GENERAL NOTES

1. USE STRUCTURAL DRAWINGS IN CONJUNCTION WITH ALL OTHER DRAWINGS. COORDINATE THE WORK OF OTHER TRADES INCLUDING, BUT NOT LIMITED TO THE REQUIREMENTS FOR SLEEVES, INSERTS, HOLES, HANGERS AND ANCHORS.
2. ELEVATIONS ON THE STRUCTURAL DRAWINGS ARE DENOTED AS [±X'-X"] REFERENCED TO THE FINISHED FIRST FLOOR ELEVATION DATUM. REFER TO THE SURVEY DRAWINGS FOR ACTUAL DATUM ELEVATION.
3. REPORT DISCREPANCIES IN DIMENSIONS BETWEEN DIFFERENT DRAWINGS TO THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING WORK IN AREAS THAT WILL BE AFFECTED.
4. DETAILS TITLED OR NOTED AS "TYPICAL" APPLY NOT ONLY WHERE SPECIFICALLY INDICATED OR REFERENCED, BUT ALSO IN ALL OTHER CASES WHERE THE NATURE OF THE CONSTRUCTION REQUIRES THEIR USE. DETERMINE APPLICABILITY OF TYPICAL DETAILS FROM DESCRIPTIVE TITLES OR FROM THE SIMILARITY OF A CONSTRUCTION CONDITION TO ANOTHER CONDITION WHERE THE DETAIL IS SPECIFICALLY INDICATED OR REFERENCED.
5. THE STRUCTURAL DRAWINGS CONTAINED HEREIN REPRESENT THE FINISHED STRUCTURE. PROVIDE ALL TEMPORARY GUYING AND BRACING REQUIRED TO ERECT AND HOLD THE STRUCTURE IN PROPER ALIGNMENT UNTIL ALL STRUCTURAL WORK, INCLUDING CONNECTIONS, IS COMPLETE. THE ANALYSIS, DESIGN, SAFETY, ADEQUACY, AND INSPECTION OF ERECTION BRACING, SHORING, AND OTHER TEMPORARY SUPPORTS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
6. CONSTRUCTION MEANS, METHODS, TECHNIQUES, AND SEQUENCES AND SUPERVISION OF THE WORK ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
7. REPRODUCTION OF CONTRACT DRAWINGS SHALL NOT BE USED AS SHOP DRAWINGS UNDER ANY CIRCUMSTANCE.
8. CONTACT AND SCHEDULE INSPECTIONS REQUIRED BY SECTION 113.3 OF THE VUSBC WITH AMHERST COUNTY CODE OFFICIAL

DESIGN NOTES

1. STRUCTURAL DESIGN IS IN ACCORDANCE WITH THE FOLLOWING CODES AND SPECIFICATIONS:
   - A. 2009 VIRGINIA CONSTRUCTION CODE (PART I OF THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE), EFFECTIVE MARCH 1, 2011
   - B. 2009 INTERNATIONAL RESIDENTIAL BUILDING CODE (IRC)
   - C. ASCE 7-05, MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
   - D. AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" DATED MARCH 9, 2005.
   - E. AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" DATED MARCH 18, 2005.
   - F. ACI 318-08, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
   - G. ACI 530-08, BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES
   - H. ANSI/AF & PA NDS-05 NATIONAL DESIGN SPECIFICATION (NDS) FOR WOOD CONSTRUCTION WITH 2005 SUPPLEMENT.
2. DESIGN LOAD CRITERIA:
   - A. LIVE LOADS (UNIFORM)

ROOF	25 PSF
SLAB-ON-GRADE	125 PSF
STORAGE	125 PSF
MECHANICAL/ELECTRICAL ROOMS	125 PSF

   LIVE LOADS (CONCENTRATED)

OFFICE CONCENTRATED LOAD (APPLIED TO 6.25 ft2)	2,000 LB

   NOTE: LIVE LOAD REDUCTION WAS NOT USED IN THE DESIGN OF THIS STRUCTURE

   - B. SNOW LOAD:

GROUND SNOW LOAD, Pg	30 PSF
SNOW EXPOSURE FACTOR, Ce	0.9
THERMAL FACTOR, Ct	1.0
SNOW LOAD IMPORTANCE FACTOR, Is	1.0
SLOPED-ROOF BALANCED SNOW LOAD, Ps	27 PSF (MIN)

   - C. WIND LOADS:

BASIC WIND SPEED, V	90 MPH
OCCUPANCY CATEGORY	II
WIND IMPORTANCE FACTOR, I	1.00
WIND EXPOSURE CATEGORY	B
GUST EFFECT FACTOR, G	0.85
INTERNAL PRESSURE COEFFICIENTS, GCpi	±0.18

   - D. COMPONENTS AND CLADDING WIND PRESSURES:

DESIGN WIND PRESSURE FOR ROOF COMPONENTS (PSF)

ROOF ZONE	COMPONENT TRIBUTARY AREA (ft2)					
	0 - 20		21 - 100		101 +	
1	+10	-13	+10	-13	+10	-12
2	+10	-23	+10	-22	+10	-17
3	+10	-34	+10	-32	+10	-27

DESIGN WIND PRESSURE FOR WALL COMPONENTS (PSF)

WALL ZONE	COMPONENT TRIBUTARY AREA (ft2)					
	0 - 20		21 - 100		101 +	
4	+15	-16	+14	-15	+12	-14
5	+15	-19	+14	-18	+12	-15

DESIGN WIND PRESSURE FOR OVERHANGS (PSF)

WALL ZONE	COMPONENT TRIBUTARY AREA (ft2)					
	0 - 20		21 - 100		101 +	
2	-29		-29		-29	
3	-48		-44		-33	

   - E. SEISMIC LOADS:

SEISMIC DESIGN CATEGORY	C

   DETACHED ONE AND TWO FAMILY DWELLINGS LOCATED IN SEISMIC DESIGN CATEGORY C ARE EXEMPT FROM THE SEISMIC REQUIREMENTS PER IRC R301.2.2

FOUNDATION NOTES

1. FOUNDATIONS HAVE BEEN DESIGNED TO BEAR ON UNDISTURBED, FIRM NATURAL SOIL OR ENGINEERED FILL CAPABLE OF SUPPORTING A NET ALLOWABLE DESIGN BEARING PRESSURE OF 2000 PSF.
2. PRIOR TO PLACING FOUNDATION CONCRETE, THE CONTRACTOR SHALL ENSURE THAT THE FOUNDATION EXCAVATIONS ARE INSPECTED BY AN INDEPENDENT TESTING LABORATORY WITH A GEOTECHNICAL ENGINEER REGISTERED IN THE COMMONWEALTH OF VIRGINIA TO EVALUATE THE EXTENT OF LOOSE, SOFT OR OTHERWISE UNSATISFACTORY SOIL MATERIAL AND TO VERIFY THE DESIGN BEARING CAPACITY. SOILS NOT SUITABLE FOR FOUNDATION SUPPORT SHALL BE UNDERCUT AND REPLACED WITH ENGINEERED FILL AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
3. ADEQUATELY PROTECT FOUNDATION EXCAVATIONS TO PREVENT WATER FROM ACCUMULATING AND STANDING IN THE EXCAVATION BOTTOMS.
4. DO NOT PLACE FOUNDATION CONCRETE ON FROZEN OR SATURATED SUBGRADES.
5. ENSURE THAT EARTH-FORMED FOOTINGS CONFORM TO THE SHAPE, LINES AND THICKNESSES INDICATED ON THE FOUNDATION PLAN. EXCAVATION WIDTHS SHALL BE A MINIMUM OF 4 INCHES GREATER THAN DIMENSIONS INDICATED.
6. PLACE FOUNDATION CONCRETE THE SAME DAY EXCAVATIONS ARE MADE OR AS SOON AS PRACTICAL THEREAFTER.
7. DO NOT INSTALL FOUNDATIONS UNTIL FOUNDATION WORK HAS BEEN COORDINATED WITH ADJACENT UNDERGROUND UTILITIES AND STRUCTURES.
8. FOOTINGS SHALL BE LOWERED AS REQUIRED TO PASS UNDER UTILITY LINES. STEP CONTINUOUS FOOTINGS DOWN AS SHOWN IN THE "TYPICAL STEPPED FOOTING" DETAIL ON SHEET S103.

