

42.0163.000  
HARTMANN INC

42.0164.000  
HOHEISEL

42.0171.000  
KURTZ

42.0196.000  
M M N R LLC

ROPERTIES INC

**KEY NOTES:**

1. REMOVE UNDERGROUND WIRE
2. SALVAGE LIGHTING UNIT & REMOVE LIGHT FOUNDATION
3. REMOVE HANDHOLE
4. REMOVE SERVICE CABINET

**LEGEND**

- EXISTING LIGHTING UNIT
- EXISTING CIRCUIT IN CONDUIT
- EXISTING HANDHOLE
- EXISTING SERVICE CABINET
- EXISTING LIGHTING UNIT NUMBER

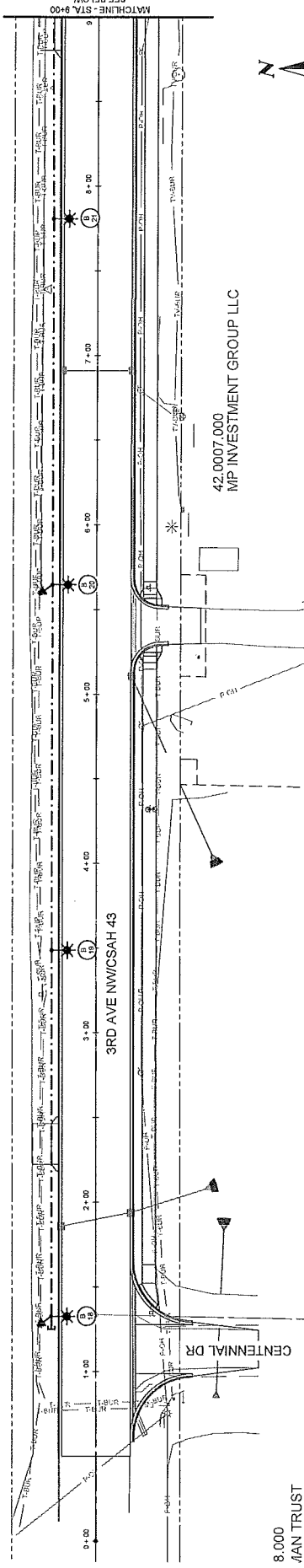
EXISTING SERVICE CABINET BY  
METERED  
COORDINATE DISCONNECTION AND REMOVAL  
OF SERVICE CABINET WITH MAIN POWER

<p>SEH 200 WILKINS CENTER DRIVE MINNEAPOLIS, MN 55404 PHONE: (612) 480-2800 WWW.SEH.COM</p>	<p>JOHN P. CARLSON, P.E. L.E. No. 2653 01/07/2021 Date:</p>	<p>MORRISON COUNTY, MINNESOTA SAP 049-943-9177; SAP 049-439-0141; SP 049-591-005</p>
<p><b>LIGHTING PLAN REMOVALS 2021 CSAH 43 &amp; 39 RECONSTRUCTION AND SRTS</b></p>		
<p>FILE NO. MORRIS 15049</p>		
<p>70</p>		
<p>97</p>		

