SUPERIMPOSED DESIGN LOAD SCHEDULE
(ALL LOADS SHOWN ARE IN POUNDS PER SQ. FT.)

COMPONENT \ AREA	1ST FLOOR	ROOF
FLOOR/ROOF FINISHES	2	2
M/E/P	-	11
CEILING	-	3
INSULATION	-	3
TOTAL DEAD LOAD	2	19
TOTAL LIVE LOAD	100	20

NOTES:
1. LOADS INDICATED WITHIN SCHEDULE INCLUDE SUPERIMPOSED DEAD & LIVE LOADS. (DOES NOT INCLUDE SELF-WEIGHT OF FLOOR STRUCTURE).
2. SELF-WEIGHT OF STRUCTURE ACCOUNTS FOR ALL COMPONENTS ASSOCIATED WITH FLOOR STRUCTURE INCLUDING BUT NOT LIMITED TO SLABS, SUB-FLOOR, METAL DECK, JOISTS, & BEAMS.
3. ALL LIVE LOADS LESS THAN 80psf INCLUDE 15psf FOR PARTITION LOADS.

LATERAL LOAD DESIGN SCHEDULE ASCE 7-16

WIND LOAD			
ITEM	SYMBOL	VALUE	REFERENCE
BASIC WIND SPEED	V	153	SECTION 26.5.1
WIND EXPOSURE	-	D	SECTION 26.7.3

SEISMIC LOAD			
ITEM	SYMBOL	VALUE	REFERENCE
SEISMIC RISK CATEGORY	-	III	TABLE 11.5-1
SEISMIC IMPORTANCE FACTOR	I	1.25	SECTION 11.5-2
SEISMIC SITE CLASS	-	D	SECTION 11.4.2
SPECTRAL RESPONSE ACCELERATION	S_1	0.027g	SECTION 11.4.3
MAPPED SPECTRAL ACCELERATION	S_s	0.052g	SECTION 11.4.3
SEISMIC DESIGN CATEGORY	-	A	SECTION 11.6
BASIC SEISMIC-FORCE RESISTANCE SYSTEM	-	INTERMEDIATE REINFORCED MASONRY SHEAR WALLS	TABLE 12.2-1
RESPONSE MODIFICATION COEFFICIENT	R	3 1/2	TABLE 12.2-1
DEFLECTION AMPLIFICATION FACTOR	C_d	2 1/4	TABLE 12.2-1
SEISMIC BASE SHEAR ANAYL. PROC.	V=CsW	EQUIVALENT LATERAL FORCE METHOD	SECTION 12.8

SNOW LOAD CRITERIA:
Is: IMPORTANCE FACTOR.....1.0
CE: EXPOSURE FACTOR.....1.0
CT: THERMAL FACTOR.....1.0
PG: GROUND SNOW LOAD.....0 PSF
PF: FLAT ROOF SNOW LOAD.....0 PSF
Cs: ROOF SLOPE FACTOR.....1.0
Ps: SLOPED ROOF SNOW LOAD.....0 PSF

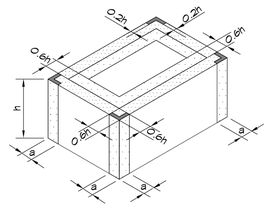
ROOF STRUCTURE DESIGNED FOR THE GREATER OF SNOW LOAD OR LIVE LOAD INDICATED ON DESIGN LOAD SCHEDULE.

SPREAD FOOTING FOUNDATIONS & SUB-GRADE

1. FOUNDATIONS HAVE BEEN DESIGNED AND FOOTING ELEVATIONS ESTABLISHED ON THE BASIS OF A SUBSURFACE INVESTIGATION REPORT AND RECOMMENDATIONS PREPARED BY ATLAS TECHNICAL CONSULTANTS, LLC DATED OCTOBER 11, 2021. SEE THE REPORT FOR ADDITIONAL REQUIREMENTS. THE REQUIREMENTS CONTAINED IN THE GEOTECHNICAL REPORT ARE PART OF THE CONSTRUCTION DOCUMENTS.
2. THE FOUNDATION FOR THE STRUCTURE HAS BEEN DESIGNED FOR THE FOLLOWING ALLOWABLE SOIL BEARING PRESSURES AT A BEARING DEPTH OF APPROXIMATELY 18" BELOW FINISHED FLOOR.

