

*LEE COUNTY PUBLIC WORKS
DEPARTMENT OF TRANSPORTATION*

CORKSCREW ROAD WIDENING - PHASE I

BEN HILL GRIFFIN PARKWAY TO BELLA TERRA BOULEVARD

JEI PROJECT ID: 20192030-000

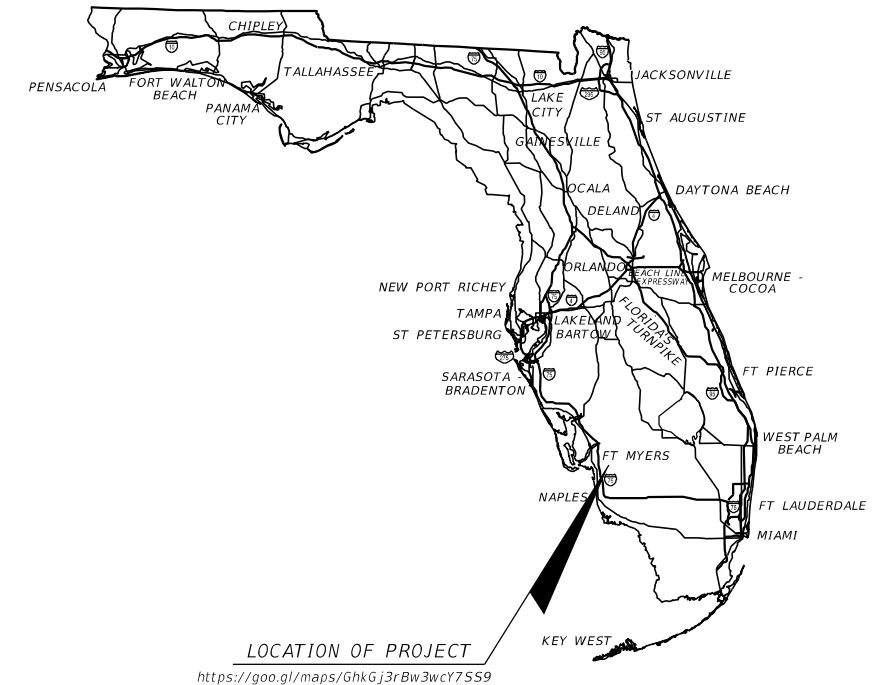
LEE COUNTY (2014100)

COUNTY ROAD NO. 850

SIGNALIZATION PLANS

INDEX OF SIGNALIZATION PLANS

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SIGNALIZATION SHOP DRAWINGS
TO BE SUBMITTED TO:

THOMAS MARQUARDT, P.E.

SIGNALIZATION PLANS
ENGINEER OF RECORD:



LEAH M. HOLMES, P.E.
P.E. LICENSE NUMBER 85359
JOHNSON ENGINEERING, INC.
2122 JOHNSON STREET
FORT MYERS, FLORIDA 33901
CONTRACT NO.:
VENDOR NO.:
CERTIFICATE OF AUTHORIZATION NO.: 642

GOVERNING STANDARD PLANS:

Florida Department of Transportation, FY2019-20 Standard Plans for Road and Bridge Construction and applicable Interim Revisions (IRs).

Standard Plans for Road Construction and associated IRs are available at the following website: <http://www.fdot.gov/design/standardplans>

Standard Plans for Bridge Construction are included in the Structures Plans Component

GOVERNING STANDARD SPECIFICATIONS:

Florida Department of Transportation, July 2019 Standard Specifications for Road and Bridge Construction at the following website: <http://www.fdot.gov/programmanagement/Implemented/SpecBooks>

NOTE: THE SCALE OF THESE PLANS MAY
HAVE CHANGED DUE TO REPRODUCTION.

**60% SUBMITTAL
MARCH 2020**

**LEE COUNTY
PROJECT MANAGER:
THOMAS MARQUARDT, P.E.**

48 HOURS BEFORE DIGGING
"CALL SUNSHINE"
1-800-432-4770



CONSTRUCTION CONTRACT NO.	FISCAL YEAR	SHEET NO.
	19	T-1

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

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JOHNSON ENGINEERING
2122 JOHNSON STREET
FORT MYERS, FLORIDA 33902
CERTIFICATE OF AUTHORIZATION: 00642
LEAH M. HOLMES, P.E. NO. 85359

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE
FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

<u>SHEET NO.</u>	<u>SHEET DESCRIPTION</u>
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T-2	SIGNATURE SHEET
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T-13 - T-15	SIGNAL OPERATIONS
T-16	MAST ARM TABULATION

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HIGH SPANS ENGINEERING, INC.
2121 MCGREGOR BOULEVARD
FORT MYERS, FLORIDA 33901
REGISTRY NUMBER: 27559
THOMAS M. WAITS, P.E. NO. 55460

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE
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<u>SHEET NO.</u>	<u>SHEET DESCRIPTION</u>
T-2	SIGNATURE SHEET
T-17	STANDARD MAST ARM ASSEMBLIES DATA TABLE


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REVISIONS				 LEAH M. HOLMES • P.E. LICENSE NO. 85359 JOHNSON ENGINEERING, INC. 2122 JOHNSON STREET • FORT MYERS, FL 33901 CERTIFICATE OF AUTHORIZATION NO. 642	LEE COUNTY PUBLIC WORKS DEPARTMENT OF TRANSPORTATION			SHEET NO. T-2
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	JEI PROJECT ID	
					CR 850	LEE	20192030-000	

TABULATION OF QUANTITIES

PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS														TOTAL THIS SHEET		GRAND TOTAL	
			T-7		T-8		T-9													
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL		
630-2-11	Conduit, Furnish & Install, Open Trench	LF	96		59		95										250	250		
630-2-12	Conduit, Furnish & Install, Directional Bore	LF	464		347		399										1210	1210		
632-7-1	Signal Cable, New Or Reconstructed Intersection, Furnish & Install	PI	1		1		1										3	3		
632-7-6	Signal Cable, Remove - Intersection	PI	1		1		1										3	3		
633-2-31	Fiber Optic Connection, Splice	EA	1		1		1										3	3		
633-2-32	Fiber Optic Connection, Termination	EA	3		3		3										9	9		
633-3-12	Fiber Optic Connection Hardware, F&I, Splice Tray	EA	1		1		1										3	3		
633-3-13	Fiber Optic Connection Hardware, F&I, Preterminated Connector Assembly	EA	1		1		1										3	3		
633-3-14	Fiber Optic Connection Hardware, F&I, Buffer Tube Fan Out Kit	EA	1		1		1										3	3		
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	1		1		1										3	3		
633-3-17	Fiber Optic Connection Hardware, F&I, Connector Panel	EA	1		1		1										3	3		
635-2-11A	Pull & Splice Box, F&I, 13" x 24" Cover Size	EA	12		12		20										44	44		
635-2-12	Pull & Splice Box, F&I, 24" x 36" Cover Size	EA	1		1		1										3	3		
639-1-112	Electrical Power Service, F&I, Overhead Meter Purchased By Contractor From Power Company	AS	1		1		1										3	3		
639-2-1	Signal, Electrical Service Wire, F&I	LF	50		50		50										150	150		
641-2-12	Prestressed Conc. Pole, F&I, Type P-II Service Pole	EA	1		1		1										3	3		
641-2-80	Prestressed Conc. Pole, Deep Pole Remove - Pole 30' And Greater	EA	4		4		3										11	11		
646-1-11	Aluminum Signals Pole, F&I, Pedestal	EA	6		4		5										15	15		
646-1-60	Aluminum Signals Pole, Remove	EA	8		4		3										15	15		
649-21-6	Steel Mast Arm Assembly, Furnish And Install, 50' Single Arm	EA					1										1	1		
649-21-10	Steel Mast Arm Assembly, Furnish And Install, 60' Single Arm	EA					1										1	1		
649-21-15	Steel Mast Arm Assembly, Furnish And Install, 70' Single Arm	EA	3		1		1										5	5		
649-21-21	Steel Mast Arm Assembly, Furnish And Install, 78' Single Arm	EA	2														2	2		
649-21-26	Steel Mast Arm Assembly, Furnish And Install, Double Arm 78'-70'	EA			1												1	1		
650-1-14	Vehicular Traffic Signal, Furnish & Install - Aluminum, 3 Section, 1 Way	AS	19		9		8													
650-1-16	Vehicular Traffic Signal, Furnish & Install - Aluminum, 4 Section, 1 Way	AS			2		3													
650-1-19	Vehicular Traffic Signal, Furnish & Install - Aluminum, 5 Section Cluster, 1 Way	AS					1										1	1		
653-1-11	Pedestrian Signal, Furnish & Install LED Count Down, 1 Way	AS	4		4		3										11	11		
653-1-12	Pedestrian Signal, Furnish & Install LED Count Down, 2 Ways	AS	2				2										4	4		
660-4-11	Vehicle Detection System- Video, Furnish & Install, Cabinet Equipment	EA	3		3		3										9	9		
663-1-111	Signal Priority and Pre-Emption System, F&I, Optical, Cabinet Electronics	EA	1		1		1										3	3		
663-1-112	Signal Priority and Pre-Emption System, F&I, Optical, Detector	EA	4		3		4										11	11		
665-1-12	Pedestrian Detector, F&I, Accessible	EA	6		4		5										15	15		
670-5-112	Traffic Controller Assembly, F&I, NEMA, 2 Pre-Emption Plans	AS	1		1		1										3	3		
670-5-600	Traffic Controller Assembly, Remove Controller And Cabinet	AS	1		1		1										3	3		
684-1-1	Managed Field Ethernet Switch, LAYER 2, Furnish & Install	EA	1		1		1										3	3		
685-1-11	Uninterruptible Power Supply, Furnish & Install, Line Interactive	EA	1		1		1										3	3		
700-3-201	Sign Panel, Furnish & Install Overhead Mount, Up to 12 SF	EA			1		1										2	2		
700-5-21	Internally Illuminated Sign	EA	5		3		4										12	12		
715-7-12	Load Center, F&I, Primary Voltage	EA	1		1		1										3	3		

