

Madison, Wisconsin

# CITY OF MADISON

## CITY ENGINEERING DIVISION

### DEPARTMENT OF PUBLIC WORKS

## PLAN OF PROPOSED IMPROVEMENT

### BLACKHAWK PATH IMPROVEMENT

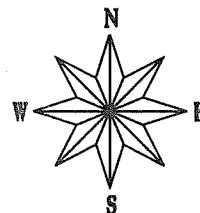
### AT OLD MIDDLETON ROAD/ EAU CLAIRE INTERSECTION

**INDEX OF SHEETS**

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D-1	TYPICAL SECTIONS
D-2	WALL AND RAILING
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P-1	PATH PLAN AND PROFILE
P-2	OLD MIDDLETON ROAD PLAN AND PROFILE
X-1 - X3	OLD MIDDLETON ROAD CROSS SECTIONS
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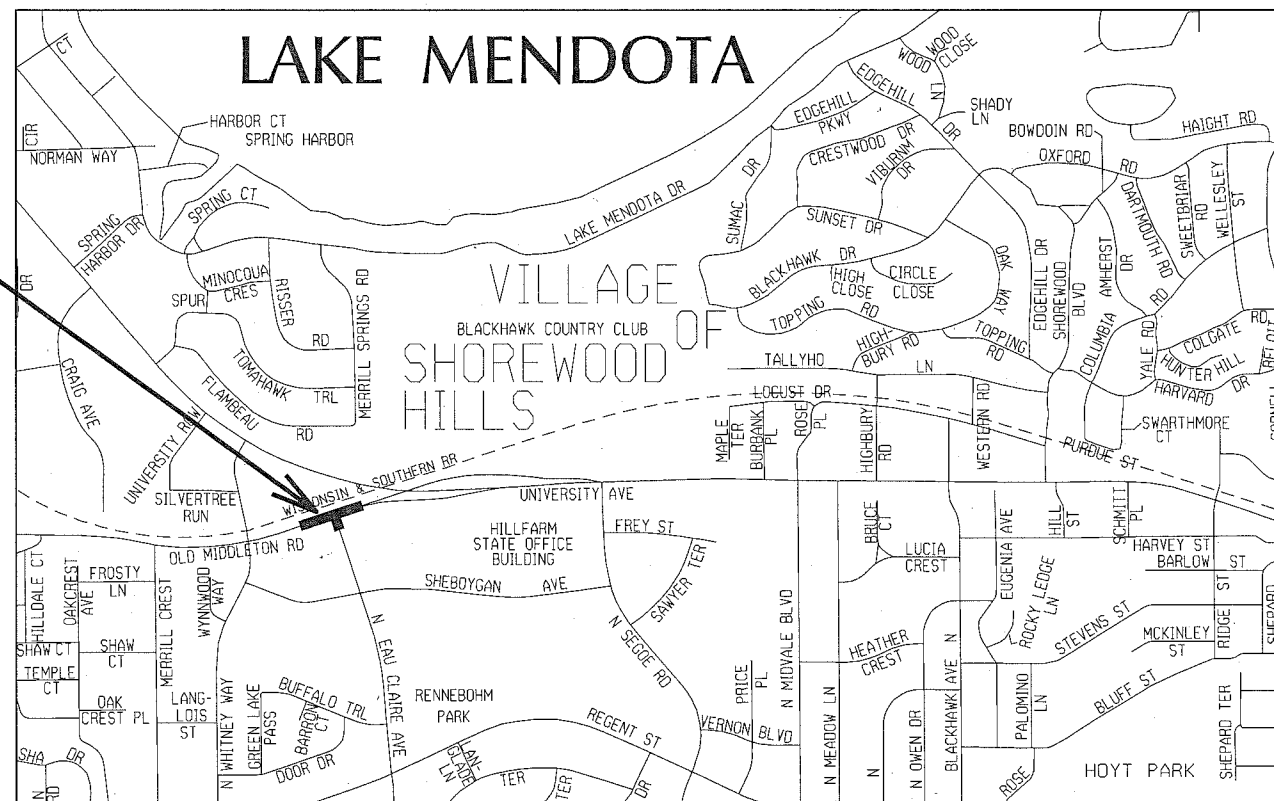
CONVENTIONAL SIGNS	
FIELD VERIFY ALL UTILITY LOCATIONS	
GAS	G
STORM SEWER	ST
SANITARY SEWER	SAN
WATER	W
OVERHEAD ELECTRIC	OH
POWER POLE	□

PROJECT LOCATION



**NOTES:**

SIDEWALK RAMPS AND CURB THRU SIDEWALK RAMPS SHALL HAVE A MAXIMUM SLOPE OF 1" PER 12". SIDEWALK AND CURB RAMPS SHALL BE CONSTRUCTED WITH A SIDE SLOPE OF 2.00%. SIDEWALK SHALL HAVE A MINIMUM LONGITUDINAL SLOPE OF 0.50% AND A MAXIMUM LONGITUDINAL SLOPE OF 5.00% EXCEPT WHERE STREET GRADES EXCEED 5.00%.



CITY PROJECT NO. 53W1250  
 CONTRACT NO. 7389  
 MUNIS NO. 10327

PUBLIC IMPROVEMENT PROJECT APPROVED

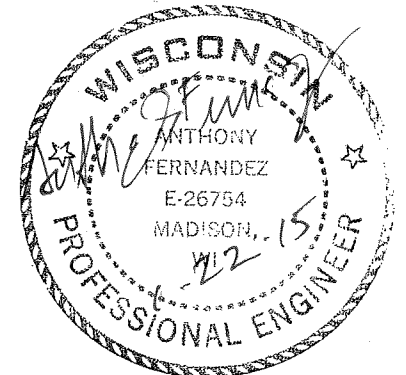
JUNE 18, 2013

BY THE COMMON COUNCIL  
 OF MADISON, WISCONSIN

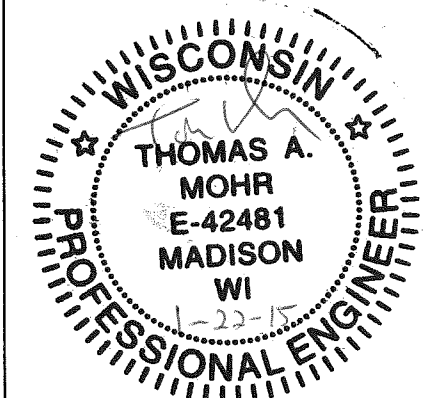
PUBLIC IMPROVEMENT DESIGN  
 APPROVED BY:

City Engineer 1-23-15  
 Date

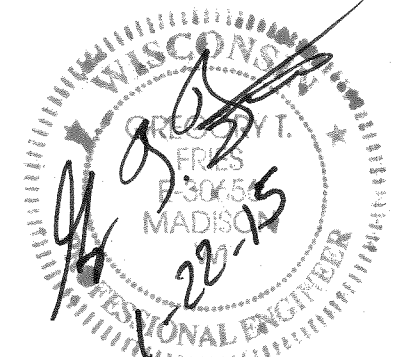
STREET GRADES  
 DESIGNED BY:



PAVEMENT MARKING  
 DESIGNED BY:



STORM SEWER  
 DESIGNED BY:

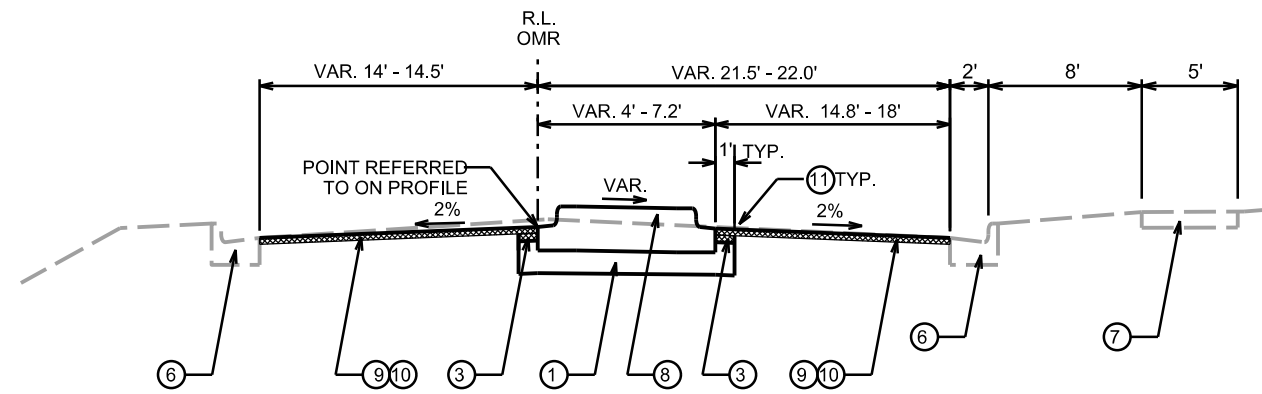


TYPICAL SECTIONS

PATH / OLD MIDDLETON RD CITY OF MADISON

LEGEND

- ① 10" CRUSHED AGGREGATE BASE COURSE, GRAD. NO. 2
- ② 8" CRUSHED AGGREGATE BASE COURSE, GRAD. NO. 2
- ③ 4.25" HMA PAVEMENT TYPE E-1 (SEE NOTE 1)
- ④ 3" HMA PAVEMENT TYPE E-1(SEE NOTE 1)
- ⑤ CONCRETE CURB AND GUTTER TYPE A (30-INCH)
- ⑥ EXISTING TYPE A CURB TO REMAIN
- ⑦ EXISTING 5" CONCRETE SIDEWALK TO REMAIN
- ⑧ CONCRETE MEDIAN SPECIAL (SEE DETAILS)
- ⑨ FULL WIDTH GRINDING, 2-INCH NOM. DEPTH
- ⑩ 2" HMA PAVEMENT TYPE E-1 (SEE NOTE 1)
- ⑪ SAW CUT EXISTING ASPHALT PAVEMENT
- ⑫ 4" TOPSOIL, SEED AND EROS. MATTING CL 1 TY URBAN
- ⑬ REMOVE EXISTING CONCRETE CURB & GUTTER
- ⑭ MODULAR BLOCK WALL (SEE DETAILS)
- ⑮ 5-INCH CONCRETE SIDEWALK
- ⑯ 5-INCH CONCRETE SIDEWALK WITH MONOLITHIC CURB (SEE DETAIL)



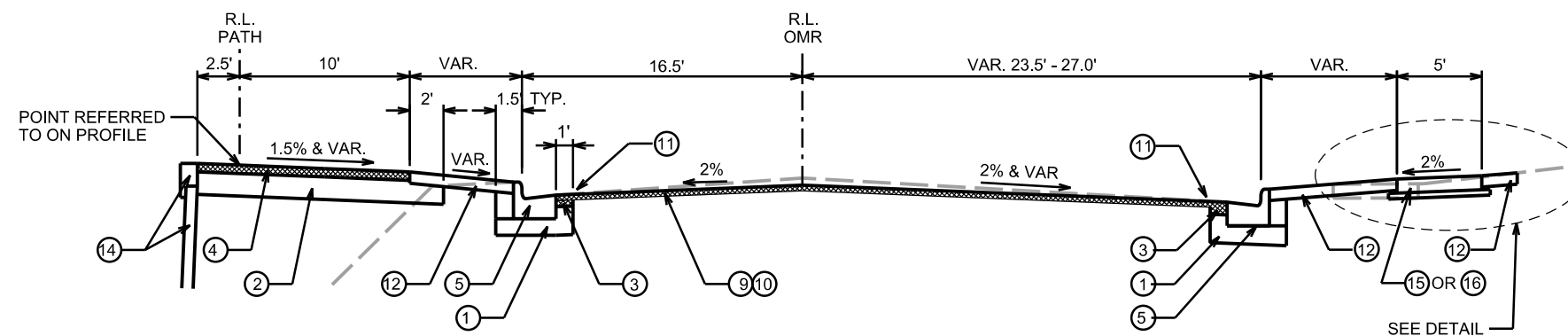
PROPOSED TYPICAL SECTION  
OLD MIDDLETON ROAD STA 25+40 TO STA 26+40

NOTES

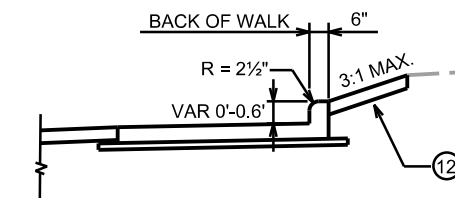
1. CONSTRUCT HMA PAVEMENTS AS FOLLOWS:

TYPE	LAYER	THICK	NOM. AGG SIZE
4 1/4" E-1	UPPER	1.75"	12.5
	LOWER	2.5"	19.0
2" E-1	SINGLE	2.0"	12.5
3" E-1	SINGLE	3.0"	12.5

2. THE UPPER LAYER OF 4.25" PAVEMENT SHALL BE PLACED AS A SINGLE CONTINUOUS LIFT WITH THE 2" PAVMENT IN THE AREA OF GRINDING.



