US 1 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

20,21 — 38TH Street — D-3(1) (VAR. X 16") DUAL-FACED

22,23 — Rhode Island AVE — D-3(1) (VAR. X 16") DUAL-FACED

PROPOSED SIGNS

24 NORTH 1 (24"x48") — 25 SOUTH 1 (36"x72") — 26 SOUTH 1 (24"x48") — 27 NORTH 1 (36"x72") — 28 WEST MARYLAND 208 (30"x51") — 29 EAST MARYLAND 208 (48"x72") — 30 WEST MARYLAND 208 (48"x72")

ASSOCIATED SHIELD ASSEMBLIES M1-5(6) (POLE-MOUNTED)

ASSOCIATED SHIELD ASSEMBLIES M1-5(6) (GROUND-MOUNTED)

16p 17p 18p 19p — R10-3(1) 9"x15"

AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON

PUSHBUTTON SIGN NUMBERS INDICATE THE ASSOCIATED PEDESTRIAN SIGNAL HEAD NUMBERS

PROPOSED SIGNALS

1,4 — 12" R 8", 12" Y 8", 12" G 8"

2,5 — 12" R, Y, G

3,6,7,8,9,12,13 — 12" R, Y, G

10,11 — R 12", Y 12", Y 8"

16-19 — 16" LED COUNTDOWN PEDESTRIAN SIGNAL

VIDEO DETECTION ZONE

a,b,c,d

a,b,c,d

PROPOSED VIDEO DETECTION CAMERA

EXISTING SIGNALS

14,15 — R, R — 12"

NEMA PHASING

Ø1 Ø2 Ø4 Ø5 Ø6 Ø8

FLASHING OPERATION

Ø8 ALT

PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY

PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY

CONSTRUCTION DETAILS

A. INSTALL NEMA "S" TYPE BASE- MOUNTED CABINET AND CONTROLLER WITH NECESSARY EQUIPMENT FOR BATTERY BACK-UP.

B. INSTALL STEEL POLE WITH TWIN 50'/60' SPECIAL "T" MAST ARMS, TRAFFIC SIGNAL HEADS, VIDEO DETECTION CAMERAS AND SIGNS (NOTE: 1-3" SCHEDULE 80, 90° PVC BEND).

C. INSTALL 10' PEDESTAL POLE WITH BREAKAWAY COUPLINGS, LED COUNTDOWN PEDESTRIAN SIGNAL HEADS, AND AUDIBLE PUSHBUTTON STATION (NOTE: 18"x36" FOUNDATION WITH 1-2" SCHEDULE 80, 90° PVC BEND).

D. INSTALL 2" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.

E. INSTALL 3" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.

F. INSTALL 4" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.

G. INSTALL 4" SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED.

H. REMOVE EXISTING RAMP, CURB/GUTTER AND SIDEWALK, AND INSTALL STANDARD RAMP MD 655.12, WITH DETECTABLE WARNING SURFACE PER MD 655.40, 2' WIDE AT THE RAMP CURB OPENING.

J. REMOVE EXISTING RAMPS, CURB/GUTTER AND SIDEWALK, AND INSTALL RAMP PER MD 655.12, WITH A 16' FLAT STANDING AREA AND DETECTABLE WARNING SURFACE PER MD 655.40, 2' WIDE AT THE RAMP CURB OPENING.

K. INSTALL ELECTRICAL HANDHOLE.

L. USE EXISTING HANDHOLE; TAKE TO NEW SIDEWALK GRADE AND INSTALL NEW FRAME AND COVER.

M. REMOVE EXISTING HANDHOLE, CAP AND ABANDON CONDUIT, RETURN AREA TO EXISTING GRADE.

CONSTRUCTION DETAILS (CONT'D.)

N. USE EXISTING HANDHOLE; PULL BACK DISCONNECTED INTERCONNECT CABLE AND FIREHOUSE SIGNAL OPERATION CABLES FROM CONTROLLER TO THIS HANDHOLE AND RE-ROUTE TO THE NEW CONTROLLER/CABINET. ADJUST EXISTING HANDHOLE TO NEW SIDEWALK GRADE AND INSTALL NEW FRAME AND COVER. (NOTE: THE CONTRACTOR SHALL INFORM THE FIRE DEPARTMENT OF THE PRE-EMPTION SWITCH OVER TO THE PROPOSED CONTROLLER. ONE (1) DAY PRIOR TO THE START OF THE WORK; CONTACT MR. STEVE KING AT 202-579-6909 (CELL) OR 301-985-5400 (OFFICE.)

O. INSTALL 100 AMP EMBEDDED METERED SERVICE PEDESTAL.

P. INSTALL 1'OF 4" SCHEDULE 80 PVC CONDUIT BEND STUB-OUT AT THE BASE OF UTILITY POLE # 812402-3857 FOR INSTALLATION OF THE POWER SERVICE.

