

# FDOT Traffic Engineering & Operations Office Traffic Engineering Research Laboratory IMSA TRAFFIC SIGNAL INSPECTOR CERTIFICATION CHECKLIST October 2008

FPN:	DATE:_	/	
PROJECT ENGIN	EER:		
PROJECT INSPEC	CTOR:	IMSA ID#:	
IMSA INSPECTO	R:	IMSA ID#:	
INTERSECTION 1	LOCATION:		
MAINTAINING A	AGENCY:		
CONTRACTOR:			
ENGINEER OF R	ECORD:		
TYPE OF INSPEC	CTION:		
NUMBER OF INS	SPECTIONS:		
ATTENDEES:			
	NAME:	AGENCY:	PHONE NUMBER:

#### Contents

- 1) Intersection Design
- 2) Traffic Controller (Min Spec and Standard Spec Section 671)
- 3) Controller Cabinet (Min Spec and Standard Spec Section 676)
  - 3.1) Load Switches
  - 3.2) Flasher
  - 3.3) Conflict Monitor/ Malfunction Management Unit
- 4) Electrical Power Service Assembly (Min Spec and Standard Spec Section 639)
- 5) Signal Installation Grounding (Min Spec and Standard Spec Section 620)
- 6) Pull and Junction Boxes (Min Spec and Standard Spec Section 635)
- 7) Conduits (Min Spec and Standard Spec Section 630)
- 8) Signal and Interconnect Cable (Min Spec and Standard Spec Section 632)
- 9) Signal Poles
  - 9.1) Mast Arm
  - 9.2) Prestressed Concrete Poles (Standard Spec Section 641)
  - 9.3) Steel Strain
  - 9.4) Signal Pole Foundation
- 10) Overhead Equipment
- 11) Vehicular Traffic Signal Assembly (Min Spec and Standard Spec Section 650)
- 12) Pedestrian Signal Assembly (Min Spec and Standard Spec Section 653)
  - 12.1) Pedestrian Features
- 13) Vehicle Detection (Min Spec and Standard Spec Section 660)
  - 13.1) Inductive Loops
    - a) Inductive Loop Detector Amplifiers
    - b) Inductive Loop Test
- 14) Signing
- 15) Pavement Marking
- 16) Sidewalk, Curb & Gutter
- 17) Removal Items
- 18) Signal Turn On

#### **Abbreviations:**

Standard Spec: Standard Specifications for Road and Bridge Construction
Min Spec: Minimum Specification for Traffic Control Signals and Devices

Design Standard: Roadway and Traffic Design Standards

UCF: Uniform Flash Code
MOV: Metal Oxide Varistor
NEC: National Electric Code

1) INTERSECTION DESIGN:	YES NO
a) Were supplemental agreements or change orders required for signal work?	
b) Did special provisions contain any technical special provisions?	
c) Was equipment installed consistent with that shown on form 750-010-02?	
d) What type of support system is used?	
Additional Comments:	
2) TRAFFIC SIGNAL CONTROLLER: (Min Spec and Standard Spec Section 671)	YES NO
Manufacturer: Model/Serial #: FDOT Certification Number: _	
a) Has the controller been installed at plan location?	
b) Is the certification sticker attached to controller in accordance with Min Spec and Standard Spec Section 671?	
c) Are timings per plans?	
d) Does controller receive vehicle/pedestrian calls?	
e) Signal phasing per plans?	
Additional Comments:	
3) TRAFFIC SIGNAL CONTROLLER CABINET: (Min Spec and Standard Spec Section 676)	YES NO
Manufacturer: Model/Serial #: FDOT Certification Number: _	
a) Is the orientation of the movements consistent with plans?	
b) Is the orientation of the movements consistent with the policy of the maintaining agency?	
c) Does the UCF flash function per specifications?	
d) Do the following service switches operate per specifications?	
(1) Signals on-off	
(2) Auto-Flash	
(3) Aux power on-off	
(4) Vehicle detectors	
e) Is the police panel per the following specifications?	
(1) Auto-Flash (2) Manual on off	
(2) Manual on-off (3) Manual Jack	
f) Is the following documentation provided?	
(1) Phasing diagram (posted on inside of door)	
(1) I hashig diagram (posted on misute of door)	

