PHASE 1A

A. GENERAL

1. ALL WORK FOR TRAFFIC SIGNALS, TRAFFIC SIGNS, AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE MOST CURRENT ROAD AND BRIDGE STANDARDS, ROAD AND BRIDGE SPECIFICATIONS, SPECIAL PROVISION COPIED NOTES AND SPECIAL PROVISIONS IN EFFECT AT THE TIME OF ADVERTISEMENT.
2. FIVE WORKING DAYS PRIOR TO COMMENCING SIGNAL INSTALLATION/MODIFICATION WORK AT ANY LOCATION IN ARLINGTON COUNTY, VIRGINIA, SIGNAL CONTRACTORS MUST NOTIFY THE COUNTY ENGINEER IN WRITING WITH THE NAME, DAYTIME PHONE NUMBER AND EMERGENCY PHONE NUMBERS OF THE CONTRACTOR. THIS NOTIFICATION IS TO INCLUDE LOCATION, ROUTE NUMBERS, TYPE AND DETAILS OF CONSTRUCTION AND SCHEDULE OF WORK.
3. THE TRAFFIC SIGNAL CONSTRUCTION SHALL NOT BEGIN WITHOUT PRIOR NOTIFICATION AND APPROVAL FROM ARLINGTON COUNTY
4. THE ENGINEER, PRIOR TO CONSTRUCTION, SHALL VERIFY POLE(S) AND CONTROL CABINET LOCATIONS.
5. ALL CATALOG CUTS, POLE CALCULATIONS, FOUNDATION DESIGNS, SHOP DRAWINGS, ETC., SHALL BE SUBMITTED TO, AND APPROVED BY, ARLINGTON COUNTY PRIOR TO CONSTRUCTION.
6. OPERATION OF THE SIGNALIZED INTERSECTION IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL THE TRAFFIC SIGNAL IS ACCEPTED BY ARLINGTON COUNTY
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B. POLES AND FOUNDATION

1. MAST ARM LENGTH IS TO BE AS SHOWN ON PLAN AND ALL MAST ARMS ARE TO BE FIELD DRILLED ONLY.
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1. CONTROLLER CABINET FOUNDATION SHALL BE STD. ARLINGTON COUNTY
2. AN EIGHT PHASE EAGLE TS2 CONTROLLER CABINET WITH EPAC CONTROLLER SHALL BE INSTALLED AND SET AS FOLLOWS:
   A. TO REST IN PHASE 2 & 6 FLASHING AMBER.
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3. THE CONTRACTOR SHALL PROVIDE, INSTALL, AND ADJUST CONTROLLER TIMINGS TO PROVIDE AN ORDERLY FLOW OF TRAFFIC.

D. TRAFFIC SIGNAL HEADS

1. ALL SIGNAL HEADS SHALL HAVE POLYCARBONATE BACKPLATES. BACK PLATE HARDWARE SHALL BE STAINLESS STEEL. EMERGENCY SIGNAL HEADS ARE EXCEPTED.
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1. JUNCTION BOX COVERS SHALL HAVE THE LETTERS "TRAFFIC" CAST IN THE TOP SURFACE DEPRESSION FOR ALL TRAFFIC SIGNAL RELATED JUNCTION BOXES CONTAINING CABLE WITH LESS THAN 50 VOLTS. TRAFFIC RELATED JUNCTION BOXES CONTAINING CABLE MORE THAN 50 VOLTS SHALL HAVE THE LETTERS "TRAF/ELEC". COMMUNICATION CABLE RELATED JUNCTION BOXES SHALL HAVE THE LETTERS "COMMUNICATIONS"
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8. COMM/FIBER JUNCTION BOXES TO BE TABULATED ON COMM PLAN.

G. SIGNS AND PAVEMENT MARKINGS

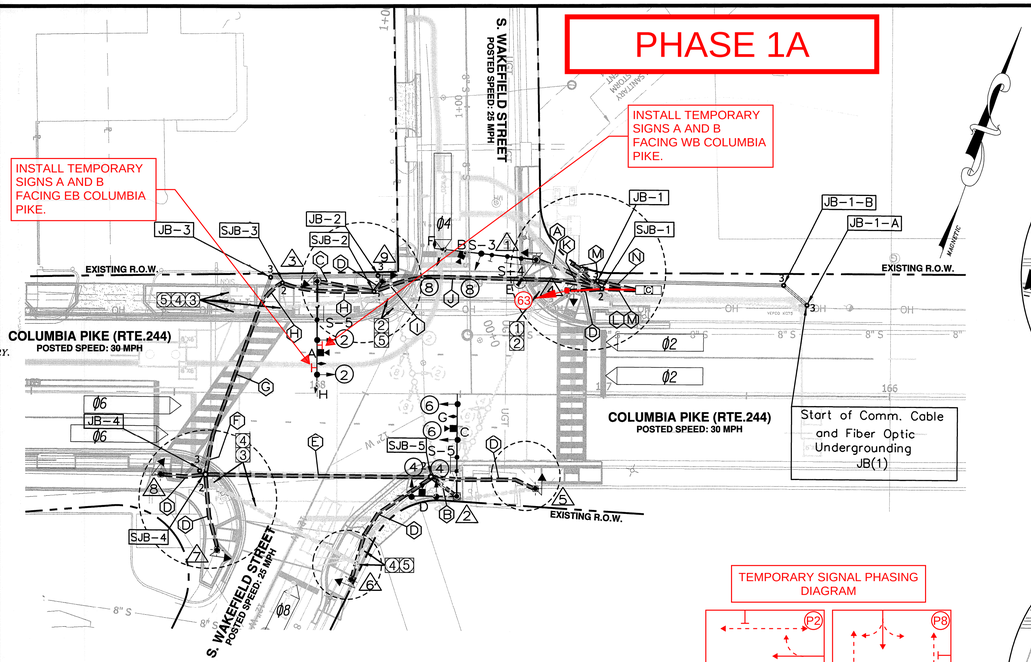
1. ALL MAST ARM SIGNS SHALL BE MOUNTED IN ACCORDANCE WITH ARLINGTON COUNTY STANDARDS. SIGNS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

COLOR SEQUENCE CHART								
PHASE	2	4	6	8	2+6	4+8		
SIGNAL	R/W	R/W	R/W	R/W	R/W	R/W	R/W	FLASH
2	G				G			A
4		G				G		R
6, 63			G		G		G	A
8				G		G		R
P2	WALK				WALK			BLANK
P4		WALK				WALK		BLANK
P6			WALK		WALK			BLANK
P8				WALK		WALK		BLANK

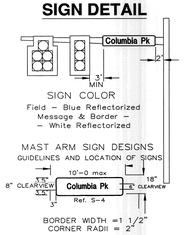
NOTE: BLANK SPACES REPRESENT A RED DISPLAY. WALK INDICATION DISPLAYED AFTER PEDESTRIAN CALL IS SERVICED; OTHERWISE "DON'T WALK" INDICATION IS DISPLAYED.

CLEARANCE CHART			
R/W	1	2	NEXT PHASE
G	G	G	G
G	A	R	R
W	W	W	W
W	FDW	DW	DW

INITIAL TIMING CHART								
PHASE	1	2	3	4	5	6	7	8
MOVEMENT		WB THRU		SB THRU/ LFT		EB THRU		NB THRU/ LEFT
PHASE ON		X		X		X		X
PHASE OFF	X		X		X		X	
PHASE TIMINGS								
MIN GR		15.0		7.0		15.0		7.0
PASSAGE		2.0		2.0		2.0		2.0
AMBER		4.0		4.0		4.0		4.0
RED		2.5		2.5		2.5		2.5
MAX 1		40.0		20.0		40.0		20.0
MAX 2		40.0		20.0		40.0		20.0
MIN GAP		2.0		2.0		2.0		2.0
TIME BEFORE REDUCTION		0.0		0.0		0.0		0.0
TIME TO REDUCE		0.0		0.0		0.0		0.0
PED WALK		7.0		7.0		7.0		7.0
PED CLEARANCE		8.0		12.0		10.0		12.0
MODE		MIN RECALL		NON-LOCK		MIN RECALL		NON-LOCK



SIGN DETAIL



CONDUIT & CABLE

A
1 - 3" CONDUIT TRENCHED
1 - 7 CONDUCTOR (No. 14 AWG) - SIGNAL HEADS
1 - 4 CONDUCTOR (No. 14 AWG) - PED HEAD
1 - 3 CONDUCTOR (No. 14 AWG) - APS PUSHBUTTON
1 - 4 CONDUCTOR (No. 14 AWG) - VIDEO DETECTION
1 - 4 CONDUCTOR - EVP
1 - 4 CONDUCTOR - CCTV
1 - No. 8 AWG - EGC

B
1 - 3" CONDUIT TRENCHED
2 - 7 CONDUCTOR (No. 14 AWG) - SIGNAL HEADS
2 - 4 CONDUCTOR (No. 14 AWG) - VIDEO DETECTION
1 - 4 CONDUCTOR - EVP
1 - No. 8 AWG - EGC

C
1 - 3" CONDUIT TRENCHED
1 - 7 CONDUCTOR (No. 14 AWG) - SIGNAL HEADS
1 - 4 CONDUCTOR (No. 14 AWG) - PED HEAD
1 - 3 CONDUCTOR (No. 14 AWG) - APS PUSHBUTTON
1 - 4 CONDUCTOR (No. 14 AWG) - VIDEO DETECTION
2 - 4 CONDUCTOR - EVP
1 - No. 8 AWG - EGC

D
1 - 3" CONDUIT TRENCHED
1 - 4 CONDUCTOR (No. 14 AWG) - PED HEAD
1 - 3 CONDUCTOR (No. 14 AWG) - APS PUSHBUTTON
1 - No. 8 AWG - EGC
TEMP. 1-14/7C FOR TEMP. SIGNAL HEAD 63

E
1 - 3" CONDUIT BORED
2 - 7 CONDUCTOR (No. 14 AWG) - SIGNAL HEADS
2 - 4 CONDUCTOR (No. 14 AWG) - PED HEAD
2 - 3 CONDUCTOR (No. 14 AWG) - APS PUSHBUTTON
2 - 4 CONDUCTOR (No. 14 AWG) - VIDEO DETECTION
1 - 4 CONDUCTOR - EVP
1 - No. 8 AWG - EGC

F
1 - 4" CONDUIT OPEN CUT
2 - 7 CONDUCTOR (No. 14 AWG) - SIGNAL HEADS
4 - 4 CONDUCTOR (No. 14 AWG) - PED HEAD
4 - 3 CONDUCTOR (No. 14 AWG) - APS PUSHBUTTON
2 - 4 CONDUCTOR (No. 14 AWG) - VIDEO DETECTION
1 - 4 CONDUCTOR - EVP
1 - No. 8 AWG - EGC

G
1 - 3" CONDUIT OPEN CUT - (DONE BY OTHERS) - FOR COMM.
4 - 2" CONDUIT OPEN CUT - (DONE BY OTHERS) - FOR FIBER OPTIC
1 - 4" CONDUIT OPEN CUT - FOR SIGNALS
2 - 7 CONDUCTOR (No. 14 AWG) - SIGNAL HEADS
4 - 4 CONDUCTOR (No. 14 AWG) - PED HEAD
4 - 3 CONDUCTOR (No. 14 AWG) - APS PUSHBUTTON
2 - 4 CONDUCTOR (No. 14 AWG) - VIDEO DETECTION
1 - 4 CONDUCTOR - EVP
1 - No. 8 AWG - EGC

H
1 - 4" CONDUIT TRENCHED - FOR SIGNALS
2 - 7 CONDUCTOR (No. 14 AWG) - SIGNAL HEADS
4 - 4 CONDUCTOR (No. 14 AWG) - PED HEAD
4 - 3 CONDUCTOR (No. 14 AWG) - APS PUSHBUTTON
2 - 4 CONDUCTOR (No. 14 AWG) - VIDEO DETECTION
1 - 4 CONDUCTOR - EVP
1 - No. 8 AWG - EGC

I
1 - 4" CONDUIT OPEN CUT - FOR SIGNALS
3 - 7 CONDUCTOR (No. 14 AWG) - SIGNAL HEADS
6 - 4 CONDUCTOR (No. 14 AWG) - PED HEAD
6 - 3 CONDUCTOR (No. 14 AWG) - APS PUSHBUTTON
3 - 4 CONDUCTOR (No. 14 AWG) - VIDEO DETECTION
3 - 4 CONDUCTOR - EVP
1 - No. 8 AWG - EGC

J
1 - 3" CONDUIT OPEN CUT - (DONE BY OTHERS) - FOR COMM.
2 - 2" CONDUIT OPEN CUT - (DONE BY OTHERS) - FOR FIBER OPTIC
1 - 4" CONDUIT OPEN CUT - FOR SIGNALS
3 - 7 CONDUCTOR (No. 14 AWG) - SIGNAL HEADS
6 - 4 CONDUCTOR (No. 14 AWG) - PED HEAD
6 - 3 CONDUCTOR (No. 14 AWG) - APS PUSHBUTTON
3 - 4 CONDUCTOR (No. 14 AWG) - VIDEO DETECTION
3 - 4 CONDUCTOR - EVP
1 - No. 8 AWG - EGC

K
1 - 4" CONDUIT OPEN CUT - FOR SIGNALS
3 - 7 CONDUCTOR (No. 14 AWG) - SIGNAL HEADS
6 - 4 CONDUCTOR (No. 14 AWG) - PED HEAD
6 - 3 CONDUCTOR (No. 14 AWG) - APS PUSHBUTTON
3 - 4 CONDUCTOR (No. 14 AWG) - VIDEO DETECTION
3 - 4 CONDUCTOR - EVP
1 - No. 8 AWG - EGC

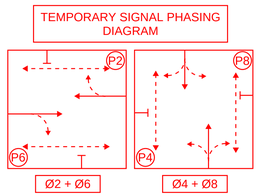
L
2 - 4" CONDUIT TRENCHED
4 - 7 CONDUCTOR (No. 14 AWG) - SIGNAL HEADS
8 - 4 CONDUCTOR (No. 14 AWG) - PED HEAD
8 - 3 CONDUCTOR (No. 14 AWG) - APS PUSHBUTTON
4 - 4 CONDUCTOR (No. 14 AWG) - VIDEO DETECTION
4 - 4 CONDUCTOR - EVP
1 - 4 CONDUCTOR - CCTV
1 - No. 8 AWG - EGC
TEMP. 1-14/7C FOR TEMP. SIGNAL HEAD 63

M
1 - 3" CONDUIT TRENCHED
1 - ELECTRICAL SERVICE CABLE
1 - No. 8 AWG - EGC

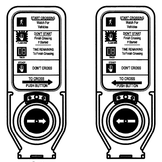
N
1 - 3" CONDUIT TRENCHED
1 - COMMUNICATIONS CABLE

TEMP. SIGNAL HEAD
R
Y
G
23

TEMPORARY SIGNAL PHASING DIAGRAM



PROPOSED SIGNS



S-1
R10-3(e)
9"x15"

S-2
R10-3(e)
9"x15"

S-3
R10-11a
24"X30"
NO TURN ON RED

S-4
18"x72
(CLEARVIEW)
Columbia Pk

S-5
18"x72
(CLEARVIEW)
S. Wakefield St

EXISTING SIGNALS
(TO BE REMOVED)

HEADS 2,4,6,8 — HEADS P2,P4,P6,P8 — HEAD P2

CONSTRUCTION NOTES

1. REMOVE POLE-MOUNTED CONTROL CABINET & POWER SUPPLY
2. REMOVE EXISTING TRAFFIC SIGNAL STRAIN POLE
3. REMOVE EXISTING PEDESTAL POLE
4. REMOVE / ABANDON EX. CONDUIT* (REMOVE EX. CONDUCTORS & CAP)
5. REMOVE EX. JUNCTION BOX

PROPOSED VIDEO DETECTION CAMERA
A,B,C,D

PROPOSED CCTV
E

PROPOSED EMERGENCY VEHICLE PRE-EMPTION DEVICE
F,G,H,I

PROPOSED SIGNALS

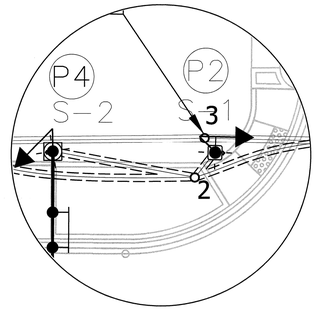
HEADS 2,4,6,8 — HEADS P2,P4,P6,P8

ALL SIGNALS SHALL BE EQUIPPED WITH POLYCARBONATE BACKPLATES.
ALL SIGNAL HEAD SECTIONS SHALL BE LED PER VDOT STANDARDS.
PEDESTRIAN SIGNALS SHALL BE LED, COUNTDOWN SP-7 (COUNTY STANDARD)

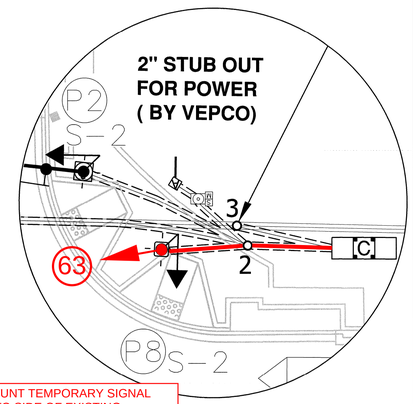
PROPOSED TEMPORARY SIGNS

R3-2
36"X36"
A
EXCEPT BUSES
B

NW CORNER

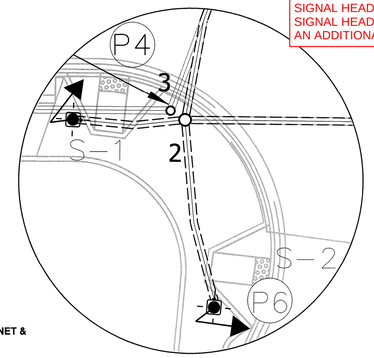


NE CORNER

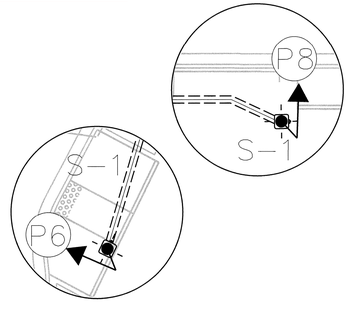


NOTE: MOUNT TEMPORARY SIGNAL HEAD 63 TO SIDE OF EXISTING PEDESTAL POLE. RUN CABLE FROM EXISTING CONTROLLER THROUGH EXISTING CONDUIT TO TEMPORARY SIGNAL HEAD 63. WIRE TEMPORARY SIGNAL HEAD 63 TO CONTROLLER AS AN ADDITIONAL PHASE 6 SIGNAL HEAD.

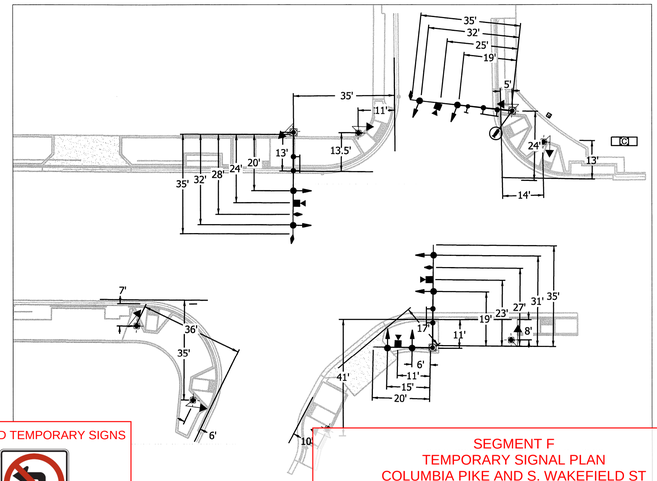
SW CORNER



SE CORNER



POLE LOCATION DETAIL



SEGMENT F
TEMPORARY SIGNAL PLAN
COLUMBIA PIKE AND S. WAKEFIELD ST
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS

F19.32 of F19.44

GRAPHIC SCALE
(IN FEET)
1 inch = 25 feet

ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES
LUIS MAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES
10/19/2021
APPROVAL DATE

ARLINGTON VIRGINIA

DEPARTMENT OF ENVIRONMENTAL SERVICES

Engineering & Capital Projects Division
Engineering Bureau
2100 Clarendon Boulevard, Suite 813
Arlington, VA 22201
Phone: 703.228.3629
Fax: 703.228.3606

Seal

COMMONWEALTH OF VIRGINIA
MICHAEL W. RANDOLPH
Lic. No. 048603
PROFESSIONAL ENGINEER

Approvals	Date
DESIGN TEAM SUPERVISOR	
ENGINEERING BUREAU CHIEF	
WATER, SEWER STREETS BUREAU CHIEF	
TRANSPORTATION DIRECTOR	

Revisions	Date

Project Name and Location
COLUMBIA PIKE SIGNAL DESIGN

Traffic Signal Plan
Columbia Pike and S. Wakefield St.
Arlington County, Virginia

Designed: RWM
Drawn: RWM
Checked: WBK
Miss Utility Transmittal #:

Filename:
Plotted:
Plotted by:

Scale: 1" = 25'

PHASE 3A

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COLOR SEQUENCE CHART							
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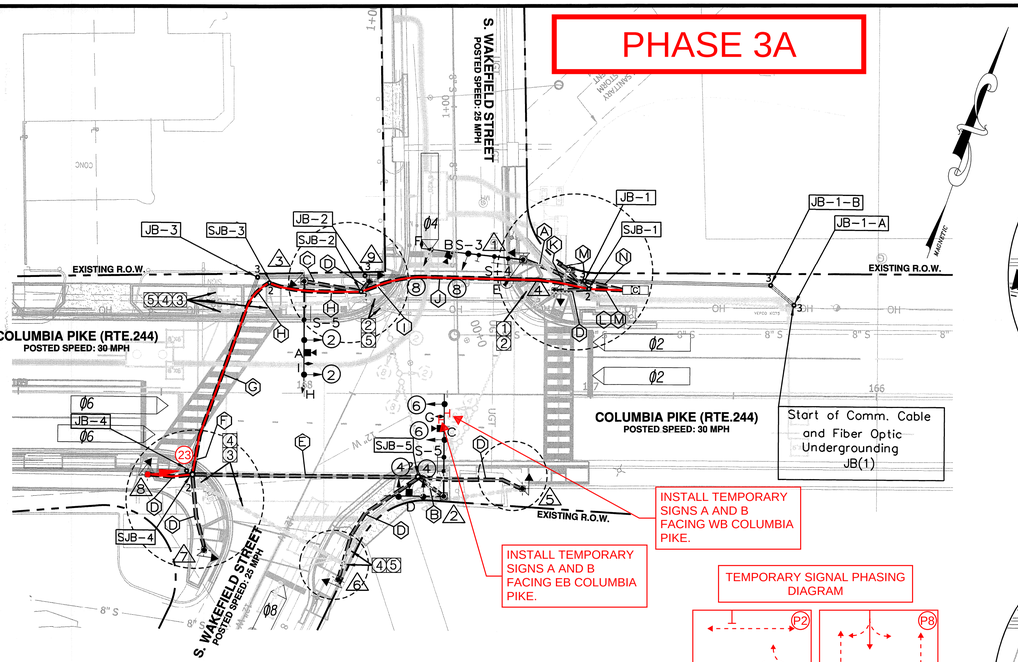
SIGNAL	R/W	R/W	R/W	R/W	R/W	R/W	FLASH
1, 23	G				G		A
4		G				G	R
6			G		G		A
8				G		G	R
P2	WALK				WALK		BLANK
P4		WALK				WALK	BLANK
P6			WALK		WALK		BLANK
P8				WALK		WALK	BLANK

NOTE: BLANK SPACES REPRESENT A RED DISPLAY. WALK INDICATION DISPLAYED AFTER PEDESTRIAN CALL IS SERVICED;OTHERWISE "DON'T WALK" INDICATION IS DISPLAYED.

CLEARANCE CHART			
R/W	1	2	NEXT PHASE
G	G	G	G
G	A	R	R
W	W	W	W
W	FDW	DW	DW

INITIAL TIMING CHART								
PHASE	1	2	3	4	5	6	7	8
MOVEMENT		WB THRU		SB THRU/ LFT		EB THRU		NB THRU/ LFT
PHASE ON		X		X		X		X
PHASE OFF	X		X		X		X	
PHASE TIMINGS								
MIN GR		15.0		7.0		15.0		7.0
PASSAGE		2.0		2.0		2.0		2.0
AMBER		4.0		4.0		4.0		4.0
RED		2.5		2.5		2.5		2.5
MAX 1		40.0		20.0		40.0		20.0
MAX 2		40.0		20.0		40.0		20.0
MIN GAP		2.0		2.0		2.0		2.0
TIME BEFORE REDUCTION		0.0		0.0		0.0		0.0
TIME TO REDUCE		0.0		0.0		0.0		0.0
PED WALK		7.0		7.0		7.0		7.0
PED CLEARANCE		8.0		12.0		10.0		12.0
MODE		MIN RECALL		NON-LOCK		MIN RECALL		NON-LOCK



CONDUIT & CABLE

A
1 - 3" CONDUIT TRENCHED
1 - 7 CONDUCTOR (No. 14 AWG) - SIGNAL HEADS
1 - 4 CONDUCTOR (No. 14 AWG) - PED HEAD
1 - 3 CONDUCTOR (No. 14 AWG) - APS PUSHBUTTON
1 - 4 CONDUCTOR (No. 14 AWG) - VIDEO DETECTION
1 - 4 CONDUCTOR - EVP
1 - 4 CONDUCTOR - CCTV
1 - No. 8 AWG - EGC

B
1 - 3" CONDUIT TRENCHED
2 - 7 CONDUCTOR (No. 14 AWG) - SIGNAL HEADS
2 - 4 CONDUCTOR (No. 14 AWG) - VIDEO DETECTION
1 - 4 CONDUCTOR - EVP
1 - No. 8 AWG - EGC

C
1 - 3" CONDUIT TRENCHED
1 - 7 CONDUCTOR (No. 14 AWG) - SIGNAL HEADS
1 - 4 CONDUCTOR (No. 14 AWG) - PED HEAD
1 - 3 CONDUCTOR (No. 14 AWG) - APS PUSHBUTTON
1 - 4 CONDUCTOR (No. 14 AWG) - VIDEO DETECTION
2 - 4 CONDUCTOR - EVP
1 - No. 8 AWG - EGC

D
1 - 3" CONDUIT TRENCHED
1 - 4 CONDUCTOR (No. 14 AWG) - PED HEAD
1 - 3 CONDUCTOR (No. 14 AWG) - APS PUSHBUTTON
1 - No. 8 AWG - EGC
TEMP: 1-14/7C FOR TEMP. SIGNAL HEAD 23

E
1 - 3" CONDUIT BORED
2 - 7 CONDUCTOR (No. 14 AWG) - SIGNAL HEADS
2 - 4 CONDUCTOR (No. 14 AWG) - PED HEAD
2 - 3 CONDUCTOR (No. 14 AWG) - APS PUSHBUTTON
2 - 4 CONDUCTOR (No. 14 AWG) - VIDEO DETECTION
1 - 4 CONDUCTOR - EVP
1 - No. 8 AWG - EGC

F
1 - 4" CONDUIT OPEN CUT
2 - 7 CONDUCTOR (No. 14 AWG) - SIGNAL HEADS
4 - 4 CONDUCTOR (No. 14 AWG) - PED HEAD
4 - 3 CONDUCTOR (No. 14 AWG) - APS PUSHBUTTON
2 - 4 CONDUCTOR (No. 14 AWG) - VIDEO DETECTION
1 - 4 CONDUCTOR - EVP
1 - No. 8 AWG - EGC
TEMP: 1-14/7C FOR TEMP. SIGNAL HEAD 23

G
1 - 4" CONDUIT OPEN CUT - (DONE BY OTHERS) - FOR COMM.
4 - 2" CONDUIT OPEN CUT - (DONE BY OTHERS) - FOR FIBER OPTIC
1 - 4" CONDUIT OPEN CUT - FOR SIGNALS
2 - 7 CONDUCTOR (No. 14 AWG) - SIGNAL HEADS
4 - 4 CONDUCTOR (No. 14 AWG) - PED HEAD
4 - 3 CONDUCTOR (No. 14 AWG) - APS PUSHBUTTON
2 - 4 CONDUCTOR (No. 14 AWG) - VIDEO DETECTION
1 - 4 CONDUCTOR - EVP
1 - No. 8 AWG - EGC
TEMP: 1-14/7C FOR TEMP. SIGNAL HEAD 23

H
1 - 4" CONDUIT TRENCHED - FOR SIGNALS
2 - 7 CONDUCTOR (No. 14 AWG) - SIGNAL HEADS
4 - 4 CONDUCTOR (No. 14 AWG) - PED HEAD
4 - 3 CONDUCTOR (No. 14 AWG) - APS PUSHBUTTON
2 - 4 CONDUCTOR (No. 14 AWG) - VIDEO DETECTION
1 - 4 CONDUCTOR - EVP
1 - No. 8 AWG - EGC
TEMP: 1-14/7C FOR TEMP. SIGNAL HEAD 23

I
1 - 4" CONDUIT OPEN CUT - FOR SIGNALS
3 - 7 CONDUCTOR (No. 14 AWG) - SIGNAL HEADS
6 - 4 CONDUCTOR (No. 14 AWG) - PED HEAD
6 - 3 CONDUCTOR (No. 14 AWG) - APS PUSHBUTTON
3 - 4 CONDUCTOR (No. 14 AWG) - VIDEO DETECTION
3 - 4 CONDUCTOR - EVP
1 - No. 8 AWG - EGC
TEMP: 1-14/7C FOR TEMP. SIGNAL HEAD 23

J
1 - 3" CONDUIT OPEN CUT - (DONE BY OTHERS) - FOR COMM.
4 - 2" CONDUIT OPEN CUT - (DONE BY OTHERS) - FOR FIBER OPTIC
1 - 4" CONDUIT OPEN CUT - FOR SIGNALS
3 - 7 CONDUCTOR (No. 14 AWG) - SIGNAL HEADS
6 - 4 CONDUCTOR (No. 14 AWG) - PED HEAD
6 - 3 CONDUCTOR (No. 14 AWG) - APS PUSHBUTTON
3 - 4 CONDUCTOR (No. 14 AWG) - VIDEO DETECTION
3 - 4 CONDUCTOR - EVP
1 - No. 8 AWG - EGC
TEMP: 1-14/7C FOR TEMP. SIGNAL HEAD 23

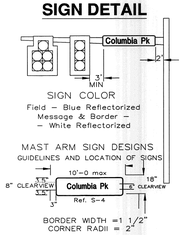
K
1 - 4" CONDUIT OPEN CUT - FOR SIGNALS
3 - 7 CONDUCTOR (No. 14 AWG) - SIGNAL HEADS
6 - 4 CONDUCTOR (No. 14 AWG) - PED HEAD
6 - 3 CONDUCTOR (No. 14 AWG) - APS PUSHBUTTON
3 - 4 CONDUCTOR (No. 14 AWG) - VIDEO DETECTION
3 - 4 CONDUCTOR - EVP
1 - No. 8 AWG - EGC

L
2 - 4" CONDUIT TRENCHED
4 - 7 CONDUCTOR (No. 14 AWG) - SIGNAL HEADS
8 - 4 CONDUCTOR (No. 14 AWG) - PED HEAD
8 - 3 CONDUCTOR (No. 14 AWG) - APS PUSHBUTTON
4 - 4 CONDUCTOR (No. 14 AWG) - VIDEO DETECTION
4 - 4 CONDUCTOR - EVP
1 - 4 CONDUCTOR - CCTV
1 - No. 8 AWG - EGC
ITEMP: 1-14/7C FOR TEMP. SIGNAL HEAD 23

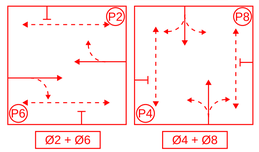
M
1 - 3" CONDUIT TRENCHED
1 - ELECTRICAL SERVICE CABLE
1 - No. 8 AWG - EGC

N
1 - 3" CONDUIT TRENCHED
1 - COMMUNICATIONS CABLE

SIGN DETAIL



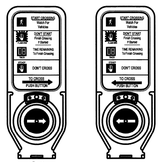
TEMPORARY SIGNAL PHASING DIAGRAM



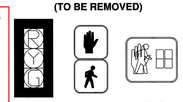
CONSTRUCTION NOTES

1. REMOVE POLE-MOUNTED CONTROL CABINET & POWER SUPPLY
2. REMOVE EXISTING TRAFFIC SIGNAL STRAIN POLE
3. REMOVE EXISTING PEDESTAL POLE
4. REMOVE / ABANDON EX. CONDUIT* (REMOVE EX. CONDUCTORS & CAP)
5. REMOVE EX. JUNCTION BOX

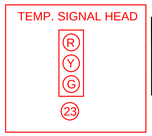
PROPOSED SIGNS



EXISTING SIGNALS (TO BE REMOVED)



TEMP. SIGNAL HEAD



PROPOSED VIDEO DETECTION CAMERA

A,B,C,D

PROPOSED CCTV

E

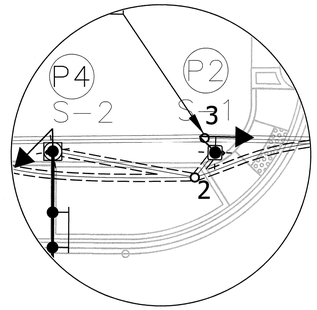
PROPOSED EMERGENCY VEHICLE PRE-EMPTION DEVICE

F,G,H,I

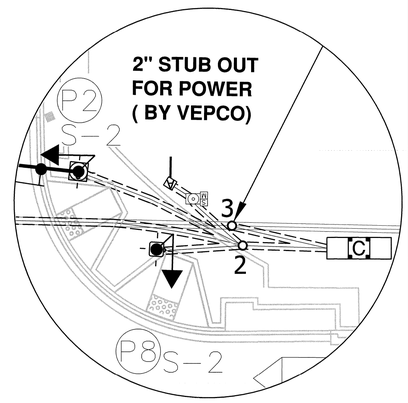
PROPOSED SIGNALS

ALL SIGNALS SHALL BE EQUIPPED WITH POLYCARBONATE BACKPLATES.
ALL SIGNAL HEAD SECTIONS SHALL BE LED PER VDOT STANDARDS.
PEDESTRIAN SIGNALS SHALL BE LED, COUNTDOWN SP-7 (COUNTY STANDARD)

NW CORNER

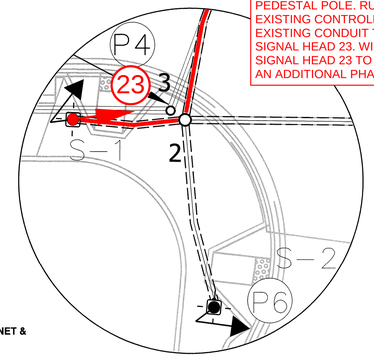


NE CORNER

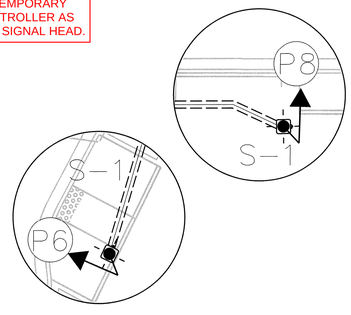


SW CORNER

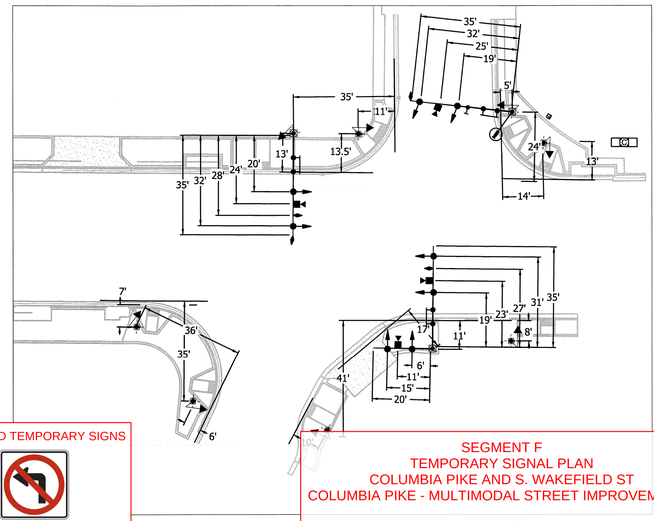
NOTE: MOUNT TEMPORARY SIGNAL HEAD 23 TO SIDE OF EXISTING PEDESTAL POLE. RUN CABLE FROM EXISTING CONTROLLER THROUGH EXISTING CONDUIT TO TEMPORARY SIGNAL HEAD 23. WIRE TEMPORARY SIGNAL HEAD 23 TO CONTROLLER AS AN ADDITIONAL PHASE 2 SIGNAL HEAD.



