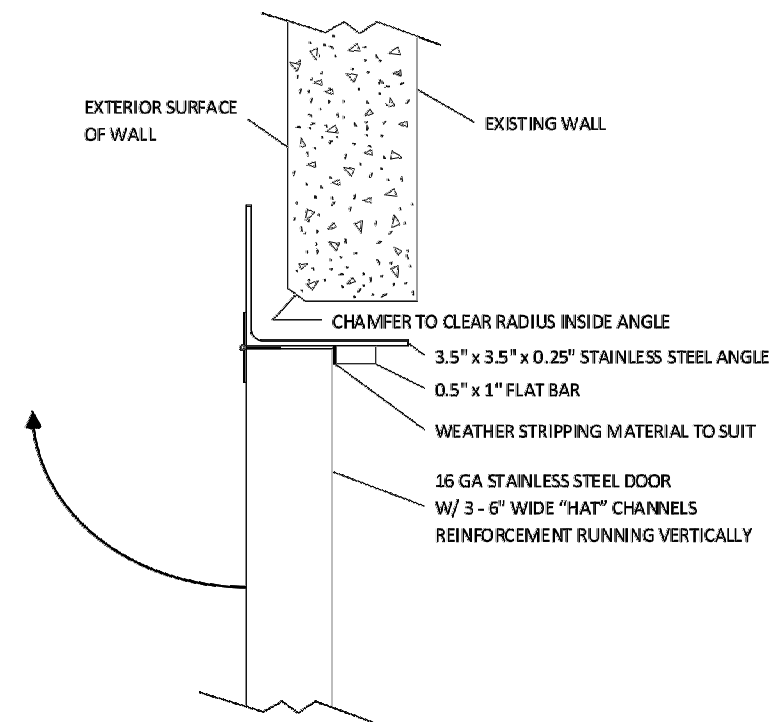


**DOOR AND DOOR FRAME (FRONT VIEW)**



**DOOR FRAME ATTACHMENT DETAIL (TOP VIEW)**

**NOTES**

**GENERAL**

1. ALL MATERIALS TO BE 304 STAINLESS STEEL. ALL WELDS GROUND SMOOTH AND ANY SPLATTER REMOVED.

**DOOR FRAME**

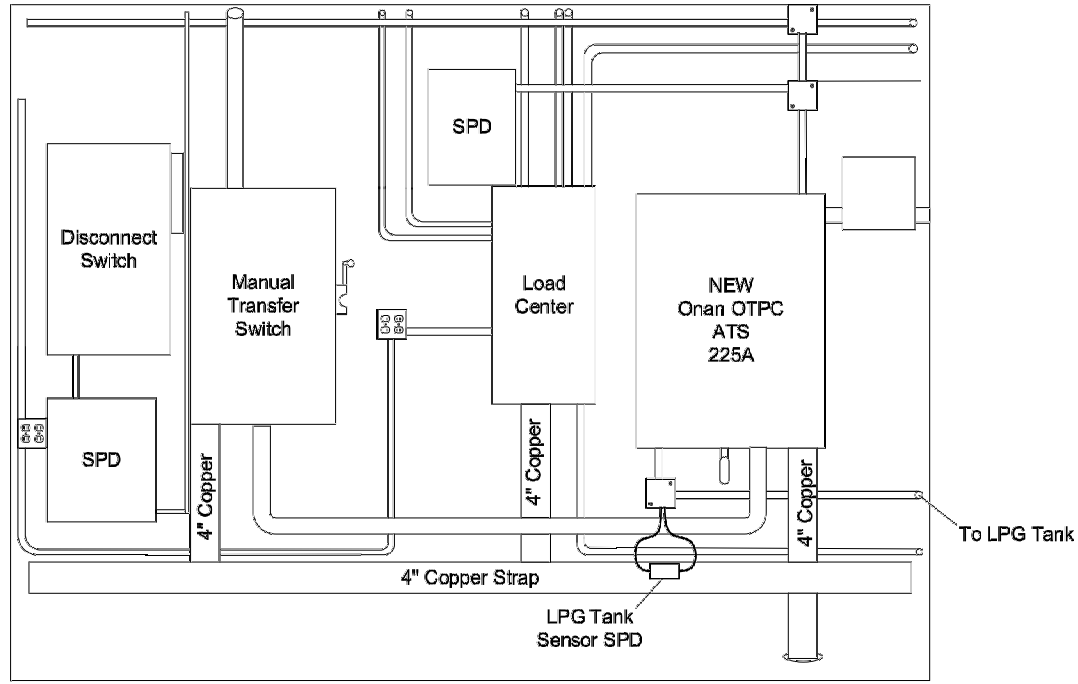
1. DOOR FRAME CONSTRUCTED FROM 3.5" x 3.5" x 0.25" STAINLESS STEEL ANGLE.
2. DOOR FRAME FITS 4" THICK CONCRETE WALL. INNER FLANGE OF ANGLE FITS INTO CUTOUT OPENING.
3. CUTOUT IN DOOR FRAME TO CLEAR DOOR LATCH STRIKER AS REQUIRED.
4. DOOR FRAME MOUNTING HOLE SIZE AND LOCATIONS THE RESPONSIBILITY OF THE VENDOR.
5. DOOR FRAME TO BE SECURE TO WALL THROUGH FLUSH-MOUNTED STAINLESS STEEL HARDWARE ON THE INSIDE OF THE DOOR JAMB.
6. SPACE BETWEEN CONCRETE WALL AND STAINLESS STEEL ANGLE TO BE SEALED WITH SONNEBORN SEALER OR APPROVED EQUIVALENT.