Q. EXISTING CONDUIT FOR INTERCONNECT AND/OR FIREHOUSE CABLES TO REMAIN.

R. DISCONNECT EXISTING INTERCONNECT CABLE AND FIREHOUSE SIGNAL OPERATION CABLES FROM EXISTING CONTROLLER/CABINET. PULL BACK CABLES ACROSS THE SPAN WIRES TO THE HANDHOLE LABLED 'N'. REMOVE EXISTING CONTROLLER/CABINET AND REMOVE FOUNDATION AT LEAST 12" BELOW GROUND GRADE AND RETURN THE AREA TO THE PROPOSED SIDEWALK GRADE.

S. REMOVE EXISTING CONCRETE SIDEWALK (JOINT-TO-JOINT) FOR THE INSTALLATION OF SIGNAL EQUIPMENT AND/OR CONSTRUCTION OF THE RAMPS. CONSTRUCT REPLACEMENT SIDEWALK AT THE END OF THE WORK.

T. REMOVE EXISTING CROSSWALK MARKINGS; AND INSTALL NEW 12" HEAT-APPLIED PERMANENT THERMOPLASTIC PAVEMENT MARKING FOR THE CROSSWALK.

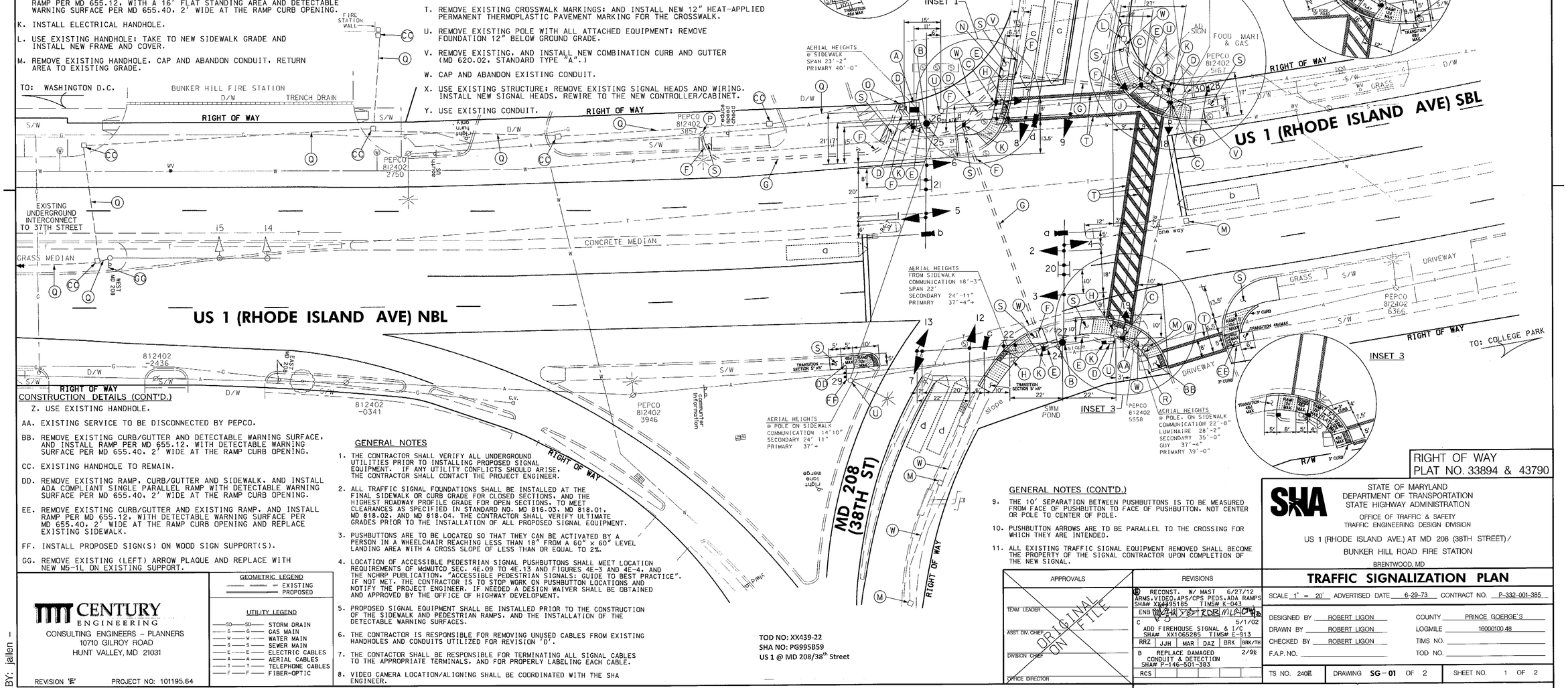
U. REMOVE EXISTING POLE WITH ALL ATTACHED EQUIPMENT; REMOVE FOUNDATION 12" BELOW GROUND GRADE.

V. REMOVE EXISTING, AND INSTALL NEW COMBINATION CURB AND GUTTER (MD 620.02, STANDARD TYPE "A".)

W. CAP AND ABANDON EXISTING CONDUIT.

X. USE EXISTING STRUCTURE; REMOVE EXISTING SIGNAL HEADS AND WIRING. INSTALL NEW SIGNAL HEADS. REWIRE TO THE NEW CONTROLLER/CABINET.

