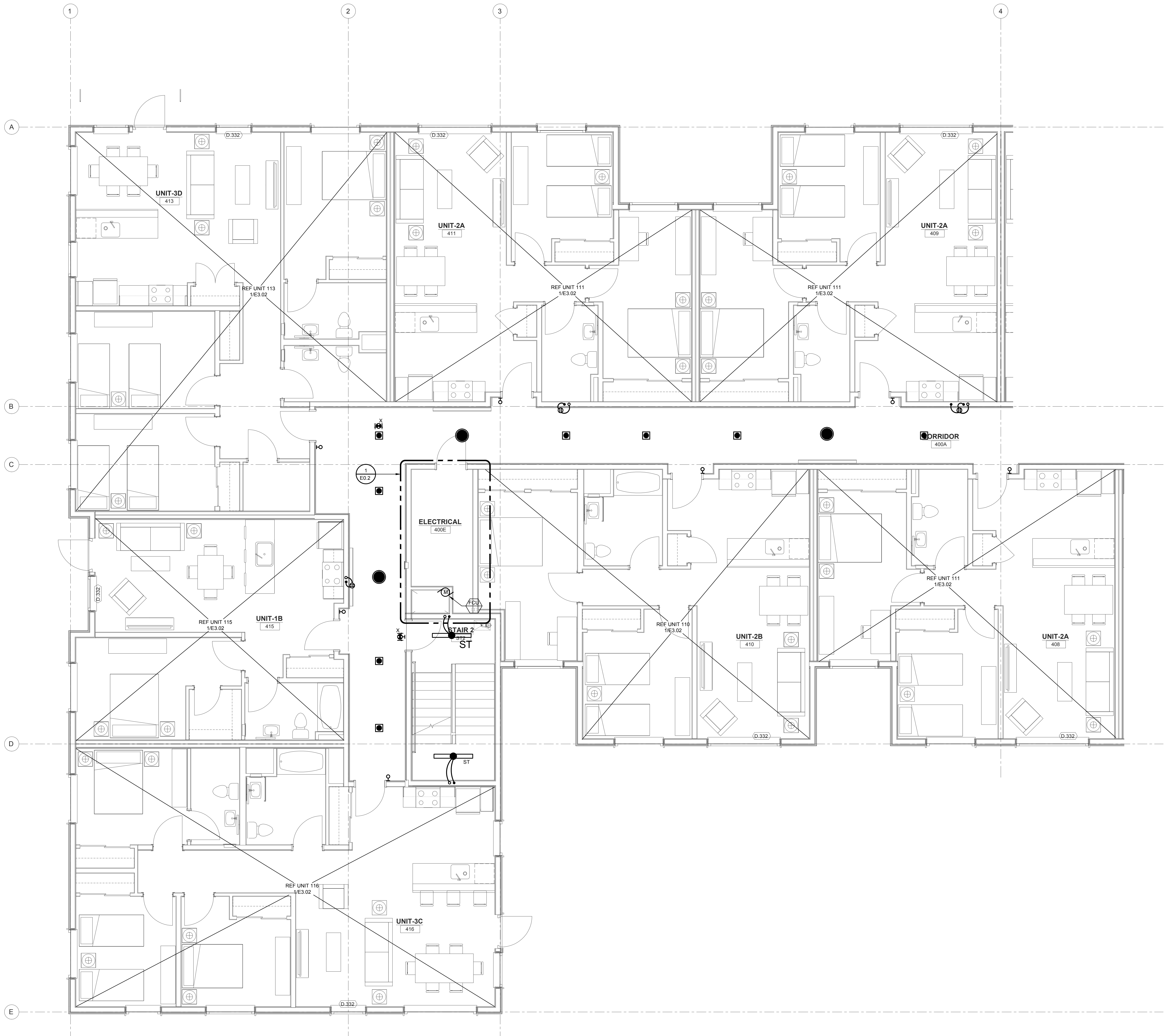
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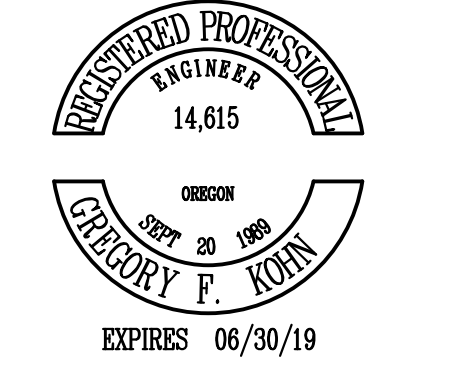
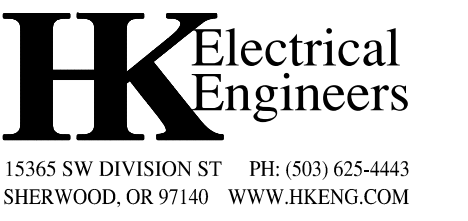
**1** LEVEL 4 NORTH ENLARGED FLOOR PLAN - ELECTRICAL  
SCALE: 1/4"=1'-0"







1 LEVEL 4 SOUTH ENLARGED FLOOR PLAN - ELECTRICAL  
SCALE: 1/4"=1'-0"



NORTH WILLIAMS APARTMENTS - FAMILY HOUSING

2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

LEVEL 4 SOUTH  
ENLARGED FLOOR  
PLAN - ELECTRICAL

GMP/PERMIT

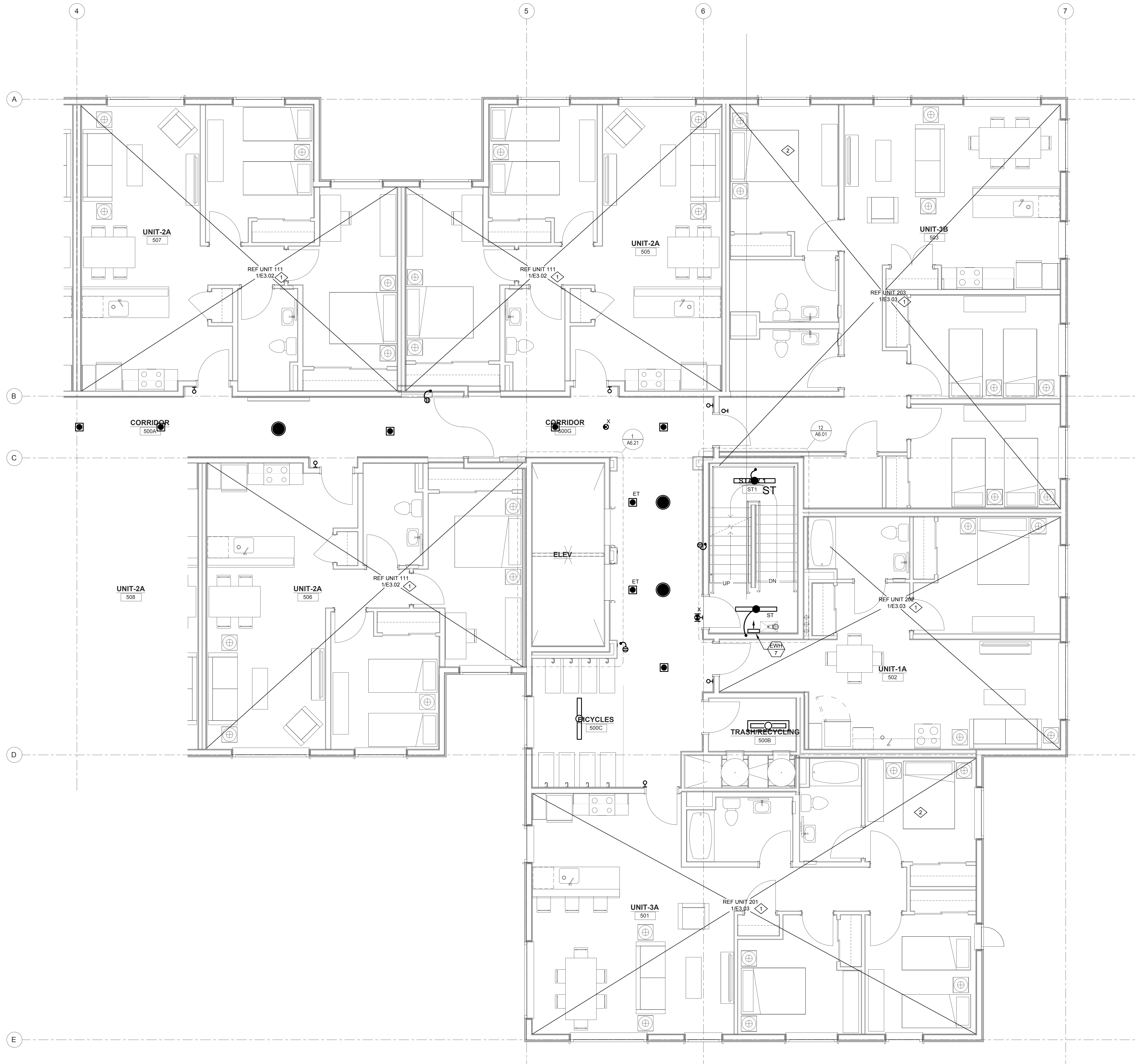
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SHEET NUMBER	

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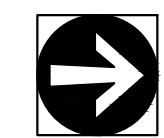


REFERENCED NOTES

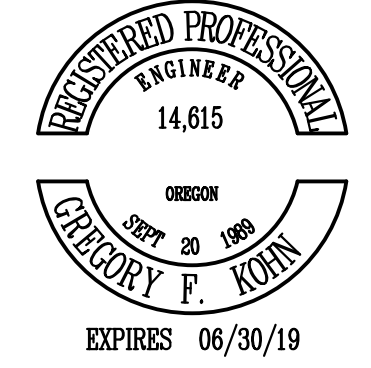
- 1 EXCEPTION: SPACE HEATERS IN BEDROOMS ARE 750W, UNLESS NOTED OTHERWISE.
- 2 SPACE HEATER IN THIS BEDROOM IS 1000W.



1 LEVEL 5 NORTH ENLARGED FLOOR PLAN - ELECTRICAL  
SCALE: 1/4"=1'-0"



**HK** Electrical Engineers  
15365 SW DIVISION ST. PH. (503) 625-4443  
SHERWOOD, OR 97140 WWW.HKEENG.COM



**NORTH WILLIAMS APARTMENTS - FAMILY HOUSING**  
2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

LEVEL 5 NORTH  
ENLARGED FLOOR  
PLAN - ELECTRICAL

GMP/PERMIT

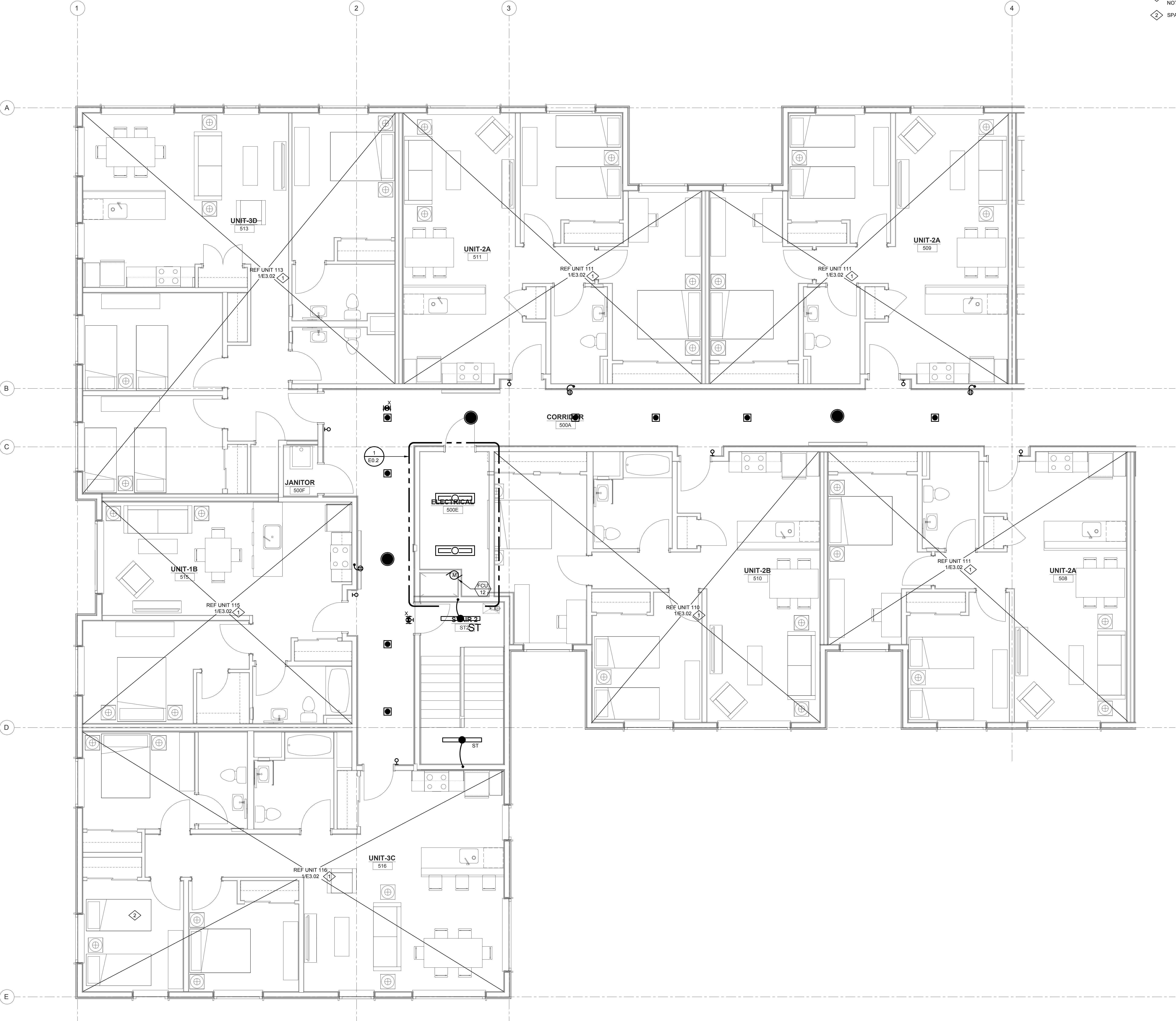
DATE 17 OCT 2018	PROJECT NUMBER 149000
SHEET NUMBER	

E3.09



REFERENCED NOTES

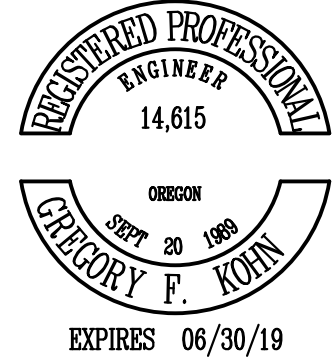
- ◇ EXCEPTION: SPACE HEATERS IN BEDROOMS ARE 750W, UNLESS NOTED OTHERWISE.
- ◇ SPACE HEATER IN THIS BEDROOM IS 1000W.



1 LEVEL 5 SOUTH ENLARGED FLOOR PLAN - ELECTRICAL  
SCALE: 1/4"=1'-0"



**HK** Electrical Engineers  
15365 SW DIVISION ST. PH. (503) 625-4443  
SHERWOOD, OR 97140 WWW.HKEENG.COM



NORTH WILLIAMS APARTMENTS - FAMILY HOUSING

2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

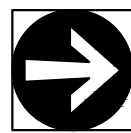
REVISION	DATE	REASON FOR ISSUE

LEVEL 5 SOUTH  
ENLARGED FLOOR  
PLAN - ELECTRICAL

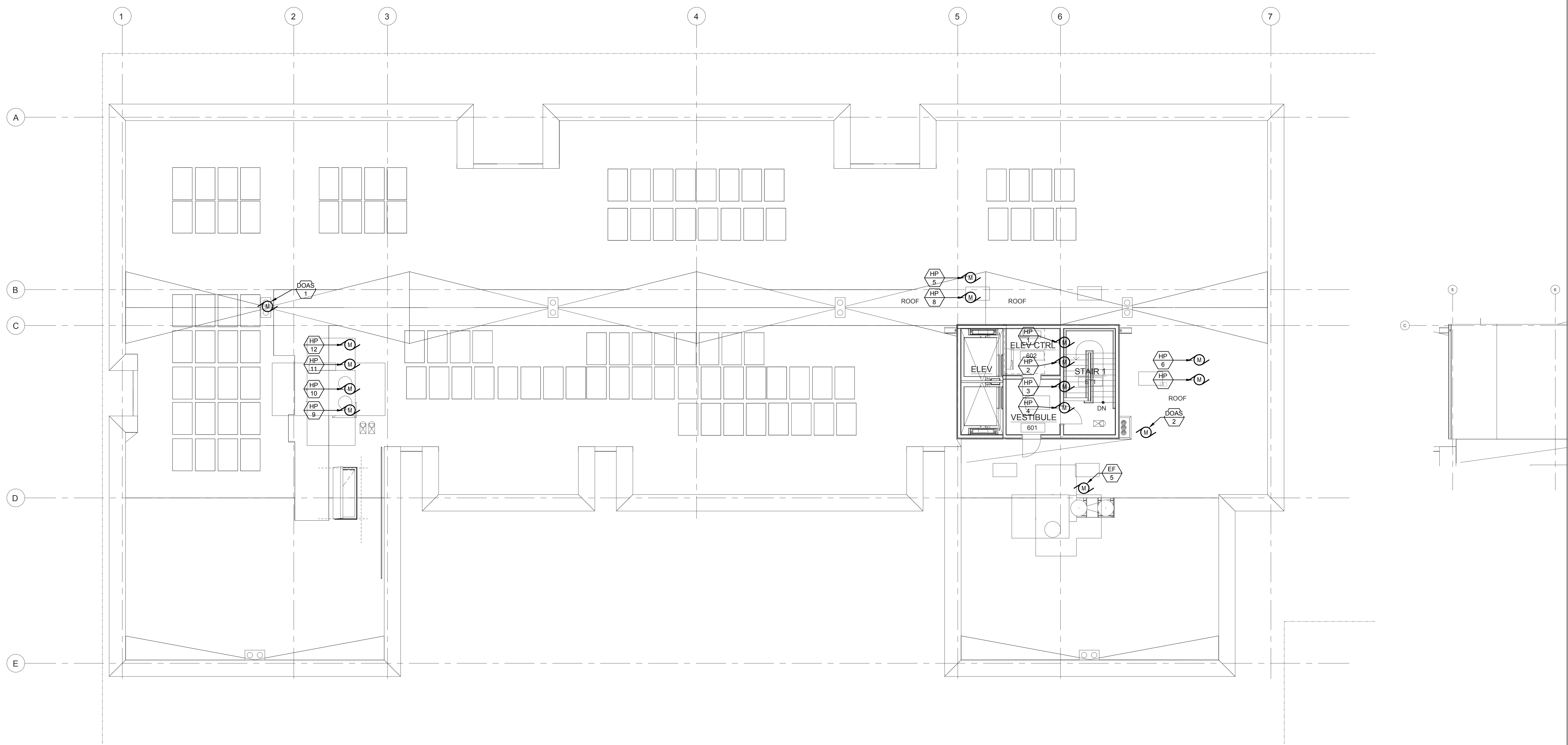
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DATE 17 OCT 2018	PROJECT NUMBER 149000
SHEET NUMBER	

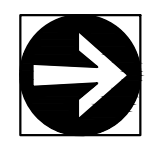
E3.10







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



**Affordable Electric, Inc.**  
15365 SW DIVISION ST. PH. (503) 625-4443  
SHERWOOD, OR 97140 WWW.AEENG.COM

**HK Electrical Engineers**  
REGISTERED PROFESSIONAL ENGINEER  
14,615  
GREGORY P. KOHN  
EXPIRES 06/30/19

**NORTH WILLIAMS APARTMENTS - FAMILY HOUSING**

2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

ROOF PLAN - ELECTRICAL

GMP/PERMIT

DATE 17 OCT 2018	PROJECT NUMBER 149000
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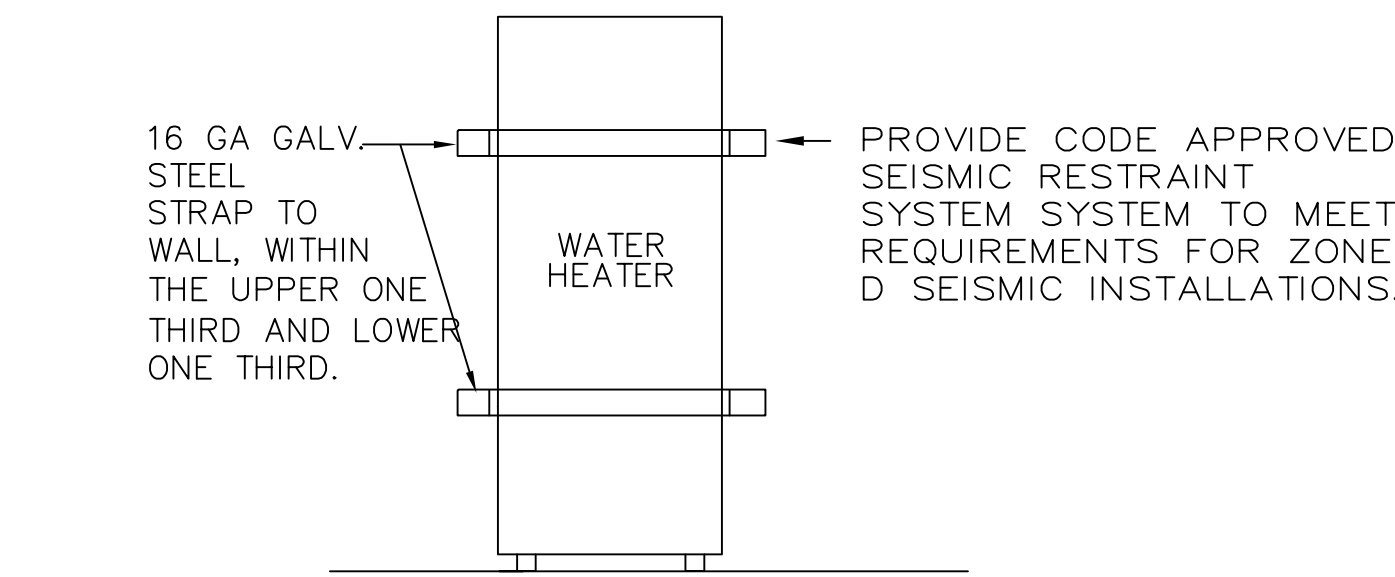
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**E3.11**



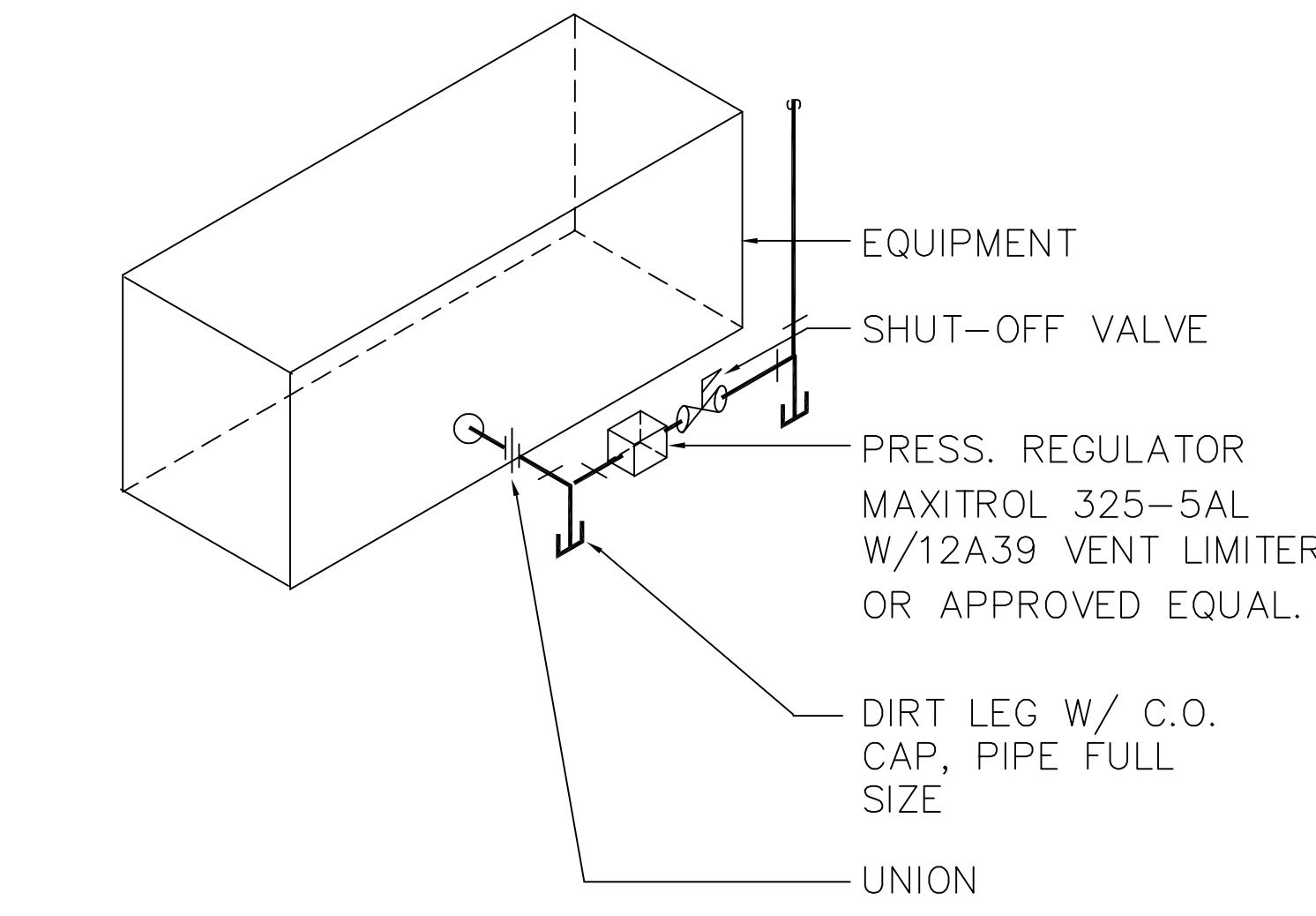
PLUMBING EQUIPMENT SCHEDULE *SEE PLUMBING CONTRACTOR FOR EXACT PLUMBING EQUIPMENT					Remarks
<b>Domestic Booster Pump:</b> Symbol: Type: Manufacturer: Model: Suction Pressure: Elevation water must be raised: Friction Loss: Pressure Required at Highest level: Pressure at Booster outlet: Required Boost: Required GPM: Pump HP RPM: Vols: Phase: Hydropneumatic Tank Manufac.: Hydropneumatic Tank Model:	DBP-1 Duplex Coordinate 34 psi 46ft. 7 psi 35 psi 69 psi 35 psi 182 Coordinate Coordinate Coordinate Coordinate Per Manf. Rec.				
<b>Bathtub/Shower:</b> Symbol: Type: Dimensions L x W x H (inches): Strainer: Valve: Diverter Tub Spout: P-Trap: Stop & Supply: Pump Control: Pump:	BT-1 60"x30" Yes Pressure Balance Yes Yes Yes — No	BT-2/ADA 60"x30" Yes Pressure Balance None Yes Yes — No			
<b>Expansion Tank</b> Symbol: Manufacturer: Model: Tank Volume: Size Dia. x H (inches) Weight Dry/Wet (lbs)	ET-1 Antrol 14.0 gallons 15x23 23"/40				
<b>Floor &amp; Wall Clean Outs</b> Symbol: Manufacturer: Model:	FCD Sloux Chief Coordinate	WCO Sloux Chief Coordinate			
<b>Floor Drain/Floor Sink</b> Symbol: Manufacturer: Model: Grate: Grate Finish: Piped Trap:	FD-1 Sloux Chief Coordinate Round NB Yes	FS-1 Sloux Chief Coordinate None Yes			Provide automatic trap primer on all floor drains and floor sinks.  Electronic trap primers require 115 volt power
<b>Garbage Disposal</b> Install:	If required Coordinate				
<b>Hose Bibb</b> Symbol: Type: Manufacturer: Model: Frost Proof:	HB-1 wall Pier #C-634P10 Yes	HB-2 wall-Hot & Cold Woodford #122 No	HB-3 Roof-top Woodford #SRH-MS Yes		
<b>Sink</b> Symbol: Type: Number of Compartments: Size: (inch) Depth (Inches): P-Trap: Stop and Supply:	KS-1 Stainless 1 Coordinate 8 Yes Yes	KS-2/ADA Stainless 1 Coordinate 6.5 Yes Yes			
<b>Lavatory</b> Symbol: Type: Color: Wall Carrier: P-Trap: Angle Valve:	L-1 Drop In White No Yes Yes	L-2/ADA Drop In White No Yes Yes			
<b>Master Mixing Valve</b> Symbol: Type: Manufacturer: Model:	MMV-1 Coordinate Coordinate Coordinate				
<b>Pump</b> Symbol: Type: Manufacturer: Model No: Total GPM: Head: (ft. hd.) Electrical: - Watts: - Volts: - Phase:	RCP-1 Hot Water Circ Pump Coordinate 8.5 10.5 — 270 115 1	ESP-1 Elevator Sump Pump Liberty #4CP-WMF 50 — 115 1			
<b>Washer Box</b> Symbol: Type: Manufacturer: Model:	WB-1 In-wall Sloux Chief OxBox				
<b>Water Heater</b> Symbol: Type: Manufacturer: Tank Size: Input:	(2) WH-1 Gas Coordinate 100 gallon 199MBH				Requires 115 volt power
<b>Water Closet</b> Symbol: Type: Color: Elongated or Round: Carrier: Flush Valve: Gallons Per Flush: Stop & Supply Seat:	WC-1 Floor Mounted White Elongated No No 1.6/1.1 Yes Yes	WC-2/ADA Floor Mounted White Elongated No No 1.6/1.1 Yes Yes			
*SEE PLUMBING CONTRACTOR FOR EXACT PLUMBING EQUIPMENT.					

PLUMBING FIXTURES	
COORDINATE WITH PLUMBING CONTRACTOR FOR PLUMBING FIXTURE MANUFACTURERS AND MODEL NUMBERS. PLUMBING FIXTURES MUST MEET 2014 OPSC REQUIREMENTS.	

