

GENERAL NOTES

1. GENERAL NOTES

- GENERAL BUILDING CODE: 2006 INTERNATIONAL BUILDING CODE
- DESIGN LOADS:
 - FOUNDATION DESIGN IS BASED ON REACTIONS OBTAINED FROM ANALYSIS OF METAL BUILDING STRUCTURE LAYOUT INDICATED ON THE DRAWINGS USING LOADS AS INDICATED BELOW. FOUNDATION DESIGN IS SUBJECT TO REVIEW AND REVISION UPON COMPLETION OF FINAL REACTIONS BY THE METAL BUILDING MANUFACTURER.
 - GRAVITY LOADS USED FOR ANALYSIS OF METAL BUILDING SYSTEM:
 - ROOF DEAD LOAD = 6 PSF
 - ROOF COLLATERAL LOAD = 8 PSF
 - ROOF LIVE LOAD = 20 PSF
 - 1ST FLOOR LIVE LOAD = 100 PSF
 - WIND LOAD:

THE FOLLOWING LOAD CRITERIA AND FACTORS HAVE BEEN USED IN THE DESIGN OF THIS STRUCTURE:

WIND CODE PER SECTION 1609	2006 IBC
BASIC WIND SPEED - SECOND GUST	130 MPH
IMPORTANCE FACTOR, I	1.15
EXPOSURE CATEGORY	B
INTERNAL PRESSURE COEFFICIENT, GCpi	
INTERNAL SUCTION	+0.18
	-0.18
COMPONENTS & CLADDING DESIGN PRESSURE (PSF)	

 SEE DIAGRAM THIS SHEET
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE JOB SITE PRIOR TO STARTING CONSTRUCTION AND THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES WITH ANY WORK SO INVOLVED.
- ALL PHASES OF THE WORK SHALL CONFORM TO THE MINIMUM STANDARDS AND REQUIREMENTS OF THE LATEST ADOPTED EDITION OF THE INTERNATIONAL BUILDING CODE.
- THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. UNLESS OTHERWISE INDICATED, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE, WORKERS AND OTHER PERSONNEL DURING CONSTRUCTION.
- ALL ASTM SPECIFICATIONS NOTED ON THESE DRAWINGS SHALL BE OF THE LATEST REVISIONS.
- IN THE EVENT CERTAIN FEATURES OF THE CONSTRUCTION ARE NOT FULLY SHOWN ON THE CONTRACT DRAWINGS OR CALLED FOR IN THE NOTES OR SPECIFICATIONS, THEN THEIR CONSTRUCTION SHALL BE OF THE SAME CHARACTER AS FOR SIMILAR CONDITIONS THAT ARE SHOWN OR CALLED FOR AND SHALL BE REVIEWED BY THE ENGINEER PRIOR TO START OF WORK.
- EXISTING CONDITIONS DEPICTED ON THESE DRAWINGS ARE TO BE FIELD VERIFIED BY THE CONTRACTOR, AS THEY ARE UNCOVERED DURING THE CONSTRUCTION. IN THE EVENT EXISTING CONDITIONS ARE DIFFERENT THAN SHOWN, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD IMMEDIATELY AND AWAIT FURTHER INSTRUCTION BEFORE PROCEEDING WITH CONSTRUCTION.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON STRUCTURAL DRAWINGS WITH ARCHITECTURAL DRAWING. NOTIFY ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO START OF WORK.
- CONTRACTOR SHALL REVIEW AND STAMP ALL SHOP DRAWINGS BEFORE SUBMITTAL FOR APPROVAL. SPECIFICATIONS AND/OR SHOP DRAWINGS SHALL BE SUBMITTED TO ENGINEER OF RECORD AND APPROVED PRIOR TO START OF WORK.
- VERIFY ALL EQUIPMENT LOCATIONS AND OPENINGS THROUGH ROOF, FLOOR AND WALLS WITH ARCHITECTURAL, ELECTRICAL AND MECHANICAL REQUIREMENTS.

2. STEEL

- STRUCTURAL STEEL SHALL MEET THE LATEST PROVISIONS OF THE AISC SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.
- ALL STRUCTURAL STEEL SHALL CONFORM TO FOLLOWING:

STRUCTURAL WIDE FLANGE SHAPES	ASTM A992 MIN 50 KSI
STRUCTURAL S, S & HP SHAPES	ASTM A36
ALL OTHER STRUCTURAL SHAPES	ASTM A36
STEEL PIPE	ASTM A53 GRADE B
STEEL TUBING	ASTM A500 GRADE B
STEEL STUDS	ASTM A108
- ALL STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST PROVISIONS OF THE AISC MANUAL OF STEEL CONSTRUCTION.
- ALL STRUCTURAL CONNECTIONS NOT SPECIFICALLY DETAILED ON THE DRAWINGS SHALL BE DESIGN TO RESIST FORCES AS INDICATED, BY THE CONTRACTOR UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED.
- BEARING (N) TYPE CONNECTIONS SHALL BE USED AT ALL SIMPLE SHEAR CONNECTIONS, UNLESS NOTED OTHERWISE.
- THE STRUCTURAL STEEL FABRICATOR SHALL FURNISH SHOP AND ERECTION DRAWINGS OF ALL STEEL FOR ENGINEER'S REVIEW BEFORE FABRICATION. CONTRACTOR SHALL NOT ERECT ANY STRUCTURAL STEEL UNTIL THE SHOP DRAWINGS ARE REVIEWED BY THE ENGINEER AND ARE RECEIVED AT THE JOB SITE. SHOP AND ERECTION DRAWINGS SHALL CONTAIN ALL INFORMATION NECESSARY TO ERECT ALL STRUCTURAL STEEL IN THE FIELD WITHOUT HAVING TO REFER TO THE STRUCTURAL DRAWINGS. SHOP DRAWINGS SHALL NOT CONTAIN ANY REPRODUCTIONS OF THE STRUCTURAL DRAWINGS.
- ALL WELDING SHALL BE PERFORMED BY WELDERS CERTIFIED BY THE APPLICABLE AUTHORITY AND THE AMERICAN WELDING SOCIETY FOR THE TYPE OF WELDING MADE. ALL WELDS SHALL BE MADE AND INSPECTED IN ACCORDANCE WITH ALL REQUIREMENTS OF THE LATEST EDITION OF THE STRUCTURAL WELDING CODE OF THE AMERICAN WELDING SOCIETY (AWS D1.1).
- ALL WELDS NOT SPECIFIED SHALL BE CONTINUOUS FILLET WELDS, SIZE OF WELD SHALL BE BASED ON AISC STANDARDS FOR THICKER PART JOINED.
- ALL PARTIAL AND FULL PENETRATION GROOVE WELDS SHALL HAVE NON-DESTRUCTIVE TESTING PERFORMED BY EITHER ULTRASONIC TESTING OR RADIOGRAPHY.
- STRUCTURAL STEEL SHALL BE WELDED WITH E70XX ELECTRODES.
- STRUCTURAL STEEL SHALL BE DELIVERED TO THE JOB SITE FREE OF EXCESS RUST, MILL SCALE, GREASE, ETC.
- ALL BOLTS SHALL BE A MINIMUM OF 3/4" IN DIAMETER (U.N.O) AND SHALL CONFORM TO ASTM A325 HIGH STRENGTH, WITH HEX NUTS, AND WASHERS AS REQUIRED UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- ANCHOR BOLTS SHALL CONFORM TO ASTM F1554 GR. 36 UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- OPENINGS SHALL NOT BE ALLOWED IN STRUCTURAL STEEL UNLESS SPECIFICALLY DETAILED OR WITHOUT ENGINEER'S APPROVAL.

STRUCTURAL DRAWING INDEX:

- S0.0 GENERAL STRUCTURAL NOTES
- S1.0 SLAB @ GRADE PLAN
- S1.1 FOUNDATION SECTIONS
- S2.0 ROOF FRAMING PLAN
- S2.1 WALL SECTIONS
- S3.0 TYP. CMU DETAILS
- S4.0 TYP. FRAMING DETAILS

3. STEEL JOISTS

- STEEL JOIST SHALL BE DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST SPECIFICATIONS OF THE STEEL JOIST INSTITUTE.
- BRIDGING INDICATED ON CONTRACT DOCUMENTS ARE FOR THE PURPOSE OF ILLUSTRATING MISCELLANEOUS ATTACHMENTS AND DETAILS. GREATER OR FEWER LINES OF BRIDGING MAY BE REQUIRED BY STEEL JOIST INSTITUTE. THESE REQUIREMENTS SHALL SUPERCEDE THE CONTRACT DOCUMENTS.
- ALL JOISTS SHALL BE CAMBERED IN ACCORDANCE WITH RECOMMENDATIONS AND SPECIFICATIONS OF THE STEEL JOIST INSTITUTE.
- PROVIDE STABILITY BRACING FOR JOISTS IN ACCORDANCE WITH STEEL JOIST INSTITUTE RECOMMENDATIONS AND OSHA REQUIREMENTS.
- IN STEEL FRAMES, WHERE COLUMNS ARE NOT FRAMED IN AT LEAST TWO DIRECTIONS WITH STRUCTURAL STEEL MEMBERS, JOISTS AT OR NEAREST COLUMN CENTERLINE SHALL BE FIELD BOLTED AT THE COLUMNS TO PROVIDE LATERAL STABILITY DURING CONSTRUCTION.

