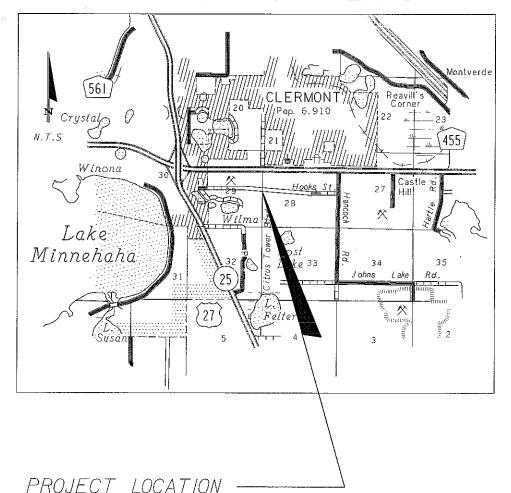
CONTRACT PLANS

LAKE COUNTY
HOOKS STREET AT
CITRUS TOWER BLVD

SIGNALIZATION PLANS



THE MAST HELD STATE OF THE PROJECT LOCATION

THE MAST HELD STATE OF THE PROJECT LOCATION

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HNTB

HNTB CORPORATION
300 PRIMERA BLVD., SUITE 200
LAKE MARY, FL. 32746
(407) 805-0355
VENDOR NO.: F431623092009
CERT. OF AUTH. NO.6500

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

SIGNALIZATION PLAYS

KEY SHEET REVISIONS

ENGINEER OF RECORD: MARC W. HUSTAD, P.E.

Juffeld with the second

FISCAL SHEET NO.

INDEX OF SIGNALIZATION PLANS

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INTERCONNECT PLAN

COUNTY COMMISSIONERS

JENNIFER S. HILL, VICE CHAIR

ELAINE RENICK

DEBBIE STIVENDER LINDA STEWART

WELTON G. CADWELL, CHAIR
CINDY HALL

DISTRICT FOUR DISTRICT FIVE COUNTY MANAGER

GOVERNING STANDARDS AND SPECIFICATIONS: FLORIDA DEPARTMENT OF TRANSPORTATION, DESIGN STANDARDS DATED 2006, AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED 2007, AS AMENDED BY CONTRACT DOCUMENTS.

LAKE COUNTY PROJECT MANAGER: JUAN CHAN, P.E.

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ITEM NO.	DESCRIPTION		T-	-5	T-	-6	T T	-9	T-	-10	T-// T-		-12 T-		-13 T-14		-14	T-15		T-	-16	THIS	
TIEM NO.	DESCRIPTION	UNIT	ORIGINAL	FINAL	SHEET																		
01-1	MOBILIZATION	LS	1																				1
30-1-12	CONDUIT, UNDERGROUND	LF	1149				307		332		266		260		446		5/0		475		393		4138
30-1-14	CONDUIT, UNDERGROUND JACKED	LF	419				280		230		130		295		91		50		45		180		1720
32-7-1	SIGNAL CABLE	PI	1												1								/
33-121-1	CABLE FIBER OPTIC (24SM)	LF	346				612		587		421		580		562		585		545		598		4836
34-4-113	SPAN WIRE ASSEMBLY (BOX)	PI	/																				1
35-1-11	PULL BOX	EΑ	14						1														14
35-1-15	FIBER OPTIC PULL BOX	EΑ					- /	i	1		1		- 1		1		1		1		1		8
35-1-16	SPECIAL PULL BOX	ĒΑ	- 1																				1
39-1-12	ELECTRICAL POWER SERVICE (OVERHEAD)	AS	1			ĺ		1															1
39-2-1	ELECTRICAL SERVICE WIRE	LF	/5																				15
41-16-46	CONCRETE STRAIN POLES (46 FOOT)	EΑ	2																				2
41-16-50	CONCRETE STRAIN POLES (50 FOOT)	EΑ	2																				2
50-51-311	TRAFFIC SIGNAL, 3 SECTION, I WAY (LED)	AS	8																				8
50-51-511	TRAFFIC SIGNAL, 5 SECTION, I WAY (LED)	AS	2															•					2
53-191	PEDESTRIAN SIGNAL, I SECTION, I WAY (LED)	AS	8																				8
60-1-109	INDUCTIVE LOOP DETECTOR TYPE 9	EΑ	3																			T	3
50-1-110	INDUCTIVE LOOP DETECTOR TYPE 10	EΑ	3																				3
60-2-102	LOOP ASSEMBLY TYPE B	AS	4								-												4
60-2-106	LOOP ASSEMBLY TYPE F	AS	8																				8
53-74-II	VEHICLE DETECTOR ASSEMBLIES (OPTICAL TYPE)	EΑ	2																				2
65 <i>-11</i>	PEDESTRIAN DETECTOR	EΑ	8																				8
70-5-110	ACTUATED SOLID STATE CONTROLLER ASSEMBLY	AS	1																				1
85-128	SYSTEM AUXILIARIES, INTERFACE PANEL	EΑ	1																				1
85-140	SYSTEM AUXILIARIES, FIBER OPTTIC MODULATOR/DEMODULATOR	EΑ	1																				1
	INTERNALLY ILLUMINATED STREET NAME SIGN (DOUBLE SIDED)	EΑ	4																				4
00-20-11	SIGN SINGLE POST (<= I2SF)	AS						Ì										"					
	R4-7, OMI-1 (24"X30", 18"X18")	AS			1																		1
20-20-60	SIGN SINGLE POST (REMOVE)	AS			1													·					1
06-3	RETRO RELECTIVE PAVEMENT MARKERS (WHITE/RED)	EΑ			34																		34
1-11-160	PAVEMENT MESSAGES	EΑ			5																		5
	DIRECTIONAL ARROW	EΑ			5																		5
11-11-121	SOLID TRAFFIC STRIPE (6" WHITE)	LF			972																		972
	SOLID TRAFFIC STRIPE (24" WHITE)	LF			167						<u> </u>						1						167
	SKIP TRAFFIC STRIPE (10'-30' SKIP, 6" WHITE)	LF			182																		182
	SOLID TRAFFIC STRIPE (6" YELLOW)	LF			575										1				1	1			575
	REMOVE EXISTING PAVEMENT MARKINGS	SF			684																		684

