PROPOSED EQUIPMENT

I, II, III, IV, V

VIDEO DETECTION CAMERA

PROPOSED SIGNS

16 — Blackburn RD 15200 — D-3(I) MOD 18" X VARIABLE

24a, 24b — Columbia PIKE — D-3(I) MOD 18" X VARIABLE

19 — YIELD — R10-1(I) (30" X 36")

15, 22 — R3-2 (36" X 36")

17 — ONLY — R3-5(L) (30" X 36")

25, 33 — NO TURN ON RED 7 - 9 AM 4 - 6 PM MONDAY - FRIDAY — (24" X 36")

3½"	
4E	2½"
4D	2½"
4D	1½"
3C	1½"
3C	1"
2C	3½"

26 — SOUTH 29 — ASSOCIATED SHIELD ASSEMBLY (24" X 51")

27 — NORTH 29 — ASSOCIATED SHIELD ASSEMBLY (36" X 75")

31 — NORTH 29 — ASSOCIATED SHIELD ASSEMBLY (24" X 51")

32 — SOUTH 29 — ASSOCIATED SHIELD ASSEMBLY (36" X 75")

18, 20, 21 — PUSH BUTTON TO CROSS US 29 — START CROSSING WITH ON FLASHING ONLY — DON'T START IF FLASHING — PEDESTRIANS SHOULD NOT BE IN CROSSWALK — R10-4(I) (9" X 12")

28, 30 — START CROSSING WITH ON FLASHING ONLY — DON'T START IF FLASHING — PEDESTRIANS SHOULD NOT BE IN CROSSWALK — R10-4(MOD) (9" X 12")

23 — R3-1 (36" X 36")

29 — STOP HERE ON RED — R10-6a (24" X 30")

PROPOSED SIGNALS

I-10 R Y G 12" — II-14 12"

NEMA PHASING

Ø 2, Ø 4, Ø 6, Ø 8, ALT Ø 8, FLASHING OPERATION

PHASING NOTES:
1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

US 29 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

EX. R.O.W.

U.S. 29 S.B.R.

U.S. 29 N.B.R.

BLACKBURN ROAD

EX. R.O.W. LINE

UG SIGNAL INTERCONNECT

UG TEL.

6" Gas

10" Water

6" Gas

BG&E #272878

BG&E #844082

BG&E #250431

CONSTRUCTION DETAILS

A. INSTALL ONE 27 FT. GALVANIZED STEEL TWIN MAST ARM POLE WITH 70 FT. AND 50 FT. MAST ARMS, SIGNAL HEADS, SIGNS, AND 20 FT. STEEL LIGHTING ARM WITH 250 WATT HIGH PRESSURE SODIUM LUMINAIRE (NOTE: 2-3 IN. SCHEDULE 80, 90 DEGREE RIGID PVC CONDUIT BEND).
B. INSTALL ONE 27 FT. GALVANIZED STEEL MAST ARM POLE WITH 70 FT. MAST ARM, SIGNAL HEADS, SIGNS, PEDESTRIAN SIGNAL HEADS, PUSH BUTTON, PUSH BUTTON SIGN, PEDESTRIAN EDUCATION SIGN, AND 20 FT. STEEL LIGHTING ARM WITH 250 WATT HIGH PRESSURE SODIUM LUMINAIRE (NOTE: 2-3 IN. SCHEDULE 80, 90 DEGREE RIGID PVC CONDUIT BEND).
C. INSTALL HANDHOLE.
D. INSTALL GROUND MOUNTED SIGN ON ONE BREAKAWAY 4 IN. X 4 IN. WOOD POST.
E. INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT, TRENCHED.
F. INSTALL 4 IN. SDR 11 HDPE CONDUIT, BORED.
G. INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT, TRENCHED.
H. INSTALL BASE MOUNTED NEMA 6 CABINET AND CONTROLLER. MOUNT METER SOCKET AND 60 AMP DISCONNECT SWITCH TO CABINET.
I. INSTALL VIDEO VEHICLE DETECTION SYSTEM ON LIGHTING ARM.
J. INSTALL 14 FT. BREAKAWAY PEDESTAL POLE WITH A PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN EDUCATION SIGN.
K. INSTALL 14 FT. BREAKAWAY PEDESTAL POLE WITH A PEDESTRIAN SIGNAL HEAD, PUSH BUTTON AND PUSH BUTTON SIGN.
L. INSTALL 14 FT. BREAKAWAY PEDESTAL POLE WITH A PUSH BUTTON AND PUSH BUTTON SIGN. CUT, CAP AND GALVANIZE PEDESTAL POLE TO A 4 FT. HEIGHT.
M. EXISTING INTERCONNECT CABLE. SEE INTERCONNECT PLANS.
N. INSTALL 12 IN. HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING MATERIAL (CROSSWALK).
O. INSTALL 24 IN. X 36 IN. "SHARKS TEETH" WITH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING MATERIAL AT 12 IN. SPACING.
P. PROPOSED BG&E POWER SERVICE PROVIDED FROM BG&E POLE #272878.
Q. INSTALL 3 IN. 90 DEGREE CONDUIT BEND AT BASE OF UTILITY POLE. EXTEND 3 IN. CONDUIT 2 FT. ABOVE GRADE AT BASE OF UTILITY POLE. BG&E SHALL INSTALL RISER AND WEATHERHEAD.
R. INSTALL 24 IN. HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING MATERIAL (STOP LINE).
S. REMOVE EXISTING STOP SIGN AFTER SIGNAL IS OPERATIONAL.
T. INSTALL HANDHOLE ALONG EXISTING INTERCONNECT CONDUIT RUN AND TIE INTO EXISTING CONDUIT. SEE DWG. NO. IP-01.

