

MIAMI-DADE COUNTY
TRAFFIC SIGNALS AND SIGNS DIVISION
QUALIFIED PRODUCTS LIST



OCTOBER 2025

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Background

The sale, purchase, or installation of any traffic control signal or device in the State of Florida must conform with the requirements of s. 316.0745, Florida Statute. All contractors, manufacturers, or suppliers within the State who intend to sell or install a transportation device must ensure its compliance with the Florida Department of Transportation (FDOT) Approved Products List (APL) certification process prior to its sale or installation.

The Miami-Dade County Traffic Signals and Signs (TSS) Division maintains and operates a uniform traffic signalization system (hereinafter referred to as “System”) serving all local and State roadways throughout Miami-Dade County. To facilitate in effectively and efficiently managing a System comprised of numerous components and subcomponents, the Division maintains a list of authorized traffic control products that are specific to the System. The TSS Division’s Qualified Products List (TSSQPL) comprised is predominantly a subset of the FDOT APL with products having System-specific characteristics that facilitate TSS Division’s role as a maintaining agency including interchangeability of components, improved product lifecycle, actual product field performance, and all desired features needed for product synchronization. Synchronization may be based on:

- a. Function (necessary for the satisfactory operation of the existing system);
- b. Aesthetics (necessary to match the visual appearance of existing system); and
- c. Logistics (the proprietary product is interchangeable with products in the TSS Division maintenance inventory).

The TSSQPL is updated periodically but typically not more than once per calendar quarter. The TSSQPL is grouped predominantly by Section numbering consistent with FDOT Standard Specifications. FDOT APL numbers and their associated approval dates are shown solely for cross-reference purposes. Refer to the actual FDOT APL listing for additional information. Product’s whose FDOT APL certification is suspended or expired may not be used in Miami-Dade County. Products with noted limitation appearing in the FDOT APL must adhere to those limitations. Products that may not require FDOT APL certification are noted with a “N/A” along with the date when the product was approved for addition to the list by the TSS Division.

See the TSS Division website at <https://www.miamidade.gov/global/transportation/public-works/traffic-signals-and-signs.page> for additional information regarding the TSS Division QPL. Contact Nahum Fernandez, Traffic Control Standards and Specifications Coordinator at Nahum.Fernandez@miamidade.gov with regards to any questions concerning this listing of authorized traffic control products or to report discrepancies, errors, or omissions.

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GROUNDING AND ELECTRICAL

620 GROUNDING AND LIGHTNING PROTECTION

Category	FDOT APL #	Approval	Manufacturer	Model/Description
Ground Rod	620-005-004	8/26/2024	nVent ERICO	Pointed Ground Rod (615800); Sectional Ground Rod (635800)
Ground Rod	620-005-002	8/26/2024	Galvan Industries Inc.	Pointed Ground Rod (6260); Sectional Ground Rod (6260S)
Ground Rod	620-005-003	8/26/2024	Harger Lightning and Grounding	Pointed Ground Rod (5810); Sectional Ground Rod S5810
Ground Rod	620-005-001	08/01/2009	Southern Grounding Products	Pointed Ground Rod (C5810); Sectional Ground Rod (CS5810)
Ground Rod Coupling	N/A	08/01/2009	Eritech (Erico International Corp.)	Compression for Pointed (CC58); Threaded for Sectional (CR58)
Ground Rod Coupling	N/A	04/13/2011	Galvan Industries Inc.	Compression for Pointed (60-TC); Threaded for Sectional (60-C)
Ground Rod Coupling	N/A	08/27/2010	Harger Lightning and Grounding	Compression for Pointed (GRCC58); Threaded for Sectional (GRC58)
Ground Rod Coupling	N/A	08/01/2009	Southern Grounding Products	Compression for Pointed (58DC); Threaded for Sectional (58C)
Ground Rod Coupling	N/A	04/13/2011	T & B/Blackburn	Threaded for Sectional (60C); Compression for Pointed (60CNT2)
Exothermic Welded Connection	N/A	08/01/2009	Continental Industries Inc.	thermOweld Single Shot CR-24 (4 Conductor); CR-2 (2 Conductor); CR-1 (1 Conductor); CR-25 (3 Conductor)
Exothermic Welded Connection	N/A	08/01/2009	Erico International Corp.	Cadweld One Shot NX1161L (4 Conductor); GT1161L (2 Conductor); GR1161L (1 Conductor); NT1161L (3 Conductor)
Exothermic Welded Connection	N/A	08/25/2010	Harger Lightning and Grounding	Ultraweld Uni-Shot G41- 584 (4 Conductor); G21- 584 (2 Conductor); G11-584 (1 Conductor); G31- 584 (3 Conductor)
Universal Grounding Clamp	N/A	04/13/2011	Galvan Industries Inc.	G-5 / #10 Solid - #2 Stranded
Universal Grounding Clamp	N/A	08/01/2009	Harger Lightning and Grounding	301LD / #10 Solid - #2 Stranded
Universal Grounding Clamp	N/A	08/01/2009	Southern Grounding Products	G-5 / #10 Solid - #2 Stranded
Universal Grounding Clamp	N/A	04/13/2011	T & B/Blackburn	G-5 / #10 Solid - #2 Stranded

SURGE PROTECTIVE DEVICES (SPDS):

1. Use FDOT certified SPDs that and meet all applicable requirements for the equipment being protected unless more stringent requirements to protect existing systems are specified by the Miami-Dade County Traffic Signals and Signs (TSS) Division. Must be listed on the FDOT Approved Products List (APL) and meet the Materials requirement of Section 620 (Grounding and Lightning Protection) of the Florida Department of Transportation (FDOT) "Standard Specifications for Road and Bridge Construction."

630 CONDUITS

See the FDOT Approved Products List for approved conduits by material type for the installation categories listed below.

