

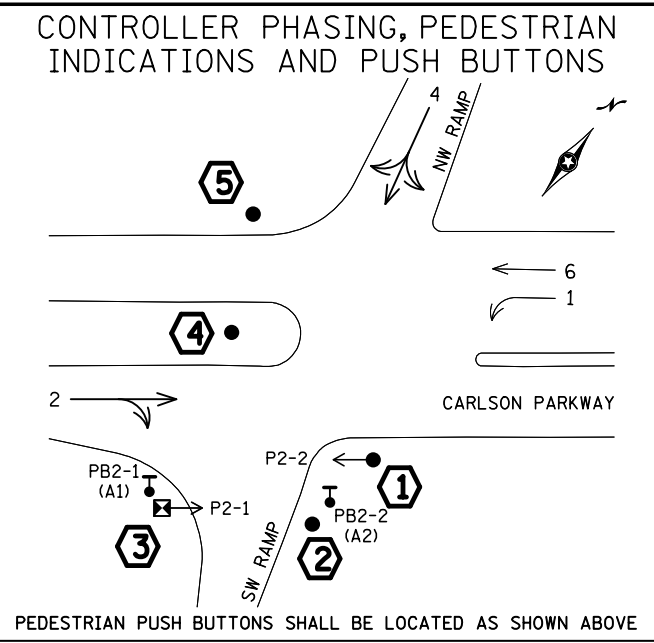
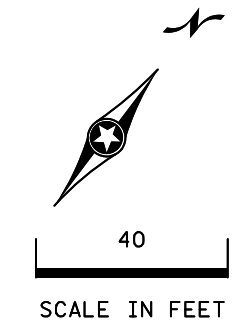
PLOTTED/REVISED: 30-OCT-2018

I PLOT NAME: I735842(2)T051.sgl
PATH & FILENAME: Projects\DM_R05\4940000\Traffic\Signal\21705\21705_sgl.dgn

LOOP DETECTOR CHART			SIGNAL HEAD CHART					
NUMBER	SIZE (FT)	LOCATION	FACE	R	Y	FYA	G	G
D1-1,D1-3	2-6x6	20 & 50	1-1,1-2,1-3	←	←	←		
D1-2,D1-4	2-6x6	5 & 35	2-1,2-2,2-3	●	●	●		
D2-1,D2-2	6x6	250	4-1,4-2	●	●		●	
D4-1	2-6x6	INPLACE	4-3	●	●		●	←
D4-2	2-6x6	INPLACE	4-4,4-5	●	←		←	
D4-3	3-6x6	INPLACE	6-1,6-2,6-3	●	●		●	
D6-1, D6-2	6x6	INPLACE						

