CEDAR LANE

CONSTRUCTION DETAILS

1 INSTALL FOUR 6' X 30' LOOP DETECTOR (QUADRUPOLE)

2 INSTALL ONE 6' X 20' LOOP DETECTOR (QUADRUPOLE)

3 INSTALL 2" PVC CONDUITS (TRENCHED)

4 INSTALL GALVANIZED CONDUITS (PUSHED)

5 INSTALL THREE HANDBOXES

6 REMOVE EXISTING CONTROLLER

7 INSTALL CONDUCTOR CABLE AS PER WIRING DIAGRAM

8. INSTALL NEW CONTROLLER, ACCESSORIES, AND CABINET ON EXISTING BASE

9 INSTALL SIGN "A" NEXT TO SIGNAL HEADS #4 & #10

10 INSTALL TWO FIVE-LENS SIGNAL HEADS

11 INSTALL ONE THREE-LENS SIGNAL HEADS

12. REMOVE TWO EXISTING SIGNAL HEADS

13 PAINT FOUR 12" STOP LINES, AS SHOWN

14 ABANDON EXISTING LOOP DETECTORS ON CEDAR LANE, AS SHOWN

15 INSTALL 1" GALVANIZED CONDUITS FOR DETECTOR WIRE LEAD-IN TO HANDBOX

GENERAL NOTES

1 THE HIGHWAY MARKING AND SIGNING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AS NOTED

2 THE UTILITIES SHOWN ON THE CONSTRUCTION PLAN ARE SCHEMATIC ONLY AND ARE NOT TO BE CONSIDERED COMPLETE THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES CAN BE LOCATED IN THE FIELD THE CONTRACTOR SHALL LOCATE EXISTING UTILITIES A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF THE CONSTRUCTION OPERATIONS IN THE VICINITY OF THE UTILITIES ANY DAMAGE INCURRED BY THE CONTRACTOR SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS

- MISS UTILITY (COLLECT) 1-559-0100
- BALTIMORE GAS & ELECTRIC COMPANY - UNDERGROUND ELECTRIC DISTRIBUTION ENGINEERING "DAMAGE CONTROL" 234-5691
- BALTIMORE GAS & ELECTRIC COMPANY - UNDERGROUND GAS DISTRIBUTION ENGINEERING "DAMAGE CONTROL" 234-5533
- CHESAPEAKE AND POTOMAC TELEPHONE COMPANY 752-9976
- TRAFFIC DIVISION 992-2072
- HOWARD COUNTY CABLE T V 461-1156
- BUREAU OF UTILITIES - HOWARD COUNTY 992-2366

3 CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH HOWARD COUNTY STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION DESIGN MANUAL VOLUME IV

4 ALL NEW SIGNAL HEADS SHALL BE SECURELY WRAPPED AND/OR BAGGED IN BURLAP, PRIOR TO SIGNAL BEING PLACED IN SERVICE

5 THE CONTRACTOR SHALL COMPLY WITH OSHA AND MOSHA CODES

6 THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING MAINTAIN SIX (6) INCHES MINIMUM CLEARANCE WITH ALL UNDERGROUND UTILITIES AND ALL OVERHEAD CLEARANCES SHALL BE IN ACCORDANCE WITH THE MARYLAND HIGH VOLTAGE ACT.

7 THE CONTRACTOR WILL SUPPLY ALL OTHER HARDWARE AND AUXILIARY EQUIPMENT REQUIRED FOR THE COMPLETION OF THE PROJECT AND ENSURE PROPER SIGNAL OPERATION AS DESIGNED AND SHOWN ON THE PLANS

8 THE ELECTRICAL FEED AND SOURCE FOR THE TRAFFIC SIGNALS SHOULD BE SEPARATE FROM POWER FOR THE LUMINAIRES

CONTROLLER AND ACCESSORIES

1 NEMA EIGHT PHASE MODULAR CONTROLLER WITH SOLID STATE CIRCUITRY AND DIGITAL TIMING, SIMILAR TO ECONOLITE KMC E-8000 SERIES DIGITAL CONTROLLER UNIT, EQUIVALENT MANUFACTURED BY CROUSE-HINDS, EAGLE SIGNAL CORPORATION OR APPROVED EQUAL SHALL BE INSTALLED WITH THE FOLLOWING

A FOUR PHASE SIGNAL OVERLAP CAPABILITY

B VEHICULAR ACTUATED MODULE WITH VOLUME DENSITY CONTROLS FOR TWO APPROACHES

C VEHICULAR ACTUATED MODULES (CAPABLE OF CONTROLLING FIVE TRAFFIC MOVEMENTS).

