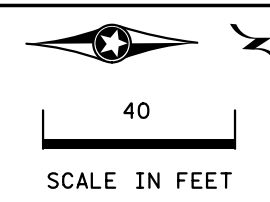


LOOP DETECTOR CHART

NUMBER	SIZE (FT)	LOCATION
D1-1	2-6x6	20 & 50
D1-2	2-6x6	0 & 35
D2-1, D2-2	6x6	465
D6-1, D6-2	6x6	480
D8-1	6x6	120
D8-2	2-6x6	5 & 20
D8-3	2-6x6	5 & 20

-ALL LOOP DETECTORS ARE PVC
 -LOCATION: DISTANCE FROM CROSSWALK/STOP BAR IN FEET

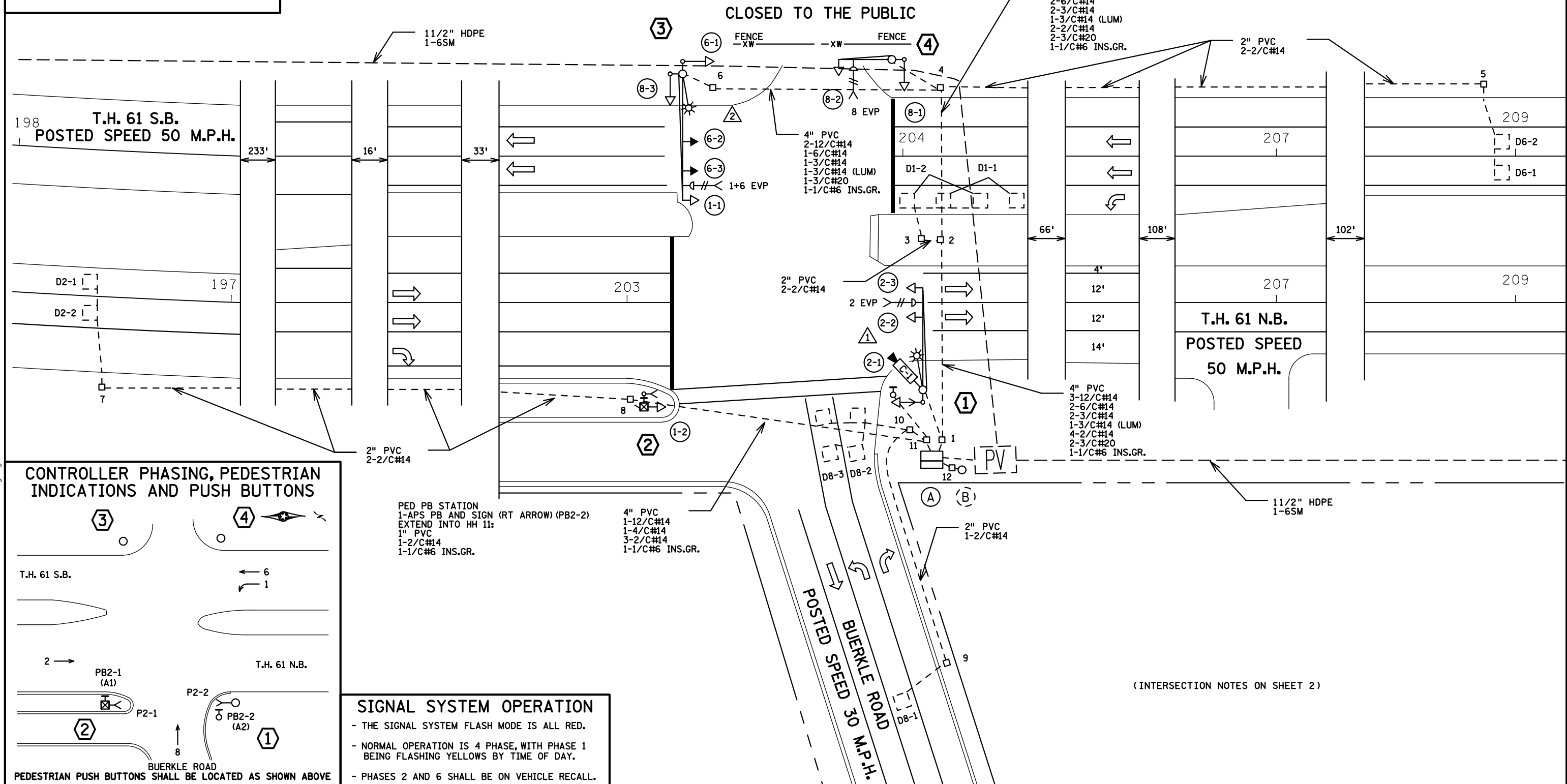


SIGNAL HEAD CHART

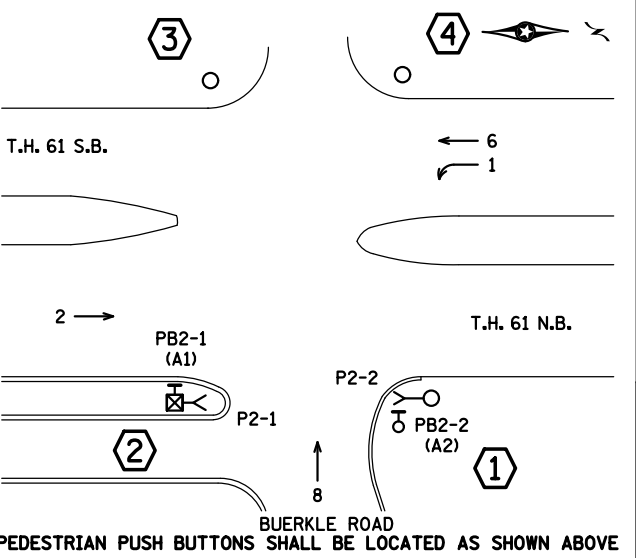
FACE	R	Y	FYA	G	YLA	GLA
1-1, 1-2	←	←	←	←		
2-1, 2-2, 2-3	○	○		○		
6-1, 6-2, 6-3	○	○		○		
8-1	○	○		○		
8-2	○	○		○		←
8-3	○	○		○		←

-ALL SIGNAL INDICATIONS ARE 12" LED
 -ALL SIGNAL HEADS ARE BLACK POLYCARBONITE WITH BACKGROUND SHIELDS
 -FYA DENOTES FLASHING YELLOW ARROW

PLOTTED/REVISED: 11/2/2015



CONTROLLER PHASING, PEDESTRIAN INDICATIONS AND PUSH BUTTONS



PED PB STATION
 1-APS PB AND SIGN (RT ARROW) (PB2-2)
 EXTEND INTO HH 11:
 1" PVC
 1-2/C#14
 1-1/C#6 INS.GR.

SIGNAL SYSTEM OPERATION

- THE SIGNAL SYSTEM FLASH MODE IS ALL RED.
- NORMAL OPERATION IS 4 PHASE, WITH PHASE 1 BEING FLASHING YELLOWS BY TIME OF DAY.
- PHASES 2 AND 6 SHALL BE ON VEHICLE RECALL.

