# 1. ELEVATIONS ARE NOTED AS FOLLOWS, MEASURED FROM THE LEVEL 2 REFERENCE DATUM: 14K6 2. TOP OF CONCRETE SLAB SHALL BE AT T/SLAB (0'-0", SEE ARCHITECTURAL DRAWINGS). 4. STEEL BEAMS SUPPORTING K-JOISTS WILL BE LOWERED BY THE JOIST SEAT DEPTH OF 2 1/2 INCHES. SLAB, SEE SECTION A/S2.01 UNFACTORED BEAM VERTICAL SHEAR DESIGN REACTION, (18 KIPS MIN.) 6. FILLER BEAMS/JOISTS ARE TO BE EQUALLY SPACED BETWEEN COLUMNS, UNO 14K6 - W 8 X 18 W/ BOTTOM **BRIDGING BY JOIST** SUPPLIER PER SJI PLATE LINTEL REQUIREMENT

SEE SECTION 6/S2.01

(SIM.) BEAM BEARING ON MASONRY WALL

DETAIL, TYP.

### **6 HJFD DESIGN CRITERIA**

- 1. DEAD, LIVE, WIND AND SEISMIC DESIGN LOADS ARE IN ACCORDANCE WITH THE 2015 INTERNATIONAL RESIDENTIAL BUILDING CODE IRC AND THE HOWARD COUNTY BUILDING CODE. THE ROOF AND ATTCI HAS BEEN DESIGNED FOR A 30 PSF LIVE LOAD, AND THE GARAGE FLOOR HAS BEEN DESIGNED FOR A 80 PSF LIVE LOAD.
- 2. SNOW LOADING IS BASED ON THE FOLLOWING:

GROUND SNOW LOAD	30 P
BUILDING CATEGORY	II
EXPOSURE FACTOR	1.0
THERMAL FACTOR	1.0
IMPORTANCE FACTOR	1.0

3. WIND LOADING FOR THE MAIN WIND-FORCE RESISTING SYSTEM IS BASED ON THE FOLLOWING:

BASIC WIND SPEED (ULT.)	1
BUILDING CATEGORY	1
EXPOSURE	E
IMPORTANCE FACTOR	1.
TOPOGRAPHICAL FACTOR	1.
DIRECTIONALITY FACTOR	0.

4. WIND LOADING FOR COMPONENTS AND CLADDING IS BASED ON THE FOLLOWING

BASIC WIND SPEED (ULT.)		115
BUILDING CATEGORY		11
EXPOSURE		В
IMPORTANCE FACTOR		1.0
TOPOGRAPHICAL FACTOR		1.0
DIRECTIONALITY FACTOR	- white	1.0

5. SEISMIC LOADING IS BASED ON THE FOLLOWING:

SITE CLASSIFICATION 0.2 SECOND SPECTRAL RESPONSE ACCELERATION, SS 1.0 SECOND SPECTRAL RESPONSE ACCELERATION, S1 SEISMIC USE GROUP IMPORTANCE FACTOR SEISMIC DESIGN CATEGOR

**GENERAL NOTES** 

### MISCELLANEOUS

ARCHITECT/ENGINEER OF ANY CONDITIONS NOT AS ASSUMED; HE SHALL TAKE FIELD MEASUREMENTS AS REQUIRED AND BE RESPONSIBLE FOR THE SAME. 2. CONTRACTOR SHALL COORDINATE WITH ALL RELATED TRADES FOR DETAILING, FABRICATION AND

ERECTION PRIOR TO SUBMITTING SHOP DRAWINGS FOR APPROVAL. 3. ALL STRUCTURAL WORK SHALL BE COORDINATED WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, ETC. REQUIREMENTS. DISCREPANCIES AND/OR INTERFERENCES SHALL BE REPORTED TO

THE ARCHITECT/ENGINEER IMMEDIATELY. 4. NO OPENINGS SHALL BE MADE IN ANY STRUCTURAL MEMBER UNLESS SPECIFICALLY SHOWN ON THE

STRUCTURAL DRAWINGS OR AFTER APPROVAL FROM THE STRUCTURAL ENGINEER.

5. CONTRACTOR SHALL FOLLOW THE TYPICAL DETAILS FOR TYPICAL CONDITIONS. THE TYPICAL DETAILS SHOWN ON THESE DRAWINGS APPLY THROUGHOUT THE BUILDING, UNLESS NOTED OTHERWISE NOTED.

DESIGN REACTIONS AND SUPPORT DETAILS FOR ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING EQUIPMENT IS BASED UPON AVAILABLE MANUFACTURER INFORMATION. SUPPORT CONDITIONS MAY NEED TO BE REVISED BASED UPON ACTUAL SUPPLIED EQUIPMENT AND SUPPORT

1. SPREAD FOOTINGS SHALL BEAR ON UNDISTURBED SOIL OF 1,500 PSF.

2 A REGISTERED PROFESSIONAL GEOTECHNICAL ENGINEER OR COUNTY INSPECTORSHALL VERIFY ALL PLACEMENTS OF FILL AND THAT THE FOUNDATION BEARING MATERIALS MEET OR EXCEED THE DESIGN REQUIREMENTS STATED ON THE DRAWINGS PRIOR TO PLACING ANY FOUNDATIONS.

 EDGES OF FOOTINGS SHALL NOT BE PLACED AT A GREATER THAN 1 (VERTICAL) TO 2 (HORIZONTAL) SLOPE WITH RESPECT TO ANY ADJACENT FOOTING OR EXCAVATION.

