#### STRUCTURAL NOTES

#### I. <u>GENERAL NOTES</u>:

STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATIONS AND ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND SITE DRAWINGS. CONSULT THESE DRAWINGS FOR SLEEVES, DEPRESSIONS, AND OTHER DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS.

ALL DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE SEOR BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK. DO NOT SCALE DRAWINGS.

HE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS COMPLETE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO ENSURE THE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING ERECTION. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS. ALL RETAINING WALLS TO BE TIED INTO ELEVATED FLOOR FRAMING SHOULD BE ASSUMED TO NEED TO BE BRACED DURING CONSTRUCTION UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS.

ELECTRONIC VERSIONS OF THE STRUCTURAL DRAWINGS ARE THE SOLE, COPYRIGHTED PROPERTY OF SNELL ENGINEERING AND ARE NOT TO BE USED OR TRANSFERRED WITHOUT THE EXPRESS, WRITTEN PERMISSION OF SNELL ENGINEERING.

#### II. DESIGN LOADS

THE STRUCTURAL SYSTEM FOR THIS BUILDING HAS BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE – BUILDING 7TH EDITION (2020). THE FOLLOWING SUPERIMPOSED LOADINGS HAVE BEEN UTILIZED:

ROOF: LIVE LOAD LIVE LOAD (CONCENTRATED-FLAT ROOF ONLY) DEAD LOAD	- -	20 PSF. 300 LBS. 20 PSF.
STAIRS: LIVE LOAD LIVE LOAD (CONCENTRATED)	-	100 PSF. 300 LBS. OVER 2"X2" AREA
EQUIPMENT AND OBSERVATION AREA LIVE LOAD DEAD LOAD	-	100 PSF. 25 PSF.

FLOORS AND OTHER SIMILAR SURFACES SHALL BE DESIGNED TO SUPPORT THE UNIFORMLY DISTRIBUTED LIVE LOADS OR CONCENTRATED LIVE LOADS SHOWN ABOVE, WHICHEVER PRODUCES THE GREATER LOAD EFFECT. DISTRIBUTED LOADS AND CONCENTRATED LOADS ARE NON-CONCURRENT UNLESS NOTED OTHERWISE.

VIND:		
ASCE 7-16		
ULTIMATE WIND SPEED	-	140 MPH
ALLOWABLE WIND SPEED	-	108 MPH
EXPOSURE C		
ENCLOSED STRUCTURE		
INTERNAL PRESSURE COEFFICIENT	-	+/- 0.18
RISK FACTOR II		
SEE WIND SCHEDULE FOR PRESSURES		
SEISMIC:		
RISK CATEGORY	-	II
SEISMIC IMPORTANCE FACTOR le	-	1.0
SITE CLASS D		
SEISMIC DESIGN CATEGORY A		
Ss - 0.047 g S1 - 0.024 g		

IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO CONFIRM ALL FINAL WEIGHTS OF EQUIPMENT (MECHANICAL, CHILLED WATER, KITCHEN, SPA/POOL, (ETC.), CLADDING, FINISHES. ETC. PRIOR TO ERECTING STRUCTURE SUPPORTING THESE ITEMS. ALL WEIGHTS ACCOUNTED FOR IN THE STRUCTURAL DESIGN ARE LISTED ABOVE OR ON THE PLANS.

#### II. CONSTRUCTION ADMINISTRATION (SHOP DRAWINGS, RIFS):

Sds - 0.051 g Sd1 - 0.038 g

SHOP DRAWINGS WILL BE REVIEWED FOR GENERAL COMPLIANCE WITH THE DESIGN INTENT OF THE CONTRACT DOCUMENTS ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY COMPLIANCE WITH THE CONTRACT DOCUMENTS AS TO QUANTITY, LENGTH, ELEVATIONS, DIMENSIONS, ETC.

ANY COMPONENT NOTED AS "DELEGATED" SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF FLORIDA AND NOT BY THE SEOR. SIGNED AND SEALED DRAWINGS SHALL BE PROVIDED TO THE ARCHITECT AND SEOR FOR REVIEW AS A SHOP DRAWING; CALCULATIONS WILL BE PROVIDED IF REQUESTED.

