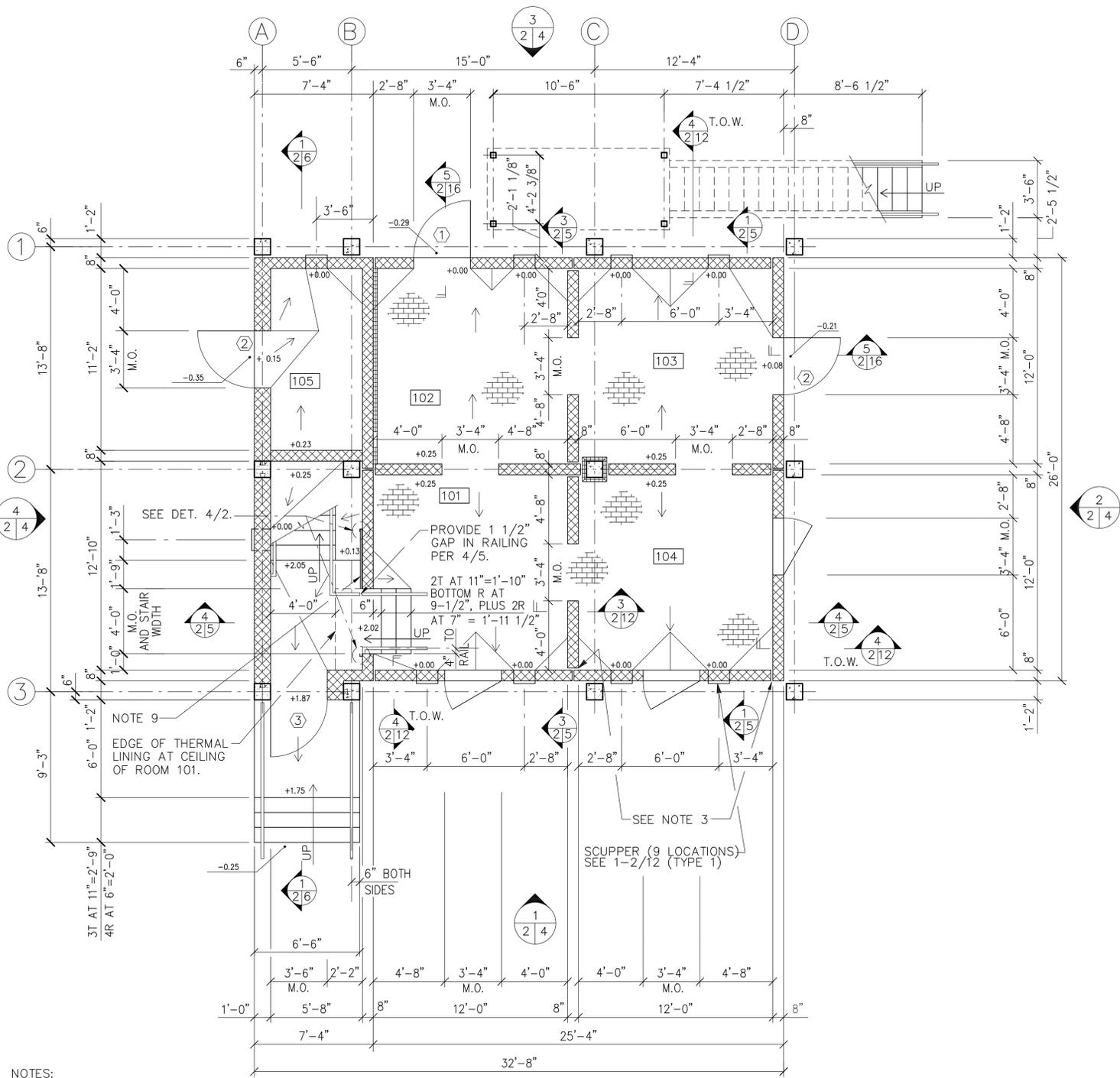
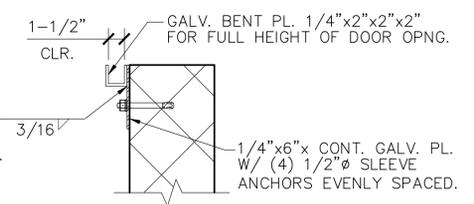




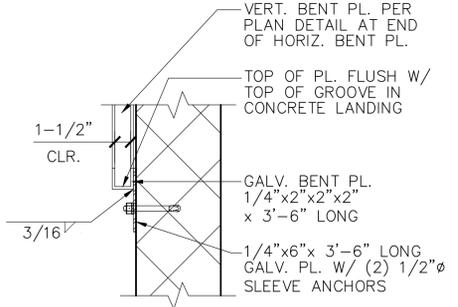
Rev.	Date	Description	Approved



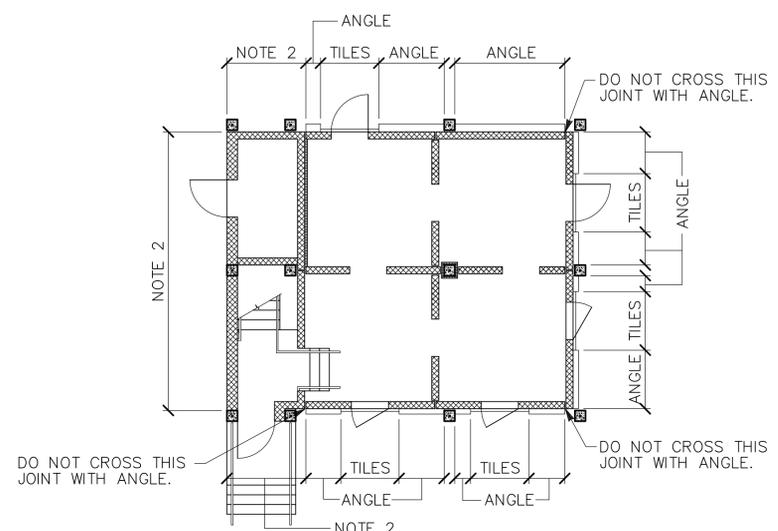
- NOTES:
- DIRECTION OF DOWNSLOPE OF TOP OF CONCRETE IS INDICATED WITH →
  - TOP OF FINISHED CONCRETE ELEVATION FOR BURN BUILDING SIMULATOR IS INDICATED "+X.XX" IN FEET ABOVE DATUM. DATUM IS AT ELEVATION +804.29' ABOVE SEA LEVEL.
  - AT 16 LOCATIONS IN PLAN, PROVIDE 1/2" OPEN VERTICAL WALL JOINT AT NEAREST HEAD JOINT LOCATION PER 1-2/15.
  - AT INTERIOR MASONRY DOOR OPENINGS W/O DOOR, MAKE DOOR OPENING FULL HEIGHT (NO LINTEL). AT JAMBS, PROVIDE BULLNOSE CMU AND REINFORCE AND GROUT FIRST CELL SOLID FULL HEIGHT.
  - SEE 1-2/13 FOR DOORS AND 1-2/14 FOR WINDOWS.
  - SEE 2-2/15 FOR THERMAL LINING DETAILS.
  - ROOMS 101-104 ARE BURN ROOMS. NO BURNING IS ALLOWED IN ROOM 105 OR ON THE INTERIOR AND EXTERIOR STAIRS AND LANDINGS.
  - TOP OF PAVEMENT AT BURN BUILDING SHALL BE AT -0.29', UNLESS NOTED OTHERWISE AS +.xxx. SEE CIVIL DWGS. FOR OTHER PAVEMENT AND SITE ELEVATIONS.
  - 4'-0" WIDE SHEET OF 1" EXTERIOR QUALITY PLYWOOD TO SLIDE ACROSS DOORWAY. SCREW ONE S.S. HANDLE NEAR EACH VERTICAL EDGE AT 4'-0" ABOVE FLOOR. PROVIDE GALV. BENT PL. 1/4"x2"x2"x2" ALONG WALL TO SUPPORT BOTTOM OF PLYWOOD BEFORE LANDING. SEE DETAIL 4-2/2 FOR ADDITIONAL INFORMATION.



PLAN DETAIL



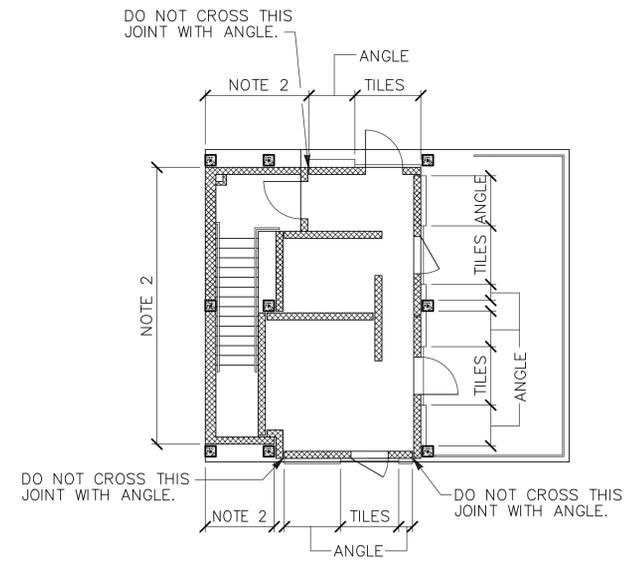
SECTION BEYOND LANDING



- NOTES:
- THIS REFLECTED CEILING PLAN SHOWS ONLY THE MEANS OF BRACING EXTERIOR FACES OF EXTERIOR WALLS. SEE PLANS AND SECTIONS FOR ALL OTHER INFORMATION, INCLUDING SPECIFIC REQUIREMENTS FOR BRACING SHOWN ON THIS PLAN.
  - DOVETAIL ANCHORS PER GENERAL NOTES.

**FIRST FLOOR -  
 REFLECTED CEILING PLAN**

2/2 NOT TO SCALE



- NOTES:
- THIS REFLECTED CEILING PLAN SHOWS ONLY THE MEANS OF BRACING EXTERIOR FACES OF EXTERIOR WALLS. SEE PLANS AND SECTIONS FOR ALL OTHER INFORMATION, INCLUDING SPECIFIC REQUIREMENTS FOR BRACING SHOWN ON THIS PLAN.
  - DOVETAIL ANCHORS PER GENERAL NOTES.

**SECOND FLOOR -  
 REFLECTED CEILING PLAN**

3/2 NOT TO SCALE



1/2 FIRST FLOOR PLAN  
 SCALE 1/4" = 1'0"



4/2 SLIDING PLYWOOD DOOR DETAILS  
 SCALE 1 1/2" = 1'-0"





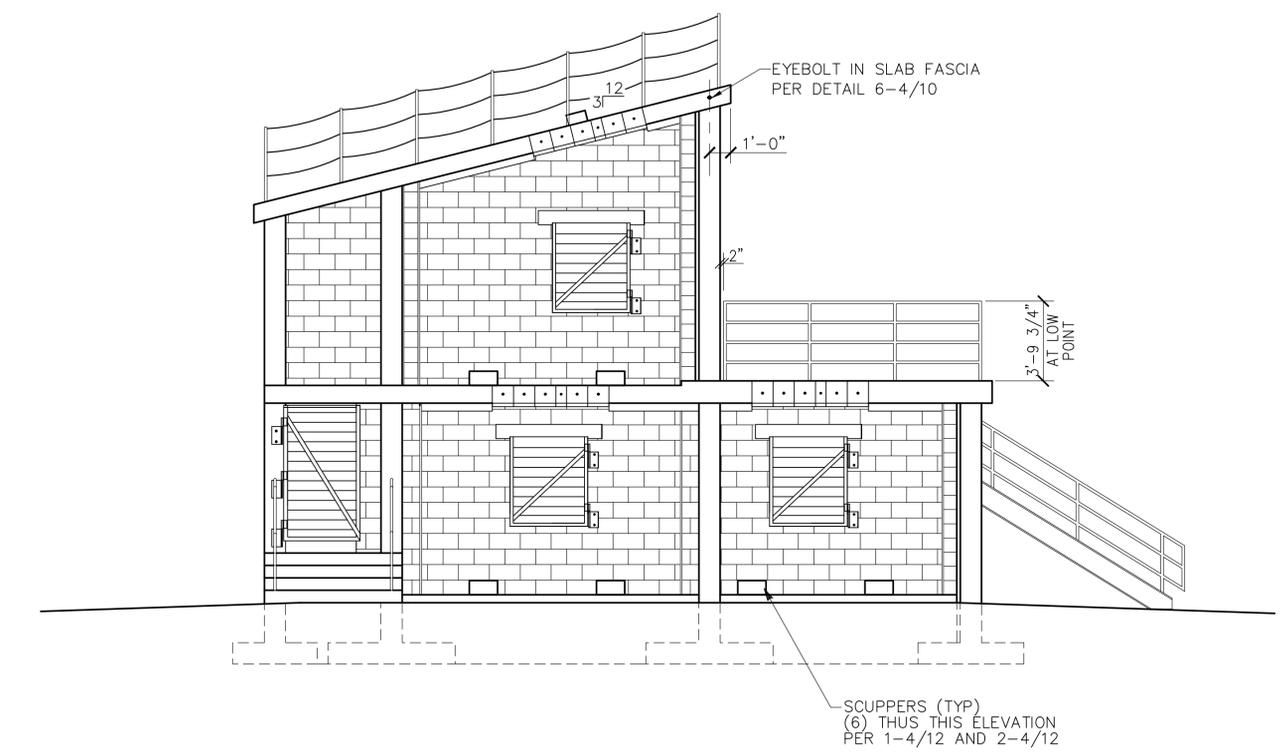
**Elliott LeBoeuf & Associates**  
 1800 N. Beauregard St., Suite 125  
 Alexandria, VA 22311  
 Phone: (703) 845-1800  
 Fax: (703) 845-1780

Project Title

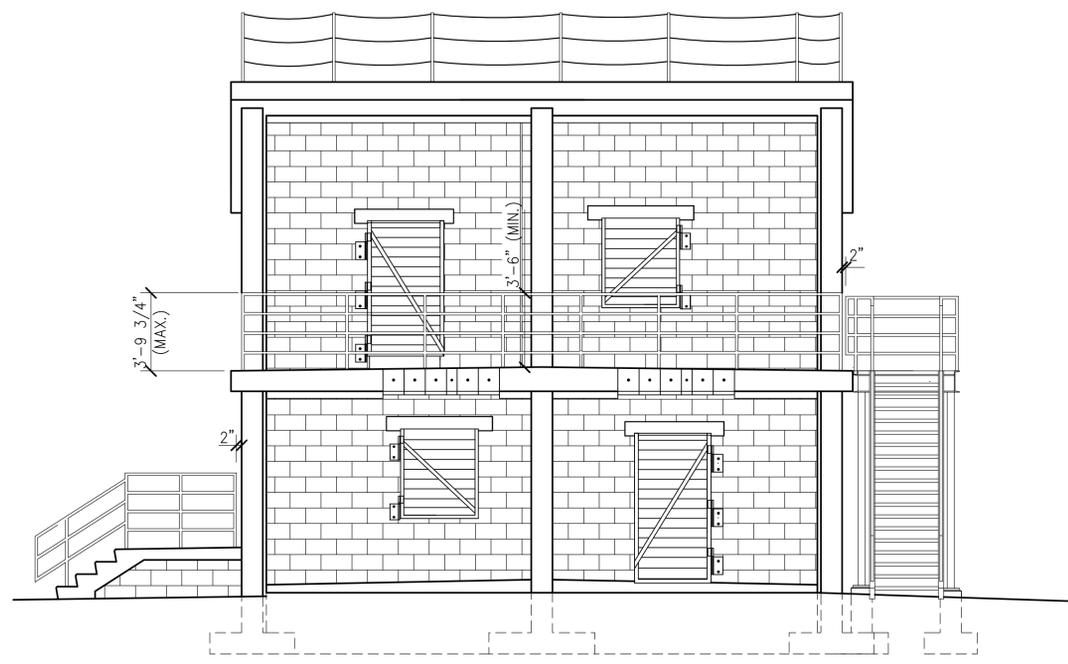
**DeKalb Co., GA  
 Burn Building  
 Simulator**

Owner

**DeKalb County  
 Bureau of Fire Services  
 3630 Camp Circle  
 Phone: (404) 294-2895  
 Fax: (404) 294-2008**

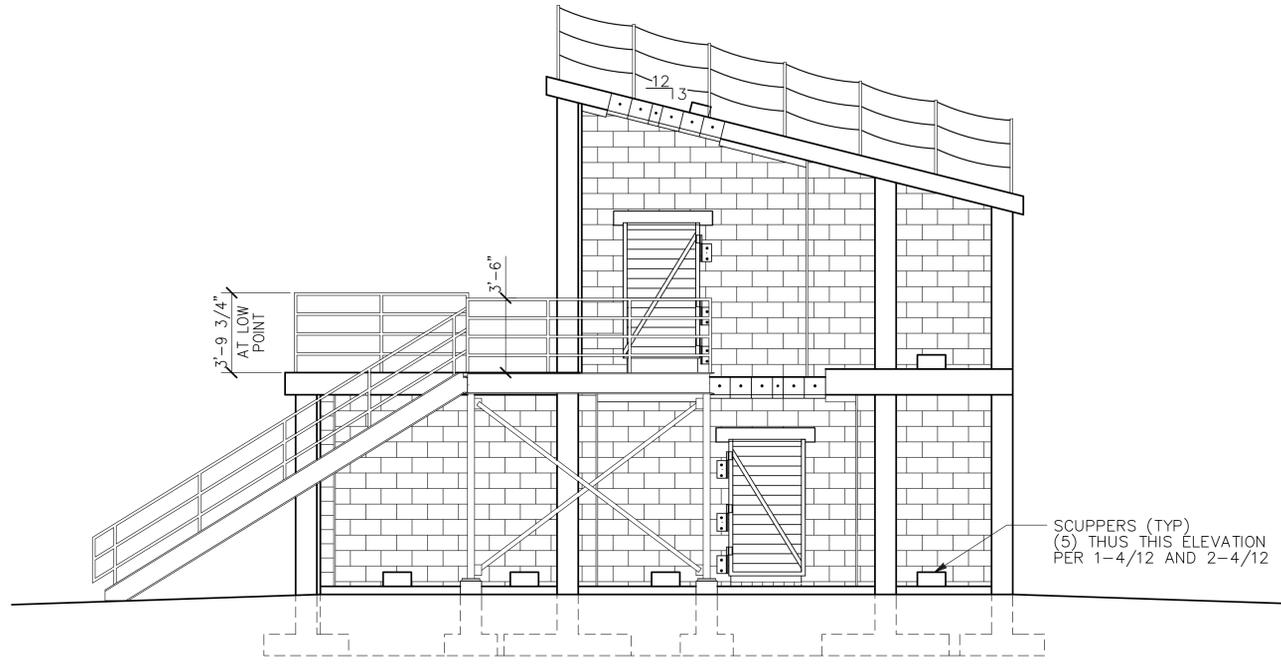


**1 SOUTH ELEVATION**  
 SCALE 1/4" = 1'-0"

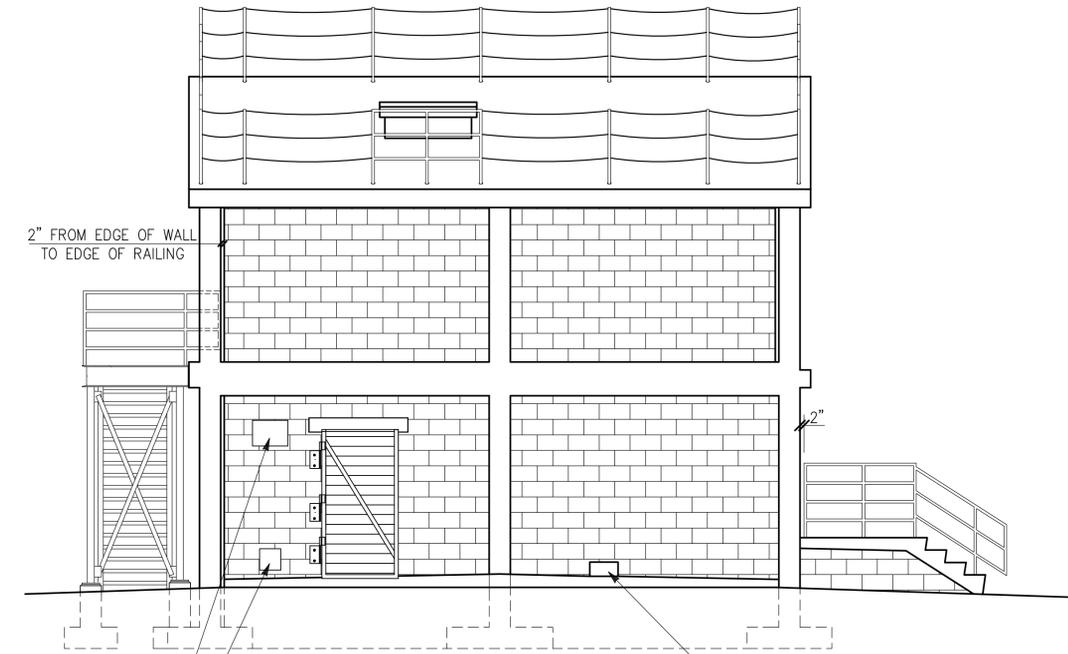


**2 EAST ELEVATION**  
 SCALE 1/4" = 1'-0"

NOTE:  
 MASONRY LINES SHOWN ON  
 ELEVATIONS ARE DIAGRAMATIC.  
 THEY DO NOT REFLECT ACTUAL  
 COURSING.



