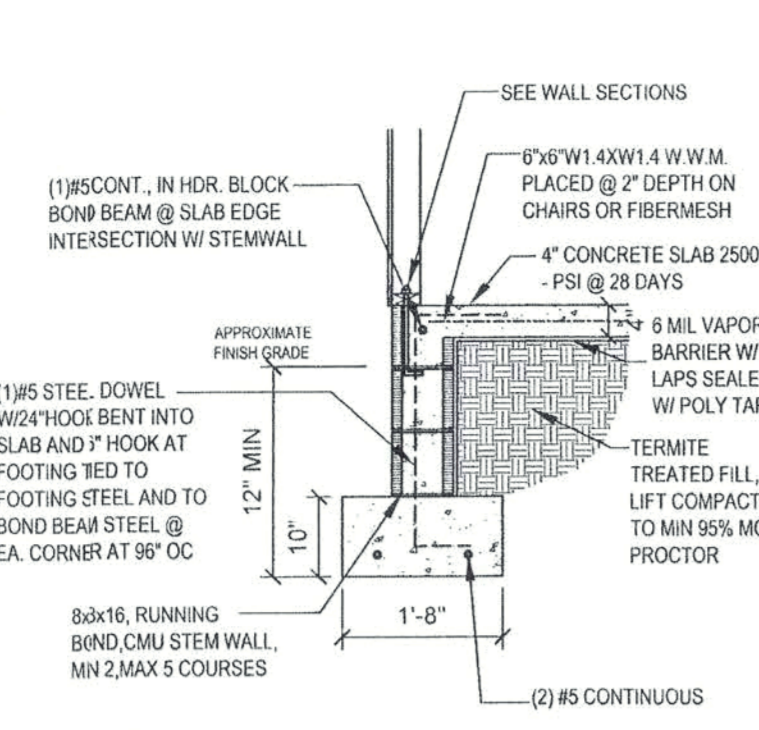


Typical Truss Uplift & Max 12" Wall Height	Anchor Bolt Spacing	SP1/SP2 Spacing	Alternate Spacing
775 LB	48" O.C.	48" O.C.	NA
850 LB	48" O.C.	32" O.C.	NA
1070 LB	32" O.C.	16" O.C.	32" O.C.
1500 LB	24" O.C.	16" O.C.	16" O.C.
2200 LB	L1701 W/ 9" X 1" WEDGE ANCHOR	NA	2" HTS20 NAIL TO STUD PACK

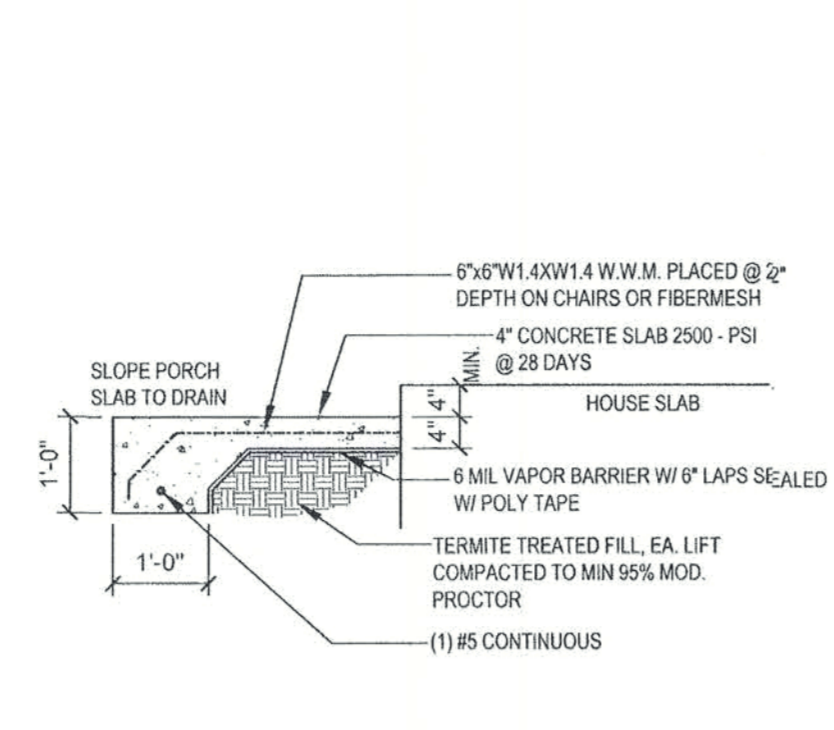
NOTE: SP2 TOP & SP1 BOTTOM ALTERNATE FOR SP46

NOTE: MINIMUM ANCHOR BOLT SPACING FOR WALLS WITH A HEIGHT GREATER THAN 10'-0" AND LESS THAN 14'-0" SHALL BE 32" O.C.

