

Madison, Wisconsin

CITY OF MADISON

CITY ENGINEERING DIVISION

DEPARTMENT OF PUBLIC WORKS

PLAN OF PROPOSED IMPROVEMENT

PUBLIC IMPROVEMENT PROJECT APPROVED

DECEMBER 11, 2012

BY THE COMMON COUNCIL OF MADISON, WISCONSIN

PUBLIC IMPROVEMENT DESIGN APPROVED BY:

[Signature] 1/11/13
City Engineer Date

INDEX OF SHEETS

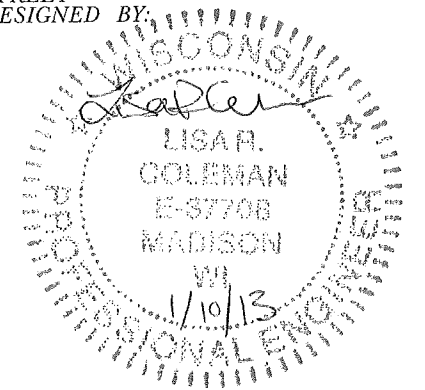
SHEET NO.	TITLE
1	DETAILS
DI	EROSION CONTROL PLANS
EC1-EC3	STREET PLAN & PROFILE
P1-P3	PATH PLAN & PROFILE
P4-P5	UTILITY PLANS
U1-U4	PATH DETOUR PLAN
DT-1	CROSS SECTIONS
X1-X10	

N. THORNTON AVENUE RECONSTRUCTION

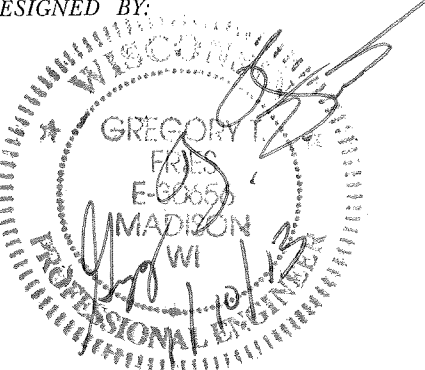
CITY PROJECT NO. 53W1484

CITY CONTRACT NO. 6984

STREET DESIGNED BY:

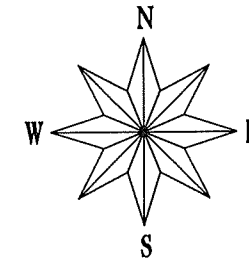
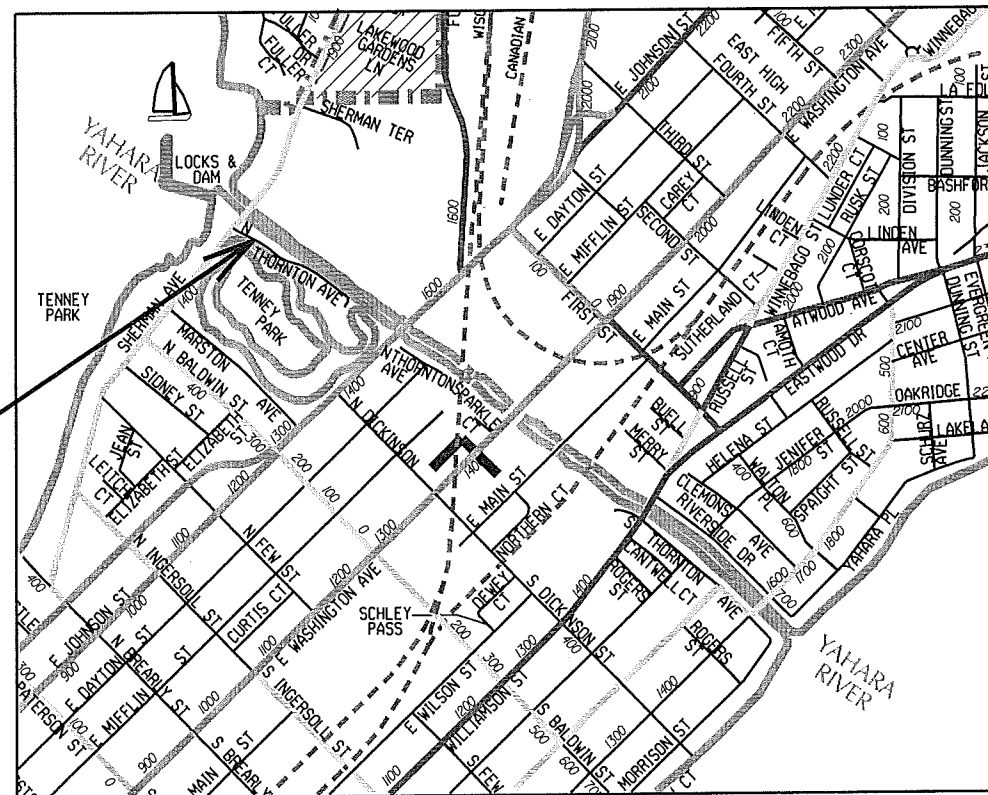


STORM SEWER DESIGNED BY:



CONVENTIONAL SIGNS	
FIELD VERIFY ALL UTILITY LOCATIONS	
GAS	— G —
STORM SEWER	— ST —
SANITARY SEWER	— SAN —
WATER	— W —
OVERHEAD ELECTRIC	— OH —
POWER POLE	⊕
ADA COMPLIANT RAMP W/ DETECTABLE WARNING FIELD	[Symbol]
COMBUSTIBLE FLUIDS	[Symbol]

CONSTRUCTION PROJECT LOCATION



NOTES:

ALL GUTTERS SHALL DRAIN WITH A MINIMUM GRADE OF 0.40% 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 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%.

EARTH WORK SUMMARY:

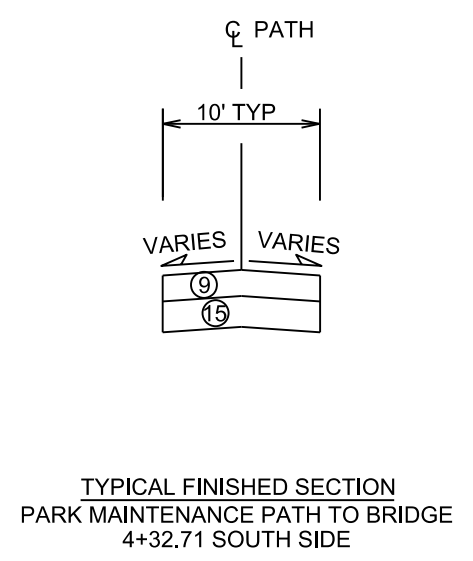
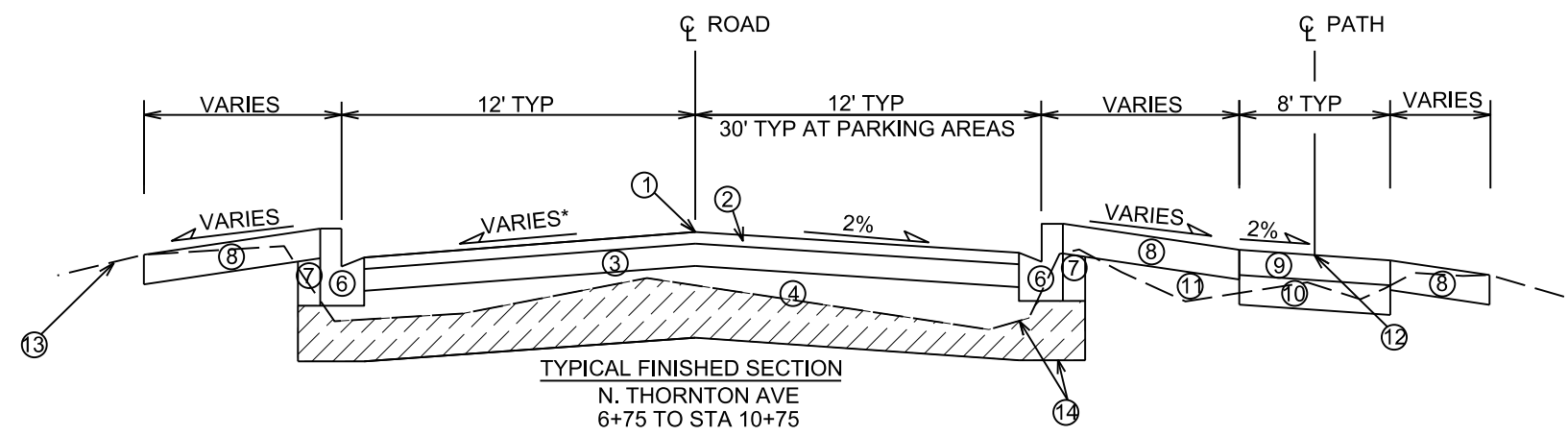
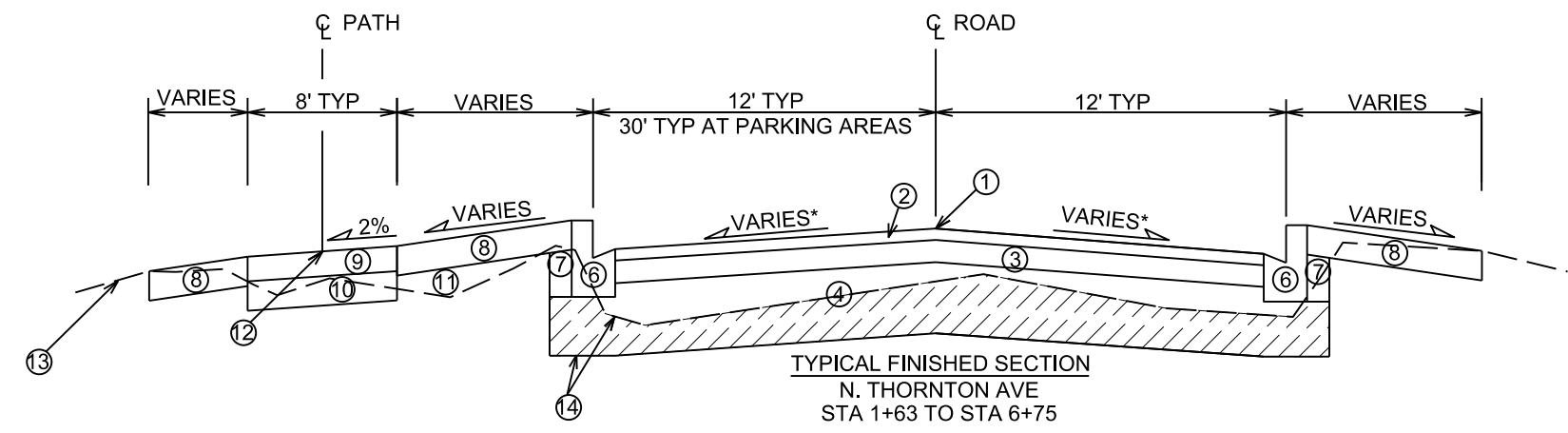
EXCAVATION CUT (MEASURED PLAN QUANTITY).....	910 C.Y.
ESTIMATED UNDISTRIBUTED UNDERCUT.....	860 C.Y.
TOTAL UNCLASSIFIED EXCAVATION CUT.....	1770 C.Y.
FILL BORROW.....	925 C.Y.

