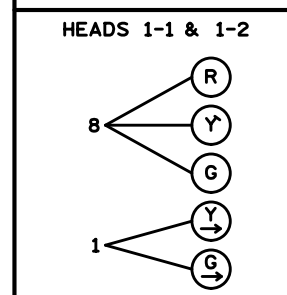


**PVC LOOP DETECTOR CHART**

| NUMBER           | SIZE      | LOCATION |
|------------------|-----------|----------|
| D1-1, D1-2       | 6X6       | 250      |
| D1-3             | 2-6X15    | 3&16&20  |
| D1-4             | 2-6X15    | 3&16&20  |
| D2-1, D2-2, D2-3 | 6X6       | 150      |
| D5-1             | 2-6X6     | 10&40    |
| D5-2             | 2-6X6     | 10&40    |
| D6-1, D6-2, D6-3 | 6X6       | 301      |
| D8-1, D8-2       | 6X6       | 250      |
| D8-3, D8-4       | 2-6X6     | 3&16&20  |
| D2-4             | MICROWAVE | 321      |

-ALL LOOP DETECTORS ARE 6' X 6' PVC UNLESS OTHERWISE SPECIFIED  
 -LOCATION: DISTANCE FROM CROSSWALK/STOP LINE IN FEET

**SIGNAL HEAD PHASING**



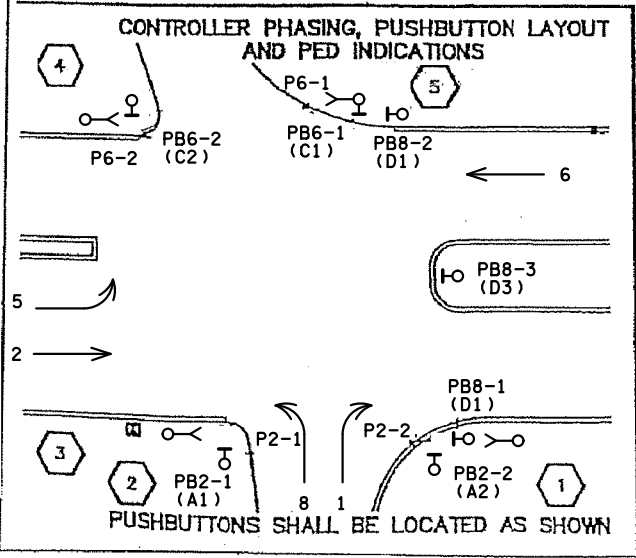
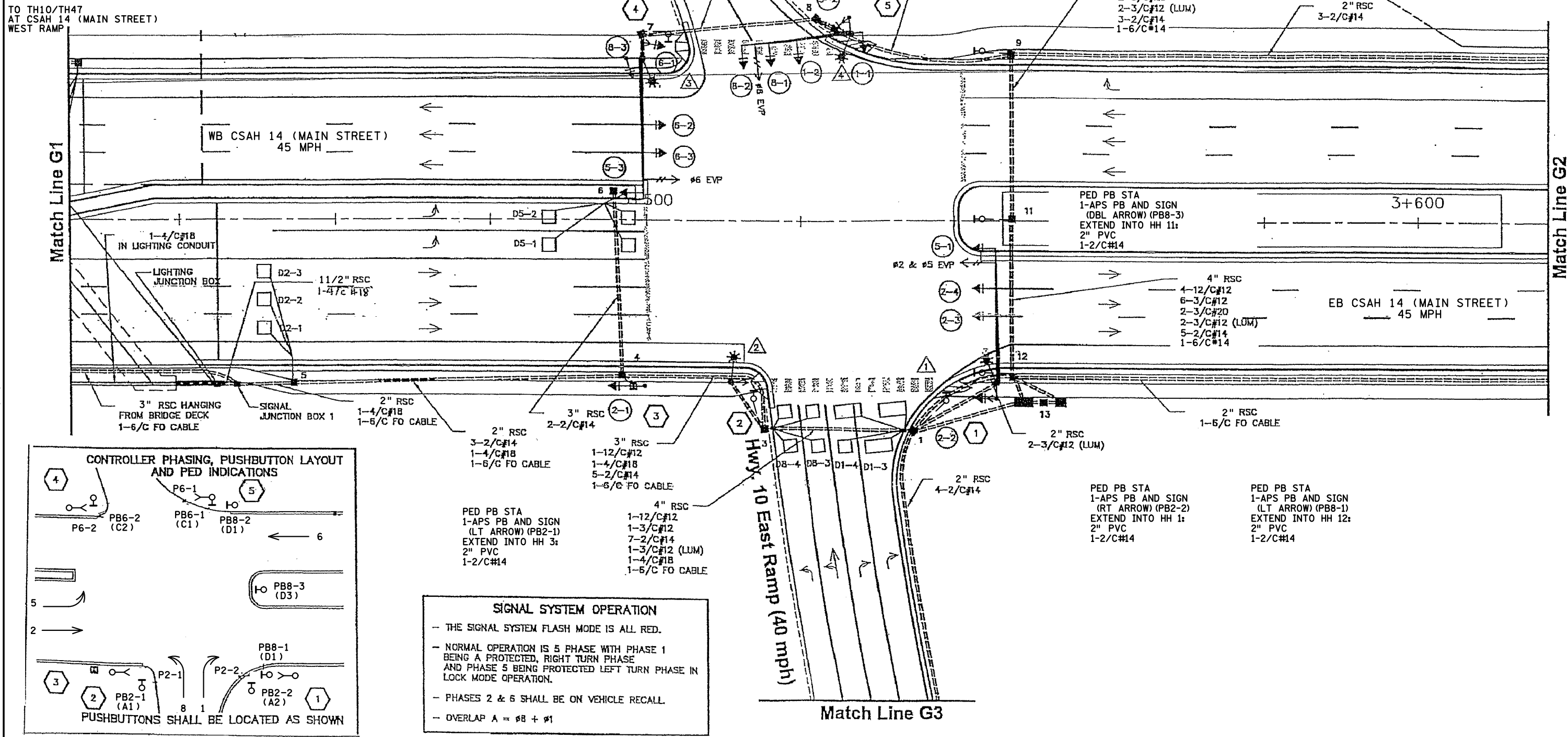
**SIGNAL HEAD CHART**

