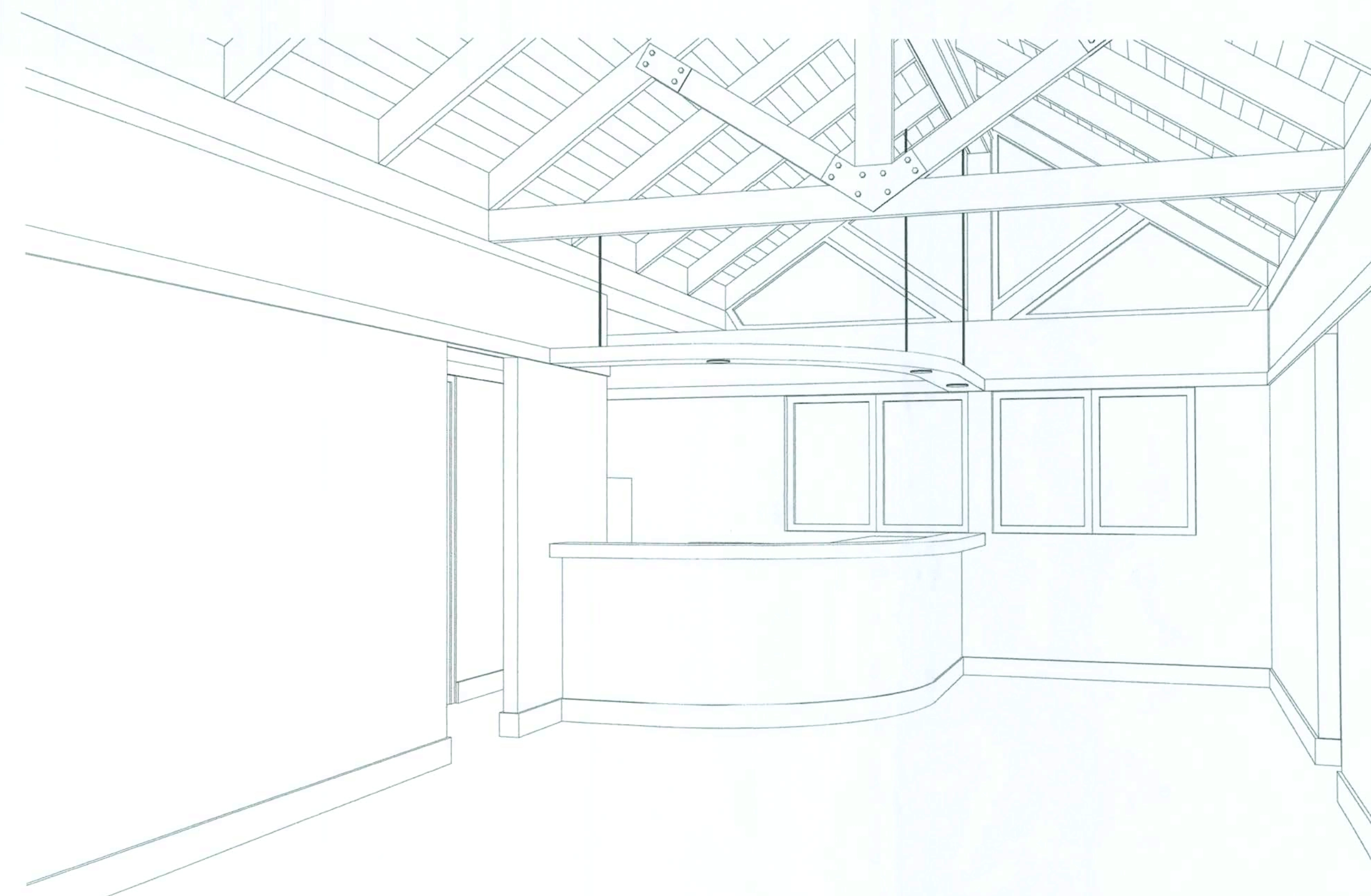




SOUTH SIDE PERSPECTIVE



NORTH SIDE PERSPECTIVE

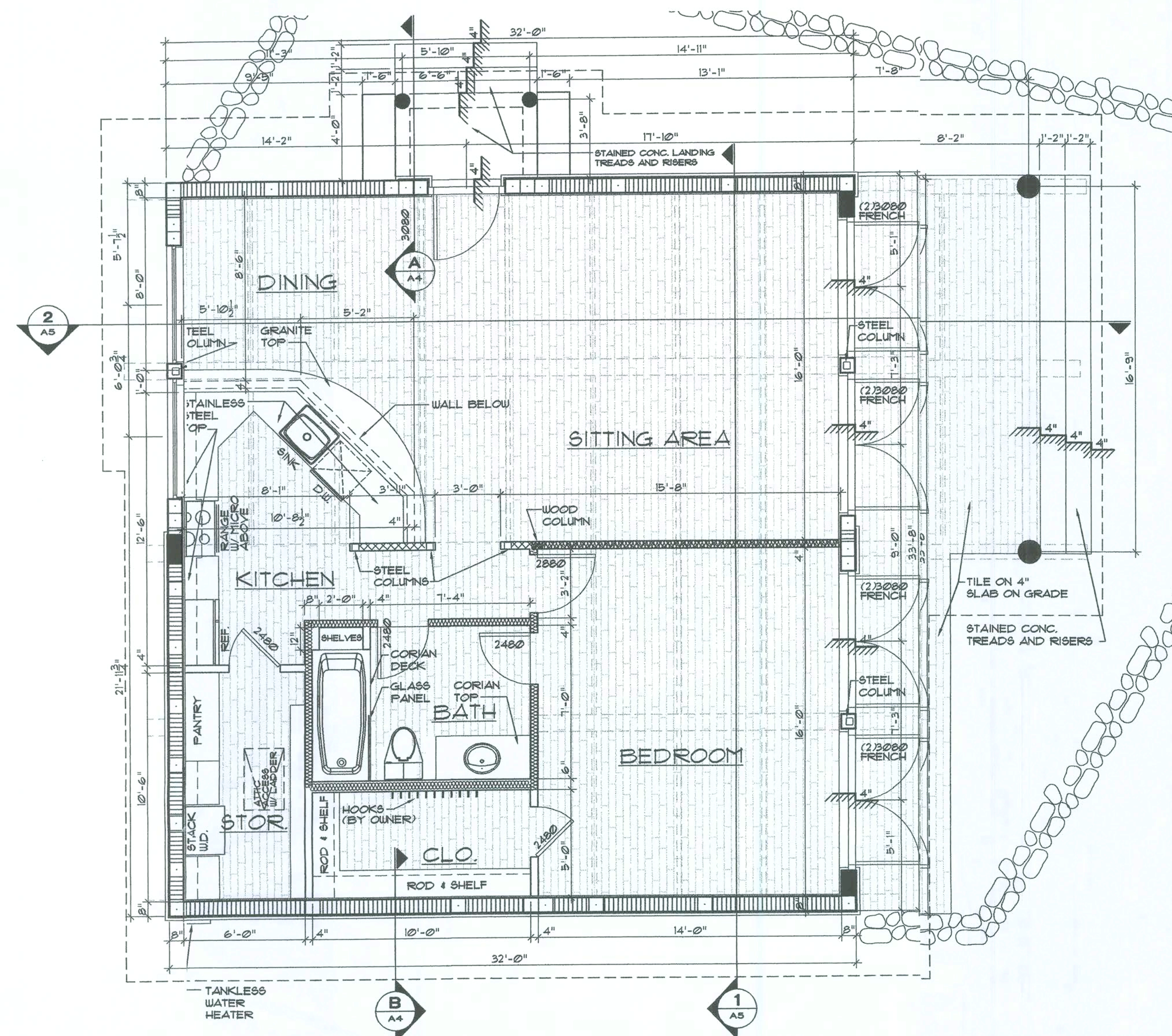


INTERIOR PERSPECTIVE

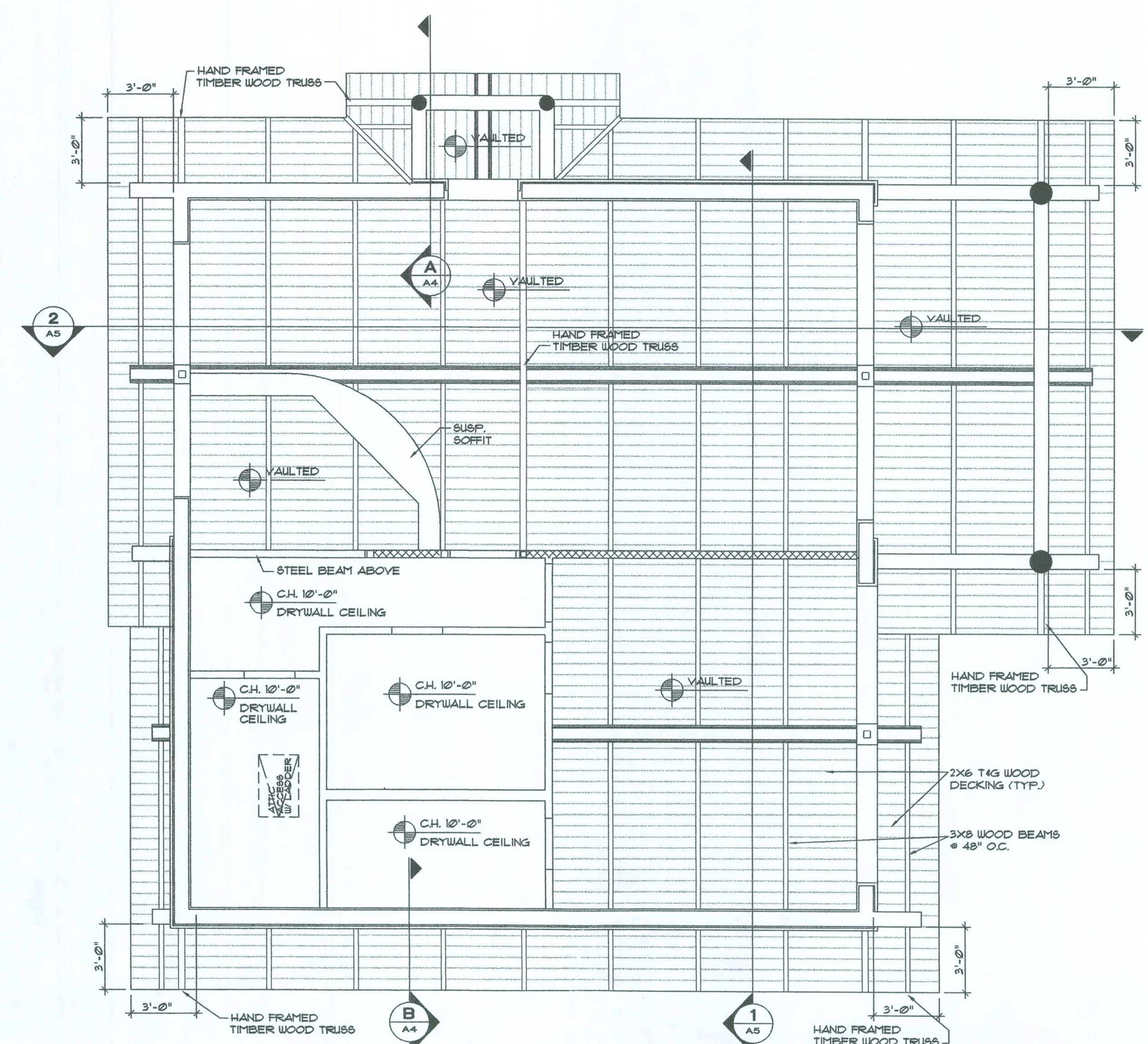
RESIDENCE FOR
MR. & MRS. WADE HORNSBY
COLUMBIA COUNTY, FLORIDA

ARCHITECT: THE LAWRENCE GROUP
STRUCTURAL ENGINEER: HUSTAD STRUCTURAL ENGINEERING, LLC
MECHANICAL ENGINEER: TEELE AND ASSOCIATES
ELECTRICAL ENGINEER:

Engineer



FLOOR PLAN
SCALE: 1/4" = 1'-0" GUEST COTTAGE



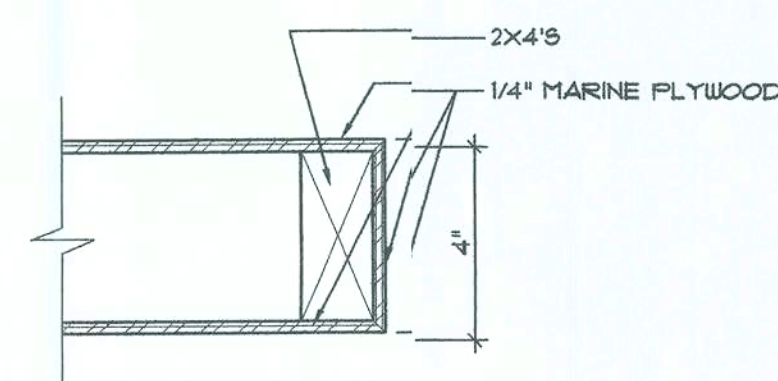
REFLECTED CEILING PLAN
SCALE: 1/4" = 1'-0" GUEST COTTAGE

- GENERAL NOTES:**
01. ALL WORK TO CONFORM TO ALL APPLICABLE CODES AND ORDINANCES.
 02. ALL WORK TO BE COMPLETE, IN PLACE, AND READY FOR USE.
 03. ALL WORK SHALL BE PERFORMED IN A FIRST CLASS WORKMANLIKE MANNER.
 04. VISIT THE SITE BEFORE DETERMINING THE CHARACTERISTICS OF THE SITE WHICH WILL AFFECT PERFORMANCE OF THE WORK, BUT WHICH ARE NOT SHOWN ON THE DRAWINGS OR THE SPECIFICATIONS.

CODES AND STANDARDS:

01. THE PROJECT WAS DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2004 EDITION - RESIDENTIAL.

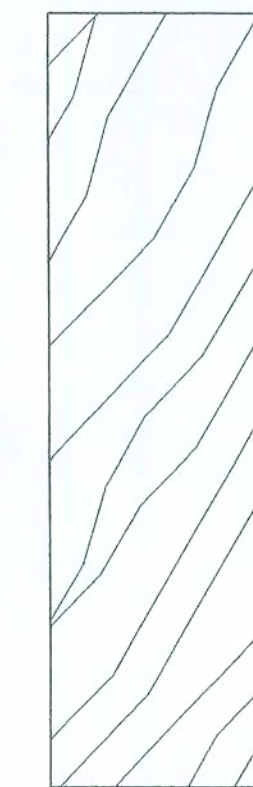
- WALL TYPE LEGEND**
- 3 5/8" METAL STUDS W/ 5/8" DRYWALL EACH SIDE
 - 3 5/8" METAL STUDS W/ 5/8" DRYWALL EACH SIDE W/ SOUND BATT
 - 8" CMU
 - 8" CMU W/ 5 VERT. IN CONC. FILLED CELL
 - CAST IN PLACE CONCRETE COLUMN



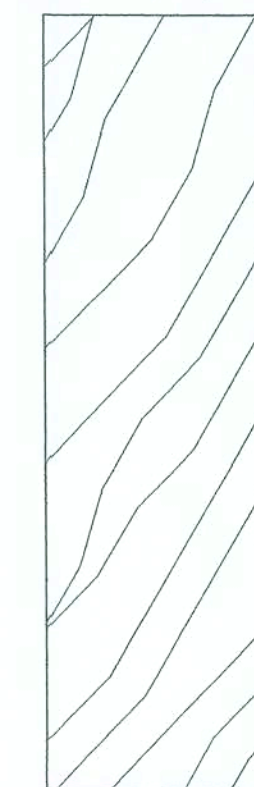
SUSP. SOFFIT @ KITCHEN
SCALE: 3" = 1'-0"

FINISH SCHEDULE				
ROOM	FLOOR	BASE	WALLS	CEILING
COVERED ENTRY	STAINED CONCRETE	-	STUCCO / STONE	WOOD
DINING	CERAMIC TILE	WOOD	DRYWALL	WOOD
SITTING ROOM	CERAMIC TILE	WOOD	DRYWALL	WOOD
KITCHEN	CERAMIC TILE	WOOD	DRYWALL	WOOD / DRYWALL
STORAGE	CERAMIC TILE	WOOD	DRYWALL	DRYWALL
BEDROOM	CERAMIC TILE	WOOD	DRYWALL	WOOD
BATH	CERAMIC TILE	WOOD	DRYWALL	DRYWALL
CLOSET	CERAMIC TILE	WOOD	DRYWALL	DRYWALL
COVERED PATIO	CERAMIC TILE	-	STUCCO / STONE	WOOD

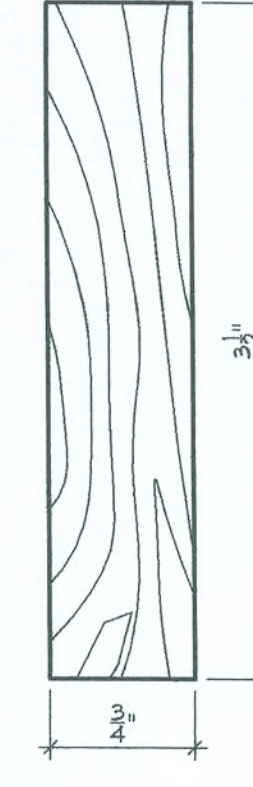
USE "DUROCK" IN ALL WET LOCATIONS, TYP.



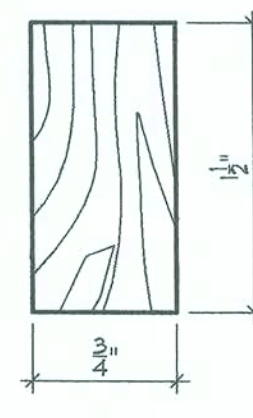
TYP. FRONT DOOR
NOT TO SCALE
1 3/4" THICK SOLID CORE, FLUSH PANEL WOOD DOOR AS SELECTED BY OWNER



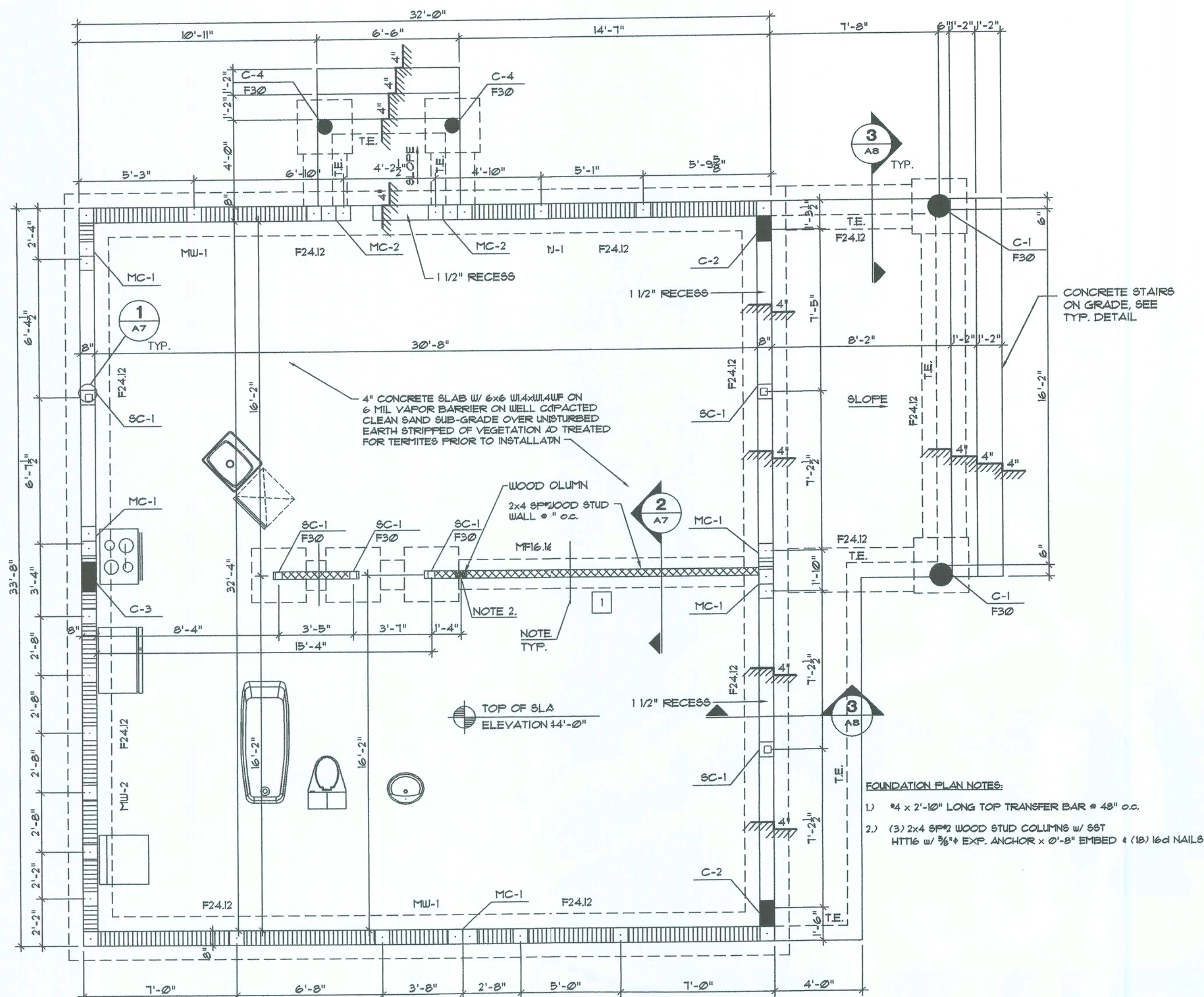
TYP. INT. DOOR
NOT TO SCALE
1 3/4" THICK SOLID CORE, FLUSH PANEL WOOD DOOR PAINT GRADE



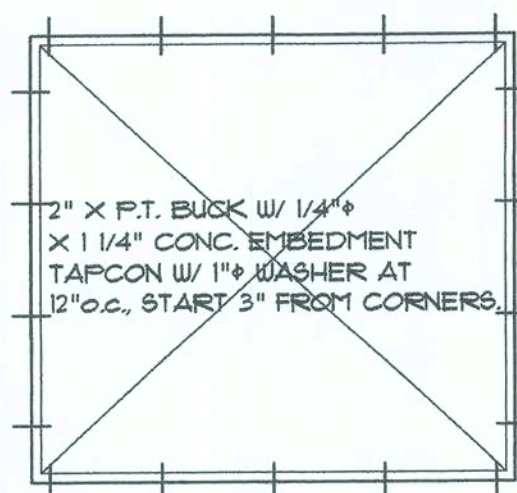
TYP. BASE
FULL SCALE



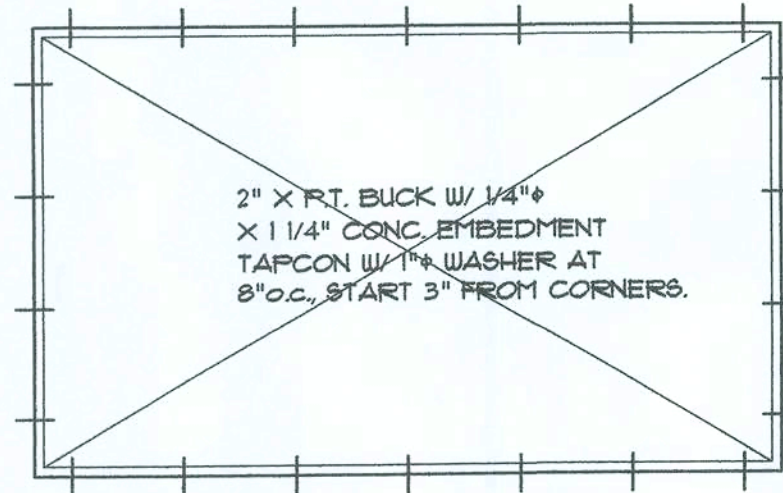
TYP. DOOR CASING
FULL SCALE



FOUNDATION PLAN
SCALE: 1/4" = 1'-0" GUEST COTTAGE



WINDOW & DOOR OPENINGS
6'-6" WIDE AND SMALLER

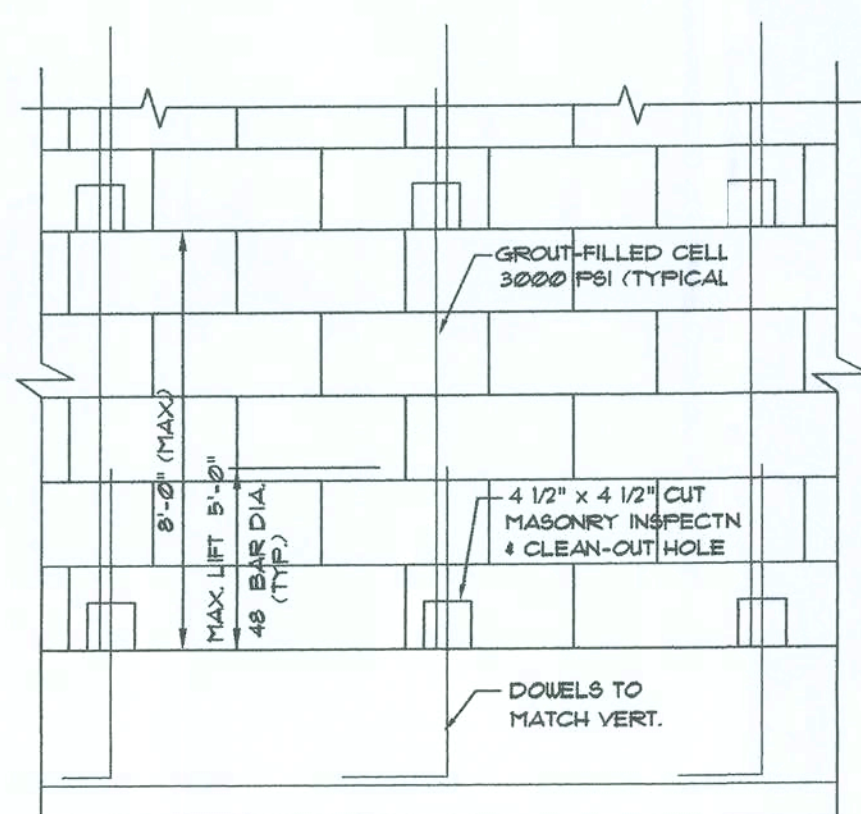


WINDOW & DOOR OPENINGS
7'-0" WIDE AND LARGER

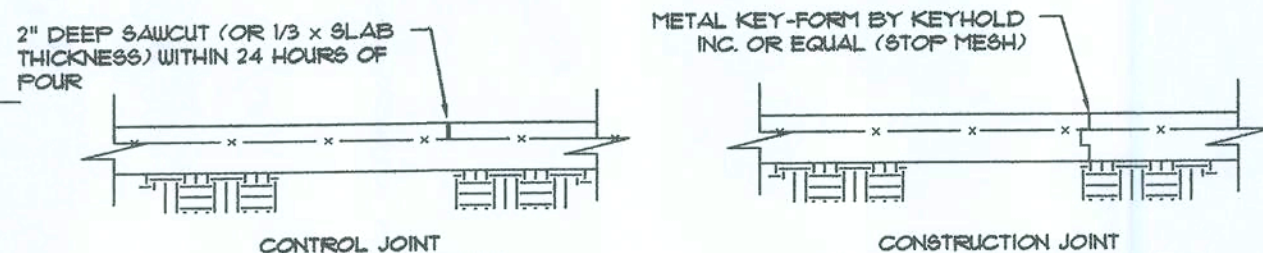
TYPICAL WOODBUCK DETAIL

1. EXTERIOR GLAZED OPENINGS IN BUILDINGS SHALL COMPLY WITH FBC 16-06 BY EITHER BEING DESIGNED FOR IMPACT RESISTANCE OR BEING PROTECTED BY IMPACT PROTECTIVE SYSTEMS.

2. BUCKS TO BE FASTENED HORIZONTALLY AND VERTICALLY TO CONCRETE BEAMS AND COLUMNS OR CONCRETE FILLED MASONRY. G.C. TO COORDINATE OPENING DIMENSIONS.

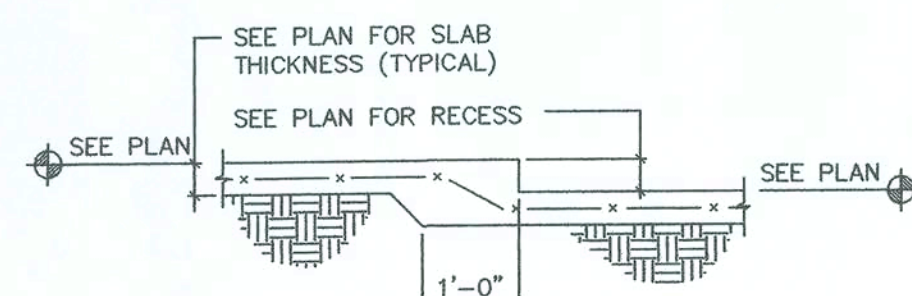


TYPICAL MASONRY FILLED CELL DETAIL
NTS

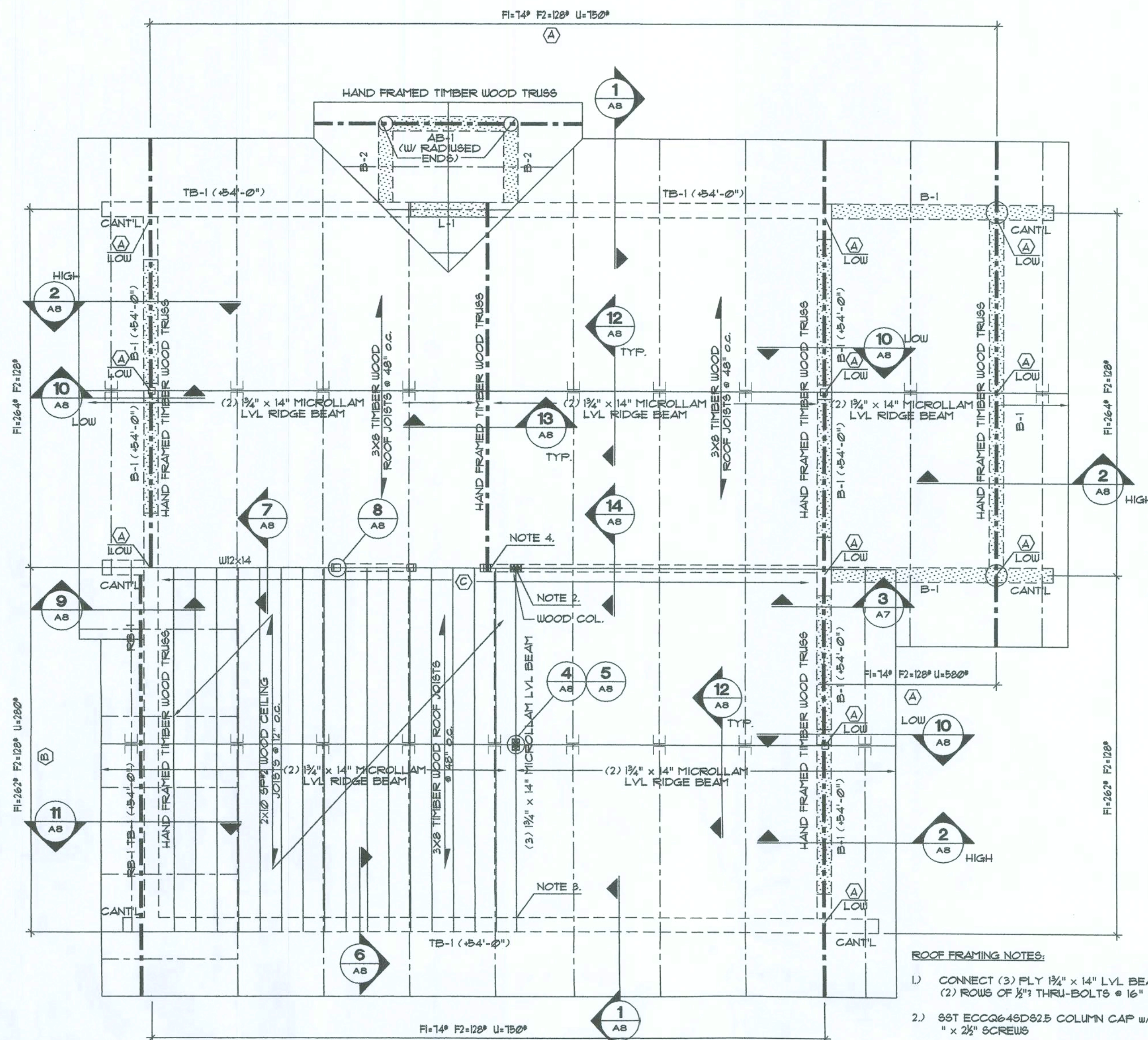


TYPICAL SLAB-ON-GRADE
NTS

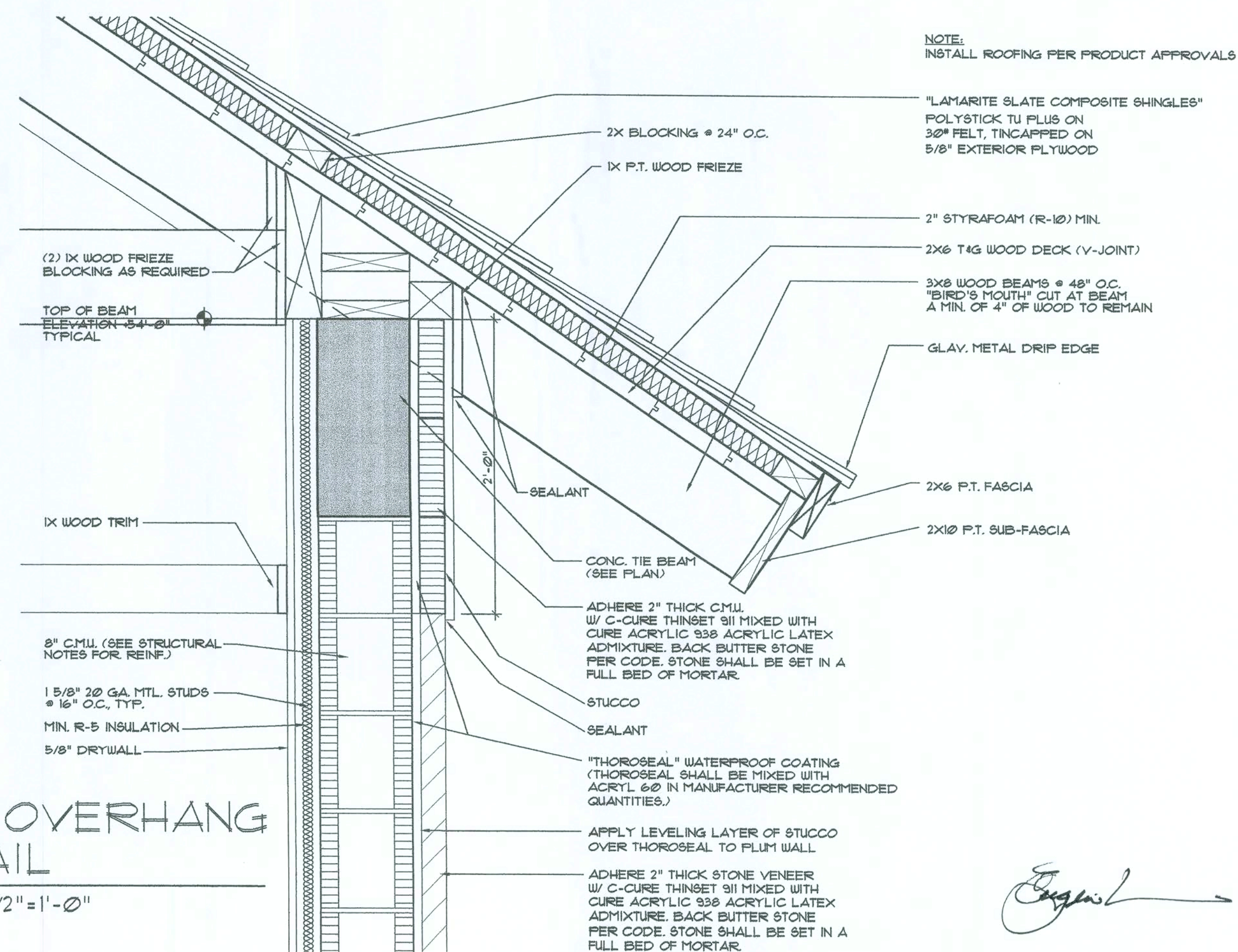
NOTE: CONTROL JOINTS SHALL BE LOCATED AT MAXIMUM 12' ON CENTER.



