



- CONSTRUCTION DETAILS**
- A. INSTALL NEMA SIZE "S" BASE MOUNTED CABINET, CONTROLLER, AND FOUNDATION WITH ALL NECESSARY EQUIPMENT (NOTE: 2-2 IN. AND 2-4 IN. 90 DEGREE PVC BENDS).
  - B. INSTALL 14 FT. BREAKAWAY PEDESTAL POLE, FOUNDATION AND OPTICALLY PROGRAMMED SIGNAL HEAD (NOTE: 1-3 IN. 90 DEGREE PVC BEND).
  - C. INSTALL 16.5 FT. STEEL POLE WITH A 15 FT. "T" DIMENSION, A 60 FT. MAST ARM (CUT TO 38 FT.), FOUNDATION, LED TRAFFIC SIGNAL HEADS, TYPE "G" CABINET WITH 2-CIRCUIT FLASHER AND SIGNS (NOTE: 1-3 IN. 90 DEGREE PVC BEND).
  - D. INSTALL 27 FT. STEEL POLE WITH A 50 FT. MAST ARM, FOUNDATION, LED TRAFFIC SIGNAL HEADS, AND 20 FT. LIGHTING ARM WITH A LED LUMINAIRE (NOTE: 1-3 IN. PVC 90 DEGREE BEND).
  - E. INSTALL 27 FT. STEEL POLE WITH A 70 FT. MAST ARM, FOUNDATION, LED TRAFFIC SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERAS AND 20 FT. LIGHTING ARM WITH A LED LUMINAIRE (NOTE: 1-3 IN. 90 DEGREE PVC BEND).
  - F. INSTALL ELECTRICAL HANDHOLE.
  - G. INSTALL 2 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED) - FOR PROPOSED UNDERGROUND TELEPHONE SERVICE. CAP AND MARK CONDUIT AND LEAVE A 1 FT. STUB WITH PULL STRING AT UTILITY POLE FOR USE BY OTHERS (SEE NOTE 10).
  - H. INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED) FOR PROPOSED POWER SOURCE. CAP, MARK AND LEAVE A 1 FT. STUB WITH PULL STRING AT BASE OF UTILITY POLE FOR USE BY OTHERS.
  - J. INSTALL 2 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED).
  - K. INSTALL 3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED).
  - L. INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED).
  - M. INSTALL 2 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (BORED).
  - N. INSTALL 3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (BORED).
  - O. INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (BORED).
  - P. REMOVE EXISTING LIGHTING EQUIPMENT. REMOVE FOUNDATION 12 IN. BELOW GRADE AND BACKFILL. CAP AND ABANDON EXISTING CONDUIT.
  - Q. REMOVE EXISTING PAVEMENT MARKINGS.
  - R. INSTALL 24 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKINGS FOR STOPLINE.

- CONSTRUCTION DETAILS CONT'D**
- S. INSTALL METERED SERVICE PEDESTAL (NOTE: 1-2 IN. AND 1-4 IN. PVC 90 DEGREE BENDS).
  - T. REMOVE EXISTING GROUND MOUNTED SIGNS AND SUPPORTS.
  - U. INSTALL NON-INVASIVE MICROLOOP PROBE SET.
  - V. REMOVE EXISTING GROUND MOUNTED SIGN # 23a FROM EXISTING SUPPORT.
  - W. REMOVE EXISTING GROUND MOUNTED SIGN # 18g FROM EXISTING SUPPORT.
  - X. REMOVE EXISTING GROUND MOUNTED SIGN # 17a FROM EXISTING SUPPORT.
  - Y. REMOVE THE EXISTING METERED SERVICE PEDESTAL. THE CONTRACTOR SHALL CONTACT SNEG TO PERFORM WORK WITH TO DISCONNECT THE EXISTING POWER FEED AND ESTABLISH SERVICE AT THE PROPOSED METERED SERVICE PEDESTAL.
  - Z. SAWCUT AND EXCAVATE EXISTING ROADWAY AND BACKFILL. INSTALL SHA STD. MD 620-02-01 STANDARD TYPE "C" CURB AND GUTTER. MATCH TO EXISTING HEIGHT (SEE NOTE 16).
  - AA. INSTALL GROUND MOUNTED SIGN ON ONE (1) 4 IN. x 4 IN. WOOD SUPPORT.
  - BB. INSTALL 5 IN. HEAT APPLIED WHITE PERMANENT PAVEMENT MARKING LINE.
  - CC. INSTALL 10 IN. HEAT APPLIED WHITE PERMANENT PAVEMENT MARKING LINE.
- 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. WITHIN 36 IN. OF UNDERGROUND UTILITY LOCATIONS, THE CONTRACTOR SHALL BE REQUIRED TO EXCAVATE FOR FOUNDATION AND CONDUIT BY HAND.
  4. 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 819.01, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.