3. THE BOTTOMS OF EXTERIOR FOOTINGS SHALL BE 30 IN. MINIMUM BELOW FINISHEDGRADE.

5. ADJACENT COLUMN FOOTINGS THAT ABUT SHALL BE SEPERATED BY A PAPER JOINT.

### FOUNDATION MATERIALS

1. CONCRETE PLACEMENT SHALL CONFORM TO ACI 318 AND SHALL BE NORMAL WEIGHT HAVING A MINIMUM 28 DAY DESIGN COMPRESSIVE STRENGTH AS FOLLOWS:

> SPREAD AND WALL FOOTINGS 3500 PSI SLAB ON GRADE

2. CONCRETE REINFORCING SHALL CONFORM TO THE FOLLOWING DESIGNATIONS:

ASTM A615, DEFORMED BARS GRADE 60 WELDED WIRE FABRIC

3. Concrete mix design shall be based on laboratory trial batch method described in ACI-318. Concrete shall also conform to the FOLLOWING REQUIREMENTS:

> Water/cement Ratio Cement Factor

0.5 maximum 470 cubic yards minimum

CONCRETE EXPOSED TO THE ATMOSPHERE WILL BE AIR ENTRAINED 5% +/- 1%.

SLUMP AS REQUIRED BY ACI 318. NO CALCIUM CHLORIDE IS PERMITTED IN THE CONCRETE.

ALL STRUCTURAL MEMBERS WILL BE POURED TO THEIR FULL DEPTH. FOOTING EXCAVATIONS SHALL BE KEPT FREE OF WATER.

SEE ARCHITECTURAL DRAWINGS FOR FINISHING AND FLATNESS REQUIREMENTS.

10. ALL DEVELOPMENT LENGHTS AND SLPICES FOR DEFORMED BARS WILL BE IN ACCORDANCE WITH THE ACI BUILDING CODE REQUIREMENTS (40 BAR DIAMETERS MINIMUM). HOOKS SHALL BE STANDARD HOOKS, UNC. LAP WELDED WIRE FABRIC SUCH THAT THE OVERLAP OF THE OUTERMOST CROSS-WIRES OF EACH ADJOINING SHEET IS NOT LESS THAN THE SPACING OF THE CROSS-WIRES PLUS TWO IN., UNO.

11. REINFORCING FOR SLABS ON GRADE WHERE NOT OTHERWISE SPECIFIED SHALL BE 6x6-W2.1xW2.1

DRAWINGS AS A MINIMUM, UNO. IF NO REACTION IS SHOWN DESIGN THAT CONNECTION FOR A MINIMUM OF 18 KIPS. 12. CONNECTIONS TO COLUMNS SHALL HAVE A MAXIMUM ECCENTRICITY OF 3 IN. WITH RESPECT TO THE FLANGE OR WEB AS APPLICABLE.

SUPERSTRUCTURE CONCRETE TOPPING ON METAL DECK

DAY DESIGN COMPRESSIVE STRENGTH OF 3500 PSI.

DEFORMED BARS (WELDABLE)

DEFORMED BARS

STRUCTURAL STEEL

W SHAPES

HIGH STRENGTH BOLTS

SHALL HAVE A MINIMUM TENSILE STRENGTH OF 70 KSI.

ANCHOR BOLTS

ASTM A992, UNO

ASTM A36, UNO

ROUND HSS

GRADE B

EXCEED 3/16 IN.

WELDED WIRE FABRIC

1. CONCRETE TOPPING ON METAL DECK SHALL BE STRUCTURAL NORMAL WEIGHT HAVING A MINIMUM 28

4. ALL DEVELOPMENT LENGHTS AND SLPICES FOR DEFORMED BARS WILL BE IN ACCORDANCE WITH THE

HOOKS, UNO. LAP WELDED WIRE FABRIC SUCH THAT THE OVERLAP OF THE OUTERMOST CROSS-WIRES

OF EACH ADJOINING SHEET IS NOT LESS THAN THE SPACING OF THE CROSS-WIRES PLUS TWO IN., UNO.

1. STRUCTURAL STEEL FABRICATION, ERECTION AND CONNECTION DESIGN SHALL CONFORM TO AISC ASD

BUILDINGS. STEEL SUPPLIER WILL COORDINATE WITH THE ARCHITECT FOR THE FINISH OF THE STEEL.

SPECIFICATIONS FOR THE DESIGN, FABRICATIONS AND ERECTION OF STRUCTURAL STEEL FOR

3. BOLTS SHALL BE MINIMUM 3/4 IN. DIAMETER AND SHALL CONFORM TO THE FOLLOWING DESIGNATIONS,

4. WELDING ELECTRODES AND FLUXES SHALL CONFORM TO ONE OF THE SPECIFICATIONS OF THE

5. IF PARTS JOINED BY FILLET WELDS ARE SEPARATED BY MORE THAN 1/16 IN. THE LEG OF THE FILLET

WELD SHALL BE INCREASED BY THE AMOUNT OF THE ROOT OPENING. ROOT OPENING SHALL NOT

6. STEEL STUD SHEAR CONNECTORS SHALL CONFORM TO ASTM A108, GRADES 1010 THROUGH 1020, AND

7. GROUT UNDER STEEL PLATES SHALL HAVE A MINIMUM DESIGN COMPRESSIVE STRENGTH OF 5000 PSI.

9. HIGH STRENGTH BOLTED CONNECTIONS SHALL BE SLIP-CRITICAL FOR OVERSIZED HOLES, SLOTTED

HOLES WHERE THE FORCE IS ACTING IN THE SAME DIRECTION AS THE SLOT, KICKERS, BRACED

11. CONNECTIONS SHALL BE DESIGNED PER AISC TO CARRY THE FACTORED REACTION SHOWN ON

10. AISC SINGLE PLATE SHEAR CONNECTIONS MAY BE TIGHTENED TO THE SNUG TIGHT CONDITION, UNO.

FRAMES, HANGERS, AND ALL CONNECTIONS UNDER TENSION OR COMPRESSION, UNO.

