



# CONSTRUCTION PLANS FOR TOWN CENTER BOULEVARD SIDEWALK/CURB RAMP INTERSECTION IMPROVEMENTS (AT JOHN YOUNG PKWY., TOWN LOOP BLVD. W., & HUNTERS CREEK BLVD.)

THERESA JACOBS, COUNTY MAYOR

## BOARD OF COUNTY COMMISSIONERS

<b>S. SCOTT BOYD</b>	<b>DISTRICT 1</b>
BYRON NELSON	DISTRICT 2
PETE CLARKE	DISTRICT 3
JENNIFER THOMPSON	DISTRICT 4
TED EDWARDS	DISTRICT 5
VICTORIA P. SIPLIN	DISTRICT 6

MARK V. MASSARO, P.E., PUBLIC WORKS DIRECTOR

ORANGE COUNTY - DISTRICT NO. 1  
PROJECT NO: 2722

### SOURCE OF BENCH MARK DATUM

ELEVATIONS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AS ESTABLISHED FROM THE FOLLOWING ORANGE COUNTY BENCHMARKS:

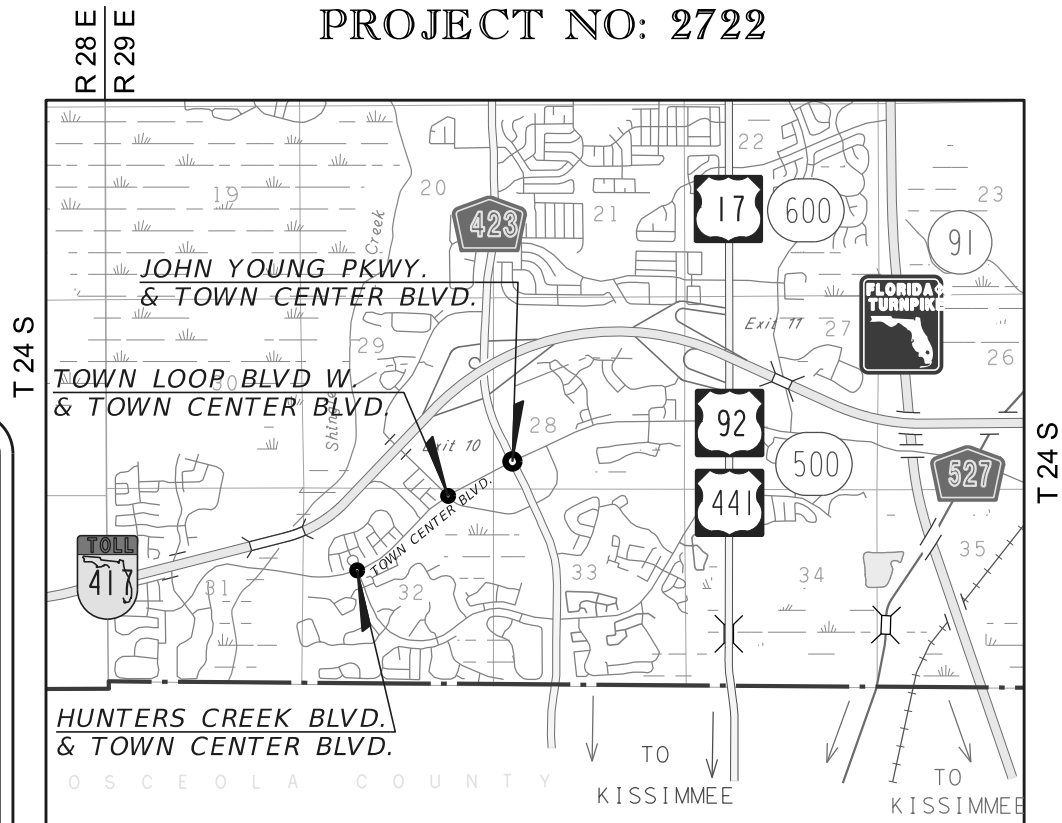
A1199003  
FOUND 3.5" ORANGE COUNTY ALUMINUM DISK IN WEST SIDE OF 7' CONCRETE SIDEWALK AT SOUTHWEST QUADRANT OF JOHN YOUNG PARKWAY AND TOWN CENTER BOULEVARD.  
PUBLISHED ELEVATION = 95.460 (NAVD88)

A1199007  
FOUND 3.5" ALUMINUM DISK AT THE NORTHEAST CORNER OF TEAL POINT ROAD & JOHN YOUNG PARKWAY IN A CONCRETE DROP INLET, 35'± NORTH OF THE CENTERLINE OF TEAL POINT ROAD & 150'± EAST  
PUBLISHED ELEVATION = 91.813 FEET (NAVD88)

S1338005  
FOUND 3.5" ORANGE COUNTY ALUMINUM DISK IN CENTERLINE OF 7' CONCRETE SIDEWALK AT NORTHWEST QUADRANT OF TOWN CENTER BOULEVARD AND TOWN LOOP BOULEVARD.  
PUBLISHED ELEVATION = 94.245 FEET (NAVD88)

S1338009  
FOUND 3" ORANGE COUNTY CONTROL DISK IN CENTERLINE OF 7' CONCRETE SIDEWALK; NORTH SIDE OF TOWN CENTER BOULEVARD 566 FEET ± WEST OF THE CENTERLINE OF LORD BARCLAY DRIVE AND SOUTH OF A CUL-DE-SAC NAMED ROXSHIRE DRIVE.  
PUBLISHED ELEVATION = 88.150 FEET (NAVD88)

S1350015  
FOUND 3" ORANGE COUNTY ALUMINUM DISK IN NORTH END CONCRETE MEDIAN AT SOUTH SIDE OF TOWN CENTER BOULEVARD AND HUNTER'S CREEK BOULEVARD INTERSECTION.  
PUBLISHED ELEVATION = 88.830 FEET (NAVD88)



**VICINITY MAP**

GOVERNING STANDARDS AND SPECIFICATIONS:  
FLORIDA DEPARTMENT OF TRANSPORTATION  
DESIGN STANDARDS DATED 2016,  
AND STANDARD SPECIFICATIONS FOR ROAD AND  
BRIDGE CONSTRUCTION DATED 2016, AS AMENDED  
BY CONTRACT DOCUMENTS.

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

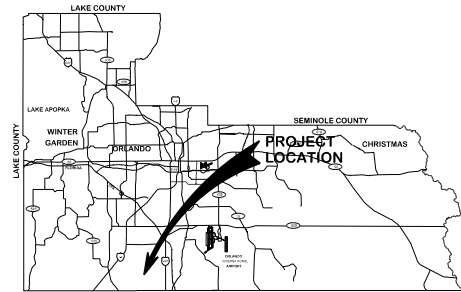
**NOTE:**

PLANS WERE PREPARED ACCORDING TO AVAILABLE INFORMATION TO ADEQUATELY ADDRESS CONDITIONS AS THEY EXISTED AT THE TIME OF PLANS PREPARATION. NEEDS, CONDITIONS AND OWNERSHIP OF PROPERTIES MAY HAVE CHANGED SINCE PROJECT DESIGN. THE COUNTY'S REPRESENTATIVE WILL ADDRESS CHANGES AND NEEDS WITH THE PROPERTY OWNER OR THEIR REPRESENTATIVES. CONTRACTOR SHALL WORK WITH THE COUNTY'S REPRESENTATIVE IN ADDRESSING AND MEETING NEEDS AND CONDITIONS THAT MAY HAVE CHANGED SINCE PLANS PREPARATION.

### CERTIFICATION TO PLANS

I HEREBY CERTIFY that the design for this project and the attached construction plans comply with the requirements of Section 336.045 of the Florida Statutes and are in substantial conformance with the standards contained in the edition of the "Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways" in effect on this date as adopted by the Florida Department of Transportation pursuant to Subsection 336.045(1) of the Florida Statutes.

DATE: \_\_\_\_\_ ENGINEER: CLAUDE L. CASSAGNOL, P.E. REG. NO. 35490  
State of Florida



SEC. 28 & 32 TWP. 24 S, RGE. 29 E

**LOCATION MAP**

### INDEX OF SHEETS

SHEET	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES
3	STANDARD DRAWINGS AND DETAILS
4	SUMMARY OF PAY ITEMS
5 - 6	SUMMARY OF QUANTITIES
7 - 9	INTERSECTION PLAN SHEETS
10 - 12	EROSION CONTROL PLAN
13 - 15	DEMOLITION PLAN
S-1 TO S-4	SIGNING AND PAVEMENT MARKING PLANS
T-1 TO T-6	SIGNALIZATION PLANS
SV-1 TO SV-5	SURVEY CONTROL SHEETS

### UTILITIES ENCOUNTERED

AT&T DISTRIBUTION	407-380-0938
BRIGHT HOUSE NETWORKS	407-532-8509
ORANGE COUNTY UTILITIES	407-254-9706
DUKE ENERGY	407-905-3321
TECO PEOPLES GAS	407-420-6607
TOWER CLOUD	813-417-2184

### GTC Engineering Corporation

98 South Semoran Blvd, Orlando, FL 32807  
Phone Number - 407.380.0402

Certificate of Authorization Claude L. Cassagnol, P.E.  
Number 6758 P.E. Number 35490

REVISIONS	DATE	BY

DESIGNED BY: CLC/AM	DATE: 6/3/16
DRAWN BY: AM	DATE: 6/3/16
CHECKED BY: CLC	DATE: 6/3/16
APPROVED BY: CLC	DATE: 6/3/16
PROJECT NO: 2722	

SHEET 1  
OF 30

**FINAL SUBMITTAL  
JUNE, 2016**

# GENERAL NOTES





































- 1 ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH AND CONFORM TO THE MOST STRINGENT REQUIREMENT OF THE PROJECT SPECIFICATIONS, THE YEAR 2016 EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (FDOT), AND SUPPLEMENTS THERETO, AND ORANGE COUNTY ROAD CONSTRUCTION SPECIFICATIONS.
- 2 SUBSURFACE INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FOR USE IN ESTABLISHING DESIGN CRITERIA FOR THE PROJECT. THE ACCURACY OF THIS INFORMATION IS NOT GUARANTEED AND IS NOT TO BE CONSTRUED AS PART OF THE PLANS GOVERNING CONSTRUCTION OF THE PROJECT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INQUIRE OF THE ENGINEER IF ADDITIONAL INFORMATION IS AVAILABLE, TO MAKE ARRANGEMENTS TO REVIEW SAME PRIOR TO BIDDING, AND TO MAKE HIS OWN DETERMINATION AS TO ALL SUBSURFACE CONDITIONS.
- 3 ALL PERSONAL PROPERTY, EXCEPT MAIL BOXES, WITHIN THE RIGHT-OF-WAY NOT RELOCATED BY THE PROPERTY OWNER SHALL BE REMOVED BY THE CONTRACTOR AS NECESSARY TO CONSTRUCT THE PROJECT IN ACCORDANCE WITH THE PLANS. MAIL BOXES SHALL BE RELOCATED BY THE CONTRACTOR IN ACCORDANCE WITH FDOT DESIGN STANDARD INDEX 532. PAYMENT WILL BE INCLUDED IN THE PAY ITEM NO. 110-1-1 (CLEARING & GRUBBING).
- 4 THE DISPOSAL OF EXCESS EARTHWORK MATERIALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. APPROVALS OF DISPOSAL SITES SHALL BE OBTAINED FROM ORANGE COUNTY PRIOR TO DISPOSAL. ALL EXCESS MATERIAL IS THE PROPERTY OF THE CONTRACTOR.
- 5 ALL EXISTING TREES WITHIN THE LIMITS OF CONSTRUCTION ARE TO BE REMOVED UNLESS OTHERWISE NOTED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. ANY TREE REMOVAL TO BE PERFORMED UNDER CLEARING AND GRUBBING.
- 6 SOD ALL DISTURBED AREAS UNLESS OTHERWISE SHOWN ON THE PLANS. SOD SHALL MATCH EXISTING TYPE SOD UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- 7 INSTALL TOPSOIL TREATMENT ON ALL PERMANENT GRASS AREAS. COST TO BE INCLUDED IN CONTRACT UNIT PRICE FOR SOD.
- 8 PEGGED SOD TO BE PLACED ON ALL SLOPES 3:1 OR STEEPER.
- 9 SAWCUT CONCRETE DRIVEWAYS AS REQUIRED FOR CONSTRUCTION. COST TO BE INCLUDED IN PAY ITEM 110-1-1 CLEARING & GRUBBING.
- 10 ALL PAVEMENT OFFSETS SHOWN ARE FROM PROPOSED CENTERLINE OF CONSTRUCTION; ALL RADII AND DIMENSIONS ARE TO PROPOSED EDGE OF PAVEMENT.
- 11 FOR STABILIZATION AT TURNOUTS AND DRIVEWAY CONNECTIONS, SEE STANDARD INDEX No. 515 AND TYPICAL SECTIONS FOR DEPTH AND LBR.
- 12 DRIVEWAY LOCATIONS AND WIDTHS SHOWN ARE APPROXIMATE AND MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER.
- 13 THE CONTRACTOR SHALL PERFORM HIS WORK IN ACCORDANCE WITH REQUIREMENTS OF THE VARIOUS PERMITS INCLUDED IN THE BID SPECIFICATIONS. PAYMENT IS INCLUDED IN THE BID PRICE FOR PAY ITEM 104-14; "PREVENTION, CONTROL, AND ABATEMENT OF EROSION AND WATER POLLUTION (LS)", EXCLUDING ITEMS SPECIFIED ELSEWHERE. ENVIRONMENTAL CONTROLS SHALL BE USED AT LOCATIONS DESIGNATED IN THE PLANS AND/OR DESIGNATED BY THE ENGINEER.
- 14 THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND AND OTHER UTILITIES IS BASED ON AVAILABLE RECORDS AND SURVEYS BUT IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR SHALL MAKE HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO AND IS RESPONSIBLE FOR COORDINATING UTILITY RELOCATION WITH PROJECT CONSTRUCTION. PRIOR TO ORDERING DRAINAGE STRUCTURES, THE CONTRACTOR SHALL DETERMINE IF DRAINAGE/UTILITY CONFLICTS EXIST. INFORMATION ON CONFLICTS IS TO BE SUBMITTED TO THE ENGINEER AS SOON AS POSSIBLE AFTER DISCOVERY FOR RESOLUTION. SUNSHINE STATE ONE CALL MUST BE NOTIFIED FOR LOCATES AT 1-800-432-4770.
- 15 UTILITIES ARE TO BE ADJUSTED BY OTHERS OR AS DIRECTED BY THE ENGINEER.
- 16 THE CONTRACTOR SHALL NOTIFY ALL GAS UTILITY COMPANIES A MINIMUM OF TWO WORKING DAYS PRIOR TO EXCAVATION AS REQUIRED BY CHAPTER 553.851 AND 556.105 OF THE FLORIDA STATUTES.

- 17 ALL DRAINAGE PIPES SHALL BE STEEL REINFORCED CONCRETE PIPE, CLASS III, UNLESS OTHERWISE NOTED.
- 18 MEASUREMENT OF DRAINAGE PIPE FOR PAYMENT SHALL BE DETERMINED FROM ACTUAL LENGTHS INSTALLED.
- 19 ALL MANHOLE COVERS SHALL INCLUDE THE ORANGE COUNTY LOGO AND BE IDENTIFIED AS "ORANGE COUNTY SANITARY", "ORANGE COUNTY STORM", OR "ORANGE COUNTY WATER", AS APPROPRIATE. (SEE STANDARD DRAWINGS AND DETAILS SHEET)
- 20 ALL INLET/MANHOLE - PIPE JOINTS SHALL BE FILLED WITH NON-SHRINK GROUT, COVERED WITH AN ASPHALTIC MASTIC COATING, AND WRAPPED WITH A FILTER FABRIC MATERIAL PER SECTION 13.03.03 OF THE ORANGE COUNTY ROAD CONSTRUCTION SPECIFICATIONS.
- 21 ALL CURB INLETS, DITCH BOTTOM INLETS, AND MANHOLES SHALL HAVE TRAFFIC BEARING FRAMES AND COVERS OR GRATES MEETING HS-20 LOADING REQUIREMENTS.
- 22 DESIGN CHANGES OF PIPE INVERTS NOT EXCEEDING PLUS OR MINUS ONE FOOT WILL NOT BE CONSIDERED AS A BASIS FOR ADDITIONAL COMPENSATION FOR THE PERTINENT PIPE BID ITEM OR FOR MODIFICATION OF PRECAST STRUCTURES.
- 23 ALL (P.R.M.'s) IRONS AND MONUMENTS SHOWN ON PLANS, OR FOUND, SHALL BE PRESERVED. THOSE SHOWN IN PROPOSED PAVEMENT SHALL BE PROTECTED WITH A CAST IRON VALVE BOX.
- 24 ANY U.S.C. AND G.S. MONUMENTS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED. IF IN DANGER OF DAMAGE, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, ORANGE COUNTY SURVEY SECTION AT 407-836-7940, AND BOTH SHALL NOTIFY:  
  

STATE GEODETIC ADVISOR, BUREAU OF SURVEY AND MAPPING MS 105 3800 COMMONWEALTH BLVD. TALLAHASSEE, FL 32399-3000 PHONE: (850) 245-2555 FAX: (850) 245-2645	ORANGE COUNTY SURVEYOR ENGINEERING DIVISION, PUBLIC WORKS DEPT. 4200 S. JOHN YOUNG PARKWAY ORLANDO, FL 32839-9205 PHONE: (407) 836-7940 FAX: (407) 836-8024
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- 25 PUBLIC LAND CORNERS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED OR DISTURBED, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AND THE COUNTY SURVEYOR, WITHOUT DELAY, BY TELEPHONE (407-836-7940). THE CONTRACTOR SHALL PROVIDE WRITTEN FOLLOW UP CONFIRMATION WITHIN 48 HOURS OF TELEPHONE NOTIFICATION.
- 26 PRIOR TO BEGINNING ANY CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO ORANGE COUNTY HIGHWAY CONSTRUCTION DIVISION A SET OF FIELD NOTES VERIFYING THE BENCHMARK ELEVATIONS AND THE REFERENCE POINT TIES SHOWN ON THE TITLE SHEET, SURVEY CONTROL SHEET, AND PLAN/PROFILE SHEETS, AND/OR A SET OF FIELD NOTES FOR ALL ADDITIONAL BENCHMARK AND REFERENCE POINT TIES PROPOSED TO BE USED IN CONSTRUCTING THE PROJECT WITH THEIR LOCATION, DESCRIPTION AND ELEVATION, BASED ON ORANGE COUNTY DATUM. ALL SUBMITTALS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA.
- 27 WITHIN 21 CALENDAR DAYS AFTER NOTICE TO PROCEED, THE CONTRACTOR SHALL STAKE THE RIGHT-OF-WAY AT 100' INTERVALS AND AT RIGHT-OF-WAY BREAKS WITH STATIONING SHOWN ON THE STAKES. NO INVOICE FOR PAYMENT WILL BE PROCESSED UNTIL THE RIGHT-OF-WAY HAS BEEN STAKED TO THE SATISFACTION OF THE ENGINEER. PAYMENT IS INCLUDED IN THE PRICE BID FOR ITEM NO. 101-1 "MOBILIZATION".
- 28 EXISTING TRAFFIC SIGNS SHALL REMAIN IN PLACE OR BE RELOCATED AS NEEDED BY THE CONTRACTOR UNTIL THE NEW SIGNS ARE INSTALLED. ONCE THE NEW SIGNS HAVE BEEN INSTALLED, THE EXISTING SIGNS SHALL BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE ORANGE COUNTY SIGN SHOP AT 4200 SOUTH JOHN YOUNG PARKWAY. COST OF RELOCATION, MAINTENANCE, REMOVAL, AND DELIVERY SHALL BE INCLUDED IN PAY ITEM 102-1, MAINTENANCE OF TRAFFIC.
- 29 ALL EXISTING DRAINAGE PIPE AND STRUCTURES AND UTILITIES WITHIN THE LIMITS OF CONSTRUCTION ARE TO REMAIN UNLESS OTHERWISE NOTED.
- 30 INLET ELEVATIONS SHOWN IN THE PLANS REFER TO THE TOP OF THE GRATE FOR DITCH BOTTOM INLETS.

- 31 ALL EXCAVATIONS SHALL BE REQUIRED TO CONFORM WITH THE PROVISIONS OF PART IV OF CHAPTER 553.60, F.S., ALSO KNOWN AS THE "TRENCH SAFETY ACT", TO PROTECT EXISTING PAVEMENT, STRUCTURES, FOUNDATIONS, AND CONSTRUCTION PERSONNEL DURING CONSTRUCTION OF THE PROJECT.
- 32 THE CONTRACTOR SHALL PROTECT EXISTING TREES THAT ARE TO REMAIN, INCLUDING MAINTAINING MINIMUM UNDISTURBED AREAS. WHEN NECESSARY TO CUT ROOTS OVER 1-1/2" DIA., THE CUT MUST BE CLEAN. TEMPORARILY COVER EXPOSED ROOTS WITH WET BURLAP TO PREVENT DRYING AND COVER WITH EARTH AS SOON AS POSSIBLE. INTERFERING BRANCHES MAY BE REMOVED AT THE DIRECTION OF A QUALIFIED TREE SURGEON. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF TREES DAMAGED BEYOND REPAIR WITH 3 TREES OF SIMILAR QUALITY AND SPECIES SIZED AT THE DIRECTION OF THE COUNTY. ALL TREES THAT ARE TO REMAIN, AS INDICATED IN THE PLANS, SHALL BE PROTECTED WITH A "TREE PROTECTION BARRICADE" PER FDOT INDEX NO. 544. THIS WORK IS TO BE PAID FOR AND INCLUDED UNDER CLEARING AND GRUBBING.
- 33 EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED IN ACCORDANCE WITH THE REQUIREMENTS OF THE FLORIDA EROSION AND SEDIMENT CONTROL MANUAL, LATEST EDITION, PRIOR TO OR AS THE FIRST STEP IN CONSTRUCTION. SILT FENCE, ROCK BAGS, TURBIDITY BARRIERS, SYNTHETIC BALES, AND ALL OTHER EROSION AND SEDIMENT CONTROL DEVICES MUST REMAIN IN PLACE AND IN GOOD CONDITION AT ALL LOCATIONS SHOWN IN PLANS OR AS REQUIRED UNTIL THE CONTRACT IS COMPLETED AND SOILS ARE STABILIZED AND VEGETATION HAS BEEN ESTABLISHED. MEASURES SHOWN ARE THE MINIMUM REQUIRED, AND THE CONTRACTOR WILL ENSURE THAT THERE IS NO DIRECT OR INDIRECT DISCHARGE OF CONSTRUCTION MATERIALS IN TURBID WATERS, WATERWAYS, OR OFFSITE AREAS.
- 34 CONTRACTOR IS TO MAINTAIN UNINTERRUPTED ACCESS TO ALL DRIVEWAYS AND SIDESTREETS AT ALL TIMES AND TO NOTIFY PROPERTY OWNERS FIVE DAYS PRIOR TO STARTING CONSTRUCTION.

LEGEND

-  = CABLE TELEVISION PEDESTAL
-  = COLUMN
-  = DRAINAGE MANHOLE
-  = END NOT FOUND OR LOCATED
-  = FLOOD LIGHT
-  = LIGHT POLE
-  = NON POTABLE/RECLAIM VALVE
-  = NON POTABLE/RECLAIM VALVE COVER
-  = OAK TREE
-  = PALM TREE
-  = PEDESTRIAN SIGNAL
-  = POST/UTILITY MARKER
-  = SANITARY MANHOLE
-  = SANITARY VALVE COVER
-  = SERVICE CABINET
-  = SHRUB
-  = SIGNAL MAST ARM
-  = SIGNAL SPAN POLE
-  = SINGLE SUPPORT SIGN
-  = TELEPHONE MANHOLE
-  = TELEPHONE PEDESTAL
-  = TRANSFORMER
-  = TREE UNKNOWN (UNLESS OTHERWISE NOTED)
-  = WATER METER
-  = WATER VALVE
-  = WATER VALVE BOX
-  = WATER VALVE COVER
-  = WIRING PULL BOX
-  = BURIED ELECTRIC LINE
-  = BURIED GAS LINE
-  = BURIED NON POTABLE/RECLAIM WATER LINE
-  = BURIED SANITARY SEWER FORCE MAIN
-  = BURIED TELEPHONE LINE
-  = BURIED TELEVISION LINE
-  = BURIED WATER LINE
-  = OVERHEAD ELECTRIC/POWER LINE

ABBREVIATIONS

- BC= BACK OF CURB
- B= BASELINE
- (C)= CALCULATED
- CB= CHORD BEARING
- CD= CHORD DISTANCE
- CONC= CONCRETE
- CM= CONCRETE MONUMENT
- CPP= CORRUGATED PLASTIC PIPE
- Δ= DELTA (CENTRAL ANGLE)
- E:= EASTING
- EP= EDGE OF PAVEMENT
- EL= ELEVATION
- FOM= FIBER OPTIC CABLE MARKER
- FND= FOUND
- GM= GAS MARKER
- ID= IDENTIFICATION
- INV= INVERT
- IRC= IRON ROD & CAP
- LSA= LANDSCAPE AREA
- LL= LANE LINE
- LT= LEFT
- L= LENGTH
- LC= LIGUSTRUM CLUSTER
- M= CRAPE MYRTLE
- NAVD88= NORTH AMERICAN VERTICAL DATUM OF 1988
- N:= NORTHING
- (P)= PLAT
- PB= PLAT BOOK
- PVC= POLYVINYL CHLORIDE
- R= RADIUS
- RCP= REINFORCED CONCRETE PIPE
- RT= RIGHT
- R/W= RIGHT OF WAY
- SW= SIDEWALK
- STA= STATION
- TOE= TOE OF SLOPE
- TOP= TOP OF BANK
- WIF= WROUGHT IRON FENCE

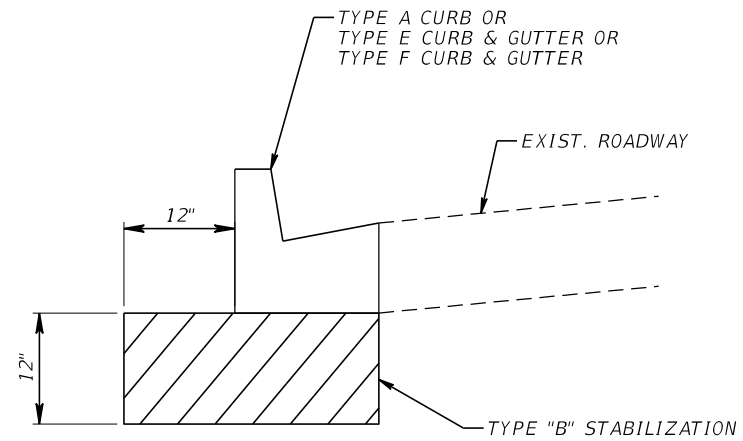
REVISIONS				<b>GTC Engineering Corporation</b>		<b>ORANGE COUNTY PUBLIC WORKS</b>		<b>GENERAL NOTES</b>	SHEET NO.  2
DATE	DESCRIPTION	DATE	DESCRIPTION	GTC PROJECT NO.	TOWN CENTER BLVD. SIDEWALK/CURB RAMP INTERSECTION IMPROVEMENTS	OCPW PROJECT NO.			
				FLO 20.11		2722			

98 South Semoran Blvd, Orlando, FL 32807  
Phone Number - 407.380.0402

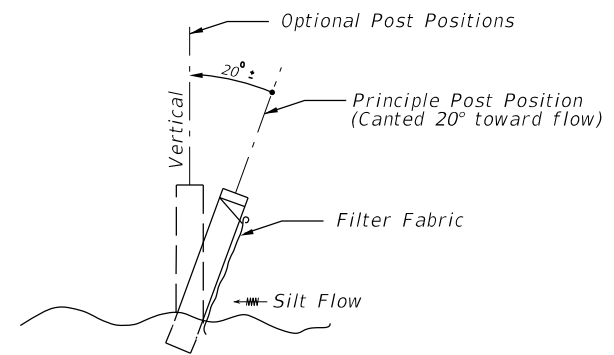
Certificate of Authorization Number 6758      Claude L. Cassagnol, P.E. P.E. Number 35490

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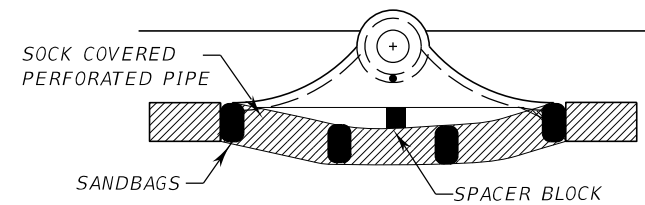
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**TYPE "B" STABILIZATION  
DETAIL**  
N.T.S.