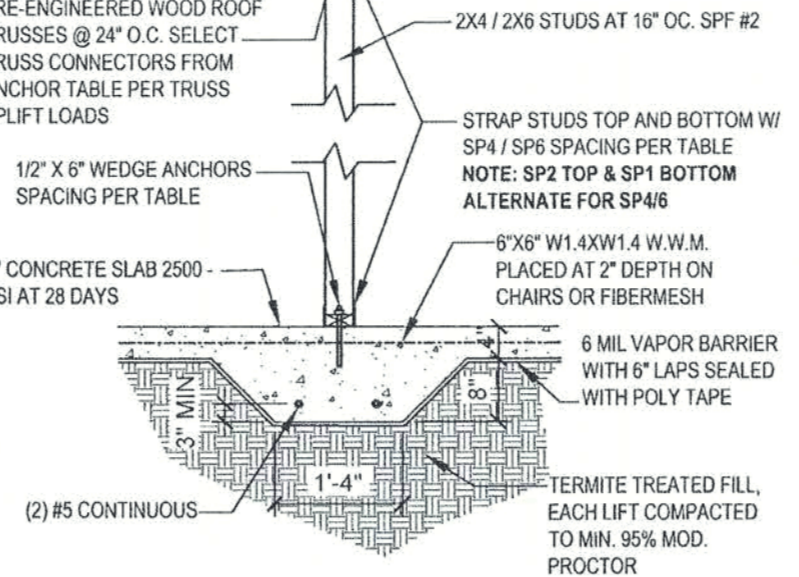
W1 - SINGLE STORY EXT. WALL SECTION  
SCALE: 1/2"=1'-0" REV-22-AUG-03



F1 - STEM WALL FOUNDATION  
SCALE: 1/2"=1'-0" REV-22-AUG-03

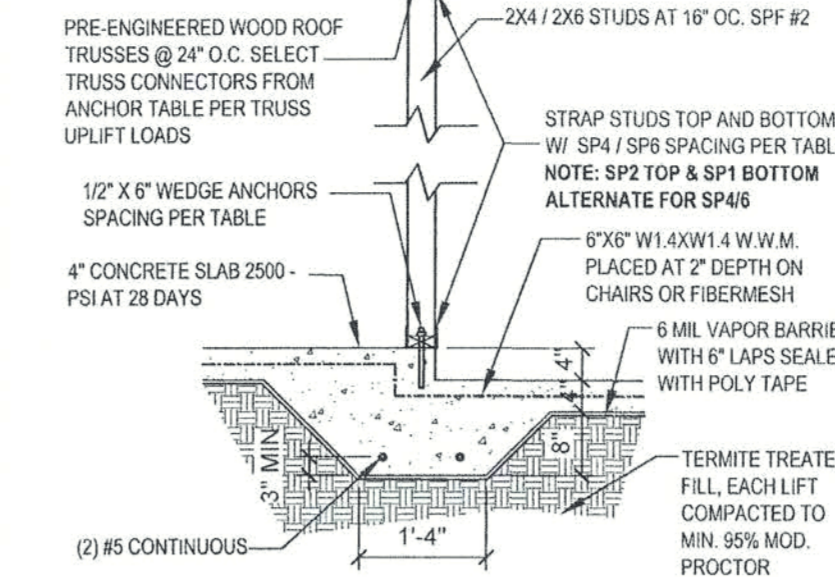


F2 - PORCH SLAB  
SCALE: 1/2"=1'-0" REV-22-AUG-03



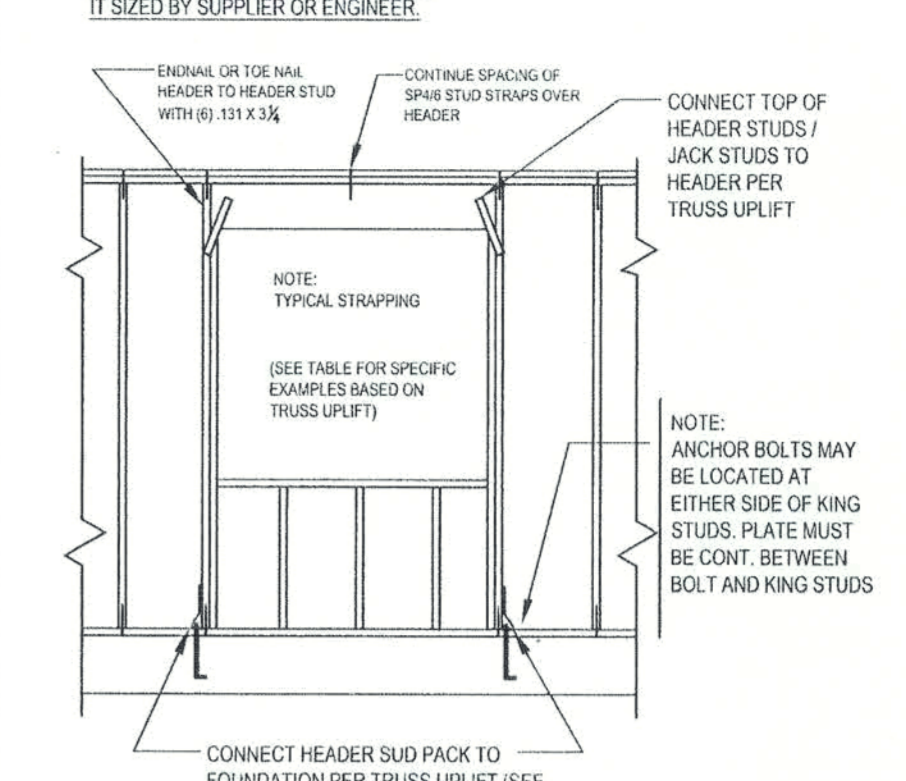
Typical Truss Uplift	Wedge Anchor Spacing	SP1/SP2 Spacing	Truss Connector
400 LB	48" O.C.	48" O.C.	H25A
600 LB	48" O.C.	32" O.C.	H10
800 LB	32" O.C.	16" O.C.	H100
2200 LB	L1701 W/ 9" X 1" WEDGE ANCHOR	NA	2" HTS20 NAIL TO STUD PACK

F4 - INTERIOR BEARING FOOTING  
SCALE: 1/2"=1'-0" REV-22-AUG-03



Typical Truss Uplift	Wedge Anchor Spacing	SP1/SP2 Spacing	Truss Connector
400 LB	48" O.C.	48" O.C.	H25A
600 LB	48" O.C.	32" O.C.	H10
800 LB	32" O.C.	16" O.C.	H100
2200 LB	L1701 W/ 9" X 1" WEDGE ANCHOR	NA	2" HTS20 NAIL TO STUD PACK

F5 - INTERIOR BEARING STEP FOOTING  
SCALE: 1/2"=1'-0" REV-22-AUG-03



W13-TYPICAL HEADER SIZING & STRAPING DETAIL  
SCALE: N.T.S. REV-22-AUG-03

Load Bearing Header Sizing Methods (BY BUILDER)

- Determine header size from FBC 2001, Tables 2308.3 A, B, & C, or 2308.5.
- Use supplier published data or Southern pine span tables.
- For engineered lumber joists have supplier's engineer size beam.
- Jack studs and King Studs (BY BUILDER)
- Lookup jack studs from FBC 2001, Tables 2308.3 A, B, C, or 2308.5.
- Use one jack stud to every 3000 lb vertical load.
- Total king plus jack studs = studs needed to be there if no opening was there.
- Header Uplift Connectors (BY BUILDER)
- Calculate the uplift at each end of the header by summing the moments of all truss uplifts and dividing by the length of the header.
- Select header connections from table below or mfg. catalog to connect header to stud (top connection) and stud to foundation (bottom connection).

Uplift, lb.	Top Connector	Bottom Connector
< 800	End nail of tie wall with 1/2" x 2 1/2"	SP1 & 100
< 1500	L1701	7/8" x 16-10 1/2" x 1/2" AB
< 1750	L1701	1055 L1701-101
< 2500	L1701	L1701, 16-10 1/2" x 1/2" AB
< 3885	L1701	3485 JHT16, 16-10 1/2" x 1/2" AB

NOTE: Uplift greater than 3885 lb requires engineering design.

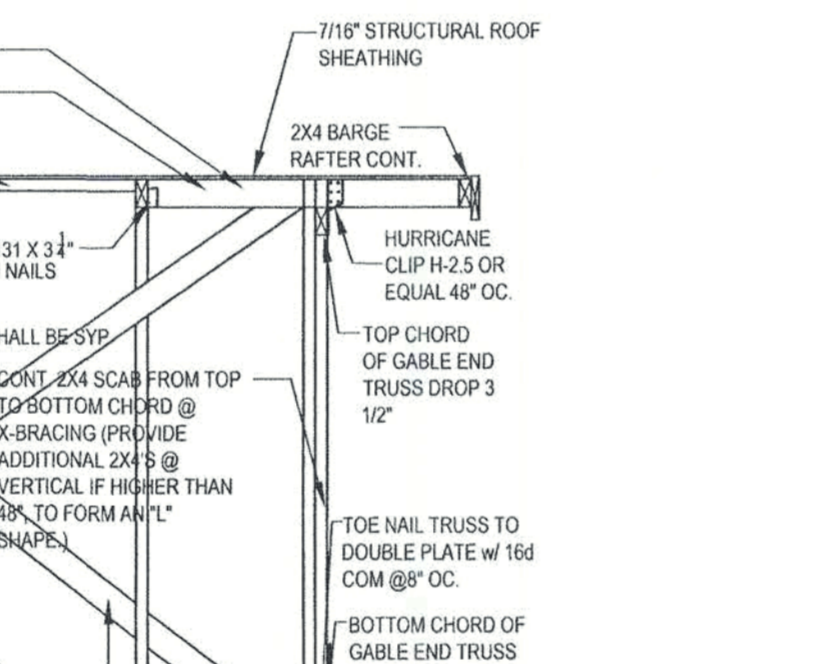
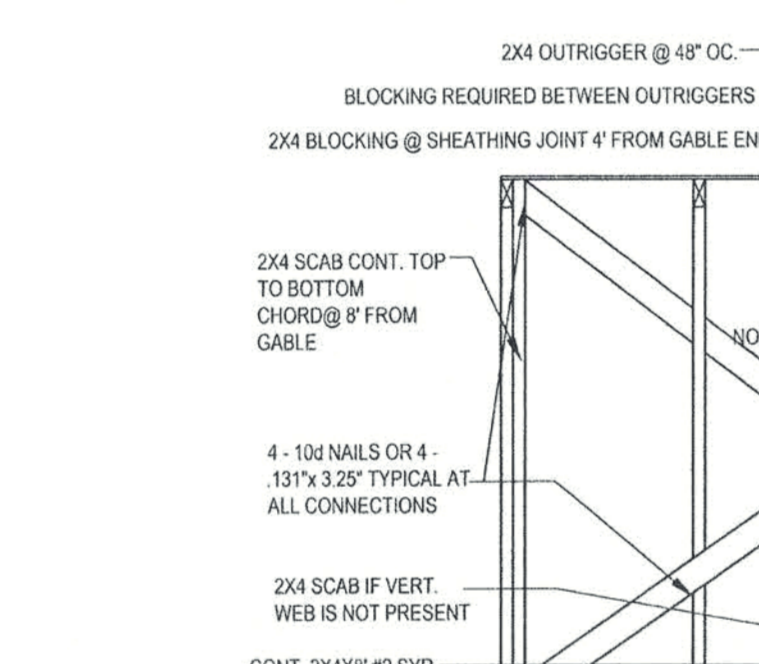
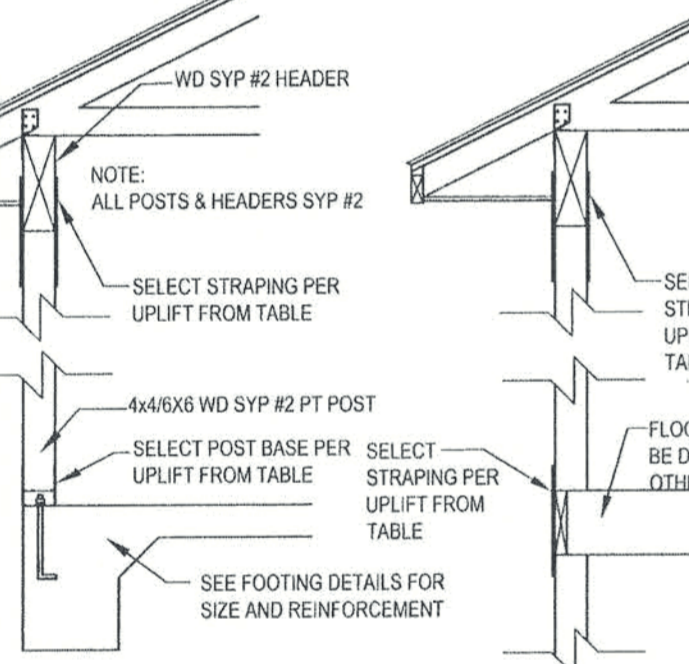
Header Span (ft)	Building Width / Truss Span (ft)		
	24	28	36
2-24	3.6	1.32	1.2
2-26	5.5	1.48	1.42
2-28	6.10	1.51	1.54
2-30	6.5	1.73	1.64
2-32	9.9	2.95	2.76
3-24	8.4	1.75	1.68
3-26	10.6	1.97	2.82
3-28	13.2	2.10	2.94
4-24	9.2	1.84	1.78
4-26	11.8	1.106	1.95
4-28	14.1	1.122	2.15

