

Madison, Wisconsin

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# CITY OF MADISON

## CITY ENGINEERING DIVISION

### DEPARTMENT OF PUBLIC WORKS

#### PLAN OF PROPOSED IMPROVEMENT

CONTRACT NO. 7613

PORTAGE ROAD ASSESSMENT DISTRICT - 2016  
CITY PROJECT NO. 11094

EASTPARK MULTI-USE PATH & BRIDGE  
CITY PROJECT NO. 11785

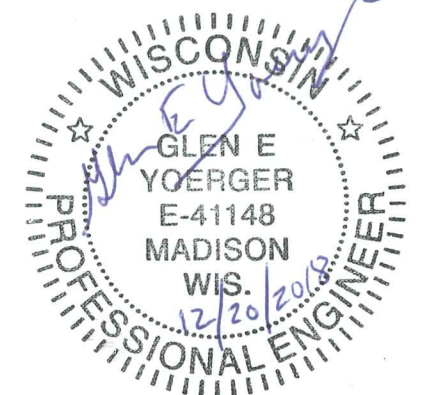
EASTLAWN PLAT MULTI-USE BRIDGE  
CITY PROJECT NO. 11338

PUBLIC IMPROVEMENT PROJECT APPROVED  
DECEMBER 1, 2015 (PORTAGE ROAD)  
&  
JUNE 19, 2018 (EASTPARK PATH & BRIDGE  
& EASTLAWN BRIDGE)  
BY THE COMMON COUNCIL  
OF MADISON, WISCONSIN

PUBLIC IMPROVEMENT DESIGN  
APPROVED BY:

*Cheryl Bach* 2-4-19  
for City Engineer Date

STREET & PATH  
DESIGNED BY:



GEOMETRICS &  
PAVEMENT MARKINGS  
DESIGNED BY:



STORM SEWER  
DESIGNED BY:



PORTAGE ROAD &  
EASTPARK MULTI-USE PATH &  
BRIDGE PROJECT LOCATION

CONVENTIONAL SIGNS

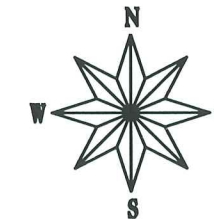
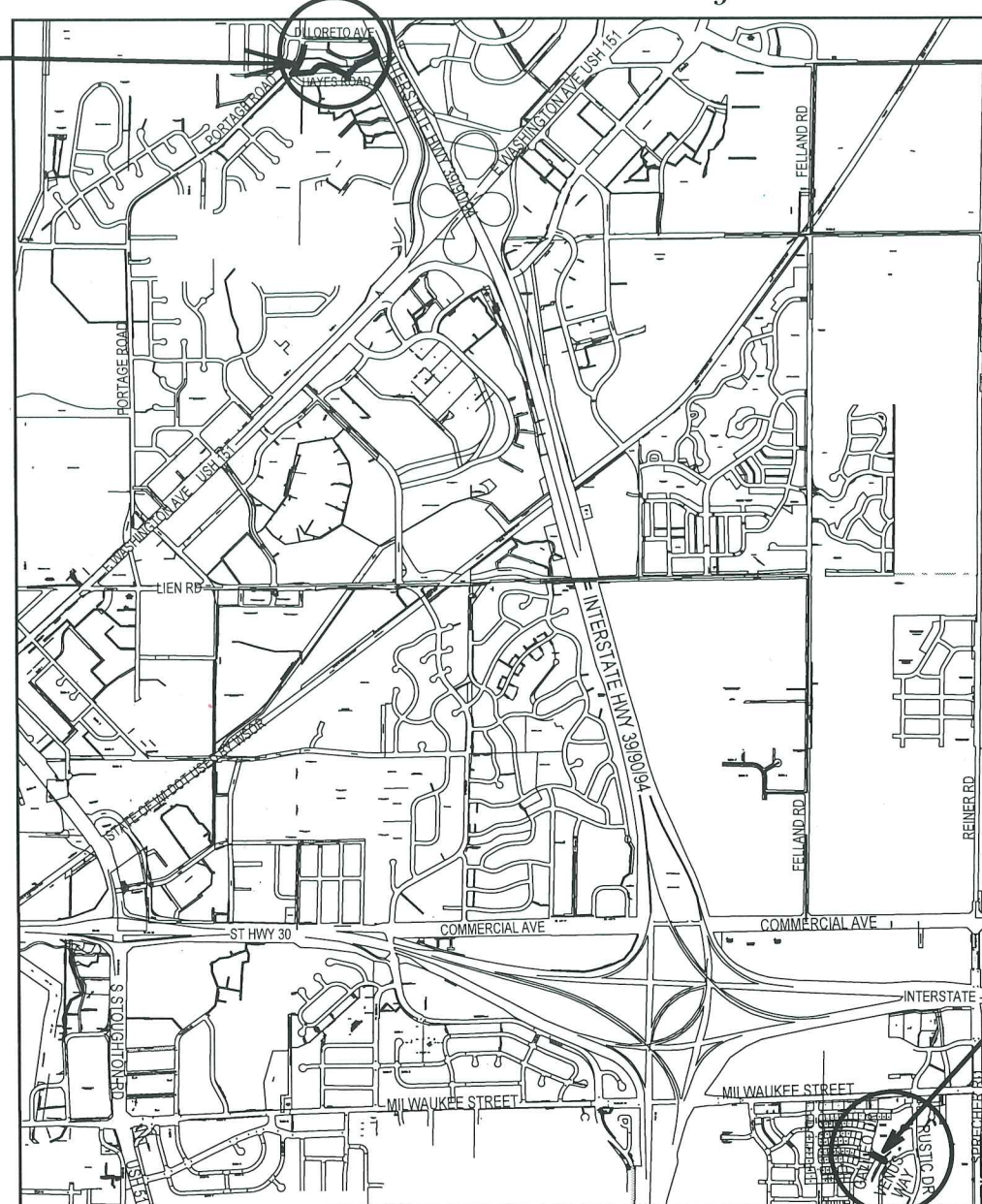
FIELD VERIFY ALL UTILITY LOCATIONS

GAS	G
STORM SEWER	ST
SANITARY SEWER	SAN
WATER	W
OVERHEAD ELECTRIC	OH
POWER POLE	□

NOTES:

ALL GUTTERS SHALL DRAIN WITH A MINIMUM GRADE OF 0.50% TOWARD STORM SEWER INLETS.

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 1.5%. SIDEWALK SHALL HAVE A MINIMUM LONGITUDINAL SLOPE OF 0.50% AND A MAXIMUM LONGITUDINAL SLOPE OF 5.00%



EASTLAWN PLAT  
MULTI-USE BRIDGE  
PROJECT LOCATION

PLOT SCALE:

PLOT NAME:

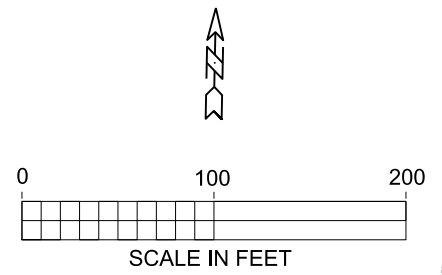
REV. DATE:

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

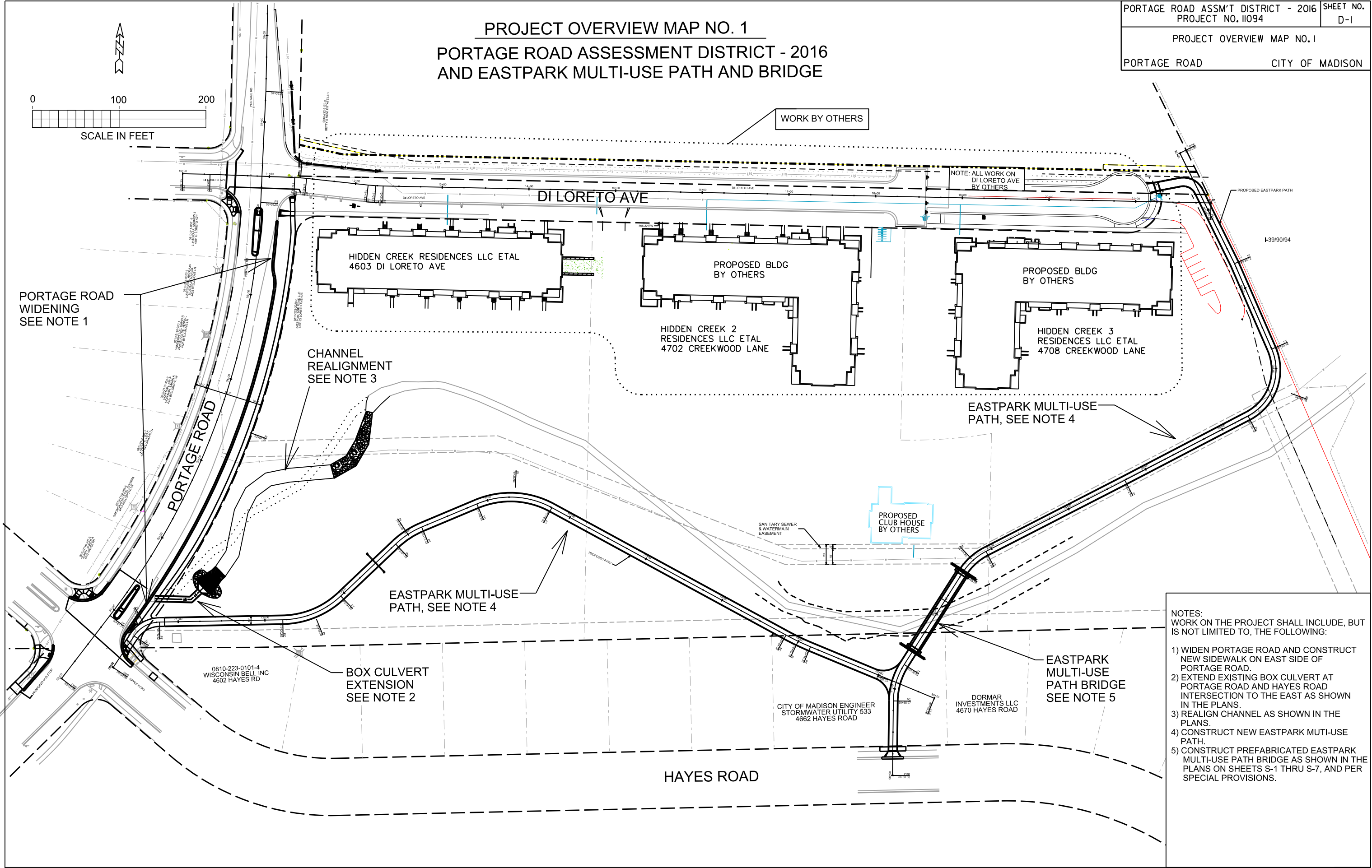


# PROJECT OVERVIEW MAP NO. 1

## PORTAGE ROAD ASSESSMENT DISTRICT - 2016 AND EASTPARK MULTI-USE PATH AND BRIDGE



PLOT SCALE: \_\_\_\_\_  
PLOT NAME: \_\_\_\_\_  
REV. DATE: \_\_\_\_\_



- NOTES:**  
WORK ON THE PROJECT SHALL INCLUDE, BUT IS NOT LIMITED TO, THE FOLLOWING:
- 1) WIDEN PORTAGE ROAD AND CONSTRUCT NEW SIDEWALK ON EAST SIDE OF PORTAGE ROAD.
  - 2) EXTEND EXISTING BOX CULVERT AT PORTAGE ROAD AND HAYES ROAD INTERSECTION TO THE EAST AS SHOWN IN THE PLANS.
  - 3) REALIGN CHANNEL AS SHOWN IN THE PLANS.
  - 4) CONSTRUCT NEW EASTPARK MULTI-USE PATH.
  - 5) CONSTRUCT PREFABRICATED EASTPARK MULTI-USE PATH BRIDGE AS SHOWN IN THE PLANS ON SHEETS S-1 THRU S-7, AND PER SPECIAL PROVISIONS.

ORIGINATOR: CITY OF MADISON, SIBBEE'S DIVISION

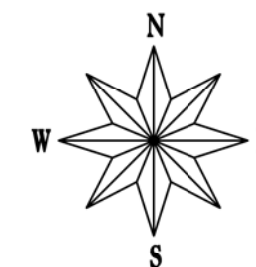




NOTES:

- 1) PLACE PREFABRICATED MULTI-USE BRIDGE ON EXISTING ABUTMENTS LOCATED AT 130 RUSTIC DRIVE ON CITY OF MADISON STORM WATER PARCEL.
- 2) SEE SPECIAL PROVISIONS AND SHEETS S-8 THRU S-11 FOR EASTLAWN PLAT BRIDGE PLANS, CONSTRUCTION SPECIFICATIONS AND DETAILS.
- 3) ACCESS THE CONSTRUCTION SITE FROM GALILEO DRIVE RIGHT OF WAY.
- 4) COORDINATE ACCESS TO THE SITE WITH:

DANIEL DAY  
D'ONOFRIO KOTTKE, & ASSOCIATES  
(608) 833-5730



PROPOSED EASTLAWN PLAT  
MULTI-USE BRIDGE LOCATION

OVERVIEW MAP 2  
EASTLAWN PLAT MULTI-USE BRIDGE  
NTS

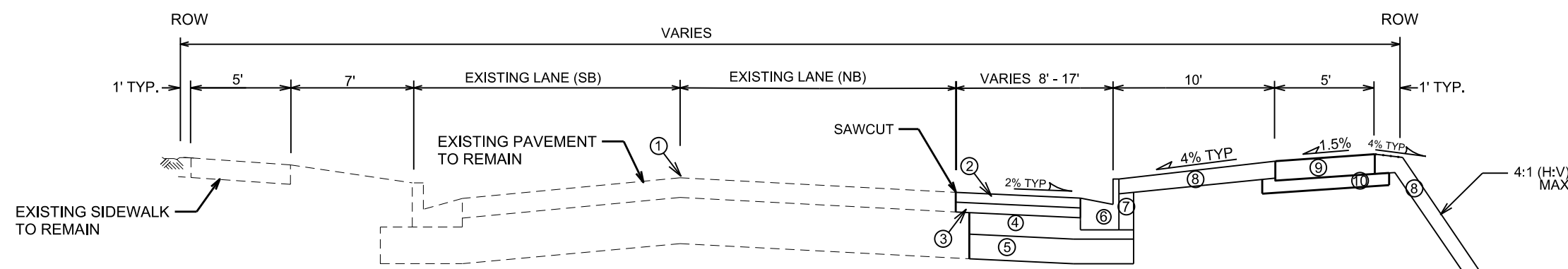
PLOT SCALE: \_\_\_\_\_

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

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION





TYPICAL FINISHED SECTION  
PORTAGE ROAD - WIDENING NB LANES  
STATION 51+00 to STATION 55+00  
NOT TO SCALE

- LEGEND
- ① POINT REFERRED TO ON PROFILE
  - ② 2.0" HMA PAVEMENT - TYPE 4 MT 58-28 S (UPPER LAYER)
  - ③ 3.5" HMA PAVEMENT - TYPE 3 MT 58-28 S (LOWER LAYER)
  - ④ 6" GRADATION 2 CRUSHED AGGREGATE BASE COURSE (UPPER LAYER)
  - ⑤ 6" GRADATION 1 CRUSHED AGGREGATE BASE COURSE (LOWER LAYER)
  - ⑥ CONCRETE CURB AND GUTTER, TYPE A
  - ⑦ FILL, INCIDENTAL TO CURB & GUTTER
  - ⑧ 6" TOPSOIL, SEED AND MATTING
  - ⑨ 5-INCH CONCRETE SIDEWALK
  - ⑩ 2" MINIMUM GRANULAR FILL (INCIDENTAL TO WALK)
  - ⑪ 1.75" HMA PAVEMENT TYPE 4 LT 58-28 S (UPPER LAYER - BIKE PATH)
  - ⑫ 1.75" HMA PAVEMENT TYPE 4 LT 58-28 S (LOWER LAYER - BIKE PATH)
  - ⑬ 8" CRUSHED AGGREGATE BASE COURSE, GRAD. NO. 2

\* SEE CROSS SECTION SHEETS FOR CROSS SLOPES AND TOP OF CURB ELEVATIONS.

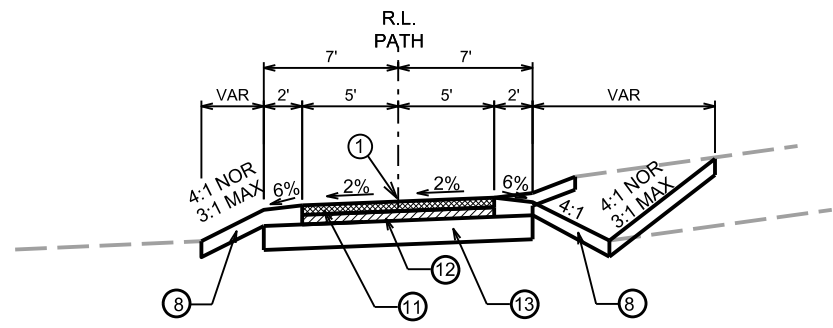
EARTHWORK SUMMARY

<b>PORTAGE ROAD WIDENING</b>	
EXCAVATION CUT	584 CY (PLAN QUANTITY)
TOPSOIL STRIPPING	467 CY (PLAN QUANTITY)
ESTIMATED UNDERCUT (EBS)	210 CY
FILL BORROW	605 CY (PLAN QUANTITY)
<b>EASTPARK PATH</b>	
EXCAVATION CUT	882 CY (PLAN QUANTITY)
TOPSOIL STRIPPING	414 CY (PLAN QUANTITY)
ESTIMATED UNDERCUT (EBS)	220 CY
FILL BORROW	224 CY (PLAN QUANTITY)
<b>CHANNEL REALIGNMENT</b>	
EXCAVATION CUT	1440 CY (PLAN QUANTITY)

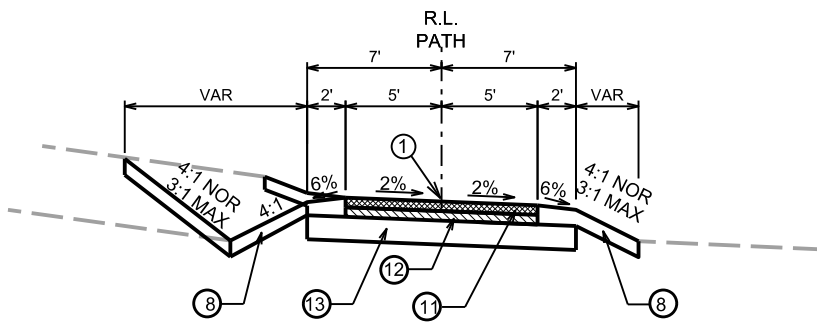
TOTALS:

EXCAVATION CUT = 3787 CY (PLAN QUANTITY INCLUDES TOPSOIL STRIPPING)  
EST. UNDERCUT = 430 CY  
UNCLASSIFIED EXC = 4217 CY

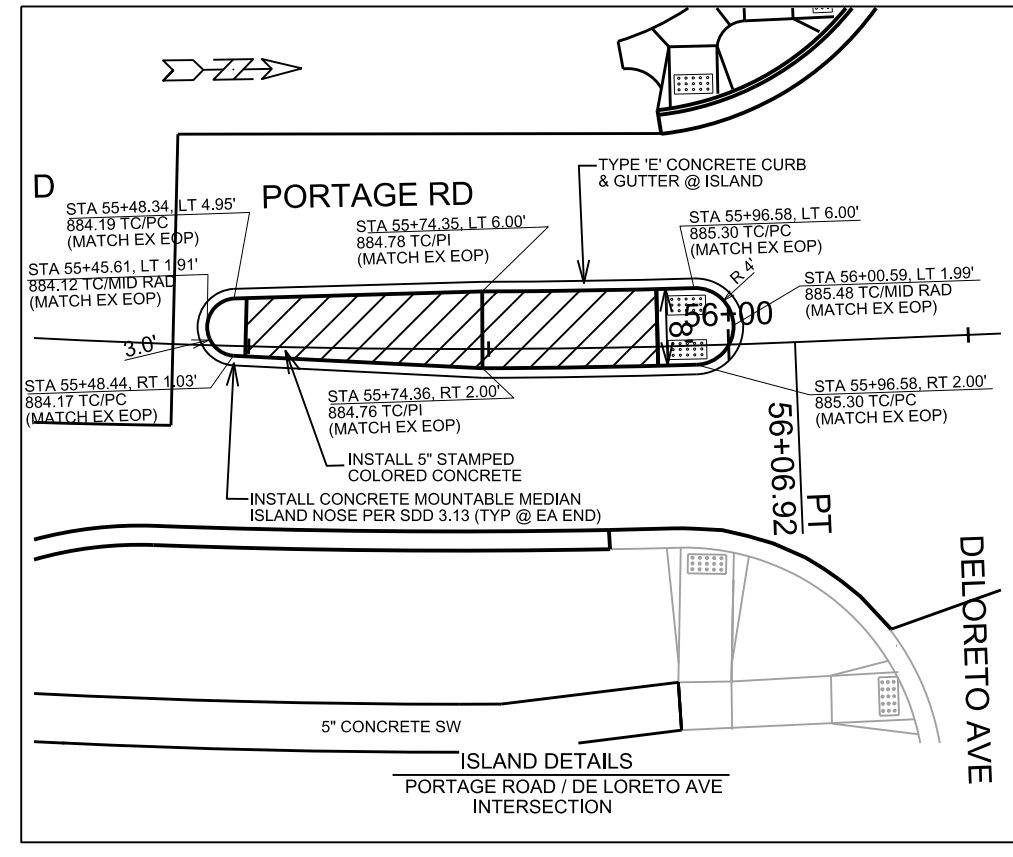
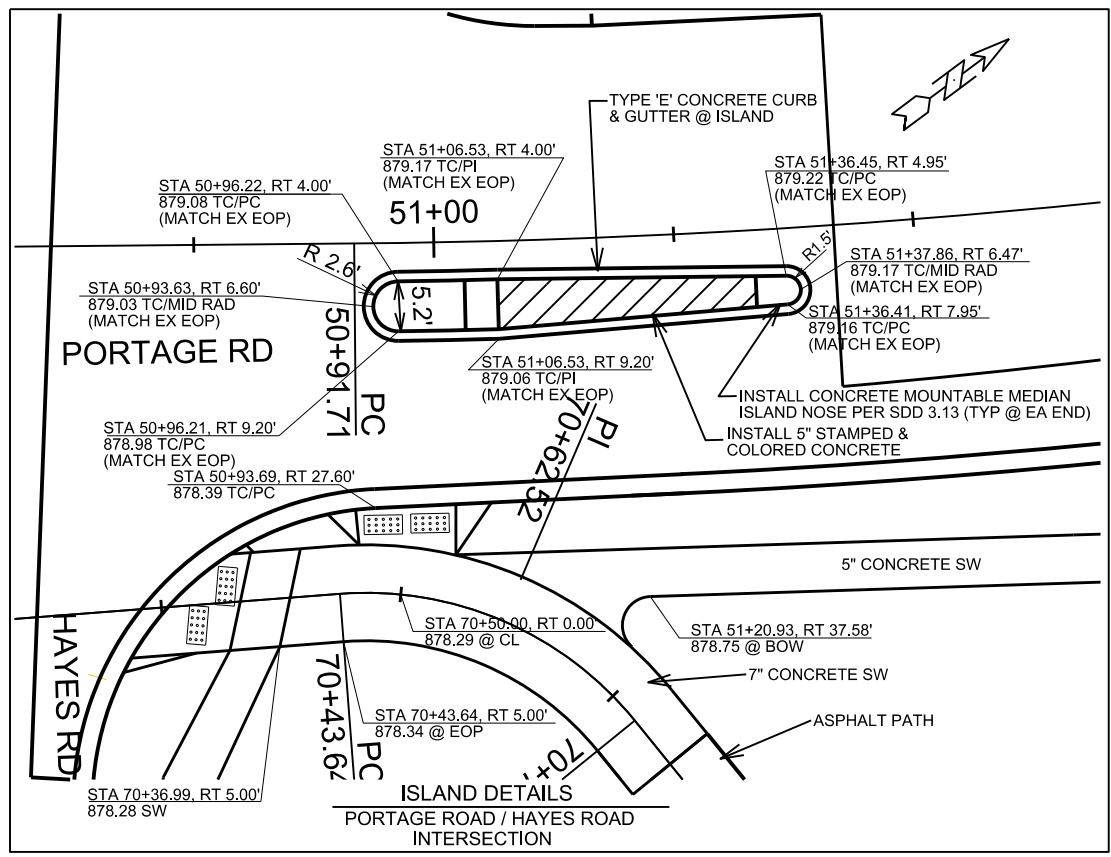
FILL BORROW = 829 CY (PLAN QUANTITY)



PROPOSED TYPICAL SECTION  
PATH STA 70+50 to STA 80+00  
PATH STA 90+50 to STA 91+25



PROPOSED TYPICAL SECTION  
PATH STA 92+75 to STA 99+50



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

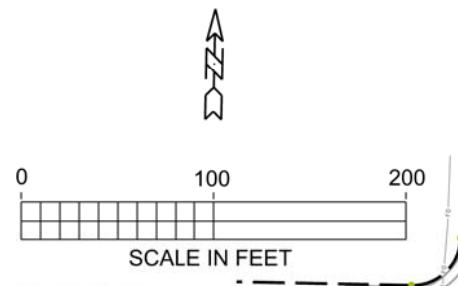
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REV. DATE: \_\_\_\_\_

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



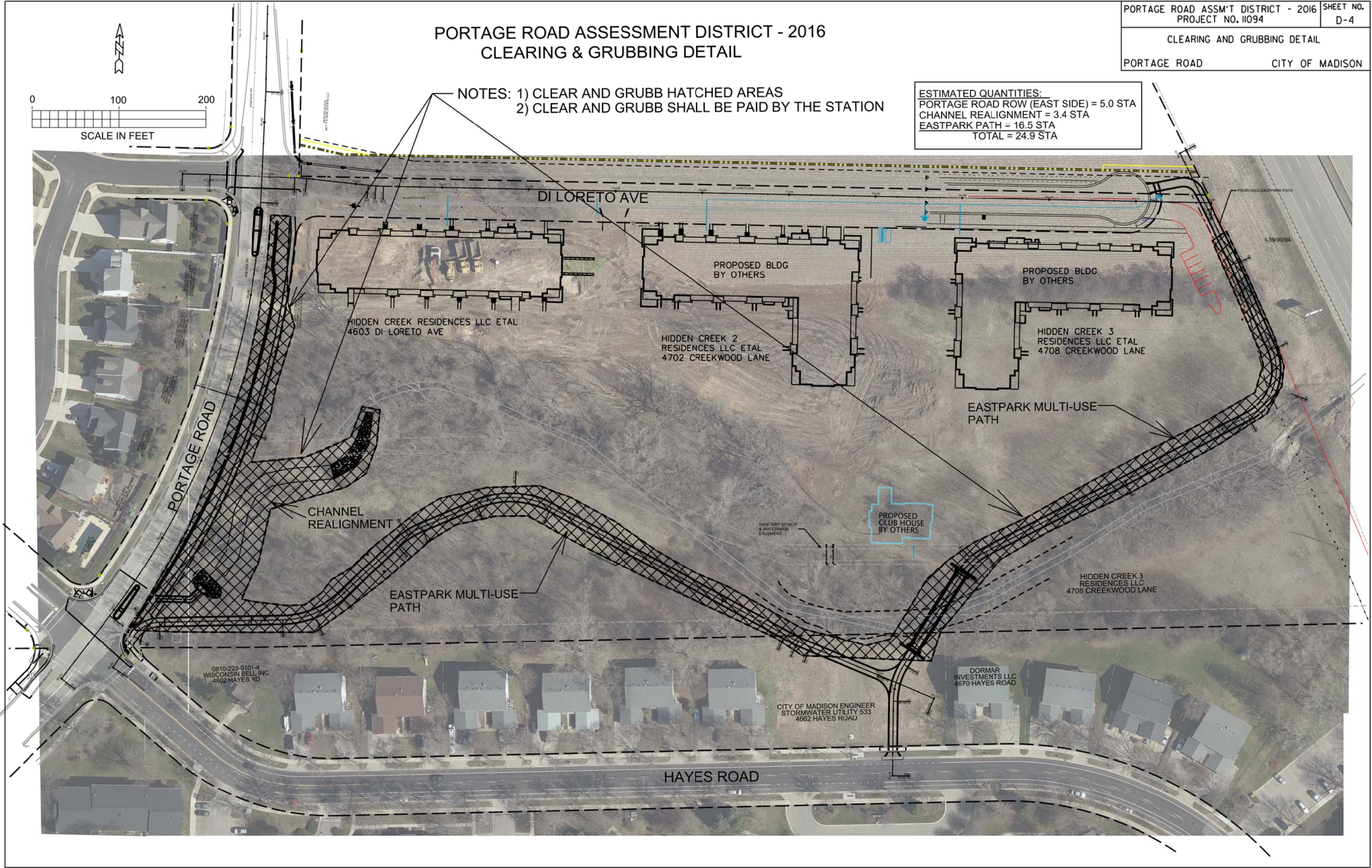
## PORTAGE ROAD ASSESSMENT DISTRICT - 2016 CLEARING & GRUBBING DETAIL



NOTES: 1) CLEAR AND GRUBB HATCHED AREAS  
2) CLEAR AND GRUBB SHALL BE PAID BY THE STATION

ESTIMATED QUANTITIES:  
 PORTAGE ROAD ROW (EAST SIDE) = 5.0 STA  
 CHANNEL REALIGNMENT = 3.4 STA  
 EASTPARK PATH = 16.5 STA  
 TOTAL = 24.9 STA

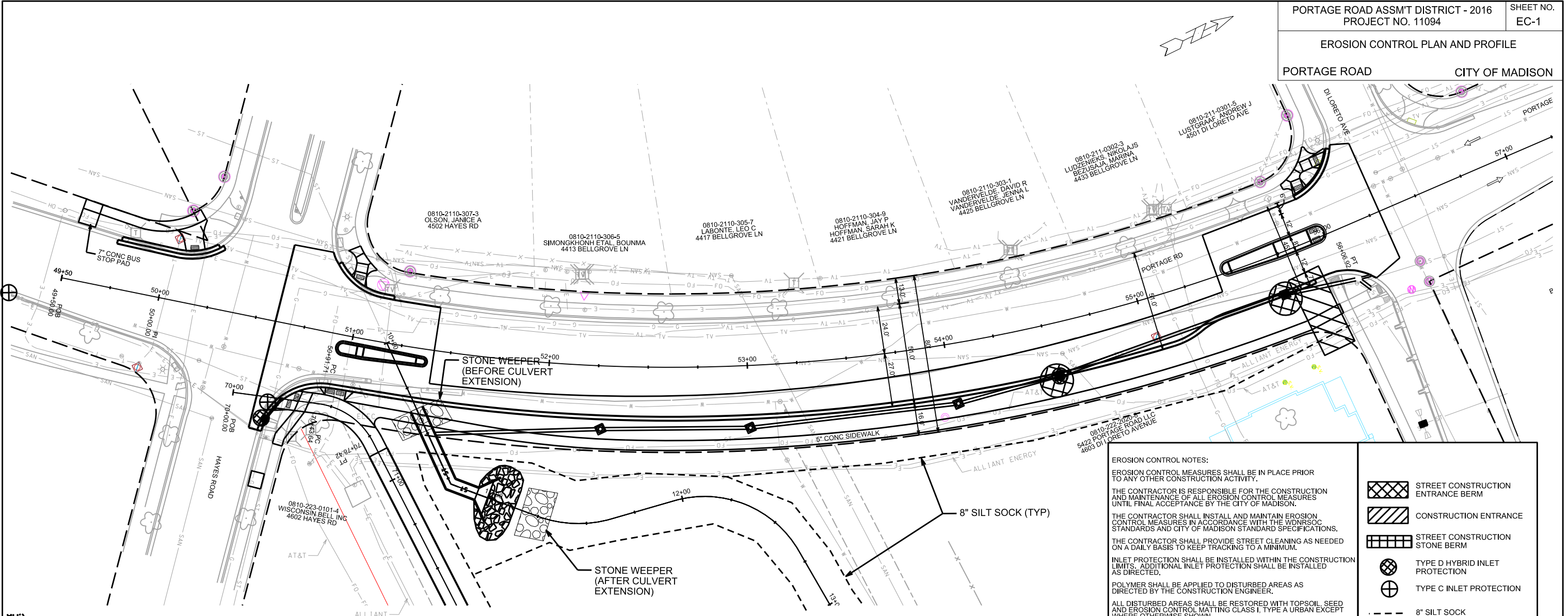
PLOT SCALE: \_\_\_\_\_  
 PLOT NAME: \_\_\_\_\_  
 REV. DATE: \_\_\_\_\_



ORIGINATOR: CITY\_OF\_MADISON\_SIBREETS\_DIVISION



EROSION CONTROL PLAN AND PROFILE  
PORTAGE ROAD CITY OF MADISON



**EROSION CONTROL NOTES:**

EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO ANY OTHER CONSTRUCTION ACTIVITY.

THE CONTRACTOR IS RESPONSIBLE FOR THE CONSTRUCTION AND MAINTENANCE OF ALL EROSION CONTROL MEASURES UNTIL FINAL ACCEPTANCE BY THE CITY OF MADISON.

THE CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE WDRS/COC STANDARDS AND CITY OF MADISON STANDARD SPECIFICATIONS.

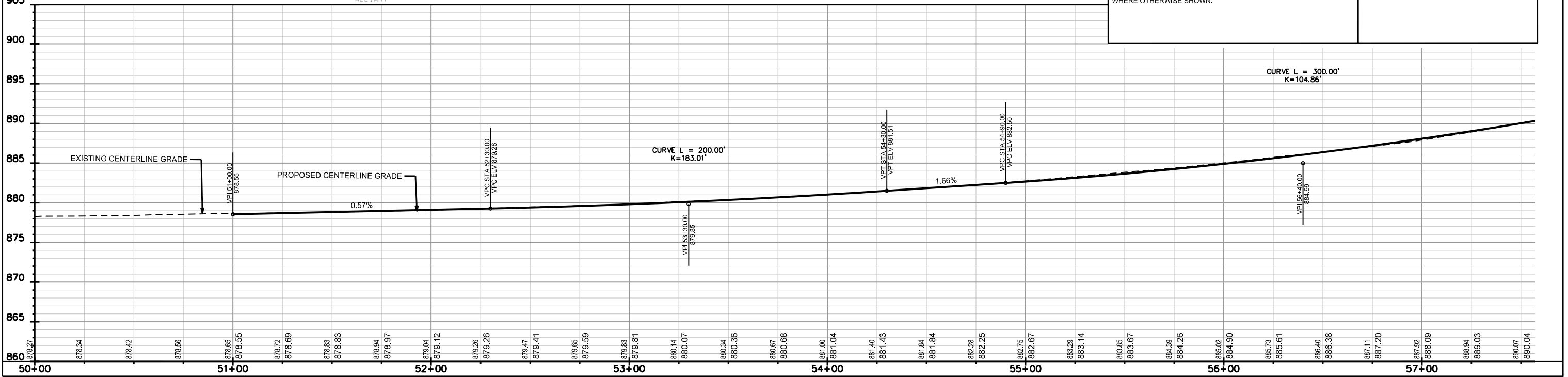
THE CONTRACTOR SHALL PROVIDE STREET CLEANING AS NEEDED ON A DAILY BASIS TO KEEP TRACKING TO A MINIMUM.

INLET PROTECTION SHALL BE INSTALLED WITHIN THE CONSTRUCTION LIMITS. ADDITIONAL INLET PROTECTION SHALL BE INSTALLED AS DIRECTED.

POLYMER SHALL BE APPLIED TO DISTURBED AREAS AS DIRECTED BY THE CONSTRUCTION ENGINEER.

ALL DISTURBED AREAS SHALL BE RESTORED WITH TOPSOIL, SEED AND EROSION CONTROL MATTING CLASS I, TYPE A URBAN EXCEPT WHERE OTHERWISE SHOWN.

	STREET CONSTRUCTION ENTRANCE BERM
	CONSTRUCTION ENTRANCE
	STREET CONSTRUCTION STONE BERM
	TYPE D HYBRID INLET PROTECTION
	TYPE C INLET PROTECTION
	8" SILT SOCK



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

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

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

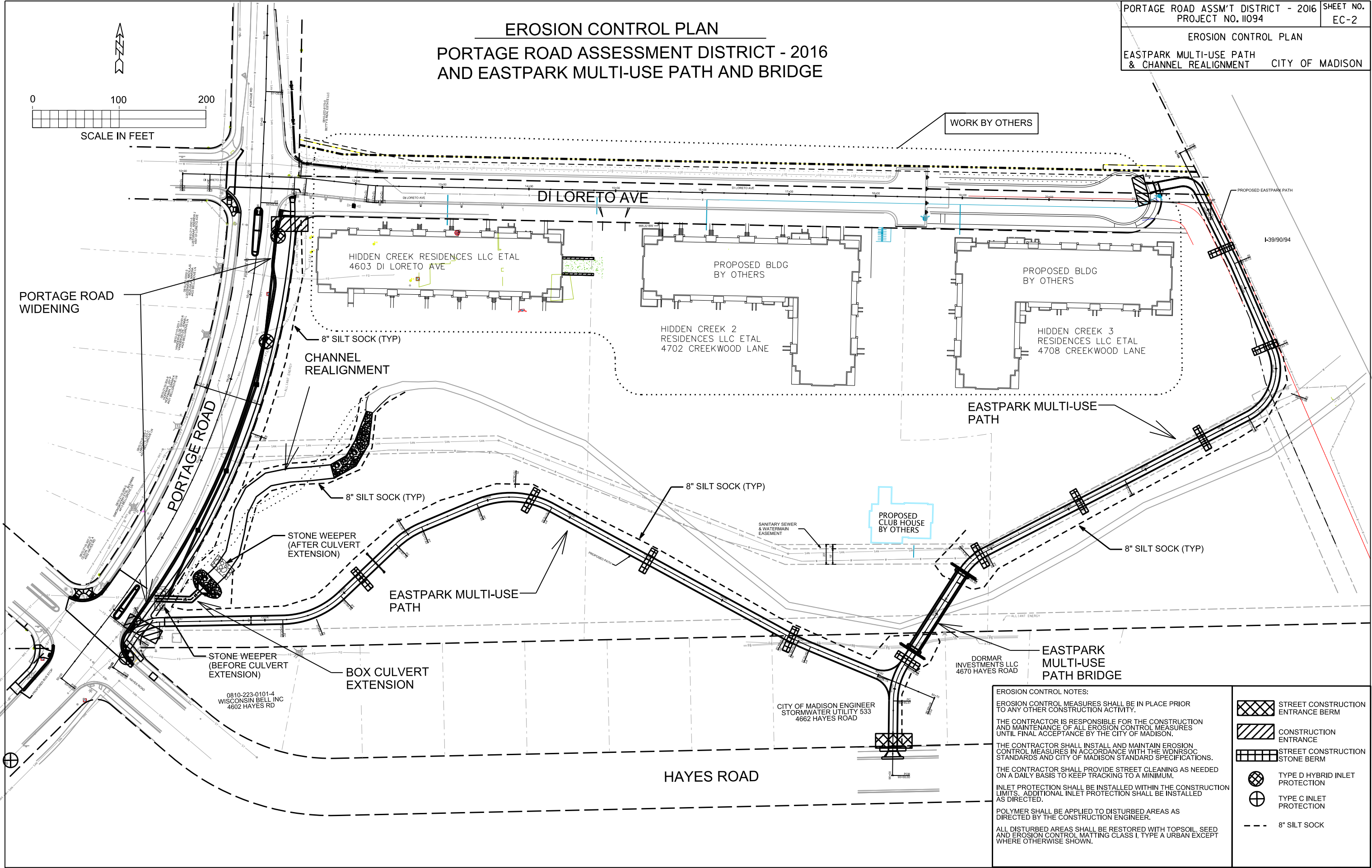
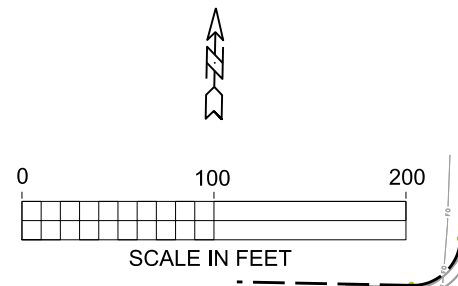
ORIGINATOR: CITY OF MADISON, STREETS DIVISION



# EROSION CONTROL PLAN

## PORTAGE ROAD ASSESSMENT DISTRICT - 2016 AND EASTPARK MULTI-USE PATH AND BRIDGE

EROSION CONTROL PLAN  
EASTPARK MULTI-USE PATH  
& CHANNEL REALIGNMENT CITY OF MADISON



**EROSION CONTROL NOTES:**

EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO ANY OTHER CONSTRUCTION ACTIVITY.

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THE CONTRACTOR SHALL PROVIDE STREET CLEANING AS NEEDED ON A DAILY BASIS TO KEEP TRACKING TO A MINIMUM.

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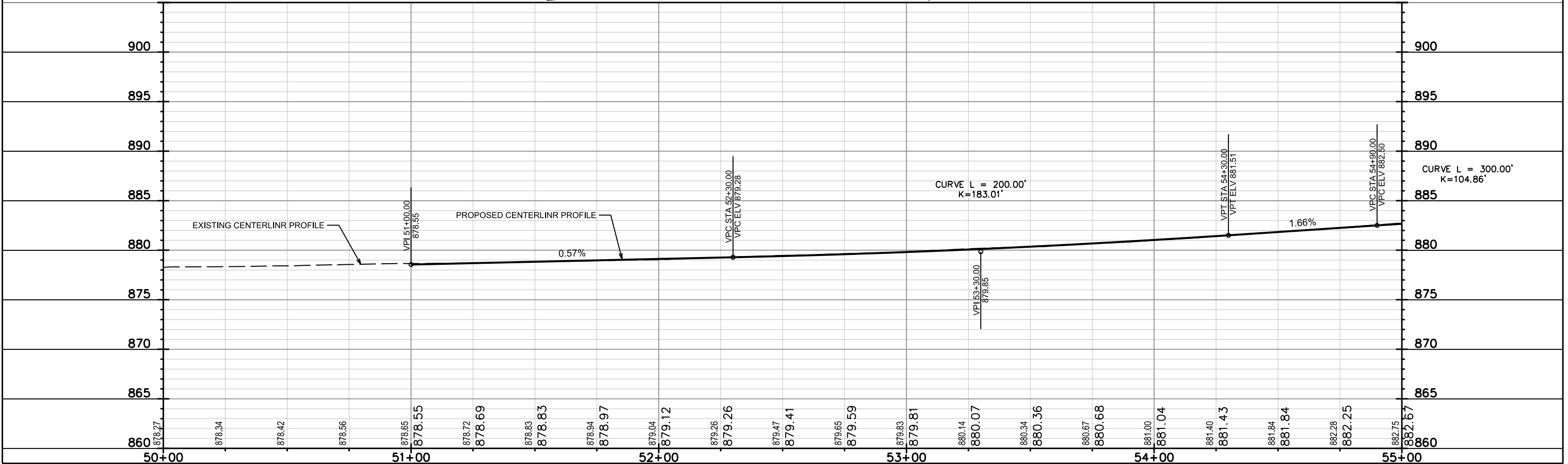
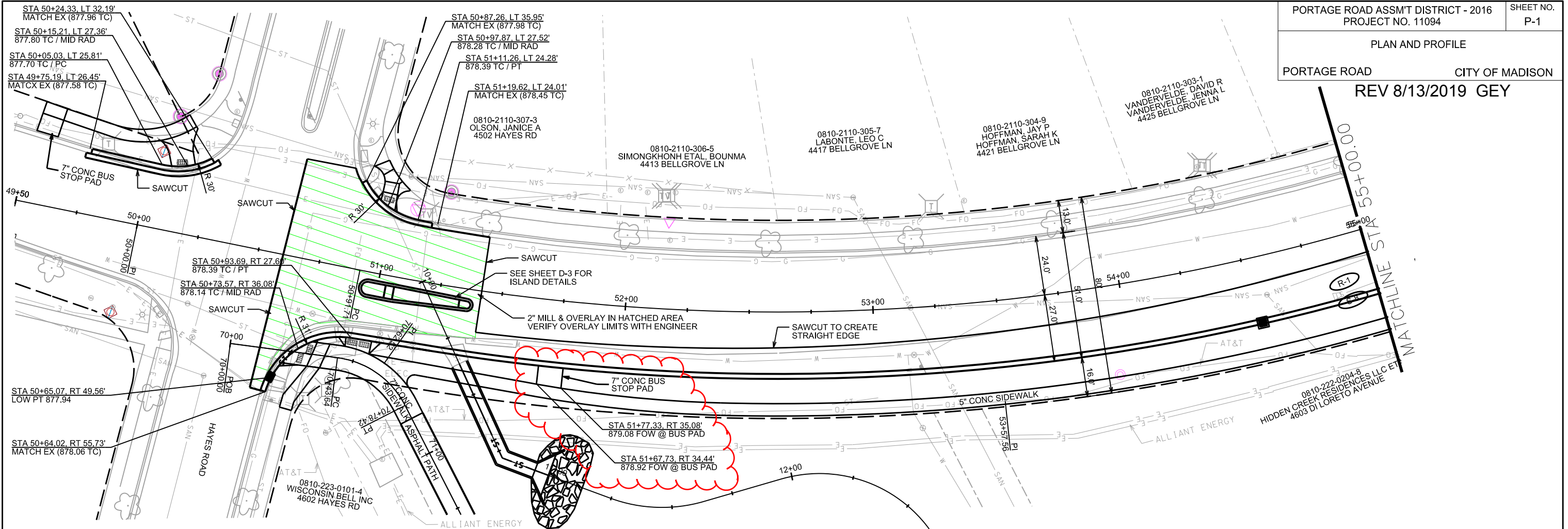
POLYMER SHALL BE APPLIED TO DISTURBED AREAS AS DIRECTED BY THE CONSTRUCTION ENGINEER.

ALL DISTURBED AREAS SHALL BE RESTORED WITH TOPSOIL, SEED AND EROSION CONTROL MATTING CLASS I, TYPE A URBAN EXCEPT WHERE OTHERWISE SHOWN.