   TOTAL LOAD.....2,500 PSF (NET)
3. THE FOOTING LEVEL SHALL BE TESTED USING DROP-BAR PERCUSSION TEST OR PENETROMETER TO A DEPTH OF 3 OR 4 FEET BELOW BEARING LEVELS TO INSURE ADEQUATE BEARING MATERIALS COMPLY WITH BORING LOGS AND DESIGN CRITERIA.
4. THE BOTTOM OF EXTERIOR FOOTINGS SHALL BE A MINIMUM OF ONE AND HALF (1.5) FEET BELOW FINISHED GRADE, OR AS REQUIRED BY LOCAL BUILDING CODES.
5. EXCAVATION SHALL BE PERFORMED SO AS NOT TO DISTURB EXISTING ADJACENT BUILDINGS, STREETS, AND UTILITY LINES. VERIFY LOCATION OF ALL UTILITIES PRIOR TO COMMENCEMENT OF WORK. HAND EXCAVATE AROUND UTILITIES AS REQUIRED.
6. REMOVE EXISTING VEGETATION, TOPSOIL, AND UNSATISFACTORY SOILS MATERIALS. PROOF ROLL SUBGRADE TO OBTAIN UNIFORMLY DENSIFIED SUBSTRATA PRIOR TO PLACING FILL MATERIAL EVENLY IN 8" THICK (MAXIMUM) LAYERS AND COMPACTING TO REQUIRED DENSITY.
7. SEE THE GEOTECHNICAL REPORT FOR EXCAVATION, BACKFILL AND PREPARATION OF THE FOUNDATION AND SLAB-ON-GRADE SUBGRADE INCLUDING COMPACTION REQUIREMENTS. IF GEOTECHNICAL REPORT IS NOT AVAILABLE, GEOTECHNICAL ENGINEER SHALL BE CONTRACTED WITH TO PROVIDE SPECIFICATIONS.
8. THE OWNER SHALL RETAIN THE SERVICES OF A PROFESSIONAL GEOTECHNICAL ENGINEER, SUBJECT TO THE APPROVAL OF THE ARCHITECT/ENGINEER, TO PERFORM SOIL TESTING AND INSPECTION. THE GEOTECHNICAL ENGINEER SHALL INSPECT THE SUBGRADE TO VERIFY BEARING LEVELS AND ENSURE THAT THE SAFE BEARING CAPACITY MEETS OR EXCEEDS THE DESIGN VALUE INDICATED ON CONTRACT DOCUMENTS. FIELD REPORTS SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER OUTLINING THE WORK PERFORMED AND TEST RESULTS.
9. THE INSPECTION AND TESTING OF ALL SUBGRADE AND COMPACTED EARTHWORK SHALL BE CONDUCTED UNDER THE SUPERVISION OF A QUALIFIED GEOTECHNICAL CONSULTANT. THE CONTRACTOR SHALL NOTIFY THE GEOTECHNICAL ENGINEER 24 HOURS PRIOR TO PLACEMENT OF CONCRETE IN THE FOOTINGS. IF UNSUITABLE SUBGRADE SOILS ARE ENCOUNTERED, THE CONTRACTOR SHALL SUBMIT RECOMMENDATIONS PREPARED BY A GEOTECHNICAL CONSULTANT TO THE STRUCTURAL ENGINEER FOR APPROVAL.
10. THE SUBGRADE AND EACH LAYER OF FILL OR BACKFILL SHALL BE COMPACTED TO A DRY DENSITY AT LEAST EQUAL TO 95% OF THE MAXIMUM DRY DENSITY ATTAINED BY THE MODIFIED PROCTOR TEST ASTM D1557.
11. IF CONDITIONS PROVE TO BE UNACCEPTABLE AT THE BEARING ELEVATIONS SHOWN, THE FOOTING BEARING ELEVATIONS MAY NEED TO BE LOWERED BASED ON THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER. FINAL BEARING ELEVATIONS AND BACKFILL RECOMMENDATIONS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO FIELD MODIFICATION. CONCRETE FOR FOUNDATIONS SHALL BE POURED ON THE SAME DAY THE SUBGRADE IS APPROVED BY THE GEOTECHNICAL ENGINEER.
