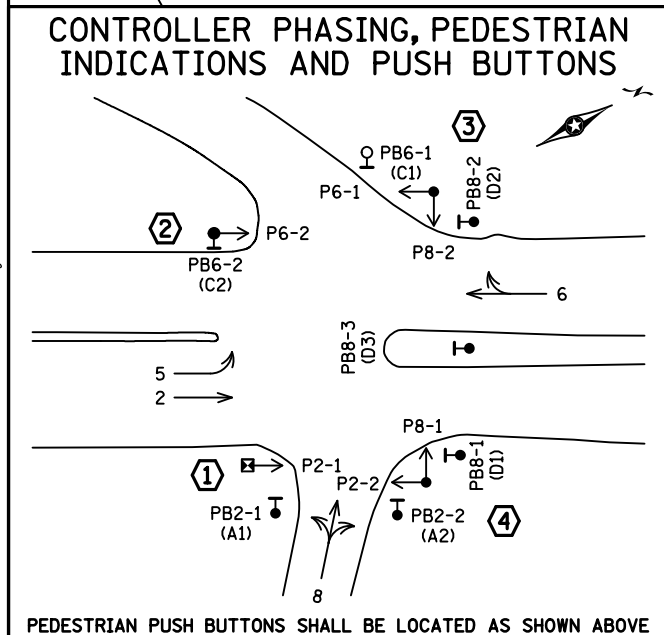
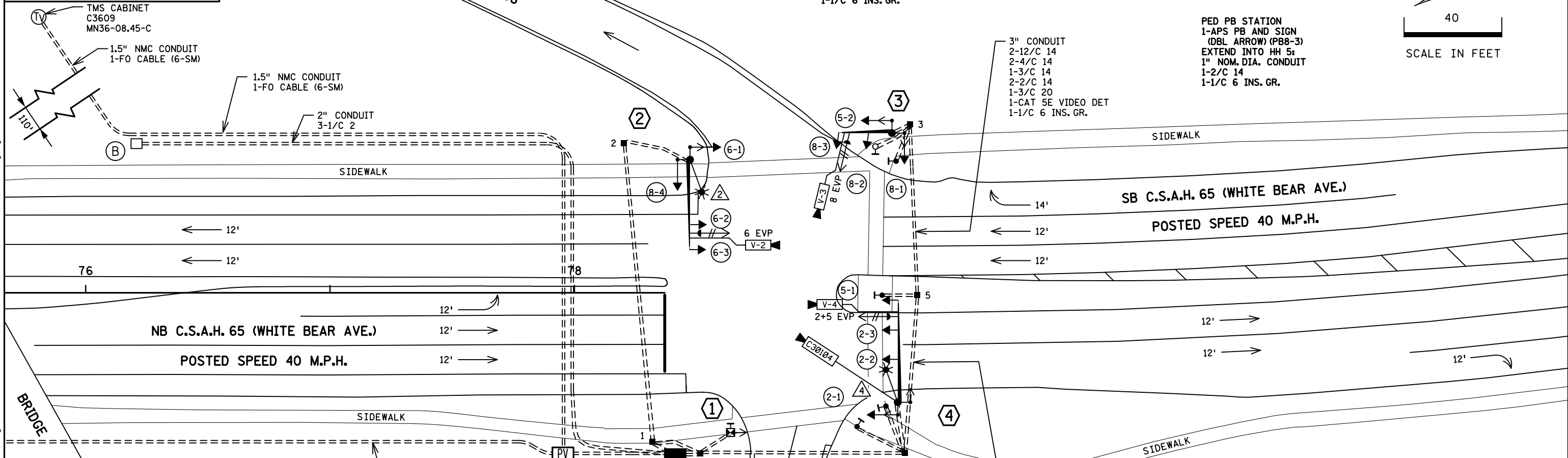
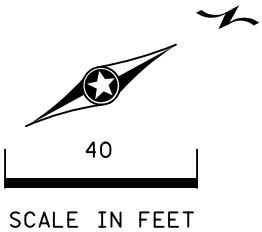


SIGNAL HEAD CHART				
FACE	R	Y	FYA	G
2-1, 2-2, 2-3	●	●		●
5-1, 5-2	←	←	←	←
6-1, 6-2, 6-3	●	●		●
8-1, 8-2	●	●		●
8-3, 8-4	←	←		←

