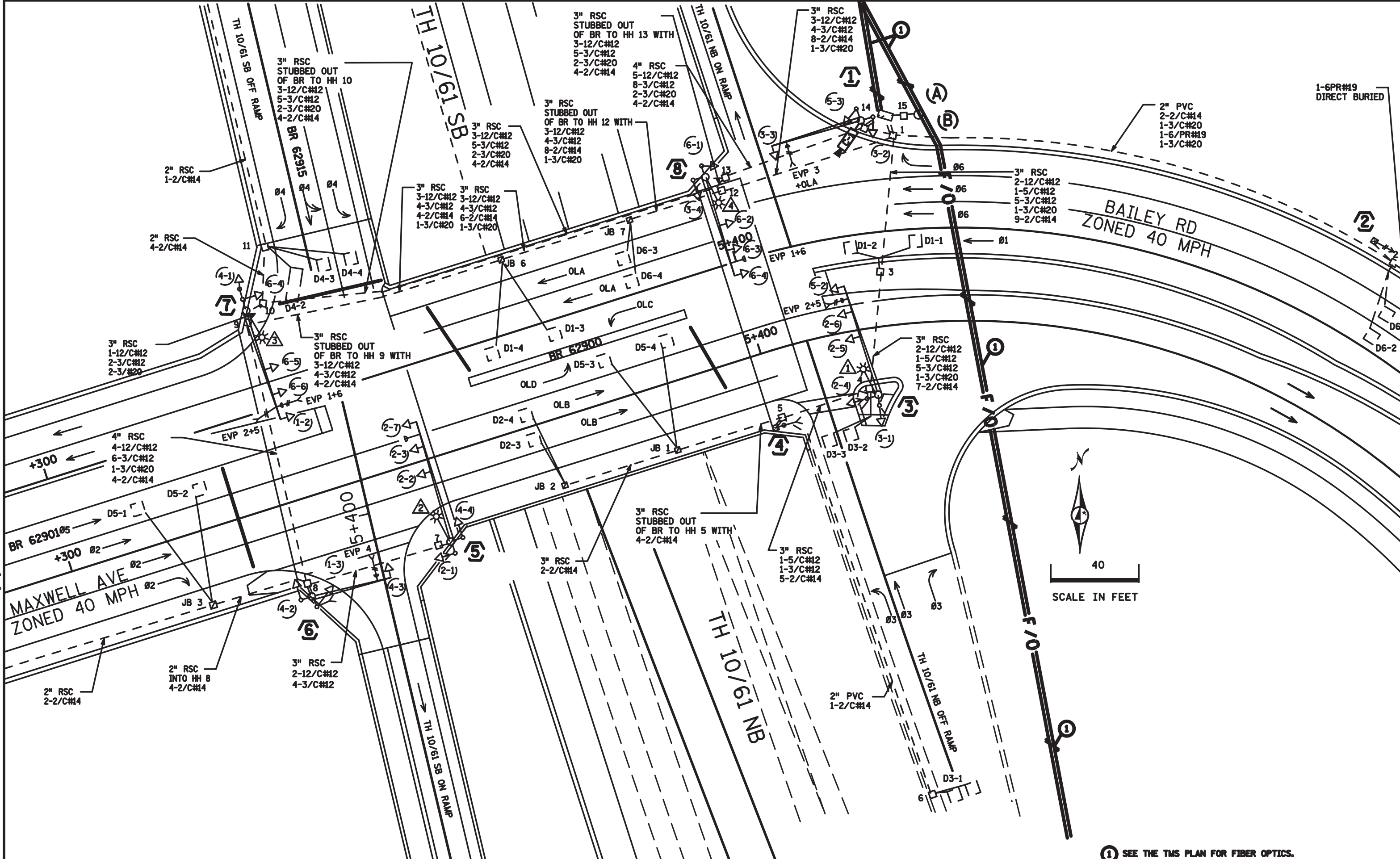


PLOTTED/REVISED: 12/2/2014

DISTRICT #: METRO
IPLOT NAME: layout
PATH & FILENAME: IP_PWP-d0779847V22521_sgl.dgn



① SEE THE TMS PLAN FOR FIBER OPTICS.