DISTRICT #: METRO
 IPLOT NAME: T21040_sgl
 PATH & FILENAME: IP_PWP-d0779950V21040_sgl.dgn

BY: EJA	DATE: 11-02-15	REVISIONS: AS-BUILT OF SP 6222-166 SIGNAL REPLACEMENT	SYSTEM ID: 21040	T.E.	S.A.P. NO.	DRAWN BY: SJK	CKD BY: EJA	DATE: 08-14-14
			METER ADDRESS: 3290 HIGHWAY 61		CERTIFIED BY: _____		LIC. NO. _____	DATE: _____
			MASTER ID:	T.E.	STATE PROJ. NO. (T.H. 61)		SHEET NO. 1 OF 5 SHEETS	

PLOTTED/REVISED: 11/2/2015

DISTRICT #: METRO
PLOT NAME: T21040.sgl
PATH & FILENAME: IP_PWP-d0779950\T21040_sgl.dgn

①

PA100 POLE FOUNDATION
TYPE PA100-A-40-X6-350/CAM-400 (X6 AT 350 DEG)
VIDEO CAMERA
LUMINAIRE-LED
1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'
1-ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT AT 6FT (2)
1-STRAIGHT MOUNT SIGNAL OVERHEAD AT 11'
1-ANGLE MOUNT SIGNAL AT 180 DEG
1-ANGLE MOUNT CD PED HEAD AT 180 DEG
1-TYPE D SIGN
1-R9-3 SIGN (FACING POLE 4)
3" PVC EXTEND INTO HH 1:
2-12/C#14
1-3/C#14 (LUM)
1-3/C#14
1-3/C#20
1-1/C#6 INS GR
1-3/C#14 (CAMERA POWER)
1-COM CABLE
1-COAXIAL CABLE