PLOT SCALE:

PLOT NAME:

REV. DATE:

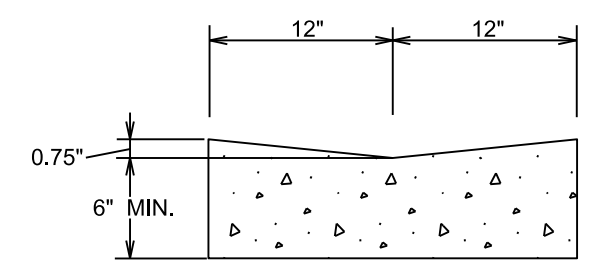
ORIGINATOR: CITY OF MADISON, STREETS DIVISION



- ① POINT REFERRED TO ON STREET PROFILE
- ② 1.75" BITUMINOUS UPPER LAYER, TYPE E-0.3
- ③ 1.75" BITUMINOUS LOWER LAYER, TYPE E-0.3
- ④ PULVERIZE AND SHAPE EX. PAVEMENT OR 10" GRADATION 2 CRUSHED STONE
- ⑥ TYPE 'H' CONCRETE CURB & GUTTER
- ⑦ FILL, INCIDENTAL
- ⑧ 4" TOPSOIL AND SEED, TYP.
- ⑨ 3" BITUMINOUS, TYPE E-0.3
- ⑩ 6" GRADATION #2 CRUSHED STONE
- ⑪ FILL BORROW
- ⑫ POINT REFERRED TO ON PATH PROFILE
- ⑬ EXISTING GROUND
- ⑭ HATCHED AREA - WHERE PULVERIZE AND SHAPE OCCURS, EXCAVATION OF THIS AREA IS NOT REQUIRED UNLESS DIRECTED BY CONSTRUCTION ENGINEER. HATCHED AREA QUANTITY IS INCLUDED IN EXCAVATION CUT BID ITEM QUANTITY.
- ⑮ 8" GRADATION #2 CRUSHED STONE

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

TYPICAL SECTIONS NOT TO SCALE



GENERAL NOTES:
LATERAL CONTRACTION JOINTS SHALL BE PLACED AT INTERVALS OF NOT MORE THAN 15' NOR LESS THAN 6' IN LENGTH. THE JOINTS SHALL BE A MINIMUM OF 3" IN DEPTH.

EXPANSION JOINTS SHALL BE PLACED TRANSVERSLY AT RADIUS POINTS ON CURVES OF RADIUS 200' OR LESS, AND AT ANGLE POINTS, OR AS DIRECTED BY THE ENGINEER. THE EXPANSION JOINT SHALL BE A ONE PIECE ASPHALTIC MATERIAL HAVING THE SAME DIMENSIONS AS CURB & GUTTER AT THAT STATION AND BE 1/2" THICK.

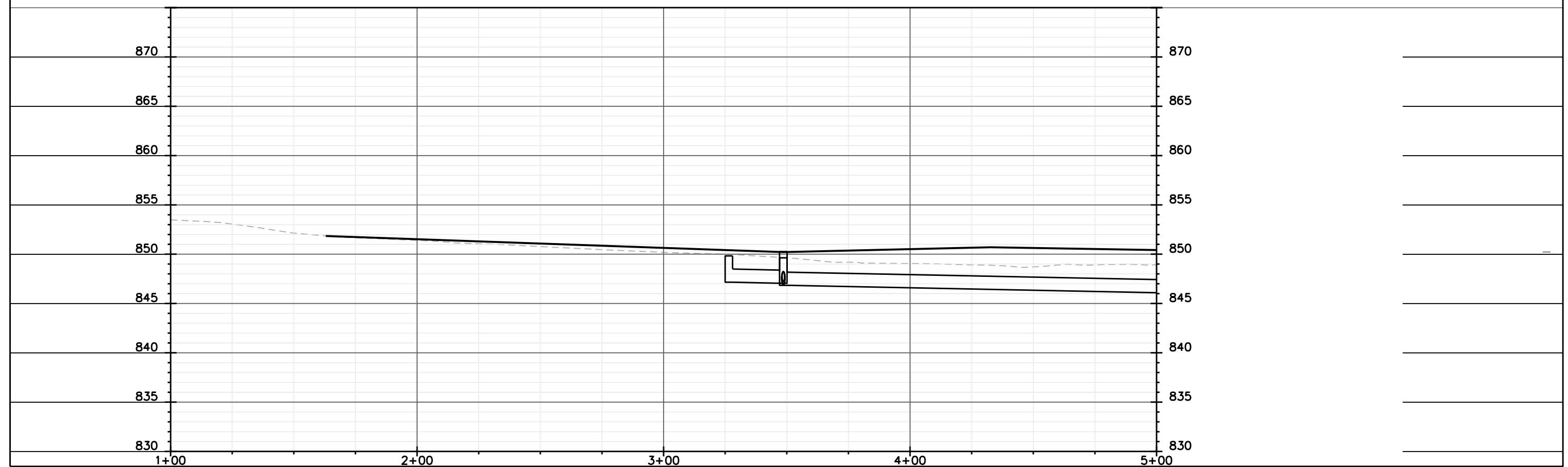
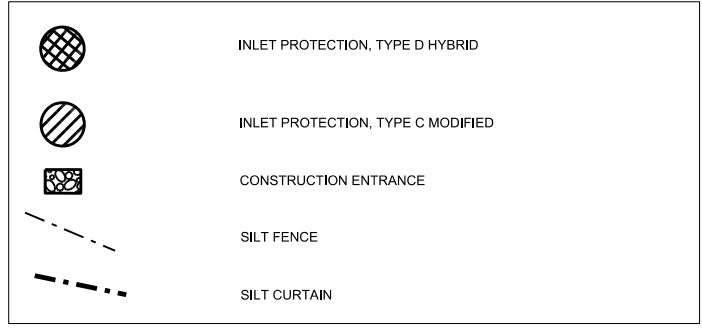
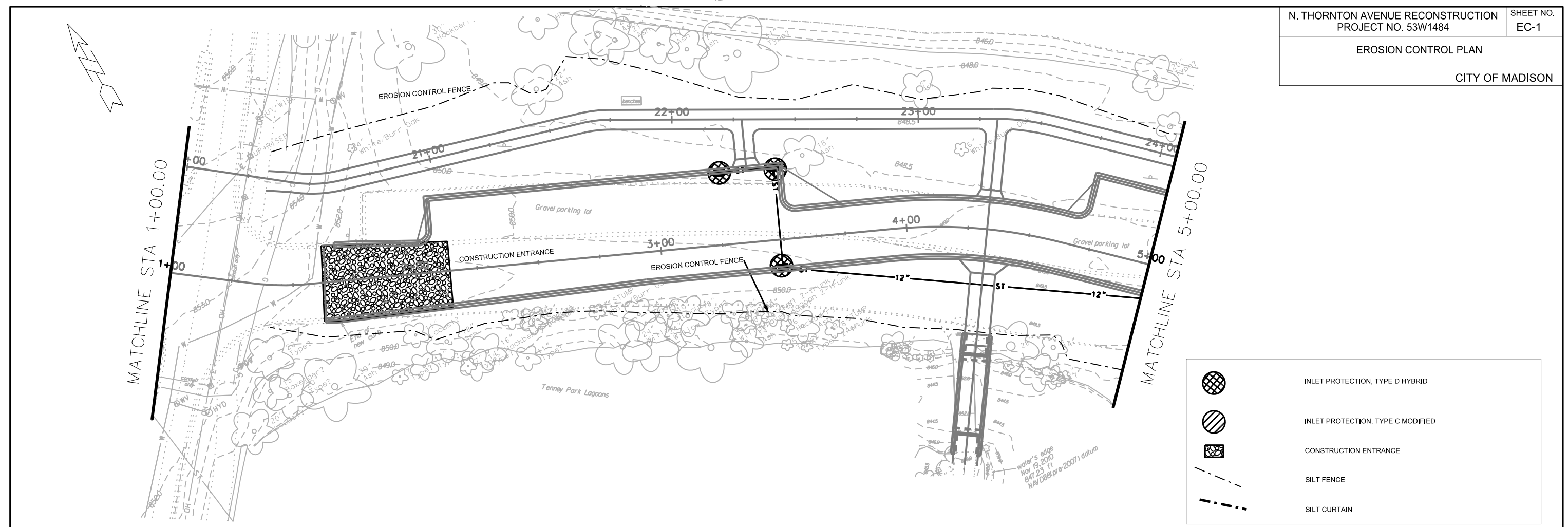
IN ALL CASES, CONCRETE CURB & GUTTER SHALL BE PLACED ON THOROUGHLY COMPACTED CRUSHED STONE.

CURB AND GUTTER AT PEDESTRIAN RAMP DETAIL

PLOT SCALE: _____
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EROSION CONTROL PLAN

CITY OF MADISON



PLOT SCALE: _____

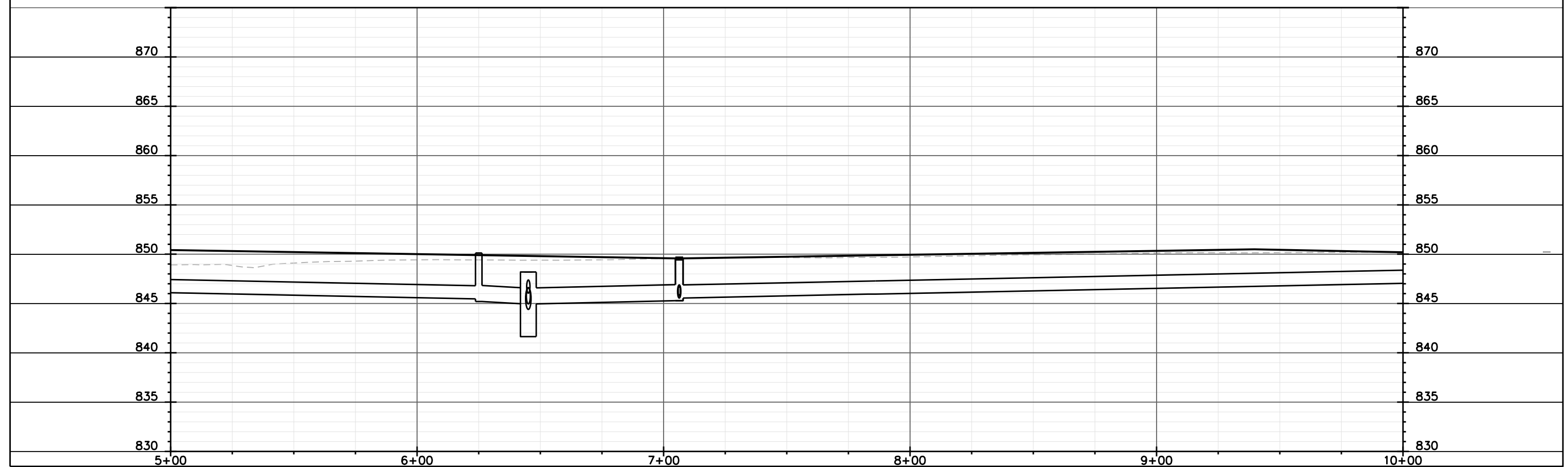
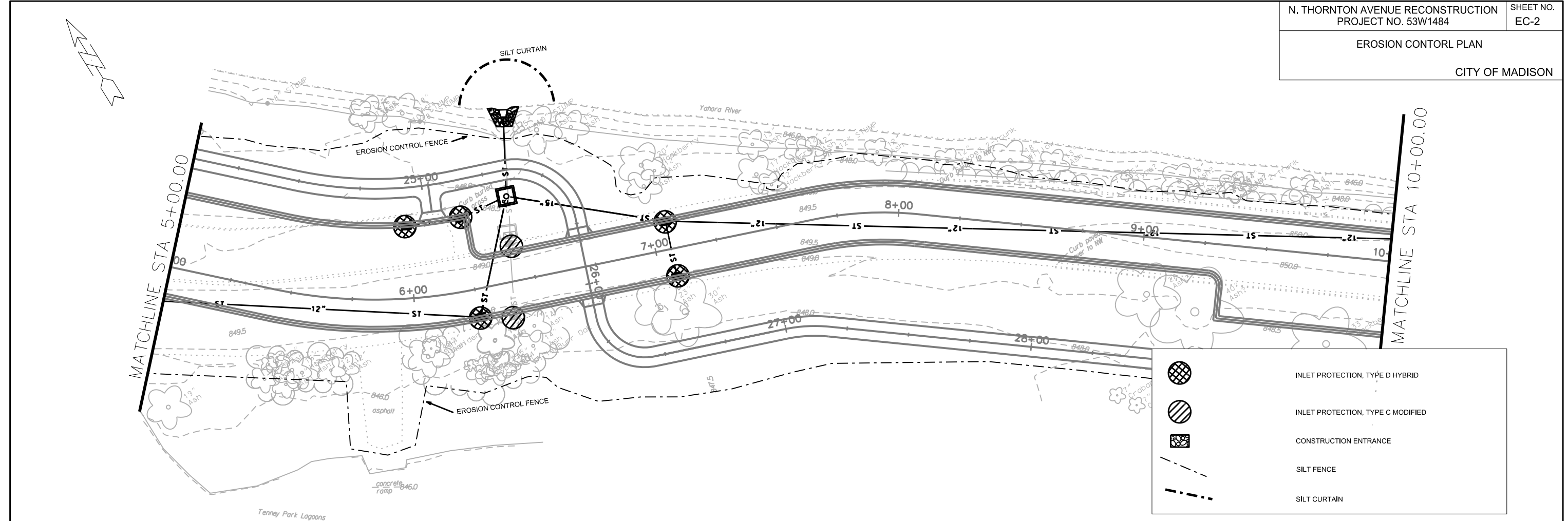
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EROSION CONTROL PLAN

