

GENERAL NOTES

LOAD CRITERIA:

1. STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE, 2006 EDITION. DESIGN CRITERIA INDICATED BELOW APPLIES TO NEW CONSTRUCTION AND AREAS REQUIRING STRUCTURAL RENOVATION.

2. DESIGN LIVE LOADS :

ROOF	20 PSF
SLAB ON GRADE	100 PSF
OFFICES	50 PSF
STAIRS	100 PSF
MECHANICAL AREAS	55 PSF

3. DESIGN SNOW LOAD:

GROUND SNOW LOAD,	Pg	10 PSF
FLAT ROOF SNOW LOAD,	Pf	10 PSF
EXPOSURE FACTOR,	Ce	1.0
ROOF THERMAL FACTOR,	Ct	1.0
IMPORTANCE FACTOR,	Is	1.0

4. DESIGN WIND LOADS:

BASIC WIND SPEED,	V	110 MPH (THREE SECOND GUST)
IMPORTANCE FACTOR,	Iw	1.0
EXPOSURE	C	C
INTERNAL PRESSURE COEFF	GCpi	±0.18

5. DESIGN SEISMIC LOADS ARE BASED ON THE FOLLOWING DATA:

MAPPED SHORT PERIOD SPECTRAL RESPONSE ACCELERATION,	Ss	0.15
MAPPED 1-SEC PERIOD SPECTRAL RESPONSE ACCELERATION,	S1	0.06
SHORT PERIOD DESIGN SPECTRAL RESPONSE ACCELERATION,	Sds	0.16
1-SEC PERIOD DESIGN SPECTRAL RESPONSE ACCELERATION,	Sd1	0.096
SEISMIC USE GROUP	GROUP 1	
SEISMIC DESIGN CATEGORY	A	
SITE CLASS (ASSUMED)	D	
BASIC SEISMIC FORCE-RESISTING-SYSTEM	ORDINARY REINFORCED CONCRETE FRAME	

RESPONSE MODIFICATION FACTOR,	R	3.5
IMPORTANCE FACTOR	Ie	1.0
SEISMIC RESPONSE COEFFICIENT	Cs	0.046
ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE	

COORDINATION:

- STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL AND OTHER CONTRACT DOCUMENTS.
- WHERE WORK OF OTHER TRADES REQUIRES CUTS, HOLES, ETC., IN STRUCTURAL MEMBERS, CUTS, HOLES, ETC., SHALL BE MADE IN THE SHOP. MAKING HOLES OR CUTS IN STRUCTURAL STEEL MEMBERS IN THE FIELD SHALL NOT BE PERMITTED WITHOUT SPECIFIC APPROVAL OF THE STRUCTURAL ENGINEER. HSM, 448 VIKING DRIVE, VIRGINIA BEACH, VIRGINIA. TELEPHONE: (757) 306-4000
- THE CONTRACTOR SHALL VERIFY THE SIZE AND LOCATION OF ALL OPENINGS, SLEEVES, INSERTS, ETC., WITH SHOP DRAWINGS OF THE EQUIPMENT TO BE INSTALLED. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR LOCATIONS OF PIPE SLEEVES.
- SPECIAL INSPECTIONS AS REQUIRED BY IBC 2006, CHAPTER 17, SHALL BE PROVIDED BY THE GOVERNMENT.
- CONTRACTOR SHALL HAVE ALL POST INSTALLED CONCRETE ANCHORS INSPECTED BY INDEPENDENT TESTING AGENCY IN ACCORDANCE WITH IBC 2006 AND SPECIAL INSPECTION REQUIREMENTS.

CONCRETE:

- ALL CONCRETE SHALL BE NORMAL WEIGHT AGGREGATE CONCRETE HAVING A MINIMUM COMPRESSIVE STRENGTH OF 3,500 P.S.I. AT THE AGE OF 28 DAYS. CONCRETE EXPOSED TO WEATHER SHALL BE AIR ENTRAINED.
- REINFORCING BARS SHALL BE AS FOLLOWS:
ASTM A 615 GRADE 60, DEFORMED REINFORCING BARS
fy = 60 KSI
- REINFORCING BARS SHALL NOT BE WELDED, BENT OR FIELD CUT WITH HEAT.
- REINFORCEMENT SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH ACI 315-99. DEVELOPMENT AND SPLICE LENGTHS ARE IN TENSION UNLESS OTHERWISE INDICATED. TENSION DEVELOPMENT LENGTHS SHALL BE 28 INCHES. TENSION LAP SPLICES SHALL BE 36 INCHES.
- UNLESS OTHERWISE SHOWN, BARS AT CONTINUOUS FOOTING AND WALL CORNERS AND INTERSECTIONS SHALL BE DETAILED AS SHOWN ON FIGURE 15 OF ACI 315-99. CORNER BARS SHALL BE DETAILED AS SHOWN FOR OUTSIDE LOADED CORNERS. INTERSECTIONS SHALL BE DETAILED WITHOUT DIAGONAL BARS.
- PROVIDE CONCRETE COVER FOR REINFORCING AS SPECIFIED IN TABLE 3.3.2.3 OF ACI 301-99. UNLESS OTHERWISE INDICATED. SECURELY PLACE REINFORCEMENT TO PREVENT DISPLACEMENT DURING CONCRETE PLACEMENT.
- PROVIDE DOWELS TO MATCH REINFORCEMENT SIZE AND SPACING INDICATED FOR ALL STRUCTURAL ELEMENTS, UNLESS OTHERWISE INDICATED.
- REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATIONS OF OPENINGS AND SLEEVES IN CONCRETE FLOORS. DO NOT CUT REINFORCEMENT.
- CHAMFER EDGES OF PERMANENTLY EXPOSED CONCRETE SURFACES 3/4-INCH, UNO.
- WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 AND BE PROVIDED IN FLAT SHEETS. WELDED WIRE MESH SHALL BE PROPERLY SUPPORTED PRIOR TO PLACING CONCRETE. HOOKING OF MESH IS NOT PERMITTED.
- ALL REINFORCING STEEL SHALL BE HELD SECURELY IN PLACE TO PREVENT DISLOCATION DURING THE POURING OPERATION. SLAB REINFORCING SHALL BE SUPPORTED ON HIGH CHAIRS AND BAR SPACERS OF SUITABLE DESIGN.
- NO CONCRETE SHALL BE PLACED UNTIL ALL EMBEDDED WORK HAS BEEN INSTALLED, TESTED AND INSPECTED.

STEEL:

1. STRUCTURAL STEEL FABRICATION AND ERECTION SHALL COMPLY WITH THE "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" 2005 WITH ITS LATEST AMENDMENTS OF THE AISC.

2. MATERIAL STRENGTH
ALL MISCELLANEOUS STRUCTURAL STEEL: ASTM A 36
FY = 36 KSI

STEEL DECK:

1. STEEL DECK SHALL CONFORM TO THE LATEST EDITION OF THE AISI SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL STEEL MEMBERS AND THE STEEL DECK INSTITUTE DESIGN MANUAL FOR COMPOSITE DECKS, FORM DECKS AND ROOF DECKS.

2. WELDING SHALL BE IN ACCORDANCE WITH AWS D1.3, "STRUCTURAL WELDING CODE - SHEET STEEL".

3. DO NOT HANG OR SUPPORT ANY LOADS FROM METAL DECK.

RENOVATION AND EXISTING STRUCTURES:

1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, ETC., NECESSARY FOR THE PROPER CONSTRUCTION AND ALIGNMENT OF THE NEW PORTIONS OF THE STRUCTURE TO THE EXISTING CONSTRUCTION. THE CONTRACTOR SHALL VERIFY ALL MEASUREMENTS NECESSARY FOR PROPER FABRICATION AND ERECTION OF ALL STRUCTURAL MEMBERS.

2. BEFORE PROCEEDING WITH ANY WORK WITHIN OR ADJACENT TO THE EXISTING STRUCTURE, THE CONTRACTOR SHALL BECOME FAMILIAR WITH EXISTING CONDITIONS. DURING THE PROCESS OF CONSTRUCTION, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE INTEGRITY OF THE EXISTING CONSTRUCTION WHERE THE EXISTING STRUCTURE IS MODIFIED TO ACCOMMODATE NEW CONSTRUCTION AND TO PROTECT FROM DAMAGE THOSE PORTIONS OF THE EXISTING STRUCTURE WHICH ARE TO REMAIN.

3. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF ANY EXISTING CONDITIONS THAT DIFFER FROM THOSE INDICATED ON THE DRAWINGS.

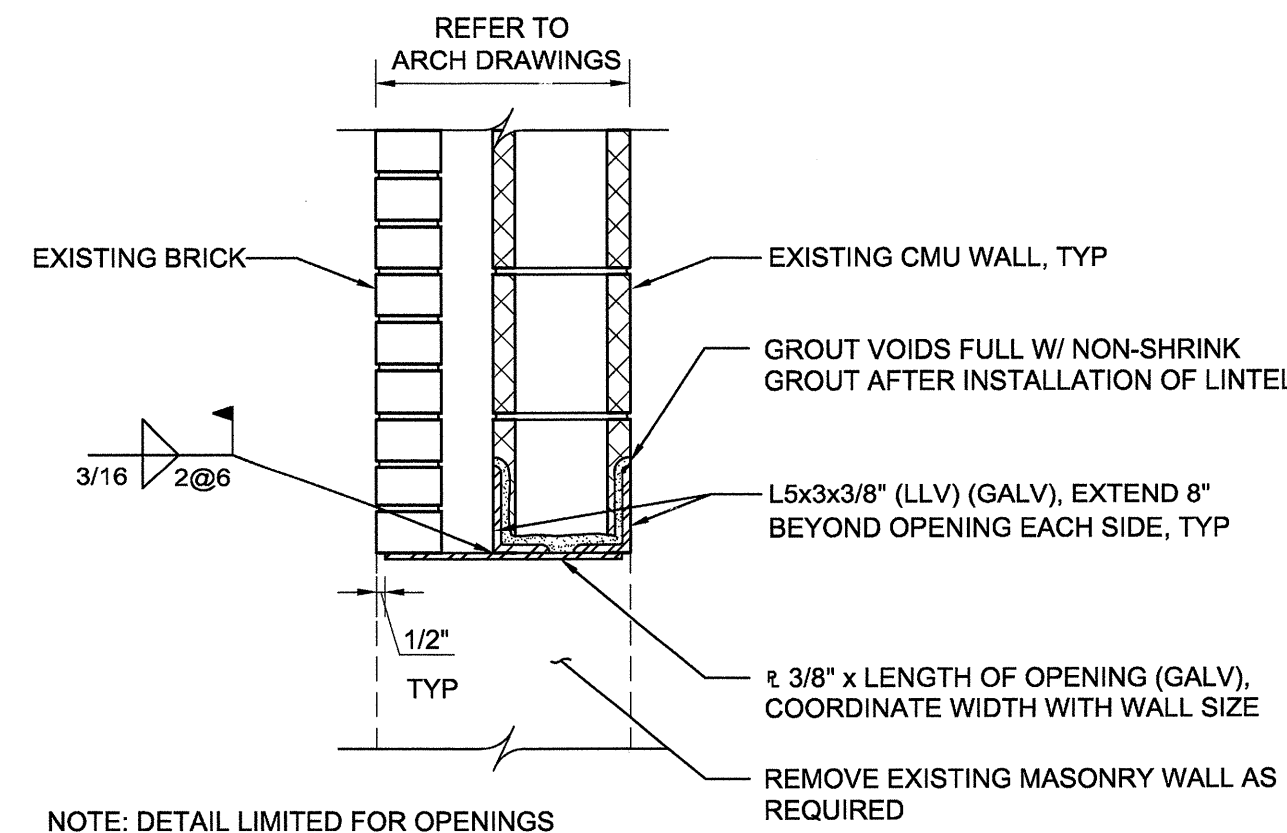
4. THE CONTRACTOR SHALL VERIFY ALL MEASUREMENTS NECESSARY FOR THE PROPER FABRICATION AND ERECTION OF THE STRUCTURAL MEMBERS.

5. CONTRACTOR SHALL PROTECT EXISTING CONCRETE BEAMS FROM DAMAGE DURING DEMOLITION PHASE OF PROJECT. (TYPICAL)

6. CONTRACTOR SHALL SAW-CUT EDGES OF ALL NEW OPENINGS.

7. CONTRACTOR SHALL NON-DESTRUCTIVELY LOCATE EXISTING STEEL REINFORCING PRIOR TO INSTALLING ANCHORS OR CUTTING SLAB PENETRATIONS. DO NOT OVER-CUT OPENINGS.

