



MANITOWOC PUBLIC UTILITIES

1303 South 8th Street P.O. Box 1090 Manitowoc, WI 54221-1090 920-683-4600 FAX 920-686-4348 www.mpu.org

December 1, 2020

Deborah Neuser
Manitowoc City Hall
900 Quay Street
Manitowoc, WI 54220

**RE: RESOLUTION FOR STREET LIGHTING
WALDO BLVD RECONSTRUCTION – MEMORIAL DRIVE TO FLEETWOOD DRIVE**

Dear Ms. Neuser,

Waldo Boulevard was reconstructed between Memorial Drive and Fleetwood Drive, requiring modification to the street lighting system. Enclosed is a resolution with map to order the replacement of 184 each, ornamental, High Pressure Sodium (HPS) street light fixtures on 104 poles with 91 each, ornamental LED street light fixtures on 60 poles. MPU seeks Common Council approval for the installation per Municipal Code 12.150.

Fiscal Impact

HPS Removals

104 Poles and 184 Fixtures
\$31,692 annual cost, including \$6,630 energy

LED Installations

60 poles and 91 fixtures
\$26,341 annual cost, including \$2,821 energy

This fiscal impact is based on a 50% capital cost contribution by the Wisconsin Department of Transportation, provided by a municipal agreement, for street lighting in the Waldo Boulevard reconstruction project scope. MPU will compensate Manitowoc for its share of the street lighting project cost, resulting in the utility rate which also serves as a basis for this fiscal impact.

Would you please return a copy of the resolution pending Common Council review/approval?

Please contact me at (920) 686-4310 with any questions.

Sincerely,

Steve Bacalzo, P.E.
Distribution Operations Manager

Enclosures

RESOLUTION

WHEREAS, a section of Waldo Boulevard between Memorial Drive and Fleetwood Drive is being reconstructed within the scope of a municipal agreement between the Wisconsin Department of Transportation and the City of Manitowoc, and

WHEREAS, the Manitowoc Public Utilities redesigned the street lighting system in the reconstructed segment of roadway to satisfy ANSI RP-8 American National Standard Practice for Roadway Lighting with the fewest number of LED street light fixtures, and

WHEREAS, the Manitowoc Public Utilities design recommended replacement of 184 High Pressure Sodium (HPS) fixtures on 104 poles with 91 LED fixtures on 60 poles within the project scope, and

WHEREAS, the Manitowoc Public Utilities proposes to reimburse the city for its share of the installation cost of the LED street lighting, estimated at \$280,000; recovering this cost through utility rates approved by the Public Service Commission of Wisconsin, and

WHEREAS, the Manitowoc Public Utilities estimates the annual street lighting expense charged to the City for this section of roadway will decrease from \$31,700 to \$26,300 (17%), including \$3,800 in reduced energy cost (57%), including additional lighting fixtures required to illuminate a new roundabout installed by the project, and

WHEREAS, Municipal Code 12.150(2)(b) provides that the Common Council may, by resolution, without petition, provide for the installation of an ornamental lighting system, and

WHEREAS, Municipal Code 12.150(2)(c) provides that the installation cost may be paid by the City at its discretion, and

WHEREAS, Municipal Code 12.150(2)(d) provides that the operation and maintenance expenses of the ornamental street lighting system are to be paid from the City's general fund to the Manitowoc Public Utilities according to rates approved and on file with the Public Service Commission of Wisconsin, and

NOW THEREFORE BE IT RESOLVED BY THE MAYOR AND COMMON COUNCIL OF THE CITY OF MANITOWOC, that Manitowoc Public Utilities is ordered to replace 184 High Pressure Sodium (HPS) fixtures on 104 poles with 91 LED fixtures on 60 poles within the Waldo Boulevard reconstruction project scope.

Introduced DEC 21 2020 _____

Adopted _____ _____

Approved _____

Justin M. Nickels, Mayor

Fiscal Impact: HPS Removals - \$31,692 annual cost, including \$6,630 energy; LED Installations - \$26,341 annual cost, including \$2,821 energy

Funding Source: 1100-32500-522200

Finance Director Approval: SMA

Approved as to Form: EMM

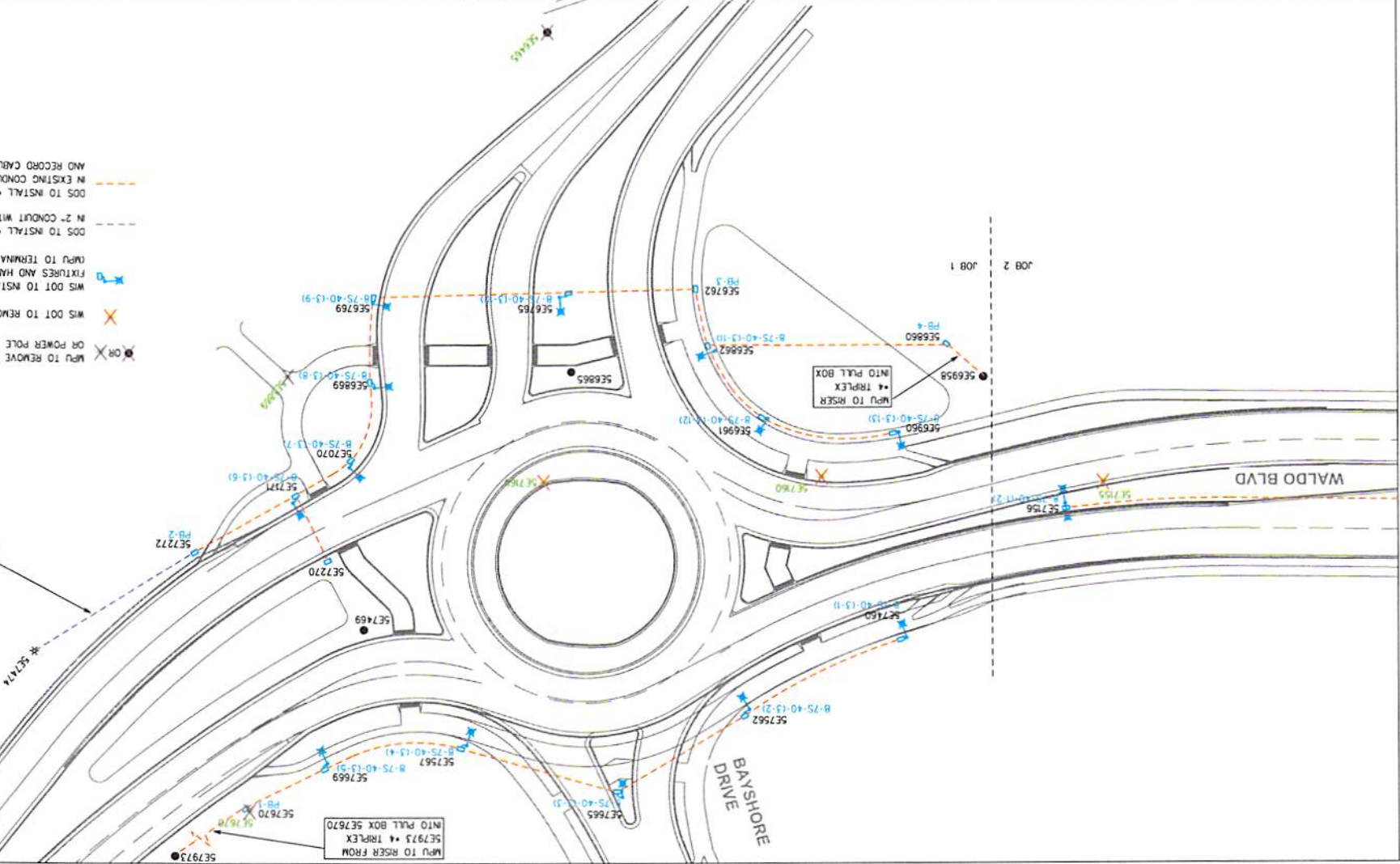
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				WALDO LIGHTING REPLACEMENT
				JOB 1 / JOB 2
				MANITOWOC PUBLIC UTILITIES
				MANITOWOC, WISCONSIN
				MPU
				DATE: 9-14-2018
				DRAWN: RAO
				CHKD: SB
				SCALE: 1"=50'
				DEPT: ED
				TYPE: WORK ORDER
				SHEET NUMBER: WO 6353
				SHEET 1



