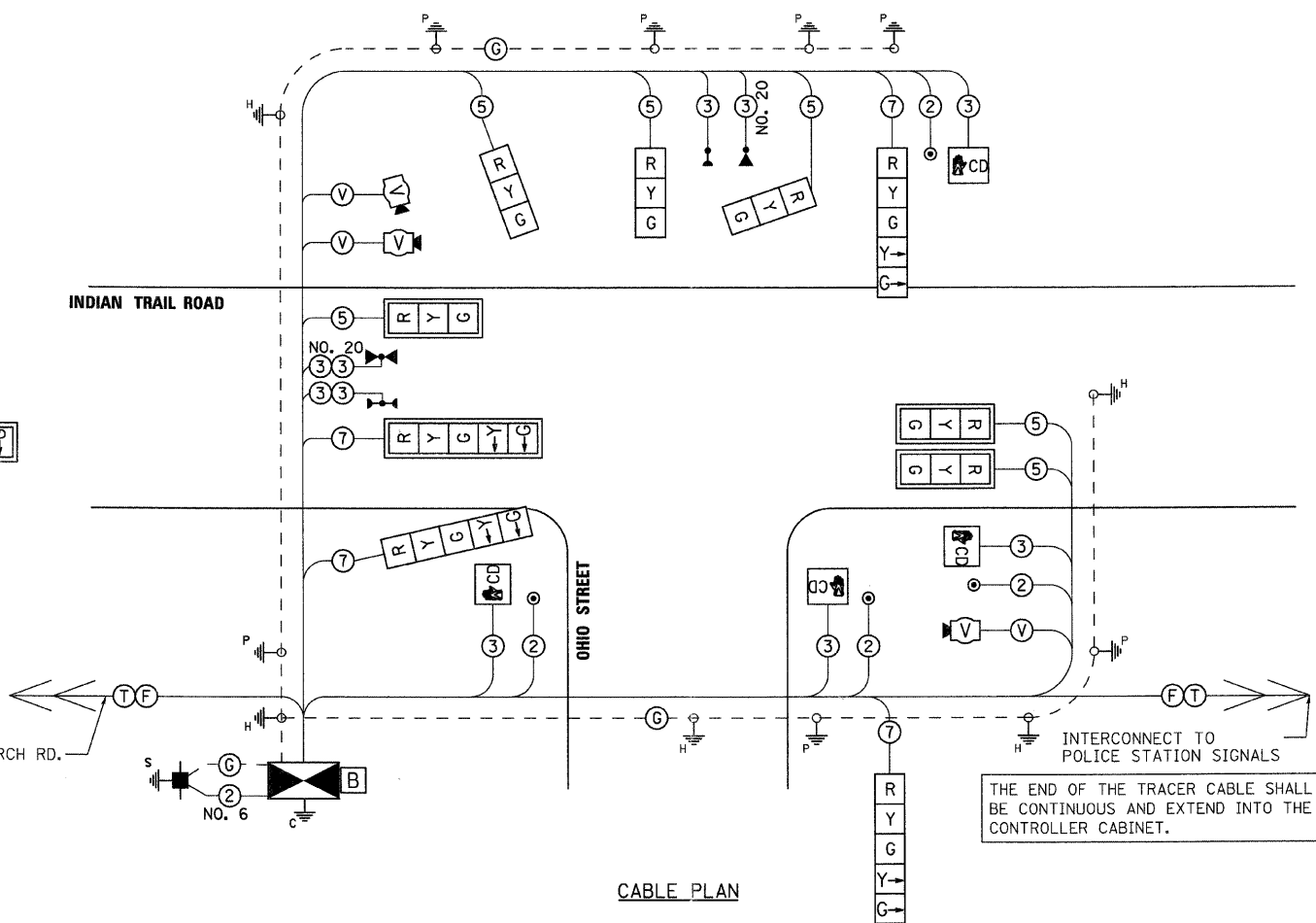


| F.A.U. RTE.         | SECTION        | COUNTY                    | TOTAL SHEETS | SHEET NO. |
|---------------------|----------------|---------------------------|--------------|-----------|
| 1503                | 08-00260-01-PV | KANE                      | 176          | 90        |
| STA.                |                | TO STA.                   |              |           |
| FED. ROAD DIST. NO. |                | ILLINOIS FED. AID PROJECT |              |           |

