

# NCDPS RANDALL BUILDING

## RENOVATION



SCO ID NO. 22-25118-01A



**DAVIS KANE**  
ARCHITECTS, P.A.  
503 OBERLIN ROAD | SUITE 300  
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PROJECT INFORMATION

### SYMBOL LEGEND

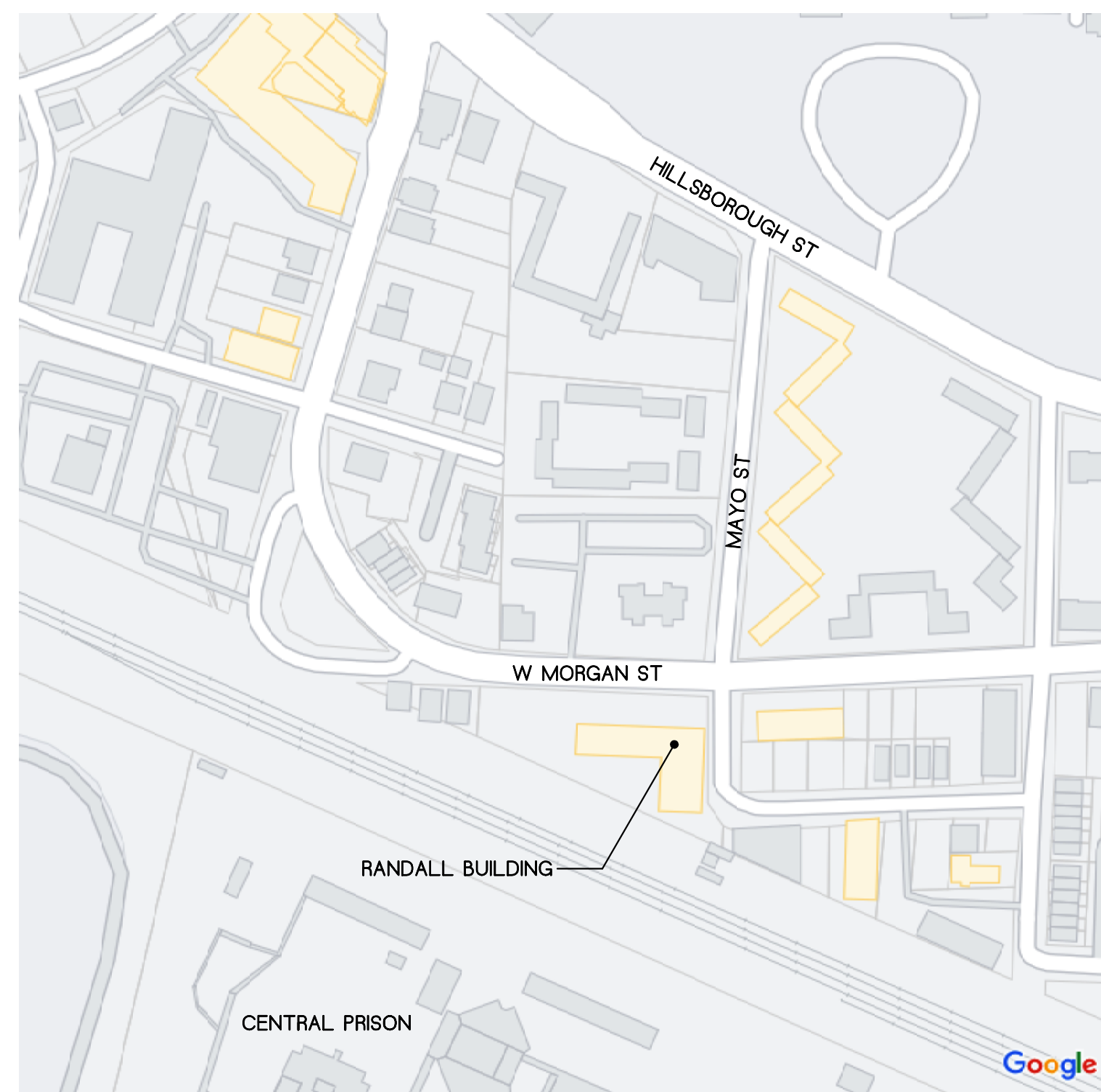
	ROOM / AREAS		EXTERIOR ELEVATIONS
	WINDOW TYPE		INTERIOR ELEVATIONS
	WALL PARTITIONS		CENTERLINE OF COLUMN
	DOORS		SECTIONS
	MISCELLANEOUS		DETAIL
	REVISIONS		NORTH ARROW
	FURNITURE, FIXTURES, & EQUIPMENT		ADD ALTERNATE DESIGNATION
	ELEVATION		

### ABBREVIATIONS

AFT above finish floor	EA each	ID inside diameter	P.T. pressure treated	SPEC specification(s)
ACT acoustical tile	ELEC electric	IF inside face	PNT paint(ed)	SPKLR sprinkler
ADJ adjacent	EWG elec. water cooler	INSUL insulation	PTN partition	SF square feet
ALUM aluminum	EI elevation	INT interior	PLAM plastic laminate	SI IN square inch
AB anchor bolt	ELEV elevator	KPL kickplate	PLWLD plywood	STD standard
AND/ and/or	EQ equal	LAB laboratory	PVC polyvinyl chloride	STL steel
APPROX approximate	EQUIP equipment	LAM laminate	PSF pounds/ sq. ft.	STOR storage
ARCH architectural	EXIST existing	LAV lavatory	PS pounds/ sq. in.	STRUCT structural
BSMT basement	EJ expansion joint	LVR lower	PROP property	SUSP suspend(ed)
BRG bearing	EJC expansion joint cover	LPT low point		TEL telephone
BID bid alternate	EXP exposed	MH manhole		THRES threshold
BD board	EXT exterior	MFR manufacture(r)		TOM top of masonry
BOT bottom	FOC face of concrete	MBL marble		TOS top of steel
BLDG building	FOM face of masonry	MED mechanical		TIP typical
CPT carpet	FIN finish	MDO masonry opening		UPS uninterrupter power supply
CI cast iron	FEE finished floor elev.	MAIL material		UN unless otherwise noted
CLD ceiling	FE fire extinguisher	MAX maximum		
CT ceramic tile	FLR floor	MDI mechanical		
CLSM classroom	FD floor drain	MTL metal		
CO clean out	FLUR fluorescent	MIN minimum		
CLR clear	FND foundation	MISC miscellaneous		
COL column	GALV galvanized	MVB moveable		
CONC concrete	GA gauge	NOM nominal		
CONC conc. masonry unit	GC general contract(or)	NTS not to scale		
CONST construction	GLZ glazing	OC on center		
CM construction manager	OPF OPF gypsum board	OPG opening		
CONT continuous	OPF OPF gypsum board	OPP opposite		
CJ control joint	OS down spout	OS outside diameter		
CSK counter sink	HDW hardware	OF outside face		
DEPT department	HD heavy duty	OH overhang		
DET detail	HT height	OHD over head		
DIA diameter	HM hollow metal			
DIM dimension	HORIZ horizontal			
DS down spout	HS hose bibb			
DWG drawing				

### VICINITY MAP

827-831 W MORGAN ST, RALEIGH, NC



NOT TO SCALE

### DESIGN TEAM

**OWNER:**  
North Carolina Department of Public Safety  
Raleigh, North Carolina  
Contact: Daniel Godwin  
919-324-1228

**ARCHITECT:**  
Davis Kane Architects, P.A.  
Raleigh, North Carolina  
Contact: Robert Stevenson, AIA  
Contact: Chad Volk  
919-719-2811

**STRUCTURAL ENGINEER:**  
Lynch Mykine Structural Engineers, PC  
Raleigh, North Carolina  
Contact: Jeff Morrison, PE  
919-782-1833

### SHEET INDEX

**TITLE SHEETS:**  
G001 COVER SHEET  
G002 BUILDING CODE SUMMARY  
G003 LIFE SAFETY PLAN  
G004 WORK RESTRICTIONS

**ARCHITECTURAL:**  
A001 PLANS  
A002 ENLARGED PLANS & DETAILS  
A003 DETAILS

**STRUCTURAL:**  
S001 STRUCTURAL NOTES  
S101 STRUCTURAL DETAILS

NCDPS RANDALL BUILDING  
RENOVATION  
SCO ID NO. 22-25118-01A  
827-831 W Morgan St, Raleigh, NC 27603

SEALS



DKA JOB NUMBER

2221

REVISIONS

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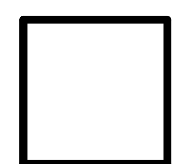
SHEET TITLE

COVER SHEET

G001

BID DOCUMENTS

SET NO.



2018 APPENDIX B

BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

Name of Project: NCDPS Randall Building Renovation
Address: 827-831 W Morgan St, Raleigh, NC
Owner or Authorized Agent: Shane Godwin
Email: daniel.godwin@dac.nc.gov

CONTACT table with columns: DESIGNER, FIRM, NAME, LICENSE #, TELEPHONE #. Includes Davis Kane Architects, PA and Lynch Mykies Structural Engineers, PC.

2018 NC BUILDING CODE: New Building, Addition, Renovation
2018 NC EXISTING BUILDING CODE: Existing: Prescriptive, Repair, Chapter 14

CONSTRUCTED: (date) 1960 CURRENT OCCUPANCY(S) (Ch.3) BUSINESS GROUP B
RENOVATED: (date) 1964 PROPOSED OCCUPANCY(S) (Ch.3) BUSINESS GROUP B

OCCUPANCY CATEGORY (Table 1604.5): Current: I, II, III, IV
Proposed: I, II, III, IV

BASIC BUILDING DATA
Construction Type: I-A, II-A, III-A, IV, V-A
Sprinklers: No, Partial, Yes
Standpipes: No, Yes, Class, I, II, III, Wet, Dry

GROSS BUILDING AREA TABLE with columns: FLOOR, EXISTING (SQ FT), NEW (SQ FT), RENOVATION (SQ FT). Rows for Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, TOTAL.

ALLOWABLE AREA EXISTING BUILDING, NO CHANGE
Primary Occupancy Classification(s): Assembly, Business, Educational, Factory, Hazardous, Institutional, Mercantile, Residential, Storage, Utility and Miscellaneous.

Accessory Occupancy Classification(s):
Incidental Uses (Table 509):
Special Uses (Chapter 4 - List Code Sections):

Non-Separated Use (508.3) - The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building.

Separated Use (508.4) - See below for area calculations for each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

Actual Area of Occupancy A + Actual Area of Occupancy B / Allowable Area of Occupancy A + Allowable Area of Occupancy B ≤ 1

EXISTING BUILDING, NO CHANGE table with columns: Story No., Description and Use, (A) Bldg Area Per Story (Actual), (B) Table 506.2\* Area, (C) Area for Frontage Increase, (D) Allowable Area per Story or Unlimited.

1 Frontage area increases from Section 506.2 are computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = - ft (F)
b. Total Building Perimeter = - ft (P)
c. Ratio (F/P) = - (F/P)
d. W = Minimum width of public way = - ft (W)
e. Percentage of frontage increase I2 = 100[(F/P - 0.25) x W/30 = - (%)

2 Unlimited area applicable under conditions of 507.
3 Maximum Building Area = total number of stories in the building x D (maximum 3 stories)(506.2).
4 The maximum area of open parking garages must comply with 406.5.4. The maximum area of air traffic control towers must comply with Table 412.3.1.
5 Frontage increase is based on the unsprinkled area value in Table 506.2.

ALLOWABLE HEIGHT EXISTING BUILDING, NO CHANGE

Table with columns: Building Height in Feet (Table 504.3), Allowable Height, Shown on Plans, Code Reference.

FIRE PROTECTION REQUIREMENTS EXISTING BUILDING, NO CHANGE

Table with columns: BUILDING ELEMENT, FIRE SEPARATION DISTANCE (FEET), RATING, DETAIL # AND SHEET #, DESIGN # FOR RATED PENETRATION, DESIGN # FOR RATED JOINTS.

PERCENTAGE OF WALL OPENING CALCULATIONS EXISTING BUILDING, NO CHANGE

Table with columns: Fire Separation Distance (feet) from Property Lines, Degree of Openings Protection (Table 705.B), Allowable Area (%), Actual Shown on Plans (%).

LIFE SAFETY SYSTEM REQUIREMENTS EXISTING BUILDING, NO CHANGE

Emergency Lighting: No, Yes
Exit Signs: No, Yes
Fire Alarm: No, Yes
Smoke Detection Systems: No, Yes, Partial
Panic Hardware: No, Yes

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: G003
Fire and/or smoke rated wall locations (Chapter 7)
Assumed and real property line locations (if not on the site plan)
Exterior wall opening area with respect to distance to assumed property lines (705.8)

ACCESSIBLE DWELLING UNITS (SECTION 1107) N/A

Table with columns: Total Units, Accessible Units Required, Accessible Units Provided, Type A Units Required, Type A Units Provided, Type B Units Required, Type B Units Provided, Total Accessible Units Provided.

ACCESSIBLE PARKING (SECTION 1106) EXISTING BUILDING, NO CHANGE

Table with columns: LOT OR PARKING AREA, TOTAL # OF PARKING SPACES REQUIRED, TOTAL # OF PARKING SPACES PROVIDED, # OF ACCESSIBLE SPACES PROVIDED (REGULAR WITH 5' ACCESS AISLE, 132" ACCESS AISLE, 8' ACCESS AISLE), TOTAL # ACCESSIBLE PROVIDED.

PLUMBING FIXTURE REQUIREMENTS (SECTION 2902.1) EXISTING BUILDING, NO CHANGE

Table with columns: USE, WATER CLOSETS (MALE, FEMALE, UNISEX), URINALS/LAVATORIES (MALE, FEMALE, UNISEX), SHOWERS/TUBS (REGULAR, ACCESSIBLE), DRINKING FOUNTAINS (REGULAR, ACCESSIBLE).

SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, etc, describe below)

ENERGY SUMMARY EXISTING BUILDING, NO CHANGE

ENERGY REQUIREMENTS: The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided.

Existing building envelope complies with code: No, Yes
Exempt Building: No, Yes
Climate Zone: 3A, 4A, 5A
Method of Compliance: Energy Code, Performance, Prescriptive

THERMAL ENVELOPE

Roof/ Ceiling Assembly (each assembly)
Description of assembly: TPO membrane on polyiso insulation on thermal barrier on metal deck
U-Value of total assembly
R-Value of insulation

Walls below grade (each assembly)

Description of assembly:
U-Value of total assembly
R-Value of insulation

Floors over unconditioned space (each assembly)

Description of assembly:
U-Value of total assembly
R-Value of insulation

Floors slab on grade

Description of assembly:
U-Value of total assembly
R-Value of insulation

2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS STRUCTURAL DESIGN (PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)

DESIGN LOADS:
Importance factors: Snow (ls), Seismic (le)
Live Loads: Roof, Mezzanine, Floor
Ground Snow Load: psf
Wind Load: Basic Wind Speed, Exposure Category

SEISMIC DESIGN CATEGORY: EXISTING BUILDING, NO CHANGE

Provide the following Seismic Design Parameters:
Risk Category (Table 1604.5)
Spectral Response Acceleration
Site Classification (ASCE 7)
Data Source: Field Test, Presumptive, Historical Data
Basic Structural System

LATERAL DESIGN CONTROL: Earthquake, Wind

SOIL BEARING CAPACITIES:

Field Test (provide copy of test report) psf
Presumptive Bearing Capacity psf
Pile Size, Type, and Capacity psf

2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS MECHANICAL DESIGN (PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT
Thermal Zone
winter dry bulb, summer dry bulb

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

Interior design conditions
winter dry bulb, summer dry bulb, relative humidity

Building Heating Load, Building Cooling Load

Mechanical Spacing Conditioning System
Unitary
description of unit, heating efficiency, cooling efficiency, size category of unit

List equipment efficiencies:

2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS ELECTRICAL DESIGN (PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)

ELECTRICAL SYSTEM AND EQUIPMENT
Method of Compliance: Energy Code, Performance, Prescriptive
ASHRAE 90.1, Performance, Prescriptive

Lighting Schedule (each fixture type)

lamp type required in fixture, number of lamps in fixture, ballast type used in fixture, number of ballasts in fixture, total wattage per fixture, total interior wattage specified vs. allowed (whole building or space by space), total exterior wattage specified vs. allowed

Additional Efficiency Package Options (When using the 2018 NCECC; not required for ASRAE 90.1)

- C406.2 More Efficient HVAC Equipment Performance
C406.3 Reduced Power Lighting Density
C406.4 Enhanced Digital Lighting Controls
C406.5 On-Site Renewable Energy
C406.6 Dedicated Outdoor Air System
C406.7 Reduced Energy Use in Service Water Heating



PROJECT INFORMATION

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827-831 W Morgan St, Raleigh, NC 27603

SEALS



DKA JOB NUMBER

2221

REVISIONS

Table for REVISIONS with columns for revision number and description.