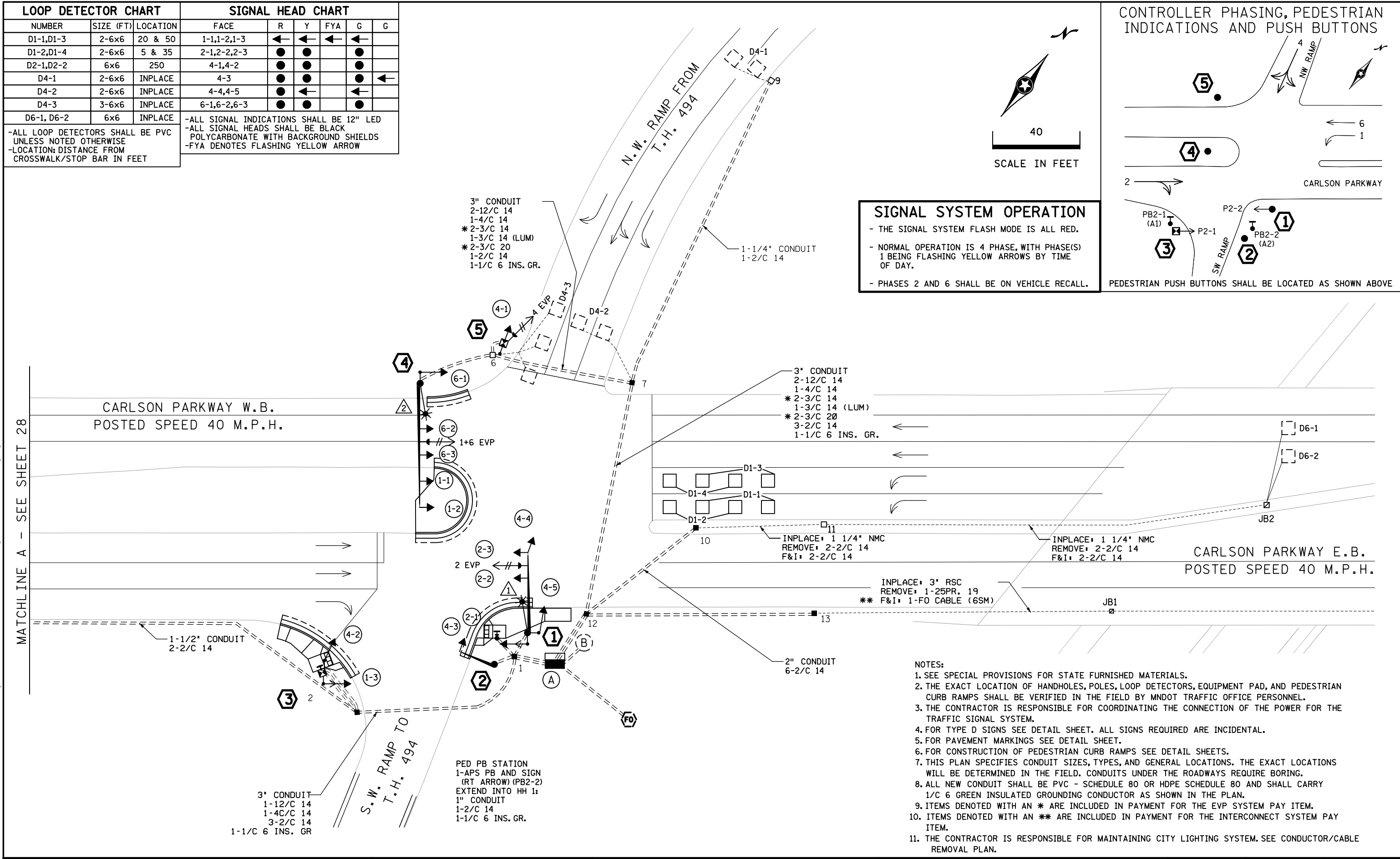
-ALL LOOP DETECTORS SHALL BE PVC UNLESS NOTED OTHERWISE
-LOCATION: DISTANCE FROM CROSSWALK/STOP BAR IN FEET

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



SIGNAL SYSTEM OPERATION

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

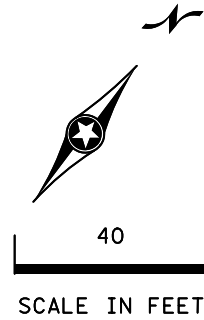
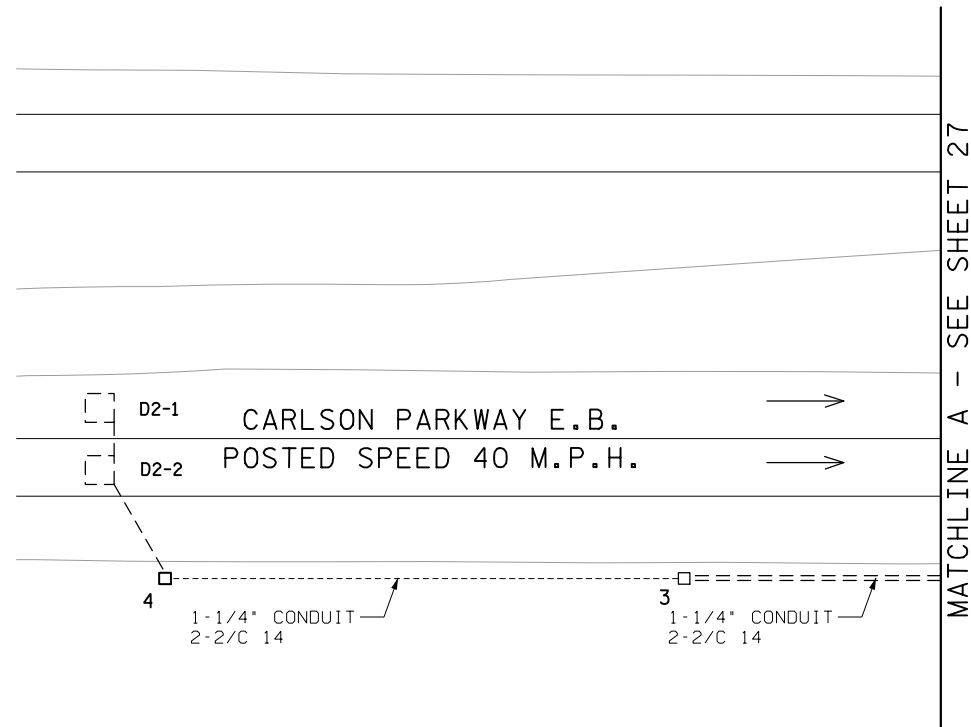