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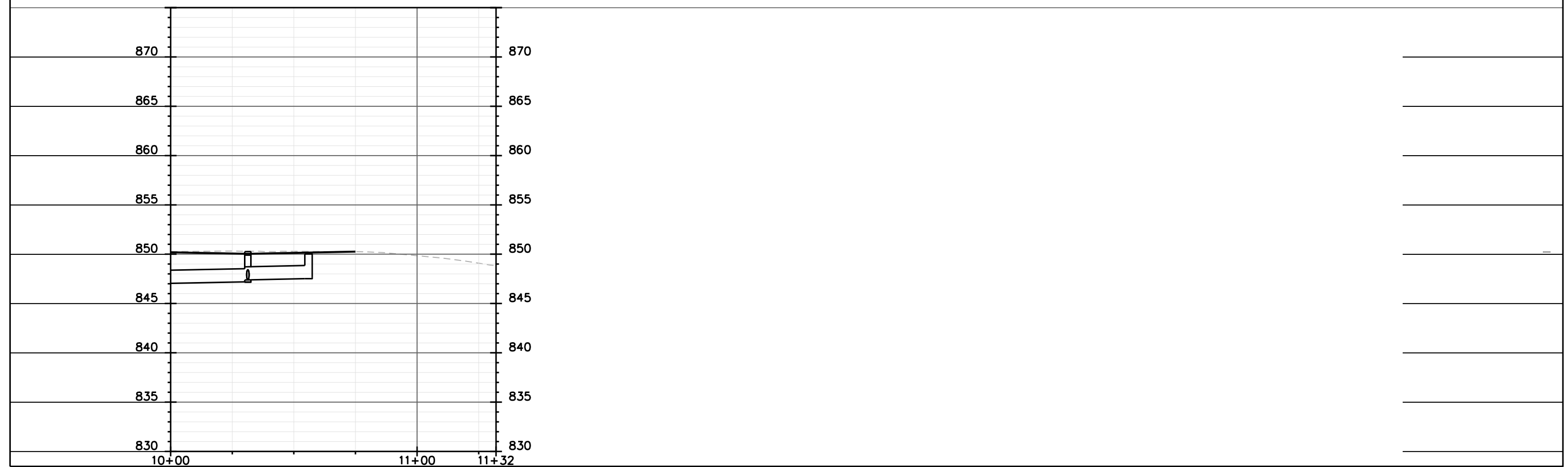
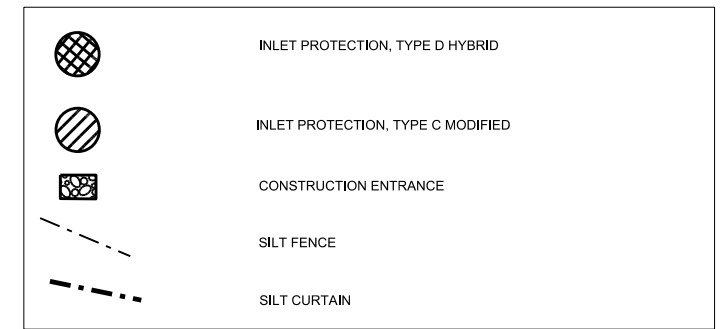
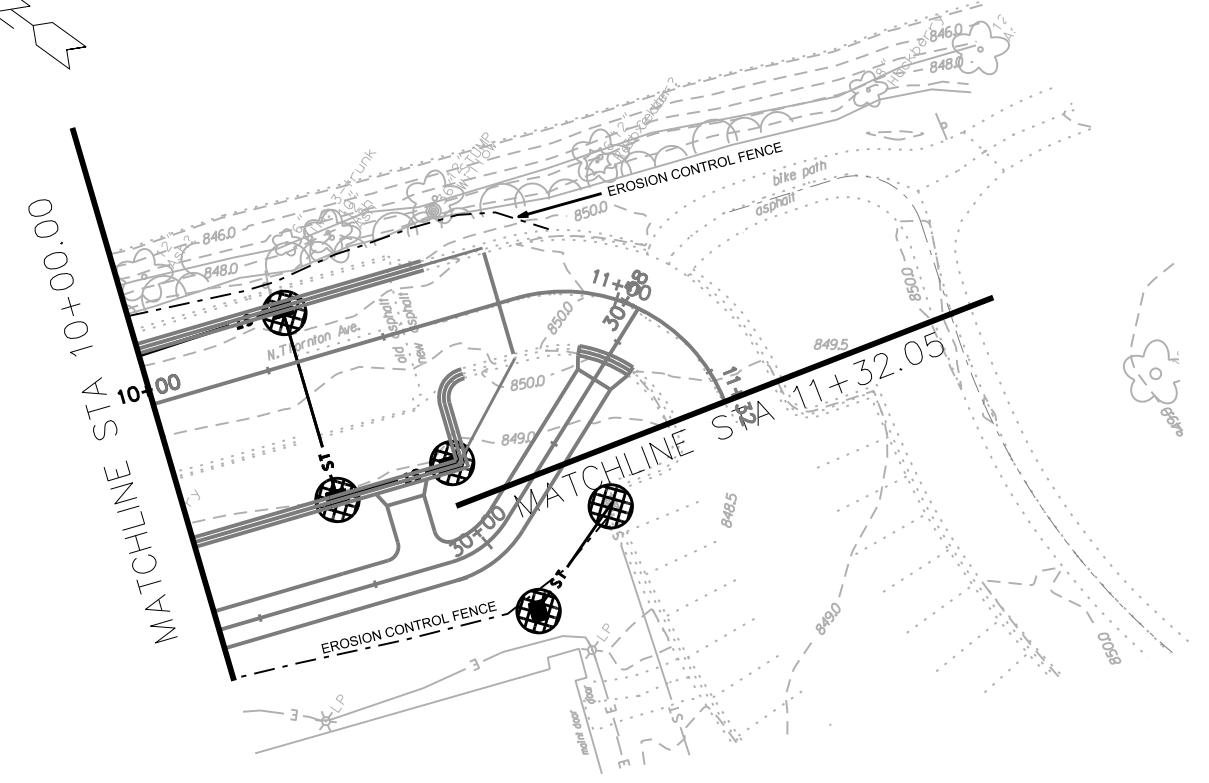
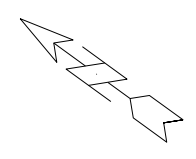
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EROSION CONTROL PLAN