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PA: ROBERT STEVENSON
PM: CHAD VOLK
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SHEET TITLE

CODE SUMMARY

G002



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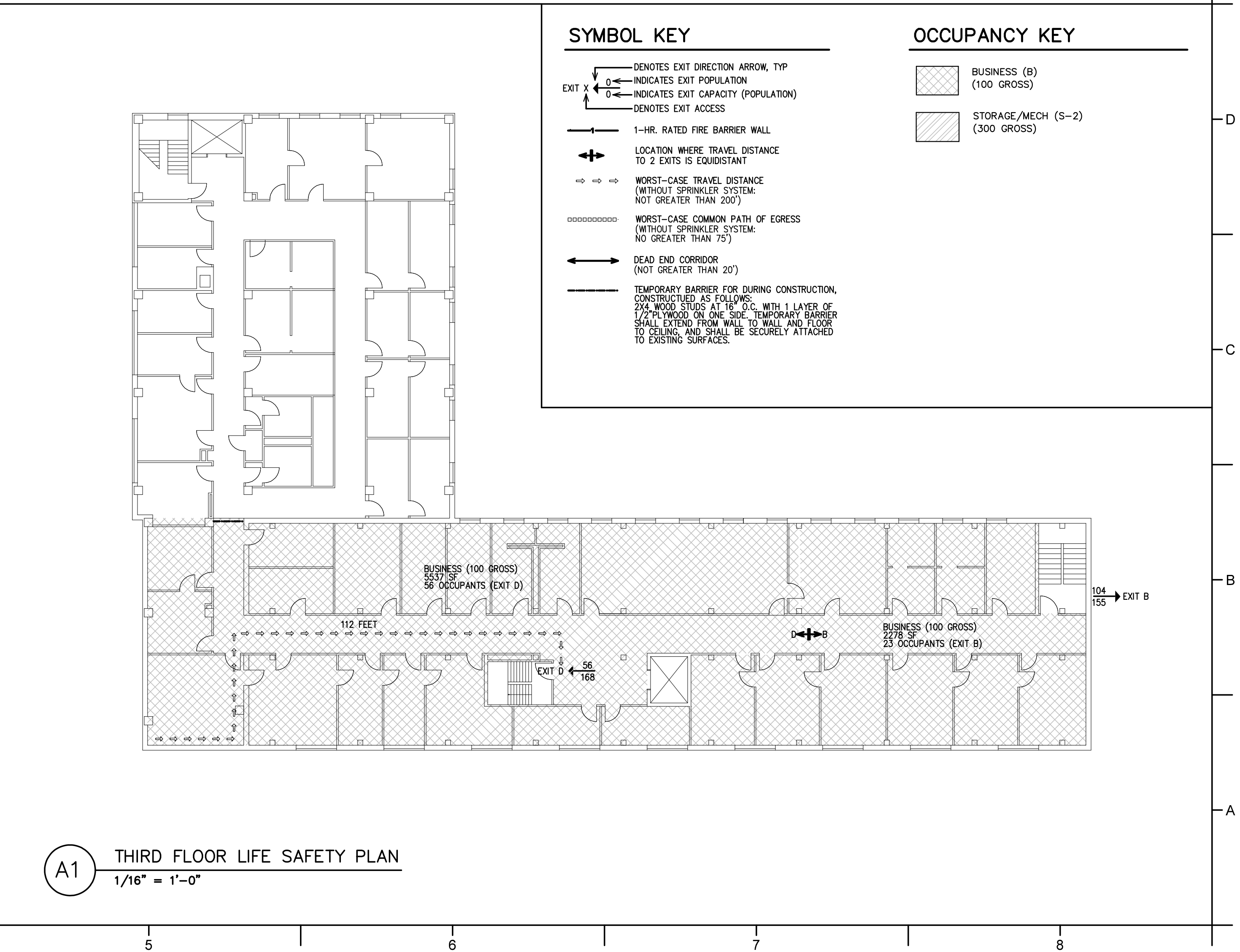
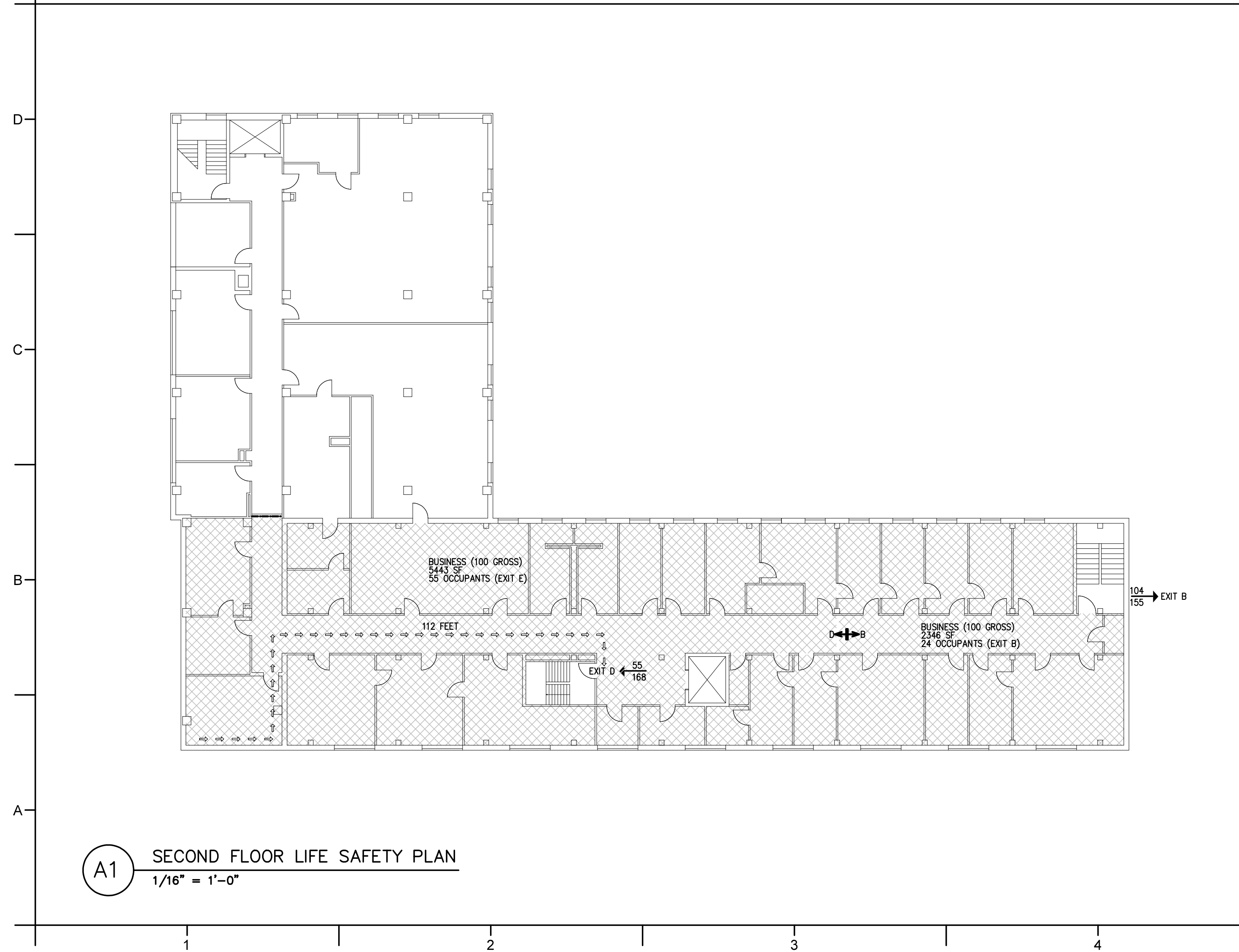
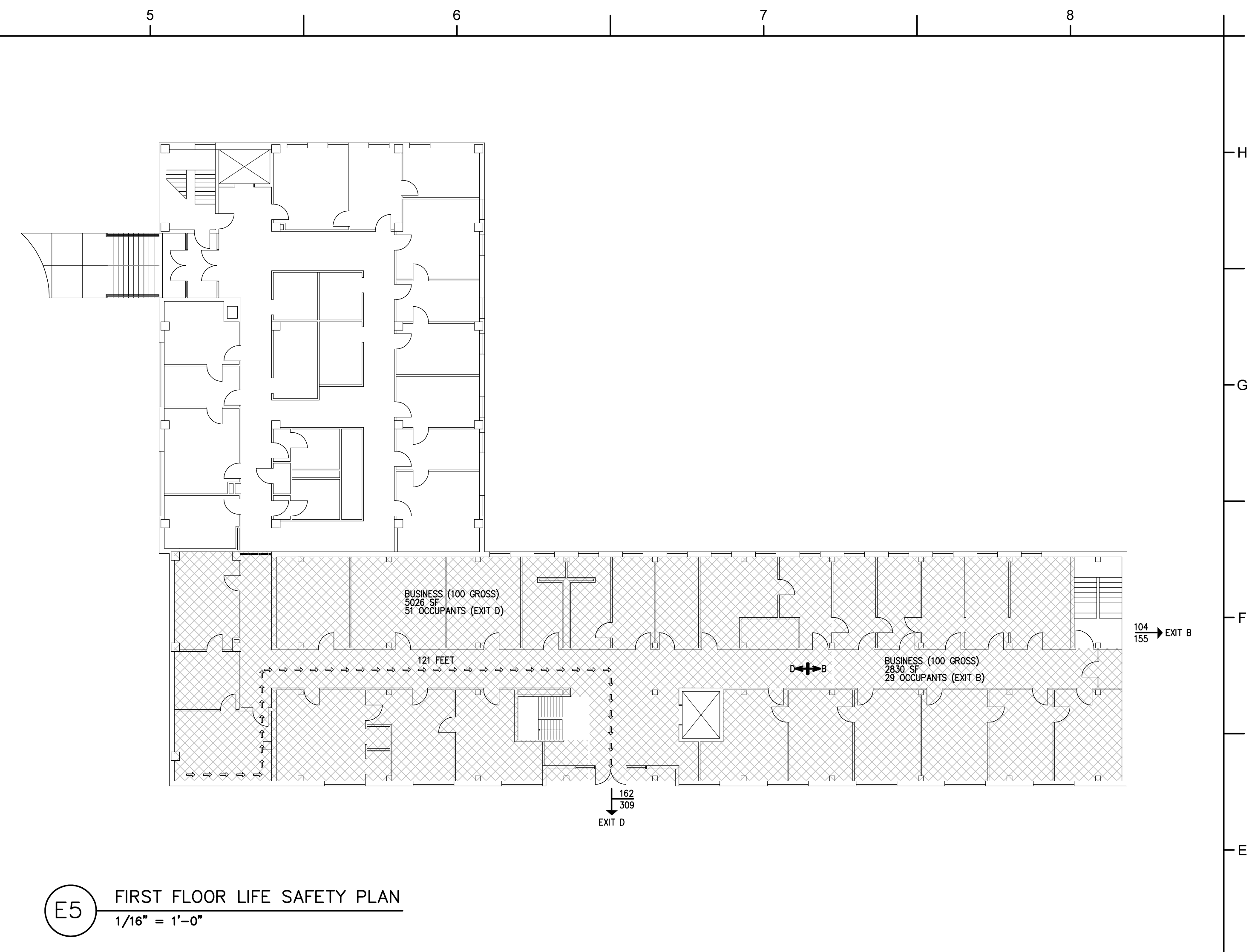
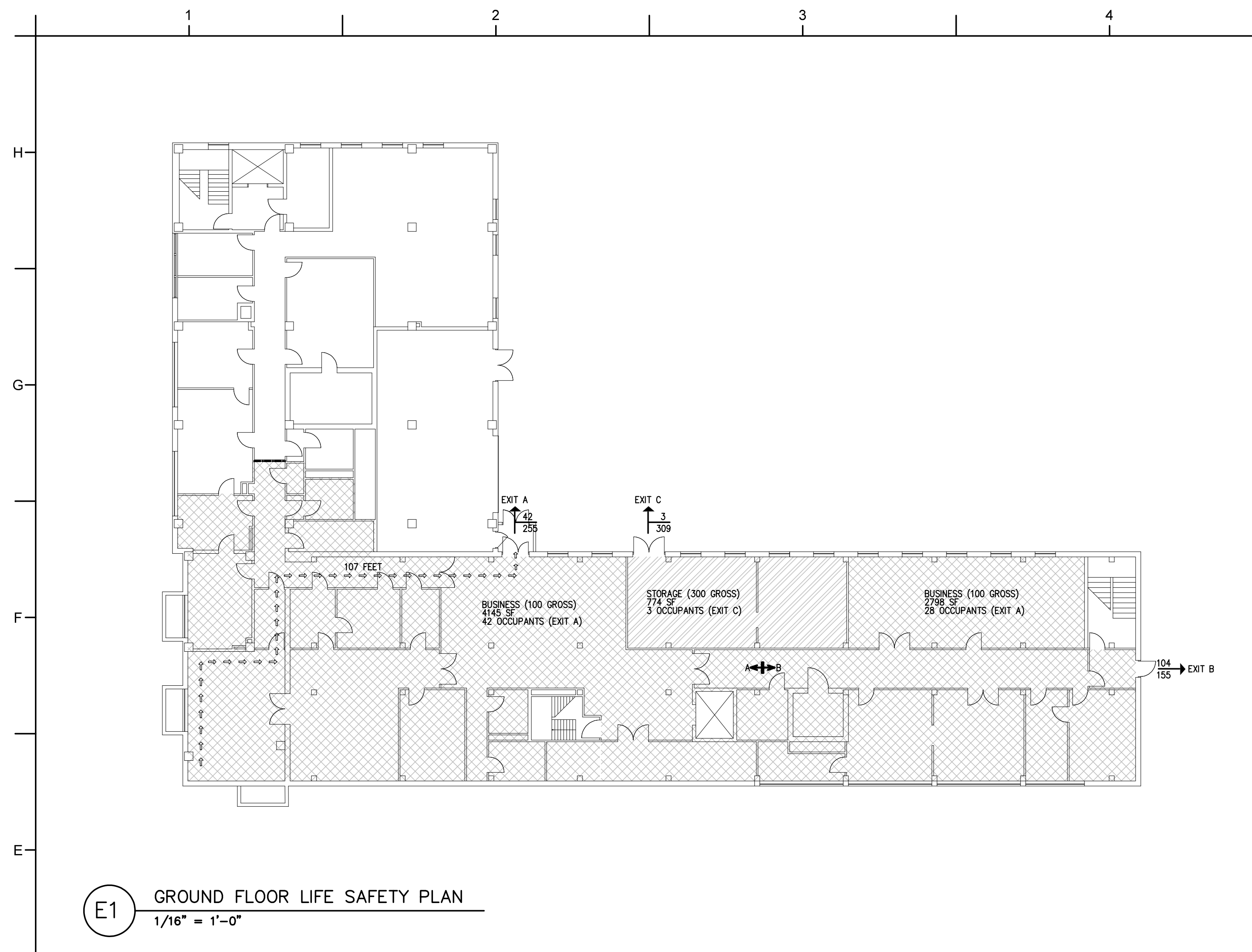
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**SHEET TITLE**

LIFE SAFETY

**G003**



**SYMBOL KEY**

- ← DENOTES EXIT DIRECTION ARROW, TYP
- 0 ← INDICATES EXIT POPULATION
- 0 ← INDICATES EXIT CAPACITY (POPULATION)
- ← DENOTES EXIT ACCESS
- 1-HR. RATED FIRE BARRIER WALL
- ↔ LOCATION WHERE TRAVEL DISTANCE TO 2 EXITS IS EQUIDISTANT
- ↔↔↔ WORST-CASE TRAVEL DISTANCE (WITHOUT SPRINKLER SYSTEM: NOT GREATER THAN 200')
- WORST-CASE COMMON PATH OF EGRESS (WITHOUT SPRINKLER SYSTEM: NO GREATER THAN 75')
- ← DEAD END CORRIDOR (NOT GREATER THAN 20')
- TEMPORARY BARRIER FOR DURING CONSTRUCTION, CONSTRUCTED AS FOLLOWS: 2X4 WOOD STUDS AT 16" O.C. WITH 1 LAYER OF 1/2" PLYWOOD ON ONE SIDE. TEMPORARY BARRIER SHALL EXTEND FROM WALL TO WALL AND FLOOR TO CEILING AND SHALL BE SECURELY ATTACHED TO EXISTING SURFACES.