1. Above-ground and underground electrical power service installations: Use rigid galvanized metal that is hot-dipped galvanized with a minimum coating of 1.24 ounces per square foot on both the inside and outside of the conduit. The weight of the zinc coating must be determined using ASTM A90. Use conduit with both ends reamed and threaded.
2. Non-structural, above ground ITS communication and electrical conduit: Use Schedule 80 PVC or rigid galvanized metal conduit.
3. Underground installations in earth or concrete for ITS and traffic control signal applications: Use HDPE with an SDR number less than or equal to 11, Schedule 80 PVC or Schedule 40 PVC conduit except, use only HDPE conduit with an SDR number less than or equal to 11 for blown fiber optic cable installations on limited access facilities.
4. Underground installations of electrical conduit in earth for ITS electrical applications only: Use HDPE with an SDR number less than or equal to 13.5, Schedule 80 HDPE, Schedule 40 HDPE, Schedule 80 PVC, or Schedule 40 PVC conduit.
5. Underground installations of electrical conduit in earth for lighting applications: Use HDPE with an SDR number less than or equal to 13.5, Schedule 80 PVC, or Schedule 40 PVC conduit.
6. Conduit inside of or embedded within structural elements: Use Schedule 40 or Schedule 80 PVC conduit. Use conduit with solvent weld slip-fit plastic couplings unless approved by the Engineer.
7. Conduit that are outside or attached to the exterior of structural elements: Use Schedule 80 PVC conduit. Use conduit with solvent weld slip-fit plastic couplings unless approved by the Engineer.

632 SIGNAL CABLE

Category	FDOT APL #	Approval	Manufacturer	Model/Description
Traffic Signal Cable (Aerial and Duct)	N/A	08/01/2009	Advanced Digital Cable (ADC)	8104 / 4 Conductor; 8107 / 7 Conductor; 8112 / 12 Conductor; 8120 / 20 Conductor
Traffic Signal Cable (Aerial and Duct)	N/A	08/01/2009	Belden Electronics Division	601137 / 4 Conductor; 601205 / 7 Conductor; 601207 / 12 Conductor; 601443 / 20 Conductor
Traffic Signal Cable (Aerial and Duct)	N/A	08/01/2009	Deca Cables	72-754 / 4 Conductor; 72-757 / 7 Conductor; 72-732 / 12 Conductor; 72-765 / 20 Conductor
Traffic Signal Cable (Aerial and Duct)	N/A	08/01/2009	Falcon Fine Wire	980414X19-1 / 4 Conductor; 980714X19-1 / 7 Conductor; 981214X19-1 / 12 Conductor; 982014X19-1 / 20 Conductor
Traffic Signal Cable (Aerial and Duct)	N/A	08/01/2009	Isotec (General Cable)	IM144BA19 / 4 Conductor; IM147BA19 / 7 Conductor; IM1412BA19 / 12 Conductor; IM1420BA19 / 20 Conductor
Traffic Signal Cable (Aerial and Duct)	N/A	02/07/2012	Tappan Wire & Cable (Southwire)	SU6066.1 / 4 Conductor; SU6036.1 / 7 Conductor; SU6069.1 / 12 Conductor; SU6073.1 / 20 Conductor
Shielded Loop Detector Lead-In Cable	N/A	08/01/2009	Advanced Digital Cable (ADC)	8780
Shielded Loop Detector Lead-In Cable	N/A	08/01/2009	Belden Electronics Division	601765
Shielded Loop Detector Lead-In Cable	N/A	08/01/2009	Deca Cables	70-915

Shielded Loop Detector Lead-In Cable	N/A	08/01/2009	Falcon Fine Wire	98021450-2
Shielded Loop Detector Lead-In Cable	N/A	08/01/2009	Isotec (General Cable)	ILT142AP19
Shielded Loop Detector Lead-In Cable	N/A	02/07/2012	Tappan Wire & Cable (Southwire)	SU6038.1
Loop Wire	N/A	07/16/2018	Advanced Digital Cable (ADC)	8460XL or 8460XLP
Loop Wire	N/A	07/16/2018	Belden Electronics Division	581923 or 582115
Loop Wire	N/A	07/16/2018	Southwire Company	595987
Communications Interconnect Cable	N/A	08/01/2009	General Cable	7524618
Communications Interconnect Cable	N/A	08/01/2009	Houston Wire and Cable Co.	HW353 01906
Communications Interconnect Cable	N/A	08/01/2009	Superior Essex	04-026-21
Pull and Locate Wire	N/A	03/02/2011	Southwire Company	22 97 08 / Orange
Composite Cable (Power and Video)	N/A	10/22/2010	ADC (Supplied by Iteris)	99163SFX
Composite Cable (Power and Video)	N/A	10/22/2010	Isotec (Supplied by Control Technologies)	X3411212-00 / WIRE-VC-RG#18/6
Composite Cable (Power and Video)	N/A	10/22/2010	Isotec (Supplied by Iteris)	I59PVCC-00

635 PULL BOXES, SPLICE BOXES, JUNCTION BOXES, AND FIBER OPTIC SPLICE VAULTS

Category	FDOT APL #	Approval	Manufacturer	Model/Description
Pull Box and Covers	635-001-079	09/02/2022	American Polymer Company	PC2436
Pull Box and Covers	635-001-077	09/02/2022	American Polymer Company	PC 1324
Pull Box and Covers	635-001-020	05/28/1997	Armorcast Products Co.	Model A6001946TAPCX12
Pull Box and Covers	635-001-025	07/05/2001	Quazite (Division of Hubbell)	Model PG1324BA12
Pull Box and Covers	635-001-051	03/18/2010	Quazite (Division of Hubbell)	Model A24132412AR81

639 ELECTRICAL POWER SERVICE ASSEMBLIES

Category	FDOT APL #	Approval	Manufacturer	Model/Description
Service Disconnect	N/A	01/27/2011	Cutler-Hammer (Eaton Corp.)	DH222NWK or DH262NWK / NEMA 4X