4. METAL DECKING

- STEEL DECK SHALL BE ERECTED IN ACCORDANCE WITH MANUFACTURER'S AND STEEL DECK INSTITUTE RECOMMENDATIONS AND SPECIFICATIONS.
- STEEL DECK PROPERTIES AND ATTACHMENTS SHALL BE IN ACCORDANCE WITH THE STEEL DECK INSTITUTE.
- METAL DECK SHALL BE AS MANUFACTURED BY VULCRAFT, A DIVISION OF NUCOR, INCORPORATED OR AN APPROVED EQUAL.
- GALVANIZING SHALL CONFORM TO ASTM A924-94 WITH A MINIMUM COATING CLASS OF C-60.
- DECK TO BE INSTALLED CONTINUOUS OVER A MINIMUM OF (3) SUPPORTS.
- LIGHT GAGE METAL FRAMING, SUSPENDED CEILING, LIGHT FIXTURES, DUCTS AND OTHER UTILITIES SHALL NOT BE SUPPORTED BY METAL ROOF DECK.
- PROVIDE MINIMUM L4x4x1/4 FRAMING AROUND ALL OPENINGS LARGER THAN 6 INCHES FOR ROOF TOP MECHANICAL UNITS.
- ROOF DECK:
 - STEEL DECK SHALL BE 1 1/2"x22 GAGE, INTERMEDIATE RIB GALVANIZED. USE VULCRAFT TYPE 1.5F22 OR APPROVED EQUAL.
 - WELD DECK TO ALL SUPPORTS WITH MINIMUM 5/8" DIAMETER PUDDLE WELD OR EQUIVALENT. FASTENERS TO BE LAID OUT IN A 36/74 PATTERN, WITH MINIMUM (4) #10 TEK SCREWS AT ALL SIDE LAPS PER SPAN.
- FLOOR DECK:
 - STEEL DECK SHALL BE 9/16"x26 GAGE, CONFORMED GALVANIZED. USE VULCRAFT TYPE .6C26 OR APPROVED EQUAL.
 - WELD DECK TO ALL SUPPORTS WITH MINIMUM 5/8" DIAMETER PUDDLE WELD OR EQUIVALENT. FASTENERS TO BE LAID OUT IN A 36/74 PATTERN, WITH MINIMUM (4) #10 TEK SCREWS AT ALL SIDE LAPS PER SPAN.
- MECHANICAL FASTENERS, EITHER POWDER ACTUATED OR PNEUMATICALLY DRIVEN, OR SCREWS MAY BE USED IN LIEU OF WELDING TO FASTEN DECK TO SUPPORTING MEMBERS PROVIDED THEY HAVE BEEN SPECIFICALLY APPROVED.
- FOR DECK UNITS WITH METAL THICKNESS LESS THAN 0.028 INCHES (22 GAGE) WELD DECK THROUGH MANUFACTURER'S STANDARD WELD WASHERS WITH SPECIFIED WELD PATTERN OR AS SHOWN ON DRAWINGS.

5. LIGHT GAGE METAL FRAMING

- ALL MEMBERS SHALL BE DESIGNED IN ACCORDANCE WITH THE AMERICAN IRON AND STEEL INSTITUTE (AISI) SPECIFICATIONS FOR DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, LATEST EDITION.
- ALL FRAMING MEMBERS SHALL BE FORMED FROM A CORROSION-RESISTANT STEEL, CORRESPONDING TO THE REQUIREMENTS OF ASTM A653 WITH A MINIMUM YIELD STRENGTH OF:
 - Fy = 33 KSI (18 GAGE AND LIGHTER)
 - Fy = 50 KSI (18 GAGE AND HEAVIER)
- FABRICATOR IS RESPONSIBLE FOR THE DESIGN AND DETAILING OF ALL LIGHT GAGE STEEL FRAMING AND TRUSSES NOT OTHERWISE DETAILED ON THE CONTRACT DOCUMENTS UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED.
- CONTRACTOR SHALL SUBMIT FOR APPROVAL CALCULATIONS AND SHOP DRAWINGS FOR DETAILS, FABRICATION AND ERECTION OF LIGHT GAGE STEEL FRAMING & TRUSSES. DRAWINGS SHALL INCLUDE LAYOUT, SPACING, MATERIAL MEMBER PROPERTIES AND DETAILS OF CONNECTION FOR ALL LIGHT GAGE FRAMING MEMBERS AND TRUSSES INDICATED ON THE DRAWINGS.
- WHERE STUD MEMBERS ARE CONNECTED TO STRUCTURAL FLOOR OR ROOF MEMBER, AN ANGLE CLIP OR "VERTICIP ASSEMBLY" SHALL BE PROVIDED CAPABLE OF ACCOMMODATING VERTICAL MOVEMENT FROM OCCUPANCY OR ROOF LIVE LOADS.
- FASTENING OF COMPONENTS SHALL BE BY SELF DRILLING/TAPPING SCREWS OR WELDING IN ACCORDANCE WITH AWS D1.1 OR D1.3 AS APPROPRIATE TO MATERIAL THICKNESS.
- FABRICATED HORIZONTAL OR DIAGONAL TYPE BRACING SHALL BE REQUIRED TO PREVENT BUCKLING OF MEMBER WHERE SHEATHING APPLIED TO MEMBER IS NOT PRESENT OR ADEQUATE TO BRACE MEMBER.
- STUDS SHALL BE PLUMBED, ALIGNED AND SECURELY ATTACHED TO BOTH TOP AND BOTTOM TRACKS. SPICES IN STUDS ARE NOT PERMITTED.