PAY ITEM NOTES

- I. PAY ITEM NO. 630-1-12 SHALL BE INSTALLED PER SECTION 630, CONDUIT OF THE STANDARD SPECIFICATIONS. ALL CONDUITS SHALL ENTER PULL BOXES AS REQUIRED IN STANDARD INDEX 17721, SHEET 2 OF 2.
- 2. WHEN JACKING CONDUIT UNDER PAVEMENT, THE CONTRACTOR MAY USE AN FOOT APPROVED GUIDED BORING SYSTEM AS AN ALTERNATE METHOD
- 3. PAY ITEM NO. 632-7-1 SHALL BE INSTALLED PER STANDARD INDEX 17727, AS APPLICABLE, AND AS STATED IN THE GENERAL NOTES.
- 4. PAY ITEM NO. 639-1-12 SHALL INCLUDE THE COST OF ALL LABOR, MATERIALS AND PERMITS REQUIRED TO FURNISH AND INSTALL THE ASSEMBLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH ALL AGENCIES REQUIRED FOR APPROVAL OF THE COMPLETED INSTALLATION. STANDARD INDEX 17736, AS APPLICABLE, SHALL APPLY.
- 5. PAY ITEM NO. 639-2-1 THE CONTRACTOR SHALL BE RESPONSIBLE FOR SIZING THE CONDUCTORS FOR THE POWER SERVICE.

- 6. PAY ITEM NO. 670-5-110 SHALL BE A TYPE V CABINET.
- 7. PAY ITEM NO. 699-I-I SHALL INCLUDE CANTILEVER ARMS, BRACKETS AND ALL HARDWARE NECESSARY TO INSTALL STREET NAME SIGNS AND PROVIDE FOR A COMPLETE INSTALLATION.
- OF CONSTRUCTION. AN ACCEPTABLE METHOD IS THE DITCH WHITCH JET-TRAC OR EQUIVALENT, PAID FOR UNDER PAY ITEM NUMBER 630-1-14.

 PAY ITEM NO. 632-7-I SHALL BE INSTALLED PER STANDARD INDEX 17727, AS APPLICABLE, AND AS STATED IN THE GENERAL NOTES.

 8. INTERNALLY ILLUMINATED STREET NAME SIGNS SHALL HAVE A SEPARATE CIRCUIT BREAKER IN THE MAIN CIRCUIT BREAKER PANEL CONTROLLED BY A SINGLE PHOTOCELL ACCESSIBLE BY A LIFT TRUCK.
 - 9. INTERNALLY ILLUMINATED STREET NAME SIGN SHALL BE DOUBLE SIDED AND ILLUMINATED BY LED.

		REVISIO	N S		HNTB CORPORATION
ATE	BY	DESCRIPTION	DATE BY	DESCRIPTION	300 FRIMERA BLVD, SUITE 200 LAKE MARY, FL 32746 (AME MARY, FL 32746 (AME MARY, FL 32746 (AME MARY, FL 32746 (AME MARY, FL 32746)
					ENGINEER OF RECORD: MARC W. HUSTALI, P.E. FL. REGISTRATION NO. 66761

LAKE COUNTY											
TRAFFIC ENGINEERING DEPARTMENT											
OAD NO.	COUNTY	PROJECT NO.									
HOOKS ST AT TRUS TOWER BLVD	LAKE	22323.08, 43817.00									

TABULATION OF QUANTITIES

SHEET NO.

BID ITEM NO.