- ### NOTES:
- SEE SPECIAL PROVISIONS FOR STATE FURNISHED MATERIALS.
 - THE EXACT LOCATION OF HANDHOLES, POLES, LOOP DETECTORS, EQUIPMENT PAD, AND PEDESTRIAN CURB RAMPS SHALL BE VERIFIED IN THE FIELD BY MNDOT TRAFFIC OFFICE PERSONNEL.
 - THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE CONNECTION OF THE POWER FOR THE TRAFFIC SIGNAL SYSTEM.
 - FOR TYPE D SIGNS SEE DETAIL SHEET. ALL SIGNS REQUIRED ARE INCIDENTAL.
 - FOR PAVEMENT MARKINGS SEE DETAIL SHEET.
 - FOR CONSTRUCTION OF PEDESTRIAN CURB RAMPS SEE DETAIL SHEETS.
 - THIS PLAN SPECIFIES CONDUIT SIZES, TYPES, AND GENERAL LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD. CONDUITS UNDER THE ROADWAYS REQUIRE BORING.
 - ALL NEW CONDUIT SHALL BE PVC - SCHEDULE 80 OR HDPE SCHEDULE 80 AND SHALL CARRY 1/C 6 GREEN INSULATED GROUNDING CONDUCTOR AS SHOWN IN THE PLAN.
 - ITEMS DENOTED WITH AN * ARE INCLUDED IN PAYMENT FOR THE EVP SYSTEM PAY ITEM.
 - ITEMS DENOTED WITH AN ** ARE INCLUDED IN PAYMENT FOR THE INTERCONNECT SYSTEM PAY ITEM.
 - THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING CITY LIGHTING SYSTEM. SEE CONDUCTOR/CABLE REMOVAL PLAN.

BY	DATE	REVISIONS	SYSTEM ID: 2033374	T.E. 3474	S.A.P. NO. 155-172-002	DRAWN BY: JAR	CKD BY: BPV	DATE: 12-6-17
JDC	8-2018	AS-BUILT	METER ADDRESS: 14301 CARLSON PKWY		CERTIFIED BY: <i>Michael P. Lubinsky</i>		LIC. NO. 19863	DATE: 12-7-17
			OLD SYSTEM ID: 21705	T.E.	STATE PROJ. NO. 2785-396 (T.H. 494)		SHEET NO. 27 OF 45 SHEETS	

PLOTTED/REVISED: 30-OCT-2018

I/PLOT NAME: I735842(2)7051.sgl
PATH & FILENAME: Projects\DM罗斯4940000\Traffic\Signals\2705\27051.sgl.dgn



(A) 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
1-6/C 14
1-4/C 14
* 1-3/C 14
* 1-3/C 20
1-2/C 14
1-1/C 6 INS. GR.

3" CONDUIT TO HH 12: 2-12/C 14
1-4/C 14
* 2-3/C 14
* 2-3/C 20
3-2/C 14
1-1/C 6 INS. GR.

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

3" CONDUIT TO HH 1: * 1-12/C 14
1-4/C 14
* 3-2/C 14
1-1/C 6 INS. GR.

