

# STRUCTURAL NOTES:

1. NO PROVISION OF ANY REFERENCED STANDARD SPECIFICATION, MANUAL OR CODE (WHETHER OR NOT SPECIFICALLY INCORPORATED BY REFERENCE IN THE CONTRACT DOCUMENTS) WILL BE EFFECTIVE TO CHANGE THE DUTIES AND RESPONSIBILITIES OF OWNER, CONTRACTOR, DESIGNER, SUPPLIER, OR ANY OF THEIR CONSULTANTS, AGENTS, OR EMPLOYEES FROM THOSE SET FORTH IN THE CONTRACT DOCUMENTS. NOR SHALL IT BE HELD THAT THE DESIGNER OR ANY OF HIS OR HER CONSULTANTS, AGENTS, OR EMPLOYEES ANY DUTY OR AUTHORITY TO SUPERVISE OR DIRECT THE FURNISHING OR PERFORMANCE OF THE WORK OR ANY DUTY OR AUTHORITY TO UNDERTAKE RESPONSIBILITIES CONTRARY TO THE PROVISIONS OF THE CONTRACT DOCUMENTS.

2. REFERENCE TO STANDARD SPECIFICATIONS OF ANY TECHNICAL SOCIETY, ORGANIZATION, OR ASSOCIATION OR TO CODES OF LOCAL OR STATE AUTHORITIES SHALL MEAN THE LATEST STANDARD CODE SPECIFICATION OR TENTATIVE SPECIFICATION ADOPTED AT THE DATE OF TAKING BIDS, UNLESS SPECIFICALLY STATED OTHERWISE.

3. CONTRACT DOCUMENTS SHALL GOVERN IN THE EVENT OF A CONFLICT WITH THE CODE OF PRACTICE OR SPECIFICATIONS OF A.C.I., A.S.T.M., A.S.I. OR OTHER STANDARDS. WHERE A CONFLICT OCCURS WITHIN THE CONTRACT DOCUMENTS, THE STRICTEST REQUIREMENT WILL GOVERN.

4. MATERIAL, WORKMANSHIP, AND DESIGN SHALL CONFORM TO THE REFERENCED BUILDING CODE.

5. CONTRACTOR SHALL VERIFY EXISTING DIMENSIONS, ELEVATIONS, AND SITE CONDITIONS BEFORE STARTING WORK. DESIGNER WILL BE NOTIFIED OF ANY DISCREPANCY.

6. CONTRACTOR HAS SOLE RESPONSIBILITY FOR MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF CONSTRUCTION.

7. THE STRUCTURE IS STABLE ONLY IN ITS COMPLETED FORM. TEMPORARY SUPPORTS REQUIRED FOR STABILITY DURING ALL INTERMEDIATE STAGES OF CONSTRUCTION SHALL BE DESIGNED, FURNISHED, AND INSTALLED BY THE CONTRACTOR.

8. CONTRACTOR HAS SOLE RESPONSIBILITY TO COMPLY WITH ALL OSHA REGULATIONS.

### CODE DESIGN CRITERIA

1. STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE IBC, CURRENT ADOPTED EDITION.

2. DESIGN LIVE LOADS (REDUCED AS ALLOWED BY THE BUILDING CODE)

ROOF FLOOR LIVE LOAD	= 20 PSF
FLOOR LIVE LOAD	= 100 PSF

3. ALL ROOF AREAS ARE TO BE DESIGNED FOR A COLLATERAL DEAD LOAD OF 6 PSF, TO INCLUDE WEIGHT OF ARCHITECTURAL INTERIOR GLASSING AND MECHANICAL AND ELECTRICAL SYSTEMS. COLLATERAL LOAD IS IN ADDITION TO THE SELF-WEIGHT OF THE STRUCTURAL FRAMING AND EXTERIOR CLADDING.

