EXISTING SIGNS TO BE REMOVED

36"X60" (1 EA.) — ONLY

36"X60" (1 EA.) — ONLY

US 40 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION

24"X30" (1 EA.)

30"X36" (1 EA.) — ONLY

McCain Drive 72"x16" (2 EA.)

PUSH BUTTON TO CROSS WEST PATRICK ST — WAIT FOR WALK — DON'T START CROSS CROSSING — FINISH CROSSING IF STARTED — PEDESTRIANS SHOULD NOT BE IN CROSSWALK — 9"X12" (2 EA.)

30"X36" (1 EA.)

PROPOSED SIGNS

38,39 — W. Patrick ST — WEST 40 EAST — M1-5(4) 78"X36"

27,35 — W. Patrick ST — EAST 40 WEST — M1-5(4) 78"X36"

29a,29b,30a,30b — McCain DR — D-3(1) 60"X16" (DUAL FACED)

36 — R3-5(2) MOD 60"X36" — ONLY

37 — R3-5L 30"X36" — ONLY

34 — R3-5R 30"X36" — ONLY

33 — R3-6(1) 30"X30"

31,32 — R4-7 @ 15° 24"X30"

28,40 — OM1-3 FY 18"X18"

EXISTING SIGNALS TO BE REMOVED

12" (4 EA.) (6 EA.) 12" (2 EA.)

16" (2 EA.)

PROPOSED LED SIGNALS

1,2,5,6,7 — 12"

3,4,8, 9,11,13 — 12"

10,12 — 12"

14,15,16, 17,18,19 — 16"

a,b,c,d — PROPOSED IP-BASED VIDEO DETECTION

NEMA PHASING

NOTE:
PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

CONSTRUCTION DETAILS (CONT.)

W. INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT – TRENCHED.

X. INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT – BORED.

Y. INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT – TRENCHED.

Z. INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT – TRENCHED.

AA. INSTALL NON-INVASIVE MICROLOOP PROBE WITH LEAD-IN CABLE.

BB. REMOVE EXISTING GROUND MOUNTED SIGN AND SUPPORTS.

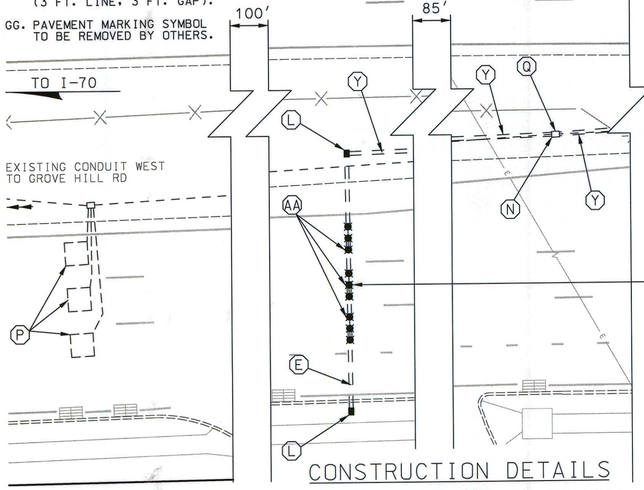
CC. INSTALL GROUND MOUNTED SIGN ON 1-4"X4" WOOD SIGN SUPPORT. NOTE: SIGN POSTS INSTALLED IN BRICK OR CONCRETE SHALL HAVE SLEEVED FOUNDATIONS MEETING THE REQUIREMENTS OF STANDARDS MD 812.05-01 AND MD 812.05-02. SLEEVED FOUNDATIONS ARE INCIDENTAL TO THE WOOD SIGN SUPPORTS.

DD. INSTALL BASE MOUNTED CABINET AND CONTROLLER WITH IP-BASED VIDEO DETECTION INTERFACE EQUPMENT, 2-WIRE APS CENTRAL CONTROL UNIT AND UPS BATTERY BACKUP. NOTE: INSTALL 2-2 IN. AND 2-4 IN. CONDUIT BENDS IN BASE. CAP UNUSED BEND.

EE. INSTALL GROUND MOUNTED SIGN ON 1-4"X6" WOOD SIGN SUPPORT (DRILLED).

FF. INSTALL 5 IN. SKIP WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING LINE (3 FT. LINE, 3 FT. GAP).

GG. PAVEMENT MARKING SYMBOL TO BE REMOVED BY OTHERS.



CONSTRUCTION DETAILS

A. INSTALL 27 FT. TWIN MAST ARM POLE WITH 70 FT. AND 50 FT. MAST ARMS, LED SIGNAL HEADS, IP-BASED VIDEO DETECTION CAMERAS, 20 FT. LIGHTING ARM WITH LED LUMINAIRE, AND SIGNS. NOTE: INSTALL 1-3 IN. CONDUIT BEND IN POLE BASE.

