

PLOTTED/REVISED: 5-OCT-2021

PLOT NAME: 18 of 40  
FILENAME: Projects\DM\_PROS\01000001\Traffic\Signals\440 TH10 @ TH169-TH47-FERRY ST (SINGLE POINT)\PENDING\31918.sgl

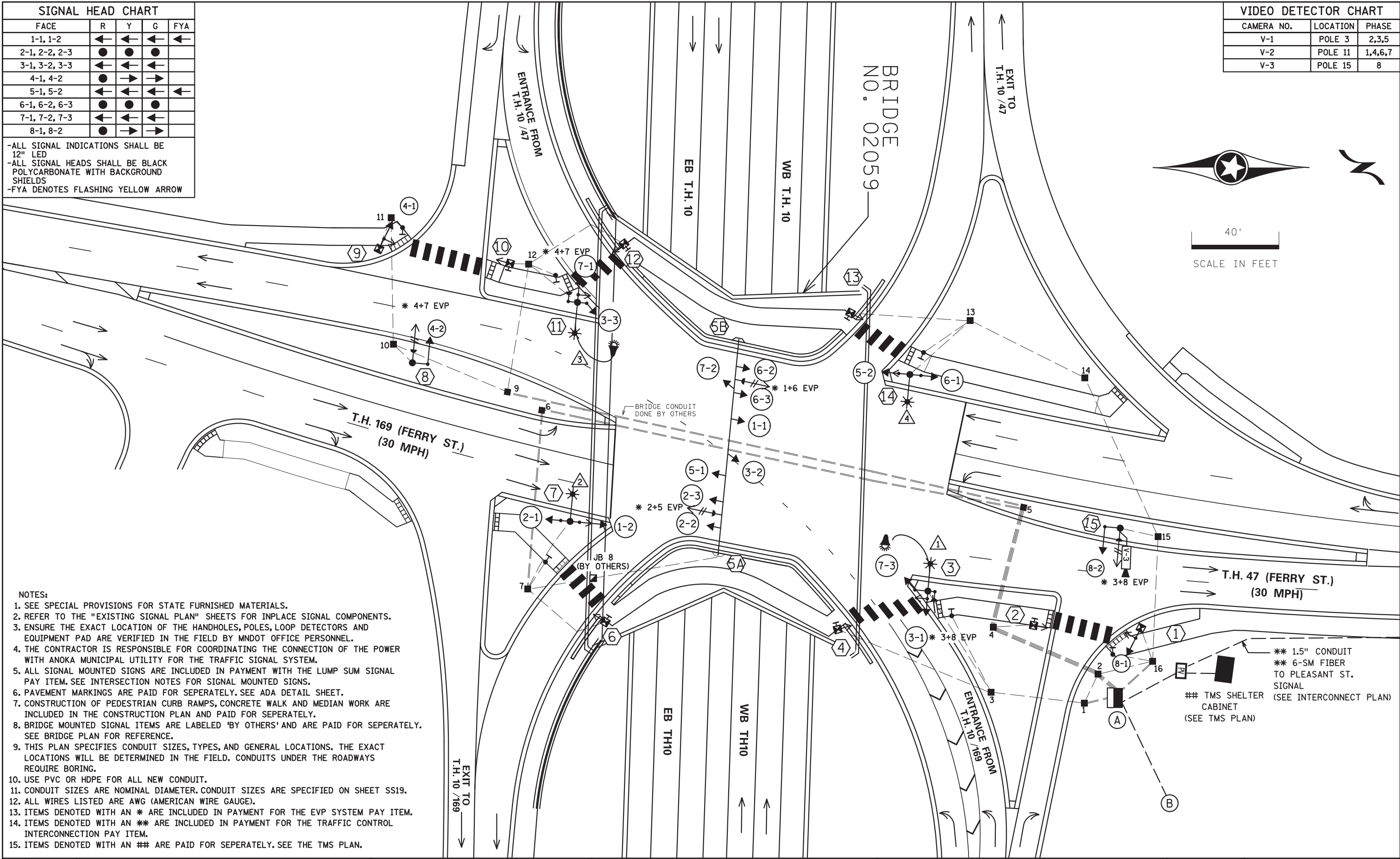
SIGNAL HEAD CHART				
FACE	R	Y	G	FYA
1-1, 1-2	←	←	←	←
2-1, 2-2, 2-3	●	●	●	
3-1, 3-2, 3-3	←	←	←	
4-1, 4-2	●	→	→	
5-1, 5-2	←	←	←	←
6-1, 6-2, 6-3	●	●	●	
7-1, 7-2, 7-3	←	←	←	
8-1, 8-2	●	→	→	