ALL SHOP DRAWINGS SHALL BE REVIEWED BY THE CONTRACTOR PRIOR TO SUBMITTAL TO THE ARCHITECT/SEOR. DRAWINGS SUBMITTED WITHOUT REVIEW NOTATION WILL BE RETURNED UNCHECKED. EVERY EFFORT WILL BE MADE TO RETURN THE SHOP DRAWINGS WITHIN TEN BUSINESS DAYS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SUBMIT THE SHOP DRAWINGS ALLOWING FOR AN ADEQUATE REVIEW PERIOD. ALL SHOP DRAWINGS SHALL BE SUBMITTED IN DIGITAL FORMAT

IN ALL INSTANCES THE CONTRACT DOCUMENTS WILL GOVERN OVER THE SHOP DRAWINGS AND ALL OTHER FORMS OF COMMUNICATION, UNLESS OTHERWISE SPECIFIED IN A REQUEST FOR INFORMATION (RFI) BY THE SEOR. EVERY EFFORT WILL BE MADE TO RETURN THE RFIS WITHIN TWO BUSINESS DAYS. SUBMITTALS SHALL CLEARLY IDENTIFY THE SPECIFIC PROJECT, APPLICABLE CODES AND DESIGN CRITERIA, AND DETAILING OF ALL COMPONENTS NECESSARY TO ENSURE PROPER INSTALLATION OF THE COMPONENTS AND SYSTEM.

SHOP DRAWINGS SHOULD BE SUBMITTED FOR ALL COMPONENTS OF THE STRUCTURAL FRAMING SYSTEM, AS REQUIRED BY THE ARCHITECT, AND AS NOTED ELSEWHERE IN THESE NOTES, INCLUDING, BUT NOT LIMITED TO:

- a. CONCRETE MIX DESIGNS b. MASONRY BLOCK
- c. MASONRY BLOCK ACCESSORIES
- d. MASONRY REINFORCING e. CONCRETE REINFORCEMENT
- PRE-ENGINEERED STEEL STAIRS
- PRECAST CONCRETE COMPONENTS . ANY PROPOSED MANUFACTURER CHANGE FROM THE BASIS OF DESIGN

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE ALL TRADES AND CONSULTANTS, CROSS REFERENCE THEIR DRAWINGS WITH THE OVERALL DESIGN, AND PROVIDE TO EACH A COMPLETE SET OF DRAWINGS AND SUBMITTALS TO ENSURE COMPATIBILITY OF CONSTRUCTION PER DESIGN INTENT.

#### IV. FOUNDATIONS:

ARE DESIGNED FOR AN ALLOWABLE SOIL BEARING PRESSURE OF 2,000 PSF ON COMPACTED FILL OR COMPACTED NATIVE SOIL. BEFORE CONSTRUCTION COMMENCES AND IF REQUIRED BY THE JURISDICTION, SOIL BEARING CAPACITY SHALL BE VERIFIED BY A SUBSURFACE INVESTIGATION, AS WELL AS FIELD AND LABORATORY TESTS PERFORMED BY A CERTIFIED TESTING LABORATORY, WHOSE REPORT SHALL INCLUDE ANALYSIS AND RECOMMENDATIONS FOR SITE PREPARATION IN ORDER TO BEAR THE FOUNDATION LOADS. THE ABOVE REPORT SHALL BE SUBMITTED TO THE SEOR FOR REVIEW BEFORE THE FOUNDATION CONSTRUCTION BEGINS.

#### V. SOIL COMPACTION:

FOUNDATIONS ARE DESIGNED FOR AN ALLOWABLE SOIL BEARING PRESSURE AS SPECIFIED ABOVE. SOIL COMPACTION SHALL MEET THE MORE STRINGENT OF THE CRITERIA LISTED BELOW OR AS SPECIFIED IN THE GEOTECHNICAL REPORT. REMOVE TOP-SOIL TO A MINIMUM DEPTH OF ONE FOOT OVER THE ENTIRE BUILDING AREA AND FIVE FEET BEYOND THE BUILDING LINES. COMPACT SUB-GRADE USING A VIBRATORY COMPACTER SUCH AS "VIBRATOW II" OR EQUIVALENT WITH A MINIMUM OF FOUR PASSES. PLACE AND COMPACT FILL MATERIAL TO FINISHED GRADE LEVEL IN LIFTS NOT EXCEEDING 12" THICK. SUB-GRADE AND EACH LIFT SHALL BE COMPACTED TO MINIMUM 95% MODIFIED PROCTOR DENSITY DETERMINED IN ACCORDANCE WITH ASTM. D-1557. VERIFICATION THAT THE COMPACTION REQUIREMENTS HAVE BEEN MET SHALL BE MADE BY AN INDEPENDENT GEOTECHNICAL CONSULTANT EMPLOYED BY THE OWNER AND APPROVED BY THE SEOR. LOCATIONS FAILING TO MEET THE REQUIREMENTS SHALL BE RECOMPACTED AND RETESTED AT THE CONTRACTORS' EXPENSE AND AS DIRECTED BY THE INDEPENDENT GEOTECHNICAL CONSULTANT.