**DOOR**

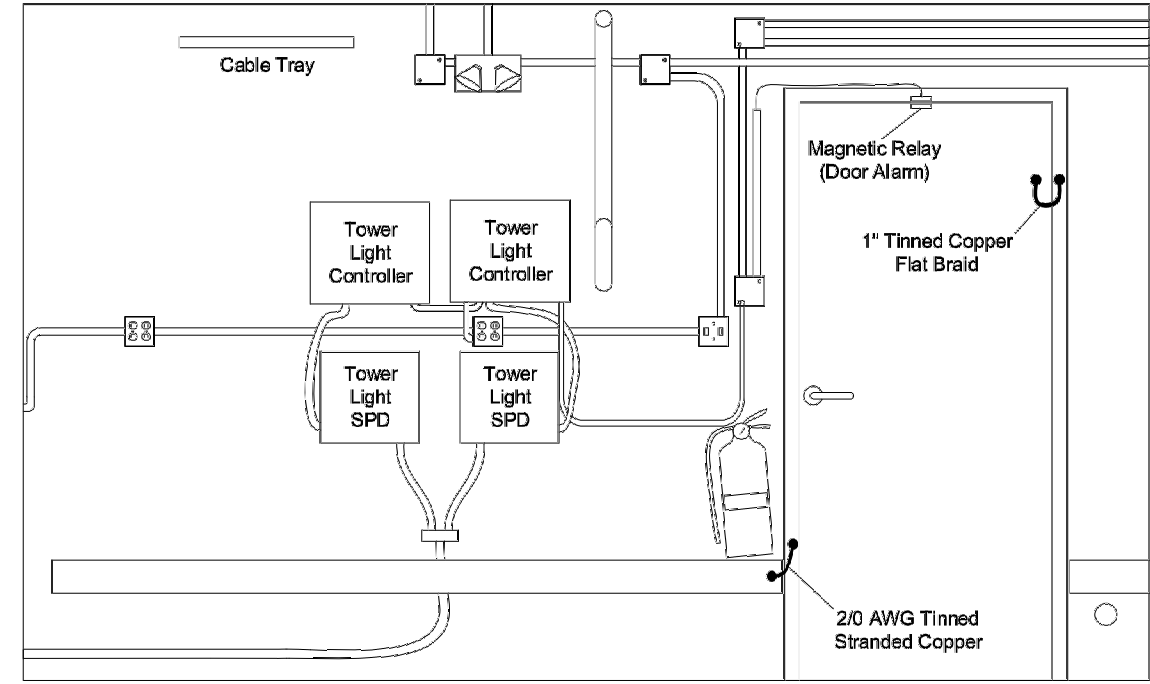
1. DOOR EXTERIOR WELD(S) TO BE GTAW (TIG), DOOR EXTERIOR SURFACE TO HAVE BRUSHED FINISH AFTER FABRICATION.
2. DOOR TO BE 1.875" x 0.125" THICK AFTER FABRICATION.
3. DOOR DIMENSIONS TO ALLOW 0.125" CLEARANCE ALL AROUND FRAME INSIDE DIAMETER, 0.375" CLEARANCE AT BOTTOM.
4. DOOR CONSTRUCTED FROM (2) HALVES, INNER HALF INSERTED INTO OUTER HALF AFTER (3) EQUALLY SPACED "HAT" CHANNEL VERTICAL STIFFENERS ARE BOUND IN PLACE WITH SUITABLE POLYURETHANE CONSTRUCTION ADHESIVE. ALLOW CLEARANCE FOR LOCKSET INSTALLATION WHEN POSITIONING STIFFENERS. THREE (3) STAINLESS STEEL HINGES, MCMASTER CARR 1624A76 OR EQUIVALENT, WELDED TO DOOR FRAME AND DOOR EXTERIOR SURFACE. DOOR OPENS OUT TO LEFT WHEN FACING EXTERIOR.
6. DOOR KNOB SETBACK AND CUTOUTS TO MATCH LOCKSET SUPPLIED.
7. WEATHERSTRIPPING MOUNTED TO 0.5" x 1" FLAT BAR - STITCH WELDED TO DOOR FRAME. FLAT BAR TO BE LOCATED SO AS TO PROPERLY COMPRESS WEATHERSTRIPPING SLIGHTLY. FLAT BAR TO BE LOCATED AFTER DOOR FABRICATION.