8. CONTRACTOR SHALL VERIFY THAT THE EXISTING CONSTRUCTION CONSISTS OF AT LEAST #5 REINFORCING BARS SPACED 12 INCHES ON CENTER, BOTTOM. IF CONSTRUCTION VARIES, CONTRACTOR SHALL INFORM HSM/AECOM IMMEDIATELY. (757.306.4000)



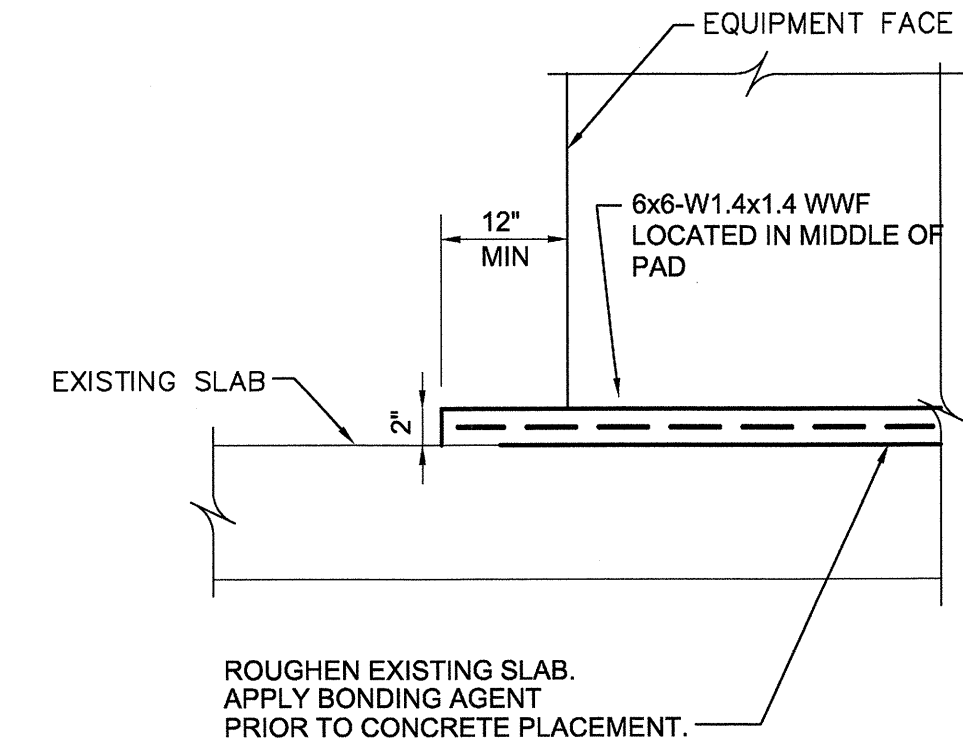
NOTE: DETAIL LIMITED FOR OPENINGS IN WALLS LESS THAN 6'-0" WIDE.