#### VI. FORMWORK AND SHORING:

NO STRUCTURAL CONCRETE SHALL BE STRIPPED UNTIL IT HAS REACHED AT LEAST TWO-THIRDS OF THE 28 DAY DESIGN STRENGTH. DESIGN, ERECTION AND REMOVAL OF ALL FORMWORK, SHORES AND RESHORES SHALL MEET THE REQUIREMENTS SET FORTH IN ACI STANDARDS 347 AND 301.

#### VII. PENETRATIONS:

NO PENETRATIONS SHALL BE MADE IN ANY STRUCTURAL MEMBERS WITHOUT PREVIOUS APPROVAL OF THE EOR, EXCEPT THOSE PENETRATIONS SHOWN ON THE STRUCTURAL DRAWINGS. THE CONTRACTOR SHOULD SUBMIT DRAWINGS SHOWING: ANY LOCATION WHERE OPENINGS, PENETRATIONS, OR ANY PLACE MORE THAN 3 PIPES OR CONDUITS ARE LOCATED IN A SLAB SYSTEM; ANY LOCATION IN A BEAM OR COLUMN WHERE MORE THAN 4% OF THE MEMBER SECTION IS REMOVED IN ANY ORIENTATION.

#### VIII. <u>PLUMBING SLEEVES</u>:

MINIMUM SLEEVE SPACING SHALL BE THREE DIAMETERS CENTER TO CENTER OF THE LARGER SLEEVE OR 6" CLEAR BETWEEN SLEEVES, WHICHEVER IS GREATER. PRIOR TO CONSTRUCTION SLEEVE LOCATIONS AND SIZES SHALL BE APPROVED BY THE SEOR. CONDUITS, PIPES AND SLEEVES SHALL BE PLACED AND SPACED IN ACCORDANCE WITH ACI 318 6.3.

#### IX. REINFORCING STEEL

SHALL BE ASTM A615 GRADE 60 DEFORMED BARS, FREE FROM OIL, SCALE AND RUST AND PLACED IN ACCORDANCE WITH THE TYPICAL BENDING DIAGRAM AND PLACING DETAILS OF ACI STANDARDS AND SPECIFICATIONS. SECURE APPROVAL OF SHOP DRAWINGS PRIOR TO COMMENCING FABRICATION.

REINFORCING BARS SHOWN IN SECTIONS DEPICT TYPICAL CONFIGURATION AND ARE NOT SPECIFIC TO THE CONCRETE MEMBER CUT ON PLAN; SEE PLAN AND SCHEDULES FOR ALL BAR SIZE AND QUANTITIES. TAKE-OFFS AND QUANTITIES SHALL BE OBTAINED FROM THE SCHEDULES AND PLANS, NOT FROM SECTIONS. WHERE HOOKS, LAP LENGTHS, ETC. ARE SHOWN IN SECTIONS, ALL LENGTHS AND DETAILS SHALL MEET ACI REQUIREMENTS FOR REINFORCING DETAILS. HOOKS SHALL BE ORIENTED AS REQUIRED TO FIT WITHIN THE CONCRETE MEMBER.

#### X. WELDED WIRE FABRIC:

A. TO CONFORM TO ASTM A-185, FREE FROM OIL, SCALE AND RUST AND PLACED IN ACCORDANCE WITH THE TYPICAL PLACING DETAILS OF ACI STANDARDS AND SPECIFICATIONS. THE MINIMUM LAP SHALL BE ONE SPACE PLUS TWO INCHES.