Service Disconnect	N/A	01/27/2011	General Electric Co. (GE)	TH3222SS / NEMA 4/4X
Service Disconnect	N/A	09/22/2014	Siemens Industry Inc.	HF222S (Type 4X) Heavy Duty
Service Disconnect	N/A	01/27/2011	Square D Company (Schneider Electric)	H222 DS / NEMA 4/4X
Meter Base	N/A	07/23/2015	Siemens/Talon	41405-025F
Fuses for Service Disconnect - Heavy Duty Safety Switch	N/A	08/01/2009	Cooper Bussman Inc.	Fusetron FRN-R-15
Fuses for Service Disconnect - Heavy Duty Safety Switch	N/A	08/01/2009	Cooper Bussman Inc.	Fusetron FRN-R-40
Fuses for Service Disconnect - Heavy Duty Safety Switch	N/A	08/01/2009	Mersen	Tri-Onic TR40R
Fuses for Service Disconnect - Heavy Duty Safety Switch	N/A	08/01/2009	Mersen	Tri-Onic TR15R
Manual Transfer Switch and Emergency Generator Interface	N/A	12/12/2019	Reliance Controls Corporation	Model C51A1L-C1 (with #2 key)
Electrical Service Wire	N/A	12/01/2010	Pyramian Cables and Systems	Q01820A / Type RHH/RHW-2/USE
Electrical Service Wire	N/A	03/02/2011	Southwire Company	#6 [SPECIFIC COLOR(S)] / Type RHH/RHW-2/USE
Electrical Service Wire	N/A	05/23/2025	Service Wire Co.	Part Number USE6BK/ Type RHH/RHW-2/USE
Electrical Service Wire	N/A	05/23/2025	Advanced Digital Cable (ADC)	Part Number 306/ Type RHH/RHW-2/USE

685 TRAFFIC CONTROL SYSTEM AUXILIARIES

Category	FDOT APL #	Approval	Manufacturer	Model/Description
Uninterruptible Power Supply (UPS)	685-002-020	11/17/2021	Alpha Technologies	Model FXM-HP-1100 UPS w/ Alpha UATS and UGTS with 19" rack mount; (4) AlphaCell 240XTV batteries; Alpha Technologies SCMini-Plus Remote Battery Management System with BS3B-12-4-EQ battery monitoring sensors; and approved battery wiring harness.
UPS Cabinet	685-002-004	01/20/2006	Southern Manufacturing (a Division of Ernest Products Inc.)	Wired UPS Enclosure Only (54" height). For use with UPS and supporting components listed herein and supported by approved shop drawings and details.

STRUCTURAL SUPPORT FOR TRAFFIC SIGNS AND SIGNALS

641 PRESTRESSED CONCRETE POLES

Category	FDOT APL #	Approval	Manufacturer	Model/Description
Service Pole (Direct Burial)	N/A	09/25/2009	Dura-Stress inc.	Type P-II (Service Pole) / 16 feet overall pole length and 6 feet direct burial/ No center void
Service Pole (Direct Burial)	N/A	04/28/2022	Precast Specialties LLC	Type P-II (Service Pole) / 16 feet overall pole length and 6 feet direct burial / No center void

646 ALUMINUM POLES, PEDESTALS, AND POSTS

Category	FDOT APL #	Approval	Manufacturer	Model/Description
Aluminum Pedestal	N/A	10/28/2011	Eastern Metal Supply	17-DOT-140 / D.O.T. Round Tube 6061-T6 - Stds. 19 / 6" OD
Aluminum Pedestal	N/A	11/03/2011	Eastern Metal Supply	DOT-6-UBOLT / 6-inch U-bolts w/ lock washers & nuts
Aluminum Pedestal	N/A	07/11/2014	Pelco Products Inc.	PB-5102
Aluminum Pedestal	N/A	07/11/2014	Pelco Products Inc.	PB-5100
Square Aluminum Pedestal Base	646-001-001	10/05/2016	Pelco Products Inc.	SP-1116-FL-AD-NL-GL-PNC; P33 Gloss Black Standard Powder Coat Finish may be accepted in lieu of non-coated (PNC) where specified on site plans approved by the TSS Division.
Collar Assembly	N/A	01/12/2000	Pelco Products Inc.	PB-5325
Anchor Bolts for Aluminum T-Base	N/A	06/30/2020	Pelco Products Inc.	PB-5543-GLV
Aluminum Pedestal Slip Base	N/A	11/03/2011	Eastern Metal Supply	DOT-6-BPB PKG / Sign Pole Base w/(DOT-6-KIT) Bolt Kits
Slip Fitter	N/A		Pelco Products Inc.	PN SP-1034-FL/For use w/ 4-

649 MAST ARMS

Category	FDOT APL #	Approval	Manufacturer	Model/Description
Mast Arms	N/A	02/02/2011	Millerbernd Manufacturing	
Mast Arms	N/A	02/02/2011	Valmont Ind. Inc.	
Mast Arms	N/A	11/22/2019	Union Metal Industries Corp.	
Mast Arms	N/A	02/02/2011	Pelco Structural, LLC	

Mast Arms	N/A	01/23/2019	Maico Industries Inc.	
Mast Arms	N/A	03/25/2024	Stony Brook Structures of Florida LLC	
Mast Arms	N/A	09/10/2021	Arcosa Traffic Structures	
Mast Arms	N/A	03/14/2019	Ameron Pole Products	

Notes:

1. Steel Mast Arms Meet the requirements of FDOT Specification Section 649. Galvanized Finish; Painted / Powder Coated Pole Finishes Prohibited; Fabricate mast arm assemblies and miscellaneous hardware in accordance with Miami-Dade County Mast Arm Detail Sheets for all traffic signalization/flashers; Exception: Signalization projects bid by FDOT, specified to meet FDOT Standards, or signalizations installed on the State Highway System shall use the FDOT Standard Plans Indices 649-030 and 649-031(Mast Arm Assemblies) for pole fabrication. Note: Base hand hole required to be located at 0° orientation; Cut all materials to the final dimensions and complete all welding prior to galvanizing; All components for individual mast arm assemblies shall be from the same fabricator (In accordance with ASTM A123; except fastener assemblies ASTM A153)