JOB TITLE		SITE REPAIR OF STORM DAMAGE		TEA TABLE SITE FOR FDOT	
DRAWING TITLE		DETAILS		DRAWING NO. TT-14 OF 17	
JOB NUMBER		17-156		REV. 0	
DESIGNED BY	RR	CHECKED BY	RR	APPROVED BY	0
DRAWN BY	MH	FOR APPROVAL	1/25/19	DATE	7/31/18
DESCRIPTION	REV.	DESCRIPTION	REV.	DATE	
	A				
	B				
	C				
	0				

**Pate Engineering Inc.**  
 13540 N. FLORIDA AVE. SUITE 203  
 TAMPA, FLORIDA 33613  
 813-960-0002  
 FL CERTIFICATE OF AUTHORIZATION #4524



COMMUNICATIONS ROOM  
INTERIOR WEST WALL



COMMUNICATIONS ROOM  
INTERIOR SOUTH WALL

NOTES

GENERAL

1. ALL INTERIOR GROUND BONDS SHALL BE MECHANICAL IN NATURE.

DOOR AND FRAME

1. DOOR FRAME SHALL BE BONDED TO THE SHELTER INTERIOR GROUND HALO WITH 2/0 AWG TINNED STRANDED COPPER WIRE AND TWO-HOLE COMPRESSION LUGS.
2. DOOR SHALL BE BONDED TO THE DOOR FRAME WITH 1" TINNED COPPER FLAT BRAID GROUND STRAP ASSEMBLY.
3. THE VENDOR SHALL REUSE THE EXISTING MAGNETIC RELAY (DOOR ALARM) ASSEMBLY. THE VENDOR SHALL REMOVE THE DOOR-SIDE MAGNET FROM THE OLD DOOR AND AFFIX TO THE NEW STAINLESS STEEL DOOR WITH PERMANENT ADHESIVE.

LPG TANK SENSOR ALARM WIRING

1. NEW ALARM WIRING CONDUCTORS SHALL BE INSTALLED BETWEEN THE NEW LPG TANK FUEL LEVEL SENSOR AND THE LPG TANK SENSOR SURGE PROTECTOR ON THE COMMUNICATIONS ROOM INTERIOR WEST WALL. THE CONDUCTORS SHALL BE SIZED IN ACCORDANCE WITH THE FUEL LEVEL SENSOR MANUFACTURER'S RECOMMENDATION.
2. THE VENDOR SHALL UTILIZE THE SAME CONDUIT THAT IS USED FOR THE EXISTING LPG TANK ALARM WIRING.