D VEHICULAR ACTUATED PHASE MODULES SHALL BE CAPABLE OF THE FOLLOWING FUNCTIONS
MINIMUM GREEN, PASSAGE TIME, YELLOW, ALL RED CLEARANCE, DUAL MAXIMUM, PEDESTRIAN TIMING, RECALL AND MEMORY

E VEHICULAR ACTUATED PHASE MODULE WITH VOLUME DENSITY CONTROLS SHALL BE CAPABLE OF FOLLOWING THE FUNCTIONS MINIMUM GREEN, PASSAGE TIME, YELLOW, ALL RED CLEARANCE, DUAL MAXIMUM, PEDESTRIAN TIMING, SECONDS PER ACTUATION, TIME TO REDUCE, TIME FOR REDUCTION, MINIMUM GAP, RECALL AND MEMORY.

2 A CONFLICT MONITOR FOR ALL PHASES AND SOLID STATE LOAD SWITCHES SHALL BE FULLY WIRED IN THE CABINET

3. THE CONTROLLER SHALL BE WIRED WITH FOUR 2 CHANNEL LOOP DETECTOR AMPLIFIERS (DELAY OUTPUT TYPE) AND HARNESSES

4 ALL PHASES SHALL BE SKIPPABLE

5 THE CONTROLLER AND ACCESSORIES SHALL BE LOCATED IN A NEW CABINET LARGE ENOUGH TO ACCOMMODATE ALL CONTROL EQUIPMENT, ON THE EXISTING BASE

UNDERGROUND WIRING

1 UNDERGROUND WIRING UNDER ROAD SURFACES SHALL BE PLACED IN NEW GALVANIZED CONDUITS PUSHED UNDER THE ROAD SURFACE P V C ELECTRICAL CONDUIT IN GRASS AREAS SHALL BE TRENCHED AS SPECIFIED AND AS SHOWN ON THE CONTRACT DRAWINGS

LOOPS AND DETECTORS

1. THE FOLLOWING LOOPS SHALL BE INSTALLED:

PHASE	DIMENSIONS	NO. OF LOOPS REQUIRED
1	6 x 30	1
3	6 x 30	1
4	6 x 30	1
7	6 x 30	1
8	6 x 20	1

2. ALL WIRING AND SAW CUTS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS FOR CORRECT OPERATION.

3. PHASES 2, 4, 6, 8 SHALL OPERATE IN THE PULSE MODE. PHASES 1, 3, 5, 7, SHALL OPERATE IN THE PRESENCE MODE.

4. DETECTOR AMPLIFIERS SHALL BE SARASOTA 235-T OR EQUIVALENT MANUFACTURED BY ECONOLITE CONTROL PRODUCTS, INC., CROUSE-HINDS, OR APPROVED EQUAL.

5. DETECTION LOOPS OPERATING IN THE PRESENCE MODE SHALL BE CONSTRUCTED WITH A 6' x 6' POWER HEAD LOOP.

6. LOOPS ARE TO BE INSTALLED CENTERED IN THE TRAVEL LANES FOR WHICH THEY ARE DESIGNED.

POLES

1. EXISTING POLES AND MAST ARMS ARE TO BE USED CONTRACTOR SHALL VERIFY THAT ARM AND POLES WILL SUPPORT ADDITION OF SIGNAL HEADS 4 & 10 SIGNALS SHALL BE MOUNTED ON THE MAST ARMS SO THAT THE BOTTOM OF THE SIGNAL HEAD HOUSING IS NOT LESS THAN 15 FEET NOR MORE THAN 19 FEET CLEARANCE ABOVE THE ROADWAY WHEN USING A RIGID MOUNTING, "ASTRO-BRAC" TYPE ADJUSTABLE SIGNAL BRACKET.

