SIGNAL 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 MUST INSTALL AND TEST ALL NEW SIGNAL ITEMS PRIOR TO REMOVING EXISTING SIGNALS FROM SERVICE.
10. WHEN APPLICABLE TO THE PLANS, CONTRACTOR WILL BE REQUIRED TO PROVIDE A NEW RISER, CONDUIT, CONDUCTORS AND DISCONNECT TO PROVIDE POWER SERVICE INTO THE CONTROLLER CABINET.
11. THE CONTRACTOR WILL 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 WILL 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 (SDR 11 HDPE), RIGID METAL OR ENCASED IN CONCRETE. ALL CONDUIT RUNS GREATER THAN 50 FEET IN LENGTH SHALL BE BURIED TO A MINIMUM DEPTH OF 48 INCHES. UNLESS APPROVED BY THE ENGINEER.
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. SIGNAL HEADS ON MAST ARMS SHALL HAVE BACK PLATES AND BE RIGID MOUNTED.
17. 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 LED MODULES.
18. 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. PEDESTRIAN SIGNAL HEADS SHALL BE COUNTDOWN, UNIFORM APPEARANCE, FULL HAND/MAN/NUMERAL LED MODULES.
19. 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 SHALL BE VANDAL RESISTANT WITH A PIEZO SWITCH, LED INDICATION AND AUDIBLE FEEDBACK.
20. ONLY THE MODELS OF VEHICLE SIGNAL MODULES, PEDESTRIAN SIGNAL MODULES, AND PUSHBUTTONS THAT HAVE BEEN TESTED AND PRE-APPROVED BY GWINNETT COUNTY DOT SHALL BE USED. CONTACT GWINNETT COUNTY DOT FOR A LIST OF APPROVED ITEMS OR TO SUBMIT ITEMS FOR TESTING AND APPROVAL, CONTACT GWINNETT COUNTY DOT AT (770) 822-7474.
21. ONE 7- CONDUCTOR, 14 AWG, STRANDED CABLE AND ONE 3-PAIR DETECTOR CABLE 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.
22. 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).
23. CONTROLLER SHALL INCLUDE 5-VOLT 2 MB DATA KEY AND SHALL HAVE THE CURRENT GDOT LICENSE INTERSECTION SOFTWARE INSTALLED AND OPERATIONAL.
24. HOT DIP GALVANIZED WELDLESS RINGS SHALL BE USED FOR SPAN WIRE JUNCTIONS. GUY ANCHORS SHALL BE GALVANIZED.
25. GWINNETT COUNTY D.O.T. WILL BE RESPONSIBLE FOR PROGRAMMING OF SIGNAL TIMING AND "TURN-ON" OF ALL NEW SIGNALS.
26. GWINNETT COUNTY D.O.T. IS NOT ON THE ONE-CALL SYSTEM. CALL (770) 822-7474 WHEN LOCATING UTILITIES FOR CONSTRUCTION.
27. BASE MOUNTED 332 CABINETS TO BE EQUIPPED WITH AN AUXILLARY FILE FOR FUTURE OR PRESENT FLASHING YELLOW ARROW (FYA) INSTALLATION.
28. ALL LOOPS AND LEAD-IN WIRE IMPACTED BY STOP BAR RELOCATION, SIDEWALK, CURB AND GUTTER CONSTRUCTION, ETC. SHALL BE REPLACED.

TRAFFIC SIGNAL LEGEND

EXISTING UTILITIES

- EXISTING GUY WIRE
- EX.OH ELECTRIC
- EX POWER POLE
- EX TRANSFORMER
- EX.UG ELECTRIC
- EX GAS LINE
- EX GAS METER (GM)
- EX GAS VALVE (GV)
- EX WATER LINE
- EX FIRE HYDRANT (FH)
- EX WATER METER (WM)
- EX WATER VALVE (WV)
- EX SANITARY SEWER
- EX SS MANHOLE
- EX TELEPHONE MH
- EX OH TELEPHONE
- EX TELEPHONE POLE
- EX UG TELEPHONE
- EX OH CABLE TV
- EX UG CABLE TV
- EX STORM DRAIN
- EX CATCH BASIN
- EX DROP INLET
- EX SD MANHOLE (SD)
- EX COMMUNICATIONS MANHOLE (E)
- EX ELECTRICAL HAND HOLE (H)

EXISTING SIGNAL

- CONTROLLER CABINET
- STRAIN POLE
- TIMBER POLE
- DOWN GUY
- MAST ARM
- STREET LIGHT
- 3 SECTION HEAD
- 5 SECTION HEAD
- OVERHEAD SIGN
- PEDESTAL POLE
- PED SIGNAL HEAD
- CURB CUT RAMP
- PULLBOX,TP 2
- PULLBOX,TP 3
- PULLBOX,TP 4
- PULLBOX,TP 5
- 6x6 CALL LOOP/VIDEO ZONE
- 6x18 CALL LOOP/VIDEO ZONE
- 6x40 PRESENCE LOOP (DIPOLE)/VIDEO ZONE
- 6x40 PRESENCE LOOP (QUADRUPOLE)
- CONDUIT
- RAILROAD CONTROLLER
- SIGN POST

PROPOSED SIGNAL

- CONTROLLER CABINET
- STRAIN POLE
- TIMBER POLE
- DOWN GUY
- MAST ARM
- STREET LIGHT
- 3 SECTION HEAD W/ BACKPLATE
- 4 SECTION HEAD W/BACKPLACE
- 5 SECTION HEAD W/BACKPLACE
- OVERHEAD SIGN
- PEDESTAL POLE
- PED SIGNAL HEAD
- CURB CUT RAMP
- PULLBOX,TP 2
- PULLBOX,TP 3
- PULLBOX,TP 4s
- PULLBOX,TP 7
- 6x6 PULSE LOOP/VIDEO ZONE
- 6x18 CALL LOOP/VIDEO ZONE
- 6x40 PRESENCE LOOP (DIPOLE)/VIDEO ZONE
- 6x40 PRESENCE LOOP (QUADRUPOLE)
- CONDUIT
- RAILROAD CONTROLLER
- SIGN POST

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REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: PROGRAM DELIVERY

SIGNAL PLANS

DRAWING No. 27-001

4/27/2012 GPLN