XI.	CONCRETE:

ALL CONCRETE SHALL MEET ACI 318 'BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE' AND ACI 301 'SPECIFICATIONS FOR STRUCTURAL CONCRETE', INCLUDING, BUT NOT LIMITED TO, MIX DESIGN, STRENGTH, COVER, PLACEMENT, CURING, TESTING, FORMS, FLATNESS, ETC. SEE THE ARCHITECTURAL SPECIFICATIONS AND PLANS FOR ANY ADDITIONAL REQUIREMENTS.

ALL CONCRETE SHALL BE AN APPROVED MIX DESIGN PROPORTIONED TO ACHIEVE A STRENGTH AT 28 DAYS AS LISTED BELOW WITH A PLASTIC AND WORKABLE MIX:

3000 PSI FOR FOUNDATIONS AND SLABS ON GRADE. 4000 PSI FOR ALL OTHER STRUCTURAL CONCRETE

SUBMIT PROPOSED MIX DESIGN FOR EACH PORTION OF WORK PRIOR TO USE. ALL MIX DESIGNS SHALL BE ACCOMPANIED BY A MINIMUM OF 15 FIELD STRENGTH TEST RECORDS. AS NOTED IN ACI 301 4.2.3.2(A); NO OTHER DOCUMENTATION OF AVERAGE COMPRESSIVE STRENGTH WILL BE ACCEPTED WITHOUT PRIOR WRITTEN APPROVAL BY THE SEOR. MIX SHALL BE UNIQUELY IDENTIFIED BY MIX NUMBER OR OTHER POSITIVE IDENTIFICATION. MIX SHALL MEET THE REQUIREMENTS OF ASTM C33 FOR COARSE AGGREGATE. FOR ALL FLATWORK, AT LEAST 75% OF LARGE AGGREGATE SHALL CONSIST OF #57 STONE. CONCRETE SHALL COMPLY WITH ALL THE REQUIREMENTS OF ASTM STANDARD C94 FOR MEASURING, MIXING, TRANSPORTING, ETC. CONCRETE TICKETS SHALL BE TIME STAMPED WHEN CONCRETE IS BATCHED.

ALL CONCRETE MIX DESIGNS SHALL INCLUDE A WRITTEN DESCRIPTION INDICATING WHERE EACH PARTICULAR MIX IS TO BE PLACED WITHIN THE STRUCTURE.

CONCRETE SHALL BE PLACED AND CURED ACCORDING TO ALL STANDARDS AND SPECIFICATIONS, INCLUDING ALL ACI REQUIREMENTS.

THE MAXIMUM TIME ALLOWED FROM THE TIME THE MIXING WATER IS ADDED UNTIL IT IS DEPOSITED IN ITS FINAL POSITION SHALL NOT EXCEED ONE AND ONE HALF (1-1/2) HOURS. IF FOR ANY REASON THERE IS A LONGER DELAY THAN THAT STATED ABOVE, THE CONCRETE SHALL BE DISCARDED. IT SHALL BE THE RESPONSIBILITY OF THE TESTING LAB TO NOTIFY THE OWNER'S REPRESENTATIVE AND THE CONTRACTOR OF ANY NONCOMPLIANCE WITH THE ABOVE. ALL SLABS SHALL BE CURED USING A DISSIPATING CURING COMPOUND MEETING ASTM STANDARD C309 TYPE 1-D AND SHALL HAVE A FUGITIVE DYE. THE COMPOUND SHALL BE PLACED AS SOON AS THE FINISHING IS COMPLETED OR AS SOON AS THE WATER HAS LEFT THE UNFINISHED CONCRETE. AL SCUFFED OR BROKEN AREAS IN THE CURING MEMBRANE SHALL BE RECOATED DAILY. CALCIUM CHLORIDES SHALL NOT BE UTILIZED; OTHER ADMIXTURES MAY BE USED ONLY WITH THE APPROVAL OF THE SEOR.

THE GENERAL CONTRACTOR SHALL NOTIFY THE SEOR A MINIMUM OF 48 HOURS PRIOR PLACEMENT OF ANY STRUCTURAL CONCRETE.