12. CONCRETE FOUNDATIONS SHALL NOT BE PLACED IN WATER OR ON FROZEN EARTH.
13. UTILITY LINES SHALL NOT BE PLACED THROUGH OR BELOW FOUNDATIONS WITHOUT THE STRUCTURAL ENGINEER'S APPROVAL.
14. SLAB-ON-GRADE HAS BEEN DESIGNED USING A SUBGRADE MODULUS OF K=100 PCI AND DESIGN LOADING OF 100 PSF. THE GEOTECHNICAL ENGINEER SHALL ENSURE SUB-GRADE IS PREPARED TO MINIMUM SPECIFICATION, OTHERWISE THE DESIGNER IS NOT RESPONSIBLE FOR DIFFERENTIAL SETTLEMENT, SLAB CRACKING OR OTHER FUTURE DEFECTS RESULTING FROM UNREPORTEDCONDITIONS MITIGATING THE ABOVE ASSUMPTIONS.
15. SLAB-ON-GRADE SHALL BE UNDERLAIN BY A MINIMUM OF SIX INCHES OF STABLE GRANULAR MATERIAL AND 10 MIL VAPOR BARRIER.
16. THE CONTRACTOR SHALL OBSERVE WATER CONDITIONS AT THE SITE AND TAKE THE NECESSARY PRECAUTIONS TO ENSURE THAT THE FOUNDATION EXCAVATIONS REMAIN DRY DURING CONSTRUCTION.
17. DEWATERING OF THE SITE DURING CONSTRUCTION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. ANY SHEETING OR SHORING REQUIRED FOR DEWATERING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. PRECAUTIONS SHALL BE TAKEN BY THE CONTRACTOR NOT TO UNDERMINE EXISTING FOUNDATIONS. METHOD OF DEWATERING AND CALCULATIONS FOR THE APPROPRIATE SYSTEM ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
18. PROVIDE A CONTINUOUS WATERSTOP AT ALL HORIZONTAL AND VERTICAL CONSTRUCTION JOINTS IN THE ELEVATOR PIT AND ALL OTHER PIT WALLS. REFERENCE CONCRETE NOTES FOR WATERSTOP SPECIFICATIONS.
19. BACKFILL SHALL BE BROUGHT UP SIMULTANEOUSLY ON EACH SIDE OF WALLS AND GRADE BEAMS WITH A GRADE DIFFERENCE NOT TO EXCEED 2'-0" AT ANY TIME.
20. BACK-FILLING AGAINST FOUNDATION WALLS WHICH RETAIN EARTH SHALL BE DONE CAREFULLY WITH SMALL COMPACTION EQUIPMENT, AFTER CONCRETE SLAB AND ELEVATED FLOOR SLAB ARE IN PLACE AND CONCRETE HAS OBTAINED THE SPECIFIED 28-DAY COMPRESSIVE STRENGTH. TRUCKS BULLDOZERS, ETC., SHALL NOT BE ALLOWED CLOSER THAN 6'-0" TO ANY FOUNDATION WALL. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY SHORING WHERE REQUIRED.
21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE NEED TO USE FOUNDATION REBAR AS A GROUNDING ELECTRODE SYSTEM AND SHALL BE RESPONSIBLE FOR INSTALLING THE BONDING CLAMP PRIOR TO PLACEMENT OF THE CONCRETE AS PER NJUCC BULLETIN NO. 02-2.