NO.	BY	DATE	REVISIONS

DESIGN TEAM  
DESIGNED BY: ANF  
CHECKED BY: JFC

42.0099.000  
HOFFMAN TRUST



8.000  
AAN TRUST

42.0007.000  
MP INVESTMENT GROUP LLC

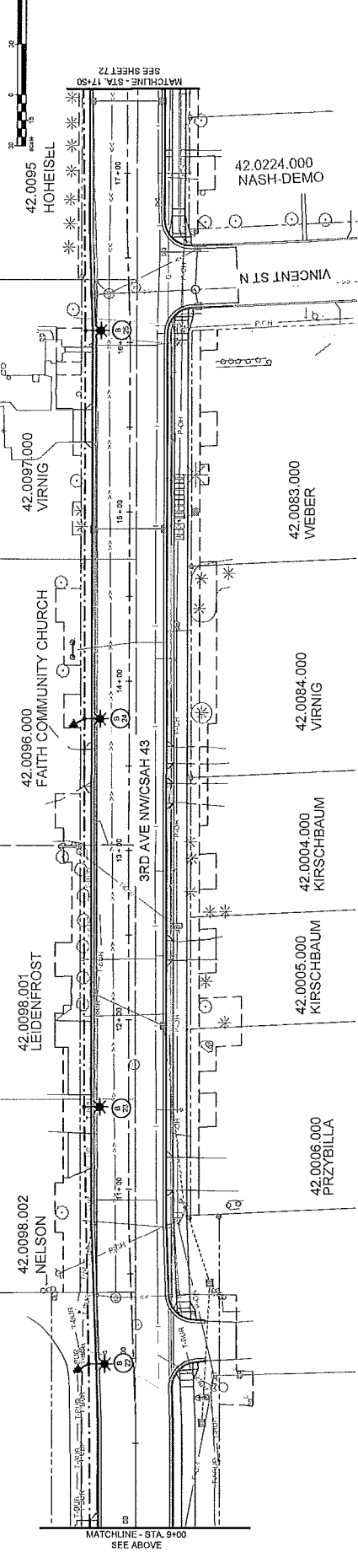
**LEGEND**

- EXISTING LIGHTING UNIT
- LIGHTING UNIT TYPE SPECIAL
- INSTALL LIGHTING UNIT
- UNDERGROUND MARK IN CONDUIT
- EXISTING CIRCUIT IN CONDUIT
- PAD MOUNTED SERVICE CABINET
- GROUND ROD
- CONDUIT STUB
- LIGHTING UNIT NUMBER
- HANDHOLE
- PAD MOUNTED TRANSFORMER
- 
- 

- NOTES:**
- ALL CONDUIT SHALL BE 2" NMC SCHEDULE 40 UNLESS OTHERWISE NOTED.
  - PROVIDE 2" CAPPED CONDUIT STUB AS INDICATED.
  - LIGHTING AND ELECTRICAL EQUIPMENT SHALL BE STAKED AND VERIFIED PRIOR TO EXCAVATION AND POURING CONCRETE FOUNDATIONS.
  - ALL CONDUCTORS SHALL BE COPPER, TYPE XHHW-2, (9)M4 & (1)M8 GND UNLESS OTHERWISE NOTED.
  - COORDINATE SERVICE CONNECTION WITH MN POWER REPRESENTATIVE, DEAN WITT AT 220-390-1889.

**SERVICE CABINET "B" 120/240V**

UNIT NO.	STATION	ALIGNMENT	LEFT	RIGHT	TYPE
B18	1+33	3RD AVE NWCSAH 43	X		SPECIAL
B19	3+48	3RD AVE NWCSAH 43	X	X	SPECIAL
B20	5+65	3RD AVE NWCSAH 43	X	X	SPECIAL
B21	7+81	3RD AVE NWCSAH 43	X	X	SPECIAL
B22	9+98	3RD AVE NWCSAH 43	X	X	SPECIAL
B23	11+49	3RD AVE NWCSAH 43	X	X	SPECIAL
B24	13+78	3RD AVE NWCSAH 43	X	X	SPECIAL
B25	16+08	3RD AVE NWCSAH 43	X	X	SPECIAL



DOWN BY:  ASF

DESIGNED BY:  ASF

CHECKED BY:  JPC

DESIGN TEAM:

NO. BY:

DATE:

REVISIONS:

**SEH**  
PHONE: 651.460.2000  
ST. PAUL, MN 55116-5190  
www.seh.com

EVERY COUNTY THAT THIS PLAN PREPARED BY OR UNDER MY DIRECT SUPERVISION AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE BOARD OF ENGINEERS OF THE STATE OF MINNESOTA  
Date: 07/27/2021  
Lic. No. 24651  
JOHN P. CARLSON, P.E.

