GENERAL NOTES

(1) ALL SIGNAL INSTALLATIONS MUST BE IN ACCORDANCE WITH THE MUTCD, LATEST REVISION, WHICH SUPERCEDES STANDARD DRAWINGS WHERE THERE IS A CONFLICT.

(2) IF THESE SPECIFICATIONS AND THE TDOT SPECIFICATIONS SHOULD CONFLICT, THESE SPECIFICATIONS SHALL APPLY OVER THE TDOT SPECIFICATIONS.

(3) REFER TO TDOT STANDARD DRAWINGS T-SG-2, T-SG-3, T-SG-3A, T-SG-5, T-SG-7, T-SG-7A, T-SG-9, T-SG-9A, T-SG-10, T-SG-12, T-FO-2, T-FO-4.

(4) REFER TO TDOT SPECIFICATIONS FOR VEHICULAR SIGNAL EQUIPMENT.

(5) WHERE SINGLE MODE FIBER ETHERNET IS EXISTING OR PROPOSED, ALL PHYSICAL AND ELECTRONIC EQUIPMENT SHALL BE INCLUDED TO COMPLETE A FULLY FUNCTIONAL CONNECTION TO THE CENTRAL OFFICE.

SIGNAL POLES

(1) EACH POLE SHALL HAVE A LUMINAIRE ARM, SINGLE TUBE DESIGN FOR A "COBRA HEAD" FIXTURE (FIXTURE PROVIDED AND INSTALLED BY OTHERS), WITH AN 8' SPAN AND A 6' RISE, BRACKETED TO THE POLE AT 34'.

(2) CAMERAS SHALL BE MOUNTED ON 6' EXTENSIONS.

(3) OPTICOM SENSORS SHALL HAVE CONFIRMATION LIGHTS.

(4) POLES AND ARMS SHALL BE ROUND AND UNIFORMLY TAPERED (MULTISIDED POLES AND ARMS ARE NOT ALLOWED).

(5) POLES AND ARMS SHALL BE DESIGNED TO MEET THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS, CURRENT EDITION.

(6) ALL POLES, ARMS, AND EXPOSED HARDWARE SHALL BE GALVANIZED AND COATED WITH POWDER COAT PAINT.

(7) LOCATIONS OF SIGNAL POLES ARE APPROXIMATE, FIELD ADJUSTMENTS MAY BE APPROVED BY THE ENGINEER.

(8) EACH SIGNAL POLE FOUNDATION SHALL HAVE ONE 3" AND TWO 2" CONDUITS LEADING TO THE NEAREST PULL BOX. THE POLE GROUND WIRE SHALL BE PLACED IN A SEPARATE 1" CONDUIT AND ATTACHED TO A GROUND ROD. THE 3" COUNDUIT SHALL BE USED FOR ALL SIGNAL WIRES. ONE 2" CONDUIT SHALL BE USED (BY OTHERS) FOR STREET LIGHT WIRING. ONE 2" CONDUIT SHALL REMAIN EMPTY AND BE PROPERLY PLUGGED AS A SPARE.

(9) FOUNDATION DEPTHS ASSUME SUITABLE MATERIAL (GREATER DEPTHS MAY BE REQUIRED IF ADVERSE CONDITIONS ARE DISCOVERED).

TRAFFIC CONTROLLER AND EQUIPMENT

(1) THE TRAFFIC CONTROLLER SHALL BE AN EAGLE EPAC 8 PHASE CONTROLLER EQUIPPED WITH AN ETHERNET PORT.

(2) THE CONFLICT MONITOR SHALL BE A 12 CHANNEL MONITOR EQUIPPED WITH AN ETHERNET PORT AND LOGGING CAPABILITY AND SHALL BE ABLE TO BE REMOTELY MONITORED VIA THE ETHERNET CONNECTION AND SOFTWARE (PROVIDED WITH THE PROJECT).

(3) THE VIDEO DETECTION SHALL EMPLOY COLOR CAMERAS AND BE REMOTELY ACCESSIBLE FOR VIEWING AND PROGRAMMING VIA AN ETHERNET CONNECTION.

(4) CONTROLLER, CONFLICT MONITOR, VIDEO DETECTION SYSTEM AND VIDEO SURVEILLANCE SYSTEM SHALL BE CONNECTED TO THE EXISTING SINGLE MODE FIBER ETHERNET SYSTEM (IF PRESENT).