COMPONENTS AND CLADDING WIND LOADS
(155 MPH)



ROOFS-ZONE 1' WALLS-ZONE 4 | ROOFS-ZONE 1 WALLS-ZONE 5 | ROOFS-ZONE 2 | ROOFS-ZONE 3

WIND LOADS ON COMPONENTS AND CLADDING

EFFECTIVE WIND AREA (SQ.FT)	WALLS			ROOF			
	DESIGN WIND PRESSURE	SUCTION		DESIGN WIND PRESSURE	SUCTION		
		ZONE 4	ZONE 5		ZONE 1'	ZONE 1	ZONE 2	ZONE 3
≤ 10	+70.3 PSF	-76.2 PSF	-93.7 PSF	+31.2 PSF	-70.3 PSF	-122.4 PSF	-161.4 PSF	-161.4 PSF
20	+67.2 PSF	-73.0 PSF	-87.5 PSF	+29.3 PSF	-70.3 PSF	-114.3 PSF	-151.0 PSF	-151.0 PSF
50	+63.1 PSF	-68.9 PSF	-79.3 PSF	+26.7 PSF	-70.3 PSF	-103.6 PSF	-137.3 PSF	-137.3 PSF
100	+59.9 PSF	-65.8 PSF	-73.0 PSF	+24.7 PSF	-70.3 PSF	-95.5 PSF	-126.9 PSF	-126.9 PSF

NOTES:
1. DISTANCE 'a'= (12 FEET)
2. 'h' INDICATES MEAN ROOF HEIGHT, IN FEET.
3. WHERE ROOF PARAPETS ARE PROVIDED THAT ARE ≥ 3'-0", ZONE 3 PRESSURES SHALL BE REDUCED TO ZONE 2 PRESSURES.
4. + AND - INDICATE PRESSURE ACTING TOWARD AND AWAY FROM THE SURFACE, RESPECTIVELY.
5. LINEAR INTERPOLATION BETWEEN TRIBUTARY AREAS IS PERMITTED.
6. HIGHER LOADS WITHIN "a" ZONE ARE APPLICABLE AT ALL SIGNIFICANT BUILDING CORNERS AND ROOF STEPS.
7. THESE LOADS ARE BASED ON ASCE 7-16. LOADS ARE LRFD ULTIMATE LOADS, MULTIPLY VALUES BY 0.6 FOR ASD SERVICE LOADS.

CAST-IN-PLACE CONCRETE SPECIFICATIONS

1. CONCRETE SHALL BE DESIGNED AND DETAILED IN ACCORDANCE WITH THE BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318), AND CONSTRUCTED IN ACCORDANCE WITH THE CRSI MANUAL OF STANDARD PRACTICE.
2. CONCRETE SHALL HAVE NATURAL SAND FINE AGGREGATE AND NORMAL WEIGHT COARSE AGGREGATES CONFORMING TO ASTM C33, TYPE 1 PORTLAND CEMENT CONFORMING TO ASTM C150.
3. CONCRETE IN THE FOLLOWING AREAS SHALL HAVE THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS (F'c) AND MAXIMUM WATER/CEMENT RATIO (W/CM) (REFERENCE PLANS AND SCHEDULES FOR PROJECT SPECIFIC REQUIREMENTS):