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION


JOHNSON ENGINEERING
LEAH M. HOLMES • P.E. LICENSE NO. 85359
 JOHNSON ENGINEERING, INC.
 2122 JOHNSON STREET • FORT MYERS, FL 33901
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ROAD NO.	COUNTY	JEI PROJECT ID
CR 850	LEE	20192030-000

TABULATION OF QUANTITIES

SHEET NO.
T-3

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

GENERAL NOTES:

1. LOCATES: ONE (1) COURTESY LOCATE SHALL BE PERFORMED BY LEE COUNTY SIGNALS AT THE START OF THE PROJECT AT THE CONTRACTOR'S REQUEST. THE CONTRACTOR SHALL DOCUMENT THE LOCATION OF THE EXISTING UNDERGROUND AND ABOVE GROUND FACILITIES. AFTER THE COURTESY LOCATE, ALL LOCATES WITHIN THE PROJECT LIMITS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE PERFORMED IN A TIMELY MANNER. TIMELY MANNER IN RESPONSE TO LOCATES IS DEFINED AS LOCATE SHALL BE PERFORMED NO LATER THAN TWENTY-FOUR (24) HOURS AFTER NOTIFICATION OR AS REQUIRED BY FLORIDA STATUTE. LEE COUNTY SIGNALS WILL ADVISE THE CONTRACTOR VIA E-MAIL OR FAX OF SUNSHINE LOCATE REQUESTS WITHIN THE WORK ZONE. ANY DAMAGE INCURRED DUE TO CONTRACTOR FAILURE TO LOCATE SHALL BE REPAIRED BY THE CONTRACTOR. SHOULD LEE COUNTY FORCES BE CALLED OUT TO MAKE REPAIRS DUE TO CONTRACTOR REFUSAL OR INABILITY TO MAKE REPAIRS, THE CONTRACTOR WILL BE BILLED THE ENTIRE COST AS A "DEDUCT" ON THE NEXT PAYMENT REQUEST AND WILL TRIGGER A "VENDOR/CONTRACTOR COMPLAINT" NOTICE TO BE FILED WITH LEE COUNTY CONTRACTS AS WELL AS FDOT. BEING AN "OUT OF TOWN" CONTRACTOR DOES NOT RELIEVE THIS RESPONSIBILITY.
2. DAMAGE TO EXISTING FACILITIES: ANY DAMAGE TO LEE COUNTY FACILITIES SHALL BE REPAIRED BY THE CONTRACTOR. REPAIRS SHALL BE MADE TO ENSURE FACILITIES ARE LIKE NEW OR BETTER. ANY DAMAGE TO EXISTING COMMUNICATION LINES SHALL NECESSITATE THE REMOVAL OF ALL DAMAGED LINES AND THE RE-PULLING OF NEW CABLE. SPLICING OF COMMUNICATION LINES WILL NOT BE ALLOWED. CAUTION SHALL BE EXERCISED DURING EXCAVATION NEAR EXISTING LEE COUNTY FIBER OPTIC LINES, SINCE MANY ENTITIES USE THESE FACILITIES. SHOULD DAMAGE OCCUR TO FIBER OPTIC LINES, LEE COUNTY WILL DECIDE WHICH QUALIFIED FIBER OPTIC SPLICING COMPANY WILL BE USED TO MAKE REPAIRS. CONTRACTOR WILL BE RESPONSIBLE FOR ALL REPAIR COSTS INCURRED, WHETHER REPAIRS ARE MADE BY LEE COUNTY OR A THIRD PARTY.
3. CABINET/CONTROLLER/VIDEO DETECTION/POLARAPED PREP: LEE COUNTY SIGNALS WILL ASSIST THE CONTRACTOR IN THE SETUP OF NEW SIGNAL CABINET/CONTROLLERS/CAMERAS WHEN THE FOLLOWING CONDITIONS ARE MET: DELIVERY OF EQUIPMENT TO 5650 ENTERPRISE PARKWAY BY CONTRACTOR OR SHIPPER. THE CONTRACTOR SHALL SEND A QUALIFIED TECHNICIAN TO THE SIGNAL SHOP TO SET UP THE EQUIPMENT WITH THE AID OF A SENIOR SIGNAL TECH, GIVING MINIMUM OF 48 HOURS NOTICE. AFTER SET UP, CONTRACTOR SHALL ARRANGE TO PICK UP THE EQUIPMENT WITHIN ONE WEEK. AT TIME OF REMOVAL FROM THE LEE COUNTY SIGNAL SHOP, THE EQUIPMENT SHALL BE SIGNED OUT BY THE CONTRACTOR REPRESENTATIVE AS COMPLETE. LEE COUNTY WILL NOT STORE CONTRACTOR EQUIPMENT. UNDER THESE CONDITIONS, LEE COUNTY SIGNALS WILL ASSIST THE CONTRACTOR ON TURN ON DAY IN THE FIELD. SHOULD THE CONTRACTOR ELECT TO SET UP, BURN IN, AND TEST THE EQUIPMENT WITHOUT LEE COUNTY ASSISTANCE, A MANUFACTURERS REPRESENTATIVE SHALL BE ONSITE, AT CONTRACTORS EXPENSE, ON THE DAY OF TURN ON TO ASSIST THE CONTRACTOR AND TO VERIFY PROPER OPERATION.
4. SPECIAL NOTE REGARDING NEW CONTROLLERS: LEE COUNTY RESERVES THE RIGHT TO SUBSTITUTE DIFFERENT CONTROL EQUIPMENT IN THE EVENT THAT DELIVERED EQUIPMENT IS NOT COMPATIBLE WITH THE EXISTING SYSTEM. SINCE SYSTEM UPGRADES MAY BE BEHIND CONTROLLER TECHNOLOGY, AS THE MAINTAINING AGENCY, LEE COUNTY SIGNALS WILL DECIDE EQUIPMENT PLACEMENT AND TIMING AND MAY PROVIDE AN ALTERNATE CONTROLLER TEMPORARILY UNTIL FUTURE UPGRADES ARE MADE. IF THERE IS A COST DIFFERENTIAL, PAYMENT WILL BE MADE TO THE CONTRACTOR PER PLAN QUANTITY AND SPECIFICATION. SIGNAL CABINETS ARE TO PROVIDE SUFFICIENT SPACE FOR COMPATIBILITY FOR FUTURE UPGRADES SUCH AS CONNECTED AND AUTONOMOUS VEHICLE TECHNOLOGY.
5. CONTRACTOR IS REQUIRED TO HAVE AN AUTHORIZED REPRESENTATIVE OF THE CONTRACTOR AND NECESSARY EQUIPMENT TO COMPLETE THE INSPECTIONS ONSITE AT ALL SIGNAL AND LIGHTING INSPECTIONS. FAILURE TO HAVE A REPRESENTATIVE ONSITE WILL RESULT IN THE CANCELLATION OF THE INSPECTION AND THE WITHHOLDING OF FINAL PAYMENT. AUTHORIZED REPRESENTATIVE IS A PERSON WITH THE KNOWLEDGE AND ABILITY TO MAKE CORRECTIONS AS NEEDED. THIS IS A REQUIREMENT AND IS NECESSARY TO ELIMINATE COSTLY RE-INSPECTIONS AND TO SPEED UP THE CLOSE OUT OF THE PROJECT.
6. RESULTS OF FIELD TESTS SHALL BE MADE AVAILABLE IN WRITTEN FORM. A QUALIFIED REPRESENTATIVE SHALL BE PRESENT AT THE CONDITIONAL ACCEPTANCE INSPECTION OF THE CONTROLLER ASSEMBLY. THE QUALIFICATIONS OF THE REPRESENTATIVE SHALL INCLUDE:
 - A. COMPLETE FAMILIARITY WITH ALL SYSTEM ELEMENTS INCLUDING CONTROLLERS, COORDINATION UNITS, SYSTEM CLOCKS AND SYSTEM COMMUNICATIONS ELEMENTS.
 - B. THE REPRESENTATIVE SHALL BE QUALIFIED TO INPUT AND RECALL ALL CONTROLLER AND SYSTEM TIMING FUNCTIONS.
7. SIGNALS SHALL BE PLACED IN FULL OPERATION ON A MONDAY, TUESDAY, OR WEDNESDAY, HOWEVER, THE SIGNAL SHALL NOT BE PLACED IN FULL OPERATIONS THE DAY PRECEDING OR SUCCEEDING A HOLIDAY, IN ACCORDANCE WITH FDOT STANDARDS SPECIFICATIONS ACCEPTANCE PROCEDURES. THE 48 HOUR TEST SHALL NOT START ON THE DAY PRECEDING OR SUCCEEDING A HOLIDAY.