101-1

630-1-12

630-1-14

632-7-1

633~121-1

634-4-113

635-1-11

635-1-15

635-1-16

639-1-12

639-2-1

641-16-46

641-16-50

650-51-311

650-51-511

653-191

660-1-109

660-1-110

660-2-102

660-2-106

663-74-11

670-5-110

685-128

685-140

699-1-1

706-3 711-11-160

711-11-170

711-11-121

711-11-125

711-11-141

711-11-221

711-17

700-20-11

700-20-60

665-11

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	TABULATION OF QUANTITIES																							
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	MOBILIZATION	LS																				-	1	
	CONDUIT, UNDERGROUND	LF	254		325		125		78		98										880		5018	
	CONDUIT, UNDERGROUND JACKED	LF	282		114		437		495		7										/335		3055	
	SIGNAL CABLE	PΙ																					1	
	CABLE FIBER OPTIC (24SM)	LF	586		684		587		598		130										2585			
	SPAN WIRE ASSEMBLY (BOX)	PΙ																					1	
	PULL BOX	EΑ																					14	
	FIBER OPTIC PULL BOX	EΑ	2				1		1		1										5			
	SPECIAL PULL BOX	EΑ								·													1	
	ELECTRICAL POWER SERVICE (OVERHEAD)	AS						T															/	
	ELECTRICAL SERVICE WIRE	LF																					<i>1</i> 5	
	CONCRETE STRAIN POLES (46 FOOT)	EΑ																					2	
	CONCRETE STRAIN POLES (50 FOOT)	EΑ																					2	
	TRAFFIC SIGNAL, 3 SECTION, I WAY (LED)	AS																					8	
	TRAFFIC SIGNAL, 5 SECTION, I WAY (LED)	AS																					2	
	PEDESTRIAN SIGNAL, I SECTION, I WAY (LED)	AS																					8	
	INDUCTIVE LOOP DETECTOR TYPE 9	EΑ																					3	
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	LOOP ASSEMBLY TYPE F	AS																					8	
	VEHICLE DETECTOR ASSEMBLIES (OPTICAL TYPE)	EΑ																		<u> </u>			2	
	PEDESTRIAN DETECTOR	EΑ																					8	
	ACTUATED SOLID STATE CONTROLLER ASSEMBLY	AS																					/	
	SYSTEM AUXILIARIES, INTERFACE PANEL	EΑ							l														1	
	SYSTEM AUXILIARIES, FIBER OPTTIC MODULATOR/DEMODULATOR	EΑ															<u></u>						1	
	INTERNALLY ILLUMINATED STREET NAME SIGN (DOUBLE SIDED)	EΑ																					4	
	SIGN SINGLE POST (<= 12SF)	AS]																<u> </u>				
	R4-7, OMI-I (24"X30", I8"XI8")	AS																					1	
	SIGN SINGLE POST (REMOVE)	AS																					1	
	RETRO RELECTIVE PAVEMENT MARKERS (WHITE/RED)	EΑ											İ										34	
	PAVEMENT MESSAGES	EΑ					ļ																5	
	DIRECTIONAL ARROW	EΑ																					5	
	SOLID TRAFFIC STRIPE (6" WHITE)	LF																					972	
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	SKIP TRAFFIC STRIPE (10'-30' SKIP, 6" WHITE)	LF																		ļ			182	
	SOLID TRAFFIC STRIPE (6" YELLOW)	LF																		ļ	<u> </u>		575	
	REMOVE EXISTING PAVEMENT MARKINGS	SF																					684	

HNTB CORPORATION 300 PRINERA BLVD, SUITE 200 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500. LAKE COUNTY HNTB TRAFFIC ENGINEERING DEPARTMENT ROAD NO. COUNTY HOUKS ST AT CITRUS TOWER BLVD LAKE 22323.08, 43817.00 ENGINEER OF RECORD: MARC W. HUSTAD, P.E. FL. REGISTRATION NO. 66761

PROJECT NO.

TABULATION OF QUANTITIES

SHEET NO.