MASONRY NOTES

1. ALL MASONRY CONSTRUCTION SHALL BE IN ACCORDANCE WITH "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" (ACI 530-08/ASCE 5-08/TMS 402-08) AND "SPECIFICATION FOR MASONRY STRUCTURES" (ACI 530.1-08/ASCE 6-08/TMS 402-08).
2. DESIGN MASONRY ASSEMBLAGE STRENGTH, f'm = 1500 PSI. NET AREA COMPRESSIVE STRENGTH OF CONCRETE MASONRY UNITS SHALL BE A MINIMUM OF 1900 PSI.
3. CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90 AND BE MANUFACTURED WITH NORMAL WEIGHT OR LIGHT WEIGHT AGGREGATE.
4. GROUT SHALL CONFORM TO ASTM C476 AND SHALL NOT CONTAIN ADMIXTURES. GROUT SHALL ATTAIN A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 2000 PSI.
5. GROUT POURS SHALL BE STOPPED 1-1/2 INCHES BELOW THE TOP OF A COURSE TO FORM A KEY AT POURED JOINTS.
6. LOCATE JOINT REINFORCEMENT 16 INCHES ON CENTER VERTICALLY. PROVIDE ADDITIONAL REINFORCEMENT AT THE TOP OF ALL FOUNDATIONS AND IN THE TWO JOINTS IMMEDIATELY ABOVE AND BELOW ALL OPENINGS. EXTEND JOINT REINFORCEMENT A MINIMUM OF 24 INCHES BEYOND THE OPENING ON EACH SIDE.
7. PLACE PIPES AND CONDUITS PASSING HORIZONTALLY THROUGH MASONRY IN STEEL OR PVC SLEEVES OR CORED HOLES UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
8. ALUMINUM CONDUITS, PIPES, AND ACCESSORIES SHALL NOT BE EMBEDDED IN MASONRY GROUT, OR MORTAR, UNLESS EFFECTIVELY COATED OR COVERED TO PREVENT ALUMINUM-CEMENT CHEMICAL REACTION OR ELECTROLYTIC REACTION BETWEEN ALUMINUM AND STEEL.

CONCRETE NOTES

1. ALL CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF THE AMERICAN CONCRETE INSTITUTE (ACI) SPECIFICATIONS FOR STRUCTURAL CONCRETE (ACI 301-05).
2. CAST-IN-PLACE CONCRETE SHALL ATTAIN A MINIMUM 28-DAY COMPRESSIVE STRENGTHS (f'c) OF 3000 PSI FOR FOOTINGS AND 3500 PSI FOR SLAB-ON-GRADE.
3. CONCRETE DENSITY SHALL BE NORMAL WEIGHT UNLESS SPECIFICALLY OTHERWISE NOTED.
4. CONCRETE REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A615/A615M, GRADE 60.
5. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185. PROVIDE SHEET-TYPE WELDED WIRE FABRIC. SHEET LAPS SHALL BE TIED AND LAPPED ONE FULL MESH SPACING PLUS 2".
6. CONCRETE REINFORCING STEEL SHALL BE CONTINUOUS UNLESS OTHERWISE INDICATED. CONTINUOUS REINFORCING STEEL SHALL BE LAPPED IN ACCORDANCE WITH THE REQUIREMENTS OF ACI 318.
7. MINIMUM CONCRETE COVER FOR REINFORCING STEEL SHALL BE AS INDICATED. IN NO CASE SHALL REINFORCEMENT COVER BE LESS THAN THE REQUIREMENTS OF ACI 301.
   - A. CONCRETE DEPOSITED AGAINST THE GROUND 3"
   - B. CONCRETE EXPOSED TO EARTH OR WEATHER 2"
   - C. SLABS (INTERIOR) 1"
8. CONCRETE REINFORCING STEEL MARKED STANDARD HOOK SHALL HAVE A 90-DEGREE HOOK UNLESS OTHERWISE NOTED. STIRRUPS, TIES, 180-DEGREE HOOKS, AND 90-DEGREE HOOKS SHALL CONFORM TO THE REQUIREMENTS OF ACI 318.
9. PROVIDE 1/2" THICK JOINT FILLER MATERIAL WHERE SLABS-ON-GRADE ABUT VERTICAL SURFACES.
10. ALL EMBEDDED ITEMS SHALL BE PROPERLY PLACED, ACCURATELY POSITIONED, AND MAINTAINED SECURELY IN PLACE PRIOR TO AND DURING CONCRETE PLACEMENT.
11. REINFORCING STEEL SHALL BE SPREAD AT SLEEVES, TIEBACKS, RECESSES AND OTHER EMBEDDED ITEMS UNLESS OTHERWISE INDICATED. REINFORCEMENT SHALL NOT BE CUT TO FACILITATE PLACEMENT OF EMBEDDED ITEMS.
12. NO CONCRETE SHALL BE PLACED UNTIL THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE HAS INSPECTED ALL EMBEDDED WORK, INCLUDING REINFORCEMENT.
13. ALL EXPOSED CONCRETE EDGES SHALL BE CHAMFERED 3/4" OR AS INDICATED.
14. ALUMINUM SHALL NOT BE PLACED IN DIRECT CONTACT WITH CONCRETE UNLESS EFFECTIVELY COATED OR COVERED TO PREVENT ALUMINUM-CONCRETE REACTION AND ELECTROLYTIC ACTION BETWEEN ALUMINUM AND STEEL.