Y. USE EXISTING CONDUIT.



CONSTRUCTION DETAILS (CONT'D.)

Z. USE EXISTING HANDHOLE.

AA. EXISTING SERVICE TO BE DISCONNECTED BY PEPCO.

BB. REMOVE EXISTING CURB/GUTTER AND DETECTABLE WARNING SURFACE, AND INSTALL RAMP PER MD 655.12, WITH DETECTABLE WARNING SURFACE PER MD 655.40, 2' WIDE AT THE RAMP CURB OPENING.

CC. EXISTING HANDHOLE TO REMAIN.

DD. REMOVE EXISTING RAMP, CURB/GUTTER AND SIDEWALK, AND INSTALL ADA COMPLIANT SINGLE PARALLEL RAMP WITH DETECTABLE WARNING SURFACE PER MD 655.40, 2' WIDE AT THE RAMP CURB OPENING.

EE. REMOVE EXISTING CURB/GUTTER AND EXISTING RAMP, AND INSTALL RAMP PER MD 655.12, WITH DETECTABLE WARNING SURFACE PER MD 655.40, 2' WIDE AT THE RAMP CURB OPENING AND REPLACE EXISTING SIDEWALK.

FF. INSTALL PROPOSED SIGN(S) ON WOOD SIGN SUPPORT(S).

GG. REMOVE EXISTING (LEFT) ARROW PLAQUE AND REPLACE WITH NEW M5-1L ON EXISTING SUPPORT.

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO INSTALLING PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS SHOULD ARISE, THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.

2. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS, AND THE HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCES AS SPECIFIED IN STANDARD NO. MD 816.03, MD 818.01, MD 818.02, AND MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL PROPOSED SIGNAL EQUIPMENT.

3. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18" FROM A 60" x 60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.

4. LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS SHALL MEET LOCATION REQUIREMENTS OF MdMUTCD SEC. 4E.09 TO 4E.13 AND FIGURES 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 AND NOTIFY THE PROJECT ENGINEER. IF NEEDED A DESIGN WAIVER SHALL BE OBTAINED AND APPROVED BY THE OFFICE OF HIGHWAY DEVELOPMENT.

5. PROPOSED SIGNAL EQUIPMENT SHALL BE INSTALLED PRIOR TO THE CONSTRUCTION OF THE SIDEWALK AND PEDESTRIAN RAMPS, AND THE INSTALLATION OF THE DETECTABLE WARNING SURFACES.

6. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING UNUSED CABLES FROM EXISTING HANDHOLES AND CONDUITS UTILIZED FOR REVISION 'D'.

7. THE CONTACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINALS, AND FOR PROPERLY LABELING EACH CABLE.

8. VIDEO CAMERA LOCATION/ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.

GENERAL NOTES (CONT'D.)

9. THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER OR POLE TO CENTER OF POLE.

10. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.

11. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE NEW SIGNAL.

TOD NO: XX439-22
SHA NO: PG995B59
US 1 @ MD 208/38th Street

RIGHT OF WAY PLAT NO. 33894 & 43790

CENTURY ENGINEERING
CONSULTING ENGINEERS – PLANNERS
10710 GILROY ROAD
HUNT VALLEY, MD 21031

REVISION 'E' PROJECT NO: 101195.64

BY: jallen

GEOMETRIC LEGEND: EXISTING / PROPOSED

UTILITY LEGEND: STORM DRAIN, GAS MAIN, WATER MAIN, SEWER MAIN, ELECTRIC CABLES, AERIAL CABLES, TELEPHONE CABLES, FIBER-OPTIC

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

REVISIONS

B	RECONST. W/ MAST ARMS, VIDEO, APS/CPS PEDS, ADA RAMPS SHA# XX4395185 TIMS# K-043					6/27/12
C	ADD FIREHOUSE SIGNAL & I/C SHA# XX1065285 TIMS# E-913					5/1/02
B	REPLACE DAMAGED CONDUIT & DETECTION SHAP P-146-501-383					2/96

RRZ JJH MAR DAZ BRK BRK/TH RCS

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

US 1 (RHODE ISLAND AVE.) AT MD 208 (38TH STREET)/
BUNKER HILL ROAD FIRE STATION
BRENTWOOD, MD

TRAFFIC SIGNALIZATION PLAN

SCALE 1" = 20' ADVERTISED DATE 6-29-73 CONTRACT NO. P-332-001-385

DESIGNED BY ROBERT LIGON — COUNTY PRINCE GOERGE'S
DRAWN BY ROBERT LIGON — LOGMILE 16000100.48
CHECKED BY ROBERT LIGON — TIMS NO.
F.A.P. NO. — TOD NO.

TS NO. 240E — DRAWING SG-01 OF 2 — SHEET NO. 1 OF 2

PLOTTED: Wednesday, June 27, 2012 AT 10:15 AM
FILE: S:\2010\Transportation\101195.64 US 1 at MD 208_38th Street\CADD\ACAD Sheet\Sets\pSG_P001\US1at 208-38th(FH).dgn