**OCCUPANCY KEY**

- ▨ BUSINESS (B) (100 GROSS)
- ▨ STORAGE/MECH (S-2) (300 GROSS)



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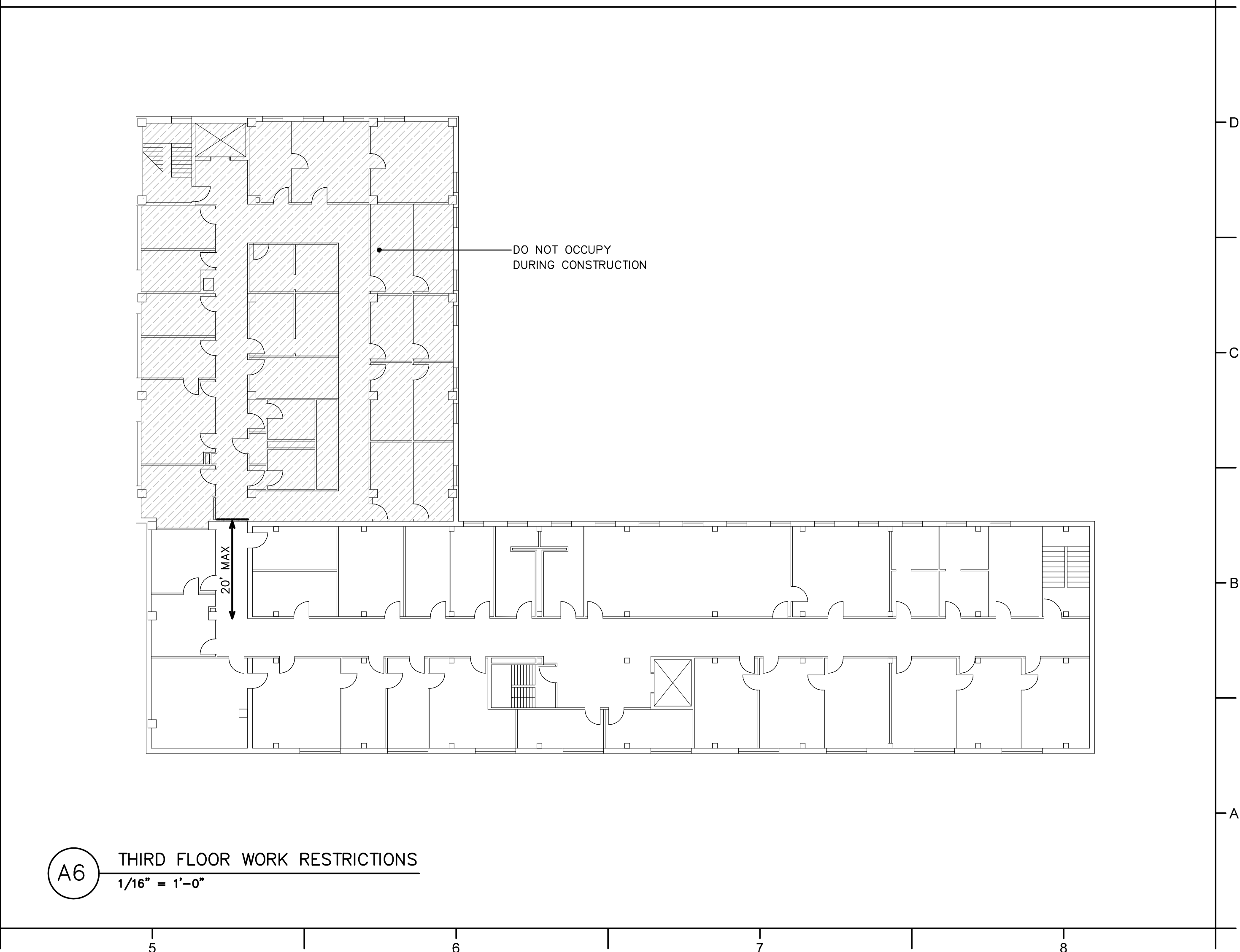
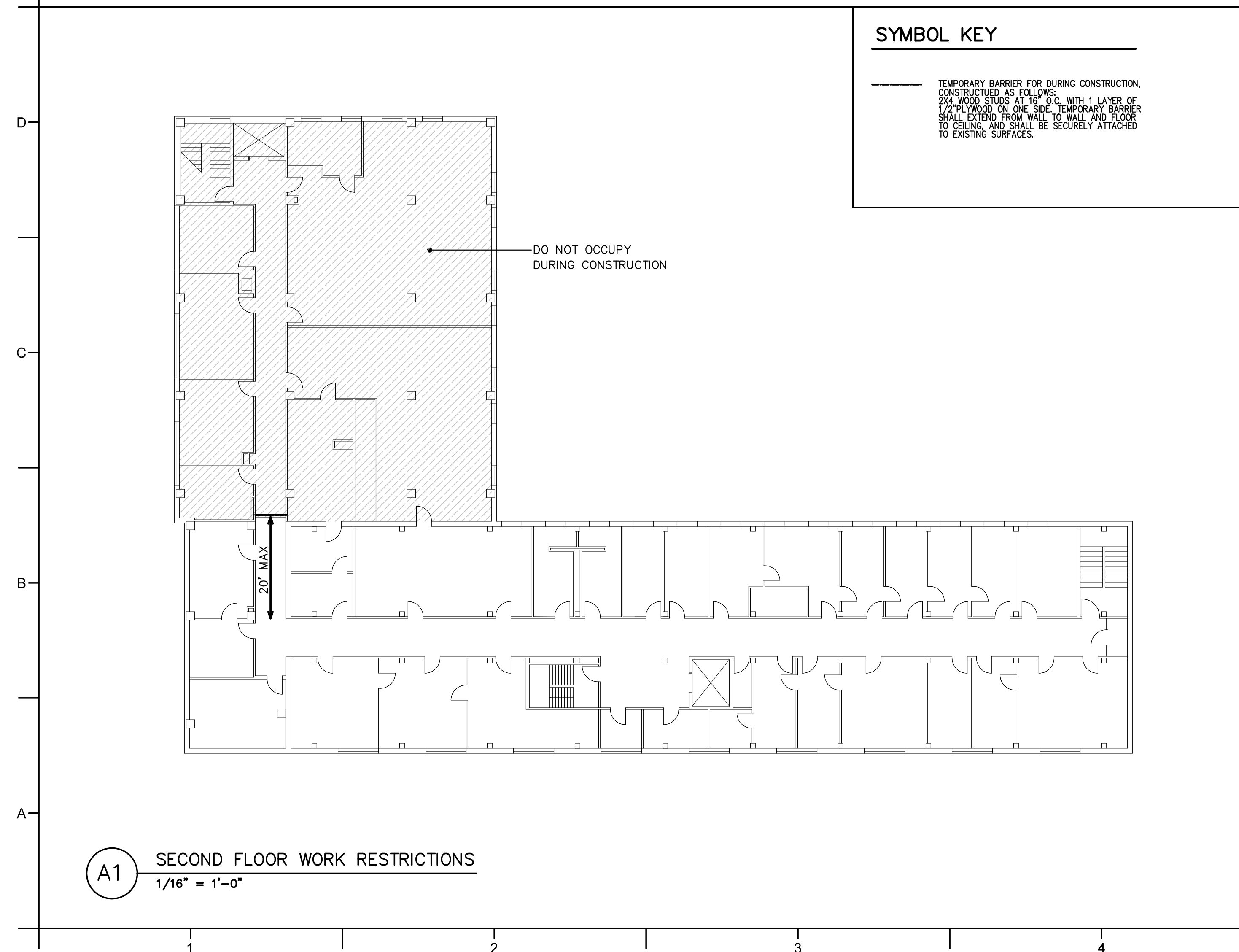
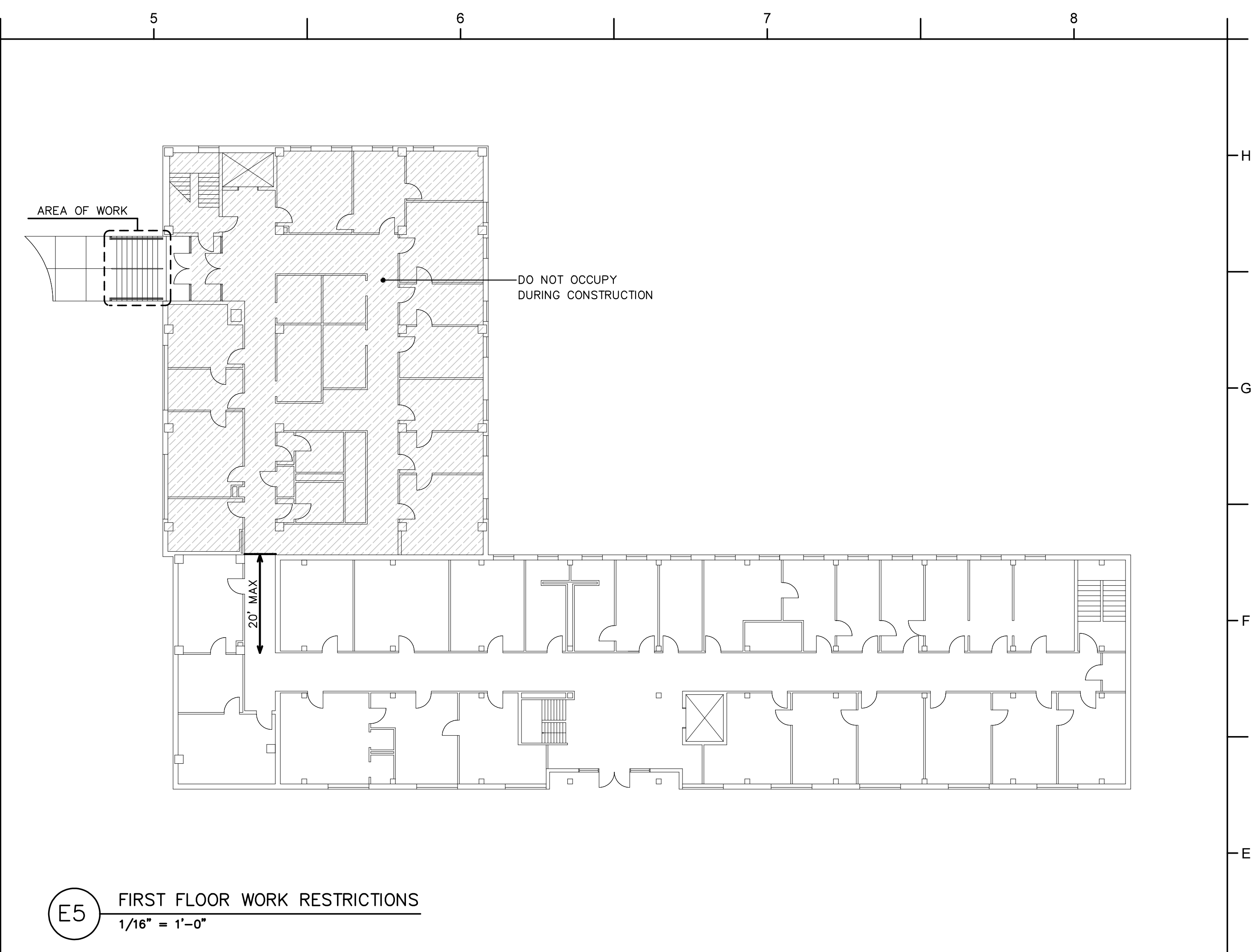
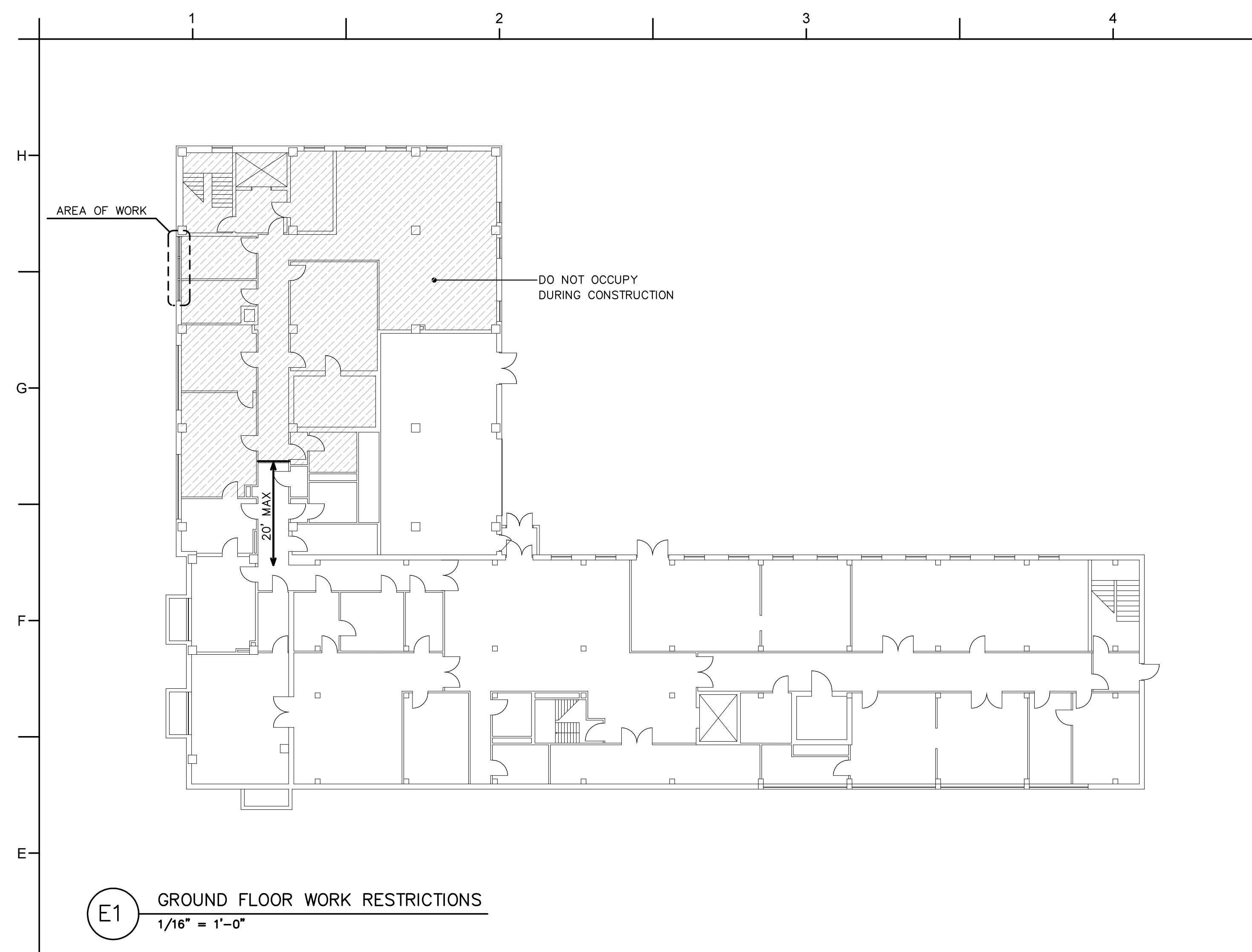
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**SHEET TITLE**

