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Building Data

Building Type: Single
Family Residence unspinkled

Occupancy Classification:
Residential Group R-3

Construction Type: V

Number of Stories: 1

Building Height: 13'-2"

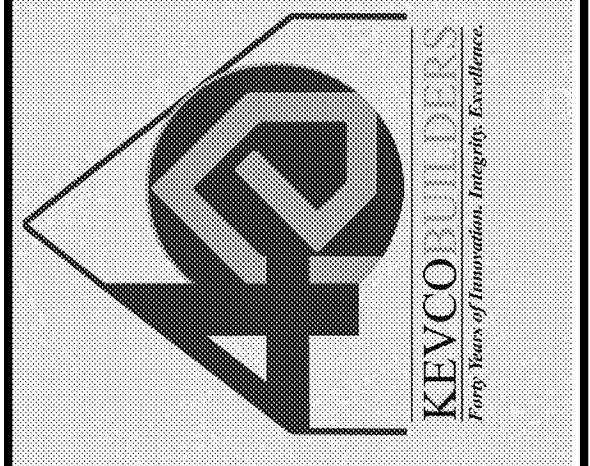
Area Tabulation:
Existing 1104 sqft
New Area 313 sqft
Living 1417 sqft
Total 1417 sqft

THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH AND MEETS THE REQUIREMENTS OF SECTION R301.1 OF THE FLORIDA RESIDENTIAL BUILDING CODE, 2011 EDITION, AND ASCE 7-10 FOR V_{ult}=140 MPH WIND SPEED, V_{red}=108 MPH

RISK CATEGORY II EXPOSURE CATEGORY C
TOPOGRAPHIC FACTOR = 1.0 GUST EFFECT, G=0.85
WIND DIR. FACTOR K_d=0.85 FULLY ENCLOSED
INTERNAL PRESSURE COEFFICIENT: +/- 0.18
DESIGN PRESSURE FOR WALL COMPONENTS & CLADDING (WORST CASE) +42.1 PSF -51.1 PSF
GARAGE DOOR DESIGN PRESSURE =+22.4, -25.3 (WORST CASE)
ROOF LIVE LOAD = 20 PSF FLOOR LIVE LOAD = 40 PSF

ENGINEERING SERVICES GROUP, LLC
391 W. Alfred St.
Tavares, FL 32718
352-388-1735 J. Lee Smith, P.E. #36171

101 E Woodward
Drawn By
Michael Roberts



1/8" Scale on 11 x 17
or
1/4" scale on 24 x 36

C-1

INTERIOR PREHUNG HOLLOW CORE DOOR OPENINGS

6' 8" HEIGHT	82-1/2"	
8' 0" HEIGHT	98-1/2"	
DOOR SIZES	OPENING WIDTH	
1' 6"	20"	
1' 8"	22"	
2' 0"	26"	
2' 4"	30"	
2' 6"	32"	
2' 8"	34"	
3' 0"	38"	
	BALL CATCH	T-AST
4' 0"	50"	51"
5' 0"	62"	63"
6' 0"	74"	75"

INTERIOR PREHUNG SOLID CORE DOOR OPENING

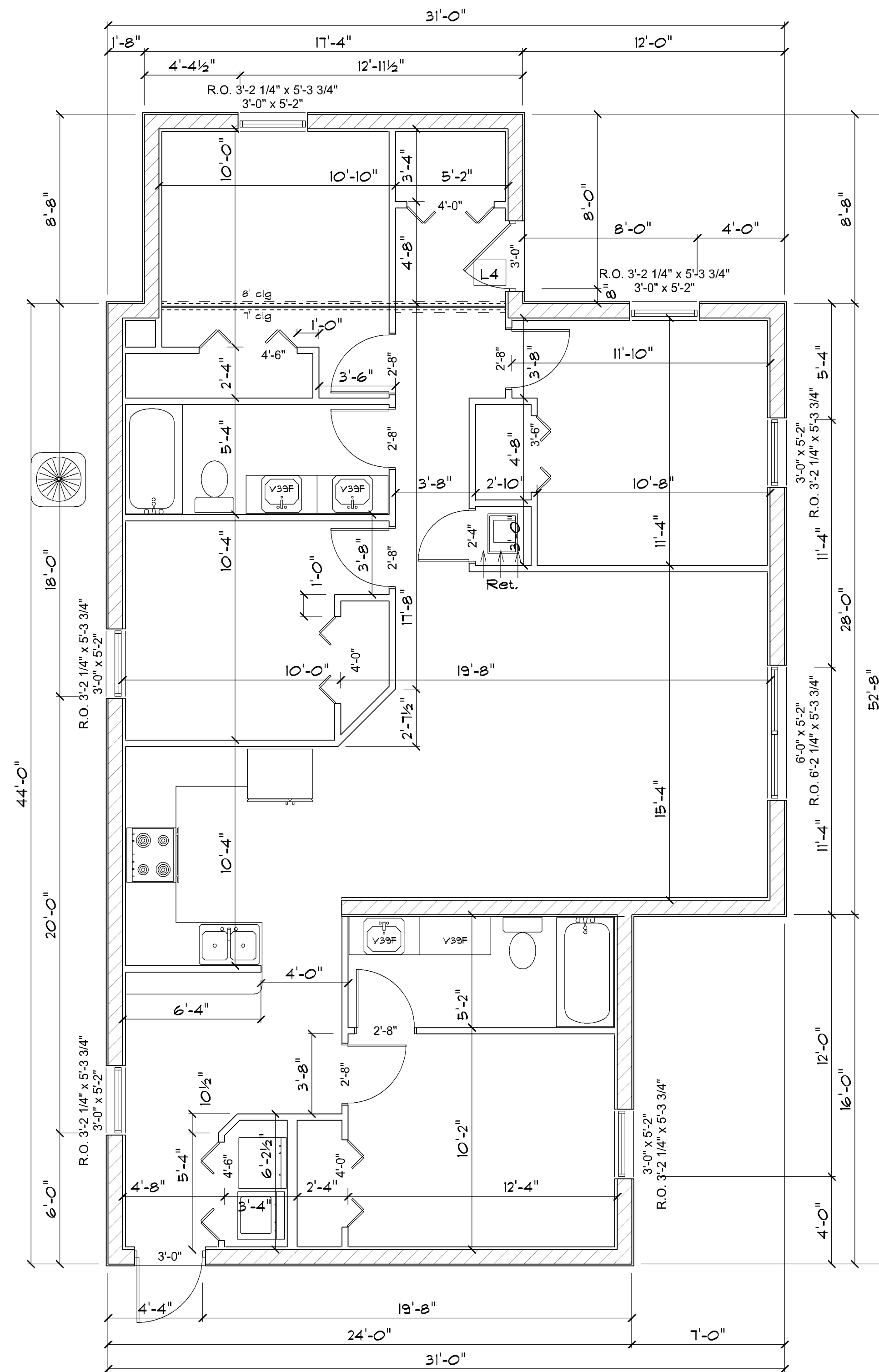
6' 8" HEIGHT	IN SWING: 83"	OUT SWING: 82-1/2"
8' 0" HEIGHT	IN SWING: 99"	OUTSWING: 98-1/2"
DOOR SIZES	OPENING WIDTH	
2' 8"	34"	

BIFOLD OPENINGS

6' 8" HEIGHT	82"
8' 0" HEIGHT	98"
DOOR SIZES	OPENING WIDTH
1' 6"	19-1/2"
1' 8"	21-1/2"
2' 0"	25-1/2"
2' 4"	29-1/2"
2' 6"	31-1/2"
2' 8"	33-1/2"
3' 0"	37-1/2"
4' 0"	49-1/2"
5' 0"	61-1/2"
6' 0"	73-1/2"

Floorplan

Area Tabulation
 Existing 1104 sqft
 New Area 313 sqft
 Living 1417 sqft
 Total 1417 sqft



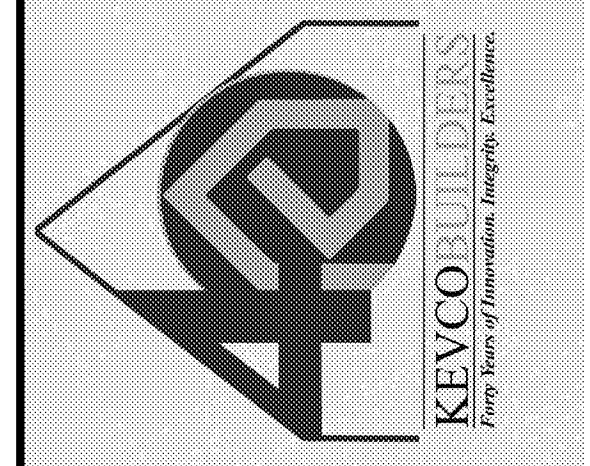
THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH AND MEETS THE REQUIREMENTS OF SECTION R301.1 OF THE FLORIDA RESIDENTIAL BUILDING CODE, 2011 EDITION, AND ASCE 7-10 FOR VULNERABILITY WIND SPEED, V_{WIND} = 108 MPH

RISK CATEGORY II EXPOSURE CATEGORY C
 TOPOGRAPHIC FACTOR = 1.0 GUST EFFECT G = 0.85
 WIND DIR. FACTOR K_d = 0.85 FULLY ENCLOSED
 INTERNAL PRESSURE COEFFICIENT, +/- C_i = 0.18
 DESIGN PRESSURE FOR WALL COMPONENTS & CLADDING (WORST CASE) = 42.1 PSF -57.1 PSF
 GARAGE DOOR DESIGN PRESSURE = 22.4, -25.3 (WORST CASE)
 ROOF LIVE LOAD = 20 PSF FLOOR LIVE LOAD = 40 PSF

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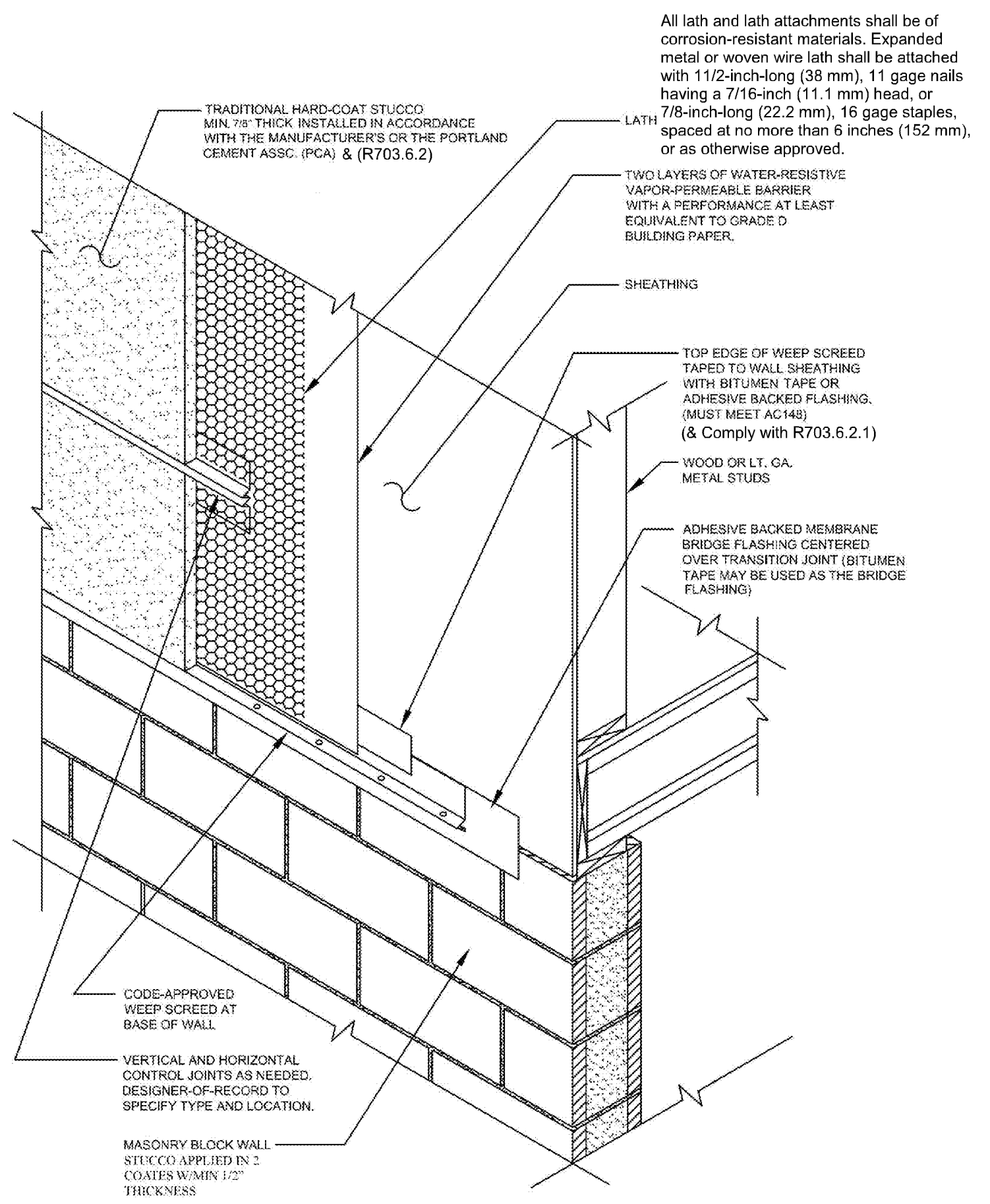
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Drawn By
 Michael Roberts



1/8" scale on 11 x 17
 or
 1/4" scale on 24 x 36

A-1



All lath and lath attachments shall be of corrosion-resistant materials. Expanded metal or woven wire lath shall be attached with 1 1/2-inch-long (38 mm), 11 gage nails having a 7/16-inch (11.1 mm) head, or 7/8-inch-long (22.2 mm), 16 gage staples, spaced at no more than 6 inches (152 mm), or as otherwise approved.

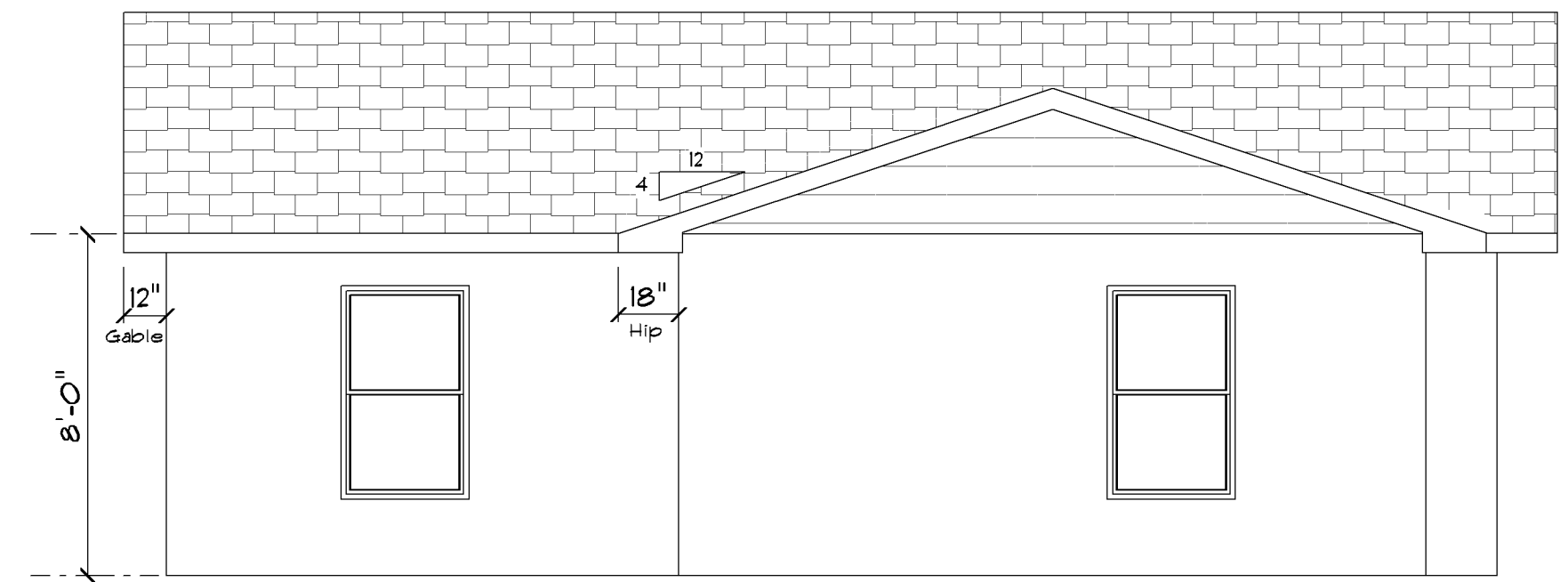
Roof Ventilation Calculations
Per the Florida Building Code Section R806 ROOF VENTILATION

Lot Number LM-451

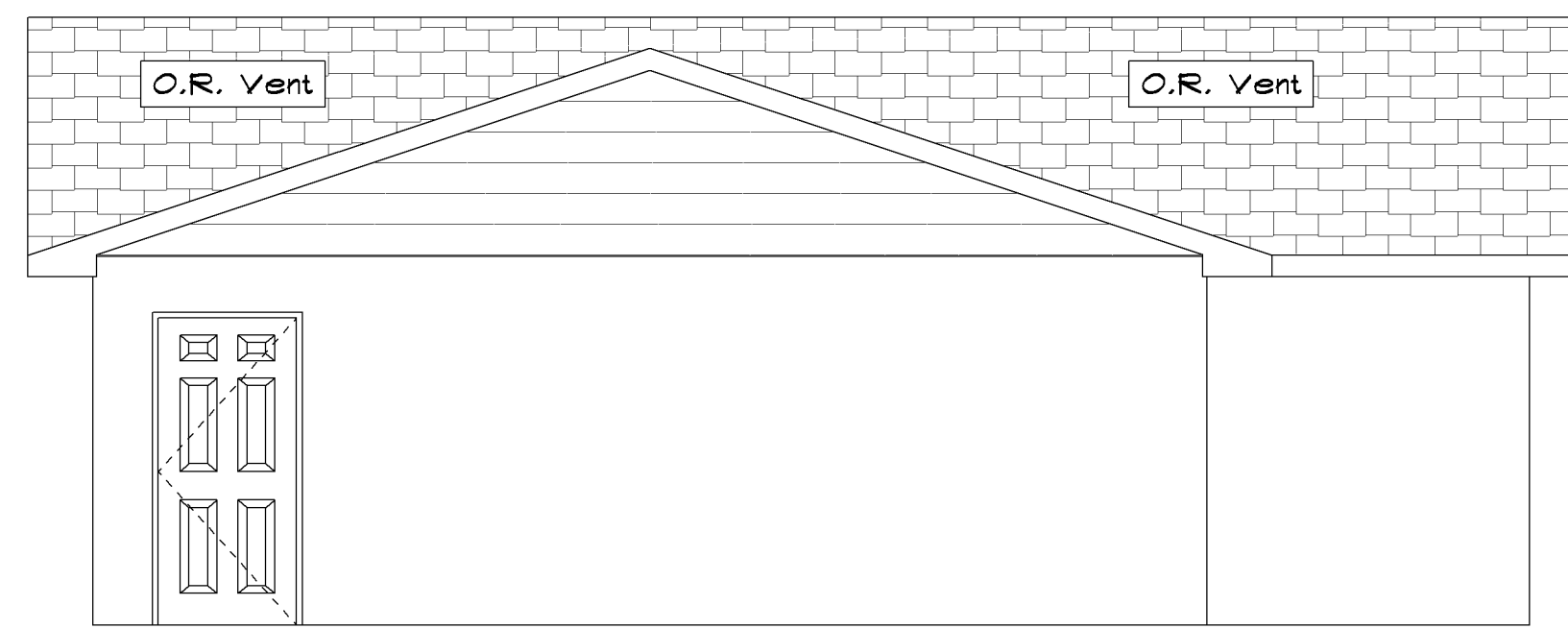
Determine the sq.ft. of attic floor space 1416 SF
Divide by Code Formula 1/300 for NFA 300
NFA = Net Free Area sf / 300 = 4.72 sq. ft.
Multiply NFA by 144" (1 SF) X 144 = 679.68 sq. in NFA
Divide result by 2 for equal intake/exhaust / 2 = 339.84 sq.in.in NFA Intake or exhaust (Intake provided by vented soffits)
Product used: Lomanco T10 D = 140 sq. in.
divide sq. in. exhaust by 140 sq. in. provided 2.427428571 vent boxes needed

TOTAL OFF RIDGE VENTS NEEDED OR 3 OFF RIDGE VENTS NEEDED

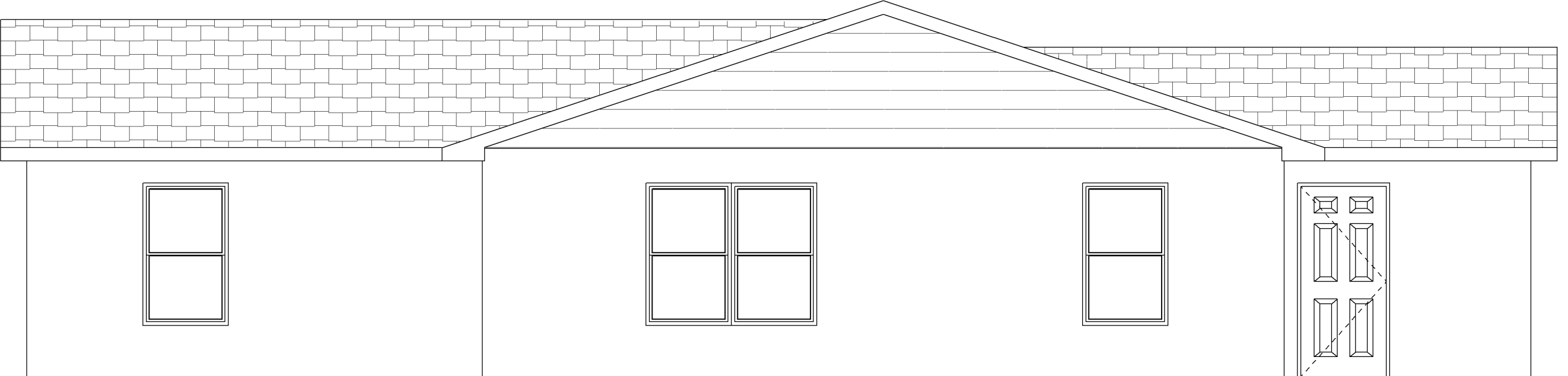
(Install off ridge vents at least three feet above eaves and minimum two feet below ridge to be field located.)