**CABLE PLAN LEGEND**

- CONTROLLER CABINET
- SERVICE INSTALLATION
- TELEPHONE SERVICE INSTALLATION
- VEHICLE DETECTION CAMERA
- EMERGENCY VEHICLE PRIORITY LIGHT DETECTOR
- EVPS CONFIRMATION BEACON
- DENOTES NUMBER OF CONDUCTORS.  
 ALL CABLE NO. 14 EXCEPT AS INDICATED.  
 ALL LOOP CABLE TO BE SHIELDED.
- FIBER OPTIC CABLE / TRACER CABLE (SEE INTERCONNECT PLAN)
- VIDEO CABLES (VENDOR SPECIFIED) (POWER AND SIGNAL)
- GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
- SIGNAL FACE WITH BACKPLATE
- SIGNAL FACE WITHOUT BACKPLATE
- PEDESTRIAN SIGNAL HEAD
- UNINTERRUPTABLE POWER SUPPLY (UPS), BATTERY BACK-UP SYSTEM
- GROUND ROD
- C: CONTROLLER  
 H: HANDHOLE  
 P: SIGNAL POST OR MAST ARM POLE  
 S: ELECTRIC SERVICE INSTALLATION



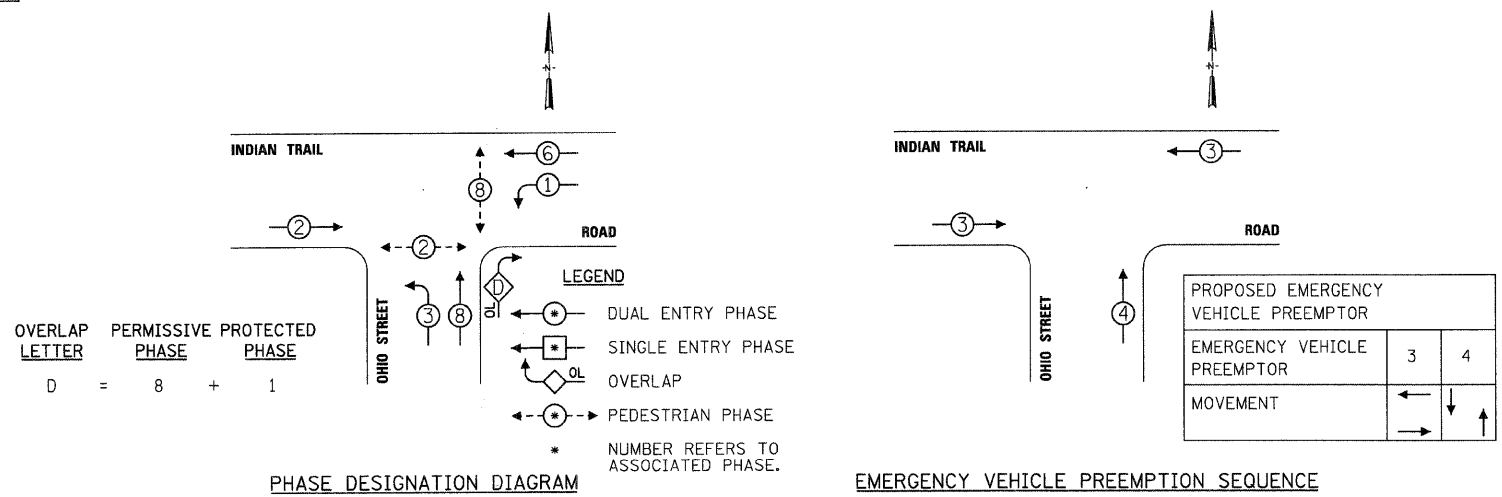
**CABLE PLAN**

- NOTES:**
- LIGHT DETECTOR CABLE SHALL BE 3/C NO. 20, TWISTED, SHIELDED.
  - CONFIRMATION BEACON CABLES SHALL BE 3/C NO. 14.
  - POWER AND SIGNAL CABLES FOR VIDEO DETECTION SHALL BE INCIDENTAL TO "VIDEO VEHICLE DETECTION" OF THE NUMBER OF CAMERAS SPECIFIED.
  - SEE LIGHTING PLANS FOR LUMINAIRE WIRING PLANS.

**SCHEDULE OF QUANTITIES**

| IDOT CODE | DESCRIPTION   | UNITS   | QUANTITY |
|-----------|---|---------|----------|
| 72000200  | SIGN PANEL, TYPE 2  | SQ. FT. | 12       |
| 80500100  | SERVICE INSTALLATION, TYPE A  | EACH    | 1        |
| 81000600  | CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL                              | FOOT    | 79       |
| 81000700  | CONDUIT IN TRENCH, 2-1/2" DIA., GALVANIZED STEEL                          | FOOT    | 203      |
| 81000800  | CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL                              | FOOT    | 3        |
| 81000900  | CONDUIT IN TRENCH, 3-1/2" DIA., GALVANIZED STEEL                          | FOOT    | 12       |
| 81001000  | CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL                              | FOOT    | 14       |
| 81018900  | CONDUIT, PUSHED 4" DIA., GALVANIZED STEEL                                 | FOOT    | 165      |
| 81400700  | HANDHOLE, PORTLAND CEMENT CONCRETE  | EACH    | 4        |
| 81400720  | DOUBLE HANDHOLE, PORTLAND CEMENT CONCRETE                                 | EACH    | 1        |
| 81900200  | TRENCH AND BACKFILL FOR ELECTRICAL WORK                                   | FOOT    | 311      |
| 85700200  | FULL-ACTUATED CONTROLLER AND TYPE IV CABINET                              | EACH    | 1        |
