## STRUCTURAL NOTES:

### FOUNDATION:

A. FOUNDATION SYSTEM CONSISTS OF WALL CONTINUOUS AND PAD FOOTINGS DESIGNED FOR AN ALLOWABLE SOIL BEARING PRESSURE OF 2000 PSF IN ACCORDANCE WITH SOIL REPORT BY ARDAMAN & ASSOCIATES, INC., DATED 04-13-2022.

CONTRACTOR TO OBTAIN A COPY OF THE GEOTECHNICAL REPORT AND FOLLOW THE INSTRUCTIONS INDICATED. B. CONCRETE WALL FOOTINGS AND PADS SHALL NOT RECEIVE SUPERIMPOSED LOADS UNTIL 48 HOUR OR MORE AFTER THE

CONCRETE IS PLACED. C. EXCAVATIONS FOR MONOLITHIC FOOTINGS AND FOUNDATIONS, WHICH ARE TO SERVE AS FORMS, SHALL BE THOROUGHLY WET PRIOR TO PLACING CONCRETE.

D. AS A MINIMUM, BOTTOM OF MONOLITHIC FOOTING SHALL BE 8" MINIMUM BELOW GRADE AND TOP OF STEM WALL FOOTING AND ISOLATED FOOTING AS WELL. IF ELEVATION OF FOOTING SHOWN IN DETAILS PUT THE FOOTING HIGHER THAN 8" BELOW GRADE, THE 8" RULE SHALL GOVERN OVER THE ELEVATION SHOWN.

### 2. SLABS ON FILL:

FILL AND BACKFILL TO BE COMPACTED TO 95% OF MAXIMUM DRY DENSITY FOR ALL LAYERS AS VERIFIED BY FIELD DENSITY TEST FOR ALL LAYERS. TESTS SHALL BE MADE IN ACCORDANCE WITH METHODS OF TEST FOR MOISTURE DENSITY RELATIONS OF SOILS, ASTM D 1557-12 MODIFIED. COMPACTION LAYERS NOT TO EXCEED 12". BACKFILL MATERIAL TO BE APPROVED BY SOIL ENGINEER. SLABS TO BE PLACED CONTINUOUSLY. PROVIDE CONTRACTION JOINTS, MAXIMUM AREA BETWEEN JOINTS LIMITED TO 225 SF, AND/OR 12 FEET IN ANY DIRECTION. COORDINATE WITH ARCHITECTURE FOR LOCATION OF SAW CUTS AT EXPOSED AREAS. SAW CUT FOR THE JOINTS TO BE A MINIMUM OF t/4 INCH DEEP AND 1/8 INCH WIDE. PROVIDE VAPOR BARRIER BELOW ALL SLABS ON FILL (6 MIL.). WELDED WIRE FABRIC REINFORCEMENT FOR SLAB ON GRADE SHALL BE ADEQUATELY CHAIRED FOR ELEVATION, WET-LIFTING SHALL NO BE PERMITTED.

ALL CONCRETE TO ATTAIN A MINIMUM ULTIMATE COMPRESSIVE STRENGTH AS SHOWN BELOW IN 28 DAYS, AGGREGATES TO BE CLEAN WELL GRADED, MAXIMUM SIZE 3/4".

CONCRETE SLUMP= 3" MIN. TO 5" MAX. VERTICAL CONCRETE DROP NOT TO EXCEED 9'-0".

= 3000 PSI FOUNDATIONS AND SLAB ON GRADE COLUMNS, TIE COLUMNS AND BEAMS, U.N.O = 4000 PSI = 4000 PSI ALL OTHER MEMBERS = 3000 PSI

4. CONCRETE COVER:	MINIMUM CLEAR COVER (IN.)
A. SLAB ON GRADE AND FOOTINGS	3
B. WALLS	
C. COLUMNS	1 1/2
D. BEAMS	1 1/2
E. WALLS AND COLUMNS EXPOSED TO EARTH OR WEATHER	2
F. SLABS	
TOP BARS · · · · · · · · · · · · · · · · · · ·	
BOTTOM BARS · · · · · · · · · · · · · · · · · · ·	
G. ANY CONCRETE CAST AGAINST EARTH	3

### 5. REINFORCING STEEL:

A. TO BE DEFORMED BARS CONFORMING TO ASTM A615/ASTM A615M-12, GRADE 60.

B. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.

C. ALL TOP REINFORCEMENT SHALL TERMINATE WITH STANDARD HOOKS AT DISCONTINUOUS ENDS. D. ALL BOTTOM BARS SHALL BEAR A MINIMUM OF 6" OVER SUPPORTS UNLESS OTHERWISE NOTED.

E. REINFORCING STEEL TO BE DETAILED AND FABRICATED IN ACCORDANCE WITH "MANUAL OF STANDARD PRACTICE OF

DETAILING REINFORCING CONCRETE STRUCTURES". AND THE ACI BUILDING CODE 318-14. . WHEN REQUIRED, WELDABLE REINFORCING TO BE A706.

G. FOR FOUNDATION SPLICES IN REINFORCING BARS SHALL BE NOT LESS THAN 36 BAR DIAMETERS AND REINFORCEMENT SHALL BE CONTINUOUS AROUND ALL CORNERS AND CHANGES IN DIRECTION. CONTINUITY SHALL BE PROVIDED AT CORNERS OR CHANGES IN DIRECTION BY BENDING THE LONGITUDINAL STEEL AROUND THE CORNER 48 BAR DIAMETERS OR BY ADDING MATCHING REINFORCING STEEL. WHICH SHALL EXTEND 48 BAR DIAMETERS FROM EACH CORNER OR CHANGE IN DIRECTION. WHEN THREE OR MORE BARS ARE REQUIRED, THE BARS SHALL BE HELD IN PLACE AND ALIGNED BY TRANSVERSE BARS SPACED NOT MORE THAN

FOR ALL OTHER SPLICES SEE SPECIFIC SECTION OR DETAIL AND TENSION LAP SPLICE SCHEDULE. H. ALL REINFORCING STEEL SHALL BE DETAILED IN ACCORDANCE WITH ACI-315-11.

A. ALL CONCRETE BLOCK MASONRY WALLS, TO COMPLY WITH FLORIDA BUILDING CODE REQUIREMENTS AND THE ACI STANDARD CALLED "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES ACI 530.1 /ASCE 6/TMS402-16/TMS-602-16. B. CONCRETE BLOCK UNITS TO BE TYPE II-NONMOISTURE CONTROLLED, CONFORMING TO ASTM C90, WITH A MINIMUM NET AREA

COMPRESSIVE STRENGTH OF 1900 PSI, (AVERAGE OF THREE).

PRISM STRENGTH OF CMU WALLS F'm=1500 PSI.

C. MORTAR SHALL CONFORM TO ASTM C 270-12A: MORTAR TYPE "M", WITH A MINIMUM AVERAGE STRENGTH OF 2500 PSI. SHALL BE USED FOR WALLS BELOW GRADE.

MORTAR TYPE "M" (2500 PSI) OR TYPE "S" (1800 PSI) SHALL BE USED FOR ALL OTHER MASONRY WALLS. D. ALL CMU WALLS SHALL BE HÓRIZONTALLY REINFORCED WITH STANDARD NO. 9 LADDER-TYPE GALVANIZED STEEL REINFORCING EVERY OTHER COURSE. EXTEND REINFORCING A MINIMUM OF 4 INCHES INTO TIE COLUMNS.

E. ALL VERTICAL REINFORCEMENT, AS SPECIFIED ON PLANS, SHALL BE PLACED IN FULLY GROUTED CELLS. DOWELS SHALL BE PROVIDED TO ENSURE CONTINUITY OF REINFORCEMENT AT THE STRUCTURE ABOVE AND BELOW. ALL LAPS SHALL BE SPLICED MINIMUM 48 BAR DIAMETERS. ADDITIONAL VERTICAL WALL REINFORCEMENT SHALL BE PROVIDED AT ALL WALL ENDS, CORNERS, INTERSECTIONS AND AT ALL WALL OPENINGS NOT BOUND BY CONCRETE COLUMNS. PROVIDE CLEANOUT HOLES IN REINFORCED WALL CELLS AT BOTTOM OF EACH POUR. CLEAN CELLS FREE OF MORTAR AND DEBRIS. TIE VERTICAL REINFORCEMENT. MAXIMUM LIFT OF EACH POUR SHALL NOT EXCEED 4 FEET. MAXIMUM VERTICAL DROP FOR GROUTING SHALL NOT EXCEED 10 FEET. VERTICAL REINFORCEMENT WITHIN TERMINATING WALLS SHALL

EXTEND TO 2" BELOW TOP OF CONCRETE CAP/TIE BEAM ABOVE. F. PROVIDE INTERLOCKING BLOCK CONSTRUCTION AT ALL INTERSECTIONS AND CORNERS, PROVIDE CONTINUOUS JOINT REINFORCING AROUND CORNERS AND AT INTERSECTIONS.

G. CONCRETE TIE COLUMNS AND TIE BEAMS SHALL BE CAST AGAINST ERECTED MASONRY WALLS. HORIZONTAL JOINT

REINFORCEMENT SHALL EXTEND A MINIMUM OF 4 INCHES INTO TIE COLUMNS.

H. PROVIDE GALVANIZED DOVETAIL ANCHORS AT ALTERNATE JOINTS AT ALL MASONRY WALLS ABUTTING CONCRETE COLUMNS. I. REINFORCED CELLS SHALL BE FILLED WITH 3000 PSI GROUT AS PER ACI 530.1 FILLING OF CELLS SHALL BE DONE IN FOUR FOOT LIFTS WITH A MAXIMUM POUR OF 9 FEET. USE MECHANICAL VIBRATION TO ACHIEVE GROUT-FILLED. GROUT SHALL CONFORM TO ASTM C476-02. SLUMP SHALL BETWEEN 8" AND 11". PEAROCK PUMP MIX CAN BE

# 7. WIND LOADS AND DESIGN STANDARDS:

USED AS AN ALTERNATIVE TO GROUT.

STRUCTURE HAS BEEN DESIGNED TO RESIST LATERAL LOADS IN ACCORDANCE WITH THE REQUIREMENTS OF ASCE 7-16: WIND VELOCITY = 150 MPH EXPOSURE C, ENCLOSED BUILDING.

# 8. STRUCTURAL STEEL:

A. STRUCTURAL STEEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE FBC AND AISC SPECIFICATIONS B. STRUCTURAL STEEL SHALL MEET THE FOLLOWING REQUIREMENTS UNLESS NOTED OTHERWISE ON THE DRAWINGS:

STURAL STEEL SHALL MEET THE FULLOWING	REQUIREMENTS	ONLESS NOTED	OTHERWISE
<u>TYPE</u>	<u>ASTM</u>	<u>GRADE</u>	<u>fy</u>
WIDE FLANGE (W SHAPE)	A36	_	36KSI
C, S&M SHAPES	A36	_	36KSI
ANGLES	A36	_	36KSI
SQUARE & RECTANGULAR HSS	A500	В	46KSI
ROUND HSS	A500	В	42KSI
STEEL PIPE	A53	_	35KSI
STRUCTURAL BOLTS	ASTM1554	36	36KSI
ANCHOR BOLTS-THREADED RODS	F1554	36	36KSI
PLATES	A36		36KSI
THREADED RODS	A36		36KSI

ALL STRUCTURAL STEEL THAT IS EXPOSED TO THE WEATHER SHALL BE HOT DIPPED GALVANIZED.

C. ALL CONNECTIONS NOT DETAILED OR OTHERWISE NOTED SHALL BE DESIGNED BY THE FABRICATOR. SHOP DRAWINGS AND CONNECTION CALCULATIONS SHALL BE SUBMITTED BEARING THE SEAL OF AN ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. D. BEAM SHEAR CONNECTIONS DESIGN SHALL BE BASED ON BEARING TYPE BOLTED CONNECTIONS WITH BOLTS "SNUG TIGHT" PER AISC.

CONNECTIONS SHOWN ARE BASED ON WELD MADE WITH E70XX ELECTRODES. WELDING TO BE DONE BY CERTIFIED WELDERS HOLDING CURRENT WELDING CERTIFICATES, AND MUST PRESENT SAME AT JOB SITE AT ALL TIMES. ALL WELDING PER PLANS AND PER GUIDELINES OF THE AMERICAN WELDING SOCIETY.

### 10. DETAILS AND SECTIONS:

ALL DETAILS AND SECTIONS SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL, AND SHALL BE CONSTRUED TO APPLY TO ANY SIMILAR SITUATION ELSEWHERE ON THE PROJECT, UNLESS A DIFFERENT DETAIL, OR SECTION IS SHOWN.

### 11. SHORING AND RESHORING:

CONTRACTOR WILL PROVIDE SHORING AND RESHORING DRAWINGS. ALONG WITH RE-SHORING SCHEDULE FOR ALL ELEVATED STRUCTURAL COMPONENTS, INCLUDING BUT NOT LIMITED TO BEAMS, SLABS, AND PRECAST ELEMENTS. DRAWINGS TO BE SIGNED AND SEALED BY A FLORIDA REGISTERED PROFESSIONAL STRUCTURAL ENGINEER, FOR SUBMITTAL TO THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD, AND THE THRESHOLD INSPECTOR (IF APPLICABLE). NO ELEVATED WORK MAY PROCEED WITHOUT THIS SUBMITTAL. CONTRACTOR TO ALSO RETAIN SAME ENGINEER TO PROVIDE FIELD INSPECTIONS, ALONG WITH REPORTS, THAT ALL OF THE SHORING AND RE-SHORING IS COMPLETED AS PER HIS DRAWINGS AND SPECIFICATIONS. SHORING SCHEDULE TO PROVIDE TIME THAT SHORES MAY BE REMOVED IN ORDER TO REMOVE FORMWORK, AND SPECIFIC SEQUENCE OF THE REMOVAL OF THE SHORING AS IT PROGRESSES THRU THE HEIGHT OF THE BUILDING. SHORING DRAWINGS TO ALSO CONTAIN DETAIL OF CONNECTION OF HEADERS AT THE TOP OF THE SHORES.

### 12. GENERAL:

A. IN CASE OF DISCREPANCY BETWEEN THESE NOTES AND PLAN NOTES OF INFORMATION IN THE PLANS, SECTION OR DETAILS,

THE MOST STRINGENT REQUIREMENT SHALL BE APPLIED.

B. IF ANY ERRORS OR OMISSIONS APPEAR IN THE DRAWINGS, SPECIFICATIONS, OR OTHER DOCUMENTS, THE CONTRACTOR MUST NOTIFY THE ARCHITECT AND ENGINEER, IN WRITING, OF THE SAME PRIOR TO PROCEEDING WITH THE WORK IN QUESTION. IN THE EVENT THAT THE CONTRACTOR FAILS TO GIVE NOTICE, OR PROVIDE SUFFICIENT TIME FOR A RESPONSE, CONTRACTOR IS RESPONSIBLE FOR THE RESULTS OF SUCH ERRORS OR OMISSIONS, AND FOR ALL COSTS FOR RECTIFYING SAME AND FOR ANY DELAYS OR ANY OTHER COSTS INCURRED BY SAME.

C. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS OF EXISTING STRUCTURES AFFECTING THE NEW CONSTRUCTION PRIOR TO COMMENCING THE WORK. ANY VARIATIONS IN ACTUAL FIELD CONDITIONS/DIMENSIONS FROM THOSE SHOWN IN THE PERMITTED CONTRACT DRAWINGS SHALL BE REPORTED TO THE ARCHITECT/ENGINEER FOR DETERMINING THE NEED FOR RE-DESIGN PRIOR TO CONTRACTOR'S SUBMITTAL OF SHOP DRAWINGS FOR REVIEW.

D. CONTRACTOR SHALL COORDINATE DIMENSIONS WITH ARCHITECTURAL DRAWINGS, VERIFY ALL FIELD DIMENSIONS PRIOR TO INSTALLATION, AND VERIFY THAT PROPOSED DIMENSIONS AND FIELD CONDITIONS AGREE WITH THIS PROPOSED PLAN. USE OF THIS DOCUMENT CONSTITUTES ACCEPTANCE OF THE PROPOSED SYSTEM LAYOUT, COMPONENTS SELECTED, AND INSTALLATION. THESE DRAWINGS ARE NOT INTENDED TO BE USED AS FABRICATION OR SHOP DRAWINGS.

ALL STRUCTURAL WOOD MEMBERS OTHER THAN TRUSSES TO BE SOUTHERN PINE GRADE NO. 2 UNLESS OTHERWISE NOTED. ALL WOOD MEMBERS TO BE FREE OF ALL IMPERFECTIONS AS: SPLITS, CHECKS, OR EXCESSIVE KNOTS. UNSATISFACTORY MATERIALS TO BE REPLACED AT NO COST TO OWNER. ALL WOOD MEMBERS EXPOSED TO THE WEATHER OR IN CONTACT WITH CONCRETE OR MASONRY TO BE PRESSURE TREATED. MOISTURE CONTENT SHALL BE 19% OR LESS.