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

VIDEO DETECTOR CHART		
CAMERA NO.	LOCATION	PHASE
V-1	POLE 3	2,3,5
V-2	POLE 11	1,4,6,7
V-3	POLE 15	8



40'  
SCALE IN FEET



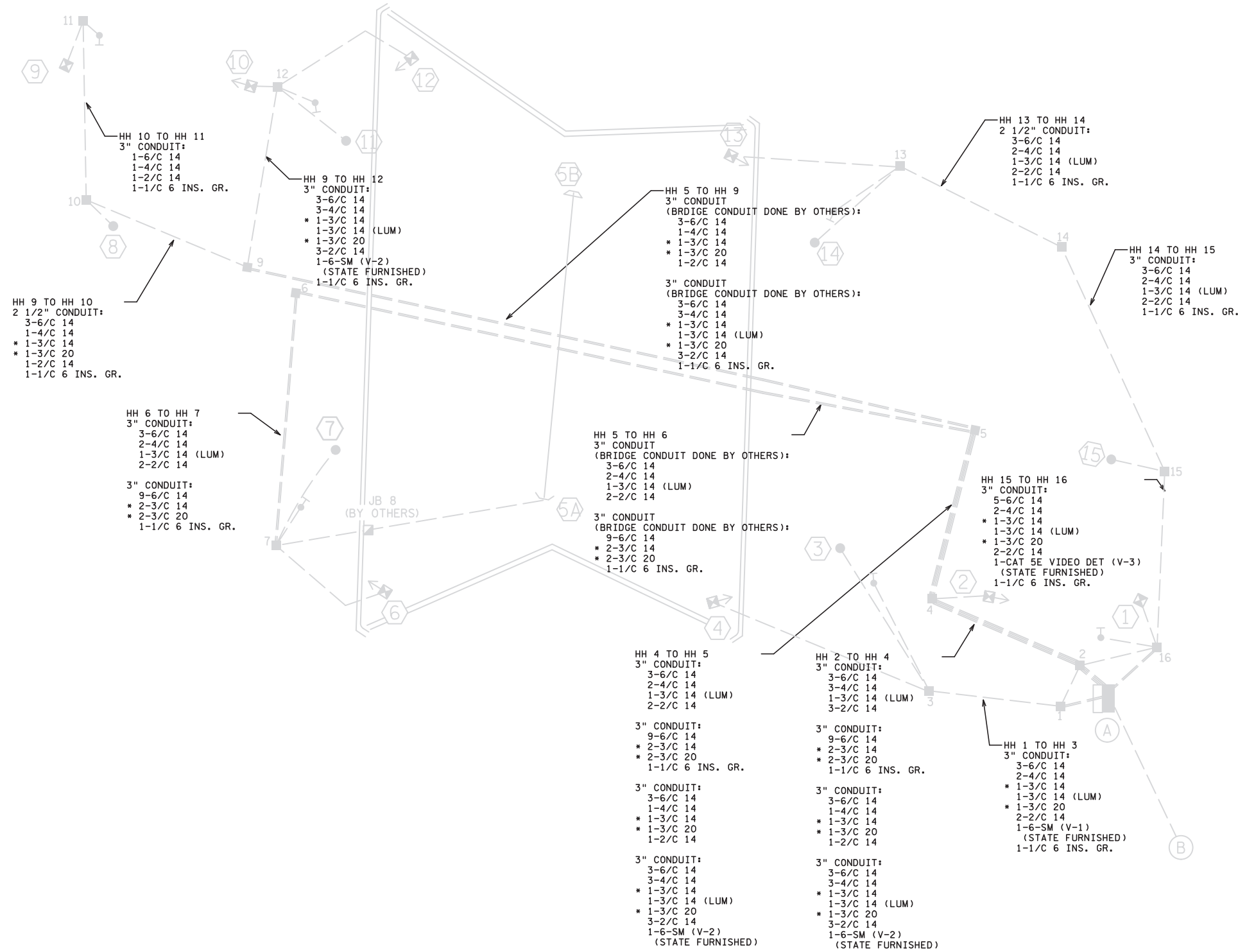
- NOTES:
1. SEE SPECIAL PROVISIONS FOR STATE FURNISHED MATERIALS.
  2. REFER TO THE "EXISTING SIGNAL PLAN" SHEETS FOR INPLACE SIGNAL COMPONENTS.
  3. ENSURE THE EXACT LOCATION OF THE HANDHOLES, POLES, LOOP DETECTORS AND EQUIPMENT PAD ARE VERIFIED IN THE FIELD BY MNDOT OFFICE PERSONNEL.
  4. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE CONNECTION OF THE POWER WITH ANOKA MUNICIPAL UTILITY FOR THE TRAFFIC SIGNAL SYSTEM.
  5. ALL SIGNAL MOUNTED SIGNS ARE INCLUDED IN PAYMENT WITH THE LUMP SUM SIGNAL PAY ITEM. SEE INTERSECTION NOTES FOR SIGNAL MOUNTED SIGNS.
  6. PAVEMENT MARKINGS ARE PAID FOR SEPERATELY. SEE ADA DETAIL SHEET.
  7. CONSTRUCTION OF PEDESTRIAN CURB RAMPS, CONCRETE WALK AND MEDIAN WORK ARE INCLUDED IN THE CONSTRUCTION PLAN AND PAID FOR SEPERATELY.
  8. BRIDGE MOUNTED SIGNAL ITEMS ARE LABELED 'BY OTHERS' AND ARE PAID FOR SEPERATELY. SEE BRIDGE PLAN FOR REFERENCE.
  9. THIS PLAN SPECIFIES CONDUIT SIZES, TYPES, AND GENERAL LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD. CONDUITS UNDER THE ROADWAYS REQUIRE BORING.
  10. USE PVC OR HDPE FOR ALL NEW CONDUIT.
  11. CONDUIT SIZES ARE NOMINAL DIAMETER. CONDUIT SIZES ARE SPECIFIED ON SHEET SS19.
  12. ALL WIRES LISTED ARE AWG (AMERICAN WIRE GAUGE).
  13. ITEMS DENOTED WITH AN \* ARE INCLUDED IN PAYMENT FOR THE EVP SYSTEM PAY ITEM.
  14. ITEMS DENOTED WITH AN \*\* ARE INCLUDED IN PAYMENT FOR THE TRAFFIC CONTROL INTERCONNECTION PAY ITEM.
  15. ITEMS DENOTED WITH AN ### ARE PAID FOR SEPERATELY. SEE THE TMS PLAN.

\*\* 1.5" CONDUIT  
 \*\* 6-SM FIBER TO PLEASANT ST. SIGNAL (SEE INTERCONNECT PLAN)  
 ## TMS SHELTER CABINET (SEE TMS PLAN)

BY	DATE	REVISIONS	SYSTEM ID: 4162283	T.E. 31918	TRAFFIC CONTROL SIGNAL SYSTEM "A" T.H. 10/169/47 AT FERRY STREET IN ANOKA, ANOKA COUNTY	S.A.P. NO.	DRAWN BY: MJB	CKD BY:	DATE: 10/1/21
			METER ADDRESS:			CERTIFIED BY: <i>Gregory Kim</i>	LIC. NO. 26829		DATE:
			OLD SYSTEM ID:			STATE PROJ. NO. 0215-76 (T.H.10)		SHEET NO. SS18 OF SS40 SHEETS	