**TYPE III SILT FENCE**



**CURB INLET SEDIMENT BARRIER**

INLET PROTECTION HAS SPACER BLOCK TO ALLOW MORE FLOW TO GO INTO INLET DURING CONSTRUCTION, TO BE USED IN AREAS WHERE INLET PROTECTION COULD CAUSE FLOODING DURING LARGE RAINFALL AMOUNTS

REVISIONS				<b>GTC Engineering Corporation</b> 98 South Semoran Blvd, Orlando, FL 32807 Phone Number - 407.380.0402  Certificate of Authorization Number 6758      Claude L. Cassagnol, P.E. P.E. Number 35490	<b>ORANGE COUNTY PUBLIC WORKS</b>		<b>STANDARD DRAWINGS AND DETAILS</b>	SHEET NO.  3
DATE	DESCRIPTION	DATE	DESCRIPTION		GTC PROJECT NO.	TOWN CENTER BLVD. SIDEWALK/CURB RAMP INTERSECTION IMPROVEMENTS		
					FLO 20.11	2722		

**SUMMARY OF PAY ITEMS**

ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY TOTAL	
			PLANS	FINAL
101-1	MOBILIZATION	LS	1	
102-1	MAINTENANCE OF TRAFFIC	LS	1	
104-14	PREVENTION, CONTROL AND ABATEMENT OF EROSION AND WATER POLLUTION	LS	1	
110-1-1	CLEARING & GRUBBING	LS	1	
120-9	EXCAVATION, EMBANKMENT AND GRADING	LS	1	
160-4	TYPE "B" STABILIZATION (12") (MIN. LBR 40)	SY	419	
520-1-7	CONCRETE CURB & GUTTER (TYPE E)	LF	22	
520-1-10	CONCRETE CURB & GUTTER (TYPE F)	LF	975	
520-2-1	CONCRETE CURB (TYPE A)	LF	329	
522-1	SIDEWALK CONCRETE, 4" THICK	SY	808	
522-2	SIDEWALK CONCRETE, 6" THICK	SY	201	
527-2	DETECTABLE WARNINGS	SF	597.8	
570-1-2	PERFORMANCE TURF (SOD)	SY	1,420	
603-1	SIGNALIZATION	LS	1	
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	AS	3	
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	AS	1	
700-1-50	SINGLE POST SIGN, RELOCATE	AS	19	
706-3-1	RETRO REFLECTIVE PAVEMENT MARKERS (BI-DIRECTIONAL) (WHITE-RED)	EA	33	
711-11-123	SOLID TRAFFIC STRIPE (WHITE) (12") (THERMOPLASTIC)	LF	2,127	
711-11-125	SOLID TRAFFIC STRIPE (WHITE) (24") (THERMOPLASTIC)	LF	2,262	
711-11-241	THERMOPLASTIC, YELLOW, GUIDE LINE, 6" (2/4)	GM	0.031	
711-11-241	THERMOPLASTIC, YELLOW, GUIDE LINE, 6" (6/10)	GM	0.012	
711-15-101	THERMOPLASTIC, STD - OPEN GRADED ASPHALT SURFACE, WHITE, SOLID, 6"	GM	0.090	
711-15-201	THERMOPLASTIC, STD - OPEN GRADED ASPHALT SURFACE, YELLOW, SOLID, 6"	GM	0.025	
900-1	AS-BUILT PLANS	LS	1	
900-2	INDEMNIFICATION	LS	1	

**PAY ITEM FOOTNOTES**

- 102-1 INCLUDES ALL ITEMS OF MAINTENANCE OF TRAFFIC INCLUDING, BUT NOT LIMITED TO, THE DESIGN OF THE MAINTENANCE OF TRAFFIC PLAN BY THE CONTRACTOR AND APPROVAL OF THE PLANS BY ORANGE COUNTY TRAFFIC ENGINEERING AND HIGHWAY CONSTRUCTION. ALSO INCLUDES ALL TEMPORARY STRIPING, REMOVAL OF EXISTING AND TEMPORARY STRIPING VIA HYDRO BLASTING, SIGNING, FLAGGERS, ETC. REQUIRED TO MAINTAIN TRAFFIC DURING CONSTRUCTION IN ACCORDANCE WITH THE MUTCD AND THE FDOT ROADWAY AND DESIGN STANDARDS, 2016 EDITION. ATTENTION IS DIRECTED TO THE 600 SERIES INDEX NUMBERS. NOTE THAT THE MAINTENANCE OF TRAFFIC PLAN SHOWN IN THE CONSTRUCTION PLANS IS FOR INFORMATION ONLY, FINAL PLAN TO BE SUBMITTED TO AND APPROVED BY THE COUNTY. THE MAINTENANCE OF TRAFFIC PLAN DONE BY THE CONTRACTOR SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA.
- 104-14 INCLUDES THE COST OF ALL ITEMS REQUIRED FOR EROSION CONTROL INCLUDING, BUT NOT LIMITED TO SYNTHETIC BALES, TURBIDITY BARRIERS, SILT FENCES AND TEMPORARY GRASSING AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER.
- 110-1-1 INCLUDES, BUT IS NOT LIMITED TO, THE COST OF REMOVAL AND DISPOSAL OF CONCRETE CURBS, DRIVEWAYS, STRUCTURES, WALLS, BRICK WALLS, VARIOUS TYPES OF FENCES, CAPPING WELLS, REMOVAL AND DISPOSAL OF SEPTIC TANKS AND DRAIN FIELDS, UNDERGROUND STORAGE TANKS, PAVEMENT, BASE, AND TRIMMING OF TREES AND SHRUBS AS REQUIRED TO CONSTRUCT THE PROJECT. ALSO INCLUDES THE COST FOR SAWCUTTING EXISTING PAVEMENT OR CONCRETE AND TREE PROTECTION BARRICADES.
- 120-9 INCLUDES THE COST OF ALL EARTHWORK OPERATIONS TO CONSTRUCT THE PROJECT.
- 522-2 INCLUDES THE COST OF CURB RAMPS PER FDOT INDEX 304.
- 570-1-2 INCLUDES THE COST OF SOD (MATCH EXISTING), PEGGING THE SOD, FERTILIZER AND WATER AS REQUIRED FOR ESTABLISHMENT OF PERMANENT SODDING. ALSO INCLUDES THE COST OF MOWING UNTIL FINAL PROJECT ACCEPTANCE BY THE COUNTY. SOD FOR POND SHALL BE SAND BASED.
- 603-1 SEE SIGNALIZATION SHEET NO. T-2 FOR SIGNALIZATION PAY ITEMS AND TABULATION OF QUANTITIES.

REVISIONS				<b>GTC Engineering Corporation</b> 98 South Semoran Blvd, Orlando, FL 32807 Phone Number - 407.380.0402  Certificate of Authorization Number 6758      Claude L. Cassagnol, P.E. P.E. Number 35490	<b>ORANGE COUNTY PUBLIC WORKS</b>			<b>SUMMARY OF PAY ITEMS</b>	SHEET NO.  4
DATE	DESCRIPTION	DATE	DESCRIPTION		GTC PROJECT NO.	TOWN CENTER BLVD. SIDEWALK/CURB RAMP INTERSECTION IMPROVEMENTS	OCPW PROJECT NO.		
				FLO 20.11		2722			





SUMMARY OF SIDEWALK (4") & DETECTABLE WARNINGS										
LOCATION	SIDE	CONCRETE SIDEWALK						DETECTABLE WARNINGS		FIELD BOOK REFERENCE
		P			F			P	F	
		L	W	SY	L	W	SY	SF	SF	
STA. TO STA.										
21+96.22 TO 22+35.04	RT	VARIES	VARIES	39						AT HUNTERS CREEK BLVD. INTERSECTION
22+06.30 TO 22+35.75	LT	VARIES	VARIES	34						AT HUNTERS CREEK BLVD. INTERSECTION
22+16.44 TO 22+21.49	LT/RT	VARIES	VARIES	14				27.5		AT HUNTERS CREEK BLVD. INTERSECTION
22+70.58 TO 22+80.83	RT	VARIES	VARIES	5				21.2		AT HUNTERS CREEK BLVD. INTERSECTION
22+71.08 TO 22+99.08	LT	VARIES	VARIES	19				33.9		AT HUNTERS CREEK BLVD. INTERSECTION
23+27.46 TO 23+60.35	LT	VARIES	VARIES	36						AT HUNTERS CREEK BLVD. INTERSECTION
23+27.99 TO 23+63.02	RT	VARIES	VARIES	35						AT HUNTERS CREEK BLVD. INTERSECTION
23+45.00 TO 23+50.01	LT/RT	VARIES	VARIES	17				20.0		AT HUNTERS CREEK BLVD. INTERSECTION
41+67.09 TO 42+19.60	RT	VARIES	VARIES	62						AT TOWN LOOP BLVD. INTERSECTION
41+81.17 TO 42+12.50	LT	VARIES	VARIES	33						AT TOWN LOOP BLVD. INTERSECTION
41+90.92 TO 41+95.93	LT/RT	VARIES	VARIES	15				23.7		AT TOWN LOOP BLVD. INTERSECTION
42+57.94 TO 42+67.87	RT	VARIES	VARIES	7				28.4		AT TOWN LOOP BLVD. INTERSECTION
43+20.03 TO 43+68.19	RT	VARIES	VARIES	54						AT TOWN LOOP BLVD. INTERSECTION
43+29.54 TO 43+61.07	LT	VARIES	VARIES	28						AT TOWN LOOP BLVD. INTERSECTION
43+46.27 TO 43+51.30	LT/RT	VARIES	VARIES	15				25.1		AT TOWN LOOP BLVD. INTERSECTION
74+59.42 TO 75+29.95	RT	VARIES	VARIES	67						AT JOHN YOUNG PKWY. INTERSECTION
74+92.12 TO 75+35.28	LT	VARIES	VARIES	101						AT JOHN YOUNG PKWY. INTERSECTION
75+70.61 TO 76+20.24	RT	VARIES	VARIES	38				28.0		AT JOHN YOUNG PKWY. INTERSECTION
75+98.46 TO 76+29.41	LT	VARIES	VARIES	23				28.0		AT JOHN YOUNG PKWY. INTERSECTION
76+77.43 TO 77+09.07	LT	VARIES	VARIES	61						AT JOHN YOUNG PKWY. INTERSECTION
76+79.67 TO 77+33.54	RT	VARIES	VARIES	97						AT JOHN YOUNG PKWY. INTERSECTION
76+97.07 TO 77+04.07	RT	VARIES	VARIES	9				28.0		AT JOHN YOUNG PKWY. INTERSECTION
75+21.95 TO 75+29.35	LT/RT	*	*	*				29.0		AT JOHN YOUNG PKWY. INTERSECTION
<b>TOTAL:</b>				<b>808</b>				<b>292.8</b>		

SUMMARY OF SIDEWALK (6") & DETECTABLE WARNINGS										
LOCATION	SIDE	CONCRETE SIDEWALK						DETECTABLE WARNINGS		FIELD BOOK REFERENCE
		P			F			P	F	
		L	W	SY	L	W	SY	SF	SF	
STA. TO STA.										
22+09.98 TO 22+26.83	RT	VARIES	VARIES	10				11.5		AT HUNTERS CREEK BLVD. INTERSECTION
22+15.43 TO 22+24.21	LT	VARIES	VARIES	6				10.4		AT HUNTERS CREEK BLVD. INTERSECTION
22+28.44 TO 22+41.40	RT	VARIES	VARIES	10				11.5		AT HUNTERS CREEK BLVD. INTERSECTION
22+32.04 TO 22+41.22	LT	VARIES	VARIES	6				13.9		AT HUNTERS CREEK BLVD. INTERSECTION
23+21.78 TO 23+31.00	LT	VARIES	VARIES	6				13.9		AT HUNTERS CREEK BLVD. INTERSECTION
23+22.07 TO 23+34.78	RT	VARIES	VARIES	10				11.3		AT HUNTERS CREEK BLVD. INTERSECTION
23+39.21 TO 23+56.46	RT	VARIES	VARIES	9				11.3		AT HUNTERS CREEK BLVD. INTERSECTION
23+42.70 TO 23+51.44	LT	VARIES	VARIES	5				14.6		AT HUNTERS CREEK BLVD. INTERSECTION
41+83.90 TO 42+02.41	RT	VARIES	VARIES	11				10.5		AT TOWN LOOP BLVD. INTERSECTION
41+84.10 TO 42+02.35	LT	VARIES	VARIES	10				10.3		AT TOWN LOOP BLVD. INTERSECTION
42+00.82 TO 42+17.32	LT	VARIES	VARIES	10				17.7		AT TOWN LOOP BLVD. INTERSECTION
42+08.18 TO 42+24.73	RT	VARIES	VARIES	12				12.0		AT TOWN LOOP BLVD. INTERSECTION
43+13.25 TO 43+29.68	RT	VARIES	VARIES	12				12.0		AT TOWN LOOP BLVD. INTERSECTION
43+20.36 TO 43+36.34	LT	VARIES	VARIES	10				16.7		AT TOWN LOOP BLVD. INTERSECTION
43+39.58 TO 43+58.43	RT	VARIES	VARIES	10				10.3		AT TOWN LOOP BLVD. INTERSECTION
43+44.37 TO 43+52.61	LT	VARIES	VARIES	4				8.9		AT TOWN LOOP BLVD. INTERSECTION
75+21.45 TO 75+29.19	LT	VARIES	VARIES	8				12.5		AT JOHN YOUNG PKWY. INTERSECTION
75+21.64 TO 75+29.19	RT	VARIES	VARIES	9				15.2		AT JOHN YOUNG PKWY. INTERSECTION
75+29.19 TO 75+38.85	RT	VARIES	VARIES	7				13.4		AT JOHN YOUNG PKWY. INTERSECTION
75+31.37 TO 75+42.62	LT	VARIES	VARIES	7				11.1		AT JOHN YOUNG PKWY. INTERSECTION
76+73.48 TO 76+81.33	RT	VARIES	VARIES	6				12.7		AT JOHN YOUNG PKWY. INTERSECTION
76+75.59 TO 76+90.00	LT	VARIES	VARIES	9				14.2		AT JOHN YOUNG PKWY. INTERSECTION
76+94.42 TO 77+05.03	RT	VARIES	VARIES	8				15.3		AT JOHN YOUNG PKWY. INTERSECTION
76+94.75 TO 77+05.27	LT	VARIES	VARIES	7.1				13.8		AT JOHN YOUNG PKWY. INTERSECTION
<b>TOTAL:</b>				<b>201</b>				<b>305.0</b>		

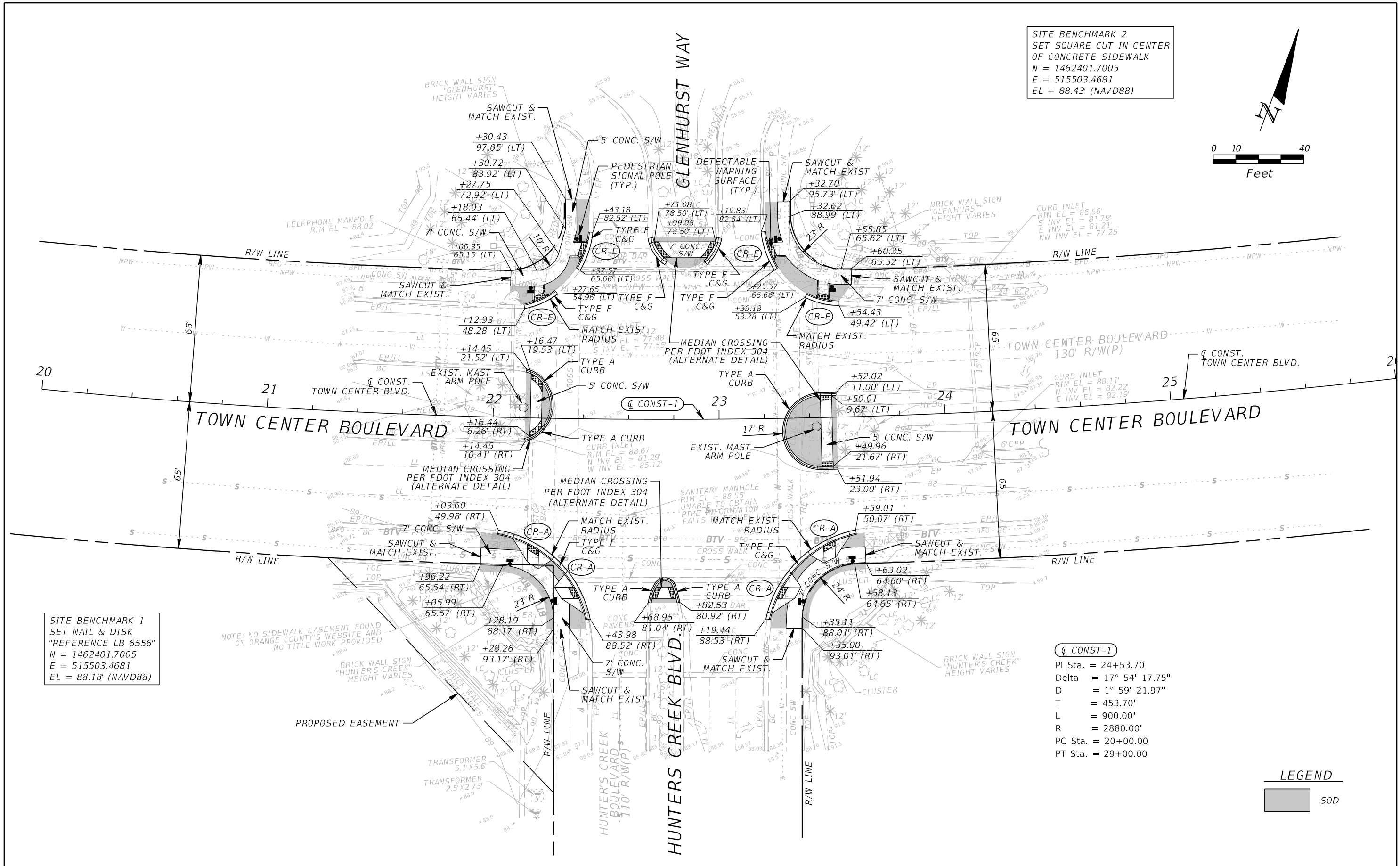
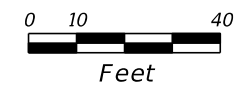
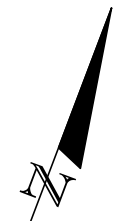
SUMMARY OF CURB AND GUTTER TYPE E					
LOCATION	SIDE	TYPE E LENGTH (FT)		REMARKS	FIELD BOOK REFERENCE
		P	F		
STA. TO STA.					
76+95.07 TO 77+06.07	LT	11		AT JOHN YOUNG PKWY. INTERSECTION	
76+95.07 TO 77+06.07	RT	11		AT JOHN YOUNG PKWY. INTERSECTION	
<b>TOTAL:</b>		<b>22</b>			

SUMMARY OF CURB TYPE F					
LOCATION	SIDE	TYPE F LENGTH (FT)		REMARKS	FIELD BOOK REFERENCE
		P	F		
STA. TO STA.					
22+12.93 TO 22+27.65	LT	16		AT HUNTERS CREEK BLVD. INTERSECTION	
22+03.60 TO 22+43.98	RT	58		AT HUNTERS CREEK BLVD. INTERSECTION	
22+37.57 TO 22+43.18	LT	16		AT HUNTERS CREEK BLVD. INTERSECTION	
22+68.31 TO 22+75.87	LT	13		AT HUNTERS CREEK BLVD. INTERSECTION	
22+95.20 TO 23+01.88	LT	13		AT HUNTERS CREEK BLVD. INTERSECTION	
23+19.83 TO 23+39.18	LT	17		AT HUNTERS CREEK BLVD. INTERSECTION	
23+19.44 TO 23+25.57	RT	58		AT HUNTERS CREEK BLVD. INTERSECTION	
23+39.18 TO 23+54.43	LT	15		AT HUNTERS CREEK BLVD. INTERSECTION	
41+81.17 TO 42+20.42	LT	44		AT TOWN LOOP BLVD. INTERSECTION	
41+80.97 TO 42+27.65	RT	61		AT TOWN LOOP BLVD. INTERSECTION	
43+17.26 TO 43+55.54	LT	43		AT TOWN LOOP BLVD. INTERSECTION	
43+10.32 TO 43+61.48	RT	65		AT TOWN LOOP BLVD. INTERSECTION	
74+66.49 TO 75+47.55	LT	136		AT JOHN YOUNG PKWY. INTERSECTION	
75+20.43 TO 75+40.86	RT	41		AT JOHN YOUNG PKWY. INTERSECTION	
76+64.64 TO 77+76.91	LT	184		AT JOHN YOUNG PKWY. INTERSECTION	
76+70.52 TO 77+85.84	RT	195		AT JOHN YOUNG PKWY. INTERSECTION	
<b>TOTAL:</b>		<b>975</b>			

SUMMARY OF CURB TYPE A					
LOCATION	SIDE	TYPE A LENGTH (FT)		REMARKS	FIELD BOOK REFERENCE
		P	F		
STA. TO STA.					
22+14.45 TO 22+14.45	LT/RT	41		AT HUNTERS CREEK BLVD. INTERSECTION	
22+68.95 TO 22+82.53	RT	27		AT HUNTERS CREEK BLVD. INTERSECTION	
23+51.94 TO 23+52.02	LT/RT	66		AT HUNTERS CREEK BLVD. INTERSECTION	
41+88.98 TO 41+88.68	LT/RT	45		AT TOWN LOOP BLVD. INTERSECTION	
42+56.35 TO 42+69.54	RT	32		AT TOWN LOOP BLVD. INTERSECTION	
43+52.90 TO 43+53.56	LT/RT	44		AT TOWN LOOP BLVD. INTERSECTION	
75+69.49 TO 75+78.99	RT	38		AT JOHN YOUNG PKWY. INTERSECTION	
76+15.77 TO 76+20.83	RT	36		AT JOHN YOUNG PKWY. INTERSECTION	
<b>TOTAL:</b>		<b>329</b>			

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REVISIONS																				
DATE	DESCRIPTION	DATE	DESCRIPTION																	

SITE BENCHMARK 2  
 SET SQUARE CUT IN CENTER  
 OF CONCRETE SIDEWALK  
 N = 1462401.7005  
 E = 515503.4681  
 EL = 88.43' (NAVD88)



SITE BENCHMARK 1  
 SET NAIL & DISK  
 "REFERENCE LB 6556"  
 N = 1462401.7005  
 E = 515503.4681  
 EL = 88.18' (NAVD88)

NOTE: NO SIDEWALK EASEMENT FOUND  
 ON ORANGE COUNTY'S WEBSITE AND  
 NO TITLE WORK PROVIDED

⊕ CONST-1  
 PI Sta. = 24+53.70  
 Delta = 17° 54' 17.75"  
 D = 1° 59' 21.97"  
 T = 453.70'  
 L = 900.00'  
 R = 2880.00'  
 PC Sta. = 20+00.00  
 PT Sta. = 29+00.00

LEGEND  
 SOD

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**GTC Engineering Corporation**  
 98 South Semoran Blvd, Orlando, FL 32807  
 Phone Number - 407.380.0402

**ORANGE COUNTY PUBLIC WORKS**

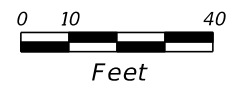
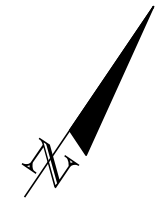
GTC PROJECT NO. FLO 20.11	TOWN CENTER BLVD. SIDEWALK/CURB RAMP INTERSECTION IMPROVEMENTS	OCPW PROJECT NO. 2722
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Certificate of Authorization Number 6758      Claude L. Cassagnol, P.E. P.E. Number 35490