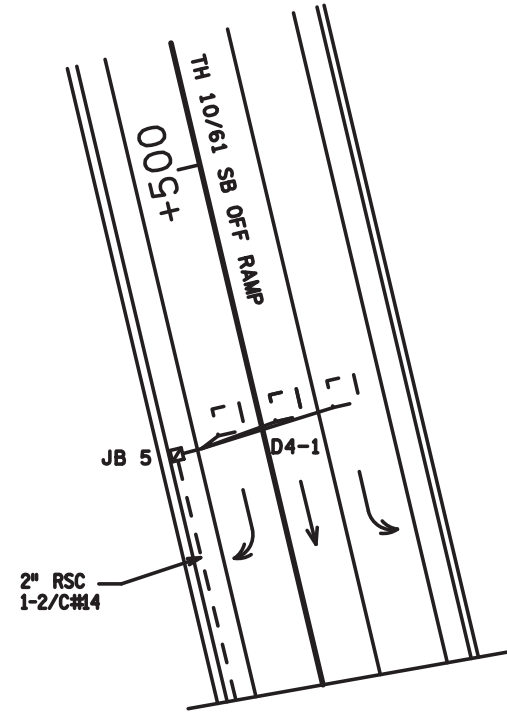
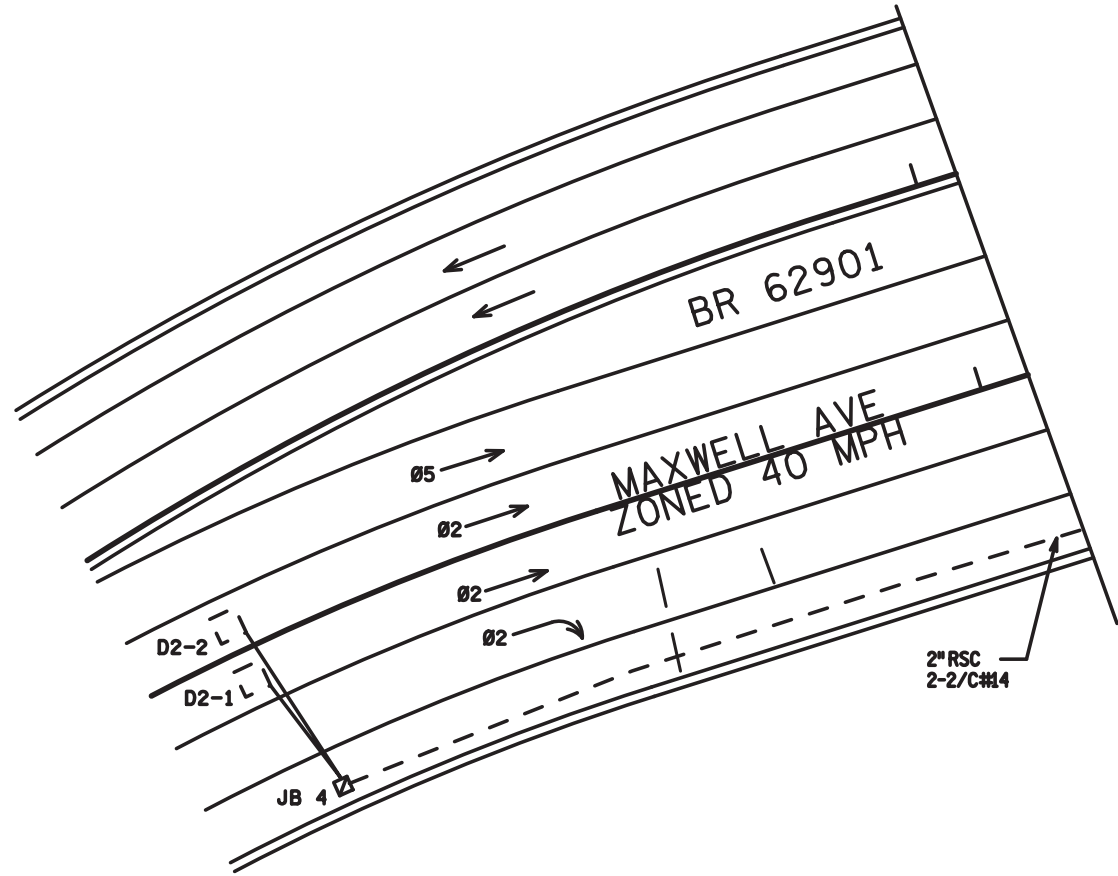
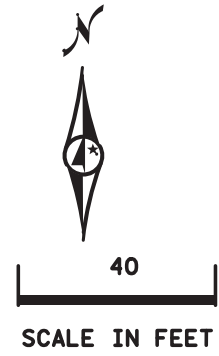
| BY | DATE | REVISIONS |
|-----|----------|---------------------------------------|
| EJA | 12-02-14 | AS-BUILT OF SP 1913-75 FIBER & CAMERA |