ALL BOLTED CONNECTIONS TO BE COMPLETED WITH A325 GALVANIZED STEEL BOLTS WITH WASHERS AT EACH END. FABRICATION, ERECTION, AND CONNECTIONS TO BE AS PER RECOMMENDATIONS OF THE A.I.T.C. (AMERICAN INSTITUTE OF TIMBER CONSTRUCTION), LATEST EDITION. PLYWOOD SHEATHING CLASSIFICATION SHALL BE "C" OR BETTER AND THE EXPOSURE SHALL BE APA RATED EXTERIOR. INSTALL PANELS WITH STRENGTH DIRECTION PERPENDICULAR TO TRUSSES OR JOISTS PRESSURE-TREATED WOOD SHALL BE USED WHERE IN CONTACT WITH CONCRETE OR EXPOSED TO WEATHER.

ALL BOLTS SHALL BE HOT DIPPED GALVANIZED, OR STAINLESS STEEL & MEET THE REQUIREMENTS OF ASTM A325. WASHERS SHALL BE USED BETWEEN WOOD & BOLT HEAD & BETWEEN WOOD & NUT. WHERE GENERIC FASTENERS ARE LABELED IN DETAILS, CAPACITIES SHALL BE EQUAL TO OR GREATER THAN HILTI KWIK BOLT III OR RED HEAD THRU BOLTS. EMBEDMENT DEPTHS SPECIFIED HEREIN ARE DEPTHS INTO SOLID SUBSTRATE AND DO NOT INCLUDE THICKNESS OF STUCCO OR OTHER FINISHES.

### 15. SUBMITTALS & SHOP DRAWINGS:

NO SHOP DRAWING SHALL BE SUBMITTED FOR ARCHITECT/ENGINEER'S REVIEW UNTIL AFTER THEY HAVE BEEN REVIEWED AND NOTED FOR CONSTRUCTION METHOD, DIMENSIONING, AND OTHER TRADE REQUIREMENTS BY THE CONTRACTOR, AND STAMPED WITH THE CONTRACTOR'S APPROVAL SEAL. SIGNED AND SEALED CALCULATIONS SHALL BE INCLUDED OF APPLICABLE,

A. REINFORCING STEEL SHOP DRAWINGS.

B. STRUCTURAL STEEL SHOP DRAWINGS. CONNECTIONS CALCULATIONS, IF ANY, SHALL BE SIGNED AND SEALED.

. SIGNED AND SEALED SHORING AND RE-SHORING SHOP DRAWINGS. D. SIGNED AND SEALED SHOP DRAWINGS FOR WINDOWS, DOORS AND STOREFRONTS.

E. ANCHORING DETAILS FOR WINDOWS AND DOOR BUCKS NOT SHOWN ON THE DRAWINGS SHALL BE DESIGNED AND DETAIL BY MANUFACTURER'S SPECIALTY ENGINEER AND SUBMITTED TO THE E.O.R. FOR APPROVAL. SUBMIT SIGNED AND SEAL SHOP DRAWINGS.

SIGNED AND SEALED SHOP DRAWINGS FOR STEEL LADDER.

SIGNED AND SEALED SHOP DRAWINGS FOR STEEL STAIRS. H. SIGNED AND SEALED SHOP DRAWINGS FOR ALL RAILINGS.

SIGNED AND SEALED SHOP DRAWINGS FOR PRE-FABRICATED CONCRETE ELEMENTS.

K. SIGNED AND SEALED SHOP DRAWINGS FOR OPEN WEB STEEL JOISTS.

### L. SIGNED AND SEALED SHOP DRAWINGS FOR WOOD TRUSSES. 16. CODES:

ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES AND ORDINANCES, INCLUDING:

- FLORIDA BUILDING CODE 2020 7TH EDITION.
- ASCE 7-16. LOADS.
- ACI 318-14. REINFORCED CONCRETE. AISC MANUAL OF STEEL CONSTRUCTION, AISC360-16.
- ACI 530.1 (TMS402-2016, TMS-602-2016) MASONRY.
- NDS FOR WOOD CONSTRUCTION, NDS-18, 2018. • ALUMINUM DESIGN MANUAL ADMI-2015.

17. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE FOLLOWING INSTALLATION OF ALL COMPONENTS AS INDICATED ON THE DRAWINGS. IT SHALL BE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE METHOD AND SEQUENCE OF ERECTION PROCEDURES (INCLUDING IMPLEMENTATION OF TEMPORARY SHORING, BRACING, ETC.) IF A SEQUENCE IS SPECIFIED IN THE ARCHITECTURAL OR STRUCTURAL DRAWINGS, CONTRACTOR SHALL VERIFY THE FEASIBILITY OF IT, AND INFORM THE ENGINEER OR ARCHITECT OF ANY DISCREPANCY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE SAFETY THROUGHOUT THE PERIOD OF CONSTRUCTION. THIS STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL, PLUMBING MECHANICAL AND ELECTRICAL DRAWINGS TO COORDINATE LOCATION OF DEPRESSED SLABS, SLOPES, DRAINS, OUTLETS, RECESSES, OPENINGS, REGLETS, BOLT SETTINGS, SLEEVES, DIMENSIONS, ETC.

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S-1.4 PARTIAL ROOF FRAMING PLAN. S-2.1 SCHEDULES.

S-4.3 SECTIONS.

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S-3.5 FOOTINGS DETAILS. S-4.1 SECTIONS. S-4.2 SECTIONS.

S-4.4 SECTIONS. S-5.1 WIND PRESSURES.

	-ADDITIONAL	LSV	-LONG LEG VERTICAL
	-ARCHITECTURAL	LP	-LOW POINT
	-BUILDING	LW	-LONG WAY
	-BEAM	LWC	-LONG WAY -LIGHT WEIGHT CONCRETE -LIGHT WEIGHT INSULATED
CIP CJ	-CAST IN PLACE -CONTROL JOINT	LWIC	<ul><li>LIGHT WEIGHT INSULATED CONCRETE</li></ul>
CL	-CENTERLINE	MAX	-MAXIMUM
CLR			-MECHANICAL
	-CONCRETE MASONRY UNIT		-MINIMUM
	-COLUMN		-NOT TO SCALE
	-CENTER		-NEAR SIDE
	-DOUBLE		ON CENTER
DET	-DETAIL		-OUTSIDE DIAMETER
	-DOWN	OPP	-OPPOSITE
DWG	-DRAWING		-PLATE
EA	-EACH		-POUNDS PER LINEAR FOOT
EE	-EACH END		-PLYWOOD
EF EJ	-EACH FACE	PSF	-POUNDS PER SQUARE FOOT
	-EXPANSION JOINT		-POUNDS PER INCH
EL	-ELEVATION		-REINFORCING
EOR	-ENG. OF RECORD		-REQUIRED
EW	-EACH WAY	REV	-REVISED/REVISION
EX	-EXISTING		-ROOM
	-EXPANSION		-STRUCT. ENG. OF RECORD
	-EXISTING WALL FOOTING		-SQUARE FOOT
	-FINISH		-SIMILAR
FLR	-FLOOR		-SLOPE
	-FOUNDATION		-STANDARD
	-FAR SIDE		-SHEARWALL/SHORT WAY
FT	-FOOT	STL	-STEEL
FTG	-FOOTING		-STRUCTURAL
F.V.	-FIELD VERIFY		-TIE BEAM
	-GAGE	TOO	-TIE COLUMN
	-GALVANIZED		-TOP OF CONCRETE
		TEMB	
	-HIGH POINT		-TEMPERATURE
	-INSIDE DIAMETER	TYP	-TYPICAL
	-ISOLATION JOINT	UNO	-UNLESS NOTED OTHERWISE
	-INFORMATION	UON	-UNLESS OTHERWISE NOTED
	-INTERIOR	VERT	-VERTICAL
	-LONG SIDE VERTICAL	W/	-WITH -WELDED HEADED STUD
LLH	-LONG LEG HORIZONTAL	WHS WWF	-WELDED HEADED STOD -WELDED WIRE FABRIC
		44 AA L	-WLLDED WIRE FADRIC

# TERMITE PROTECTION

PROVIDE SOIL TREATMENT PROTECTION AGAINST SUBTERRANEAN TERMITES FOR ALL SLAB CUTS IN COMPLIANCE W/ FBC SECTION 1816. A CERTIFICATE OF COMPLIANCE SHALL BE ISSUED TO THE BUILDING DEPARTMENT BY A LICENSED PEST CONTROL COMPANY THAT CONTAINS THE FOLLOWING STATEMENT: "THE BUILDING HAS RECEIVED A COMPLETE TREATMENT FOR THE PREVENTION OF SUBTERRANEAN TERMITES. TREATMENT IS ACCORDANCE WITH RULES AND LAWS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES."

# SITE PREPARATION:

1.- EXCAVATION SHALL REMOVE ALL GRASS, WEEDS, ROOTS, AND ANY DEBRIS. 2.— EXISTING SOFT SILT AND ORGANIC SOIL LAYER SHALL BE REMOVED AND REPLACED WITH CLEAN FILL, SEE NOTE 7.

3.- SAND AND LIME ROCK SOIL CAN BE STOCKEDPILED AND USED AS BACKFILL.

4.- ONCE THE ORGANIC LAYER HAS BEEN REMOVED, THE DEMUCKED SURFACE SHALL BE COMPACTED.

5.- FILL MATERIAL SHALL BE PLACED IN LIFTS NOT EXCEEDING 12 INCHES IN LOOSE THICKNESS.

6.- EACH LIFT SHALL BE THOROUGHLY COMPACTED WITH VIBRATORY COMPACTION EQUIPMENT.

7.- FILL SHALL CONSIST OF CLEAN SAND, LIME STONE OR GRAVEL. FILL MATERIAL SHALL HAVE A MAXIMUM PARTICLE SIZE OF 3" AND NO MORE THAN 10 % PASSING THE No. 200 SIEVE.

# SOIL STATEMENT:

FOUNDATION SYSTEM HAS BEEN DESIGNED USING A LOAD-BEARING CAPACITY OF 2000 PSF. BASED ON THE GEOTECHNICAL REPORT BY ARDAMAN & ASSOCIATES, INC., DATED 04-13-2022. CONTRACTOR TO OBTAIN A COPY OF THE GEOTECHNICAL REPORT AND FOLLOW THE INSTRUCTIONS INDICATED IN THE REPORT.

# REQUIREMENTS FOR CONDUITS AND PIPES EMBEDDED IN CONCRETE:

1-CONDUITS AND PIPES OF ALUMINUM SHALL NOT BE EMBEDDED IN STRUCTURAL CONCRETE UNLESS EFFECTIVELY COATED OR COVERED. 2-THE OUTSIDE DIAMETER OF CONDUITS AND PIPES SHALL NOT BE LARGER THAN 1/3 THE OVERALL THICKNESS OF SLAB, BEAM OR WALL IN WHICH THEY ARE EMBEDDED.

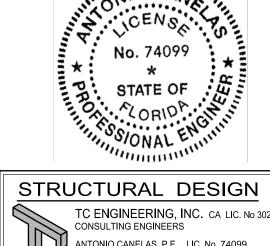
3-THE NOMINAL INSIDE DIAMETER IF THE CONDUITS AND PIPES SHALL NOT BE GREATER THAN 2". 4-STEEL AND IRON PIPES AND CONDUITS SHALL NOT BE THINNER THAN STANDARD SCHEDULE 40, AND CAN BE UNCOATED OR GALVANIZED. PIPES AND CONDUITS OF OTHER MATERIAL SHALL BE DESIGNED TO RESIST PRESSURE AND TEMPERATURE WHICH THEY WILL BE SUBJECTED.

5-CONDUITS AND PIPES SHALL NOT BE SPACED CLOSER THAN 4 TIMES THE OUTSIDE DIAMETER OR WIDTH (CLEAR SPACING). 6-IN SOLID SLABS PIPING AND CONDUITS SHALL BE PLACED BETWEEN TOP AND BOTTOM

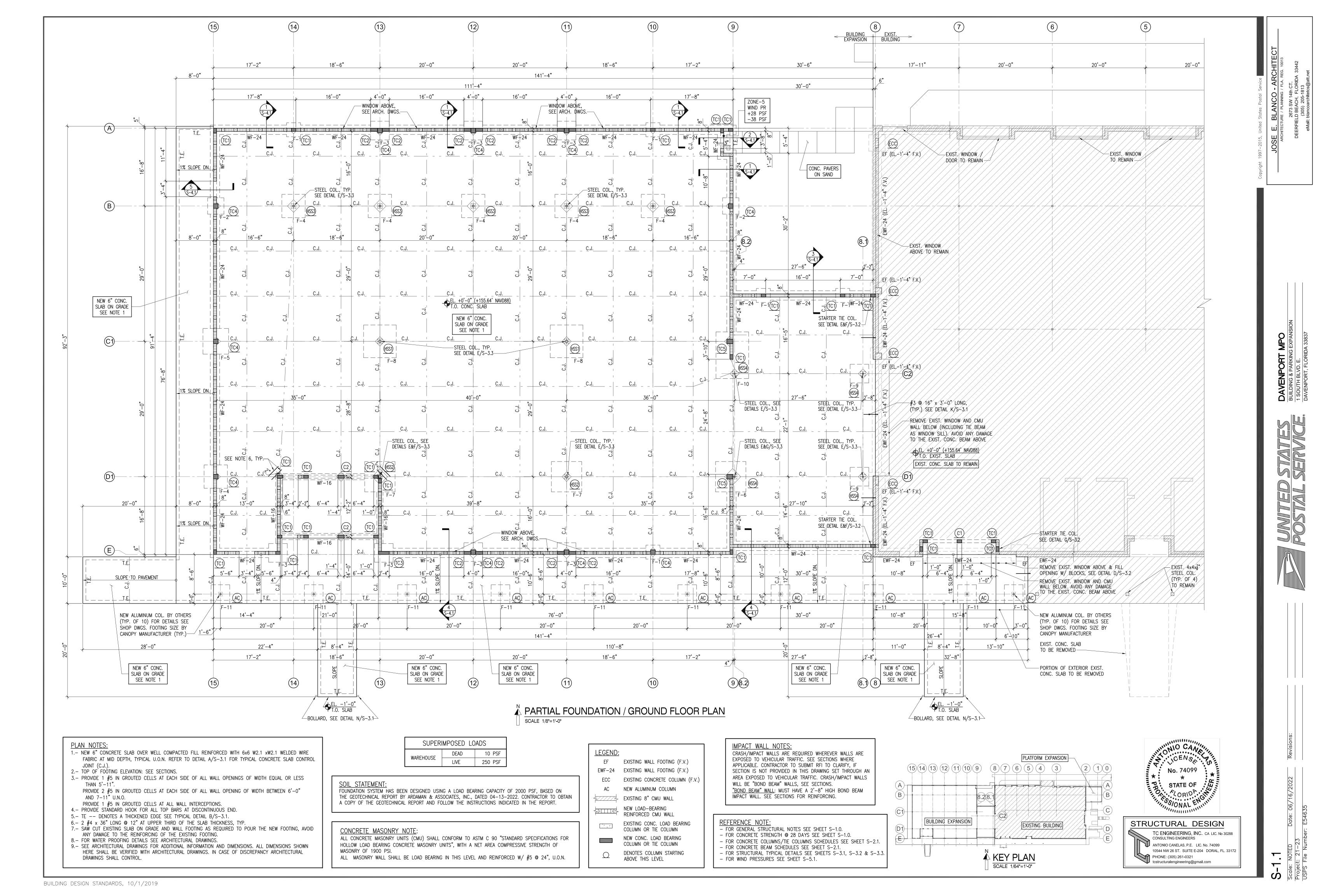
REINFORCEMENT. 7-CONCRETE COVER FOR PIPES, CONDUITS AND FITTINGS SHALL BE NO LESS THAN 1½" FOR CONCRETE EXPOSED TO EARTH OR WEATHER AND NO LESS THAN 34" FOR CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND.

8-PIPING AND CONDUIT SHALL BE SO FABRICATED AND INSTALLED THAT CUTTING, BENDING, OR

DISPLACEMENT OF REINFORCEMENT FROM ITS PROPER LOCATION WILL NOT BE REQUIRED.



