PROPOSED SIGNS

26,34 — R4-7, 24" x 30"
37 — R3-5a, 30" x 36" (ONLY)
21,22,27,35 — R3-5, 30" x 36" (ONLY)
36 — R3-6, 30" x 36"
32 — R10-11b, 24" x 24" (NO TURN ON RED)
31 — R10-6a(MOD), 24" x 30" (STOP HERE ON RED)

23,24 — Little Falls Pkwy | Little Falls Pkwy
D3-2 VARIABLE X 16" (DUAL FACED)

28,38 — River Road | River Road
D3-2 VARIABLE X 16" (DUAL FACED)

NOTE:
MD 190 IS CONSIDERED TO RUN IN AN EAST-WEST DIRECTION

29 — EAST, MARYLAND 190, M3-2 24" x 12", M1-5 30" x 24", M6-1 21" x 15"
ASSOCIATED SHIELD ASSEMBLY 30" x 51"

30 — WEST, MARYLAND 190, M3-2 24" x 12", M1-5 30" x 24", M6-1 21" x 15"
ASSOCIATED SHIELD ASSEMBLY 30" x 51"

25 — EAST, MARYLAND 190, M3-2 24" x 12", M1-5 30" x 24", M6-1 21" x 15"
ASSOCIATED SHIELD ASSEMBLY 30" x 51"

33 — EAST, MARYLAND 190, M3-4 30" x 15", M1-5 48" x 36", M6-1 30" x 24"
ASSOCIATED SHIELD ASSEMBLY 48" x 75"

PUSH BUTTON TO CROSS RIVER ROAD
START CROSSING WATCH FOR TURNING CARS
RUN + START FINISH CROSSING IF STARTED
PEDESTRIANS USE THIS SIDE OF SIDEWALK
R10-4C 9" x 12" (TO BE INSTALLED WITH PUSHBUTTON)

PROPOSED SIGNALS

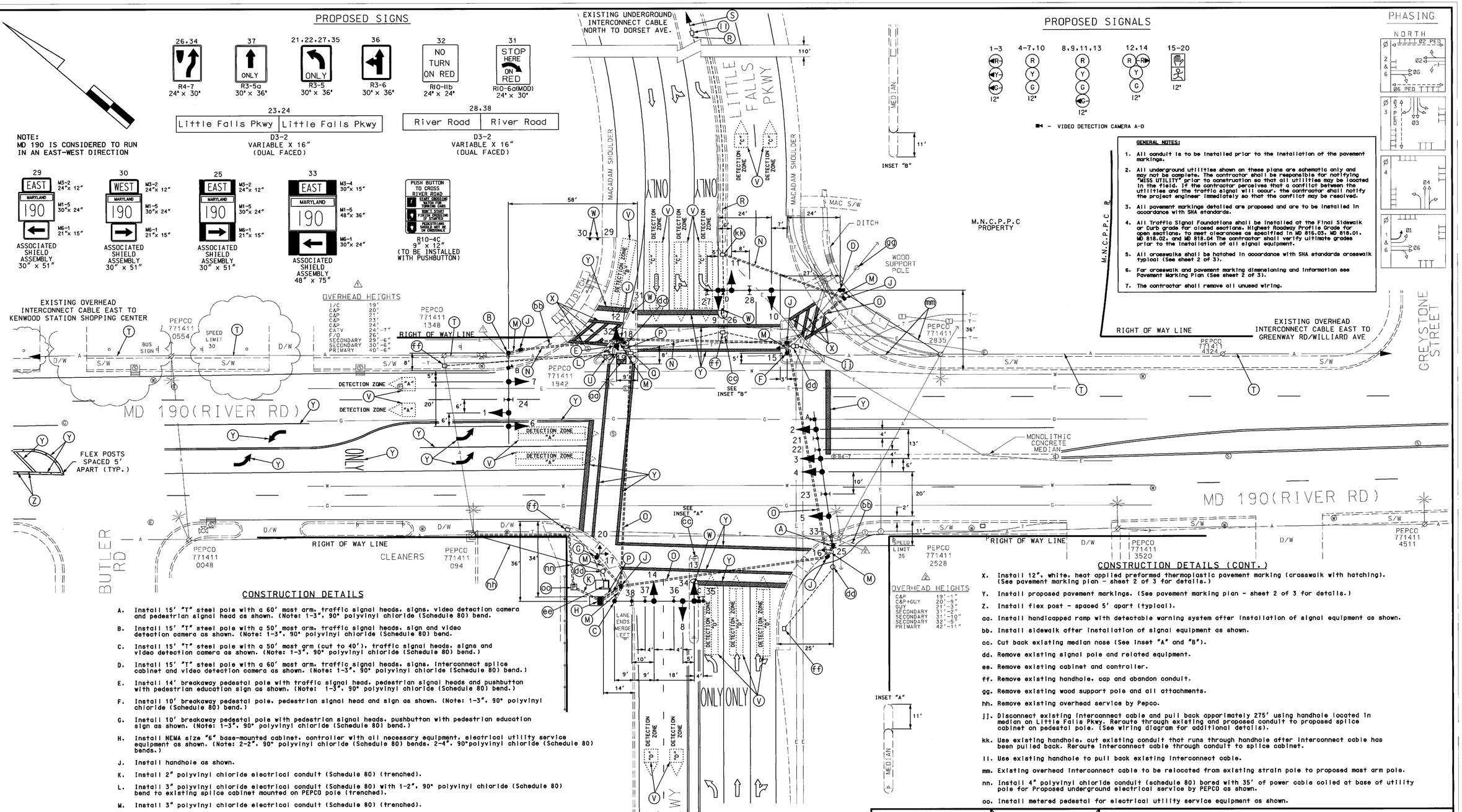
1-3 — R, Y, G, 12"
4-7,10 — R, Y, G, 12"
8,9,11,13 — R, Y, G, 12"
12,14 — R, Y, G, 12"
15-20 — 12"