| | |
|---------------------------------|-----------|
| SYSTEM ID: 22521 | T.E. 5870 |
| METER ADDRESS: 1600 SOUTH TH 61 | |
| MASTER ID: | T.E. |

INTERSECTION LAYOUT
T.H. 61/10 AT MAXWELL AVE/
CSAH 20 (BAILEY RD) RAMPS
IN ST. PAUL, RAMSEY COUNTY

| | | | |
|--|----------------|-------------------------|----------------|
| S.A.P. NO. | DRAWN BY: SJK | CKD BY: EJA | DATE: 09-10-13 |
| CERTIFIED BY: <i>Michael P. Libinsky</i> | LIC. NO. 19863 | DATE: 09-10-13 | |
| STATE PROJ. NO. | (T.H. 61) | SHEET NO. 1 OF 4 SHEETS | |

PLOTTED/REVISED: 12/2/2014



DISTRICT #: METRO
PLOT NAME: match lines
PATH & FILENAME: IP_PWP-d0779847\T22521_sgl.dgn

| BY | DATE | REVISIONS |
|-----|----------|---------------------------------------|
| EJA | 12-02-14 | AS-BUILT OF SP 1913-75 FIBER & CAMERA |
| | | |
| | | |

| | |
|---------------------------------|-----------|
| SYSTEM ID: 22521 | T.E. 5870 |
| METER ADDRESS: 1600 SOUTH TH 61 | |
| MASTER ID: | T.E. |

MATCH LINES
**T.H. 61/10 AT MAXWELL AVE/
 CSAH 20 (BAILEY RD) RAMPS
 IN ST. PAUL, RAMSEY COUNTY**

| | | | |
|---|----------------|----------------|----------------|
| S.A.P. NO. | DRAWN BY: SJK | CKD BY: EJA | DATE: 09-10-13 |
| CERTIFIED BY: <i>Michael P. Liburdy</i> | LIC. NO. 19863 | DATE: 09-10-13 | |
| STATE PROJ. NO. | (T.H. 61) | SHEET NO. 3 OF | 4 SHEETS |

PLOTTED/REVISED: 12/2/2014

1 PA100 POLE FOUNDATION
 TYPE PA100-A-40-X400
 1-VIDEO CAMERA WITH MOUNT
 ONE WAY SIGNAL (OVERHEAD)
 2-TYPE 10A AT 90 AND 180 DEG
 ONE WAY EVP DETECTOR &
 CONFIRMATORY LIGHT (PHASE 3)
 2-R6-1L SIGN (ONE WAY)
 1-R6-1R SIGN (ONE WAY)
 2-R9-3 SIGNS (FACING POLES 2 & 7)
 1-TYPE D SIGN (D-1)
 3" RSC INTO HH 14 WITH
 2-12/C#12
 2-3/C#12
 1-3/C#20
 1-7/16" GROUNDING BRAID
 TO GROUND ROD IN HH 14
 1-3/C #14 (CAMERA POWER)
 1-COM CABLE
 1-COAXIAL CABLE

3 PA100 POLE FOUNDATION
 TYPE PA100-A-50-D40-9(DAVIT AT 350 DEG)
 3-ONE WAY SIGNAL (OVERHEAD)
 (0, 11' AND 23' FROM END OF MAST ARM)
 TYPE 10A AT 180 DEG
 TYPE 10B AT 270 DEG
 LUMINAIRE-250W HPS
 ONE WAY, TWO CHANNEL EVP DETECTOR
 (PHASES 1 & 6 AND 2 & 5)
 CONFIRMATORY LIGHT (PHASES 2, 4 & 5)
 1-PED PB & R10-4B SIGN
 1-R9-3 SIGN (FACING POLE 1)
 1-TYPE D SIGN (D-3)
 3" RSC INTO HH 4 WITH
 2-12/C#12
 3-3/C#12
 1-3/C#14 (LUM)
 1-3/C#20