**3 NORTH ELEVATION**  
 SCALE 1/4" = 1'-0"



**4 WEST ELEVATION**  
 SCALE 1/4" = 1'-0"

MASONRY OPNG. FOR EXHAUST FAN.  
 COORDINATE SIZE OF OPNG.  
 WITH UNIT SELECTED. PROVIDE  
 LOUVER W/ BACKDRAFT DAMPER.  
 12"x12" MASONRY OPNG. FOR AIR  
 INTAKE. PROVIDE LOUVER W/  
 BACKDRAFT DAMPER.

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Sheet Title  
**ELEVATIONS**

Drawn: JDJ      Approved: RML  
 Scale: AS NOTED      Date: 6/2/03

Sheet No.  
**BB-4**  
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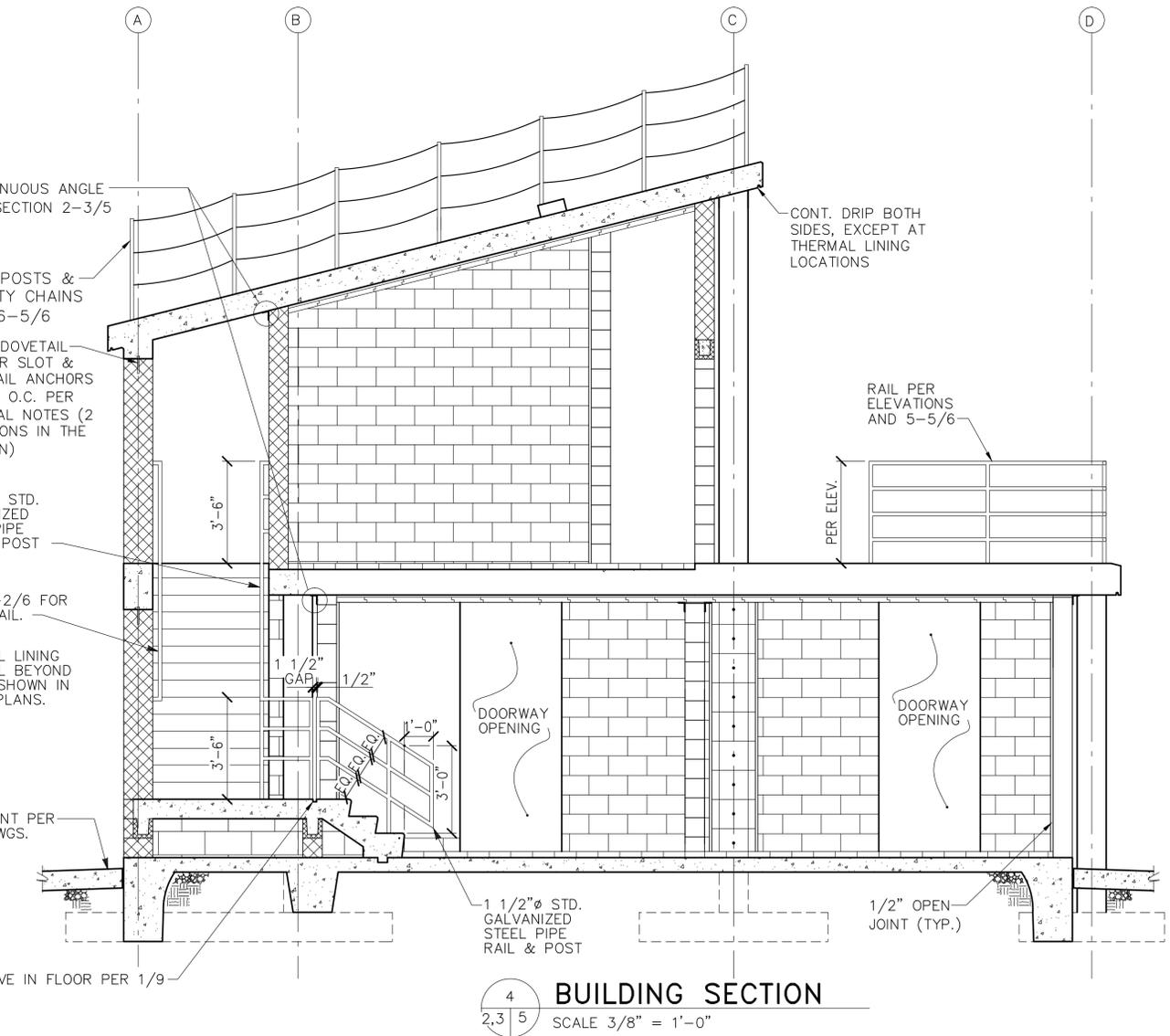
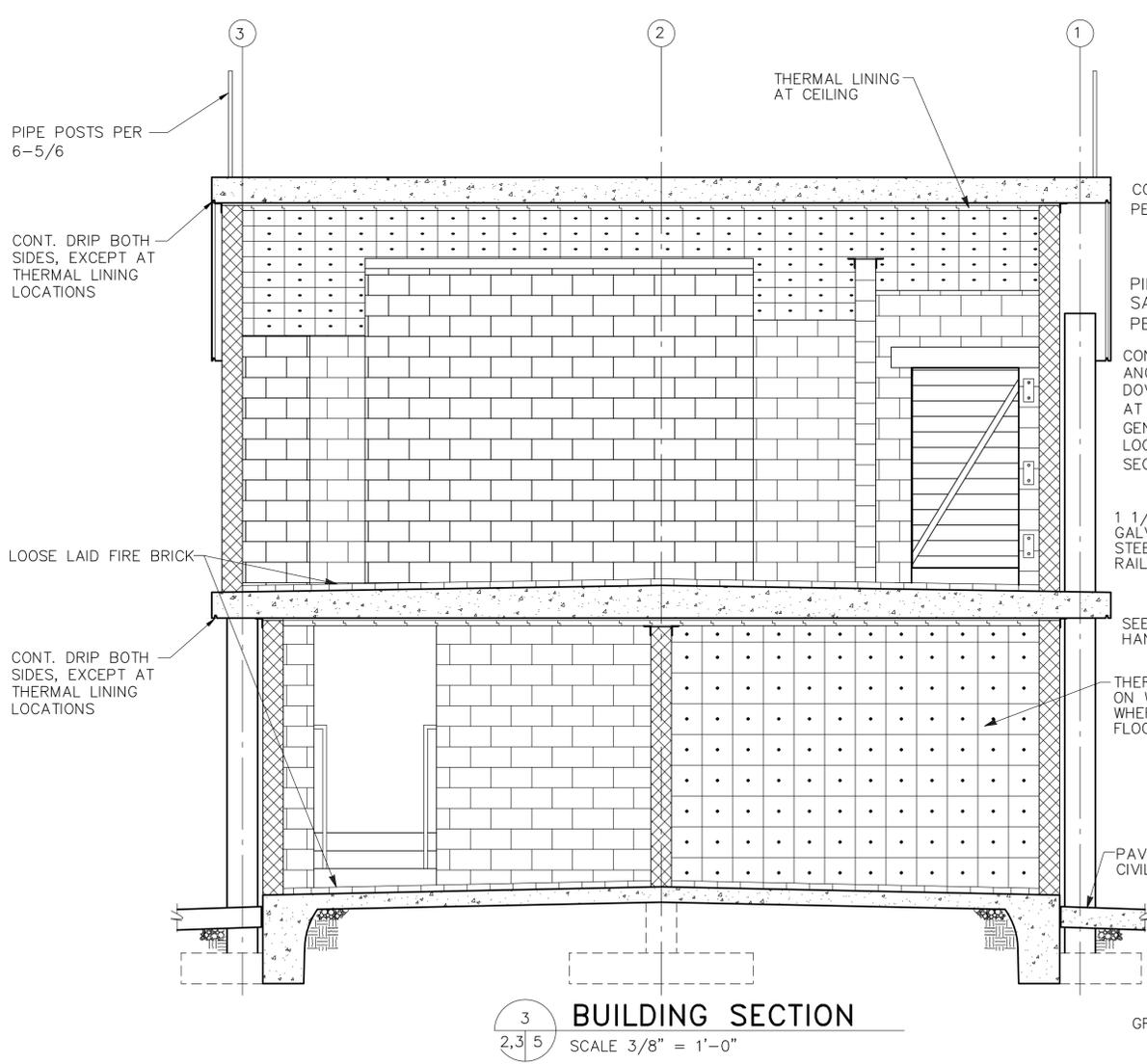
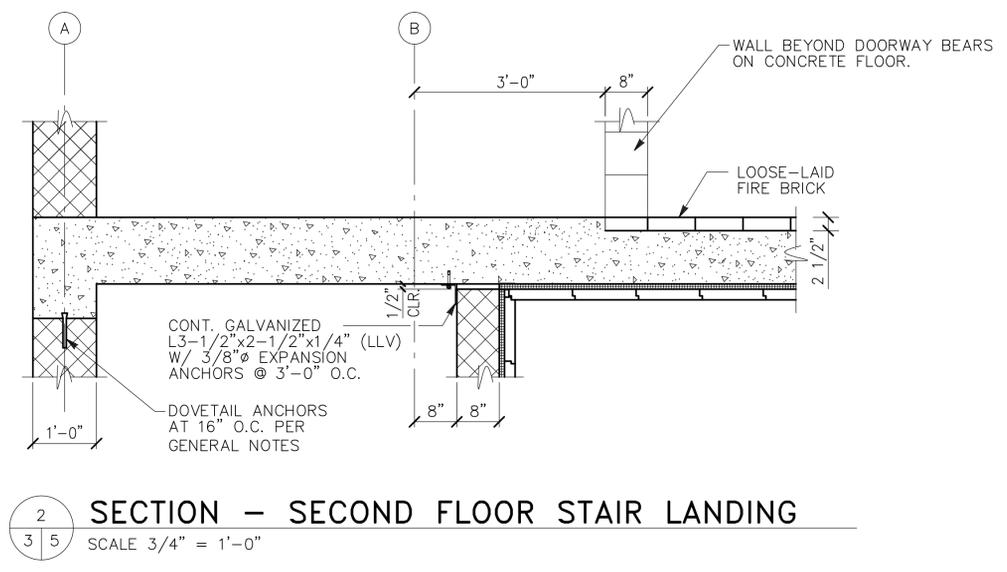
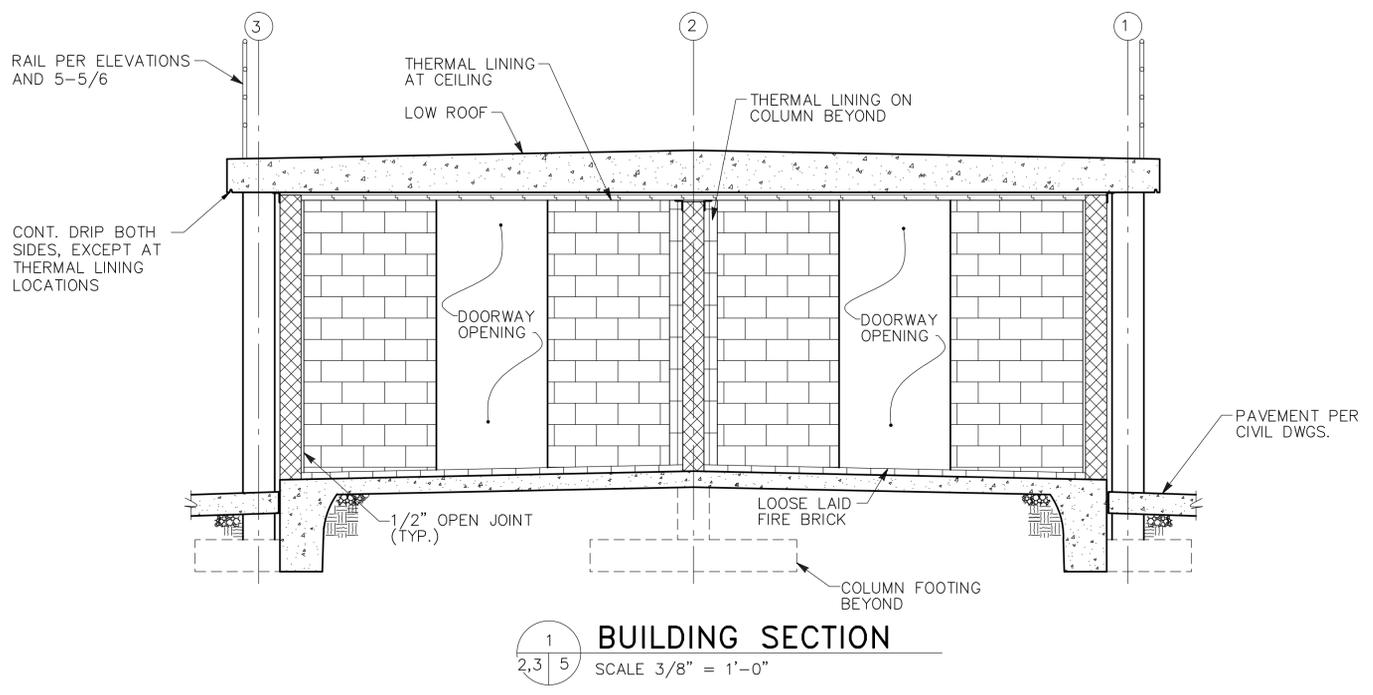
**BUILDING SECTIONS**

Drawn: JDJ      Approved: RML  
 Scale: AS NOTED      Date: 6/2/03

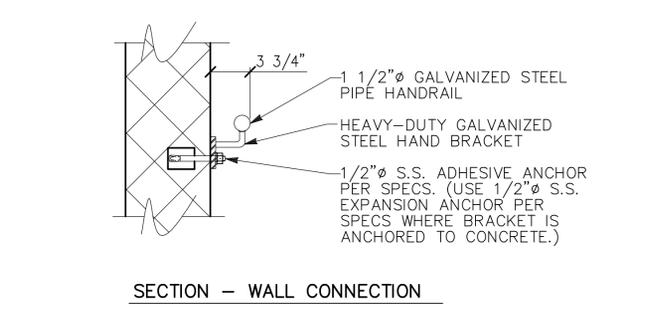
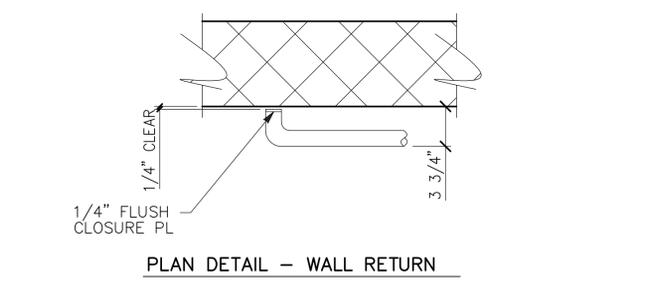
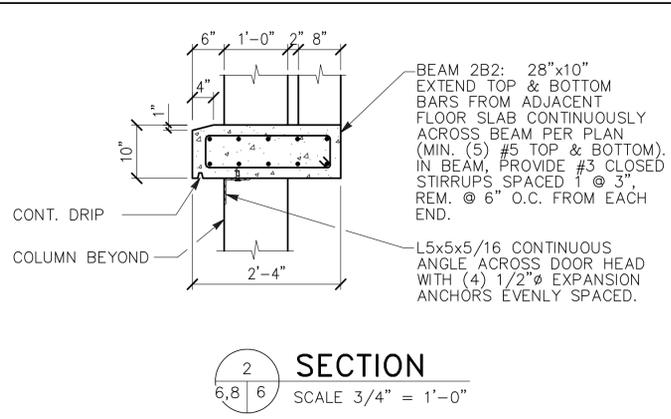
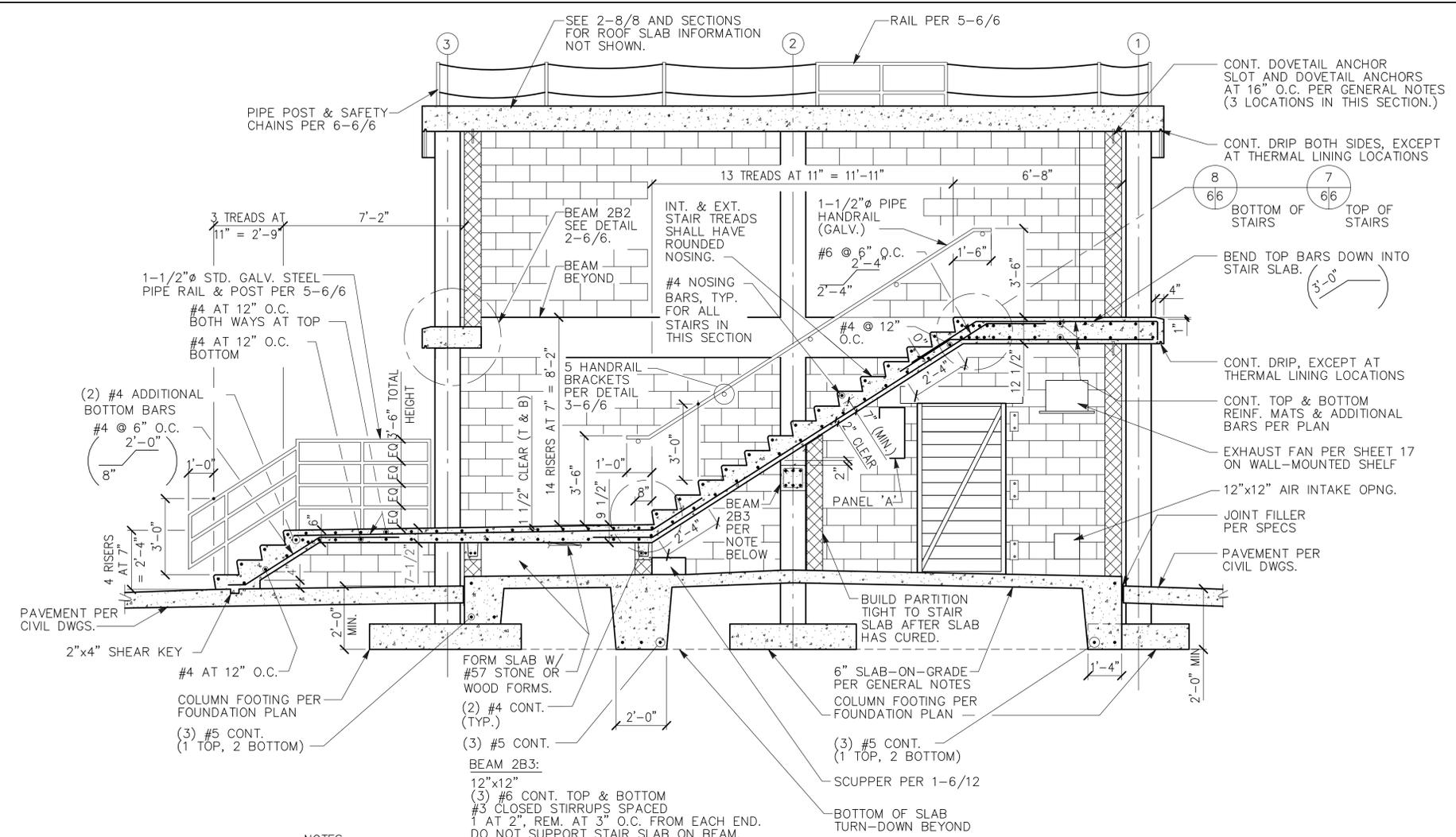
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**BB-5**