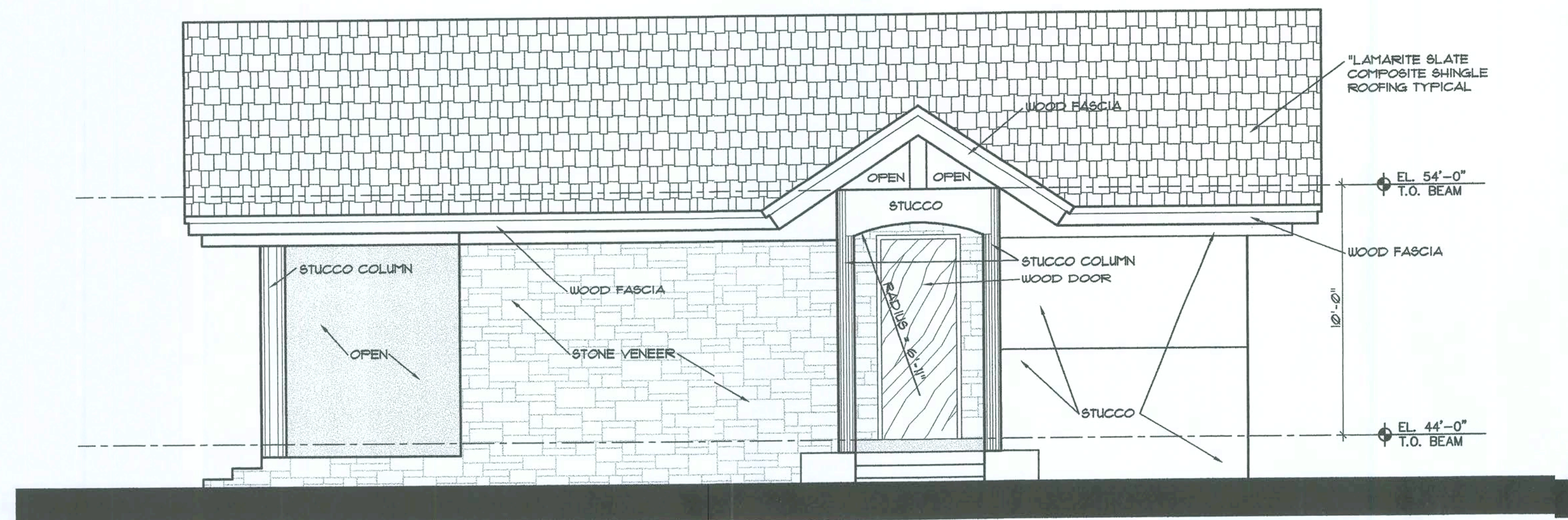
TYPICAL SLAB RECESS
NTS



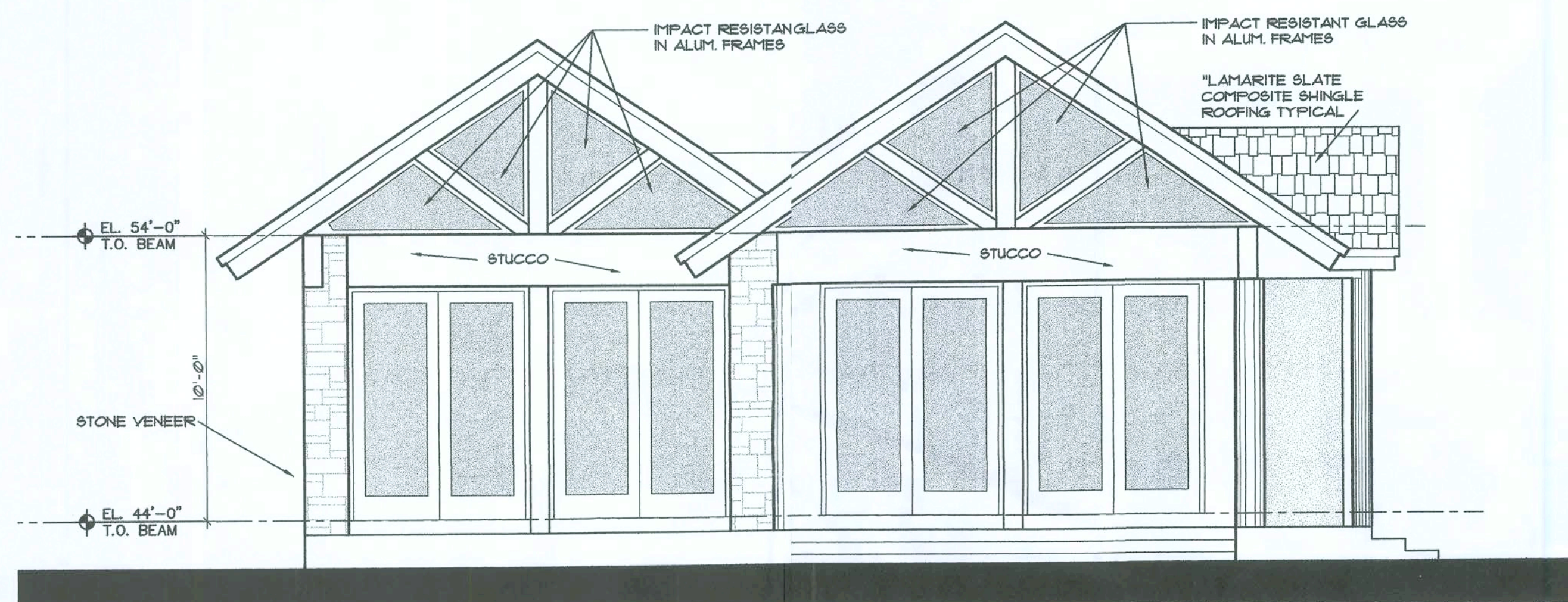
ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0" GUEST COTTAGE



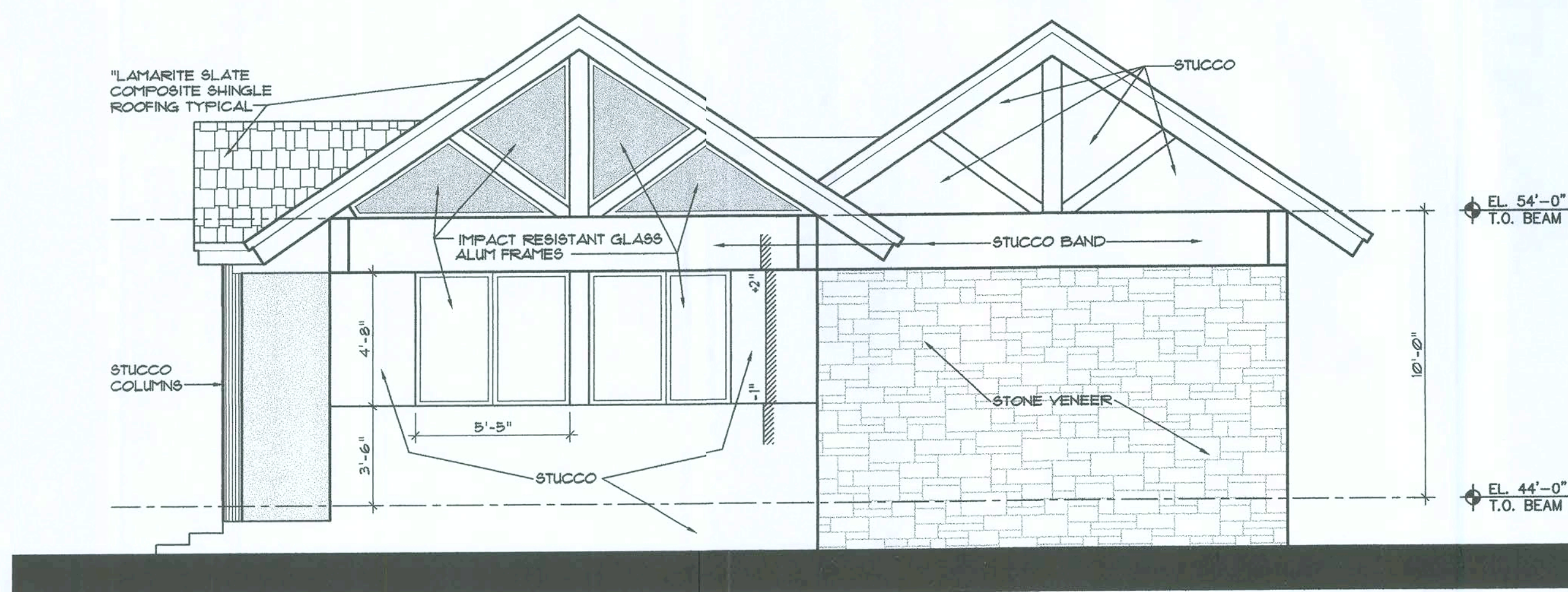
TYP. OVERHANG DETAIL
SCALE: 1 1/2" = 1'-0"



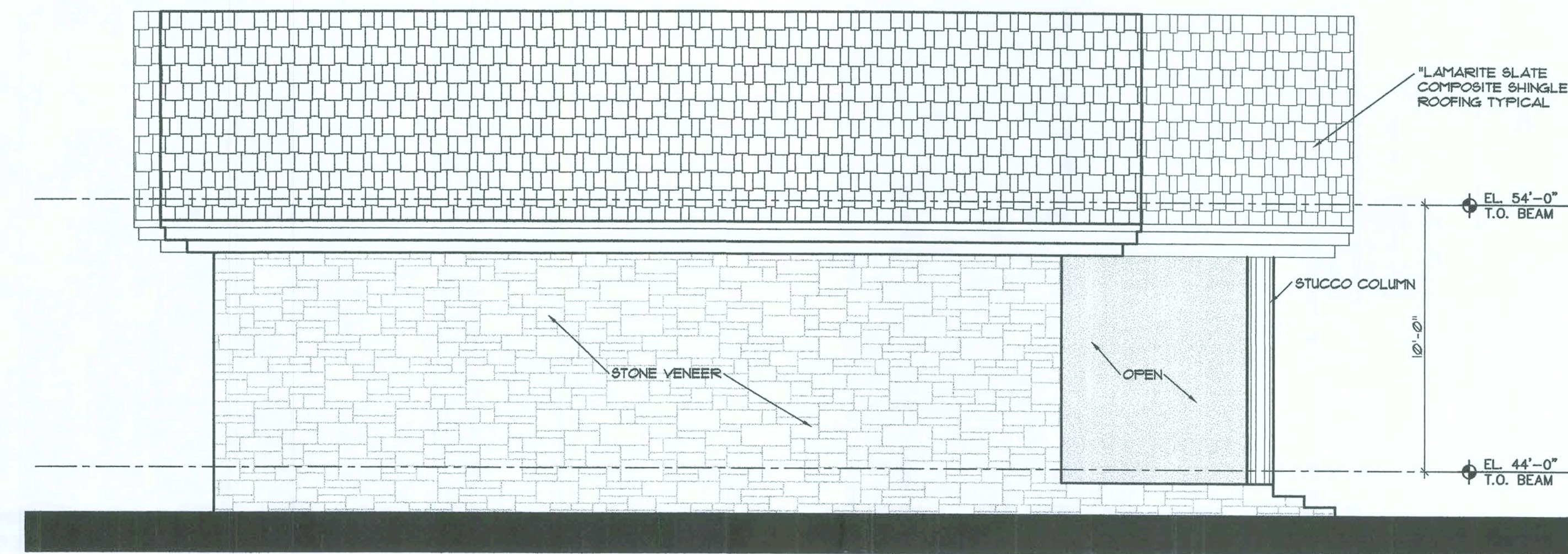
EAST ELEVATION



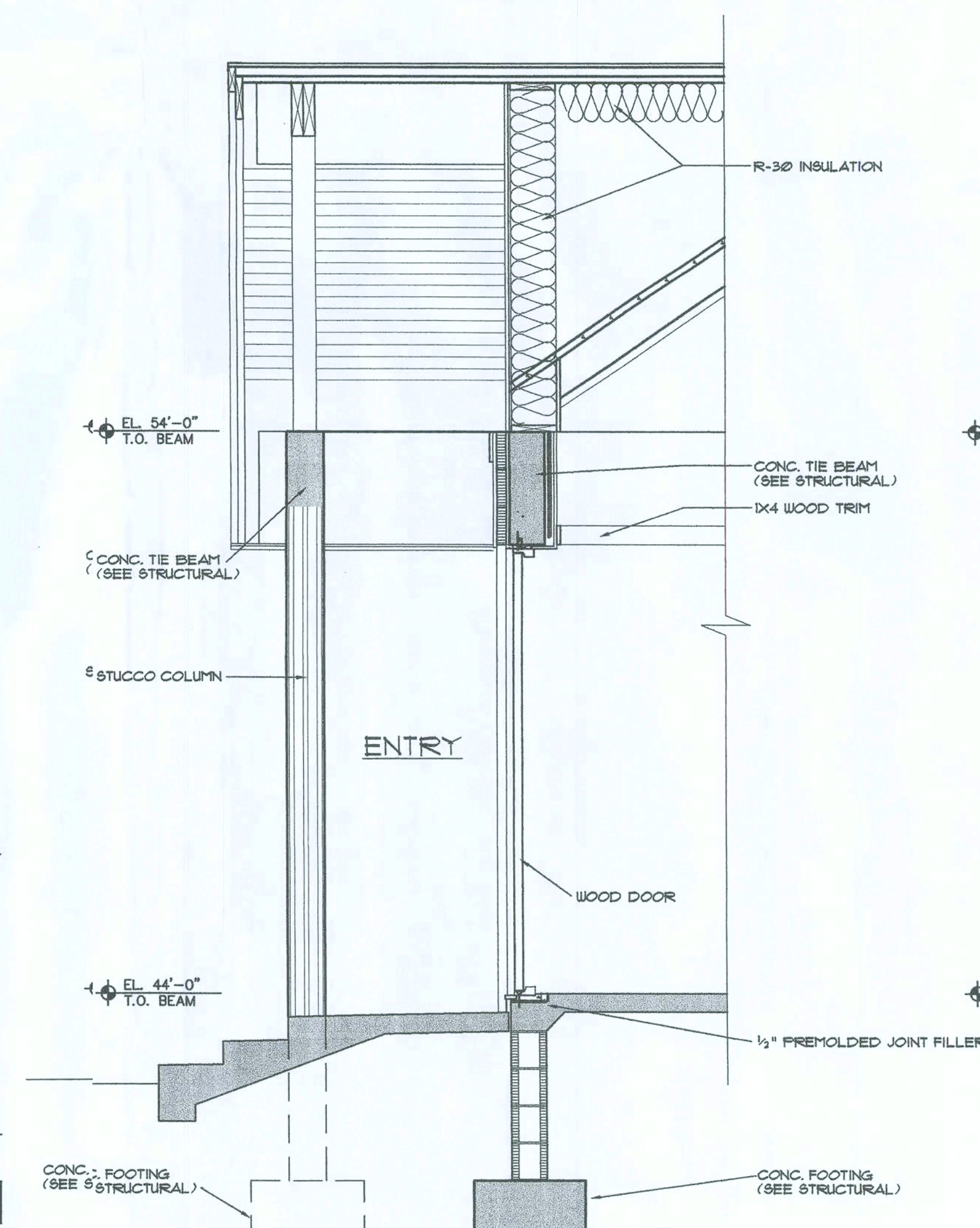
SOUTH ELEVATION



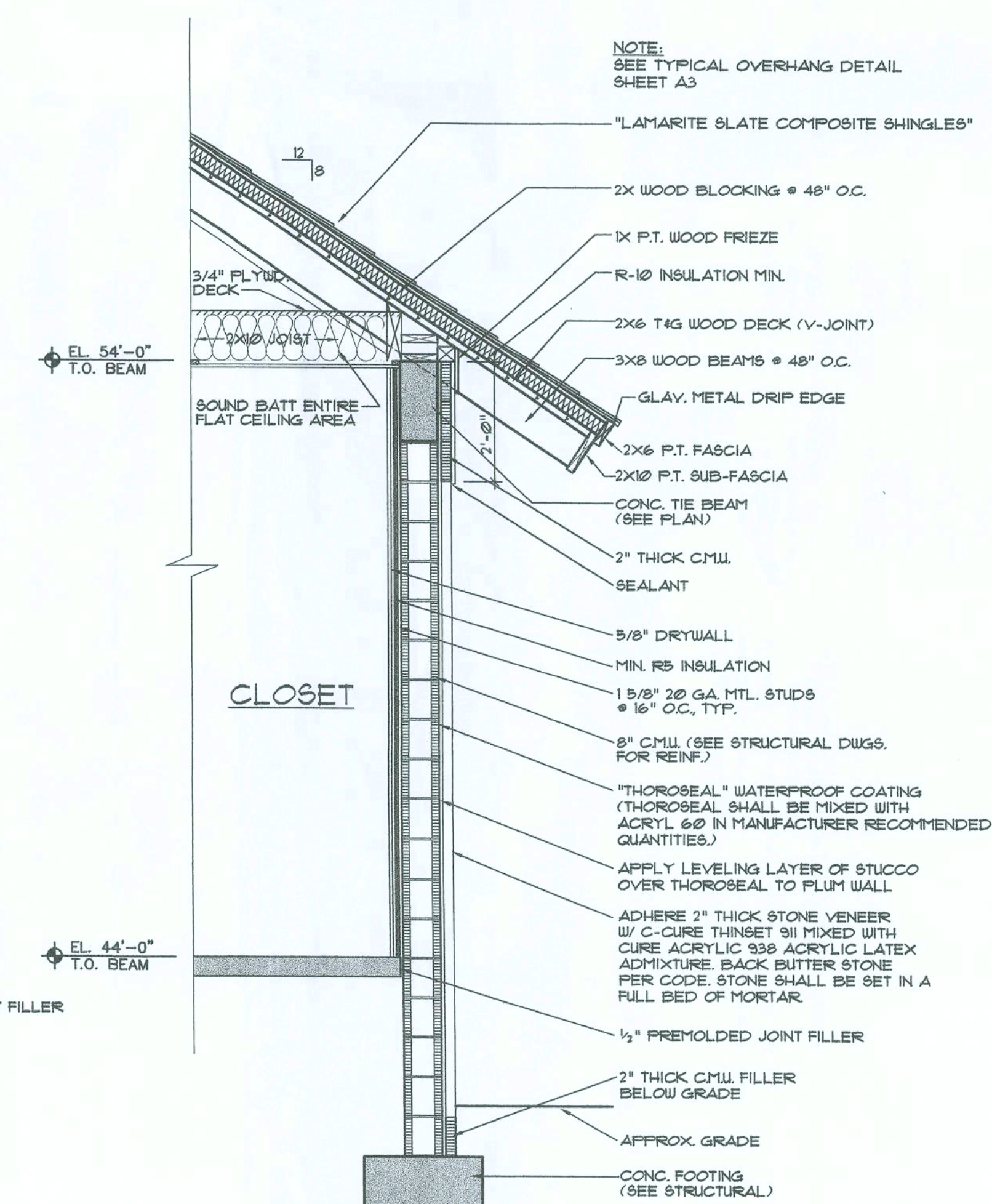
NORTH ELEVATION



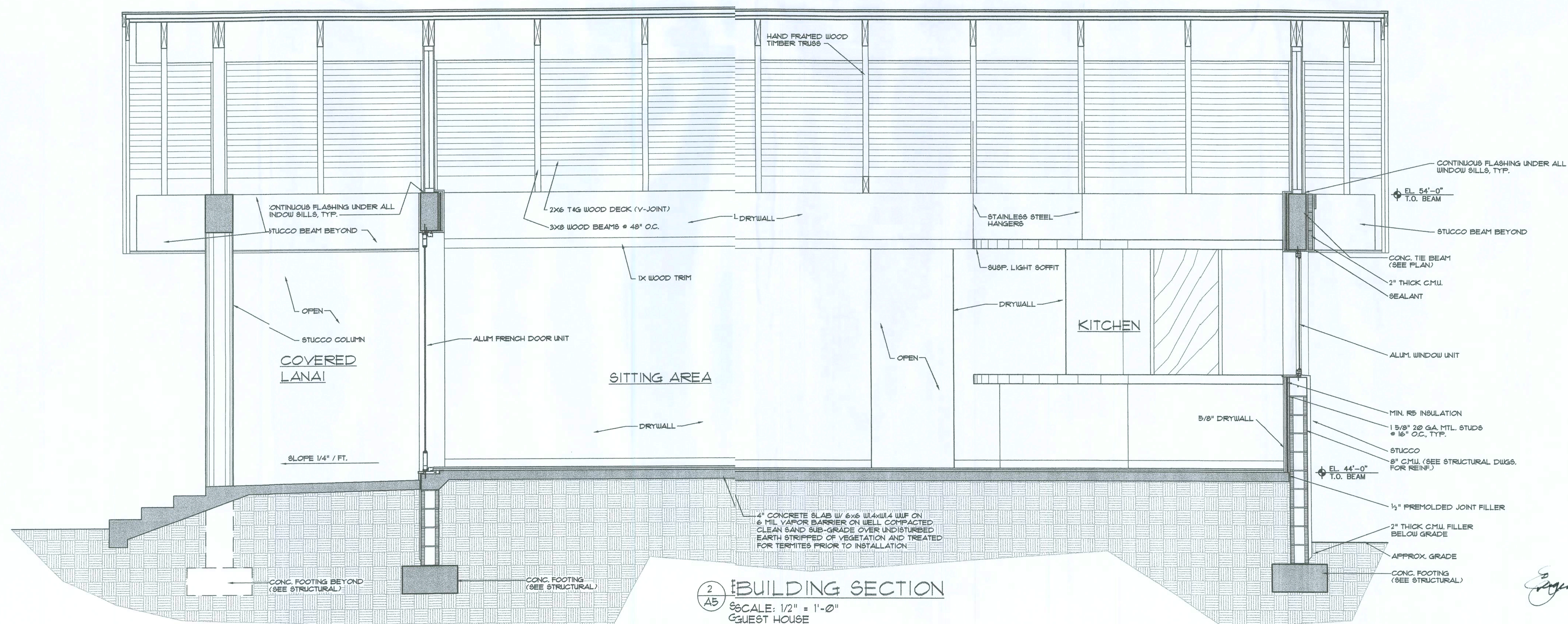
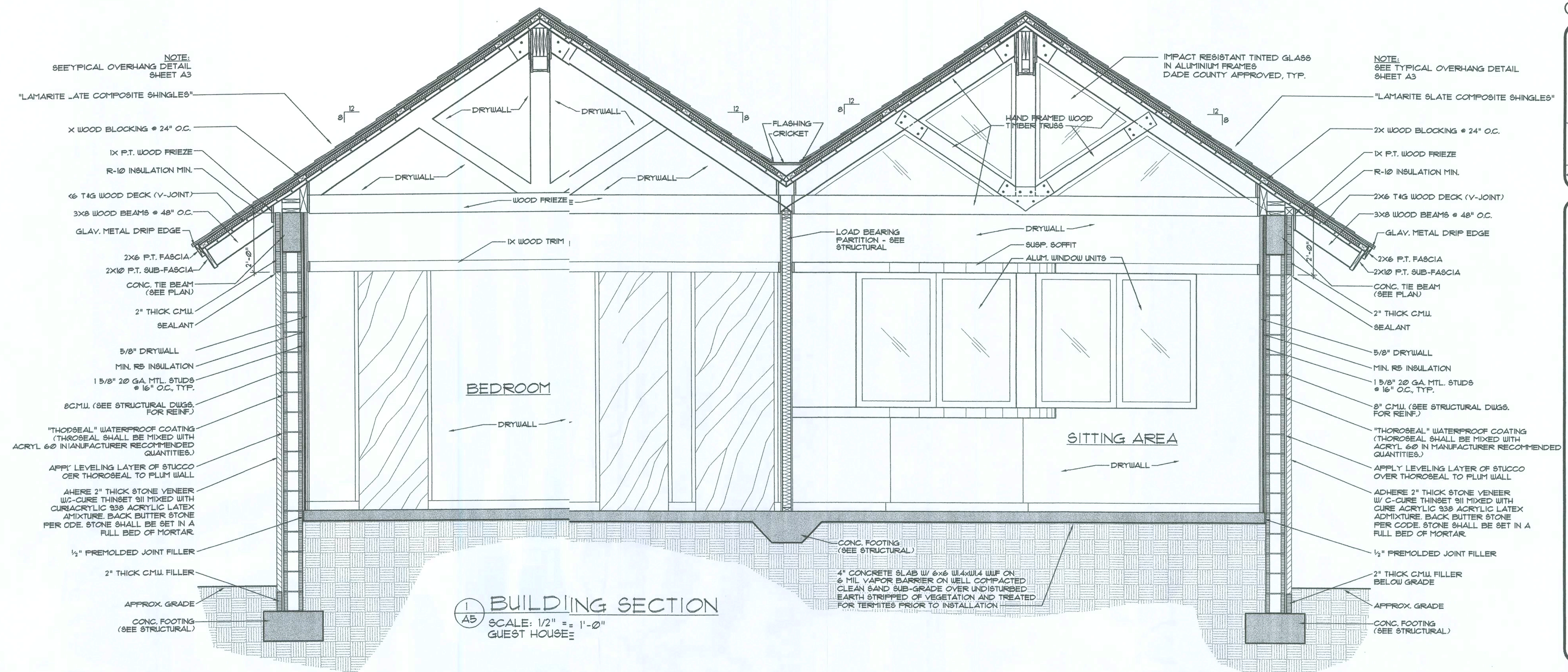
WEST ELEVATION

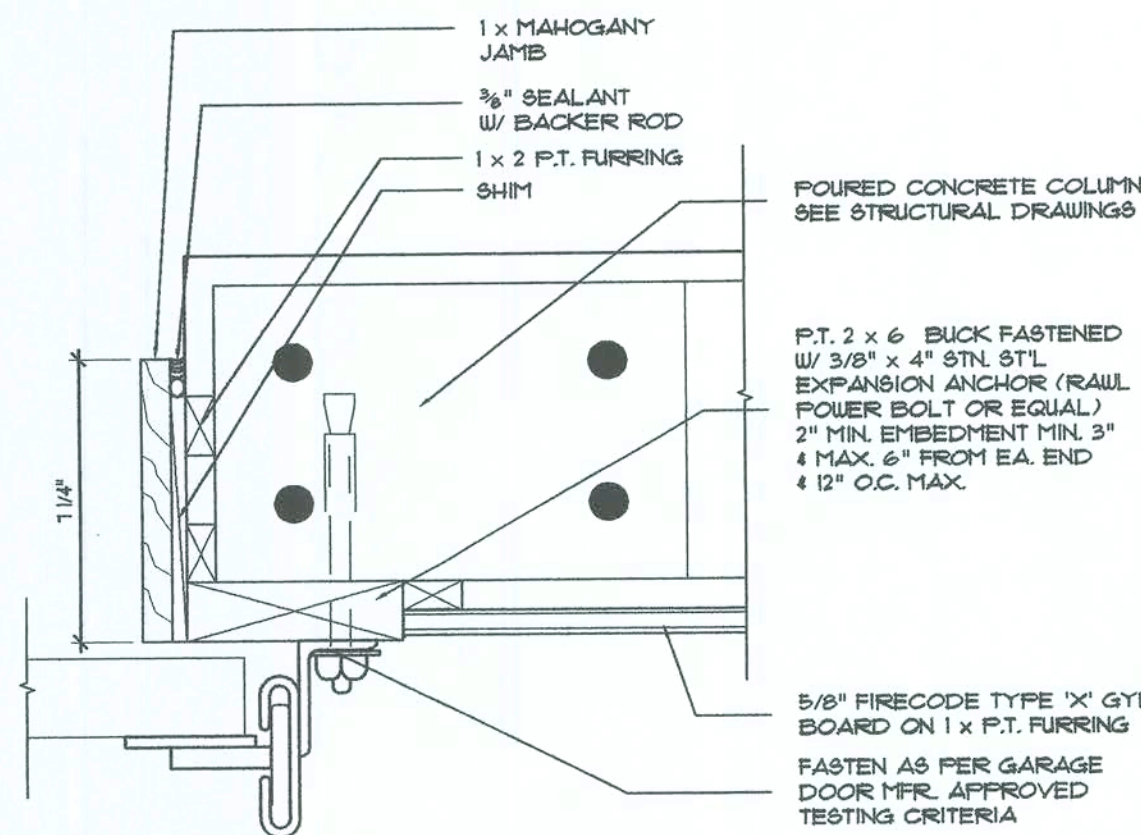


A WALL SECTION
SCALE: 1/2" = 1'-0"
GUEST HOUSE

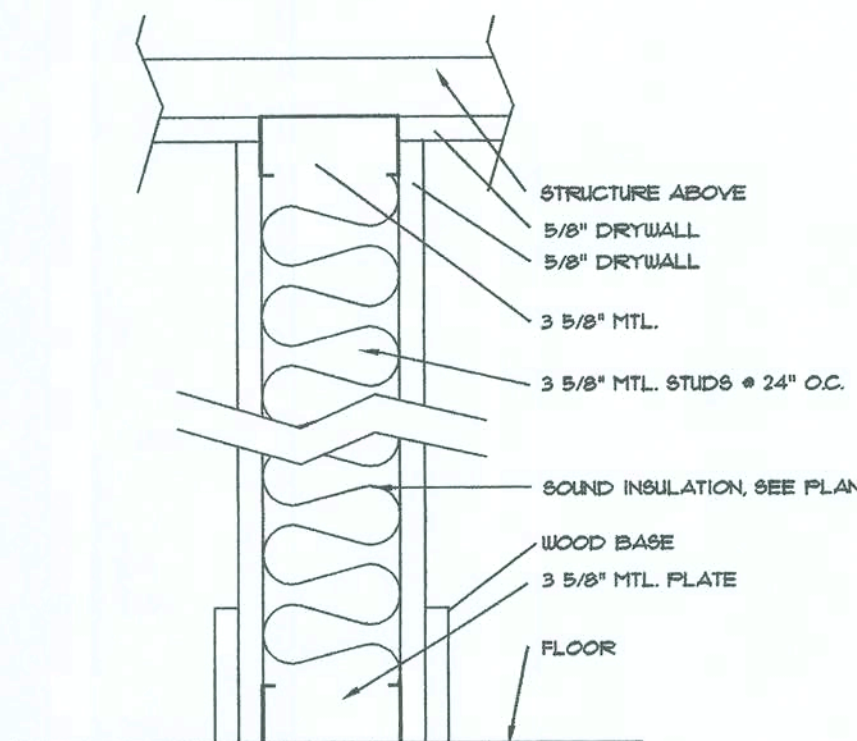


B WALL SECTION
SCALE: 1/2" = 1'-0"
GUEST HOUSE

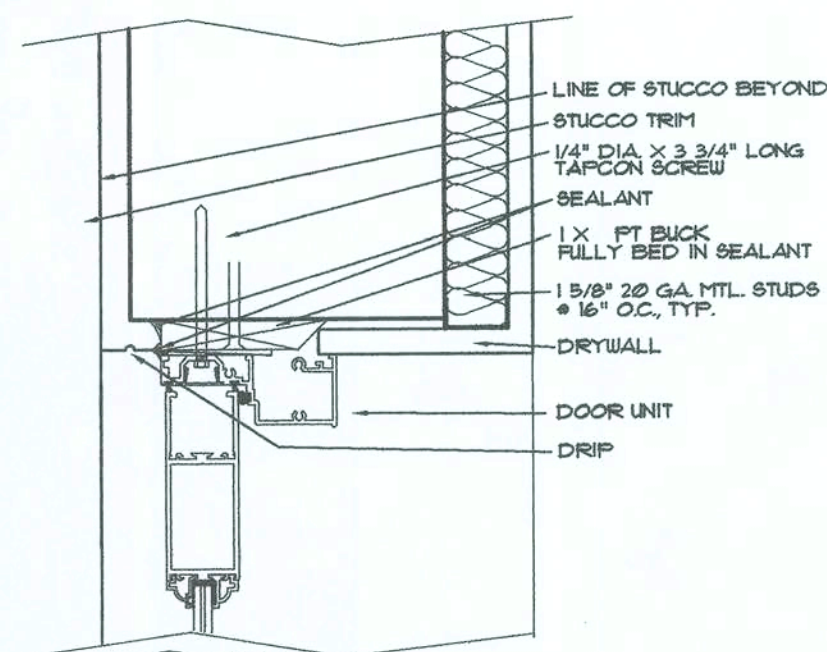




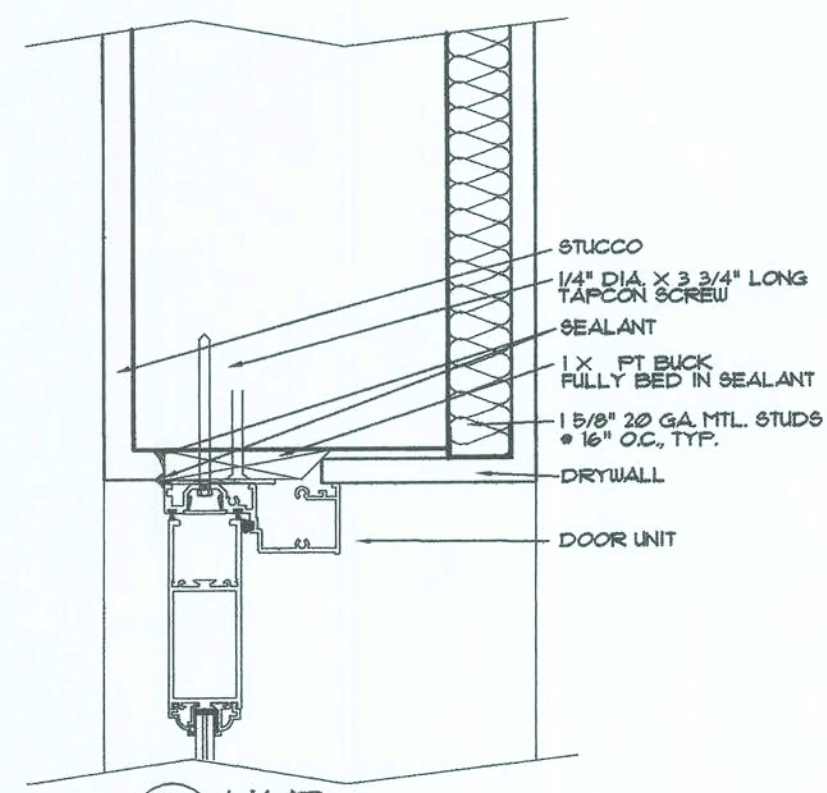
N TYPICAL GARAGE DOOR JAMB
SCALE: 3" = 1'-0"



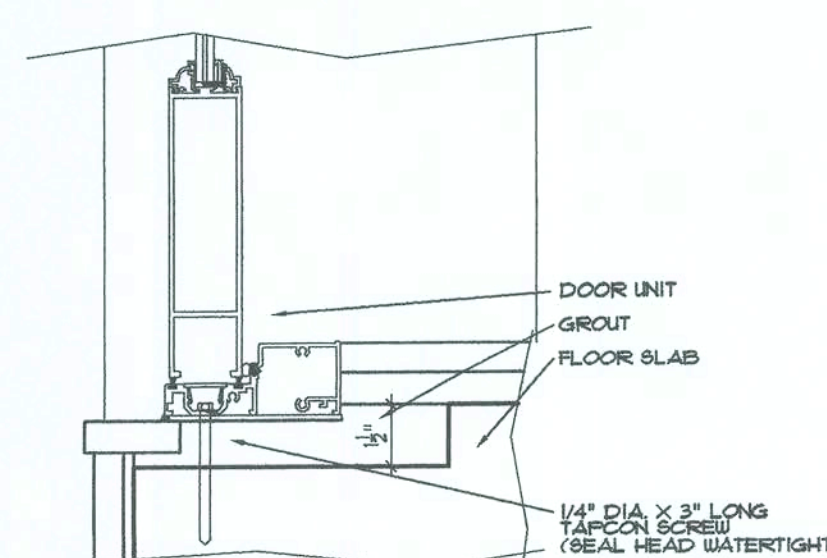
M TYPICAL INTERIOR PARTITION
SCALE: 3" = 1'-0"



L HEAD
SCALE: 3" = 1'-0"

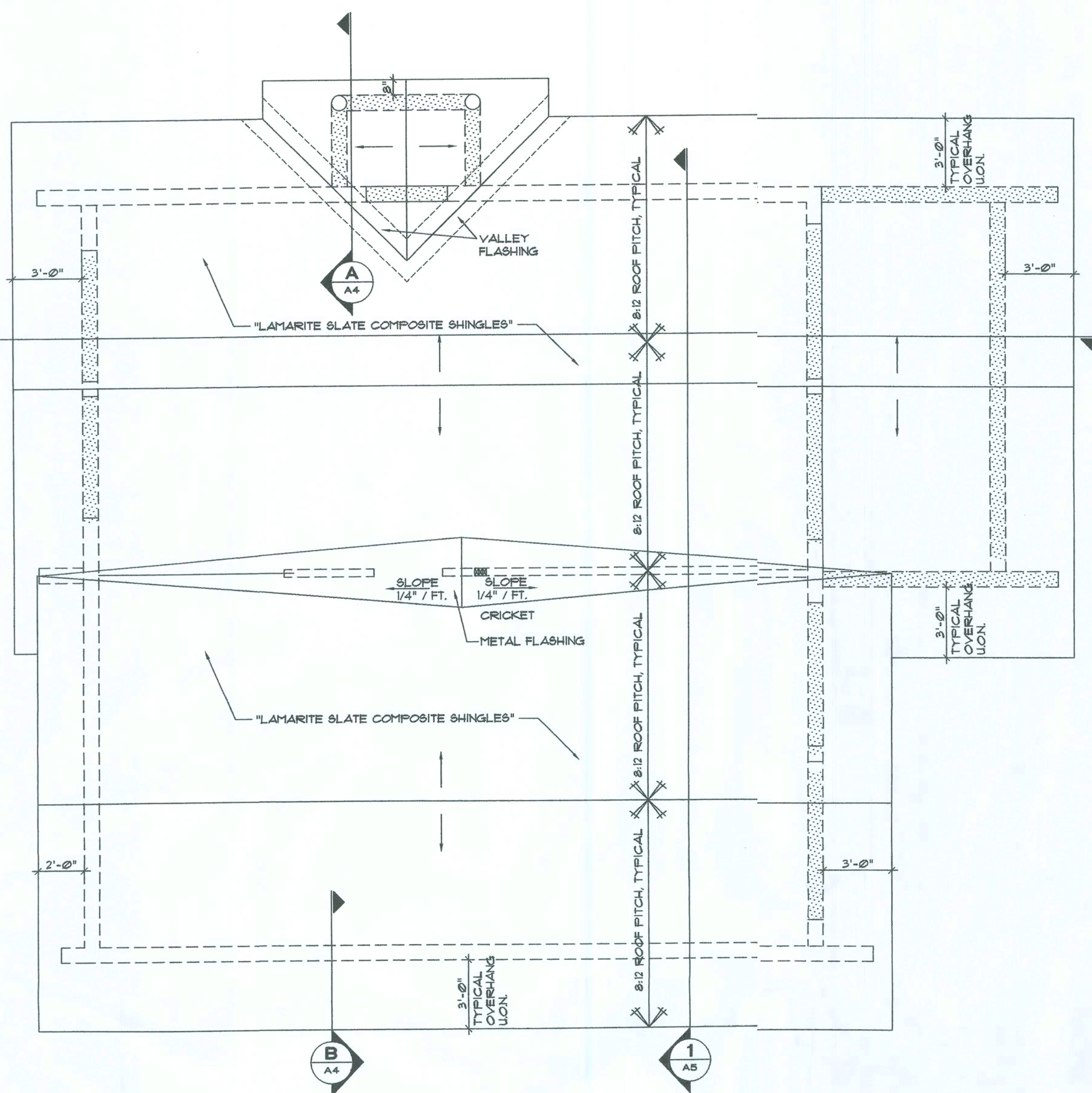


K JAMB
SCALE: 3" = 1'-0"

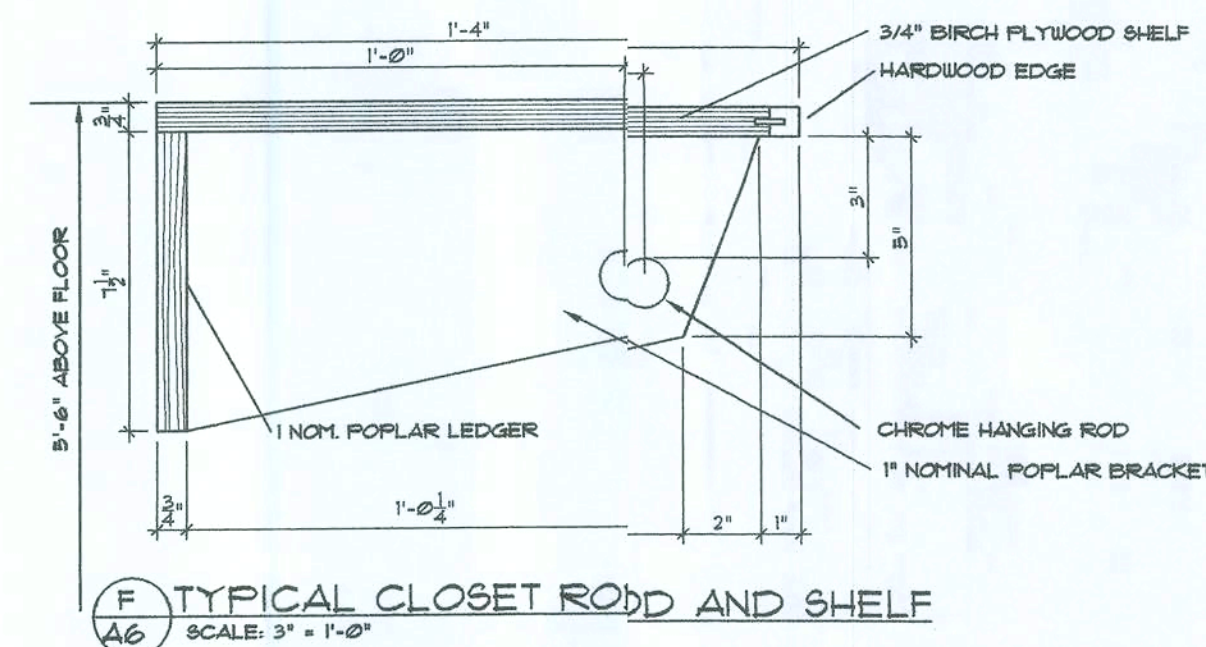


J SILL
SCALE: 3" = 1'-0"