TRAFFIC SIGNAL ASSEMBLIES

650 VEHICULAR TRAFFIC SIGNAL ASSEMBLIES

Category	FDOT APL #	Approval	Manufacturer	Model/Description
12" LED Signal	650-013-026	02/12/2014	Dialight Corp.	433-2220-001XLF15 / Green
12" LED Signal	650-012-023	02/12/2014	Dialight Corp.	433-3230-901XLF15 / Yellow
12" LED Signal	650-010-038	02/12/2014	Dialight Corp.	433-1210-003XLF15 / Red
12" LED Signal	650-013-021	02/20/2007	Dialight Corp.	433-2220-001XLF / Green
12" LED Signal	650-012-017	06/26/2009	Dialight Corp.	433-3230-901XLF / Yellow
12" LED Signal	650-010-033	02/20/2007	Dialight Corp.	433-1210-003XLF / Red
12" LED Signal	650-012-021	10/19/2012	Leotek Electronics USA LLC	TSL-12Y-LX-IL6-A1-P2 / Yellow
12" LED Signal	650-010-036	10/19/2012	Leotek Electronics USA LLC	TSL-12R-LX-IL6-A1-P2 / Red
12" LED Signal	650-013-024	10/19/2012	Leotek Electronics USA LLC	TSL-12G-LX-IL6-A1-P2 / Green
12" LED Arrow	650-011-028	10/9/2017	Current, powered by GE	Model: DR6-RTAAN-VLA / Red
12" LED Arrow	650-014-020	10/9/2017	Current, powered by GE	Model: DR6-YTAAN-VLA / Yellow
12" LED Arrow	650-015-020	10/9/2017	Current, powered by GE	Model: DR6-GTAAN-VLA / Green
12" LED Arrow	650-014-019	01/05/2015	Dialight Corp.	431-3334-901XOF15 / Yellow
12" LED Arrow	650-011-022	11/19/2007	Dialight Corp.	432-1314-001XODF / Red
12" LED Arrow	650-014-014	06/26/2009	Dialight Corp.	431-3334-901XODF / Yellow
12" LED Arrow	650-011-027	01/05/2015	Dialight Corp.	432-1314-001XOF15 / Red
12" LED Arrow	650-015-014	11/19/2007	Dialight Corp.	432-2324-001XODF / Green
12" LED Arrow	650-015-019	01/05/2015	Dialight Corp.	432-2324-001XOF15 / Green
12" LED Arrow	650-014-018	10/19/2012	Leotek Electronics USA LLC	TSL-12YA-IL6-A1 / Yellow
12" LED Arrow	650-015-018	10/19/2012	Leotek Electronics USA LLC	TSL-12GA-IL6-A1 / Green
12" LED Arrow	650-011-026	10/19/2012	Leotek Electronics USA LLC	TSL-12RA-IL6-A1 / Red
LED Lamp for Optically Programmable Signal	650-019-002	05/20/2005	Dialight Corp.	P46-3Y33-003 / Yellow; Plug-in module replacement for Optically Programmable Signal Heads
LED Lamp for Optically Programmable Signal	650-020-002	05/20/2005	Dialight Corp.	P46-3G33-003 / Green; Plug-in module replacement for Optically Programmable Signal Heads
LED Lamp for Optically Programmable Signal	650-018-002	05/20/2005	Dialight Corp.	P46-3R33-003 / Red; Plug-in module replacement for Optically Programmable Signal Heads
Die Cast Vehicular Signal Housing	650-002-006	06/02/1987	Econolite Control Products Inc.	Die Cast Black Housing w/Tunnel Visors; Aluminum signal housings required on all new installations
Die Cast Vehicular Signal Housing	650-002-007	09/05/1990	McCain Traffic Supply	Die Cast Black Housing w/Tunnel Visors; Aluminum signal housings required on all new installations.

Die Cast Vehicular Signal Housing	650-002-006	06/02/1987	Econolite Control Products Inc.	Die Cast Black Housing w/Tunnel Visors; Aluminum signal housings required on all new installations.
Die Cast Vehicular Signal Housing	650-002-011	05/14/1982	Mobotrex (formerly Siemens ITS/Eagle)	SG Aluminum Die Cast Black Housing w/Tunnel Visors -FL Series; Aluminum signal housings required on all new installations.
Polycarbonate Vehicular Signal Housing	650-008-001	02/07/2009	Econolite Control Products Inc.	Poly Black Housing* w/Tunnel Visors; Limited to retrofit installations approved by Miami-Dade County. Require attachment of internal metal mounting plate(s) (fabricated by Manufacturer) at point of attachment(s) to signal mounting bracket(s).
Polycarbonate Vehicular Signal Housing	650-001-008	12/12/1991	McCain Traffic Supply	Poly Black Housing* w/Tunnel Visors; Limited to retrofit installations approved by Miami-Dade County. Require attachment of internal metal mounting plate(s) (fabricated by Manufacturer) at point of attachment(s) to signal mounting bracket(s).
Polycarbonate Vehicular Signal Housing	650-001-006	12/10/1985	Peek Traffic Corp. (formally Traffic Control Technologies)	Poly Black Housing* w/Tunnel Visors; Limited to retrofit installations approved by Miami-Dade County. Require attachment of internal metal mounting plate(s) (fabricated by Manufacturer) at point of attachment(s) to signal mounting bracket(s).
12" Die Cast Optically Programmable Signal Head	650-005-002	07/01/1994	McCain Traffic Supply	HP-XX-3 / Die Cast Black Housing w/Tunnel Visors
Backplates w/Retroreflective Borders	650-022-002	07/20/2009	McCain Traffic Supply	Model M6 Series
Backplates w/Retroreflective Borders	650-022-005	03/18/2019	Pelco Products Inc.	AeroFlex Flexible Retroreflective Backplates (BK-8#0#-RTX-FL).; Use "Signal Specific" backplates consistent with the approved signal housing
Backplates w/Retroreflective Borders	650-022-004	05/12/2010	Transportation Control Systems	BP-5000B Series