8. THE CONTRACTOR SHALL BE AWARE THAT NO TEST BORINGS WERE MADE WHERE CONDUIT IS TO BE INSTALLED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXAMINING THE JOB SITE CONDITIONS BEFORE SUBMITTING BID PROPOSALS IN ACCORDANCE WITH SECTIONS 2-4 OF THE STANDARD SPECIFICATIONS.
9. PULL BOXES AND CONDUIT ARE TO BE PLACED BEHIND CURB AND GUTTER. IF CURB AND GUTTER ARE NOT PRESENT, THE PULL BOXES AND CONDUIT SHALL BE PLACED A MINIMUM OF TEN (10) FEET FROM THE EDGE OF PAVEMENT OR AT THE BACK OF THE EXISTING RIGHT OF WAY TO AVOID EXISTING UTILITIES.
14. INSURANCE AS REFERENCED IN SECTIONS 7-13 IN THE FDOT STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION (LATEST EDITION) SHALL BE PROVIDED BY THE CONTRACTOR WHEN INSTALLING OR WHEN WORKING ON OR IN THE VICINITY OF JOINT-USE POLES OR WHEN WORKING IN THE VICINITY OF POWER LINES.
15. WHEN PERFORMING NECESSARY WORK UNDER POWER LINES, SUCH AS THE INSTALLATIONS OF SIGNAL CABLE, AND SIGNAL POLES, THE CONTRACTOR SHALL NOTIFY THE POWER COMPANY AT LEAST 72 HOURS PRIOR TO THE INSTALLATION OF THIS EQUIPMENT.
16. ALL SIGNALIZATION WORK SHALL CONFORM TO LEE COUNTY'S SUPPLEMENTAL SPECIFICATIONS. CONTRACTOR SHALL NOTIFY LEE COUNTY DOT 48 HOURS PRIOR TO THE START OF WORK. EFFECTIVE JANUARY 1, 2003, LEE COUNTY BECAME PART OF THE ONE-CALL LOCATE SYSTEM. IF THE CONTRACTOR REQUIRES INSPECTION SERVICES THERE SHALL BE AT LEAST 48 HOUR NOTICE. CONTRACTOR SHALL MAINTAIN THE TRAFFIC SIGNAL DURING CONSTRUCTION UNTIL SUCH TIME LEE COUNTY ASSUMES MAINTENANCE RESPONSIBILITY. IF CONTRACTOR DOES NOT FOLLOW THE REQUIREMENT THEY WILL BE SUBJECT TO ALL COST OF DAMAGED EQUIPMENT.
17. ALL EQUIPMENT AND WORK TO BE COMPLIANT TO LEE COUNTY DEPARTMENT OF TRANSPORTATION PLAN SPECIFICATIONS FOR TRAFFIC SIGNALS (LATEST EDITION).
18. CONTROLLER FOUNDATION ELEVATION SHALL BE SIX (6) INCHES ABOVE THE BACK OF SIDEWALK GRADE OR ONE (1) FOOT ABOVE PROPOSED EDGE OF ROADWAY. USE UR OR UY CONNECTORS TO SPLICE CABLE. MINIMUM DEPTH OF CONDUIT SHALL BE THIRTY SIX (36) INCHES. WHEN UNDER SIDEWALK, A MINIMUM OF THIRTY (30) INCHES SHALL BE MAINTAINED.
19. ALL PEDESTAL POLES WHICH ARE PROVIDED WITH A BREAKAWAY FEATURE SHALL CONFORM TO THE LEE COUNTY DEPARTMENT OF TRANSPORTATION SPECIFICATIONS (LATEST EDITION).
20. REFER TO LATEST EDITION FDOT STANDARD PLANS 665-001 FOR PEDESTRIAN DETECTOR ASSEMBLY INSTALLATION DETAILS. POLARA ENZ & CCUZEN, POLARA ENZ TO HAVE STREET NAMES PROGRAMMED BY POLARA, LEE COUNTY TO RECEIVE VOICE FILES, LEE COUNTY THEN TO RECEIVE ENZ'S AND CCUZEN FOR PROGRAMMING SPECS.
21. THE POSITION OF PEDESTRIAN PUSH BUTTON SHOULD CLEARLY INDICATE WHICH CROSSWALK SIGNAL IS ACTUATED BY EACH PUSH BUTTON. PUSH BUTTON AND SIGNS ARE TO BE MOUNTED IN ACCORDANCE WITH STANDARD SPECIFICATIONS, SECTION 665, AND MEET ALL GROUNDING REQUIREMENTS OF SECTION 620 OF THE STANDARD SPECIFICATIONS.
23. PULL BOXES SHALL BE COMPOSITE CONSTRUCTION (QUAZITE) AND LOAD RATED 20,000 LBS. NO EXCEPTIONS WILL BE APPROVED. PULL BOX LIDS SHALL BE COMPOSITE CONSTRUCTION (QUAZITE) AND MARKED APPROPRIATELY, "TRAFFIC SIGNAL" OR "STREET LIGHTS". NO CONCRETE PULL BOXES SHALL BE ALLOWED. NO STEEL LIDS SHALL BE ALLOWED. PULL BOXES SHALL BE SIZED TO ACCOMMODATE MAXIMUM NUMBER OF PIPES ALLOWED PER NEC AND TO COMPLY WITH CABLE MANUFACTURE'S BEND RADIUS.
24. CABINET BASE SHALL BE COMPOSITE CONSTRUCTION (QUAZITE). EQUAL TO QUAZITE PIN: PB40581224B24, "POLYMER CONCRETE PRECAST BASE" APPROVED FOR LEE COUNTY. CABINET BASE SHALL BE BURIED TO MANUFACTURER'S RECOMMENDED DEPTH. ELEVATION OF THE CABINET BASE SHALL BE AT THE SAME ELEVATION AS THE CENTER OF ROADWAY, BUT NO HIGHER THAN TWELVE (12) INCHES ABOVE THE CENTER OF THE ROADWAY. SPARE CONDUITS FROM CABINET BASE SHALL TERMINATE AT A PULL BOX IN FRONT OF THE BASE AND SHALL BE SEALED WITH DUCT SEAL OR CAPPED. ALL FILL DIRT MUST BE COMPACTED AROUND THE CABINET BASE. STUB UP CONDUITS SHALL BE NO LOWER THAN TWELVE (12) INCHES AND NO HIGHER THAN SIX (6) INCHES BELOW THE ACCESS HOLE IN CABINET PAD. INSTALL TWELVE (12) INCH MINIMUM OF BED OF ROCK UNDER CABINET BASE. GRAVE SHALL BE #57 STONE OR EQUIVALENT.
25. ON MAST ARM, ALL THREE (3) SECTION HEADS SHALL HAVE A FIVE (5) CONDUCTOR, FOUR (4) SECTION HEADS SHALL HAVE A SEVEN (7) CONDUCTOR, AND FIVE (5) SECTION HEADS SHALL HAVE A SEVEN (7) CONDUCTOR. EACH SIGNAL PHASE SHALL HAVE ITS OWN NEUTRAL. SHARING OF A NEUTRAL IS NOT ALLOWED. EACH PEDESTRIAN PHASE SHALL HAVE ITS OWN NEUTRAL. SHARING OF A NEUTRAL IS NOT ALLOWED ON A MAST ARM INSTALLATION. ALL SIGNAL HEADS SHALL BE WIRED WITH JACKETED CABLE INTO SIGNAL MAST ARM HAND HOLE. SIGNAL CABLE SHALL HAVE A MINIMUM OF THREE (3) FEET OF SLACK. SIGNAL CABLE #4 AWG STRANDED COPPER SHALL BE USED UNLESS OTHERWISE SPECIFIED, AND SHALL MEET IMSA SPECIFICATIONS #19-1. THE COLOR CODE OF SIGNAL CABLE SHALL BE VERIFIED WITH LEE COUNTY TRAFFIC SECTION PRIOR TO WIRING INTERSECTION. THE COLOR CODE CAN BE OBTAINED FROM LEE COUNTY TRAFFIC SECTION. SIGNAL CABLE SHALL BE ATTACHED TO THE MESSENGER BY MEANS OF THE WRAPS AND LASHING ROD. LASHING ROD SHALL THREAD THROUGH THE DR18 LOOP. ALL IMSA 19-1 SIGNAL CABLE OUTER BLACK JACKETED SHALL EXTEND INTO DISCONNECT AND SIGNAL HEAD ASSEMBLIES ON MAST ARM INSTALLATION A MINIMUM OF 3".
26. EACH SIGNAL POLE SHALL HAVE A MINIMUM OF TWENTY (20) FEET OF GROUND ROD DRIVEN. GROUND RODS MUST READ LESS THAN 15 OHMS WHEN TESTED AFTER INSTALLATION.