SIGNAL HEADS

1. THE CONTRACTOR SHALL PROVIDE THE FOLLOWING SIGNAL HEADS

HEAD NO 4 & 10 - ONE-WAY, FIVE SECTION 12" SIGNAL HEAD HAVING RED, YELLOW, GREEN, YELLOW ARROW, GREEN ARROW INDICATIONS WITH TUNNEL VISORS INCLUDING PROPER ADJUSTABLE RIGID MOUNTING BRACKETS FOR MASTARM MOUNTED INSTALLATION

HEAD NO 6 - ONE-WAY, THREE SECTION 12" SIGNAL HEAD HAVING RED, YELLOW ARROW, GREEN ARROW INDIDICATIONS WITH TUNNEL VISORS INCLUDING PROPER ADJUSTABLE RIGID MOUNTING BRACKETS FOR POLE MOUNTED INSTALLATION.

2. ALL SIGNALS SHALL BE PAINTED BROWN BAKED ENAMEL WITH M A BRUDER AND SONS, INC SEASHORE GLOSS TRIM 27721, DURANODIC BRONZE, CODE 7557581 OR EQUAL.

3 SIGNAL HEAD LOCATIONS AND AIMING TO BE DETERMINED IN THE FIELD WITH THE ENGINEER.

CONSTRUCTION SEQUENCE

1 INSTALL NEW SIGNAL HEADS, CABLES, SIGNS, CONDUIT, LOOP DETECTORS NEW SIGNAL HEADS AND SIGNS SHALL BE SECURELY WRAPPED OR BAGGED IN BURLAP

2 TURN OFF EXISTING SIGNAL AT THE DIRECTION OF THE ENGINEER THE CONTRACTOR SHALL ARRANGE FOR POLICE ASSISTANCE FOR TRAFFIC CONTROL WHEN THE SIGNAL IS NOT IN OPERATION