DRAWING TITLE DETAILS	DRAWING NO. TT-156	OF 17	REV. 0	JOB NUMBER 17-156	JOB TITLE SITE REPAIR OF STORM DAMAGE TEA TABLE SITE FOR FDOT	 <b>Pate Engineering Inc.</b> 13540 N. FLORIDA AVE. SUITE 203 TAMPA, FLORIDA 33613 813-960-0002 FL CERTIFICATE OF AUTHORIZATION #4524	DESIGNED BY RR	CHECKED BY RR	APPROVED BY 0	DESCRIPTION FOR APPROVAL	DATE 7/31/18	REVISION REV.	DESCRIPTION FOR APPROVAL	DATE 1/25/19	REVISION REV.	DESCRIPTION FOR APPROVAL	DATE 3/27/19	REVISION REV.	DESCRIPTION FOR CONSTRUCTION	DATE 4/2/19	REVISION REV.
							DRWN BY MH	DESIGNATION A	DATE 7/31/18	DESCRIPTION FOR APPROVAL	DATE 1/25/19	REVISION REV.	DESCRIPTION FOR APPROVAL	DATE 3/27/19	REVISION REV.	DESCRIPTION FOR CONSTRUCTION	DATE 4/2/19	REVISION REV.			

DESIGN CRITERIA

THIS DESIGN MEETS THE REQUIREMENTS OF THE FLORIDA BUILDING CODE 6<sup>TH</sup> EDITION (2017) FOR THE FOLLOWING CRITERIA:

V<sub>ULT</sub> = 199 MPH (3-SECOND GUST ULTIMATE WIND SPEED)  
 (RISK CATEGORY III/IV)  
 EXPOSURE D  
 TOPOGRAPHIC FACTOR 1  
 MAXIMUM LPG TANK WEIGHT (FULLY FUELED) 6,030 LB.  
 LIVE LOAD = 100 PSF

GENERAL NOTES

MATERIALS:

STRUCTURAL STEEL, AND PLATES ASTM A36 F<sub>y</sub> = 36.0 KSI  
 PIPE ASTM A53 GR B  
 EHS CABLE ASTM A475 (EXTRA HIGH STRENGTH) CLASS A GALVANIZED  
 U-BOLTS AND ALL-THREAD ASTM A36 F<sub>y</sub> = 36.0 KSI  
 WELD ELECTRODES E70 SERIES  
 SPECIFIED PART NUMBERS PER MANUFACTURER'S SPECIFICATIONS

1. BOLTS

- 1.1 ALL BOLTS 1/2" DIA. AND LARGER, SHALL BE A325X, THREADS EXCLUDED FROM SHEAR PLANE, AND FURNISHED WITH A HEAVY HEX NUT, HEAVY ROUND WASHER, AND HEAVY "PALNUT", ALL HOT-DIPPED GALVANIZED.
- 1.2 U-BOLTS AND ALL-THREAD SHALL BE FURNISHED WITH HEAVY WASHERS, HEAVY HEX NUTS AND "PALNUTS" OR LOCK WASHERS, ALL HOT-DIPPED GALVANIZED OR STAINLESS STEEL. NUTS SHALL BE FURNISHED "RUN UP" ON U-BOLT OR ALL-THREAD.

2. FABRICATION

- 2.1 ALL STEEL FABRICATION SHALL BE DONE IN ACCORDANCE WITH AISC "STEEL CONSTRUCTION MANUAL", LATEST EDITION.
- 2.2 HOLES SHALL BE 1/16" LARGER THAN BOLT DIAMETER SPECIFIED UNLESS OTHERWISE NOTED.
- 2.3 SLOTTED HOLES MAY NOT BE USED UNLESS SPECIFICALLY SHOWN ON THESE DRAWINGS.
- 2.4 ALL WELDING SHALL BE DONE IN ACCORDANCE WITH AWS STRUCTURAL WELDING CODE D1.1, LATEST EDITION. WELDER SHALL HOLD CURRENT CERTIFICATES FOR THE PROCESS AND POSITION BEING USED. WELDING ROD MATERIAL SHALL BE COMPATIBLE IN CHEMISTRY AND STRENGTH TO HIGHEST GRADE BASE METAL.
- 2.5 ALL WELDED CONNECTIONS SHALL BE "SEAL" WELDED TO PREVENT WEEPING OF RUST FROM CONNECTIONS.
- 2.6 ALL STEEL MATERIAL SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123. AFTER GALVANIZING, ALL THREADED AND OTHER ITEMS SHALL BE PROPERLY CLEANED. ALL BURRS, ETC. SHALL BE REMOVED FROM ALL GALVANIZED MATERIAL PRIOR TO SHIPMENT. DRAIN HOLES SHALL BE PROVIDED FOR CLOSED SECTIONS.
- 2.7 THESE DRAWINGS ARE NOT FABRICATION (SHOP) DRAWINGS. THE USE OF ANY DIMENSIONS ON THESE DRAWINGS FOR FABRICATION PURPOSES, IS DONE AT THE SOLE RISK OF THE CONTRACTOR.
- 2.8 ANY CHANGES FROM THESE DRAWINGS SHALL BE REQUESTED IN WRITING AND MAY NOT BE MADE WITHOUT WRITTEN CONSENT FROM PATE ENGINEERING, INC.

