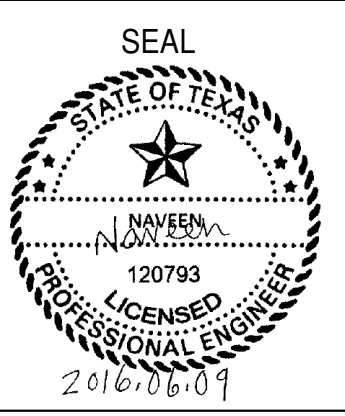


RADHA KRISHNA TEMPLE
Owner
ALLEN TEXAS

JOB NUMBER
16DLS003
ISSUE DATE
04-22-2016
DRAWN BY
SDB
DESIGNED BY
NAV

REVISIONS



SHEET NUMBER
S0.1A

STRUCTURAL GENERAL NOTES AND ABBREVIATIONS

ABBREVIATIONS (FOR STRUCTURAL DRAWINGS ONLY)			
AR	- ANCHOR ROD	FOM	- FACE OF MASONRY
ALT	- ALTERNATE	FS	- FAR SIDE
APPROX	- APPROXIMATELY	FT	- FOOT
ARCH	- ARCHITECT	FTG	- FOOTING
ARCHL	- ARCHITECTURAL	GA	- GAGE
B/	- BOTTOM OF	GALV	- GALVANIZED
BC	- BOTTOM CHORD	GC	- GENERAL CONTRACTOR
BLDG	- BUILDING	GT	- GIRDER TRUSS
BM	- BEAM	HC	- HOLLOW CORE
BOTT	- BOTTOM	HCP	- HOLLOW CORE PLANK
BRG	- BEARING	HDG	- HOT DIPPED GALVANIZED
C/C	- CENTER TO CENTER	HG	- HIP GIRDER
CIP	- CAST IN PLACE	HK	- HOOK
CJ	- CONTRACTION JOINT	HORIZ	- HORIZONTAL
CL	- CENTERLINE	HP	- HIGH POINT
CLR	- CLEAR	HS	- HIGH STRENGTH
CMU	- CONCRETE MASONRY UNIT	IJ	- ISOLATION JOINT
COL	- COLUMN	INFO	- INFORMATION
CONC	- CONCRETE	INS	- INSULATION
CONFIG	- CONFIGURATION	INT	- INTERIOR
CONT	- CONTINUOUS	IRR	- IRREGULAR
CONTR	- CONTRACTOR	JR	- JAMB REINFORCING
CTR	- CENTER	JT	- JOINT
DBL	- DOUBLE	K	- KIP(S)
DET	- DETAIL	KIP(S)	- 1000 POUNDS
DIA	- DIAMETER	KLF	- KIPS PER LINEAR FOOT
DIM	- DIMENSION	KJ	- CONSTRUCTION JOINT
DN	- DOWN	L	- ANGLE
DR	- DOOR/DRAIN	LG	- LONG
DWG	- DRAWING	LLH	- LONG LEG HORIZONTAL
EA	- EACH	LLV	- LONG LEG VERTICAL
EE	- EACH END	LP	- LOW POINT
EF	- EACH FACE	LW	- LONG WAY
EJ	- EXPANSION JOINT	MFR	- MANUFACTURER
EL	- ELEVATION	MAS	- MASONRY
ELEV	- ELEVATION/ELEVATOR	MO	- MASONRY OPENING
ENGR	- ENGINEER	MATL	- MATERIAL
EOBP	- EDGE OF BENT PLATE	MAX	- MAXIMUM
EOR	- ENGINEER OF RECORD	MECHL	- MECHANICAL
EOS	- EDGE OF SLAB	MTL	- METAL
EQ	- EQUAL	MIN	- MINIMUM
EW	- EACH WAY	MISC	- MISCELLANEOUS
EXIST	- EXISTING	NS	- NEAR SIDE
EXP	- EXPANSION	NIC	- NOT IN CONTRACT
EXT	- EXTERIOR	NTS	- NOT TO SCALE
FIN	- FINISH	OC	- ON CENTER
FLR	- FLOOR	OH	- OPPOSITE HAND
FND	- FOUNDATION		
		OPNG	- OPENING
		PAF	- POWDER ACTUATED FASTENERS
		PART	- PARTITION
		PARTL	- PARTIAL
		PCJ	- PRECAST CONCRETE JOIST
		PED	- PEDESTAL
		PL	- PLATE
		PLF	- POUNDS PER LINEAR FOOT
		PSF	- POUNDS PER SQUARE FOOT
		PSI	- POUNDS PER SQUARE INCH
		PT	- POST TENSIONED/PRESSURE TREATED
		R	- RISER/RADIUS
		REG	- REGULAR
		REINF	- REINFORCING
		REM	- REMAINDER
		REDD	- REQUIRED
		REV	- REVISED/REVISION
		RM	- ROOM
		RO	- ROUGH OPENING
		ROMTS	- REQUIREMENTS
		SCHED	- SCHEDULE
		SECT	- SECTION
		SM	- SIMILAR
		SL	- SLOPE
		SOG	- SLAB-ON-GRADE
		SP	- SPIRAL
		SPECS	- SPECIFICATIONS
		SQ	- SQUARE
		SS	- STAINLESS STEEL
		STD	- STANDARD
		STL	- STEEL
		STRUCTL	- STRUCTURAL
		SW	- SHEARWALL/SHORT WAY
		TJ	- TOP OF
		TB	- TIE BEAM
		TC	- TIE COLUMN/TOP CHORD
		TEMP	- TEMPERATURE
		TJ	- TIE JOIST
		T/O	- THRU OUT
		TR	- TREAD/TRUSS
		TYP	- TYPICAL
		UNO	- UNLESS NOTED OTHERWISE
		VERT	- VERTICAL
		W	- WITH
		WO	- WITHOUT
		WD	- WOOD
		WP	- WORK POINT
		WWR	- WELDED WIRE REINFORCEMENT