CITY OF MADISON



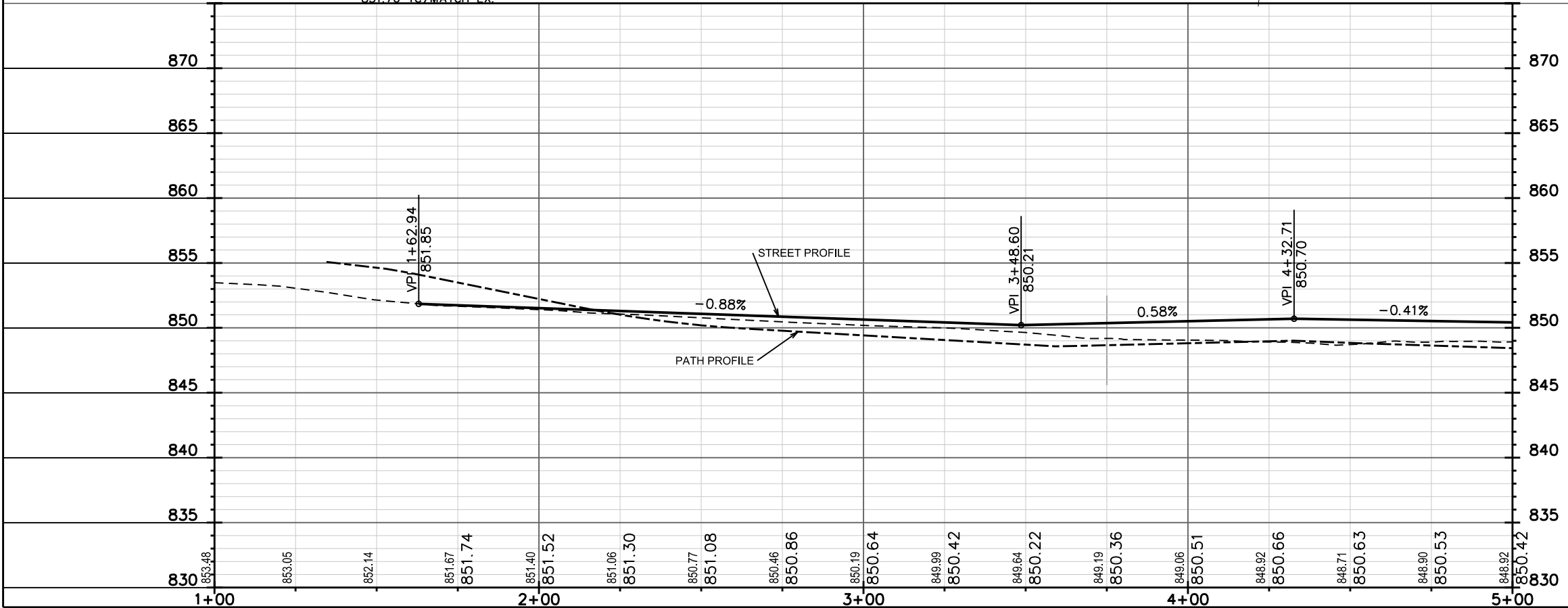
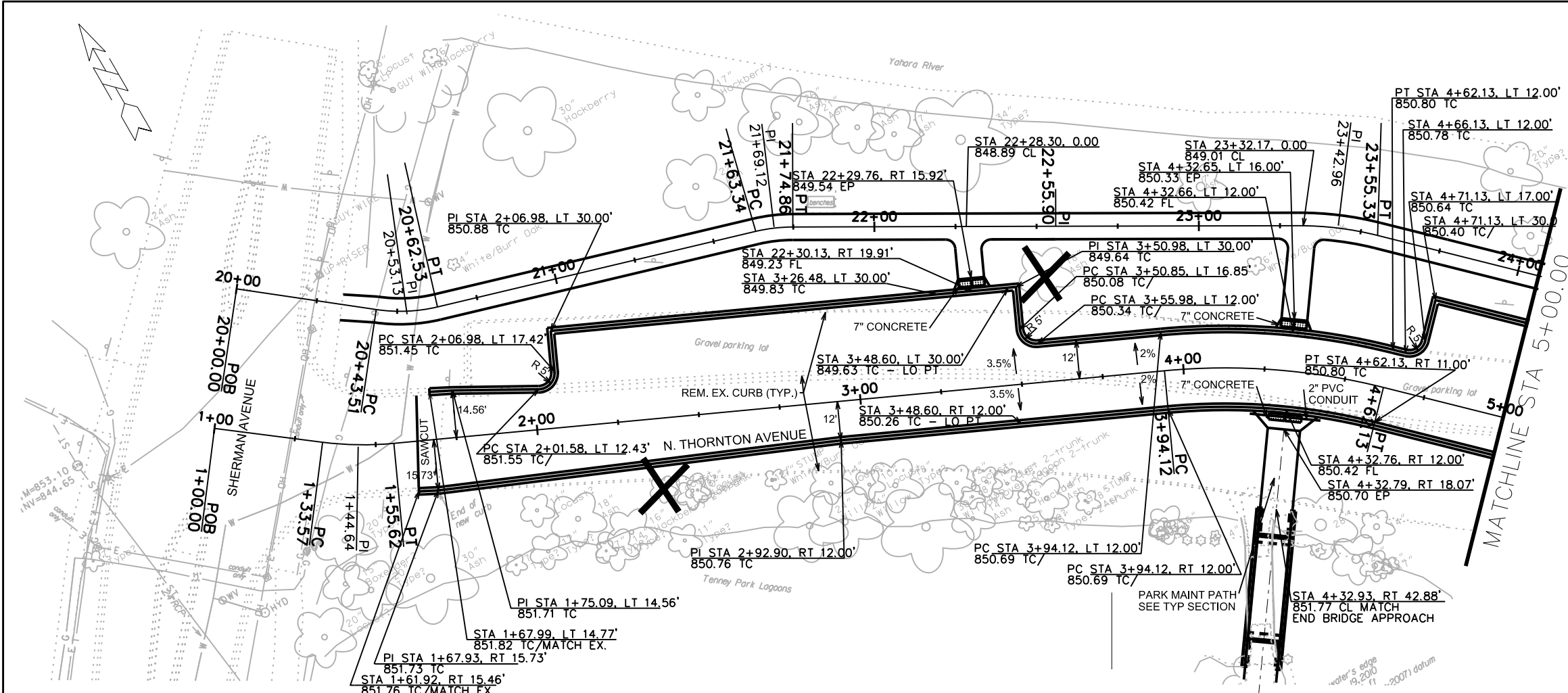
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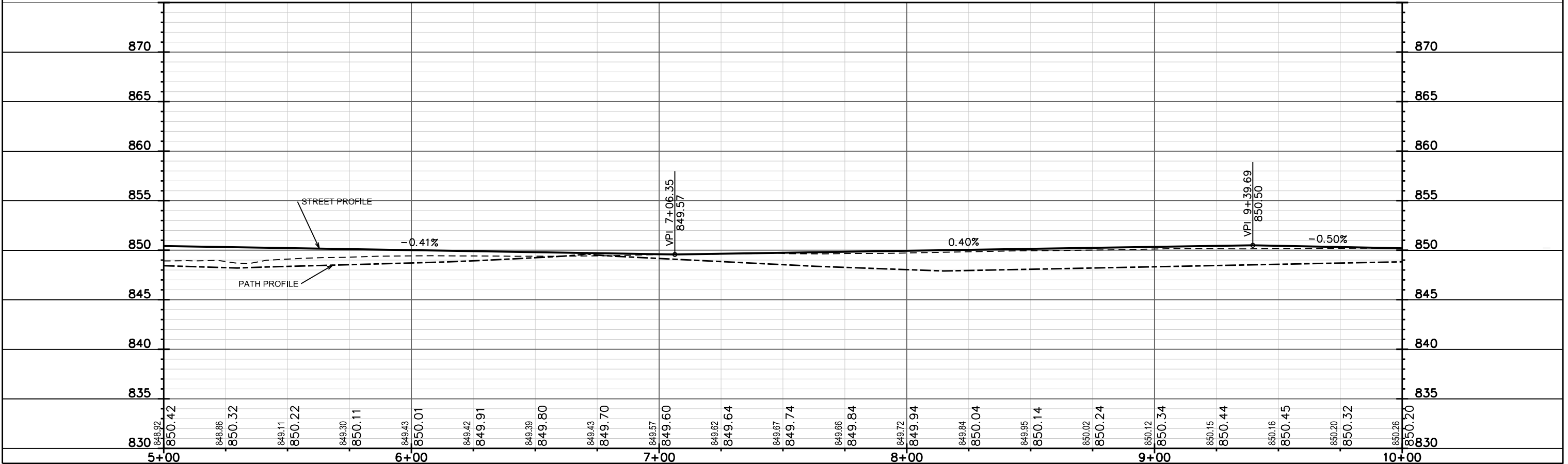
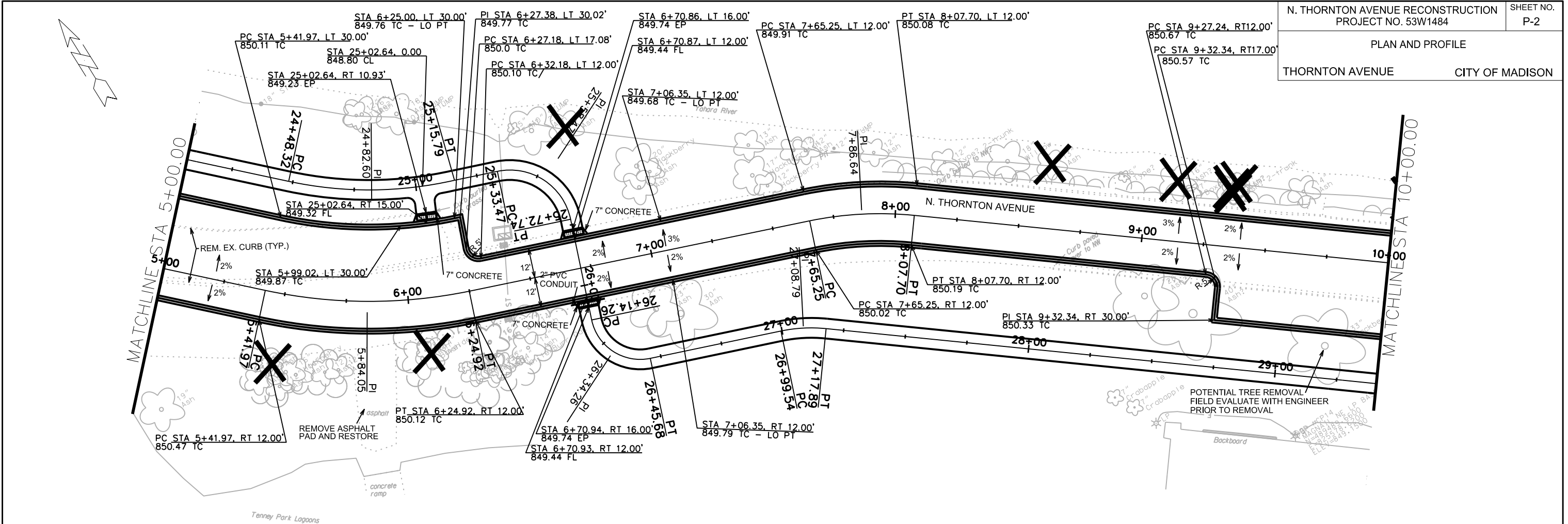
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PLAN AND PROFILE
THORNTON AVENUE CITY OF MADISON

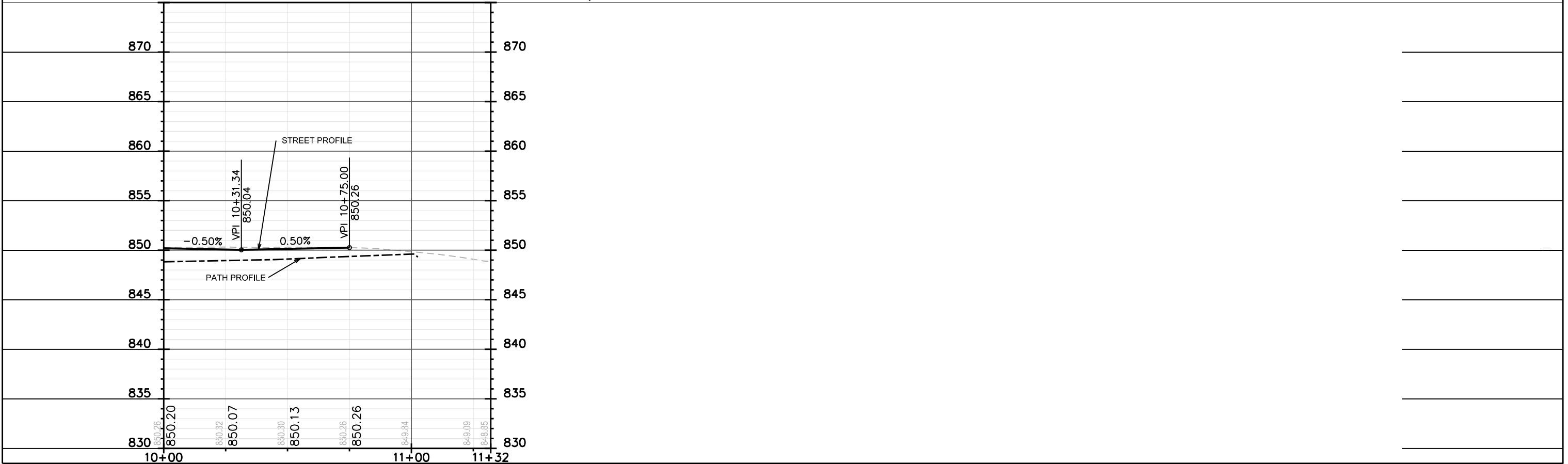
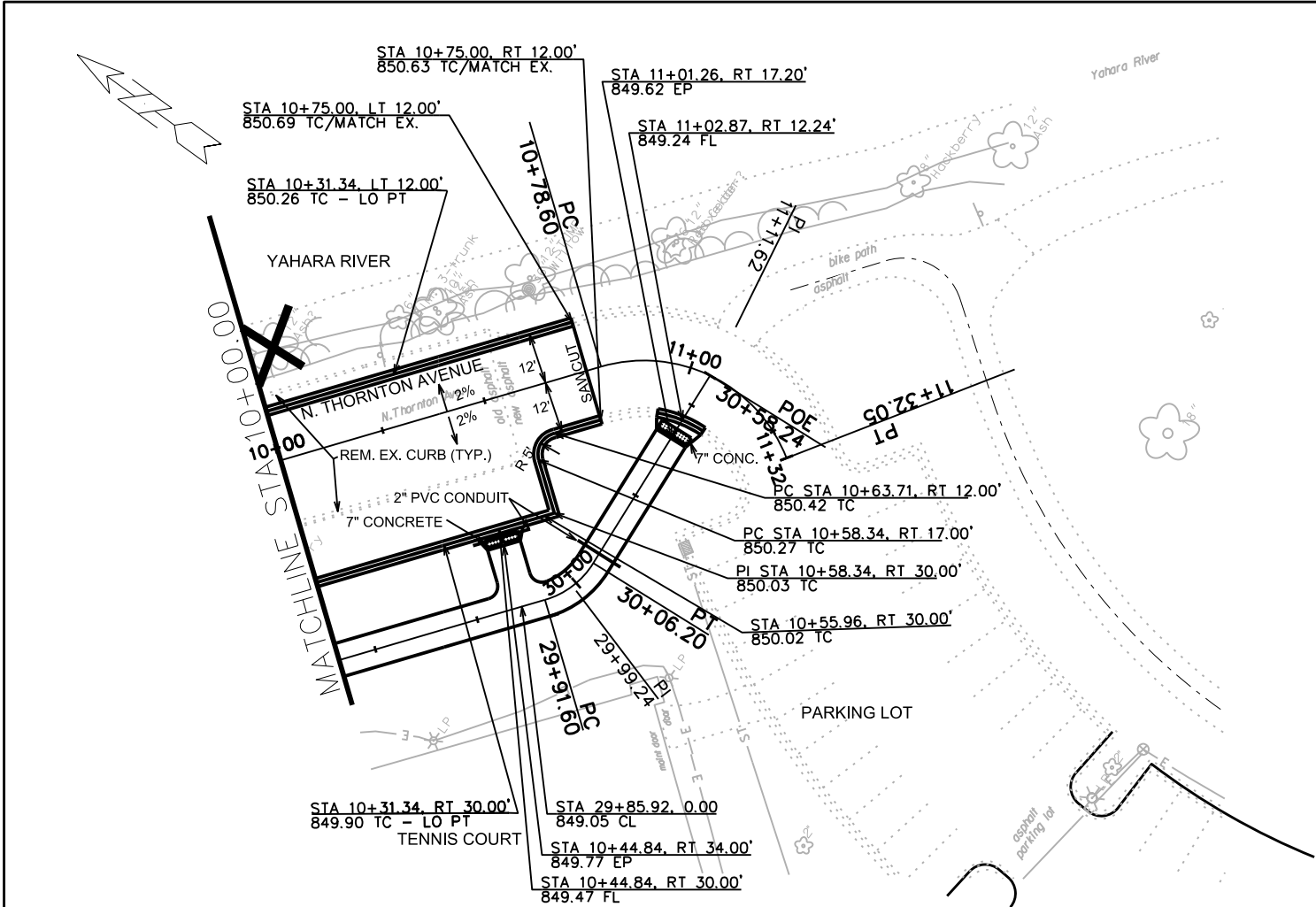