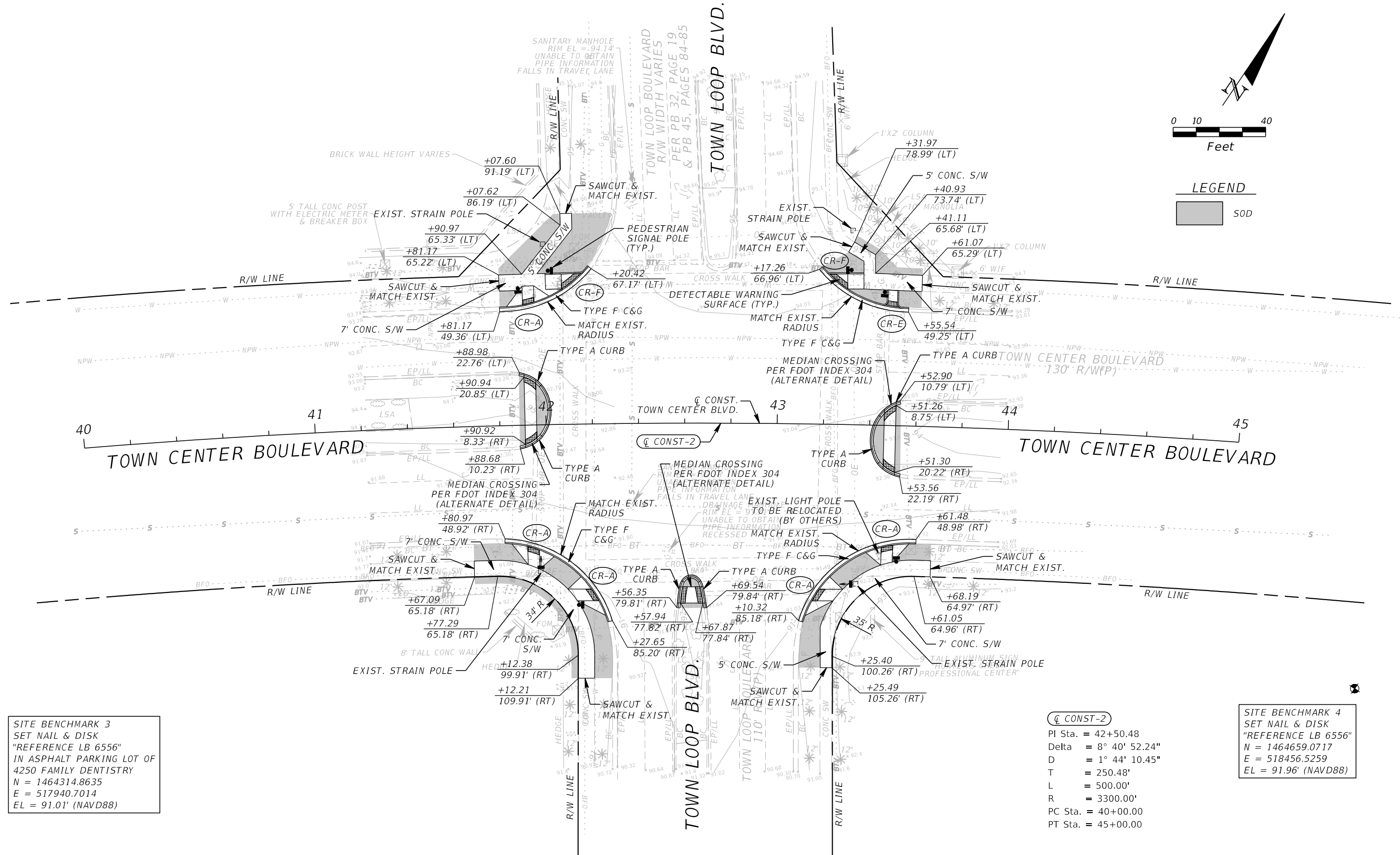
**PLAN**  
**HUNTERS CREEK BLVD.**  
**AT TOWN CENTER BLVD.**

SHEET NO.  
7

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**LEGEND**  
 [Grey Box] SOD



SITE BENCHMARK 3  
 SET NAIL & DISK  
 "REFERENCE LB 6556"  
 IN ASPHALT PARKING LOT OF  
 4250 FAMILY DENTISTRY  
 N = 1464314.8635  
 E = 517940.7014  
 EL = 91.01' (NAVD88)

SITE BENCHMARK 4  
 SET NAIL & DISK  
 "REFERENCE LB 6556"  
 N = 1464659.0717  
 E = 518456.5259  
 EL = 91.96' (NAVD88)

⊙ CONST-2  
 PI Sta. = 42+50.48  
 Delta = 8° 40' 52.24"  
 D = 1° 44' 10.45"  
 T = 250.48'  
 L = 500.00'  
 R = 3300.00'  
 PC Sta. = 40+00.00  
 PT Sta. = 45+00.00

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**GTC Engineering Corporation**  
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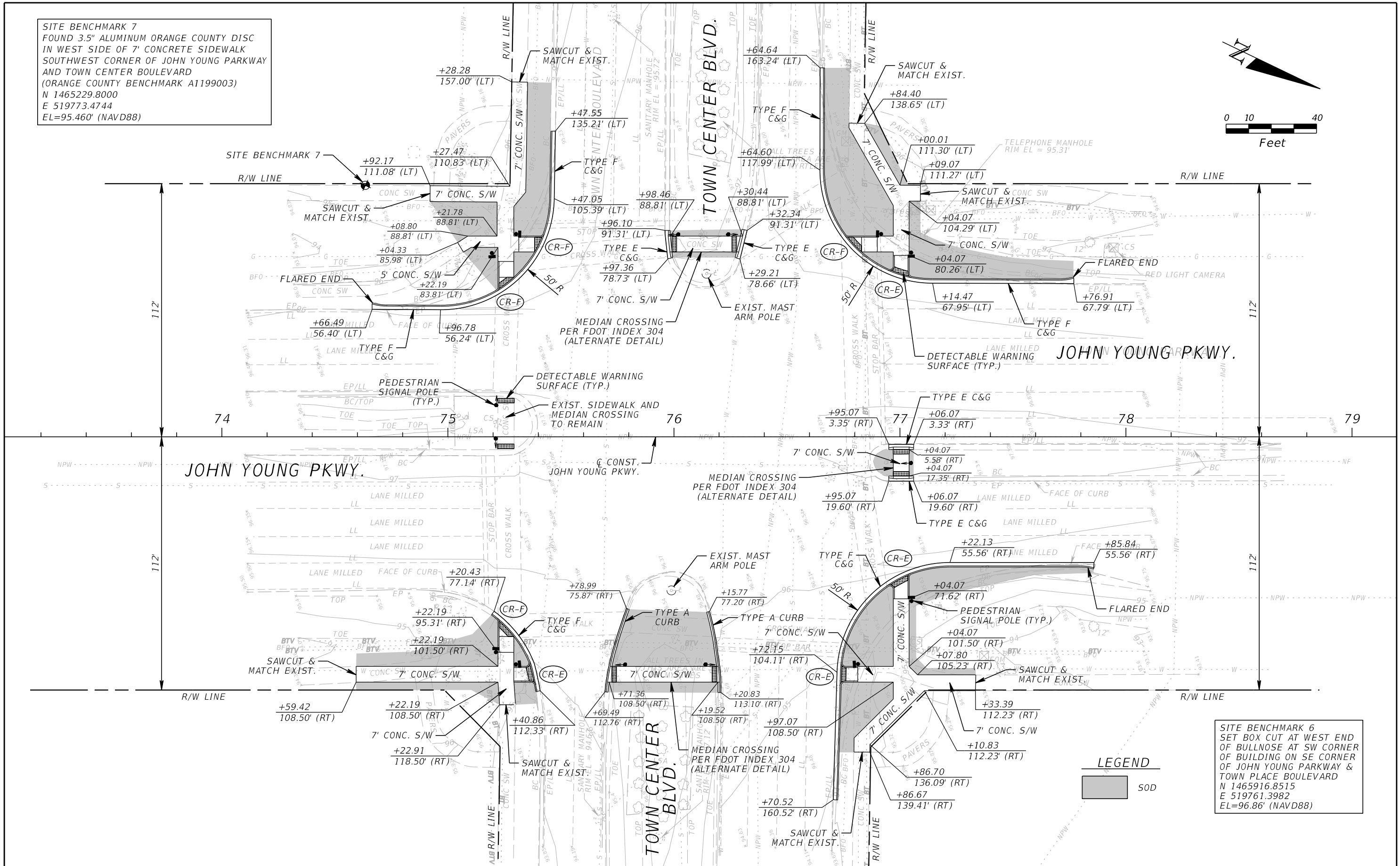
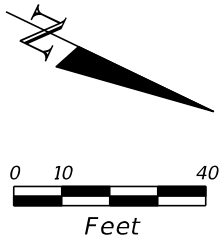
GTC PROJECT NO.	TOWN CENTER BLVD. SIDEWALK/CURB RAMP INTERSECTION IMPROVEMENTS	OCPW PROJECT NO.
FLO 20.11		2722

**PLAN**  
**TOWN LOOP BLVD.**  
**AT TOWN CENTER BLVD.**

SHEET NO. 8

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SITE BENCHMARK 7  
 FOUND 3.5" ALUMINUM ORANGE COUNTY DISC  
 IN WEST SIDE OF 7" CONCRETE SIDEWALK  
 SOUTHWEST CORNER OF JOHN YOUNG PARKWAY  
 AND TOWN CENTER BOULEVARD  
 (ORANGE COUNTY BENCHMARK A1199003)  
 N 1465229.8000  
 E 519773.4744  
 EL=95.460' (NAVD88)



JOHN YOUNG PKWY.

MEDIAN CROSSING PER FDOT INDEX 304 (ALTERNATE DETAIL)

JOHN YOUNG PKWY.

TOWN CENTER BLVD.

SITE BENCHMARK 6  
 SET BOX CUT AT WEST END  
 OF BULLNOSE AT SW CORNER  
 OF BUILDING ON SE CORNER  
 OF JOHN YOUNG PARKWAY &  
 TOWN PLACE BOULEVARD  
 N 1465916.8515  
 E 519761.3982  
 EL=96.86' (NAVD88)

LEGEND  
 SOD

REVISIONS		REVISIONS	
DATE	DESCRIPTION	DATE	DESCRIPTION

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**ORANGE COUNTY PUBLIC WORKS**

GTC PROJECT NO. TOWN CENTER BLVD. SIDEWALK/CURB RAMP INTERSECTION IMPROVEMENTS  
 FLO 20.11

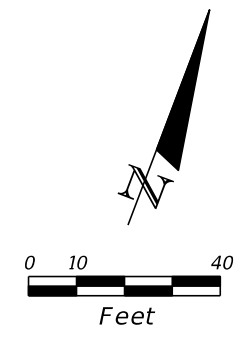
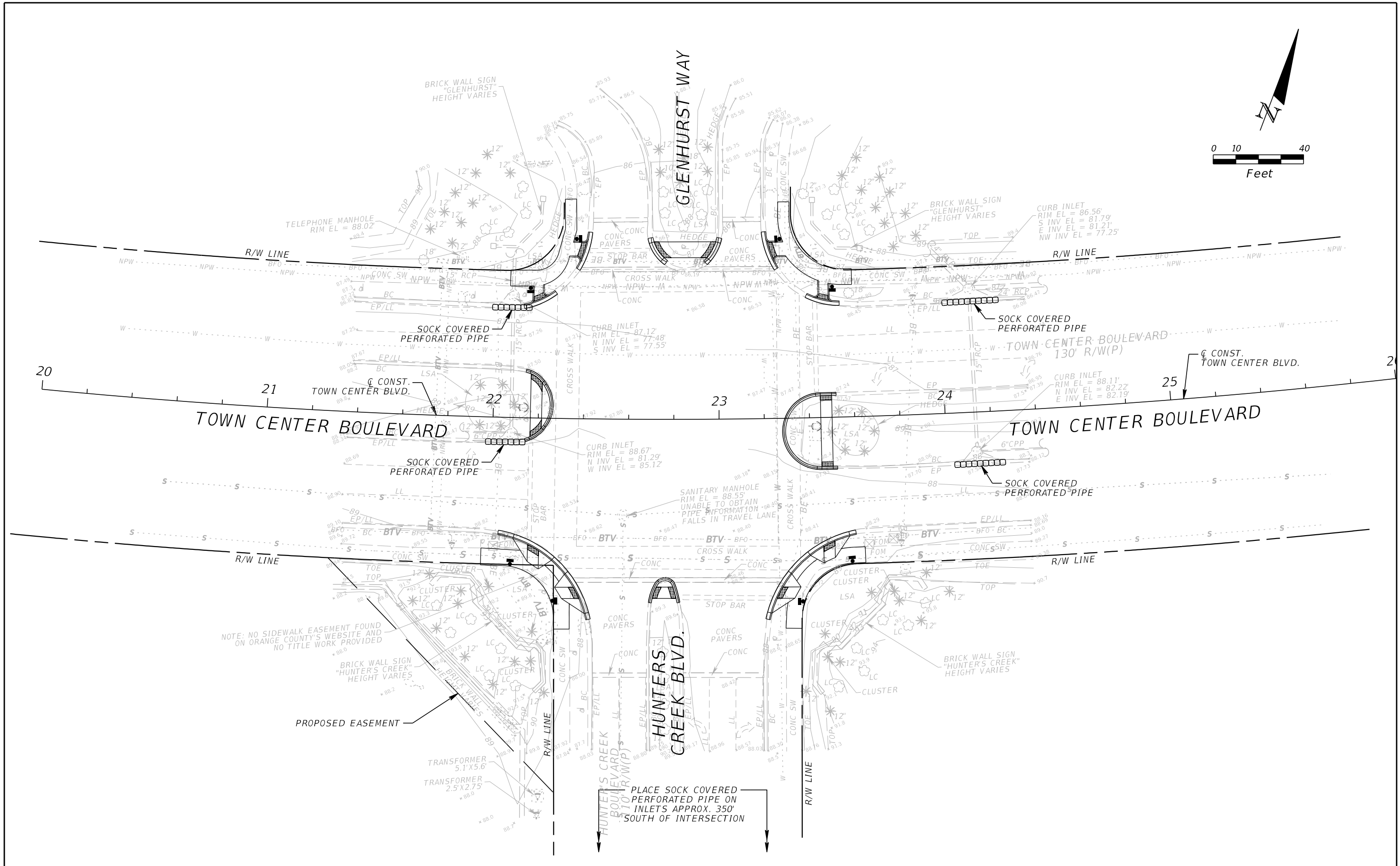
OCPW PROJECT NO. 2722

**PLAN**  
**JOHN YOUNG PKWY.**  
**AT TOWN CENTER BLVD.**

SHEET NO. 9

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 DATE: 6/3/2016 10:30:19 AM





NOTE: NO SIDEWALK EASEMENT FOUND ON ORANGE COUNTY'S WEBSITE AND NO TITLE WORK PROVIDED

PLACE SOCK COVERED PERFORATED PIPE ON INLETS APPROX. 350' SOUTH OF INTERSECTION

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

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 98 South Semoran Blvd, Orlando, FL 32807  
 Phone Number - 407.380.0402

Certificate of Authorization Number 6758      Claude L. Cassagnol, P.E. P.E. Number 35490

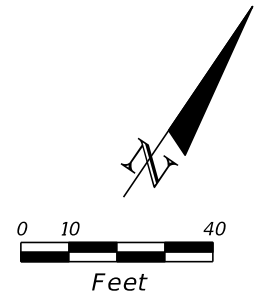
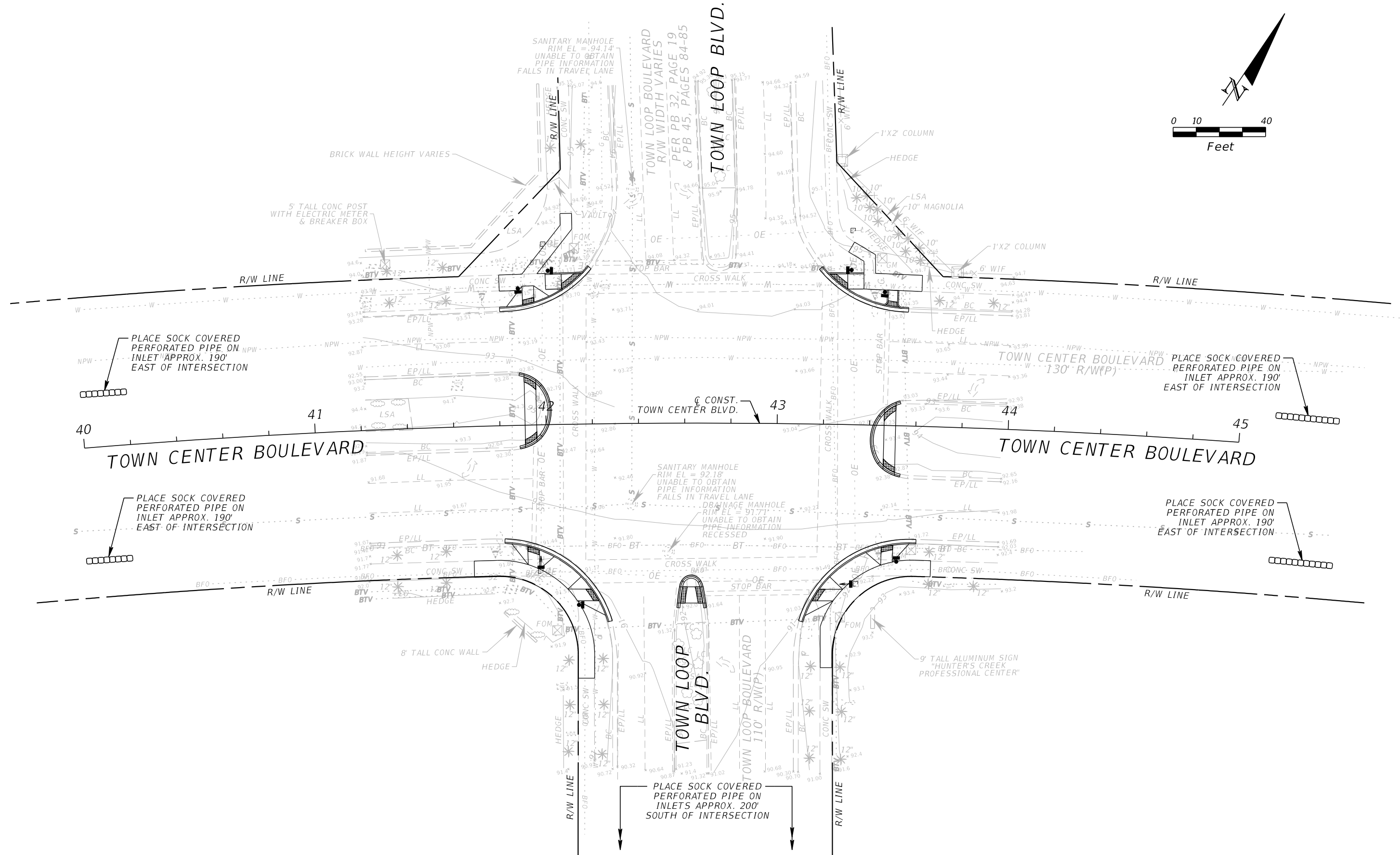
**ORANGE COUNTY PUBLIC WORKS**

GTC PROJECT NO.	TOWN CENTER BLVD. SIDEWALK/CURB RAMP INTERSECTION IMPROVEMENTS	OCPW PROJECT NO.
FLO 20.11		2722

**EROSION CONTROL PLAN**  
**HUNTERS CREEK BLVD.**  
**AT TOWN CENTER BLVD.**

SHEET NO. 10

FILE: H:\Jobs\FLO20.11-TCBNroadway\ERCTRDOI.DGN  
 DATE: 6/3/2016 1:51:04 PM



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**GTC Engineering Corporation**  
 98 South Semoran Blvd, Orlando, FL 32807  
 Phone Number - 407.380.0402  
 Certificate of Authorization Number 6758  
 Claude L. Cassagnol, P.E.  
 P.E. Number 35490

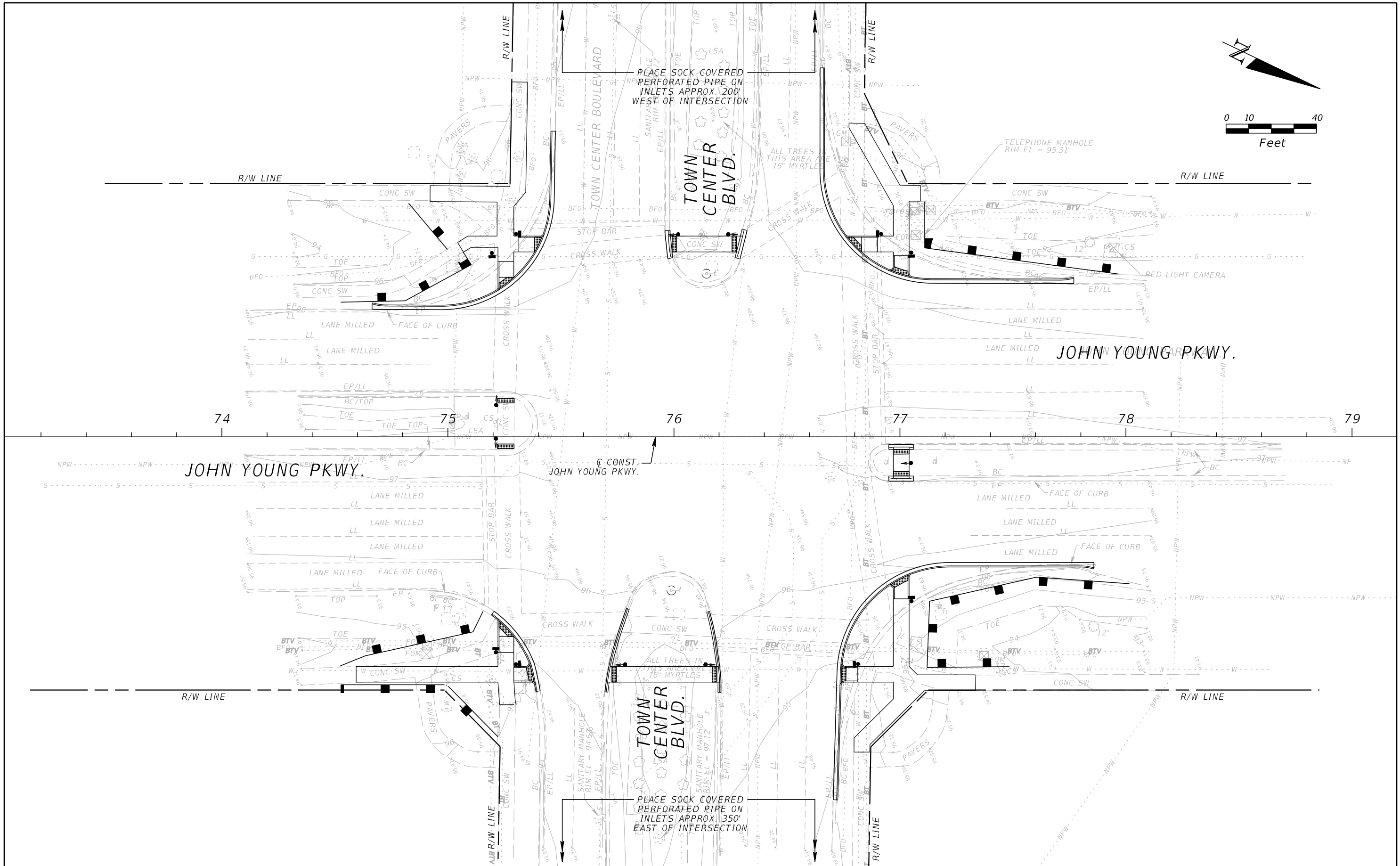
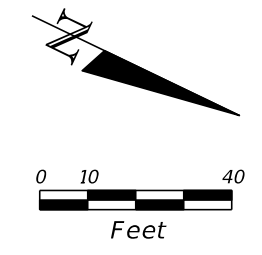
**ORANGE COUNTY PUBLIC WORKS**

GTC PROJECT NO.	TOWN CENTER BLVD. SIDEWALK/CURB RAMP INTERSECTION IMPROVEMENTS	OCPW PROJECT NO.
FLO 20.11		2722

**EROSION CONTROL PLAN**  
**TOWN LOOP BLVD.**  
**AT TOWN CENTER BLVD.**

SHEET NO. 11

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**GTC Engineering Corporation**  
 98 South Semoran Blvd, Orlando, FL 32807  
 Phone Number - 407.380.0402  
 Certificate of Authorization Number 6758  
 Claude L. Cassagnol, P.E.  
 P.E. Number 35490