②

PEDESTAL FOUNDATION
13' PEDESTAL PLUS BASE
1-STRAIGHT MOUNT SIGNAL
STRAIGHT MOUNT C.D. PED HEAD
1-APS PB AND SIGN (LT ARROW) (PB2-1)
1-R9-3 SIGN (FACING POLE 3)
3" PVC EXTEND INTO HH 8:
1-12/C#14
1-4/C#14
1-2/C#14
1-1/C#6 INS GR

Ⓐ

EQUIPMENT PAD (SEE SHEET 3)
SERVICE CABINET (SSB)
CONTROLLER AND CABINET
4" PVC TO HH 11:
1-12/C #14
1-4/C #14
7-2/C #14
1-1/C#6 INS.GR.

4" PVC TO HH 1:
5-12/C #14
2-6/C #14
3-3/C #14
4-2/C #14
3-3/C #20
1-1/C #6 INS. GR.
1-3/C#14 (CAMERA POWER)
1-COM CABLE
1-COAXIAL CABLE

2-2" AND 1-3" PVC STUBBED OUT (CAPPED BOTH ENDS)
3/4" PVC STUBBED OUT (CAPPED BOTH ENDS)

1-1/2" PVC TO TMS VAULT:
1-FO PIGTAIL (6-SM)
CONTROLLER CABINET TO SERVICE CABINET:
2" PVC
2-1/C #6
1-1/C #6 INS. GR.
CONTROLLER CABINET TO SERVICE CABINET (COMMS):
2" PVC
1-6PR #19 (FOR FUTURE USE)
SERVICE CABINET TO HH 12:
2" PVC
3-1/C #2
SERVICE CABINET TO HH 1:
2" PVC
2-3/C #14 (LUM)

③

PA100 POLE FOUNDATION
TYPE PA100-A-50-D40-9 (DAVIT AT 350 DEG)
1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'
1-ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT AT 6'(1+6)
2-STRAIGHT MOUNT SIGNALS OVERHEAD AT 11' AND 23'
2-ANGLE MOUNT SIGNALS AT 90 AND 180 DEG
LUMINAIRE-LED
1-TYPE D SIGN
1-R10-X12 SIGN (ADJACENT TO HEAD 1-1)
1-R9-3 (FACING POLE 2)
3" PVC EXTEND INTO HH 6:
2-12/C#14
1-6/C#14
1-3/C#14 (LUM)
1-3/C#14
1-3/C#20
1-1/C#6 INS GR

④

PA85 POLE FOUNDATION
TYPE PA85-A-20
1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'
1-ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT AT 6'(8)
1-ANGLE MOUNT SIGNAL AT 180 DEG
1-TYPE D SIGN
1-R9-3 SIGN (FACING POLE 1)
3" PVC EXTEND INTO HH 4:
1-12/C#14
1-6/C#14
1-3/C#14
1-3/C#20
1-1/C#6 INS GR

Ⓑ

INPL. WOOD POLE
F&I: 2" RSC RISER AND WEATHERHEAD
EXTEND TO HH 12 WITH:
3-1/C#2

BY	DATE	REVISIONS
EJA	11-02-15	AS-BUILT OF SP 6222-166 SIGNAL REPLACEMENT

SYSTEM ID: 21040 T.E.
METER ADDRESS: 3290 HIGHWAY 61
MASTER ID: T.E.