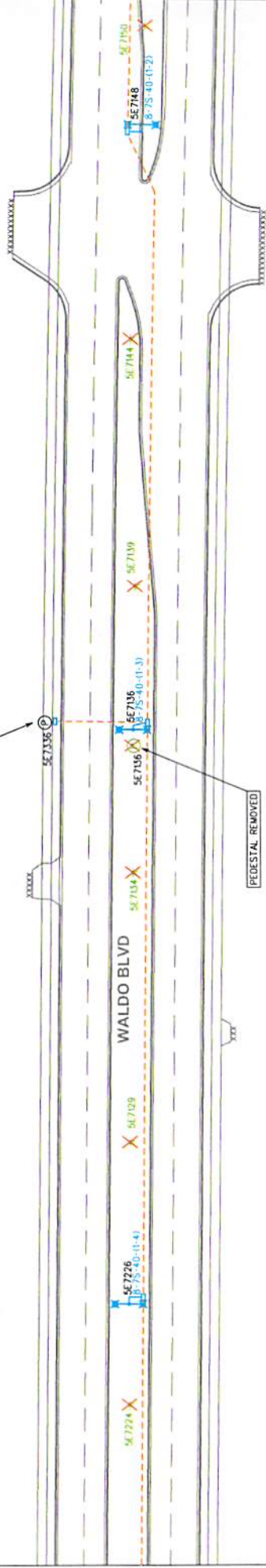
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- MPU TO REMOVE EXISTING LIGHTING OR POWER POLE
- WIS DOT TO REMOVE EXISTING LIGHTING
- WIS DOT TO INSTALL NEW LIGHTING POLES, FIXTURES AND HAND HOLES
- MPU TO TERMINATE AT ALL PULL BOXES
- N-2 CONDUIT WITH LOCATE WIRE
- DOS TO INSTALL 4x3 2C (MM) CABLE
- DOS TO INSTALL 4x TRIPLEX WITH LOCATE WIRE
- N EXISTING CONDUIT BETWEEN ALL PULL BOXES AND RECORD CABLE FOOTAGE FOR EACH SEGMENT

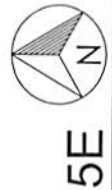
SUPPLY EXISTING LIGHT 5E7474 FROM HAND HOLE 5E7272



TRIPLEX AND LOCATE WIRE
 INSTALLED INTO EXISTING
 PED 5E7336 POSSIBLY
 ELIMINATING PULL BOX
 -AT FIELD DISCRETION



- X WIS DOT TO REMOVE EXISTING LIGHTING
- X-to WIS DOT TO INSTALL NEW LIGHTING POLES, FIXTURES AND PULL BOXES
 (MPU TO TERMINATE AT ALL PULL BOXES)
- - - - - DSS TO INSTALL 4" TRIPLEX WITH LOCATE WIRE IN EXISTING CONDUIT BETWEEN ALL PULL BOXES AND RECORD CABLE FOOTAGE FOR EACH SEGMENT
- MPU TO ALTERNATE 120V LEGS AT EACH STANDARD



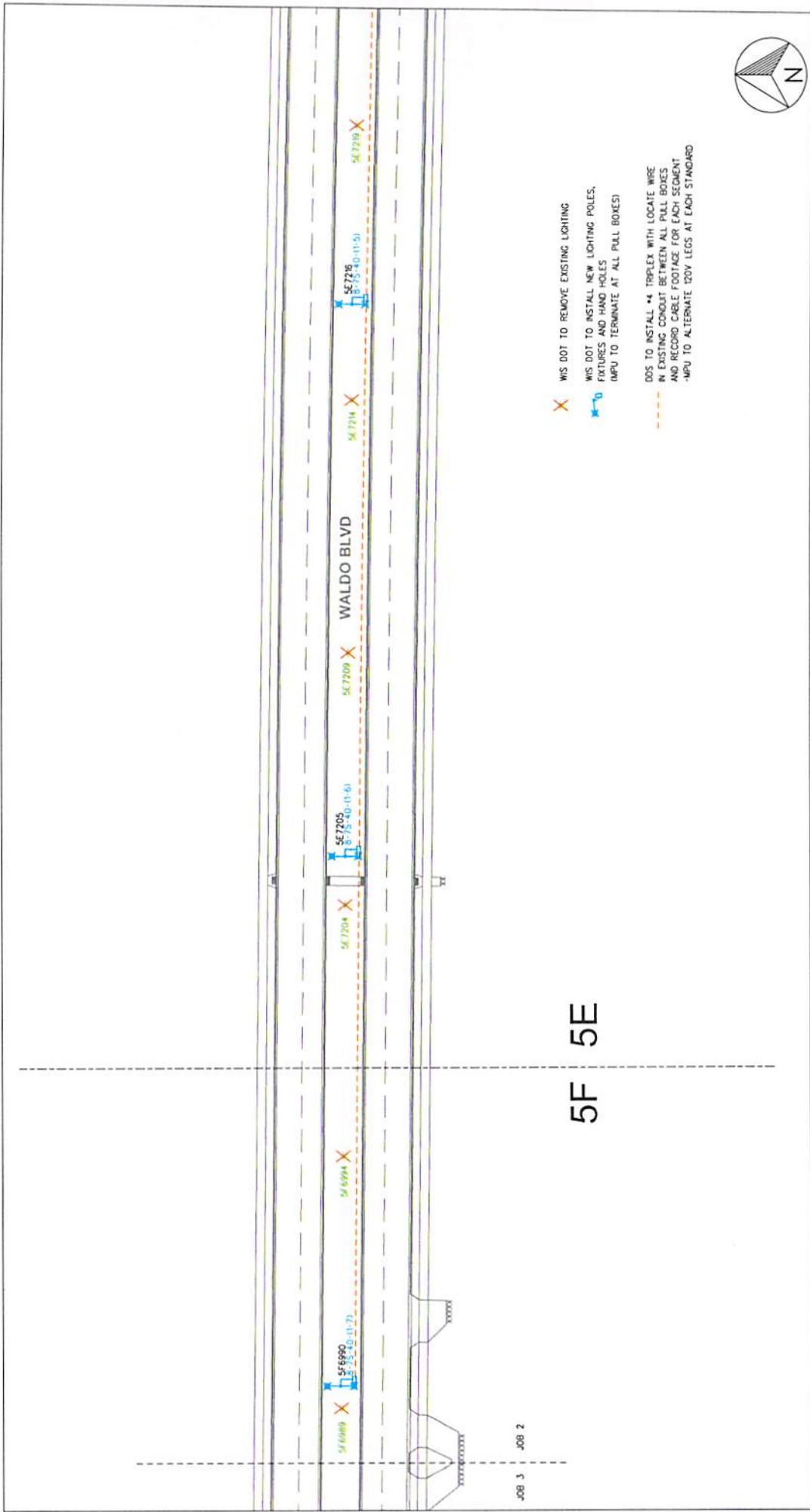
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TITLE:	WALDO LIGHTING REPLACEMENT JOB 2
BY:	
DESCRIPTION:	
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DATE:	