FRENCH DOOR DETAILS



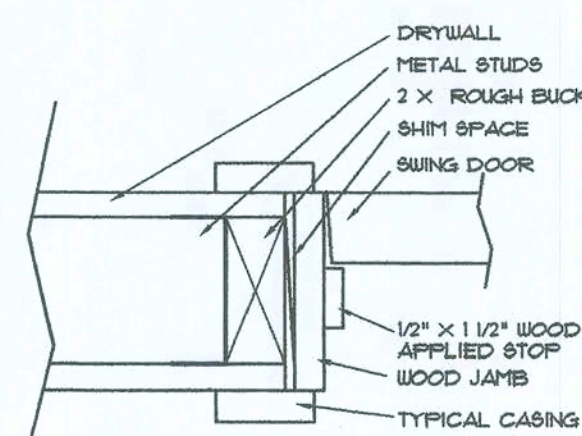
ROOF PLAN
SCALE: 1/4" = 1'-0" GUEST COTTAGE



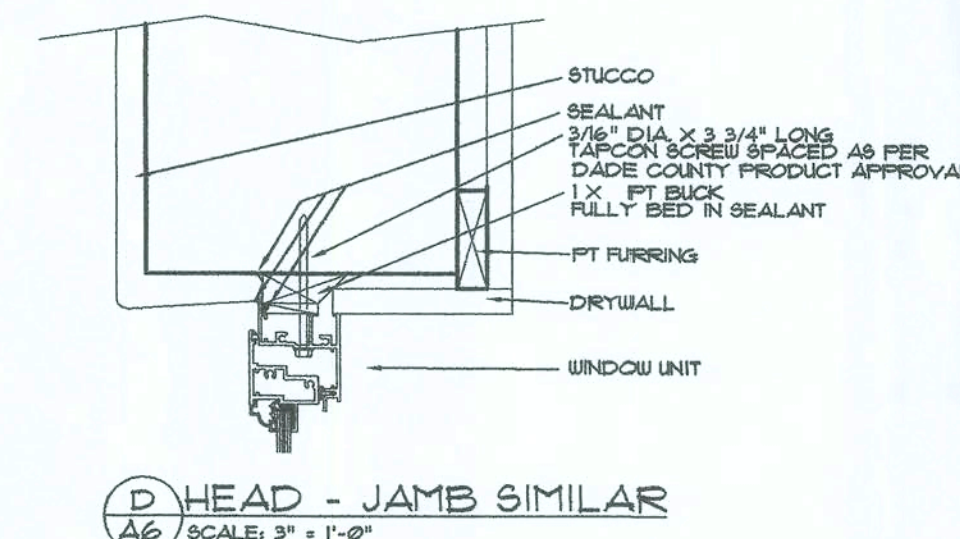
F TYPICAL CLOSET ROBD AND SHELF
SCALE: 3" = 1'-0"



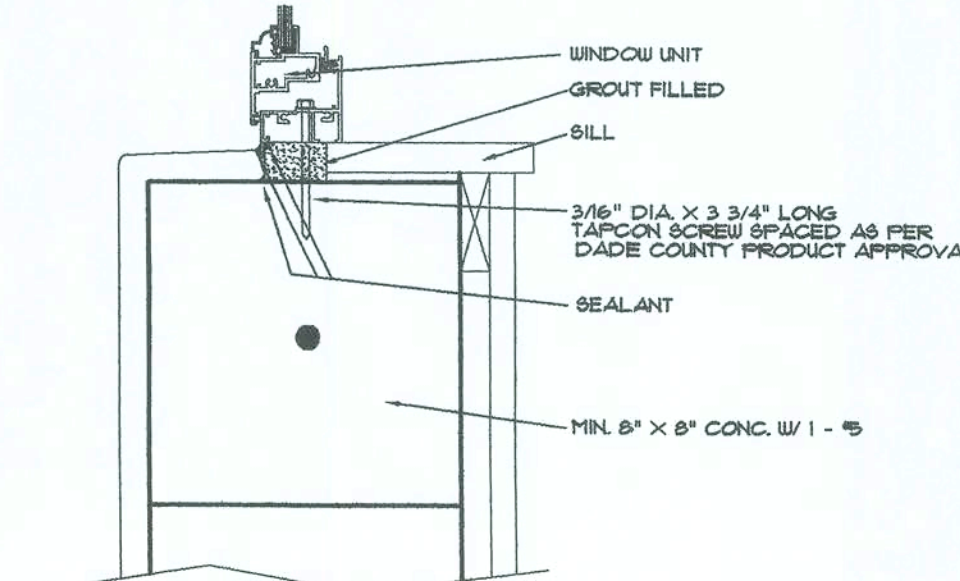
H DRYWALL CEILING
SCALE: 3" = 1'-0"



G SWING DOOR - JAMB
SCALE: 3" = 1'-0"

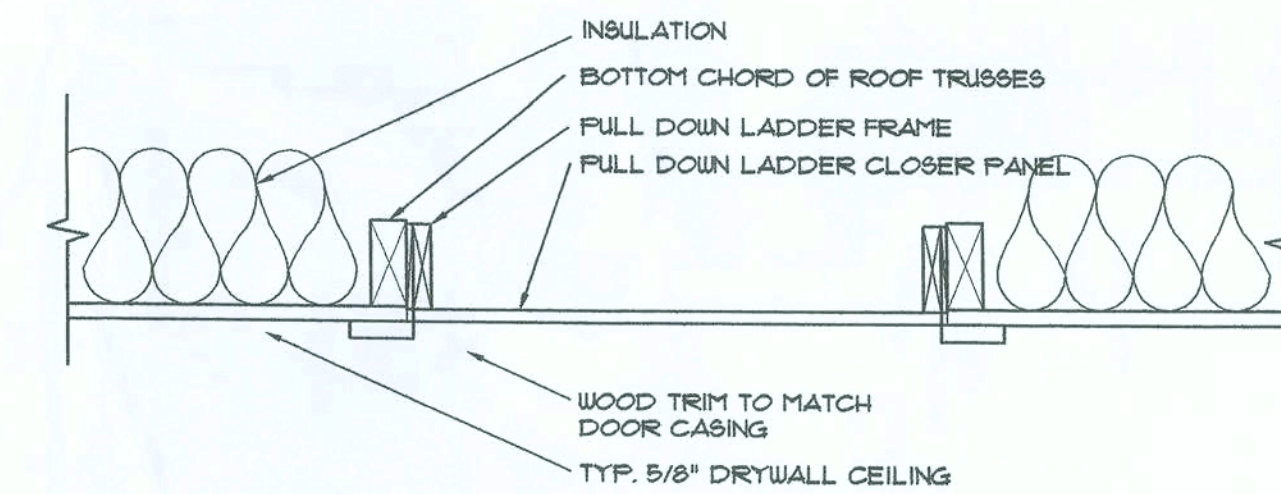


D HEAD - JAMB SIMILAR
SCALE: 3" = 1'-0"

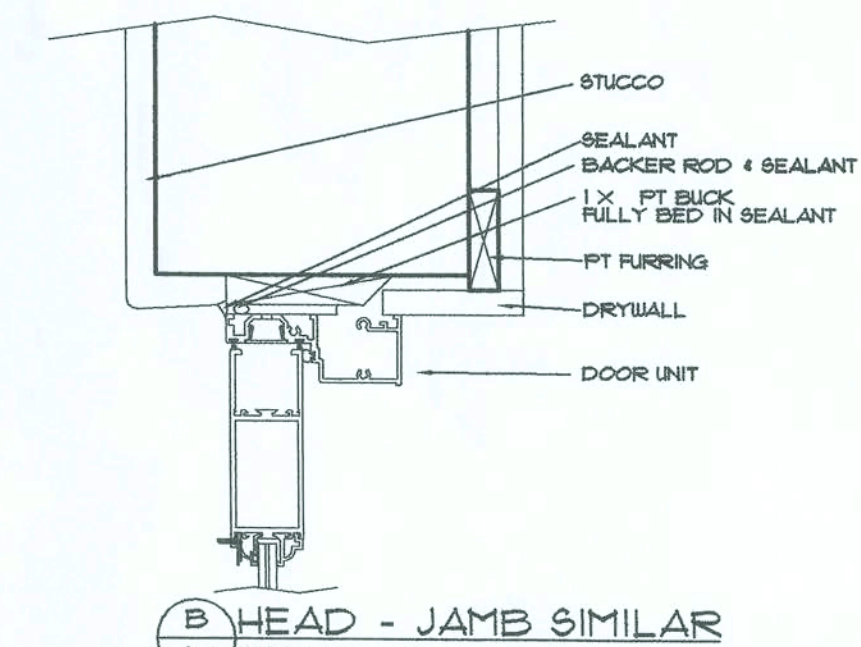


E SILL
SCALE: 3" = 1'-0"

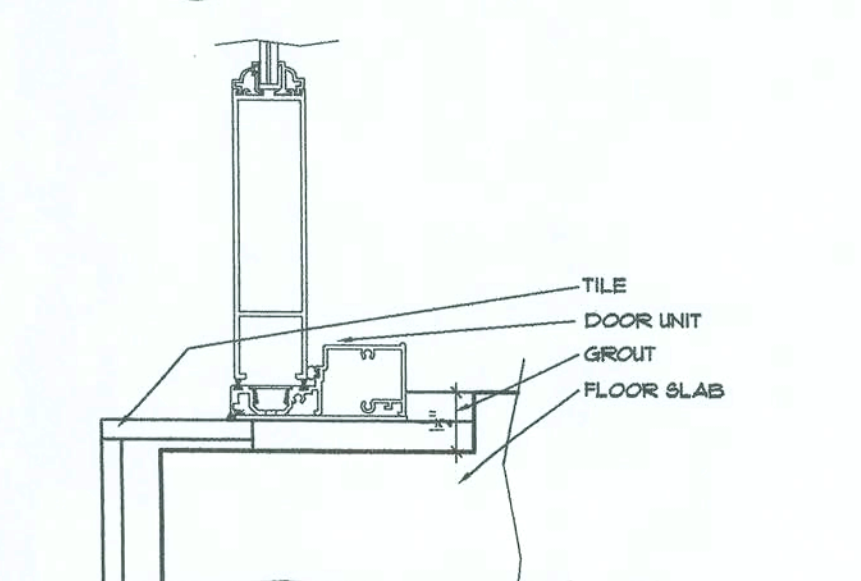
CASEMENT WINDOW DETAILS



A ATTIC ACCESS DETAIL
SCALE: 1 1/2" = 1'-0"

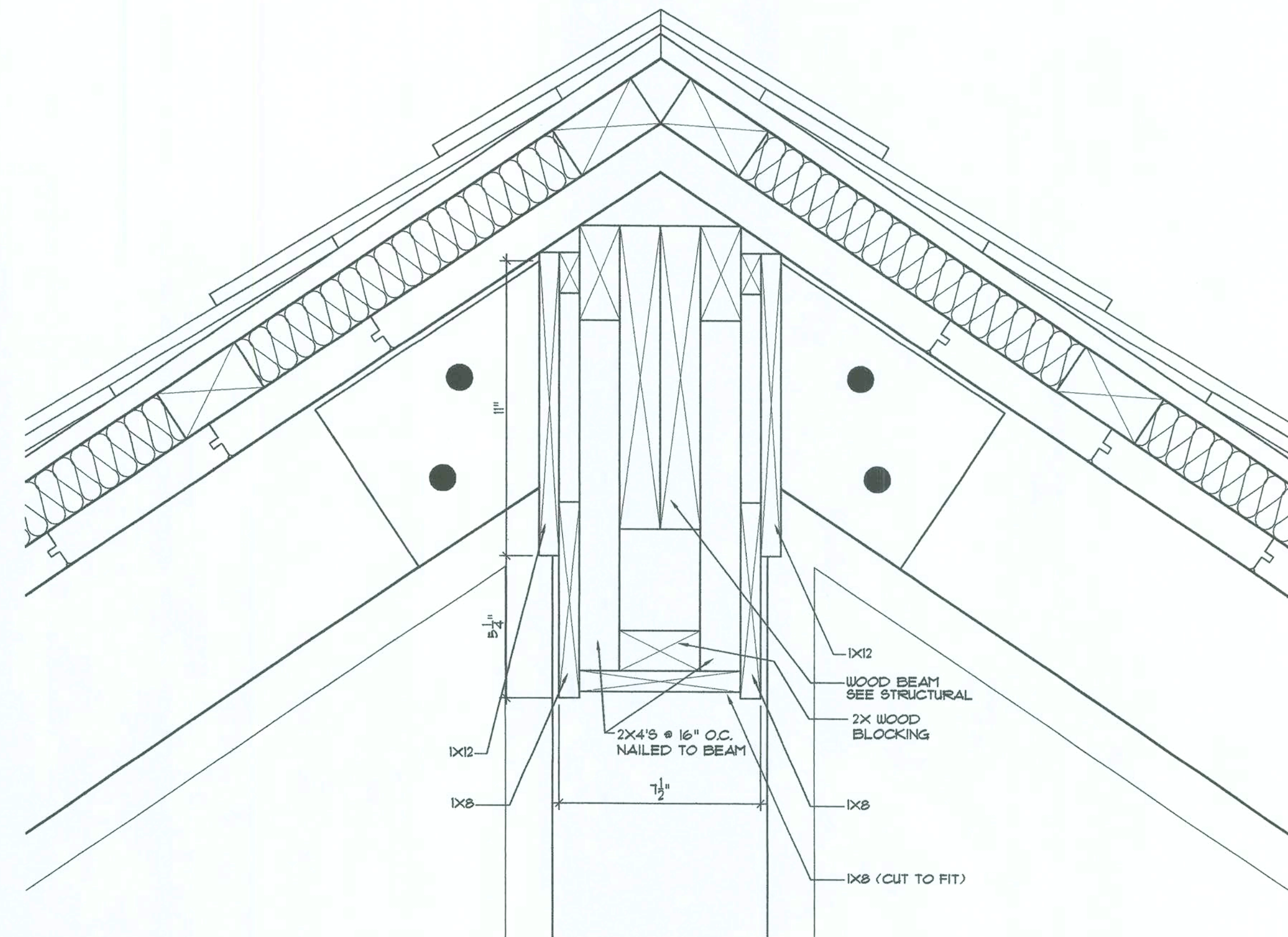


B HEAD - JAMB SIMILAR
SCALE: 3" = 1'-0"

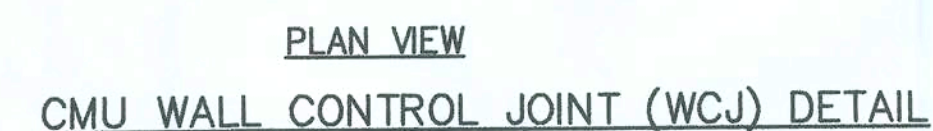
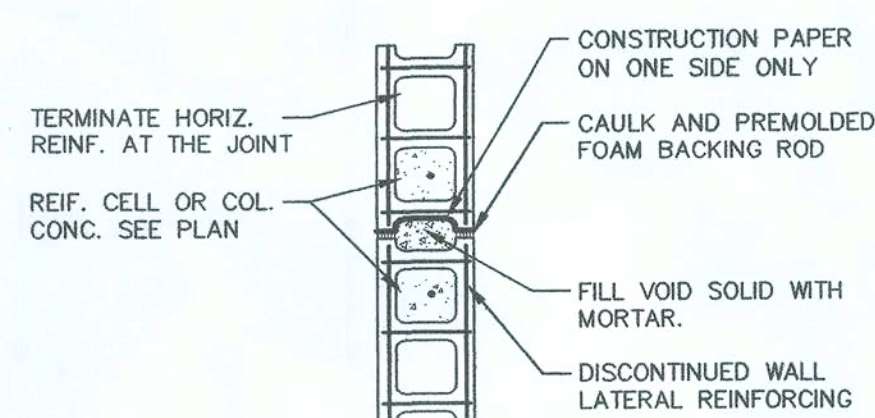
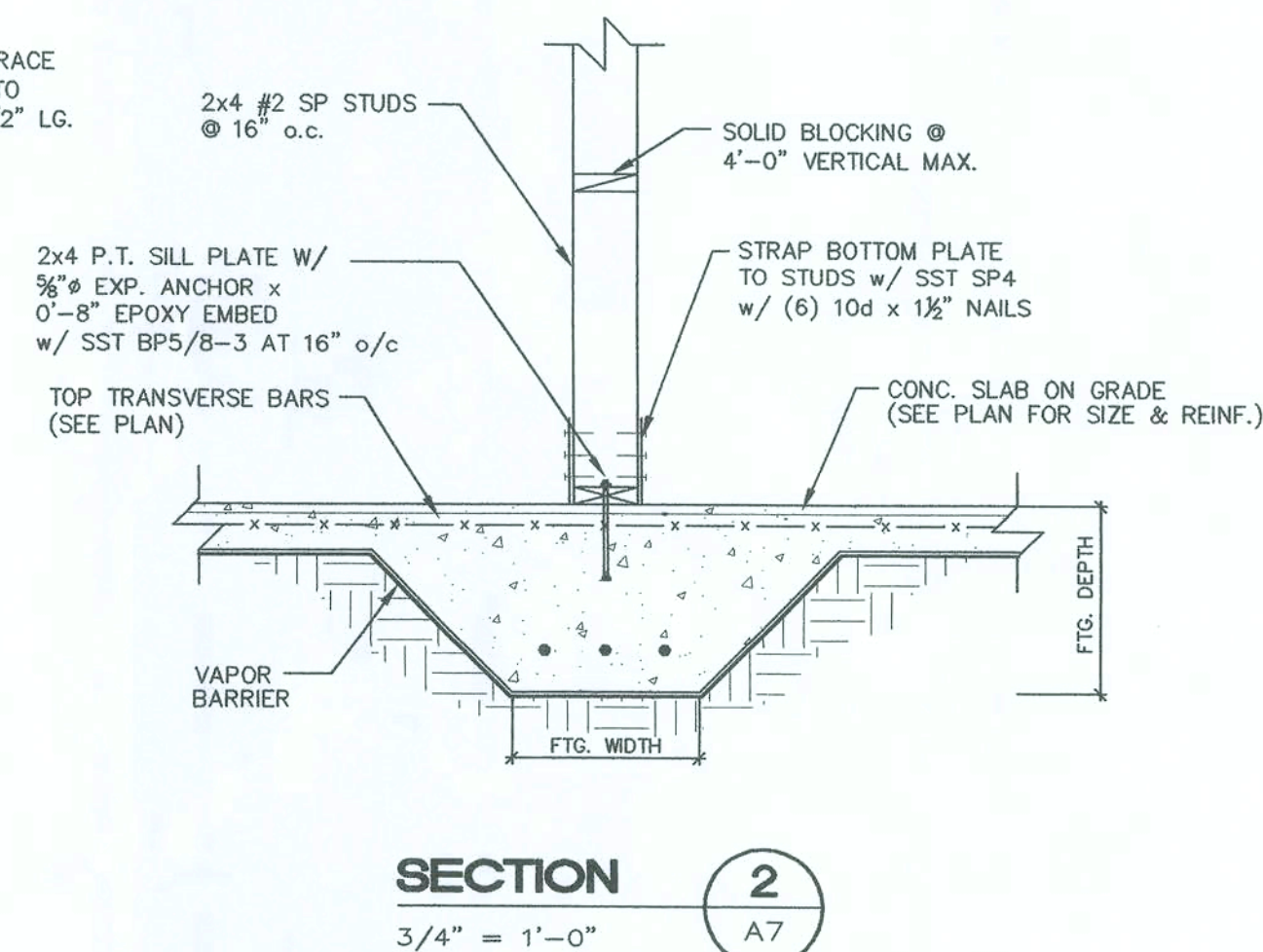
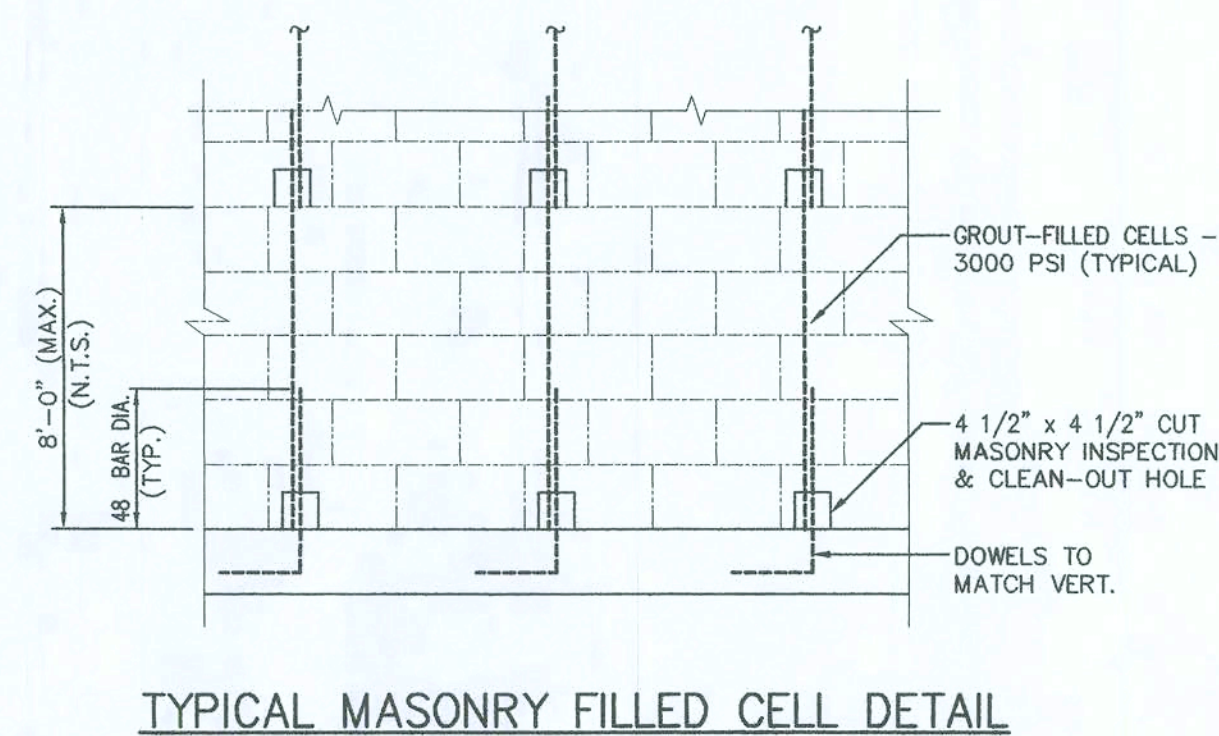
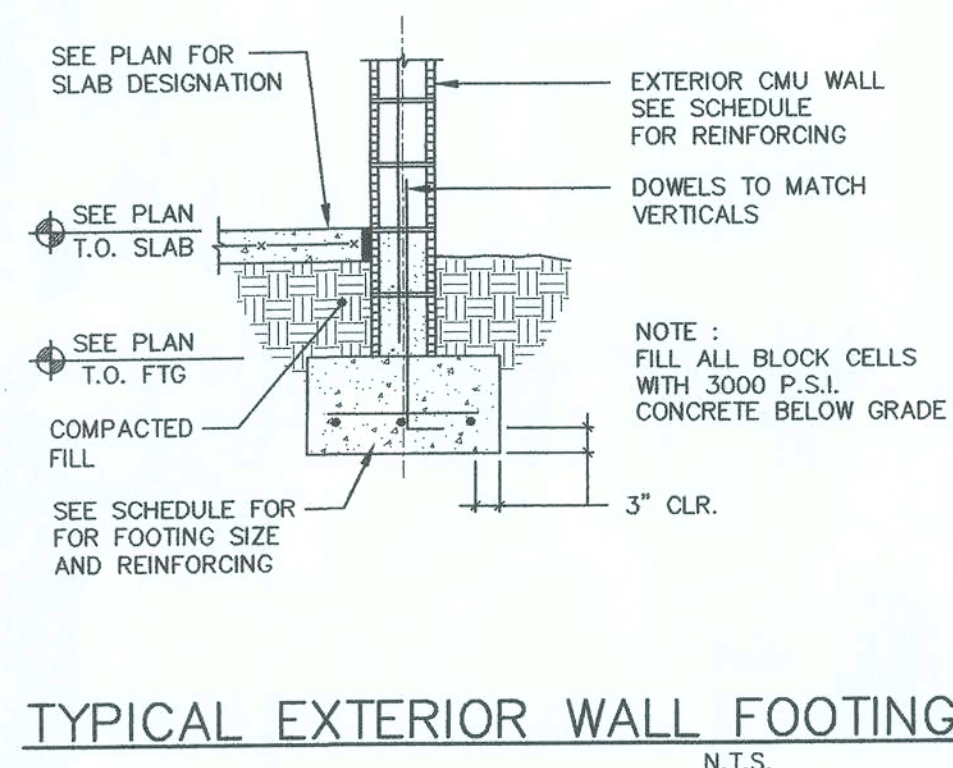
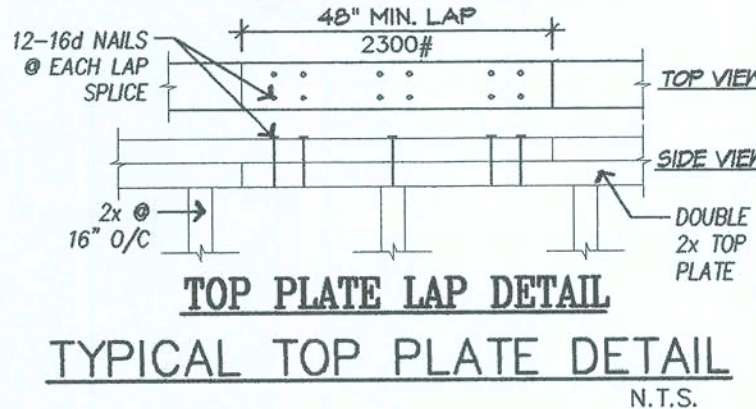
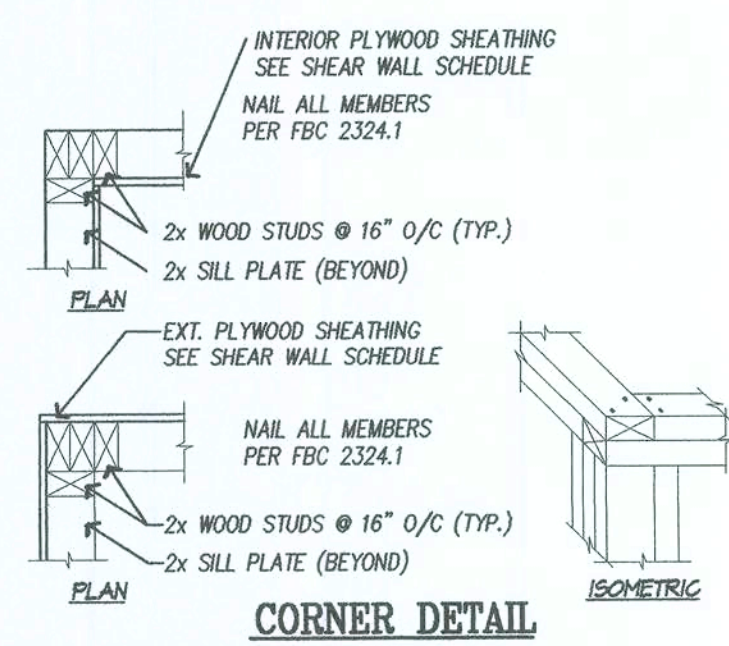
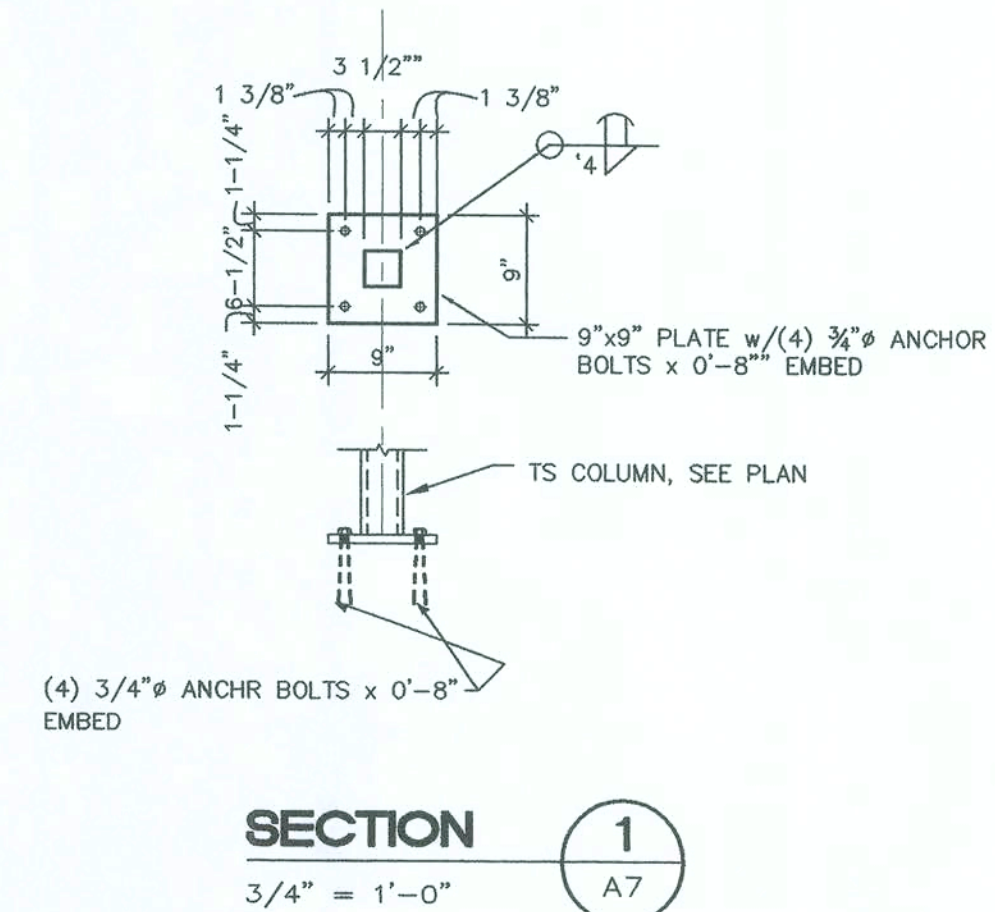
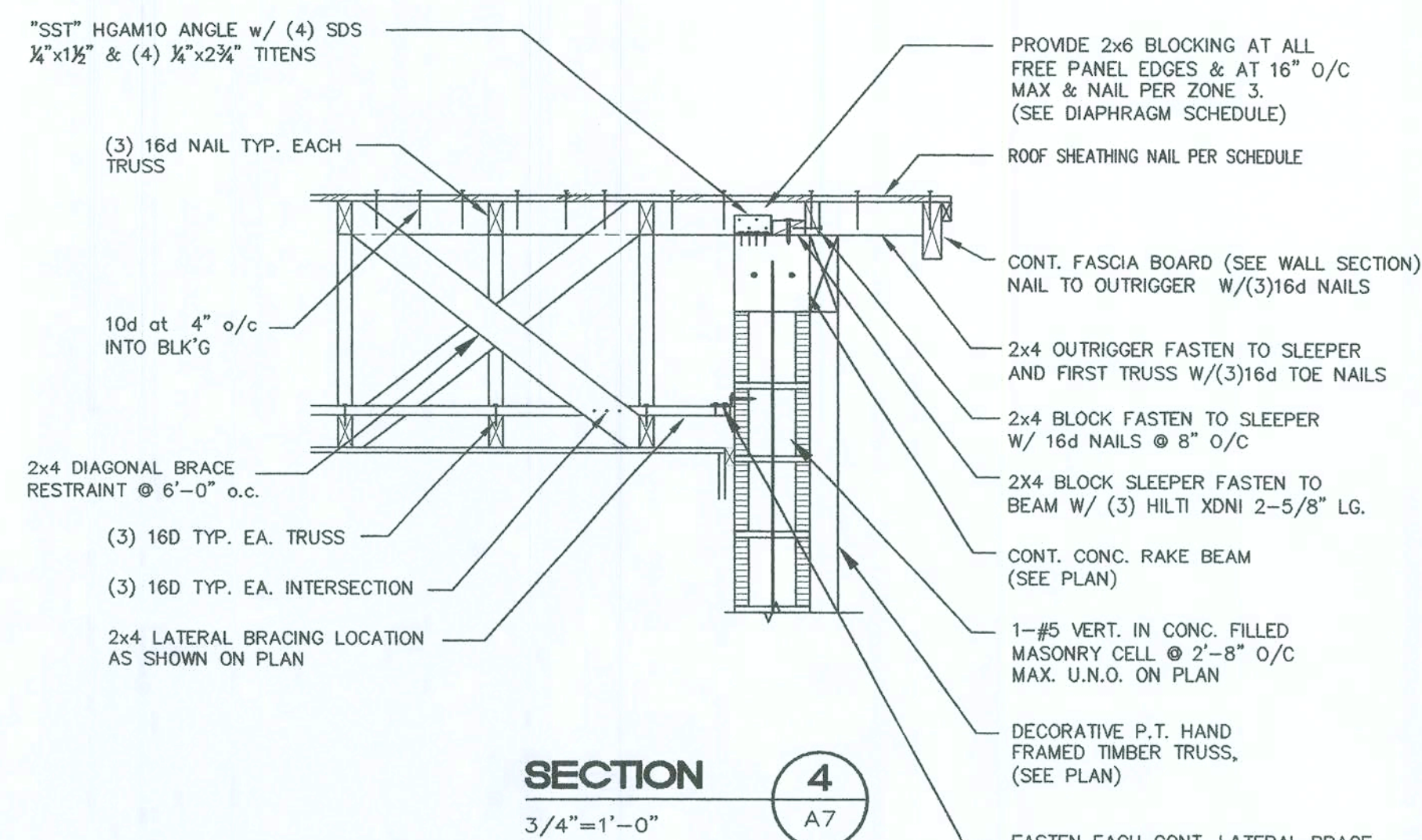
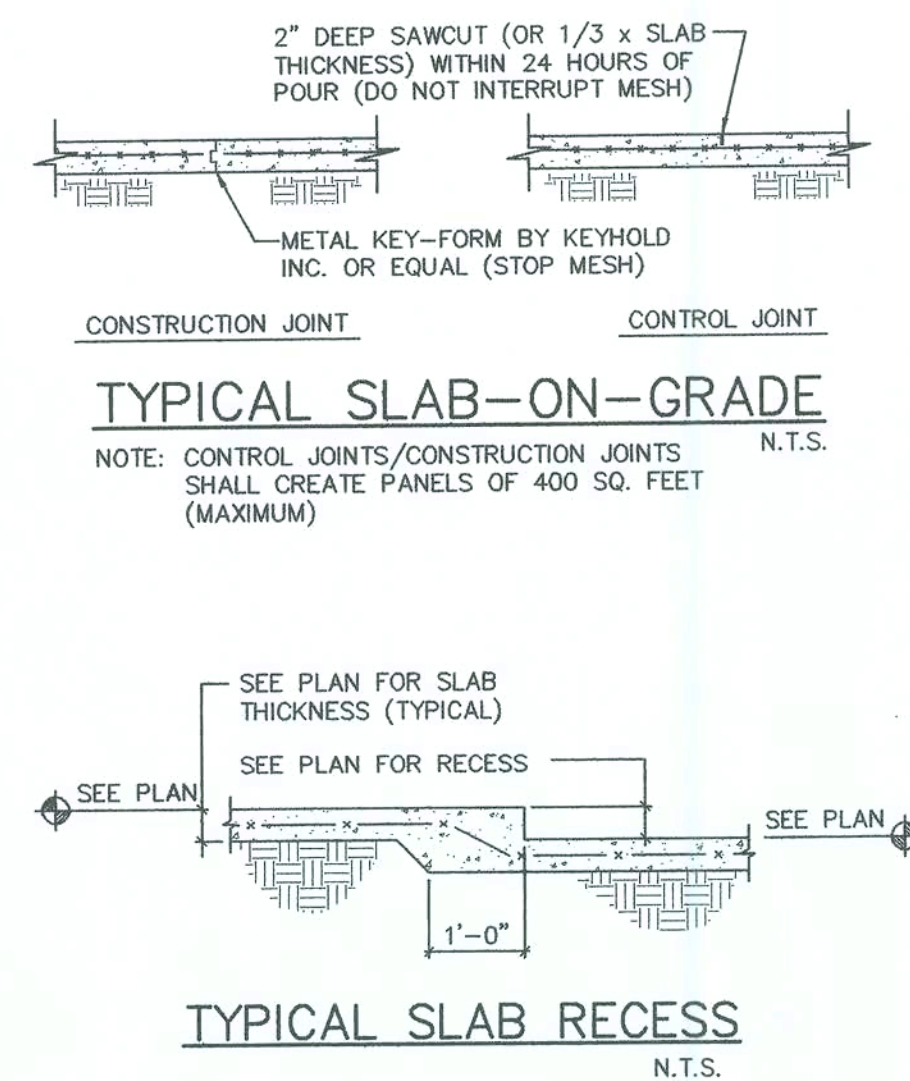
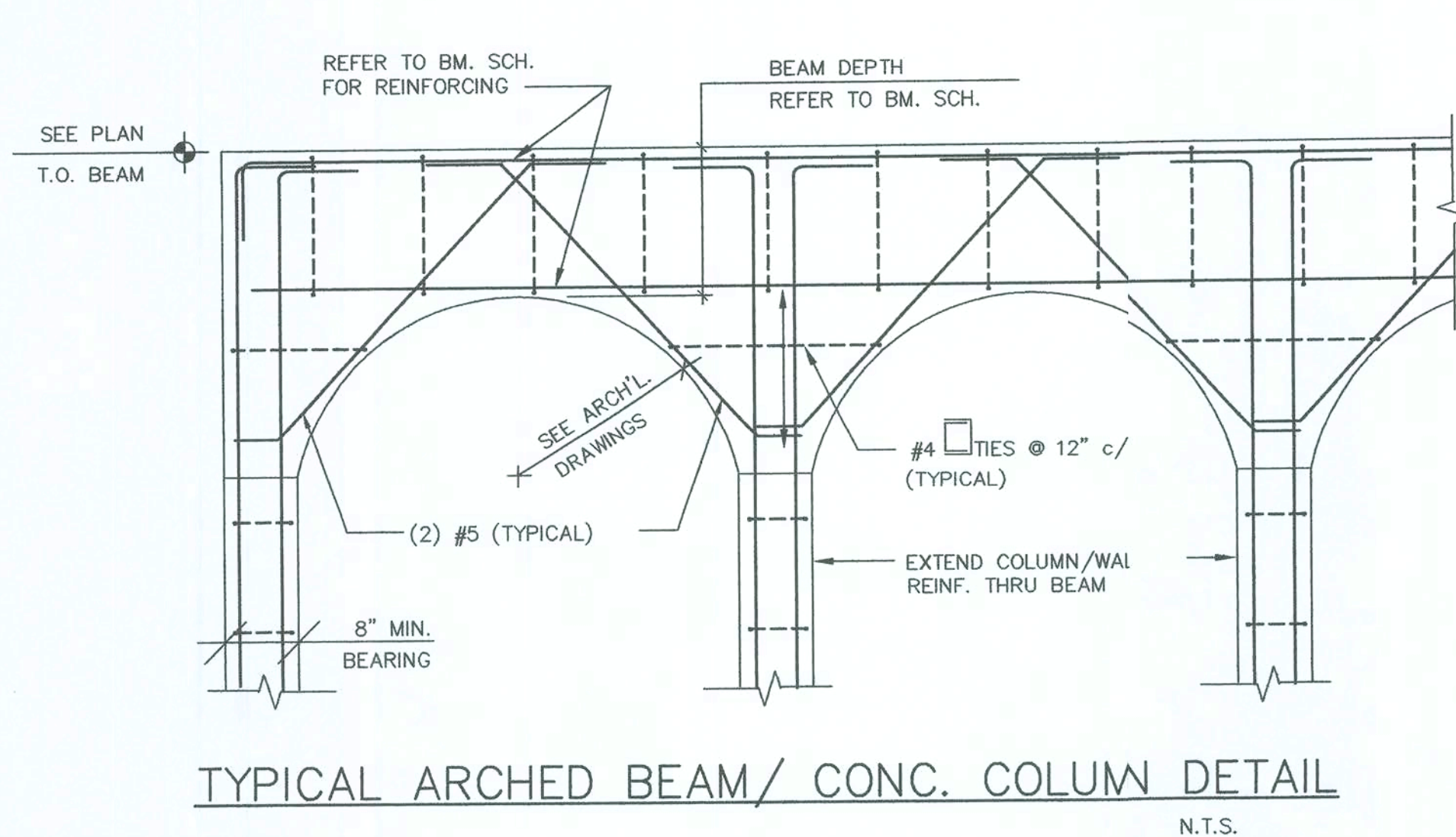