-ALL SIGNAL INDICATIONS SHALL BE 12" LED
 -ALL SIGNAL HEADS SHALL BE BLACK POLYCARBONATE WITH BACKGROUND SHIELDS
 -FYA DENOTES FLASHING YELLOW ARROW

VIDEO DETECTION CHART		
CAMERA NUMBER	LOCATION	PHASE
V2	POLE 2	6
V3	POLE 3	8
V4	POLE 4	2 & 5



SIGNAL SYSTEM OPERATION

- THE SIGNAL SYSTEM FLASH MODE IS ALL RED.
- NORMAL OPERATION IS 4 PHASE, WITH PHASE 5 BEING FLASHING YELLOW ARROWS BY TIME OF DAY.
- PHASES 2 AND 6 SHALL BE ON VEHICLE RECALL.

PEDESTRIAN PUSH BUTTONS SHALL BE LOCATED AS SHOWN ABOVE

BY	DATE	REVISIONS
SJK	09/27/22	AS-BUILT PLAN SP 6211-103

SYSTEM ID: 2422117 T.E. 9748
 METER ADDRESS: 2358 WHITE BEAR AVE
 OLD SYSTEM ID: 20635

**INTERSECTION LAYOUT
 TRAFFIC CONTROL SIGNAL SYSTEM A
 T.H. 36 AT C.S.A.H. 65 (WHITE BEAR AVE.) N RAMPS
 IN MAPLEWOOD, RAMSEY COUNTY**

S.A.P. NO. 062-665-059	DRAWN BY: GDS	CKD BY: GBB	DATE: 07-15-19
CERTIFIED BY _____	LIC. NO. 19863	DATE: _____	
STATE PROJ. NO. 6211-103 (T.H.36)		SHEET NO. 30R OF 45 SHEETS	

DISTRICT #: Metro
 IPLOT NAME: layout
 PATH & FILENAME: Projects\DM_R05\036\0000\Traffic\Sig\Signal\8.57.165\WHITE BEAR AVE NR-2422117\2422117.sgl.dgn PLOTTED/REVISED: 27-SEP-2022

SEE SHEET 31R FOR NOTES.

DISTRICT *: Metro
 IPLOT NAME: pole notes
 PATH & FILENAME: Projects\DM_R05\036\0000\Traffic\Signal\8.57.165\WHITE BEAR AVE NR-2422117\2422117.sgl.dgn PLOTTED/REVISED: 27-SEP-2022

② PA90 POLE FOUNDATION
 TYPE PA90-A-35-D40-9 (DAVIT AT 350 DEG)
 1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'
 1-STRAIGHT MOUNT SIGNAL OVERHEAD AT 11'
 2-ANGLE MOUNT SIGNALS AT 90 AND 180 DEG
 1-ANGLE MOUNT FOR C.D. PED HEAD AT 180 DEG
 1-PED PB AND SIGN (RT ARROW) (PB6-2)
 1-ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT (PHASE 6)
 1-VIDEO DETECTION CAMERA (STATE FURNISHED) MOUNTED ON 6' EXTENSION AT 5' FROM END OF MAST ARM
 LUMINAIRE-LED (FOR 40' MOUNTING HEIGHT)
 1-R9-3 SIGN (NO PEDS) FACING POLE 1
 1-TYPE D SIGN (D-1) (SEE SIGN DETAILS)
 3" CONDUIT TO HH 2:
 2-12/C 14
 1-4/C 14
 1-3/C 14
 1-3/C 14 LUM
 1-2/C 14
 1-3/C 20
 1-CAT 5E VIDEO DET
 1-1/C 6 INS. GR.

① PEDESTAL FOUNDATION
 10' PEDESTAL POLE PLUS BASE
 1-STRAIGHT MOUNT FOR C.D. PED HEAD AT 180 DEG
 1-APS PB AND SIGN (LT ARROW) (PB2-1)
 1-R9-3 SIGN (NO PEDS) FACING POLE 2
 1-R6-1L SIGN (ONE WAY)
 1-R6-1R SIGN (ONE WAY)
 3" CONDUIT TO HH 8:
 1-4/C 14
 1-1/C 6 INS. GR.