| 87301215  | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C                               | FOOT    | 600      |
| 87301225  | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C                               | FOOT    | 1,100    |
| 87301245  | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C                               | FOOT    | 1,000    |
| 87301255  | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C                               | FOOT    | 600      |
| 87301805  | ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C                             | FOOT    | 100      |
| 87502480  | TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.                              | EACH    | 1        |
| 87502500  | TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.                              | EACH    | 3        |
| 87502520  | TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.                              | EACH    | 1        |
| 87700170  | STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 24 FT.                       | EACH    | 2        |
| 87800100  | CONCRETE FOUNDATION, TYPE A   | FOOT    | 20       |
| 87800150  | CONCRETE FOUNDATION, TYPE C   | FOOT    | 4        |
| 87800415  | CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER                              | FOOT    | 30       |
| 88030020  | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED                     | EACH    | 3        |
| 88030050  | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED                      | EACH    | 1        |
| 88030100  | SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED                      | EACH    | 3        |
| 88030110  | SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED                     | EACH    | 1        |
| 88102717  | PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER | EACH    | 4        |
| 88200110  | TRAFFIC SIGNAL BACKPLATE, LOUVERED  | EACH    | 4        |
| 88700200  | LIGHT DETECTOR  | EACH    | 3        |
| 88700300  | LIGHT DETECTOR AMPLIFIER  | EACH    | 1        |
| 88800100  | PEDESTRIAN PUSH-BUTTON  | EACH    | 4        |
| X0323777  | VIDEO VEHICLE DETECTION, 3 CAMERAS  | EACH    | 1        |
| X8730027  | ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C                            | FOOT    | 600      |
| XX005660  | ELECTRIC CABLE IN CONDUIT, NO. 20 3/C TWISTED SHIELDED                    | FOOT    | 500      |
| XX006661  | UNINTERRUPTABLE POWER SUPPLY  | EACH    | 1        |