4. SNOW LOADS

GROUND SNOW LOAD, P <sub>g</sub>	= 20 PSF
FLAT ROOF SNOW LOAD, P <sub>f</sub>	= 15 PSF (BLDG)
	= 17.6 PSF (CANOPY)
SNOW EXPOSURE COEFFICIENT, C <sub>e</sub>	= 1.0
SNOW LOAD IMPORTANCE FACTOR, I	= 1.0
THERMAL FACTOR, C <sub>t</sub>	= 1.0

5. WIND LOADS: (PER ASCE 7-05 FOR BUILDINGS UNDER 60')

BASIC WIND SPEED	= 30 MPH
IMPORTANCE FACTOR	= 1.0
EXPOSURE CATEGORY	= C
VELOCITY PRESSURE, q <sub>h</sub>	= 15.9 PSF

6. EARTHQUAKE LOADS:

SEISMIC IMPORTANCE FACTOR	= 1.0
SEISMIC USE GROUP	= III
OCCUPANCY CATEGORY	= B
MAPPED SPECTRAL RESPONSE ACCELERATION, S <sub>s</sub> =0.149	
MAPPED SPECTRAL RESPONSE ACCELERATION, S <sub>1</sub> =0.179	
SITE CLASS	= D (ASSUMED)
Worst Period Design Spectral Response Coefficient	
S <sub>ds</sub> = 0.240	
1 SECOND PERIOD DESIGN SPECTRAL RESPONSE COEFFICIENT	
S <sub>d1</sub> = 0.249	
SEISMIC DESIGN CATEGORY	= D
BASIC SEISMIC-FORCE RESISTING SYSTEM: WOOD FRAME	
RESPONSE MODIFICATION FACTOR, R	= 3

### FOUNDATION

1. ALL FOUNDATIONS SHALL BE INSTALLED UNDER THE GUIDANCE OF A REGISTERED PROFESSIONAL GEOTECHNICAL ENGINEER IN THE PROJECT STATE. THE GEOTECHNICAL ENGINEER SHALL GIVE CONSIDERATION TO THE TYPE OF BUILDING AND FOUNDATION LOADS INVOLVED AS WELL AS THE REQUIREMENTS OF THESE DOCUMENTS. DESIGNER IS NOT RESPONSIBLE FOR SUBSIDIARY CONDITIONS ENCOUNTERED IN THE FIELD DIFFERENT TO THOSE ASSUMED FOR DESIGN.

2. STRUCTURAL TESTING/INSPECTION AGENCY SHALL CERTIFY THE BEARING MEDIUM.

3. INDIVIDUAL SPREAD FOOTINGS AND CONTINUOUS FOOTINGS SHALL BEAR ON SOIL CAPABLE OF SUPPORTING 2,000 PSF AND 2,000 PSF, RESPECTIVELY.

3) NO FOOTINGS SHALL BEAR ON ROCK UNDER CUT ROCK A MINIMUM OF 2 FEET BELOW BOTTOM OF FOOTING AND REPLACE WITH STRUCTURAL FILL.

4. STRUCTURAL FILL SHALL CONTAIN NO ORGANIC MATERIAL AND BE APPROVED BY A GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT. STRUCTURAL FILL UNDER SLABS AND WITHIN 12'-0" OF THE BUILDING FOOTPRINT SHALL BE PLACED IN LIFTS OF THICKNESS DETERMINED BY THE INDEPENDENT TESTING AGENCY AND COMPACTED TO AT LEAST 98% OF ITS STANDARD PROCTOR MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D698. THE TOP 12" SUB-BASE UNDER SLABS ON GRADE SHALL BE COMPACTED TO AT LEAST 98% OF ITS STANDARD PROCTOR MAXIMUM DRY DENSITY. ALL BACKFILL, COMPACTATION AND PROOF ROLLING OPERATIONS SHALL BE OBSERVED BY AN INDEPENDENT TESTING LABORATORY.

5. SLABS-ON-GRADE SHALL BE PLACED ON A 4" GRANULAR BASE, COMPACTED TO 98% OF ITS STANDARD PROCTOR MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D698, AND COVERED WITH A 10 ML CONTINUOUSLY SEALED VAPOR BARRIER. THE BASE FOR SLABS-ON-GRADE SHALL BE INSPECTED BY A GEOTECHNICAL ENGINEER PRIOR TO EACH PLACEMENT OF CONCRETE.