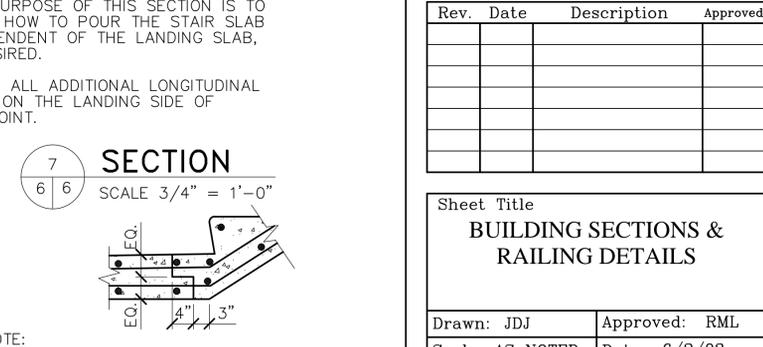
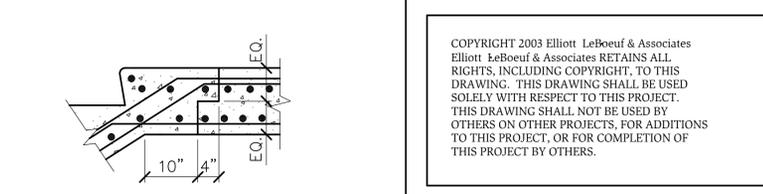
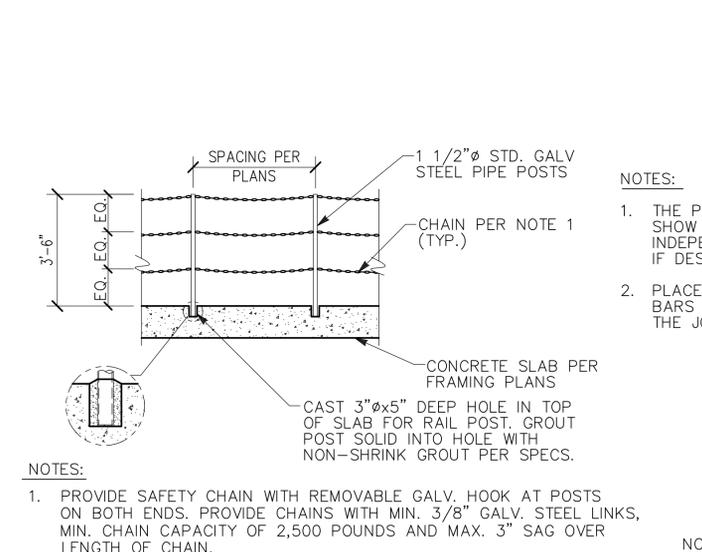
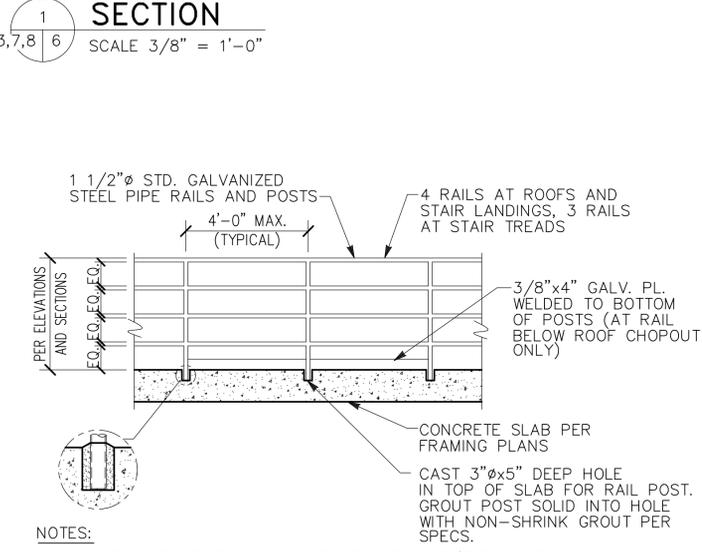
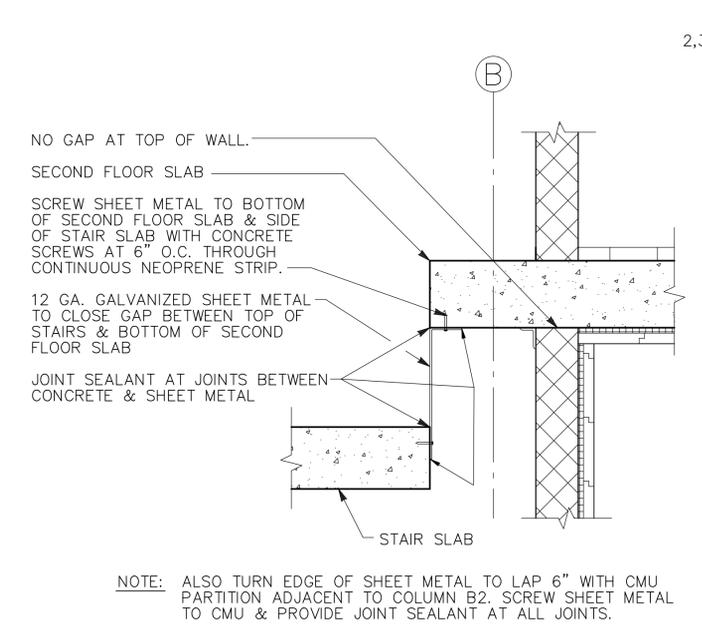
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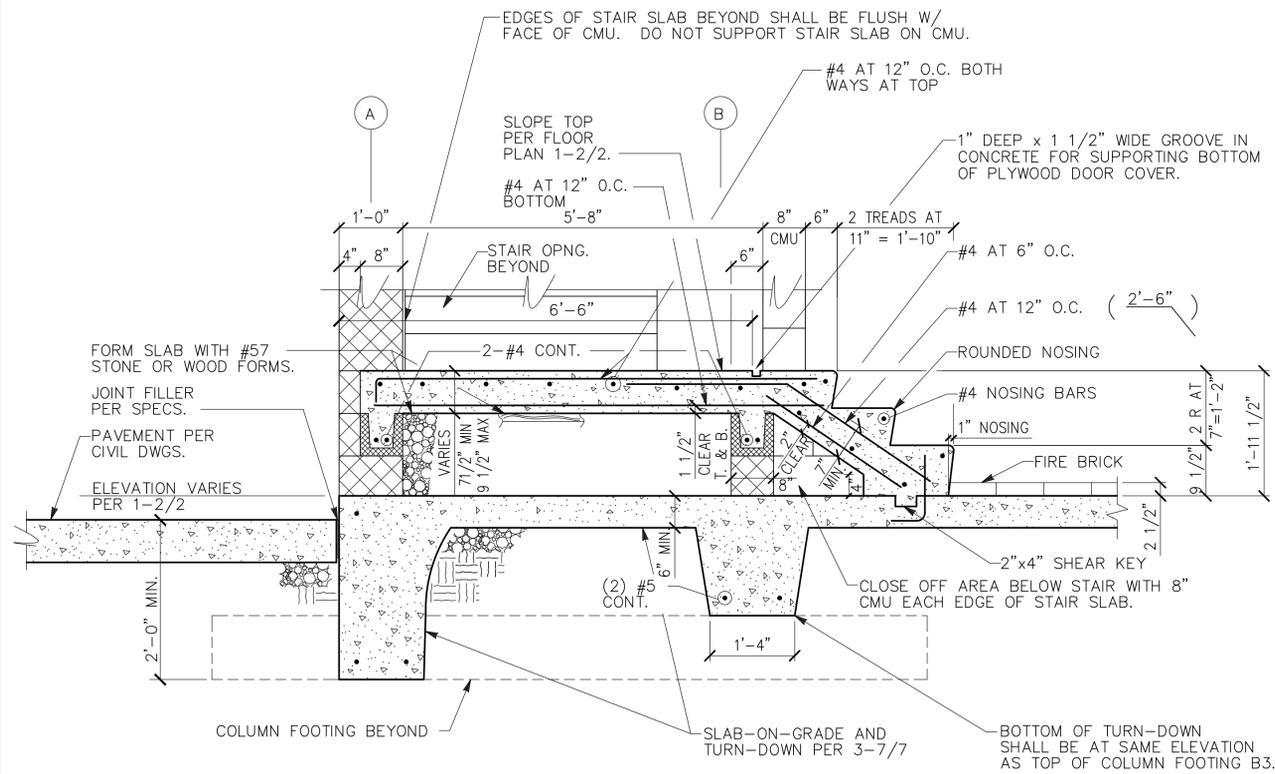


- NOTES:**
- DO NOT SUPPORT STAIR SLAB ON CMU SIDE WALLS.
  - PROVIDE NON-SLIP STAIR NOSING (TYP. AT ALL TREADS). STAIR NOSINGS SHALL BE MADE OF CORROSION RESISTANT CAST ALUMINUM. STAIR NOSINGS SHALL BE 4" WIDE x 4'-0" LONG. PROVIDE STYLE NO. 801 STAIR NOSINGS, AS MANUFACTURED BY AMERICAN SAFETY TREAD CO., OR AN EQUIVALENT APPROVED BY THE ENGINEER. INSTALL STAIR NOSINGS IN ACCORDANCE WITH THE REQUIREMENTS OF THE MANUFACTURER.





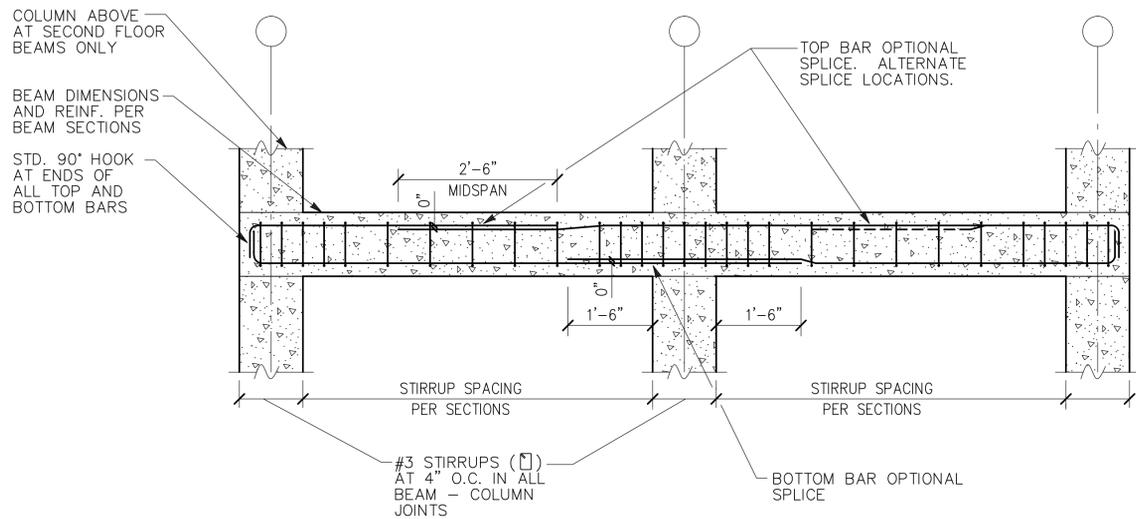




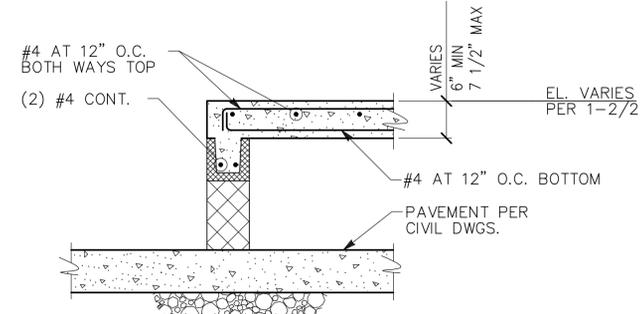
**NOTES:**

1. PROVIDE NON-SLIP STAIR NOSING (TYP. AT ALL TREADS). STAIR NOSINGS SHALL BE MADE OF CORROSION RESISTANT CAST ALUMINUM. STAIR NOSINGS SHALL BE 4" WIDE x 4'-0" LONG. PROVIDE STYLE NO. 801 STAIR NOSINGS, AS MANUFACTURED BY AMERICAN SAFETY TREAD CO., OR AN EQUIVALENT APPROVED BY THE ENGINEER. INSTALL STAIR NOSINGS IN ACCORDANCE WITH THE REQUIREMENTS OF THE MANUFACTURER.

**SECTION - LOW STAIR LANDING**  
SCALE 3/4" = 1'-0"

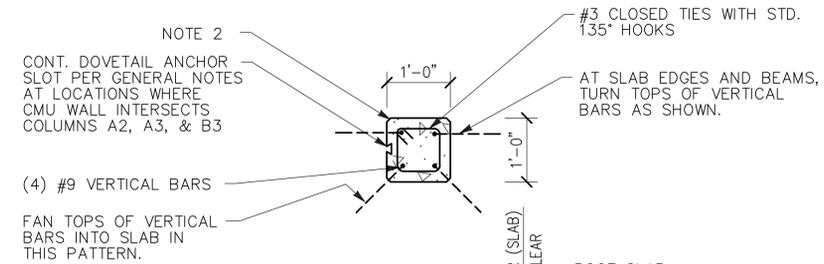


**TYPICAL BEAM BENDING AND CUTOFF DETAIL**  
NO SCALE



**SECTION - EXTERIOR CONCRETE LANDING**

SCALE 3/4" = 1'-0"



A = FIRST TIE AT 3"  
B = TIES AT 6" O.C. FOR DISTANCE OF (CLEAR HEIGHT/6) OR 1'-6", WHICHEVER IS GREATER  
C = ONE TIE WITHIN SLAB DEPTH TWO TIES WITHIN BEAM DEPTH

**NOTES:**

1. THIS DETAIL APPLIES TO ALL COLUMNS. ALL COLUMNS SHALL BE 12"x12".
2. 3/4" CHAMFER AT ALL COLUMNS, EXCEPT COLUMNS A-2 & C-2.

**TYPICAL COLUMN DETAIL**  
NO SCALE

**Engineers**



**Elliott LeBoeuf & Associates**  
1800 N. Beauregard St., Suite 125  
Alexandria, VA 22311  
Phone: (703) 845-1800  
Fax: (703) 845-1780

**Project Title**  
**DeKalb Co., GA  
Burn Building  
Simulator**

**Owner**  
**DeKalb County  
Bureau of Fire Services  
3630 Camp Circle  
Phone: (404) 294-2895  
Fax: (404) 294-2008**

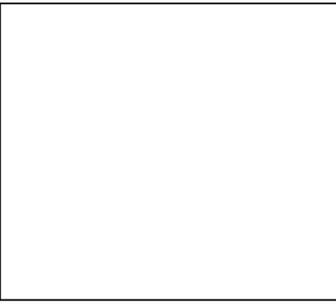
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**Sheet Title**  
**CONCRETE SECTIONS**

Drawn: JDJ      Approved: RML  
Scale: AS NOTED      Date: 6/2/03

Sheet No.  
**BB-9**  
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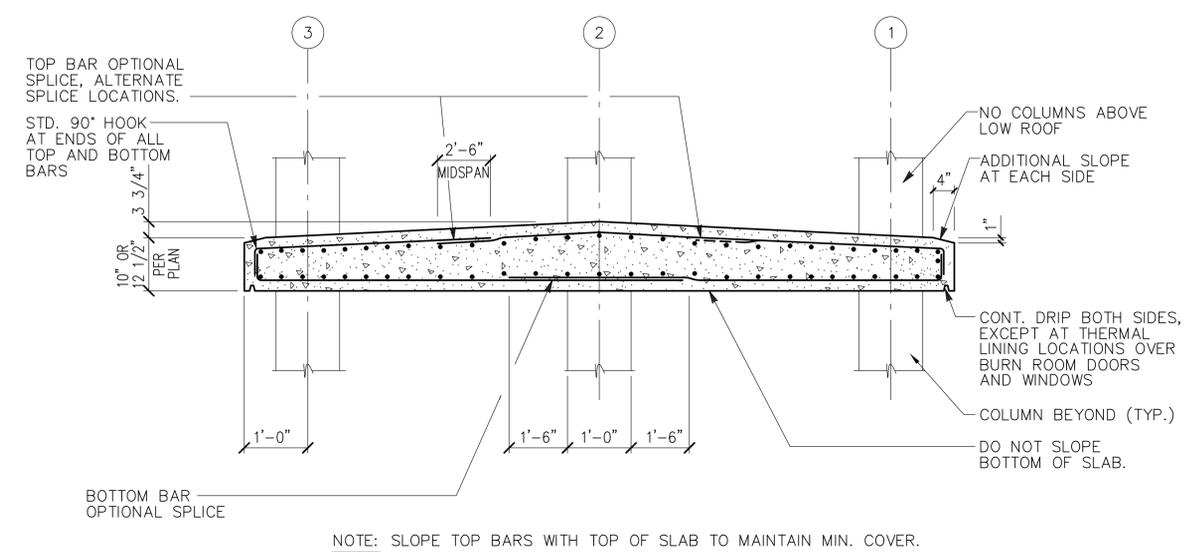
**CONCRETE SECTIONS &  
 ROPE ANCHOR &  
 EYE-BOLT DETAILS**

Drawn: JDJ      Approved: RML  
 Scale: AS NOTED      Date: 6/2/03

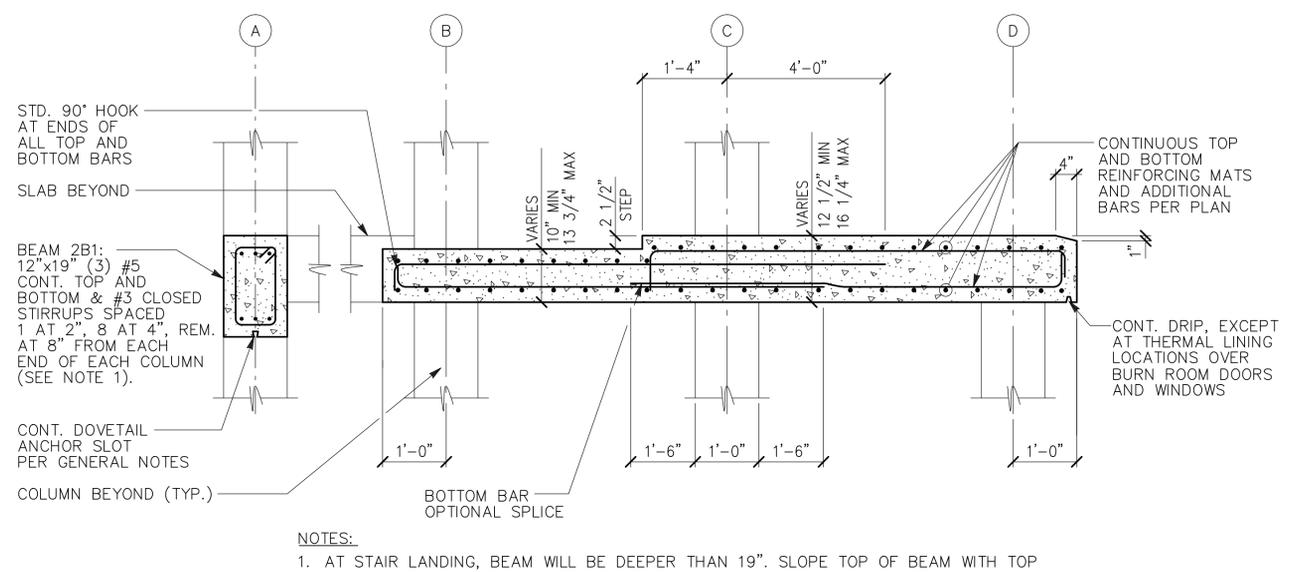
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**BB-10**