■ - VIDEO DETECTION CAMERA A-D

PHASING

GENERAL NOTES:

1. All conduit is to be installed prior to the installation of the pavement markings.
2. All underground utilities shown on these plans are schematic only and may not be complete. The contractor shall be responsible for notifying "MISS UTILITY" prior to construction so that all utilities may be located in the field. If the contractor perceives that a conflict between the utilities and the traffic signal will occur, the contractor shall notify the project engineer immediately so that the conflict may be resolved.
3. All pavement markings detailed are proposed and are to be installed in accordance with SHA standards.
4. All Traffic Signal Foundations shall be installed at the Final Sidewalk or Curb grade for closed sections. Highest Roadway Profile Grade for open sections, to meet clearances as specified in MD 816.03, MD 818.01, MD 818.02, and MD 818.04 The contractor shall verify ultimate grades prior to the installation of all signal equipment.
5. All crosswalks shall be hatched in accordance with SHA standards crosswalk typical (See sheet 2 of 3).
6. For crosswalk and pavement marking dimensioning and information see Pavement Marking Plan (See sheet 2 of 3).
7. The contractor shall remove all unused wiring.



OVERHEAD HEIGHTS

I/C	19'
C&P	20'
C&P	21'
C&P	23'
C&P	24'
CATV	24'-7"
F/O	26'
SECONDARY	29'-6"
SECONDARY	30'-6"
PRIMARY	40'-6"

OVERHEAD HEIGHTS

C&P	19'-1"
C&P-GUY	20'-9"
GUY	21'-3"
SECONDARY	31'-2"
SECONDARY	31'-10"
SECONDARY	32'-6"
PRIMARY	42'-11"

CONSTRUCTION DETAILS

A. Install 15' "T" steel pole with a 60' mast arm, traffic signal heads, signs, video detection camera and pedestrian signal head as shown. (Note: 1-3", 90° polyvinyl chloride (Schedule 80) bend.

B. Install 15' "T" steel pole with a 50' mast arm, traffic signal heads, sign and video detection camera as shown. (Note: 1-3", 90° polyvinyl chloride (Schedule 80) bend.

C. Install 15' "T" steel pole with a 50' mast arm (cut to 40'), traffic signal heads, signs and video detection camera as shown. (Note: 1-3", 90° polyvinyl chloride (Schedule 80) bend.)

D. Install 15' "T" steel pole with a 60' mast arm, traffic signal heads, signs, interconnect splice cabinet and video detection camera as shown. (Note: 1-3", 90° polyvinyl chloride (Schedule 80) bend.)

E. Install 14' breakaway pedestal pole with traffic signal head, pedestrian signal heads and pushbutton with pedestrian education sign as shown. (Note: 1-3", 90° polyvinyl chloride (Schedule 80) bend.)

F. Install 10' breakaway pedestal pole, pedestrian signal head and sign as shown. (Note: 1-3", 90° polyvinyl chloride (Schedule 80) bend.)

G. Install 10' breakaway pedestal pole with pedestrian signal heads, pushbutton with pedestrian education sign as shown. (Note: 1-3", 90° polyvinyl chloride (Schedule 80) bend.)