PROPOSED TYPICAL SECTION  
PATH STA 46+60 TO STA 47+60  
OLD MIDDLETON ROAD STA 26+40 TO STA 27+75



SIDEWALK WITH MONOLITHIC CURB DETAIL  
STA 26+38 TO STA 26+65  
STA 27+30 TO STA 27+90

PLOT SCALE: \_\_\_\_\_

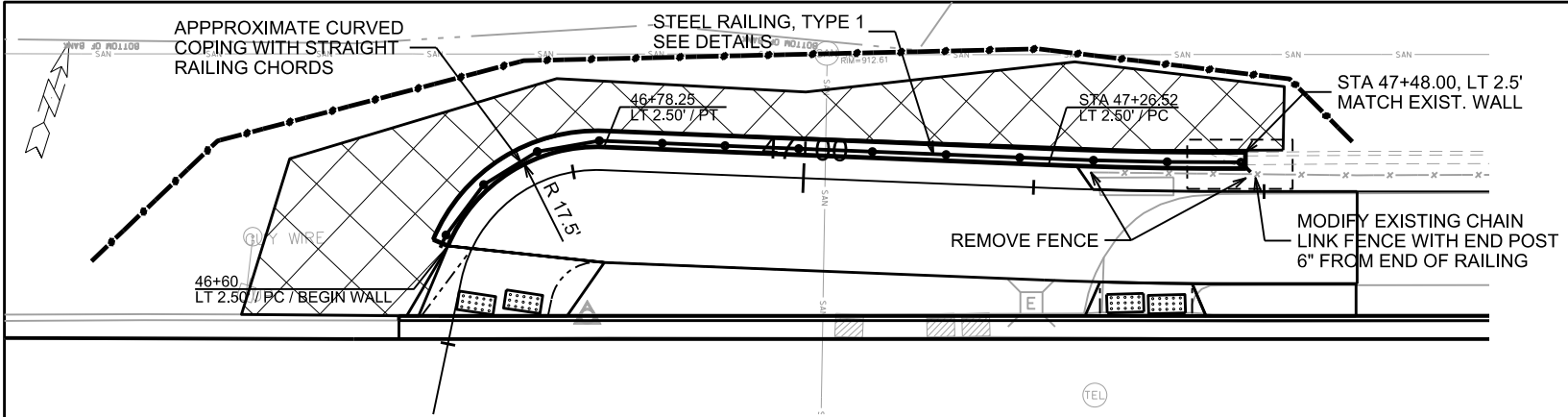
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REV. DATE: \_\_\_\_\_

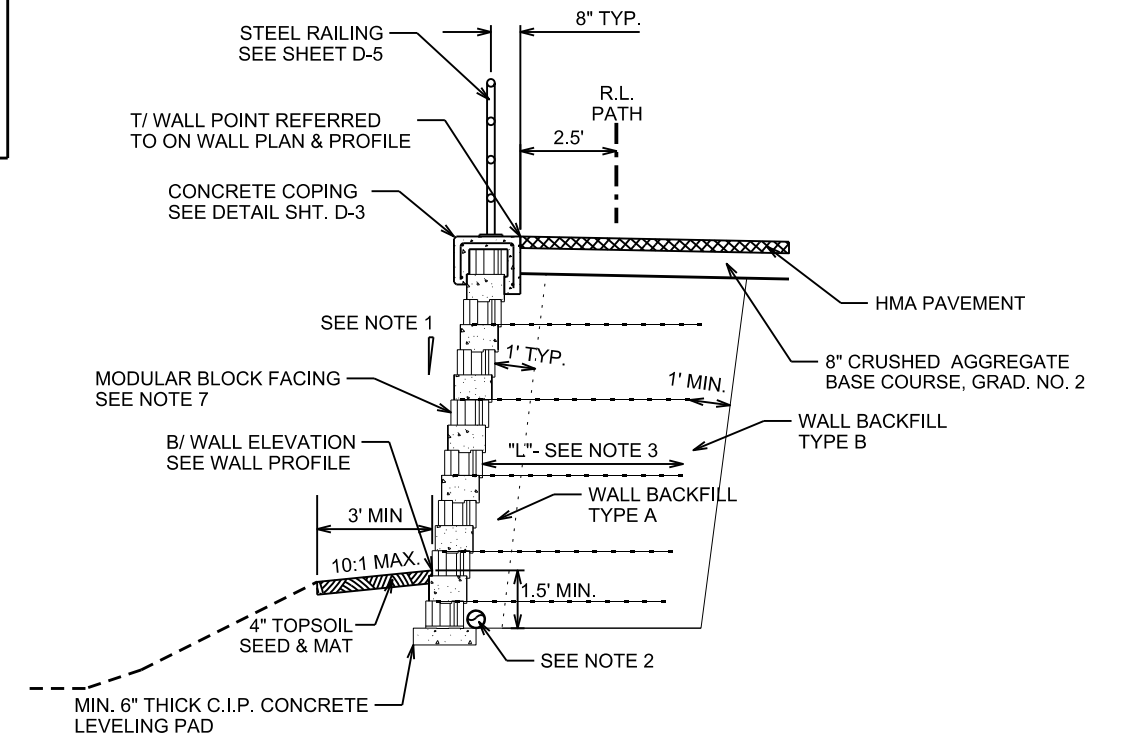
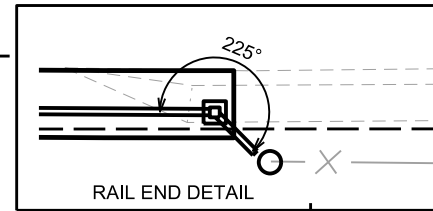
ORIGINATOR: CITY OF MADISON, STREETS DIVISION

WALL DETAIL

PATH CITY OF MADISON



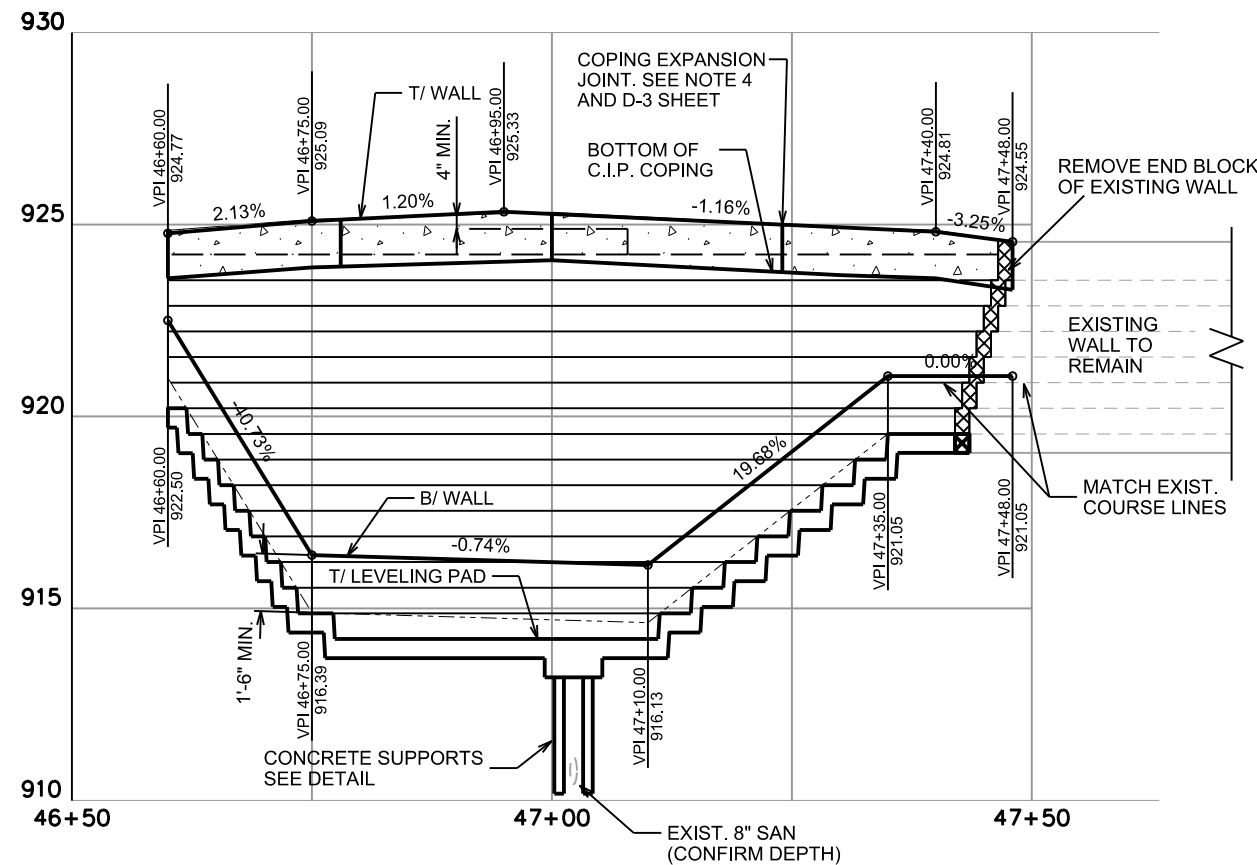
RETAINING WALL AND RAILING PLAN



TYPICAL WALL SECTION  
STA 36+10 TO STA 37+48

NOTES:

1. BATTER PER WALL MANUFACTURER.
2. PIPE UNDERDRAIN WRAPPED 6-INCH, SLOPE 0.5% MIN. TO SUITABLE DISCHARGE.
3. "L" SHALL BE A MINIMUM OF 0.7 TIMES THE WALL HEIGHT BUT NOT LESS THAN 6 FEET.
4. PLACE EXPANSION JOINTS AT ALL WALL RADIUS PC/PT POINTS AND BEND POINTS AND AT 30' MAXIMUM SPACING ON TANGENTS.
5. PLACE CONTRACTION JOINTS AT MAXIMUM 10' SPACING BETWEEN EXPANSION JOINTS. DO NOT RUN BAR STEEL THRU JOINT.
6. MAINTAIN 2" MINIMUM COVER ON ALL REBAR
7. USE 8" BLOCK HEIGHT, STRAIGHT FACE, SANDSTONE COLOR