TYPICAL LINTEL DETAIL FOR OPENINGS IN EXISTING MASONRY WALLS

NO SCALE

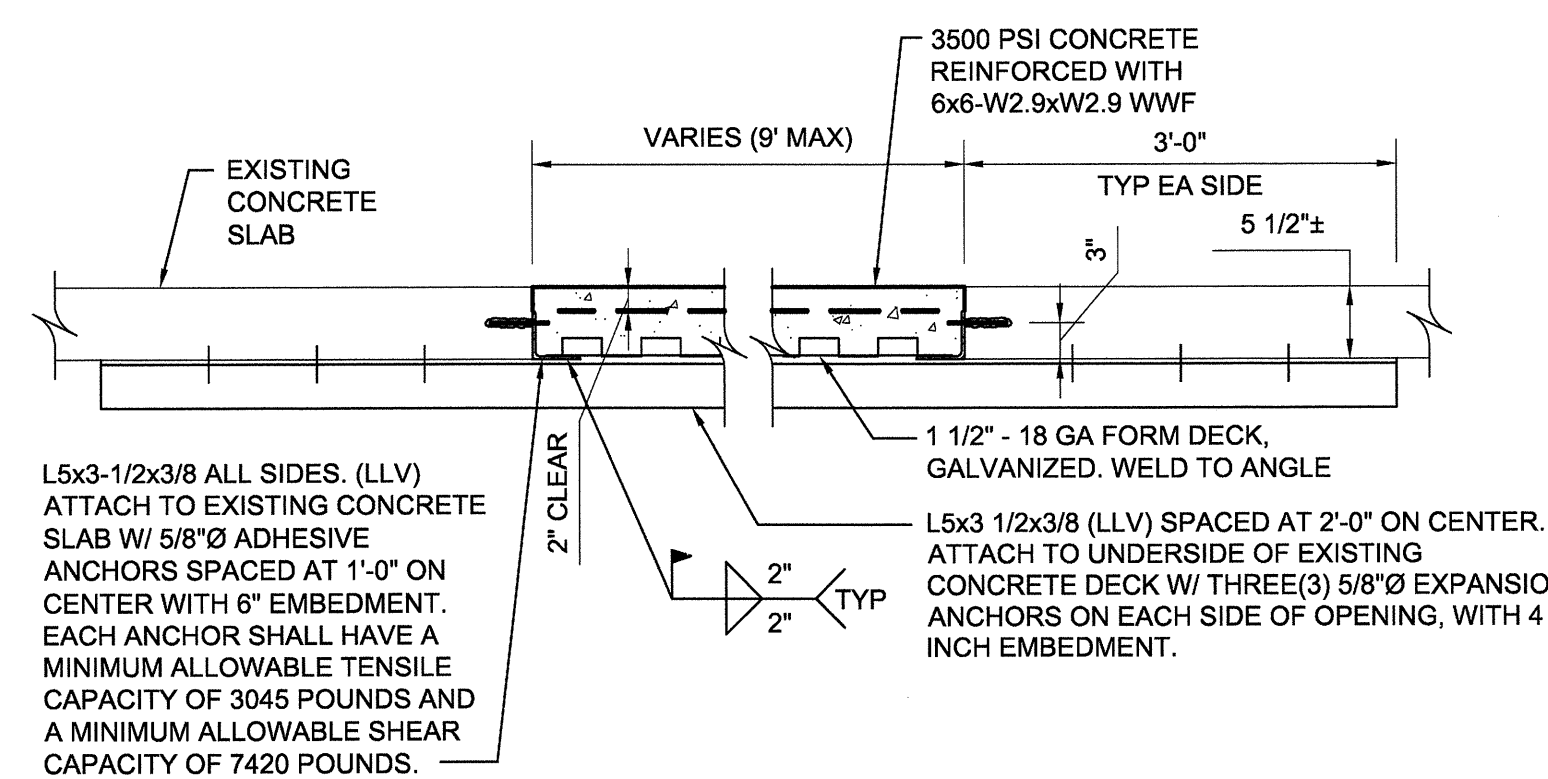
LINTEL NOTES:

- SHORE ALL LOADS ON WALL PRIOR TO CUTTING NEW WALL OPENINGS.
- NEEDLE AND SHORE EXISTING WALL ABOVE OPENING.
- REMOVE WALL AS REQ'D TO INSTALL LINTELS. BEARING WALLS SHALL BE REMOVED TO 8" BELOW FINISHED FLOOR.
- INSTALL NEW LINTEL. GROUT CAVITY AND OPEN CELLS AT END FOR 3 CELLS VERTICALLY.
- REPAIR WALL TO MATCH EXISTING CONDITION.
- PATCH FLOOR WITH CONCRETE.