D1.1. STUDS SHALL BE WELDED BY AUTOMATIC EQUIPMENT TO STRUCTURAL STEEL.

8. HIGH STRENGTH BOLTED CONNECTIONS SHALL BE FULLY PRE-TENSIONED, UNO.

SHALL CONFORM TO THE FOLLOWING REQUIREMENTS OF STRUCTURAL WELDING CODE - STEEL, AWS

AMERICAN WELDING SOCIETY LISTED IN STRUCTURAL WELDING CODE - STEEL, AWS D1.1. ELECTRODES

ACI BUILDING CODE REQUIREMENTS (40 BAR DIAMETERS MINIMUM). HOOKS SHALL BE STANDARD

ASTM A706

ASTM A185

ASTM A615, GRADE 60

ASTM A500

ASTM A36, UNO

ASTM A325 OR A490

2. NORMAL WEIGHT CONCRETE SHALL HAVE A MAXIMUM DRY UNIT WEIGHT OF 150 PCF.

3. CONCRETE REINFORCING SHALL CONFORM TO THE FOLLOWING DESIGNATIONS:

5. REINFORCING FOR CONCRETE TOPPING, UNO, SHALL BE 6x6-W1.4xW1.4 WWF.

2. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING DESIGNATIONS:

NO CONDUIT SHALL BE PLACED IN CONCRETE SLAB ON METAL DECK.

13. IN SEATED BEAM CONNECTIONS, THE SEAT TO SUPPORT CONNECTION SHALL RESIST BOTH THE SHEAR AND MOMENT RESULTING FROM THE SUPPORTED BEAM REACTION ECCENTRICITY. 14. IN SINGLE ANGLE CONNECTIONS, THE ANGLE TO SUPPORT CONNECTION SHALL RESIST BOTH THE

SHEAR AND MOMENT RESULTING FROM THE SUPPORTED BEAM REACTION ECCENTRICITY. 15. SEE ARCHITECTURAL DRAWINGS FOR MISCELLANEOUS STEEL NOT SHOWN ON THE STRUCTURAL DRAWINGS.

INDICATES TOP OF STEEL

1. STEEL JOISTS AND BRIDGING SHALL CONFORM TO STEEL JOIST INSTITUTE CODE OF STANDARD STEEL JOIST SHOPW DRAINWGS. REFER TO THE TYPICAL DETAILS FOR CONNECTION TO STRUCTURAL

MEMEBERS. THE BRIDGING SHALL BE PLACED AND ANCHORED PRIOR TO INTSLALLING THE DECK. 2. BOTTOM CHORD EXTENSIONS SHALL HAVE A MAXIMUM SLENDERNESS RATIO, KL/R, OF 200, AND, IF INDICATED ON THE DRAWINGS, A COMPRESSIVE CAPACITY "P". BOTTOM CHORD EXTENSIONS SHALL HAVE POSITIVE ATTACHMENT TO SUPPORT BY BOLTING OR BY WELDING.

REFER TO DESIGN CRITERIA FOR NET UPLIFT LOADING REQUIREMENTS. 4. THE ENDS OF STEEL JOISTS SHALL EXTEND A MINIMUM OF 2 1/2 INCHES OVER STEEL SUPPORTS AND 4 INCHES OVER ALL OTHER SUPPORTS. FASTEN ENDS BY BOLTING OR WELDING.

1. METAL DECKING SHALL CONFORM TO THE FOLLOWING DESIGNATIONS:

FLOOR DECK ASTM A653, STRUCTURAL QUALITY, 50 KSI

2. SPECIFIED COMPOSITE FLOOR DECK GAGES ARE MINIMUM. PROVIDE GAGE CONFORMING TO SDI REQUIREMENTS FOR STRESS AND DEFLECTION DURING CONSTRUCTION, BASED ON ACTUAL SPAN LENGTHS, NUMBER OF CONTINUOUS SPANS, LOADING AND PRESENCE OR ABSENCE OF SHORING. PROVIDE SHORING IF REQUIRED, OR FURNISH HIGHER DECK GAGE IF REQUIRED TO SUPPORT

APPLICABLE LOADS. 3. SPECIFIED ROOF DECK HAS BEEN DESIGNED TO BE CONTINUOUS OVER 3 SPANS MINIMUM. FOR ONE OR TWO SPAN CONDITIONS, FURNISH HIGHER GAGE DECK IF REQUIRED TO SUPPORT APPLICABLE

4. METAL DECK SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES PER FOOT WIDTH:

1-1/2" TYPE C "CONFORM" FLOOR DECK, 22 GAGE 1 = 0.177 IN^4

FLOOR DECK SHALL HAVE A ZINC COATING COMFORMING TO ASTM 8525.

SEE THE TYPICAL DETAILS FOR THE CONNETION OF THE DECK TO THE STRUCTURE. 7. PROVIDE STANDARD CLOSURES, CANT STRIPS, POUR STOPS, AND OTHER ACCESSORIES AS SHOW ON THE DRAWINGS OR AS REQUIRED.

1. REINFORCED MASONRY CONSTRUCTION (CMU) SHALL CONFORM TO BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES, ACI 530, AND SPECIFICATIONS FOR MASONRY STRUCTURES, ACI 530.1. 2. CMU SHALL BE GRADE N, 2-CELL BLOCK AND CONFORM TO ASTM C90 (NORMAL WEIGH). PROVIDE TYPE I FOR EXTERIOR WALLS AND FOUNDATIONS. TYPE I OR TYPE II BLOCK MAY BE USED FOR INTERIOR PARTITION WALLS.