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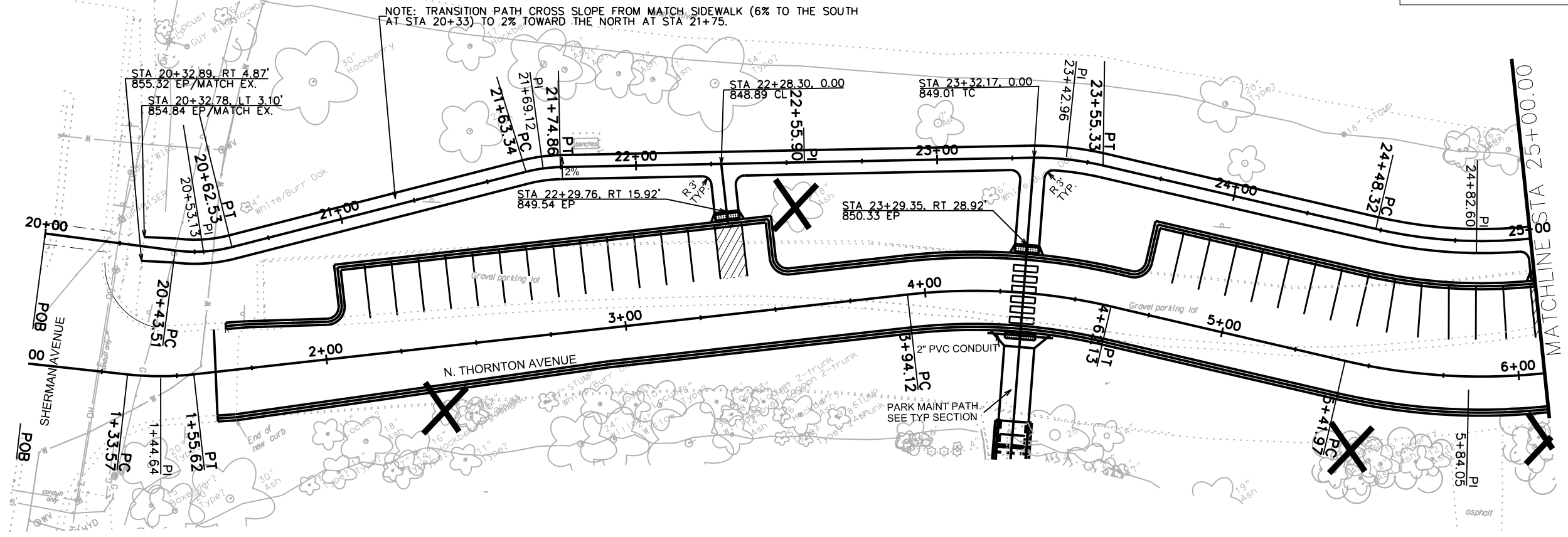
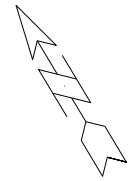


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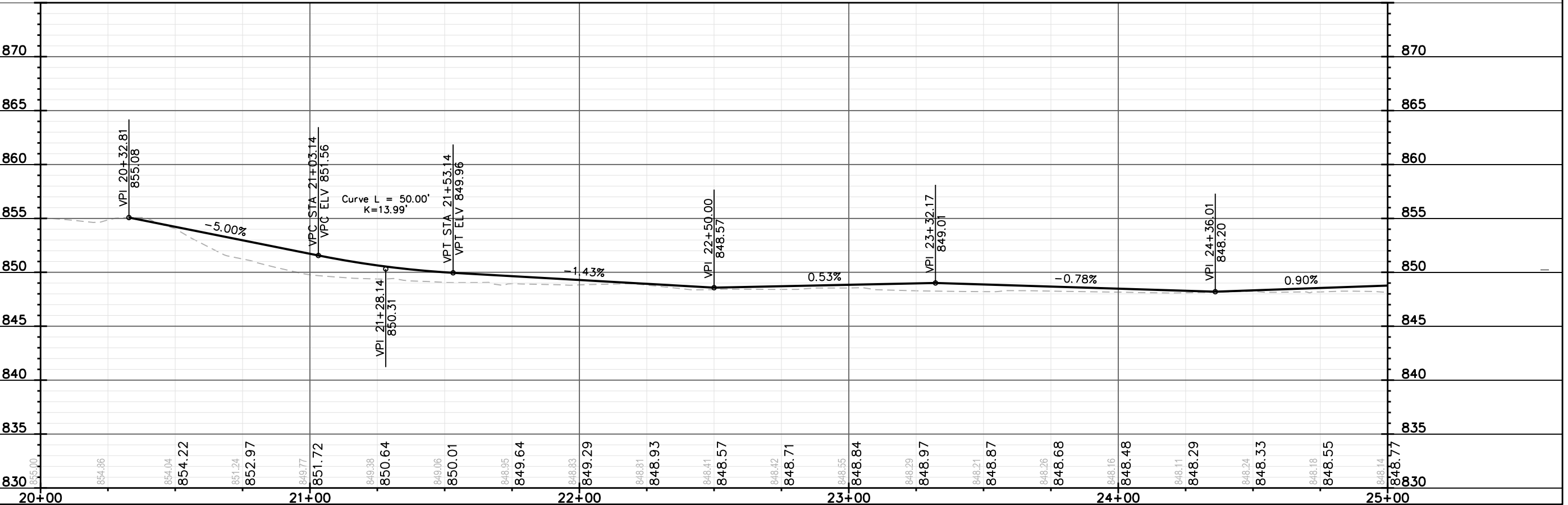
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NOTE: TRANSITION PATH CROSS SLOPE FROM MATCH SIDEWALK (6% TO THE SOUTH AT STA 20+33) TO 2% TOWARD THE NORTH AT STA 21+75.

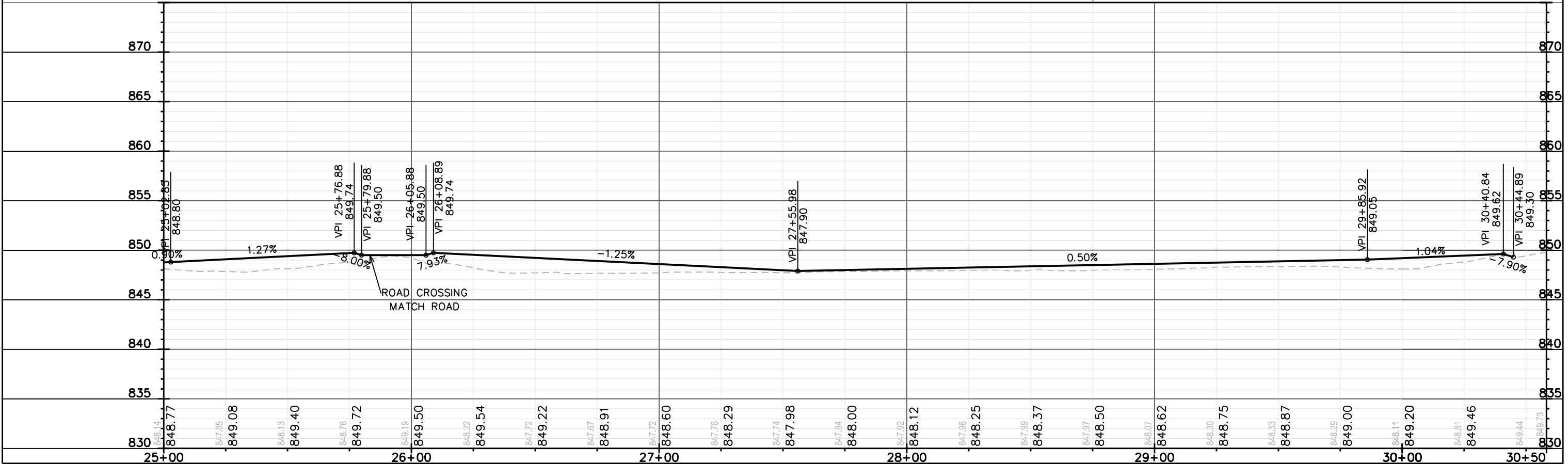
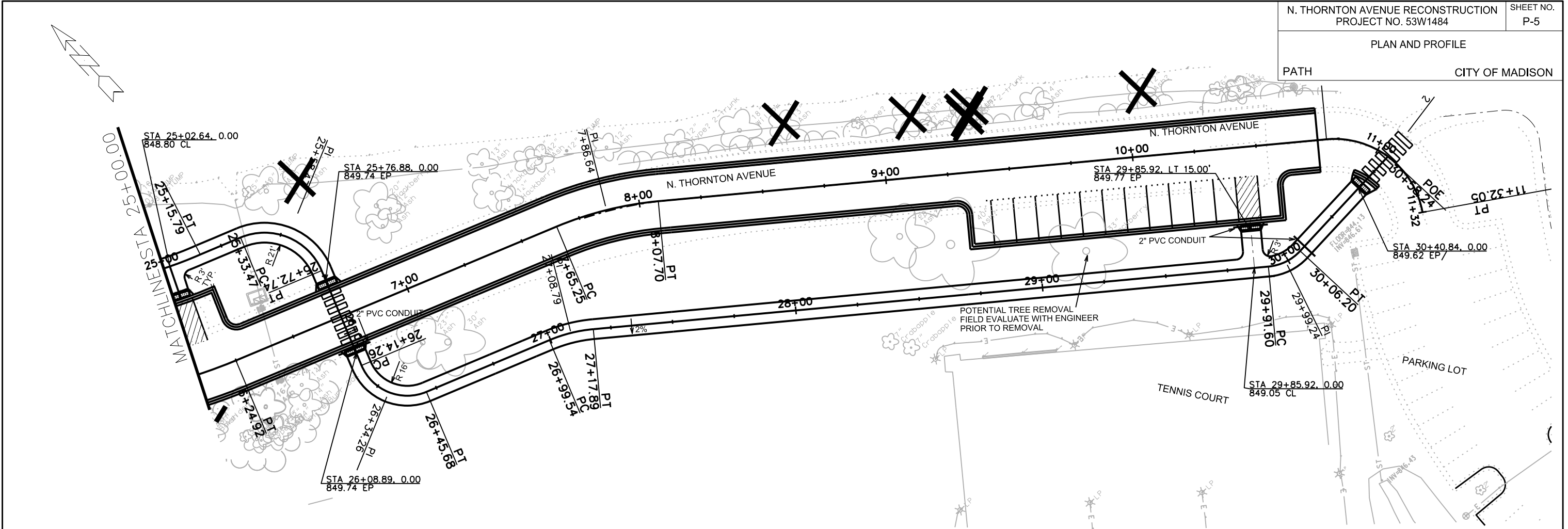