**ORANGE COUNTY PUBLIC WORKS**

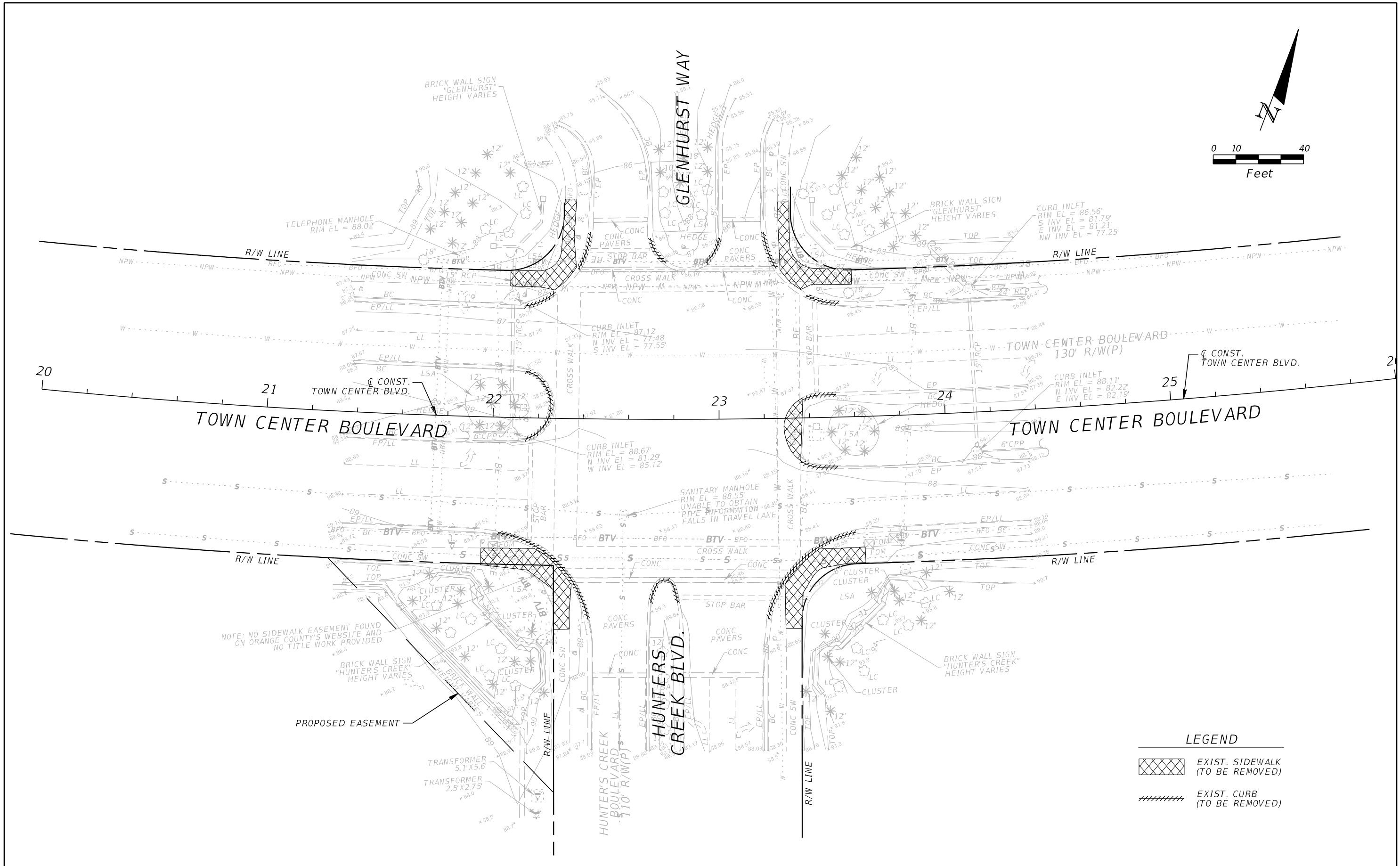
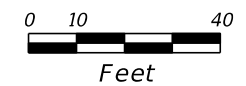
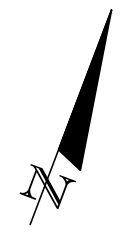
GTC PROJECT NO.	TOWN CENTER BLVD. SIDEWALK/CURB RAMP INTERSECTION IMPROVEMENTS	OCPW PROJECT NO.	2722
FLO 20.11			

**EROSION CONTROL PLAN**  
**JOHN YOUNG PKY.**  
**AT TOWN CENTER BLVD.**

SHEET NO.  
 12

FILE: H:\Jobs\FLO20.11-TCB\roadway\ERCTR03.DGN  
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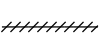


NOTE: NO SIDEWALK EASEMENT FOUND ON ORANGE COUNTY'S WEBSITE AND NO TITLE WORK PROVIDED

BRICK WALL SIGN "HUNTER'S CREEK" HEIGHT VARIES

PROPOSED EASEMENT

**LEGEND**

	EXIST. SIDEWALK (TO BE REMOVED)
	EXIST. CURB (TO BE REMOVED)

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**GTC Engineering Corporation**  
 98 South Semoran Blvd, Orlando, FL 32807  
 Phone Number - 407.380.0402

*Certificate of Authorization Number 6758*      *Claude L. Cassagnol, P.E. P.E. Number 35490*

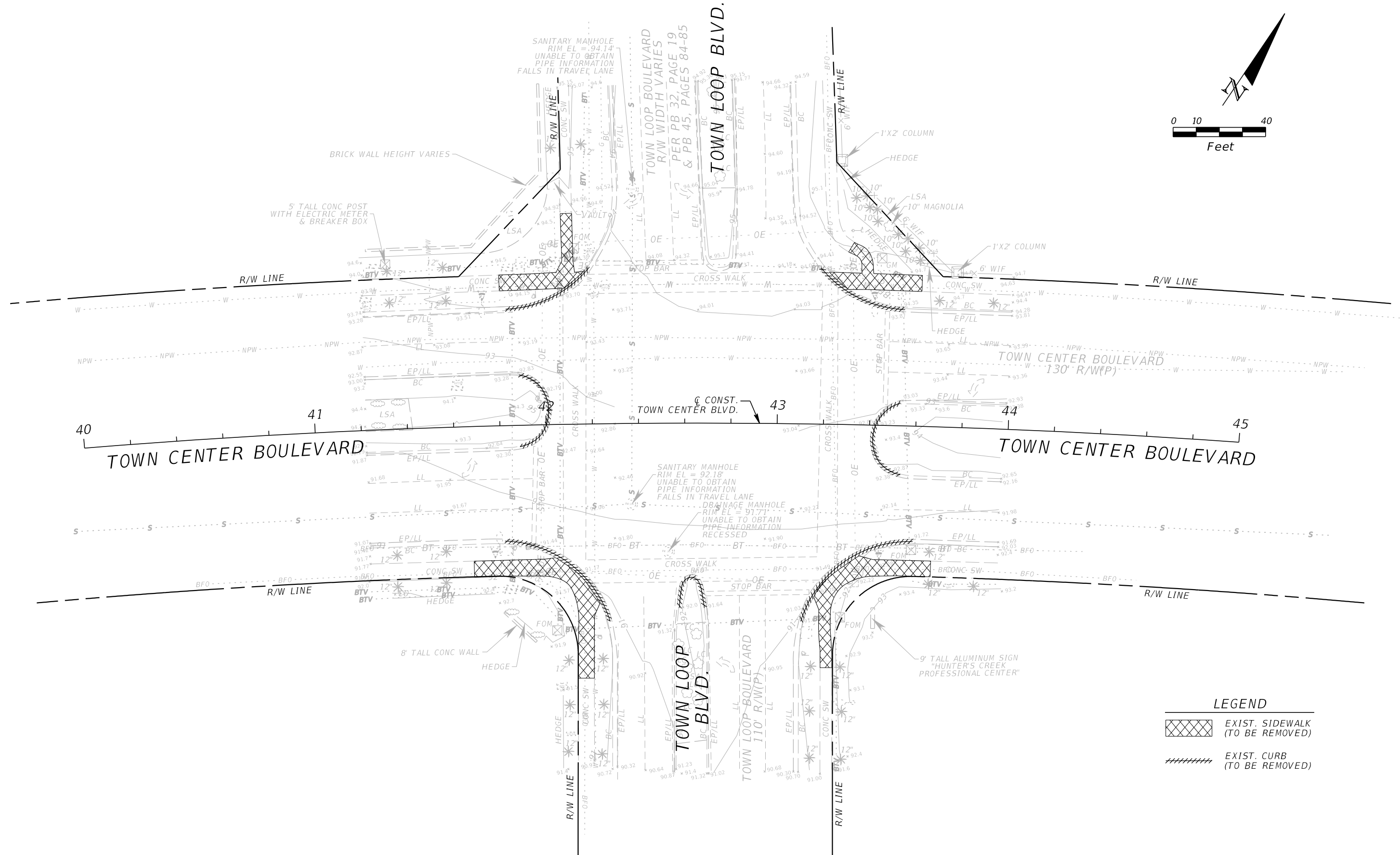
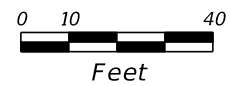
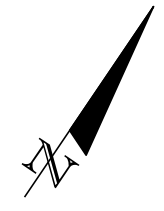
**ORANGE COUNTY PUBLIC WORKS**

GTC PROJECT NO.	TOWN CENTER BLVD. SIDEWALK/CURB RAMP INTERSECTION IMPROVEMENTS	OCPW PROJECT NO.
FLO 20.11		2722



**DEMOLITION PLAN**  
**HUNTERS CREEK BLVD.**  
**AT TOWN CENTER BLVD.**

SHEET NO. 13

FILE: H:\Jobs\FLO20.11-TCBNroadway\SCGRDD01.DGN  
 DATE: 6/3/2016 1:51:06 PM



**LEGEND**

	EXIST. SIDEWALK (TO BE REMOVED)
	EXIST. CURB (TO BE REMOVED)

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**GTC Engineering Corporation**  
 98 South Semoran Blvd, Orlando, FL 32807  
 Phone Number - 407.380.0402

**ORANGE COUNTY PUBLIC WORKS**

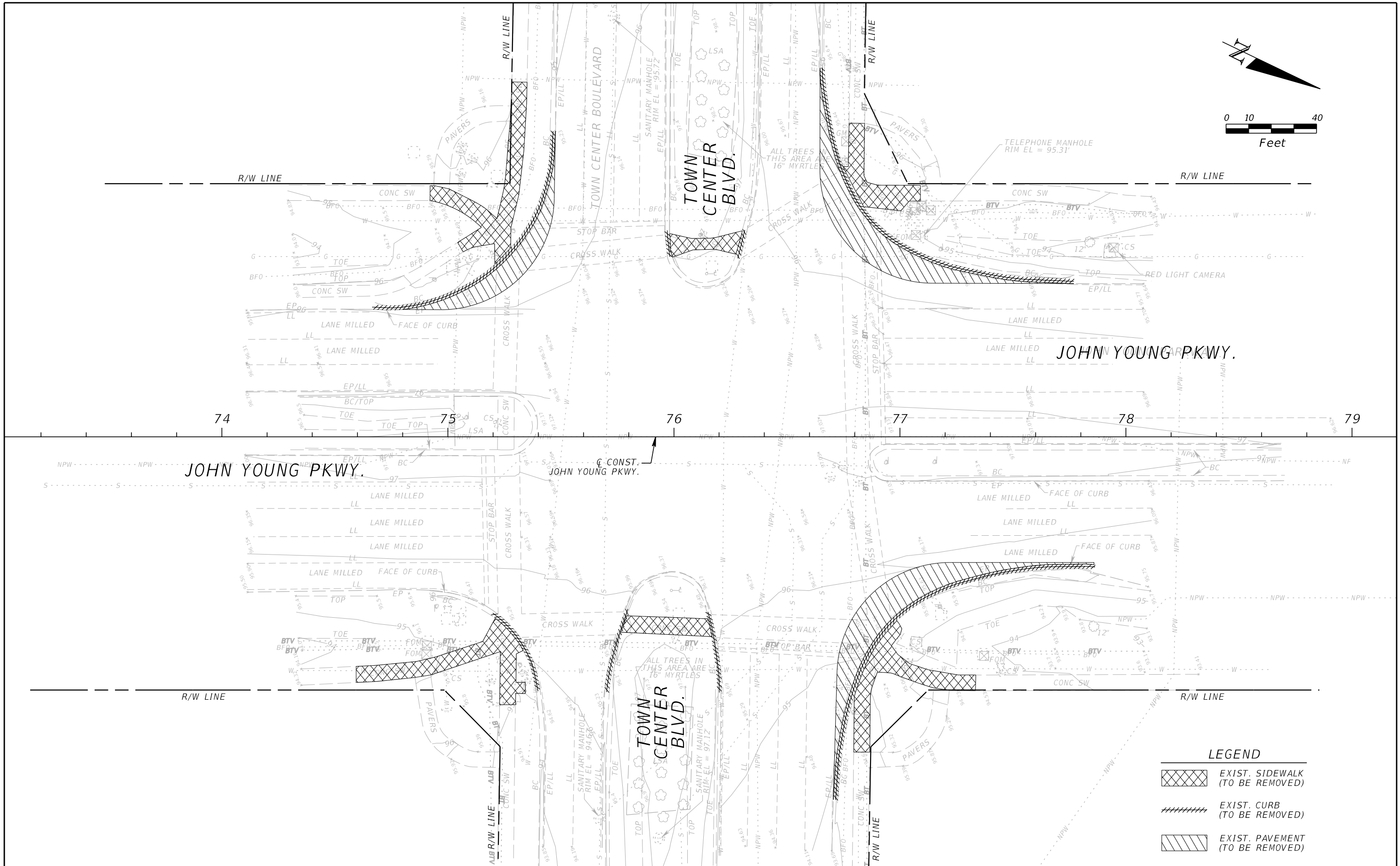
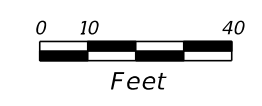
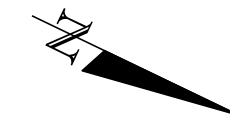
GTC PROJECT NO.	TOWN CENTER BLVD. SIDEWALK/CURB RAMP INTERSECTION IMPROVEMENTS	OCPW PROJECT NO.
FLO 20.11		2722

Certificate of Authorization Number 6758      Claude L. Cassagnol, P.E. P.E. Number 35490


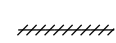

**DEMOLITION PLAN**  
**TOWN LOOP BLVD.**  
**AT TOWN CENTER BLVD.**

SHEET NO. 14

FILE: H:\Jobs\FLO20.11-TCB\roadway\SCGRD02.DGN  
 DATE: 6/3/2016 10:30:28 AM



**LEGEND**

	EXIST. SIDEWALK (TO BE REMOVED)
	EXIST. CURB (TO BE REMOVED)
	EXIST. PAVEMENT (TO BE REMOVED)

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**GTC Engineering Corporation**  
 98 South Semoran Blvd, Orlando, FL 32807  
 Phone Number - 407.380.0402  
 Certificate of Authorization Number 6758  
 Claude L. Cassagnol, P.E.  
 P.E. Number 35490

**ORANGE COUNTY PUBLIC WORKS**

GTC PROJECT NO.	TOWN CENTER BLVD. SIDEWALK/CURB RAMP INTERSECTION IMPROVEMENTS	OCPW PROJECT NO.
FLO 20.11		2722

**DEMOLITION PLAN**  
**JOHN YOUNG PKY.**  
**AT TOWN CENTER BLVD.**

SHEET NO. 15

FILE: H:\Jobs\FLO20.11-TCB\roadway\SCGRRD03.DGN  
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TABULATION OF QUANTITIES

PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS														TOTAL THIS SHEET		GRAND TOTAL		
			S-2		S-3		S-4										PLAN	FINAL	PLAN	FINAL	
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL							
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	AS	-		3		-											3		3	
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	AS	-		1		-											1		1	
700-1-50	SINGLE POST SIGN, RELOCATE	AS	6		4		9											19		19	
706-3-1	RETRO REFLECTIVE PAVEMENT MARKERS (BI-DIRECTIONAL) (WHITE-RED)	EA	6		11		16											33		33	
711-11-123	THERMOPLASTIC, WHITE, SOLID FOR CROSSWALK AND ROUNDABOUT, 12"	LF	557		681		889											2127		2127	
711-11-125	THERMOPLASTIC, WHITE, SOLID FOR STOP LINE AND CROSSWALK, 24"	LF	586		722		954											2262		2262	
711-11-241	THERMOPLASTIC, YELLOW, GUIDE LINE, 6" (2/4)	GM	0.022		0.009		-											0.031		0.031	
711-11-241	THERMOPLASTIC, YELLOW, GUIDE LINE, 6" (6/10)	GM	0.012		-		-											0.012		0.012	
711-15-101	THERMOPLASTIC, STD - OPEN GRADED ASPHALT SURFACE, WHITE, SOLID, 6"	GM	-		-		0.090											0.090		0.090	
711-15-201	THERMOPLASTIC, STD - OPEN GRADED ASPHALT SURFACE, YELLOW, SOLID, 6"	GM	0.014		-		0.011											0.025		0.025	

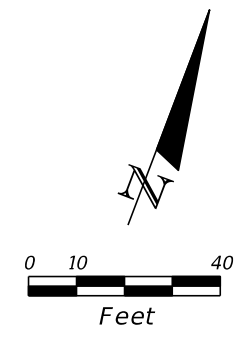
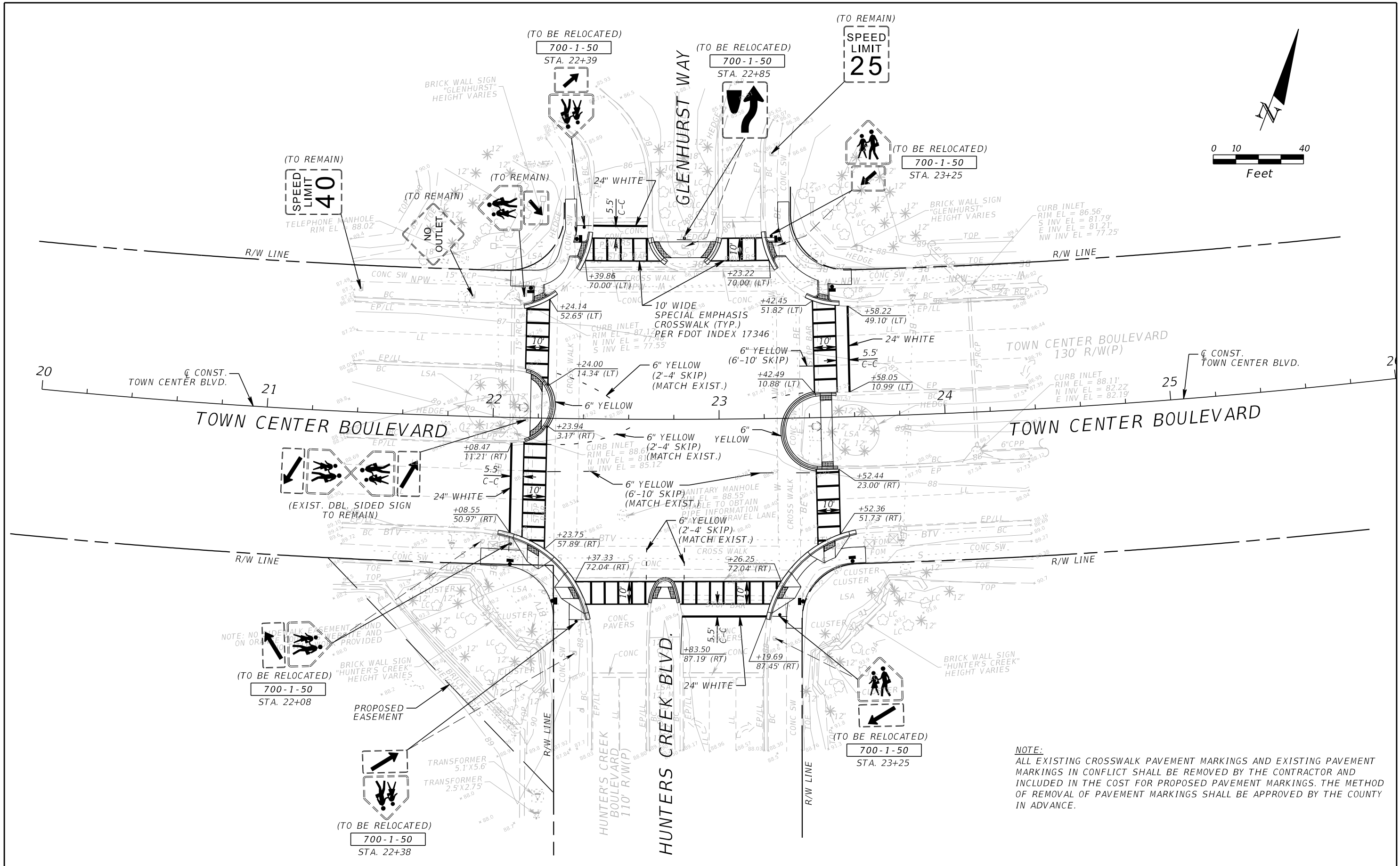
**SIGNING AND PAVEMENT MARKING NOTES**

- FOR PAVEMENT MARKING AND SIGN INSTALLATION DETAILS REFER TO FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS, DATED 2016.
- ALL THERMOPLASTIC PAVEMENT MARKINGS ARE TO BE ALKYD BASED THERMOPLASTIC.
- ALL SURFACES SHALL BE CLEANED PRIOR TO THE START OF INSTALLATION OF ALL PAVEMENT MARKINGS.
- ALL STRIPING SHALL BE APPLIED BEFORE REFLECTIVE PAVEMENT MARKERS ARE APPLIED.
- FOR SIGN DETAILS REFER TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, PUBLISHED BY U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION 2009.
- ALL SIGNS SHALL BE LOCATED IN ACCORDANCE WITH HORIZONTAL CLEARANCES (CLEAR ZONES) AS SPECIFIED IN THE F.D.O.T. PLANS PREPARATION MANUAL.
- FOR REFLECTIVE PAVEMENT MARKER PLACEMENT DETAILS, REFER TO FDOT DESIGN STANDARDS, INDEX NO. 17352.
- BITUMINOUS ADHESIVE SHALL BE USED TO SET REFLECTIVE PAVEMENT MARKERS ON ALL ASPHALT SURFACES.
- THERMOPLASTIC PAVEMENT MARKINGS SHALL NOT BE INSTALLED UNTIL THE FINAL ASPHALT SURFACE HAS CURED FOR 30 DAYS. TEMPORARY PAINT PAVEMENT MARKINGS SHALL BE INSTALLED DURING THE CURE PERIOD. TEMPORARY PAINT PAVEMENT MARKINGS SHALL NOT BE PAID SEPARATELY BUT SHALL BE INCLUDED IN THE BID PRICES FOR THERMOPLASTIC PAVEMENT MARKINGS.
- ALL EXISTING SIGNS SHALL BE MAINTAINED EXCEPT THOSE NOTED IN THE PLANS TO BE REPLACED OR RELOCATED.
- ALL SIGNS SHALL BE CONSTRUCTED WITH TYPE XI (DG 3) REFLECTIVE SHEETING.
- SIGN POSTS NOT REQUIRING A SLIP BASE AND FOOTING SHALL BE A MINIMUM 14 GAUGE 2"X 2" SQUARE WELDED STEEL WITH 3/8" KNOCKOUTS ON 1" CENTERS ON ALL FOUR SIDES. THE POSTS SHALL BE SEALED WITH A POLYMER TOPCOAT.

**PAY ITEM FOOTNOTES:**

- 102-1 THIS PAY ITEM NUMBER IS TO INCLUDE THE REMOVAL AND REPLACEMENT OF ALL EXISTING SIGNS THAT CONFLICT WITH CONSTRUCTION OPERATIONS. IF SIGNS ARE DAMAGED BY THE CONTRACTOR, THE SIGNS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- 706-3-X INCLUDES THE REMOVAL OF ALL EXISTING RPM'S WITHIN THE LIMITS OF THE PROJECT OPERATION AND IS INCIDENTAL TO PAY ITEM NUMBER 706-3-X.

<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>DATE</th> <th>DESCRIPTION</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>				DATE	DESCRIPTION	DATE	DESCRIPTION					<p><b>GTC Engineering Corporation</b>                  98 South Semoran Blvd, Orlando, FL 32807                  Phone Number - 407.380.0402                  Certificate of Authorization Number 6758                  Claude L. Cassagnol, P.E.                  P.E. Number 35490</p>		<p><b>ORANGE COUNTY PUBLIC WORKS</b></p> <table border="1"> <tr> <td>GTC PROJECT NO.</td> <td>TOWN CENTER BLVD. SIDEWALK/CURB RAMP INTERSECTION IMPROVEMENTS</td> <td>OCPW PROJECT NO.</td> <td>2722</td> </tr> </table>		GTC PROJECT NO.	TOWN CENTER BLVD. SIDEWALK/CURB RAMP INTERSECTION IMPROVEMENTS	OCPW PROJECT NO.	2722	<p><b>SIGNING &amp; PAVEMENT MARKINGS</b>  <b>TABULATION OF QUANTITIES</b></p>		<p>SHEET NO. S-1</p>
DATE	DESCRIPTION	DATE	DESCRIPTION																			
GTC PROJECT NO.	TOWN CENTER BLVD. SIDEWALK/CURB RAMP INTERSECTION IMPROVEMENTS	OCPW PROJECT NO.	2722																			



**NOTE:**  
 ALL EXISTING CROSSWALK PAVEMENT MARKINGS AND EXISTING PAVEMENT MARKINGS IN CONFLICT SHALL BE REMOVED BY THE CONTRACTOR AND INCLUDED IN THE COST FOR PROPOSED PAVEMENT MARKINGS. THE METHOD OF REMOVAL OF PAVEMENT MARKINGS SHALL BE APPROVED BY THE COUNTY IN ADVANCE.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

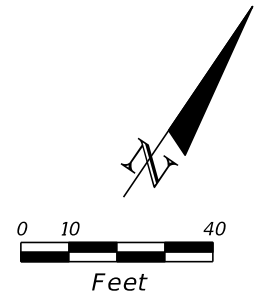
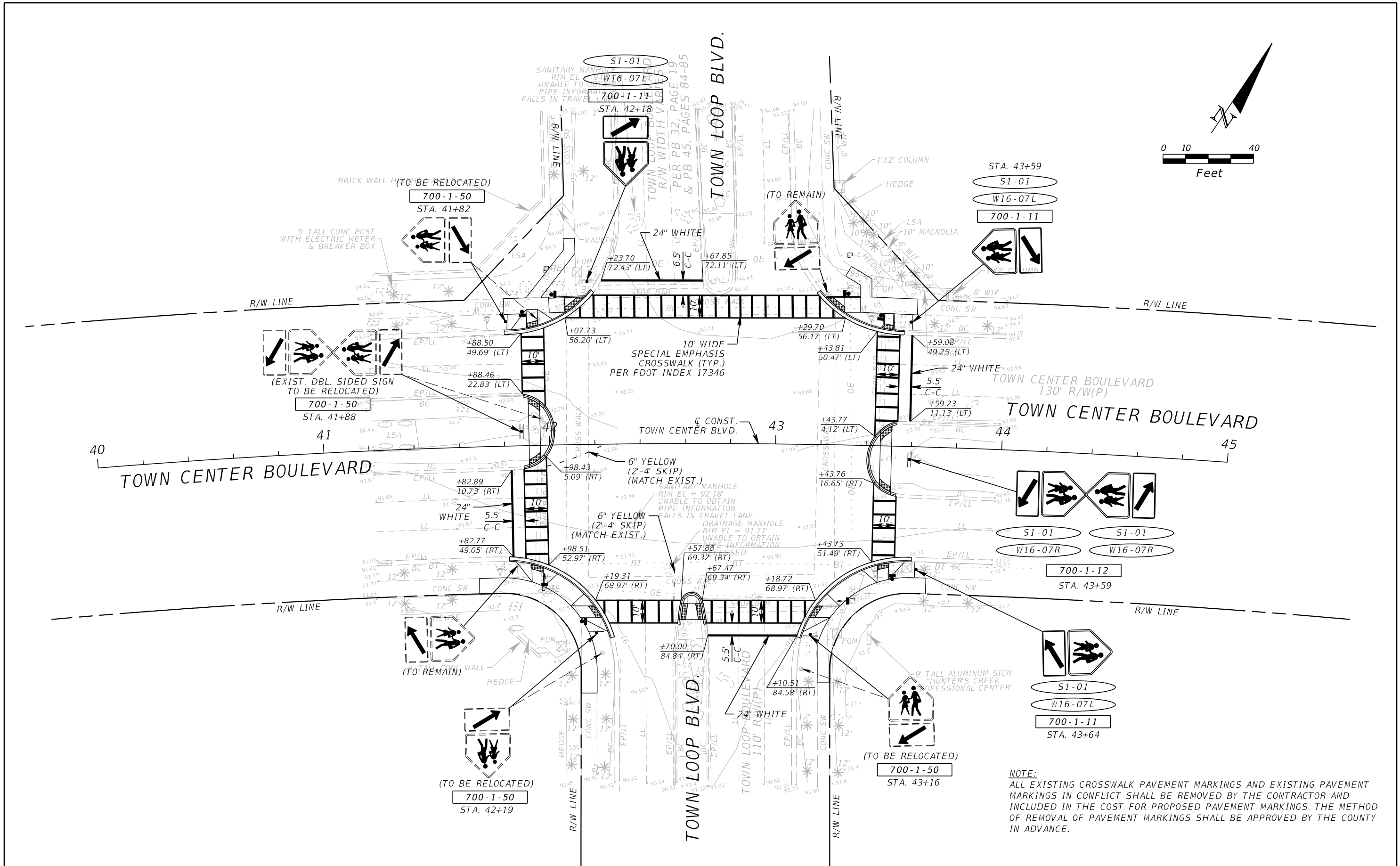
**GTC Engineering Corporation**  
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 P.E. Number 35490

**ORANGE COUNTY PUBLIC WORKS**  
 GTC PROJECT NO. FLO 20.11  
 TOWN CENTER BLVD. SIDEWALK/CURB RAMP INTERSECTION IMPROVEMENTS  
 OCPW PROJECT NO. 2722

**SIGNING & PAVEMENT MARKINGS**  
**HUNTERS CREEK BLVD.**  
**AT TOWN CENTER BLVD.**

SHEET NO. S-2

FILE: H:\Jobs\FLO20.11-TCB\Signing\PLANSPO1.DGN  
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**NOTE:**  
 ALL EXISTING CROSSWALK PAVEMENT MARKINGS AND EXISTING PAVEMENT MARKINGS IN CONFLICT SHALL BE REMOVED BY THE CONTRACTOR AND INCLUDED IN THE COST FOR PROPOSED PAVEMENT MARKINGS. THE METHOD OF REMOVAL OF PAVEMENT MARKINGS SHALL BE APPROVED BY THE COUNTY IN ADVANCE.