PLOTTED/REVISED: 5-OCT-2021

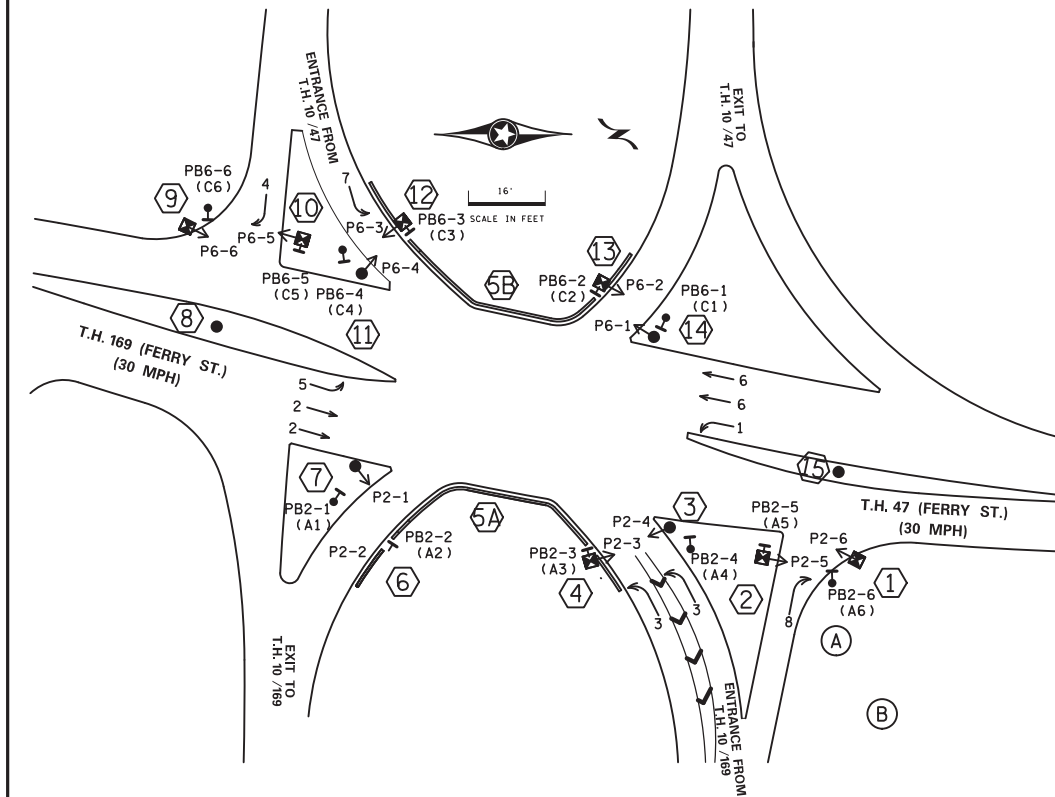
DISTRICT \*: Metro  
 IPLOT NAME: 19 of 40  
 FILENAME: Projects\DM\_FROSO\10\0000\Traffic\Signals\440 TH10 @ TH169+TH47-FERRY ST (SINGLE POINT)\PENDING\31918.sgl



**SIGNAL SYSTEM OPERATION**

- THE SIGNAL SYSTEM FLASH MODE IS ALL RED.
- NORMAL OPERATION IS 8 PHASE, WITH PHASE(S) 1 & 5 BEING FLASHING YELLOW ARROWS BY TIME OF DAY.
- PHASES 4 AND 8 SHALL BE ON VEHICLE RECALL.

**CONTROLLER PHASING, PEDESTRIAN INDICATIONS AND PUSH BUTTONS**



PEDESTRIAN PUSH BUTTONS SHALL BE LOCATED AS SHOWN ABOVE

BY	DATE	REVISIONS

SYSTEM ID: 4162283 T.E. 31918  
 METER ADDRESS:  
 OLD SYSTEM ID:

**TRAFFIC CONTROL SIGNAL SYSTEM "A"  
 OPERATIONAL NOTES AND CONDUIT NOTES  
 T.H. 10/169/47 AT FERRY STREET  
 IN ANOKA, ANOKA COUNTY**

S.A.P. NO. \_\_\_\_\_  
 CERTIFIED BY *Gregory Kim* LIC. NO. 26829 DATE: \_\_\_\_\_  
 LICENSED PROFESSIONAL ENGINEER  
 STATE PROJ. NO. 0215-76 (T.H.10) SHEET NO. SS19 OF SS40 SHEETS

PLOTTED/REVISED: 5-OCT-2021

DISTRICT \*: Metro  
PLOT NAME: 20 of 40  
FILENAME: Projects\DM\_FROSO\10\0000\Traffic\Signals\440 TH10 @ TH169-TH47-FERRY ST (SINGLE POINT)\PENDING\31918.sgl

### INTERSECTION NOTES

**9** X=468,146.277, Y=161,754.720  
PEDESTAL FOUNDATION  
(DESIGN 817-LIGHT FOUNDATION E)  
PEDESTAL POLE WITH BASE  
1-STRAIGHT MOUNT SIGNAL AT 180 DEG  
1-STRAIGHT MOUNT C.D. PED IND (P6-6)  
AT 270 DEG  
13' PEDESTAL POLE PLUS BASE  
2" CONDUIT TO HH 11  
1-6/C 14  
1-4/C 14  
1-1/C 6 INS. GR.

**10** X=468,152.996, Y=161,814.684  
PEDESTAL FOUNDATION  
TYPE 4A - 1 C.D. PED HEAD (P6-5)  
8' PEDESTAL POLE PLUS BASE  
1-APS PUSH PB AND SIGN  
(LT ARROW) (PB6-5)  
AND APS PB MOUNTING SPACERS \*  
2" CONDUIT TO HH 12  
1-4/C 14  
1-2/C 14  
1-1/C 6 INS. GR.