STEEL NOTES

1. FABRICATION AND ERECTION OF STRUCTURAL STEEL AND DESIGN OF CONNECTIONS SHALL BE IN ACCORDANCE WITH THE AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" DATED MARCH 9, 2005 AND THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES", DATED MARCH 18, 2005.
2. UNLESS OTHERWISE NOTED, STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE ABOVE-LISTED AISC SPECIFICATION AND THE FOLLOWING:
   - A. STANDARD PIPE ASTM A53, GRADE B, Fy = 35 KSI
   - B. PLATES AND ANGLES ASTM A36
   - C. HIGH STRENGTH BOLTS ASTM A325
   - D. ANCHOR RODS W/ NUT AND WASHER ASTM F1554, GRADE 36
3. ALL SHOP AND FIELD WELDING SHALL BE BY CERTIFIED WELDERS AND SHALL CONFORM TO AWS STANDARDS. USE E70XX ELECTRODES UNLESS NOTED OTHERWISE. CURRENT AWS CERTIFICATIONS SHALL BE AVAILABLE AT THE JOB SITE FOR REVIEW BY THE OWNER'S REPRESENTATIVE.
4. ALL BOLTED CONNECTIONS, UNLESS OTHERWISE NOTED, SHALL USE HIGH-STRENGTH BOLTS WITH HARDENED CARBON STEEL WASHERS AS REQUIRED FOR THE CONNECTION LOADS.
5. FIELD CUTTING OF STRUCTURAL STEEL MEMBERS BY ANY TRADE SHALL NOT BE PERMITTED. BOLT HOLES SHALL NOT BE CUT OR ENLARGED BY FLAME CUTTING IN THE FIELD.
6. ALL FIELD-BOLTED SHEAR CONNECTIONS SHALL BE SNUG-TIGHT BEARING-TYPE CONNECTIONS, THREADS INCLUDED IN THE SHEAR PLANE.
7. PAINT ALL STEEL BELOW GRADE WITH TWO COATS OF COAL TAR EPOXY.
8. SUBMIT STRUCTURAL STEEL SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION AND CONSTRUCTION.

LINTEL NOTES

1. LINTELS SHALL BEAR 8" ONTO SOLID OR GROUT FILLED MASONRY, UNLESS OTHERWISE INDICATED.
2. LINTELS ARE REQUIRED OVER ALL MASONRY OPENINGS GREATER THAN 8", UNLESS OTHERWISE NOTED.
3. STEEL ANGLE LINTELS EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED PER ASTM A123.
4. TOE OF STEEL ANGLE LINTELS SHALL BE LOCATED 3/4" FROM FACE OF BRICK.
5. FOR OPENINGS IN BRICK VENEER CONSTRUCTION WHERE A LINTEL IS NOT INDICATED IN THE STRUCTURAL DRAWINGS PROVIDE LOOSE LINTEL, SEE SCHEDULE BELOW.

LOOSE LINTEL SCHEDULE

MAX M.O.	ANGLE
7'-4"	L5x5x5/16

ROUGH CARPENTRY NOTES

1. DESIGN OF ALL ROUGH CARPENTRY CONSTRUCTION IS IN ACCORDANCE WITH THE 2005 EDITION OF THE AMERICAN FOREST AND PAPER ASSOCIATION, "NATIONAL DESIGN SPECIFICATION(NDS) FOR WOOD CONSTRUCTION", INCLUDING SUPPLEMENTS.
2. ALL DIMENSION LUMBER MEMBERS SHALL COMPLY WITH PS-20 "AMERICAN SOFTWOOD LUMBER STANDARD". MAXIMUM MOISTURE CONTENT SHALL BE 19 PERCENT. SPECIES AND GRADE SHALL BE AS FOLLOWS:
   - A. LOAD BEARING WALL FRAMING - SOUTHERN PINE, NO. 2 OR BETTER.
   - B. SPRUCE PINE FIR IS NOT PERMITTED FOR STRUCTURAL WOOD FRAMING.
3. PROVIDE CONSTRUCTION PANELS IN ACCORDANCE WITH PS1 "CONSTRUCTION AND INDUSTRIAL PLYWOOD" AND THE FOLLOWING REQUIREMENTS:
   - A. EXTERIOR WALL SHEATHING: 15/32" APA RATED PLYWOOD SHEATHING, EXPOSURE 1.
   - B. ROOF SHEATHING: 19/32" APA RATED PLYWOOD SHEATHING, EXPOSURE 1.
4. ATTACH CONSTRUCTION PANELS TO FRAMING AS INDICATED BELOW:
   - A. EXTERIOR WALL SHEATHING: 8d NAILS AT 6" ON CENTER AT PANEL EDGES AND AT 12" ON CENTER ALONG INTERMEDIATE FRAMING MEMBERS UON, SEE SHEET S105 FOR SHEAR WALL PANEL ATTACHMENT.
   - B. ROOF SHEATHING: 10d NAILS AT 6" ON CENTER AT PANEL EDGES AND AT 12" ON CENTER ALONG INTERMEDIATE FRAMING MEMBERS.
5. USE PRESERVATIVE TREATED WOOD FRAMING MEMBERS FOR MEMBERS PERMANENTLY EXPOSED TO WEATHER, SILL PLATES AND ALL OTHER WOOD FRAMING MEMBERS IN CONTACT WITH CONCRETE OR MASONRY.
6. BOLTS CONNECTING WOOD MEMBERS SHALL COMPLY WITH ASTM A307 COMMON STEEL BOLTS AND SHALL BE 3/4" DIAMETER UON.
7. UNLESS OTHERWISE NOTED, NAIL ALL STRUCTURAL FRAMING MEMBERS IN ACCORDANCE WITH THE "FASTENING SCHEDULE", TABLE R602.3(1) OF THE 2009 INTERNATIONAL RESIDENTIAL BUILDING CODE.
8. UNLESS OTHERWISE NOTED, ATTACH BLOCKING AND NAILERS TO STEEL FRAMING USING 5/8" DIAMETER BOLTS AT 16" ON CENTER. STAGGER FASTENERS TO ALTERNATE SIDES OF BEAM.
9. WHERE MULTIPLE FRAMING MEMBERS ARE INDICATED, FASTEN MEMBERS TOGETHER WITH (2) ROWS OF 16d NAILS AT 12" ON CENTER STAGGERED.
10. AT BEARING WALLS, PROVIDE WALL STUDS AT 16" ON CENTER (ALIGNED WITH ROOF TRUSSES ABOVE) AND PROVIDE AN ADDITIONAL WALL STUD BENEATH TRUSS WHERE ROOF TRUSSES DO NOT ALIGN WITH TYPICAL (16" OC) WALL STUD SPACING. AT BLOCKING PANEL BRACE BETWEEN TRUSSES, ADD ADDITIONAL STUD UNDER EACH TRUSS. SEE SHEET S105. (1)
11. WHERE MULTIPLE TRUSSES ARE INDICATED, PROVIDE SAME NUMBER OF VERTICAL STUDS AS MULTIPLE TRUSS PLIES DIRECTLY BENEATH TRUSS BEARING, UON.