MANITOWOC PUBLIC UTILITIES
 MANITOWOC, WISCONSIN

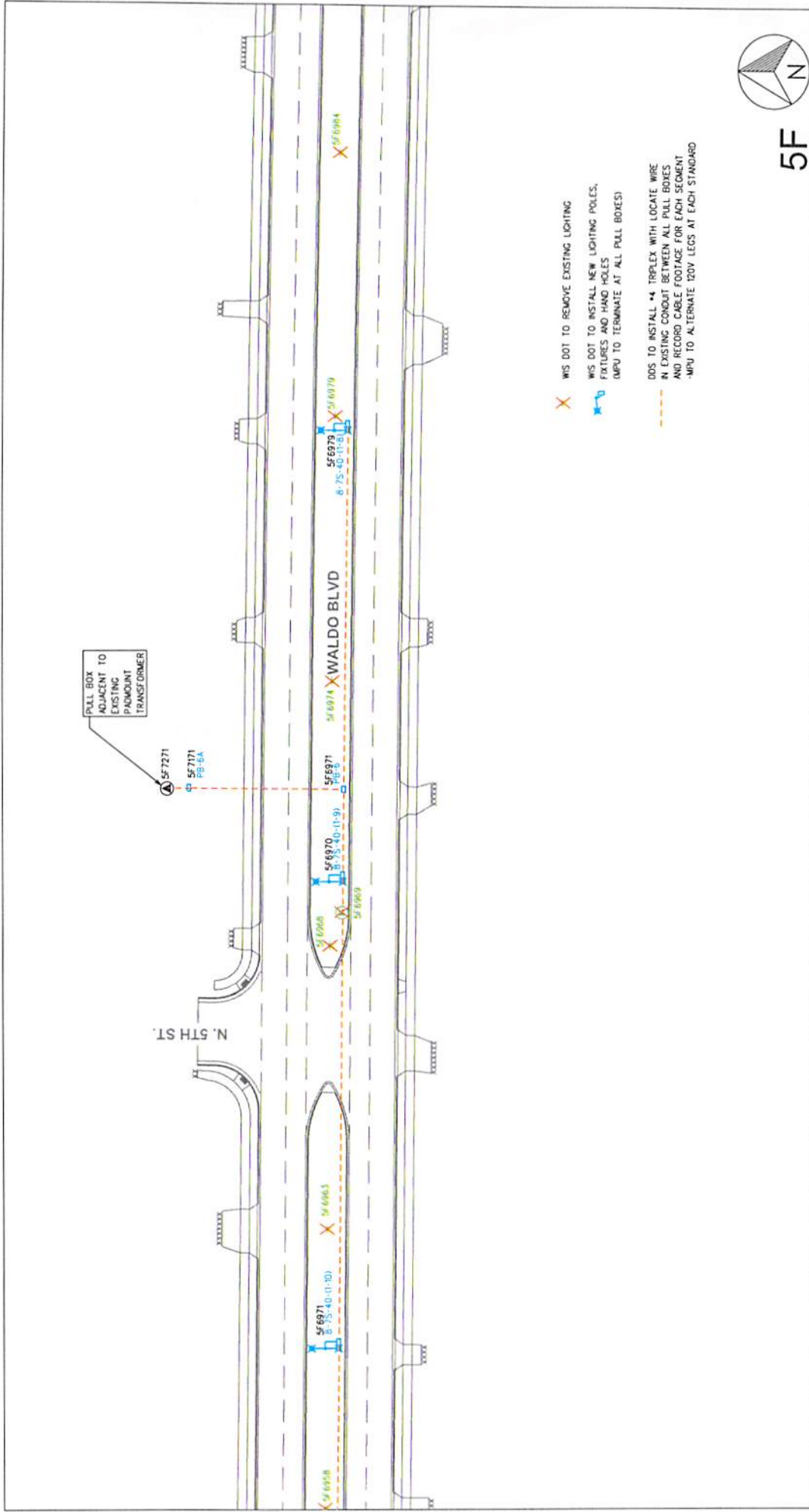


- X WIS DOT TO REMOVE EXISTING LIGHTING
- X WIS DOT TO INSTALL NEW LIGHTING POLES, FIXTURES AND HAND HOLES (MPU TO TERMINATE AT ALL PULL BOXES)
- DOGS TO INSTALL #4 TRIPLEX WITH LOCATE WIRE IN EXISTING CONDUIT BETWEEN ALL PULL BOXES AND RECORD CABLE FOOTAGE FOR EACH SEGMENT (MPU TO ALTERNATE 120V LEGS AT EACH STANDARD)




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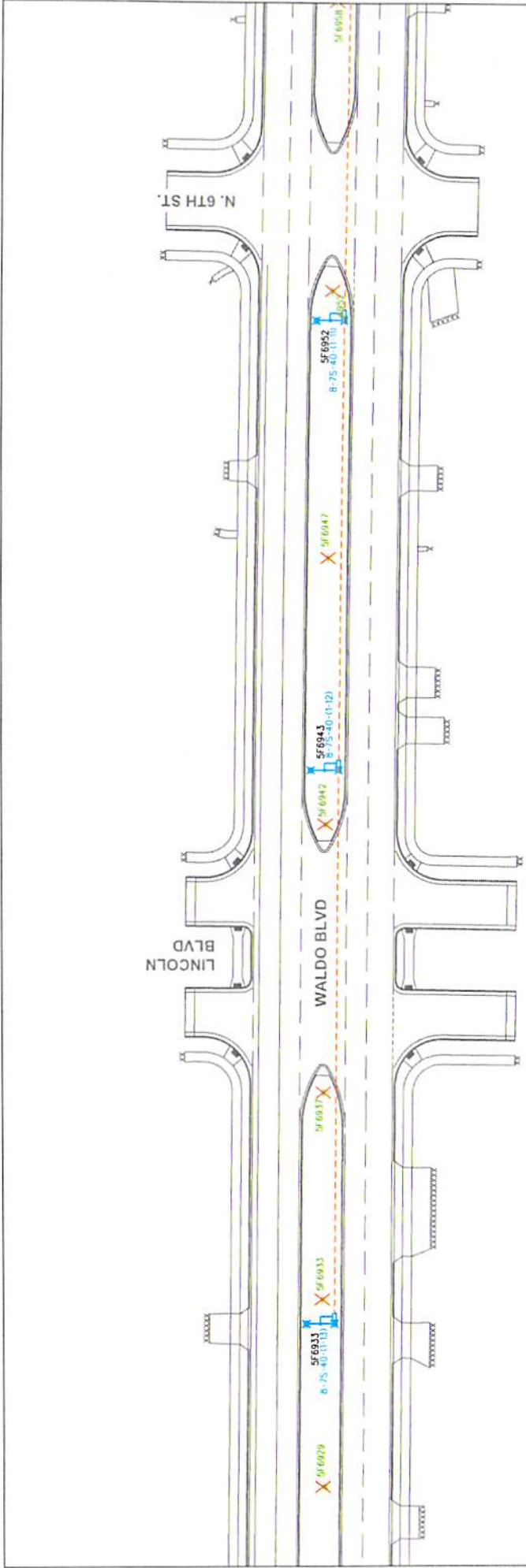




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TITLE: WALDO LIGHTING REPLACEMENT JOB 3	
 MANITOWOC PUBLIC UTILITIES <small>MANITOWOC, WISCONSIN</small>	