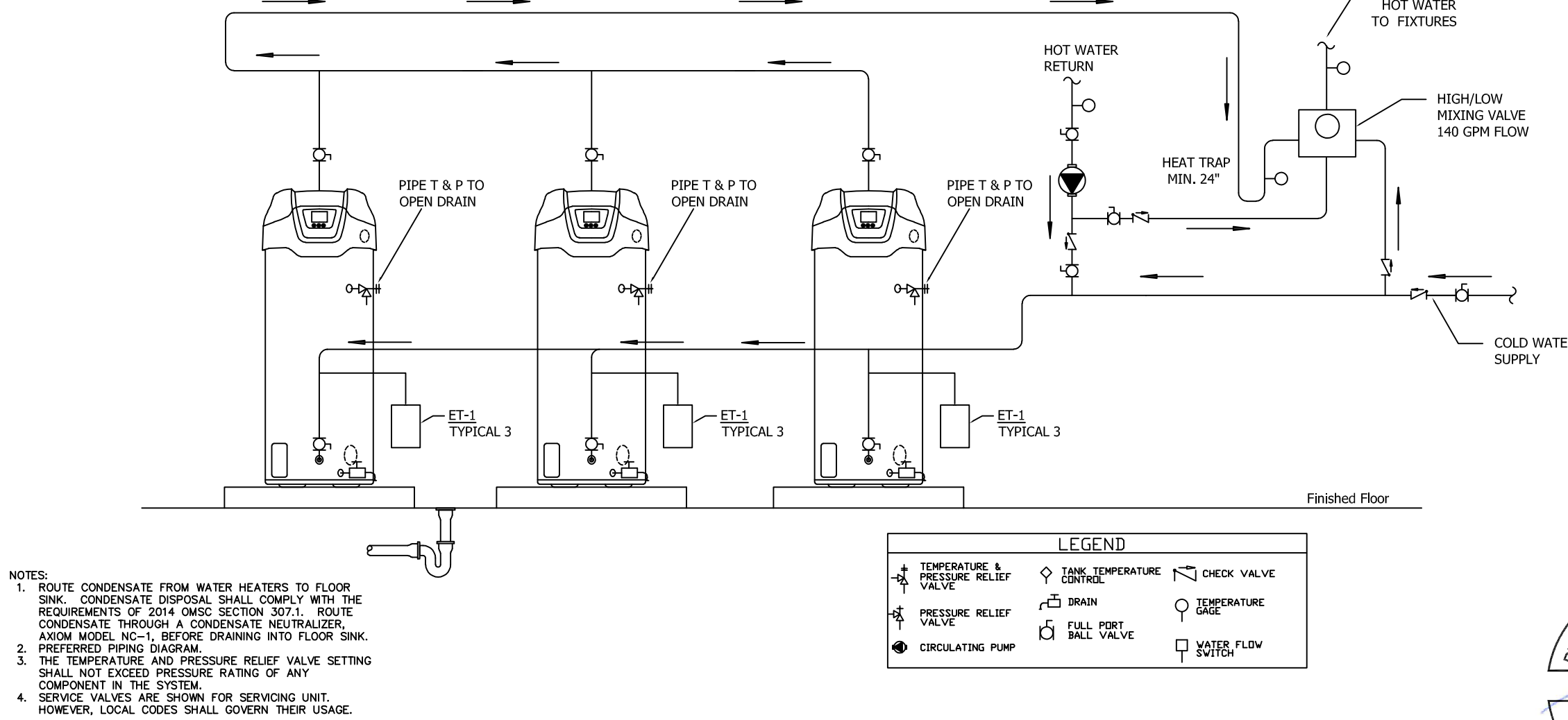
CODE COMPLIANCE																	
COLD WATER PIPE, UPC APPENDIX "A":																	
Fixtures:	T WC*	T WC*	Lav	Lav	TS	Sink	DW	Sink	Washer	Washer	Mop Sink	HB	HB				Total
Min Fix Pipe Size	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2				WSFU
WSFU Per Fixture	2.5	2.5	1	1	4	1.5	1.5	4	4	4	3	2.5	1				
Quantity 1st Floor	11	2	2	11	11	9	9	2	1	5	1	1	3				
Quantity 2nd Floor	17	0	0	17	17	13	13	0	0	0	1						
Quantity 3rd Floor	17	0	0	17	17	13	13	0	0	0	1						
Quantity 4th Floor	17	0	0	17	17	13	13	0	0	0	1						
Quantity 5th Floor	17	0	0	17	17	13	13	0	0	0	1						
Total WSFU's	197.5	5	2	79	316	91.5	91.5	3	4	20	15	2.5	3	0			830
From chart A-2, water flow 182 GPM From chart A-4 @ 8.0 FPS max velocity use 4" pipe size.																	
Pressure calcs: a. Pressure after booster pump b. Static Pressure (Height x 0.434) c. Pressure required at furthest fixture: Pressure available for friction loss: (a-b-c) Total Equivalent pipe length:  Maximum friction loss for PIPE SIZING: (Press. Avail. X 100'/Equiv. pipe length)																	
75 psi 20 psi 35 psi 20.04 psi 275 feet 7.29 psi/100ft.																	
From chart A-4 @ 182 GPM and 8.0 FPS max velocity and a max friction loss of 7.29psi/100', use 4" pipe size.																	
* Tank type symbol T.																	
WATER HEATER SIZED: ASPE 2010 Plumbing Engineering and Design Handbook, CHAPTER 6:																	
120F HOT WATER			Lav	Lav	TS	Sink	DW	Sink	Washer	Washer	Mop Sink						Total
Fixtures:			Public	Private	Private	Private	Private	Public	Public	Stacked	Public						
Hot Water Dem./Fix.			6	2	20	10	4.25	10	12	12	20						
Quantity 1st Floor			2	11	11	9	9	2	1	5	1						
Quantity 2nd Floor			0	17	17	13	13	0	0	0	1						
Quantity 3rd Floor			0	17	17	13	13	0	0	0	1						
Quantity 4th Floor			0	17	17	13	13	0	0	0	1						
Quantity 5th Floor			0	17	17	13	13	0	0	0	1						
Hot Water Demand	0	0	12	158	1580	610	259.25	20	12	60	100	0	0	0	0	0	2811.25
Demand Factor	0.3																
Storage Factor	0.3																
Probable max. demand = Demand x Storage Factor = 843.38 GPH 253.01 Gallons 90+ 199 MBH Water Heater at 90 degree rise= 100 gallons of storage(70% usable)= 326 gallons Use 3-100 gallon tanks. Heater GPH x 8.33 x (140-50) = BTU/Hr input each. 491.8 MBH Use three 90plus water heaters 199MBH input each. Total gallons of hot water available in 1st hr= 768 gal.																	
*ENERGY STAR rated Dishwasher uses 4.25 gallons/cycle per current ENERGY STAR criteria effective January 20, 2012 **ENERGY STAR rated Clotheswasher has a water factor of 6.0 gallons per cycle per cubic foot. Stackable clotheswasher has a cubic foot capacity of approx. 2.0.																	
WASTE PIPING: UPC CHAPTER 7:																	
Fixtures	T WC	T WC	Lav	Lav	BT	S/DW		Sink	Washer	Washer	Mop Sink	FD	FS				Total
Min Trap Size (In.)	3	3	1 1/4	1 1/4	1 1/2	1 1/2		1 1/2	2	2	2	2	3				DFU
DFU per Fixture	3	4	1	1	2	2		2	3	6	3	Emg.	2				
Quantity 1st Floor	11	2	2	11	0	9		2	1	5	1	10	1				
Quantity 2nd Floor	17	0	0	17	17	13		0	0	0	1	0	0				
Quantity 3rd Floor	17	0	0	17	17	13		0	0	0	1	0	0				
Quantity 4th Floor	17	0	0	17	17	13		0	0	0	1	0	0				
Quantity 5th Floor	17	0	0	17	17	13		0	0	0	1	0	0				
Total DFU's	237	8	2	79	136	122	0	4	3	30	15	0	2	0	0	0	638
** 6" waste sloped at 1/4" per foot will handle 720 total fixture units.																	
Use 6" Waste																	



1 WATER HEATER SEISMIC BRACING  
P001 NTS



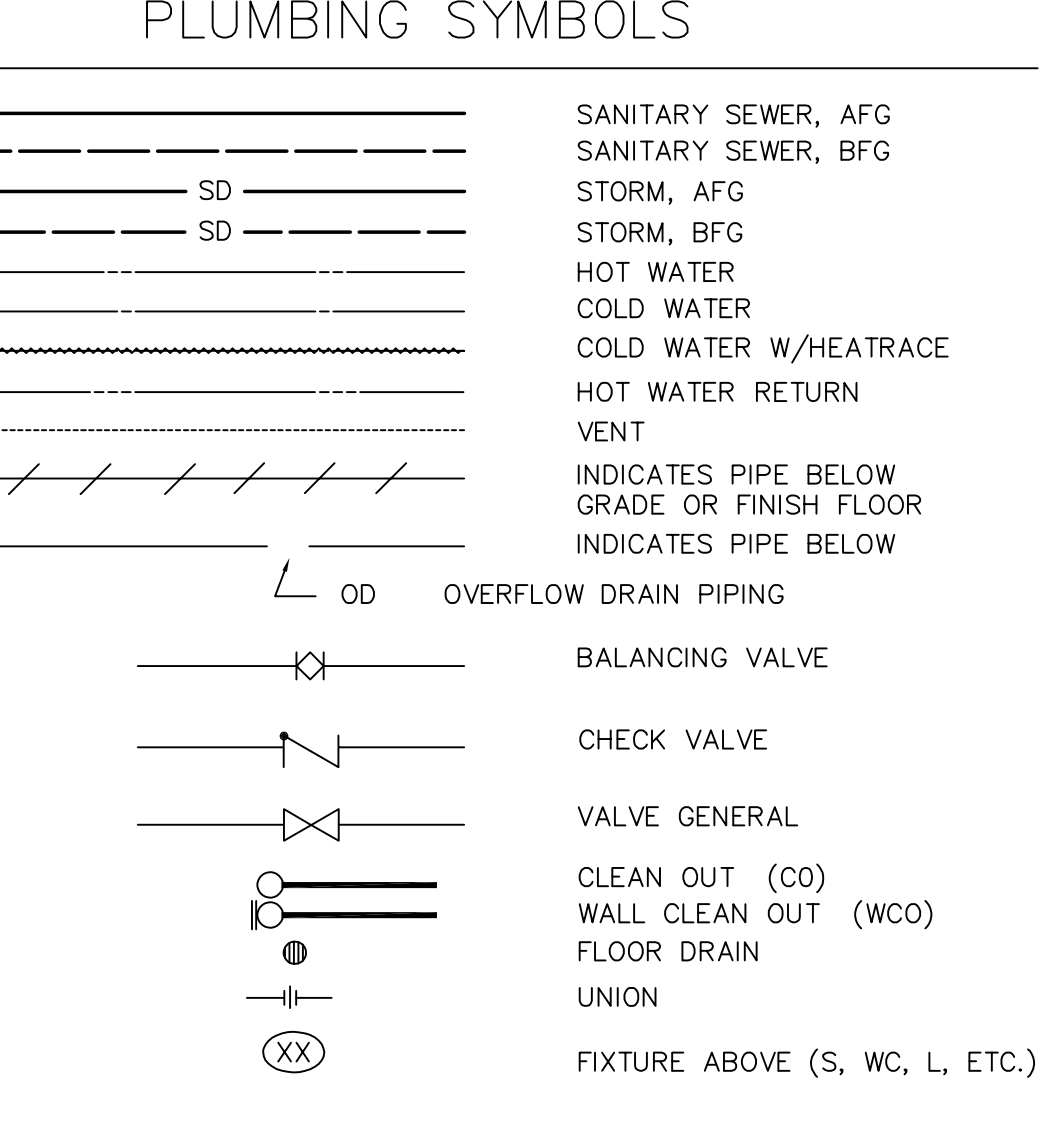
2 TYP. GAS CON. DETAIL  
P001 NTS



3 WATER HEATER DETAIL  
P001 NTS

DRAWING INDEX	
P2.00	COVER SHEET - SYMBOLS AND ABBREVIATIONS; CODE COMPLIANCE; SCHEDULES
P2.01	LEVEL 1 FLOOR PLAN - BELOW GRADE - PLUMBING
P2.01A	LEVEL 1 FLOOR PLAN - ABOVE GRADE - PLUMBING
P2.02	LEVEL 2 FLOOR PLAN - PLUMBING
P2.03	LEVEL 3 FLOOR PLAN - PLUMBING
P2.04	LEVEL 4 FLOOR PLAN - PLUMBING
P2.05	LEVEL 5 FLOOR PLAN - PLUMBING
P2.06	ROOF PLAN - PLUMBING
P3.00	RISER DIAGRAMS AND GAS ISO - PLUMBING

ABBREVIATIONS	
(N)	New
(R)	Remove
(RL)	Relocate
Abv.	Above
AFF	Above Finished Floor
AP	Access Panel
BFC	Below Finished Ceiling
BFF	Below Finished Floor
BFG	Below Finished Grade
Cig.	Ceiling
Col	Column
COTG	Clean Out to Grade
D	Drop
ET	Expansion Tank
FC	Flexible Connection
Flr.	Floor
' or Ft.	Feet
Ftg.	Footing
GPM	Gallons Per Minute
HP	Horsepower
"	Inches
Inv. El. or IE	Invert Elevation
Max.	Maximum
Min.	Minimum
N	North
Nom.	Nominal
NTS	Not to Scale
OD	Overflow Drain
P	Pump
PSI	Pounds Per Square Inches
R	Riser
RD	Roof Drain
SD	Storm Drain
TOP	Top of Pipe
Typ.	Typical
V	Vent
VTR	Vent Through Roof



REVISION			DATE	REASON FOR ISSUE

COVER SHEET - PLUMBING

PERMIT SET

DATE: 10/09/2018 PROJECT NUMBER: 18-022

SHEET NUMBER: P2.00

**CPCD, LLC**  
Commercial Plumbing Consulting & Design LLC  
18840 SW Boones Ferry Rd. #310  
Tualatin, OR 97062  
PHONE: (503) 845-8233; CELL: 503-780-3106  
email: shane@cpcdlc.com  
CONTACT: Shane Fitzpatrick, CPD

**TAPANI PLUMBING INCORPORATED**  
Billing and Mailing Address P.O. Box 2350 Battle Ground, WA 98604  
Office Location  
19501 NE 142nd Ave. Battle Ground, WA 98604  
Office (360) 687-3983 Fax (360) 687-8147

NORTH WILLIAMS APARTMENTS - FAMILY HOUSING  
2156 N WILLIAMS AVENUE, PORTLAND, OREGON  
BRIDGE HOUSING





NORTH WILLIAMS APARTMENTS – FAMILY HOUSING  
2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

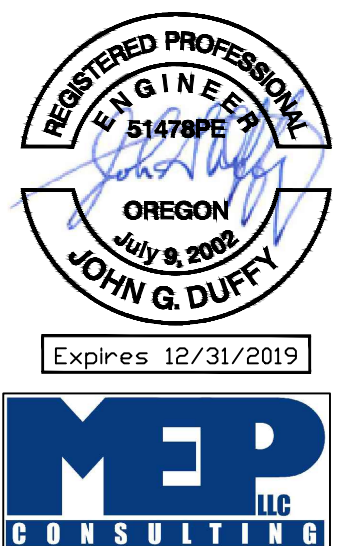
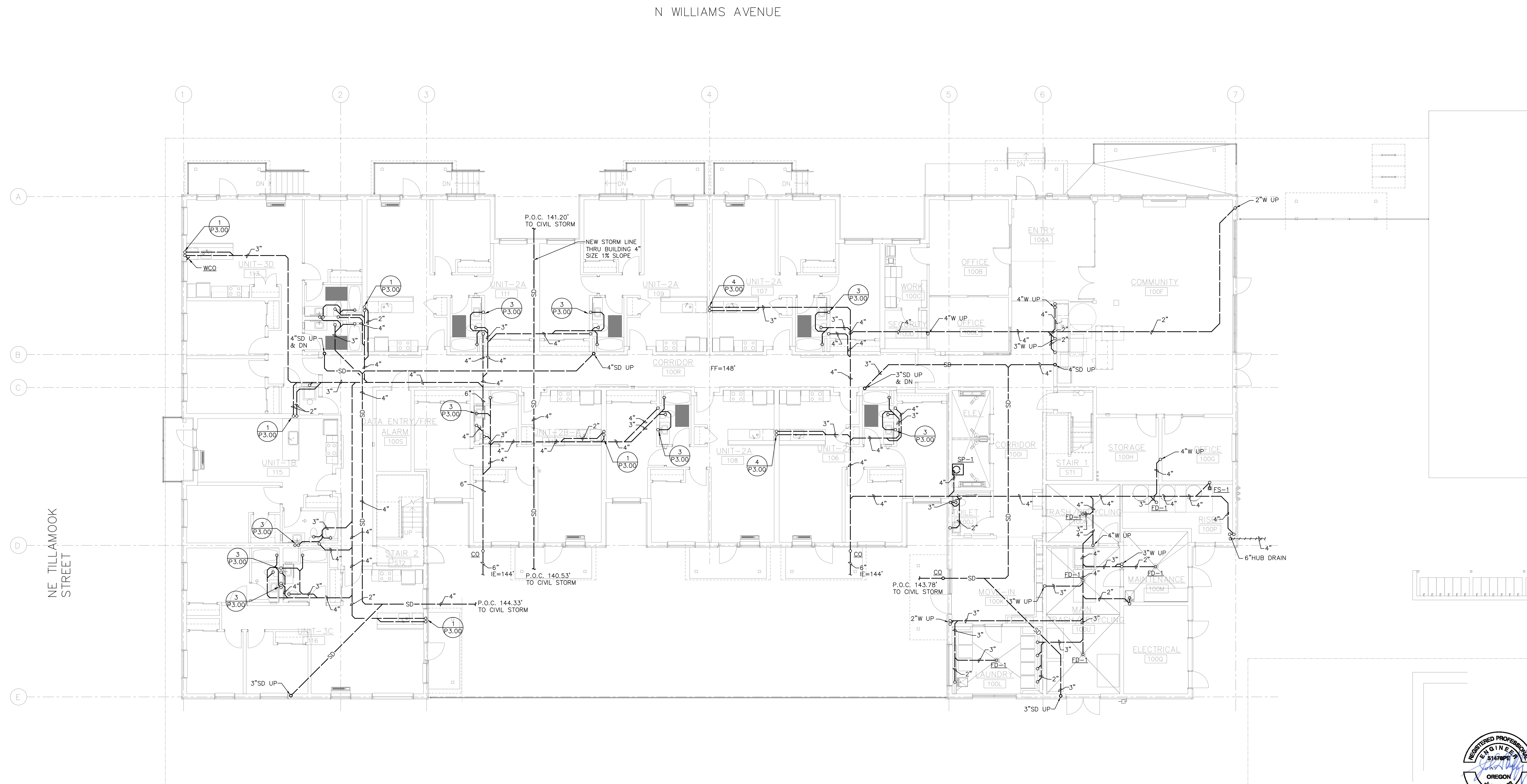
REVISION	DATE	REASON FOR ISSUE

LEVEL 1 FLOOR  
PLAN - PLUMBING  
BELOW GRADE

PERMIT SET

DATE 10/09/2018	PROJECT NUMBER 18-022
SHEET NUMBER	

P2.01



The image shows a business card for CPCD, LLC. On the left is a circular logo with a stylized 'f' inside. To the right of the logo, the text 'CPCD, LLC' is written in a large, bold, serif font. Below this, in a smaller, sans-serif font, is the text 'Commercial Planning Consulting & Design LLC'. A horizontal line separates this header from the contact information below. The contact information is as follows:  
18840 SW Boones Ferry Rd. #310  
Tualatin, OR 97062  
Phone: (503) 843-8233; CELL: 503-780-3106  
email: shanef@cpcdlc.com  
At the bottom, another horizontal line separates the contact information from a single line of text: 'CONTACT: Shane Fitzpatrick, CPD'.

1 LEVEL 1 FLOOR PLAN - PLUMBING - BELOW GRADE  
1/8" = 1'-0"

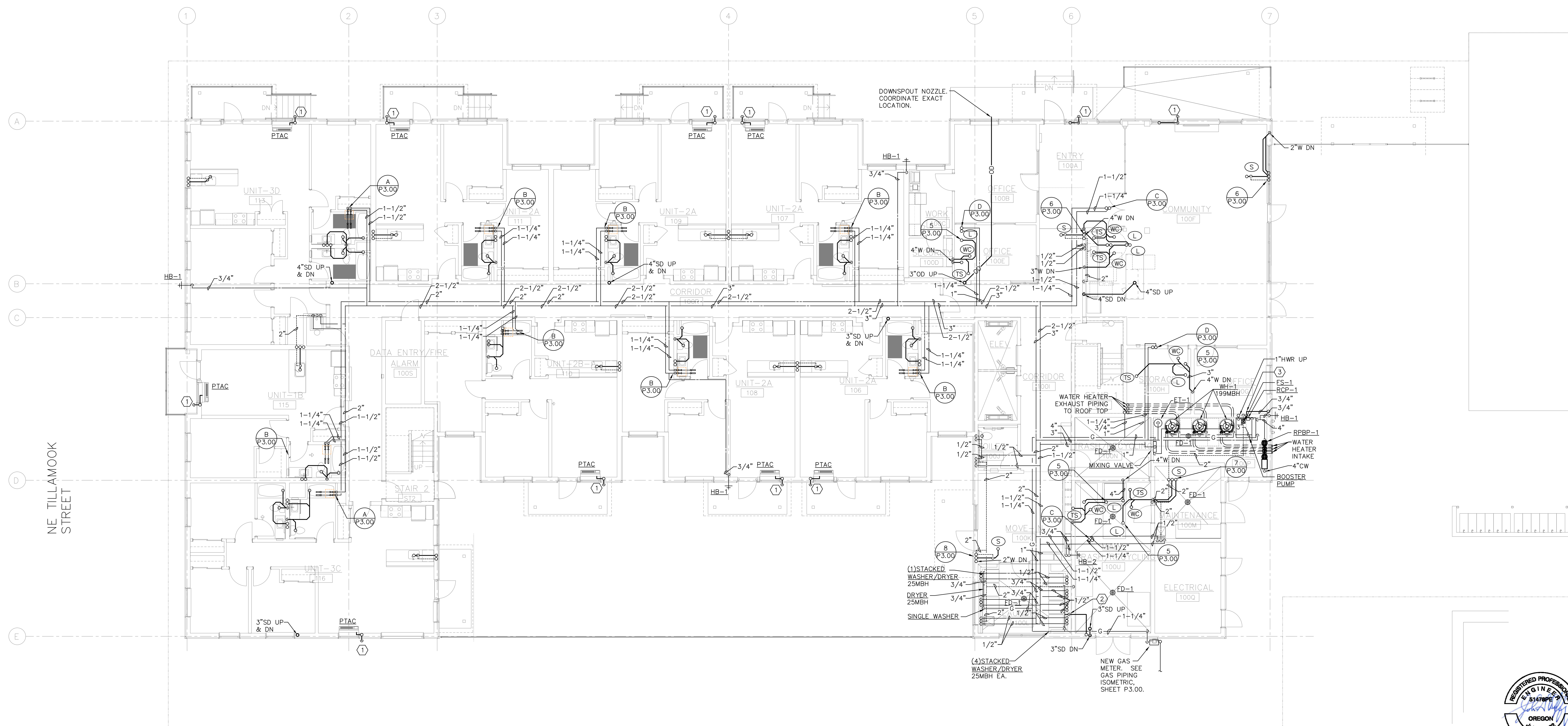




**NOTES THIS SHEET**

- ROUTE 3/4" CONDENSATE FROM PTAC UNITS DOWN THEN OUTSIDE OF WALL AND TURN DOWN. COORDINATE FOR EXACT LOCATION. COORDINATE FOR GRAVEL AREA BLOCKED OUT OF PATIO OR ROUTE TO PLANTER AREA.
- ROUTE 3/4" CONDENSATE FROM PTAC UNITS DOWN FOR CONNECTION TO INDIRECT DRAIN INTO WASHER BOX.
- ROUTE 3/4" CONDENSATE FROM PTAC UNITS DOWN AND INDIRECT DRAIN INTO FLOOR SINK.

N WILLIAMS AVENUE



1 LEVEL 1 FLOOR PLAN - PLUMBING - ABOVE GRADE  
1/8" = 1'-0"

NORTH WILLIAMS APARTMENTS - FAMILY HOUSING

2156 N WILLIAMS AVENUE, PORTLAND, OREGON

BRIDGE HOUSING

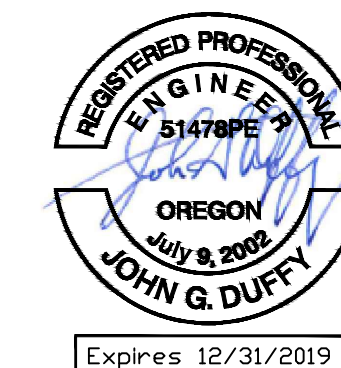
REVISION	DATE	REASON FOR ISSUE

LEVEL 1 FLOOR  
PLAN - PLUMBING  
ABOVE GRADE

PERMIT SET

DATE	PROJECT NUMBER
10/09/2018	18-022
SHEET NUMBER	

P2.01A



**CPCD, LLC**  
Commercial Plumbing Consulting & Design LLC  
18840 SW Boones Ferry Rd. #310  
Tualatin, OR 97062  
PHONE: (503) 845-8233; CELL: 503-780-3106  
email: shane@cpcdlc.com  
CONTACT: Shane Fitzpatrick, CPD



NORTH WILLIAMS APARTMENTS – FAMILY HOUSING  
2156 N WILLIAMS AVENUE, PORTLAND, OREGON  
BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

LEVEL 2 FLOOR  
PLAN – PLUMBING

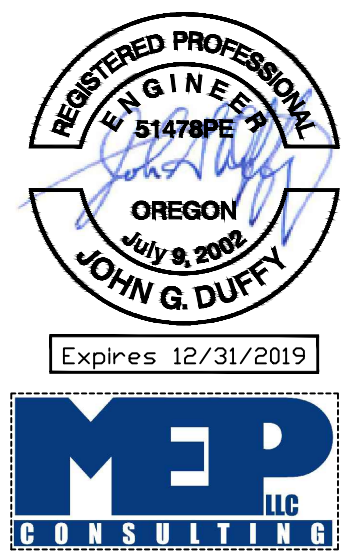
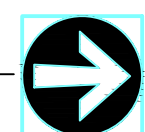
PERMIT SET

DATE 10/09/2018	PROJECT NUMBER 18-022
SHEET NUMBER	

P2.02



1 LEVEL 2 FLOOR PLAN – PLUMBING  
1/8" = 1'-0"



**CPCD, LLC**  
Commercial Plumbing Consulting & Design LLC  
18840 SW Boones Ferry Rd. #310  
Tualatin, OR 97062  
PHONE: (503) 845-8233; CELL: 503-780-3106  
email: shane@cpcdlc.com  
CONTACT: Shane Fitzpatrick, CPD



NORTH WILLIAMS APARTMENTS – FAMILY HOUSING  
2156 N WILLIAMS AVENUE, PORTLAND, OREGON  
BRIDGE HOUSING

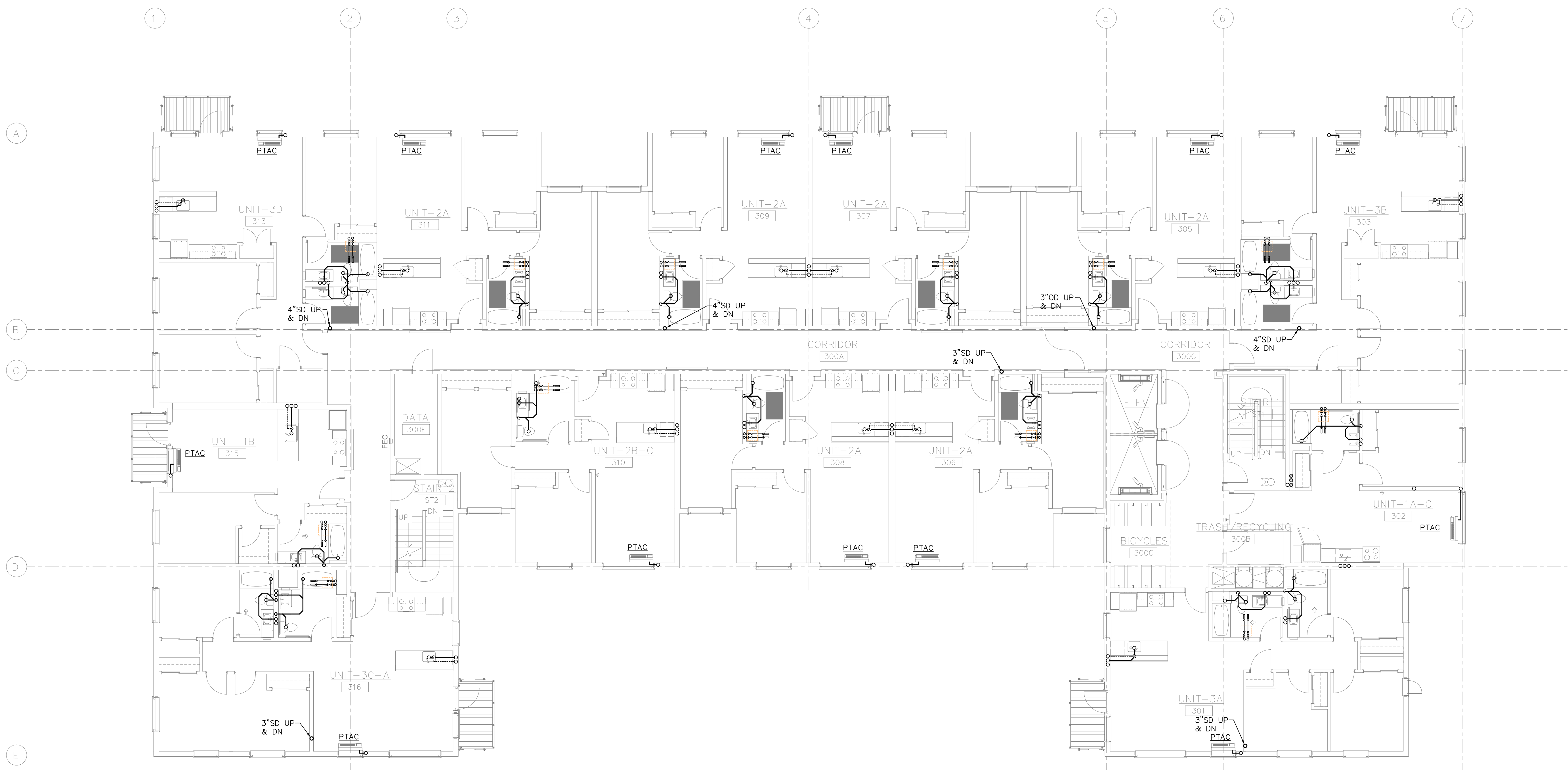
REVISION	DATE	REASON FOR ISSUE

LEVEL 3 FLOOR  
PLAN – PLUMBING

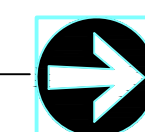
PERMIT SET

DATE 10/09/2018	PROJECT NUMBER 18-022
SHEET NUMBER	

P2.03



1 LEVEL 3 FLOOR PLAN – PLUMBING  
1/8" = 1'-0"



**CPCD, LLC**  
Commercial Plumbing Consulting & Design LLC  
18840 SW Boones Ferry Rd. #310  
Tualatin, OR 97062  
PHONE: (503) 845-8233; CELL: 503-780-3106  
email: shane@cpcdlc.com  
CONTACT: Shane Fitzpatrick, CPD



NORTH WILLIAMS APARTMENTS – FAMILY HOUSING  
2156 N WILLIAMS AVENUE, PORTLAND, OREGON  
BRIDGE HOUSING

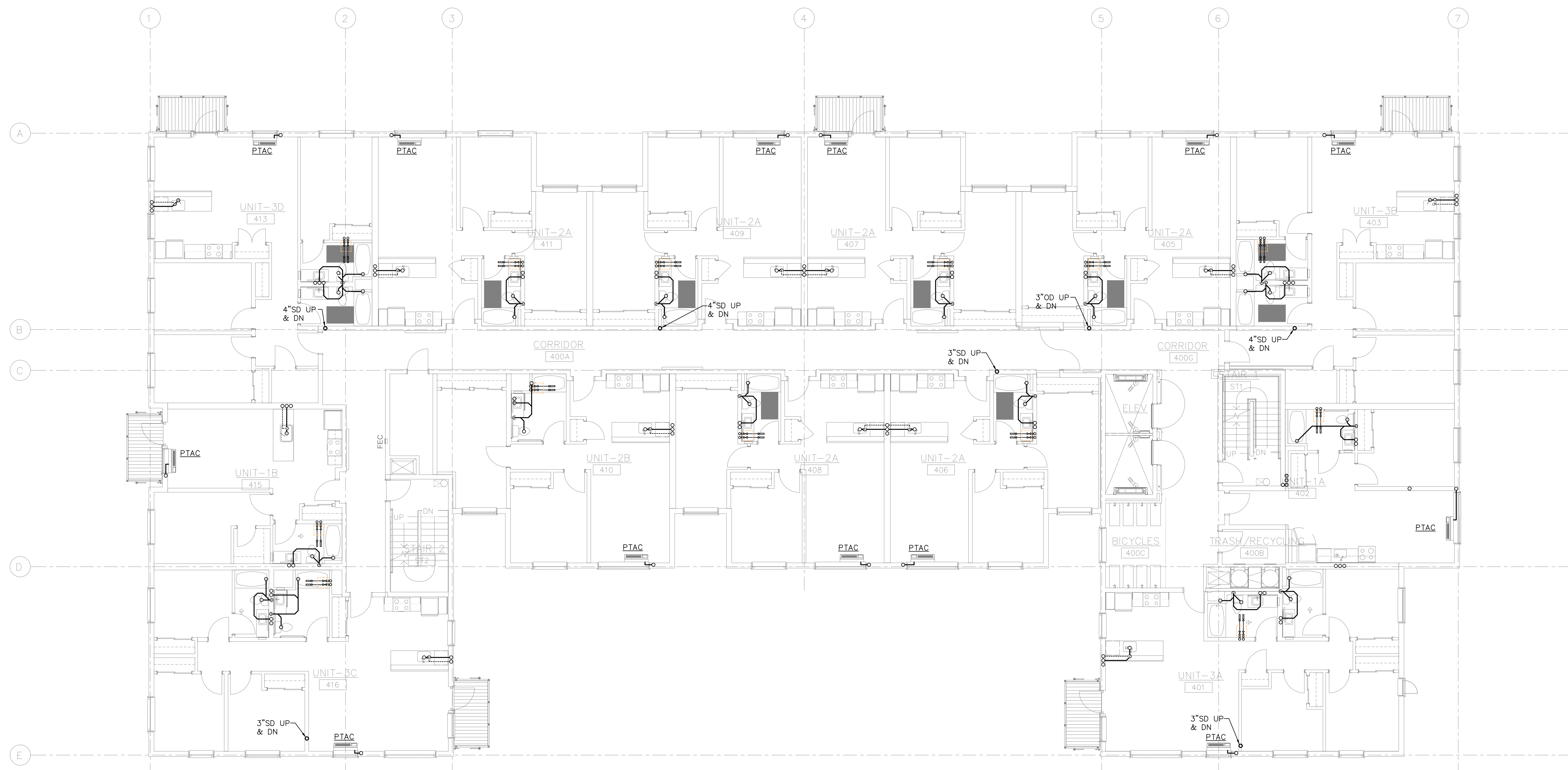
REVISION	DATE	REASON FOR ISSUE

LEVEL 4 FLOOR  
PLAN – PLUMBING

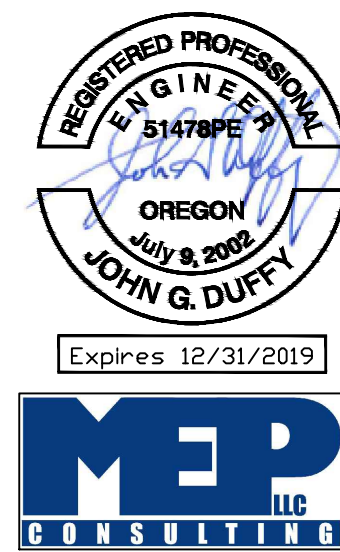
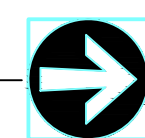
PERMIT SET

DATE	PROJECT NUMBER
10/09/2018	18-022
SHEET NUMBER	

P2.04



1 LEVEL 4 FLOOR PLAN – PLUMBING  
1/8" = 1'-0"



**CPCD, LLC**  
Commercial Plumbing Consulting & Design LLC  
18840 SW Boones Ferry Rd. #310  
Tualatin, OR 97062  
PHONE: (503) 845-8233; CELL: 503-780-3106  
email: shane@cpcdlc.com  
CONTACT: Shane Fitzpatrick, CPD



NORTH WILLIAMS APARTMENTS – FAMILY HOUSING  
2156 N WILLIAMS AVENUE, PORTLAND, OREGON  
BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