3" CONDUIT TO HH 12: 6-2/C 14
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)
3/4" CONDUIT STUBBED OUT (FOR TELEPHONE LINE)

** 1-1/2" CONDUIT TO FO SPLICE VAULT:
** 1-FO PIGTAIL (6-SM)
** 1-1/2" CONDUIT TO HH12:
** 1-FO PIGTAIL (6-SM)
CONTROLLER CABINET TO SERVICE CABINET:
2" CONDUIT
2-1/C 6
1-1/C 6 INS. GR.
CONTROLLER CABINET TO SERVICE CABINET (COMMS):
2" CONDUIT
1-6PR 19
SERVICE CABINET TO GROUND MOUNTED TRANSFORMER:
2" CONDUIT
3-1/C 2
SERVICE CABINET TO HH 1:
2" CONDUIT
2-3/C 14 (LUM)
SERVICE CABINET TO HH 12:
2" CONDUIT
2-3/C 14 (LUM)
SERVICE CABINET TO EXTERNAL GR. RD.:
1" CONDUIT
1-1/C 6 INS. GR.
(SEE EQUIPMENT PAD LAYOUT)

NOTES:

- ITEMS DENOTED WITH AN * ARE INCLUDED IN PAYMENT FOR THE EVP SYSTEM PAY ITEM.
- ITEMS DENOTED WITH AN ** ARE INCLUDED IN PAYMENT FOR THE INTERCONNECT SYSTEM PAY ITEM.

① PA90 POLE FOUNDATION
TYPE PA90-A-35-D40-9 (DAVIT AT 350 DEG)
1-TWO WAY SIGNAL MOUNTED OVERHEAD AT 0'
1-STRAIGHT MOUNT SIGNAL OVERHEAD AT 12'
2-ANGLE MOUNT SIGNALS AT 90 AND 180 DEG
1-ANGLE MOUNT C.D. PED HEAD 180 DEG
1-ONE WAY EVP DETECTOR AND
* CONFIRMATORY LIGHT (PHASE 2)
LUMINAIRE-LED (FOR 40' MOUNTING HEIGHT)
2-TYPE D SIGNS (D-1) (D-2) (SEE SIGN DETAILS)
1-R6-1L (ONE WAY)
1-R9-3 AT 0 DEG
3" CONDUIT TO HH 1:
2-12/C 14
1-4/C 14
* 1-3/C 14
1-3/C 14 (LUM)
* 1-3/C 20
1-1/C 6 INS. GR.

④ PA100 POLE FOUNDATION
TYPE PA100-A-55-D40-9 (DAVIT AT 350 DEG)
1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'
3-STRAIGHT MOUNT SIGNALS OVERHEAD AT 12', 24', & 36'
1-ANGLE MOUNT SIGNAL AT 180 DEG
* 1-ONE WAY EVP DETECTOR AND
CONFIRMATORY LIGHT (PHASE 1 & 6)
LUMINAIRE-LED (FOR 40' MOUNTING HEIGHT)
1-TYPE D SIGN (D-4) (SEE SIGN DETAILS)
1-R10-X12 SIGN ADJACENT TO HEAD (1-2)
1-R9-3 FACING POLE 3
1-R9-3 AT 270 DEG
3" CONDUIT TO HH 6:
2-12/C 14
1-3/C 14
* 1-3/C 14 (LUM)
1-3/C 20
* 1-1/C 6 INS. GR.

② PA85 POLE FOUNDATION
TYPE PA85-A-15
1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'
1-TYPE D SIGN (D-3) (SEE SIGN DETAILS)
3" CONDUIT TO HH 1:
1-6/C 14
1-1/C 6 INS. GR.

⑤ PEDESTAL FOUNDATION
PEDESTAL POLE PLUS BASE
1-STRAIGHT MOUNT SIGNAL
* 1-ONE WAY EVP DETECTOR AND
CONFIRMATORY LIGHT (PHASE 4)
1-R6-1R (ONE WAY)
3" CONDUIT TO HH 6:
* 1-4/C 14
* 1-3/C 14
1-3/C 20
1-1/C 6 INS. GR.