3 REPLACE EXISTING CONTROLLER AND LOOP DETECTOR AMPLIFIERS WITH NEW EQUIPMENT IN NEW CABINET ON EXISTING BASE

4 RELOCATE EXISTING CABLES AND POWER FEED TO NEW CONTROLLER

5. REMOVE SIGNAL HEADS ADJACENT TO HEADS 4, 6, AND 10

6 UNCOVER NEW SIGNAL HEADS AND SIGNS

7 ENERGIZE SIGNALS.

8 SALVAGE EXISTING CONTROLLER, AND CABINET, AND SIGNALS AS DIRECTED BY THE ENGINEER

GOV. WARFIELD PARKWAY

CONSTRUCTION DETAILS

1. INSTALL FOUR 6' X 30' LOOP DETECTOR (QUADRUPOLE)

2. INSTALL TWO 6' X 20' LOOP DETECTOR (QUADRUPOLE)

3. INSTALL 2" PVC CONDUITS (TRENCHED)

4. INSTALL GALVANIZED CONDUITS (PUSHED)

5. INSTALL EIGHT HANDBOXES

6 INSTALL TWO 8' SIGNAL POLES

7. INSTALL CONDUCTOR CABLE AS PER WIRING DIAGRAM

8. INSTALL CONTROLLER, AND ACCESSORIES IN NEW CABINET & BASE

9. INSTALL SIGN "A" NEXT TO SIGNAL HEAD #4 & #5

10. INSTALL SIGNS "B" NEXT TO SIGNAL HEADS #10 & #11 AND ON SIGNAL POLE UNDER SIGNAL HEADS #9 & #12

11. INSTALL TWO FIVE-LENS SIGNAL HEADS

12. INSTALL TEN THREE-LENS SIGNAL HEADS

13. REMOVE ALL EXISTING SIGNAL HEADS AND EXISTING CONTROLLER

14. INSTALL PRE-EMPTION ACTUATION EQUIPMENT IN FIRE STATION

15. ABANDON EXISTING CABLE AND CONDUIT EXCEPT FOR DETECTORS ON BANNEKER ROAD

16. PAINT FOUR 12" STOP LINES (WHITE REFLECTORIZED), AS SHOWN

17. INSTALL 1" GALVANIZED CONDUITS FOR DETECTOR WIRE LEAD-IN TO HANDBOX

GENERAL NOTES

1 THE HIGHWAY MARKING AND SIGNING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AS NOTED

2 THE UTILITIES SHOWN ON THE CONSTRUCTION PLAN ARE SCHEMATIC ONLY AND ARE NOT TO BE CONSIDERED COMPLETE THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES CAN BE LOCATED IN THE FIELD THE CONTRACTOR SHALL LOCATE EXISTING UTILITIES A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF THE CONSTRUCTION OPERATIONS IN THE VICINITY OF THE UTILITIES ANY DAMAGE INCURRED BY THE CONTRACTOR SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS

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- BUREAU OF UTILITIES - HOWARD COUNTY 992-2366

3 CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH HOWARD COUNTY STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION DESIGN MANUAL VOLUME IV

4 ALL NEW SIGNAL HEADS SHALL BE SECURELY WRAPPED AND/OR BAGGED IN BURLAP, PRIOR TO SIGNAL BEING PLACED IN SERVICE

5 THE CONTRACTOR SHALL COMPLY WITH OSHA AND MOSHA CODES

6 THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING MAINTAIN SIX (6) INCHES MINIMUM CLEARANCE WITH ALL UNDERGROUND UTILITIES AND ALL OVERHEAD CLEARANCES SHALL BE IN ACCORDANCE WITH THE MARYLAND HIGH VOLTAGE ACT

7 THE CONTRACTOR WILL SUPPLY ALL OTHER HARDWARE AND AUXILIARY EQUIPMENT REQUIRED FOR THE COMPLETION OF THE PROJECT AND ENSURE PROPER SIGNAL OPERATION AS DESIGNED AND SHOWN ON THE PLANS

8 THE ELECTRICAL FEED AND SOURCE FOR THE TRAFFIC SIGNALS SHOULD BE SEPARATE FROM POWER FOR THE LUMINAIRES

CONTROLLER AND ACCESSORIES

1. NEMA EIGHT PHASE MODULAR CONTROLLER WITH SOLID STATE CIRCUITRY AND DIGITAL TIMING, SIMILAR TO ECONOLITE KMC E-8000 SERIES DIGITAL CONTROLLER UNIT, EQUIVALENT MANUFACTURED BY CROUSE-HINDS, EAGLE SIGNAL CORPORATION OR APPROVED EQUAL SHALL BE INSTALLED WITH THE FOLLOWING:
   A. FOUR PHASE SIGNAL OVERLAP CAPABILITY
   B. VEHICULAR ACTUATED MODULE WITH VOLUME DENSITY CONTROLS FOR TWO APPROACHES
   C. VEHICULAR ACTUATED MODULES (CAPABLE OF CONTROLLING FIVE TRAFFIC MOVEMENTS).
   D. VEHICULAR ACTUATED PHASE MODULES SHALL BE CAPABLE OF THE FOLLOWING FUNCTIONS:
   MINIMUM GREEN, PASSAGE TIME, YELLOW, ALL RED CLEARANCE, DUAL MAXIMUM, PEDESTRIAN TIMING, RECALL AND MEMORY.
   E. VEHICULAR ACTUATED PHASE MODULE WITH VOLUME DENSITY CONTROLS SHALL BE CAPABLE OF FOLLOWING THE FUNCTIONS: MINIMUM GREEN, PASSAGE TIME, YELLOW, ALL RED CLEARANCE, DUAL MAXIMUM, PEDESTRIAN TIMING, SECONDS PER ACTUATION, TIME TO REDUCE, TIME FOR REDUCTION, MINIMUM GAP, RECALL AND MEMORY.