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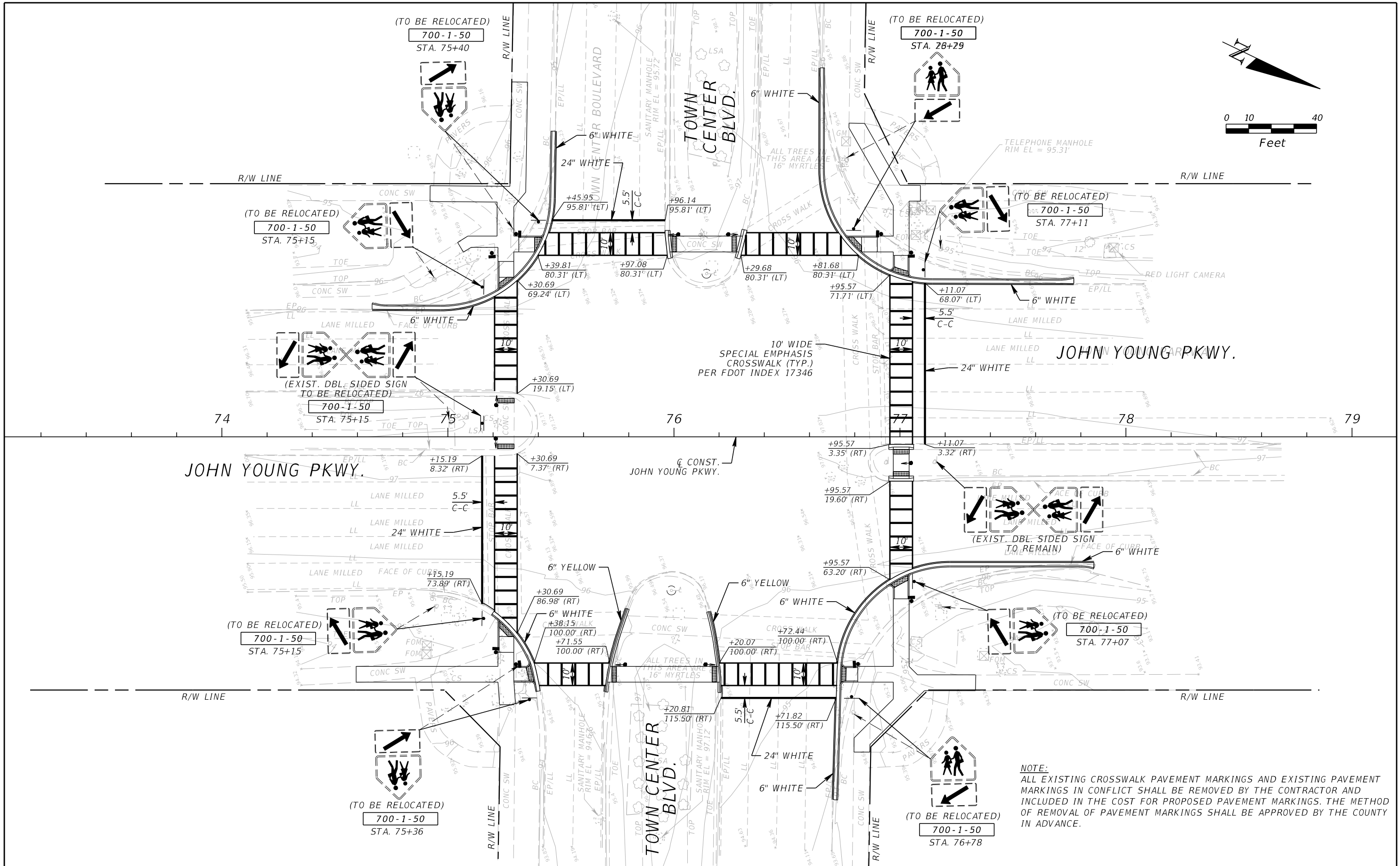
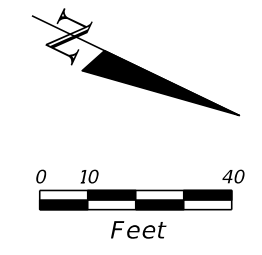
**ORANGE COUNTY PUBLIC WORKS**  
 GTC PROJECT NO. FLO 20.11  
 TOWN CENTER BLVD. SIDEWALK/CURB RAMP INTERSECTION IMPROVEMENTS  
 OCPW PROJECT NO. 2722

**SIGNING & PAVEMENT MARKINGS**  
**TOWN LOOP BLVD.**  
**AT TOWN CENTER BLVD.**

SHEET NO. S-3

FILE: H:\Jobs\FLO20.11-TCB\Signing\PLANS\FLO20.DGN  
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**NOTE:**  
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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

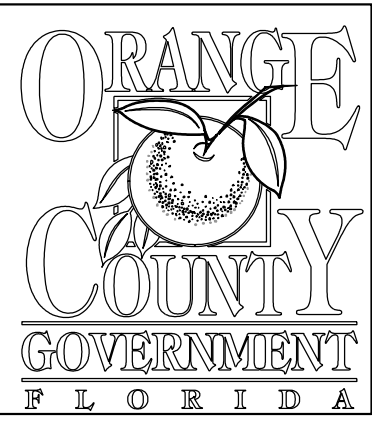
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 Phone Number - 407.380.0402  
 Certificate of Authorization Number 6758  
 Claude L. Cassagnol, P.E.  
 P.E. Number 35490

**ORANGE COUNTY PUBLIC WORKS**  
 GTC PROJECT NO. FLO 20.11  
 TOWN CENTER BLVD. SIDEWALK/CURB RAMP INTERSECTION IMPROVEMENTS  
 OCPW PROJECT NO. 2722

**SIGNING & PAVEMENT MARKINGS**  
**JOHN YOUNG PKWY.**  
**AT TOWN CENTER BLVD.**

SHEET NO. S-4

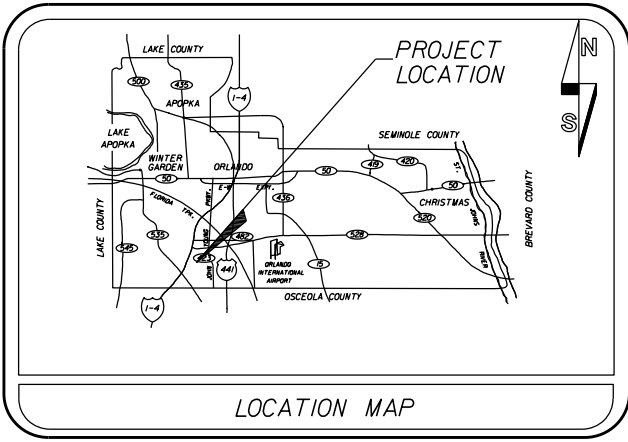
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# SIGNALIZATION PLANS FOR TOWN CENTER BOULEVARD INTERSECTION IMPROVEMENTS ORANGE COUNTY, FLORIDA

DISTRICT 3

FINAL PLANS  
JUNE 2016



SHEET	DESCRIPTION
T-1	KEY SHEET
T-2	TABULATION OF QUANTITIES
T-3	GENERAL NOTES
T-4 to T-6	SIGNALIZATION PLANS

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6/3/2016  
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TERESA JACOBS, COUNTY MAYOR

### BOARD OF COUNTY COMMISSIONERS

- |                       |                       |
|-----------------------|-----------------------|
| S. SCOTT BOYD         | DISTRICT 1            |
| BRYAN NELSON          | DISTRICT 2            |
| PETE CLARKE           | DISTRICT 3            |
| JENNIFER THOMPSON     | DISTRICT 4            |
| TED EDWARDS           | DISTRICT 5            |
| VICTORIA P. SIPLIN    | DISTRICT 6            |
| MARK V. MASSARO, P.E. | PUBLIC WORKS DIRECTOR |

NOTE:  
PLANS WERE PREPARED ACCORDING TO AVAILABLE INFORMATION TO ADEQUATELY ADDRESS CONDITIONS AS THEY EXISTED AT THE TIME OF PLAN PREPARATION. DEEDS, CONDITIONS, AND OWNERSHIP OF PROPERTIES MAY HAVE CHANGED SINCE THE PROJECT DESIGN. THE COUNTY'S REPRESENTATIVE WILL ADDRESS CHANGES AND NEEDS WITH THE PROPERTY OWNER OR THEIR REPRESENTATIVE. CONTRACTOR SHALL WORK WITH THE COUNTY'S REPRESENTATIVE IN ADDRESSING AND MEETING NEEDS AND CONDITIONS THAT MAY HAVE CHANGED SINCE PLANS PREPARATION.

GOVERNING STANDARDS AND SPECIFICATIONS:  
FLORIDA DEPARTMENT OF TRANSPORTATION,  
DESIGN STANDARDS DATED 2016,  
AND STANDARD SPECIFICATIONS FOR ROAD AND  
BRIDGE CONSTRUCTION DATED 2015,  
AS AMENDED BY CONTRACT DOCUMENTS.

### CERTIFICATION TO PLANS

I HEREBY CERTIFY THAT THE DESIGN FOR THIS PROJECT AND THE ATTACHED CONSTRUCTION PLANS COMPLY WITH THE REQUIREMENTS OF SECTION 336.045 OF THE FLORIDA STATUTES AND ARE IN SUBSTANTIAL CONFORMANCE WITH THE STANDARDS CONTAINED IN THE EDITION OF THE "MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS" IN EFFECT ON THIS DATE AS ADOPTED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION PURSUANT TO SUBSECTION 336.045 ( 1 ) OF THE FLORIDA STATUTES.

DATE: \_\_\_\_\_ ENGINEER: KATHRYN L. LEE, P.E. FLORIDA REG. NO. 62420

PLANS PREPARED BY:  
Vanasse Hagen Brustlin, Inc.  
Transportation, Land Development,  
Environmental Services  
225 E. Robinson St., Suite 300  
Landmark Center Two  
Orlando, FL 32801 (407) 839-4006  
Certificate of Authorization # 3932  
Kathryn L. Lee, P.E.  
PE # 62420

REVISIONS	DATE	BY


DESIGNED BY: JMD	DATE: 6/3/2016
CHECKED BY: KLL	DATE: 6/3/2016
DRAWN BY: JMD	DATE: 6/3/2016
APPROVED BY: KLL	DATE: 6/3/2016
PROJECT NO:	62535.03

SHEET T-1



**TABULATION OF QUANTITIES**

PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS												TOTAL THIS SHEET		GRAND TOTAL	
			T-4		T-5		T-6								PLAN	FINAL	PLAN	FINAL
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL				
630-2-11	CONDUIT, F&I, OPEN TRENCH	LF	119		79		250								448		448	
630-2-12	CONDUIT, F&I, DIRECTIONAL BORE	LF	134				168								302		302	
632-7-1	SIGNAL CABLE - NEW OR RECONSTRUCTED INTERSECTION, FURNISH & INSTALL	PI	1		1		1								3		3	
635-2-11	PULL & SPLICE BOX, F&I, 13"X24"	EA	2				2								4		4	
646-1-11	ALUMINUM SIGNALS POLE, F&I, PEDESTAL	EA	6		5		7								18		18	
646-1-12	ALUMINUM SIGNALS POLE, F&I, PEDESTRIAN DETECTOR POST	EA					7								7		7	
646-1-60	ALUMINUM SIGNALS POLE, REMOVE	EA	2		1		6								9		9	
653-1-11	PEDESTRIAN SIGNAL, F&I, LED COUNTDOWN, 1 WAY	AS	8		5		8								21		21	
653-1-60	PEDESTRIAN SIGNAL, REMOVE PED SIGNAL, PEDESTAL TO REMAIN	AS	2		1		1								4		4	
660-4-51	VEHICLE DETECTION SYSTEM, VIDEO, MODIFY CABINET EQUIPMENT	EA	1		1		1								3		3	
665-1-12	PEDESTRIAN DETECTOR, F&I, ACCESSIBLE	EA	8		8		15								31		31	
665-1-60	PEDESTRIAN DETECTOR, REMOVE, PEDESTAL TO REMAIN	EA	4		4		2								10		10	
671-2-40	TRAFFIC CONTROLLER, MODIFY	EA	1		1		1								3		3	

<b>REVISIONS</b>				Vanasse Hangen Brustlin, Inc. Transportation, Land Development, Environmental Services 225 E. Robinson St., Suite 300 Landmark Center Two Orlando, FL 32801 (407) 839-4006 Certificate of Authorization # 3932 Kathryn L. Lee, P.E. PE # 62420	 ORANGE COUNTY PUBLIC WORKS ENGINEERING DIVISION 4200 SOUTH JOHN YOUNG PARKWAY ORLANDO, FLORIDA 32839-9205 (407) 836-7908	<b>TABULATION OF QUANTITIES</b>	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION				T-2

1. THE SIGNALIZATION PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH THE FDOT'S DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, DATED 2016. GOVERNING SPECIFICATIONS ARE THE STATE OF FLORIDA, 2016 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND SUPPLEMENTS THERETO IF NOTED IN SPECIAL PROVISIONS FOR THIS PROJECT.

2. THESE PLANS REFLECT CONDITIONS KNOWN DURING PLAN DEVELOPMENT. IN THE EVENT ACTUAL PHYSICAL CONDITIONS PREVENT THE APPLICATION OR THE PROGRESSION OF ANY WORK SPECIFIED IN THESE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY AND PRIOR TO ANY FURTHER WORK ACTIVITY.

3. WHENEVER SIGNAL WORK IS BEING PERFORMED AT AN INTERSECTION (INSTALLING CONDUIT IN THE STREET, REMOVING EXISTING SIGNAL EQUIPMENT, INSTALLING NEW SIGNAL EQUIPMENT, INSTALLING LOOPS AND RUNS) WHERE A LANE IS CLOSED AN OFF-DUTY LAW ENFORCEMENT OFFICER SHALL DIRECT TRAFFIC. THE COST OF THE OFF-DUTY LAW ENFORCEMENT OFFICER SHALL BE INCIDENTAL TO THE WORK AND WILL NOT BE PAID SEPARATELY.

4. DURING NON-WORKING HOURS, NO EQUIPMENT, VEHICLES OR MATERIAL SHALL BE PARKED OR STORED WITHIN 30 FEET (9 METERS) OF THE ROADWAY CARRYING TRAFFIC. IF THE ABOVE IS NOT POSSIBLE, A STORAGE AREA WITH PROPER DELINEATION AND ADVANCED WARNING SHALL BE USED WITH THE APPROVAL OF THE ENGINEER.

5. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE UTILITY DEPARTMENT AT LEAST 48 HOURS IN ADVANCE OF POLE SETTING OPERATIONS WHERE A CONFLICT WITH OVERHEAD ELECTRICAL CONDUCTORS IS EXPECTED AND IN ALL CASES WHERE JOINT POLES ARE TO BE USED.

6. AT THE TIME OF FINAL PROJECT INSPECTION THE CONTRACTOR SHALL FURNISH TO THE INSPECTOR THREE COMPLETE SETS OF AS-BUILT PLANS. ONE SET SHALL BE LEFT IN THE CABINET FOR THE LOCAL MAINTAINING AGENCY, ORANGE COUNTY.

7. THE CONTRACTOR SHALL HAVE AN IMSA LEVEL II CERTIFIED SIGNAL TECHNICIAN ON CALL WITHIN A MAXIMUM OF TWO HOURS RESPONSE TIME.

8. THE CONTRACTOR SHALL NOTIFY ORANGE COUNTY TRAFFIC OPERATIONS (407-836-7890) AT LEAST 24 HOURS IN ADVANCE OF INSTALLING UNDERGROUND CONDUIT SO THAT THESE OPERATIONS MAY BE OBSERVED.

9. IT SHOULD BE NOTED THAT NO TEST BORINGS WERE MADE WHERE CONDUIT RUNS ARE TO BE INSTALLED BY JACKING OR TRENCHING. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE JOB SITE CONDITIONS BEFORE SUBMITTING BID PROPOSALS IN ACCORDANCE WITH SECTION 2-4 OF THE FDOT SPECIFICATIONS.

10. AS DIRECTED BY THE PROJECT ENGINEER, THE CONTRACTOR SHALL ADJUST CONDUIT VERTICALLY TO AVOID ANY POSSIBLE CONFLICTS WITH UNDERGROUND UTILITIES.

11. ALL CONDUITS TO BE INSTALLED UNDER PAVEMENT OR SIDEWALK SHALL BE INSTALLED PRIOR TO THE INSTALLATION OF THE BASE COURSE OR SIDEWALK.

12. ALL CONDUIT SHALL BE SCHEDULE 40, 2 INCH (5 CM) DIA. MINIMUM UNLESS OTHERWISE SPECIFIED IN PLANS, EXCEPT ELECTRICAL POWER SERVICE DUCT.

13. THE CONTRACTOR SHALL INSTALL A CONDUIT STUB WITH CAP A MINIMUM OF 12 INCHES (30 CM) OUTSIDE THE POLE FOOTING COMPLETE WITH SWEEP UP INTO THE POLE, IN EACH CONDUIT ENTRANCE IN THE POLE. THE FOOTING, TOP OF THE SIDEWALK, SIDE OF THE POLE, ETC. SHALL BE MARKED WITH AN APPROPRIATE ETCHED "X" IN ORDER THAT IT MAY BE READILY LOCATED FOR FUTURE USE.

14. ALL ENDS OF CONDUITS IN PULL BOXES AND CABINETS SHALL BE SEALED WITH ELECTRICAL PUTTY AFTER WIRING IS COMPLETE.

15. PULL BOXES SHALL BE PLACED BEHIND CURB AND GUTTER. IF THERE IS NO CURB AND GUTTER, THEN PULL BOXES SHALL BE PLACED AT LEAST 7 FEET (2.1 METERS) FROM THE EDGE OF PAVEMENT.

16. UNLESS SPECIFIED OTHERWISE, ALL PULL BOX COVERS TO BE FURNISHED AND INSTALLED SHALL BE NON-METALLIC.

17. UNDER NO CIRCUMSTANCES SHALL ENERGIZED CABLE BE PLACED IN THE SAME CONDUIT OR PULL BOX AS LOOP LEAD-IN CABLE.

18. ALL CABLE SHALL BE PULLED IN THE CONDUIT WITH A CABLE GRIP DESIGNED TO PROVIDE A FIRM HOLD ON THE EXTERIOR COVERING OF THE CABLE. A WINCH WITH A SLIP CLUTCH SHALL BE USED TO ENSURE THAT THE ALLOWABLE TENSION UNIT IS NOT EXCEEDED. AN APPROVED LUBRICANT SHALL BE USED TO FACILITATE THE PULLING OF THE CABLE.

19. THE CONTRACTOR SHALL VERIFY COLOR CODES FOR SIGNAL WITH ORANGE COUNTY BEFORE ORDERING. WIRING DIAGRAMS SHALL BE IN ACCORDANCE WITH ORANGE COUNTY SPECIFICATIONS.

20. ALL FIELD WIRING SHALL BE NEATLY BUNDLED AND CLEARLY IDENTIFIED WITH PERMANENT LEGIBLE, WEATHERPROOF TAGS THAT ARE SECURELY ATTACHED TO EACH CABLE. THE TAGGING SYSTEM PROPOSED SHALL BE SUBMITTED FOR APPROVAL WITH THE OTHER EQUIPMENT SUBMITTALS REQUIRED FOR THIS PROJECT.

21. THREE SPARE WIRES ARE REQUIRED PER SIGNAL CABLE. SPARES SHALL BE BOUND AND GROUNDED IN CABINET.

22. NO POLYCARBONATE HOUSING OR MOUNTING HARDWARE WILL BE PERMITTED FOR VEHICULAR OR PEDESTRIAN SIGNAL HEAD ASSEMBLIES. ALL LENSES FOR THESE HEADS SHALL BE GLASS. ALL SIGNAL HEADS SHALL BE BLACK ALUMINUM. TUNNEL VISORS SHALL BE USED ON ALL SIGNAL SECTIONS. PAYMENT FOR TUNNEL VISORS SHALL BE INCLUDED IN THE PRICE OF THE SIGNAL HEADS.

23. THE USE OF "JONES" PLUGS FOR SIGNAL INSTALLATIONS SHALL BE PROHIBITED.

24. ALL SIGNAL INDICATIONS SHALL BE LED. LED SIGNAL PRODUCT INFORMATION SHALL BE SUBMITTED TO ORANGE COUNTY FOR APPROVAL.

25. EXISTING SIGNALIZATION SHALL REMAIN IN PLACE TO THE EXTENT POSSIBLE AND SHALL BE USED FOR THE MAINTENANCE OF TRAFFIC AS REQUIRED. THE MAINTENANCE OF EXISTING SIGNALS, UNTIL REMOVED, SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR.

26. PUSH BUTTONS SHALL BE CONSTRUCTED WITH MECHANICAL CONTACTS. MICROSWITCHES SHALL NOT BE USED.

27. UNLESS OTHERWISE NOTED, ALL REMOVED EQUIPMENT EXCEPT CONCRETE POLES SHALL BE DELIVERED TO THE MAINTAINING AGENCY. THE MAINTAINING AGENCY IS:  
ORANGE COUNTY TRAFFIC OPERATIONS  
4200 SOUTH JOHN YOUNG PARKWAY  
ORLANDO, FLORIDA 32839-9205 (407) 836-7804

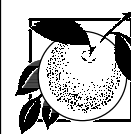
28. IN THE EVENT PERMANENT VEHICLE DETECTION DISRUPTED, PROVIDE AN ALTERNATIVE MEANS OF DETECTION TO ALL LANES APPROACHING THE INTERSECTION, SEPARATING EACH MOVEMENT WHICH PREVIOUSLY HAD DETECTION. THE TYPE OF DETECTOR SHALL APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. EQUIPMENT SHALL ONLY DETECT THE INTENDED MOVEMENT.

29. PULL BOX COVERS SHALL BE LABELED "TRAFFIC SIGNAL" AND SHALL BE ORANGE COLORED. PULL BOX LIDS SHALL HAVE A STAINLESS STEEL LOCKING BOLT.

REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION

Vanasse Hangen Brustlin, Inc.  
Transportation, Land Development,  
Environmental Services  
225 E. Robinson St., Suite 300  
Landmark Center Two  
Orlando, FL 32801 (407) 839-4006  
Certificate of Authorization # 3932  
Kathryn L. Lee, P.E.  
PE # 62420



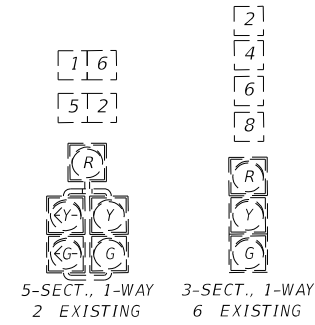
ORANGE COUNTY PUBLIC WORKS  
ENGINEERING DIVISION  
4200 SOUTH JOHN YOUNG PARKWAY  
ORLANDO, FLORIDA 32839-9205  
(407) 836-7908

GENERAL NOTES

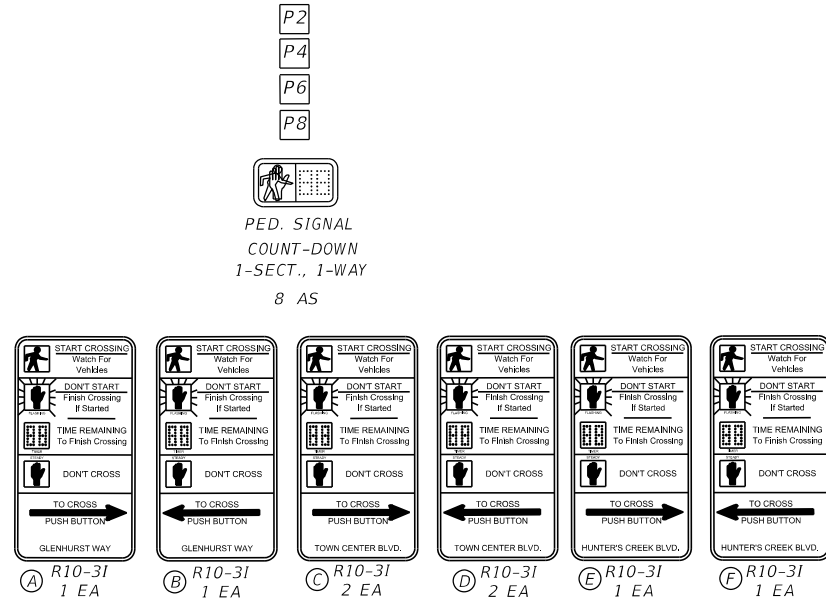
SHEET NO.