③ PEDESTAL FOUNDATION
PEDESTAL POLE PLUS BASE
2-STRAIGHT MOUNT SIGNALS
1-APS PUSH BUTTON AND SIGN (LT ARROW) (PB2-1)
1-STRAIGHT MOUNT C.D. PED HEAD
1-R9-3 FACING POLE 4
3" CONDUIT TO HH 2:
1-12/C 14
1-4/C 14
1-2/C 14
1-1/C 6 INS. GR.

BY	DATE	REVISIONS
JDC	8-2018	AS-BUILT

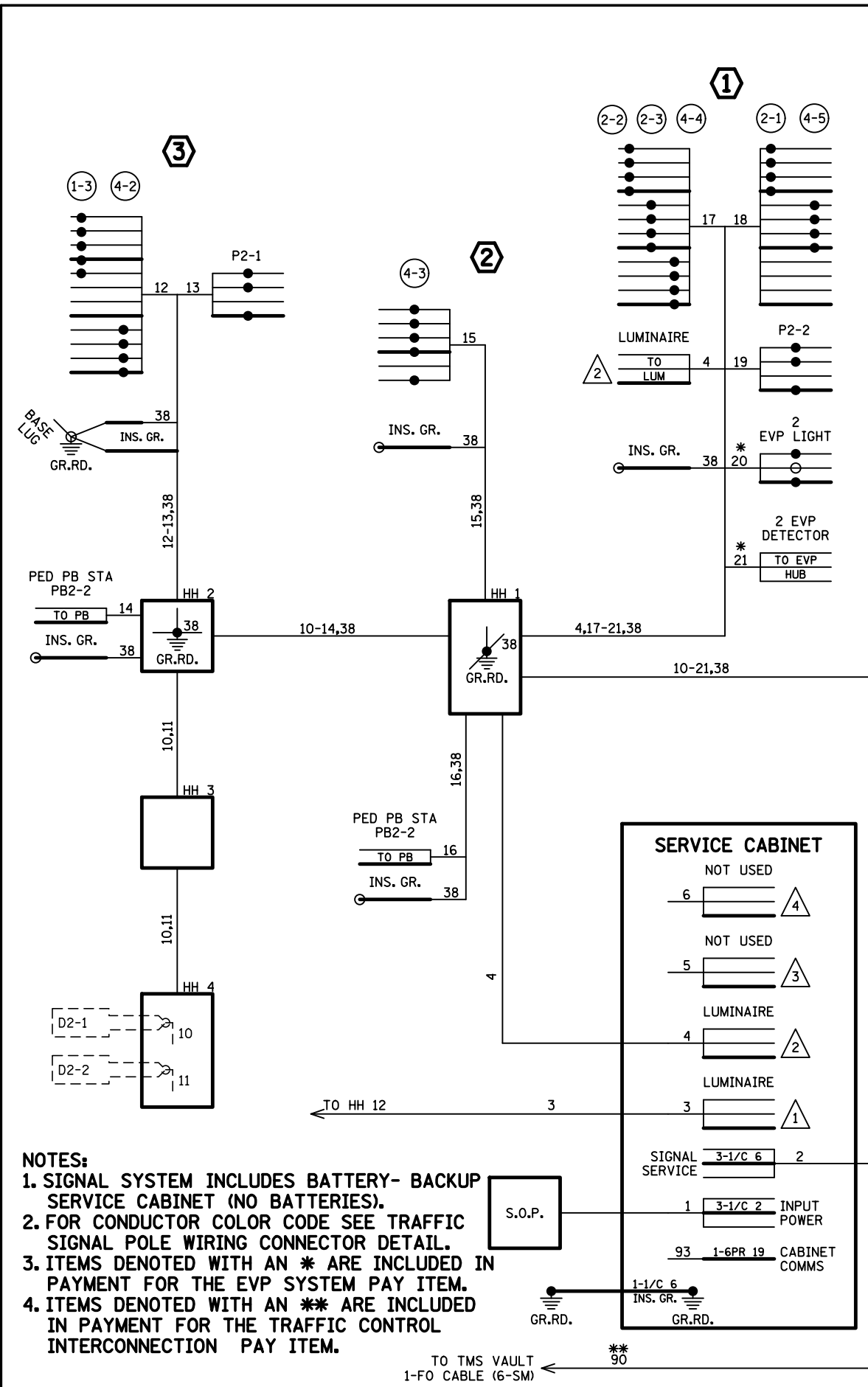
SYSTEM ID: 2033374	T.E. 3474
METER ADDRESS: 14301 CARLSON PKWY	
OLD SYSTEM ID: 21705	T.E.