TC ENGINEERING, INC. CA LIC. No 30288 ANTONIO CANELAS, P.E. LIC. No. 74099 10544 NW 26 ST. SUITE E-204 DORAL, FL. 33172 PHONE: (305) 261-0321 tcstructuralengineering@gmail.com



EXIST. WINDOW TO REMAIN — NEW WF-16 (EL.-5'-0") (EL.-5'-0") ~ **CONCRETE MASONRY NOTE:** /\_#3/@/16" x/3'-b" LONG, (TYP.) SEE DETAIL K/S-3.1 MASONRY OF 1900 PSI. **IMPACT WALL NOTES:** WILL BE "BOND BEAM" WALLS, SEE SECTIONS. "BOND BEAM" WALL: MUST HAVE A 2'-8" HIGH BOND BEAM IMPACT WALL. SEE SECTIONS FOR REINFORCING. EXIST. CONC. SLAB TO REMAIN EXIST, DOOR TO REMAIN — **LEGEND:** EF EXISTING WALL FOOTING (F.V.) EWF-24 EXISTING WALL FOOTING (F.V.) EXISTING 8" CMU WALL NEW LOAD-BEARING REINFORCED CMU WALL NEW 8" CONC. WALL BELOW OR CONC. COLUMN/TIE COLUMN BELOW NEW CONC. LOAD BEARING COLUMN OR TIE COLUMN DENOTES COLUMN STARTING ABOVE THIS LEVEL –EXIST.∕WINDOW∕ ABOVE TO REMAIN— REFERENCE NOTE:

- FOR GENERAL STRUCTURAL NOTES SEE SHEET S-1.0. - FOR CONCRETE COLUMNS/TIE COLUMNS SCHEDULES SEE SHEET S-2.1. FOR STRUCTURAL TYPICAL DETAILS SEE SHEETS S-3.1, S-3.2 & S-3.3. - FOR WIND PRESSURES SEE SHEET S-5.1. SCALE 1/8"=1'-0"

0

(EL.-5'-0")

∯. 5. ≰¦

7'-0"

20'-6"

20'-0"

8" CMU WALL W/ #5 @ 48"

8" CMU WALL "/ "

NEW WF-16

(EL. -1'-4" F.V.)

TENDED FOOTING

(EL. -5'-0")

—PORTION OF EXTERIOR EXIST.

CONC. SLAB TO BE REMOVED

SLAB ON GRADE SEE NOTE 1

—SEE DETAIL L/S-3.1 -STEPPED FOOTING ∖ SEE DETAIL M/S-3.1→

50'-4"

-EXIST./WINDOW/

DOOR TO REMAIN-

EXIST. WINDOW

/TO/REMAIN /

EL. +0'-0" (+155,64' NAVD88) T.O. EXIST. SI.AB

EXIST. CONC. SLAB TO REMAIN]

# PLAN NOTES:

1.- NEW 6" CONCRETE SLAB OVER WELL COMPACTED FILL REINFORCED WITH 6x6 W2.1 xW2.1 WELDED WIRE FABRIC AT MID DEPTH, TYPICAL U.O.N.

REFER TO DETAIL A/S-3.1 FOR TYPICAL CONCRETE SLAB CONTROL JOINT (C.J.).

2.— TOP OF FOOTING ELEVATION: SEE SECTIONS. 3.— PROVIDE 1 #5 IN GROUTED CELLS AT EACH SIDE OF ALL WALL OPENINGS OF WIDTH EQUAL OR LESS THAN 5'-11". PROVIDE 2 #5 IN GROUTED CELLS AT EACH SIDE OF ALL WALL OPENING OF WIDTH BETWEEN 6'-0" AND 7-11" U.N.O.

PROVIDE 1 #5 IN GROUTED CELLS AT ALL WALL INTERCEPTIONS. 4.- PROVIDE STANDARD HOOK FOR ALL TOP BARS AT DISCONTINUOUS END.

5.- FOR WATER PROOFING DETAILS SEE ARCHITECTURAL DRAWINGS. 6.— SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION AND DIMENSIONS. ALL DIMENSIONS SHOWN HERE SHALL BE VERIFIED WITH ARCHITECTURAL DRAWINGS. IN CASE OF DISCREPANCY ARCHITECTURAL DRAWINGS SHALL CONTROL.

SUPERIMPOSED LOADS								
WARFHOUSE	DEAD	10 PSF						
WAREHOUSE	LIVE	250 PSF						

SOIL STATEMENT:
FOUNDATION SYSTEM HAS BEEN DESIGNED USING A LOAD BEARING CAPACITY OF 2000 PSF, BASED ON THE GEOTECHNICAL REPORT BY ARDAMAN & ASSOCIATES, INC., DATED 04-13-2022. CONTRACTOR TO OBTAIN A COPY OF THE GEOTECHNICAL REPORT AND FOLLOW THE INSTRUCTIONS INDICATED IN THE REPORT.

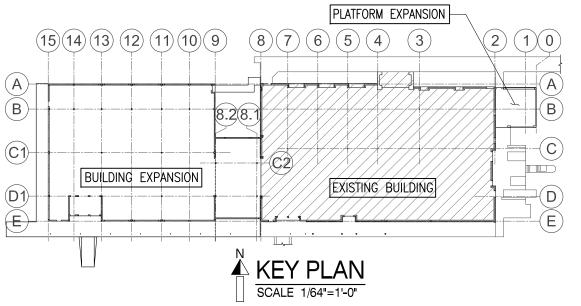
ALL CONCRETE MASONRY UNITS (CMU) SHALL CONFORM TO ASTM C 90 "STANDARD SPECIFICATIONS FOR HOLLOW LOAD BEARING CONCRETE MASONRY UNITS", WITH A NET AREA COMPRESSIVE STRENGTH OF

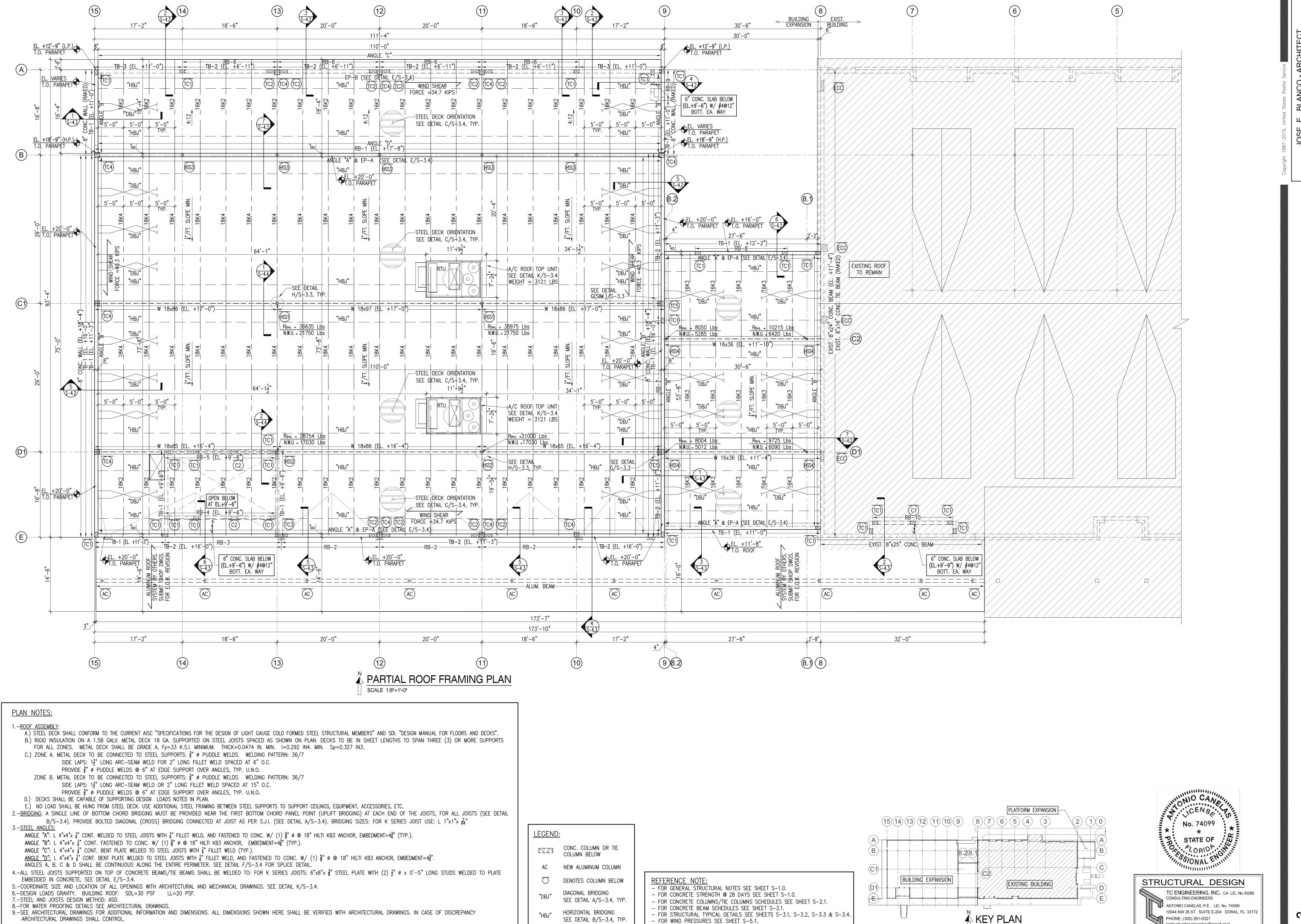
ALL MASONRY WALL SHALL BE LOAD BEARING IN THIS LEVEL AND REINFORCED W/ #5 @ 24", U.O.N.

CRASH/IMPACT WALLS ARE REQUIRED WHEREVER WALLS ARE EXPOSED TO VEHICULAR TRAFFIC. SEE SECTIONS WHERE APPLICABLE. CONTRACTOR TO SUBMIT RFI TO CLARIFY, IF SECTION IS NOT PROVIDED IN THIS DRAWING SET THROUGH AN AREA EXPOSED TO VEHICULAR TRAFFIC. CRASH/IMPACT WALLS

- FOR CONCRETE STRENGTH @ 28 DAYS SEE SHEET S-1.0.

- FOR CONCRETE BEAM SCHEDULES SEE SHEET S-2.1.





SEE DETAIL B/S-3.4, TYP.

- FOR WIND PRESSURES SEE SHEET S-5.1.

BUILDING DESIGN STANDARDS, 10/1/2019

ARCHITECTURAL DRAWINGS SHALL CONTROL.

PHONE: (305) 261-0321 tcstructuralengineering@gmail.com

SCALE 1/64"=1'-0"

< EXIST. PLATFORM PUBLICATION PLATFORM EXISTING ROOF TO REMAIN ------EXISTING ROOF TO REMAIN EXISTING ROOF TO REMAIN 

PARTIAL ROOF FRAMING PLAN SCALE 1/8"=1'-0"

## PLAN NOTES:

- 1.- COLD-FORMED METAL TRUSSES: §" PLYWOOD SHEATHING FASTENED TO AN STEEL METAL DECK AND OVER A PRE-ENGINEERED AND PRE-FABRICATED COLD-FORMED METAL TRUSSES SPACED AT 24". SUBMIT SHOP DRAWINGS AND CALCULATIONS SIGNED AND SEALED BY FLORIDA REGISTERED PROFESSIONAL ENGINEER. METAL DECK AND FASTENERS AS PER DETAIL G/S-3.4. PLYWOOD SHEATHING AS PER DETAIL H/S-3.4. ROOFING INSTALLER SHALL PROVIDE SHOP DRAWINGS FOR APPROVAL, INCLUDING TYPE OF SCREWS WITH N.O.A.
- 2.- SCREWING REQUIREMENTS: SIZE & TYPE: USE #12-24x24" WOOD TO METAL TEK SCREWS. SCREWS SHALL BE CORROSION RESISTANT. SCREW SPACING: 4" O.C. AT PANEL EDGES.
- 6" O.C. AT INTERMEDIATE SUPPORTS.
- 3.- TRUSS DESIGN LOAD: SDL: 30 PSF LL: 20 PSF. UPLIFT IN ACCORDANCE WITH THE FLORIDA BUILDING CODE AND ASCE 7-16.
- METAL TRUSSES END CONNECTIONS SHALL BE WELDED TO AN EMBEDDED STEEL PLATE AS SHOWN IN ROOF SECTIONS.
- 4.– BRACING: A. HORIZONTAL BRACING BOTTOM CHORD: PROVIDE ONE ROW OF HORIZONTAL BRACING AT PANEL POINTS AS SHOWN EVERY 10'-0" OF SPAN OF TRUSS.
- B. DIAGONAL BRACING: PROVIDE CROSS BRACING, AS SHOWN, AT EACH END OF EACH ROW OF PERMANENT HORIZONTAL BRACING, AND AT NOT MORE THAN 20'-0" SPACING IN DIRECTION OF
- HORIZONTAL BRACING. 5.- STEEL AND TRUSSES DESIGN METHOD: ASD.
- 6.- FOR WATER PROOFING DETAILS SEE ARCHITECTURAL DRAWINGS.
- 7.- SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION AND DIMENSIONS. ALL DIMENSIONS SHOWN HERE SHALL BE VERIFIED WITH ARCHITECTURAL DRAWINGS. IN CASE OF DISCREPANCY ARCHITECTURAL DRAWINGS SHALL CONTROL.

## NOTES TO TRUSS DESIGNER MANUFACTURER:

- TRUSS CONCENTRATED LOAD REQUIREMENT: ANY SINGLE PANEL POINT OF THE LOWER CHORD OF ROOF TRUSSES SHALL BE CAPABLE OF SAFELY CARRYING A SUSPENDED, CONCENTRATED LOAD OF NOT LESS THAN 200 POUNDS (8896 N) IN ADDITION TO 10 PSF DEAD LOAD AS PRESCRIBED IN FBC 2319.17.2.1.3. - TRUSSES SURFACE DESIGN LOAD:
  - DL = 15 PSF TOP CHORD AND 10 PSF BOTTOM CHORD
- LL = 20 PSF TOP CHORD - TEMPORARY BRACING SHALL ALWAYS BE REQUIRED DURING THE ERECTION OF ROOF TRUSSES. THE PROVISIONS FOR TEMPORARY BRACING SHOWN IN HIB-91 SHALL BE USED.
- PROVIDE VERTICAL TUBULAR MEMBER OR 2 CHANNEL WELDED TOGETHER TO ALLOW FOR SIDE PLATE CONNECTIONS. SEE ROOF SECTIONS.

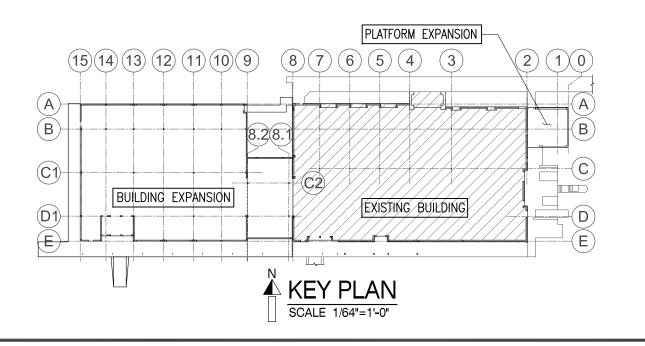
	TRUSS REACTION SCHEDULE										
MARK	DL REACTION (Lbs)			LL REACTION (Lbs)			NET UPLIFT REACTION (Lbs)				
	LEFT	INTER	RIGHT	LEFT	INTER	RIGHT	LEFT	INTER	RIGHT		
T-1	805	_	825	537	_	537	1261	_	1261		

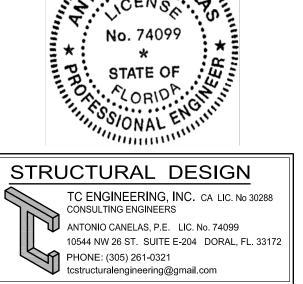
REFERENCE FOR LEFT AND RIGHT SUPPORT SHALL BE TAKEN WHEN THE OBSERVER INSIDE THE BUILDING IS FACING WEST OR FACING SOUTH.

LEGEND:	
	CONC. COLUMN OR TIE COLUMN BELOW
$\bigcirc$	DENOTES COLUMN BELOW
"DBT"	DIAGONAL BRACING SEE DETAIL G/S-3.4, TYP.
"HBT"	HORIZONTAL BRACING SEE DETAIL H/S-3.4, TYP.
5″ CD−X	5" CD-X PLYWOOD OVER PREFABRICATED STEEL TRUSSES @ 24". SEE DETAIL J/S-3.4

- REFERENCE NOTE:

   FOR GENERAL STRUCTURAL NOTES SEE SHEET S-1.0. - FOR CONCRETE STRENGTH @ 28 DAYS SEE SHEET S-1.0.
- FOR CONCRETE COLUMNS/TIE COLUMNS SCHEDULES SEE SHEET S-2.1.
- FOR CONCRETE BEAM SCHEDULES SEE SHEET S-2.1. - FOR STRUCTURAL TYPICAL DETAILS SEE SHEETS S-3.1, S-3.2, S-3.3 & S-3.4.
- FOR WIND PRESSURES SEE SHEET S-5.1.





