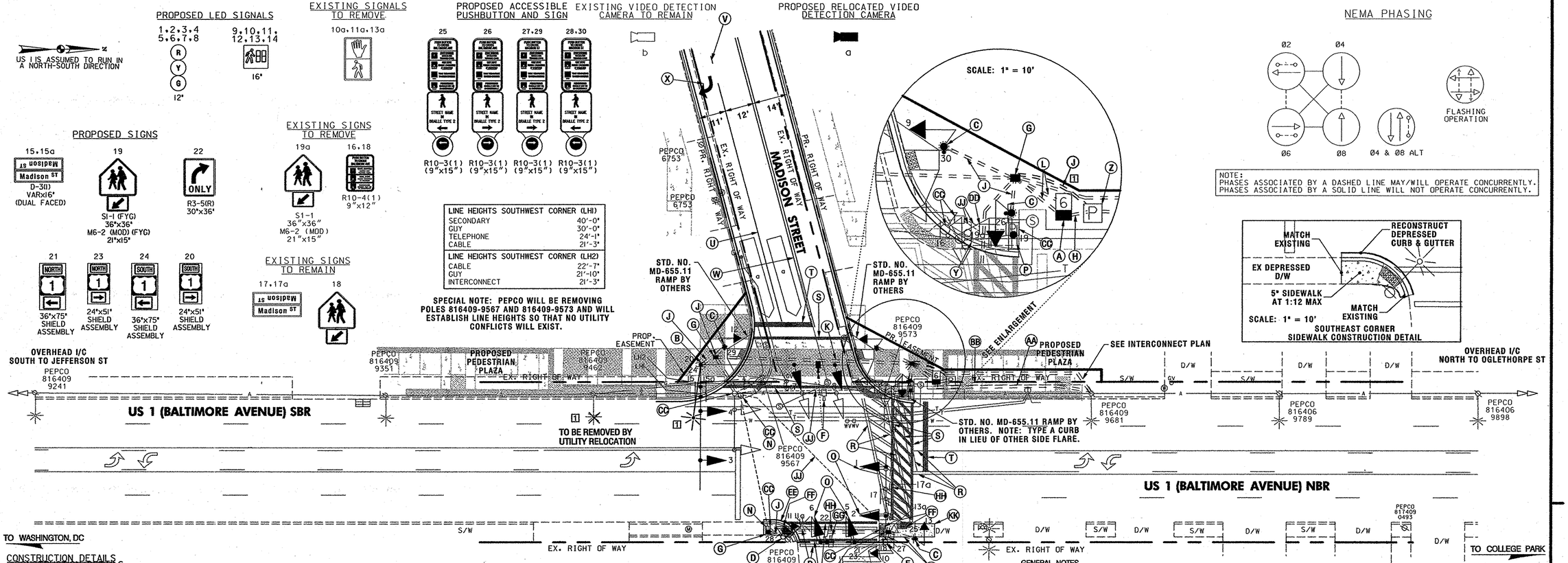

CONSTRUCTION DETAILS

A. INSTALL EIGHT PHASE FULLY-ACTUATED CONTROLLER HOUSED IN A NEMA SIZE 6 BASE MOUNTED CABINET WITH ALL OF THE NECESSARY EQUIPMENT (NOTE: 2-2 IN. AND 2-4 IN. PVC 90 DEGREE BENDS) (NOTE: USE PROPOSED SIDEWALK AS COURTESY PAD)
[1] 27 FT. 20 FT. LIGHTING ARM WITH 250 WATT HPS LUMINAIRE
B. INSTALL ~~21 FT.~~ STEEL POLE WITH TWIN 50 FT./60 FT. MAST ARMS, FOUNDATION, TRAFFIC SIGNAL HEADS, RELOCATED VIDEO DETECTION CAMERA (INSTALL NEW CONTROL CABLE), SIGNS, (NOTE: 2-3 IN. PVC 90 DEGREE BENDS (ONE BEND FOR FUTURE USE)) (THE 60 FT. ARM IS FOR THE WESTBOUND APPROACH)
C. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH COUNTDOWN PEDESTRIAN SIGNAL HEAD, ACCESSIBLE PEDESTRIAN PUSHBUTTON STATION AND R10-3(I) SIGN TO READ "PUSH BUTTON TO CROSS MADISON ST OR BALTIMORE AVE" (NOTE 1-3 IN. PVC 90 DEGREE BEND)
D. REMOVE EXISTING PEDESTRIAN SIGNAL HEAD FROM EXISTING STRUCTURE AND INSTALL NEW COUNTDOWN PEDESTRIAN SIGNAL HEAD, ACCESSIBLE PEDESTRIAN PUSHBUTTON STATION AND R10-3(I) SIGN TO READ "PUSH BUTTON TO CROSS MADISON ST"
E. REMOVE EXISTING PEDESTRIAN SIGNAL HEADS, PUSH BUTTON AND PUSH BUTTON SIGN FROM EXISTING STRUCTURE AND INSTALL NEW COUNTDOWN PEDESTRIAN SIGNAL HEAD (POSITION ABOVE EXISTING S1-1 SIGN), ACCESSIBLE PEDESTRIAN PUSH BUTTON STATION AND R10-3(I) SIGN TO READ "PUSH BUTTON TO CROSS MADISON ST"
F. RELOCATE EXISTING VIDEO DETECTION CAMERA
G. INSTALL ELECTRICAL HANDHOLE
H. INSTALL 2 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED) (SEE NOTE 14)
J. INSTALL 3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED) (SEE NOTE 14)
K. INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (SLOTTED) (SEE NOTE 14)
L. INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED) (SEE NOTE 14)
M. INSTALL 3 IN. PVC 90 DEGREE BEND IN EXISTING FOUNDATION.
N. INTERCEPT EXISTING CONDUIT AND EXTEND 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED) TO PROPOSED ELECTRICAL HANDHOLE
O. INSTALL NEW LED TRAFFIC SIGNAL HEAD AND REMOVE EXISTING TRAFFIC SIGNAL HEAD
