MD 97 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

PROPOSED LED SIGNALS

1,2,5,6,7 — 12″ (R, Y, G)

3,4 — 12″ (R, Y, G)

8,9 — 16″ LED COUNTDOWN PEDESTRIAN SIGNAL

PROPOSED ACCESSIBLE PUSHBUTTON AND SIGN

10 — R10-3(1) 9″ x 15″

11 — R10-3(1) 9″ x 15″

PROPOSED SIGNS

12,12a — D-3(1) (VAR.x16″) DUAL FACED (August DR 2100 →)

15,15a — (← August DR <2100)

20 — M1-5(4) (78″x36″) Georgia Ave; SOUTH 97 NORTH

13,16 17,19 — S1-1 (36″x36″) W16-7p(L) (24″x12″) F.Y.G.

21,22 — S1-1 (36″x36″) W16-7p(R) (24″x12″) F.Y.G.

PROPOSED VIDEO DETECTION

a,b — VIDEO DETECTION ZONE

EXISTING SIGNS TO BE REMOVED

14b, 18

EXISTING SIGNS TO REMAIN

14a,23, 24 (AHEAD)

NW S/W RAMP DETAIL

NOT TO SCALE

H=HEIGHT OF CURB

TIE INTO EXISTING SIDEWALK

DETECTABLE WARNING SURFACE MD 655.40

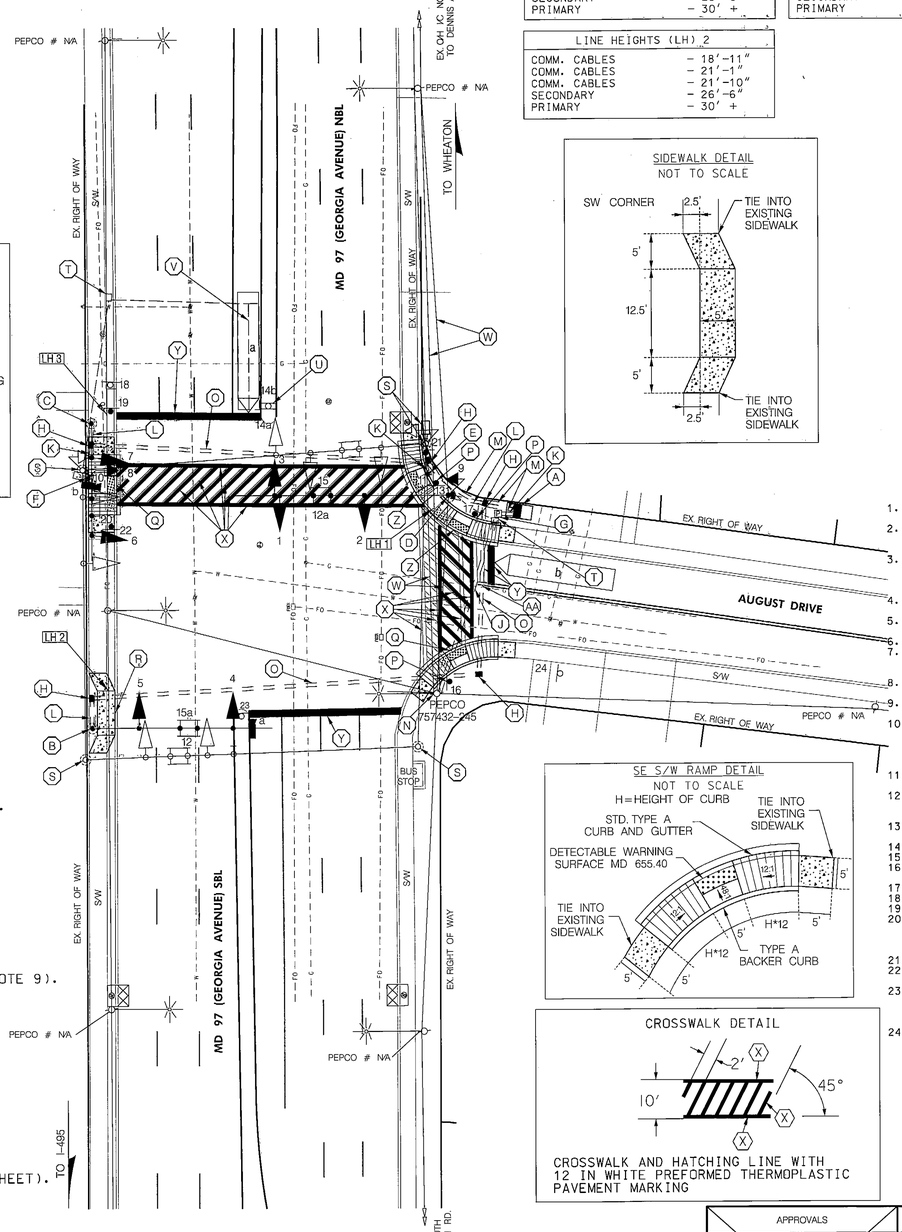
STD. TYPE A CURB AND GUTTER

TIE INTO EXISTING SIDEWALK

TYPE A BACKER CURB

CONSTRUCTION DETAILS

A. INSTALL NEMA SIZE "S" BASE MOUNTED CABINET AND CONTROLLER WITH ALL NECESSARY EQUIPMENT (NOTE: 2-2 IN. AND 2-4 IN. 90 DEGREE BENDS).
B. INSTALL A 16.5 FT. STEEL POLE WITH A 50 FT. MAST ARM, 15 FT. "T" DIMENSION, FOUNDATION, LED TRAFFIC SIGNAL HEADS, SIGNS AND VIDEO DETECTION CAMERA (NOTE: 1-3 IN. AND 1-2 IN. 90 DEGREE PVC BENDS).
C. INSTALL A 16.5 FT. STEEL POLE WITH A 38 FT. MAST ARM, 15 FT. "T" DIMENSION, FOUNDATION, LED TRAFFIC SIGNAL HEADS, SIGNS AND VIDEO DETECTION CAMERA (NOTE: 1-3 IN. AND 1-2 IN. 90 DEGREE PVC BENDS).
D. INSTALL A 16.5 FT. STEEL POLE WITH A 60 FT. MAST ARM, 15 FT. "T" DIMENSION, FOUNDATION, LED TRAFFIC SIGNAL HEADS, SIGN, LED COUNTDOWN PEDESTRIAN SIGNAL, 3 IN. WEATHER HEAD AND INTERCONNECT SPLICE CABINET (NOTE: 1-3 IN. AND 1-2 IN. 90 DEGREE PVC BENDS).
E. INSTALL A 5 FT. BREAKAWAY PEDESTAL POLE WITH MODIFIED FOUNDATION BASE PER MD STD. 801.01-01, BREAKWAY COUPLINGS, ACCESSIBLE PUSHBUTTON (ARROW LEFT) AND R10-3(1) SIGN "PUSH BUTTON TO CROSS GEORGIA AVENUE" (NOTE: 1-2 IN. 90 DEGREE PVC BEND).
F. INSTALL A 10 FT. BREAKAWAY PEDESTAL POLE WITH MODIFIED FOUNDATION BASE PER MD STD. 801.01-01, BREAKWAY COUPLINGS, LED COUNTDOWN PEDESTRIAN SIGNAL, ACCESSIBLE PUSHBUTTON (ARROW RIGHT) AND R10-3(1) SIGN "PUSH BUTTON TO CROSS GEORGIA AVENUE" (NOTE: 1-2 IN. 90 DEGREE PVC BEND).