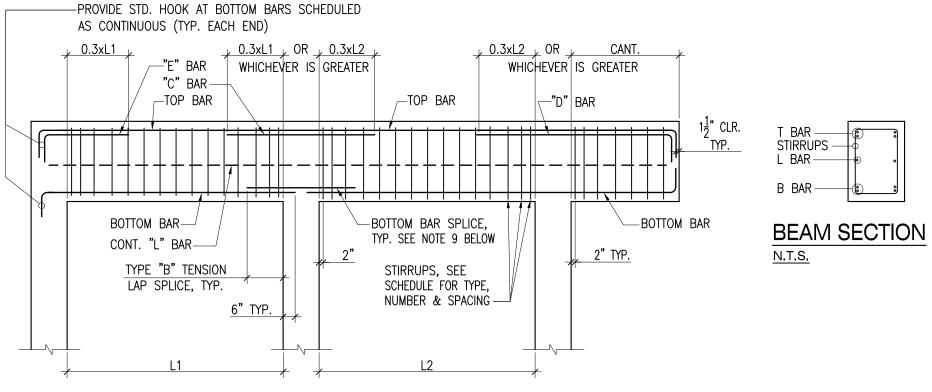
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- \i		st: 21–23	File Number: E54635

		B=BOTTOM T=TOP			
MARK	SIZ	ZE	REINFOF	RCEMENT	REMARKS
IVIALITY	DIMENSION	THICKNESS (IN)	LONG BARS	SHORT BARS	TEMATING
F-1	3'-0"x3'-0"	12	4 #4 T&B	4 #4 T&B	
F-2	3'-6"x3'-6"	12	5 #4 T&B	5 #4 T&B	
F-3	4'-0"x4'-0"	12	6 #4 T&B	6 #4 T&B	
F-4	5'-0"x5'-0"	12	5 #5 T&B	5 #5 T&B	
F-5	5'-6"x5'-6"	12	6 #5 T&B	6 #5 T&B	
F-6	6'-6"x6'-6"	13	6 #5 T&B	6 #5 T&B	
F-7	6'-6"x6'-6"	16	8 #5 T&B	8 #5 T&B	
F-8	7'-0"x7'-0"	14	7 #5 T&B	7 #5 T&B	
F-9	4'-0"x4'-0"	12	6 #4 T&B	6 #4 T&B	(SEE DETAIL ON S-3.5)
F-10	7'-0"x10'-0"	14	#5 @ 12" T&B	#5 @ 12" T&B	(SEE DETAIL ON S-3.5)
F-11	4'-0"x4'-0"	24			ESTIMATED SIZE (SEE PLAN)

	WALL FOOTING SCHEDULE									
MARK	SIZE	REINFOR	REMARKS							
IVIALIIX	(WxDxL)	TRANSVERSE	LONGITUDINAL	TILIVIATINO						
WF-16	16"x12"x CONT.	#3 @ 36"	2 #5 CONT.							
WF-24	24"x12"x CONT.	#4 @ 12"	3 #5 CONT.							

		D 4 0 E	0.4.0		HE	ADED STU	OS		
MARK	TYPE	BASE PLATE	CAP PLATE	NUM	IBER	SIZE Ø /	LENGTH "	REMARKS	
				BASE	CAP	BASE	CAP		
(HSS1)	HSS 6"x6"x4"	12"x12"x¾"	8"x12"x½"	4	_	5″øx0'−8"	_		
(HSS2)	HSS 6"x6"x4"	12"x12"x§"	8"x12"x <sup>1</sup>	4	_	5/8° øx0'−8"	-		
(HSS3)	HSS 5"x5"x4"	12"x12"x§"	8"x12"x\sqrt{8}"	4	2	§"øx0'−8"	5″øx0'−8"		
(HSS4)	HSS 4"x4"x4"	12"x12"x <del>1</del> "	6"x10"x <sup>1</sup> "	4	_	§"øx0'−8"	-		

			В	EAM	/ TIE	BEAN	1 SC	HED	ULE	B- BOTTC T- TOP	M EE- EACH END EC- EACH CORNER EB- EACH BENT
NAA DIA	TOP OF	SIZE		REINFORCING						STIRRUPS	DEMARKS
MARK	BEAM	(IN.) W×D	В	Т	С	E	D	L	No.	SPACING	REMARKS
RB-1	+17'-8"	8x24	2 #6	2 #6				1 <b>#</b> 5 E.F.	3	@ 9"	
RB-2	+16'-0"	8x32	2 #6	2 #6					3	@ 11"	
RB-3	+11'-3"	8x27	2 #8	2 #8					3	@ 11"	
RB-4	+9'-6"	8x26	2 #6	2 #5					3	@ 11"	
RB-5	+9'-6"	8x12	2 #5	2 #5					3	@ 12"	
RB-6	+11'-0"	8x24	2 #5	2 #5					3	@ 10"	
RB-7	+11'-3"	8x27	4 #7*	2 #7					3	<b>©</b> 11"	* IN TWO LAYERS
RB-8	+8'-8"	8x18	2 #7	2 #6					3	© 7"	
RB-9	+11'-0"	8x24	2 #5	2 #5					3	<b>©</b> 12"	
RB-10	+8'-3"	8x12	2 #5	2 #5					3	<b>©</b> 12"	
RB-11	+9'-4"	12x24	2 #7	2 #7					3	<b>©</b> 10"	
RB-12	+10'-10"	12x18	3 #8	3 #8					3	@ 6"	
TB-1	SEE PLAN	8x12 MIN.	2 #5	2 #5					3	4 @ 12" EE. EB. EC. BALANCED @ 36"	
TB-2	SEE PLAN	8x16	2 #5	2 #5				1 #5 E.F.	3 🖺	<b>©</b> 12"	
TB-3	+11'-0"	8x24	2 #6	2 #6					3 🖺		
TB-4	+9'-4"	12x12	2 #5	2 #5					3		



# TYPICAL BEAM BAR PLACING DIAGRAM N.T.S.

# NOTES:

- 1.- "C" BARS ARE TOP BARS AT NON-CONTINUOUS ENDS.
- 2.- "E" BARS ARE TOP BARS OVER RIGHT INTERIOR SUPPORTS.
- 3.- TOP BARS CALLED FOR AS CONTINUOUS, WHEN SPLICED, SHALL BE SPLICED IN THE MIDDLE THIRD OF THE SPAN. THE SPLICE SHALL BE CLASS "B" TENSION LAP SPLICE.
- 4.- CONCRETE BEAM DEPTH, AS SCHEDULED, IS MINIMUM. IT CAN BE INCREASED AS REQUIRED TO MATCH BLOCK COURSING, TO FOLLOW A SLOPE, TO FORM ARCHES, OR TO BE USED AS A LINTEL OR TO ACCOMMODATE WINDOW & DOOR OPENINGS. REFER TO ARCH. DWGS. FOR OPENING SIZES. PROVIDE 2 #5 BOTTOM (ADD'L.) AND #3 @ 12" STIRRUPS IF INCREASE IN DEPTH EXCEEDS 4". EXTEND DROP PORTION OF TIE BEAM MINIMUM 8" BEYOND FACE OF OPENING.
- 5.— SEE ARCHED BEAM DETAIL FOR REQUIRED ADDITIONAL REINFORCING.
- 6.- ALL BARS OF BEAMS SHALL BE EXTENDED TO FAR FACE OF T.C., T.B. OR BEAM AT INTERCEPTIONS. TOP BARS SHALL BE PROVIDED WITH A STANDARD HOOK.
- 7.- BARS IN TWO OR MORE LAYERS: BARS IN UPPER LAYER SHALL BE PLACED DIRECTLY ABOVE BARS IN THE BOTTOM LAYER WITH AT LEAST 1 INCH CLEAR VERTICALLY BETWEEN LAYERS.
- 8.- E.E. (EACH END) FOR STIRRUPS REINFORCEMENTS IS DEFINED AS EACH COLUMNS OR WALL SUPPORT.
- 9.- PROVIDE  $\frac{1}{4}$  OF THE AREA OF THE BOTTOM REINFORCING OF THE ADJACENT SPAN WITH THE HIGHEST AREA OF BOTTOM
- REINFORCING, BUT NOT LESS THAN TWO BARS. BAR SIZE NO LESS THAN A #5 BAR. WHERE ADJACENT BEAMS ARE DIFFERENT IN DEPTH, PLACE THE SPLICE BAR AT THE LEVEL OF THE BOTTOM BARS OF THE SHALLOWEST BEAM. THE SPLICE SHALL BE CLASS "B" TENSION LAP SPLICE.

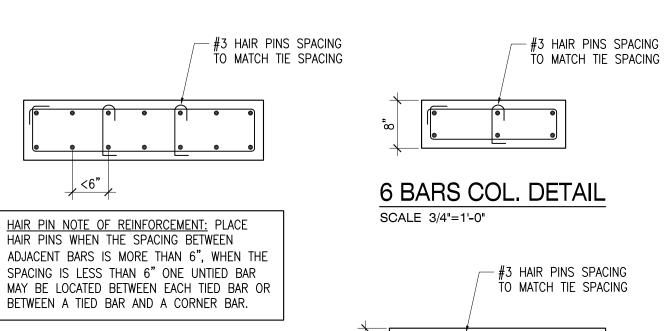
TIE - COLUMN & CONCRETE COLUMN SCHEDULE											
MARK		REINFORCING		DEMARKS							
IVIARK	SIZE VERTICAL		TIES	REMARKS							
TC1	8"x12"	4 #5	#3 @ 8"								
TC2	8"x18"	6 #5	#3 @ 8" W/ HAIRPIN								
TC3	8"x28"	8 #5	#3 @ 8" W/ HAIRPIN								
TC4	12"x12"	8 #5	#3 @ 10" W/ HAIRPIN								
TC5	12"x16"	8 #5	#3 @ 10"								
C1	8"x12"	4 #5	#3 <b>@</b> 8"								
C2	8"x16"	6 #5	#3 @ 8"								
C3	8"x24"	8 #5	#3 @ 8"								
C4	12"x24"	10 #5	#3 <b>@</b> 8"								
FC1)	1 #5 IN 1 GROUT-FILLED CELLS										
FC2	2 #5 IN 2 GROUT-FILLED CELLS										
NOTE: SEE	NOTE: SEE COLUMN BAR ARRANGEMENT DIAGRAM THIS PAGE FOR ALL COLUMNS.										

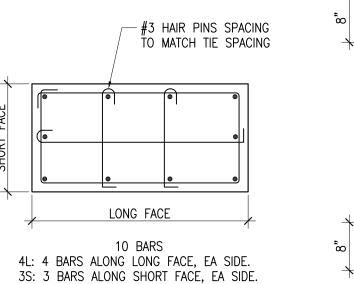
NOTE:	SEE	COLUMN	BAR	ARRANGEMENT	DIAGRAM	THIS	PAGE	FOR	ALL	COLUMNS.	

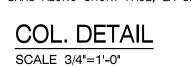
TIE-COLUMN & COLUMN BAR ARRANGEMENT DIAGRAMS

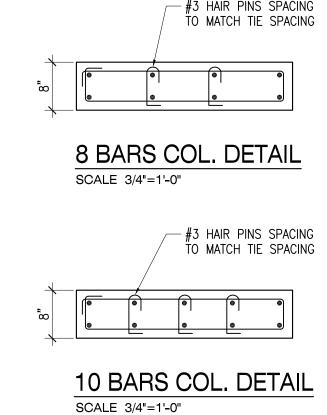
		_											
JMN S	CHEDULE		TENSION LAP SPLICE						MIN. TENSION EMBEDMENT LENGTH (Ldh) FOR				
	DEMARKO		BAR	(INC	HES)	SPLICE LENGTH (INCHES) 4000 PSI			STANDARD HOOKS				
S	REMARKS		SIZE	TOP	OTHER	TOP	OTHER		BAR SIZE	fc (psi)	fc (psi)		
<b></b>				BARS	BARS	BARS	BARS			3000	4000		
8"			# 3	28	22	24	19		# 3	6"	6"		
8" W/ \			# 4	37	29	32	25		# 4	7"	7"		
8" W/		1	# 5	47	36	40	31		# 5	9"	9"		
10" W/			# 6	56	43	48	37		# 6	10"	10"		
10 117			# 7	81	63	70	54		# 7	12"	12"		
10"			# 8	93	72	80	62		# 8	14"	14"		
8" 8" 8"			NOTES:  -SIDE CONC COVER >= 2½" -D:  D=6db FOR #3 TO #8  D=8db FOR #9 TO #11 -db: BAR DIAMETER BAR				EDGE OF CONCRETE						
								12bd STANDARD 90° END HOOKS					
									STAINDAIND 3	O LIND HO	J1\J		

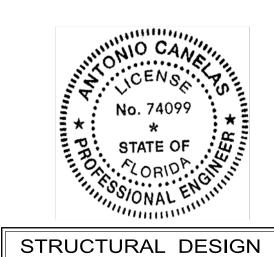


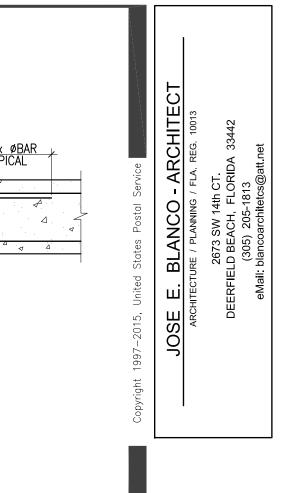


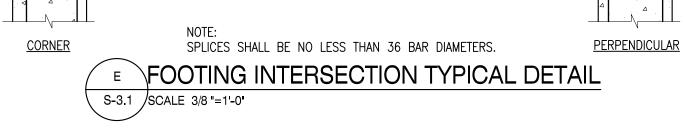












— WALL FOOTING

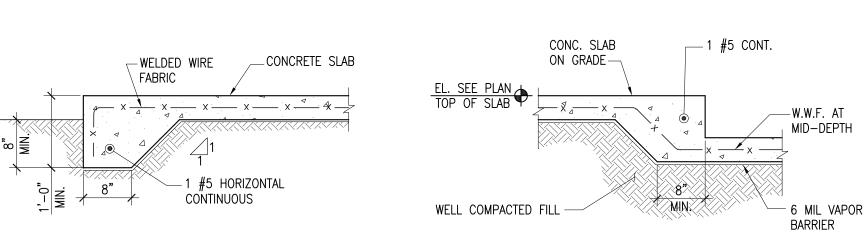
THRU PADS

REINFORCING CONT.

-CORNERS BARS TO

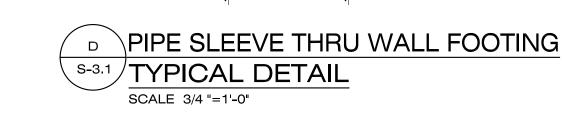
MATCH FOOTING

REINFORCING









PIPEø+12"

— PIPE SLEEVE 2"

LARGER THAN

PIPE DIAMETER

WALL FOOTING

- CONT. WALL FOOTING REINF.

OVER PIPE PROVIDE

TENSION LAP SPLICE

REINF. SEE

SCHEDULE -

2 #4 BARS

TRÄNSVERSE –

- WALL FOOTING

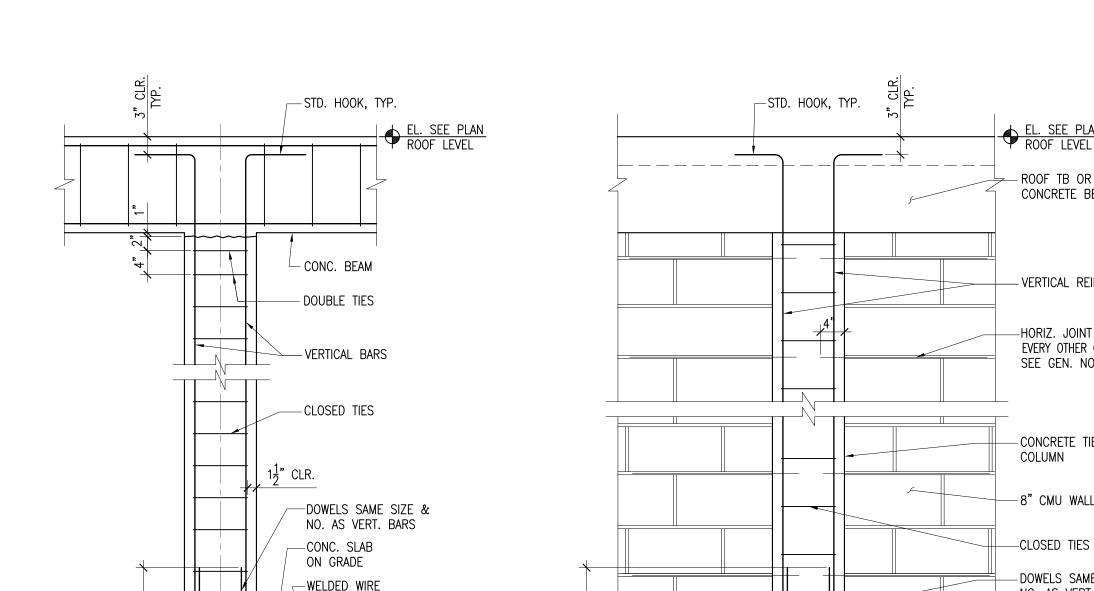
2 #4 BARS

TRÄNSVERSE -

BAR TO MATCH

FOOTING REINFORCING -

4 4



-- WWF OR REBARS

-VAPOR BARRIER

CONTROL JOINT (CJ-3)

TERMINATED POURS.