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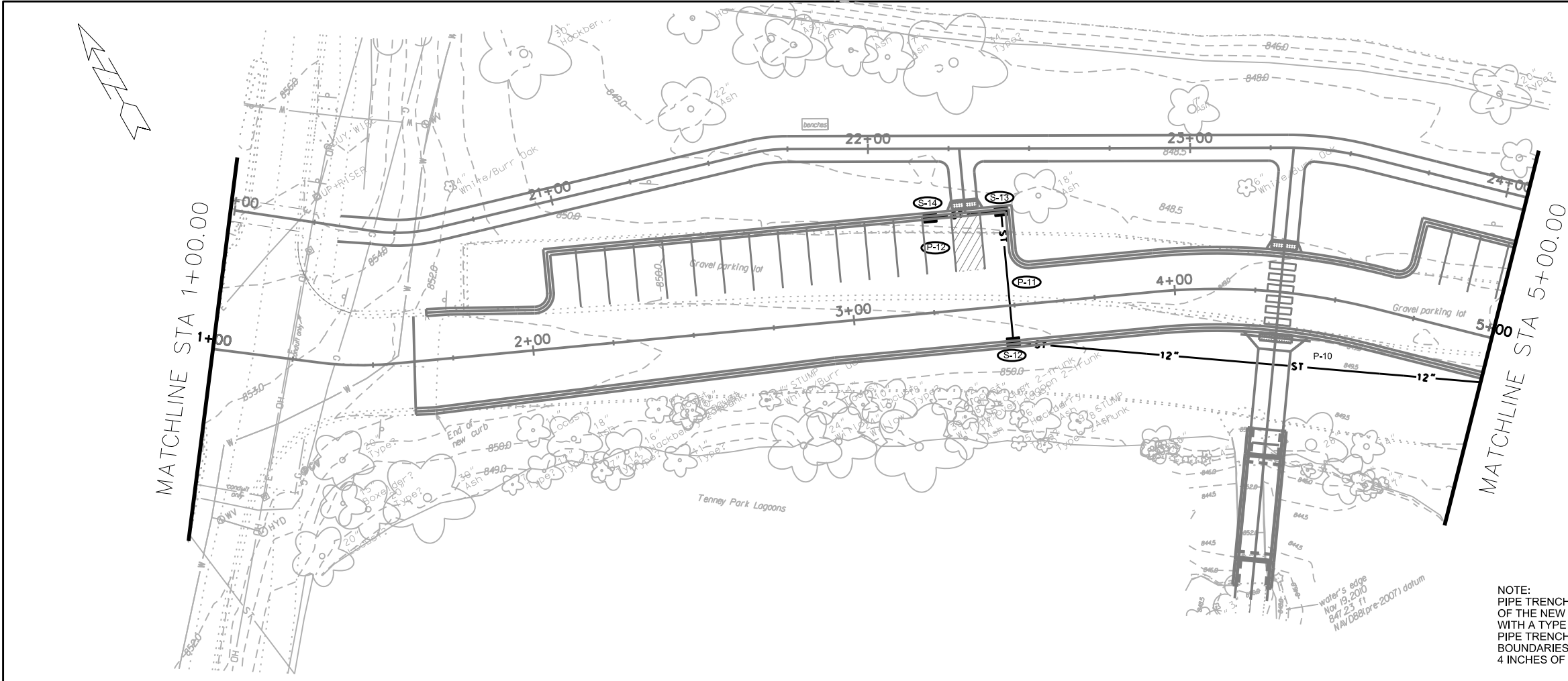


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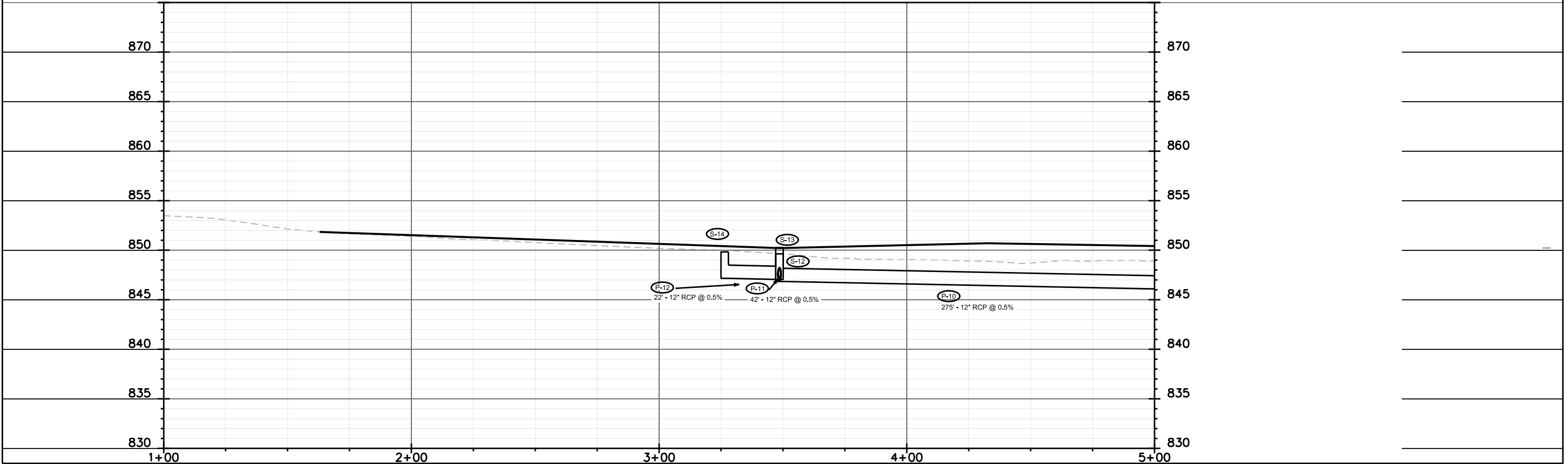
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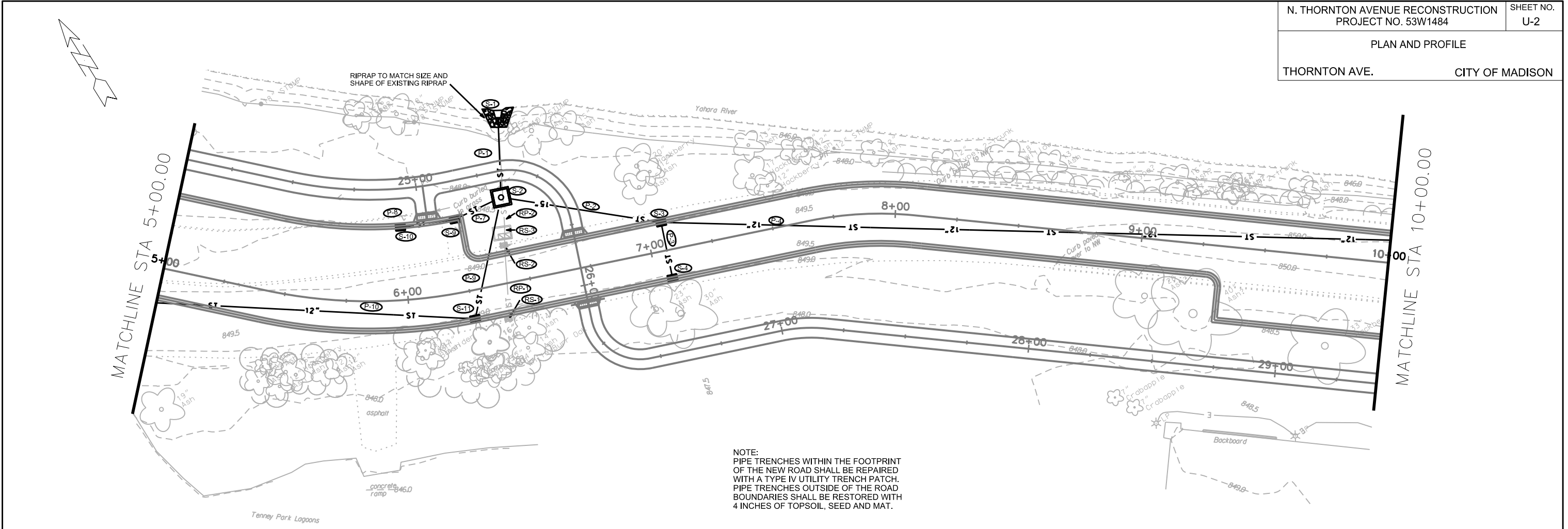
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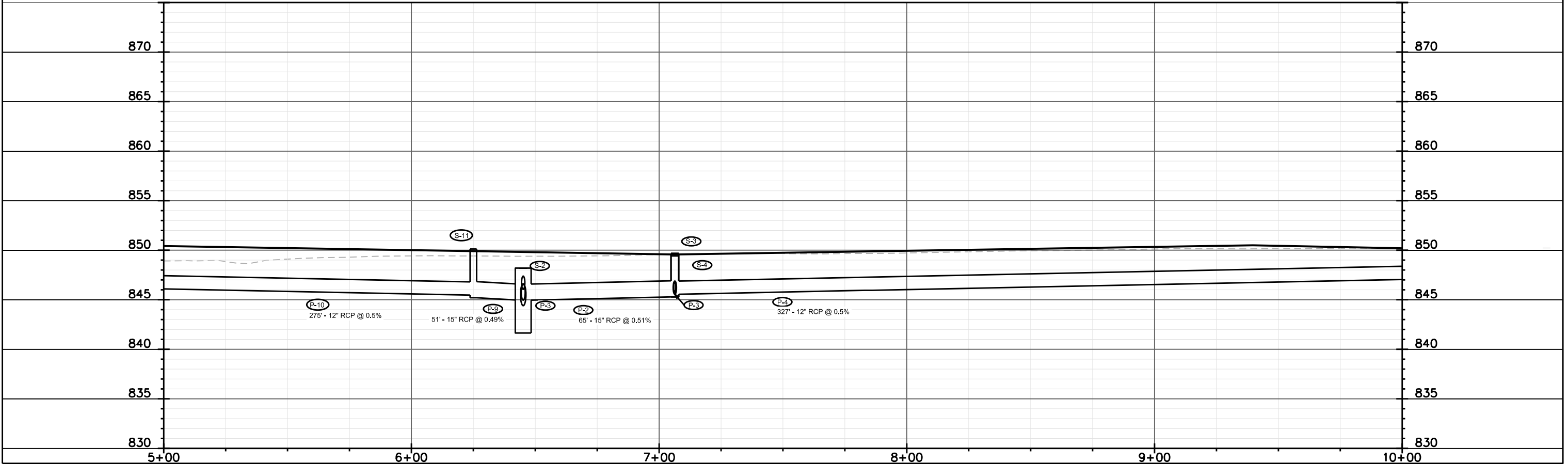
NOTE:
PIPE TRENCHES WITHIN THE FOOTPRINT OF THE NEW ROAD SHALL BE REPAIRED WITH A TYPE IV UTILITY TRENCH PATCH. PIPE TRENCHES OUTSIDE OF THE ROAD BOUNDARIES SHALL BE RESTORED WITH 4 INCHES OF TOPSOIL, SEED AND MAT.