| FACE          | R | Y | G | Y | G |
|---------------|---|---|---|---|---|
| 1-1, 1-2      | ○ | ○ | ○ | → | → |
| 2-1, 2-2, 2-3 | ○ | ○ | ○ |   |   |
| 5-1, 5-2, 5-3 | ← | ← | ← |   |   |
| 6-1, 6-2, 6-3 | ○ | ○ | ○ |   |   |
| 8-1           | ○ | ○ | ○ | ← |   |
| 8-2, 8-3      | ○ | ← | ← |   |   |

-ALL SIGNAL INDICATIONS SHALL BE 12"  
 -ALL SIGNAL INDICATIONS SHALL BE LED  
 -ALL SIGNAL FACES SHALL HAVE A BACKGROUND SHIELD

PLOTTED/REVISED: 7/2/2014

DISTRICT #: METRO  
 IPLOT NAME: Intersection layout  
 PATH & FILENAME: IP\_PWP-d078017NT2023LMLWR\_sgl.dgn



**SIGNAL SYSTEM OPERATION**

- THE SIGNAL SYSTEM FLASH MODE IS ALL RED.
- NORMAL OPERATION IS 5 PHASE WITH PHASE 1 BEING A PROTECTED, RIGHT TURN PHASE AND PHASE 5 BEING PROTECTED LEFT TURN PHASE IN LOCK MODE OPERATION.
- PHASES 2 & 6 SHALL BE ON VEHICLE RECALL
- OVERLAP A = #8 + #1

| BY  | DATE     | REVISIONS   |
|-----|----------|---|
| EJA | 07-31-13 | REVISED HEADS 1-1 & 1-2 FROM 3 SECTION TO 5 SECTION |
| EJA | 07-02-14 | AS-BUILT OF SP 0202-94 APS                          |

SYSTEM ID: 20213 T.E. 5784  
 METER ADDRESS: MAIN STREET/TH 10 WEST R  
 MASTER ID: T.E.