MINIMUM COMPRESSIVE STRENGTH OF MASONRY, FM, SHALL BE 1500 PSI.

 MASONRY REINFORCING SHALL BE DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60. 5. GROUT SHALL CONFORM TO ASTM C476, AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF

2000 PSI. MORTAR SHALL CONFORM TO ASTM C270, TYPE S.

VERTICAL CONTROL JOINT.

7. REINFORCED VOIDS IN MASONRY AS CALLED OUT ON THE CONTRACT DOCUMENTS SHALL BE FILLED SOLID WITH GROUT (3,000 PSI PEA GRAVEL), AND A MAXIMUM OF 6 COURSE LIFTS WITHH BE GROUTED AT ONE TIME.

8. LAP DEFORMED BARS 48 DIAMETERS AND PLACE IN THE CENTER OF THE BLOCK, UNO. 9. ALL CMU SHALL HAVE LADDER TYPE HORIZONTAL JOINT REINFORCEMENT AT 16 INCHES ON CENTER VERTICAL SPACING WITH PREFABRICATED CORNER REINFORCING. LAP HORIZONTAL REINFORCIN A MINIMUM OF 6 INCHES, PROVIDE AN ADDITIONAL ROW OF REINFORCING ABOVE AND BELOW ALL OPENINGS AND EXTEND 2 FEET BEYOND JAMBS, STOP HORIZONTAL REINFORCING AT EACH SIDE OF A

### LOOSE LINTELS FOR OPENINGS IN MASONRY WALLS

PROVIDE LOOSE LINTELS OVER PENETRATIONS IN NEW MASONRY WALLS AND NEW PENETRATIONS IN EQUIPMENT, ETC., UNO.

2. PROVIDE ONE STEEL ANGLE FOR EACH 4 IN. OF MASONRY THICKNESS BEARING 6 IN. MINIMUM ON A FULL MORTAR BED AS FOLLOWS:

OPENINGS UP TO 3 FT. L3-1/2x3-1/2x5/16 OPENINGS >3 FT. TO 5 FT. L4x3-1/2x5/16, LONG LEG VERTICAL (LLV) OPENINGS >5 FT. TO 8 FT. L6x3-1/2x5/16, (LLV)

3. WHERE REQUIRED FOR ARCHITECTURAL REASONS, OR AS NOTED, PROVIDE PRECAST CONCRETE LINTELS BEARING 8 IN. MINIMUM ON A FULL MORTAR BED AS FOLLOWS:

4" WALLS (8" MAX OPENING) 4"x8", REINFORCED WITH 1#3 TOP & 1#5 BOTTOM 6"x8", REINFORCED WITH 1#3 TOP & 1#5 6" WALLS (8' MAX OPENING) BOTTOM 8" WALLS (8' MAX OPENING) 8"x8", REINFORCED WITH 2#3 TOP & 2#5 BOTTOM

4. WHEN WALLS ARE PRESENT THAT ARE THICKER THAN 8" USE COMBINATION OF 4", 6", AND 8" PRECAST CONCRETE LINTELS

PLEASE SUBMITT SUBSTITUTIONS (PRODUCT INFORMATION) TO THE STRUCTURAL ENGINEER FOR

1. STRUCTURAL SAWN LUMBER SHALL BE OF NOMINAL SIZE CROSS SECTIONS AS SHOWN ON THE PLANS AND SECTIONS AND SHALL BE EITHER SPF NO. 1-2 OR HEM FIR NO.2 WITH THE FOLLOWING MINIMUM STRUCTURAL PROPERTIES:

SPF NO. 1-2		
Fb		875 PS
Ft		450 PS
Fv		70 PSI
Fc (PERPENDICULAR TO GRAIN)	405 PSI	
Fc (PARALLEL TO GRAIN)	1,150 PSI	
E/MOEV		4 200 000 DOI

2. STRUCTURAL LVL's SHALL HAVE THE MINIMAL SIZE CROSS SECTIONS AS SHOWN ON THE PLANS AND SHALL HAVE THE FOLLOWING MINIMUM STRUCTURAL PROPERTIES:

2,600 PSI 250 PSI E (MOE) 1.900.000 PSI

3. TJI AS A CALLED OUT ON PLAN WILL BE MANUFACTURED BY TRUS JOIST MACMILLIAN. SUBSTITIONS WILL BE OF EQUAL STRENGHT AND QUALITY AND SUBMITTED TO THE STRUCTURAL ENGINEER FOR

APPROVAL. 4. ALL MULTIPLE BEAMS, LINTELS, AND JOISTS WILL BE GLUED TOGTEHER USING LIQUID NAILS AND SCREWED WITH 3 1/4 INCH LONG DECK MATE SCREWS AT 16 INCHES O.C. STAGGERED 2 INCHES FROM THE TOP AND BOTTOM OF THE MEMBERS.

5. INSTALLED 2X (SAME DEPTH AS JOIST) BRIDGING AT 8 FEET O.C. MAX, PERPENDICULAR TO THE JOIST SPAN AS SHOWN ON PLAN.

8. PROVIDE SIMPSON CONNECTORS FOR ALL WOOD TO WOOD CONNECTSIONS AS CALLED OUT ON PLANS. FOLLOW SIMPSONS RECOMMENDATIONS FOR FASTENING THE CONNECTORS.

7. ALL STUD BEARING WALLS WILL HAVE A DOUBLE CONTINUOUS TOP PLATES AND A SINGLE BOTTOM PLATE. SPLICES SHALL OCCUR OVER BEARING STUDS. STUD BEARING WALLS WILL HAVE BLOCKING AT THE MID-HEIGHT OF THE WALL. 8. MULTIPLE BEARING STUDS SHALL BE NAILED TOGTHER WITH 10d NAILS AT 24 INCHES ON CENTER.