P. INSTALL GROUND MOUNTED SIGN ON ONE TUBULAR STEEL SUPPORT (SEE NOTE 12)
Q. INSTALL OVERHEAD SIGN ON EXISTING MAST ARM POLE
R. REMOVE EXISTING PAVEMENT MARKING LINES - ANY WIDTH
S. INSTALL 12 IN. WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS FOR CROSSWALK (SEE NOTE 20)
T. INSTALL 24 IN. WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS FOR STOPLINE
U. INSTALL 5 IN. SOLID WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS ON MADISON AVENUE (SEE MADISON STREET PAVEMENT MARKING DETAIL)
V. INSTALL 5 IN. (3 FT. LINE/9 FT. GAP/3 FT. LINE) WHITE LEAD FREE REFLECTIVE THERMOPOLASTIC PAVEMENT MARKINGS ON MADISON STREET (SEE MADISON STREET PAVEMENT MARKING DETAIL)
W. INSTALL 5 IN. DOUBLE YELLOW LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS ON MADISON STREET (SEE MADISON STREET PAVEMENT MARKING DETAIL)
X. INSTALL PERMANENT PREFORMED PAVEMENT MARKING ARROW (SEE MADISON STREET PAVEMENT MARKING DETAIL)
Y. REMOVE GROUND MOUNTED SIGN AND SUPPORT
Z. INSTALL METERED SERVICE PEDESTAL (NOTE: 1-2 IN. AND 2-3 IN. PVC 90 DEGREE BENDS)
AA. INSTALL 2 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED) - FOR PROPOSED TELEPHONE SERVICE. CAP AND MARK CONDUIT, AND LEAVE A 1 FT. STUB WITH PULL STRING AT UTILITY POLE FOR USE BY OTHERS.
BB. INSTALL 3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED) - FOR UNDERGROUND POWER SERVICE. THE CONTRACTOR SHALL CAP, MARK, AND LEAVE A ONE FOOT STUB WITH PULL STRING AT BASE OF UTILITY POLE FOR USE BY OTHERS. INSTALL 10 FT. LONG 3 IN. PVC CONDUIT RISER ON PEPCO 816409-9681.
CC. REMOVE AND DISPOSE OF EXISTING TRAFFIC SIGNAL EQUIPMENT
DD. SALVAGE EXISTING TRAFFIC SIGNAL EQUIPMENT (SEE NOTE 18)
EE. RE-CONSTRUCT CONCRETE SIDEWALK AND CURB AND GUTTER PER DETAIL
FF. INSTALL DETECTABLE WARNING SURFACE (SEE NOTE 21)
GG. RE-WIRE EXISTING VIDEO DETECTION CAMERA
HH. INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (BORED) (SEE NOTE 14)
JJ. ABANDON EXISTING CONDUIT
KK. RECONSTRUCT EXISTING DEPRESSED SIDEWALK AND PORTIONS OF DRIVEWAY AS NECESSARY