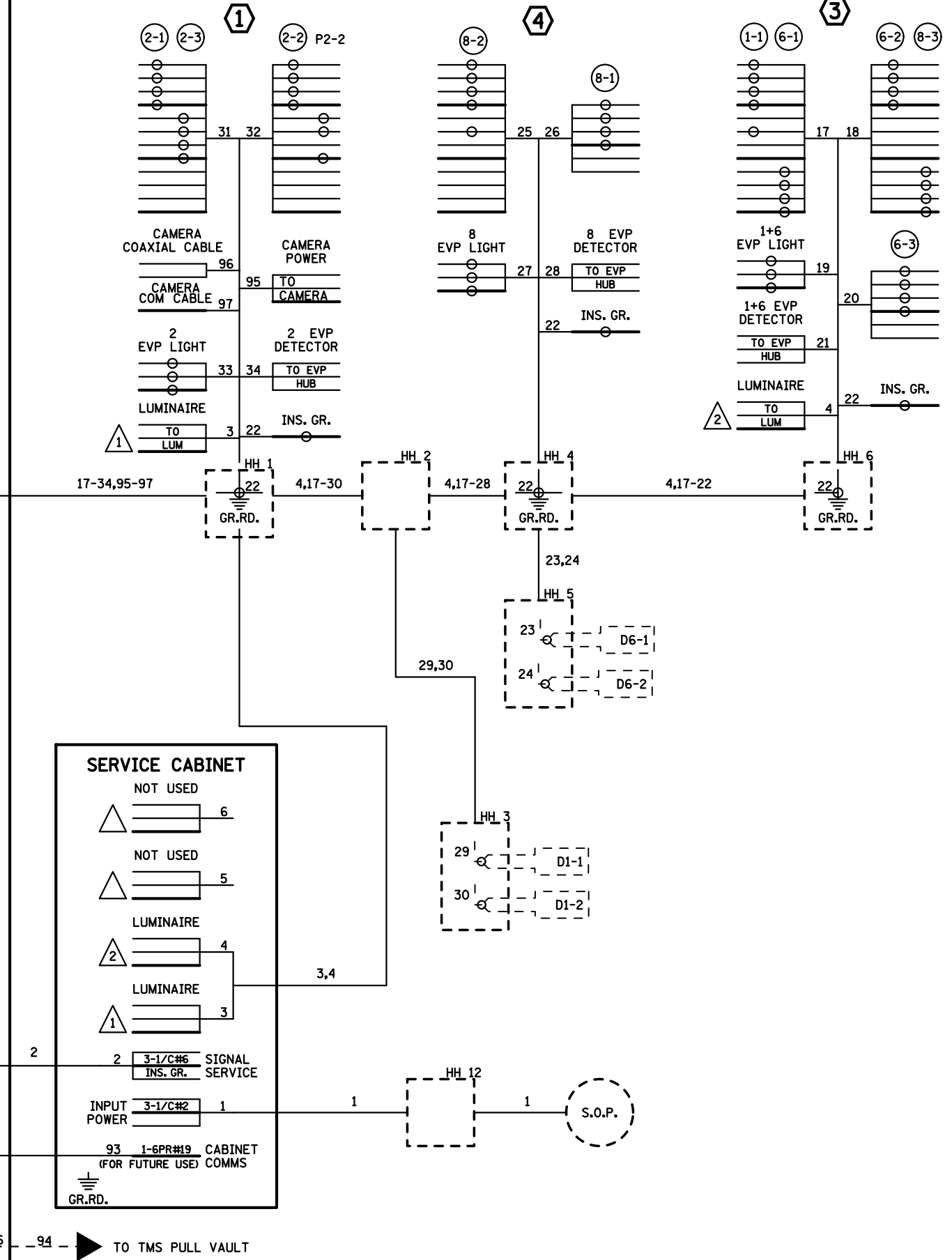
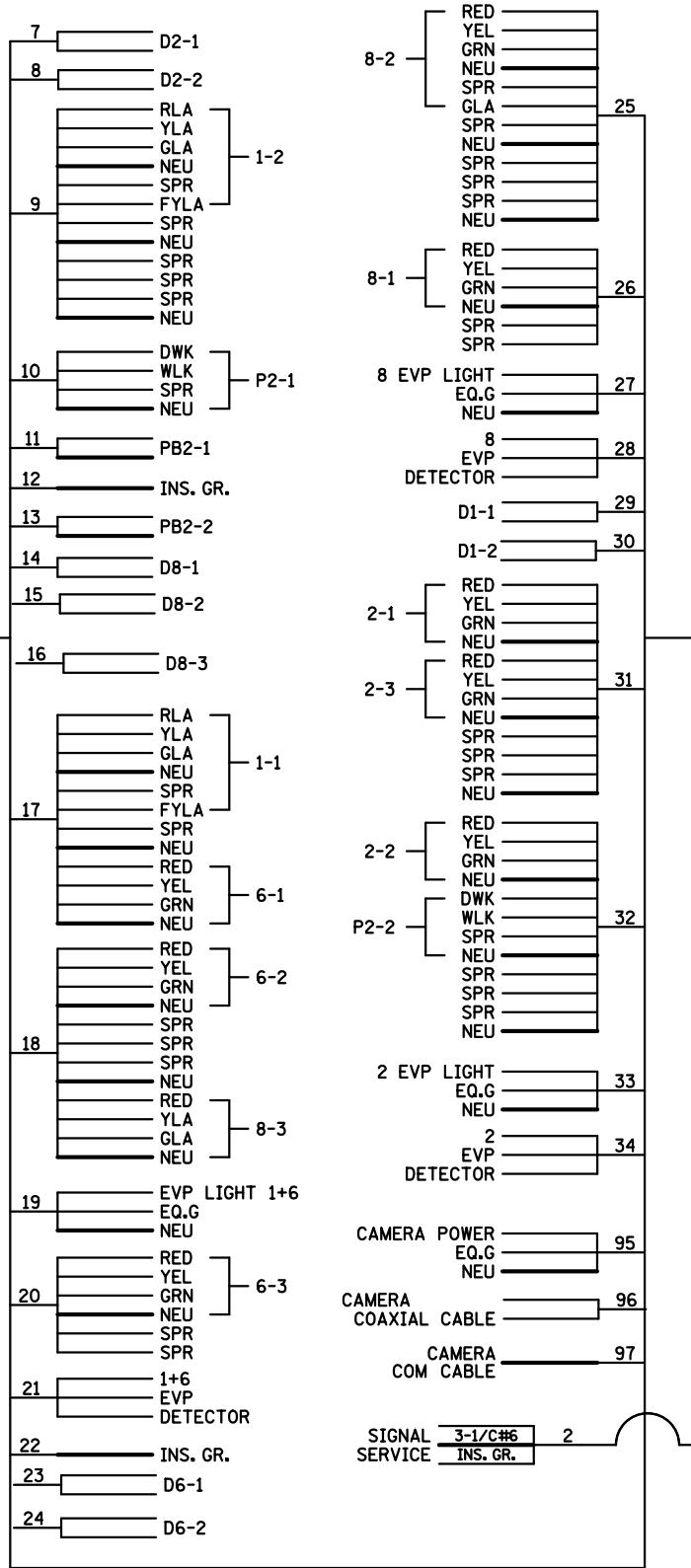