SE CORNER



POLE LOCATION DETAIL



PROPOSED TEMPORARY SIGNS

SEGMENT F
TEMPORARY SIGNAL PLAN
COLUMBIA PIKE AND S. WAKEFIELD ST
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS

F19.33 of F19.44

GRAPHIC SCALE

25 0 25 50

(IN FEET)
1 inch = 25 feet

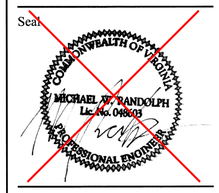
ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES
LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES
10/19/2021
APPROVAL DATE

ARLINGTON VIRGINIA

DEPARTMENT OF ENVIRONMENTAL SERVICES

Engineering & Capital Projects Division
Engineering Bureau
2100 Clarendon Boulevard, Suite 813
Arlington, VA 22201
Phone: 703.228.3629
Fax: 703.228.3606

Seal



Approvals	Date
DESIGN TEAM SUPERVISOR	
ENGINEERING BUREAU CHIEF	
WATER, SEWER STREETS BUREAU CHIEF	
TRANSPORTATION DIRECTOR	

Revisions	Date

Project Name and Location
COLUMBIA PIKE SIGNAL DESIGN
Traffic Signal Plan
Columbia Pike and S. Wakefield St.
Arlington County, Virginia

Designed: RWM
Drawn: RWM
Checked: WBK
Miss Utility Transmittal #:

Filename:
Plotted:
Plotted by:

Scale: 1" = 25'

PHASE 1A / 1A(2)

CONDUIT AND CABLE DESCRIPTIONS

1 1-2" CONDUIT PVC
1-14/7C FOR PED HEAD P41
1-14/3C FOR PED PUSH BUTTON P41
1-#6 AWG (EGC)

2 1-3" CONDUIT PVC
1-14/7C FOR SIGNAL HEADS 41, 42
1-14/7C FOR PED HEAD P22
1-14/3C FOR PED PUSH BUTTON P22
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC (SPARE)
1-#6 AWG (EGC)

3 1-4" CONDUIT (BORED) HDPE
1-14/7C FOR SIGNAL HEADS 41, 42
2-14/7C FOR PED HEADS P22, P41
2-14/3C FOR PED PUSH BUTTONS P22, P41
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE SPARE
1-#6 AWG (EGC)

4 1-2" CONDUIT PVC
1-14/7C FOR PED HEAD P21
1-14/3C FOR PED PUSH BUTTON P21
1-12/2C FOR CARLYLE STREET LIGHT
1-#6 AWG (EGC)

5 1-3" CONDUIT PVC
2-14/7C FOR SIGNAL HEADS 21, 22, 83
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
2-PREEMPTION CABLES
1-#6 AWG (EGC)

6 1-2" CONDUIT PVC
1-14/7C FOR PED HEAD P82
1-14/3C FOR PED PUSH BUTTON P82
1-#6 AWG (EGC)

7 1-4" CONDUIT (BORED) HDPE
2-14/7C FOR SIGNAL HEADS 21, 22, 83
2-14/7C FOR PED HEADS P21, P82
2-14/3C FOR PED PUSH BUTTONS P21, P82
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR CARLYLE STREET LIGHT
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT(BORED) HDPE
2-PREEMPTION CABLES
1-#6 AWG (EGC)

8 1-3" CONDUIT PVC
1-14/7C FOR SIGNAL HEADS 61, 62
1-14/7C FOR PED HEAD P42
1-14/3C FOR PED PUSH BUTTON P42
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

9 1-2" CONDUIT PVC
1-14/7C FOR PED HEAD P61
1-14/3C FOR PED PUSH BUTTON P61
1-#6 AWG (EGC)

10 1-4" CONDUIT BORED (HDPE)
2-14/7C FOR SIGNAL HEADS 41, 42, 61, 62
4-14/7C FOR PED HEADS P22, P41, P42, P61
4-14/3C FOR PED PUSH BUTTONS P22, P41, P42, P61
2-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
2-12/2C FOR LUMINAIRES
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE
1-PREEMPTION CABLE
1-#6 AWG (EGC)

11 1-2" CONDUIT PVC
1-14/7C FOR PED HEAD P81
1-14/3C FOR PED PUSH BUTTON P81
1-12/2C FOR CARLYLE STREET LIGHT
1-#6 AWG (EGC)

12 1-2" CONDUIT PVC
1-14/7C FOR SIGNAL HEADS 81, 82
1-14/7C FOR PED HEAD P62
1-14/3C FOR PED PUSH BUTTON P62
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC (SPARE)
1-#6 AWG (EGC)

13 3-3" CONDUIT PVC
5-14/7C FOR SIGNAL HEADS 21, 22, 41, 42, 61, 62, 81, 82, 83
8-14/7C FOR PED HEADS P21, P22, P41, P42, P61, P62, P81, P82
8-14/3C FOR PED PUSH BUTTONS P21, P22, P41, P42, P61, P62, P81, P82
4-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
3-#6 AWG (EGC)

1-3" CONDUIT PVC
3-PREEMPTION CABLES
1-#6 AWG (EGC)

14 1-2" CONDUIT METAL
4-#6 AWG FOR ELECTRICAL SERVICE

1-2" CONDUIT PVC
4-#6 AWG FOR LUMINAIRES
1-#6 AWG FOR CARLYLE STREET LIGHTS
1-#6 AWG (EGC)

LEGEND: *EXISTING CABLE TO BE REMOVED*
EXISTING CABLE/CONDUIT TO REMAIN
PROPOSED CABLE/CONDUIT INSTALLED
EXISTING CONDUIT TO BE REMOVED
HANDHOLE

INSTALL TEMPORARY SIGN G FACING EB COLUMBIA PIKE.

INSTALL TEMPORARY SIGN G FACING WB COLUMBIA PIKE.

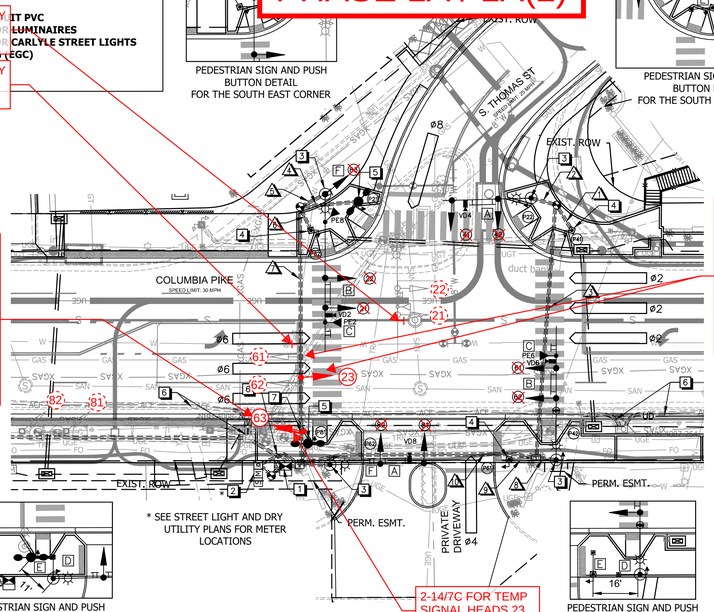
MOUNT TEMPORARY SIGNAL HEAD 63 TO EXISTING SIGNAL POLE. RUN CABLE FROM EXISTING CONTROLLER THROUGH EXISTING CONDUIT TO TEMPORARY SIGNAL HEAD 63. WIRE TEMPORARY SIGNAL HEAD 63 TO CONTROLLER AS ADDITIONAL PHASE 6 SIGNAL HEAD.

REMOVE EXISTING SIGNAL HEAD 61 AND INSTALL ON OTHER SIDE OF MAST ARM FACING WB APPROACH AS TEMPORARY SIGNAL HEAD 23. RUN CABLE FROM EXISTING CONTROLLER THROUGH EXISTING CONDUIT TO TEMPORARY SIGNAL HEAD 23. WIRE TEMPORARY SIGNAL HEAD 23 TO CONTROLLER AS ADDITIONAL PHASE 2 SIGNAL HEAD.

NOTE: EXACTLY ONE SIGNALIZED PEDESTRIAN CROSSING SHALL BE PROVIDED ACROSS COLUMBIA PIKE AT EITHER S. TAYLOR ST OR S. THOMAS ST DURING EACH PHASE. THIS CROSSWALK LOCATION MAY CHANGE DURING EACH PHASE.

2-14/7C FOR TEMP SIGNAL HEADS 23 AND 63.

NOTE:
THIS TEMPORARY SIGNAL PLAN ANTICIPATES ALL EXISTING SIGNAL INFRASRUCTURE WILL REMAIN IN OPERATION THROUGH PHASES 1A AND 1A(2). NO PROPOSED SIGNAL INFRASTRUCTURE WILL BE IN OPERATION.

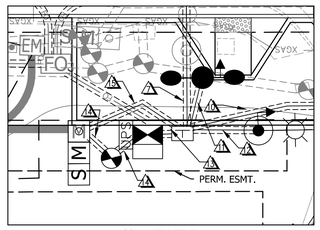


PEDESTRIAN SIGN AND PUSH BUTTON DETAIL FOR THE SOUTH EAST CORNER

PEDESTRIAN SIGN AND PUSH BUTTON DETAIL FOR THE SOUTH WEST CORNER

PEDESTRIAN SIGN AND PUSH BUTTON DETAIL FOR THE NORTH EAST CORNER

PEDESTRIAN SIGN AND PUSH BUTTON DETAIL FOR THE NORTH WEST CORNER



CONDUIT DETAIL FOR THE NORTH EAST CORNER
SCALE: 1" = 10'

CONSTRUCTION NOTES

EXISTING CONTROLLER AND CABINET TO BE REPLACED WITH NEW CONTROLLER AND CABINET ON A NEW FOUNDATION. ALL OTHER EXISTING EQUIPMENT TO BE REMOVED INCLUDING UNUSED WIRING, CONDUIT, AND JUNCTION BOXES, UNLESS OTHERWISE SPECIFIED. EXISTING CONTROLLER AND CABINET SHALL BE RETURNED TO ARLINGTON COUNTY.

1. INSTALL SIGNAL CONTROLLER … UNDER UPS.
2. INSTALL UNDERGROUND ELECT… ELECTRICAL SERVICE CONNECTION.
3. INSTALL ORNAMENTAL MAST A… DESTRIAN SIGNAL HEAD, AND POLARA PEDESTRIAN EQU… H BUTTON MOUNTING EXTENDER.
4. INSTALL NON-ORNAMENTAL PE… AL, POLARA PEDESTRIAN EQUIPMENT, AND SIGN.
5. INSTALL CARLYLE STREET LIGH… QUIPMENT, AND SIGN.
6. SEE COMMUNICATION PLAN ON SHEET F17.1.2 FOR COMMUNICATION CONNECTION DETAILS.
7. … TMS UNIT ON SIGNAL POLE FROM CABINET, AND SALVAGE CABLE AND UNIT. RETURN TO … COUNTY.

INITIAL TIMING CHART

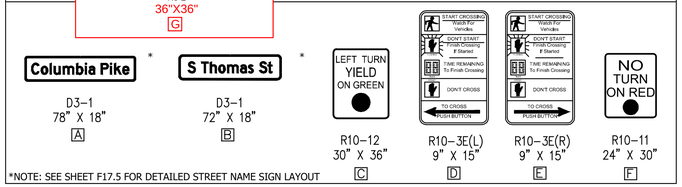
PHASE	1	2	3	4	5	6	7	8
MOVEMENT		EB COLUMBIA PIKE		PRIVATE DRIVEWAY		WB COLUMBIA PIKE		NB S. THOMAS STREET
PHASE ON		X		X		X		X
PHASE OFF	X		X		X		X	
INTERVAL		PHASE TIMINGS						
MIN GR		5.0		5.0		5.0		5.0
PASSAGE		0.0		2.0		0.0		2.0
YELLOW		4.0		4.0		4.0		4.0
RED		3.0		3.0		3.0		3.0
MAX 1		50.0		25.0		50.0		25.0
MAX 2		-		-		-		-
MIN GAP		-		-		-		-
TIME BEFORE REDUCTION		-		-		-		-
TIME TO REDUCE		-		-		-		-
PED WALK		7.0		7.0		7.0		7.0
PED FLASH DON'T WALK		15.0		17.0		13.0		17.0
MODE		MAX RECALL		NON-LOCK		MAX RECALL		NON-LOCK

POLE SCHEDULE

No.	POLE IDENTIFICATION	STATION	OFFSET	STANDARD TYPE	SIG. M.A. ORIENT.	SIG. M.A.	LUM. M.A. ORIENT.	LUM. M.A. (TYPE)	LUM. LED (4)	POLE SIGNAL MOUNTING: VEHICLE & PED. HEADS	PED. PUSH BUTTONS	SIGNS	VIDEO DETECTOR PREEMPTION & CCTV	STREET NAME SIGN
A	019-CP-01-NE	160+78.18	36.84' RT	DOUBLE CARLYLE POLE 16'	-	-	-	-	69W	P81	P81	E	-	-
B	019-MA-01-SE	160+84.27	50.29' LT	MAST ARM POLE 30'	180°	54'	180°	6' (STANDARD)	145W	21, 22, 83	-	C, F	VD2, PE2, PE8	B
C	019-MA-01-NE	160+85.97	44.22' RT	MAST ARM POLE 30'	180°	36'	180°	6' (STANDARD)	145W	81, 82, P62	P62	D, F	VD8	A
D	019-CP-01-SE	160+95.91	47.72' LT	DOUBLE CARLYLE POLE 16'	-	-	-	-	69W	P21	P21	E	-	-
E	019-PP-01-NW	161+48.52	42.46' RT	PEDESTAL POLE 12'	-	-	-	-	-	P61	P61	E	-	-
F	019-MA-01-SW	161+56.18	48.94' LT	MAST ARM POLE 30'	180°	30'	180°	6' (STANDARD)	145W	41, 42, P22	P22	D	VD4	A
G	019-MA-01-NW	161+64.91	42.55' RT	MAST ARM POLE 30'	180°	46'	180°	6' (STANDARD)	145W	61, 62, P42	P42	C, D	VD6, PE6, CCTV	B
H	019-PP-01-SW	161+70.45	37.70' LT	PEDESTAL POLE 12'	-	-	-	-	-	P41	P41	E	-	-
I	019-PP-01-SE	160+79.32	37.64' LT	PEDESTAL POLE 12'	-	-	-	-	-	P82	P82	D	-	-

NOTE: ALL POLES LISTED ABOVE SHALL BE LABELED WITH A POLE IDENTIFICATION STICKER IN ACCORDANCE WITH THE APPROPRIATE POLE ID.

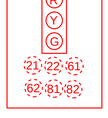
PROPOSED SIGNS



*NOTE: SEE SHEET F17.5 FOR DETAILED STREET NAME SIGN LAYOUT

PROPOSED TEMPORARY SIGNS

EXISTING SIGNAL HEAD



LEGEND

EXISTING	PROPOSED
RIGHT OF WAY	PERMANENT EASEMENT
EASEMENT	TEMPORARY CONSTRUCTION EASEMENT
TRAFFIC SIGNAL CABINET W/ UPS	TRAFFIC SIGNAL CABINET W/ UPS
EXTRA LARGE JUNCTION BOX	24"X36" JUNCTION BOX (61-04, TYPE-3)
LARGE JUNCTION BOX	LARGE JUNCTION BOX (61-02)
SMALL JUNCTION BOX	SMALL JUNCTION BOX (14040-01)
TRAFFIC SIGNAL HEAD	TRAFFIC SIGNAL HEAD
PEDESTRIAN SIGNAL HEAD	PEDESTRIAN SIGNAL HEAD
SIGNAL PHASING	SIGNAL PHASING
TRAFFIC SIGNAL LUMINAIRE	TRAFFIC SIGNAL LUMINAIRE
SIGNAL POLE AND MAST ARM	SIGNAL POLE AND MAST ARM
PEDESTAL POLE	PEDESTAL POLE
PEDESTRIAN PUSH BUTTON	PEDESTRIAN PUSH BUTTON
PREEMPTION DEVICE	PREEMPTION DEVICE
VIDEO DETECTION CAMERA	VIDEO DETECTION CAMERA
VIDEO DETECTION ZONE	VIDEO DETECTION ZONE
CLOSED CIRCUIT TELEVISION VIDEO	CLOSED CIRCUIT TELEVISION VIDEO
SIGN	SIGN
POWER SERVICE PEDESTAL	POWER SERVICE PEDESTAL
CONDUIT	CONDUIT
CONDUIT WITH PROPOSED CABLE	16 FT CARLYLE STREET LIGHT POLE

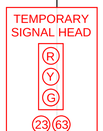
COLOR SEQUENCE CHART

PHASE	2	4	6	8	2+6	4+8	
SIGNAL	R/W	R/W	R/W	R/W	R/W	R/W	FLASH
21, 22, 23	G				G		Y
41, 42		G				G	R
61, 62, 63			G		G		Y
81, 82				G		G	R
P21, P22	W*				W*		DARK
P41, P42		W*				W*	DARK
P61, P62			W*		W*		DARK
P81, P82				W*		W*	DARK

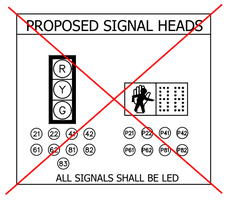
NOTE: BLANK SPACES IN THIS CHART REPRESENT A "RED" SIGNAL INDICATION.

*WALK INDICATION IS DISPLAYED WHEN PEDESTRIAN CALL IS SERVICED; WALK INDICATION IS DISPLAYED UNTIL IT IS TIMED OUT. OTHERWISE "DON'T WALK" INDICATION IS DISPLAYED.

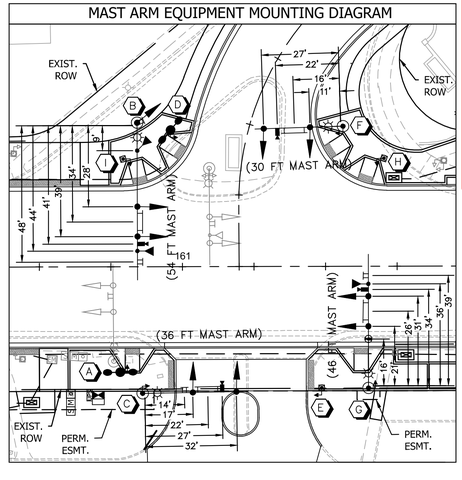
TEMPORARY SIGNAL HEAD



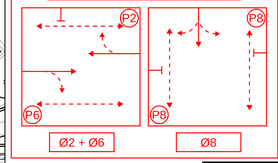
PROPOSED SIGNAL HEADS



MAST ARM EQUIPMENT MOUNTING DIAGRAM



TEMPORARY SIGNAL PHASING DIAGRAM



GRAPHIC SCALE IN FEET
0 12.5 25 50
(HORIZONTAL SCALE)

PROPOSED ACCESSIBLE PEDESTRIAN PUSHBUTTON

P22, P42, P62, P82 — P21, P41, P61, P81

NOTE: ACCESSIBLE PUSHBUTTON SYSTEM SHALL BE POLARA SYSTEM CONFORMING TO ARLINGTON COUNTY SPECIFICATIONS AND SHALL INCLUDE A POLARA CENTRAL CONTROL UNIT.

PUSHBUTTON	WALK MESSAGE
P41, P42, P81, P82	"COLUMBIA PIKE, WALK SIGN IS ON TO CROSS COLUMBIA PIKE."
P21, P22, P61, P62	"THOMAS STREET, WALK SIGN IS ON TO CROSS THOMAS STREET."

ARLINGTON VIRGINIA

DEPARTMENT OF ENVIRONMENTAL SERVICES

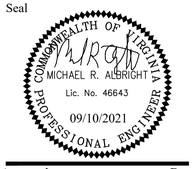
Facilities & Engineering Division
Engineering Bureau
2100 Clarendon Boulevard, Suite 813
Arlington, VA 22201
Phone: 703.228.3629
Fax: 703.228.3606

Kimley»Horn
Kimley-Horn and Associates, Inc.

©2021 KIMLEY-HORN AND ASSOCIATES, INC.

11400 Commerce Park Drive, Suite 400
Reston, Virginia 20191
Phone: 703-674-1300
Fax: 703-674-1350

Seal



Approvals Date

Design Team Engineer Supervisor
Construction Management Supervisor
Water, Sewer, Streets Bureau Chief
Transportation Director
Project Manager

Revisions Date

Designed: TC
Drawn: TC
Checked: GG
Miss Utility Transmittal #:

Filename: 010073-F-TRAF-THOMAS.dwg
Path: K:\NVA_RPRT\010073\7 Columbia Pike Multimodal\Production\Task 7.5 Final Design of Columbia Pike Segments\Segment F\7.5.2 - 100% Design\Plan\Sheets
Plotted: September 10, 2021
Plotted by: patrick.husted

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

TEMPORARY SIGNAL PLAN
COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS
SEGMENT F
COLUMBIA PIKE AND S. THOMAS ST (TS #019)

SCALE: AS SHOWN SHEET: F19.34 of F19.44

ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES
LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES
10/19/2021
APPROVAL DATE

CONDUIT AND CABLE DESCRIPTIONS

1 (A)
1-2" CONDUIT PVC
1-14/7C FOR PED HEAD P41
1-14/3C FOR PED PUSH BUTTON P41
1-#6 AWG (EGC)

2 (A)
1-3" CONDUIT PVC
1-14/7C FOR SIGNAL HEADS 41, 42
1-14/7C FOR PED HEAD P22
1-14/3C FOR PED PUSH BUTTON P22
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC (SPARE)
1-#6 AWG (EGC)

3 (A)
1-4" CONDUIT (BORED) HDPE
1-14/7C FOR SIGNAL HEADS 41, 42
2-14/7C FOR PED HEADS P22, P41
2-14/3C FOR PED PUSH BUTTONS P22, P41
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE SPARE
1-#6 AWG (EGC)

4 (A)
1-2" CONDUIT PVC
1-14/7C FOR PED HEAD P21
1-14/3C FOR PED PUSH BUTTON P21
1-12/2C FOR CARLYLE STREET LIGHT
1-#6 AWG (EGC)

5 (A)
1-3" CONDUIT PVC
2-14/7C FOR SIGNAL HEADS 21, 22, 83
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
2-PREEMPTION CABLES
1-#6 AWG (EGC)

6 (A)
1-2" CONDUIT PVC
1-14/7C FOR PED HEAD P82
1-14/3C FOR PED PUSH BUTTON P82
1-#6 AWG (EGC)

7 (A)
1-4" CONDUIT (BORED) HDPE
2-14/7C FOR SIGNAL HEADS 21, 22, 83
2-14/7C FOR PED HEADS P21, P82
2-14/3C FOR PED PUSH BUTTONS P21, P82
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR CARLYLE STREET LIGHT
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT(BORED) HDPE
2-PREEMPTION CABLES
1-#6 AWG (EGC)

8 (A)
1-3" CONDUIT PVC
1-14/7C FOR SIGNAL HEADS 61, 62
1-14/7C FOR PED HEAD P42
1-14/3C FOR PED PUSH BUTTON P42
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

9 (A)
1-2" CONDUIT PVC
1-14/7C FOR PED HEAD P61
1-14/3C FOR PED PUSH BUTTON P61
1-#6 AWG (EGC)

10 (A)
1-4" CONDUIT BORED (HDPE)
2-14/7C FOR SIGNAL HEADS 41, 42, 61, 62
4-14/7C FOR PED HEADS P22, P41, P42, P61
4-14/3C FOR PED PUSH BUTTONS P22, P41, P42, P61
2-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
2-12/2C FOR LUMINAIRES
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) H
1-PREEMPTION CABLE
1-#6 AWG (EGC)

11 (A)
1-2" CONDUIT PVC
1-14/7C FOR PED HEAD P
1-14/3C FOR PED PUSH BUTTON P81
1-12/2C FOR CARLYLE STREET LIGHT
1-#6 AWG (EGC)

12 (A)
1-2" CONDUIT PVC
1-14/7C FOR SIGNAL HEADS 81, 82
1-14/7C FOR PED HEAD P62
1-14/3C FOR PED PUSH BUTTON P62
1-LEAD IN CABLE FOR THERMAL VEH
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC (SPARE)
1-#6 AWG (EGC)

13 (A)
3-3" CONDUIT PVC
5-14/7C FOR SIGNAL HEADS 21, 22, 41, 42, 61, 62, 81, 82, 83
8-14/7C FOR PED HEADS P21, P22, P41, P42, P61, P62, P81, P82
8-14/3C FOR PED PUSH BUTTONS P21, P22, P41, P42, P61, P62, P81, P82
4-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
3-#6 AWG (EGC)

1-3" CONDUIT PVC
3-PREEMPTION CABLES
1-#6 AWG (EGC)

14 (A)
1-2" CONDUIT METAL
4-#6 AWG FOR ELECTRIC

15 (A)
1-3" CONDUIT PVC
4-12/C FOR LUMINAIRES
2-12/C FOR CARLYLE STREET LIGHTS
1-#6 AWG (EGC)

LEGEND: *EXISTING CABLE TO BE REMOVED*
EXISTING CABLE/CONDUIT TO REMAIN
BE INSTALLED
CONDUCTOR
YLENE CONDUIT

PROPOSED TEMPORARY SIGNS

R3-2
36"X36"
G

TEMPORARY CONDUIT AND 1-14/7C FOR EXISTING SIGNAL HEADS 21 AND 22.

PHASE 1B

INSTALL TEMPORARY SIGN G FACING EB COLUMBIA PIKE.

INSTALL TEMPORARY SIGN G FACING WB COLUMBIA PIKE.

MOUNT TEMPORARY SIGNAL HEAD 63 TO EXISTING SIGNAL POLE. RUN CABLE FROM PROPOSED CONTROLLER THROUGH NEW CONDUIT TO TEMPORARY SIGNAL HEAD 63, EXISTING SIGNAL HEAD 61, AND TEMPORARY SIGNAL HEAD 23.

EXISTING SIGNAL CABINET TO REMAIN FOR USE WITH S. TAYLOR STREET TEMPORARY SIGNAL PLAN.

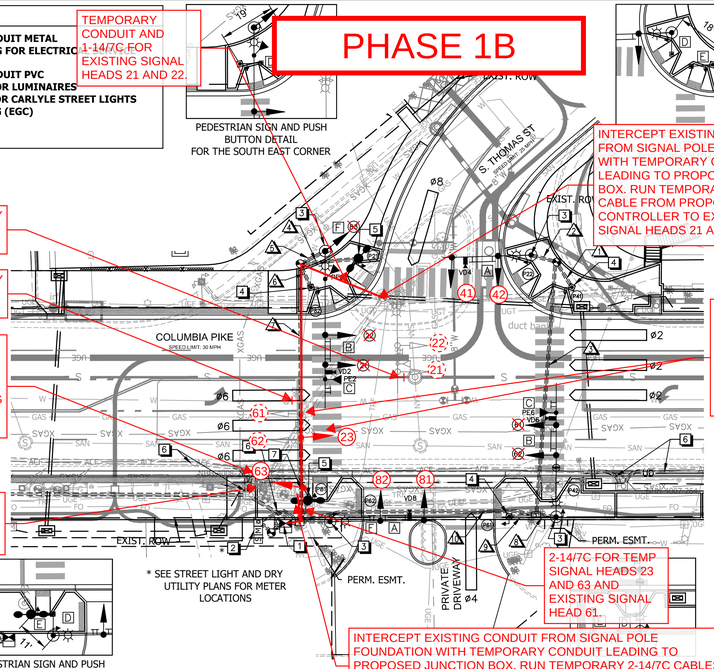
INTERCEPT EXISTING CONDUIT FROM SIGNAL POLE FOUNDATION WITH TEMPORARY CONDUIT LEADING TO PROPOSED JUNCTION BOX. RUN TEMPORARY 14/7C CABLE FROM PROPOSED CONTROLLER TO EXISTING SIGNAL HEADS 21 AND 22.

REMOVE EXISTING SIGNAL HEAD 61 AND INSTALL ON OTHER SIDE OF MAST ARM FACING WB APPROACH AS TEMPORARY SIGNAL HEAD 23. RUN TEMPORARY CABLE FROM PROPOSED CONTROLLER TO TEMPORARY SIGNAL HEAD 23.

NOTE: EXACTLY ONE SIGNALIZED PEDESTRIAN CROSSING SHALL BE PROVIDED ACROSS COLUMBIA PIKE AT EITHER S. TAYLOR ST OR S. THOMAS ST DURING EACH PHASE. THIS CROSSWALK LOCATION MAY CHANGE DURING EACH PHASE.

2-14/7C FOR TEMP SIGNAL HEADS 23 AND 63 AND EXISTING SIGNAL HEAD 61.

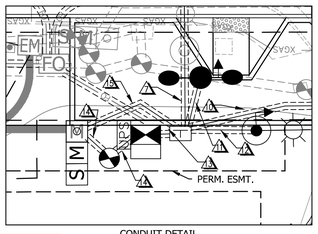
INTERCEPT EXISTING CONDUIT FROM SIGNAL POLE FOUNDATION WITH TEMPORARY CONDUIT LEADING TO PROPOSED JUNCTION BOX. RUN TEMPORARY 2-14/7C CABLES FROM PROPOSED CONTROLLER TO EXISTING SIGNAL HEADS 61 AND TEMPORARY SIGNAL HEADS 23 AND 63.



PEDESTRIAN SIGN AND PUSH BUTTON DETAIL FOR THE SOUTH EAST CORNER

PEDESTRIAN SIGN AND PUSH BUTTON DETAIL FOR THE NORTH EAST CORNER

* SEE STREET LIGHT AND DRY UTILITY PLANS FOR METER LOCATIONS



CONDUIT DETAIL FOR THE NORTH EAST CORNER SCALE: 1" = 10'

CONSTRUCTION NOTES

EXISTING CONTROLLER AND CABINET TO BE REPLACED WITH NEW CONTROLLER AND CABINET ON A NEW FOUNDATION. ALL OTHER EXISTING EQUIPMENT TO BE REMOVED I UNLESS OTHERWISE SPECIFIED. EXISTING CONTROL

1. INSTALL SIGNAL CONTROLLER CABINET WITH UPS A
2. INSTALL UNDERGROUND ELECTRIC SERVICE WITH P CONNECTION.
3. INSTALL ORNAMENTAL MAST ARM SIGNAL POLE, POW AND POLARA PEDESTRIAN EQUIPMENT ATTACHED T EXTENDER.
4. INSTALL NON-ORNAMENTAL PEDESTAL POLE, POWDE EQUIPMENT, AND SIGN.
5. INSTALL CARLYLE STREET LIGHT POLE WITH PEDEST
6. SEE COMMUNICATION PLAN ON SHEET F17.1.2 FOR C
7. DISCONNECT EXISTING RTMS UNIT ON SIGNAL POLE ARLINGTON COUNTY.

PHASE	1						
MOVEMENT							
PHASE ON							
PHASE OFF	X						
INTERVAL	PHASE TIMINGS						
MIN GR		5.0		5.0		5.0	5.0
PASSAGE		0.0		2.0		0.0	2.0
YELLOW		4.0		4.0		4.0	4.0
RED		3.0		3.0		3.0	3.0
MAX 1		50.0		25.0		50.0	25.0
MAX 2		-		-		-	-
MIN GAP		-		-		-	-
TIME BEFORE REDUCTION		-		-		-	-
TIME TO REDUCE		-		-		-	-
PED WALK		7.0		7.0		7.0	7.0
PED FLASH DON'T WALK		15.0		17.0		13.0	17.0
MODE		MAX RECALL		NON-LOCK		MAX RECALL	NON-LOCK

POLE SCHEDULE

No.	POLE IDENTIFICATION	STATION	OFFSET	STANDARD TYPE	SIG. M.A. ORIENT.	SIG. M.A.	LUM. M.A. ORIENT.	LUM. M.A. (TYPE)	LUM. LED (4)	POLE SIGNAL MOUNTING: VEHICLE & PED. HEADS	PED. PUSH BUTTONS	SIGNS	VIDEO DETECTOR PREEMPTION & CCTV	STREET NAME SIGN
A	019-CP-01-NE	160+78.18	36.84' RT	DOUBLE CARLYLE POLE 16'	-	-	-	-	69W	P81	P81	E	-	-
B	019-MA-01-SE	160+84.27	50.29' LT	MAST ARM POLE 30'	180°	54'	180°	6' (STANDARD)	145W	21, 22, 83	-	C, F	VD2, PE2, PE8	B
C	019-MA-01-NE	160+85.97	44.22' RT	MAST ARM POLE 30'	180°	36'	180°	6' (STANDARD)	145W	81, 82, P62	P62	D, F	VD8	A
D	019-CP-01-SE	160+95.91	47.72' LT	DOUBLE CARLYLE POLE 16'	-	-	-	-	69W	P21	P21	E	-	-
E	019-PP-01-NW	161+48.52	42.46' RT	PEDESTAL POLE 12'	-	-	-	-	-	P61	P61	E	-	-
F	019-MA-01-SW	161+56.18	48.94' LT	MAST ARM POLE 30'	180°	30'	180°	6' (STANDARD)	145W	41, 42, P22	P22	D	VD4	A
G	019-MA-01-NW	161+64.91	42.55' RT	MAST ARM POLE 30'	180°	46'	180°	6' (STANDARD)	145W	61, 62, P42	P42	C, D	VD6, PE6, CCTV	B
H	019-PP-01-SW	161+70.45	37.70' LT	PEDESTAL POLE 12'	-	-	-	-	-	P41	P41	E	-	-
I	019-PP-01-SE	160+79.32	37.64' LT	PEDESTAL POLE 12'	-	-	-	-	-	P82	P82	D	-	-

NOTE: ALL POLES LISTED ABOVE SHALL BE LABELED WITH A POLE IDENTIFICATION STICKER IN ACCORDANCE WITH THE APPROPRIATE POLE ID.

PROPOSED SIGNS

Columbia Pike — D3-1, 78" X 18", A
S Thomas St — D3-1, 72" X 18", B
LEFT TURN YIELD ON GREEN — R10-12, 30" X 36", C
START CROSSING WHEN Flashing Vehicles / DON'T START / Finish Crossing If Started / TIME REMAINING To Finish Crossing / DON'T CROSS / TO CROSS PUSH BUTTON — R10-3E(L), 9" X 15", D
START CROSSING WHEN Flashing Vehicles / DON'T START / Finish Crossing If Started / TIME REMAINING To Finish Crossing / DON'T CROSS / TO CROSS PUSH BUTTON — R10-3E(R), 9" X 15", E
NO TURN ON RED — R10-11, 24" X 30", F

*NOTE: SEE SHEET F17.5 FOR DETAILED STREET NAME SIGN LAYOUT

EXISTING SIGNAL HEAD
R Y G
21 22
61 62

LEGEND

EXISTING	PROPOSED
RIGHT OF WAY	PERMANENT EASEMENT
EASEMENT	TEMPORARY CONSTRUCTION EASEMENT
TRAFFIC SIGNAL CABINET W/ UPS	TRAFFIC SIGNAL CABINET W/ UPS
EXTRA LARGE JUNCTION BOX	24"X36" JUNCTION BOX (61-04, TYPE-3)
LARGE JUNCTION BOX	LARGE JUNCTION BOX (61-02)
SMALL JUNCTION BOX	SMALL JUNCTION BOX (14040-01)
TRAFFIC SIGNAL HEAD	TRAFFIC SIGNAL HEAD
PEDESTRIAN SIGNAL HEAD	PEDESTRIAN SIGNAL HEAD
SIGNAL PHASING	SIGNAL PHASING
TRAFFIC SIGNAL LUMINAIRE	TRAFFIC SIGNAL LUMINAIRE
SIGNAL POLE AND MAST ARM	SIGNAL POLE AND MAST ARM
PEDESTAL POLE	PEDESTAL POLE
PEDESTRIAN PUSH BUTTON	PEDESTRIAN PUSH BUTTON
PREEMPTION DEVICE	PREEMPTION DEVICE
VIDEO DETECTION CAMERA	VIDEO DETECTION CAMERA
VIDEO DETECTION ZONE	VIDEO DETECTION ZONE
CLOSED CIRCUIT TELEVISION VIDEO	CLOSED CIRCUIT TELEVISION VIDEO
SIGN	SIGN
POWER SERVICE PEDESTAL	POWER SERVICE PEDESTAL
CONDUIT	CONDUIT
CONDUIT WITH PROPOSED CABLE	16 FT CARLYLE STREET LIGHT POLE

TEMPORARY SIGNAL HEAD
R Y G
23 63

COLOR SEQUENCE CHART

PHASE	2	4	6	8	2+6	4+8	
SIGNAL	R/W	R/W	R/W	R/W	R/W	R/W	FLASH
21, 22, 23	G				G		Y
41, 42		G				G	R
61, 62, 63			G		G		Y
81, 82				G		G	R
P21, P22	W*				W*		DARK
P41, P42		W*				W*	DARK
P61, P62			W*		W*		DARK
P81, P82				W*		W*	DARK

NOTE: BLANK SPACES IN THIS CHART REPRESENT A "RED" SIGNAL INDICATION.

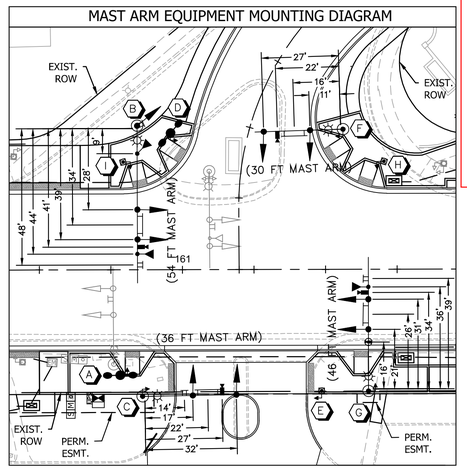
*WALK INDICATION IS DISPLAYED WHEN PEDESTRIAN CALL IS SERVICED; WALK INDICATION IS DISPLAYED UNTIL IT IS TIMED OUT. OTHERWISE "DON'T WALK" INDICATION IS DISPLAYED.

PROPOSED SIGNAL HEADS

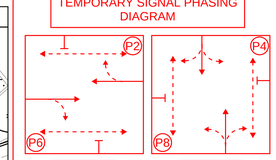
R Y G
21 22 41 42 P21 P22 P41 P42
61 62 81 82 P61 P62 P81 P82
63

ALL SIGNALS SHALL BE LED

MAST ARM EQUIPMENT MOUNTING DIAGRAM



TEMPORARY SIGNAL PHASING DIAGRAM



GRAPHIC SCALE IN FEET
0 12.5 25 50
(HORIZONTAL SCALE)

PROPOSED ACCESSIBLE PEDESTRIAN PUSHBUTTON

P22, P42, P62, P82 — P21, P41, P61, P81

NOTE: ACCESSIBLE PUSHBUTTON SYSTEM SHALL BE POLARA SYSTEM CONFORMING TO ARLINGTON COUNTY SPECIFICATIONS AND SHALL INCLUDE A POLARA CENTRAL CONTROL UNIT.