   FTG/GBS (F1 EXPOSURE)..... 4000PSI.....0.55
   FNDN WALLS/PIERS (F1 EXPOSURE).....4000PSI.....0.55
   INTERIOR SOG (F1 EXPOSURE).....4000PSI.....0.55
   EXTERIOR SOG (F3 EXPOSURE).....5000PSI.....0.4
   COLUMNS (F1 EXPOSURE).....5000PSI.....0.55
   STRUCTURAL SLAB (INT) (F0 EXPOSURE)...5000PSI.....0.5
   STRUCT SLAB (EXT) (F2 EXPOSURE).....5000PSI.....0.4
   SLAB ON METAL DECK (F0 EXPOSURE).... 3500PSI.....0.5
4. AIR ENTRAINMENT SHALL BE A MINIMUM OF 6% IN ALL EXPOSED CONCRETE.
5. MAXIMUM AGGREGATE SIZE SHALL BE:
   FOOTINGS.....1-1/2"
   WALLS / GRADE BEAMS / SLAB.....3/4"
6. NORMAL WEIGHT CONCRETE (145 PCF ± 5) SHALL BE PROVIDED WITH ALL CEMENT CONFORMING TO ASTM C150, TYPE 1, WHERE NOTED, LIGHTWEIGHT SLAB CONCRETE (110 PCF ± 5) SHALL BE PROVIDED WITH ALL CEMENT CONFORMING TO ASTM C330, TYPE 1.
7. CONCRETE REINFORCEMENT BARS SHALL CONFORM TO ASTM A615, GRADE 60.
8. WHERE NOTED ON PLAN, EPOXY COATED REINFORCING STEEL SHALL CONFORM TO ASTM A775.
9. REINFORCEMENT BARS SHALL NOT BE TACK WELDED, WELDED, HEATED OR CUT UNLESS INDICATED ON THE CONTRACT DOCUMENTS OR APPROVED BY THE STRUCTURAL ENGINEER. WELDING OF REINFORCEMENT BARS, WHEN APPROVED BY THE STRUCTURAL ENGINEER, SHALL CONFORM TO THE AMERICAN WELDING SOCIETY STANDARD D1.4. ELECTRODES FOR SHOP AND FIELD WELDING OF REINFORCEMENT BARS SHALL BE CLASS E90XX.
10. WELDED WIRE FABRIC WHEN USED SHALL CONFORM TO ASTM A185. FABRIC SHALL BE SUPPLIED IN FLAT SHEETS. FABRIC SHALL BE LAPPED WITH MINIMUM TWO MESHES AT SPLICES. WELDED WIRE FABRIC SHALL BE LOCATED NO MORE THAN 1" FROM TOP OF SLAB.
11. FIBROUS REINFORCEMENT FOR SLABS SHALL BE FIBRILLATED POLYPROPYLENE FIBERS ENGINEERED AND DESIGNED FOR USE IN CONCRETE COMPLYING WITH ASTM C 1116 TYPE III, 1/2" TO 1 1/2", UNIFORMLY DISPERSE FIBERS IN THE CONCRETE MIX AT THE MANUFACTURER'S RECOMMENDED RATE BUT NOT LESS THAN 1.5 POUNDS PER CUBIC YARD.
12. GROUT SHALL BE NON-SHRINK GROUT CONFORMING TO ASTM C827, AND SHALL HAVE SPECIFIED COMPRESSIVE STRENGTH AT 28 DAYS OF 5,000 PSI. PRE-GROUTING OF BASE PLATES IS NOT PERMITTED.
13. RIGID INSULATION USED AS FLOOR FILL SHALL BE STYROFOAM HIGHLOAD 40 EXTRUDED POLYSTYRENE INSULATION (40 PSI COMPRESSIVE STRENGTH) ASTM C578, TYPE VI MANUFACTURED BY DOW CHEMICAL COMPANY, OR APPROVED EQUAL.
14. ALL EMBEDDED STEEL SHALL BE ASTM A36. ALUMINUM INSERTS ARE NOT PERMITTED.
15. CONSTRUCT EXPANSION JOINTS WHERE INDICATED. EXPANSION JOINT FILLER SHALL BE NONEXTRUDING BITUMINOUS TYPE PER ASTM D1751 INSTALL TO FULL DEPTH OF CONCRETE RECESSED TO ACCOMODATE JOINT SEALANT AND BACKER ROD WHERE NECESSARY.
16. CONCRETE COVERING OF REINFORCING STEEL (INCLUDING TIES AND STIRRUPS) SHALL CONFORM TO THE FOLLOWING MINIMUM REQUIREMENTS (SEE ACI 318 FOR CONDITIONS NOT NOTED):
   CONCRETE POURED AGAINST EARTH..... 3"
   CONCRETE EXPOSED TO EARH OR WEATHER:
      #5 OR SMALLER..... 1 1/2"
      #6 OR LARGER..... 2"
   CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
   COLUMNS (TIES AND MAIN REINFORCING)..... 1 1/2"
   SLABS, WALLS, JOISTS:
      #14 OR #18 BARS..... 1 1/2"
      #11 OR SMALLER..... 1"
   BEAMS (STIRRUPS AND MAIN REINFORCING)..... 1 1/2"
   ALL OTHER SURFACES NOT EXPOSED TO EARTH OR WEATHER..... 3/4"

