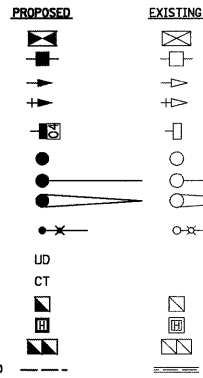
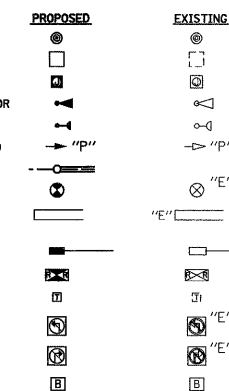


CONTROLLER  
SERVICE INSTALLATION  
SIGNAL HEAD  
SIGNAL HEAD WITH BACKPLATE  
SIGNAL HEAD, PEDESTRIAN WITH COUNTDOWN TIMER  
SIGNAL POST  
STEEL MAST ARM ASSEMBLY AND POLE  
MAST ARM ASSEMBLY AND POLE, ALUMINUM  
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE  
UNIT DUCT  
COMMON TRENCH  
HANDHOLE  
HEAVY DUTY HANDHOLE  
DOUBLE HANDHOLE  
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)



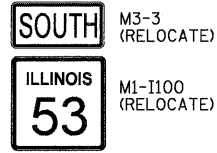
PEDESTRIAN PUSH-BUTTON DETECTOR  
DETECTOR LOOP, TYPE I  
CAST IRON JUNCTION BOX  
EMERGENCY VEHICLE SYSTEM DETECTOR  
CONFIRMATION BEACON  
SIGNAL HEAD OPTICALLY PROGRAMMED  
CONDUIT SPLICE  
WOOD POLE  
RAILWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II  
VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE  
RAILROAD CONTROL CABINET  
TELEPHONE CONNECTION  
ILLUMINATED SIGN "NO LEFT TURN"  
ILLUMINATED SIGN "NO RIGHT TURN"  
UNINTERRUPTIBLE POWER SUPPLY