C SILL
SCALE: 3" = 1'-0"

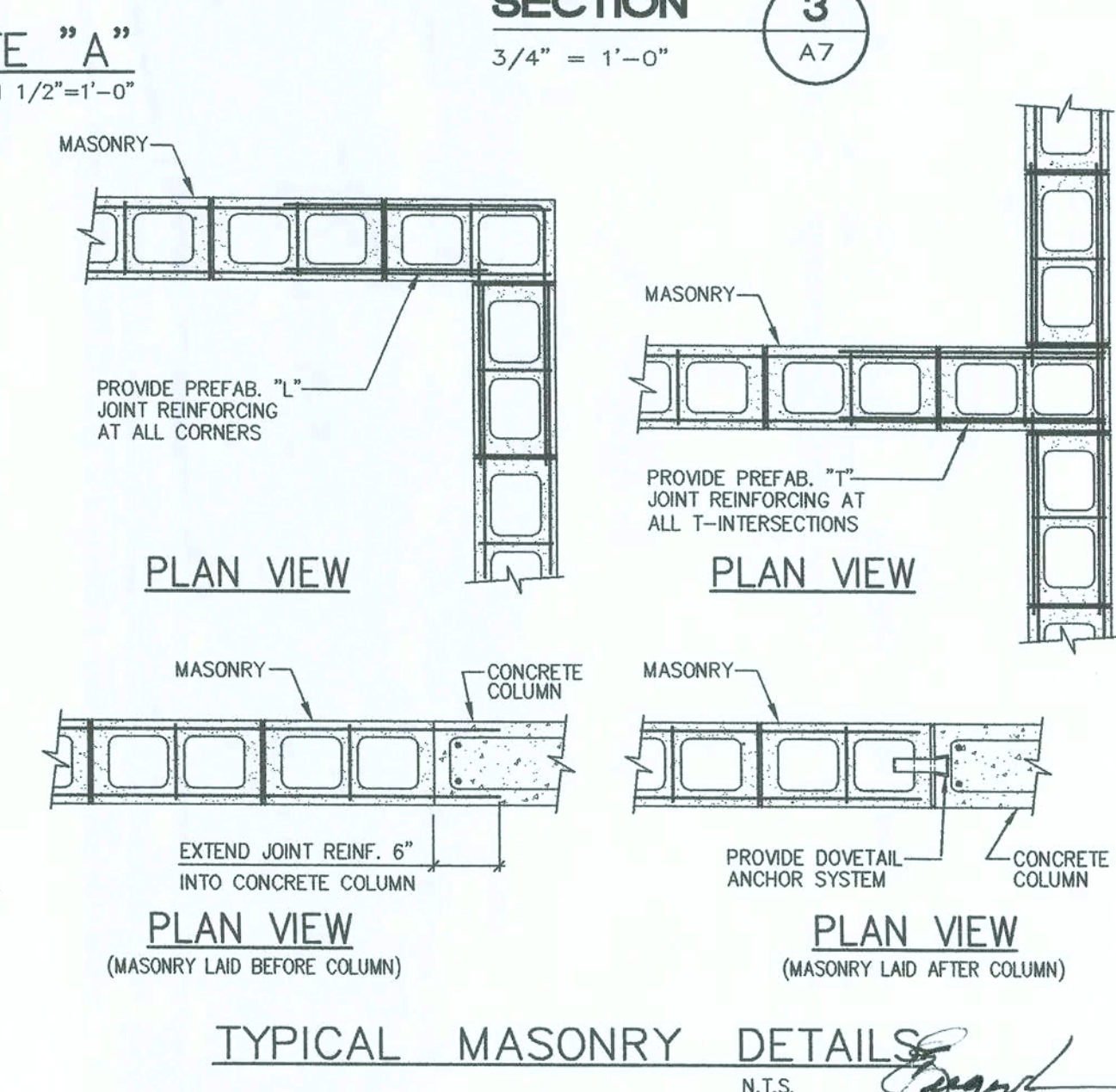
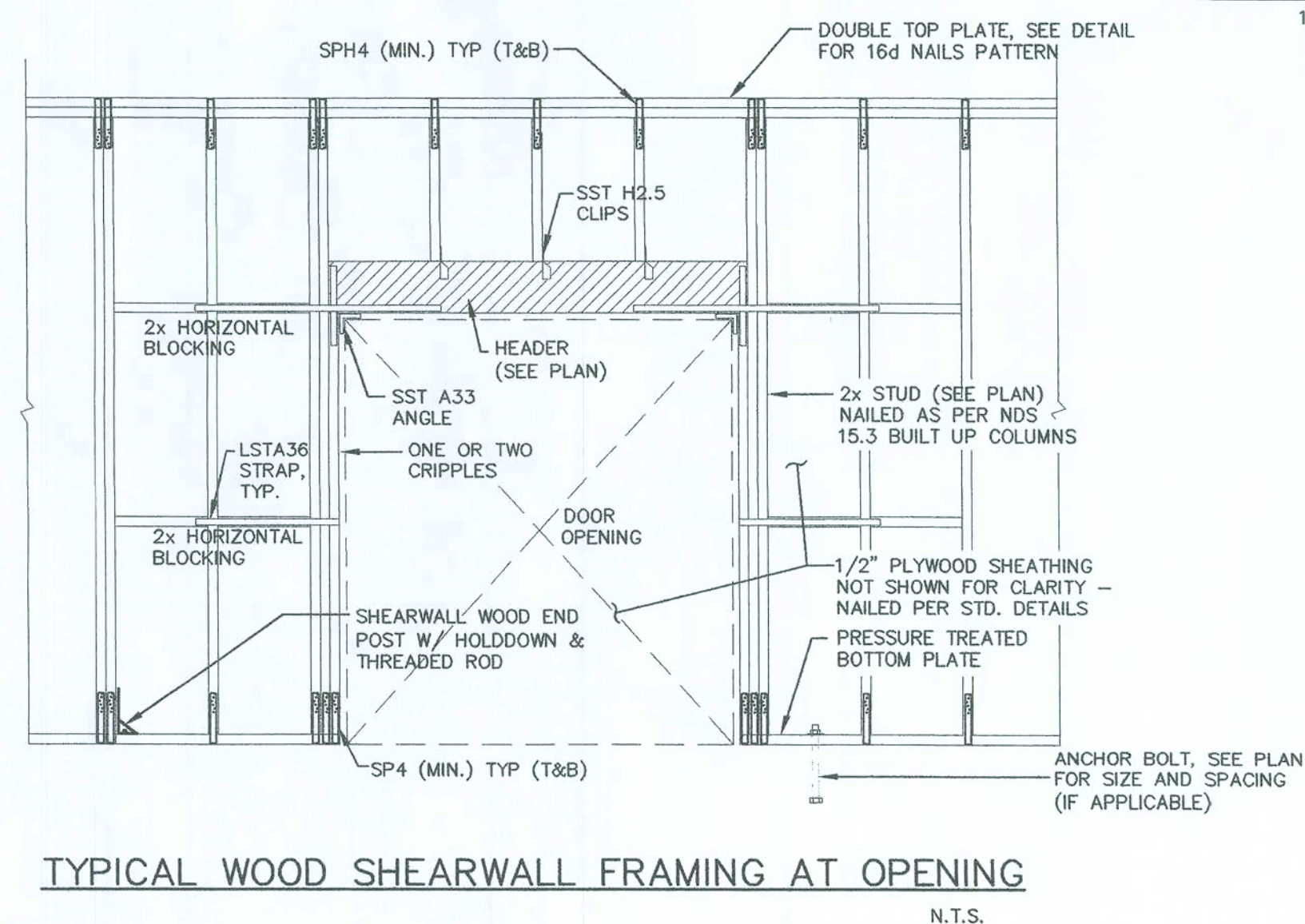
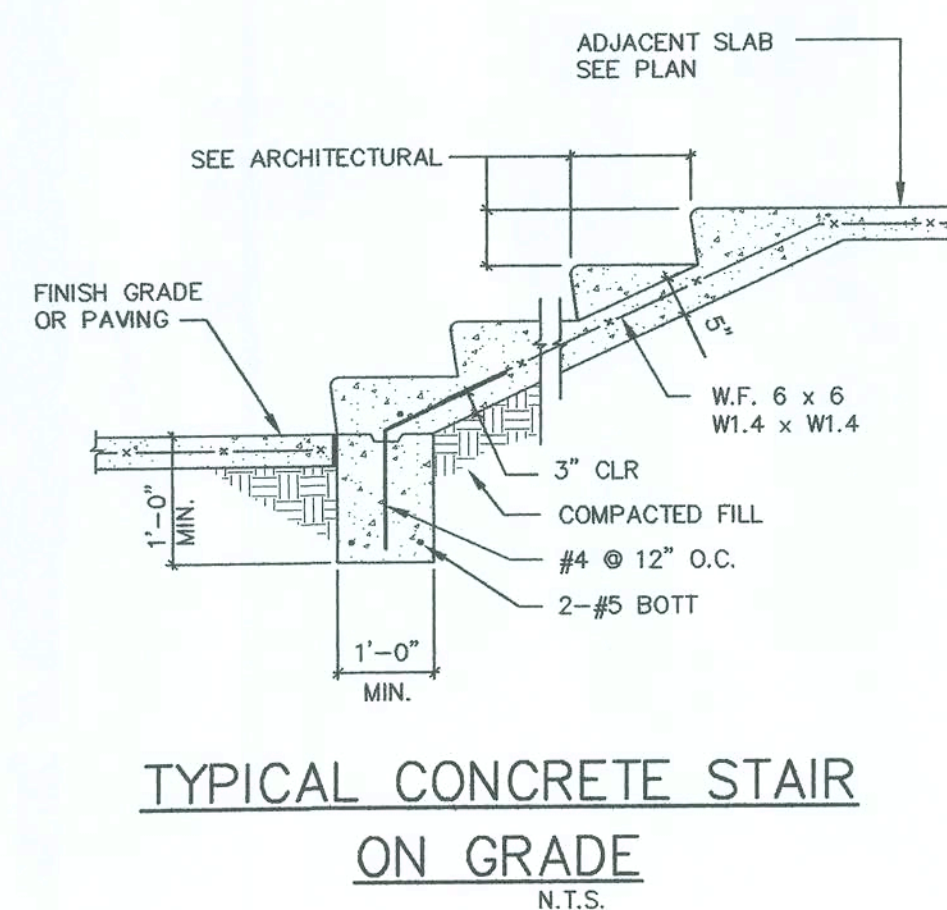
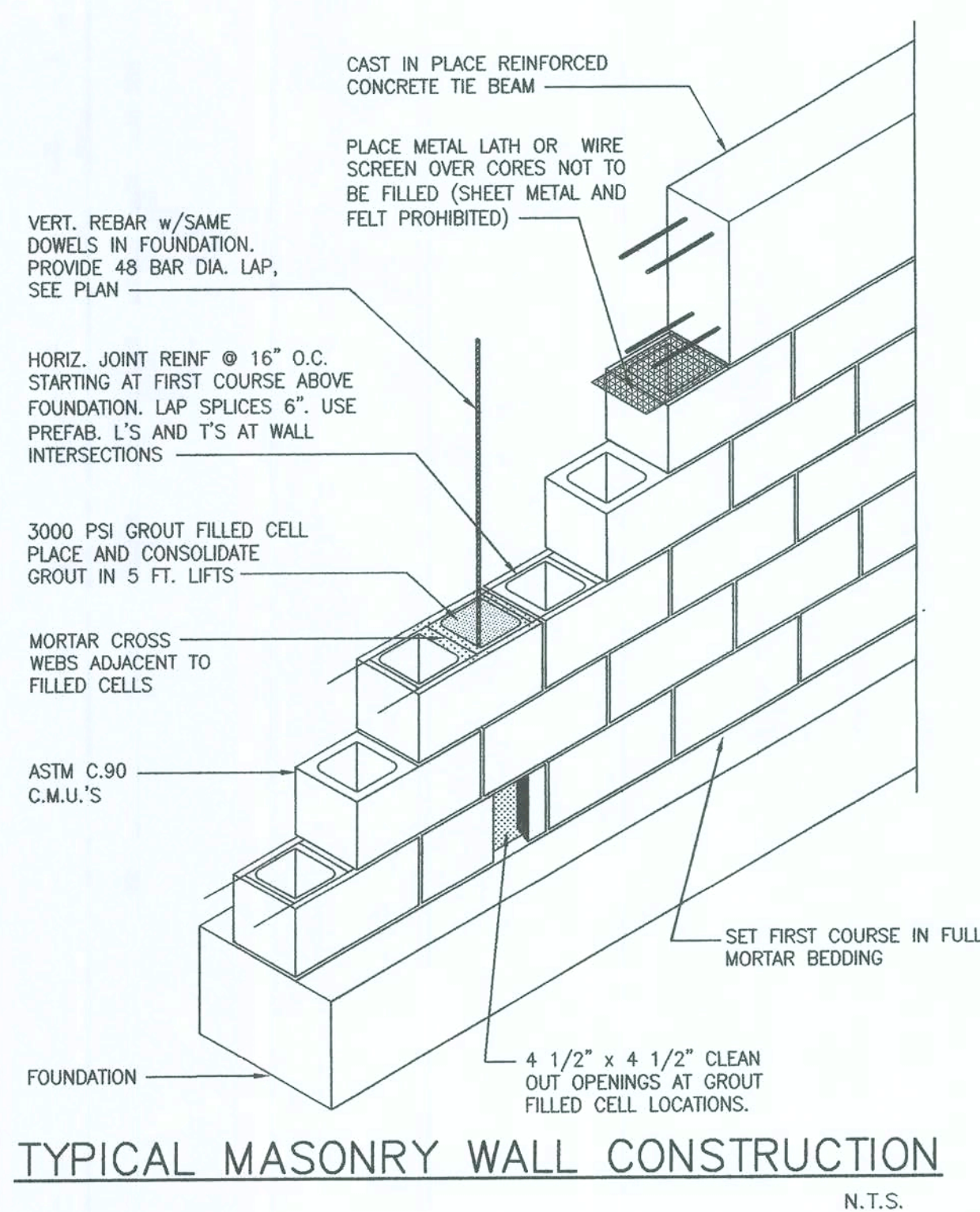
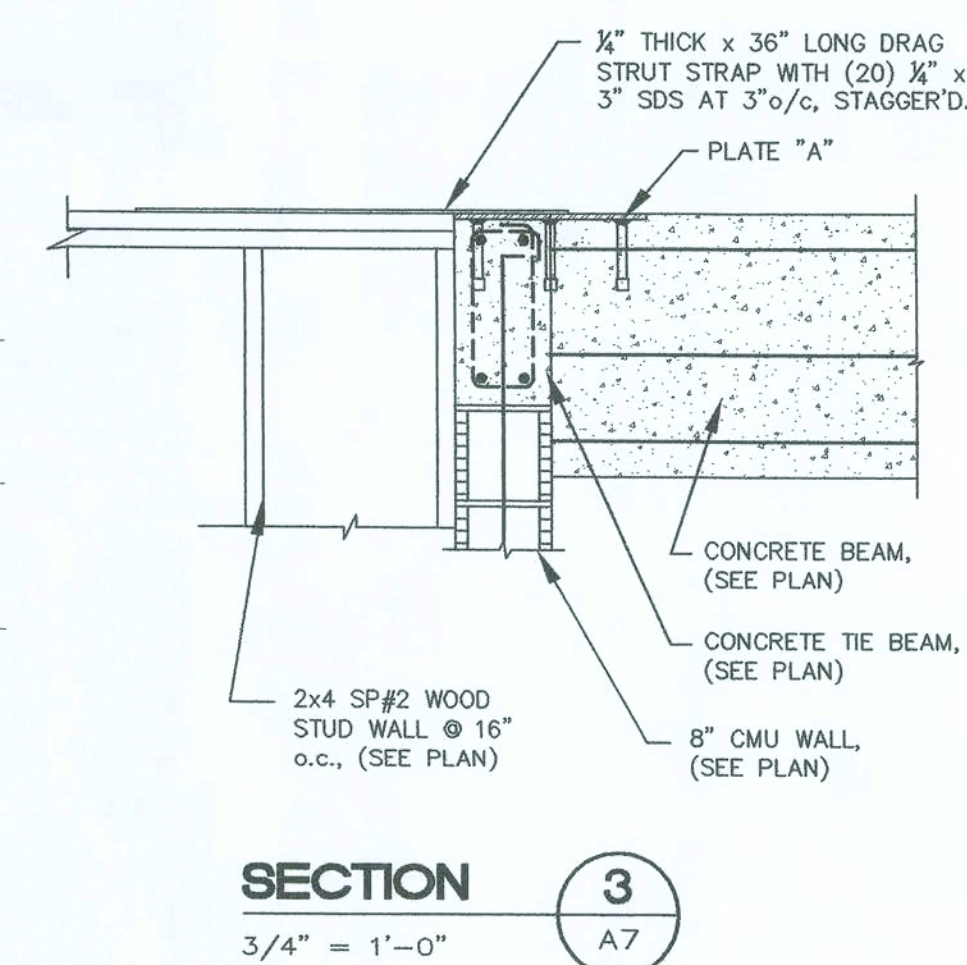
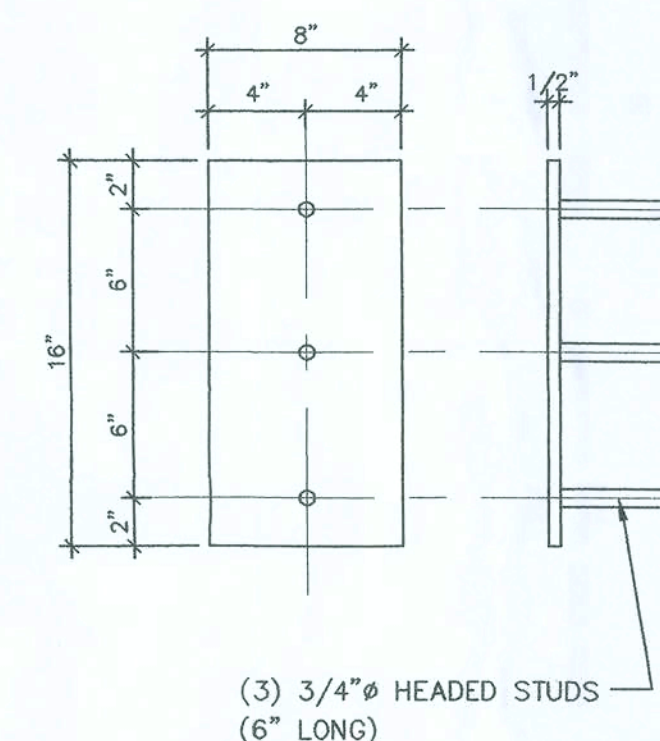
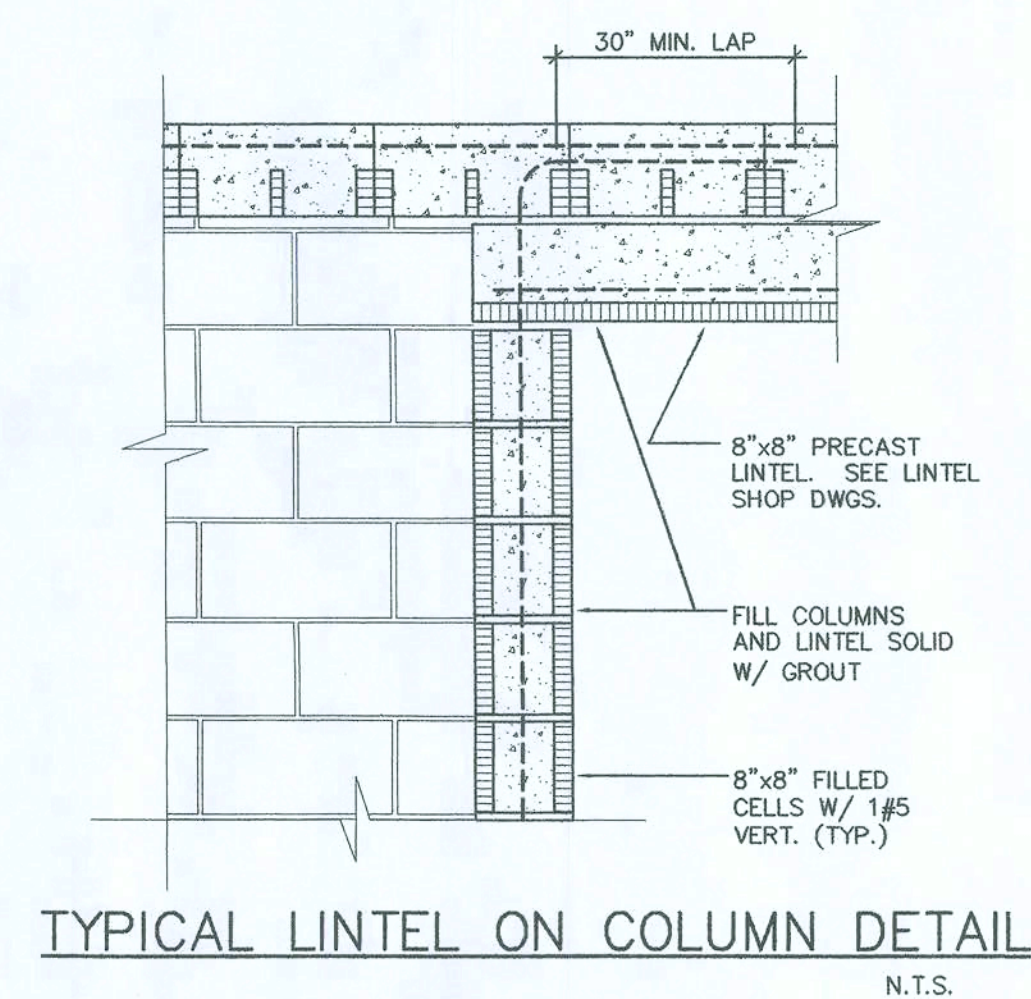
ALUMINUM FRENCH DOOR DETAILS

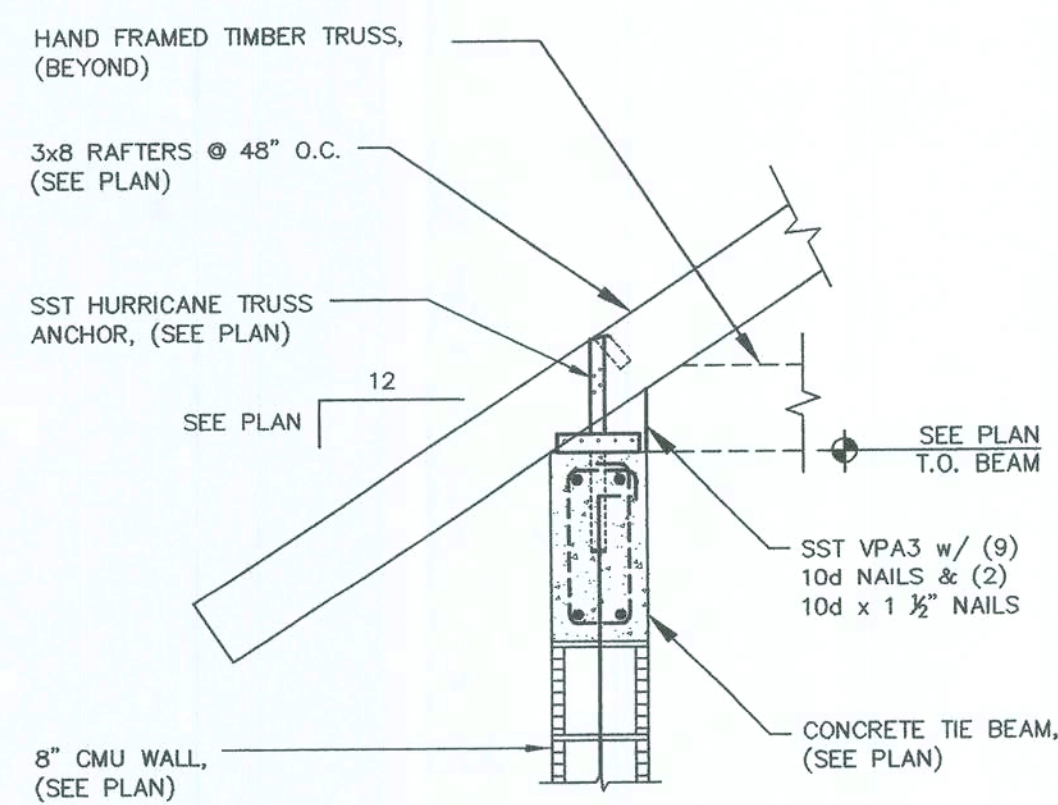


DETAIL
SCALE: 3" = 1'-0" AT TYPICAL RIDGE BEAM



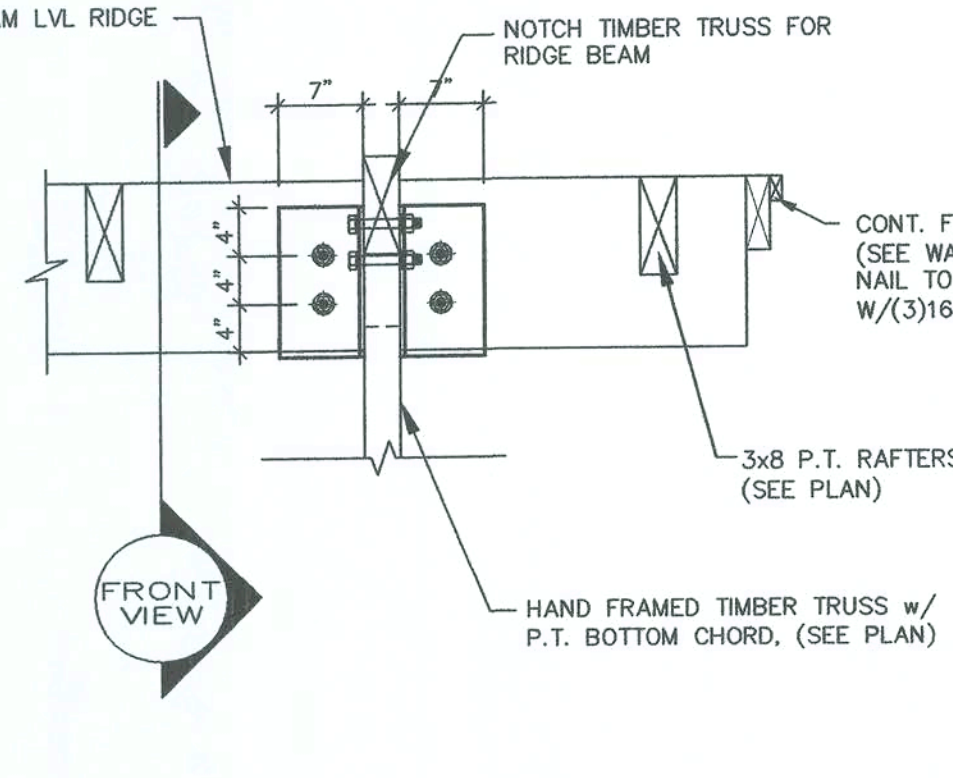
- NOTES :
- 1.- SAW CUT BOND BEAMS, TIE BEAMS 1" DEEP TO CONTINUE WALL CONTROL JOINT TO TOP OF WALL.
 - 2.- CONTROL JOINT SPACING IS NOT TO EXCEED 25'-0" O.C. IN WALLS WITH MORE THAN 25'-0" OF UNINTERRUPTED MASONRY. REFER TO DWGS. FOR ADDITIONAL SPECIFIED LOCATIONS AS NOTED THUS (WCJ).
 - 3.- CONTINUE ALL BOND BEAMS, TIE BEAMS REINF. THROUGH THE JOINT.



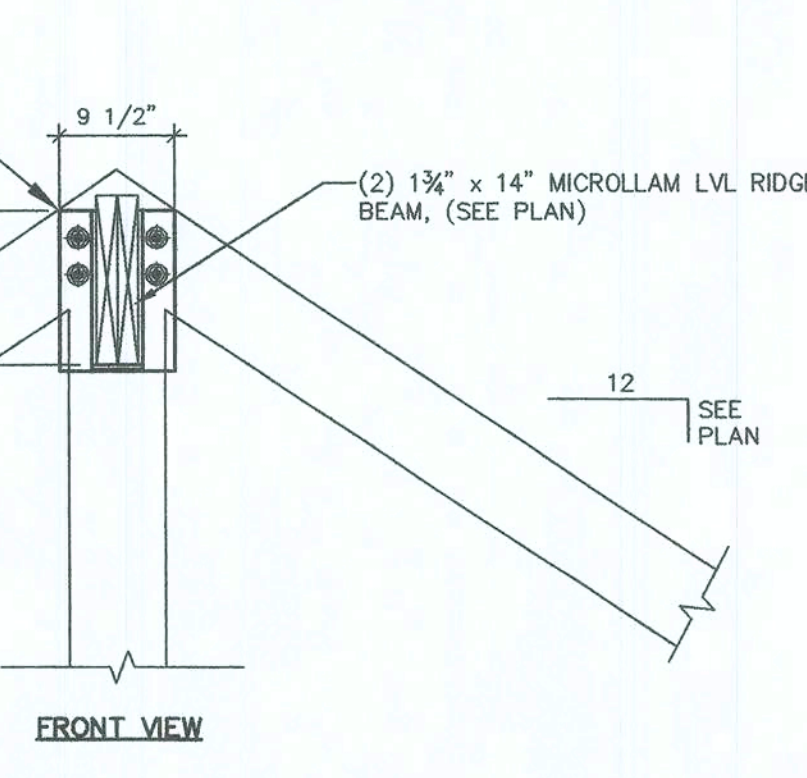


SECTION 1
3/4" = 1'-0"

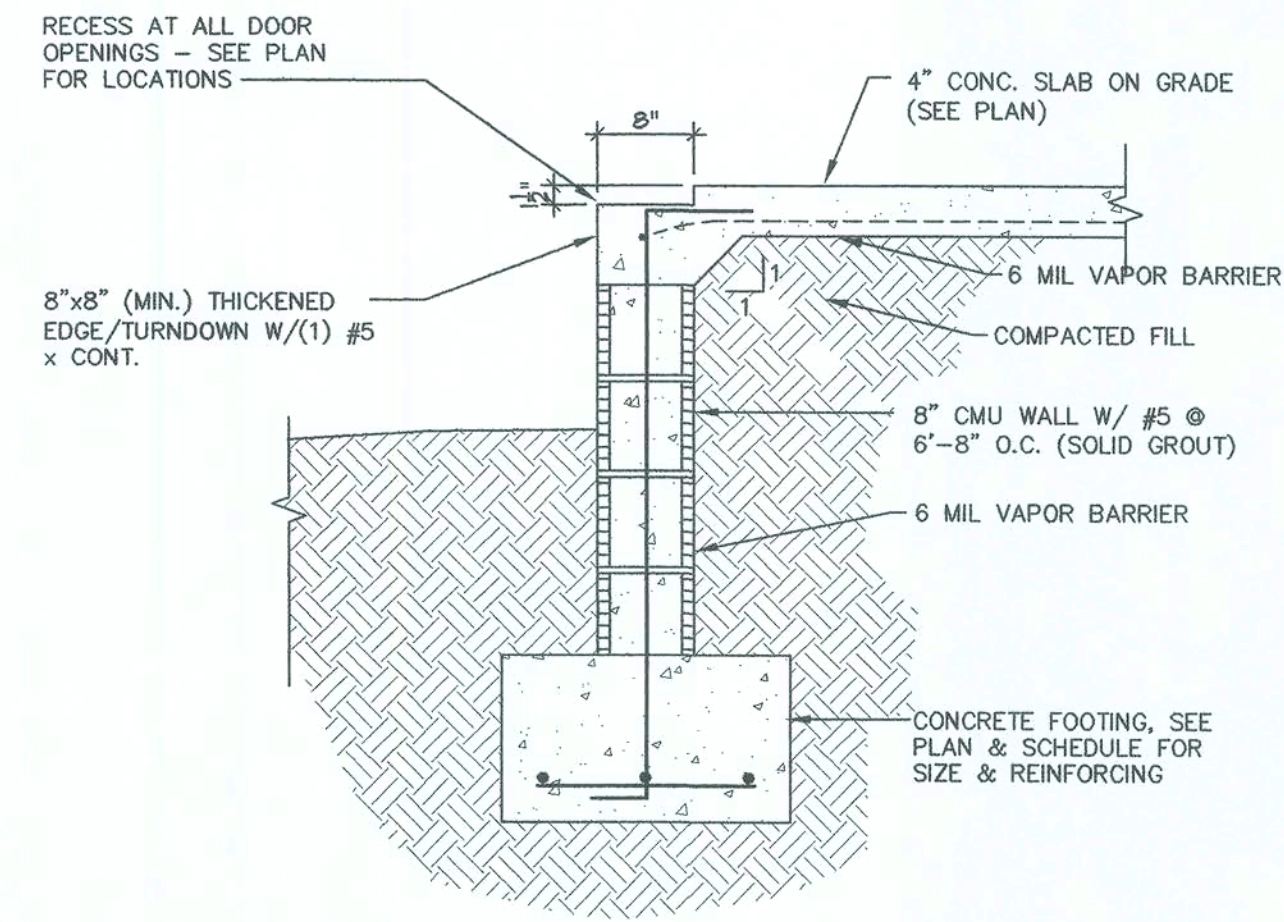
NOTE:
FOR SIMILAR CONDITION USE
PRE-ENGINEERED WOOD
ROOF TRUSSES @ 24" o.c.



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

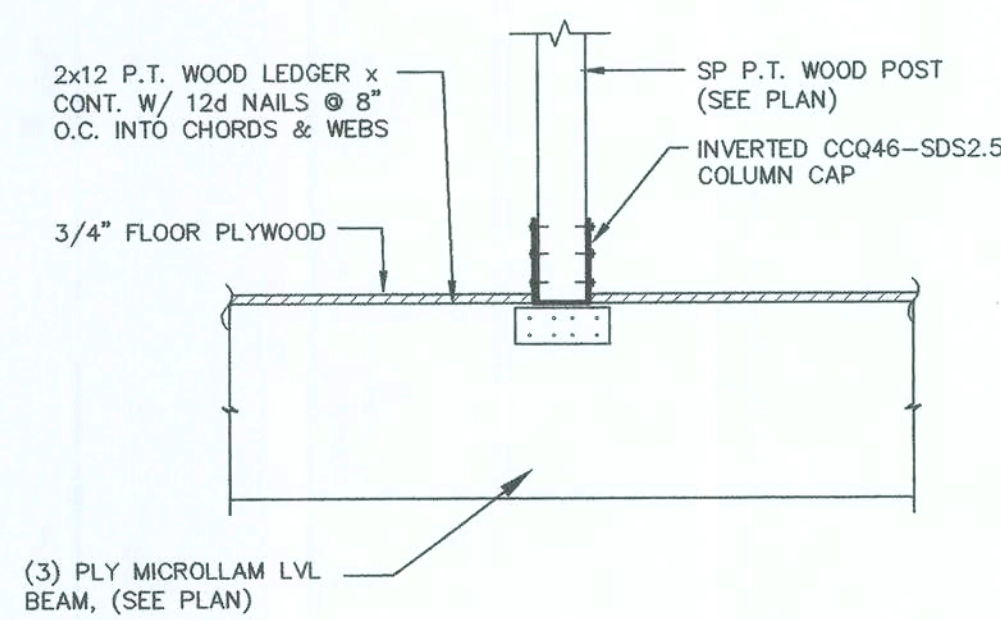


NOTE: STEEL FABRICATOR TO
SUPPLY SHOP DRAWINGS, (TYP.)