PUSHBUTTON	WALK MESSAGE
P41, P42, P81, P82	"COLUMBIA PIKE, WALK SIGN IS ON TO CROSS COLUMBIA PIKE."
P21, P22, P61, P62	"THOMAS STREET, WALK SIGN IS ON TO CROSS THOMAS STREET."

NOTE:

THIS TEMPORARY SIGNAL PLAN ANTICIPATES THAT THE EXISTING SIGNAL POLES AND HEADS FOR EB AND WB COLUMBIA PIKE WILL REMAIN IN PLACE DURING PHASE 1B. THE PROPOSED SIGNAL INFRASTRUCTURE INCLUDING PROPOSED CONTROLLER CABINET, POLES C AND F, JUNCTION BOXES, AND CONDUIT ARE ANTICIPATED TO BE INSTALLED PRIOR TO PHASE 1B AND WILL BE USED FOR TEMPORARY SIGNAL OPERATIONS. THE EXISTING CONTROLLER CABINET IS NOT ANTICIPATED TO BE USED FOR TEMPORARY SIGNAL OPERATIONS AT S. THOMAS STREET, BUT IT MUST REMAIN IN OPERATION FOR THE SIGNAL AT S. TAYLOR STREET.

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

TEMPORARY SIGNAL PLAN
COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS SEGMENT F
COLUMBIA PIKE AND S. THOMAS ST (TS #019)

SCALE: AS SHOWN | SHEET: F19.35 of F19.44

ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES
LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES
10/19/2021
APPROVAL DATE

ARLINGTON VIRGINIA
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Seal
COMMONWEALTH OF VIRGINIA
MICHAEL R. ALBRIGHT
Lic. No. 46643
09/10/2021
PROFESSIONAL ENGINEER

Approvals Date
Design Team Engineer Supervisor
Construction Management Supervisor
Water, Sewer, Streets Bureau Chief
Transportation Director
Project Manager

Revisions Date

Designed: TC
Drawn: TC
Checked: GG
Miss Utility Transmittal #:

Filename: 010073-F-TRAF-THOMAS.dwg
Path: K:\NVA_RHW\110010073 Columbia Pike Multimodal\Production\Task 2.0 Final Design of Columbia Pike Segments\Segment F\7.5.2 - 100% Design\Plan\Sheets
Plotted: September 10, 2021
Plotted by: patrick.husted

PHASE 2A/2B

CONDUIT AND CABLE DESCRIPTIONS

1 **1-2" CONDUIT PVC**
1-14/7C FOR PED HEAD P41
1-14/3C FOR PED PUSH BUTTON P41
1-#6 AWG (EGC)

2 **1-3" CONDUIT PVC**
1-14/7C FOR SIGNAL HEADS 41, 42
1-14/7C FOR PED HEAD P22
1-14/3C FOR PED PUSH BUTTON P22
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC (SPARE)
1-#6 AWG (EGC)

3 **1-4" CONDUIT (BORED) HDPE**
1-14/7C FOR SIGNAL HEADS 41, 42
2-14/7C FOR PED HEADS P22, P41
2-14/3C FOR PED PUSH BUTTONS P22, P41
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE SPARE
1-#6 AWG (EGC)

4 **1-2" CONDUIT PVC**
1-14/7C FOR PED HEAD P21
1-14/3C FOR PED PUSH BUTTON P21
1-12/2C FOR CARLYLE STREET LIGHT
1-#6 AWG (EGC)

5 **1-3" CONDUIT PVC**
2-14/7C FOR SIGNAL HEADS 21, 22, 83
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
2-PREEMPTION CABLES
1-#6 AWG (EGC)

6 **1-2" CONDUIT PVC**
1-14/7C FOR PED HEAD P82
1-14/3C FOR PED PUSH BUTTON P82
1-#6 AWG (EGC)

7 **1-4" CONDUIT (BORED) HDPE**
2-14/7C FOR SIGNAL HEADS 21, 22, 83
2-14/7C FOR PED HEADS P21, P82
2-14/3C FOR PED PUSH BUTTONS P21, P82
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR CARLYLE STREET LIGHT
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT(BORED) HDPE
2-PREEMPTION CABLES
1-#6 AWG (EGC)

8 **1-3" CONDUIT PVC**
1-14/7C FOR SIGNAL HEADS 61, 62
1-14/7C FOR PED HEAD P42
1-14/3C FOR PED PUSH BUTTON P42
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

9 **1-2" CONDUIT PVC**
1-14/7C FOR PED HEAD P61
1-14/3C FOR PED PUSH BUTTON P61
1-#6 AWG (EGC)

10 **1-4" CONDUIT BORED (HDPE)**
2-14/7C FOR SIGNAL HEADS 41, 42, 61, 62
4-14/7C FOR PED HEADS P22, P41, P42, P61
4-14/3C FOR PED PUSH BUTTONS P22, P41, P42, P61
2-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
2-12/2C FOR LUMINAIRES
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE
1-PREEMPTION CABLE
1-#6 AWG (EGC)

11 **1-2" CONDUIT PVC**
1-14/7C FOR PED HEAD P81
1-14/3C FOR PED PUSH BUTTON P81
1-12/2C FOR CARLYLE STREET LIGHT
1-#6 AWG (EGC)

12 **1-2" CONDUIT PVC**
1-14/7C FOR SIGNAL HEADS 81, 82
1-14/7C FOR PED HEAD P62
1-14/3C FOR PED PUSH BUTTON P62
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC (SPARE)
1-#6 AWG (EGC)

13 **3-3" CONDUIT PVC**
5-14/7C FOR SIGNAL HEADS 21, 22, 41, 42, 61, 62, 81, 82, 83
8-14/7C FOR PED HEADS P21, P22, P41, P42, P61, P62, P81, P82
8-14/3C FOR PED PUSH BUTTONS P21, P22, P41, P42, P61, P62, P81, P82
4-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
3-#6 AWG (EGC)

1-3" CONDUIT PVC
3-PREEMPTION CABLES
1-#6 AWG (EGC)

14 **1-2" CONDUIT METAL**
4-#6 AWG FOR ELECTRICAL SERVICE

15 **1-3" CONDUIT PVC**
4-12/C FOR LUMINAIRES
2-12/C FOR CARLYLE STREET LIGHTS
1-#6 AWG (EGC)

LEGEND: *EXISTING CABLE TO BE REMOVED*
EXISTING CABLE/CONDUIT TO REMAIN
BE INSTALLED
CONDUCTOR
YLENE CONDUIT

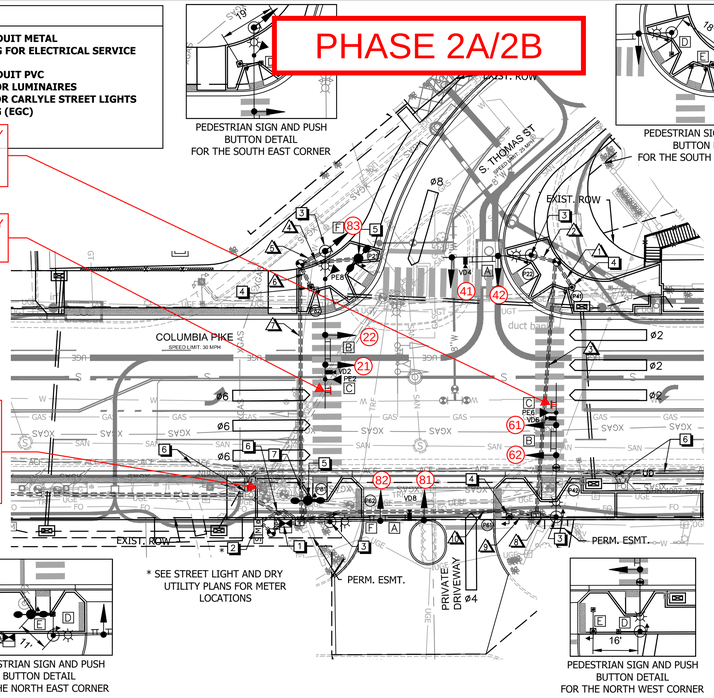
PROPOSED TEMPORARY SIGNS

R3-2
36"X36"
G

INSTALL TEMPORARY SIGN G FACING WB COLUMBIA PIKE (PHASE 2B ONLY).

INSTALL TEMPORARY SIGN G FACING EB COLUMBIA PIKE.

EXISTING SIGNAL CABINET TO REMAIN WITH S. TAYLOR STREET TEMPORARY SIGNAL PLAN.

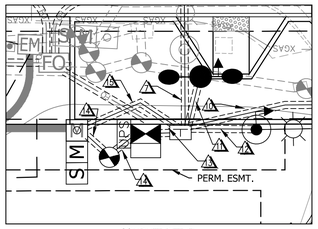


PEDESTRIAN SIGN AND PUSH BUTTON DETAIL FOR THE SOUTH EAST CORNER

PEDESTRIAN SIGN AND PUSH BUTTON DETAIL FOR THE SOUTH WEST CORNER

PEDESTRIAN SIGN AND PUSH BUTTON DETAIL FOR THE NORTH EAST CORNER

PEDESTRIAN SIGN AND PUSH BUTTON DETAIL FOR THE NORTH WEST CORNER



CONDUIT DETAIL
FOR THE NORTH EAST CORNER
SCALE: 1" = 10'

CONSTRUCTION NOTES

EXISTING CONTROLLER AND CABINET TO BE REPLACED WITH NEW CONTROLLER AND CABINET ON A NEW FOUNDATION. ALL OTHER EXISTI… UNLESS OTHERWIS…

1. INSTALL SIGNAL C…
2. INSTALL UNDERGR… CONNECTION.
3. INSTALL ORNAMEN… AND POLARA PEDE… EXTENDER.
4. INSTALL NON-ORN… EQUIPMENT, AND S…
5. INSTALL CARLYLE …
6. SEE COMMUNICATION … FOR INTERCONNECT DETAILS.
7. DISCONNECT EXISTING RTMS UNIT ON SIGNAL POLE FROM CABINET, AND SALVAGE CABLE AND UNIT. RETURN TO ARLINGTON COUNTY.

NOTE:

THE PROPOSED SIGNAL INFRASTRUCTURE INCLUDING PROPOSED CONTROLLER CABINET, POLES B, C, G, AND H, JUNCTION BOXES, AND CONDUIT ARE ANTICIPATED TO BE INSTALLED PRIOR TO PHASE 2 AND WILL BE USED FOR TEMPORARY SIGNAL OPERATIONS. THE EXISTING CONTROLLER CABINET IS NOT ANTICIPATED TO BE USED FOR TEMPORARY SIGNAL OPERATIONS AT S. THOMAS STREET, BUT IT MUST REMAIN IN OPERATION FOR THE SIGNAL AT S. TAYLOR STREET."

NOTE: EXACTLY ONE SIGNALIZED PEDESTRIAN CROSSING SHALL BE PROVIDED ACROSS COLUMBIA PIKE AT EITHER S. TAYLOR ST OR S. THOMAS ST DURING EACH PHASE. THIS CROSSWALK LOCATION MAY CHANGE DURING EACH PHASE.

INITIAL TIMING CHART

PHASE	1	2	3	4	5	6	7	8
MOVEMENT		EB COLUMBIA PIKE		PRIVATE DRIVEWAY		WB COLUMBIA PIKE		NB S. THOMAS STREET
PHASE ON		X		X		X		X
PHASE OFF	X		X		X		X	
INTERVAL	PHASE TIMINGS							
MIN GR		5.0		5.0		5.0		5.0
PASSAGE		0.0		2.0		0.0		2.0
YELLOW		4.0		4.0		4.0		4.0
RED		3.0		3.0		3.0		3.0
MAX 1		50.0		25.0		50.0		25.0
MAX 2		-		-		-		-
MIN GAP		-		-		-		-
TIME BEFORE REDUCTION		-		-		-		-
TIME TO REDUCE		-		-		-		-
PED WALK		7.0		7.0		7.0		7.0
PED FLASH DON'T WALK		15.0		17.0		13.0		17.0
MODE		MAX RECALL		NON-LOCK		MAX RECALL		NON-LOCK

POLE SCHEDULE

No.	POLE IDENTIFICATION	STATION	OFFSET	STANDARD TYPE	STANDARD SIG. M.A. ORIENT.	STANDARD SIG. M.A.	STANDARD LUM. M.A. ORIENT.	STANDARD LUM. M.A. (TYPE)	LUM. LED (4)	POLE SIGNAL MOUNTING VEHICLE & PED. HEADS	PED. PUSH BUTTONS	SIGNS	VIDEO DETECTOR PREEMPTION & CCTV	STREET NAME SIGN
A	019-CP-01-NE	160+78.18	36.84' RT	DOUBLE CARLYLE POLE 16'	-	-	-	-	69W	P81	P81	E	-	-
B	019-MA-01-SE	160+84.27	50.29' LT	MAST ARM POLE 30'	180°	54'	180°	6' (STANDARD)	145W	21, 22, 83	-	C, F	VD2, PE2, PE8	B
C	019-MA-01-NE	160+85.97	44.22' RT	MAST ARM POLE 30'	180°	36'	180°	6' (STANDARD)	145W	81, 82, P62	P62	D, F	VD8	A
D	019-CP-01-SE	160+95.91	47.72' LT	DOUBLE CARLYLE POLE 16'	-	-	-	-	69W	P21	P21	E	-	-
E	019-PP-01-NW	161+48.52	42.46' RT	PEDESTAL POLE 12'	-	-	-	-	-	P61	P61	E	-	-
F	019-MA-01-SW	161+56.18	48.94' LT	MAST ARM POLE 30'	180°	30'	180°	6' (STANDARD)	145W	41, 42, P22	P22	D	VD4	A
G	019-MA-01-NW	161+64.91	42.55' RT	MAST ARM POLE 30'	180°	46'	180°	6' (STANDARD)	145W	61, 62, P42	P42	C, D	VD6, PE6, CCTV	B
H	019-PP-01-SW	161+70.45	37.70' LT	PEDESTAL POLE 12'	-	-	-	-	-	P41	P41	E	-	-
I	019-PP-01-SE	160+79.32	37.64' LT	PEDESTAL POLE 12'	-	-	-	-	-	P82	P82	D	-	-

NOTE: ALL POLES LISTED ABOVE SHALL BE LABELED WITH A POLE IDENTIFICATION STICKER IN ACCORDANCE WITH THE APPROPRIATE DOT&E…

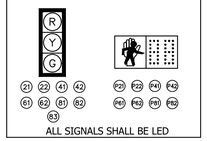
COLOR SEQUENCE CHART

PHASE	2	4	6	8	2+6	4+8	
SIGNAL	R/W	R/W	R/W	R/W	R/W	R/W	FLASH
21, 22	G				G		Y
41, 42		G				G	R
61, 62			G		G		Y
81, 82, 83				G		G	R
P21, P22	W*				W*		DARK
P41, P42		W*				W*	DARK
P61, P62			W*		W*		DARK
P81, P82				W*		W*	DARK

NOTE: BLANK SPACES IN THIS CHART REPRESENT A "RED" SIGNAL INDICATION.

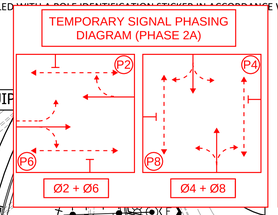
*WALK INDICATION IS DISPLAYED WHEN PEDESTRIAN CALL IS SERVICED; WALK INDICATION IS DISPLAYED UNTIL IT IS TIMED OUT. OTHERWISE "DON'T WALK" INDICATION IS DISPLAYED.

PROPOSED SIGNAL HEADS

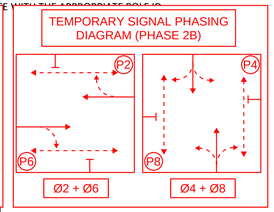


ALL SIGNALS SHALL BE LED

TEMPORARY SIGNAL PHASING DIAGRAM (PHASE 2A)



TEMPORARY SIGNAL PHASING DIAGRAM (PHASE 2B)



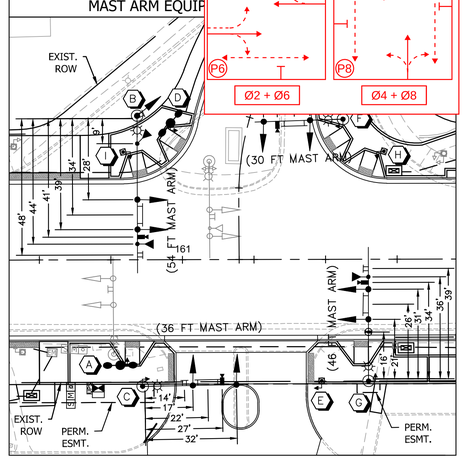
PROPOSED ACCESSIBLE PEDESTRIAN PUSHBUTTON

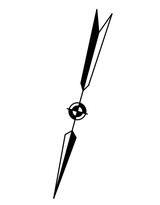
P22, P42, P62, P82 — P21, P41, P61, P81

NOTE: ACCESSIBLE PUSHBUTTON SYSTEM SHALL BE POLARA SYSTEM CONFORMING TO ARLINGTON COUNTY SPECIFICATIONS AND SHALL INCLUDE A POLARA CENTRAL CONTROL UNIT.

PUSHBUTTON	WALK MESSAGE
P41, P42, P81, P82	"COLUMBIA PIKE, WALK SIGN IS ON TO CROSS COLUMBIA PIKE."
P21, P22, P61, P62	"THOMAS STREET, WALK SIGN IS ON TO CROSS THOMAS STREET."

MAST ARM EQUIP…





GRAPHIC SCALE IN FEET
0 12.5 25 50
(HORIZONTAL SCALE)

PROPOSED SIGNS

Columbia Pike	S Thomas St	LEFT TURN YIELD ON GREEN	START CROSSING WHEN Flashing Vehicles DON'T START Finish Crossing If Started TIME REMAINING To Finish Crossing DON'T CROSS TO CROSS PUSH BUTTON	START CROSSING WHEN Flashing Vehicles DON'T START Finish Crossing If Started TIME REMAINING To Finish Crossing DON'T CROSS TO CROSS PUSH BUTTON	NO TURN ON RED
D3-1 78" X 18" A	D3-1 72" X 18" B	R10-12 30" X 36" C	R10-3E(L) 9" X 15" D	R10-3E(R) 9" X 15" E	R10-11 24" X 30" F

*NOTE: SEE SHEET F17.5 FOR DETAILED STREET NAME SIGN LAYOUT

LEGEND

EXISTING	PROPOSED
RIGHT OF WAY	PERMANENT EASEMENT
EASEMENT	TEMPORARY CONSTRUCTION EASEMENT
TRAFFIC SIGNAL CABINET W/ UPS	TRAFFIC SIGNAL CABINET W/ UPS
EXTRA LARGE JUNCTION BOX	24"X36" JUNCTION BOX (61-04, TYPE-3)
LARGE JUNCTION BOX	LARGE JUNCTION BOX (61-02)
SMALL JUNCTION BOX	SMALL JUNCTION BOX (14040-01)
TRAFFIC SIGNAL HEAD	TRAFFIC SIGNAL HEAD
PEDESTRIAN SIGNAL HEAD	PEDESTRIAN SIGNAL HEAD
SIGNAL PHASING	SIGNAL PHASING
TRAFFIC SIGNAL LUMINAIRE	TRAFFIC SIGNAL LUMINAIRE
SIGNAL POLE AND MAST ARM	SIGNAL POLE AND MAST ARM
PEDESTAL POLE	PEDESTAL POLE
PEDESTRIAN PUSH BUTTON	PEDESTRIAN PUSH BUTTON
PREEMPTION DEVICE	PREEMPTION DEVICE
VIDEO DETECTION CAMERA	VIDEO DETECTION CAMERA
VIDEO DETECTION ZONE	VIDEO DETECTION ZONE
CLOSED CIRCUIT TELEVISION VIDEO	CLOSED CIRCUIT TELEVISION VIDEO
SIGN	SIGN
POWER SERVICE PEDESTAL	POWER SERVICE PEDESTAL
CONDUIT	CONDUIT
CONDUIT WITH PROPOSED CABLE	16 FT CARLYLE STREET LIGHT POLE

ARLINGTON VIRGINIA

DEPARTMENT OF ENVIRONMENTAL SERVICES

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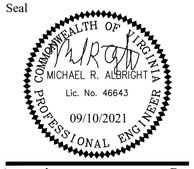
Seal



Approvals Date

Design Team Engineer Supervisor
Construction Management Supervisor
Water, Sewer, Streets Bureau Chief
Transportation Director
Project Manager

Revisions Date

Designed: TC
Drawn: TC
Checked: GG
Miss Utility Transmittal #:

Filename: 010073-F-TRAF-THOMAS.dwg
Path: K:\NVA_RPRT\010073\07 Columbia Pike Multimodal\Production\Task 7.5 Final Design of Columbia Pike Segments\Segment F\7.5.2 - 100% Design\Plan\Sheets
Plotted: September 10, 2021
Plotted by: patrick.husted

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

TEMPORARY SIGNAL PLAN

COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS SEGMENT F
COLUMBIA PIKE AND S. THOMAS ST (TS #019)

SCALE: AS SHOWN SHEET: F19.35.1 of F19.44

ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES

10/19/2021
APPROVAL DATE

PHASE 3A/3B

CONDUIT AND CABLE DESCRIPTIONS

1
1-2" CONDUIT PVC
1-14/7C FOR PED HEAD P41
1-14/3C FOR PED PUSH BUTTON P41
1-#6 AWG (EGC)
TEMP: 1-14/7C FOR SIGNAL HEAD 63

2
1-3" CONDUIT PVC
1-14/7C FOR SIGNAL HEADS 41, 42
1-14/7C FOR PED HEAD P22
1-14/3C FOR PED PUSH BUTTON P22
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC (SPARE)
1-#6 AWG (EGC)

3
1-4" CONDUIT (BORED) HDPE
1-14/7C FOR SIGNAL HEADS 41, 42
2-14/7C FOR PED HEADS P22, P41
2-14/3C FOR PED PUSH BUTTONS P22, P41
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)
TEMP: 1-14/7C FOR SIGNAL HEAD 63
1-2" CONDUIT (BORED) HDPE SPARE
1-#6 AWG (EGC)

4
1-2" CONDUIT PVC
1-14/7C FOR PED HEAD P21
1-14/3C FOR PED PUSH BUTTON P21
1-12/2C FOR CARLYLE STREET LIGHT
1-#6 AWG (EGC)

5
1-3" CONDUIT PVC
2-14/7C FOR SIGNAL HEADS 21, 22, 83
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
2-PREEMPTION CABLES
1-#6 AWG (EGC)

6
1-2" CONDUIT PVC
1-14/7C FOR PED HEAD P82
1-14/3C FOR PED PUSH BUTTON P82
1-#6 AWG (EGC)

7
1-4" CONDUIT (BORED) HDPE
2-14/7C FOR SIGNAL HEADS 21, 22, 83
2-14/7C FOR PED HEADS P21, P82
2-14/3C FOR PED PUSH BUTTONS P21, P82
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR CARLYLE STREET LIGHT
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT(BORED) HDPE
2-PREEMPTION CABLES
1-#6 AWG (EGC)

LEGEND: *EXISTING CABLE TO BE REMOVED*
EXISTING CABLE/CONDUIT TO REMAIN
PROPOSED CONDUIT TO BE INSTALLED
PROPOSED CONDUCTOR
PROPOSED POLYLENE CONDUIT

8
1-3" CONDUIT PVC
1-14/7C FOR SIGNAL HEADS 61, 62
1-14/7C FOR PED HEAD P42
1-14/3C FOR PED PUSH BUTTON P42
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

9
1-2" CONDUIT PVC
1-14/7C FOR PED HEAD P61
1-14/3C FOR PED PUSH BUTTON P61
1-#6 AWG (EGC)

10
1-4" CONDUIT BORED (HDPE)
2-14/7C FOR SIGNAL HEADS 41, 42, 61, 62
4-14/7C FOR PED HEADS P22, P41, P42, P61
4-14/3C FOR PED PUSH BUTTONS P22, P41, P42, P61
2-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
2-12/2C FOR LUMINAIRES
1-#6 AWG (EGC)
TEMP: 1-14/7C FOR SIGNAL HEAD 63
1-2" CONDUIT (BORED) HDPE
1-PREEMPTION CABLE
1-#6 AWG (EGC)

11
1-2" CONDUIT PVC
1-14/7C FOR PED HEAD P81
1-14/3C FOR PED PUSH BUTTON P81
1-12/2C FOR CARLYLE STREET LIGHT
1-#6 AWG (EGC)

12
1-2" CONDUIT PVC
1-14/7C FOR SIGNAL HEADS 81, 82
1-14/7C FOR PED HEAD P62
1-14/3C FOR PED PUSH BUTTON P62
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC (SPARE)
1-#6 AWG (EGC)

13
3-3" CONDUIT PVC
5-14/7C FOR SIGNAL HEADS 21, 22, 41, 42, 61, 62, 81, 82, 83
8-14/7C FOR PED HEADS P21, P22, P41, P42, P61, P62, P81, P82
8-14/3C FOR PED PUSH BUTTONS P21, P22, P41, P42, P61, P62, P81, P82
4-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
3-#6 AWG (EGC)

1-3" CONDUIT PVC
3-PREEMPTION CABLES
1-#6 AWG (EGC)

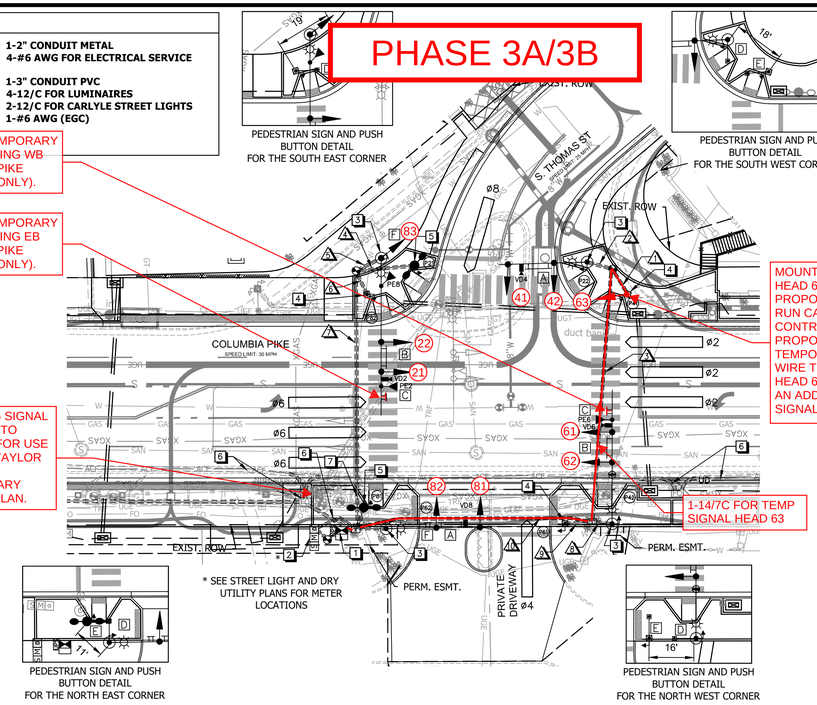
14
1-2" CONDUIT METAL
4-#6 AWG FOR ELECTRICAL SERVICE

15
1-3" CONDUIT PVC
4-12/C FOR LUMINAIRES
2-12/C FOR CARLYLE STREET LIGHTS
1-#6 AWG (EGC)

INSTALL TEMPORARY SIGN G FACING WB COLUMBIA PIKE (PHASE 3A ONLY).

INSTALL TEMPORARY SIGN G FACING EB COLUMBIA PIKE (PHASE 3A ONLY).

EXISTING SIGNAL CABINET TO REMAIN FOR USE WITH S. TAYLOR STREET TEMPORARY SIGNAL PLAN.

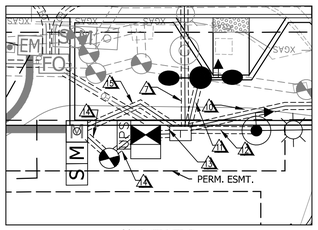


PEDESTRIAN SIGN AND PUSH BUTTON DETAIL FOR THE SOUTH EAST CORNER

PEDESTRIAN SIGN AND PUSH BUTTON DETAIL FOR THE SOUTH WEST CORNER

PEDESTRIAN SIGN AND PUSH BUTTON DETAIL FOR THE NORTH EAST CORNER

PEDESTRIAN SIGN AND PUSH BUTTON DETAIL FOR THE NORTH WEST CORNER



CONDUIT DETAIL FOR THE NORTH EAST CORNER
SCALE: 1" = 10'

MOUNT TEMPORARY SIGNAL HEAD 63 TO SIDE OF PROPOSED PEDESTAL POLE. RUN CABLE FROM PROPOSED CONTROLLER THOUGH PROPOSED CONDUIT TO TEMPORARY SIGNAL HEAD 63. WIRE TEMPORARY SIGNAL HEAD 63 TO CONTROLLER AS AN ADDITIONAL PHASE 6 SIGNAL HEAD.

NOTE: EXACTLY ONE SIGNALIZED PEDESTRIAN CROSSING SHALL BE PROVIDED ACROSS COLUMBIA PIKE AT EITHER S. TAYLOR ST OR S. THOMAS ST DURING EACH PHASE. THIS CROSSWALK LOCATION MAY CHANGE DURING EACH PHASE.

NOTE:

THE PROPOSED SIGNAL INFRASTRUCTURE INCLUDING PROPOSED CONTROLLER CABINET, POLES B, C, F, G, AND H, JUNCTION BOXES, AND CONDUIT ARE ANTICIPATED TO BE INSTALLED PRIOR TO PHASE 3 AND WILL BE USED FOR TEMPORARY SIGNAL OPERATIONS. THE EXISTING CONTROLLER CABINET IS NOT ANTICIPATED TO BE USED FOR TEMPORARY SIGNAL OPERATIONS AT S. THOMAS STREET, BUT IT MUST REMAIN IN OPERATION FOR THE SIGNAL AT S. TAYLOR STREET."

CONSTRUCTION NOTES

EXISTING CONTROLLER AND CABINET TO BE REPLACED WITH NEW CONTROLLER AND CABINET ON A NEW FOUNDATION. ALL OTHER EXISTI... UNLESS OTHERWIS...

1 INSTALL SIGNAL C...

2 INSTALL UNDERGR... CONNECTION.

3 INSTALL ORNAMEN... AND POLARA PEDE... EXTENDER.

4 INSTALL NON-ORN... EQUIPMENT, AND S...

5 INSTALL CARLYLE ...

6 SEE COMMUNICAT...

...TING RTMS UNIT ON SIGNAL POLE FROM CABINET, AND SALVAGE CABLE AND UNIT. RETURN TO ...TY.

INITIAL TIMING CHART

PHASE	1	2	3	4	5	6	7	8
MOVEMENT		EB COLUMBIA PIKE		PRIVATE DRIVEWAY		WB COLUMBIA PIKE		NB S. THOMAS STREET
PHASE ON		X		X		X		X
PHASE OFF	X		X		X		X	
INTERVAL	PHASE TIMINGS							
MIN GR		5.0		5.0		5.0		5.0
PASSAGE		0.0		2.0		0.0		2.0
YELLOW		4.0		4.0		4.0		4.0
RED		3.0		3.0		3.0		3.0
MAX 1		50.0		25.0		50.0		25.0
MAX 2		-		-		-		-
MIN GAP		-		-		-		-
TIME BEFORE REDUCTION		-		-		-		-
TIME TO REDUCE		-		-		-		-
PED WALK		7.0		7.0		7.0		7.0
PED FLASH DON'T WALK		15.0		17.0		13.0		17.0
MODE		MAX RECALL		NON-LOCK		MAX RECALL		NON-LOCK

POLE SCHEDULE

No.	POLE IDENTIFICATION	STATION	OFFSET	STANDARD TYPE	STANDARD SIG. M.A. ORIENT.	STANDARD SIG. M.A.	STANDARD LUM. M.A. ORIENT.	STANDARD LUM. M.A. (TYPE)	LUM. LED (4)	POLE SIGNAL MOUNTING VEHICLE & PED. HEADS	PED. PUSH BUTTONS	SIGNS	VIDEO DETECTOR PREEMPTION & CCTV	STREET NAME SIGN
A	019-CP-01-NE	160+78.18	36.84' RT	DOUBLE CARLYLE POLE 16'	-	-	-	-	69W	P81	P81	E	-	-
B	019-MA-01-SE	160+84.27	50.29' LT	MAST ARM POLE 30'	180°	54'	180°	6' (STANDARD)	145W	21, 22, 83	-	C, F	VD2, PE2, PE8	B
C	019-MA-01-NE	160+85.97	44.22' RT	MAST ARM POLE 30'	180°	36'	180°	6' (STANDARD)	145W	81, 82, P62	P62	D, F	VD8	A
D	019-CP-01-SE	160+95.91	47.72' LT	DOUBLE CARLYLE POLE 16'	-	-	-	-	69W	P21	P21	E	-	-
E	019-PP-01-NW	161+48.52	42.46' RT	PEDESTAL POLE 12'	-	-	-	-	-	P61	P61	E	-	-
F	019-MA-01-SW	161+56.18	48.94' LT	MAST ARM POLE 30'	180°	30'	180°	6' (STANDARD)	145W	41, 42, P22	P22	D	VD4	A
G	019-MA-01-NW	161+64.91	42.55' RT	MAST ARM POLE 30'	180°	46'	180°	6' (STANDARD)	145W	61, 62, P42	P42	C, D	VD6, PE6, CCTV	B
H	019-PP-01-SW	161+70.45	37.70' LT	PEDESTAL POLE 12'	-	-	-	-	-	P41	P41	E	-	-
I	019-PP-01-SE	160+79.32	37.64' LT	PEDESTAL POLE 12'	-	-	-	-	-	P82	P82	D	-	-

NOTE: ALL POLES LISTED ABOVE SHALL BE LABELED WITH A POLE IDENTIFICATION STICKER IN ACCORDANCE WITH THE APPROPRIATE POLE ID

PROPOSED TEMPORARY SIGNS

R3-2
36"X36"
G

PROPOSED SIGNS

Columbia Pike — D3-1, 78" X 18", A
S Thomas St — D3-1, 72" X 18", B
LEFT TURN YIELD ON GREEN — R10-12, 30" X 36", C
R10-3E(L), 9" X 15", D
R10-3E(R), 9" X 15", E
NO TURN ON RED — R10-11, 24" X 30", F

*NOTE: SEE SHEET F17.5 FOR DETAILED STREET NAME SIGN LAYOUT

LEGEND

EXISTING	PROPOSED
RIGHT OF WAY	PERMANENT EASEMENT
EASEMENT	TEMPORARY CONSTRUCTION EASEMENT
TRAFFIC SIGNAL CABINET W/ UPS	TRAFFIC SIGNAL CABINET W/ UPS
EXTRA LARGE JUNCTION BOX	24"X36" JUNCTION BOX (61-04, TYPE-3)
LARGE JUNCTION BOX	LARGE JUNCTION BOX (61-02)
SMALL JUNCTION BOX	SMALL JUNCTION BOX (14040-01)
TRAFFIC SIGNAL HEAD	TRAFFIC SIGNAL HEAD
PEDESTRIAN SIGNAL HEAD	PEDESTRIAN SIGNAL HEAD
SIGNAL PHASING	SIGNAL PHASING
TRAFFIC SIGNAL LUMINAIRE	TRAFFIC SIGNAL LUMINAIRE
SIGNAL POLE AND MAST ARM	SIGNAL POLE AND MAST ARM
PEDESTAL POLE	PEDESTAL POLE
PEDESTRIAN PUSH BUTTON	PEDESTRIAN PUSH BUTTON
PREEMPTION DEVICE	PREEMPTION DEVICE
VIDEO DETECTION CAMERA	VIDEO DETECTION CAMERA
VIDEO DETECTION ZONE	VIDEO DETECTION ZONE
CLOSED CIRCUIT TELEVISION VIDEO	CLOSED CIRCUIT TELEVISION VIDEO
SIGN	SIGN
POWER SERVICE PEDESTAL	POWER SERVICE PEDESTAL
CONDUIT	CONDUIT
CONDUIT WITH PROPOSED CABLE	16 FT CARLYLE STREET LIGHT POLE

TEMPORARY SIGNAL HEAD

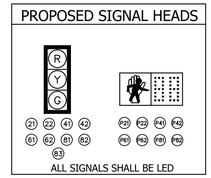
COLOR SEQUENCE CHART

PHASE	2	4	6	8	2+6	4+8	
SIGNAL	R/W	R/W	R/W	R/W	R/W	R/W	FLASH
21, 22	G				G		Y
41, 42		G				G	R
61, 62			G		G		Y
81, 82, 83				G		G	R
61, 62, 63	W*				W*		DARK
P41, P42		W*				W*	DARK
P61, P62			W*		W*		DARK
P81, P82				W*		W*	DARK

NOTE: BLANK SPACES IN THIS CHART REPRESENT A "RED" SIGNAL INDICATION.

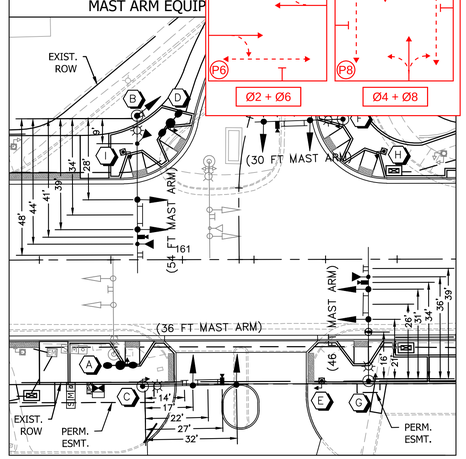
*WALK INDICATION IS DISPLAYED WHEN PEDESTRIAN CALL IS SERVICED; WALK INDICATION IS DISPLAYED UNTIL IT IS TIMED OUT. OTHERWISE "DON'T WALK" INDICATION IS DISPLAYED.