6. ALL FOOTINGS AND TURN DOWN SLAB EDGES SHALL PENETRATE TO A MINIMUM DEPTH OF 12" BELOW FINISHED GRADE.

### REINFORCEMENT

1. REINFORCING STEEL SHALL CONFORM TO ASTM A63, GRADE 60, UNLESS NOTED OTHERWISE.

2. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A955 AND HAVE MINIMUM SIDE AND END LAPS OF 8".

3. SPLICES SHALL BE CLASS B IN ACCORDANCE WITH ACI-308, UNLESS NOTED OTHERWISE. REINFORCEMENT SHALL BE SPLICED ONLY AT LOCATIONS SHOWN OR NOTED IN THE STRUCTURAL DOCUMENTS, EXCEPT REINFORCEMENT MARKED "CONTINUOUS" CAN BE SPLICED AT LOCATIONS DETERMINED BY CONTRACTOR. SPLICES AT OTHER LOCATIONS SHALL BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER.

4. PROVIDE DOWELS FROM FOUNDATIONS THE SAME SIZE AND NUMBER AS THE VERTICAL WALL OR COLUMN REINFORCING, UNLESS NOTED OTHERWISE.

5. PLACE REINFORCEMENT AS FOLLOWS, UNLESS NOTED OTHERWISE:

5.1 CONCRETE REINFORCEMENT COVER

BELOW GRADE - UNFORMED	3" CLEAR
FORMED	2" CLEAR

5.2 MASONRY REINFORCING STEEL SHALL BE PLACED IN THE CENTER OF THE WALL UNLESS NOTED OTHERWISE.

6. REINFORCING STEEL DESIGNATED CONTINUOUS SHALL BE LAPPED AS FOLLOWS:

CONCRETE REINFORCEMENT:	CLASS B TENSION LAP
MASONRY REINFORCEMENT:	4B BAR DIAMETERS

7. ADHESIVE FOR REINFORCING DOWELS IN EXISTING CONCRETE SHALL BE EITHER THE EPON SYSTEM CERAMIC & EPOXY ADHESIVE SUPPLIED BY ITW RANGETECH REP HEAD OR THE HIT HYPER INJECTION ADHESIVE SYSTEM BY HILTI FASTENING SYSTEMS, OR APPROVED EQUAL. MINIMUM EMBEDMENT LENGTH SHALL BE 12 BAR DIAMETERS, UNLESS NOTED OTHERWISE.

8. ALL DOWELS AND TERMINATING BARS SHALL HAVE A STANDARD 90 DEGREE HOOK.

9. ALL HORIZONTAL REINFORCING SHALL BE CONTINUOUS THROUGH CONTROL AND/OR CONSTRUCTION JOINTS AND AROUND CORNERS.

### CAST-IN-PLACE CONCRETE

1. CONCRETE WORK SHALL CONFORM TO ACI-308 AND CRSI STANDARDS.

2. CONCRETE WALL HAVE THE FOLLOWING MINIMUM SPECIFIED 28-DAY COMPRESSIVE STRENGTH:

2) NORMAL WEIGHT STRUCTURAL CONCRETE:

	MIN 28 DAY	AIR	W/C %	SLUMP
FOOTINGS	3000 PSI	N/A	0.6	5"
SLABS-ON-GRADE	4000 PSI	N/A	0.5	4"
EXTERIOR EXPOSED	4000 PSI	6%	0.5	4"

3. REFER TO ARCHITECTURAL DRAWINGS FOR MOLDS, GROOVES, ORNAMENTS, CLIPS OR GROUNDS REQUIRED TO BE ENCASED IN CONCRETE AND FOR LOCATION OF FLOOR FINISHES AND SLAB DEPRESSIONS.

4. DEFECTIVE AREAS IN CONCRETE INCLUDING, BUT NOT LIMITED TO, HONEY-COMBING, WALLS, AND CRACKS WITH WIDTHS EXCEEDING 0.01 INCH SHALL BE REPAIRED. EXTENT OF DEFECTIVE AREA TO BE DETERMINED BY THE DESIGNER.