3. ERECTION

- 3.1 PRIOR TO BIDDING ON THIS PROJECT, THE CONTRACTOR SHALL VISIT THE SITE TO DETERMINE IF ANY CLEARANCE PROBLEMS EXIST.
- 3.2 FIELD DRILLED HOLES AND CUTS AND DAMAGED GALVANIZED SURFACES SHALL BE GIVEN ONE COAT OF Z.R.C. (800-831-3275). PREPARE SURFACES AND APPLY IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. A TOP COAT OF HIGH UV RESISTANCE ACRYLIC PAINT SHALL BE APPLIED OVER THE Z.R.C.

3. ERECTION (CONTINUED)

- 3.3 FIELD CUTS AND HOLES SHALL BE MADE WITH POWER TOOLS SUCH AS POWER HACKSAWS, DRILLS OR PUNCHES. CUTS AND HOLES MAY NOT BE BURNED.
- 3.4 ALL FIELD WELDING SHALL BE DONE IN ACCORDANCE WITH AWS STRUCTURAL WELDING CODE D1.1, LATEST EDITION. WELDER MUST HOLD CURRENT CERTIFICATION FOR WELD BEING USED. ALL SURFACES TO BE FIELD WELDED MUST BE PROPERLY CLEANED AND PREPARED.
- 3.5 ALL FIELD WELDS SHALL BE GIVEN TWO (2) COATS OF Z.R.C. PREPARE SURFACES AND APPLY IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. A TOP COAT OF HIGH UV RESISTANCE ACRYLIC PAINT SHALL BE APPLIED OVER THE Z.R.C.

**3.8 NEW FENCES, AND THE NEW LPG TANK SHALL BE GROUNDED PER FDOT REQUIREMENTS.**

- 3.9 NEW BOLTS SHALL BE TIGHTENED AND TENSIONED BY THE "TURN OF THE NUT" METHOD, PER AISC MANUAL OF STEEL CONSTRUCTION, I.E. 1/3 TURN BEYOND "SNUG" TIGHT.
- 3.10 U-BOLTS SHALL BE "SNUG" TIGHT. DO NOT BEND PLATES.
- 3.11 ALL CONSTRUCTION PROCEDURES SHALL COMPLY WITH THE SAFETY REQUIREMENTS OF OSHA, THE OWNER, AND OTHER APPLICABLE REGULATIONS.
- 3.12 ANY CHANGES FROM THESE DRAWINGS SHALL BE REQUESTED IN WRITING AND MAY NOT BE MADE WITHOUT WRITTEN CONSENT FROM PATE ENGINEERING, INC.