PRE-ENGINEERED WOOD TRUSS NOTES

1. TOP AND BOTTOM CHORDS SHALL CONFORM TO THE PROFILE AS INDICATED. 2X6 MINIMUM TOP AND BOTTOM CHORD MEMBERS. THE TRUSS MANUFACTURER MAY VARY TRUSS TYPE AND MEMBER SIZE AS REQUIRED TO ACHIEVE SPAN AND ROOF PITCH SPECIFIED.
2. DESIGN WOOD TRUSSES FOR THE FOLLOWING SUPERIMPOSED LOADS IN ADDITION TO THE LOADS INDICATED IN "DESIGN NOTES":

   ROOF TRUSS

   - A. TOP CHORD LIVE LOAD: 27 PSF
   - B. TOP CHORD DEAD LOAD: 10 PSF
   - C. BOTTOM CHORD DEAD LOAD: 15 PSF
   - D. BOTTOM CHORD LIVE LOAD: 10 PSF

   INCLUDE SECONDARY BENDING STRESSES DUE TO SUPERIMPOSED LOADS IN DESIGN OF CHORD MEMBERS.
3. LIMIT MIDSPAN DEFLECTION OF THE BOTTOM CHORD OF EACH TRUSS DUE TO LIVE LOAD TO SPAN/360 WITH A MAXIMUM OF 1". LIMIT MIDSPAN DEFLECTION OF THE BOTTOM CHORD OF EACH TRUSS DUE TO TOTAL LOAD TO SPAN/240 WITH A MAXIMUM OF 1".
4. WHERE OVERFRAMING IS INDICATED ON DRAWINGS, DESIGN TRUSSES SUPPORTING OVERFRAMING FOR ADDITIONAL SUPERIMPOSED DEAD LOADS OF OVERFRAMING. USE ACTUAL DEAD LOAD OF FRAMING AND SHEATHING (MINIMUM 10 PSF).
5. PROVIDE PERMANENT CONTINUOUS LATERAL BRACING OF THE WEB AND CHORD MEMBERS IN THE LOCATIONS SPECIFIED BY THE TRUSS DESIGNER ON THE TRUSS SHOP DRAWINGS.
6. PROVIDE SHEAR BLOCKING PANELS BETWEEN EVERY THIRD TRUSS AT EXTERIOR BEARING LOCATIONS CAPABLE OF TRANSFERRING A SERVICE LEVEL HORIZONTAL SHEAR FORCE OF 200 LBS FROM THE ROOF DIAPHRAGM TO THE SHEAR WALLS.
7. SUBMIT WOOD TRUSS SHOP DRAWINGS AND CALCULATIONS TO COMPLY WITH PERFORMANCE REQUIREMENTS AND DESIGN CRITERIA, INCLUDING ANALYSIS DATA SIGNED AND SEALED BY THE QUALIFIED PROFESSIONAL ENGINEER LICENSED IN THE COMMONWEALTH OF VIRGINIA.
8. THE SHOP DRAWINGS SHALL INCLUDE THE FOLLOWING FABRICATION AND INSTALLATION DETAILS:
   - A. SHOW LOCATION, PITCH, SPAN, CONFIGURATION, SPACING FOR EACH TYPE OF TRUSS REQUIRED.
   - B. INCLUDE SIZES, STRESS GRADE, AND SPECIES OF LUMBER.
   - C. INDICATE LOCATIONS, SIZES, AND MATERIAL OF PERMANENT BRACING REQUIRED TO PREVENT BUCKLING OF INDIVIDUAL TRUSS MEMBERS DUE TO DESIGN LOADS.
   - D. INDICATE TYPE, SIZE, MATERIAL, FINISH, DESIGN VALUES, ORIENTATION, AND LOCATION OF METAL CONNECTOR PLATES.
   - E. SHOW SPLICE DETAILS AND BEARING DETAILS.
9. THE TRUSS MANUFACTURER SHALL BE A MEMBER OF TPI AND COMPLY WITH QUALITY CONTROL PROCEDURES IN TPI 1 FOR MANUFACTURE OF CONNECTOR PLATES.

STRUCTURAL ABBREVIATIONS

SYMBOL	DESCRIPTION
AB	ANCHOR BOLT
AFF	ABOVE FINISHED FLOOR
ARCH	ARCHITECTURAL
BD	BAR DIAMETER
CJ	SLAB CONSTRUCTION JOINT
CL	CENTER LINE
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONN	CONNECTION
CONC	CONCRETE
CONT	CONTINUOUS
DIA, Ø	DIAMETER
DN	DOWN
DWG	DRAWING
EA	EACH
ELEV	ELEVATION
EOS	EDGE OF SLAB
EQ	EQUAL
EW	EACH WAY
FFE	FINISHED FLOOR ELEVATION
FOB	FACE OF BRICK
FTG	FOOTING
GALV	GALVANIZED
HD	SHEARWALL HOLD DOWN LOCATION
HORIZ	HORIZONTAL
HS	HIGH STRENGTH
KIP (k)	1000 LBS
MAX	MAXIMUM
MFR	MANUFACTURER
MIN	MINIMUM
NO.	NUMBER
OC	ON CENTER
PJF	PREMOLDED JOINT FILLER
PLF	POUNDS PER LINEAR FOOT
PSF	POUNDS PER SQUARE FOOT
PT	PRESSURE TREATED WOOD
REINF	REINFORCEMENT
REQD	REQUIRED
SD	SLAB DEPRESSION
SF	STEPPED FOOTING
SIM	SIMILAR
SJ	SLAB SAWED (CONTRACTION) JOINT
SL	SLOPE(D)
SOG	SLAB-ON-GRADE
SWP	SHEAR WALL PANEL
T&B	TOP AND BOTTOM
TBE	TRUSS BEARING ELEVATION
TOC	TOP OF CONCRETE
TOF	TOP OF FOOTING
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
VERT	VERTICAL
WWF	WELDED WIRE FABRIC

STRUCTURAL LEGEND

SYMBOL	DESCRIPTION
[±X'-X"]	SPOT ELEVATION
[±X'-X"]	INDICATES ELEVATION REFERENCED TO FINISHED FIRST FLOOR
	BRICK
	CONCRETE
	EARTH FILL
	GROUT
	CONCRETE MASONRY UNIT (CMU)
	POROUS FILL
	DEPRESSED SLAB

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NOT FOR CONSTRUCTION BID SET