(5) WHEN LOOP DETECTION IS USED, LOOP DETECTOR AMPLIFIERS SHALL BE 4 CHANNEL RACK TYPE WITH ON-BOARD DIAGNOSTICS AND FAILURE LOGGING.

(6) FULL SURGE SUPPRESSION SHALL BE INCLUDED IN THE CABINET FOR POWER, LOOP DETECTION AND VIDEO DETECTION.

(7) THE CABINET SHALL BE WIRED COMPLETE TO MEET OR EXCEED MANUFACTURER'S SPECIFICATIONS FOR CONTROLLER, VIDEO DETECTION, AND PREEMPTION.

(8) THE CABINET DOOR SHALL BE FITTED WITH DOOR SWITCHES THAT TURNS ON THE CABINET LIGHT AND TURNS ON "SPECIAL STATUS 1" WHEN THE CABINET DOOR IS OPENED AND TURNS THE LIGHT OFF AND TURNS OFF "SPECIAL STATUS 1" WHEN THE DOOR IS CLOSED.

(9) A POLICE BUTTON IN THE POLICE DOOR SHALL BE WIRED AND PROVIDED COMPLETE AND FUNCTIONAL.

(10) PREEMPTION EQUIPMENT SHALL BE OPTICOM.

VEHICLE SIGNAL HEADS

(1) ALL SIGNAL HEADS SHALL BE YELLOW ALUMINUM WITH FLAT BLACK LOUVERED ALUMINUM BACKPLATES.

(2) ALL HEADS SHALL USE RIGID MOUNTING BRACKET ALTERNATE 1.

(3) ALL SIGNS ON SIGNAL POLES AND ARMS SHALL BE BANDED TO THE ARMS USING AN APPROVED BRACKET.

(4) SIGNAL HEADS SHALL HAVE INTERTEK VERIFIED ITE COMPLIANT INCANDESCENT LOOK LED MODULES.

PEDESTRIAN SIGNALS

(1) ALL SIGNAL HEADS SHALL BE 16" X 18" YELLOW ALUMINUM, MOUNTED WITH CLAMSHELL BRACKETS.

(2) ALL PEDESTRIAN SIGNS ON SIGNAL POLES OR PEDESTRIAN POLES SHALL BE BANDED USING AN APPROVED BRACKET.

(3) PEDESTRIAN SIGNAL HEADS SHALL BE COUNTDOWN TYPE AND HAVE INTERTEK VERIFIED ITE COMPLIANT INCANDESCENT LOOK LED MODULES.

(4) PEDESTRIAN PUSHBUTTONS SHALL BE ADA COMPLIANT AND GIVE AN AUDIBLE AND MOMENTARY LED CONFIRMATION WHEN PUSHED.

(5) R10-3E (9" X 12") SIGNS ON ALUMINUM BLANKS SHALL BE BANDED TO THE POLE ABOVE THE PEDESTRIAN PUSHBUTTON.

WIRING

(1) TRAFFIC SIGNAL CABLE SHALL NOT BE SPLICED BETWEEN THE CABINET AND THE FIRST TRAFFIC SIGNAL HEAD.

(2) THE VIDEO CABLE, CONNECTORS AND HARDWARE SHALL MEET THE VIDEO CAMERA / SYSTEM MANUFACTURER SPECIFICATIONS.

(3) THERE SHALL BE NO SPLICES BETWEEN THE CABINET AND THE VIDEO CAMERA.

(4) PREEMPTION CABLE SHALL CONSIST OF OPTICOM MODEL 138 CABLE AND A SEPARATE 3 CONDUCTOR CABLE FOR CONFIRMATION LIGHTS. NO SPLICES SHALL BE ALLOWED IN EITHER CABLE.

REVISIONS	DATE

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PROJECT: SIGNAL DESIGN
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BRISTOL HWY @ CARROLL CREEK RD
UNIVERSITY PARKWAY @ SOUTHWEST AVE
JOHNSON CITY, TN

GENERAL NOTES

PRELIMINARY

CC PROJECT NO.	856-0000.1
DATE	06-15-10
P.M.	ALC
DRAWN	RLS
Q.C.	

RX.XX