PROPOSED SIGNAL HEADS

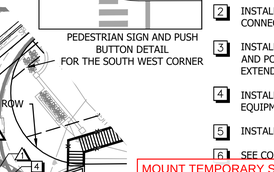


ALL SIGNALS SHALL BE LED

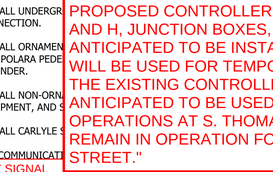
MAST ARM EQUIP...



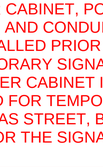
TEMPORARY SIGNAL PHASING DIAGRAM (PHASE 3A)



TEMPORARY SIGNAL PHASING DIAGRAM (PHASE 3B)



PROPOSED ACCESSIBLE PEDESTRIAN PUSHBUTTON



P22, P42, P62, P82 — P21, P41, P61, P81

NOTE: ACCESSIBLE PUSHBUTTON SYSTEM SHALL BE POLARA SYSTEM CONFORMING TO ARLINGTON COUNTY SPECIFICATIONS AND SHALL INCLUDE A POLARA CENTRAL CONTROL UNIT.

PUSHBUTTON	WALK MESSAGE
P41, P42, P81, P82	"COLUMBIA PIKE, WALK SIGN IS ON TO CROSS COLUMBIA PIKE."
P21, P22, P61, P62	"THOMAS STREET, WALK SIGN IS ON TO CROSS THOMAS STREET."

GRAPHIC SCALE IN FEET
0 12.5 25 50
(HORIZONTAL SCALE)

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

TEMPORARY SIGNAL PLAN

COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS
SEGMENT F
COLUMBIA PIKE AND S. THOMAS ST (TS #019)

SCALE: AS SHOWN | SHEET: F19.36 of F19.44

ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES
LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES
10/19/2021
APPROVAL DATE

ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES
Facilities & Engineering Division
Engineering Bureau
2100 Clarendon Boulevard, Suite 813
Arlington, VA 22201
Phone: 703.228.3629
Fax: 703.228.3606

Kimley»Horn
Kimley-Horn and Associates, Inc.
©2021 KIMLEY-HORN AND ASSOCIATES, INC.
11400 Commerce Park Drive, Suite 400
Reston, Virginia 20191
Phone: 703-674-1300
Fax: 703-674-1350

Seal
COMMONWEALTH OF VIRGINIA
MICHAEL R. ALBRIGHT
Lic. No. 46643
09/10/2021
PROFESSIONAL ENGINEER

Approvals Date
Design Team Engineer Supervisor
Construction Management Supervisor
Water, Sewer, Streets Bureau Chief
Transportation Director
Project Manager

Revisions Date

Designed: TC
Drawn: TC
Checked: GG
Miss Utility Transmittal #:

Filename: 010073-F-TRAF-THOMAS.dwg
Path: K:\NVA_RPR\110010073 Columbia Pike Multimodal\Production\Task Design\PlanSheets
Plotted: September 10, 2021
Plotted by: patrick.husted

CONDUIT AND CABLE DESCRIPTIONS

1 2-2" CONDUIT PVC
2-14/7C FOR SIGNAL HEADS 21, 22, 41, 42 (TO BE REMOVED)
1-14/7C FOR PED HEAD P42 (TO BE REMOVED)
2-14/7C FOR SIGNAL HEADS 21, 22, 41, 42
1-14/7C FOR PED HEAD P42
1-14/3C FOR PED PUSH BUTTON P42
2-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE (TO BE REMOVED)
2-PREEMPTION CABLES (TO BE REMOVED)
1-12/2C FOR LUMINAIRE
2-PREEMPTION CABLES
1-#8 AWG (EGC)

2 **1-2" CONDUIT PVC**
1-14/7C FOR PED HEAD P43
1-14/3C FOR PED PUSH BUTTON P43
1-12/2C FOR CARLYLE STREET LIGHT
1-#6 AWG (EGC)

3 **1-3" CONDUIT PVC**
2-14/7C FOR SIGNAL HEADS 21, 22, 41, 42
2-LEAD IN CABLE FOR THERMAL VIDEO DETECTION
1-14/7C FOR PED HEAD P42
1-14/3C FOR PED PUSH BUTTON P42
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
2-PREEMPTION CABLES
1-#6 AWG (EGC)

4 **1-4" CONDUIT (BORED) HDPE**
2-14/7C FOR SIGNAL HEADS 21, 22, 41, 42
2-LEAD IN CABLE FOR THERMAL VIDEO DETECTION
2-14/7C FOR PED HEADS P42, P43
2-14/3C FOR PED PUSH BUTTONS P42, P43
1-12/2C FOR LUMINAIRE
1-12/2C FOR CARLYLE STREET LIGHT
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE
2-PREEMPTION CABLES
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE SPARE
1-#6 AWG (EGC)

5 **1-2" CONDUIT PVC**
1-14/7C FOR PED HEAD P41
1-14/3C FOR PED PUSH BUTTON P41
1-#6 AWG (EGC)

6 **1-2" CONDUIT PVC**
1-14/7C FOR PED HEAD P62
1-14/3C FOR PED PUSH BUTTON P62
1-12/2C FOR CARLYLE STREET LIGHT
1-#6 AWG (EGC)

7 **1-4" CONDUIT (BORED) HDPE**
2-14/7C FOR PED HEADS P41, P62
2-14/3C FOR PED PUSH BUTTONS P41, P62
1-12/2C FOR CARLYLE STREET LIGHT
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE SPARE
1-#6 AWG (EGC)

8 **1-2" CONDUIT PVC**
1-14/7C FOR PED HEAD P61
1-14/3C FOR PED PUSH BUTTON P61
1-12/2C FOR CARLYLE STREET LIGHT
1-#6 AWG (EGC)

9 **1-3" CONDUIT PVC**
1-14/7C FOR SIGNAL HEADS 61, 62
1-CCTV LEAD IN CABLE
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

10 **1-2" CONDUIT PVC**
1-14/7C FOR PED HEAD P44
1-14/3C FOR PED BUSH BUTTON P44
1-#6 AWG (EGC)

11 **3-3" CONDUIT PVC**
3-14/7C FOR SIGNAL HEADS 21, 22, 41, 42, 61, 62
6-14/7C FOR PED HEAD P41, P42, P43, P44, P61, P62
6-14/3C FOR PED PUSH BUTTON P41, P42, P43, P44, P61, P62
3-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN
3-#6 AWG (EGC)

1-3" CONDUIT PVC
3-PREEMPTION CABLES
1-#6 AWG (EGC)

12 **1-2" CONDUIT METAL**
4-#6 AWG FOR ELECTRICAL SERVICE

13 **1-4" CONDUIT PVC**
1-14/7C FOR SIGNAL HEADS 61, 62
3-14/7C FOR PED HEADS P41, P61, P62
3-14/3C FOR PED PUSH BUTTONS P41, P6
1-CCTV LEAD IN CABLE
1-LEAD IN FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
2-12/2C FOR CARLYLE STREET LIGHTS
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

14 **1-3" CONDUIT PVC**
2-12/C FOR LUMINAIRES
3-12/C FOR CARLYLE STREET LIGHTS
1-#6 AWG (EGC)

EGC - ELECTRICAL GROUNDING CONDUCTOR
HDPE - HIGH DENSITY POLYETHYLENE CONDUIT

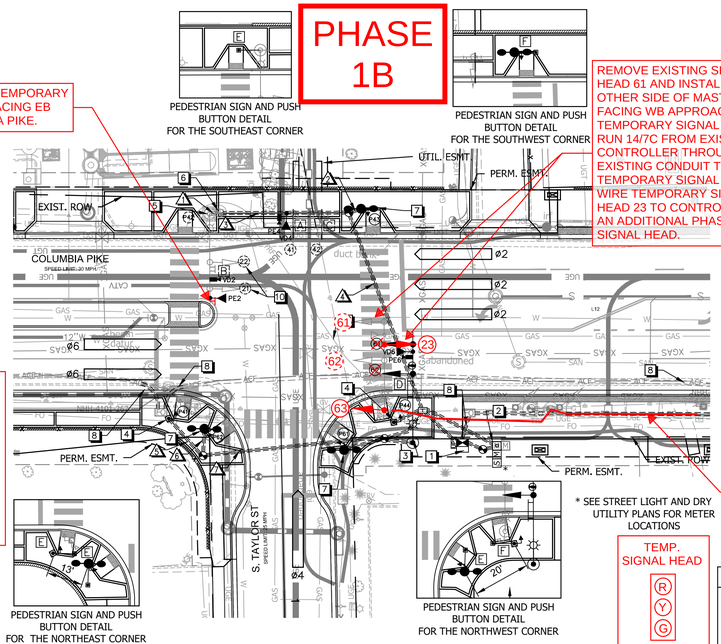
LEGEND: *EXISTING CABLE TO BE REMOVED*
EXISTING CABLE/CONDUIT TO REMAIN
PROPOSED CABLE/CONDUIT TO BE INSTALLED

PHASE 1B

INSTALL TEMPORARY SIGN G FACING EB COLUMBIA PIKE.

REMOVE EXISTING SIGNAL HEAD 61 AND INSTALL ON OTHER SIDE OF MAST ARM FACING WB APPROACH AS TEMPORARY SIGNAL HEAD 23. RUN 14/7C FROM EXISTING CONTROLLER THROUGH EXISTING CONDUIT TO TEMPORARY SIGNAL HEAD 23. WIRE TEMPORARY SIGNAL HEAD 23 TO CONTROLLER AS AN ADDITIONAL PHASE 2 SIGNAL HEAD.

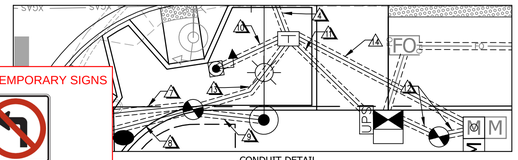
NOTE: MOUNT TEMPORARY SIGNAL HEAD 63 TO SIDE OF EXISTING MAST ARM POLE. RUN CABLE FROM EXISTING CONTROLLER THROUGH EXISTING CONDUIT TO TEMPORARY SIGNAL HEAD 63. WIRE TEMPORARY SIGNAL HEAD 63 TO CONTROLLER AS AN ADDITIONAL PHASE 6 SIGNAL HEAD.



* SEE STREET LIGHT AND DRY UTILITY PLANS FOR METER LOCATIONS

TEMP. SIGNAL HEAD

2-14/7C FOR TEMP SIGNAL HEADS 23 AND 63 TO EXISTING CONTROLLER AT S. THOMAS STREET.



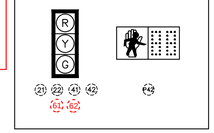
PROPOSED TEMPORARY SIGNS

PROPOSED ACCESSIBLE PEDESTRIAN PUSHBUTTON

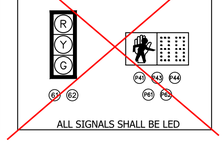
NOTE: ACCESSIBLE PUSHBUTTON SYSTEM SHALL BE POLARA SYSTEM CONFORMING TO ARLINGTON COUNTY SPECIFICATIONS AND SHALL INCLUDE A POLARA CENTRAL CONTROL UNIT.

PUSHBUTTON	WALK MESSAGE
P41, P42, P43, P44	"COLUMBIA PIKE, WALK SIGN IS ON TO CROSS COLUMBIA PIKE."
P61, P62	"TAYLOR STREET, WALK SIGN IS ON TO CROSS TAYLOR STREET."

EXISTING SIGNAL HEADS



PROPOSED SIGNAL HEADS



ALL SIGNALS SHALL BE LED

CONSTRUCTION NOTES

EXISTING CONTROLLER AND CABINET TO BE REPLACED WITH NEW CONTROLLER AND CABINET ON A NEW FOUNDATION. ALL OTHER EXISTING EQUIPMENT TO BE REMOVED INCLUDING UNUSED WIRING, CONDUIT, AND JUNCTION BOXES, UNLESS OTHERWISE SPECIFIED. EXISTING [illegible]NTY.

1. INSTALL SIGNAL CONTROLLER CABINET WI
2. INSTALL UNDERGROUND ELECTRIC SERVIC[illegible]VICE CONNECTION.
3. INSTALL ORNAMENTAL MAST ARM SIGNAL
4. INSTALL NON-ORNAMENTAL PEDESTAL POL[illegible]ESTRIAN EQUIPMENT, AND SIGN.
5. EXISTING MAST ARM, POLE, TRAFFIC SIGN[illegible]NS TO BE RETAINED. CONTRACTOR TO REMOVE E[illegible] PEDESTRIAN EQUIPMENT, SIGN, AND 18" P[illegible].
6. CONTRACTOR TO INSTALL PROPOSED CONDUIT INTO EXISTING JUNCTION BOX AS SHOWN. DO NOT CUT EXISTING CONDUCTORS. PROPOSED CONDUIT SHALL EXTEND INTO EXISTING JUNCTION BOX THREE INCHES. CONTRACTOR IS RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF CONDUCTORS, CONDUITS, AND JUNCTION BOXES IF DAMAGED.
7. INSTALL CARLYLE STREET LIGHT POLE WITH PEDESTRIAN SIGNAL HEAD, POLARA PEDESTRIAN EQUIPMENT, AND SIGN.
8. SEE COMMUNICATION PLAN ON SHEET F17.1.2 FOR COMMUNICATION CONNECTION DETAILS.
9. EXISTING SIGNAL CABLES BETWEEN POLE G AND THE EXISTING SIGNAL CABINET TO REMAIN IN SERVICE DURING CONSTRUCTION. CONTRACTOR SHALL REMOVE EXISTING SIGNAL CABLES AT THE TIME THE NEW TRAFFIC SIGNAL IS ACTIVATED FOR SERVICE.
10. CONTRACTOR TO FIELD ADJUST THE LATERAL POSITION OF SIGNAL HEADS 21 AND 22 ON THE MAST ARM TO BE CENTERED OVER THE EASTBOUND LANES.

NOTE:

THIS TEMPORARY SIGNAL PLAN ANTICIPATES ALL EXISTING SIGNAL INFRASRUCTURE WILL REMAIN IN OPERATION THROUGH PHASE 1. NO PROPOSED SIGNAL INFRASTRUCTURE WILL BE IN OPERATION. THE EXISTING CONTROLLER AT S. THOMAS STREET SHALL BE MAINTAINED THROUGHOUT THIS MOT PHASE.

NOTE: EXACTLY ONE SIGNALIZED PEDESTRIAN CROSSING SHALL BE PROVIDED ACROSS COLUMBIA PIKE AT EITHER S. TAYLOR ST OR S. THOMAS ST DURING EACH PHASE. THIS CROSSWALK LOCATION MAY CHANGE DURING EACH PHASE.

INITIAL TIMING CHART

PHASE	1	2	3	4	5	6	7	8
MOVEMENT		EB COLUMBIA PIKE		SB S. TAYLOR STREET		WB COLUMBIA PIKE		
PHASE ON		X		X		X		
PHASE OFF	X		X		X		X	X
INTERVAL	PHASE TIMINGS							
MIN GR		5.0		5.0		5.0		
PASSAGE		0.0		2.0		0.0		
YELLOW		4.0		4.0		4.0		
RED		3.0		3.0		3.0		
MAX 1		50.0		25.0		50.0		
MAX 2		-		-		-		
MIN GAP		-		-		-		
TIME BEFORE REDUCTION		-		-		-		
TIME TO REDUCE		-		-		-		
PED WALK		-		7.0		7.0		
PED FLASH DON'T WALK		-		16.0		10.0		
MODE		MAX RECALL		NON-LOCK		MAX RECALL		

COLOR SEQUENCE CHART

PHASE	2	4	6	2+6	
SIGNAL	R/W	R/W	R/W	R/W	FLASH
21, 22, 23	G			G	Y
41, 42		G			R
61, 62, 63			G	G	Y
P41, P42 P43, P44		W*			DARK
P61, P62			W*	W*	DARK

NOTE: BLANK SPACES IN THIS CHART REPRESENT A "RED" SIGNAL INDICATION.

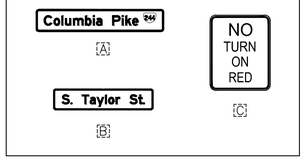
*WALK INDICATION IS DISPLAYED WHEN PEDESTRIAN CALL IS SERVICED; WALK INDICATION IS DISPLAYED UNTIL IT IS TIMED OUT. OTHERWISE "DONT WALK" INDICATION IS DISPLAYED.

POLE SCHEDULE

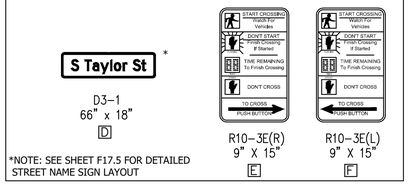
No.	POLE IDENTIFICATION	STATION	OFFSET	STANDARD TYPE	STANDARD SIG. M.A. ORIENT.	STANDARD SIG. M.A.	STANDARD LUM. M.A. ORIENT.	STANDARD LUM. M.A. (TYPE)	LUM. LED (4)	POLE SIGNAL MOUNTING VEHICLE & PED. HEADS	PED. PUSH BUTTONS	SIGNS	VIDEO DETECTOR PREEMPTION & CCTV	STREET NAME SIGN
A	354-PP-01-NE	158+57.32	36.43' RT	PEDESTAL POLE 12'	-	-	-	-	-	P41	P41	E	-	-
B	354-CP-01-NE	158+69.73	40.02' RT	DOUBLE CARLYLE POLE 16'	-	-	-	-	69W	P62	P62	E	-	-
C	354-CP-01-NW	159+18.55	47.40' RT	DOUBLE CARLYLE POLE 16'	-	-	-	-	69W	P61	P61	E	-	-
D	354-CP-01-SW	159+24.44	36.87' LT	DOUBLE CARLYLE POLE 16'	-	-	-	-	69W	P43	P43	F	-	-
E	354-PP-01-NW	159+35.88	37.73' RT	PEDESTAL POLE 12'	-	-	-	-	-	P44	P44	F	-	-
F	354-MA-01-NW	159+42.60	44.91' RT	MAST ARM POLE 30'	180°	38'	180°	6' (STANDARD)	145W	61, 62	-	-	VD6, PE6, CCTV	D
G	354-MA-01-SE	EXISTING	EXISTING	DUAL MAST ARM POLE	-	-	-	-	145W	21, 22, 41, 42, P42	P42	C, E	VD2, VD4, PE2, PE4	A, B

NOTE: ALL POLES LISTED ABOVE SHALL BE LABELED WITH A POLE IDENTIFICATION STICKER IN ACCORDANCE WITH THE APPROPRIATE POLE ID.

EXISTING SIGNS



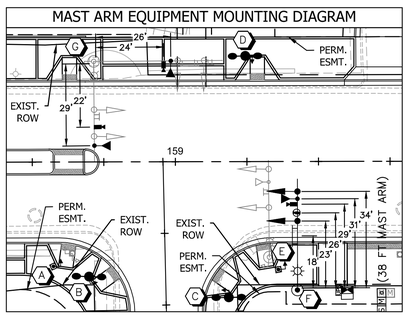
PROPOSED SIGNS



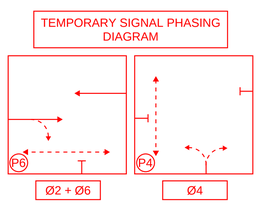
LEGEND

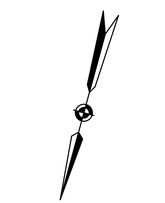
EXISTING	PROPOSED
RIGHT OF WAY	PERMANENT EASEMENT
EASEMENT	TEMPORARY CONSTRUCTION EASEMENT
TRAFFIC SIGNAL CABINET W/ UPS	TRAFFIC SIGNAL CABINET W/ UPS
EXTRA LARGE JUNCTION BOX	24"X36" JUNCTION BOX (61-04, TYPE-3)
LARGE JUNCTION BOX	LARGE JUNCTION BOX (61-02)
SMALL JUNCTION BOX	SMALL JUNCTION BOX (14040-01)
TRAFFIC SIGNAL HEAD	TRAFFIC SIGNAL HEAD
PEDESTRIAN SIGNAL HEAD	PEDESTRIAN SIGNAL HEAD
SIGNAL PHASING	SIGNAL PHASING
TRAFFIC SIGNAL LUMINAIRE	TRAFFIC SIGNAL LUMINAIRE
SIGNAL POLE AND MAST ARM	SIGNAL POLE AND MAST ARM
PEDESTAL POLE	PEDESTAL POLE
PEDESTRIAN PUSH BUTTON	PEDESTRIAN PUSH BUTTON
PREEMPTION DEVICE	PREEMPTION DEVICE
VIDEO DETECTION CAMERA	VIDEO DETECTION CAMERA
VIDEO DETECTION ZONE	VIDEO DETECTION ZONE
CLOSED CIRCUIT TELEVISION VIDEO	CLOSED CIRCUIT TELEVISION VIDEO
SIGN	SIGN
POWER SERVICE PEDESTAL	POWER SERVICE PEDESTAL
CONDUIT	CONDUIT
CONDUIT WITH PROPOSED CABLE	16 FT CARLYLE STREET LIGHT POLE

MAST ARM EQUIPMENT MOUNTING DIAGRAM



TEMPORARY SIGNAL PHASING DIAGRAM





GRAPHIC SCALE IN FEET
0 12.5 25 50
(HORIZONTAL SCALE)

ARLINGTON VIRGINIA

DEPARTMENT OF ENVIRONMENTAL SERVICES

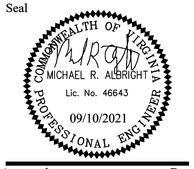
Facilities & Engineering Division
Engineering Bureau
2100 Clarendon Boulevard, Suite 813
Arlington, VA 22201
Phone: 703.228.3629
Fax: 703.228.3606

Kimley»Horn
Kimley-Horn and Associates, Inc.

©2021 KIMLEY-HORN AND ASSOCIATES, INC.

11400 Commerce Park Drive, Suite 400
Reston, Virginia 20191
Phone: 703-674-1300
Fax: 703-674-1350

Seal



Approvals Date

Design Team Engineer Supervisor

Construction Management Supervisor

Water, Sewer, Streets Bureau Chief

Transportation Director

Project Manager

Revisions Date

Designed: TC
Drawn: TC
Checked: GG
Miss Utility Transmittal #:

Filename: 010073-F-TRAF-TAYLOR.dwg
Path: K:\NOVA_RDWY\010073\Columbia Pike Multimodal\Production\Task 7.5 Final Design of Columbia Pike Segment\Segment F\7.5.2 - 100% Design\Plan\Sheets
Plotted: September 10, 2021
Plotted by: patrick.husted

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

TEMPORARY SIGNAL PLAN

COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS
SEGMENT F
COLUMBIA PIKE AND S. TAYLOR ST (TS #354)

SCALE: AS SHOWN SHEET: F19.37 of F19.44

ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES

10/19/2021
APPROVAL DATE

CONDUIT AND CABLE DESCRIPTIONS

1
2-2" CONDUIT PVC
2-14/7C FOR SIGNAL HEADS 21, 22, 41, 42 (TO BE REMOVED)
1-14/7C FOR PED HEAD P42 (TO BE REMOVED)
2-14/7C FOR SIGNAL HEADS 21, 22, 41, 42
1-14/7C FOR PED HEAD P42
1-14/3C FOR PED PUSH BUTTON P42
2-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE (TO BE REMOVED)
2-PREEMPTION CABLES (TO BE REMOVED)
1-12/2C FOR LUMINAIRE
2-PREEMPTION CABLES
1-#8 AWG (EGC)

2
1-2" CONDUIT PVC
1-14/7C FOR PED HEAD P43
1-14/3C FOR PED PUSH BUTTON P43
1-12/2C FOR CARLYLE STREET LIGHT
1-#6 AWG (EGC)

3
1-3" CONDUIT PVC
2-14/7C FOR SIGNAL HEADS 21, 22, 41, 42
2-LEAD IN CABLE FOR THERMAL VIDEO DETECTION
1-14/7C FOR PED HEAD P42
1-14/3C FOR PED PUSH BUTTON P42
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
2-PREEMPTION CABLES
1-#6 AWG (EGC)

4
1-4" CONDUIT (BORED) HDPE
2-14/7C FOR SIGNAL HEADS 21, 22, 41, 42
2-LEAD IN CABLE FOR THERMAL VIDEO DETECTION
2-14/7C FOR PED HEADS P42, P43
2-14/3C FOR PED PUSH BUTTONS P42, P43
1-12/2C FOR LUMINAIRE
1-12/2C FOR CARLYLE STREET LIGHT
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE
2-PREEMPTION CABLES
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE SPARE
1-#6 AWG (EGC)

5
1-2" CONDUIT PVC
1-14/7C FOR PED HEAD P41
1-14/3C FOR PED PUSH BUTTON P41
1-#6 AWG (EGC)

6
1-2" CONDUIT PVC
1-14/7C FOR PED HEAD P62
1-14/3C FOR PED PUSH BUTTON P62
1-12/2C FOR CARLYLE STREET LIGHT
1-#6 AWG (EGC)

7
1-4" CONDUIT (BORED) HDPE
2-14/7C FOR PED HEADS P41, P62
2-14/3C FOR PED PUSH BUTTONS P41, P62
1-12/2C FOR CARLYLE STREET LIGHT
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE SPARE
1-#6 AWG (EGC)

8
1-2" CONDUIT PVC
1-14/7C FOR PED HEAD P61
1-14/3C FOR PED PUSH BUTTON P61
1-12/2C FOR CARLYLE STREET LIGHT
1-#6 AWG (EGC)

9
1-3" CONDUIT PVC
1-14/7C FOR SIGNAL HEADS 61, 62
1-CCTV LEAD IN CABLE
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

10
1-2" CONDUIT PVC
1-14/7C FOR PED HEAD P44
1-14/3C FOR PED BUSH BUTTON P44
1-#6 AWG (EGC)

11
3-3" CONDUIT PVC
3-14/7C FOR SIGNAL HEADS 21, 22, 41, 42, 61, 62
6-14/7C FOR PED HEAD P41, P42, P43, P44, P61, P62
6-14/3C FOR PED PUSH BUTTON P41, P42, P43, P44, P61, P62
3-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN
3-#6 AWG (EGC)

1-3" CONDUIT PVC
3-PREEMPTION CABLES
1-#6 AWG (EGC)

12
1-2" CONDUIT METAL
4-#6 AWG FOR ELECTRICAL SERVICE

13
1-4" CONDUIT PVC
1-14/7C FOR SIGNAL HEADS 61, 62
3-14/7C FOR PED HEADS P41, P61, P62
3-14/3C FOR PED PUSH BUTTONS P41, P61, P62
1-CCTV LEAD IN CABLE
1-LEAD IN FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
2-12/2C FOR CARLYLE STREET LIGHTS
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

14
1-3" CONDUIT PVC
2-12/C FOR LUMINAIRES
3-12/C FOR CARLYLE STREET LIGHTS
1-#6 AWG (EGC)

EGC - ELECTRICAL GROUNDING CONDUCTOR
HDPE - HIGH DENSITY POLYETHYLENE CONDUIT

LEGEND: *EXISTING CABLE TO BE REMOVED*
EXISTING CABLE/CONDUIT TO REMAIN
PROPOSED CABLE/CONDUIT TO BE INSTALLED

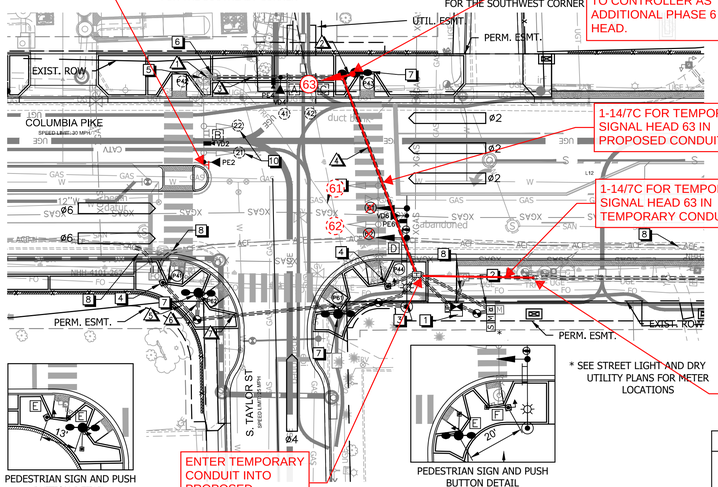
PHASE 3A / 3B

INSTALL TEMPORARY SIGN G FACING EB COLUMBIA PIKE.

PEDESTRIAN SIGN AND PUSH BUTTON DETAIL FOR THE SOUTHEAST CORNER

PEDESTRIAN SIGN AND PUSH BUTTON DETAIL FOR THE SOUTHWEST CORNER

INSTALL TEMPORARY SIGNAL HEAD 63 ON PROPOSED CARLYLE POLE. RUN CABLE FROM EXISTING CONTROLLER THROUGH EXISTING, TEMPORARY, AND PROPOSED CONDUIT TO TEMPORARY SIGNAL HEAD 63. WIRE TEMPORARY SIGNAL HEAD 63 TO CONTROLLER AS ADDITIONAL PHASE 6 SIGNAL HEAD.



PEDESTRIAN SIGN AND PUSH BUTTON DETAIL FOR THE NORTHEAST CORNER

ENTER TEMPORARY CONDUIT INTO PROPOSED JUNCTION BOX.

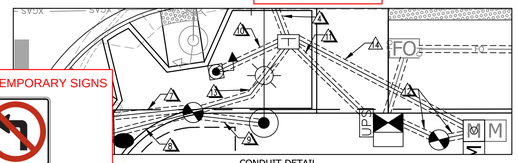
PEDESTRIAN SIGN AND PUSH BUTTON DETAIL FOR THE NORTHWEST CORNER

* SEE STREET LIGHT AND DRY UTILITY PLANS FOR METER LOCATIONS

ENTER TEMPORARY CONDUIT INTO EXISTING JUNCTION BOX.

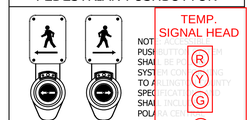
PROPOSED TEMPORARY SIGNS

R3-2
36"X36"
G



CONDUIT DETAIL FOR THE NORTHWEST CORNER
SCALE: 1" = 10'

PROPOSED ACCESSIBLE PEDESTRIAN PUSHBUTTON



TEMP. SIGNAL HEAD

NOTE: PUSHBUTTON SHALL BE LOCATED SYSTEM CONTROLLER TO ACCOMMODATE SPECIFICATIONS. SHALL BE LOCATED POLE A. CONTROL UNIT.

PUSHBUTTON	WALK MESSAGE
P41, P42, P43, P44	"COLUMBIA PIKE, WALK SIGN IS ON TO CROSS COLUMBIA PIKE."
P61, P62	"TAYLOR STREET, WALK SIGN IS ON TO CROSS TAYLOR STREET."

CONSTRUCTION NOTES

EXISTING CONTROLLER AND CABINET TO BE REPLACED WITH NEW CONTROLLER AND CABINET ON A NEW FOUNDATION. ALL OTHER EXISTING EQUIPMENT TO BE REMOVED INCLUDING UNUSED WIRING, CONDUIT, AND JUNCTION BOXES UNLESS OTHERWISE SPECIFIED.

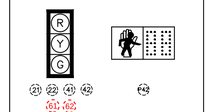
1. INSTALL SIGNAL CONTROLLER
2. INSTALL UNDERGROUND ELECT CONNECTION.
3. INSTALL ORNAMENTAL MAST A
4. INSTALL NON-ORNAMENTAL PE EQUIPMENT, AND SIGN.
5. EXISTING MAST ARM, POLE, TR BE RETAINED. CONTRACTOR TO PEDESTRIAN EQUIPMENT, SIGN
6. CONTRACTOR TO INSTALL PROPOSED CONDUIT INTO EXISTING JUNCTION BOX AS SHOWN. DO NOT CUT EXISTING CONDUCTORS. PROPOSED CONDUIT SHALL EXTEND INTO EXISTING JUNCTION BOX THREE INCHES. CONTRACTOR IS RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF CONDUCTORS, CONDUITS, AND JUNCTION BOXES IF DAMAGED.
7. INSTALL CARLYLE STREET LIGHT POLE WITH PEDESTRIAN SIGNAL HEAD, POLARA PEDESTRIAN EQUIPMENT, AND SIGN.
8. SEE COMMUNICATION PLAN ON SHEET F17.1.2 FOR COMMUNICATION CONNECTION DETAILS.
9. EXISTING SIGNAL CABLES BETWEEN POLE G AND THE EXISTING SIGNAL CABINET TO REMAIN IN SERVICE DURING CONSTRUCTION. CONTRACTOR SHALL REMOVE EXISTING SIGNAL CABLES AT THE TIME THE NEW TRAFFIC SIGNAL IS ACTIVATED FOR SERVICE.
10. CONTRACTOR TO FIELD ADJUST THE LATERAL POSITION OF SIGNAL HEADS 21 AND 22 ON THE MAST ARM TO BE CENTERED OVER THE EASTBOUND LANES.

NOTE:

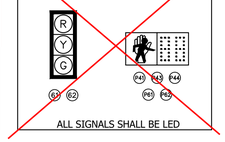
THIS TEMPORARY SIGNAL PLAN ANTICIPATES ALL EXISTING SIGNAL INFRASRUCTURE WILL REMAIN IN OPERATION THROUGH PHASE 3. NO PROPOSED SIGNAL INFRASTRUCTURE WILL BE IN OPERATION EXCEPT PROPOSED CARLYLE POLE D. THE EXISTING CONTROLLER AT S. THOMAS STREET SHALL BE MAINTAINED THROUGHOUT THIS MOT PHASE.

NOTE: EXACTLY ONE SIGNALIZED PEDESTRIAN CROSSING SHALL BE PROVIDED ACROSS COLUMBIA PIKE AT EITHER S. TAYLOR ST OR S. THOMAS ST DURING EACH PHASE. THIS CROSSWALK LOCATION MAY CHANGE DURING EACH PHASE.

EXISTING SIGNAL HEADS



PROPOSED SIGNAL HEADS



ALL SIGNALS SHALL BE LED

INITIAL TIMING CHART

PHASE	1	2	3	4	5	6	7	8
MOVEMENT		EB COLUMBIA PIKE		SB S. TAYLOR STREET		WB COLUMBIA PIKE		
PHASE ON		X		X		X		
PHASE OFF	X		X		X		X	X
INTERVAL	PHASE TIMINGS							
MIN GR		5.0		5.0		5.0		
PASSAGE		0.0		2.0		0.0		
YELLOW		4.0		4.0		4.0		
RED		3.0		3.0		3.0		
MAX 1		50.0		25.0		50.0		
MAX 2		-		-		-		
MIN GAP		-		-		-		
TIME BEFORE REDUCTION		-		-		-		
TIME TO REDUCE		-		-		-		
PED WALK		-		7.0		7.0		
PED FLASH DON'T WALK		-		16.0		10.0		
MODE		MAX RECALL		NON-LOCK		MAX RECALL		

COLOR SEQUENCE CHART

PHASE	2	4	6	2+6	
SIGNAL	R/W	R/W	R/W	R/W	FLASH
21, 22	G			G	Y
41, 42		G			R
61, 62, 63			G	G	Y
P41, P42 P43, P44		W*			DARK
P61, P62			W*	W*	DARK

NOTE: BLANK SPACES IN THIS CHART REPRESENT A "RED" SIGNAL INDICATION.

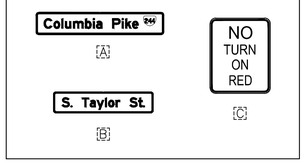
*WALK INDICATION IS DISPLAYED WHEN PEDESTRIAN CALL IS SERVICED; WALK INDICATION IS DISPLAYED UNTIL IT IS TIMED OUT. OTHERWISE "DONT WALK" INDICATION IS DISPLAYED.

POLE SCHEDULE

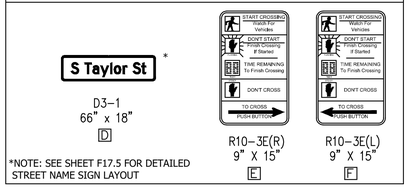
No.	POLE IDENTIFICATION	STATION	OFFSET	STANDARD TYPE	STANDARD SIG. M.A. ORIENT.	STANDARD SIG. M.A.	STANDARD LUM. M.A. ORIENT.	STANDARD LUM. M.A. (TYPE)	LUM. LED (4)	POLE SIGNAL MOUNTING VEHICLE & PED. HEADS	PED. PUSH BUTTONS	SIGNS	VIDEO DETECTOR PREEMPTION & CCTV	STREET NAME SIGN
A	354-PP-01-NE	158+57.32	36.43' RT	PEDESTAL POLE 12'	-	-	-	-	-	P41	P41	E	-	-
B	354-CP-01-NE	158+69.73	40.02' RT	DOUBLE CARLYLE POLE 16'	-	-	-	-	69W	P62	P62	E	-	-
C	354-CP-01-NW	159+18.55	47.40' RT	DOUBLE CARLYLE POLE 16'	-	-	-	-	69W	P61	P61	E	-	-
D	354-CP-01-SW	159+24.44	36.87' LT	DOUBLE CARLYLE POLE 16'	-	-	-	-	69W	P43	P43	F	-	-
E	354-PP-01-NW	159+35.88	37.73' RT	PEDESTAL POLE 12'	-	-	-	-	-	P44	P44	F	-	-
F	354-MA-01-NW	159+42.60	44.91' RT	MAST ARM POLE 30'	180°	38'	180°	6' (STANDARD)	145W	61, 62	-	-	VD6, PE6, CCTV	D
G	354-MA-01-SE	EXISTING	EXISTING	DUAL MAST ARM POLE	-	-	-	-	145W	21, 22, 41, 42, P42	P42	C, E	VD2, VD4, PE2, PE4	A, B

NOTE: ALL POLES LISTED ABOVE SHALL BE LABELED WITH A POLE IDENTIFICATION STICKER IN ACCORDANCE WITH THE APPROPRIATE POLE ID.

