PROPOSED SIGNS

MD 202 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

33 SOUTH MARYLAND 202 — 30"x51"
35 NORTH MARYLAND 202 — 30"x51"
34 NORTH MARYLAND 202 — 48"x72"
36 SOUTH MARYLAND 202 — 48"x72"
ASSOCIATED SHIELD ASSEMBLIES M1-5(6)

37p, 39p, 40p — R10-3(1) 9"x15"
43p — R10-3(1) 9"x15"

24, 27 Largo Road D-3(1) (16" x VAR)
16, 20 Campus Way South D-3(1) (16" x VAR)

28, 31 W11-2(L) 36"x36" — W16-7pL 24"x12"
29, 32 W11-2(R) 36"x36" — W16-7pR 24"x12"

23 R3-5a (30"x36")
26 R3-6(L) (30"x36")
17-19, 22, 25 R3-5(L) (30"x36")
21 R3-5(R) (30"x36")
32 R4-7 (24"x30")
30 OM1-3 18"x18"

EXISTING SIGNALS

37-42 — 16" LED COUNTDOWN PEDESTRIAN SIGNAL

EXISTING SIGNS

42p, 41p, 38r, 39r, 40r — R10-3(1) 9" x 15"

NOTE: SIGN AND PUSHBUTTON 38r TO BE REMOVED. SIGNS 37r, 39r, AND 40r TO BE REPLACED.

PROPOSED SIGNALS

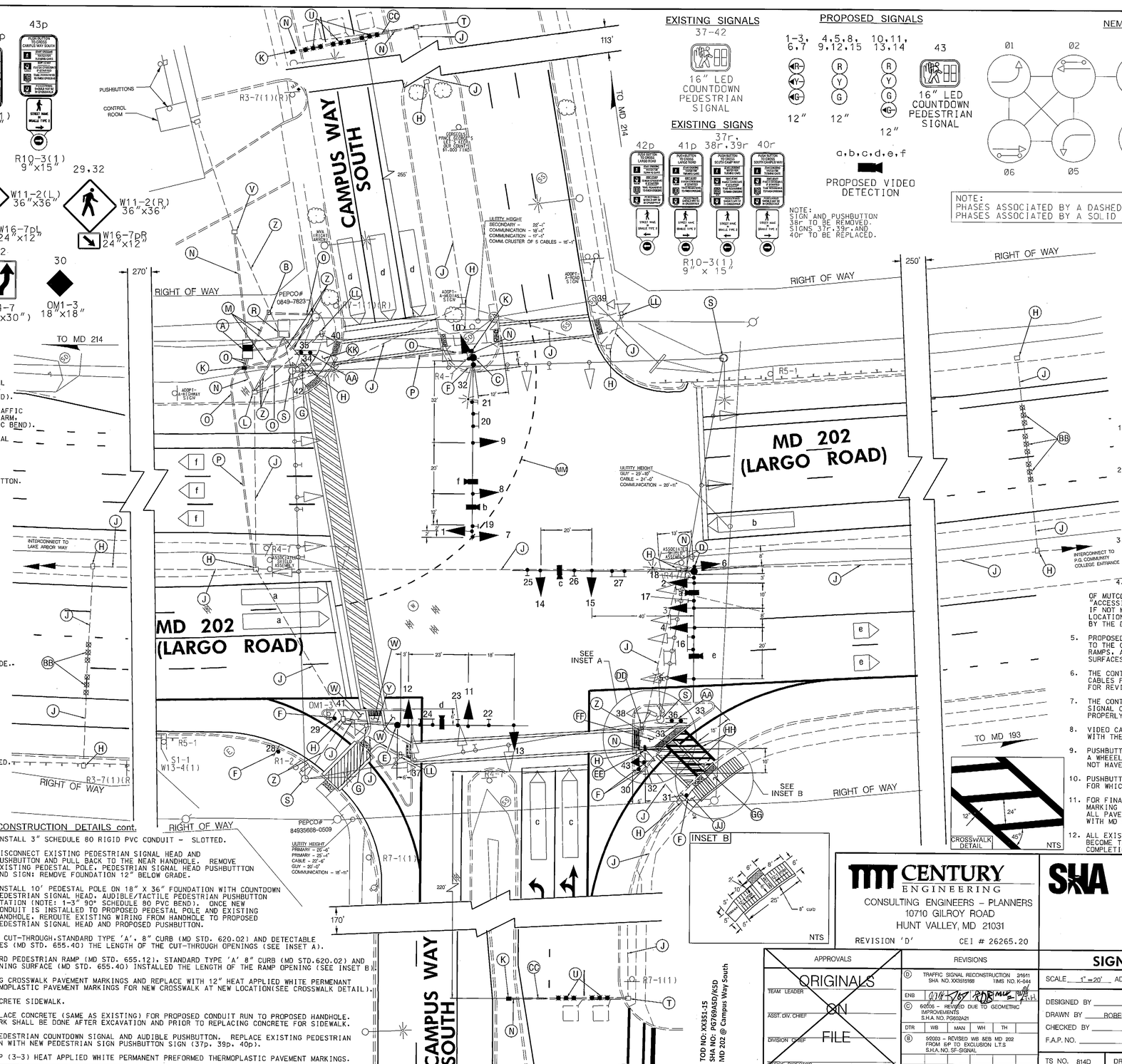
1-3, 6, 7 — 12"
4, 5, 8, 9, 12, 15 — 12"
10, 11, 13, 14 — 12"
43 — 16" LED COUNTDOWN PEDESTRIAN SIGNAL