(2) Loop chart	
(3) FDOT Certification sticker	 
(4) Controller and monitor manual	 
(5) Cabinet prints	 
(6) Terminal connection tag	
(7) Copy of submittal data sheet	 
g) Is the peripheral equipment installed consistent with plans and submittals?	 
h) Are all connections secured?	 
i) Are MOV and load resisters installed on field signal and loop terminal strip correctly?	
j) Is the transient suppressor for service line installed correctly?	
k) What type of cabinet is installed?	
(Circle one): Type (1), (2), (3), (4) or (5)	
(Circle one): (NEMA TS1) (NEMA TS2 Type 1) (NEMA TS2 Type 2) (Type 170/2070)	
1) Is the cabinet base free from honey combing?	
m) Is the cabinet pad the correct height?	 
n) Has the tech pad been installed?	
o) Has the cabinet to base connection been secured and sealed properly?	
p) Are all cables identified in cabinet?	
q) Does the conduit in the cabinet extend at least 2" above pad?	
r) Is the correct number of spare conduits supplied?	
s) Are spare conduits terminated and capped in a pull box?	
t) Have the cables runs and wiring been secured?	
u) Does the wiring present a neat and orderly appearance?	
v) Are all conduits sealed?	
w) Is the control for the illuminated street name sign installed?	 
x) Is there a separate terminal block for loop splicing?	 
y) Is the cabinet grounded in accordance with Min Spec and Standard Spec Section 620?	 
z) Is the interface panel the correct type and installed properly?	 
aa) Does cabinet contain all equipment called for (load switches, flashers, transfer relays, detector	
harnesses, etc.) per contract?	 
bb) Are the directions of conduit stub outs marked in the cabinet base?	 
cc) Are the lugs on the field signal wires?	 
Additional Comments:	

3.1) Load Switches:				
Manufacturer:	Model/Serial #:	FDOT Certification Number: _		
Additional Comments:				
3.2) Flasher:				
Manufacturer:	Model/Serial #:	FDOT Certification Number: _		
Additional Comments:				
3.3) Conflict Monitor/ Mal	function Management Unit:		YES	NO
Manufacturer:	Model/Serial #:	FDOT Certification Number:		
a) Is the FDOT certification	sticker attached?			
b) Does the program card ma	atch cabinet prints?			
c) Are all cables secured?				
d) Does monitor sense confli	ct?			
e) Is time and date correct?				
Additional Comments:				
*	R SERVICE ASSEMBLY: (Min Spe	<u>-</u>	YES	NO
,	e requirements of the NEC and local co			
*	the proper clearance above any road of	· · · · · · · · · · · · · · · · · · ·		
	center a greater value than the main in	the cabinet?		
d) Are the service elements s	1 1 2			
e) Is the surge suppressor con	<u> </u>			
f) What is the voltage at the				
•	ons been exothermically attached?			
,	can 5.5' above surrounding grade?			
i) Is service meter can and lo				
j) What size wire was used for				
k) Are surfaces free of scratc	<u> </u>			
l) Is lightning arrestor install				
m) Is the black service neutra	al wire identified per the NEC?			