**INTERSECTION LAYOUT
TRAFFIC CONTROL SIGNAL SYSTEM A
T.H. 494/CARLSON PKWY INTERCHANGE-W RAMP
IN PLYMOUTH, HENNEPIN COUNTY**

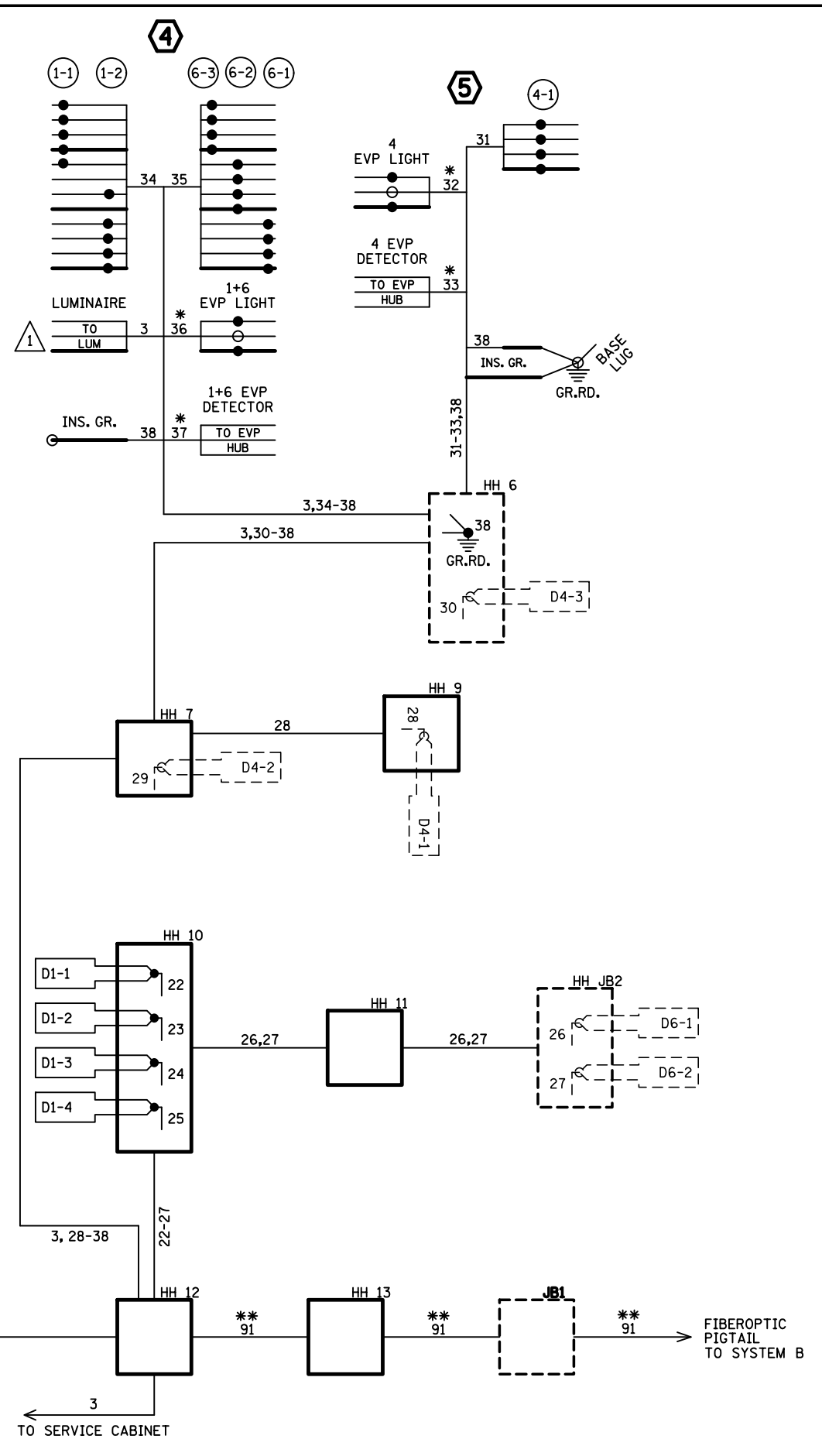
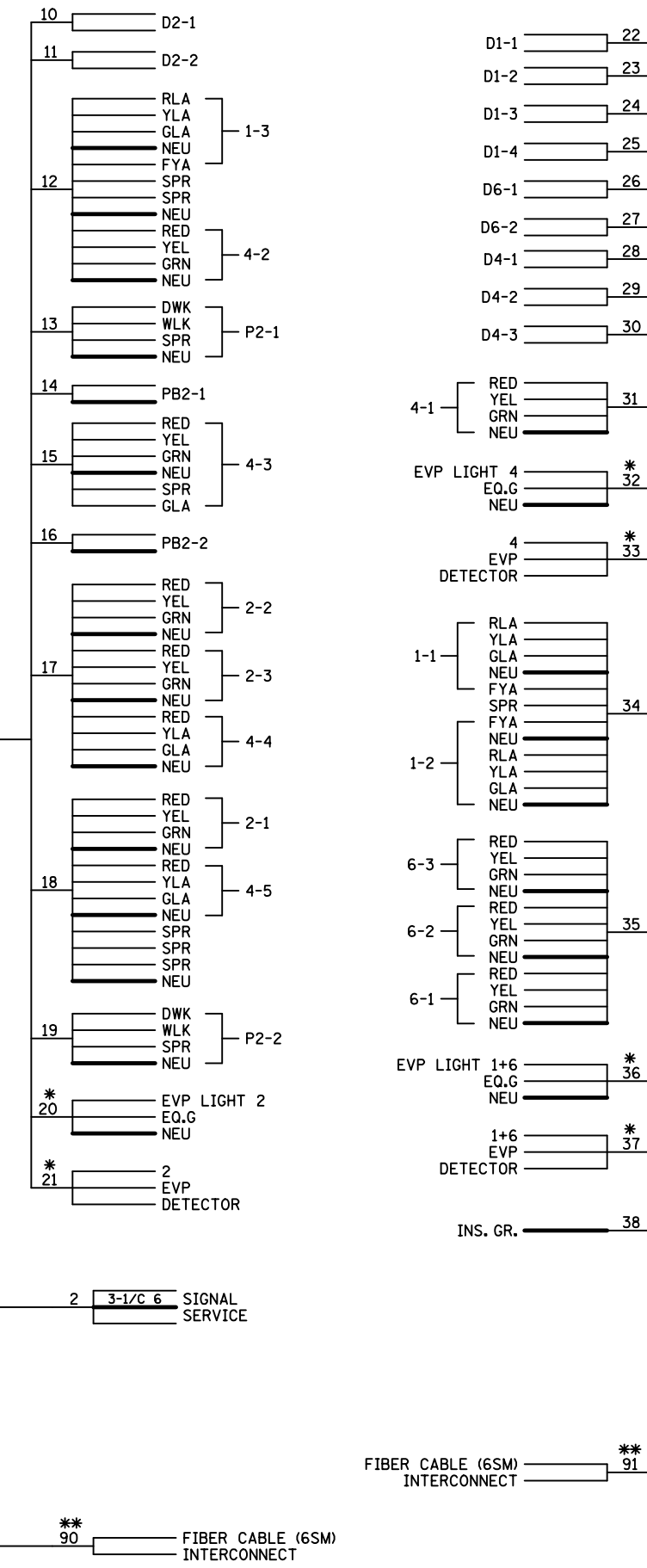
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CERTIFIED BY: <i>Michael P. Lubinsky</i>	LIC. NO. 19863	DATE: 12-7-17	
STATE PROJ. NO. 2785-396 (T.H. 494)		SHEET NO. 28 OF 45 SHEETS	