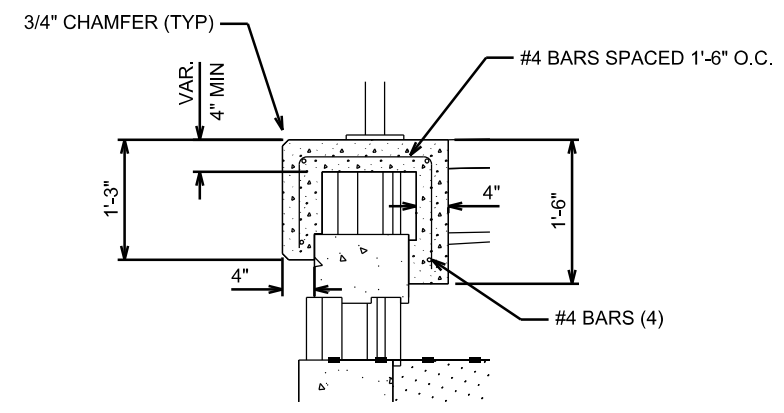
RETAINING WALL ELEVATION

PLOT SCALE: \_\_\_\_\_

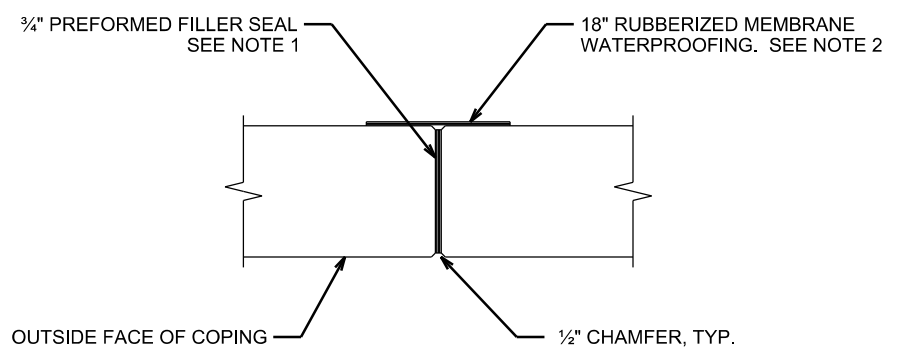
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REV. DATE: \_\_\_\_\_

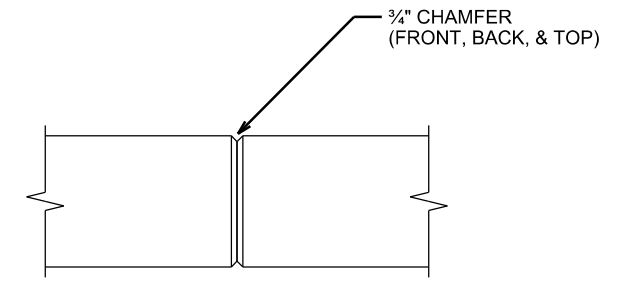
ORIGINATOR: CITY OF MADISON, STREETS DIVISION



**COPING DETAIL**



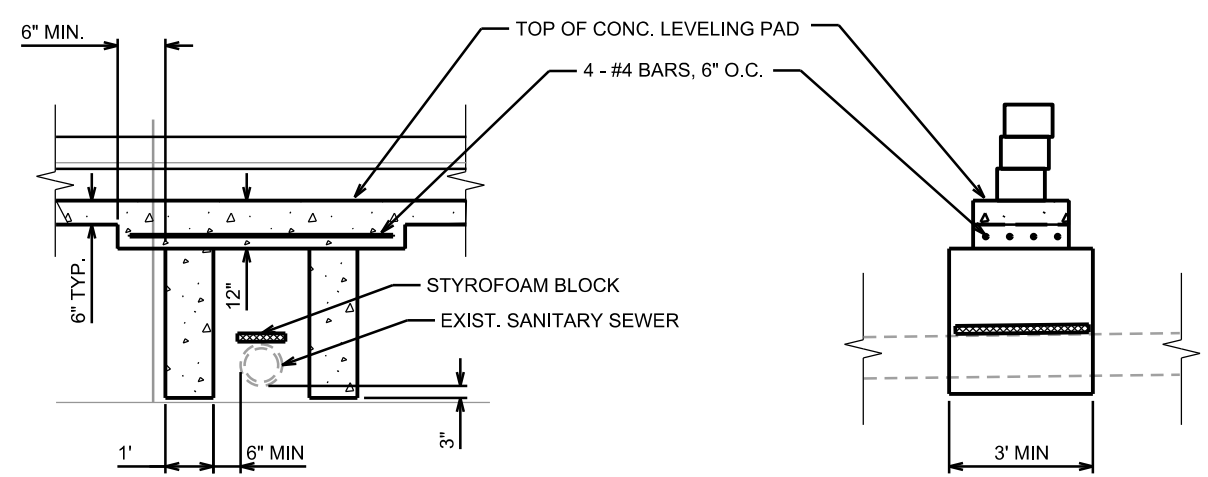
**COPING EXPANSION JOINT**



**COPING CONTRACTION JOINT**

NOTES FOR CONCRETE COPING:

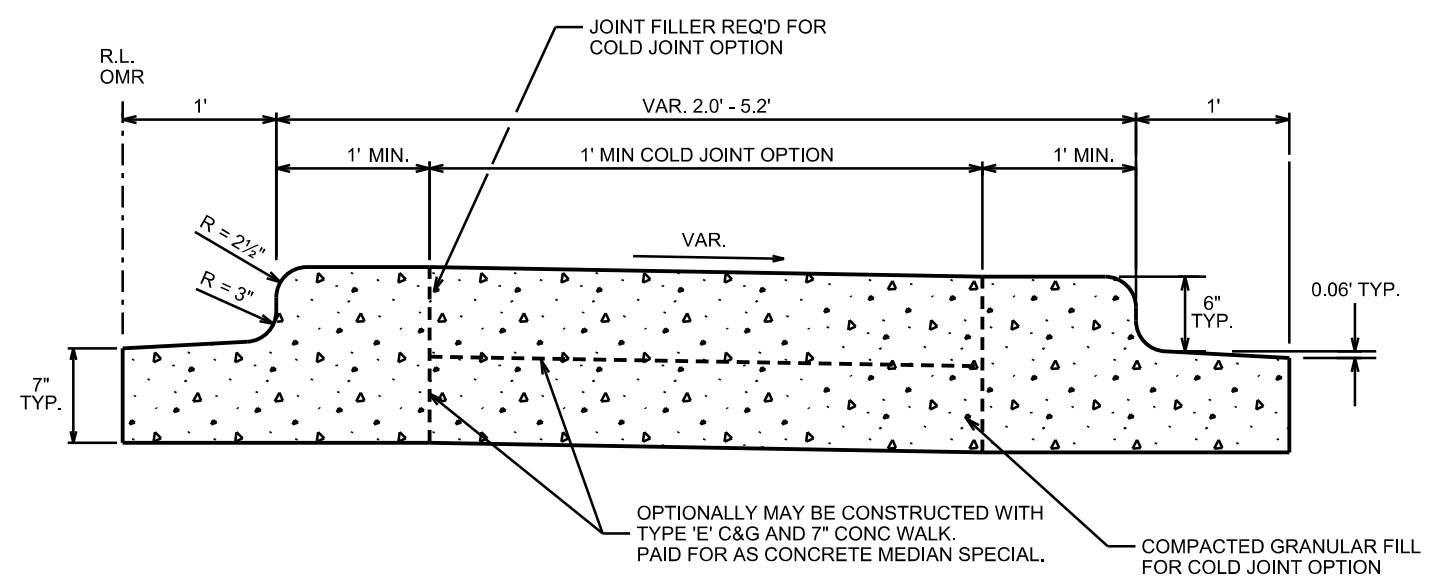
1. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/2" BELOW SURFACE OF CONC.)
2. MEMBRANE WATERPROOFING TO EXTEND FROM TOP OF COPING TO BOTTOM OF COPING
3. PLACE EXPANSION JOINTS AT ALL WALL RADIUS PC/PT POINTS AND BEND POINTS, AND AT 30' MAX. SPACING ON TANGENTS.
4. PLACE CONTRACTION JOINTS AT MAX. 10' SPACING BETWEEN EXPANSION JOINTS. DO NOT RUN BAR STEEL THRU JOINT.
5. MAINTAIN 2" MIN. COVER ON ALL REBAR.



**SECTION PERPENDICULAR TO SANITARY PIPE**

**SECTION PARALLEL TO SANITARY PIPE**

**CONCRETE SUPPORTS DETAIL**



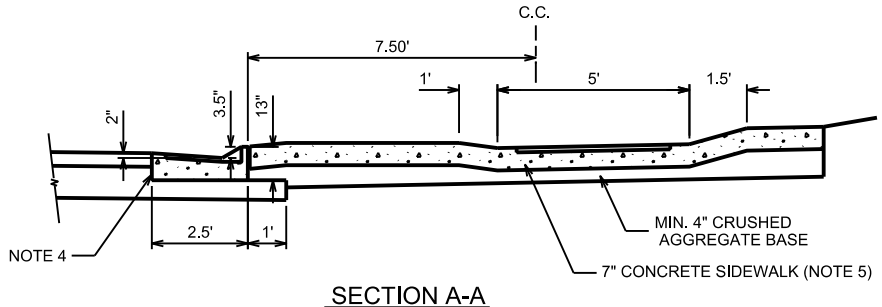
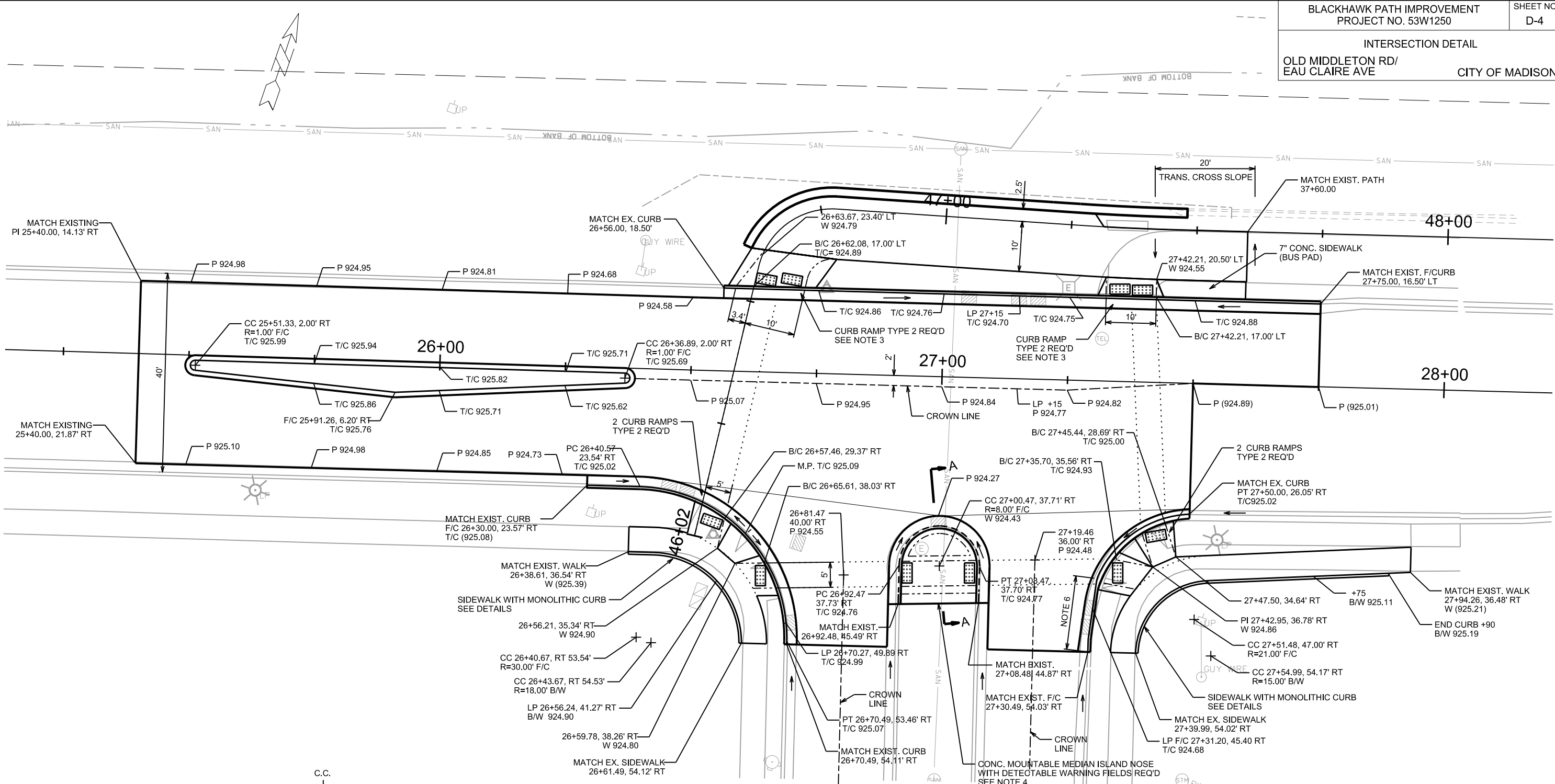
**CONCRETE MEDIAN SPECIAL DETAIL**