n) Is the conduit supported every	75"?			
o) Is the conduit terminated with	ground and plastic bushings?			
p) Is the service grounded per FI	OOT specifications and Design S	Standard 17736?		
q) Is the disconnect is 8' from gr	ound?			
r) Is the weather head is higher to	han telephone and cable TV, and	d 1' bellow neutral?		
Additional Comments:				
5) SIGNAL INSTALLATION	GROUNDING: (Min Spec and	d Standard Spec Section 620)	YES	NO
a) Is all grounding per Standard				
b) Were exothermic welds used				
c) Has the contractor installed th				
d) Has the contractor provided g				
e) Has the span wires been tied t	_	1		
f) Have all pedestrian features be	1 0			
g) Has the drain wire for loop re-	•			
h) Was a sketch showing the loc	ation of all ground nodes in inte	rsection provided (see appendix B)		
,	anon or an ground nodes in more	iscetion provided (see appendix B)		
Additional Comments:  6) PULL and JUNCTION BOX	XES: (Min Spec and Standard	Spec Section 635):	YES	
Additional Comments:  6) PULL and JUNCTION BOX Manufacturer:	XES: (Min Spec and Standard  Model/Serial #:			
Additional Comments:  6) PULL and JUNCTION BOX Manufacturer: a) Are lids stamped "Traffic Sign	XES: (Min Spec and Standard Model/Serial #: nal" and "20K"?	Spec Section 635):		
Additional Comments:  6) PULL and JUNCTION BOX Manufacturer: a) Are lids stamped "Traffic Sign b) If required, has the ground roo	XES: (Min Spec and Standard Model/Serial #: nal" and "20K"? d been installed?	Spec Section 635):		
Additional Comments:  6) PULL and JUNCTION BOX Manufacturer:  a) Are lids stamped "Traffic Sign b) If required, has the ground roc c) Are covers secured to the box	XES: (Min Spec and Standard Model/Serial #: nal" and "20K"? d been installed? es?	Spec Section 635):		
Additional Comments:	XES: (Min Spec and Standard Model/Serial #: nal" and "20K"? d been installed? es? ounded?	Spec Section 635): FDOT Certification Number		
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Additional Comments:  6) PULL and JUNCTION BOX Manufacturer: a) Are lids stamped "Traffic Sign b) If required, has the ground roc c) Are covers secured to the box d) Where required are covers gro e) Has the required amount of per f) Are all conduits sealed?	XES: (Min Spec and Standard Model/Serial #: nal" and "20K"? d been installed? es? bunded? ea gravel been installed under bo	Spec Section 635): FDOT Certification Number		
Additional Comments:	XES: (Min Spec and Standard Model/Serial #: nal" and "20K"? d been installed? es? bunded? ea gravel been installed under bore required?	Spec Section 635): FDOT Certification Number		
Additional Comments:  6) PULL and JUNCTION BOX Manufacturer: a) Are lids stamped "Traffic Sign b) If required, has the ground roc c) Are covers secured to the box d) Where required are covers gro e) Has the required amount of pe f) Are all conduits sealed? g) Have boxes been located whe h) Have the cables in the boxes by	XES: (Min Spec and Standard  Model/Serial #: nal" and "20K"? d been installed? es? bunded? ea gravel been installed under both re required? been labeled?	Spec Section 635): FDOT Certification Number		
Additional Comments:  6) PULL and JUNCTION BOX Manufacturer: a) Are lids stamped "Traffic Sign b) If required, has the ground roc c) Are covers secured to the box d) Where required are covers gre e) Has the required amount of per f) Are all conduits sealed? g) Have boxes been located whe h) Have the cables in the boxes bein Are the boxes flush with surro	XES: (Min Spec and Standard Model/Serial #: nal" and "20K"? d been installed? es? ounded? ea gravel been installed under bore required? been labeled? een labeled? ounding grades?	Spec Section 635):  FDOT Certification Number ox?		
Additional Comments:  6) PULL and JUNCTION BOX Manufacturer: a) Are lids stamped "Traffic Sign b) If required, has the ground roc c) Are covers secured to the box d) Where required are covers gro e) Has the required amount of per f) Are all conduits sealed? g) Have boxes been located whe h) Have the cables in the boxes be i) Are the boxes flush with surro j) Are pull boxes installed per M	XES: (Min Spec and Standard Model/Serial #:	Spec Section 635):  FDOT Certification Number  ox?  and Design Standard 17721?		
Additional Comments:  6) PULL and JUNCTION BOX Manufacturer: a) Are lids stamped "Traffic Sign b) If required, has the ground roc c) Are covers secured to the box d) Where required are covers gre e) Has the required amount of per f) Are all conduits sealed? g) Have boxes been located whe h) Have the cables in the boxes bein Are the boxes flush with surro	XES: (Min Spec and Standard  Model/Serial #: nal" and "20K"? d been installed? es? bunded? ea gravel been installed under both re required? been labeled? bunding grades? fin Spec and Standard Spec 660 a alled per section 635 of special p	Spec Section 635):  FDOT Certification Number  ox?  and Design Standard 17721?  provisions?		