③ PA85 POLE FOUNDATION
 TYPE PA85-A-20
 1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'
 1-STRAIGHT MOUNT SIGNAL OVERHEAD AT 11'
 2-ANGLE MOUNT SIGNALS AT 90 AND 180 DEG
 2-ANGLE MOUNTS FOR C.D. PED HEADS AT 90 AND 180 DEG
 1-ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT (PHASE 8)
 1-VIDEO DETECTION CAMERA (STATE FURNISHED) MOUNTED ON 6' EXTENSION AT 5' FROM END OF MAST ARM
 1-R6-1L SIGN (ONE WAY)
 1-R6-1R SIGN (ONE WAY)
 1-TYPE D SIGN (D-2) (SEE SIGN DETAILS)
 3" CONDUIT TO HH 3:
 2-12/C 14
 2-4/C 14
 1-3/C 14
 1-3/C 20
 1-CAT 5E VIDEO DET
 1-1/C 6 INS. GR.

④ PA90 POLE FOUNDATION
 TYPE PA90-A-40-X6-350/CAM 400 EXTENSION (MOUNTED AT 350 DEG) (INCLUDES LIGHTNING ROD, 7/16" GROUND BRAID AND GROUND ROD)
 1-TRAFFIC MANAGEMENT CAMERA (STATE FURNISHED) WITH MOUNT
 1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'
 2-STRAIGHT MOUNT SIGNALS OVERHEAD AT 11' AND 23'
 1-ANGLE MOUNT SIGNAL AT 180 DEG
 2-ANGLE MOUNTS FOR C.D. PED HEADS AT 90 AND 180 DEG
 1-ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT (PHASES 2+5)
 1-VIDEO DETECTION CAMERA (STATE FURNISHED) MOUNTED ON 6' EXTENSION AT 5' FROM END OF MAST ARM
 LUMINAIRE-LED (FOR 35' MOUNTING HEIGHT)
 1-R10-X12 SIGN ADJACENT TO HEAD (5-1)
 1-TYPE D SIGN (D-2) (SEE SIGN DETAILS)
 3" CONDUIT TO HH 6:
 2-12/C 14
 2-4/C 14
 1-3/C 14
 1-3/C 14 LUM
 1-3/C 20
 1-CAT 5E VIDEO DET
 1-1/C 6 INS. GR.
 1-7/16" GROUNDING BRAID TO GROUND ROD IN HH 6
 1-CAT 5E TRA MGMT CAM

Ⓐ EQUIPMENT PAD (SEE DETAIL SHEET)
 SERVICE CABINET (SSB) NO BATTERY BACKUP SYSTEM OR BATTERIES
 CONTROLLER AND CABINET (STATE FURNISHED)
 3" CONDUIT TO HH 1:
 2-12/C 14
 1-4/C 14
 1-3/C 14
 1-2/C 14
 1-3/C 20
 1-CAT 5E VIDEO DET
 1-1/C 6 INS. GR.

3" CONDUIT TO HH 8:
 2-12/C 14
 2-4/C 14
 1-3/C 14
 3-2/C 14
 1-3/C 20
 1-CAT 5E VIDEO DET
 1-CAT 5E TRA MGMT CAM

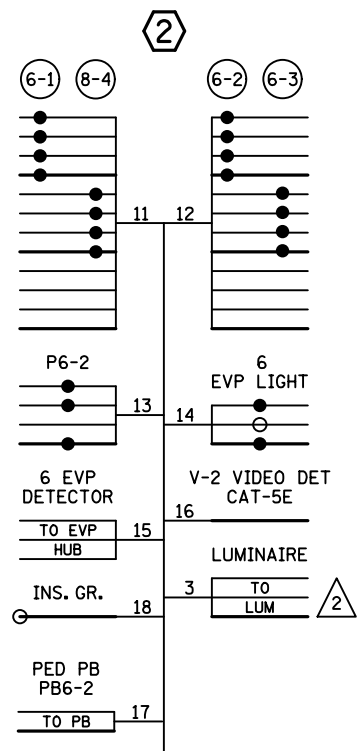
 3" CONDUIT TO HH 8:
 2-12/C 14
 3-4/C 14
 1-3/C 14
 2-2/C 14
 1-3/C 14 (LUM)
 1-3/C 20
 1-CAT 5E VIDEO DET
 1-1/C 6 INS. GR.