5. CONCRETE MIX DESIGN FOR 3000 PSI CONCRETE SHALL BE BASED ON A MAXIMUM AGGREGATE SIZE OF 1" IN MAXIMUM WATER CEMENT RATIO OF 80 FOR NON-AIR-ENTRAINED CONCRETE AND 75 FOR AIR-ENTRAINED CONCRETE AND A MAXIMUM SLUMP OF 4" IN AIR ENTRAINED CONCRETE. WALL BE USED FOR EXTERIOR EXPOSED CONCRETE WITH AN AIR CONTENT BETWEEN 55 AND 75 PERCENT.

6. CONCRETE SLABS ON GRADE SHALL NOT BE LOADED UNTIL A MINIMUM CONCRETE STRENGTH OF 1800 PSI HAS BEEN ATTAINED AND THE CONCRETE IS AT LEAST THREE DAYS OLD. ALL OTHER CONCRETE MEMBERS SHALL NOT BE LOADED UNTIL THE SPECIFIED CONCRETE DESIGN STRENGTH HAS BEEN ATTAINED.

7. CONCRETE WALL BE TESTED IN ACCORDANCE WITH ACI-301 AND THE SPECIFICATIONS FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS. AT A MINIMUM CONCRETE SPECIMENS SHALL BE TAKEN FOR EVERY 100 YARDS OR PORTION THEREOF FOR EACH MIX DESIGN PLACED IN A DAY. CONCRETE TEST REPORTS SHALL BE AVAILABLE ON SITE FOR INSPECTION.

8. CJ ON THE SLAB AND FOUNDATION PLAN INDICATES A KEY-FORMED CONSTRUCTION JOINT OR SAW-CUT CONTROL JOINT IN THE CONCRETE SLAB ON GRADE. SAW-CUT CONTROL JOINTS SHALL BE INSTALLED WITHIN 12 HOURS OF SLAB PLACEMENT. CONTROL REINFORCEMENT THROUGH JOINTS, DO NOT CUT REINFORCING STEEL CONSTRUCTION AND/OR CONTROL JOINTS SHALL BE SPACED NO FARTHER APART THAN 20 FT O.C. IN EACH DIRECTION CREATING PANELS WITH AN ASPECT RATIO NOT GREATER THAN 3:1.

9. UNLESS OTHERWISE NOTED, ALL REINFORCING SHALL BE CONTACT LAP SPLICED WITH A CLASS B SPLICE IN ACCORDANCE WITH ACI-308-03 FOR BARS WITH MINIMUM COVER AND SPACING GREATER THAN 24d AND 30d RESPECTIVELY. THE MINIMUM SPLICE LENGTH OF NOT LESS THAN 48d (48-BAR DIAMETER) SHALL BE USED. SPLICE LENGTH SHALL BE INCREASED BY A FACTOR OF 1.0 FOR TOP REINFORCEMENT. LAP WELDED WIRE FABRIC (W.W.F.) ONE SPACE PLUS 2 IN. ON ALL SIDES AT SPLICES.

10. CONCRETE SHALL RECEIVE THE FOLLOWING FINISHES:

INTERIOR EXPOSED SLABS - STEEL TROWEL FINISH (UNO. OR REQUESTED BY THE OWNER)

EXTERIOR SLABS - BROOM FINISH IN DIRECTION OF SLOPE

11. MAINTAIN CONCRETE AFTER PLACEMENT WITH MINIMAL MOISTURE LOSS AT RELATIVELY CONSTANT TEMPERATURE FOR THE PERIOD NECESSARY FOR HYDRATION OF GEMENT AND HARDENING OF CONCRETE (NOT LESS THAN 1 DAYS). COMPLY WITH THE REQUIREMENTS OF ACI-308. STANDARD PRACTICE FOR CURING CONCRETE. AMERICAN CONCRETE INSTITUTE. A COMBINATION CURING AND SEALING COMPOUND SHALL BE APPLIED AFTER THE CONCRETE HAS BEEN FINISHED OR THE FORMS REMOVED. COMPOUND SHALL MEET THE REQUIREMENTS OF ASTM C1395.