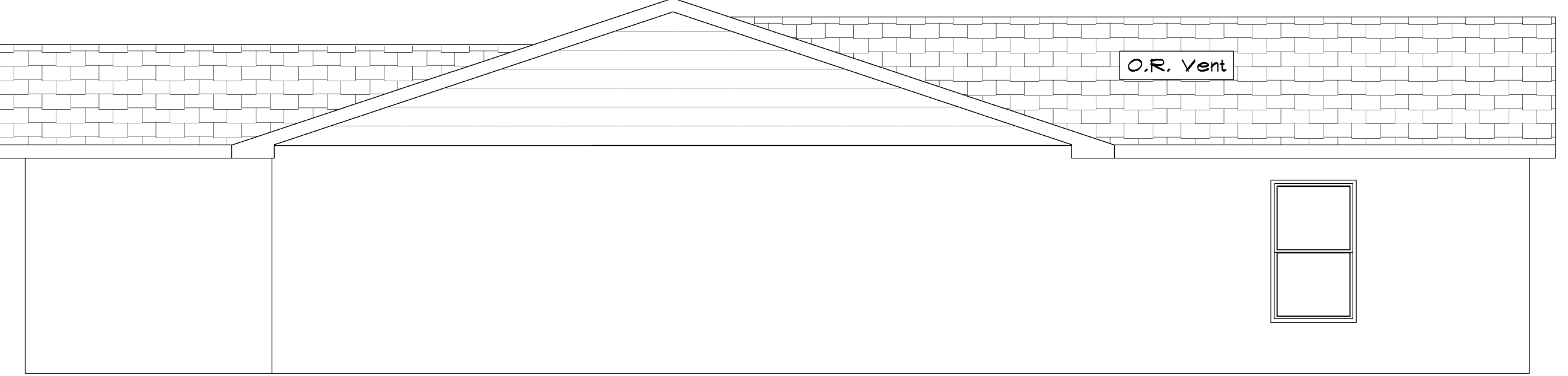
Front Elevation



Rear Elevation



Left Elevation



Right Elavation

THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH AND MEETS THE REQUIREMENTS OF SECTION R301.1 OF THE FLORIDA RESIDENTIAL BUILDING CODE, 2011 EDITION, AND ASCE 7-10 FOR Vult.-140 MPH WIND SPEED, Vasc. =108 MPH

RISK CATEGORY II EXPOSURE CATEGORY C

TOPOGRAPHIC FACTOR = 1.0 GUST EFFECT, G=0.85

WIND DIR. FACTOR Kz=0.85 FULLY ENCLOSED

INTERNAL PRESSURE COEFFICIENT: +/- 0.18

DESIGN PRESSURE FOR WALL COMPONENTS & CLADDING (WORST CASE) =42.1 Psf +/-1 Psf

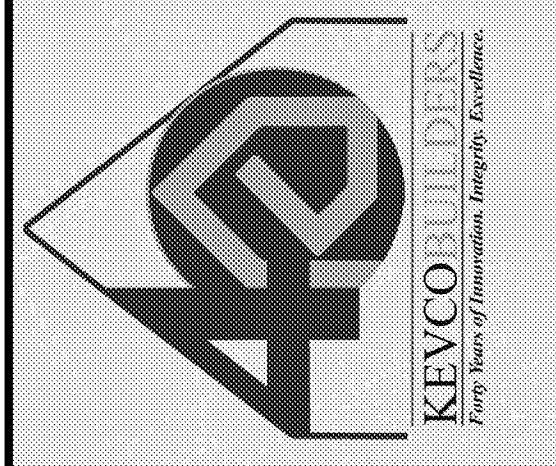
GARAGE DOOR DESIGN PRESSURE =+22.4, -25.3 (WORST CASE)

ROOF LIVE LOAD = 20 Psf FLOOR LIVE LOAD = 40 Psf

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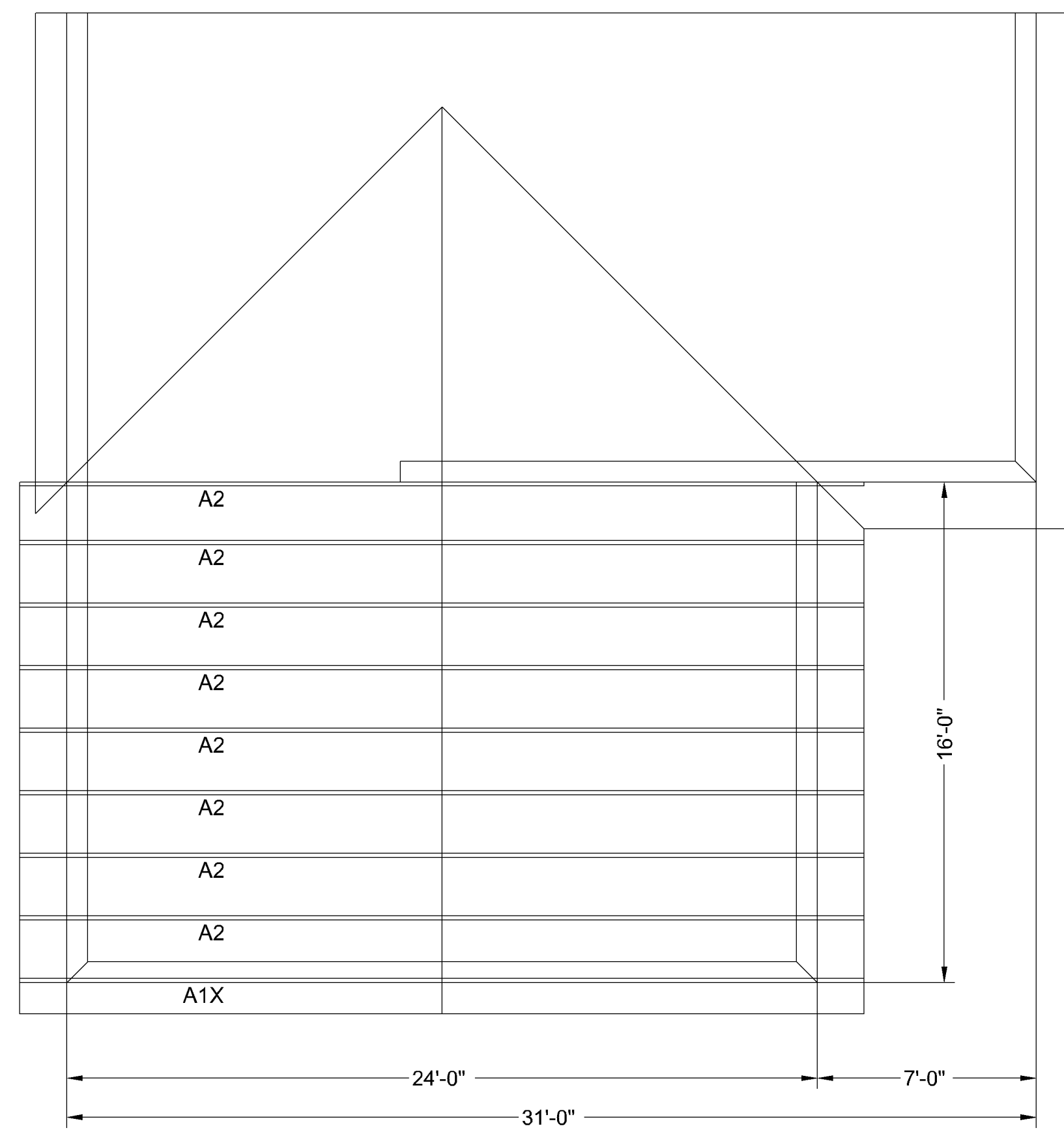
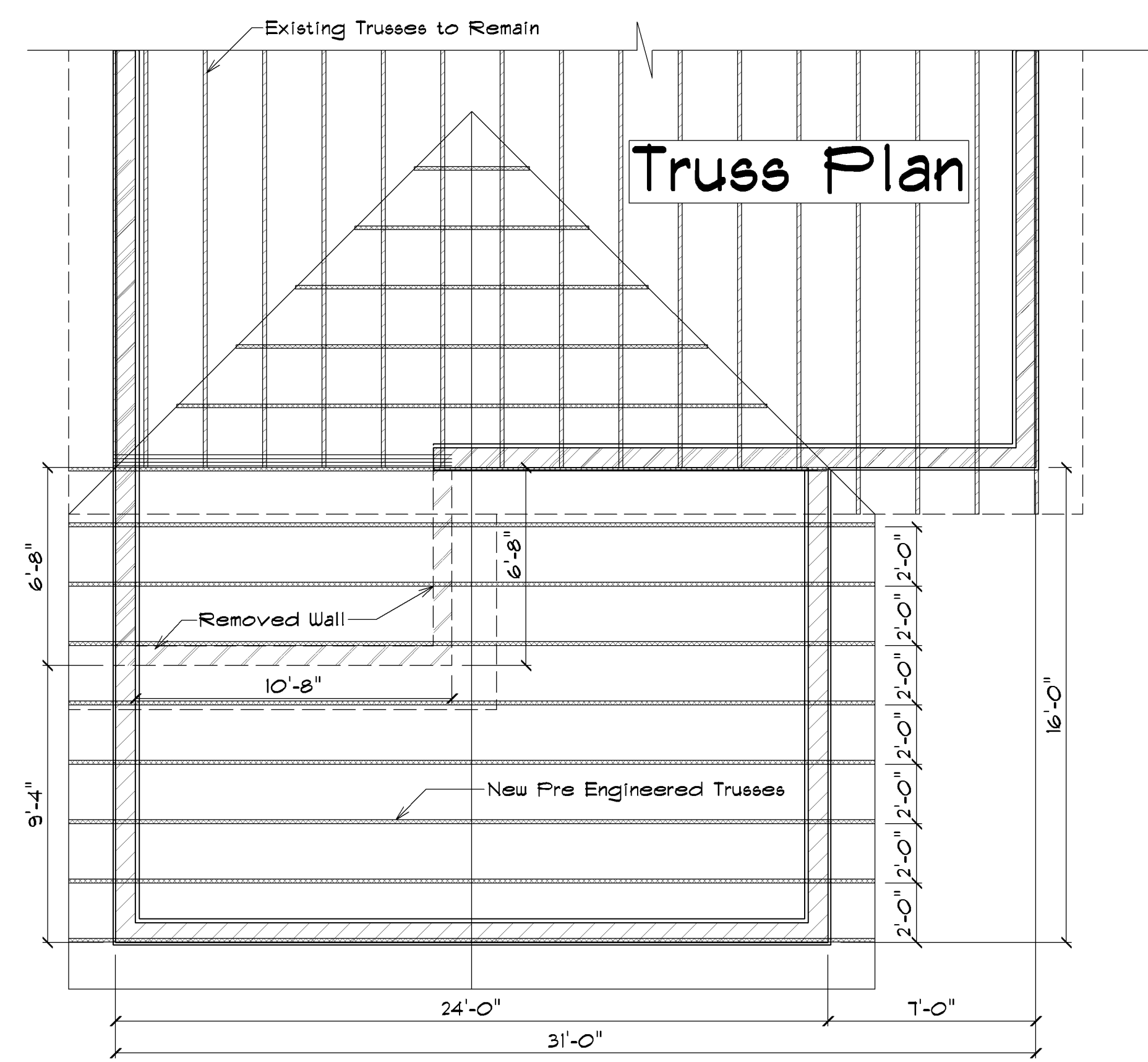
Drawn By
Michael Roberts



1/8" scale on 11 x 17
or
1/4" scale on 24 x 36

A-2

Unless otherwise noted
 Use ③ truss to framing
 ① truss to C.M.U.
 for double girders x 2 straps
 for triple girders x 3 straps
 See Connector Schedule



712 Duck Lake RD., Lady Lake, FL 32159
 Phone: (352) 259-1768 Fax: (352) 259-2521

*** Signature of this document acknowledges that the client has reviewed the truss placement diagram in its entirety and is in agreement with the following items, including, but not limited to:

A.) It is the client's responsibility to verify the accuracy of information submitted for use in design, fabrication, and scheduling. Any labor, material, or time delay incurred from inadequate or incorrect information supplied from the client will be at the client's expense. Any field measurements, by an associate of Pro-Build, are performed solely as a courtesy to the client and shall be verified by the client. It is the client's responsibility to report any design changes or errors in the construction documents to the building designer.

B.) General Information: The client acknowledges that the following information has been supplied, and the information shown or noted on the truss placement diagram is in agreement with the construction documents: 1) dimensions; 2) wall heights, widths, and bearing wall locations; 3) roof pitch, top chord size, and heel height; and any special roof edge detailing requirements; 4) overhang and / or cantilever lengths and end cut; 5) ceiling conditions including vaults, sloped or stepped trays, special ceiling transitions, and centering requirements; 6) floor truss depth and bearing requirements; 7) AHU location, placement (suspended, recessed, or attic) and any special AHU sizes or loading requirements; and 8) any other special conditioning including, but not limited to, chimneys, suspended soffits, suspended headers or beams, skylight locations, spanning for attic spaces, and attic storage requirements. Trusses will be built in accordance with this truss placement diagram.

C.) Design Criteria: The client acknowledges that the truss design criteria noted on this truss placement diagram meets or exceeds the design criteria specified by the building designer, engineer of record, and local and state building requirements.

D.) Fabrication and Delivery: One approved truss placement diagram must be returned to the truss manufacturer before fabrication and delivery will be scheduled. It is the client's responsibility to coordinate delivery dates with the truss manufacturer. The client shall provide a marked location for delivery, which must be accessible, level and clear of materials and debris; in lieu of this, trusses will be delivered in the best available location at our driver's discretion. No back charges will be accepted if the above criteria are not met. Care and handling of the trusses following delivery is the responsibility of the client.

E.) Installation & Bracing: BCSI 2006 (Building Component Safety Information) WTCA / TPI guidelines shall be followed when handling, installing & bracing trusses. Temporary and / or permanent bracing and blocking is not included in the truss package. Trusses shall be braced to prevent rotation and provide lateral stability in accordance with the requirements specified in the construction documents for the building and on the individual truss design drawings. The overall stability of the truss system is the responsibility of the building designer.

F.) Field framing: 1.) Tray ceilings and other ceiling transitions may require field framing by others. 2.) Ceiling drops, and valleys not shown are to be field framed by others. 3.) Overhangs may be over length - cut to fit in the field. Overhangs are 2x4 or 2x6 - no blocking is applied.

G.) Repairs: Truss related problems are to be reported to the truss manufacturer ASAP, preferably in writing. Do Not Cut. Any trusses before contacting the truss manufacturer with specifics of the problem. Any field modifications made without an engineered repair drawing will be the responsibility of the client. Repair information may require written approval by the client prior to production and / or delivery of any necessary material or repair drawings. No back charges or crane charges of any kind will be accepted, unless specifically approved in writing by the truss manufacturer's management.

H.) This Truss Placement Diagram was not created by an engineer, but rather by the Pro-Build staff, and is purely to be used as an installation guide and does not require a seal. Complete truss engineering and analysis can be found on the Truss Design Drawings which may be sealed by the Truss Design Engineer.

*** Approved By: _____ Delivery Date: _____

Please Print Name: _____ Employed By: _____ Approval Date: _____	
Shingle - Load: 37# psf; 20 TCLL, 7 TCDL, 00 BCLL, 10 BCDL; Dur.: 1.25 Design checked for 10psf non-concurrent LL on BC.	
T.C. Pitch : 6 / 12 B.C. Pitch : 0 / 12 T.C. Size : 2 x 4 Heel Hgt. : 4-3 Bearing : 8" Cantilever : NA Overhang : 18" O.H. Cut : Plumb Spacing : 24" O.C. Lumber : SYP	MITek Engineering : MITek 2020 8-24 Building Code : FBC 2020 ASCE 7-16 TPI 1-2014 Truss Design : Comp. & Cladding Uplift Calculations : MWFRS Wind Speed / Exposure : 140 mph / Exp. B Mean Height : ≤ 15' Bldg. Cat. (Factor) : II (1.00) Enclosure (Coefficient) : Enclosed (± 0.18) Entry : Exposed to Wind Lanai : Exposed to Wind

8'-0" Brg. Hgt.	Brg. Hgt.
10'-0" Brg. Hgt.	Brg. Hgt.
Brg. Hgt.	Brg. Hgt.
Brg. Hgt.	Non-Brg. Wall
All Bearing Heights Above Finished Floor	

Simpson Strong-Tie	HTU26	HTU28	LUS24
	HTU26-2	HTU28-2	
	HGUS26-3	HGUS28-3	
USP	HTHJ24-18	GTWS2T	
	HJC26	GTWS3T	

Installation shall be per connector manufacturer's guidelines. All connectors and tie downs, other than truss to girder truss connectors, are to be specified and supplied by others.

①	R:	U:	②	R:	U:
③			④		
⑤			⑥		
⑦			⑧		
⑨			⑩		
⑪			⑫		
⑬			⑭		
⑮			⑯		
⑰			⑱		
⑲			⑳		

Only Points Listed Above have Reaction >5000 or Uplift >1000
 Values shown on the sealed Truss Design Drawings supersede the above.

NOTES

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⑮

⑯

⑰

⑱

⑲

⑳

CLIENT INFO.
 Client : KEVCO BUILDERS INC
 Project : ADDITION
 Address : 101 E. WOODWARD AVE.

REV.