INTERMEDIATE CARE FACILITY
HORIZON BEHAVIORAL HEALTH
RIVERVIEW ROAD, MADISON HEIGHTS, VIRGINIA

CN NO: 4533
DATE: 05/31/2013
DESIGN: CWJ
DRAWN: SLG
REVIEW: WRS

REVISIONS

No.	Date	Description
1	06/12/13	TRUSS BEARING

GENERAL NOTES AND LEGENDS

S101

SHEET 2 OF 25

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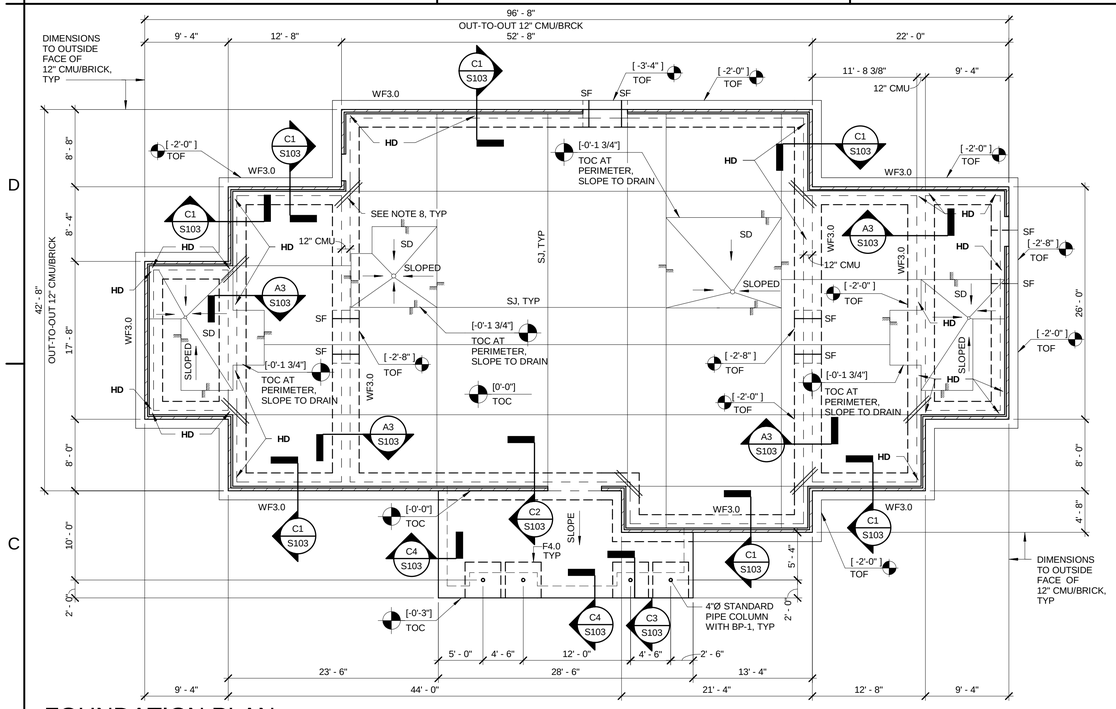
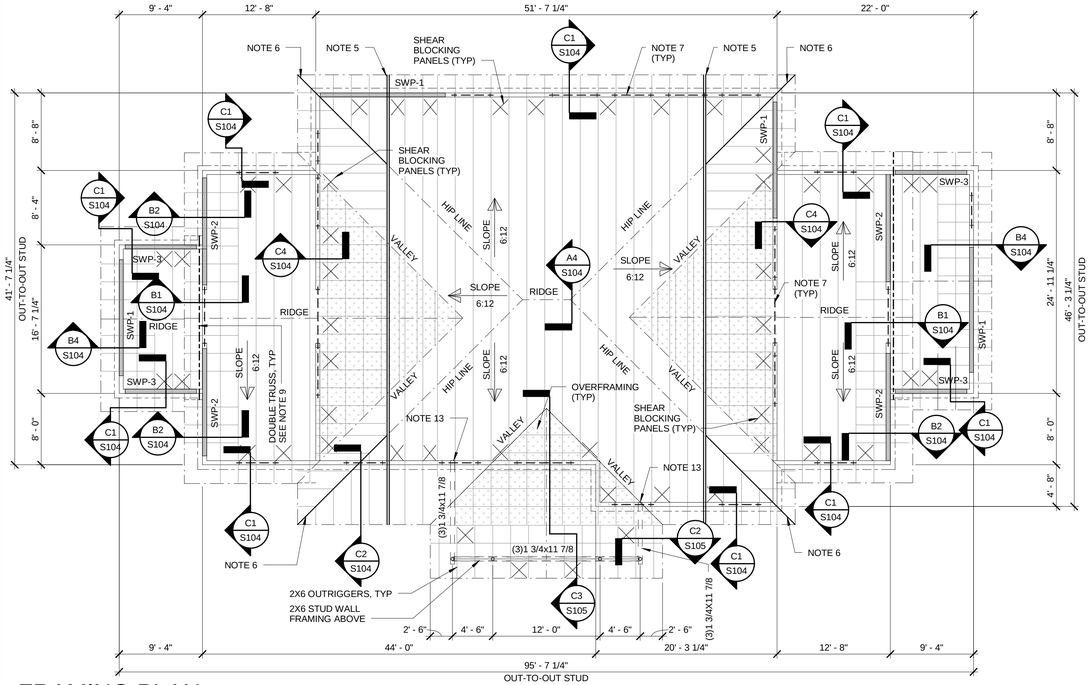


FOUNDATION PLAN

1/8" = 1'-0"

FOUNDATION PLAN SHOWN FOR BUILDING "A". BUILDING "B" SHALL BE MIRROR IMAGE OF BUILDING "A" . SEE CIVIL DRAWING SHEET C.4

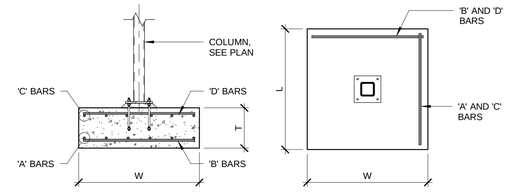


FRAMING PLAN

1/8" = 1'-0"

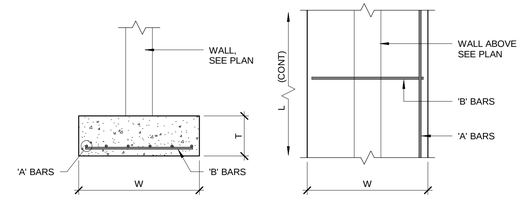
FRAMING PLAN SHOWN FOR BUILDING "A". BUILDING "B" SHALL BE MIRROR IMAGE OF BUILDING "A" . SEE CIVIL DRAWING SHEET C.4

COLUMN FOOTING SCHEDULE								
	DIMENSIONS			REINFORCING				
MARK	W	L	T	'A' BARS	'B' BARS	'C' BARS	'D' BARS	NOTES
F4.0	4'-0"	4'-0"	1'-0"	(4) #5	(4) #5	(4) #5	(4) #5	

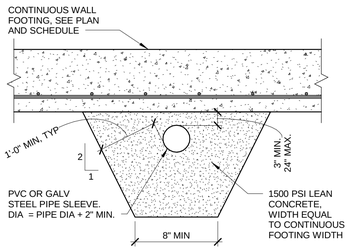


SECTION **PLAN**

WALL FOOTING SCHEDULE							
	DIMENSIONS		REINFORCING				
MARK	W	T	'A' BARS	'B' BARS	'C' BARS	'D' BARS	NOTES
WF3.0	3'-0"	1'-0"	(3) #5	#5 AT 16" OC	---	---	



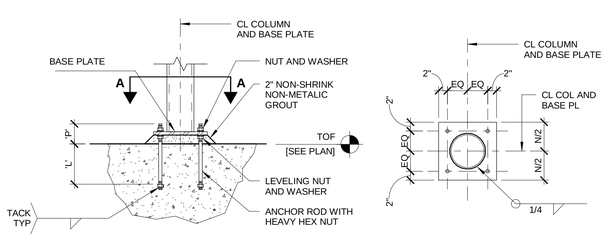
SECTION **PLAN**



TYPICAL PIPE SLEEVE UNDER FOOTING

3/4" = 1'-0"

ANCHOR ROD AND BASE PLATE SCHEDULE						
TYPE	ANCHOR RODS			BASE PLATE		
	ROD DIAMETER	EMBEDMENT 'L'	PROJECTION 'P'	WIDTH 'B'	LENGTH 'N'	THICKNESS
BP1	3/4"	9"	6"	12"	12"	1"



PLAN A-A

TYPICAL ANCHOR ROD AND BASE PLATE

3/4" = 1'-0"