\* SPECIAL PROVISION REQUIRED



**PHASE DESIGNATION DIAGRAM**

OVERLAP LETTER PERMISSIVE PHASE PROTECTED PHASE

D = 8 + 1

**EMERGENCY VEHICLE PREEMPTION SEQUENCE**

| I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS |           |                 |             |             | TOTAL WATTAGE |
|--|-----------|-----------------|-------------|-------------|---------------|
| TYPE   | NO. LAMPS | WATTAGE INCAND. | WATTAGE LED | % OPERATION |               |
| SIGNAL (RED)   | 9         |                 | 17          | 0.50        | 76.5          |
| (YELLOW)   | 9         |                 | 25          | 0.25        | 56.3          |
| (GREEN)  | 9         |                 | 15          | 0.25        | 33.8          |
| ARROW  | 4         |                 | 12          | 1.00        | 47.8          |
| PED. SIGNAL  | 4         |                 | 25          | 1.00        | 100.0         |
| CONTROLLER   | 1         | 100             |             | 1.00        | 100.0         |
| VIDEO CAMERA   | 3         | 15              |             | 1.00        | 45.0          |
| VIDEO BASE   | 1         | 26              |             | 1.00        | 26.0          |
| UPS  | 1         | 50              |             | 1.00        | 50.0          |
| <b>TOTAL =</b>   |           |                 |             |             | <b>492</b>    |

| FOUNDATION (DEPTH) | FT. (m)     | CABLE SLACK      | FT. (m)   | VERTICAL          | FT. (m)            |
|--------------------|-------------|------------------|-----------|-------------------|--------------------|
| TYPE A - POST      | 4 (1.2)     | HANDHOLE         | 6.5 (2.0) | ALL FOUNDATIONS   | 3.5 (1.0)          |
| C - CONT. W/UPS    | 4 (1.2)     | DOUBLE HANDHOLE  | 13 (4.0)  | MAST ARM (L) POLE | 20' H.L. ± 2"      |
| D - CONTROLLER     | 4 (1.2)     | SIGNAL POST      | 2 (0.6)   |                   | (6m H.L. - 0.6m) ± |
| E - M. ARM POLE    |             | CONTROLLER CAB.  | 1 (0.5)   | BRACKET MOUNTED   | 13 (4.0)           |
|                    | 30" (750mm) | FIBER OPTIC      | 13 (4.0)  | PED. PUSHBUTTON   | 4 (1.2)            |
|                    | 36" (900mm) | ELECTRIC SERVICE | 1 (0.5)   | ELECTRIC SERVICE  | 13.5 (4.1)         |
|                    |             | GROUND CABLE     | 1 (0.5)   | SERVICE TO GROUND | 13.5 (4.1)         |
|                    |             |                  |           | POST MOUNTED      | 6 (1.8)            |

ENERGY COSTS TO: \_\_\_\_\_ TOTAL = 492

ENERGY SUPPLY CONTACT: \_\_\_\_\_  
 PHONE: \_\_\_\_\_  
 COMPANY: \_\_\_\_\_



| REVISIONS |      |
|-----------|------|
| NAME      | DATE |
|           |      |
|           |      |
|           |      |
|           |      |

ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN  
 INDIAN TRAIL ROAD AND  
 OHIO STREET

SCALE: VERT. 1"=20'  
 HORIZ. 1"=20'

DATE 1/7/09

DRAWN BY KMA  
 CHECKED BY TC/SBP

PLOT DATE = 1/5/2009  
 FILE NAME = H:\Users\cva120895\_1\Public\Civil\Signal\Signal\_082.dgn  
 PLOT SCALE = 1"=20'  
 USER NAME = USER