B. INSTALL 27 FT. TWIN MAST ARM POLE WITH 70 FT. AND 50 FT. MAST ARMS, LED SIGNAL HEADS, IP-BASED VIDEO DETECTION CAMERAS, 15 FT. LIGHTING ARM WITH LED LUMINAIRE, AND SIGNS. NOTE: INSTALL 1-3 IN. CONDUIT BEND IN POLE BASE.

C. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, APS PUSHBUTTON AND SIGN (ORIENT PARALLEL TO CROSSWALK). NOTE: INSTALL 1-2 IN. CONDUIT BEND IN POLE BASE. REFER TO STANDARD MD 801.01-01 FOR FOUNDATION DETAILS. TOP OF FOUNDATION SHALL BE INSTALLED FLUSH WITH FINAL SIDEWALK GRADE.

D. INSTALL 5 FT. BREAKAWAY PEDESTAL POLE WITH APS PUSHBUTTON AND SIGN (ORIENT PARALLEL TO CROSSWALK). REFER TO STANDARD MD 801.01-01 FOR FOUNDATION DETAILS. TOP OF FOUNDATION SHALL BE FLUSH WITH FINAL SIDEWALK GRADE. NOTE: INSTALL 1-2 IN. CONDUIT BEND IN POLE BASE. CUT, CLEAN, GALVANIZE AND CAP SIGNAL STRUCTURE.

E. INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT – BORED FOR CARRIER PIPE.

F. REMOVE EXISTING BASE MOUNTED CABINET AND CONTROLLER. REMOVE EXISTING FOUNDATION 12 IN. BELOW GRADE AND BACKFILL TO GRADE. CAP AND ABANDON EXISTING CONDUITS.

G. REMOVE EXISTING SIGNAL POLE, ASSOCIATED EQUIPMENT AND SIGNS. REMOVE EXISTING FOUNDATION 12 IN. BELOW GRADE AND MAKE FLUSH WITH FINAL GRADE. UTILITY COMPANY TO DISCONNECT EXISTING ELECTRICAL SERVICE.

H. INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT – TRENCHED. REFER TO INTERCONNECT PLAN FOR DETAILS.

I. INSTALL 100 AMP EMBEDDED METERED SERVICE PEDESTAL. NOTE: INSTALL 1-4 IN. AND 3-2 IN. CONDUIT BENDS IN BASE.

J. INSTALL ELECTRICAL HANDHOLE.

K. REMOVE EXISTING SIGNAL POLE, ASSOCIATED EQUIPMENT AND SIGNS. REMOVE EXISTING FOUNDATION 12 IN. BELOW GRADE AND MAKE FLUSH WITH FINAL GRADE.