NOTES: N1 = Number of jack studs required to support each stud. Building width is measured perpendicular to the ridge. For widths between those shown, spans may be interpolated. Spans are based on uniform loads on header.

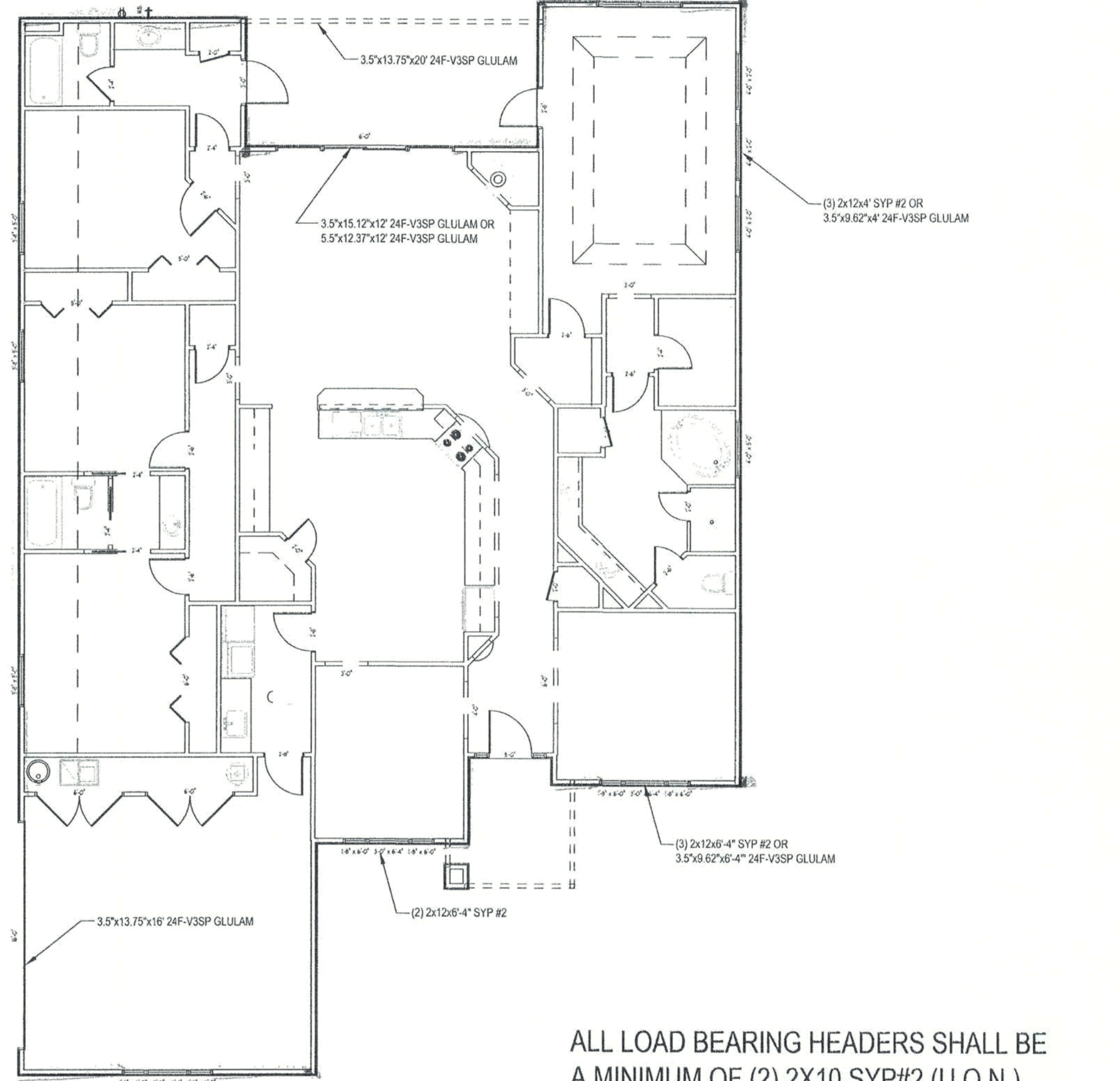
W1 - SINGLE STORY EXT. WALL SECTION  
SCALE: 1/2"=1'-0" REV-22-AUG-03

F3 - GARAGE DOOR POCKET  
SCALE: 1/2"=1'-0" REV-22-AUG-03

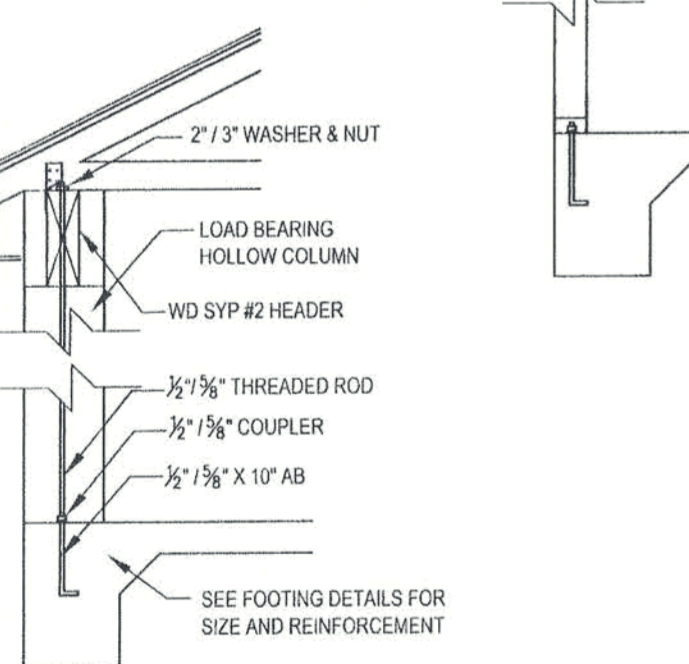
F12 - NON-BEARING STEP FOOTING  
SCALE: 1/2"=1'-0" REV-10-FEB-03



W10 - TYPICAL GABLE END (X-BRACING)  
SCALE: 1/2"=1'-0"