T-3

**TRAFFIC SIGNAL DETAIL**



**PEDESTRIAN SIGNAL DETAIL**



**VIDEO DETECTION CHART**

VIDEO DETECTOR #	MOVEMENT	DETECTION ZONE	DELAY TIME (SEC)
VD 2	2	VDZ 2A	-
	5	VDZ 2B	-
VD 4	4	VDZ 4	-
	7	VDZ 7	-
VD 6	1	VDZ 6A	5
	6	VDZ 6B	-
VD 8	8	VDZ 8	-
		VDZ 8R	5

DELAY TIME IS INITIAL AND MAY REQUIRE FIELD ADJUSTING AS DIRECTED BY PROJECT ENGINEER.

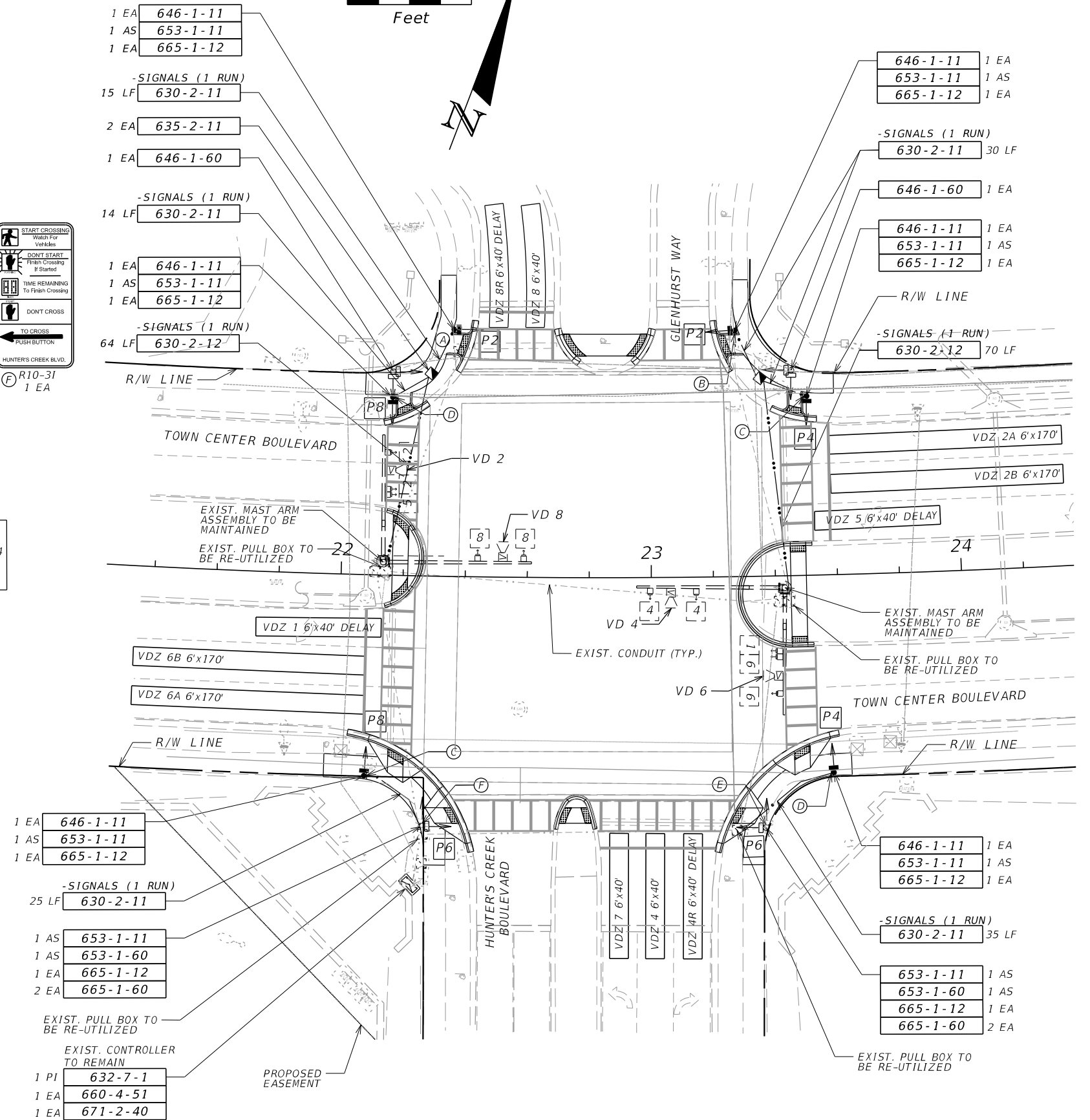
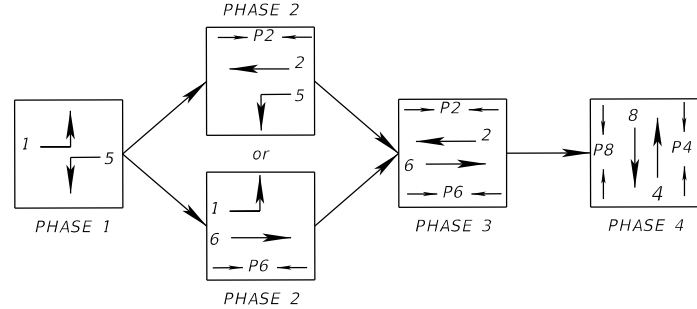
**CONTROLLER TIMINGS**

TIMING FUNCTION	1	2	3	4	5	6	7	8
MINIMUM GREEN								
EXTENSION								
MAXIMUM GREEN 1								
MAXIMUM GREEN 2								
YELLOW CLEARANCE	4.4	4.4	4.4	4.4	4.4	4.4	3.4	3.4
ALL RED	2.8	2.0	3.3	2.8	2.0		3.3	3.3
PEDESTRIAN WALK	7	7	7	7	7		7	7
PED. CLEARANCE	24	31	26	32				
RECALL								

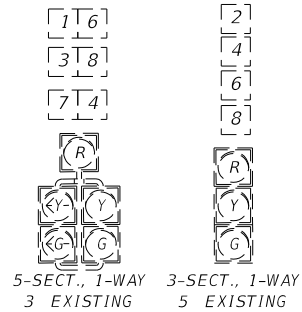
EXISTING TIMINGS TO REMAIN WITH THE NOTED REVISIONS

NOTES:  
1. TOWN CENTER BOULEVARD, MOVEMENTS 2 AND 6, IS THE MAJOR ROADWAY, WITH A POSTED SPEED LIMIT OF 40 MPH. THE MINOR ROADWAYS ARE HUNTER'S CREEK BOULEVARD, MOVEMENT 4, AND GLENHURST WAY, MOVEMENT 8. HUNTER'S CREEK BOULEVARD HAS A POSTED SPEED LIMIT OF 40 MPH AND GLENHURST WAY HAS A POSTED SPEED LIMIT OF 25 MPH.  
2. PULL BOXES AND CONDUIT SHALL BE MAINTAINED AND RE-UTILIZED TO THE EXTENT POSSIBLE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO WIRE THE PROPOSED PEDESTRIAN SIGNALS TO THE APPROPRIATE EXISTING SIGNAL PULL BOX.

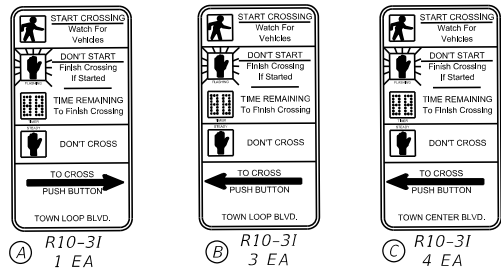
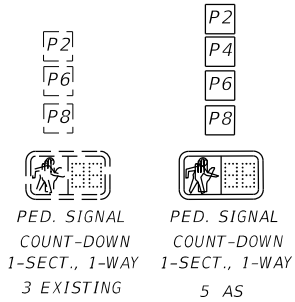
**MOVEMENT DIAGRAM S.O.P. 7**



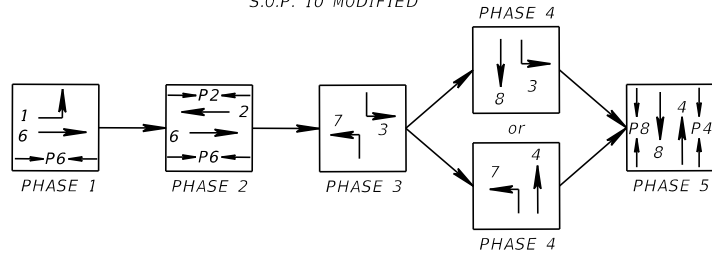
**TRAFFIC SIGNAL DETAIL**



**PEDESTRIAN SIGNAL DETAIL**



**MOVEMENT DIAGRAM**  
S.O.P. 10 MODIFIED



**VIDEO DETECTION CHART**

VIDEO DETECTOR #	MOVEMENT	DETECTION ZONE	DELAY TIME (SEC)
VD 2	2	VDZ 2A	-
		VDZ 2B	-
	5	VDZ 5	-
VD 4	4	VDZ 4A	5
	7	VDZ 7	5
VD 6	1	VDZ 1	5
	6	VDZ 6A	-
VD 8	8	VDZ 8	-
		VDZ 8R	5
	3	VDZ 3	5

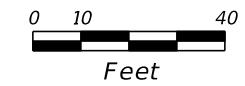
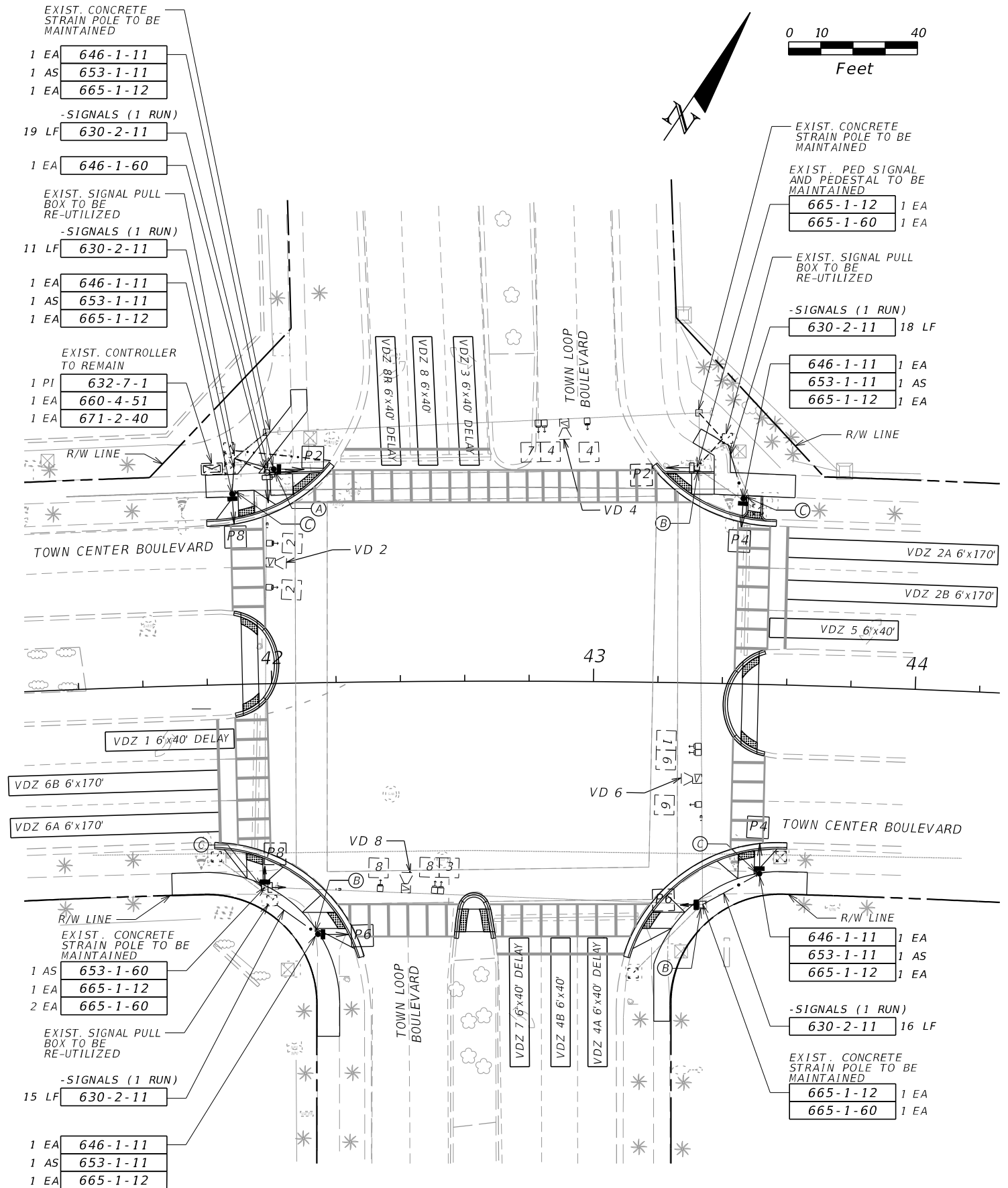
DELAY TIME IS INITIAL AND MAY REQUIRE FIELD ADJUSTING AS DIRECTED BY PROJECT ENGINEER.

**CONTROLLER TIMINGS**

TIMING FUNCTION	1	2	3	4	5	6	7	8
MINIMUM GREEN								
EXTENSION								
MAXIMUM GREEN 1								
MAXIMUM GREEN 2								
YELLOW CLEARANCE	4.4	4.4	4.0	4.0		4.4	4.0	4.0
ALL RED	4.2	2.6	3.8	3.0		2.6	3.7	2.9
PEDESTRIAN WALK		7		7		7		7
PED. CLEARANCE		33		30		28		31
RECALL								

EXISTING TIMINGS TO REMAIN WITH THE NOTED REVISIONS

NOTES:  
1. TOWN CENTER BOULEVARD, MOVEMENTS 2 AND 6, IS THE MAJOR ROADWAY, WITH A POSTED SPEED LIMIT OF 40 MPH. TOWN LOOP BOULEVARD, MOVEMENTS, 4 AND 8, IS THE MINOR ROADWAY, WITH A POSTED SPEED LIMIT OF 35 MPH.  
2. PULL BOXES AND CONDUIT SHALL BE MAINTAINED AND RE-UTILIZED TO THE EXTENT POSSIBLE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO WIRE THE PROPOSED PEDESTRIAN SIGNAL TO THE APPROPRIATE EXISTING SIGNAL PULL BOX.

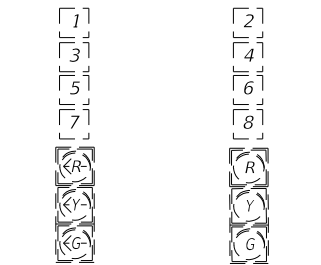


REVISIONS		REVISIONS		<p>ORANGE COUNTY PUBLIC WORKS ENGINEERING DIVISION 4200 SOUTH JOHN YOUNG PARKWAY ORLANDO, FLORIDA 32839-9205 (407) 836-7908</p>	SHEET NO. T-5
DATE	DESCRIPTION	DATE	DESCRIPTION		

Vanasse Hangen Brustlin, Inc.  
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Certificate of Authorization # 3932  
Kathryn L. Lee, P.E.  
PE # 62420

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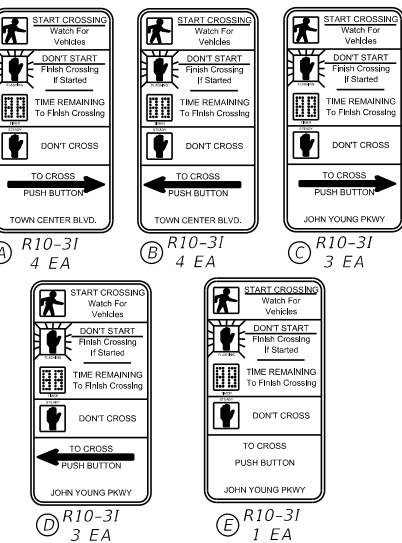
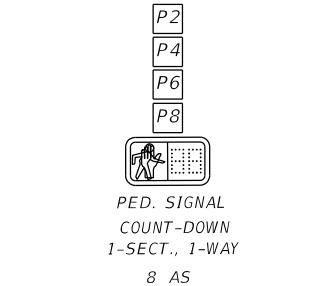
**TRAFFIC SIGNAL DETAIL**



3-SECT., 1-WAY  
6 EXISTING

3-SECT., 1-WAY  
8 EXISTING

**PEDESTRIAN SIGNAL DETAIL**

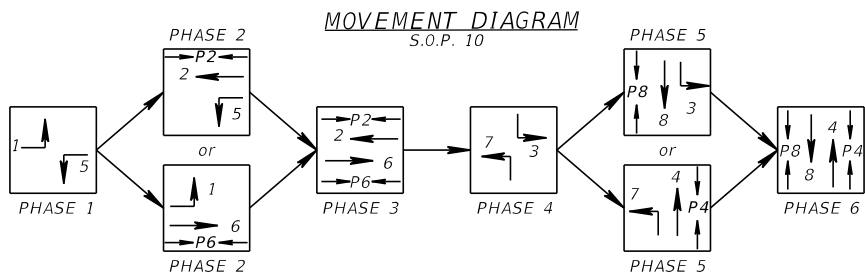


CONTROLLER TIMINGS								
TIMING FUNCTION	1	2	3	4	5	6	7	8
MOVEMENT NUMBER	1	2	3	4	5	6	7	8
MINIMUM GREEN								
EXTENSION								
MAXIMUM GREEN 1								
MAXIMUM GREEN 2								
YELLOW CLEARANCE	4.8	4.8	4.4	4.4	4.8	4.8	4.4	4.4
ALL RED	3.3	2.0	4.4	2.3	5.3	2.0	3.9	2.0
PEDESTRIAN WALK	7		7		7		7	
PED. CLEARANCE	40		39		40		44	
RECALL								

EXISTING TIMINGS TO REMAIN WITH THE NOTED REVISIONS

VIDEO DETECTION CHART			
VIDEO DETECTOR #	MOVEMENT	DETECTION ZONE	DELAY TIME (SEC.)
VD 2	2	VDZ 2A	-
		VDZ 2B	-
		VDZ 2C	-
VD 5	5	VDZ 5A	-
		VDZ 5B	-
VD 8	3	VDZ 3A	-
		VDZ 3B	-
		VDZ 3C	-
VD 4	4	VDZ 4A	-
		VDZ 4B	-
VD 6	1	VDZ 6A	-
		VDZ 6B	-
		VDZ 6C	-

DELAY TIME IS INITIAL AND MAY REQUIRE FIELD ADJUSTING AS DIRECTED BY PROJECT ENGINEER.



NOTES:  
1. JOHN YOUNG PARKWAY, MOVEMENTS 2 AND 6, IS THE MAJOR ROADWAY, WITH A POSTED SPEED LIMIT OF 45 MPH. TOWN CENTER BOULEVARD, MOVEMENTS 4 AND 8, IS THE MINOR ROADWAY, WITH A POSTED SPEED LIMIT OF 40 MPH.  
2. PULL BOXES AND CONDUIT SHALL BE MAINTAINED AND RE-UTILIZED TO THE EXTENT POSSIBLE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO WIRE THE PROPOSED PEDESTRIAN SIGNAL TO THE APPROPRIATE EXISTING SIGNAL PULL BOX.

0 10 40

Feet

R/W LINE

2 EA 646-1-12

2 EA 665-1-12

1 EA 646-1-11

1 AS 653-1-11

1 EA 665-1-12

-SIGNALS (1 RUN)

15 LF 630-2-11

EXIST. SIGNAL PULL BOX TO BE RE-UTILIZED

1 AS 653-1-11

1 AS 653-1-60

1 EA 665-1-12

2 EA 665-1-60

1 EA 646-1-60

-SIGNALS (1 RUN)

34 LF 630-2-11

EXIST. MAST ARM ASSEMBLY TO BE MAINTAINED

15 LF 630-2-11

71 LF 630-2-12

646-1-60 1 EA

646-1-12 1 EA

665-1-12 1 EA

VDZ 7 6'x40'

VDZ 6C 6'x330'

VDZ 6B 6'x330'

VDZ 6A 6'x330'

VDZ 7 6'x40'

VDZ 6C 6'x330'

VDZ 6B 6'x330'

VDZ 6A 6'x330'

VDZ 7 6'x40'

VDZ 6C 6'x330'

VDZ 6B 6'x330'

VDZ 6A 6'x330'

VDZ 7 6'x40'

VDZ 6C 6'x330'

VDZ 6B 6'x330'

VDZ 6A 6'x330'

VDZ 7 6'x40'

VDZ 6C 6'x330'

VDZ 6B 6'x330'

VDZ 6A 6'x330'

VDZ 7 6'x40'

VDZ 6C 6'x330'

VDZ 6B 6'x330'

VDZ 6A 6'x330'

VDZ 7 6'x40'

VDZ 6C 6'x330'

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VDZ 6A 6'x330'

VDZ 7 6'x40'

VDZ 6C 6'x330'

VDZ 6B 6'x330'

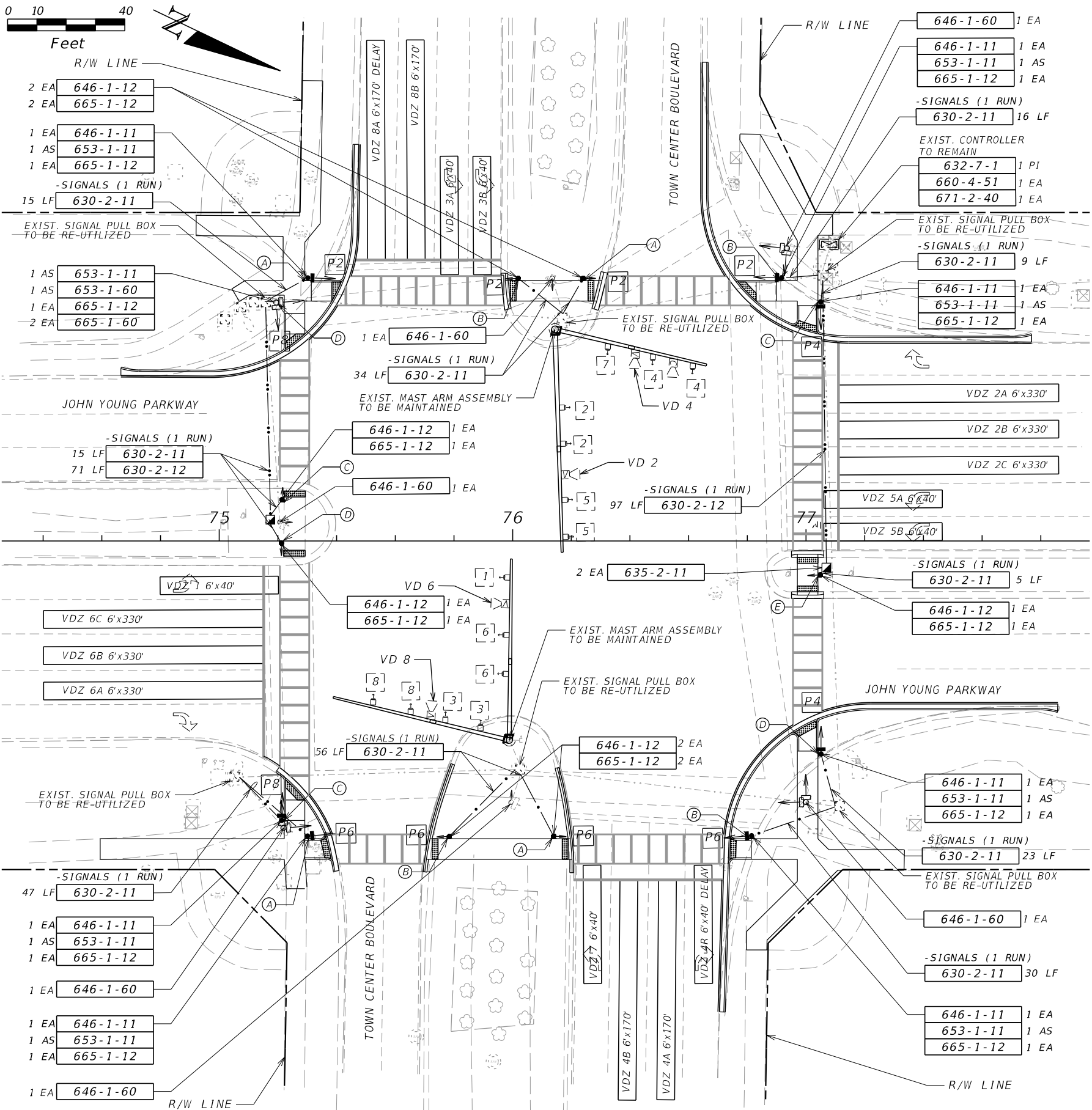
VDZ 6A 6'x330'

VDZ 7 6'x40'

VDZ 6C 6'x330'

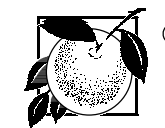
VDZ 6B 6'x330'

VDZ 6A 6'x330'



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

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ORANGE COUNTY PUBLIC WORKS  
ENGINEERING DIVISION  
4200 SOUTH JOHN YOUNG PARKWAY  
ORLANDO, FLORIDA 32839-9205  
(407) 836-7908

**SIGNALIZATION PLAN**

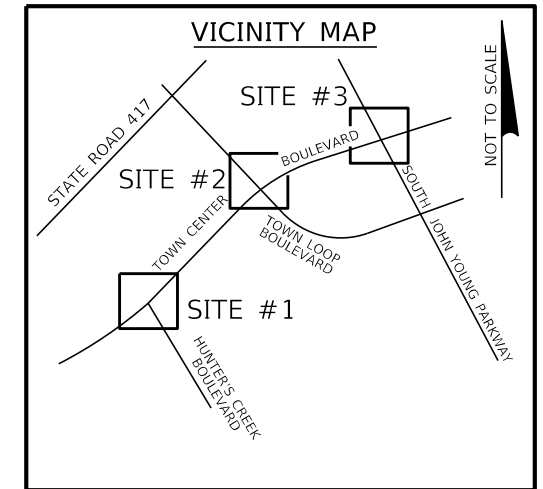
SHEET NO.  
T-6

# TOPOGRAPHIC SURVEY

## TOWN CENTER BOULEVARD INTERSECTIONS

### CROSS WALK IMPROVEMENTS PROJECT

LYING IN SECTIONS 28, 29 & 32, TOWNSHIP 24 SOUTH,  
RANGE 29 EAST, ORANGE COUNTY, FLORIDA



#### SURVEYOR'S REPORT

1. THE PURPOSE OF THIS SURVEY IS TO ESTABLISH THE EXISTING RIGHT OF WAY LINES OF THREE INTERSECTIONS ALONG TOWN CENTER BOULEVARD WITH HUNTER'S CREEK BOULEVARD, WEST TOWN LOOP BOULEVARD AND SOUTH JOHN YOUNG PARKWAY BY ESTABLISHING OR RE-ESTABLISHING CORNERS, MONUMENTS AND BOUNDARY LINES, AND TO ESTABLISH THE HORIZONTAL AND VERTICAL SPATIAL RELATIONSHIP OF THE NATURAL OR MANMADE FEATURES LYING WITHIN THE DEFINED TOPOGRAPHIC SURVEY LIMITS NOTED ABOVE.