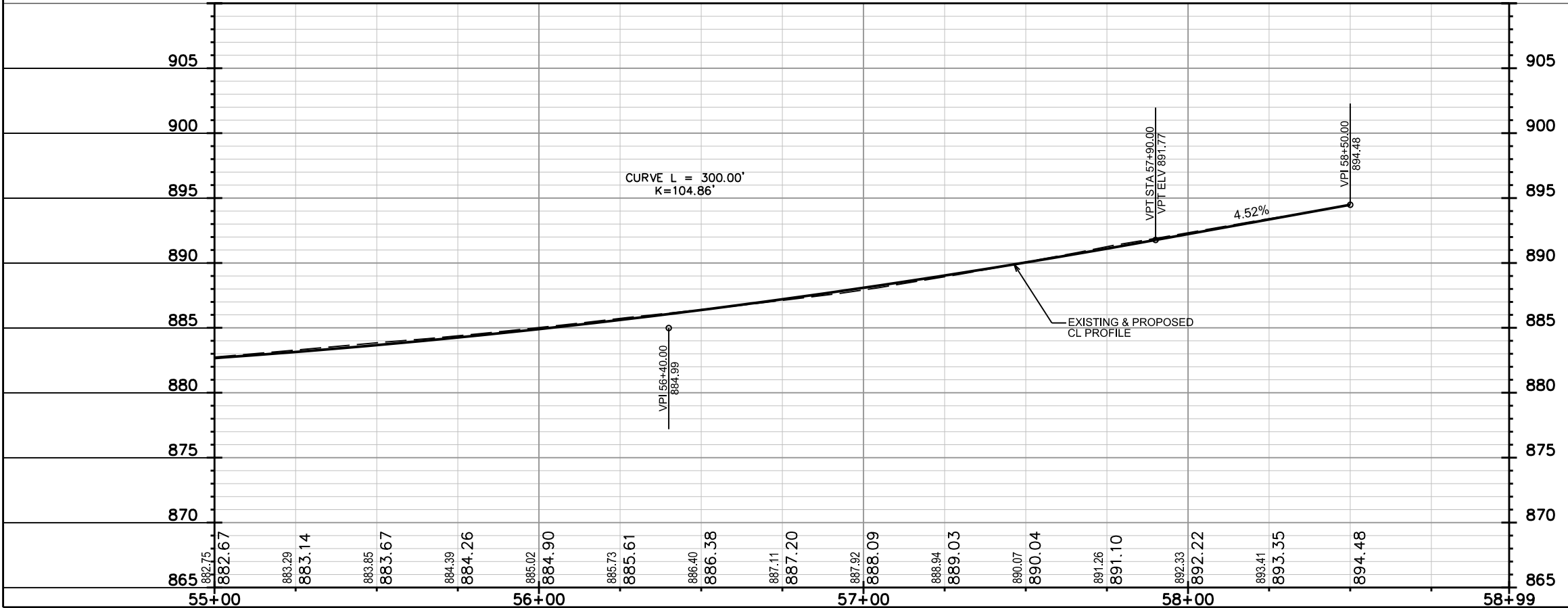
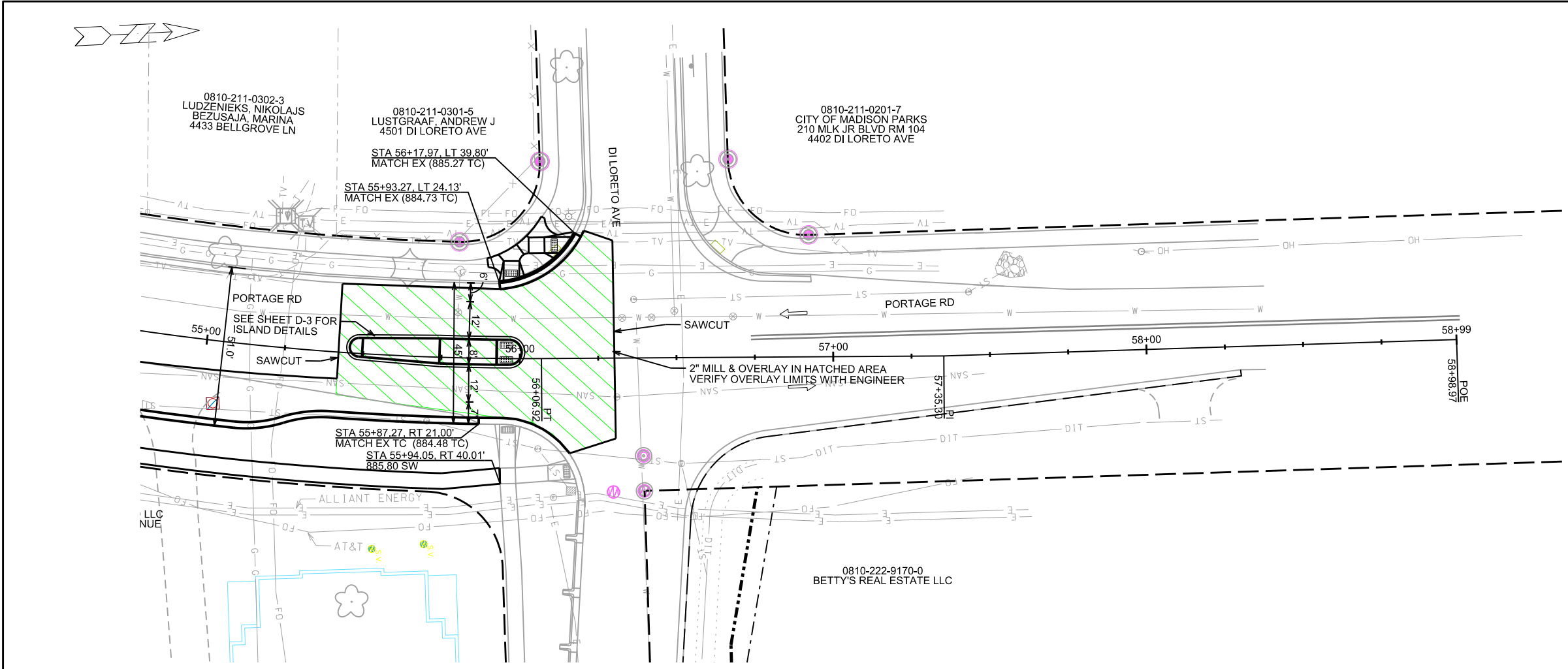
- STREET CONSTRUCTION ENTRANCE BERM
- CONSTRUCTION ENTRANCE
- STREET CONSTRUCTION STONE BERM
- TYPE D HYBRID INLET PROTECTION
- TYPE C INLET PROTECTION
- 8" SILT SOCK

PLOT SCALE: \_\_\_\_\_  
PLOT NAME: \_\_\_\_\_  
REV. DATE: \_\_\_\_\_  
ORIGINATOR: CITY OF MADISON, STREETS DIVISION









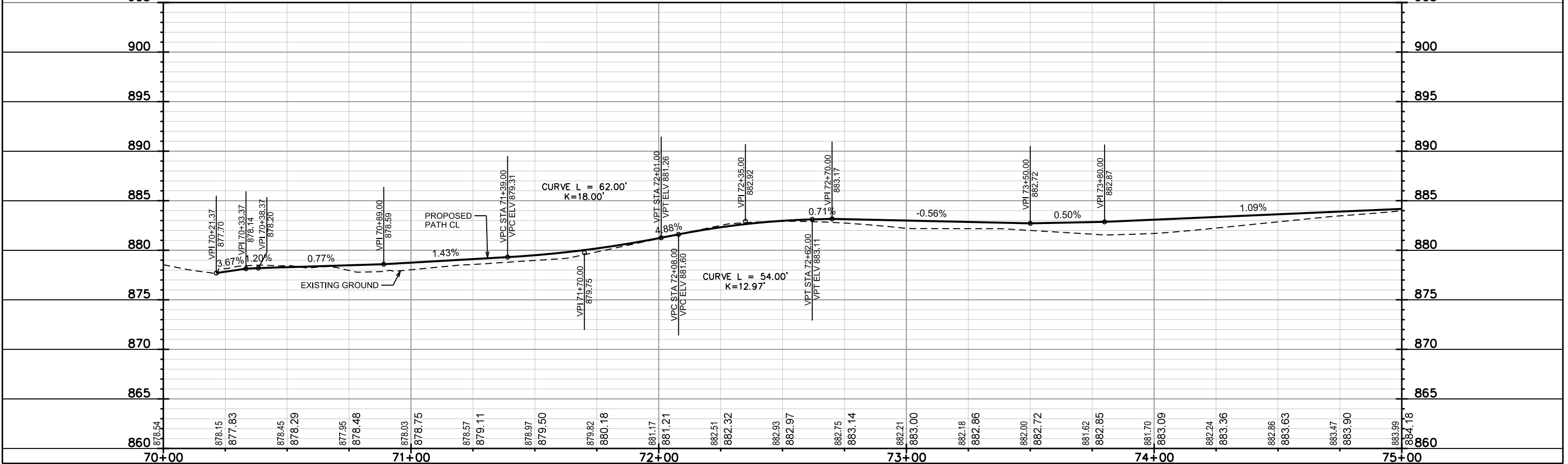
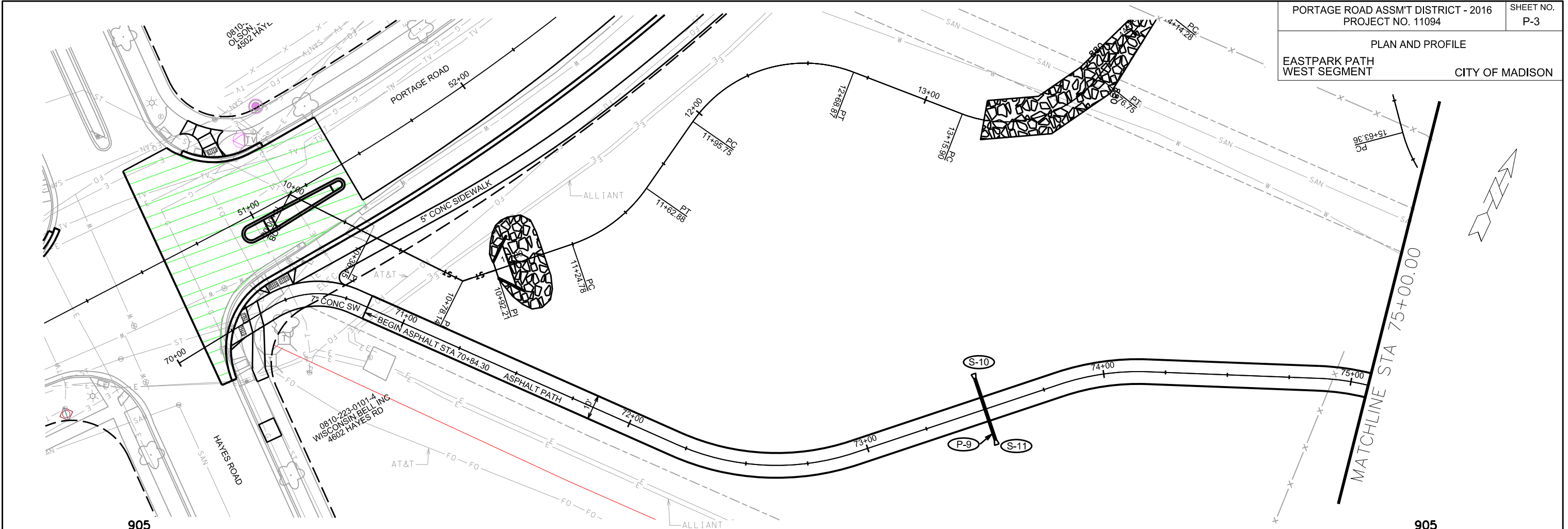
PLOT SCALE: \_\_\_\_\_

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

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION





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

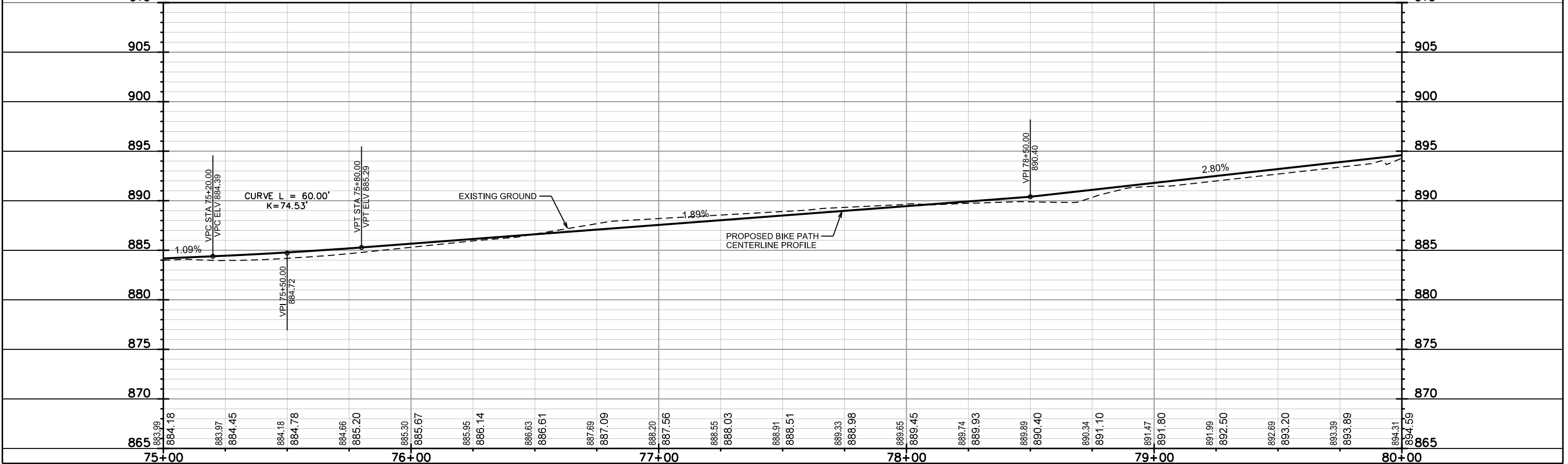
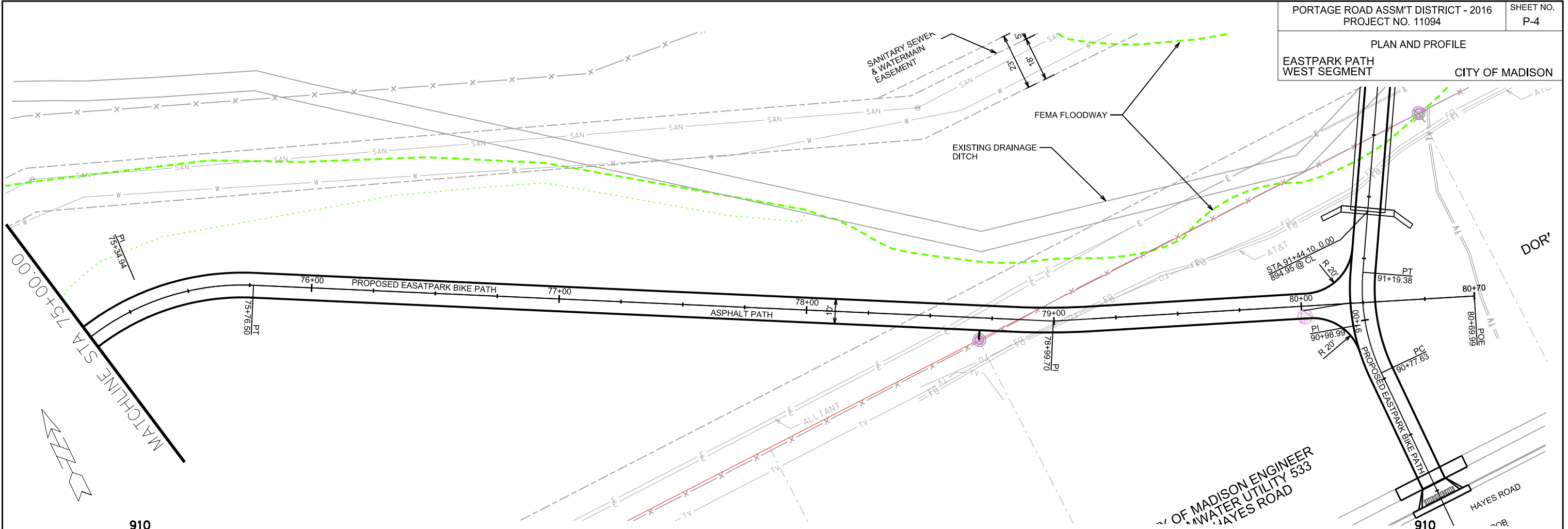
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REV. DATE: \_\_\_\_\_

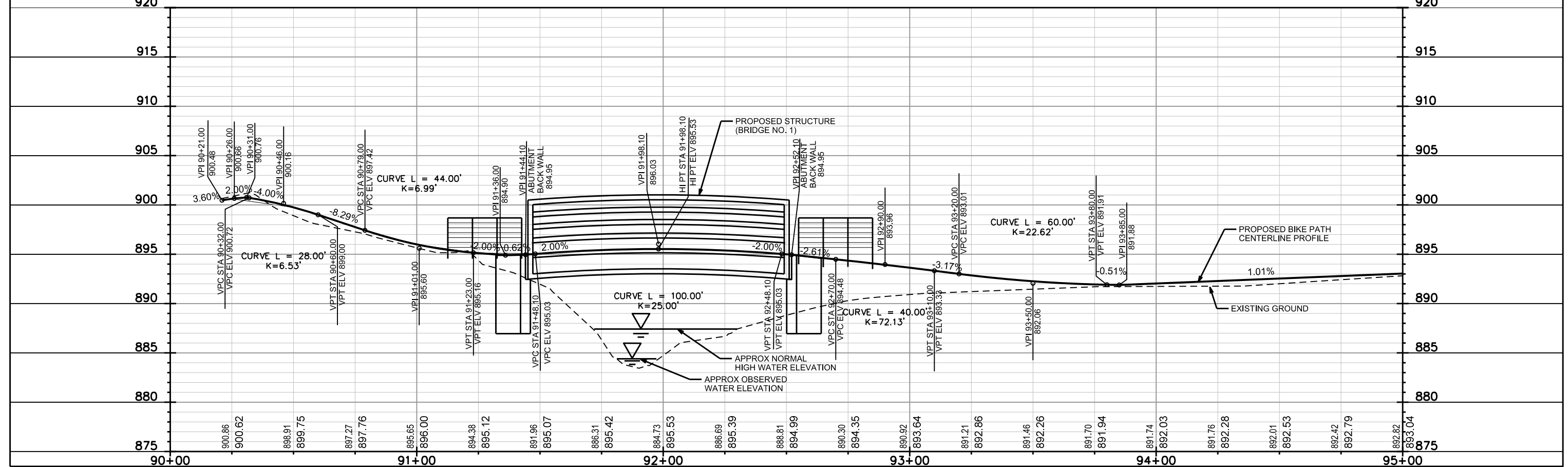
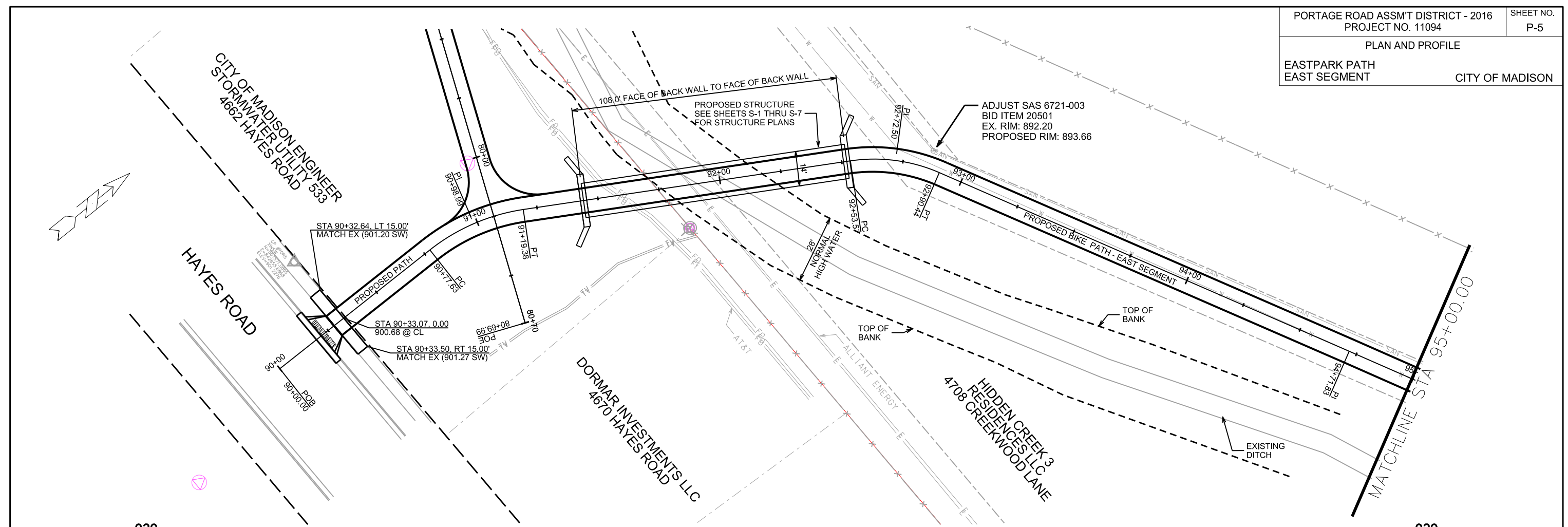
ORIGINATOR: CITY OF MADISON, STREETS DIVISION



PLAN AND PROFILE  
EASTPARK PATH  
WEST SEGMENT  
CITY OF MADISON



PLOT SCALE: \_\_\_\_\_  
PLOT NAME: \_\_\_\_\_  
REV. DATE: \_\_\_\_\_  
ORIGINATOR: CITY OF MADISON, STREETS DIVISION



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

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

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



PLAN AND PROFILE  
EASTPARK PATH  
EAST SEGMENT  
CITY OF MADISON



MATCHLINE STA 95+00.00

TERMINATE PATH @ STA 99+72 - COORDINATE  
PATH TERMINUS WITH DEVELOPER  
(DI LORETO AVE WORK IS BY OTHERS)

EXISTING DRAINAGE  
DITCH

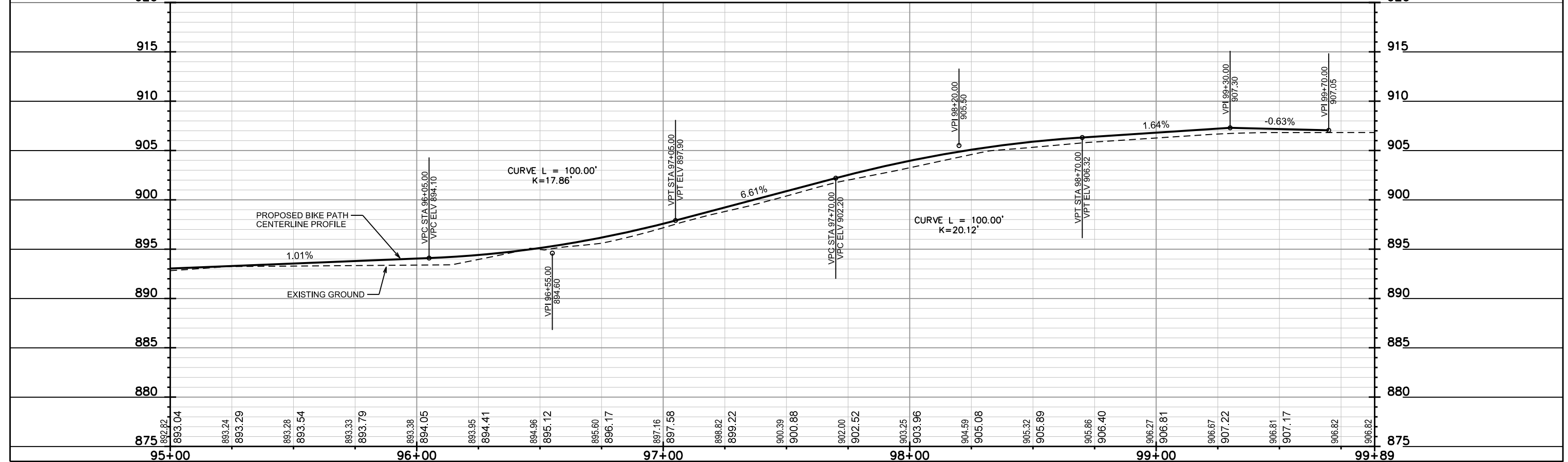
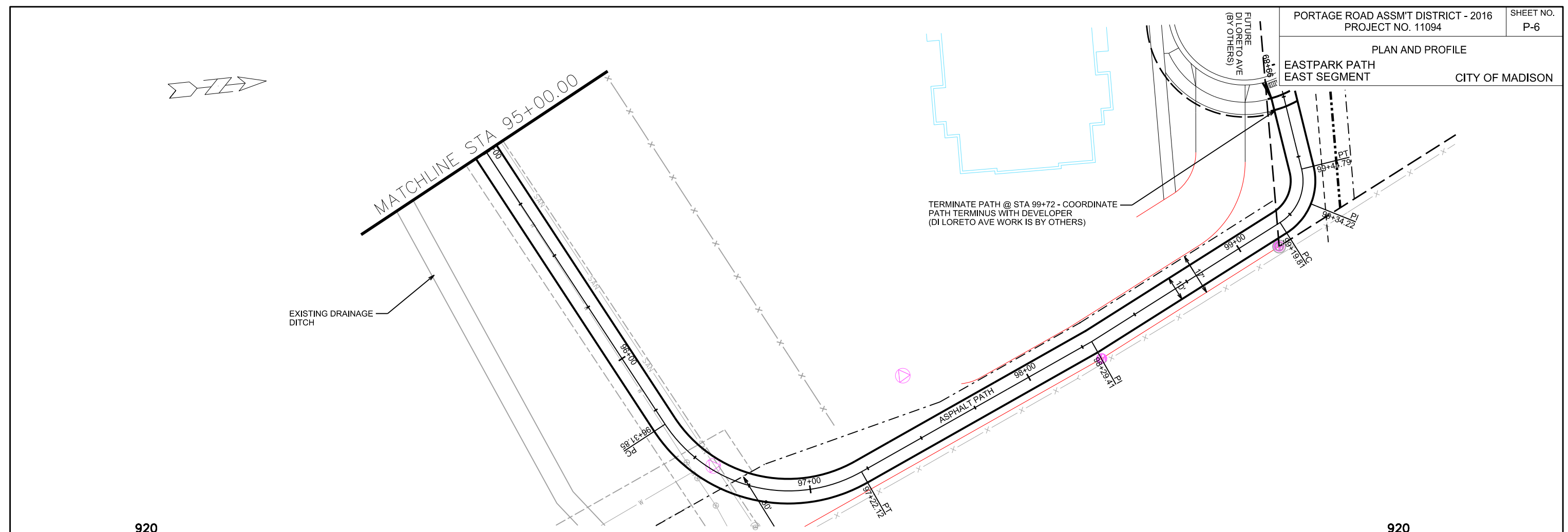
FUTURE  
DI LORETO AVE  
(BY OTHERS)

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

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

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

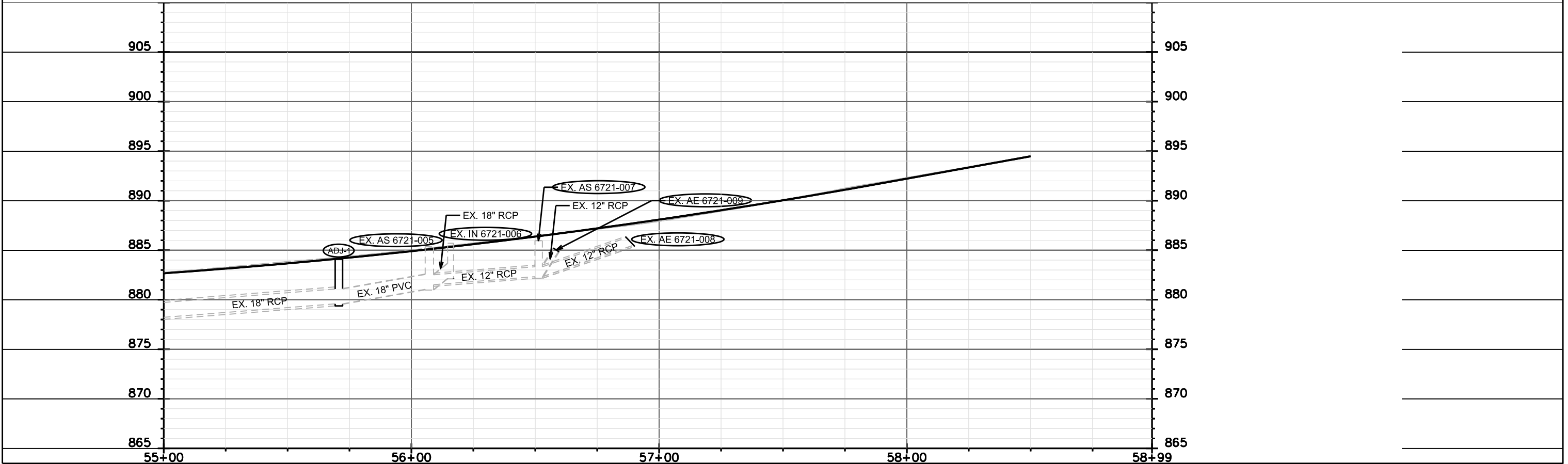
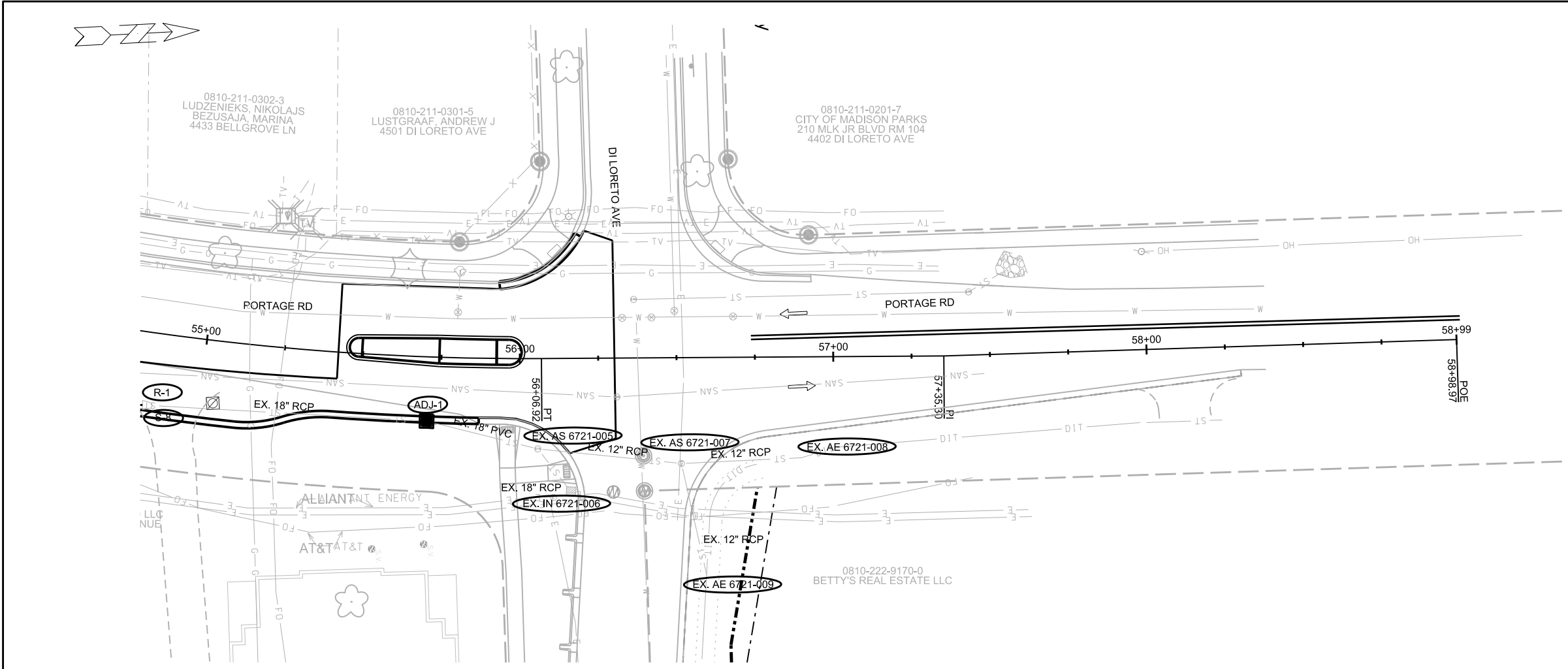
ORIGINATOR: CITY OF MADISON, STREETS DIVISION











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

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

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



# STORM SEWER SCHEDULE

## ALIGNMENT CODES:

'CU'- CULVERT  
'PR'- PORTAGE RD  
'BP'- BIKE PATH

PORTAGE RD ASSM'T DISTRICT - 2016	SHEET NO.
PROJECT NO. 11094	U-3
STORM SEWER SCHEDULE	
CITY OF MADISON	

### PROPOSED STORM STRUCTURES

STRUC NO.	STATION	LOCATION (OFFSET)	TYPE	TOP OF CASTING	E.I.	DEPTH	NOTES
S-1	10'CU'+36.45	LT-0.00	CONCRETE COLLAR	-	871.87	-	PER S.D.D. 5.4.5; SEE SPEC. NOTE 1
S-2	10'CU'+78.14	RT-0.00	CONCRETE COLLAR	-	872.08	-	PER S.D.D. 5.4.5; SEE SPEC. NOTE 1
S-3	10'CU'+92.21	RT-0.00	CBC WINGWALL W/ RIP RAP APRON	-	872.15	-	FP; PER S.D.D. 5.5.1 AND 5.5.2
S-4	52'PR'+27.10	RT-31.94	3'X3' SAS	879.38	875.20	4.18	R-1550-0054
S-5	53'PR'+00.19	RT-21.45	3'X3' SAS	879.91	875.74	4.17	R-1550-0054
S-6	54'PR'+02.17	RT-30.38	3'X3' SAS	881.17	876.99	4.18	R-1550-0054
S-7	54'PR'+53.08	RT-26.50	3'X3' SAS	881.82	877.33	4.49	R-3067-7004-V
S-8	54'PR'+82.51	RT-23.41	CONCRETE COLLAR	-	877.88	-	PER S.D.D. 5.4.4; SEE SPEC. NOTE 1
S-9	50'PR'+64.76	RT-49.43	H INLET	877.94	875.06	2.88	FP; R-3067-7004-V
S-10	73'BP'+50.00	LT-16.00	18 INCH AE	-	880.03	-	PER S.D.D. 5.4.1; SEE SPEC. NOTE 2
S-11	73'BP'+50.00	RT-17.00	18 INCH AE	-	880.36	-	PER S.D.D. 5.4.1; SEE SPEC. NOTE 2

### PROPOSED STORM PIPES

PIPE NO.	FROM SAS (DWNSTRM)	TO SAS (UPSTREAM)	EI # (DWNSTRM)	EI # (UPSTRM)	PIPE LENGTH (FT)	PLAN LENGTH (FT)	SLOPE (%)	SIZE (DIA)	TYPE	NOTES
P-1	S-1	S-2	871.87	872.08	42	42	0.50%	4'X6'	CBC	BID ITEM 90030
P-2	S-2	S-3	872.08	872.15	14	14	0.50%	4'X6'	CBC	BID ITEM 90030
P-3	T-1	S-4	873.20	875.20	82	84	2.43%	18"	TYPE II STORM	
P-4	S-4	S-5	875.20	875.74	73	76	0.74%	18"	TYPE II STORM	
P-5	S-5	S-6	875.74	876.99	103	106	1.22%	18"	TYPE II STORM	
P-6	S-6	S-7	876.99	877.33	50	53	0.68%	18"	TYPE II STORM	
P-7	S-7	S-8	877.33	877.88	29	30	1.90%	18"	RCP	
P-8	T-2	S-9	875.00	875.06	12	15	0.50%	12"	RCP	
P-9	S-10	S-11	880.03	880.36	33	33	1.00%	18"	RCP	

### UTILITY LINE OPENING (ULO)

STRUC NO.	STATION	LOCATION (OFFSET)	TYPE
ULO-1	10'CU'+61.44	CL	FIBER
ULO-2	10'CU'+68.57	CL	ELECTRIC

### STORM STRUCTURE TAP

STRUC NO.	STRUC I.D.	STATION	LOCATION (OFFSET)	E.I.	TYPE
T-1	P-1	10'CU'+51.62	LT-3.00	873.20	SEE SPEC. NOTE 1
T-2	AS 6622-008	50'PR'+71.86	RT-35.96	875.00	SEE SPEC. NOTE 1

### STORM STRUCTURE ADJUSTMENTS

STRUC NO.	STRUC I.D.	STATION	LOCATION (OFFSET)	EXISTING CASTING TYPE	EXISTING TOC	PROP. CASTING TYPE	ADJ TOC	ELEV	NOTES
ADJ-1	AS 6721-004	55'PR'+71.00	RT-20.50	R-1550-0054	883.83	R-3067-7004-V	884.09		
ADJ-2	AS 6622-008	50'PR'+71.86	RT-35.96	R-1550-0054	878.03	R-1689-0054	877.75		

### STORM STRUCTURE REMOVAL

STRUC NO.	STRUC ID	STRUC ID	LOCATION (OFFSET)	TYPE	NOTE
R-1	AE 6621-076	54'PR'+82.51	RT-23.41	18-IN RCP AE W/ GATE	REMOVE & SALVAGE PER PLAN SET
R-2	IN 6622-011	50'PR'+64.68	RT-43.01	H INLET	

### STORM PIPE REMOVAL

PIPE NO.	FROM STA (DS)	FROM LOCATI (OFFSET)	TO STA (US)	TO LOCATION (OFFSET)	PIPE LENGTH (FT)	SIZE (DIA)	TYPE
RP-1	50'PR'+71.58	RT-43.74	R-2	-	6.66	12"	RCP

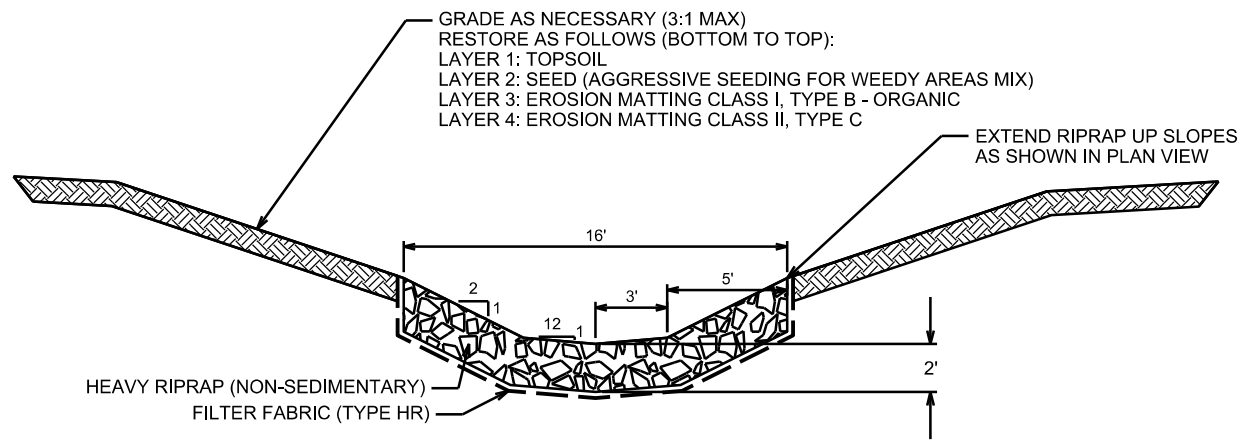
**NOTE:** PLAN LENGTH (PAY LENGTH) IS FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE. PIPE LENGTH IS ACTUAL LENGTH OF PIPE FROM STRUCTURE WALL TO STRUCTURE WALL. SLOPE CALCULATED USING PIPE LENGTH.

### STANDARD NOTES:

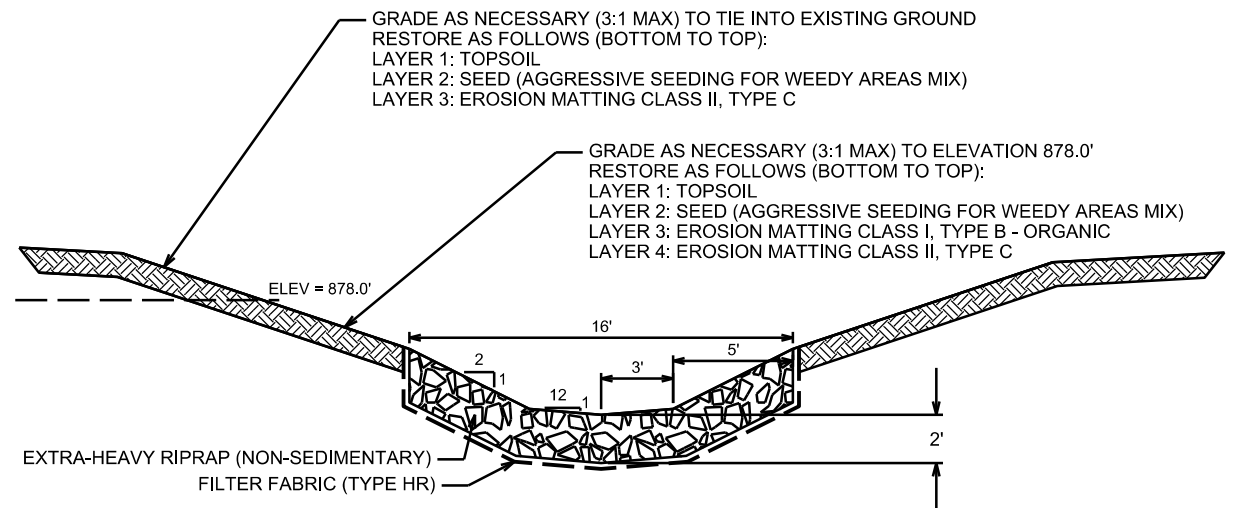
- 1) PLACE SEWER ELECTRONIC MARKER ABOVE STORM SEWER TAP AND BEND LOCATIONS
- 2) SEE CROSS SECTION SHEET X-7 FOR DETAILS

### STANDARD NOTES:

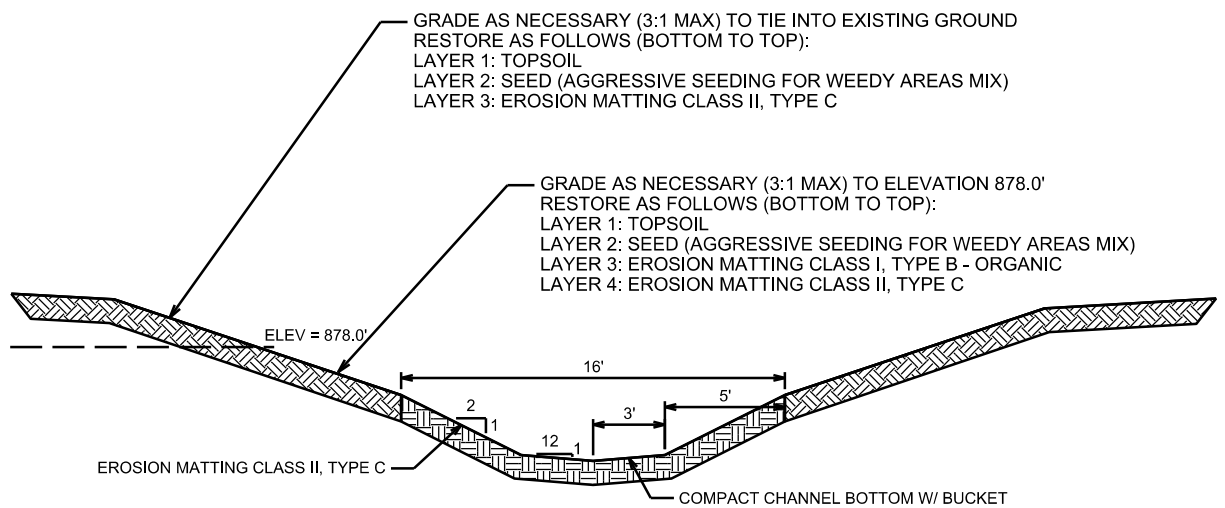
- ABBREVIATIONS: AE = APRON ENDWALL; RCP = REINFORCED CONCRETE PIPE; HERCP = HORIZONTAL ELLIPTICAL REINFORCED CONCRETE PIPE; DNA = DOES NOT APPLY; SAS = SEWER ACCESS STRUCTURE; LP = LOW POINT INLET STRUCTURE; FP = FIELD POURED STRUCTURE; TR = TOP OF CONCRETE ROOF; NCM = NO CROWN MATCH FOR PIPES; UD = UNDERDRAIN
- APPROXIMATE DISCHARGE E.I. GIVEN, ADJUST E.I. AND PIPE SLOPE IN THE FIELD.
- TOP OF CASTING GRADE GIVEN IS THE TOP OF CURB FOR INLET STRUCTURES AND THE FLOWLINE OF THE CLOSED CASTING FOR SAS's.
- TOP OF CONCRETE ROOF (TR) IS 1.25' BELOW TOP OF CASTING UNLESS OTHERWISE NOTED.
- ALL REINFORCED CONCRETE PIPES TO BE CLASS III UNLESS OTHERWISE NOTED.
- SURVEYOR TO CONFIRM THAT ALL INLET STATION / OFFSETS LINE UP WITH PROPOSED CURB AND GUTTER.
- ALL STRUCTURES CALLED OUT AS FIELD POURED SHALL BE FIELD POURED. ALL OTHER STRUCTURES (NOT INDICATED AS FIELD POURED) SHALL BE SUBMITTED TO CITY ENGINEERING FOR APPROVAL IF PRECAST STRUCTURES ARE PREFERRED. CONTACT LAUREN STRIEGL OF CITY ENGINEERING AT (608) 266-4094, LSTRIEGL@CITYOFMADISON.COM, FOR PRECAST APPROVALS, OR FAX SHOP DRAWINGS TO (608) 264-9275.
- INLETS LOCATED IN TYPE "H" CURB SHALL BE INSTALLED PER S.D.D. 5.7.27



**DETAIL 1: ARMORING/RESTORATION DETAIL FOR STREAM SEGMENT 1**  
STA 10'CU'+92.21 TO 11'CU'+12.56



**DETAIL 3: ARMORING/RESTORATION DETAIL FOR STREAM SEGMENT 3**  
STA 13'CU'+25.00 TO 14'CU'+11.00



**DETAIL 2: ARMORING/RESTORATION DETAIL FOR STREAM SEGMENT 2**  
STA 11'CU'+12.56 TO 13'CU'+25.00

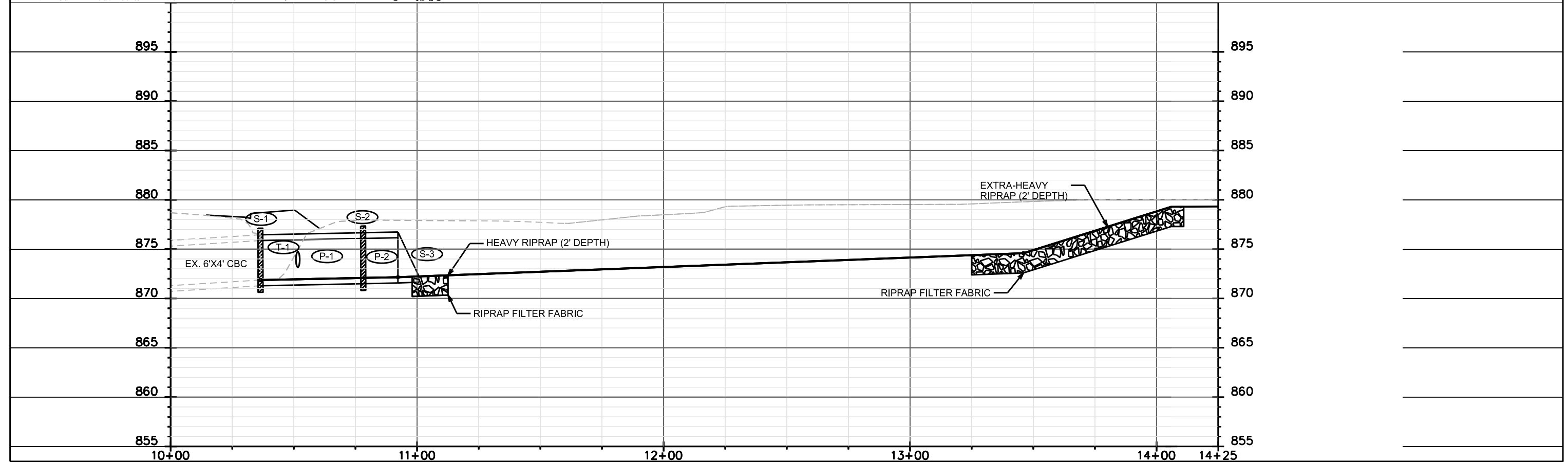
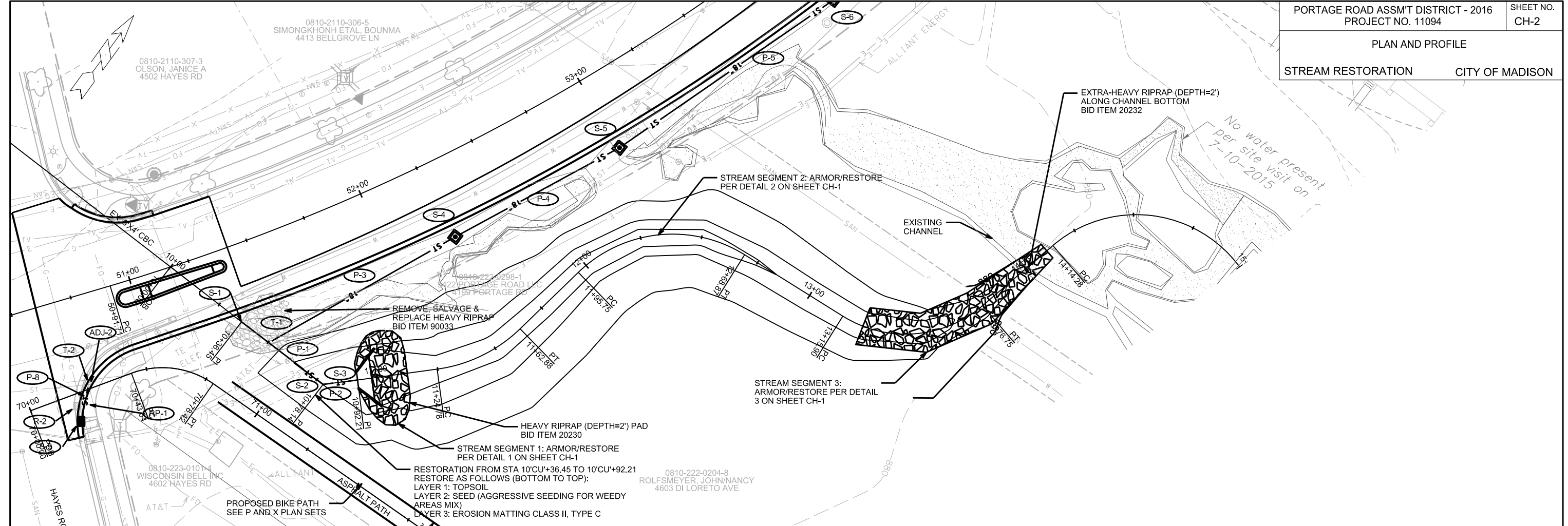
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PLOT NAME: \_\_\_\_\_