WORK RESTRICTIONS

**G004**



**SYMBOL KEY**

— TEMPORARY BARRIER FOR DURING CONSTRUCTION, CONSTRUCTED AS FOLLOWS:  
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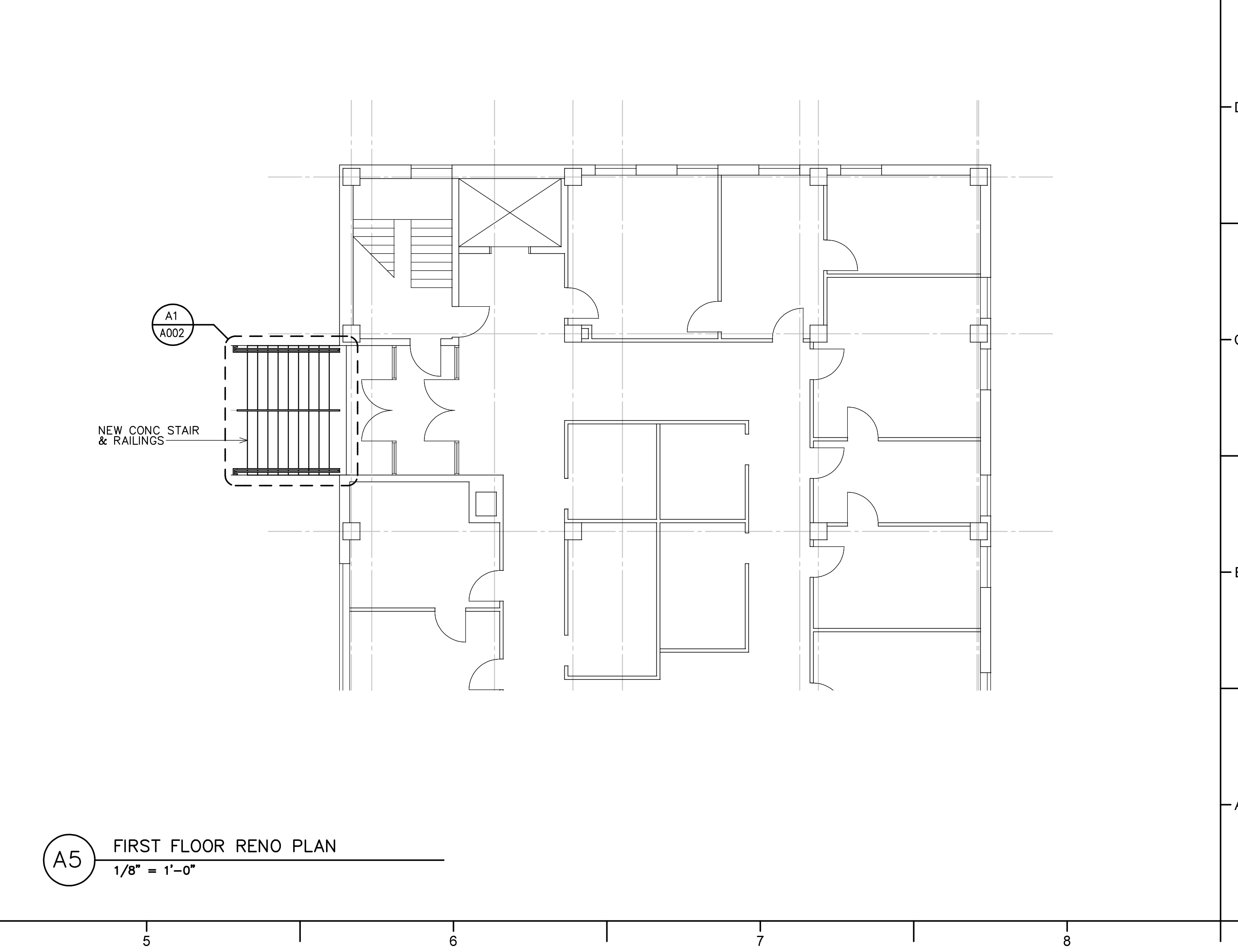
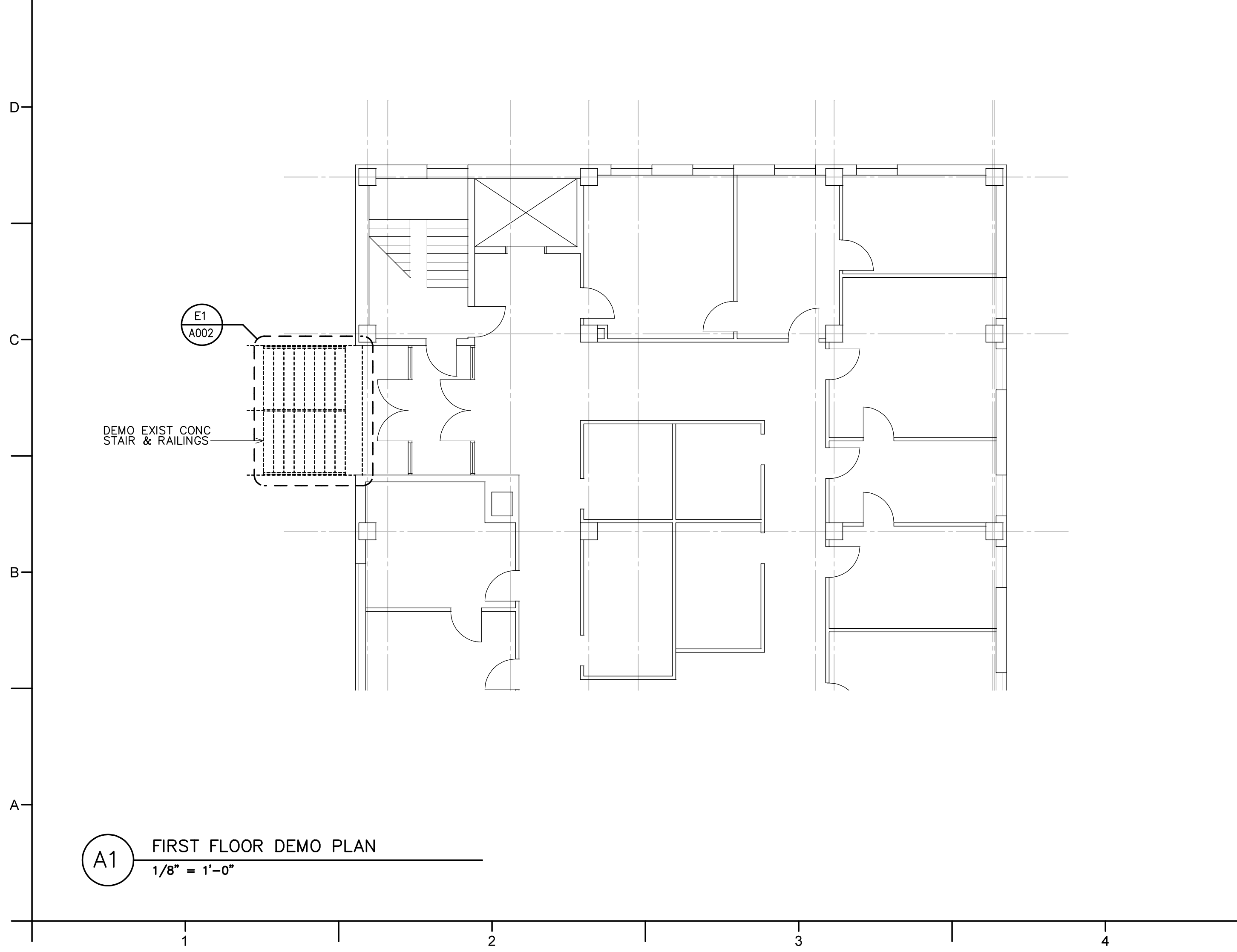
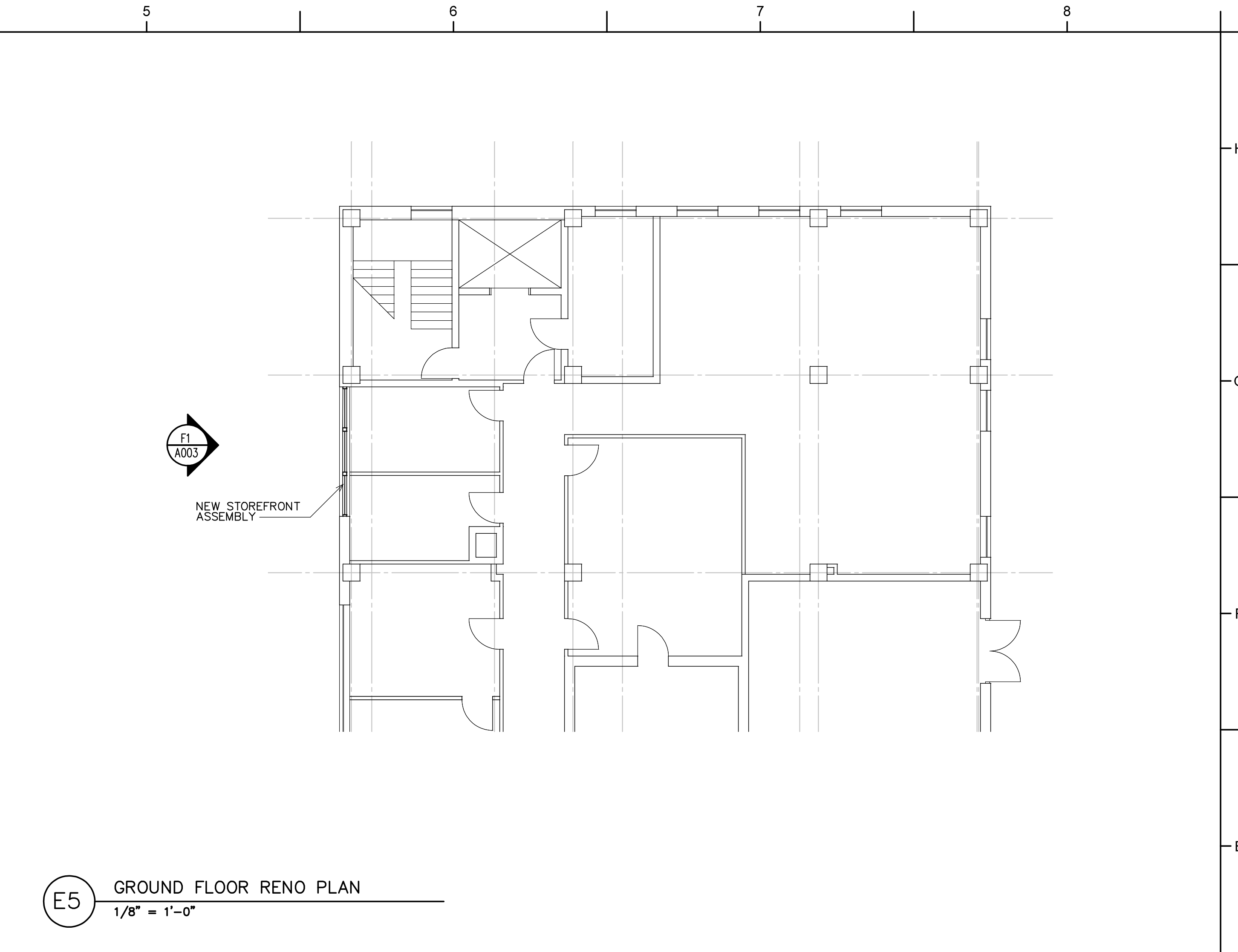
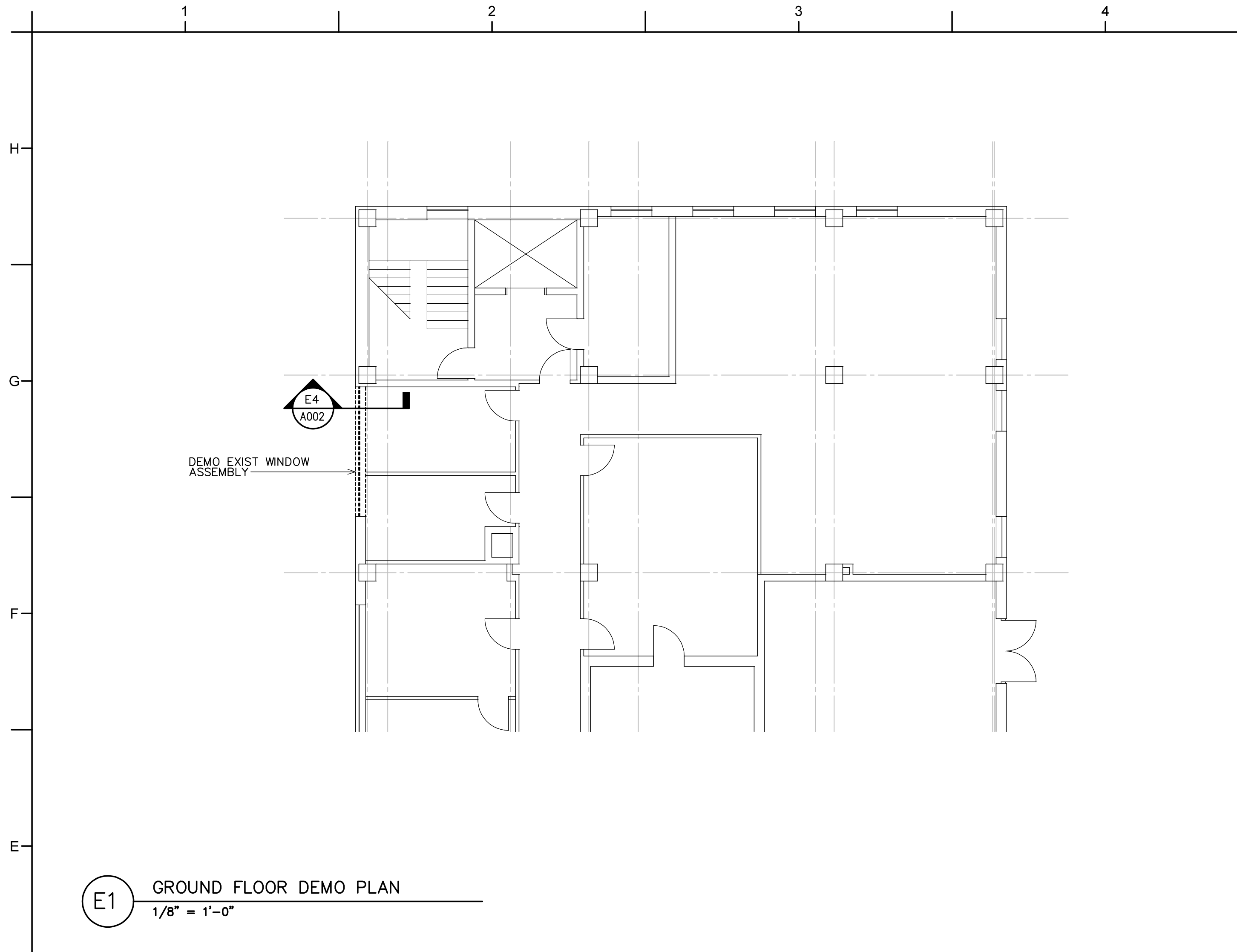
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**SHEET TITLE**