FOUNDATION PLAN NOTES

1. FINISH FLOOR ELEVATION = 774.0 FEET FOR BUILDING 'A'
   FINISH FLOOR ELEVATION = 773.0 FEET FOR BUILDING 'B'
2. TOP OF SLAB ELEVATION SHALL BE [0'-0"], UNLESS OTHERWISE INDICATED.
3. TOP OF FOOTING ELEVATION SHALL BE [-2'-0"], UNLESS OTHERWISE NOTED. SEE TYPICAL FOOTING DETAIL AND FOOTING SCHEDULE ON THIS SHEET FOR FOOTING SIZE AND REINFORCEMENT.
4. SLAB-ON-GRADE SHALL BE 4" THICK REINFORCED WITH 6x6-W2.1xW2.1 WWF PLACED 1 1/2" BELOW TOP OF SLAB. PLACE SLAB ON 10 MIL VAPOR RETARDER OVER 4" POROUS FILL.
5. CENTERLINE OF FOOTINGS AND COLUMNS ARE COINCIDENT, UNLESS OTHERWISE NOTED.
6. CONTINUOUS WALL FOOTINGS AND SPREAD FOOTINGS ARE DENOTED WFX AND FX RESPECTIVELY ON PLAN. SEE THIS SHEET AND S103 FOR FOOTING SCHEDULE AND TYPICAL DETAILS.
7. JOINTS INDICATED ON PLAN TO BE SLAB CONTRACTION JOINTS (SJ) MAY BE CONSTRUCTION JOINTS (CJ) AT THE CONTRACTOR'S OPTION. MAXIMUM PANEL ASPECT RATIO = 1.5 : 1.0. SEE SHEET S103 FOR TYPICAL SLAB DETAILS.
8. PROVIDE (2) 3'-0" LONG #5 DIAGONAL BAR AT ALL SLAB-ON-GRADE RE-ENTRANT CORNERS. PLACE BAR 6" FROM CORNER AT MID-DEPTH OF SLAB.
9. '**HD**' INDICATES APPROXIMATE LOCATION OF SHEARWALL HOLD DOWN

ROOF FRAMING PLAN NOTES

1. ROOF CONSTRUCTION SHALL BE PRE-ENGINEERED WOOD TRUSSES SPACED AT 24" OC MAXIMUM WITH 19/32" APA RATED PLYWOOD ROOF SHEATHING, UON.
2. WALL CONSTRUCTION SHALL BE NO. 2 OR BETTER 2X6 STUDS AT 16" OC WITH 15/32" APA RATED PLYWOOD SHEATHING, TYP, UON. PROVIDE AN ADDITIONAL 2X6 WALL STUD BENEATH TRUSSES WHERE ROOF TRUSSES DO NOT ALIGN WITH TYPICAL (16" OC) WALL STUD SPACING. 1
3. OUTRIGGER FRAMING SHALL BE NO. 2 OR BETTER 2X6 STUDS AT 16" OC, TYP UON.
4. TRUSS BEARING ELEVATION (TBE) SHALL BE [+9'-4"] UON.
5. MULTIPLE PLY GIRDER TRUSS INDICATED THUS: ═══
6. HIP GIRDER TRUSS
7. HEADERS OVER ALL EXTERIOR AND INTERIOR OPENINGS INDICATED THUS: ─ ─ ─ ─
   HEADERS SHALL BE (3) 1-3/4"X9-1/4" LVL'S, TYP UON.
8. PRE-ENGINEERED WOOD TRUSS ROOF OVER-FRAMING INDICATED THUS:
   PROVIDE CONTINUOUS ROOF ~~SHEATHING UNDER~~ THESE TRUSSES.
9. DOUBLE TRUSS INDICATED THUS:
10. SHEAR WALLS INDICATED THUS: SWP-X: WALL CONSTRUCTION SHALL BE NO. 2 2X6 STUDS SPACED AT 16" OC MAXIMUM WITH 15/32" APA RATED PLYWOOD SHEATHING, SEE SCHEDULE ON SHEET S105 FOR ADDITIONAL INFORMATION.
11. SHEAR BLOCKING PANELS BY THE PRE-ENGINEERED WOOD TRUSS MANUFACTURER SHALL BE INSTALLED WHERE INDICATED ON PLAN. SEE SHEET S105 FOR DETAILS.
12. TOP PLATES SHALL BE SPLICED AS REQUIRED WITH 4'-0" LAP LENGTH. USE (24) 10d NAILS OR (3) 3/4"Ø BOLTS AT EACH SIDE OF EACH SPLICE. STAGGER BUTT JOINTS 4'-0" OC MIN.
13. PROVIDE (3) 2X6 STUDS TO SUPPORT THE END OF THE ROOF CANOPY HEADER.

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INTERMEDIATE CARE FACILITY
HORIZON BEHAVIORAL HEALTH
RIVERVIEW ROAD, MADISON HEIGHTS, VIRGINIA

CN NO: 4533
DATE: 05/31/2013
DESIGN: CWJ
DRAWN: SLG
REVIEW: WRS

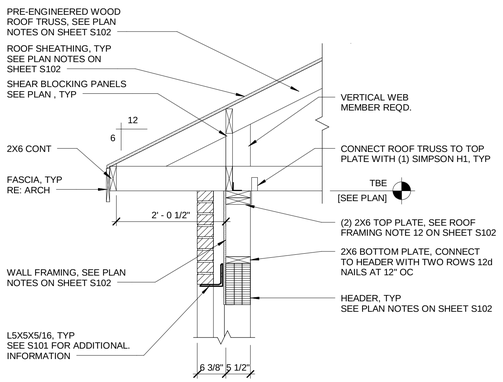
REVISIONS

No.	Date	Description
1	06/12/13	TRUSS BEARING

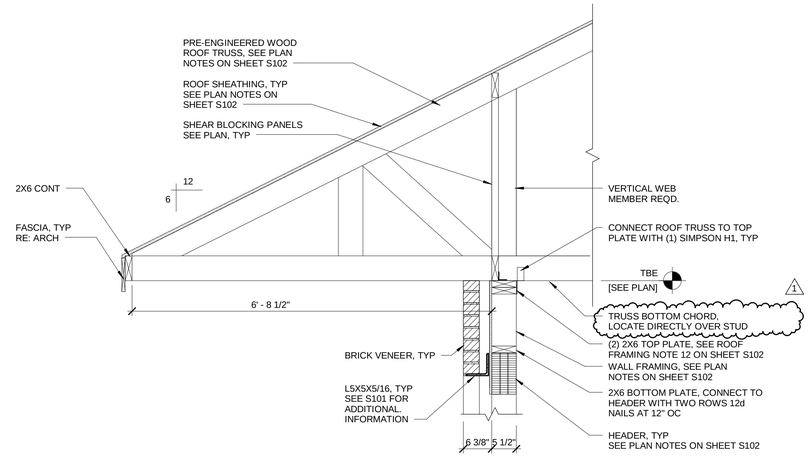
FOUNDATION AND ROOF FRAMING PLAN

S102

SHEET 3 OF 25



C1 SECTION
3/4" = 1'-0"



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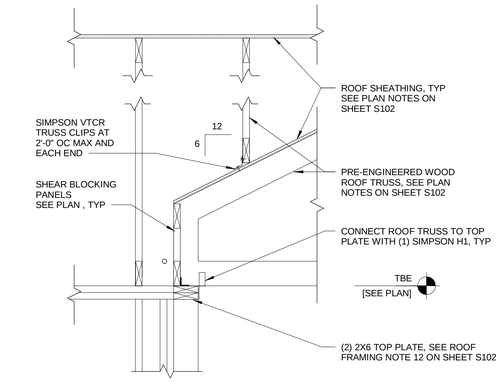