EACH PEDESTRIAN POLE SHALL HAVE MINIMUM OF TWENTY (20) FEET OF GROUND ROD DRIVEN. GROUND RODS MUST READ LESS THAN 15 OHMS WHEN TESTED AFTER INSTALLATION.

EACH CABINET SHALL HAVE MINIMUM OF FIFTY (50) FEET OF GROUND ROD DRIVEN. GROUND RODS MUST READ LESS THAN 5 OHMS WHEN TESTED AFTER INSTALLATION.

REVISIONS				 LEAH M. HOLMES • P.E. LICENSE NO. 85359 JOHNSON ENGINEERING, INC. 2122 JOHNSON STREET • FORT MYERS, FL 33901 CERTIFICATE OF AUTHORIZATION NO. 642	LEE COUNTY PUBLIC WORKS DEPARTMENT OF TRANSPORTATION			SHEET NO. GENERAL NOTES T-4
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	JEI PROJECT ID	
					CR 850	LEE	20192030-000	

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GENERAL NOTES (CONTD.)

NO RODS INSTALLED IN CABINET BASE. NO GROUND RODS IN CABINET BASE. EACH ELECTRICAL SERVICE SHALL HAVE MINIMUM OF TWENTY (20) FEET OF GROUND ROD DRIVEN. GROUND RODS MUST READ LESS THAN 15 OHMS WHEN TESTED AFTER INSTALLATION.

ALL GROUND WIRE SHALL BE #6 STRANDED COPPER. ENSURE THAT ALL GROUNDED ELEMENTS AT AN INTERSECTION ARE BONDED TOGETHER TO FORM AN INTERSECTION GROUNDING NETWORK (620-3.1). ALL SIGNAL POLES, PEDESTRIAN POLES SHALL BE TIED INTO A NETWORK GROUND SYSTEM AND BROUGHT BACK TO THE CABINET. ALL GROUND RODS SHALL BE INSTALLED IN A PULL BOX. TOP OF GROUND ROD SHALL BE TWO (2) INCHES ABOVE TOP OF ROCK IN PULL BOX. FOR MAST ARM FOUNDATIONS OR STEEL POLES, INSTALL GROUND ROD IN PULL BOX WITH SIGNAL CABLE NEXT TO POLE GROUND SPARE CONDUCTORS INSIDE CABINET ON CABINET GROUND BAR.

27. MAINTENANCE OF TRAFFIC SIGNAL SHALL BE THE RESPONSIBILITY OF THE SIGNAL CONTRACTOR. MAINTENANCE SHALL INCLUDE LOCATES.
28. ALL THREE (3), FOUR (4), AND FIVE (5) SECTION SIGNAL HEADS SHALL HAVE A METAL LOUVERED BACK PLATE WITH REFLECTORIZED TAPE PER THE FDOT STANDARD PLANS.
29. HUBS SHALL BE SILICONE SEALED TO SIGNAL HEADS. METAL HEADS SHALL BE USED UNLESS OTHERWISE APPROVED IN THE LEE COUNTY DEPARTMENT OF TRANSPORTATION PLAN SPECIFICATIONS. ALL SIGNAL HEADS SHALL BE NEW AND UNIFORM FOR EACH INTERSECTION. TWO (2) EACH 1-1/4 INCH DRAIN HOLD SHALL BE PLACED IN BOTTOM OF EACH SIGNAL HEAD. THE SIGNAL PHASE SHALL BE MARKED IN SIGNAL HEAD.
30. IMSA 19-1 SIGNAL CABLE OUTER JACKET SHALL REMAIN INTACT THROUGH ASSEMBLY, EXTENDING A MINIMUM THREE (3) INCHES INTO TRAFFIC SIGNAL HEAD ON MAST ARM INSTALLATION. NO STRIPPED SIGNAL CABLE INSIDE GUSSET TUBES. WHEN MAST ARM POLES ARE INSTALLED, THE POLE HEIGHT SHALL INCLUDE ADDITIONAL HEIGHT TO INCLUDE STREET LIGHTS. NO ELECTRICAL SERVICES AND CONTROLLER CABINETS ARE TO BE ATTACHED TO MAST ARM POLES UNLESS APPROVED BY ENGINEER. NO TERMINAL BLOCKS ARE TO BE USED IN MAST ARM POLES OR ASTRO BRACKETS.
31. ASTRO CLAMPS SHALL BE STAINLESS STEEL CABLES. NO BANDS SHALL BE PERMITTED. ALL MAST ARM HARDWARE SHALL BE STAINLESS STEEL 304 OR 316. STRAIN RELIEF'S SHALL BE USED TO SUPPORT SIGNAL CABLE IN A MAST ARM POLE. ASTRO BRACKETS SHALL BE CAPABLE OF BEING ROTATED 90 DEGREES WITHOUT DISASSEMBLY.
32. NO PREFORMED CONCRETE BASES FOR MAST ARM POLES WILL BE PERMITTED. EACH SIGNAL HEAD SHALL HAVE A SEPARATED CABLE FROM HEAD TO BOTTOM OF MAST ARM POLE. A MINIMUM OF FOUR (4) SPARE CONDUCTORS AT BASE OF MAST ARM POLE IS REQUIRED PER CABLE FROM CABINET. BOLT CAPS SHALL BE INSTALLED ON ALL MAST ARE BASE BOLTS. BUCANON B2 B-CAP NON-SILICON FILLED WIRE NUTS SHALL BE USED TO SPLICE SIGNAL CABLE IN THE BASE OF THE POLE.
33. CONTRACTOR SHALL INSTALL FOUR (4) EACH 2-INCH CONDUITS, PLUS ONE (1) EACH 1-INCH CONDUIT IN EACH FOUNDATION. STUB OUT LOCATION TO BE DETERMINED IN FIELD. STUB OUTS SHALL BE A MINIMUM OF THIRTY (30) INCHES DEEP.
34. INSTALLATION MOUNTING HEIGHT OF PED HEAD SHALL BE NINE (9) FEET SIX (6) INCHES ABOVE GRADE TO BOTTOM OF HEAD. MOUNTING HEIGHT OF PED BUTTON SHALL BE FOURTY-TWO (42) INCHES TO CENTER OF BOTTOM ABOVE GRADE. BUTTON SHOULD BE UNDER THE HEAD IT CALLS. SEAL WITH SILICONE AROUND ROSETTE CAPS AND PED BUTTONS. EACH SIGN IS TO IDENTIFY THE CROSSWALK TO WHICH EACH BUTTON APPLIES. SIGNAL CABLE SHALL BE SPLICED IN BASE OF PED POLE AND NOT IN PED HEAD. SPLICE CABLE WITH RED B2 B-CAP WIRE UTS. PED CALL WIRES SHALL BE CONNECTED TO A PED ISOLATOR BOARD AND CHASSIS GROUND IN CABINET. PED BUTTONS SHALL HAVE ONLY BELDEN CABLE. INSTRUCTION SIGNS AND PUSH BUTTON SIGN SHALL BE ONE SIGN MOUNTED ABOVE PED BUTTON.
35. EACH 15 AMP BREAKER TO HAVE OWN IF ACCEPTABLE. SHALL BE A MINIMUM OF 1800 WATTS. INSTALLATION TWENTY FEET OF 518 COPPER WELD GROUND ROD SHALL BE INSTALLED FOR EACH ELECTRIC SERVICE. GROUND WIRE SHALL BE 1-1/2 INCH SCHEDULE 80 PVC OR 1-1/2 INCH RIGID GALVANIZED CONDUIT. CONDUIT SHALL EXTEND MINIMUM OF SIX (6) INCHES BELOW FINISH GRADE. RISER CONDUIT SHALL BE CONNECTED TOGETHER BY USE OF GALVANIZED THREADED COUPLINGS OR COMPRESSION NO-THREAD COUPLINGS. - NATIONAL ELECTRICAL CODE 820.10.
36. AFTER GALVANIZING, ALL GALVANIZED SURFACES MUST BE ALLOWED TO COOL AND VENT GASES PRODUCED DURING THE COOLING DOWN PROCESS.
37. AFTER GALVANIZED SURFACES HAVE BEEN ALLOWED AIR DRY, THEY SHALL BE CLEANED TO ACHIEVE A "BRUSH BLAST" CONDITION AS DEFINED BY SSPC-SP6.
38. TEST GALVANIZING THICKNESS TO ENSURE SUFFICIENT GALVANIZING REMAINS ON THE SUBSTRATE TO MEET SPECIFICATION.

38. MAINTENANCE - LEE COUNTY IS RESPONSIBLE FOR THE MAINTENANCE OF THE TRAFFIC SIGNAL FACILITY AFTER FINAL INSPECTION AND A 90 DAY BURN IN PERIOD.
39. ALL MAST ARMS SHALL BE GALVANIZED.
40. AT THE UPRIGHT BASE AND FOR A LENGTH OF TWO (2) FEET, THE INTERIOR OF THE POLE IS MECHANICALLY CLEANED AND COATED WITH A ZINK RICH EPOXY POWDER THAT IS ELECTRO STATICALLY APPLIED AND CURED BY HEATING THE STEEL SUBSTRATE 350 DEGREES FAHRENHEIT MINIMUM, AND 400 DEGREES FAHRENHEIT MAXIMUM.