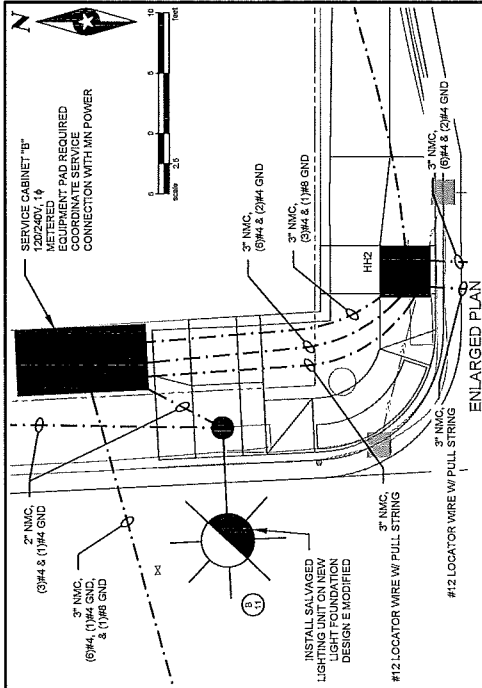
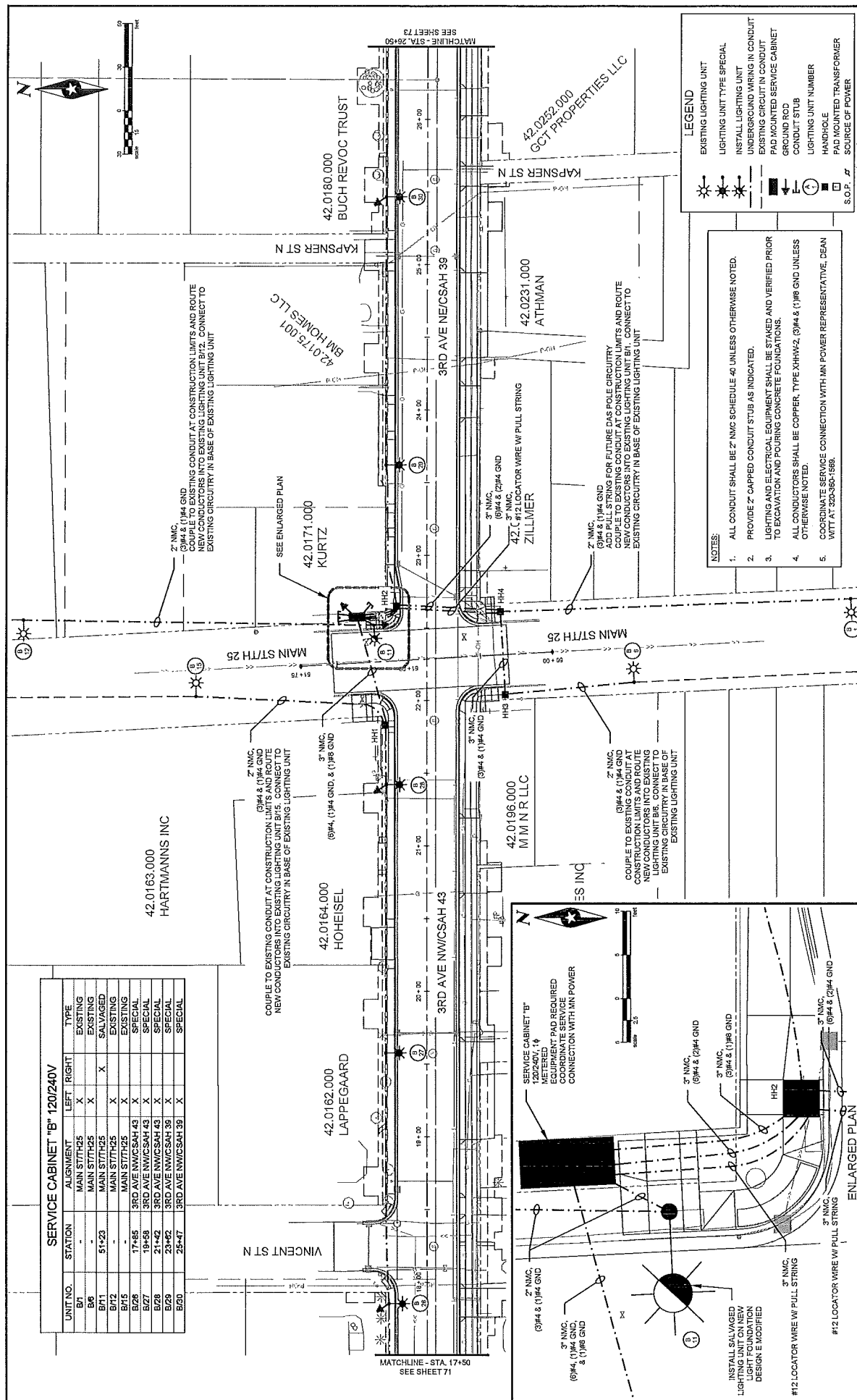
MORRISON COUNTY,  
MINNESOTA  
SAP 049-43-017; SAP 048-43-014;  
SP 048-591-008

2021 CSAH 43 & 39 RECONSTRUCTION  
AND SRKTS

FILE NO.  
MORC 16043B

71  
97

SERVICE CABINET "B" 120/240V			
UNIT NO.	ALIGNMENT	LEFT / RIGHT	TYPE
B6	MAIN ST/TH 25	X	EXISTING
B71	MAIN ST/TH 25	X	EXISTING
B72	MAIN ST/TH 25	X	SALVAGED
B75	MAIN ST/TH 25	X	EXISTING
B76	3RD AVE NW/CSAH 43	X	SPECIAL
B77	3RD AVE NW/CSAH 43	X	SPECIAL
B78	3RD AVE NW/CSAH 43	X	SPECIAL
B79	3RD AVE NW/CSAH 39	X	SPECIAL
B20	3RD AVE NW/CSAH 39	X	SPECIAL



**LEGEND**

- EXISTING LIGHTING UNIT
- LIGHTING UNIT TYPE SPECIAL
- INSTALL LIGHTING UNIT
- UNDERGROUND WIRING IN CONDUIT
- EXISTING CIRCUIT IN CONDUIT
- PAD MOUNTED SERVICE CABINET
- GROUND ROD
- CONDUIT STUB
- LIGHTING UNIT NUMBER
- HANDHOLE
- PAD MOUNTED TRANSFORMER
- S.O.P.