653 PEDESTRIAN SIGNAL ASSEMBLIES

Category	FDOT APL #	Approval	Manufacturer	Model/Description
Countdown Pedestrian Signal	653-022-014	06/24/2011	Dialight Corp.	430-6479-805XF
Countdown Pedestrian Signal	653-022-018	09/04/2015	GE Lighting Solutions	PS7-CFF1-VLA
Countdown Pedestrian Signal	653-022-019	02/13/2017	Leotek Electronics USA LLC	TSL-PED-16-SPC-V1
16" X 18" Polycarbonate Pedestrian Signal Housing	653-020-001	01/07/2000	McCain Traffic Supply	Series 8000 / Polycarbonate Black

16" X 18" Polycarbonate Pedestrian Signal Housing	653-025-001	05/22/2007	Mobotrex (formerly Siemens ITS/Eagle)	Model: SG7SZ10C3BBB10-21 / Polycarbonate Black
16" X 18" Die Cast Pedestrian Signal Housing	653-019-001	01/07/2000	McCain Traffic Supply	Series 8000 / Die Cast Black
16" X 18" Die Cast Pedestrian Signal Housing	653-024-002	08/29/2006	Mobotrex (formerly Siemens ITS/Eagle)	Model: SG7SZ20C3FFF10-21 / Die Cast Black
Pedestrian Signal Bracket	653-001-001	05/14/1982	Cost Cast Inc.	PN 1915 / Elbow Tri-stud / Green
Pedestrian Signal Bracket	N/A		Cost Cast Inc.	Alum. 1-1/2" x 10" Pipe Nipple
Pedestrian Signal Bracket	N/A		Cost Cast Inc.	Pole End- Flat/Curved; (Assembly)
Pedestrian Signal Bracket	N/A		Pelco Products Inc.	SE-0436-10 / Alum. 1-1/2" x 10" Pipe Nipple
Pedestrian Signal Bracket	653-001-004	07/07/1987	Pelco Products Inc.	SP-1011-FL; Pedestrian Signal Bracket Sand Cast

659 MAST ARM, SPAN WIRE, AND POLE MOUNTING ASSEMBLIES

Category	FDOT APL #	Approval	Manufacturer	Model/Description
Adjustable Hanger	659-005-003	05/13/1983	Cost Cast Inc.	PN 1906
Adjustable Hanger	659-005-008	04/02/1993	Pelco Products Inc.	SP-1029-FL
Disconnect Hanger	659-004-002	05/14/1982	Cost Cast Inc.	PN 1901T (18 Circuit Sand Cast/Almag Hub Plate)
Disconnect Hanger	659-004-019	02/04/1987	Pelco Products Inc.	SP-1022-FL
Extension Bar	659-015-001	05/13/1983	Cost Cast Inc.	PN 1906-E
Extension Bar	659-015-003	09/22/1987	Pelco Products Inc.	SE-0507-72
Mast Arm Camera Mounting	659-015-001	05/13/1983	Cost Cast Inc.	PN 1906-E
Mast Arm Camera Mounting	659-015-003	09/22/1987	Pelco Products Inc.	SE-0507-72
Mast Arm Detector Mounting	659-038-001	03/23/2016	Pelco Products Inc.	SP-1113-FL; for mounting GTT Opticom Model 3100 GPS Radio
Mast Arm Sign Mounting	659-034-003	06/23/2014	Pelco Products Inc.	SP-1010-FL
Mast Arm Sign Mounting	659-034-010	09/22/2020	Pelco Products Inc.	SP-1131-FL

Mast Arm Signal Mounting	659-031-018	09/03/2015	Cost Cast Inc.	Value-Brac Model 1416-G-Cxx Gyy; Per Drawing No. 1393
Mast Arm Signal Mounting	659-031-020	05/12/2017	Pelco Products Inc.	SP-1119-FL, Astro-Brac Atlas; Articulating horizontal mounted; gusseted tube must be centered on cable mount
Mast Arm Signal Mounting	659-031-011	06/23/2014	Pelco Products Inc.	SP-1006-FL
Pivotal Adjustable Hanger Assembly	659-032-002	10/12/2007	Signal Safe Inc. (w/Cost Cast)	Model 880/For Existing 2-Point Span Wire
Span Wire Signal Mounting	659-037-003	05/10/2012	Pelco Products Inc.	SP-1050-FL; for mounting of Wavetronix sensors
Spanwire Clamp	659-010-002	08/18/1982	Cost Cast Inc.	PN 1909 w/ bushing; Black; Cast Aluminum; w/Stainless Steel hardware
Vehicle Signal Bracket	659-001-007	05/14/1982	Cost Cast Inc.	1902 (Top) / 1902B (Bottom); 2-Way; Black; Cast Aluminum; w/Stainless Steel hardware
Vehicle Signal Bracket	659-001-008	05/14/1982	Cost Cast Inc.	1903 (Top) / 1903B (Bottom); 3-Way; Black; Cast Aluminum; w/Stainless Steel hardware
Vehicle Signal Bracket	659-001-047	06/11/1997	Cost Cast Inc.	1916-A; Black; Cast Aluminum; w/Stainless Steel hardware
Vehicle Signal Bracket	659-001-009	05/14/1982	Cost Cast Inc.	1904 (Top) / 1904B (Bottom); 4-Way; Black; Cast Aluminum; w/Stainless Steel hardware
Vehicle Signal Bracket	659-001-037	02/21/1991	Pelco Products Inc.	SP-1017-FL (Top); 4-Way; Black; Cast Aluminum; w/Stainless Steel hardware
Vehicle Signal Bracket	659-001-030	02/21/1991	Pelco Products Inc.	SP-1018-FL (Bottom); 4-Way; Black; Cast Aluminum; w/Stainless Steel hardware
Vehicle Signal Bracket	659-001-030	08/15/1988	Pelco Products Inc.	SP-1026-FL (Top); 2-Way; Black; Cast Aluminum; w/Stainless Steel hardware
Vehicle Signal Bracket	659-001-031	08/15/1988	Pelco Products Inc.	SP-1027-FL (Bottom); 2-Way; Black; Cast Aluminum; w/Stainless Steel hardware
Vehicle Signal Bracket	659-001-036	02/21/1991	Pelco Products Inc.	SP-1015-FL (Top); 3-Way; Black; Cast Aluminum; w/Stainless Steel hardware
Vehicle Signal Bracket	659-001-034	02/21/1991	Pelco Products Inc.	SP-1016-FL (Bottom); 3-Way; Black; Cast Aluminum; w/Stainless Steel hardware
Wire Entrance Fitting	659-006-001	05/14/1982	Cost Cast Inc.	1976T (Single Entrance;1 bushing); Cast Aluminum; Color: Natural Aluminum Finish; w/Stainless Steel hardware; For span wire