5 PA100 POLE FOUNDATION
 TYPE PA100-A-55-D40-9 (DAVIT AT 350 DEG)
 3-ONE WAY SIGNAL (OVERHEAD)
 (0, 11' AND 23' FROM END OF MAST ARM)
 TYPE 10A AT 90 DEG
 TYPE 10B AT 180 DEG
 LUMINAIRE-250W HPS
 ONE WAY EVP CONFIRMATORY
 LIGHT (PHASE 2 & 5)
 1-PED PB & R10-4B SIGN
 1-TYPE D SIGN (D-4)
 3" RSC INTO HH 7 WITH
 2-12/C#12
 3-3/C#12
 1-3/C#12 (LUM)

7 PA100 POLE FOUNDATION
 TYPE PA100-A-50-D40-9 (DAVIT AT 350 DEG)
 3-ONE WAY SIGNAL (OVERHEAD)
 (0, 11' AND 23' FROM END OF MAST ARM)
 TYPE 20A AT 180 DEG
 LUMINAIRE-250W HPS
 1-TWO WAY, TWO CHANNEL EVP DETECTOR
 (PHASE 1, 6 & 3 AND PHASE 2 & 5)
 CONFIRMATORY LIGHT (PHASE 1, 6 & 3)
 2-R9-3 SIGNS (FACING POLES 5 & 7)
 1-TYPE D SIGN (D-5)
 3" RSC INTO HH 10 WITH
 2-12/C#12
 2-3/C#12
 1-3/C#12 (LUM)
 2-3/C#20

2 PEDESTAL FOUNDATION
 8' SIGNAL PEDESTAL POLE PLUS BASE
 ONE WAY EVP DETECTOR (PHASES 1 & 6)
 3" RSC INTO HH 2 WITH
 1-3/C#20

4 PEDESTAL FOUNDATION
 8' SIGNAL PEDESTAL POLE PLUS BASE
 TYPE 4A
 1-R6-1L SIGN (ONE WAY)
 1-R6-1R SIGN (ONE WAY)
 1-PED PB & R10-4B SIGN
 1-R9-3 SIGN (FACING POLE 7)
 3" RSC INTO HH 5 WITH
 1-5/C#12
 1-3/C#12

6 PA90 POLE FOUNDATION
 TYPE PA90-A-35
 ONE WAY SIGNAL (OVERHEAD)
 TYPE 10B AT 90 DEG
 TYPE 10A AT 180 DEG
 ONE WAY EVP DETECTOR &
 CONFIRMATORY LIGHT (PHASE 4)
 1-R6-1L SIGN (ONE WAY)
 1-R6-1R SIGN (ONE WAY)
 1-PED PB & R10-4B SIGN
 1-R9-3 SIGN (FACING POLE 6)
 1-TYPE D SIGN (D-2)
 3" INTO HH 8 WITH
 2-12/C#12
 2-3/C#12
 1-3/C#20

8 PA100 POLE FOUNDATION
 TYPE PA100-A-45-D40-9 (DAVIT AT 350 DEG)
 3-ONE WAY SIGNAL (OVERHEAD)
 (0, 11' AND 23' FROM END OF MAST ARM)
 2-TYPE 10A AT 90 AND 180 DEG
 LUMINAIRE-250W HPS
 ONE WAY EVP CONFIRMATORY LIGHT (PHASES 1 & 6)
 2-R9-3 SIGNS (FACING POLES 1 & 3)
 1-TYPE D SIGN (D-6)
 3" RSC INTO HH 13 WITH
 2-12/C#12
 2-3/C#12
 1-3/C#12 (LUM)