- 2. ALL WORK SHALL COMFORM TO THE ABOVE STANDARD REQUIREMENTS, ANY LOCAL JURISDICTIONAL REQUIREMENTS THAT EXCEED THOSE LISTED ABOVE, AND ANY MANUFACTURER'S REQUIREMENTS THAT ARE NOT COVERED ABOVE.
- 3. THE MAINTAINING AGENCY SHALL BE LAKE COUNTY.
- 4, NO TEST BORINGS WERE MADE IN THE VICINITY OF PROPOSED CONDUIT RUNS OR DIRECTIONAL BORES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE JOB SITE CONDITIONS PRIOR TO THE SUBMISSION OF BID PROPOSALS PER SECTION 2-4 OF THE FDOT SPECIFICATIONS.
- 5. THESE PLANS REFLECT CONDITIONS KNOWN AT THE TIME OF PLAN DEVELOPMENT. IN THE EVENT THAT ACTUAL FIELD CONDITIONS PREVENT THE APPLICATION OF THESE PLANS AND/OR THE SPECIFICATIONS OR THE PROGRESSION OF THE WORK SPECIFIED IN THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN CHARGE IMMEDIATELY AND PRIOR TO ANY FURTHER PROSECUTION OF THE WORK.
- 6. ALUMINUM HOUSINGS SHALL BE USED FOR ALL TRAFFIC SIGNAL HEADS. NO POLYCARBONATE HOUSING OR MOUNTING HARDWARE WILL BE PERMITTED. TUNNEL VISORS SHALL BE FULL VISORS (NOT CUT-AWAY TYPE) AND PAYMENT FOR TUNNEL VISORS SHALL BE INCIDENTAL TO PAY ITEMS FOR TRAFFIC SIGNAL HEAD ASSEMBLIES. SIGNAL HOUSINGS SHALL BE BLACK IN COLOR. ALL SIGNAL HEADS ON THE EAST AND WEST APPROACHES SHALL HAVE BACK PLATES.
- 7. THE CONTRACTOR SHALL VERIFY WITH THE MAINTAINING AGENCY, COLOR CODES FOR THE SIGNAL CABLE CONDUCTORS PRIOR TO ORDERING
- 8. ONE ADDITIONAL ISPARE) CONDUIT SHALL BE RUN FROM THE CONTROLLER CABINET BASE TO THE NEAREST PULL BOX FOR DETECTION EQUIPMENT WIRES AND SIGNAL CABLE RESPECTIVELY.
- 9. PULL BOXES SHALL BE QUAZITE 1324 OR EQUIVALENT AND SHALL BE PLACED BEHIND CURB AND GUTTER. IF THERE IS NO CURB AND GUTTER, THE PULL BOXES SHALL BE PLACED A MINIMUM OF 10' FROM THE EDGE OF PAVEMENT, BUT NOT AT THE BOTTOM OF ANY DITCH OR RETENTION AREA. THE LIDS SHALL BE NON-METALLIC, TRAFFIC BEARING MATERIAL AND PRESSED COVER LOGO WITH "TRAFFIC SIGNAL". ALL PULL BOXES AND COVERS SHALL BE FOOT APPROVED.
- IO. DURING NON-WORKING HOURS, THE CONTRACTOR SHALL NOT STORE ANY MATERIALS OR PARK ANY EQUIPMENT WITHIN 30' OF THE EDGE OF THE TRAVELWAY. IF THE ABOVE IS NOT POSSIBLE, THE CONTRACTOR SHALL REQUEST THE ENGINEER IN CHARGE TO APPOINT AN APPROVED STORAGE AREA AND SUCH AREA SHALL BE PROPERLY DELINEATED AND ADVANCE WARNING SHALL BE UTILIZED.
- II. PER FDOT STANDARD SPECIFICATIONS, ALL FIELD WIRING SHALL BE CLEARLY IDENTIFIED WITH WEATHER PROOF TAGS THAT ARE SECURELY ATTACHED TO EACH CABLE. THE CONTRACTOR SHALL SUBMIT THE PROPOSED TAGGING SYSTEM WITH THE SUBMITTALS PACKAGE AS REQUIRED FOR PERMIT JORS.
- 12. THE CONTROLLER BASE ELEVATION SHALL BE 4"-8" ABOVE THE GRADE.
- 13. THREE SPARE CONDUCTORS PER SIGNAL CABLE ARE REQUIRED, SPARES SHALL BE BOUND TOGETHER AND GROUNDED TO THE BUS GROUNDING FACILITY IN THE CONTROLLER CABINET.
- 14. ALL TRAFFIC SIGNAL HEAD ASSEMBLIES SHALL HAVE A MINIMUM LOW POINT OF CLEARANCE OF 17.5' AND A MAXIMUM HIGH POINT OF CLEARANCE OF 19' FROM THE BOTTOM OF THE ASSEMBLY TO THE ROADWAY.
- 15. AT THE TIME OF FINAL INSPECTION OF THE INSTALLATION, THE CONTRACTOR SHALL PROVIDE TWO SETS OF CONSTRUCTION AS-BUILT PLANS, THAT INCLUDE CONDUIT AND PULL BOX LOCATIONS, AND FDOT FORMAT SERIES RESISTENCE DATA FORMS FOR ALL GROUNDING ELECTRODES.
- 16. THE CONTRACTOR SHALL FURNISH ALL NECESSARY EQUIPMENT INCLUDING A BUCKET TRUCK FOR TESTING AND INSPECTION OF TRAFFIC SIGNALS.
- 17. UPON COMPLETION OF THE TRAFFIC SIGNAL INSTALLATION, THE TRAFFIC SIGNAL SHALL BE PLACED IN FLASHING OPERATION FOR A PERIOD OF 7-14 DAYS PRIOR TO COMMENCEMENT OF FULL STOP CONTROL OPERATION.
- 18. SIGNAL CABLE AND LOOP WIRES TO BE IN SEPARATE PULL BOXES.
- 19. THE CONTRACTOR SHALL STAKE ALL POLE LOCATIONS AND HAVE THEM APPROVED BY LAKE COUNTY TRAFFIC ENGINEERING.
- 20. AS DIRECTED BY THE PROJECT ENGINEER, THE CONTRACTOR SHALL ADJUST CONDUIT AND PULL BOXES HORIZONTALLY AND/OR VERTICALLY IN ORDER TO AVOID ANY POSSIBLE CONFLICTS WITH UNDERGROUND UTILITIES.
- 21. ALL CONDUIT SHALL BE 2-INCH MINIMUM UNLESS OTHERWISE SPECIFIED IN THE PLANS AND SHALL HAVE A LOCATE WIRE INSTALLED IN ALL FIBER OPTIC AND FUTURE USE CONDUITS.
- 22. TYPE "F" LOOPS SHALL BE 40' LONG BY 6' WIDE QUARDRAPOLE, CENTERED IN THE LANE AND EXTEND 5' IN FRONT OF THE STOP BAR UNLESS OTHERWISE SHOWN ON PLAN SHEET.
- 23. THE CONTRACTOR SHALL MAKE ALL LOOP ASSEMBLIES AND LOOP DETECTORS INSTALLED AS PART OF THE PROJECT FULLY OPERATIONAL IN ACCORDANCE WITH THEIR ASSOCIATED ISOLATED INTERSECTION SIGNAL TIMING CHART. ALL LOOP ASSEMBLIES SHALL BE SEALED WITH AN FOOT APPROVED LOOP SEALANT. ALL SAW CUTS SHALL BE SEALED IMMEDIATELY AFTER THE LOOP WIRES AND LEAD-IN WIRES HAVE BEEN PLACED IN THE SAW CUTS. LOOPS SHALL NOT BE INSTALLED IN SERIES.
- 24. NO LOOP HOME RUNS SHALL BE CUT IN THE RADIUS.
- 25. ALL SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE LOCATED IN PULL BOXES AND SOLDERED AND TAPED WITH A WATERPROOF COATING APPLIED IN A MANNER APPROVED BY THE ENGINEER.

- 26. ALL TRAFFIC SIGNAL LOOP ASSEMBLY WIRES AND SHIELDED LEAD-IN CABLES SHALL BE ROUTED TO THE TRAFFIC SIGNAL CONTROLLER CABINET IN ONE CONTINUOUS RUN. THERE SHALL BE NO SPLICING ALLOWED EXCEPT IN INSTANCES WHERE LOOP WIRE IS SPLICED TO SHIELDED LEAD-IN CABLE. ALL SHIELDED LOOP LEAD-IN WIRES MUST BE GROUNDED TO THE CONTROLLER CABINET GROUND.
- 27. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UTILITY LOCATION COORDINATION EFFORTS AS REQUIRED BY FLORIDA STATUTE REGARDING PROTECTION OF EXISTING UTILITIES. THE CONTRACTOR IS REMINDED THAT NOT ALL UTILITY PROVIDERS ARE SUBSCRIBERS TO THE SUNSHINE STATE ONE—CALL SYSTEM, AND IT SHALL BE INCUMBENT UPON THE CONTRACTOR TO MAKE EVERY EFFORT TO INSURE THAT ALL UTILITIES ARE LOCATED PRIOR TO CONSTRUCTION.