7) CONDUIT: (Section 630) a) Does the conduit comply with the MSTCSD"? b) Was conduit installed per plan location?
a) Does the conduit comply with the MSTCSD"?  b) Was conduit installed per plan location?
b) Was conduit installed per plan location?
· ·
c) Does any conduit run have more than 360 degrees of bends?
d) Was an approved metal conduit used for above ground locations?
e) Was the underground service feed an approved metal conduit?
f) Was schedule 80 PVC or fiberglass conduit used on bridge decks?
g) Was a pull wire installed in all spare conduits?
h) Was expansion fittings installed on bridge conduit were required?
i) Was conduit installation in compliance with the NEC?
j) Was the size of conduit used in compliance with plans and specifications?
k) Are ends of metal conduit protected by a bushing?
l) Are all conduits sealed correctly?
m) Was restoration of the trench in compliance with specifications?
n) Was all above ground conduit strapped per NEC requirements?
o) Is the radius of curvature of the inner edge of any bend in compliance with Standard Spec 630-3.10?
p) Do as-builds reflect any deviations from plan location for the conduit runs?
q) Was the depth of the conduit in compliance with plans and specifications?
r) Were directional bores done with approved equipment?
s) Where underground nonmetal conduit transitions to above ground metallic conduit is there at least 6" of
metal conduit underground?
Additional Comments:
8) SIGNAL and INTERCONNECT CABLE: (Min Spec and Standard Spec Section 632)  YES NO
a) Is the cable IMSA certified?
b) Is the color code correct?
c) Are all connections tight?
d) Was a calibrated crimper used to crimp terminals?
e) Were sufficient conductors supplied for present and future heads?
f) Was the correct strain relief device used?
g) Have all unused conductors been secured properly?

h) Have all cables been labeled in pole bases, pull boxes and cabinet?		
i) Has the insulation on any cable or conductor been chaffed?		
If so, list location.		
j) Has sufficient cable been coiled in the cabinet?		
k) Are required spares been provided for in all signal and pedestrian cables?		
1) Is there one neutral per approach?		
m) Has Appendix B been completed in the back of this checklist?		
Additional Comments:		
9) SIGNAL POLES		
9.1) Mast Arm:	YES	NO
a) Is the uprights plumb?		
b) Is the jam nut installed?		
c) Are the nut covers installed?		
d) Is the correct amount of thread exposed above the nut?		
e) Does the end of the arm fall below the center of the arm at the attachment point?		
f) Has the correct strain relief for the signal cable been installed?		
g) Does the upright have a terminal compartment?		
h) Do the bolts holding the arm to the upright have the correct reveal?		
i) Have the Astro-brackets been installed properly?		
j) Is the cable jacket intact inside the bracket?		
k) Has the grommet been installed in the drilled cable entrance hole?		
1) Is the head aligned correctly?		
m) Have all the pole covers been installed?		
n) Are there any dents or scratches that have not been repaired?		
o) Has the mast arm been installed in the correct location and have the proper alignment?		
p) What is the distance from head to stop bar? Min Max		
q) Is the grout cap installed including drainage?		
r) Arm securely fastened to pole?		
s) All holes not used are plugged?		
t) Has all mast-arm hardware been installed?		
u) Is mast-arm assembly upright and square to the road?		
v) Are poles installed per plans and FDOT specifications?		