**11** X=468,170.767, Y=161,845.591  
PA 85 POLE FOUNDATION  
TYPE PA85-A-D40-90 (DAVIT AT 0 DEG)  
(NO MAST ARM)  
2-ANGLE MOUNT SIGNALS AT 90 AND 180 DEG  
1-ANGLE MOUNT C.D. PED HEAD (P6-4) AT 180 DEG  
ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT  
(PHASE 7) POLE MOUNTED AT 180 DEG  
3/4" HALF COUPLING (CENTERED BETWEEN  
UPPER AND LOWER MAST ARM BRACKET)  
1-LUMINAIRE-LED (FOR 40' MOUNTING HEIGHT)  
1-GRIDSMA RT VIDEO DETECTION CAMERA (V-2)  
(STATE FURNISHED) MOUNTED ON LUMINAIRE  
AT 2-4' FROM END  
1-TYPE R9-3 SIGN (NO PEDS) FACING POLE 7  
3" CONDUIT TO HH 12  
3-6/C 14  
1-4/C 14  
\* 1-3/C 14  
1-3/C 14 (LUM)  
\* 1-3/C 20  
1-6-SM (V-2) (STATE FURNISHED)  
1-7/16" GROUND BRAID TO GROUND ROD  
1-1/C 6 INS. GR.

**12** X=468,143.994, Y=161,866.812  
PEDESTAL FOUNDATION  
(DONE BY OTHERS)  
8' PEDESTAL POLE PLUS BASE  
TYPE 4A - 1 C.D. PED HEAD (P6-3)  
1-APS PUSH PB AND SIGN  
(LT ARROW) (PB6-3)  
AND APS PB MOUNTING SPACERS  
2" CONDUIT TO HH 12  
(BRIDGE CONDUIT DONE BY OTHERS)  
1-4/C 14  
1-2/C 14  
1-1/C 6 INS. GR.

**13** X=468,175.626, Y=161,970.596  
PEDESTAL FOUNDATION  
(DONE BY OTHERS)  
8' PEDESTAL POLE PLUS BASE  
TYPE 4A - 1 C.D. PED HEAD (P6-2)  
1-APS PUSH PB AND SIGN  
(RT ARROW) (PB6-2)  
AND APS PB MOUNTING SPACERS  
2" CONDUIT TO HH 13  
(BRIDGE CONDUIT DONE BY OTHERS)  
1-4/C 14  
1-2/C 14  
1-1/C 6 INS. GR.

**14** X=468,203.802, Y=161,997.774  
PA 85 POLE FOUNDATION  
TYPE PA85-A-D40-9 (DAVIT AT 270 DEG)  
(NO MAST ARM)  
2-ANGLE MOUNT SIGNALS AT 0 AND 180 DEG  
1-ANGLE MOUNT C.D. PED HEAD (PB6-1)  
AT 0 DEG  
1-LUMINAIRE-LED (FOR 40' MOUNTING HEIGHT)  
1-TYPE R9-3 SIGN (NO PEDS) FACING POLE 3  
3" CONDUIT TO HH 13  
3-6/C 14  
1-4/C 14  
1-3/C 14 (LUM)  
1-1/C 6 INS. GR.

**15** X=468,274.174, Y=162,094.074  
PA 85 POLE FOUNDATION  
TYPE PA85-A  
(NO MAST ARM)  
1-ANGLE MOUNT SIGNAL AT 0 DEG  
\* 1-ONE WAY EVP DETECTOR AND  
CONFIRMATORY LIGHT (PHASE 8) ON POLE AT 0 DEG  
3/4" HALF COUPLING (CENTERED BETWEEN  
UPPER AND LOWER MAST ARM BRACKET)  
1-VIDEO DETECTION CAMERA (V-3) (STATE FURNISHED)  
(POLE MOUNTED)  
1-TYPE R6-1R SIGN (ONE WAY)  
2" CONDUIT TO HH 15  
2-6/C 14  
\* 1-3/C 14  
\* 1-3/C 20  
1-CAT 5E VIDEO DET (V-3) (STATE FURNISHED)  
1-1/C 6 INS. GR.

**7** X=468,271.090, Y=161,842.206  
PA 85 POLE FOUNDATION  
TYPE PA85-A-D40-9 (DAVIT AT 270 DEG)  
(NO MAST ARM)  
2-ANGLE MOUNT SIGNALS AT 0 AND 180 DEG  
1-STRAIGHT MOUNT C.D. PED HEAD (P2-1)  
AT 0 DEG  
1-LUMINAIRE-LED (FOR 40' MOUNTING HEIGHT)  
1-TYPE R9-3 SIGN (NO PEDS) FACING POLE 11  
3" CONDUIT TO HH 7  
3-6/C 14  
1-4/C 14  
1-3/C 14 (LUM)  
1-1/C 6 INS. GR.

**5A** X=468,286.533, Y=161,909.925  
MONOPOLE STRUCTURE FOUNDATION (DONE BY OTHERS)  
OVERHEAD TRAFFIC SUPPORT AND BASE (SEE BRIDGE PLANS)  
8-ONE WAY SIGNALS OVERHEAD AT LOCATIONS AS  
SHOWN ON MONTOTUBE STRUCTURE DETAIL (SEE BRIDGE PLANS)  
\* 2-EVP DETECTORS AND CONFIRMATORY LIGHTS AS  
SHOWN ON MONOTUBE STRUCTURE DETAIL (SEE BRIDGE PLANS)  
3" CONDUIT TO JB 8 (BRIDGE CONDUIT DONE BY OTHERS)  
9-6/C 14  
\* 2-3/C 14  
\* 2-3/C 20  
1-1/C 6 INS. GR.

**5B** X=468,187.672, Y=161,919.464  
MONOPOLE FOUNDATION (DONE BY OTHERS)  
PED PB STATION  
1-APS PB AND SIGN  
(LT ARROW) (PB6-4)  
EXTEND INTO HH 14:  
1" NOM. DIA. CONDUIT  
1-2/C 14  
1-1/C 6 INS. GR.

**6** X=468,317.139, Y=161,858.306  
PEDESTAL FOUNDATION  
(DONE BY OTHERS)  
8' PEDESTAL POLE PLUS BASE  
TYPE 4A - 1 C.D. PED HEAD (P2-2)  
1-APS PUSH PB AND SIGN  
(RT ARROW) (PB2-2)  
AND APS PB MOUNTING SPACERS  
2" CONDUIT TO HH 7  
(BRIDGE CONDUIT DONE BY OTHERS)  
1-4/C 14  
1-2/C 14  
1-1/C 6 INS. GR.