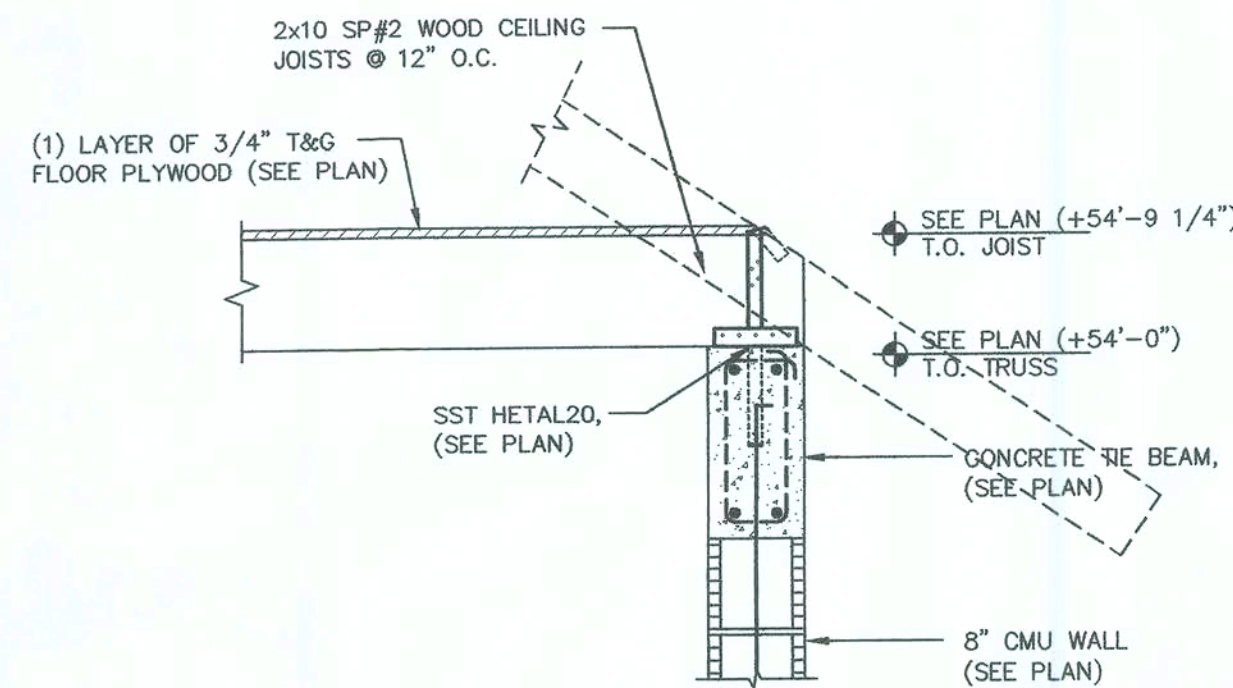


SECTION 3
3/4" = 1'-0"

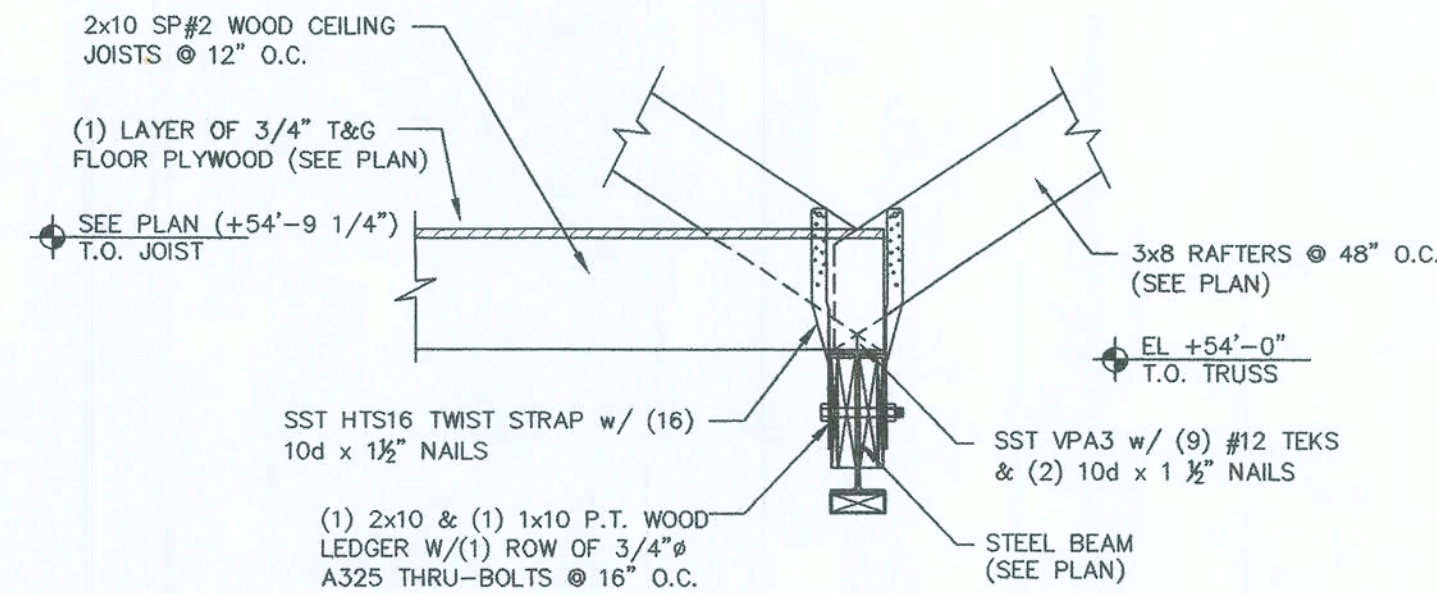
SECTION 4
3/4" = 1'-0"



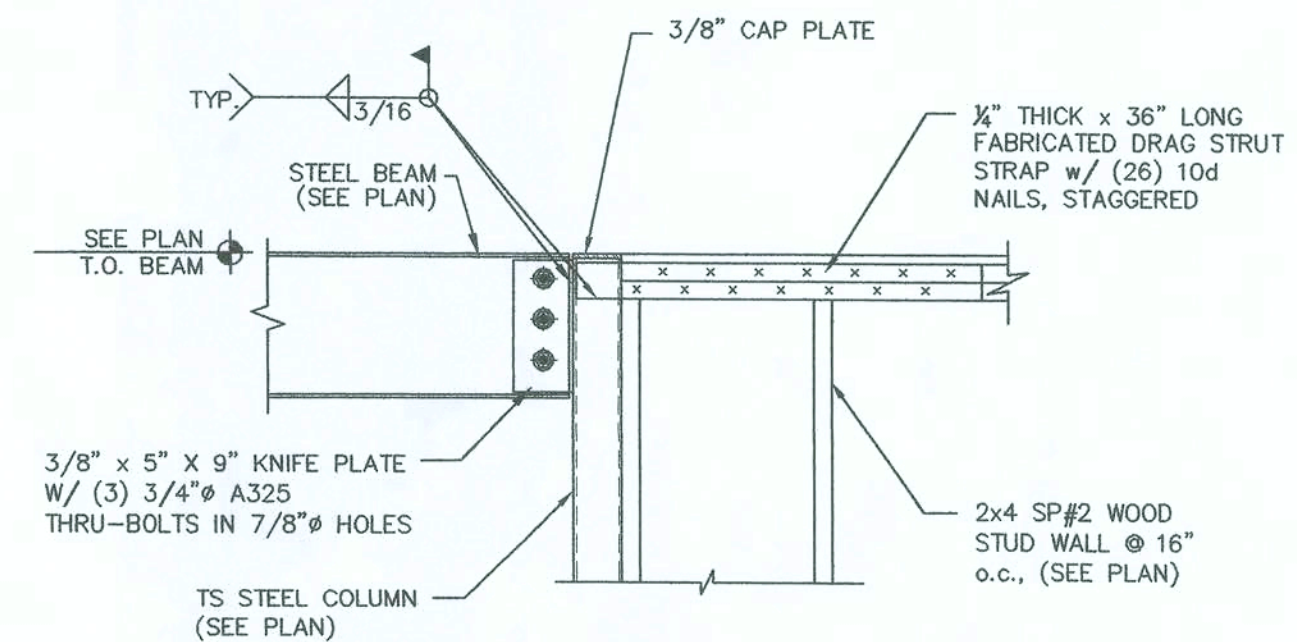
SECTION 5
3/4" = 1'-0"



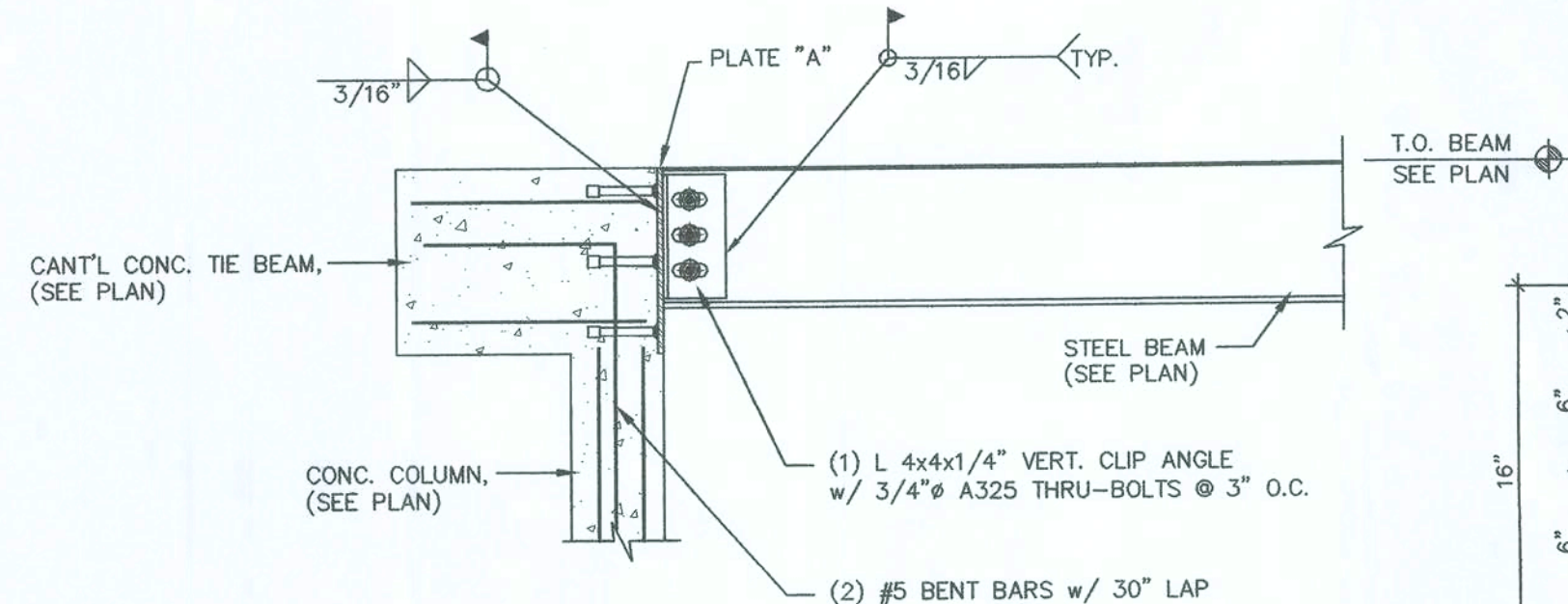
SECTION 6
3/4" = 1'-0"



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



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



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

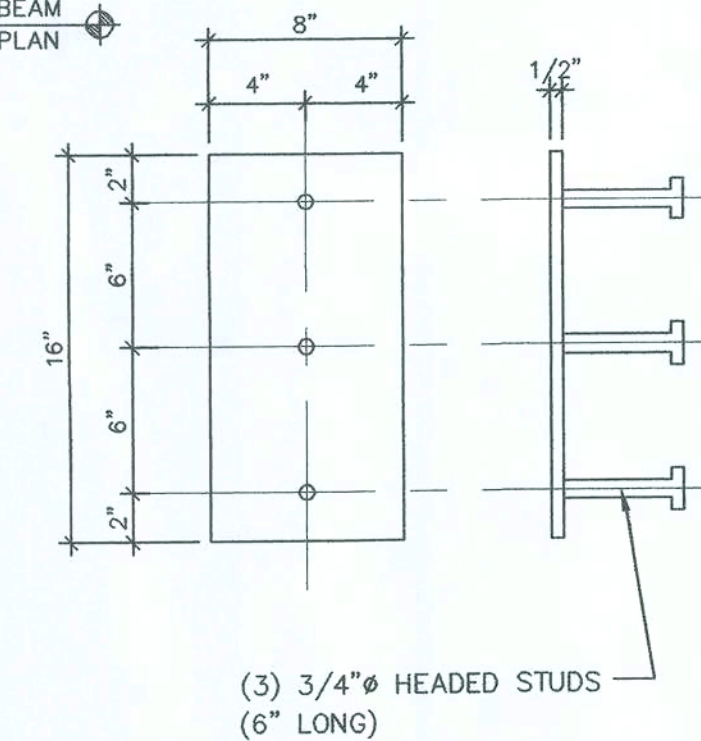
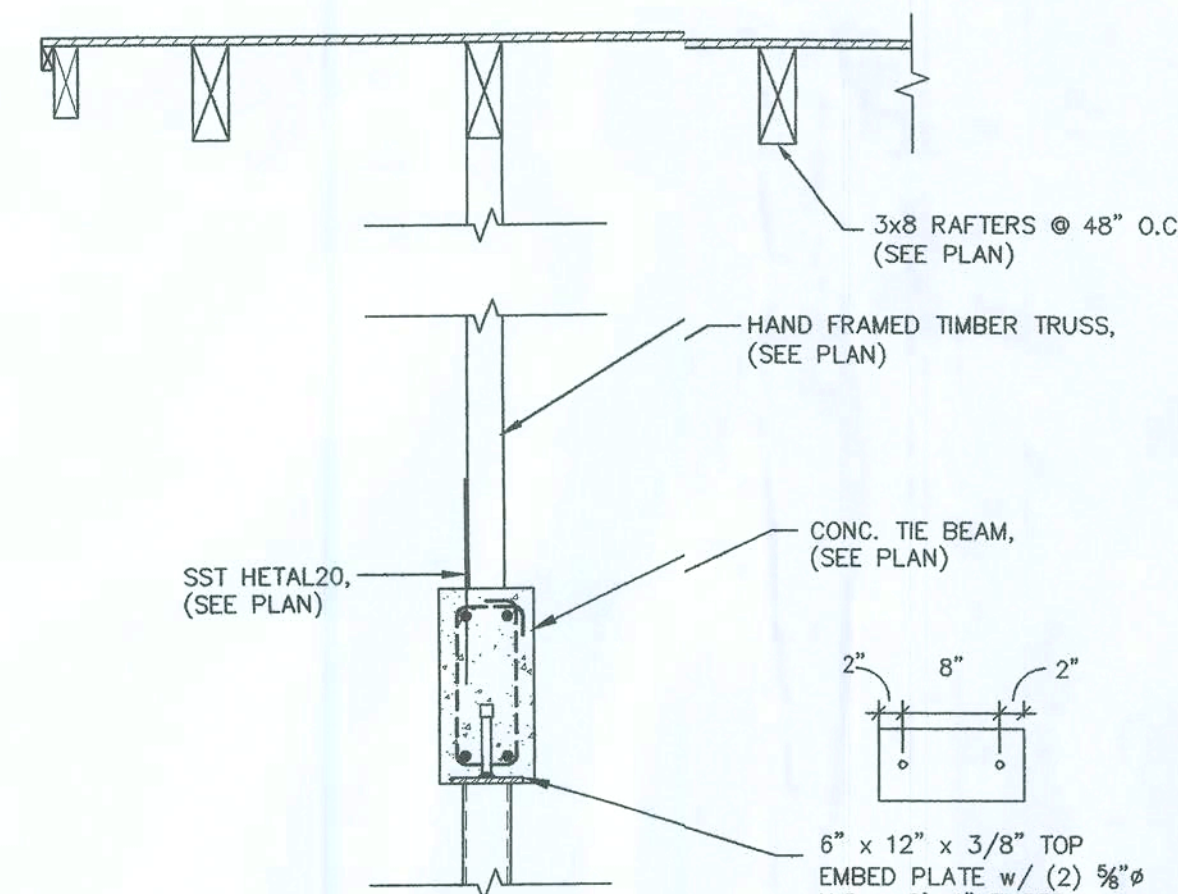
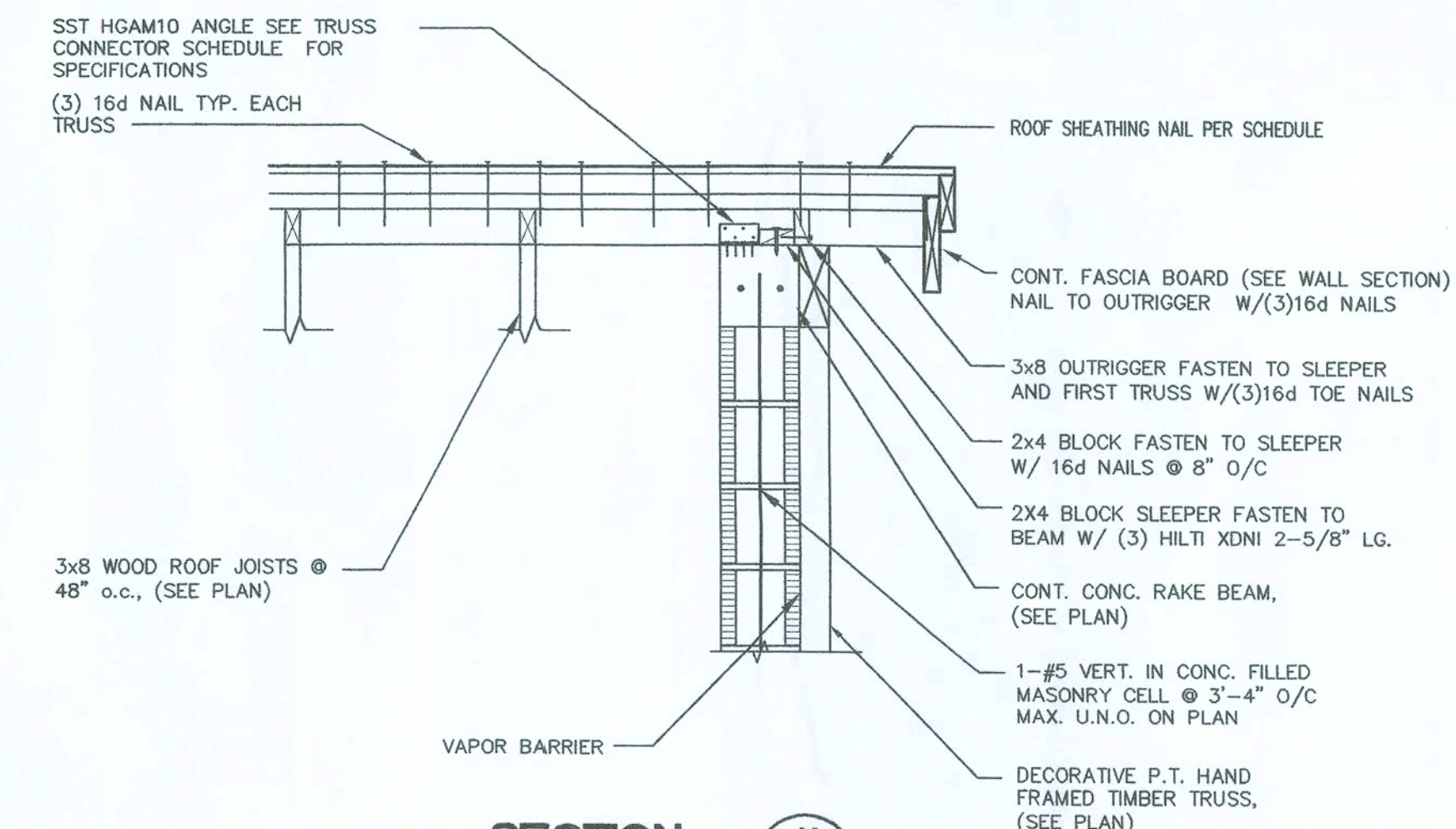


PLATE "A"
1 1/2" = 1'-0"

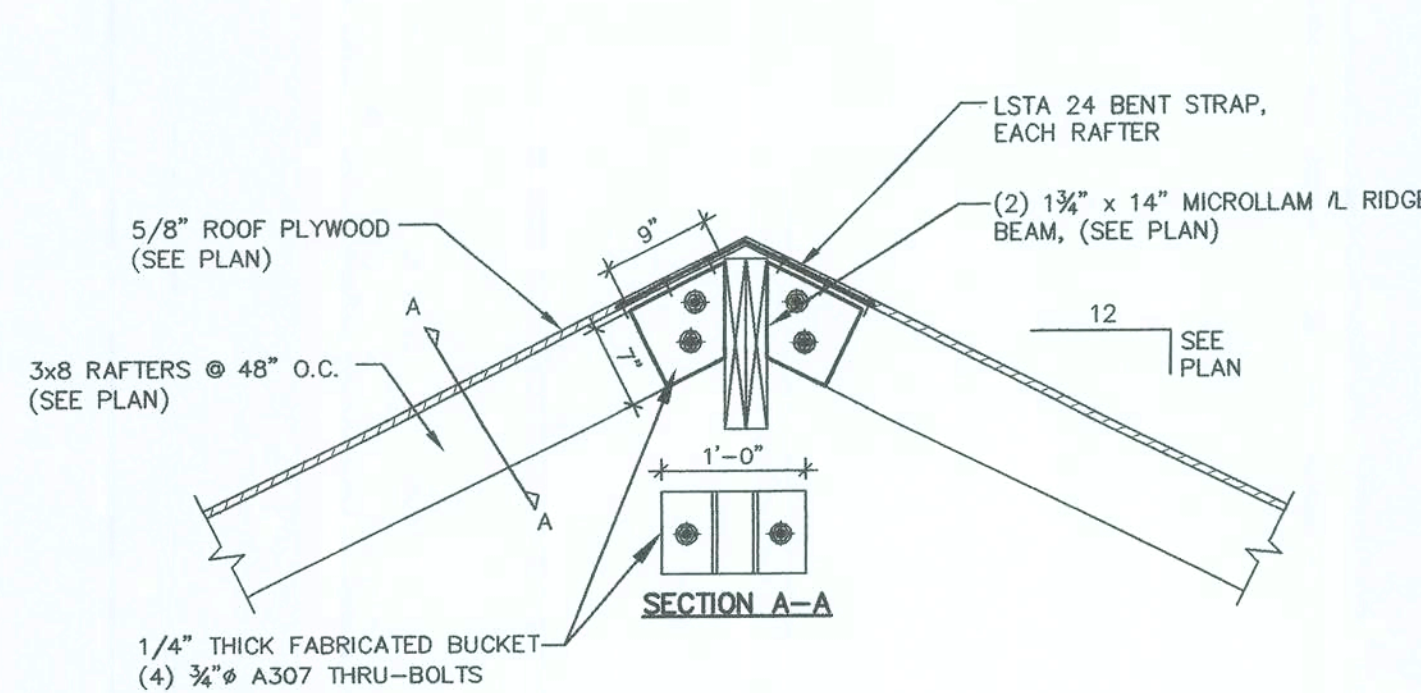


SECTION 10
3/4" = 1'-0"

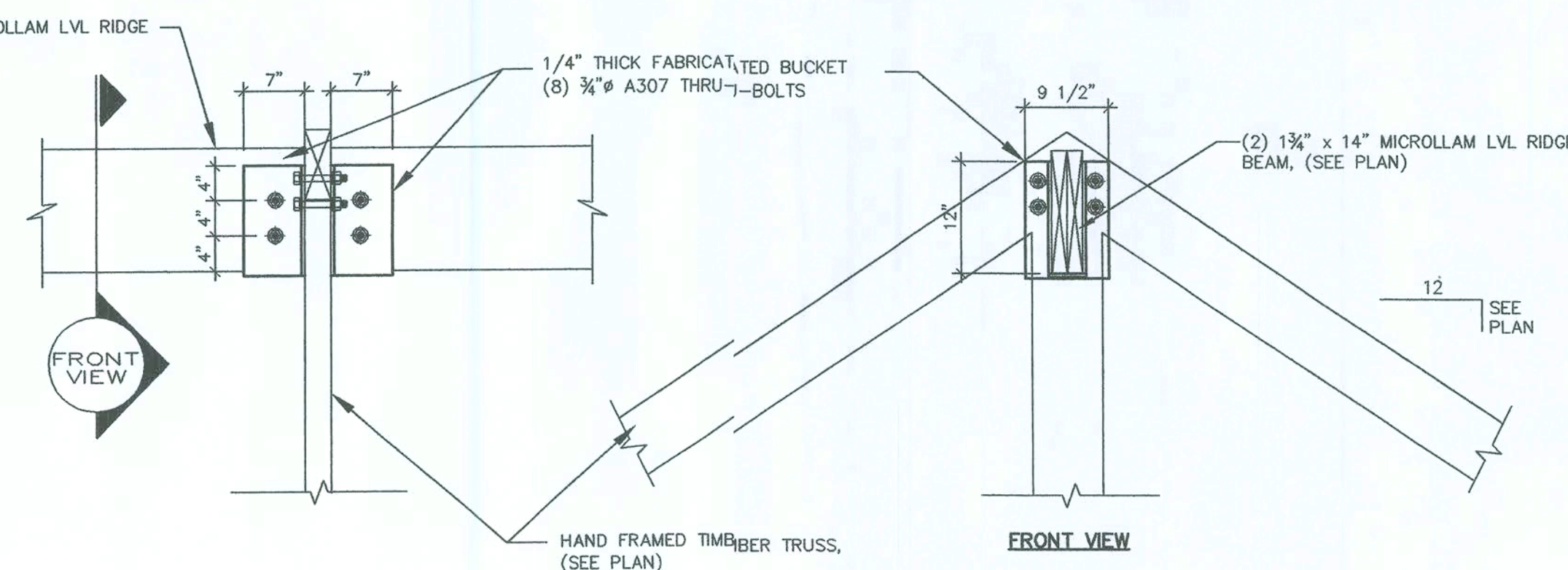
NOTE:
FOR SIM. CONDITION, NO
STEEL COLUMN IS USED



SECTION 11
3/4" = 1'-0"

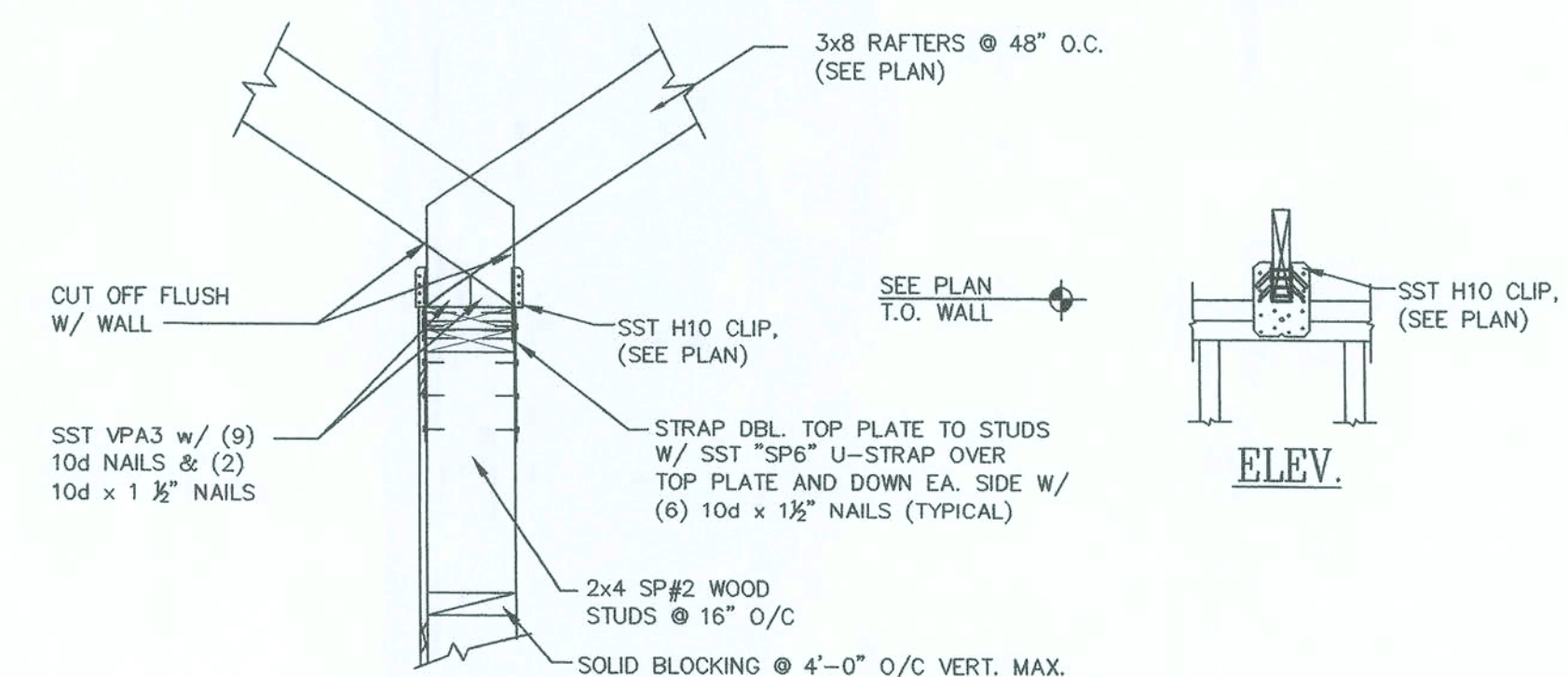


SECTION 12
3/4" = 1'-0"



SECTION 13
3/4" = 1'-0"

NOTE: STEEL FABRICATOR TO
SUPPLY SHOP DRAWINGS, (TYP.)



SECTION 14
3/4" = 1'-0"

Signature

STRUCTURAL DETAILS
SCALE: AS NOTED

MR. AND MRS. WADE HORNSBY
COLUMBIA COUNTY
FLORIDA

the lawrence group
ARCHITECTS 205 WORTH AVENUE, PALM BEACH, FLORIDA 33480 P.H. (561) 855-0670

PERMIT ISSUE
4-6-07

A8
6004

STRUCTURAL NOTES

CODING AND STANDARDS

1. WIND LOADS AS PER ASCE 1-02/EDITION, FOR A 110-MPH WIND SPEED, EXPOSURE B, 100 IMPORTANCE FACTOR, AND AN INTERIOR PRESSURE COEFFICIENT +0.18 AND -0.18.
2. THE PROJECT WAS DESIGNED IN ACCORDANCE WITH THE:
- A. FLORIDA BUILDING CODE 2004 EDITION, ENCLOSED.
- B. BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318/2002 EDITION).
- C. MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES (ACI 318/1994 EDITION).
- D. SPECIFICATION FOR THE DESIGN, FABRICATION & ERECTION OF STRUCTURAL STEEL FOR BUILDINGS (AMERICAN INSTITUTE OF STEEL CONSTRUCTION) AISC ASD/ 19th EDITION.
- E. SPECIFICATION FOR STRUCTURAL CONCRETE FOR BUILDINGS, ACI 301/1996 EDITION.
- F. ASCE 1-02.

3. ARCHITECTURAL AND MECHANICAL DRAWINGS:

- A. THE STRUCTURAL DRAWINGS ARE PART OF THE CONTRACT DOCUMENTS AND DO NOT BY THEMSELVES PROVIDE ALL THE INFORMATION REQUIRED TO PROPERLY COMPLETE THE PROJECT STRUCTURE. THE GENERAL CONTRACTOR SHALL CONSULT THE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND COORDINATE THE INFORMATION CONTAINED IN THESE DRAWINGS WITH THE STRUCTURAL DRAWINGS TO PROPERLY CONSTRUCT THE PROJECT.
- B. REFER TO ARCHITECTURAL, MECHANICAL OR ELECTRICAL DRAWINGS FOR ADDITIONAL OPENINGS, DEPRESSIONS, FINISHES, INSERTS, BOLTS, SETTINGS, DRAINS, REGLETTS, ETC.
- C. BEFORE ORDERING ANY MATERIALS OR DOING ANY WORK, THE CONTRACTOR SHALL VERIFY ALL REQUIREMENTS TO PROPERLY SIZE OR FIT THE WORK. NO EXTRA CHARGE OR COMPENSATION WILL BE ALLOWED BY THE OWNER RESULTING FROM THE CONTRACTOR'S FAILURE TO COMPLY WITH THIS REQUIREMENT.
- D. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER BEFORE PROCEEDING WITH ANY WORK.
4. SECTIONS AND DETAILS:
- ALL DETAILS, SECTIONS AND NOTES SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS ELSEWHERE UNLESS OTHERWISE SHOWN.

SPECIALTY ENGINEER PRODUCTS

1. THE GENERAL CONTRACTOR IS RESPONSIBLE TO COORDINATE THE PROPER SUBMISSION OF SPECIALTY ENGINEERED SHOP DRAWINGS WHICH SHALL BE SIGNED AND SEALED BY AN ENGINEER REGISTERED IN THE STATE OF FLORIDA. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO ASSURE THAT THE SPECIALTY ENGINEERED SHOP DRAWINGS ARE SUBMITTED IN A TIMELY MANNER SO AS TO ALLOW REVIEW AND RESUBMISSIONS AS REQUIRED. ALL SPECIALTY ENGINEERED PRODUCTS SHALL BE DESIGNED FOR THE APPROPRIATE GRAVITY LOADS AND WIND LOADS INCLUDING UPLIFT AND LATERAL LOADS. INTERIOR SPECIALTY PRODUCTS SHALL BE DESIGNED FOR LATERAL LOADS TO ASSURE STABILITY. SPECIALTY ENGINEERED PRODUCTS SHALL BE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
- A. LIGHT GAUGE METAL FRAMING INCLUDING, BUT NOT LIMITED TO, SOFFITS, CLADDINGS, CEILING, ETC.
- B. MISCELLANEOUS METALS INCLUDING STEEL STAIRS, MECHANICAL EQUIPMENT SUPPORTS, FRAMES THAT SUPPORT MACHINES, PIPES OR OTHER STRUCTURAL METAL USED FOR SUPPORT OF MECHANICAL SYSTEMS.
- C. MISCELLANEOUS HANGARS, METAL FRAMES, LADDERS, RIGGING, HANGING WALLS, METAL RAILINGS, GLAZING FRAMES, CLADDINGS SUCH AS STONE, PRECAST, ALUMINUM, METAL PANELS, CABLE BARRIER SYSTEMS, ETC. OR ANY OTHER MISCELLANEOUS PRODUCT REQUIRED BY THE ARCHITECTURAL OR MECHANICAL CONSTRUCTION DOCUMENTS.

FOUNDATION

1. ALL SITE PREPARATION AND EXCAVATION WORK IS TO BE PERFORMED IN STRICT ACCORDANCE WITH THE RECOMMENDATIONS WITHIN THE SOILS AND FOUNDATIONS INVESTIGATION REPORT PREPARED BY REGISTERED SOILS ENGINEER.
2. THE BUILDING SITE SHOULD BE EXCAVATED TO THE DEPTH AND EXTENT INDICATED IN THE SOILS REPORT. ALL SUBGRADES SHALL BE APPROVED IN WRITING BY THE SOILS ENGINEER PRIOR TO BACKFILLING.
3. BOTTOM OF FOOTINGS ASSUMED TO BEAR ON SOIL CAPABLE OF SAFELY SUPPORTING 2500 PSF.
4. SOILS SUPPORTING ALL FOOTINGS MUST BE INSPECTED AND APPROVED BY A REGISTERED SOILS ENGINEER BEFORE CONSTRUCTION. APPROVAL IN WRITING MUST INDICATE THE SOIL IS ADEQUATE TO SAFELY SUSTAIN SPECIFIED SOIL BEARING PRESSURE.
5. TOP OF ALL EXTERIOR FOOTINGS SHALL BE MINIMUM 12-INCHES BELOW EXTERIOR FINISH GRADE.
6. EXCAVATION & BACKFILL:
- A. ALL EXCAVATION SHALL BE KEPT DRY. EXCAVATE TO DEPTHS AND DIMENSIONS INDICATED. TAKE EVERY PRECAUTION TO GUARD AGAINST ANY MOVEMENT OR SETTLEMENT OF ADJACENT STRUCTURES, UTILITIES, PIPING, ETC.
- B. PROVIDE ANY BRACING OR SHORING NECESSARY TO AVOID SETTLEMENT OR DISPLACEMENT OF EXISTING FOUNDATION OR STRUCTURES.
7. CENTERLINE OF FOOTINGS SHALL COINCIDE WITH CENTERLINE OF COLUMNS UNLESS OTHERWISE NOTED ON DRAWINGS.
8. DIMENSIONS: ALL DIMENSIONS AND ELEVATIONS SHOWN ON THE STRUCTURAL DRAWINGS MUST BE VERIFIED AND COORDINATED WITH THE ARCHITECTURAL DRAWINGS BY THE CONTRACTOR BEFORE PROCEEDING WITH THE CONSTRUCTION. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT OR ENGINEER IN WRITING BEFORE PROCEEDING WITH ANY WORK.

CONCRETE

1. CONCRETE ELEMENTS TO HAVE THE FOLLOWING STRENGTHS:

A. FOUNDATIONS	3,000 PSI
B. SLAB-ON-GRADE	3,000 PSI
C. COLUMNS	3,000 PSI
D. BEAMS	3,000 PSI
E. TIE BEAMS	3,000 PSI
F. MASONRY GROUT	3,000 PSI

ALL OTHER CONCRETE TO BE 3,000 PSI UNLESS NOTED OTHERWISE.

2. ALL CONCRETE SHALL BE READY MIX, HAVE A MINIMUM COMPRESSIVE STRENGTH OF:

A. 3,000 PSI + 28 DAYS AND HAVE A MINIMUM OF 91 LBS. OF CEMENT PER CUBIC YARD.

B. SLUMPS SHALL BE 4" MINIMUM AND 6" MAXIMUM.

C. CONCRETE SHALL HAVE 2 PERCENT AIR ENTRAINMENT.

D. ALL CONCRETE TO HAVE MAXIMUM WATER/CEMENT RATIO OF 0.59.

E. JOBSITE WATER SHALL NOT BE ADDED.

3. ALL CONCRETE WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE ACI BUILDING CODE (ACI 318/1999 EDITION), THE ACI DETAILING MANUAL (ACI 318/1994 EDITION) AND THE SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 301/1996 EDITION).

4. SUBMIT ALL REINFORCING STEEL SHOP DRAWINGS FOR APPROVAL PRIOR TO ANY FABRICATION.

5. CONCRETE COVER FOR REINFORCING STEEL SHALL BE AS REQUIRED BY THE 1995 ACI SPECIFICATIONS.

6. WELDED WIRE FABRIC SHALL COMPLY WITH ASTM A 185, UNLESS OTHERWISE SPECIFIED. PLACE FABRIC 2" CLEAR FROM TOP OF THE SLAB IN SLAB ON GRADE AND SUPPORT ON SLAB BOLTERS SPACED AT 3'-0" O.C.

7. REINFORCING:

A. ALL REINFORCING STEEL SHALL BE MANUFACTURED FROM HIGH STRENGTH BILLET STEEL CONFORMING TO ASTM DESIGNATION A 615 GRADE 60.

8. LAP ALL BARS MINIMUM 48 DIAMETERS UNLESS OTHERWISE NOTED ON DRAWINGS. LAP ALL WWP A MINIMUM OF 6 INCHES UNLESS OTHERWISE NOTED.

9. REINFORCING BARS:

A. AT CORNERS OF CONCRETE WALLS, BEAMS AND CONTINUOUS WALL FOOTINGS, PROVIDE MATCHING HORIZONTAL BARS X 5'-0" BENT BAR FOR EACH HORIZONTAL BAR SCHEDULED AT EACH FACE.

B. WHERE COLUMNS ARE AN INTEGRAL PART OF CONCRETE WALLS, WALL REINFORCEMENT SHALL BE CONTINUOUS THRU THE COLUMNS.

C. ALL HOOKS SHOWN IN REINFORCEMENT SHALL BE ACI RECOMMENDED HOOKS UNLESS OTHERWISE NOTED.

CONCRETE CONT'D

9. REINFORCING BAR

- D. CONTRACTOR SHALL INCLUDE IN HIS BASE BID THE COST OF 2500 LBS. OF ADDITIONAL REINFORCING STEEL, INCLUDING FABRICATION, BENDING, FURNISHING AND PLACING. THIS EXTRA STOCK SHALL BE FURNISHED AND USED FOR SPECIAL CONDITIONS AS DIRECTED BY THE ARCHITECT, THE ARCHITECT'S AGENT OR BY THE OWNER'S CONSTRUCTION SUPERVISOR. THIRDFRICE OF THE UNUSED EXTRA STOCK SHALL BE CREDITED TO THE OWNER'S ACCOUNT.
10. CONSTRUCTION JOINTS IN STRUCTURAL SLABS AND BEAMS SHALL BE AT MID-SPAN AND KEY JOINTED WITH REINFORCING CONTINUOUS ACROSS JOINT, AND ADDITIONAL SHEAR FRCTION WITH REINFORCING.

STEEL

1. ALL STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST AISC CODE STRUCTURAL STEEL SHALL CONFORM TO:

A. ASTM SPECIFICATION A 36 FOR PLATES.

B. ALL STEEL TUBS SHALL CONFORM TO ASTM SPECIFICATION A 500 GRADE B (FY=46 KSI).

C. ASTM SPECIFICATION A 992 GRADE 50 FOR BEAMS.

D. ALL STEEL TO HAVE A SHOP COAT OF RUST INHIBITIVE PAINT.

E. DELETE PAINT CALL STEEL TO RECEIVE SPRAYS ON FIREPROOFING OR CONCRETE ENCASUREMENT.

F. ALL MILL CAMBIE TO BE ORIENTED UPWARD DURING FABRICATION AND ERECTION.

2. ALL SHOP AND FLD WELDING SHALL BE PERFORMED BY WELDERS QUALIFIED, AS DESCRIBED IN "AMERICAN WELDING SOCIETY'S STANDARD QUALIFICATION PROCEDURE" (AWS D1.1) TO PERFORM THE TYPE OF WORK REQUIRED.