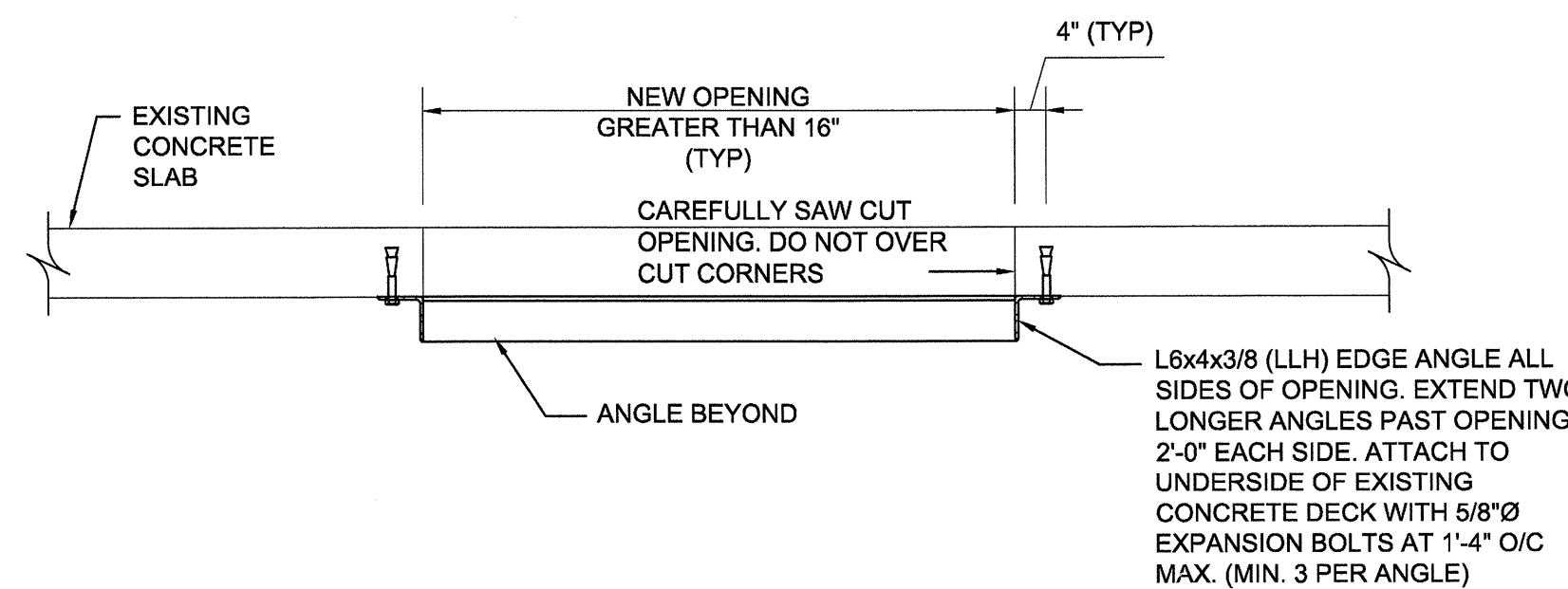
EQUIPMENT PAD DETAIL ON EXISTING SLAB

NO SCALE



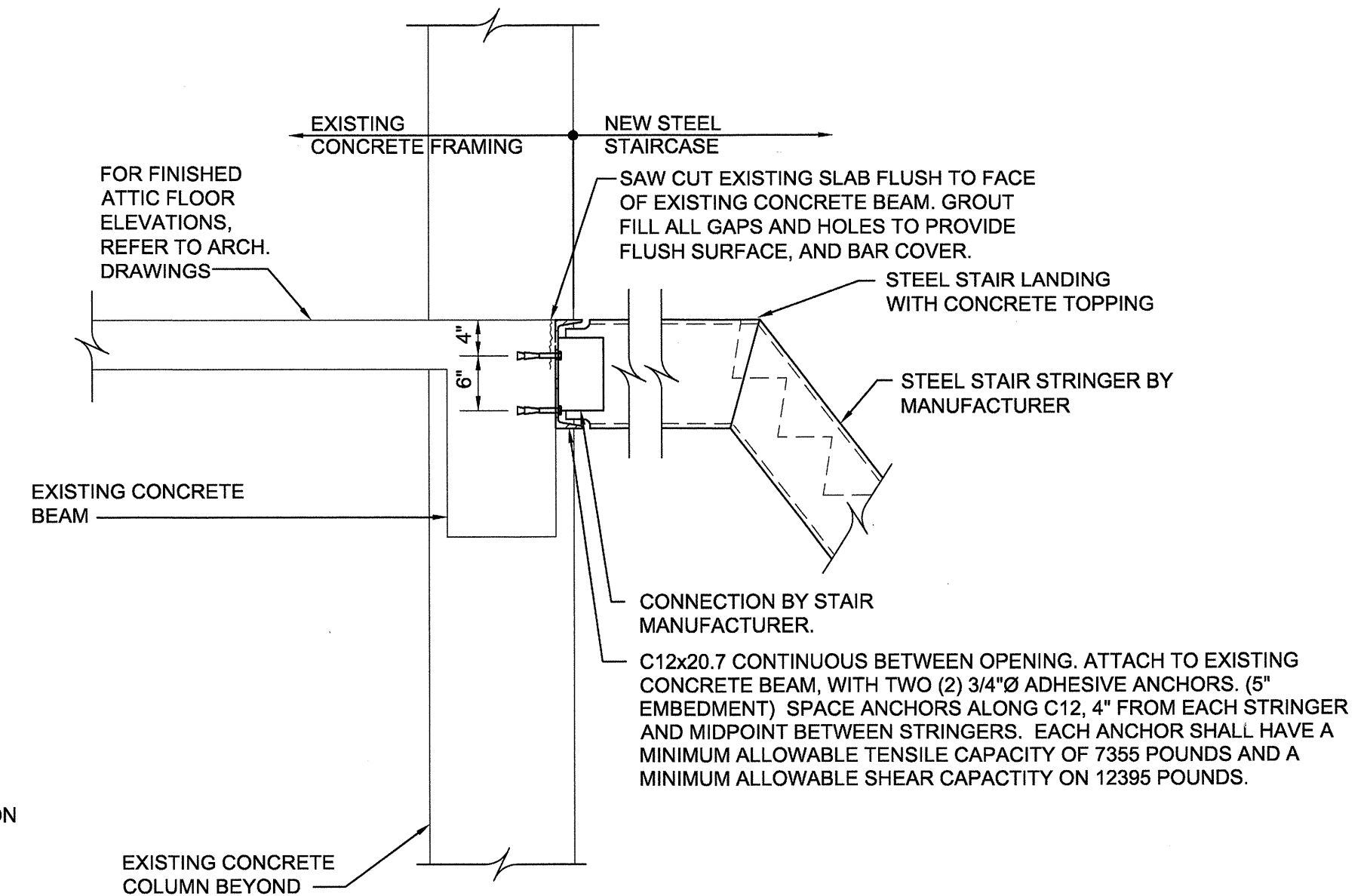
TYPICAL INFILL OF EXISTING STAIR OPENING

NO SCALE



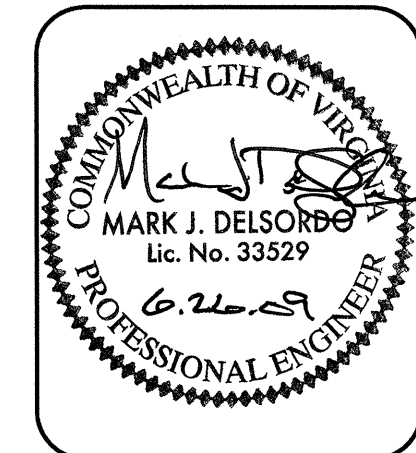
TYPICAL DETAIL AT NEW OPENING IN EXISTING SLAB

NO SCALE



SHIPS LADDER TOP ELEVATION

NO SCALE

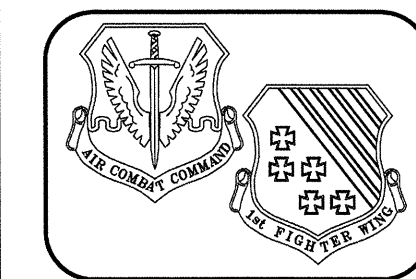


REV	DATE	DESCRIPTION

DESIGNED BY: MJD	CHECKED BY: BHD
DATE: 06/26/2009	FILE NAME: PCSL_N_000.DWG
DRAWN BY: RWH	REVIEWED BY: X
PROJECT: HQ ACC/DSF RENOVATION OF BUILDING 669	PLOT DATE: XX/XX/XXXX
PROJECT NUMBER: MUHJ08-4112	PLOT SCALE: AS NOTED
DEPARTMENT OF THE AIR FORCE	CIVIL ENGINEERING OFFICE
AIR COMBAT COMMAND	LANGLEY AFB VA

PROJECT NUMBER: MUHJ08-4112

HQ ACC/DSF RENOVATION OF BUILDING 669
GENERAL NOTES AND TYPICAL DETAILS



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