GENERAL NOTES

1. 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.
2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING MDSHA STANDARD PLATES FOR TRAFFIC CONTROL.
3. THE SHA SIGNAL SHOP WILL BE RESPONSIBLE FOR ALL INTERNAL CABINET WIRING.
4. VIDEO CAMERA LOCATION/ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
5. SEE GENERAL INFORMATION SHEET FOR SIGNAL POLE, CABINET, APS, SIGNAL HEADS, VIDEO DETECTION CAMERA, SIGNS, STOPLINE, AND CROSSWALK LAYOUTS.
6. WITHIN 36 IN. OF UNDERGROUND UTILITY LOCATIONS, THE CONTRACTOR SHALL BE REQUIRED TO EXCAVATE FOR FOUNDATION AND CONDUIT BY HAND.
7. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MDSHA STANDARDS.
8. THE CONTRACTOR SHALL VERIFY THE PROPOSED POLE/CABINET LOCATION(S) PRIOR TO INSTALLATION.
9. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS, HIGHEST ROADWAY PROFILE FOR OPEN SECTIONS, TO MEET CLEARANCES AS SPECIFIED IN 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 SIGNAL EQUIPMENT.
10. ACCESSIBLE PEDESTRIAN SIGNAL EQUIPMENT, CABINET AND THE CONTROLLER SHALL BE DELIVERED TO THE SHA SIGNAL SHOP FOR TESTING AND PROGRAMMING PRIOR TO INSTALLATION. CONTACT MR. EDWARD RODENHIZER TO COORDINATE AT 410-787-7650.
11. THE CONTRACTOR SHALL CENTER THE PROPOSED CROSSWALKS ON NEWLY CONSTRUCTED RAMPS.
12. THE CONTRACTOR SHALL LEAVE A SLEEVE IN CONCRETE AREAS WHERE SIGNS ARE PROPOSED.
13. GEOMETRIC MODIFICATIONS PROPOSED ON THE WEST SIDE OF US 1 (TURN LANE CONSTRUCTION, SIDEWALK, PEDESTRIAN RAMPS AND DETECTABLE WARNING SURFACES WILL BE CONSTRUCTED BY OTHERS. THE TRAFFIC SIGNAL CONTRACTOR SHALL COORDINATE WITH THE ROADWAY CONTRACTOR AS NECESSARY. IMPROVEMENTS ON THE EAST SIDE OF US 1 WILL BE CONSTRUCTED BY THE SIGNAL CONTRACTOR.
14. INSTALL ALL CONDUIT PRIOR TO SIDEWALK AND PEDESTRIAN RAMP/DRIVEWAY RE-CONSTRUCTION.
15. IF THE LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST BE CHANGED, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER TO OBTAIN APPROVAL FOR THE NEW LOCATION TO ENSURE MUTCD SEC. 4E.09 AND FIGURE 4E.2 REQUIREMENTS ARE MET. ALL WORK MUST BE HALTED UNTIL THE PROJECT ENGINEER HAS OBTAINED AN APPROVED LOCATION OR A DESIGN WAIVER IS OBTAINED.
16. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR FROM 60 IN. X 60 IN. LEVEL LANDING AREA. A LEVEL LANDING AREA IS AN AREA WITH CROSS SLOPE OF LESS THAN OR EQUAL TO 2 PERCENT.
17. THE 10 FOOT MINIMUM SEPARATION BETWEEN PUSH BUTTONS IS TO BE MEASURED BETWEEN THE FACE OF PUSH BUTTON TO FACE OF PUSH BUTTON, NOT CENTER OF POLE TO CENTER OF POLE.
THE CONTRACTOR SHALL CONTACT MR. EDWARD RODENHIZER 72 HOURS IN ADVANCE OF RETURNING SALVAGED EQUIPMENT.
19. THE CONTRACTOR SHALL ENSURE THAT THE EXISTING TRAFFIC SIGNAL REMAINS FUNCTIONAL DURING THE SIGNAL MODIFICATION.
20. THE CONTRACTOR SHALL REFER TO FIGURE 3B-17a OF THE MARYLAND MUTCD FOR CROSS HATCH DETAIL.
21. PLACE 24 IN. WIDE DETECTABLE WARNING SURFACE ALONG THE FULLY DEPRESSED PORTION OF THE PROPOSED RAMP.
22. THE CONTRACTOR SHALL INSTALL THE PROPOSED POWER FEED CABLE WHEN PEPCO IS ON SITE.
23. THE PUSHBUTTON IS TO BE LOCATED SO THAT A PEDESTRIAN IN A WHEELCHAIR LOCATED ON A LEVEL LANDING AREA DOES NOT HAVE TO REACH MORE THAN 18 INCHES.