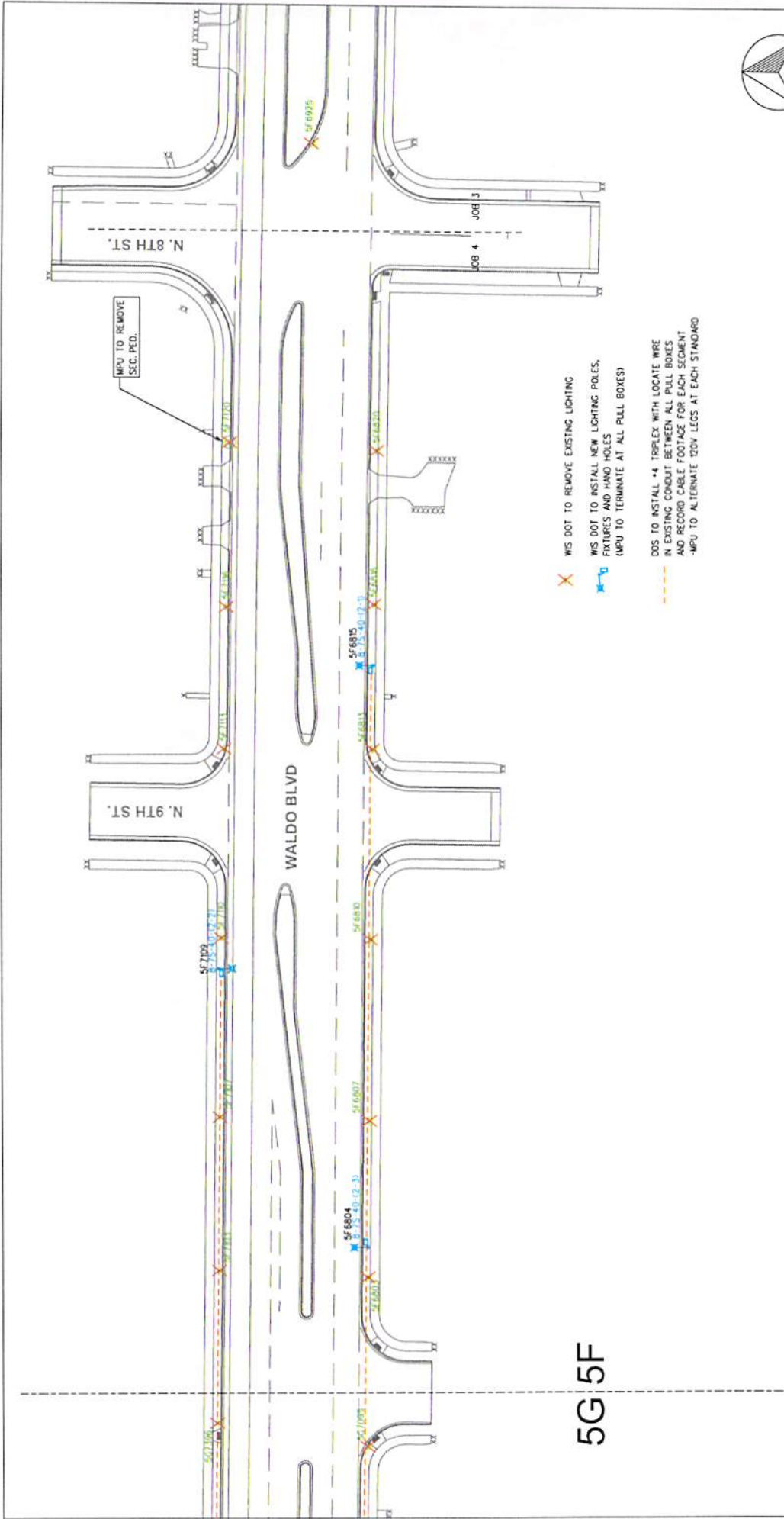


- X WIS DOT TO REMOVE EXISTING LIGHTING
- WIS DOT TO INSTALL NEW LIGHTING POLES, FIXTURES AND HAND HOLES (MPU TO TERMINATE AT ALL PULL BOXES)
- DOGS TO INSTALL #4 TERPEX WITH LOCATE WIRE IN EXISTING CONDUIT BETWEEN ALL PULL BOXES AND RECORD CABLE FOOTAGE FOR EACH SEGMENT (MPU TO ALTERNATE 120V LEGS AT EACH STANDARD)



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					SCALE: 1"=50'	
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					SHEET NUMBER:	
					WO 6353	
						SHEET 5





- X MS DOT TO REMOVE EXISTING LIGHTING
- MS DOT TO INSTALL NEW LIGHTING POLES, FIXTURES AND HAND HOLES (MPU TO TERMINATE AT ALL PULL BOXES)
- DGS TO INSTALL -4- TIRREX WITH LOCATE WIRE IN EXISTING CONDUIT BETWEEN ALL PULL BOXES AND RECORD CABLE FOOTAGE FOR EACH SEGMENT -MPU TO ALTERNATE 120V LEGS AT EACH STANDARD

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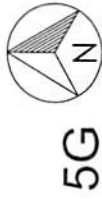
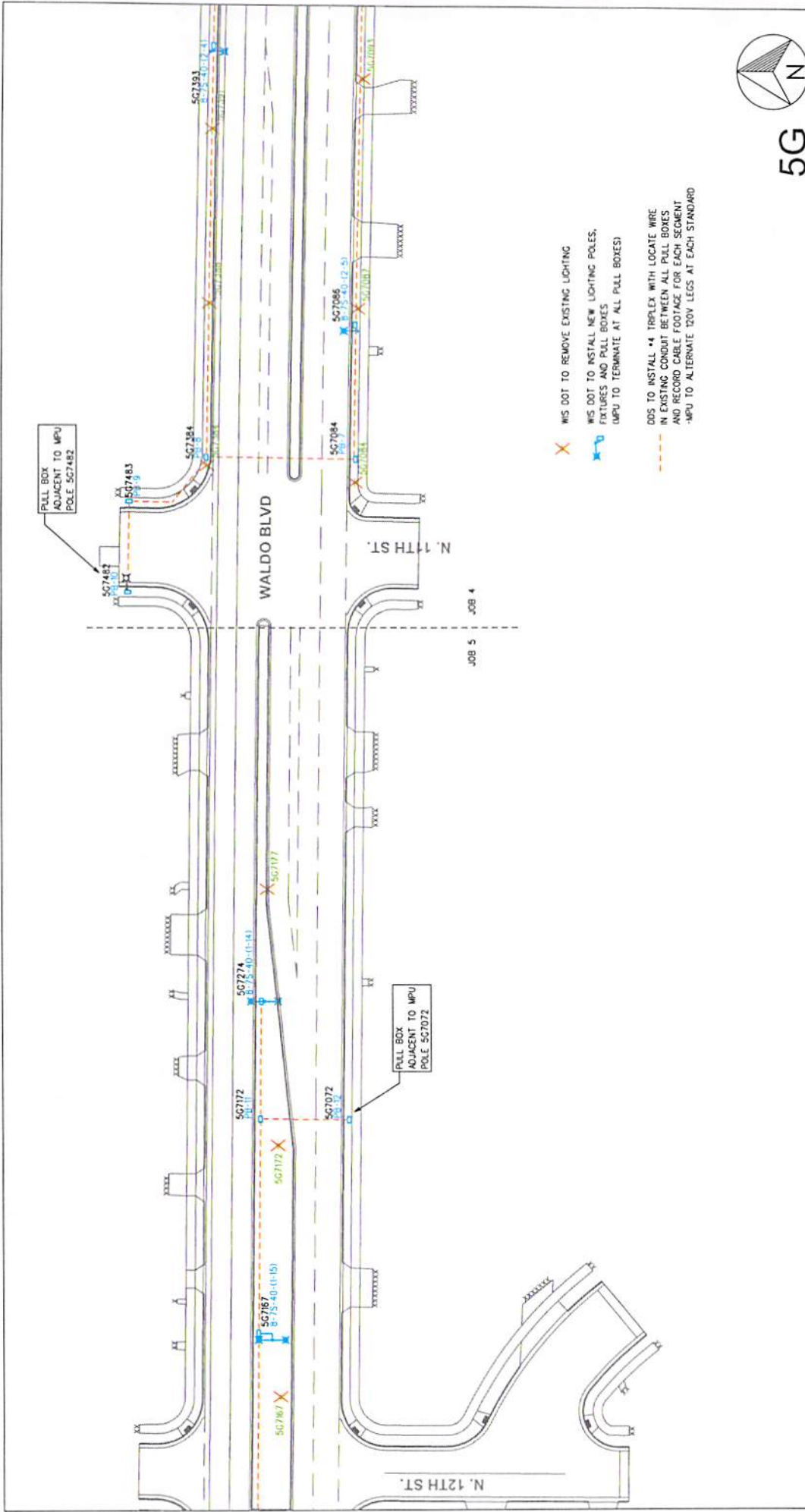
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TITLE:
WALDO LIGHTING REPLACEMENT
JOB 3 \ JOB 4



MANITOWOC PUBLIC UTILITIES
 MANITOWOC, WISCONSIN

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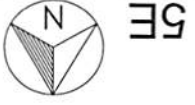
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SHEET NUMBER:	WO 6353