4. CONCRETE NOTES

MATERIALS

CONCRETE f'<sub>c</sub> = 3,000 PSI @ 28 DAYS  
 REINFORCING STEEL ASTM A-615 GRADE 60

- 4.1 CONCRETE SHALL BE DESIGNED, DETAILED, PRODUCED AND PLACED AS PROVIDED FOR IN ACI STANDARD 318, LATEST EDITION, "BUILDING CODE REQUIREMENT FOR STRUCTURAL CONCRETE" AND ACI STANDARD 301, LATEST EDITION, "SPECIFICATIONS FOR STRUCTURAL CONCRETE."
- 4.2 REINFORCING STEEL SHALL BE HANDLED, CUT AND PLACED AS PROVIDED FOR IN "THE MANUAL OF STANDARD PRACTICE", CRSI.
- 4.3 GROUNDING, CONDUITS, LINES, ETC. SHALL BE RELOCATED AS NECESSARY TO CLEAR THE NEW STRUCTURE. GROUNDING SHALL BE MAINTAINED AT ALL TIMES. PROVIDE PROTECTIVE GROUNDING IN ACCORDANCE WITH FDOT REQUIREMENTS.
- 4.4 WHERE FIELD WORK IS CARRIED OUT NEAR THE TOWER AND OTHER STRUCTURES, EXTREME CARE SHALL BE EXERCISED TO PREVENT DAMAGE.
- 4.5 IF NECESSARY TO MOVE FENCES OR OTHER ITEMS, OR DISTURB THE GROUNDS, THEY SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.
- 4.6 THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING. ANY PROBLEMS WITH ACCESS, REQUIRED CLEARING OF TREES AND VEGETATION, INTERFERENCE, PROPERTY LINES, ETC. SHALL BE RESOLVED PRIOR TO MOVING ONTO THE JOB SITE. UNDERGROUND UTILITIES SHALL BE LOCATED PRIOR TO BEGINNING WORK. NO EXTRA WILL BE CONSIDERED FOR THESE CONDITIONS.
- 4.7 THE CONTRACTOR MUST COORDINATE THE WORK AND COOPERATE WITH THE OWNER PRIOR TO MOVING INTO THE SITE.
- 4.8 ALL CONSTRUCTION PROCEDURES SHALL MEET THE REQUIREMENTS OF OSHA, THE OWNER, AND OTHER APPLICABLE REGULATIONS TO PROTECT PERSONNEL.
- 4.9 THE CONTRACTOR SHALL OBTAIN CONCRETE TEST CYLINDERS FROM CONCRETE POUR. FURNISH COPIES OF THE TEST RESULTS TO THE OWNER FOR THE SEVEN (7) DAY BREAK AND TWENTY-EIGHT (28) DAY BREAK.

DRAWING TITLE	JOB NUMBER 17-156		DRAWING NO. 11-16 OF 17		REV. 0
	NOTES				
JOB TITLE	SITE REPAIR OF STORM DAMAGE TEA TABLE SITE FOR FDOT				
	 <b>Pate Engineering Inc.</b> 13540 N. FLORIDA AVE. SUITE 203 TAMPA, FLORIDA 33613 813-960-0002 FL CERTIFICATE OF AUTHORIZATION #4524				
DESIGNED BY	RR	DRAWN BY	MH	CHECKED BY	RR
APPROVED BY					
DRAWING RECORD	REV.	DESCRIPTION	DATE	REV.	DATE
	A	FOR APPROVAL	7/31/18		
	B	FOR APPROVAL	1/25/19		
	C	FOR APPROVAL	3/27/19		
	0	FOR CONSTRUCTION	4/2/19		

CONCRETE REPAIR NOTES

1. MATERIALS (MASTER BUILDERS SOLUTIONS BY BASF)  
 REPAIR MORTAR                      MASTEREMACO N420CI
  - 1.1 EQUIVALENT MATERIALS MAY BE PROPOSED AT THE TIME OF BIDDING. SUCH SUBSTITUTIONS MUST BE APPROVED BY THE ENGINEER PRIOR TO PURCHASE OR USE.
  - 1.2 ALL MATERIALS SHALL BE HANDLED, SHIPPED, STORED, MIXED, AND APPLIED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. ALSO, ALL SURFACE PREPARATIONS SHALL BE MADE IN ACCORDANCE WITH THESE DRAWINGS AND THE MANUFACTURER'S INSTRUCTIONS.
2. WORK PROTECTION FOR OTHER ITEMS
  - 2.1 PRIOR TO BIDDING ON THE PROJECT, THE CONTRACTOR SHALL VISIT THE SITE TO DETERMINE WHETHER ANY ITEMS MAY INTERFERE WITH THE REPAIR WORK.
  - 2.2 WHERE OTHER ITEMS INTERFERE OR MAY BE DAMAGED BY THE REPAIR WORK, THEY SHALL BE TEMPORARILY RELOCATED AND PROPERLY PROTECTED.
  - 2.3 THESE ITEMS MAY HAVE DAMAGED SUPPORTS THAT SHALL BE REMOVED AND REPLACED WITH NEW SUPPORTS, INCLUDING SMALL ANCHORS. THESE NEW SUPPORTS SHALL BE GALVANIZED OR STAINLESS STEEL.
  - 2.4 THE CONTACTOR SHALL VERIFY WITH THE OWNER WHETHER SOME ITEMS ARE UNUSED. THESE ITEMS SHALL BE REMOVED.
3. PROCEDURE FOR THE REPAIR OF DAMAGED CONCRETE
  - 3.1 CHIP AWAY ALL LOOSE, DELAMINATED OR CRACKED CONCRETE AND EXPOSE ALL CORRODED REBAR. CONCRETE SHALL BE REMOVED UNTIL AT LEAST 3 INCHES OF CLEAN REBAR IS EXPOSED. USE LIGHT CHIPPING HAMMER TO PREVENT DAMAGE AND MICRO-CRACKING.
  - 3.2 IN AREAS THAT HAVE NO EXPOSED REBAR, CHIP DOWN TO SOUND CONCRETE.
  - 3.3 SAW CUT AT LEAST 1/2" DEEP TO ELIMINATE AND REMOVE FEATHER EDGES. SEE DETAILS AND SECTIONS.
  - 3.4 CHIP AWAY A MINIMUM OF 3/4" ALL AROUND EXPOSED REBAR. ROUGHEN THE SURFACE TO A MINIMUM 1/4" PROFILE AMPLITUDE.
  - 3.5 SAND BLAST TO REMOVE (IF ANY) ALL CORROSION FROM EXPOSED REBAR IN ACCORDANCE WITH ICRI TECHNICAL GUIDELINE NO. 310.1R.
  - 3.6 SAND BLAST ALL EXPOSED CONCRETE IN REPAIR AREA TO REMOVE ALL LOOSE CONCRETE, DIRT, DEBRIS, AND OTHER BOND-INHIBITING MATERIALS.
  - 3.7 PRESSURE WASH EXPOSED CONCRETE AND REBAR IN THE REPAIR AREA TO REMOVE ALL DUST, ETC.
  - 3.8 FINISH THE REPAIR AREA TO MATCH THE SHAPE OF THE EXISTING MEMBER.
  - 3.9 APPLY CURING COMPOUND.
  - 3.10 SMALL CAVITIES AND HOLES SHALL ALSO BE FILLED WITH THE REPAIR MORTAR.
4. THE CONTRACTOR SHALL CONTACT THE ENGINEER IF A REBAR IS FOUND TO HAVE LOST MORE THAN 25% OF ITS CROSS SECTION.