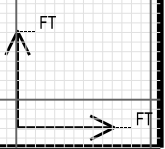
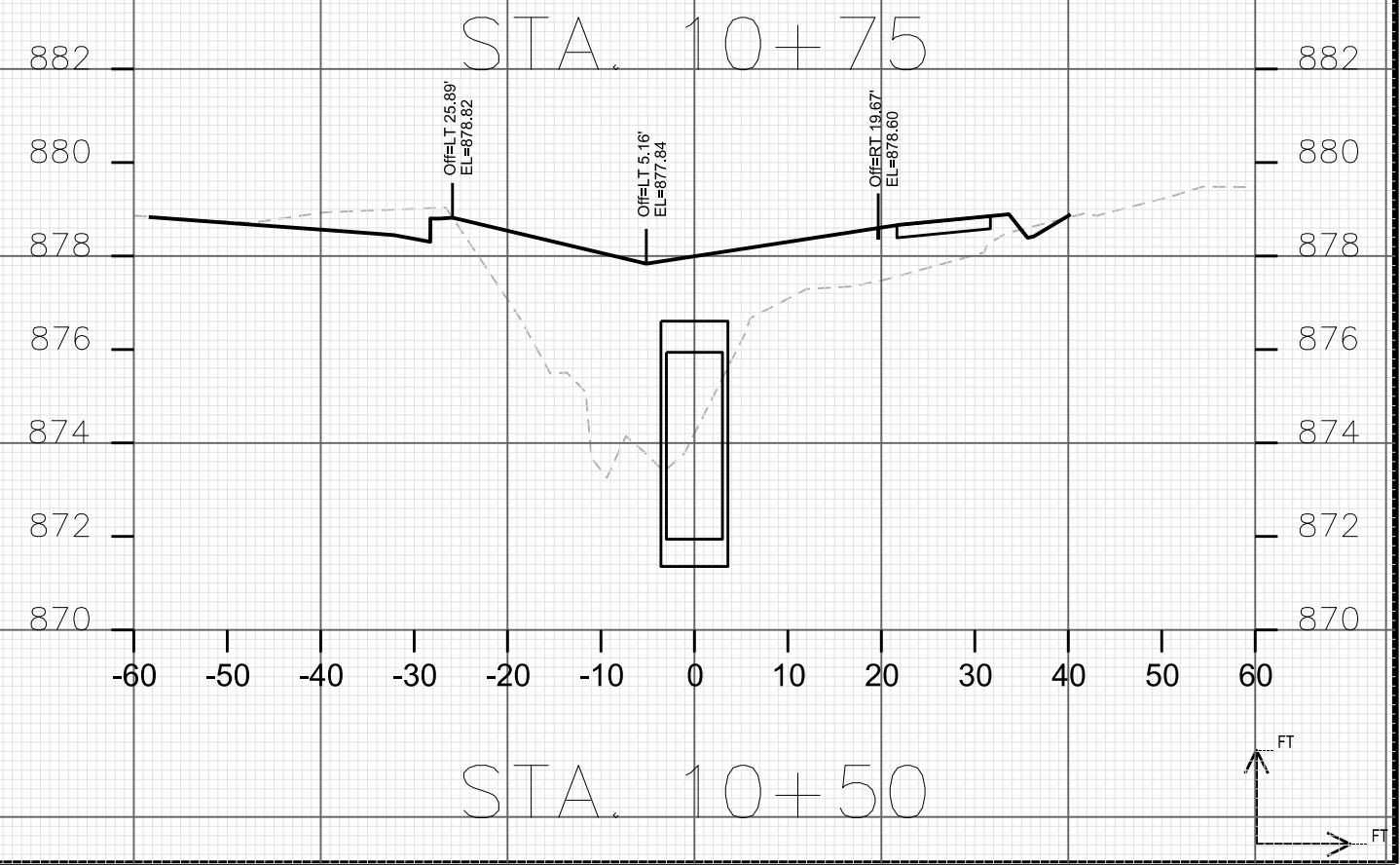
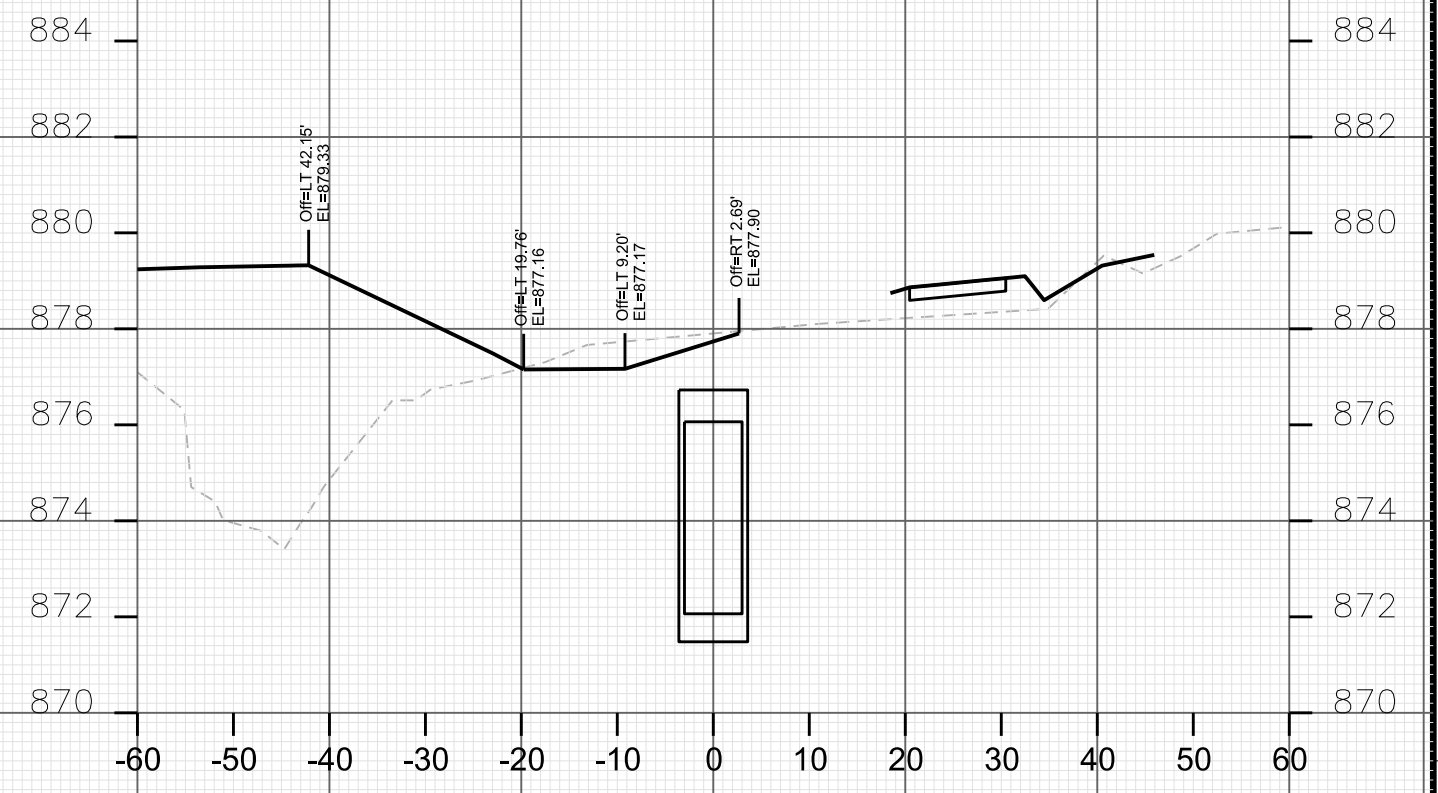
REV. DATE: \_\_\_\_\_

ORIGINATOR: CITY OF MADISON, STREETS DIVISION





CROSS SECTIONS  
CROSS SECTIONS CITY OF MADISON



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

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

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



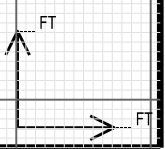
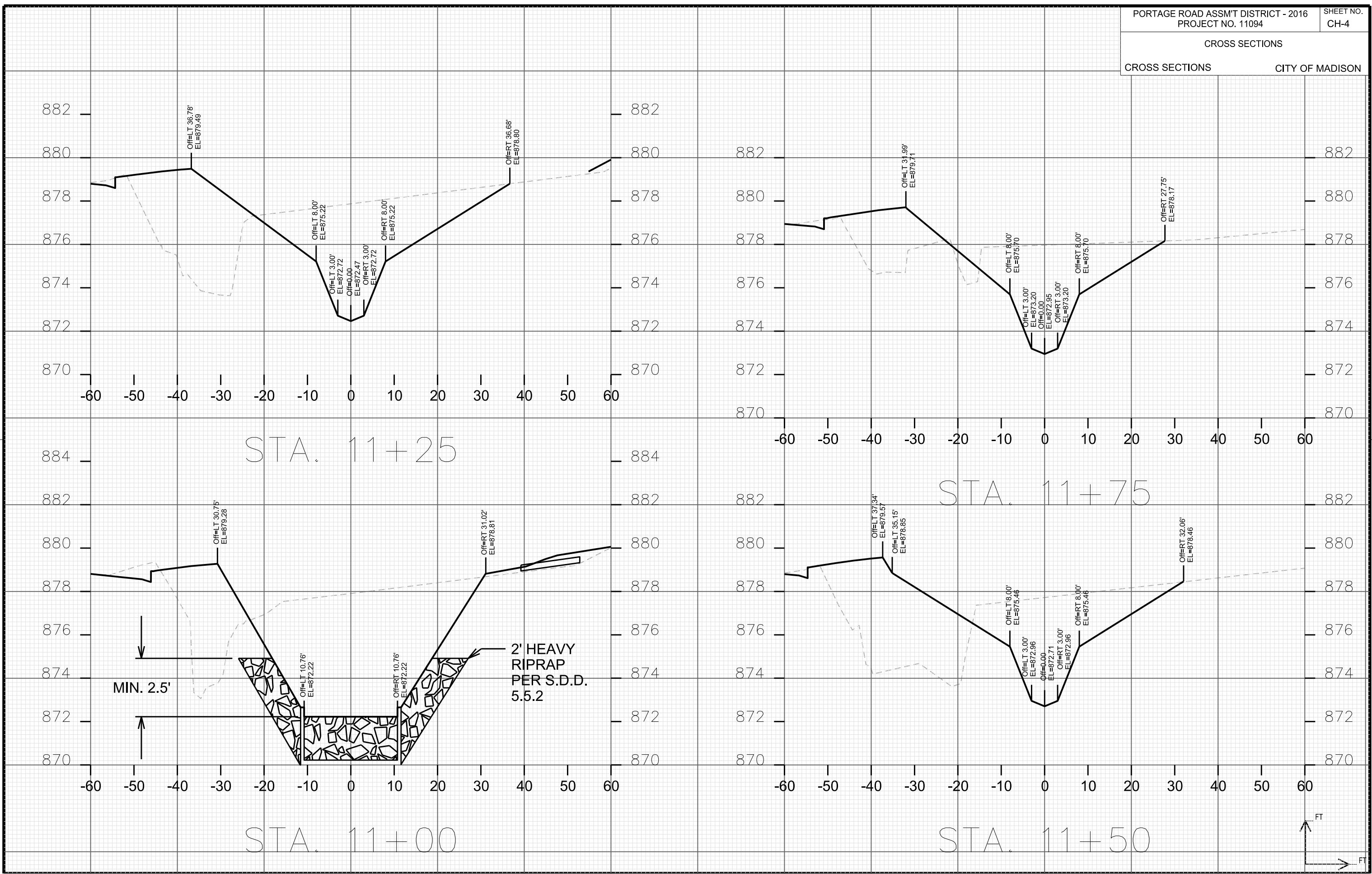
CROSS SECTIONS  
CROSS SECTIONS CITY OF MADISON

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

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

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



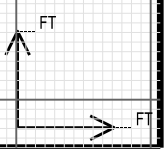
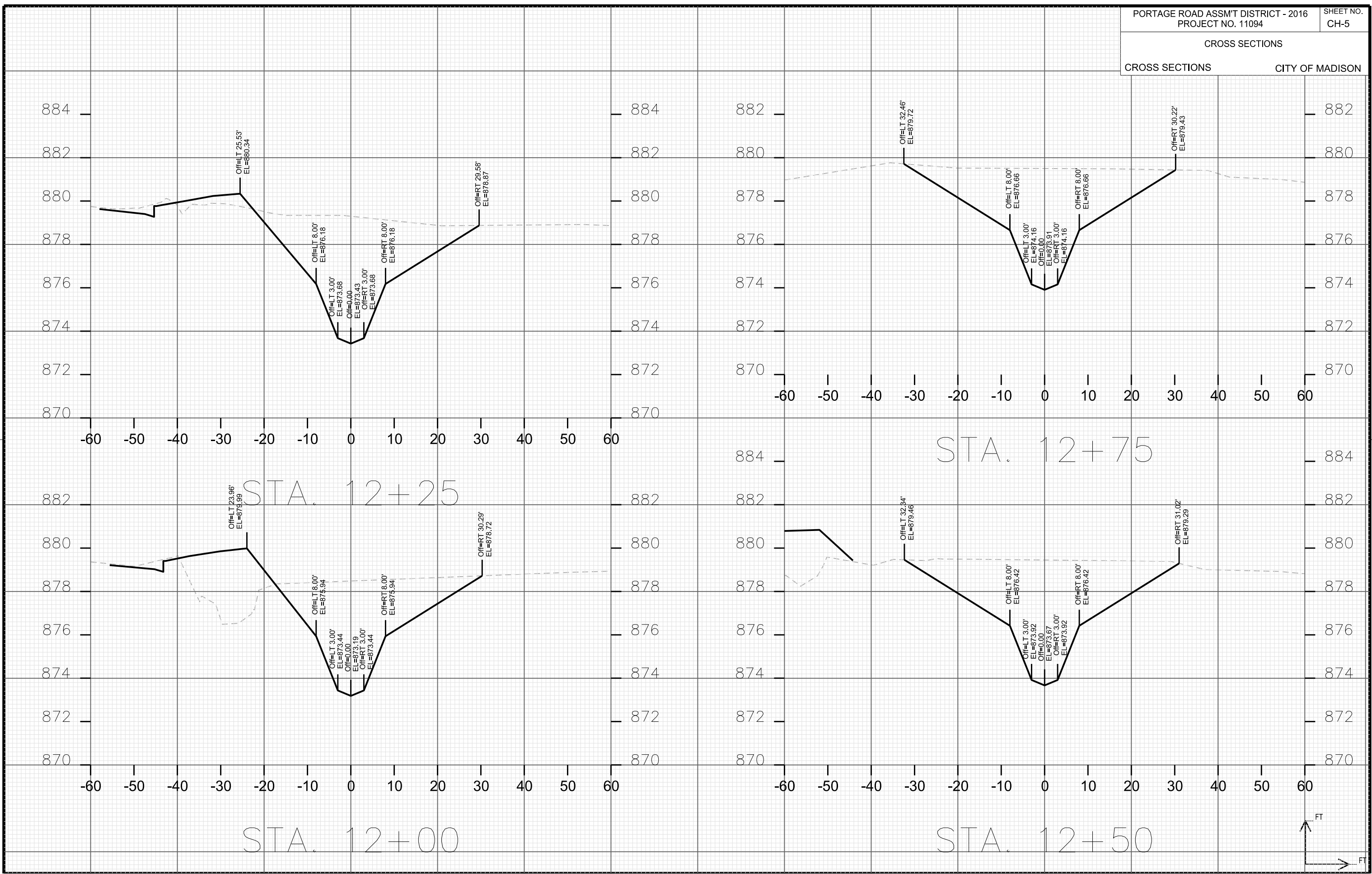
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CROSS SECTIONS CITY OF MADISON

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

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

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



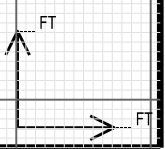
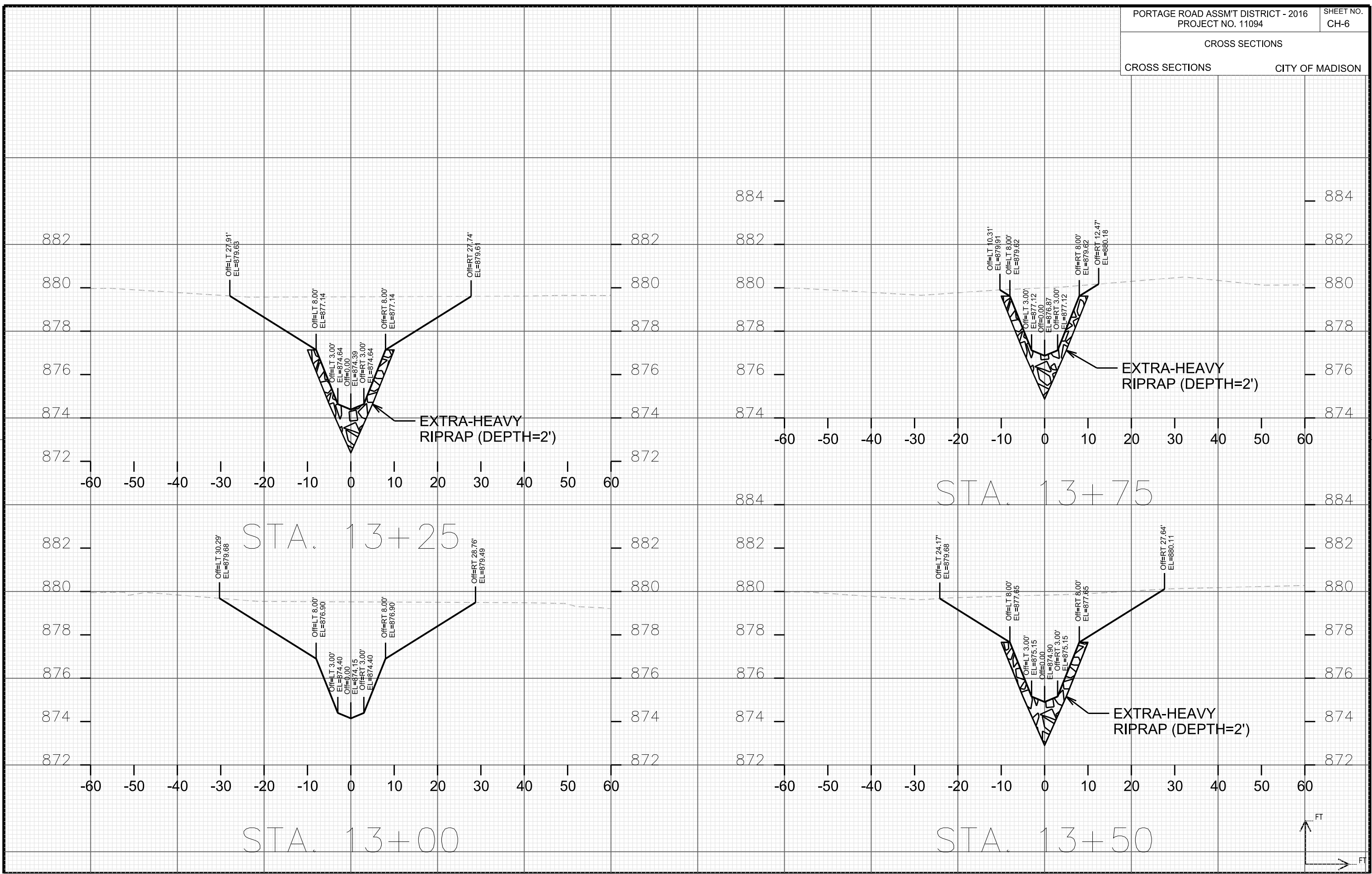


PLOT SCALE: \_\_\_\_\_

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

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



CROSS SECTIONS

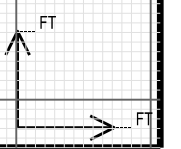
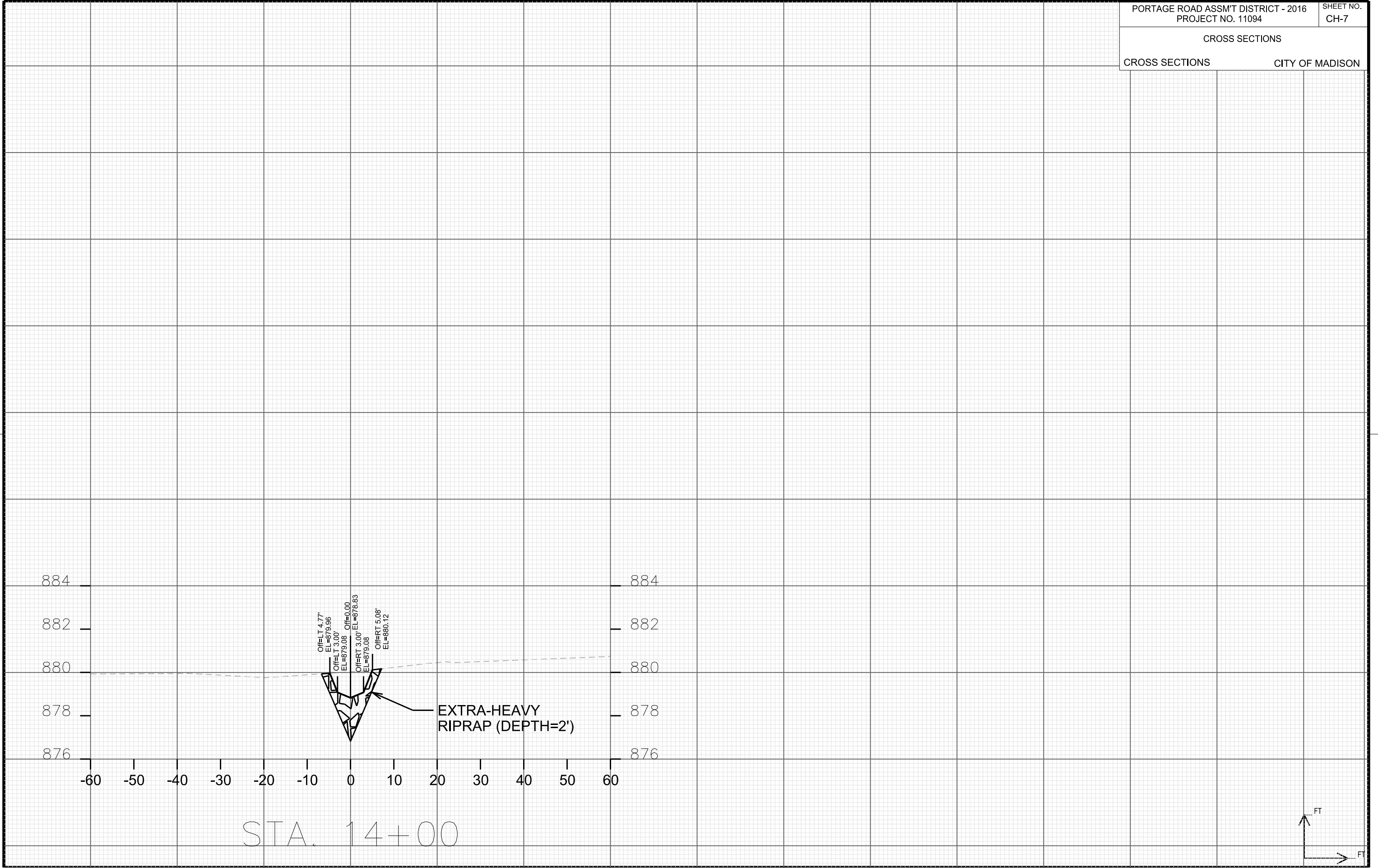
CROSS SECTIONS CITY OF MADISON

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

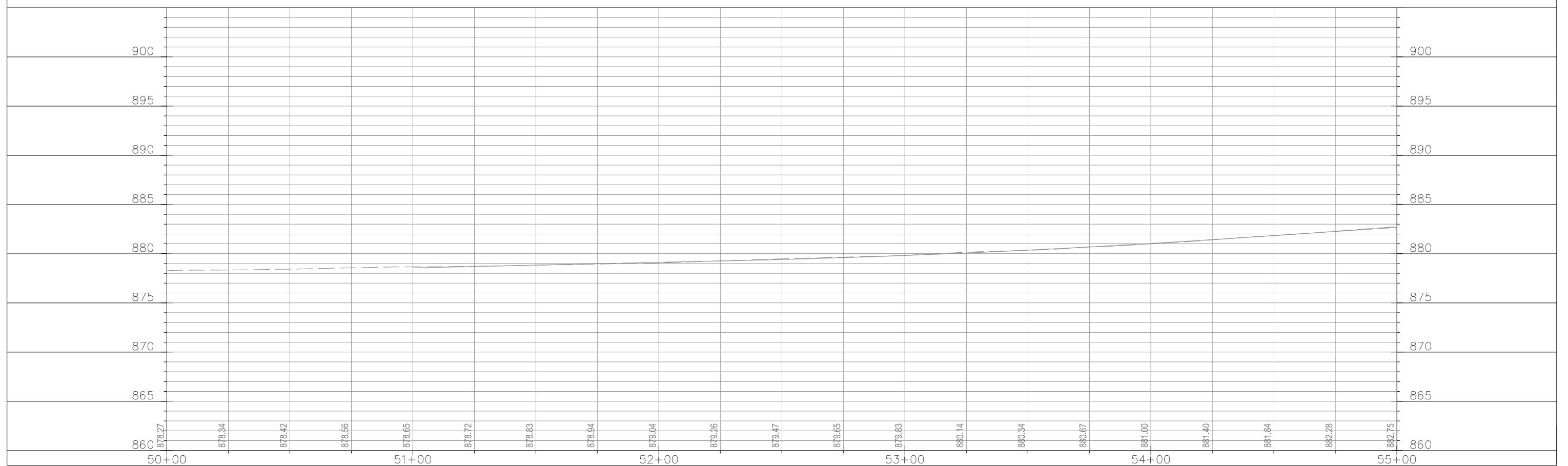
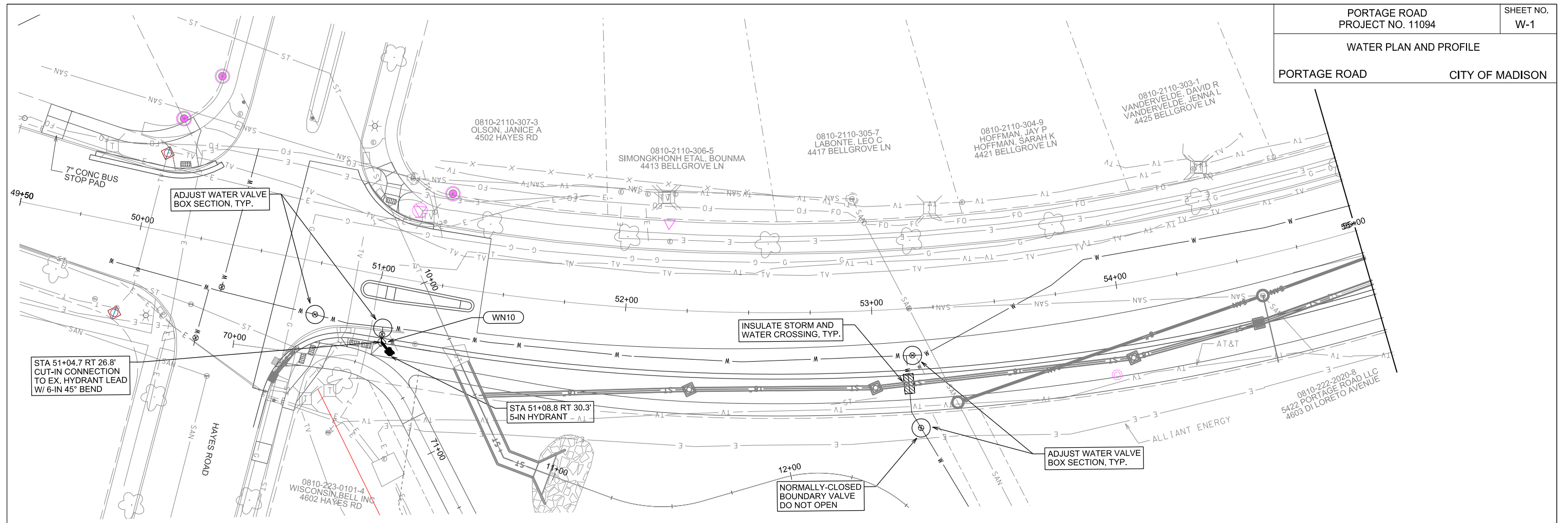
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REV. DATE: \_\_\_\_\_

ORIGINATOR: CITY OF MADISON, STREETS DIVISION







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

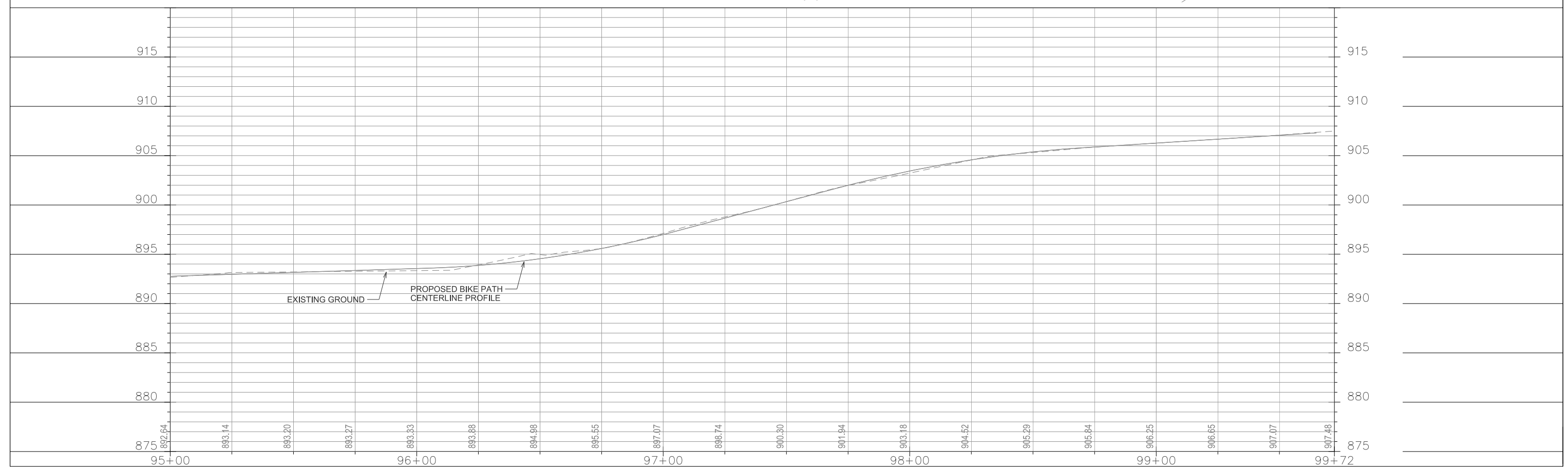
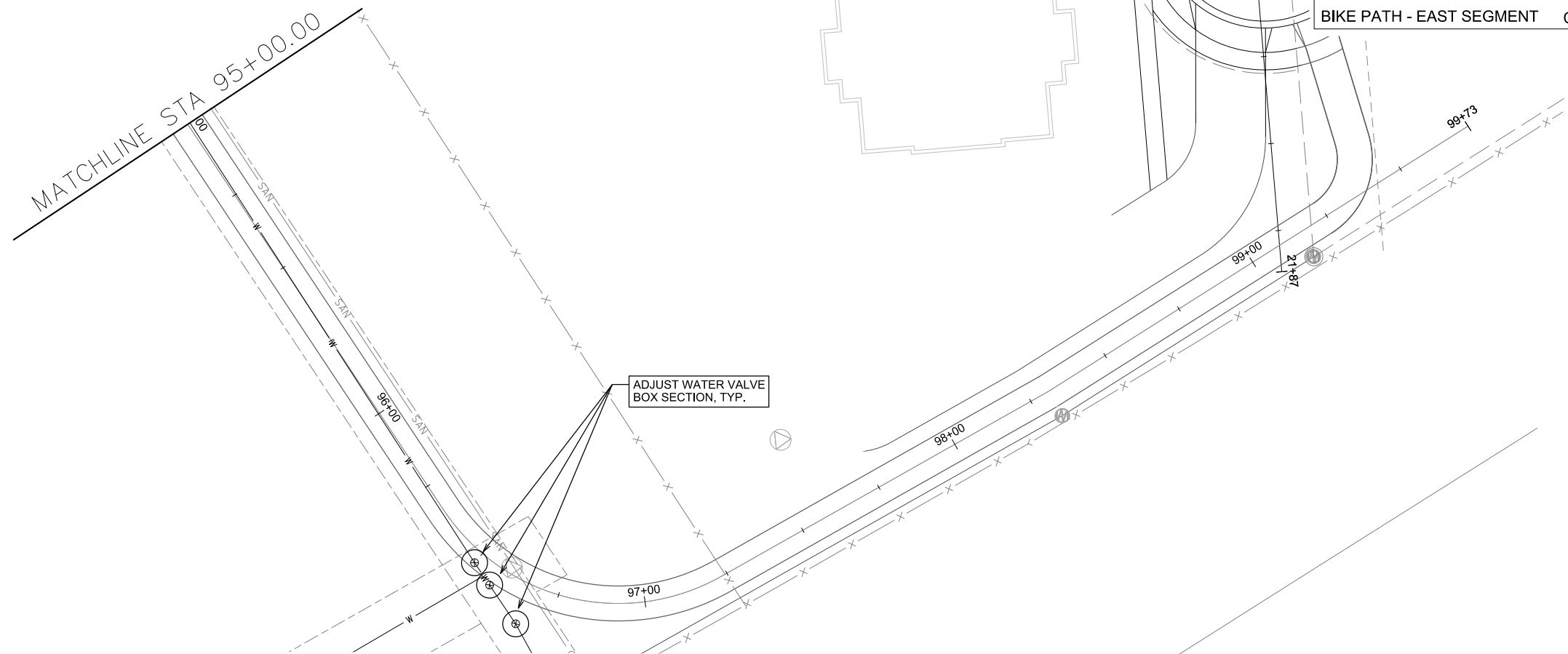
PLOT NAME: \_\_\_\_\_

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

PLAN AND PROFILE

BIKE PATH - EAST SEGMENT CITY OF MADISON



PLOT SCALE: \_\_\_\_\_  
PLOT NAME: \_\_\_\_\_  
REV. DATE: \_\_\_\_\_  
ORIGINATOR: CITY OF MADISON, STREETS DIVISION

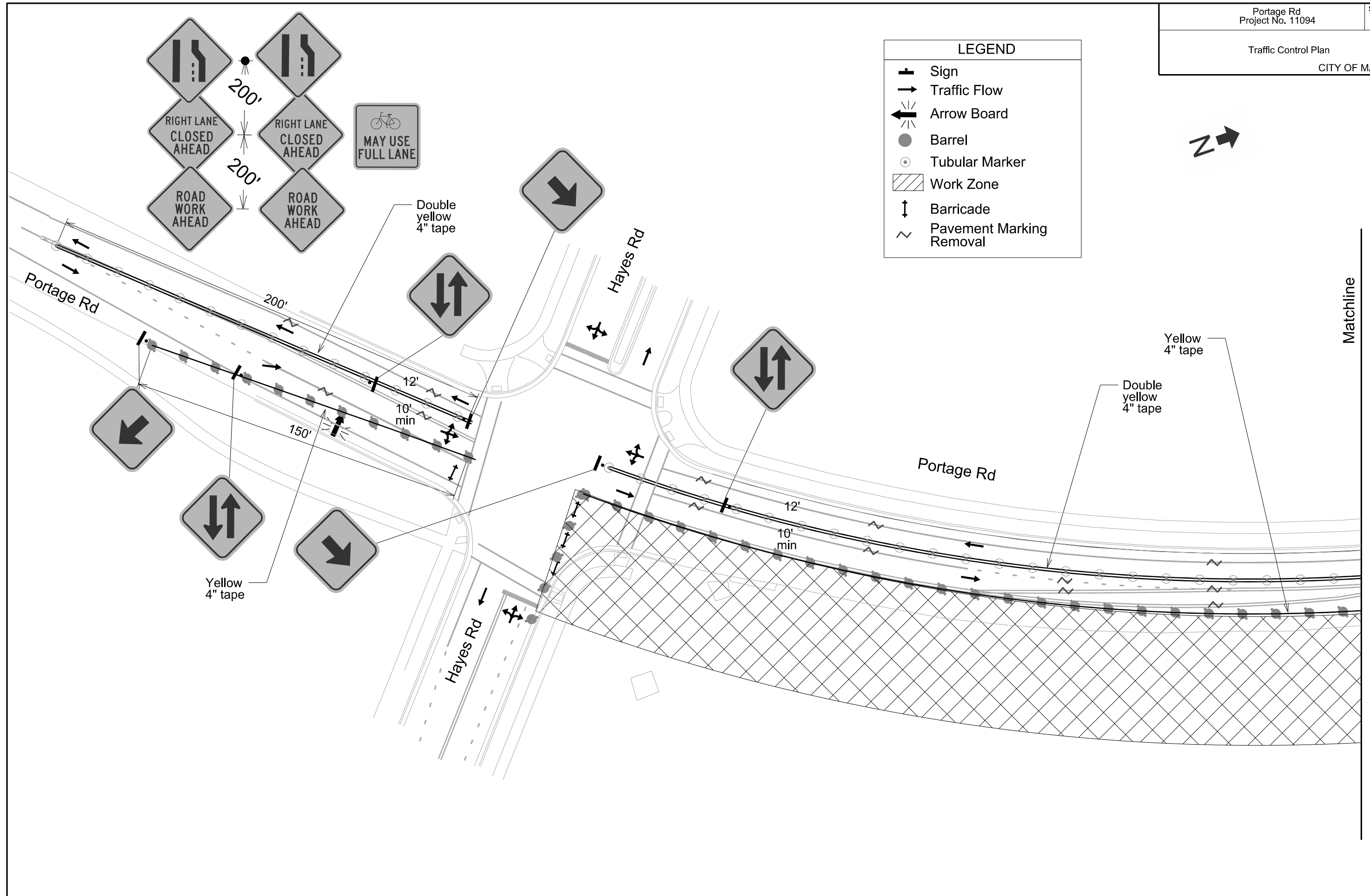


**LEGEND**

- Sign
- Traffic Flow
- Arrow Board
- Barrel
- Tubular Marker
- Work Zone
- Barricade
- Pavement Marking Removal



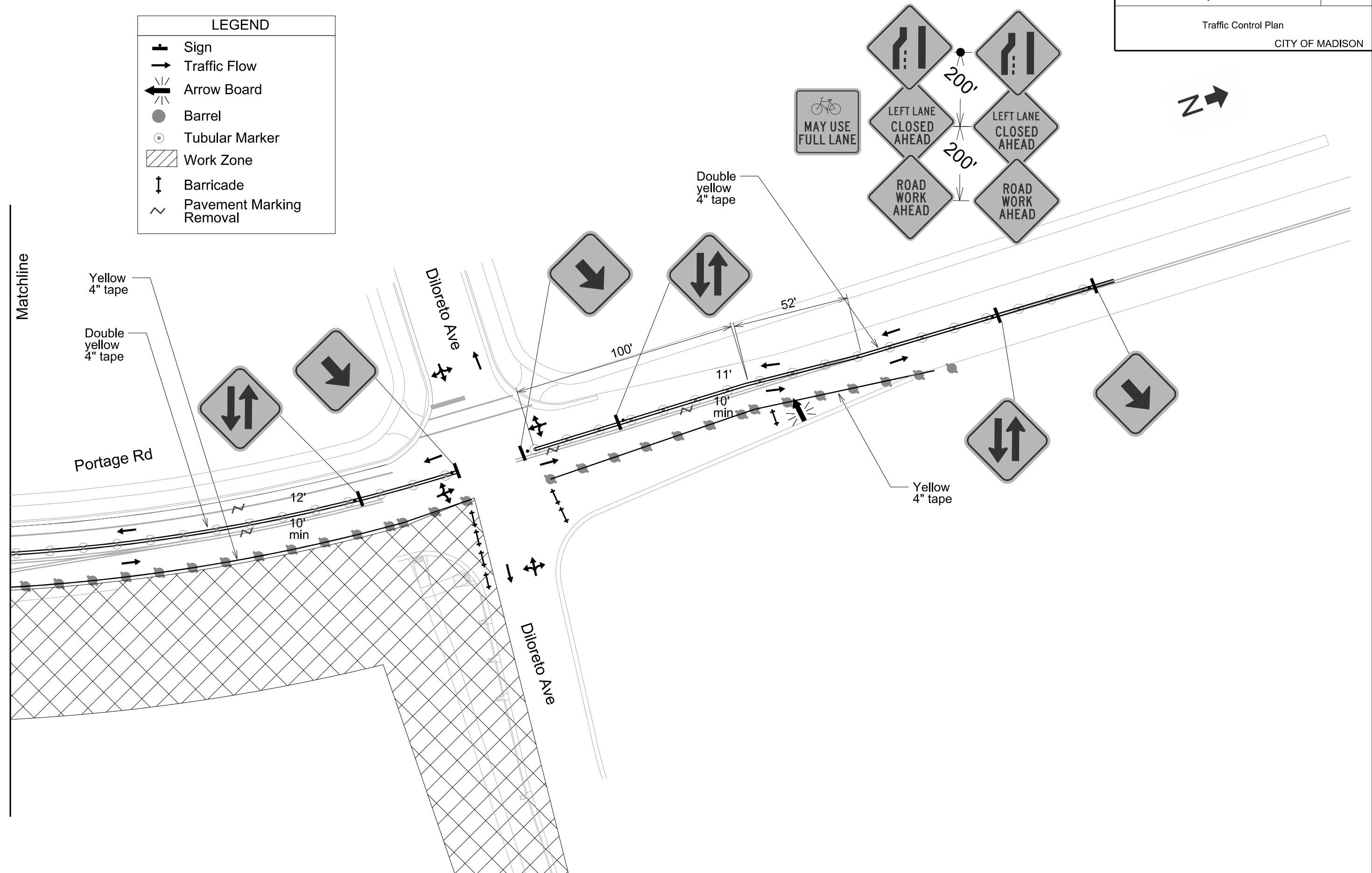
PLOT SCALE:  
PLOT NAME:  
REV. DATE:  
ORIGINATOR: CITY OF MADISON, TRAFFIC ENG. DIV.



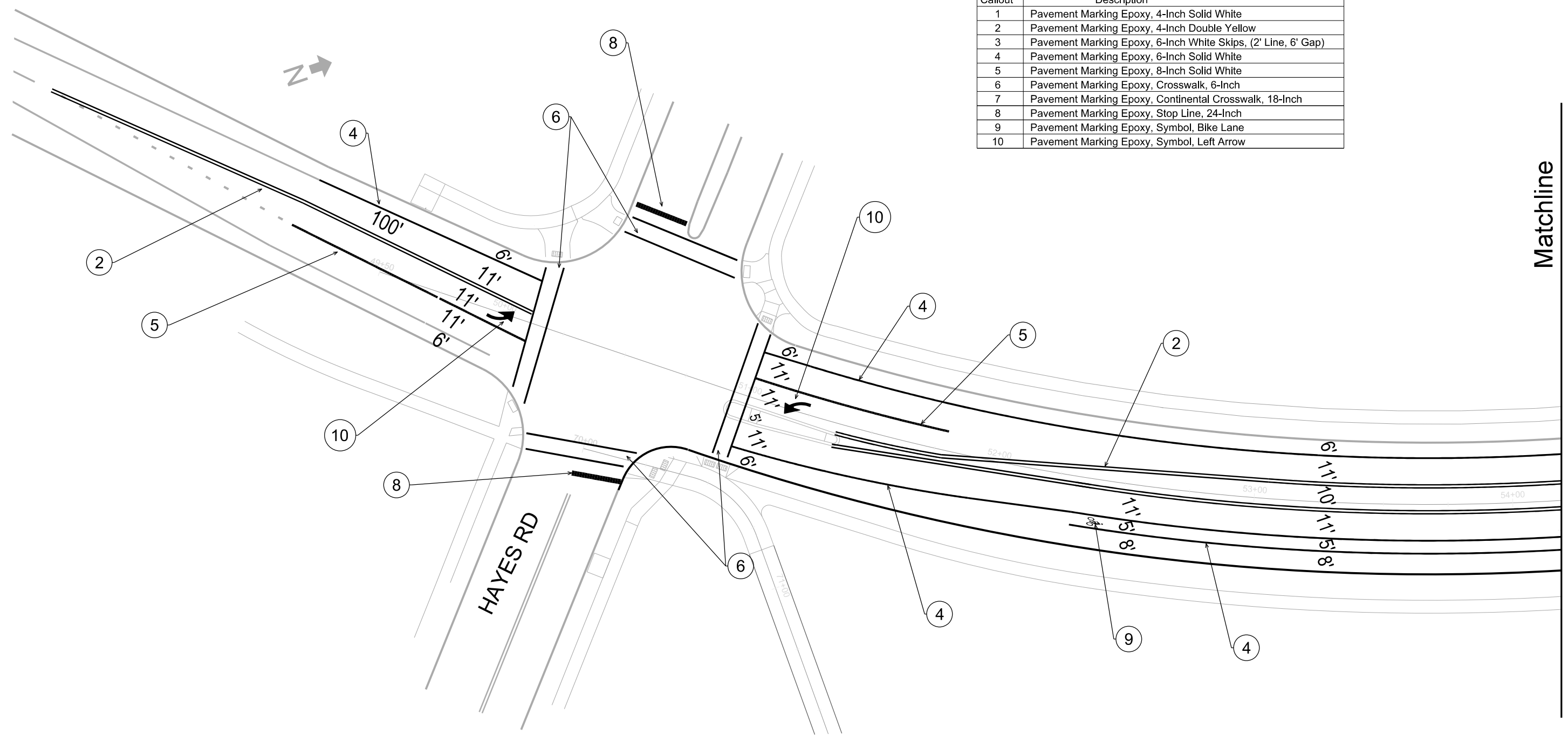
**LEGEND**

- Sign
- Traffic Flow
- Arrow Board
- Barrel
- Tubular Marker
- Work Zone
- Barricade
- Pavement Marking Removal

PLOT SCALE:  
PLOT NAME:  
REV. DATE:  
ORIGINATOR: CITY OF MADISON, TRAFFIC ENG. DIV.



Callout	Description
1	Pavement Marking Epoxy, 4-Inch Solid White
2	Pavement Marking Epoxy, 4-Inch Double Yellow
3	Pavement Marking Epoxy, 6-Inch White Skips, (2' Line, 6' Gap)
4	Pavement Marking Epoxy, 6-Inch Solid White
5	Pavement Marking Epoxy, 8-Inch Solid White
6	Pavement Marking Epoxy, Crosswalk, 6-Inch
7	Pavement Marking Epoxy, Continental Crosswalk, 18-Inch
8	Pavement Marking Epoxy, Stop Line, 24-Inch
9	Pavement Marking Epoxy, Symbol, Bike Lane
10	Pavement Marking Epoxy, Symbol, Left Arrow



PLOT SCALE:

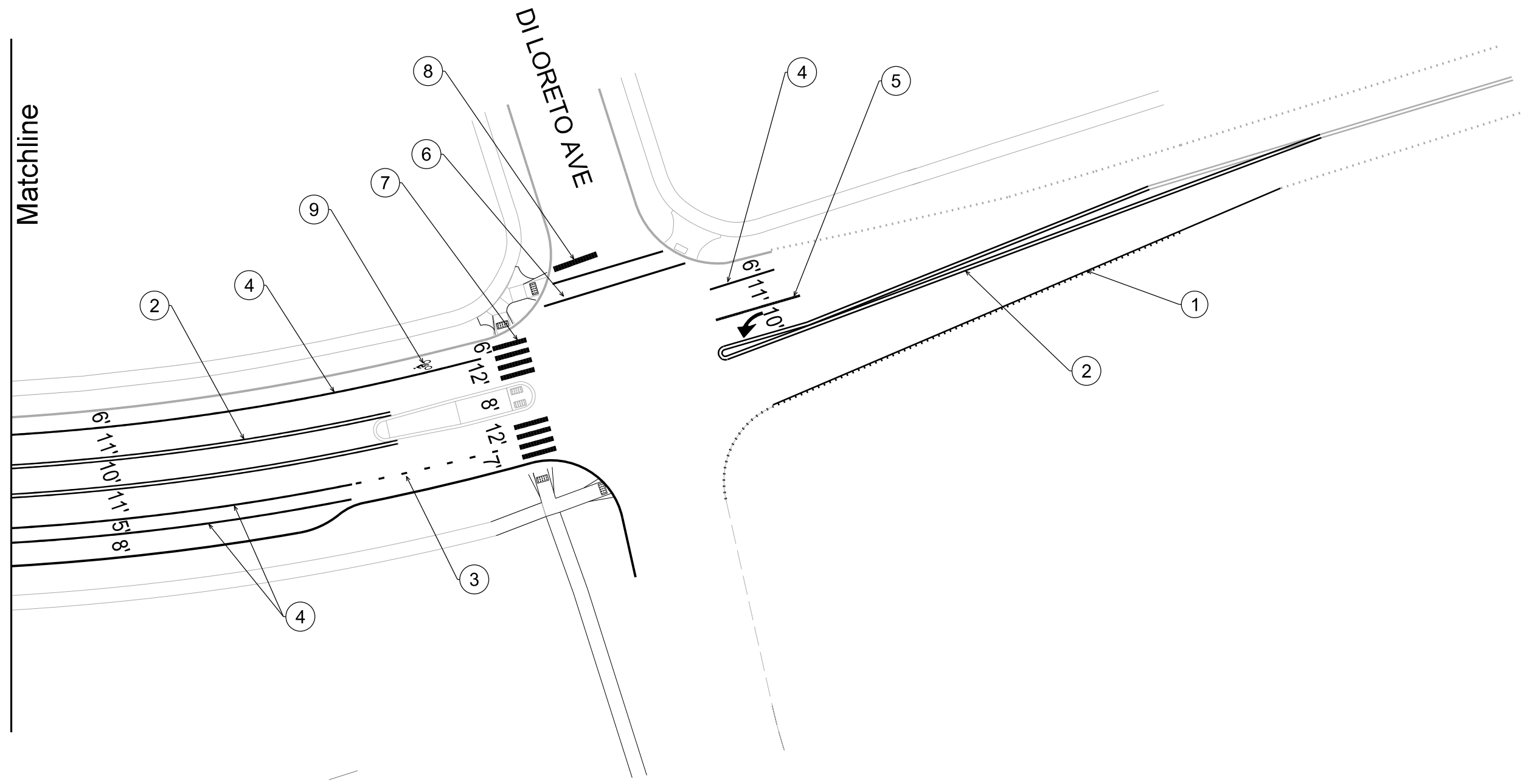
PLOT NAME:

REV. DATE:

ORIGINATOR: CITY OF MADISON, TRAFFIC ENG. DIV.



Callout	Description
1	Pavement Marking Epoxy, 4-Inch Solid White
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8	Pavement Marking Epoxy, Stop Line, 24-Inch
9	Pavement Marking Epoxy, Symbol, Bike Lane
10	Pavement Marking Epoxy, Symbol, Left Arrow



PLOT SCALE: \_\_\_\_\_  
 PLOT NAME: \_\_\_\_\_  
 REV. DATE: \_\_\_\_\_  
 ORIGINATOR: CITY OF MADISON, TRAFFIC ENG. DIV.