**NOTES:**

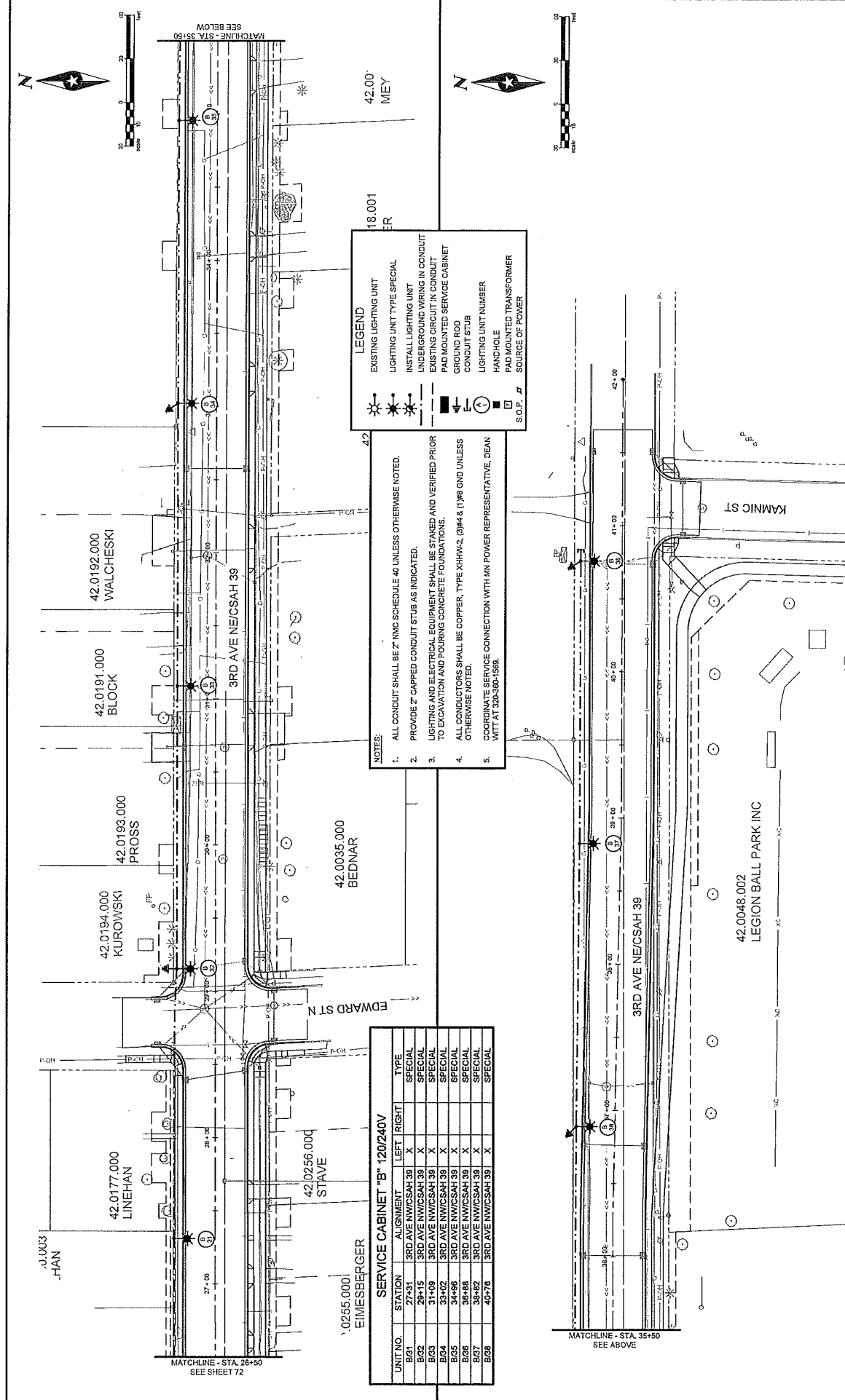
- ALL CONDUIT SHALL BE 2" NMC SCHEDULE 40 UNLESS OTHERWISE NOTED.
- PROVIDE 2" CAPPED CONDUIT STUB AS INDICATED.
- LIGHTING AND ELECTRICAL EQUIPMENT SHALL BE STAKED AND VERIFIED PRIOR TO EXCAVATION AND POURING CONCRETE FOUNDATIONS.
- ALL CONDUCTORS SHALL BE COPPER, TYPE XHHW-2, (3) #4 & (1) #8 GND UNLESS OTHERWISE NOTED.
- COORDINATE SERVICE CONNECTION WITH MN POWER REPRESENTATIVE, DEAN WITT AT 626-580-1588.

**SEH**  
 PHONE: 612.480.2000  
 227 MAIN ST. SUITE 100  
 MINNEAPOLIS, MN 55401  
 WWW.SEH.COM

**MORRISON COUNTY, MINNESOTA**  
 2021 CSAH 43 & 39 RECONSTRUCTION AND SRTS  
 JOHN P. CARLSON, P.E. Lic. No. 24591  
 S.A.P. 049-643-0177, S.A.P. 049-638-0141, S.P. 048-591-005

FILE NO. 72  
 MORIC 16089

DATE: \_\_\_\_\_  
 NO. BY: \_\_\_\_\_  
 DESIGN TEAM: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 DESIGNED BY: \_\_\_\_\_