.2) Prestressed Concrete Poles: (Standard Spec Section 641)	YES	NO
Are poles installed per plans and FDOT specifications?		
) Were the poles the type and length as specified in the plans?		
) Was the camber of the pole measured as the maximum deviation between the centerline of the pole and a straight line connecting the centroids of the cross-sections at each end of the pole greater than the		
total pole length in millimeters divided by 140?		
) Was the footing constructed per plans and specifications?		
) Was the excavation for the pole backfilled properly?		
If foundation extended above ground level was the concrete troweled to a smooth finish?		
) Is the orientation of the span wires to the poles perpendicular for single span and perpendicular to a line		
bisecting the angle between the spans on a two span attachment?		
) Was the pole raked correctly?		
Were all unused holes plugged?		
Was the correct number of conduits stubbed out from the base of the poles?		
) Was the pole bonding wire brought out of the foundation?		
Additional Comments:		
		NT/
.3) Steel Strain Pole:	YES	NO
	YES	NO —
3) Steel Strain Pole:  Was the pole secured to the foundation properly?  Is the pole free from scratches and defects?	YES	NO 
3) Steel Strain Pole:  Was the pole secured to the foundation properly?  Is the pole free from scratches and defects?  Is the pole cap in place and secured?	YES :	NO 
3) Steel Strain Pole:  Was the pole secured to the foundation properly?  Is the pole free from scratches and defects?  Is the pole cap in place and secured?  Was the proper strain relief provided?	YES :	NO 
3) Steel Strain Pole:  () Was the pole secured to the foundation properly?  () Is the pole free from scratches and defects?  () Is the pole cap in place and secured?  () Was the proper strain relief provided?  () Was all hardware secured correctly?	YES :	NO 
3) Steel Strain Pole:  Was the pole secured to the foundation properly?  Is the pole free from scratches and defects?  Is the pole cap in place and secured?  Was the proper strain relief provided?	YES :	
3) Steel Strain Pole:  () Was the pole secured to the foundation properly?  () Is the pole free from scratches and defects?  () Is the pole cap in place and secured?  () Was the proper strain relief provided?  () Was all hardware secured correctly?	YES :	NO
3) Steel Strain Pole:  () Was the pole secured to the foundation properly? () Is the pole free from scratches and defects? () Is the pole cap in place and secured? () Was the proper strain relief provided? () Was all hardware secured correctly? () Was the pole bonded correctly? () Additional Comments:	YES T	
3) Steel Strain Pole:  () Was the pole secured to the foundation properly? () Is the pole free from scratches and defects? () Is the pole cap in place and secured? () Was the proper strain relief provided? () Was all hardware secured correctly? () Was the pole bonded correctly? () Was the pole bonded correctly?		
3) Steel Strain Pole:  () Was the pole secured to the foundation properly? () Is the pole free from scratches and defects? () Is the pole cap in place and secured? () Was the proper strain relief provided? () Was all hardware secured correctly? () Was the pole bonded correctly? () Additional Comments:		

e) Was the f) Was the g) Was the h) Were the i) Did the a j) Was the k) Did the ol) Was the m) Is the fin o) Does it h p) Even wir Complete of	th sidewalk? hart below:	earance correct? conduits stubbed of correct? ight size and lengt the proper height per width and dept form to the design of the mild per FDOT specifion top acceptable?	ut? h? above the for h? mix? x checked? ications?	undation?				
POLES	MFG	MATERIAL	TYPE	LENGTH	QUADRANT	**		
1								
2								
3								
4								
5								
Additional	Comments:							
<b>10) OVER</b>	HEAD EQUIPMI	ENT					YES	NO
a) Are sign	als weather-tight (s	silastic sealant inst	alled per Mii	n Spec A659)?				
	o ¼" holes been dr							
	tion doors open pro							
, ,	lamp filament in a	1 0 1	, forming a "	W"?				
	amps the correct wa	•						
	ignal heads installe							
g) Are sign bar)?	als installed per pla	ans and FDOT spe	cifications (v	ertical/horizont	al and distance fro	om stop		
,	the distance from h	nead to stop bar? M	Iin	Max				