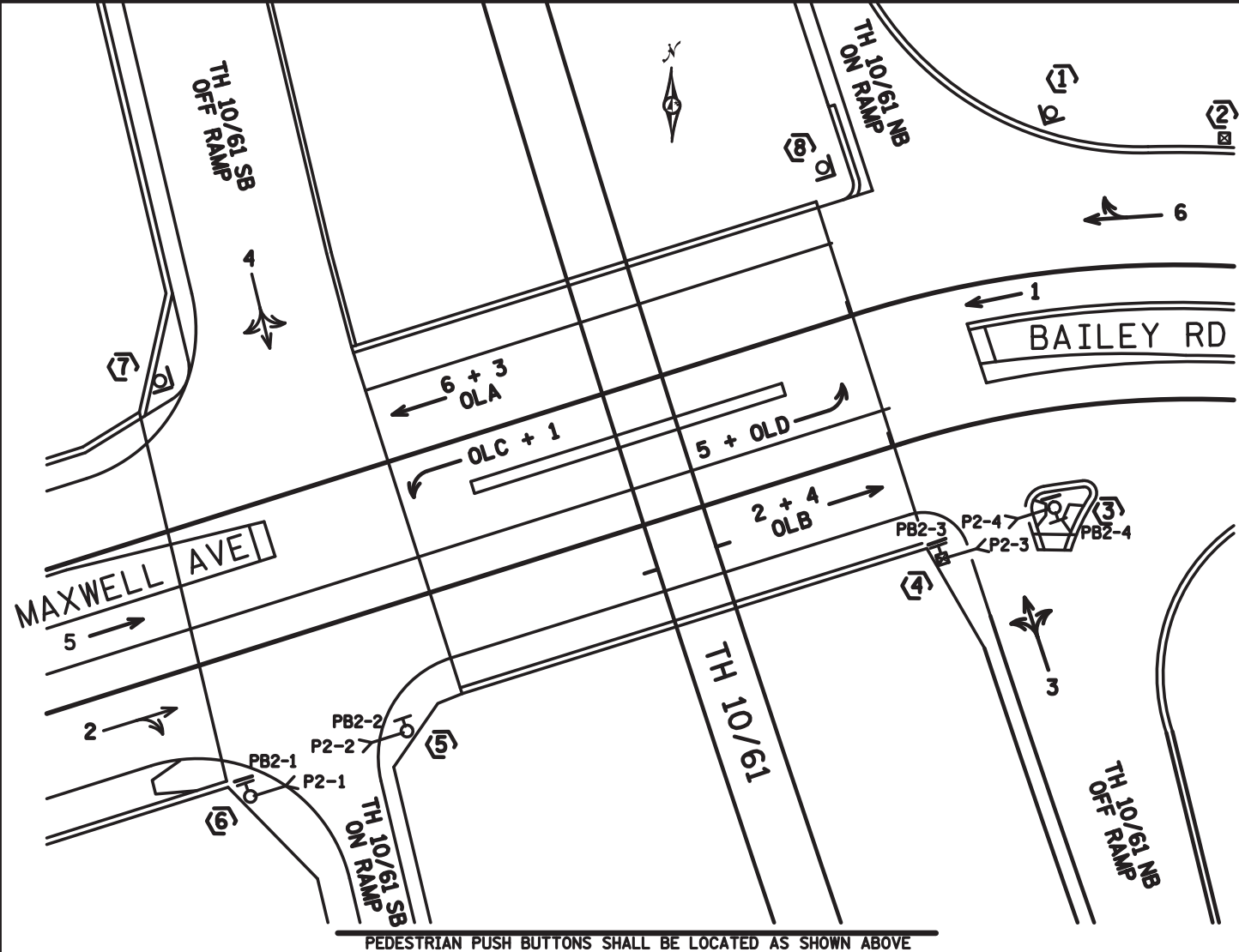
| SIGNAL HEAD CHART | | | |
|-------------------------|---|---|---|
| FACES | R | Y | G |
| 6-4 | ○ | ○ | △ |
| 1-2,1-3 | ← | ← | ← |
| 2-1,2-2,2-3,2-4,2-5,2-6 | ○ | ○ | ○ |
| 3-1,3-2,3-3,3-4 | ○ | ○ | ○ |
| 4-1,4-2,4-3,4-4 | ○ | ○ | ○ |
| 2-7 | ○ | ○ | △ |
| 5-2,5-3 | ← | ← | ← |
| 6-1,6-2,6-3,6-4,6-5,6-6 | ○ | ○ | ○ |