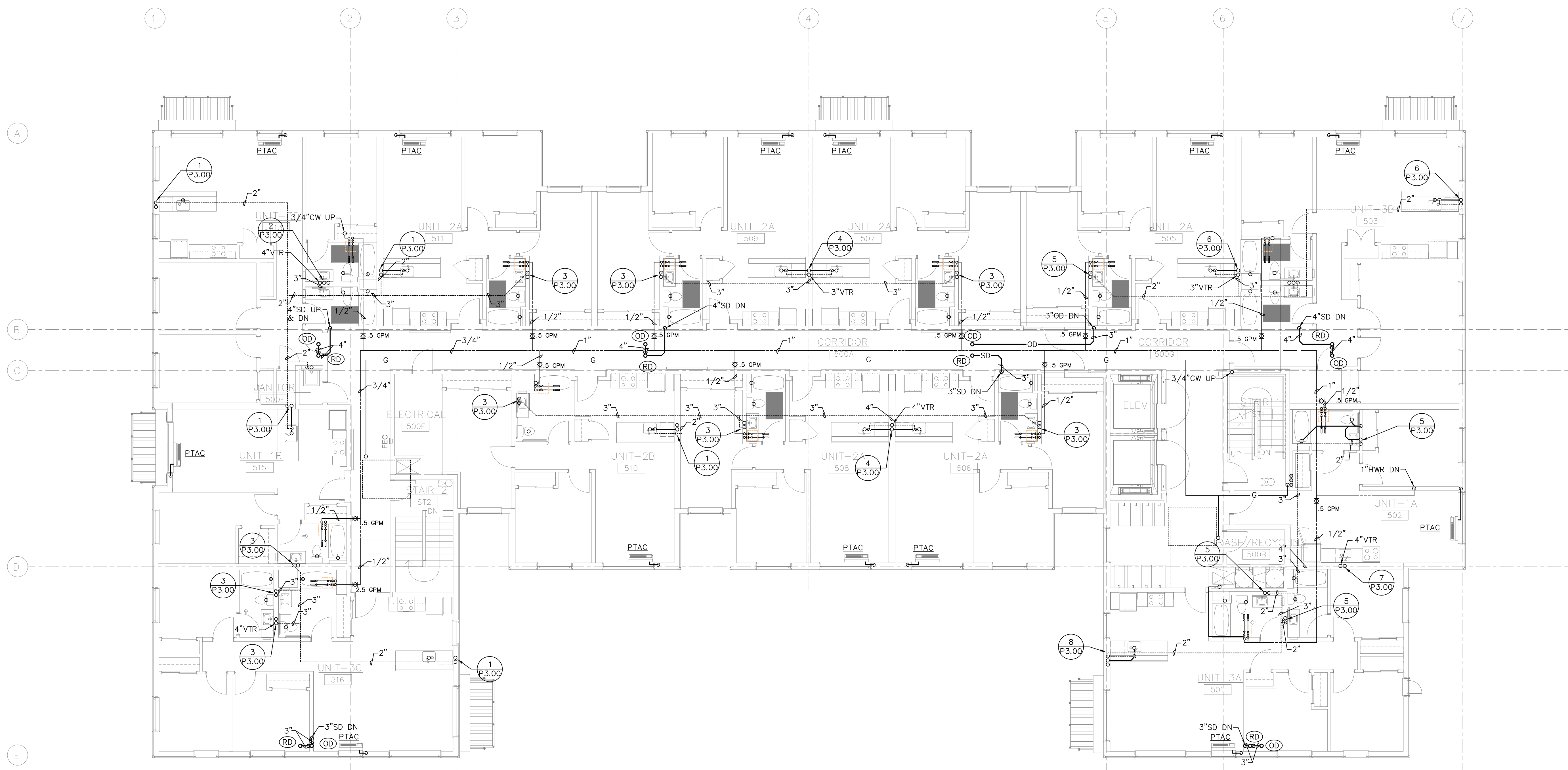
LEVEL 5 FLOOR  
PLAN – PLUMBING

PERMIT SET

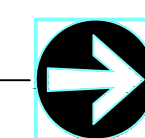
DATE	PROJECT NUMBER
10/09/2018	18-022

SHEET NUMBER

P2.05



1 LEVEL 5 FLOOR PLAN – PLUMBING  
1/8" = 1'-0"



**CPCD, LLC**  
Commercial Plumbing Consulting & Design LLC  
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Tualatin, OR 97062  
PHONE: (503) 845-8233; CELL: 503-780-3106  
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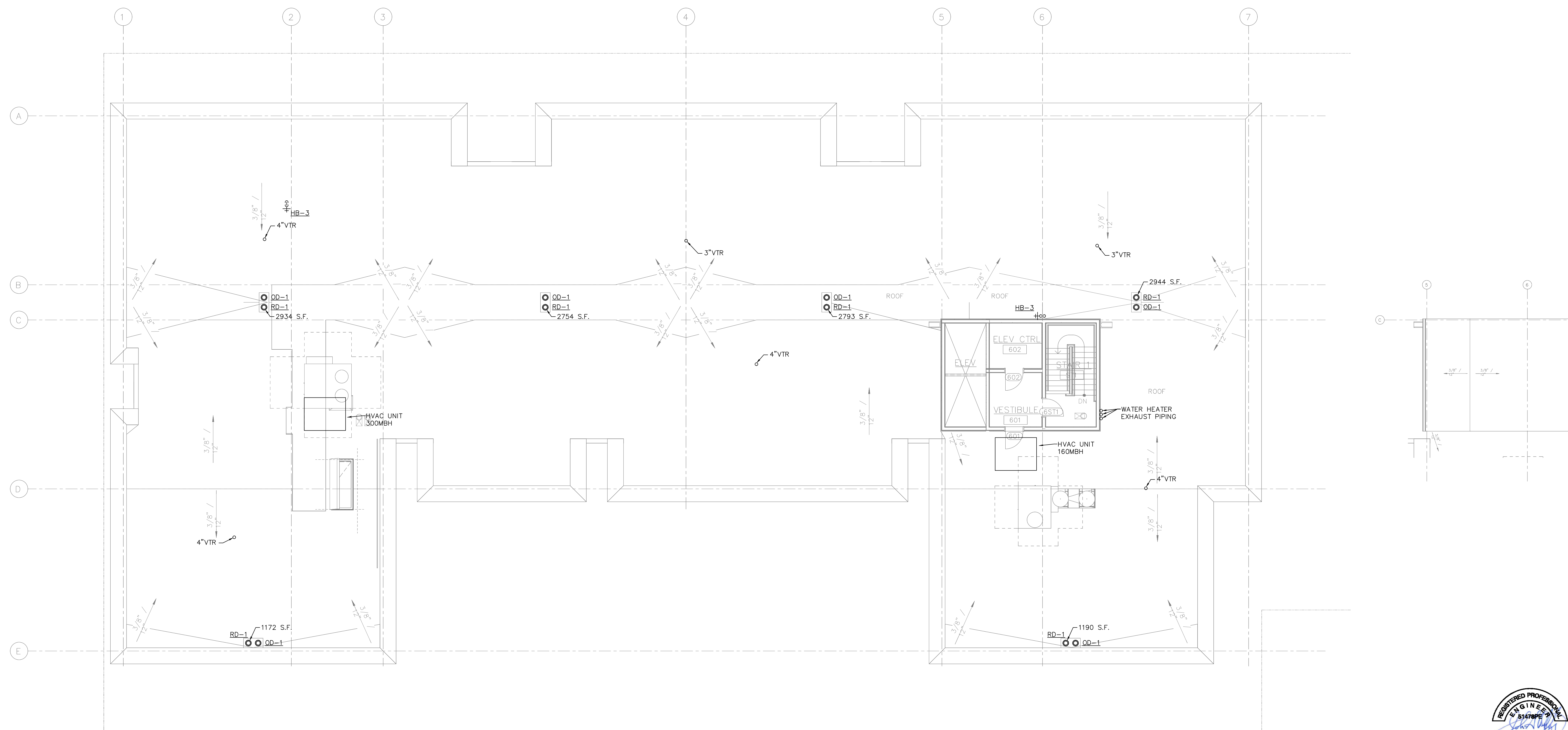
NORTH WILLIAMS APARTMENTS – FAMILY HOUSING  
2156 N WILLIAMS AVENUE, PORTLAND, OREGON  
BRIDGE HOUSING

REVISION	DATE	REASON FOR ISSUE

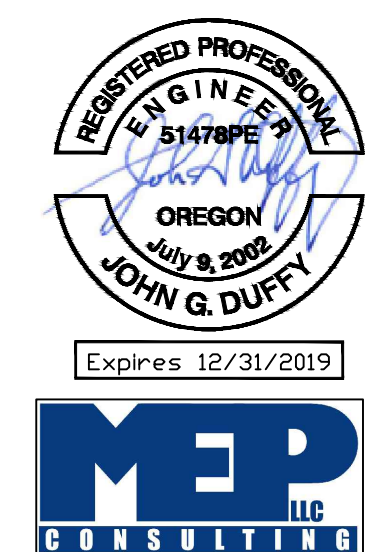
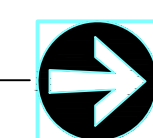
ROOF PLAN – PLUMBING

PERMIT SET

DATE 10/09/2018	PROJECT NUMBER 18-022
SHEET NUMBER P2.06	



1 ROOF PLAN – PLUMBING  
1/8" = 1'-0"



**CPCD, LLC**  
Commercial Plumbing Consulting & Design LLC  
18840 SW Boones Ferry Rd. #310  
Tualatin, OR 97062  
PHONE: (503) 845-8233; CELL: 503-780-3106  
email: shane@cpcdllc.com  
CONTACT: Shane Fitzpatrick, CPD

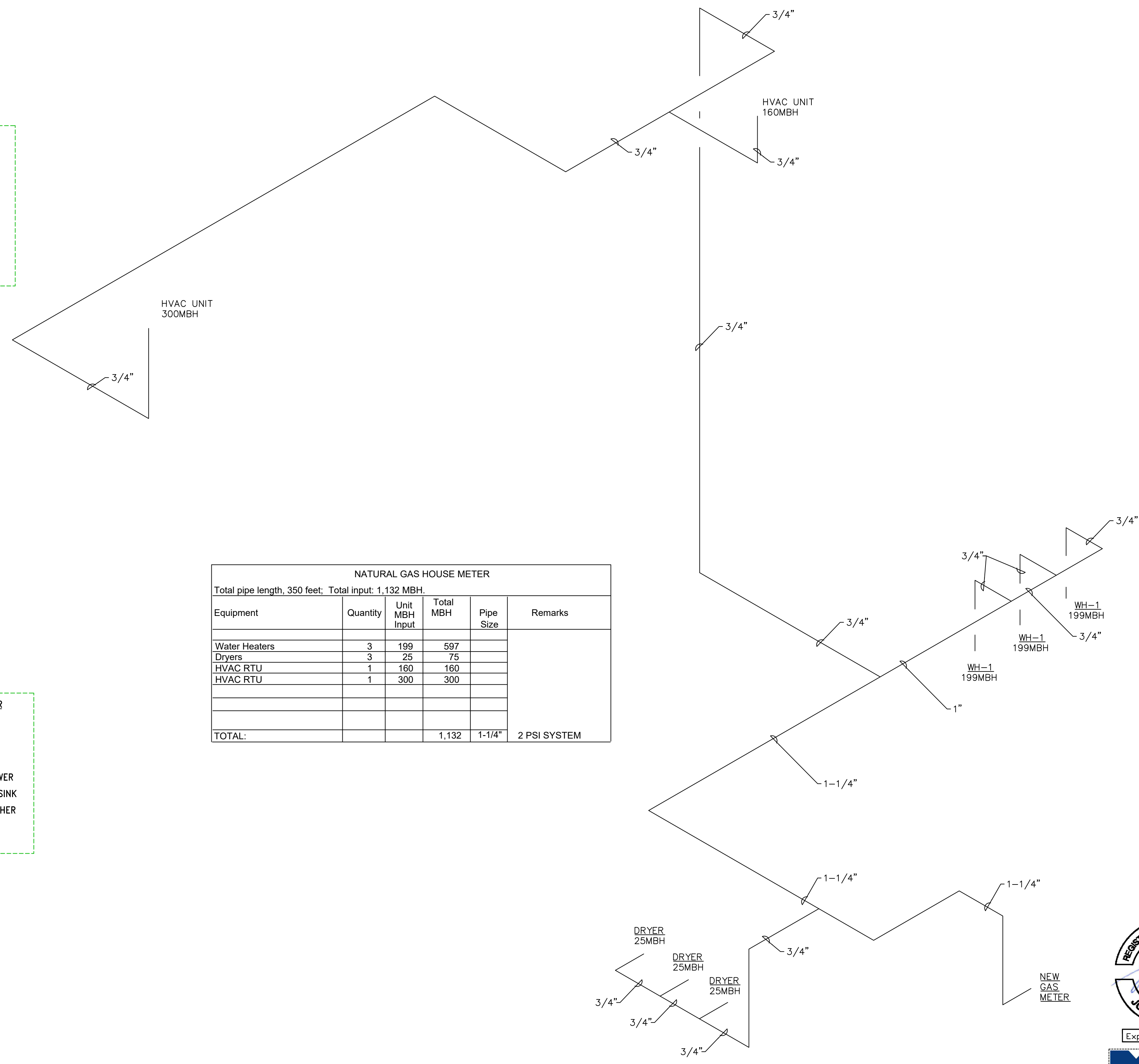
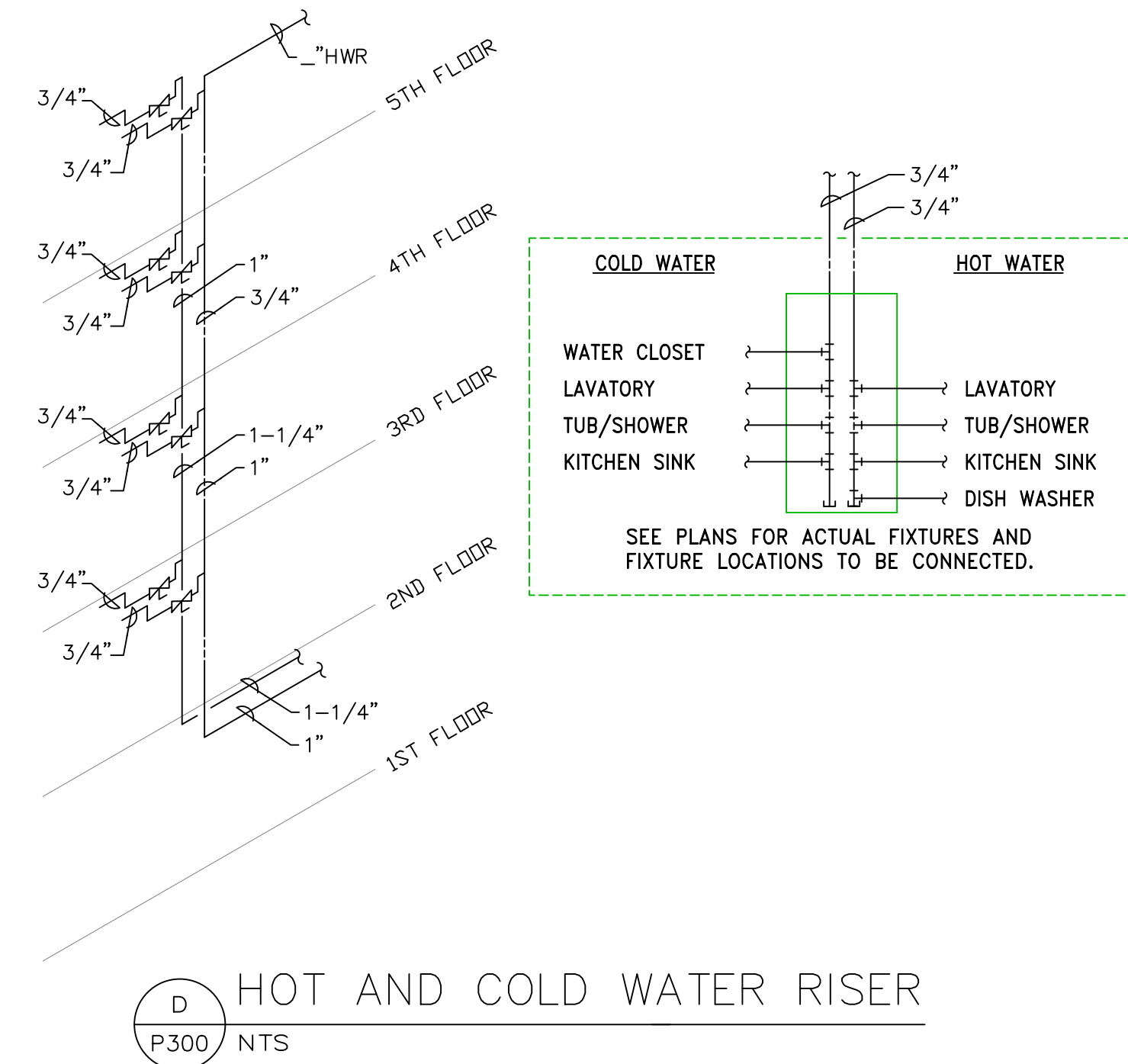
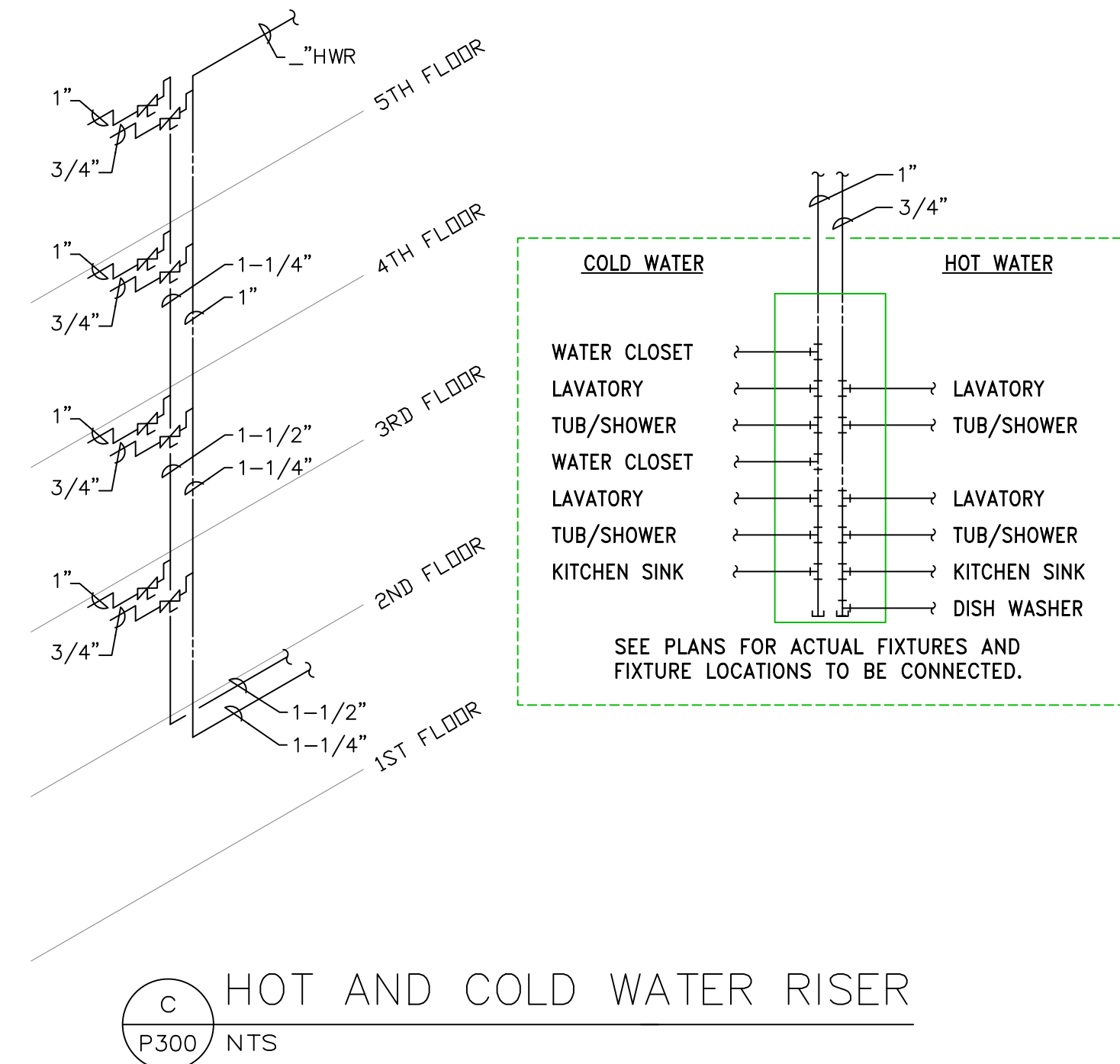
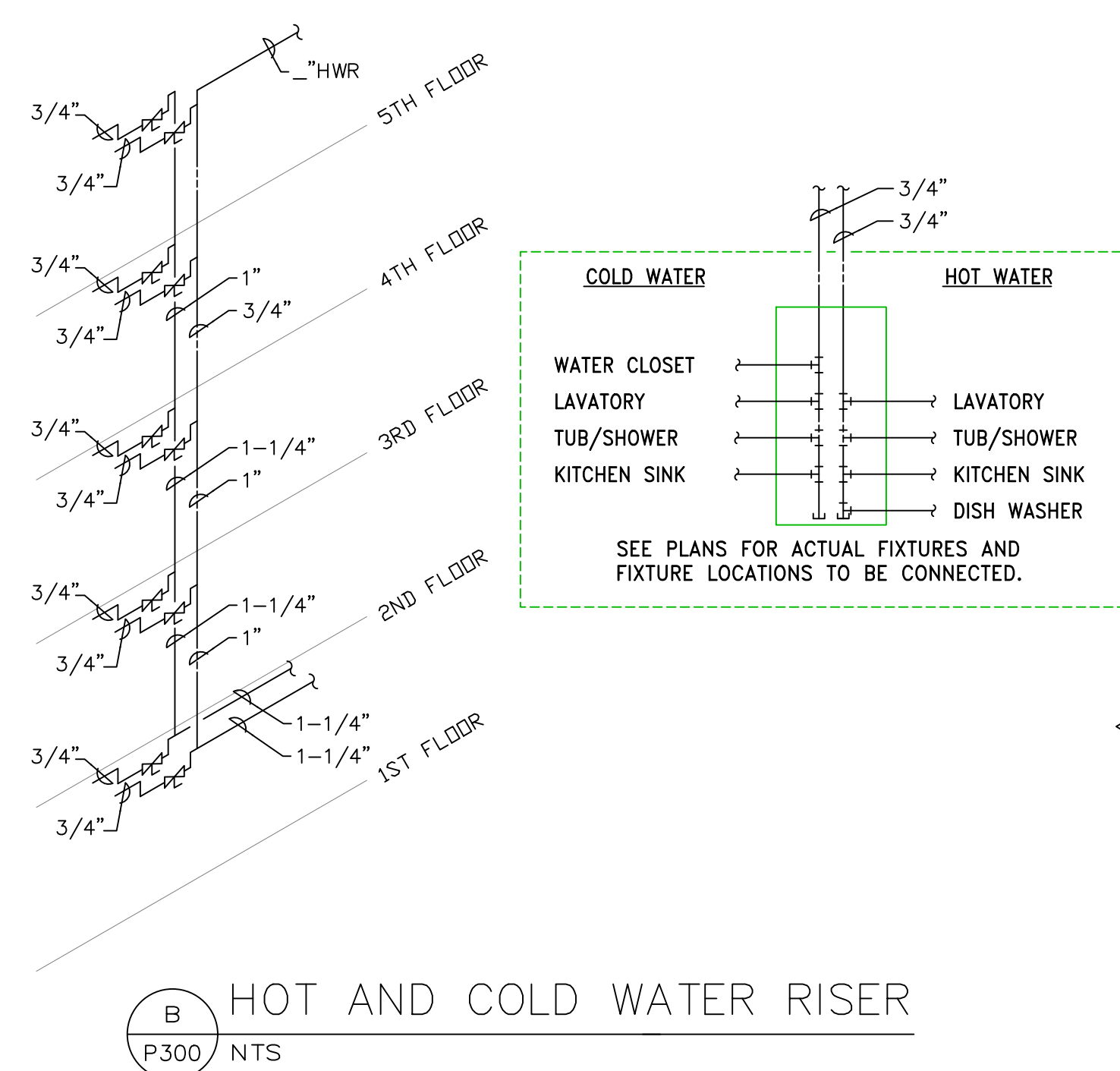
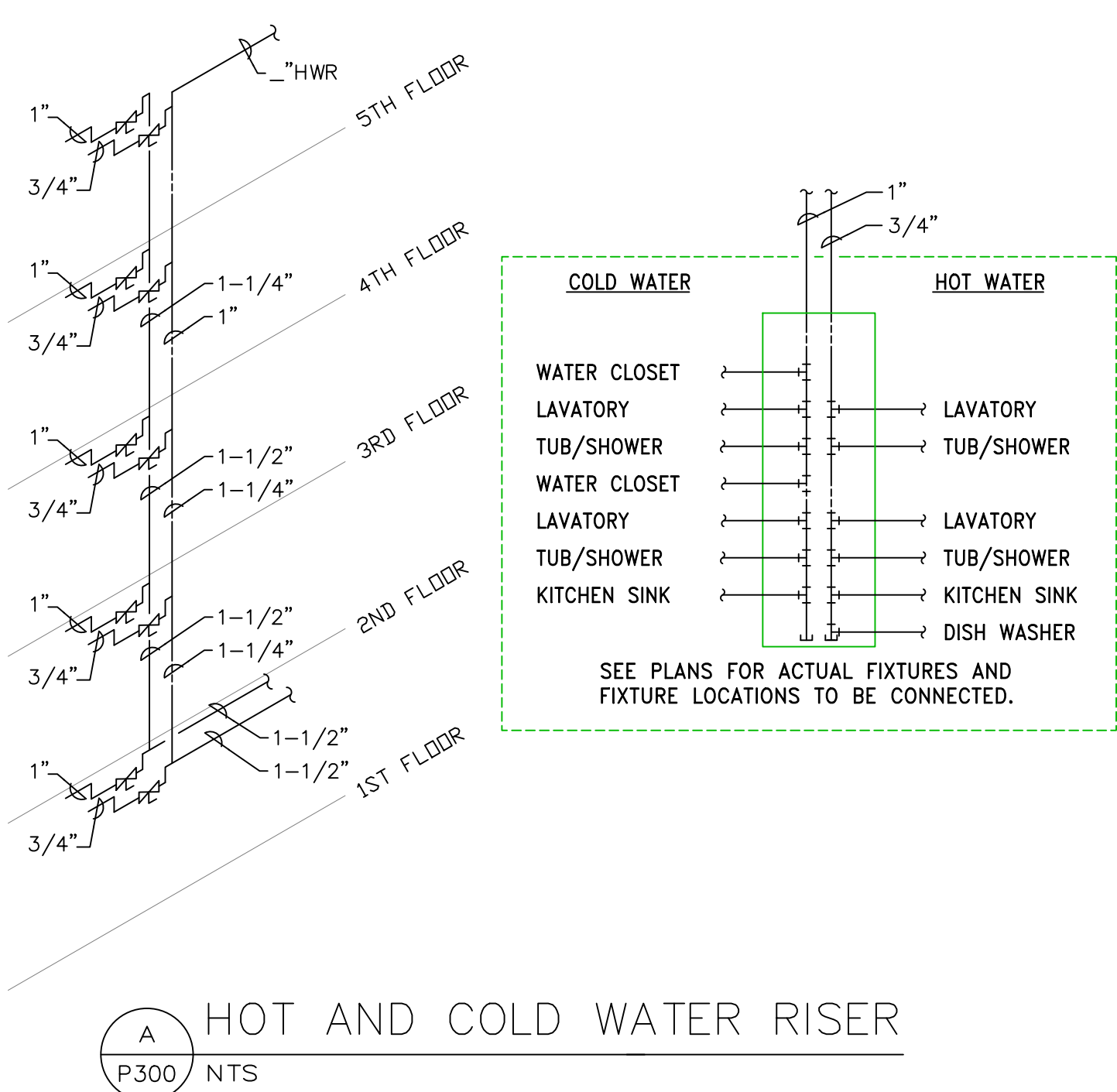
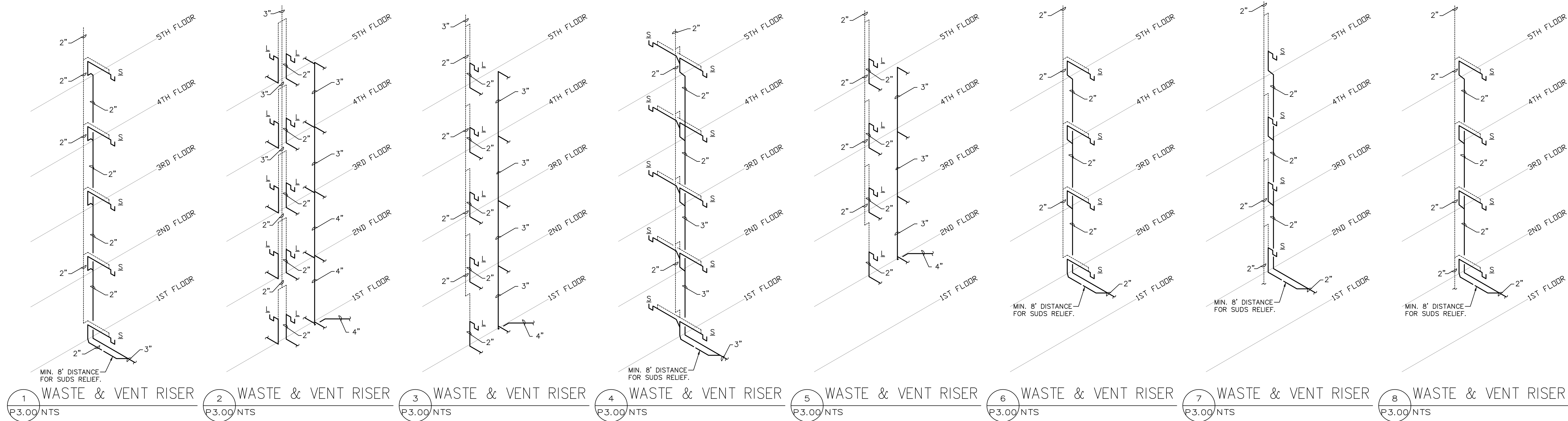


REVISION	DATE	REASON FOR ISSUE

RISER DIAGRAM – PLUMBING












PERMIT SET

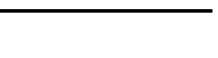

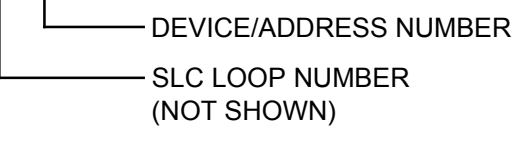
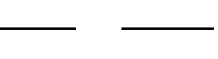
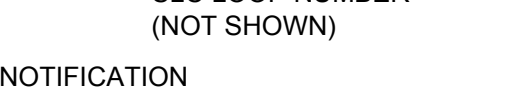
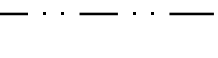
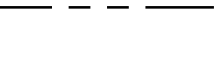
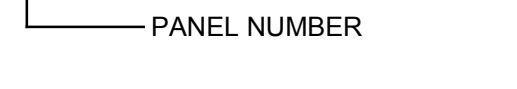
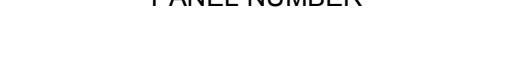
DATE 10/09/2018	PROJECT NUMBER 18-022
SHEET NUMBER P3.00	






NATURAL GAS HOUSE METER					
Total pipe length, 350 feet; Total input: 1,132 MBH.					
Equipment	Quantity	Unit MBH Input	Total MBH	Pipe Size	Remarks
Water Heaters	3	199	597		
Dryers	3	25	75		
HVAC RTU	1	160	160		
HVAC RTU	1	300	300		
TOTAL:			1,132	1-1/4"	2 PSI SYSTEM