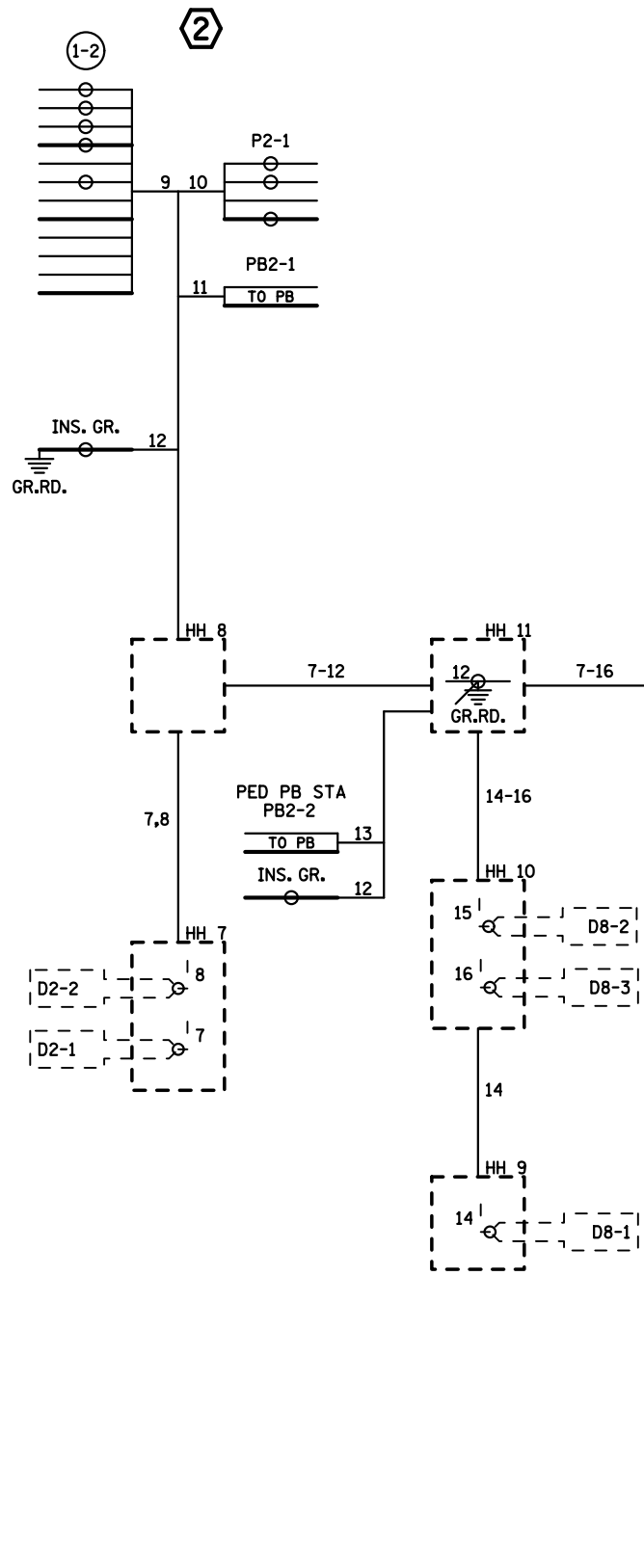
INTERSECTION NOTES
T.H. 61 AT BUERKLE RD.
IN VADNAIS HEIGHTS, RAMSEY COUNTY