### CONCRETE MASONRY

1. MINIMUM 28-DAY COMPRESSIVE STRENGTH OF CONCRETE-MASONRY WALL BE FM = 1500 PSI.

2. MORTAR WALL COMPLY WITH THE BUILDING CODE REQUIREMENTS FOR CONCRETE MASONRY AND WALL BE OF THE FOLLOWING TYPE:

WALLS BELOW GRADE	TYPE M
BEARING WALLS	TYPE M OR S

3. CONCRETE MASONRY UNITS SHALL BE GRouted WITH 2500 PSI COARSE GROUT AS SHOWN IN THE STRUCTURAL DOCUMENTS. GROUT FOR REINFORCED AND NON-REINFORCED MASONRY WALL CONFORM TO ASTM C416.

4. PROVIDE HORIZONTAL JOINT REINFORCEMENT WITH NO. 3 GAGE LONGITUDINAL WIRES AT 16" O.C. VERTICALLY, UNLESS NOTED OTHERWISE. PROVIDE SPECIAL ACCESSORIES FOR CORNERS, INTERSECTIONS, ETC.

5. PROVIDE OPEN BOTTOM BEAM BLOCK UNITS WITH 5" DEEP MINIMUM WEB OPENINGS AT HORIZONTAL REINFORCEMENT LOCATIONS. A MINIMUM CLEAR SPACE OF ONE BAR DIAMETER WILL BE PROVIDED BETWEEN THE REINFORCING BARS AND THE FACE OF MASONRY UNITS.

6. PROVIDE CONTROL JOINTS IN ALL CONCRETE MASONRY WALLS AT LOCATIONS APPROVED BY THE ARCHITECT AT A MAXIMUM SPACING OF 3 TIMES THE WALL LENGTH OR 40'-0", WHICHEVER IS LESS.

7. PROVIDE DOWEL ANCHORS AT 16" O.C. UNLESS NOTED OTHERWISE, WHERE MASONRY WALLS ABUT CONCRETE SURFACES.

8. SUBMIT WRITTEN CONSTRUCTION PROCEDURES PRIOR TO THE START OF MASONRY CONSTRUCTION.

9. MINIMUM VERTICAL WALL REINFORCEMENT SHALL BE # 5 @ 48" O.C. UNLESS NOTED OTHERWISE.

### WOOD

1. WOOD FRAMING SHALL BE SOUTHERN PINE, NO. 2 KD. (6% MAX MOISTURE CONTENT) OR EQUIVALENT. MINIMUM ALLOWABLE BENDING STRESS SHALL BE 1200 PSI.

2. STRUCTURAL GLUED LAMINATED TIMBER SHALL BE PRODUCED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC) MINIMUM ALLOWABLE BENDING STRESS SHALL BE 2400 PSI (DRY CONDITIONS).

3. WOOD TRUSSES SHALL BE CAPABLE OF SUPPORTING THE SUPERIMPOSED LOADS AS GIVEN IN THE CONTRACT DOCUMENTS.

4. DESIGN OF WOOD TRUSSES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. SUBMIT SHOP DRAWINGS, DESIGN LOAD DATA, AND SUPPORT REACTIONS SEALED BY AN ENGINEER LICENSED IN THE PROJECT STATE. REVIEW OF SHOP DRAWINGS SHALL BE FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS WITH REGARD TO TRUSS CONFIGURATION, AND THE CONTRACTOR'S INTERPRETATION OF DESIGN LOADS AND DETAILS. SUCH REVIEW SHALL NOT RELIEVE THE CONTRACTOR OF THE FULL RESPONSIBILITY FOR THE DESIGN OF THE TRUSSES OR TRUSS CONNECTIONS NOT SPECIFICALLY DETAILED IN THE CONTRACT DOCUMENTS.

5. ERECTION AND TEMPORARY BRACING OF FABRICATED WOOD TRUSSES WILL BE IN CONFORMANCE WITH THE RECOMMENDATIONS OF THE TRUSS MANUFACTURER AND THE TRUSS PLATE INSTITUTES "BRACING WOOD TRUSSES: COMMENTARY AND RECOMMENDATIONS".