REVISIONS				 LEAH M. HOLMES • P.E. LICENSE NO. 85359 JOHNSON ENGINEERING, INC. 2122 JOHNSON STREET • FORT MYERS, FL 33901 CERTIFICATE OF AUTHORIZATION NO. 642	LEE COUNTY PUBLIC WORKS DEPARTMENT OF TRANSPORTATION			SHEET NO. T-5
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	JEI PROJECT ID	
					CR 850	LEE	20192030-000	

GENERAL NOTES

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PAY ITEM FOOTNOTES:

1. ITEMS NO. 630-2-11, & 630-2-12:
THE CONTRACT UNIT PRICE PER FOOT OF CONDUIT, FURNISHED AND INSTALLED WILL INCLUDE FURNISHING ALL HARDWARE AND MATERIALS AS SPECIFIED ON THE TABULATION SHEET (T-2). ALL LABOR, TRENCHING, BACK FILLING, AND RESTORATION MATERIALS NECESSARY FOR A COMPLETE AND ACCEPTED INSTALLATION. CONSIDER THE LOCATIONS OF CONDUIT AS SHOWN ON THE PLANS AS APPROXIMATE. CONSTRUCT CONDUIT RUNS AS STRAIGHT AS POSSIBLE, AND OBTAIN THE ENGINEER'S APPROVAL OF ALL MAJOR DEVIATIONS IN CONDUIT LOCATIONS FROM THOSE SHOWN ON THE PLANS. UNDERGROUND CONDUITS ARE TO BE ADJUSTED TO AVOID UNDERGROUND UTILITIES AND SIDEWALKS. INCLUDES CONDUIT FOR MULTIPLE RUNS IN ONE TRENCH. LINEAR FOOTAGE SHOWN ON PLANS ARE FOR LENGTH OF TRENCH ONLY.
2. ITEM NO. 632-7-1:
THIS ITEM SHALL INCLUDE ALL LABOR AND WIRE NECESSARY FOR A COMPLETE INSTALLATION. THE COLOR CODE OF SIGNAL CABLE SHALL BE VERIFIED WITH THE INSPECTION TEAM PRIOR TO WIRING INTERSECTION. THERE SHALL BE NO SPLICES IN ANY SIGNAL CABLE AT ANY POINT BETWEEN THE CONTROLLER CABINET AND SIGNAL HEADS. NUMBER OF SPARE CONDUCTORS SHALL BE IN ACCORDANCE WITH SECTION 632 OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 2014.
3. ITEMS NO. 633-2-32 & 633-3-12:
ALL FIBERS USED AND UNUSED, NEED TO BE TESTED.
4. ITEM NO. 635-2-11:
ALL PULL BOXES SHALL BE TRAFFIC-RATED, FIBERGLASS REINFORCED CONCRETE SHALL BE "QUAZITE COMPOSITE". ALL PULL BOXES SHALL BE USED FOR A SINGLE, DEDICATED FUNCTION AND SHALL NOT CARRY CABLES OF VARYING FUNCTION. A PULL BOX WITH A MINIMUM COVER MEASUREMENT OF 24X36X24 SHALL BE USED ON INTERCONNECT BETWEEN CABINETS. COVER SHALL BE MARKED TRAFFIC SIGNAL. A PULL BOX WITH A MINIMUM COVER MEASUREMENT OF 30X60 RECTANGULAR OR 36" ROUND COVER SIZE SHALL BE USED ON THE INTERCONNECT AT CABINETS; COVER SHALL BE MARKED TRAFFIC SIGNAL. A PULL BOX WITH A MINIMUM COVER MEASUREMENT OF 13X24X12 SHALL BE USED ON TRAFFIC SIGNALS AND STREET LIGHTS. COVER SHALL BE MARKED TRAFFIC SIGNAL, STREET LIGHT, OR TRAFFIC SIGNAL INTERCONNECT.
5. ITEM NO. 639-2-1:
PAYMENT SHALL BE BASED UPON THE LINEAR FOOT OF A SINGLE CONDUCTOR.
6. ITEMS NO. 649-21-6, 649-21-10, 649-21-15, 649-21-21 & 649-21-26:
MAST ARM POLES SHALL INCLUDE THREE 2 INCH AND ONE 1-1/2 INCH CONDUITS STUBBED OUT THROUGH THE FOUNDATION AND TEMPORARILY SEALED. ALL MAST ARM HARDWARE SHALL BE HOT DIP GALVANIZED. HARDWARE SUCH AS HAND HOLE COVERS SHALL BE STAINLESS STEEL.
7. ITEM NO. 650-1-14:
TWELVE (12) INCH SIGNAL HEAD SECTIONS SHALL BE USED. ALL SIGNAL INDICATIONS SHALL BE "LED".
8. ITEM NO. 653-1-11, 653-1-12:
COUNT DOWN PEDESTRIAN SIGNALS SHALL BE USED. THESE SHALL BE SINGLE- SECTION, INTERNATIONAL SYMBOL HEADS & LED HEADS. ALL ATTACHING HARDWARE SHALL BE STAINLESS STEEL 304 OR 316. CONTRACTOR SHALL USE PELCO OR EQUAL BREAKAWAY BASES FOR FED POLES WITH LOCKING SET SCREW AND GROUND LUG. USE FOUR (4) INCH ID ALUMINUM CONDUIT FOR PED POLES.
9. ITEM NO. 700-5-21:
ALL INTERNALLY ILLUMINATED STREET NAME SIGNS SHALL BE ONE SIDED WITH 1-1/2 (1.5) INCH WHITE BORDER AROUND THE ENTIRE EDGE, AND RIGID MOUNTED TO THE MAST ARM POLE UPRIGHT. WIRES TO GO TO SERVICE PER LEE COUNTY SPECIFICATIONS. ALL ATTACHING HARDWARE SHALL BE STAINLESS STEEL 304 OR 316.

UTILITY/AGENCY OWNERS:

COMCAST	MARK COOK	239-432-1805
FPL FIBERNET, LLC	DANNY HASKETT	305-552-2931
FPL RELOCATION COORINATOR	JAMEL J. BAKER	239-947-7356
FLORIDA POWER & LIGHT	TRACY STERN	800-868-9554
LEE COUNTY UTILITIES	TALYA MAYER	239-533-8504
TECO - PEOPLES GAS SYSTEM	MARILYN D. ALOI	239-690-5517 / 239-896-0812
CENTURYLINK	JIM NOTTINGHAM	239-336-2035

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DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	JEI PROJECT ID	
					CR 850	LEE	20192030-000	

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REMOVAL ITEMS

1 PI	632-7-6
4 EA	641-2-80
8 EA	646-1-60
1 AS	670-5-600

1B EL 18.91
POLE LOCATION=
STA. 635+94.38
95.00' LT
11 LF 630-2-11
1 EA 649-21-21
1 EA 663-1-112

PED. POLE
STA. 635+94.50
87.44' LT
5 LF 630-2-11
1 EA 646-1-11
1 AS 653-1-11
1 EA 665-1-12

PED. POLE
STA. 635+88.31
80.06' LT
4 LF 630-2-11
1 EA 646-1-11
1 AS 653-1-11
1 EA 665-1-12

1A EL 18.74
POLE LOCATION=
STA. 635+82.76
78.33' LT
6 LF 630-2-11
1 EA 649-21-21
1 EA 663-1-112

SIGNAL PULL BOXES
(17"X30")
3 EA 635-2-11A

EXIST. PED. POLE
TO BE REMOVED
2 EA 646-1-60

SIGNAL PULL BOXES
(17"X30")
3 EA 635-2-11A

4 EL 18.63
POLE LOCATION=
STA. 635+99.27
96.99' RT
10 LF 630-2-11
1 EA 649-21-15
1 EA 663-1-112

PED. POLE
STA. 636+17.38
90.73' RT
10 LF 630-2-11
1 EA 646-1-11
1 AS 653-1-12
1 EA 665-1-12

134 LF 630-2-12
4 CONDUIT RUNS:
2 SIGNAL, 1 PED, 1 SPARE
(DIRECTIONAL DRILL)

PG STA. 52+56.01

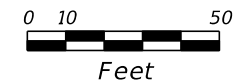
EXIST. PED SIGNAL
TO BE REMOVED

630-2-12 163 LF
4 CONDUIT RUNS:
2 SIGNAL, 1 PED, 1 SPARE
(DIRECTIONAL DRILL)