2. BEARINGS AND COORDINATES SHOWN HEREON ARE RELATIVE TO THE FLORIDA STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983/2011 ADJUSTMENT (NAD83/11), ZONE 901, FLORIDA EAST.

3. ELEVATIONS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AS ESTABLISHED FROM THE FOLLOWING ORANGE COUNTY BENCHMARKS:

A1199003  
FOUND 3.5" ORANGE COUNTY ALUMINUM DISK IN WEST SIDE OF 7' CONCRETE SIDEWALK AT SOUTHWEST QUADRANT OF JOHN YOUNG PARKWAY AND TOWN CENTER BOULEVARD.  
PUBLISHED ELEVATION = 95.460 (NAVD88)

A1199007  
FOUND 3.5" ALUMINUM DISK AT THE NORTHEAST CORNER OF TEAL POINT ROAD & JOHN YOUNG PARKWAY IN A CONCRETE DROP INLET, 35'± NORTH OF THE CENTERLINE OF TEAL POINT ROAD & 150'± EAST  
PUBLISHED ELEVATION = 91.813 FEET (NAVD88)

S1338005  
FOUND 3.5" ORANGE COUNTY ALUMINUM DISK IN CENTERLINE OF 7' CONCRETE SIDEWALK AT NORTHWEST QUADRANT OF TOWN CENTER BOULEVARD AND TOWN LOOP BOULEVARD.  
PUBLISHED ELEVATION = 94.245 FEET (NAVD88)

S1338009  
FOUND 3" ORANGE COUNTY CONTROL DISK IN CENTERLINE OF 7' CONCRETE SIDEWALK; NORTH SIDE OF TOWN CENTER BOULEVARD 566 FEET ± WEST OF THE CENTERLINE OF LORD BARCLAY DRIVE AND SOUTH OF A CUL-DE-SAC NAMED ROXSHIRE DRIVE.  
PUBLISHED ELEVATION = 88.150 FEET (NAVD88)

S1350015  
FOUND 3" ORANGE COUNTY ALUMINUM DISK IN NORTH END CONCRETE MEDIAN AT SOUTH SIDE OF TOWN CENTER BOULEVARD AND HUNTER'S CREEK BOULEVARD INTERSECTION.  
PUBLISHED ELEVATION = 88.830 FEET (NAVD88)

4. THE SURVEYOR HAS NOT ABSTRACTED THE LANDS SHOWN HEREON FOR EASEMENTS AND/OR RIGHT-OF-WAY RECORDS. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT.

5. THE LOCATION OF UNDERGROUND UTILITY LINES SHOWN HEREON WERE DETERMINED BY A CALL SUNSHINE LOCATE REQUEST, TICKET NUMBERS 265501893, 265501971 AND 265504631, AND BY EXAMINATION OF SURFACE APPURTENANCES OF SAID UTILITIES.

6. NO UNDERGROUND INSTALLATIONS OR IMPROVEMENTS HAVE BEEN LOCATED EXCEPT AS SHOWN.

7. UNLESS IT BEARS THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER THIS DRAWING, SKETCH, PLAT, OR MAP IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT VALID.

8. ALL RECORDING REFERENCES SHOWN ON THIS SURVEY REFER TO THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA, UNLESS OTHERWISE NOTED.

9. ALL STATION AND OFFSETS ARE TO THE BASELINE OF SURVEYS.

#### LEGEND

	= CABLE TELEVISION PEDESTAL
	= COLUMN
	= DRAINAGE MANHOLE
	= ELECTRIC BOX
	= END NOT FOUND OR LOCATED
	= FLOOD LIGHT
	= LIGHT POLE
	= NON POTABLE/RECLAIM VALVE
	= NON POTABLE/RECLAIM VALVE COVER
	= OAK TREE
	= PALM TREE
	= PEDESTRIAN SIGNAL
	= POST/UTILITY MARKER
	= SANITARY MANHOLE
	= SANITARY VALVE COVER
	= SERVICE CABINET
	= SHRUB
	= SIGNAL MAST ARM
	= SIGNAL SPAN POLE
	= SINGLE SUPPORT SIGN
	= SPOT ELEVATION
	= TELEPHONE MANHOLE
	= TELEPHONE PEDESTAL
	= TRANSFORMER
	= TREE UNKNOWN (UNLESS OTHERWISE NOTED)
	= WATER METER
	= WATER VALVE
	= WATER VALVE BOX
	= WATER VALVE COVER
	= WIRING PULL BOX
	--- BE --- = BURIED ELECTRIC LINE
	----- = BURIED GAS LINE
	--- NPW --- = BURIED NON POTABLE/RECLAIM WATER LINE
	--- S --- = BURIED SANITARY SEWER FORCE MAIN
	--- BT --- = BURIED TELEPHONE LINE
	--- BTV --- = BURIED TELEVISION LINE
	--- W --- = BURIED WATER LINE
	--- OE --- = OVERHEAD ELECTRIC/POWER LINE

#### ABBREVIATIONS

BC	= BACK OF CURB
B	= BASELINE
(C)	= CALCULATED
CL	= CENTERLINE
CB	= CHORD BEARING
CD	= CHORD DISTANCE
CONC	= CONCRETE
CM	= CONCRETE MONUMENT
CPP	= CORRUGATED PLASTIC PIPE
Δ	= DELTA (CENTRAL ANGLE)
E:	= EASTING
EP	= EDGE OF PAVEMENT
EL	= ELEVATION
FOM	= FIBER OPTIC CABLE MARKER
FND	= FOUND
GM	= GAS MARKER
ID	= IDENTIFICATION
INV	= INVERT
IRC	= IRON ROD & CAP
LSA	= LANDSCAPE AREA
LL	= LANE LINE
LT	= LEFT
L	= LENGTH
LC	= LIGUSTRUM CLUSTER
M	= CRAPE MYRTLE
NAVD88	= NORTH AMERICAN VERTICAL DATUM OF 1988
N:	= NOTHING
N/A	= NOT APPLICABLE
(P)	= PLAT
PB	= PLAT BOOK
PC	= POINT OF CURVATURE
PI	= POINT OF INTERSECTION
PT	= POINT OF TANGENCY
PVC	= POLYVINYL CHLORIDE
R	= RADIUS
RCP	= REINFORCED CONCRETE PIPE
RT	= RIGHT
R/W	= RIGHT OF WAY
SW	= SIDEWALK
STA	= STATION
T	= TANGENT LENGTH
TOE	= TOE OF SLOPE
TOP	= TOP OF BANK
WIF	= WROUGHT IRON FENCE

#### SURVEYOR'S CERTIFICATION

I HEREBY CERTIFY THAT A SURVEY OF THE PROPERTY SHOWN HEREON WAS MADE UNDER MY SUPERVISION AND THAT THE SURVEY MEETS THE STANDARDS OF PRACTICE AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO CHAPTER 472.027 OF THE FLORIDA STATUTES AND THAT THE SKETCH HEREON IS A TRUE AND ACCURATE REPRESENTATION THEREOF TO THE BEST OF MY KNOWLEDGE AND BELIEF. SUBJECT TO NOTES AND NOTATIONS SHOWN.

THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2015

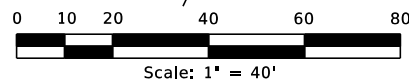
H. Paul deVivero, Professional Land Surveyor No. 4990  
Land Surveyor Business License No. 6556  
VALID ONLY WITH SIGNATURE AND EMBOSSED SEAL

SHEET INDEX	
SHEET	CONTENTS
SV-1	COVER
SV-2	HUNTER'S CREEK BOULEVARD INTERSECTION DETAILS
SV-3	WEST TOWN LOOP BOULEVARD INTERSECTION DETAILS
SV-4	SOUTH JOHN YOUNG PARKWAY INTERSECTION DETAILS
SV-5	REFERENCE DETAILS

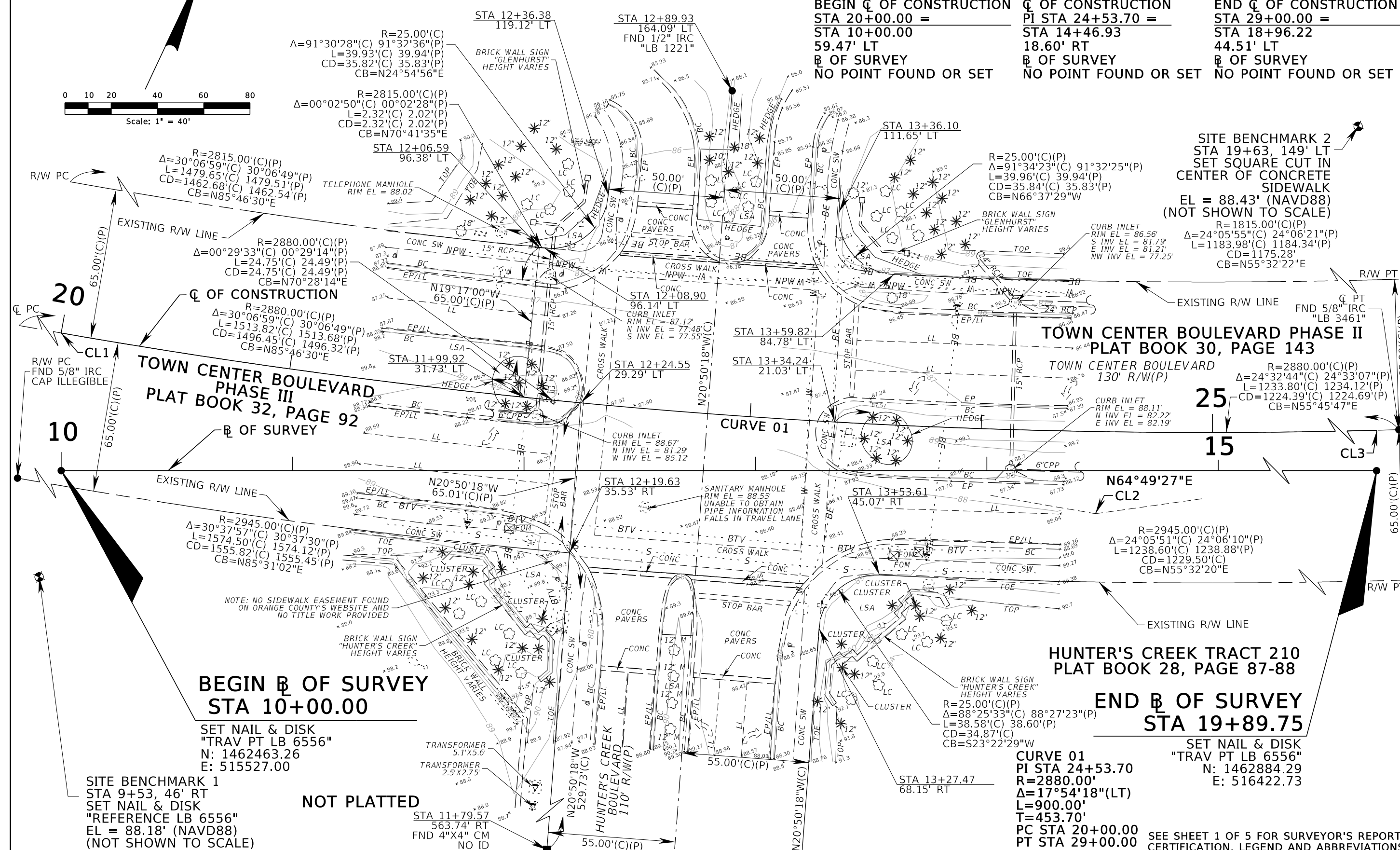
<b>PREPARED FOR: GTC ENGINEERING CORPORATION ORANGE COUNTY ENGINEERING PUBLIC WORKS ROADS AND DRAINAGE DIVISION</b>		
 <b>GEODATA CONSULTANTS, INC.</b> SURVEYING & MAPPING 1349 S INTERNATIONAL PARKWAY SUITE 2401 LAKE MARY, FLORIDA 32746 VOICE: (407) 732-6965	DRAWN BY: PMM	CHECKED BY: RJH & JMS
	LAST DATE OF FIELD SURVEY: 10-16-15 FIELD BOOK 15-18, PAGES 06-58	
<b>ORANGE COUNTY, FLORIDA</b>		
DATE: OCTOBER 20, 2015	SCALE: N/A	
PROJECT No. G07-21	SHEET SV-1	
REVISION	BY	DATE



HUNTER'S CREEK-TRACT 335, PHASE I  
PLAT BOOK 26, PAGES 132-134



CL1 BEGIN $\bar{C}$ OF CONSTRUCTION STA 20+00.00 = STA 10+00.00 59.47' LT $\bar{B}$ OF SURVEY NO POINT FOUND OR SET	CL2 $\bar{C}$ OF CONSTRUCTION PI STA 24+53.70 = STA 14+46.93 18.60' RT $\bar{B}$ OF SURVEY NO POINT FOUND OR SET	CL3 END $\bar{C}$ OF CONSTRUCTION STA 29+00.00 = STA 18+96.22 44.51' LT $\bar{B}$ OF SURVEY NO POINT FOUND OR SET
---	--	---



R=2815.00'(C)(P)  
 $\Delta=30^{\circ}06'59''(C)$   $30^{\circ}06'49''(P)$   
L=1479.65'(C) 1479.51'(P)  
CD=1462.68'(C) 1462.54'(P)  
CB=N85 $^{\circ}$ 46'30"E

R=2880.00'(C)(P)  
 $\Delta=00^{\circ}29'33''(C)$   $00^{\circ}29'14''(P)$   
L=24.75'(C) 24.49'(P)  
CD=24.75'(C) 24.49'(P)  
CB=N70 $^{\circ}$ 28'14"E

R=2880.00'(C)(P)  
 $\Delta=30^{\circ}06'59''(C)$   $30^{\circ}06'49''(P)$   
L=1513.82'(C) 1513.68'(P)  
CD=1496.45'(C) 1496.32'(P)  
CB=N85 $^{\circ}$ 46'30"E

R=2945.00'(C)(P)  
 $\Delta=30^{\circ}37'57''(C)$   $30^{\circ}37'30''(P)$   
L=1574.50'(C) 1574.12'(P)  
CD=1555.82'(C) 1555.45'(P)  
CB=N85 $^{\circ}$ 31'02"E

R=2880.00'(C)(P)  
 $\Delta=24^{\circ}32'44''(C)$   $24^{\circ}33'07''(P)$   
L=1233.80'(C) 1234.12'(P)  
CD=1224.39'(C) 1224.69'(P)  
CB=N55 $^{\circ}$ 45'47"E

R=25.00'(C)(P)  
 $\Delta=91^{\circ}30'28''(C)$   $91^{\circ}32'36''(P)$   
L=39.93'(C) 39.94'(P)  
CD=35.82'(C) 35.83'(P)  
CB=N24 $^{\circ}$ 54'56"E

R=2815.00'(C)(P)  
 $\Delta=00^{\circ}02'50''(C)$   $00^{\circ}02'28''(P)$   
L=2.32'(C) 2.02'(P)  
CD=2.32'(C) 2.02'(P)  
CB=N70 $^{\circ}$ 41'35"E

R=25.00'(C)(P)  
 $\Delta=91^{\circ}34'23''(C)$   $91^{\circ}32'25''(P)$   
L=39.96'(C) 39.94'(P)  
CD=35.84'(C) 35.83'(P)  
CB=N66 $^{\circ}$ 37'29"W

R=1815.00'(C)(P)  
 $\Delta=24^{\circ}05'55''(C)$   $24^{\circ}06'21''(P)$   
L=1183.98'(C) 1184.34'(P)  
CD=1175.28'  
CB=N55 $^{\circ}$ 32'22"E

R=2945.00'(C)(P)  
 $\Delta=24^{\circ}05'51''(C)$   $24^{\circ}06'10''(P)$   
L=1238.60'(C) 1238.88'(P)  
CD=1229.50'(C)  
CB=N55 $^{\circ}$ 32'20"E

R=25.00'(C)(P)  
 $\Delta=88^{\circ}25'33''(C)$   $88^{\circ}27'23''(P)$   
L=38.58'(C) 38.60'(P)  
CD=34.87'(C)  
CB=S23 $^{\circ}$ 22'29"W

**BEGIN  $\bar{B}$  OF SURVEY**  
STA 10+00.00

SET NAIL & DISK  
"TRAV PT LB 6556"  
N: 1462463.26  
E: 515527.00

**END  $\bar{B}$  OF SURVEY**  
STA 19+89.75

SET NAIL & DISK  
"TRAV PT LB 6556"  
N: 1462884.29  
E: 516422.73

SITE BENCHMARK 1  
STA 9+53, 46' RT  
SET NAIL & DISK  
"REFERENCE LB 6556"  
EL = 88.18' (NAVD88)  
(NOT SHOWN TO SCALE)

SITE BENCHMARK 2  
STA 19+63, 149' LT  
SET SQUARE CUT IN  
CENTER OF CONCRETE  
SIDEWALK  
(NOT SHOWN TO SCALE)  
EL = 88.43' (NAVD88)

NOTE: NO SIDEWALK EASEMENT FOUND  
ON ORANGE COUNTY'S WEBSITE AND  
NO TITLE WORK PROVIDED

SEE SHEET 1 OF 5 FOR SURVEYOR'S REPORT, CERTIFICATION, LEGEND AND ABBREVIATIONS

CL4  
 BEGIN  $\mathcal{C}$  OF CONSTRUCTION  
 STA 40+00.00 =  
 STA 30+00.00  
 55.10' LT  
 $\mathcal{B}$  OF SURVEY  
 NO POINT FOUND OR SET  
 CL6  
 END  $\mathcal{C}$  OF CONSTRUCTION  
 STA 45+00.00 =  
 STA 34+99.52  
 56.85' LT  
 $\mathcal{B}$  OF SURVEY  
 NO POINT FOUND OR SET

CL5  
 $\mathcal{C}$  OF CONSTRUCTION  
 PI STA 42+50.48 =  
 STA 32+49.69  
 74.93' LT  
 $\mathcal{B}$  OF SURVEY  
 NO POINT FOUND OR SET

HUNTER'S CREEK TRACT 350  
 PHASE I  
 PLAT BOOK 30, PAGE 146

HUNTER'S CREEK TRACT 280  
 PHASE II  
 PLAT BOOK 28, PAGES 13-14  
 40

CL4  
 $\mathcal{C}$  OF CONSTRUCTION  
 $\mathcal{B}$  OF SURVEY  
 30

BEGIN  $\mathcal{B}$  OF SURVEY  
 STA 30+00.00

SET 5/8" IRON ROD & CAP  
 "TRAV PT LB 6556"  
 N: 1464391.91  
 E: 517973.84

STA 32+13.21  
 154.76' RT  
 FND 5/8" IR  
 NO ID

C2  
 R=34.04'(C)(P)  
 $\Delta=91^{\circ}36'04''$ (C)  $91^{\circ}35'39''$ (P)  
 L=54.42'(C)(P)  
 CD=48.81'(C)(P)  
 CB=S79°48'47"E

STA 32+13.50  
 34.70' RT  
 FND 5/8" IRC  
 CAP ILLEGIBLE

HUNTER'S CREEK TRACT 330-A  
 PLAT BOOK 45, PAGES 84-85

STA 33+25.74  
 178.27' LT  
 FND 4"x4" CM  
 WITH NAIL & DISK  
 NO ID  
 1'x2' COLUMN

STA 33+71.60  
 128.65' LT  
 FND NAIL & DISK  
 "PRM LB 1221"

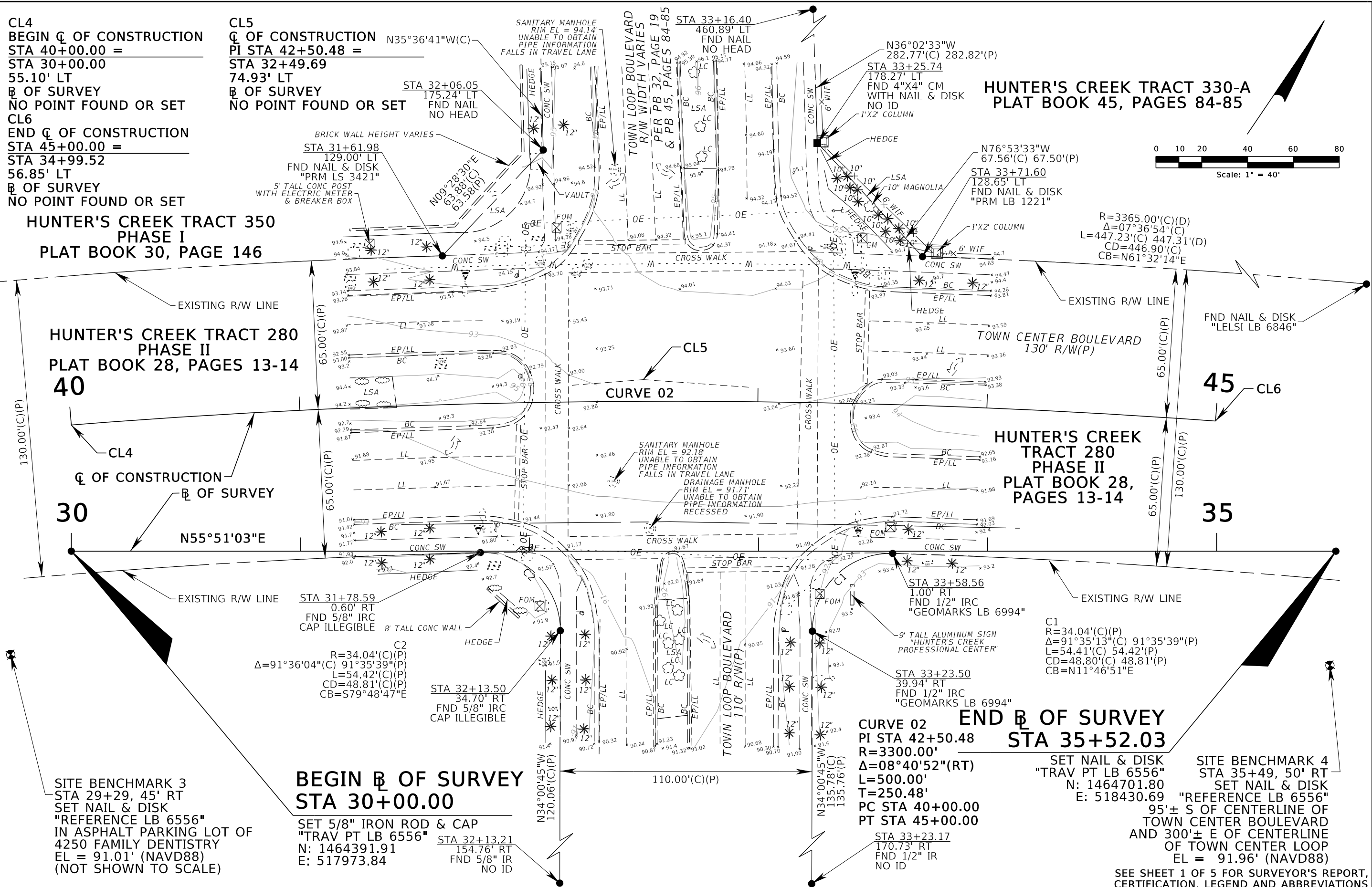
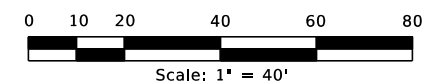
HUNTER'S CREEK  
 TRACT 280  
 PHASE II  
 PLAT BOOK 28,  
 PAGES 13-14

END  $\mathcal{B}$  OF SURVEY  
 STA 35+52.03

SET NAIL & DISK  
 "TRAV PT LB 6556"  
 N: 1464701.80  
 E: 518430.69

SITE BENCHMARK 4  
 STA 35+49, 50' RT  
 SET NAIL & DISK  
 "REFERENCE LB 6556"  
 95'± S OF CENTERLINE OF  
 TOWN CENTER BOULEVARD  
 AND 300'± E OF CENTERLINE  
 OF TOWN CENTER LOOP  
 EL = 91.96' (NAVD88)