**Eastpark Multi-Use Path Bridge  
 Madison, WI**

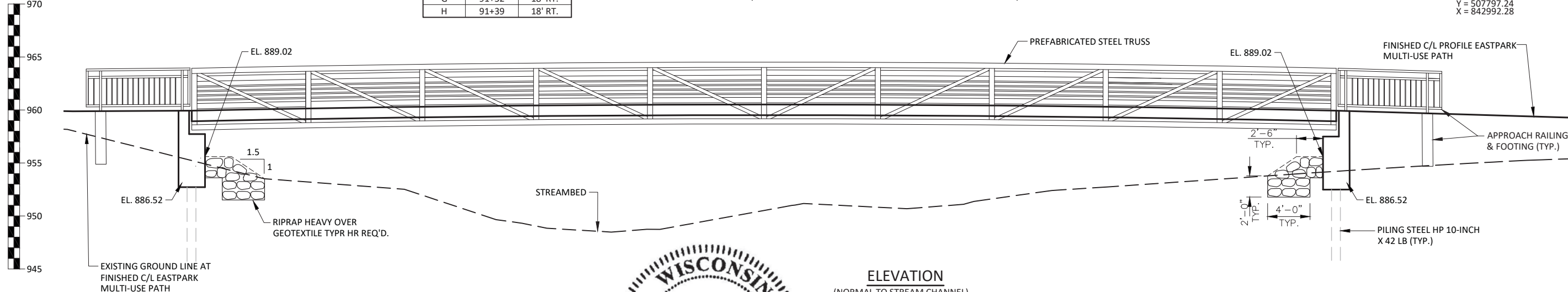
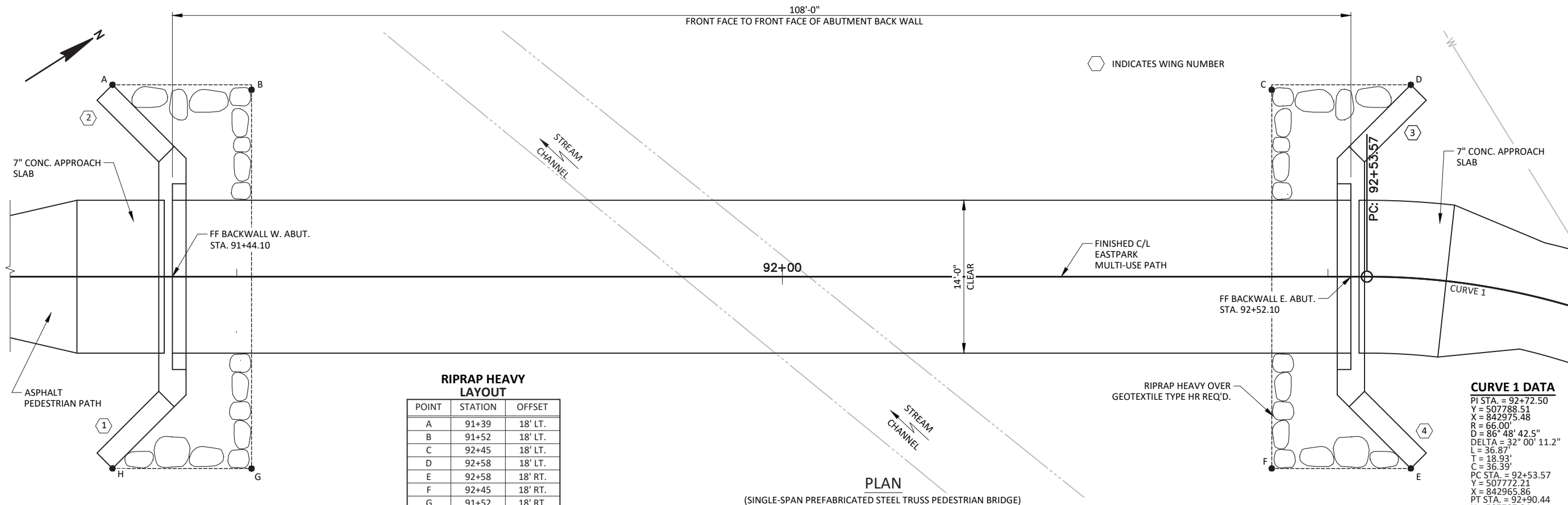
Date  
**1/29/2019**

Date Revision

Drawing Name  
**General Plan**

S-1

Sheet No.  
**1 of 7**  
 Jewell Project Number  
**M68030**



**DESIGN DATA**

**DESIGN LOADS:**

VEHICLE \_\_\_\_\_ AASHTO H-10 (20,000 LBS)  
 PEDESTRIAN \_\_\_\_\_ 90 PSF

**ULTIMATE DESIGN STRESSES:**

CONCRETE SUBSTRUCTURES \_\_\_\_\_  $f'_c = 3,500$  P.S.I.  
 CONCRETE DECK \_\_\_\_\_  $f'_c = 4,000$  P.S.I.  
 HIGH STRENGTH BAR STEEL REINFORCEMENT (GRADE 60) \_\_\_\_\_  $f_y = 60,000$  P.S.I.

**THE STEEL FOR THE PREFABRICATED STEEL TRUSS:**

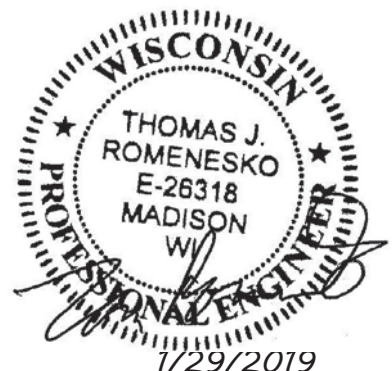
W SHAPES (ASTM A992) \_\_\_\_\_  $f'_c = 50,000$  P.S.I.  
 RECTANGULAR HSS (ASTM A500, GR. B) \_\_\_\_\_  $f'_c = 46,000$  P.S.I.  
 CHANNELS AND ANGLES (ASTM A36) \_\_\_\_\_  $f_y = 36,000$  P.S.I.

**FOUNDATION DATA**

ABUTMENTS TO BE SUPPORTED ON HP 10-INCH X 42 LB DRIVEN TO A REQ'D DRIVING RESISTANCE OF 105 TONS\*\* PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.

\*\*THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

ESTIMATED PILE LENGTH BELOW BOTTOM OF ABUTMENT:  
 W. ABUTMENT = 10 FT.  
 E. ABUTMENT = 30 FT.  
 PILING FOR W. ABUT. SHALL BE PRE-BORED.



- LIST OF DRAWINGS**
- GENERAL PLAN
  - CROSS SECTION AND QUANTITIES
  - SUBSURFACE EXPLORATION
  - ABUTMENTS
  - ABUTMENT DETAILS
  - APPROACH SLAB DETAILS
  - RAILING

**GENERAL NOTES**

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

AT THE BACKFACE OF ABUTMENTS, ALL VOLUME NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH BACKFILL STRUCTURE.

FABRICATION, MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE WISCONSIN DOT STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, 2018.

EXISTING GROUNDLINE SHALL BE THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES.

THE FIRST DIGIT OF A THREE DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFY THE BAR SIZE.

ALL DIMENSIONS ARE IN FEET AND INCHES, UNLESS OTHERWISE NOTED.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE TYPE HR TO THE EXTENT SHOWN ON THIS SHEET.

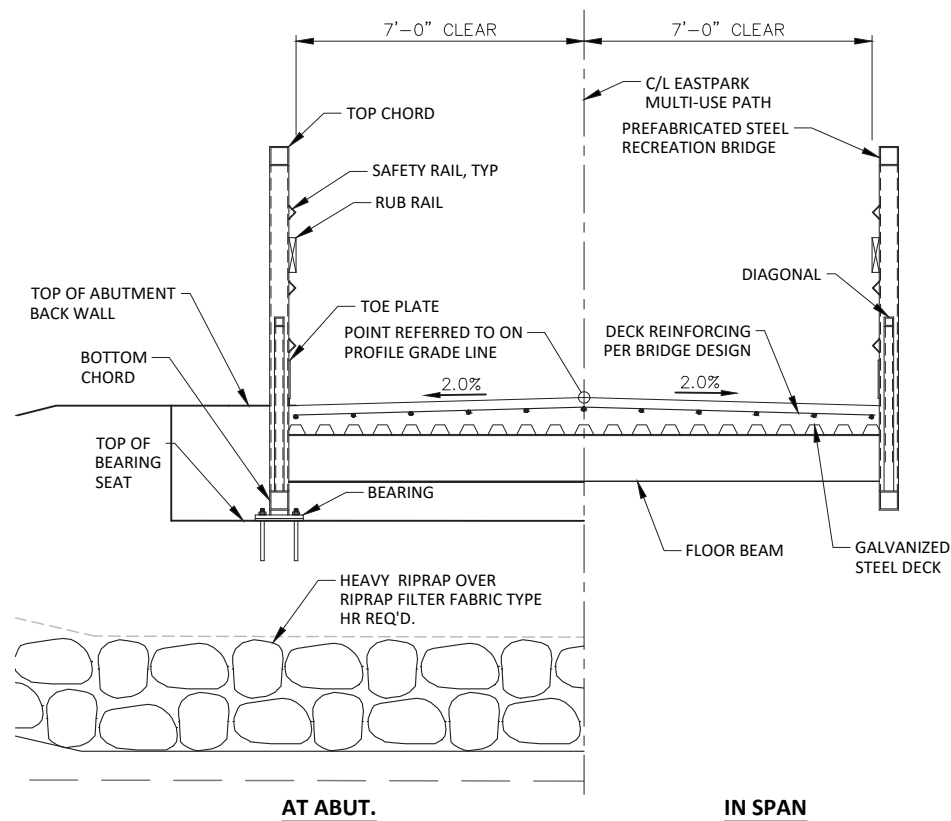
STEEL RAILING FOR ABUTMENT APPROACHES SHALL BE GALVANIZED AND INCLUDED IN THE BID ITEM "STEEL RAILING APPROACHES."

THE CONCRETE DECK AND COATED BAR STEEL REINFORCEMENT IN THE DECK SHALL BE INCLUDED IN THE BID ITEM "PREFABRICATED STEEL TRUSS BRIDGE FURNISHED AND INSTALLED - EASTPARK PATH BRIDGE - TYPE H-10 LOADING".

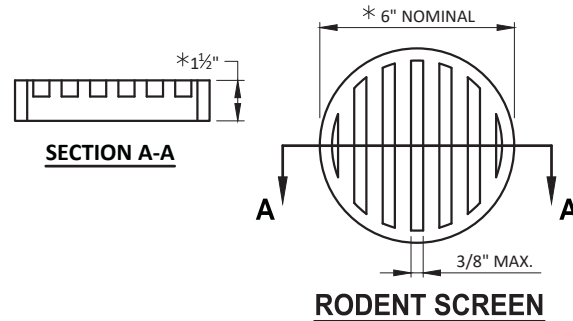
THE TRUSS FLOOR BEAMS SHALL CONSIST OF WIDE FLANGE BEAMS. TUBE SECTIONS ARE NOT ALLOWED FOR FLOOR BEAMS.

THE PREFABRICATED STEEL TRUSS MANUFACTURER SHALL CALCULATE THE DEAD LOAD DEFLECTION OF THE TRUSS AND CAMBER THE TRUSS TO MAINTAIN THE PROFILE SHOWN ON SHEET 2 AFTER DEAD LOAD DEFLECTION.

THE PREFABRICATED STEEL TRUSS MANUFACTURER SHALL DETERMINE THE OVERALL LENGTH OF THE BRIDGE DECK CONSIDERING THERMAL MOVEMENT OF THE TRUSS FOR A TEMPERATURE RANGE OF (-) 30°F TO (+) 120°F.



**CROSS SECTION THROUGH STRUCTURE**



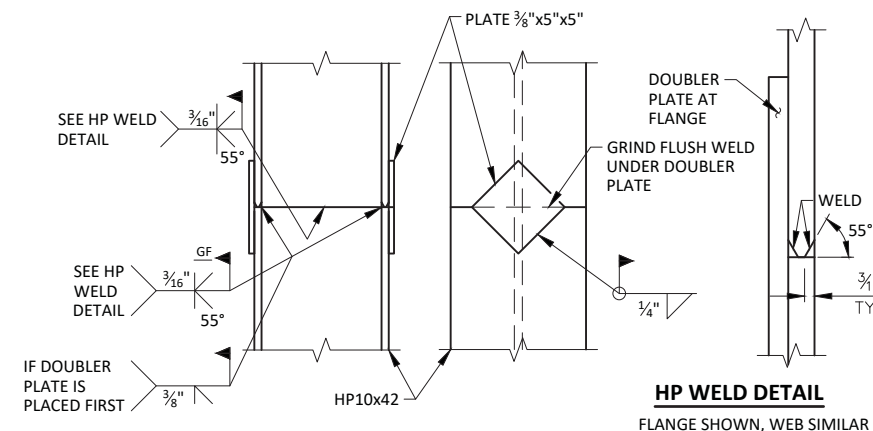
**NOTES:**

\* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.

ORIENT SCREEN SO SLOTS ARE VERTICAL.

THE RODENT SCREEN, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SCREEN SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SCREEN TO THE EXPOSED ENDS OF THE PIPE UNDERDRAIN. THE SCREEN SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

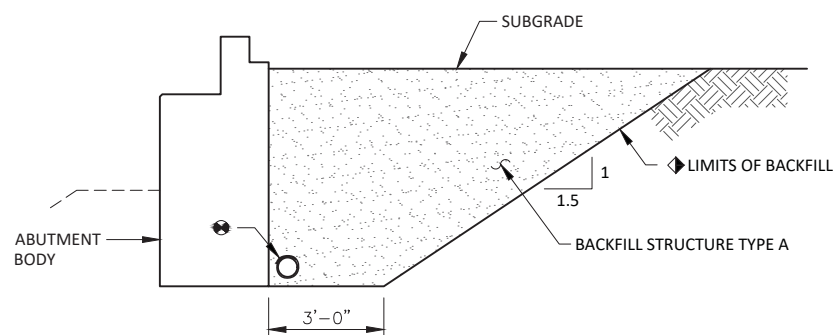


**PILE SPLICE DETAIL**

STEEL "HP" PILE MATERIAL SHALL BE ASTM A572 GRADE 50.

BACKFILL STRUCTURE TYPE A PAY LIMITS. BACKFILL BEYOND PAY LIMITS SHALL BE INCIDENTAL TO THE BID ITEM "EXCAVATION FOR STRUCTURES BRIDGES". LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPED 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SCREEN AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON THIS SHEET. RODENT SCREEN TO BE INCLUDED IN THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH."

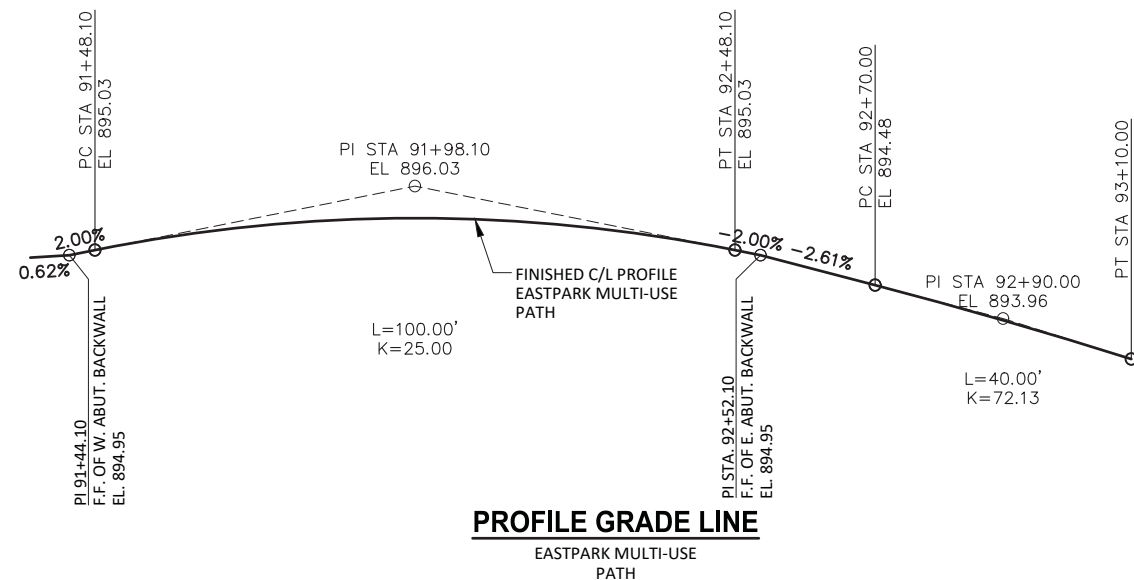


**BACKFILL STRUCTURE DETAIL**

TYPICAL AT BOTH ABUTMENTS

**TOTAL ESTIMATED QUANTITIES**

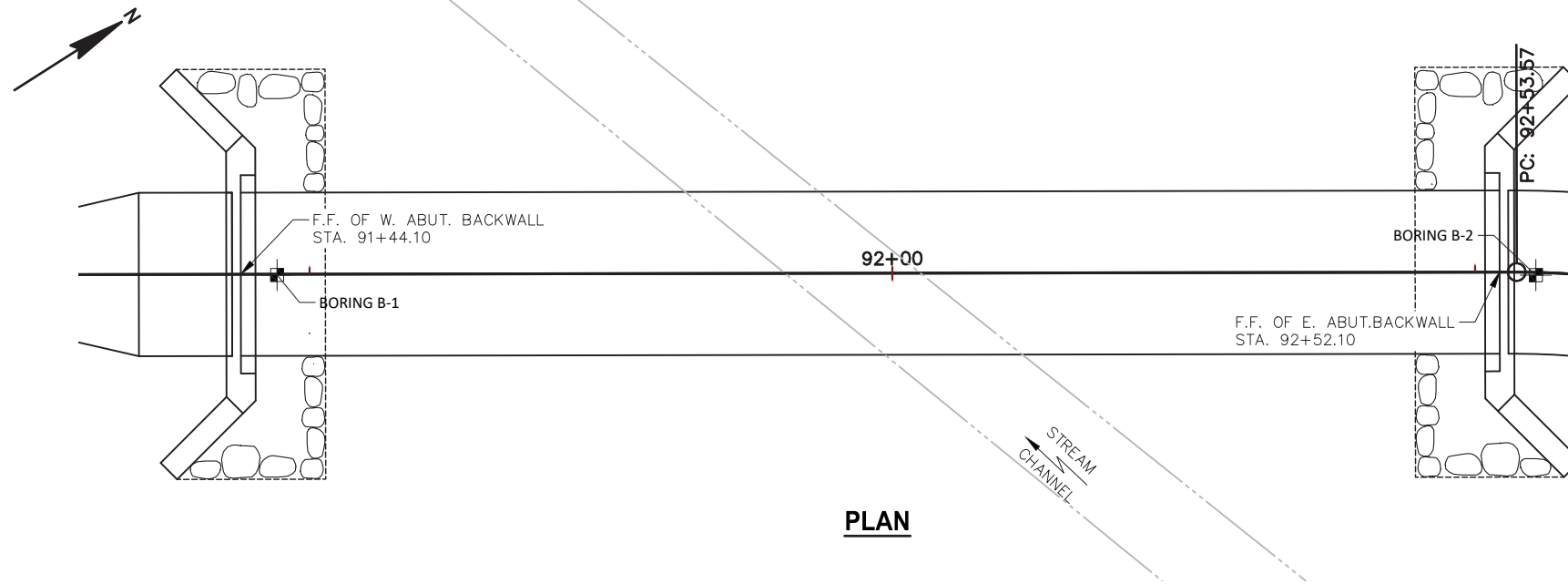
ITEM NUMBER	ITEM DESCRIPTION	UNIT	TOTALS
20230	HEAVY RIPRAP	TONS	100
20233	RIPRAP FILTER FABRIC, TYPE HR	SY	100
90000	PREFABRICATED STEEL STRUCTURE FURNISHED AND INSTALLED - EASTPARK PATH BRIDGE - TYPE H-10 LOADING	LS	1
90001	REINFORCED CONCRETE BRIDGE ABUTMENTS AND WINGWALLS	LS	1
90002	PILING STEEL HP 10-INCH X 42 LB	LF	200
90003	STEEL RAILING APPROACHES	LF	40
90004	RAILING CONCRETE FOOTING	EA	4
90005	REINFORCED CONCRETE APPROACH SLAB	SY	25
90006	PRE-BORING ROCK OR CONSOLIDATED MATERIALS	LF	50



**PROFILE GRADE LINE**

EASTPARK MULTI-USE PATH

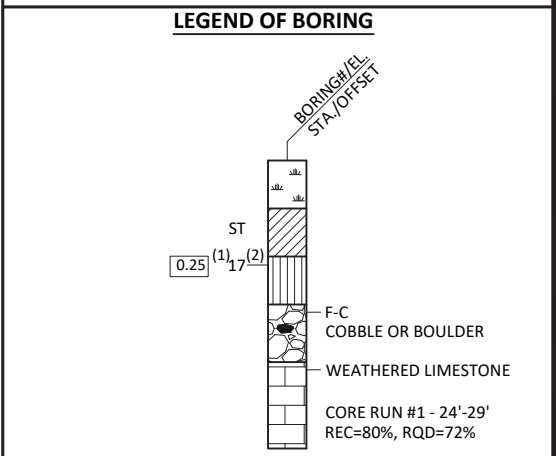




SOIL BORINGS			
BORING NUMBER	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	05/14/18	507,683.1	842,909.3
2	05/10/18	507,774.3	842,967.3

BORINGS & REPORT COMPLETED BY: CGC, INC.  
2921 PERRY STREET  
MADISON WI 53713

MATERIAL SYMBOLS		



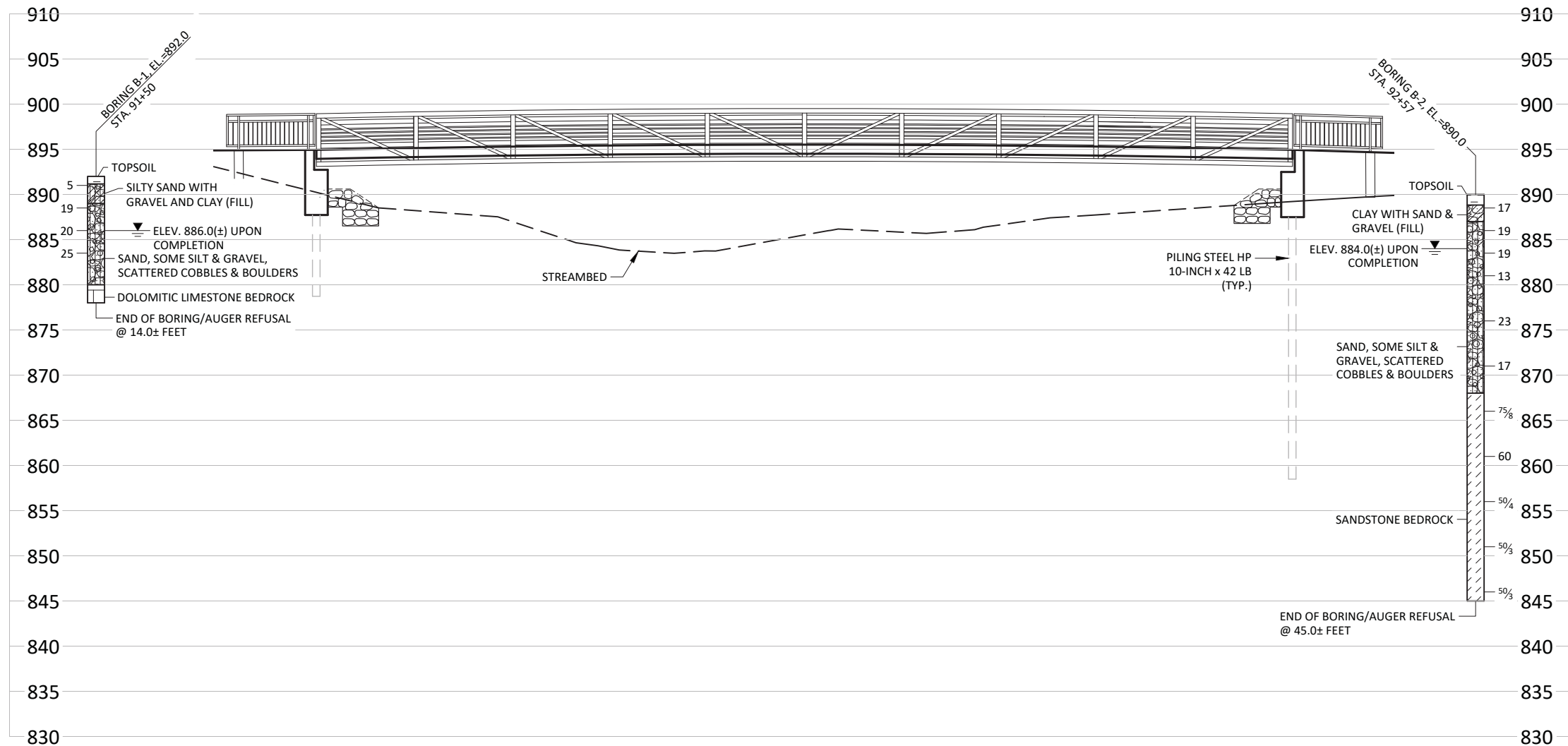
(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)  
(2) UNLESS OTHERWISE SPECIFIED, THE SPT 'N' VALUE IS BASED ON AASHTO T-206 STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATIONS	
	AT TIME OF DRILLING
	END OF DRILLING
	AFTER DRILLING

ABBREVIATIONS	
F-FINE	M-MEDIUM
C-COURSE	ST-SHELBY TUBE

**SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION**  
BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.



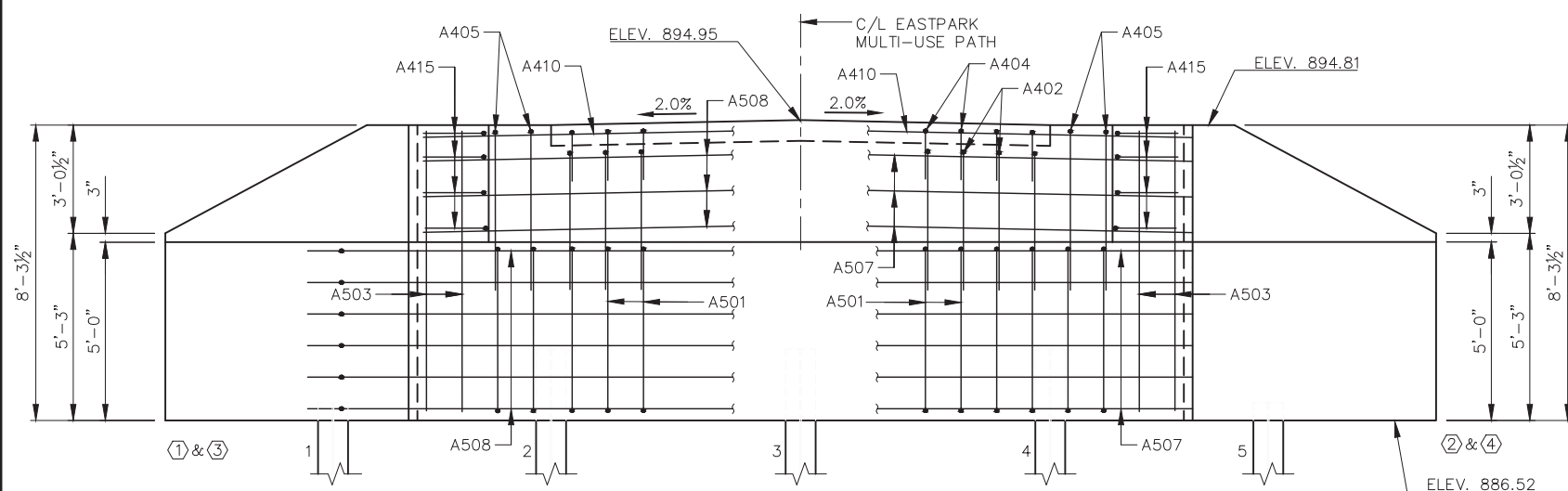
**JEWELL**  
associates engineers, inc.  
Engineers - Architects - Surveyors

560 Sunrise Drive  
Spring Green, WI 53588  
phone: 608-588-7484

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**Eastpark Multi-Use Path Bridge  
Madison, WI**

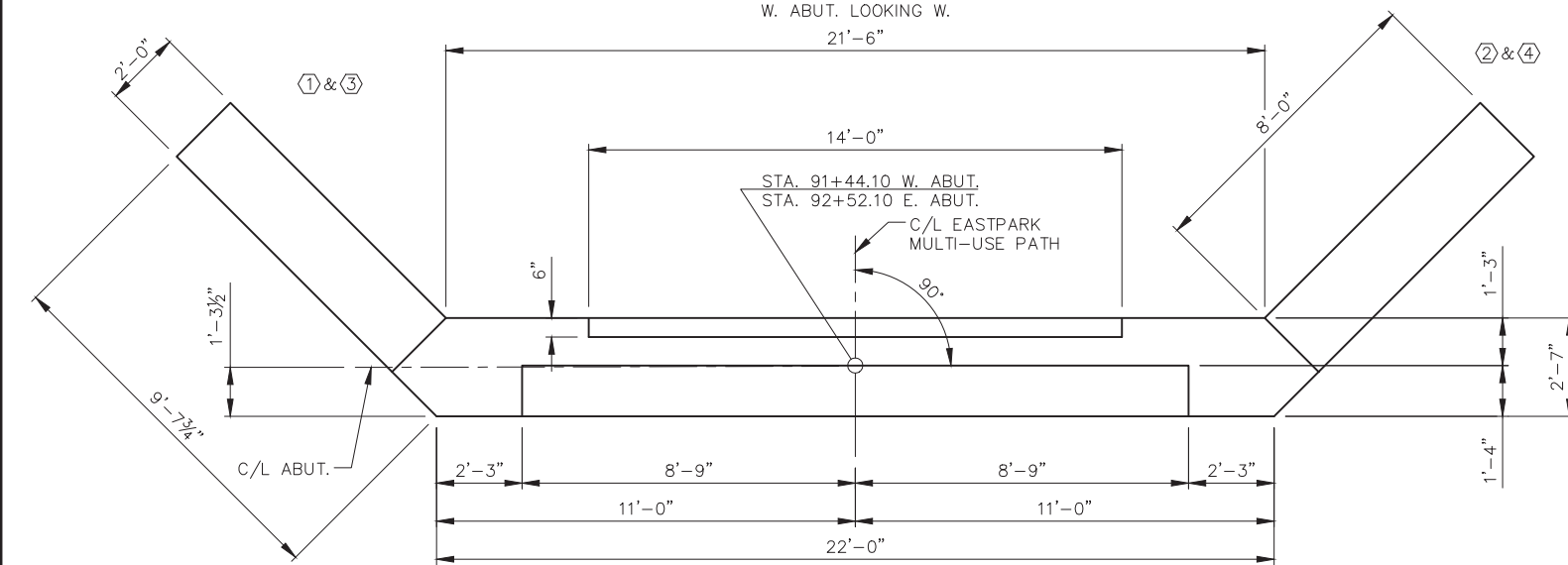
Date	1/29/2019
Revision	
Drawing Name	Subsurface Exploration
Sheet No.	S-3
3 of 7	
Jewell Project Number	M68030



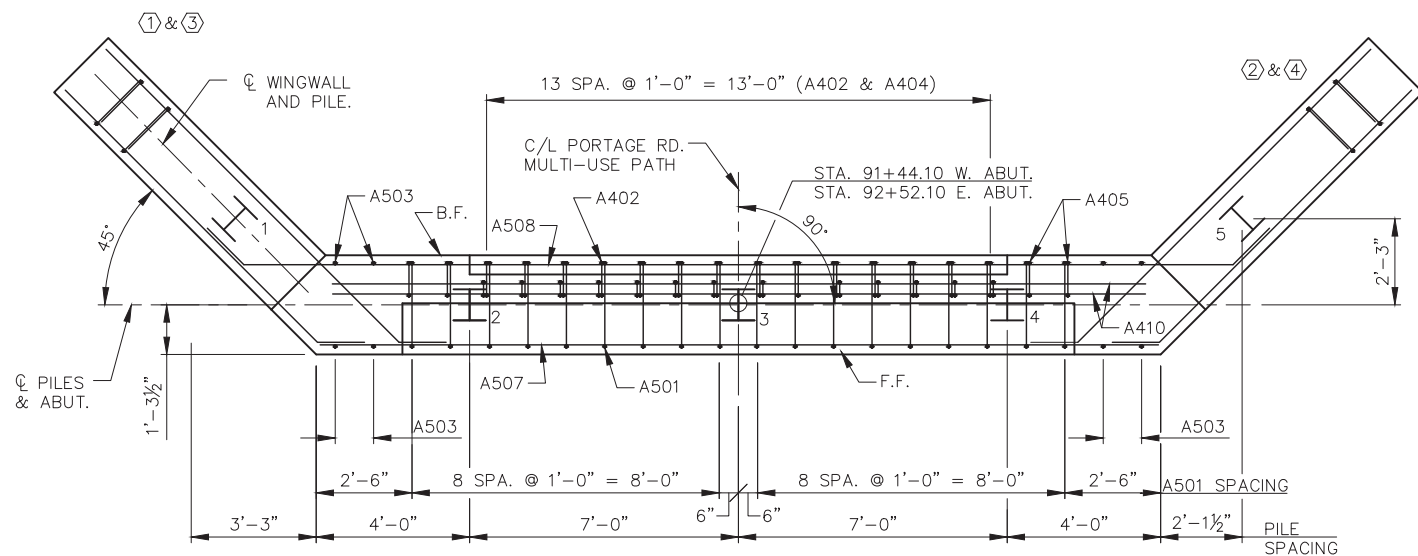
BACK FACE BAR STEEL REINF.

FRONT FACE BAR STEEL REINF.

**ELEVATION**  
 E. ABUT. LOOKING E. OR  
 W. ABUT. LOOKING W.  
 21'-6"

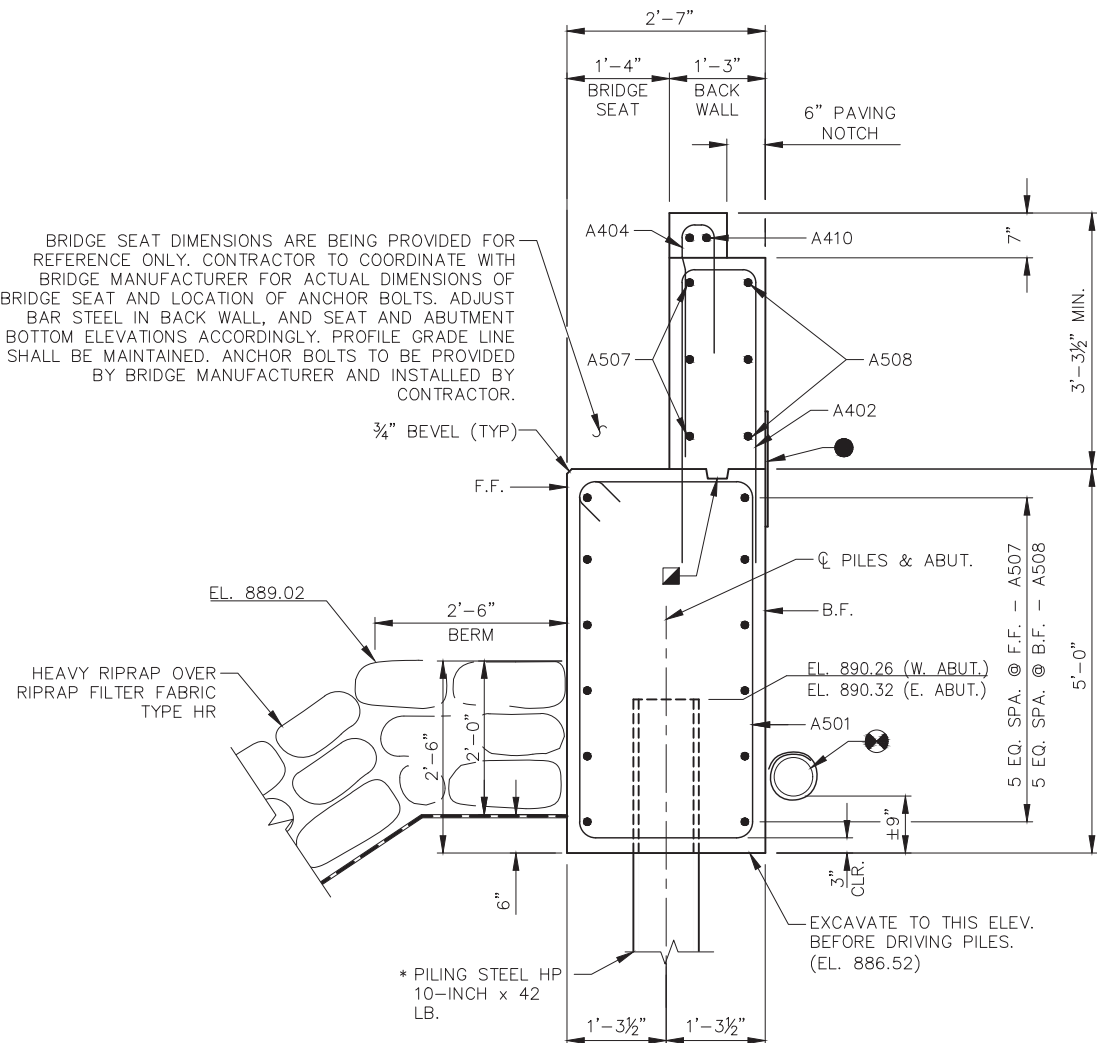


**PLAN**



**LAYOUT**

BRIDGE SEAT DIMENSIONS ARE BEING PROVIDED FOR REFERENCE ONLY. CONTRACTOR TO COORDINATE WITH BRIDGE MANUFACTURER FOR ACTUAL DIMENSIONS OF BRIDGE SEAT AND LOCATION OF ANCHOR BOLTS. ADJUST BAR STEEL IN BACK WALL, AND SEAT AND ABUTMENT BOTTOM ELEVATIONS ACCORDINGLY. PROFILE GRADE LINE SHALL BE MAINTAINED. ANCHOR BOLTS TO BE PROVIDED BY BRIDGE MANUFACTURER AND INSTALLED BY CONTRACTOR.



**TYPICAL SECTION THROUGH ABUTMENT BODY**

ABUTMENTS TO BE SUPPORTED ON PILING STEEL HP 10-INCH X 42 LB. DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 105 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATE 10 FT. PILE LENGTHS AT W. ABUT. AND 30 FT. PILE LENGTHS AT E. ABUT.

**NOTES**

SOME BARS HAVE BEEN OMITTED FOR CLAIRTY, SEE SHEET 5 FOR BILL OF BARS.

DO NOT PLACE FILL HIGHER THAN 3 FEET FROM BOTTOM OF ABUTMENT UNTIL SUPERSTRUCTURE IS IN PLACE.

REINFORCEMENT SPACING MAY BE ADJUSTED TO MISS PILING.

F.F. - FRONT FACE

B.F. - BACK FACE.

**LEGEND**

☒ PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPED 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SCREEN AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON SHEET 2. RODENT SCREEN TO BE INCLUDED.

■ PILE SPACING MEASURED AT BASE OF SHAFT.

▣ 2"X4" BEVELED KEYWAY CONSTRUCTION JOINT.

● 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. AND VERT. JOINTS AT BACKFACE.

**BILL OF BARS - TWO ABUTMENTS SHOWN**

FOR INFORMATION PURPOSES ONLY

BAR MARK	NO. REQ'D.	LENGTH	BEND	BAR SERIES	LOCATION
A501	36	14-2	X		BODY - VERT.
A402	28	8-3	X		BODY - VERT. - BACKWALL
A503	24	7-10			BODY - VERT. - ENDS
A404	28	3-7	X		BODY - VERT. - PAVING BLOCK
A405	8	9-5	X		BODY - VERT. - ENDS TOP
A506	64	8-6	X	X	WINGS - VERT. - F.F. & B.F.
A507	18	22-0			BODY - HORIZ. - F.F.
A508	18	28-11			BODY - HORIZ. - B.F.
A509	24	11-4	X		WINGS - HORIZ. - B.F.
A410	4	21-2			BACKWALL & PAVING BLOCK - HORIZ.
A411	8	9-3			WINGS - HORIZ. - F.F. & B.F.
A412	8	6-7			WINGS - HORIZ. - F.F. & B.F.
A413	8	4-1			WINGS - HORIZ. - F.F. & B.F.
A414	8	9-10	X		WINGS - HORIZ. - F.F. & B.F. - TOP
A415	16	7-8	X		BODY - HORIZ. - ENDS - TOP
A516	24	10-10	X		WINGS - HORIZ. - F.F.

THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

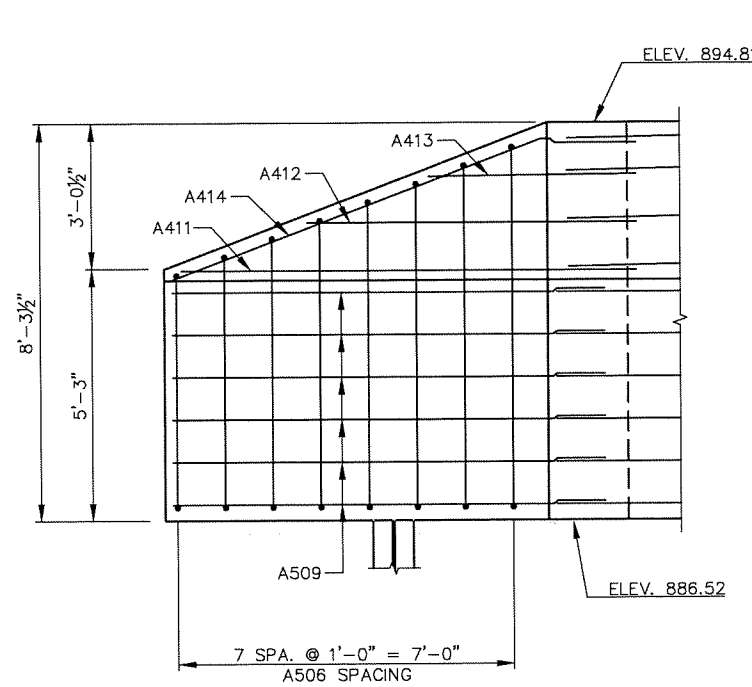
ALL BAR STEEL SHALL BE EPOXY COATED.

\* LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

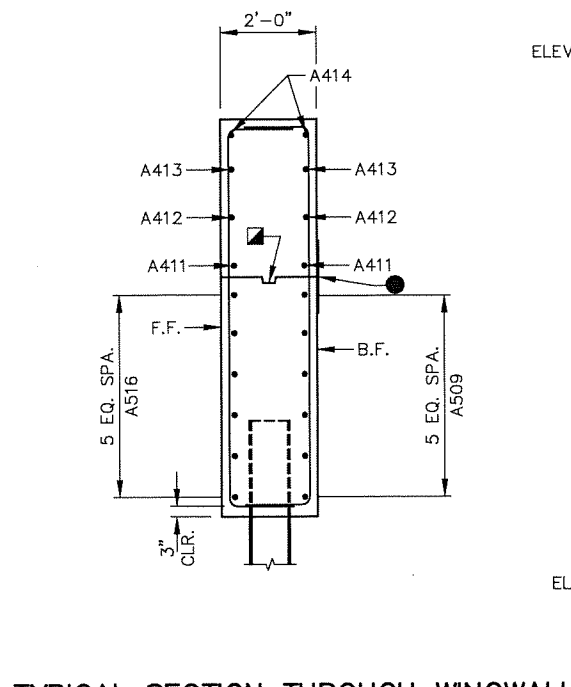
**BAR SERIES TABLE**

BAR MARK	NO. REQ'D.	LENGTH
A506	8 SERIES OF 8	7-3 TO 9-9

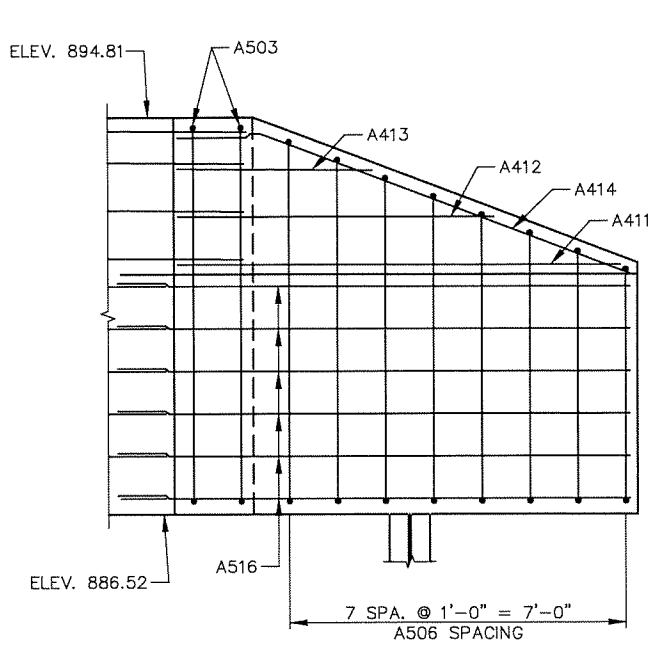
BAR MARK	"H"	"W"
A402	3-9	0-11
A404	1-8	0-5
A405	4-3	0-11



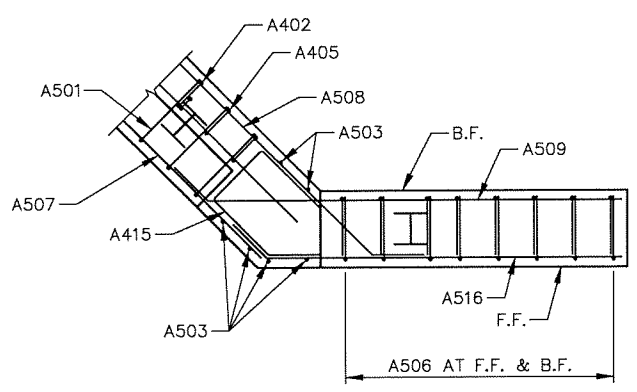
**B.F. ELEVATION - WINGS 2 & 4**  
 WINGS 1 & 3 SIMILAR



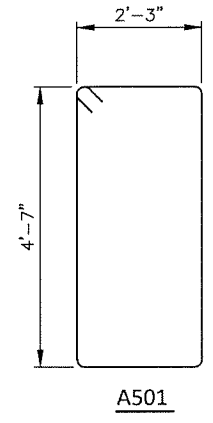
**TYPICAL SECTION THROUGH WINGWALL**



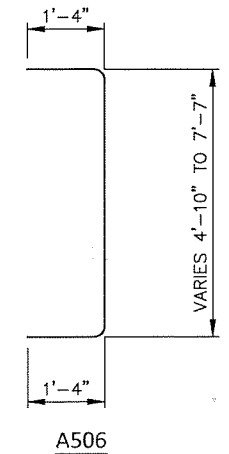
**F.F. ELEVATION - WINGS 2 & 4**  
 WINGS 1 & 3 SIMILAR



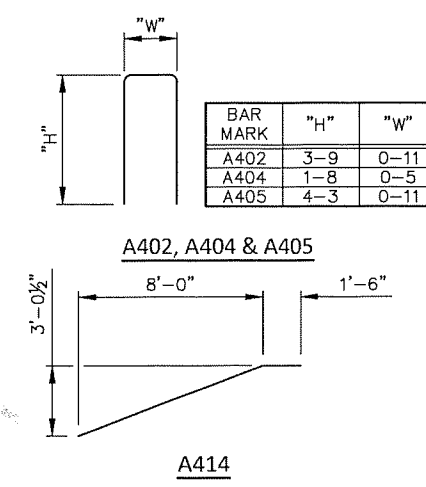
**PLAN VIEW - WINGS 2 & 4**  
 WINGS 1 & 3 SIMILAR



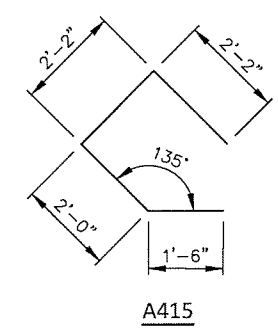
A501



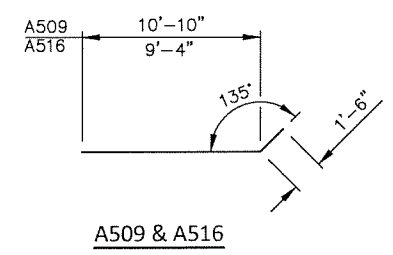
A506



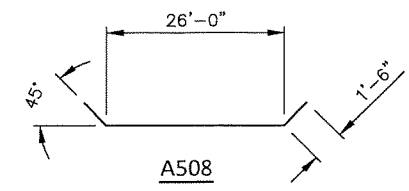
A414



A415



A509 & A516



A508

**TOTAL ABUTMENT ESTIMATED QUANTITIES**

WISDOT ITEM NUMBER	ITEM DESCRIPTION	UNIT	TOTALS
206.1000	EXCAVATION FOR STRUCTURES BRIDGES	LS	1
210.0100	BACKFILL STRUCTURE	TON	340
502.0100	CONCRETE MASONRY BRIDGES	CY	46
505.0405	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	3,380
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	14
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	100

ALL ITEMS IN ESTIMATED QUANTITIES ON THIS SHEET SHALL BE INCLUDED IN THE BID ITEM 90001 "REINFORCED CONCRETE BRIDGE ABUTMENTS AND WINGWALLS" AND SHALL CONFORM TO THE SPECIFICATIONS FOR EACH INDIVIDUAL BID ITEM CONTAINED WITHIN THE WISDOT "2019 STANDARD SPECIFICATIONS".

**NOTES**

SOME BARS HAVE BEEN OMITTED FOR CLARITY, SEE THIS SHEET FOR BILL OF BARS.

REINFORCEMENT SPACING MAY BE ADJUSTED TO MISS PILING.

F.F. - FRONT FACE

B.F. - BACK FACE.