TITLE:
WALDO LIGHTING REPLACEMENT
JOB 4 \ JOB 5

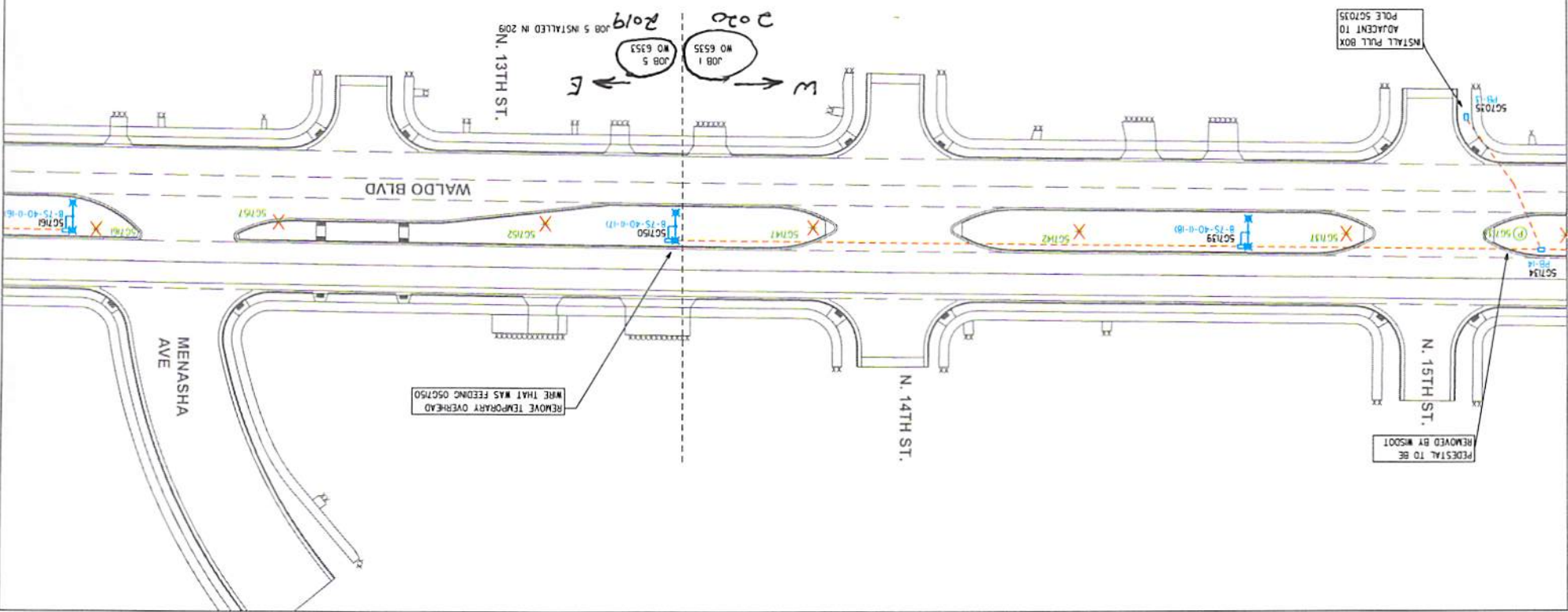
MANITOWOC PUBLIC UTILITIES
 MANITOWOC, WISCONSIN

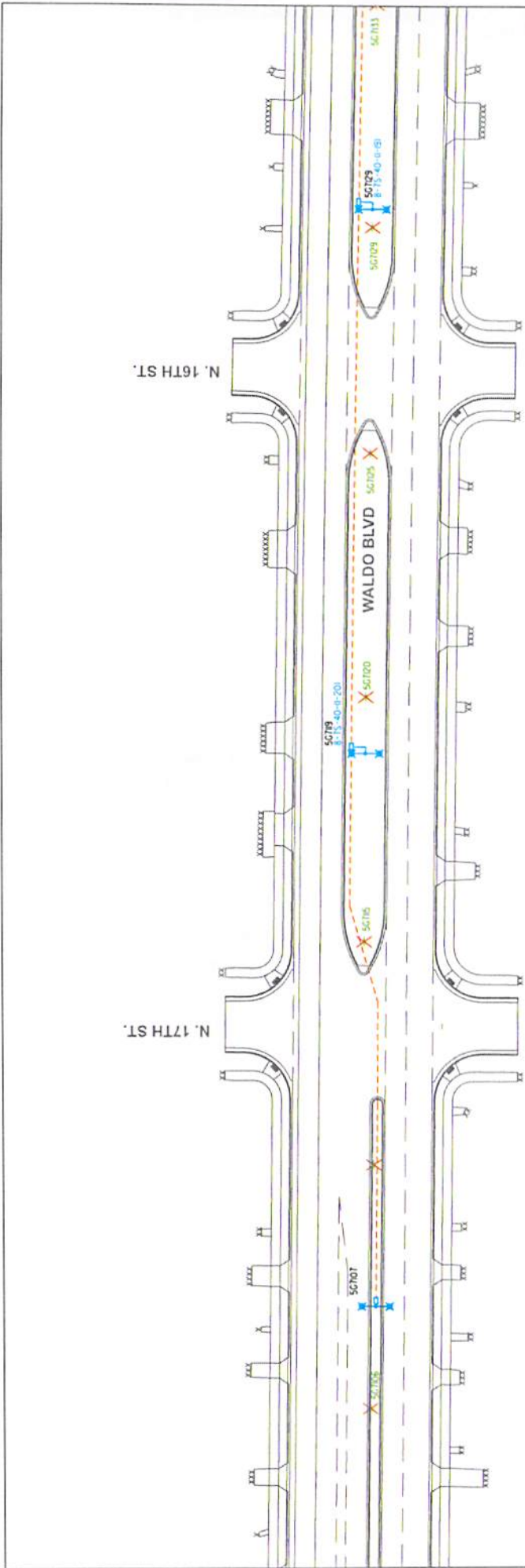
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				JOB 1		TYPE: WORK ORDER	
				WALDO LIGHTING REPLACEMENT		DEPT: ED	
						SCALE: 1"=50'	
						CHK'D: SB	
						DRAWN: RAO	
						DATE: 5-31-2019	



- X MIS DOT TO REMOVE EXISTING LIGHTING
- W MIS DOT TO INSTALL NEW LIGHTING POLES, FIXTURES AND PULL BOXES (MPU TO TERMINATE AT ALL PULL BOXES)
- IN EXISTING CONDUIT BETWEEN ALL PULL BOXES AND RECORD CABLE FOOTAGE FOR EACH SEGMENT
- MPU TO ALTERNATE 20V LEGS AT EACH STANDARO