SEE PLAN NOTES FOR SPECIFIC COVER REQUIREMENTS. UNLESS NOTED OTHERWISE ON PLANS, THE FOLLOWING CONCRETE CLEAR COVER SHALL BE PROVIDED FOR ALL NON-PRESTRESSED CONCRETE REINFORCEMENT PER ACI 318:

	CONCRETE CAST AGAINST EARTH: CONCRETE EXPOSED TO EARTH (FORMED FACE): CONCRETE EXPOSED TO WEATHER: WHERE NOT EXPOSED TO EARTH OR WEATHER: SLABS. WALLS. AND JOISTS:	ALL BARS ALL BARS #6 BARS AND GREATER #5 BARS AND SMALLER #14 & #18 BARS		3" 2" 2" 1 1/2" 1 1/2"
	BEAMS AND COLUMNS:	#11 BARS AND SMALLER ALL BARS	- -	1" 1 1/2"
CONCRETE TESTING: AN INDEPENDENT TESTING LABORATORY SHALL PERFORM THE				

FOLLOWING TESTS ON CAST IN PLACE CONCRETE

A) ASTM C143 - "STANDARD TEST METHOD FOR SLUMP OF PORTLAND CEMENT CONCRETE." THE MAXIMUM SLUMP SHALL BE 4-6 INCHES, PRIOR TO ADDING A SUPER PLASTICIZER

B) ASTM C39 - "STANDARD TEST METHOD FOR COMPRESSIVE STRENGTH OF CYLINDRICAL CONCRETE SPECIMENS." A SEPARATE TEST SHALL BE CONDUCTED FOR EACH CLASS, FOR EVERY 50 CUBIC YARDS (OR FRACTION THEREOF), PLACED PER DAY. REQUIRED CYLINDER(S) QUANTITIES AND TEST AGE AS FOLLOWS: 1 AT 7 DAYS 2 AT 28 DAYS

ONE ADDITIONAL RESERVE CYLINDER TO BE TESTED UNDER THE DIRECTION OF THE SEOR, IF REQUIRED, IF 28 DAY STRENGTH IS ACHIEVED. THE ADDITIONAL CYLINDER(S) MAY BE DISCARDED. UPON RECEIPT, IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL COMPRESSIVE TEST RESULTS BE SENT TO THE SEOR. ARCHITECT OF RECORD. CONCRETE SUBCONTRACTOR. AND CONCRETE SUPPLIER.

POUR STRUCTURAL CONCRETE WITHIN THE FOLLOWING TOLERANCES: VARIATION FROM PLUMB: 1/4" IN 10'-0" VARIATION FROM LEVEL IN TOPS OF PILASTERS: 1/8" IN 10'-0" VARIATION FOOTINGS:

ANATION I COTINGO.	
PLAN DIMENSIONS:	+2", - 1/2"
THICKNESS:	- 0"

XII. NON-SHRINK GROUT:

NON-SHRINK GROUT SHALL BE A HIGH-STRENGTH MORTAR OR GROUT WITH A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI AT 28 DAYS. THE GROUT IS TO BE NON-METALLIC. NON-CORROSIVE, CEMENT-BASED AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM C1107. IT SHALL BOND PERMANENTLY TO A CLEAN METAL BASEPLATE AND CONCRETE SUBSTRATE AND WILL NOT SHRINK IN ITS PLASTIC STATE, AS TESTED IN ACCORDANCE WITH ASTM C827.

#### XIII. HOLLOW-CORE SLABS:

FLOORS SHALL BE PRESTRESSED CONCRETE HOLLOW-CORE SLABS DESIGNED IN ACCORDANCE WITH ACI 318-14 FOR THE DESIGN LOADS LISTED ABOVE.

SHOP DRAWINGS AND CALCULATIONS SHALL BE PREPARED FOR ALL WORK AND SUBMITTED FOR REVIEW. SHOP DRAWINGS SHALL BEAR THE SIGNATURE AND IMPRESSED SEAL OF A FLORIDA REGISTERED PROFESSIONAL ENGINEER.

NO ALTERNATE PRODUCT SUBSTITUTION FOR HOLLOW-CORE SLABS WILL BE ACCEPTED.

#### XIV. CHEMICAL ANCHORS:

SHALL BE AN EQUAL TWO-PART EPOXY POLYMER INJECTION SYSTEM, SUCH AS SIMPSON SET-XP "STRUCTURAL ANCHORING ADHESIVE," HILTI HIT-HY 200, OR SEOR APPROVED SUBSTITUTION, INSTALLED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS. INSTALLERS SHALL BE TRAINED BY THE MANUFACTURER'S REPRESENTATIVE. BRUSH AND BLOW OUT ALL HOLES.