**INTERSECTION LAYOUT**  
 TH 10/47 AT CSAH 14 (MAIN STREET)  
 EAST RAMP  
 IN COON RAPIDS, ANOKA COUNTY

S.A.P. NO. \_\_\_\_\_ DRAWN BY: SJK CKD BY: EJA DATE: 03-07-13  
 CERTIFIED BY: *Michael P. Lubinsky* L.C. NO. 19863 DATE: 03-26-13  
 STATE PROJ. NO. (T.H.10) SHEET NO. 1 OF 3 SHEETS

PLOTTED/REVISED: 7/2/2014

①

TYPE PA100 POLE FOUNDATION  
 TYPE PA100-A-55-X30 (DAVIT AT 350 DEG)  
 LUMINAIRE 250 WATT HPS WITH CHECK AND PEC SWITCH  
 3-ONE WAY SIGNAL OVERHEAD AT 0', 17' AND 29'  
 FROM END OF MASTARM  
 1-TYPE 30A AT 90 DEG  
 1-TYPE 10B AT 180 DEG  
 2-C.D. PED HEADS  
 1-R9-3 SIGN (FACING POLE 5)  
 ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT  
 MOUNTED AT 6' FROM END OF MAST ARM (PHASES 2&5)  
 EXTEND INTO HH 1:  
 3" RSC  
 2-12/C#12  
 2-3/C#12  
 1-3/C#20  
 1-3/C#12 (LUM)  
 1-2/C#14

③

PEDESTAL FOUNDATION  
 10' PEDESTAL POLE AND BASE  
 1-TYPE 1A  
 EXTEND INTO HH 4:  
 2" RSC  
 1-12/C#12

⑤

TYPE PA100 POLE FOUNDATION  
 TYPE PA100-A-45-X30 (DAVIT AT 350 DEG)  
 LUMINAIRE 250 WATT HPS WITH CHECK AND PEC SWITCH  
 3-ONE WAY SIGNAL OVERHEAD AT 0', 10' AND 23'  
 FROM END OF MASTARM  
 2-TYPE 10B AT 90 & 180 DEG  
 2-C.D. PED HEADS  
 ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT  
 MOUNTED AT 6' FROM END OF MAST ARM (PHASE 8)  
 EXTEND INTO HH 8:  
 3" RSC  
 2-12/C#12  
 1-6/C#14  
 4-3/C#12  
 1-3/C#20  
 1-3/C#12 (LUM)  
 1-2/C#14

④

TYPE PA100 POLE FOUNDATION  
 TYPE PA100-A-55-X30 (DAVIT AT 350 DEG)  
 LUMINAIRE 250 WATT HPS WITH CHECK AND PEC SWITCH  
 3-ONE WAY SIGNAL OVERHEAD AT 0', 17' AND 29'  
 FROM END OF MASTARM  
 1-TYPE 10A AT 90 DEG  
 1-TYPE 10B AT 180 DEG  
 1-C.D. PED HEAD  
 1-R9-3 SIGN (FACING POLE 2)  
 ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT  
 MOUNTED AT 6' FROM END OF MAST ARM (PHASE 6)  
 EXTEND INTO HH 7:  
 3" RSC  
 2-12/C#12  
 2-3/C#12  
 1-3/C#20  
 1-3/C#12 (LUM)  
 1-2/C#14