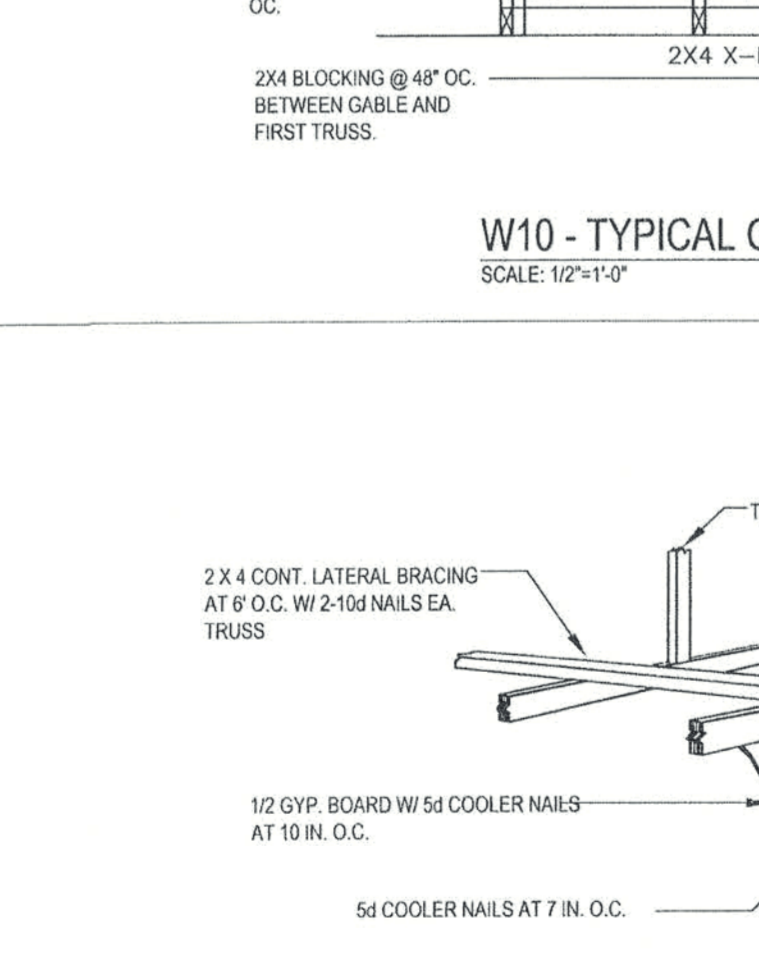


ALL LOAD BEARING HEADERS SHALL BE A MINIMUM OF (2) 2X10 SYP#2 (U.O.N.)

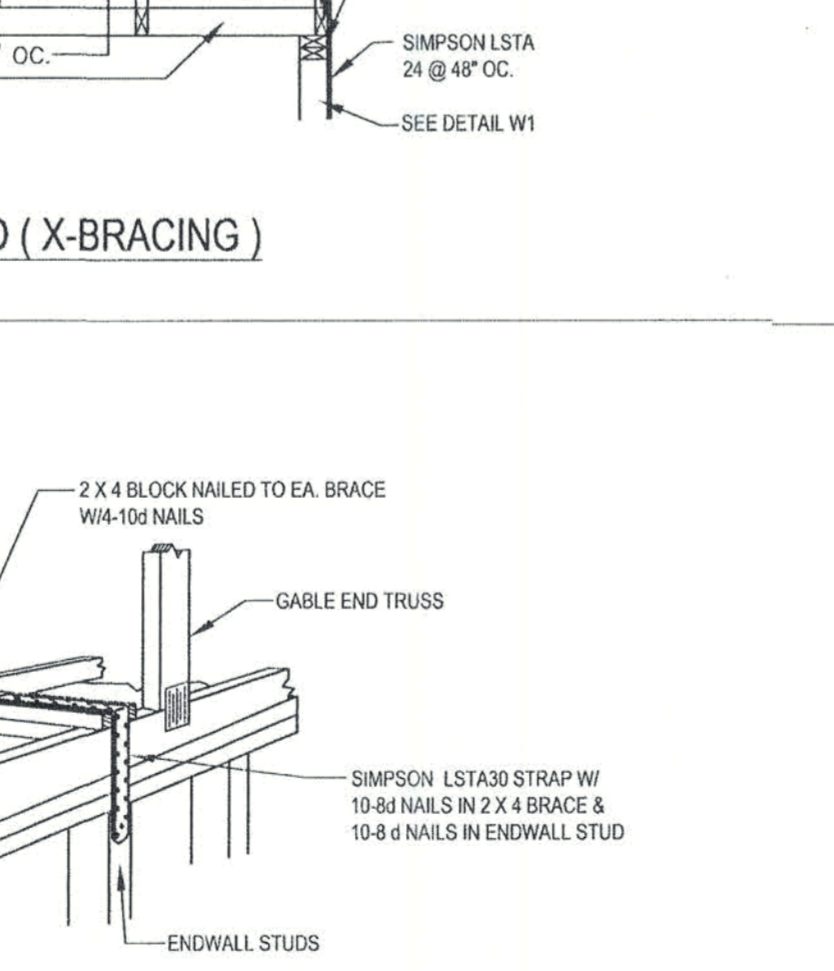


Typical Post Uplift	Post Base Anchor	Between Floor Strapping	Header Strapping
555 LB	AN46 W/ 10x16 1/2" AB	(1) L1701 W/ 80-100 EA	(1) L1701 W/ 80-100 EA
720 LB	AN46 W/ 10x16 1/2" AB	(1) L1701 W/ 80-100 EA	(1) L1701 W/ 80-100 EA
2000 LB	AN46 W/ 10x16 1/2" AB	(1) L1701 W/ 80-100 EA	(1) L1701 W/ 80-100 EA
2300 LB	AN46 W/ 10x16 1/2" AB	(1) L1701 W/ 80-100 EA	(1) L1701 W/ 80-100 EA

W12 - PORCH HEADER ANCHORS  
SCALE: 1/2"=1'-0" REV-10-FEB-03



W23 - GYPSUM CEILING DIAPHRAGM OPTION - GABLE END WALL  
SCALE: N.T.S.



W23 - GYPSUM CEILING DIAPHRAGM OPTION - GABLE END WALL  
SCALE: N.T.S.

Uplift SYP	Truss Connector	To Plate	To Truss / Rafter
320	H2	4-8d	4-8d
245	H5A	3-8d	3-8d
535	H2.5A	5-8d	5-8d
620	H10	8-10d x 1 1/2"	8-10d x 1 1/2"
850	LTS12	8-8d x 1 1/2"	8-8d x 1 1/2"
1245	HTS20	10-10d or 12-10d x 1 1/2"	10-10d or 12-10d x 1 1/2"
1285	L1701	10-10d x 1 1/2"	2-10d x 1 1/2"
1765	LGT2	14-10d Striker	15-10d Striker
3655	4200 MAGT	3/4" Thk. Rod	22-10d
SYP	SYP Strap Connector	To One Member	To Other Member
780	885 SP4	6-10d x 1 1/2"	NA
865	1005 CS20	9-8d or 7-10d	9-8d or 7-10d
1085	1265 LSTA19-24	7-10d	7-10d
1100	1360 SP14	12-10d x 1 1/2"	NA
1420	1650 CS16	14-8d or 11-10d	14-8d or 11-10d
SYP	SYP Column Anchor	To Foundation	To Column / Truss
1180	1350 LTT19	3/4" x 16" AB	8-16d Sinkers
1985	2310 LTT01	3/4" x 16" AB	18-10d x 1 1/2"
2385	2775 H25A	3/4" x 16" AB	2 1/2" 30dls
3590	4175 HJT16	3/4" x 16" AB	15-16d
1975	2300 ABU68	3/4" x 16" AB	12-16d

Basic Wind Speed	110 MPH	
Wind Exposure	B	
Wind Importance Factor	1.0	
Building Category	II	
Internal Pressure Coefficient	NA (Enclosed)	
Mean Roof Height	< 30 ft	
Roof Slope <td>10-45 Degrees</td>	10-45 Degrees	
Zone	Effective Wind Area (ft <sup>2</sup> )	
1	100	
2	21.8	
3	128.8	
4	21.8	
5	21.8	
6	281.1	
7	18.5	
8	22.8	
Required	Transverse	Longitudinal
45.0'	23.9'	113.0'

N3-WINDLOAD ENGINEER'S SCOPE OF WORK: The wind load engineer is engineer of record for compliance of the structure to wind load requirements of FBC 2001, Section 1606. If trusses are used, the wind load engineer is not engineer of record for the trusses and did not design the trusses or delegate to the truss designer.

BUILDER'S RESPONSIBILITY: The builder and owner are responsible for the following, which are specifically not part of the wind load engineer's scope of work.