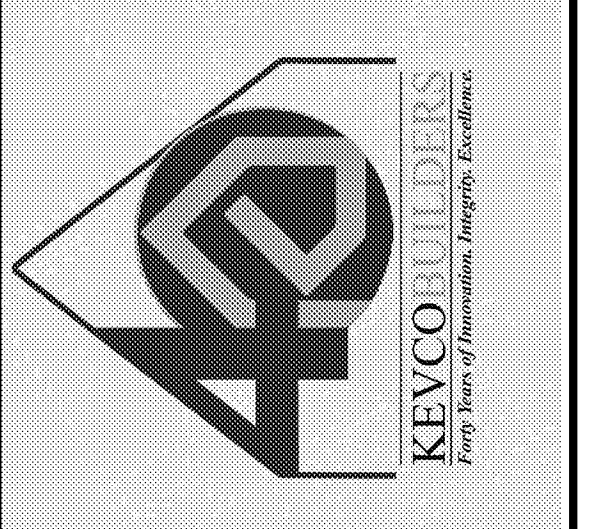
Date : 3/18/2021 Scale : N.T.S.
 Revised : Drawn By : BB
 Sheet # : 1 of 1 Job # : 2647895

THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH AND MEETS THE REQUIREMENTS OF SECTION R301.1 OF THE FLORIDA RESIDENTIAL BUILDING CODE, 2011 EDITION, AND ASCE 7-10 FOR VULT.=140 MPH WIND SPEED, V.aed. =108 MPH ASCE 7-10 FOR VULT.=140 MPH WIND SPEED, V.aed. =108 MPH

RISK CATEGORY II EXPOSURE CATEGORY C
 TOPOGRAPHIC FACTOR = 1.0 GUST EFFECT, G=0.85
 WIND DIR. FACTOR Kz=0.85 FULLY ENCLOSED
 INTERNAL PRESSURE COEFFICIENT: +/- 0.18
 DESIGN PRESSURE FOR WALL COMPONENTS & CLADDING (WORST CASE) 42.1 PSF -57.1 PSF
 GARAGE DOOR DESIGN PRESSURE +22.4, -25.3 (WORST CASE)
 FLOOR LIVE LOAD = 20 PSF FLOOR LIVE LOAD = 40 PSF

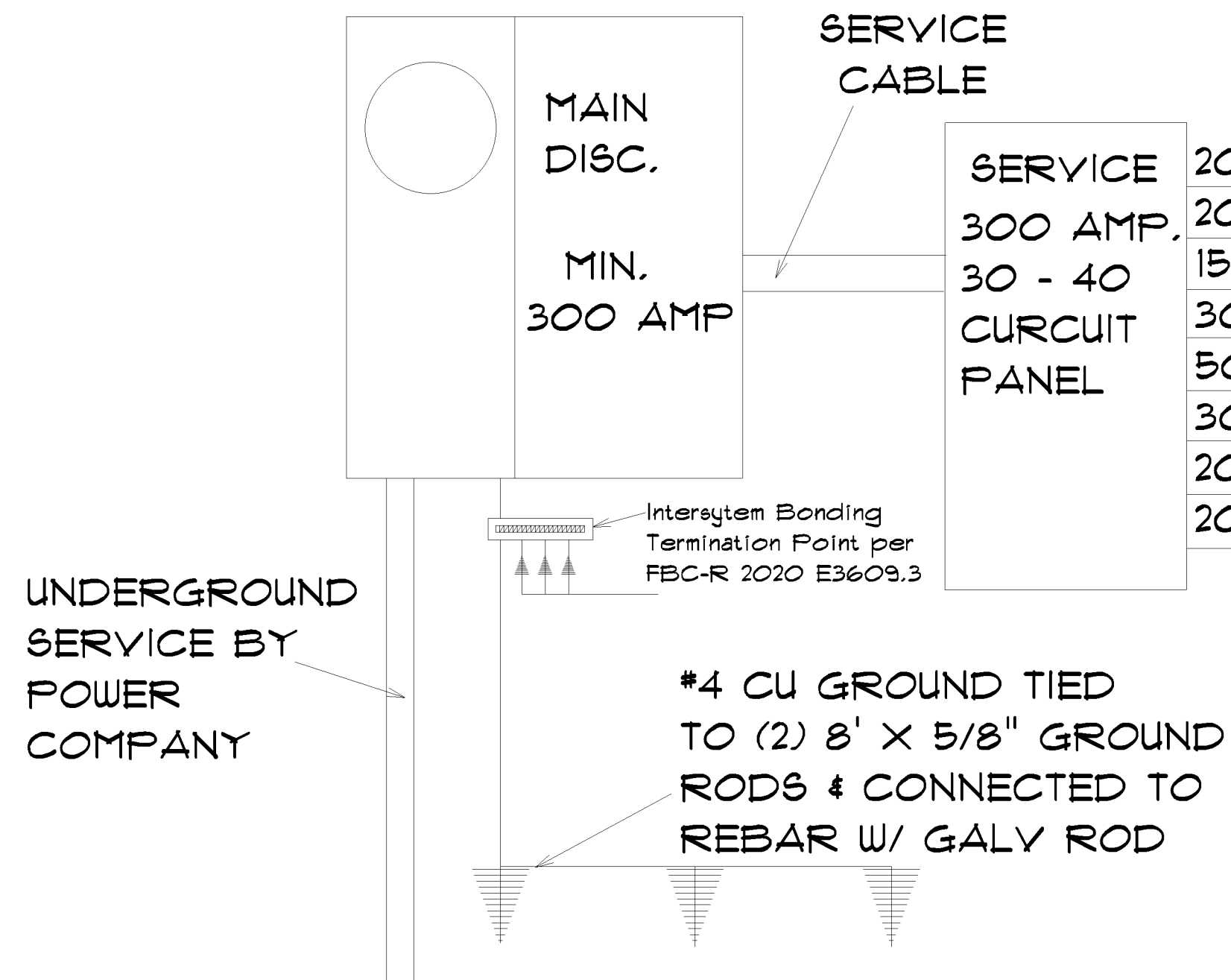
ENGINEERING SERVICES GROUP, LLC
 391 W. Alfred St. CA#0886
 Tavares, FL 32716
 352-388-1735 J. Lee Smith, P.E. #56111

101 E Woodward
 Proven By
 Michael Roberts



1/8" scale on 11 x 17
 or
 1/4" scale on 24 x 36

S-2



SERVICE	20 AMP. #12 COPPER TO APPLIANCES
300 AMP.	20 AMP. #12 COPPER TO KITCH. & DINING
30 - 40	15 AMP. #14 COPPER TO LIGHTS & OUTLETS
CURCUIT	30 AMP. #10 COPPER TO WASH. & DRYER
PANEL	50 AMP. # 8 COPPER TO RANGE
	30 AMP. #10 COPPER TO A/C & HEAT
	20 AMP. #12 COPPER TO GFCI
	20 AMP. #12 COPPER TO WPGFCI

ELECTRICAL RISER

NOTE: WIRING TO MEET N.E.C. & ALAPPLICABLE LOCAL CODES

IN ALL AREAS SPECIFIED IN NEC 2017 210.52 & FBC-R 2020 6th edition, ALL 125V 15 & 20 AMP RECEPTALS SHALL BE LISTED TAMPER RESISTANT RECEPTALS

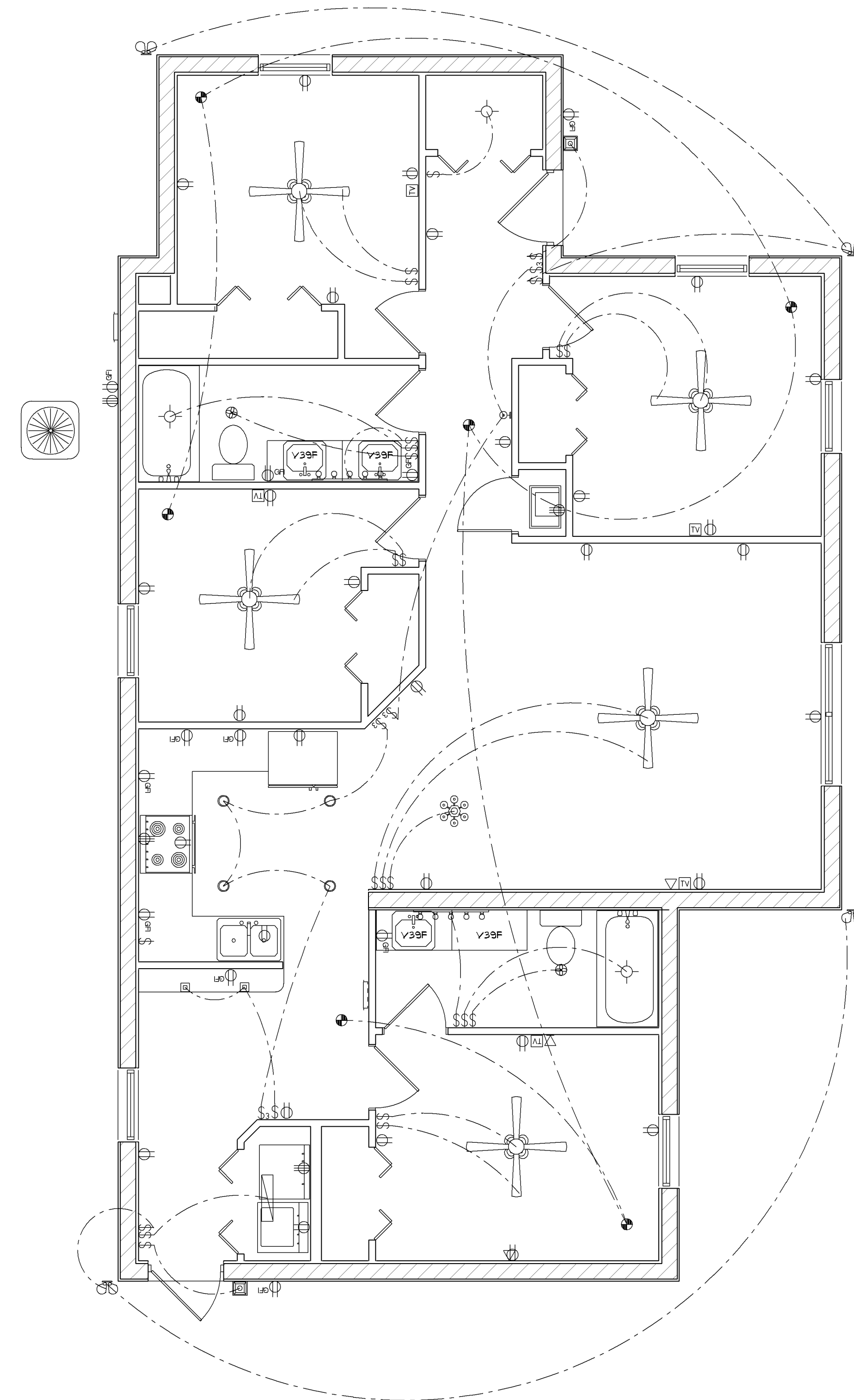
FBC-R 2020 E3902.16 Arc-fault circuit-interrupter protection. Branch circuits that supply 120-volt, single-phase, 15- and 20-ampere outlets installed in kitchens, family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sun-rooms, recreations rooms, closets, hallways, laundry areas and similar

USE C.M. DETECTORS WHERE REQUIRED & STANDARD SMOKE DETECTOR IN ALL OTHER AREAS REQUIRED

All GFCI to Comply with FBCR E3703.3 "A Min of (1) 20A Curcuit Shall Be Provided for Recepticals Located in & only serve the Laundry Area"

All GFCI & WPGFCI to comply with FBC-R 2020 E3901.9 "Curcuit Separation"

ELECTRICAL	COUNT	SYMBOL
ceiling fan spotlights	2	5
chandelier	1	
double spotlight	4	
fluorescent fixture	1	
pendant cube	2	
pot light	4	
vanity bar light	2	
wall mount	2	
wall sconce	1	
electrical panel	2	
cable tv outlet	5	
fan	2	
light	3	
outlet	30	
outlet 220v	4	
outlet gfi	11	
smoke detector	6	
switch	25	
switch 3 way	4	
telephone	3	



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RISK CATEGORY II EXPOSURE CATEGORY C

TOPOGRAPHIC FACTOR = 1.0 GUST EFFECT, G=0.85

WIND DIR. FACTOR K=0.85 FULLY ENCLOSED

INTERNAL PRESSURE COEFFICIENT: +/- 0.18

DESIGN PRESSURE FOR WALL COMPONENTS & CLADDING (WORST CASE) +42.1 PSF -57.1 PSF

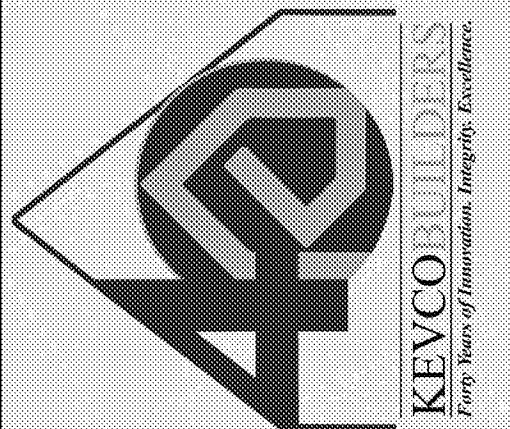
GARAGE DOOR DESIGN PRESSURE +22.4, -25.3 (WORST CASE)

ROOF LIVE LOAD = 20 PSF FLOOR LIVE LOAD = 40 PSF

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1/8" Scale on 11 x 17
Or
1/4" scale on 24 x 36

M-1

DESIGN LOADS:

(THESE DESIGN LOADS BELOW ARE ALSO INTENDED TO SERVE AS INSTRUCTIONS TO THE DELEGATED (TRUSS) ENGINEER FOR THIS PROJECT).

ROOF TRUSSES: LIVE LOAD=20 P&F, DEAD LOAD=7 P&F (TC) + 10 P&F (BC), (SHINGLES) 15 P&F (BC), (TILE)

ATTIC FLOOR: 20 P&F

FLOOR TRUSSES: LIVE LOAD=40 P&F, DEAD LOAD=10 P&F (TC) + 5 P&F (BC).

DESIGN WIND LOADS IN ACCORDANCE WITH SECTION R301 OF THE FLORIDA RESIDENTIAL BUILDING CODE 2020, 7th EDITION, AND ASCE 7-16:
WIND SPEED: Vu1t= 140 MPH, Vased= 108 MPH
RISK CATEGORY II
EXPOSURE CATEGORY C
FULLY ENCLOSED
TOPOGRAPHIC FACTOR = 1.0
WIND DIR. FACTOR Kd = 0.85
GUST EFFECT, G = 0.85

DESIGN PRESSURES FOR WALL COMPONENTS AND CLADDING (WORST CASE) = +25.6 P&F, -33.9 P&F

GARAGE DOOR DESIGN PRESSURES (WORST CASE) +22.4 P&F, -25.3 P&F

DESIGN PRESSURES FOR ROOF COMPONENTS (WORST CASE)= +21.0 P&F, -59.3 P&F

NOTE TO DELEGATED ENGINEER:

PREFABRICATED WOOD JOISTS AND TRUSSES FOR ROOF ASSEMBLIES AND FLOOR SYSTEMS (IF APPLICABLE) SHALL BE DESIGNED AND MANUFACTURED IN CONFORMANCE TO ASTM D5055-13, ANSI/TPI-2014 AND BC81 (WTCA)-2013 AND SHALL BE CERTIFIED BY A FLORIDA REGISTERED ENGINEER AS EMPLOYED BY THE TRUSS MANUFACTURER (DELEGATED ENGINEER). ALL ROOF AND FLOOR TRUSSES SHALL BE DESIGNED TO RESIST THE WORST CASE LOAD COMBINATION WHICH RESULTS IN THE MAXIMUM STRESSES BEING PLACED ON THAT COMPONE NT. GALVANIZED SEAT-PLATES ARE TO BE ATTACHED TO EACH TRUSS AS A PROTECTIVE BARRIER, WHERE THEY BEAR ON CONCRETE OR CMU. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD PRIOR TO FABRICATION TO ENSURE CONFORMANCE TO THE DESIGN INTENT OF THE PROJECT.

SOIL:

FOOTINGS HAVE BEEN DESIGNED FOR 2000 P&F SOIL BEARING CAPACITY. ANY LESSER BEARING SHALL BE THE SOLE RESPONSIBILITY OF THE OWNER OR THE CONTRACTOR. WHERE THE SOIL BEARING CAPACITY IS NOT KNOWN OR IS IN QUESTION, THE SOIL SHALL BE TESTED BY A QUALIFIED GEOTECHNICAL ENGINEER, WHO SHALL ESTABLISH THE BEARING CAPACITY. SAID ENGINEER SHALL CO-ORDINATE WITH STRUCTURAL ENGINEER WHEN NECESSARY. COMPACTED SOILS SHALL BE TESTED TO A MINIMUM OF 95% MODIFIED PROCTOR IN ACCORDANCE WITH ASTM D 1557.

SLAB ON GRADE:

SLAB SHALL BE OVER .006" POLYETHYLENE VAPOR/RADON BARRIER SEALED ON TERMITE-TREATED SOIL WHICH HAS BEEN COMPACTED TO 95% MODIFIED PROCTOR IN ACCORDANCE WITH ASTM D 1557, OR UNDISTURBED SOIL. SLABS SHALL BE AT A MINIMUM ELEVATION OF 8" ABOVE FINISHED GRADE. HIGHER ELEVATION MAY BE SUBSTITUTED OR REQUIRED. FOR #5 REBAR FOR 90 DEG HOOK, LENGTH SHALL BE 10", MINIMUM EMBEDMENT SHALL BE 7" AND BEND RADIUS SHALL BE 2".

REBAR EMBEDMENT AND

HOOK LENGTH / BEND RADIUS:

SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD PRIOR TO FABRICATION TO ENSURE CONFORMANCE TO THE DESIGN INTENT OF THE PROJECT. FOR #5 REBAR FOR 90 DEG HOOK, LENGTH SHALL BE 12DB MINIMUM EMBEDMENT SHALL BE 7.5" AND BEND RADIUS SHALL BE 3.75" PER ACI-318-14 TABLE 25.3.1

CONNECTORS:

ALL METAL FASTENERS SHALL CONFORM TO ISANTA NER-272, AND SHALL BE GALVANIZED OR STAINLESS STEEL (WITHIN 3 MILES OF COASTAL SALT WATER AREAS). FASTENERS SHALL NOT BE OVER-DRIVEN BY MORE THAN 1/8". FOR PRESSURE TREATED WOOD, USE GALVANIZED FASTENERS.

CONCRETE:

UNLESS OTHERWISE SPECIFIED, CAST IN PLACE CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI. CAST IN PLACE GROUT 2,000 PSI, PRECAST CONCRETE LINTELS 3000 PSI AND PRE-STRESSED CONCRETE LINTELS 5000 PSI, AT 28 DAYS. CONCRETE SHALL CONSIST OF 1" MAX AGGREGATE CONCRETE MIX WITH SLUMP BETWEEN 6" AND 7" AT THE TIME OF PLACEMENT. SEE ASTM AND ACI SPECIFICATIONS FOR ADDITIONAL CRITERIA.

CONSTRUCTION JOINTS ARE TO BE PROVIDED IN ACCORDANCE WITH THE DESIGN CODES AND GUIDELINES AT THE ENGINEER'S DIRECTION.

METHOD OF CONCRETE FORMING, PLACEMENT AND CURING SHALL BE CONDUCTED IN ACCORDANCE WITH ACI AND ASTM SPECIFICATIONS.

CMU:

ALL CONCRETE MASONRY UNITS SHALL BE STANDARD WEIGHT BLOCK CONFORMING TO ASTM C-90, TYPE II NON-MOISTURE CONTROLLED AND SHALL HAVE A MINIMUM NET AREA COMPRESSIVE STRENGTH OF 2,000 PSI.

PRECAST LINTELS:

ALL PRECAST LINTEL6 SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH PCI-MNL-116

MORTAR:

MORTAR SHALL BE EITHER TYPE M OR SIN ACCORDANCE WITH ASTM C 270 AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI.

GROUT:

GROUT SHALL HAVE A MINIMUM COARSE AGGREGATE SIZE OF 3/8 INCH PLACED AT AN 8 TO 10 INCH SLUMP AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI AT 28 DAYS. SEE ACI AND ASTM SPECIFICATIONS FOR ADDITIONAL CRITERIA.

REINFORCING STEEL:

REINFORCING STEEL SHALL BE A MINIMUM OF GRADE 40 AND SHALL CONFORM TO ASTM A615 UNLESS OTHERWISE NOTED.

ALL CONTINUOUS VERTICAL AND HORIZONTAL REBAR SHALL BE LAP SPICED WHERE NECESSARY BY WIRING TOGETHER. LAP SPICES SHALL BE CLASS B WITH A MINIMUM LAP OF 48 BAR DIAMETERS UNLESS SPECIFIED OTHERWISE. IN LIEU OF 6"x 6" WELDED WIRE MESH OF 10 GAUGE STEEL, CONCRETE MAY BE REINFORCED WITH AN APPROVED FIBER MESH PRODUCT AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIDNS. FIBER MANUFACTURER MUST DOCUMENT COMPLIANCE WITH ASTM C-1116.

COVER FOR REINFORCING SHALL BE MEASURED FROM CENTER OF BAR AND BE AS FOLLOWS UNLESS NOTED OTHERWISE:

CAST IN PLACE CONCRETE AGAINST EARTH = 3"

CAST IN PLACE CONCRETE EXPOSED TO EXTERIOR = 2"

CAST IN PLACE CONCRETE NOT EXPOSED TO EXTERIOR = 1-1/2"

GROUT FILLED MASONRY = 1-1/2"

PRE-CAST AND PRE-STRESSED GROUT FILLED LINTELS = 1-1/2"

STEEL REINFORCEMENT MAY NOT BE WELDED.

WELDED WIRE MESH:

WELDED WIRE MESH SHALL CONFORM TO ASTM A185.

WELDED WIRE MESH SHALL BE SUPPLIED IN SHEETS NOT ROLLS.

ANCHOR BOLTS:

CAST IN PLACE ANCHOR BOLTS SHALL BE GALVANIZED AND MUST EXTEND

7" MINIMUM INTO CONCRETE UNLESS OTHERWISE NOTED.

RAILINGS:

RAILINGS (IF APPLICABLE) ARE TO BE DESIGNED TO RESIST A 200 LB. CONCENTRATED LOAD AT ANY POINT AND IN ANY DIRECTION. TYPE OF LUMBER.

FOR WOOD FRAME CONSTRUCTION, USE ~2 SPF FOR ALL EXTERIOR AND INTERIOR BEARING WALLS. ALL ROOF FRAMING MEMBERS TO BE ~2 YELLOW PINE.

TYPE OF LUMBER:

FOR WOOD FRAME CONSTRUCTION, USE ~2 SPF FOR ALL EXTERIOR AND INTERIOR

BEARING WALLS. ALL ROOF FRAMING MEMBERS TO BE ~2 YELLOW PINE.

TREATED LUMBER:

ALL WOOD MEMBERS THAT ARE WITHIN 8" OF FINISHED GRADE LEVEL, ALL EXPOSED

UNFINISHED WOOD AND ALL WOOD MEMBERS IN CONTACT WITH CONCRETE AND/OR

OTHER MASONRY SHALL BE PRESERVATIVE TREATED WITH DISODIUM OCTABORATE

TETRAHYDRATE TO A MINIMUM GRADE OF 0.40PCF RETENTION AND SHALL CONFORM TO

AUPA STANDARD C1 THROUGH C23 DEPENDING ON THE APPLICATION.