6. CONNECTIONS FOR STRUCTURAL TIMBER SHALL BE GALVANIZED STRONG-TIE CONNECTORS BY THE SIMPSON COMPANY OR APPROVED EQUAL.

7. WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE FOUNDATION GRADE PRESURE-TREATED SOUTHERN PINE. USE GALVANIZED NAILS IN PRESURE-TREATED WOOD.

8. PLYWOOD DIAPHRAGMS WILL BE EITHER STRUCTURAL I OR II SOUTHERN PINE PLYWOOD WITH THICKNESS AS NOTED IN THE STRUCTURAL DOCUMENTS. PLYWOOD WILL CONFORM TO THE REQUIREMENTS OF THE BUILDING CODE.

9. PLYWOOD SHALL BE ORIENTED AND NAILED TO SUPPORTING MEMBERS AS NOTED IN THE STRUCTURAL DOCUMENTS.

10. GENERAL:

A. FOR FIRE RATING REQUIREMENTS OF COMPONENTS AND ASSEMBLIES SEE ARCHITECTURAL DRAWINGS.

B. LUMBER IN CONTACT WITH CONCRETE AND OR MASONRY WILL BE PRESURE TREATED IN ACCORDANCE WITH AWPJ LP-2.

C. EXTERIOR LUMBER SHALL BE A MINIMUM OF 8" ABOVE FINISHED GRADE.

### TREATED WOOD PRODUCTS

A. ALL EXPOSED EXTERIOR LUMBER WILL RECEIVE PRESERVATIVE PRESURE TREATMENT FOR PROTECTION FROM DECAY AND TERMITES IN ACCORDANCE WITH CGA TYPE 3 PRESERVATIVE IN ACCORDANCE WITH AWPJ STANDARDS P5 AND C1 AS WELL AS THE FOLLOWING STANDARDS:

LUMBER	C1
PLYWOOD	C3

THE MINIMUM PRESERVATIVE RETENTION SHALL BE IN ACCORDANCE WITH THE FOLLOWING:

ABOVE GROUND APPLICATIONS	0.35 PCF
GROUND OR FRESH WATER CONTACT	0.40 PCF

D. TREATED MATERIAL SHALL BE DRIED AFTER TREATMENT TO A MOISTURE CONTENT OF NOT MORE THAN 18% FOR LUMBER AND 18% FOR PLYWOOD.

G. ALL FIELD CUTS SHALL BE FIELD TREATED IN ACCORDANCE WITH AWA STANDARD MA.

12. SAW LUMBER SHALL BE PROVIDED IN ACCORDANCE WITH THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION, LATEST EDITION, BY THE AMERICAN FOREST AND PAPER ASSOCIATION.

A. LUMBER GRADE AND SPECIES SHALL CONFORM WITH THE FOLLOWING:

SOUTHERN PINE OR DOUGLAS FIR - #2 GRADE OR BETTER WITH MAXIMUM MOISTURE CONTENT OF 18% (UNO.)

B. PLYWOOD WILL BE PROVIDED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE AMERICAN PLYWOOD ASSOCIATION (APA) THE MINIMUM THICKNESS WHICH FOLLOWS WILL BE INCREASED AS REQUIRED TO SATISFY ARCHITECTURAL REQUIREMENTS.

A. ROOF SHEATHING SHALL BE APA RATED MATCHING, EXPOSURE 1, 45 X 36" FOR SUPPORTS 24" O.C. USE 19/32" PLYWOOD. PLYWOOD SHALL BE TONGUE AND GROOVE OR BE INSTALLED WITH PANEL CLIPS IN ACCORDANCE WITH APA RECOMMENDATIONS. WHERE ALLOWABLE SPANS ARE EXCEEDED AT ROOF SLOPE TRANSITIONS, PROVIDE SPECIALLY DESIGNED SUPPLEMENTAL MEMBERS AS REQUIRED.

SHEATHING WILL BE INSTALLED WITH THE LONG EDGE ACROSS A MINIMUM OF THREE SUPPORTING MEMBERS. SUPPORT AND STAGGER EDGES OF PLYWOOD PARALLEL TO SUPPORTING MEMBER.