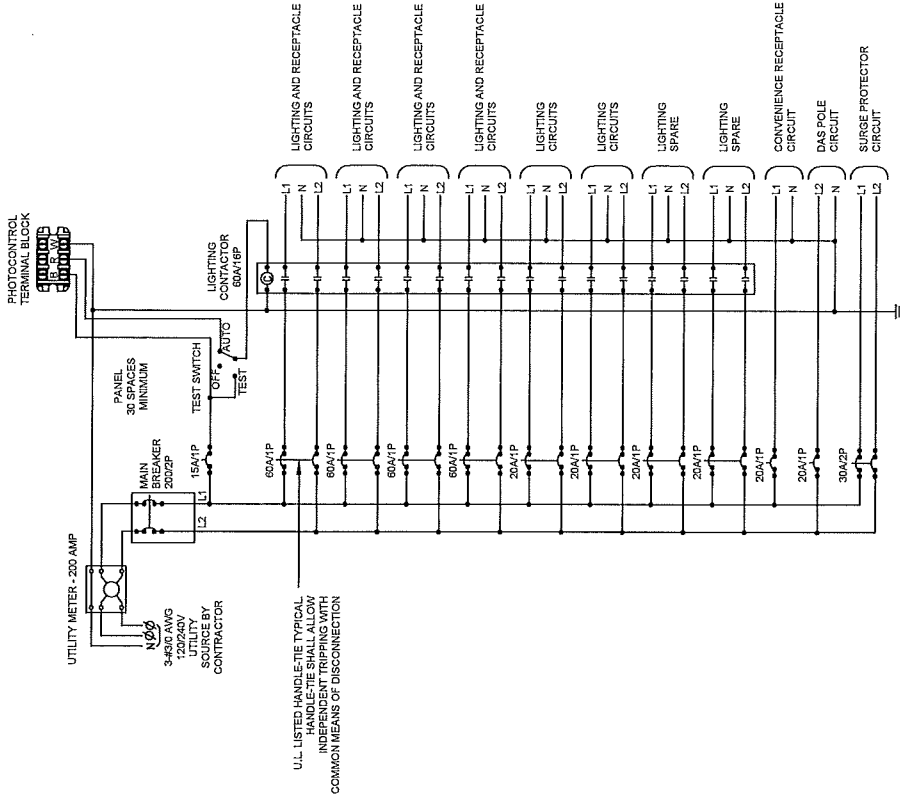
**LEGEND**

- EXISTING LIGHTING UNIT
- INSTALL LIGHTING UNIT
- UNDERGROUND WIRING IN CONDUIT
- EXISTING CIRCUIT IN CONDUIT
- PAD MOUNTED SERVICE CABINET
- GROUND ROD
- CONDUIT STUB
- LIGHTING UNIT NUMBER
- HANDHOLE
- PAD MOUNTED TRANSFORMER
- S.O.P. SOURCE OF POWER

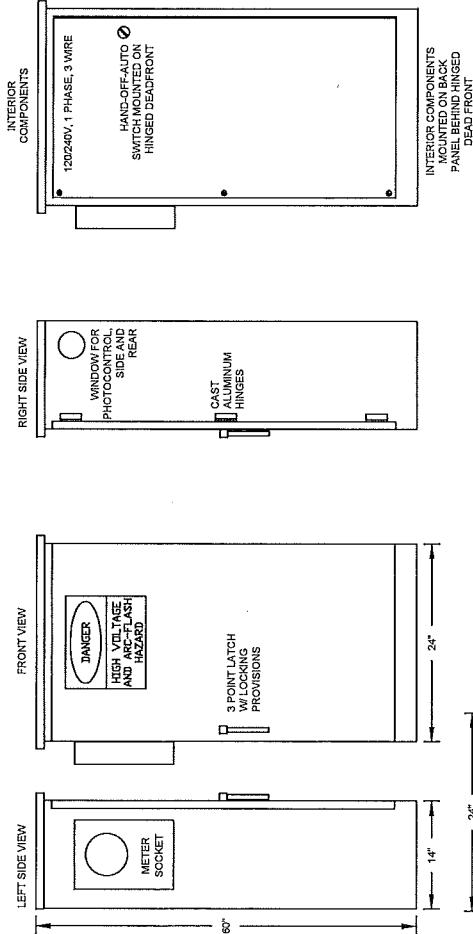
- NOTES:**
- ALL CONDUIT SHALL BE 2" NMC SCHEDULE 40 UNLESS OTHERWISE NOTED.
  - PROVIDE 2" CAPPED CONDUIT STUBS AS INDICATED.
  - LIGHTING AND ELECTRICAL EQUIPMENT SHALL BE STAGED AND VERIFIED PRIOR TO EXCAVATION AND POURING CONCRETE FOUNDATIONS.
  - ALL CONDUCTORS SHALL BE COPPER, TYPE XHHW-2, (3) #4 & (1) #6 GND UNLESS OTHERWISE NOTED.
  - COORDINATE SERVICE CONNECTION WITH MIN POWER REPRESENTATIVE, DEAN WITT AT 320-360-1569.