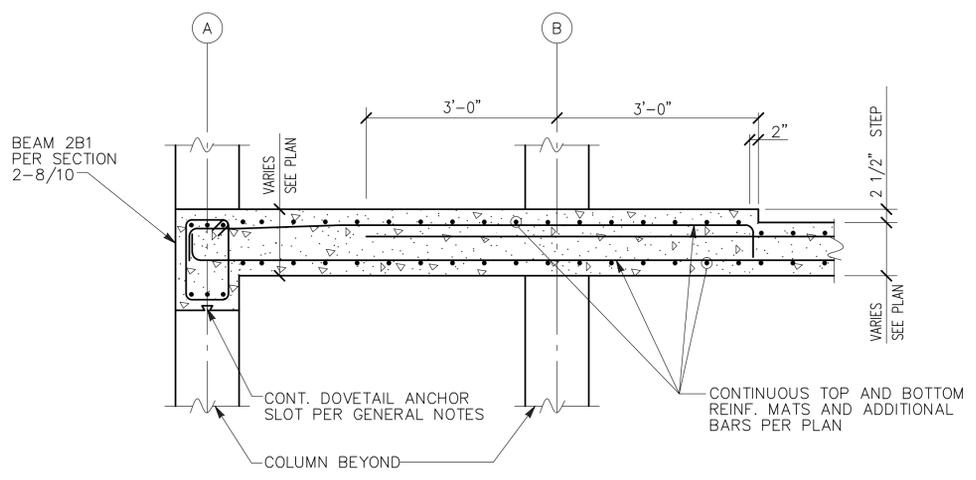
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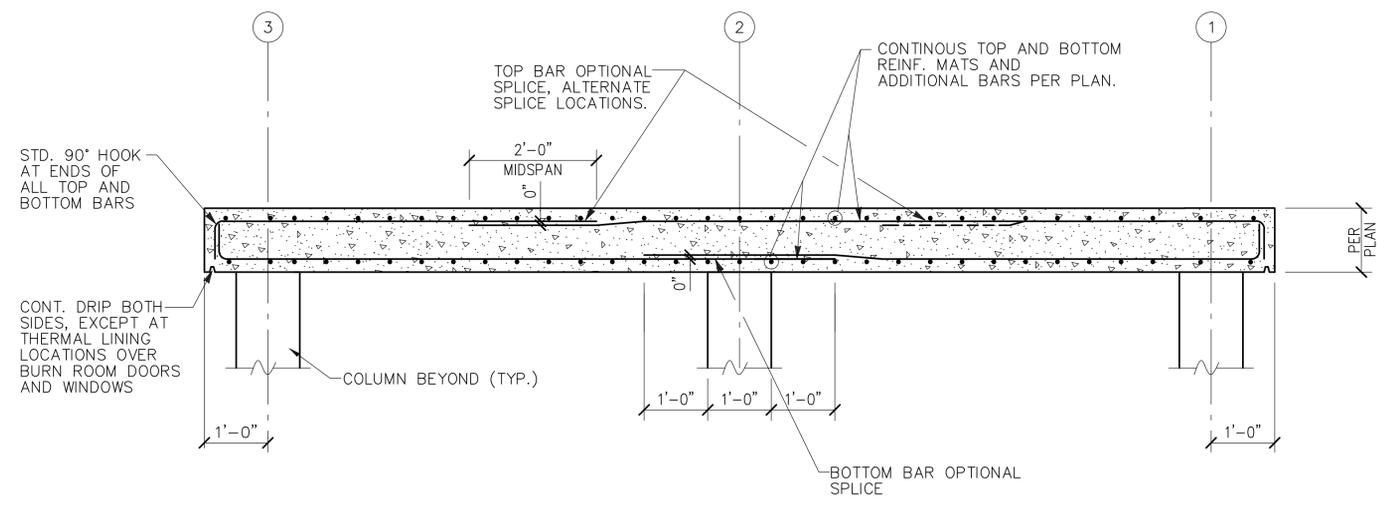
**1 SECTION - SECOND FLOOR/LOW ROOF SLAB**  
 NO SCALE



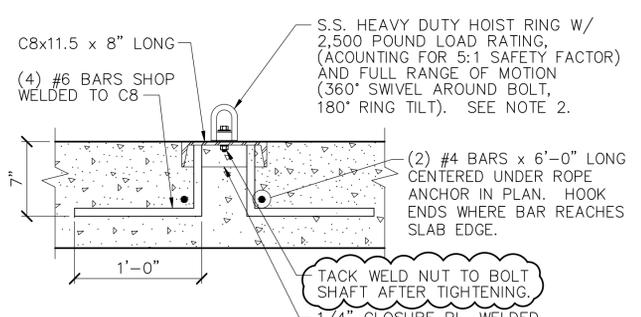
**2 SECTION - SECOND FLOOR/LOW ROOF SLAB**  
 NO SCALE



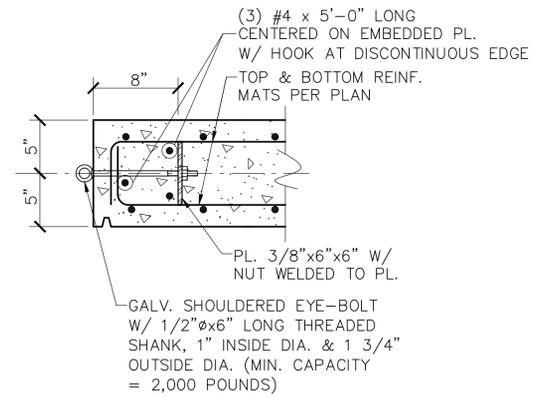
**3 SECTION - 2ND FLOOR STAIR LANDING SLAB**  
 SCALE 3/4" = 1'-0"



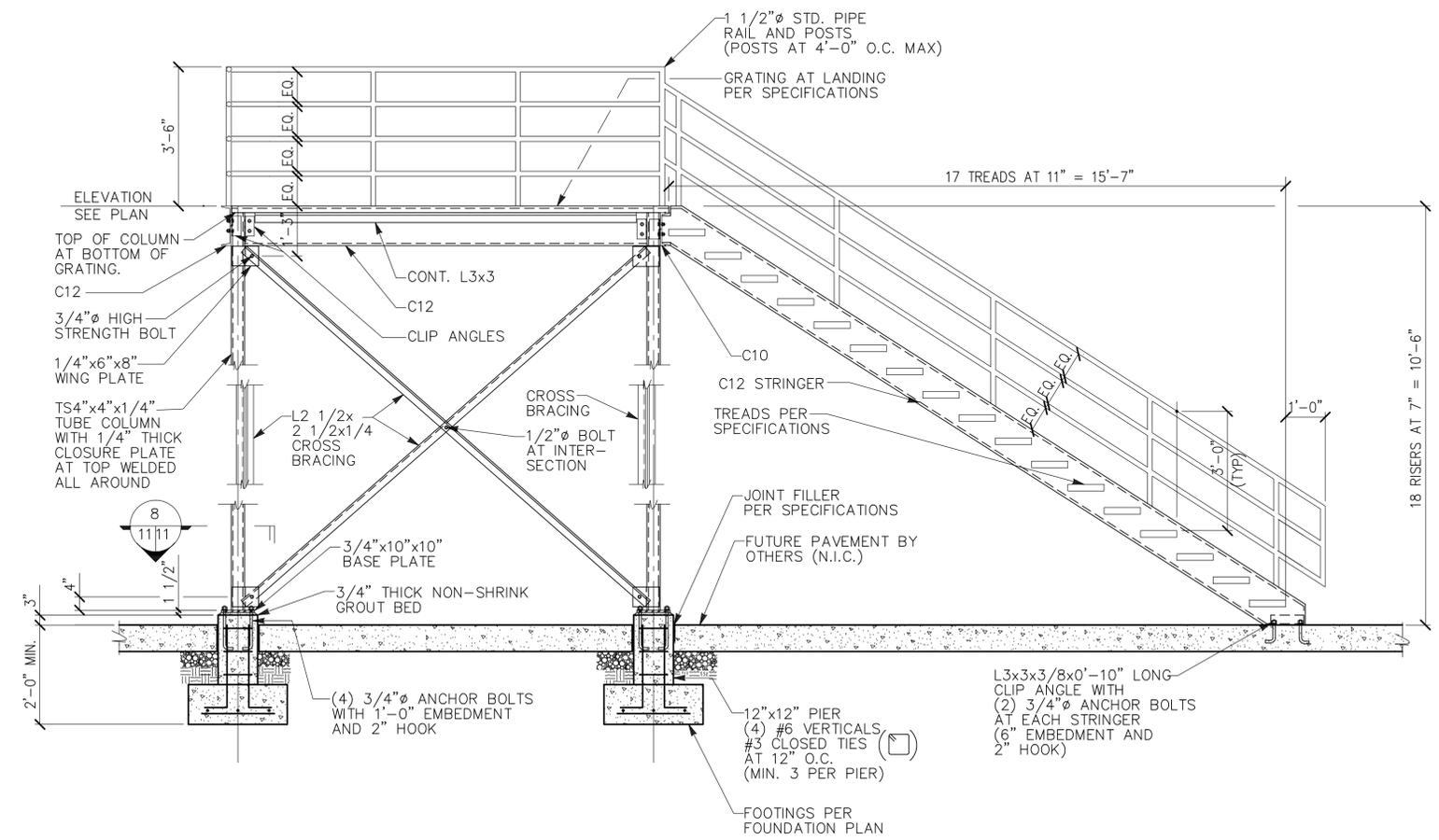
**4 SECTION - HIGH ROOF SLAB**  
 NO SCALE



**5 ROPE ANCHOR DETAIL**  
 SCALE 1 1/2" = 1'-0"

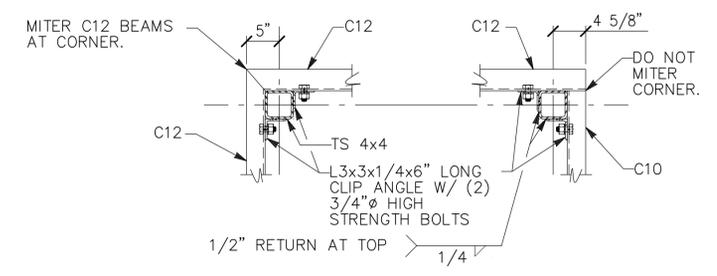


**6 EYE-BOLT DETAIL**  
 SCALE 1-1/2" = 1'-0"

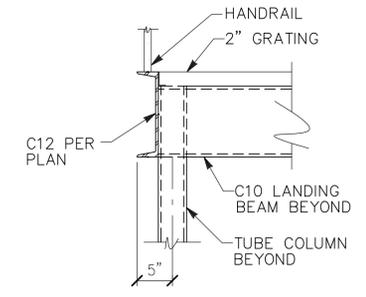


NOTE: ALL STEEL AND GRATING IN THIS SECTION SHALL BE GALVANIZED, U.O.N.

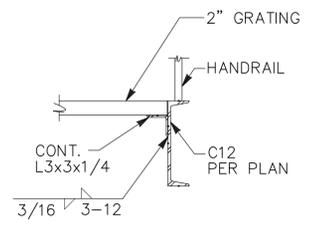
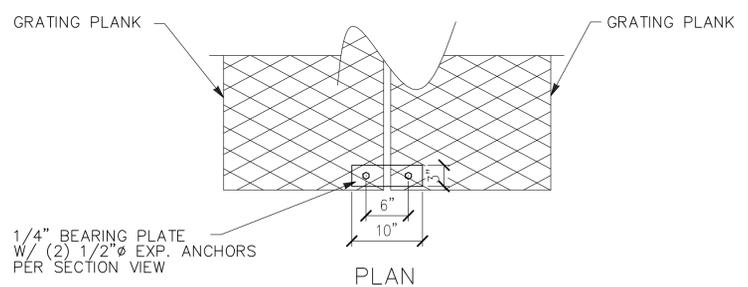
**1 SECTION**  
 SCALE 1/2" = 1'-0"



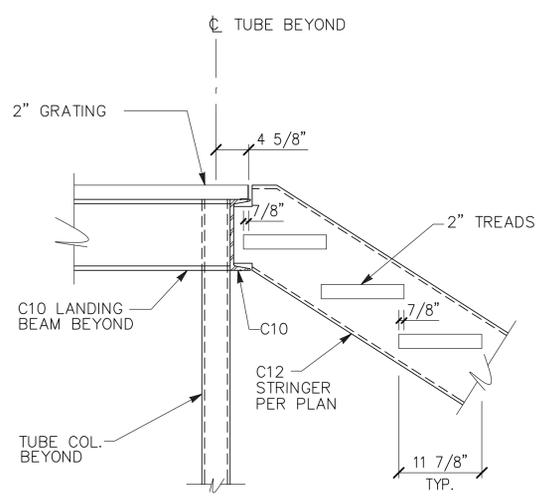
**2 PLAN DETAIL-LANDING BEAMS TO COLUMNS**  
 SCALE 1" = 1'-0"



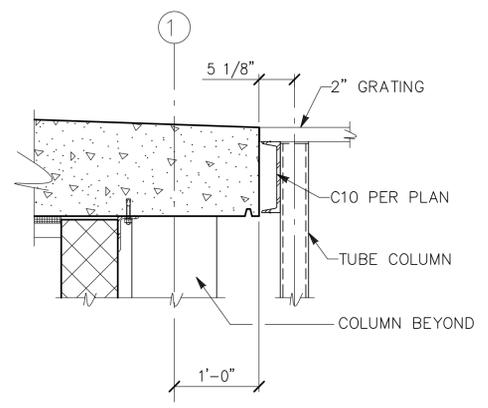
**3 SECTION**  
 SCALE 1" = 1'-0"



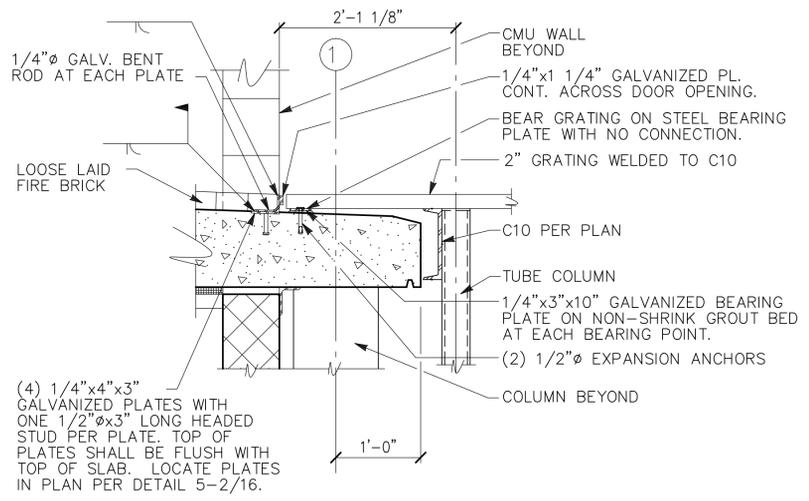
**7 SECTION**  
 SCALE 1" = 1'-0"



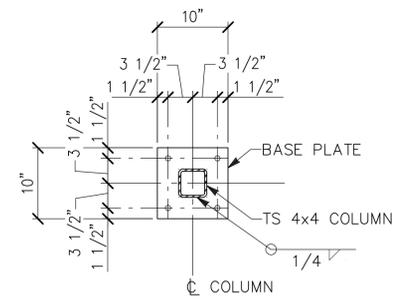
**4 SECTION**  
 SCALE 1" = 1'-0"



**5 SECTION**  
 SCALE 1" = 1'-0"



**6 SECTION**  
 SCALE 1" = 1'-0"



**8 PLAN DETAIL BASE PLATE**  
 SCALE 1" = 1'-0"

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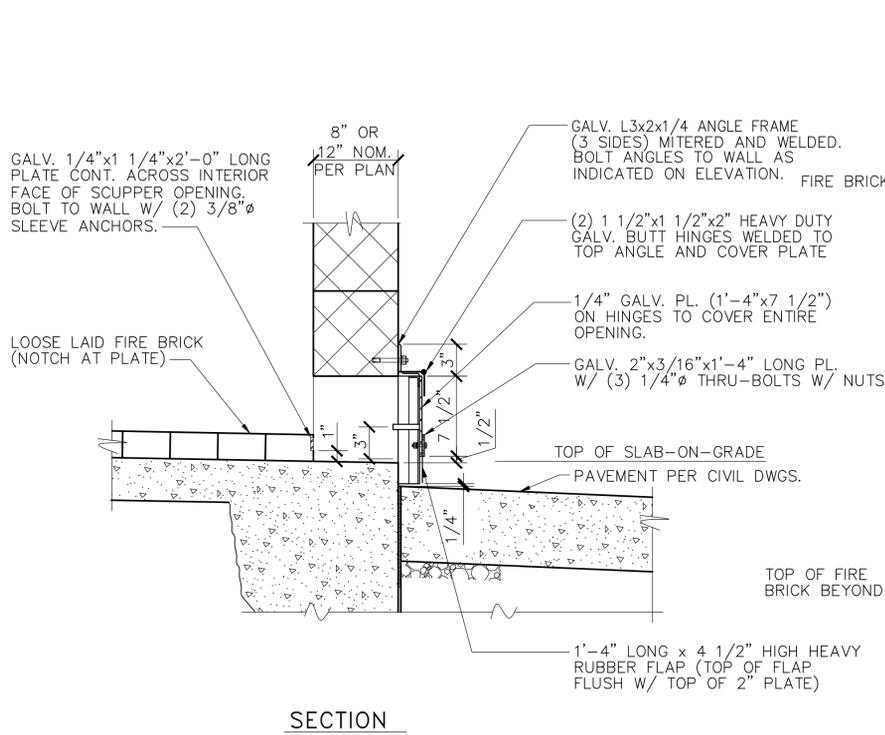
**SCUPPER DETAILS &  
 MASONRY DETAILS**