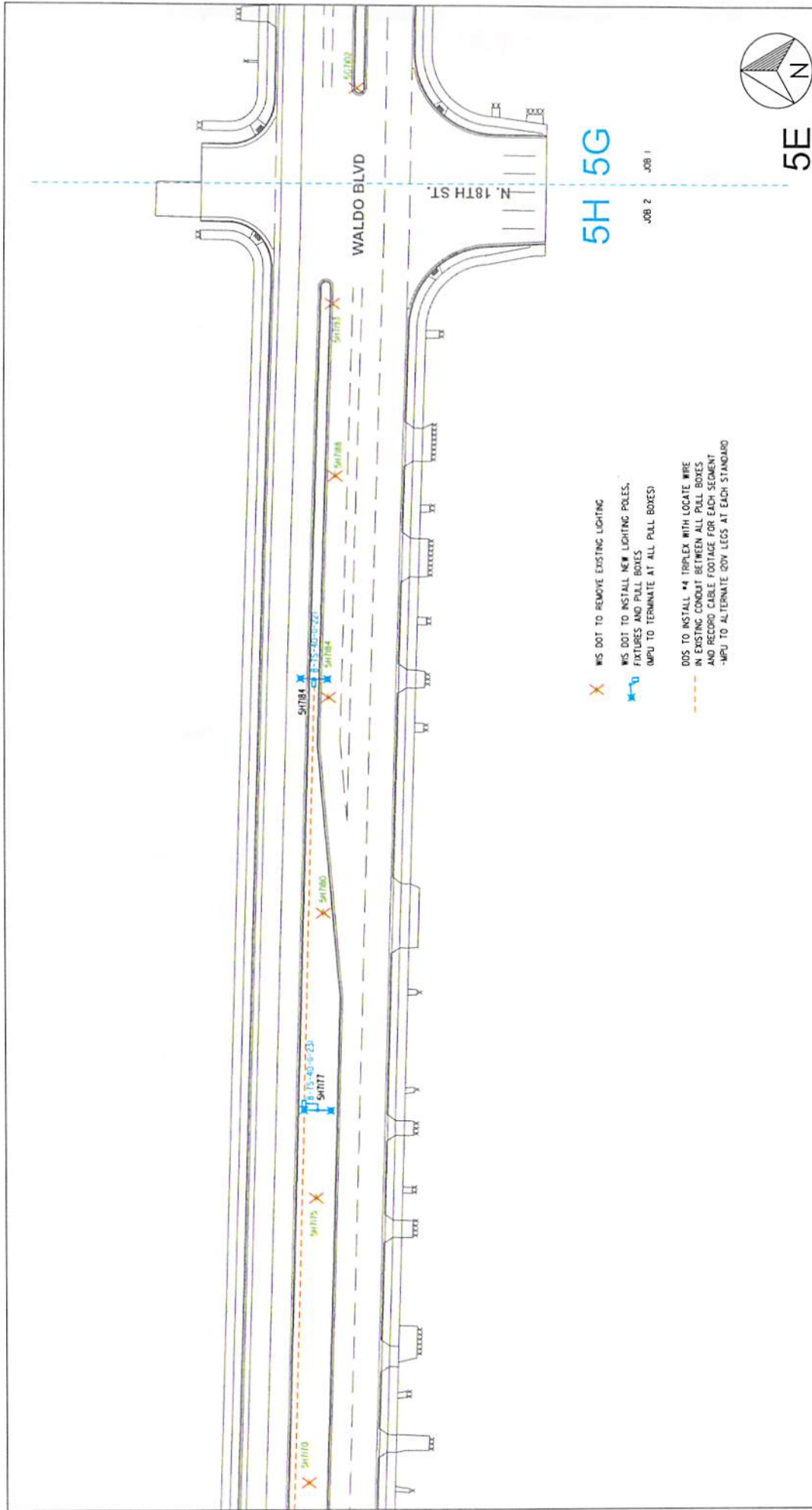


-  X NIS DOT TO REMOVE EXISTING LIGHTING
-  X NIS DOT TO INSTALL NEW LIGHTING POLES, FIXTURES AND PULL BOXES
MPU TO TERMINATE AT ALL PULL BOXES
-  --- DDS TO INSTALL #4 TRIPLEX WITH LOCATE WIRE IN EXISTING CONDUIT BETWEEN ALL PULL BOXES AND RECORD FOOTAGE FOR EACH SEGMENT
-MPU TO ALTERNATE 20V LEGS AT EACH STANDARD



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				WALDO LIGHTING REPLACEMENT	5-31-2019
				JOB 1	
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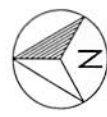


- X WS DOT TO REMOVE EXISTING LIGHTING
- X WS DOT TO INSTALL NEW LIGHTING POLES, FIXTURES AND PULL BOXES
- (MPU TO TERMINATE AT ALL PULL BOXES)
- DOTS TO INSTALL #4 TRIPLEX WITH LOCATE WIRE IN EXISTING CONDUIT BETWEEN ALL PULL BOXES AND RECORD CABLE FOOTAGE FOR EACH SEGMENT
- MPU TO ALTERNATE 20V LEGS AT EACH STANDARD

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JOB 2

JOB 1

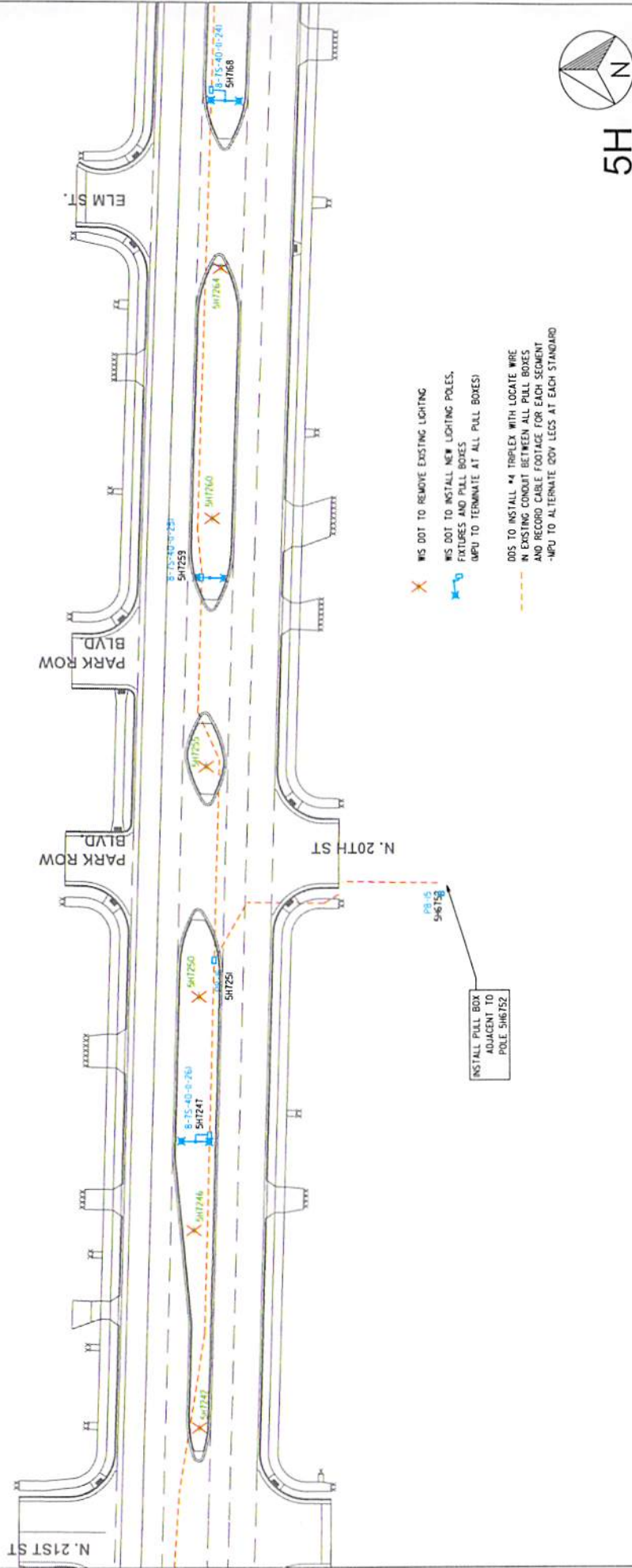


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MANITOWOC PUBLIC UTILITIES
MANITOWOC, WISCONSIN



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				JOB 7	
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					SHEET 4