6. PREFABRICATED LIGHT GAGE METAL TRUSSES

- FABRICATOR IS RESPONSIBLE FOR THE DESIGN AND DETAILING OF ALL PREFABRICATED LIGHT GAGE TRUSS FRAMING AS SHOWN ON DRAWINGS. ALL TRUSS COMPONENTS AND CONNECTIONS SHALL BE DESIGNED BY QUALIFIED ENGINEER REGISTERED IN THE STATE OF PROJECT. TRUSS MANUFACTURER DESIGN FOR THE FOLLOWING SUPERIMPOSED LOADS:

TOP CHORD LIVE LOAD	16 PSF
TOP CHORD DEAD LOAD	5 PSF
BOTTOM CHORD DEAD LOAD	12 PSF

 WIND DESIGN LOADS SHALL BE CALCULATED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE SECTION 1606 WITH THE PARAMETERS INDICATED IN NOTE 2.B. ABOVE.
- IN ADDITION TO THE LOADS INDICATED ABOVE, TRUSSES SHALL BE DESIGNED FOR ANY CONCENTRATED LOADS FROM MECHANICAL, ELECTRICAL OR ARCHITECTURAL ITEMS. REFER TO THE MECHANICAL, ELECTRICAL AND ARCHITECTURAL DRAWINGS FOR LOAD INFORMATION AND LOCATION.
- ALL TRUSS TOP AND BOTTOM CHORDS SHALL BE MINIMUM 6" IN DEPTH.
- MAXIMUM TRUSS TO TRUSS CENTER SPACING SHALL BE 2'-0".
- ALL TRUSS COMPONENTS AND CONNECTIONS SHALL BE DESIGNED BY A QUALIFIED PROFESSIONAL ENGINEER CURRENTLY REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. ALL TRUSS TO TRUSS CONNECTIONS AND TRUSS TO SUPPORT CONNECTIONS INDICATED ON THE DRAWINGS ARE TO BE DESIGNED BY THE TRUSS MANUFACTURER'S QUALIFIED DESIGN ENGINEER.
- THE STEEL TRUSS SUB-CONTRACTOR IS RESPONSIBLE FOR TEMPORARY BRACING OF STEEL ROOF TRUSSES DURING CONSTRUCTION.
- THE STEEL TRUSS SUB-CONTRACTOR IS RESPONSIBLE FOR OBTAINING QUALIFIED PROFESSIONAL GUIDANCE AS REQUIRED FOR DESIGN AND INSTALLATION OF THE TEMPORARY ROOF TRUSS BRACING SYSTEMS.
- STEEL TRUSS MANUFACTURER SHALL PROVIDE PERMANENT ROOF TRUSS BRACING SYSTEM DESIGNED BY A QUALIFIED REGISTERED PROFESSIONAL ENGINEER CURRENTLY LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED. PERMANENT TRUSS BRACING SYSTEM SHALL BE INDICATED ON THE STEEL TRUSS ERECTION DRAWINGS AND SHALL INCLUDE DETAILS, INFORMATION ON MEMBERS, FASTENERS AND CONNECTIONS. LYLE STOVER ENGINEERING WILL PROVIDE GUIDANCE, IF REQUIRED, TO THE BRACING SYSTEM DESIGN ENGINEER IN IDENTIFYING PROPER LOCATIONS OF CONNECTIONS FROM THE BRACING SYSTEM TO THE BUILDING STRUCTURE.
- CONTRACTOR SHALL SUBMIT CALCULATIONS AND SHOP DRAWINGS FOR DETAILING, FABRICATION AND ERECTION OF LIGHT GAUGE STEEL TRUSSES. CALCULATIONS AND DRAWINGS SHALL CLEARLY INDICATE SPACING, TYPE, MATERIAL MEMBER PROPERTIES, BRACING AND CONNECTIONS FOR LIGHT GAUGE STEEL TRUSSES AND BRACING SYSTEMS. TRUSS FABRICATION SHALL NOT BEGIN UNTIL THE CONTRACTOR RECEIVES STAMPED REVIEW CALCULATIONS AND SHOP DRAWINGS FROM THE ARCHITECT AND STRUCTURAL ENGINEER. ARCHITECTURAL AND STRUCTURAL DRAWINGS SHALL NOT BE COPIED OR REPRODUCED FOR USE AS SHOP DRAWINGS.