PED. POLE
STA. 637+46.30
87.57' LT
630-2-11 9 LF
646-1-11 1 EA
653-1-12 1 AS
665-1-12 1 EA

2 EL 19.47
POLE LOCATION=
STA. 637+53.68
80.97' LT
4 LF 630-2-11
1 EA 649-21-15
1 EA 663-1-112

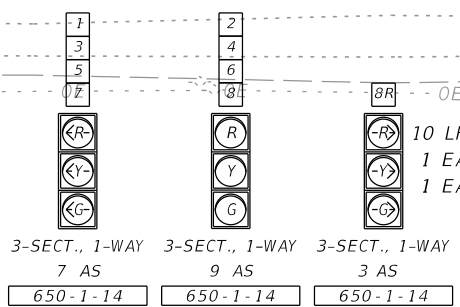
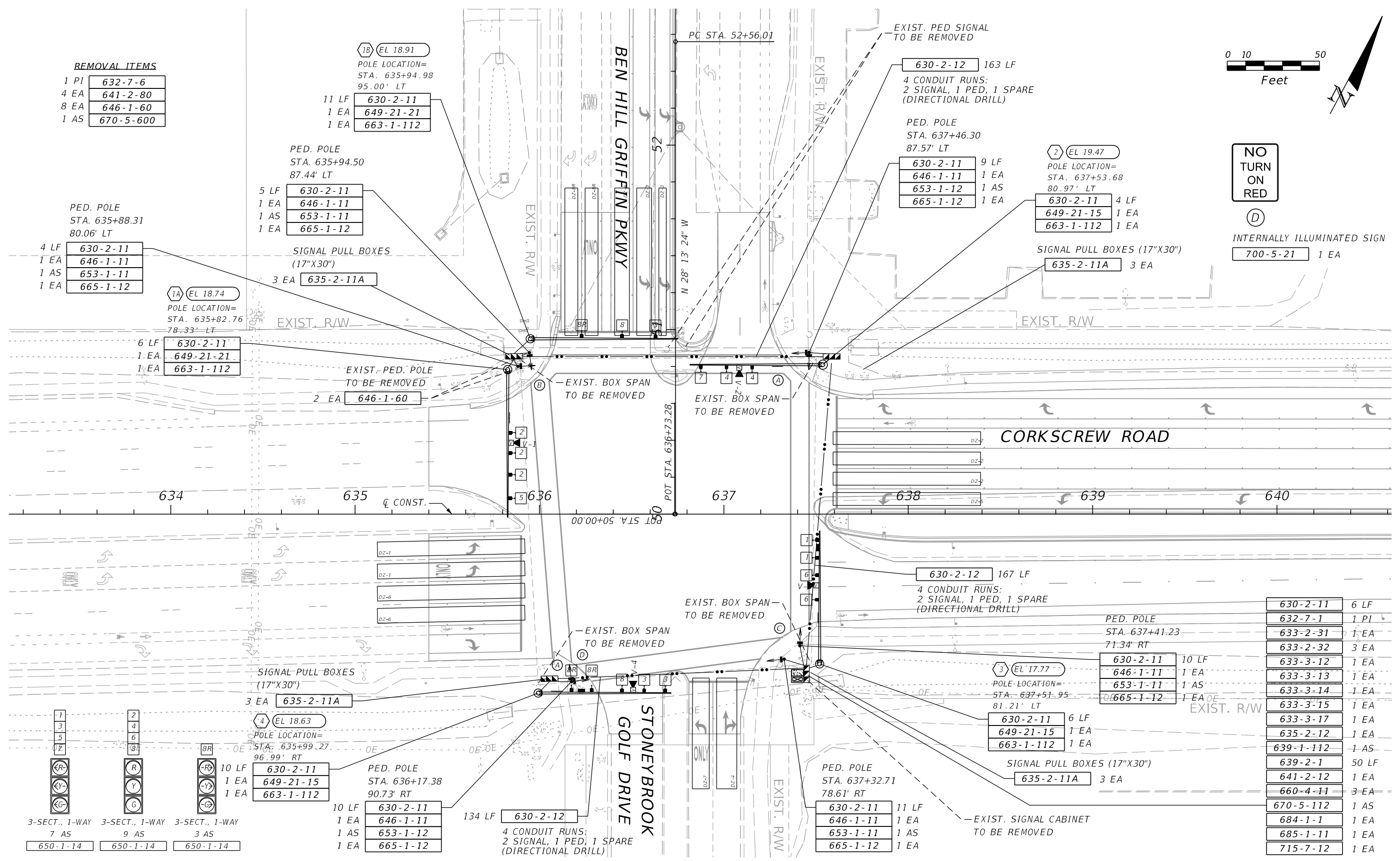
SIGNAL PULL BOXES (17"X30")
635-2-11A 3 EA



**NO
TURN
ON
RED**

(D)

INTERNALLY ILLUMINATED SIGN
700-5-21 1 EA



630-2-11	6 LF
632-7-1	1 PI
633-2-31	1 EA
633-2-32	3 EA
633-3-12	1 EA
633-3-13	1 EA
633-3-14	1 EA
633-3-15	1 EA
633-3-17	1 EA
635-2-12	1 EA
639-1-112	1 AS
639-2-1	50 LF
641-2-12	1 EA
660-4-11	3 EA
670-5-112	1 AS
684-1-1	1 EA
685-1-11	1 EA
715-7-12	1 EA

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

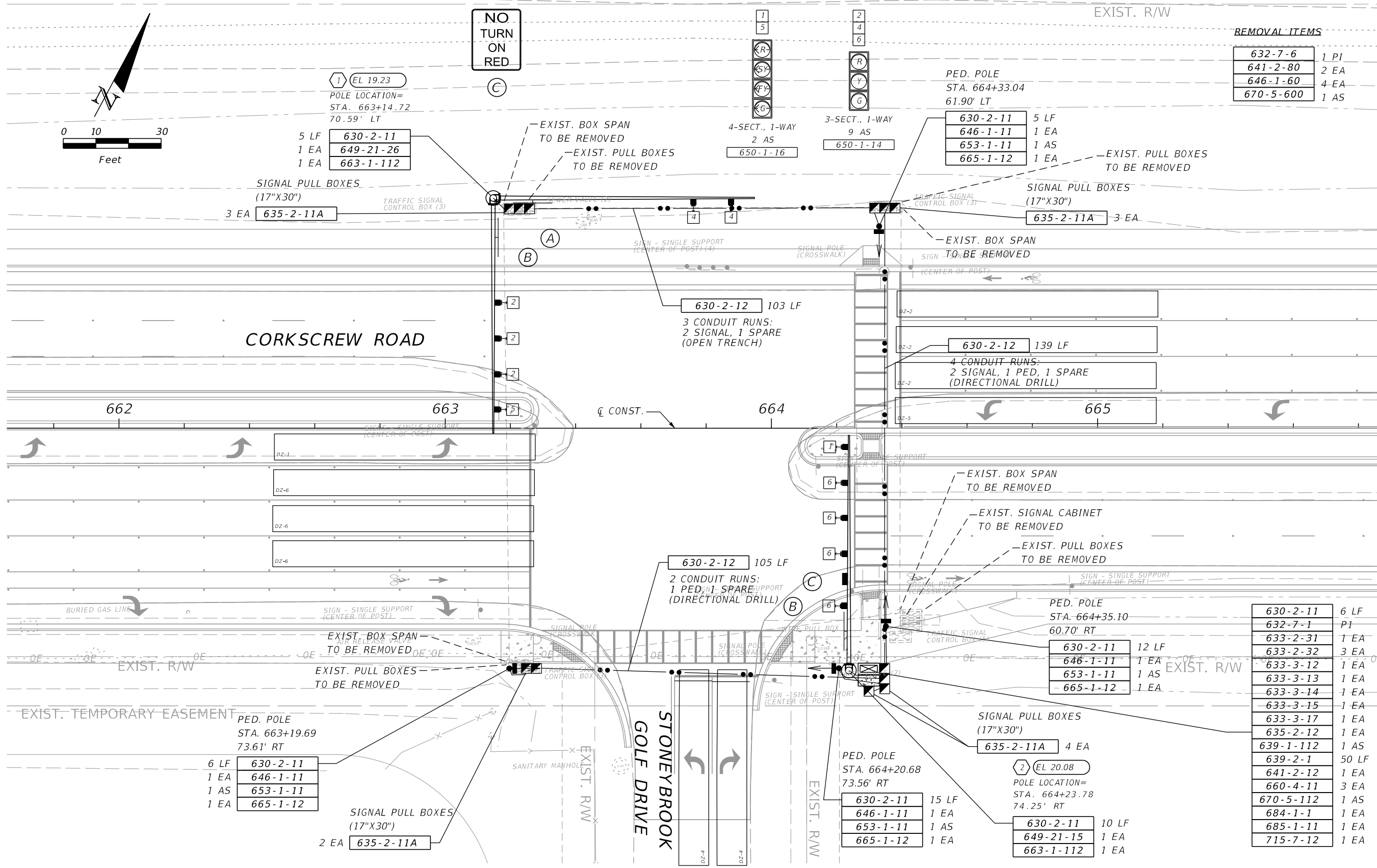
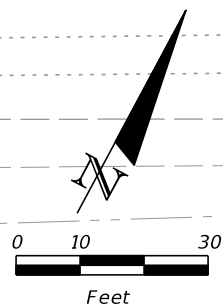
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JOHNSON ENGINEERING, INC.
2122 JOHNSON STREET • FORT MYERS, FL 33902
CERTIFICATE OF AUTHORIZATION NO. 642