COMPANIES	PHONE NUMBERS
BELL SOUTH - AT&T FL	(407) 539-0644
BROADWING	(512) 742-6676
CITY OF CLERMONT	(352) 394-7178
PROGRESS ENERGY OF FLORIDA	(407) 938-6638
LAKE APOPKA NATURAL GAS	(407) 656-2734
MCI	(972) 729~6016
EMBARQ	(407) 814-5344
BRIGHT HOUSE NETWORKS	(386) 445-8804 EXT: 1308

- 28. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE UTILITY DEPARTMENT AT LEAST 2 FULL BUSINESS DAYS IN ADVANCE OF POLE SETTING OPERATIONS WHERE A CONFLICT WITH OVERHEAD ELECTRICAL CONDUCTORS IS EXPECTED AND WHEN JOINT USE POLES ARE TO BE USED.
- 29. THE CONTRACTOR SHALL ADHERE TO ALL LOCAL MAINTAINING AGENCY AND STATE REGULATIONS DURING ALL CONSTRUCTION OPERATIONS.
- 30. THE CONTRACTOR SHALL NOTIFY LAKE COUNTY TRAFFIC OPERATIONS AT LEAST 2 FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION AND LOOP CUTTING, NOTIFY DENIS DELITZ OR STEVE BOLLINGER 352-742-766. THE CONTRACTOR SHALL NOTIFY LAKE COUNTY TRAFFIC OPERATIONS AT LEAST 24 HOURS IN ADVANCE OF INSTALLING SIGNAL POLES, GROUND RODS, UNDERGROUND CONDUIT, AND SEALING SIGNAL HEAD ASSEMBLIES SO THAT THESE OPERATIONS CAN BE OBSERVED.
- SI. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE POWER COMPANY AND MAINTAINING AGENCY OF THEIR PROPOSED DATE ON WHICH THE NEW ELECTRICAL SERVICE FOR THIS SIGNAL WILL BE COMPLETE IN ORDER THAT ARRANGEMENTS CAN BE MADE FOR ESTABLISHING AN ACCOUNT FOR THE LOCAL MAINTAINING AGENCY AND HOOK-UP DATE WITH THE LOCAL POWER COMPANY.
- 32. ALL SIGNAL HEADS SHALL USE FDOT APPROVED LED'S FOR ALL INDICATIONS, UNLESS OTHERWISE NOTED. PEDESTRIAN ASSEMBLIES SHALL BE FDOT APPROVED COUNT DOWN FULL HAND/PERSON LED.
- 33. THE CONTRACTOR SHALL HAND DIG THE FIRST 4' AT THE STRAIN POLE FOUNDATION LOCATIONS TO INSURE THERE ARE NO UTILITY CONFLICTS.
- 34. THE CONTRACTOR IS RESPONSIBLE FOR ALL STATE AND LOCAL PERMITS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING THE ELECTRIC PERMIT AND TO COORDINATE APPLICATION FOR POWER WITH LAKE COUNTY TRAFFIC OPERATIONS, KATHY WILSON, 352-742-766.
- 35. ALL MAINTENANCE OF TRAFFIC SHALL CONFORM TO STANDARD INDEX 600 SERIES AND SHALL BE PAID FOR UNDER MOBILIZATION (IOI-I). THE COST FOR THE USE OF OFF-DUTY LAW ENFORCEMENT OFFICERS TO DIRECT TRAFFIC IN CASE OF LANE CLOSURES SHALL BE INCIDENTAL TO THE WORK AND WILL NOT BE PAID SEPARATELY.
- 36. ALL MATERIALS AND HARDWARE SHALL BE FDOT APPROVED AND PRE-APPROVED BY LAKE COUNTY TRAFFIC ENGINEERING.
- 37. ALL REMOVED EQUIPMENT SHALL BE DELIVERED TO LAKE COUNTY TRAFFIC OPERATIONS, 28127 C.R. 561, TAVARES, 352-742-1766, EXCEPT SIGNAL POLES, WHICH SHALL BE DISPOSED OF BY THE CONTRACTOR.
- 38. SIGNAL HEADS SHALL BE WIRED DIRECTLY TO THE TERMINAL BLOCKS. THE USE OF "JONES" PLUGS SHALL BE PROHIBITED.
- 39. SIGNAL CABLE SHALL BE ATTACHED TO MESSENGER WIRE USING PROPER SIZE SPIRAL WRAP.
- 40. NO POWER SERVICE INSTALLATION WILL BE ALLOWED ON THE CABINET.
- 41. THE CONTROLLER ASSEMBLY SHALL BE LAKE COUNTY NAZTEC REGIONAL TS2-I WITH A TS2-I CONTROLLER ETHERNET ENABLED REQUIRED FOR COUNTY'S CLOSED LOOP SYSTEM WHICH SHOULD INCLUDE A GENERATOR SWITCH BOX PANEL.
- 42. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING THE PROPER AMOUNT OF RAKE WITH RESPECT TO LOADING TO BE USED ON POLES AT THE TIME OF INSTALLATION.
- 43. THE CONTRACTOR SHALL FURNISH LAKE COUNTY TRAFFIC OPERATIONS WITH EMERGENCY CONTACTS AND TELEPHONE NUMBERS AND HAVE AN IMSA LEVEL II CERTIFIED SIGNAL TECHNICIAN ON CALL WITHIN A TWO-HOUR MAXIMUM RESPONSE.
- 44. ANY STRIPING/PAVEMENT MARKINGS DESTROYED BY CONTRACTOR DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