#### XV. MASONRY WALLS

MASONRY UNITS SHALL MEET ASTM C-90 FOR HOLLOW LOAD BEARING TYPE MASONRY WITH UNIT STRENGTH OF 2000 PSI ON THE NET AREA (F'M = 2000 PSI). MORTAR SHALL BE TYPE "M" OR "S" AND MEET ASTM C-270. GROUT SHALL BE 3000 PSI MINIMUM COMPRESSIVE STRENGTH AND MEET ASTM C-476. PROVIDE HOOKED DOWELS IN FOOTINGS FOR ALL VERTICAL REINFORCING ABOVE. LAP SPLICES 48 BAR DIAMETERS.

MASONRY CONSTRUCTION SHALL BE LAID IN RUNNING BOND CONFIGURATION UNLESS OTHERWISE NOTED. AT ALL WALL INTERSECTIONS, AT LEAST FIFTY PERCENT OF THE MASONRY UNITS AT THE INTERFACE SHALL INTERLOCK.

BLOCK CELLS AS SHOWN ON PLANS SHALL BE GROUT FILLED WITH VERTICAL REINFORCING BARS. SEE PLAN NOTES FOR BAR SIZE AND SPACING. DOWELS SHALL BE USED TO PROVIDE CONTINUITY INTO THE STRUCTURE ABOVE AND/OR BELOW, UNLESS NOTED OTHERWISE. USE METAL LATH, MORTAR, OR SPECIAL UNITS TO CONFINE CONCRETE AND GROUT TO AREA REQUIRED. CELLS TO BE GROUT FILLED SHALL HAVE VERTICAL ALIGNMENT SUFFICIENT TO MAINTAIN A CLEAR, UNOBSTRUCTED, CONTINUOUS VERTICAL GROUT SPACE.

PROVIDE 9 GAUGE GALVANIZED HORIZONTAL JOINT REINFORCING (DUR-O-WALL OR SEOR APPROVED SUBSTITUTION) AT ALTERNATE BLOCK COURSES, BEGINNING 8" ABOVE FOOTINGS AND FLOOR LEVELS. MASONRY WALLS ABOVE OPENINGS SHALL BE REINFORCED AT THE SAME SPACING AS THE WALL WITH DOWELS HOOKED INTO THE BEAM OR LINTEL ABOVE THE OPENING.

GROUT LIFT:	AN INCREMENT OF GROUT HEIGHT WITHIN A TOTAL GROU
GROUT POUR:	THE TOTAL HEIGHT OF MASONRY TO BE GROUTED PRIOR
	OF ADDITIONAL MASONRY. A GROUT POUR CONSISTS
MORE	GROUT LIFTS. GROUT POURS SHALL SET FOR A MI
HOURS	BEFORE ANY ADDITIONAL GROUT PLACEMENT.

GROUT SHALL HAVE A SLUMP BETWEEN 8 AND 11 INCHES, EXCEPT SELF-CONSOLIDATING GROUT. JOB-SITE PROPORTIONING OF SELF-CONSOLIDATING GROUT IS NOT PERMITTED.

MASONRY GROUTING REQUIREMENTS:

- A. FIELD-MIXED GROUT SHALL BE PLACED WITHIN 1-1/2 HOURS FROM INTRODUCING WATER INTO THE MIXTURE AND BEFORE THE INITIAL SET. B. GROUT SLUMP REQUIREMENTS:
- A. FOR GROUT SLUMP BETWEEN 8 AND 10 INCHES, THE MAXIMUM GROUT LIFT HEIGHT IS 5 FEET.
- B. FOR GROUT SLUMP BETWEEN 10 AND 11 INCHES, THE MAXIMUM GROUT LIFT
- HEIGHT IS 12.67 FEET. C. FOR SELF-CONSOLIDATING GROUT, THE GROUT LIFT HEIGHT SHALL NOT EXCEED
- THE GROUT POUR HEIGHT (24 FEET MAX.). C. GROUT LIFT HEIGHTS EXCEEDING 5 FEET SHALL MEET THE FOLLOWING
- REQUIREMENTS: A. MASONRY MORTAR HAS CURED FOR AT LEAST 4 HOURS.
- B. GROUT SLUMP IS BETWEEN 10 AND 11 INCHES.
- C. NO INTERMEDIATE BOND BEAMS ARE PLACED BETWEEN THE TOP AND BOTTOM OF THE GROUT LIFT HEIGHT. D. EACH GROUT LIFT SHALL BE CONSOLIDATED BY MECHANICAL VIBRATION AT THE TIME
- OF PLACEMENT. CONSOLIDATION IS NOT REQUIRED FOR SELF-CONSOLIDATING E. EACH GROUT LIFT SHALL BE RECONSOLIDATED BY MECHANICAL VIBRATION AFTER
- INITIAL WATER LOSS AND SETTLEMENT HAS OCCURRED, AND BEFORE ADDING THE SUBSEQUENT GROUT LIFT. RECONSOLIDATION IS NOT REQUIRED FOR SELF-CONSOLIDATING GROUT. F. THE TIME BETWEEN PLACING GROUT LIFTS SHALL NOT EXCEED 1 HOUR.
- G. THE MAXIMUM POUR HEIGHT IS 24 FEET. H. A GROUT KEY SHALL BE PROVIDED AT THE TOP OF EACH GROUT LIFT AND GROUT
- POUR. GROUT KEYS SHOULD BE FORMED BY TERMINATING THE GROUT 1-1/2 INCHES BELOW A MORTAR JOINT.