HATCH LEGEND			
PLAN		SECTION	
ENGINEERED FILL OR UNDISTURBED SOIL		ENGINEERED FILL OR UNDISTURBED SOIL	
ROCK		ROCK	
CONCRETE		CONCRETE	
RECESS		RECESS	
AGGREGATE FILL		AGGREGATE FILL	
STEEL		STEEL	
EXISTING		EXISTING	
BLOCK		BLOCK	
BRICK		BRICK	

SYMBOL LEGEND	
	FOOTING MARK
	COLUMN MARK
	GRADE BEAM MARK
	PILE CAP MARK
	CONCRETE BEAM MARK
	MOMENT CONNECTION (SEE SECTION)
	2-#6 VERTICAL REINFORCING
	MOMENT SPLICE
	REVISIONS
	JOIST BOTTOM CHORD EXTENSION
	SLOPE
	SLIP CONNECTION

GENERAL DESIGN AND CODE INFORMATION:

EXTERIOR LIGHT-GAUGE METAL FRAMING:

- A. STRUCTURAL PROPERTIES OF STUDS SHALL BE COMPUTED IN ACCORDANCE WITH AISI "SPECIFICATION FOR DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS".
 - 1. MAXIMUM ALLOWABLE HEIGHTS BASED ON CONTINUOUS SUPPORT OF EACH FLANGE OVER THE FULL LENGTH OF THE STUD.
 - 2. YIELD STRESS OF STEEL 33KSI.
 - 3. (T) - SPACE STUDS AT 12" MAX. WITHIN 15'-0" OF BUILDING CORNERS.
- B. VERTICAL STUDS SUPPORTING FRAMING MEMBERS SHALL BE 100% END BEARING.
- C. PROVIDE COLD-ROLLED BRACING FOR ALL VERTICAL LOAD BEARING STUDS AT 48" ON CENTER MAXIMUM. PROVIDE SIMPSON STRONG-TIE TYPE TB BRIDGING AT 8'-0" ON CENTER MAXIMUM FOR ALL JOIST FLOOR FRAMING.
- D. VERTICAL STUDS INTERRUPTED BY WALL OPENINGS SHALL BE LOCATED EQUALLY ON EACH SIDE OF THE OPENING. WELD STUD FLANGES TOGETHER WITH FILLET WELDS AT 6".
- E. PROVIDE SHOP DRAWINGS SHOWING PLANS, ELEVATIONS, AND CONNECTION DETAILS FOR ALL LIGHT-GAUGE FRAMING.