- Confirm that the foundation design & site conditions meet gravity load requirements (assume 1000 PSF bearing capacity unless visual observation or soils test proves otherwise)
- Provide materials and construction techniques, which comply with FBC 2001 requirements for the stated wind velocity and design pressures.
- Provide a continuous load path from roof to foundation. If you believe the plan omits a continuous load path connection, call the wind load engineer immediately.
- Verify the truss engineering includes truss design, placement plans, temporary and permanent bracing details, truss-to-truss connections, and load reactions for all bearing locations.
- Select uplift connections, walls, columns, and footings based on truss engineering bearing locations and reactions, including interior bearing walls.
- Size headers for gravity loads; headers sized by the builder for gravity loads will also satisfy wind loads.

DOCUMENT CONTROL AND PRIORITY: Structural requirements on S-1 control unless the building code or architectural sheets have more stringent requirements. Non-structural requirements on architectural sheets control. Specific requirements take precedence over general requirements. Revision control by the latest signature date and is the responsibility of the builder.

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DIAMENSIONS: Stated dimensions supercede scaled dimensions. Refer all questions to Mark Dicosway, P.E. for resolution. Do not proceed without clarification.

WINDLOAD ENGINEER: Mark Dicosway, PE No. 53151

CERTIFICATION: The attached plans and "Windload Engineering", sheet S-1, comply with FBC 2001, Section 1606 and all loads, to the best of my knowledge.

LIMITATION: This design is valid for one building, at specified location. This drawing is not valid for construction unless sealed as is affixed.

REV-06-OCT-02

N2-GENERAL NOTES:

CONCRETE: MINIMUM COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS SHALL BE  $F_c = 3000$  PSI. WHERE EXCESS WATER IS ADDED TO THE CONCRETE SO THAT ITS SERVICABILITY IS DEGRADED, THE ATTAINMENT OF REQUIRED STRENGTH SHALL NOT RELEASE THE CONTRACTOR FROM PROVIDING SUCH MODIFICATIONS AS MAY BE REQUIRED BY THE ENGINEER TO PROVIDE A SERVICEABLE MEMBER OR SURFACE. ALL CONCRETE SHALL BE VIBRATED. NO REPAIR OR RUBBING OF CONCRETE SURFACES SHALL BE MADE PRIOR TO INSPECTION BY AND APPROVAL OF THE ENGINEER, OWNER OR HIS REPRESENTATIVE.

WELDED WIRE REINFORCED SLAB: 6" x 4' x 11' x 1.4, FB = 65ksi, WELDED WIRE REINFORCEMENT FABRIC (W.W.M.) CONFORMING TO ASTM A185, LOCATED IN MIDDLE OF THE SLAB, SUPPORTED WITH APPROVED MATERIALS OR SUPPORTS AT SPACINGS NOT TO EXCEED 3'.

FIBER CONCRETE SLAB: CONCRETE SLABS ON GROUND CONTAINING SYNTHETIC FIBER REINFORCEMENT. FIBER LENGTHS SHALL BE 1/2 INCH TO 2 INCHES IN LENGTH. DOSAGE AMOUNTS SHALL BE FROM 0.75 TO 1.5 POUNDS PER CUBIC YARD IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. SYNTHETIC FIBERS SHALL COMPLY WITH ASTM C 1116. THE MANUFACTURER OR SUPPLIER SHALL PROVIDE CERTIFICATION OF COMPLIANCE WITH ASTM C 1116 WHEN REQUESTED BY THE BUILDING OFFICIAL.

CONTROL JOINTS: WHERE SPECIFIED, SAWN CONTROL JOINTS IN SLAB-ON-GRADE SHALL BE CUT IN ACCORDANCE WITH ACI 302. JOINTS SHALL BE CUT WITHIN 12 HOURS OF SLAB PLACEMENT. THE LENGTH / WIDTH RATIOS OF SLAB AREAS SHALL NOT EXCEED 1:5 AND TYPICAL SPACING OF CUTS TO BE 12 FT. DO NOT CUT W.W.M. OR REINFORCING STEEL. RECOMMENDED LOCATION OF CONTROL JOINTS IS SUBJECT TO OWNER AND CONTRACTOR'S APPROVAL. THE CONTROL JOINTS ARE NOT INTENDED TO PREVENT CRACKS BUT RATHER TO ENCOURAGE THE SLAB TO CRACK ON A GIVEN LINE.)

REBAR: ASTM A 615, GRADE 40, DEFORMED BARS, FB = 40 KSI. ALL LAPS SPACES 40" / 16" (25' FOR #5 BARS); LINO. ALL REINFORCEMENT SHALL BE BENT AND PLACED IN ACCORDANCE WITH ACI 315-95 WITH ACI 315-96 UNLESS NOTED OTHERWISE. ALL TENSION DEVELOPMENT LENGTHS SHALL BE 23 INCHES.

STRUCTURAL CONNECTORS: MANUFACTURERS AND PRODUCT NUMBER FOR CONNECTORS, ANCHORS, AND REINFORCEMENT ARE LISTED FOR EXAMPLE NOT ENDORSEMENT. AN EQUIVALENT DEVICE OF THE SAME OR OTHER MANUFACTURER CAN BE SUBSTITUTED FOR ANY DEVICES LISTED IN THE EXAMPLE TABLES AS LONG AS IT MEETS THE REQUIRED LOAD CAPACITIES. MANUFACTURER'S INSTALLATION INSTRUCTIONS MUST BE FOLLOWED TO ACHIEVE RATED LOADS.

ANCHOR BOLTS: A-307 ANCHOR BOLTS WITH MINIMUM EMBEDMENT AS SPECIFIED IN DRAWINGS BUT NO LESS THAN 7" IN CONCRETE OR REINFORCED BOND BEAM OR 15" IN GROUTED CMU.

WASHERS: WASHERS USED WITH 1/2" BOLTS TO BE 2" x 2" x 9/64"; WITH 5/8" BOLTS TO BE 3" x 3" x 9/64"; WITH 3/4" BOLTS TO BE 3" x 3" x 9/64"; WITH 7/8" BOLTS TO BE 3" x 3" x 5/16"; NO.

NAILS: ALL NAILS ARE COMMON NAILS UNLESS OTHERWISE SPECIFIED OR ACCEPTED BY FBC TEST REPORTS AS HAVING EQUAL STRUCTURAL VALUES.

REV-22-AUG-03

# WINDLOAD ENGINEERING

"EVERYTHING YOU NEED FOR YOUR BUILDING PERMIT"

Mark Dicosway P.E.

POB 868, Lake City, FL 32056 Phone: (386) 754-5419  
 Fax: (702) 543-7241 Email: windloadengineer@bellsouth.net