7. CONCRETE

- CONCRETE MIXES TO BE DESIGNED BY A RECOGNIZED TESTING LABORATORY AND COPIES OF DESIGN MIX SUBMITTED TO THE ENGINEER. COMPRESSIVE TEST REPORTS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER AND ANY OTHER AGENCIES AS SPECIFIED BY LOCAL BUILDING CODE.
- ALL CONCRETE SHALL DEVELOP MINIMUM 3000 PSI COMPRESSIVE STRENGTH IN 28 DAYS.
- ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60. ALL WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A185.
- MINIMUM WWF LAP SHALL BE THE GREATER OF ONE CROSS WIRE SPACING PLUS 2 INCHES OR MINIMUM OF 6 INCHES.
- ALL CONCRETE CONSTRUCTION SHALL CONFORM TO THE LATEST ADOPTED EDITION OF THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318) AND ITS REVISIONS.
- ALL REINFORCING SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH ACI STANDARDS. NO WELDING OF REINFORCEMENT SHALL BE ALLOWED UNLESS NOTED OR OTHERWISE APPROVED BY ENGINEER.
- NO SPLICING OF REINFORCEMENT SHALL BE MADE EXCEPT AS DETAILED OR AUTHORIZED BY THE STRUCTURAL ENGINEER. LAP SPLICES WHERE PERMITTED SHALL BE CLASS "B" TENSION LAP SPLICES, UNLESS NOTED OTHERWISE. MAKE ALL BARS CONTINUOUS AROUND CORNERS.
- STAGGER SPLICES A MINIMUM OF 4'-0" FOR CONTINUOUS BARS IN ALL CONCRETE WORK, UNLESS NOTED OTHERWISE.
- PROVIDE (2) #5 BARS (1 EACH FACE) WITH MINIMUM 2'-0" PROJECTION AROUND ALL OPENINGS IN CONCRETE UNLESS NOTED OTHERWISE.
- SLABS, WALLS, AND FLEE CAPS SHALL NOT HAVE JOINTS IN A HORIZONTAL PLANE.
- THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCED PLACED CAST-IN-PLACE CONCRETE:

A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSE TO EARTH	3 INCHES
B. FORMED CONCRETE EXPOSED TO EARTH OR WEATHER:	
#6 THROUGH #18 BARS	2 INCHES
#5 BARS AND SMALLER	1.5 INCHES
C. CONCRETE NOT EXPOSED TO WEATHER NOR IN CONTACT WITH GROUND:	
SLABS, WALLS AND JOISTS:	
#14 AND #18 BARS	1.5 INCHES
#11 BARS AND SMALLER	1 INCHES
BEAMS, COLUMNS AND WALL JAMBS:	
PRIMARY REINFORCEMENT, TIES, STIRRUPS AND SPIRALS:	
#14 AND #18 BARS	2.5 INCHES
#11 BARS AND SMALLER	1.5 INCHES
- PROVIDE REINFORCING BAR PLACING ACCESSORIES NECESSARY TO SUPPORT REINFORCEMENT IN ACCORDANCE WITH ACI MANUAL OF STANDARD PRACTICE.
- ALL CONSTRUCTION JOINTS SHALL BE AS DETAILED OR AS APPROVED BY THE STRUCTURAL ENGINEER.
- CONTRACTOR SHALL NOT PLACE ANY REINFORCEMENT UNTIL SHOP DRAWING REVIEWED BY THE ENGINEER ARE RECEIVED ON THE JOB SITE. SHOP DRAWINGS SHALL CONSIST OF BOTH "CUT" AND PLACING SHEETS. PLACING SHEETS SHALL CONTAIN ALL INFORMATION NECESSARY TO POSITION ALL REINFORCING STEEL IN THE FIELD WITHOUT HAVING TO REFER TO THE STRUCTURAL DRAWINGS. SHOP DRAWINGS SHALL NOT CONTAIN ANY REPRODUCTIONS OF THE STRUCTURAL DRAWINGS.
- ALL FIELD BENDING OF REINFORCING BARS SHALL BE MADE COLD FOR #8 BARS AND SMALLER. #8, #10 AND #11 BARS UPON APPROVAL MAY BE PREHEATED UNIFORMLY TO 1400-1600 DEGREES FAHRENHEIT AND CAREFULLY BENT OR STRAIGHTENED PER CRSI RECOMMENDATIONS.
- ALL REINFORCING BAR, ANCHOR BOLTS, AND OTHER CONCRETE INSERTS SHALL BE WELL SECURED IN POSITION PRIOR TO PLACING CONCRETE.
- PROJECTING CORNERS OF BEAMS, COLUMNS, ETC. SHALL BE FORMED WITH 3/4" CHAMFER UNLESS DETAILED OTHERWISE.