LEE COUNTY PUBLIC WORKS DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	JEI PROJECT ID
CR 850	LEE	20192030-000

**CORKSCREW ROAD AT
BEN HILL GRIFFIN PKWY
SIGNALIZATION PLAN**

SHEET NO.
T-7

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REMOVAL ITEMS

632-7-6	1 PI
641-2-80	2 EA
646-1-60	4 EA
670-5-600	1 AS

630-2-11	6 LF
632-7-1	P1
633-2-31	1 EA
633-2-32	3 EA
633-3-12	1 EA
633-3-13	1 EA
633-3-14	1 EA
633-3-15	1 EA
633-3-17	1 EA
635-2-12	1 EA
639-1-112	1 AS
639-2-1	50 LF
641-2-12	1 EA
660-4-11	3 EA
670-5-112	1 AS
684-1-1	1 EA
685-1-11	1 EA
715-7-12	1 EA

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

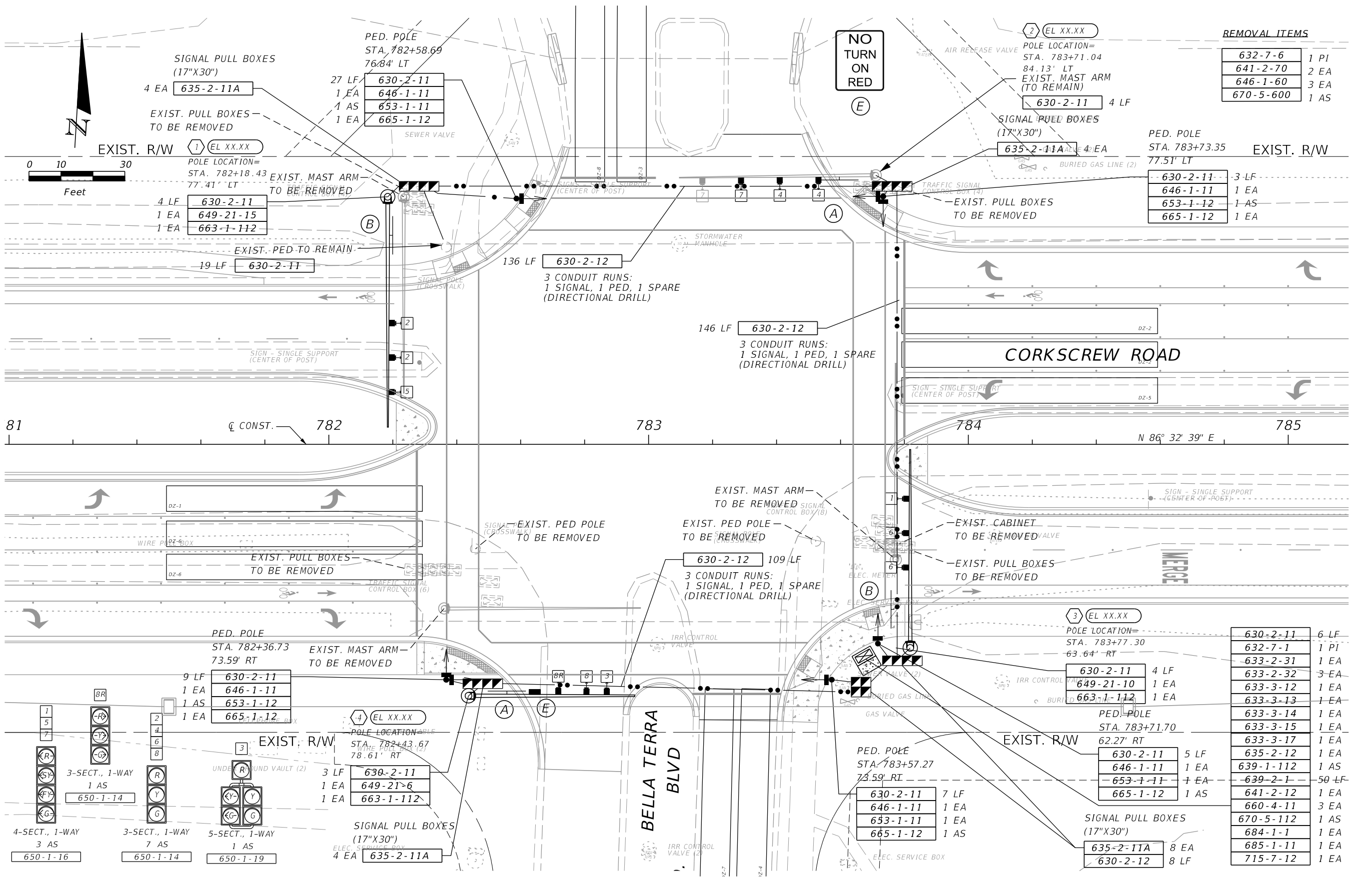
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LEE COUNTY PUBLIC WORKS DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	JEI PROJECT ID
CR 850	LEE	20192030-000

**CORKSCREW ROAD AT
 STONEYBROOK GOLF DR
 SIGNALIZATION PLAN**

SHEET NO.
T-8

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



REMOVAL ITEMS

632-7-6	1 PI
641-2-70	2 EA
646-1-60	3 EA
670-5-600	1 AS

630-2-11	6 LF
632-7-1	1 PI
633-2-31	1 EA
633-2-32	3 EA
633-3-12	1 EA
633-3-13	1 EA
633-3-14	1 EA
633-3-15	1 EA
633-3-17	1 EA
635-2-12	1 EA
639-1-112	1 AS
639-2-1	50 LF
641-2-12	1 EA
660-4-11	3 EA
670-5-112	1 AS
684-1-1	1 EA
685-1-11	1 EA
715-7-12	1 EA

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JOHNSON ENGINEERING
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 2122 JOHNSON STREET • FORT MYERS, FL 33901
 CERTIFICATE OF AUTHORIZATION NO. 642

LEE COUNTY PUBLIC WORKS
DEPARTMENT OF TRANSPORTATION

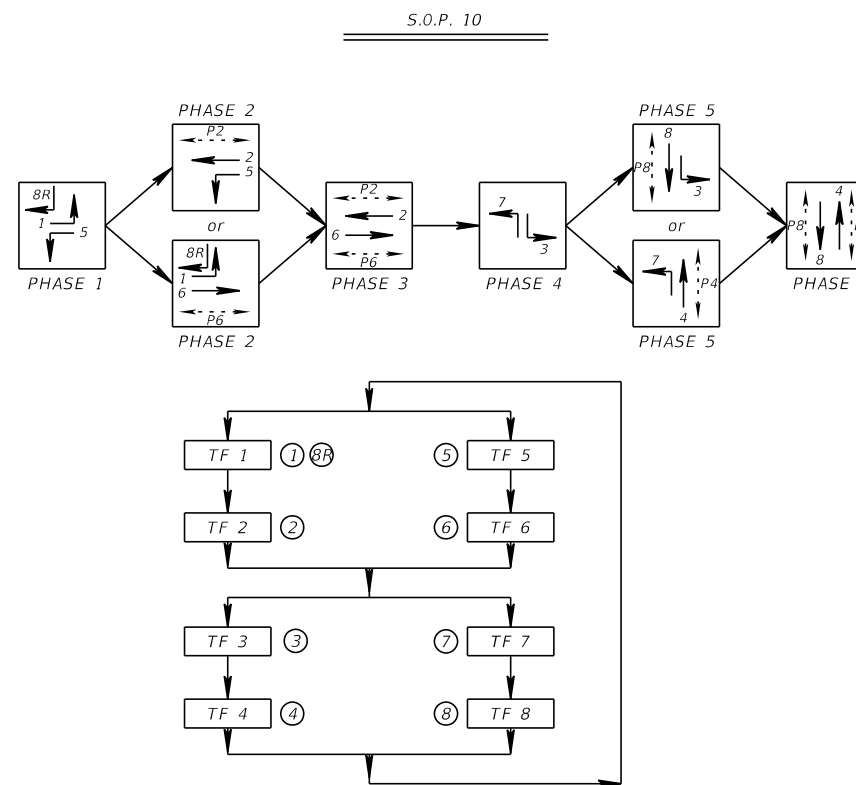
ROAD NO.	COUNTY	JEI PROJECT ID
CR 850	LEE	20192030-000

CORKSCREW ROAD AT BELLA TERRA BLVD SIGNALIZATION PLAN

SHEET NO. T-9

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

VIDEO DETECTION			
CAMERA DETECTOR	DETECTION ZONE	TIMING FUNCTION CONNECTION	DELAY TIME (SEC)
V-1	DZ-2	TF-2	
	DZ-5	TF-5	
V-2	DZ-4	TF-4	
	DZ-7	TF-7	
V-3	DZ-1	TF-1	
	DZ-6	TF-6	
V-4	DZ-3	TF-3	
	DZ-8	TF-8	
	DZ-8R	TF-1	