L. INSTALL ELECTRICAL HANDHOLE WITH LONG DIMENSION PERPENDICULAR TO ROADWAY.

M. REMOVE EXISTING HANDHOLE. CAP AND ABANDON EXISTING CONDUITS AND BACKFILL TO GRADE.

N. DISCONNECT, PULLBACK AND REROUTE EXISTING INTERCONNECT COMMUNICATION CABLE.

O. PROPOSED VIDEO DETECTION ZONE.

P. ABANDON EXISTING LOOP DETECTOR.

Q. USE EXISTING HANDHOLE.

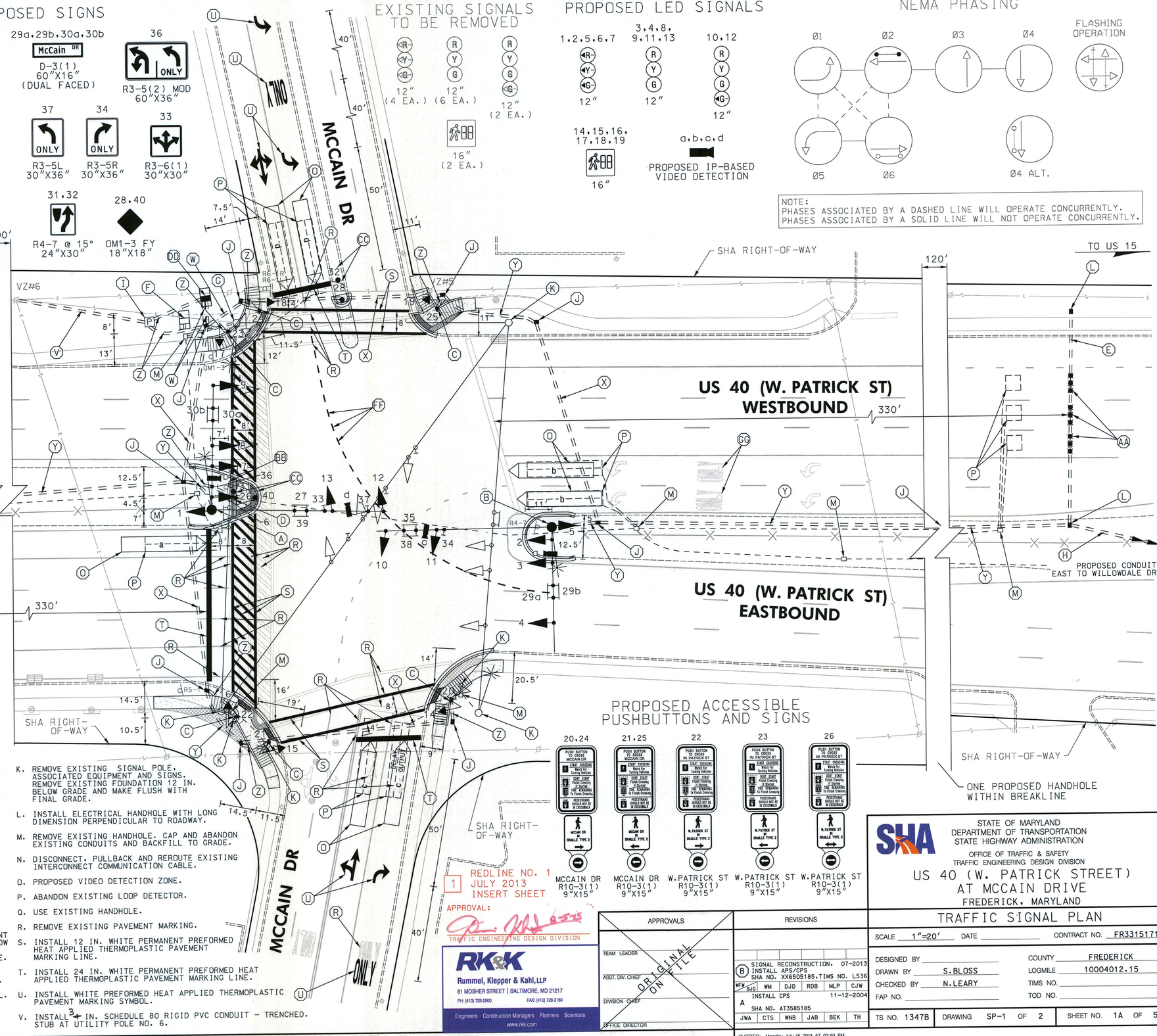
R. REMOVE EXISTING PAVEMENT MARKING.

S. INSTALL 12 IN. WHITE PERMANENT PREFORMED HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING LINE.

T. INSTALL 24 IN. WHITE PERMANENT PREFORMED HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING LINE.

U. INSTALL WHITE PREFORMED HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING SYMBOL.

V. INSTALL 3/4 IN. SCHEDULE 80 RIGID PVC CONDUIT – TRENCHED. STUB AT UTILITY POLE NO. 6.



PROPOSED ACCESSIBLE PUSHBUTTONS AND SIGNS

GEOMETRIC LEGEND
EXISTING
PROPOSED

UTILITY LEGEND
SD — STORM DRAIN
G — GAS MAIN
W — WATER MAIN
S — SEWER MAIN
E — ELECTRIC CABLES
E — AERIAL CABLES
T — TELEPHONE CABLES
F — FIBER-OPTIC

1 REDLINE NO. 1 JULY 2013 INSERT SHEET

APPROVAL:
TRAFFIC ENGINEERING DESIGN DIVISION

RK&K
Rummel, Klepper & Kahl, LLP
81 MOSHER STREET | BALTIMORE, MD 21217
PH: (410) 728-2900 FAX: (410) 728-3160
Engineers Construction Managers Planners Scientists
www.rkk.com

APPROVALS
TEAM LEADER
ASST. DIV. CHIEF
DIVISION CHIEF
OFFICE DIRECTOR
ORIGINAL ON FILE

REVISIONS
B SIGNAL RECONSTRUCTION, 07-2013
INSTALL APS/CPS
SHA NO. XX6505185.TIMS NO. L536
WFW BJG | WM | DJD | RDB | MLP | CJW
A INSTALL CPS 11-12-2004
SHA NO. AT3585185
JWA | CTS | WNB | JAB | BEK | TH

SHA
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

US 40 (W. PATRICK STREET) AT MCCAIN DRIVE
FREDERICK, MARYLAND

TRAFFIC SIGNAL PLAN

SCALE 1"=20' DATE _____ CONTRACT NO. FR3315171

DESIGNED BY _____ COUNTY FREDERICK
DRAWN BY S.BLOSS LOGMILE 10004012.15
CHECKED BY N.LEARY TIMS NO. _____
FAP NO. _____ TOD NO. _____

TS NO. 1347B | DRAWING SP-1 OF 2 | SHEET NO. 1A OF 5

PLOTTED: Monday, July 15, 2013 AT 02:50 PM
FILE: \\baltnrv03\v2008\2008\08148_tcoddes\Task 118_US 40 Signals\CADD\L536 (MCCAIN)\pSG-0001_US40@McCain_R1.dgn

BY: WFW