**4** X=468,320.571, Y=161,964.746  
PEDESTAL FOUNDATION  
(DONE BY OTHERS)  
8' PEDESTAL POLE PLUS BASE  
TYPE 4A - 1 C.D. PED HEAD (P2-3)  
1-APS PUSH PB AND SIGN  
(RT ARROW) (PB2-3)  
AND APS PB MOUNTING SPACERS  
2" CONDUIT TO HH 3  
(BRIDGE CONDUIT DONE BY OTHERS)  
1-4/C 14  
1-2/C 14  
1-1/C 6 INS. GR.

**3** X=468,302.997, Y=162,006.049  
PA 85 POLE FOUNDATION  
TYPE PA85-A-D40-9 (DAVIT AT 0 DEG)  
(NO MAST ARM)  
2-ANGLE MOUNT SIGNALS AT 90 AND 180 DEG  
1-ANGLE MOUNT C.D. PED HEAD (P2-4) AT 180 DEG  
\* ONE WAY EVP DETECTOR AND CONFIRMATORY LIGHT  
(PHASE 3) POLE MOUNTED AT 270 DEG  
3/4" HALF COUPLING (CENTERED BETWEEN  
UPPER AND LOWER MAST ARM BRACKET)  
1-LUMINAIRE-LED (FOR 40' MOUNTING HEIGHT)  
1-GRIDSMA RT VIDEO DETECTION CAMERA (V-1)  
(STATE FURNISHED) MOUNTED ON LUMINAIRE  
AT 2-4' FROM END  
1-TYPE R9-3 SIGN (NO PEDS) FACING POLE 14  
3" CONDUIT TO HH 3  
3-6/C 14  
1-4/C 14  
\* 1-3/C 14  
1-3/C 14 (LUM)  
\* 1-3/C 20  
1-6-SM (V-1) (STATE FURNISHED)  
1-7/16" GROUND BRAID TO GROUND ROD  
1-1/C 6 INS. GR.

**2** X=468,318.747, Y=162,054.411  
PEDESTAL FOUNDATION  
TYPE 4A - 1 C.D. PED HEAD (P2-5)  
8' PEDESTAL POLE PLUS BASE  
1-APS PUSH PB AND SIGN  
(LT ARROW) (PB2-5)  
AND APS PB MOUNTING SPACERS  
2" CONDUIT TO HH 4  
1-4/C 14  
1-2/C 14  
1-1/C 6 INS. GR.

**1** X=468,319.983, Y=162,103.554  
PEDESTAL FOUNDATION  
(DESIGN 8127-LIGHT FOUNDATION E)  
PEDESTAL POLE WITH BASE  
1-STRAIGHT MOUNT SIGNAL AT 180 DEG  
1-STRAIGHT MOUNT C.D. PED IND (P2-6)  
AT 270 DEG  
13' PEDESTAL POLE PLUS BASE  
2" CONDUIT TO HH 16  
1-6/C 14  
1-4/C 14  
1-1/C 6 INS. GR.

<b>A</b>	EQUIPMENT PAD (SEE DETAIL SHEET) SERVICE CABINET (SSB) CONTROLLER AND CABINET (STATE FURNISHED)  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 TMS PULL VAULT; ### 1-FO PIGTAIL (6-SM) (SEE TMS PLAN) ** 1-6-SM FIBER (SEE INTERCONNECT PLAN)  CONTROLLER CABINET TO SERVICE CABINET: 2" CONDUIT 3-1/C 6  CONTROLLER CABINET TO SERVICE CABINET (COMMS): 2" CONDUIT 1-6PR 19	3" CONDUIT CONTROLLER CABINET TO HH 1: 3-6/C 14 2-4/C 14 * 1-3/C 14 * 1-3/C 20 2-2/C 14 1-6-SM (V-1) (STATE FURNISHED) 1-1/C 6 INS. GR.  3" CONDUIT CONTROLLER CABINET TO HH 2: 3-6/C 14 3-4/C 14 3-2/C 14  3" CONDUIT CONTROLLER CABINET TO HH 2: 9-6/C 14 * 2-3/C 14 * 2-3/C 20 1-1/C 6 INS. GR.	2 1/2" CONDUIT CONTROLLER CABINET HH 2: 3-6/C 14 1-4/C 14 * 1-3/C 14 * 1-3/C 20 1-2/C 14  3" CONDUIT CONTROLLER CABINET TO HH 2: 3-6/C 14 1-4/C 14 * 1-3/C 14 * 1-3/C 20 3-2/C 14 1-6-SM (V-2) (STATE FURNISHED)	3" CONDUIT CONTROLLER CABINET TO HH 16: 5-6/C 14 2-4/C 14 * 1-3/C 14 * 1-3/C 20 2-2/C 14 1-CAT 5E VIDEO DET (V-3) (STATE FURNISHED) 1-1/C 6 INS. GR.  2" CONDUIT CONTROLLER CABINET TO HH 16: 1-6/C 14 1-4/C 14 1-2/C 14	SERVICE CABINET TO HH 1: 2" CONDUIT 4-3/C 14 (LUM)  HH 1 TO HH 2: 2" CONDUIT 3-3/C 14 (LUM)  HH 2 TO HH 16: 2" CONDUIT 1-3/C 14 (LUM)  SERVICE CABINET TO EXTERNAL GR. RD.: 1" CONDUIT 1-1/C 6 INS. GR. (SEE EQUIPMENT PAD LAYOUT)	<b>B</b>	S.O.P. (POLE MOUNTED 120/240V TRANSFORMER) PEDESTAL AT BASE OF POLE (ANOKA ELECTRIC) 2" CONDUIT FROM PEDESTAL INTO SERVICE CABINET: 3-1/C 2
----------	--	--	---	---	---	----------	--