PROVIDE CRIPPLES AS REQUIRED BETWEEN FLOORING AND SUPPORTING MEMBERS AT POINT LOADS

9. ANCHOR BOLTS CONNECTING PRESSURE TREATED LUMBER SHALL BE HOT-DIPPED GALVINIZED.

1. FLOOR SHEATHING SHALL BE 23/32 (3/4) INCH APA RATED PLYWOOD. SHEETS WILL BE INSTALLED WITH THE LONG DIMENSION ACROSS AT LEAST 3-JOISTS. FLOOR SHEATHNIG WILL BE GLUED WITH CONSTRUCTION ADHESIVE AND FASTENED WITH 8d NAILS SPACED AT 3 INCHES ON CENTER AT THE EDGES AND 6 INCHES ON CENTER AT INTERMEDIATE SUPPORTS.

2. EXTERIOR WALL AND ROOF SHEATHING SHALL BE 7/16 (1/2) INCH APA RATED PLYWOOD. SHEETS WILL BE INSTALLED WITH THE LONG DIMENSION ACROSS AT LEAST 3-STUDS. SHEATHNIG WILL BE FASTENED WITH 8d NAILS SPACED AT 4 INCHES ON CENTER AT THE EDGES AND 6 INCHES ON CENTER AT INTERMEDEATE SUPPORTS.

### PRE-ENGINEERED WOOD ROOF TRUSSES

1. PRE-ENGINEERED ROOF TRUSSES SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MARYLAND. TRUSSES SHALL BE DESIGNED TO THE REQUIREMENTS OF THE TRUSS PLATE INSTITUTE, ALL APPLICABLE CODES, AND THE REQUIREMENTS NOTED ON THESE

2. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS, WORKING POINTS AND PITCHES OF ENGINEERED ROOF TRUSSES. VERIFY ALL TRUSS DIMENSIONS PRIOR TO FABRICATION. 3. ROOF TRUSSES SHALL BE DESIGNED FOR THE FOLLOWING MINIMUM UNIFORM LOADS:

TRUSS CHORD	DEAD LOAD	LIVE LOAD	SNOW LOAD	WIND LOAD
TOP SEE DESIGN	12 PSF	3	0 PSF	SEE DESIG
BOTTOM	8 PSF	10 PS	SF CRIT	TERIA

ALL TRUSSES SHALL BE DESIGNED FOR SNOW LOADS INCLUDING SNOWDRIFT AND UNBALANCED SNOW LOADS AND WIND LOADS INCLUDING NET UPLIFT FORCES.

4. PROVIDE 2X4 CONTINUOUS BOTTOM CHORD BRACING AT 8'-0" MAXIMUM FOR ALL WOOD TRUSSES. ADDITIONAL BRACING SHALL BE PROVIDED BY THE WOOD TRUSS MANUFACTURER AS PER THE STANDARD DESIGN SPECIFICATION FOR METAL PLATE CONNECTED WOOD TRUSSES, TPI, AS PREPARED BY THE TRUSS PLATE INSTITUTE. DESIGN TRUSS BOTTOM CHORDS AS IF UNSHEATHED, WITH BOTTOM CHORD LATERALLY SUPPORTED ONLY AT THE 2X4 CONTINUOUS BOTTOM CHORD

5. TRUSS TO STRUCTURE CONNECTION DESIGN IS THE RESPONSIBILITY OF THE TRUSS DESIGNER AND SHALL BE SHOWN ON THE TRUSS INSTALLATION DRAWINGS, AND SHALL BE SUBMITTED FOR APPROVAL. 6. WOOD TRUSS ERECTOR SHALL INSTALL BRACING IN ACCORDANCE WITH THE HANDLING INSTALLATION

AND BRACING REQUIREMENTS, HIB, BY THE TRUSS PLATE INSTITUTE.

PERMIT SET

STRUCTURAL

SOLUTIONS

PETER J. MALMQUIST, PE

certify that these documents

and that I am a duly licensed

Date: 10/3/2018.

professional engineer under the laws of the State of Maryland, License No. 22485, Expiration