a, b, c, d, e, f — PROPOSED VIDEO DETECTION

NEMA PHASING

01, 02, 03, 04, FLASHING OPERATION
06, 05, 03 ALT., PRE-EMPTION 1

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



CONSTRUCTION DETAILS

A. INSTALL NEMA S-TYPE BASE-MOUNTED CABINET AND CONTROLLER WITH ALL NECESSARY EQUIPMENT (NOTE: 2-2", 1-3", 2-4" 90° PVC SCHEDULE 80 BEND).

B. INSTALL 100 AMP METERED PEDESTAL FOR ELECTRICAL SERVICE.

C. INSTALL 27' STEEL POLE WITH 70' MAST ARM WITH TRAFFIC SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERA, 15' LIGHTING ARM, AND 250 WATT HPS LUMINAIRE (NOTE: 1-3", 90° SCHEDULE 80 PVC BEND).

D. INSTALL 27' STEEL POLE WITH TWIN MAST ARMS (70'/50') WITH TRAFFIC SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERAS, 15' LIGHTING ARM, AND 250 WATT HPS LUMINAIRE (NOTE: 2-3", 90° SCHEDULE 80 PVC BEND).

E. INSTALL 27' STEEL POLE WITH 50' MAST ARMS WITH TRAFFIC SIGNAL HEADS, SIGNS, AND VIDEO DETECTION CAMERAS (NOTE: 1-3", 90° SCHEDULE 80 PVC BEND).

F. INSTALL PROPOSED SIGN ON ONE 4" X 6" WOOD SIGN SUPPORT.

G. USE EXISTING PEDESTRIAN COUNTDOWN SIGNAL AND AUDIBLE PUSHBUTTON.

H. USE EXISTING HANDHOLE.

J. USE EXISTING CONDUIT.

K. INSTALL ELECTRICAL HANDHOLE.

L. USE EXISTING HANDHOLE AND ADJUST TO GRADE WITH NEW FRAME AND COVER. DISCONNECT EXISTING SIGNAL AND INTERCONNECT CABLES FROM EXISTING CABINET. REMOVE ALL TRAFFIC SIGNAL HEAD WIRING EXCEPT WIRING FOR PEDESTRIAN SIGNALS AND PUSHBUTTONS. PULL BACK EXISTING INTERCONNECT, PEDESTRIAN SIGNAL, AND PUSHBUTTON CABLES FROM EXISTING CABINET TO THIS HANDHOLE. REROUTE EXISTING INTERCONNECT, PEDESTRIAN SIGNAL, AND PUSHBUTTON CABLES TO PROPOSED CABINET.