PLOT SCALE: \_\_\_\_\_

PLOT NAME: \_\_\_\_\_

REV. DATE: \_\_\_\_\_

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



PLAN

- NOTES:
1. T/C ELEVATIONS BASED ON FULL CURB HEIGHT, INCLUDING IN RAMPS AND TRANSITIONS.
  2. ALL CURB LOCATIONS SHOWN AT FACE OF CURB UNLESS OTHERWISE NOTED.
  3. MODIFY AS SHOWN TO PROVIDE 10' WIDE FLAT AREA.
  4. USE 30" MOUNTABLE CURB & GUTTER WITH VARIABLE CURB HEIGHT, PAID AS CONCRETE CURB & GUTTER TYPE A.
  5. CONCRETE SIDEWALK PAID AS CONCRETE MOUNTABLE MEDIAN ISLAND NOSE. SEE SDD 3.13 FOR ADDITIONAL DETAILS.
  6. TRANSITION FROM TYPE A TO TYPE H CURB & GUTTER. PAID AS TYPE H.

PLOT SCALE: \_\_\_\_\_

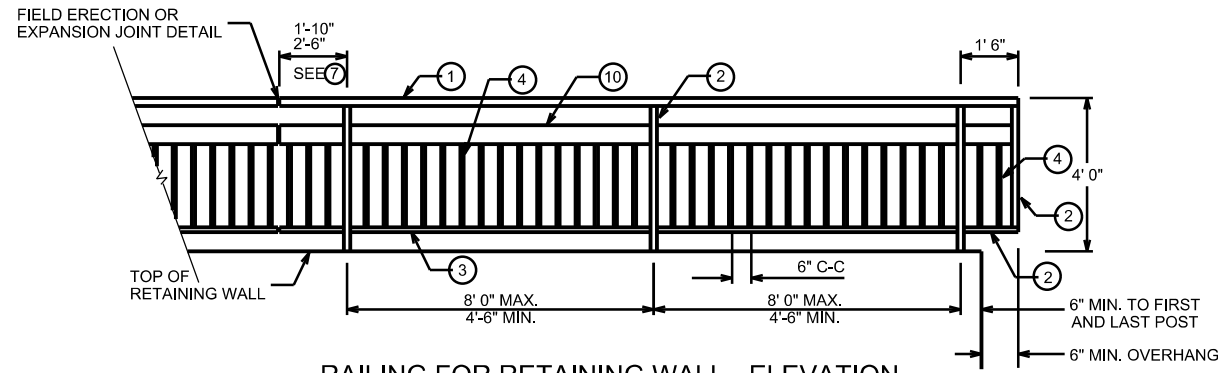
PLOT NAME: \_\_\_\_\_

REV. DATE: \_\_\_\_\_

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

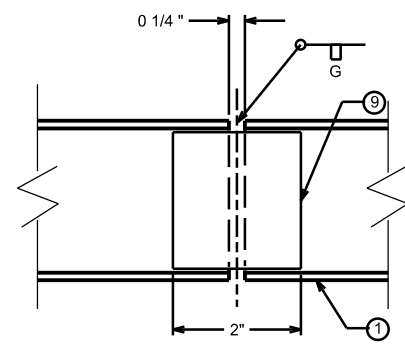
RAILING DETAILS

PATH CITY OF MADISON



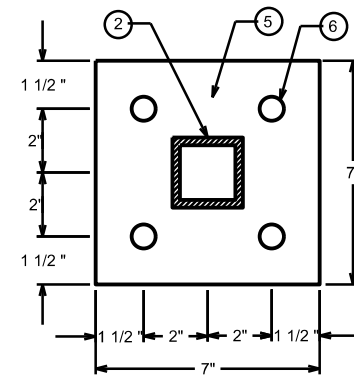
**RAILING FOR RETAINING WALL - ELEVATION**

SEE RETAINING WALL DETAIL FOR LOCATION

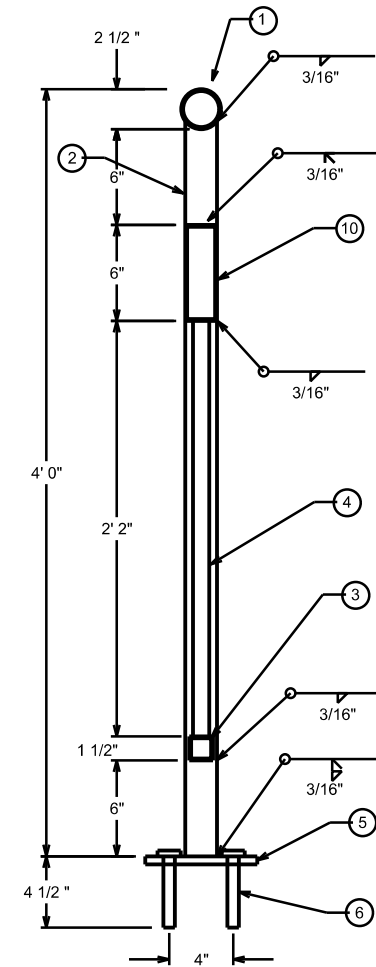


**SHOP RAIL SPLICE DETAIL**

(SHOW LOCATION ON SHOP DRAWINGS)



**RAILING BASE PLATE**



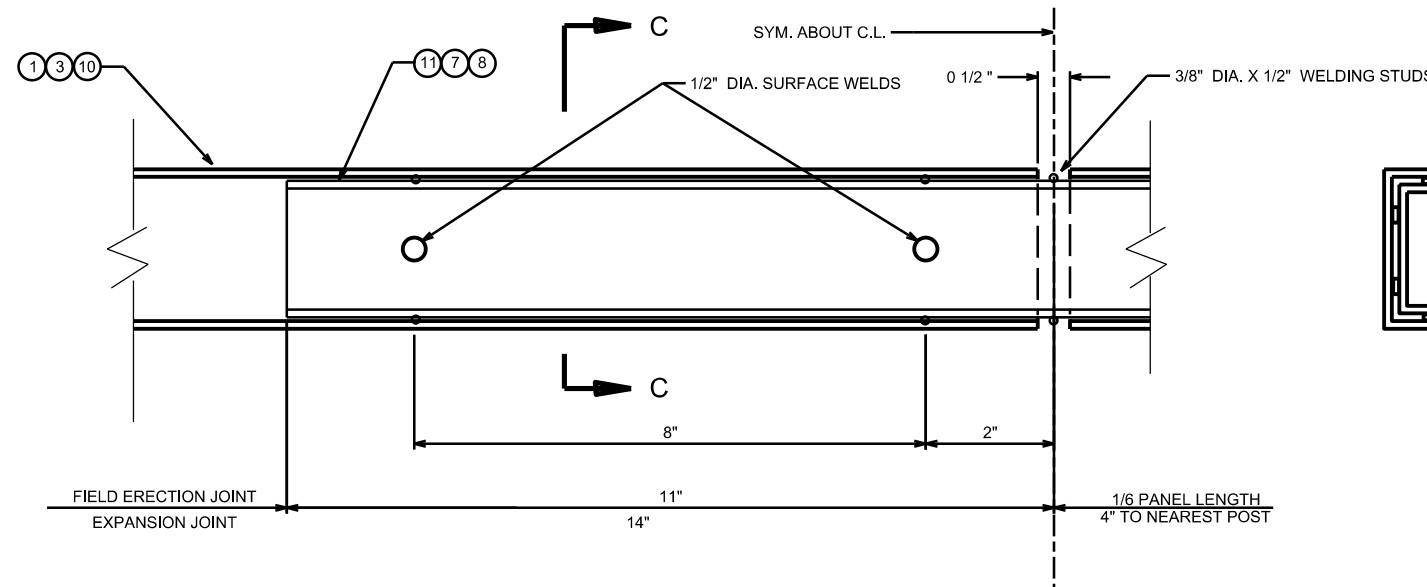
**SECTION THRU RAILING**

**LEGEND**

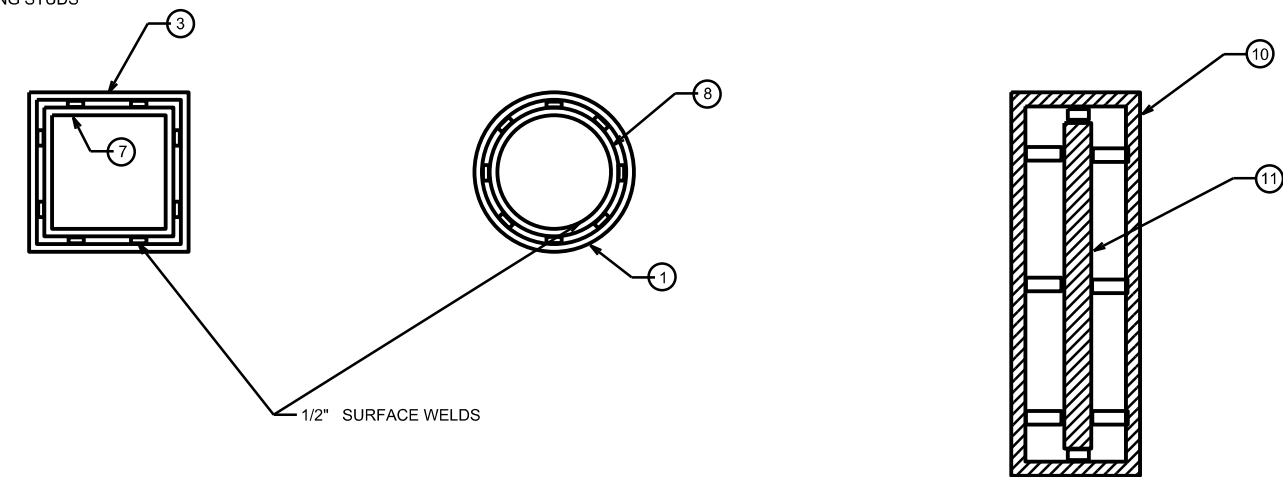
- ① 2 1/2" DIA. STEEL PIPE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS.
- ② TS 2" X 2" X 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B. CUT BOTTOM OF POST TO MATCH SLOPE OF TOP OF WALL. HOLD 1/16" ABOVE BASE PLATE TO ALLOW POST AND BASE PLATE TO BE WELDED TOGETHER. PLACE POST VERTICAL AND CENTERED ON THE BASE PLATE.
- ③ TS 1 1/2" X 1 1/2" X 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.
- ④ TS 1" X 1" X 0.125" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.
- ⑤ BASE PLATE 1/2" X 7" X 7" CONFORMING TO ASTM DESIGNATION A709 GRADE 36 WITH 9/16" HOLES FOR HEX BOLTS NO. 6. WELD TO VERTICAL POSTS AS SHOWN.
- ⑥ CONCRETE MASONRY ANCHORS, TYPE S, 5/8". PULLOUT STRENGTH SHALL BE 3.6 KIPS.
- ⑦ SQUARE SLEEVE FABRICATED FROM 1/2" COLD DRAWN STEEL ALLOY CONFORMING TO ASTM A331 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE 1/2" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 3. PROVIDE 3/8" DIA. X 1/2" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.
- ⑧ 1 1/2" DIA. STEEL PIPE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS X 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE 1/2" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 1. PROVIDE 3/8" DIA. X 1/2" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.
- ⑨ 2" DIA. PIPE SLEEVE CONFORMING TO SECTION 506 OF THE STANDARE SPECIVICATIONS. PROVIDE "SLIDING FIT".
- ⑩ TS 6" X 2" X 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.
- ⑪ 1" X 5" SLEEVE CONFORMING TO ASTM A709 GRADE 36 X 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE 1/2" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 10. PROVIDE 3/8" DIA. X 1/2" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.