**Eastpark Multi-Use Path Bridge  
 Madison, WI**

Date  
 1/29/2019

Date Revision

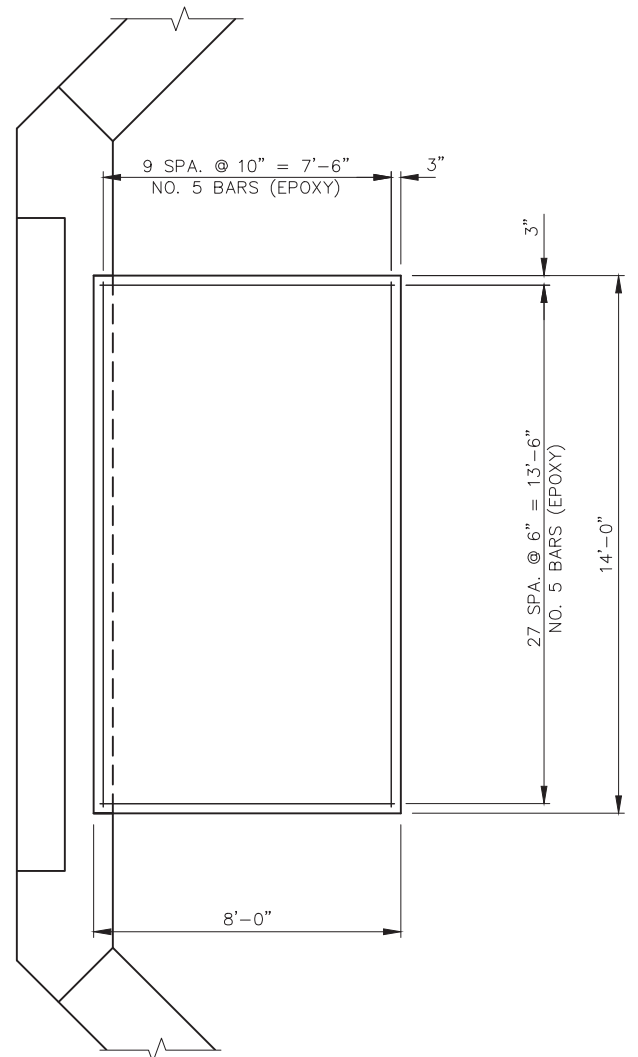
Drawing Name

**Approach Slab  
 Details**

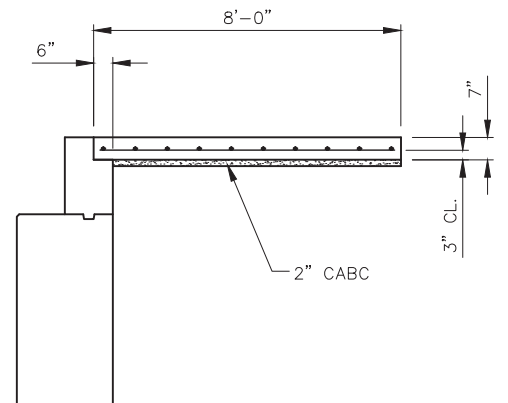
S-6

Sheet No.  
**6 of 7**

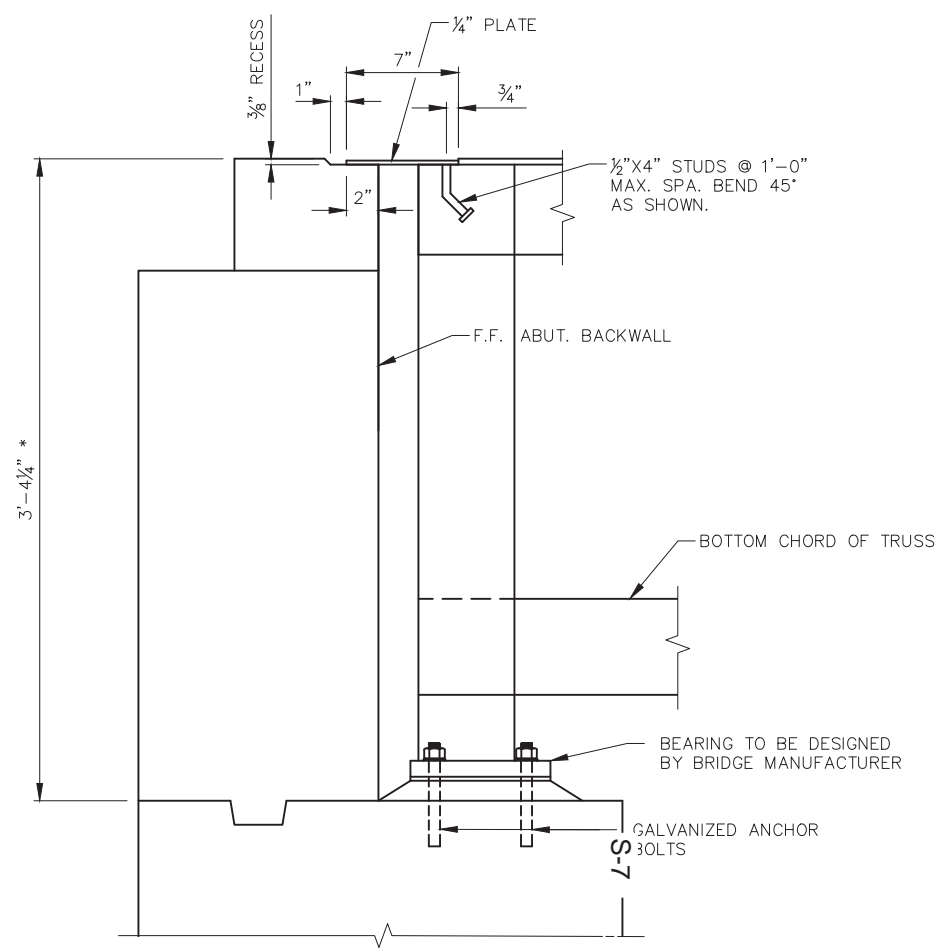
Jewell Project Number  
**M68030**



**APPROACH SLAB PLAN**  
 WEST SIDE SHOWN. EAST TO BE CONCENTRIC TO C/L OF PATH.



**SECTION THRU APPROACH SLAB**



**SLIDING PLATE & BEARING DETAIL**  
 \* ASSUMED DIMENSION AT CROWN.

**NOTES**

RAILING BID ITEM SHALL BE "STEEL RAILING APPROACHES", WHICH SHALL INCLUDE ALL STEEL ITEMS SHOWN. CONCRETE FOOTING FOR RAILING SUPPORT OFF THE BRIDGE WILL BE PAID FOR AS "RAILING CONCRETE FOOTING" AND SHALL INCLUDE DRILLING HOLE, PROVIDING AND PLACING REINFORCEMENT BARS AND CONCRETE MASONRY.

POST BASE PLATES 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 CUTS.

ALL PLATES, BARS, AND RECTANGULAR SLEEVES SHALL CONFORM TO ASTM A709 GRADE 36. ALL STRUCTURAL TUBING SHALL CONFORM TO ASTM A500 GRADE B.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

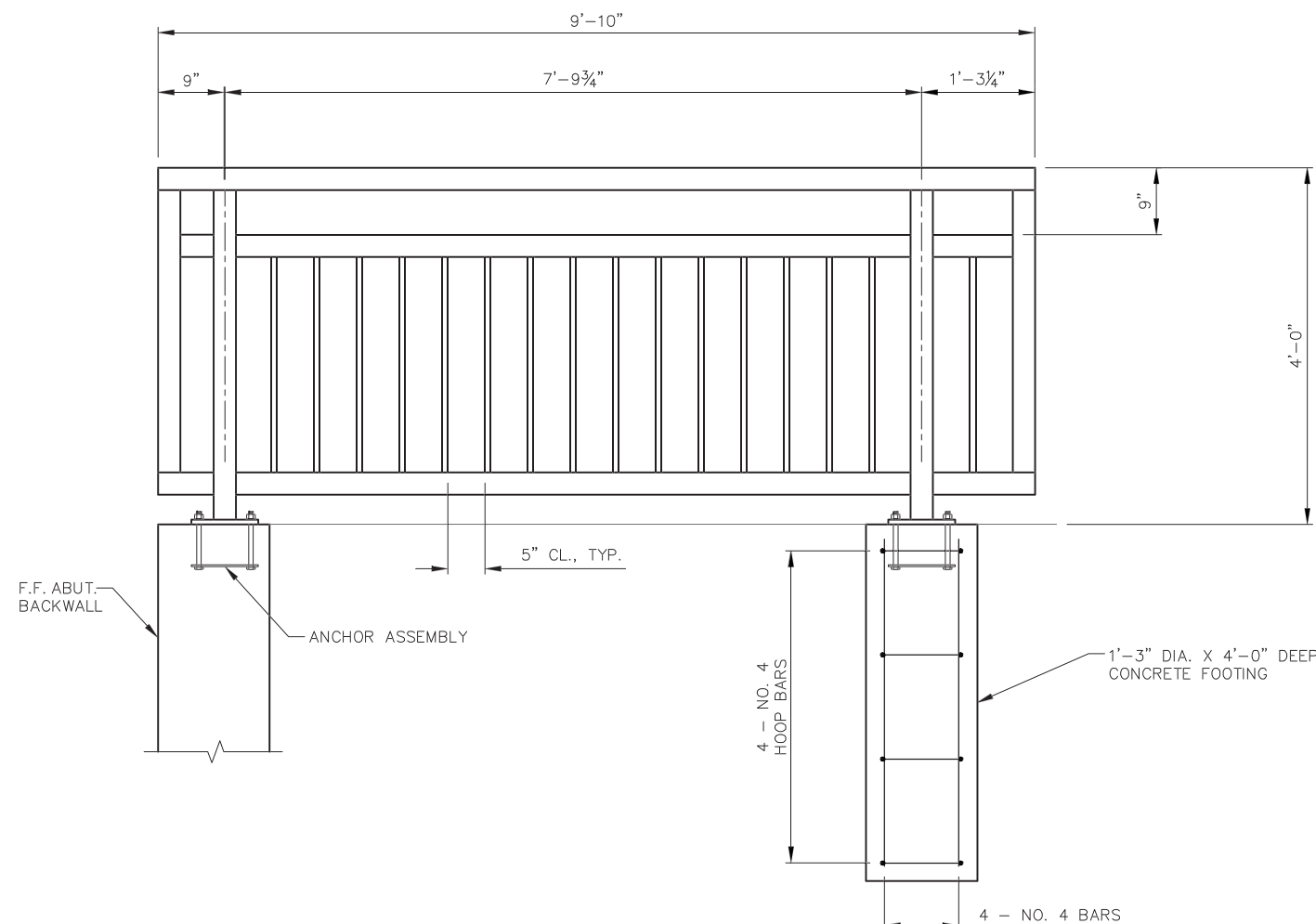
CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT AND SHALL BE GALVANIZED.

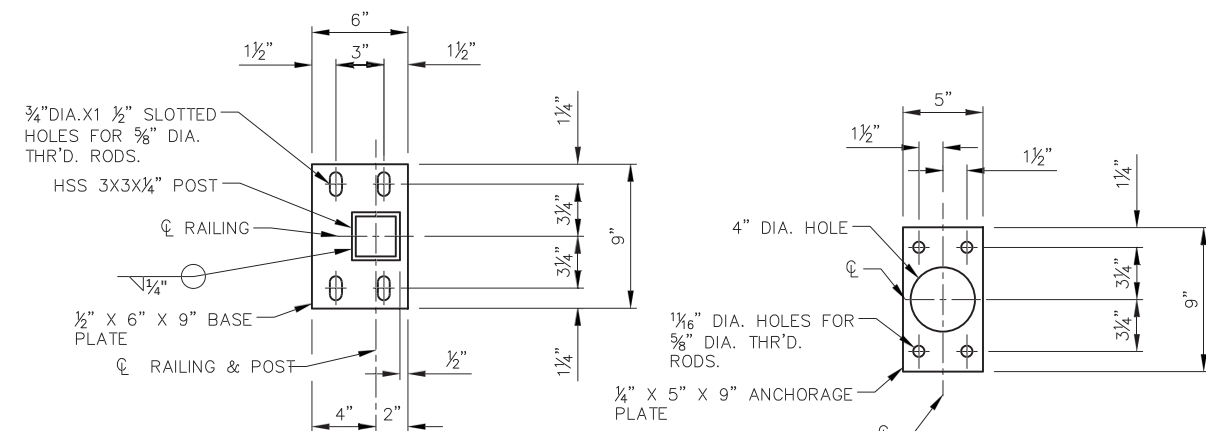
CAULK AROUND PERIMETER OF BASE PLATES, NO. 1, AND FILL BOLT SLOT OPENINGS IN SHIMS AND BASE PLATES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, THE STEEL RAILING SHOULD BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS.

VENT HOLES SHALL BE DRILLED IN POST AND RAIL MEMBERS AS REQ'D. TO FACILITATE GALVANIZING AND DRAINAGE.

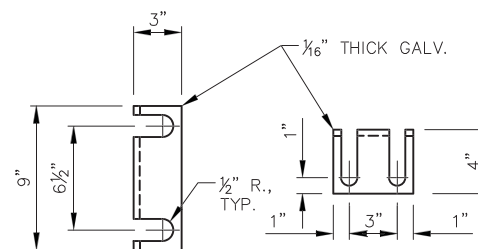


**RAILING INSIDE ELEVATION**



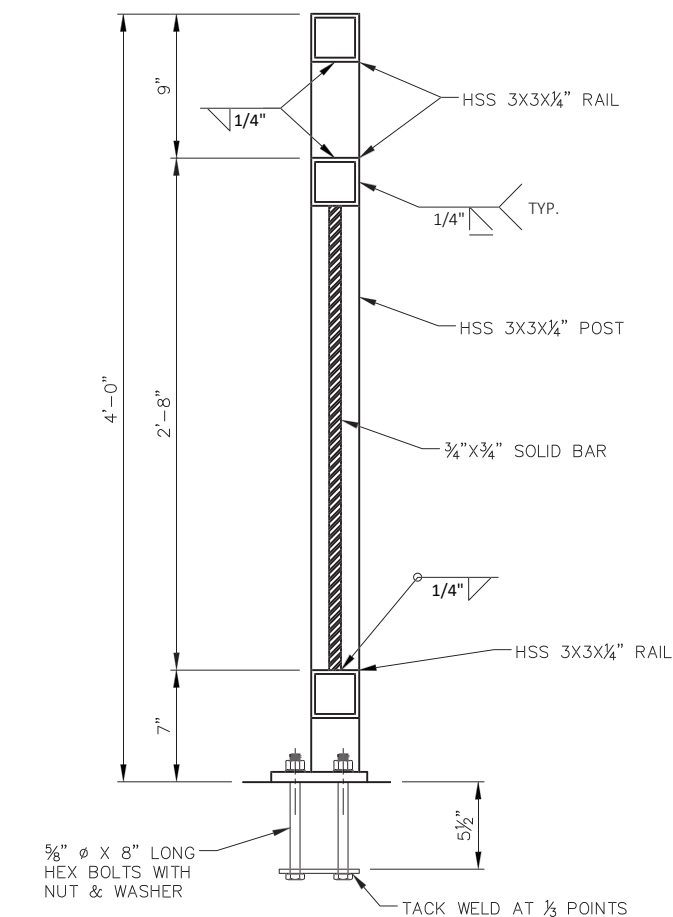
**RAILING BASE PLATE**

**ANCHOR PLATE**



**ANCHOR PLATE**

TWO SHIMS OF EACH SIZE REQ'D PER POST.

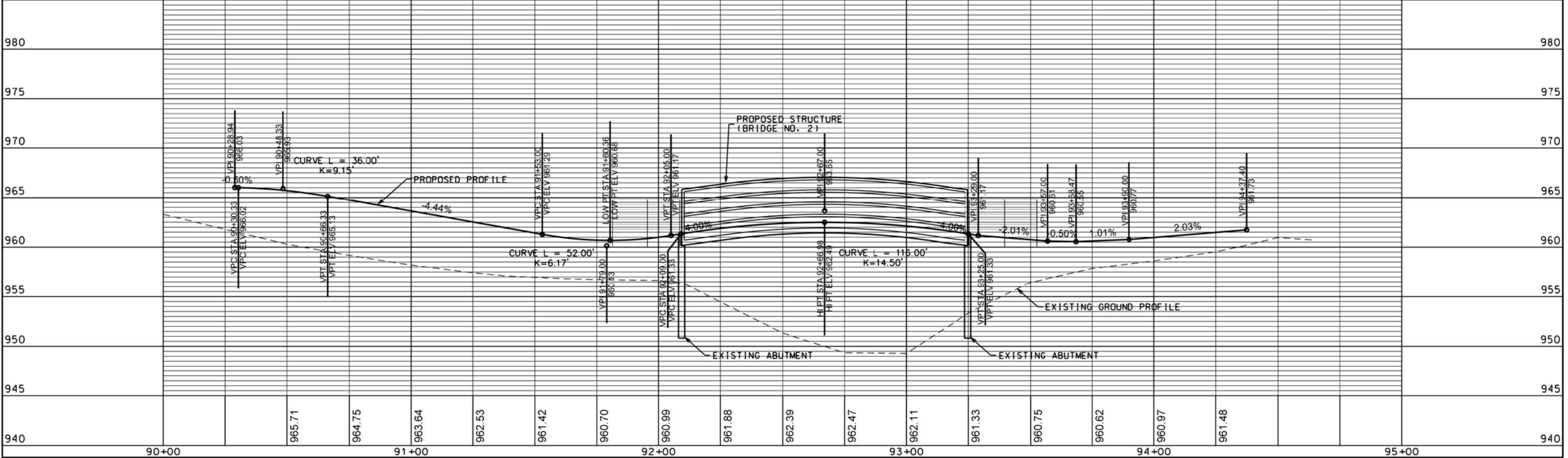
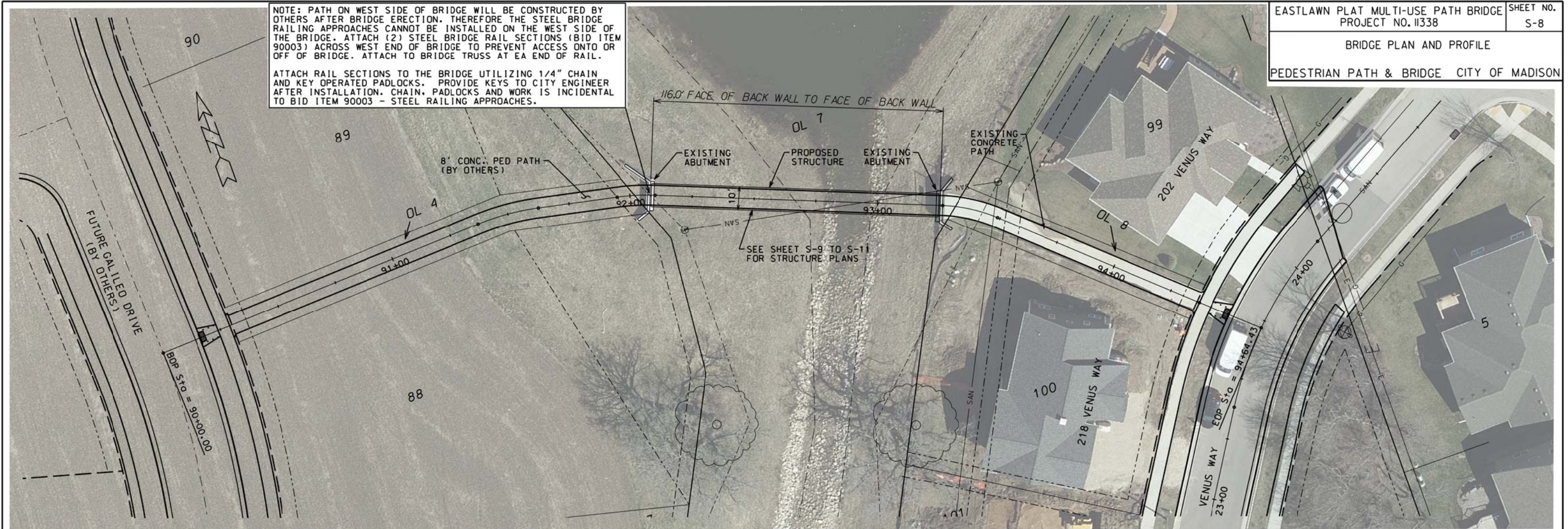


**SECTION THRU RAILING**

ADHESIVE ANCHORS 5/8", EMBED 7" IN CONCRETE MAY BE SUBSTITUTED FOR CAST-IN-PLACE BOLTS AND ANCHORAGE PLATE.



NOTE: PATH ON WEST SIDE OF BRIDGE WILL BE CONSTRUCTED BY OTHERS AFTER BRIDGE ERECTION. THEREFORE THE STEEL BRIDGE RAILING APPROACHES CANNOT BE INSTALLED ON THE WEST SIDE OF THE BRIDGE. ATTACH (2) STEEL BRIDGE RAIL SECTIONS (BID ITEM 90003) ACROSS WEST END OF BRIDGE TO PREVENT ACCESS ONTO OR OFF OF BRIDGE. ATTACH TO BRIDGE TRUSS AT EA END OF RAIL.  
 ATTACH RAIL SECTIONS TO THE BRIDGE UTILIZING 1/4" CHAIN AND KEY OPERATED PADLOCKS. PROVIDE KEYS TO CITY ENGINEER AFTER INSTALLATION. CHAIN, PADLOCKS AND WORK IS INCIDENTAL TO BID ITEM 90003 - STEEL RAILING APPROACHES.



ORIGINATOR: CITY OF MADISON, STREETS DIVISION

PLOT NAME: \_\_\_\_\_ PLOT SCALE: \_\_\_\_\_ REV. DATE: \_\_\_\_\_



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**Eastlawn Plat Multi-Use Path Bridge  
 Madison, WI**

Date  
**12/4/2018**

Date Revision

Drawing Name

**General Plan**

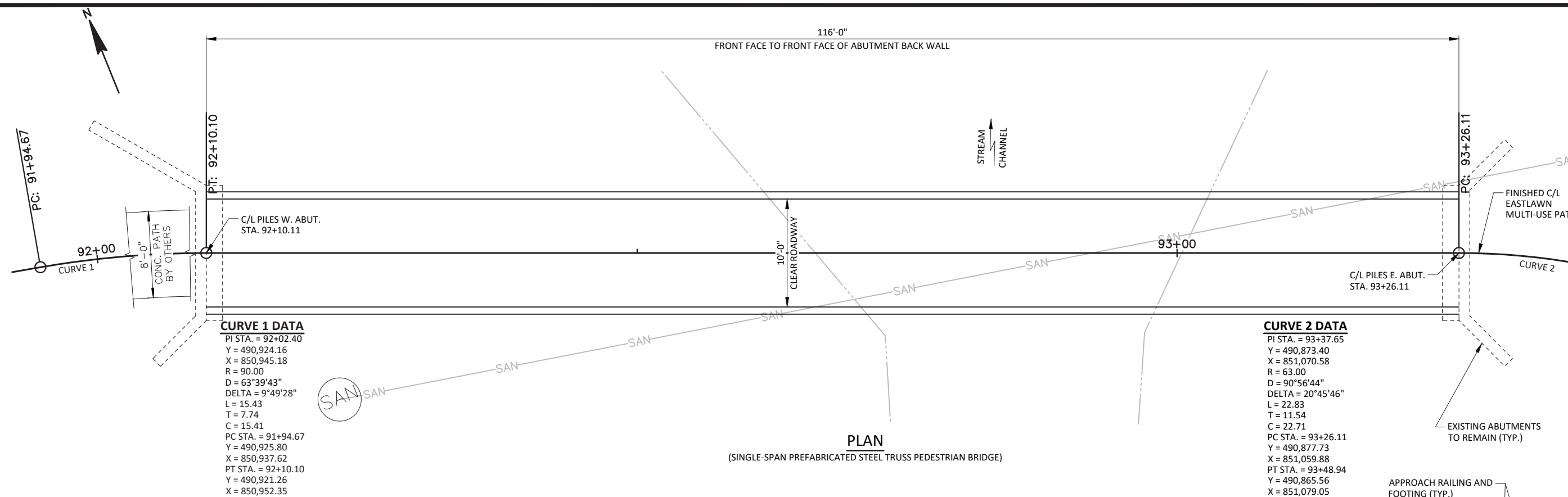
S-9

Sheet No.

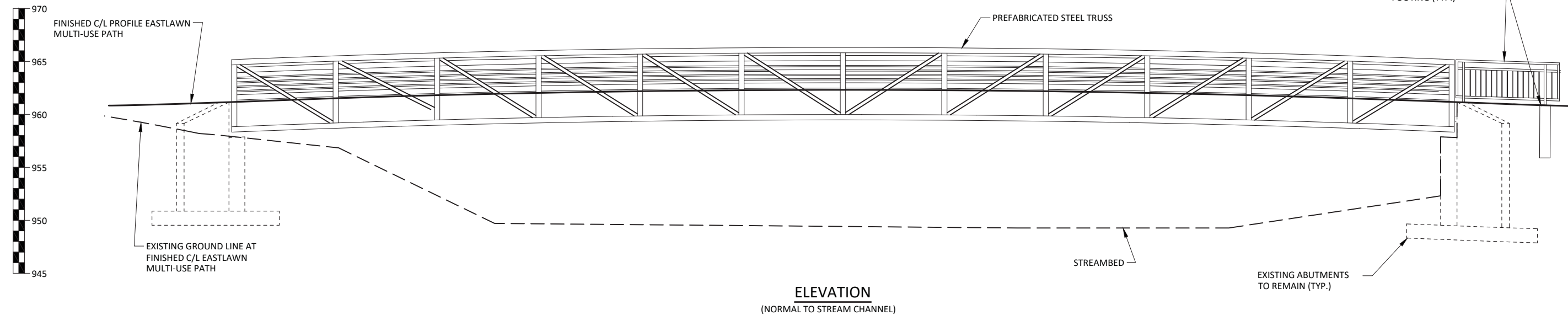
**1 of 3**

Jewell Project Number

**M68030**



**PLAN**  
 (SINGLE-SPAN PREFABRICATED STEEL TRUSS PEDESTRIAN BRIDGE)



**DESIGN DATA**

**DESIGN LOADS:**  
 VEHICLE \_\_\_\_\_ AASHTO H-5 (10,000 LBS)  
 PEDESTRIAN \_\_\_\_\_ 90 PSF

**ULTIMATE DESIGN STRESSES:**  
 CONCRETE DECK \_\_\_\_\_ f'c = 4,000 P.S.I.  
 HIGH STRENGTH BAR STEEL REINFORCEMENT (GRADE 60) \_\_\_\_\_ fy = 60,000 P.S.I.

**THE STEEL FOR THE PREFABRICATED STEEL TRUSS:**  
 W SHAPES (ASTM A992) \_\_\_\_\_ f'c = 50,000 P.S.I.  
 RECTANGULAR HSS (ASTM A500, GR. B) \_\_\_\_\_ f'c = 46,000 P.S.I.  
 CHANNELS AND ANGLES (ASTM A36) \_\_\_\_\_ fy = 36,000 P.S.I.

**FOUNDATION DATA**  
 EXISTING FOUNDATION TO REMAIN



**LIST OF DRAWINGS**

- 1. GENERAL PLAN \_\_\_\_\_
- 2. CROSS SECTION AND QUANTITIES \_\_\_\_\_
- 3. RAILINGS \_\_\_\_\_

**GENERAL NOTES**

- DRAWINGS SHALL NOT BE SCALED.
- BAR STEEL SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.
- FABRICATION, MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE WISCONSIN DOT STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, 2018.
- ALL DIMENSIONS ARE IN FEET AND INCHES, UNLESS OTHERWISE NOTED.
- STEEL RAILING FOR THE APPROACHES SHALL BE GALVANIZED AND INCLUDED IN THE BID ITEM "STEEL RAILING APPROACHES."
- THE TRUSS FLOOR BEAMS SHALL CONSIST OF WIDE FLANGE BEAMS. TUBE SECTIONS ARE NOT ALLOWED FOR FLOOR BEAMS.
- THE CONCRETE DECK AND COATED BAR STEEL REINFORCEMENT IN THE DECK SHALL BE INCLUDED IN THE BID ITEM "PREFABRICATED STEEL TRUSS BRIDGE FURNISHED AND INSTALLED - EASTLAWN PLAT BRIDGE - TYPE H-5 LOADING".

THE PREFABRICATED STEEL TRUSS MANUFACTURER SHALL CALCULATE THE DEAD LOAD DEFLECTION OF THE TRUSS AND CAMBER THE TRUSS ACCORDINGLY TO MAINTAIN THE PROFILE SHOWN ON SHEET 2 AFTER DEAD LOAD DEFLECTION.

THE PREFABRICATED STEEL TRUSS MANUFACTURER SHALL DETERMINE THE OVERALL LENGTH OF THE BRIDGE DECK CONSIDERING THERMAL MOVEMENT OF THE TRUSS FOR A TEMPERATURE RANGE OF (-) 30°F TO (+)120° F.

THE APPROACH RAILING FOR THE WEST END SHALL BE USED TO BLOCK THE END OF THE WEST SIDE OF THE BRIDGE. CHAINS WITH LOCKS SHALL BE PROVIDED TO ATTACH THE RAILING TO THE SUPERSTRUCTURE. COST FOR CHAINS AND LOCKS TO BE INCLUDED IN PRICE BID FOR "STEEL RAILING APPROACHES".

**Eastlawn Plat Multi-Use Path Bridge  
 Madison, WI**

Date  
**12/4/2018**

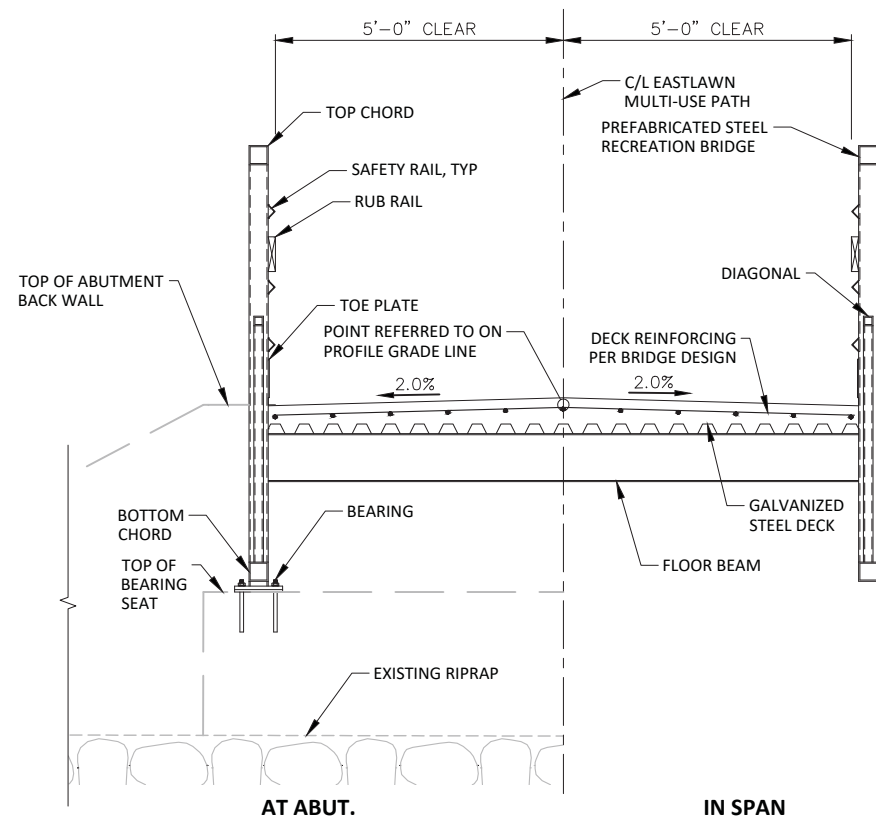
Date Revision

Drawing Name

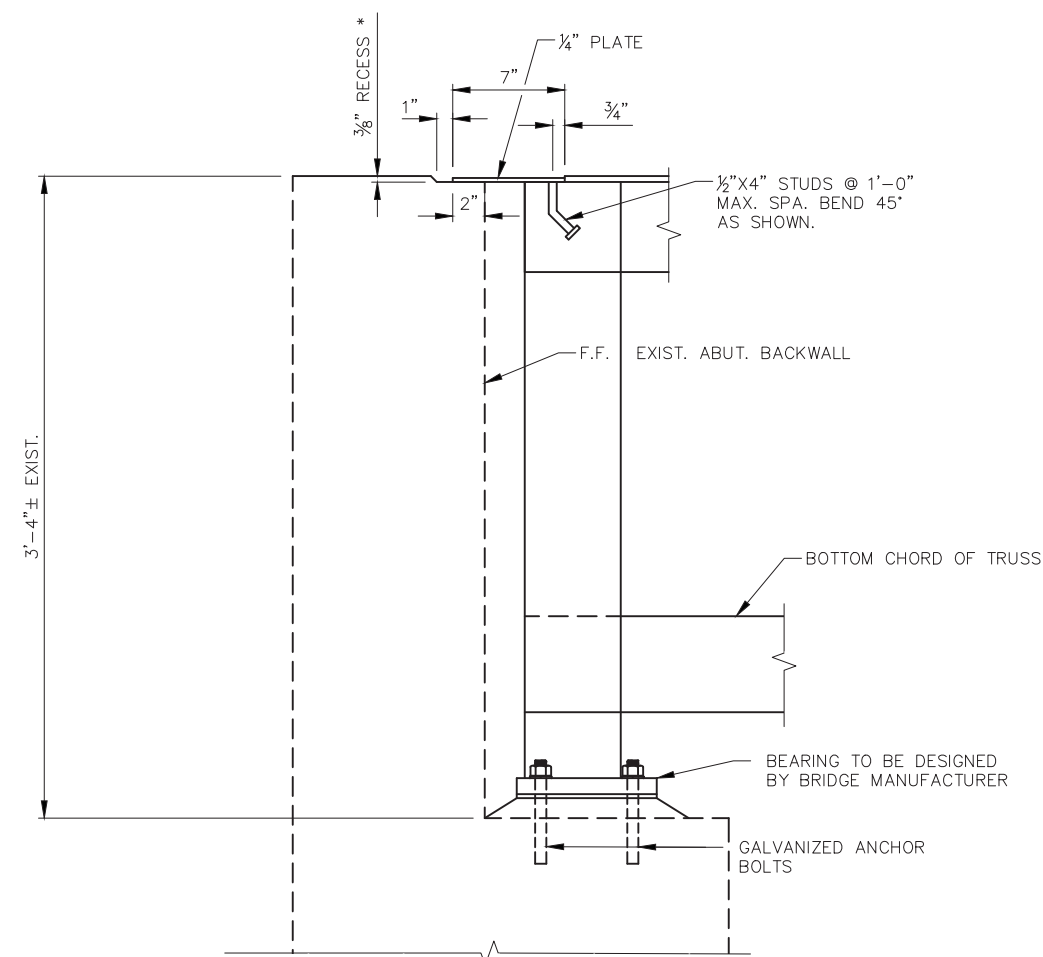
**Typical Section & Quantities** S-10

Sheet No.  
**2 of 3**

Jewell Project Number  
**M68030**



**CROSS SECTION THROUGH STRUCTURE**

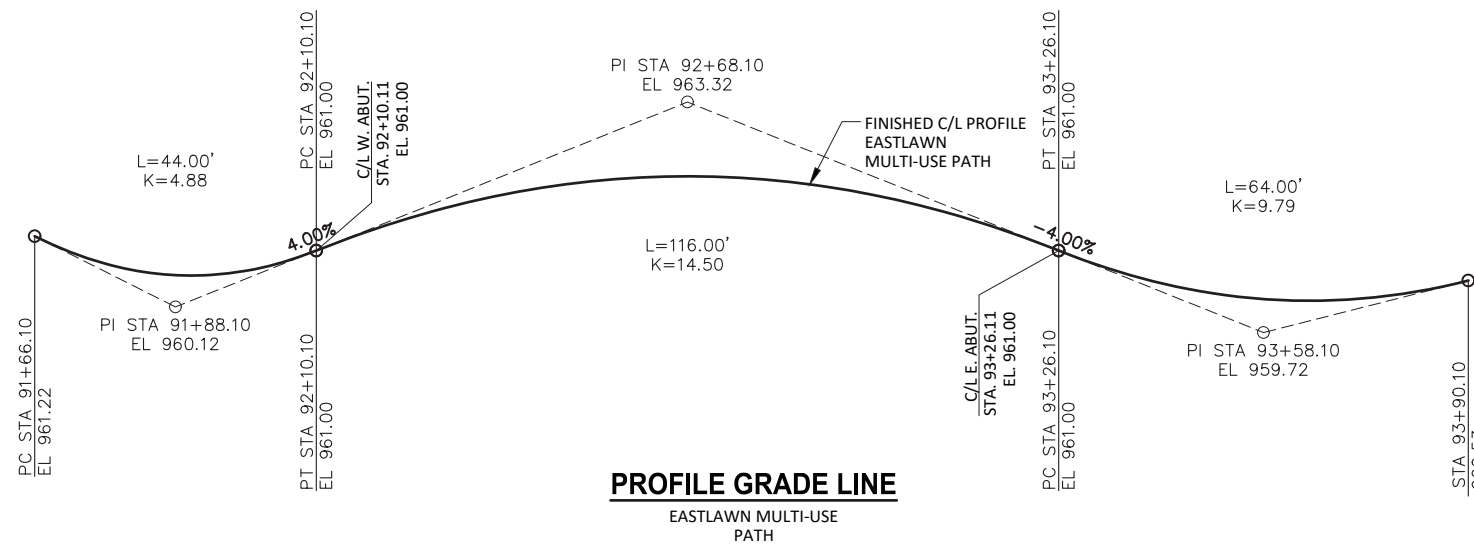


**SLIDING PLATE & BEARING DETAIL**

\* GRIND  $\frac{3}{8}$ " RECESS FOR SLIDING EXPANSION PLATE. COST INCLUDED IN "PREFABRICATED STEEL STRUCTURE FURNISHED AND INSTALLED - EASTLAWN PLAT BRIDGE - TYPE H-5 LOADING".

**TOTAL ESTIMATED QUANTITIES**

ITEM NUMBER	ITEM DESCRIPTION	UNIT	TOTALS
90003	STEEL RAILING APPROACHES	LF	40
90004	CONCRETE RAILING FOOTING	EA	2
90007	PREFABRICATED STEEL STRUCTURE FURNISHED AND INSTALLED - EASTLAWN PLAT BRIDGE - TYPE H-5 LOADING	LS	1



**PROFILE GRADE LINE**  
 EASTLAWN MULTI-USE PATH

**Eastlawn Plat Multi-Use Path Bridge  
 Madison, WI**

Date  
 12/4/2018

Date Revision

Drawing Name

**Railing**

S-11

Sheet No.  
**3 of 3**

Jewell Project Number  
**M68030**

**NOTES**

RAILING BID ITEM SHALL BE "STEEL RAILING APPROACHES", WHICH SHALL INCLUDE ALL STEEL ITEMS SHOWN. CONCRETE FOOTING FOR RAILING SUPPORT OFF THE BRIDGE WILL BE PAID FOR AS "RAILING CONCRETE FOOTING" AND SHALL INCLUDE DRILLING HOLE, PROVIDING AND PLACING REINFORCEMENT BARS AND CONCRETE MASONRY. "RAILING CONCRETE FOOTING" AT EAST ABUTMENT ONLY.

POST BASE PLATES 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 CUTS.

ALL PLATES, BARS, AND RECTANGULAR SLEEVES SHALL CONFORM TO ASTM A709 GRADE 36. ALL STRUCTURAL TUBING SHALL CONFORM TO ASTM A500 GRADE B.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

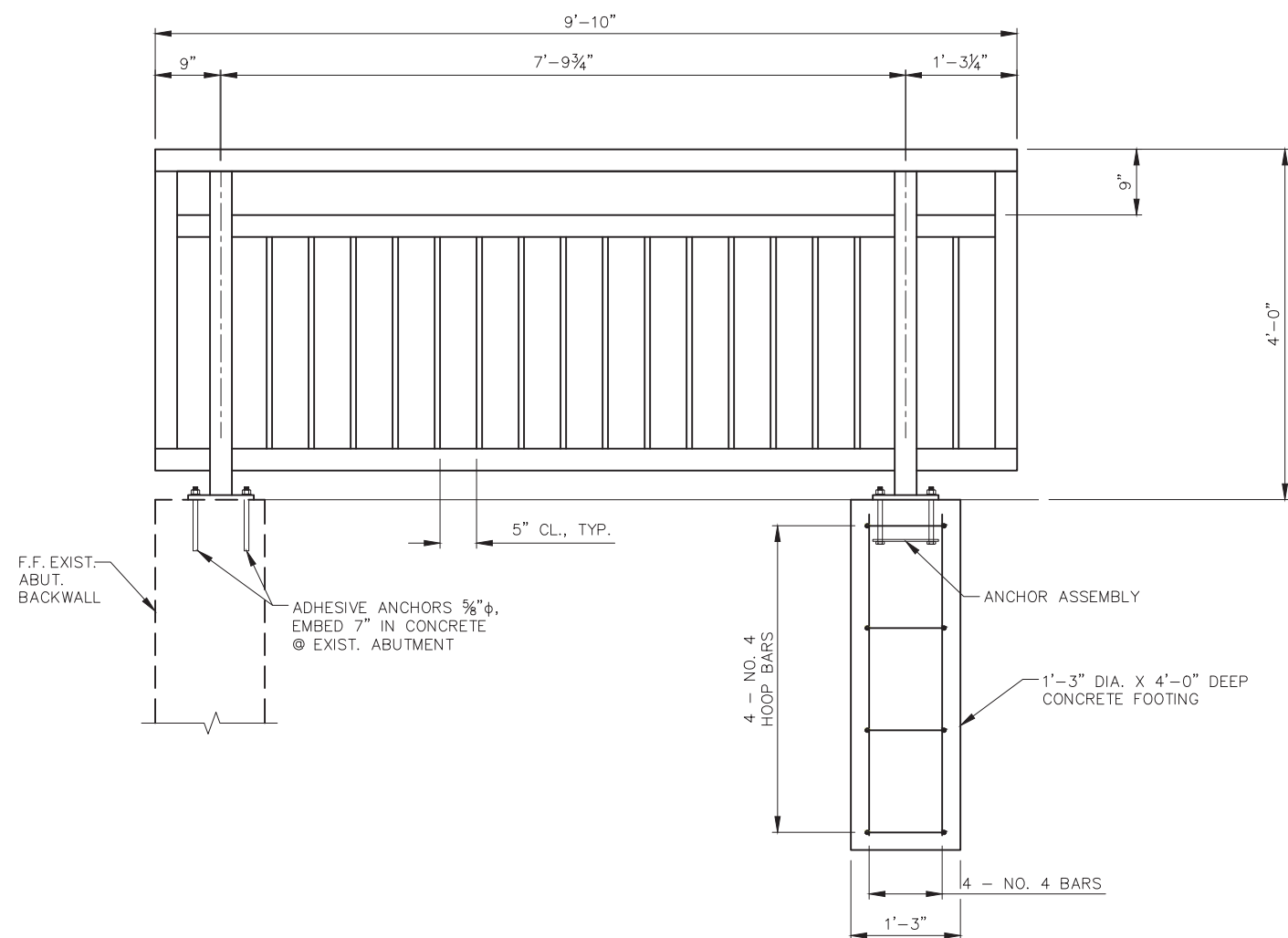
CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT AND SHALL BE GALVANIZED.

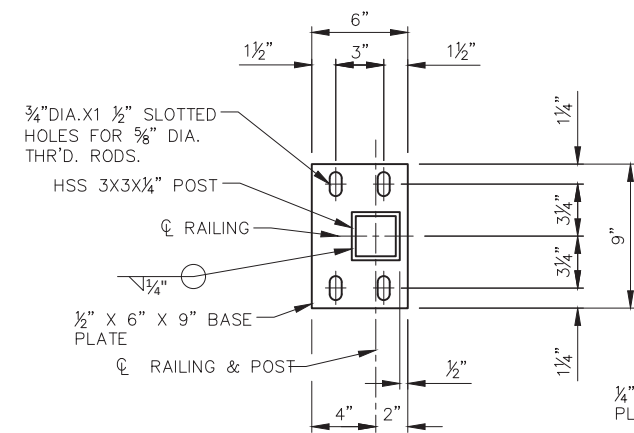
CAULK AROUND PERIMETER OF BASE PLATES, NO. 1, AND FILL BOLT SLOT OPENINGS IN SHIMS AND BASE PLATES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, THE STEEL RAILING SHOULD BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS.

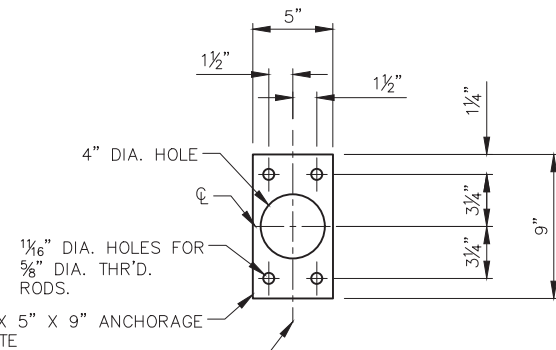
VENT HOLES SHALL BE DRILLED IN POST AND RAIL MEMBERS AS REQ'D. TO FACILITATE GALVANIZING AND DRAINAGE.



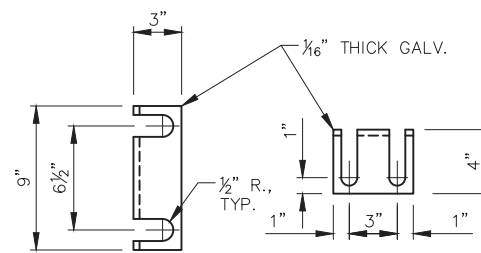
**RAILING INSIDE ELEVATION**



**RAILING BASE PLATE**

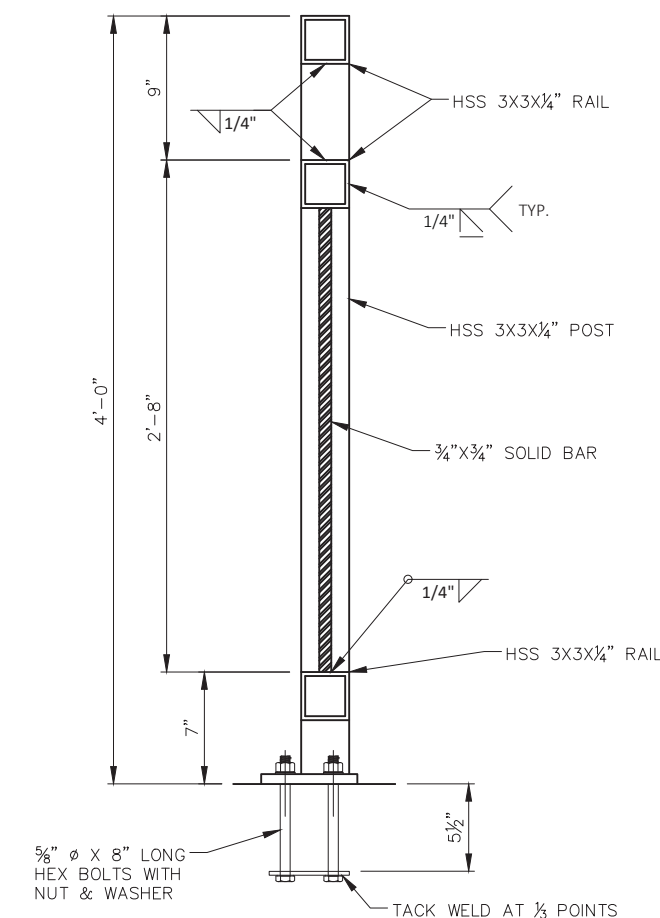


**ANCHOR PLATE**



**ANCHOR PLATE**

TWO SHIMS OF EACH SIZE REQ'D PER POST.



**SECTION THRU RAILING**

ADHESIVE ANCHORS 5/8", EMBED 7" IN CONCRETE MUST BE SUBSTITUTED FOR CAST-IN-PLACE BOLTS AND ANCHORAGE PLATE AT EXIST. ABUTMENT OPTIONAL IN FOOTING.



