PROPOSED SIGNALS

1,2,4,5 — 12"

3,6,9,12 — 12"

7,8,10,11 — 12"

13,14,19,20

12" LED COUNTDOWN PEDESTRIAN SIGNAL

BAGGED PROPOSED SIGNALS

15,16,17,18

12" LED COUNTDOWN PEDESTRIAN SIGNAL

PROPOSED SIGNS

34 — Montrose PKWY ⇒ / ⇐ Montrose PKWY — D3-1(1) (VAR.x16") (DUAL FACED)

36 — Randolph RD ⇒ / ⇐ Randolph RD — D3-1(1) (VAR.x16") (DUAL FACED)

30 — ⇐ Chapman Ave / Chapman Ave ⇒ — D3-1(1) (VAR.x16") (DUAL FACED)

32 — ⇐ Maple Ave / Maple Ave ⇒ — D3-1(1) (VAR.x16") (DUAL FACED)

PROPOSED SIGNS

23, 24, 27, 28, 25, 26, 21, 22

APS BUTTON AND SIGN

PROPOSED SIGNS

29,31,35 — ONLY — R3-5(L) (30"x36")

33,38 — NO TURN ON RED — R10-11B (24"x24")

37 — R3-6(MOD) (30"x36")

FUTURE SIGN

39 — ONLY — R3-5(R) (30"x36")

APS PUSHBUTTON NOTES:

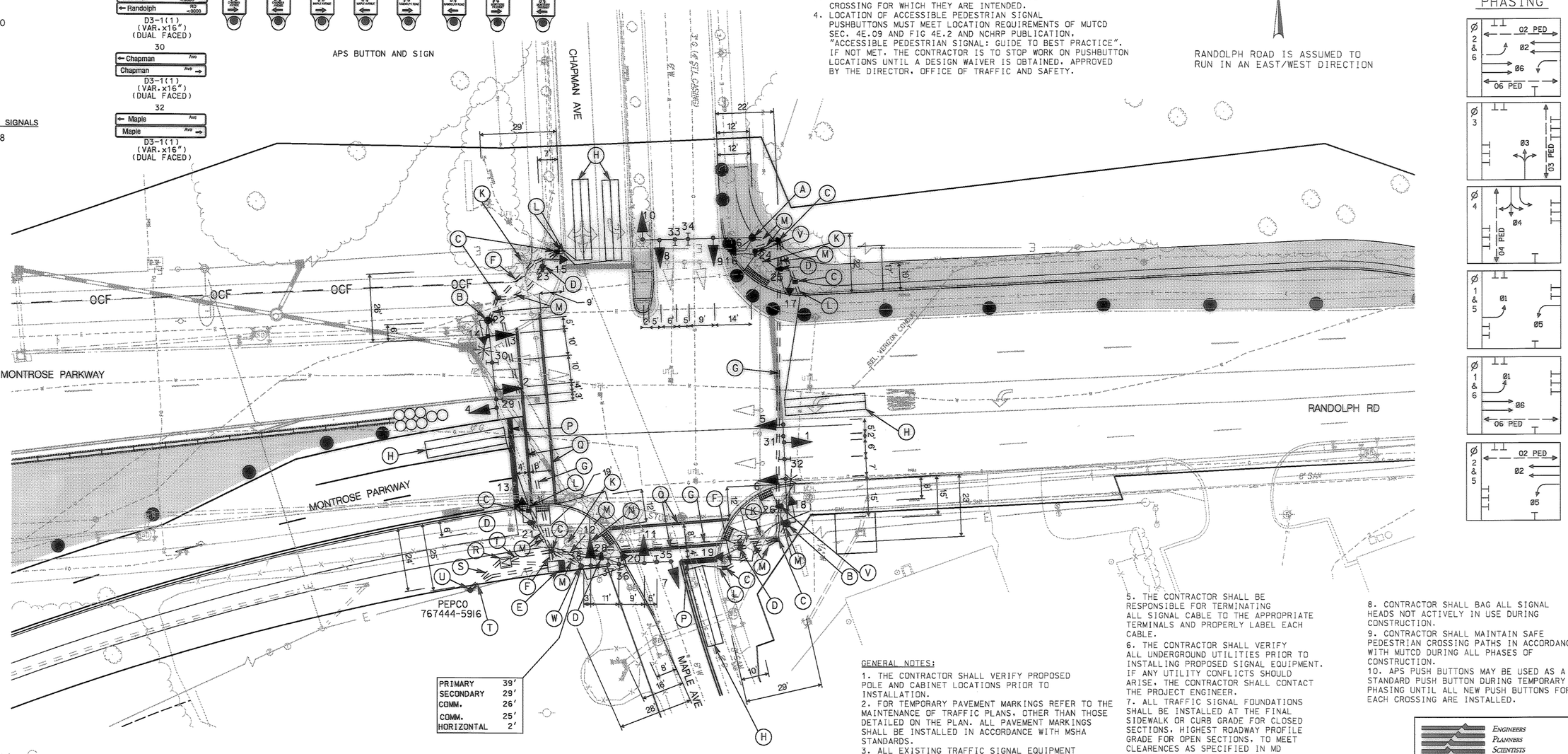
1. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18" FROM A 60"X60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
2. THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
3. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
4. LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.09 AND FIG 4E.2 AND NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNAL: GUIDE TO BEST PRACTICE". IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL A DESIGN WAIVER IS OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.