8. CONCRETE MASONRY UNITS (CMU)

- HOLLOW CONCRETE BLOCK (MASONRY) UNITS SHALL CONFORM TO ASTM C90 SPECIFICATIONS. NORMAL WEIGHT, TYPE 1, GRADE N.
- COMPOSITION, QUALITY, STORAGE, HANDLING, PREPARATION AND PLACEMENT OF MATERIALS, QUALITY ASSURANCE FOR MATERIALS AND MASONRY, AND CONSTRUCTION OF MASONRY SHALL COMPLY WITH ACI 530.1/ASCE 6/TMS 602. A QUALITY ASSURANCE PROGRAM SHALL BE USED TO ENSURE THAT THE CONSTRUCTED MASONRY IS IN CONFORMANCE WITH THE CONTRACT DOCUMENTS.
- SPECIFIED COMPRESSIVE STRENGTH OF MASONRY:
 - 8" NOMINAL DEPTH UNITS, f'm, SHALL BE A MINIMUM OF 1,500 PSI.
 - 12" NOMINAL DEPTH UNITS, f'm, SHALL BE A MINIMUM OF 1,500 PSI.
- MINIMUM NET AREA COMPRESSIVE STRENGTH OF CONCRETE MASONRY UNITS:
 - 8" NOMINAL DEPTH UNITS SHALL BE 1,900 PSI.
 - 12" NOMINAL DEPTH UNITS SHALL BE 1,900 PSI.
- ALL MORTAR FOR USED IN MASONRY SHALL CONFORM TO ASTM C270, TYPE M OR S. ALL GROUT FILL FOR USE IN MASONRY SHALL CONFORM TO ASTM C476, WITH MINIMUM COMPRESSIVE STRENGTH 3000 PSI.
- ALL REINFORCEMENT FOR USE IN MASONRY CONSTRUCTION SHALL CONFORM TO ASTM A615, GRADE 60.
- ALL DEFORMED WIRE HORIZONTAL REINFORCEMENT IN CMU WALLS SHALL CONFORM TO ASTM A497.
- ALL PLAIN WIRE HORIZONTAL REINFORCEMENT IN CMU WALLS SHALL CONFORM TO ASTM A82 OR ASTM A185.
- MASONRY IS BE TO LAID IN ACCORDANCE WITH LATEST ADOPTED EDITION OF THE STANDARD BUILDING CODE SECTION 2104.7 AND TABLES 2104.7A AND 2104.7B, OR APPLICABLE LOCAL GOVERNING CODES. TYPE "N" MASONRY CEMENT MORTAR IS NOT ACCEPTABLE.
- VERTICAL AND HORIZONTAL REINFORCEMENT IS TO BE CONTINUOUS AND LAPPED A MINIMUM OF 48 BAR DIAMETERS.
- MASONRY WALLS SHALL BE ADEQUATELY BRACED DURING CONSTRUCTION TO WITHSTAND WIND LOADS. BRACING SHALL REMAIN IN PLACE UNTIL ROOF FRAMING IS COMPLETELY INSTALLED AND CAPABLE OF PROVIDING LATERAL SUPPORT.
- ALL MASONRY C.M.U. WALLS SHALL BE LAID IN RUNNING BOND IN ACCORDANCE WITH ACI 530-95.
- VERTICAL REINFORCEMENT FOR C.M.U. WALLS TO BE PLACED IN CENTER OF WALL, UNLESS INDICATED OTHERWISE ON THE DRAWINGS. PROVIDE ALL ACCESSORIES AS REQUIRED TO SUPPORT BARS AT LOCATIONS INDICATED.