Drawn: JDJ Approved: RML  
 Scale: AS NOTED Date: 6/2/03

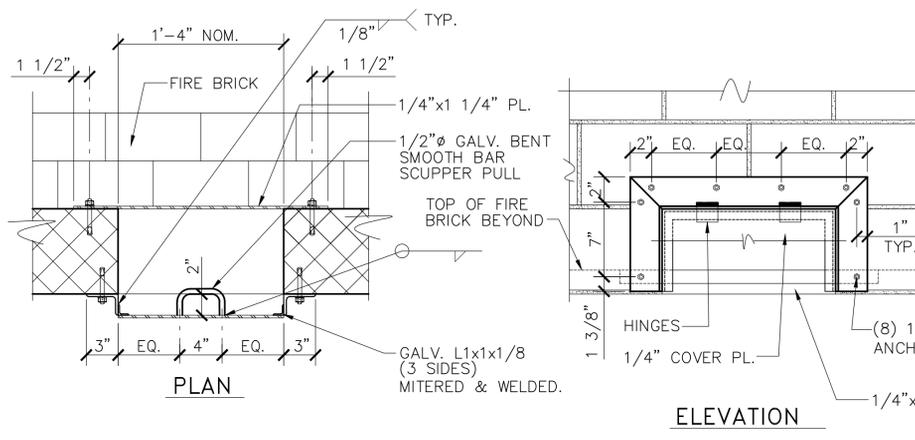
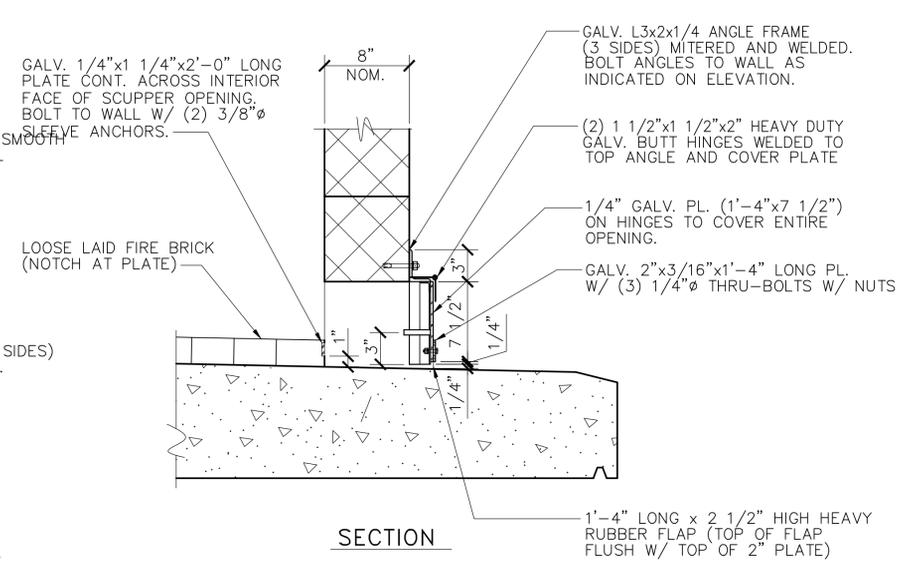
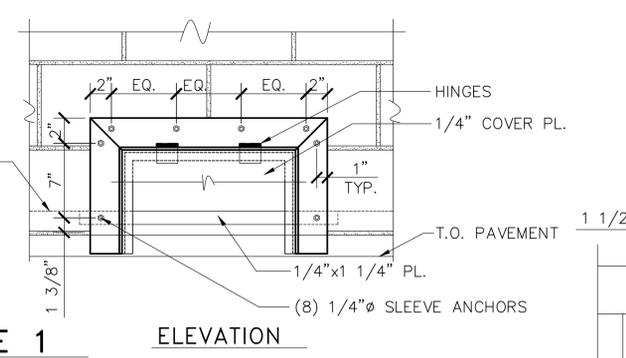
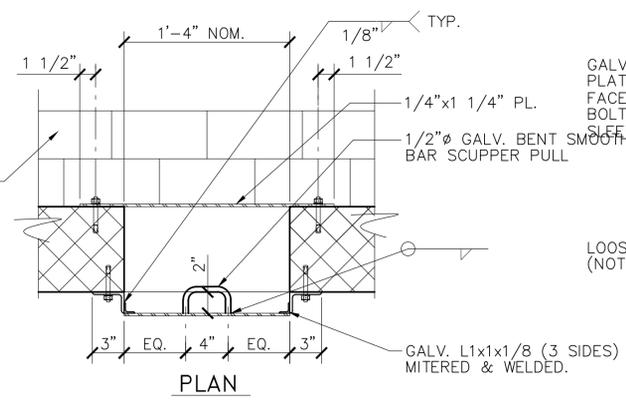
Sheet No.

**BB-12**

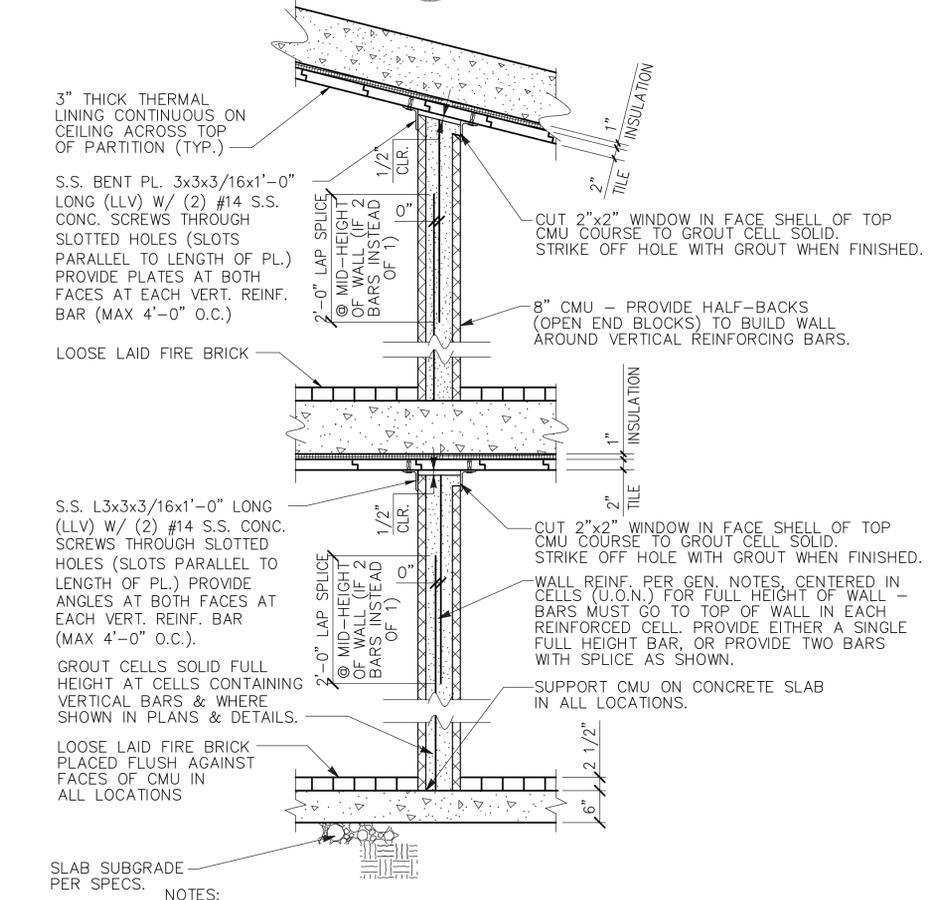
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**SCUPPER DETAILS - TYPE 1**  
 SCALE 1 1/2" = 1'-0"



**SCUPPER DETAILS - TYPE 2**  
 SCALE 1 1/2" = 1'-0"

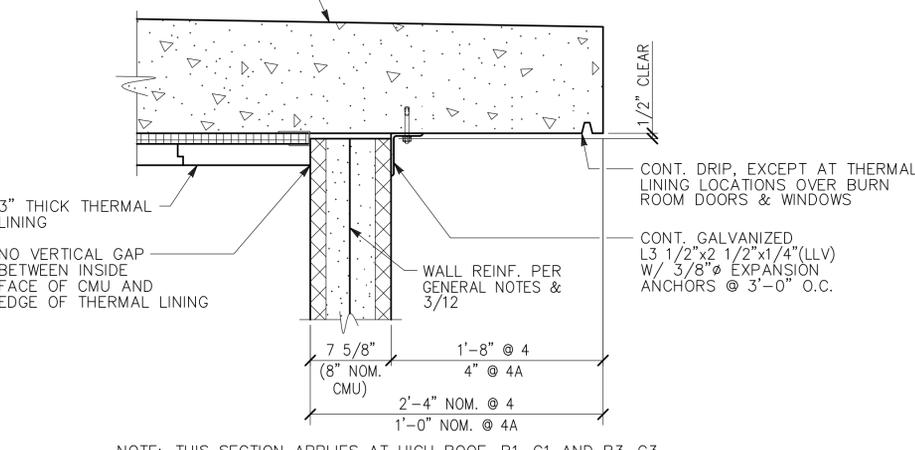


- NOTES:
- SEE 5/12 FOR TYP. LINTEL DETAIL.
  - INSTALL THERMAL LININGS AT CEILINGS PRIOR TO CONSTRUCTING INTERIOR WALLS.
  - PROVIDE FULL 8" DEEP COURSE AT TOPS OF ALL WALLS. LOCATE CUT COURSE OF BLOCK AT ANY HEIGHT OF WALL OTHER THAN TOP COURSE.

**TYPICAL NON-BEARING MASONRY WALL  
 REINFORCING AND BRACING DETAIL**

SCALE 3/4" = 1'-0"

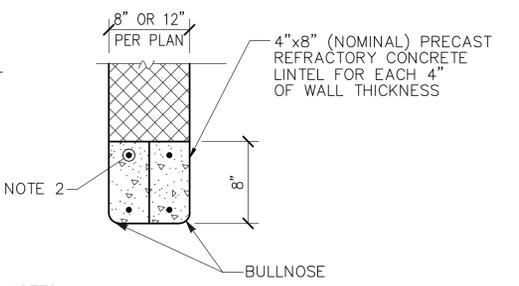
HIGH ROOF, SECOND FLOOR, OR LOW ROOF SLAB. SEE PLANS AND CONCRETE SLAB SECTIONS FOR SLAB THICKNESS, ELEVATION, SLOPE, REINFORCING, AND EDGE CHAMFER.



NOTE: THIS SECTION APPLIES AT HIGH ROOF, B1-C1 AND B3-C3, AND AT SECOND FLOOR/LOW ROOF, B1-E1, B3-E3, AND E1-E3.

**TYPICAL SECTION -  
 TOP OF EXTERIOR CMU PARTITIONS**

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



- NOTES:
- THIS DETAIL APPLIES TO ALL CMU OPENINGS, U.O.N.
  - (1) #4 TOP AND BOTTOM IN EACH 4"x8" LINTEL.
  - BEAR LINTEL ON WALL FOR 8" AT EACH END.

**TYP. LINTEL DETAIL**  
 SCALE 1 1/2" = 1'-0"

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Sheet Title

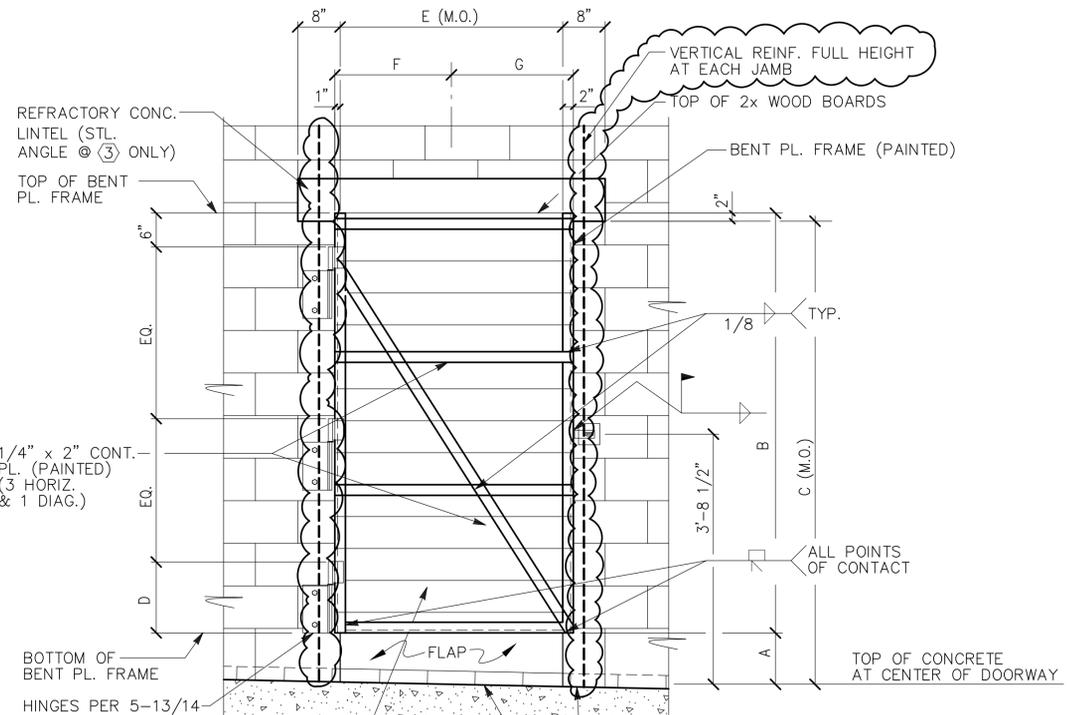
**DOOR DETAILS**

Drawn: JDJ      Approved: RML  
 Scale: AS NOTED      Date: 6/2/03

Sheet No.

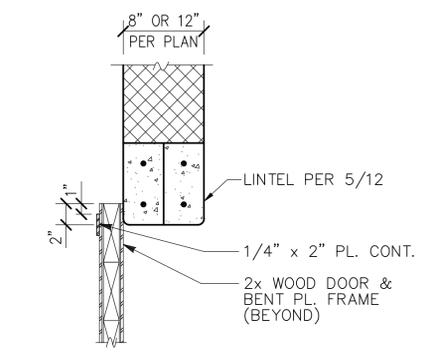
**BB-13**

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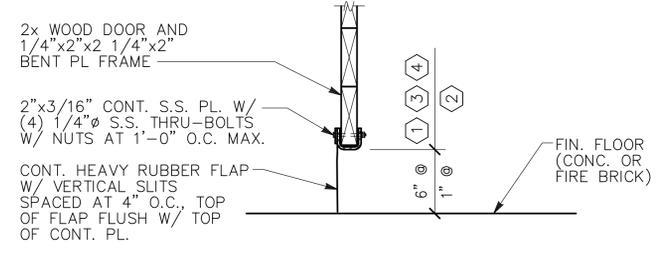


- NOTES:
- SEE DETAILS 2, 3, 4 AND 5 THIS SHEET FOR HEAD, SILL, AND JAMB DETAILS.
  - SEE FLOOR PLANS FOR DOOR SWING DIRECTION.
  - USE TOP OF CONCRETE ELEVATION AT CENTER OF DOORWAY AS POINT OF REFERENCE FOR DOOR DIMENSIONS.
  - INSTALL HASP & LOCK ON ALL EXTERIOR DOORS ONLY. (6 TOTAL LOCATIONS).

1  
 2,3 13  
**TYPICAL DOOR ELEVATION**  
 SCALE 3/4" = 1'-0"



2  
 13 13  
**DOOR HEAD DETAIL**  
 SCALE 1 1/2" = 1'-0"

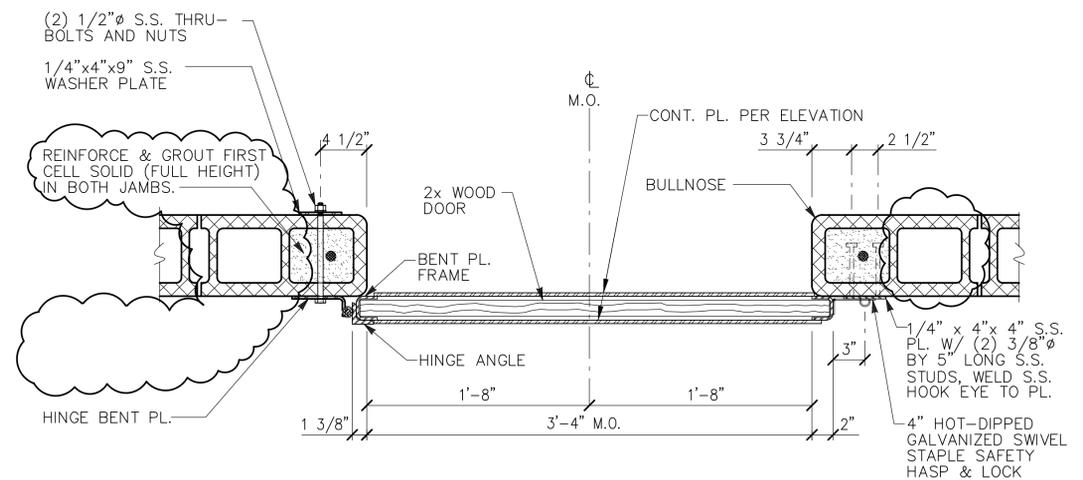


3  
 13 13  
**DOOR SILL DETAIL**  
 SCALE 1 1/2" = 1'-0"

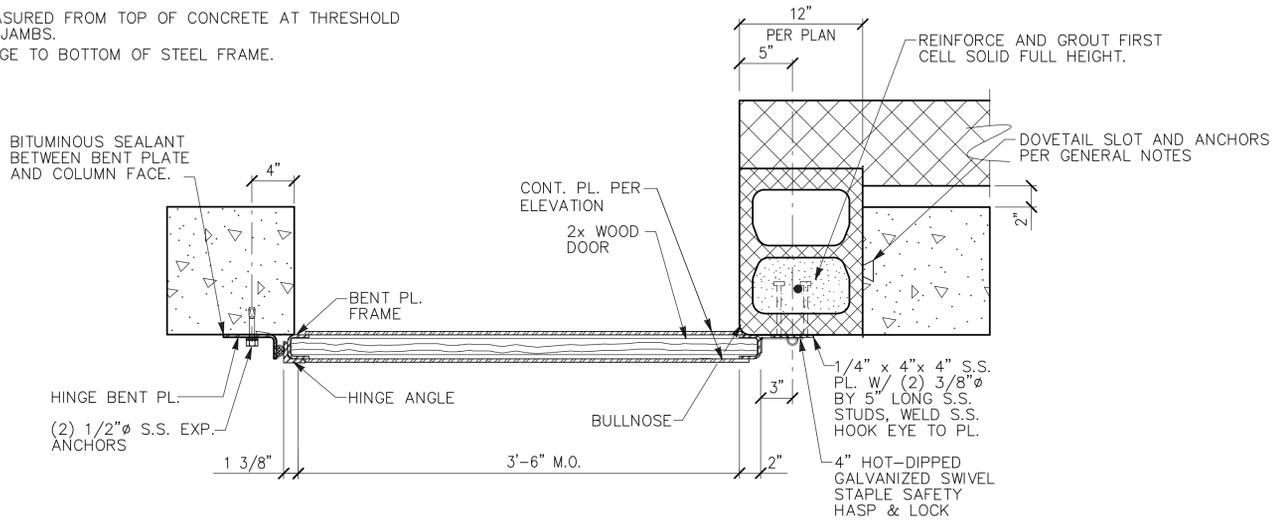
DOOR MARK	DIMENSION MARK						
	A	B	C	D	E	F	G
①	8 1/2"	6'-1 1/2"	6'-8"	9"	3'-4"	1'-9"	1'-10"
②	1"	6'-9"	6'-8"	1'-2"	3'-4"	1'-9"	1'-10"
③	6"	6'-4 1/2"	6'-8 1/2"	9"	3'-6"	1'-10"	1'-11"
④	6"	6'-4"	6'-8"	9"	3'-4"	1'-9"	1'-10"
INT. OPENING W/O DOOR	N/A	N/A	*	N/A	3'-4"	N/A	N/A

\* INTERIOR MASONRY OPENINGS SHALL BE FULL HEIGHT FROM FLOOR TO CEILING WITH NO LINTEL.