LEGEND			
SYM	DESCRIPTION	MODEL NUMBER	BACK BOX
	FIRE ALARM CONTROL PANEL	EST I01000RD	28"H X 15.75"W X 3.85"D
	REMOTE ANNUNCIATOR	EST RLCD-C	5.625"H X 8.5"W X 1.5"D 4" SQUARE STANDARD BOX
	NAC EXPANSION PANEL	EST BPS10A	17"H X 13"W X 3.5"D
	MULTIPLE I/O MODULE CABINET W/ SIGA MOUNTING PLATES	EST MFC-AMP2L(2EA.)	8"H X 14"W X 3.5"D
	CELLULAR COMMUNICATOR	DSC LE4010CF	10"H X 11.5"W X 3"D
	MANUAL PULL STATION	EST SIGA-278	1-GANG STANDARD ELECTRICAL BOX
	PHOTOELECTRIC SMOKE W/BASE	EST SIGA-PD/SIGA-SB4	4" SQUARE OR OCTAGON STANDARD BOX
	PHOTOELECTRIC SMOKE/CO W/BASE	EST SIGA-PCD/SIGA-SB4	4" SQUARE OR OCTAGON STANDARD BOX
	HEAT DETECTOR W/BASE	EST SIGA-HFD/SIGA-SB4	4" SQUARE OR OCTAGON STANDARD BOX
	ADDRESSABLE HVAC DUCT DETECTOR W/ AUX. RLY & SAMPLING TUBE	EST SIGA-SD/EST SD-T## (##=8,18, 24,36,42,60,78 OR 120, VERIFY)	FURNISHED WITH UNIT FOR SURFACE MOUNT ON DUCTWORK
	SITE VAULT TAMPER	SUPPLIED BY OTHERS	
	SPRINKLER FLOW SWITCH	SUPPLIED BY OTHERS	
	SPRINKLER TAMPER SWITCH	SUPPLIED BY OTHERS	
	DRY PIPE HIGH/LOW AIR ALARM	SUPPLIED BY OTHERS	
	OUTSIDE WATERFLOW BELL	SUPPLIED BY OTHERS	120V CONNECTION REQUIRED
	SYNCHRONIZATION SIGNAL MODULE	EST SIGA-CC1S	MOUNTS IN NAC PANEL
	ADDRESSABLE SIGNAL MODULE	EST SIGA-CC1	4" SQUARE 2.25" DEEP BOX
	ADDRESSABLE RELAY MODULE	EST SIGA-CR	4" SQUARE W/1-GANG MUDRING
	ADDRESSABLE RELAY MODULE	EST SIGA-CRH - HIGH POWER	4" SQUARE 2.25" DEEP BOX
	ADDRESSABLE INPUT MODULE	EST SIGA-CT1	4" SQUARE W/1-GANG MUDRING
	ADDRESSABLE DUAL INPUT MODULE	EST SIGA-CT2	4" SQUARE W/1-GANG MUDRING
	CEILING HORN/STROBE UNIT	EST GENESIS GCF-HDVM	4" SQUARE STANDARD BOX
	CEILING HORN/STROBE, HIGH CANDELA (GREATER THAN 95cd)	EST GENESIS GCF-HDVMH	4" SQUARE STANDARD BOX
	CEILING STROBE UNIT	EST GENESIS GCF-VM	4" SQUARE STANDARD BOX
	CEILING STROBE, HIGH CANDELA (GREATER THAN 95cd)	EST GENESIS GCF-VMH	4" SQUARE STANDARD BOX
	WALL HORN/STROBE UNIT	EST GENESIS G1F-HDVM	1-GANG STANDARD ELECTRICAL BOX
	WALL STROBE UNIT	EST GENESIS G1F-VM	1-GANG STANDARD ELECTRICAL BOX
	WALL HORN UNIT LF = LOW FREQUENCY	EST GENESIS G4LFWF-H	4" SQUARE STANDARD BOX
	WALL HORN/STROBE, WEATHERPROOF	EST GENESIS WG4WF-HVMC	EST 499
	ELEVATOR TO ALTERNATE FLR RELAY	EST SIGA-CR	VIA MFC-A CABINET
	ELEVATOR TO PRIMARY FLR RELAY	EST SIGA-CR	VIA MFC-A CABINET
	ELEVATOR SHUNT TRIP RELAY	EST SIGA-CR	VIA MFC-A CABINET
	ELEVATOR FIRE HAT BLINK RELAY	EST SIGA-CR	VIA MFC-A CABINET
	ELEVATOR SHUNT TRIP POWER MONITOR	EST SIGA-CT1	VIA MFC-A CABINET
	KITCHEN HOOD INPUT	EST SIGA-CT1	4" SQUARE W/ 1-GAND MUDRING
	FIRE SMOKE DAMPER	BY OTHERS VIA EST SIGA-CRH	
	MAGNETIC DOOR HOLDER(24VDC)	BY OTHERS	

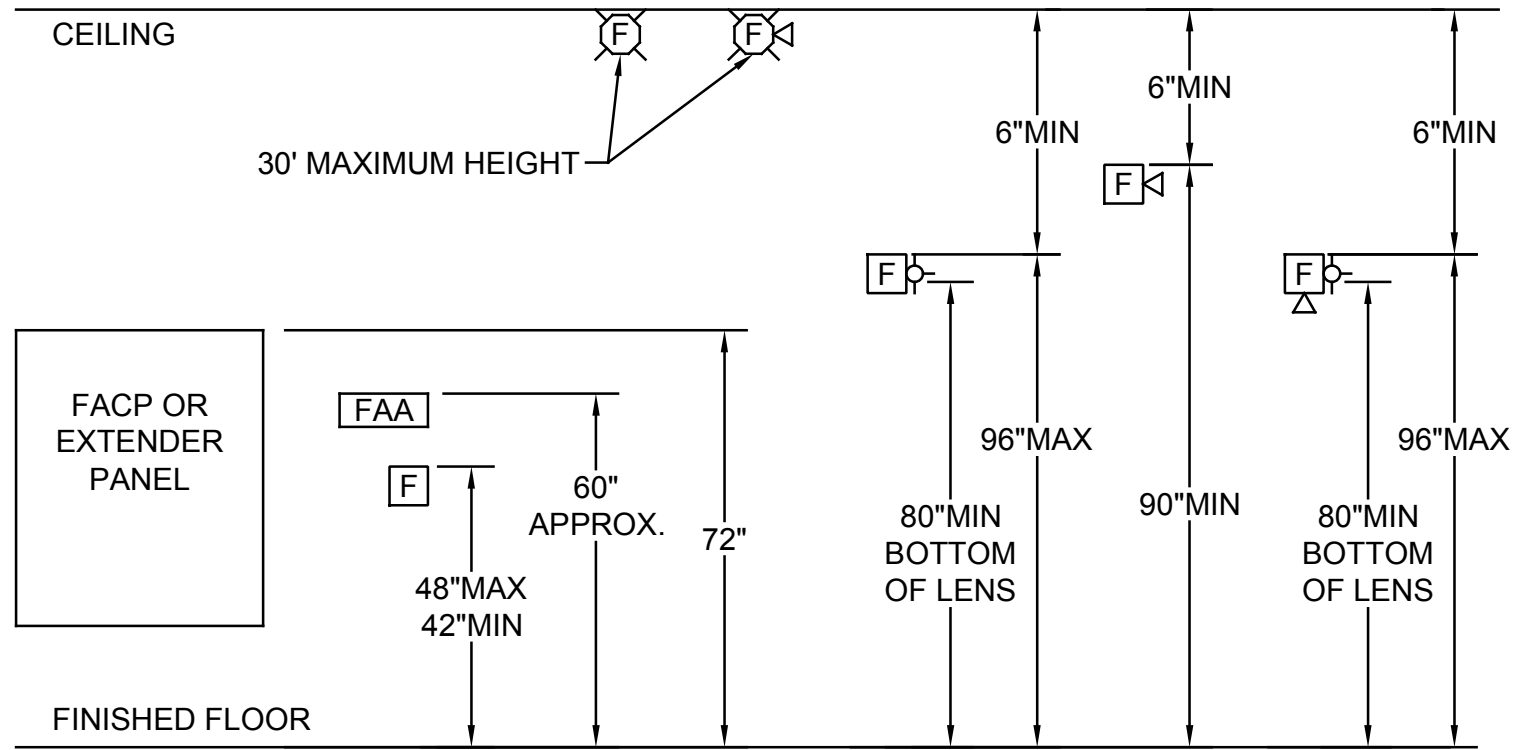
NOT ALL SYMBOLS USED		
CONDUIT TYPE	DEVICE TAG	ABBREVIATIONS
 INDICATES NAC CIRCUIT WIRING	<b>INITIATING DEVICES</b> 1.##	cd CANDELLA EOLR END OF LINE RESISTOR EOL END OF LINE FSD FIRE/SMOKE DAMPER SD SMOKE DAMPER VR VANDAL RESISTANT W WATT WP WEATHERPROOF WG WIREGUARD
 INDICATES VOICE EVAC. SPEAKER WIRING	 DEVICE/ADDRESS NUMBER	
 INDICATES SLC LOOP WIRING	 SLC LOOP NUMBER (NOT SHOWN)	
 INDICATES 24VDC POWER SUPPLY WIRING	<b>NOTIFICATION</b> N#.#	(D) EXISTING TO BE DEMOLISHED (E) EXISTING TO REMAIN (R) EXISTING TO BE RELOCATED
 INDICATES MISC. FIRE ALARM WIRING	 CIRCUIT NUMBER  PANEL NUMBER	

AREA OF RESCUE LEGEND			
SYM	DESCRIPTION	MODEL NUMBER	BACK BOX
	AREA OF RESCUE MASTER PANEL	RATH 2500-210FM	PROVIDED WITH UNIT (16.1"H X 14"W X 3"D)
	AREA OF RESCUE POWER SUPPLY	RATH 2500-24PWR	PROVIDED WITH UNIT (8.125"H X 9.275"W X 3.75"D)
	CALL STATION	RATH 2100-958NSR	PROVIDED WITH UNIT (6"H X 6"W X 3"D)

FIRE ALARM CHECKLIST			
Location	Yes	No	A/C Power:
			Dedicated 120 VAC for Fire Alarm Control Panel
			Dedicated Power for Remote NAC Power Supplies
			Circuit Breakers Location Recorded in FACP & NAC Panels
			Circuit Breaker Painted RED & Breaker Locks Installed
Location	Yes	No	Raceways & Boxes:
			40% Fill Rule is adhered to
			J-Boxes & Cans have covers installed
			Vertical Riser Cable is properly supported in Boxes
			Outside Boxes & conduit is weather tight
Location	Yes	No	Wiring & Cabling:
			Cable is proper size and type for project per calculations & Wire Schedule
			Non-Shielded wire used
			Open Cables properly strapped
			Open Cables below 7 ft. off of finished floor properly protected
			Check for "Opens" in wiring on all detection and notification circuits
			Check for "Shorts" in wiring on all detection and notification circuits
			Check for "Grounds" in Wiring on all detection and notification circuits
			Two Phone Lines are installed & operating
			1" Taps and Junction boxes are clearly labeled on plans / as-builts
Location	Yes	No	Fire Alarm Panels:
			A/C Power location is labeled on all panels & power supplies
			Two phone lines are labeled with primary & secondary phone numbers
			Batteries have Manufacturer's date marked in Permanent Ink
			Panel is clean & professional looking
Location	Yes	No	Field Devices:
			Pull Stations at proper mounting height and location (48" to top of actionable part)
			Smoke detectors mounted per plans / spacing looks appropriate ( no dead air space)
			Smoke detectors installed at least 4" from corners & not more than 12" below ceiling level
			Smoke detectors installed proper distance from Supply and Return Air Vents
			All devices are installed and accounted for on as-builts
			Horns / strobes at proper mounting height and location (80-96" AFF)
			Horns audibility meets minimum requirements
Location	Yes	No	Functional Test:
			All pull stations pulled for proper operation
			All smoke detectors activated with proper aerosol equipment
			All heat detectors tested according to manufacturer's instructions
			All sprinkler waterflows tested under actual flow condition
			All tamper / supervisory switches tested by valve actuation
			Duct detectors tested for proper function and universal shut down
			All Auxiliary relays operate according to system matrix
			<b>Note: Other Trades that can keep you from getting your approval for occupancy</b>
Location	Yes	No	Mechanical / HVAC:
			All duct detectors are installed and operational
			All motorized dampers are installed and operational
			HVAC System is fully operational
Location	Yes	No	Electrical:
			Panel properly labeled (a/c, phones, batteries)
			A/C circuit breaker painted red & lock installed
			A/C circuit breaker dedicated
			Power to Door Holders dedicated & locked, painted red
Location	Yes	No	Door Hardware:
			All door holders are installed & powered up
			All door holders are properly aligned
Location	Yes	No	Sprinkler:
			All Flow Switches are installed
			All Tamper Switches are installed & adjusted
			Sprinkler Vault Switches are installed & adjusted
			PIV Valve & Switches are installed & adjusted
			Wall PIV's are installed & adjusted
			All Dry Flow Valves are installed
			Low Air Switches are installed
Location	Yes	No	Security:
			Door Releasing Hardware installed & powered up
			Interfacing functions according to matrix
Location	Yes	No	Elevator:
			Powered up, Programmed & Operational
			Elevator Functions Tested

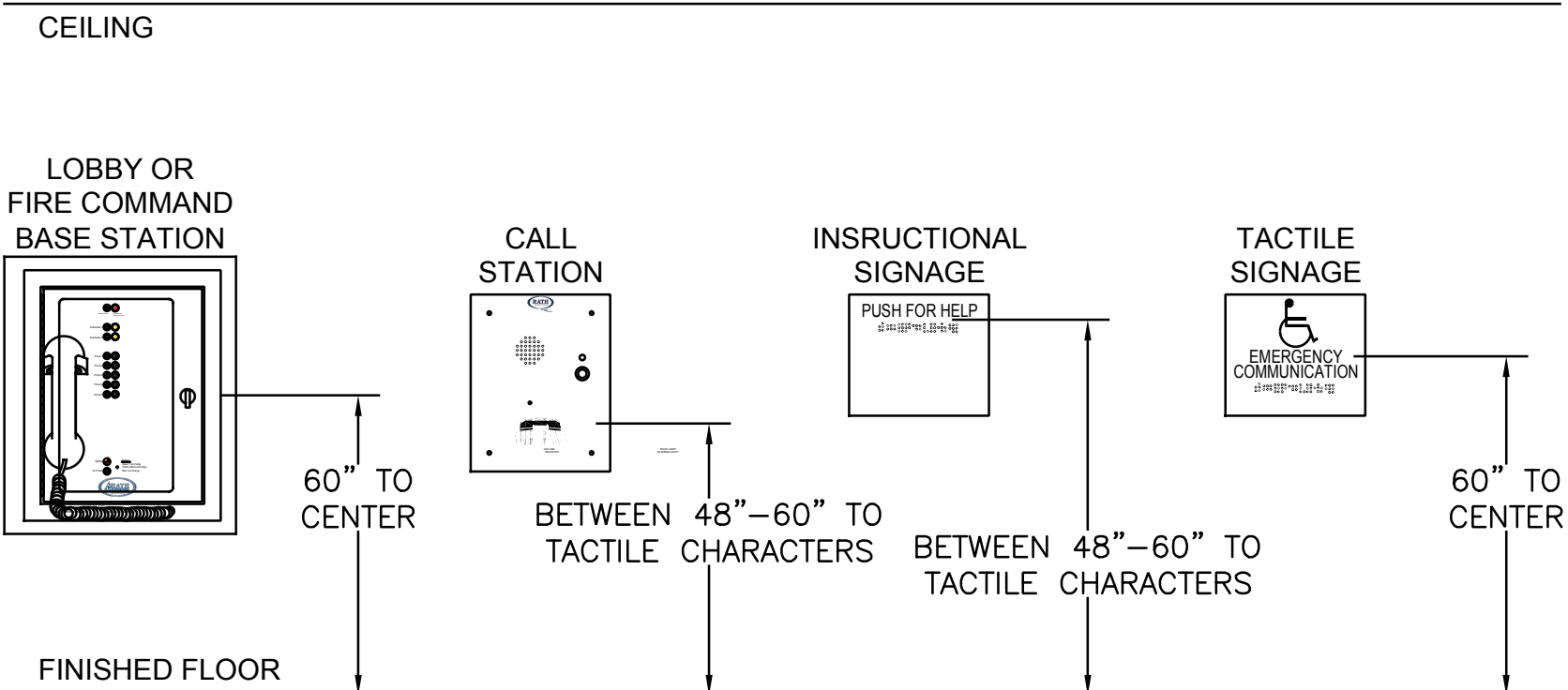
## GENERAL NOTES

- A. ONLY NAC WIRING SHOWN. INSTALLATION CONTRACTOR TO SHOW SLC LOOP WIRING, INCLUDING CONDUIT & J-BOX DISTRIBUTION ON AS-BUILT DRAWINGS.
- B. LABEL ALL ADDRESSABLE FIELD DEVICES SUCH THAT ADDRESS INFORMATION CAN BE READ FROM FLOOR LEVEL. WITHOUT NEED FOR LADDER - OTHER BOXES AND DEVICES LABELED AND READILY LEGIBLE ALSO.
- C. PER NATIONAL FIRE ALARM CODE (NFPA 72-2013, 17.7.1.11.2), WHERE DETECTORS ARE INSTALLED BUT NOT OPERATIONAL DURING CONSTRUCTION, THEY SHALL BE PROTECTED FROM CONSTRUCTION DEBRIS, DUST, DIRT, AND DAMAGE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND VERIFIED TO BE OPERATING IN ACCORDANCE WITH THE LISTED SENSITIVITY, OR THEY SHALL BE REPLACED PRIOR TO THE FINAL COMMISSIONING OF THE SYSTEM.
- D. PER NATIONAL FIRE ALARM CODE (NFPA 72-2013, 17.7.4.1), IN SPACES SERVED BY AIR-HANDLING SYSTEMS, DETECTORS SHALL NOT BE LOCATED WHERE AIRFLOW PREVENTS OPERATION OF THE DETECTORS.
- E. 18.4.3.1\* TO ENSURE THAT AUDIBLE PUBLIC MODE SIGNALS ARE CLEARLY HEARD, UNLESS OTHERWISE PERMITTED BY 18.4.3.2 THROUGH 18.4.3.5, THEY SHALL HAVE A SOUND LEVEL AT LEAST 15 DB ABOVE THE AVERAGE AMBIENT SOUND LEVEL OR 5 DB ABOVE THE MAXIMUM SOUND LEVEL HAVING A DURATION OF AT LEAST 60 SECONDS, WHICHEVER IS GREATER, MEASURED 5 FT (1.5 M) ABOVE THE FLOOR IN THE AREA REQUIRED TO BE SERVED BY THE SYSTEM USING THE A-WEIGHTED SCALE (DBA).
- F. PROVIDE FA SYSTEM EQUIPMENT AND SERVICE LABELS PER AHJ REQUIREMENTS. THE LOCATION OF THE FACP PANEL TO BE PERMANENTLY NOTED AT THE ENTRY ANNUNCIATOR (TYPICALLY WITH SYSTEM ZONE MAP). THE LOCATION OF ALL NAC PANELS TO BE PERMANENTLY NOTED AT THE FACP PANEL. THE LOCATION OF THE POWER SOURCE CIRCUIT BREAKER PERMANENTLY LABELED AT FACP AND ALL NAC PANELS.
- G. THE CONTRACTOR SHALL PRE-TEST THE SYSTEM TO VERIFY PROPER PERFORMANCE PRIOR TO INSPECTION.
- H. UL CERTIFIED CENTRAL STATION REQUIRED.  
COMPANY NAME: \_\_\_\_\_  
UL CERTIFICATION #: \_\_\_\_\_
- I. SYSTEM IS DESIGNED IN ACCORDANCE WITH 2014 OSSC AND NFPA 72-2013. SYSTEM SHALL BE INSTALLED PER NFPA 70 (NEC) 2014.



1 TYPICAL FIRE ALARM DEVICE MOUNTING HEIGHTS

NO SCALE



2 TYPICAL AREA OF RESCUE MOUNTING HEIGHTS

NO SCALE

SEQUENCE OF OPERATION CONTROL MATRIX																
SYSTEM OPERATION DESCRIPTION (OUTPUTS)	SYSTEM DEVICES															
	General Area Smoke	Pull Station	Duct Detector	Water Flow	Sprinkler Valve Tamper	Elev. Power Supv	Elev. Machine Room Heat	Elev. Hoist-way Heat	Elev. Machine Room Smoke	Elev. Hoist-way Smoke	Elev. Primary Lobby Smoke	Elev. Alternate Lobby Smoke	Wiring: Open Short Ground	Missing Device	Low/No AC	Low/No Battery
Alarm at FACP/Annun/DACT	X	X														
Supervisory at FACP/Annun/DACT			X		X	X										
Trouble at FACP/Annun/DACT																
Activate Horns/ Strobes	X	X		X			X	X	X	X	X	X	X	X	X	X
Activate Exterior Bell																
HVAC Shut Down	X		X													
Fire Damper Close (If Applicable)	X		X													
Hoistway Smoke Damper (If Applicable)							X	X	X	X	X	X				
Security Doors Release (If Applicable)	X	X	X	X			X	X	X	X	X	X				
Elev. To Primary Floor									X	X	X	X				
Elev. To Alternate Floor																
Elev. Fire Hat									X							
Elev. Shunt Trip							X	X								

- NOTES:
- 1) Annunciator is at a public accessible location.
- 2) DACT transmits to a continuously attended location.
- 3) Verify if Smoke/Heat detection is required in the Elevator Hoistway.

SHEET INDEX	
FA001	NOTES, LEGEND, ADDRESSES & GENERAL NOTES - FIRE ALARM
FA002	RISER DIAGRAMS & BATTERY CALCULATIONS - FIRE ALARM
FA101	LEVEL ONE FLOOR PLAN - FIRE ALARM
FA102	LEVEL TWO FLOOR PLAN - FIRE ALARM
FA103	LEVEL THREE FLOOR PLAN - FIRE ALARM
FA104	LEVEL FOUR FLOOR PLAN - FIRE ALARM
FA105	LEVEL FIVE FLOOR PLAN - FIRE ALARM

SIGNED BY:  
HALBERG, MARK W  
OREGON LICENSE  
#22907J

Fire Alarm Designer  
JOSEPH MOUNT  
Fire Alarm Systems, Level 4  
NICET #96586  
Expires: 3/31/2019



NORTH WILLIAMS APARTMENTS

2156 N. WILLIAMS AVE  
PORTLAND, OR 97227

REV	DATE	DESCRIPTION
0	10-09-2018	FIRE ALARM GMP/PERMIT SET

DRAWN BY: JOSEPH MOUNT  
Job Contact: NATHAN BUTZ  
Job Number: WO 5026

SHOP DRAWINGS

LEVEL ONE  
FIRE ALARM

FA001



SIGNED BY:  
HALBERG, MARK W  
OREGON LICENSE  
#22907J

Fire Alarm Designer

JOSEPH MOUNT  
Fire Alarm Systems, Level 4  
NICET #96586  
Expires: 3/31/2019



**MANCHESTER**  
TECHNOLOGY SYSTEMS, INC.  
8000 NE 88TH Street, Suite B103  
Vancouver, WA 98665  
Tel: (360) 816-0454 Fax: (360) 816-0452

# NORTH WILLIAMS APARTMENTS

2156 N. WILLIAMS AVE  
PORTLAND, OR 97227

DESCRIPTION

REV

DATE

0

10-09-2018

FIRE ALARM (CM/PERMIT SET)

DRAWN BY: JOSEPH MOUNT

Job Contact: NATHAN BUTZ

Job Number: WO 5026

SHOP DRAWINGS

RISER DIAGRAM  
FIRE ALARM

FA002

## NORTH WILLIAMS APARTMENTS

EST (EDWARDS IO1000RD) SERIES FIRE ALARM CONTROL PANEL(FACP#0) BATTERY CALCULATION

MODEL	Desc	DEVICE QTY.	1-Way Distance Feet	Wire Gauge #	Ohms Per Foot	Total Ohms	Volts at Eol	Min Volts Req'd	Volt Drop EOL Method	Drop% EOL Volt	STANDBY (A)	ALARM (A)	TOTAL STANDBY (A)	TOTAL ALARM (A)
IO1000R	FACP, 250pt, 4 NACS Red, 120v	1									0.17200	0.26700	0.1720	0.2670
SA-DACCT	Dual Line Driver	1									0.04100	0.04100	0.0410	0.0410
RLCD-CR	LED Ann w/common LEDs & Chrs. Red	1									0.00900	0.11500	0.0090	0.1150
NAC CKT #1			254 FT	#14	3.07	0.810	17.978	16.00	2.422	11.87%	Ckt. Amps*	1.494		
GALFWF-H Horn, Hi db		9									0.1660		1.4940	
NAC CKT #2			261 FT	#14	3.07	0.801	18.006	16.00	2.394	11.74%	Ckt. Amps*	1.494		
GALFWF-H Horn, Hi db		9									0.1660		1.4940	
NAC CKT #3			252 FT	#14	3.07	0.774	18.088	16.00	2.312	11.33%	Ckt. Amps*	1.494		
GALFWF-H Horn, Hi db		9									0.1660		1.4940	
NAC CKT #4			440 FT	#14	3.07	1.351	18.998	16.00	1.402	8.87%	Ckt. Amps*	0.519		
GL1WF-HDVMC Horn-Strobe, 30cd, Wall Hi db		4									0.0460		0.1840	
GL1WF-HDVMC Horn-Strobe, 75cd, Wall Hi db		1									0.1250		0.1250	
GL1WF-VMC Strobe 15cd, Wall		3									0.0300		0.0900	
CURRENT TOTALS (A)-->											Nac Ckts=	6.001	0.312	5.424
Voltage Drop Calculation Notes:														
1) Calculations use the NFPA70(NEC 2014)														
Wire Resistance Values for 167 Degrees Fahrenheit (See Chp. 9, Table 8)														
2) Calculations are using the manufacturer's U.L. Max. current values for Notification Devices														
STANDBY HOURS REQUIRED														
ALARM SOUNDING MINUTES														
TOTAL SYSTEM STANDBY (A)														
TOTAL SYSTEM ALARM (A)														
TOTAL SYSTEM STANDBY (A/H)														
TOTAL SYSTEM ALARM (A/H)														
MINIMUM AH BATTERY REQUIRED														
WITH 20% SPARE CAPACITY (A/H)														
BATTERIES PROVIDED AT 12VDC (A/H) (2) 18 AH														

## 3 FACP BATTERY CALCULATIONS - FIRE ALARM

NO SCALE

## NORTH WILLIAMS APARTMENTS

EST SERIES (BPS10A) REMOTE BOOSTER SUPPLY BATTERY CALCULATION

MODEL	Desc	DEVICE QTY.	1-Way Distance Feet	Wire Gauge #	Ohms Per Foot	Total Ohms	Volts at Eol	Min Volts Req'd	Volt Drop EOL Method	Drop% EOL Volt	STANDBY (A)	ALARM (A)	TOTAL STANDBY (A)	TOTAL ALARM (A)
BPS10A	Remote Booster Supply, 10A	1									0.07000	0.27000	0.0700	0.2700
NAC CKT #1			264 FT	#14	2.60	0.686	18.349	16.00	2.051	10.05%	Ckt. Amps*	1.494		
GALFWF-H Horn, Hi db		9									0.0000	0.1660	0.0000	1.4940
NAC CKT #2			283 FT	#14	2.60	0.736	18.084	16.00	2.316	11.35%	Ckt. Amps*	1.674		
GL1WF-HDVMC Horn-Strobe, 15cd, Wall Hi db		2									0.0000	0.0400	0.0000	0.0800
GALFWF-H Horn, Hi db		9									0.0000	0.1660	0.0000	1.4940
NAC CKT #3			297 FT	#14	2.60	0.772	17.456	16.00	2.944	14.43%	Ckt. Amps*	1.906		
GALFWF-H Horn, Hi db		11									0.0000	0.1660	0.0000	1.8260
GL1WF-HDVMC Horn-Strobe, 15cd, Wall Hi db		2									0.0000	0.0400	0.0000	0.0800
NAC CKT #4			364 FT	#14	2.60	0.946	17.593	16.00	2.807	13.76%	Ckt. Amps*	1.483		
GALFWF-H Horn, Hi db		8									0.0000	0.1660	0.0000	1.3280
GL1WF-HDVMC Horn-Strobe, 75cd, Wall Hi db		1									0.0000	0.1250	0.0000	0.1250
GL1WF-VMC Strobe 15cd, Wall		1									0.0000	0.0300	0.0000	0.0300
CURRENT TOTALS (A)-->											Nac Ckts=	6.457	0.070	6.727
Voltage Drop Calculation Notes:														
1) Calculations use the NFPA70(NEC 2014)														
Wire Resistance Values compensated to 125 Degrees Fahrenheit (Chp. 9, Table 8)														
2) Calculations are using the manufacturer's U.L. Max. current values for Notification Devices														
STANDBY HOURS REQUIRED														
ALARM SOUNDING MINUTES														
TOTAL SYSTEM STANDBY (A)														
TOTAL SYSTEM ALARM (A)														
TOTAL SYSTEM STANDBY (A/H)														
TOTAL SYSTEM ALARM (A/H)														
MINIMUM AH BATTERY REQUIRED														
WITH 20% SPARE CAPACITY (A/H)														
BATTERIES PROVIDED AT 12VDC (A/H) (2) 10 AH														

## NORTH WILLIAMS APARTMENTS

EST SERIES (BPS10A) REMOTE BOOSTER SUPPLY BATTERY CALCULATION

MODEL	Desc	DEVICE QTY.	1-Way Distance Feet	Wire Gauge #	Ohms Per Foot	Total Ohms	Volts at Eol	Min Volts Req'd	Volt Drop EOL Method	Drop% EOL Volt	STANDBY (A)	ALARM (A)	TOTAL STANDBY (A)	TOTAL ALARM (A)
BPS10A	Remote Booster Supply, 10A	1									0.07000	0.27000	0.0700	0.2700
NAC CKT #1			264 FT	#14	2.60	0.686	18.349	16.00	2.051	10.05%	Ckt. Amps*	1.494		
GALFWF-H Horn, Hi db		9									0.0000	0.1660	0.0000	1.4940
NAC CKT #2			283 FT	#14	2.60	0.736	18.084	16.00	2.316	11.35%	Ckt. Amps*	1.674		
GL1WF-HDVMC Horn-Strobe, 15cd, Wall Hi db		2									0.0000	0.0400	0.0000	0.0800
GALFWF-H Horn, Hi db		9									0.0000	0.1660	0.0000	1.4940
NAC CKT #3			297 FT	#14	2.60	0.772	17.456	16.00	2.944	14.43%	Ckt. Amps*	1.906		
GALFWF-H Horn, Hi db		11									0.0000	0.1660	0.0000	1.8260
GL1WF-HDVMC Horn-Strobe, 15cd, Wall Hi db		2									0.0000	0.0400	0.0000	0.0800
NAC CKT #4			364 FT	#14	2.60	0.946	17.593	16.00	2.807	13.76%	Ckt. Amps*	1.483		
GALFWF-H Horn, Hi db		8									0.0000	0.1660	0.0000	1.3280
GL1WF-HDVMC Horn-Strobe, 75cd, Wall Hi db		1									0.0000	0.1250	0.0000	0.1250
GL1WF-VMC Strobe 15cd, Wall		1									0.0000	0.0300	0.0000	0.0300
CURRENT TOTALS (A)-->											Nac Ckts=	6.457	0.070	6.727
Voltage Drop Calculation Notes:														
1) Calculations use the NFPA70(NEC 2014)														
Wire Resistance Values compensated to 125 Degrees Fahrenheit (Chp. 9, Table 8)														
2) Calculations are using the manufacturer's U.L. Max. current values for Notification Devices														
STANDBY HOURS REQUIRED														
ALARM SOUNDING MINUTES														
TOTAL SYSTEM STANDBY (A)														
TOTAL SYSTEM ALARM (A)														
TOTAL SYSTEM STANDBY (A/H)														
TOTAL SYSTEM ALARM (A/H)														
MINIMUM AH BATTERY REQUIRED														
WITH 20% SPARE CAPACITY (A/H)														
BATTERIES PROVIDED AT 12VDC (A/H) (2) 10 AH														

## NORTH WILLIAMS APARTMENTS

EST SERIES (BPS10A) REMOTE BOOSTER SUPPLY BATTERY CALCULATION

MODEL	Desc	DEVICE QTY.	1-Way Distance Feet	Wire Gauge #	Ohms Per Foot	Total Ohms	Volts at Eol	Min Volts Req'd	Volt Drop EOL Method	Drop% EOL Volt	STANDBY (A)
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SHEET NOTES

A. FOR GENERAL NOTES & LEGEND SEE FA0.01.

KEYED NOTES

- 1. FIRE ALARM RELAY FOR ELEVATOR SMOKE CURTIAN CONTROL.
- 2. FIRE ALARM RELAY FOR FIRESMOKE DAMPER CONTROL.
- 3. FIRE ALARM RELAY FOR TRASH CHUTE DOOR CONTROL.
- 4. VERIFY LOCATION AND QUANTITY OF SPRINKLER EQUIPMENT WITH SPRINKLER CONTRACTOR.
- 5. AREA OF RESCUE ASSISTANCE TWO-WAY COMMUNICATION CALL STATION.
- 6. AREA OF RESCUE TWO-WAY COMMUNICATION HEAD END PANEL AND POWER SUPPLY AND MONITOR MODULE FOR POWER SUPPLY TROUBLE MONITOR.