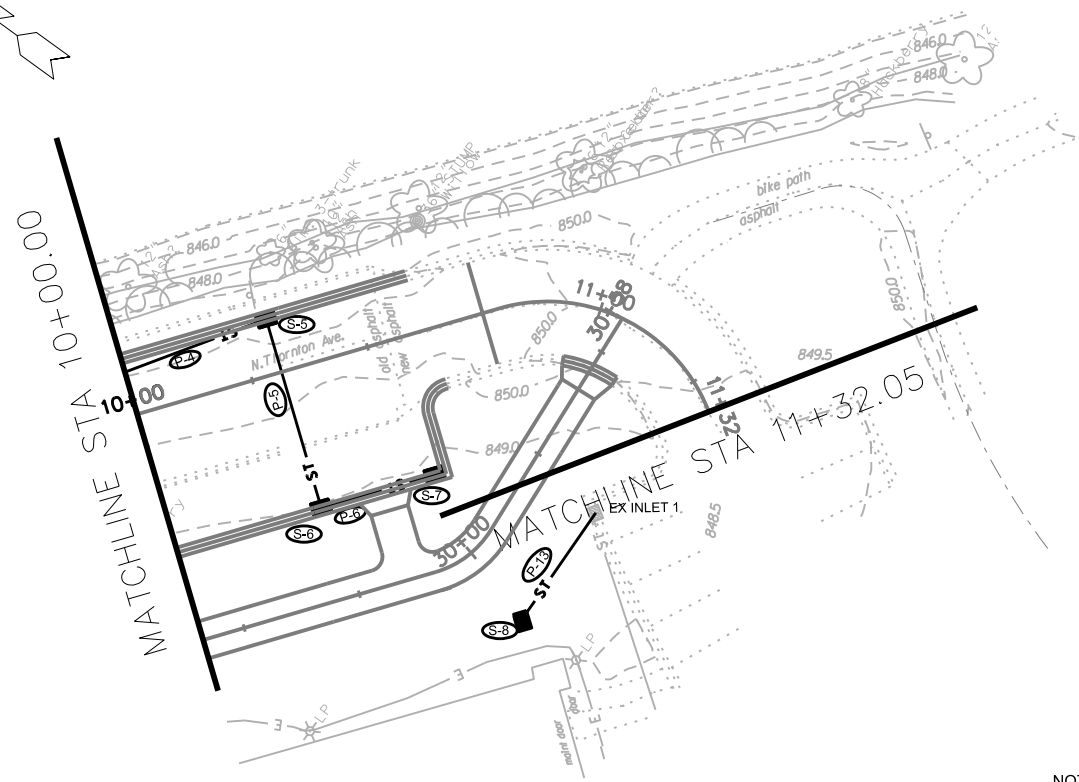
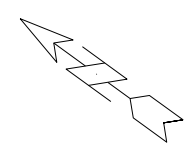
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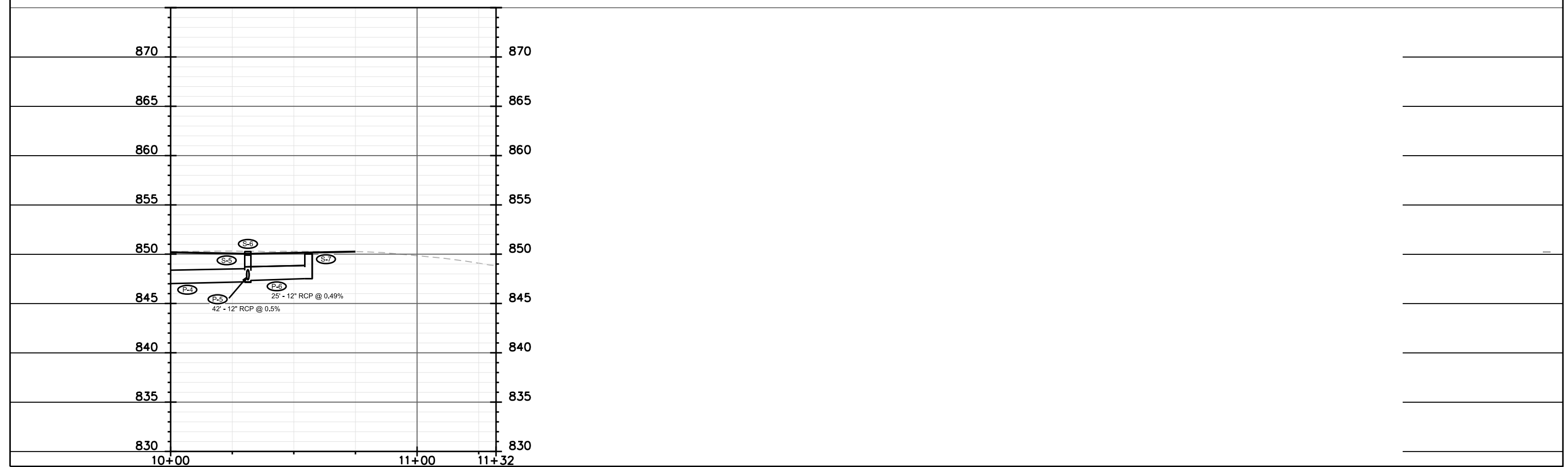
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STORM SEWER SCHEDULE

N. THORNTON AVENUE RECONSTRUCTION		SHEET NO.
PROJECT NO. 53W1484		U-4
STORM SEWER SCHEDULE		
THORNTON AVE.	CITY OF MADISON	

STRUCTURES

STRUC. NO.	STATION	LOCATION (OFFSET)	TYPE	TOP OF CASTING	E.I.	DEPTH	NOTES
S-1	6+50.46	LT-66.17	APRON ENDWALL	--	844.50	--	(1), W/ AE GATE
S-2	6+45.13	LT-34.46	6X6 CATCHBASIN	848.19	844.64	3.55	(2), FP, W/R-1550-0054 x2, S.D.D. 5.7.4
S-3	7+06.35	LT-12.00	H INLET	849.68	845.47	4.21	W/R-3067-7004
S-4	7+06.36	RT-12.00	H INLET	849.79	845.84	3.95	W/R-3067-7004
S-5	10+31.34	LT-12.00	H INLET	850.26	847.36	2.90	FP, W/R-3067-7004
S-6	10+31.34	RT-30.00	H INLET	849.90	847.57	2.33	FP, W/R-3067-7004
S-7	10+55.96	RT-30.00	H INLET	850.02	847.69	2.33	FP, W/R-3067-7004-V
S-8	10+65.00	RT-63.91	H INLET	848.00	846.66	1.34	FP, W/R-1878-B7G
S-9	6+25.00	LT-30.00	H INLET	849.76	846.41	3.35	W/R-3067-7004-V
S-10	5+99.02	LT-30.00	H INLET	849.87	846.63	3.24	W/R-3067-7004
S-11	6+25.00	RT-12.00	H INLET	850.12	845.39	4.73	W/R-3067-7004-V
S-12	3+48.60	RT-12.00	H INLET	850.26	847.01	3.25	W/R-3067-7004
S-13	3+48.60	LT-30.00	H INLET	849.63	847.22	2.41	FP, W/R-3067-7004
S-14	3+26.48	LT-30.00	H INLET	849.83	847.33	2.50	FP, W/R-3067-7004-V

PIPES

PIPE NO.	FROM (DNSTM)	TO (UPSTM)	LGTH (FT)	DISCH. E.I.	INLET E.I.	SLOPE (%)	PIPE SIZE	TYPE	NOTES
P-1	S-1	S-2	32.22	844.50	844.64	0.43%	21"	RCP	(1)
P-2	S-2	S-3	65.21	845.14	845.47	0.51%	15"	RCP	
P-3	S-3	S-4	24.00	845.72	845.84	0.50%	12"	RCP	
P-4	S-3	S-5	326.80	845.72	847.36	0.50%	12"	RCP	
P-5	S-5	S-6	42.00	847.36	847.57	0.50%	12"	RCP	
P-6	S-6	S-7	24.62	847.57	847.69	0.49%	12"	RCP	
P-7	S-2	S-9	20.62	846.20	846.41	1.02%	12"	RCP	NCM
P-8	S-9	S-10	22.17	846.41	846.63	0.99%	12"	RCP	
P-9	S-2	S-11	50.64	845.14	845.39	0.49%	15"	RCP	
P-10	S-11	S-12	274.50	845.64	847.01	0.50%	12"	RCP	
P-11	S-12	S-13	42.00	847.01	847.22	0.50%	12"	RCP	
P-12	S-13	S-14	22.12	847.22	847.33	0.50%	12"	RCP	
P-13	S-8	EX INLET 1	26.74	846.61	846.66	0.19%	8"	NON-METALLIC PIPE, STORM TAP	

STRUCTURE REMOVALS

STRUC. NO.	STATION	LOCATION (OFFSET)	TYPE	TOP OF CASTING	E.I.	DEPTH	NOTES
RS-1	6+38.20	RT-14.11	TUB INLET	848.89	845.97	2.92	
RS-2	6+42.33	LT-15.23	TUB INLET	848.94	844.97	3.97	
RS-3	6+42.68	LT-20.80	6X4 STRUCTURE	848.89	844.98	3.91	

PIPE REMOVALS

PIPE NO.	FROM (DNSTM)	TO (UPSTM)	LGTH (FT)	PAID (Y/N)
RP-1	RS-2	RS-1	35	Y
RP-2	OUTLET	RS-2	39	N

SPECIFIC NOTES

- (1) STATIONING DENOTES OUTLET INVERT OF 21" PIPE (JUNCTION OF PIPE AND APRON ENDWALL)
- (2) 3' SUMP BELOW LISTED INVERT

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
- 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 SALLY SWENSON OF CITY ENGINEERING AT (608) 266-4862 FOR PRECAST APPROVALS, OR FAX SHOP DRAWINGS TO (608)264-9275.



PLOT SCALE:

PLOT NAME:

REV. DATE:

ORIGINATOR: CITY OF MADISON, TRAFFIC ENG. DIV.