VEHICLE AND PEDESTRIAN DETECTION

660 VEHICLE DETECTION SYSTEM

Category	FDOT APL #	Approval	Manufacturer	Model/Description
Vehicle Loop Detector 2 Channels Auto Rack Mount	660-008-025	06/24/2005	Eberle Design Inc.	LM222
Vehicle Loop Detector 2 Channels Auto Rack Mount	660-008-034	12/31/2008	Eberle Design Inc.	LMD222
Loop Sealant	660-005-024	04/16/1996	Durant Performance Coatings	STAT-A-FLEX (For Asphalt or Concrete)
Vehicle Detector - Video	660-015-023	03/13/2008	FLIR ITS	Model VIP3D.1s with CT RDP TC650AZD65 camera and RDP OHT housing with sun shield, FLIR FC-Series ITS cameras (with lens option selected for site-specific use), or CT BCH-AZ10X30-115x camera; FLIR ViewCom/E MAX+ Communication Board ; and CT Port 1 Interface Module (PIM)
Vehicle Detector - Video	660-015-024	03/13/2008	FLIR ITS	Model VIP3D.2s with CT RDP TC650AZD65 camera and RDP OHT housing with sun shield, FLIR FC-Series ITS cameras (with lens option selected for site-specific use), or CT BCH-AZ10X30-115x camera; and FLIR ViewCom/E MAX+ Communication Board
Vehicle Detector - Video	660-015-012	03/10/2003	Iteris Inc. (Odetic)	+/-Ext Modules / Vantage Edge2-1N
Advance Detection System	660-026-002	12/18/2023	Wavetronix LLC	SS-200V and SS-200E (SmartSensor Advance): SS-200V or SS-200E Sensor with Arc6 and SmartSensor Surge card(s); ss710 junction box; cables 600v insulation rated including factory-terminated drop cable; mount with Pelco SP-1139-FL (mast arm) and SP-4171-PNC (span wire)
Vehicle Detector - Microwave	660-018-004	12/18/2023	Wavetronix LLC	SS225 SmartSensor Matrix: SS-225 Sensor with Arc6 and SmartSensor Surge card(s); ss710 junction box; cables 600v insulation rated including factory-terminated drop cable; mount with Pelco SP-1139-FL (mast arm) and SP-4171-PNC (span wire)

663 SIGNAL PRIORITY AND PREEMPTION SYSTEMS

Category	FDOT APL #	Approval	Manufacturer	Model/Description
Preemption System	663-001-006	01/12/2012	Global Traffic Technologies LLC	GTT Opticom: Model 764 Multimode Phase Selector; Model 3100 GPS Radio (mast arm mounted using Pelco SP 1113-FL or Pelco SP-1076-FL with 1-1/2" NPT X 3/4" NPT reducer bushing)

665 PEDESTRIAN DETECTION SYSTEM

Category	FDOT APL #	Approval	Manufacturer	Model/Description
Standard Pedestrian Detector	665-003-010	03/09/2010	Pelco Products Inc.	SP-1090-FL
Accessible (Audible/Tactile) Pedestrian Detector	665-004-012	05/29/2020	Polara Enterprises LLC	iNavigator 2-Wire with iCCU-S2, iN2-ICB and 9" x 15" APS Push Button Station (iNS2 PBS); Requires use of 14 AWG IMSA 50-2 cable (12AWG if PBS is greater than 300 feet from controller cabinet)
Mid-Block Pedestrian Detector	654-003-001	11/16/2020	Polara Engineering Inc.	Model iNX (Mid-Block APS for RRFB).

TRAFFIC CABINETS AND CONTROLLER ASSEMBLIES

671 TRAFFIC CONTROLLER

Category	FDOT APL #	Approval	Manufacturer	Model/Description
2070LX				Pending*

Note:

- * Product pending evaluation by the Traffic Signals and Signs (TSS) Division. Requires controller software approved by the TSS Division and integration with the applicable ATMS software at the TSS Division Traffic Management Center.