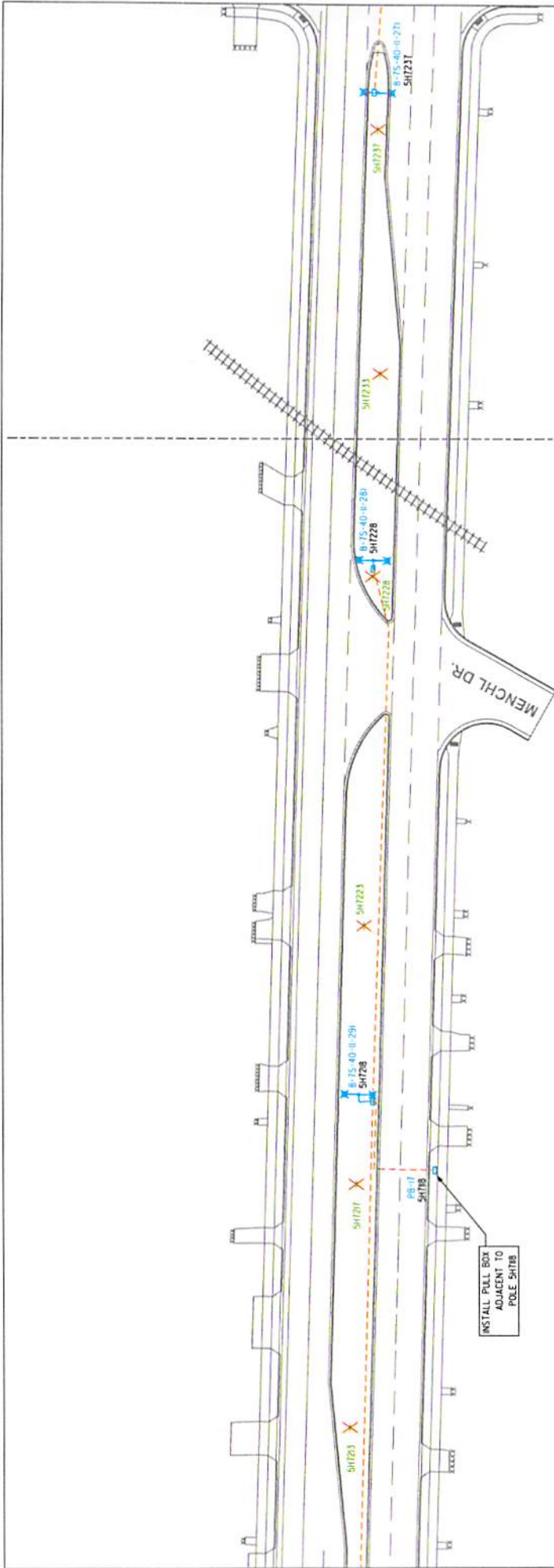
X WIS DOT TO REMOVE EXISTING LIGHTING
 WIS DOT TO INSTALL NEW LIGHTING POLES, FIXTURES AND PULL BOXES (MPU TO TERMINATE AT ALL PULL BOXES)
 OOS TO INSTALL #4 TRIPLEX WITH LOCATE WIRE IN EXISTING CONDUIT BETWEEN ALL PULL BOXES AND RECORD CABLE FOOTAGE FOR EACH SEGMENT
 -MPU TO ALTERNATE 200V LEADS AT EACH STANDARD



MANITOWOC PUBLIC UTILITIES
 MANITOWOC, WISCONSIN

5H





- X WS DOT TO REMOVE EXISTING LIGHTING
- WS DOT TO INSTALL NEW LIGHTING POLES, FIXTURES AND PULL BOXES
MPU TO TERMINATE AT ALL PULL BOXES!
- DOES TO INSTALL #4 TRIPLEX WITH LOCATE WIRE IN EXISTING CONDUIT BETWEEN ALL PULL BOXES AND RECORD CABLE FOOTAGE FOR EACH SEGMENT
-MPU TO ALTERNATE 100V LEGS AT EACH STANDARD

JOB 3 JOB 2



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				WALDO LIGHTING REPLACEMENT	5-31-2019	5-31-2019
				JOB 2 / JOB 3		
					DRAWN: RAO	
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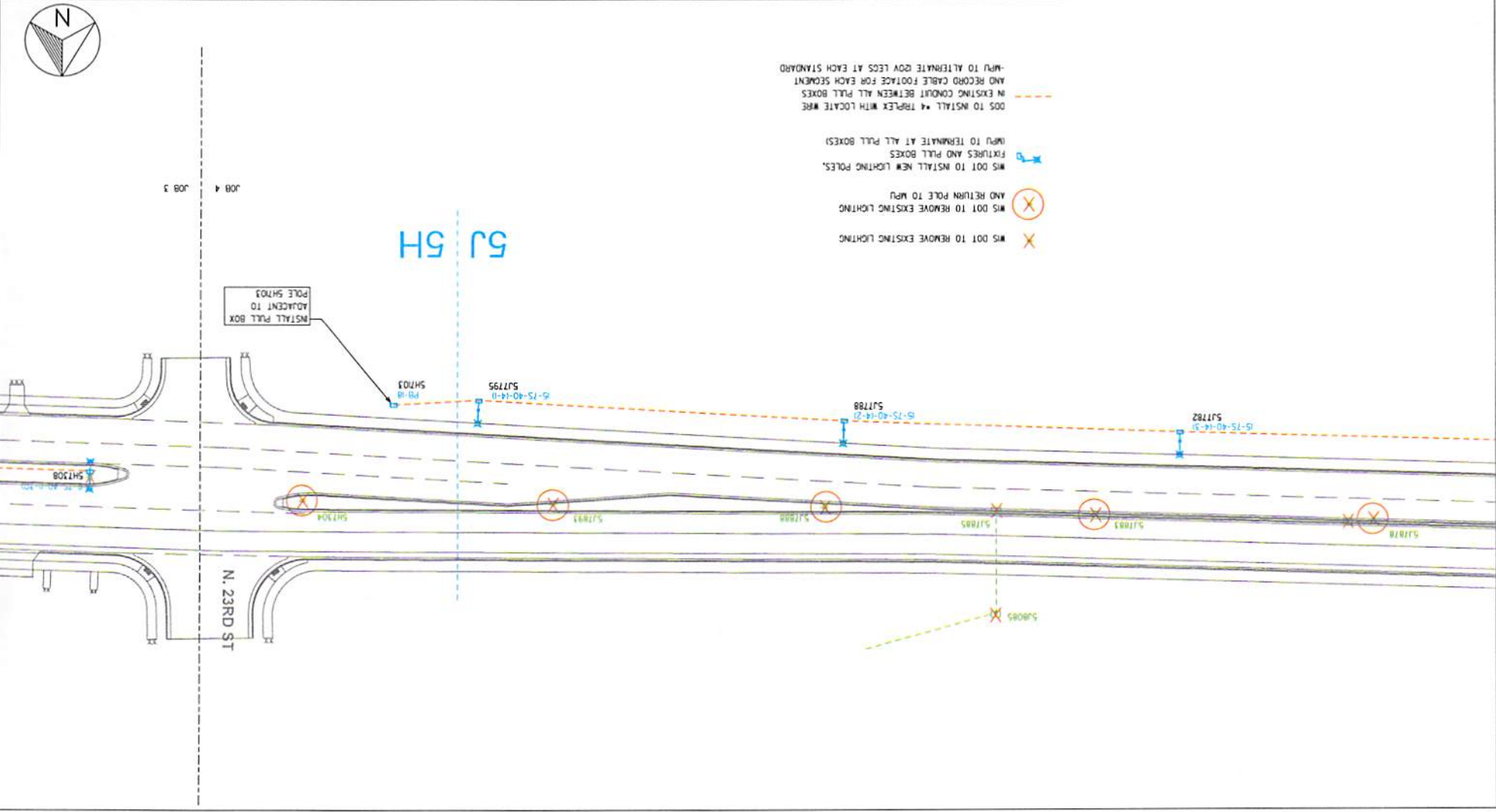