U-W-12-3-07

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DATE BY

GNN TSG02

S I O N S

DATE BY DESCRIPTION

HNTB

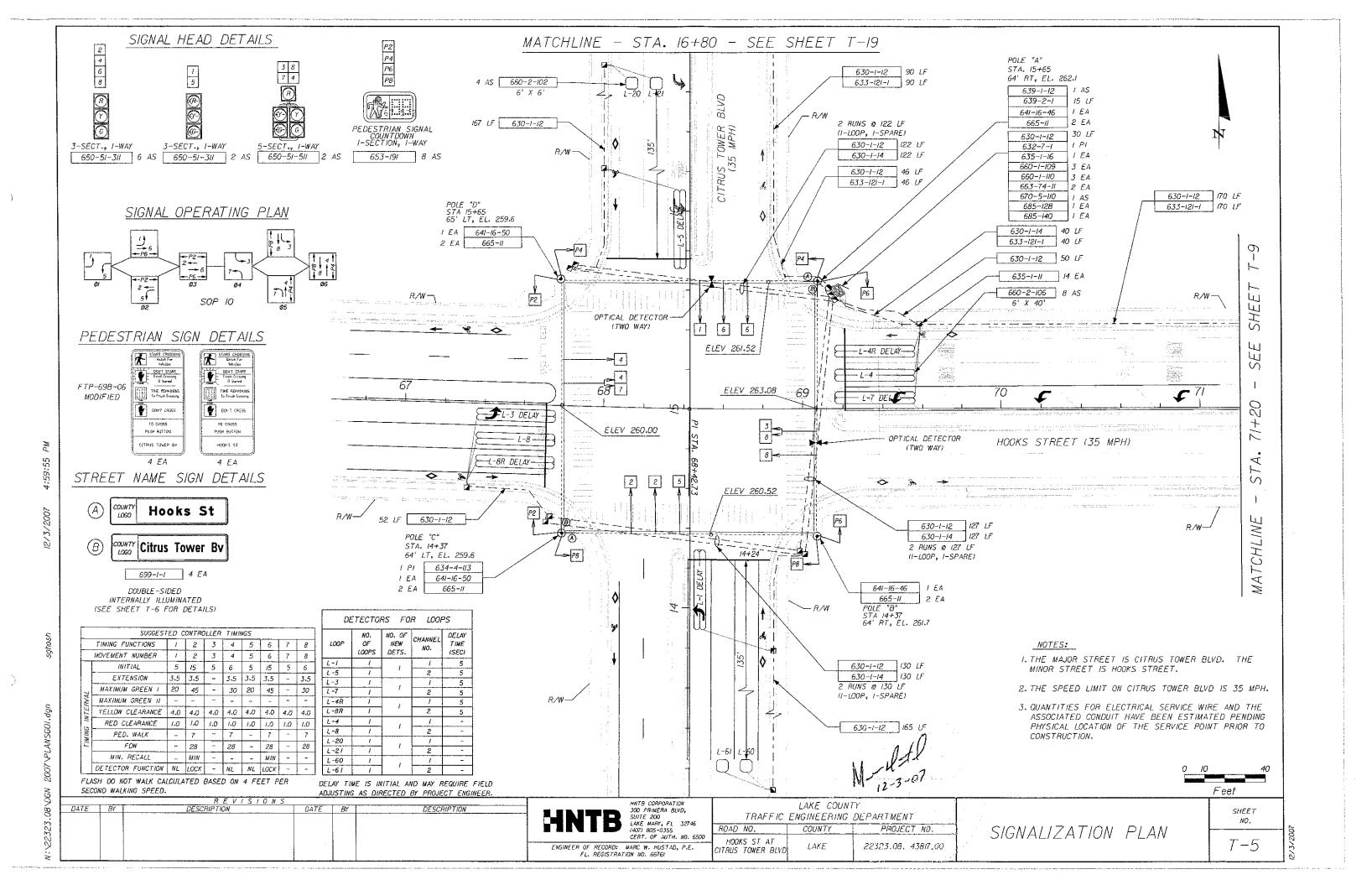
ENGINEER OF RECORD: MARC W. HUSTAD, P.E.

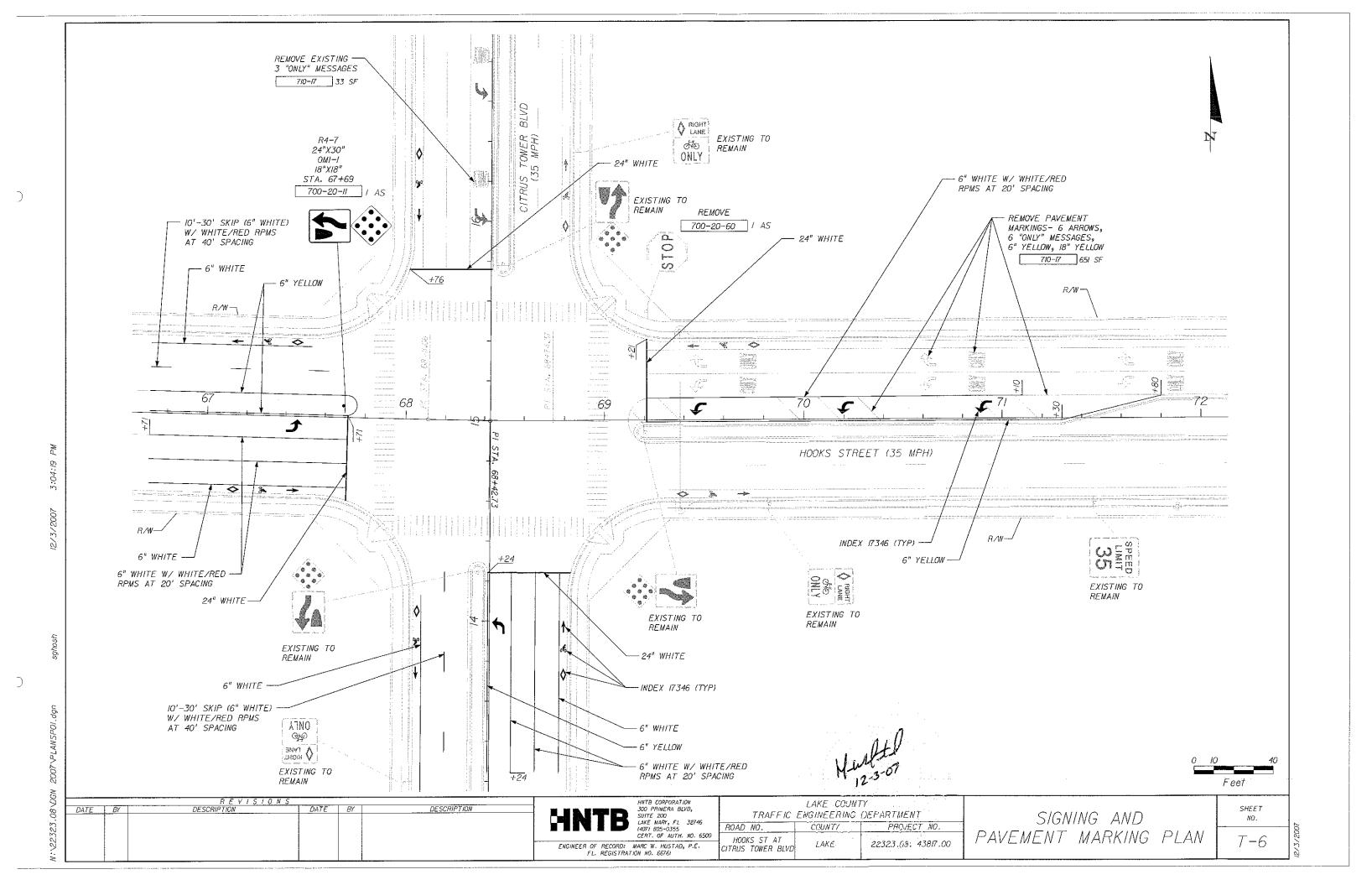
HHTB CORPORATION
300 PRIMERA BLVO;
SUITE 200
LAKE MARY, FL 32745
(407) 805-0355
CERT. OF AUTH. NO. 6500