**GENERAL NOTES**

- BID ITEM SHALL BE "STEEL RAILING TYPE 1" WHICH INCLUDES ALL ITEMS SHOWN INCLUDING GALVANIZED COATING
- RAILING SHALL BE FABRICATED IN 2 OR 3 PANEL LENGTHS.
- POST BASE PLATES NO. 5 SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP, AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.
- ALL MATERIALS EXCEPT ANCHOR BOLTS NO. 6 SHALL BE GALVANIZED AFTER FABRICATION.
- PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS, STEEL TUBING AND STEEL PIPE SHALL BE GIVEN A NO. 6 BLAST CLEANING PER S.S.P.C. SPECIFICATIONS.
- VERTICAL MEMBERS SHALL BE PLUMB.
- HORIZONTAL MEMBERS SHALL BE PARALLEL TO TOP OF WALL.



**FIELD ERECTION / EXPANSION JOINT DETAIL**



**SECTION C-C**

PLOT SCALE: \_\_\_\_\_

PLOT NAME: \_\_\_\_\_

REV. DATE: \_\_\_\_\_

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

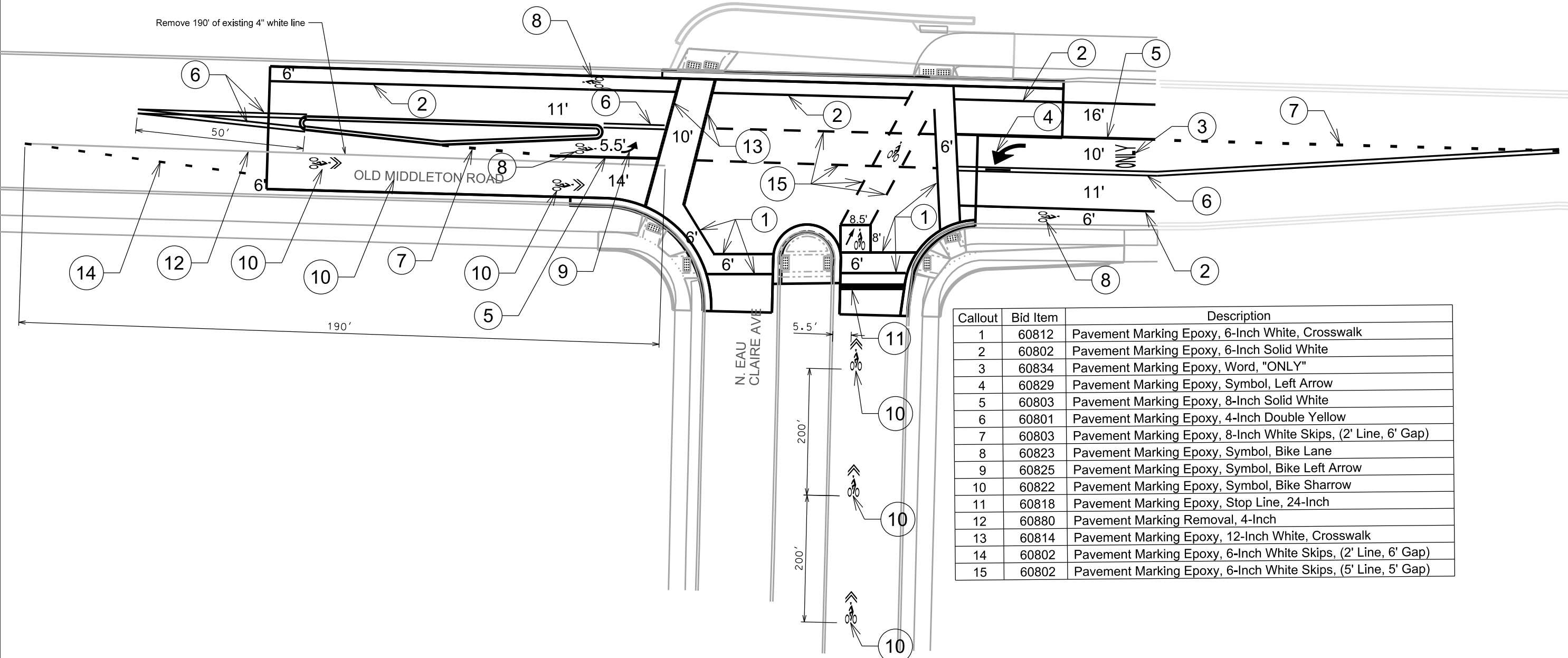


PLOT SCALE:

PLOT NAME:

REV. DATE:

ORIGINATOR: CITY OF MADISON, TRAFFIC ENG. DIV.



Callout	Bid Item	Description
1	60812	Pavement Marking Epoxy, 6-Inch White, Crosswalk
2	60802	Pavement Marking Epoxy, 6-Inch Solid White
3	60834	Pavement Marking Epoxy, Word, "ONLY"
4	60829	Pavement Marking Epoxy, Symbol, Left Arrow
5	60803	Pavement Marking Epoxy, 8-Inch Solid White
6	60801	Pavement Marking Epoxy, 4-Inch Double Yellow
7	60803	Pavement Marking Epoxy, 8-Inch White Skips, (2' Line, 6' Gap)
8	60823	Pavement Marking Epoxy, Symbol, Bike Lane
9	60825	Pavement Marking Epoxy, Symbol, Bike Left Arrow
10	60822	Pavement Marking Epoxy, Symbol, Bike Sharrow
11	60818	Pavement Marking Epoxy, Stop Line, 24-Inch
12	60880	Pavement Marking Removal, 4-Inch
13	60814	Pavement Marking Epoxy, 12-Inch White, Crosswalk
14	60802	Pavement Marking Epoxy, 6-Inch White Skips, (2' Line, 6' Gap)
15	60802	Pavement Marking Epoxy, 6-Inch White Skips, (5' Line, 5' Gap)

PLAN AND PROFILE

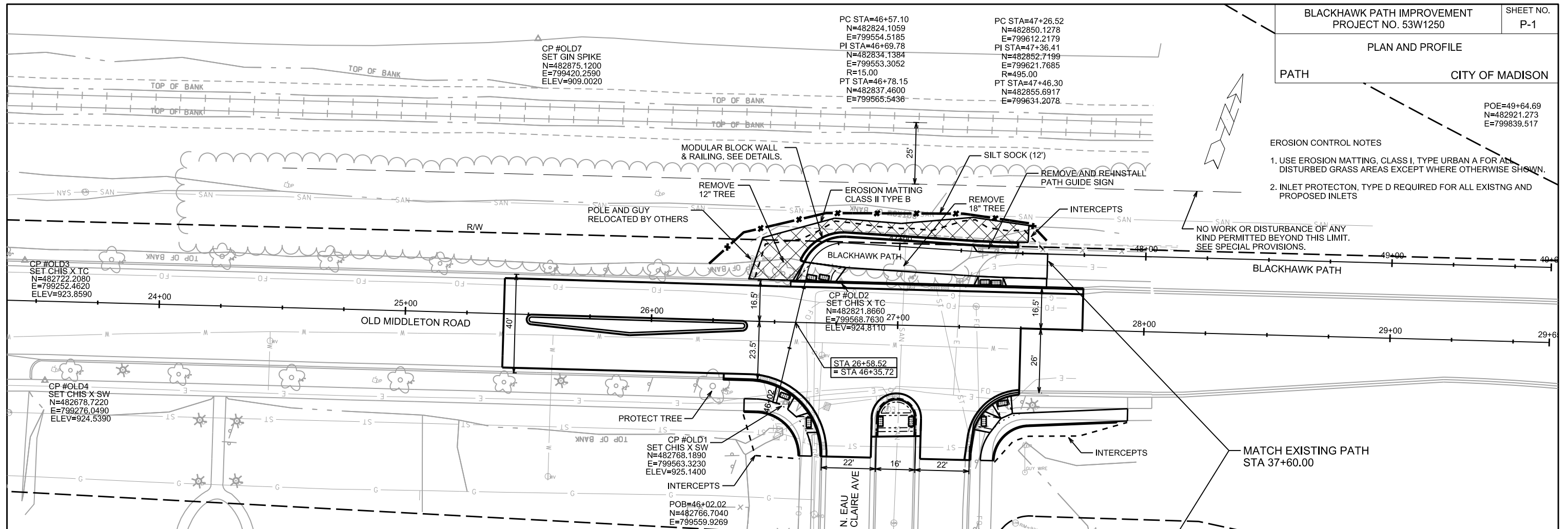
PATH CITY OF MADISON

POE=49+64.69  
N=482921.273  
E=799839.517

EROSION CONTROL NOTES

1. USE EROSION MATTING, CLASS I, TYPE URBAN A FOR ALL DISTURBED GRASS AREAS EXCEPT WHERE OTHERWISE SHOWN.
2. INLET PROTECTION, TYPE D REQUIRED FOR ALL EXISTING AND PROPOSED INLETS

NO WORK OR DISTURBANCE OF ANY KIND PERMITTED BEYOND THIS LIMIT. SEE SPECIAL PROVISIONS.