②

TYPE PA85 POLE FOUNDATION  
 TYPE PA85-X30 (DAVIT AT 350 DEG)  
 LUMINAIRE 250 WATT HPS WITH CHECK AND PEC SWITCH  
 1-TYPE 30A AT 0 DEG  
 1-C.D. PED HEAD  
 1-R9-3 SIGN (FACING POLE 3)  
 EXTEND INTO HH 3:  
 3" RSC  
 2-12/C#12  
 1-3/C#12  
 1-3/C#12 (LUM)  
 1-2/C#14

Ⓐ

CONTROLLER AND CABINET  
 CABINET FOUNDATION  
 3" RSC STUBBED OUT AND CAPPED TO WEST  
 EXTEND INTO HH 13:  
 METERED SIGNAL SERVICE  
 1 1/2" RSC  
 3-1/C#6

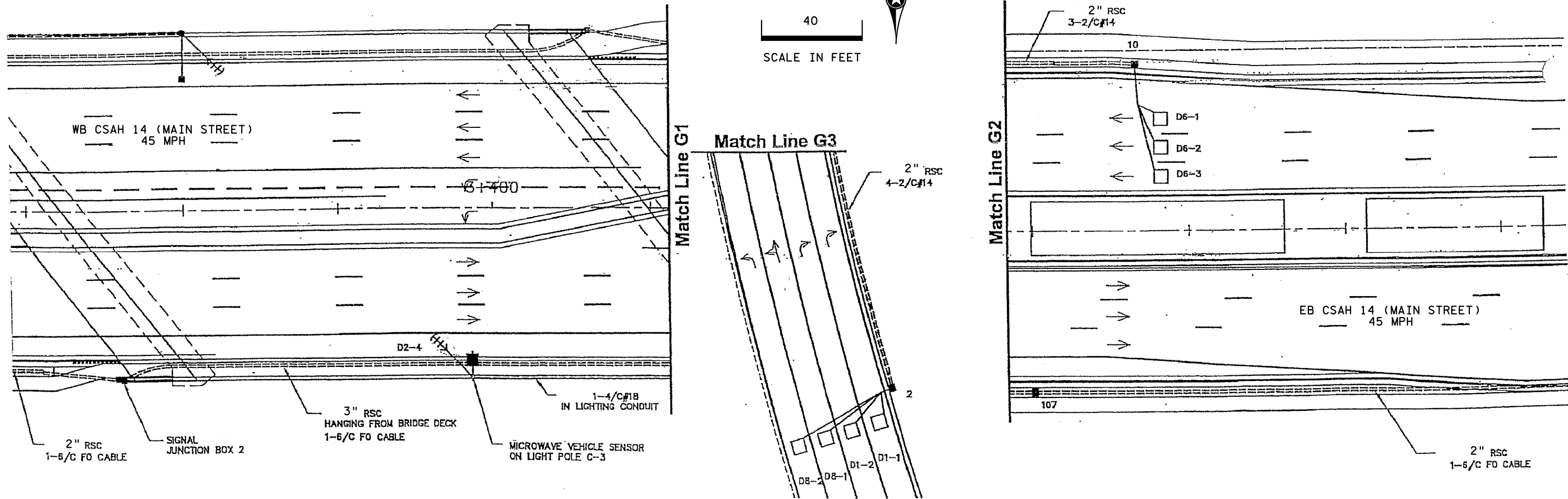
Ⓑ

SERVICE CABINET  
 CABINET FOUNDATION  
 EXTEND INTO HH 13:  
 METERED SIGNAL SERVICE  
 1 1/2" RSC  
 3-1/C#6

EXTEND INTO HH 12:  
 4" RSC  
 4-12/C#12  
 1-6/C#14  
 5-3/C#12  
 2-3/C#20  
 5-2/C#14  
 1-6/C FO CABLE

EXTEND INTO HH 1:  
 4" RSC  
 3-12/C#12  
 3-3/C#12  
 1-3/C#20  
 13-2/C#14  
 1-4/C#18  
 1-6/C FO CABLE

EXTEND INTO HH 12:  
 UNMETERED STREET LIGHT SERVICE  
 1 1/2" RSC  
 4-3/C#12 (LUM)  
 UNMETERED ILLUMINATED SIGN SERVICE  
 1-3/C#12  
 2" RSC TO POWER POLE (BY CONNEXUS)