PLANS

**A001**





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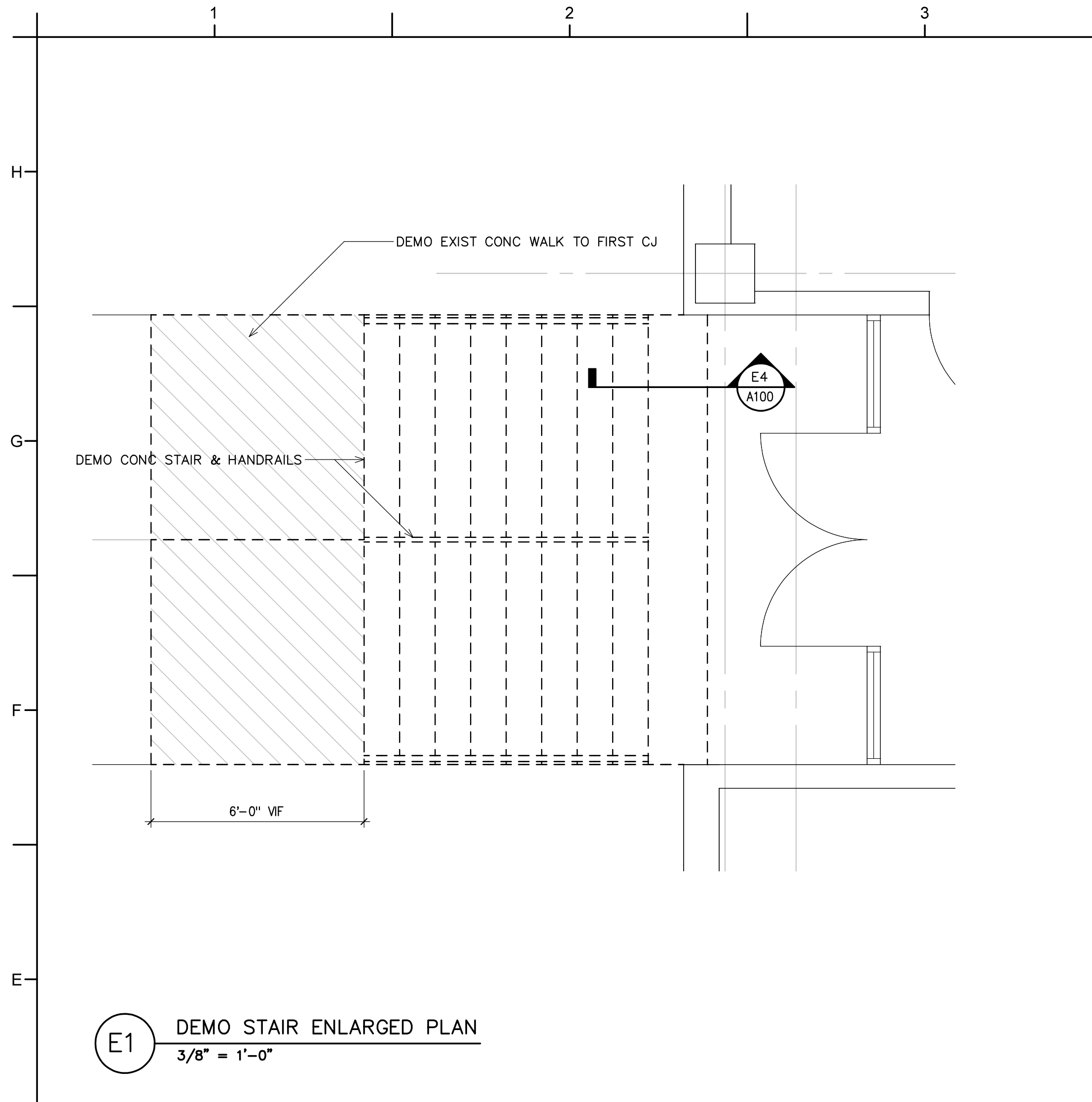
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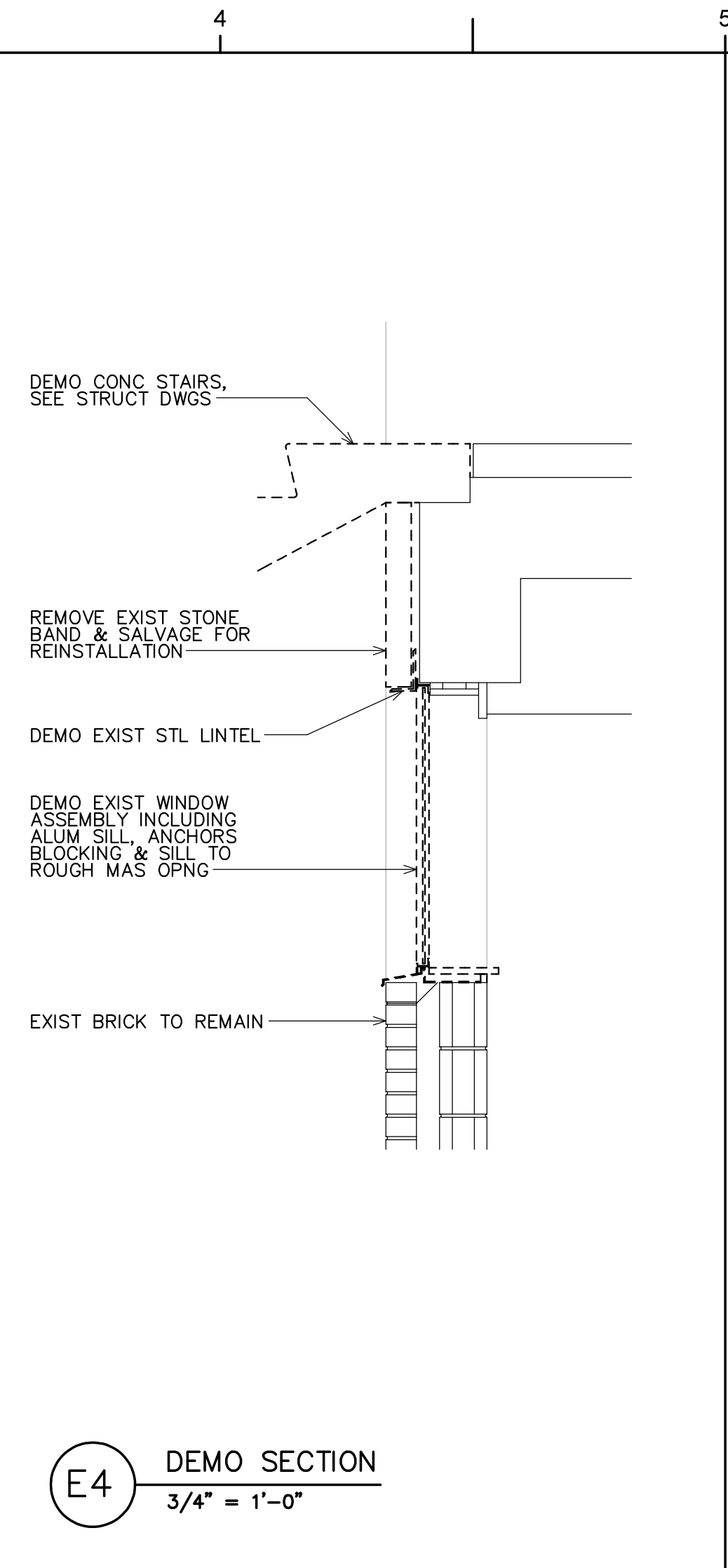
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ENLARGED PLANS  
& DETAILS

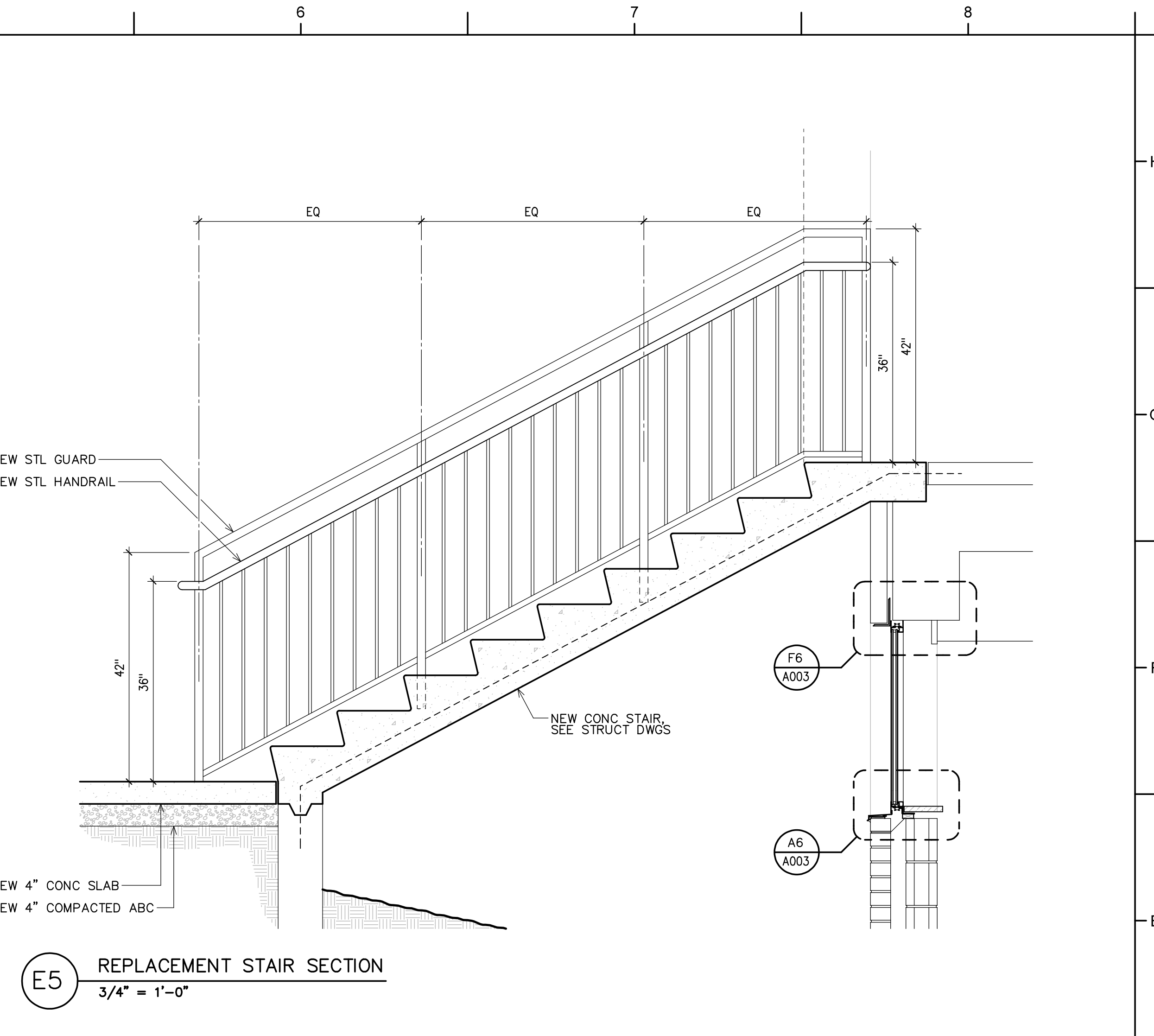
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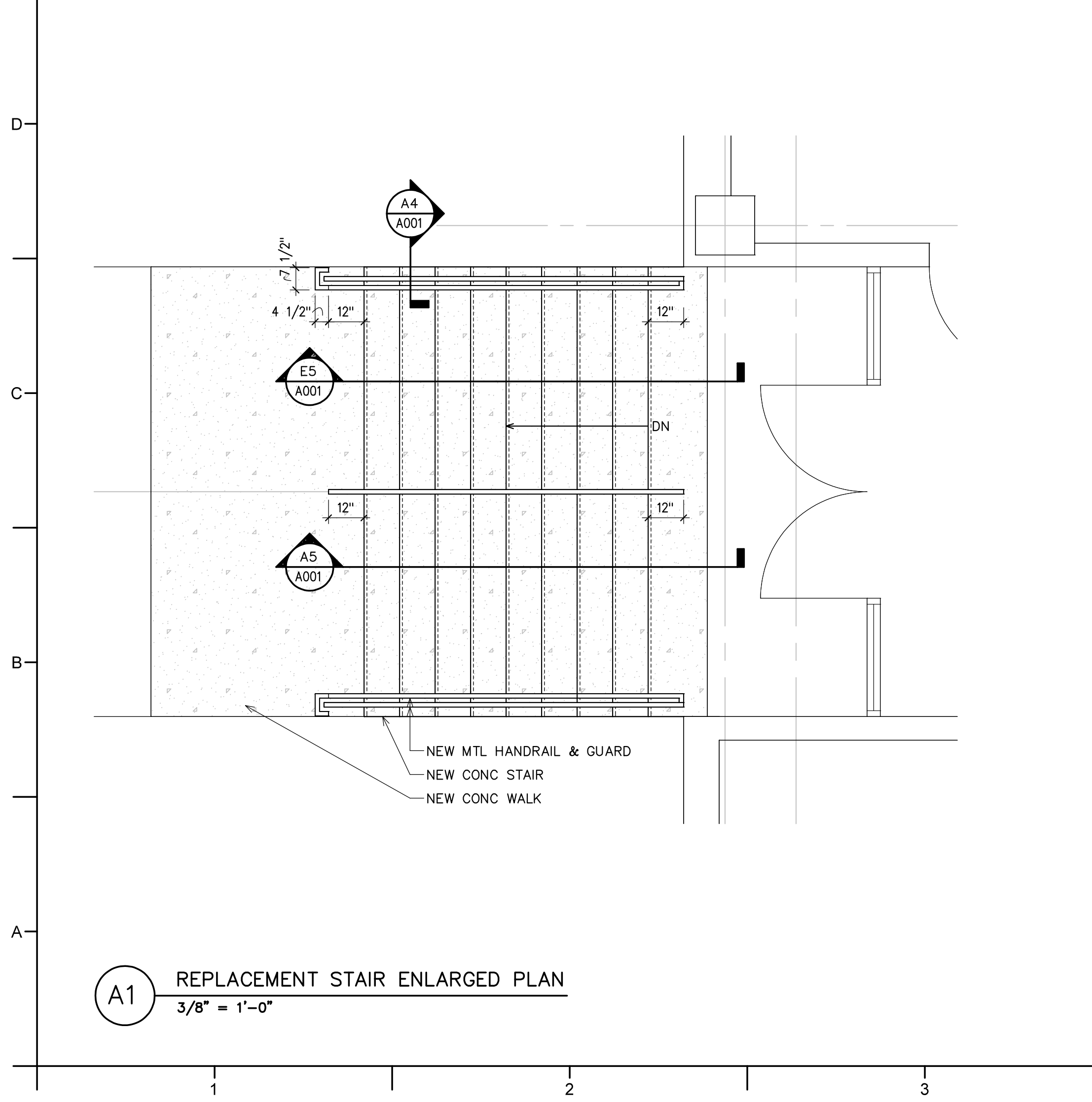
E1 DEMO STAIR ENLARGED PLAN  
3/8" = 1'-0"