Location: Lot #17 Emerald Lakes S/D Columbia County, Florida

Mehako Residence

Builder: Don Reed Construction

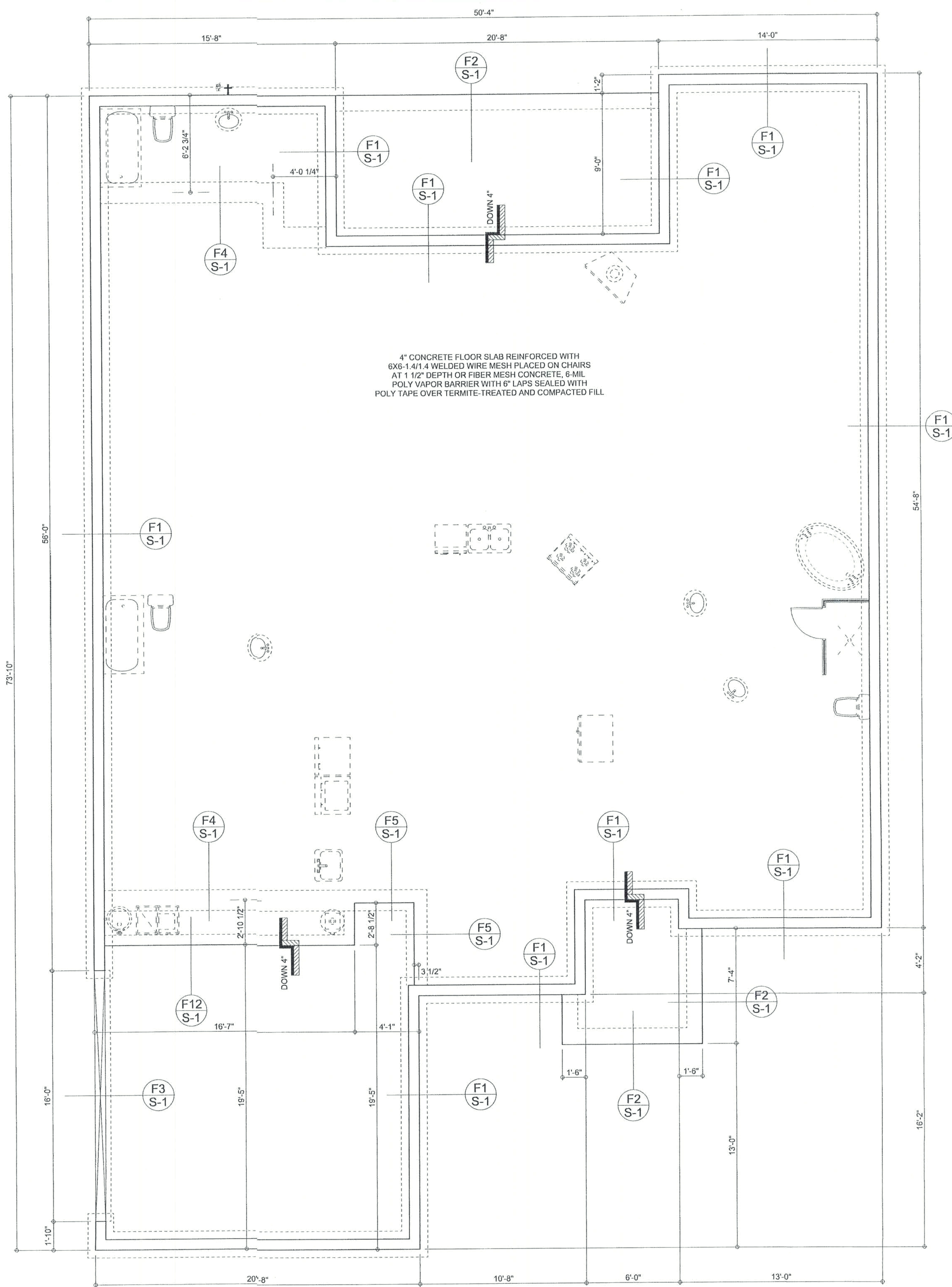
Designer: DDS

Approved: FLEPES315

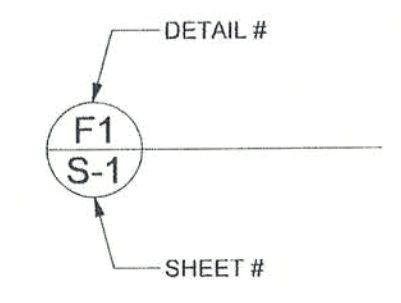
Sheet S-1 of 2 Sheets

Windload Engineering  
 Job # 402173

REV-06-OCT-02



**FOUNDATION PLAN**  
SCALE: 1/4" = 1'-0"  
DIMENSIONS ON STRUCTURAL SHEETS ARE NOT EXACT. REFER TO ARCHITECTURAL FLOOR PLAN FOR ACTUAL DIMENSIONS



WINDLOAD ENGINEER: Mark Disosway, P.E. No. 53915, P.O. Box 868, Lake City, FL 32055, 386-754-5419

**DIMENSIONS:**  
Stated dimensions supercede scaled dimensions. Refer all questions to Mark Disosway, P.E. for resolution. Do not proceed without clarification.

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**CERTIFICATION:** These plans and "Windload Engineering", Sheet S-1, attached, comply with Florida Building Code 2001, Section 1606 wind loads, to the best of my knowledge.

**LIMITATION:** This design is valid for one building at specified location. In case of conflict, structural requirements, scope of work, and holder responsibilities on sheet S-1 control.

MARK DISOSWAY  
P.E. 53915  
*Mark Disosway*  
2/18/04  
SEAL

**Don Reed Construction**

**Mehalko Residence**

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PRINTED DATE:  
February 25, 2004

DRAWN BY: David Disosway      CHECKED BY:

DESIGNED BY:

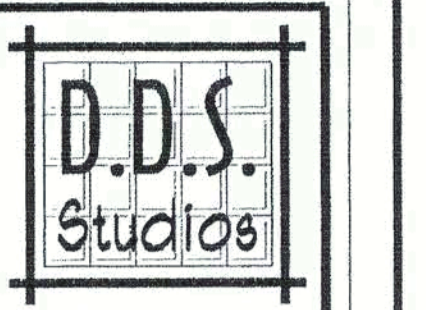
FINALS DATE:  
24 / Feb / 04

JOB NUMBER:  
402173

DRAWING NUMBER  
S-2  
OF 2 SHEETS

*Daniel Shaheen*  
Daniel Shaheen

February 05, 2004



ARCHITECTURAL DESIGN  
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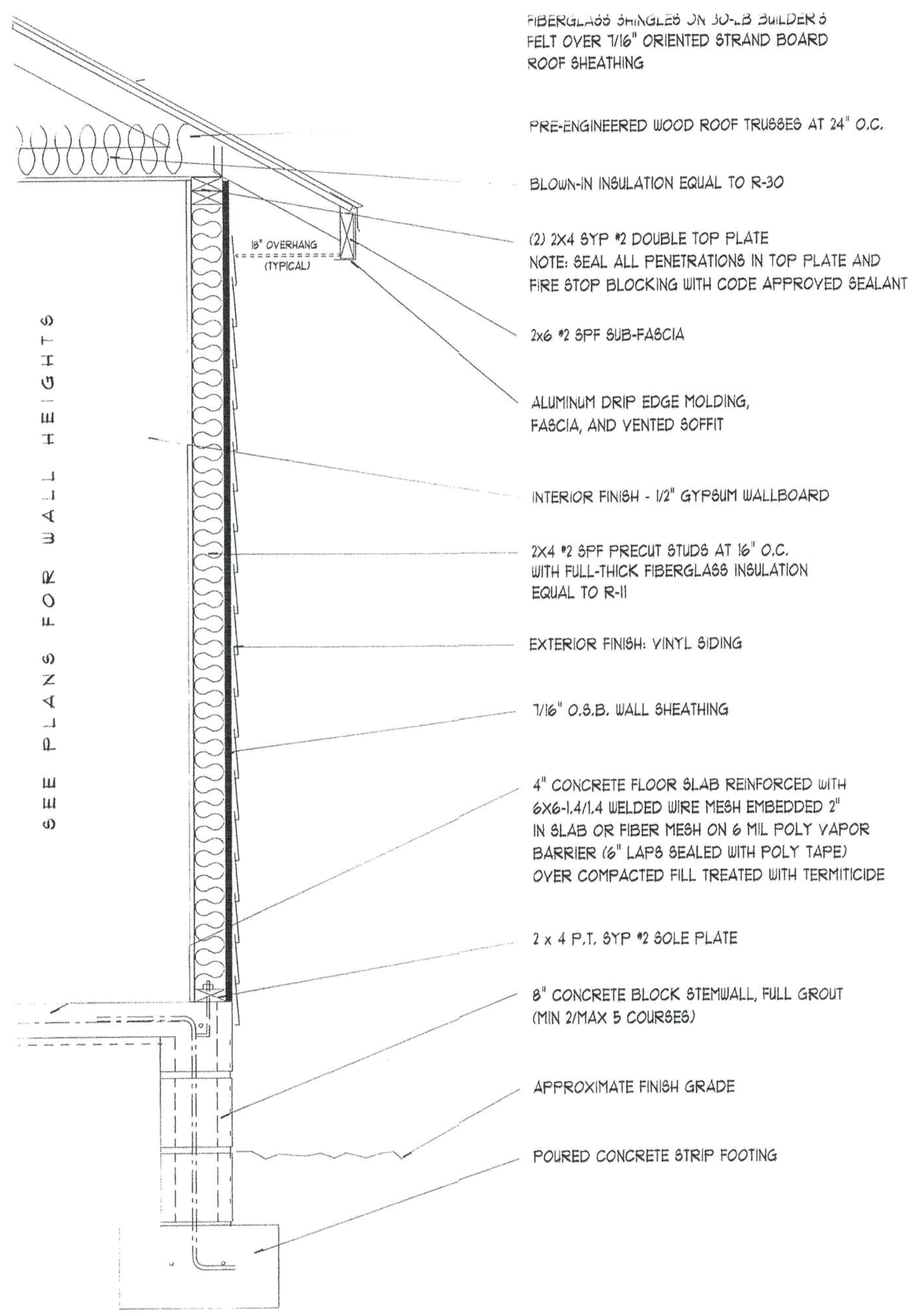
ENGINEERED BY:

A CUSTOM HOME BY DON REED CONSTRUCTION  
**MEHALKO RESIDENCE**  
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FLOOR PLAN  
TYPICAL WALL SECTION

SHEET NUMBER  
2 of 3

All work shall comply with the standard building code, and all applicable local codes and ordinances.  
Contractor shall verify all dimensions prior to commencing construction.