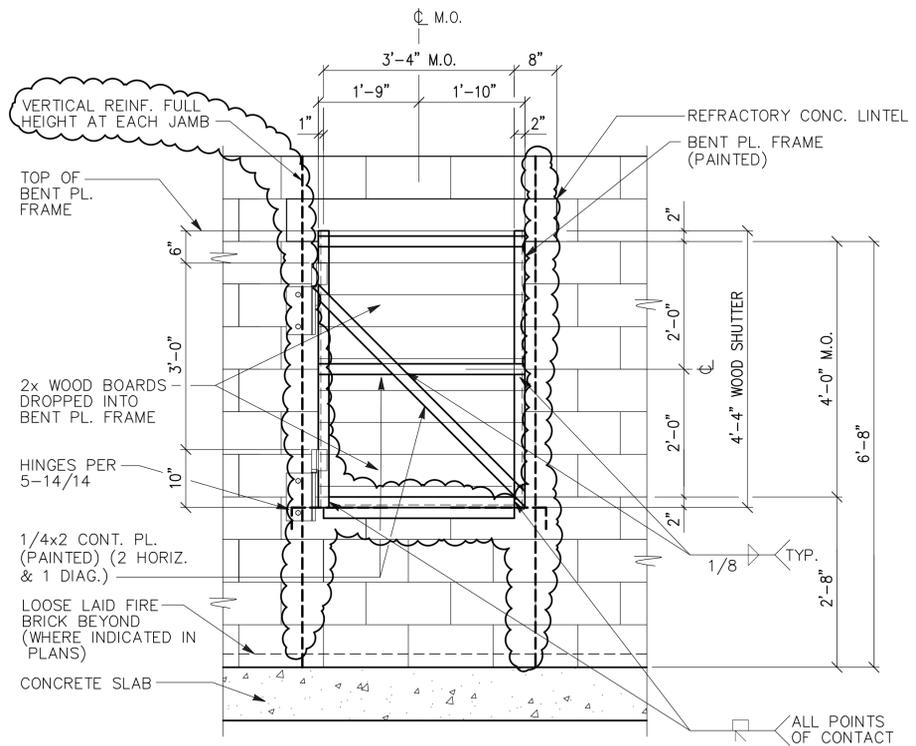
NOTES:  
 "A" = BOTTOM OF FRAME TO TOP OF CONCRETE SURFACE AT THRESHOLD BETWEEN MASONRY JAMBS.  
 "B" = FRAME HEIGHT.  
 "C" = HEIGHT OF M.O. MEASURED FROM TOP OF CONCRETE AT THRESHOLD BETWEEN MASONRY JAMBS.  
 "D" = TOP OF LOWEST HINGE TO BOTTOM OF STEEL FRAME.



4  
 13 13  
**DOOR JAMB DETAIL - TYPES ① ② ④**  
 SCALE 1 1/2" = 1'-0"

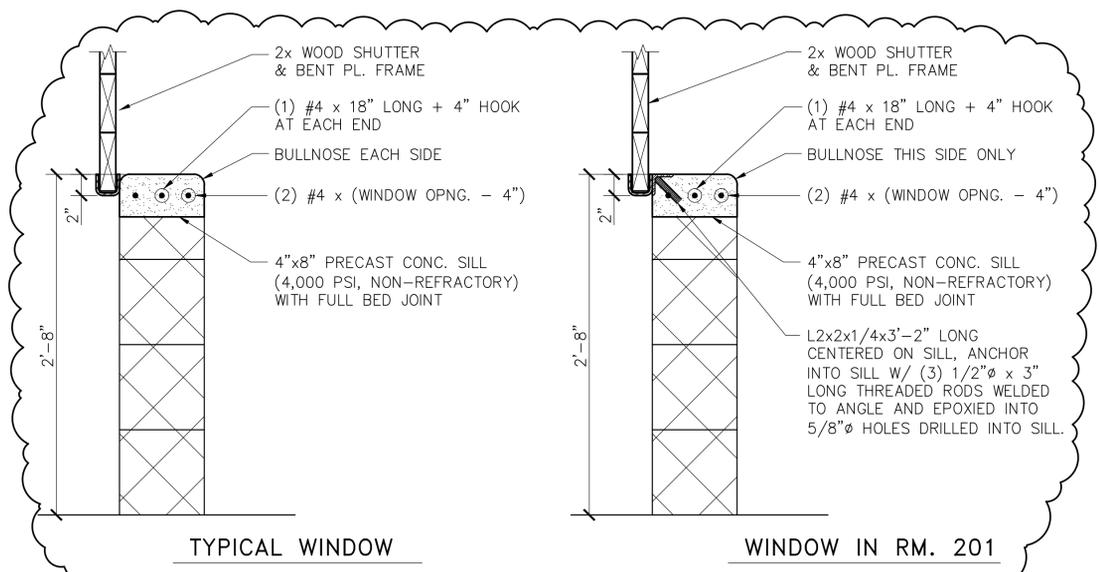
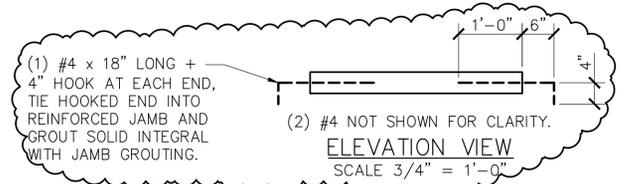


5  
 13 13  
**DOOR JAMB DETAIL - TYPE ③**  
 SCALE 1 1/2" = 1'-0"

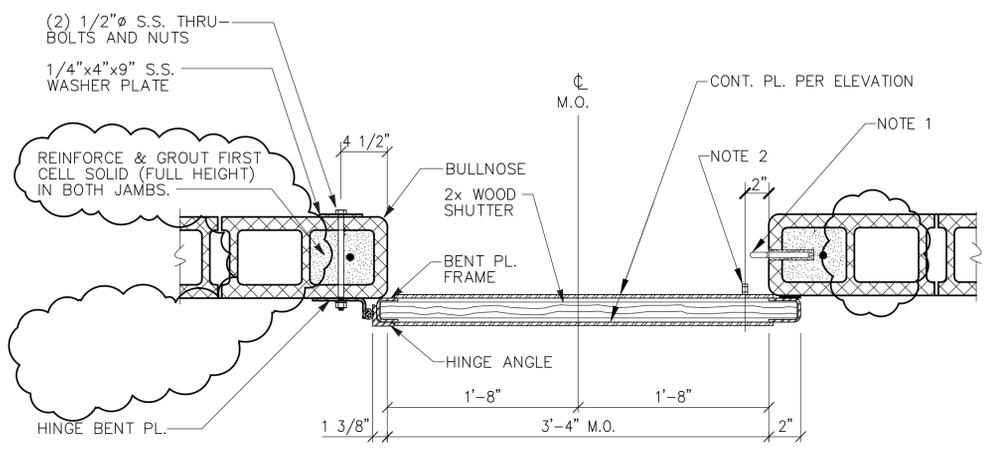


NOTES:  
 1. SEE FLOOR PLANS FOR WINDOW SWING DIRECTION.  
 2. SEE DETAILS 2, 3, 4, AND 5 THIS SHEET FOR JAMB, HEAD & SILL DETAILS.

1 TYPICAL WINDOW ELEVATION  
 2,3 14 SCALE 3/4" = 1'-0"

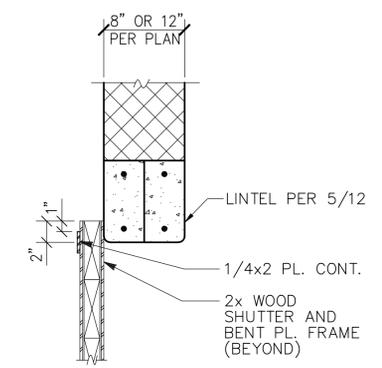


4 WINDOW SILL DETAILS  
 14 14 SCALE AS NOTED

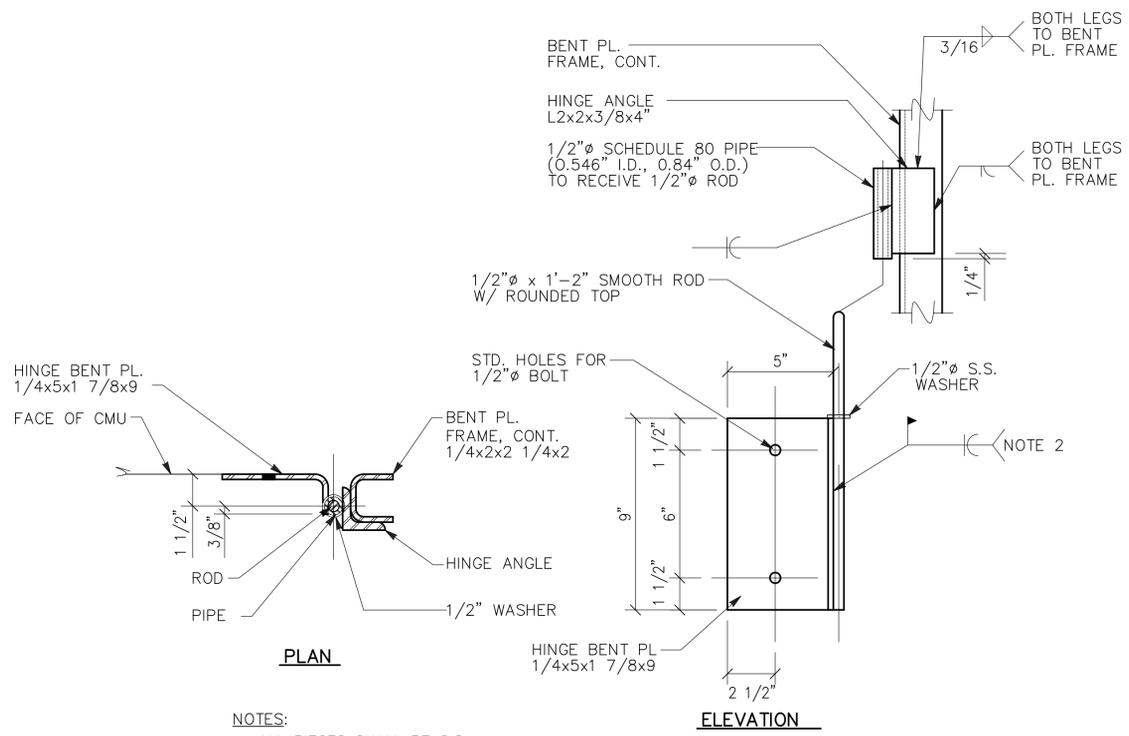


NOTES:  
 1. HEAVY-DUTY S.S. EYEBOLT (1/2" INSIDE DIAMETER) ANCHOR AT MID-HEIGHT OF JAMB W/ ADHESIVE ANCHOR PER GENERAL NOTES.  
 2. 1/2" NUT TACK WELDED TO CONT. PLATE AT MID-HEIGHT OF SHUTTER.

2 WINDOW JAMB DETAIL  
 14 14 SCALE 1 1/2" = 1'-0"



3 WINDOW HEAD DETAIL  
 14 14 SCALE 1 1/2" = 1'-0"



NOTES:  
 1. ALL PIECES SHALL BE S.S.  
 2. HOLD SHUTTER OR DOOR IN PLACE WHILE FIELD WELDING ROD TO ASSURE PROPER FIT AND OPERATION OF HUNG SHUTTER OR DOOR.

5 TYPICAL DOOR & SHUTTER HINGE DETAIL  
 13,14 14 SCALE 3" = 1'-0"

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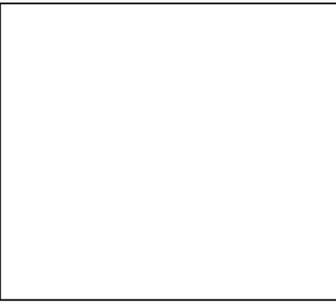
## WINDOW DETAILS & HINGE DETAILS

Drawn: JDJ Approved: RML  
 Scale: AS NOTED Date: 6/2/03

Sheet No.

# BB-14

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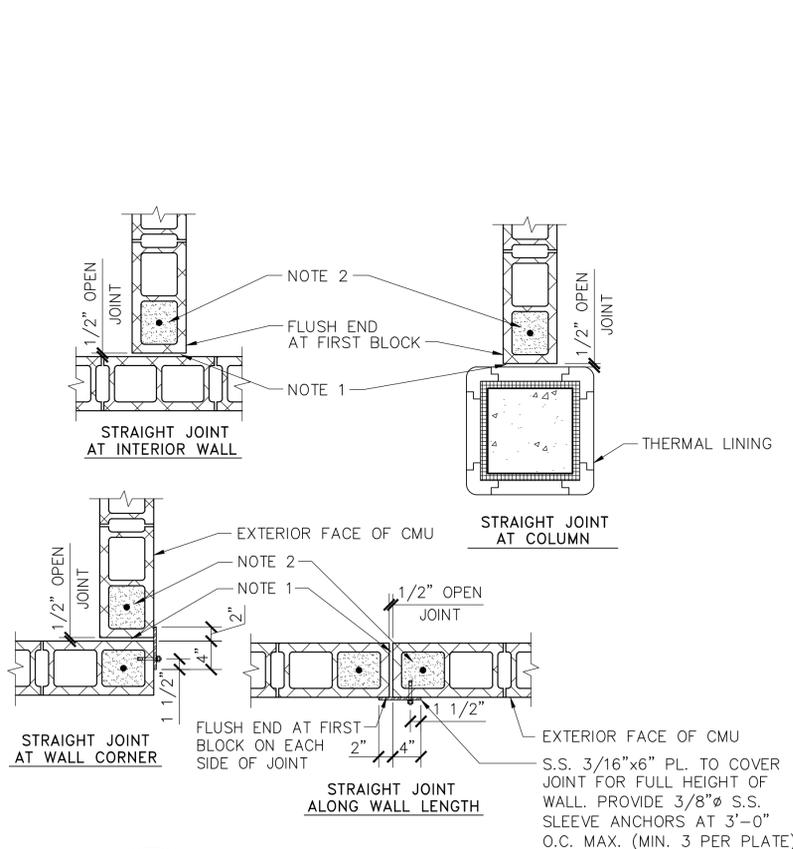
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Sheet Title  
**MASONRY JOINT DETAILS,  
 THERMAL LINING DETAILS,  
 & FINISH SCHEDULE**

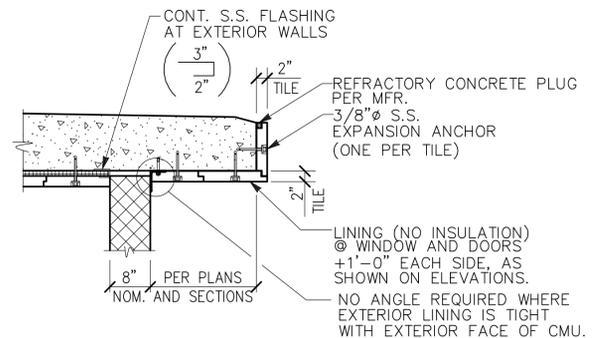
Drawn: JDJ      Approved: RML  
 Scale: AS NOTED      Date: 6/2/03

Sheet No.  
**BB-15**  
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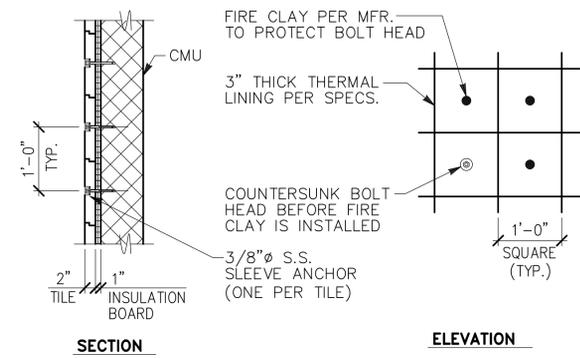
- NOTES:
- FORM JOINT WITH 1/2" PLYWOOD OR COMPRESSIBLE STYROFOAM. PLYWOOD SHALL BE STRIPPED PRIOR TO FIRST BURN.
  - REINFORCE & GROUT FIRST CELL SOLID FULL HEIGHT ON EACH SIDE OF JOINT.

**PLAN DETAILS -  
 OPEN JOINTS IN WALLS**  
 SCALE 1" = 1'-0"

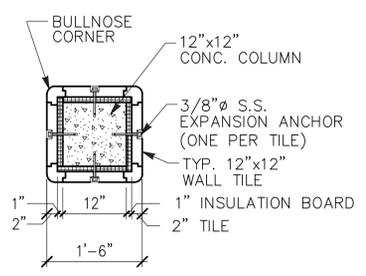


- NOTES:
- NO DRIP EDGE AT EXTERIOR THERMAL LINING LOCATIONS.

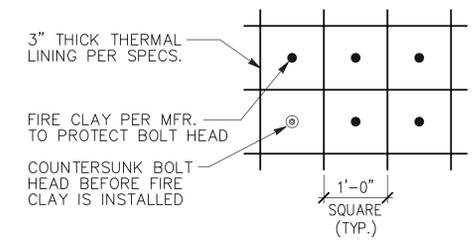
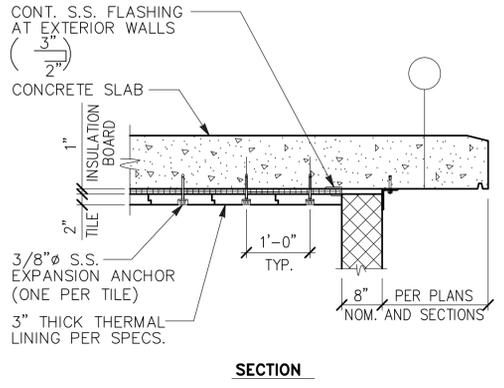
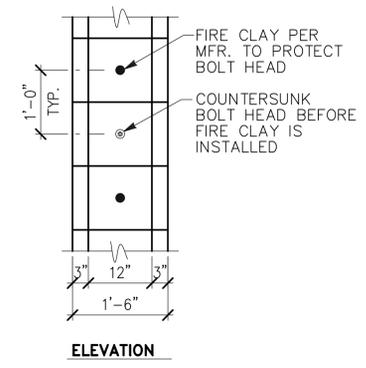
**EXTERIOR SLAB EDGE ABOVE  
 WINDOWS AND DOORS**  
**THERMAL LINING  
 EXTERIOR INSTALLATION**



**THERMAL LINING  
 WALL INSTALLATION**



**THERMAL LINING  
 COLUMN INSTALLATION**



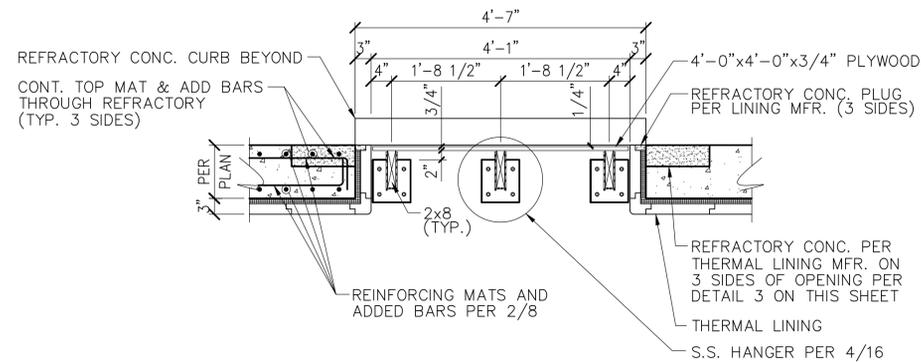
**THERMAL LINING  
 CEILING INSTALLATION**

- NOTE:  
 THERMAL LININGS ARE NOT IN THIS CONTRACT (N.I.C.) G.C. SHALL COORDINATE WITH LINING MANUFACTURER/INSTALLER AS REQUIRED TO PROVIDE FINISHED BURN BUILDING SIMULATOR PER THE CONTRACT DOCUMENTS.

**TYPICAL THERMAL LINING DETAILS**  
 SCALE 3/4" = 1'-0"

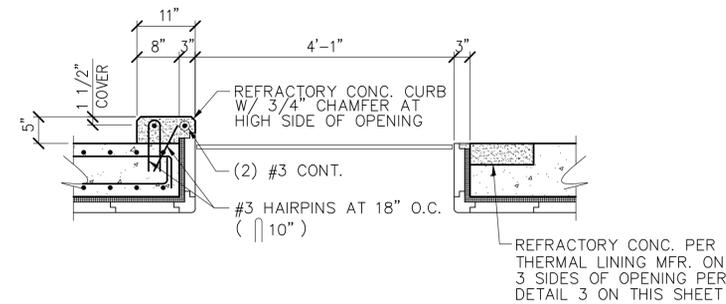
LOCATION	CEILING FINISH	WALL FINISH	FLOOR FINISH	NOTES
101, 103, 104, 201-203	THERMAL LINING	CMU	LOOSE-LAID FIRE BRICK ON CONCRETE SLAB W/ BROOM FINISH	SEE SPECS. FOR CONC. COATING/SEALER ON TOP OF SLAB, BELOW FIRE BRICK AT ROOMS 201-203.
102	THERMAL LINING	THERMAL LINING AND CMU	LOOSE-LAID FIRE BRICK ON CONCRETE SLAB W/ BROOM FINISH	
105	CONCRETE	CMU	CONCRETE WITH BROOM FINISH	
INTERIOR STAIRS AND LANDINGS	CONCRETE	CMU	CONCRETE WITH BROOM FINISH	SEE SPECS. FOR CONC. COATING/SEALER. SEE NOTE 4 BELOW.
EXTERIOR CONCRETE STAIRS AND LANDINGS	N/A	N/A	CONCRETE WITH BROOM FINISH	
EXTERIOR STEEL STAIRS AND LANDINGS	N/A	N/A	GALVANIZED STEEL SAFETY GRATING	
HIGH ROOF AND LOW ROOF	N/A	N/A	CONCRETE WITH BROOM FINISH	SEE SPECS. FOR CONC. COATING/SEALER ON TOP OF ROOF SLABS.