CONTROL JOINT TYPICAL DETAILS

AT EXPANSION JOINTS AND

(TYPICAL)



3" CLR. STD. HOOK — CCOL. &

**FABRIC** 

VAPOR BARRIER

EL. SEE PLAN T.O. FOUNDATION

UNDISTURBED

(TYPICAL) —

1 SAW CUT JOINT

-VAPOR BARRIER

(TYPICAL)

CONTROL JOINT (CJ-1)

FOOTING, SEE

PLAN & SCHEDULE-

CLR.

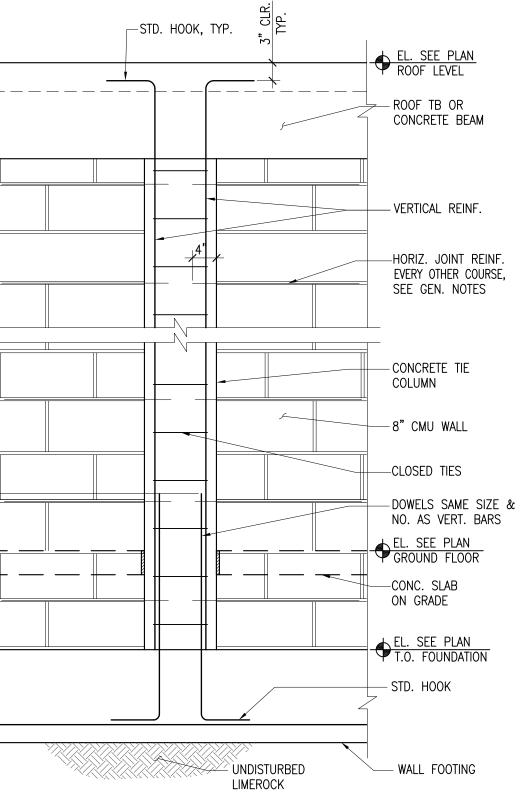
FILLED W/ SEALANT—

X X X X X X

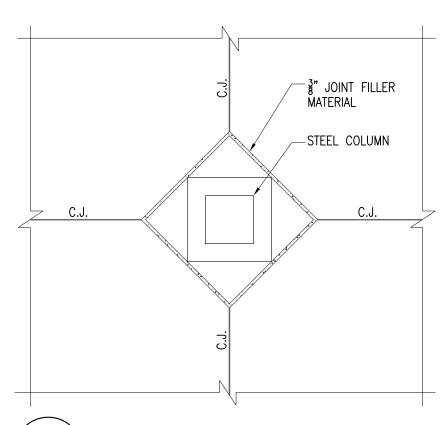
FOR DIAMOND SAW CUTS AT FREE STANDING

COLUMNS AND FOR FLOOR SAW CUTS.

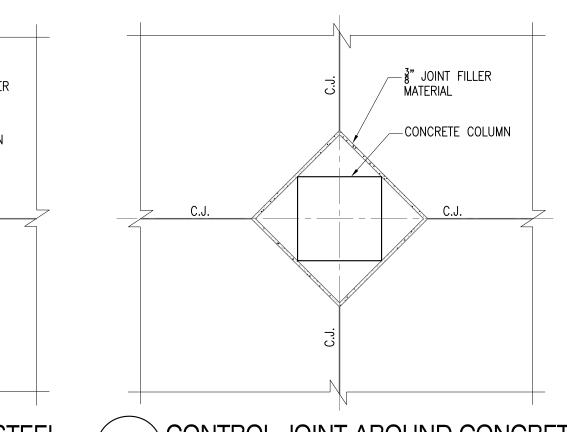
S-3.1 /SCALE 3/4 "=1'-0"



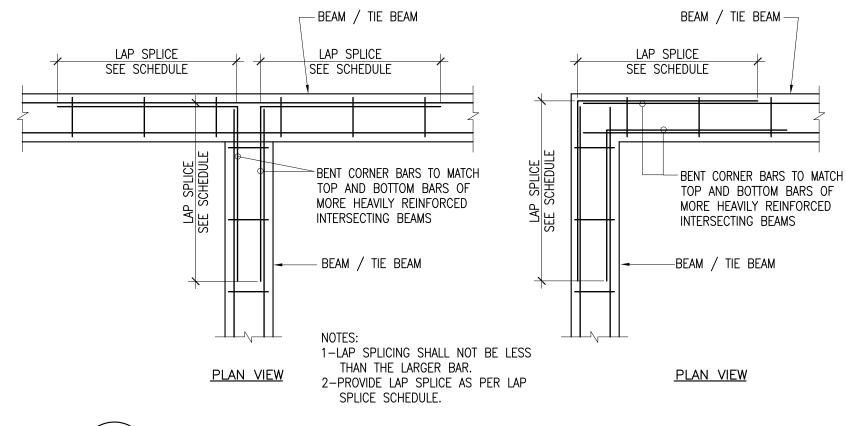
 $oxed{G}$  G igwedgeTYPICAL TIE COLUMN / S-3.1/WALL FOOTING DETAIL



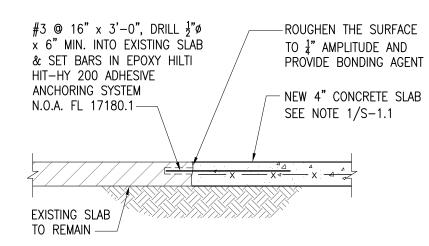
**\CONTROL JOINT AROUND STEEL** S-3.1 COLUMN TYPICAL DETAIL SCALE N.T.S.



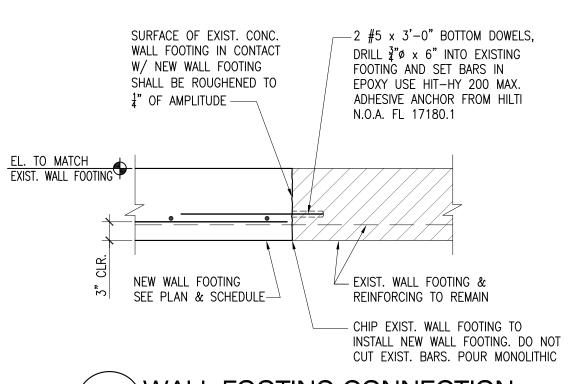
CONTROL JOINT AROUND CONCRETE igsim s-3.1igg/ COLUMN TYPICAL DETAIL SCALE N.T.S.



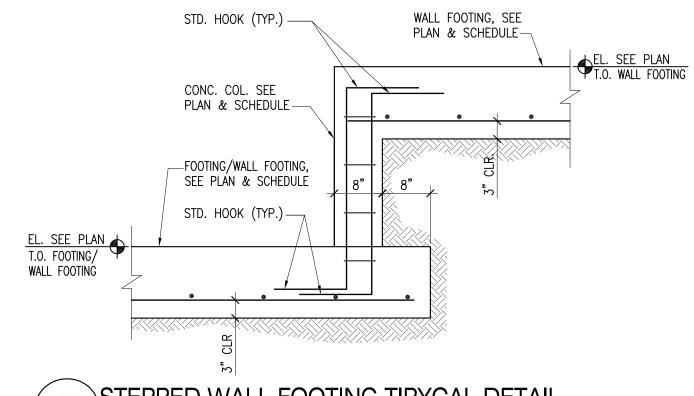
BEAM CORNER BARS AND INTERSECTION DETAILS 、S-3.1 / SCALE 3/4 "= 1'-0"



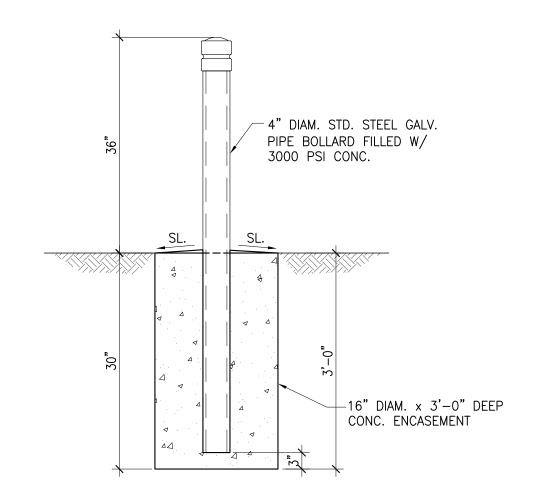




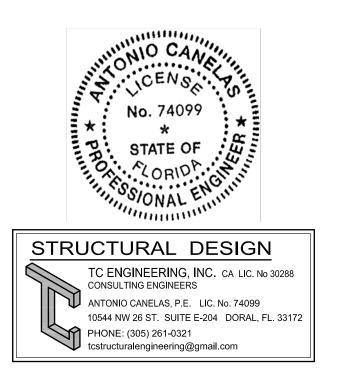




M STEPPED WALL FOOTING TIPYCAL DETAIL S-3.1 /SCALE 3/4'=1'-0"





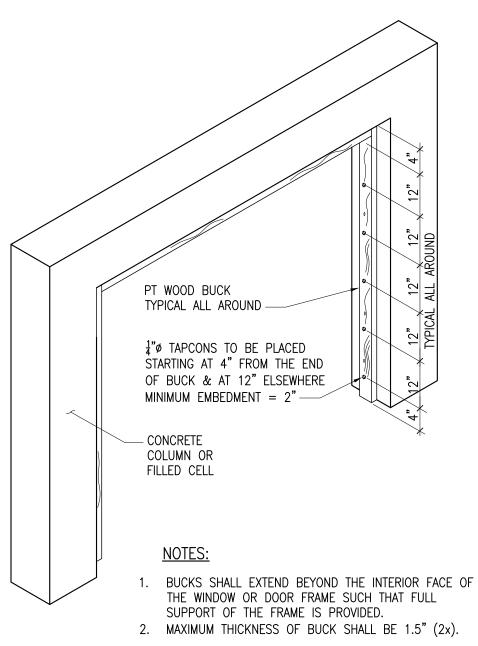


BUILDING DESIGN STANDARDS, 10/1/2019

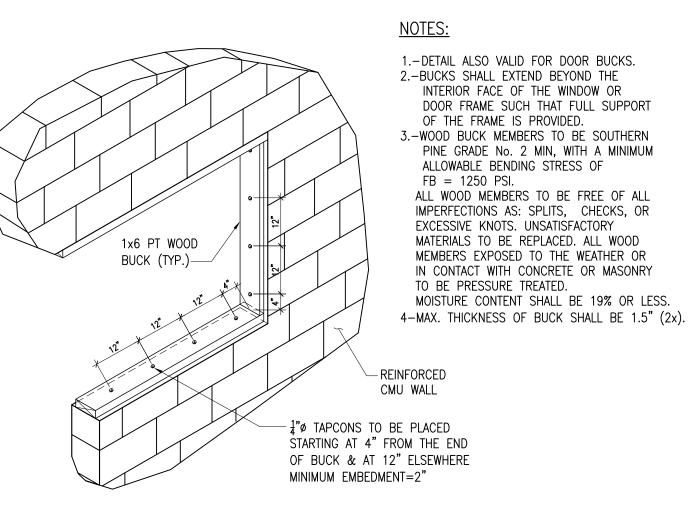
— STANDARD \_\_TIE BEAM -  $\square$  #3 @ 12" ADDITIONAL \_\_\_ TIE BEAM. SEE PLAN HOOK TYP. REINFORCEMENT STIRRUPS IF DROPS EXCEEDS 8" AND SCHEDULE PROVIDE ADDITIONAL TIE DOWN - MAXIMUM DROP BAR FOR WALL REINF. PLACED WITHOUT — 2 #5 ADDITIONAL IF REINFORCEMENT AT HALF THE SPACING DROP EXCEEDS 8" SPECIFIED IN THE MASONRY WALL SCHEDULE AS MEASURED FROM THE NEAREST JAMB MAXIMUM REINFORCEMENT — JAMB REINFORCEMENT --8"x8" CONC. CAP W/ TIE COLUMN SEE PLAN AND SCHEDULE 2 #5 HORIZ. OR /8" CONC. "U" BLOCK ` PROVIDE TIE DOWNS - VERT. BARS IN FILLED W/ 2 #5 CONT. IN FILLED CELL AS CELLS AS SCHEDULED INDICATED ON PLAN. PROVIDE 2 #5 IN TWO FILLED CELLS U.N.O. IN PLAN — —CONC. SLAB

NOTE:
THIS IS A TYPICAL DETAIL SHOWING IN THE LEFT SIDE A MASONRY JAMB CONDITION AND IN THE RIGHT SIDE A TIE COLUMN
THIS IS A TYPICAL DETAIL SHOWING IN THE LEFT SIDE A MASONRY JAMB CONDITIONS APPLY TO EACH PARTICULAR OPENING CONDITION. REFER TO FLOOR PLAN TO DETERMINE WHICH OF THE TWO CONDITIONS APPLY TO EACH PARTICULAR OPENING.

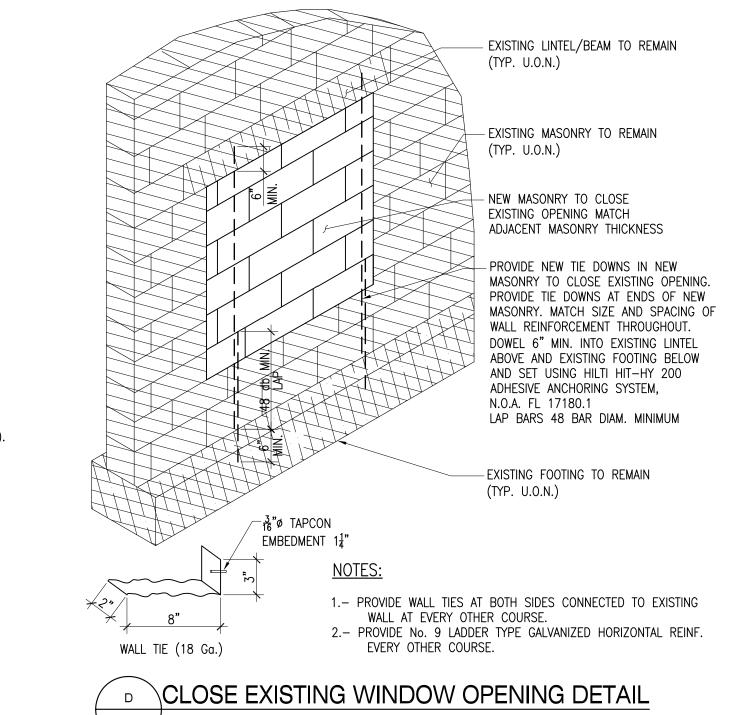
> TYPICAL LINTEL / SILL / JAMB DETAIL S-3.2 /N.T.S. DROPPED TIE BEAM OPTION SIMILAR FOR DOOR OPENINGS



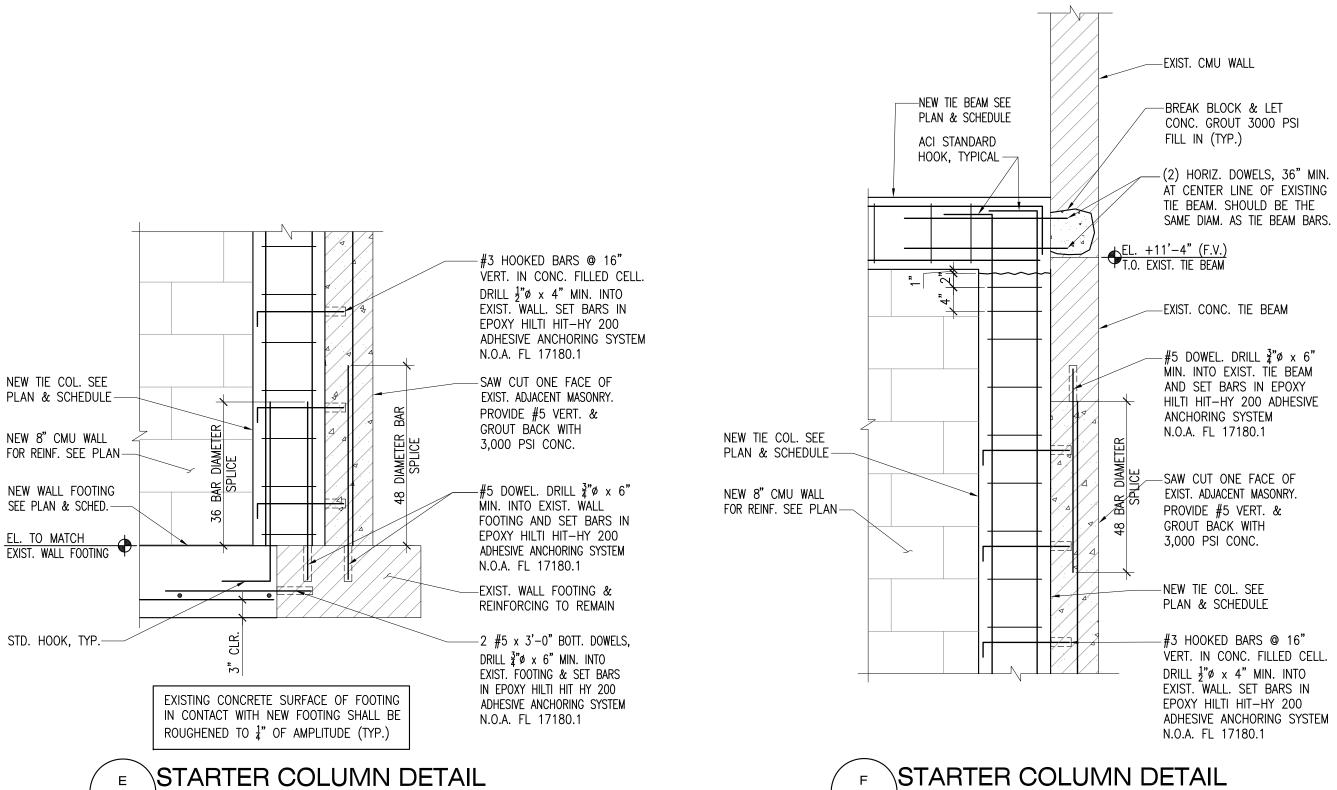
**\DOOR BUCK CONNECTION DETAIL** S-3.2 /N.T.S. IF REQUIRED



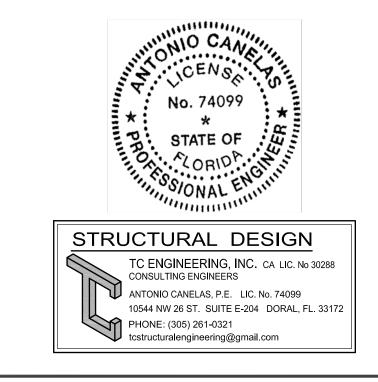
○ \WINDOW BUCK DETAIL S-3.2 /N.T.S. IF REQUIRED



S-3.2 /N.T.S.