LAKE COUNTY
TRAFFIC ENGINEERING DEPARTMENT
ROAD NO. COUNTY PROJECT NO.
HOOKS ST AT LAKE 22323.08, 43817.00

GENERAL NOTES

SHEET NO.



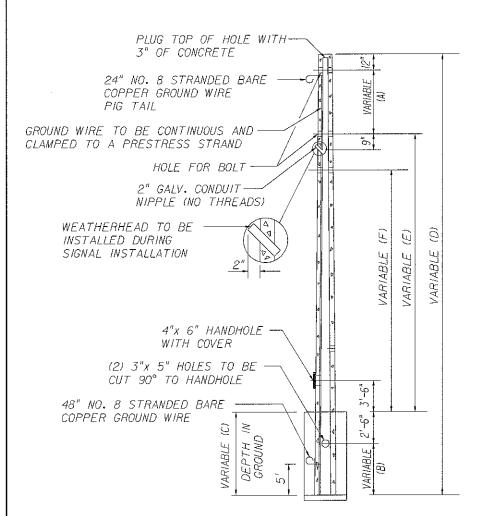








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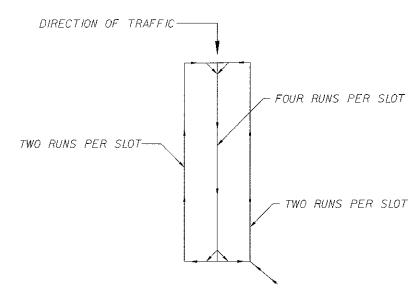


POLE SCHEDULE

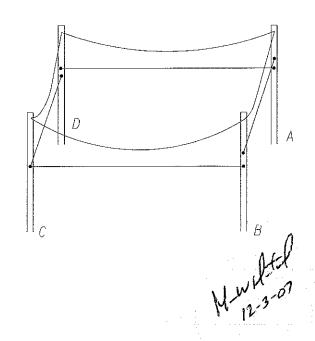
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POLE NO.	TYPE	А	В	_ C	D	Ε	F
Α	VII	8'	9.5'	12.0'	46 . 0'	25.0'	23.5'
В	VII	8'	9./'	11.6'	46.0'	25.4'	22.6'
С	VII	10.8'	11.0'	13.5'	50.0'	24.7'	N/A
D	VII	9 . 5'	11.0'	13.5'	50.0'	26.0'	24.71

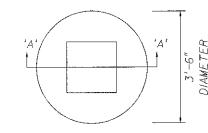
SPAN WIRE CABLE NOTES

CATENARY WIRE CABLE = 3/8" MESSENGER WIRE CABLE = 7/16"

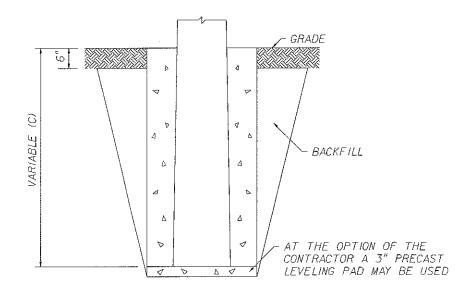


LOOP WINDING DETAIL (QUADRAPOLE PRESENCE LOOP) NOTE: LOOP WIRE SHALL BE PLACED IN THE ABOVE MANNER TO AVOID CENTER SLOT CANCELLATION.





FOUNDATION PLAN



SECTION 'A' - 'A'

FOUNDATION NOTES

EXCAVATION & BACKFILL: EXCAVATION & BACKFILL FOR THE FOOTINGS SHALL BE IN ACCORDANCE WITH ARTICLES 125-4 AND 125-82 WITH THE EXCEPTION THE BACKFILL, IN LIEU OF THE REQUIREMENTS FOR OBTAINING THE SPECIFIED DENSITY, MAY BE HAND TAMPED IN FOUR INCH MAXIMUM LAYERS OR MACHINE TAMPED IN SIX INCH MAXIMUM LAYERS. THE MATERIAL SHOULD BE NEITHER DRY NOR SATURATED. AT THE CONTRACTOR'S OPTION BACKFILLING MAY BE DONE WITH POURED CONCRETE.