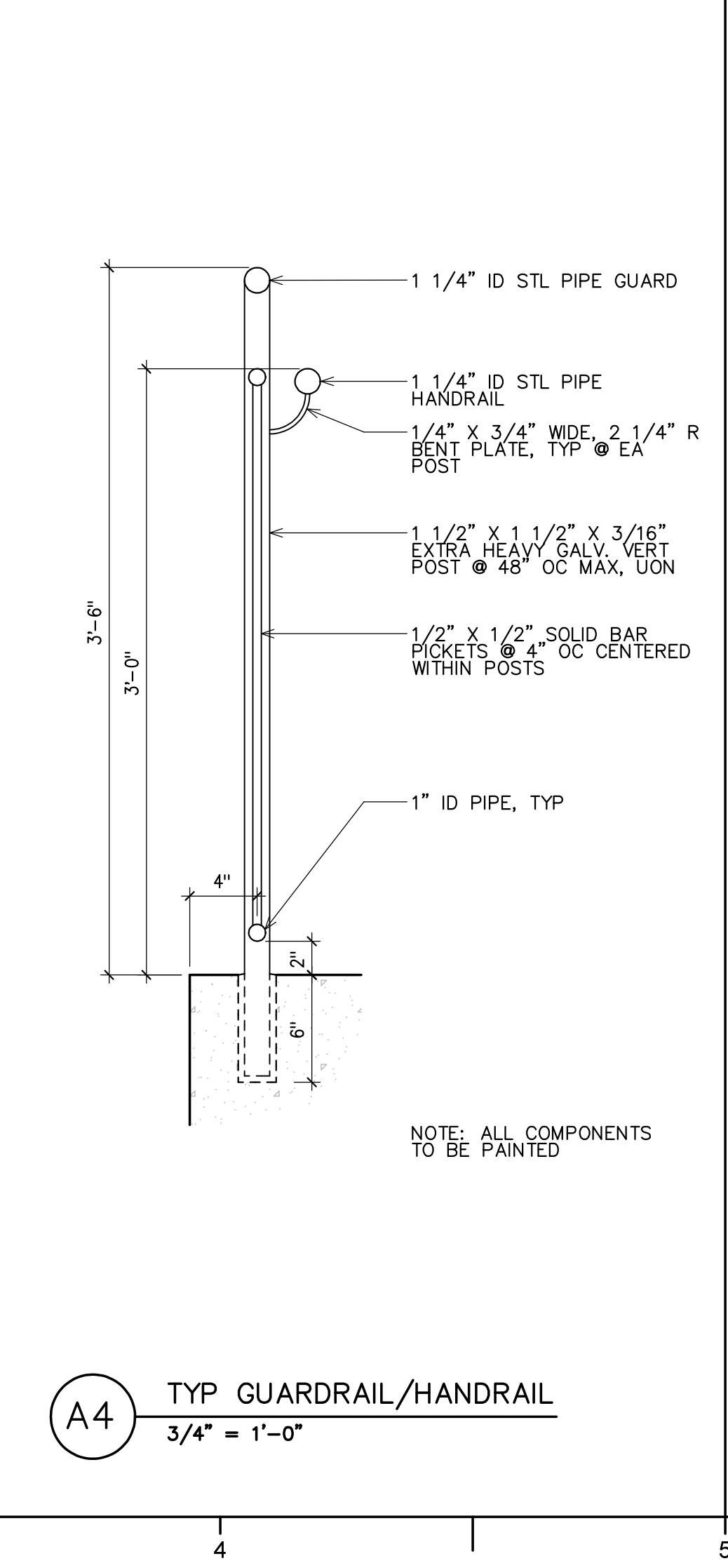
E4 DEMO SECTION  
3/4" = 1'-0"



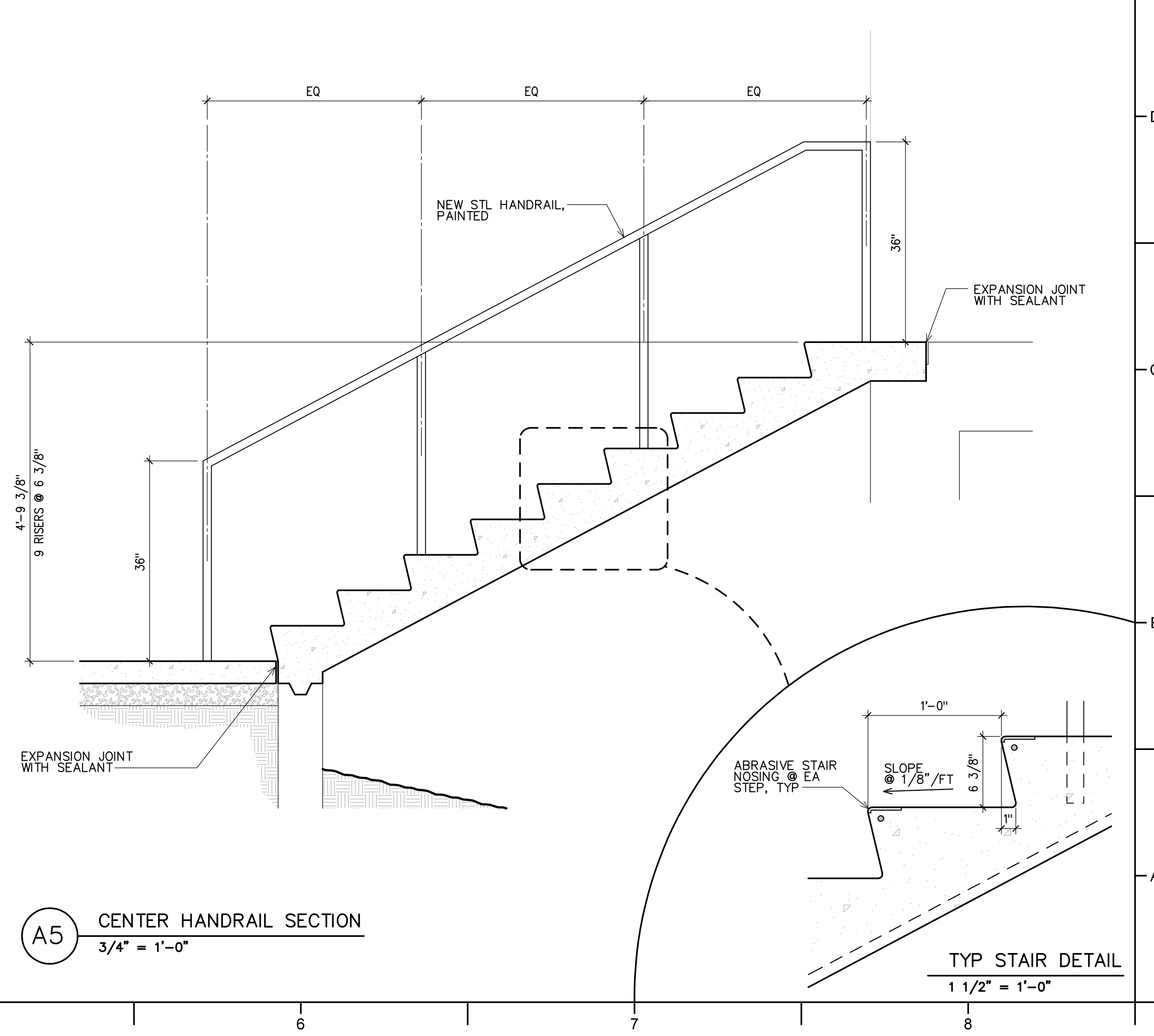
E5 REPLACEMENT STAIR SECTION  
3/4" = 1'-0"



A1 REPLACEMENT STAIR ENLARGED PLAN  
3/8" = 1'-0"



A4 TYP GUARDRAIL/HANDRAIL  
3/4" = 1'-0"



A5 CENTER HANDRAIL SECTION  
3/4" = 1'-0"

TYP STAIR DETAIL  
1 1/2" = 1'-0"

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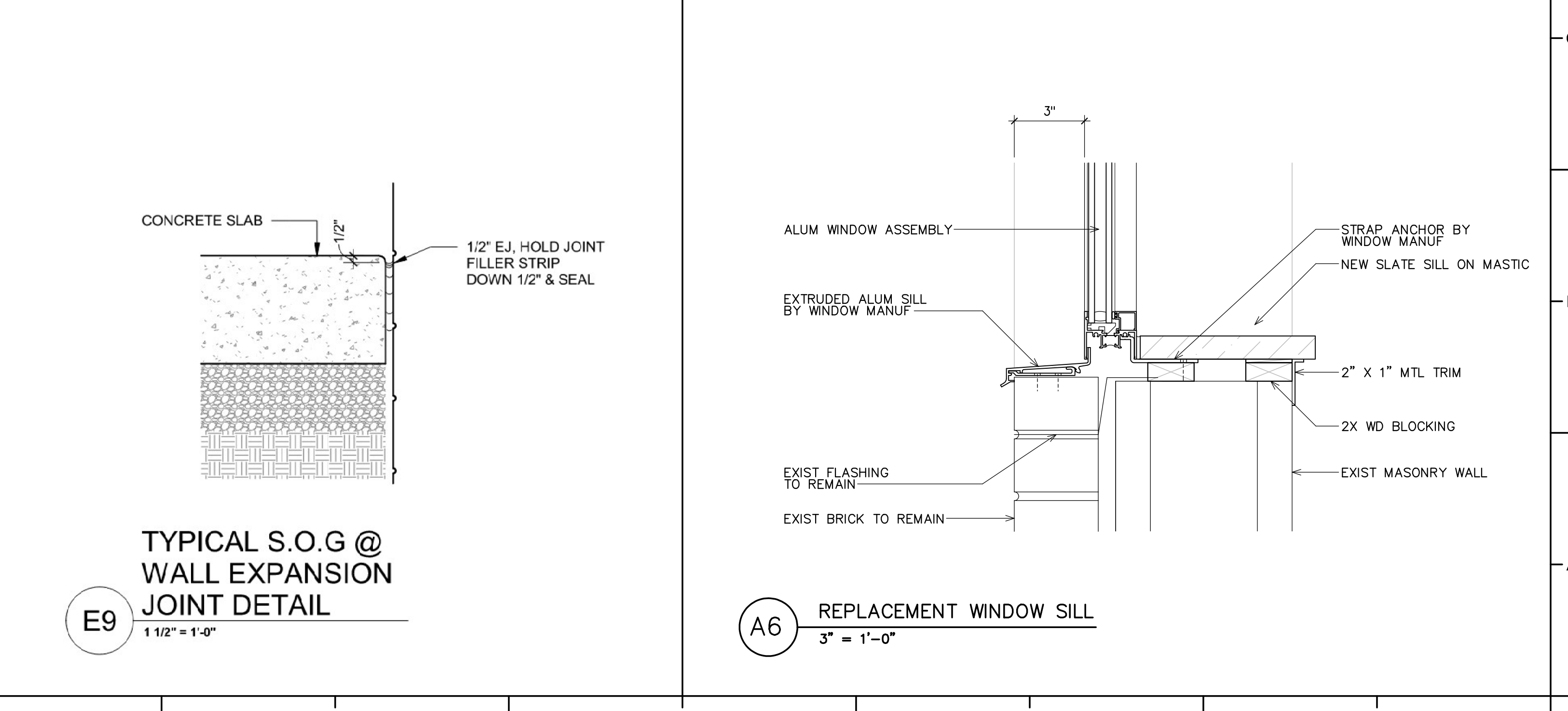
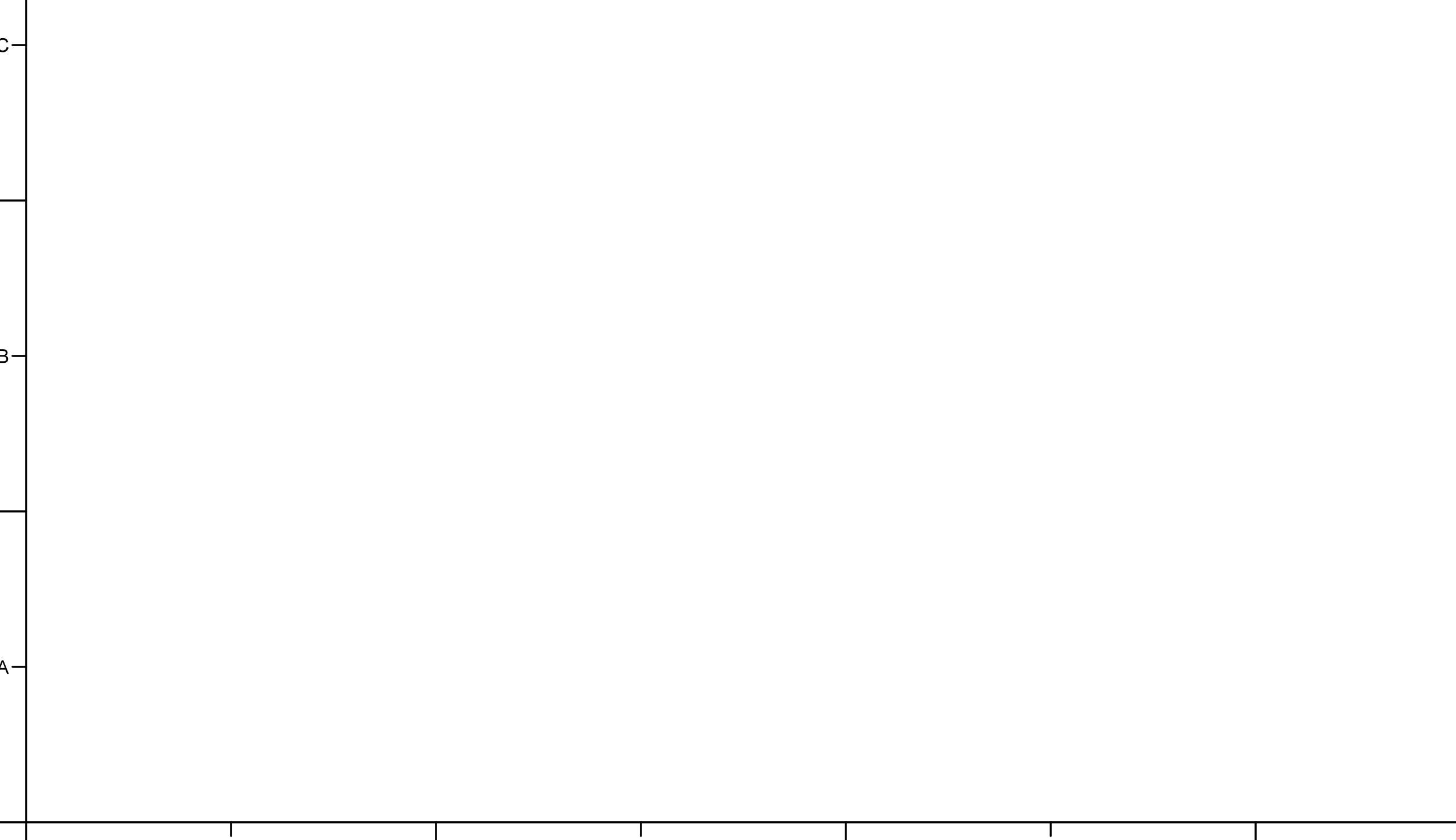
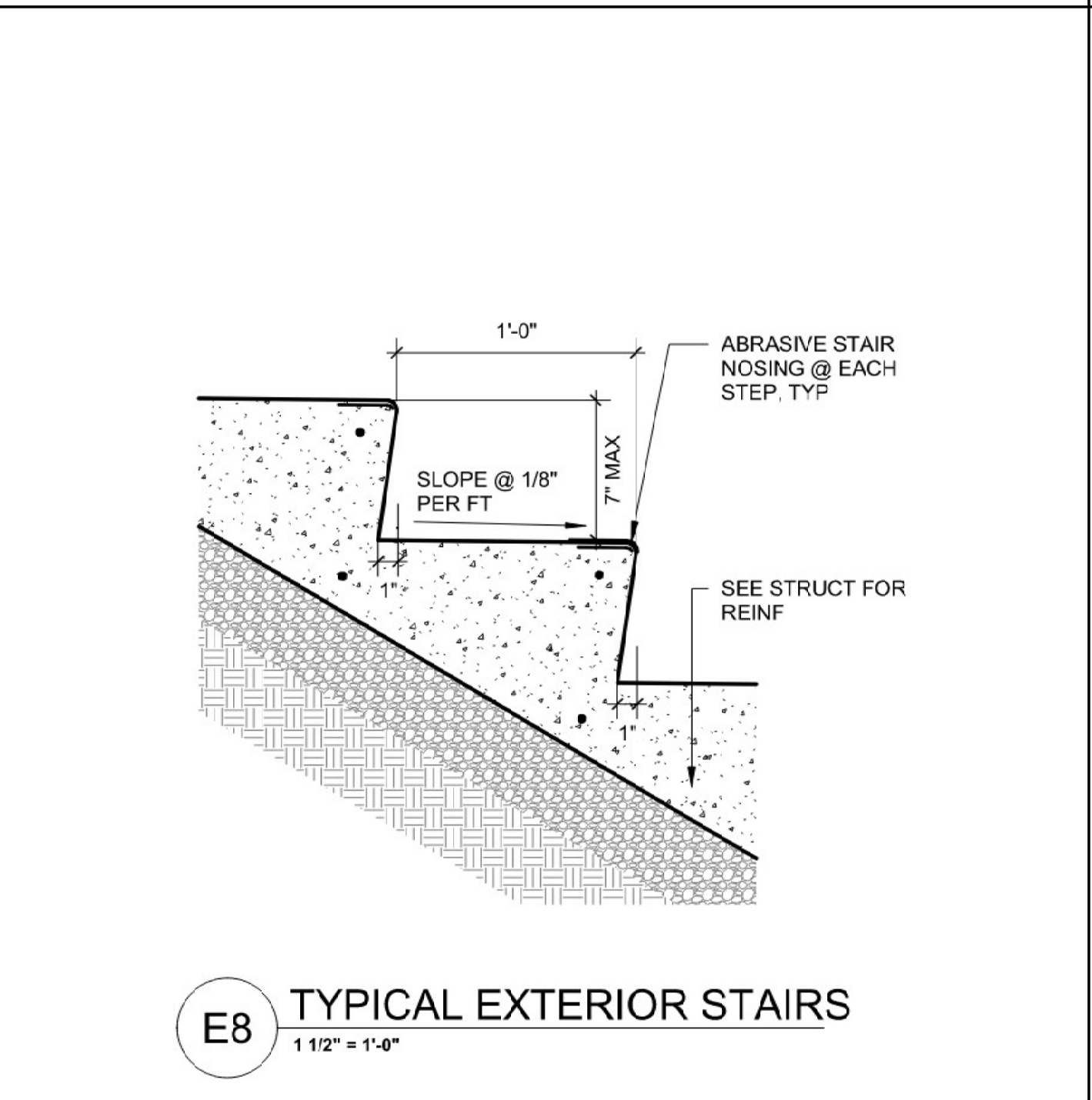
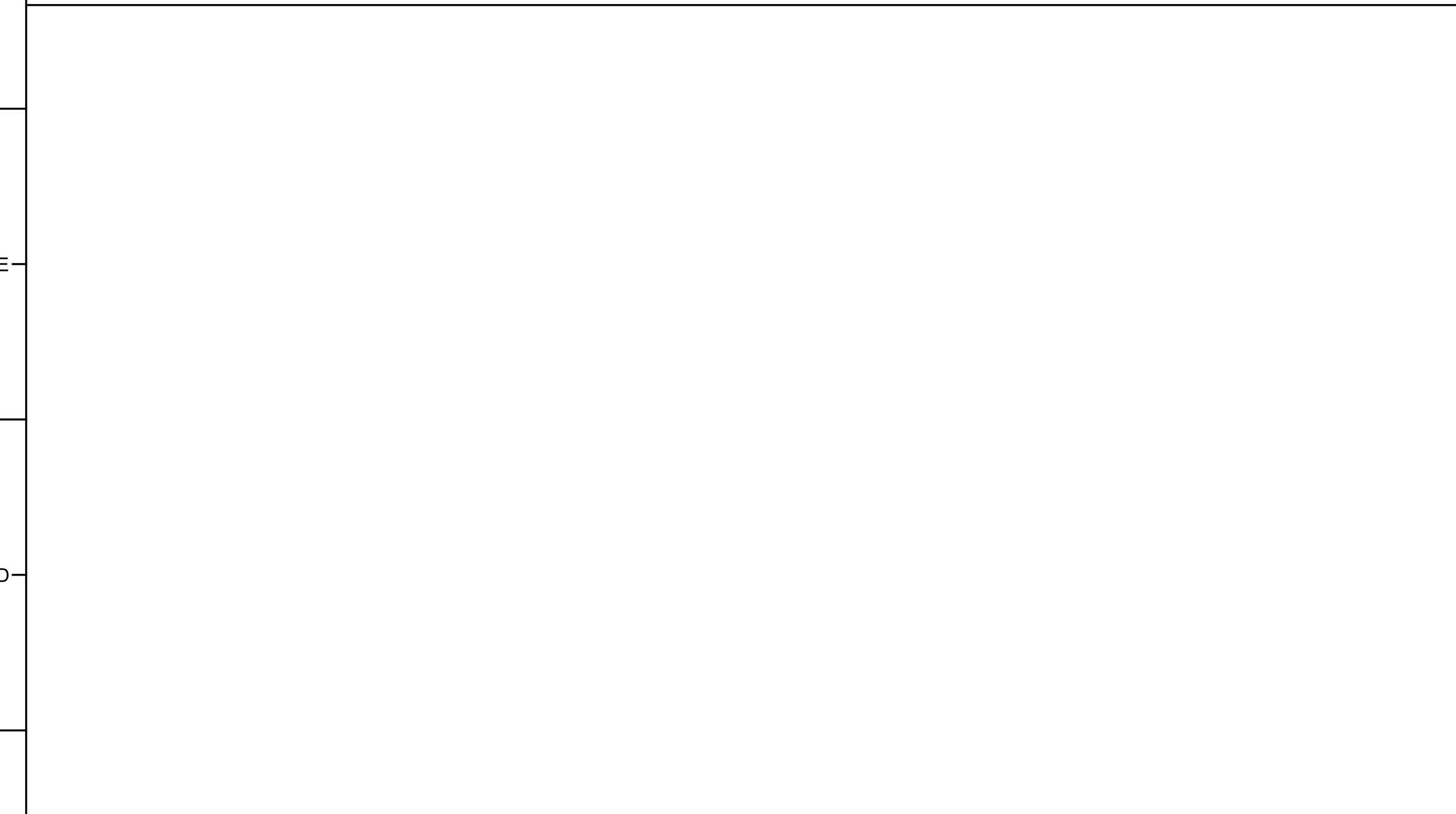
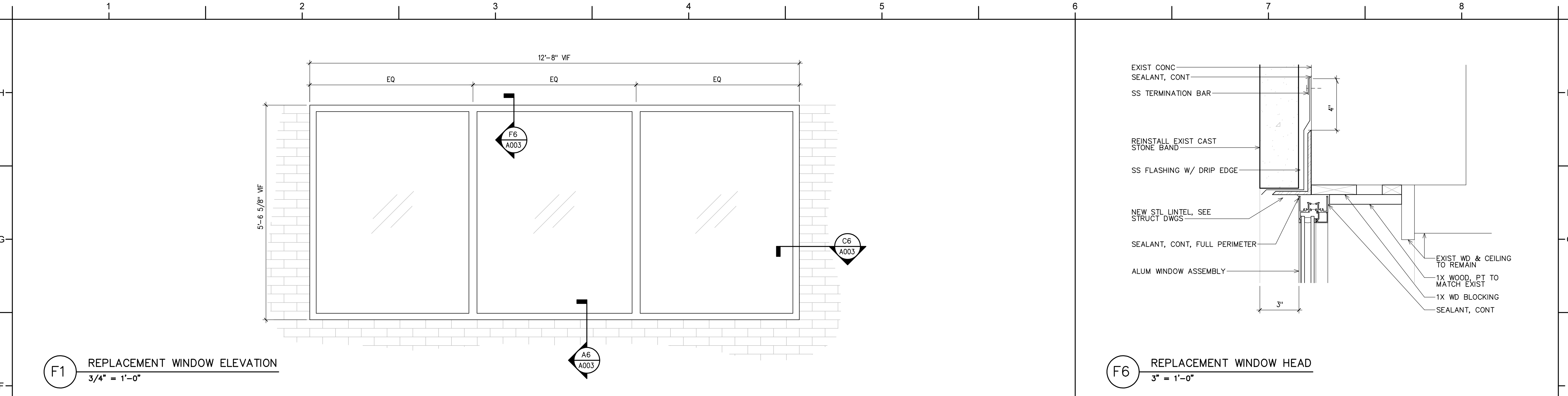
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DETAILS