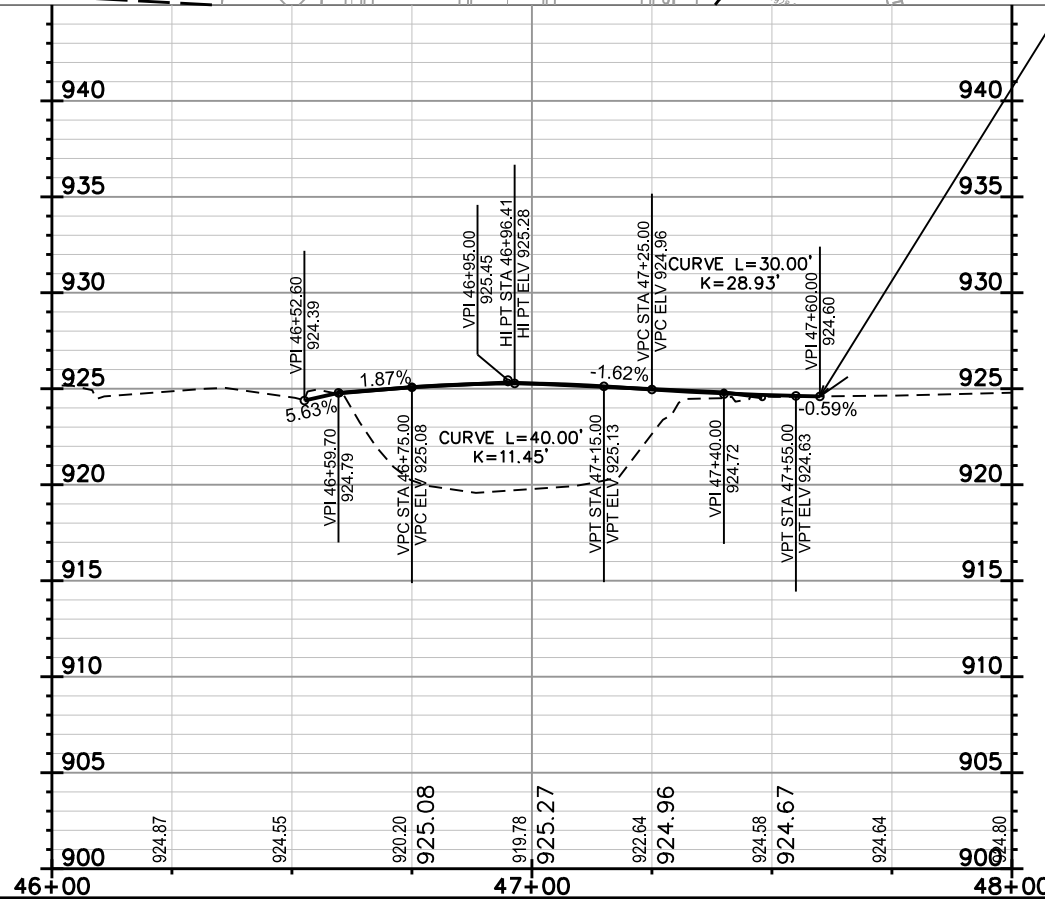


PLOT SCALE: \_\_\_\_\_

PLOT NAME: \_\_\_\_\_

REV. DATE: \_\_\_\_\_

ORIGINATOR: CITY OF MADISON, STREETS DIVISION





**STORM SEWER SCHEDULE**

**STRUCTURES**

STRUC. NO.	STATION	LOCATION (OFFSET)	TYPE	TOP OF CASTING	E.I.	DEPTH	NOTES
S-1	27+00.08	28.83' RT	ADJUST	924.58	922.03	2.55	REPLACE CASTING W/R-3067-7009
S-2	26+52.67	44.99' RT	RECONSTR.	925.85	921.00	4.85	SEE SPECIAL PROVISIONS

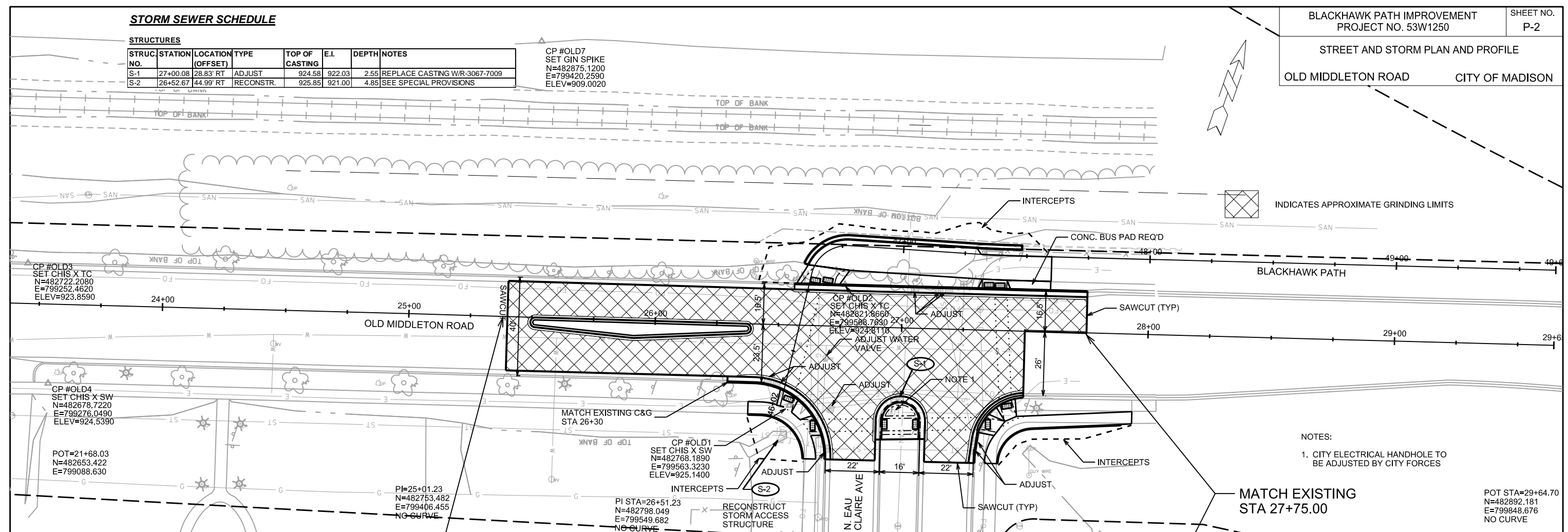
CP #OLD7  
SET GIN SPIKE  
N=482875.1200  
E=799420.2590  
ELEV=909.0020