EXISTING SIGNS



PROPOSED SIGNS

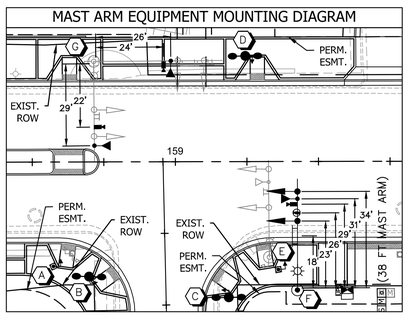


*NOTE: SEE SHEET F17.5 FOR DETAILED STREET NAME SIGN LAYOUT

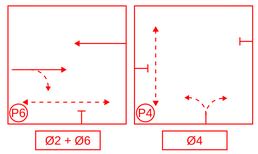
LEGEND

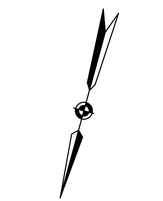
EXISTING	PROPOSED
RIGHT OF WAY	PERMANENT EASEMENT
EASEMENT	TEMPORARY CONSTRUCTION EASEMENT
TRAFFIC SIGNAL CABINET W/ UPS	TRAFFIC SIGNAL CABINET W/ UPS
EXTRA LARGE JUNCTION BOX	24"X36" JUNCTION BOX (61-04, TYPE-3)
LARGE JUNCTION BOX	LARGE JUNCTION BOX (61-02)
SMALL JUNCTION BOX	SMALL JUNCTION BOX (14040-01)
TRAFFIC SIGNAL HEAD	TRAFFIC SIGNAL HEAD
PEDESTRIAN SIGNAL HEAD	PEDESTRIAN SIGNAL HEAD
SIGNAL PHASING	SIGNAL PHASING
TRAFFIC SIGNAL LUMINAIRE	TRAFFIC SIGNAL LUMINAIRE
SIGNAL POLE AND MAST ARM	SIGNAL POLE AND MAST ARM
PEDESTAL POLE	PEDESTAL POLE
PEDESTRIAN PUSH BUTTON	PEDESTRIAN PUSH BUTTON
PREEMPTION DEVICE	PREEMPTION DEVICE
VIDEO DETECTION CAMERA	VIDEO DETECTION CAMERA
VIDEO DETECTION ZONE	VIDEO DETECTION ZONE
CLOSED CIRCUIT TELEVISION VIDEO	CLOSED CIRCUIT TELEVISION VIDEO
SIGN	SIGN
POWER SERVICE PEDESTAL	POWER SERVICE PEDESTAL
CONDUIT	CONDUIT
CONDUIT WITH PROPOSED CABLE	16 FT CARLYLE STREET LIGHT POLE

MAST ARM EQUIPMENT MOUNTING DIAGRAM



TEMPORARY SIGNAL PHASING DIAGRAM





GRAPHIC SCALE IN FEET
0 12.5 25 50
(HORIZONTAL SCALE)

ARLINGTON VIRGINIA

DEPARTMENT OF ENVIRONMENTAL SERVICES

Facilities & Engineering Division
Engineering Bureau
2100 Clarendon Boulevard, Suite 813
Arlington, VA 22201
Phone: 703.228.3629
Fax: 703.228.3606

Kimley»Horn
Kimley-Horn and Associates, Inc.

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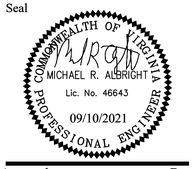
11400 Commerce Park Drive, Suite 400
Reston, Virginia 20191
Phone: 703-674-1300
Fax: 703-674-1350

Seal



Approvals Date

Design Team Engineer Supervisor

Construction Management Supervisor

Water, Sewer, Streets Bureau Chief

Transportation Director

Project Manager

Revisions Date

Designed: TC
Drawn: TC
Checked: GG
Miss Utility Transmittal #:

Filename: 010073-F-TRAF-TAYLOR.dwg
Path: K:\NOVA_RDWY\1100307\ Columbia Pike Multimodal\Production\Task 7.5 Final Design of Columbia Pike Segment\Segment F\7.5.2 - 100% Design\Plan\Sheets
Plotted: September 10, 2021
Plotted by: patrick.husted

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

TEMPORARY SIGNAL PLAN

COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS
SEGMENT F
COLUMBIA PIKE AND S. TAYLOR ST (TS #354)

SCALE: AS SHOWN SHEET: F19.38 of F19.44

ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES

10/19/2021
APPROVAL DATE

PHASE 1B/1C

CONDUIT AND CABLE DESCRIPTIONS

1 **1-3" CONDUIT PVC**
2-14/7C FOR SIGNAL HEADS 11, 61, 62
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

2 **1-3" CONDUIT PVC**
2-14/7C FOR PED SIGNAL HEADS P42, P61
2-14/3C FOR PED PUSH BUTTONS P42, P61
1-#6 AWG (EGC)

3 **1-4" CONDUIT (BORED) HDPE**
2-14/7C FOR SIGNAL HEADS 11, 61, 62
2-14/7C FOR PED SIGNAL HEADS P42, P61
2-14/3C FOR PED PUSH BUTTONS P42, P61
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE
1-PREEMPTION CABLE
1-#6 AWG (EGC)

4 **1-3" CONDUIT PVC**
1-14/7C FOR SIGNAL HEADS 81, 82
1-14/7C FOR PED SIGNAL HEAD P62
1-14/3C FOR PED PUSH BUTTON P62
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

5 **1-2" CONDUIT PVC**
1-14/7C FOR PED SIGNAL HEAD P81
1-14/3C FOR PED PUSH BUTTON P81
1-#6 AWG (EGC)

6 **1-4" CONDUIT (BORED) HDPE**
3-14/7C FOR SIGNAL HEADS 11, 61, 62, 81, 82
4-14/7C FOR PED SIGNAL HEADS P42, P61, P62, P81
4-14/3C FOR PED PUSH BUTTONS P42, P61, P62, P81
2-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
2-12/2C FOR LUMINAIRES
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE
2-PREEMPTION CABLES
1-#6 AWG (EGC)

7 **1-2" CONDUIT PVC**
1-14/7C FOR PED SIGNAL HEAD P82
1-14/3C FOR PED PUSH BUTTON P82
1-#6 AWG (EGC)

8 **1-3" CONDUIT PVC**
2-14/7C FOR SIGNAL HEADS 21, 22, 51
1-14/7C FOR PED SIGNAL HEAD P21
1-14/3C FOR PED PUSH BUTTON P21
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

9 **1-2" CONDUIT PVC**
4-RED LIGHT CAMERA CABLES (TO BE INSTALLED BY OTHERS)
1-#6 AWG (EGC)

10 **1-2" CONDUIT PVC**
1-14/7C FOR PED SIGNAL HEAD P41
1-14/3C FOR PED PUSH BUTTON P41
1-12/2C FOR CARLYLE STREET LIGHT
1-#6 AWG (EGC)

11 **1-3" CONDUIT PVC**
3-14/7C FOR SIGNAL HEADS 41, 42, 43, 71
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

12 **1-2" CONDUIT PVC**
1-14/7C FOR PED SIGNAL HEAD P22
1-14/3C FOR PED PUSH BUTTON P22
1-#6 AWG (EGC)

13 **1-4" CONDUIT (BORED) HDPE**
3-14/7C FOR SIGNAL HEADS 41, 42, 43, 71
2-14/7C FOR PED SIGNAL HEADS P22, P41
2-14/3C FOR PED PUSH BUTTONS P22, P41
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
4-RED LIGHT CAMERA CABLES (TO BE INSTALLED BY OTHERS)
1-12/2C FOR CARLYLE STREET LIGHT
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE
1-PREEMPTION CABLE
1-#6 AWG (EGC)

14 **3-3" CONDUIT PVC**
8-14/7C FOR SIGNAL HEADS 11, 21, 41, 42, 43, 51, 61, 62, 71, 81, 82
8-14/7C FOR PED SIGNAL HEADS P21, P22, P41, P42, P61, P62, P81, P82
8-14/3C FOR PED PUSH BUTTONS P21, P22, P41, P42, P61, P62, P81, P82
4-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
4-RED LIGHT CAMERA CABLES (TO BE INSTALLED BY OTHERS)
3-#6 AWG (EGC)

1-3" CONDUIT PVC
4-PREEMPTION CABLES
1-#6 AWG (EGC)

15 **1-2" CONDUIT METAL**
4-#6 AWG FOR ELECTRICAL SERVICE

16 **1-3" CONDUIT PVC**
1-12/C FOR CARLYLE STREET LIGHTS
4-12/C FOR LUMINAIRES
1-#6 AWG (EGC)

16A **1-3" CONDUIT PVC**
1-12/C FOR CARLYLE STREET LIGHTS
4-12/C FOR LUMINAIRES
1-#6 AWG (EGC)

LEGEND:
EXISTING CABLE TO BE REMOVED
EXISTING CABLE/CONDUIT TO REMAIN
PROPOSED CABLE/CONDUIT TO BE INSTALLED

EGC - ELECTRICAL GROUNDING CONDUCTOR
HDPE - HIGH DENSITY POLYETHYLENE CONDUIT

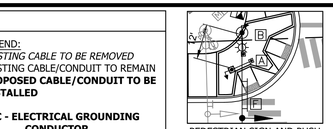
1-14/7C FOR TEMP SIGNAL HEAD 52.

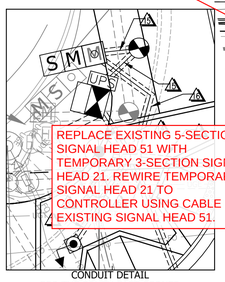
PROPOSED ACCESSIBLE PEDESTRIAN PUSHBUTTON

P42, P61, P62, P82 — P21, P22, P41, P81

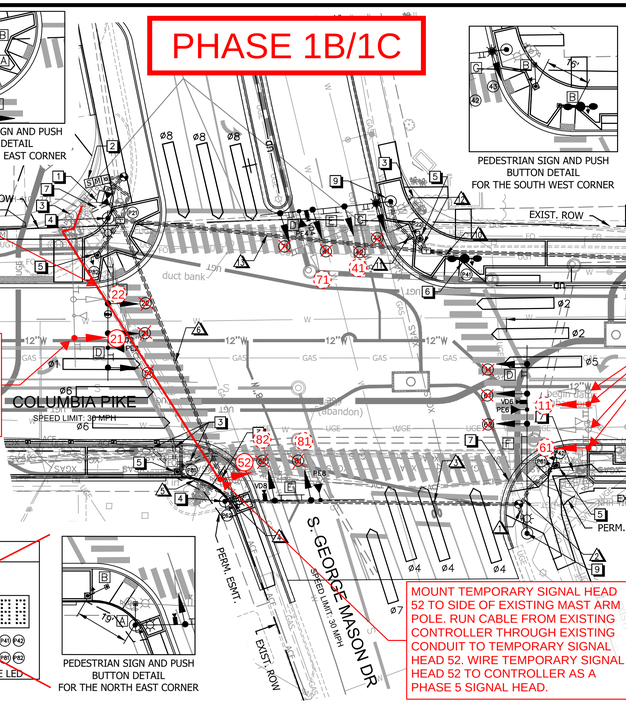
NOTE: ACCESSIBLE PUSHBUTTON SYSTEM SHALL BE POLARA SYSTEM CONFORMING TO ARLINGTON COUNTY SPECIFICATIONS AND SHALL INCLUDE A POLARA CENTRAL CONTROL UNIT.

PUSHBUTTON	WALK MESSAGE
P41, P42, P81, P82	"COLUMBIA PIKE, WALK SIGN IS ON TO CROSS COLUMBIA PIKE."
P21, P22, P61, P62	"GEORGE MASON DRIVE, WALK SIGN IS ON TO GEORGE MASON DRIVE."

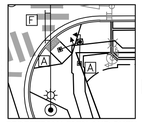




REPLACE EXISTING 5-SECTION SIGNAL HEAD 51 WITH TEMPORARY 3-SECTION SIGNAL HEAD 21. REWIRE TEMPORARY SIGNAL HEAD 21 TO CONTROLLER USING CABLE FOR EXISTING SIGNAL HEAD 51.



SHIFT SIGNAL HEADS 11 AND 61 NORTH TO ALIGN WITH WB COLUMBIA PIKE.

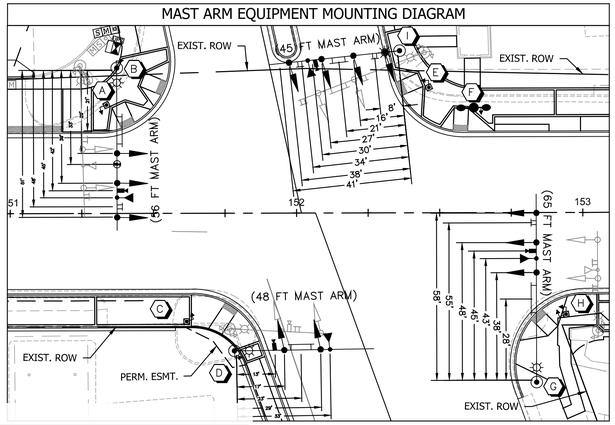


MOUNT TEMPORARY SIGNAL HEAD 52 TO SIDE OF EXISTING MAST ARM POLE. RUN CABLE FROM EXISTING CONTROLLER THROUGH EXISTING CONDUIT TO TEMPORARY SIGNAL HEAD 52. WIRE TEMPORARY SIGNAL HEAD 52 TO CONTROLLER AS A PHASE 5 SIGNAL HEAD.

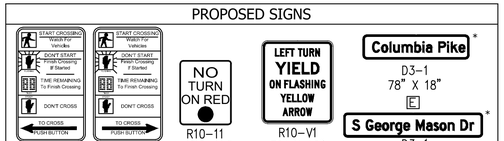
PROPOSED SIGNAL HEADS

ALL SIGNALS SHALL BE LED

MAST ARM EQUIPMENT MOUNTING DIAGRAM



PROPOSED SIGNS



*NOTE: SEE SHEET F17.5 FOR DETAILED STREET NAME SIGN LAYOUT

CONSTRUCTION NOTES

EXISTING CONTROLLER AND CABINET TO BE REPLACED WITH NEW CONTROLLER AND CABINET ON A NEW FOUNDATION. ALL OTHER EXISTING EQUIPMENT TO BE REMOVED INCLUDING UNUSED WIRING, CONDUIT, AND JUNCTION BOXES, UNLESS OTHERWISE SPECIFIED. EXISTING CONTROLLER AND CABINET SHALL BE RETURNED TO ARLINGTON COUNTY.

CONTRACTOR SHALL SEQUENCE INSTALLATION OF NE… TION.

CONTRACTOR SHALL COORDINATE THE REVISIONS TO… NTY POLICE DEPARTMENT AND ATS (DANIELLE FREY-VALE… ED

1. INSTALL SIGNAL CONTROLLER CABINET WITH UPS AN…
2. INSTALL UNDERGROUND ELECTRIC SERVICE WITH PE…
3. PRIOR TO REMOVAL, EXISTING SIGNAL POLES STILL I… SIGNAL POLE.
4. INSTALL ORNAMENTAL MAST ARM, POWDER COATED BLACK, SIGNAL POLE WITH LUMINAIRE, PEDESTRIAN SIGNAL HEAD(S), AND POLARA PEDESTRIAN EQUIPMENT ATTACHED TO 12" POLARA EZ523 (OR EQUIVALENT) PUSH BUTTON MOUNTING EXTENDER.
5. INSTALL NON-ORNAMENTAL PEDESTAL POLE, POWDER COATED BLACK, WITH PEDESTRIAN SIGNAL(S), POLARA PEDESTRIAN EQUIPMENT, AND SIGN(S).
6. INSTALL CARLYLE STREET LIGHT POLE WITH SIGNAL HEAD, PEDESTRIAN SIGNAL HEAD, POLARA PEDESTRIAN EQUIPMENT, AND SIGN.
7. SEE COMMUNICATION PLAN ON SHEET F17.2.1 FOR COMMUNICATION CONNECTION DETAILS.
8. INSTALL NEW PEDESTAL POLE FOUNDATION FOR RED LIGHT CAMERA AND EQUIPMENT IN LOCATION SHOWN. EXISTING POLE, CAMERA, AND ASSOCIATED EQUIPMENT IS TO BE RELOCATED/INSTALLED ONTO THE NEW FOUNDATION BY OTHERS FOLLOWING ACCEPTANCE OF THE NEW FOUNDATION BY ARLINGTON COUNTY. THE EXISTING RED LIGHT CAMERA IS TO REMAIN OPERATIONAL THROUGHOUT CONSTRUCTION TO THE EXTENT POSSIBLE UNLESS OTHERWISE DIRECTED BY ARLINGTON COUNTY. THE CONTRACTOR SHALL NOTIFY DANIELLE FREY-VALENTINE AT ATS (631-848-1098) AT LEAST TWO WEEKS PRIOR TO THE PLANNED TRAFFIC SIGNAL CONTROLLER SWITCHOVER, AND PRIOR TO ANY SERVICE DISRUPTIONS TO THIS EQUIPMENT.
9. INSTALL ORNAMENTAL MAST ARM SIGNAL POLE, POWDER COATED BLACK, WITH LUMINAIRE.

NOTE:
THIS TEMPORARY SIGNAL PLAN ANTICIPATES ALL EXISTING SIGNAL INFRASRUCTURE WILL REMAIN IN OPERATION THROUGH PHASE 1. NO PROPOSED SIGNAL INFRASTRUCTURE WILL BE IN OPERATION.

GRAPHIC SCALE IN FEET
0 12.5 25 50
(HORIZONTAL SCALE)

INITIAL TIMING CHART

PHASE	1	2	3	4	5	6	7	8
MOVEMENT	WB LEFT COLUMBIA PIKE	EB COLUMBIA PIKE		SB S. GEORGE MASON DR.	EB LEFT COLUMBIA PIKE	WB COLUMBIA PIKE	SB LEFT S. GEORGE MASON DR.	NB S. GEORGE MASON DR.
PHASE ON	X	X		X	X	X	X	X
PHASE OFF			X					
INTERVAL	PHASE TIMINGS							
MIN GR	5.0	5.0		5.0	5.0	5.0	5.0	5.0
PASSAGE	2.0	0.0		2.0	2.0	0.0	2.0	2.0
YELLOW	4.0	4.0		4.0	4.0	4.0	4.0	4.0
RED	3.0	3.0		3.0	3.0	3.0	3.0	3.0
MAX 1	10.0	50.0		45.0	10.0	50.0	10.0	45.0
MAX 2	-	-		-	-	-	-	-
MIN GAP	-	-		-	-	-	-	-
TIME BEFORE REDUCTION	-	-		-	-	-	-	-
TIME TO REDUCE	-	-		-	-	-	-	-
PED WALK	-	7.0		7.0	-	7.0	-	7.0
PED FLASH DON'T WALK	-	24.0		20.0	-	31.0	-	21.0
MODE	NON-LOCK	MAX RECALL		NON-LOCK	NON-LOCK	MAX RECALL	NON-LOCK	NON-LOCK

POLE SCHEDULE

No.	POLE IDENTIFICATION	STATION	OFFSET	STANDARD TYPE	STANDARD SIG. M.A. ORIENT.	STANDARD SIG. M.A.	STANDARD LUM. M.A. ORIENT.	STANDARD LUM. M.A. (TYPE)	LUM. LED (4)	POLE SIGNAL MOUNTING VEHICLE & PED. HEADS	POLE SIGNAL MOUNTING PED. PUSH BUTTONS	POLE SIGNAL MOUNTING SIGNS	POLE SIGNAL MOUNTING VIDEO DETECTOR PREEMPTION & CCTV	STREET NAME SIGN
A	021-PP-01-SE	151+33.69	37.90' LT	PEDESTAL POLE 12'	-	-	-	-	-	P82	P82	A	-	-
B	021-MA-01-SE	151+37.30	50.79' LT	MAST ARM POLE 30'	180°	56'	180°	6' (STANDARD)	145W	21, 22, 51, P21	P21	B, D	VD2, PE2, CCTV	F
C	021-PP-01-NE	151+61.52	37.83' RT	PEDESTAL POLE 12'	-	-	-	-	-	P81	P81	B	-	-
D	021-MA-01-NE	151+78.16	48.13' RT	MAST ARM POLE 30'	180°	48'	180°	6' (STANDARD)	145W	81, 82, P62	P62	A	VD8, PE8	E
E	021-PP-01-SW	152+46.31	43.81' LT	PEDESTAL POLE 12'	-	-	-	-	-	P22	P22	B	-	-
F	021-CP-01-SW	152+61.94	36.68' LT	CARLYLE POLE 16'	-	-	-	-	69W	P41	P41	B	-	-
G	021-MA-01-NW	152+83.73	59.33' RT	MAST ARM POLE 30'	180°	65'	180°	6' (STANDARD)	145W	11, 61, 62	-	D	VD6, PE6	F
H	021-PP-01-NW	152+94.05	35.54' RT	PEDESTAL POLE 12'	-	-	-	-	-	P42, P61	P42, P61	A(x2)	-	-
I	021-MA-01-SW	152+36.08	56.64' LT	MAST ARM POLE 30'	180°	45'	180°	6' (STANDARD)	**145W**	41, 42, 43, 71	-	C, D	VD4, PE4	E

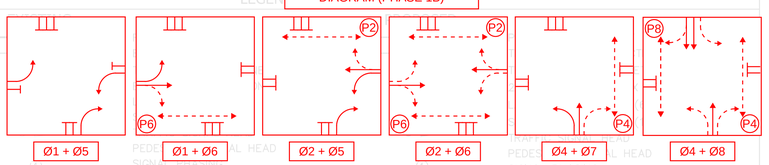
NOTE: ALL POLES LISTED ABOVE SHALL BE LABELED WITH A POLE IDENTIFICATION STICKER IN ACCORDANCE WITH THE APPROPRIATE POLE ID.

COLOR SEQUENCE CHART

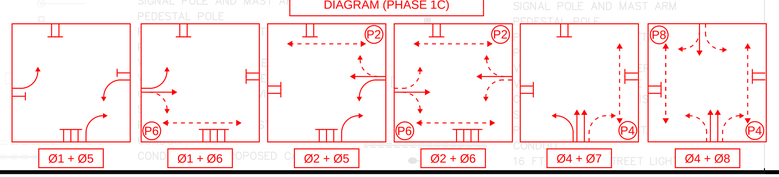
PHASE	1	2	4	5	6	7	8	1+5	1+6	2+5	2+6	4+7	4+8	
SIGNAL	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	FLASH
11	~~G~~				G			~~G~~	~~G~~/Y		G			Y
21, 22		G								G	G			Y
41			G					~~G~~		~~G~~		G	G	R
52		G		~~G~~				~~G~~		~~G~~/Y	G			Y
61					G				G		G			Y
71			G			~~G~~						~~G~~/Y	G	~~R~~
81, 82							G						G	R
P21, P22		W*								W*	W*			DARK
P41, P42			W*									W*	W*	DARK
P61, P62					W*				W*		W*			DARK
P81, P82							W*						W*	DARK

NOTE: BLANK SPACES IN THIS CHART REPRESENT A "RED" SIGNAL INDICATION.
*WALK INDICATION IS DISPLAYED WHEN PEDESTRIAN CALL IS SERVICED; WALK INDICATION IS DISPLAYED UNTIL IT IS TIMED OUT. OTHERWISE "DON'T WALK" INDICATION IS DISPLAYED.

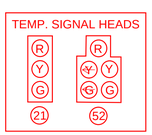
TEMPORARY SIGNAL PHASING DIAGRAM (PHASE 1B)



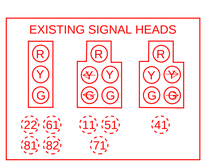
TEMPORARY SIGNAL PHASING DIAGRAM (PHASE 1C)



TEMP. SIGNAL HEADS



EXISTING SIGNAL HEADS



ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

TEMPORARY SIGNAL PLAN
COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS
SEGMENT F
COLUMBIA PIKE AND S. GEORGE MASON DR (TS #021)

SCALE: AS SHOWN | SHEET: F19.39 of F19.44

ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES
10/19/2021
APPROVAL DATE

ARLINGTON VIRGINIA
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Facilities & Engineering Division
Engineering Bureau
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Arlington, VA 22201
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Seal
COMMONWEALTH OF VIRGINIA
MICHAEL R. ALBRIGHT
Lic. No. 46643
10/13/2021
PROFESSIONAL ENGINEER

Approvals Date

Design Team Engineer Supervisor
Construction Management Supervisor
Water, Sewer, Streets Bureau Chief
Transportation Director
Project Manager

Revisions Date

Designed: TC
Drawn: TC
Checked: GG
Miss Utility Transmittal #:

Filename: 010073-F-TRAF-GEORGEMASON.dwg
Path: K:\NVA_RDWY\110010073 Columbia Pike Multimodal\Production\Task 7.5 Final Design of Columbia Pike Segments\Segment F\7.5.2 - 100% Design\Plan\Sheets
Plotted: October 13, 2021
Plotted by: Patrick.Husted

CONDUIT AND CABLE DESCRIPTIONS

1 1-3" CONDUIT PVC
2-14/7C FOR SIGNAL HEADS 11, 61, 62
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

2 1-3" CONDUIT PVC
2-14/7C FOR PED SIGNAL HEADS P42, P61
2-14/3C FOR PED PUSH BUTTONS P42, P61
1-#6 AWG (EGC)

3 1-4" CONDUIT (BORED) HDPE
2-14/7C FOR SIGNAL HEADS 11, 61, 62
2-14/7C FOR PED SIGNAL HEADS P42, P61
2-14/3C FOR PED PUSH BUTTONS P42, P61
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE
1-PREEMPTION CABLE
1-#6 AWG (EGC)

4 1-3" CONDUIT PVC
1-14/7C FOR SIGNAL HEADS 81, 82
1-14/7C FOR PED SIGNAL HEAD P62
1-14/3C FOR PED PUSH BUTTON P62
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

5 1-2" CONDUIT PVC
1-14/7C FOR PED SIGNAL HEAD P81
1-14/3C FOR PED PUSH BUTTON P81
1-#6 AWG (EGC)

6 1-4" CONDUIT (BORED) HDPE
3-14/7C FOR SIGNAL HEADS 11, 61, 62, 81, 82
4-14/7C FOR PED SIGNAL HEADS P42, P61, P62, P81
4-14/3C FOR PED PUSH BUTTONS P42, P61, P62, P81
2-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
2-12/2C FOR LUMINAIRES
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE
2-PREEMPTION CABLES
1-#6 AWG (EGC)

7 1-2" CONDUIT PVC
1-14/7C FOR PED SIGNAL HEAD P82
1-14/3C FOR PED PUSH BUTTON P82
1-#6 AWG (EGC)

8 1-3" CONDUIT PVC
2-14/7C FOR SIGNAL HEADS 21, 22, 51
1-14/7C FOR PED SIGNAL HEAD P21
1-14/3C FOR PED PUSH BUTTON P21
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

A 1-2" CONDUIT PVC
4-RED LIGHT CAMERA CABLES (TO BE INSTALLED BY OTHERS)
1-#6 AWG (EGC)

B 1-2" CONDUIT PVC
1-14/7C FOR PED SIGNAL HEAD P41
1-14/3C FOR PED PUSH BUTTON P41
1-12/2C FOR CARLYLE STREET LIGHT
1-#6 AWG (EGC)

C 1-3" CONDUIT PVC
3-14/7C FOR SIGNAL HEADS 41, 42, 43, 71
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

D 1-2" CONDUIT PVC
1-14/7C FOR PED SIGNAL HEAD P22
1-14/3C FOR PED PUSH BUTTON P22
1-#6 AWG (EGC)

E 1-4" CONDUIT (BORED) HDPE
3-14/7C FOR SIGNAL HEADS 41, 42, 43, 71
2-14/7C FOR PED SIGNAL HEADS P22, P41
2-14/3C FOR PED PUSH BUTTONS P22, P41
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
4-RED LIGHT CAMERA CABLES (TO BE INSTALLED BY OTHERS)
1-12/2C FOR CARLYLE STREET LIGHT
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE
1-PREEMPTION CABLE
1-#6 AWG (EGC)

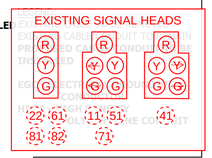
F 3-3" CONDUIT PVC
8-14/7C FOR SIGNAL HEADS 11, 21, 41, 42, 43, 51, 61, 62, 71, 81, 82
8-14/7C FOR PED SIGNAL HEADS P21, P22, P41, P42, P61, P62, P81, P82
8-14/3C FOR PED PUSH BUTTONS P21, P22, P41, P42, P61, P62, P81, P82
4-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
4-RED LIGHT CAMERA CABLES (TO BE INSTALLED BY OTHERS)
3-#6 AWG (EGC)

1-3" CONDUIT PVC
4-PREEMPTION CABLES
1-#6 AWG (EGC)

G 1-2" CONDUIT METAL
4-#6 AWG FOR ELECTRICAL SERVICE

H 1-3" CONDUIT PVC
1-12/C FOR CARLYLE STREET LIGHTS
4-12/C FOR LUMINAIRES
1-#6 AWG (EGC)

EXISTING SIGNAL HEADS



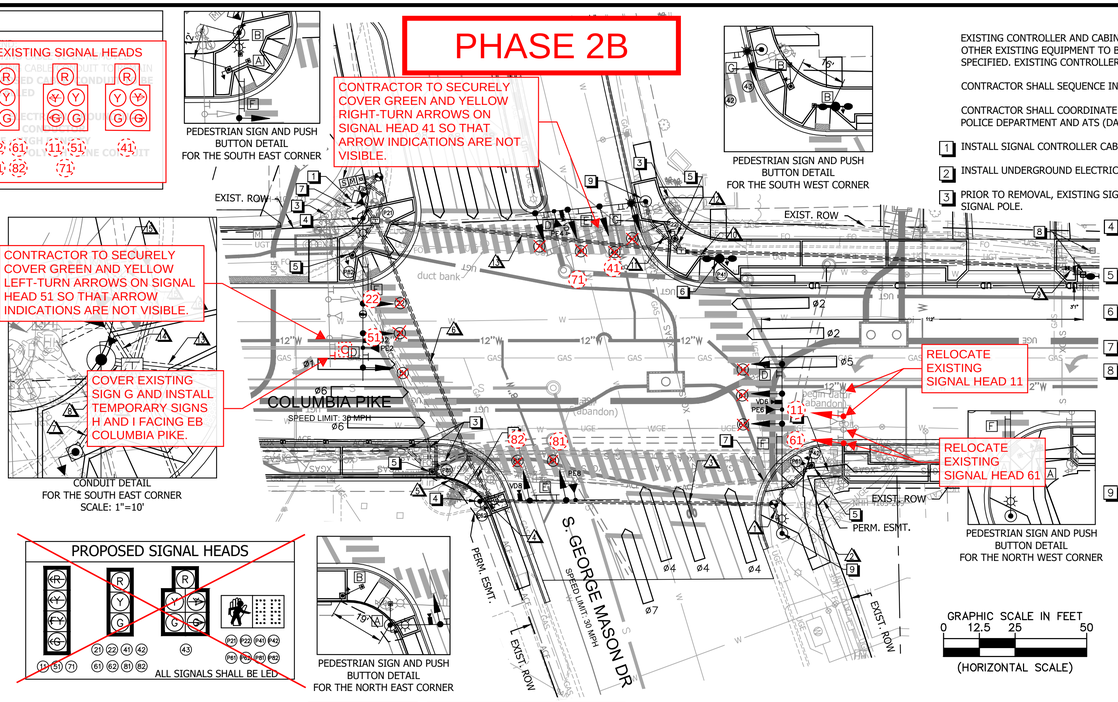
PROPOSED ACCESSIBLE PEDESTRIAN PUSHBUTTON

P42, P61, P62, P82 — P21, P22, P41, P81

NOTE: ACCESSIBLE PUSHBUTTON SYSTEM SHALL BE POLARA SYSTEM CONFORMING TO ARLINGTON COUNTY SPECIFICATIONS AND SHALL INCLUDE A POLARA CENTRAL CONTROL UNIT.

PUSHBUTTON	WALK MESSAGE
P41, P42, P81, P82	"COLUMBIA PIKE, WALK SIGN IS ON TO CROSS COLUMBIA PIKE."
P21, P22, P61, P62	"GEORGE MASON DRIVE, WALK SIGN IS ON TO GEORGE MASON DRIVE."

PHASE 2B



PEDESTRIAN SIGN AND PUSH BUTTON DETAIL FOR THE SOUTH EAST CORNER

PEDESTRIAN SIGN AND PUSH BUTTON DETAIL FOR THE SOUTH WEST CORNER

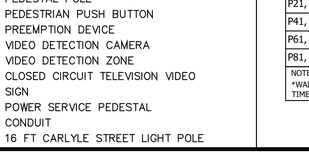
CONDUIT DETAIL FOR THE SOUTH EAST CORNER
SCALE: 1"=10'

PEDESTRIAN SIGN AND PUSH BUTTON DETAIL FOR THE NORTH WEST CORNER

PEDESTRIAN SIGN AND PUSH BUTTON DETAIL FOR THE NORTH EAST CORNER

GRAPHIC SCALE IN FEET
0 12.5 25 50
(HORIZONTAL SCALE)

PROPOSED SIGNAL HEADS



MAST ARM EQUIPMENT

EXISTING SIGNS

LEFT TURN YIELD ON GREEN
G

PROPOSED TEMPORARY SIGNS

R3-2
36"X36"
H

EXCEPT BUSES
I

PROPOSED SIGNS

*NOTE: SEE SHEET F17.5 FOR DETAILED STREET NAME SIGN LAYOUT

CONSTRUCTION NOTES

EXISTING CONTROLLER AND CABINET TO BE REPLACED WITH NEW CONTROLLER AND CABINET ON A NEW FOUNDATION. ALL OTHER EXISTING EQUIPMENT TO BE REMOVED INCLUDING UNUSED WIRING, CONDUIT, AND JUNCTION BOXES, UNLESS OTHERWISE SPECIFIED. EXISTING CONTROLLER AND CABINET SHALL BE RETURNED TO ARLINGTON COUNTY.

CONTRACTOR SHALL SEQUENCE INSTALLATION OF NEW MAS

CONTRACTOR SHALL COORDINATE THE REVISIONS TO THE T POLICE DEPARTMENT AND ATS (DANIELLE FREY-VALENTINE

NOTE:

THIS TEMPORARY SIGNAL PLAN ANTICIPATES ALL EXISTING SIGNAL INFRASRUCTURE WILL REMAIN IN OPERATION THROUGH PHASE 2. NO PROPOSED SIGNAL INFRASTRUCTURE WILL BE IN OPERATION.

1. INSTALL SIGNAL CONTROLLER CABINET WITH UPS AND CON
2. INSTALL UNDERGROUND ELECTRIC SERVICE WITH PEDESTAL
3. PRIOR TO REMOVAL, EXISTING SIGNAL POLES STILL IN OPE SIGNAL POLE.
4. INSTALL ORNAMENTAL MAST ARM, POWDER COATED BLACK, SIGNAL POLE WITH LUMINAIRE, PEDESTRIAN SIGNAL HEAD(S), AND POLARA PEDESTRIAN EQUIPMENT ATTACHED TO 12" POLARA EZ523 (OR EQUIVALENT) PUSH BUTTON MOUNTING EXTENDER.
5. INSTALL NON-ORNAMENTAL PEDESTAL POLE, POWDER COATED BLACK, WITH PEDESTRIAN SIGNAL(S), POLARA PEDESTRIAN EQUIPMENT, AND SIGN(S).
6. INSTALL CARLYLE STREET LIGHT POLE WITH SIGNAL HEAD, PEDESTRIAN SIGNAL HEAD, POLARA PEDESTRIAN EQUIPMENT, AND SIGN.
7. SEE COMMUNICATION PLAN ON SHEET F17.2.1 FOR COMMUNICATION CONNECTION DETAILS.
8. INSTALL NEW PEDESTAL POLE FOUNDATION FOR RED LIGHT CAMERA AND EQUIPMENT IN LOCATION SHOWN. EXISTING POLE, CAMERA, AND ASSOCIATED EQUIPMENT IS TO BE RELOCATED/INSTALLED ONTO THE NEW FOUNDATION BY OTHERS FOLLOWING ACCEPTANCE OF THE NEW FOUNDATION BY ARLINGTON COUNTY. THE EXISTING RED LIGHT CAMERA IS TO REMAIN OPERATIONAL THROUGHOUT CONSTRUCTION TO THE EXTENT POSSIBLE UNLESS OTHERWISE DIRECTED BY ARLINGTON COUNTY. THE CONTRACTOR SHALL NOTIFY DANIELLE FREY-VALENTINE AT ATS (631-848-1098) AT LEAST TWO WEEKS PRIOR TO THE PLANNED TRAFFIC SIGNAL CONTROLLER SWITCHOVER, AND PRIOR TO ANY SERVICE DISRUPTIONS TO THIS EQUIPMENT.
9. INSTALL ORNAMENTAL MAST ARM SIGNAL POLE, POWDER COATED BLACK, WITH LUMINAIRE.