PROVIDE CONTINUOUS BLOCKING AT PERIMETER OF EACH DIAPHRAGM PLANE INCLUDING ROOF SLOPE TRANSITIONS AND AROUND OPENINGS. FASTEN SHEATHING WITH 10d NAILS AT 6" O.C. AT SUPPORTED EDGES UNO. AND AT 12" O.C. AT INTERMEDIATE SUPPORTS.

AN 1/2" GAP WILL BE LEFT BETWEEN ADJACENT PANELS. PROTECT EDGES AGAINST EXPOSURE TO WEATHER OR USE EXTERIOR GRADE PLYWOOD. COVER SHEATHING AS SOON AS POSSIBLE WITH ROOFING FELT OR SHINGLE UNDERLAYMENT FOR PROTECTION AGAINST EXCESSIVE MOISTURE PRIOR TO ROOFING INSTALLATION.

14. PRE-ENGINEERED LUMBER - ALL HORIZONTAL FRAMING SHALL BE ENGINEERED LUMBER AND SHALL BE DESIGNED BY THE SUPPLIER IN ACCORDANCE WITH THE CRITERIA BELOW:

SHOP DRAWINGS SHALL INCLUDE PLANS, DETAILS, BRACING, SUPPORT REACTIONS, WEB STIFFENERS AND ANCHORAGE REQUIREMENTS AT A MINIMUM. THE ALLOWABLE DEFLECTIONS ARE L/480 FOR LIVE LOAD AND L/240 FOR DEAD PLUS LIVE LOADS.

A. TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION AND THE DESIGN SPECIFICATION FOR METAL PLATE CONNECTED WOOD TRUSSES PUBLISHED BY THE TRUSS JOIST INSTITUTE, LATEST EDITION FOR THE FOLLOWING LOADS. CONNECTIONS BETWEEN TRUSSES SHALL BE DESIGNED AND SPECIFIED BY THE TRUSS ENGINEER. TRUSSES SHALL HAVE A MINIMUM NOMINAL BEARING LENGTH OF 4" (3-1/2" ACTUAL).

CONCENTRATED MECHANICAL/ELECTRICAL LOADS: SEE PLANS

15. FASTENING SCHEDULE SHALL BE IN ACCORDANCE WITH TABLE 2304.91 IN THE INTERNATIONAL BUILDING CODE, 2003 EDITION UNLESS OTHERWISE SPECIFIED.

### ROOF FRAMING NOTES:

1. ROOF FRAMING SHALL BE APA RATED SHEATHING, EXPOSURE 1, 45" X 36" X 3/8" THICK PLYWOOD (3/8" SPAN RATING). SEE DETAILS FOR SHEATHING NAILING PATTERN, TYP.

2. DESIGN WOOD TRUSSES FOR:

- 10 PSF DEAD LOAD ON TOP AND BOTTOM CHORDS
- 20 PSF LIVE LOAD ON TOP CHORD
- WIND UPLIFT ACCORDING TO CURRENT ADOPTED EDITION OF IBC & ASCE 07.

3. SEE ARCHITECTURAL SECTIONS FOR ADDITIONAL FRAMING INFORMATION.

### FOUNDATION PLAN NOTES:

1. CONCRETE SLAB-ON-GRADE TO BE 5" THICK MIN. CONCRETE ON 10 MIL VAPOR BARRIER ON 4" THICK COMPACTED GRANULAR FILL OVER COMPACTED FILL PER THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER. REINFORCE THE 5" SLAB ON GRADE WITH #6 W2.8 X W2.8 W.W.F. PLACED AND SECURED IN THE TOP THIRD OF SLAB THICKNESS.