FIBERGLASS SHINGLES ON JOIST BULKHEAD FELT OVER 1/16" ORIENTED STRAND BOARD ROOF SHEATHING

PRE-ENGINEERED WOOD ROOF TRUSSES AT 24" O.C.

BLOWN-IN INSULATION EQUAL TO R-30

(2) 2X4 SYP #2 DOUBLE TOP PLATE  
NOTE: SEAL ALL PENETRATIONS IN TOP PLATE AND FIRE STOP BLOCKING WITH CODE APPROVED SEALANT

2x6 #2 SYP SUB-FASCIA

ALUMINUM DRIP EDGE MOLDING, FASCIA, AND VENTED SOFFIT

INTERIOR FINISH - 1/2" GYPSUM WALLBOARD

2X4 #2 SYP PRECUT STUDS AT 16" O.C. WITH FULL-THICK FIBERGLASS INSULATION EQUAL TO R-11

EXTERIOR FINISH: VINYL SIDING

1/16" O.S.B. WALL SHEATHING

4" CONCRETE FLOOR SLAB REINFORCED WITH 6X6-14/14 WELDED WIRE MESH EMBEDDED 2" IN SLAB OR FIBER MESH ON 6 MIL POLY VAPOR BARRIER (6" LAP & SEALED WITH POLY TAPE) OVER COMPACTED FILL TREATED WITH TERMITICIDE

2 x 4 P.T. SYP #2 SOLE PLATE

8" CONCRETE BLOCK STEMWALL, FULL GROUT (MIN 2/MAX 5 COURSES)

APPROXIMATE FINISH GRADE

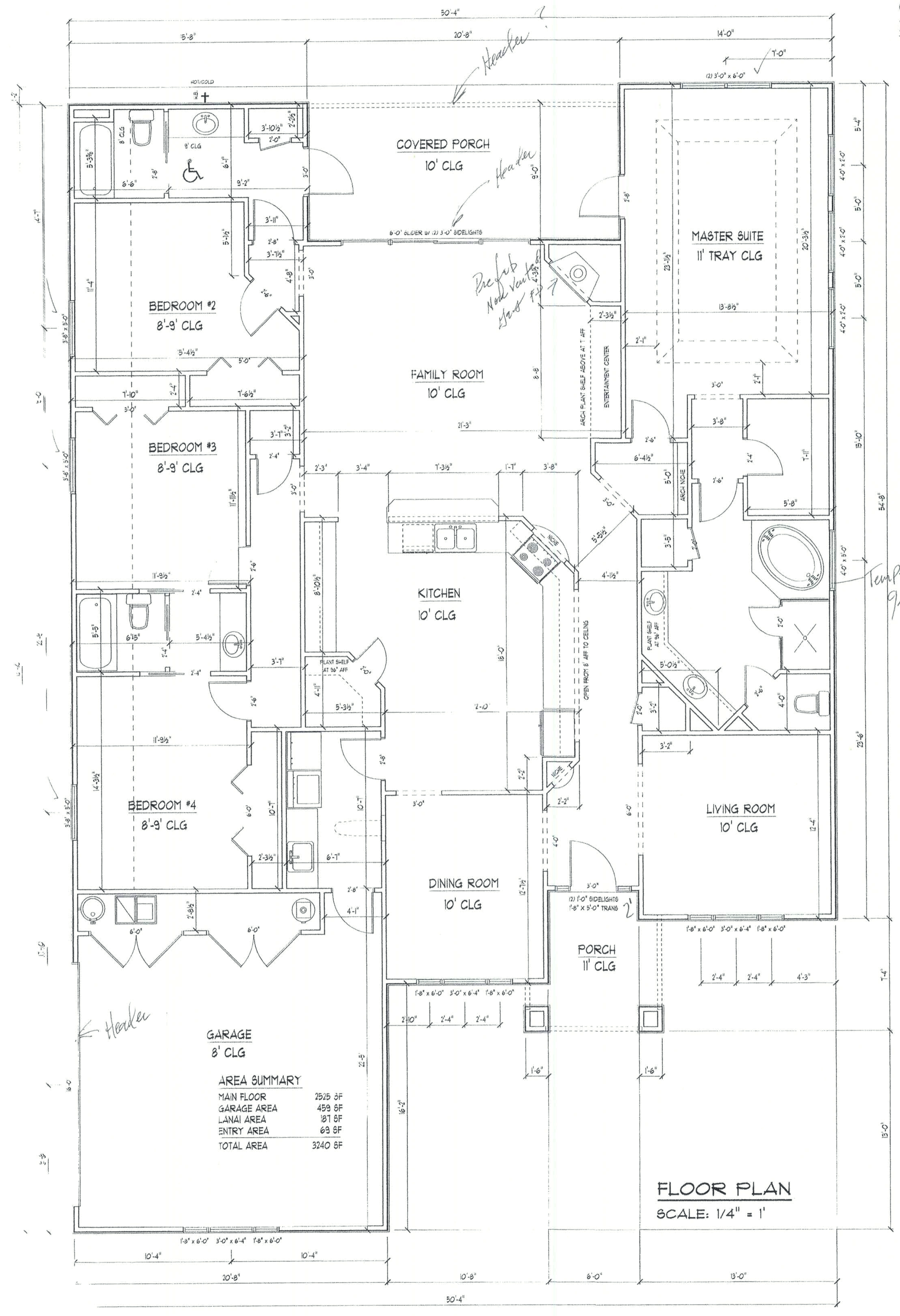
POURED CONCRETE STRIP FOOTING

**TYPICAL WALL SECTION**

SCALE: 1" = 1'0"

REFER TO STRUCTURAL PAGE FOR STRUCTURAL SPECIFICATIONS

ALL DRAWINGS NOT TO BE SCALED, WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS



**AREA SUMMARY**

MAIN FLOOR	2925 SF
GARAGE AREA	459 SF
LANAI AREA	181 SF
ENTRY AREA	63 SF
TOTAL AREA	3240 SF

**FLOOR PLAN**

SCALE: 1/4" = 1'

Daniel Shaheen  
Daniel Shaheen

February 05, 2004



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ENGINEERED BY:

A CUSTOM HOME BY DON REED CONSTRUCTION

**MEHALKO RESIDENCE**

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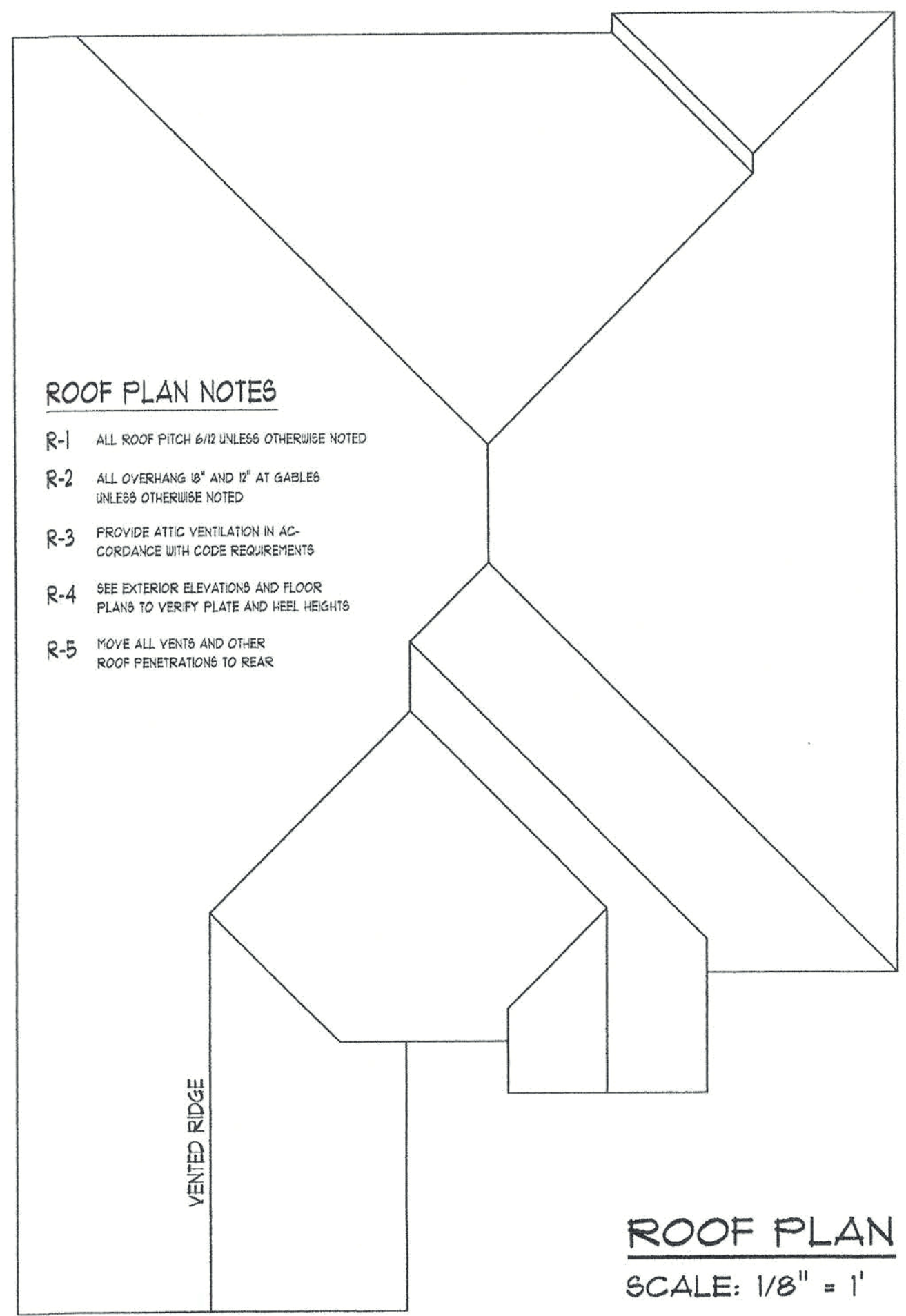
ELECTRICAL PLAN

ROOF PLAN

SHEET NUMBER  
3 of 3

All work shall comply with the standard building code, and all applicable local codes and ordinances.  
Contractor shall verify all dimensions prior to commencing construction.

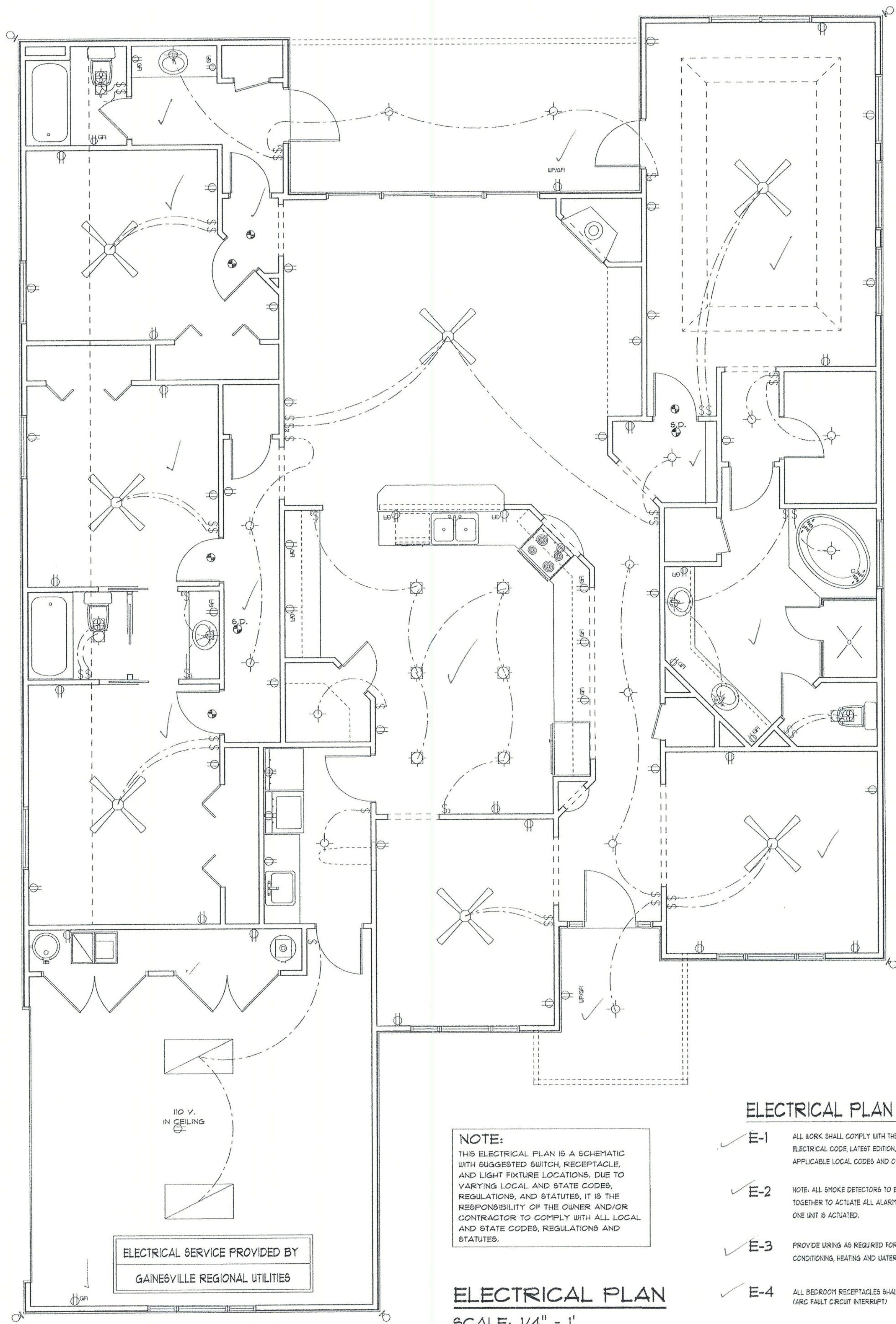
ALL DRAWINGS NOT TO BE SCALED, WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS



**ROOF PLAN NOTES**

- R-1 ALL ROOF PITCH 6/12 UNLESS OTHERWISE NOTED
- R-2 ALL OVERHANGS 6" AND 12" AT GABLES UNLESS OTHERWISE NOTED
- R-3 PROVIDE ATTIC VENTILATION IN ACCORDANCE WITH CODE REQUIREMENTS
- R-4 SEE EXTERIOR ELEVATIONS AND FLOOR PLANS TO VERIFY PLATE AND HEEL HEIGHTS
- R-5 MOVE ALL VENTS AND OTHER ROOF PENETRATIONS TO REAR

**ROOF PLAN**  
SCALE: 1/8" = 1'



**NOTE:**  
THIS ELECTRICAL PLAN IS A SCHEMATIC WITH SUGGESTED SWITCH, RECEPTACLE, AND LIGHT FIXTURE LOCATIONS. DUE TO VARYING LOCAL AND STATE CODES, REGULATIONS, AND STATUTES, IT IS THE RESPONSIBILITY OF THE OWNER AND/OR CONTRACTOR TO COMPLY WITH ALL LOCAL AND STATE CODES, REGULATIONS AND STATUTES.

**ELECTRICAL PLAN**  
SCALE: 1/4" = 1'

**ELECTRICAL PLAN NOTES**

- ✓ E-1 ALL WORK SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE LATEST EDITION, AND ALL OTHER APPLICABLE LOCAL CODES AND ORDINANCES.
- ✓ E-2 NOTE: ALL SMOKE DETECTORS TO BE WIRED TOGETHER TO ACTIVATE ALL ALARMS IF ANY ONE UNIT IS ACTIVATED.
- ✓ E-3 PROVIDE WIRING AS REQUIRED FOR APPLIANCES, AIR CONDITIONING, HEATING AND WATER HEATING EQUIPMENT.
- ✓ E-4 ALL BEDROOM RECEPTACLES SHALL BE AFCI (ARC FAULT CIRCUIT INTERRUPT)