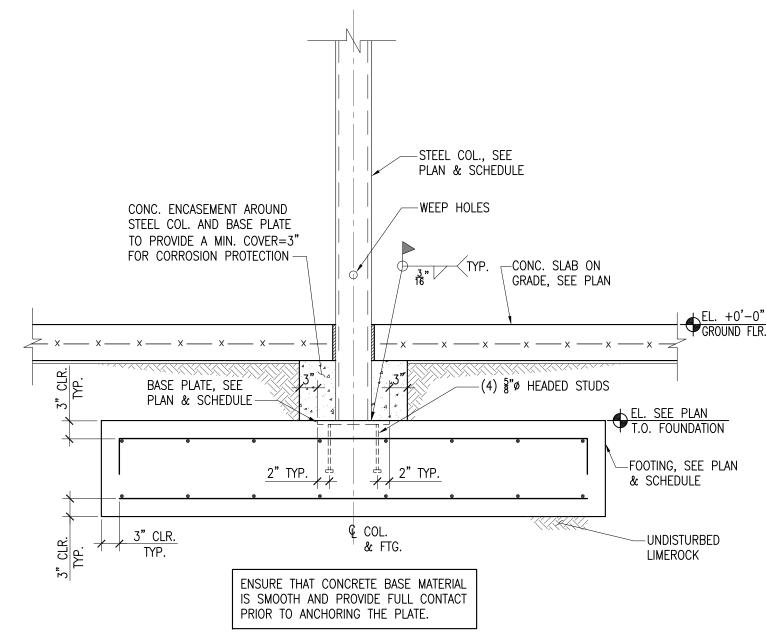
S-3.2 /SCALE N.T.S

 $\vec{c}$ က

STEEL COLUMN
SEE PLAN & SCHED.

STEEL PLATE
W/ (4) § o WELDED
HEADED ANCHORS

BASE PLATE PLAN VIEW



STEEL COLUMN-FOOTING TYPICAL DETAIL
S-3.3 SCALE N.T.S.

STEEL BEAM
SEE PLAN

TYP.

3"x5x16" STIFFENER PLATE
(ONE ON EACH SIDE)

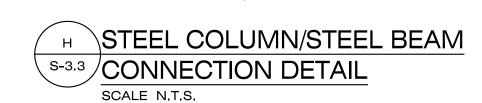
STEEL BEAM
SEE PLAN

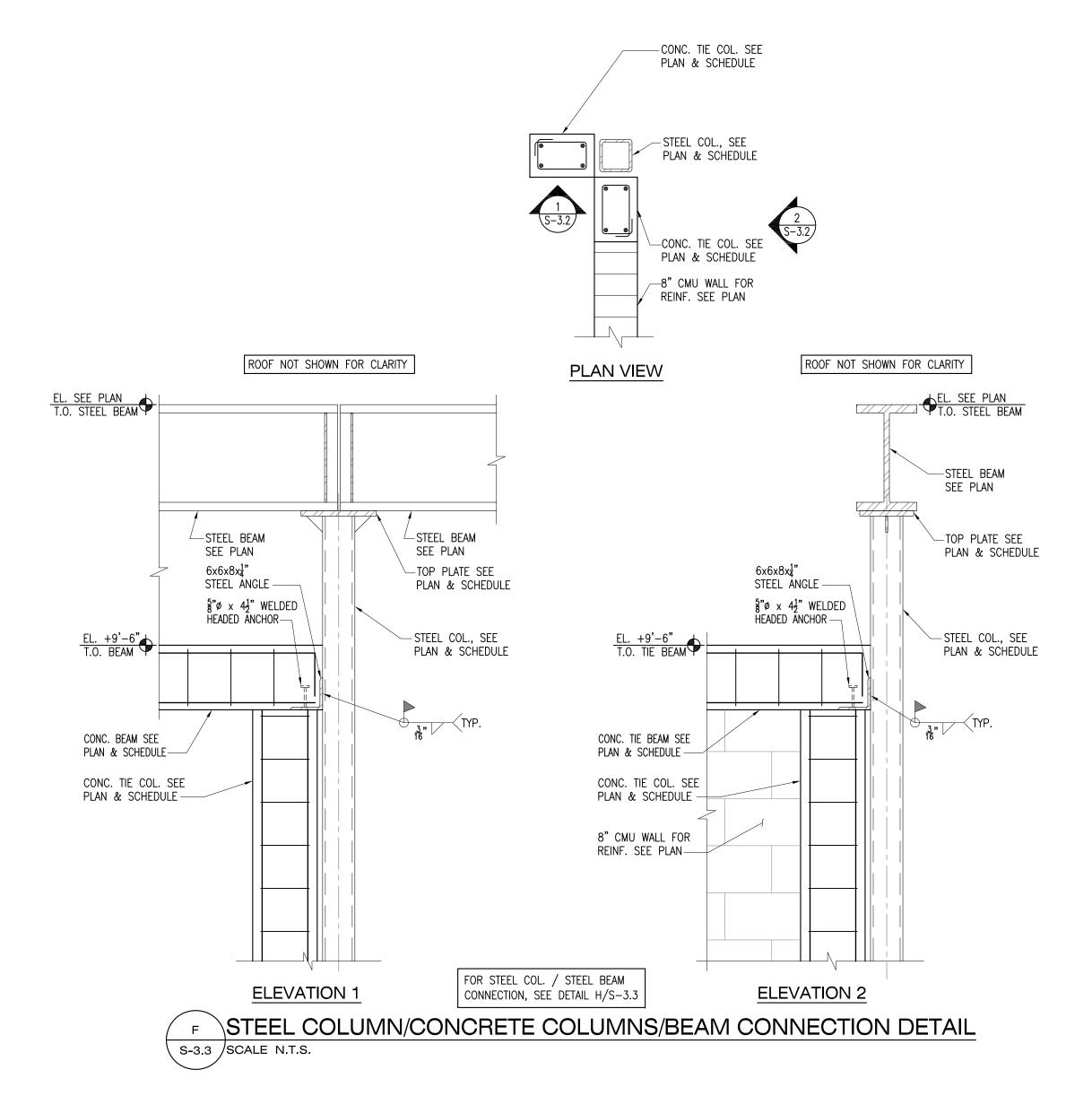
TOP PLATE SEE
PLAN & SCHEDULE

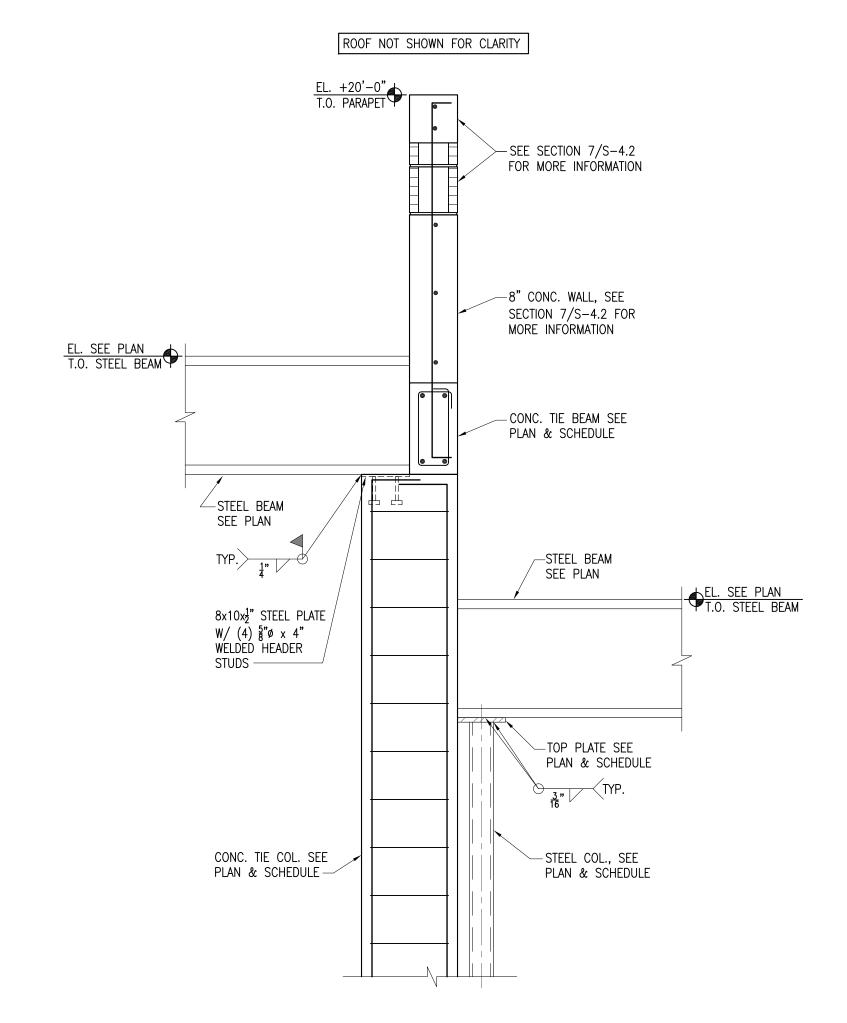
TYP.

3"x3"x8" STIFFENER
PLATE, TYP. EA. SIDE

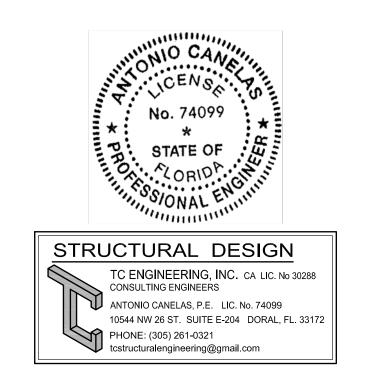
STEEL COL., SEE
PLAN & SCHEDULE

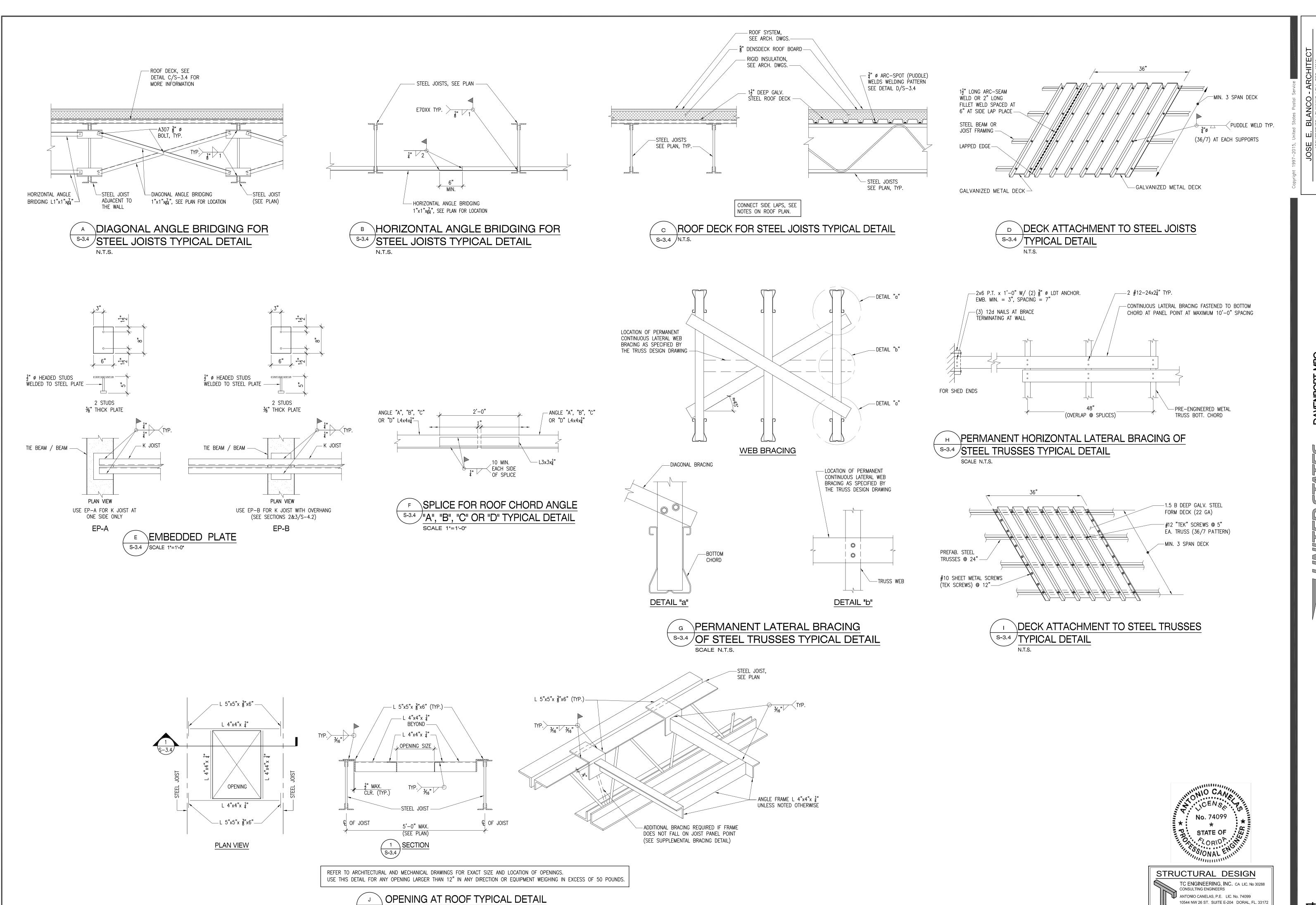






G STEEL COLUMN/CONCRETE COLUMN
S-3.3 CONNECTION DETAIL
SCALE N.T.S.