3. ALL ALUMINUM AN STEEL MEMBERS TO BE TREATED OR PROPERLY SEPARATED TO PREVENT GALVANIC AND CORROSIVE EFFECTS.

4. ALL STEEL WELDS RODS SHALL BE E70XX ELECTRODES.

5. SUBMIT ALL STEESHOOP DRAWINGS FOR APPROVAL PRIOR TO ANY FABRICATION.

6. EQUIPMENT SUPPORTS:

PROVIDE ALL SUPPORTING STEEL NOT INDICATED ON PLAN AS REQUIRED FOR THE INSTALLATION OF MECHANICAL EQUIPMENT AND MATERIALS, INCLUDING ANGLES, CHANNELS, BEAMS, HANGERS, ETC. DO NOT SUPPORT EQUIPMENT OR PIPING FROM METAL DECKING.

7. DECK SUPPORTS:

PROVIDE 1/4" BENT LATES AT ALL HIPS, VALLEYS, SKEWED BEAMS AND OTHER AREAS FOR DECK SUPPORT.

MASONRY

1. MASONRY UNITS SHALL BE ASTM C 90 GRADE N WITH MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI ON NET AREA OF INDIVIDUAL UNITS. ALL CMU SHALL BE LAID IN A FULL BED OF MORTAR IN RUNNING BOND (UNO).

2. FOLLOWING ARE T BLOCK STRENGTHS REQUIRED:

A. ASTM C 90 - 2,000 PSI ON NET AREA OF INDIVIDUAL UNITS

3. ALL MORTAR SHALL BE TYPE S (OR TYPE M)

A. IN ACCORDANCE WITH ASTM SPECIFICATION C 270

B. WITH A MINIMUM COMPRESSIVE STRENGTH OF 1,800 PSI AT 28 DAYS, (2,500 WITH TYPE M).

4. GROUT SHALL BE HIGH SLUMP MIX

A. IN ACCORDANCE WITH ASTM SPECIFICATION C 476

B. HAVING A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI

5. ALL CONCRETE MORTAR BEARINGS AND SHEAR WALLS SHALL BE CONSTRUCTED AND INSPECTED BY A QUALIFIED ENGINEER IN ACCORDANCE WITH THE "BUILDING CODE REQUIREMENT FOR MASONRY STRUCTURES" (ACI 530/ASCE 5/TMS 402) AND "SPECIFICATIONS FOR MASONRY STRUCTURES" (ACI 530/ASCE 6/TMS 602/11 1995 EDITIONS).

6. PROVIDE HOT DIPPED GALVANIZED LADDER TYPE HORIZONTAL JOINT REINFORCEMENT (9 GA) AT 16" ON CENTER VERTICAL IN ALL MASONRY WALLS, PROVIDE DOVE TAIL SLOT ANCHORS AT CONCRETE COLUMNS.

7. PROVIDE CONTROL JOINTS IN MASONRY WALLS AT A SPACING OF 96' + O.C. AND ALIGN WITH ARCHITECTURAL CONTROL JOINTS.

8. EPOXY GROUT SHALL BE NON-SHRINK HIGH CREEP RESISTANT, AND SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE PROPERTIES:

TENSILE STRENGTH: ASTM C 301, 1800 PSI

FLEXURAL STRENGTH: ASTM C 308, 4,000 PSI

COMPRESSIVE STRENGTH: ASTM C 578, 16,000 PSI/1 DAYS.

WOOD

1. ALL STRUCTURAL WOOD MEMBERS ARE DESIGNED AS "DRY-USE". MOISTURE CONTENT MUST BE 19 % OR LESS. STORE WOOD FRAMING ABOVE GROUND AND UNDER TARPS IN PROPER AIR CIRCULATION.

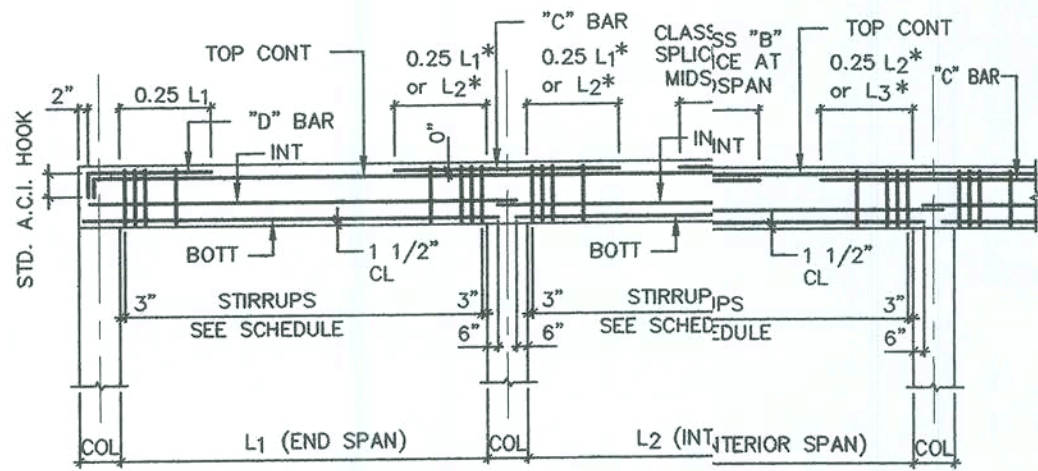
2. ALL LUMBER SHALL BE SOUTHERN PINE SPECIES 2 GRADE OR APPROVED EQUAL. ALLOWABLE DESIGN STRESS SHALL FOLLOW NATIONAL DESIGN SPECIFICATION (NDS) (LATEST EDITION).

3. PROVIDE 8P BOATE PRESSURE TREATED LUMBER IN ACCORDANCE WITH AWWA STANDARDS TO MINIMUM 0.40 PCF RETENTION WHERE LUMBER IS IN CONTACT WITH CONCRETE/MASONRY OR OUTSIDE OF BUILDING.

4. FLYWOOD SHEARING:

- A. ROOF: USE 1/2" 40/20 RATED, EXP. 1, FLYWOOD SHEATHING.
- B. SEE FRAMING PLANS FOR NAILING AND/OR BLOCKING REQUIREMENTS. USE 8'-0" X 4'-0" WIDE SHEETS WITH LENGTH ACROSS FRAMING. STAGGER JANEL END JOINTS 4'-0" TYP. ALLOW 1/8" SPACE ALONG PANEL EDGES AND END JOINTS.
- C. SEE FRAMING PLANS FOR DIAPHRAGM NAILING TYPE, SIZE, SPACING AND LOCATION.

5. WOOD CONNECTORS - ALL NAILS USED FOR STRUCTURAL FRAMING MEMBERS SHALL BE CORNION W/ UNO. ALL NAILS, TRUSS HANGERS, TRUSS ANCHORS AND STRAPS SHALL BE 602020 TYPE 304, STAINLESS STEEL OR EQUAL FOR CORROSIVE RESISTANCE. LL METAL STRAPS MUST BE INSTALLED WITH EQUAL LENGTHS ABOUT THE HOT LINE. USE SIMPSON STRONG-TIE CONNECTOR PRODUCTS OR APPROVED EIAL. TOE NAILING WILL NOT BE PERMITTED.



"C" BAR : TOP BAR AT INTERIOR SUPPORT (IN ADDITION TO TOP CONT BARS) PLACE IN SAME LAYER AS TOP CONT BARS (U_{U.O.N.}). LOCATE AT RIGHT SUPPORT OF SPAN INDICATED IN SCHEDULE.

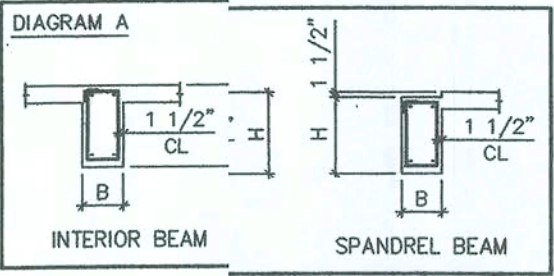
"D" BAR : TOP BAR AT EXTERIOR SUPPORT (IN ADDITION TO TOP CONT BARS) PLACE IN SAME LAYER AS TOP CONT BARS (U_{U.O.N.}).

"INT" BARS : INTERMEDIATE BARS LOCATED AT A SPACING E EQUAL TO THE WIDTH OF THE BEAM BUT NOT GREATER THAN 12" ABOVE BOTH BARS. IF MORE THAN ONE PAIR, PLACE IN LAYERS OF TWO.

CLASS "B" TENSION SPICE

#4	23"	#8	72"
#5	29"	#9	80"
#6	35"	#10	91"
#7	63"	#11	101"

* WHICHEVER IS GREATER.



NOTES :

WHEN ADJACENT BEAMS OR THE BEAMS HAVE TOP CONT BARS OF DIFFERENT SIZE, THE TRANSITION SHOULD BE MADE AT MIDSPAN OF THE BEAM WITH SMALLER SCHEDULED BARS. USE LAP SPICE LENGTH OF SMALLER SIZE BAR.

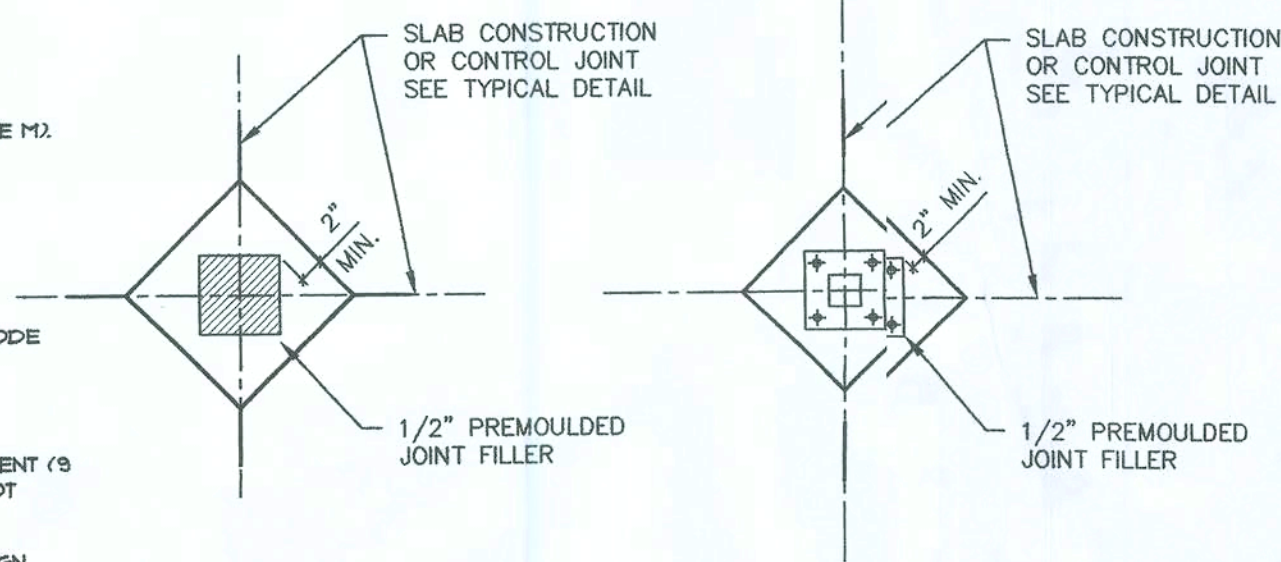
(2L) - INDICATES BARS PLACE IN TWO LAYERS. WHERE BARS ARE PLACED IN TWO LAYERS, THE SECOND LAYER BARS MUST BE PLACED DIRECTLY UNDER BARS IN THE FIRST LAYER (IF TOP BAR) OR DIRECTLY OVER BAR IN THE FIRST LAYER (IF BOTI BAR). PROVIDE 1" CLEAR DISTANCE BETWEEN LAYERS OR ONE BAR D DIAMETER, WHICHEVER IS THE GREATER DISTANCE.

SCHEDULED BEAM SIZES : [SEE DIAGRAM A]

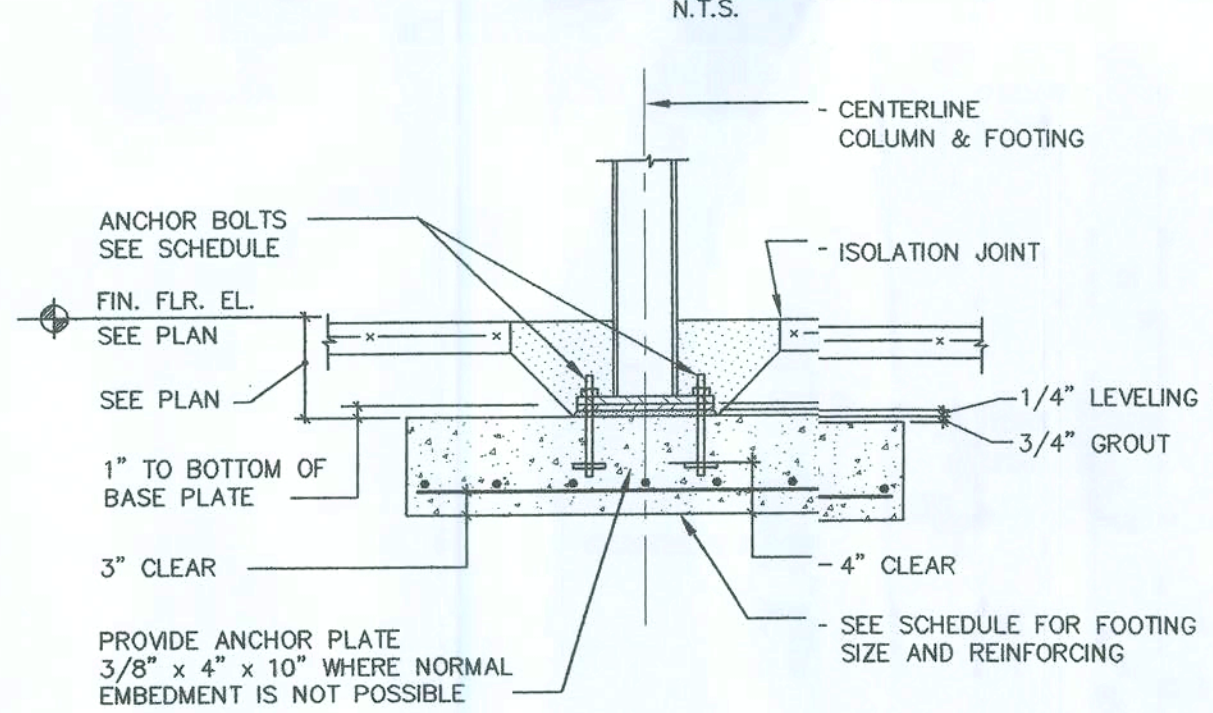
"B" INDICATES BEAM WIDTH DIMENSION. WHEN BEAM IS OVER A BLOCK WALL, USE ACTUAL BLOCK WIDTH (7 5/8" OR 11 5/8").

"H" INDICATES BEAM DEPTH DIMENSION. LESS 1 1/2" FOR REDCESS FOR BLOCK WALL. DEDUCTED WHERE APPLICABLE, OR MINIMUM DEPTH IN A VARIABLE DEPTH BEAM. COORDINATE BEAM CONFIGURATION WITH ARCHITECTURAL DRAWINGS.

TYPICAL BEAM BAR PLACEMENT DIAGRAM



TYPICAL ISOLATION JOINTS
CONCRETE AND STEEL



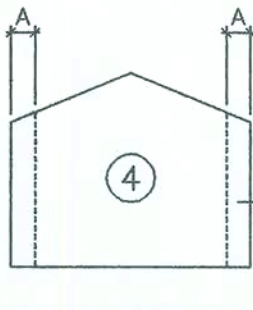
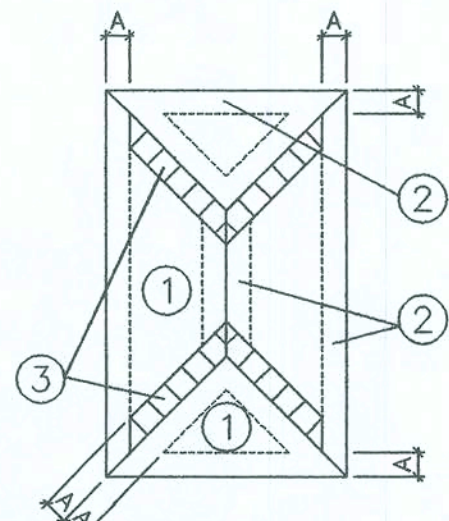
TYPICAL STEEL COLUMN FOOTING

METAL PLATE CONNECTED WOOD ROOF TRUSS CONNECTOR SCHEDULE												
MARK	MANUFACTURER	MODEL DESIGNATION	STATE (FL) OR LOCAL APPROVAL NUMBER	STATE APPROVAL FILE (PDF) NAME OR OTHER REFERENCE DOCUMENT NAME	UPLIFT		LATERAL LOAD				FASTENERS	COMBINED STRESS INDEX
					CALCULATED LOAD	ALLOWABLE CAPACITY	PARALLEL TO TRUSS (F1) CALCULATED LOAD	ALLOWABLE CAPACITY	PERPENDICULAR TO TRUSS (F2) CALCULATED LOAD	ALLOWABLE CAPACITY		
A	SIMPSON STRONG TIE CONNECTORS	HETAL 20	1901.21	NER489.PDF	750	1810	74	415	128	1100	(15) 10d x 1 1/2"	47K
B	SIMPSON STRONG TIE CONNECTORS	HGM10	—	—	280	850	282	1005	128	1105	(4) SDS 1/4"x1 1/2" (4) 1/4" x 2 3/4" TITENS	44K
C	SIMPSON STRONG TIE CONNECTORS	H10	1423.20	—	510	905	—	—	—	—	(16) 8d x 1 1/2"	57K

PLYWOOD SHEARWALL SCHEDULE									
MARK	THICKNESS	GRADE	NAILING	STUDS	FLOOR SILL	FND. SILL	SHEARWALL END POST	HOLDDOWN 2nd/Fnd	ALLOW SHEAR (plf)
(1)	19/32" ONE SIDE	APA RATED 40/20, EXP. 1	10d NAIL S @ 6" O.C. (FIELD) 10d NAIL S @ 4" O.C. (EDGES)	2x4, #2 SP @ 16" O.C.	2x4 W/(2) ROWS OF 16d NAILS @ 9" O.C.	2x4 P.T. W/ 1/4" @ T.C. x 3" LONG W/ SST BP5/8-3 @ 8" O.C.	(2) 2x4, #2 SP	HTT22 W/ 12" EMBED	715
NOTES: 1) ALL PANEL EDGES BACKED WITH 2 INCH NOMINAL OR WIDER FRAMING. 2) ALL NAILS ARE COMMON, TYPICAL. 3) STRICTLY FOLLOW ALL SST MANUFACTURER'S GUIDELINES AND INSTRUCTIONS FOR INSTALLATION OF CONNECTORS.									

WIND LOAD SCHEDULE - FLAT ROOF					
COMPONENTS & CLADDING	ROOF WIND LOADS			WALL WIND LOADS (SEE NOTE 1)	
	ROOF AREA (10 s.f.)			WALL AREA	
	(1)	(2)	(3)	(4)	(5)
PRESSURE (PSF)	+18.6	+18.6	+18.6	+19.5	+19.5
SUCTION (PSF)	-19.2	-22.9	-22.9	-21.3	-24.6

1. EXTERIOR GLAZED OPENINGS IN BUILDINGS SHALL COMPLY WITH FBC 2004 SECTION 1606 BY EITHER BEING DESIGNED FOR IMPACT RESISTANCE OR BEING PROTECTED BY IMPACT PROTECTIVE SYSTEMS.
2. CORNER DISTANCE, A = 3.0 FEET, 50 S.F., C&C



DOOR & WINDOW WIND PRESSURE (PSF)			
SIZE OF WALL OPENING (SQ. FT.)	WALL AREA		
	(4)	(5)	
0-10	+21.8 / -23.6	+21.8 / -29.1	
11-20	+21.6 / -23.5	+21.6 / -28.9	
21-30	+20.7 / -22.6	+20.7 / -27.0	
31-40	+20.2 / -22.0	+20.2 / -25.9	
41-50	+19.8 / -21.6	+19.8 / -25.2	
51-60	+19.5 / -21.3	+19.5 / -24.5	
61-75	+19.2 / -21.1	+19.2 / -24.0	
76-100	+18.9 / -20.7	+18.9 / -23.4	
101-125	+18.5 / -20.3	+18.5 / -22.6	
126-150	+18.2 / -20.0	+18.2 / -22.0	
151-200	+17.9 / -19.8	+17.9 / -21.5	

NOTES:

1. WIND DESIGN PER FLORIDA BUILDING CODE 2004 EDITION.
2. WIND LOADS AS PER ASCE 7-02/EDITION, FOR A 110-MPH WIND SPEED, EXPOSURE B, 1.00 IMPORTANCE FACTOR, AND AN INTERIOR PRESSURE COEFFICIENT +0.18 AND -0.18.
3. +: INDICATES WIND PRESSURE
-: INDICATES WIND SUCION
4. WALL DISTANCE A = 3.0 FT (COMPONENTS AND CLADDING)
5. FOR WALL OPENINGS BETWEEN THOSE GIVEN ABOVE THE LOAD MAY BE INTERPOLATED, OTHERWISE USE THE LOAD ASSOCIATED WITH THE LOWER WALL OPENING AREA.
6. EXTERIOR GLAZED OPENINGS IN BUILDINGS SHALL COMPLY WITH FBC-2004 BY EITHER BEING DESIGNED FOR IMPACT RESISTANCE OR BEING PROTECTED BY IMPACT PROTECTIVE SYSTEMS

ROOF SHEATHING NAILING SCHEDULE		
NAIL SIZE	NAIL SPACING	ZONE
8d RING SHANK	6" @ EDGES, 6" @ INTERMEDIATE SUPPORTS	ROOF (1) (2)
8d RING SHANK	4" @ EDGES, 6" @ INTERMEDIATE SUPPORTS	ROOF (3)

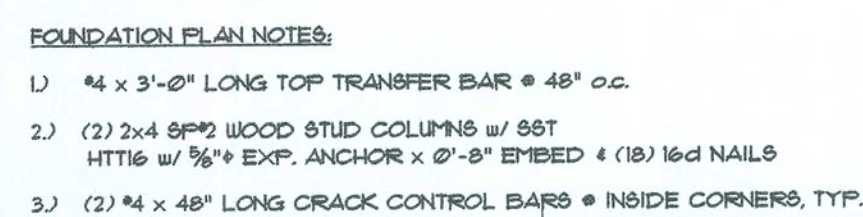
CORNER DISTANCE, A = 3.0 FEET

STEEL COLUMN SCHEDULE				
MARK	SIZE	BASE R	EXP. ANCHORS	REM
SC-1	15 3 1/2"x3 1/2"x3/16"	9x9x3/4"	(4) 5/8" @ EXP. ANCHOR x 0'-8" EMBED	DETAIL 1/A7

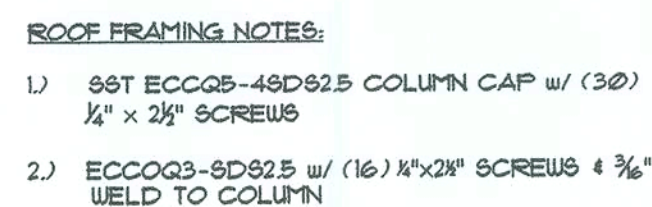
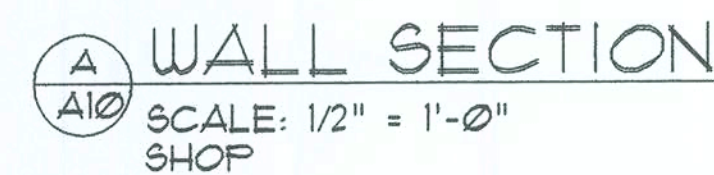
FOOTING SCHEDULE			
MARK	SIZE	REINFORCING	REM
F24.12	2'-0" x 12" x CONT.	3 #5 x CONT. & #4 TRANSVERSE BARS @ 24" o.c.	-
MF16.16	1'-4" x 16" x CONT.	3 #5 x CONT. BOTI.	-
F30	3'-0" x 3'-0" x 12"	(3) #5 EA. WAY TOP & BOTI.	-

CONCRETE/MASONRY COLUMN SCHEDULE					
MARK	SIZE (inches)	VERT. REINF.	TIES	SPACING	REMARKS
C-1	12" @	4 #5	#3	@ 8" O.C.	CONC.
C-2	8 x 12 (MIN.)	4 #5	#3	@ 8" O.C.	CONC.
C-3	8 x 16	6 #5	#3	@ 8" O.C.	CONC.
C-4	8" @	4 #5	#3	@ 8" O.C.	CONC.
C-5	8 x 18	6 #5	#3	@ 8" O.C.	CONC.
MC-1	8 x 16	2 #5	-	-	MASONRY
MC-2	8 x 24	3 #5	-	-	MASONRY

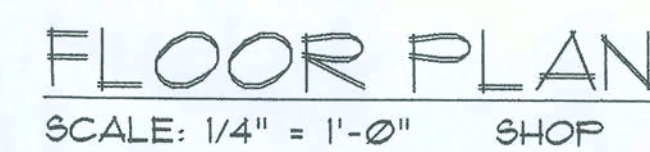
BEAM SCHEDULE							
MARK	SIZE BxH (inches)	REINFORCING			STIRRUPS		REMARKS
		BOTT	TOP	INT	TIES	SPACING	
B-1	8 x 22	2 #5	2 #5	2 #5	#3	@ 8" O.C.	-
B-2	8 x 24	2 #5	2 #5	2 #5	#3	@ 8" O.C.	-
B-3	8 x 30	2 #5	2 #5	2 #5	#3	@ 8" O.C.	-
AB-1	8 x 16	2 #5	2 #5	-	#3	@ 8" O.C.	ARCH BEAM
RB-1	8 x 12	-	-	2 #5	#3	@ 24" O.C.	RAKE BEAM
TB-1	8 x 16	2 #5	2 #5	-	#3	@ 24" O.C.	TIE BEAM
L-1	8 x 22	1 #5	1 #5	-	-	-	8F22 1B/1T
L-2	8 x 28	1 #5	1 #5	-	-	-	8F28 1B/1T








FOUNDATION PLAN
SCALE: 1/4" = 1'-0" SHOP

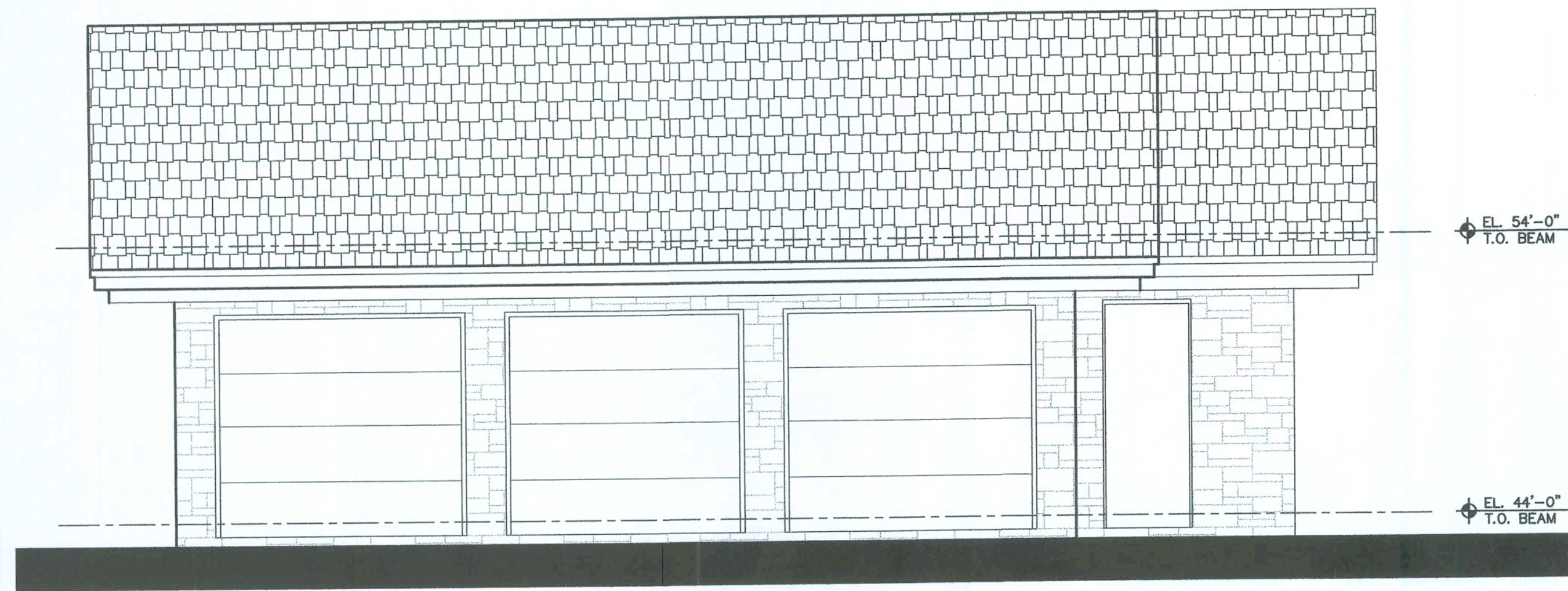


ROOF PLAN
SCALE: 1/4" = 1'-0" SHOP

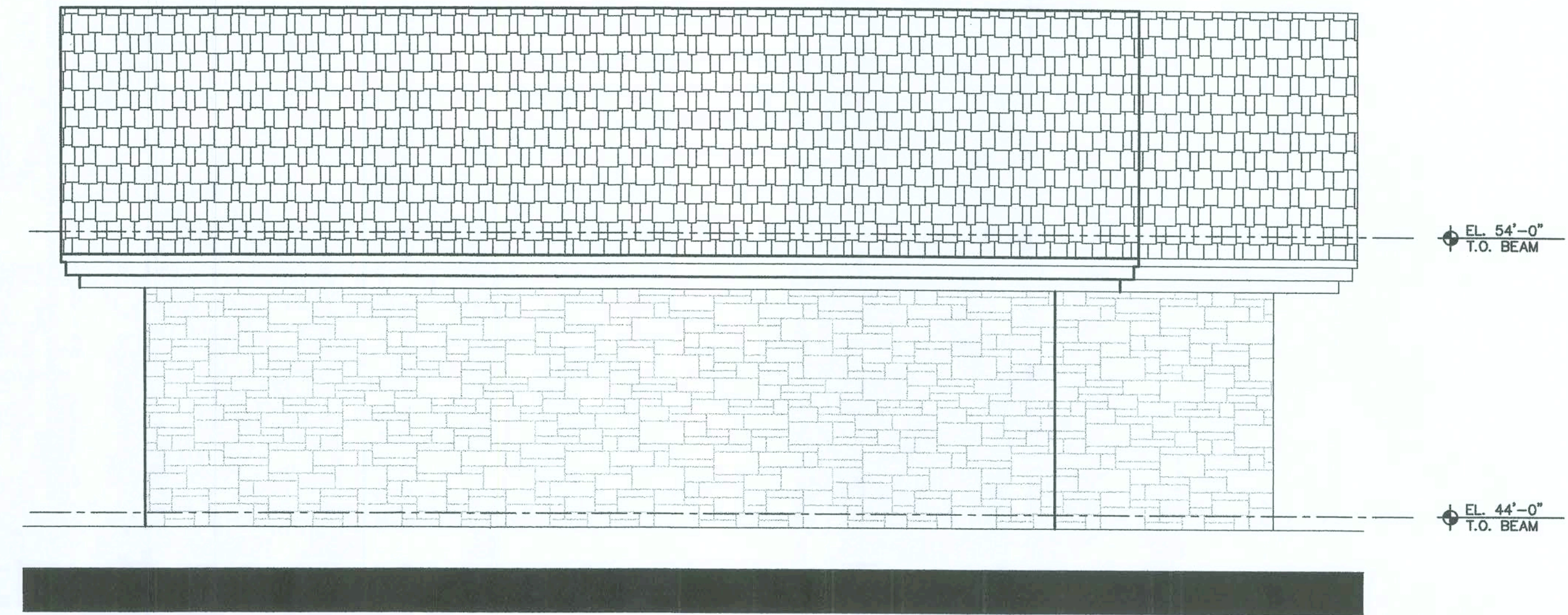


WALL TYPE LEGEND

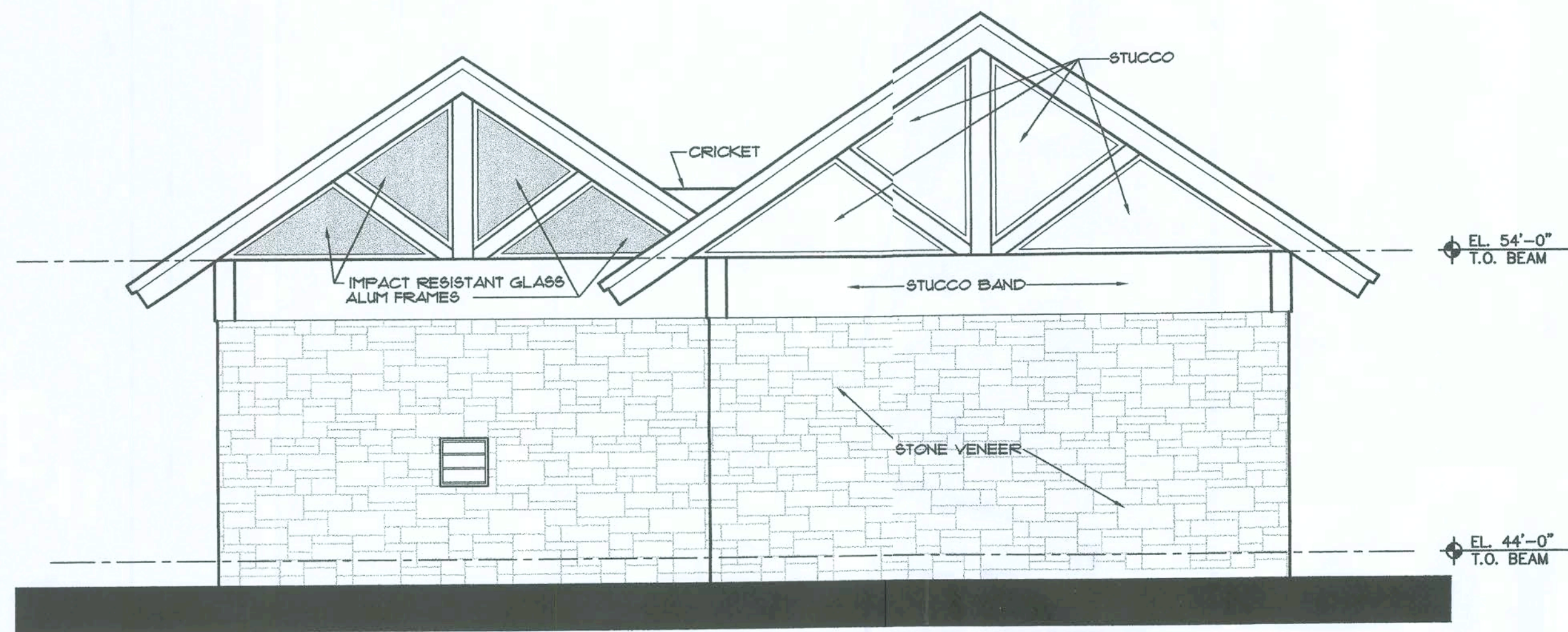
- | | |
|---|--|
|  | 3 5/8" METAL STUDS W/ 5/8" DRYWALL EACH SIDE |
|  | 3 5/8" METAL STUDS W/ 5/8" DRYWALL EACH SIDE W/ SOUND BATT |
|  | 8" CMU. |
|  | 8" CMU. W/ #5 VERT. IN CONC. FILLED CELL |
|  | CAST IN PLACE CONCRETE COLUMN |



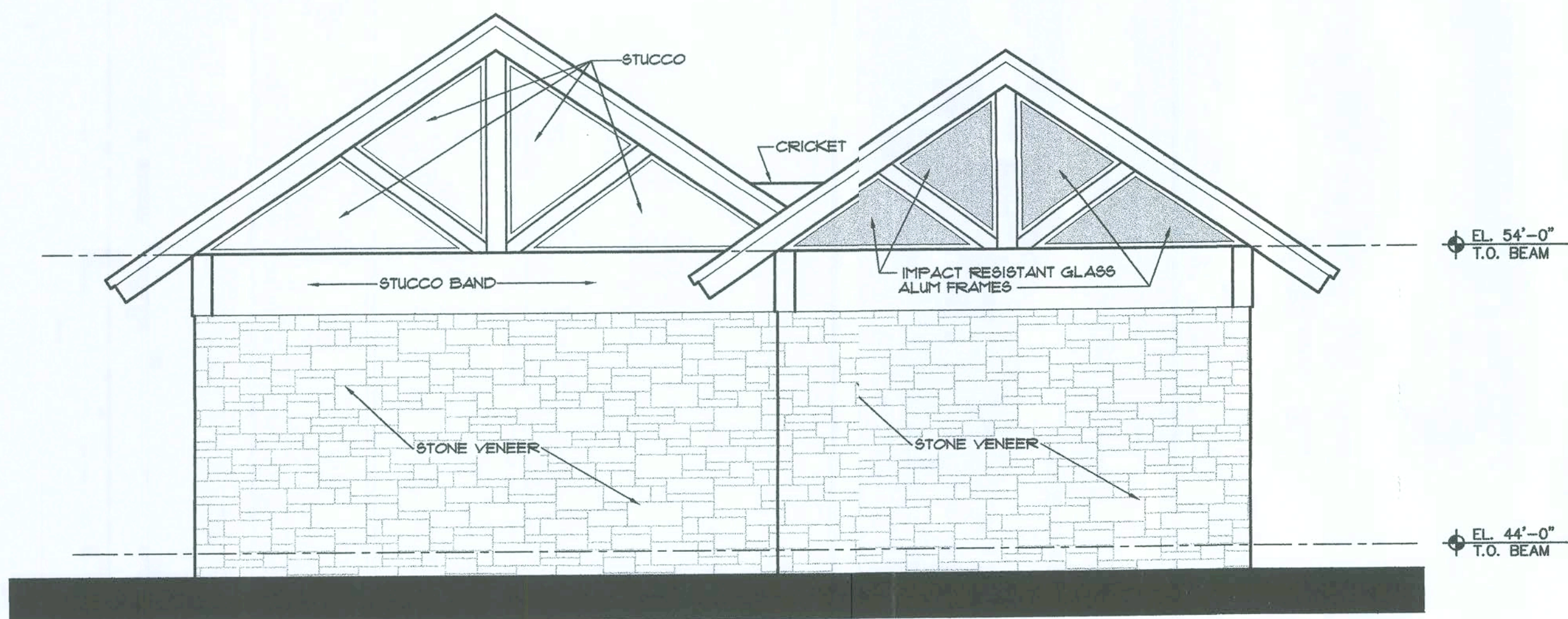
NORTH ELEVATION
SCALE: 1/4" = 1'-0" SHOP