ALL INDICATIONS ARE 12 INCH LED
 EACH SIGNAL FACE HAS A BACKGROUND SHIELD

| PVC LOOP DETECTORS | | |
|--------------------|-------------|----------|
| DESIGNATION | SIZE (FEET) | LOCATION |
| D1-1, D1-2 | 6X6 | 10 & 40 |
| D1-3, D1-4 | 6X6 | 10 & 40 |
| D2-1, D2-2 | 6X6 | 250 |
| D2-3, D2-4 | 6X6 | 85 |
| D3-1 | 2-6X6 | 180 |
| D3-2, D3-3 | 6X6 | 3 |
| D4-1 | 3-6X6 | 180 |
| D4-2 | 6X15 | 0 |
| D4-3, D4-4 | 2-6X6 | 10 |
| D5-1, D5-2 | 6X6 | 10 & 40 |
| D5-3, D5-4 | 6X6 | 10 & 40 |
| D6-1, D6-2 | 6X6 | 250 |
| D6-3, D6-4 | 6X6 | 85 |

LOCATION = DISTANCE IN FEET FROM
 STOP BAR/PEDESTRIAN MARKINGS TO
 FRONT OF DETECTOR.

**CONTROLLER PHASING, TYPE 'R' SIGNS AND
 PEDESTRIAN INDICATIONS**



- (A)** SHARED EQUIPMENT PAD
 CONTROLLER & CABINET
 SERVICE CABINET
 CABINET TO HH 1
 4" RSC
 3" RSC
 5-12/C#12
 1-5/C#12
 7-3/C#12
 2-3/C#20
 19-2/C#14
 1-6PR#19
- CABINET TO HH 14
 4" RSC
 3" RSC
 7-12/C#12
 8-3/C#12
 3-3/C#20
 4-2/C#14
 1-3/C #14 (CAMERA POWER)
 1-COM CABLE
 1-COAXIAL CABLE
- SERVICE CABINET TO CONTROLLER CABINET
 2" RSC
 2-1/C#6
 1-1/C#6 INS. GR.
- SERVICE CABINET TO HH 1
 2" RSC
 4-3/C#12 (LUM)
- HH 1 TO HH 14
 2" RSC
 2-3/C#12 (LUM)
- SERVICE CABINET TO HH 15
 2" RSC
 3-1/C#2
- CONTROLLER CABINET TO TMS VAULT
 1 1/2" PVC INSIDE 3" RSC STUB OUT
 1-FIBER OPTIC CABLE (6SM)
 WITH PRE-TERMINATED CABLE END

(B) SOP
 45' WOOD POLE (CL 2)
 2" RSC RISER & WEATHERHEAD
 WITH 3-1/C#3/0 TO SHARED EQUIPMENT
 PAD VIA HH 15

SIGNAL SYSTEM OPERATION

- THE SIGNAL SYSTEM FLASH MODE IS ALL RED.
- NORMAL OPERATION IS 6 PHASE, WITH PHASE 5 & 1 BEING A PROTECTED LEFT TURN PHASE.
- PHASES 4 AND 3 WILL RUN SPLIT PHASE
- PHASES 2 AND 6 SHALL BE ON VEHICLE RECALL.

1 SEE THE TMS PLAN FOR FIBER OPTICS.

DISTRICT #: METRO
 IPLOT NAME: pole notes
 PATH & FILENAME: IP_PWP-d0779847V22521_sgl.dgn