INITIAL TIMING CHART

PHASE	1	2	3	4	5	6	7	8
MOVEMENT	WB LEFT COLUMBIA PIKE	EB COLUMBIA PIKE		SB S. GEORGE MASON DR.	EB LEFT COLUMBIA PIKE	WB COLUMBIA PIKE	SB LEFT S. GEORGE MASON DR.	NB S. GEORGE MASON DR.
PHASE ON	X	X		X		X	X	X
PHASE OFF			X		X			
INTERVAL	PHASE TIMINGS							
MIN GR	5.0	5.0		5.0	5.0	5.0	5.0	5.0
PASSAGE	2.0	0.0		2.0	2.0	0.0	2.0	2.0
YELLOW	4.0	4.0		4.0	4.0	4.0	4.0	4.0
RED	3.0	3.0		3.0	3.0	3.0	3.0	3.0
MAX 1	10.0	50.0		45.0	10.0	50.0	10.0	45.0
MAX 2	-	-		-	-	-	-	-
MIN GAP	-	-		-	-	-	-	-
TIME BEFORE REDUCTION	-	-		-	-	-	-	-
TIME TO REDUCE	-	-		-	-	-	-	-
PED WALK	-	7.0		7.0	-	7.0	-	7.0
PED FLASH DON'T WALK	-	24.0		20.0	-	31.0	-	21.0
MODE	NON-LOCK	MAX RECALL		NON-LOCK	NON-LOCK	MAX RECALL	NON-LOCK	NON-LOCK

POLE SCHEDULE

No.	POLE IDENTIFICATION	STATION	OFFSET	STANDARD TYPE	SIG. M.A. ORIENT.	SIG. M.A.	LUM. M.A. ORIENT.	LUM. M.A. (TYPE)	LUM. LED (4)	POLE SIGNAL MOUNTING VEHICLE & PED. HEADS	PED. PUSH BUTTONS	SIGNS	VIDEO DETECTOR PREEMPTION & CCTV	STREET NAME SIGN
A	021-PP-01-SE	151+33.69	37.90' LT	PEDESTAL POLE 12'	-	-	-	-	-	P82	P82	A	-	-
B	021-MA-01-SE	151+37.30	50.79' LT	MAST ARM POLE 30'	180°	56'	180°	6' (STANDARD)	145W	21, 22, 51, P21	P21	B, D	VD2, PE2, CCTV	F
C	021-PP-01-NE	151+61.52	37.83' RT	PEDESTAL POLE 12'	-	-	-	-	-	P81	P81	B	-	-
D	021-MA-01-NE	151+78.16	48.13' RT	MAST ARM POLE 30'	180°	48'	180°	6' (STANDARD)	145W	81, 82, P62	P62	A	VD8, PE8	E
E	021-PP-01-SW	152+46.31	43.81' LT	PEDESTAL POLE 12'	-	-	-	-	-	P22	P22	B	-	-
F	021-CP-01-SW	152+61.94	36.68' LT	CARLYLE POLE 16'	-	-	-	-	69W	P41	P41	B	-	-
G	021-MA-01-NW	152+83.73	59.33' RT	MAST ARM POLE 30'	180°	65'	180°	6' (STANDARD)	145W	11, 61, 62	-	D	VD6, PE6	F
H	021-PP-01-NW	152+94.05	35.54' RT	PEDESTAL POLE 12'	-	-	-	-	-	P42, P61	P42, P61	A(x2)	-	-
I	021-MA-01-SW	152+36.08	56.64' LT	MAST ARM POLE 30'	180°	45'	180°	6' (STANDARD)	**145W**	41, 42, 43, 71	-	C, D	VD4, PE4	E

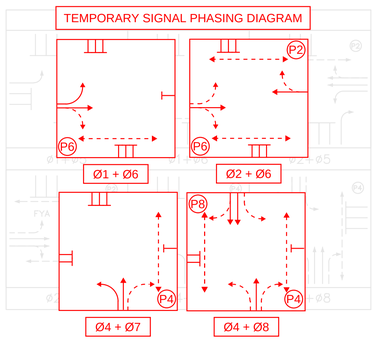
NOTE: ALL POLES LISTED ABOVE SHALL BE LABELED WITH A POLE IDENTIFICATION STICKER IN ACCORDANCE WITH THE APPROPRIATE POLE ID.

COLOR SEQUENCE CHART

PHASE	1	2	4	5	6	7	8	1+5	1+6	4+7	4+8	
SIGNAL	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	FLASH
11	~~G~~				G			~~G~~	~~G~~/G			Y
22		G							G			Y
41			G							G	G	R
43			G							G	G	R
51		G						~~G~~	~~G~~/Y			~~R~~
61					G				G			Y
71			G			~~G~~				~~G~~/G	G	~~R~~
81, 82							G				G	R
P21, P22		W*										DARK
P41, P42			W*							W*	W*	DARK
P61, P62					W*				W*			DARK
P81, P82							W*				W*	DARK

NOTE: BLANK SPACES IN THIS CHART REPRESENT A "RED" SIGNAL INDICATION.
*WALK INDICATION IS DISPLAYED WHEN PEDESTRIAN CALL IS SERVICED; WALK INDICATION IS DISPLAYED UNTIL IT IS TIMED OUT. OTHERWISE "DON'T WALK" INDICATION IS DISPLAYED.

TEMPORARY SIGNAL PHASING DIAGRAM



LEGEND

EXISTING		PROPOSED	
	RIGHT OF WAY		PERMANENT EASEMENT
	EASEMENT		TEMPORARY CONSTRUCTION EASEMENT
	TRAFFIC SIGNAL CABINET W/ UPS		TRAFFIC SIGNAL CABINET W/ UPS
T	EXTRA LARGE JUNCTION BOX	T	24"X36" JUNCTION BOX (61-04, TYPE-3)
	LARGE JUNCTION BOX		LARGE JUNCTION BOX (61-02)
	SMALL JUNCTION BOX		SMALL JUNCTION BOX (14040-01)
	TRAFFIC SIGNAL HEAD		TRAFFIC SIGNAL HEAD
	PEDESTRIAN SIGNAL HEAD		PEDESTRIAN SIGNAL HEAD
4	SIGNAL PHASING	4	SIGNAL PHASING
	TRAFFIC SIGNAL LUMINAIRE		TRAFFIC SIGNAL LUMINAIRE
	SIGNAL POLE AND MAST ARM		SIGNAL POLE AND MAST ARM
	PEDESTAL POLE		PEDESTAL POLE
	PEDESTRIAN PUSH BUTTON		PEDESTRIAN PUSH BUTTON
	PREEMPTION DEVICE		PREEMPTION DEVICE
	VIDEO DETECTION CAMERA		VIDEO DETECTION CAMERA
	VIDEO DETECTION ZONE		VIDEO DETECTION ZONE
	CLOSED CIRCUIT TELEVISION VIDEO		CLOSED CIRCUIT TELEVISION VIDEO
ATT	SIGN	ATT	SIGN
SMC	POWER SERVICE PEDESTAL	SMC	POWER SERVICE PEDESTAL
	CONDUIT		CONDUIT
	CONDUIT WITH PROPOSED CABLE		16 FT CARLYLE STREET LIGHT POLE

ARLINGTON VIRGINIA
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Seal

COMMONWEALTH OF VIRGINIA
MICHAEL R. ALBRIGHT
Lic. No. 46643
10/13/2021
PROFESSIONAL ENGINEER

Approvals Date

Design Team Engineer Supervisor
Construction Management Supervisor
Water, Sewer, Streets Bureau Chief
Transportation Director
Project Manager

Revisions Date

Designed: TC
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Miss Utility Transmittal #:

Filename: 010073-F-TRAF-GEORGEMASON.dwg
Path: K:\NVA_RPW\110010073 Columbia Pike Multimodal\Production\Task 7.5 Final Design of Columbia Pike Segment\Segment F\7.5.2 - 100% Design Plan\Sheets
Plotted: October 13, 2021
Plotted by: Patrick.Husted

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

TEMPORARY SIGNAL PLAN

COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS
SEGMENT F
COLUMBIA PIKE AND S. GEORGE MASON DR (TS #021)

SCALE: AS SHOWN SHEET: F19.40 of F19.44

ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES
LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES
10/19/2021
APPROVAL DATE

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1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

2 1-3" CONDUIT PVC
2-14/7C FOR PED SIGNAL HEADS P42, P61
2-14/3C FOR PED PUSH BUTTONS P42, P61
1-#6 AWG (EGC)

3 1-4" CONDUIT (BORED) HDPE
2-14/7C FOR SIGNAL HEADS 11, 61, 62
2-14/7C FOR PED SIGNAL HEADS P42, P61
2-14/3C FOR PED PUSH BUTTONS P42, P61
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE
1-PREEMPTION CABLE
1-#6 AWG (EGC)

4 1-3" CONDUIT PVC
1-14/7C FOR SIGNAL HEADS 81, 82
1-14/7C FOR PED SIGNAL HEAD P62
1-14/3C FOR PED PUSH BUTTON P62
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

5 1-2" CONDUIT PVC
1-14/7C FOR PED SIGNAL HEAD P81
1-14/3C FOR PED PUSH BUTTON P81
1-#6 AWG (EGC)

6 1-4" CONDUIT (BORED) HDPE
3-14/7C FOR SIGNAL HEADS 11, 61, 62, 81, 82
4-14/7C FOR PED SIGNAL HEADS P42, P61, P62, P81
4-14/3C FOR PED PUSH BUTTONS P42, P61, P62, P81
2-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
2-12/2C FOR LUMINAIRES
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE
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1-#6 AWG (EGC)

7 1-2" CONDUIT PVC
1-14/7C FOR PED SIGNAL HEAD P82
1-14/3C FOR PED PUSH BUTTON P82
1-#6 AWG (EGC)

8 1-3" CONDUIT PVC
2-14/7C FOR SIGNAL HEADS 21, 22, 51
1-14/7C FOR PED SIGNAL HEAD P21
1-14/3C FOR PED PUSH BUTTON P21
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

9 1-2" CONDUIT PVC
4-RED LIGHT CAMERA CABLES (TO BE INSTALLED BY OTHERS)
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10 1-2" CONDUIT PVC
1-14/7C FOR PED SIGNAL HEAD P41
1-14/3C FOR PED PUSH BUTTON P41
1-12/2C FOR CARLYLE STREET LIGHT
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11 1-3" CONDUIT PVC
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1-2" CONDUIT PVC
1-PREEMPTION CABLE
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12 1-2" CONDUIT PVC
1-14/7C FOR PED SIGNAL HEAD P22
1-14/3C FOR PED PUSH BUTTON P22
1-#6 AWG (EGC)

13 1-4" CONDUIT (BORED) HDPE
3-14/7C FOR SIGNAL HEADS 41, 42, 43, 71
2-14/7C FOR PED SIGNAL HEADS P22, P41
2-14/3C FOR PED PUSH BUTTONS P22, P41
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
4-RED LIGHT CAMERA CABLES (TO BE INSTALLED BY OTHERS)
1-12/2C FOR CARLYLE STREET LIGHT
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE
1-PREEMPTION CABLE
1-#6 AWG (EGC)

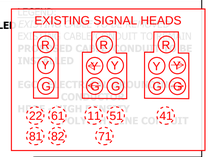
14 3-3" CONDUIT PVC
8-14/7C FOR SIGNAL HEADS 11, 21, 41, 42, 43, 51, 61, 62, 71, 81, 82
8-14/7C FOR PED SIGNAL HEADS P21, P22, P41, P42, P61, P62, P81, P82
8-14/3C FOR PED PUSH BUTTONS P21, P22, P41, P42, P61, P62, P81, P82
4-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
4-RED LIGHT CAMERA CABLES (TO BE INSTALLED BY OTHERS)
3-#6 AWG (EGC)

1-3" CONDUIT PVC
4-PREEMPTION CABLES
1-#6 AWG (EGC)

15 1-2" CONDUIT METAL
4-#6 AWG FOR ELECTRICAL SERVICE

16 1-3" CONDUIT PVC
1-12/C FOR CARLYLE STREET LIGHTS
4-12/C FOR LUMINAIRES
1-#6 AWG (EGC)

EXISTING SIGNAL HEADS



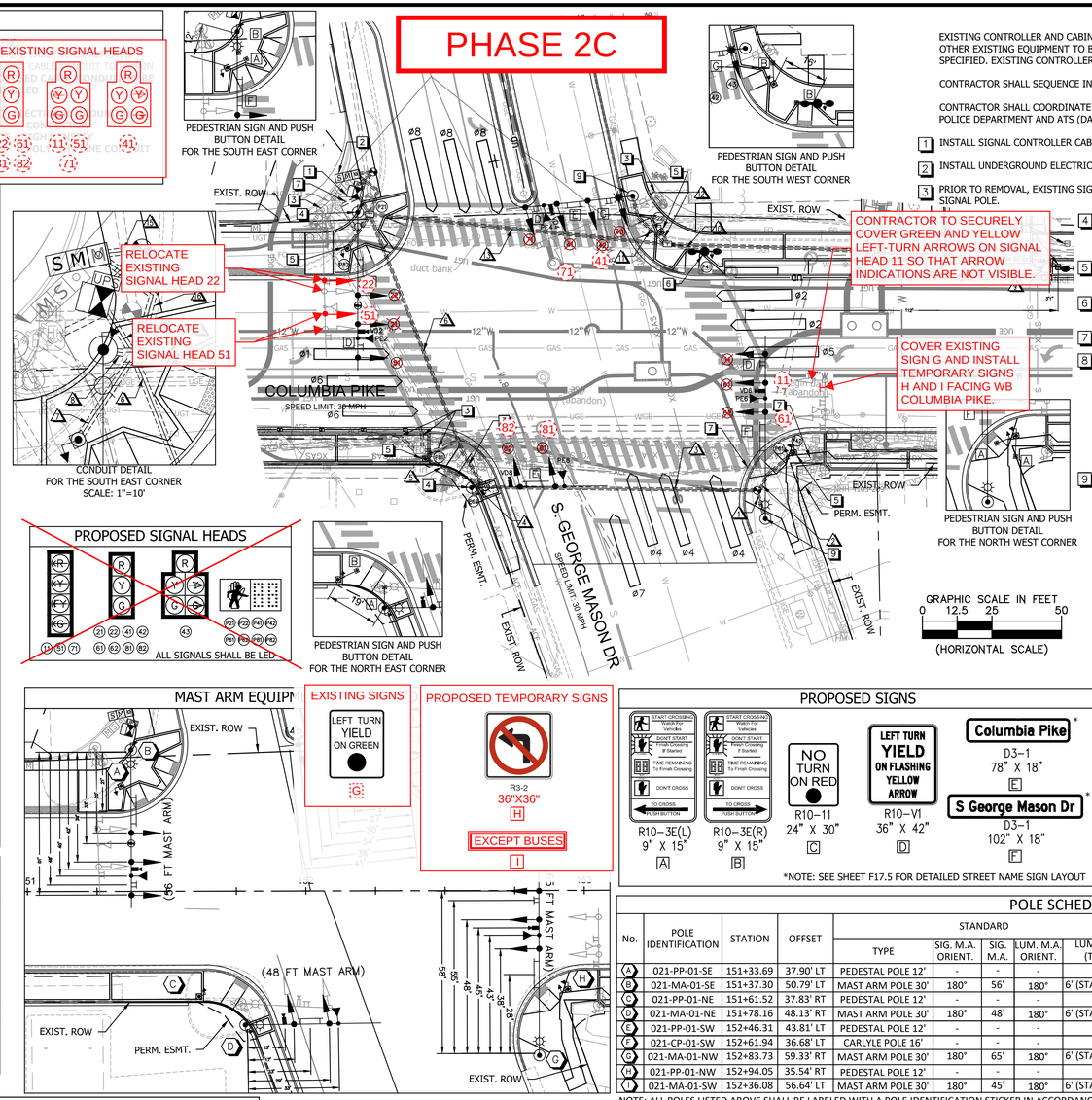
PROPOSED ACCESSIBLE PEDESTRIAN PUSHBUTTON

P42, P61, P62, P82 — P21, P22, P41, P81

NOTE: ACCESSIBLE PUSHBUTTON SYSTEM SHALL BE POLARA SYSTEM CONFORMING TO ARLINGTON COUNTY SPECIFICATIONS AND SHALL INCLUDE A POLARA CENTRAL CONTROL UNIT.

PUSHBUTTON	WALK MESSAGE
P41, P42, P81, P82	"COLUMBIA PIKE, WALK SIGN IS ON TO CROSS COLUMBIA PIKE."
P21, P22, P61, P62	"GEORGE MASON DRIVE, WALK SIGN IS ON TO GEORGE MASON DRIVE."

PHASE 2C



PROPOSED SIGNAL HEADS

MAST ARM EQUIPMENT

EXISTING SIGNS

LEFT TURN YIELD ON GREEN — G

PROPOSED TEMPORARY SIGNS

R3-2 36"X36" — H

EXCEPT BUSES — I

PROPOSED SIGNS

R10-3E(L) 9" X 15" — A

R10-3E(R) 9" X 15" — B

R10-11 24" X 30" — C

R10-V1 36" X 42" — D

D3-1 78" X 18" — E

D3-1 102" X 18" — F

*NOTE: SEE SHEET F17.5 FOR DETAILED STREET NAME SIGN LAYOUT

CONSTRUCTION NOTES

EXISTING CONTROLLER AND CABINET TO BE REPLACED WITH NEW CONTROLLER AND CABINET ON A NEW FOUNDATION. ALL OTHER EXISTING EQUIPMENT TO BE REMOVED INCLUDING UNUSED WIRING, CONDUIT, AND JUNCTION BOXES, UNLESS OTHERWISE SPECIFIED. EXISTING CONTROLLER AND CABINET SHALL BE RETURNED TO ARLINGTON COUNTY.

CONTRACTOR SHALL SEQUENCE INSTALLATION OF NE

CONTRACTOR SHALL COORDINATE THE REVISIONS TO NTY POLICE DEPARTMENT AND ATS (DANIELLE FREY-VALEN

1. INSTALL SIGNAL CONTROLLER CABINET WITH UPS AND
2. INSTALL UNDERGROUND ELECTRIC SERVICE WITH PED TION.
3. PRIOR TO REMOVAL, EXISTING SIGNAL POLES STILL IN ED SIGNAL POLE.
4. INSTALL ORNAMENTAL MAST ARM, POWDER COATED BLACK, SIGNAL POLE WITH LUMINAIRE, PEDESTRIAN SIGNAL HEAD(S), AND POLARA PEDESTRIAN EQUIPMENT ATTACHED TO 12" POLARA EZ523 (OR EQUIVALENT) PUSH BUTTON MOUNTING EXTENDER.
5. INSTALL NON-ORNAMENTAL PEDESTAL POLE, POWDER COATED BLACK, WITH PEDESTRIAN SIGNAL(S), POLARA PEDESTRIAN EQUIPMENT, AND SIGN(S).
6. INSTALL CARLYLE STREET LIGHT POLE WITH SIGNAL HEAD, PEDESTRIAN SIGNAL HEAD, POLARA PEDESTRIAN EQUIPMENT, AND SIGN.
7. SEE COMMUNICATION PLAN ON SHEET F17.2.1 FOR COMMUNICATION CONNECTION DETAILS.
8. INSTALL NEW PEDESTAL POLE FOUNDATION FOR RED LIGHT CAMERA AND EQUIPMENT IN LOCATION SHOWN. EXISTING POLE, CAMERA, AND ASSOCIATED EQUIPMENT IS TO BE RELOCATED/INSTALLED ONTO THE NEW FOUNDATION BY OTHERS FOLLOWING ACCEPTANCE OF THE NEW FOUNDATION BY ARLINGTON COUNTY. THE EXISTING RED LIGHT CAMERA IS TO REMAIN OPERATIONAL THROUGHOUT CONSTRUCTION TO THE EXTENT POSSIBLE UNLESS OTHERWISE DIRECTED BY ARLINGTON COUNTY. THE CONTRACTOR SHALL NOTIFY DANIELLE FREY-VALENTINE AT ATS (631-848-1098) AT LEAST TWO WEEKS PRIOR TO THE PLANNED TRAFFIC SIGNAL CONTROLLER SWITCHOVER, AND PRIOR TO ANY SERVICE DISRUPTIONS TO THIS EQUIPMENT.
9. INSTALL ORNAMENTAL MAST ARM SIGNAL POLE, POWDER COATED BLACK, WITH LUMINAIRE.

NOTE:

THIS TEMPORARY SIGNAL PLAN ANTICIPATES ALL EXISTING SIGNAL INFRASRUCTURE WILL REMAIN IN OPERATION THROUGH PHASE 2. NO PROPOSED SIGNAL INFRASTRUCTURE WILL BE IN OPERATION.

GRAPHIC SCALE IN FEET
0 12.5 25 50
(HORIZONTAL SCALE)

INITIAL TIMING CHART

PHASE	1	2	3	4	5	6	7	8
MOVEMENT	WB LEFT COLUMBIA PIKE	EB COLUMBIA PIKE		SB S. GEORGE MASON DR.	EB LEFT COLUMBIA PIKE	WB COLUMBIA PIKE	SB LEFT S. GEORGE MASON DR.	NB S. GEORGE MASON DR.
PHASE ON		X		X	X	X	X	X
PHASE OFF	X		X					
INTERVAL	PHASE TIMINGS							
MIN GR	5.0	5.0		5.0	5.0	5.0	5.0	5.0
PASSAGE	2.0	0.0		2.0	2.0	0.0	2.0	2.0
YELLOW	4.0	4.0		4.0	4.0	4.0	4.0	4.0
RED	3.0	3.0		3.0	3.0	3.0	3.0	3.0
MAX 1	10.0	50.0		45.0	10.0	50.0	10.0	45.0
MAX 2	-	-		-	-	-	-	-
MIN GAP	-	-		-	-	-	-	-
TIME BEFORE REDUCTION	-	-		-	-	-	-	-
TIME TO REDUCE	-	-		-	-	-	-	-
PED WALK	-	7.0		7.0	-	7.0	-	7.0
PED FLASH DON'T WALK	-	24.0		20.0	-	31.0	-	21.0
MODE	NON-LOCK	MAX RECALL		NON-LOCK	NON-LOCK	MAX RECALL	NON-LOCK	NON-LOCK

POLE SCHEDULE

No.	POLE IDENTIFICATION	STATION	OFFSET	STANDARD TYPE	STANDARD SIG. M.A. ORIENT.	STANDARD SIG. M.A.	STANDARD LUM. M.A. ORIENT.	STANDARD LUM. M.A. (TYPE)	LUM. LED (4)	POLE SIGNAL MOUNTING VEHICLE & PED. HEADS	POLE SIGNAL MOUNTING PED. PUSH BUTTONS	POLE SIGNAL MOUNTING SIGNS	POLE SIGNAL MOUNTING VIDEO DETECTOR PREEMPTION & CCTV	STREET NAME SIGN
A	021-PP-01-SE	151+33.69	37.90' LT	PEDESTAL POLE 12'	-	-	-	-	-	P82	P82	A	-	-
B	021-MA-01-SE	151+37.30	50.79' LT	MAST ARM POLE 30'	180°	56'	180°	6' (STANDARD)	145W	21, 22, 51, P21	P21	B, D	VD2, PE2, CCTV	F
C	021-PP-01-NE	151+61.52	37.83' RT	PEDESTAL POLE 12'	-	-	-	-	-	P81	P81	B	-	-
D	021-MA-01-NE	151+78.16	48.13' RT	MAST ARM POLE 30'	180°	48'	180°	6' (STANDARD)	145W	81, 82, P62	P62	A	VD8, PE8	E
E	021-PP-01-SW	152+46.31	43.81' LT	PEDESTAL POLE 12'	-	-	-	-	-	P22	P22	B	-	-
F	021-CP-01-SW	152+61.94	36.68' LT	CARLYLE POLE 16'	-	-	-	-	69W	P41	P41	B	-	-
G	021-MA-01-NW	152+83.73	59.33' RT	MAST ARM POLE 30'	180°	65'	180°	6' (STANDARD)	145W	11, 61, 62	-	D	VD6, PE6	F
H	021-PP-01-NW	152+94.05	35.54' RT	PEDESTAL POLE 12'	-	-	-	-	-	P42, P61	P42, P61	A(x2)	-	-
I	021-MA-01-SW	152+36.08	56.64' LT	MAST ARM POLE 30'	180°	45'	180°	6' (STANDARD)	**145W**	41, 42, 43, 71	-	C, D	VD4, PE4	E

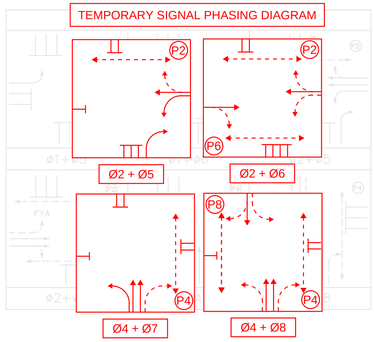
NOTE: ALL POLES LISTED ABOVE SHALL BE LABELED WITH A POLE IDENTIFICATION STICKER IN ACCORDANCE WITH THE APPROPRIATE POLE ID.

COLOR SEQUENCE CHART

PHASE	1	2	4	5	6	7	8	1+5	1+6	2+5	2+6	4+7	4+8	FLASH
SIGNAL	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	
11														~~G~~
22	G									G	G			Y
41		G										G	G	R
43												G	G	R
51	G		~~G~~					~~G~~/G		G				Y
61				G						G				Y
71		G			~~G~~				~~G~~/G			G	~~G~~	Y
81, 82						G						G	R	
P21, P22	W*									W*	W*			DARK
P41, P42		W*										W*	W*	DARK
P61, P62				W*							W*			DARK
P81, P82						W*							W*	DARK

NOTE: BLANK SPACES IN THIS CHART REPRESENT A "RED" SIGNAL INDICATION.
*WALK INDICATION IS DISPLAYED WHEN PEDESTRIAN CALL IS SERVICED; WALK INDICATION IS DISPLAYED UNTIL IT IS TIMED OUT. OTHERWISE "DON'T WALK" INDICATION IS DISPLAYED.

TEMPORARY SIGNAL PHASING DIAGRAM



LEGEND

EXISTING	PROPOSED
RIGHT OF WAY	PERMANENT EASEMENT
EASEMENT	TEMPORARY CONSTRUCTION EASEMENT
TRAFFIC SIGNAL CABINET W/ UPS	TRAFFIC SIGNAL CABINET W/ UPS
EXTRA LARGE JUNCTION BOX	24"X36" JUNCTION BOX (61-04, TYPE-3)
LARGE JUNCTION BOX	LARGE JUNCTION BOX (61-02)
SMALL JUNCTION BOX	SMALL JUNCTION BOX (14040-01)
TRAFFIC SIGNAL HEAD	TRAFFIC SIGNAL HEAD
PEDESTRIAN SIGNAL HEAD	PEDESTRIAN SIGNAL HEAD
SIGNAL PHASING	SIGNAL PHASING
TRAFFIC SIGNAL LUMINAIRE	TRAFFIC SIGNAL LUMINAIRE
SIGNAL POLE AND MAST ARM	SIGNAL POLE AND MAST ARM
PEDESTAL POLE	PEDESTAL POLE
PEDESTRIAN PUSH BUTTON	PEDESTRIAN PUSH BUTTON
PREEMPTION DEVICE	PREEMPTION DEVICE
VIDEO DETECTION CAMERA	VIDEO DETECTION CAMERA
VIDEO DETECTION ZONE	VIDEO DETECTION ZONE
CLOSED CIRCUIT TELEVISION VIDEO	CLOSED CIRCUIT TELEVISION VIDEO
SIGN	SIGN
POWER SERVICE PEDESTAL	POWER SERVICE PEDESTAL
CONDUIT	CONDUIT
CONDUIT WITH PROPOSED CABLE	16 FT CARLYLE STREET LIGHT POLE

ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES
Facilities & Engineering Division
Engineering Bureau
2100 Clarendon Boulevard, Suite 813
Arlington, VA 22201
Phone: 703.228.3629
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Reston, Virginia 20191
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Seal

COMMONWEALTH OF VIRGINIA — MICHAEL R. ALBRIGHT — Lic. No. 46643 — 10/13/2021 — PROFESSIONAL ENGINEER

Approvals	Date
Design Team Engineer Supervisor	
Construction Management Supervisor	
Water, Sewer, Streets Bureau Chief	
Transportation Director	
Project Manager	

Revisions	Date

Designed: TC
Drawn: TC
Checked: GG
Miss Utility Transmittal #:

Filename: 010073-F-TRAF-GEORGEMASON.dwg
Path: K:\NVA_RPW\110010073 Columbia Pike Multimodal\Production\Task 7.5 Final Design of Columbia Pike Segment\Segment F\7.5.2 - 100% Design Plan\Sheets
Plotted: October 13, 2021
Plotted by: Patrick.Husted

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

TEMPORARY SIGNAL PLAN

COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS
SEGMENT F
COLUMBIA PIKE AND S. GEORGE MASON DR (TS #021)

SCALE: AS SHOWN | SHEET: F19.41 of F19.44

ARLINGTON VIRGINIA — DEPARTMENT OF ENVIRONMENTAL SERVICES
LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES
10/19/2021
APPROVAL DATE

PHASE 3B/3C

CONDUIT AND CABLE DESCRIPTIONS

1 1-3" CONDUIT PVC
2-14/7C FOR SIGNAL HEADS 11, 61, 62
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

2 1-3" CONDUIT PVC
2-14/7C FOR PED SIGNAL HEADS P42, P61
2-14/3C FOR PED PUSH BUTTONS P42, P61
1-#6 AWG (EGC)

3 1-4" CONDUIT (BORED) HDPE
2-14/7C FOR SIGNAL HEADS 11, 61, 62
2-14/7C FOR PED SIGNAL HEADS P42, P61
2-14/3C FOR PED PUSH BUTTONS P42, P61
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE
1-PREEMPTION CABLE
1-#6 AWG (EGC)

4 1-3" CONDUIT PVC
1-14/7C FOR SIGNAL HEADS 81, 82
1-14/7C FOR PED SIGNAL HEAD P62
1-14/3C FOR PED PUSH BUTTON P62
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

5 1-2" CONDUIT PVC
1-14/7C FOR PED SIGNAL HEAD P81
1-14/3C FOR PED PUSH BUTTON P81
1-#6 AWG (EGC)

6 1-4" CONDUIT (BORED) HDPE
3-14/7C FOR SIGNAL HEADS 11, 61, 62, 81, 82
4-14/7C FOR PED SIGNAL HEADS P42, P61, P62, P81
4-14/3C FOR PED PUSH BUTTONS P42, P61, P62, P81
2-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
2-12/2C FOR LUMINAIRES
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE
2-PREEMPTION CABLES
1-#6 AWG (EGC)

7 1-2" CONDUIT PVC
1-14/7C FOR PED SIGNAL HEAD P82
1-14/3C FOR PED PUSH BUTTON P82
1-#6 AWG (EGC)

8 1-3" CONDUIT PVC
2-14/7C FOR SIGNAL HEADS 21, 22, 51
1-14/7C FOR PED SIGNAL HEAD P21
1-14/3C FOR PED PUSH BUTTON P21
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

9 1-2" CONDUIT PVC
4-RED LIGHT CAMERA CABLES (TO BE INSTALLED BY OTHERS)
1-#6 AWG (EGC)

10 1-2" CONDUIT PVC
1-14/7C FOR PED SIGNAL HEAD P41
1-14/3C FOR PED PUSH BUTTON P41
1-12/2C FOR CARLYLE STREET LIGHT
1-#6 AWG (EGC)
TEMP: 1-14/7C FOR TEMP. SIGNAL HEAD 63

11 1-3" CONDUIT PVC
3-14/7C FOR SIGNAL HEADS 41, 42, 43, 71
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

12 1-2" CONDUIT PVC
1-14/7C FOR PED SIGNAL HEAD P22
1-14/3C FOR PED PUSH BUTTON P22
1-#6 AWG (EGC)

13 1-4" CONDUIT (BORED) HDPE
3-14/7C FOR SIGNAL HEADS 41, 42, 43, 71
2-14/7C FOR PED SIGNAL HEADS P22, P41
2-14/3C FOR PED PUSH BUTTONS P22, P41
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
4-RED LIGHT CAMERA CABLES (TO BE INSTALLED BY OTHERS)
1-12/2C FOR CARLYLE STREET LIGHT
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)
TEMP: 1-14/7C FOR TEMP. SIGNAL HEAD 63
1-2" CONDUIT (BORED) HDPE
1-PREEMPTION CABLE
1-#6 AWG (EGC)

14 3-3" CONDUIT PVC
8-14/7C FOR SIGNAL HEADS 11, 21, 41, 42, 43, 51, 61, 62, 71, 81, 82
8-14/7C FOR PED SIGNAL HEADS P21, P22, P41, P42, P61, P62, P81, P82
8-14/3C FOR PED PUSH BUTTONS P21, P22, P41, P42, P61, P62, P81, P82
4-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
4-RED LIGHT CAMERA CABLES (TO BE INSTALLED BY OTHERS)
3-#6 AWG (EGC)

1-3" CONDUIT PVC
4-PREEMPTION CABLES
1-#6 AWG (EGC)

15 1-2" CONDUIT METAL
4-#6 AWG FOR ELECTRICAL SERVICE

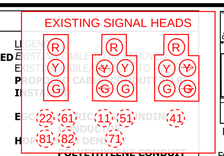
16 1-3" CONDUIT PVC
1-12/C FOR CARLYLE STREET LIGHTS
4-12/C FOR LUMINAIRES
1-#6 AWG (EGC)

PROPOSED ACCESSIBLE PEDESTRIAN PUSHBUTTON

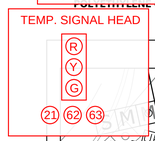
NOTE: ACCESSIBLE PUSHBUTTON SYSTEM SHALL BE POLARA SYSTEM CONFORMING TO ARLINGTON COUNTY SPECIFICATIONS AND SHALL INCLUDE A POLARA CENTRAL CONTROL UNIT.

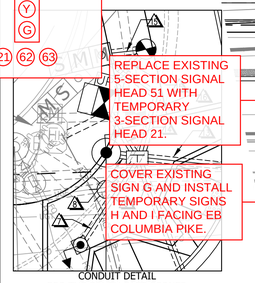
PUSHBUTTON	WALK MESSAGE
P41, P42, P81, P82	"COLUMBIA PIKE, WALK SIGN IS ON TO CROSS COLUMBIA PIKE."
P21, P22, P61, P62	"GEORGE MASON DRIVE, WALK SIGN IS ON TO GEORGE MASON DRIVE."

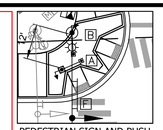
EXISTING SIGNAL HEADS

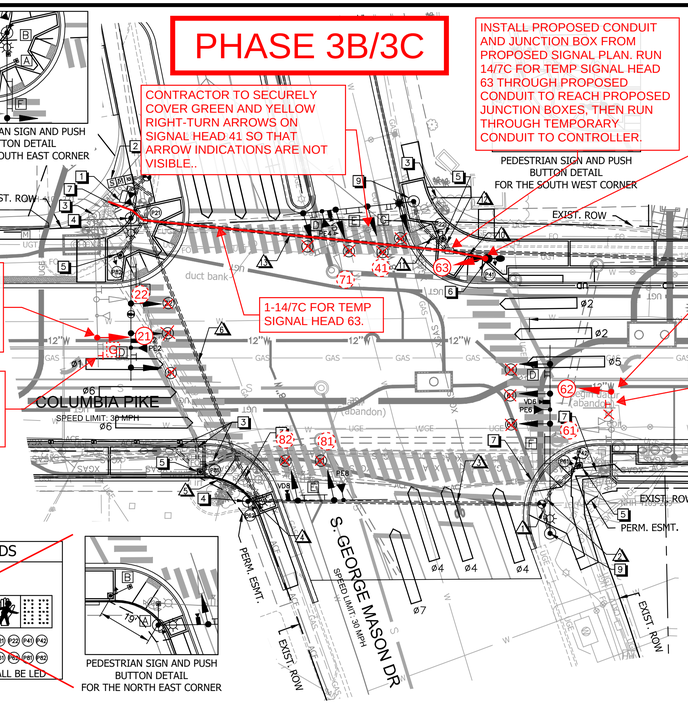


TEMP. SIGNAL HEAD

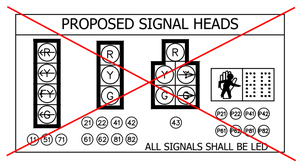




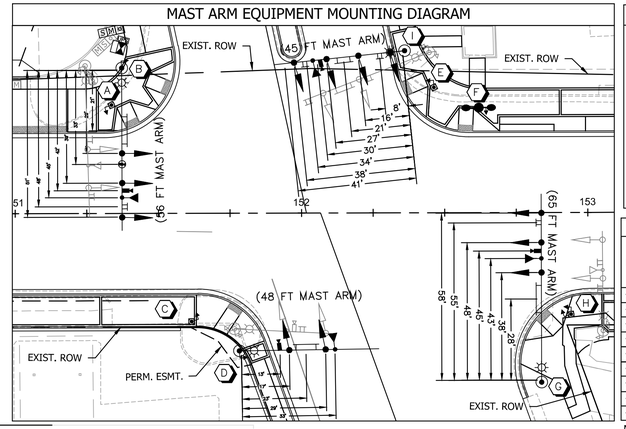




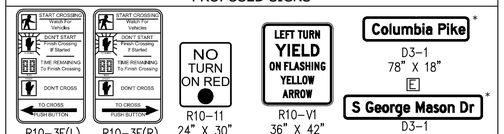
PROPOSED SIGNAL HEADS



MAST ARM EQUIPMENT MOUNTING DIAGRAM



PROPOSED SIGNS



*NOTE: SEE SHEET F17.5 FOR DETAILED STREET NAME SIGN LAYOUT

CONSTRUCTION NOTES

EXISTING CONTROLLER AND CABINET TO BE REPLACED WITH NEW CONTROLLER AND CABINET ON NEW FOUNDATION. REMOVE OTHER EXISTING EQUIPMENT TO BE REMOVED INCLUDING UNUSED SIGNAL HEADS, MOUNTING HARDWARE, CONDUIT, CONDUCTORS, SPLICES, PULL BOXES, ETC. RETURN

CONTROLLER AND CABINET TO BE REPLACED WITH NEW CONTROLLER AND CABINET ON NEW FOUNDATION. REMOVE OTHER EXISTING EQUIPMENT TO BE REMOVED INCLUDING UNUSED SIGNAL HEADS, MOUNTING HARDWARE, CONDUIT, CONDUCTORS, SPLICES, PULL BOXES, ETC. RETURN

1 INSTALL PROPOSED CARLYLE POLE F FROM PROPOSED SIGNAL PLAN FOR USE WITH TEMPORARY SIGNAL PLAN. INSTALL TEMPORARY SIGNAL HEAD 63 ON CARLYLE POLE. RUN CABLE FROM EXISTING CONTROLLER THROUGH TEMPORARY AND PROPOSED CONDUIT TO TEMPORARY SIGNAL HEAD 63. WIRE TEMPORARY SIGNAL HEAD 63 TO CONTROLLER AS ADDITIONAL PHASE 6 SIGNAL HEAD.