ROOF DECKING:

UNLESS OTHERWISE SPECIFIED, ROOF SHEATHING SHALL BE 19/32 CDX PLYWOOD INSTALLED

WITH EDGE CLIPS IN EACH BAY. ALL SHEATHING SHALL BE APA RATED FOR THE USE

INTENDED.

PREFABRICATED PRODUCTS:

LAMINATED VENEER LUMBER SHALL CONFORM TO ASTM D5456 STANDARD SPECIFICATION FOR EVALUATION OF STRUCTURAL COMPOSITE LUMBER PRODUCTS. ALL WOOD STRUCTURAL PANELS, INCLUDING BUT NOT LIMITED TO PLYWOOD, OSB, WAFERBOARD AND MEDIUM DENSITY FIBERBOARD (MDF) SHALL CONFORM TO PS-1 AND PS-2 PERFORMANCE STANDARDS FOR WOOD BASED STRUCTURAL-USE PLYWOOD. MDF SHALL NOT BE USED IN ANY EXTERIOR APPLICATIONS. THE USE OF FORMALDEHYDE-BASED GLUES AND RESINS IS DISCOURAGED.

ALL FINGER JOINTED LUMBER SHALL CONFORM TO NDS SECTION 4.1.6 AND SHALL NOT BE USED IN A MANNER INCONSISTENT WITH THE LIMITATIONS OF FINGER-JOINTED LUMBER WITH RESPECT TO THE INTENDED APPLICATION.

PREFABRICATED WOOD JOISTS AND TRUSSES SHALL BE DESIGNED AND MANUFACTURED IN CONFORMANCE TO ASTM D5055, ANSI/TPI 1-1995 AND WTCA 1-1995 AND SHALL BE CERTIFIED BY A FLORIDA REGISTERED ENGINEER (DELEGATED ENGINEER).

CONTRACTOR RESPONSIBILITIES:

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OR START OF CONTRUCTION. WRITTEN DIMENSIONS SHALL TAKE PRECEDENT OVER SCALED DIMENSIONS. ANY DEVIATIONS OR DISCREPANCIES SHALL BE PROMPTLY REPORTED TO THE ENGINEER OF RECORD. CONTRACTOR SHALL MAKE ALL EFFORTS TO PROTECT THE STRUCTURE, THE WORK PERSONS, AND OTHER PEOPLE DURING CONSTRUCTION. HE SHALL SUPERVISE AND DIRECT THE WORK AND BE RESPONSIBLE FOR ALL CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE ARCH ITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND CONSTRUCTION FOR ANCHORS, EMBEDS AND SUPPORTS OR ANY OTHER ITEMS WHICH AFFECT THE STRUCTURAL DRAWINGS. THERE SHALL NOT BE ANY CHANGES TO THESE CONSTRUCTION DOCUMENTS DURING THE DEVELOPMENT OF SHOP DRAWINGS OR DURING CONSTRUCTION WITHOUT PRIOR WRITTEN APPROVAL BY THE ENGINEER OF RECORD.

ENGINEERING SERVICES GROUP, LLC ASSUMES NO RESPONSIBILITY FOR THE ARCHITECTURAL, MECHANICAL, PLUMBING, ELECTRICAL, HVAC, FIRE PROTECTION OR FIRE CODE PROVISIONS, FABRICATION, INSTALLATION/ERECTION, SUPERVISION, PLAN DIMENSIONS, UNKNOWN FIELD CONDITIONS OR OTHER CONDITIONS NOT FULLY REPRESENTED IN THESE DRAWINGS.

THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH AND MEETS THE REQUIREMENTS OF IBC 2020, 7TH EDITION, AND ASCE 7-10 FOR Vult=160 MPH WIND SPEED, Vased= 124 MPH WIND SPEED, Vased= 124 MPH RISK CATEGORY II EXPOSURE CATEGORY C TOPOGRAPHIC FACTOR = 1.0 GUST EFFECT, G=0.85 WIND DIR. FACTOR Kd=0.85 FULLY ENCLOSED INTERNAL PRESSURE COEFFICIENT: +/- 0.18 DESIGN PRESSURE FOR WALL COMPONENTS & CLADDING (WORST CASE) +33.1 P&F -43.8 P&F GARAGE DOOR DESIGN PRESSURE = +28.9, -32.1 (WORST CASE) ROOF LIVE LOAD = 20 P&F FLOOR LIVE LOAD = 40 P&F

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352-388-1135 J. Lee Smith, P.E. #36111

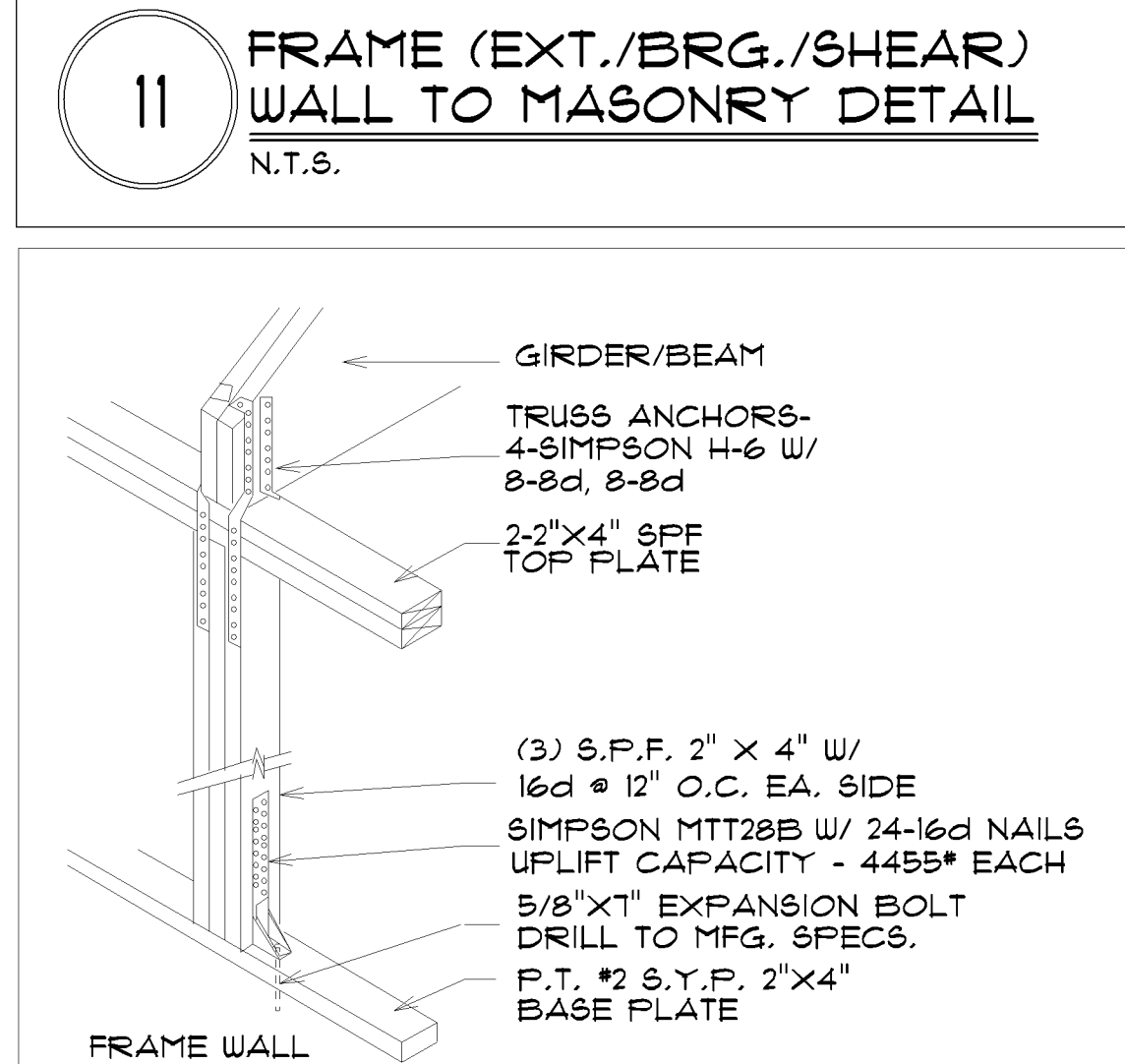
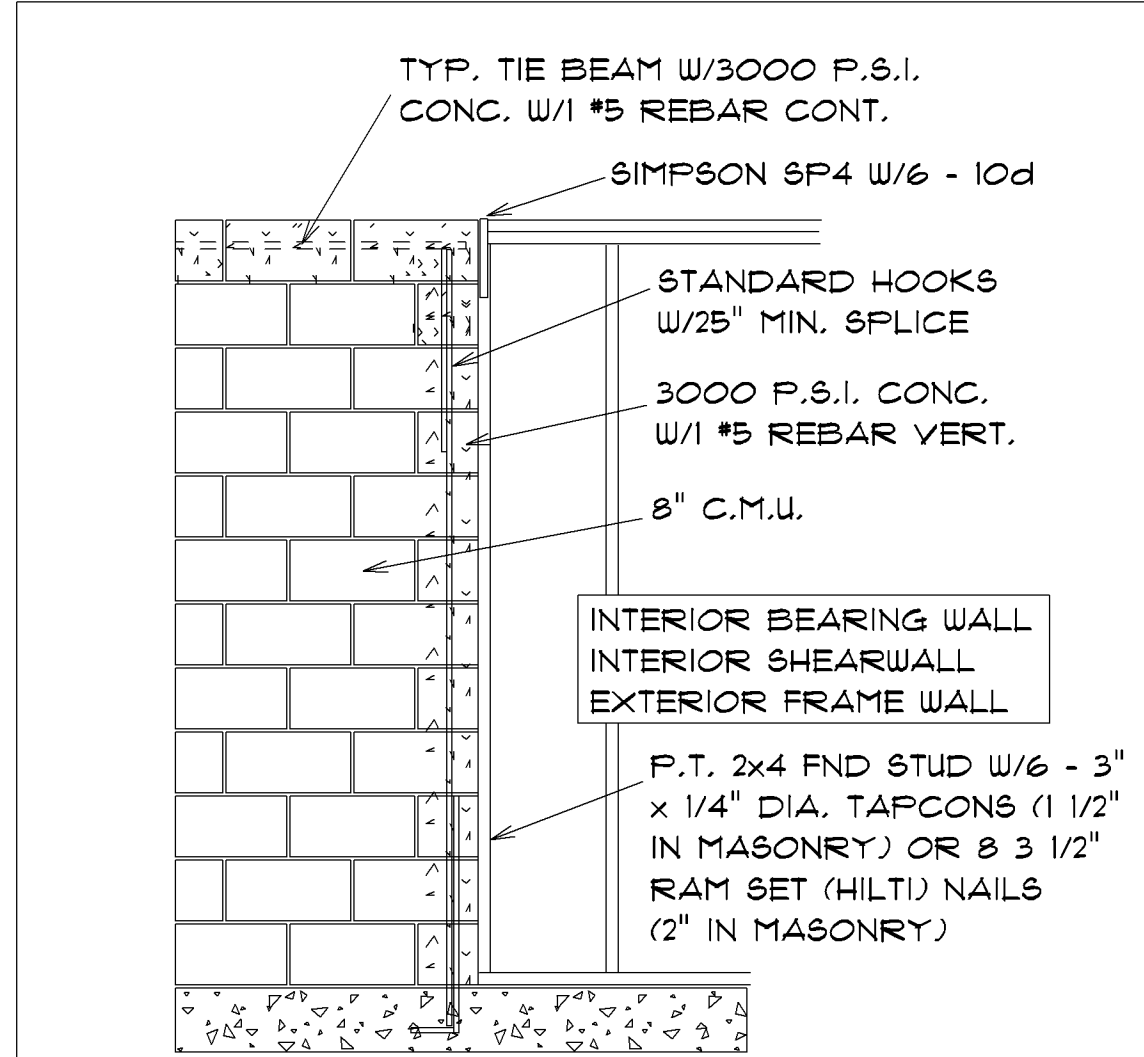
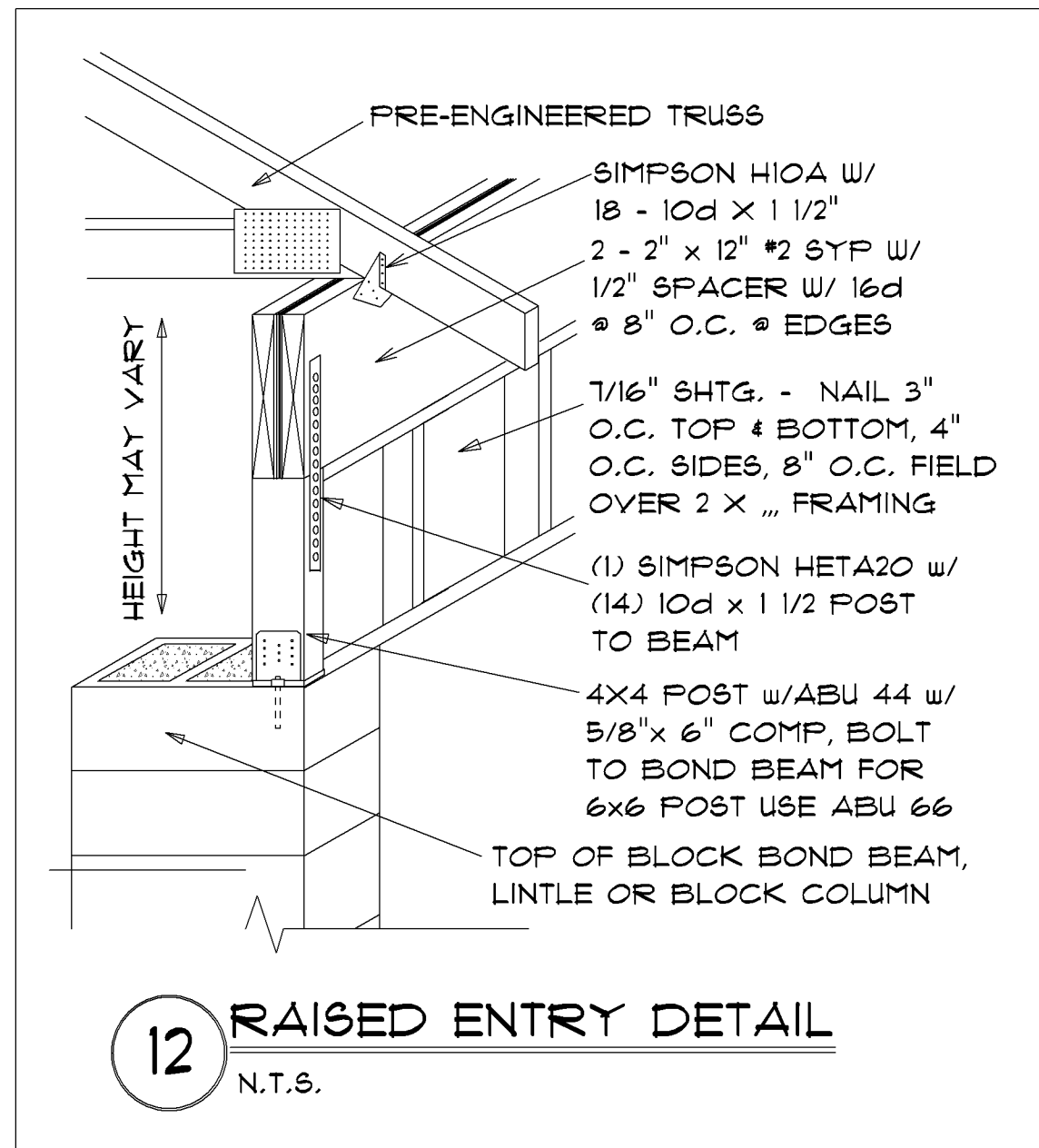
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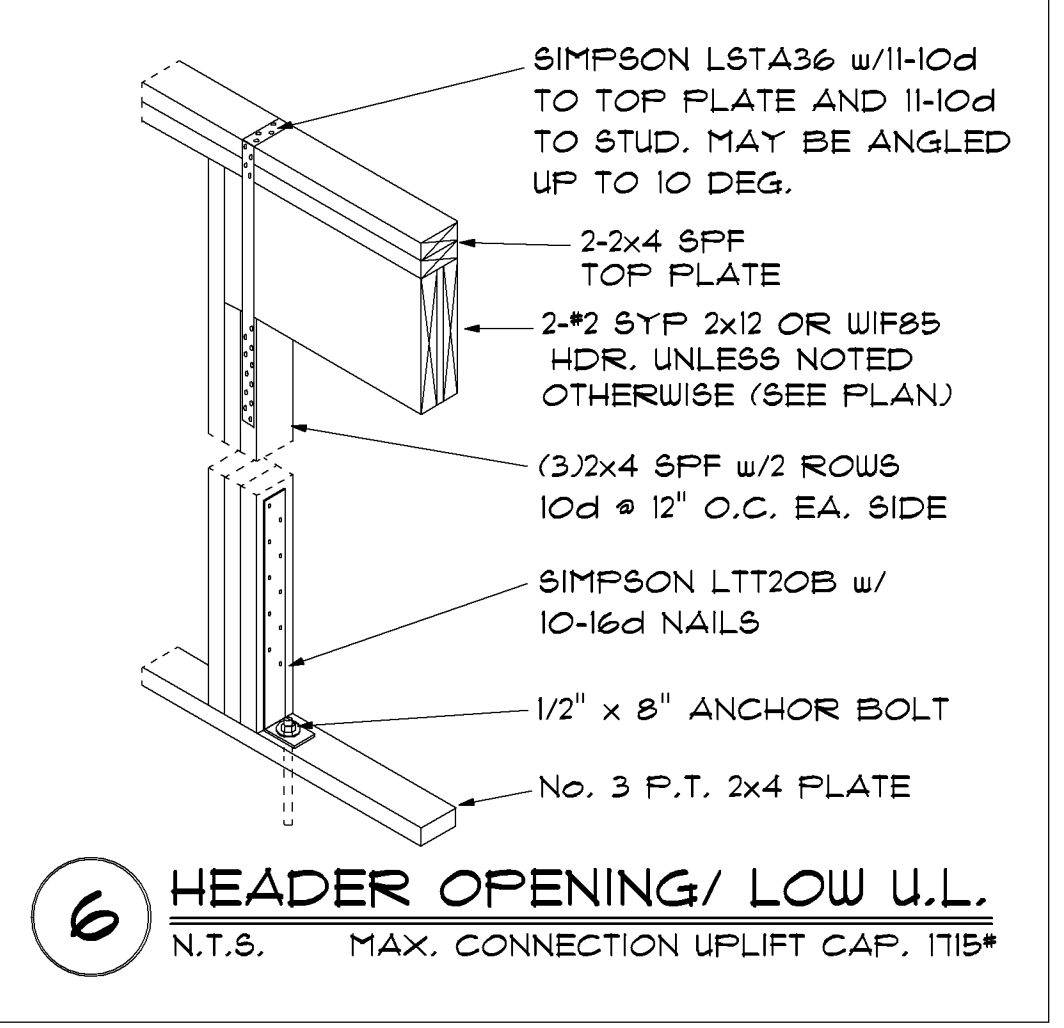
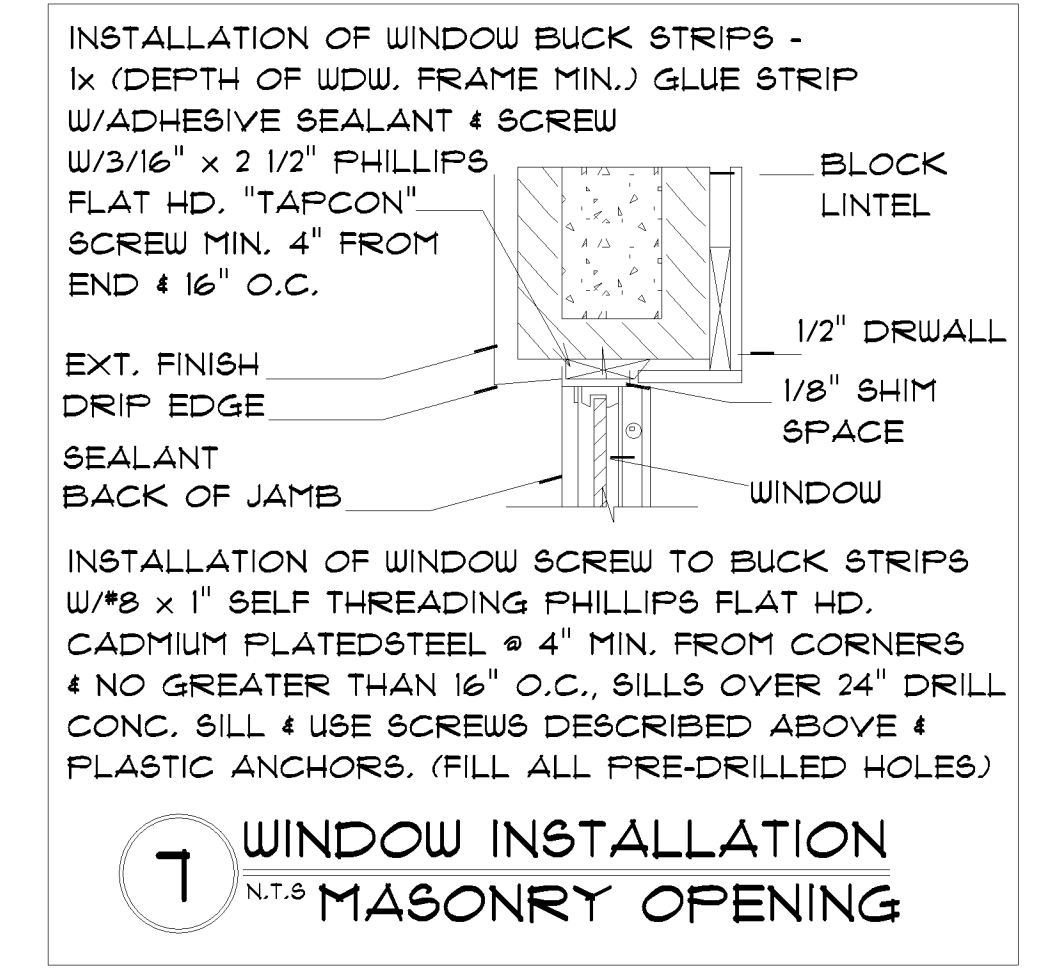
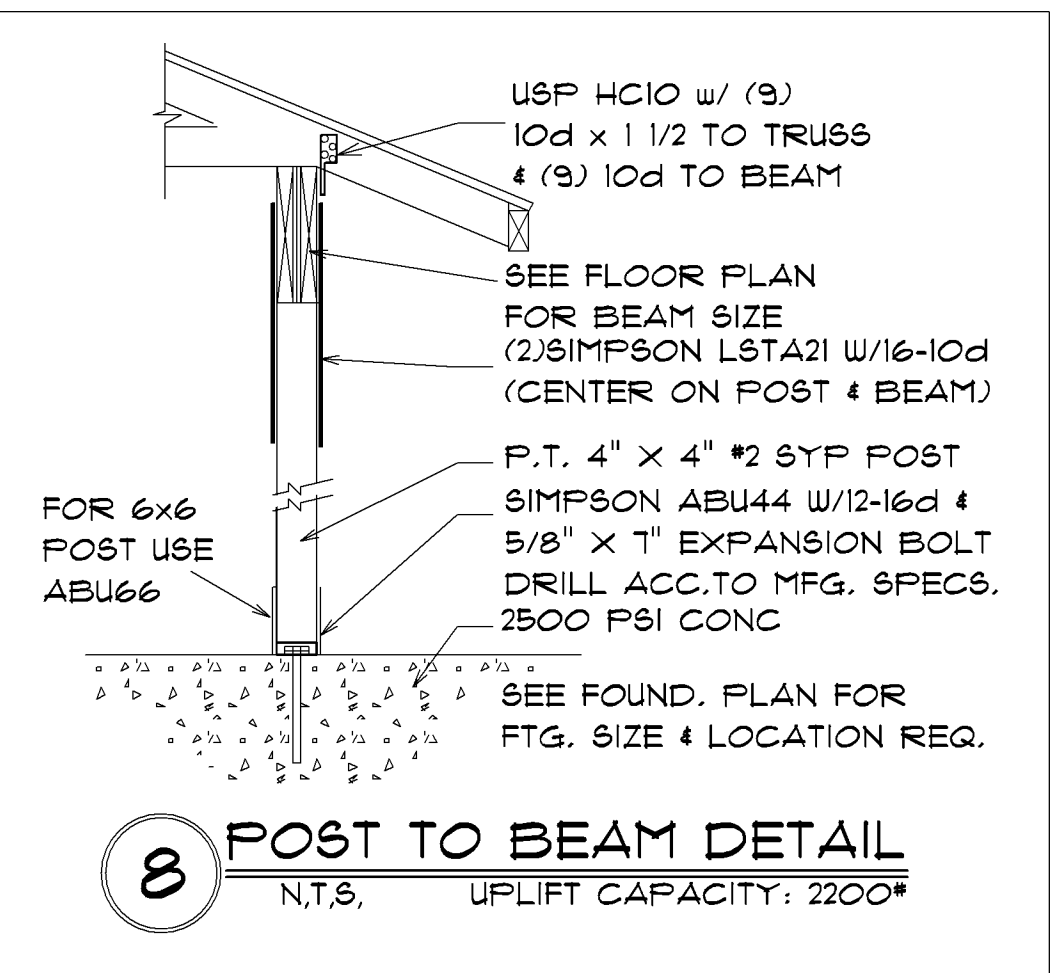
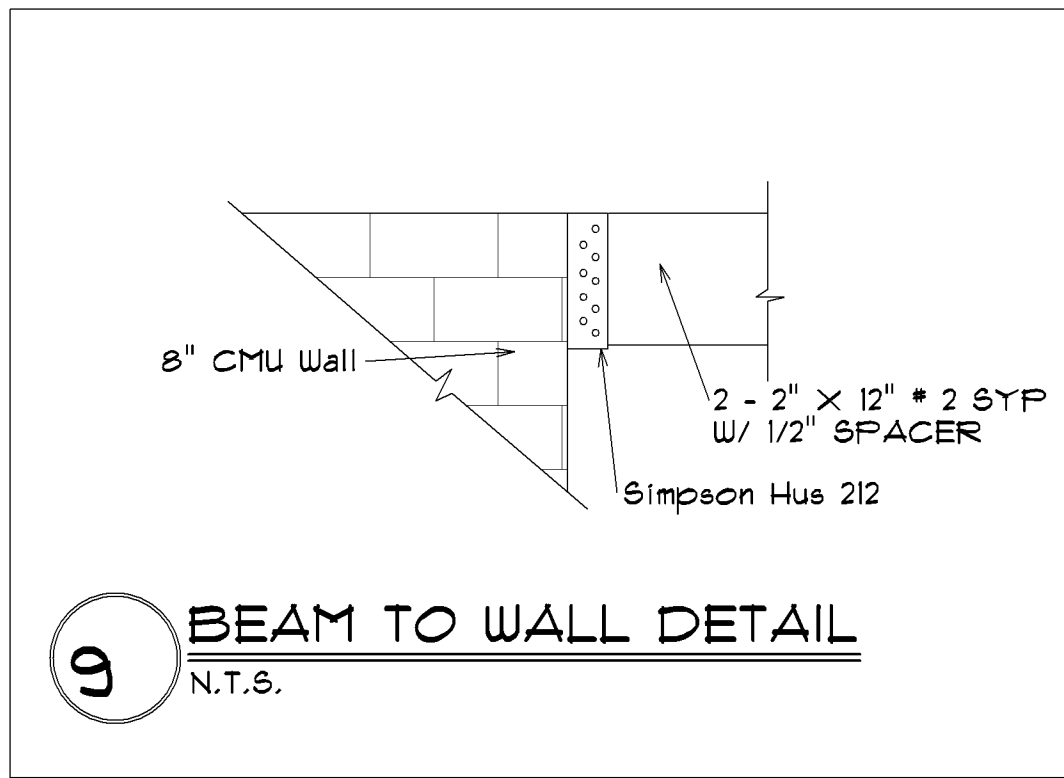
Detail Typical