SERVICE CABINET "B" 120/240V			
UNIT NO.	STATION	ALIGNMENT	TYPE
B/51	27+31	3RD AVE NW/CSAH 39	SPECIAL
B/52	29+15	3RD AVE NW/CSAH 39	SPECIAL
B/53	31+09	3RD AVE NW/CSAH 39	SPECIAL
B/54	33+02	3RD AVE NW/CSAH 39	SPECIAL
B/55	34+66	3RD AVE NW/CSAH 39	SPECIAL
B/56	36+68	3RD AVE NW/CSAH 39	SPECIAL
B/57	38+72	3RD AVE NW/CSAH 39	SPECIAL
B/58	40+76	3RD AVE NW/CSAH 39	SPECIAL

DRAWN BY: <input type="checkbox"/> ASJ DESIGNER: <input type="checkbox"/> JPC CHECKED BY: <input type="checkbox"/> JPC DESIGN TEAM:	NO. BY DATE REVISIONS	 PHONE: 651-462-2000 3300 MILWAUKEE CENTER DRIVE MINNETONKA, MN 55345 WWW.SEH.COM	LICENSED PROFESSIONAL ENGINEER SUPERVISION AND SEALING AUTHORITY THE STATE OF MINNESOTA JOHN P. CARLSON, P.E. L.E. NO. Z8051 Date: 01/07/2021	MORRISON COUNTY, MINNESOTA 2021 CSAH 43 & 39 RECONSTRUCTION AND SRTS	FILE NO. MORRIS 16429	73
					LIGHTING PLAN PROPOSED 2021 CSAH 43 & 39 RECONSTRUCTION AND SRTS	97



SERVICE CABINET SCHEMATIC



SERVICE CABINET NOTES:

- PROVIDE METER SOCKET PER UTILITY COMPANY REQUIREMENTS.
- CIRCUIT BREAKERS SHALL BE 120/240 VOLT AC, 60 Hz AND SHALL BE CLEARLY MARKED WITH THE "ON" AND "OFF" POSITIONS AND IDENTIFIED WITH THE LOAD WHICH IT IS CARRYING.
- SHORT CIRCUIT RATING - 22,000 AIC SYMMETRICAL
- 3-POSITION SELECTOR SWITCH ALLEN BRADLEY #800T-J2A.
- CIRCUIT CONTACTORS SHALL HAVE A 240 VOLT RATING, WITH 120 VOLT COIL.
- PROVIDE 50KA SURGE PROTECTOR.
- PROVIDE PANEL WITH DIMENSIONS AS REQUIRED TO FIT EQUIPMENT PROPOSED.
- PROVIDE 20A WR-RATED GFCI RECEPTACLE MOUNTED TO CABINET DEAD-FRONT.
- BOTH PHOTOCONTROL AND ITS SOCKET SHALL BE 3 TERMINAL, POLARIZED, TWIST-LOCK TYPE. IT SHALL BE EQUIPPED WITH A MOV TYPE LIGHTNING ARRESTER.
- CABINET SHALL BE MANUFACTURED BY POVOLNY SPECIALTIES INC. 651.452.7359.
- COORDINATE SERVICE CONNECTION WITH MN POWER DESIGNER DEAN WITT AT 320.380.1583.

- CABINET CONSTRUCTION SHALL BE 18" ANODIZED ALUMINUM (DURANODIC BLACK)
- NEOPRENE GASKETED DOORS - STAINLESS
- ETL LISTED IN ACCORDANCE WITH UL508A