2 INSTALL NEW METER

3 PROVISION FOR FUTURE SIGNAL

4 INSTALL ORNAMENTAL MAST ARM POLE, POWDER COATED BLACK, SIGNAL POLE WITH LUMINAIRE, PEDESTRIAN SIGNAL HEAD(S), AND POLARA PEDESTRIAN EQUIPMENT ATTACHED TO 12" POLARA EZ523 (OR EQUIVALENT) PUSH BUTTON MOUNTING EXTENDER.

5 INSTALL NON-ORNAMENTAL PEDESTAL POLE, POWDER COATED BLACK, WITH PEDESTRIAN SIGNAL(S), POLARA PEDESTRIAN EQUIPMENT, AND SIGN(S).

6 INSTALL CARLYLE STREET LIGHT POLE WITH SIGNAL HEAD, PEDESTRIAN SIGNAL HEAD, POLARA PEDESTRIAN EQUIPMENT, AND SIGN.

7 SEE COMMUNICATION PLAN ON SHEET F17.2.1 FOR COMMUNICATION CONNECTION DETAILS.

8 INSTALL NEW PEDESTAL POLE FOUNDATION FOR RED LIGHT CAMERA AND EQUIPMENT IN LOCATION SHOWN. EXISTING POLE, CAMERA, AND ASSOCIATED EQUIPMENT IS TO BE RELOCATED/INSTALLED ONTO THE NEW FOUNDATION BY OTHERS FOLLOWING ACCEPTANCE OF THE NEW FOUNDATION BY ARLINGTON COUNTY. THE EXISTING RED LIGHT CAMERA IS TO REMAIN OPERATIONAL THROUGHOUT CONSTRUCTION TO THE EXTENT POSSIBLE UNLESS OTHERWISE DIRECTED BY ARLINGTON COUNTY. THE CONTRACTOR SHALL NOTIFY DANIELLE FREY-VALENTINE AT ATS (631-848-1098) AT LEAST TWO WEEKS PRIOR TO THE PLANNED TRAFFIC SIGNAL CONTROLLER SWITCHOVER, AND PRIOR TO ANY SERVICE DISRUPTIONS TO THIS EQUIPMENT.

9 INSTALL ORNAMENTAL MAST ARM SIGNAL POLE, POWDER COATED BLACK, WITH LUMINAIRE.

NOTE:

THIS TEMPORARY SIGNAL PLAN ANTICIPATES ALL EXISTING SIGNAL INFRASTRUCTURE WILL REMAIN IN OPERATION THROUGH PHASE 3. NO PROPOSED SIGNAL INFRASTRUCTURE WILL BE IN OPERATION EXCEPT FOR PROPOSED CARLYLE POLE F.

INITIAL TIMING CHART

PHASE	1	2	3	4	5	6	7	8
MOVEMENT	WB LEFT COLUMBIA PIKE	EB COLUMBIA PIKE		SB S. GEORGE MASON DR.	EB LEFT COLUMBIA PIKE	WB COLUMBIA PIKE	SB LEFT S. GEORGE MASON DR.	NB S. GEORGE MASON DR.
PHASE ON		X		X		X	X	X
PHASE OFF	X		X		X			
INTERVAL	PHASE TIMINGS							
MIN GR	5.0	5.0		5.0	5.0	5.0	5.0	5.0
PASSAGE	2.0	0.0		2.0	2.0	0.0	2.0	2.0
YELLOW	4.0	4.0		4.0	4.0	4.0	4.0	4.0
RED	3.0	3.0		3.0	3.0	3.0	3.0	3.0
MAX 1	10.0	50.0		45.0	10.0	50.0	10.0	45.0
MAX 2	-	-		-	-	-	-	-
MIN GAP	-	-		-	-	-	-	-
TIME BEFORE REDUCTION	-	-		-	-	-	-	-
TIME TO REDUCE	-	-		-	-	-	-	-
PED WALK	-	7.0		7.0	-	7.0	-	7.0
PED FLASH DON'T WALK	-	24.0		20.0	-	31.0	-	21.0
MODE	NON-LOCK	MAX RECALL		NON-LOCK	NON-LOCK	MAX RECALL	NON-LOCK	NON-LOCK

POLE SCHEDULE

No.	POLE IDENTIFICATION	STATION	OFFSET	STANDARD TYPE	STANDARD SIG. M.A. ORIENT.	STANDARD SIG. M.A.	STANDARD LUM. M.A. ORIENT.	STANDARD LUM. M.A. (TYPE)	LUM. LED (4)	POLE SIGNAL MOUNTING VEHICLE & PED. HEADS	POLE SIGNAL MOUNTING PED. PUSH BUTTONS	POLE SIGNAL MOUNTING SIGNS	POLE SIGNAL MOUNTING VIDEO DETECTOR PREEMPTION & CCTV	STREET NAME SIGN
A	021-PP-01-SE	151+33.69	37.90' LT	PEDESTAL POLE 12'	-	-	-	-	-	P82	P82	A	-	-
B	021-MA-01-SE	151+37.30	50.79' LT	MAST ARM POLE 30'	180°	56'	180°	6' (STANDARD)	145W	21, 22, 51, P21	P21	B, D	VD2, PE2, CCTV	F
C	021-PP-01-NE	151+61.52	37.83' RT	PEDESTAL POLE 12'	-	-	-	-	-	P81	P81	B	-	-
D	021-MA-01-NE	151+78.16	48.13' RT	MAST ARM POLE 30'	180°	48'	180°	6' (STANDARD)	145W	81, 82, P62	P62	A	VD8, PE8	E
E	021-PP-01-SW	152+46.31	43.81' LT	PEDESTAL POLE 12'	-	-	-	-	-	P22	P22	B	-	-
F	021-CP-01-SW	152+61.94	36.68' LT	CARLYLE POLE 16'	-	-	-	-	69W	P41	P41	B	-	-
G	021-MA-01-NW	152+83.73	59.33' RT	MAST ARM POLE 30'	180°	65'	180°	6' (STANDARD)	145W	11, 61, 62	-	D	VD6, PE6	F
H	021-PP-01-NW	152+94.05	35.54' RT	PEDESTAL POLE 12'	-	-	-	-	-	P42, P61	P42, P61	A(x2)	-	-
I	021-MA-01-SW	152+36.08	56.64' LT	MAST ARM POLE 30'	180°	45'	180°	6' (STANDARD)	**145W**	41, 42, 43, 71	-	C, D	VD4, PE4	E

NOTE: ALL POLES LISTED ABOVE SHALL BE LABELED WITH A POLE IDENTIFICATION STICKER IN ACCORDANCE WITH THE APPROPRIATE POLE ID.

LEGEND

EXISTING	PROPOSED
RIGHT OF WAY	PERMANENT
EASEMENT	TEMPORARY
TRAFFIC SIGNAL CABINET W/ UPS	TRAFFIC
EXTRA LARGE JUNCTION BOX	24"X36"
LARGE JUNCTION BOX	LARGE JU
SMALL JUNCTION BOX	SMALL JU
TRAFFIC SIGNAL HEAD	TRAFFIC
PEDESTRIAN SIGNAL HEAD	PEDESTRI
SIGNAL PHASING	SIGNAL P
TRAFFIC SIGNAL LUMINAIRE	TRAFFIC
SIGNAL POLE AND MAST ARM	SIGNAL POLE AND MAST
PEDESTAL POLE	PEDESTAL POLE
PEDESTRIAN PUSH BUTTON	PEDESTRIAN PUSH BUTTO
PREEMPTION DEVICE	PREEMPTION DEVICE
VIDEO DETECTION CAMERA	VIDEO DETECTION CAMERA
VIDEO DETECTION ZONE	VIDEO DETECTION ZONE
CLOSED CIRCUIT TELEVISION VIDEO	CLOSED CIRCUIT TELEVISION
SIGN	SIGN
POWER SERVICE PEDESTAL	POWER SERVICE PEDESTA
CONDUIT	CONDUIT
CONDUIT WITH PROPOSED CABLE	16 FT CARLYLE STREET LIGHT POLE

PROPOSED TEMPORARY SIGNS

R3-2
36"X36"
H

EXCEPT BUSES
I

EXISTING SIGNS

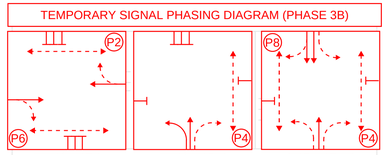
LEFT TURN YIELD ON GREEN
G

COLOR SEQUENCE CHART

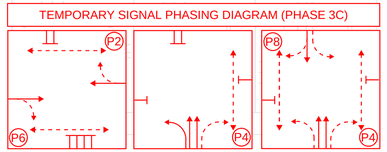
PHASE	1	2	4	5	6	7	8	1+5	1+6	2+5	2+6	4+7	4+8	FLASH
SIGNAL	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	
11														~~R~~
21, 22	G							G			G			Y
41		G										G	G	R
43												~~G~~	~~G~~	~~R~~
51														~~R~~
61,62,63					G						G			Y
71		G				~~G~~						~~G~~	G	~~R~~
81, 82							G						G	R
P21, P22	W*							W*			W*			DARK
P41, P42		W*										W*	W*	DARK
P61, P62					W*				W*		W*			DARK
P81, P82							W*						W*	DARK

NOTE: BLANK SPACES IN THIS CHART REPRESENT A "RED" SIGNAL INDICATION.
*WALK INDICATION IS DISPLAYED WHEN PEDESTRIAN CALL IS SERVICED; WALK INDICATION IS DISPLAYED UNTIL IT IS TIMED OUT. OTHERWISE "DON'T WALK" INDICATION IS DISPLAYED.

TEMPORARY SIGNAL PHASING DIAGRAM (PHASE 3B)



TEMPORARY SIGNAL PHASING DIAGRAM (PHASE 3C)



GRAPHIC SCALE IN FEET
0 12.5 25 50
(HORIZONTAL SCALE)

ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES
Facilities & Engineering Division
Engineering Bureau
2100 Clarendon Boulevard, Suite 813
Arlington, VA 22201
Phone: 703.228.3629
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11400 Commerce Park Drive, Suite 400
Reston, Virginia 20191
Phone: 703-674-1300
Fax: 703-674-1350

Seal

COMMONWEALTH OF VIRGINIA
MICHAEL R. ALBRIGHT
Lic. No. 46643
10/13/2021
PROFESSIONAL ENGINEER

Approvals Date

Design Team Engineer Supervisor
Construction Management Supervisor
Water, Sewer, Streets Bureau Chief
Transportation Director
Project Manager

Revisions Date

Designed: TC
Drawn: TC
Checked: GG
Miss Utility Transmittal #:

Filename: 010073-F-TRAF-GEORGEMASON.dwg
Path: K:\NVA_RDW\110010073 Columbia Pike Multimodal\Production\Task 7.5 Final Design of Columbia Pike Segments\Segment F\7.5.2 - 100% Design Plan\Sheets
Plotted: October 13, 2021
Plotted by: Patrick.Husted

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

TEMPORARY SIGNAL PLAN
COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS
SEGMENT F
COLUMBIA PIKE AND S. GEORGE MASON DR (TS #021)

SCALE: AS SHOWN SHEET: F19.42 of F19.44

ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES
LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES
10/19/2021
APPROVAL DATE

CONDUIT AND CABLE DESCRIPTIONS

1 1-3" CONDUIT PVC
2-14/7C FOR SIGNAL HEADS 11, 61, 62
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

2 1-3" CONDUIT PVC
2-14/7C FOR PED SIGNAL HEADS P42, P61
2-14/3C FOR PED PUSH BUTTONS P42, P61
1-#6 AWG (EGC)

3 1-4" CONDUIT (BORED) HDPE
2-14/7C FOR SIGNAL HEADS 11, 61, 62
2-14/7C FOR PED SIGNAL HEADS P42, P61
2-14/3C FOR PED PUSH BUTTONS P42, P61
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE
1-PREEMPTION CABLE
1-#6 AWG (EGC)

4 1-3" CONDUIT PVC
1-14/7C FOR SIGNAL HEADS 81, 82
1-14/7C FOR PED SIGNAL HEAD P62
1-14/3C FOR PED PUSH BUTTON P62
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

5 1-2" CONDUIT PVC
1-14/7C FOR PED SIGNAL HEAD P81
1-14/3C FOR PED PUSH BUTTON P81
1-#6 AWG (EGC)

6 1-4" CONDUIT (BORED) HDPE
3-14/7C FOR SIGNAL HEADS 11, 61, 62, 81, 82
4-14/7C FOR PED SIGNAL HEADS P42, P61, P62, P81
4-14/3C FOR PED PUSH BUTTONS P42, P61, P62, P81
2-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
2-12/2C FOR LUMINAIRES
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE
2-PREEMPTION CABLES
1-#6 AWG (EGC)

7 1-2" CONDUIT PVC
1-14/7C FOR PED SIGNAL HEAD P82
1-14/3C FOR PED PUSH BUTTON P82
1-#6 AWG (EGC)

8 1-3" CONDUIT PVC
2-14/7C FOR SIGNAL HEADS 21, 22, 51
1-14/7C FOR PED SIGNAL HEAD P21
1-14/3C FOR PED PUSH BUTTON P21
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

9 1-2" CONDUIT PVC
4-RED LIGHT CAMERA CABLES (TO BE INSTALLED BY OTHERS)
1-#6 AWG (EGC)

10 1-2" CONDUIT PVC
1-14/7C FOR PED SIGNAL HEAD P41
1-14/3C FOR PED PUSH BUTTON P41
1-12/2C FOR CARLYLE STREET LIGHT
1-#6 AWG (EGC)

11 1-3" CONDUIT PVC
3-14/7C FOR SIGNAL HEADS 41, 42, 43, 71
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

12 1-2" CONDUIT PVC
1-14/7C FOR PED SIGNAL HEAD P22
1-14/3C FOR PED PUSH BUTTON P22
1-#6 AWG (EGC)

13 1-4" CONDUIT (BORED) HDPE
3-14/7C FOR SIGNAL HEADS 41, 42, 43, 71
2-14/7C FOR PED SIGNAL HEADS P22, P41
2-14/3C FOR PED PUSH BUTTONS P22, P41
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
4-RED LIGHT CAMERA CABLES (TO BE INSTALLED BY OTHERS)
1-12/2C FOR CARLYLE STREET LIGHT
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE
1-PREEMPTION CABLE
1-#6 AWG (EGC)

14 3-3" CONDUIT PVC
8-14/7C FOR SIGNAL HEADS 11, 21, 41, 42, 43, 51, 61, 62, 71, 81, 82
8-14/7C FOR PED SIGNAL HEADS P21, P22, P41, P42, P61, P62, P81, P82
8-14/3C FOR PED PUSH BUTTONS P21, P22, P41, P42, P61, P62, P81, P82
4-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
4-RED LIGHT CAMERA CABLES (TO BE INSTALLED BY OTHERS)
3-#6 AWG (EGC)

1-3" CONDUIT PVC
4-PREEMPTION CABLES
1-#6 AWG (EGC)

15 1-2" CONDUIT METAL
4-#6 AWG FOR ELECTRICAL SERVICE

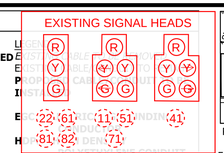
16 1-3" CONDUIT PVC
1-12/C FOR CARLYLE STREET LIGHTS
4-12/C FOR LUMINAIRES
1-#6 AWG (EGC)

PROPOSED ACCESSIBLE PEDESTRIAN PUSHBUTTON

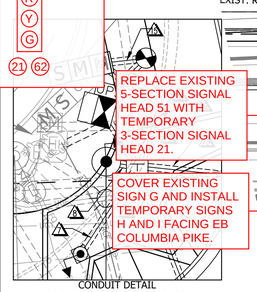
NOTE: ACCESSIBLE PUSHBUTTON SYSTEM SHALL BE POLARA SYSTEM CONFORMING TO ARLINGTON COUNTY SPECIFICATIONS AND SHALL INCLUDE A POLARA CENTRAL CONTROL UNIT.

PUSHBUTTON	WALK MESSAGE
P41, P42, P81, P82	"COLUMBIA PIKE, WALK SIGN IS ON TO CROSS COLUMBIA PIKE."
P21, P22, P61, P62	"GEORGE MASON DRIVE, WALK SIGN IS ON TO GEORGE MASON DRIVE."

EXISTING SIGNAL HEADS



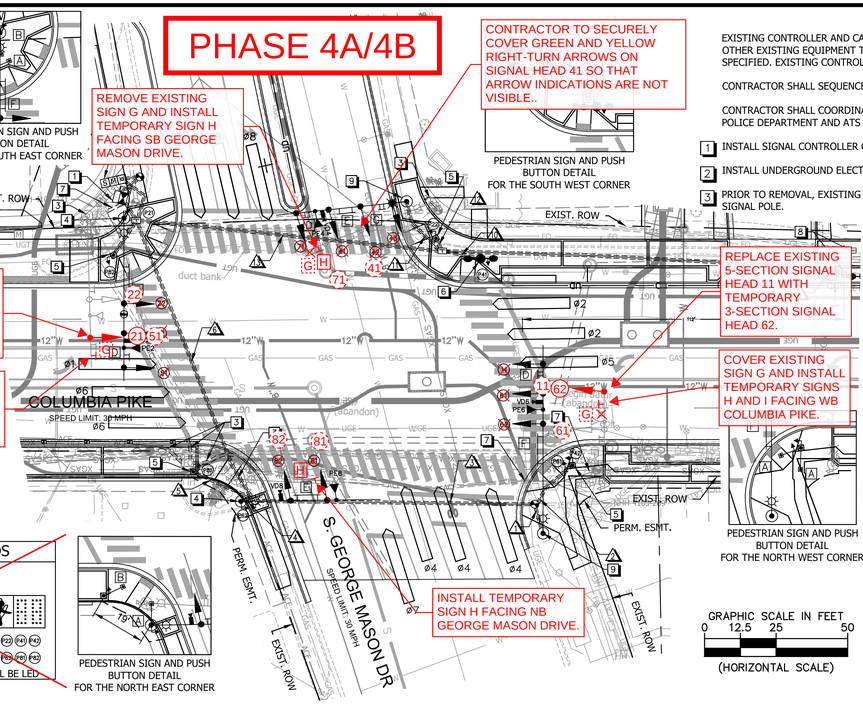
TEMP. SIGNAL HEAD



PHASE 4A/4B

REMOVE EXISTING SIGN G AND INSTALL TEMPORARY SIGN H FACING SB GEORGE MASON DRIVE.

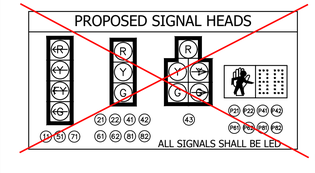
CONTRACTOR TO SECURELY COVER GREEN AND YELLOW RIGHT-TURN ARROWS ON SIGNAL HEAD 41 SO THAT ARROW INDICATIONS ARE NOT VISIBLE..



REPLACE EXISTING 5-SECTION SIGNAL HEAD 11 WITH TEMPORARY 3-SECTION SIGNAL HEAD 62.

COVER EXISTING SIGN G AND INSTALL TEMPORARY SIGNS H AND I FACING WB COLUMBIA PIKE.

INSTALL TEMPORARY SIGN H FACING NB GEORGE MASON DRIVE.

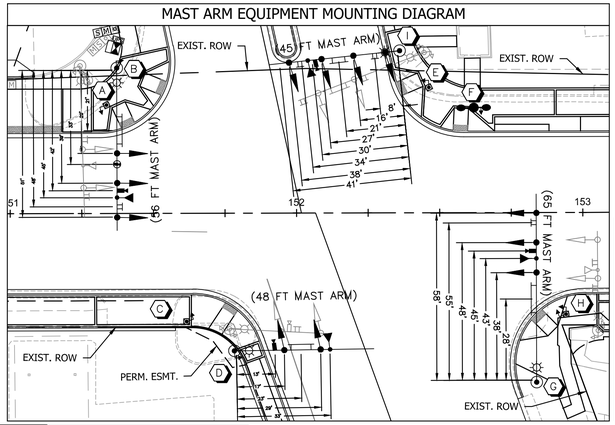


GRAPHIC SCALE IN FEET
0 12.5 25 50
(HORIZONTAL SCALE)

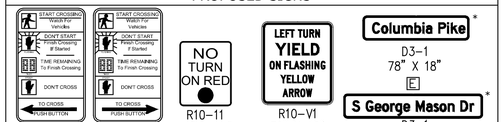
PROPOSED SIGNAL HEADS

ALL SIGNALS SHALL BE LED

MAST ARM EQUIPMENT MOUNTING DIAGRAM



PROPOSED SIGNS



*NOTE: SEE SHEET F17.5 FOR DETAILED STREET NAME SIGN LAYOUT

CONSTRUCTION NOTES

EXISTING CONTROLLER AND CABINET TO BE REPLACED WITH NEW CONTROLLER AND CABINET ON NEW FOUNDATION. ALL OTHER EXISTING EQUIPMENT TO BE REMOVED INCLUDING UNUSED CONDUIT AND CABLE UNLESS OTHERWISE SPECIFIED. EXISTING CONTROLLER AND CABINET SHALL BE RETURN

CONTRACTOR SHALL SEQUENCE INSTALLATION OF NEW MAST ARM S

CONTRACTOR SHALL COORDINATE THE REVISIONS TO THE RED LIG POLICE DEPARTMENT AND ATS (DANIELLE FREY-VALENTINE AT 631-8

1 INSTALL SIGNAL CONTROLLER CABINET WITH UPS AND CONCRETE S

2 INSTALL UNDERGROUND ELECTRIC SERVICE WITH PEDESTAL METER

3 PRIOR TO REMOVAL, EXISTING SIGNAL POLES STILL IN OPERATION SIGNAL POLE.

4 INSTALL ORNAMENTAL MAST AR PEDESTRIAN SIGNAL HEAD(S), AND POLARA PEDESTRIAN EQUIPMENT ATTACHED TO 12" POLARA EZ523 (OR EQUIVALENT) PUSH BUTTON MOUNTING EXTENDER.

5 INSTALL NON-ORNAMENTAL PEDESTAL POLE, POWDER COATED BLACK, WITH PEDESTRIAN SIGNAL(S), POLARA PEDESTRIAN EQUIPMENT, AND SIGN(S).

6 INSTALL CARLYLE STREET LIGHT POLE WITH SIGNAL HEAD, PEDESTRIAN SIGNAL HEAD, POLARA PEDESTRIAN EQUIPMENT, AND SIGN.

7 SEE COMMUNICATION PLAN ON SHEET F17.2.1 FOR COMMUNICATION CONNECTION DETAILS.

8 INSTALL NEW PEDESTAL POLE FOUNDATION FOR RED LIGHT CAMERA AND EQUIPMENT IN LOCATION SHOWN. EXISTING POLE, CAMERA, AND ASSOCIATED EQUIPMENT IS TO BE RELOCATED/INSTALLED ONTO THE NEW FOUNDATION BY OTHERS FOLLOWING ACCEPTANCE OF THE NEW FOUNDATION BY ARLINGTON COUNTY. THE EXISTING RED LIGHT CAMERA IS TO REMAIN OPERATIONAL THROUGHOUT CONSTRUCTION TO THE EXTENT POSSIBLE UNLESS OTHERWISE DIRECTED BY ARLINGTON COUNTY. THE CONTRACTOR SHALL NOTIFY DANIELLE FREY-VALENTINE AT ATS (631-848-1098) AT LEAST TWO WEEKS PRIOR TO THE PLANNED TRAFFIC SIGNAL CONTROLLER SWITCHOVER, AND PRIOR TO ANY SERVICE DISRUPTIONS TO THIS EQUIPMENT.

9 INSTALL ORNAMENTAL MAST ARM SIGNAL POLE, POWDER COATED BLACK, WITH LUMINAIRE.

NOTE:

THIS TEMPORARY SIGNAL PLAN ANTICIPATES ALL EXISTING SIGNAL INFRASRUCTURE WILL REMAIN IN OPERATION THROUGH PHASE 4B. NO PROPOSED SIGNAL INFRASTRUCTURE WILL BE IN OPERATION.

INITIAL TIMING CHART

PHASE	1	2	3	4	5	6	7	8
MOVEMENT	WB LEFT COLUMBIA PIKE	EB COLUMBIA PIKE		SB S. GEORGE MASON DR.	EB LEFT COLUMBIA PIKE	WB COLUMBIA PIKE	SB LEFT S. GEORGE MASON DR.	NB S. GEORGE MASON DR.
PHASE ON		X		X		X	X	X
PHASE OFF	X		X		X			
INTERVAL	PHASE TIMINGS							
MIN GR	5.0	5.0		5.0	5.0	5.0	5.0	5.0
PASSAGE	2.0	0.0		2.0	2.0	0.0	2.0	2.0
YELLOW	4.0	4.0		4.0	4.0	4.0	4.0	4.0
RED	3.0	3.0		3.0	3.0	3.0	3.0	3.0
MAX 1	10.0	50.0		45.0	10.0	50.0	10.0	45.0
MAX 2	-	-		-	-	-	-	-
MIN GAP	-	-		-	-	-	-	-
TIME BEFORE REDUCTION	-	-		-	-	-	-	-
TIME TO REDUCE	-	-		-	-	-	-	-
PED WALK	-	7.0		7.0	-	7.0	-	7.0
PED FLASH DON'T WALK	-	24.0		20.0	-	31.0	-	21.0
MODE	NON-LOCK	MAX RECALL		NON-LOCK	NON-LOCK	MAX RECALL	NON-LOCK	NON-LOCK

POLE SCHEDULE

No.	POLE IDENTIFICATION	STATION	OFFSET	STANDARD TYPE	STANDARD SIG. M.A. ORIENT.	STANDARD SIG. M.A.	STANDARD LUM. M.A. ORIENT.	STANDARD LUM. M.A. (TYPE)	LUM. LED (4)	POLE SIGNAL MOUNTING VEHICLE & PED. HEADS	POLE SIGNAL MOUNTING PED. PUSH BUTTONS	POLE SIGNAL MOUNTING SIGNS	POLE SIGNAL MOUNTING VIDEO DETECTOR PREEMPTION & CCTV	STREET NAME SIGN
A	021-PP-01-SE	151+33.69	37.90' LT	PEDESTAL POLE 12'	-	-	-	-	-	P82	P82	A	-	-
B	021-MA-01-SE	151+37.30	50.79' LT	MAST ARM POLE 30'	180°	56'	180°	6' (STANDARD)	145W	21, 22, 51, P21	P21	B, D	VD2, PE2, CCTV	F
C	021-PP-01-NE	151+61.52	37.83' RT	PEDESTAL POLE 12'	-	-	-	-	-	P81	P81	B	-	-
D	021-MA-01-NE	151+78.16	48.13' RT	MAST ARM POLE 30'	180°	48'	180°	6' (STANDARD)	145W	81, 82, P62	P62	A	VD8, PE8	E
E	021-PP-01-SW	152+46.31	43.81' LT	PEDESTAL POLE 12'	-	-	-	-	-	P22	P22	B	-	-
F	021-CP-01-SW	152+61.94	36.68' LT	CARLYLE POLE 16'	-	-	-	-	69W	P41	P41	B	-	-
G	021-MA-01-NW	152+83.73	59.33' RT	MAST ARM POLE 30'	180°	65'	180°	6' (STANDARD)	145W	11, 61, 62	-	D	VD6, PE6	F
H	021-PP-01-NW	152+94.05	35.54' RT	PEDESTAL POLE 12'	-	-	-	-	-	P42, P61	P42, P61	A(x2)	-	-
I	021-MA-01-SW	152+36.08	56.64' LT	MAST ARM POLE 30'	180°	45'	180°	6' (STANDARD)	145W	41, 42, 43, 71	-	C, D	VD4, PE4	E

NOTE: ALL POLES LISTED ABOVE SHALL BE LABELED WITH A POLE IDENTIFICATION STICKER IN ACCORDANCE WITH THE APPROPRIATE POLE ID.

LEGEND

EXISTING	PROPOSED
RIGHT OF WAY	PERMANENT
EASEMENT	TEMPORARY
TRAFFIC SIGNAL CABINET W/ UPS	TRAFFIC
EXTRA LARGE JUNCTION BOX	24"X36"
LARGE JUNCTION BOX	LARGE JU
SMALL JUNCTION BOX	SMALL JU
TRAFFIC SIGNAL HEAD	TRAFFIC
PEDESTRIAN SIGNAL HEAD	PEDESTRI
SIGNAL PHASING	SIGNAL P
TRAFFIC SIGNAL LUMINAIRE	TRAFFIC
SIGNAL POLE AND MAST ARM	SIGNAL POLE AND MAST
PEDESTAL POLE	PEDESTAL POLE
PEDESTRIAN PUSH BUTTON	PEDESTRIAN PUSH BUTTO
PREEMPTION DEVICE	PREEMPTION DEVICE
VIDEO DETECTION CAMERA	VIDEO DETECTION CAMERA
VIDEO DETECTION ZONE	VIDEO DETECTION ZONE
CLOSED CIRCUIT TELEVISION VIDEO	CLOSED CIRCUIT TELEVISION
SIGN	SIGN
POWER SERVICE PEDESTAL	POWER SERVICE PEDESTA
CONDUIT	CONDUIT
CONDUIT WITH PROPOSED CABLE	16 FT CARLYLE STREET LIGHT POLE

PROPOSED TEMPORARY SIGNS

R3-2
36"X36"
H

EXCEPT BUSES
I

EXISTING SIGNS

LEFT TURN YIELD ON GREEN
G

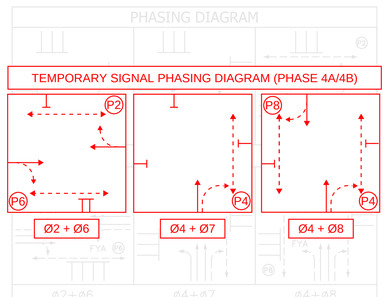
COLOR SEQUENCE CHART

PHASE	1	2	4	5	6	7	8	3+5	1+6	2+5	2+6	4+7	4+8	FLASH
SIGNAL	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	
11														~~R~~
21, 22	G									G	G			Y
41		G										G	G	R
43														~~R~~
51														~~R~~
61, 62					G						G			Y
71		G				~~G~~						~~G/R~~	G	~~R~~
81, 82							G						G	R
P21, P22	W*									W*	W*			DARK
P41, P42		W*										W*	W*	DARK
P61, P62					W*					W*	W*			DARK
P81, P82							W*						W*	DARK

NOTE: BLANK SPACES IN THIS CHART REPRESENT A "RED" SIGNAL INDICATION.
*WALK INDICATION IS DISPLAYED WHEN PEDESTRIAN CALL IS SERVICED; WALK INDICATION IS DISPLAYED UNTIL IT IS TIMED OUT. OTHERWISE "DON'T WALK" INDICATION IS DISPLAYED.

PHASING DIAGRAM

TEMPORARY SIGNAL PHASING DIAGRAM (PHASE 4A/4B)



ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

TEMPORARY SIGNAL PLAN
COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS
SEGMENT F
COLUMBIA PIKE AND S. GEORGE MASON DR (TS #021)

SCALE: AS SHOWN | SHEET: F19.42.1 of F19.44

ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES
LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES
10/19/2021
APPROVAL DATE

ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES
Facilities & Engineering Division
Engineering Bureau
2100 Clarendon Boulevard, Suite 813
Arlington, VA 22201
Phone: 703.228.3629
Fax: 703.228.3606

Kimley»Horn
Kimley-Horn and Associates, Inc.
©2021 KIMLEY-HORN AND ASSOCIATES, INC.
11400 Commerce Park Drive, Suite 400
Reston, Virginia 20191
Phone: 703-674-1300
Fax: 703-674-1350

Seal

Approvals Date

Design Team Engineer Supervisor
Construction Management Supervisor
Water, Sewer, Streets Bureau Chief
Transportation Director
Project Manager

Revisions Date

Designed: TC
Drawn: TC
Checked: GG
Miss Utility Transmittal #:

Filename: 010073-F-TRAF-GEORGEMASON.dwg
Path: K:\NVA_RDW\110010073 Columbia Pike Multimodal\Production\Task 7.5 Final Design of Columbia Pike Segments\Segment F\7.5.2 - 100% Design Plan\Sheets
Plotted: October 13, 2021
Plotted by: Patrick.Husted

PHASE 1C/1D

CONDUIT AND CABLE DESCRIPTIONS

1 **1-2" CONDUIT PVC**
1-14/7C FOR PED HEAD P81
1-14/3C FOR PED PUSH BUTTON P81
1-#6 AWG (EGC)

2 **1-2" CONDUIT PVC**
1-14/7C FOR PED HEAD P62
1-14/3C FOR PED PUSH BUTTON P62
1-#6 AWG (EGC)

3 **1-3" CONDUIT PVC**
2-14/7C FOR PED HEADS P62, P81
2-14/3C FOR PED PUSH BUTTONS P62, P81
1-#6 AWG (EGC)

4 1-2" CONDUIT PVC
1-14/7C FOR SIGNAL HEADS 81, 82
1-12/2C FOR LUMINAIRE
2-14/7C FOR PED HEADS P62, P81 (TO BE REMOVED)
1-14/2C FOR PED PUSH BUTTON P81 (TO BE REMOVED)
1-14/4C FOR VIDEO DETECTION (TO BE REMOVED)
1-COAXIAL CABLE FOR VIDEO DETECTION (TO BE REMOVED)
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-PREEMPTION CABLE
1-#8 AWG (EGC)

5 **1-4" CONDUIT (BORED) HDPE**
3-14/7C FOR SIGNAL HEADS 21, 22, 41, 42, 61, 62
6-14/7C FOR PED HEADS 21, 22, 41, 42, 61, 82
6-14/3C FOR PEAD PUSH BUTTONS 21, 22, 41, 42, 61, 82
3-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
2-12/2C FOR CARLYLE STREET LIGHTS
3-12/2C FOR LUMINAIRES
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE
3-PREEMPTION CABLES
1-#6 AWG (EGC)

6 **1-3" CONDUIT PVC**
1-14/7C FOR SIGNAL HEADS 61, 62
1-14/7C FOR PED HEAD P42
1-14/3C FOR PED PUSH BUTTON P42
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

7 **1-2" CONDUIT PVC**
1-14/7C FOR PED HEAD P61
1-14/3C FOR PED PUSH BUTTON P61
1-12/2C FOR CARLYLE STREET LIGHT
1-#6 AWG (EGC)

8 **1-4" CONDUIT (BORED) HDPE**
2-14/7C FOR SIGNAL HEADS 21, 22, 41, 42
4-14/7C FOR PED HEADS 21, 22, 41, 82
4-14/3C FOR PED PUSH BUTTONS 21, 22, 41, 82
2-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
1-12/2C FOR CARLYLE STREET LIGHT
2-12/2C FOR LUMINAIRES
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE
2-PREEMPTION CABLES
1-#6 AWG (EGC)

9 **1-2" CONDUIT PVC**
1-14/7C FOR PED HEAD P22
1-14/3C FOR PED PUSH BUTTON P22
1-#6 AWG (EGC)

10 **1-2" CONDUIT PVC**
1-14/7C FOR PED HEAD P41
1-14/3C FOR PED PUSH BUTTON P41
1-12/2C FOR CARLYLE STREET LIGHT
1-#6 AWG (EGC)

11 **1-2" CONDUIT PVC**
1-14/7C FOR SIGNAL HEADS 41, 42
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

12 **1-4" CONDUIT (BORED) HDPE**
1-14/7C FOR SIGNAL HEADS 21, 22
2-14/7C FOR PED HEADS P21, P82
2-14/3C FOR PED PUSH BUTTONS P21, P82
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE
1-PREEMPTION CABLE
1-#6 AWG (EGC)

13 **1-2" CONDUIT PVC**
1-14/7C FOR PED HEAD P21
1-14/3C FOR PED PUSH BUTTON P21
1-#6 AWG (EGC)

14 **1-2" CONDUIT PVC**
1-14/7C FOR PED HEAD P82
1-14/3C FOR PED PUSH BUTTON P82
1-#6 AWG (EGC)

15 **1-2" CONDUIT PVC**
1-14/7C FOR SIGNAL HEADS 21, 22
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

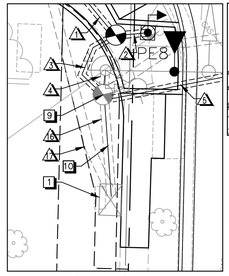
1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

16 2-2" CONDUIT PVC
1-14/7C FOR SIGNAL HEADS 81, 82
3-14/7C FOR SIGNAL HEADS 21, 22, 41, 42, 61, 62 (TO BE REMOVED)
3-14/7C FOR SIGNAL HEADS 21, 22, 41, 42, 61, 62
8-14/7C FOR PED HEADS P21, P22, P41, P42, P61, P62, P81, P82 (TO BE REMOVED)
8-14/7C FOR PED HEADS P21, P22, P41, P42, P61, P62, P81, P82
4-14/2C FOR PED PUSH BUTTON P41, P42, P81, P82 (TO BE REMOVED)
8-14/3C FOR PED PUSH BUTTONS P21, P22, P41, P42, P61, P62, P81, P82
2-14/4C FOR VIDEO DETECTION (TO BE REMOVED)
2-COAXIAL CABLE FOR VIDEO DETECTION (TO BE REMOVED)
4-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
2-PREEMPTION CABLES (TO BE REMOVED)
4-PREEMPTION CABLES
2-12/2C FOR CARLYLE STREET LIGHTS
1-12/2C FOR LUMINAIRE
3-12/2C FOR LUMINAIRES
2-#8 AWG (EGC)
TEMP. 2-14/7C FOR TEMP. SIGNAL HEADS 23 AND 63

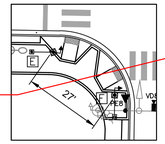
17 **1-2" CONDUIT PVC**
1-12 FIBER CABLES FOR COMMUNICATION

18 **4-2" CONDUIT**
2-144 FIBER CABLES FOR COMMUNICATION

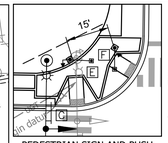
LEGEND: *EXISTING CABLE TO BE REMOVED*
EXISTING CABLE/CONDUIT TO REMAIN
PROPOSED CABLE/CONDUIT TO BE INSTALLED
EGC - ELECTRICAL GROUNDING CONDUCTOR
HDPE - HIGH DENSITY POLYETHYLENE CONDUIT



CONDUIT DETAIL
FOR THE NORTH EAST CORNER
SCALE: 1"=10'

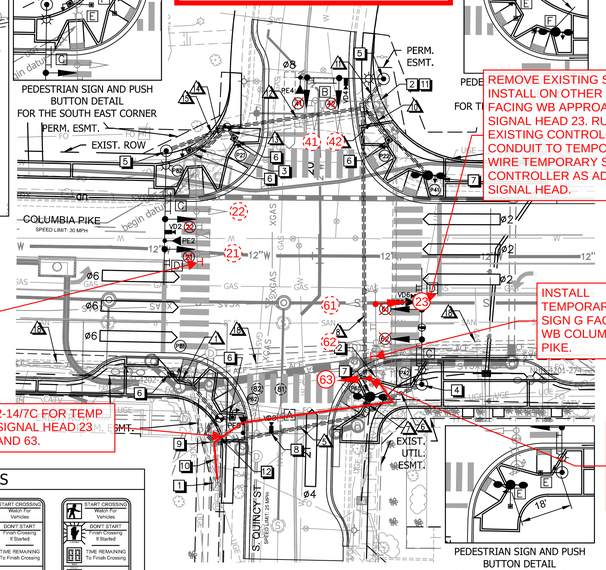


PEDESTRIAN SIGN AND PUSH BUTTON DETAIL
FOR THE NORTH EAST CORNER



PEDESTRIAN SIGN AND PUSH BUTTON DETAIL
FOR THE SOUTH EAST CORNER

PEDESTRIAN SIGN AND PUSH BUTTON DETAIL
FOR THE NORTH WEST CORNER



INSTALL TEMPORARY SIGN G FACING EB COLUMBIA PIKE.