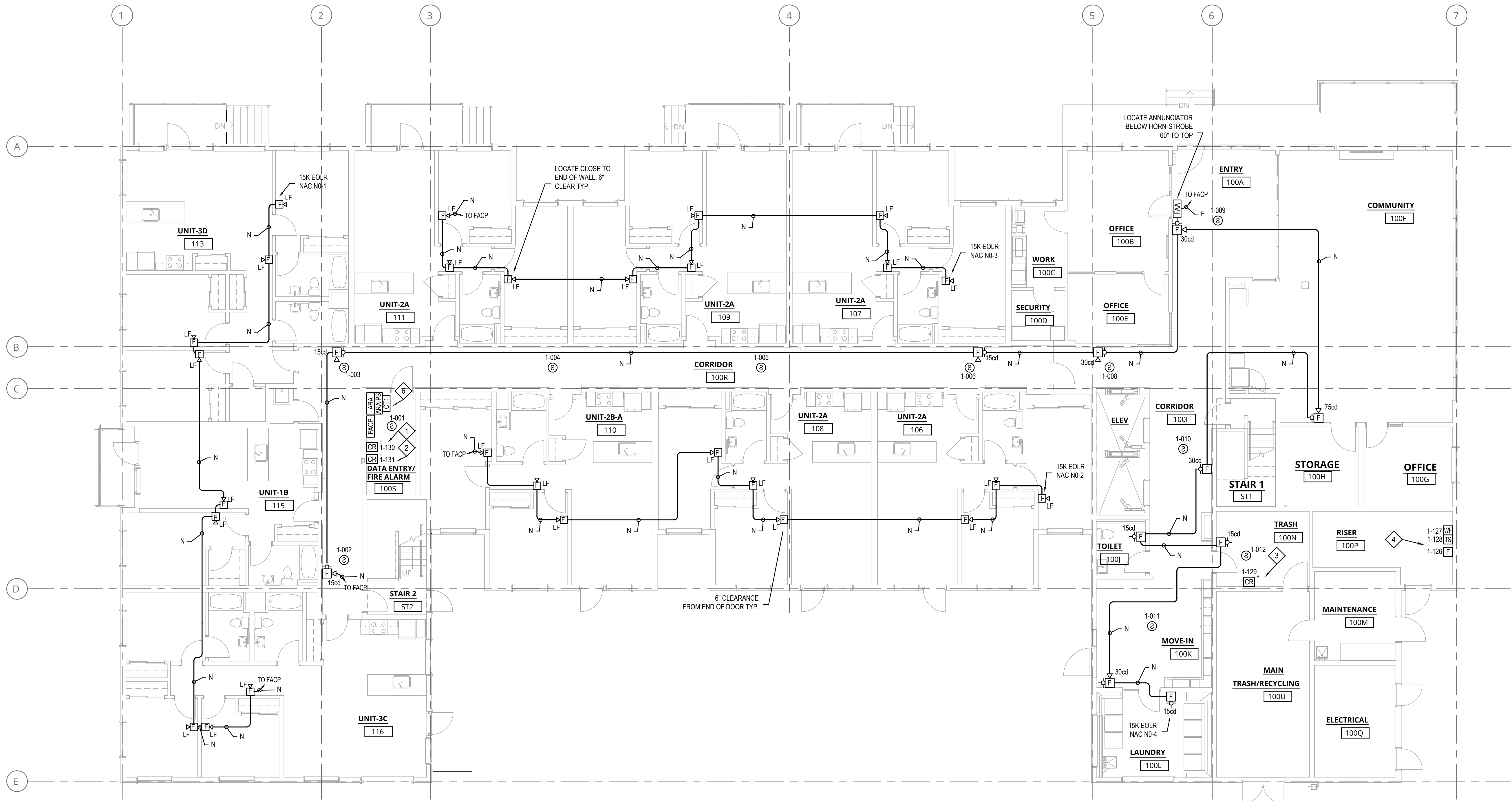
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HALBERG, MARK W  
OREGON LICENSE  
#22907J

Fire Alarm Designer  
JOSEPH MOUNT  
Fire Alarm Systems, Level 4  
NICET #96586  
Expires: 3/31/2019

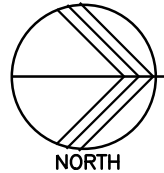


NORTH WILLIAMS APARTMENTS

2156 N. WILLIAMS AVE  
PORTLAND, OR 97227



1 LEVEL ONE – FIRE ALARM  
SCALE: 1/8" = 1'-0"



REV	DATE	DESCRIPTION
0	10-09-2018	FIRE ALARM CMP/PERMIT SET

DRAWN BY: JOSEPH MOUNT  
Job Contact: NATHAN BUTZ  
Job Number: WO 5026

SHOP DRAWINGS

LEVEL ONE  
FIRE ALARM

FA101



SHEET NOTES

A. FOR GENERAL NOTES & LEGEND SEE FA0.01.

KEYED NOTES

- 1. FIRE ALARM RELAY FOR ELEVATOR SMOKE CURTIAN CONTROL.
- 2. FIRE ALARM RELAY FOR FIRE/SMOKE DAMPER CONTROL.
- 3. FIRE ALARM RELAY FOR TRASH CHUTE DOOR CONTROL.
- 4. VERIFY LOCATION AND QUANTITY OF SPRINKLER EQUIPMENT WITH SPRINKLER CONTRACTOR.

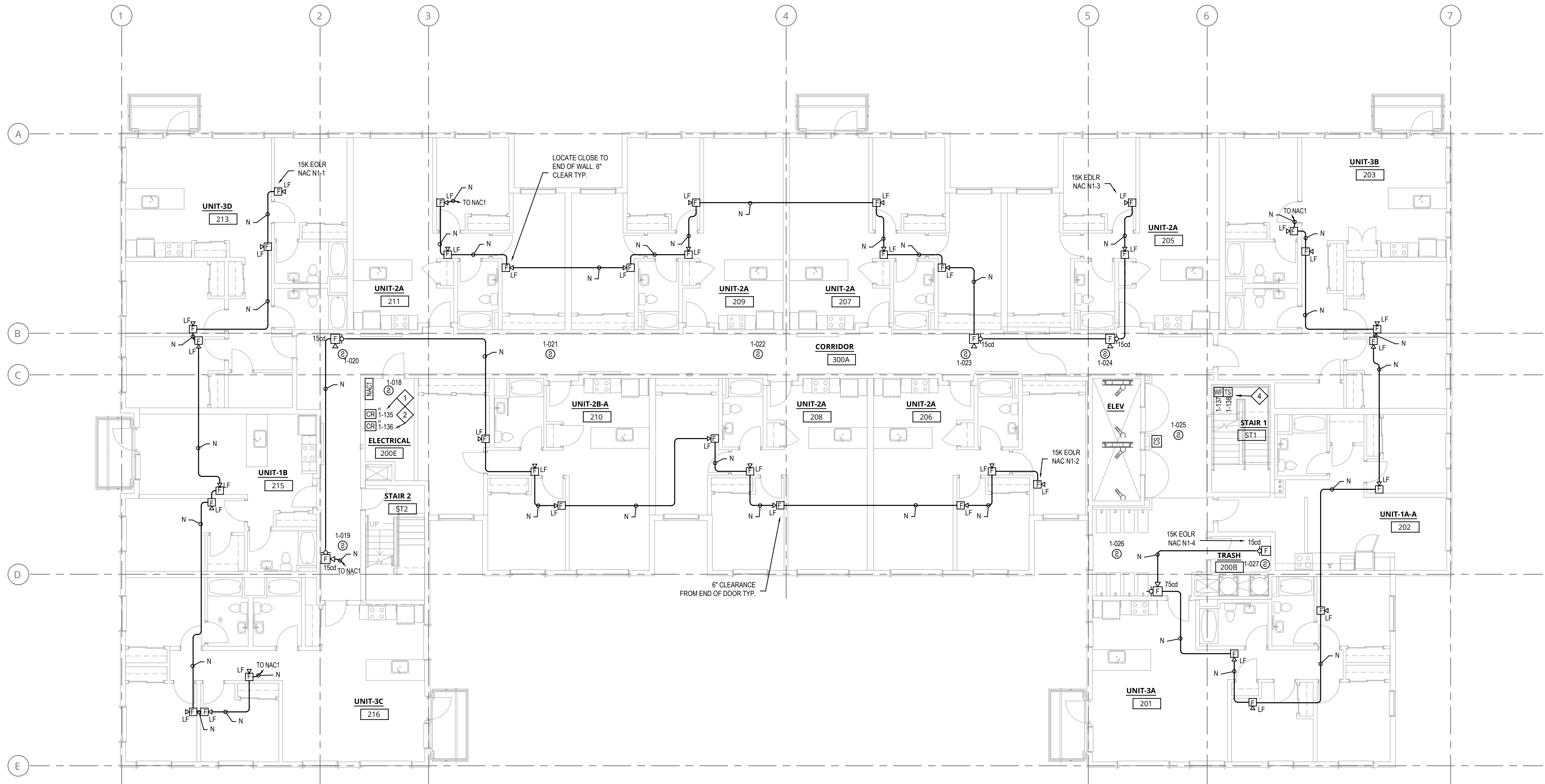
SIGNED BY:  
HALBERG, MARK W  
OREGON LICENSE  
#22907J

Fire Alarm Designer  
JOSEPH MOUNT  
Fire Alarm Systems, Level 4  
NICET #96586  
Expires: 3/31/2019

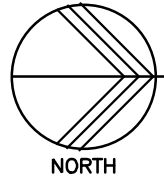
**GB**  
**MANCHESTER**  
TECHNOLOGY SYSTEMS  
6000 NE 88TH Street, Suite B103  
Vancouver, WA 98665  
Tel: (360) 616-0454 Fax: (360) 616-0482

NORTH WILLIAMS APARTMENTS

2156 N. WILLIAMS AVE  
PORTLAND, OR 97227



1 LEVEL TWO – FIRE ALARM  
SCALE: 1/8" = 1'-0"



REV	DATE	DESCRIPTION
0	10-09-2018	FIRE ALARM CMP/PERMIT SET

DRAWN BY: JOSEPH MOUNT  
Job Contact: NATHAN BUTZ  
Job Number: WO 5026

SHOP DRAWINGS

LEVEL TWO  
FIRE ALARM

FA102



SHEET NOTES

A. FOR GENERAL NOTES & LEGEND SEE FA0.01.

KEYED NOTES

- 1. FIRE ALARM RELAY FOR ELEVATOR SMOKE CURTIAN CONTROL.
- 2. FIRE ALARM RELAY FOR FIRE/SMOKE DAMPER CONTROL.
- 3. FIRE ALARM RELAY FOR TRASH CHUTE DOOR CONTROL.
- 4. VERIFY LOCATION AND QUANTITY OF SPRINKLER EQUIPMENT WITH SPRINKLER CONTRACTOR.

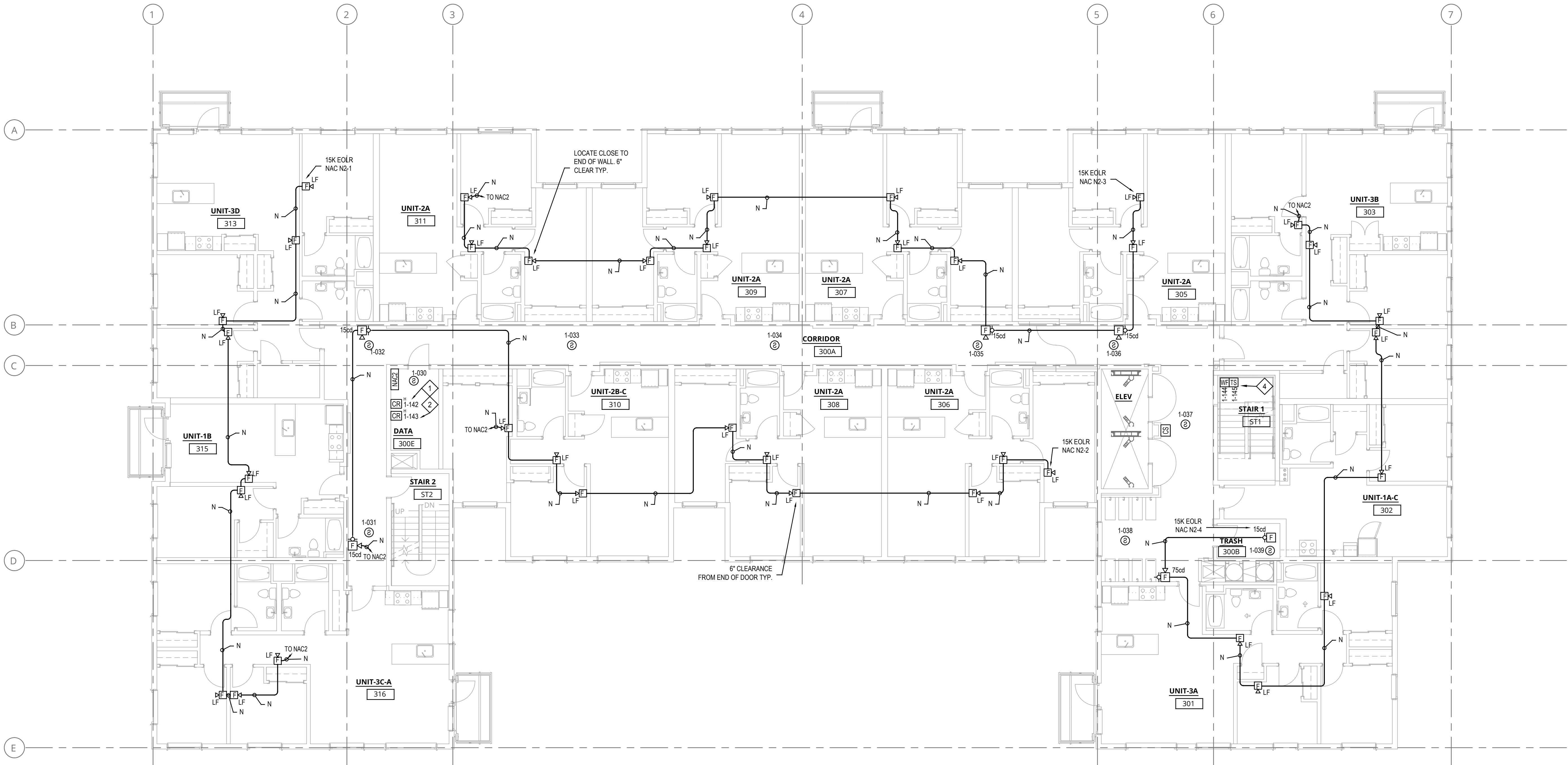
SIGNED BY:  
HALBERG, MARK W  
OREGON LICENSE  
#22907J

Fire Alarm Designer  
JOSEPH MOUNT  
Fire Alarm Systems, Level 4  
NICET #96586  
Expires: 3/31/2019

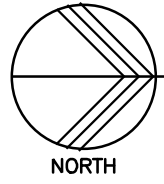


NORTH WILLIAMS APARTMENTS

2156 N. WILLIAMS AVE  
PORTLAND, OR 97227



1 LEVEL THREE – FIRE ALARM  
SCALE: 1/8" = 1'-0"



REV	DATE	DESCRIPTION
0	10-09-2018	FIRE ALARM GMP/PERMIT SET

DRAWN BY: JOSEPH MOUNT  
Job Contact: NATHAN BUTZ  
Job Number: WO 5026

SHOP DRAWINGS

LEVEL THREE  
FIRE ALARM

FA103



SHEET NOTES

A. FOR GENERAL NOTES & LEGEND SEE FA0.01.

KEYED NOTES

- 1. FIRE ALARM RELAY FOR ELEVATOR SMOKE CURTIAN CONTROL.
- 2. FIRE ALARM RELAY FOR FIRE/SMOKE DAMPER CONTROL.
- 3. FIRE ALARM RELAY FOR TRASH CHUTE DOOR CONTROL.
- 4. VERIFY LOCATION AND QUANTITY OF SPRINKLER EQUIPMENT WITH SPRINKLER CONTRACTOR.

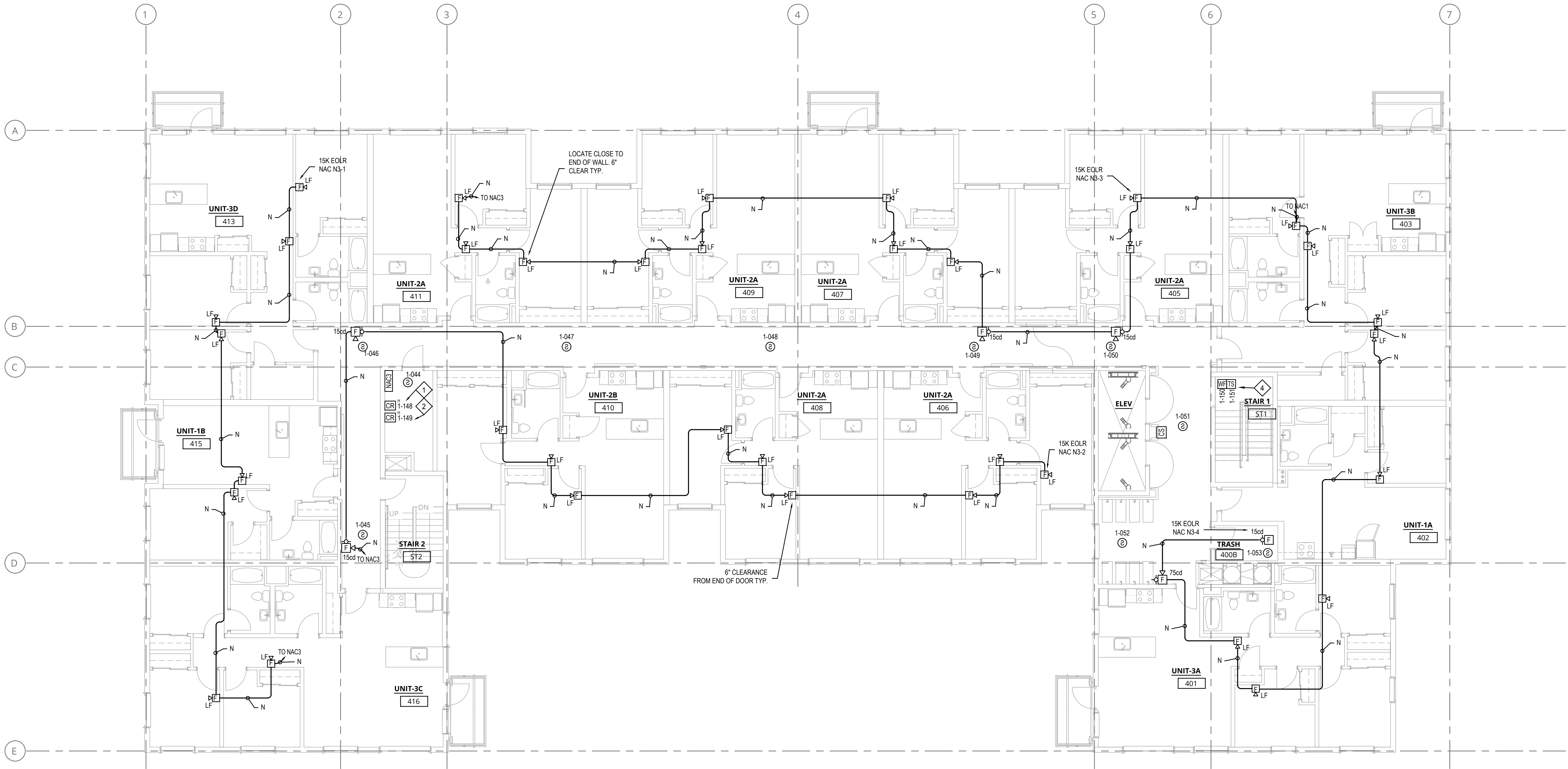
SIGNED BY:  
HALBERG, MARK W  
OREGON LICENSE  
#22907J

Fire Alarm Designer  
JOSEPH MOUNT  
Fire Alarm Systems, Level 4  
NICET #96586  
Expires: 3/31/2019

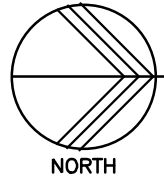


NORTH WILLIAMS APARTMENTS

2156 N. WILLIAMS AVE  
PORTLAND, OR 97227



1 LEVEL FOUR – FIRE ALARM  
SCALE: 1/8" = 1'-0"



REV	DATE	DESCRIPTION
0	10-09-2018	FIRE ALARM CMP/PERMIT SET

DRAWN BY: JOSEPH MOUNT  
Job Contact: NATHAN BUTZ  
Job Number: WO 5026

SHOP DRAWINGS

LEVEL FOUR  
FIRE ALARM

FA104



SHEET NOTES

A. FOR GENERAL NOTES & LEGEND SEE FA0.01.

KEYED NOTES

1. FIRE ALARM RELAY FOR ELEVATOR SMOKE CURTIAN CONTROL.
2. FIRE ALARM RELAY FOR FIRE/SMOKE DAMPER CONTROL.
3. FIRE ALARM RELAY FOR TRASH CHUTE DOOR CONTROL.
4. VERIFY LOCATION AND QUANTITY OF SPRINKLER EQUIPMENT WITH SPRINKLER CONTRACTOR.
5. LOCATED HEAT DETECTOR WITHIN 24" OF SPRINKLER HEAD. COORDINATE WITH SPRINKLER CONTRACTOR.
6. ELEVATOR SMOKE RELIEF DAMPER FIRE ALARM CONTROL RELAY.

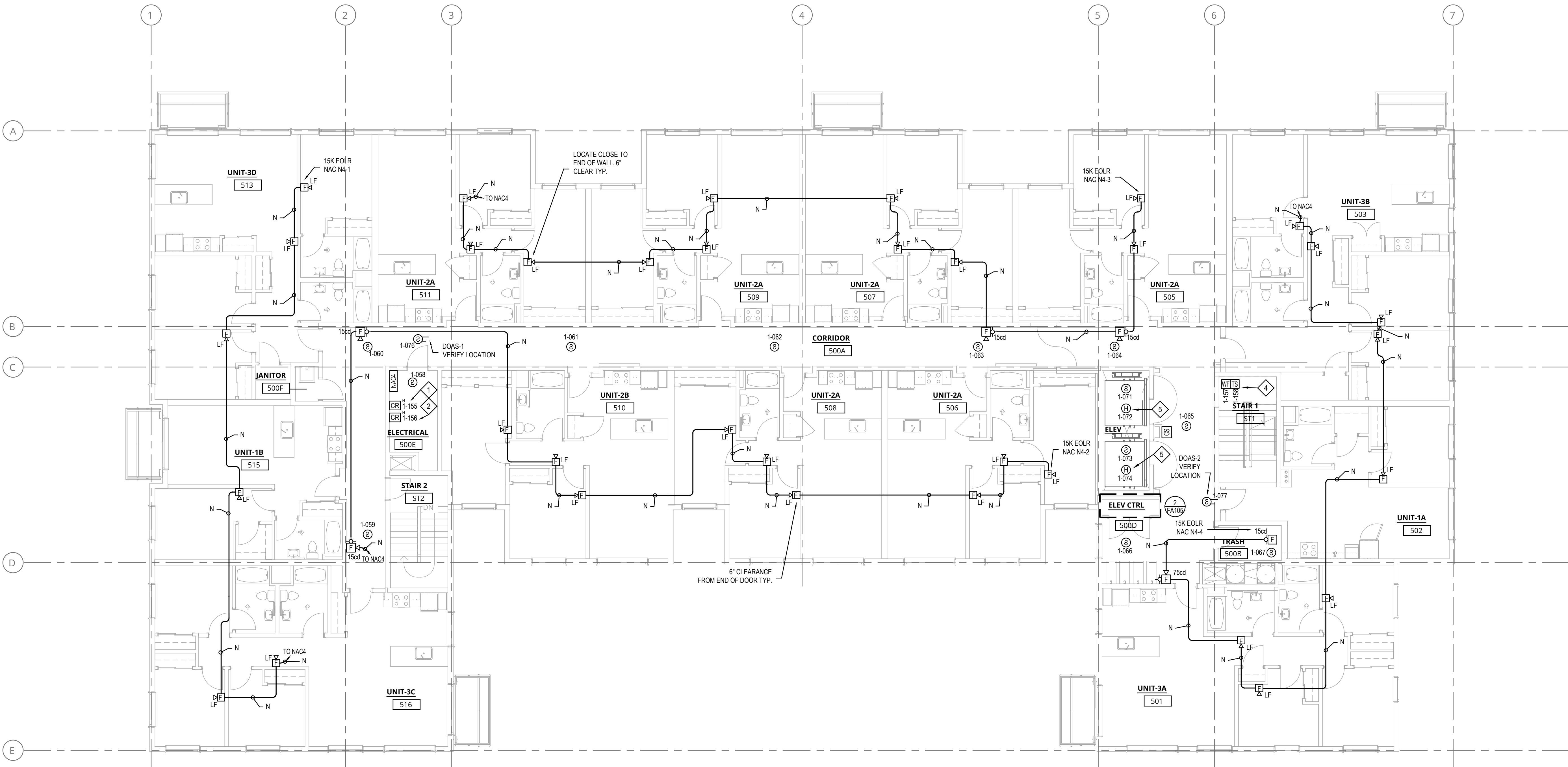
SIGNED BY:  
HALBERG, MARK W  
OREGON LICENSE  
#22907J

Fire Alarm Designer  
JOSEPH MOUNT  
Fire Alarm Systems, Level 4  
NICET #96586  
Expires: 3/31/2019

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TECHNOLOGY SYSTEMS  
6000 NE 88TH Street, Suite B103  
Vancouver, WA 98665  
Tel: (360) 515-0454 Fax: (360) 515-0452

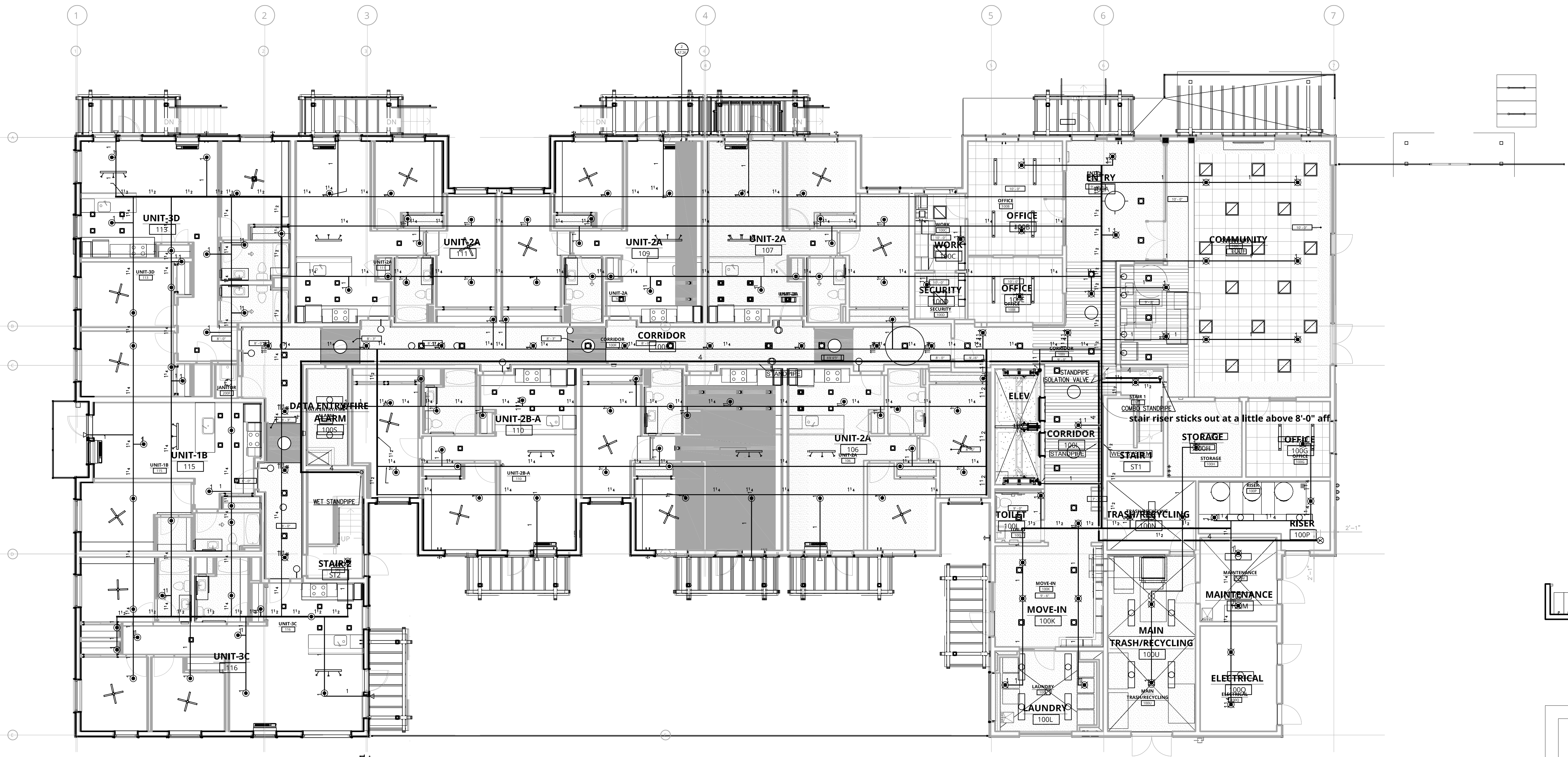
NORTH WILLIAMS APARTMENTS

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PORTLAND, OR 97227

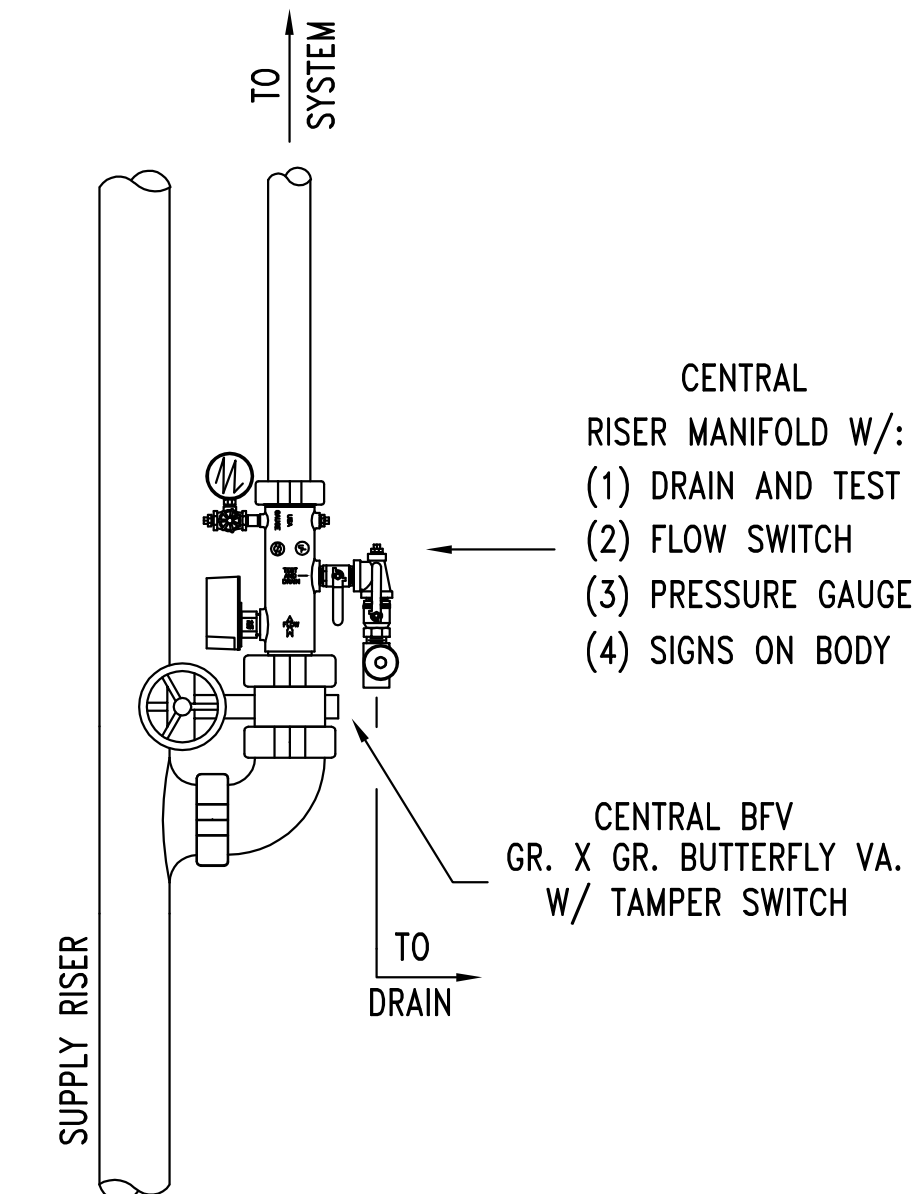
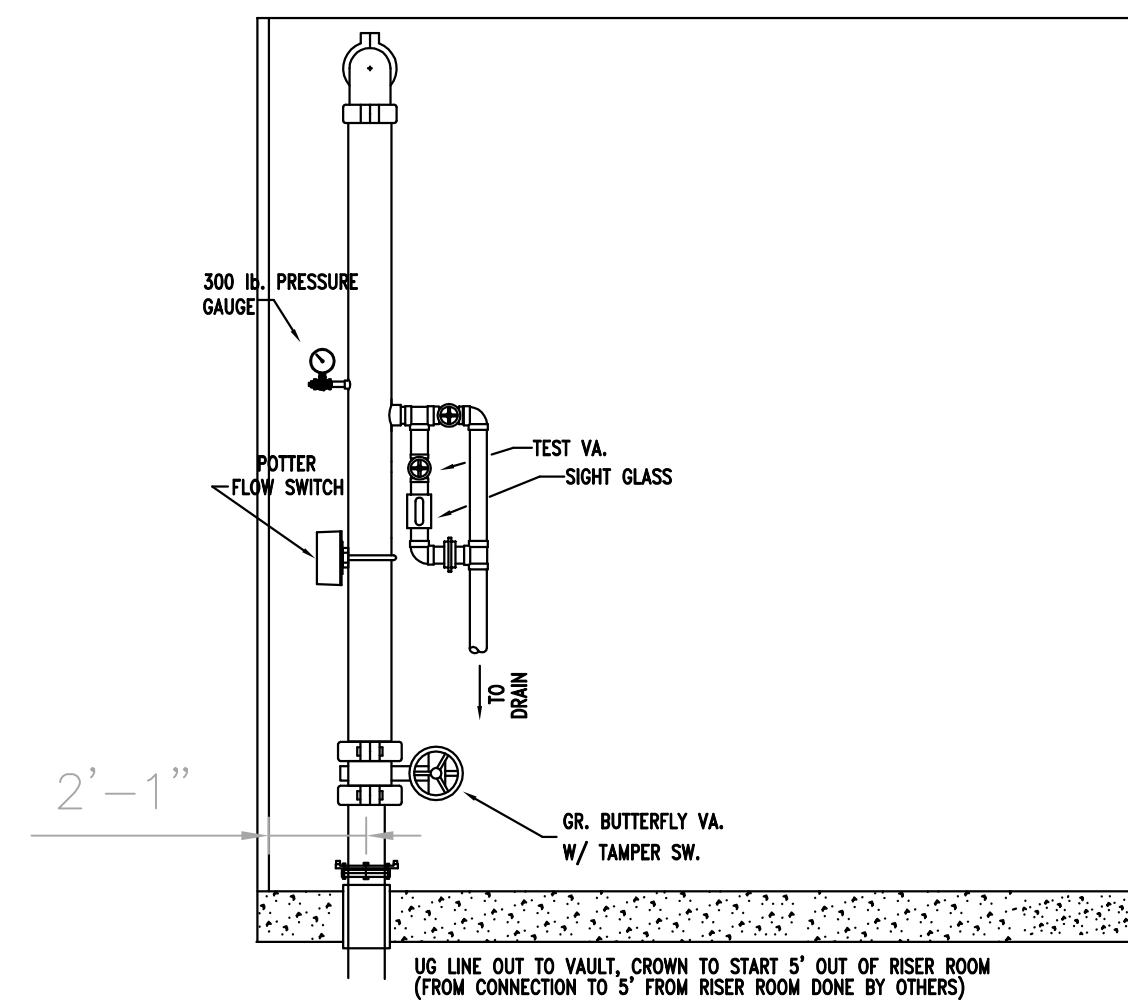