SERVICE CABINET DETAILS

DRAWN BY:	ASF	NO.	DATE
DESIGNER:	ASF	NO.	DATE
CHECKED BY:	JPC	NO.	DATE
DESIGN TEAM:		NO.	DATE

SEH  
 PHONE 651.452.7359  
 27. FALL, MN 55125.5197  
 www.sehinc.com

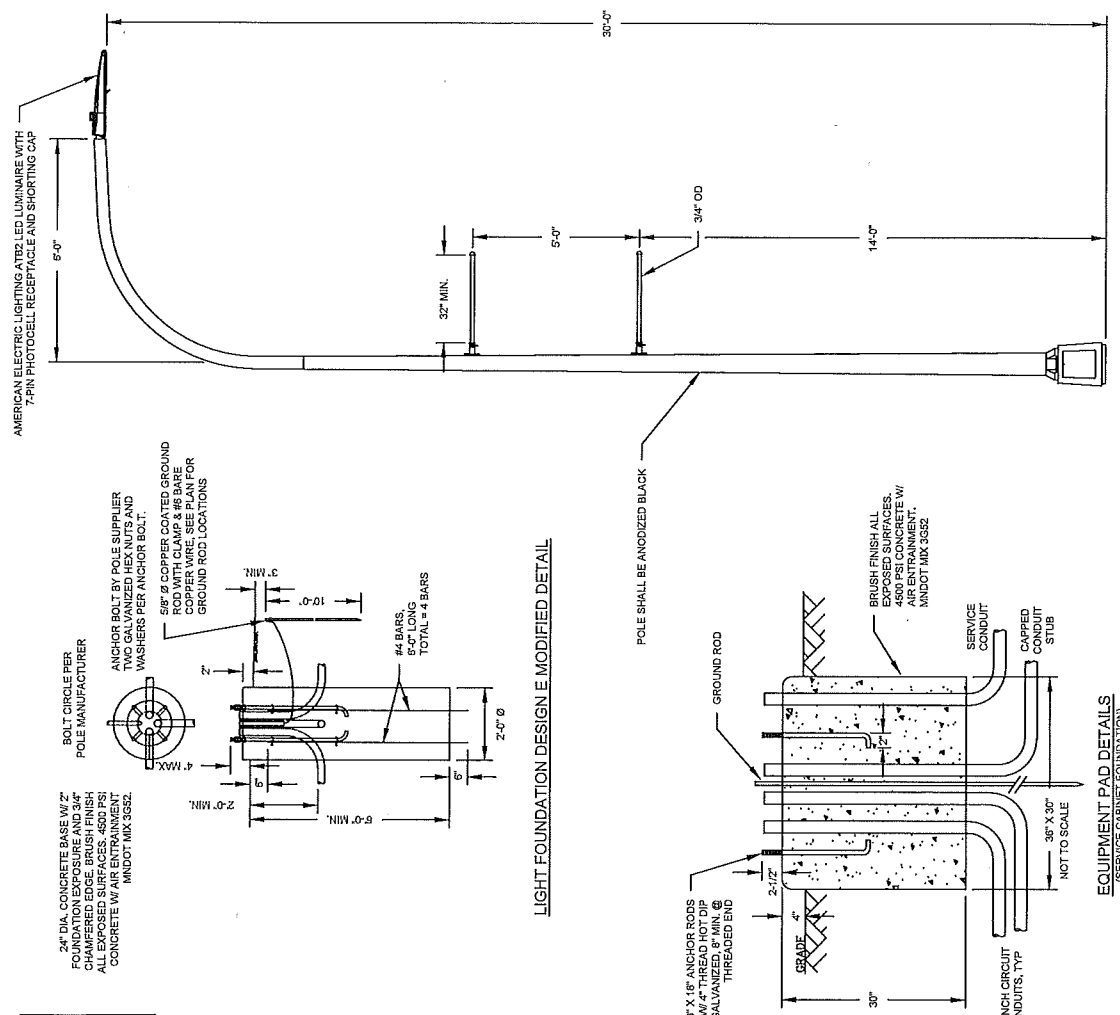
MORRISON COUNTY,  
 MINNESOTA  
 SAP 048-543-077; SAP 048-530-044;  
 SP 048-591-005

LIGHTING PLAN  
 DETAILS  
 2021 CSAH 43 & 39 RECONSTRUCTION  
 AND SRKTS

FILE NO.  
 MORRIS 1008P

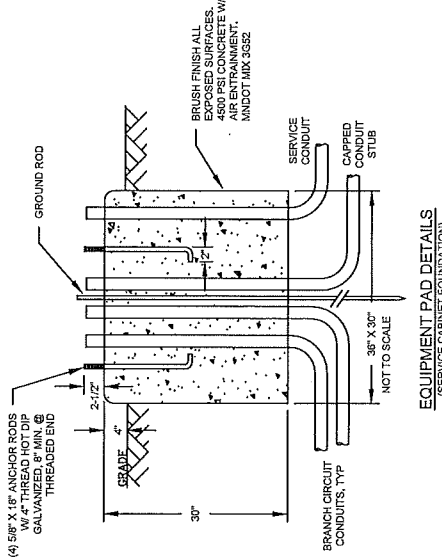
74  
 97

EQUIPMENT SCHEDULE		
SYMBOL	DESCRIPTION	LAMP SOURCE MOUNTING OPTICS MANUFACTURER & SERIES #
	LIGHTING UNIT TYPE: BROWALL LED COB HEAD STYLE LUMINAIRE ON ROUND TAPERED ALUMINUM POLE WITH TRANSFORMER BASE, DAVIT ARM, BANNER ARMS, AND BLACK ANODIZED FINISH	180 WATT 40 LED 3000K HAFPO - LUMINAIRE: ATR9-48BLEDE/CH/VOLT-FR3-KB-K-AC-PT-SH POLE: RTA3008BFD16-A5X