M. INSTALL 2" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.

N. INSTALL 3" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.

O. INSTALL 4" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.

P. INSTALL 4" SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED.

R. DISCONNECT EXISTING CABLES FROM SIGNAL CABINET. REMOVE CABINET AND CONTROLLER; REMOVE AND FOUNDATION 12" BELOW GRADE.

S. REMOVE EXISTING STRAIN POLE AND ALL ASSOCIATED EQUIPMENT; REMOVE FOUNDATION 12" BELOW GRADE.

T. USE EXISTING HANDHOLE AND REMOVE EXISTING LOOP DETECTION WIRING.

U. INSTALL NON-INVASIVE MICRO-LOOP PROBES.

V. USE EXISTING HANDHOLE AND ADJUST TO GRADE WITH NEW FRAME AND COVER. DISCONNECT EXISTING FIREHOUSE PUSHBUTTON CABLE FROM THE EXISTING CABINET AND PULL BACK CABLES TO THIS HANDHOLE. REROUTE EXISTING FIREHOUSE PUSHBUTTON CABLE TO PROPOSED CABINET ONCE PROPOSED CONDUIT RUN TO IT IS COMPLETED.

W. REMOVE ISLAND AND RAMP CONCRETE FOR PROPOSED SIGNAL POLE INSTALLATION AND CONDUIT RUN TO EXISTING HANDHOLE. (SEE CONSTRUCTION DETAIL "E" AND "Y"). INSTALL CONCRETE FOR EXCAVATED ISLAND AND RAMP REPLACEMENT (SAME AS EXISTING) AFTER INSTALLATION OF PROPOSED SIGNAL POLE AND CONDUIT.

Y. INSTALL 3" SCHEDULE 80 RIGID PVC CONDUIT TRENCHED IN THE EXCAVATED AREA OF ISLAND. TRENCH SHALL BE HAND DUG UNDER EXISTING RAMP FOR PROPOSED CONDUIT INSTALLATION.

Z. REMOVE UNUSED WIRING. CAP AND ABANDON CONDUIT.

AA. INSTALL ASSOCIATED SHEILD ASSEMBLIES ON TWO 4" X 6" WOOD SIGN SUPPORTS.

BB. EXISTING NON-INVASIVE PROBES ARE TO BE REROUTED (SEE CONSTRUCTION DETAIL "L") AND TO REMAIN ACTIVE DURING THE SIGNAL RECONSTRUCTION OF THIS INTERSECTION.

CONSTRUCTION DETAILS cont.

CC. INSTALL 3" SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED.

DD. DISCONNECT EXISTING PEDESTRIAN SIGNAL HEAD AND PUSHBUTTON AND PULL BACK TO THE NEAR HANDHOLE. REMOVE EXISTING PEDESTAL POLE, PEDESTRIAN SIGNAL HEAD PUSHBUTTTON AND SIGN; REMOVE FOUNDATION 12" BELOW GRADE.

EE. INSTALL 10' PEDESTAL POLE ON 18" X 36" FOUNDATION WITH COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION (NOTE: 1-3" 90° SCHEDULE 80 PVC BEND). ONCE NEW CONDUIT IS INSTALLED TO PROPOSED PEDESTAL POLE AND EXISTING HANDHOLE, REROUTE EXISTING WIRING FROM HANDHOLE TO PROPOSED PEDESTRIAN SIGNAL HEAD AND PROPOSED PUSHBUTTON.

FF. INSTALL ISLAND CUT-THROUGH, STANDARD TYPE 'A', 8" CURB (MD STD. 620.02) AND DETECTABLE WARNING SURFACES (MD STD. 655.40) THE LENGTH OF THE CUT-THROUGH OPENINGS (SEE INSET A).

GG. INSTALL STANDARD PEDESTRIAN RAMP (MD STD. 655.12), STANDARD TYPE 'A' 8" CURB (MD STD.620.02) AND DETECTABLE WARNING SURFACE (MD STD. 655.40) INSTALLED THE LENGTH OF THE RAMP OPENING (SEE INSET B).

HH. REMOVE EXISTING CROSSWALK PAVEMENT MARKINGS AND REPLACE WITH 12" HEAT APPLIED WHITE PERMENANT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS FOR NEW CROSSWALK AT NEW LOCATION(SEE CROSSWALK DETAIL).

JJ. INSTALL 5' CONCRETE SIDEWALK.