N WILLIAMS AVENUE



## 1st Floor FIRE SPRINKLER PLAN

$$1/8'' = 1'-0''$$



## GENERAL LEGEND

	EARTHQUAKE BRACING
	PIPE HANGER
	FLEXIBLE COUPLING
	RIGID COUPLING
	GAP
	PLUG VALVE
	GATE VALVE
	HYDRAULIC REFERENCE POINT
	BOR CENTERLINE PIPE TO BOTTOM OF DECK
	BOR CENTERLINE PIPE TO BOTTOM OF BEAM
	BOR CENTERLINE PIPE TO BOTTOM OF JOIST
	FMS FACE OF SITED
	FMS FACE OF WALL
	INSIDE FACE OF WALL
	ABOVE FINISHED FLOOR
	BELOW FINISHED FLOOR
	MAIN PIPE NUMBERS
	WELDED OUTLET
	T/F FITTING
	END TO CENTER
	C/E CENTERS TO END
	GROOVE/GROOVE
	GROOVE/SCRIBE (ALSO 90°)
	THREAD/7/11 (ALSO 7xT)
	DRAIN DEEP DRAIN

[illegible]

RAWN BY: W. Jones
CONTRACT NO: 18-21
DATE: 5/8/2108
SYSTEM TYPE: WET
HAZARD: LIGHT
CL: CITY OF PORTLAND

MITTAL

 NORTH	DRAWING NUMBER
	1 of 5

7402 S.E. JOHNSON CREEK BLVD.  
PORTLAND, OR 97206  
PH 503 777-5030 FAX 503 777-0659  
METRO LIC#: (002366)  
CCB #163820



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**NORTH WILLIAMS**  
2156 N Williams Ave  
Portland, OR 97227


CONTRACT WITH: Ankrom Moisan





GENERAL LEGEND	
	EARTHQUAKE BRACING
	PIPE HANGER
	GROUND COUPLING
	COUPLING
	CAP
	PLUG
	CENTERLINE
	REFERENCE POINT
	CENTERLINE PIPE TO BOTTOM OF BEAM
	BOTTOM OF BEAM
	CENTERLINE PIPE TO BOTTOM OF JOIST
	BOTTOM OF JOIST
	FACE OF WALL
	INSIDE FACE OF WALL
	OUTSIDE FACE OF WALL
	GROUND REDUCING COUPLING
	MAIN PIPE NUMBERS
	TEE FITTING
	END TO CENTER
	CENTER TO CENTER
	CENTER TO GROOVE
	THRU GROOVE (ALSO 1/4")
	GROOVE TO GROOVE (ALSO 1/4")
	END OF BEAM

DRAWN BY: W. Jones
CONTRACT NO: 18-21
DATE: 5/8/2018
SYSTEM TYPE: WET
HAZARD: LIGHT
AHJ: CITY OF PORTLAND


 DRAWING NUMBER  
 2 of 5



**CROWN**  
FIRE SYSTEMS

***NORTH WILLIAMS***  
2156 N Williams Ave  
Portland, OR 97227





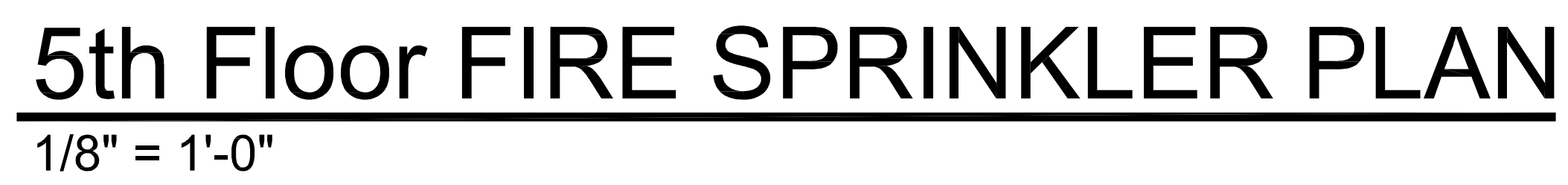




CONTRACT NAME: ***NORTH WILLIAMS***  
2156 N Williams Ave  
Portland, OR 97227

CONTRACT WITH: Anshom Moisan



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**MANCHESTER**  
TECHNOLOGY SYSTEMS  
6000 NE 88TH Street, Suite B103  
Vancouver, WA 98665  
Tel. (360) 515-0454 Fax. (360) 515-0482

NORTH WILLIAMS APARTMENTS  
FAMILY HOUSING

2156 N WILLIAMS AVENUE  
PORTLAND, OREGON

REV	DATE	DESCRIPTION
0	09.25.2018	TECHNOLOGY SHOP DRAWINGS
1	10.09.2018	GMP SET

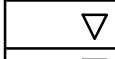
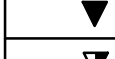
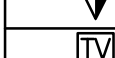
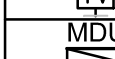
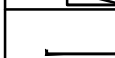
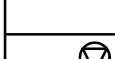
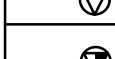
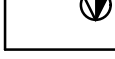
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Job Contact:  
Job Number:

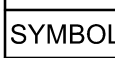








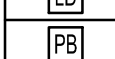





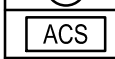





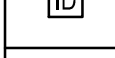

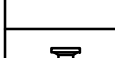




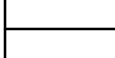

NOAH T  
LARS L  
510596

PERMIT / GMP

COVER SHEET  
TECHNOLOGY

T0.01

LOW VOLTAGE LEGEND			
SYMBOL	ITEM	CABLE	BACK BOX
	DATA	(1) CAT6	1 GANG
	PHONE	(1) CAT6	1 GANG
	PHONE/DATA	(2) CAT6	1 GANG
	TV LOCATION	(1) RG6	1 GANG
	UNIT LV DIST. CENTER	N/A	N/A
	TELECOM DEMARC BACKBOARD, BY OTHERS	N/A	N/A
	CEILING MOUNTED DATA	(1) CAT6	1 GANG
	CEILING MOUNTED PHONE AND DATA	(2) CAT6	1 GANG

SECURITY LEGEND			
SYMBOL	ITEM	CABLE	BACK BOX
	CARD READER	22-6	1 GANG
	CARD READER/KEYAD	22-6	1 GANG
	DOOR CONTACT	22-2	N/A
	REQUEST TO EXIT	22-4	1 GANG HORIZ
	ELECTRIC LOCK	18-4	N/A
	ELECTRIC STRIKE	18-4	N/A
	ELECTRIC PANIC	18-4	N/A
	MAGNETIC LOCK	18-4	N/A
	INTRUSION KP	18-4	1 GANG
	LOCKDOWN BUTTON	22-6	1 GANG
	PANIC BUTTON	22-4	1 GANG
	MOTION DETECTOR - 360 DEGREE	22-4	
	MOTION DETECTOR	22-4	
	WIRELESS RECEIVER	22-6/18-4	1 GANG
	CABLE TO ADA OPERATOR	22-6	N/A
	HANDICAP BUTTON	22-4	1 GANG
	GLASSBREAK DETECTOR	22-4	1 GANG
	ACCESS CONTROL PANEL	N/A	N/A
	SECURITY PANEL	N/A	N/A
	ELEVATOR CONTROL	22-4	N/A
	GATE CONTROL	18-4	N/A
	ENTRY INTERCOM STATION	VARIES - SEE DRAWING	CUSTOM
	ENTRY INTERCOM DISPLAY	VARIES - SEE DRAWING	CUSTOM
	TELEPHONE ENTRY	VARIES - SEE DRAWING	CUSTOM
	180 DEGREE SECURITY CAMERA	VARIES - SEE DRAWING	1 GANG
	360 DEGREE SECURITY CAMERA	VARIES - SEE DRAWING	1 GANG
	SECURITY CAMERA	VARIES - SEE DRAWING	2 GANG
	NETWORK SWITCH	VARIES - SEE DRAWING	N/A
	POWER SUPPLY	VARIES - SEE DRAWING	N/A
	SECURITY SIREN	18-2	1 GANG

SECURITY CABLE LEGEND		
MARK	ITEM	CABLE
A	ACCESS CONTROL BUNDLED CABLE	(1)22-2; (1)22-4; (1)22-6; (1)18-4
B	CABLE: 22-2	(1)22-2
C	CABLE: 22-4	(1)22-4
D	CABLE: 22-6 Shielded	(1)22-6
E	CABLE: 18-2	(1)18-2
F	CABLE: 18-4	(1)18-4
G	CABLE: 18-6	(1)18-6
H	CABLE: 16-2	(1)16-2
J	CABLE: CATEGORY 6 (CAT 6)	(1)CAT 6
K	CABLE: CATEGORY 6A (CAT 6A)	(1)CAT 6A
L	CABLE: CATEGORY 5e (CAT 5e)	(1)CAT 5e
M	FIBER OPTIC CABLE - 6 STRAND OM3	
N	CABLE: 16-4	(1)16-4



## 1. CAMERA MOUNTED ON LIGHT POLE

1. CAMERA MOUNTED ON LIGHT POLE



**TECHNOLOGY SYSTEMS**  
6000 NE 88TH Street, Suite B103  
Vancouver, WA 98665  
Tel: (360) 816-0484 Fax: (360) 816-0482

**2130 N WILLIAMS AVENUE  
PORTLAND, OREGON**

DRAWN BY: NOAH T  
 to Contact: LARS L  
 to Number: 510596

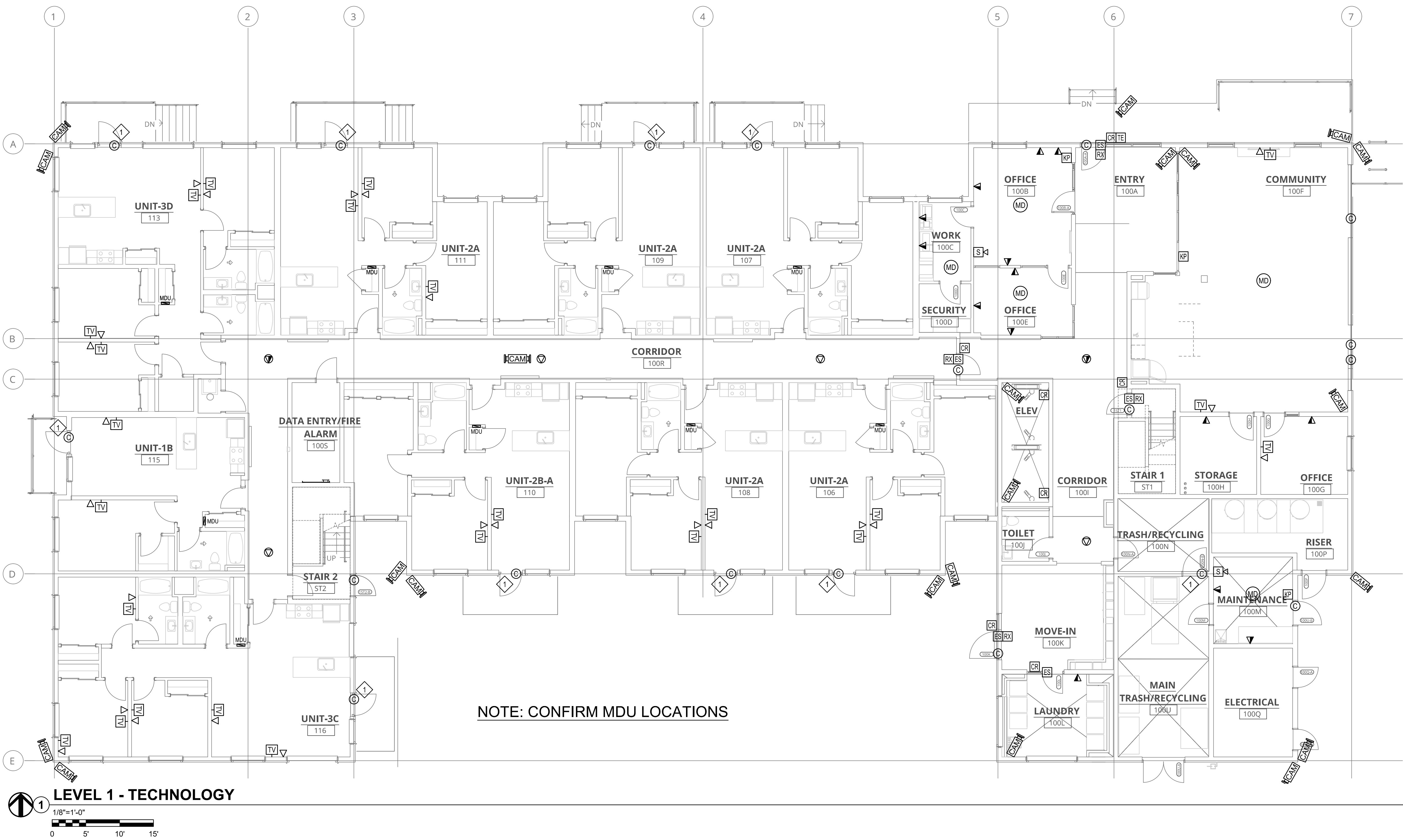
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TE PLAN -  
TECHNOLOGY

## Г1.01







**SHEET NOTES**

1. ACCESS CONTROL SYSTEM TO PROVIDE LOG OF DOOR ACTIVITY



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FAMILY HOUSING**  
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PORTLAND, OREGON

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1	10.05.2018	GMP SET

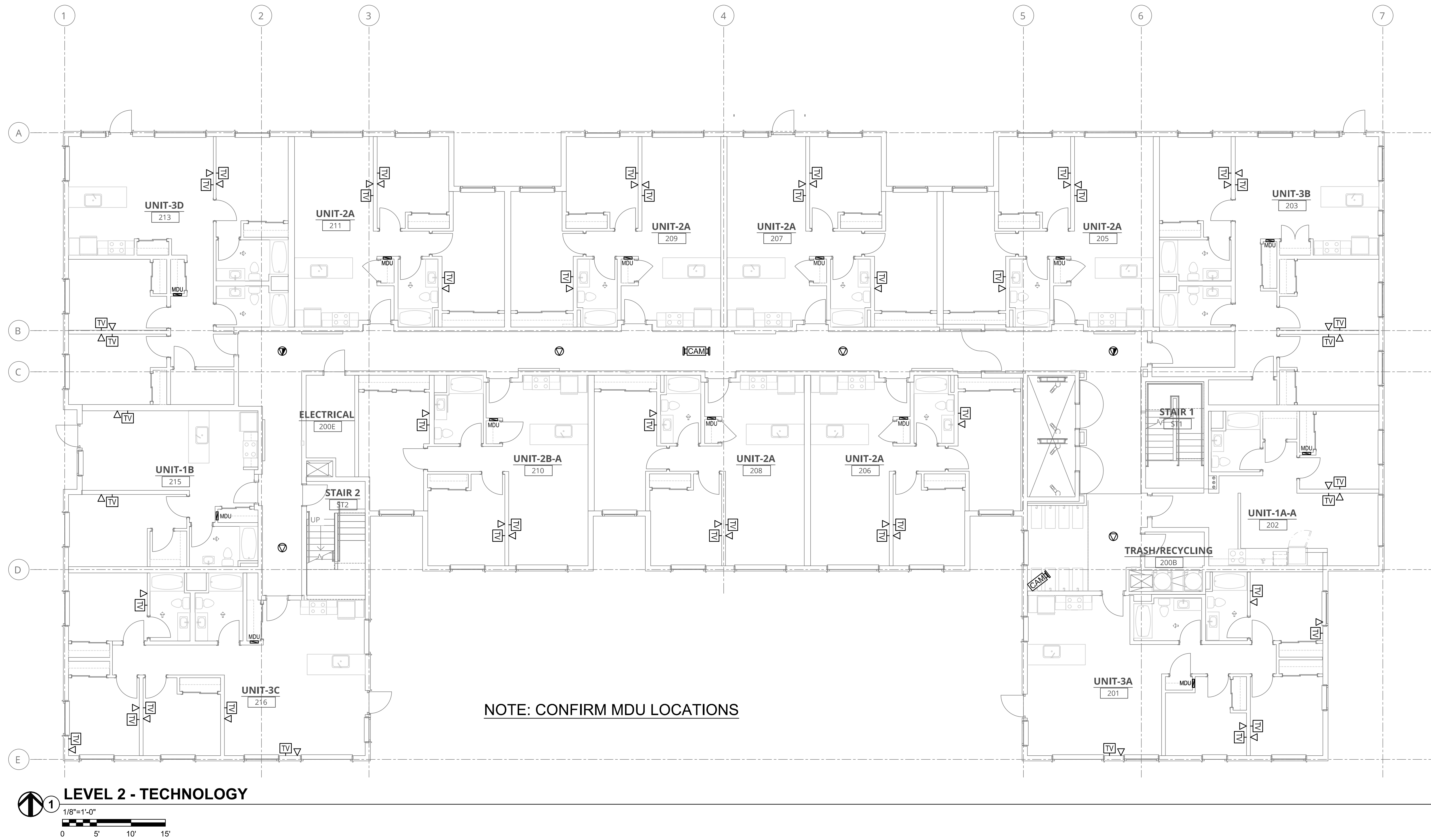
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Job Contact: LARS L  
Job Number: 510596

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FLOOR PLAN -  
LEVEL 1 -  
TECHNOLOGY

**T2.01**





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FAMILY HOUSING**  
2156 N WILLIAMS AVENUE  
PORTLAND, OREGON

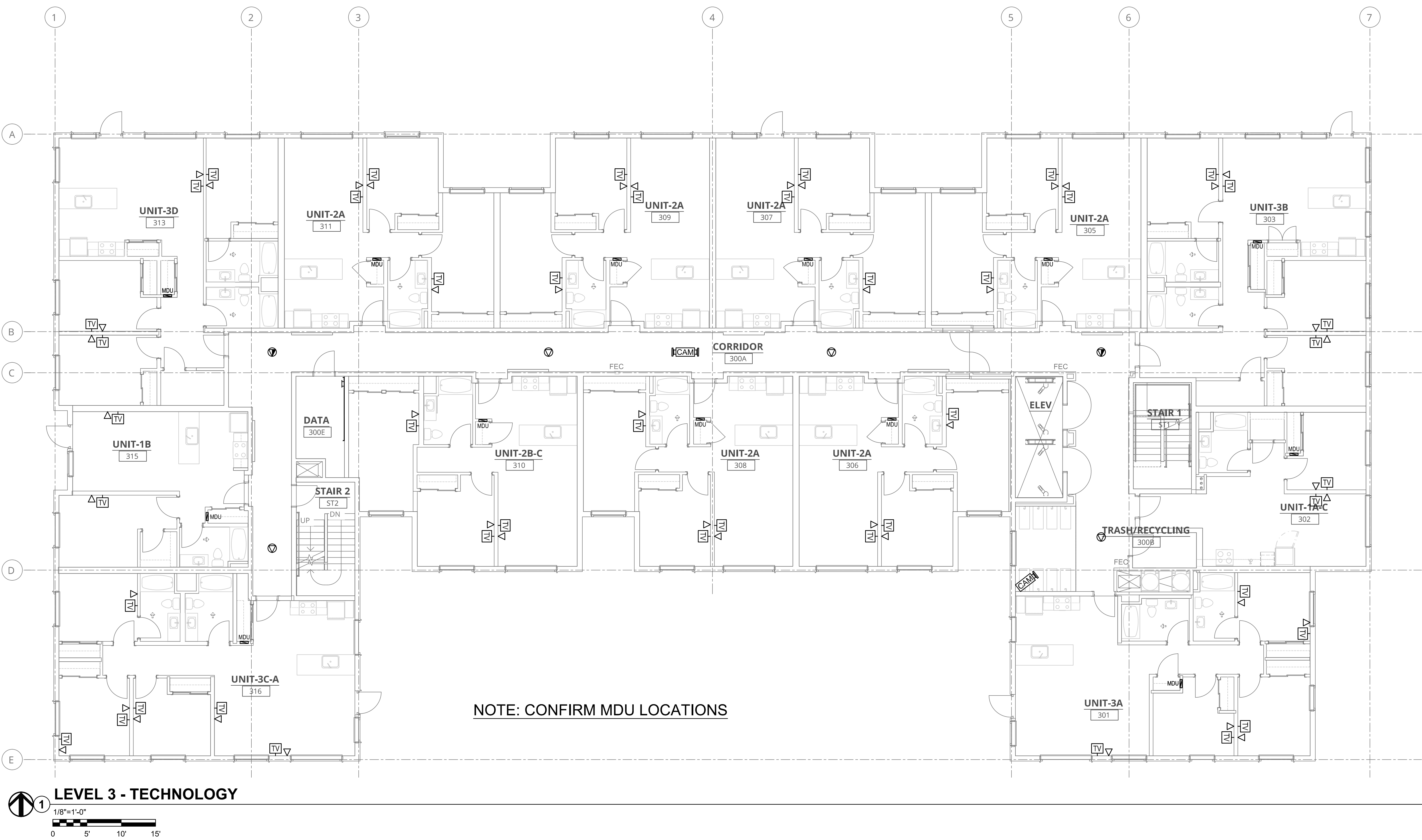
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Job Number: 510596

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FLOOR PLAN -  
LEVEL 2 -  
TECHNOLOGY  
**T2.02**





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PORTLAND, OREGON

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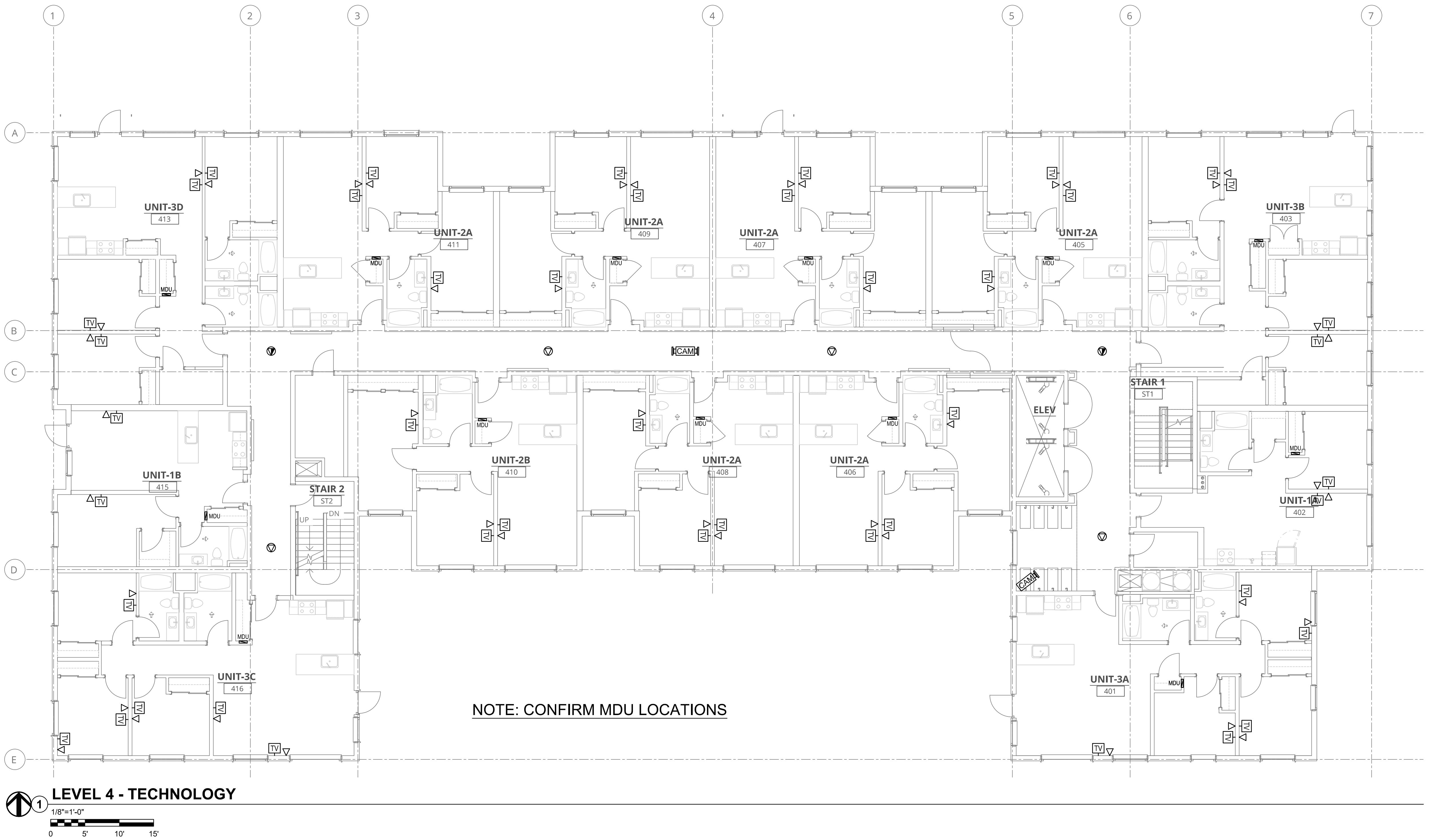
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Job Number: 510596

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FLOOR PLAN -  
LEVEL 3 -  
TECHNOLOGY

**T2.03**





**NORTH WILLIAMS APARTMENTS  
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2156 N WILLIAMS AVENUE  
PORTLAND, OREGON

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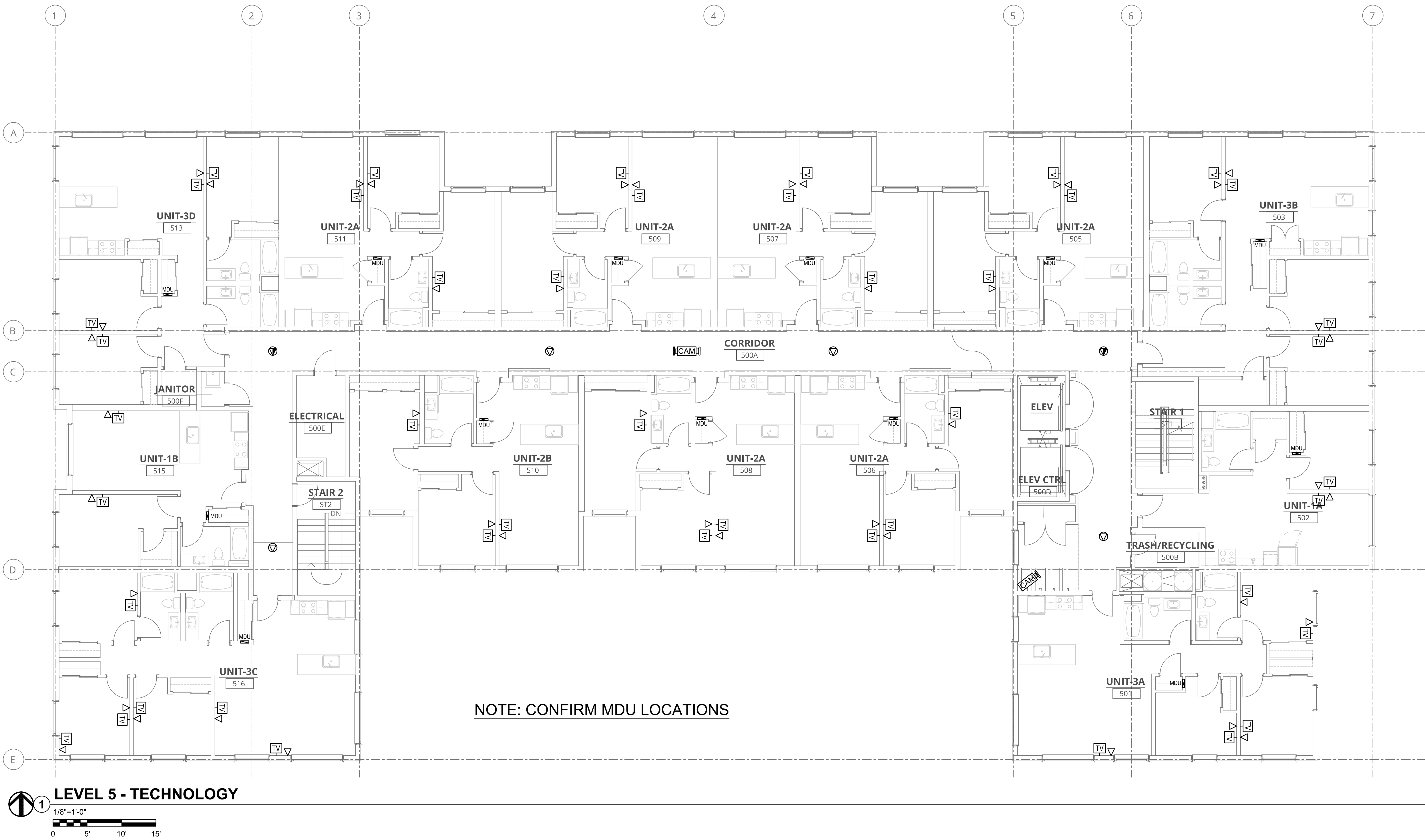
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Job Number: 510596

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FLOOR PLAN -  
LEVEL 4 -  
TECHNOLOGY

**T2.04**





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2156 N WILLIAMS AVENUE  
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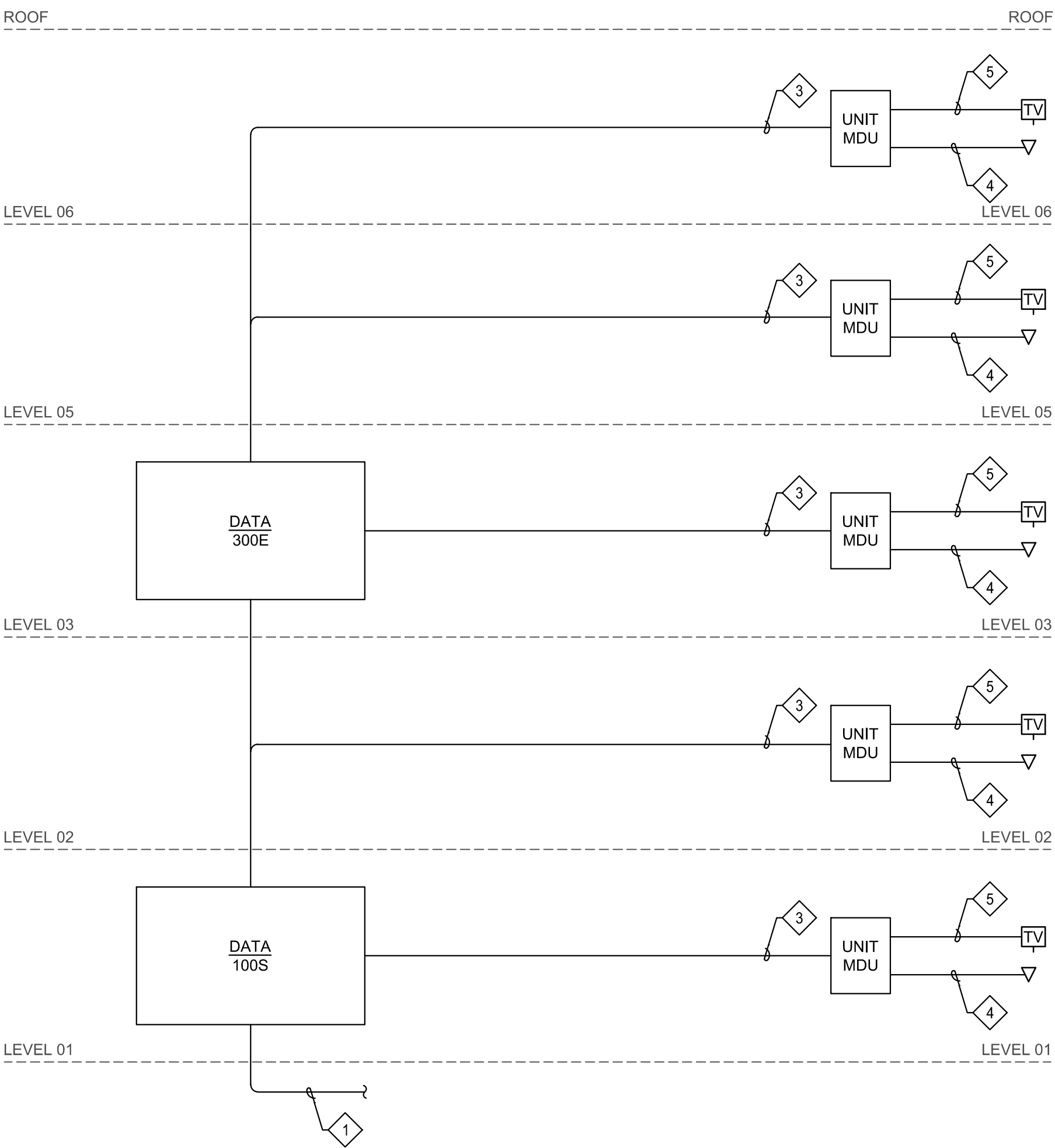
DRAWN BY: NOAH T  
Job Contact: LARS L  
Job Number: 510596

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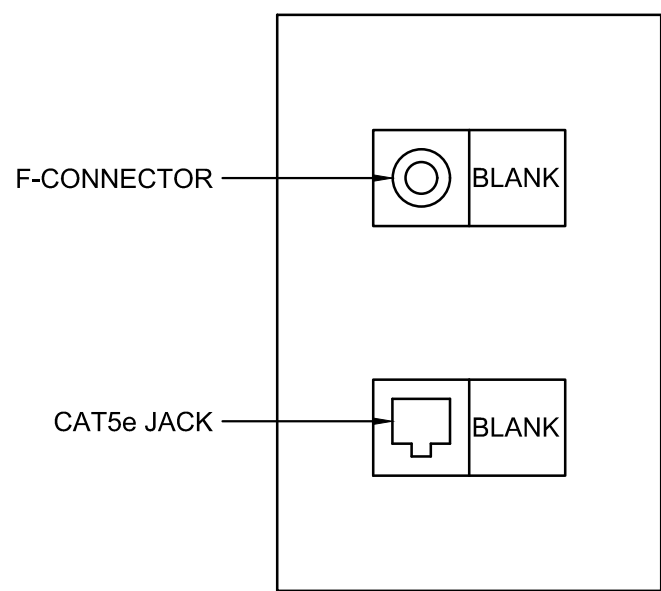
FLOOR PLAN -  
LEVEL 5 -  
TECHNOLOGY

**T2.05**





1 TELECOM RISER DIAGRAM  
NO SCALE



2 TYPICAL TELECOM OUTLET FACEPLATE  
NO SCALE

- KEYED NOTES**
1. INCOMING SERVICES BY SERVICE PROVIDERS. REFER TO ELECTRICAL SITE PLAN.
  2. NOT USED
  3. (1) RG6 CABLE AND (1) RUGGEDIZED FIBER CABLE. CABLE TO BE PROVIDED BY SERVICE PROVIDERS AND INSTALLED BY CONTRACTOR. TERMINATIONS BY SERVICE PROVIDER.
  4. (1) CAT5e CABLE PROVIDED AND INSTALLED BY GB MANCHESTER. TERMINATE CABLE ON CAT5e MODULE AND AT OUTLET. REFER TO DETAIL 2/T5.00.
  5. (1) RG6 CABLE PROVIDED AND INSTALLED BY GB MANCHESTER. COIL CABLE AT MDU AND TERMINATE AT OUTLET. REFER TO DETAIL 2/T5.00.