		_		_								
*	one head for		oach	betw	een 4	lO' ai	nd 150	)'?				 
	dware tight a											 
k) Have the	span wires b	been tension	ed p	ropei	:ly?							 
1) Has the s	ignal cable b	een attached	d pro	perly	'?							 
m) Are drip	loops the co	orrect size a	nd se	cure	d pro	perly	?					 
n) Is there a	it least 8' hor	rizontal sepa	aratic	on be	twee	n hea	ids fac	cing t	the sa	ame	direction?	
	ay signal hea	-						Ū				
*	cle traffic sig	1 00						8000	hrs)?	•		 
<b>.</b> '	amp certifica					`	,		,			
	nal head doo			perl	v (do	wnw	ard or	out	to co	rrec	et side)?	
-	shers installe		-	-								
	stalled prope		_		_							
	d serrated ad	-		_			_			er's c	data sheets?	 
*			•	_			_				of bolts (per manufacturer's	 
instruction		rop nangers	muv	c the	COIIC		verrap	una	mann	oci (	or boits (per manaracturer s	
	nal head heig	thts (Mast A	rme'	١								 
Record Sig.	POLE #	ARM #	1	2	3	4	5	6	7	8	1	
	FULE #	AKWI#	1		3	4	3	6	/	0	-	
											_	
											]	
											1	
<u> </u>		1									_	
Additional	Comments:											
	-											

Record Signal head heights (Span Wire)

9	5			<del></del>								
POLE #	1	2	3	4	5	6	7	8	9	10	11	12

Additional Comments:				
11) VEHICULAR TRAFF	IC SIGNAL ASSEMBLY: (Min Spec	c and Standard Spec Section 650)	YES	NO
Manufacturer:	Model/Serial #:	FDOT Certification Number:		
a) Is the FDOT certification	numbers labels near the terminal block	?		
b) Are the number and locat	on of signals as per the plans?			
c) Are the signals installed p from stop bar)?	er the plans and FDOT specifications (	i.e. vertical/horizontal and distance		
d) Are signals within the req	uired minimum and maximum heights	per Standard Spec Section 650?		
e) Are lenses, lamps, and vis	ors installed in proper direction?			
f) Do horizontally mounted	signal head doors open downwards?			
g) Are all the hardware used	made of stainless steel type 304/316?			
h) Are the Astro Brackets se	curely fastened with cable tied downs?			
i) Are all the required condu	ctors terminated with calibrated ratchet	t type crimp tool?		
j) Are all the spare conducto	rs individually and properly capped?			
k) Is the signal head surface	free of scratches and dents?			
1) Disconnect Hanger:				
1) Are cable entran	ce bushings installed in accordance wit	th Min Spec Section A659?		
2) Are unused cabl	e entrances plugged?			
3) Are adaptor hub	s tight?			
4) Are nuts tight ar	d lock washers installed on tri-stud bol	lts?		
5) Are the correct r	number of disconnects installed per plan	ns?		

6) Have all unused conductors in the Jones plug been secured? m) Are cotter pins installed in span wire clamps?	
n) Are lock washers installed and nuts tight in span wire clamps?	
12) PEDESTRIAN SIGNAL ASSEMBLY: (Min Spec and Standard Spec Section 653)  Manufacturer: Model/Serial #: FDOT Certification Number: _ a) Are the signals not less than 8' from ground and no more than 10'?	YES NO
b) Are the pedestrian signals housing weather proof and doors open downward?	
c) Are the pedestrian detectors within 1 ½' and 4' from ground as per Standard Spec Section 665-3 and Design Index 17784?	
d) Is the pedestrian detector and sign pointing in the same direction as the corresponding crosswalk?	
e) Are ped signal surfaces free from scratches and dents?	
f) Are FDOT certification stickers provided in accordance with Standard Spec Section 603?	
g) Are the correct wattage lamps installed?	
h) Are signals weather-tight?	
i) Are pedestrian signals installed per Standard Spec Section 665-3 and Design Index 17784??	
j) Are pedestrian detectors weather tight (silastic sealant installed around mounting bolts/conduit)?	
k) Is the pedestal installed per standard index?	
l) Is the correct number of signals, pedestals, signs, etc, installed per plans?	
m) Are pedestrian detectors' locations handicap accessible and do they meet ADA requirements?	
12.1) Pedestrian Features:	YES NO
On tight corners are the pedestrian heads located such that the chance of a turning truck striking the head is minimized?	
Do the indications match plans?	
Are the pedestrian detectors in compliance with ADA?	<del></del> <del></del>
Do any audio /tactile pedestrian features function correctly?	<del></del>
Do the heads line up with crosswalks?	<del></del>
Are there three spares in each pedestrian signal cable?	
Is the pedestrian clearance time sufficient to clear pedestrians?	
Additional Comments:	
13) VEHICLE DETECTION:	YES NO