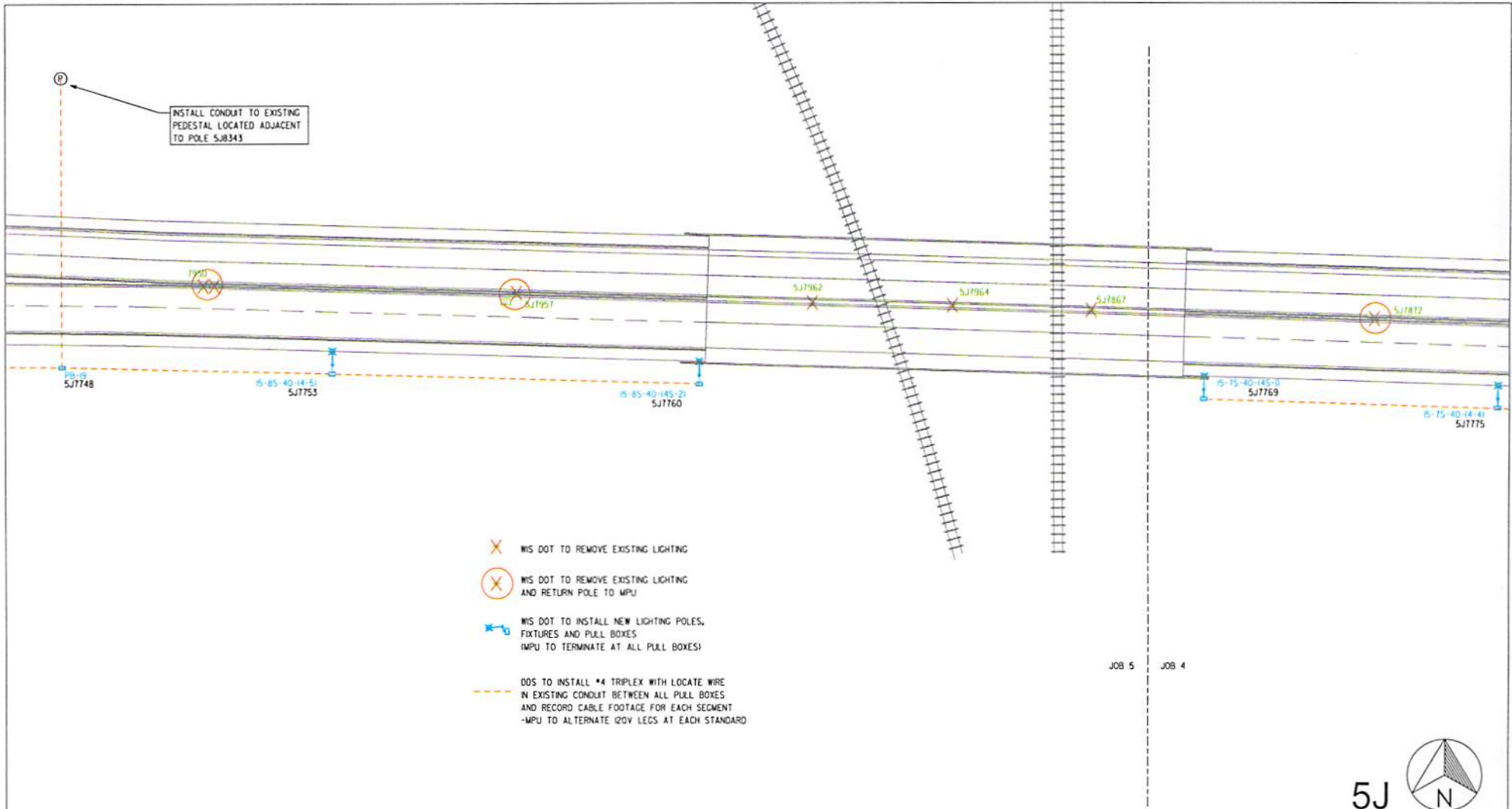
MANITOWOC PUBLIC UTILITIES
MANITOWOC, WISCONSIN

DATE: 5-31-2019
 DRAWN: RAO
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 SHEET NUMBER: WO 6535
 SHEET 6

TITLE: WALDO LIGHTING REPLACEMENT
 JOB 3 / JOB 4
 MANITOWOC PUBLIC UTILITIES
 MANITOWOC, WISCONSIN
 MPU

NO	DATE	DESCRIPTION	BY





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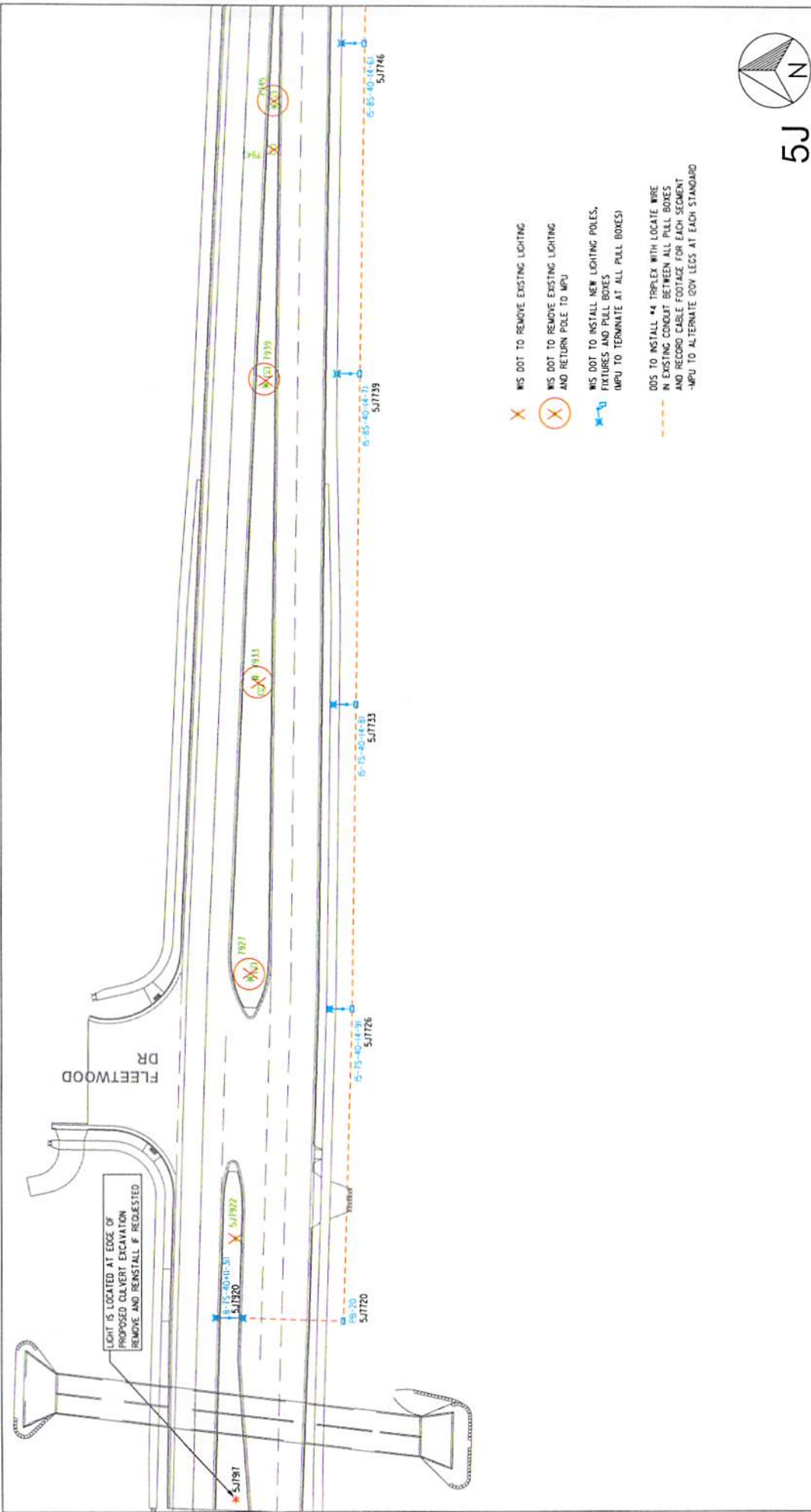


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TITLE:
WALDO LIGHTING REPLACEMENT
JOB 4 / JOB 5



DATE:	5-31-2019
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SCALE:	1"=50'
DEPT:	ED
TYPE:	WORK ORDER
SHEET NUMBER:	WO 6535
	SHEET 7



NO	DATE	DESCRIPTION	BY	TITLE:	DATE:
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				JOB 5	
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					CHK'D: SB
					SCALE: 1"=50'
					DEPT: ED
					TYPE: WORK ORDER
					SHEET NUMBER:
					WO 6535
					SHEET 8

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- X WIS DOT TO REMOVE EXISTING LIGHTING
- (X) WIS DOT TO REMOVE EXISTING LIGHTING AND RETURN POLE TO MPU
- (X) WIS DOT TO INSTALL NEW LIGHTING POLES, FIXTURES AND PULL BOXES (MPU TO TERMINATE AT ALL PULL BOXES)
- DDS TO INSTALL #4 TRIPLEX WITH LOCATE WIRE IN EXISTING CONDUIT BETWEEN ALL PULL BOXES AND RECORD CABLE FOOTAGE FOR EACH SEGMENT -MPU TO ALTERNATE GOV LEGS AT EACH STANDARD

LIGHT IS LOCATED AT EDGE OF PROPOSED CULVERT EXCAVATION REMOVE AND REINSTALL IF REQUESTED

FLEETWOOD DR