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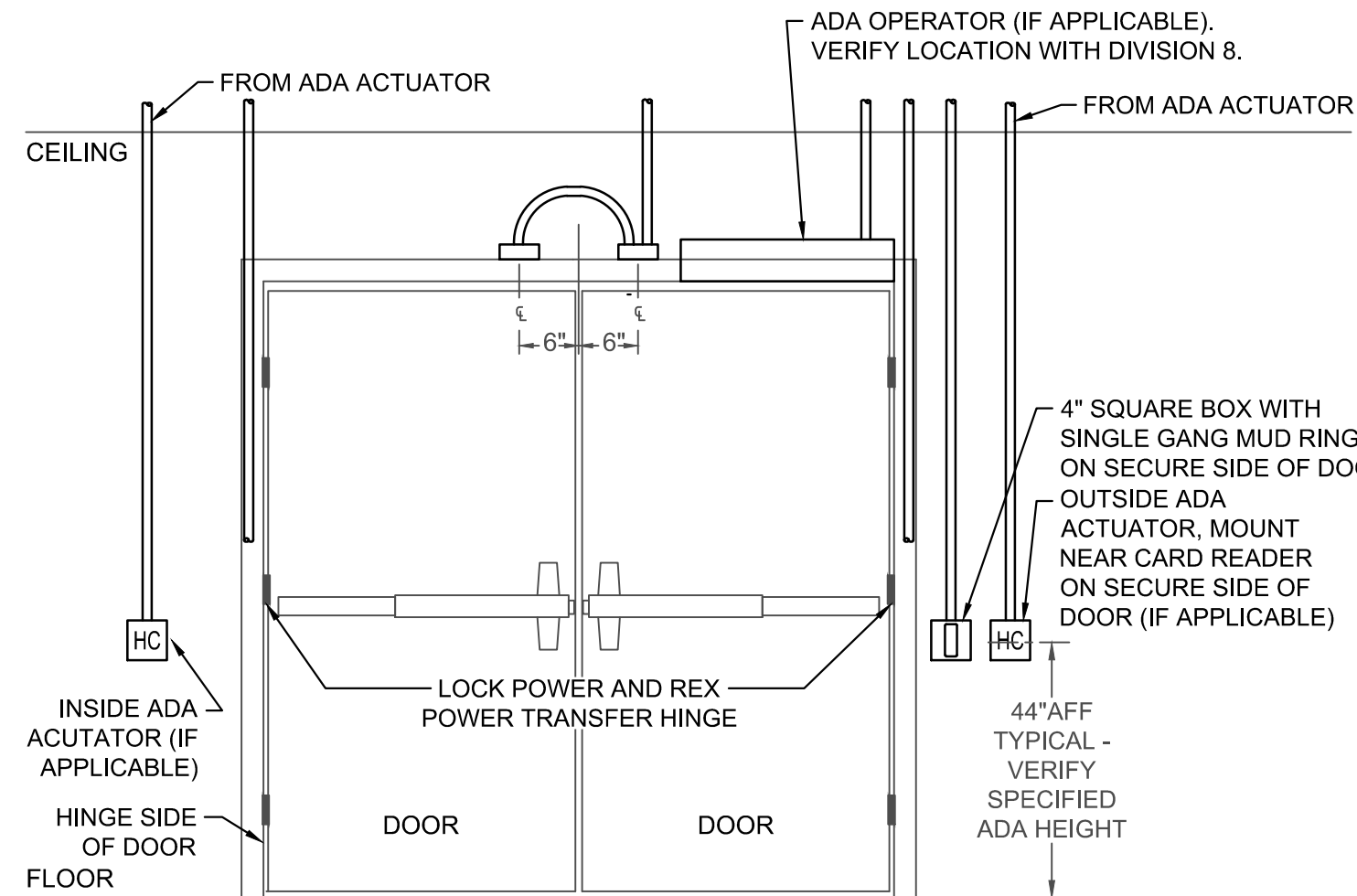
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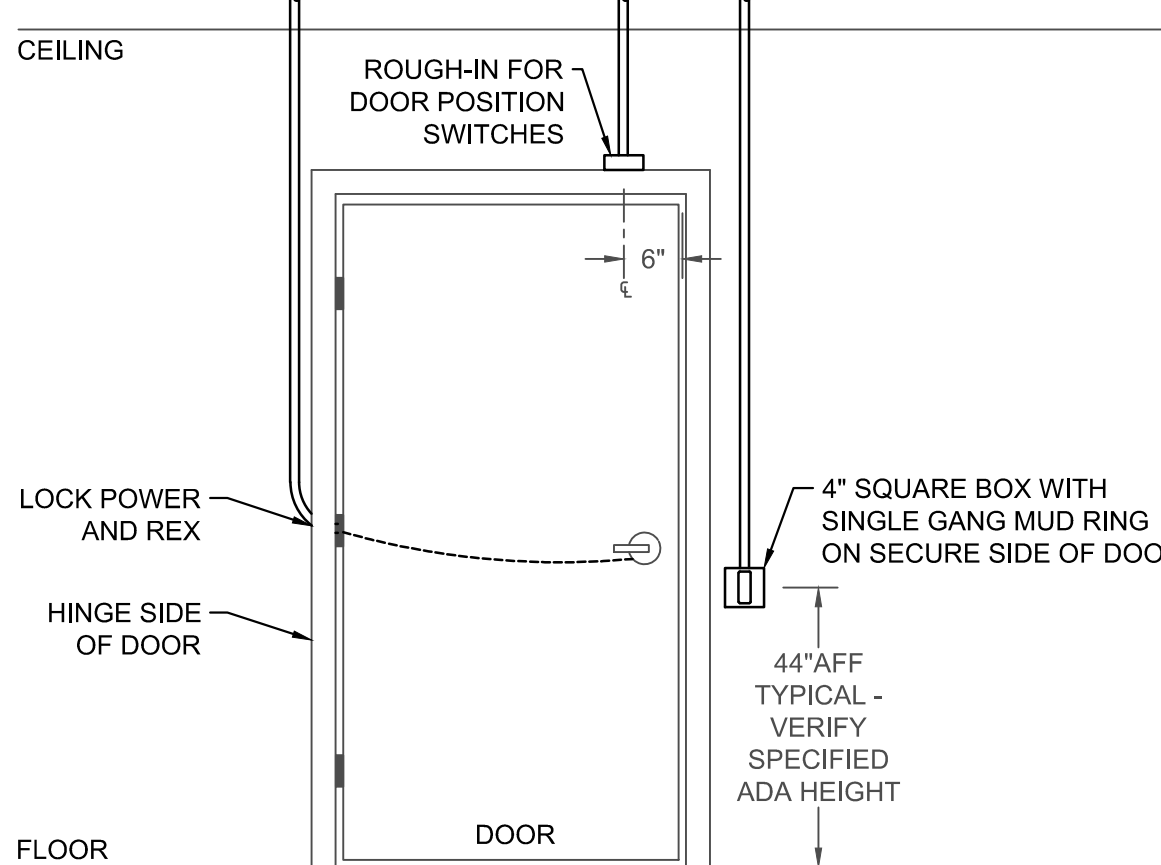
DETAILS -  
TECHNOLOGY

**T6.01**

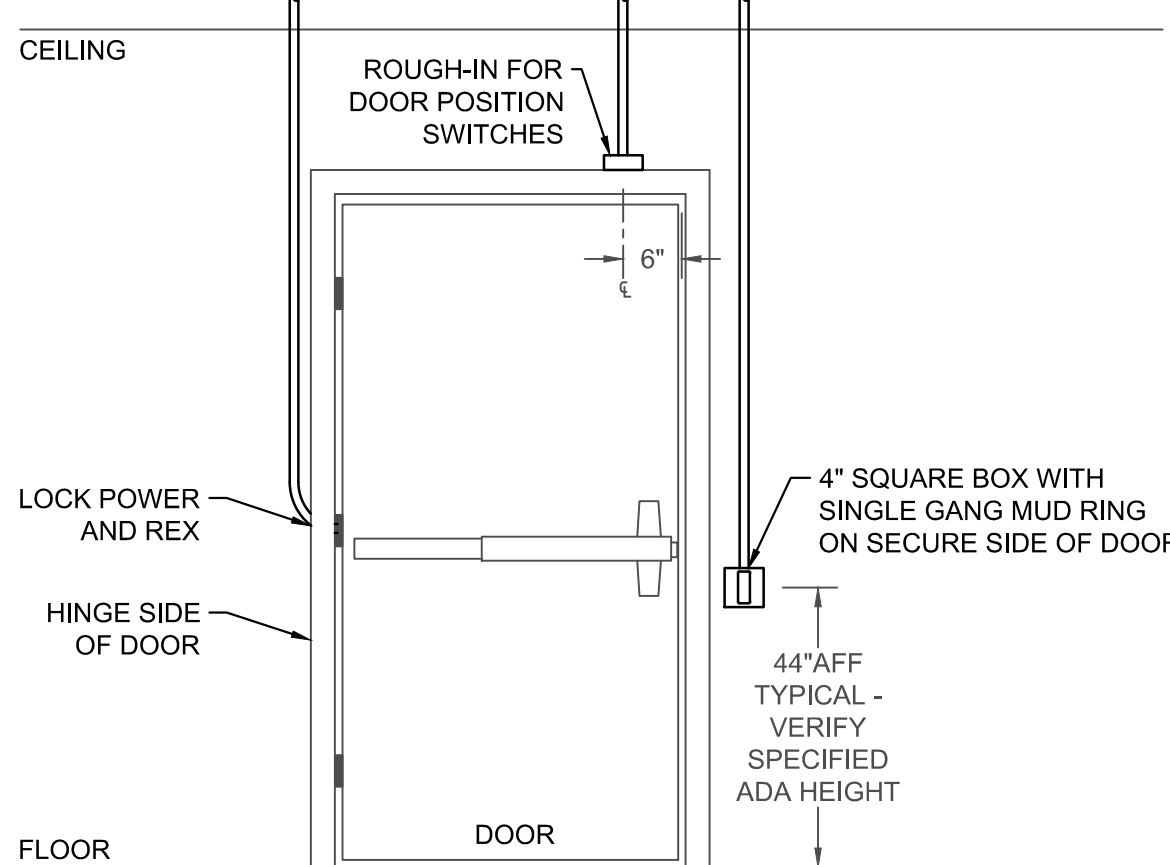




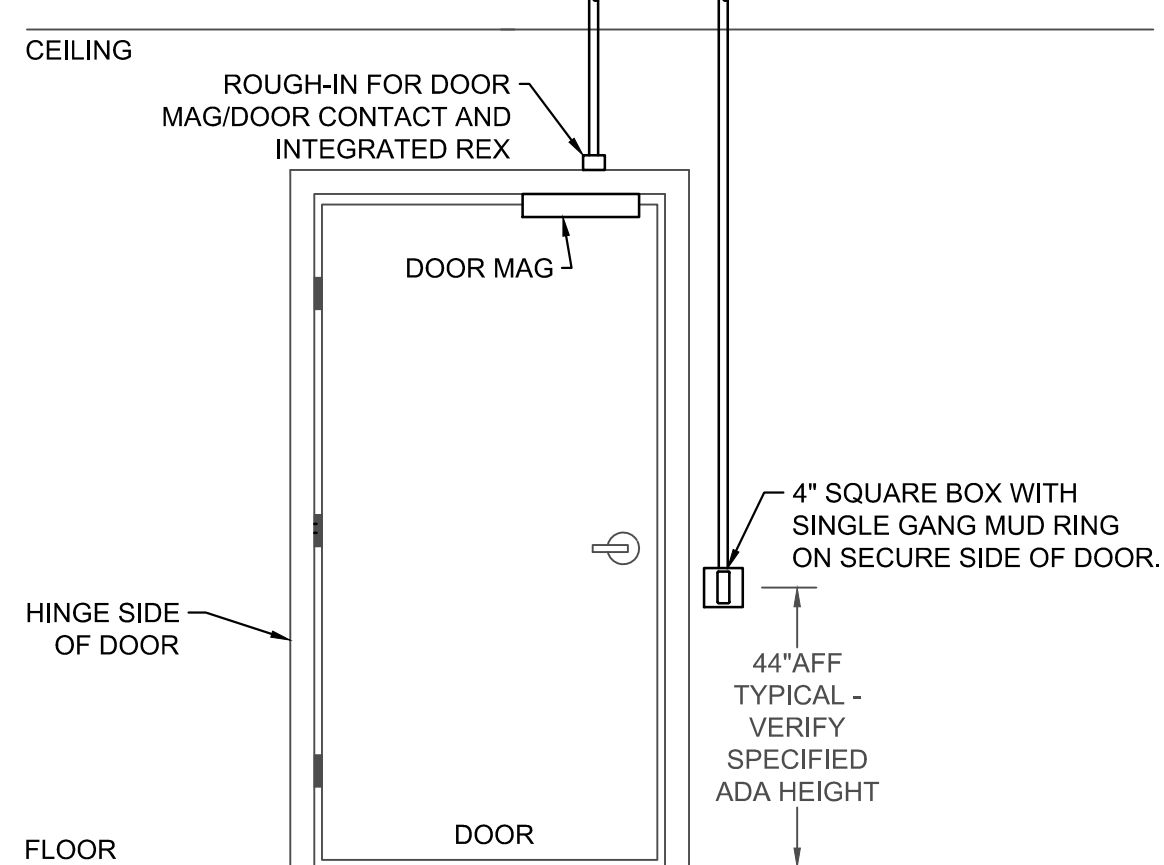
**1 ACCESS CONTROL DOUBLE DOOR WITH ELECTRIFIED PANIC HARDWARE AND INTEGRATED REX**  
NO SCALE



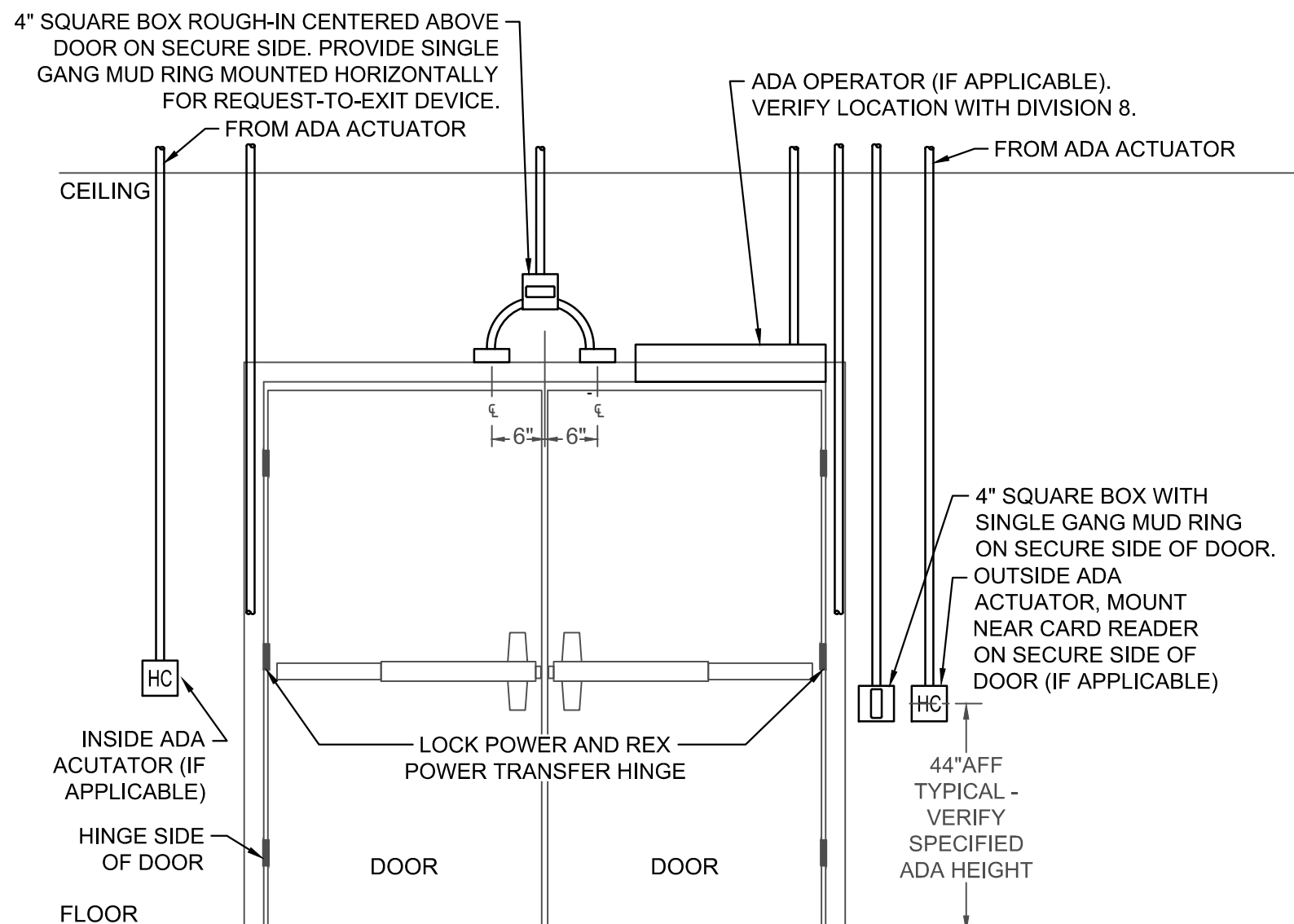
**2 ACCESS CONTROL DOOR WITH LEVER SET AND INTEGRATED REX**  
NO SCALE



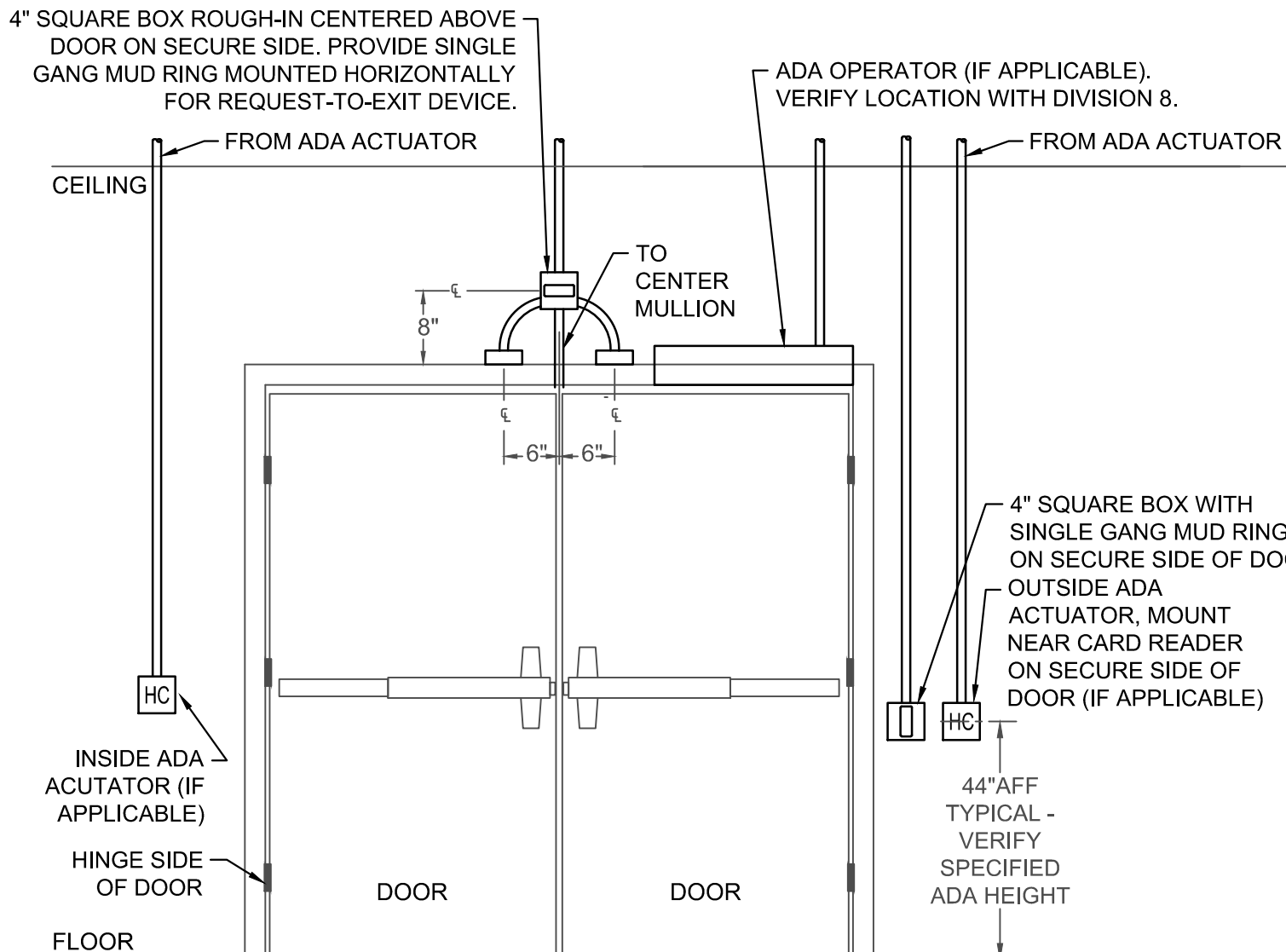
**3 ACCESS CONTROL DOOR WITH ELECTRIFIED PANIC HARDWARE AND INTEGRATED REX**  
NO SCALE



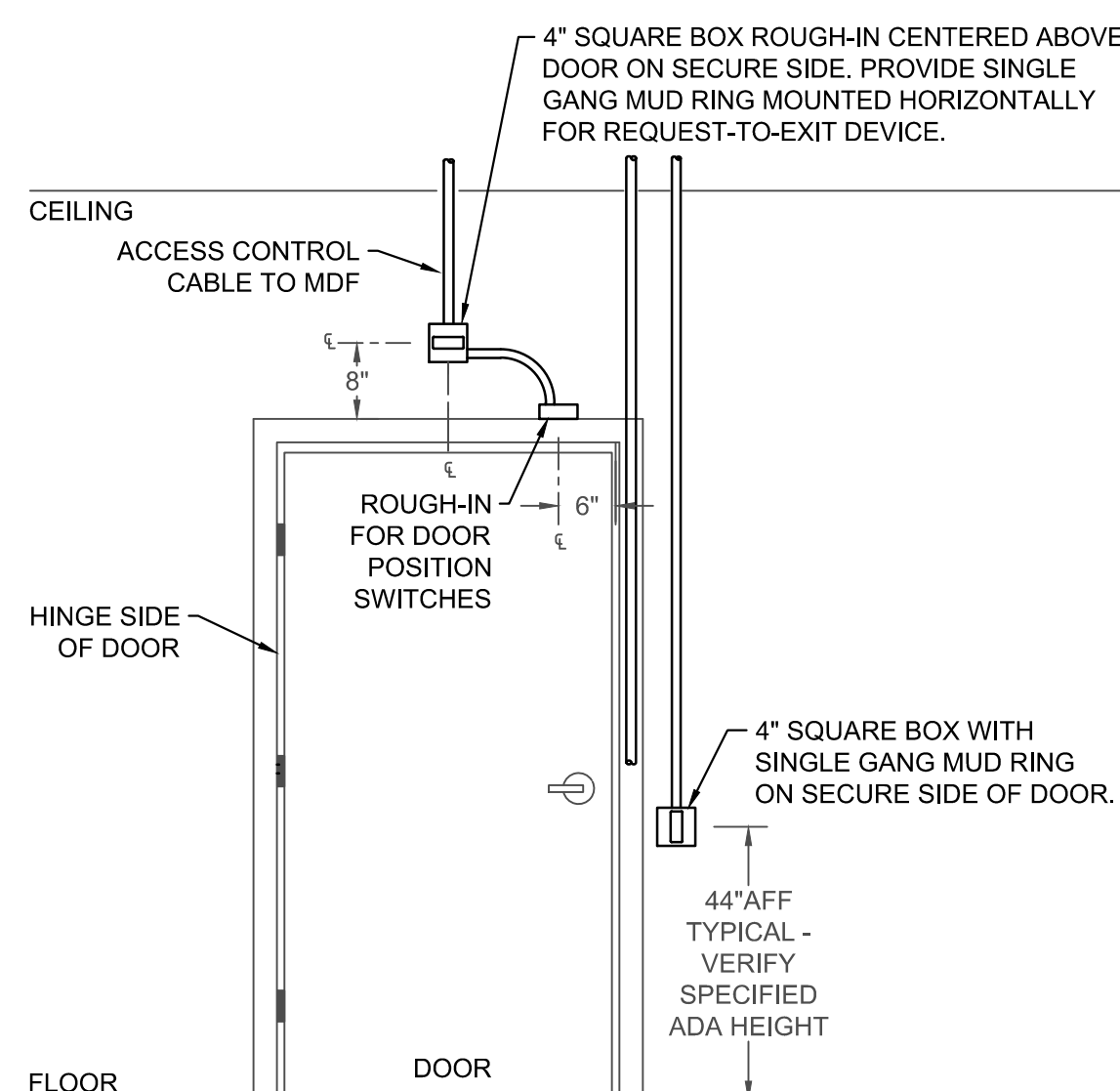
**4 ACCESS CONTROL DOOR WITH MAG LOCK AND INTEGRATED REX**  
NO SCALE



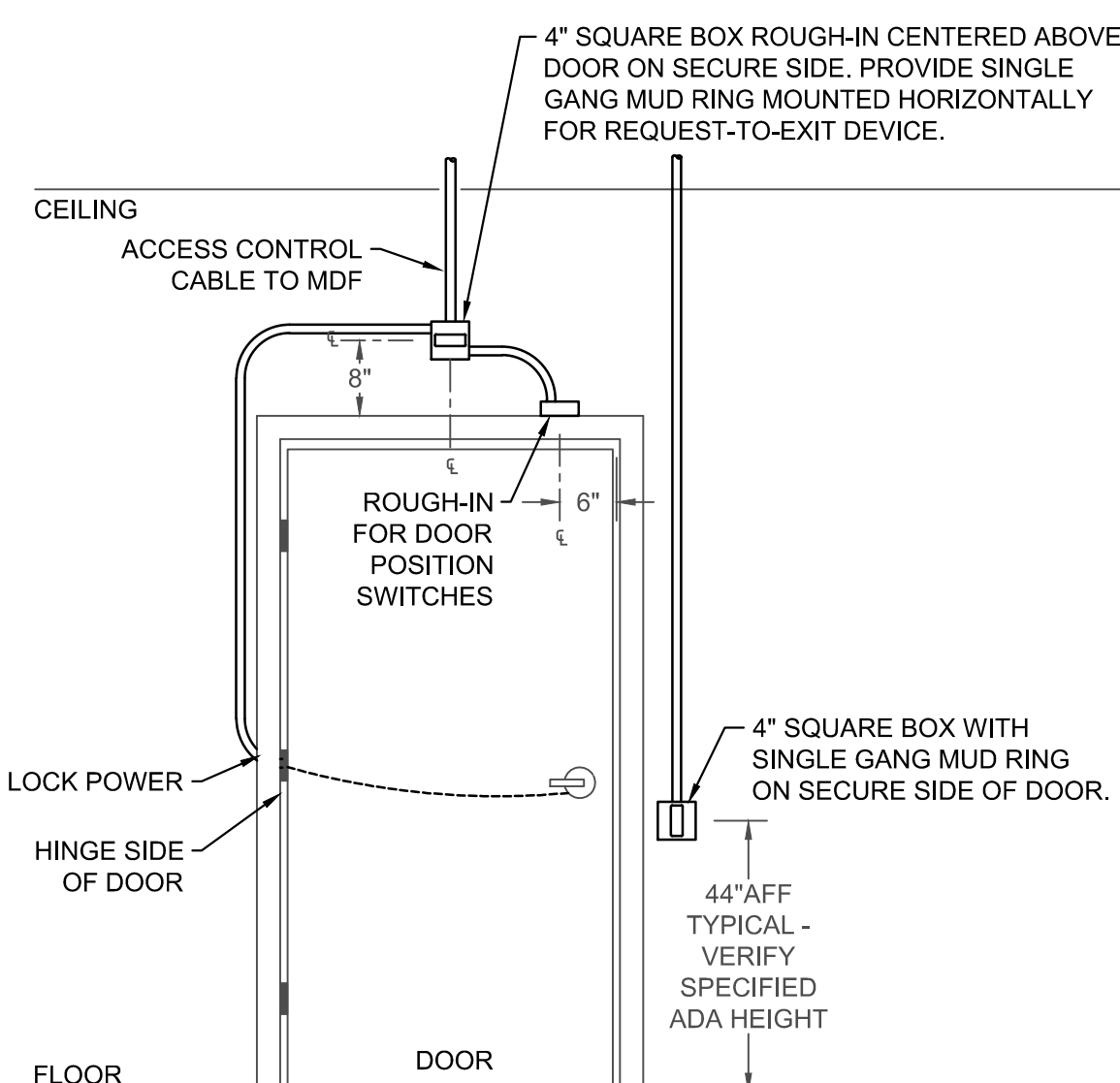
**5 ACCESS CONTROL DOUBLE DOOR WITH ELECTRIFIED PANIC HARDWARE AND ACTIVE REX**  
NO SCALE



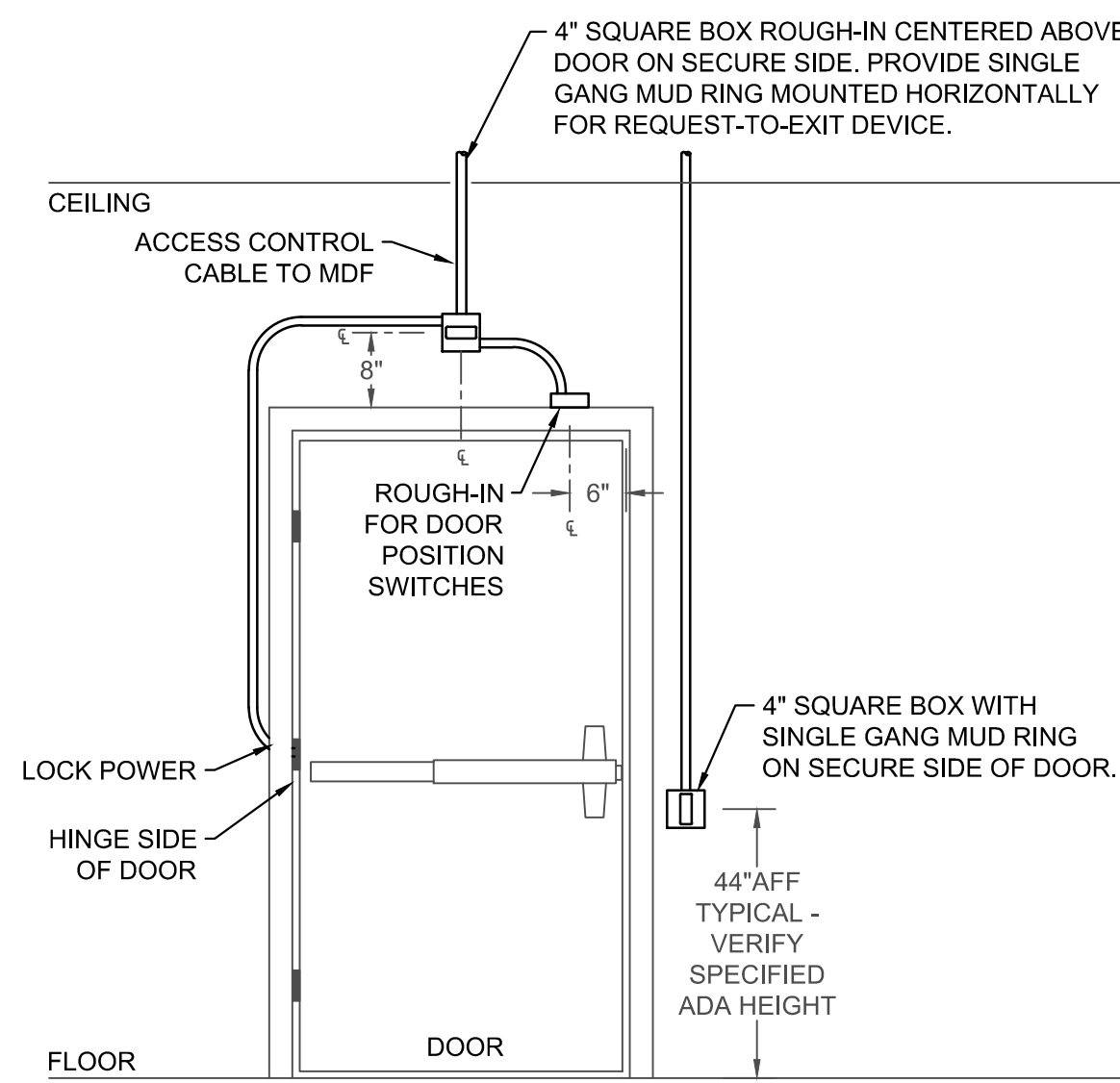
**6 ACCESS CONTROL DOUBLE DOOR WITH MULLION MOUNTED STRIKE(S) AND ACTIVE REX**  
NO SCALE