PLOT SCALE: \_\_\_\_\_

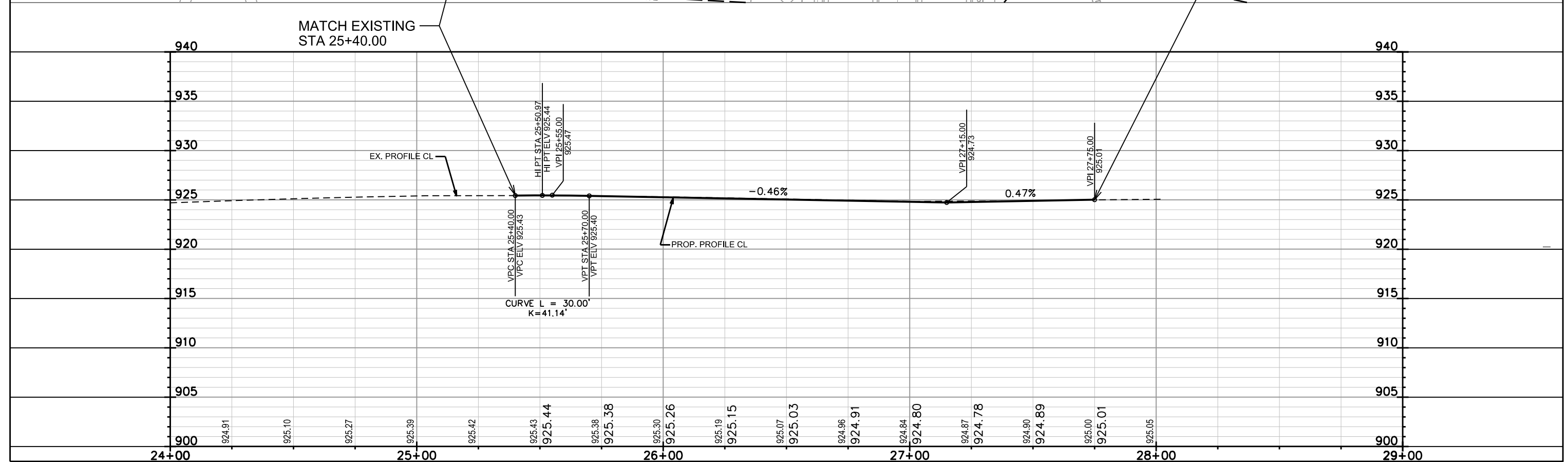
PLOT NAME: \_\_\_\_\_

REV. DATE: \_\_\_\_\_

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



NOTES:  
1. CITY ELECTRICAL HANDHOLE TO BE ADJUSTED BY CITY FORCES



CROSS SECTIONS

OLD MIDDLETON ROAD

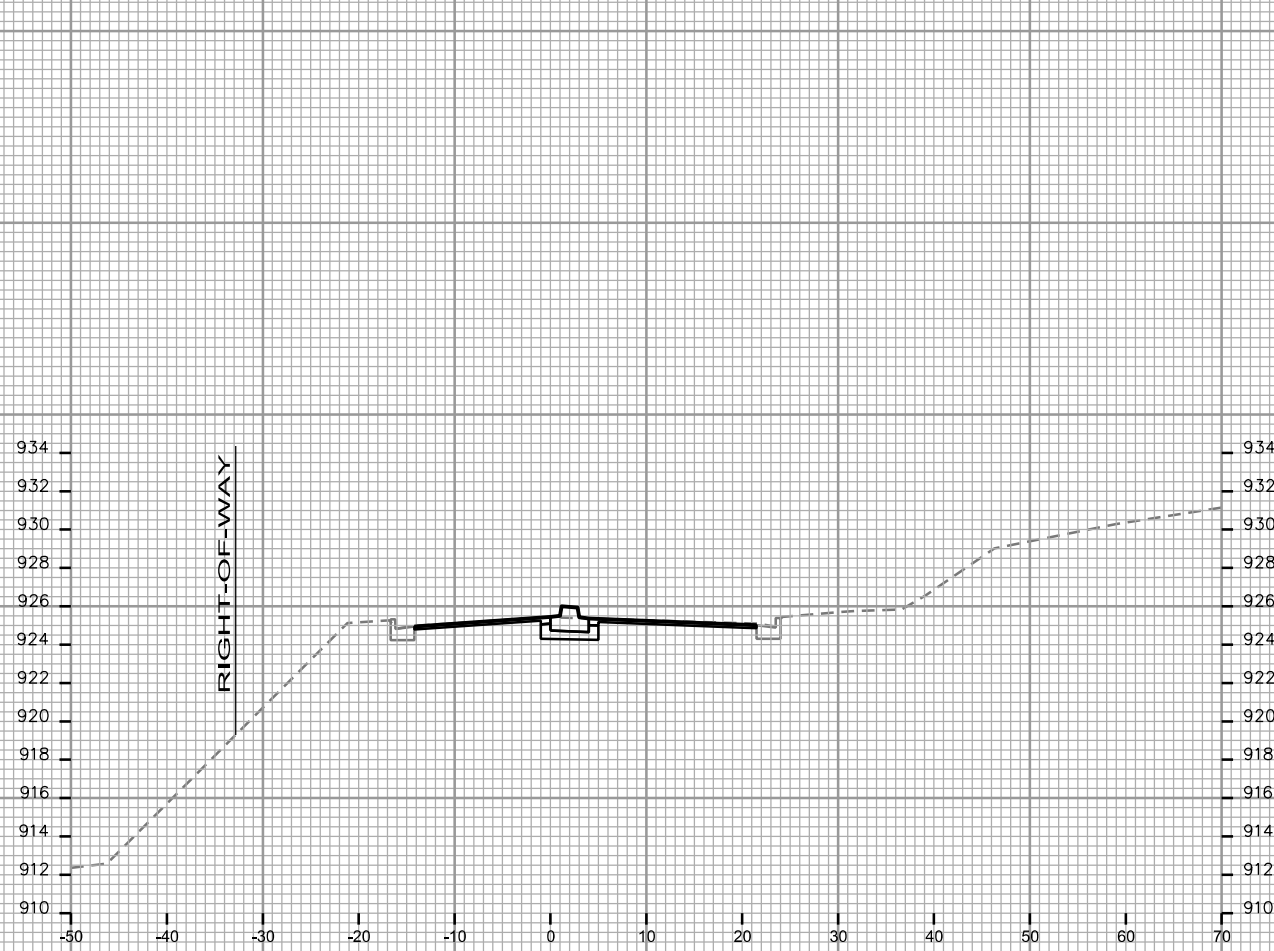
CITY OF MADISON

PLOT SCALE: \_\_\_\_\_

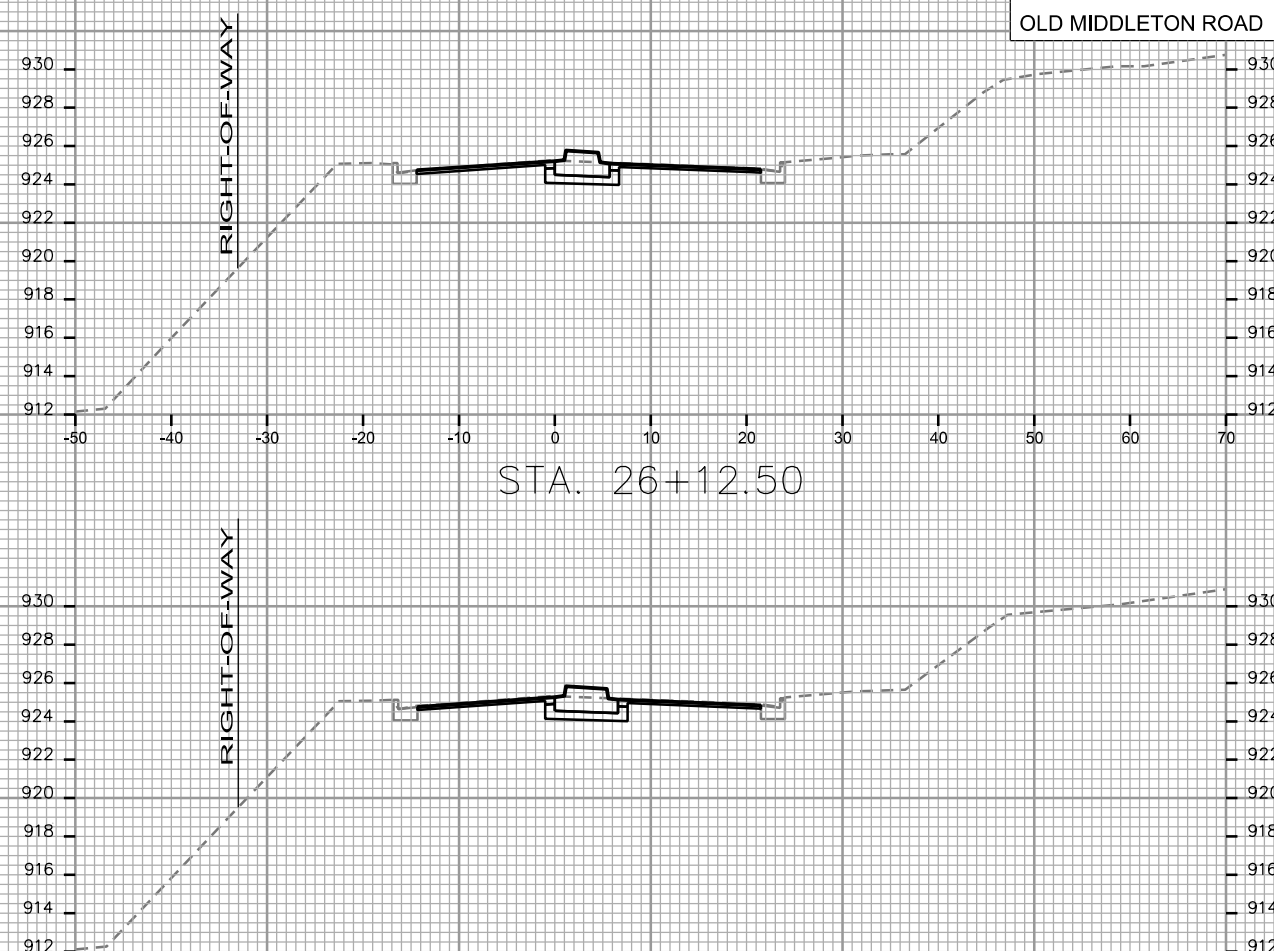
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REV. DATE: \_\_\_\_\_