were prepared or approved by me

706 WALKER AVE BALTIMORE, MD 21212

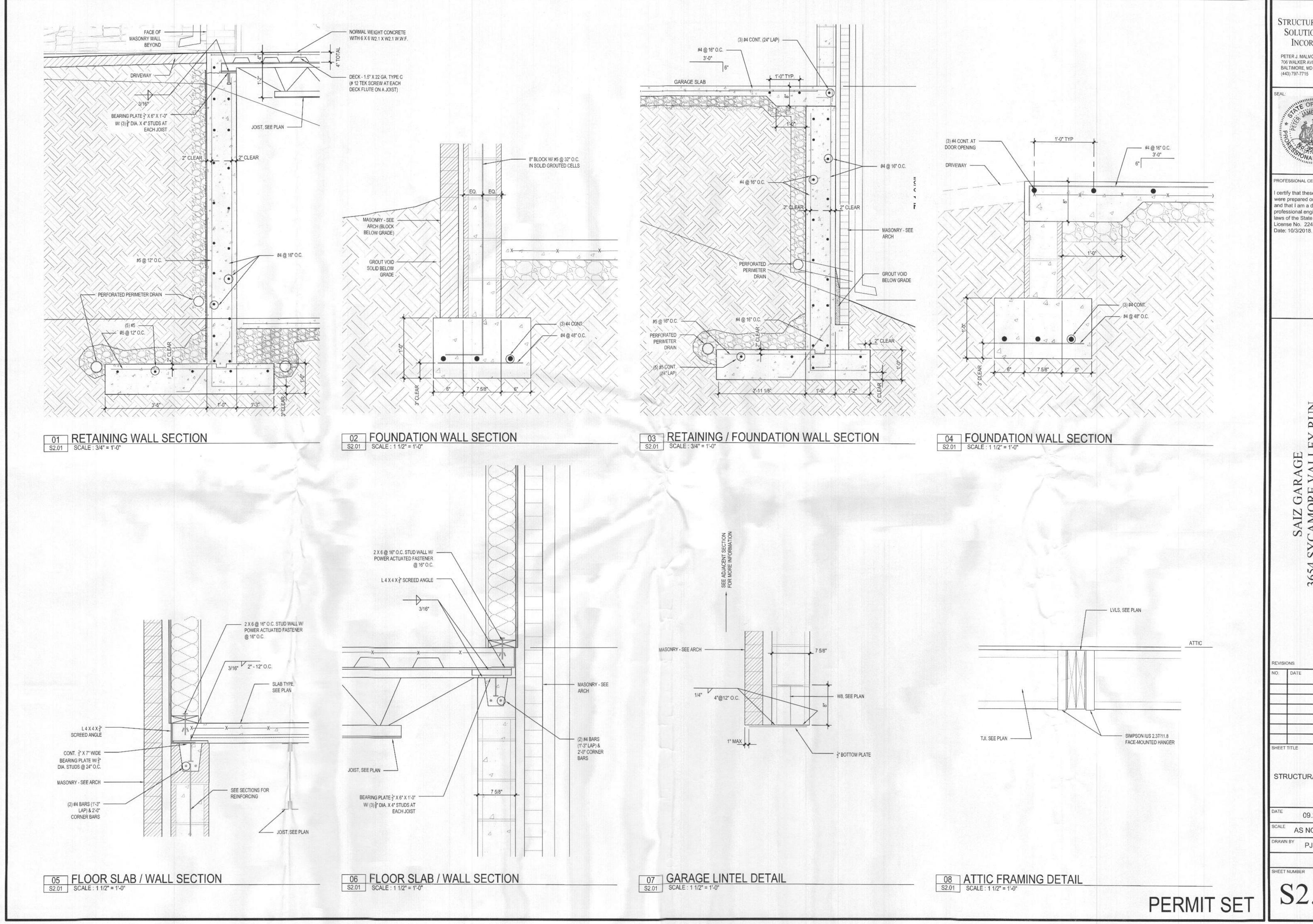
INCORPORATED

REVISIONS		
DATE		

STRUCTURAL PLANS

SHEET TITLE

09.25.17 AS NOTED



STRUCTURAL SOLUTIONS INCORPORATED

PETER J. MALMQUIST, PE 706 WALKER AVE. BALTIMORE, MD 21212



PROFESSIONAL CERTIFICATION:

I certify that these documents and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 22485, Expiration Date: 10/3/2018.