APPROVAL: [signature] 2/19/08
[1] REDLINE REVISION NO. 1 02-19-2008

NOTE:

THESE PLANS ARE APPROVED FOR CONSTRUCTION FOR A PERIOD OF ONE (1) YEAR. SHOULD CONSTRUCTION NOT BEGIN WITHIN THIS TIME FRAME, THESE PLANS SHALL BE NULL AND VOID WITH A RE-REVIEW FROM THE TRAFFIC ENGINEERING DESIGN DIVISION.

EAPD PERMIT NO._____

UTILITY LEGEND

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

GEOMETRIC LEGEND

EXISTING
PROPOSED

LENHART TRAFFIC CONSULTING
TRAFFIC ENGINEERING & TRANSPORTATION PLANNING
331 Redwood Grove Court Millersville, Maryland 21108
Tel: (410) 987-3888 Fax: (443) 782-2288

APPROVALS	REVISIONS
TEAM LEADER	D MODIFY TRAFFIC SIGNAL FOR NEW GEOMETRICS & ADD APS AND UPGRADE TO LED OCTOBER 2007 GW906M82
ASST. DIV. CHIEF	LTC MMJ
DIVISION CHIEF	C INSTALL NEW CABINET AND REPLACE SIGNAL HEADS FEBRUARY 15, 2005 SHA AT5665185
OFFICE DIRECTOR	STS RRZ
ORIGINALS ON FILE	B AS BUILT MARCH 13, 1997 SHA 859-16673
	STS RRZ

PLOTTED: $DATETIME$
FILE: $FILE$

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

US 1 (BALTIMORE AVENUE) AT MADISON STREET /CLEVELAND AVENUE

TRAFFIC SIGNALIZATION PLAN

SCALE 1" = 20' DATE N/A CONTRACT NO. 869-16673

DESIGNED BY N/A COUNTY PRINCE GEORGE'S
DRAWN BY N/A LOGMILE 16000102.18
CHECKED BY N/A T.I.M.S. NO. I-664
F.A.P. NO. N/A TOD NO.

DRAWING NO. TS-1124-D OF SHEET NO. OF