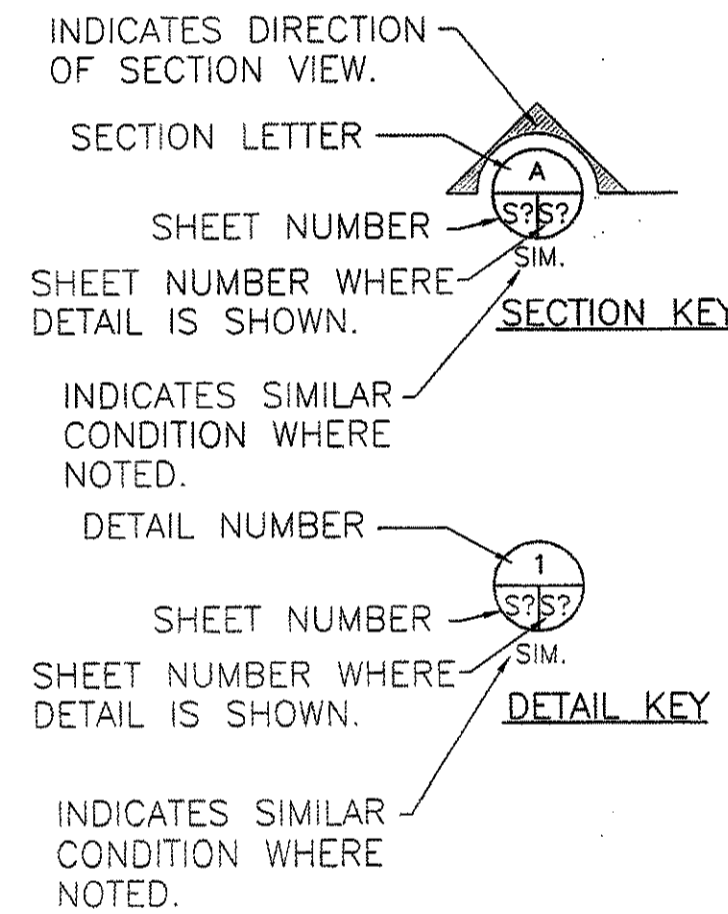
9. MANUFACTURED/PRE-ENGINEERED METAL BUILDING:

- MINIMUM DESIGN LOADS FOR METAL BUILDING STRUCTURE AND COMPONENTS:
 - GRAVITY LOADS SHALL BE AS INDICATED IN NOTE 1.B. ABOVE, WITH ADDED DEAD LOAD OF METAL BUILDING STRUCTURAL COMPONENTS.
 - WIND DESIGN LOADS SHALL BE CALCULATED IN ACCORDANCE WITH THE 2006 INTERNATIONAL BUILDING CODE SECTION 1609 USING THE CRITERIA FROM NOTE 2.C. ABOVE.
 - ADDITIONAL LOADS FROM INSULATION, MECHANICAL ROOF TOP SUPPORTED UNITS, EQUIPMENT SUSPENDED FROM THE METAL BUILDING STRUCTURE AND OTHER APPURTENANCES AS SHOWN ON THE ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS ARE TO BE INCLUDED IN THE METAL BUILDING DESIGN WHERE APPLICABLE.
- ALL METAL BUILDING PURLINS, GIRTS, FRAME, COMPONENTS AND CONNECTIONS, INCLUDING ANCHOR BOLT DESIGN AND EMBEDMENT FOR METAL BUILDING COLUMNS, SHALL BE DESIGNED BY A QUALIFIED PROFESSIONAL ENGINEER CURRENTLY REGISTERED IN THE STATE OF MISSISSIPPI.
- ALL DEFLECTIONS SHALL BE IN ACCORDANCE WITH SECTION 1604.3.1 OF THE 2006 INTERNATIONAL BUILDING CODE.
- THE GENERAL CONTRACTOR SHALL SUBMIT A MINIMUM OF FIVE (5) COPIES OF SHOP DRAWINGS AND CALCULATIONS SIGNED AND SEALED BY THE RESPONSIBLE DESIGN ENGINEER TO THE ARCHITECT FOR REVIEW PRIOR TO FABRICATION. THE SHOP DRAWINGS AND CALCULATIONS SHALL CLEARLY INDICATE THE DESIGN AND LOCATIONS OF ALL METAL BUILDING COMPONENTS AND CONNECTIONS AND SHALL ALSO INCLUDE ALL REACTIONS FROM THE METAL BUILDING TO THE FOUNDATION. FABRICATION OF THE METAL BUILDING COMPONENTS SHALL NOT BE STARTED UNTIL THE GENERAL CONTRACTOR RECEIVES REVIEWED SHOP DRAWINGS AND CALCULATIONS BACK FROM THE ARCHITECT.