- FINISH SCHEDULE NOTES:
- ALL EXPOSED CONCRETE AND CMU SURFACES ARE UNPAINTED.
  - SEE 2-2/15 AND SPECIFICATIONS FOR THERMAL LINING.
  - WHERE WALL FINISH IS "THERMAL LINING AND CMU", SEE FLOOR PLANS FOR WALL LOCATIONS OF THERMAL LININGS.
  - PROVIDE THERMAL LININGS ABOVE LANDINGS AT ALL FLOOR LEVELS.



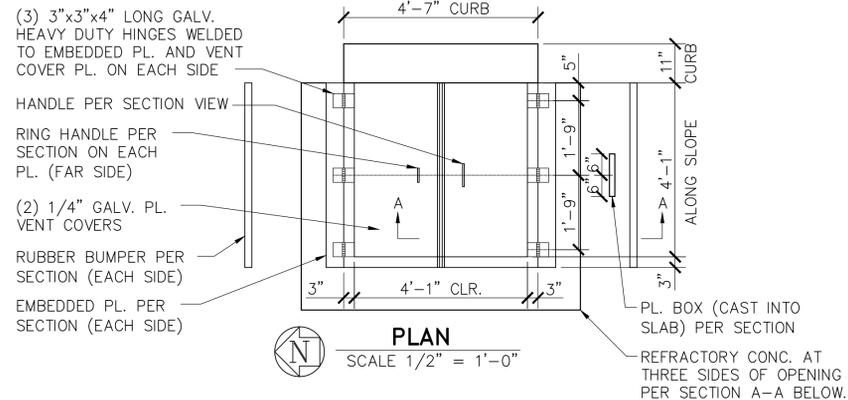
NOTE: SEE DETAIL 3 ON THIS SHEET FOR PLATE COVER.

**1 SECTION - CHOPOUT OPENING**  
SCALE 3/4" = 1'-0"

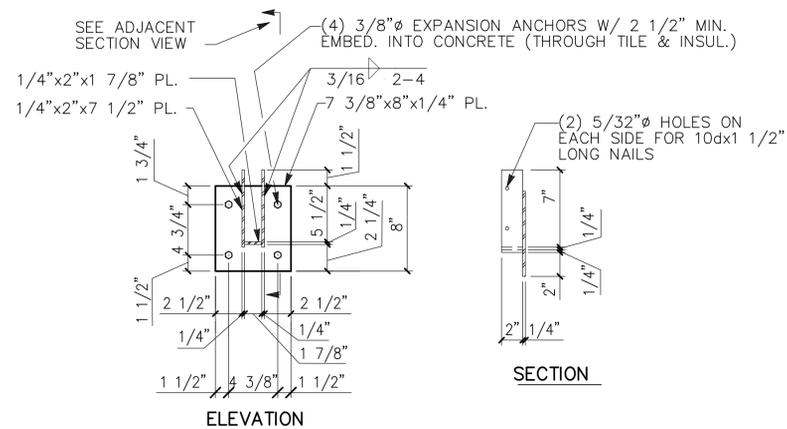


NOTE: SEE SECTION 1 ON THIS SHEET FOR ADDITIONAL INFORMATION NOT SHOWN.

**2 SECTION - CHOPOUT OPENING**  
SCALE 3/4" = 1'-0"



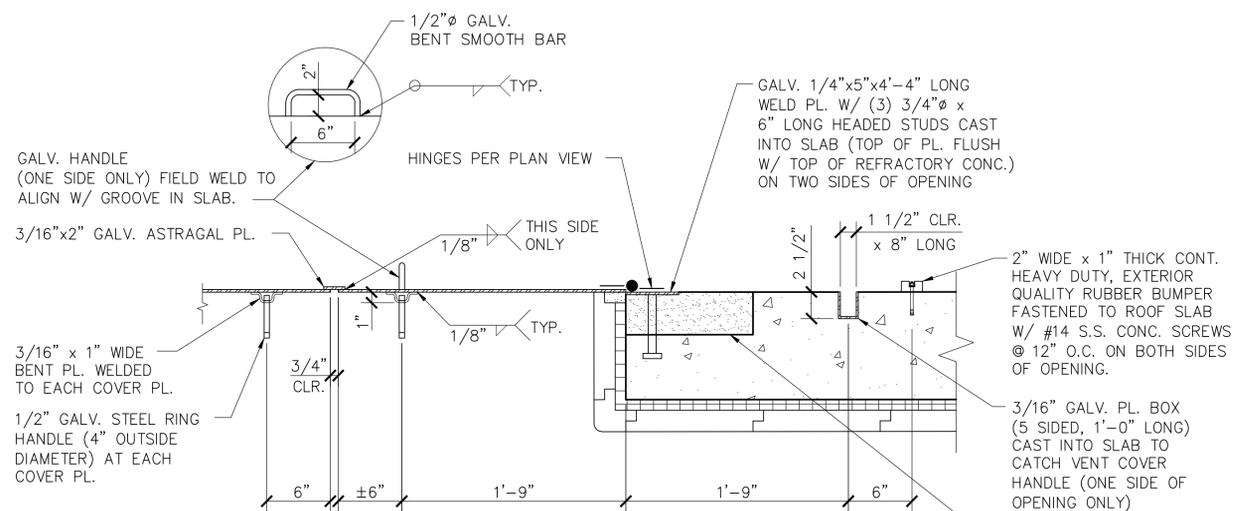
**PLAN**  
SCALE 1/2" = 1'-0"



**ELEVATION**

- NOTES:
1. ALL PIECES IN THIS DETAIL SHALL BE S.S.
  2. THIS HANGER HAS BEEN DESIGNED TO ACCOMMODATE EITHER A 2x8 OR A 7 1/2" TJI JOIST WITH UP TO 1 3/4" WIDE FLANGES.

**4 DETAIL - JOIST HANGERS**  
SCALE 1 1/2" = 1'-0"

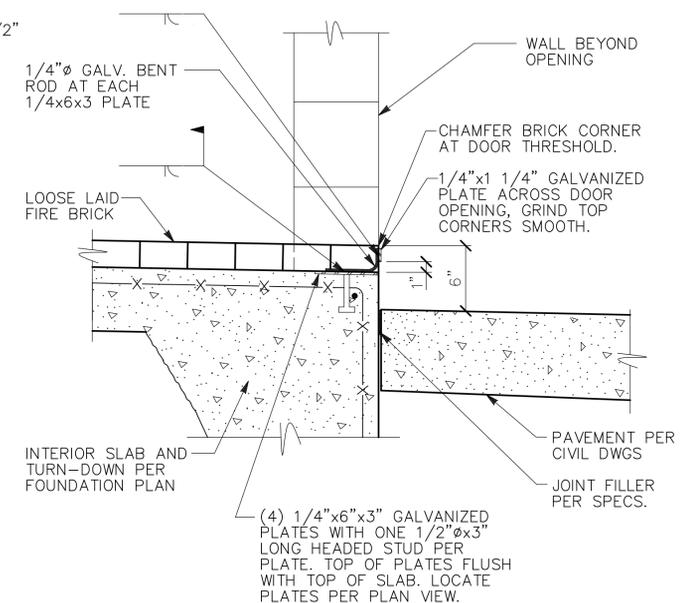


**SECTION A-A**  
SCALE 1 1/2" = 1'-0"

- NOTES:
1. SEE FRAMING PLAN & SLAB SECTIONS FOR REINFORCING.

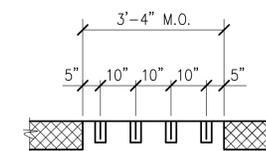
**TYPICAL DETAIL - PLATE COVER FOR ROOF CHOPOUT**

**3**  
SCALE: AS NOTED



- NOTES:
1. THIS SECTION APPLIES TO EXTERIOR DOORS AT ROOMS 102 & 103.
  2. PROVIDE 6" STEP FROM PAVEMENT TO TOP OF SLAB-ON-GRADE AT EXTERIOR DOOR AT ROOM 105, BUT DO NOT PROVIDE EMBEDDED PLATES.
  3. PROVIDE NOTCHES IN BOTTOM OF BRICKS OVER BENT RODS SO THAT BRICKS WILL SIT FLUSH ON CONCRETE.

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



- NOTES:
1. THIS PLAN APPLIES TO EXTERIOR DOORS AT ROOMS 102 & 103.

**PLAN VIEW**  
SCALE 1/2" = 1'-0"

**5**  
SCALE: AS NOTED

**EXTERIOR DOOR THRESHOLD DETAIL**

Engineers



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Project Title

**DeKalb Co., GA  
Burn Building  
Simulator**

Owner

**DeKalb County  
Bureau of Fire Services  
3630 Camp Circle  
Phone: (404) 294-2895  
Fax: (404) 294-2008**

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**CHOPOUT DETAILS &  
DOOR THRESHOLD DETAIL**

Drawn: JDJ Approved: RML  
Scale: AS NOTED Date: 6/2/03

Sheet No.

**BB-16**



CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING CRITERIA UNLESS OTHERWISE NOTED ON THE DRAWINGS. DO NOT USE THESE DRAWINGS WITHOUT THE ACCOMPANYING SPECIFICATIONS AND RELATED CIVIL DRAWINGS. FOR ALL ITEMS, SEE THE SPECIFICATIONS FOR ADDITIONAL DETAILS AND REQUIREMENTS. THE MOST STRINGENT REQUIREMENTS GOVERN CONDITIONS COVERED BY BOTH THE DRAWINGS AND THE PROJECT SPECIFICATIONS.

**A. STRUCTURE CLASSIFICATION**

1. THE LIVE FIRE TRAINING STRUCTURE WILL BE A TRAINING PROP USED BY THE FIRE DEPARTMENT TO TRAIN ABLE-BODIED FIREFIGHTERS UNDER LIVE FIRE AND OTHER TRAINING SCENARIOS.
2. THE LIVE FIRE TRAINING STRUCTURE WILL NOT BE AN OCCUPIED STRUCTURE, EXCEPT DURING TRAINING EXERCISES.
3. THE LIVE FIRE TRAINING STRUCTURE IS CLASSIFIED AS MISCELLANEOUS USE GROUP (USE GROUP U).

**B. LIVE FIRE TRAINING DESIGN CRITERIA**

THE STRUCTURE HAS BEEN DESIGNED FOR THE FOLLOWING CRITERIA:

1. MAXIMUM NUMBER OF LIVE FIRE TRAINING DAYS PER YEAR = UNLIMITED
2. MAXIMUM NUMBER OF LIVE FIRE TRAINING EVOLUTIONS PER DAY = 20
3. MAXIMUM DURATION OF EACH LIVE FIRE TRAINING EVOLUTION = 20 MINUTES
4. MAXIMUM SUSTAINED TEMPERATURE DURING LIVE FIRE TRAINING IN BURN ROOMS = 1,500° F
5. MAXIMUM TEMPERATURE SPIKE DURING LIVE FIRE TRAINING IN BURN ROOMS = 1,800° F
6. ONLY "CLASS A" FUEL MATERIALS SHALL BE USED FOR LIVE FIRE TRAINING.
7. LIVE FIRE TRAINING SHALL BE IN ACCORDANCE WITH NFPA 1403.
8. LIVE FIRE TRAINING SHALL OCCUR IN BURN ROOMS ONLY. BURN ROOMS ARE 101, 102, 103, 104, AND 201. NO FIRES ARE ALLOWED IN ROOMS 105, 202, AND 203, ON THE STAIRS AND LANDINGS, OR ON THE ROOFS.
9. TRAINING THAT INCLUDES TEAR GAS, EXPLOSIVES, OR FIREARMS SHALL NOT BE PERMITTED WITHIN OR NEAR THE LIVE FIRE TRAINING STRUCTURE.
10. ONCE ALL CONCRETE AND MASONRY WORK HAS BEEN COMPLETED, THE STRUCTURE SHALL STAND FOR A 2 MONTH MINIMUM CURING PERIOD BEFORE CONDUCTING THE FIRST LIVE FIRE TRAINING EVOLUTION. INSTALLATION OF OTHER TRADES MAY OCCUR DURING THE 2 MONTH CONCRETE AND MASONRY CURING PERIOD.
11. THE STRUCTURAL ELEMENTS HAVE BEEN PROTECTED FROM HEAT AND THERMAL SHOCK WITH THERMAL LININGS. MASONRY WALLS AND OTHER NON-STRUCTURAL ITEMS ARE NOT PROTECTED WITH THERMAL LININGS AND ARE EXPECTED TO GRADUALLY DETERIORATE WITH EVERY EVOLUTION. MAINTENANCE WILL BE REQUIRED AND SHOULD BE INCLUDED IN ANNUAL BUDGETS.
12. FIRES SHOULD BE PLACED AWAY FROM DOORS, SHUTTERS, AND ROOF OPENINGS TO REDUCE DETERIORATION OF THOSE ITEMS.

**C. DESIGN LIVE LOADS**

1. FLOORS: 100 PSF PLUS DEAD WEIGHT OF THERMAL LININGS, FIRE BRICK, AND PARTITIONS.
2. STAIRS: 100 PSF
3. FLAT AND SLOPED ROOFS: 100 PSF PLUS DEAD WEIGHT OF THERMAL LININGS.

**D. DESIGN WIND LOADS**

1. THE STRUCTURE HAS BEEN DESIGNED FOR WIND IN ACCORDANCE WITH THE REQUIREMENTS OF THE 1997 STANDARD BUILDING CODE (SBC) FOR THE MINIMUM CRITERIA IN DEKALB COUNTY, GEORGIA:
2. BASIC WIND SPEED = 80 MPH
3. WIND IMPORTANCE FACTOR (I) = 1.0
4. WIND EXPOSURE CATEGORY = C
5. WIND DESIGN PRESSURE (P) FOR THE MAIN WIND RESISTING SYSTEM = 18.70 PSF FOR WINDWARD WALLS AND -8.80 PSF FOR LEEWARD WALLS OR 11.80 PSF FOR WINDWARD WALLS AND -15.7 PSF FOR LEEWARD WALLS.
6. WIND DESIGN PRESSURE (P) FOR BUILDING COMPONENTS AND CLADDING (EXTERIOR MASONRY WALLS) = 28.30 PSF (INWARD OR OUTWARD).

**E. EARTHQUAKE DESIGN DATA**

1. SEISMIC DESIGN HAS BEEN PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE 1997 STANDARD BUILDING CODE (SBC) FOR THE MINIMUM CRITERIA IN DEKALB COUNTY, GEORGIA:
2. PEAK VELOCITY-RELATED ACCELERATION (A<sub>v</sub>) = 0.10
3. PEAK ACCELERATION (A<sub>a</sub>) = 0.10
4. SEISMIC HAZARD EXPOSURE GROUP 1
5. SEISMIC PERFORMANCE CATEGORY B
6. SOIL PROFILE TYPE IS ASSUMED TO BE S4
7. RESPONSE MODIFICATION FACTOR (R) = 3.0 (ORDINARY MOMENT FRAME)
8. DEFLECTION AMPLIFICATION FACTOR (Cd) = 2.5

**F. DATUM AND BUILDING ELEVATIONS**

1. THE DATUM IS THE TOP OF THE FIRST FLOOR SLAB AT THE EXTERIOR FACE OF THE EXTERIOR WALLS AT THE SCUPPER LOCATIONS, AND IS DESIGNATED ON THE DRAWINGS AS 0.00 FEET.
2. THE DATUM ELEVATION IS 804.29 FEET ABOVE SEA LEVEL.
3. ALL STRUCTURE ELEVATIONS ARE SHOWN IN THE PLANS AS +XX.XX OR -XX.XX IN FEET RELATIVE TO THE DATUM.

**G. SOIL BEARING VALUE**

1. ALLOWABLE SOIL BEARING VALUE IS 3,000 PSF, AS STATED IN THE GEOTECHNICAL REPORT PREPARED BY MATRIX ENGINEERING GROUP, INC. AND DATED AUGUST 8, 2002.

**H. FOOTINGS**

1. EXTEND BOTTOMS OF ALL FOOTINGS 1'-0" MINIMUM INTO UNDISTURBED SOIL AND, AT LEAST 2'-0" BELOW EXTERIOR FINISHED GRADE.
2. WHERE BEARING ON UNDISTURBED VIRGIN SOIL IS NOT POSSIBLE AT FOOTING ELEVATIONS INDICATED, EITHER SUPPORT FOOTINGS ON STRUCTURAL FILL OR EXTEND FOOTINGS BELOW ELEVATIONS SHOWN AS DIRECTED BY THE GEOTECHNICAL ENGINEER SO THAT FOUNDATIONS WILL BE SUPPORTED ON SOILS THAT MEET THE ALLOWABLE SOIL BEARING CAPACITY.

3. PARTIALLY WEATHERED ROCK AND/OR BEDROCK WAS ENCOUNTERED NEAR EXISTING GRADE AT SEVERAL BORING LOCATIONS DURING SUBSURFACE EXPLORATION.
4. PLACE BOTTOMS OF FOOTINGS AT A MINIMUM OF 12 INCHES ABOVE THE BEDROCK ELEVATIONS.
5. IF ROCK IS ENCOUNTERED DURING FOOTING EXCAVATION, CUT A MINIMUM OF 12 INCHES OF ROCK AND REPLACE WITH COMPACTED SAND OR CRUSHED STONE AT THE DIRECTION OF THE TESTING AGENCY GEOTECHNICAL ENGINEER PRIOR TO POURING THE FOOTING.
6. FOOTING SUBGRADES SHALL BE APPROVED BY THE TESTING AGENCY GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF THE FOOTINGS.

**I. SITE PREPARATION & BACKFILL REQUIREMENTS WITHIN STRUCTURE FOOTPRINT**

1. STRIP THE EXISTING TOPSOIL LAYER, AND SCARIFY THE TOP 12 INCHES OF THE SUBGRADE SOILS.
2. IT IS ANTICIPATED THAT STRUCTURAL FILL WILL BE REQUIRED TO ACHIEVE THE FINISHED SUBGRADE ELEVATIONS. FOLLOW REQUIREMENTS OF THE SOILS REPORT REFERENCED IN NOTE G.1. ABOVE TO USE RESIDUAL SOILS AT THE SITE FOR STRUCTURAL FILL. ALL FILL MATERIALS SHALL BE APPROVED BY THE TESTING AGENCY GEOTECHNICAL ENGINEER.
3. FILL MATERIALS MUST BE FREE OF ORGANIC, DELETERIOUS MATERIALS AND PLASTIC SOILS.
4. PLACE FILL MATERIAL IN MAXIMUM LEVEL LOOSE LIFTS OF 8 INCHES AND COMPACT TO A MINIMUM OF 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D-698). COMPACT THE TOP 12 INCHES TO 100%.

**J. CAST-IN-PLACE CONCRETE CONSTRUCTION**

1. CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 318-95, ACI 301, AND THE ACI DETAILING MANUAL.
2. PROVIDE CONCRETE WITH PROPERTIES THAT CONFORM TO THE CRITERIA SPECIFIED BELOW.