CROSS SECTIONS

PORTAGE ROAD

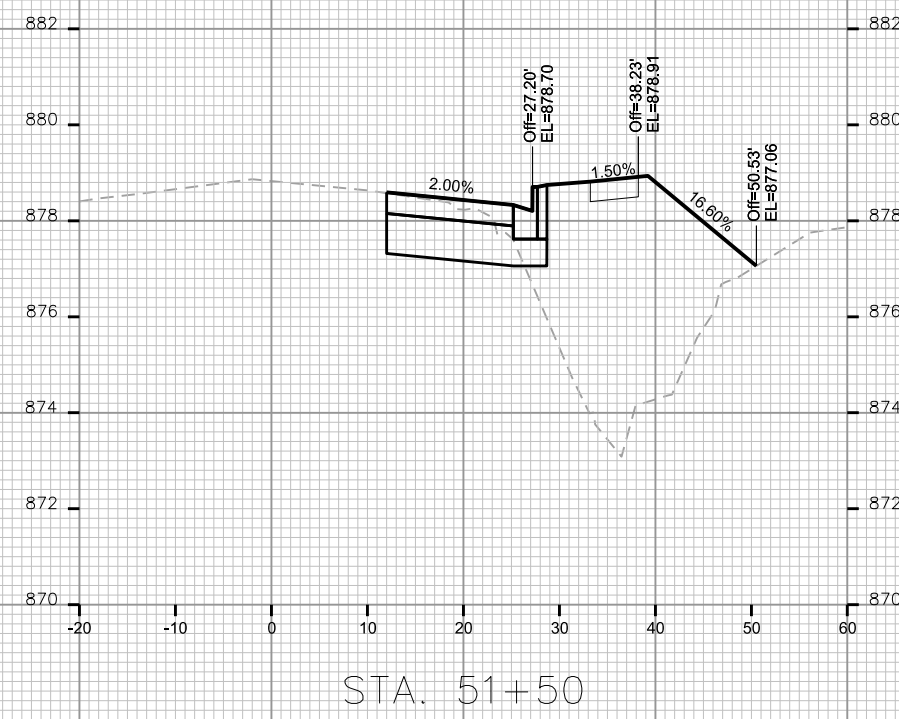
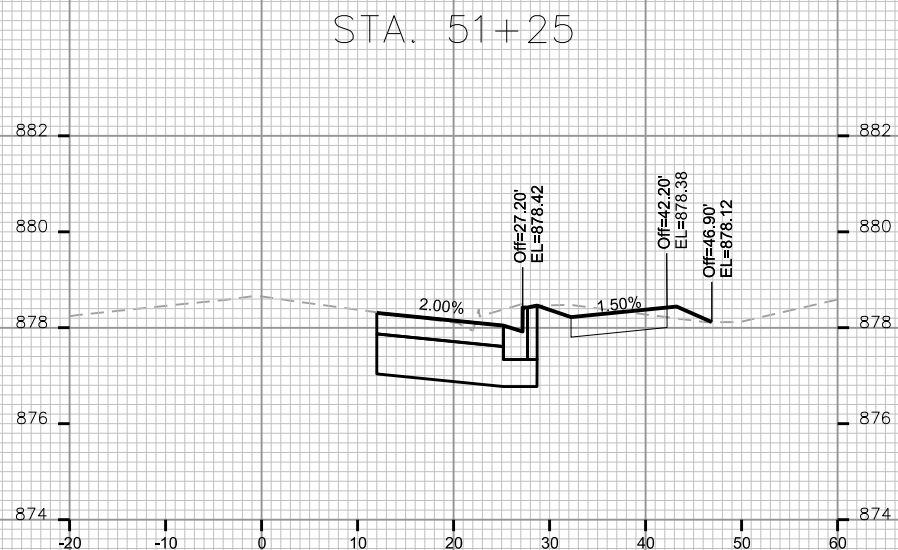
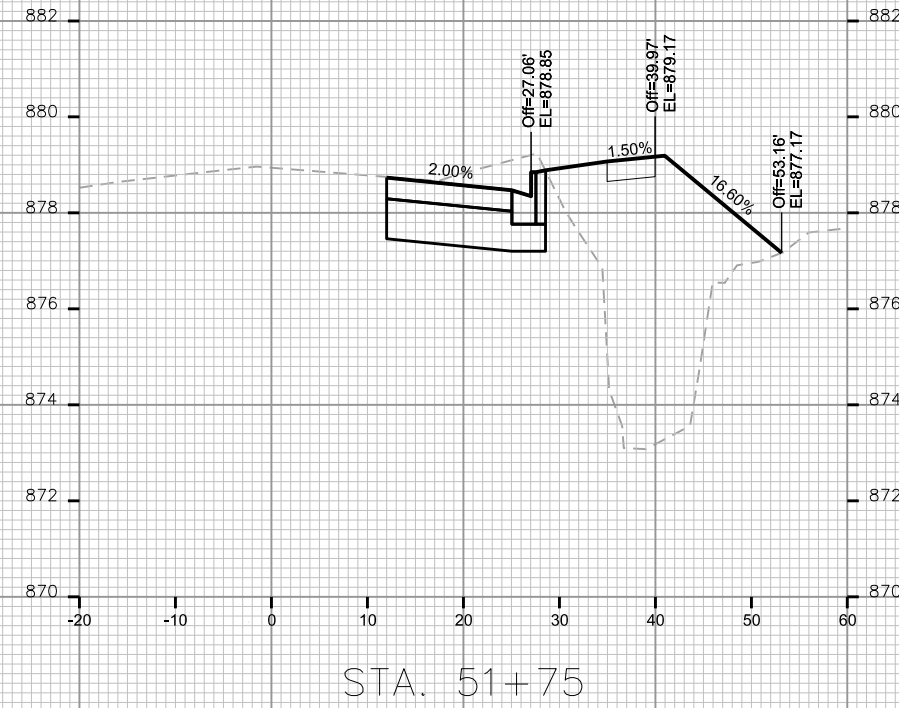
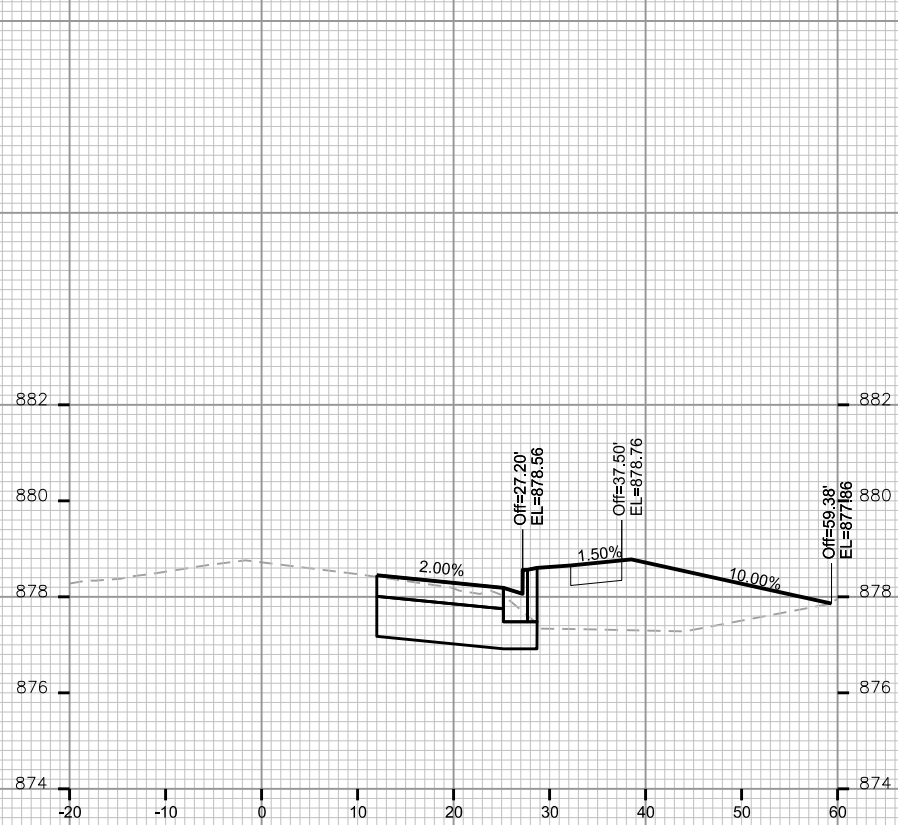
CITY OF MADISON

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

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

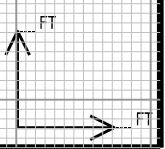
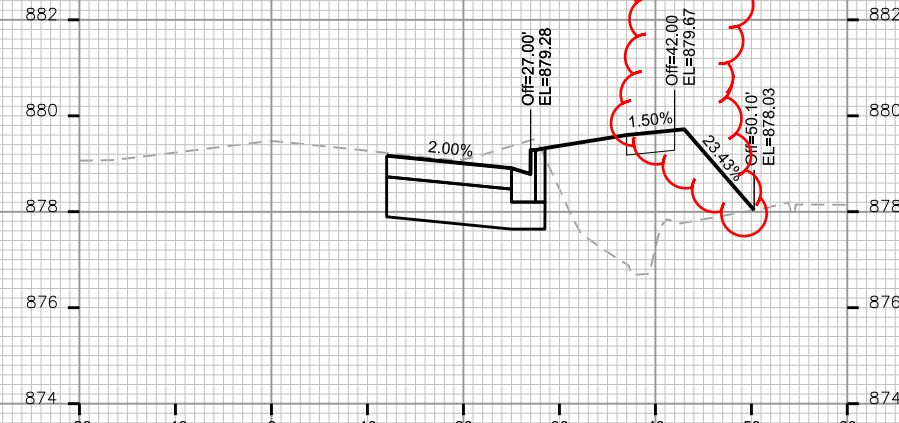
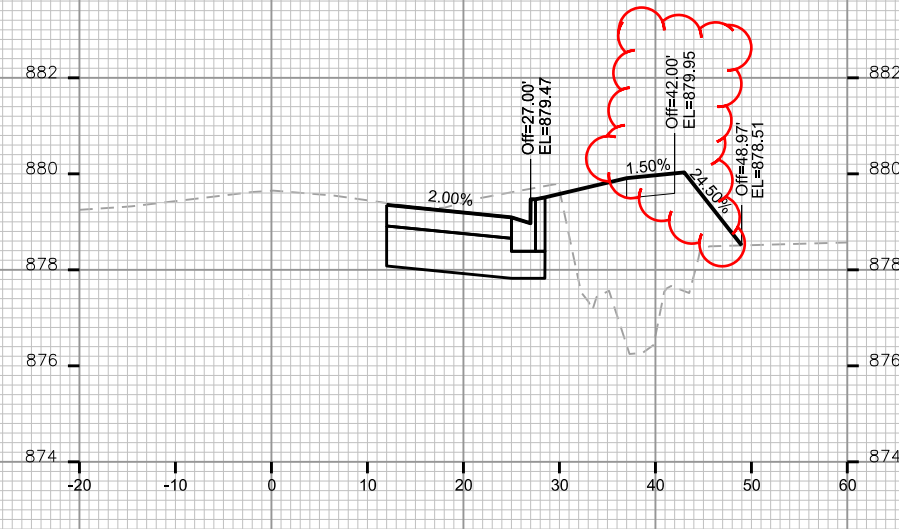
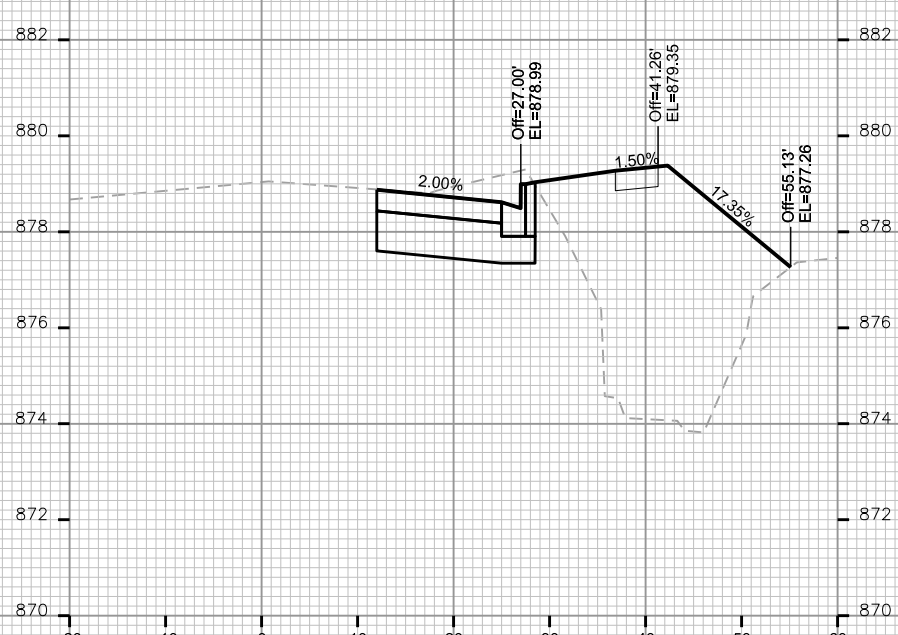
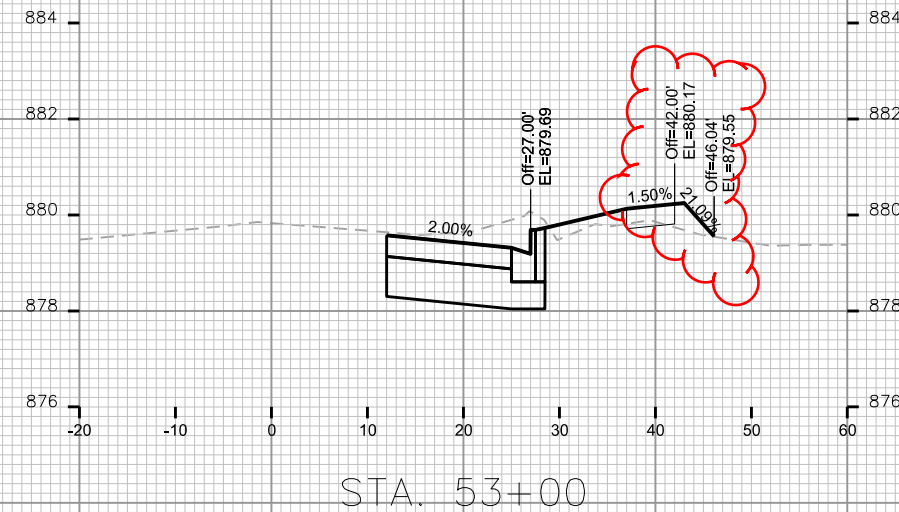
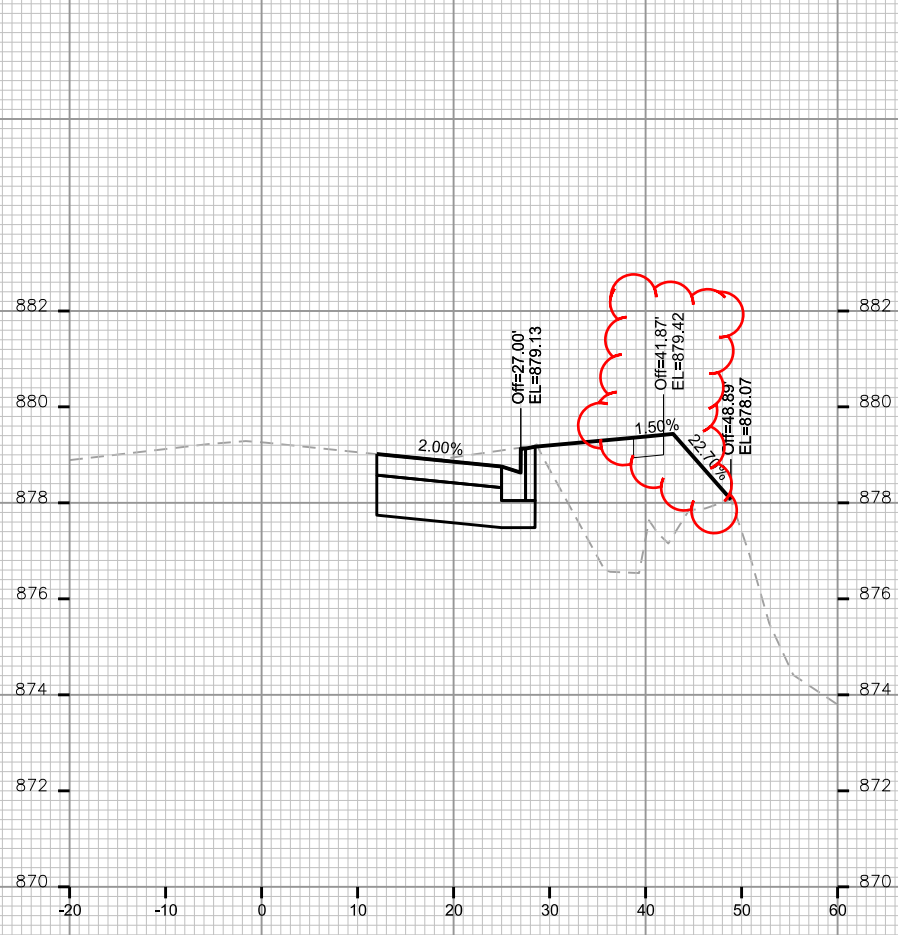
REV. DATE: \_\_\_\_\_

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



CROSS SECTIONS

PORTAGE ROAD CITY OF MADISON  
REV 8/13/2019 GEY



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

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

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

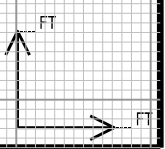
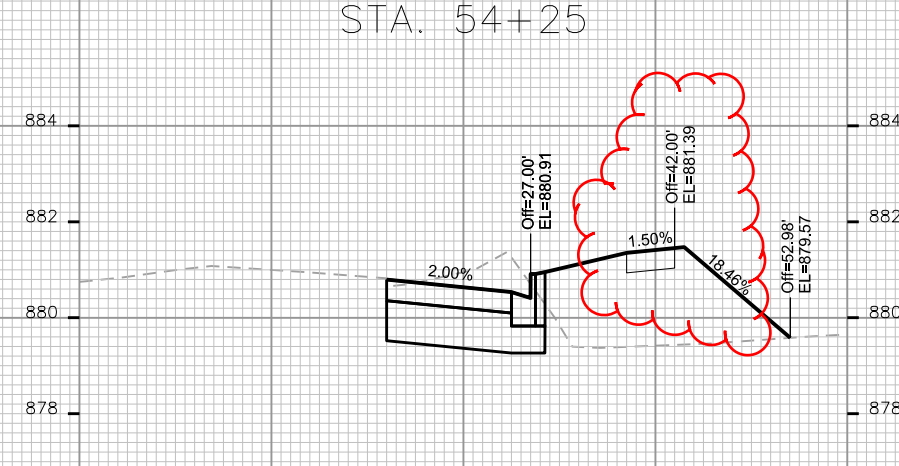
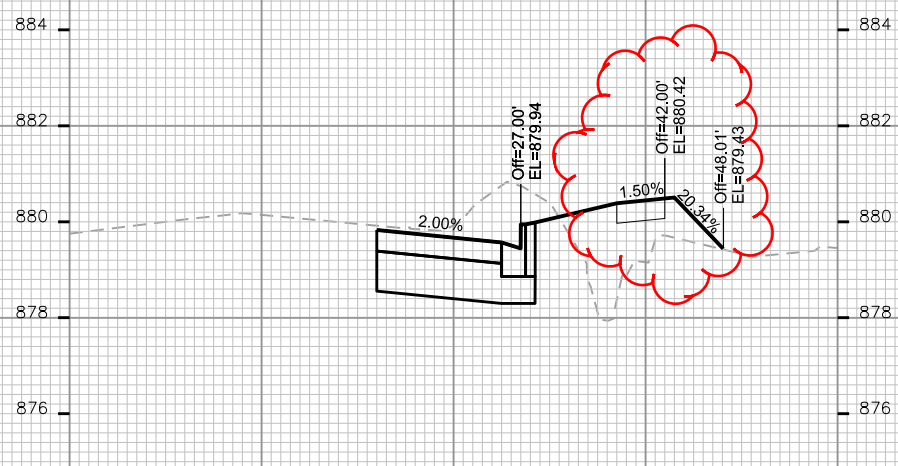
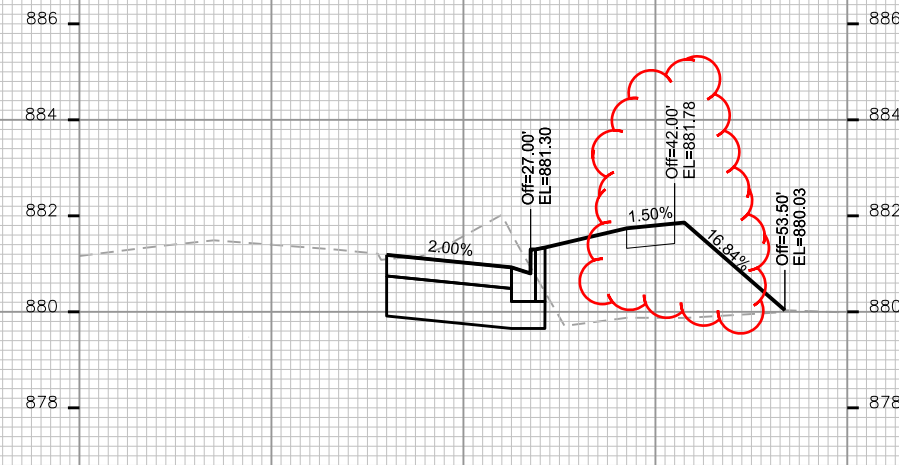
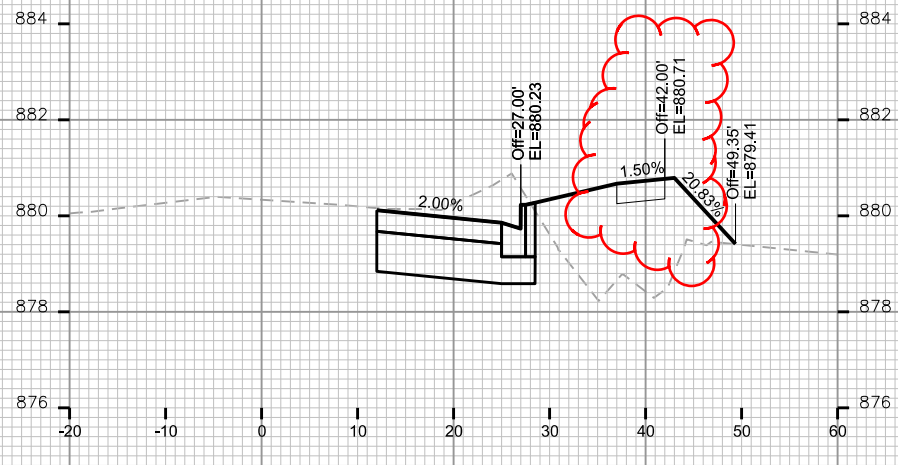
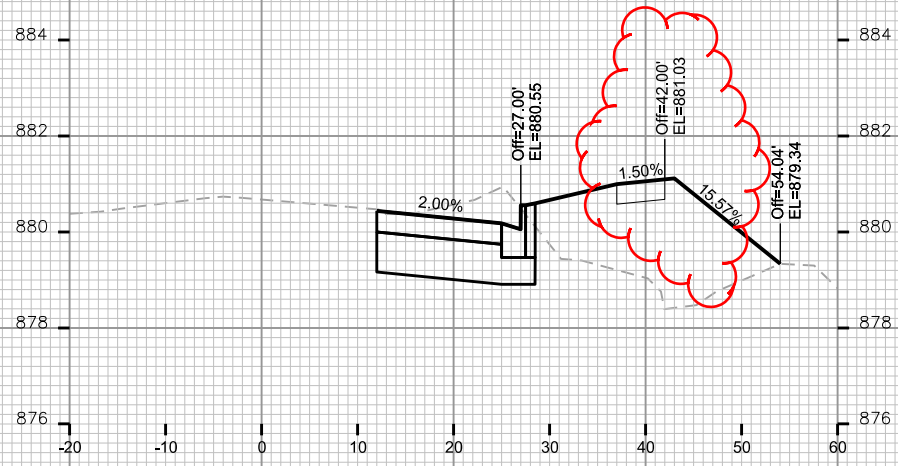
ORIGINATOR: CITY OF MADISON, STREETS DIVISION

CROSS SECTIONS

PORTAGE ROAD

CITY OF MADISON

REV 8/13/2019 GEY



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

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

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

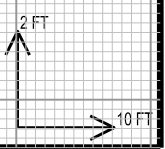
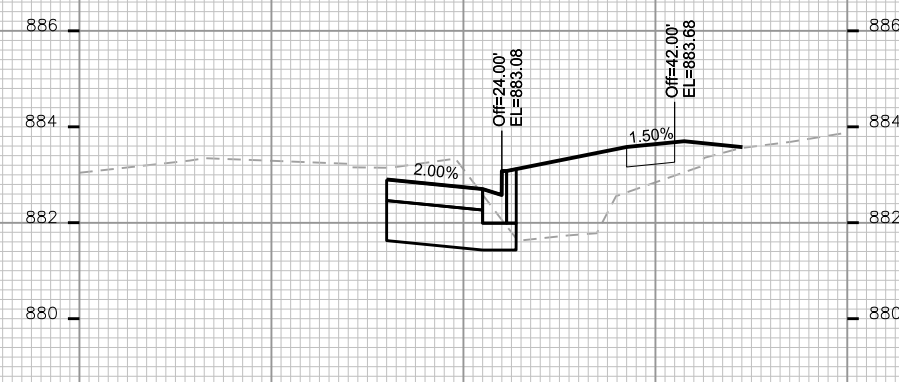
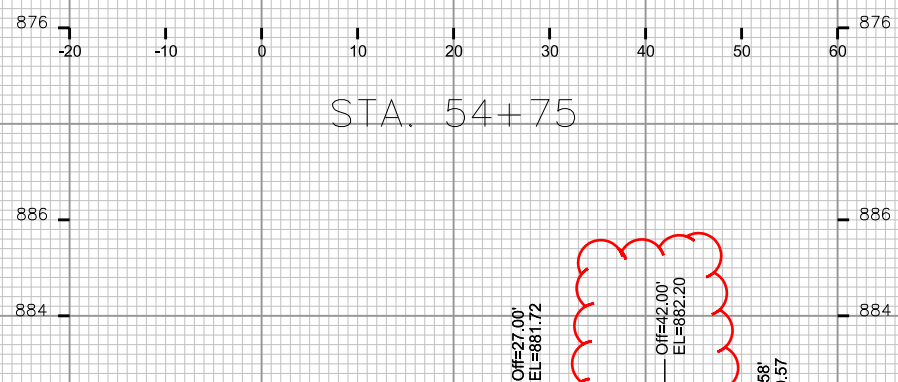
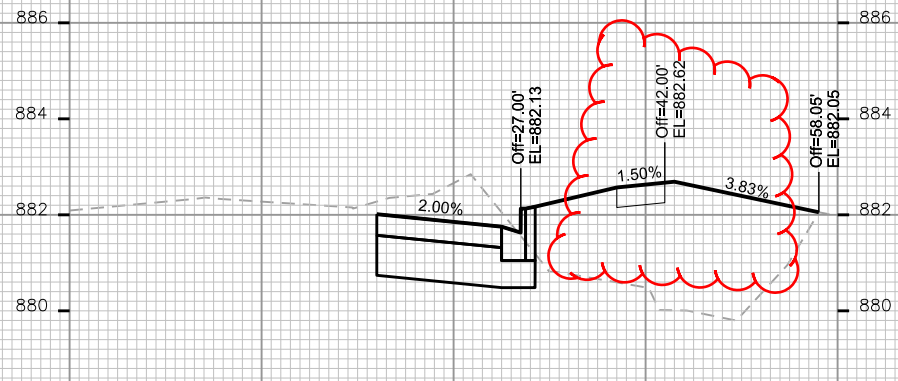
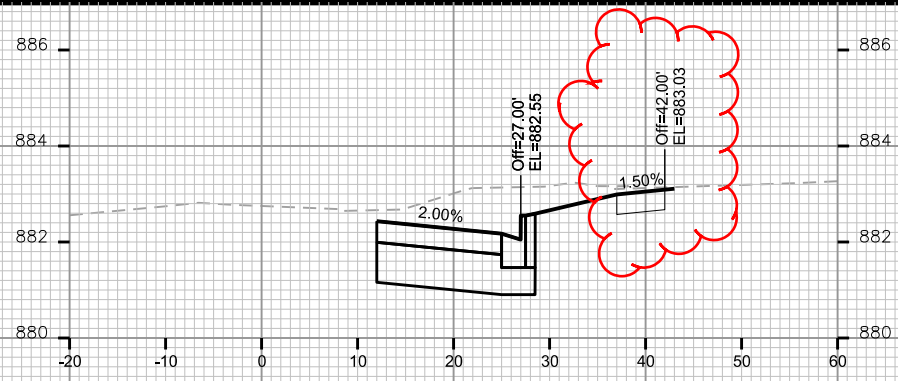


CROSS SECTIONS

PORTAGE ROAD

CITY OF MADISON

REV 8/13/2019 GEY



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

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

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

CROSS SECTIONS

EASTPARK PATH

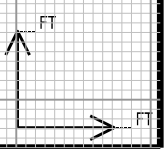
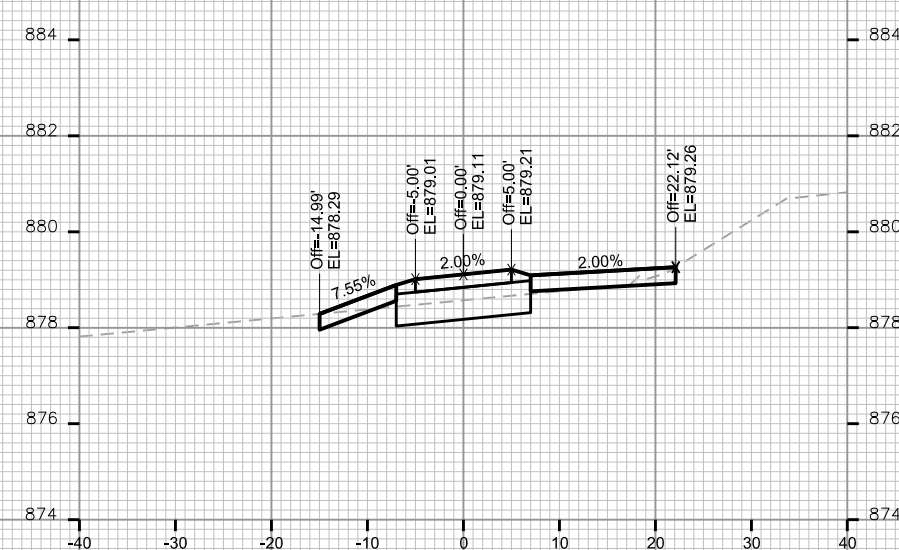
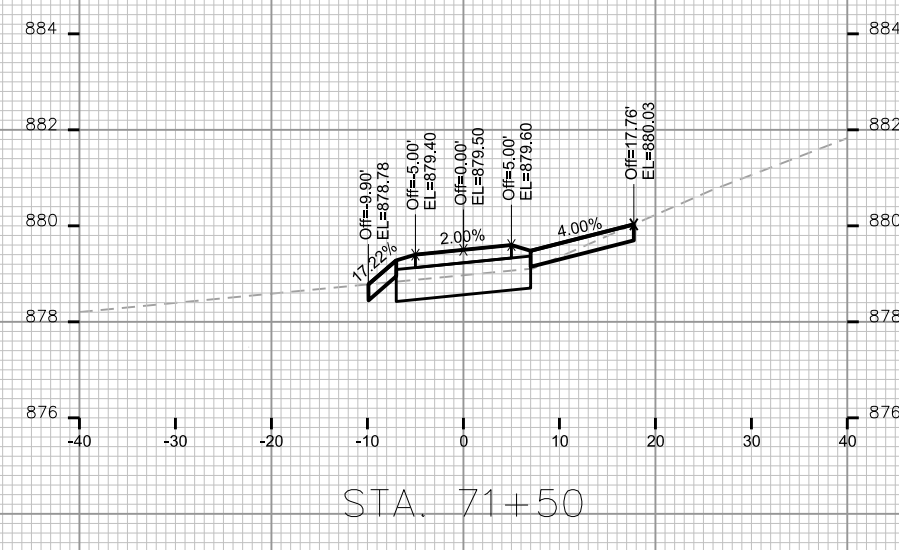
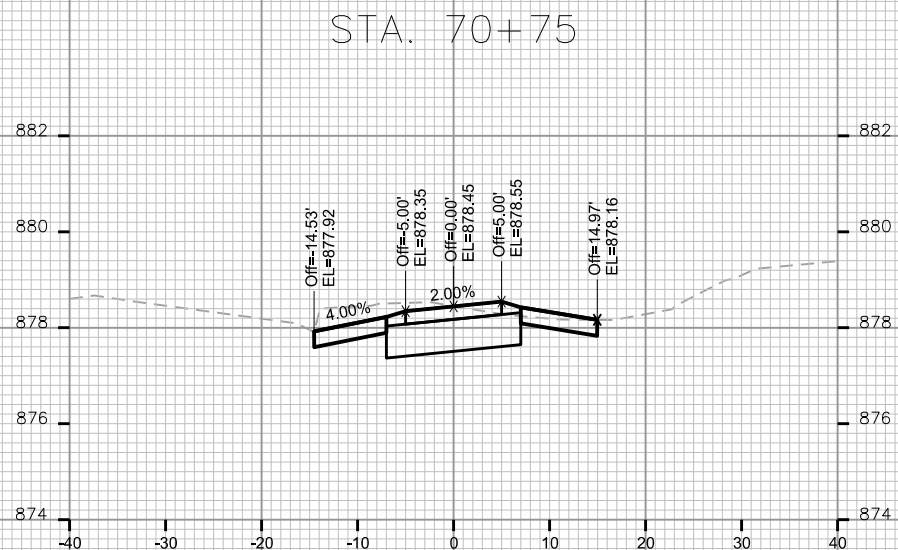
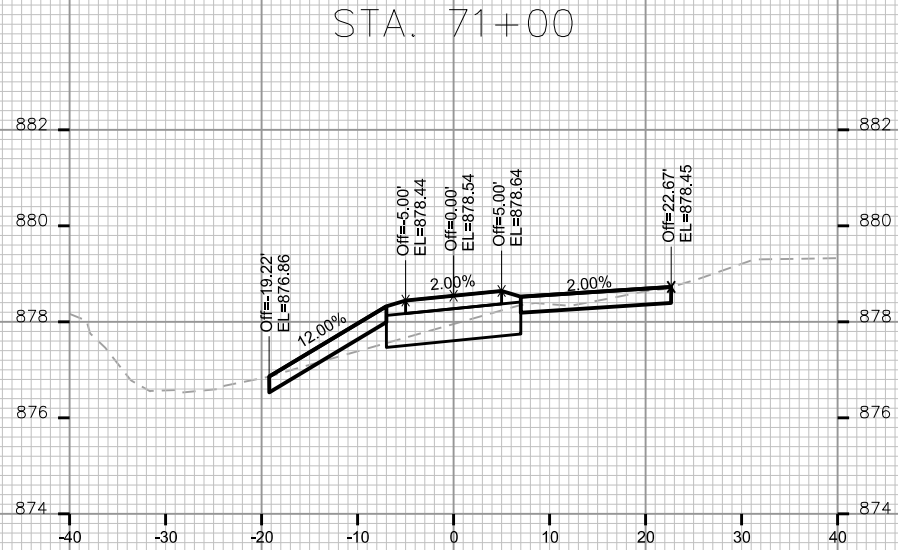
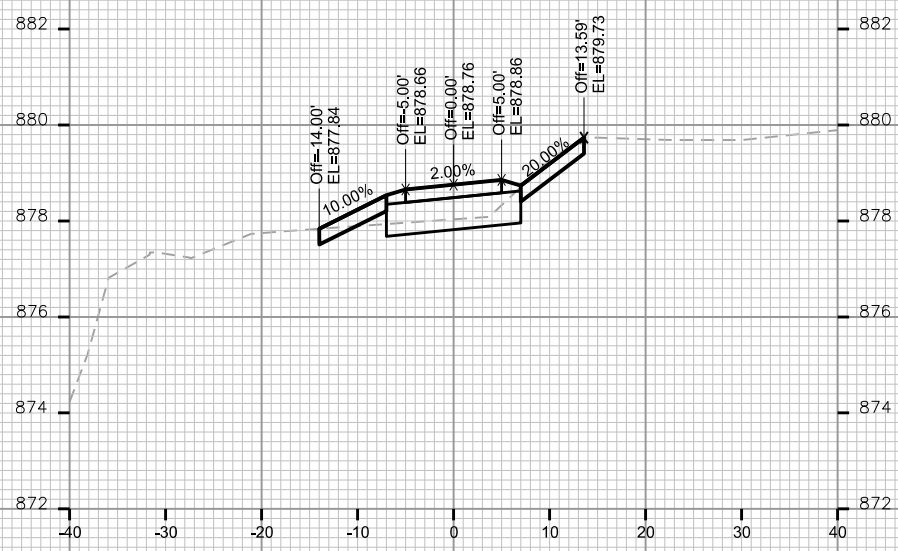
CITY OF MADISON

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

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

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



CROSS SECTIONS

EASTPAARK PATH

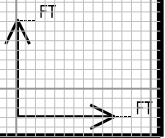
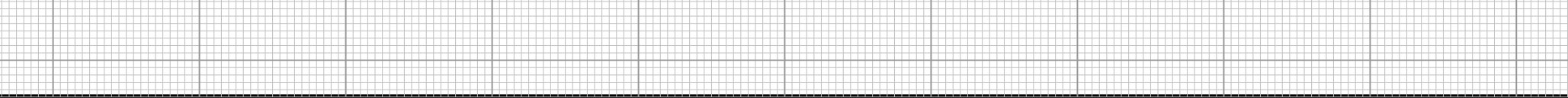
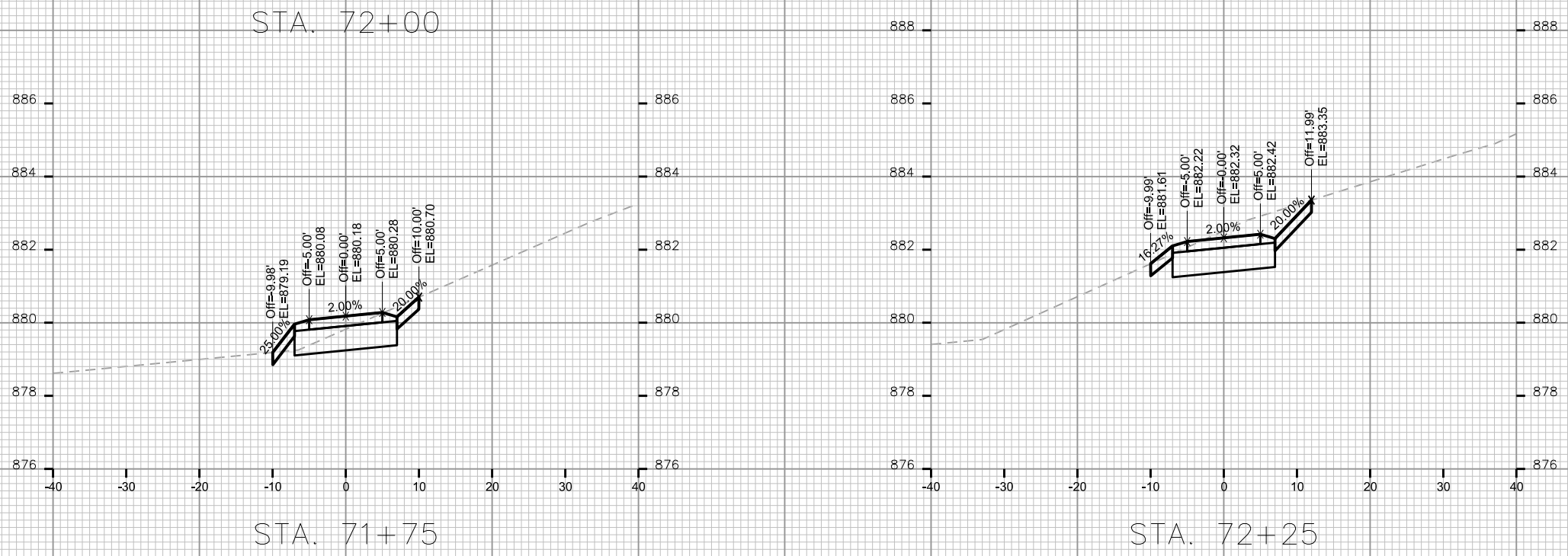
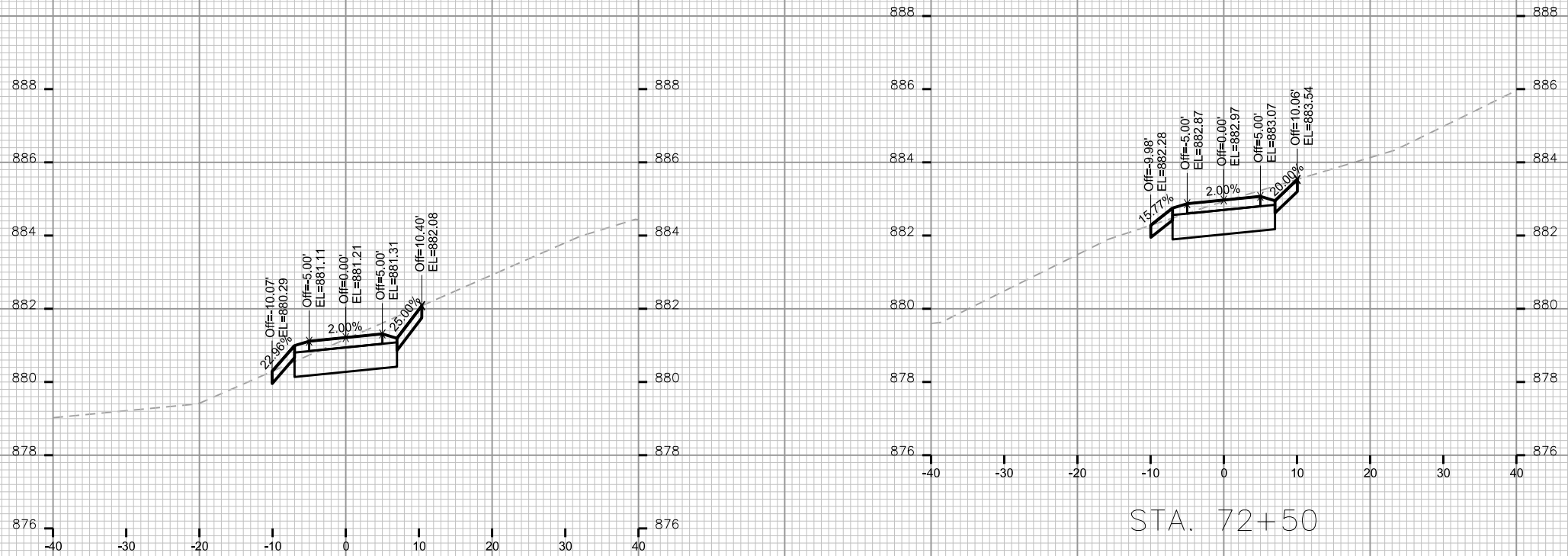
CITY OF MADISON

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

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

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

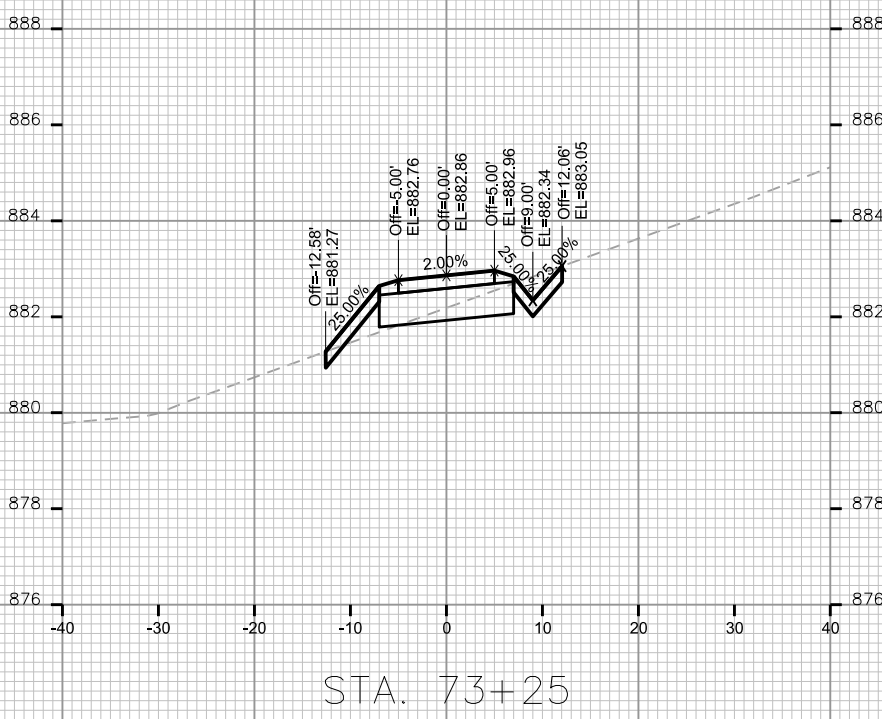
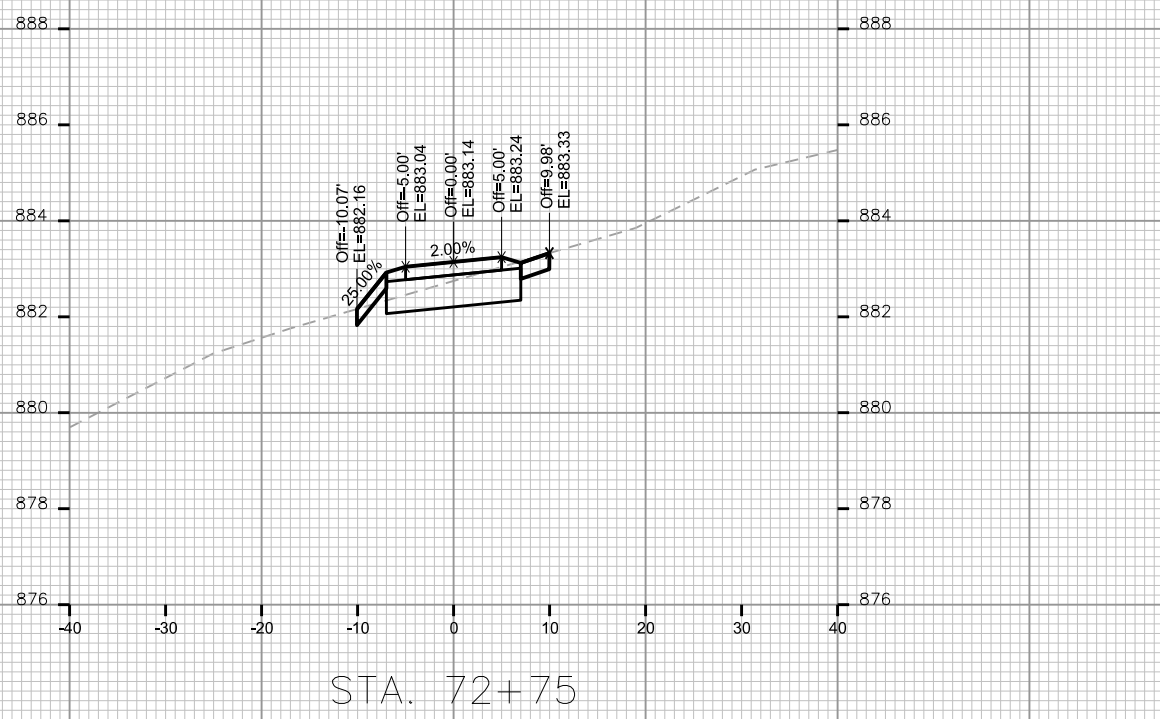
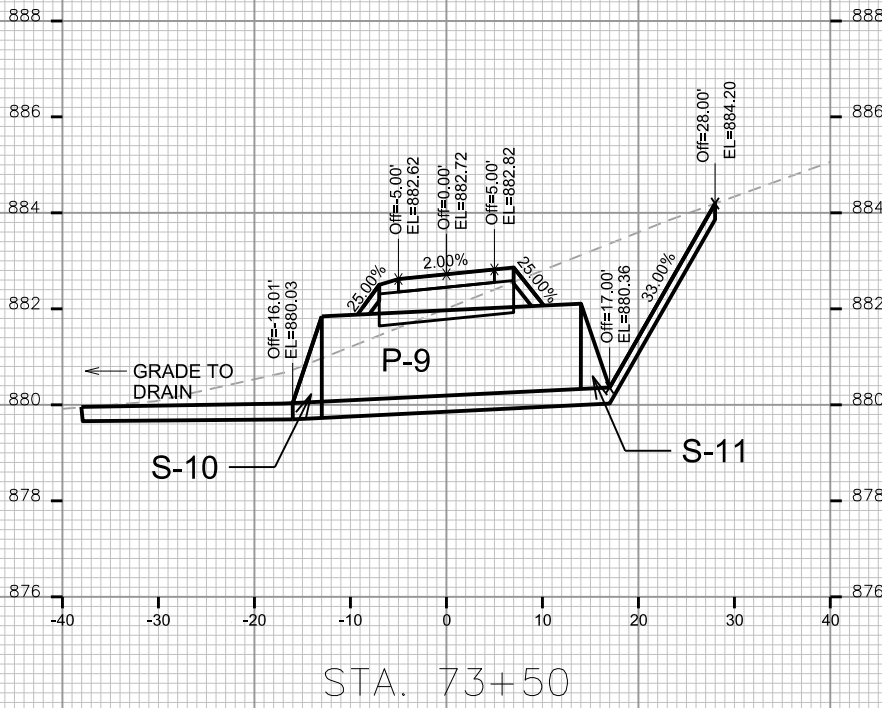
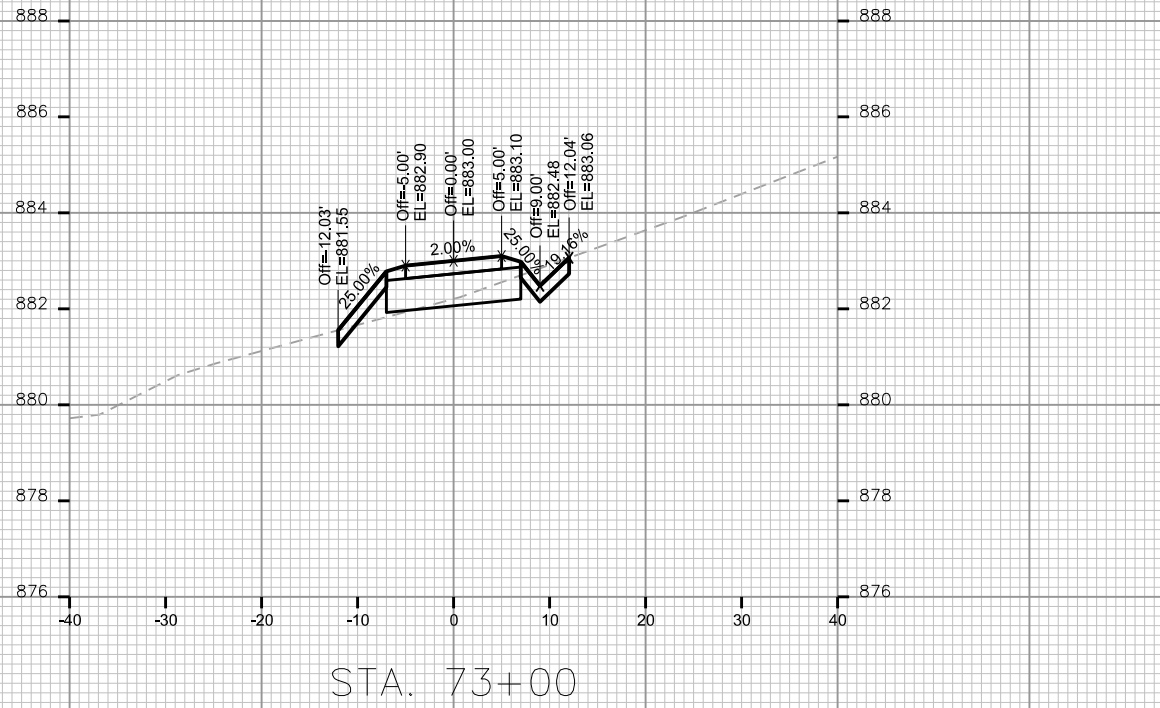
ORIGINATOR: CITY OF MADISON, STREETS DIVISION