General Notes

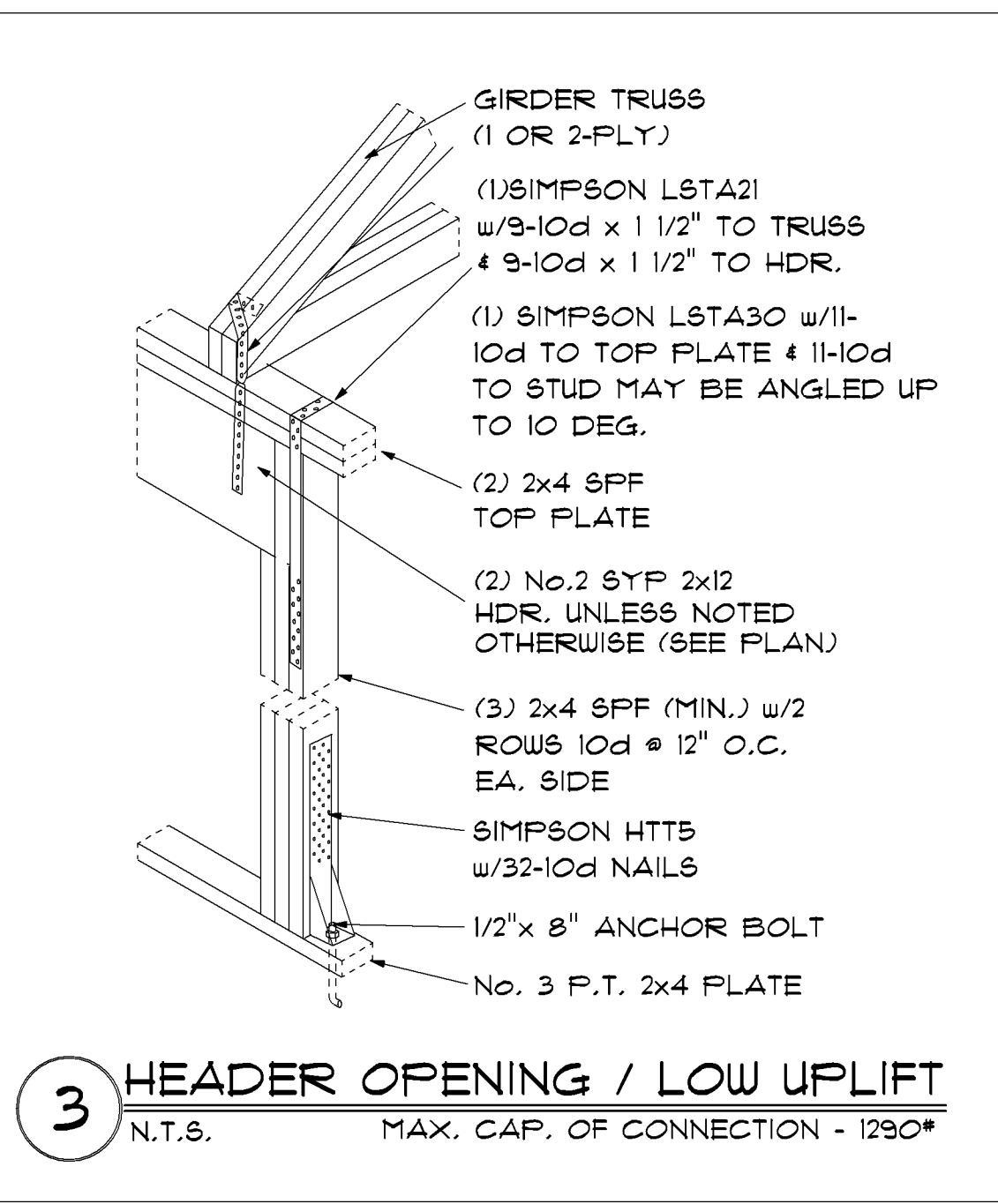
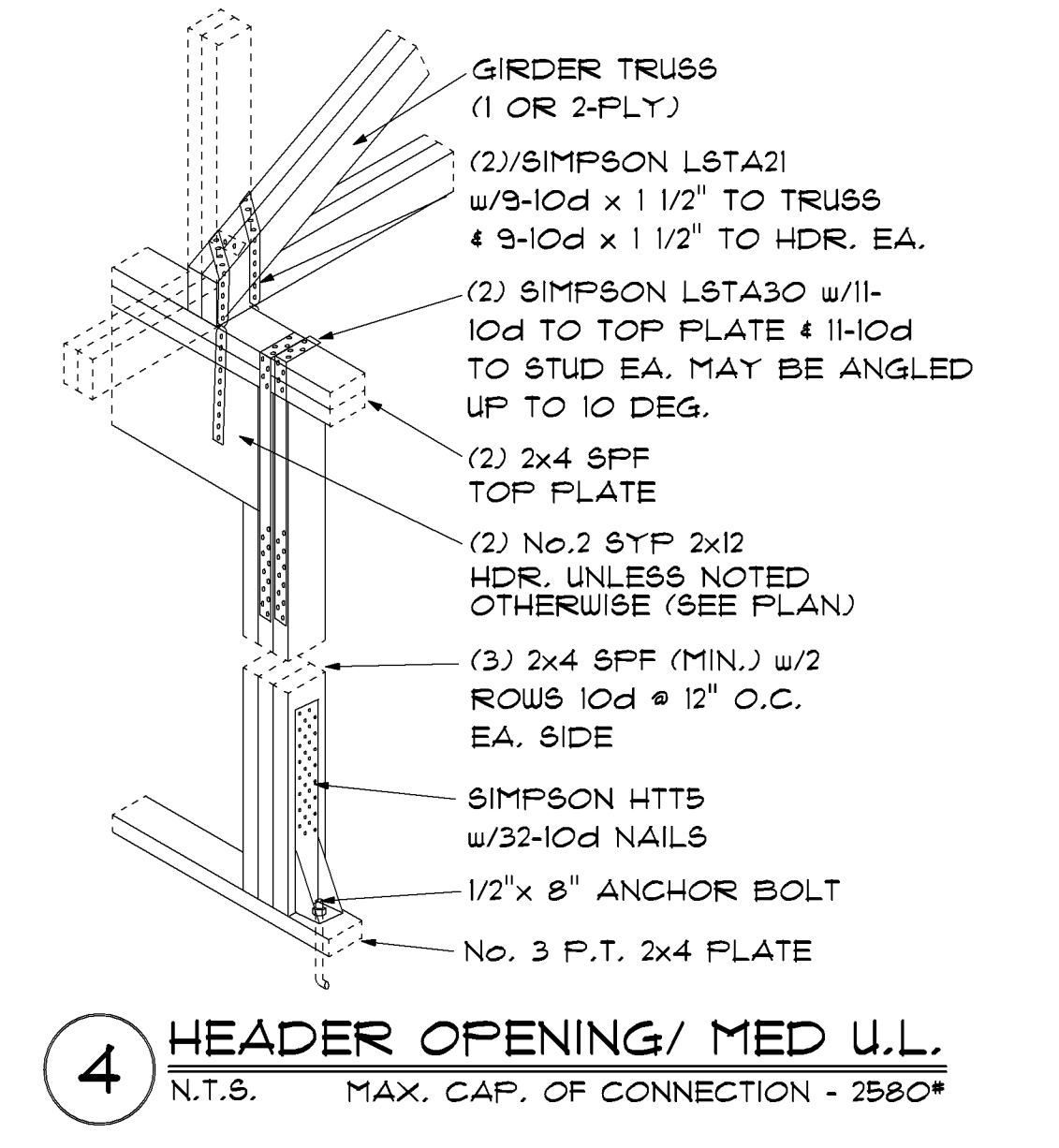
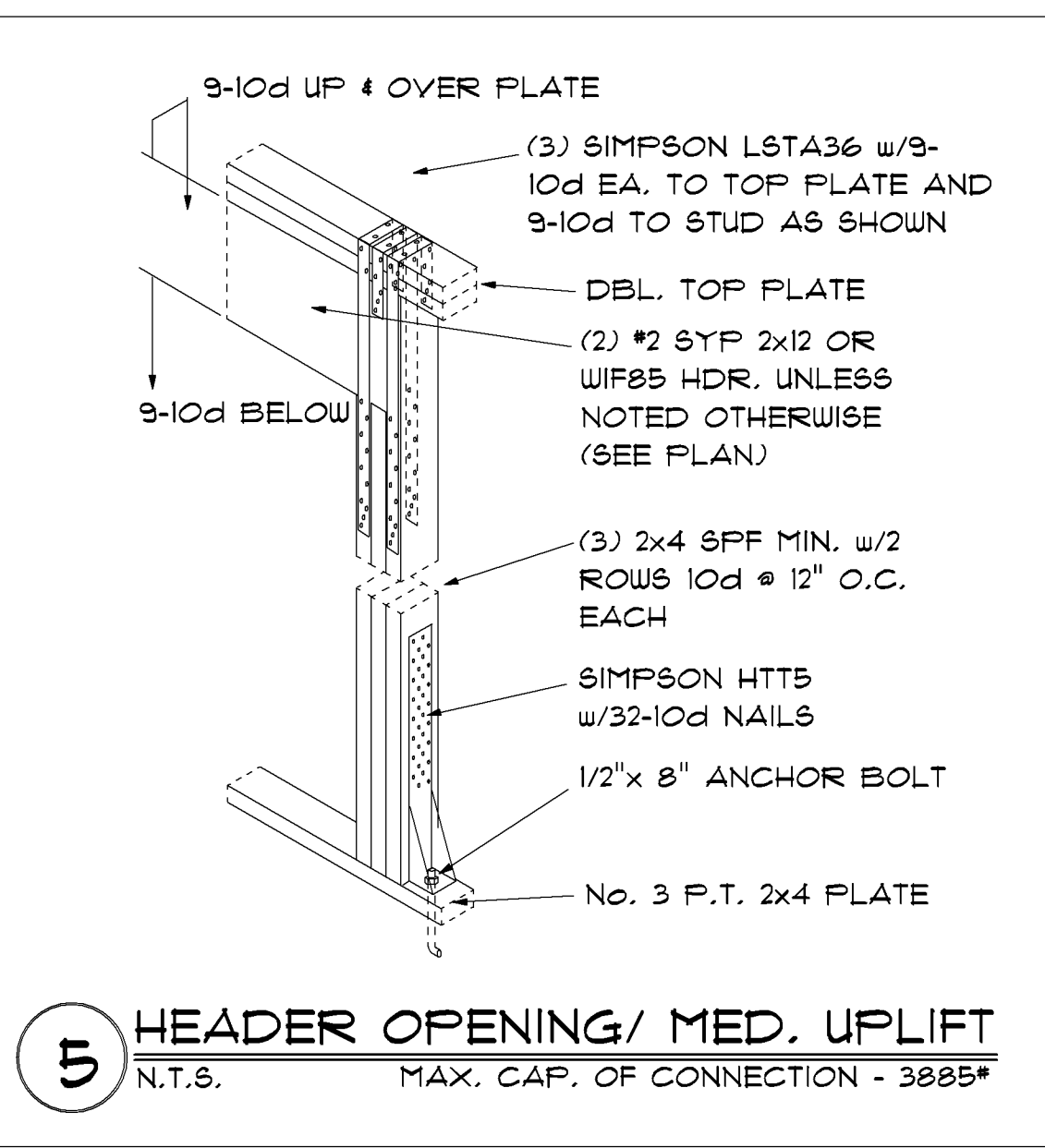
Drawn By
Michael Roberts