676 TRAFFIC CABINETS

Category	FDOT APL #	Approval	Manufacturer	Model/Description
Pole/Pedestal Mounted (Type 1- Unwired)	676-005-001	05/14/1982	Southern Manufacturing (a Division of Ernest Products Inc.)	Flasher Unwired (+/- 16"H x 14"W x 11"D)
Pole/Pedestal Mounted (Type 1- Unwired)	676-005-006	05/04/2005	Transportation Control Systems	Model TCS-1/TYPE 1(+/- 13"H x 10"W x 11"D)
Traffic Signal Cabinet	676-041-001	04/20/2009	Control Technologies	MD660X
Traffic Signal Cabinet	676-040-001	04/20/2009	Control Technologies	MD552X
Cabinet Base Adapter	N/A	09/30/2009	Control Technologies	Cabinet extender base

678 TRAFFIC CONTROLLER ACCESSORIES

Category	FDOT APL #	Approval	Manufacturer	Model/Description
Time Switch/Type 2	678-009-005	04/24/2023	RTC Manufacturing Inc.	Model AP-22 Time Switch with 506475M2-ADV (communications harness), Advantech SmartFlex Router (Part No. BB-SR30500420-SWH) and PSD-A40W24 P/S; and Skywave Antenna Model 16-7024-C
Conflict Monitor for 170/2070 Controllers	678-023-001	11/04/2004	Eberle Design Inc.	2010ECL
Conflict Monitor for 170/2070 Controllers	678-023-002	12/31/2008	Eberle Design Inc.	Model: 2018KCLip with Ethernet (IP) communication port

CCTV AND COMMUNICATIONS**682 VIDEO EQUIPMENT**

Category	FDOT APL #	Approval	Manufacturer	Model/Description
Camera - Dome	682-002-011	06/08/2016	CohuHD Costar LLC	Model 4220HD Series CCTV with 75W PoE++ Injector; Requires 600V rated field cable.

684 NETWORK DEVICES

Category	FDOT APL #	Approval	Manufacturer	Model/Description
Managed Field Ethernet Switch	684-002-017	06/29/2017	Advantech B+B Smartworx	EKI-7710G-2CI-AE, Managed Ethernet Switch (evaluated with Advantech PSD-A40W24, P/S); DIN Rail Mounted

ROADWAY SIGNS AND PAVEMENT MARKINGS

654 MIDBLOCK CROSSWALK ENHANCEMENT ASSEMBLIES

Category	FDOT APL #	Approval	Manufacturer	Model/Description
Rectangular Rapid Flashing Beacon Assembly	654-001-013	09/24/2021	Carmanah Technologies Corp.	RRFB-XL2 Series as approved by Miami-Dade County; Solar Powered or AC Powered (radio or radioless) and Polara Model iNX (Mid-Block APS for RRFB)
Rectangular Rapid Flashing Beacon Assembly	654-001-009	10/23/2019	TAPCO	RRFB-XL2 Series as approved by Miami-Dade County; Solar Powered or AC Powered (radio or radioless) and Polara Model iNX (Mid-Block APS for RRFB)

700 ROADWAY SIGNS

Category	FDOT APL #	Approval	Manufacturer	Model/Description
24/7 Sign Beacon Controller Assembly	700-026-013	06/13/2016	Carmanah Technologies Corp.	Solar powered; Model R247-G approved with 80W solar panel, Dialight 12 VDC Red (433-1210-000XL) or Yellow (433-3230-900XL) LED Module, Eagle signal head housing, and 100Ah battery
24/7 Sign Beacon Controller Assembly	676-011-002	04/30/1985	Transportation Control Systems	AC powered; Model: 2266082AT/S w/ Reno A&E FL-200 Type 3 flasher and SE-1100 cabinet mount
School Zone Sign Beacon Controller Assembly	700-026-014	06/10/2016	Carmanah Technologies Corp.	Solar powered; Model R829-G approved with 80W solar panel, Dialight 12 VDC Yellow (433-3230-900XL) LED Modules, Eagle signal head housings, 100Ah battery, and RTC AP-22 time switch.
School Zone Sign Beacon Controller Assembly	676-011-012	05/29/2014	Temple Inc.	AC powered; Model: TF4001F-FL, Type I wired cabinet with Model 204 Flasher and Pelco SE 1100 mounting kits for mounting on 4" pedestal. For non-pedestal mounting, use Pelco SE-0120 cabinet mounting bracket where suitable.
Electronic Speed Feedback Signage (ESFS)	700-019-001	08/03/2007	Carmanah Technologies Corp.	SpeedCheck-15; AC-powered and Solar-powered (80W panel & 100AH C&D Tech. Model VRS 12-100HIT battery)
Blank-Out Signs	700-012-010	05/20/2005	Southern Manufacturing (a Division of Ernest Products Inc.)	Model LED Blankout Series*
Blank-Out Signs	700-012-012	05/01/2014	Transportation Control Systems	Models TCSLEDBO Series*
AGM Batteries	N/A	09/30/2021	C&D Technologies Inc.	Model VRS 12-100HIT
AGM Batteries	N/A	01/27/2022	East Penn Manufacturing Co	MK Battery/Deka Model 8A31DT
Internally Illuminated Street Name Signs (IISNS)	700-015-021	04/12/2005	Southern Manufacturing (a Division of Ernest Products Inc.)	Model SSLED Series

Internally Illuminated Street Name Signs (IISNS)	700-015-020	05/04/2005	Transportation Control Systems	TCSSIGNFLO***
Internally Illuminated Street Name Signs (IISNS)	700-015-024	07/09/2012	Transportation Control Systems	BriteLite TCSSIGNBL Series mounted with Pelco SP-1010-FL
Internally Illuminated Street Name Signs (IISNS)	700-015-025	11/09/2007	Transportation Control Systems	TCSSIGNLED Series
Photo Control	N/A	08/01/2009	Intermatic Inc.	K4221C/1/2"-14 threaded stem; swivel

706 RAISED PAVEMENT MARKERS AND BITUMINOUS ADHESIVE

Category	FDOT APL #	Approval	Manufacturer	Model/Description
Internally Illuminated Raised Pavement Markers (Class F)	706-005-001	08/05/2019	Lux Solar Inc	<p>Use in roadway surface, pursuant to Chapter 3B of the MUTCD, as an alternative to standard RPMs and subject to the following:</p> <ol style="list-style-type: none"> 1. Proposed use of IIRPMs is limited to mitigation strategies on County Roads whose curves have substandard horizontal alignment or super-elevation; substandard lane widths; or substandard shoulder widths. 2. A signed and sealed Traffic Engineering and Safety Study must be conducted to justify the use of IIRPMs. Installation requires County-approved site-specific engineering plans and permit. 3. Design and construction must meet all requirements of FDOT Standard Specifications for Road and Bridge Construction Sections 706 and 970; and FDOT Standard Plans Index 706-001. IIRPM spacing must comply with Sections 3B.12 through 3B.14 of the MUTCD. 4. The manufacturer must provide a five-year, non-prorated warranty on all components for five years from the date of final acceptance of construction in accordance with FDOT Section 706.