N

RANDOLPH ROAD IS ASSUMED TO RUN IN AN EAST/WEST DIRECTION

SHEET NO. ____ OF ____

PHASING



GENERAL NOTES:

1. THE CONTRACTOR SHALL VERIFY PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
2. FOR TEMPORARY PAVEMENT MARKINGS REFER TO THE MAINTENANCE OF TRAFFIC PLANS, OTHER THAN THOSE DETAILED ON THE PLAN. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MSHA STANDARDS.
3. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE NEW SIGNAL.
4. ALL PROPOSED LUMINAIRES SHALL BE SUPPLIED WITH A PHOTOCELL.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
6. 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.
7. 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 CLEARENCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
8. CONTRACTOR SHALL BAG ALL SIGNAL HEADS NOT ACTIVELY IN USE DURING CONSTRUCTION.
9. CONTRACTOR SHALL MAINTAIN SAFE PEDESTRIAN CROSSING PATHS IN ACCORDANCE WITH MUTCD DURING ALL PHASES OF CONSTRUCTION.
10. APS PUSH BUTTONS MAY BE USED AS A STANDARD PUSH BUTTON DURING TEMPORARY PHASING UNTIL ALL NEW PUSH BUTTONS FOR EACH CROSSING ARE INSTALLED.

CONSTRUCTION DETAILS

A. INSTALL CONCRETE FOUNDATION WITH ONE 20' STEEL POLE AND ONE 50' MAST ARM, TRAFFIC SIGNAL HEADS, PEDESTRIAN SIGNAL HEAD AND SIGNS. (1-3" CONDUIT BEND).
B. INSTALL CONCRETE FOUNDATION WITH ONE 27' STEEL POLE AND ONE 38' MAST ARM, TRAFFIC SIGNAL HEADS, AND SIGNS 15' LIGHTING ARM AND 250 WATT HPS LUMINAIRE, BAG TRAFFIC SIGNAL HEADS AND SIGNS AS INDICATED. (1-3" CONDUIT BEND).
C. INSTALL ELECTRICAL HANDHOLE.
D. INSTALL CONCRETE FOUNDATION WITH ONE 10' PEDESTAL POLE, PEDESTRIAN SIGNAL HEAD, APS PUSH BUTTON AND SIGNS. (1-3" CONDUIT BEND) (MD. STD. NO. 801.01-01 AND 816.16-01)
E. INSTALL A NEMA SIZE 6 BASE MOUNTED CABINET AND CONTROLLER (2-4", AND 2-2" CONDUIT BENDS).
F. INSTALL 2-4" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.
G. INSTALL 2-4" SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED.
H. INSTALL 6' X 30' QUADRUPOLE TYPE (3-6-3.) LOOP DETECTOR ENCASED IN FLEXIBLE CONDUIT.
K. REMOVE EXISTING SIGNAL POLE, SPAN WIRE, SIGNAL HEADS, LUMINAIRES AND LIGHTING ARMS.
L. INSTALL 1" GALVANIZED CONDUIT FOR DETECTOR SLEEVE.
M. INSTALL 3" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
N. REMOVE EXISTING TRAFFIC SIGNAL CONTROLLER.
P. INSTALL 24" WHITE WATERBORNE PAINT PAVEMENT MARKINGS.
Q. INSTALL 12" WHITE WATERBORNE PAINT PAVEMENT MARKINGS 8' APART FOR CROSSWALK.
R. INSTALL EMBEDDED METERED SERVICE PEDESTAL.
S. INSTALL 1-4" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.
T. INSTALL 1-2" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.
U. INSTALL 1-4" PVC RISER ON UTILITY POLE. INSTALL 3-50 FOOT 250 KCMIL CABLES FROM THE METER TO UTILITY POLE BASE FOR PEPCO USE.
V. INSTALL CONCRETE FOUNDATION WITH ONE 10' PEDESTAL POLE, APS PUSH BUTTON AND SIGNS. (1-3" CONDUIT BEND) AND CUT TO 5'. (MD. STD. NO. 801.01-01 AND 816.16-01)
W. INSTALL CONCRETE FOUNDATION WITH ONE 20' STEEL POLE AND ONE 38' MAST ARM, TRAFFIC SIGNAL HEADS, AND SIGNS (1-3" CONDUIT BEND).

SCALE : 1"= 20'

KCI TECHNOLOGIES — ENGINEERS, PLANNERS, SCIENTISTS, CONSTRUCTION MANAGERS

NO.	REVISION	BY	APP'D	DATE
1	MD 355 INTERCHANGE MO 8305171	KCI		3/07/09

DESIGNED BY:	DATE
DRAWN BY:	DATE
CHECKED BY:	DATE
DRAWING NO.:	

Approved: _____ Chief, Division of Traffic Engineering

Reviewed: _____ Manager, Traffic Engineering Studies

Reviewed: _____ Manager, Transportation Systems Engineering

Recommended: _____ Engineer, Transportation Systems Engineering

DEPARTMENT OF TRANSPORTATION
DIVISION OF TRAFFIC ENGINEERING & OPERATIONS
MONTGOMERY COUNTY, MARYLAND

MD 355 AT MONTROSE RD./RANDOLPH RD.
FROM 'OLD' OLD GEORGETOWN RD. TO MAPLE/CHAPMAN AVE.
(DESIGN-BUILD)

MONTROSE PARKWAY/RANDOLPH ROAD AT MAPLE AVE./CHAPMAN AVE.
TEMPORARY TRAFFIC SIGNAL PLAN
STAGE 4

TIMS # G248
TS 10895A

SP - 36 OF 41 | SHEET 40 OF 84

PLOTTED: 09:34 AM on Tuesday, March 03, 2009
BY: Ardalan Faghri Division: 0101 Transportation
FILE: M:\2007\0107170.dbx\drawings\SG-P269_M0355.dgn