Type of detection: Model/Serial #: a) Has the contractor provided the correct documentation?		
Manufacturer: Model/Serial #:	FDOT Certification Number:	
a) Has the contractor provided the correct documentation?	_	
b) Do all detector units detect?	_	
c) Are all loops (or alternate detection device cabling) labele	ed and attached to the correct terminals?	
d) Are loops (or alternate detection device cabling) labeled i movement number?	n pull boxes and in cabinet as to location and  —	
13.1) Inductive Loops:		
a) Was the slot for the loops and home runs cut to the proper Design Index 17781?	r depth per Standard Spec Section 660 and	
b) Are there more than 4 home run cables in a saw cut?	_	<del>_</del>
c) Was the window installed correctly?	_	<del></del>
d) Was the loop window cut the proper size and sealed prop	erly?	<del></del>
e) Was the correct wire installed (size and insulation)?		<del></del>
f) Are the loops to home run connection watertight?	_	<del>_</del> <del></del>
g) Is there conduit installed from window to pull box?	_	<del></del>
h) Loop Sealant: (FDOT Certification number:	) Was the correct sealant used?	<del></del>
Was the sealant applied per manufacturers requirement		<del></del>
Was the excess sealant removed?	<u></u>	
i) Were the drain wires attached?	_	
j) Is there an individual run for each loop back to the cabine	<u>-</u> t?	<del>_</del>
k) If more than one loop is connected to a detector are they connected to a detector are the connected to a detector and the connected to a detector are the		<del>_</del> <del></del>
1) Was this connection of multiple loops done on a separate		<del>_</del>
m) Are adjacent loops wound in opposite directions?	_	<del>_</del>
n) Was the home run cable the correct size and type?	_	<del>_</del>
o) Were all loop parameters within tolerance?	_	<del></del>
p) Has the contractor provided loop data sheet?	_	<del></del> <del></del>
q) Was an inspector present during loop cutting and while g	round rod were driven?	<del></del> <del></del>
r) Are there any loop leads exposed?		<del></del>
s) Is the splicing of the loops in accordance with Design Ind	ex 17781?	<del></del>
t) Are the loop lead-in bare wires terminated per contract pla		
u) Do all loops meet meg-ohms specification requirement?	_	
v) Is the loop saw cut depth per Standard Spec Section 660 a	and Design Index 17781?	

Additional Comments:	
13.1.1) Inductive Loop Detector Amplifiers:	YES NO
a) Have the loops been installed according to plans (i.e.; type of loop; location of loop)?	
b) Has the loop sealant been installed neatly and evenly?	
c) Has the loop wire been installed as per Standard Spec 660 (i.e.; twisted, shielded, number of turns)?	
d) Has the contractor recorded the inductance meg reading on a FDOT Traffic Signal Resistance	
Measurement Data Sheet? (if yes, attach copy)	
e) Have the loops/lead-ins been spliced in accordance with Design Index 17781?	
f) Have lead-in shields been grounded?	
Additional Comments:	