2-14/7C FOR TEMP SIGNAL HEAD 23 AND 63.

REMOVE EXISTING SIGNAL HEAD 61 AND INSTALL ON OTHER SIDE OF MAST ARM FACING WB APPROACH AS TEMPORARY SIGNAL HEAD 23. RUN CABLE FROM EXISTING CONTROLLER THROUGH EXISTING CONDUIT TO TEMPORARY SIGNAL HEAD 23. WIRE TEMPORARY SIGNAL HEAD 23 TO CONTROLLER AS ADDITIONAL PHASE 2 SIGNAL HEAD.

INSTALL TEMPORARY SIGN G FACING WB COLUMBIA PIKE.

MOUNT TEMPORARY SIGNAL HEAD 63 TO EXISTING SIGNAL POLE. RUN CABLE FROM EXISTING CONTROLLER THROUGH EXISTING CONDUIT TO TEMPORARY SIGNAL HEAD 63. WIRE TEMPORARY SIGNAL HEAD 63 TO CONTROLLER AS ADDITIONAL PHASE 6 SIGNAL HEAD.

PROPOSED SIGNS

Columbia Pike D3-1 78" X 18" B	* LEFT TURN YIELD ON GREEN R10-12 30" X 36" D	START CROSSING Watch For Vehicles / DON'T START From Crossing If Started / TIME REMAINING To Finish Crossing / DON'T CROSS / TO CROSS PUSH BUTTON R10-3E(L) 9" X 15" E	START CROSSING Watch For Vehicles / DON'T START From Crossing If Started / TIME REMAINING To Finish Crossing / DON'T CROSS / TO CROSS PUSH BUTTON R10-3E(R) 9" X 15" F	
S Quincy St D3-1 66"x18' C				

*NOTE: SEE SHEET F17.5 FOR DETAILED STREET NAME SIGN LAYOUT

EXISTING SIGNS

Columbia Pike
A

GRAPHIC SCALE IN FEET
0 12.5 25 50
(HORIZONTAL SCALE)

CONSTRUCTION NOTES

CONTRACTOR SHALL SEQUENCE THE INSTALL…

1 INSTALL UPS ON EXISTING SIGNAL CONTROLL… SERVICE PEDESTAL TO REMAIN FOR USE WITH…

2 EXISTING SIGNAL POLE, MAST ARM, AND ALL S… COMPLETELY REMOVE AND DISPOSE OF EXIST…

3 …OLE, MAST ARM, AND ALL S… CUT 36" BELOW GRADE A…

4 …TAL MAST ARM SIGNAL POL… A PEDESTRIAN EQUIPMENT… …ERS.

5 …TAL MAST ARM SIGNAL POLE, POWDER COATED BLACK, WITH LUMINAIRE.

6 INSTALL NON-ORNAMENTAL PEDESTAL POLE, POWDER COATED BLACK, WITH PEDESTRIAN SIGNAL, POLARA PEDESTRIAN EQUIPMENT, AND SIGN.

7 INSTALL CARLYLE STREET LIGHT POLE WITH PEDESTRIAN SIGNAL HEAD, POLARA PEDESTRIAN EQUIPMENT, AND SIGN.

8 REPLACE EXISTING VIDEO DETECTION CAMERA WITH THERMAL VIDEO DETECTION CAMERA.

9 CONTRACTOR TO INSTALL PROPOSED CONDUIT(S) INTO EXISTING JUNCTION BOX AS SHOWN. DO NOT CUT EXISTING CONDUCTORS. PROPOSED CONDUIT SHALL EXTEND INTO EXISTING JUNCTION BOX THREE INCHES. CONTRACTOR IS RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF CONDUCTORS, CONDUITS, AND JUNCTION BOX IF DAMAGED.

10 EXISTING CONDUIT CAPACITY INTO CONTROLLER IS LIMITED. CONTRACTOR SHALL ASSUME ADDITIONAL TRAFFIC CONTROL TIME WILL BE NECESSARY TO REMOVE EXISTING CABLES, INSTALL AND CONNECT NEW CABLES TO CONTROLLER.

11 PRIOR TO REMOVAL, EXISTING SIGNAL POLE STILL IN OPERATION SHALL BE STABILIZED DURING INSTALLATION OF PROPOSED SIGNAL POLE.

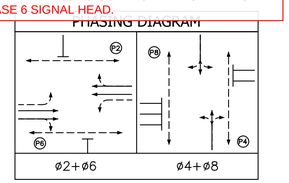
12 EXISTING SIGNAL POLE AND MAST ARM TO REMAIN. PEDESTRIAN SIGNALS AND PUSHBUTTONS TO BE REMOVED.

NOTE:

THIS TEMPORARY SIGNAL PLAN ANTICIPATES ALL EXISTING SIGNAL INFRASRUCTURE WILL REMAIN IN OPERATION THROUGH PHASE 1. NO PROPOSED SIGNAL INFRASTRUCTURE WILL BE IN OPERATION.

PHASING DIAGRAM

21, 22, 23



COLOR SEQUENCE CHART

62, 63

PHASE	2	4	6	8	2+6	4+8	
SIGNAL	R/W	R/W	R/W	R/W	R/W	R/W	FLASH
21, 22	G				G		Y
41, 42		G				G	R
61, 62			G		G		Y
81, 82				G		G	R
P21, P22	W*				W*		DARK
P41, P42		W*				W*	DARK
P61, P62			W*		W*		DARK
P81, P82				W*		W*	DARK

NOTE: BLANK SPACES IN THIS CHART REPRESENT A "RED" SIGNAL INDICATION.

*WALK INDICATION IS DISPLAYED WHEN PEDESTRIAN CALL IS SERVICED; WALK INDICATION IS DISPLAYED UNTIL IT IS TIMED OUT. OTHERWISE "DON'T WALK" INDICATION IS DISPLAYED.

POLE SCHEDULE

No.	POLE IDENTIFICATION	STATION	OFFSET	STANDARD TYPE	STANDARD SIG. M.A. ORIENT.	STANDARD SIG. M.A.	STANDARD LUM. M.A. ORIENT.	STANDARD LUM. M.A. (TYPE)	LUM. LED (4)	POLE SIGNAL MOUNTING VEHICLE & PED. HEADS	POLE SIGNAL MOUNTING PED. PUSH BUTTONS	POLE SIGNAL MOUNTING SIGNS	POLE SIGNAL MOUNTING VIDEO DETECTOR PREEMPTION & CCTV	STREET NAME SIGN
A	022-MA-01-SE	143+67.63	43.98' LT	MAST ARM POLE 30'	180°	46'	180°	6' (STANDARD)	145W	21, 22	-	D	VD2, PE2	C
B	022-PP-01-NE	143+70.69	33.97' RT	PEDESTAL POLE 12'	-	-	-	-	-	P81	P81	E	-	-
C	022-PP-01-SE	143+75.79	44.41' LT	PEDESTAL POLE 12'	-	-	-	-	-	P82	P82	E	-	-
D	022-PP-02-NE	143+92.20	48.70' RT	PEDESTAL POLE 12'	-	-	-	-	-	P62	P62	F	-	-
E	022-PP-02-SE	143+91.49	48.78' LT	PEDESTAL POLE 12'	-	-	-	-	-	P21	P21	F	-	-
F	022-CP-01-NW	144+33.95	41.05' RT	DOUBLE CARLYLE POLE 16'	-	-	-	-	69W	P61	P61	E	-	-
G	022-MA-01-SW	144+44.02	70.00' LT	MAST ARM POLE 30'	180°	30'	180°	6' (STANDARD)	145W	41, 42	-	-	VD4, PE4	B
H	022-PP-01-SW	144+45.84	48.63' LT	PEDESTAL POLE 12'	-	-	-	-	-	P22	P22	E	-	-
I	022-MA-01-NW	144+57.75	36.70' RT	MAST ARM POLE 30'	180°	40'	180°	6' (STANDARD)	145W	61, 62	P42	D, E	VD6, PE6, CCTV	C
J	022-CP-01-SW	144+59.79	36.34' LT	DOUBLE CARLYLE POLE 16'	-	-	-	-	69W	P41	P41	F	-	-
K	022-PP-01-SE	EXISTING	EXISTING	MAST ARM POLE	-	-	-	-	145W	81, 82	-	-	VD8, PE8	A

NOTE: ALL POLES LISTED ABOVE SHALL BE LABELED WITH A POLE IDENTIFICATION STICKER IN ACCORDANCE WITH THE APPROPRIATE POLE ID.

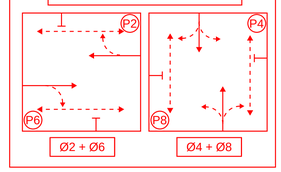
PROPOSED TEMPORARY SIGNS

R3-2
36"X36"
G

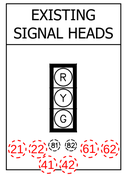
PROPOSED ACCESSIBLE PEDESTRIAN PUSHBUTTON

NOTE: ACCESSIBLE…

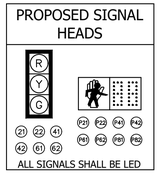
TEMPORARY SIGNAL PHASING DIAGRAM



EXISTING SIGNAL HEADS

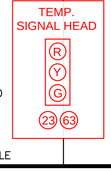


PROPOSED SIGNAL HEADS

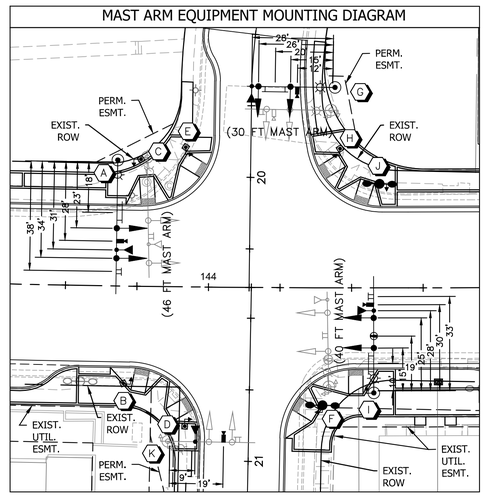


ALL SIGNALS SHALL BE LED

TEMP. SIGNAL HEAD



MAST ARM EQUIPMENT MOUNTING DIAGRAM



INITIAL TIMING CHART

PHASE	1	2	3	4	5	6	7	8
MOVEMENT		EB COLUMBIA PIKE		SB S. QUINCY STREET		WB COLUMBIA PIKE		NB S. QUINCY STREET
PHASE ON		X		X		X		X
PHASE OFF	X		X		X		X	
INTERVAL	PHASE TIMINGS							
MIN GR		5.0		5.0		5.0		5.0
PASSAGE		0.0		2.0		0.0		2.0
YELLOW		4.0		4.0		4.0		4.0
RED		3.0		3.0		3.0		3.0
MAX 1		50.0		25.0		50.0		25.0
MAX 2		-		-		-		-
MIN GAP		-		-		-		-
TIME BEFORE REDUCTION		-		-		-		-
TIME TO REDUCE		-		-		-		-
PED WALK		7.0		7.0		7.0		7.0
PED FLASH DON'T WALK		12.0		17.0		11.0		17.0
MODE		MAX RECALL		NON-LOCK		MAX RECALL		NON-LOCK

LEGEND

EXISTING		PROPOSED	
	RIGHT OF WAY		PERMANENT EASEMENT
	EASEMENT		TEMPORARY CONSTRUCTION EASEMENT
	TRAFFIC SIGNAL CABINET W/ UPS		TRAFFIC SIGNAL CABINET W/ UPS
T	EXTRA LARGE JUNCTION BOX	T	24"X36" JUNCTION BOX (61-04, TYPE-3)
	LARGE JUNCTION BOX		LARGE JUNCTION BOX (61-02)
	SMALL JUNCTION BOX		SMALL JUNCTION BOX (14040-01)
	TRAFFIC SIGNAL HEAD		TRAFFIC SIGNAL HEAD
	PEDESTRIAN SIGNAL HEAD		PEDESTRIAN SIGNAL HEAD
4	SIGNAL PHASING	4	SIGNAL PHASING
	TRAFFIC SIGNAL LUMINAIRE		TRAFFIC SIGNAL LUMINAIRE
	SIGNAL POLE AND MAST ARM		SIGNAL POLE AND MAST ARM
	PEDESTAL POLE		PEDESTAL POLE
	PEDESTRIAN PUSH BUTTON		PEDESTRIAN PUSH BUTTON
	PREEMPTION DEVICE		PREEMPTION DEVICE
	VIDEO DETECTION CAMERA		VIDEO DETECTION CAMERA
	VIDEO DETECTION ZONE		VIDEO DETECTION ZONE
	CLOSED CIRCUIT TELEVISION VIDEO		CLOSED CIRCUIT TELEVISION VIDEO
A TT	SIGN	A TT	SIGN
S M O	POWER SERVICE PEDESTAL	S M	POWER SERVICE PEDESTAL
	CONDUIT		CONDUIT
	CONDUIT WITH PROPOSED CABLE		16 FT CARLYLE STREET LIGHT POLE

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

TEMPORARY SIGNAL PLAN

COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS
SEGMENT F
COLUMBIA PIKE AND S. QUINCY ST (TS #022)

SCALE: AS SHOWN | SHEET: F19.43 of F19.44

ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES

10/19/2021
APPROVAL DATE

ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES
Facilities & Engineering Division
Engineering Bureau
2100 Clarendon Boulevard, Suite 813
Arlington, VA 22201
Phone: 703.228.3629
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Seal

COMMONWEALTH OF VIRGINIA
MICHAEL R. ALBRIGHT
Lic. No. 46643
09/10/2021
PROFESSIONAL ENGINEER

Approvals Date

Design Team Engineer Supervisor

Construction Management Supervisor

Water, Sewer, Streets Bureau Chief

Transportation Director

Project Manager

Revisions Date

Designed: KF
Drawn: KF
Checked: GG
Miss Utility Transmittal #:

Filename: 010073-F-TRAF-QUINCY.dwg
Path: K:\NVA_RDW\T\1001073 - Columbia Pike Multimodal\Production\Task 3.5 Final Design of Columbia Pike Segments\Segment F\3.5.2 - 100% Design\Preliminary
Plotted: September 10, 2021
Plotted by: patrick.husted

PHASE 3C/3D

CONDUIT AND CABLE DESCRIPTIONS

1 **1-2" CONDUIT PVC**
1-14/7C FOR PED HEAD P81
1-14/3C FOR PED PUSH BUTTON P81
1-#6 AWG (EGC)

2 **1-2" CONDUIT PVC**
1-14/7C FOR PED HEAD P62
1-14/3C FOR PED PUSH BUTTON P62
1-#6 AWG (EGC)

3 **1-3" CONDUIT PVC**
2-14/7C FOR PED HEADS P62, P81
2-14/3C FOR PED PUSH BUTTONS P62, P81
1-#6 AWG (EGC)

4 1-2" CONDUIT PVC
1-14/7C FOR SIGNAL HEADS 81, 82
1-12/2C FOR LUMINAIRE
2-14/7C FOR PED HEADS P62, P81 (TO BE REMOVED)
1-14/2C FOR PED PUSH BUTTON P81 (TO BE REMOVED)
1-14/4C FOR VIDEO DETECTION (TO BE REMOVED)
1-COAXIAL CABLE FOR VIDEO DETECTION (TO BE REMOVED)
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-PREEMPTION CABLE
1-#8 AWG (EGC)

5 **1-4" CONDUIT (BORED) HDPE**
3-14/7C FOR SIGNAL HEADS 21, 22, 41, 42, 61, 62
6-14/7C FOR PED HEADS 21, 22, 41, 42, 61, 82
6-14/3C FOR PEAD PUSH BUTTONS 21, 22, 41, 42, 61, 82
3-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
2-12/2C FOR CARLYLE STREET LIGHTS
3-12/2C FOR LUMINAIRES
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE
3-PREEMPTION CABLES
1-#6 AWG (EGC)

6 **1-3" CONDUIT PVC**
1-14/7C FOR SIGNAL HEADS 61, 62
1-14/7C FOR PED HEAD P42
1-14/3C FOR PED PUSH BUTTON P42
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

7 **1-2" CONDUIT PVC**
1-14/7C FOR PED HEAD P61
1-14/3C FOR PED PUSH BUTTON P61
1-12/2C FOR CARLYLE STREET LIGHT
1-#6 AWG (EGC)

8 **1-4" CONDUIT (BORED) HDPE**
2-14/7C FOR SIGNAL HEADS 21, 22, 41, 42
4-14/7C FOR PED HEADS 21, 22, 41, 82
4-14/3C FOR PED PUSH BUTTONS 21, 22, 41, 82
2-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
1-12/2C FOR CARLYLE STREET LIGHT
2-12/2C FOR LUMINAIRES
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE
2-PREEMPTION CABLES
1-#6 AWG (EGC)

9 **1-2" CONDUIT PVC**
1-14/7C FOR PED HEAD P22
1-14/3C FOR PED PUSH BUTTON P22
1-#6 AWG (EGC)

10 **1-2" CONDUIT PVC**
1-14/7C FOR PED HEAD P41
1-14/3C FOR PED PUSH BUTTON P41
1-12/2C FOR CARLYLE STREET LIGHT
1-#6 AWG (EGC)

11 **1-2" CONDUIT PVC**
1-14/7C FOR SIGNAL HEADS 41, 42
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

12 **1-4" CONDUIT (BORED) HDPE**
1-14/7C FOR SIGNAL HEADS 21, 22
2-14/7C FOR PED HEADS P21, P82
2-14/3C FOR PED PUSH BUTTONS P21, P82
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE
1-PREEMPTION CABLE
1-#6 AWG (EGC)

13 **1-2" CONDUIT PVC**
1-14/7C FOR PED HEAD P21
1-14/3C FOR PED PUSH BUTTON P21
1-#6 AWG (EGC)

14 **1-2" CONDUIT PVC**
1-14/7C FOR PED HEAD P82
1-14/3C FOR PED PUSH BUTTON P82
1-#6 AWG (EGC)

15 **1-2" CONDUIT PVC**
1-14/7C FOR SIGNAL HEADS 21, 22
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

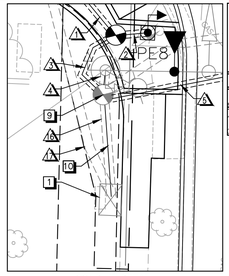
1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

16 2-2" CONDUIT PVC
1-14/7C FOR SIGNAL HEADS 81, 82
3-14/7C FOR SIGNAL HEADS 21, 22, 41, 42, 61, 62 (TO BE REMOVED)
3-14/7C FOR SIGNAL HEADS 21, 22, 41, 42, 61, 62
8-14/7C FOR PED HEADS P21, P22, P41, P42, P61, P62, P81, P82 (TO BE REMOVED)
8-14/7C FOR PED HEADS P21, P22, P41, P42, P61, P62, P81, P82
4-14/2C FOR PED PUSH BUTTON P41, P42, P81, P82 (TO BE REMOVED)
8-14/3C FOR PED PUSH BUTTONS P21, P22, P41, P42, P61, P62, P81, P82
2-14/4C FOR VIDEO DETECTION (TO BE REMOVED)
2-COAXIAL CABLE FOR VIDEO DETECTION (TO BE REMOVED)
4-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
2-PREEMPTION CABLES (TO BE REMOVED)
4-PREEMPTION CABLES
2-12/2C FOR CARLYLE STREET LIGHTS
1-12/2C FOR LUMINAIRE
3-12/2C FOR LUMINAIRES
2-#8 AWG (EGC)
TEMP: 1-14/7C FOR TEMP. SIGNAL HEAD 63

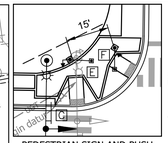
17 **1-2" CONDUIT PVC**
1-12 FIBER CABLES FOR COMMUNICATION

18 **4-2" CONDUIT**
2-144 FIBER CABLES FOR COMMUNICATION

LEGEND: *EXISTING CABLE TO BE REMOVED*
EXISTING CABLE/CONDUIT TO REMAIN
PROPOSED CABLE/CONDUIT TO BE INSTALLED
EGC - ELECTRICAL GROUNDING CONDUCTOR
HDPE - HIGH DENSITY POLYETHYLENE CONDUIT

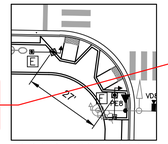


CONDUIT DETAIL
FOR THE NORTH EAST CORNER
SCALE: 1"=10'



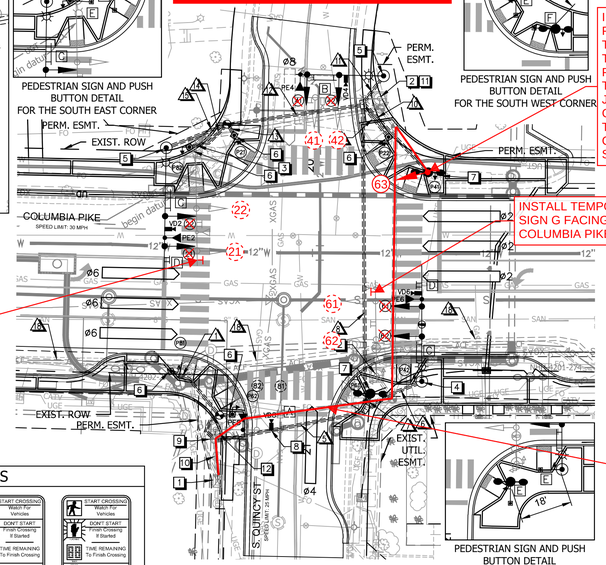
PEDESTRIAN SIGN AND PUSH BUTTON DETAIL
FOR THE SOUTH EAST CORNER

PEDESTRIAN SIGN AND PUSH BUTTON DETAIL
FOR THE SOUTH WEST CORNER



PEDESTRIAN SIGN AND PUSH BUTTON DETAIL
FOR THE NORTH EAST CORNER

INSTALL TEMPORARY SIGN G FACING EB COLUMBIA PIKE.



INSTALL TEMPORARY SIGN G FACING WB COLUMBIA PIKE.

PEDESTRIAN SIGN AND PUSH BUTTON DETAIL
FOR THE NORTH WEST CORNER

1-14/7C FOR TEMP SIGNAL HEAD 63.

INSTALL PROPOSED CARLYLE POLE J FROM PROPOSED SIGNAL PLAN FOR USE WITH TEMPORARY SIGNAL PLAN. INSTALL TEMPORARY SIGNAL HEAD 63 ON PROPOSED CARLYLE POLE J. RUN TEMPORARY CONDUIT TO EXISTING JUNCTION BOX. RUN CABLE FROM EXISTING CONTROLLER THROUGH EXISTING AND TEMPORARY SIGNAL HEAD 63 TO CONTROLLER AS ADDITIONAL PHASE 6 SIGNAL HEAD.

CONSTRUCTION NOTES

CONTRACTOR SHALL SEQUENCE THE INSTALLATION OF

1 INSTALL HDP ON EXISTING SIGNAL CONTROLLER CABIN[illegible] H PROPOS[illegible]

2 [illegible] SIGNAL EQ[illegible]

3 [illegible] TING POLE

4 [illegible] SIGNAL EQ[illegible] AND ADD N[illegible]

5 [illegible] LE, POWDE[illegible] T ATTACH[illegible]

[illegible] INSTALL ORNAMENTAL MAST ARM SIGNAL POLE, POWDE[illegible]

6 INSTALL NON-ORNAMENTAL PEDESTAL POLE, POWDER COATED BLACK, WITH PEDESTRIAN SIGNAL, POLARA PEDESTRIAN EQUIPMENT, AND SIGN.

7 INSTALL CARLYLE STREET LIGHT POLE WITH PEDESTRIAN SIGNAL HEAD, POLARA PEDESTRIAN EQUIPMENT, AND SIGN.

8 REPLACE EXISTING VIDEO DETECTION CAMERA WITH THERMAL VIDEO DETECTION CAMERA.

9 CONTRACTOR TO INSTALL PROPOSED CONDUIT(S) INTO EXISTING JUNCTION BOX AS SHOWN. DO NOT CUT EXISTING CONDUCTORS. PROPOSED CONDUIT SHALL EXTEND INTO EXISTING JUNCTION BOX THREE INCHES. CONTRACTOR IS RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF CONDUCTORS, CONDUITS, AND JUNCTION BOX IF DAMAGED.

10 EXISTING CONDUIT CAPACITY INTO CONTROLLER IS LIMITED. CONTRACTOR SHALL ASSUME ADDITIONAL TRAFFIC CONTROL TIME WILL BE NECESSARY TO REMOVE EXISTING CABLES, INSTALL AND CONNECT NEW CABLES TO CONTROLLER.

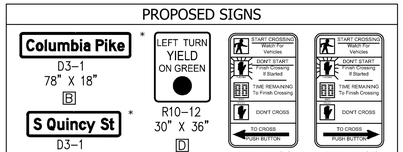
11 PRIOR TO REMOVAL, EXISTING SIGNAL POLE STILL IN OPERATION SHALL BE STABILIZED DURING INSTALLATION OF PROPOSED SIGNAL POLE.

12 EXISTING SIGNAL POLE AND MAST ARM TO REMAIN. PEDESTRIAN SIGNALS AND PUSHBUTTONS TO BE REMOVED.

NOTE:

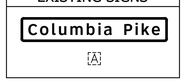
THIS TEMPORARY SIGNAL PLAN ANTICIPATES ALL EXISTING SIGNAL INFRASTRUCTURE WILL REMAIN IN OPERATION THROUGH PHASE 3. NO PROPOSED SIGNAL INFRASTRUCTURE WILL BE IN OPERATION, EXCEPT FOR PORPOSED CARLYLE POLE J.

PROPOSED SIGNS



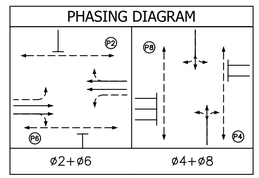
*NOTE: SEE SHEET F17.5 FOR DETAILED STREET NAME SIGN LAYOUT

EXISTING SIGNS



GRAPHIC SCALE IN FEET
0 12.5 25 50
(HORIZONTAL SCALE)

PHASING DIAGRAM



COLOR SEQUENCE CHART

61, 62, 63

PHASE	2	4	6	8	2+6	4+8	
SIGNAL	R/W	R/W	R/W	R/W	R/W	R/W	FLASH
21, 22	G				G		Y
41, 42		G				G	R
61, 62			G		G		Y
81, 82				G		G	R
P21, P22	W*				W*		DARK
P41, P42		W*				W*	DARK
P61, P62			W*		W*		DARK
P81, P82				W*		W*	DARK

NOTE: BLANK SPACES IN THIS CHART REPRESENT A "RED" SIGNAL INDICATION.

*WALK INDICATION IS DISPLAYED WHEN PEDESTRIAN CALL IS SERVICED; WALK INDICATION IS DISPLAYED UNTIL IT IS TIMED OUT. OTHERWISE "DON'T WALK" INDICATION IS DISPLAYED.

POLE SCHEDULE

No.	POLE IDENTIFICATION	STATION	OFFSET	STANDARD TYPE	STANDARD SIG. M.A. ORIENT.	STANDARD SIG. M.A.	STANDARD LUM. M.A. ORIENT.	STANDARD LUM. M.A. (TYPE)	LUM. LED (4)	POLE SIGNAL MOUNTING VEHICLE & PED. HEADS	POLE SIGNAL MOUNTING PED. PUSH BUTTONS	POLE SIGNAL MOUNTING SIGNS	POLE SIGNAL MOUNTING VIDEO DETECTOR PREEMPTION & CCTV	STREET NAME SIGN
A	022-MA-01-SE	143+67.63	43.98' LT	MAST ARM POLE 30'	180°	46'	180°	6' (STANDARD)	145W	21, 22	-	D	VD2, PE2	C
B	022-PP-01-NE	143+70.69	33.97' RT	PEDESTAL POLE 12'	-	-	-	-	-	P81	P81	E	-	-
C	022-PP-01-SE	143+75.79	44.41' LT	PEDESTAL POLE 12'	-	-	-	-	-	P82	P82	E	-	-
D	022-PP-02-NE	143+92.20	48.70' RT	PEDESTAL POLE 12'	-	-	-	-	-	P62	P62	F	-	-
E	022-PP-02-SE	143+91.49	48.78' LT	PEDESTAL POLE 12'	-	-	-	-	-	P21	P21	F	-	-
F	022-CP-01-NW	144+33.95	41.05' RT	DOUBLE CARLYLE POLE 16'	-	-	-	-	69W	P61	P61	E	-	-
G	022-MA-01-SW	144+44.02	70.00' LT	MAST ARM POLE 30'	180°	30'	180°	6' (STANDARD)	145W	41, 42	-	-	VD4, PE4	B
H	022-PP-01-SW	144+45.84	48.63' LT	PEDESTAL POLE 12'	-	-	-	-	-	P22	P22	E	-	-
J	022-MA-01-NW	144+57.75	36.70' RT	MAST ARM POLE 30'	180°	40'	180°	6' (STANDARD)	145W	61, 62	P42	D, E	VD6, PE6, CCTV	C
J	022-CP-01-SW	144+59.79	36.34' LT	DOUBLE CARLYLE POLE 16'	-	-	-	-	69W	P41	P41	F	-	-
K	022-PP-01-SE	EXISTING	EXISTING	MAST ARM POLE	-	-	-	-	145W	81, 82	-	-	VD8, PE8	A

NOTE: ALL POLES LISTED ABOVE SHALL BE LABELED WITH A POLE IDENTIFICATION STICKER IN ACCORDANCE WITH THE APPROPRIATE POLE ID.

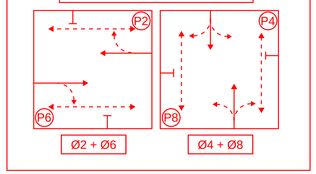
INITIAL TIMING CHART

PHASE	1	2	3	4	5	6	7	8
MOVEMENT		EB COLUMBIA PIKE		SB S. QUINCY STREET		WB COLUMBIA PIKE		NB S. QUINCY STREET
PHASE ON		X		X		X		X
PHASE OFF	X		X		X		X	
INTERVAL	PHASE TIMINGS							
MIN GR		5.0		5.0		5.0		5.0
PASSAGE		0.0		2.0		0.0		2.0
YELLOW		4.0		4.0		4.0		4.0
RED		3.0		3.0		3.0		3.0
MAX 1		50.0		25.0		50.0		25.0
MAX 2		-		-		-		-
MIN GAP		-		-		-		-
TIME BEFORE REDUCTION		-		-		-		-
TIME TO REDUCE		-		-		-		-
PED WALK		7.0		7.0		7.0		7.0
PED FLASH DON'T WALK		12.0		17.0		11.0		17.0
MODE		MAX RECALL		NON-LOCK		MAX RECALL		NON-LOCK

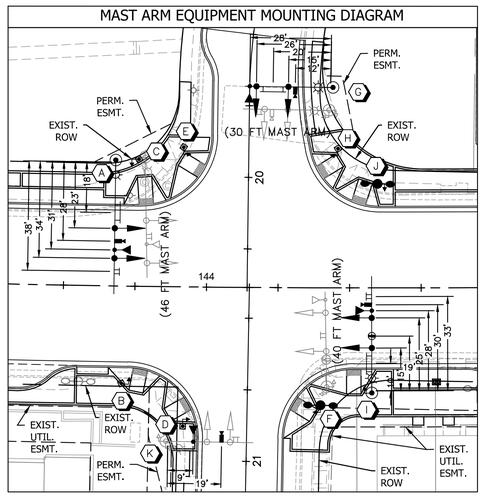
PROPOSED TEMPORARY SIGNS

PROPOSED ACCESSIBLE PEDESTRIAN PUSHBUTTON

TEMPORARY SIGNAL PHASING DIAGRAM



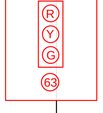
MAST ARM EQUIPMENT MOUNTING DIAGRAM



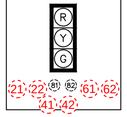
LEGEND

EXISTING		PROPOSED	
	RIGHT OF WAY		PERMANENT EASEMENT
	EASEMENT		TEMPORARY CONSTRUCTION EASEMENT
	TRAFFIC SIGNAL CABINET W/ UPS		TRAFFIC SIGNAL CABINET W/ UPS
T	EXTRA LARGE JUNCTION BOX	T	24"X36" JUNCTION BOX (61-04, TYPE-3)
	LARGE JUNCTION BOX		LARGE JUNCTION BOX (61-02)
	SMALL JUNCTION BOX		SMALL JUNCTION BOX (14040-01)
	TRAFFIC SIGNAL HEAD		TRAFFIC SIGNAL HEAD
	PEDESTRIAN SIGNAL HEAD		PEDESTRIAN SIGNAL HEAD
4	SIGNAL PHASING	4	SIGNAL PHASING
	TRAFFIC SIGNAL LUMINAIRE		TRAFFIC SIGNAL LUMINAIRE
	SIGNAL POLE AND MAST ARM		SIGNAL POLE AND MAST ARM
	PEDESTAL POLE		PEDESTAL POLE
	PEDESTRIAN PUSH BUTTON		PEDESTRIAN PUSH BUTTON
	PREEMPTION DEVICE		PREEMPTION DEVICE
	VIDEO DETECTION CAMERA		VIDEO DETECTION CAMERA
	VIDEO DETECTION ZONE		VIDEO DETECTION ZONE
CCTV	CLOSED CIRCUIT TELEVISION VIDEO	CCTV	CLOSED CIRCUIT TELEVISION VIDEO
A TT	SIGN	A TT	SIGN
S M O	POWER SERVICE PEDESTAL	S M O	POWER SERVICE PEDESTAL
	CONDUIT		CONDUIT
	CONDUIT WITH PROPOSED CABLE		16 FT CARLYLE STREET LIGHT POLE

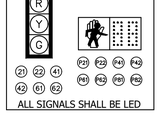
TEMP. SIGNAL HEAD



EXISTING SIGNAL HEADS



PROPOSED SIGNAL HEADS



ALL SIGNALS SHALL BE LED

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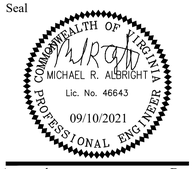
Seal



Approvals Date

Design Team Engineer Supervisor

Construction Management Supervisor

Water, Sewer, Streets Bureau Chief

Transportation Director

Project Manager

Revisions Date

Designed: KF
Drawn: KF
Checked: GG
Miss Utility Transmittal #:

Filename: 010073-F-TRAF-QUINCY.dwg
Path: K:\NVA_RDW\11001073 - Columbia Pike Multimodal\Production\Task 3.3 Final Design of Columbia Pike Segments\Segment F\3.3.2 - 100% Design\Plotsheets
Plotted: September 10, 2021
Plotted by: patrick.husted

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

TEMPORARY SIGNAL PLAN

COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS
SEGMENT F
COLUMBIA PIKE AND S. QUINCY ST (TS #022)

SCALE: AS SHOWN SHEET: F19.44 of F19.44

ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES

10/19/2021
APPROVAL DATE