**A003**



**GENERAL NOTES:**

1. THE STRUCTURAL DRAWINGS MUST BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, CIVIL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS, AND THE SPECIFICATIONS. THE CONTRACTOR MUST VERIFY THE REQUIREMENTS OF OTHER TRADES AS TO SLEEVES, CHASES, HANGERS, INSERTS, ANCHORS, HOLES, AND ADDITIONAL ITEMS TO BE PLACED OR SET IN THE STRUCTURAL WORK.
2. THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE PROVISIONS OF THE NORTH CAROLINA STATE BUILDING CODE, 2018 EDITION.
3. THE WORK OUTLINED IN THE BUILDING CODE IS SUBJECT TO SPECIAL INSPECTIONS AS DESCRIBED IN THE BUILDING CODE.
4. THE CONTRACTOR MUST PROVIDE TEMPORARY SHORING AND BRACING REQUIRED TO ERECT AND HOLD THE STRUCTURE IN PROPER ALIGNMENT UNTIL PERMANENT SUPPORTS AND LATERAL BRACING ARE IN PLACE.
5. PORTIONS OF THE STRUCTURE NOT ALTERED AND NOT AFFECTED BY THE ALTERATION HAVE NOT BEEN REVIEWED FOR COMPLIANCE WITH THE CODE REQUIREMENTS FOR A NEW STRUCTURE.
6. THE CONTRACTOR MUST FIELD VERIFY THE DIMENSIONS, ELEVATIONS, AND OTHER REQUIREMENTS NECESSARY FOR THE PROPER CONSTRUCTION AND ALIGNMENT OF THE NEW PORTIONS OF THE STRUCTURE TO THE EXISTING. ANY DIMENSIONS SHOWN OF EXISTING STRUCTURES MUST BE CONSIDERED AS APPROXIMATE AND ADEQUATE FOR BIDDING PURPOSES ONLY. THE CONTRACTOR MUST MAKE ALL MEASUREMENTS NECESSARY FOR THE FABRICATION AND ERECTION OF STRUCTURAL MEMBERS. DISCREPANCIES MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
7. DESIGN CRITERIA:

CLASSIFICATION OF BUILDING  
RISK CATEGORY ..... III

LIVE LOADS - UNIFORM:  
STAIRWAYS ..... 100 PSF

**POST-INSTALLED ANCHOR NOTES:**

1. ALL POST INSTALLED ANCHORS INDICATED ON THE DRAWINGS ARE BY HILTI, INC, AND MUST BE CONSIDERED THE BASIS OF DESIGN PRODUCT. WHERE NOT EXPLICITLY INDICATED IN THE DRAWINGS, THE FOLLOWING ANCHORS/ADHESIVES MUST BE USED:
  - A. ANCHORAGE TO CONCRETE
    1. ADHESIVE ANCHORS FOR CRACKED AND UNCRACKED CONCRETE USE:
      - a. HILTI HIT-HY 200 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT (TE-CD OR TE-YD) AND VC 20/40 VACUUM SYSTEM (VC 20-U OR VC40U) WITH STEEL THREADED ROD PER ICC ESR-3187.
      2. SCREW ANCHORS FOR CRACKED AND UNCRACKED CONCRETE USE:
        - a. HILTI KWIK HUS EZ SCREW ANCHORS PER ICC ESR-3027.
    - B. REBAR DOWELING INTO CONCRETE
      1. ADHESIVE ANCHORS FOR CRACKED AND UNCRACKED CONCRETE USE:
        - a. HILTI HIT-HY 200 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT (TE-CD OR TE-YD) AND VC 20/40 VACUUM SYSTEM (VC 20-U OR VC 40-U) WITH CONTINUOUSLY DEFORMED REBAR PER ICC ESR-3187.
      - C. ANCHORAGE TO SOLID GROUTED MASONRY
        1. ADHESIVE ANCHORS USE:
          - a. HILTI HIT-HY 270 MASONRY ADHESIVE ANCHORING SYSTEM (ICC PENDING).
          - b. STEEL ANCHOR ELEMENT MUST BE HILTI HAS-E CONTINUOUSLY THREADED ROD.
        2. MECHANICAL ANCHORS USE:
          - a. HILTI KWIK HUS EZ SCREW ANCHORS PER ICC ESR 3056.
      - D. ANCHORAGE TO HOLLOW / MULTI-WYTHE MASONRY
        1. ADHESIVE ANCHORS USE:
          - a. HILTI HIT-HY 270 MASONRY ADHESIVE ANCHORING SYSTEM PER ICCESR-3342.
          - b. STEEL ANCHOR ELEMENT MUST BE HILTI HAS-E CONTINUOUSLY THREADED ROD OR CONTINUOUSLY DEFORMED STEEL REBAR.
          - c. THE APPROPRIATE SIZE SCREEN TUBE MUST BE USED PER ADHESIVE MANUFACTURER'S RECOMMENDATION.
  2. ALTERNATE POST INSTALLED ANCHOR PRODUCTS MAY BE SUBMITTED TO THE ENGINEER FOR REVIEW AND POSSIBLE APPROVAL. ALL SUBSTITUTION REQUESTS MUST BE ACCOMPANIED BY AN ICC ESR SHOWING COMPLIANCE WITH THE RELEVANT BUILDING CODE FOR SEISMIC USES, LOAD RESISTANCE, INSTALLATION CATEGORY, AND COMPREHENSIVE INSTALLATION INSTRUCTIONS. ADHESIVE ANCHOR EVALUATION WILL ALSO CONSIDER CREEP, IN-SERVICE TEMPERATURE AND INSTALLATION TEMPERATURE. ALTERNATE PRODUCTS MAY REQUIRE MODIFICATIONS TO ANCHOR DIAMETER, SPACING, AND EMBEDMENT.
  3. INSTALL ANCHORS PER THE MANUFACTURER INSTRUCTIONS, AS INCLUDED IN THE ANCHOR PACKAGING.
  4. THE CONTRACTOR MUST ARRANGE FOR AN ANCHOR MANUFACTURER'S REPRESENTATIVE TO PROVIDE ONSITE INSTALLATION TRAINING FOR ALL OF THEIR ANCHORING PRODUCTS SPECIFIED. THE STRUCTURAL ENGINEER OF RECORD MUST RECEIVE DOCUMENTED CONFIRMATION THAT ALL OF THE CONTRACTOR'S PERSONNEL WHO INSTALL ANCHORS ARE TRAINED PRIOR TO THE COMMENCEMENT OF ANCHOR INSTALLATION.
  5. ANCHOR CAPACITY IS DEPENDANT UPON SPACING BETWEEN ADJACENT ANCHORS AND PROXIMITY OF ANCHORS TO EDGE OF CONCRETE. INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON THE DRAWINGS.
  6. EXISTING REINFORCING BARS IN THE CONCRETE STRUCTURE MAY CONFLICT WITH SPECIFIC ANCHOR LOCATIONS. UNLESS NOTED ON THE DRAWINGS THAT THE BARS CAN BE CUT, THE CONTRACTOR MUST LOCATE THE POSITION OF THE REINFORCING BARS AT THE LOCATIONS OF THE CONCRETE ANCHORS, BY FERROSCAN OR GPR.
  7. ALL POST INSTALLED ANCHORS REQUIRE CONTINUOUS SPECIAL INSPECTIONS TO VERIFY INSTALLATION HAS BEEN PERFORMED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS. REFERENCE THE STATEMENT AND SCHEDULE OF SPECIAL INSPECTIONS FOR ADDITIONAL INFORMATION.