# 13.1.2) Inductive Loop Test

# **Record Loop Readings**

DIRECTION	PHASE	LOOP#	L	R	Q	FREQ	DELTA L	TYPE

Additional Comments:	
14) SIGNING:	YES NO
a) Were the street name signs installed per plans?	
b) Was the logo and block number correct?	<del></del>
c) Was a HOA switch installed?	
d) Do the photocells function correctly?	
e) Was a drip loop provided at the cable entry point?	
f) Was the correct cable type used to wire sign?	<del></del> -
g) Do all lamps function in illuminated signs?	
h) Have manufacturer and date stickers been applied to back of signs?	
i) Have wind beams been installed where applicable?	
j) Are sign surface free of scratches of damage?	
k) Is all hardware stainless steel type 304/316?	<del></del>
l) If used, list internally illuminated street name sign FDOT Certification number:	
Additional Comments:	
15) PAVEMENT MARKING:	YES NO
a) Have markings been installed per plans?	
b) Do new crosswalks line up with ped signals and handicap ramps?	
c) Are stop bars no closer than 40' and no further away than 150' from traffic signals?	
d) Are stop bars laid out properly in relation to vehicle loops?	
e) Have conflicting markings been removed?	<del></del>
f) Are raised pavement markings installed properly and per plan?	
g) Is general appearance and clean-up is acceptable?	
g) is general appearance and clean up is acceptable.	
Additional Comments:	
16) SIDEWALK, CURB & GUTTER:	YES NO
a) Are ramps in an accessible location?	
b) Is concrete stamped properly (in ramps)?	
c) Is any new concrete cracking?	
d) Has concrete over spray been removed from painted structures, (where applicable)?	
1 7	

<ul><li>e) Is general appearance and clean-up is acceptable?</li><li>f) Does new concrete installed match existing concrete (color, finish, etc.)?</li></ul>		
Additional Comments:		
17) REMOVAL ITEMS:	YES	NO
a) Have all existing foundations been removed entirely or lowered 2' below grade?		
b) Have all existing pavement markings and signs in conflicts with new installation been removed?		
c) Have all removals involving excavation been restored appropriately?		
d) Have all abandoned pull boxes been removed and restored appropriately?		
e) Has all clean-up, backfill, dressing, and sod work needed to make a quality job been completed?		
Additional Comments:		
18) CERTIFICATION OF TRAFFIC CONTROL SIGNAL DEVICES: (Min Spec and Standard Spec		
Section 603)	YES	NO
a) Are all traffic control signal devices marked in accordance with SSRBC Section 603 (manufacturer name		
and/or trademark and part number)?		
b) Has all traffic control signal devices requiring certification been marked with the FDOT Certification		
Number in accordance with SSRBC Section 603?		
Additional Comments:		
19) SIGNAL TURN ON:	YES	NO
a) Measure and record line voltage		
b) Measure and compare voltage at furthermost indication.		
c) Is the voltage between the two readings greater than 5% of line voltage?		
d) Does the test button work on the GFI?		
e) Verify the field wiring for each movement to insure continuity to the appropriate signal head and record any discrepancies		
f) Does police flash operate correctly?		
g) Does UCF flash operate correctly?		
h) Have all connection been checked to insure they are secured?		

i) Do light, t	fan, and thermostat fun	action correctly?			 
	f the detectors showing				 
			op and go. Flash		
l) Did the co	ontractor have qualified	d personnel at tu	rn on who could program	the controller and trouble shoot	
the syste	em?				 
*	eads aimed correctly?				 
· •	call the correct moven				 
	edestrian detectors call				 
p) Measure			listance for each approach	h.	
	APPROACH	MIN	MAX		
a) Did the in	nstallation function pro	nerly at turn on	)		
<del>-</del> -	al ready to turn on at the				 
,	bles labeled and neatly		· ·		
s, mo un cu	ioros racerea una neutr	,			
Additional (	Comments:				 

## APPENDIX A

		111 1 11 111		i e e e e e e e e e e e e e e e e e e e	
ITEMS	MFG	MODEL#	SERIAL#	TYPE	PHASE
CONTROLLER					
CABINET					
SIGNAL HEADS					
SIGNAL MONITOR					
FLASHER					
COORDINATION UNIT					
PRE-EMPT UNIT					
SIGNAL HEADS					
SIGNAL HEADS (PEDS)					
DISCONNECT HANGER					
DETECTIONS					
_					

VENCTH	VENCTHERMOSTAT		FAN		HANDSWITCH			_LINE FILTER		**
SIGNAL HEADS	1	2	3	4	5	6	7	8	9	I
CLEARANCE HT.										1
NOTES										

## APPENDIX B

### CABLE RUN IDENTIFICATION

Darken Lines Appropriate For Intersection

Draw in Cabinet Location (Symbol:

Draw in Signal and Ped Heads, with Head Numbers Record all Cable ID (Color or Number) Record

Conductor Size Record Number of Conductors in each Cable

Example: Green or 1-14/12