G. INSTALL METERED SERVICE PEDESTAL (NOTE: 1-4 IN. AND 3-2 IN. 90 DEGREE PVC BENDS).
H. INSTALL ELECTRICAL HANDHOLE.
J. INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (BORED) – FOR PROPOSED UNDERGROUND POWER SERVICE. CAP AND MARK CONDUIT, AND LEAVE A 1 FT. STUB WITH PULL STRING AT UTILITY POLE FOR USE BY OTHERS. ELECTRICAL SERVICE CABLE TO BE INSTALLED UP THE POLE AND COILED.
K. INSTALL 2 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED).
L. INSTALL 1-2 IN. AND 1-3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED).
M. INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED).
N. INSTALL 3 INCH ELECTRICAL CONDUIT-PVC RISER ON EXISTING UTILITY POLE.
O. INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (BORED).
P. INSTALL GROUND MOUNTED SIGN ON ONE 4 IN. X 6 IN. WOOD POST DRILLED.
Q. REMOVE EXISTING SIDEWALK RAMP AND CONSTRUCT NEW SIDEWALK RAMP PER MD STD. 655.12 WITH DETECTABLE WARNING SURFACE PER MD STD. 655.40 AND TYPE A BACKER CURB (SEE NOTE 9).
R. REMOVE EXISTING SIDEWALK AND CONSTRUCT NEW 5 IN. CONCRETE SIDEWALK. SEE DETAIL THIS SHEET FOR SW CORNER SIDEWALK CONSTRUCTION.
S. REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT. REMOVE FOUNDATION 12 IN. BELOW GRADE AND BACKFILL. CAP AND ABANDON EXISTING CONDUIT.
T. REMOVE EXISTING HANDHOLE AND BACKFILL. CAP AND ABANDON EXISTING CONDUIT.
U. REMOVE EXISTING GROUND MOUNTED PEDESTRIAN SIGN AND ARROW PANEL FROM POST. EXISTING R4-7 SIGN TO REMAIN ON EXISTING SUPPORT.
V. ABANDON EXISTING LOOP DETECTOR.
W. PULL BACK AND RE-ROUTE EXISTING INTERCONNECT CABLE (NOTE: SEE WIRING DIAGRAM ON GI SHEET FOR DETAILS).
X. REMOVE EXISTING PAVEMENT MARKINGS AND INSTALL 12 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKINGS FOR CROSSWALK.
Y. REMOVE EXISTING PAVEMENT MARKINGS AND INSTALL 24 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKINGS FOR STOPLINE.
Z. REMOVE EXISTING SIDEWALK RAMP AND CONSTRUCT NEW SIDEWALK RAMP (SEE DETAIL THIS SHEET).
AA. ERADICATE EXISTING DOUBLE YELLOW PAVEMENT MARKINGS BEYOND PROPOSED STOPLINE.