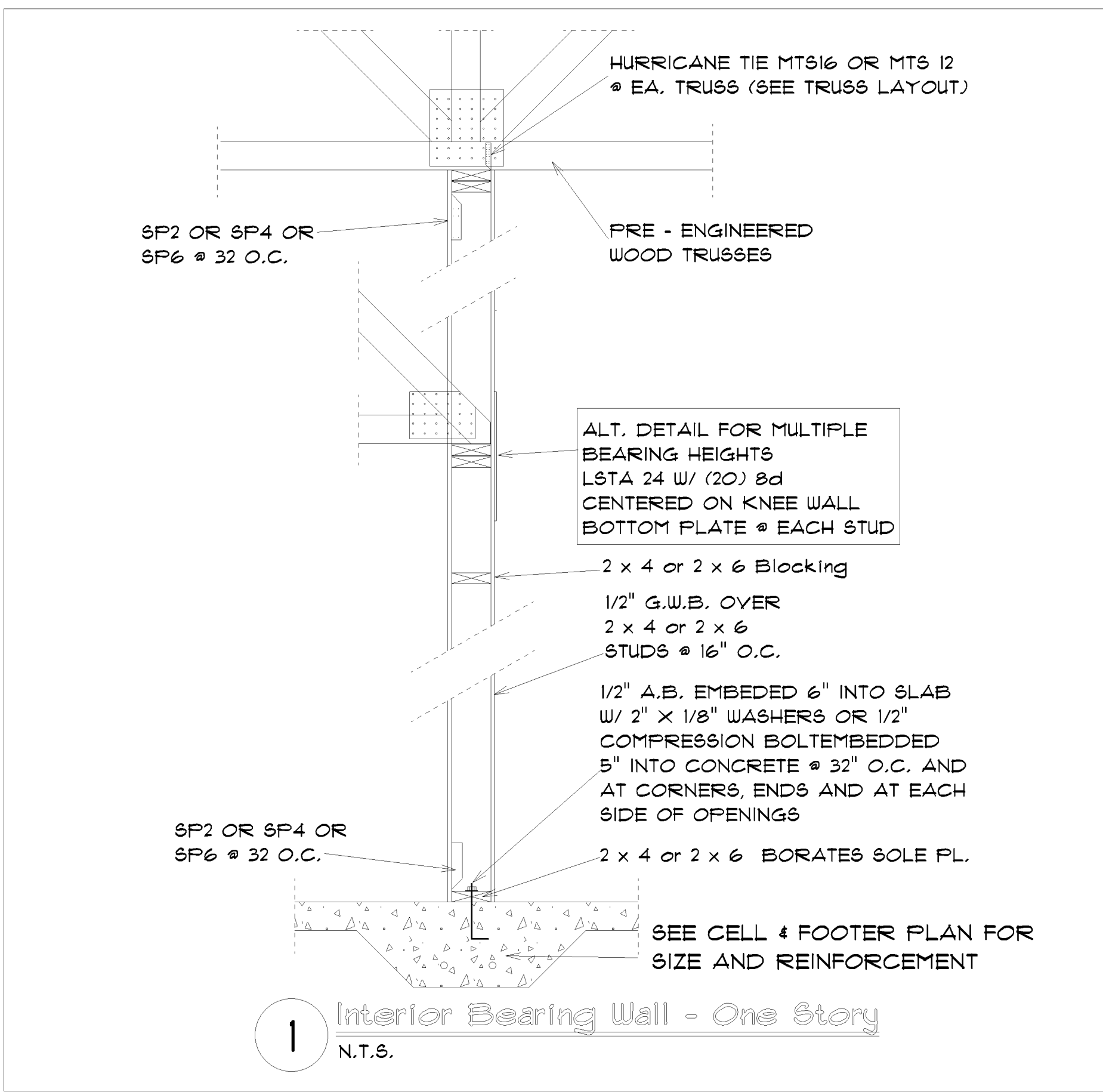
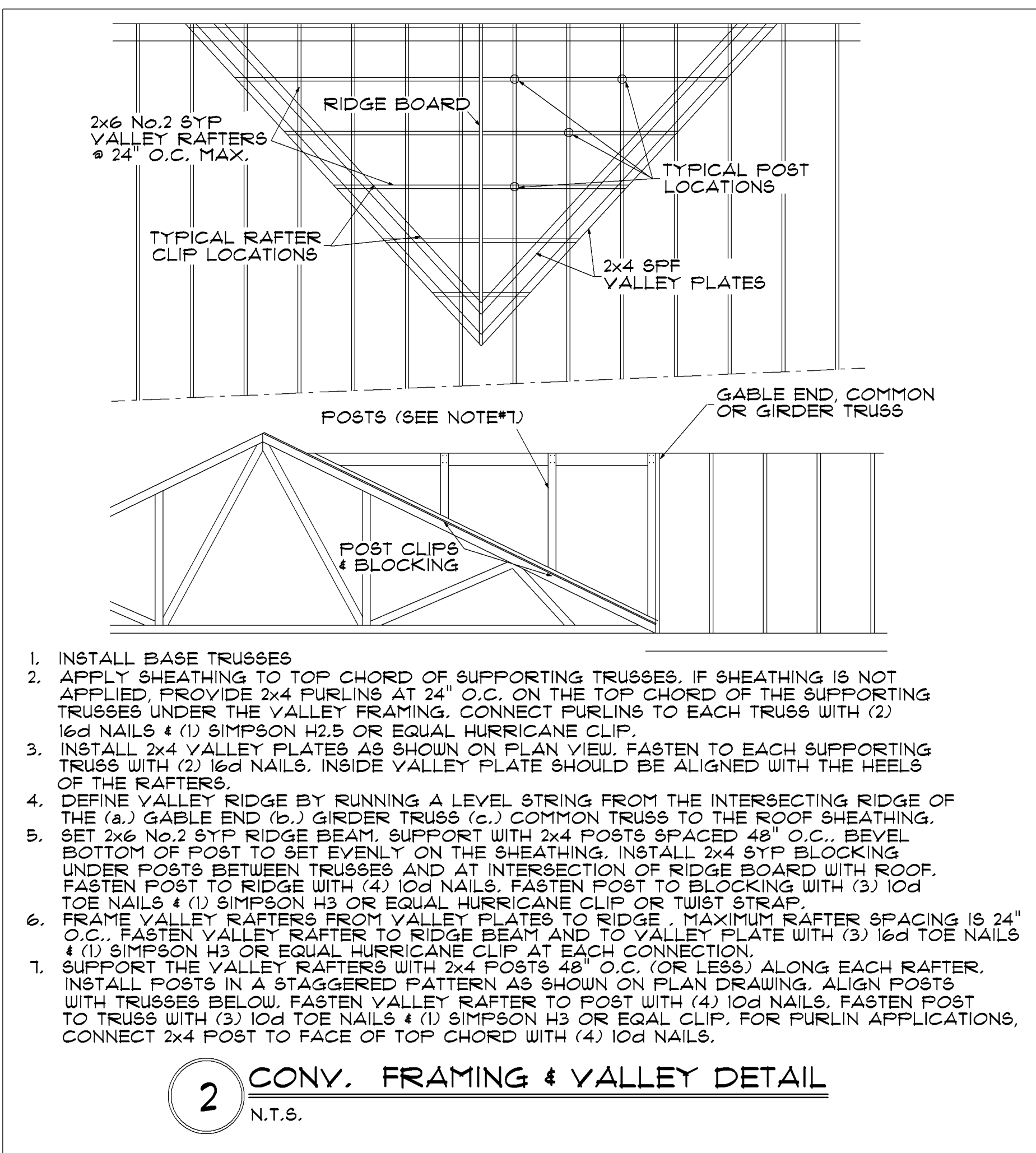
10 GIRDER/BEAM CONN.
N.T.S. UPLIFT 3040 *



6 HEADER OPENING/ LOW U.L.
N.T.S. MAX. CONNECTION UPLIFT CAP. 1715*



3 HEADER OPENING / LOW UPLIFT
N.T.S. MAX. CAP. OF CONNECTION - 1290*



1 Interior Bearing Wall - One Story
N.T.S.

THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH AND MEETS THE REQUIREMENTS OF IRC 2020, 11th EDITION, AND ASCE 7-16 FOR VUL. 140 MPH WIND SPEED, V_{bas}, 108 MPH RISK CATEGORY II EXPOSURE CATEGORY C TOPOGRAPHIC FACTOR = 1.0 GUST EFFECT, G_{e0.85} WIND DIR. FACTOR K_d=0.85 FULLY ENCLOSED INTERNAL PRESSURE COEFFICIENT: +/- 0.18 DESIGN PRESSURE FOR WALL COMPONENTS & CLADDING (WORST CASE) = 25.6 P.S.F. P₃₃ P.S.F. GARAGE DOOR DESIGN PRESSURE = 42.4, -25.3 (WORST CASE) ROOF LIVE LOAD = 20 P.S.F. FLOOR LIVE LOAD = 40 P.S.F.

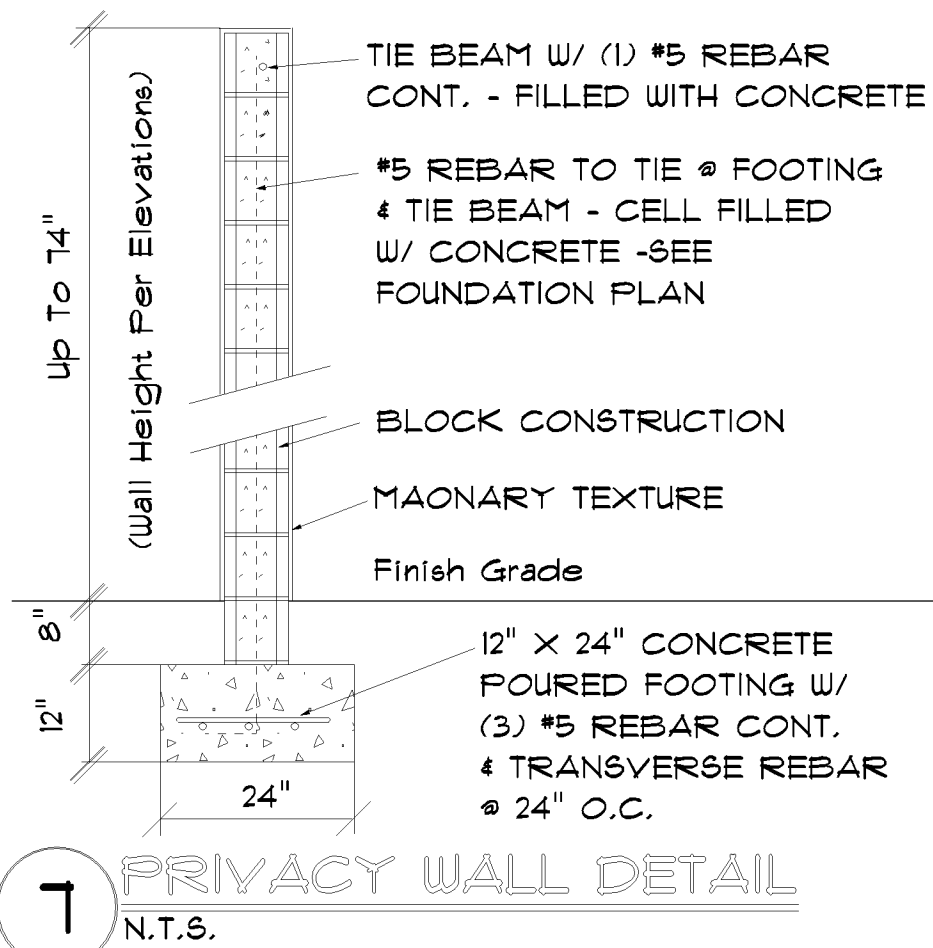
ENGINEERING SERVICES GROUP, LLC
391 W. Alfred St.
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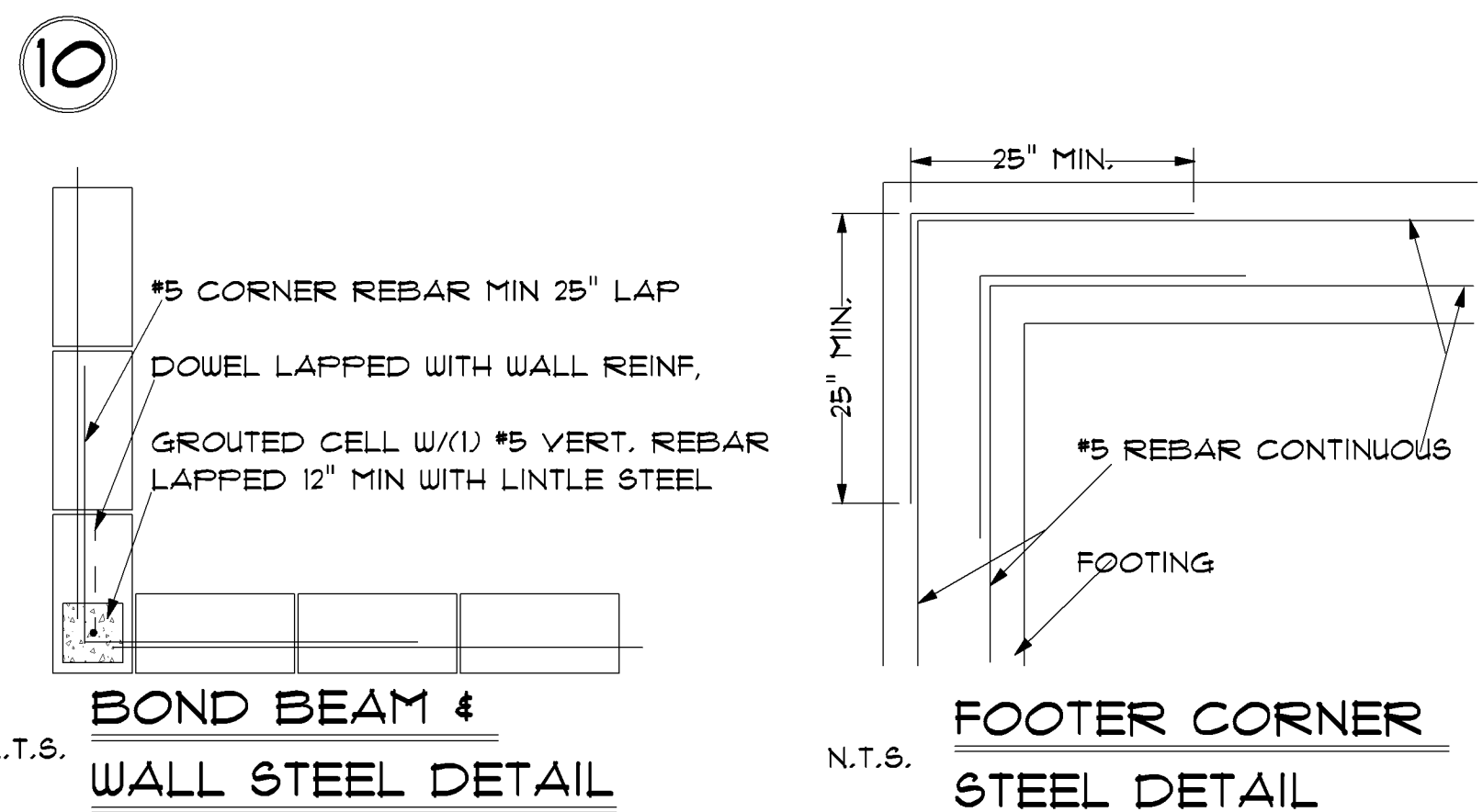
Drawn By
Michael Roberts

Detail Typical

D-2



7 PRIVACY WALL DETAIL
N.T.S.



10 BOND BEAM & WALL STEEL DETAIL
N.T.S.

FIX FOR MISSING OR MISPLACED DOWELS

THIS LETTER IS TO DESCRIBE ALTERNATIVES TO MITIGATE FOR CASTING REBAR VERTICAL REINFORCING AT AN INCORRECT LOCATION.

IF THE WALL HAS NOT BEEN BUILT DRILL A 1" DIAM. HOLE 6" DEEP INTO THICKENED EDGE OF SLAB AT THE CORRECT LOCATION. EPOXY A 30" LONG #5 REBAR INTO DRILLED HOLE. AS THE WALL IS BUILT, LAP REBAR A MINIMUM OF 25" & BEND VERTICAL BAR 90 DEG. TO ACHIEVE A 12" LONG LAP WITH THE CONTINUOUS REBAR IN THE TIE BEAM.

IF THE WALL HAS BEEN BUILT, OPEN WALL AT THE CORRECT LOCATION APPROX. 16" HIGH & 4" WIDE OFF THE FLOOR. DRILL HOLE & INSTALL REBAR AS DESCRIBED ABOVE. LAP VERTICAL STEEL AS DESCRIBED ABOVE INTO TIE BEAM. FORM WALL & POUR SOLID WITH 3000 PSI GROUT

FIX FOR MISSING OR MISPLACED ANCHOR BOLTS

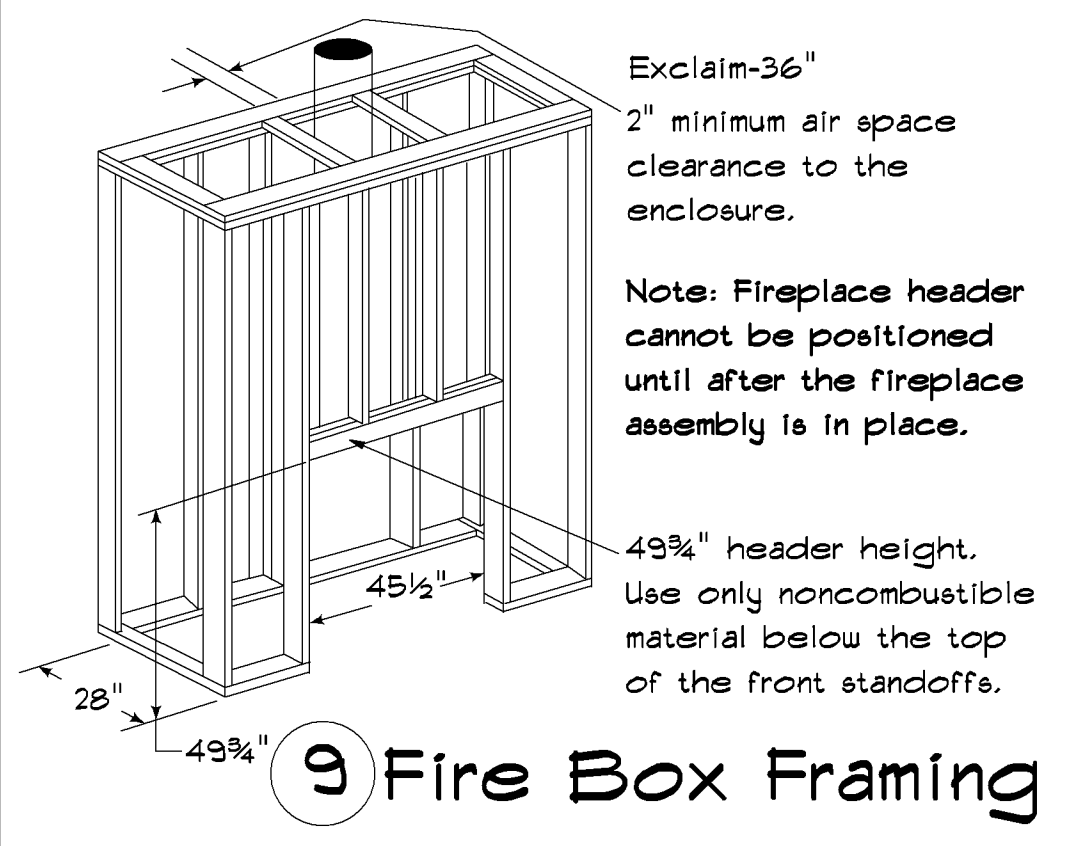
THIS LETTER IS TO DESCRIBE ALTERNATIVES TO ANCHOR BOLTS IN THE SLAB & BOND BEAM.

IF THE BOLT TO BE INSTALLED MEETS THE MIN. CONCRETE EDGE DIST. AS SPECIFIED BY THE MFG. OR IS AT LEAST 2 3/4" FROM ANY EDGE FOR 1/2" BOLTS & 3 1/2" FOR 5/8" & 3/4" BOLTS, THEN A STANDARD EXPANSION BOLT EMBEDDED 6" MIN. & THE SAME DIAM. AS THE ANCHOR BOLT MAY BE USED.