TILT-UP WALL PANELS

- A. ALL REINFORCED CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS AND A MINIMUM OF 3000 PSI PRIOR TO LIFTING OF PANELS
- B. A SUITABLE "BOND BREAKER" OR SAND LAYER SHALL BE APPLIED TO ALL CASTING SURFACES FOR PRECAST PANELS IF REQUIRED. A FOUR INCH SLUMP CONCRETE IS SUITABLE FOR THIS CONSTRUCTION, AND SITE ADDED WATER IS NOT RECOMMENDED.
- C. THE USE OF "FLY-ASH" OR OTHER SIMILAR ADMIXTURES IS NOT PERMISSIBLE IN PANELS.
- D. LIFTING HARDWARE SHALL BE PLACED ACCORDING TO THE INSERT SUPPLIER'S RECOMMENDATIONS. WIND BRACING FOR PANELS ARE TO PROVIDE A WIND RESISTANCE FOR A TWO-WAY WIND LOAD OF 15 P.S.F.
- E. ALL MISCELLANEOUS EMBEDDED STEEL SHALL BE ASTM A36
- F. ALL HEADED STUDS AND DEFORMED BAR ANCHORS SHALL BE MANUFACTURED TO MEET OR EXCEED THE PERFORMANCE SPECIFICATIONS FOR NELSON HEADED STUDS. WELDS SHALL BE FULL AMPERE ARC WELDS AS RECOMMENDED BY THE MANUFACTURER TO MEET OR EXCEED THE FULL TENSILE CAPACITY OF THE STUD SHANK.
- G. ALL BARS UTILIZED FOR EMBED CONNECTIONS SHALL CONFORM TO THE ENCLOSED DETAILS AND MEET REQUIREMENTS OF THE SPECIFICATIONS OF THE CONSTRUCTION DOCUMENTS.
- H. PANELS ARE TO BE PER THICKNESS SPECIFIED ON THE PANEL SHOP DRAWINGS AND TO BE CONSTRUCTED ACCORDING TO THE REFERENCED SECTION AND/OR ELEVATIONS ENCLOSED. ALL PANELS ARE TO BE COORDINATED WITH THE ARCHITECTURAL ELEVATIONS AND SECTIONS OF CONSTRUCTION DOCUMENTS.
- I. WIND BRACING SHALL IMMEDIATELY FOLLOW ERECTION. BRACING SHALL BE PROVIDED AS RECOMMENDED BY INSERT SUPPLIER. PROVIDE PANELS WITH "KNEE BRACING" IF REQUIRED BY THE BRACE SUPPLIER.
- J. COORDINATE WITH ARCHITECTURAL PLANS FOR ALL EMBEDDED ITEMS SUCH AS CAST-IN-PLACE DOOR AND WINDOW FRAMES, DOOR BUMPERS, SCUPPERS, AND DOWNSPOUTS. ALSO, COORDINATE ALL FINISHES SUCH AS REVEALS WITH ARCHITECTURAL PLANS.
- K. ALL PANELS SHALL BE ANCHORED TO PIERS AS DETAILED ON THE CONSTRUCTION DOCUMENTS.
- L. PROVIDE 3/4" CHAMFER AT EXTERIOR AND INTERIOR PANEL JOINTS.
- M. PROPER CURING OF ALL EXPOSED SURFACES WITH CHEMICAL COMPOUNDS OR WATER IS RECOMMENDED TO PREVENT SHRINKAGE CRACKS FROM OCCURRING.
- N. ALL ROOF STEEL SHALL BE ERECTED AND ALL CONNECTIONS BETWEEN STEEL AND WALL PANELS SHALL BE ACCOMPLISHED PRIOR TO REMOVAL OF WIND BRACING.
- O. TILT-UP WALL PANELS HAVE BEEN DESIGNED TO WITHSTAND GRAVITY LOADS AND WIND LOADS AS INDICATED IN THE DWGS. HOWEVER, NO ALLOWANCE HAS BEEN MADE FOR HANDLING AND LIFTING STRESSES. ERECTION CONTRACTOR SHALL SUBMIT SHOP DRAWINGS SIGNED AND SEALED BY AN ENGINEER REGISTERED IN THE STATE OF TEXAS INDICATING LIFTING DEVICES, LOCATIONS AND ADDITIONAL REINFORCING REQUIRED FOR REVIEW.
- P. SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW SHOWING PANEL LAYOUT WITH REINFORCEMENT, EMBEDS, OPENINGS, DIMENSIONS, JOINTS, ETC., AS REQUIRED TO PROPERLY CONSTRUCT THE WALL PANELS. SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY AN ENGINEER REGISTERED IN THE STATE OF TEXAS.
- Q. TILT-UP WALL PANELS SHALL BE OF THE CONFIGURATION SHOWN ON DRAININGS AND SHALL HAVE A MINIMUM OF THE REINFORCEMENT SHOWN. CONTRACTOR SHALL COORDINATE THE LOCATIONS OF JOIST SEATS, BRIDGING CONNECTIONS, DECK ANGLE CONNECTIONS, ETC., WITH THE APPROVED STEEL JOIST SHOP DRAWINGS AND WITH THE STRUCTURAL DRAWINGS.
- R. TILT UP BUILDING WALLS ARE INTENDED TO BE CAST DIRECTLY ON FLOOR SLAB ON-GRADE OR ON CONSTRUCTED-WASTE SLABS AND ERECTED BY "TILT-UP" PANEL METHOD. SEE CONCRETE AND REINFORCING STEEL NOTES FOR MATERIALS.
- S. PARTING MEDIUM TO BE APPROVED BY THE ARCHITECT AND FINISH MATERIAL APPLICATOR AND IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- T. CONTRACTOR SHALL SUBMIT DETAILED SHOP DRAWINGS OF TILT-UP PANELS TO ARCHITECT FOR REVIEW PRIOR TO CONSTRUCTION, SIGNED BY A LICENSED STRUCTURAL ENGINEER. DETAILS SHALL INDICATE PICK-UP POINTS AND ANY STRONGBACKS OR ADDITIONAL REINFORCING REQUIRED TO ERECT THE PANELS SAFELY AND WITHOUT CRACKING.
- U. PANELS SHALL BE SAFELY SHORED DURING CONSTRUCTION OF THE BUILDING.
- V. ALL BAR SUPPORT CHAIRS SHALL BE PLASTIC.
- W. SPLICES ARE NOT PERMITTED IN THE HORIZONTAL AND VERTICAL REINFORCING STEEL WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER.