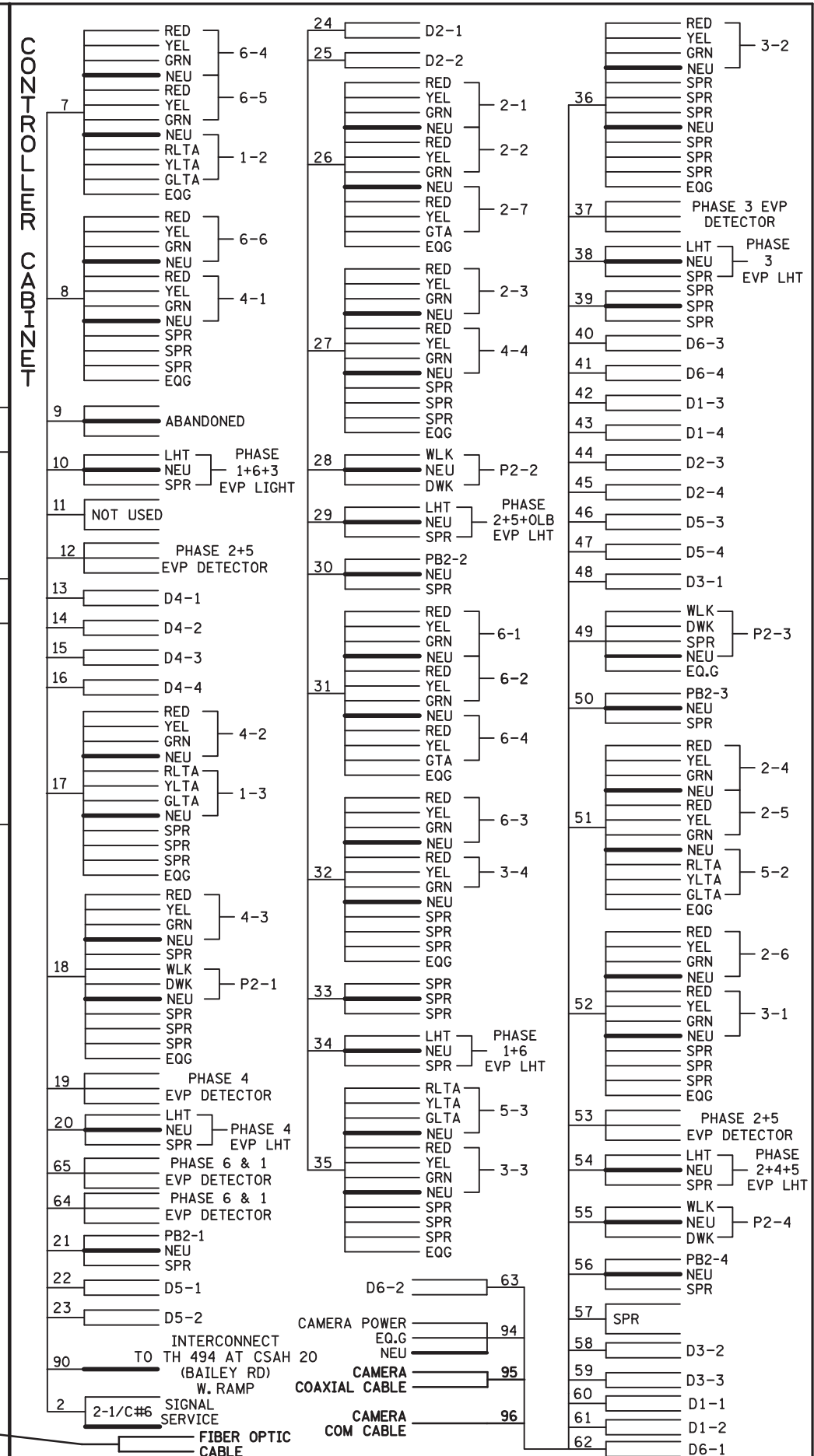
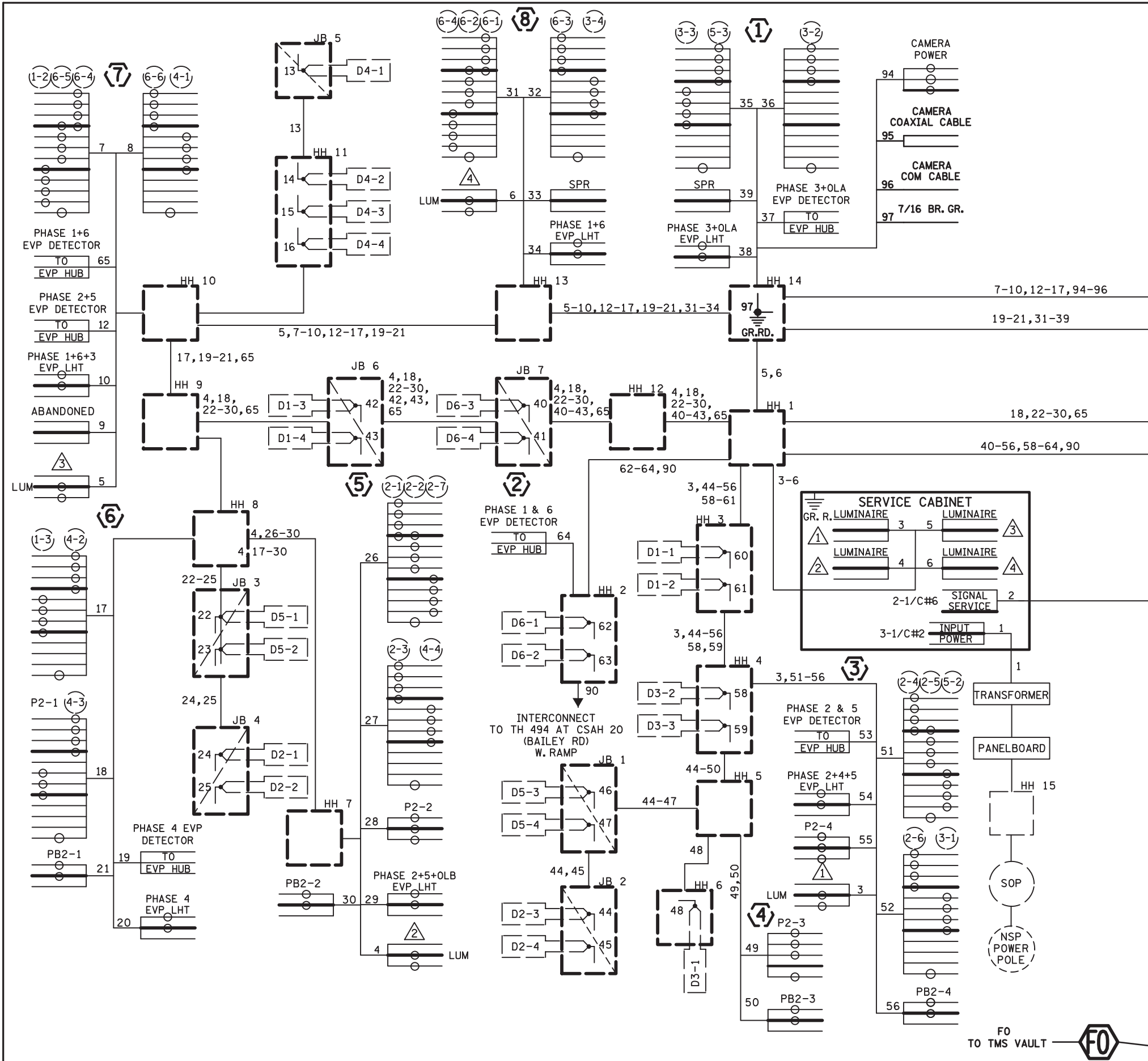
| BY | DATE | REVISIONS |
|----|------|---------------------------------------|
| | | AS-BUILT OF SP 1913-75 FIBER & CAMERA |