S.A.P. NO.	DRAWN BY: SJK	CKD BY: EJA	DATE: 08-14-14
CERTIFIED BY _____	LIC. NO. _____	DATE: _____	
STATE PROJ. NO.	(T.H.)	SHEET NO. 2 OF	5 SHEETS

PLOTTED/REVISED: 11/2/2015

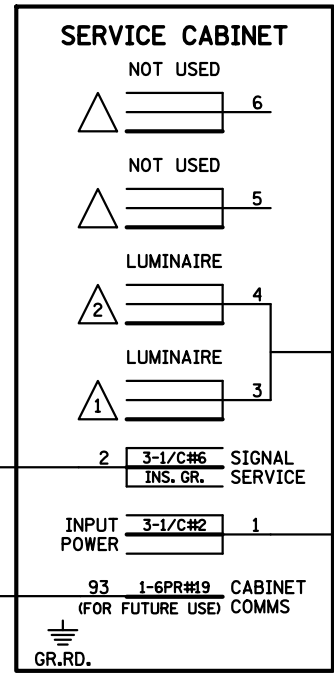
DISTRICT #: METRO
IPLOT NAME: T21040_sgl
PATH & FILENAME: IP_PWP-d0779950V21040_sgl.dgn

CONTROLLER CABINET



NOTES:
 1. SIGNAL SYSTEM INCLUDES BATTERY- BACKUP SERVICE CABINET (BATTERIES & UPS NOT INCLUDED)
 2. FOR CONDUCTOR COLOR CODE SEE SHEET 4.

CABINET COMMS 1-6PR#19 93 (FOR FUTURE USE)



6SM FIBER OPTIC 36 -94 - TO TMS PULL VAULT

BY	DATE	REVISIONS
EJA	11-02-15	AS-BUILT OF SP 6222-166 SIGNAL REPLACEMENT

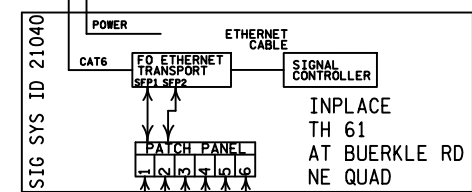
SYSTEM ID: 21040 T.E.
 METER ADDRESS: 3290 HIGHWAY 61
 MASTER ID: T.E.

WIRING DIAGRAM (2 OF 2)
T.H. 61 AT BUERKLE RD.
IN VADNAIS HEIGHTS, RAMSEY COUNTY

S.A.P. NO.	DRAWN BY: SJK	CKD BY: EJA	DATE: 08-14-14
CERTIFIED BY	LIC. NO.		DATE:
STATE PROJ. NO.	(T.H. 61)	SHEET NO.	5 OF 5 SHEETS

CAM 1719
(INPLACE)