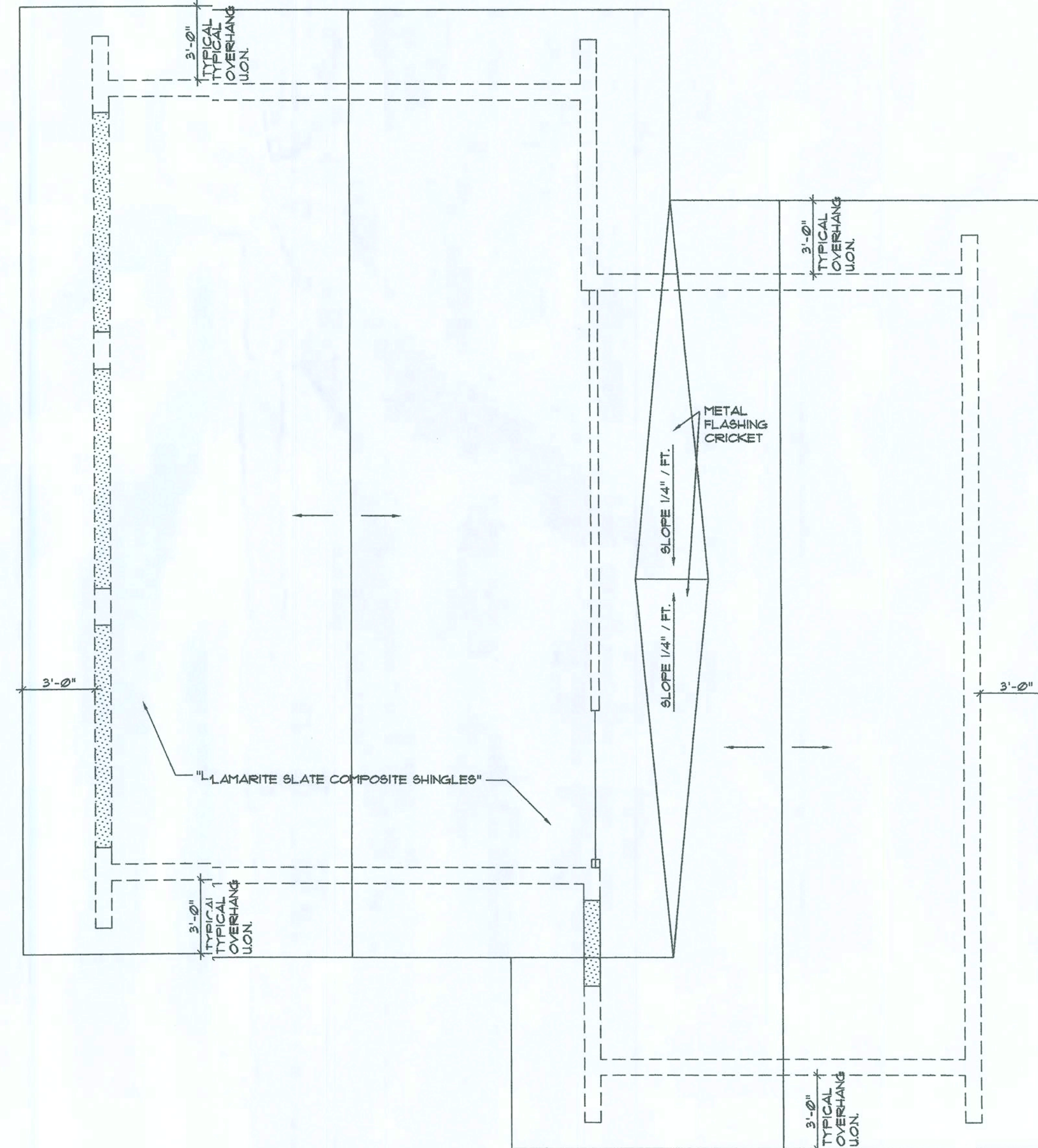
SOUTH ELEVATION
SCALE: 1/4" = 1'-0" SHOP



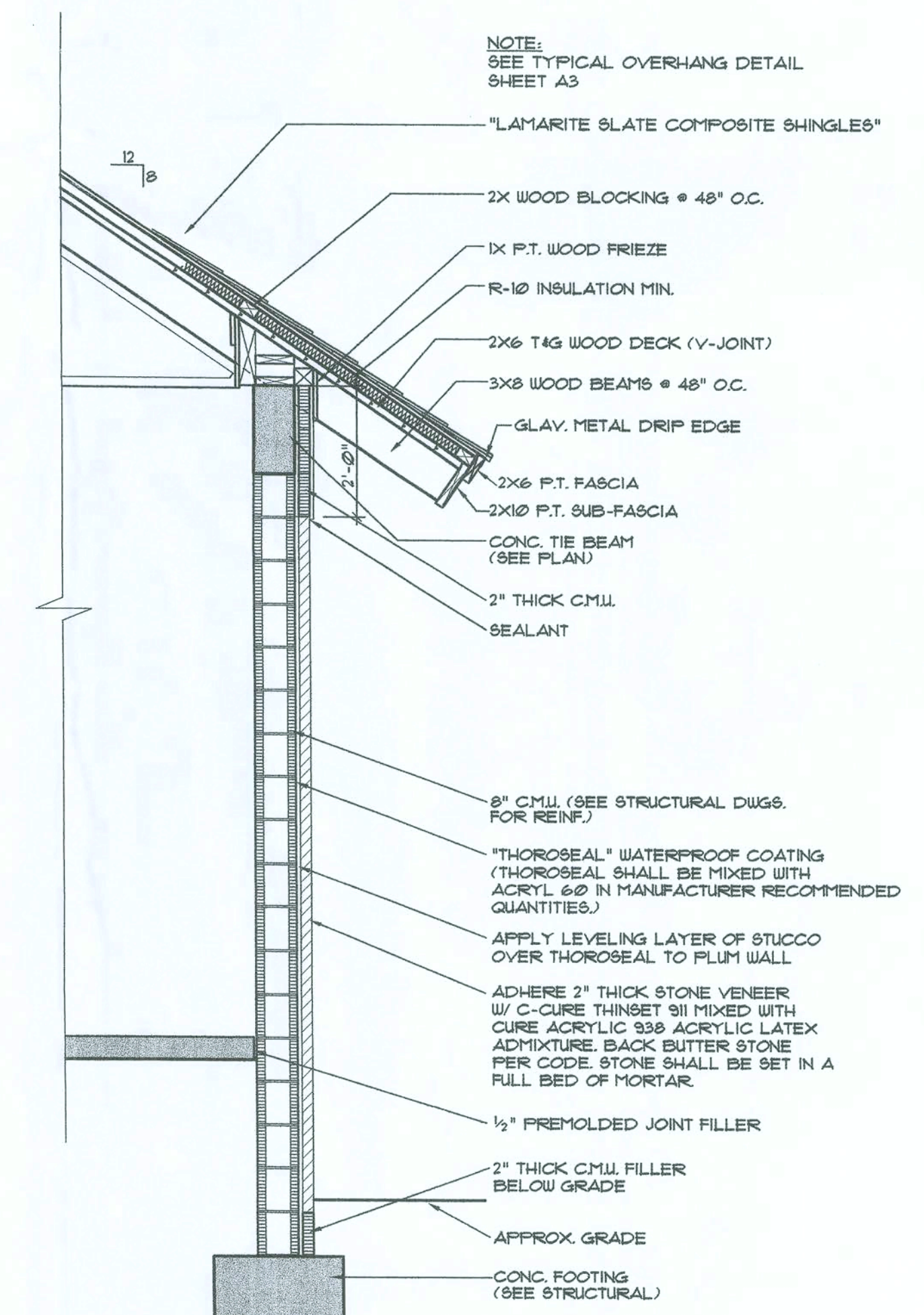
EAST ELEVATION
SCALE: 1/4" = 1'-0" SHOP



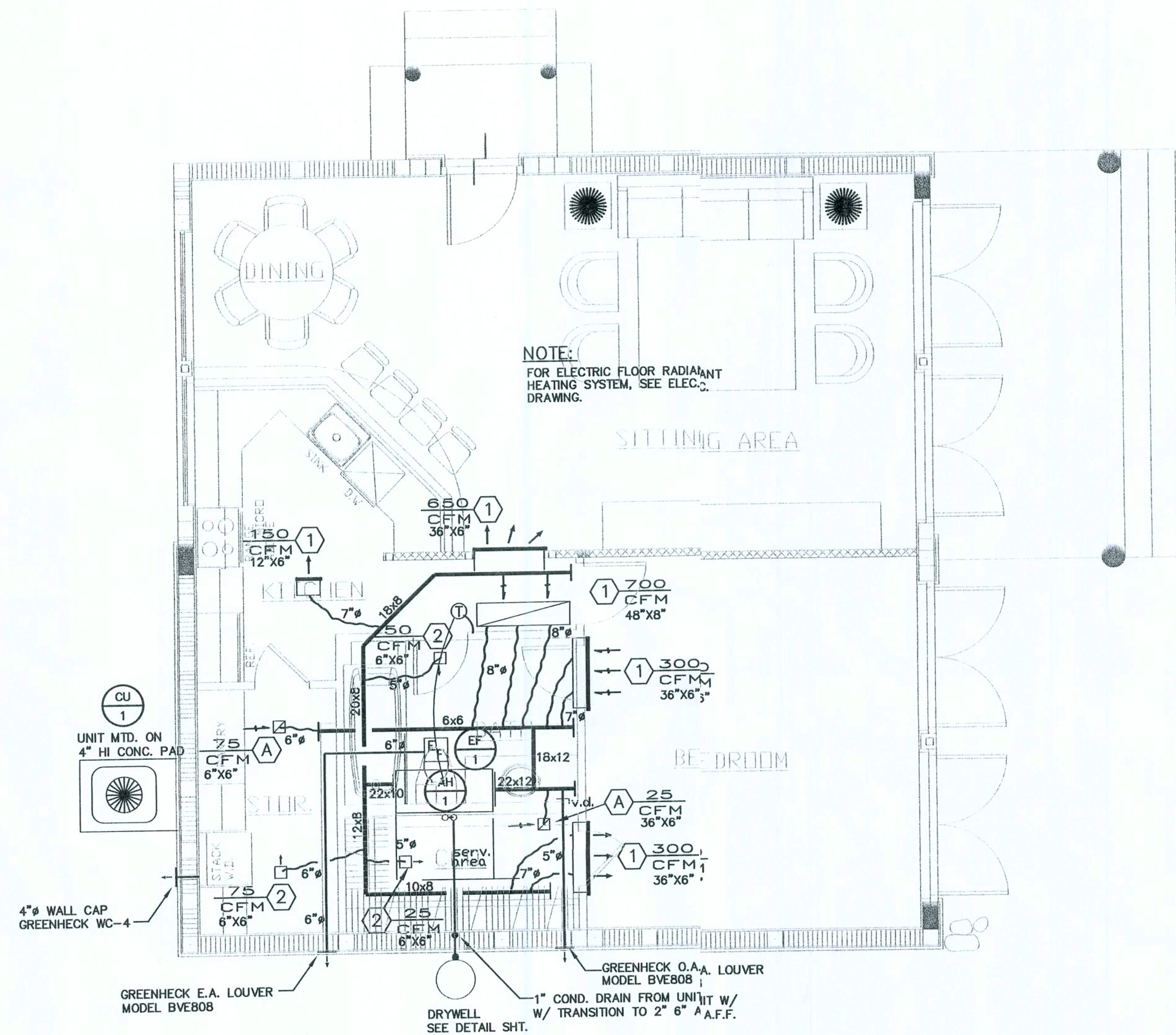
WEST ELEVATION
SCALE: 1/4" = 1'-0" SHOP



ROOF PLAN
SCALE: 1/4" = 1'-0" SHOP

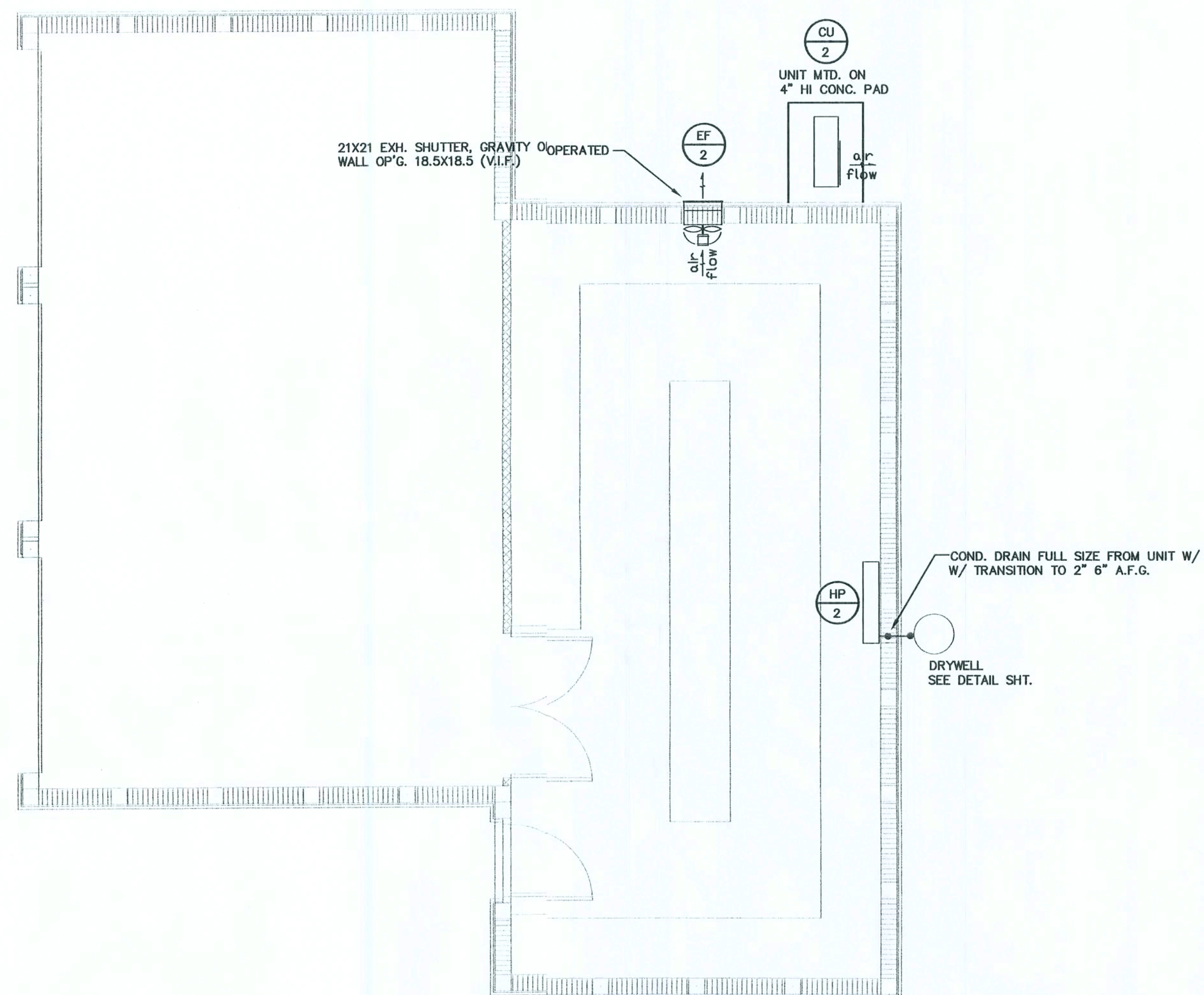


A TYPICAL WALL SECTION
SCALE: 1/4" = 1'-0" SHOP



GUEST HOUSE MECHANICAL PLAN





SHOP BUILDING MECHANICAL PLAN

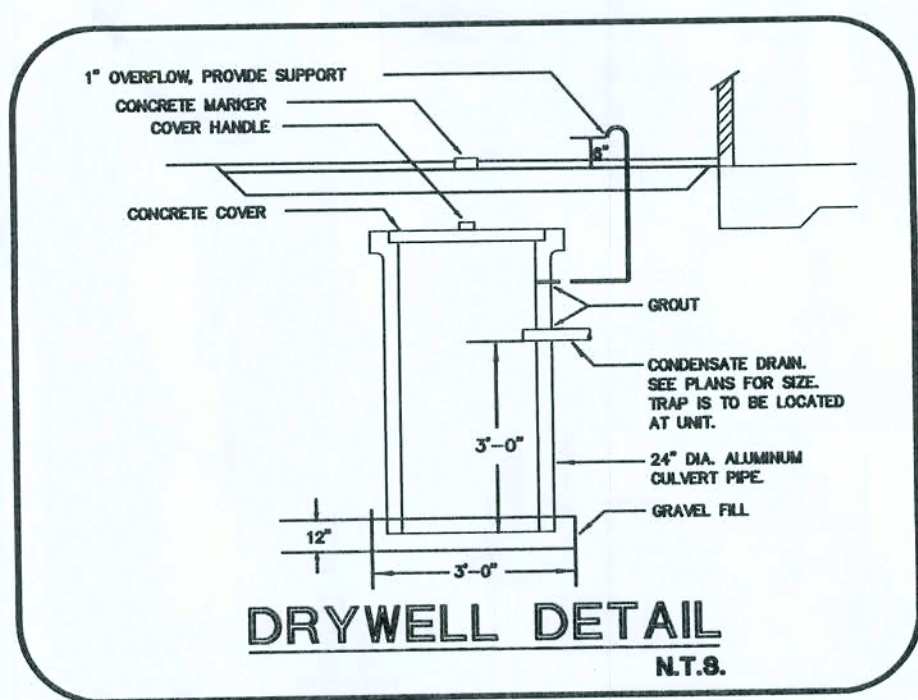
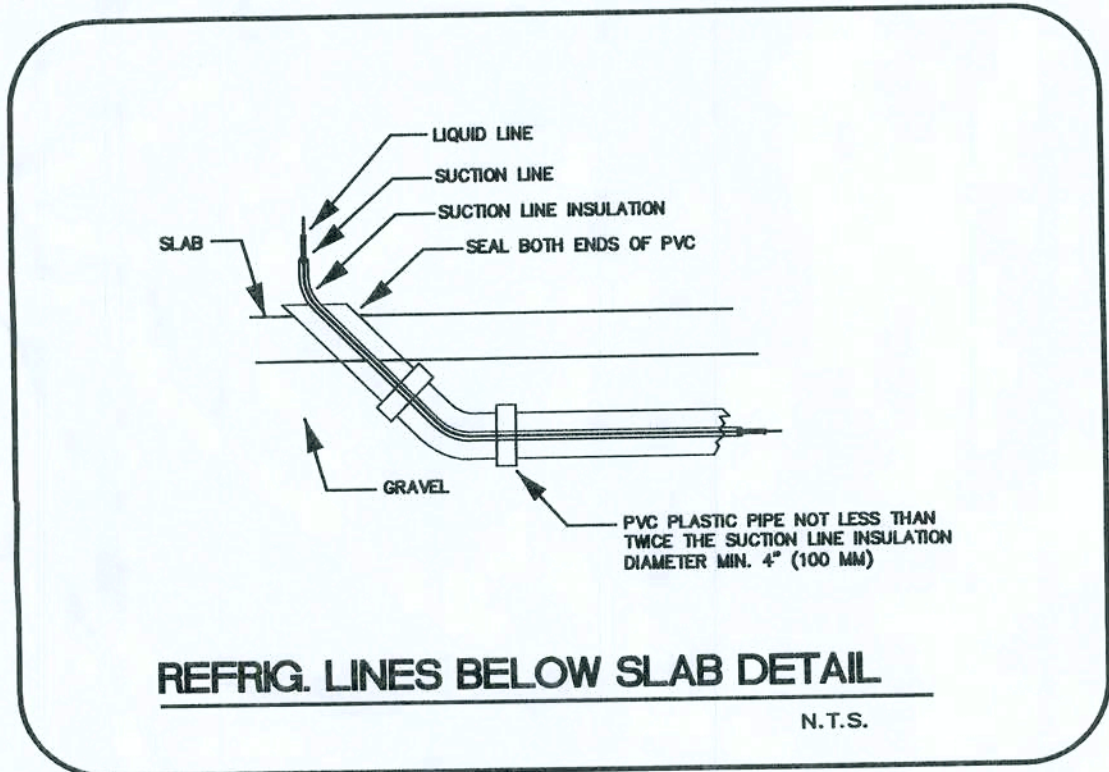
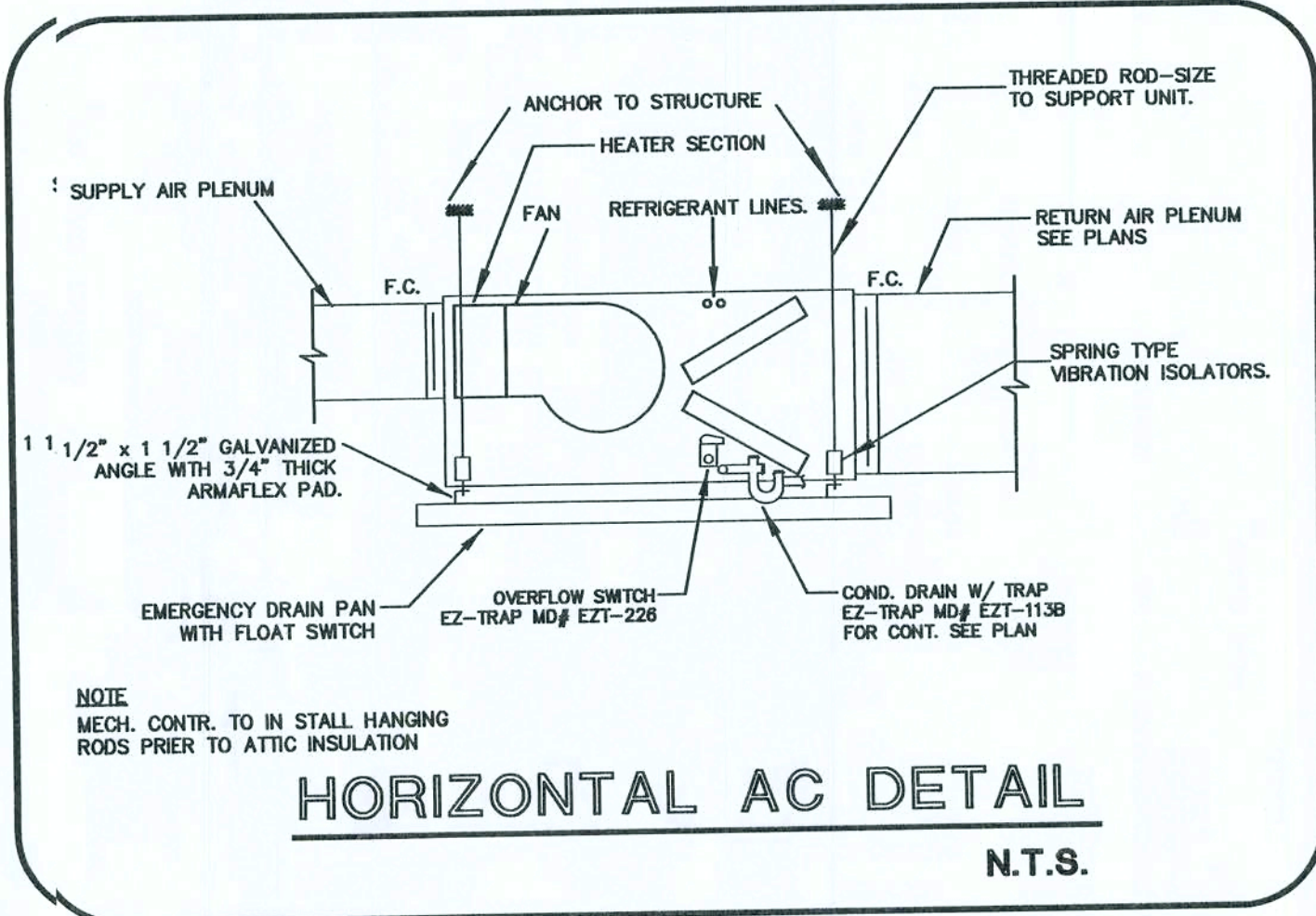
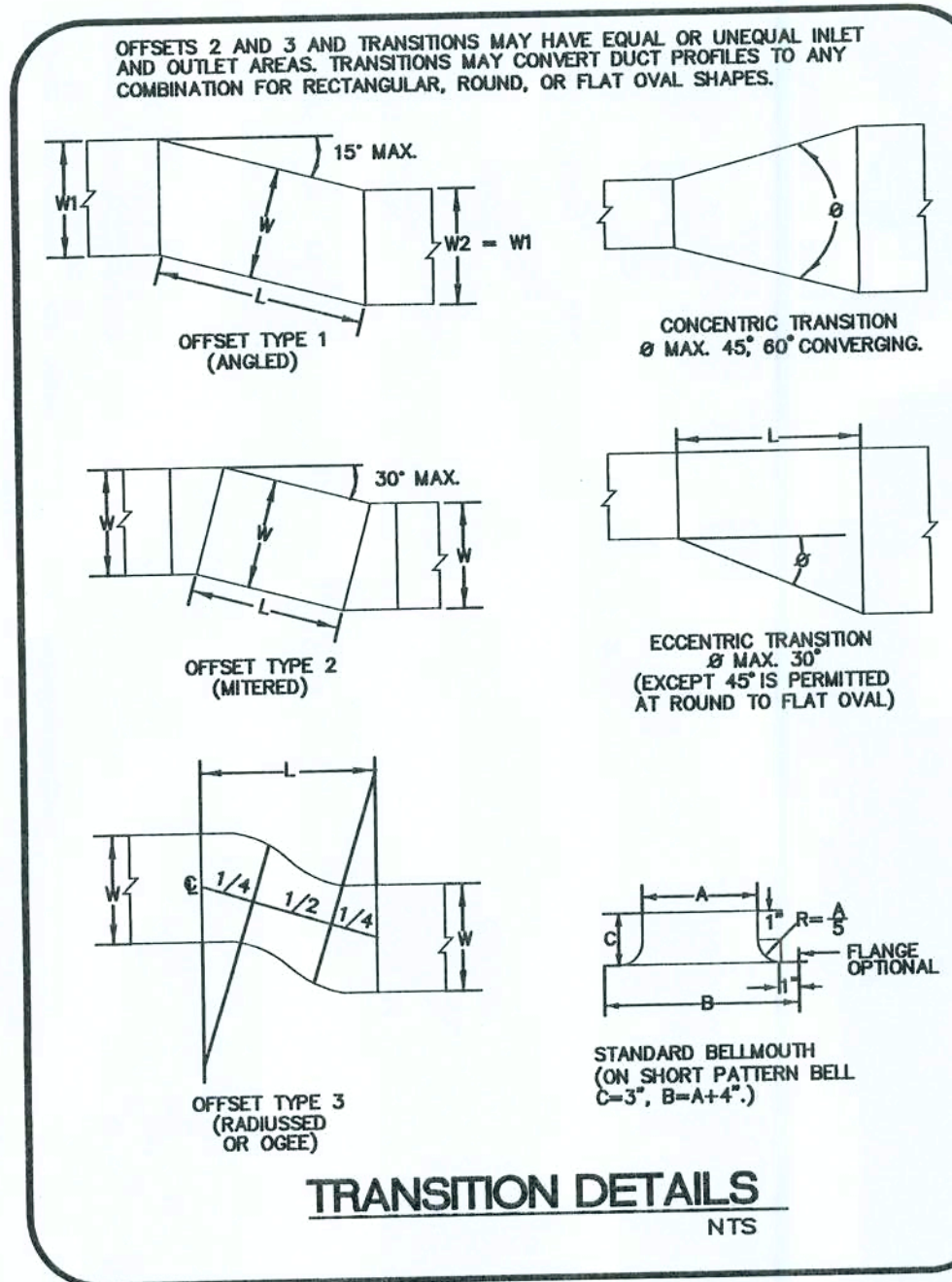
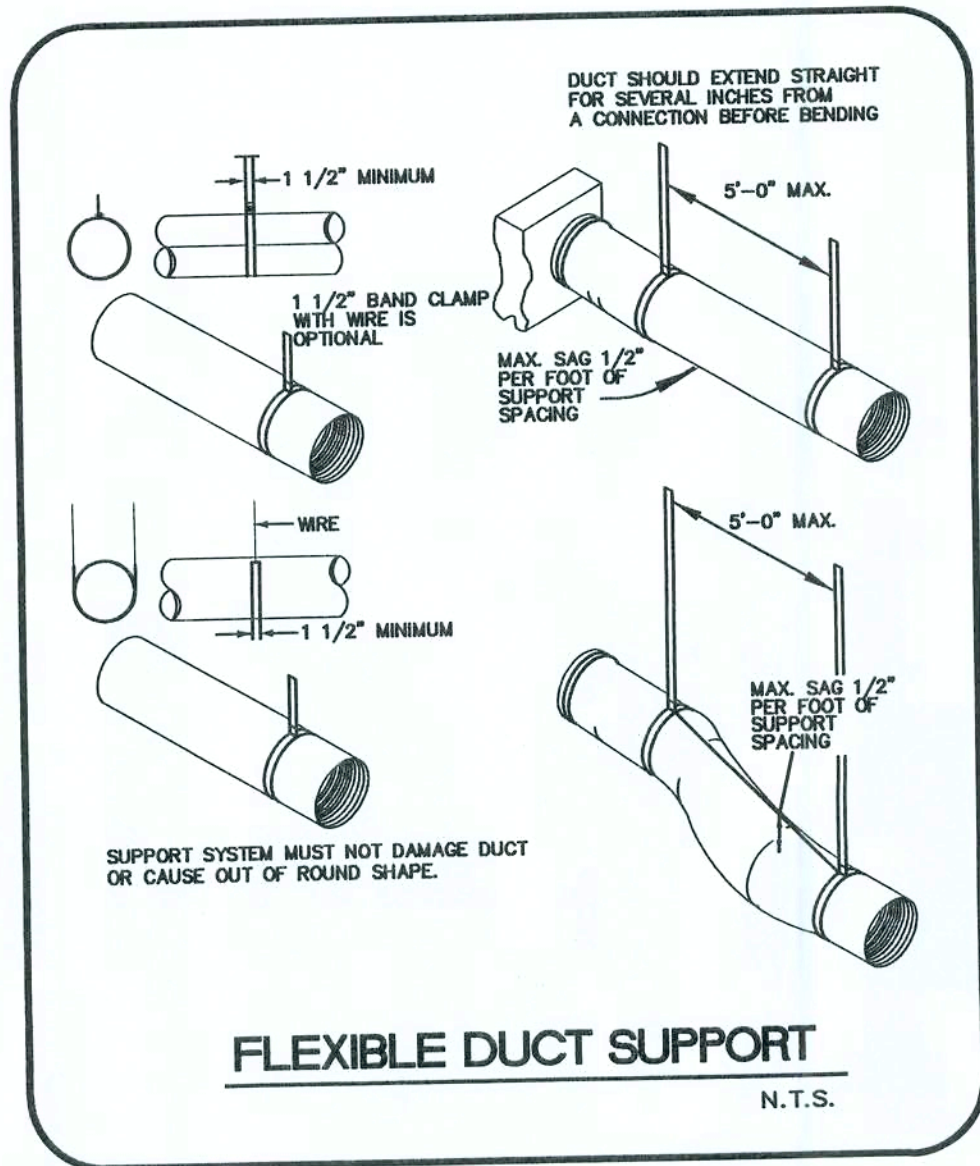


FAN SCHEDULE							
UNIT NO.	MFGR. MODEL NUMBER	CFM	SP	RPM MAX.	AMPS OR HP	ELECTRIC REQ. VOLT. PHASE	REMARKS
EF-1	PANASONIC FV-11V02	100	0.10	3.6	0.35	120 1	1, 2, 3, 4
EF-2	GRANGER - 4C007	885	0.125	-	1/20	120 1	
1. FURNISH WITH SPEED CONTROLLER TO ELEC. CONTR. FOR INSTALLATION 2. HANGING VIBRATION ISOLATORS 3. FLEXIBLE CONNECTIONS 4. BACKDRAFT DFR.							

GRILLE AND DIFFUSER SCHEDULE								
DESIGN.	MFGR. MODEL NUMBER	SIZE	DIRECTION	CFM	TYPE	MNT. TYPE	FINISH	MARKS
1	TITUS / 272FS	SEE PLAN	SEE PLAN	SEE PLAN	SUP/RET	--	WHITE	SEWALL
2	TITUS / TDCA-AA	SEE PLAN	SEE PLAN	SEE PLAN	SUPPLY	--	WHITE	CJNG
A	TITUS / 4F	SEE PLAN	SEE PLAN	SEE PLAN	RETURN	--	WHITE	CJNG
NOTE DIFFUSER TYPE 1 INSTALLATIONS TO HAVE HIDDEN FLANGES								

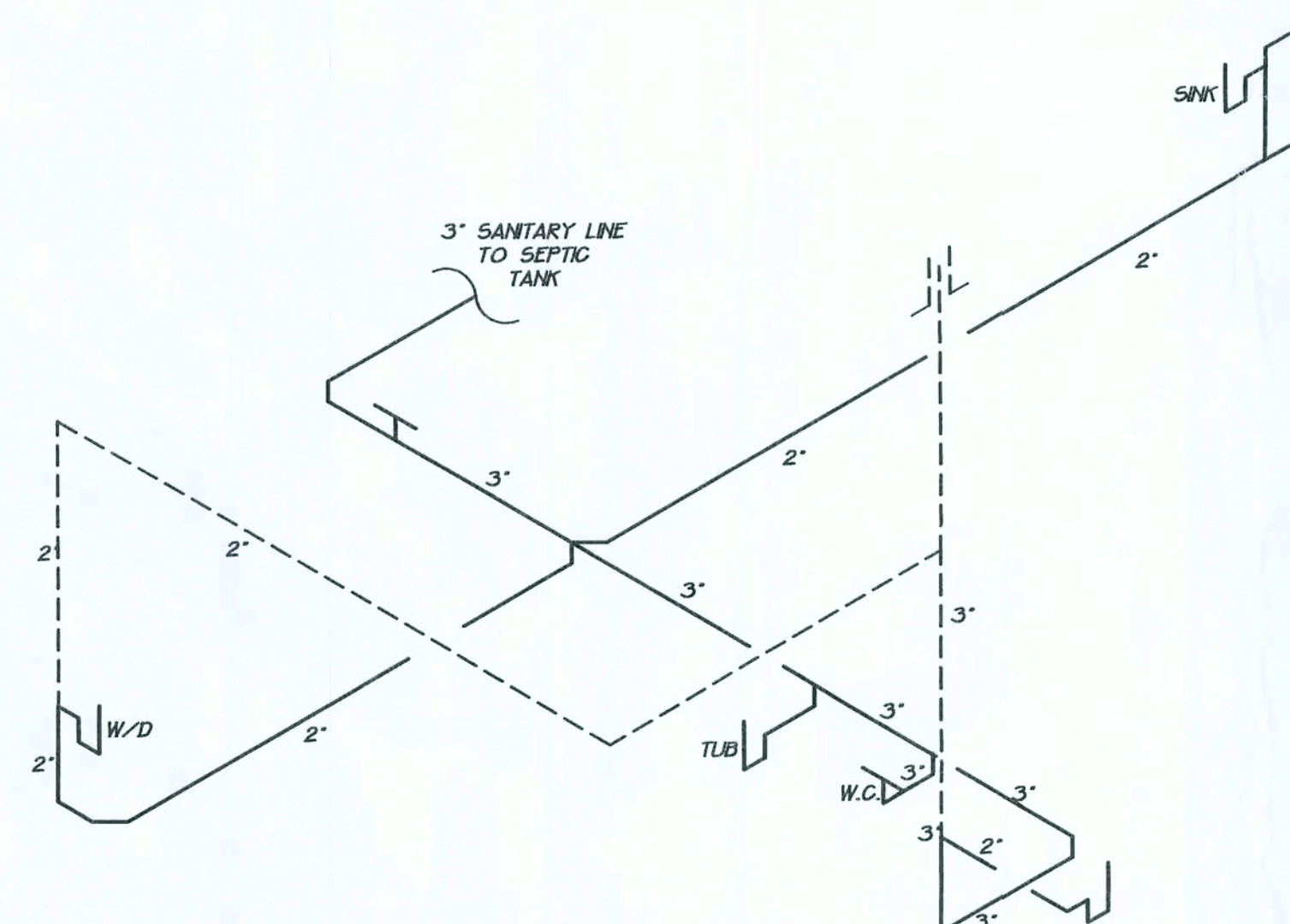
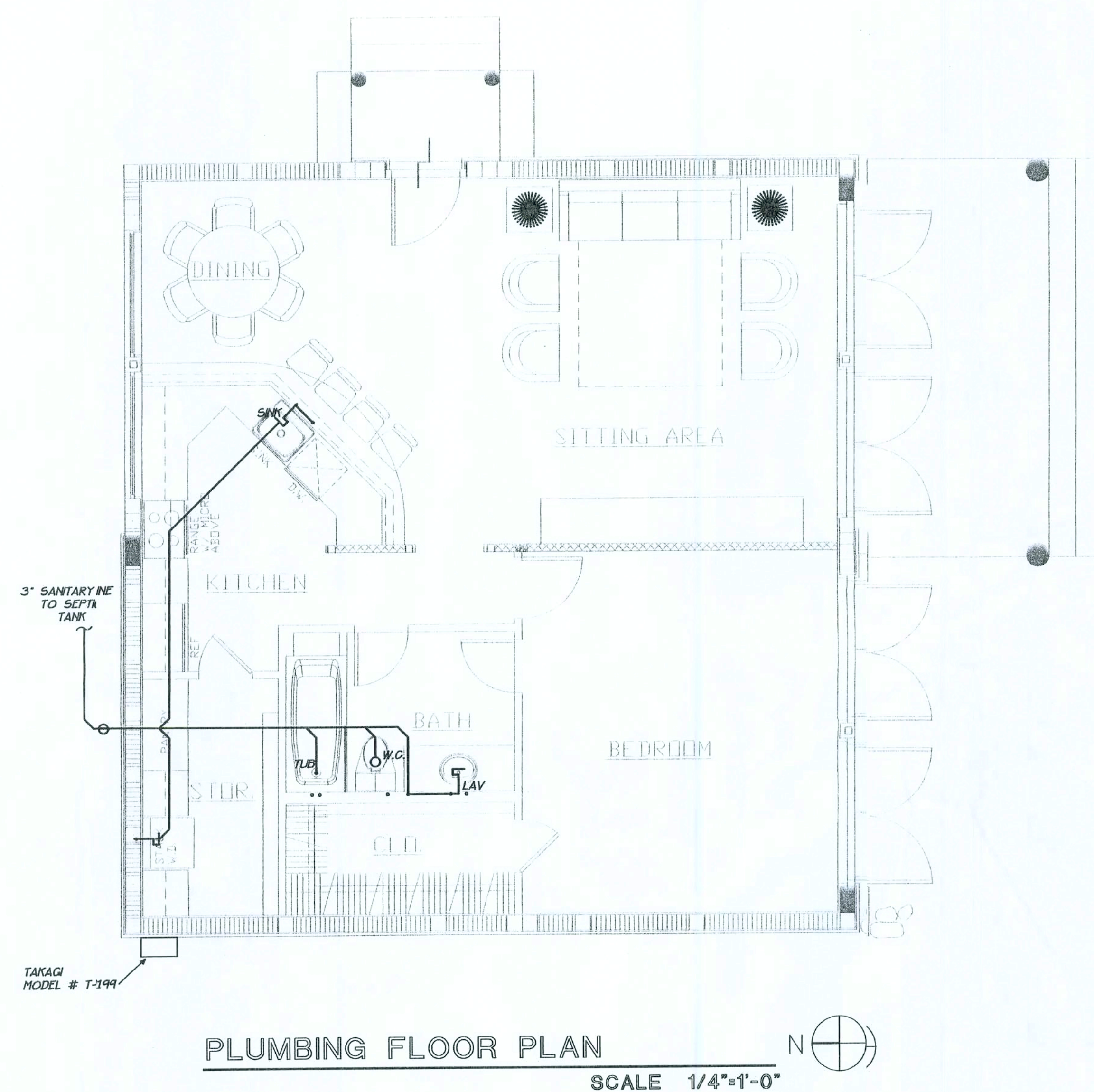
SUPPLY AIR UNIT SCHEDULE												
SYS. NO.	CU. NO.	MFGR. MODEL NUMBER	CAPACITY		FAN	HEAT	ELECTRIC REQ.		EER (SEER)	DIMENXNS	LOCATION	
			TOTAL	SENS	CFM	H.P.	KW	VOLT	PHASE			
AC1	CU1	CARRIER - FY4ANF036000	33.5	26.3	1200	1/3	-	208	1	13.0	21 X 22 X 3	ATTIC
HP2	CU2	SANYO - KHS2472	24.2	-	500	-	2.5	208	1	16.0	41 X 11 X	WALL. MTD.
SUPPLY AIR UNIT TO HAVE ONE (1) POINT ELECTRICAL CONNECTION AND INTEGRAL DISCONNECTS.												
HP-2 PROVIDED W/ WIRELESS REMOTE CONTROLLER												

CONDENSING UNIT SCHEDULE										
SYS. NO.	CU. NO.	MFGR. MODEL NUMBER	COMPRESSOR NO. FLA (EA)	COND. FAN NO. FLA (EA)	BRANCH CIR. MAX. AMPS	ELECTRIC REQ. VOLT PHASE	SIZE	DIMENSIONS		
AC1	CU1	CARRIER -- 24ABA336A003	1 14.1	1 1.4	30	208 1	3. T	28 X 26 X 35		
HP2	CU2	SANYO -- CH2472	1 1.3	1 --	20	208 1	2. T	35 X 12 X 29		
CONTRACTOR TO SUBMIT FOR ENGINEER REVIEW, REFRIGERANT LINE SIZING CALCULATIONS BASED ON MANUFACTURERS/PUBLISHED CRITERIA.										