DISTRICT #: METRO  
 IPLOT NAME: match line pole notes  
 PATH & FILENAME: IP\_PWP-d078017NT2023LMLWR\_sgl.dgn

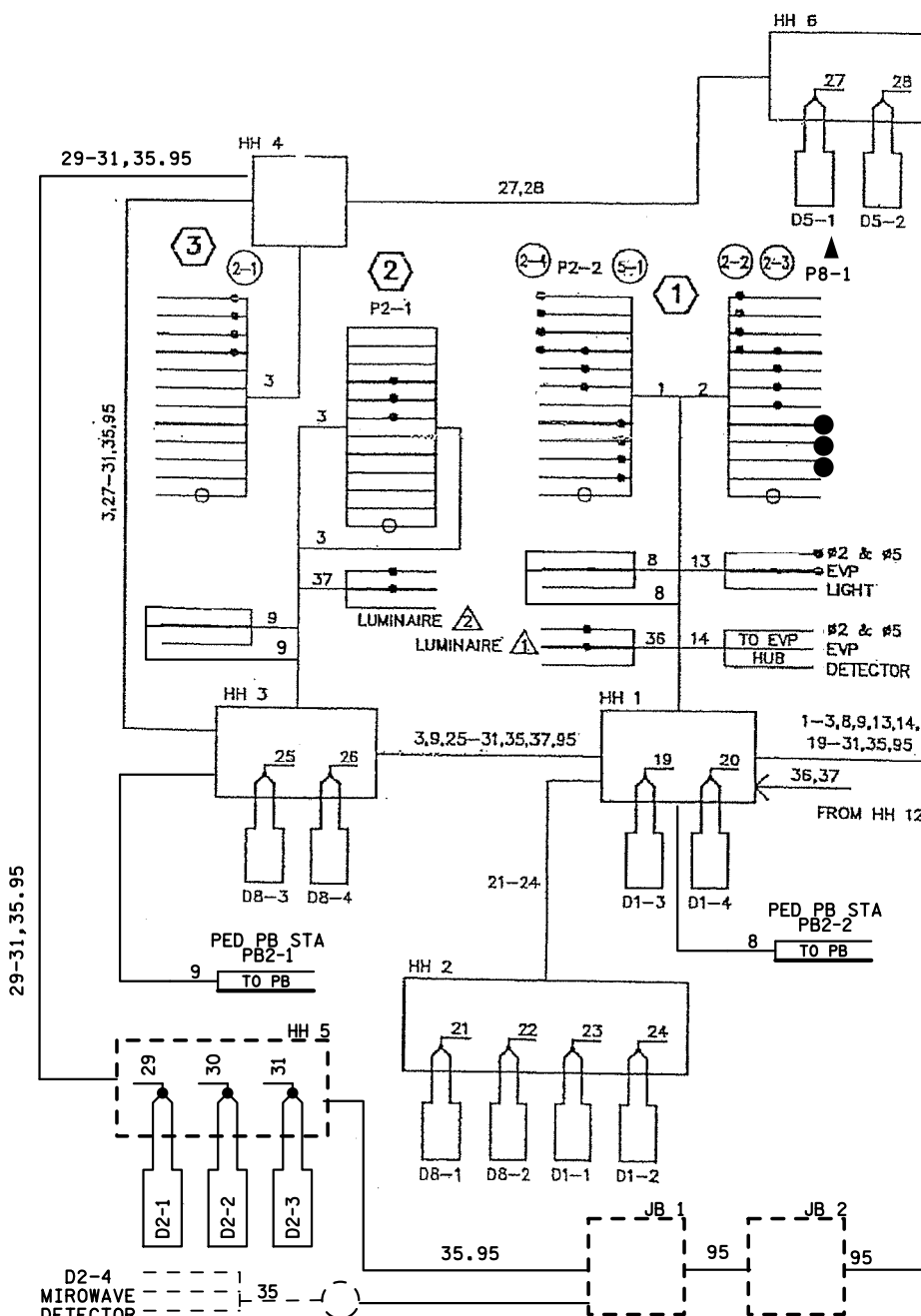
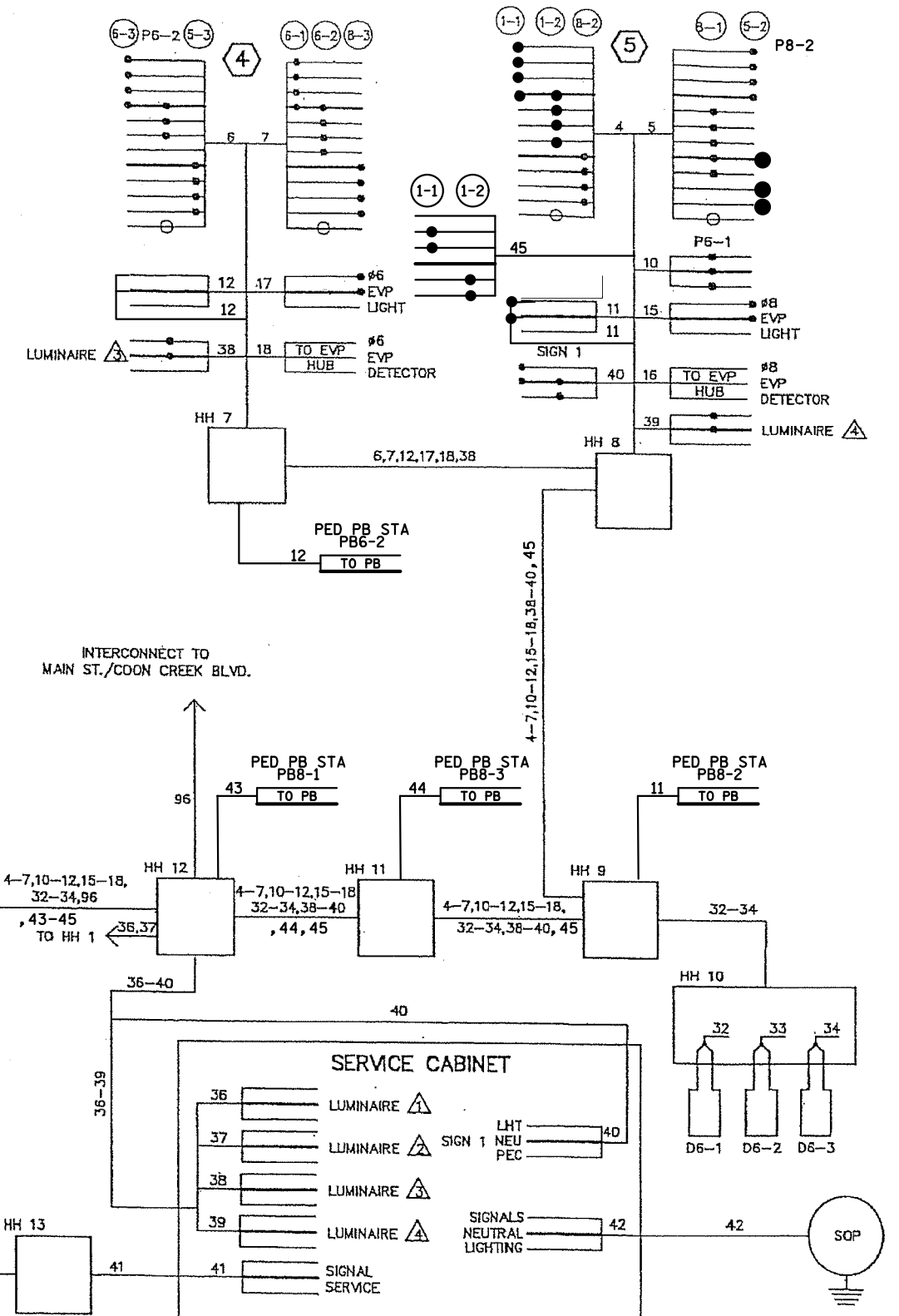
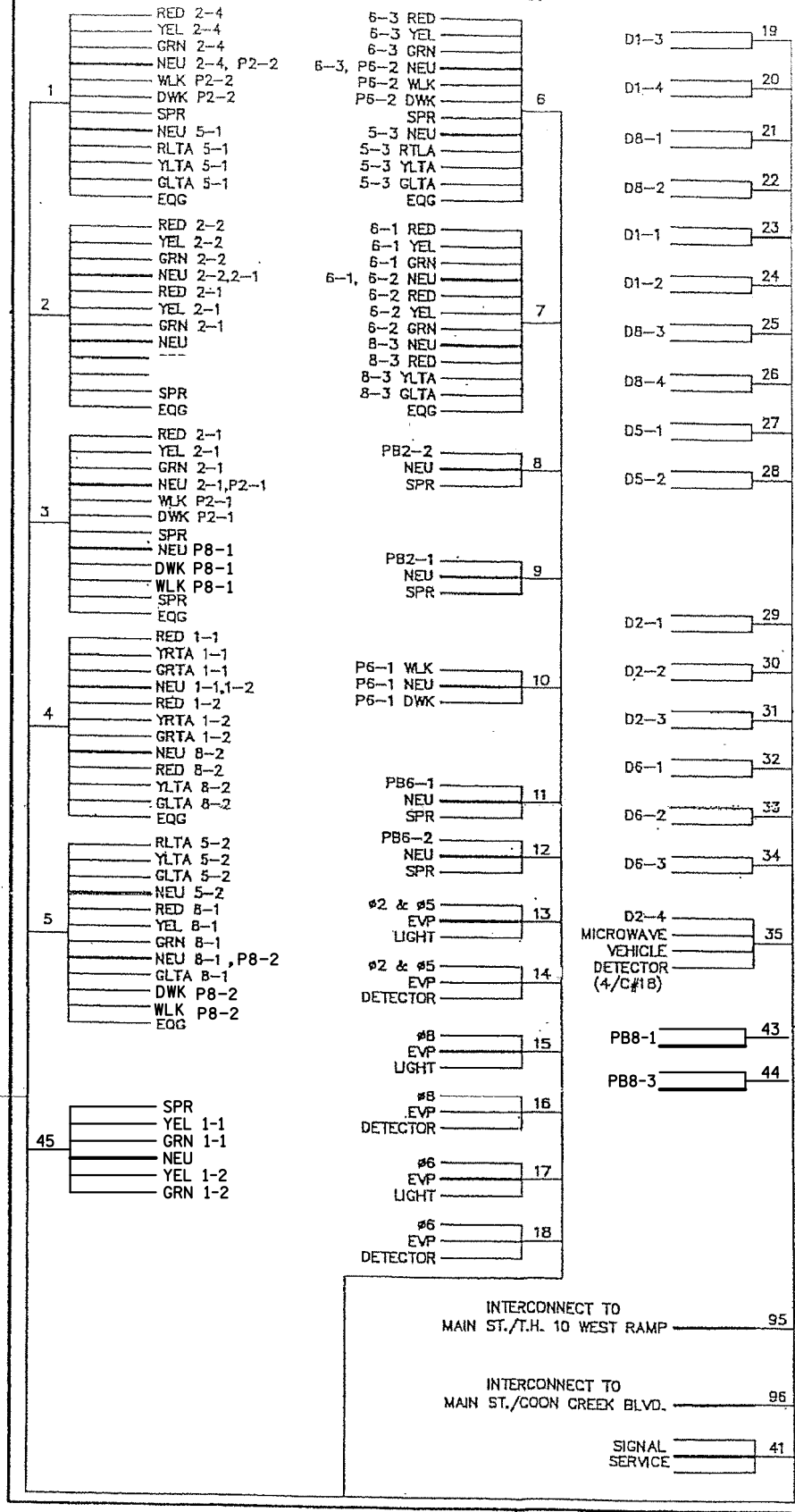
|     |          |   |   |           |  |                |                |                |
|-----|----------|---|---|-----------|--|----------------|----------------|----------------|
| BY  | DATE     | REVISIONS   | SYSTEM ID: 20213                        | T.E. 5784 | S.A.P. NO.   | DRAWN BY: SJK  | CKD BY: EJA    | DATE: 03-07-13 |
| EJA | 07-31-13 | REVISED HEADS 1-1 & 1-2 FROM 3 SECTION TO 5 SECTION | METER ADDRESS: MAIN STREET/TH 10 WEST R |           | CERTIFIED BY: <i>Michael P. Subrany</i>                          | LIC. NO. 19863 | DATE: 03-26-13 |                |
| EJA | 07-02-14 | AS-BUILT OF SP 0202-94 APS                          | MASTER ID:                              | T.E.      | STATE PROJ. NO. 0202-94 (T.H.10) SHEET NO. SS19R2 OF SS20 SHEETS |                |                |                |