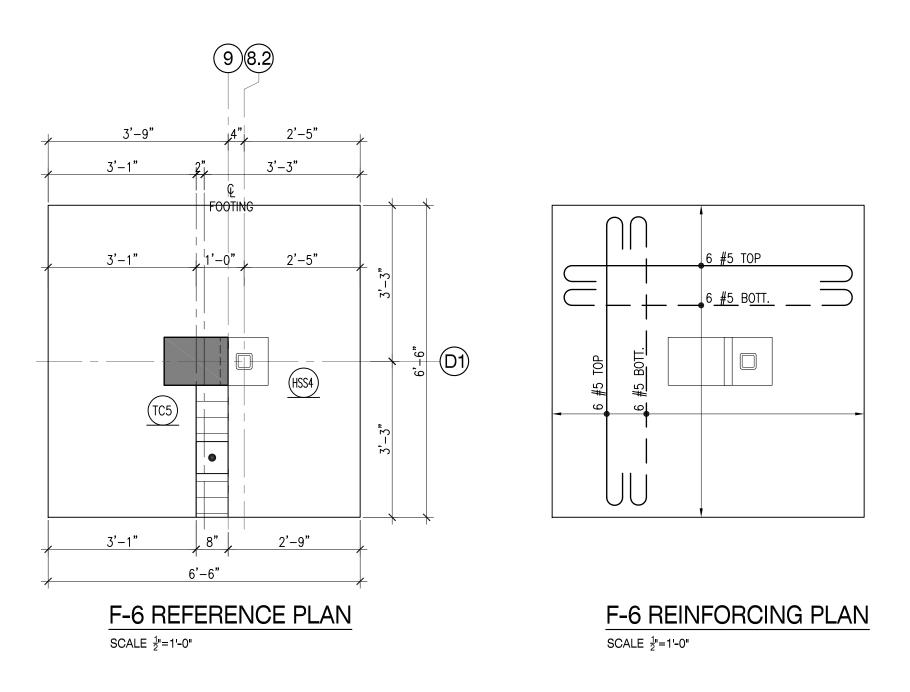


Scale: NOTE:

PHONE: (305) 261-0321 tcstructuralengineering@gmail.com

BUILDING DESIGN STANDARDS, 10/1/2019

S-3.4 N.T.S.



2'-9"

2'-9" 1'-3"

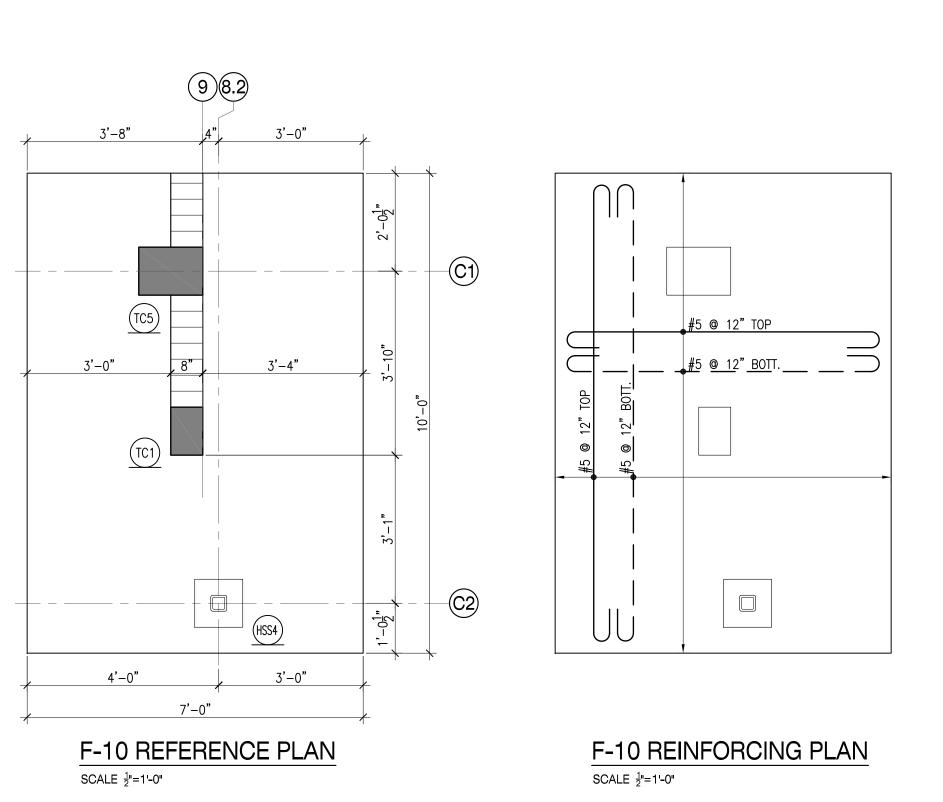
F-9 REINFORCING PLAN

SCALE ½"=1'-0"

4'-0"

F-9 REFERENCE PLAN

SCALE ½"=1'-0"

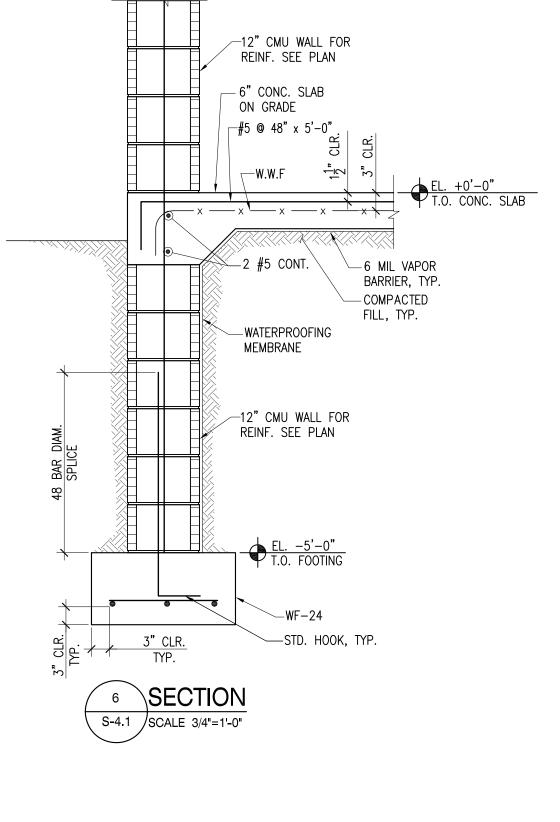


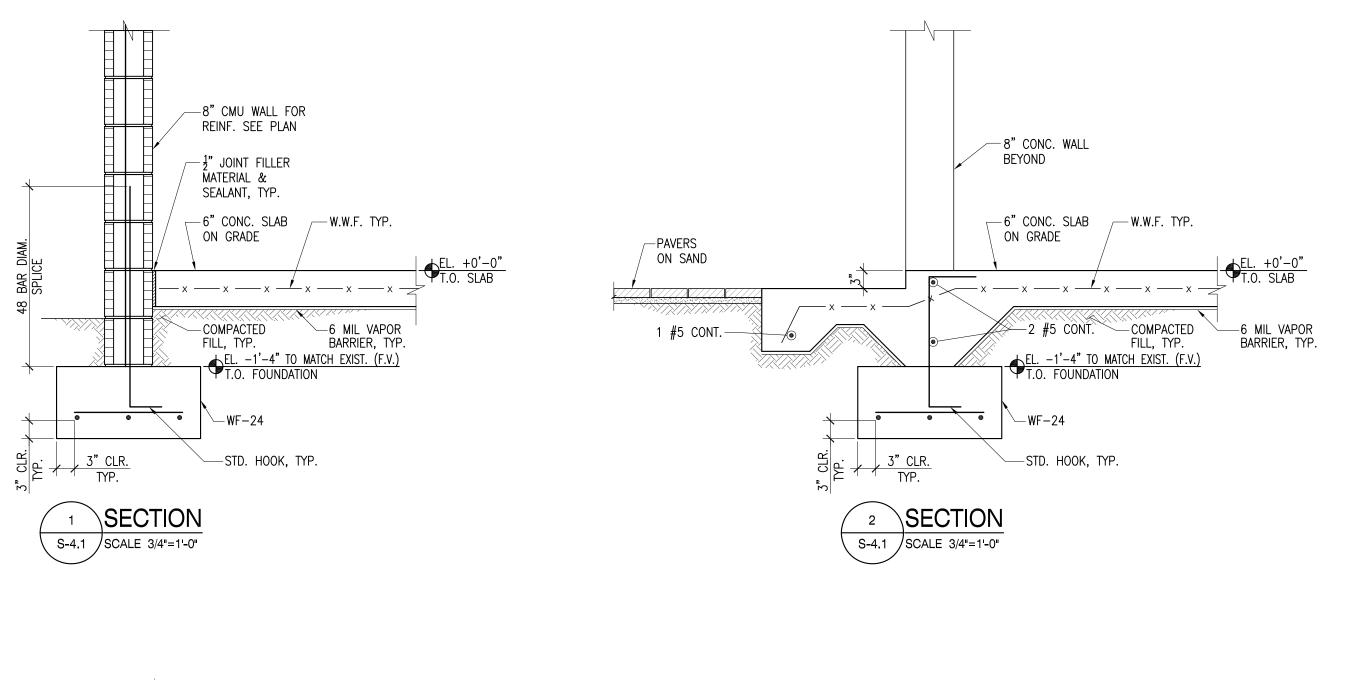












∠8" CMU WALL FOR REINF. SEE PLAN

/ 1" JOINT FILLER
MATERIAL &

SEALANT, TYP.

ON GRADE

COMPACTED FILL, TYP.

₩F-24

—STD. HOOK, TYP.

EL. -1'-4" TO MATCH EXIST. (F.V.)

6 MIL VAPOR BARRIER, TYP.

—ALUMINUM COLUMN BEYOND BY OTHERS

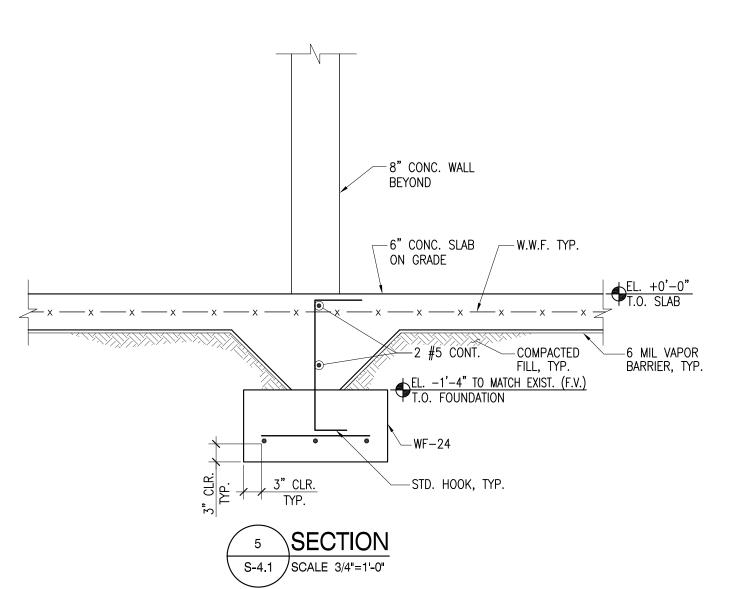
SEE SHOP DRAWINGS

ON GRADE

6" CONC. SLAB — W.W.F. TYP.

4 SECTION

S-4.1 | SCALE 3/4"=1'-0"



—CONC. TIE COL. BEYOND

- 8"x8" CONC. CAP W/ 2 #5 EMBEDDED 6" INTO EACH END

—8" CMU WALL FOR REINF. SEE PLAN

 $-rac{1}{2}$ " JOINT FILLER MATERIAL &

\_x \_\_\_x \_\_\_x \_\_\_x \_\_\_x \_\_\_x \_\_\_x \_\_\_x

—STD. HOOK, TYP.

PACTED —6 MIL VAPOR TYP. BARRIER, TYP.

EL. -1'-4" TO MATCH EXIST. (F.V.)

T.O. FOUNDATION

SEALANT, TYP.

ON GRADE

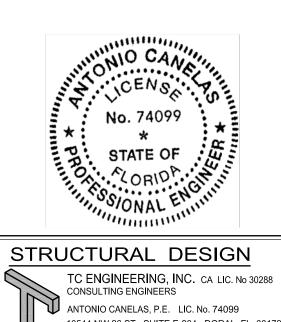
— COMPACTED FILL, TYP.

3 SECTION

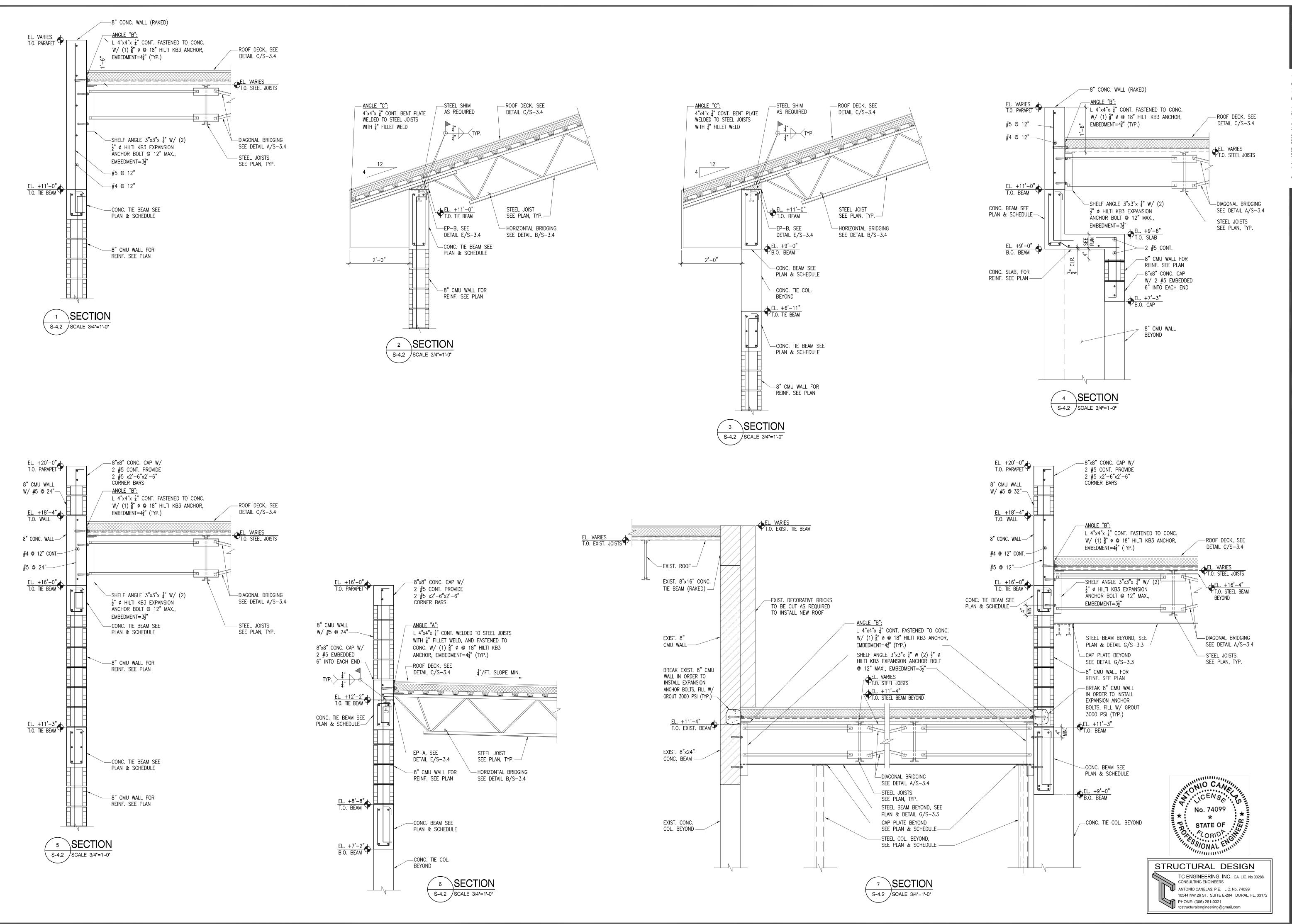
S-4.1 | SCALE 3/4"=1'-0"