SAIZ GAR 3654 SYCAMORE ' GLENWOOD,

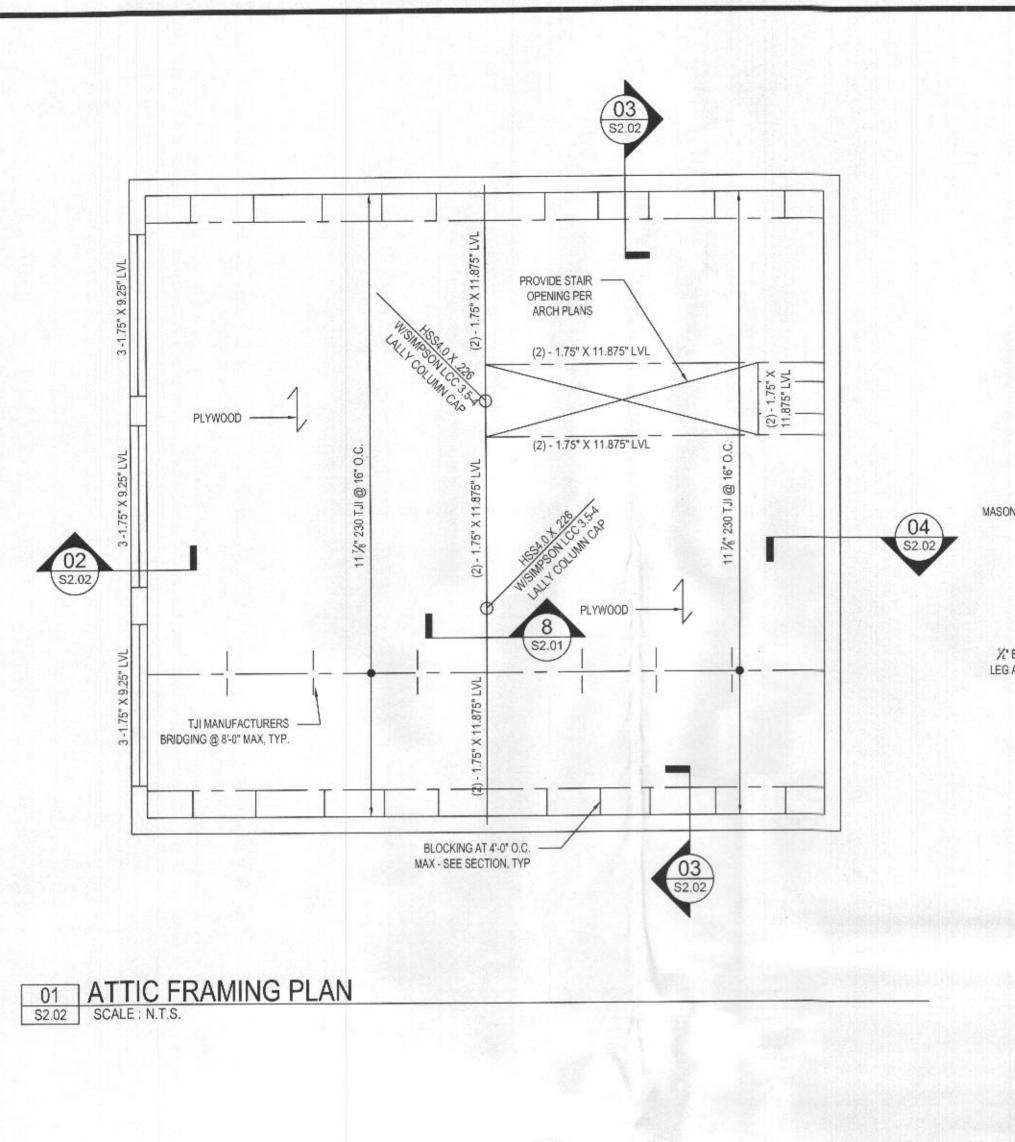
STRUCTURAL DETAILS

09.25.17

AS NOTED

PJM

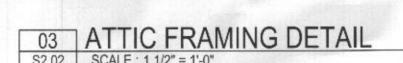
SHEET NUMBER

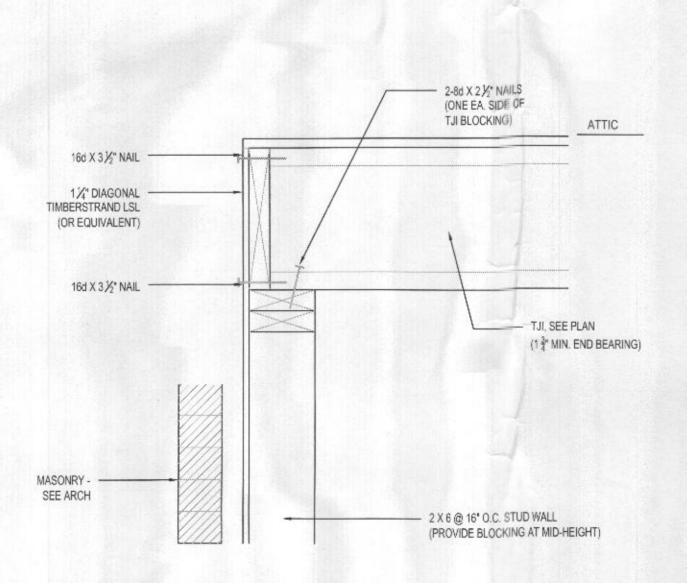


RAFTERS @ 24" O.C.

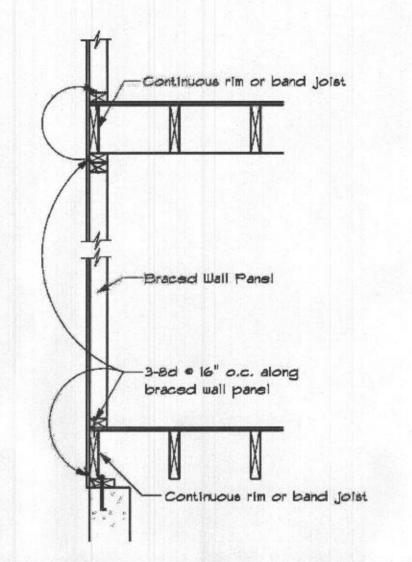
2-8d X 2 ½\* NAILS (ONE EA. SIDE OF TJI BLOCKING) 16d X 3 1/2" NAIL 11/4" DIAGONAL TIMBERSTRAND LSL (OR EQUIVALENT) 16d X 3 1/2" NAIL \_\_\_ TJI, SEE PLAN (13" MIN. END BEARING) 2 X 6 @ 16" O.C. STUD WALL (PROVIDE BLOCKING AT MID-HEIGHT) LVLs, SEE PLAN MASONRY - SEE ARCH -1" MAX % BENT PLATE W 4" VERTICAL LEG AND ½" DIA. THRU-BOLTS @ ENDS & @ 2'-6" O.C. MAX. 02 GARAGE LINTEL DETAIL S2.02 SCALE: 1 1/2" = 1'-0"

- 2-8d X 2½\* NAILS (ONE EA. SIDE OF TJI BLOCKING) ATTIC 16d X 3 1/2" NAIL -1光 DIAGONAL TIMBERSTRAND LSL (OR EQUIVALENT) TJI BLOCKING, SEE PLAN - 2 X 6 @ 16" O.C. STUD WALL (PROVIDE BLOCKING AT MID-HEIGHT) SEE ARCH