KK. REMOVE AND REPLACE CONCRETE (SAME AS EXISTING) FOR PROPOSED CONDUIT RUN TO PROPOSED HANDHOLE. ALL CONDUIT WORK SHALL BE DONE AFTER EXCAVATION AND PRIOR TO REPLACING CONCRETE FOR SIDEWALK.

LL. USE EXISTING PEDESTRIAN COUNTDOWN SIGNAL AND AUDIBLE PUSHBUTTON. REPLACE EXISTING PEDESTRIAN PUSHBUTTON SIGN WITH NEW PEDESTRIAN SIGN PUSHBUTTON SIGN (37p, 39p, 40p).

MM. INSTALL 5" SKIP (3-3) HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS.

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO INSTALLING PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS SHOULD ARISE, THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
2. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS, AND THE HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS TO MEET CLEARANCES AS SPECIFIED IN MD STD. 816.03, MD STD. 818.01, MD 818.02, AND MD STD. 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL PROPOSED SIGNAL EQUIPMENT.
3. PUSHBUTTONS ARE TO BE INSTALLED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR FROM A 60" X 60" LEVEL LANDING AREA. A LEVEL LANDING IS AN AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
4. LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.09 AND 4E.2 AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE". IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL A DESIGN WAIVER IS OBTAINED, AND APPROVED BY THE DIRECTOR OF THE OFFICE OF TRAFFIC AND SAFETY.
5. PROPOSED SIGNAL EQUIPMENT SHALL BE INSTALLED PRIOR TO THE CONSTRUCTION OF THE SIDEWALKS, AND PEDESTRIAN RAMPS, AND THE INSTALLATION OF THE DETECTABLE WARNING SURFACES.
6. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING UNUSED CABLES FROM EXISTING HANDHOLES AND CONDUITS UTILIZED FOR REVISION 'D'.
7. THE CONTACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINALS AND FOR PROPERLY LABELING EACH CABLE.
8. VIDEO CAMERA LOCATION/ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
9. PUSHBUTTONS ARE TO BE LOCATED SO THAT A PEDESTRIAN IN A WHEEELCHAIR LOCATED ON THE LEVEL LANDING AREA DOES NOT HAVE TO REACH MORE THAN 18".
10. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSINGS FOR WHICH THEY ARE INTENDED.
11. FOR FINAL PAVEMENT MARKINGS, REFER TO THE PAVEMENT MARKING PLAN, OTHER THAN THOSE DETAILED ON THIS PLAN. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MD SHA STANDARDS.
12. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE NEW SIGNAL.

GEOMETRIC LEGEND

EXISTING
PROPOSED

UTILITY LEGEND

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

TOD NO: XX351-15
SHA NO: PG769A5D/K5D
MD 202 @ Campus Way South

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

REVISIONS					
(D) TRAFFIC SIGNAL RECONSTRUCTION 2/6/11 SHA NO. XX3595B TIMS NO. K-044					
ENB	01/17/07	RDB	RMW	WB	RHL
(C) 6/2006 - REVISED DUE TO GEOMETRIC IMPROVEMENTS S.H.A. NO. PG602A21					
DTR	WB	MAN	WH	TH	
(B) 5/2003 - REVISED WB &EB MD 202 FROM 6P TO EXCLUSION L.T.S S.H.A. NO. SF-SIGNAL					

PLOTTED: Friday, February 25, 2011 AT 08:00 AM
FILE: J:\DATA\K044\PSE_Submittal\pSG-P001_MD202Campusway.dgn

BY: Jhenkel

CENTURY ENGINEERING
CONSULTING ENGINEERS – PLANNERS
10710 GILROY ROAD
HUNT VALLEY, MD 21031
REVISION 'D' CEI # 26265.20

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

MD 202 (LARGO ROAD)
AT CAMPUS WAY SOUTH
KETTERING, MD

SIGNALIZATION PLAN SHEET

SCALE 1" = 20' ADVERTISED DATE 04/28/1977 CONTRACT NO. P-557-501-385

DESIGNED BY
DRAWN BY ROBERT W. TYSON
CHECKED BY
F.A.P. NO.
COUNTY PRINCE GEORGE'S
LOGMILE 16.02/0.05 77
TIMS NO.
TOD NO.

TS NO. 814D | DRAWING SG-1 | OF 2 | SHEET NO. 1 OF 2