CAST-IN-PLACE CONCRETE TESTING/INSPECTIONS

1. EVALUATION AND ACCEPTANCE OF CONCRETE STRUCTURES SHALL BE IN ACCORDANCE WITH ACI 301.
2. CONCRETE SHALL NOT BE POURED UNTIL THE PLACEMENT OF REINFORCING HAS BEEN APPROVED BY THE INSPECTION AGENCY.
3. INSPECTIONS SHALL BE PERFORMED BY A SPECIAL INSPECTOR WHO HAS BEEN APPROVED BY THE ENGINEER OF RECORD & BUILDING OFFICIAL. THE SPECIAL INSPECTOR SHALL VERIFY THAT ALL REINFORCEMENT, TIES, ANCHORS, & SLEEVES WERE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, THE APPLICABLE ICC ESR REPORTS AND THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS. THE INSPECTION SHALL INCLUDE VERIFICATION OF ANCHOR SPACING, EMBEDMENT AND EDGE DISTANCE REQUIREMENTS.
4. REINFORCING STEEL SHALL BE INSTALLED TO WITHIN THE FOLLOWING TOLERANCES PER ACI 117, "STANDARD SPECIFICATION FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS":
   CONCRETE COVER FOR SLAB TOP AND BOTTOM BARS..... ±1/4"
   COVER FOR OTHER REINFORCING STEEL..... ±3/8"
   SPECIFIED SPACING BETWEEN PARALLEL BARS IN SLABS..... (SPECIFICED SPACING/4") BUT NOT TO EXCEED 1"
   HORIZONTAL DEVIATION FROM SPECIFIED LOCATION, U.N.O..... ±3"
   SPACING AND LOCATION OF BEAM STIRRUPS..... (BEAM DEPTH IN INCHES/12) x 1"
   SPACING AND LOCATION OF COLUMN TIES..... (MIN. COL. DIM. IN INCHES/12) x 1"
   LOCATION OF ENDS OF BARS PERPENDICULAR TO SLAB EDGES..... ±1"

   THE ABOVE LIST OF PERMITTED TOLERANCES MUST BE PROVIDED ON ALL REINFORCING STEEL PLACING DRAWINGS. PLACING DRAWINGS THAT DO NOT PROVIDE THIS LIST OF TOLERANCES WILL BE REJECTED.
5. THE CONCRETE SUPPLIER SHALL SUBMIT MIX DESIGNS FOR REVIEW. COMPRESSIVE STRENGTH MUST BE SUBSTANTIATED BY A SUITABLE EXPERIENCE RECORD OR BY THE METHOD OF LABORATORY TRIAL BATCHES. THE PERTINENT CRITERIA OF ACI 318 SHALL APPLY TO THE PROPORTIONING OF MIX DESIGNS AND TO THE ACCEPTANCE OF CONCRETE PRODUCED FOR THE JOB. IF DURING CONSTRUCTION ANY CLASS CONCRETE FAILS TO MEET THE ACCEPTANCE CRITERIA, THE CONTRACTOR SHALL TAKE SUCH STEPS AS ARE DEEMED NECESSARY BY THE STRUCTURAL ENGINEER TO IMPROVE SUBSEQUENT TEST RESULTS AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL ALSO BEAR THE COST OF SPECIAL INVESTIGATION, TESTING, OR REMEDIAL WORK NECESSARY BECAUSE OF EVIDENCE OF LOW STRENGTH OR NON-CONFORMING CONCRETE OR WORKMANSHIP.
6. PREPARE A MINIMUM OF (3) CONCRETE TEST CYLINDERS AT 1 DAYS / (3) CONCRETE TEST CYLINDERS AT 28 DAYS / (1) CONCRETE TEST CYLINDER AT 56 DAYS PER BATCH OF CONCRETE. CYLINDERS SHALL BE PROPERLY CURED AND STORED. SAMPLE FRESH CONCRETE IN ACCORDANCE WITH ASTM C172.
7. RETAIN LABORATORY TO PROVIDE TESTING SERVICE. SLUMP PER ASTM C143L AIR CONTENT PER ASTM C231 OR C173, CYLINDER TESTS PER ASTM C31 AND C39. ONE SET OF SEVEN (7) CYLINDERS FOR EACH 50 CUBIC YARDS FOR EACH MIX USED. REPORTS OF ALL TESTS TO BE SUBMITTED TO THE ENGINEER OF RECORD.
8. SLUMP TESTS SHALL BE MADE PRIOR TO THE ADDITION OF PLASTICIZERS. CONCRETE FOR THE PREPARATION OF TEST CYLINDERS SHALL BE TAKEN FROM THE HOSE END FOR CONCRETE PLACED BY PUMP. PROPORTION AND DESIGN MIXES TO RESULT IN CONCRETE SLUMP OF 3-1/2IN. ± 1 IN. AT THE POINT OF PLACEMENT. CONCRETE CONTAINING HIGH-RANGE WATER REDUCERS (HRWR) SHALL HAVE A SLUMP OF 4 IN. TO 8 IN.
9. ALL CONCRETE SHALL BE PLACED IN ACCORDANCE WITH ACI 117-90 "STANDARD SPECIFICATIONS FOR TOLERANCE FOR CONCRETE CONSTRUCTION AND MATERIALS" AND SHALL MEET THE FOLLOWING REQUIREMENTS:

   MINIMUM SLAB CONSTRUCTION TOLERANCE SPECIFICATIONS:

   - FLOOR FLATNESS (FF) = 32 OR GRATER +0" / -3/16 FOR EVERY 24"
   - FLOOR LEVELNESS (FL) = 30 OR GREATER (PRIOR TO REMOVAL OF FORMWORK)
   - ELEVATION ENVELOPE = +/-3/4" (FROM AVERAGE SLAB ELEVATION)
   - SLAB THICKNESS TOLERANCE = +/-3/8 IN. AND -1/4 IN. (FOR SLABS 12" THICK OR LESS)
   - FORMED SURFACE TOLERANCE = +/- 1/4"

   THE CONTRACTOR SHALL ALSO COORDINATE CONCRETE CLASS OF SURFACE WITH THE PROPOSED ARCHITECTURAL FINISHES.

   - CLASS A - SURFACE PROMINENTLY EXPOSED TO PUBLIC VIEW WHERE APPEARANCE IS OF SPECIAL IMPORTANCE.
   - CLASS B - COARSE-TEXTURED CONCRETE-FORMED SURFACE INTENDED TO RECEIVE PASTER, STUCCO OR WAINSCOTING.
   - CLASS C - STANDARD FOR EXPOSED SURFACE WHERE FINISHES ARE NOT SPECIFIED.
   - CLASS D - MINIMUM QUALITY OF SURFACE WHERE ROUGHNESS IS NOT OBJECTIONABLE.

CONSTRUCTION JOINTS

1. CONSTRUCTION JOINTS FOR SLABS ON METAL DECK SHALL BE LOCATED MIDWAY BETWEEN BEAMS WHERE THE JOINT IS PARALLEL TO THE BEAM SPAN. JOINTS SHALL BE LOCATED WITHIN THE MIDDLE THIRD OF SPAN WHERE THE JOINT IS PERPENDICULAR TO THE BEAM SPAN. ANY STOP IN CONCRETE WORK MUST BE MADE WITH VERTICAL BULKHEADS, UNLESS OTHERWISE SHOWN. ALL REINFORCING IS TO BE CONTINUOUS THROUGH JOINTS.
2. HORIZONTAL JOINTING WILL NOT BE PERMITTED IN CONCRETE CONSTRUCTION EXCEPT AS SHOWN ON THE CONTRACT DOCUMENT. VERTICAL JOINTS SHALL OCCUR AT CENTER OF SPANS AT LOCATIONS APPROVED BY THE STRUCTURAL ENGINEER.
3. CONSTRUCTION JOINTS BETWEEN FOOTINGS AND PILASTERS AND SIMILAR JOINTS SHALL BE PREPARED BY ROUGHENING THE CONTACT SURFACE IN AN APPROVED MANNER TO A FULL AMPLITUDE OF APPROXIMATELY 14 INCHES, LEAVING THE CONTACT SURFACE FREE AND CLEAR OF LAITANCE. REINFORCED (DOWELLED) JOINTS SHALL HAVE BINDER ADDITIVE APPLIED PRIOR TO POUR.
4. PROVIDE CONTINUOUS WATERSTOPS AT ALL HORIZONTAL AND VERTICAL CONSTRUCTION JOINTS AND/OR AS NOTED ON PLAN, SIZED AND CONFIGURED TO SUIT JOINTS. MINIMUM PROVIDED WATERSTOP SHALL BE 6" PVC RIBBED WITH CENTER BULB WATERSTOP BY "GREENSTREAK" OR APPROVED EQUAL. INSTALL TO FORM CONTINUOUS, WATERTIGHT DAM, WITH FIELD JOINTS FABRICATED IN STRICT ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.
5. CONSTRUCTION JOINTS FOR MILD-REINFORCED CONCRETE SHALL BE LOCATED WITHIN THE MIDDLE THIRD OF SPAN. PROPOSED CONSTRUCTION JOINT LOCATIONS SHALL BE SHOWN ON REINFORCING STEEL SHOP DRAWINGS. ANY STOP IN CONCRETE WORK MUST BE MADE WITH VERTICAL BULKHEADS AND HORIZONTAL KEYS, UNLESS OTHERWISE SHOWN. ALL REINFORCING IS TO BE CONTINUOUS THROUGH JOINTS.