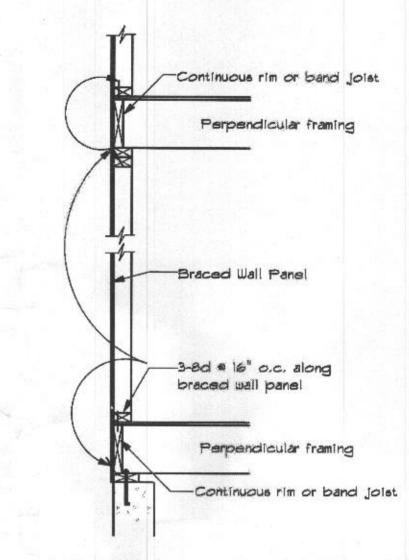


04 ATTIC FRAMING DETAIL
S2.02 SCALE: 1 1/2" = 1'-0"



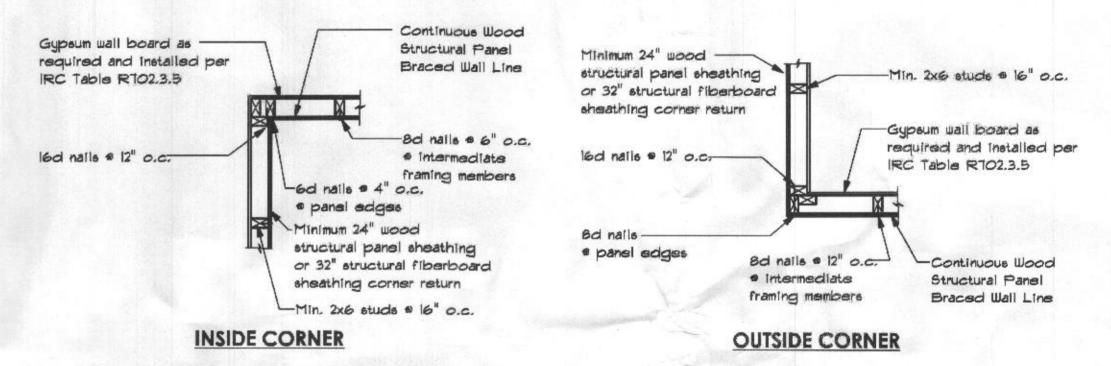
### **BRACED EXTERIOR WALL PANEL CONNECTION WHEN** PARALLEL TO FLOOR/CEILING FRAMING

TYPICAL AT ALL EXTERIOR, PLYWOOD SHEATHED WALLS

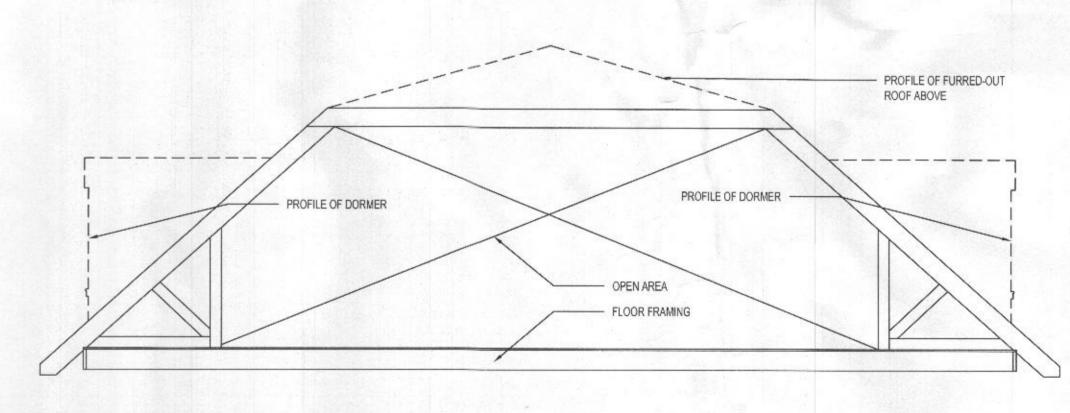


### **BRACED EXTERIOR WALL PANEL CONNECTION WHEN** PERPENDICULAR TO FLOOR/CEILING FRAMING

TYPICAL AT ALL EXTERIOR, PLYWOOD SHEATHED WALLS



## **EXTERIOR CORNER WALL DETAILS**



- PRE-ENGINEERED ROOF TRUSSES SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MARYLAND. TRUSSES SHALL BE DESIGNED TO THE REQUIREMENTS OF THE TRUSS PLATE INSTITUTE, ALL APPLICABLE CODES, AND THE REQUIREMENTS NOTED ON THESE DRAWINGS.
- 2. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS, WORKING POINTS AND PITCHES OF ENGINEERED ROOF TRUSSES. VERIFY ALL TRUSS DIMENSIONS PRIOR TO
- 3. ROOF TRUSSES SHALL BE DESIGNED FOR THE FOLLOWING MINIMUM UNIFORM LOADS:

12 PSF 30 PSF SEE DESIGN SEE DESIGN 5 PSF 10 PSF CRITERIA CRITERIA ALL TRUSSES SHALL BE DESIGNED FOR SNOW LOADS INCLUDING SNOWDRIFT AND UNBALANCED SNOW LOADS AND WIND LOADS INCLUDING NET UPLIFT FORCES.

- DESIGN TRUSS BOTTOM CHORDS AS IF UNSHEATHED, WITH BOTTOM CHORD LATERALLY SUPPORTED ONLY AT THE 2X4 CONTINUOUS BOTTOM CHORD BRACING. 5. TRUSS TO STRUCTURE CONNECTION DESIGN IS THE RESPONSIBILITY OF THE TRUSS DESIGNER AND SHALL BE SHOWN ON THE TRUSS INSTALLATION DRAWINGS, AND
- 6. WOOD TRUSS ERECTOR SHALL INSTALL BRACING IN ACCORDANCE WITH THE HANDLING INSTALLATION AND BRACING REQUIREMENTS, HIB, BY THE TRUSS PLATE

06 PRE-ENGINEERED WOOD ROOF TRUSS PROFILE
S2.02 SCALE: 1/4" = 1'-0"

LEY RUN 21738

STRUCTURAL SOLUTIONS

INCORPORATED

PETER J. MALMQUIST, PE 706 WALKER AVE.

PROFESSIONAL CERTIFICATION:

certify that these documents

were prepared or approved by m and that I am a duly licensed

professional engineer under the laws of the State of Maryland,

License No. 22485, Expiration

Date: 10/3/2018.

BALTIMORE, MD 21212 (443) 797-7715

STRUCTURAL DETAILS

09.25.17 AS NOTED

PJM

PERMIT SET