FOUNDATION NOTES

- 1.1 THE FOUNDATION HAS BEEN DESIGNED IN ACCORDANCE WITH AN EXISTING FDOT SOIL REPORT, DATED 12/1/1993, AND A MINIMUM SOIL BEARING CAPACITY OF 1000 PSF USED FOR THE DESIGN OF THE ELEVATED CONCRETE PLATFORM FOUNDATIONS.
- 1.2 THE CONTRACTOR SHALL ANTICIPATE THE PRESENCE OF DIFFERENT TYPES OF SOIL DURING EXCAVATION. FILL MATERIALS HAVE BEEN ADDED TO THE SITE AT SOME LOCATIONS. THE PRESENCE OF GROUNDWATER AND LOOSE SOIL MATERIAL MUST ALSO BE ANTICIPATED.
- 1.3 UNDERGROUND UTILITIES SHALL BE LOCATED PRIOR TO FOUNDATION EXCAVATION.
- 1.4 FOUNDATION INSTALLATION SHALL BE SUPERVISED BY PERSONNEL EXPERIENCED WITH THE SITE LOCAL CONDITIONS.
- 1.5 LOOSE MATERIAL SHALL BE REMOVED FROM THE BOTTOM OF THE EXCAVATIONS PRIOR TO CONCRETE PLACEMENT.
- 1.6 COMPACT BACKFILL IN 6" LIFTS WITH A POWERED HAND TAMPER.
- 1.7 CONCRETE SHALL BE FORMED TO LINE AND GRADE SHOWN ON THE DRAWINGS. THE FORMS SHALL BE PROPERLY REMOVED AFTER INSTALLATION.

DRAWING TITLE <b>NOTES</b>	DRAWING NO. <b>TT-17 OF 17</b>	REV. <b>0</b>	JOB NUMBER <b>17-156</b>	JOB TITLE <b>SITE REPAIR OF STORM DAMAGE TEA TABLE SITE FOR FDOT</b>	 <b>Pate Engineering Inc.</b> 13540 N. FLORIDA AVE. SUITE 203 TAMPA, FLORIDA 33613 813-960-0002 FL CERTIFICATE OF AUTHORIZATION #4524	DESIGNED BY RR DRAWN BY MH CHECKED BY RR APPROVED BY	DRAWING RECORD			
							REV.	DATE	DESCRIPTION	DATE
		A	7/31/18	FOR APPROVAL						
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		C	3/27/19	FOR APPROVAL						
		0	4/2/19	FOR CONSTRUCTION						