MASONRY WALLS MARKED AS "LOAD-BEARING" ARE DESIGNED TO CARRY GRAVITY FLOOR LOADS AND MUST BE CONSTRUCTED TO SUPPORT THE FLOOR SYSTEM. ON CURRENTLY WITH ALL OTHER LOAD-BEARING CONCRETE AND STEEL COLUMNS.

MASONRY WALLS MARKED AS "INFILL" ARE NOT DESIGNED TO CARRY GRAVITY FLOOR LOADS AND MUST BE CONSTRUCTED AFTER THE FLOOR SYSTEM, WITH ALL LOAD-BEARING COMPONENTS, HAVE BEEN INSTALLED AND THE FLOOR SYSTEM UNSHORED.

AT SILLS OF MASONRY OPENINGS IN LOAD-BEARING MASONRY WALLS, PROVIDE AN 8" KNOCKOUT COURSE, GROUTED SOLID AND REINFORCED WITH 1 #5 CONTINUOUS HORIZONTAL BAR, TYPICAL UNLESS NOTED OTHERWISE ON PLAN OR DETAILS.

ALL WALLS EXCEEDING 16 FEET TALL SHALL HAVE A MID-HEIGHT DOUBLE-KNOCK OUT BLOCK, GROUTED SOLID WITH (2)#5 BARS CONT, IN EACH COURSE, UNLESS A CONCRETE TIE-BEAM OR BOND BEAM IS NOTED.



07/21/2023



USE (1) #5 VERT BAR AT EACH SIDE OF OPENING UP TO 6'-0", (2) #5 VERT BAR AT EACH SIDE OF OPENING GREATER THAN

4. AT THE CONTROL JOINTS IN MASONRY, REFER TO DETAIL 5/S-4.00. SEE STRUCTURAL DWGS FOR LOCATIONS.

FOR WALLS WITH CLEAR HEIGHT GREATER THAN 16'-0", PROVIDE (2) #5 VERT BARS IN FILLED CELLS AT 16" O.C. PROVIDE

SLAB ON GRADE SHALL BE A MINIMUM OF 6" CONCRETE SLAB ON GRADE REINFORCED WITH ONE LAYER OF 6x6 - W2.9 x W2.9 WELDED WIRE FABRIC IN UPPER HALF OF SLAB (UNLESS INDICATED OTHERWISE). REFER TO STRUCTURAL NOTES FOR SOIL COMPACTION REQUIREMENTS. REINFORCING "CHAIRS" ARE REQUIRED PER FLORIDA BUILDING CODE. THE CONCRETE SLAB SHALL BE CAST ON A VAPOR BARRIER (6 MIL MIN. THICKNESS) ON WELL COMPACTED, CLEAN,

ELEVATIONS SHOWN ON THESE PLANS REFER TO 0'-0" REFERENCE ELEVATION (TOP OF GROUND FLOOR SLAB).

VERIFY ALL DIMENSIONS, ELEVATIONS, SLAB STEPS AND SLAB FINISHES WITH BUILDING DRAWINGS PRIOR TO COMMENCING CONSTRUCTION. FOR ADDITIONAL DIMENSIONAL INFORMATION NOT GIVEN HERE, REFER TO ARCH.