GROUND WIRE AND GROUND ROD - MIN 8' OUT FROM PAD
 2-2" AND 1-3" CONDUIT STUBBED OUT (CAPPED BOTH ENDS)
 1-1/2" CONDUIT TO PULL VAULT:
 1-FIBER OPTIC CABLE PIGTAIL (6-SM FIELD TERMINATED) TO SOUTH RAMP
 1-FIBER OPTIC CABLE PIGTAIL (6-SM FIELD TERMINATED) TO TMS CABINET
 CONTROLLER CABINET TO SERVICE CABINET:
 2" CONDUIT
 3-1/C 6
 2" CONDUIT
 1-3/C 14 (LUM)
 SERVICE CABINET TO SOP:
 2" CONDUIT
 3-1/C 2
 SERVICE CABINET TO EXTERNAL GR. RD.:
 1" CONDUIT
 1-1/C 6 INS. GR.
 (SEE EQUIPMENT PAD LAYOUT)
 SERVICE CABINET TO HH 1:
 2" CONDUIT
 1-3/C 14 LUM

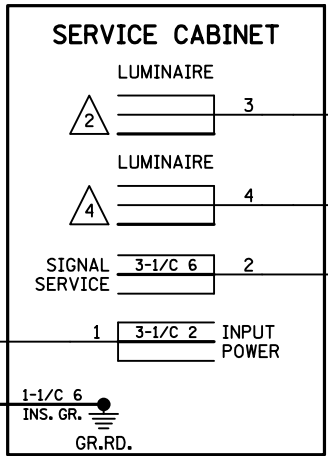
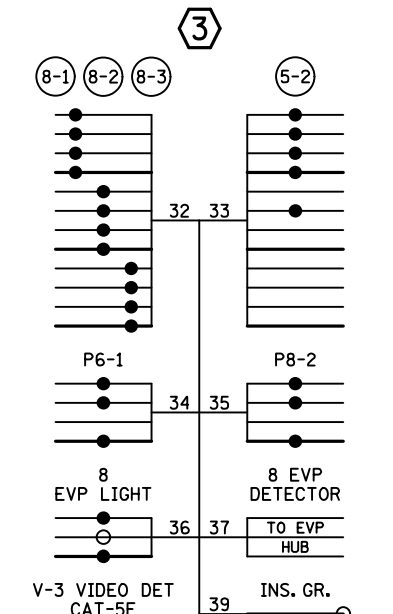
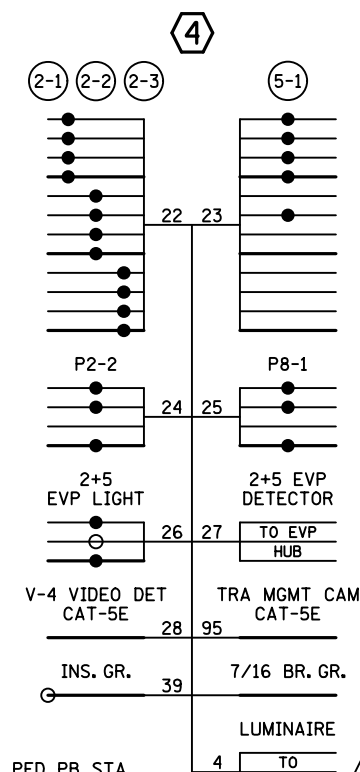
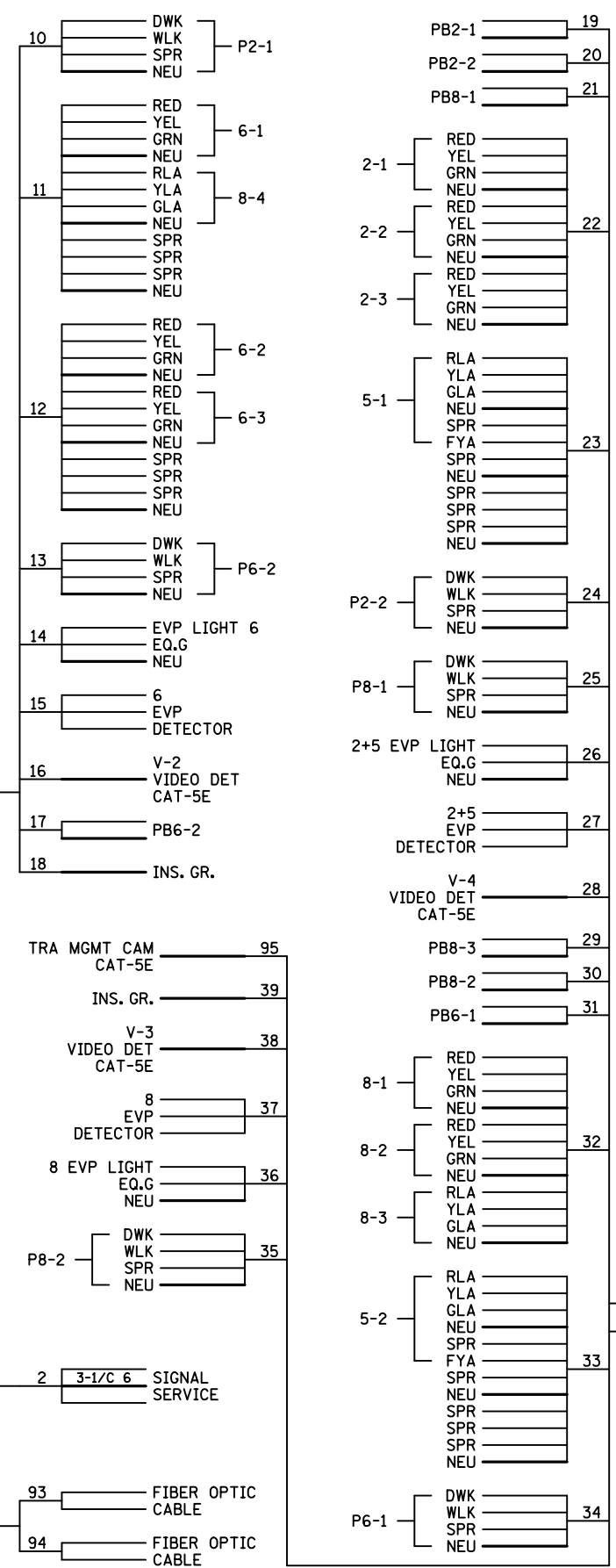
Ⓑ SOP- GROUND MOUNTED TRANSFORMER (XCEL ENERGY)
 2" CONDUIT INTO SERVICE CABINET:
 3-1/C 2