EL. SEE ARCH. DWGS. T.O. WINDOW SILL

FOOTING BEYOND—

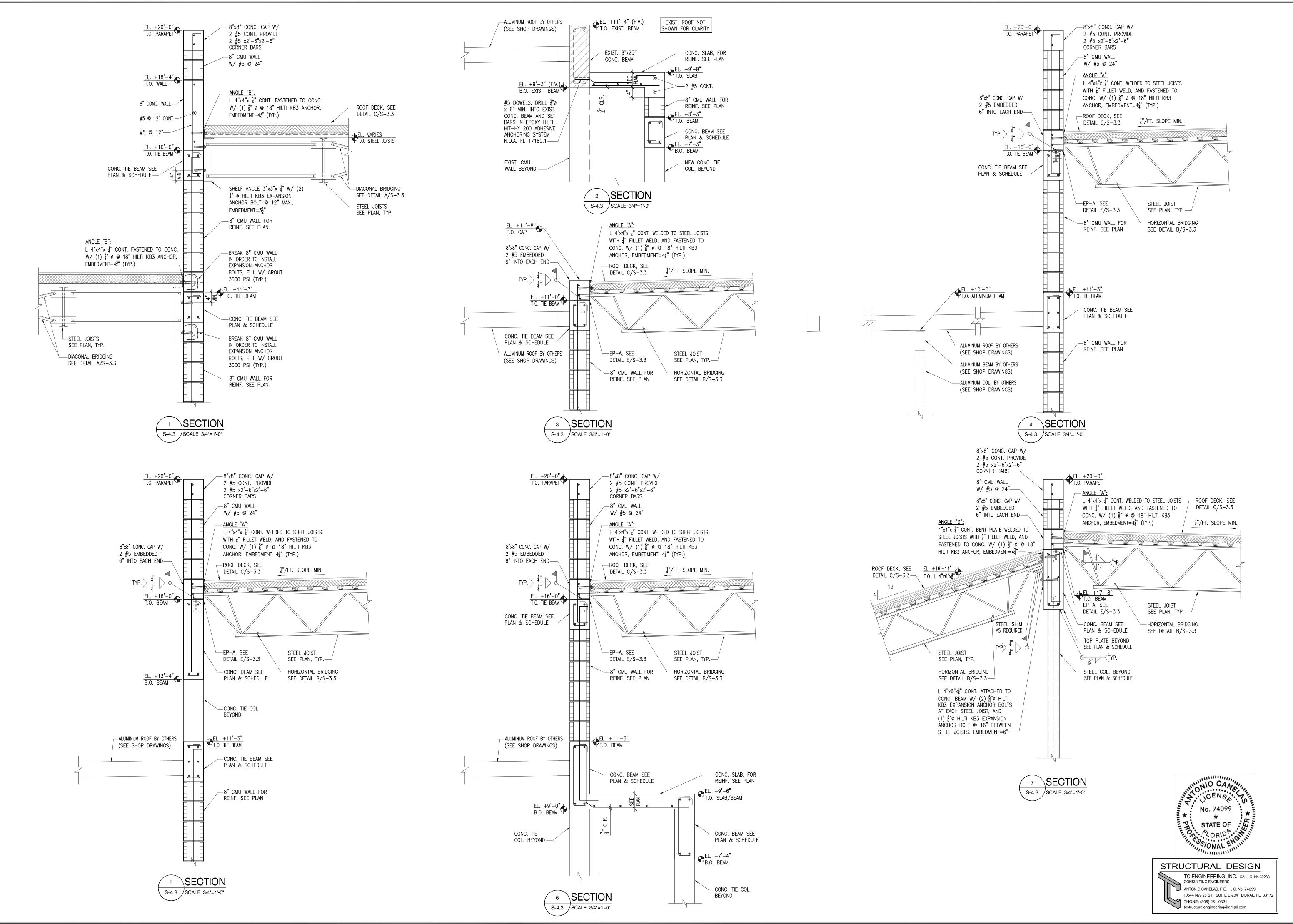


FOOTING BEYOND—



S-4.2

BUILDING DESIGN STANDARDS, 10/1/2019



S-4.3

BUILDING DESIGN STANDARDS, 10/1/2019



- §" "CDX" PLYWOOD SHEATHING FASTENED TO STEEL DECK

W/ #8 GALV. "TEK" SCREWS

-6"x4"x $\frac{3}{8}$ " STEEL PLATE W/ (2)  $\frac{5}{8}$ "ø x 7" LONG.

—CONC. TIE BEAM

12" CMU WALL FOR REINF. SEE PLAN

WÉLDED HEADED STUDS, TYP.

— PREFAB. STEEL

TRUSSES @ 24" TYP.

@´6", TYP.

1x2 P.T. WOOD —

CONT. 2x6 WOOD FASCIA W/ (2) #10 "TEK SCREWS" (TYP.)—

EL. +9'-4"
T.O. BEAM

STEEL DECK SEE DETAIL I/S-3.4

3 SECTION

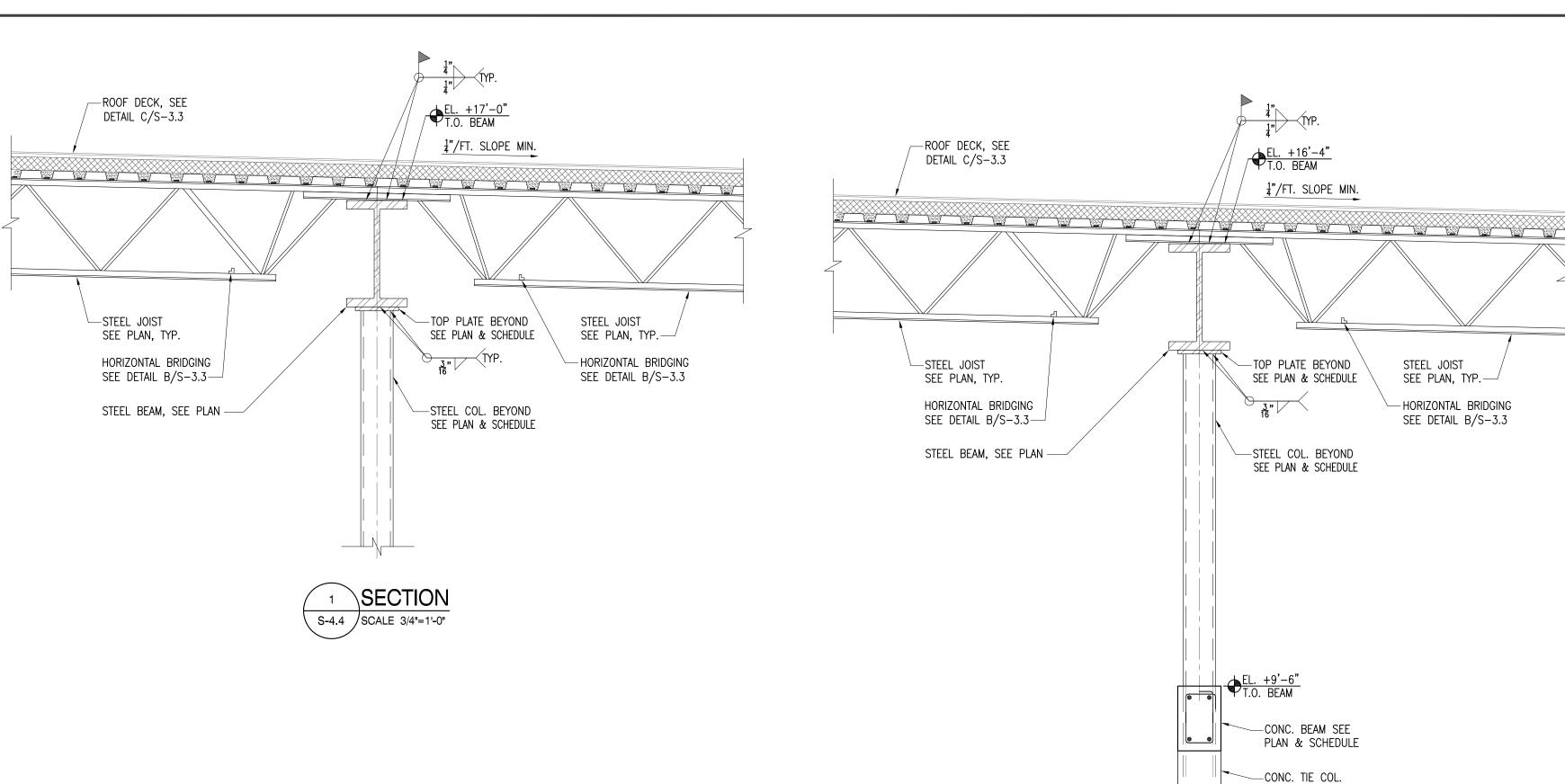
S-4.4 SCALE 3/4'=1'-0"

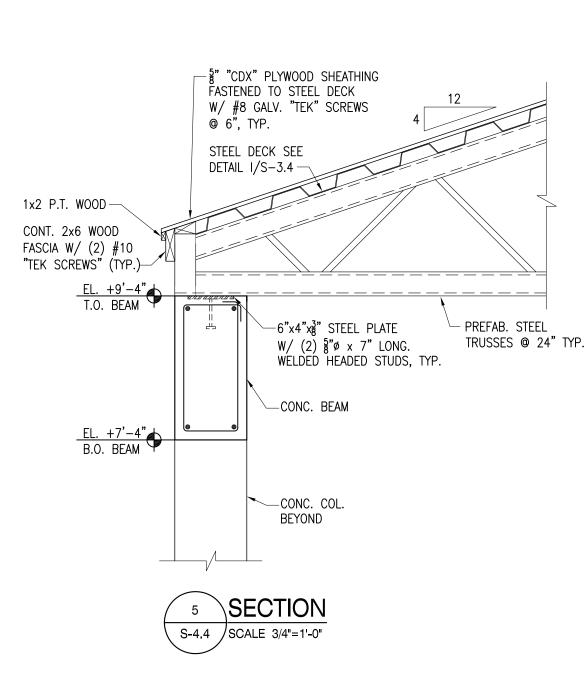
STRUCTURAL DESIGN

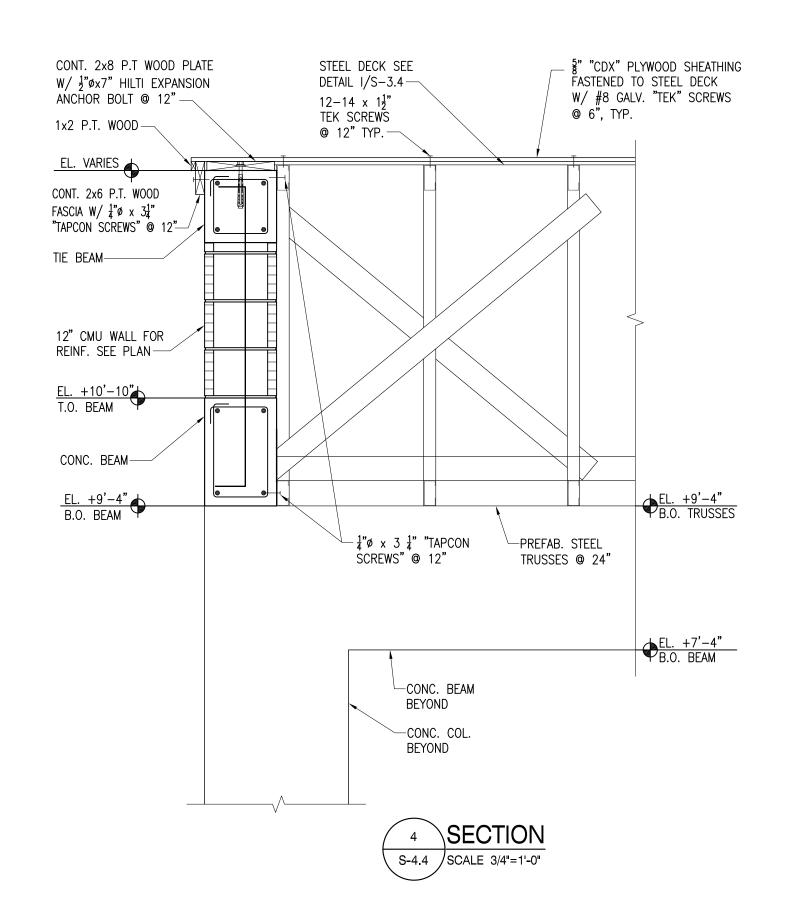
PHONE: (305) 261-0321 tcstructuralengineering@gmail.com

TC ENGINEERING, INC. CA LIC. No 30288 CONSULTING ENGINEERS

ANTONIO CANELAS, P.E. LIC. No. 74099 10544 NW 26 ST. SUITE E-204 DORAL, FL. 33172







-ROOF DECK, SEE

DETAIL C/S-3.3

-Steel Joist

SEE PLAN, TYP.

HORIZONTAL BRIDGING

SEE DETAIL B/S-3.3—

STEEL BEAM, SEE PLAN -

EL. +17'-0" T.O. BEAM

 $\frac{1}{4}$ "/FT. SLOPE MIN.

TOP PLATE BEYOND

SEE PLAN & SCHEDULE

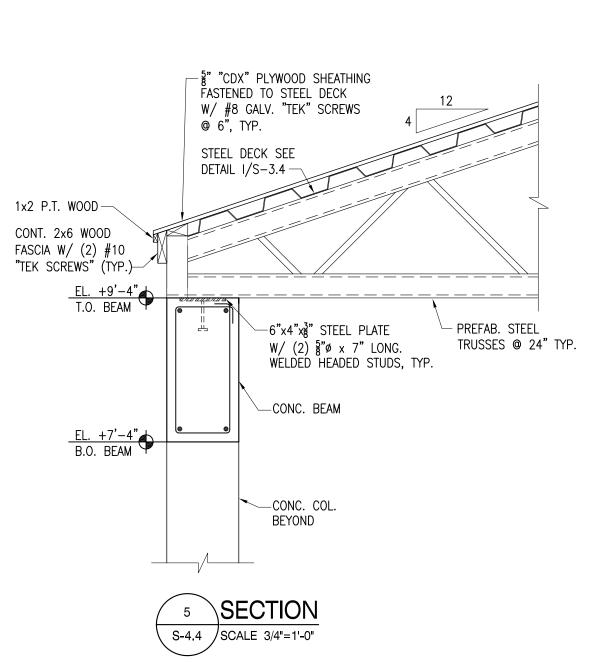
STEEL COL. BEYOND

SECTION

S-4.4 /SCALE 3/4"=1'-0"

SEE PLAN & SCHEDULE

STEEL JOIST

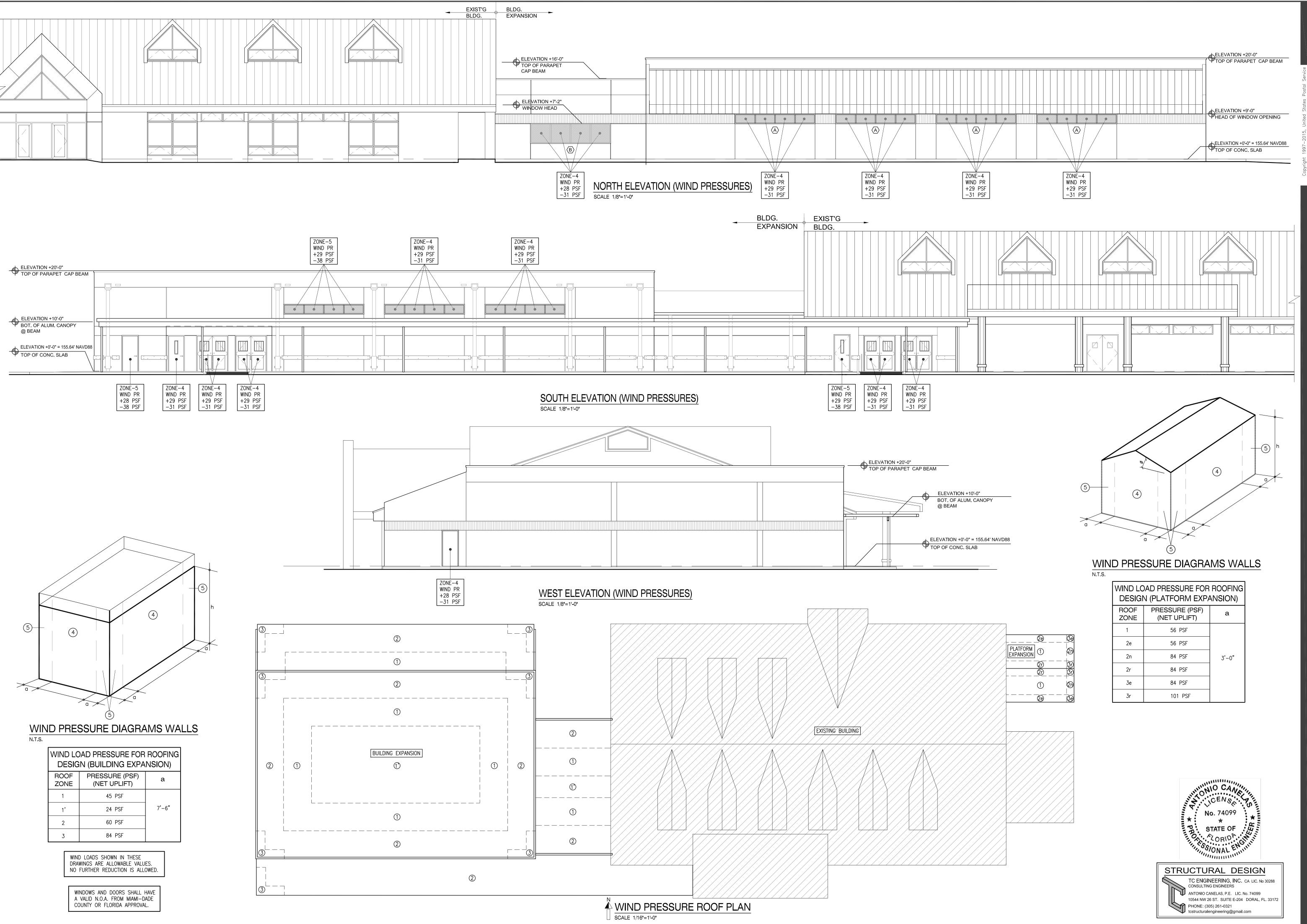


BEYOND

<sup>2</sup> SECTION

S-4.4 /SCALE 3/4"=1'-0"

—STEEL COL. BEYOND SEE PLAN & SCHEDULE



**Scale:** NOTED D