2. A CONFLICT MONITOR FOR ALL PHASES AND SOLID STATE LOAD SWITCHES SHALL BE FULLY WIRED IN THE CABINET.

3. A GROUND MOUNTED TRAFFIC CONTROLLER CABINET LARGE ENOUGH TO ACCOMODATE THE ABOVE CONTROL EQUIPMENT AND DETECTORS SHALL BE INSTALLED. THE CABINET SHALL BE FURNISHED WITH A THERMOSTATICALLY CONTROLLED CABINET VENT FAN

4 THE FINISH OF THE CABINET SHALL BE ALL-WEATHER BRONZE PAINT.

5. THE CONTROLLER SHALL BE WIRED WITH SIX 2 CHANNEL LOOP DETECTOR AMPLIFIERS (DELAY OUTPUT TYPE) AND HARNESSES.

6. A METER BOX SHALL BE INSTALLED IN A VANDAL PROOF ENCLOSURE PROVIDED BY THE CONTRACTOR. THE FINISH OF THE METER BOX, HOUSING AND CONDUITS SHALL BE ALL-WEATHER BRONZE PAINT.

7. ALL PHASES SHALL BE SKIPPABLE.

8. PREMPTION EQUIPMENT & NECESSARY HARDWARE ARE TO BE LOCATED INSIDE THE FIRE STATION BETWEEN THE TWO BAYS FACING BANNEKER ROAD. THE CONTRACTOR SHALL CONTACT CMDR EDGAR G. SCHILLING, OFFICE OF THE FIRE ADMINISTRATOR (992-2311 OR 992-2314) PRIOR TO BEGINNING WORK ON THE PREEEMPTION EQUIPMENT INSTALLATION.

UNDERGROUND WIRING

1 UNDERGROUND WIRING UNDER ROAD SURFACES SHALL BE PLACED IN NEW GALVANIZED CONDUITS PUSHED UNDER THE ROAD SURFACE. P.V.C. ELECTRICAL CONDUIT IN GRASS AREAS SHALL BE TRENCHED AS SPECIFIED AND AS SHOWN ON THE CONTRACT DRAWINGS.

LOOPS AND DETECTORS

1 THE FOLLOWING LOOPS SHALL BE INSTALLED

PHASE	DIMENSIONS	NO OF LOOPS REQUIRED
1	6 x 30	1
2	6 x 20	1
4	6 x 30	1
5	6 x 30	1
6	6 x 20	1
7	6 x 30	1
3 & 8	6 x 30	EXISTING

2 ALL WIRING AND SAW CUTS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS FOR CORRECT OPERATION.

3 PHASES 2, 4, 6, 8 SHALL OPERATE IN THE PULSE MODE, PHASES 1, 3, 5, 7 SHALL OPERATE IN THE PRESENCE MODE

4 DETECTOR AMPLIFIERS SHALL BE SARASOTA 235-T OR EQUIVALENT MANUFACTURED BY ECONOLITE CONTROL PRODUCTS, INC , CROUSE-HINDS, OR APPROVED EQUAL.

5 DETECTION LOOPS OPERATING IN THE PRESENCE MODE SHALL BE CONSTRUCTED WITH A 6' x 6' POWER HEAD LOOP

6 LOOPS ARE TO BE INSTALLED CENTERED IN THE TRAVEL LANES FOR WHICH THEY ARE DESIGNED

SIGNAL HEADS

1. THE CONTRACTOR SHALL PROVIDE THE FOLLOWING SIGNAL HEADS

HEAD NO 4 & 5 - ONE-WAY, FIVE SECTION 12" SIGNAL HEAD HAVING RED, YELLOW, GREEN, YELLOW ARROW, GREEN ARROW INDICATIONS WITH TUNNEL VISORS INCLUDING PROPER ADJUSTABLE RIGID MOUNTING BRACKETS FOR MASTARM MOUNTED INSTALLATION

HEAD NO. 1,2,3,6 7, 8 - ONE-WAY, THREE SECTION 12" SIGNAL HEAD HAVING RED, YELLOW, GREEN INDICATIONS WITH TUNNEL VISORS INCLUDING PROPER ADJUSTABLE RIGID MOUNTING BRACKETS FOR MASTARM MOUNTED INSTALLATION