CONTROLLER OPERATION

MAJOR STREET IS CORKSCREW ROAD
 MINOR STREET IS BEN HILL GRIFFIN PKWY

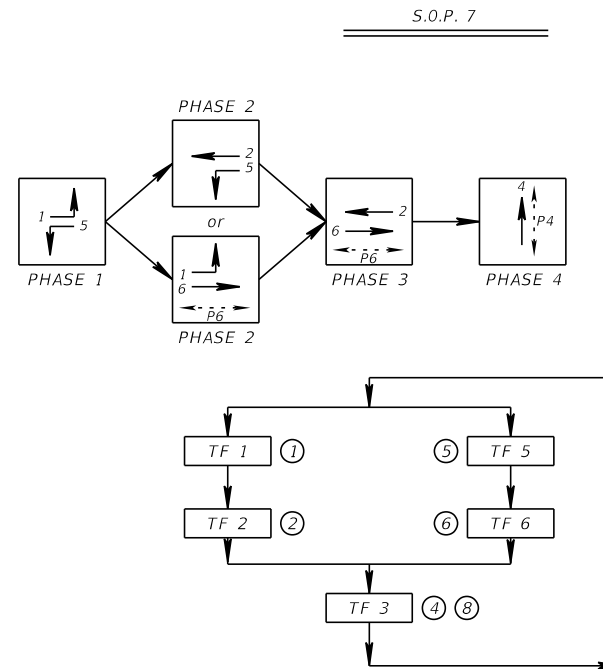
CONTROLLER TO OPERATE AS INDICATED IN THE FLASH MODE:
 CORKSCREW ROAD (2 & 6) SHALL FLASH YELLOW
 BEN HILL GRIFFIN PKWY (4 & 8) SHALL FLASH RED
 CORKSCREW ROAD POSTED SPEED = 45 MPH
 BEN HILL GRIFFIN PKWY SPEED = 45 MPH

CONTROLLER TIMINGS (SECONDS)									
MOVEMENT #	1	2	3	4	5	6	7	8	8R
DIRECTION	EBL	WB	SBL	NB	WBL	EB	NBL	SB	SBR
TURN TYPE	PROT	-	PROT	-	PROT	-	PROT	-	PROT/OVER
MIN GREEN	5	15	5	8	5	15	5	8	8
EXT	2.0	5.0	3.0	2.0	2.0	5.0	2.0	2.0	2.0
YELLOW	5.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0	4.0
ALL RED	3.0	2.5	3.0	3.0	3.0	2.5	3.0	3.0	3.0
MAX I	35	50	20	15	25	50	20	20	20
MAX II	40		25					30	
WALK		7		7		7		7	
FLASHING DON'T WALK		38		38		31		41	
DETECTOR MEMORY									
DET. CROSS SWITCH									
DUAL ENTRY									
VEHICLE RECALL									

REVISIONS				 LEAH M. HOLMES • P.E. LICENSE NO. 85359 JOHNSON ENGINEERING, INC. 2122 JOHNSON STREET • FORT MYERS, FL 33901 CERTIFICATE OF AUTHORIZATION NO. 642	LEE COUNTY PUBLIC WORKS DEPARTMENT OF TRANSPORTATION			CORKSCREW ROAD AT BEN HILL GRIFFIN PKWY SIGNAL OPERATIONS		SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	JEI PROJECT ID			T-13
					CR 850	LEE	20192030-000			

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VIDEO DETECTION			
CAMERA DETECTOR	DETECTION ZONE	TIMING FUNCTION CONNECTION	DELAY TIME (SEC)
V-1	DZ-6	TF-6	
	DZ-1	TF-1	
V-2	DZ-2	TF-2	
	DZ-5	TF-5	
V-3	DZ-4	TF-3	



CONTROLLER OPERATION

MAJOR STREET IS CORKSCREW ROAD
MINOR STREET IS STONEYBROOK GOLF DR

CONTROLLER TO OPERATE AS INDICATED IN THE FLASH MODE:
CORKSCREW ROAD (2 & 6) SHALL FLASH YELLOW
STONEYBROOK GOLF DR (4) SHALL FLASH RED
CORKSCREW ROAD POSTED SPEED = 45 MPH
STONEYBROOK GOLF DR SPEED = 30 MPH

CONTROLLER TIMINGS (SECONDS)								
MOVEMENT #	1	2	3	4	5	6	7	8
DIRECTION	EBL	WB		NB	WBL	EB		
TURN TYPE	PROT/PERM	-		-	PROT/PERM	-		
MIN GREEN	5	20		7	5	20		
EXT	3.0	6		3	3	6		
YELLOW	4.0	5.5		4	4	5.5		
ALL RED	2.0	2.0		2.5	2.0	2.0		
MAX I	25	75.0		35	25	75		
MAX II								
WALK				7		7		
FLASHING DON'T WALK				24		16		
DETECTOR MEMORY								
DET. CROSS SWITCH								
DUAL ENTRY								
VEHICLE RECALL								

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JOHNSON ENGINEERING
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CERTIFICATE OF AUTHORIZATION NO. 642

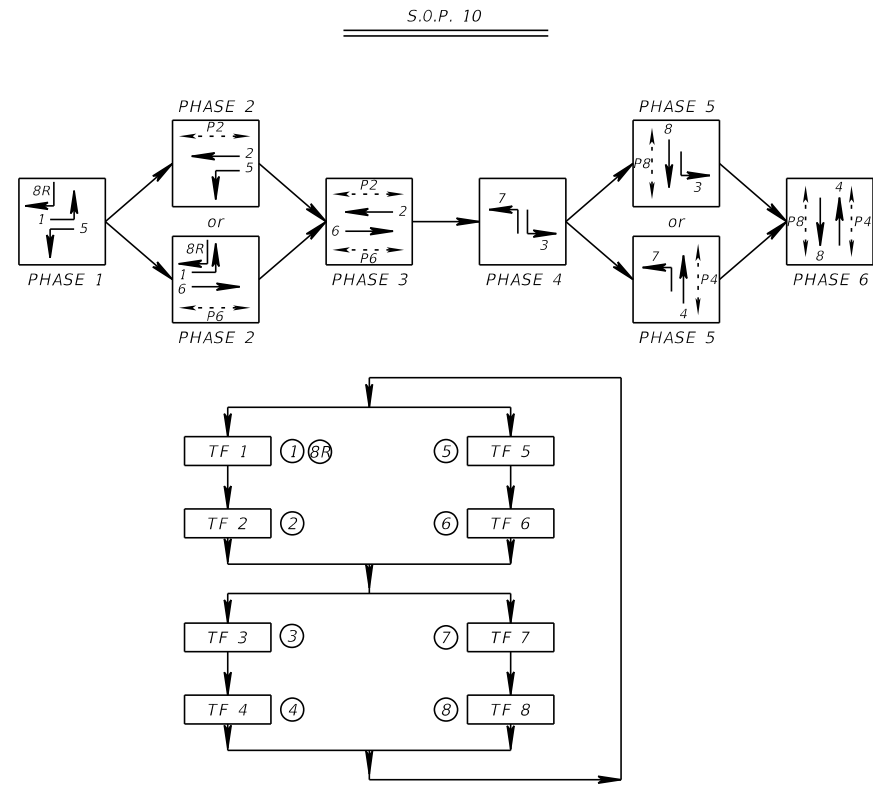
LEE COUNTY PUBLIC WORKS DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	JEI PROJECT ID
CR 850	LEE	20192030-000

**CORKSCREW ROAD AT
STONEBROOK GOLF DR
SIGNAL OPERATIONS**

SHEET NO.	T-14
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VIDEO DETECTION			
CAMERA DETECTOR	DETECTION ZONE	TIMING FUNCTION CONNECTION	DELAY TIME (SEC)
V-1	DZ-2	TF-2	
	DZ-5	TF-5	
V-2	DZ-4	TF-4	
	DZ-7	TF-7	
V-3	DZ-1	TF-1	
	DZ-6	TF-6	
V-4	DZ-3	TF-3	
	DZ-8	TF-8	
	DZ-8R	TF-1	



CONTROLLER OPERATION

MAJOR STREET IS CORKSCREW ROAD
MINOR STREET IS BELLA TERRA BLVD

CONTROLLER TO OPERATE AS INDICATED IN THE FLASH MODE:
CORKSCREW ROAD (2 & 6) SHALL FLASH YELLOW
BELLA TERRA BLVD (4 & 8) SHALL FLASH RED

CORKSCREW ROAD POSTED SPEED = 45 MPH
BELLA TERRA BLVD SPEED = 30 MPH

CONTROLLER TIMINGS (SECONDS)									
MOVEMENT #	1	2	3	4	5	6	7	8	8R
DIRECTION	EBL	WB	SBL	NB	WBL	EB	NBL	SB	SBR
TURN TYPE	PROT/PERM	-	PROT/PERM	-	PROT/PERM	-	PROT/PERM	-	PERM/OVER
MIN GREEN									
EXT									
YELLOW									
ALL RED									
MAX I									
MAX II									
WALK									
FLASHING DON'T WALK									
DETECTOR MEMORY									
DET. CROSS SWITCH									
DUAL ENTRY									
VEHICLE RECALL									

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JOHNSON ENGINEERING
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LEE COUNTY PUBLIC WORKS DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	JEI PROJECT ID
CR 850	LEE	20192030-000

**CORKSCREW ROAD AT
BELLA TERRA BLVD
SIGNAL OPERATIONS**

SHEET NO.	T-15
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