2. TOP OF FOOTING = (-1'-4") TYP. UNO. MAINTAIN TOP OF FOOTING AT (-1'-0") MIN. BELOW FINISHED GRADE.

### REVISIONS

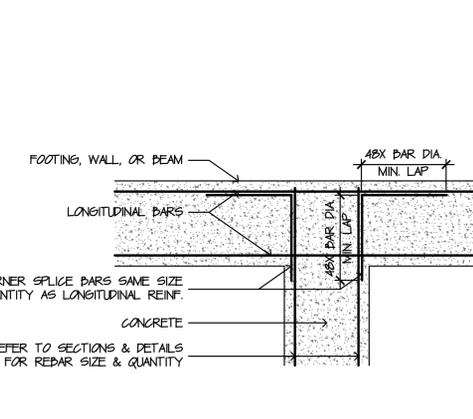
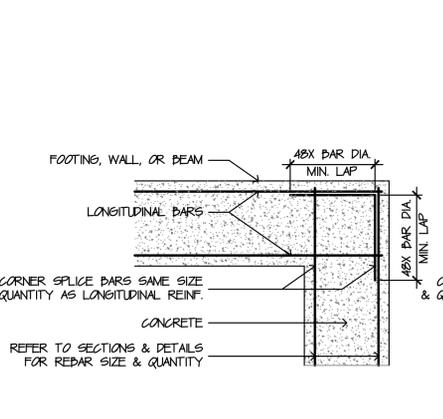
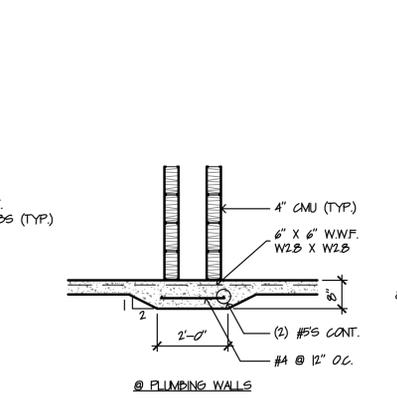
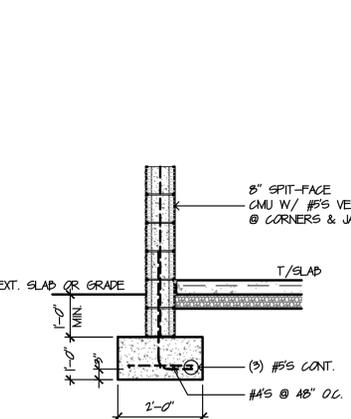
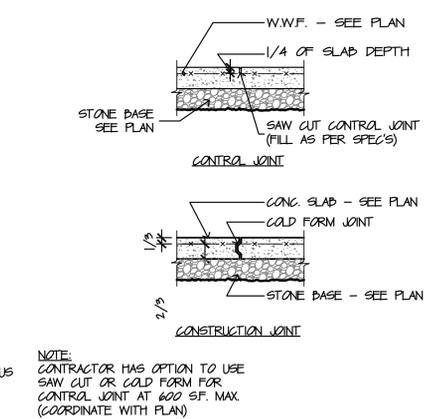
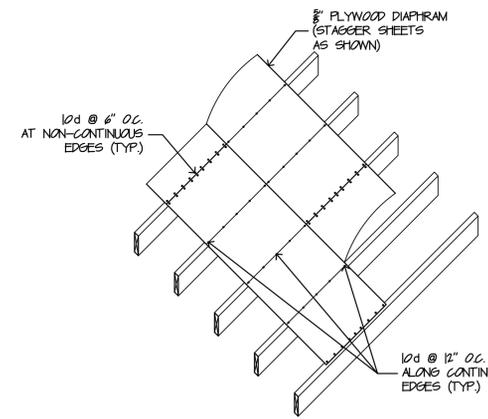
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TODD COUNTY BOARD OF EDUCATION  
 TRACK AND FIELD RENOVATION  
 ELKTON, KY

DRAWN: JHC  
 APPROVED: NN  
 PROJECT NUMBER: 18-104  
 DATE: JANUARY 11, 2019  
 SHEET NAME: STRUCTURAL NOTES & DETAILS  
 SHEET NO. S100



**A** TYP. SHEATHING NAILING PATTERN  
 1/2" = 1'-0"

**B** CONTROL/CONSTRUCTION JOINTS  
 1/2" = 1'-0"

**C** EXT. WALL & FOUNDATION  
 1/2" = 1'-0"

**D** TYP. THICKENED SLAB  
 1/2" = 1'-0"

**E** CORNER REINFORCEMENT DETAIL  
 1/2" = 1'-0"

**F** JUNCTION REINFORCEMENT DETAIL  
 1/2" = 1'-0"

# S100