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



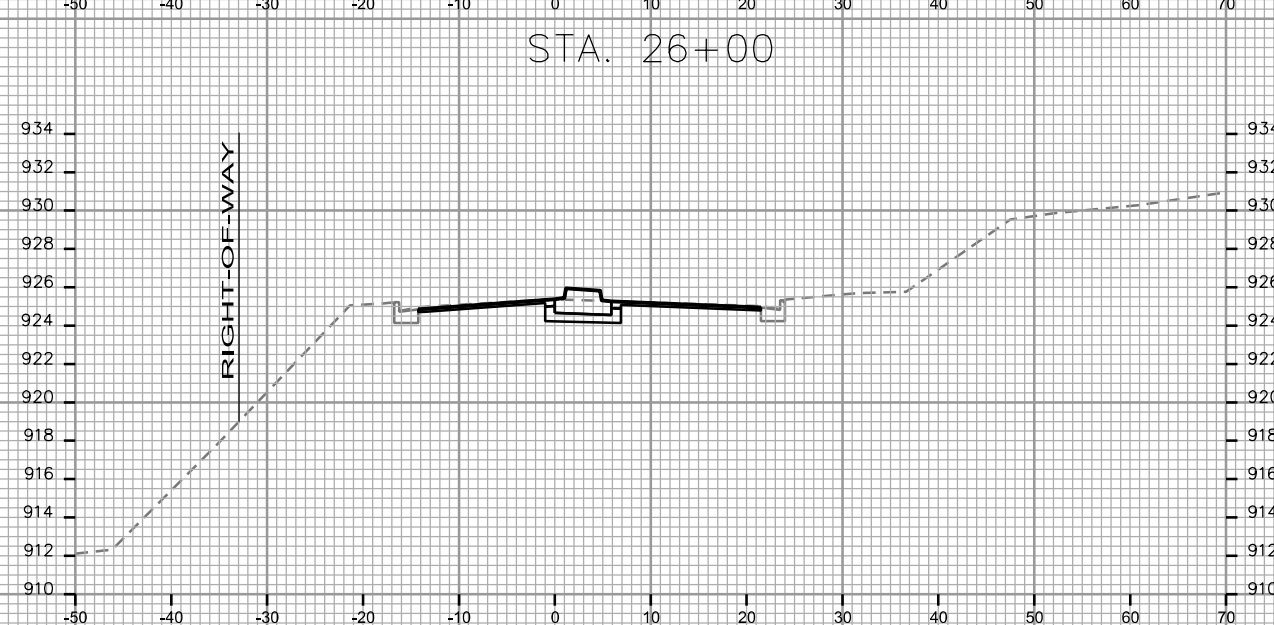
STA. 25+50



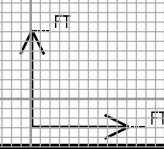
STA. 26+12.50



STA. 25+40



STA. 25+75



CROSS SECTIONS

OLD MIDDLETON ROAD

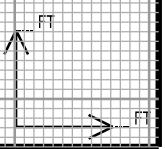
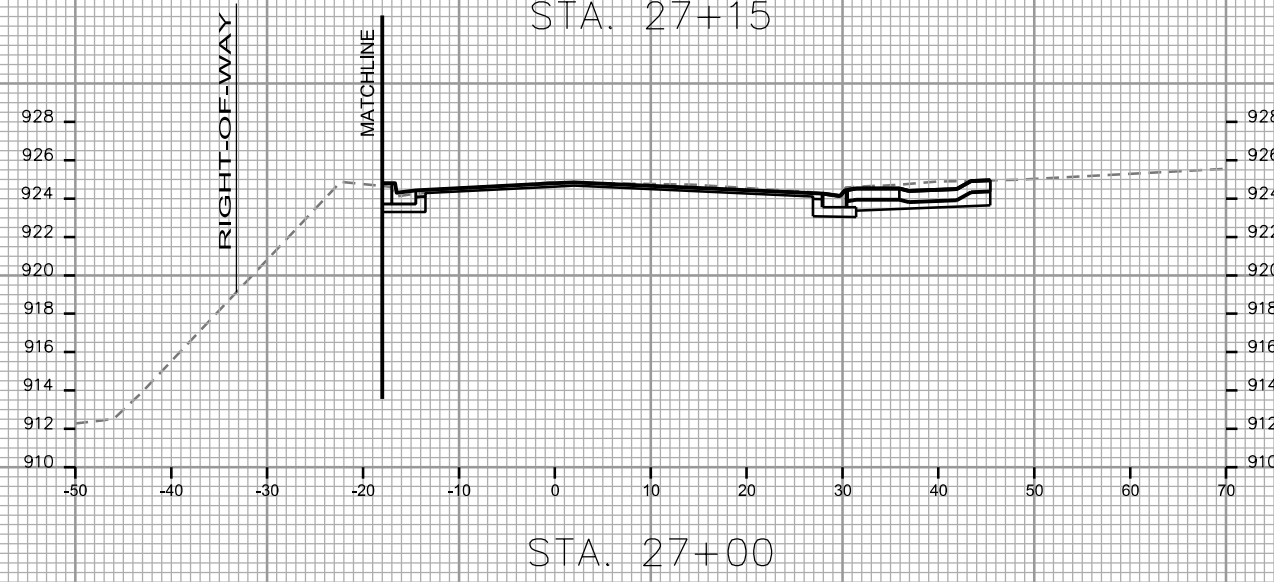
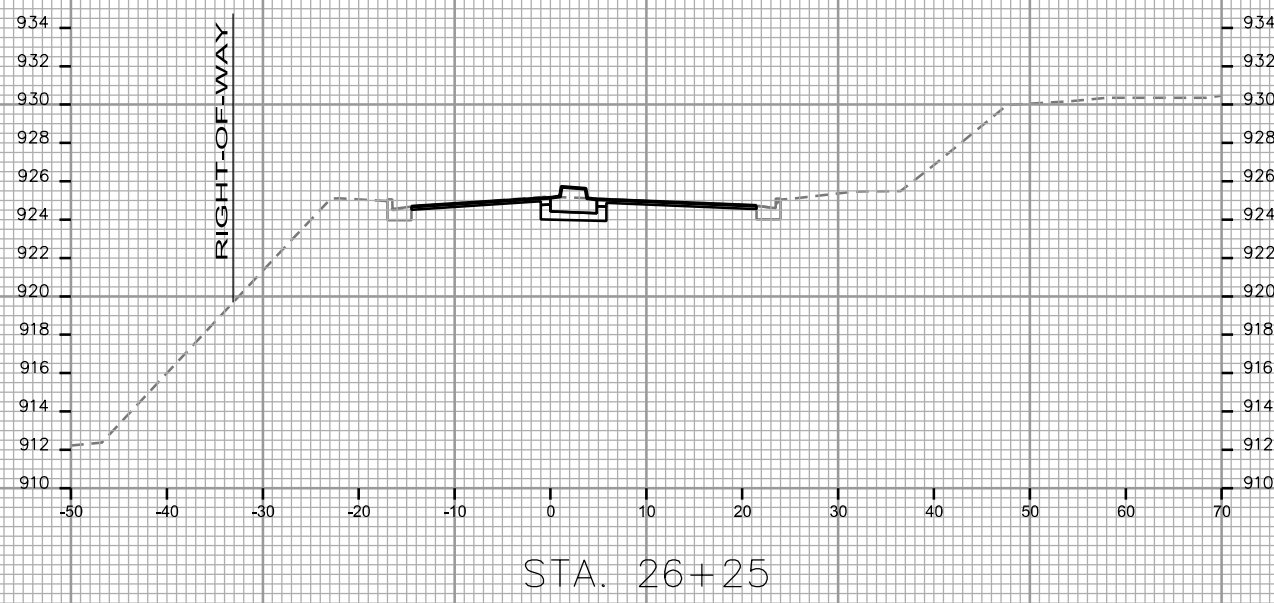
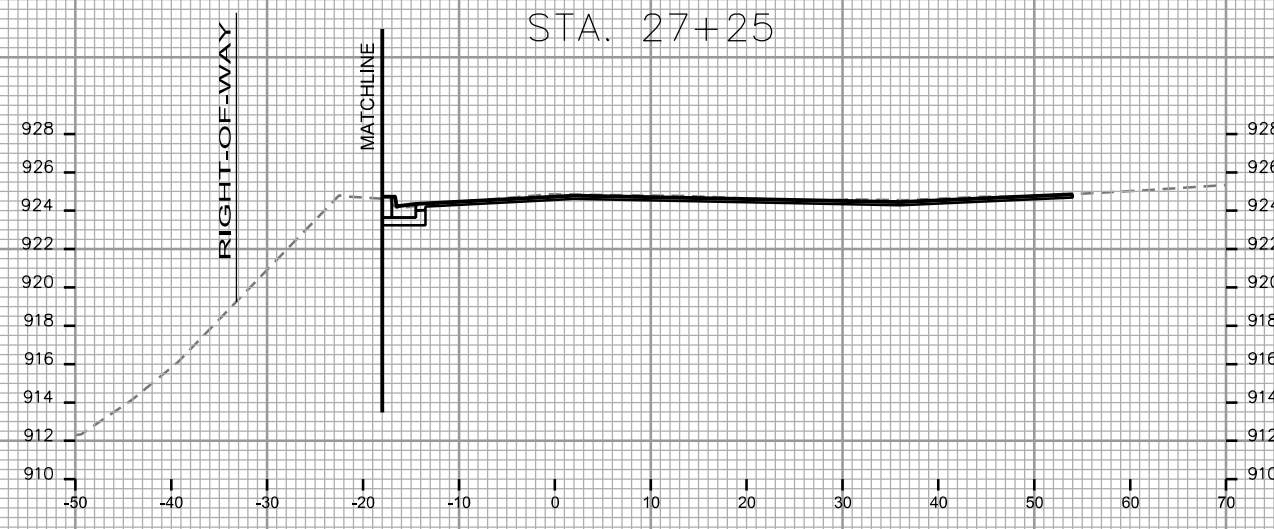
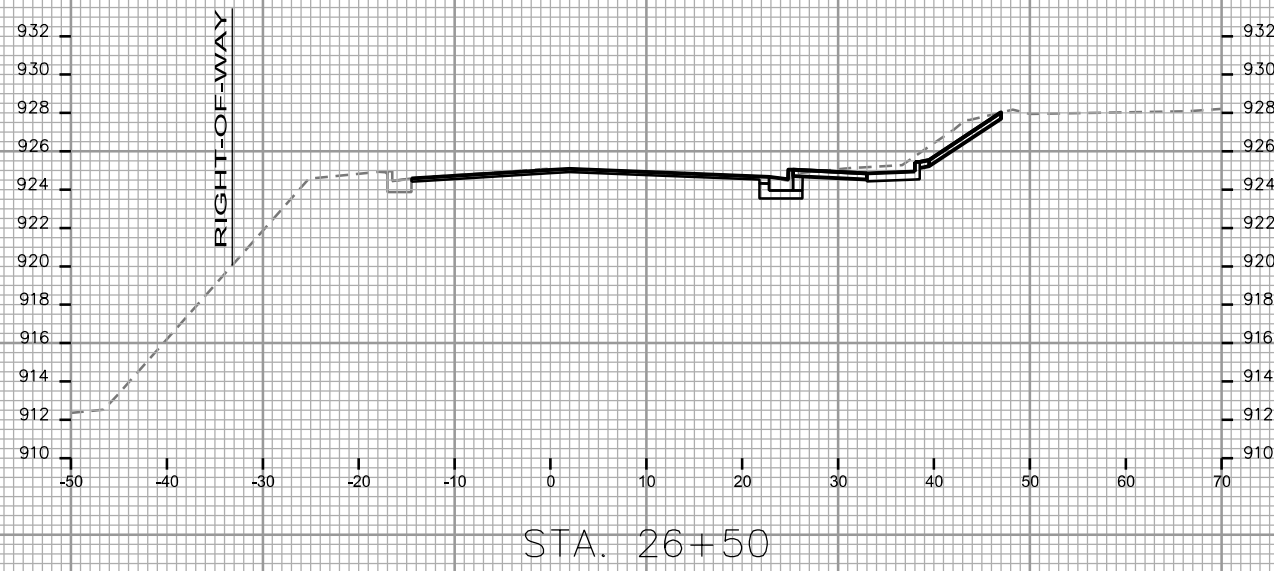
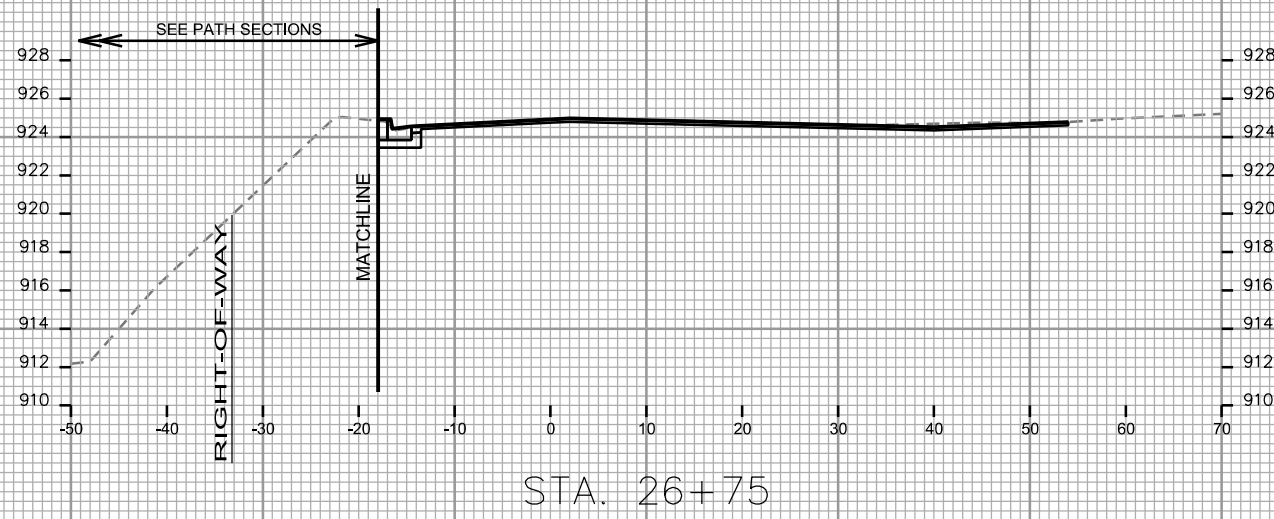
CITY OF MADISON

PLOT SCALE: \_\_\_\_\_

PLOT NAME: \_\_\_\_\_

REV. DATE: \_\_\_\_\_

ORIGINATOR: CITY OF MADISON - STREETS DIVISION



CROSS SECTIONS

OLD MIDDLETON ROAD

CITY OF MADISON

PLOT SCALE: \_\_\_\_\_

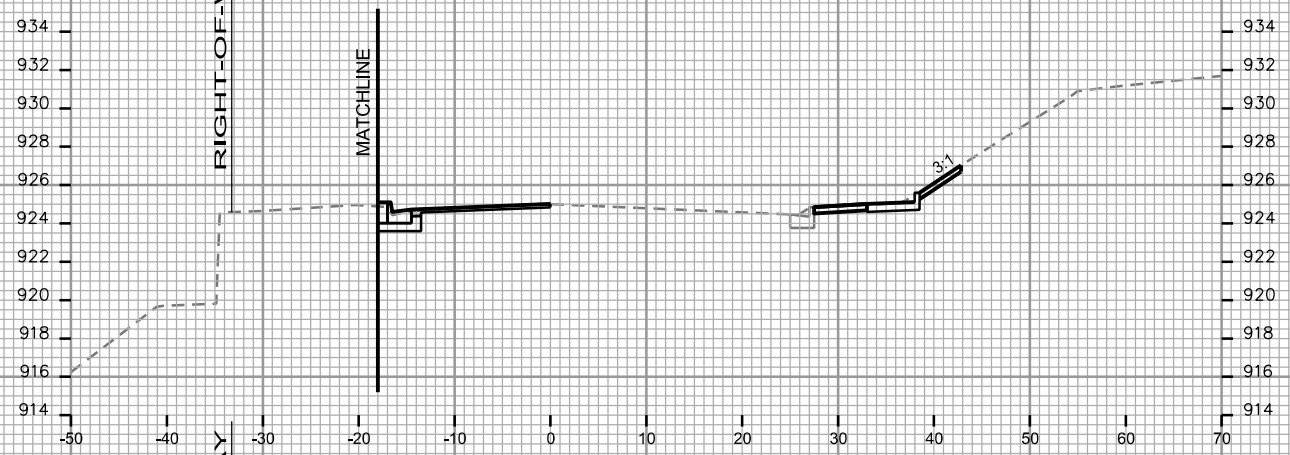
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REV. DATE: \_\_\_\_\_

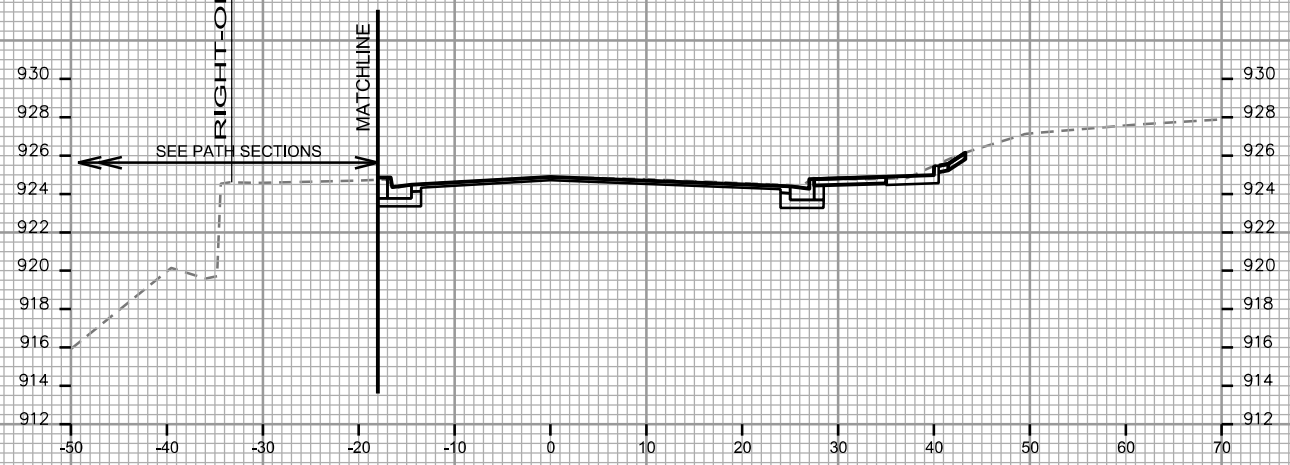
ORIGINATOR: CITY OF MADISON - STREETS DIVISION



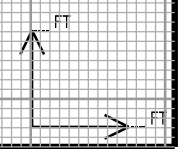
STA. 27+87.5



STA. 27+75



STA. 27+50



CROSS SECTIONS

BLACKHAWK PATH

CITY OF MADISON

PLOT SCALE: \_\_\_\_\_

PLOT NAME: \_\_\_\_\_

REV. DATE: \_\_\_\_\_

ORIGINATOR: CITY OF MADISON - STREETS DIVISION