LINE HEIGHTS (LH) 1	
COMM. CABLES	- 18′-1″
COMM. CABLES	- 19′-0″
COMM. CABLES	- 21′-5″
COMM. CABLES	- 22′-6″
SECONDARY	- 25′-9″
PRIMARY	- 30′ +

LINE HEIGHTS (LH) 2	
COMM. CABLES	- 18′-11″
COMM. CABLES	- 21′-1″
COMM. CABLES	- 21′-10″
SECONDARY	- 26′-6″
PRIMARY	- 30′ +

LINE HEIGHTS (LH) 3	
COMM. CABLES	- 17′-1″
COMM. CABLES	- 18′-7″
COMM. CABLES	- 19′-7″
COMM. CABLES	- 21′-9″
SECONDARY	- 30′-0″
PRIMARY	- 30′ +

SIDEWALK DETAIL

NOT TO SCALE

SW CORNER — TIE INTO EXISTING SIDEWALK

NEMA PHASING

Ø2, Ø4, Ø4 ALT., Ø5, Ø6, FLASHING OPERATION

NOTE:
PHASES ASSOCIATED BY A DASHED LINE MAY/WILL OPERATE CONCURRENTLY.
PHASES ASSOCIATED BY A SOLID LINE SHALL NOT OPERATE CONCURRENTLY.

NE S/W RAMP DETAIL

NOT TO SCALE

H=HEIGHT OF CURB

TIE INTO EXISTING SIDEWALK

STD. TYPE A CURB AND GUTTER

DETECTABLE WARNING SURFACE MD 655.40

STD. 3″ CURB AND GUTTER

TYPE A BACKER CURB

SE S/W RAMP DETAIL

NOT TO SCALE

H=HEIGHT OF CURB

STD. TYPE A CURB AND GUTTER

DETECTABLE WARNING SURFACE MD 655.40

TIE INTO EXISTING SIDEWALK

TYPE A BACKER CURB

CROSSWALK DETAIL

CROSSWALK AND HATCHING LINE WITH 12 IN WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING

GENERAL NOTES

1. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING MDSHA STANDARD TYPICALS FOR TRAFFIC CONTROL.
2. THE CONTRACTOR SHALL CONTACT MISS UTILITY TO VERIFY ALL UNDERGROUND UTILITIES PRIOR TO THE INSTALLATION OF PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
3. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS. HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
4. THE CONTRACTOR SHALL INTEGRATE PROPOSED CONCRETE FOUNDATIONS WITH NEW SIDEWALK RAMP WHERE NECESSARY.
5. THE MONTGOMERY COUNTY SIGNAL SHOP WILL BE RESPONSIBLE FOR ALL INTERNAL CABINET WIRING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ROUTING AND PROPERLY LABELING ALL SIGNAL CABLES.
6. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ABANDONED ELECTRICAL CABLES.
7. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED, WITH THE EXCEPTION OF SOLO CAMERAS, SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE SIGNAL RECONSTRUCTION. SOLO CAMERAS ARE TO BE RETURNED TO SHA PON COMPLETION OF THE SIGNAL RECONSTRUCTION.
8. THE CONTRACTOR SHALL VERIFY THE PROPOSED POLE AND CABINET LOCATION(S) PRIOR TO INSTALLATION.
9. THE CONTRACTOR SHALL CENTER THE NEWLY CONSTRUCTED RAMP WITH THE EXISTING/PROPOSED CROSSWALKS.
10. LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.09 AND FIG. 4E.3 AND 4E.4; AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE." IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL THE CONFLICT HAS BEEN RESOLVED. IF NEEDED, A DESIGN WAIVER SHALL BE OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
11. PUSHBUTTON IS TO BE LOCATED SO THAT A PEDESTRIAN IN A WHEELCHAIR LOCATED ON THE LEVEL LANDING AREA DOES NOT HAVE TO REACH MORE THAN 18 IN.
12. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR FROM A 60 IN. X 60 IN. LEVEL LANDING AREA. A LEVEL LANDING AREA IS AN AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
13. THE 10 FT. MINIMUM SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER OF POLE TO CENTER OF POLE.
14. PUSHBUTTON ARROWS SHOULD BE TURNED PARALLEL TO THE CROSSWALK FOR WHICH THEY ARE INTENDED.
15. ALL TRAFFIC SIGNAL MODIFICATIONS SHALL BE CONSTRUCTED PRIOR TO SIDEWALK INSTALLATION.
16. THE CONTRACTOR SHALL ENSURE THE EXISTING TRAFFIC SIGNAL REMAINS OPERATIONAL UNTIL RECONSTRUCTED TRAFFIC SIGNAL IS OPERATIONAL.
17. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MDSHA STANDARDS.
18. VIDEO CAMERA LOCATION / ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
19. ALL UNUSED SIGNAL CABLES SHALL BE REMOVED AND DISPOSED.
20. THE CONTRACTOR SHALL MAINTAIN THE CONTINUOUS OPERATION OF ALL INTERCONNECT, VEHICULAR, PEDESTRIAN DETECTORS, AND LIGHTING DEVICES. IF ANY DEVICE IS DAMAGED BY CONTRACTOR, IT SHALL BE REPAIRED WITHIN 72 HOURS BY THE CONTRACTOR AT NO COST TO SHA AFTER NOTIFICATION BY THE ENGINEER.
21. ALL PAVEMENT MARKINGS SHALL BE INSTALLED PER SHA STANDARDS.
22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERING THE SIGNAL VIDEO INTERFACE EQUIPMENT TO THE MONTGOMERY COUNTY SIGNAL SHOP.
23. THE CONTRACTOR SHALL DELIVER APS PUSHBUTTONS AND CENTRAL CONTROL UNIT TO MR. ROBERT RICKETTS AT MONTGOMERY COUNTY TECHNICAL CENTER AT 2383 SEVEN LOCKS ROAD, ROCKVILLE, MD 20854 AT LEAST 3 WEEKS PRIOR TO BEGINNING WORK. CONTRACTOR SHALL HAVE THE APS MESSAGES PROGRAMMED FROM THE FACTORY AND DELIVER THE APS WAV FILES TO MR. ROBERT RICKETS.
24. CONTRACTOR SHALL NOTIFY MR. KAMAL HAMUD AND MR. ROBERT RICKETS 72 HOURS IN ADVANCE OF INTENDED WORK.

UTILITY LEGEND

—E—E—	ELECTRIC CABLES	—SD—SD—	STORM DRAIN
—A—A—	AERIAL CABLES	—G—G—	GAS MAIN
—T—T—	TELEPHONE CABLES	—W—W—	WATER MAIN
—FO—FO—	FIBER-OPTIC	—S—S—	SEWER MAIN

GEOMETRIC LEGEND

EXISTING

PROPOSED

T3 DESIGN CORP
3927 OLD LEE HWY
SUITE 101-C
FAIRFAX, VA 22030
PHONE: 703-359-5861
www.t3design.us

BY: swilkening –

APPROVALS: TEAM LEADER / ASST. DIV. CHIEF / DIVISION CHIEF / OFFICE DIRECTOR — ORIGINAL ON FILE

REVISIONS

D	UPGRADE SIGNAL RECONSTRUCTION PLAN FROM REVISION "C" SHA NO. XY1515185			TIMS# L603	3-21-2013
	SJW	AJM			CJW
C	FULL SIGNAL RECONSTRUCTION CONTRACT EXPIRED SHA NO. XX8315185			TIMS# K534	2-1-2011
STY	MCG				
B	INSTALL VIDEO FOR EAST LEG, REPLACE SB LT LOOP DETECTOR SHA NO. MO0035177			TIMS# H326	3-2006
STY	MCG	JMS	JAS	MAR	WH	TH 4/4

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 97 (GEORGIA AVENUE) AT AUGUST DRIVE

WHEATON, MARYLAND

TRAFFIC SIGNALIZATION PLAN

SCALE 1″ = 20′ ADVERTISED DATE _____ CONTRACT NO. _____

DESIGNED BY _____ COUNTY MONTGOMERY

DRAWN BY DERRICK DICKERSON LOGMILE 15009702.02

CHECKED BY G.S.D. TIMS NO. _____

F.A.P. NO. _____ TOD NO. _____

TS NO. 3290C | DRAWING SG – 01 OF 02 | SHEET NO. 01 OF 02

PLOTTED: Thursday, April 11, 2013 AT 03:21 PM
FILE: Y:\12-0294-118 MD 97 Signal Mods\4-MD 97 @ August\pSG-P001_MD97.dgn