BY	DATE	REVISIONS	SYSTEM ID: 2422117	T.E. 9748	INTERSECTION NOTES TRAFFIC CONTROL SIGNAL SYSTEM A T.H. 36 AT C.S.A.H. 65 (WHITE BEAR AVE.) N RAMPS IN MAPLEWOOD, RAMSEY COUNTY	S.A.P. NO. 062-665-059	DRAWN BY: GDS	CKD BY: GBB	DATE: 07-15-19	
SJK	09/27/22	AS-BUILT PLAN SP 6211-103	METER ADDRESS: 2358 WHITE BEAR AVE	OLD SYSTEM ID: 20635		CERTIFIED BY _____	LIC. NO. 19863	DATE: _____		
						LICENSED PROFESSIONAL ENGINEER				
						STATE PROJ. NO. 6211-103 (T.H.36)	SHEET NO. 31R OF 45 SHEETS			

DISTRICT #: Metro
 PLOT NAME: wiring diagram
 PATH & FILENAME: Projects\DM_R05\036\0000\Traffic\Sig\8.57.165\WHITE BEAR AVE NR-242211\T242211\sgl.dgn PLOTTED/REVISED: 27-SEP-2022



CONTROLLER CABINET



TO TMS CABINET
 1-FO CABLE (6-SM) ← 94

TO T.H. 36
 AT C.S.A.H. 65
 (WHITE BEAR AVE.)
 SOUTH RAMP
 1-FO CABLE (6-SM) ← 93

NOTES:
 1. SIGNAL SYSTEM INCLUDES BATTERY-BACKUP SERVICE CABINET (NO BATTERIES).

BY	DATE	REVISIONS	SYSTEM ID: 2422117	T.E. 9748	S.A.P. NO. 062-665-059	DRAWN BY: GDS	CKD BY: GBB	DATE: 07-15-19
SJK	09/27/22	AS-BUILT PLAN SP 6211-103	METER ADDRESS: 2358 WHITE BEAR AVE		CERTIFIED BY _____	LIC. NO. 19863	DATE: _____	
			OLD SYSTEM ID: 20635		STATE PROJ. NO. 6211-103 (T.H.36)		SHEET NO. 32R OF 45 SHEETS	

FIELD WIRING DIAGRAM
TRAFFIC CONTROL SIGNAL SYSTEM A
T.H. 36 AT C.S.A.H. 65 (WHITE BEAR AVE.) N RAMPS
IN MAPLEWOOD, RAMSEY COUNTY