CROSS SECTIONS

EASTPARK PATH

CITY OF MADISON



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

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

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



CROSS SECTIONS

EASTPARK PATH

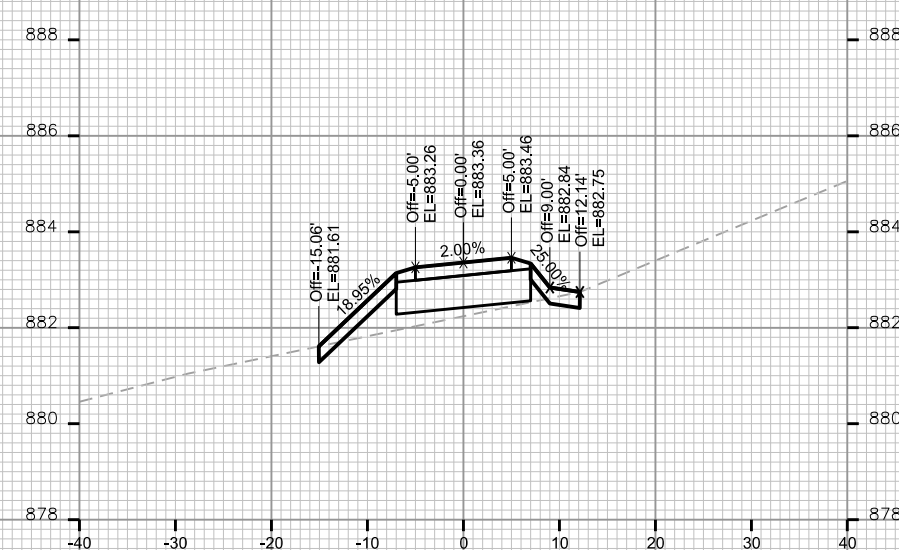
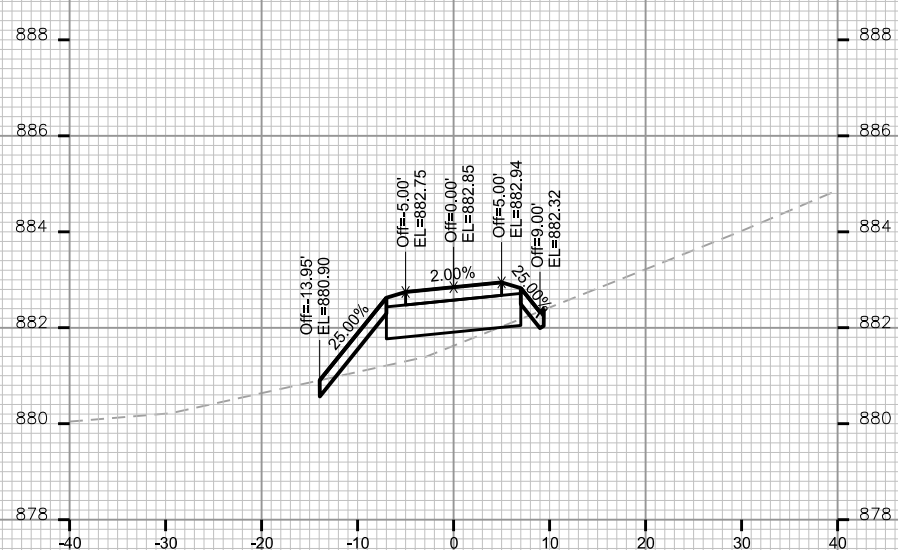
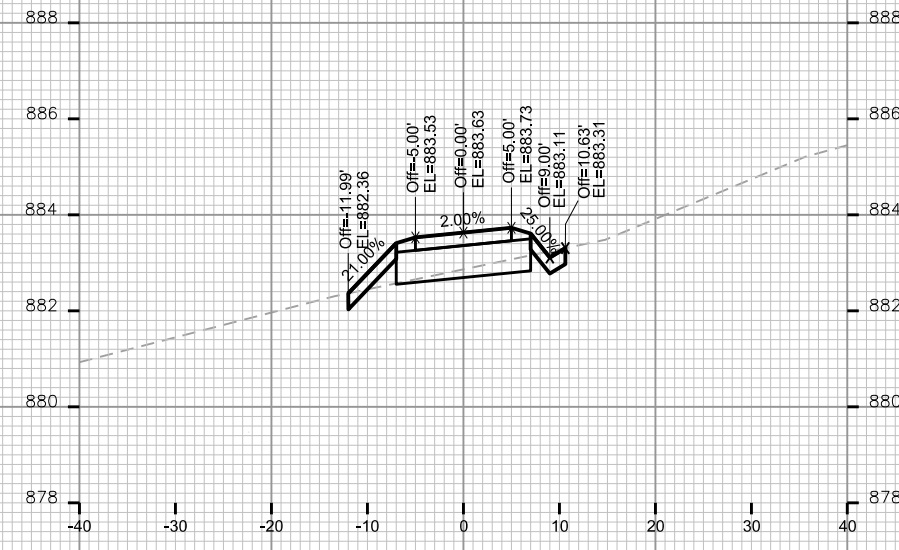
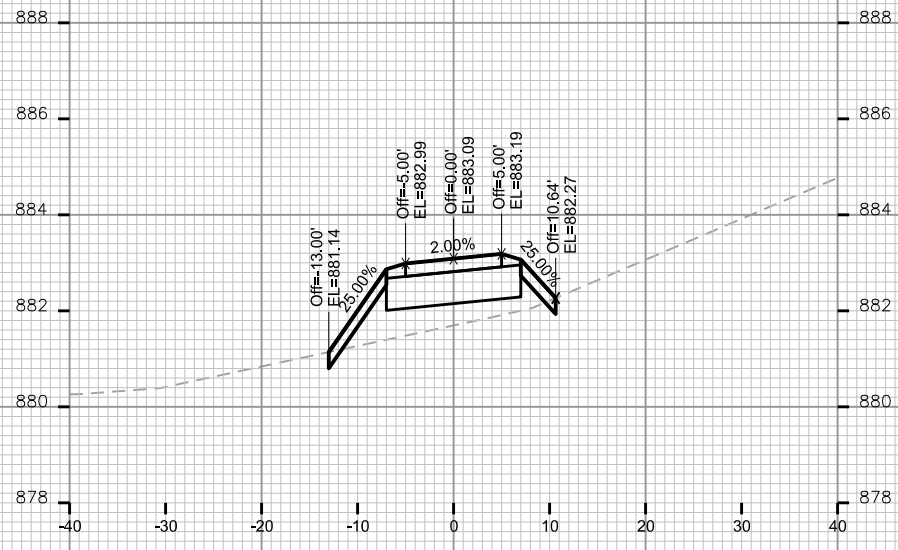
CITY OF MADISON

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

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

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

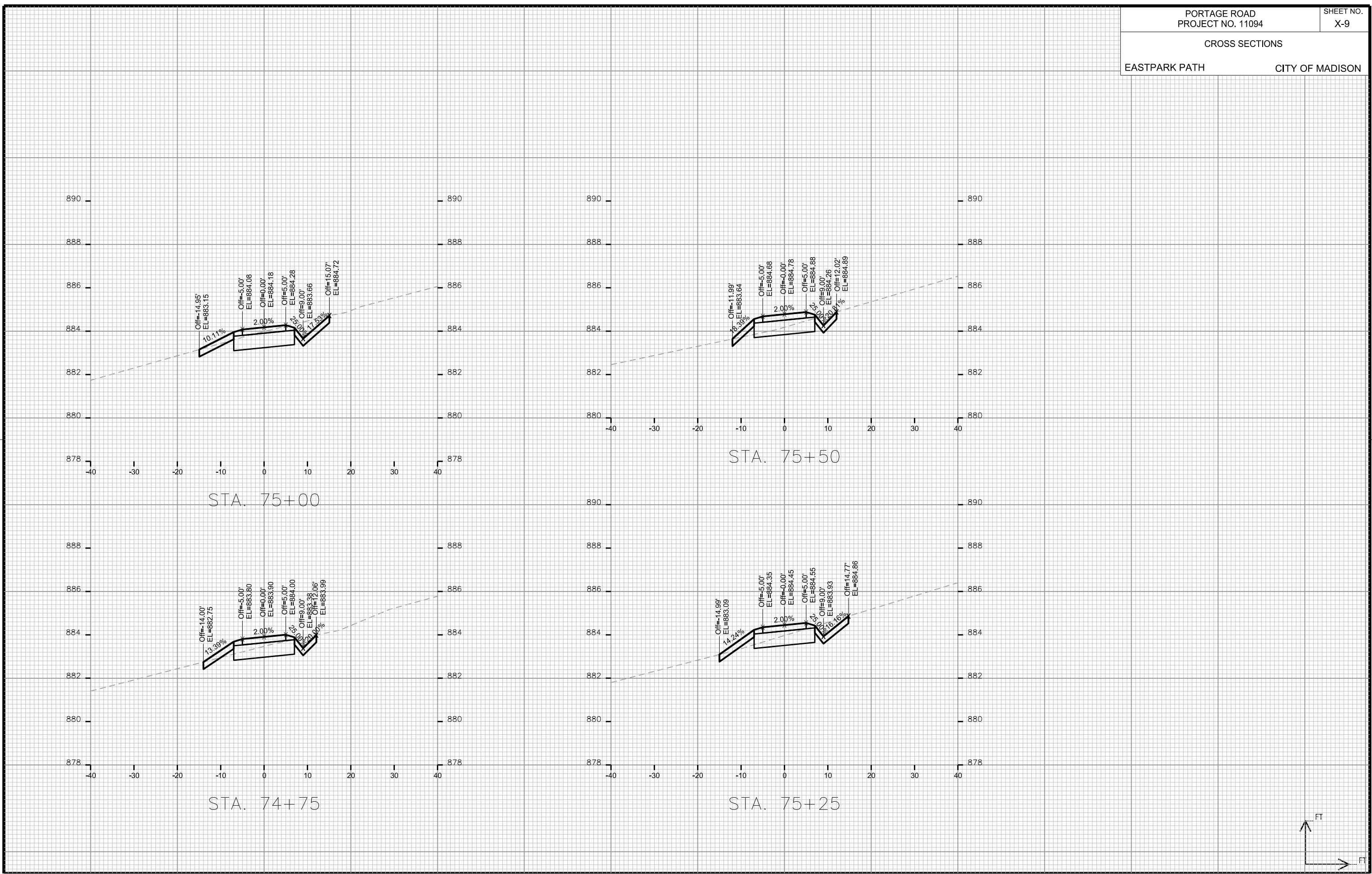


PLOT SCALE: \_\_\_\_\_

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

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



CROSS SECTIONS

EASTPARK PATH

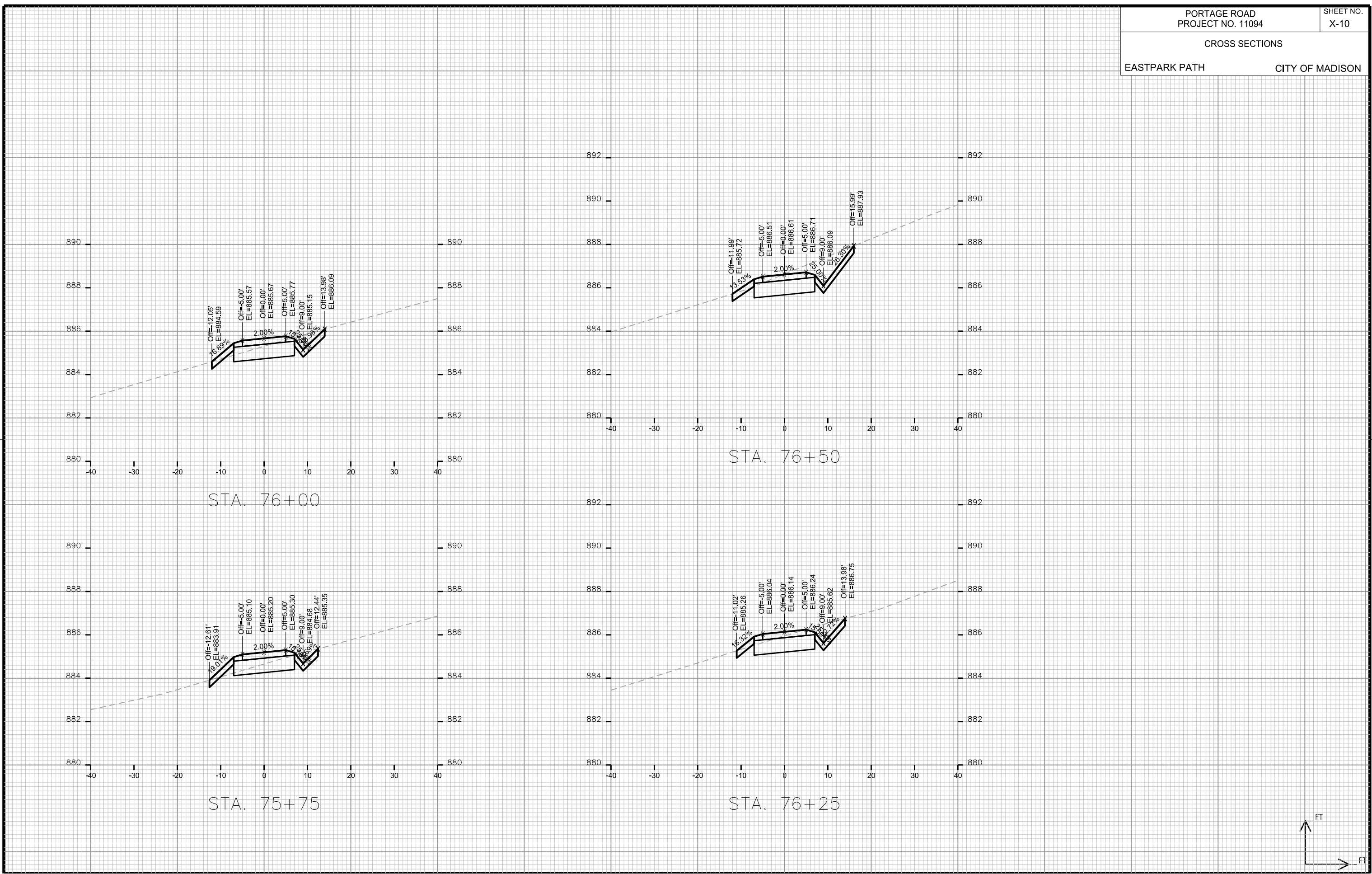
CITY OF MADISON

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

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

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



CROSS SECTIONS

EASTPARK PATH

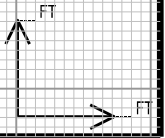
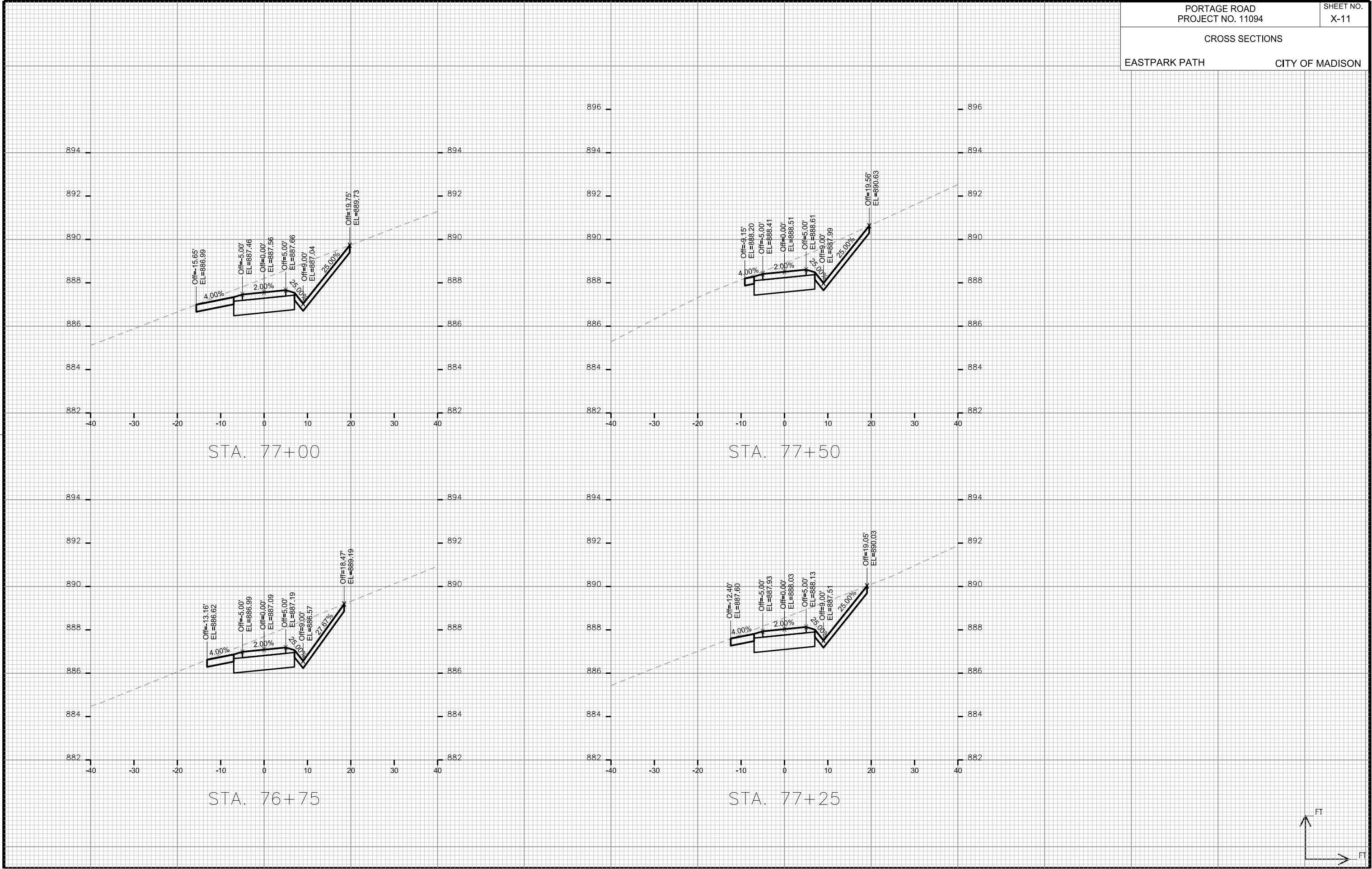
CITY OF MADISON

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

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

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION





CROSS SECTIONS

EASTPARK PATH

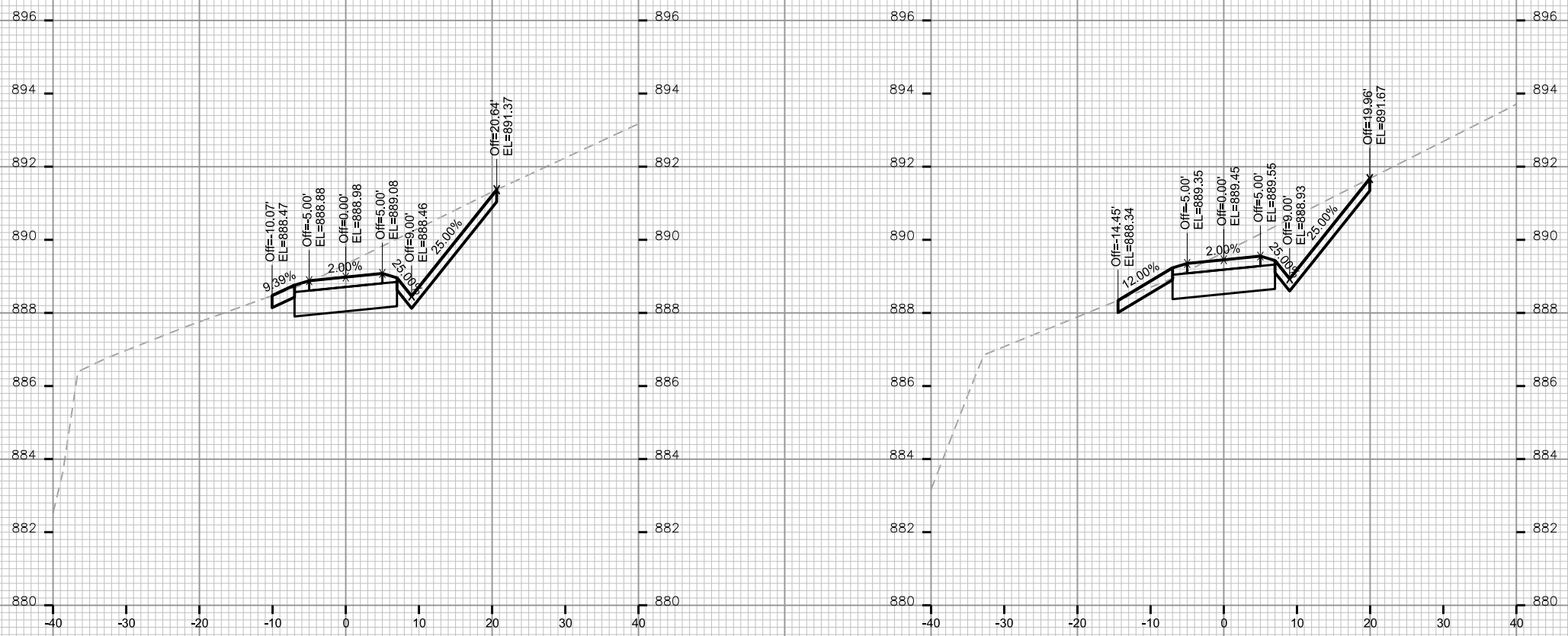
CITY OF MADISON

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

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

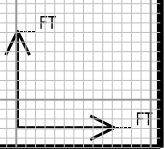
REV. DATE: \_\_\_\_\_

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



STA. 77+75

STA. 78+00



CROSS SECTIONS

EASTPARK PATH

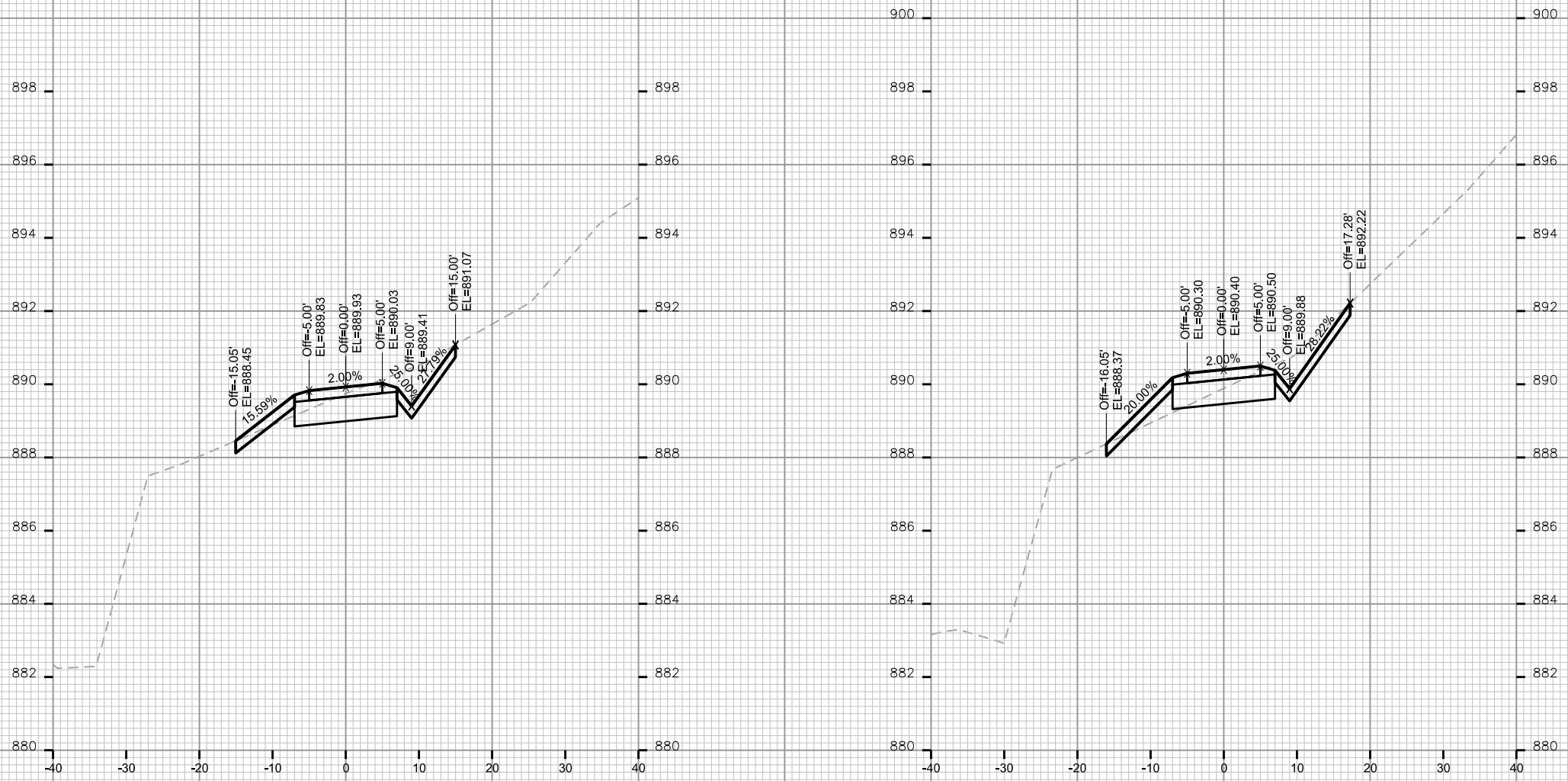
CITY OF MADISON

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

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

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



STA. 78+25

STA. 78+50



CROSS SECTIONS

EASTPARK PATH

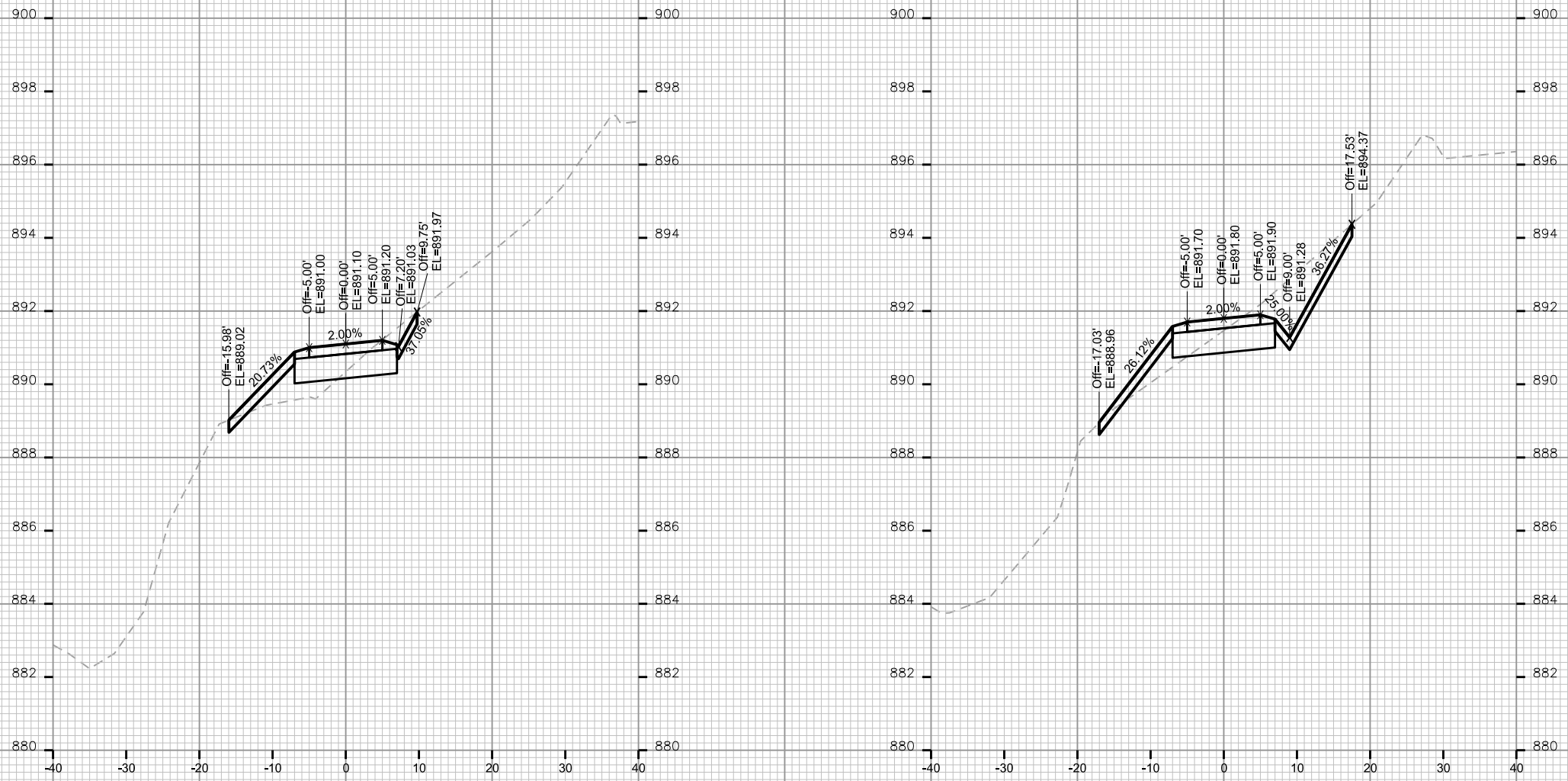
CITY OF MADISON

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

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

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



STA. 78+75

STA. 79+00



CROSS SECTIONS

EASTPARK PATH

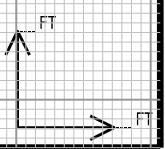
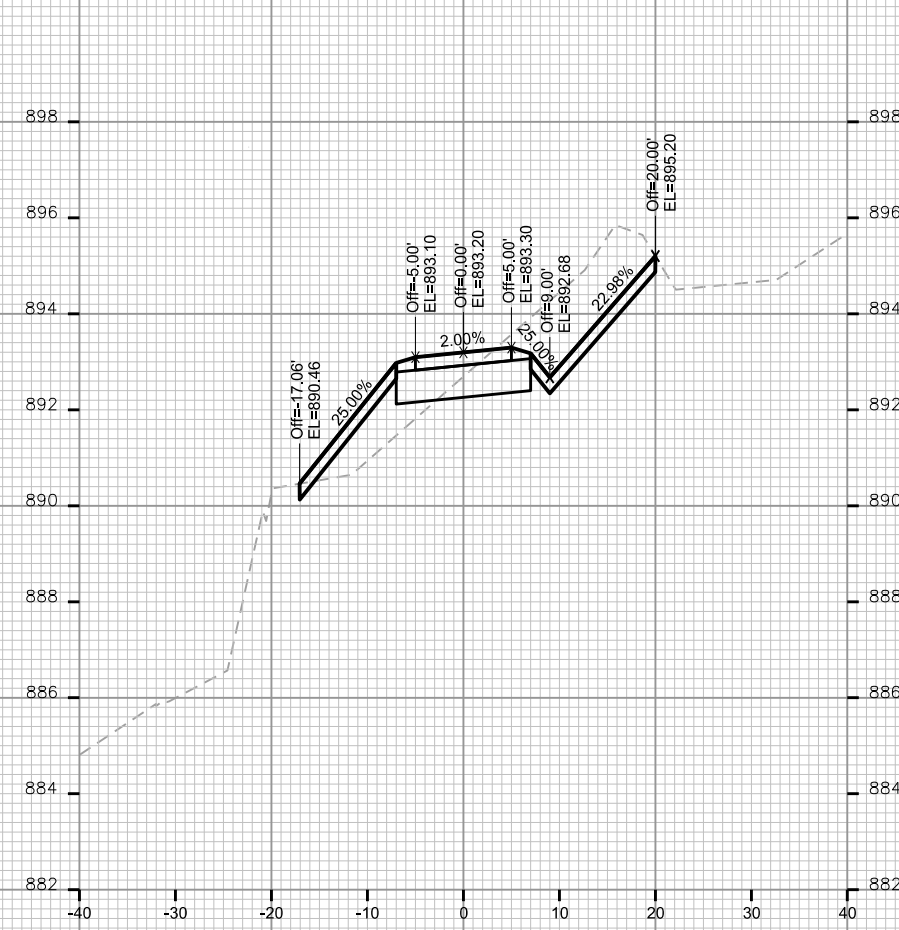
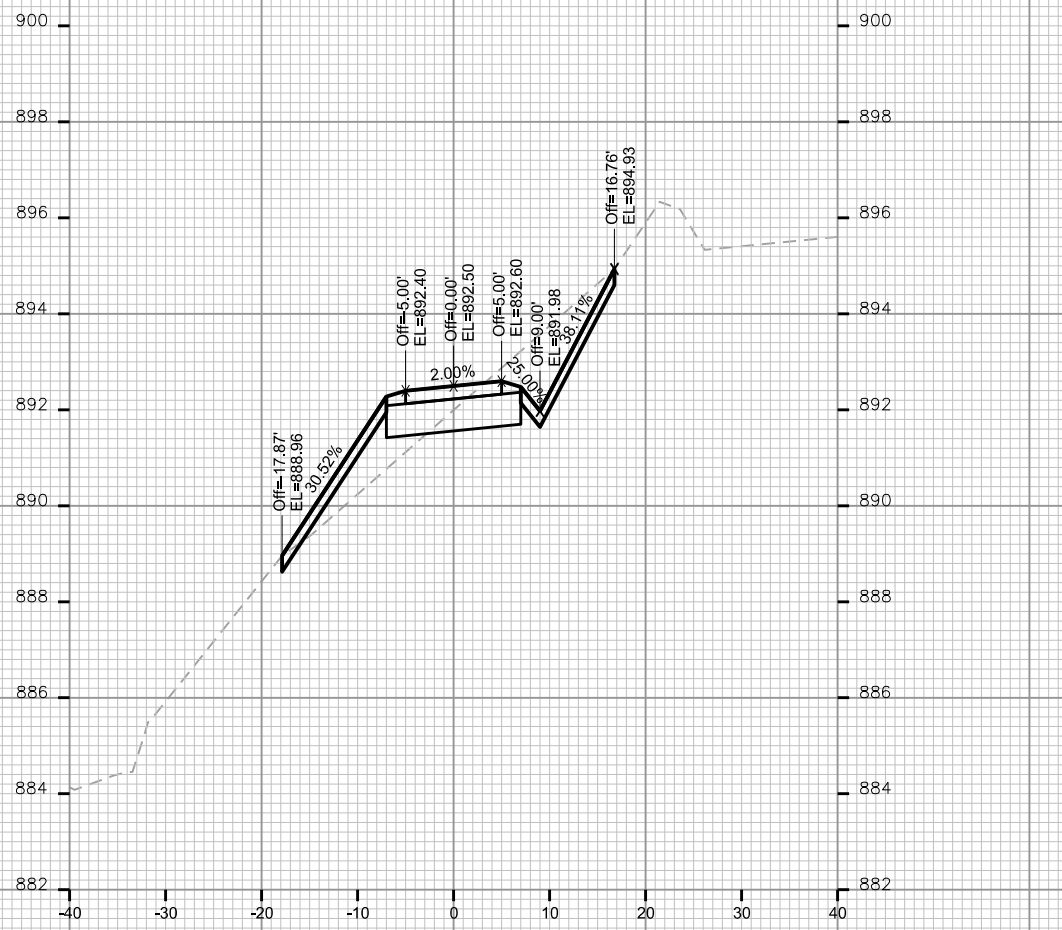
CITY OF MADISON

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

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

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION





CROSS SECTIONS

EASTPARK PATH

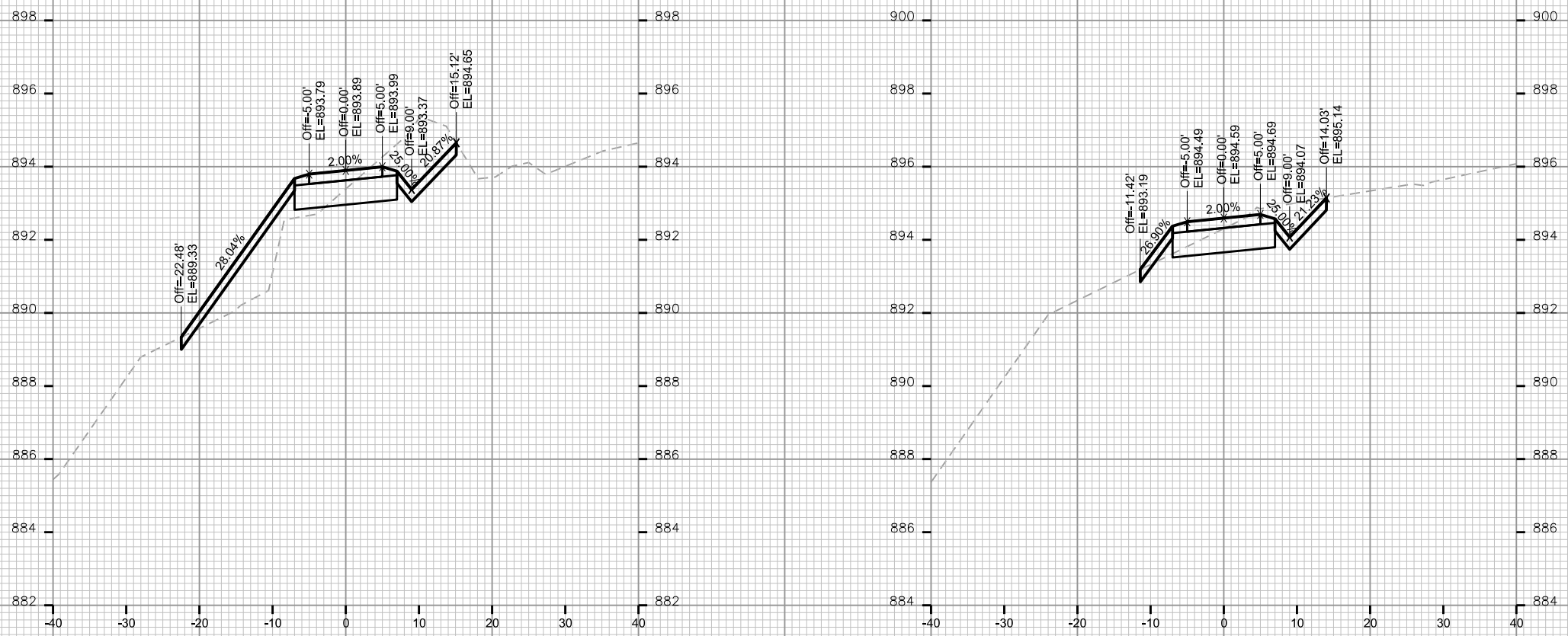
CITY OF MADISON

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

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

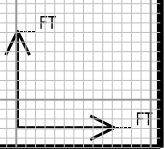
REV. DATE: \_\_\_\_\_

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



STA. 79+75

STA. 80+00



CROSS SECTIONS

EASTPARK PATH

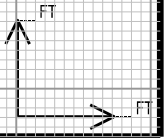
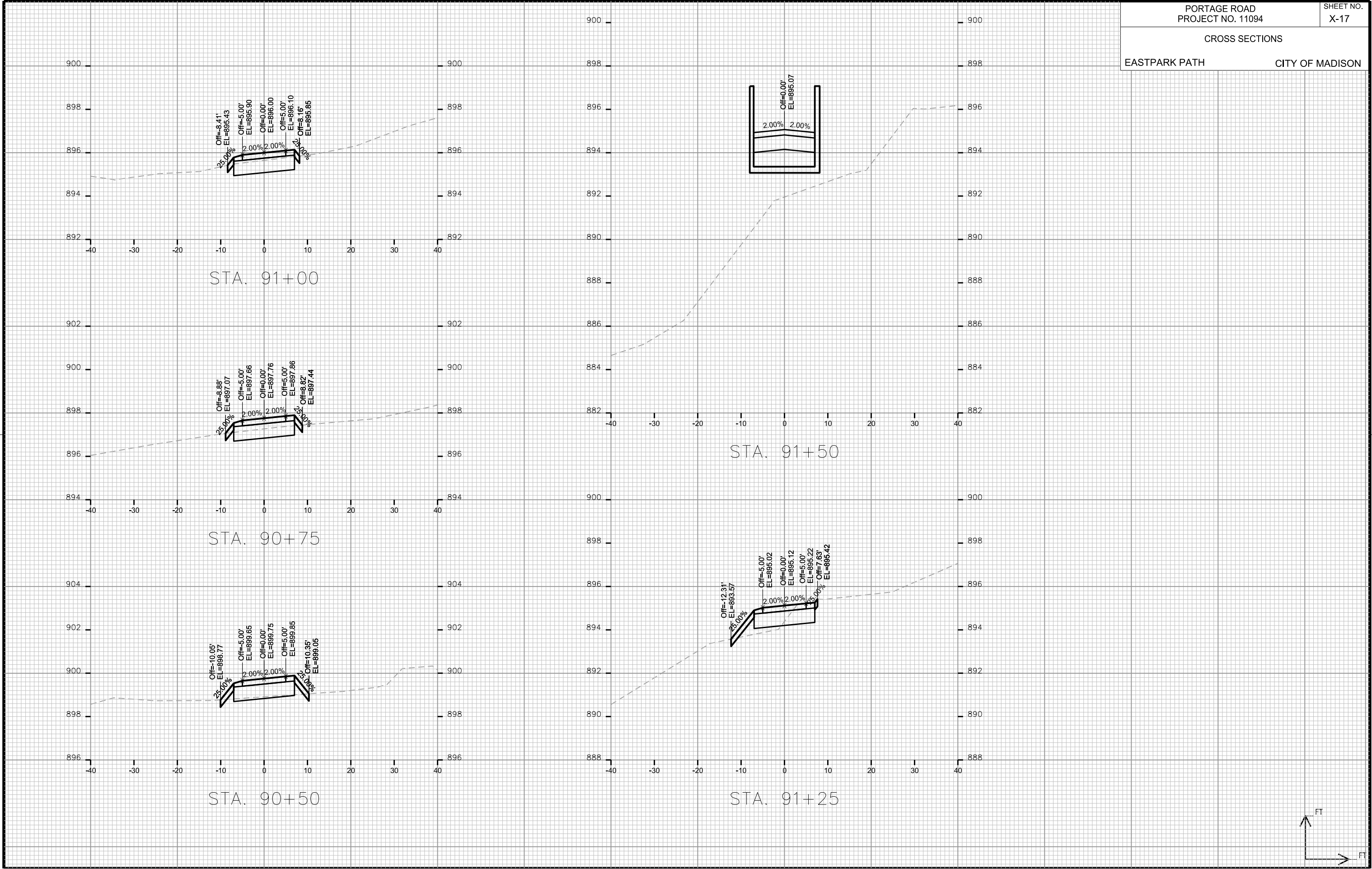
CITY OF MADISON

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

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

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



CROSS SECTIONS

EASTPARK PATH

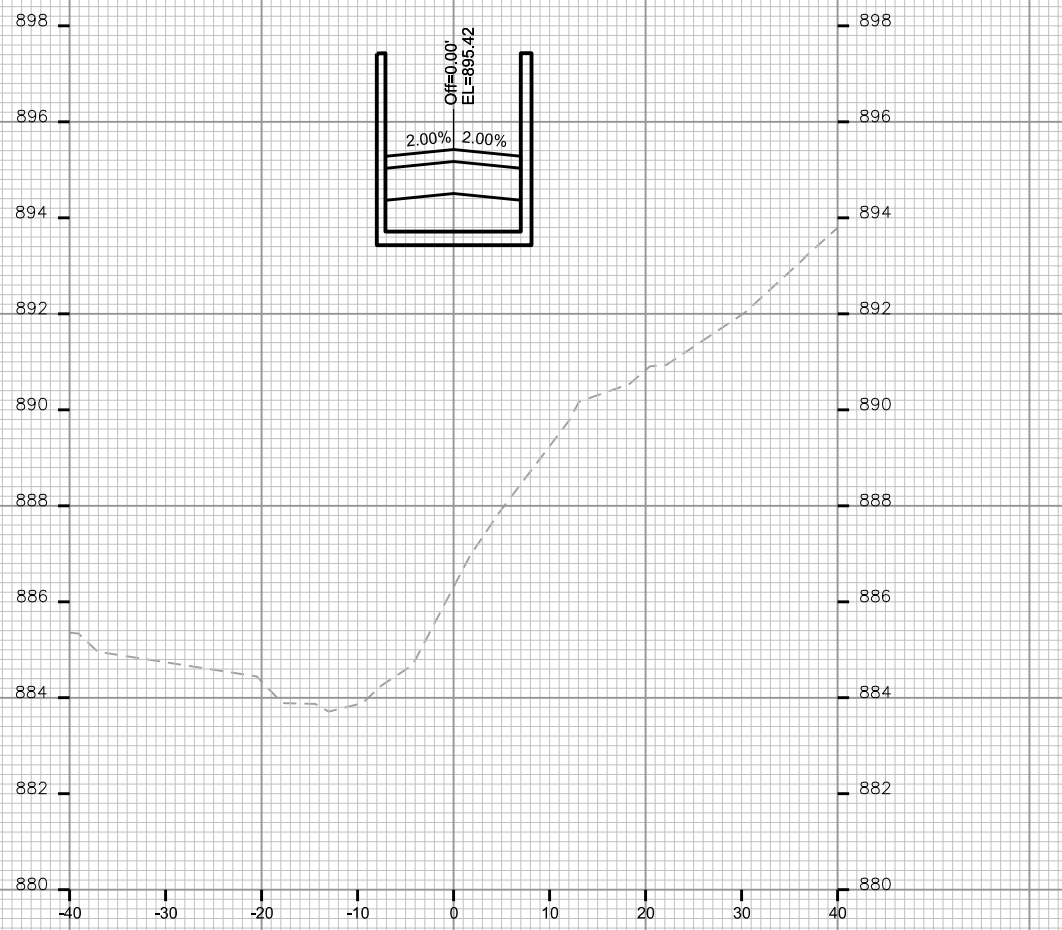
CITY OF MADISON

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

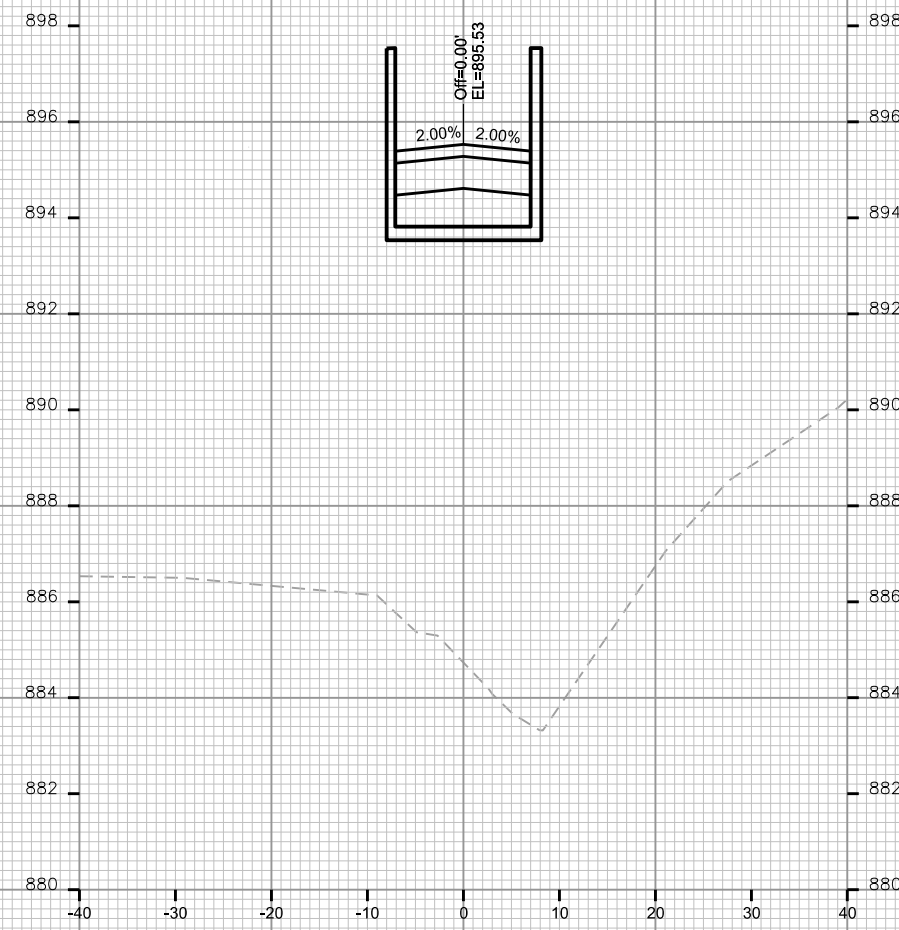
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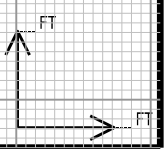
ORIGINATOR: CITY OF MADISON, STREETS DIVISION