**CAST-IN-PLACE CONCRETE NOTES:**

1. CONCRETE MUST BE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 301 AND 318.
2. CONCRETE FOR EXTERIOR STAIR (EXPOSURE CLASS C2): f<sub>c</sub> = 4000 PSI, 4.5% TO 7.5% ENTRAINED AIR, MAXIMUM WATER CEMENTITIOUS RATION = 0.45.
3. REINFORCING MATERIALS MUST BE AS FOLLOWS:
  - A. REINFORCING BARS - ASTM A615, GRADE 60, DEFORMED, WITH ASTM A775 EPOXY COATING WITH LESS THAN 2% DAMAGE EACH 12" BAR LENGTH.
4. ALL REINFORCING STEEL AND EMBEDDED ITEMS SUCH AS ANCHOR RODS AND WELD PLATES MUST BE ACCURATELY PLACED AND ADEQUATELY TIED AND SUPPORTED BEFORE CONCRETE IS PLACED TO PREVENT DISPLACEMENT BEYOND PERMITTED TOLERANCES.
5. CONCRETE COVER TO REINFORCING STEEL MUST CONFORM TO THE MINIMUM COVER RECOMMENDATIONS IN ACI 318, UNLESS THE DRAWINGS SHOW GREATER COVER REQUIREMENTS.
6. LAP CONTINUOUS REINFORCING STEEL 57 X BAR DIAMETER, TYPICAL UNLESS OTHERWISE NOTED.

**STRUCTURAL STEEL NOTES:**

1. STRUCTURAL STEEL MUST BE IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) 360.
2. STRUCTURAL STEEL MUST COMPLY WITH THE FOLLOWING SPECIFICATIONS:
  - A. STRUCTURAL STEEL SHAPES, PLATES AND BARS UNLESS OTHERWISE NOTED - ASTM A36, F<sub>y</sub> = 36 KSI
3. HOT-DIP GALVANIZE AFTER FABRICATION THE FOLLOWING:
  - A. ANGLES AND PLATES SUPPORTING MASONRY IN EXTERIOR WALLS.

**ABBREVIATIONS:**

AFF	ABOVE FINISHED FLOOR	HVY	HEAVY
ARCH	ARCHITECT	INT	INTERIOR
BD	BAR DIAMETER	JBE	JOIST BEARING ELEVATION
BF	BRACED FRAME	JT	JOINT
BEJ	BUILDING EXPANSION JOINT	KCJ	KEYED CONSTRUCTION JOINT
BLDG	BUILDING	L	LOW
BM	BEAM	LLH	LONG LEG HORIZONTAL
BOD	BOTTOM OF DECK	LLV	LONG LEG VERTICAL
BOT, B	BOTTOM	LSH	LONG SIDE HORIZONTAL
BRG	BEARING	LSV	LONG SIDE VERTICAL
BTWN	BETWEEN	LWTW	LIGHTWEIGHT
C TO C	CENTER TO CENTER	LWC	LIGHTWEIGHT CONCRETE
CFMF	COLD-FORMED METAL FRAMING	MAS	MASONRY
CJ	CONTROL JOINT	MATL	MATERIAL
CL	CENTERLINE	MAX	MAXIMUM
CLR	CLEAR	MECH	MECHANICAL
CMU	CONCRETE MASONRY UNIT	MF	MOMENT FRAME
COL	COLUMN	MFR	MANUFACTURER
CONC	CONCRETE	MID	MIDDLE
CONN	CONNECTION	MIN	MINIMUM
CONSTR	CONSTRUCTION	MOD	MODIFY
CONT	CONTINUOUS	MOS	MIDDEPTH OF SLAB
COORD	COORDINATE	NOM	NOMINAL
CTR	CENTER	NTS	NOT TO SCALE
CTR'D	CENTERED	OC	ON CENTER
CW	CURTAIN WALL	OPH	OPPOSITE HAND
DBL	DOUBLE	OPNG	OPENING
DC	DIAPHRAGM CHORD	PAF	POWDER ACTUATED FASTENER
DCJ	DOWELED CONSTRUCTION JOINT	PAR	PARALLEL
DIA, Ø	DIAMETER	PC	PRE-ENGINEERED METAL BUILDING
DJ	DOUBLE JOIST	PEMB	PRE-ENGINEERED METAL BUILDING
DWGS	DRAWINGS	PEN	PENETRATE, PENETRATION
EA	EACH	PERP	PERPENDICULAR
EF	EACH FACE	PL	PLATE
EJ	EXPANSION JOINT	R	RADIUS
EL	ELEVATION	REF	REFERENCE, REFER TO
ELEV	ELEVATOR	REINF	REINFORCE, REINFORCED, REINFORCING
EMBED	EMBEDMENT	REQD	REQUIRED
EOD	EDGE OF DECK	REQMTS	REQUIREMENTS
EOS	EDGE OF SLAB	SCHED	SCHEDULE
EQ	EQUAL	SF	STEPPED FOOTING
EW	EACH WAY	SGB	STEPPED GRADE BEAM
EXIST	EXISTING	SIM	SIMILAR
EXP	EXPANSION	SJ	SAWED JOINT
EXT	EXTERIOR	SL	SLOPE
FD	FLOOR DRAIN	SOG	SLAB-ON-GRADE
FDN	FOUNDATION	SPF	SIDEPLATE FRAME
FO	FACE OF	STD	STANDARD
FF EL	FINISHED FLOOR ELEVATION	TBE	TRUSS BEARING ELEVATION
FIN	FINISH	T&B	TOP & BOTTOM
FIN FLR	FINISHED FLOOR	T&G	TONGUE AND GROOVE
FOB	FACE OF BUILDING	THK	THICKNESS
FOC	FACE OF CONCRETE	TOC	TOP OF CONCRETE
FOM	FACE OF MASONRY	TOF	TOP OF FOOTING
FOS	FACE OF SLAB/ STUD	TOM	TOP OF MASONRY
FRMG	FRAMING	TOCP	TOP OF CONCRETE PEDESTAL
FTG	FOOTING	TOS	TOP OF STEEL
FV, ±	FIELD VERIFY	TS	THICKENED SLAB
GALV	GALVANIZED	TYP	TYPICAL
GEN	GENERAL	UON	UNLESS OTHERWISE NOTED
GR BM	GRADE BEAM	VERT	VERTICAL
H	HIGH	W/	WITH
HK	HOOK	WP	WORKING POINT
HORIZ	HORIZONTAL	WSP	WOOD STRUCTURAL PANEL(S)
HSS	HOLLOW STRUCTURAL SECTION	WWR	WELDED WIRE REINFORCING
HT	HEIGHT		

**PLAN LEGEND:**

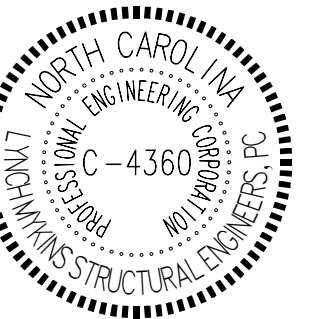
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	= TOP OF SLAB ELEVATION MEASURED FROM REFERENCED FINISHED FIRST FLOOR ELEVATION = 0'-0"
	= CHANGE IN ELEVATION - REF ARCH DWGS FOR DIMENSIONS
	= DIRECTION OF SLOPE
	= PLAN KEY NOTE MARK
	= COLUMN GRID MARK
	= SECTION/DETAIL NUMBER/LETTER
	= SECTION/DETAIL MARK
	= SHEET NUMBER WHERE SECTION/DETAIL MARK IS DRAWN



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**NC DPS RANDALL BUILDING RENOVATION**  
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 827-831 W Morgan St, Raleigh, NC 27603

SEALS



DKA JOB NUMBER  
2221

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SHEET TITLE  
GENERAL NOTES

**S001**





DAVIS KANE  
ARCHITECTS, P.A.

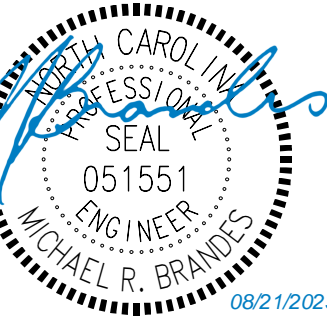
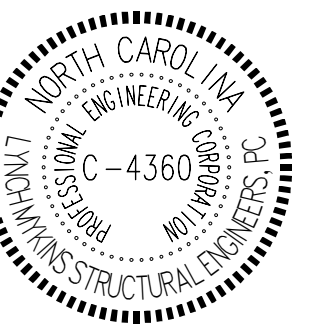
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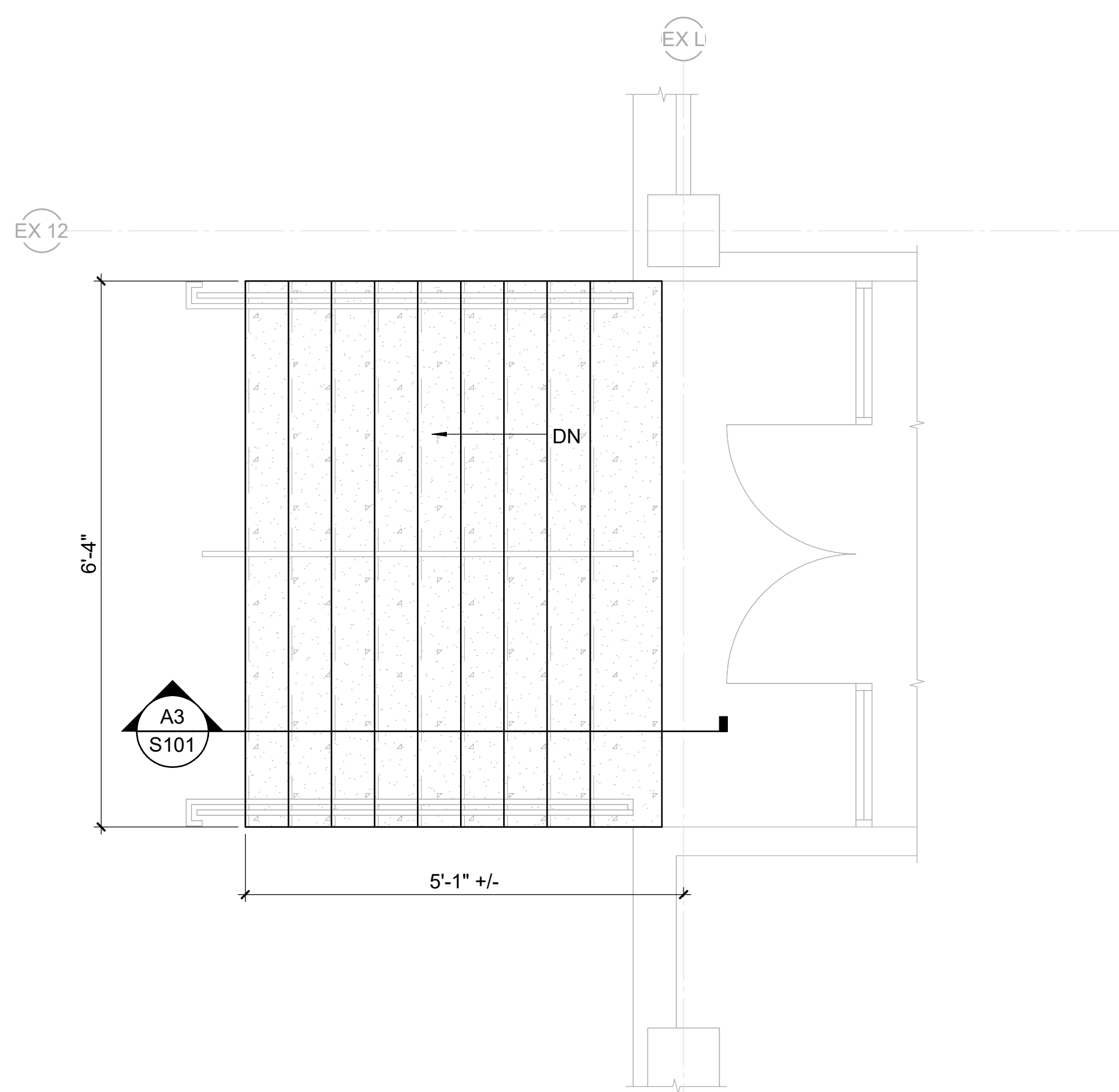
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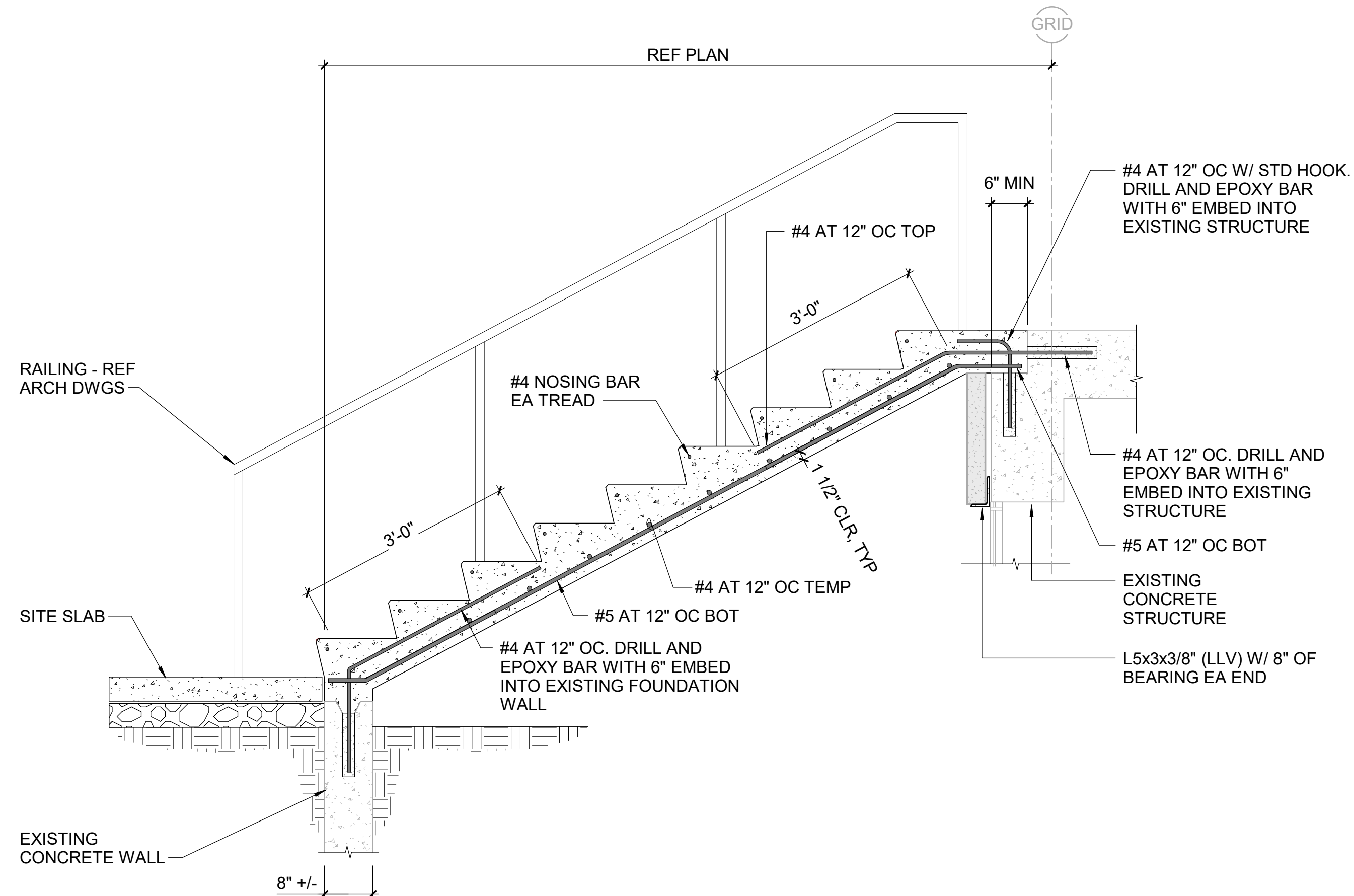
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SHEET TITLE  
FRAMING PLANS  
AND SECTIONS

S101



**A1** REPLACEMENT STAIR ENLARGED PLAN  
3/4" = 1'-0"



**A3** CENTER HANDRAIL SECTION  
3/4" = 1'-0"