H. Install NEMA size "6" base-mounted cabinet, controller with all necessary equipment, electrical utility service equipment as shown. (Note: 2-2", 90° polyvinyl chloride (Schedule 80) bends, 2-4", 90°polyvinyl chloride (Schedule 80) bends.)

J. Install handhole as shown.

K. Install 2" polyvinyl chloride electrical conduit (Schedule 80) (trenched).

L. Install 3" polyvinyl chloride electrical conduit (Schedule 80) with 1-2", 90° polyvinyl chloride (Schedule 80) bend to existing splice cabinet mounted on PEPCO pole (trenched).

M. Install 3" polyvinyl chloride electrical conduit (Schedule 80) (trenched).

N. Install 4" polyvinyl chloride electrical conduit (Schedule 80) (slotted).

O. Install 4" polyvinyl chloride electrical conduit (Schedule 80) (bored).

P. Install 4" polyvinyl chloride electrical conduit (Schedule 80) (trenched).

Q Use existing handhole.

R. Use existing conduit.

S. Existing underground interconnect cable.

T. Existing overhead interconnect cable.

U. Use existing interconnect splice cabinet on PEPCO pole.

V. Proposed video detection area

W. Install ground mounted sign as shown.(Install sleeve in median where required. Cost incidental to sign installation.)

CONSTRUCTION DETAILS (CONT.)

X. Install 12", white, heat applied preformed thermoplastic pavement marking (crosswalk with hatching). (See pavement marking plan - sheet 2 of 3 for details.)

Y. Install proposed pavement markings. (See pavement marking plan - sheet 2 of 3 for details.)

Z. Install flex post - spaced 5' apart (typical).

aa. Install handicapped ramp with detectable warning system after installation of signal equipment as shown.

bb. Install sidewalk after installation of signal equipment as shown.

cc. Cut back existing median nose (See inset "A" and "B").

dd. Remove existing signal pole and related equipment.

ee. Remove existing cabinet and controller.

ff. Remove existing handhole, cap and abandon conduit.

gg. Remove existing wood support pole and all attachments.

hh. Remove existing overhead service by Pepco.

jj. Disconnect existing interconnect cable and pull back approximately 275' using handhole located in median on Little Falls Pkwy. Reroute through existing and proposed conduit to proposed splice cabinet on pedestal pole. (See wiring diagram for additional details).

kk. Use existing handhole, cut existing conduit that runs through handhole after interconnect cable has been pulled back. Reroute interconnect cable through conduit to splice cabinet.

ll. Use existing handhole to pull back existing interconnect cable.

mm. Existing overhead interconnect cable to be relocated from existing strain pole to proposed mast arm pole.

nn. Install 4" polyvinyl chloride conduit (schedule 80) bored with 35' of power cable coiled at base of utility pole for Proposed underground electrical service by PEPCO as shown.

oo. Install metered pedestal for electrical utility service equipment as shown.

GEOMETRIC LEGEND

PROPOSED
EXISTING

LEGEND OF UNDERGROUND AND OVERHEAD UTILITIES

AERIAL CABLE	A	A
ELECTRIC	E	E
TELEPHONE	T	T
GAS	G	G
SEWER	S	S
WATER	W	W
CABLE TV	TV	TV

REVISION "B"

STREET TRAFFIC STUDIES, LTD.
400 Crain Hwy.NW.
Glen Burnie,MD 21061
Ph (410) 590-5500
Fax (410) 590-6637

4569.dgn WT-18

REVISIONS	
B	7-14-04 REBUILD TRAFFIC SIGNAL & ADD EXCLUSIVE EAST BOUND LEFT TURN PHASE SHA NO.: AT3575185 RRZ
A	6-12-91 ADD SIGNAL HEADS, SIGNS, LOOPS, AND ASBUILT. SHA NO.: M-651-501-377 RRZ

APPROVALS

TEAM LEADER, TRAFFIC ENGINEERING DESIGN DIVISION
ASST. CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
DIRECTOR, TRAFFIC & SAFETY

ORIGINAL ON FILE

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

MD 190 AND LITTLE FALLS PARKWAY

CHI #: MO350A52/662 TOD#: AT356-01

DRAWN BY:	W J NIES	F.A.P. NO.	
CHECKED BY:	R R ZACHERL	S.H.A. NO.	
SCALE:	1"= 20'	COUNTY:	MONTGOMERY
DATE:	6-12-91	LOG MILE:	15019015.26

TS. NO. 3180B
T.I.M.S. NO. G093
SHEET NO. 1 OF 3

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