SLAB ON GRADE CONTRACTION JOINTS (CJ) SHALL BE TOOLED OR SAWCUT WITHIN 6 HOURS OF POURING. SEE DETAIL

SIDE FORMS SHALL BE USED FOR ALL FOOTING UNLESS IT CAN BE DEMONSTRATED THAT SOILS ARE STABLE ENOUGH TO MAINTAIN VERTICAL "FORM-CUT" DURING CONSTRUCTION. INSPECTOR TO VERIFY AND ADVISE.

PROVIDE 8" W x 12" D THICKENED CONCRETE EDGE REINFORCED WITH (1) #5 BAR CONTINUOUS AT ALL DOOR OPENINGS. COORDINATE FINAL GRADE ELEVATIONS WITH TOP / FOOTING ELEVATIONS AND CIVIL PLANS PRIOR TO COMMENCING CONSTRUCTION. VERIFY 6" MINIMUM FROM TOP OF FOOTING TO FINISHED GRADE.

10. SEE DETAIL 1/S-4.00 FOR CONSTRUCTION JOINT DETAILS (SLAB COLD JOINTS, IF NEEDED)

### **BUILDING & ACCESSORY STRUCTURES FOOTING SCHEDULE** MARK 917E REMARKS BOTTOM CONT. THICKENED SLAB EDGE <u>⁻∕6∖</u> ONT Э́МТ 12" O.C. EACH WAY PYLON SIGN COLUMN AT CONTROL ROOM CONT. EACH WAY CONT. EACH WAY COLUMN AT TUNNEL ENTRY

MARK		SIZE				REINFORCI
$\langle \rangle$	LENGTH	WIDTH	DEPTH	TOP	CENTER	
TE10	CONT.	1'-0"	1'-0"	-	-	(1) #5 BARS C
SF20	CONT.	2'-0"	1'-0"		-	(2) #5 BARS C
SF25		Y Y 2'-6" 、人 人	Y 1'-0" 、 人	γ γ 	γ - 	(3) #5 BARS C
SF30	CONT.	3'-0"	1'-0"			(3) #5 BARS C
FP10	10'-0"	4'-0"	2'-0"	-	-	#5 BARS AT 12
FP20	2'-0"	2'-0"	1'-0"	-	-	(2) #5 BARS C
FP40	3'-6"	3'-6"	1'-0"	-	-	(4) #5 BARS C

NOTES:

1. THE BOTTOM OF ALL FOOTINGS SHALL BE (1'-0") MIN. BELOW FINISHED EARTH GRADE. 2. TOP OF ALL INTERIOR FOOTINGS SHALL BE (8") MIN. BELOW FINISHED FLOOR UNLESS NOTED OTHERWISE. 3. REFER TO STRUCTURAL FOUNDATION SITE PLAN FOR FOOTING SIZES FOR CANOPIES, PYLON SIGN & SITE SIGNAGE.

# MASONRY LINTEL SCHEDULE

MARK	LOCATION	TYPE	REMARKS
L-1	DOOR & WINDOWS	8 - 8"	8" DEEP FILLED IN MASONRY LINTEL w/
L-2	DOOR & WINDOWS	8 - 16"	16" DEEP FILLED IN MASONRY LINTEL w
L-3	DOOR & WINDOWS	8 - 24"	24" DEEP FILLED IN MASONRY LINTEL w
L-4	DOOR & WINDOWS	8 - 48"	48" DEEP FILLED IN MASONRY LINTEL w

## NOTES:

1. PER MFGR'S INSTUCTIONS, PROVIDE MINIMIUM 3" +/- 1/2" BEARING AT EACH END. 2. LINTEL MAY ACT AS COMPOSITE WITH BOND BEAMS AT THE FLOOR AND/OR ROOF LEVELS.







8" BLOCK WALL. SEE PLAN FOR REINFORCING (1) #5 BAR AT TOP **PÉR MFGR** INSTRUCTIONS 8" H BLOCK, FILL SOLID w/ CONC. TYP. - 8" PECAST U-LINTEL, FILL SOLID w/ CONC. TYP.

(1) #5 BAR AT BOTTOM PER MFGR INSTRUCTIONS







- 8" PECAST U-LINTEL, FILL SOLID w/ CONC. TYP. (1) #5 BAR AT

BOTTOM PER MFGR INSTRUCTIONS























