

TRAFFIC SIGNAL GENERAL NOTES

1. THE COMPLETE SIGNAL INSTALLATION SHALL CONFORM TO ALL APPROPRIATE PARTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION, INCLUDING SUBSEQUENT PUBLISHED RULINGS.
2. ALL MATERIALS AND WORK SHALL BE IN ACCORDANCE WITH THE GEORGIA DEPARTMENT OF TRANSPORTATION CURRENT STANDARD AND SUPPLEMENTAL SPECIFICATIONS AND STANDARD DETAILS FOR TRAFFIC SIGNAL INSTALLATION (WITH EXCEPTIONS AS DIRECTED BY THESE PLANS OR GWINNETT COUNTY D.O.T.). INSTALLATION SHALL MEET CURRENT NFPA NATIONAL ELECTRICAL CODE AND ANSI NATIONAL ELECTRICAL SAFETY CODE.
3. MATERIAL CERTIFICATION IS REQUIRED PRIOR TO BEGINNING ANY SIGNAL INSTALLATION WORK. THE CONTRACTOR SHALL FOLLOW PROCEDURES OUTLINED IN THE SPECIAL PROVISIONS.
4. CONTRACTOR SHALL SUBMIT LOAD CALCULATIONS, SHOP DRAWINGS AND FOUNDATION DIMENSIONS OF POLES AND CATALOG CUTS OF PROPOSED SIGNAL EQUIPMENT AND ELECTRICAL/LINE HARDWARE MATERIALS TO THE PROJECT ENGINEER FOR APPROVAL.
5. FOR STRAIN POLE FOUNDATION SIZE AND REINFORCEMENT, SEE STRAIN POLE AND MAST ARM POLE FOUNDATION SHEET.
6. THE CONTRACTOR SHALL LOCATE UNDERGROUND UTILITIES IN THE VICINITY OF NEW TRAFFIC SIGNAL POLES BEFORE INSTALLATION. MINOR SHIFTS (UP TO A MAXIMUM OF 5 FEET) IN LOCATION OF NEW SIGNAL POLES, AT THE DISCRETION OF THE ENGINEER, ARE ACCEPTABLE TO AVOID UNDERGROUND UTILITIES. MINIMUM CLEARANCES FROM EDGE OF PAVEMENT SHALL BE MAINTAINED. PLACEMENT OF THE SIGNAL HEADS MUST BE RETAINED AS SHOWN ON THE PLANS.
7. SIGNAL HEADS SHALL BE ERECTED TO PROVIDE AT LEAST 17 FEET BUT NO MORE THAN 19 FEET CLEARANCE FROM BOTTOM OF SIGNAL HEADS TO TOP OF ROAD SURFACE AND A MINIMUM OF 8 FEET MEASURED HORIZONTALLY BETWEEN CENTERS OF SIGNAL FACES.
8. THE CONTRACTOR SHALL MAINTAIN EXISTING TRAFFIC SIGNALS DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC SIGNAL AND/OR CONTROL SYSTEM ADJUSTMENTS, INCLUDING TEMPORARY SUPPORT POLE LOCATION(S) REQUIRED BY THE PROJECT DURING THE INTERIM PERIOD THROUGH INSTALLATION OF NEW SIGNAL EQUIPMENT. AT NO TIME SHALL THE CONTRACTOR CAUSE ANY PART OF THE SIGNAL OPERATION TO BE INOPERABLE.
9. WHEN APPLICABLE TO THE PLANS, THE CONTRACTOR SHALL INSTALL AND TEST ALL NEW SIGNAL ITEMS PRIOR TO REMOVING EXISTING SIGNALS FROM SERVICE.
10. WHEN APPLICABLE TO THE PLANS, CONTRACTOR SHALL BE REQUIRED TO PROVIDE A NEW RISER, CONDUIT, CONDUCTORS AND DISCONNECT TO PROVIDE POWER SERVICE INTO THE CONTROLLER CABINET.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NEW GUYS ON EXISTING POLES WHEN ATTACHING SPAN WIRE OR FIBER OPTIC INTERCONNECT CABLE TO THE POLES, WHEN REQUIRED, AS DIRECTED BY THE ENGINEER.