BY	DATE	REVISIONS	SYSTEM ID: 4162283	T.E. 31918	S.A.P. NO.	DRAWN BY: MJB	CKD BY:	DATE: 10/4/21
			METER ADDRESS:		CERTIFIED BY: <i>Gregory Ken</i>	LIC. NO. 26829		DATE:
			OLD SYSTEM ID:		STATE PROJ. NO. 0215-76 (T.H.10)		SHEET NO. SS20 OF SS40 SHEETS	

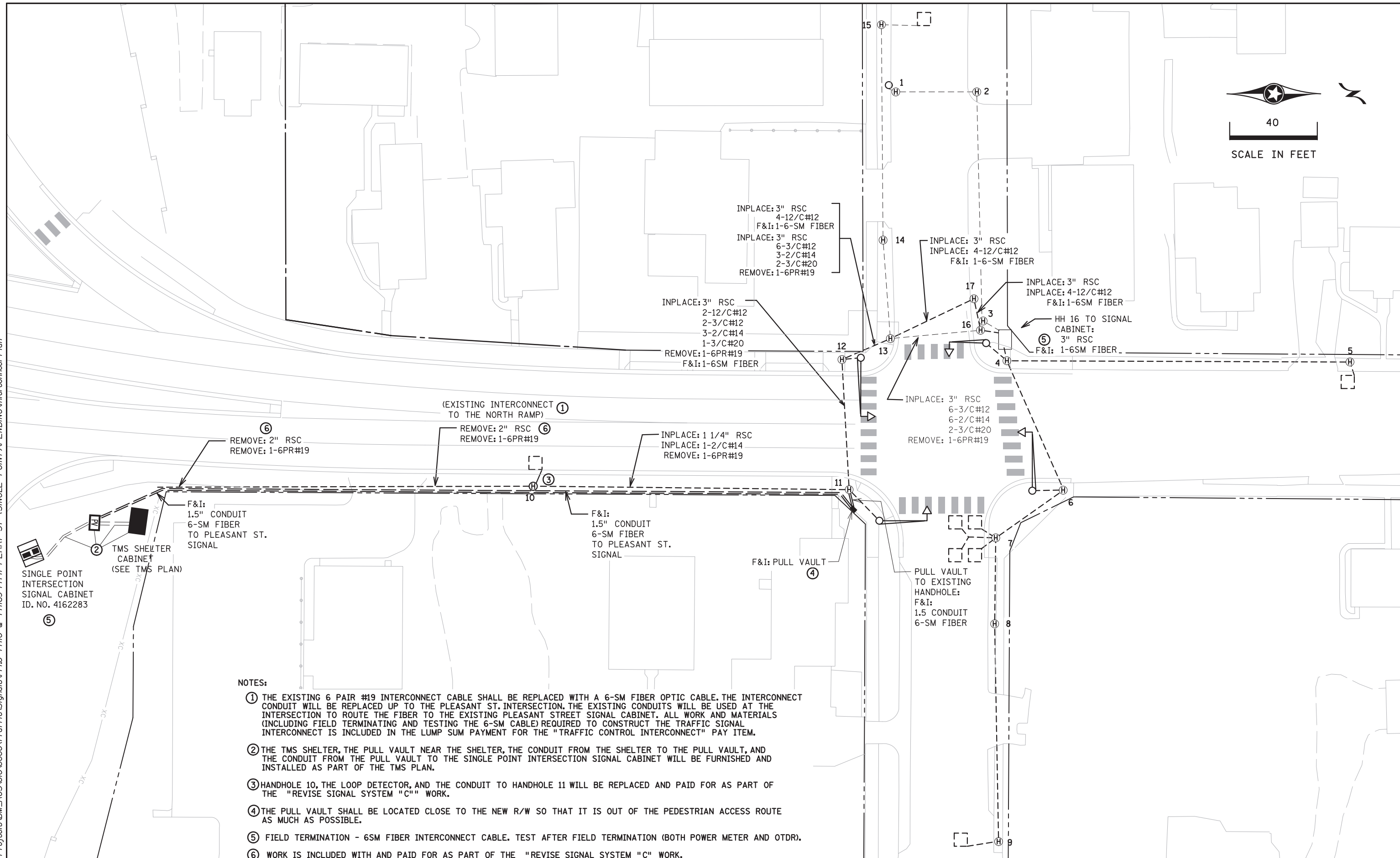
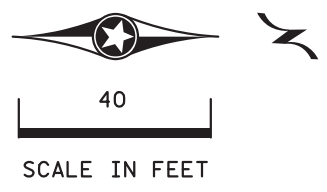






PLOTTED/REVISED: 5-OCT-2021

PLOT NAME: 13 of 40  
 FILENAME: Projects\DM\_FROSO\10\0000\Traffic\Signals\440 TH10 @ TH169-TH47-FERRY ST (SINGLE POINT)\PENDING\Interconnect Plan



- NOTES:**
- ① THE EXISTING 6 PAIR #19 INTERCONNECT CABLE SHALL BE REPLACED WITH A 6-SM FIBER OPTIC CABLE. THE INTERCONNECT CONDUIT WILL BE REPLACED UP TO THE PLEASANT ST. INTERSECTION. THE EXISTING CONDUITS WILL BE USED AT THE INTERSECTION TO ROUTE THE FIBER TO THE EXISTING PLEASANT STREET SIGNAL CABINET. ALL WORK AND MATERIALS (INCLUDING FIELD TERMINATING AND TESTING THE 6-SM CABLE) REQUIRED TO CONSTRUCT THE TRAFFIC SIGNAL INTERCONNECT IS INCLUDED IN THE LUMP SUM PAYMENT FOR THE "TRAFFIC CONTROL INTERCONNECT" PAY ITEM.
  - ② THE TMS SHELTER, THE PULL VAULT NEAR THE SHELTER, THE CONDUIT FROM THE SHELTER TO THE PULL VAULT, AND THE CONDUIT FROM THE PULL VAULT TO THE SINGLE POINT INTERSECTION SIGNAL CABINET WILL BE FURNISHED AND INSTALLED AS PART OF THE TMS PLAN.
  - ③ HANDHOLE 10, THE LOOP DETECTOR, AND THE CONDUIT TO HANDHOLE 11 WILL BE REPLACED AND PAID FOR AS PART OF THE "REVISE SIGNAL SYSTEM "C" WORK.
  - ④ THE PULL VAULT SHALL BE LOCATED CLOSE TO THE NEW R/W SO THAT IT IS OUT OF THE PEDESTRIAN ACCESS ROUTE AS MUCH AS POSSIBLE.
  - ⑤ FIELD TERMINATION - 6SM FIBER INTERCONNECT CABLE. TEST AFTER FIELD TERMINATION (BOTH POWER METER AND OTDR).
  - ⑥ WORK IS INCLUDED WITH AND PAID FOR AS PART OF THE "REVISE SIGNAL SYSTEM "C" WORK.