**SIGN "A"**



**SIGN ASSEMBLY "B"**



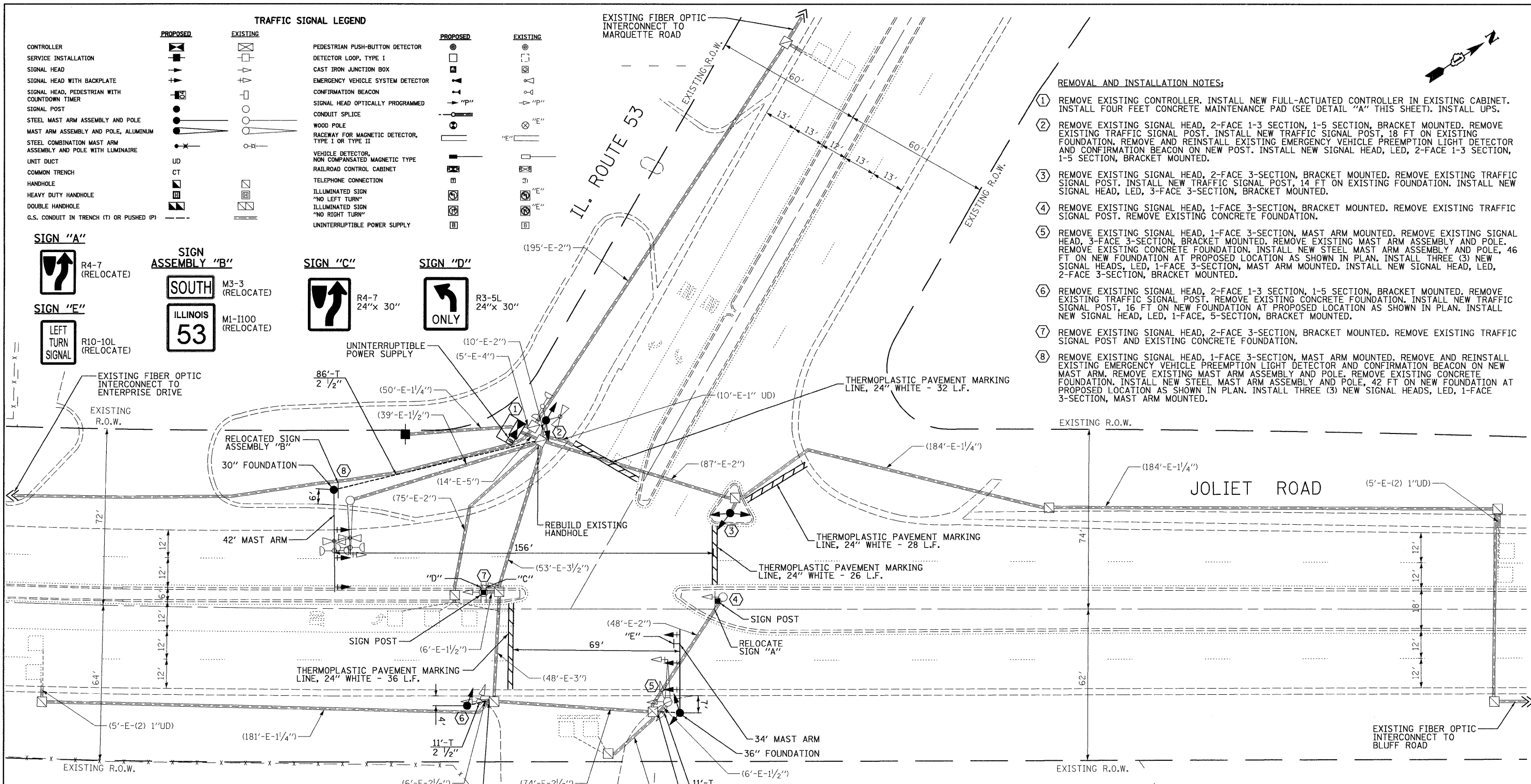
**SIGN "C"**



**SIGN "D"**

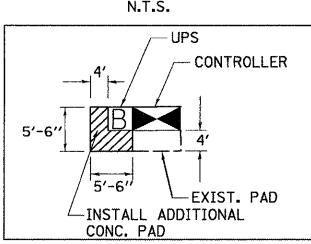


**SIGN "E"**



- REMOVAL AND INSTALLATION NOTES:**
- 1) REMOVE EXISTING CONTROLLER. INSTALL NEW FULL-ACTUATED CONTROLLER IN EXISTING CABINET. INSTALL FOUR FEET CONCRETE MAINTENANCE PAD (SEE DETAIL "A" THIS SHEET). INSTALL UPS.
  - 2) REMOVE EXISTING SIGNAL HEAD, 2-FACE 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED. REMOVE EXISTING TRAFFIC SIGNAL POST. INSTALL NEW TRAFFIC SIGNAL POST, 18 FT ON EXISTING FOUNDATION. REMOVE AND REINSTALL EXISTING EMERGENCY VEHICLE PREEMPTION LIGHT DETECTOR AND CONFIRMATION BEACON ON NEW POST. INSTALL NEW SIGNAL HEAD, LED, 2-FACE 1-3 SECTION, BRACKET MOUNTED.
  - 3) REMOVE EXISTING SIGNAL HEAD, 2-FACE 3-SECTION, BRACKET MOUNTED. REMOVE EXISTING TRAFFIC SIGNAL POST. INSTALL NEW TRAFFIC SIGNAL POST, 14 FT ON EXISTING FOUNDATION. INSTALL NEW SIGNAL HEAD, LED, 3-FACE 3-SECTION, BRACKET MOUNTED.
  - 4) REMOVE EXISTING SIGNAL HEAD, 1-FACE 3-SECTION, BRACKET MOUNTED. REMOVE EXISTING TRAFFIC SIGNAL POST. REMOVE EXISTING CONCRETE FOUNDATION.
  - 5) REMOVE EXISTING SIGNAL HEAD, 1-FACE 3-SECTION, MAST ARM MOUNTED. REMOVE EXISTING SIGNAL HEAD, 3-FACE 3-SECTION, BRACKET MOUNTED. REMOVE EXISTING MAST ARM ASSEMBLY AND POLE. REMOVE EXISTING CONCRETE FOUNDATION. INSTALL NEW STEEL MAST ARM ASSEMBLY AND POLE, 46 FT ON NEW FOUNDATION AT PROPOSED LOCATION AS SHOWN IN PLAN. INSTALL THREE (3) NEW SIGNAL HEADS, LED, 1-FACE 3-SECTION, MAST ARM MOUNTED. INSTALL NEW SIGNAL HEAD, LED, 2-FACE 3-SECTION, BRACKET MOUNTED.
  - 6) REMOVE EXISTING SIGNAL HEAD, 2-FACE 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED. REMOVE EXISTING TRAFFIC SIGNAL POST. REMOVE EXISTING CONCRETE FOUNDATION. INSTALL NEW TRAFFIC SIGNAL POST, 16 FT ON NEW FOUNDATION AT PROPOSED LOCATION AS SHOWN IN PLAN. INSTALL NEW SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED.
  - 7) REMOVE EXISTING SIGNAL HEAD, 2-FACE 3-SECTION, BRACKET MOUNTED. REMOVE EXISTING TRAFFIC SIGNAL POST AND EXISTING CONCRETE FOUNDATION.
  - 8) REMOVE EXISTING SIGNAL HEAD, 1-FACE 3-SECTION, MAST ARM MOUNTED. REMOVE AND REINSTALL EXISTING EMERGENCY VEHICLE PREEMPTION LIGHT DETECTOR AND CONFIRMATION BEACON ON NEW MAST ARM. REMOVE EXISTING MAST ARM ASSEMBLY AND POLE. REMOVE EXISTING CONCRETE FOUNDATION. INSTALL NEW STEEL MAST ARM ASSEMBLY AND POLE, 42 FT ON NEW FOUNDATION AT PROPOSED LOCATION AS SHOWN IN PLAN. INSTALL THREE (3) NEW SIGNAL HEADS, LED, 1-FACE 3-SECTION, MAST ARM MOUNTED.