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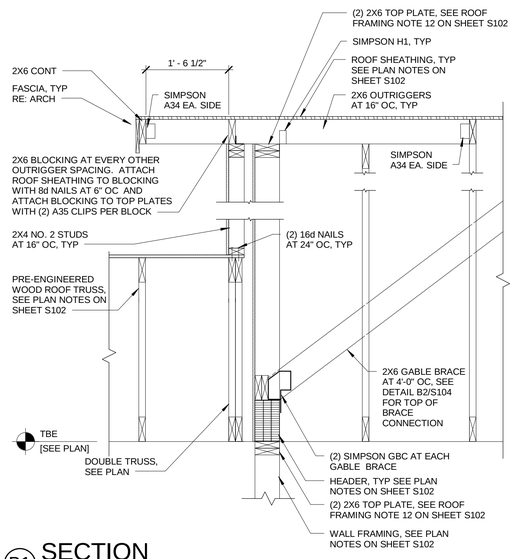
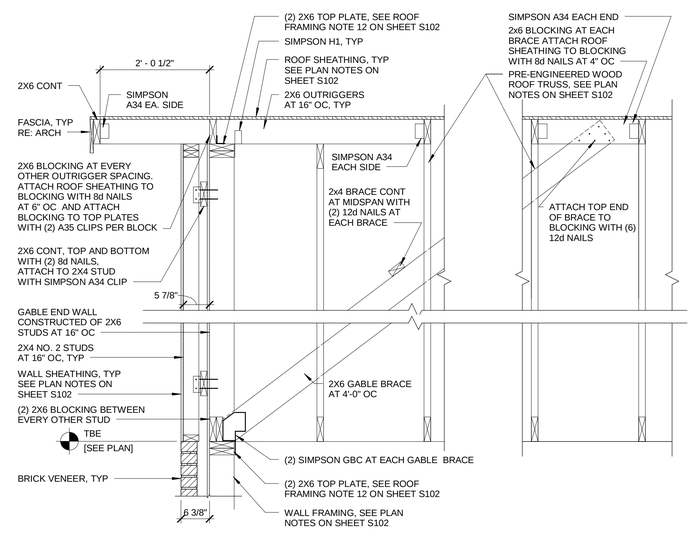


B1 SECTION
3/4" = 1'-0"



B2 SECTION
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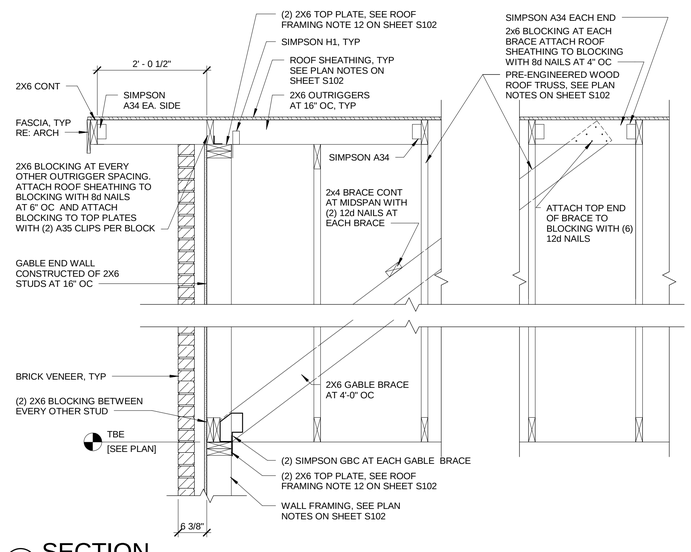
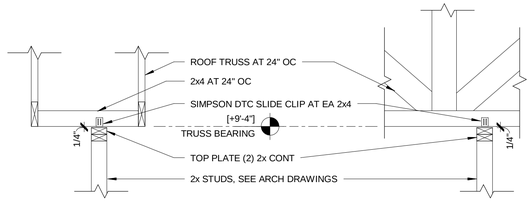
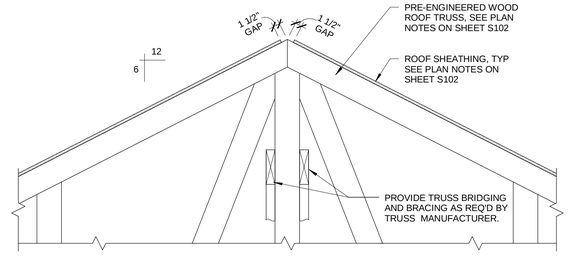


B4 SECTION
3/4" = 1'-0"



PARALLEL TO TRUSSES **PERPENDICULAR TO TRUSSES**

TYPICAL ROOF TRUSS TO INTERIOR NON-BEARING WALL CONNECTION
3/4" = 1'-0"



A4 SECTION
3/4" = 1'-0"

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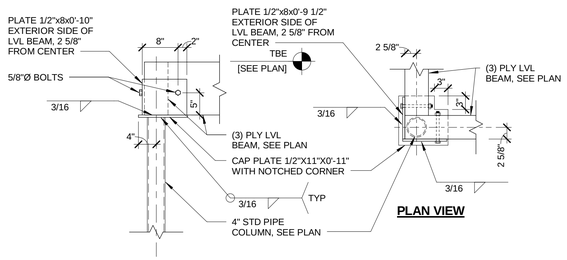
1	06/12/13	TRUSS BEARING