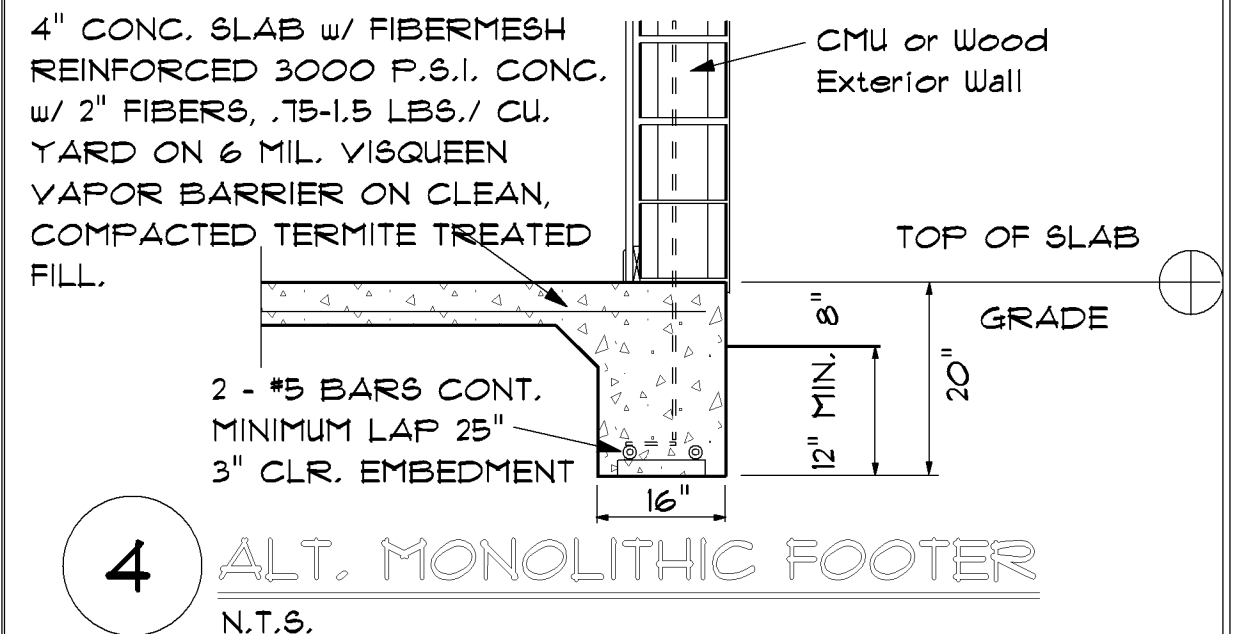
IF THE BOLT TO BE INSTALLED DOES NOT MEET THE MIN. CONCRETE EDGE DIST. AS SPECIFIED ABOVE THEN INSTALL A EPOXY ANCHOR, EMBEDDED 6" MIN. & THE SAME SIZE AS THE ANCHOR BOLT TO BE REPLACED

FIX FOR CMU BLOW OUT AT BOND BEAM

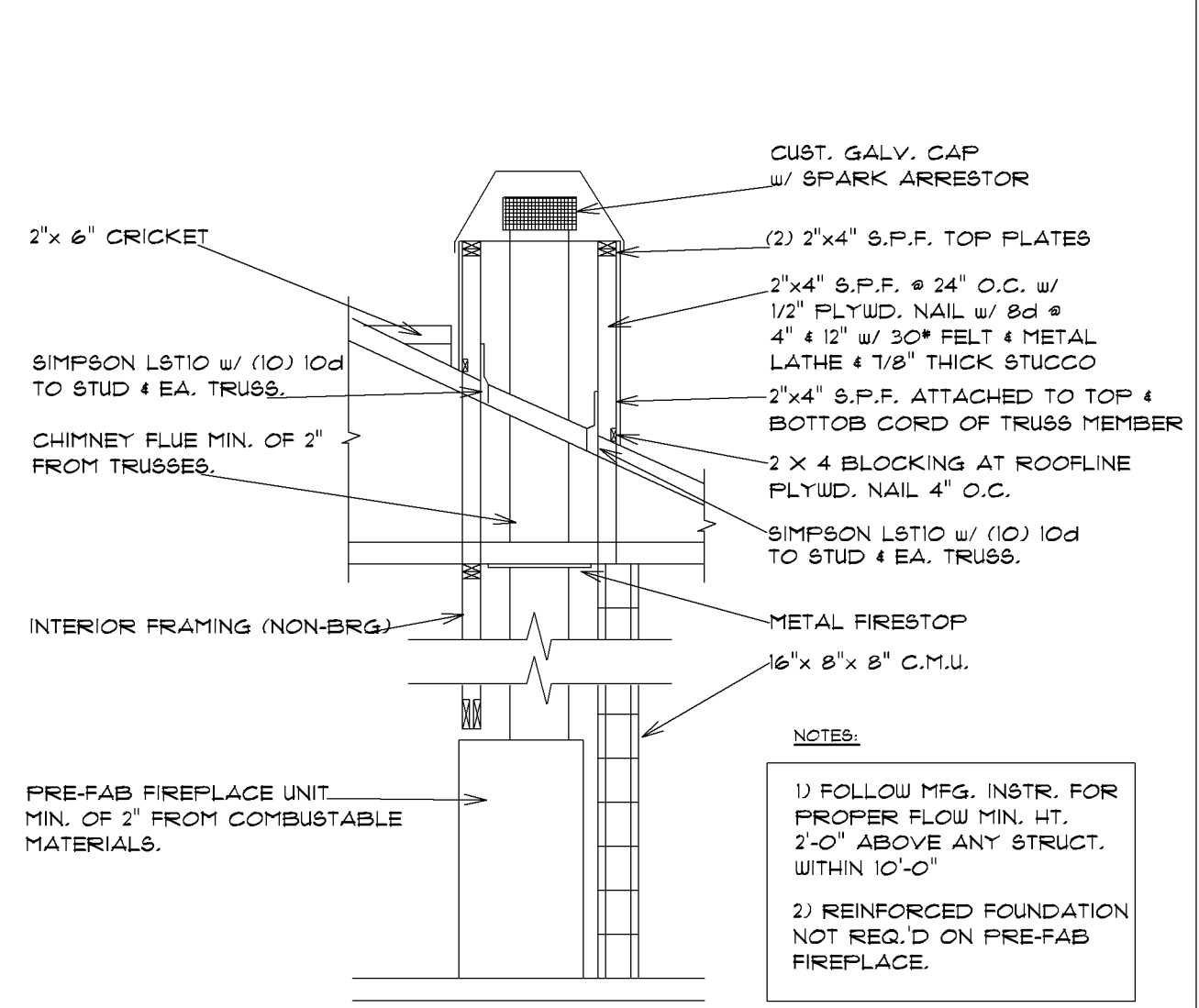
THIS LETTER IS TO DESCRIBE ALTERNATIVES FOR BLOWN OUT CMU IN THE BOND BEAM



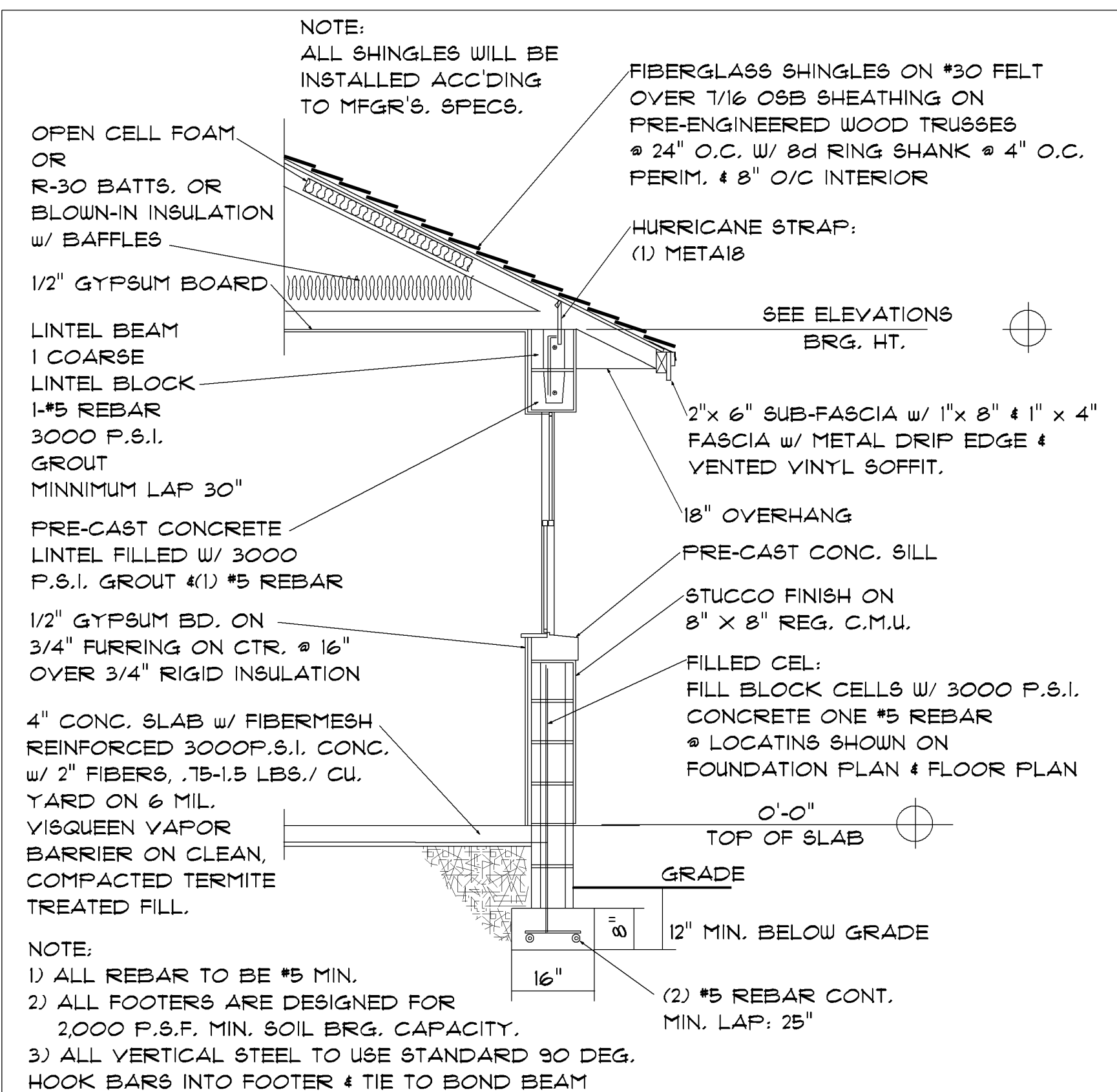
9 Fire Box Framing



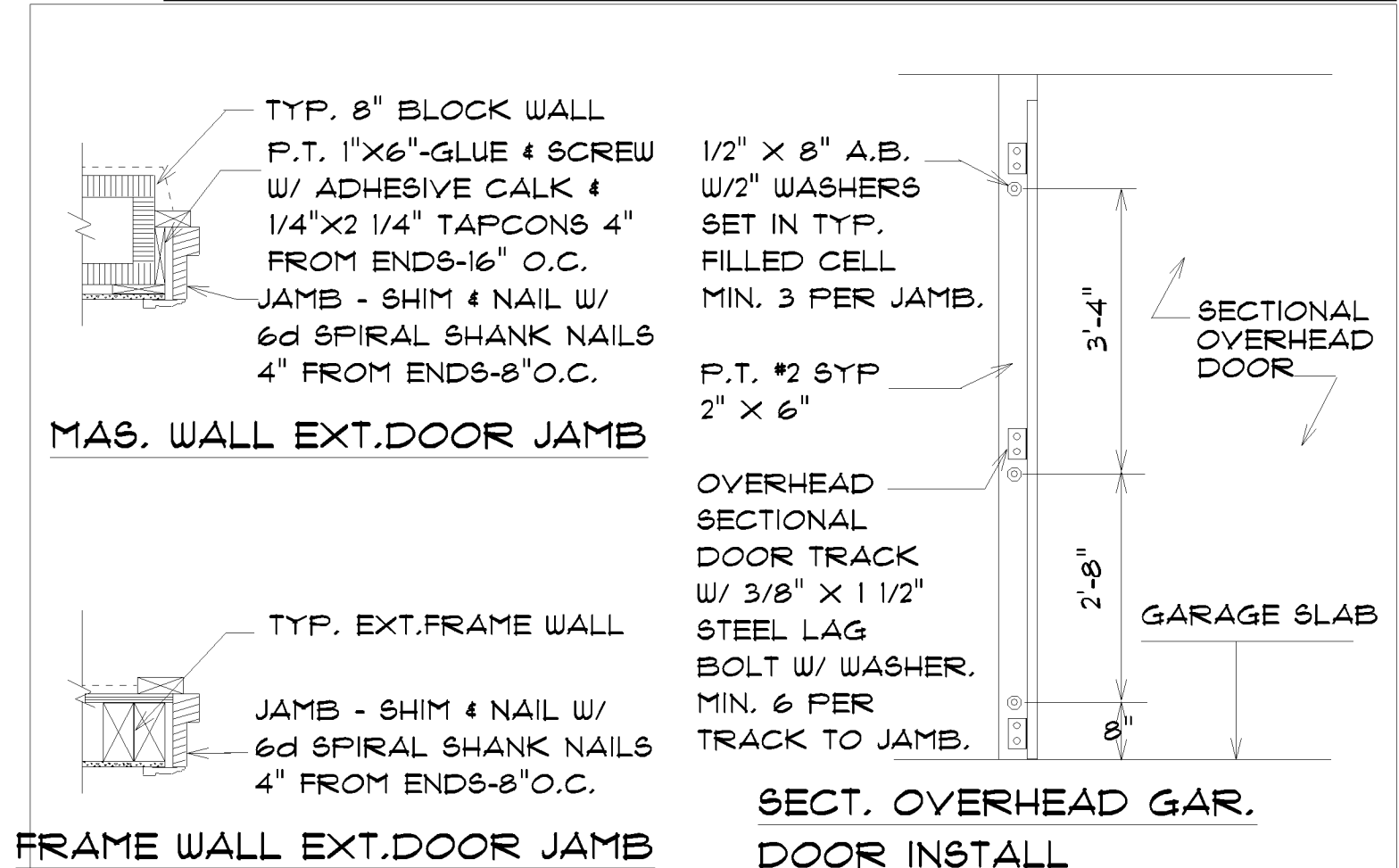
4 ALT. MONOLITHIC FOOTER
N.T.S.



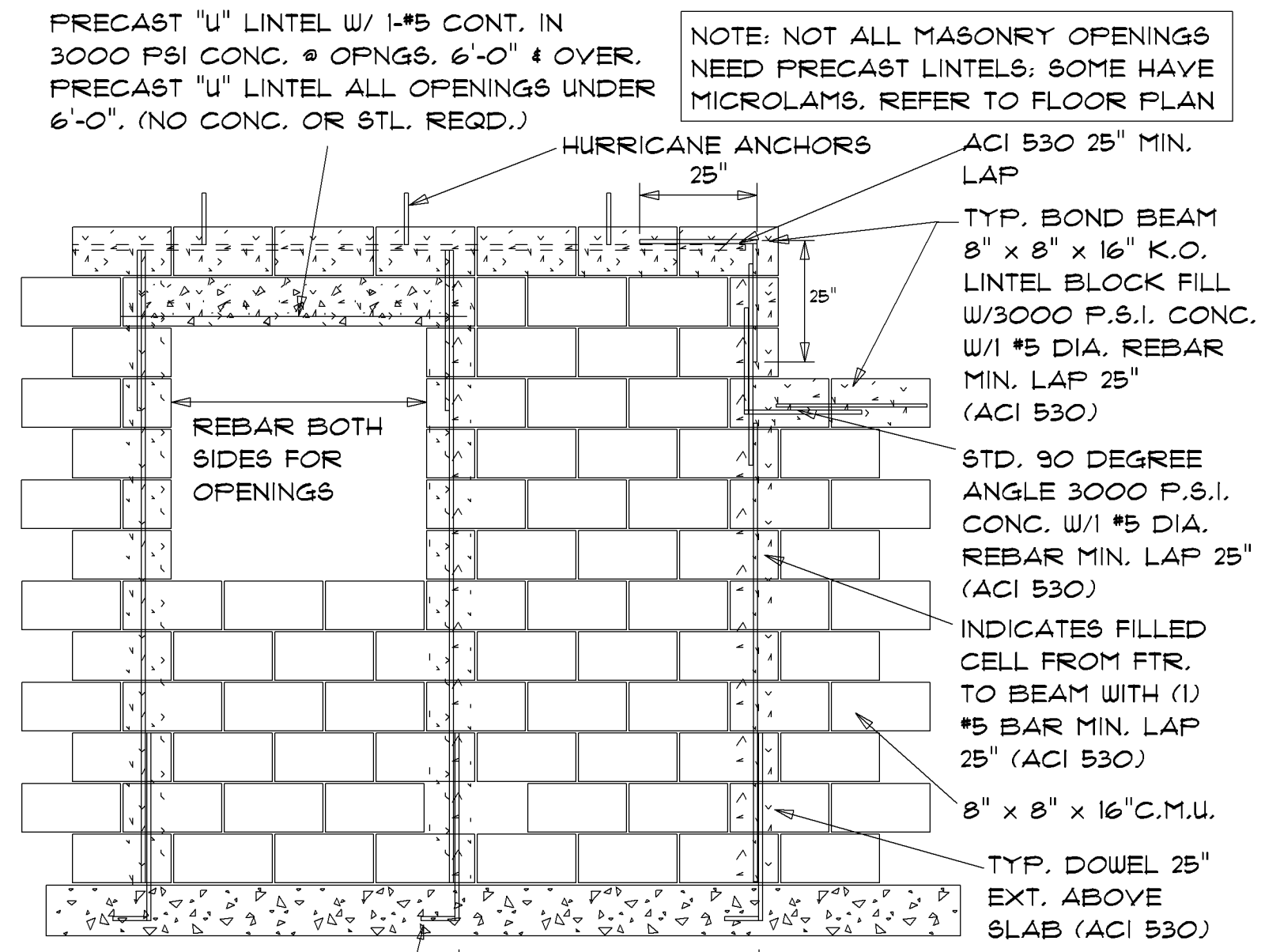
8 EXTERIOR BLOCK FIREPLACE DETAIL
NO SCALE



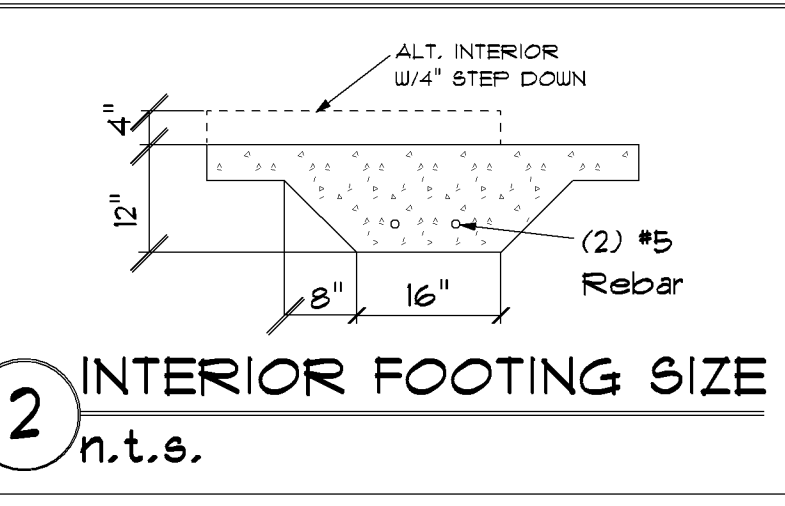
6 SINGLE STORY Typ. WALL SECTION
N.T.S. SHINGLE ROOF



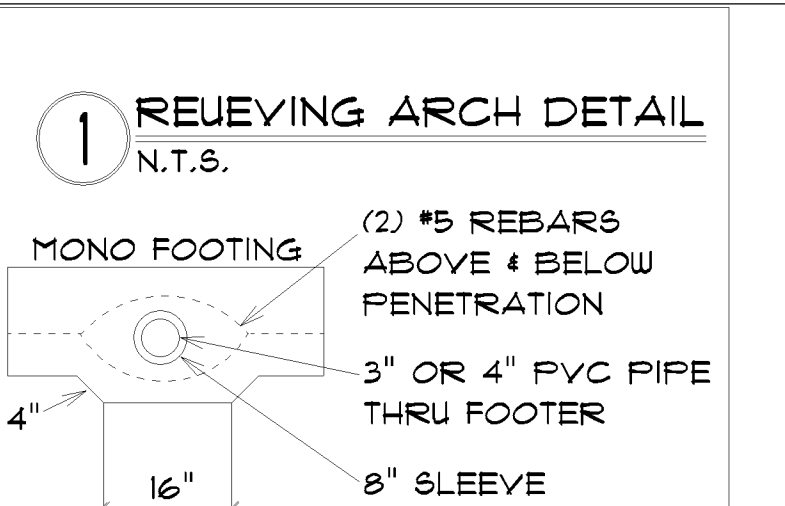
5 EXT. DOOR INSTALLATION
N.T.S.



3 BLOCK WALL DETAIL
N.T.S.



2 INTERIOR FOOTING SIZE
n.t.s.



1 RELIEVING ARCH DETAIL
N.T.S.

THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH AND MEETS THE REQUIREMENTS OF NBC 2020, 11th EDITION, AND ASCE 7-16 FOR VULNERABILITY WIND SPEED: V_{wind} = 140 MPH RISK CATEGORY: II EXPOSURE CATEGORY: C TOPOGRAPHIC FACTOR: = 1.0 GUST EFFECT: G_e = 0.85 WIND DIR. FACTOR K_d = 0.85 FULLY ENCLOSED INTERNAL PRESSURE COEFFICIENT: +/- 0.18 DESIGN PRESSURE FOR WALL COMPONENTS & CLADDING (WORST CASE): +/- 25.6 PSF -33.9 PSF (WORST CASE) GARAGE DOOR DESIGN PRESSURE = +22.4, -25.3 (WORST CASE) FLOOR LIVE LOAD = 40 PSF ROOF LIVE LOAD = 20 PSF

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James Lee Smith / P.E.