CONCRETE: FOOTING TO BE POURED WITH CLASS I CONCRETE, (SECTION 345)

FORMS: FORMS SHALL BE IN ACCORDANCE WITH ARTICLE 700-8-3. (IF THE FOOTING IS POURED IN AN OVERSIZED HOLE, THE CONCRETE IN THE TOP SIX INCHES SHALL BE PLACED IN A FORM. ALL EXPOSED SURFACES SHALL BE TROWELED TO A SMOOTH FINISH.

				REVISIOI
	DESCRIPTION	BY	DATE	DESCRIPTION
HNTB				
INID				
		1	1	
ENGINEER OF RECORD: M				
FL. REGISTRATIO				

HNTB	HNTB CORPORATION 300 PRIMERA SLYD, SUITE 200 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD:	

	LAKE COUNT	γ
TRAFFIC	ENGINEERING	DEPARTMENT
AD NO.	COUNTY	PROJECT NO.
HOOKS ST AT RUS TOWER BLVD	LAKE	22323.08, 43817.00

CONCRETE STRAIN POLE SCHEDULE

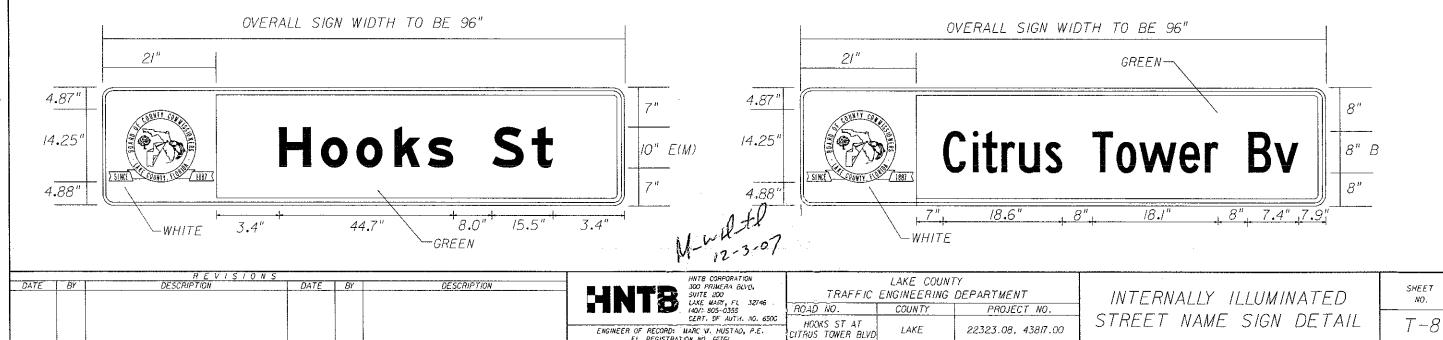
SHEET NO.

SIGN BRACKET ATTACHMENT DETAIL TWO POINT CLAMP-ON CANTILEVER ARM SIGN MOUNTING ASSEMBLY DETAIL

STAINLESS STEEL

- I. PHOTO CELL SHALL BE INSTALLED IN THE SIGNAL CABINET WITH A 2 INCH PLEXIGLAS WINDOW.
- 2. A "HANDS OFF PHOTO TEST SWITCH" SHALL BE INSTALLED.
- 3. INTERNALLY ILLUMINATED STREET NAME SIGN SHALL BE ILLUMINATED BY LED. THE INTERNALLY ILLUMINATED STREET NAME SIGN SHALL BE FROM THE FLORIDA DEPARTMENT OF TRANSPORTATION APPROVED PRODUCTS LIST.
- 4. THE INTERNALLY ILLUMINATED STREET NAME SIGN SHALL BE THE 22 INCH/24 INCH STYLE CONTAINER, 22 INCH VIEWABLE SIGN FACE HEIGHT, 24 INCH CONTAINER HEIGHT.
- 5. THE INTERNALLY ILLUMINATED STREET NAME SIGN SHALL BE INSTALLED ON A SEPARATE BREAKER.
- 6. THE SIGN BRACKET AND CLAMP-ON CANTILEVER ARM SHOULD BE INSTALLED BELOW THE MESSENGER CABLE, LEVEL WITH THE RED INDICATION.

- 10. A PHOTOCELL SHALL BE INSTALLED NEAR THE ELECTRIC SERVICE WITHIN REACH OF A LIFT TRUCK. CARE TO BE GIVEN TO INSTALL WHERE STREET LIGHTING DOES NOT AFFECT OPERATION.
- II. INTERNALLY ILLUMINATED STREET NAME SIGN FACING SPECIFICATIONS: THE BACKING SHALL BE 1/2 INCH CLEAR LEXAN. THE SHEETING SHALL BE WHITE DIAMOND GRADE VIP SHEETING, 3-M SERIES 3990 OR COMPARABLE. THE FACING SHALL BE COVERED WITH GREEN ACRYLIC ELECTRIC CUTTABLE FILM, 3-M SERIES 1177C OR COMPARABLE.
- 12. A 21 INCH WIDE AREA ON THE LEFT SIDE OF THE SIGN FACING SHALL BE WHITE TO ACCOMMODATE THE LAKE COUNTY LOGO.
- 13. THE LAKE COUNTY LOGO SHALL BE SUPPLIED BY LAKE COUNTY AND INSTALLED BY THE CONTRACTOR INSTALLING THE SIGNS,
- 14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING THE MESSAGE WITH LOCAL MAINTAINING AGENCY BEFORE FABRICATION THE SIGNS. SHOP DRAWINGS SHALL BE REQUIRED.



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