SEE SHEET 1 OF 5 FOR SURVEYOR'S REPORT,  
 CERTIFICATION, LEGEND AND ABBREVIATIONS



TOPOGRAPHIC  
 SURVEY

TOWN CENTER BOULEVARD  
 CROSS WALK IMPROVEMENTS PROJECT

REVISION	BY	DATE

GEODATA CONSULTANTS, INC.  
 SURVEYING & MAPPING

1349 S. INTERNATIONAL PARKWAY  
 SUITE 2401  
 LAKE MARY, FLORIDA 32746  
 VOICE: (407) 732-6965 FAX: (407) 878-0841

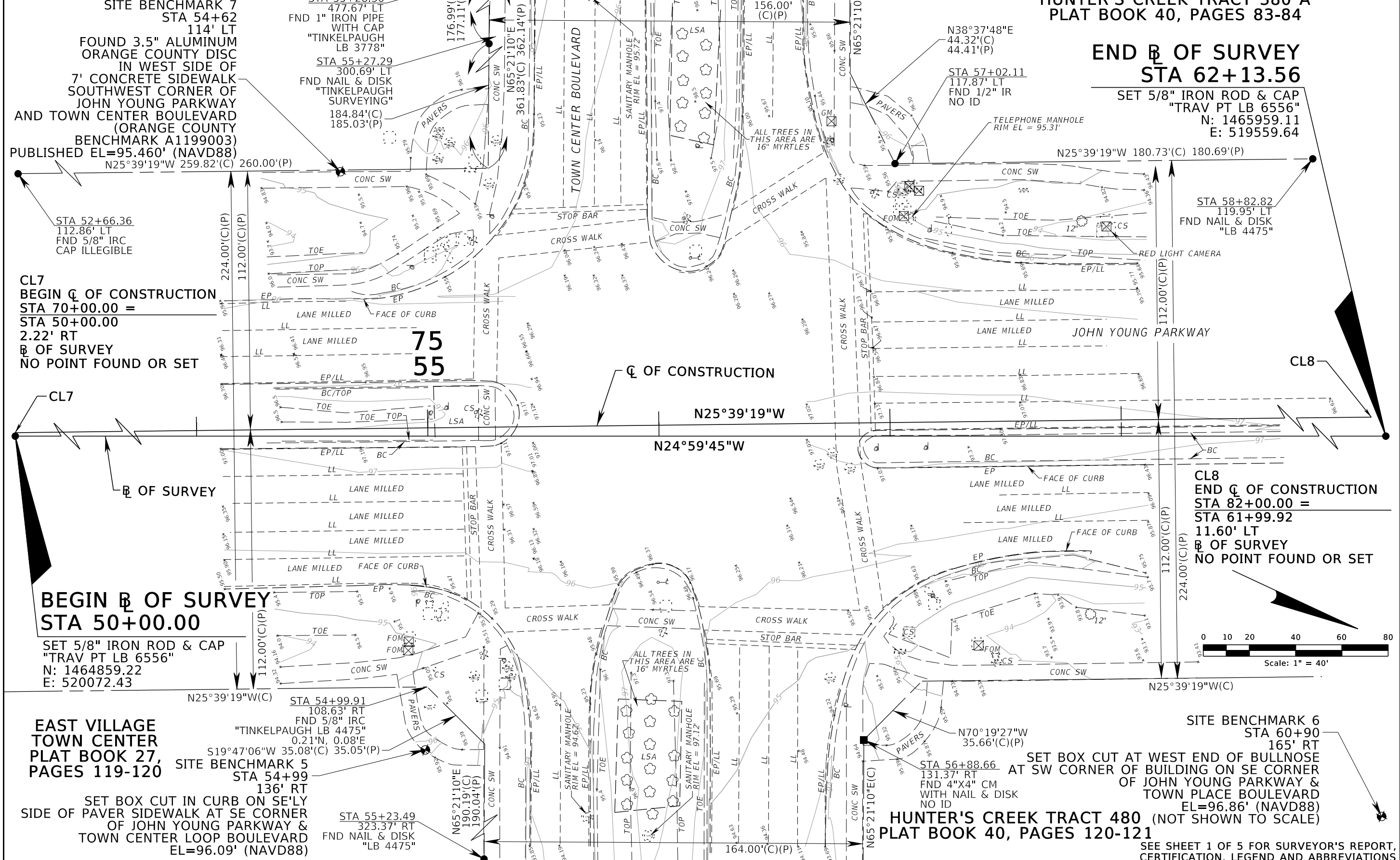
DATE:  
 OCTOBER 20, 2015  
 PROJECT No.  
 G07-21  
 SCALE:  
 1"=40'  
 SHEET SV-3



**HUNTER'S CREEK TRACT 280 PHASE I  
PLAT BOOK 27, PAGE 59**

**HUNTER'S CREEK TRACT 380 A  
PLAT BOOK 40, PAGES 83-84**

**END OF SURVEY  
STA 62+13.56**



SITE BENCHMARK 7  
STA 54+62  
114' LT  
FOUND 3.5" ALUMINUM  
ORANGE COUNTY DISC  
IN WEST SIDE OF  
7' CONCRETE SIDEWALK  
SOUTHWEST CORNER OF  
JOHN YOUNG PARKWAY  
AND TOWN CENTER BOULEVARD  
(ORANGE COUNTY  
BENCHMARK A1199003)  
PUBLISHED EL=95.460' (NAVD88)  
N25°39'19"W 259.82'(C) 260.00'(P)

STA 55+28.36  
477.67' LT  
FND 1" IRON PIPE  
WITH CAP  
"TINKELPAUGH  
LB 3778"  
STA 55+27.29  
300.69' LT  
FND NAIL & DISK  
"TINKELPAUGH  
SURVEYING"  
184.84'(C)  
185.03'(P)

N38°37'48"E  
44.32'(C)  
44.41'(P)  
STA 57+02.11  
117.87' LT  
FND 1/2" IR  
NO ID  
TELEPHONE MANHOLE  
RIM EL = 95.31'

SET 5/8" IRON ROD & CAP  
"TRAV PT LB 6556"  
N: 1465959.11  
E: 519559.64

STA 58+82.82  
119.95' LT  
FND NAIL & DISK  
"LB 4475"

STA 52+66.36  
112.86' LT  
FND 5/8" IRC  
CAP ILLEGIBLE

CL7  
BEGIN OF CONSTRUCTION  
STA 70+00.00 =  
STA 50+00.00  
2.22' RT  
OF SURVEY  
NO POINT FOUND OR SET

CL8  
END OF CONSTRUCTION  
STA 82+00.00 =  
STA 61+99.92  
11.60' LT  
OF SURVEY  
NO POINT FOUND OR SET

BEGIN OF SURVEY  
STA 50+00.00  
SET 5/8" IRON ROD & CAP  
"TRAV PT LB 6556"  
N: 1464859.22  
E: 520072.43

EAST VILLAGE  
TOWN CENTER  
PLAT BOOK 27,  
PAGES 119-120  
SITE BENCHMARK 5  
STA 54+99  
136' RT  
SET BOX CUT IN CURB ON SE'LY  
SIDE OF PAVER SIDEWALK AT SE CORNER  
OF JOHN YOUNG PARKWAY &  
TOWN CENTER LOOP BOULEVARD  
EL=96.09' (NAVD88)

STA 54+99.91  
108.63' RT  
FND 5/8" IRC  
"TINKELPAUGH LB 4475"  
0.21'N, 0.08'E  
S19°47'06"W 35.08'(C) 35.05'(P)

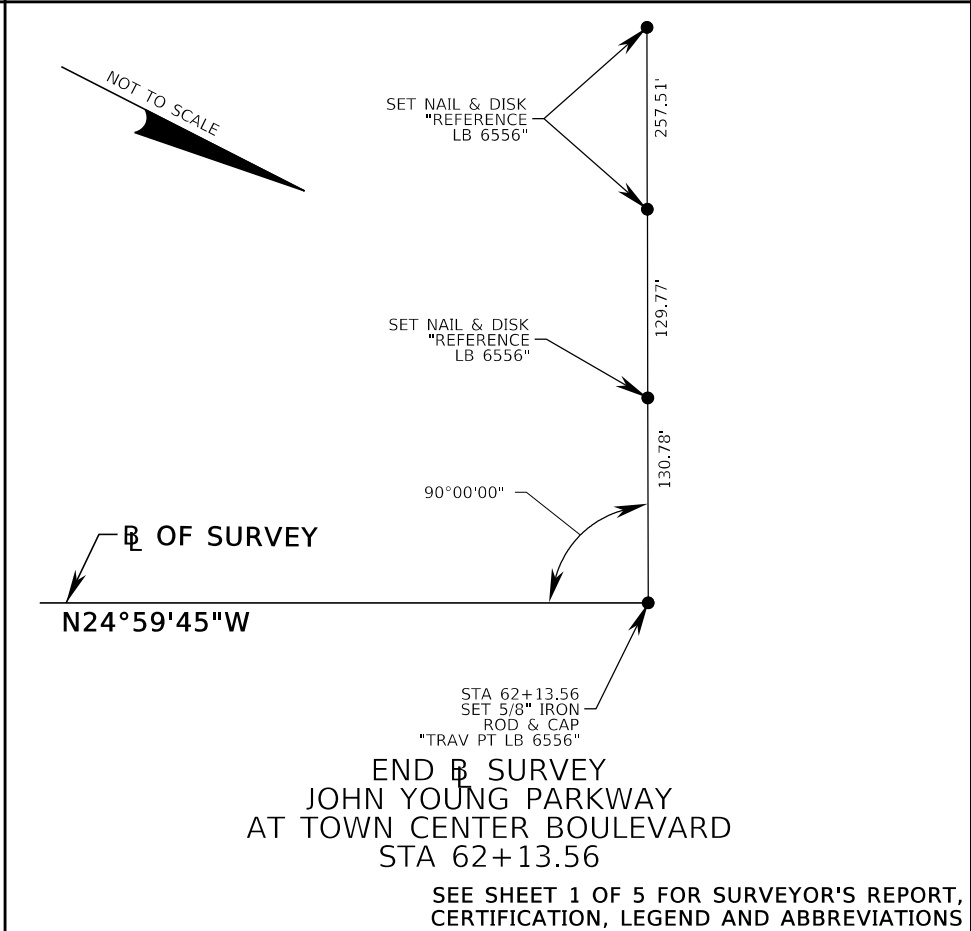
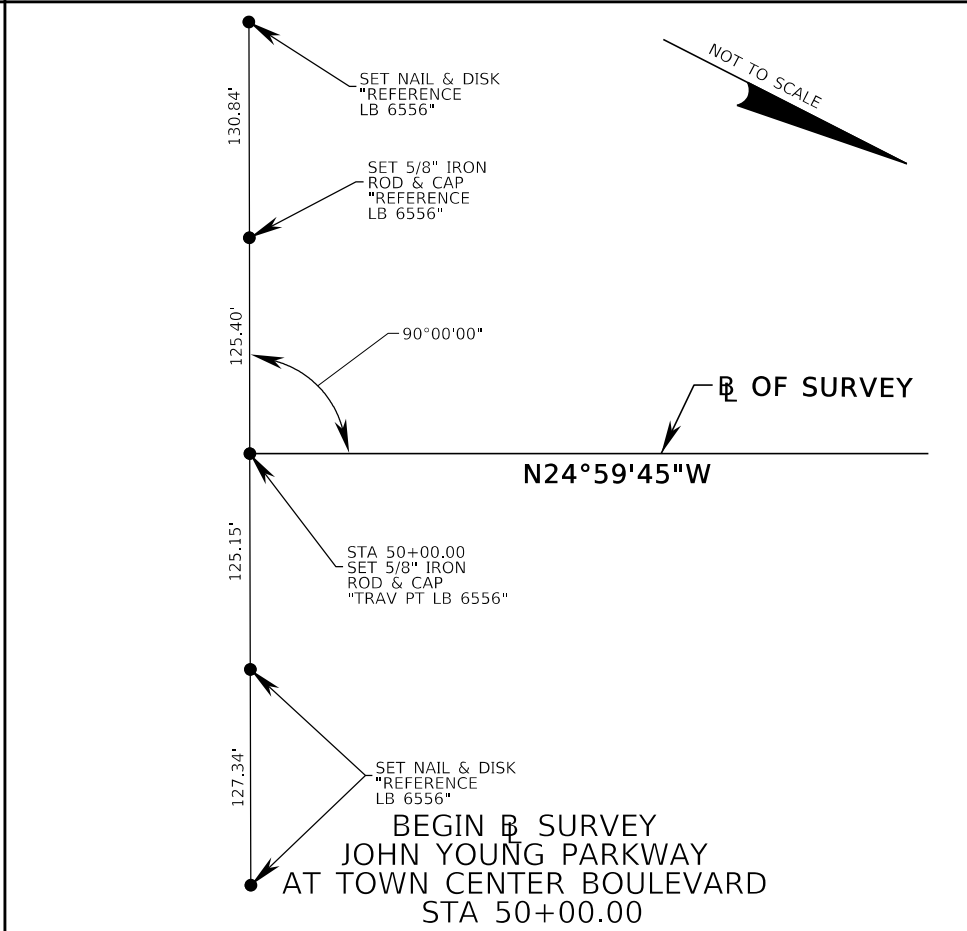
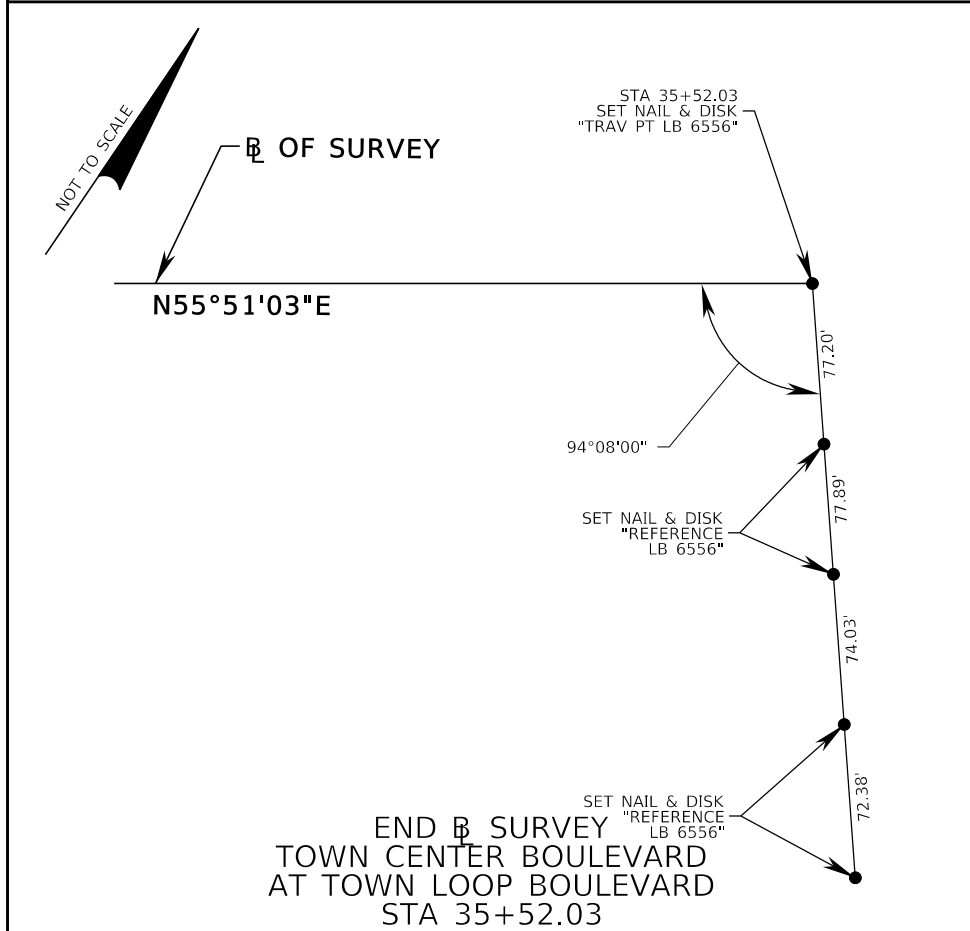
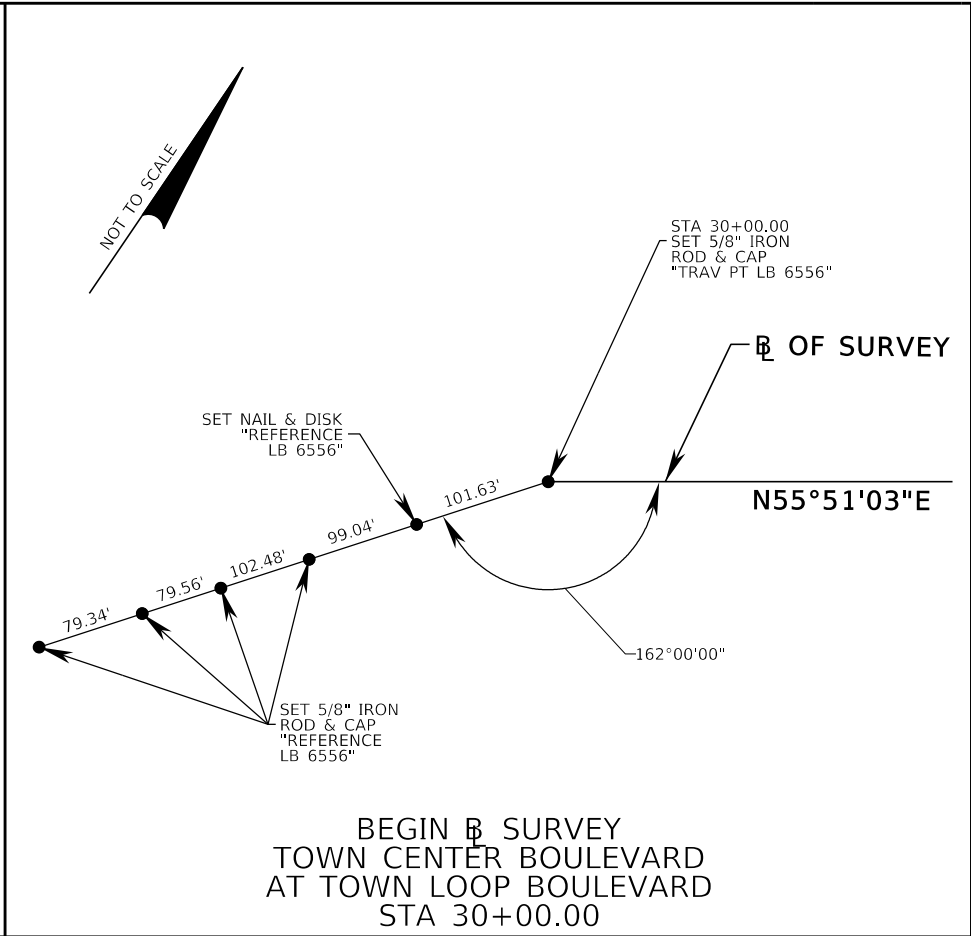
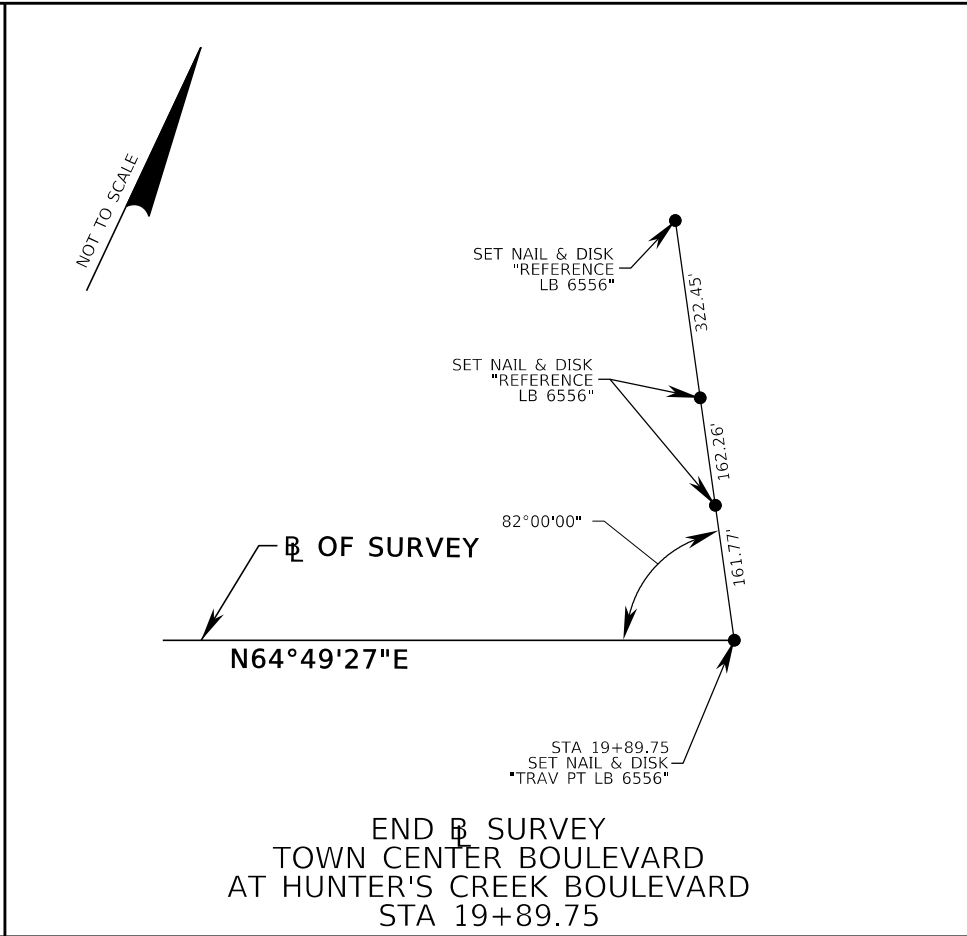
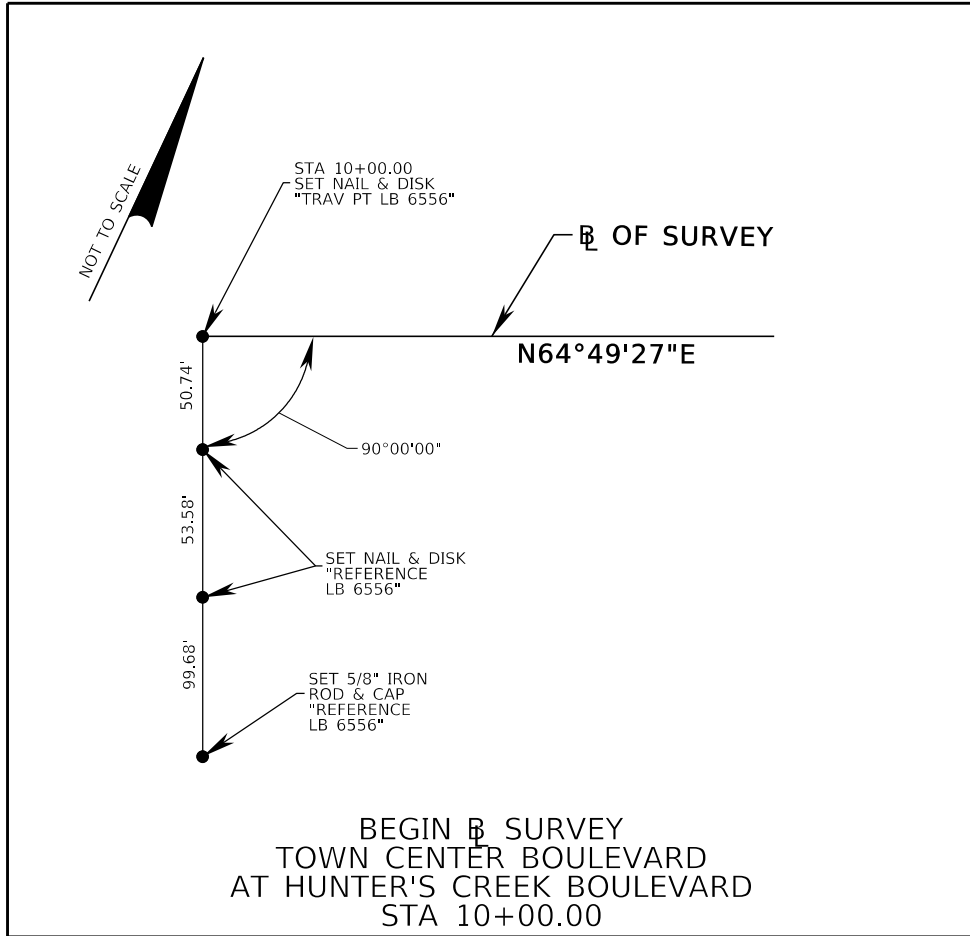
N70°19'27"W  
35.66'(C)(P)  
STA 56+88.66  
131.37' RT  
FND 4"X4" CM  
WITH NAIL & DISK  
NO ID

SET BOX CUT AT WEST END OF BULLNOSE  
AT SW CORNER OF BUILDING ON SE CORNER  
OF JOHN YOUNG PARKWAY &  
TOWN PLACE BOULEVARD  
EL=96.86' (NAVD88)  
HUNTER'S CREEK TRACT 480  
PLAT BOOK 40, PAGES 120-121


SITE BENCHMARK 6  
STA 60+90  
165' RT

SEE SHEET 1 OF 5 FOR SURVEYOR'S REPORT,  
CERTIFICATION, LEGEND AND ABBREVIATIONS

TOPOGRAPHIC SURVEY	TOWN CENTER BOULEVARD CROSS WALK IMPROVEMENTS PROJECT	REVISION	BY	DATE	GEODATA CONSULTANTS, INC. SURVEYING & MAPPING 1349 S. INTERNATIONAL PARKWAY SUITE 2401 LAKE MARY, FLORIDA 32746 VOICE: (407) 732-6965 FAX: (407) 878-0841	DATE: OCTOBER 20, 2015 PROJECT No. G07-21	SCALE: 1"=40' SHEET SV-4
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SEE SHEET 1 OF 5 FOR SURVEYOR'S REPORT,  
CERTIFICATION, LEGEND AND ABBREVIATIONS

TOPOGRAPHIC SURVEY	TOWN CENTER BOULEVARD CROSS WALK IMPROVEMENTS PROJECT	REVISION	BY	DATE	 GEODATA CONSULTANTS, INC. SURVEYING & MAPPING	1349 S. INTERNATIONAL PARKWAY SUITE 2401 LAKE MARY, FLORIDA 32746 VOICE: (407) 732-6965 FAX: (407) 878-0841	DATE: OCTOBER 20, 2015	SCALE: 1"=40'
							PROJECT No. G07-21	SHEET SV-5