Detail Typical

D-4

Drawn By
Michael Roberts

CONNECTOR SCHEDULE SIMPSON			
•	CONNECTOR	FASTNERS	UPLIFT (lbs)
30	MTSM16	(7) 10d X 1-1/2" NAILS & (4) 1/4" X 1-1/2" TITEN Z	830
31	HTSM20	(10) 10d X 1-1/2" NAILS & (4) 1/4" X 3" TITEN Z	1,110
32	MSTAM24	(9) 10d X 5" NAILS & (5) 1/4" X 3" TITEN Z	1,375
33	MSTAM36	(13) 10d X 3" NAILS & (8) 1/4" X 3" TITEN Z	1,870
34	MSTCM40	(26) 10d X 3-1/4" NAILS & (10) 1/4" X 3" TITEN Z	2,800
35	CS16-R (CUT TO FIT)	(11) 10d X 15 NAILS & (8) 3/16" X 1-1/4" TITEN Z	1,650
36	H16S INV. HANGER	(2) 10d X 1-1/2" NAILS & (6) 1/4" X 3" TITEN Z	1,370
37	HUC410 MASONRY	(18) 1/4" X 2 1/4" TITEN Z 1SSUE	1,135
38	HUC412 MASONRY	(22) 1/4" X 2 1/4" TITEN Z 1SSUE	1,800
39	MBHA MASONRY	(1) 3/4" THREADED ROD + TOP & FACE (4) 1/4" X 2 3/4" TITEN Z TO MASONRY & (4) 1/4" X 1-1/2" SDS SCREWS TO TRUSS	3475
40	HGAM10	(24) 3/16" X 2 1/4" TAPCONS	810 875 IAT.
41	HGUS48	(24) 3/16" X 2 1/4" TAPCONS	2300
42	HGUS550/10	(24) 3/16" X 2 1/4" TAPCONS	2300

TYPICAL CONNECTIONS & DETAILS	
A	(2) STUDS / (15) X 2 OR (6) X 2 @ TOP & (22) @ BASE TYP. @ 1 STORY
B	(3) STUDS / (15) X 3 OR (6) X 3 @ TOP & (23) @ BASE TYP. @ 1 STORY
C	(2) STUDS / (15) X 2 OR (6) X 2 @ TOP & (15) X 2 OR (6) X 2 @ LOWER BEAM OR RIMBOARD
C1	(3) STUDS / (15) X 2 OR (6) X 2 @ TOP & (15) X 2 OR (6) X 2 @ LOWER BEAM OR RIMBOARD
D	(4) STUDS OR 6X6 P.T. POST / (28) X 2 @ TOP & (5) @ BASE
E	(2) STUDS / (15) X 2 OR (6) X 2 @ TOP & (12) X 2 - 52" LONG @ FLOOR & (22) @ BASE
F	(3) STUDS / (15) X 3 OR (6) X 3 @ TOP & (12) X 2 - 52" LONG @ FLOOR & (23) @ BASE
G	(2) STUDS / (15) X 2 OR (6) X 2 @ TOP & (12) X 2 - 52" LONG @ BASE W/ (13) 10d NAILS TO STUDS & (10) 3/16" X 2 1/4" TAPCONS TO GROUTED C.M.U.
H	(3) STUDS / (15) X 3 OR (6) X 3 @ TOP & (12) X 3 - 52" LONG @ BASE W/ (13) 10d NAILS TO STUDS & (10) 3/16" X 2 1/4" TAPCONS TO GROUTED C.M.U.
I	5 1/4" X 5 1/4" PARALAM POST W/ (21) X 2 POST / BEAM / (23) @ BASE (TYP)
J	2nd FLOOR STUDS TO FLOOR SYSTEM W/ LSTA36 @ 32" O.C. & AT OR CS16-R LONG @ 32 3/2" O.C. & AT CORNERS, ENDS & (2) AT EACH SIDE OF OPENINGS
K	2 X 10 LEDGER BOARD W/ (3) 1/4" X 4" WOOD SCREWS AT 16" O.C. AT FRAME OR 1/4" X 4 1/2" TAPCONS @ 5" O.C.
K1	(2) 2X12 LEDGER BOARD DOUBLE STAGGERED ROW OF 3/4" X 10" ANCHOR BOLTS @ 16" O.C. TO GROUTED CMU OR CONCRETE
L	5 1/4" X 5 1/4" PARALAM POST W/ (21) X 2 POST / BEAM / (23) @ BASE (TYP)
M	6X6 P.T. POST W/ (21) X 2 POST/BEAM / (23) @ BASE (TYP)
N	4X4 P.T. POST W/ (14) X 2 POST/BEAM / (24) @ BASE (TYP)
O	4X4 P.T. POST W/ (16) X 3 POST/BEAM / (23) @ BASE (TYP)

CMU WALL SYSTEM AS WELL AS ICF SEGMENTS WHICH HAVE AN UNINTERRUPTED LENGTH OF 4'0" OR MORE SHALL BE CONSIDERED SHEER WALLS

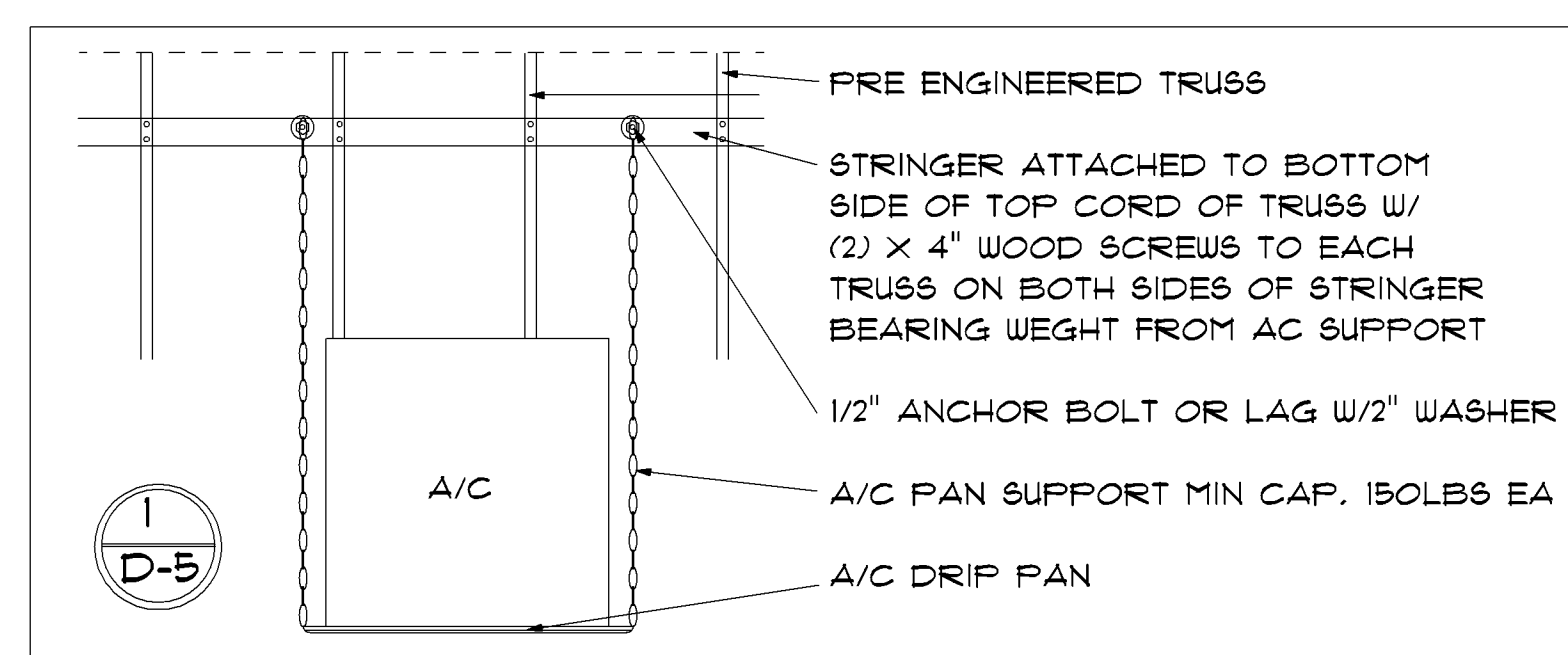
6.W.S = SHEERWALL SEGMENTS (SEE ATTACHED DETAILS)

ROOF LIVE LOAD = 20 P.S.F. FLOOR LIVE LOAD = 40 P.S.F. STAIRS = 100 P.S.F. DECKS & BALCONIES = 60 P.S.F.

CONNECTOR SCHEDULE SIMPSON			
•	CONNECTOR	FASTNERS	UPLIFT (lbs)
1	META18	(8) 10d X 1-1/2" PLY (6) 16d X 3-1/2" 3-PLY	1,450
2	HETA20	1 PLY (9) 10d X 1.5 2/3 PLY (8) 16d X 3-1/2"	1,810
3	MTS12 OR MTS 16	(14) 10d	990
4	H3	(8) 8d	400 UPLIFT 170 LATERAL
5	HD9B	1/8" ANCHOR BOLT (3) 7/8" BOLTS THRU	7,910
6	HTS20	24- 10d X 1.5	1,310
7	HHETA20	1 PLY (10) 10d X 1.5 2-3 PLY (9) 16d X 3-1/2"	2,120
8	HGT-2 OR HGT-3	(2) 3/4" ANCHORS TO CMU & (16) 10d X 3" TO GIRDER	10,690
9	SP1	(6) 10d X 3" TO STUD (4) 10d X 3" TO PLATE	555
10	SP2	(6) 10d X 3" TO STUD (6) 10d X 3" TO PLATE	1,010
11	SP4	(6) 10d X 1.5 TO STUD	415 SIDE 825 CENTER
12	CS16-R	(22) 10d X 2 1/2"	1,705
13	LSTA12	(10) 10d X 2 1/2"	925
14	LSTA24	(18) 10d X 2 1/2"	1,235
15	LSTA30	(22) 10d X 2 1/2"	1,640
16	LSTA36	(24) 10d X 2 1/2"	1,640
17	MSTA36	(26) 10d X 2 1/2"	2,050
18	HETA16	1 PLY (9) 10d X 1.5 2 PLY (8) 16d X 3 1/3	1,810
19	HUS26	(14) 16d X 3 1/2 TO HEADER (6) 16d X 3 1/2 TO JOIST	1,320
20	HGUS48	(36) 16d X 3 1/2 TO FACE (12) 16d X 3 1/2 TO JOIST	3,235
21	RTPGA824	(24) 16d	1,500
22	HTTT16	(18) 16d + 5/8" A.BOLT	4,175
23	HTT22	(32) 16d + 5/8" A.BOLT	5,250
24	ABU44	(12) 16d + 5/8" A.BOLT	1,900
25	ABU66	(12) 16d + 5/8" A.BOLT	2,475
26	H10A	(9) 10d X 1.5 TO TRUSS (9) 10d X 1 1/2" TO PLATE	855
27	MST21	(30) 16d X 2 1/2"	3,700
28	MST148	(48) 10d X 1.5	5,070
29	MGT	(1) 5/8" BOLT TO LINTLE & (22) 10d NAILS TO TRUSS	3,965

UNLESS NOTED OTHERWISE:

- WHERE CONNECTOR NOT NOTED FOR TRUSS TO FRAME USE (6) / TRUSS TO NEW CMU USE (3) / TRUSS TO EXISTING CMU USE (5)
- ALL INTERIOR BEAMS USE (6) X 2 ON FRAME AND (2) X 2 ON BLOCK
- ALL CONVENTIONALLY FRAMED MEMBERS USE (4) 10d TOE NAILS @ EACH END OF MEMBERS
- USE HUS26 AS 1 PLY HANGER & HGUS48 AS 2 PLY HANGER
- MINIMUM OF 6" EMBEDMENT FOR ANCHOR BOLTS TO SLAB
- WHERE USED WITH WOOD FRAME WALLS, ALSO MUST USE (2) INVERTED HTT22 UNDER PLATES



8X8 PRECAST LINTLE (FILLED & UNFILLED)

TOTAL ALLOWABLE SUPERIMPOSED LOAD - POUNDS PER LINEAR FOOT				
MARK NO.	NOMINAL CELAR SPAN	TOTAL LINTLE SIZE	NO FILL NO STEEL	FILLED (1) #5 A
L-1	1'6"	2'10"	6191	7845
L-2	2'2"	3'8"	4271	5413
L-3	2'8"	4'0"	3466	4383
L-4	3'2"	4'6"	2917	3686
L-5	4'0"	5'4"	2304	2906
L-6	4'6"	5'10"	2045	2571
L-7	5'2"	6'8"	1722	2167
L-8	6'2"	7'8"	1484	1885
L-9	7'0"	8'4"	1304	1836
L-10	8'0"	9'4"	1138	1425
L-11	9'2"	10'8"	989	1236
L-12	10'0"	11'4"	904	1128
L-13	11'2"	12'8"	807	1004
L-14	12'0"	13'4"	749	931
L-15	12'8"	14'0"	708	783
L-16 (P.S.)	13'4"	14'8"	548	760
L-17 (P.S.)	14'0"	15'4"	491	687
L-18 (P.S.)	16'0"	17'4"	332	521
L-19 (P.S.)	18'0"	19'4"	233	406
L-20 (P.S.)	18'8"	20'0"	208	376
L-21 (P.S.)	20'8"	21'4"	188	302
L-22 (P.S.)	22'8"	24'0"	111	231

NOTE: (P.S.) = PRECAST LINTLES PRESTRESSED USING (2) 7/16" DIAM. PRESTRESSING STRANDS

8X16 PRECAST LINTLE (COMPOSIT)

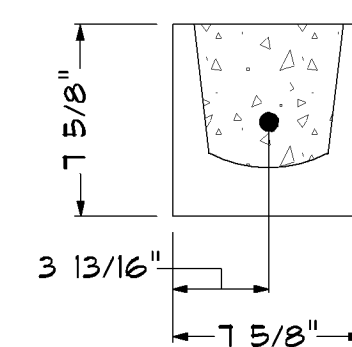
TOTAL ALLOWABLE SUPERIMPOSED LOAD - POUNDS PER LINEAR FOOT				
MARK NO.	NOMINAL CELAR SPAN	TOTAL LINTLE SIZE	FILLED (1) #5 T4B C	(1) #5 T4B
L-1	1'6"	2'10"	12374	
L-2	2'2"	3'8"	8488	
L-3	2'8"	4'0"	8868	
L-4	3'2"	4'6"	5772	
L-5	4'0"	5'4"	4546	
L-6	4'6"	5'10"	4028	
L-7	5'2"	6'8"	3382	
L-8	6'2"	7'8"	2908	
L-9	7'0"	8'4"	2548	
L-10	8'0"	9'4"	2216	
L-11	9'2"	10'8"	1918	
L-12	10'0"	11'4"	1749	
L-13	11'2"	12'8"	1554	
L-14	12'0"	13'4"	1438	
L-15	12'8"	14'0"	1356	
L-16 (P.S.)	13'4"	14'8"	1395	
L-17 (P.S.)	14'0"	15'4"	1326	
L-18 (P.S.)	16'0"	17'4"	1153	
L-19 (P.S.)	18'0"	19'4"	1019	
L-20 (P.S.)	18'8"	20'0"	980	
L-21 (P.S.)	20'8"	21'4"	880	
L-22 (P.S.)	22'8"	24'0"	740	

NOTE: (P.S.) = PRESTRESSED LINTLES USING (2) 7/16" DIAM. PRESTRESSING STRANDS

8X24 PRECAST LINTLE (COMPOSIT)

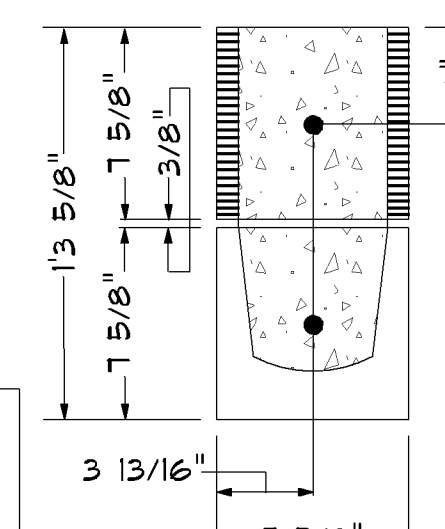
TOTAL ALLOWABLE SUPERIMPOSED LOAD - POUNDS PER LINEAR FOOT				
MARK NO.	NOMINAL CELAR SPAN	TOTAL LINTLE SIZE	FILLED (1) #5 T4B L	(1) #5 T4B
L-1	1'6"	2'10"	19724	
L-2	2'2"	3'8"	13599	
L-3	2'8"	4'0"	11004	
L-4	3'2"	4'6"	9250	
L-5	4'0"	5'4"	7287	
L-6	4'6"	5'10"	6458	
L-7	5'2"	6'8"	5548	
L-8	6'2"	7'8"	4885	
L-9	7'0"	8'4"	4089	
L-10	8'0"	9'4"	3558	
L-11	9'2"	10'8"	3081	
L-12	10'0"	11'4"	2809	
L-13	11'2"	12'8"	2497	
L-14	12'0"	13'4"	2312	
L-15	12'8"	14'0"	2180	
L-16 (P.S.)	13'4"	14'8"	1956	
L-17 (P.S.)	14'0"	15'4"	1857	
L-18 (P.S.)	16'0"	17'4"	1611	
L-19 (P.S.)	18'0"	19'4"	1412	
L-20 (P.S.)	18'8"	20'0"	1368	
L-21 (P.S.)	20'8"	21'4"	1223	
L-22 (P.S.)	22'8"	24'0"	1106	

NOTE: (P.S.) = PRESTRESSED LINTLES USING (2) 7/16" DIAM. PRESTRESSING STRANDS

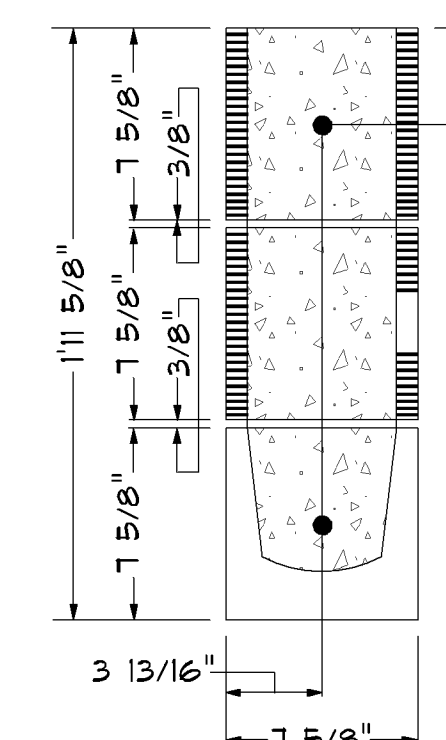


DETAIL A

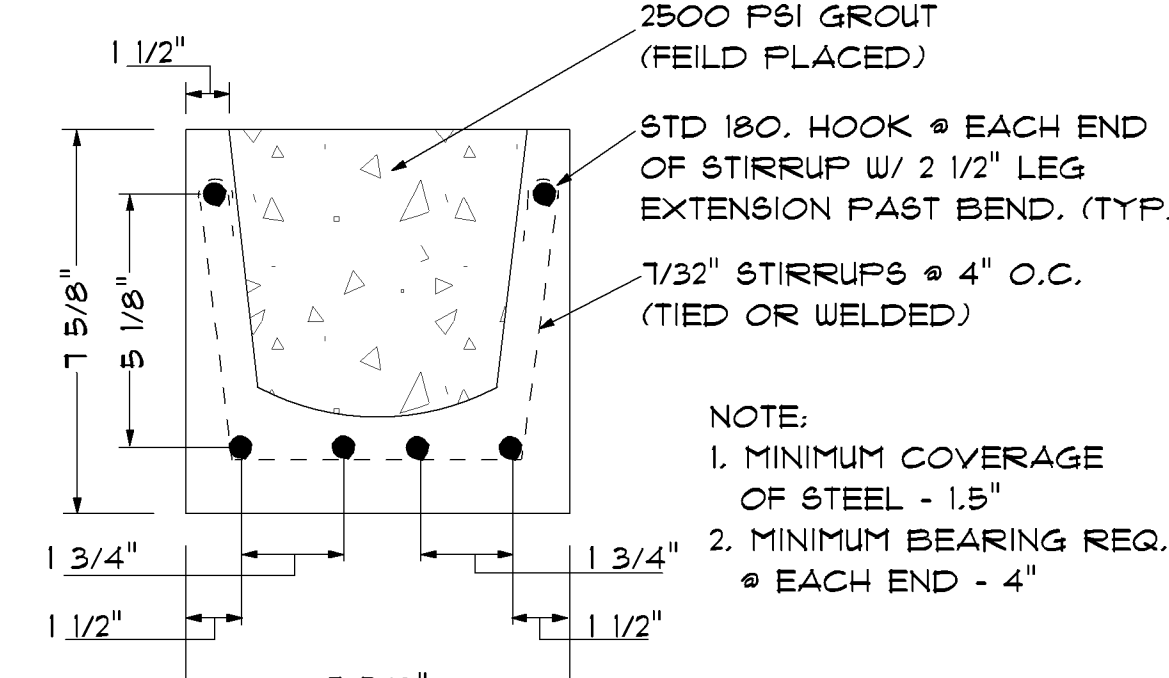
Unless otherwise noted use Lintle "DETAIL C" for all C.M.U. Openings



DETAIL C



DETAIL L



TYPICAL PRECAST LINTLE

NOTE:
1. MINIMUM COVERAGE OF STEEL - 1.5"
2. MINIMUM BEARING REQ. @ EACH END - 4"

THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH AND MEETS THE REQUIREMENTS OF
FBC 2020, 11th EDITION, AND ASCE 7-16 FOR VUL=140 MPH
WIND SPEED, V_{WIND} = 108 MPH
RISK CATEGORY II
EXPOSURE CATEGORY C
GUST EFFECT, G=0.85
FULLY ENCLOSED
TOPOGRAPHIC FACTOR = 1.0
WIND DIR. FACTOR K_d=0.85
INTERNAL PRESSURE COEFFICIENT: +/- 0.18
DESIGN PRESSURE FOR WALL COMPONENTS & CLADDING (WORST CASE) = 25.6 PSF = 33.9 P.S.F.
GARAGE DOOR DESIGN PRESSURE = 42.4, -25.3 (WORST CASE)
ROOF LIVE LOAD = 20 P.S.F. FLOOR LIVE LOAD = 40 P.S.F.

ENGINEERING SERVICES GROUP, LLC
391 W. Alfred St.
Tavares, FL 32718
352-388-1135 J. Lee Smith, P.E. #36177

James Lee Smith / P.E.

Detail Typical

D-5

Drawn By
Michael Roberts