			SYSTEM ID: 4162283 to 1735325	S.A.P. NO.	DRAWN BY: CDB	CKD BY:	DATE: 10/4/21
			METER ADDRESS:	CERTIFIED BY		LIC. NO. 26829	DATE: 10/1/21
			OLD SYSTEM ID:	STATE PROJ. NO. 0215-76 (T.H.10)		SHEET NO. SS13 OF SS40 SHEETS	

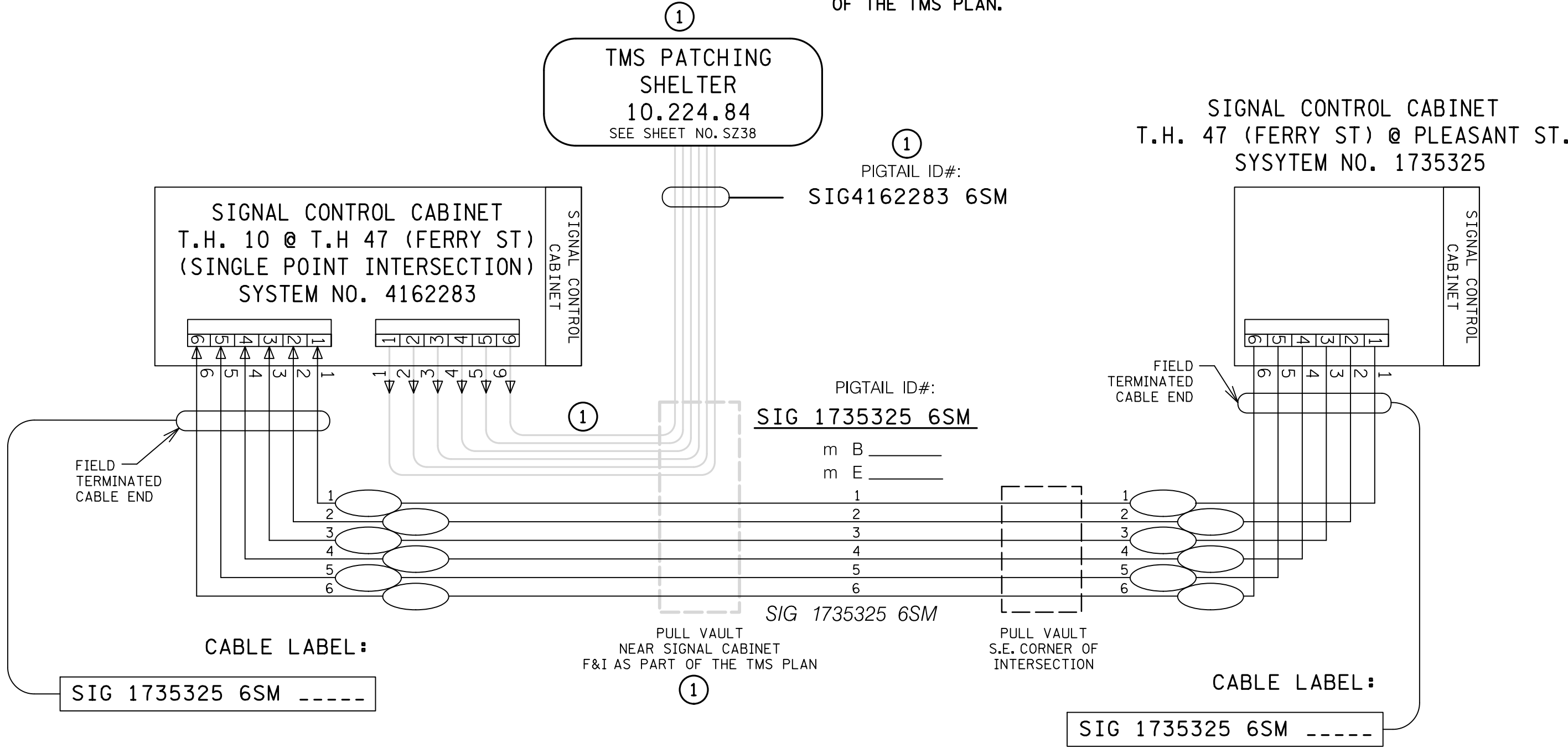
**TRAFFIC CONTROL INTERCONNECT  
 T.H. 10/169 AT T.H.47 (FERRY STREET) TO  
 PLEASANT STREET IN ANOKA, ANOKA COUNTY**

**FIBER OPTIC SCHEMATIC**  
(FOR SIGNAL COMMUNICATIONS)

PLOTTED/REVISED: 5-OCT-2021

DISTRICT \*: Metro  
PLOT NAME: 14 of 40  
FILENAME: Projects\DM\_FROSV010\0000\Traffic\Signals\440 TH10 @ TH169-TH47-FERRY ST (SINGLE POINT)\PENDING\Interconnect Plan

① THE PIGTAIL FROM TMS SHELTER TO SIGNAL CABINET AND THE PULL VAULT NEAR THE SHELTER IS INCLUDED AS PART OF THE TMS PLAN.