GENERAL NOTES

1. ALL SIGNAL POLES, MAST ARMS AND LIGHTING EQUIPMENT ON MAST ARMS SHALL HAVE "NATIONAL PARK SERVICE BROWN" COLOR TREATMENT.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE, EXCLUDING INTERCONNECT, TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
3. DISCONNECTING AND SPLICING OF INTERCONNECT CABLE SHALL BE PERFORMED BY MONTGOMERY COUNTY FORCES. THE CONTRACTOR SHALL RUN THE INTERCONNECT CABLE INTO THE BASE OF EACH CABINET AND PROPERLY TAG THE CABLE. CONTACT MR. BOB GONZALES AT (240) 777-8761 SEVENTY-TWO HOURS IN ADVANCE OF THE INTENDED WORK.
4. CONTACT MONTGOMERY COUNTY TRANSPORTATION MANAGEMENT SECTION 48 HOURS PRIOR TO ANY WORK, TO MARK EXISTING UNDERGROUND TRAFFIC SIGNAL EQUIPMENT (240) 777-2100.
5. ALL MAST ARM MOUNTED STREET NAME SIGNS SHALL USE A 10.67/8 FONT SIZE WITH THE OTHER CHARACTERS SIZED PROPORTIONALLY.

DWG. NO. SP-01

REVISIONS

APPROVALS

TEAM LEADER, TRAFFIC ENGINEERING DESIGN DIVISION — 3-22-04
ASST. CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION — 3/22/04
CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION — 3.24.04
DIRECTOR, OFFICE OF TRAFFIC & SAFETY — 3.24.04

WHITNEY BAILEY COX MAGNANI
CONSULTING ENGINEERS
849 FAIRMOUNT AVENUE
SUITE 100
BALTIMORE, MD 21286
(410) 512-4500

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
TRAFFIC SIGNALIZATION PLAN
US 29 AT BLACKBURN ROAD

DRAWN BY:	J.E.H./M.E.V.	F.A.P. NO.	AC-NH-G-109-1(45)N	TS NO.	SHEET NO.
CHECKED BY:	J.W.H.	S.H.A. NO.	M0867517O	4229	
SCALE:	1" = 20'	COUNTY:	MONTGOMERY	T.I.M.S. NO.	2 OF 20
DATE:	SEPTEMBER 2003	LOG MILE:	15002910.16	E856	

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