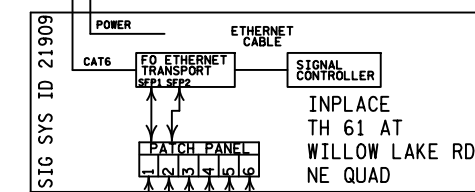
ID 1735488



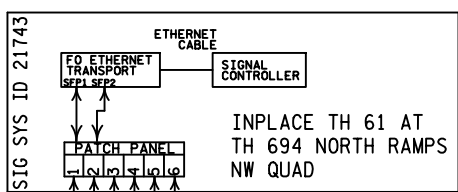
NOTE: THIS PLAN SHEET IS BEING PROVIDED FOR INFORMATIONAL PURPOSES. ALL FIBER INTERCONNECT CABLES, CAMERAS, AND VAULTS SHOWN ON THIS PAGE ARE INPLACE AND SHALL BE REUSED AND MAINTAINED INPLACE (EXCEPT FOR FIBER-OPTIC CABLE TESTING AT ALL SPLICE LOCATION TO BE COMPLETED BY THE CONTRACTOR AND PAID FOR UNDER THE "TRAFFIC CONTROL INTERCONNECT" PAY ITEM (ITEM NO. 2565). SEE SPECIAL PROVISIONS.

CAM 1720
(INPLACE)

ID 4465199



ID 1735873

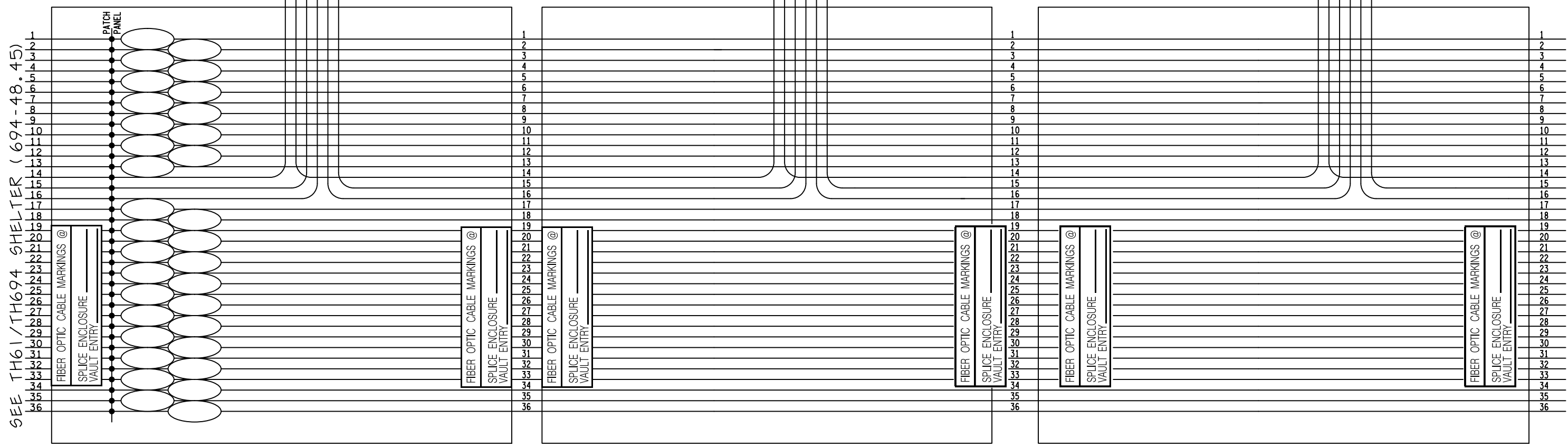


TRUNK ID# 61-188

TRUNK ID# 61-188A

TRUNK ID# 61-189

TRUNK ID# 61-190



SEE TH61/TH694 SHELTER (694-48.45)

INPLACE PULL/SPLICE VAULT TH61 AT TH 694 NW QUAD

INPLACE PULL/SPLICE VAULT TH61 AT BUERKLE RD NE QUAD

INPLACE PULL/SPLICE VAULT TH61 AT WILLOW LK. RD NE QUAD

DESIGN TEAM			
DRAWN BY:	MRB		
DESIGNER:	MRB		
CHECKED BY:	JMG		
NO.	BY	DATE	REVISIONS

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
 Certified By: *John M. Gray* Lic. No. 22457
 Printed Name: JOHN M. GRAY Date: 12/22/2023



RAMSEY COUNTY, MINNESOTA
T.H. 61
 S.P. 6222-197

SIGNAL PLAN
 FIBER OPTIC SCHEMATIC
 TRUCK HIGHWAY 61 (TH 694 TO WILLOW LAKE RD)

SEH FILE NO. ISDWB170688	80
SG12 OF 5627	101