SYSTEM ID: 22521 T.E. 5870
 METER ADDRESS: 1600 SOUTH TH 61
 MASTER ID: T.E.

POLE NOTES, PHASING AND PED CHART
 T.H. 61/10 AT MAXWELL AVE/
 CSAH 20 (BAILEY RD) RAMPS
 IN ST.PAUL, RAMSEY COUNTY

S.A.P. NO. _____ DRAWN BY: SJK CKD BY: EJA DATE: 09-10-13
 CERTIFIED BY: *Michael P. Subway* L.I.C. NO. 19863 DATE: 09-10-13
 STATE PROJ. NO. 1913-75 (T.H.61) SHEET NO. 2 OF 4 SHEETS

DISTRICT #: Metro
 PLOT NAME: T22521-ssl
 PATH & FILENAME: Projects\DM_POS\06\0000\Traffic\Signal\30-40_BAILEY_RD_MAXWELL_AVE_RAMPS-1736334-T22521-ssl.dgn



| BY | DATE | REVISIONS |
|-----|--------|----------------------------------|
| SJK | 5/8/24 | UPDATED 2 & 5 EVP DETECTOR CABLE |

SYSTEM ID: 1736334 T.E. 5870
 METER ADDRESS: 1600 SOUTH TH 61
 MASTER ID: T.E.

FIELD WIRING DIAGRAM
T.H. 61/10 AT MAXWELL AVE/
CSAH 20 (BAILEY RD) RAMPS
IN ST. PAUL, RAMSEY COUNTY

| | | | |
|--------------------|----------------|----------------|----------------|
| S.A.P. NO. | DRAWN BY: SJK | CKD BY: EJA | DATE: 09-10-13 |
| CERTIFIED BY _____ | LIC. NO. 19863 | DATE: 09-10-13 | |
| STATE PROJ. NO. | (T.H. 61) | SHEET NO. | 4 OF 4 SHEETS |