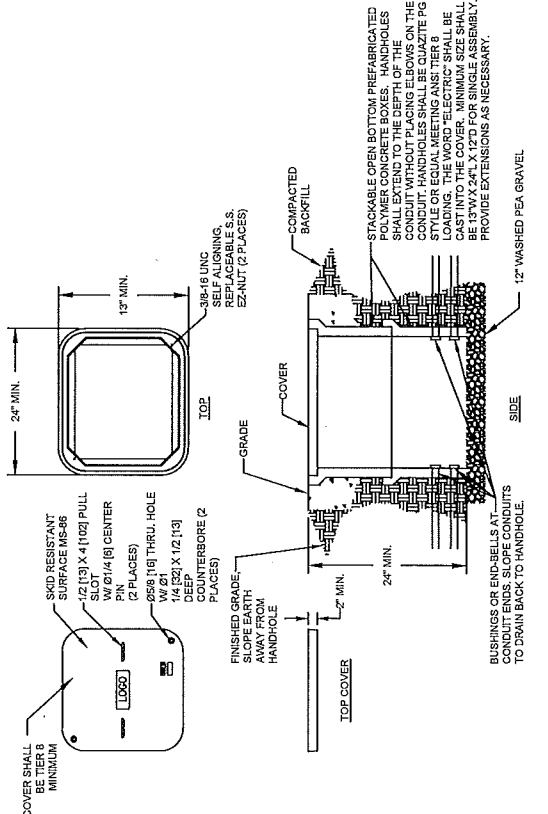


**LIGHT FOUNDATION DESIGN E MODIFIED DETAIL**

**LIGHTING UNIT TYPE SPECIAL DETAIL**



**EQUIPMENT PAD DETAILS (SERVICE CABINET FOUNDATION)**



**HANDHOLE DETAILS**

FILE NO: MORRIS 193409	75	75
PROJECT NAME: 2021 CSAH 43 & 39 RECONSTRUCTION AND SRKTS	75	75
PROJECT LOCATION: MORRISON COUNTY, MINNESOTA SAP 049-633-017; SAP 049-633-014; SP 048-591-005	75	75
DATE: 01/27/2021	75	75
DESIGNER: JOHN F. CARLSON, P.E.	75	75
DRAWN BY: JPC	75	75
CHECKED BY: JPC	75	75
DESIGN TEAM:	75	75
NO.	BY	DATE
REVISIONS:		

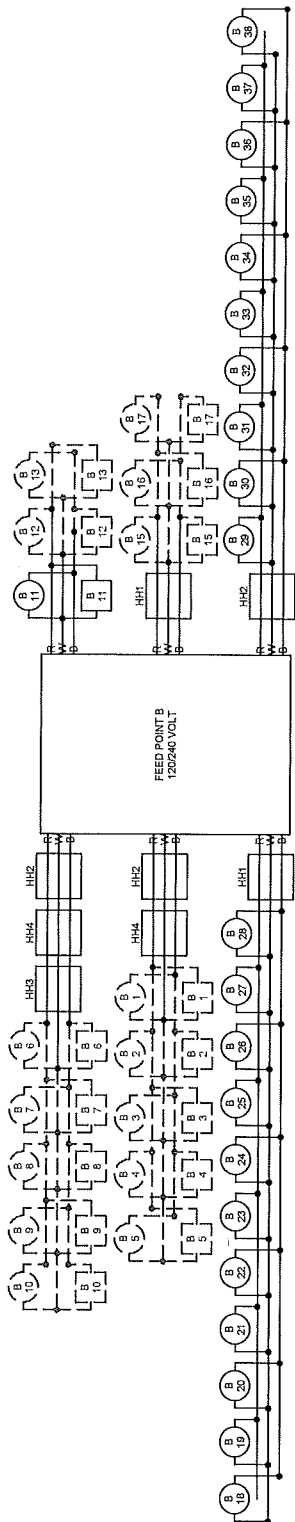


PHONE: 951-492-2000  
27. FALL, MN 55114-1100  
www.sehinc.com

STATE OF MINNESOTA  
REGISTERED PROFESSIONAL ENGINEER  
JOHN F. CARLSON, P.E.  
LIC. NO. 24651

LICENSEE CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY CLOSE SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE PROVISIONS OF THE ENGINEERING ACT OF 1907.  
DATE: 01/27/2021

75



B AND R DENOTE CURRENT CARRYING CONDUCTORS  
 HH DENOTES HANDHOLE  
 HH DENOTES HANDHOLE  
 GROUND NOT SHOWN  
 DASHED/SHADED LINES DENOTE EXISTING CIRCUITRY/EQUIPMENT

X FESTOON RECEPTACLE  
 XX LUMINAIRE

DESIGNED BY: ASH  
 CHECKED BY: APC  
 DESIGN TEAM

NO.	BY	DATE	REVISIONS

SEH  
 10000 10000 10000  
 10000 10000 10000  
 10000 10000 10000

THESE PLANS WERE PREPARED BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND THAT I AM A duly LICENSED PROFESSIONAL ENGINEER UNDER THE STATE OF MINNESOTA.  
 JOHN P. CARLSON, P.E.  
 License No. 24001  
 Date: 01/22/2021

MORRISON COUNTY,  
 MINNESOTA  
 SAP 048-643-0177; SAP 048-639-014;  
 SP 048-891-005

LIGHTING PLAN  
 DETAILS  
 2021 CSAH 43 & 39 RECONSTRUCTION  
 AND SR15