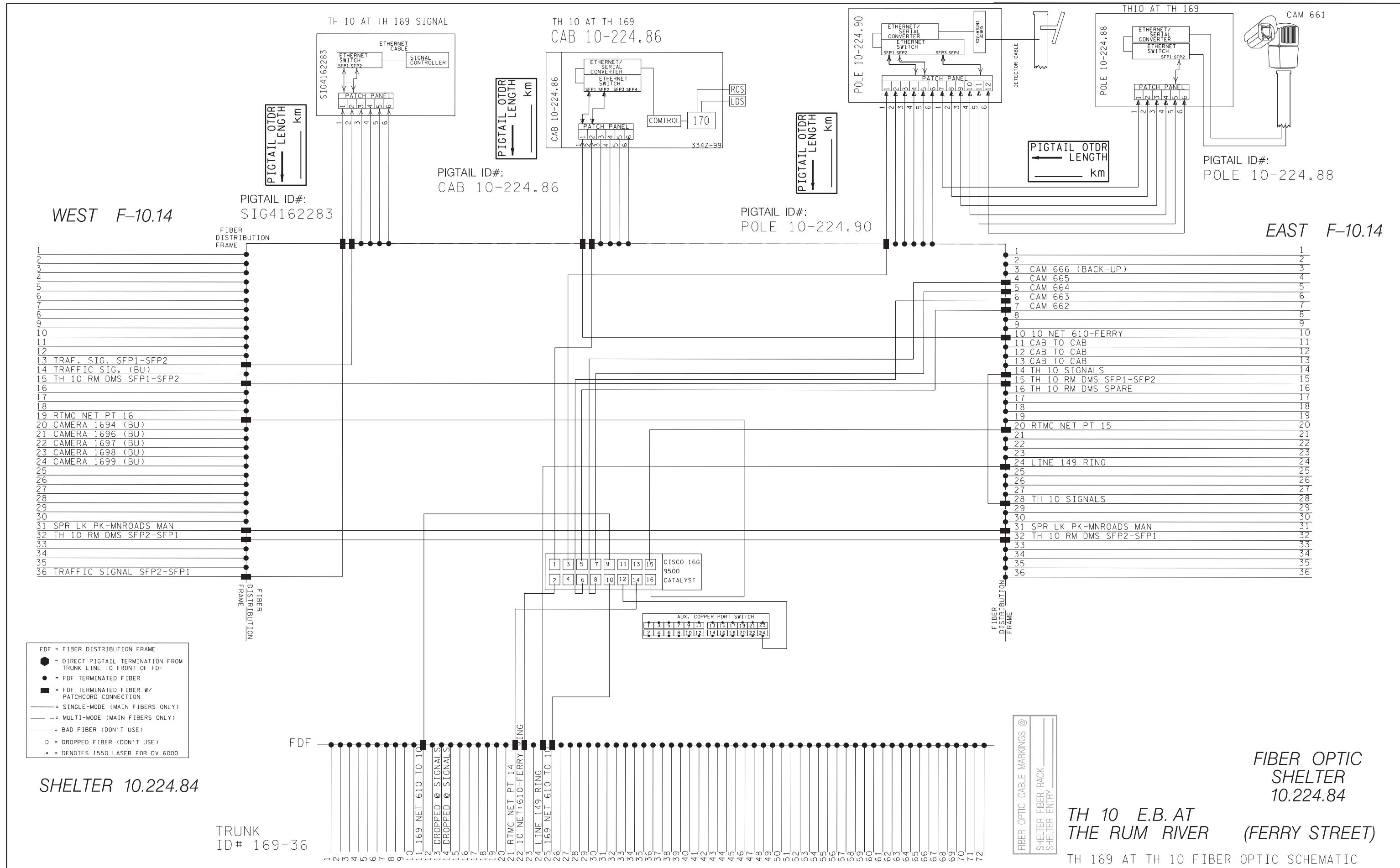
- GENERAL NOTES:
1. TEST THE 6-SM PIGTAIL CABLE AFTER FIELD TERMINATION (BOTH POWER METER AND OTDR).
  2. ALL WORK AND MATERIALS, INCLUDING FIELD TERMINATING AND TESTING THE 6-SM CABLE, REQUIRED TO CONSTRUCT THE TRAFFIC SIGNAL INTERCONNECT IS INCLUDED IN THE LUMP SUM PAYMENT FOR THE "TRAFFIC CONTROL INTERCONNECT" PAY ITEM.

BY	DATE	REVISIONS	SYSTEM ID: 4162283 to 1735325	S.A.P. NO.	DRAWN BY: CDB	CKD BY:	DATE: 10/4/21
			METER ADDRESS:	CERTIFIED BY: <i>Gregory Kern</i>	LIC. NO. 26829		DATE: 10/1/21
			OLD SYSTEM ID:	STATE PROJ. NO. 0215-76 (T.H.10) SHEET NO. SS14 OF SS40 SHEETS			

**FIBER OPTIC SCHEMATIC**  
T.H. 10/169 AT T.H.47 (FERRY STREET) TO  
PLEASANT STREET IN ANOKA, ANOKA COUNTY

bmi.tbi

christian.mayala pdf-B and W.pltcfq 5/3/2023 9:10:02 AM



FDF = FIBER DISTRIBUTION FRAME  
 ● = DIRECT PIGTAIL TERMINATION FROM TRUNK LINE TO FRONT OF FDF  
 ● = FDF TERMINATED FIBER  
 ■ = FDF TERMINATED FIBER W/ PATCHCORD CONNECTION  
 — = SINGLE-MODE (MAIN FIBERS ONLY)  
 - - = MULTI-MODE (MAIN FIBERS ONLY)  
 - - = BAD FIBER (DON'T USE)  
 D = DROPPED FIBER (DON'T USE)  
 \* = DENOTES 1550 LASER FOR DV 6000

SHELTER 10.224.84

TRUNK ID# 169-36

FIBER OPTIC CABLE MARKINGS @  
 SHELTER FIBER RACK  
 SHELTER ENTRY

FIBER OPTIC  
 SHELTER  
 10.224.84

TH 10 E.B. AT  
 THE RUM RIVER (FERRY STREET)

TH 169 AT TH 10 FIBER OPTIC SCHEMATIC