10. FOUNDATIONS

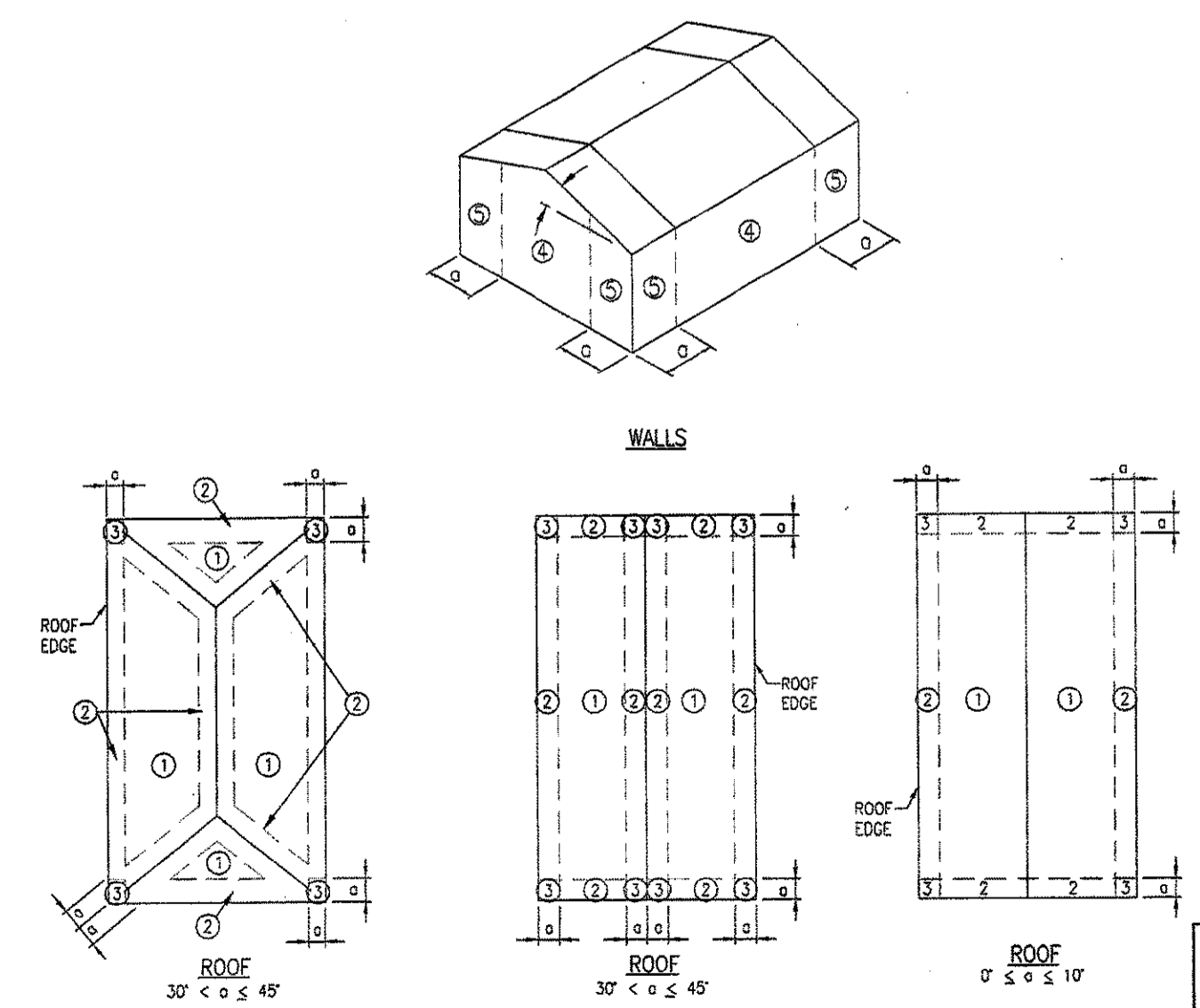
- FOUNDATIONS SHALL BE IN COMPLIANCE WITH THE RECOMMENDATIONS OF CORE ENGINEERING, INC. PROJECT NO. 7332, DATED FEBRUARY 21, 2000. RELATED RECOMMENDATIONS IN THIS REPORT SHALL BE FOLLOWED.
- THE REGISTERED GEOTECHNICAL ENGINEER OF RECORD SHALL BE RETAINED DURING CONSTRUCTION TO INSPECT FOUNDATION EXCAVATION, INSPECT AND MONITOR PLACEMENT OF COMPACTED FILL, AND TO MONITOR PROOF ROLLING OPERATIONS, AS REQUIRED.
- ALLOWABLE SOIL BEARING PRESSURE USED IN FOUNDATION DESIGN = 2000 PSF.

STRUCTURAL LEGEND



COMPONENTS AND CLADDING - EXTERNAL WIND PRESSURES

ZONES	COMPONENTS AND CLADDING - EXTERNAL WIND PRESSURES FLAT ROOF			
	10 SF	20 SF	50 SF	100 SF
1	23.3	-37.2	21.6	-33.6
2	23.3	-42.4	19.1	-32.4
3	23.3	-62.2	21.6	-84.4
4	40.4	-43.9	37.0	-42.1
5	40.4	-54.1	37.0	-47.3



NOTE: VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF WORK.

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MULTI-PURPOSE BUILDING FOR
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ZITO • RUSSELL
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REVISIONS

STATE OF LOUISIANA
WILLIAM T. SEAR
REGISTERED PROFESSIONAL ENGINEER
IN CIVIL ENGINEERING
6-28-10

June 24, 2010

FILE H10561
DATE 06/24/10
SHEET

S0.0