HEAD NO 9, 10,11, 12 - ONE-WAY, THREE SECTION 12" SIGNAL HEAD HAVING RED, YELLOW ARROW, GREEN ARROW INDIDICATIONS WITH TUNNEL VISORS INCLUDING PROPER ADJUSTABLE RIGID MOUNTING BRACKETS FOR MASTARM MOUNTED INSTALLATION (HEADS 10 & 11), OR FOR PEDESTAL POLE MOUNTED INSTALLATION (HEADS 9 & 12)

2. ALL SIGNALS SHALL BE PAINTED BAKED BROWN ENAMEL WITH M A. BRUDER AND SONS, INC SEASHORE GLOSS TRIM 27721, DURANODIC BRONZE, CODE 7557581 OR EQUAL

3. SIGNAL HEAD LOCATIONS AND AIMING TO BE DETERMINED IN THE FIELD WITH THE ENGINEER.

CONSTRUCTION SEQUENCE

1. INSTALL NEW PEDESTAL POLES, AND POLE MOUNTED SIGNAL HEADS INSTALL NEW CONTROLLER & ACCESORIES, CABINET & BASE INSTALL ALL NEW CABLE, CONDUIT, SIGNS, LOOP DETECTORS AND HANDBOXES. NEW SIGNAL HEADS & SIGNS SHALL BE SECURELY WRAPPED OR BAGGED IN BURLAP
2. TURN OFF EXISTING SIGNAL AT THE DIRECTION OF THE ENGINEER THE CONTRACTOR SHALL ARRANGE FOR POLICE ASSISTANCE FOR TRAFFIC CONTROL WHEN THE SIGNAL IS NOT IN OPERATION.
3. REMOVE EXISTING SIGNALS.
4. INSTALL ALL NEW MAST ARM MOUNTED SIGNALS.
5 RELOCATE EXISTING CABLES AND POWER FEED TO NEW CONTROLLER
6 UNCOVER NEW SIGNAL HEADS AND SIGNS.
7 ENERGIZE SIGNALS.
8. SALVAGE EXISTING CONTROLLER, CABINET AND SIGNALS AS DIRECTED BY THE ENGINEER.

POLES

1. EXISTING POLES AND MAST ARMS ARE TO BE USED. CONTRACTOR SHALL VERIFY THAT ARMS & POLES WILL SUPPORT SIGNAL HEADS & SIGNS AS SHOWN ON PLAN.

2. TWO (2) STEEL PEDESTAL POLES, 8' IN HEIGHT SHALL BE INSTALLED TO SUPPORT SIGNAL HEADS 9 & 12 AND SIGN "B" STYLE, APPEARANCE AND FINISH SHALL BE UNION METAL #50200 OR EQUAL. FINISH OF POLES SHALL BE BRONZE IN COLOR.

3. SIGNALS SHALL BE MOUNTED ON THE MAST ARMS SO THAT THE BOTTOM OF THE SIGNAL HEAD HOUSING IS NOT LESS THAN 15 FEET NOR MORE THAN 19 FEET CLEARANCE ABOVE THE ROADWAY WHEN USING A RIGID MOUNTING, "ASTRO-BRAC" TYPE ADJUSTABLE SIGNAL BRACKET.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS — DATE 2-1-17

CHIEF BUREAU OF ENGINEERING — DATE 2/13/17

CHIEF - ROADS, BRIDGES, & STORM DRAINAGE DIVISION — DATE

ARI ENGINEERING
8150 Leesburg Pike Suite 503
Vienna, Virginia 22180
(703) 442-0202

STATE OF MARYLAND

NO. — DATE — BY — REVISION — DATE — SUBSIDIARY MAP NO. — BLOCK NO.

LITTLE PATUXENT PARKWAY INTERSECTION IMPROVEMENT

CAPITAL PROJECT NO T-7033

ELECTION DISTRICT NO 5
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 4 OF 4

746

LPPBANN 3