12. SHIELDED CABLE SHALL BE USED FOR DETECTOR RUNS, AS SHOWN ON THE DETAIL SHEET. DETECTORS SHALL HAVE SEPARATE LEAD-INS TO THE CONTROLLER CABINET. LOOP AND PEDESTRIAN DETECTOR CABLES SHALL BE 14 AWG IMSA 50-2 3-PAIR EQUIVALENT CABLE.
13. ENSURE DETECTION LOOPS ARE INSTALLED PROMPTLY. FAILURE TO DO SO SHALL RESULT IN ASSESSMENT OF LIQUIDATED DAMAGES IN ACCORDANCE WITH SECTION 150.08 OF THE SPECIFICATIONS.
14. CONDUIT UNDER DRIVEWAYS AND ROADWAYS SHALL BE TYPE 3 (HDPE). ALL CONDUIT RUNS GREATER THAN 50 FEET IN LENGTH SHALL BE BURIED TO A DEPTH OF 48 INCHES.
15. WHEN APPLICABLE TO THE PLANS, DETECTABLE MARKING TAPE LABELED "GWINNETT DOT CALL 770-822-7474 SHALL BE INSTALLED DIRECTLY ABOVE ALL UNDERGROUND CONDUIT CONTAINING FIBER OPTIC INTERCONNECT CABLE. AN INSULATED TRACING WIRE, GROUNDED ON ONE END, SHALL BE INSTALLED INSIDE A CONDUIT SEPARATE FROM THE FIBER OPTIC INTERCONNECT CABLE.
16. VEHICLE AND PEDESTRIAN SIGNAL HEADS AND HARDWARE SHALL BE ALL BLACK IN COLOR. VEHICLE SIGNAL HEADS SHALL HAVE TUNNEL VISORS AND SHALL BE MADE OF POLYCARBONATE MATERIAL VEHICLE SIGNAL HEADS SHALL BE EQUIPPED WITH EXPANDED VIEW PIXELATED DISPLAY 5 MM LED MODULES. PEDESTRIAN SIGNAL HEADS SHALL BE EQUIPPED WITH UNIFORM DISPLAY FULL HAND/MAN COUNTDOWN LED MODULES.
17. PEDESTRIAN SIGNAL HEADS ATTACHED TO PEDESTAL POLES AND STEEL STRAIN POLES SHALL BE MOUNTED WITH "CLAMSHELL" TYPE BRACKET ASSEMBLIES. ALL PEDESTRIAN SIGNAL HEADS ATTACHED TO CONCRETE STRAIN POLES SHALL BE MOUNTED WITH ONE-WAY SIDE-OF-POLE ALUMINUM BRACKETS.
18. PUSHBUTTON STATIONS THAT ARE INSTALLED ON A PEDESTAL POLE FOR TWO PERPENDICULAR CROSSINGS SHALL BE MOUNTED ON A "DOUBLE PUSHBUTTON STATION ADAPTER". PEDESTRIAN PUSHBUTTONS SHALL BE INSTALLED WITHIN 10' OF SIDEWALK WITH SIGN ARROW INDICATING THE CROSSING DIRECTION. PEDESTRIAN PUSHBUTTONS AND SIGNS SHALL BE VANDAL RESISTANT WITH A PIEZO SWITCH, LED INDICATION AND AUDIBLE FEEDBACK.
19. ONE 7- OR 5-CONDUCTOR, 14 AWG, STRANDED CABLE AND TWO DETECTOR CABLES FOR PROPOSED AND FUTURE PEDESTRIAN SIGNALS SHALL BE INSTALLED AT EACH STRAIN POLE. A MINIMUM OF ONE 7-CONDUCTOR, 14 AWG, STRANDED SIGNAL CABLE FOR PROPOSED AND FUTURE VEHICLE SIGNALS SHALL BE INSTALLED ON ALL FOUR SIDES OF THE INSTALLATION.
20. LOOP DETECTOR UNIT SHALL ENERGIZE ITS INDIVIDUAL LOOP CHANNELS NONCONCURRENTLY. DETECTOR UNIT SHALL BE FAIL SAFE (PROVIDE A CONSTANT CALL TO THE CONTROLLER IF LOOP FAILURE OCCURS
21. CONTROLLER SHALL INCLUDE 5-VOLT 2 MB DATA KEY AND SHALL HAVE THE CURRENT GDOT LICENSE INTERSECTION SOFTWARE INSTALLED AND OPERATIONAL.
22. HOT DIP GALVANIZED WELDLESS RINGS SHALL BE USED FOR SPAN WIRE JUNCTIONS. GUY ANCHORS SHALL BE GALVANIZED.