STRUCTURE TYPE	f <sub>c</sub> (MINIMUM ULTIMATE COMPRESSIVE STRENGTH AT 28 DAYS) (psi)	MAXIMUM WATER/CEMENT RATIO	ENTRAINED AIR RANGE (%)
ROOF AND FLOOR SLABS, STAIR SLABS, BEAMS, SLABS-ON-GRADE, COLUMNS, AND PIERS	4,000	0.45	6%±1 1/2%
COLUMN FOOTINGS	3,000	0.55	3%±1 1/2%

3. PROVIDE NORMAL WEIGHT CONCRETE. (NOTE THAT NORMAL WEIGHT CONCRETE SHALL BE USED, EVEN THOUGH LIGHTWEIGHT CONCRETE HAS GREATER FIRE RESISTANCE, BECAUSE THE THERMAL LINING HAS SUFFICIENT INSULATING CAPABILITY THAT ADDITIONAL FIRE RESISTANCE OF LIGHTWEIGHT CONCRETE WILL NOT BE REQUIRED.)
4. TAKE CONCRETE TEST CYLINDERS IN ACCORDANCE WITH THE REQUIREMENTS OF ACI 318-95, CHAPTER 5 AND THE CONTRACT SPECIFICATIONS.
5. WHEN PLACING CONCRETE ON SLOPING FORMS AT ROOF AND CONCRETE STAIRS, PLACE CONCRETE AT LOWEST ELEVATION OF FORMS FIRST AND WORK UP TOWARD THE HIGHEST ELEVATION.
6. APPLY 2 COATS OF SIKATOP SEAL 107, BY SIKA CORPORATION, OR APPROVED EQUAL, TO TOP SURFACES OF ROOFS AND INTERIOR SECOND FLOOR SLAB (BELOW LOOSE-LAID FIRE BRICK) AFTER SLABS HAVE CURED MINIMUM 28 DAYS. APPLY LIGHT BROOM FINISH TO FINAL COAT AT ALL ELEVATED SLABS. PREPARE SURFACES AND APPLY COATING IN ACCORDANCE WITH REQUIREMENTS OF THE MANUFACTURER.
7. PROVIDE CONTINUOUS DRIP ALONG EDGES OF ELEVATED CONCRETE SLABS AS SHOWN IN DRAWINGS. MAKE DRIP DISCONTINUOUS (I.E. DO NOT PROVIDE DRIP) AT LOCATIONS WHERE THERMAL LININGS WILL BE INSTALLED ABOVE BURN ROOM DOORS AND WINDOWS.

**K. CONCRETE REINFORCEMENT**

1. PROVIDE HIGH STRENGTH, NEW BILLET DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60 FOR STEEL REINFORCEMENT IN CONCRETE.
2. PROVIDE STEEL REINFORCEMENT DETAILS IN ACCORDANCE WITH ACI 318-95 AND CRSI STANDARDS.
3. PROVIDE CONCRETE PROTECTION FOR STEEL REINFORCEMENT OF CAST-IN-PLACE CONCRETE AS SPECIFIED BELOW. PLACE THE OUTERMOST LAYERS OF REINFORCING AS CLOSE TO THE CONCRETE SURFACES AS POSSIBLE WITHOUT VIOLATING THE REQUIREMENTS SHOWN IN THE TABLE BELOW.

TYPE OF STRUCTURE	MINIMUM CLEAR COVER (UNLESS OTHERWISE NOTED IN DRAWINGS)
SLABS, STAIR SLABS, AND BEAMS	1 1/2" TO BOTTOM BARS 2" TO TOP BARS
COLUMNS AND PIERS	2" TO VERTICAL BARS 1 5/8" TO TIES
FOOTINGS AND OTHER EARTH FORMED CONCRETE	3"

**L. SLABS-ON-GRADE**

1. UNLESS OTHERWISE NOTED, PROVIDE 6" THICK POURED CONCRETE SLABS-ON-GRADE REINFORCED WITH 6x6 W2.9 X W2.9 SMOOTH WELDED WIRE FABRIC LOCATED IN THE UPPER THIRD PORTION OF SLAB THICKNESS.
2. FOLLOW WRI STANDARDS FOR WELDED WIRE FABRIC REINFORCING PLACING, LAP, ETC.
3. COMPACT SOIL FILL UNDER SLABS-ON-GRADE TO 98% MAXIMUM DRY DENSITY PER ASTM D-698 (STANDARD PROCTOR). COMPACT THE TOP 12 INCHES TO 100%.
4. PROVIDE 4 INCHES OF OPEN GRADED, NO. 57 STONE, MEETING THE GEORGIA DOT SPECIFICATIONS AS A BASE BELOW THE BUILDING SLAB-ON-GRADE.
5. PROVIDE A VAPOR BARRIER (MINIMUM 6-MIL POLYETHYLENE) BELOW THE BUILDING SLAB-ON-GRADE.
6. PROVIDE A CONTINUOUS MANUFACTURED CRACK CONTROL JOINT (PREMOLDED PLASTIC STRIP) IN THE TOP OF SLAB AT LOCATIONS SHOWN ON SHEET 6.

**M. MASONRY**

1. PROVIDE MASONRY CONSTRUCTION THAT CONFORMS TO THE REQUIREMENTS OF ACI 530 (LATEST EDITION), "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES."
2. PROVIDE 2-CELL LIGHTWEIGHT CONCRETE BLOCK CONFORMING TO ASTM C-90, TYPE II.
3. PROVIDE MORTAR THAT CONFORMS TO ASTM C-270, TYPE N.
4. ADD INTEGRAL WATER REPELLENT ADMIXTURE TO BLOCK AND MORTAR IN WALLS IN ACCORDANCE WITH SPECIFICATIONS.
5. UNLESS OTHERWISE NOTED, PROVIDE HORIZONTAL JOINT REINFORCING AT 16" ON CENTER VERTICALLY IN ALL MASONRY WALLS.
6. UNLESS OTHERWISE NOTED, PROVIDE (1) #4 VERTICAL BAR AT 48" O.C. MAXIMUM IN ALL MASONRY WALLS, EXCEPT THE WALLS ALONG COLUMN LINE A. PROVIDE VERTICAL BARS FULL HEIGHT OF WALL, BUT DO NOT DOWEL BARS INTO CONCRETE. SEE DRAWINGS FOR ADDITIONAL DETAILS RELATING TO VERTICAL REINFORCING BARS, INCLUDING BARS AT ENDS OF WALLS, AT OPENINGS, AND OTHER LOCATIONS.
7. KEEP CELLS TO RECEIVE BARS CLEAN OF MORTAR DROPPINGS.
8. SECURE VERTICAL BARS WITH WIRE TIES AND SPACERS AT TOP AND BOTTOM TO ASSURE THAT BARS REMAIN IN POSITION DURING GROUTING.
9. FILL CELLS CONTAINING VERTICAL BARS FULL HEIGHT WITH PEA GRAVEL CONCRETE, 3000 PSI AT 28 DAYS, OR 3000 PSI MASONRY GROUT PER ASTM C-476.
10. CLOSE CLEANOUTS AFTER GROUT FLOWS FULLY TO BOTTOM OF WALL. VIBRATE CONCRETE DURING PLACEMENT TO ELIMINATE AIR POCKETS.
11. WHERE MASONRY INTERSECTS VERTICAL SURFACES OF CONCRETE COLUMNS AND BOTTOM SURFACES OF CONCRETE SLABS AND BEAMS, ANCHOR MASONRY TO CONCRETE WITH GALVANIZED DOVETAIL ANCHORS AT 16" ON CENTER UNLESS OTHERWISE NOTED. DO NOT ANCHOR MASONRY TO CONCRETE WHERE OPEN JOINTS ARE SHOWN NOR WHERE THERMAL LINING SEPARATES CONCRETE FROM MASONRY. PROVIDE NO. 106 CORRUGATED DOVETAIL ANCHORS AND NO. 100 STANDARD DOVETAIL SLOTS BY HECKMAN BUILDING PRODUCTS, INC., OR AN EQUIVALENT APPROVED BY THE BURN BUILDING ENGINEER.
12. PROVIDE LOOSE-LAID FIRE BRICK (TO BE PLACED ON BURN ROOM FLOORS) THAT CONFORMS TO ASTM C-27, CLASSIFICATION: MEDIUM-DUTY.

**N. ANCHORS**

GENERAL

1. INSTALL ALL ANCHORS IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER.
2. DRILL HOLES FOR ANCHORS TO BE INSTALLED IN MASONRY WITH A ROTARY DRILL ONLY, NOT A ROTARY-HAMMER DRILL.

EXPANSION ANCHORS

3. PROVIDE STUD TYPE EXPANSION ANCHORS WITH A SINGLE PIECE THREE SECTION WEDGE. PROVIDE ANCHORS THAT MEET THE DESCRIPTION IN FEDERAL SPECIFICATION FF-S-325, GROUP II, TYPE 4, CLASS I FOR CONCRETE EXPANSION ANCHORS. PROVIDE HILTI KWIK BOLT II, MANUFACTURED BY HILTI FASTENING SYSTEMS, OR AN EQUIVALENT APPROVED BY THE ENGINEER.
4. PROVIDE ZINC PLATED EXPANSION ANCHORS IN ACCORDANCE WITH ASTM B633, SERVICE CONDITION SC 1, TYPE III UNLESS INDICATED IN THE DRAWINGS AS STAINLESS STEEL.
5. UNLESS OTHERWISE NOTED, PROVIDE EXPANSION ANCHORS THAT MEET THE FOLLOWING MINIMUM REQUIREMENTS:

ANCHOR DIAMETER	EMBEDMENT DEPTH	ALLOWABLE LOADS IN 4,000 PSI CONCRETE	
		TENSION (POUNDS)	SHEAR (POUNDS)
3/8"	2 1/2"	1,250	1,330
1/2"	3 1/2"	2,130	2,220

SLEEVE ANCHORS

6. PROVIDE SLEEVE ANCHORS THAT MEET THE FEDERAL SPECIFICATION FF-S-325, GROUP II, TYPE 3, CLASS 3 FOR EXPANSION SHIELD ANCHORS. PROVIDE SLEEVE ANCHORS, MANUFACTURED BY HILTI FASTENING SYSTEMS, OR AN EQUIVALENT APPROVED BY THE ENGINEER.
7. PROVIDE ZINC PLATED SLEEVE ANCHORS IN ACCORDANCE WITH ASTM B633, SERVICE CONDITION SC 1, TYPE III UNLESS INDICATED IN THE DRAWINGS AS STAINLESS STEEL.
8. UNLESS OTHERWISE NOTED, PROVIDE SLEEVE ANCHORS THAT MEET THE FOLLOWING MINIMUM REQUIREMENTS:

ANCHOR DIAMETER	EMBEDMENT DEPTH	ALLOWABLE LOADS IN HOLLOW CMU	
		TENSION (POUNDS)	SHEAR (POUNDS)
3/8"	1 1/2"	470	890

ADHESIVE ANCHORS

9. WHERE INSTALLED IN HOLLOW CMU, PROVIDE ADHESIVE ANCHORS THAT CONSIST OF A THREADED ANCHOR ROD, NUT, AND WASHER, A CYLINDRICAL WIRE MESH SCREEN TUBE, AND AN INJECTABLE ADHESIVE MATERIAL SPECIFICALLY DESIGNED FOR FASTENING INTO MATERIAL CONTAINING VOIDS AND HOLES SUCH AS HOLLOW BLOCK. PROVIDE HILTI HIT HY20, MANUFACTURED BY HILTI FASTENING SYSTEMS, OR AN EQUIVALENT APPROVED BY THE ENGINEER.
10. WHERE INSTALLED IN GROUTED OR SOLID CMU, PROVIDE ADHESIVE ANCHORS THAT CONSIST OF A THREADED ANCHOR ROD AND AN INJECTABLE ADHESIVE MATERIAL SPECIFICALLY DESIGNED FOR FASTENING INTO GROUTED MASONRY CELLS OR SOLID MASONRY. ADHESIVE ANCHORS SHALL BE HILTI HIT HY150, MANUFACTURED BY HILTI FASTENING SYSTEMS, OR AN EQUIVALENT APPROVED BY THE ENGINEER.
11. PROVIDE STAINLESS STEEL ADHESIVE ANCHORS UNLESS OTHERWISE NOTED.
12. UNLESS OTHERWISE NOTED, PROVIDE ADHESIVE ANCHORS THAT MEET THE FOLLOWING MINIMUM REQUIREMENTS:

ANCHOR DIAMETER	EMBEDMENT DEPTH	ALLOWABLE LOADS IN HOLLOW CMU	
		TENSION (POUNDS)	SHEAR (POUNDS)
1/2" (HY20)	2" (HIT SHORT ROD)	525	1,230
1/2" (HY150)	4 1/4"	1,785	1,935

**O. STEEL SHAPES AND PLATES**

1. PROVIDE STRUCTURAL STEEL THAT CONFORMS TO THE AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS - ALLOWABLE STRESS DESIGN AND PLASTIC DESIGN" (6/1/89).
2. STEEL SHAPES, ANGLES, AND PLATES: ASTM A-36, UNLESS INDICATED TO BE STAINLESS STEEL. SEE SPECIFICATIONS FOR REQUIREMENTS OF STAINLESS STEEL SHAPES, ANGLES, AND PLATES.
3. STEEL TUBES: ASTM A-500, GRADE B, WITH A MINIMUM YIELD STRENGTH OF 46 KSI.
4. STEEL PIPES FOR HANDRAILS AND GUARDRAILS: ASTM A-53.
5. PROVIDE WELDED SHOP CONNECTIONS UNLESS OTHERWISE NOTED.
6. MAKE FIELD CONNECTIONS WITH ASTM A-325N HIGH STRENGTH BOLTS TIGHTENED TO A SNUG TIGHT CONDITION, UNLESS OTHERWISE NOTED.
7. PROVIDE WELDING THAT CONFORMS TO THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE - STEEL, AWS D1.1 (LATEST EDITION). PERFORM ALL WELDING WITH WELDERS QUALIFIED IN ACCORDANCE WITH AWS PROCEDURES FOR WELDER QUALIFICATION.
8. PROVIDE GALVANIZED STEEL MEMBERS, INCLUDING DOOR AND SHUTTER FRAMES, UNLESS OTHERWISE NOTED ON THE DRAWINGS AS "PAINTED" OR "STAINLESS STEEL".
9. WHERE INDICATED IN THE DRAWINGS, PROVIDE PAINTED STEEL WITH ONE SHOP COAT OF RUST-INHIBITING PRIMER AND TWO FIELD COATS OF RUST-INHIBITING, EXTERIOR QUALITY ENAMEL PAINT (CONSULT OWNER FOR COLOR SELECTION).
10. WHERE INDICATED IN THE DRAWINGS, PROVIDE STAINLESS STEEL OF TYPE INDICATED IN SPECIFICATIONS. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS FOR GALVANIZED, PAINTED, AND STAINLESS STEEL.

**P. STEEL GRATING AND TREADS**

1. PROVIDE 2" DEEP, 13 GAUGE, GALVANIZED McNICHOOLS' OPEN-GRIP' STEEL GRATING OR AN EQUIVALENT APPROVED BY THE ENGINEER. MAXIMUM PLANK WIDTH IS 12 INCHES. INSTALL GRATING IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS TO CREATE A TWO-SPAN CONDITION BY WELDING. WELD SIDES OF ADJACENT PANELS TOGETHER PER MANUFACTURER'S RECOMMENDATIONS.
2. PROVIDE 2" DEEP, 13 GAUGE, GALVANIZED McNICHOOLS' OPEN-GRIP' STAIR TREADS OR AN EQUIVALENT APPROVED BY THE ENGINEER. INSTALL TREADS IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS USING STANDARD ZINC COATED BOLTS.
3. PROVIDE A GALVANIZED END PLATE TO CLOSE OFF THE ENDS OF ALL GRATING PLANKS (WHERE ENDS ARE EXPOSED TO VIEW) TO ELIMINATE JAGGED EDGES AND TO STRENGTHEN THE END OF THE PLANKS.

**Q. TIMBER**

1. PROVIDE PRESSURE TREATED SOUTHERN PINE, SPRUCE PINE FIR, OR FIR AND LARCH, WITH ALLOWABLE BENDING STRESS OF 1,500 PSI, OR AN EQUIVALENT APPROVED BY THE ENGINEER.

**R. THERMAL LINING**

1. THERMAL LININGS ARE NOT IN THIS CONTRACT (N.I.C.) G.C. SHALL COORDINATE WITH LINING MANUFACTURER/INSTALLER TO PROVIDE FINISHED BURN BUILDING SIMULATOR PER THE CONTRACT DOCUMENTS.
2. PROVIDE HTL SYSTEM 203, MANUFACTURED BY HIGH TEMPERATURE LININGS, INC., OF FAIRFAX, VIRGINIA AT (800) 411-6313.
3. INSTALL THERMAL LINING IN ACCORDANCE WITH THE REQUIREMENTS OF THE MANUFACTURER. INSTALLATION SHALL BE PERFORMED BY AN HTL-APPROVED INSTALLER.
4. THERMAL LINING INSTALLER REQUIRES THE FOLLOWING SEQUENCE OF CONSTRUCTION TO COORDINATE INSTALLATION OF THERMAL LININGS AND MASONRY WALLS:
  - A. CONSTRUCT THE CONCRETE FRAME AND STRUCTURE.
  - B. CONSTRUCT EXTERIOR MASONRY WALLS.
  - C. INSTALL THERMAL LININGS ON CEILINGS.
  - D. CONSTRUCT INTERIOR MASONRY WALLS.
  - E. INSTALL BRACING ANGLES AT TOPS OF INTERIOR AND EXTERIOR WALLS.
5. PER THE REQUIREMENTS OF THE LINING MANUFACTURER, PERFORM A "PRE-BURN" AT LEAST ONE DAY BEFORE TRAINING BEGINS TO PROPERLY DRY OUT AND CURE THE THERMAL LINING. RECOMMENDATIONS ARE AS FOLLOWS:
  - A. BURN 2 WOOD PALLETS AND A BAIL OF STRAW IN EACH ROOM THAT CONTAINS THERMAL LINING TILES.
  - B. ALLOW THE FIRE TO BURN UNTIL NEARLY EXHAUSTED.
  - C. AT THIS POINT, ADD 2 MORE PALLETS AND BURN AGAIN UNTIL NEARLY EXHAUSTED.
  - D. REPEAT FOR A TOTAL OF 4 TIMES (8 PALLETS).
  - E. LET THE FIRE BURN OUT COMPLETELY WITHOUT THE USE OF WATER TO EXTINGUISH THE FIRE.
  - F. DO NOT BURN ALL 8 PALLETS AT THE SAME TIME.
6. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION ABOUT THERMAL LININGS. SEE DRAWINGS FOR DETAILS AND HOW LINING INSTALLATION MUST BE COORDINATED WITH CONCRETE, MASONRY, AND METAL INSTALLATION.

**S. TEMPERATURE MONITORING SYSTEM**

1. PROVIDE A TEMPERATURE MONITORING SYSTEM THAT CONSISTS OF A CENTRAL RECORDER LOCATED IN ROOM 105 AND 12 THERMOCOUPLES AS SHOWN ON SHEETS 17 AND 18. SEE SPECIFICATIONS FOR REQUIREMENTS.
2. PROVIDE FOUR TYPE K THERMOCOUPLES, WITH HIGH TEMPERATURE PLUG AND ADEQUATE LEAD WIRE LENGTH BETWEEN THERMOCOUPLE AND PLUG AS EXTRA PARTS FOR THE OWNER.

Engineers



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Project Title

DeKalb Co., GA  
Burn Building  
Simulator

Owner

DeKalb County  
Bureau of Fire Services  
3630 Camp Circle  
Phone: (404) 294-2895  
Fax: (404) 294-2008

Blank area for notes or drawings.

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Rev.	Date	Description	Approved

Sheet Title

GENERAL NOTES

Drawn: JDJ      Approved: RML  
Scale: AS NOTED      Date: 6/2/03

Sheet No.

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