CAST-IN-PLACE ANCHORS

1. ALL ANCHORS SHALL ASSUME THE CRACKED CONCRETE DESIGN CONDITION, U.N.O.
2. THE CONTRACTOR SHALL ARRANGE FOR AN ANCHOR MANUFACTURER'S REPRESENTATIVE TO PROVIDE ON SITE INSTALLATION TRAINING FOR EACH SPECIFIED ANCHOR TYPE. THE STRUCTURAL ENGINEER OF RECORD SHALL RECEIVE DOCUMENTATION VERIFYING THAT ALL OF THE CONTRACTOR'S PERSONNEL WHO INSTALL ANCHORS HAVE BEEN TRAINED PRIOR TO COMMENCEMENT OF INSTALLING ANCHORS.
3. SURVEY ANCHOR BOLTS FOR PLACEMENT AND ALIGNMENT PRIOR TO CASTING CONCRETE.
4. ANCHOR CAPACITY IS DEPENDENT UPON SPACING BETWEEN ANCHORS AND PROXIMITY OF ANCHORS TO EDGES OF CONCRETE OR MASONRY. INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON THE DRAWINGS.
5. ALL INSERTS AND SLEEVES SHALL BE CAST-IN-PLACE WHENEVER FEASIBLE. DRILLED OR POWDER DRIVEN FASTENERS WILL BE PERMITTED WHEN PROVEN TO THE SATISFACTION OF THE ENGINEER OF RECORD THAT THE FASTENERS WILL NOT SPALL THE CONCRETE AND HAVE THE SAME CAPACITY AS CAST-IN-PLACE INSERTS. WHEN INSTALLING EXPANSION BOLTS OR ADHESIVE ANCHORS, THE CONTRACTOR SHALL TAKE MEASURES TO AVOID DRILLING OR CUTTING OF ANY EXISTING REINFORCING AND DESTRUCTION OF CONCRETE. HOLES SHALL BE BLOWN CLEAN PRIOR TO PLACING BOLTS OR ADHESIVE ANCHORS.

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Jason Tarantino
Digitally signed by Jason Tarantino
Date: 2023.12.26 17:17:42 -05'00'
FLORIDA LICENSE: PE 94381

ISSUED FOR PERMIT

REVISIONS:

Mk	DATE:	REMARKS
1	12/08/23	ISSUED FOR PERMIT

PROJECT:
Proposed Building
Okeechobee (Shul)
FL-78 & Access Road
Okeechobee, Florida, 34978

ALL DRAWINGS AND WRITTEN MATERIALS APPEARING HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED WORK OF THE ENGINEER. THE REPRODUCTION OF THIS DRAWING FOR THE PURPOSE OF COPYING THIS WORK OR REVISING SAID DRAWING SHALL BE CONSIDERED A VIOLATION OF BOTH THE PROFESSIONAL CODE OF ETHICS AND A THEFT OF COMPANY ASSETS, BOTH OF WHICH SHALL BE PROSECUTED TO THE FULLEST EXTENT OF CURRENT STATUTES.

DRAWING TITLE:
STRUCTURAL SPECIFICATIONS

DRAFTED BY: NAR
REVIEWED BY: JCT
PROJECT NUMBER: 2318_05
DRAWING SCALE: AS NOTED
DRAWING NUMBER: S002