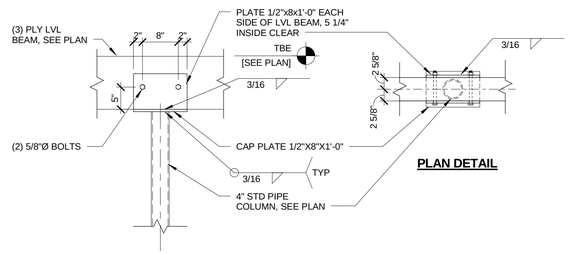
ROOF FRAMING SECTIONS AND TYPICAL DETAILS

S104

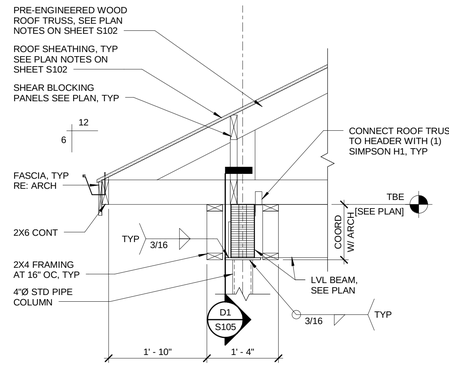
SHEET 5 OF 25



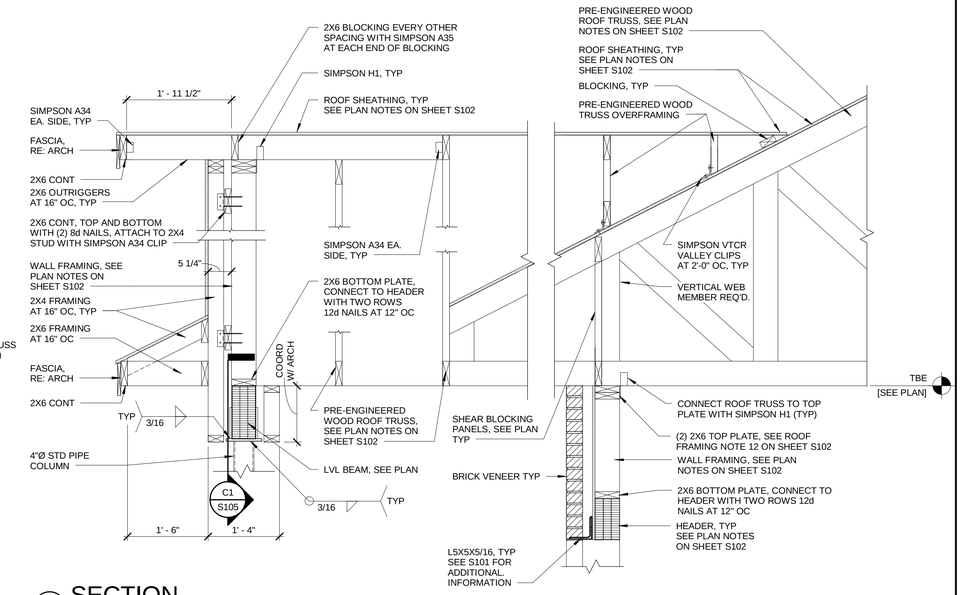
D1 DETAIL
3/4" = 1'-0"



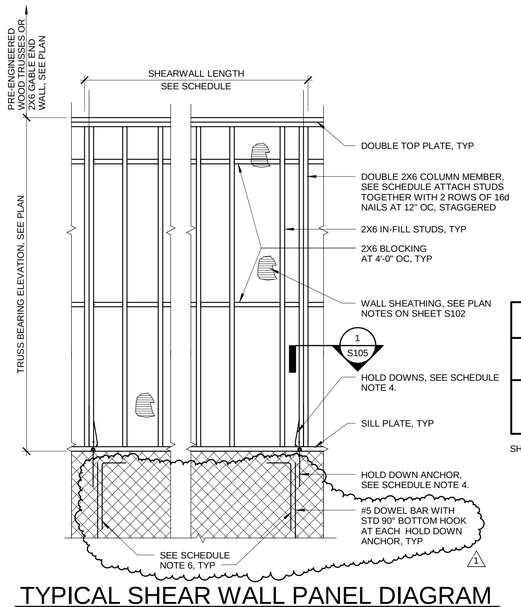
C1 DETAIL
3/4" = 1'-0"



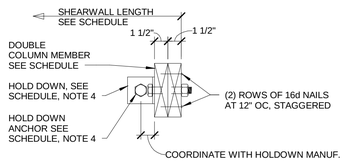
C2 SECTION
3/4" = 1'-0"



C3 SECTION
3/4" = 1'-0"

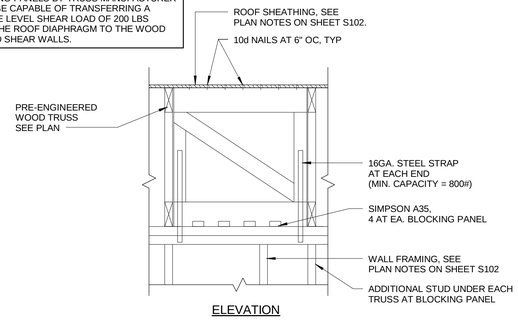


TYPICAL SHEAR WALL PANEL DIAGRAM
1/2" = 1'-0"



1 SECTION
NOT TO SCALE

NOTE:
BLOCKING PANELS BY TRUSS MANUFACTURER SHALL BE CAPABLE OF TRANSFERRING A SERVICE LEVEL SHEAR LOAD OF 200 LBS FROM THE ROOF DIAPHRAGM TO THE WOOD FRAMED SHEAR WALLS.



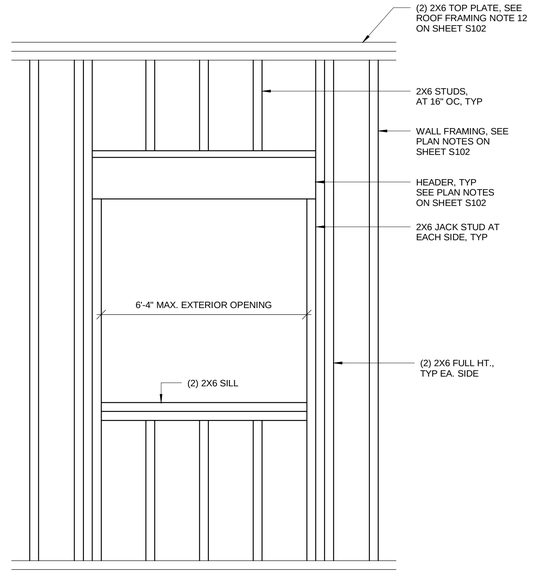
ELEVATION

TYPICAL SHEAR BLOCKING PANEL BETWEEN TRUSSES
NOT TO SCALE

SHEARWALL PANEL (SWP-X) SCHEDULE						
ELEVATION	PANEL MARK	LENGTH	LATERAL LOAD (PLF)	TENSION/COMPRESSION COLUMN MEMBER	FASTENER SPACING AT PANEL EDGES (IN)	INTERMEDIATE FASTENER SPACING (IN)
ELEVATION [+9'-4"]	SWP-1	14'-0"	100	(2) NO. 2 2X6 SP STUDS	4	12
	SWP-2	12'-0"	100	(2) NO. 2 2X6 SP STUDS	4	12
	SWP-3	8'-0"	270	(2) NO. 2 2X6 SP STUDS	4	12

SHEARWALL SCHEDULE AUGMENTS TYPICAL SHEARWALL DIAGRAM

NOTES:
1. SHEATHING APPLIED WITH LONG DIMENSION ACROSS STUDS.
2. INSTALL 2X6 BLOCKING AT ALL PANEL EDGES.
3. THE STRUCTURAL PANELS SHALL BE ATTACHED TO WOOD FRAMING WITH 8d (2-1/2"X0.131") COMMON NAILS.
4. PROVIDE SIMPSON MODEL HD7B HOLD DOWN AT EACH COLUMN MEMBER. FASTEN HOLD DOWN TO COLUMN MEMBERS WITH (3) 3/4" DIAMETER BOLTS. ANCHOR HOLD DOWN TO FOUNDATION WITH (1) 7/8" Ø HILTI HIT-RE 500-SD DRILLED IN EPOXY ADHESIVE ANCHOR, EMBED = 12".
5. SEE PLAN NOTES ON SHEET S102 FOR IN-FILL STUD AND DETAILS ON SHEET S103 FOR SILL PLATE INFORMATION.
6. PROVIDE #5 HOOKED BAR (VERTICAL LEG LENGTH = 18") AT EACH HOLD DOWN ANCHOR. LAP #5 HOOKED BAR WITH FOUNDATION DOWEL BAR.



TYPICAL OPENING DETAIL
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TYPICAL DETAILS

S105

SHEET 6 OF 25

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