**DETAIL "A"**



1) 5" THICK CONCRETE PAD SHALL BE POURED NEXT TO NEW CONTROLLER AND /OR UPS TO PROVIDE EASY MAINTENANCE ACCESS.  
2) MAINTENANCE PAD SHALL EXTEND TO THE EDGE OF EXISTING CONTROLLER FOUNDATION.  
3) COST OF PAD SHALL BE INCLUDED IN THE PRICE OF THE UNINTERRUPTIBLE POWER SUPPLY PAY ITEM.  
**NOTE:**  
THE WORK SHOWN IN DETAIL "A" SHALL BE INCLUDED IN THE COST FOR THE U.P.S. EQUIPMENT.

**NOTE:**  
THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.

**NOTE:**  
RELOCATE SIGNS ON MAST ARMS AND SIGNAL POSTS TO NEW MAST ARMS.

**NOTE:**  
CONTRACTOR SHALL REINSTALL "EVP" EQUIPMENT WHERE SHOWN TO NEW MAST ARM OR TRAFFIC SIGNAL POST AND CABINET. THIS WORK SHALL BE INCLUDED IN COST FOR "FULL-ACTUATED CONTROLLER IN EXISTING CABINET, SPECIAL".

**NOTE:**  
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 1 EACH CONTROLLER
- 3 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 2 EACH SIGNAL HEAD, 2-FACE, 3-SECTION
- 2 EACH SIGNAL HEAD, 2-FACE, 1-3-SECTION, 1-5-SECTION
- 1 EACH SIGNAL HEAD, 3-FACE, 3-SECTION
- 1 EACH TRAFFIC SIGNAL BACKPLATE
- 2 EACH TRAFFIC SIGNAL POST
- 1 EACH MAST ARM ASSEMBLY AND POLE
- 1 EACH SERVICE INSTALLATION

|                                        |                      |                 |           |
|----------------------------------------|----------------------|-----------------|-----------|
| FILE NAME =                            | USER NAME = RDS      | DESIGNED - KK   | REVISED - |
| \\MICROST\352072\ RT53 @JOLIET SIG.DGN |                      | DRAWN - RDS     | REVISED - |
|                                        | PLOT SCALE = 1"=20'  | CHECKED - BPT   | REVISED - |
|                                        | PLOT DATE = 03-18-09 | DATE - 03-18-09 | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODIFICATION PLAN  
IL. ROUTE 53 AT JOLIET ROAD**

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

PREPARED BY:  
**CEMCON, Ltd.**  
Consulting Engineers, Land Surveyors & Planners  
2280 White Oak Circle, Suite 100  
Aurora, Illinois 60504-9675  
Ph: 630.862.2100 Fax: 630.862.2199  
E-Mail: codd@cemcon.com Website: www.cemcon.com

|                     |             |        |                           |           |
|---------------------|-------------|--------|---------------------------|-----------|
| F.A.P. RTE.         | SECTION     | COUNTY | TOTAL SHEETS              | SHEET NO. |
|                     | 2009-039 TS | WILL   | 20                        | 17        |
| FED. ROAD DIST. NO. |             |        | ILLINOIS FED. AID PROJECT |           |
|                     |             |        | CONTRACT NO. 60G44        |           |