STA. 91+75



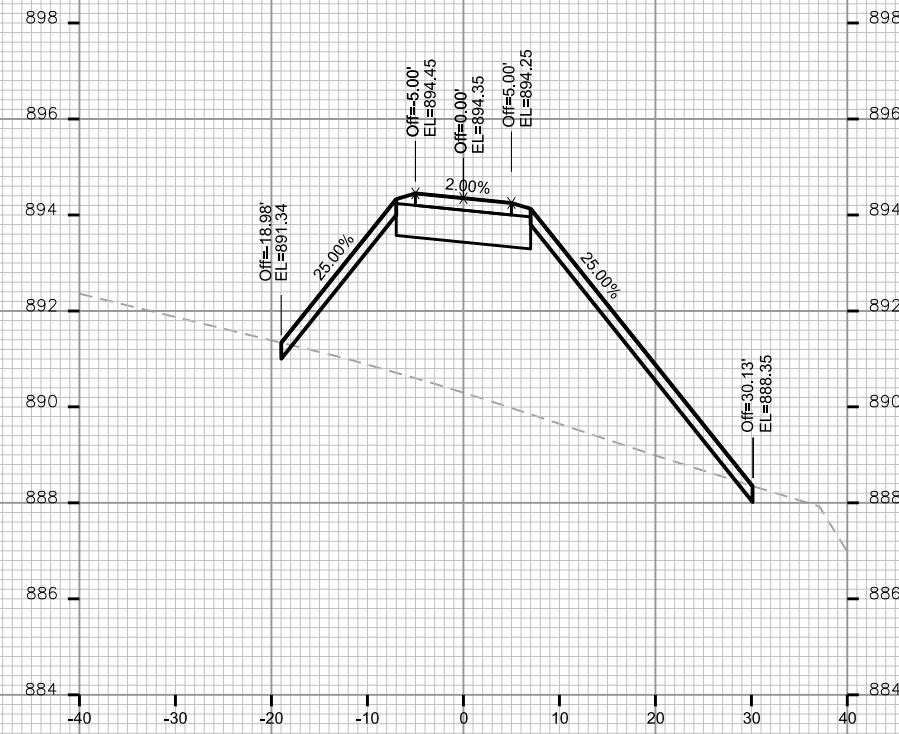
STA. 92+00



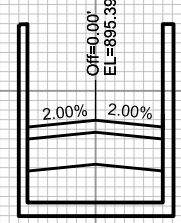
CROSS SECTIONS

EASTPARK PATH

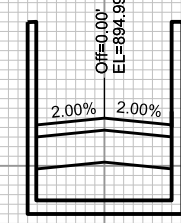
CITY OF MADISON



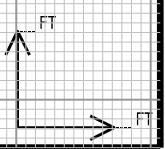
STA. 92+75



STA. 92+25



STA. 92+50



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

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

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



CROSS SECTIONS

EASTPARK PATH

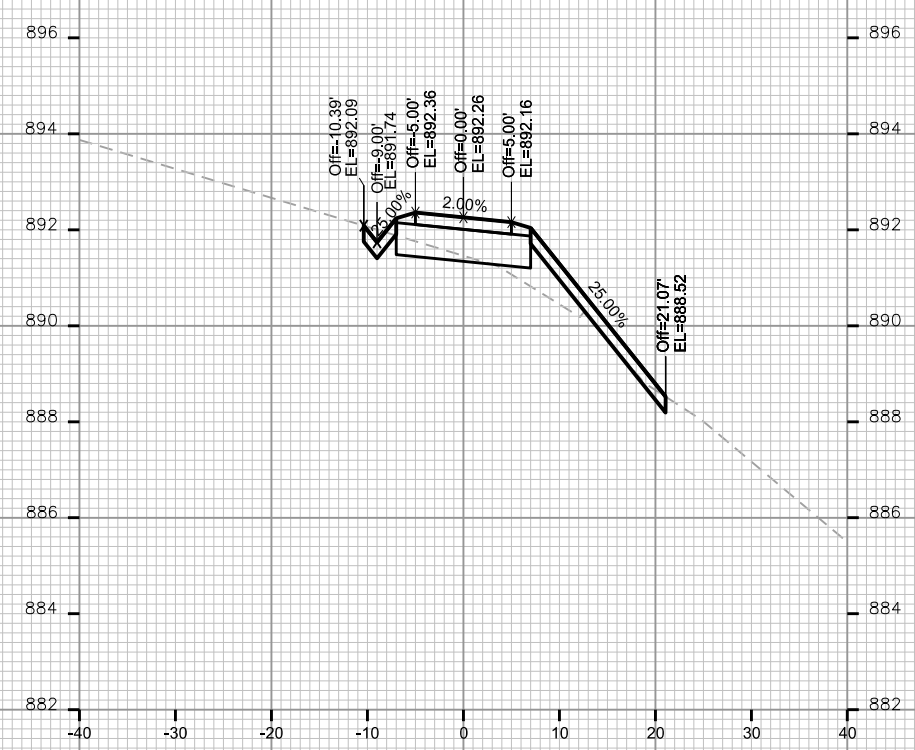
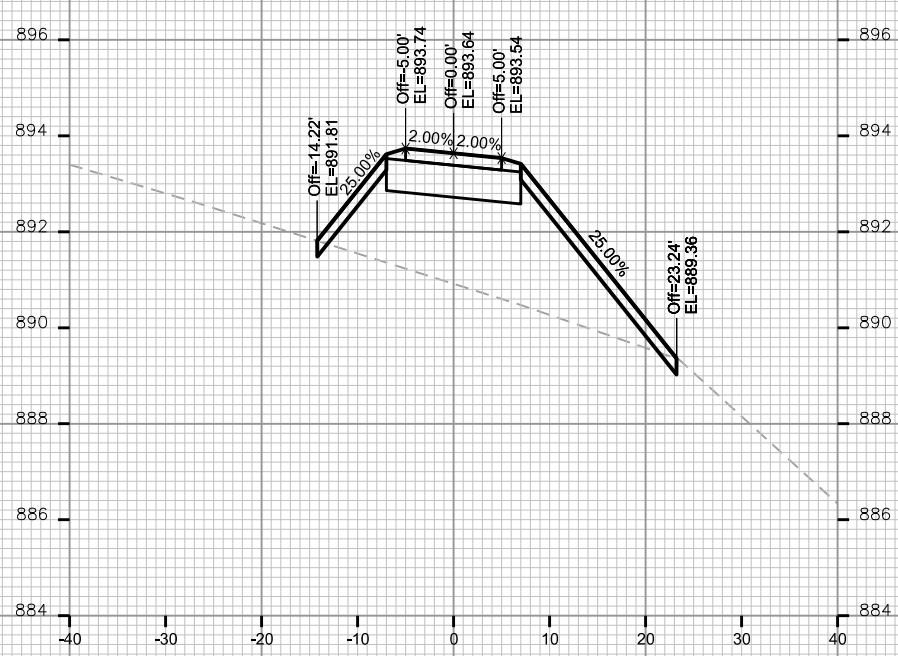
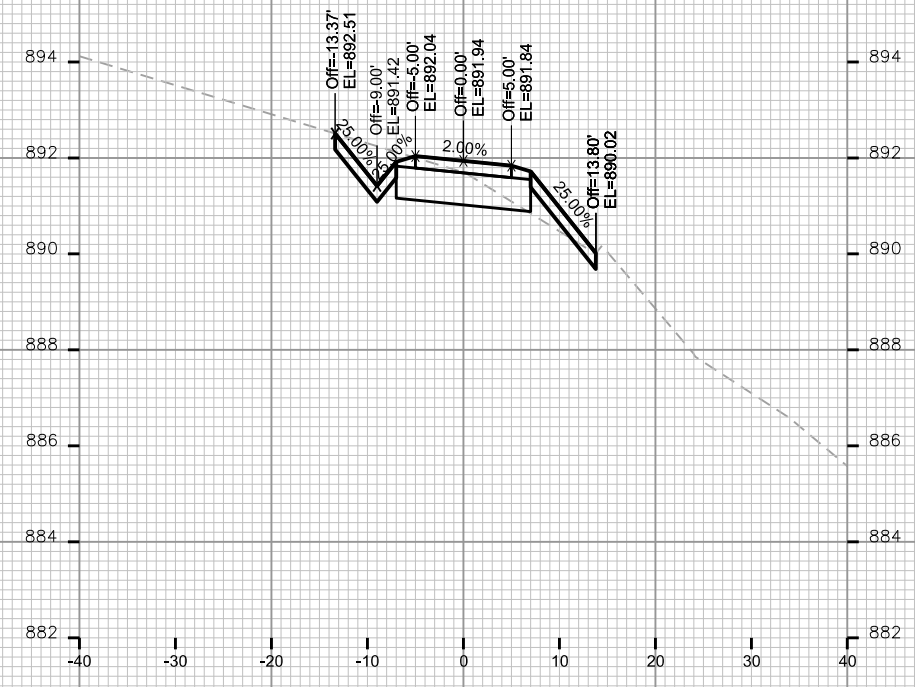
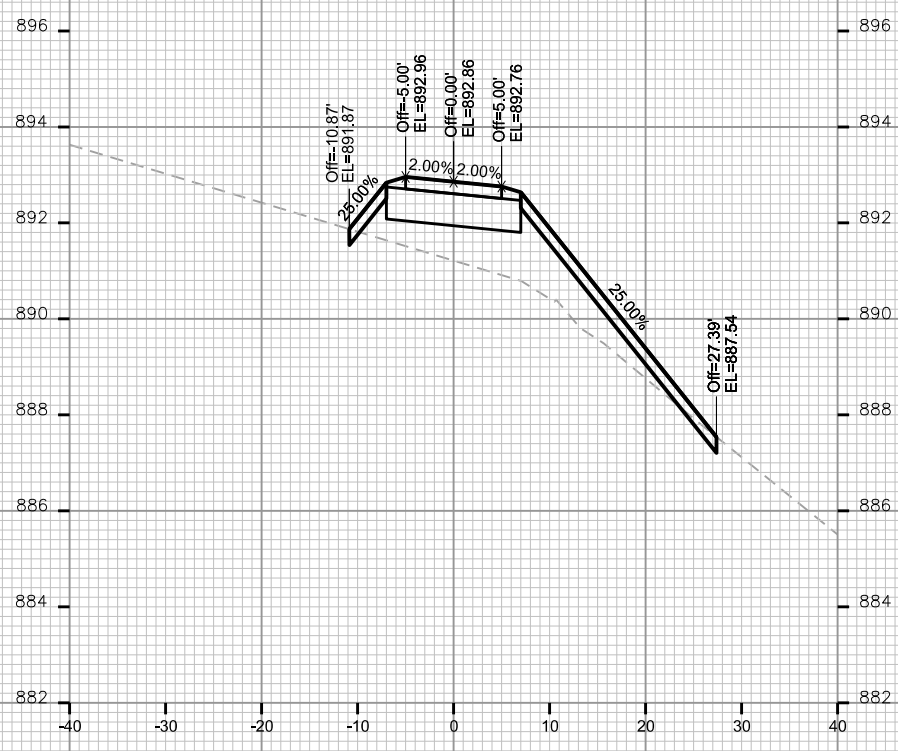
CITY OF MADISON

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

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

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



CROSS SECTIONS

EASTPARK PATH

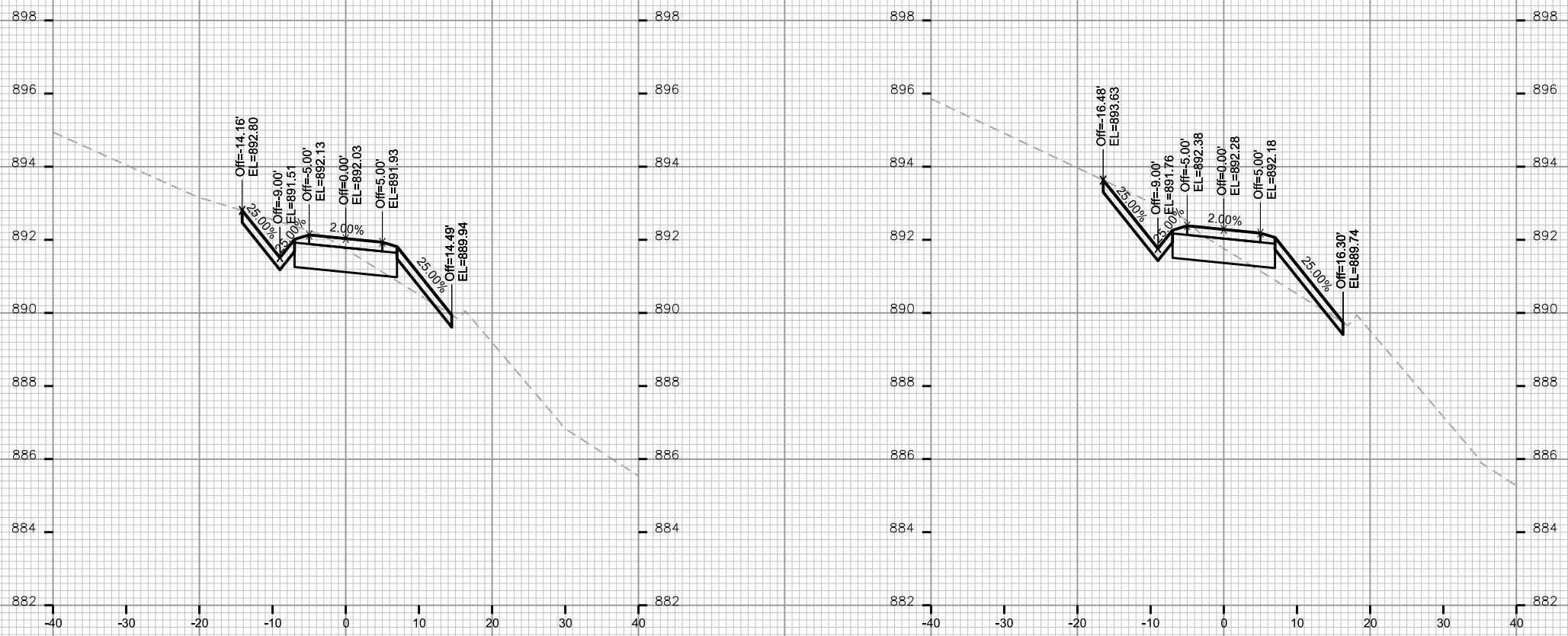
CITY OF MADISON

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

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

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



CROSS SECTIONS

EASTPARK PATH

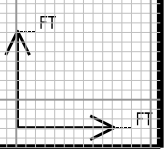
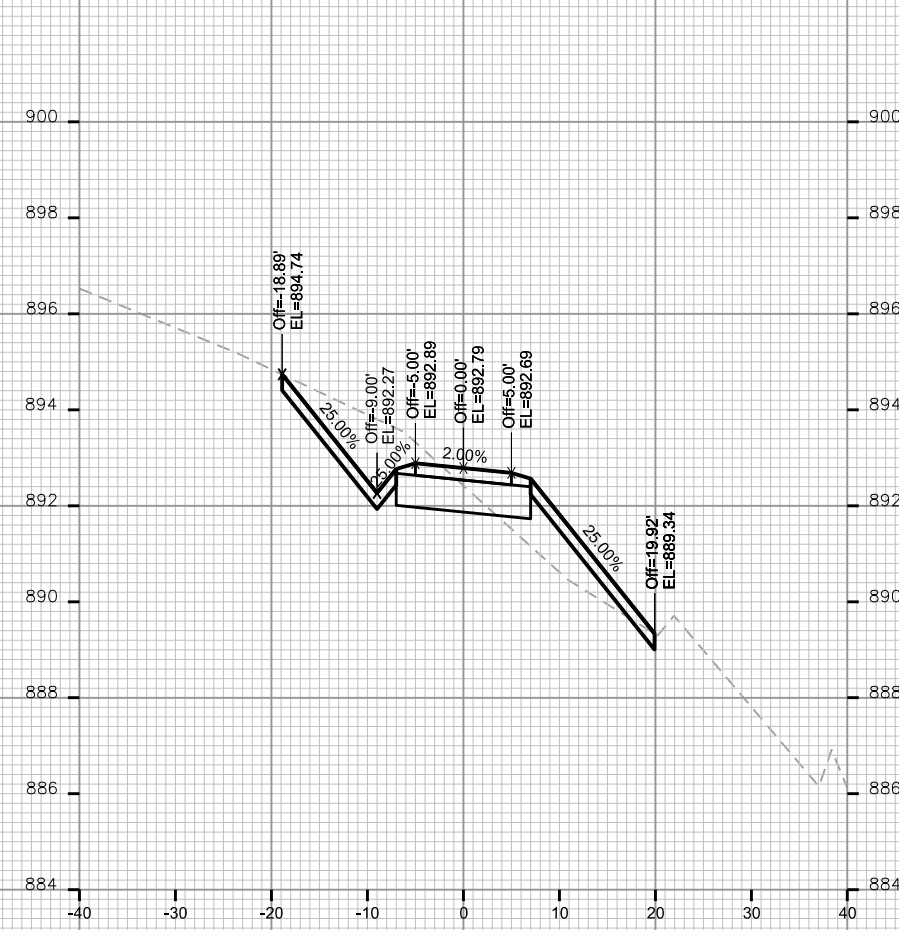
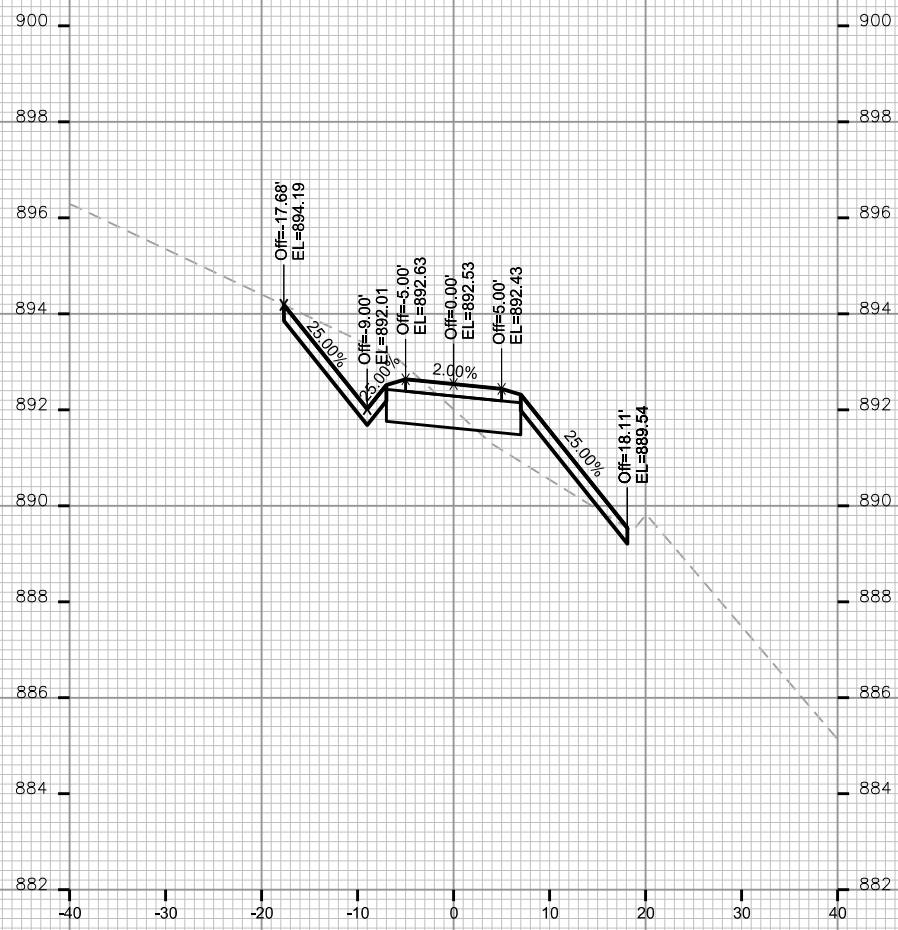
CITY OF MADISON

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

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

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



CROSS SECTIONS

EASTPARK PATH

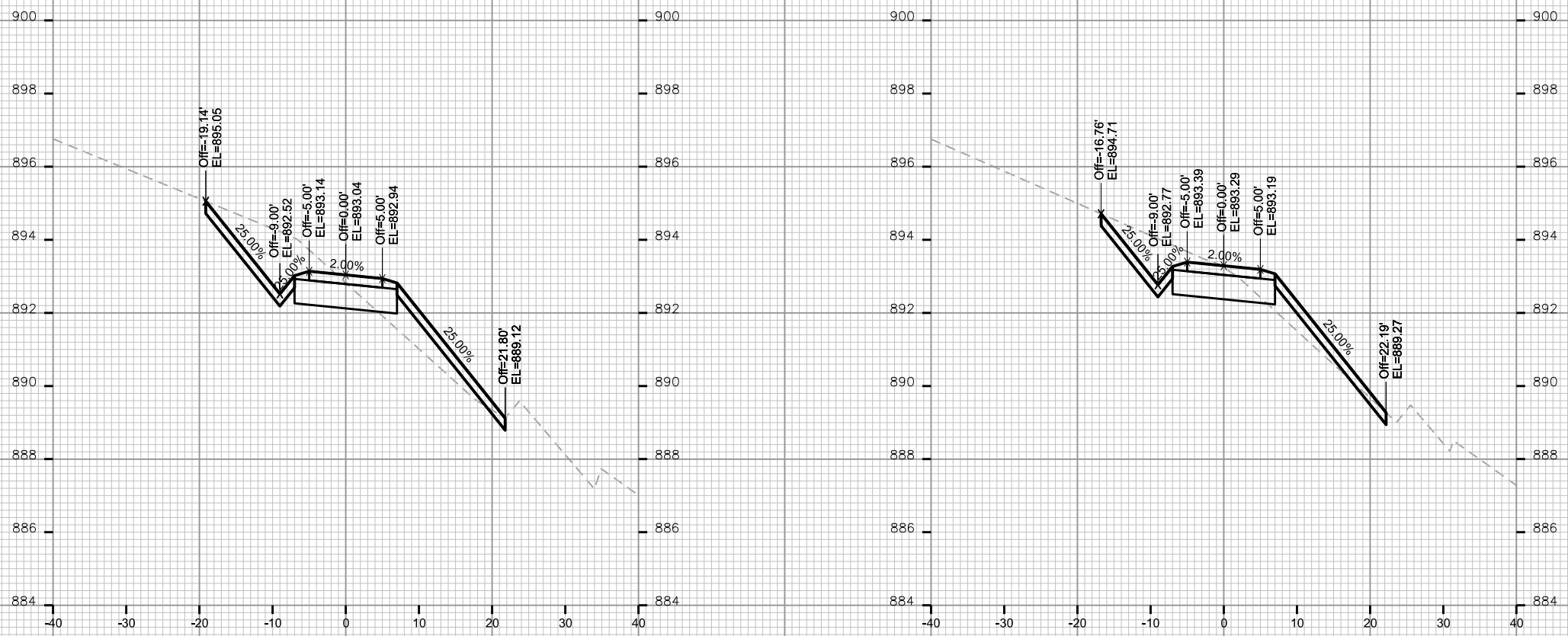
CITY OF MADISON

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

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

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



CROSS SECTIONS

EASTPARK PATH

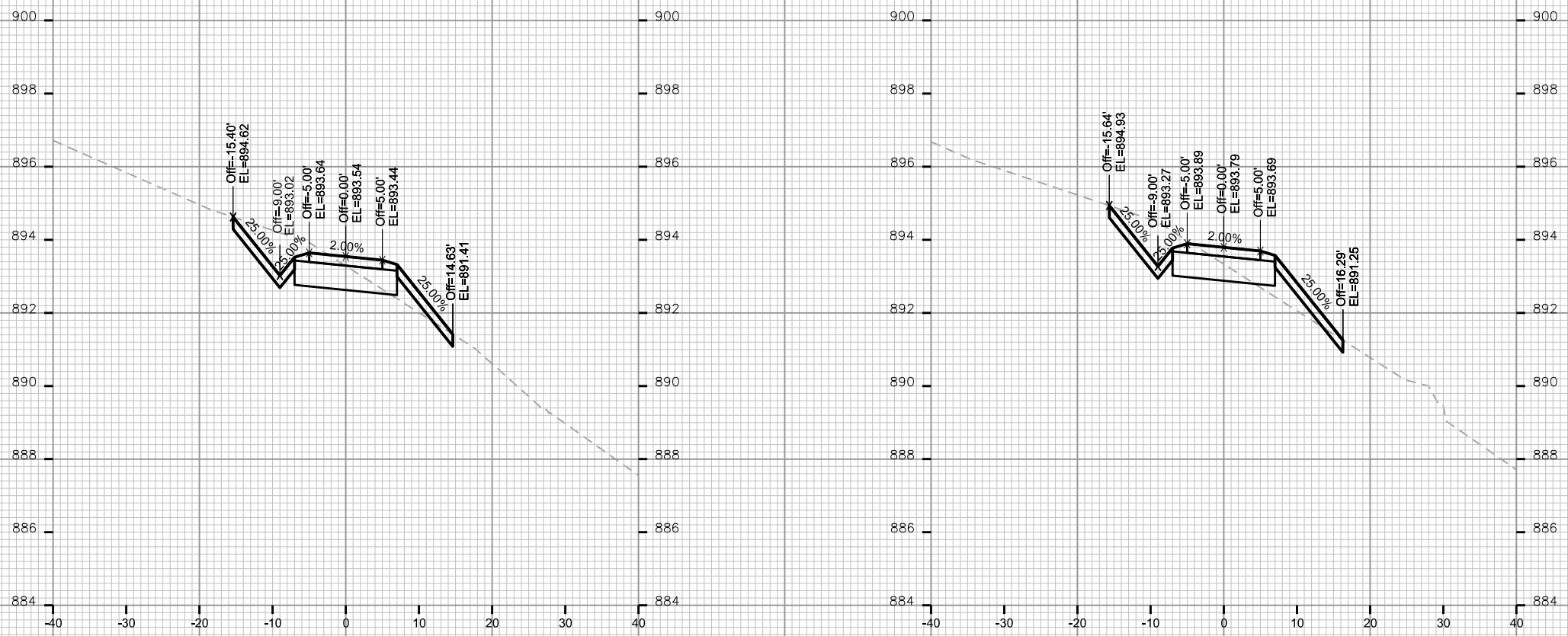
CITY OF MADISON

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

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

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



STA. 95+50

STA. 95+75





CROSS SECTIONS

EASTPARK PATH

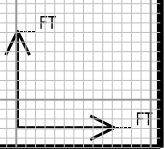
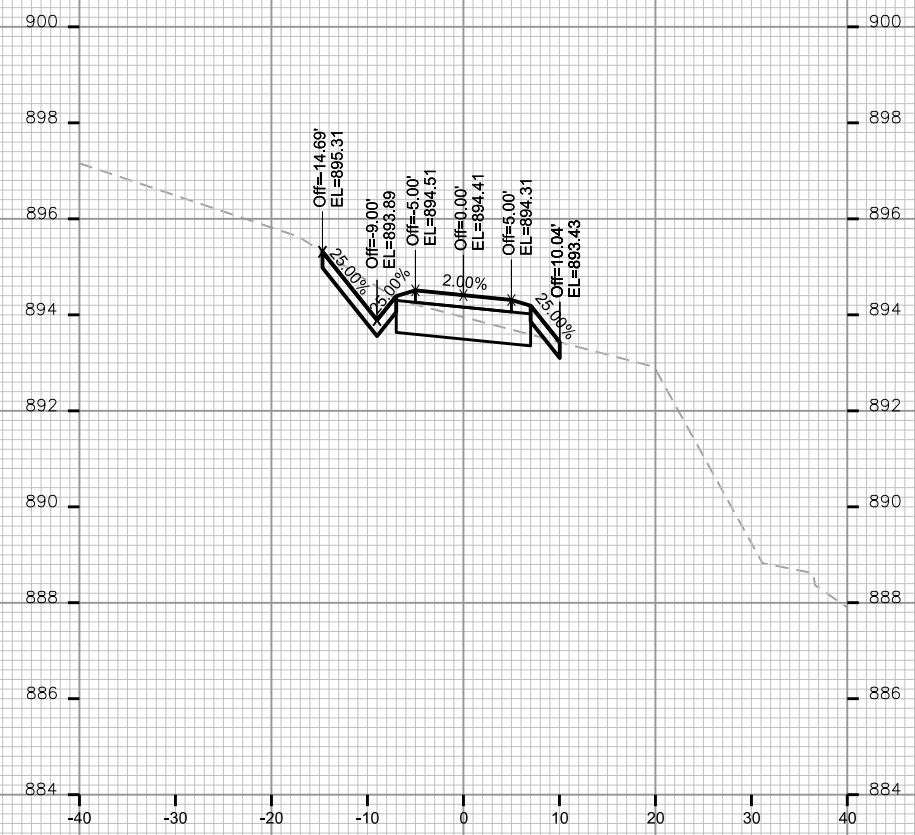
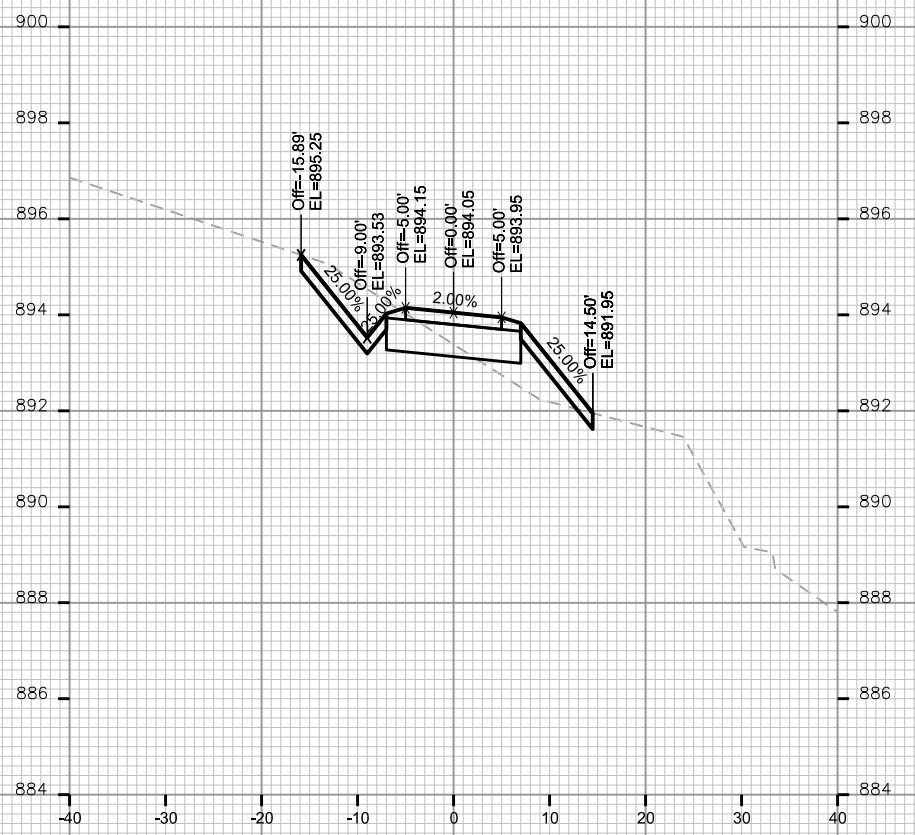
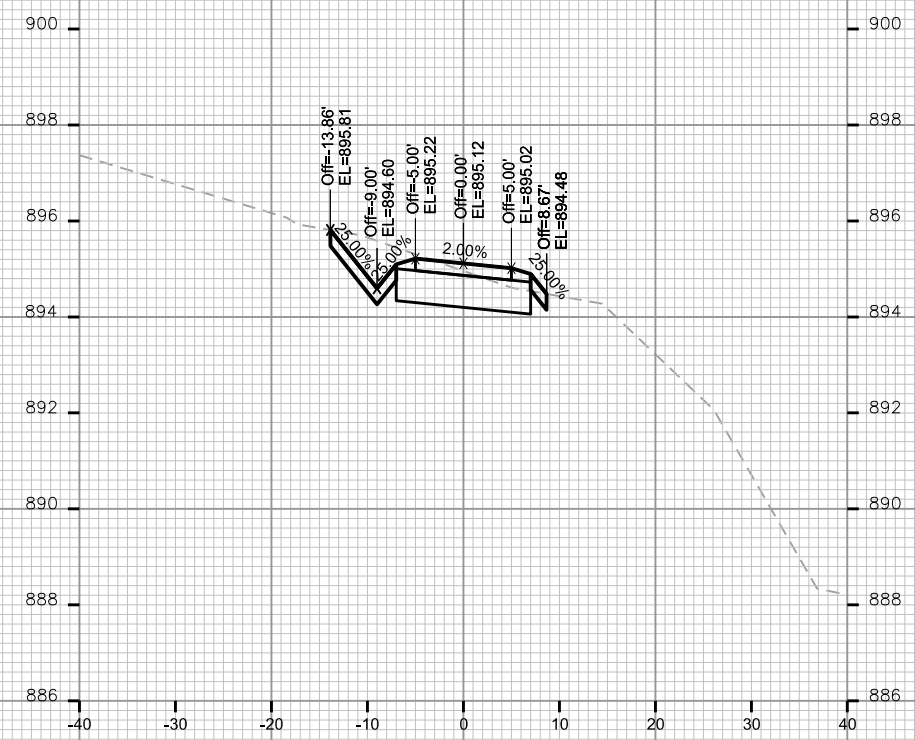
CITY OF MADISON

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

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

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

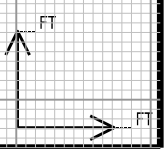
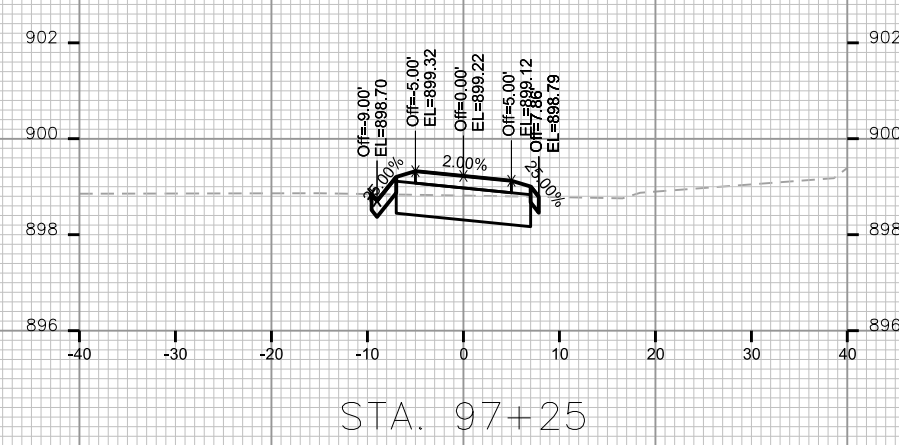
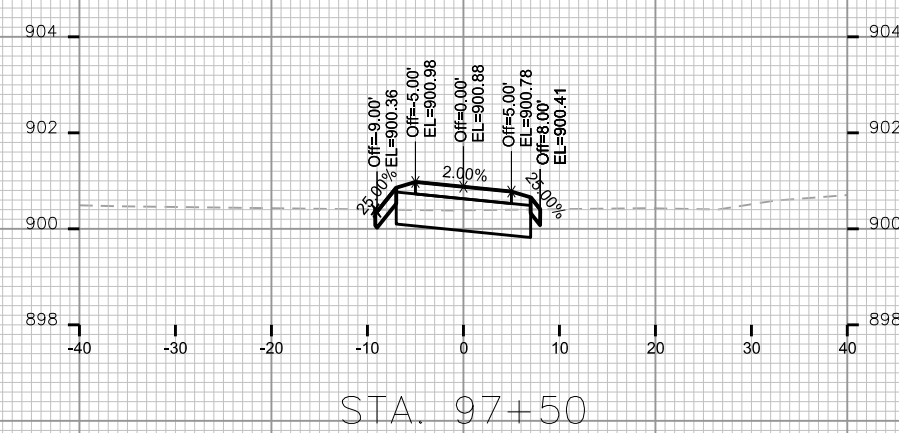
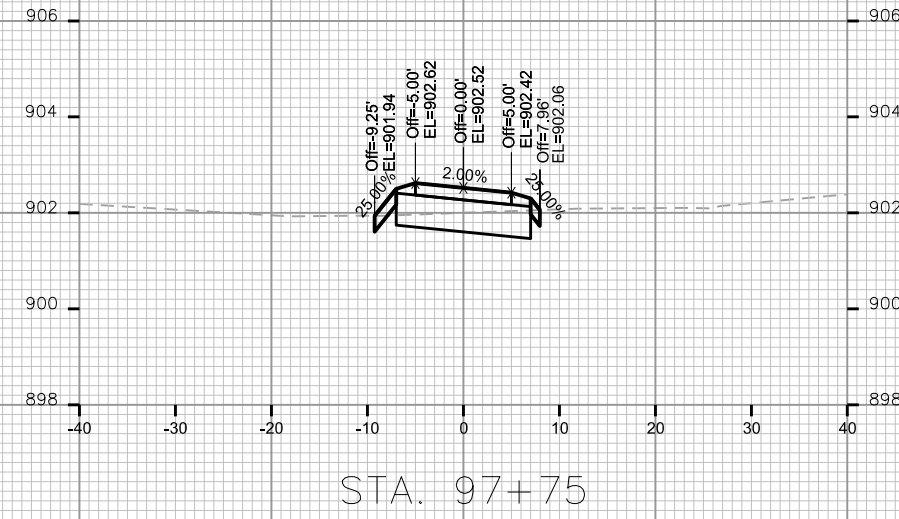
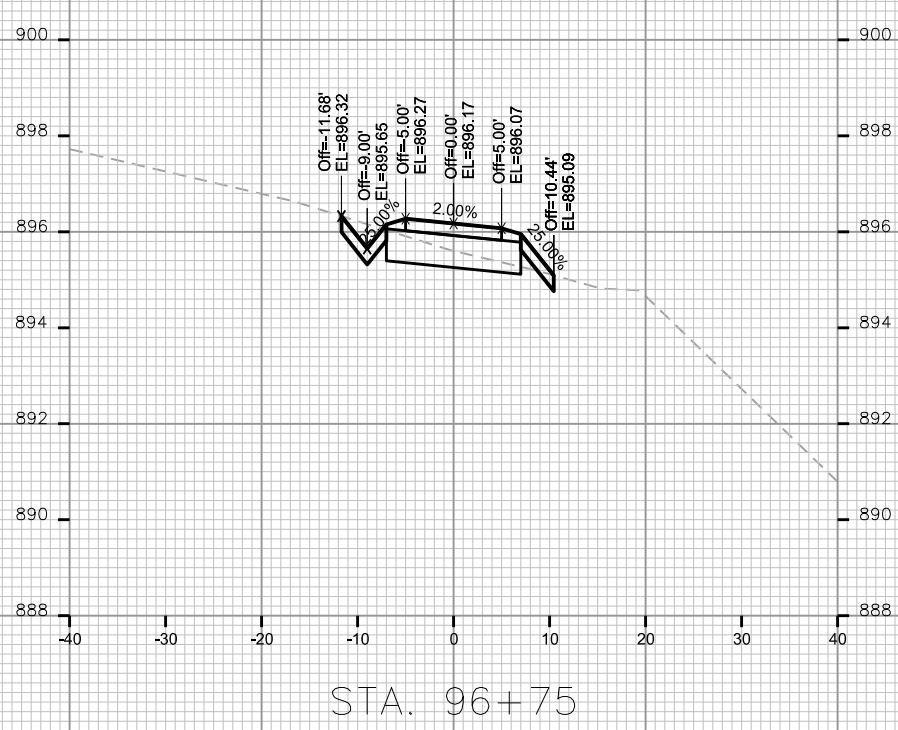
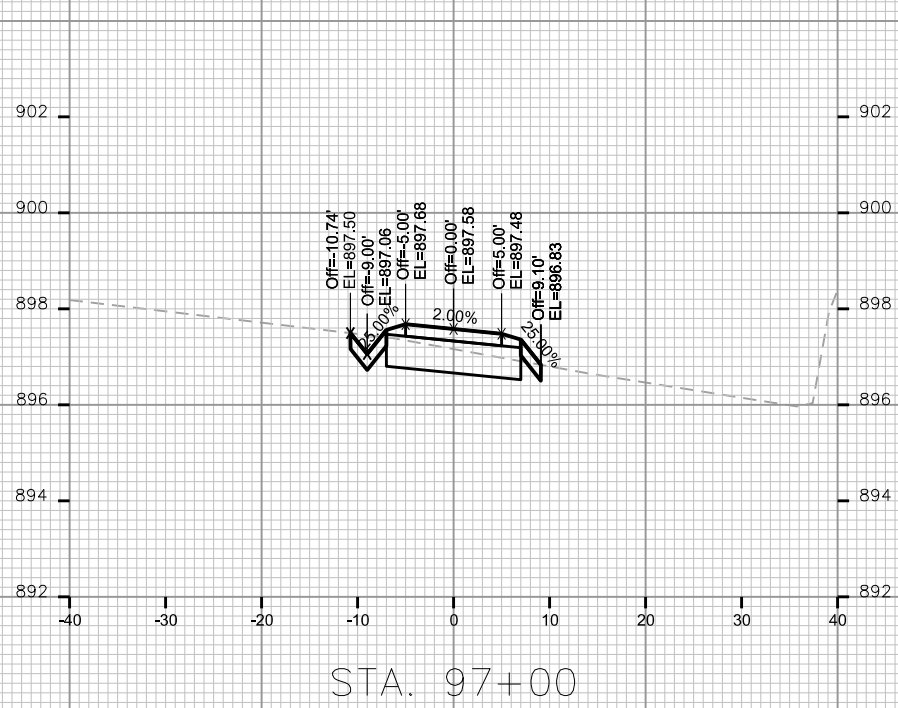


PLOT SCALE: \_\_\_\_\_

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

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



CROSS SECTIONS

EASTPARK PATH

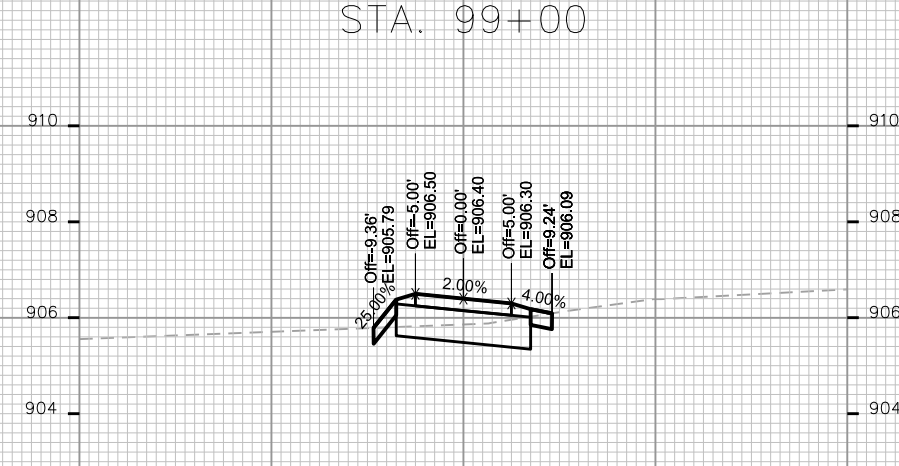
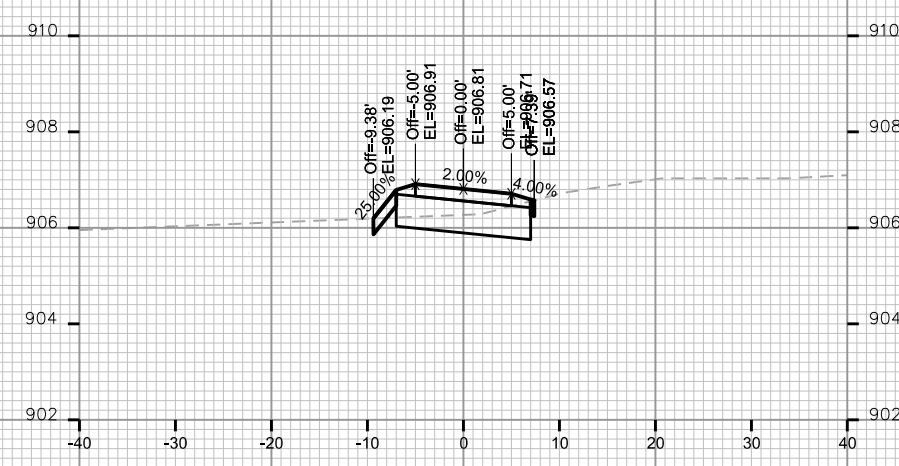
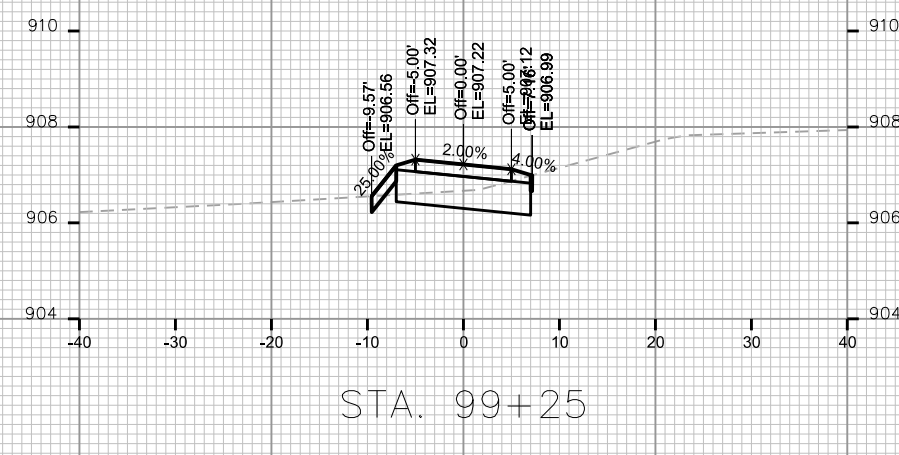
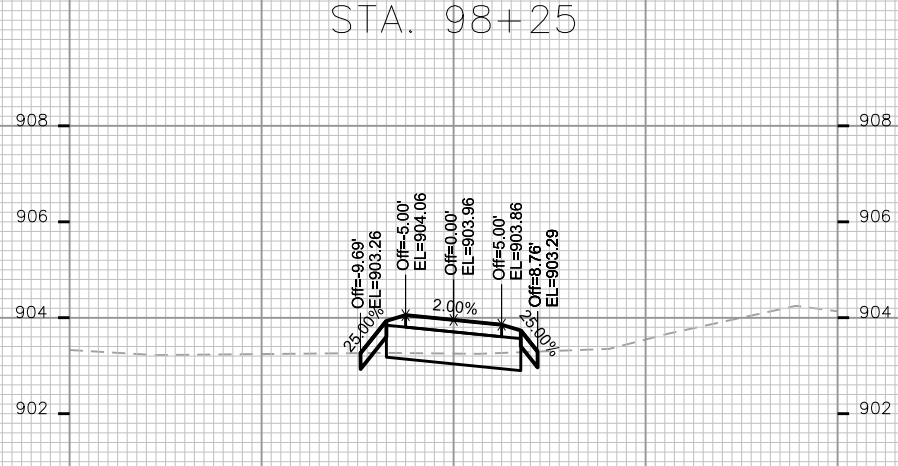
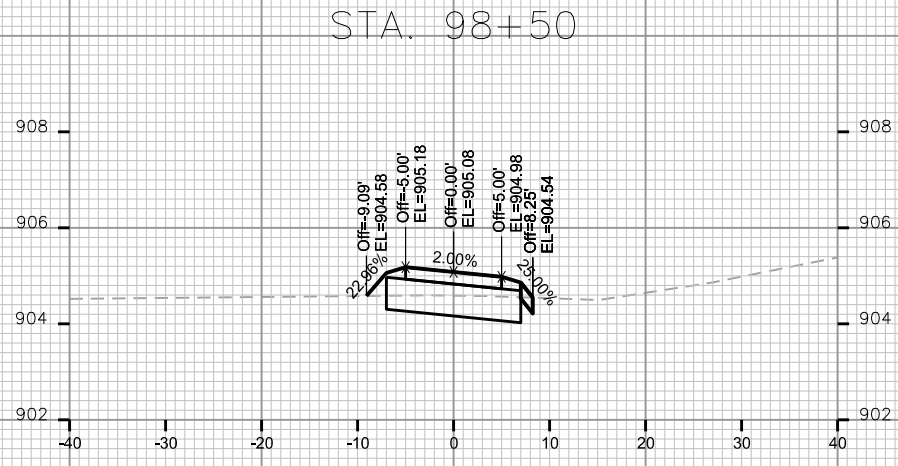
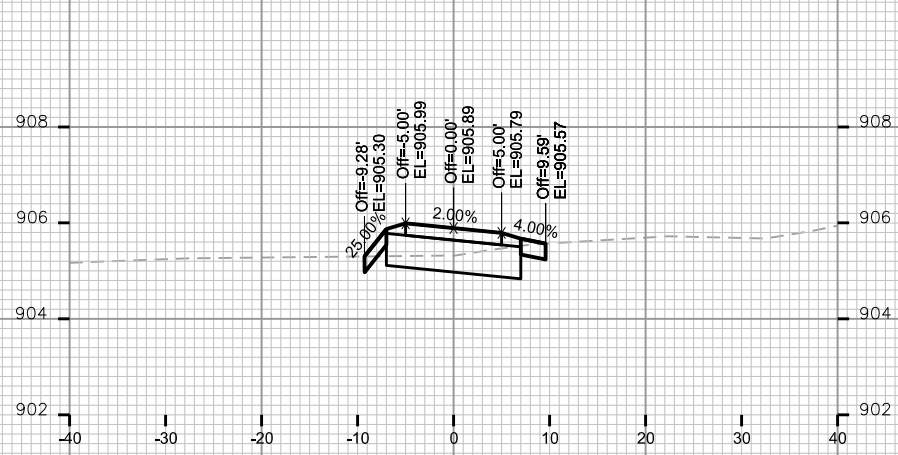
CITY OF MADISON

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

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

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



CROSS SECTIONS

EASTPARK PATH

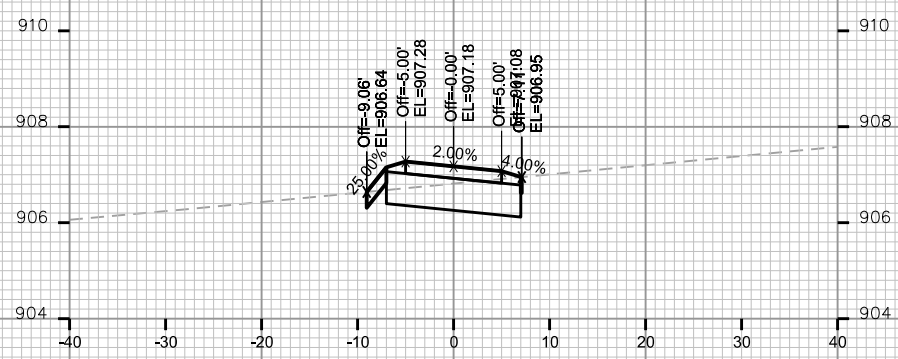
CITY OF MADISON

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

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

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

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



STA. 99+50