MECHANICAL SPECIFICATIONS

- SCOPE**
 - The work covered in this section of the specifications consists of furnishing all labor, equipment, and material and in performing all operations in connection with the installation of the complete air conditioning and heating system. All work will be complete and in accordance with this section of the specifications and applicable drawings, and will be subject to the terms and conditions of the contract.
- SPECIFICATIONS AND DRAWINGS**
 - The mechanical drawings indicate the general arrangement of the air conditioning and heating system. These specifications and drawings shall supplement each other. Equipment, ductwork and piping shall fit into the space allocated and shall provide all necessary clearance for servicing and maintenance.
- CODES AND STANDARDS**
 - The work shall comply with the latest applicable requirements of the NFPA and all local codes governing this installation as a minimum standard unless specifications listed herein or shown on the plans require a higher minimum standard.
- PERMITS AND FEES**
 - The HVAC Contractor shall procure all permits and pay all fees associated with the permitting and inspection process. The HVAC Contractor shall also arrange for all inspections.
- ELECTRICAL**
 - The Electrical Contractor shall furnish and install all conduit, wire, seal-tight, and disconnects. Unless otherwise stipulated, the Electrical Contractor shall connect the air conditioning units. The HVAC Contractor will furnish all materials, wire and connect the thermostat.
- VIBRATION AND ISOLATION**
 - Both the air handler unit and condensing unit shall be placed on vibration isolators. The HVAC contractor shall take all necessary steps to eliminate all excessive vibration and objectional noise projected by any equipment installed under this contract.
- INSTALLATION**
 - The HVAC contractor shall supply one thermostat per air system. Staging of heating and cooling shall be indicated on the drawings.
 - All refrigeration piping to be of Type "L" copper with wrought copper fittings. Joints shall be made with silver solder.
 - The refrigeration suction lines shall be insulated as follows: above ground with 1/2" "Armstrong Armaflex" below ground/slab with same encased in P.V.C. conduit. Insulation shall be slipped on piping prior to connection. All butt joints to be sealed with an approved adhesive. Installation of condensate line is by the HVAC contractor. Insulate all lines run above ceiling. See detail for underground piping.
 - The supply and return air duct system shall be fabricated of Johns Manville "Superduct Type 800. All fabrication shall be in accordance with the manufacturers written fabrication manual and follow NAIMA Fibrous Glass Duct Construction Standards. Turning vanes shall be provided in duct at all changes in direction. Vanes shall be Johns Manville "Supervane". All joints shall be stapled approximately 2" on center with outward clinching steel staples and Fortifiber "Therm-Lock" closure with automatic bond indicator. Tape shall have minimum 1" overlap on each side of seam.
 - Supply and return air registers shall be Titus or their Metal Aire equivalent as indicated on the drawings. All supply registers are to be equipped with manual dampers.
 - Extractors and turning vanes shall be installed where indicated on the drawings in addition to all bends over 45 degrees.
 - Filters to be 2" Fiberglass Dustlok with Sporex antimicrobial agent and dual ply construction, or its equivalent. Furnish two additional filters for each size of filter used.
- TESTING AND BALANCING**
 - Upon completion of work the HVAC Contractor shall use accurate meters, instruments of type and size as required to determine proper air flow and distributions. Confirm that all fuse sizes are in accordance to the motor nameplate data.
 - Air quantities: Check each blower and diffuser as indicated on drawings for correct and adequate diffusion. Outside air quantities to be checked and adjusted as required. After spaces have been brought up to design temperatures and equipment is functioning properly, re-balance, if necessary, by means of calibrated thermometers placed in each room and in open spaces, not over 20' apart. Thermostat: No deviation in temperature of more than 3 degrees Fahrenheit throughout conditioned space. Contractor shall submit complete data report regarding balancing, in addition to various control settings for approval of Architect.



SANITARY RISER

NOT TO SCALE

MICHAEL A. TEELE, P.E.
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FLORIDA REGISTRATION
P.E. 32066

APR 06 2007
DATE:

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CERT. OF AUTH. NO. 4659

ELECTRICAL SPECIFICATIONS

1. GENERAL SPECIFICATIONS

GENERAL:
The requirements of the general, supplementary and special conditions of the contract specifications and drawings are hereby made a part of this section of the specifications. It is the intent of the plans and specifications to provide a complete and operating installation including all obviously necessary items even though items are not indicated on the drawings or specifications.

C. PERMITS, SALES TAX, ETC.:

The contractor shall secure and pay for all permits, State Sales Tax, Federal Excise Tax, royalties and other taxes or fees as required for installation of a complete system as outlined herein and as shown on the plans. The contractor shall secure all necessary licenses and insurance.

D. CODES:

The work shall comply with latest applicable requirements of the NFPA and all local codes governing this installation as a minimum standard unless specifications listed herein or shown on the plans require a higher minimum standard.

E. BRANDS OF EQUIPMENT:

Where one manufacturer only is named, the bids shall be based on furnishing equipment or materials by this manufacturer. Products of other manufacturers will be considered for use if in the engineer's opinion the item requested for substitution is equal to that specified. Where no manufacturers are named, the contractor shall select equipment or material which meets the specifications.

F. DEPARTURES FROM DRAWINGS:

The contract drawings indicate the extent and general arrangements of equipment and systems. If any departures from the contract drawings are deemed necessary by the contractor, details of such departures and reasons therefor shall be submitted to the engineer for approval. No such departures shall be made without the prior written approval of the engineer.

G. CHANGES:

The contractor shall conform to all reasonable changes without additional cost.

H. ERRORS AND OMISSIONS:

All obvious errors and/or omissions in the above mentioned documents shall be called to the attention of the engineer at least four days prior to the bid date. If notification is not received, no extras to the original drawings and specifications will be authorized.

I. GUARANTEE:

The contractor shall provide a guarantee against defective workmanship, materials or equipment for a period of one year from the date of acceptance. This guarantee shall include all costs encountered in the replacing of defective work or materials. The contractor shall convey to the owner any additional guarantees or warranties provided by the manufacturer of an individual item, equipment or material.

2. RACEWAY

EMT:
May be used for all branch circuit wiring in areas above grade and within the building. All EMT shall be galvanized. All EMT fittings shall be steel with set screws.

B. PVC:

Shall be schedule 40 high impact, UL approved, and shall be installed underground or in the slab.

C. RIGID CONDUIT:

Shall be used for all exterior installation where mechanical damage is possible.

3. WIRE AND CABLE

A. CONDUCTORS:

Shall be copper. Insulation shall be type THHN/THWN for ALL sizes. Minimum size wire No. 12. Conductors No. 10 and larger are to be stranded. Branch conduit outlets shall be connected as indicated.

B. COLOR CODES:

Conductors shall be color coded throughout. Same color shall be used for branch circuit wiring of a given phase. Grounded conductors No. 4 AWG and larger may be Black, But shall be identified with colored tape in junction boxes, pull boxes, panels and service equipment.

- 120/240V or 120/208V systems
 - Three wire circuits - one black, one red and one white
 - Four wire circuits - one black, one red, one white, one blue.
- 277/480V systems - one brown, one orange, one yellow, one gray
- Continuity of neutrals of multi-wired branch circuits shall not be made at terminals of any device. This will assure no opening of neutral in replacement of device.

C. SPLICES:

- 10 and below - Scotchlok or equal
- 10 and larger - Not allowed

4. BOXES

A. OUTLET BOXES:

Section welded galvanized stamped steel for gang sizes required. Sectional boxes will not be acceptable. Boxes larger than standard shall be provided in accordance with the National Electrical Code where necessary to prevent crowding of wires.

B. FLOOR BOXES:

To be Carlon E971FB with E97ABR adapter for cast Bronze cover plates as manufactured by Steel City.

5. WIRING DEVICES

A. MOUNTING HEIGHTS:

- Switches at 4'0" or as noted
- Receptacles at 18" or as noted
- Telephone outlets at 18" or as noted

B. WALL SWITCHES:

Shall be intermediate grade, quiet-type, high performance switches rated at 15A/277V. Color and switch plates as directed by the Architect and Interior Decorator.

C. RECEPTACLES:

See general notes on this sheet for requirements.

D. POWER OUTLETS:

Leviton or Slater, type and size as noted.

E. DIMMER SWITCHES:

Shall be equal to Lutron RN - 1500 ML slide dimmer with touch - button on/off switch with Lutron RN - SML for three way control. Low voltage dimmers shall be Nova Series, load coordinated as required.

6. DISCONNECT SWITCHES

Shall be furnished with enclosures as required by exposures either NEMA 1 or 3R and shall be horsepower rated, heavy duty with fuses as noted.

B. NON-FUSIBLE DISCONNECT SWITCHES:

Shall be provided for all motors located out of sight of motor controller and where indicated on the drawings. Disconnect switches shall disconnect all ungrounded conductors.

C. FUSES:

To be furnished for fusible equipment. Motor fuses shall be bus fuses/rated between 125 and 150 percent of motor name plate rating. Furnish extra set of spare fuses for each fused disconnect installed. Spare fuses to be placed within a fuse cabinet located in the electric room.

7. PANELBOARD, LOADCENTER

Loadcenters shall be as noted on plans with cover and typewritten directory inside of cover. Panelboards shall be the product of Cutler-Hammer or Square D.

8. LIGHTING FIXTURES

Unless otherwise noted, Light Fixtures will be furnished and installed as indicated on the lighting fixture schedule for installation by the electrical contractor.

9. IDENTIFICATION

Tag all conductors and identify major conduits in or at wireways, panels, pullboxes, switchboards, motor controllers, cabinets and similar items to assist in future circuit tracing. Conductor tags shall be nonconductive. Identify all circuits and equipment to correspond with the plans and specifications.

10. CLEAN-UP

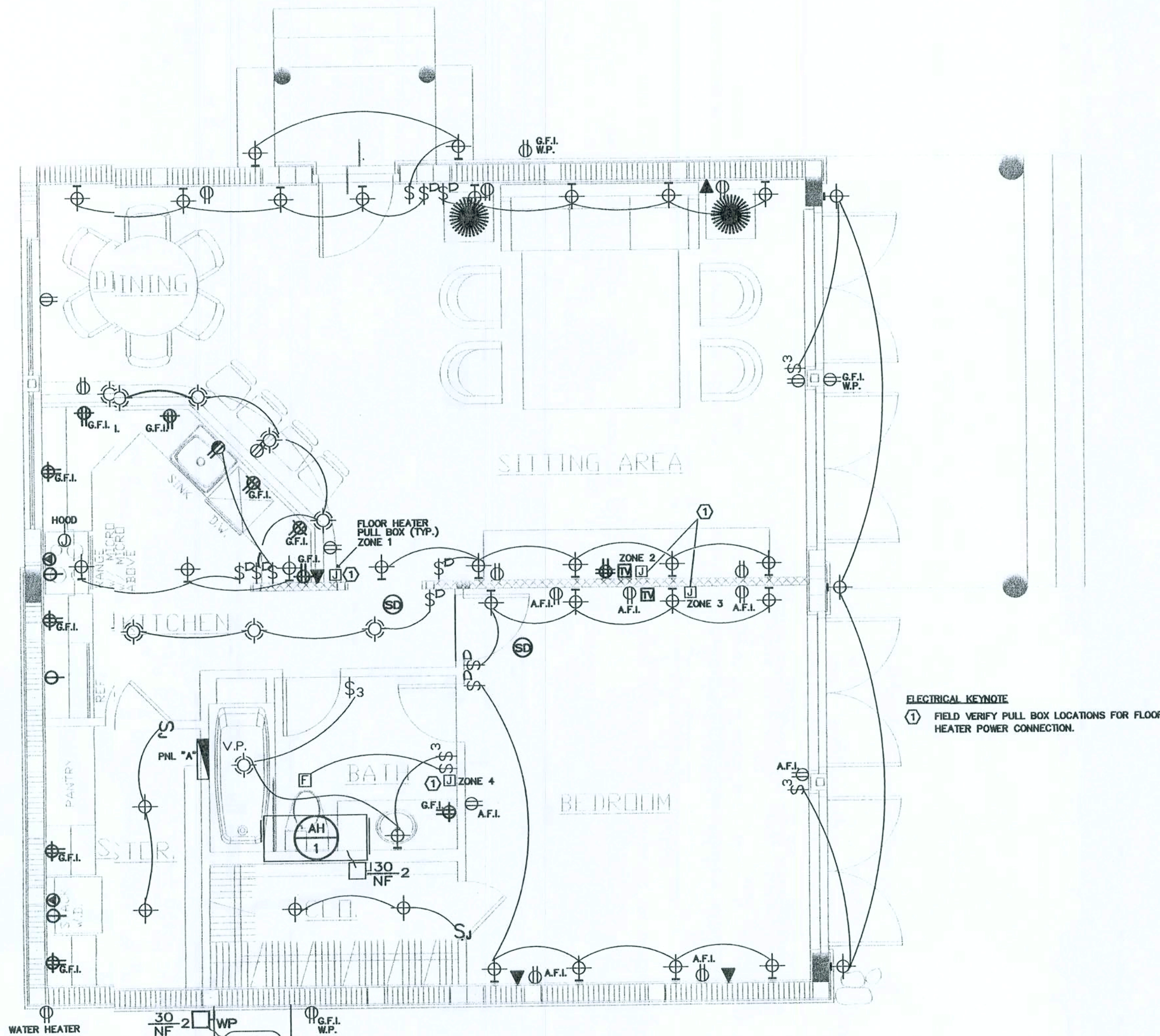
On completion of work, remove all excess material, equipment and debris. Leave workspace in clean condition.

ELECTRICAL LEGEND:

SYMBOL	DESCRIPTION
⚡	SINGLE POLE SWITCH - 20A/120V.
⚡ ³	3 - WAY SWITCH - 20A/120V.
⚡ ⁴	4 - WAY SWITCH - 20A/120V
S _J	DOOR JAMB SWITCH FOR CLOSET LIGHTS
	DIMMER SWITCH
⚡ ³	3 - WAY DIMMER SWITCH
⚡	HALF-SWITCHED DUPLEX RECEPTACLE - 20A/125V
⚡	DUPLEX RECEPTACLE • 42" A.F.F. - 20A/125V
⚡	DUPLEX RECEPTACLE - 20A/125V
⚡	DUPLEX RECEPTACLE - 20A/125V
⚡	QUADRAPLEX RECEPTACLE - 20A/125V
⚡	DUPLEX RECEPTACLE - 20A/125V ISOLATED GROUND.
⚡	DUPLEX RECEPTACLE - 20A/125V GROUND FAULT INTERRUPTER.
⚡	OUTLET - WEATHERPROOF.
⚡	POWER OUTLET - VOLTAGE & SIZE AS NOTED.
⚡	FLOORBOX WITH DUPLEX RECEPTACLE 20A/125V.
⚡	DISCONNECT, VOLTAGE & SIZE AS NOTED.
⚡	JUNCTION BOX
⚡	TELEPHONE OUTLET-WALL MOUNTED. EACH OUTLET TO HAVE 3/4" W/PULL STRING ROUTED BACK TO TELEPHONE BOARD.
⚡	FAX OUTLET-WALL MOUNTED. EACH OUTLET TO HAVE 3/4" W/PULL STRING ROUTED BACK TO TELEPHONE BOARD.
⚡	PANEL, SIZE & VOLTAGE - SEE PANEL SCHEDULE.
⚡	TELEVISION OUTLET. EACH OUTLET TO HAVE 1" W/PULL STRING ROUTED BACK TO TELEPHONE BOARD.
⚡	COMPUTER TERMINAL. EACH OUTLET TO HAVE 3/4" W/PULL STRING ROUTED BACK TO TELEPHONE BOARD.
⚡	SMOKE DETECTOR / SMOKE ALARM.

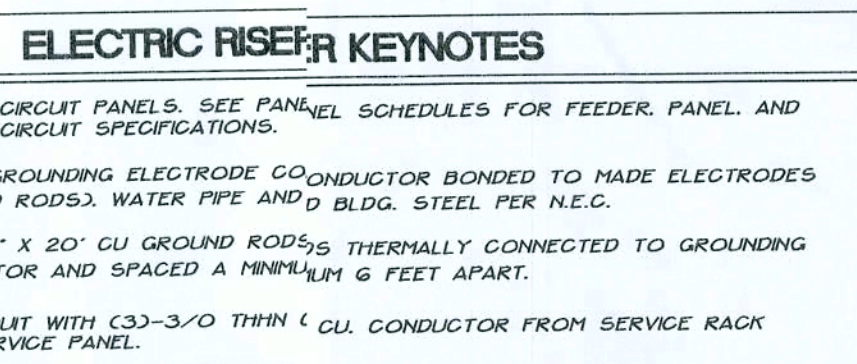
LIGHTING FIXTURE LEGEND:

SYMBOL	DESCRIPTION
⚡	RECESSED DOWN LIGHT
⚡	RECESSED WALL WASHER
⚡	SURFACE MOUNTED LIGHT FIXTURE (CEILING)
⚡	SURFACE MOUNTED PENDANT LIGHT FIXTURE (CEILING)
⚡	SURFACE MOUNTED LIGHT FIXTURE (WALL)
⚡	SURFACE MOUNTED DUAL FLOOD LIGHTS
⚡	SINGLE TUBE FLUORESCENT LIGHT FIXTURE - NO LENS
⚡	2 TUBE FLUORESCENT LIGHT FIXTURE ASSEMBLY WRAP AROUND LENS
⚡	CEILING FAN



ELECTRICAL FLOOR PLAN

SCALE 1/4"=1'-0"



ELECTRICAL RISER DIAGRAM

NOT TO SCALE

PANELBOARD A																			
RATED VOLTAGE RATED AMPS MAIN BRANCH POLES BRANCH DEVICES				120/240, 1PH, 3WIRE 200 MAIN BREAKER 42 PLUG-ON				LOCATION MOUNTING FEEDER CONDUCTORS FEEDING CONDUIT MANUF. CAT. NO.				SEE PLAN FLUSH (3)-3/0 THHN CU. 2" S.Q.D. "QD"							
WIRE SIZE	DESCRIPTION	APPL. KVA	INAC KVA	INAC HEAT	A/C	TRIP	POLE	CHUIT NUMBER	POLE	TRIP	INAC KVA	APPL. KVA	DESCRIPTION	WIRE SIZE					
#12	APPLANCE CIRCUIT	1.5				20	1	1	2	2	20	2.9	FLOOR HEATER (G.F.I.)-ZONE 1	#12					
#12	APPLANCE CIRCUIT	1.5				20	1	3	4					#12					
#12	REFRIGERATOR	1.5				20	1	5	6	1	20		THERMOSTAT G.F.I.-ZONE 1	#12					
#12	DISHWASHER	1.5				20	1	7	8	2	30	3.2	FLOOR HEATER (G.F.I.)-ZONE 2	#12					
#12	DISPOSAL	1.2				20	1	9	10				THERMOSTAT G.F.I.-ZONE 2	#12					
#12	MICROWAVE	1.5				20	1	11	12	1	20		THERMOSTAT G.F.I.-ZONE 2	#12					
#12	HOOD EXHAUST FAN	1.0				20	1	13	14	2	30	2.9	FLOOR HEATER (G.F.I.)-ZONE 3	#12					
#6	RANGE	10.5				60	2	15	16				THERMOSTAT G.F.I.-ZONE 3	#12					
#12	LAUNDRY CIRCUIT	1.5				20	1	19	20	2	20	0.6	FLOOR HEATER (G.F.I.)-ZONE 4	#12					
#12	WASHER	1.5				20	1	21	22				THERMOSTAT G.F.I.	#12					
#10	DRYER	5.5				30	2	23	24	1	20	0.9	A.H.U. (NO HEAT LOAD)	#12					
#12	BED RM A.F.I. RECEIPTS					20	1	27	28					#12					
#12	BED RM LIGHTS					20	1	29	30	2	30	3.7	COND. UNIT	#12					
#12	BATH G.F.I.					20	1	31	32					#12					
#12	EXTERIOR G.F.I.					20	1	33	34	1	20		WATER HEATER (GAS)	#12					
#12	GENERAL RECEIPTS					20	1	35	36	1	20		GENERAL LIGHTS	#12					
#12	GENERAL RECEIPTS					20	1	37	38	1	20		GENERAL LIGHTS	#12					
	SPACE							39	40				SPACE						
	SPACE							41	42				SPACE						
SUBTOTAL CONNECTED LOADS		28.7	0.0	0.0							3.7	10	0.9						
TOTAL CONNECTED KVA= 32.9 APPLANCE LOAD @ 100% = 28.600 LTS & RECEIPTS LOAD @ 3/5 F = 3.288 TOTAL OTHER LOADS = 32.888 FIRST 10KW @ 100% = 10.000 BALANCE @ 40% = 0.155												LARGEST OF THE FOLLOWING A/C LOAD 3.7 KW @ 100% = HEAT LOAD 9.6 KW @ 65% = 6.240				GROUND BUS IS REQUIRED KEYED DOOR LATCH IS NOT REQUIRED			
TOTAL DEMAND KVA = 25.4 TOTAL DEMAND AMPS = 105.8 INTERRUPTING RATING 22,000 RMS																			

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DATE: APR 06 2007

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the lawrence group

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MR. AND MRS. WADE HORNSBY

FLORIDA COLUMBIA COUNTY

GUEST HOUSE

SCALE 1/4"=1'-0"

E-1

8004

MAIN SERVICE PANEL									
RATED VOLTAGE		120/240V, 1 PHASE, 3 WIRE		LOCATION		SERVICE RAC			
RATED AMPS		400		MOUNTING		SURFACE - DIA 3R			
MAIN		LUGS ONLY		FEEDER CONDUCTORS		(6)-4/0 THH CU			
BRANCH POLES		16		FEEDING CONDUIT		3"			
BRANCH DEVICES		PLUG-ON		MANUF. CAT. NO.		SQ. D "HOM"			
WIRE SIZE	DESCRIPTION	BREAKER TRIP	POLE	CIR. NUM.	BREAKER POLE	TRIP	DESCRIPTION	WIRE SIZE	
3/0	GUEST HOUSE	200	2	1 2	2	200	TEMP POWER PANEL	3/0	
			3	4					
3/0	SHOP	200	2	5 6	2	-	SPACE	-	
			7	8					
-	SPACE	-	2	9 10	2	-	SPACE	-	
				11 12					
-	SPACE	-	2	13 14	2	60	SURGE SUPPRESSION MODULE	#8	
				15 16					
DEMAND KVA						GROUND BUS IS REQUIRED			
INTERPUTING RATING 10,000 RMS SYM.						KEYED DOOR LATCH IS NOT REQUIRED			
						FEED TO BE BOTTOM			

TEMP SITE PANEL									
RATED VOLTAGE		120/240V, 1 PHASE, 3 WIRE			LOCATION		SERVICE RAC		
RATED AMPS		200			MOUNTING		SURFACE		
MAIN		LUGS ONLY			FEEDER CONDUCTORS		(3)-3/0 THH CU		
BRANCH POLES		30			FEEDING CONDUIT		2"		
BRANCH DEVICES		PLUG-ON			MANUF. CAT. NO.		SQ. D "Q013150GRB"		
WIRE SIZE	DESCRIPTION	BREAKER TRIP POLE	CIR. NUM.	BREAKER POLE TRIP	DESCRIPTION	WIRE SIZE			
#12	SERVICE RECEPTACLE	20	1	1 2	2 80	IRRIGATION PANEL	#4		
#12	SERVICE RECEPTACLE	20	1	3 4					
--	--	20	1	5 6	1 20	--	--		
--	--	20	1	7 8	1 20	--	--		
--	--	20	1	9 10	1 20	--	--		
--	--	20	1	11 12	1 20	--	--		
--	--	20	1	13 14	1 20	--	--		
--	--	20	1	15 16	1 20	--	--		
--	--	20	1	17 18	1 20	--	--		
--	--	20	1	19 20	1 20	--	--		
--	--	20	1	21 22	1 20	--	--		
--	--	20	1	23 24	1 20	--	--		
--	--	20	1	25 26	1 20	--	--		
--	--	20	1	27 28	1 20	--	--		
--	--	20	1	29 30	1 20	--	--		
DEMAND KVA						GROUND BUS IS REQUIRED			
INTERPUTING RATING 10,000 RMS SYM.						KEYED DOOR LATCH IS NOT REQUIRED			
						FEED TO BE BOTTOM			

IRRIGATION PANEL									
RATED VOLTAGE		120/240V, 1 PHASE, 3 WIRE		LOCATION		SEE PLAN			
RATED AMPS		100		MOUNTING		SURFACE			
MAIN		LUGS ONLY		FEEDER CONDUCTORS		(3)-#8 THWCU			
BRANCH POLES		20		FEEDING CONDUIT		1 1/2"			
BRANCH DEVICES		PLUG-ON		MANUF. CAT. NO.		SQ. D "Q0114L125GRB"			
WIRE SIZE	DESCRIPTION		BREAKER TRIP POLE	CIR. NUM.	BREAKER POLE TRIP	DESCRIPTION		WIRE SIZE	
#12	CONST.	SITE RECEPTACLE	GF1	20	1 1 2	2 60	SHP IRRIGATION PUMP	#8	
#12	CONST.	SITE RECEPTACLE	GF1	20	1 3 4				
#12	CONST.	SITE RECEPTACLE	GF1	20	1 5 6	1 20	-	-	
#12	CONST.	SITE RECEPTACLE	GF1	20	1 7 8	1 20	-	-	
-	-	-		20	1 9 10	1 20	-	-	
-	-	-		20	1 11 12	1 20	-	-	
-	-	-		20	1 13 14	1 20	-	-	
-	-	-		20	1 15 16	1 20	-	-	
DEMAND KVA							GROUND BUS IS REQUIRED		
INTER interrupting RATING 10,000 RMS SYM.							KEYED DOOR LATCH IS NOT REQUIRED		
							FEED TO BE BOTTOM		

ALL NUMBERS ARE SQUARE D

MAIN POWER PANEL
(1) HCM448A
(1) HC3248VP
(1) HC4SN
(1) HNM1BL
(1) HNM4BL
(1) PG32DGT1A
(1) QBA2200AB
(1) FA2200AB

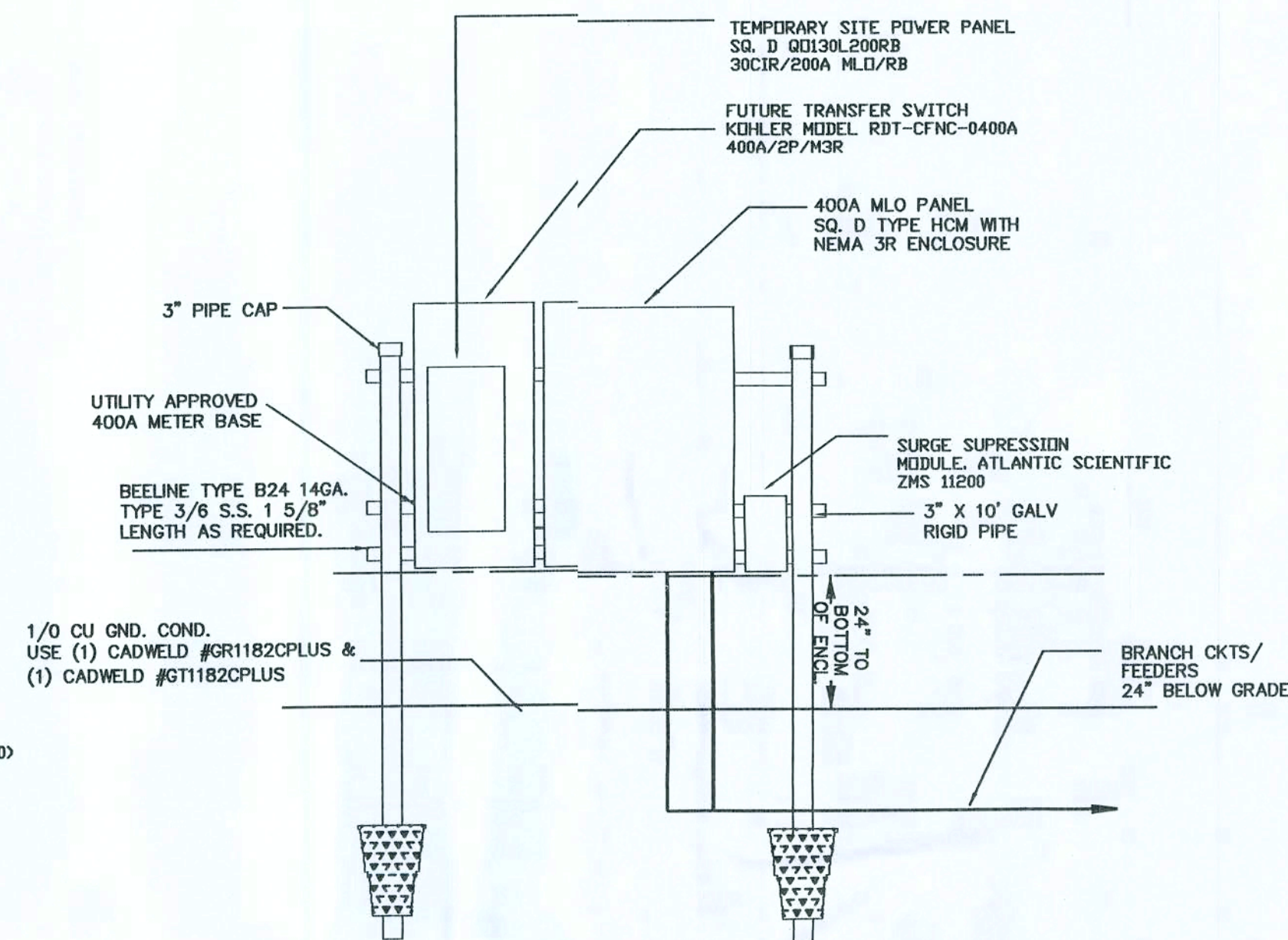
TEMPORARY SITE PANEL
(1) Q0130L200RB
(1) Q0280
(2) Q0120GF1

IRRIGATION PANEL
(1) Q0114L125GRB
(1) Q0260
(4) Q0120GF1

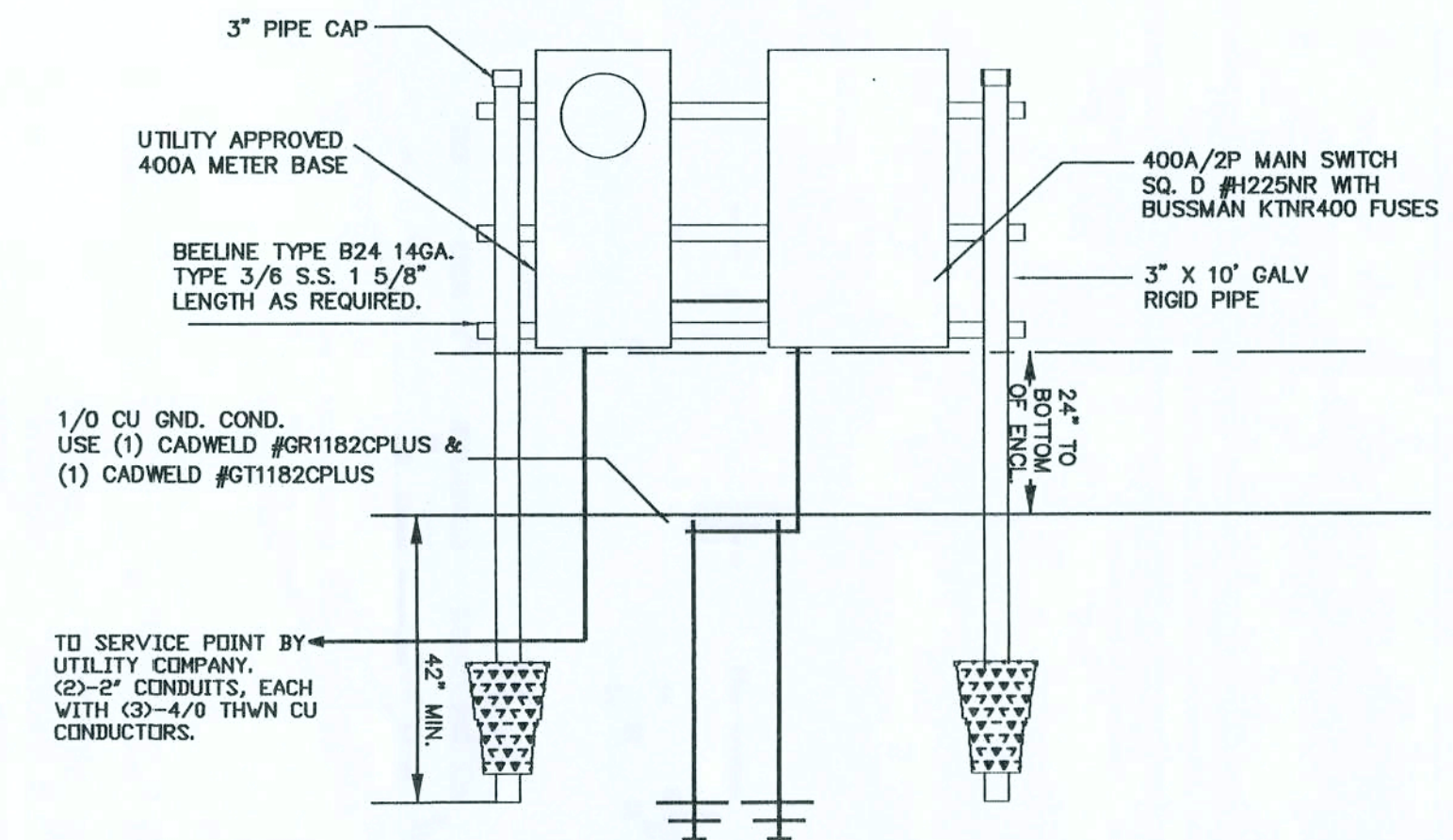
MAIN DISCONNECT
(1) H225NR
(2) PK01A2
(1) HRK4060
(2) KTR400 (BUSSMAN)

GROUNDING
(4) 3/4" X 10' GROUND RODS
(2) CADWELD GT1182CPLUS
(2) CADWELD GR1182CPLUS
(1) CADWELD PLUSCU

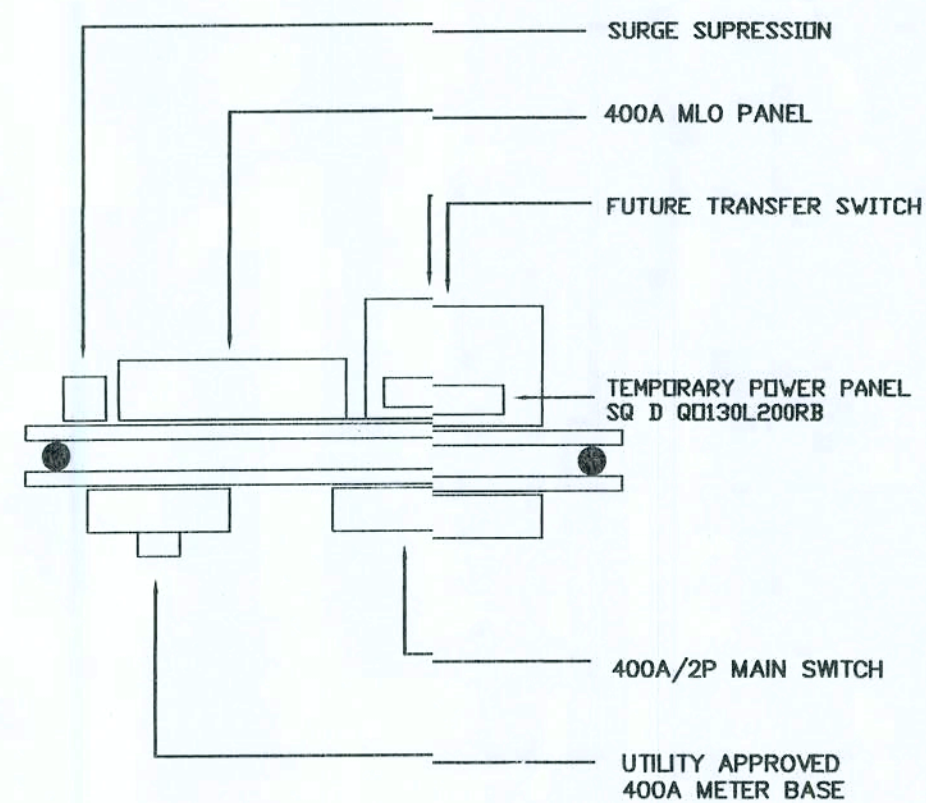
SURGE SUPPRESSION MODULE
ATLANTIC SCIENTIFIC ZMS-150 (CAT#11200)



SERVICE RACK - FRONT SIDE
NOT TO SCALE



SERVICE RACK - BACK SIDE
NOT TO SCALE



SERVICE RACK - TOP VIEW
NOT TO SCALE

8-15-06

the lawrence group
ARCHITECTS 208 WORTH AVENUE, PALM BEACH, FLORIDA 33480 P.H. 0601 655-0570

FLORIDA

MR. AND MRS. WADE HORNSBY

COLUMBIA COUNTY

SERVICE RACK DETAIL
SCALE: 1/4\"/>

E-3

6004

TEELE & ASSOCIATES
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2903 CORPORATE DRIVE
BOYNTON BEACH, FLORIDA 33426 (561) 730-4747
CERT. OF AUTH. NO. 4669

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DATE: APR 06 2007