ATMS GENERAL NOTES

1. ALL CCTV CAMERAS SHALL BE MOUNTED ON THE SIDE OF THE POLE ADJACENT TO THE TRAVEL LANES FOR WHICH THE CCTV CAMERA IS INTENDED TO COVER. CCTV SYMBOLS ON THE ATMS PLANS INDICATE THE REQUIRED LOCATION OF THE CCTV CAMERA AND THE FIELD PLACMENT OF THE CCTV CAMERAS SHALL BE VERIFIED BY THE APPROPRIATE GDOT OR GWINNETT COUNTY DOT ENGINEER.
2. ALL CCTV CAMERAS AND POLES SHALL BE INSTALLED AS SHOWN PER GDOT DETAIL ITS-04 UNLESS OTHERWISE DESIGNATED TO GWINNETT COUNTY DOT. CCTV CAMERAS AND POLES DESIGNATED TO GWINNETT COUNTY DOT (COLLINS HILL RD AND BUFORD DRIVE/SR 20) SHALL BE INSTALLED AS SHOWN PER SPECIAL CONSTRUCTION DETAIL DWG. 38-06.
3. ALL FIBER SHALL BE LABELED AS DETAILED IN THE SPECIAL PROVISION 935-FIBER OPTIC SYSTEM UNLESS THE FIBER IS OTHERWISE DESIGNATED TO GWINNETT COUNTY DOT. ALL FIBER DESIGNATED TO GWINNETT COUNTY DOT (COLLINS HILL RD, BUFORD DRIVE/SR 20, AND 24-FIBER CONNECTION ALONG SR 316 BETWEEN COLLINS HILL RD AND BUFORD DR/SR 20) SHALL BE LABELED "GWINNETT COUNTY DOT" IN PLACE OF "GA DOT". ALL ASSOCIATED CONDUIT FOR THE FIBER SYSTEM SHALL BE LABELED AS DETAILED IN THE SPECIAL PROVISION 682-ELECTRICAL WIRING, CABLE, AND CONDUIT UNLESS THE CONDUIT CARRYING FIBER IS OTHERWISE DESIGNATED TO GWINNETT COUNTY DOT. ALL CONDUIT CARRYING FIBER DESIGNATED TO GWINNETT COUNTY DOT (COLLINS HILL RD, BUFORD DRIVE/SR 20, AND 24-FIBER CONNECTION ALONG SR 316 BETWEEN COLLINS HILL RD AND BUFORD DR/SR 20) SHALL BE LABELED "GWINNETT D.O.T. CABLE - FOR ASSISTANCE CALL 770-822-7474" IN PLACE OF "GEORGIA D.O.T. CABLE - FOR ASSISTANCE CALL 404-624-2661".
4. ALL CAT-5 ETHERNET CABLE INSTALLATIONS SHALL BE PAID FOR IN THE FIELD SWITCH PAY ITEMS.
5. ALL ADDITIONAL REQUIRED GBICS AND GBIC SOCKETS SHALL BE PAID FOR IN THE FIELD SWITCH PAY ITEMS.



REVISION DATES

06/14/2011					

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: PROGRAM DELIVERY

GENERAL NOTES
SIGNAL & ATMS INSTALLATION

SR 316

DRAWING No.
4-05