**CONDUCTOR COLOR CODE**

|         |                                  |   |  |                                    |                       |
|---------|----------------------------------|---|--|------------------------------------|-----------------------|
| 3/C#20  | R OR O<br>WH OR YEL<br>BLK OR BL | R<br>O<br>BL<br>WH<br>R/BLK<br>O/BLK<br>BL/BLK<br>WH/BLK<br>BLK<br>BLK/WH<br>G/BLK<br>G | 6/C#14                                     | R<br>O<br>BL<br>WH<br>BLK/R<br>BLK |                       |
| 2/C#14  | BLK<br>CLR OR WH                 | 12/C#12   | R<br>O<br>BL<br>WH<br>BLK/WH<br>G/BLK<br>G | 4/C#18                             | MICROWAVE<br>DETECTOR |
| 3-1/C#2 | INPUT<br>POWER                   | 5/C#12  | R<br>O<br>BLK<br>WH<br>G                   |                                    |                       |
| 3-1/C#6 | SIGNAL<br>SERVICE                | 3/C#12  | R<br>WH<br>BLK                             |                                    |                       |
| 2-1/C   |                                  |   |  |                                    |                       |
| 1/C#6   |                                  |   |  |                                    |                       |
| 6PR#19  |                                  |   |  |                                    |                       |

NOTE:  
ALL TERMINAL BLOCK CONNECTIONS SHALL BE ARRANGED AS SPECIFIED ABOVE.

**CONTROLLER CABINET**



PLOTTED/REVISED: 7/2/2014

DISTRICT #: METRO  
IPLOT NAME: wiring diagram  
PATH & FILENAME: IP\_PWP-d078017N2023LMLWR\_sgl.dgn

| BY  | DATE     | REVISIONS   |
|-----|----------|---|
| EJA | 7-31-13  | REVISED HEADS 1-1 & 1-2 FROM 3 SECTION TO 5 SECTION |
| EJA | 07-02-14 | AS-BUILT OF SP 0202-94 APS                          |

|   |           |
|---|-----------|
| SYSTEM ID: 20213                        | T.E. 5784 |
| METER ADDRESS: MAIN STREET/TH 10 WEST R |           |
| MASTER ID:                              | T.E.      |

**FIELD WIRING DIAGRAM**  
TH 10/47 AT CSAH 14 (MAIN STREET)  
EAST RAMP  
IN COON RAPIDS, ANOKA COUNTY

S.A.P. NO. \_\_\_\_\_  
CERTIFIED BY *Michael P. Selinsky*  
STATE PROJ. NO. 0202-94 (T.H.10)

DRAWN BY: SJK CKD BY: EJA DATE: 03-07-13  
LIC. NO. 19863 DATE: 03-26-13  
SHEET NO. 3 OF 3 SHEETS