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**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
F — F — FIBER-OPTIC	S — S — SEWER MAIN

**GEOMETRIC LEGEND**

	EXISTING
	PROPOSED

ROADWAY TO BE EXCAVATED

REPLACEMENT SHEET  
 REDLINE REVISION NO. 1  
 DECEMBER 2012  
 SH A NO. XX6475185

**LINE HEIGHTS (LH-1) MEASURED @ 2.5' BELOW ROADWAY**

COMMUNICATION 1:	28'-0"
COMMUNICATION 2:	33'-6"
SECONDARY:	35'-5"
PRIMARY:	38'+

**LINE HEIGHTS (LH-2)**

COMMUNICATION 1:	16'-8"
COMMUNICATION 2:	17'-8"
COMMUNICATION 3:	18'-5"
COMMUNICATION 4:	21'-11"
COMMUNICATION 5:	23'-5"

**LINE HEIGHTS (LH-3)**

COMMUNICATION 1:	19'-8"
COMMUNICATION 2:	20'-0"
COMMUNICATION 3:	21'-5"
COMMUNICATION 4:	23'-5"
COMMUNICATION 5:	25'-5"

**LINE HEIGHTS (LH-4)**

COMMUNICATION 1:	21'-1"
COMMUNICATION 2:	22'-1"
COMMUNICATION 3:	23'-5"
COMMUNICATION 4:	24'-11"

**GENERAL NOTES CONT.**

5. THE SHA 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 VERIFY THE PROPOSED POLE AND CABINET LOCATION(S) PRIOR TO INSTALLATION.
7. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MDSHA STANDARDS.
8. VIDEO CAMERA LOCATION/ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
9. ALL HANDHOLES FOR NON-INVASIVE PROBES SHALL BE INSTALLED WITH THE LONG DIMENSION OF THE HANDHOLE PERPENDICULAR TO THE ROADWAY AS SHOWN.
10. CONTRACTOR SHALL BORE THE PORTIONS OF PROPOSED CONDUIT UNDER DRIVEWAYS.
11. SEE G1 SHEET FOR SIGNAL EQUIPMENT DETAILS AND DIMENSIONS.
12. ALL PROPOSED LUMINAIRES SHALL BE SUPPLIED WITH A PHOTOCELL.
13. WOOD SUPPORTS INSTALLED IN CONCRETE SHALL BE INSTALLED WITH SLEEVED FOUNDATIONS AS PER STANDARDS.
14. THE 5 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINE ITEM IS DOUBLED TO PAY FOR THE 10 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES.
15. PROPOSED HANDHOLES SHALL BE FIELD LOCATED SO THAT CONDUIT RUNS DO NOT EXCEED 200 FT.
16. TYPE "C" CURB AND GUTTER TO BE PAID UNDER STANDARD TYPE "A" COMBINATION CURB AND GUTTER ITEM.

APPROVALS	REVISIONS
TEAM LEADER	
ASST. DIR. CHIEF	
DIVISION CHIEF	
OFFICE DIRECTOR	

**SHA** STATE OF MARYLAND  
 DEPARTMENT OF TRANSPORTATION  
 STATE HIGHWAY ADMINISTRATION  
 OFFICE OF TRAFFIC & SAFETY  
 TRAFFIC ENGINEERING DESIGN DIVISION  
 MD 5 (LEONARDTOWN ROAD) AND  
 GALLANT GREEN ROAD  
 HUGHESVILLE, MARYLAND

**TRAFFIC SIGNALIZATION PLAN**

SCALE 1" = 20' DATE 08/13/2012 CONTRACT NO. XX6475185

DESIGNED BY EMP. OF STV COUNTY CHARLES  
 DRAWN BY EMP. OF STV LOG/MLE 08000503.16  
 CHECKED BY MTS. OF STV TMS NO. L168  
 F.A.P. NO. TOD NO.

TS NO. 4832 DRAWING SG-01 OF 02 SHEET NO. 01 OF 02