STRUCTURAL PRECAST CONCRETE:

- A. ALL PRECAST CONCRETE WORK SHALL CONFORM TO THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318, LATEST EDITION).
- B. REINFORCING STEEL SHALL BE DEFORMED BARS ASTM A615 (GRADE 60). PRESTRESSING STEEL SHALL BE ASTM A416 (GRADE 270) STRESS RELIEVED OR LOW RELAXATION.
- C. MINIMUM COMPRESSIVE STRENGTH OF PRECAST CONCRETE SHALL BE 5000 PSI AT 28 DAYS AND 3500 PSI AT STRIPPING.
- D. CONTRACTOR SHALL DESIGN WALL PANELS AND LIFTING INSERTS FOR ERECTING AND HANDLING STRESSES.
- E. TENSILE STRESSES DURING ERECTION SHALL BE LIMITED TO .80 TIMES THE MODULUS OF RUPTURE OF THE CONCRETE.
- F. CHAMFER EXPOSED CORNERS OF WALL PANELS 3/4".
- G. SEE ARCHITECTURAL DRAWINGS FOR LOCATION AND TYPE OF SPECIAL CONCRETE FINISHES.
- H. ALL EMBEDS REQUIRED BY PRECAST ENGINEER SHALL BE GALVANIZED. EMBEDS SHOWN ON DRAWINGS FOR PRECAST ARE SCHEMATIC IN NATURE ONLY. EXACT NUMBER, EXTENT, AND LOCATIONS ARE TO BE SET BY THE PRECAST ENGINEER.
- I. SUBMIT STAMPED SHOP DRAWINGS AND CALCULATIONS FOR ALL PRECAST MEMBERS AND THEIR CONNECTIONS TO STRUCTURE FOR REVIEW. DRAWINGS AND CALCULATIONS SHALL BEAR THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF TEXAS.
- J. ANY CONNECTIONS SHOWN ON CONTRACT DRAWINGS ARE SHOWN FOR GENERAL ARRANGEMENT ONLY. THE CONTRACTOR SHALL COORDINATE ALL PRECAST CONNECTIONS AND EMBEDDED ITEMS WITH THE PRECAST MANUFACTURER. ALL PRECAST CONNECTIONS TO NON-PRECAST STRUCTURAL ELEMENTS SHALL BE CO-ORDINATED WITH THE PRECAST MANUFACTURER BEFORE THE STRUCTURAL ELEMENT IS ERECTED OR POURED.
- K. THE ERECTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL TEMPORARY BRACING UNTIL ALL CONNECTIONS HAVE BEEN MADE AND TOPPING HAS BEEN CAST.
- L. PRECAST MANUFACTURER SHALL PROVIDE STABILIZING ANGLES, AS REQUIRED IN ALL PRECAST WORK.
- M. ALL EXPOSED STEEL CONNECTIONS AND SUPPORT ANGLES, PLATES, BARS, AND BOLTS IN CONJUNCTION WITH ALL PRECAST CONCRETE SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION AND FIELD TOUCHED UP WITH ZINC RICH PAINT.
- N. ADJUSTMENT AND POSSIBLY RESETTING OF PRECAST MAY BE REQUIRED TO ALIGN PRECAST DUE TO SUPPORT DEFLECTION AND/OR ROTATION.
- O. SUPPORTING BEAMS AND STRUCTURE WILL DEFLECT AND/OR ROTATE. PRECAST MANUFACTURER AND ERECTOR SHALL COORDINATE CONNECTION/ERECTION SEQUENCE TO ACCOUNT FOR THIS MOVEMENT AND MAKE FINAL ADJUSTMENTS TO ALIGN AND PLUMB PRECAST. THIS MAY REQUIRE ADJUSTING CONNECTIONS OR RECONNECTING.