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I PLOT NAME: I735842(2)T05...sgl
PATH & FILENAME: Projects\DM_ROS\4940000\Traffic\Sig\dm\21705\21705...sgl.dgn



CONTROLLER CABINET



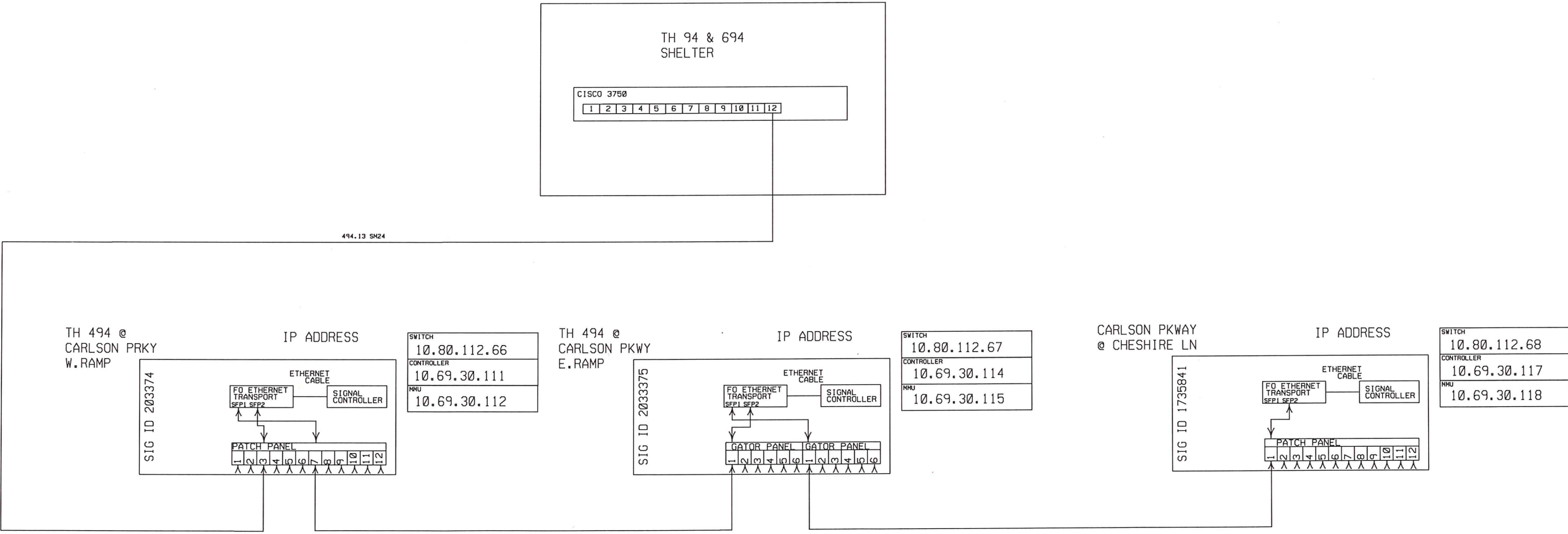
BY	DATE	REVISIONS
JDC	8-2018	AS-BUILT

SYSTEM ID: 2033374	T.E. 3474
METER ADDRESS: 14301 CARLSON PKWY	
OLD SYSTEM ID: 21705	T.E.

**FIELD WIRING DIAGRAM
 TRAFFIC CONTROL SIGNAL SYSTEM A
 T.H. 494/CARLSON PKWY INTERCHANGE W RAMP
 IN PLYMOUTH, HENNEPIN COUNTY**

S.A.P. NO. 155-172-002	DRAWN BY: JAR	CKD BY: BPV	DATE: 12-6-17
CERTIFIED BY: <i>Michael P. Lubinsky</i>	LIC. NO. 19863	DATE: 12-7-17	
STATE PROJ. NO. 2785-396 (T.H. 494)		SHEET NO. 29 OF 45 SHEETS	

NETWORK: 10.69.30.0/24
 MASK: 255.255.255.0
 GATEWAY: 10.69.30.1
 3750 PORT: 12
 AREA: 1
 VLAN: 100



TH 494 @
CARLSON PKWY

J. ADAMEK
V3 5.12.2018