MANUFACTURERS

The following are manufacturers that may have been referenced in the preceding listing.

Manufacturer	Website
Advanced Digital Cable (ADC)	https://www.adcable.com/
Allied Tube and Conduit	https://www.atkore.com/about-us/brands/allied-tube-conduit
Alpha Technologies	https://www.alpha.ca/solutions/by-industry/traffic-and-its
American Polymer Company	https://www.apcunderground.com/
Ameron Pole Products	https://ameronpoles.com/
Arcosa Traffic Structures	https://arcosatrafficstructures.com/
Armorcast Products Co. (Division of Hubbell)	https://www.hubbell.com/hubbellpowersystems/en/hps-brands#armorcast
B+B Smartworx (Advantech)	https://www.advantech.com/en-us
Belden Electronics Division	https://www.belden.com/
Blackburn	https://tnb.ca.abb.com/en/brands/blackburn/
Bosch Security Systems Inc.	https://commerce.boschsecurity.com/us/en/Moving-cameras-PTZ/c/90853174923
C & D Technologies Inc.	https://www.cdtechno.com/
Cantex Inc.	https://www.cantexinc.com/
Carmanah Technologies Corp.	https://carmanah.com/
CohuHD Costar LLC	https://www.cohuhd.com/
Continental Industries Inc.	https://www.hubbell.com/continentalindustries/en
Control Technologies	https://www.cttraffic.com/
Cooper Bussman Inc.	https://www.eaton.com/us/en-us/products/electrical-circuit-protection/fuses/bussmann-catalogs.html
Cost Cast, Inc	http://costcast.com/
Current by GE	https://www.led.com/applications/transportation
Cutler-Hammer (Eaton Corp.)	https://www.eaton.com/us/en-us/company/about-us/our-heritage/cutler-hammer.html
Deca Cables	https://www.decacables.com/
Dialight	https://www.dialight.com/
Durant Performance Coatings	https://durantcorp.com/
Dura-Stress Inc.	https://www.durastress.com/
East Penn Manufacturing Co	https://www.eastpennmanufacturing.com/divisions/transportation/
Eastern Metal Supply	https://www.easternmetal.com/
Eberle Design Inc.	https://www.editrtraffic.com/
Econolite	https://www.econolite.com/
Falcon Fine Wire	https://www.falconfinewire.com/
G.E. Industrial Solutions	https://electrification.us.abb.com/

Manufacturer	Website
Galvan Industries Inc.	https://galvanelectrical.com/
General Cable	https://generalcableco.com/
Global Traffic Technologies, LLC	https://miovision.com/opticom/
Harger Lightning and Grounding	https://www.harger.com/
Houston Wire and Cable Co.	https://www.houwire.com/
Intermatic	https://www.intermatic.com/
Isco Industries	https://isco-pipe.com/
Isotec (General Cable)	https://generalcableco.com/
Iteris, Inc.	https://www.iteris.com/
Kraloy	https://kraloyfittings.com/
Leotek Electronics USA LLC	https://leotek.com/
Lux Solar, Inc.	https://www.iirpm.com/
Maico Industries Inc.	https://www.maicoind.com/
Mersen	https://us.mersen.com/en
Millerbernd Manufacturing	https://www.millerbernd.com/
MoboTrex (formerly Siemens and Eagle)	https://www.mobotrex.com/
nVent ERICO	https://www.nvent.com/en-us/erico
Oriux (formerly Peek Traffic)	https://oriux.com
Pelco Products, Inc.	https://www.pelcoinc.com/
Pelco Structural, LLC	https://www.pelcostructural.com/
Polara Enterprises, LLC	https://polara.com/
Precast Specialties LLC	https://precastspecialties.com/
Prime Conduit Inc.	https://www.primeconduit.com/
Pyrsman Cables and Systems	https://www.pyrsman.com/en
Quazite (Division of Hubbell)	https://www.hubbell.com/hubbellpowersystems/en/hps-brands/quazite
Reliance Controls	https://www.reliancecontrols.com/
Republic Conduit	https://www.nucortubular.com/
RTC Manufacturing, Inc.	https://www.rtc-traffic.com/
Service Wire Company	https://www.servicewire.com/Products/USE-CT.htm
Siemens	https://www.siemens.com/us/en/products/energy/low-voltage/switches/heavy-duty-safety-switches.html
Southern Grounding Products	https://southatlanticllc.com/southern-grounding/
Southern Mfg. Co. (Division of Earnest Products)	https://www.southernmfg.com/
Southwire Company	https://www.southwire.com/
Square D Company (Schneider Electric)	https://www.se.com/us/en/brands/squared/

Manufacturer	Website
Stony Brook Structures of Florida LLC	https://www.stonybrookstructures.com/
Superior Essex	https://superioressex.com/
Swarco McCain Inc	https://www.mccain-inc.com/
Tapco, LLC	https://www.tapconet.com/
Tappan Wire & Cable (Southwire)	https://www.southwire.com/
Teledyne Flir	https://www.flir.com/
Temple Inc.	https://www.temple-inc.com/
Transportation Control Systems	https://tcstraffic.com/
Union Metal Industries Corp.	https://www.unionmetal.com/
Valmont Industries, Inc.	https://www.valmont.com/
Wavetronix, LLC	https://www.wavetronix.com/
Western Tube and Conduit Co.	https://www.westerntube.com/
Wheatland Tube Co.	https://www.wheatland.com/