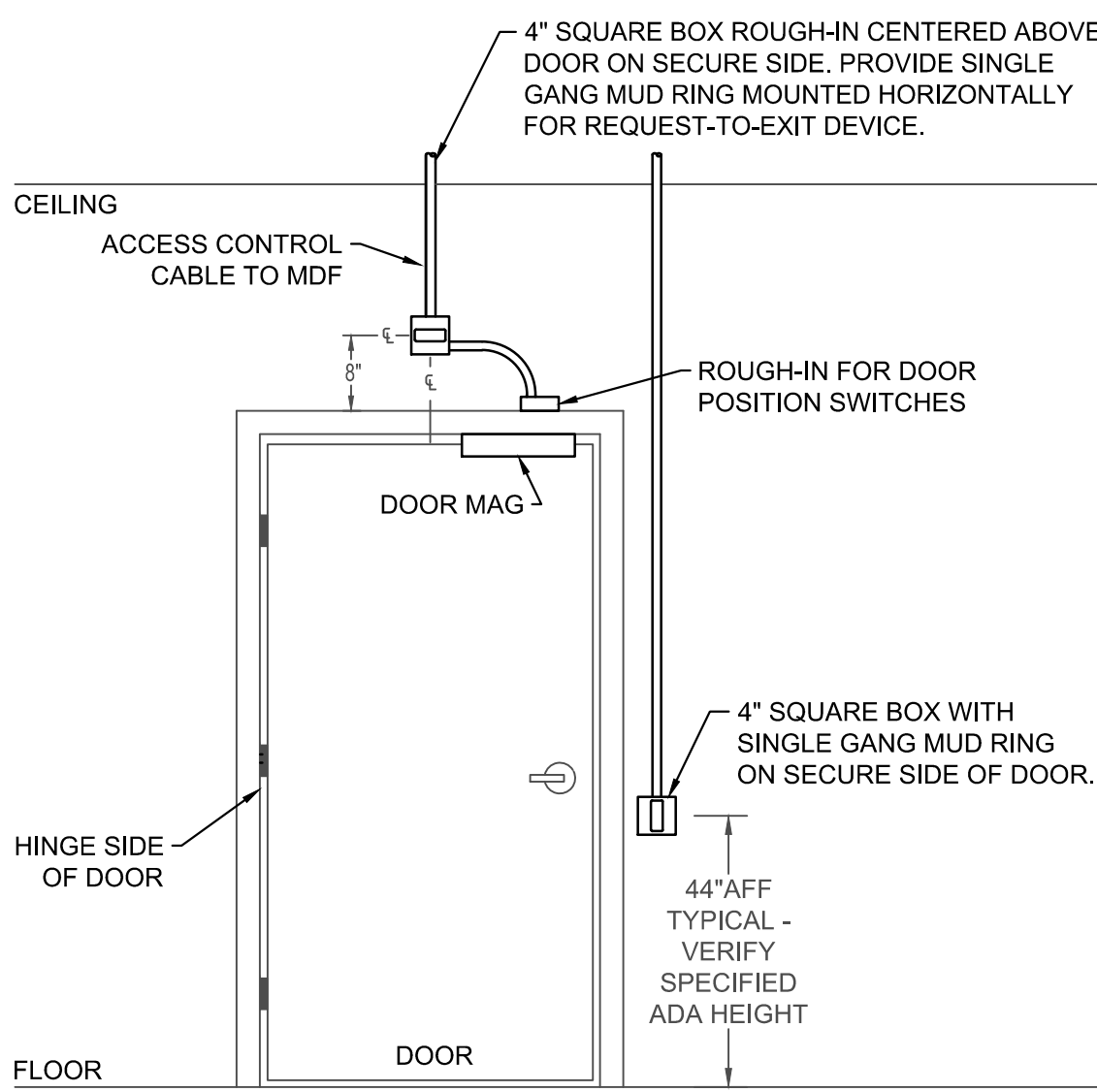
**7 ACCESS CONTROL DOOR WITH ELECTRIC STRIKE AND ACTIVE REX**  
NO SCALE



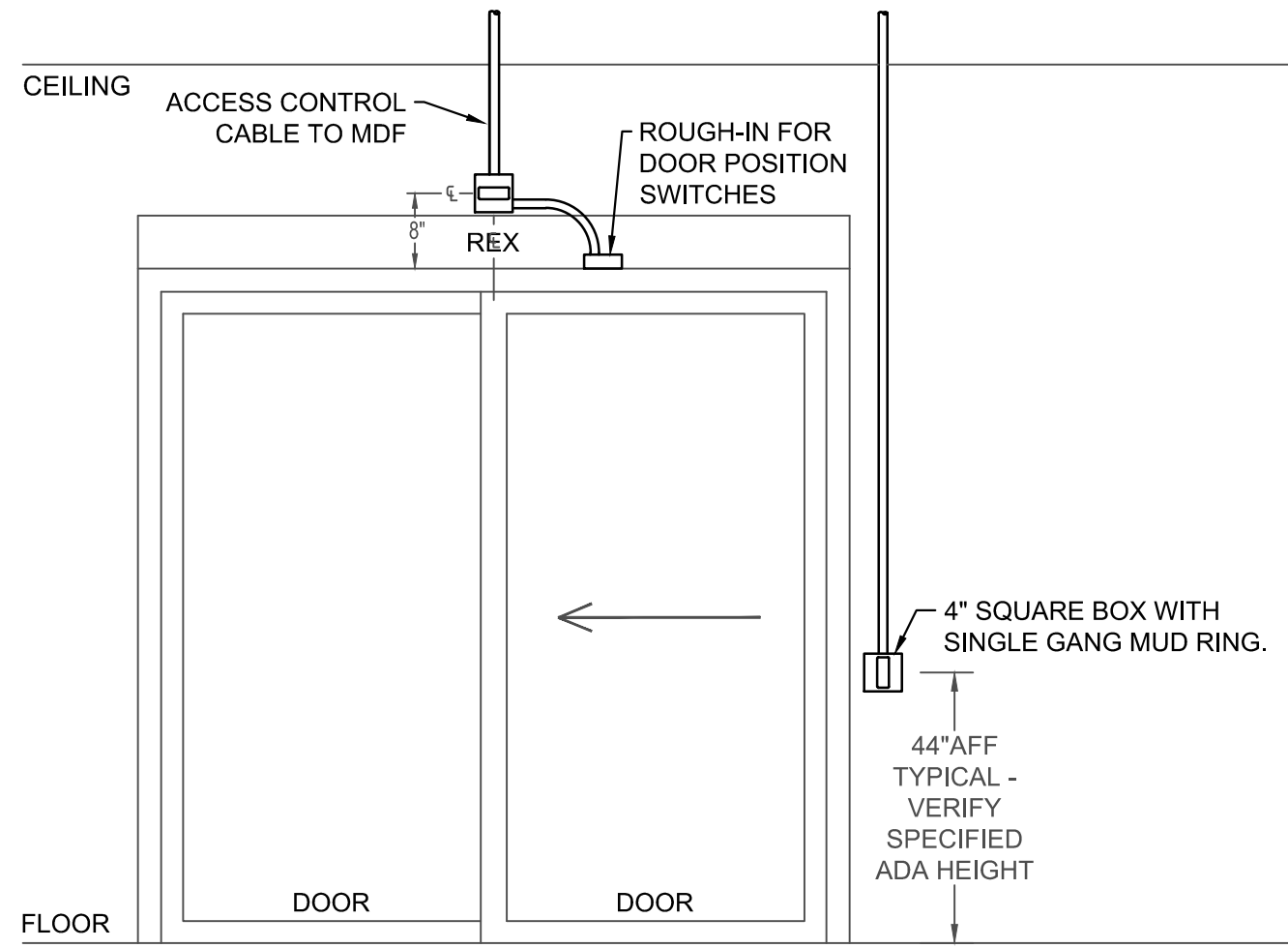
**8 ACCESS CONTROL DOOR WITH LEVER SET AND ACTIVE REX**  
NO SCALE



**9 ACCESS CONTROL DOOR WITH PANIC HARDWARE AND ACTIVE REX**  
NO SCALE



**10 ACCESS CONTROL DOOR WITH MAG LOCK AND ACTIVE REX**  
NO SCALE



**11 ACCESS CONTROL SLIDING DOOR WITH ACTIVE REX**  
NO SCALE

**GENERAL NOTES**

- COORDINATE INSTALLATION WITH DOOR HARDWARE SUPPLIER PRIOR TO ROUGH-IN.
- ALL CONDUIT SHALL BE 3/4", RAN TO ACCESSIBLE CEILING SPACE.
- POWER SUPPLY PROVIDED BY DIVISION 8 WILL NEED TO BE INSTALLED NEAR THE DOOR. LOW-VOLTAGE PATHWAY PROVIDED TO JUNCTION BOX. 120V PROVIDED BY OTHERS.

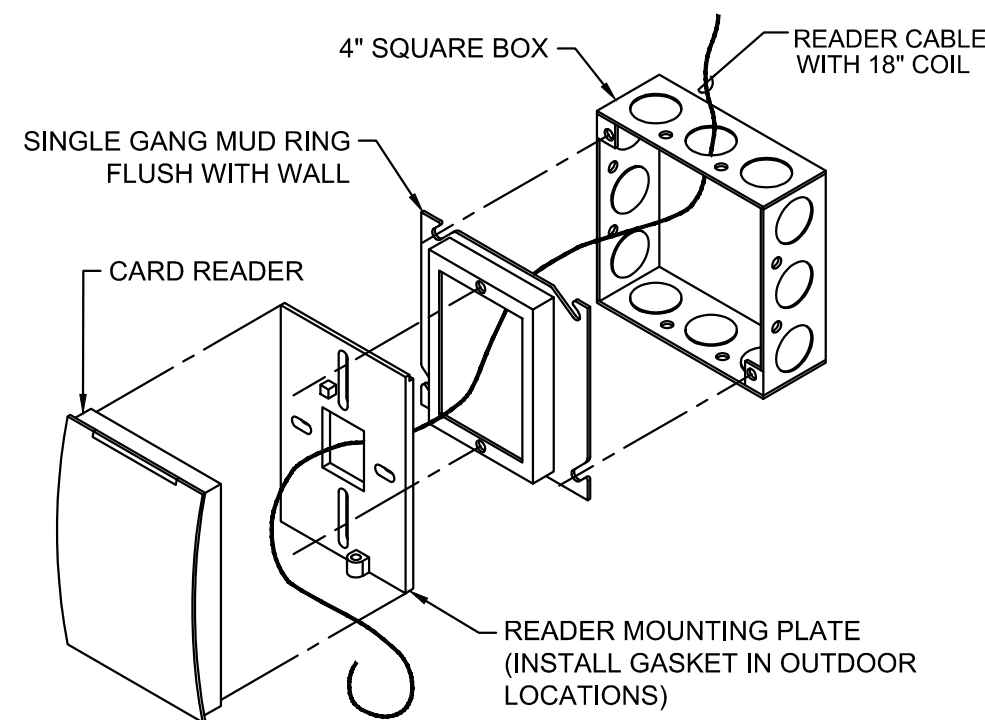
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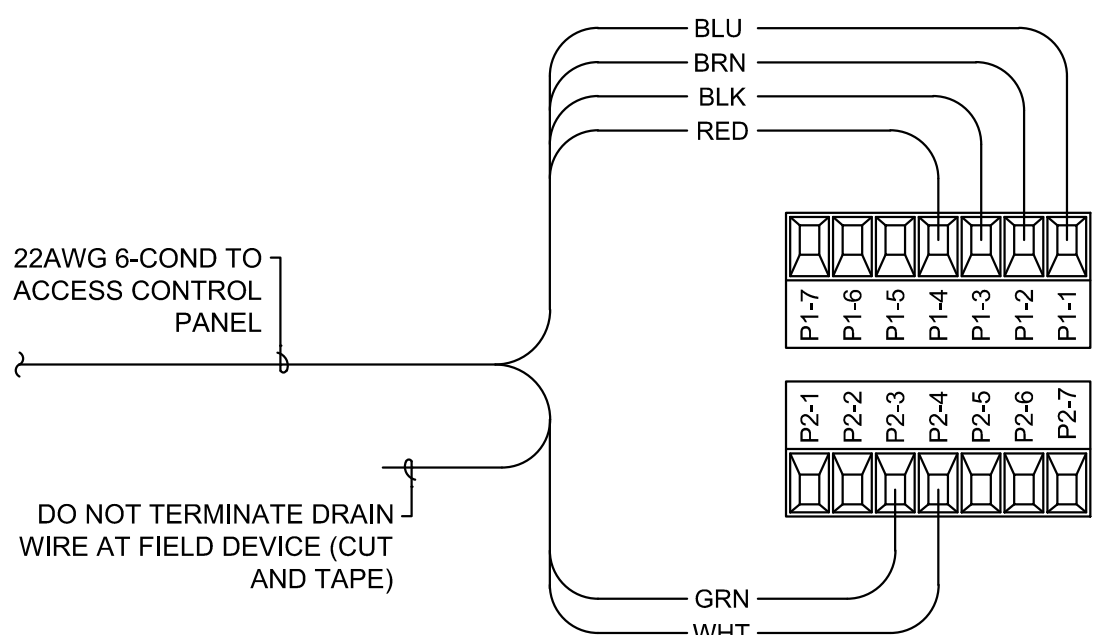
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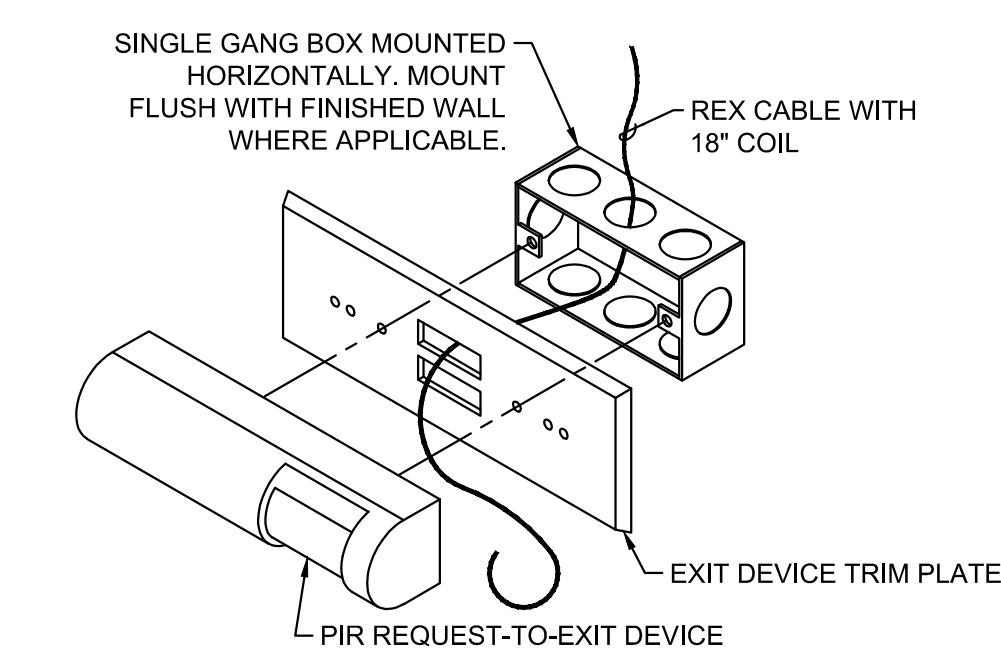


1 **HID RP40 MULTICLASS SE CARD READER 920PTNTEK00000 - INSTALLATION AND TERMINATION DETAIL**  
NO SCALE

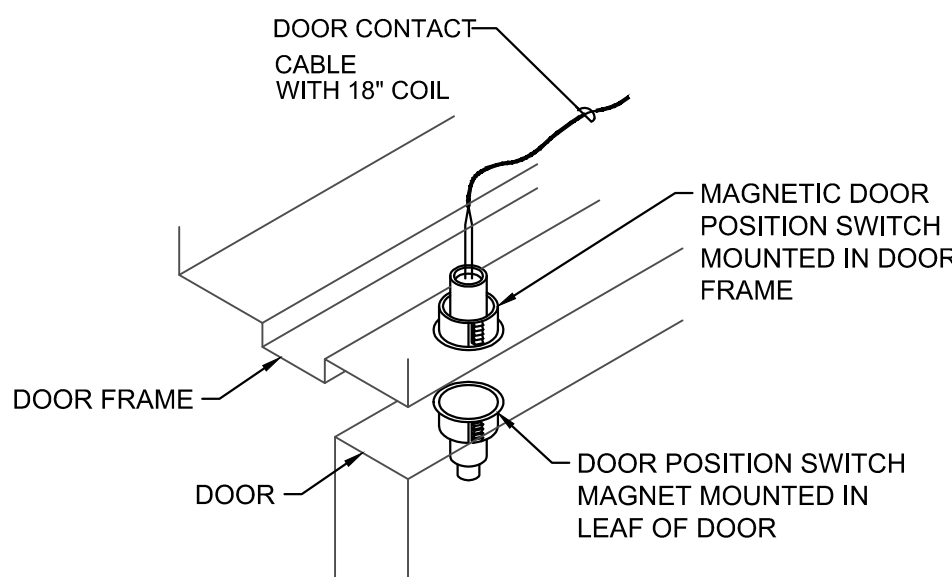


READER TERMINAL BLOCK P1	
TERMINAL	DESCRIPTION
P1-1	BEEPER INPUT
P1-2	GREEN LED INPUT
P1-3	GROUND (RTN)
P1-4	+12VDC
P1-5	(UNUSED)
P1-6	RED LED INPUT
P1-7	HOLD INPUT

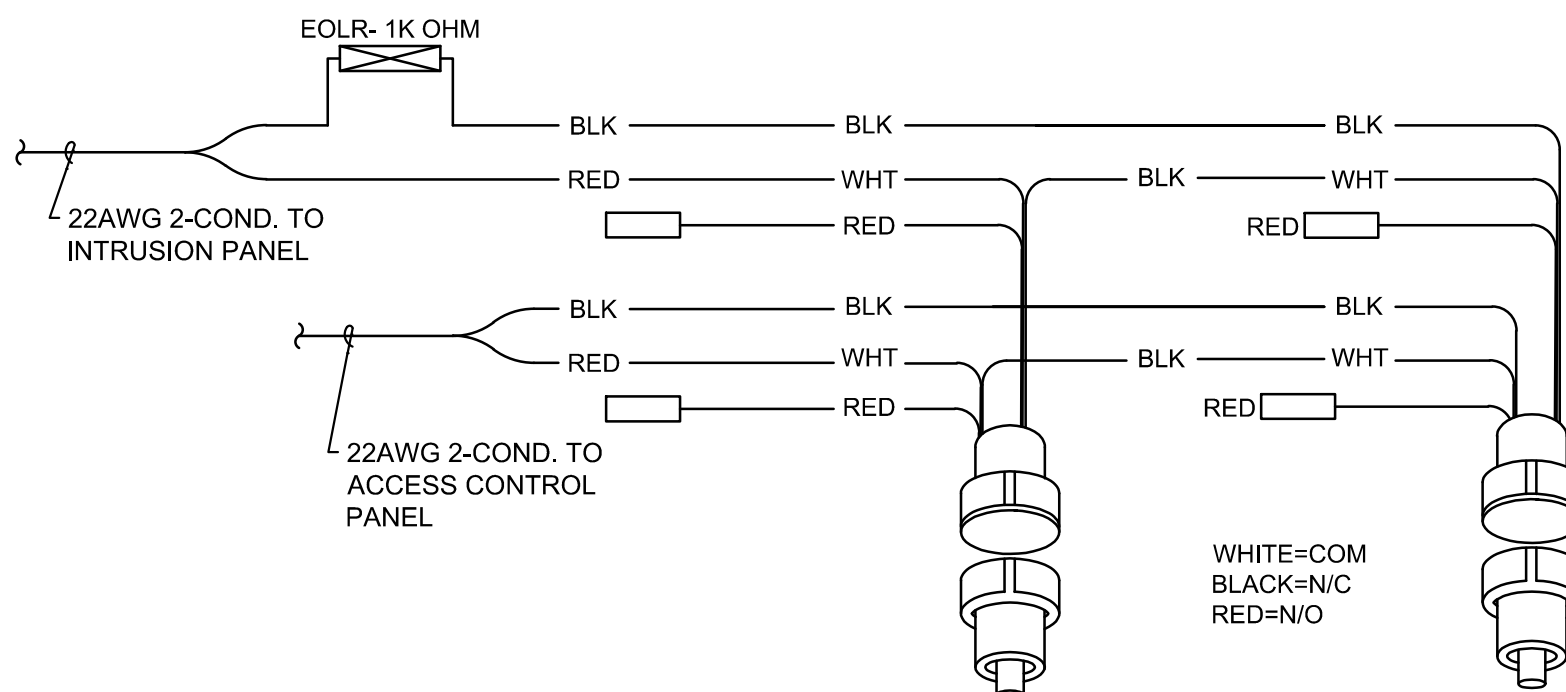
READER TERMINAL BLOCK P2	
TERMINAL	DESCRIPTION
P2-1	GPIO4 (RS485-FDX-Y)
P2-2	GPIO3 (RS485-FDX-Z)
P2-3	WIEGAND DATA 1
P2-4	WIEGAND DATA 0
P2-5	TAMPER O.C. OUTPUT
P2-6	GPIO2 (RS485-FDX-HDX-B)
P2-7	GPIO1 (RS485-FDX-HDX-A)



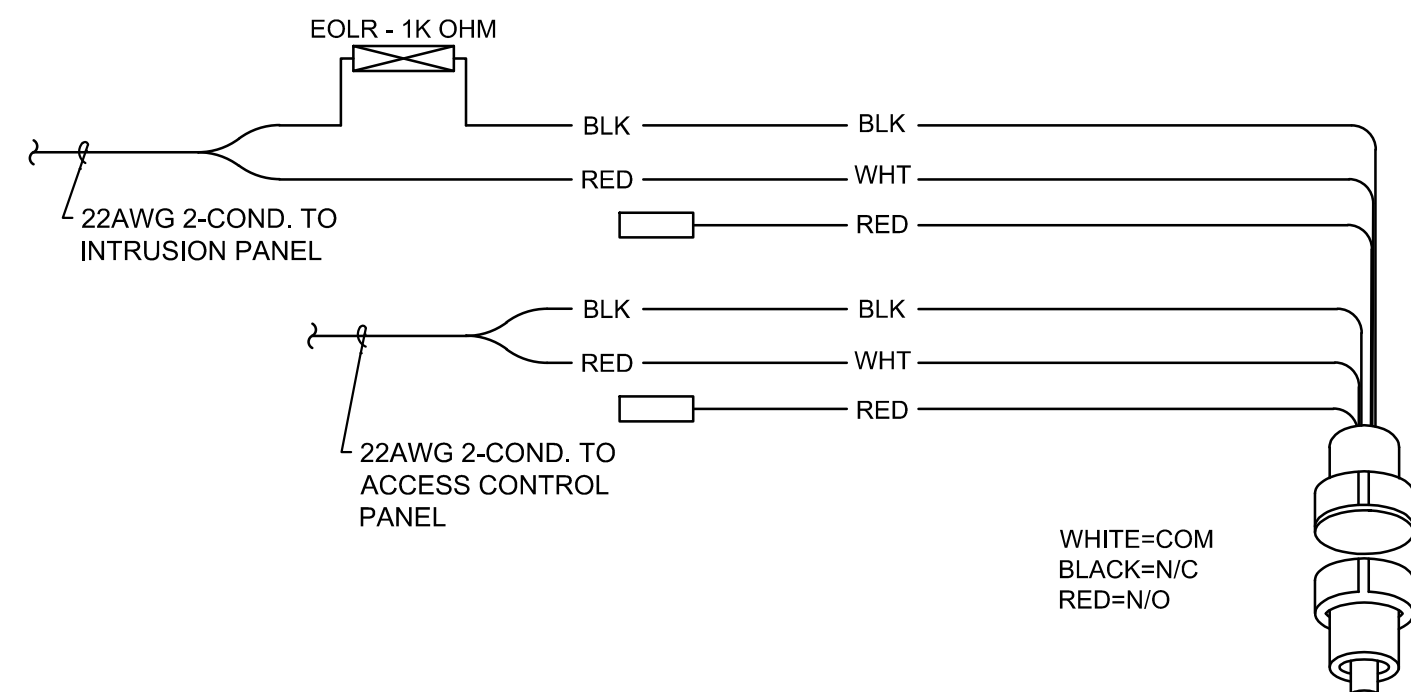
3 **TYPICAL ADA OPERATOR AND ACCESS CONTROL INTEGRATION**  
NO SCALE



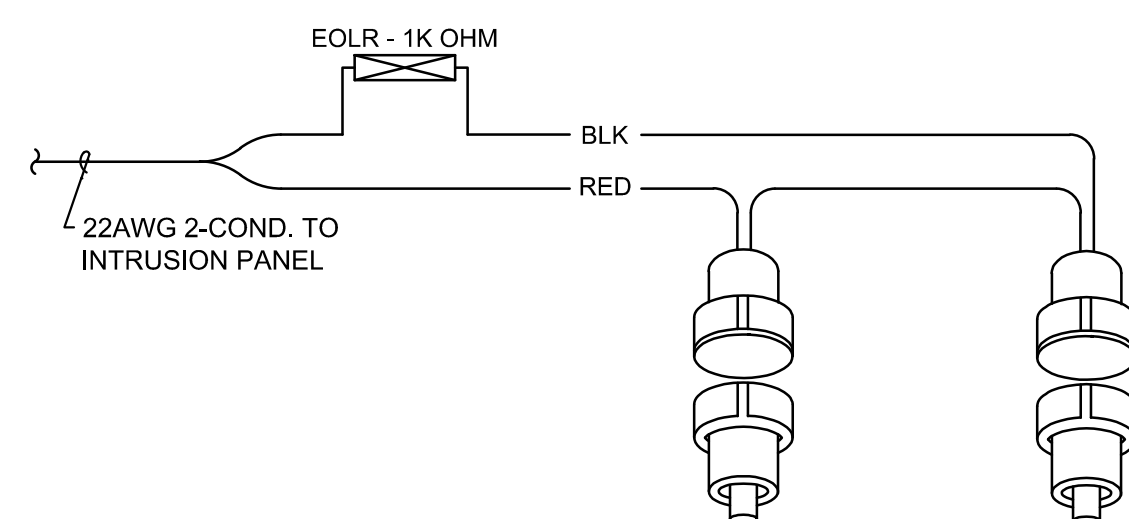
4 **TYPICAL DOOR CONTACT WIRING**  
NO SCALE



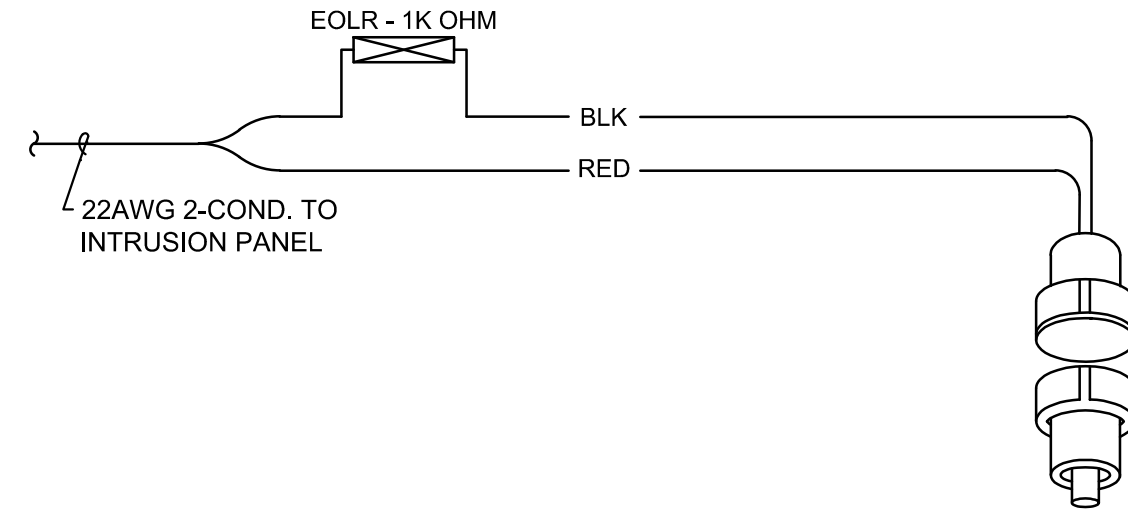
4A **TYPICAL DOUBLE THROW DOOR CONTACT - DOUBLE DOORS - ACCESS CONTROL AND INTRUSION**  
NO SCALE



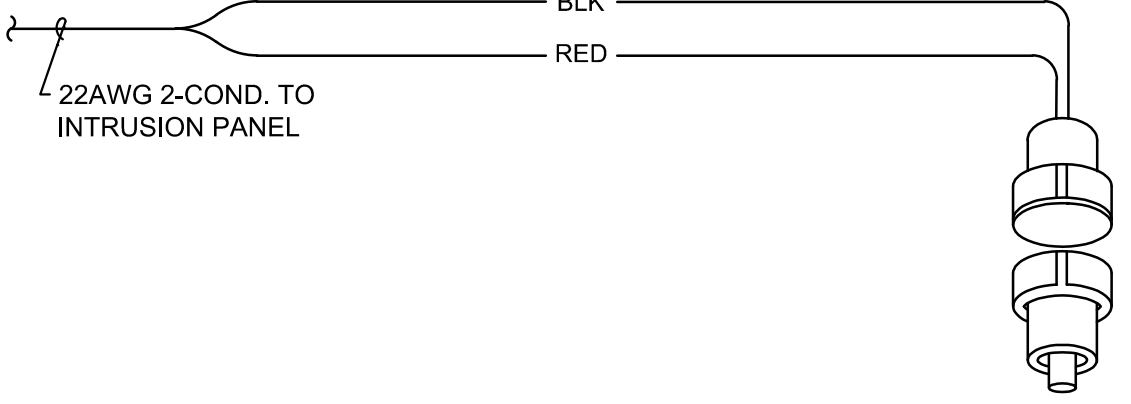
4B **TYPICAL DOUBLE THROW DOOR CONTACT - SINGLE DOOR - ACCESS CONTROL AND INTRUSION**  
NO SCALE



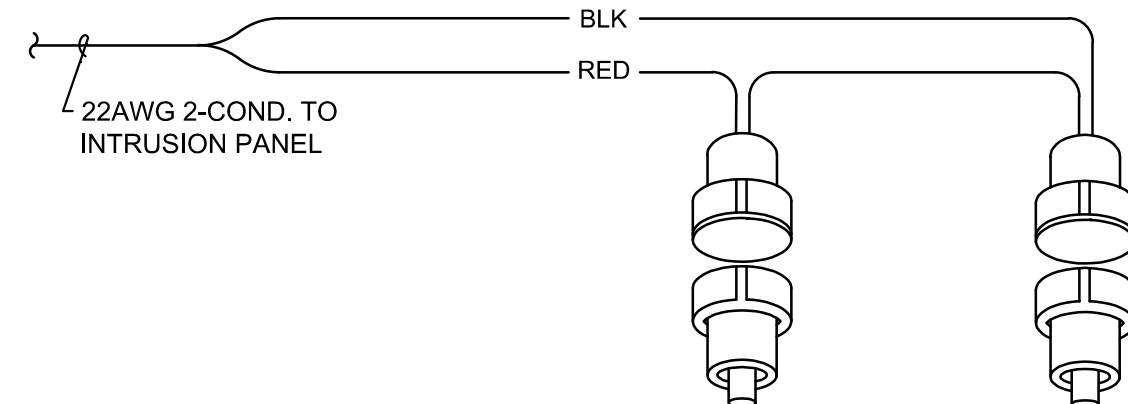
4C **TYPICAL DOOR CONTACT - DOUBLE DOORS- INTRUSION ONLY**  
NO SCALE



4D **TYPICAL DOOR CONTACT - SINGLE DOOR - INTRUSION ONLY**  
NO SCALE



4E **TYPICAL DOOR CONTACT - SINGLE DOOR - ACCESS CONTROL ONLY**  
NO SCALE



4F **TYPICAL DOOR CONTACT - DOUBLE DOORS- ACCESS CONTROL ONLY**  
NO SCALE



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