CROSS SECTIONS

THORNTON AVE

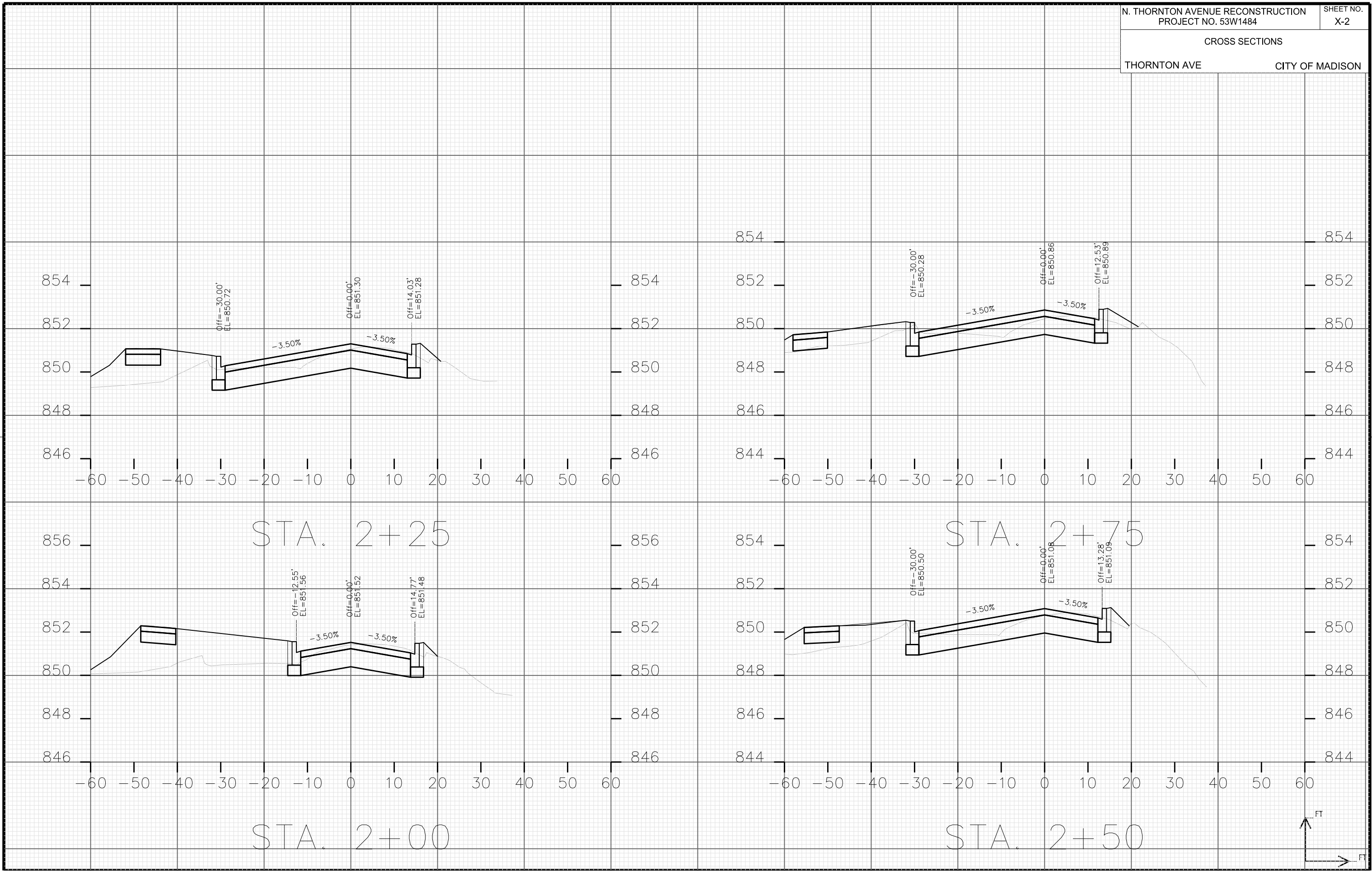
CITY OF MADISON

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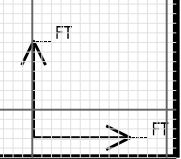
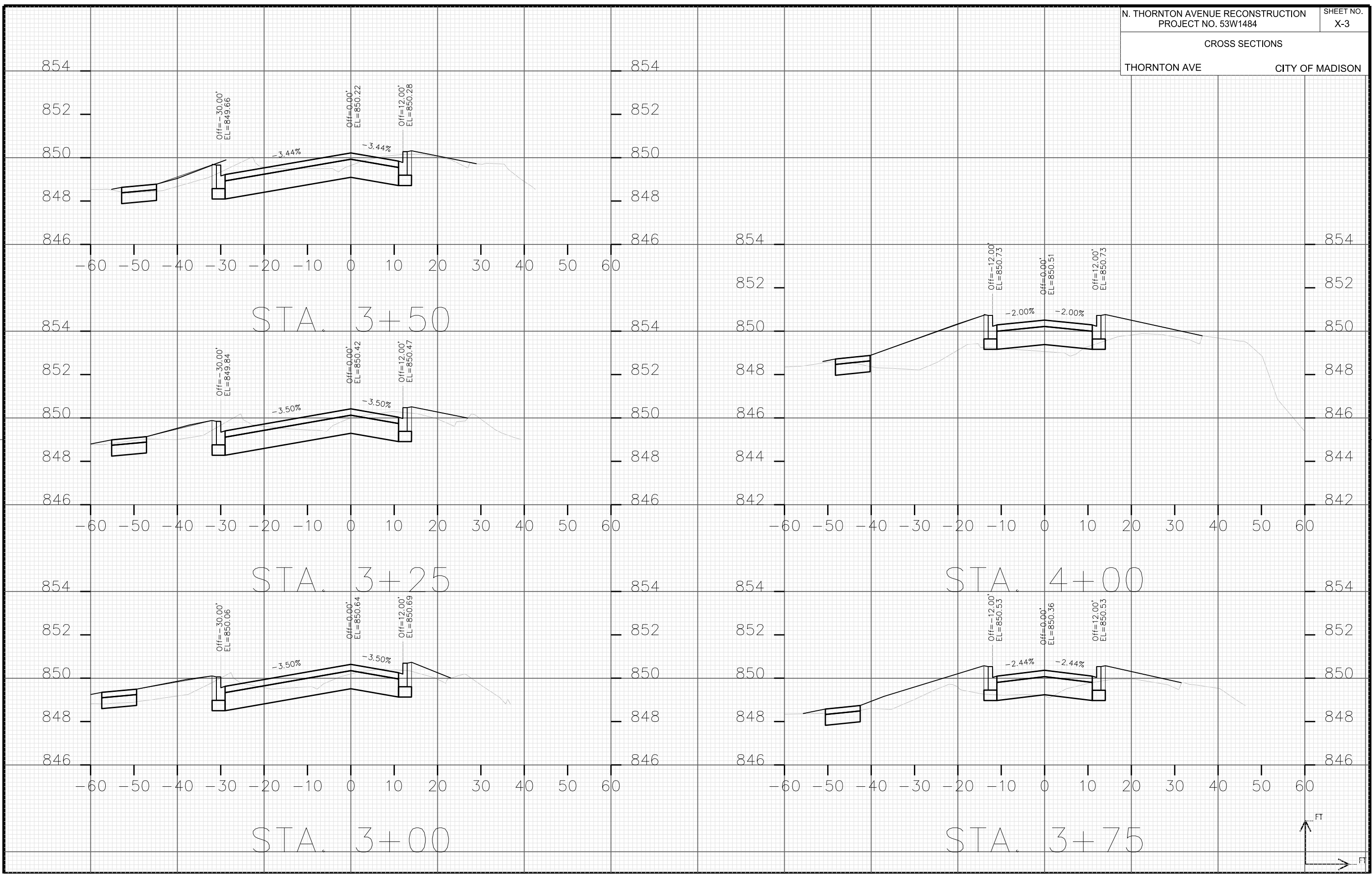


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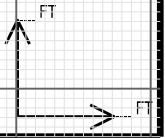
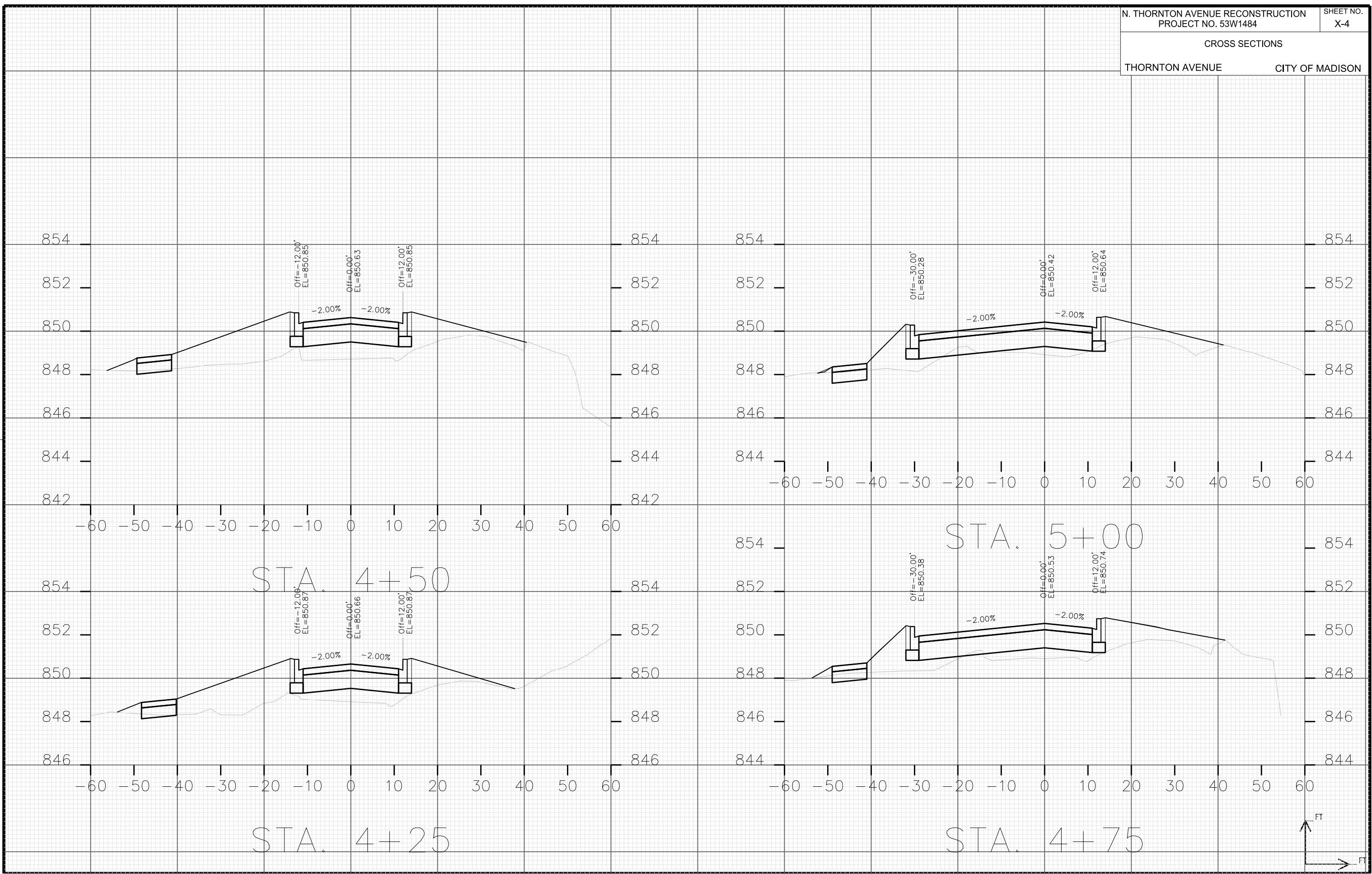


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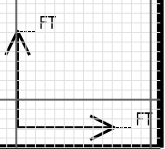
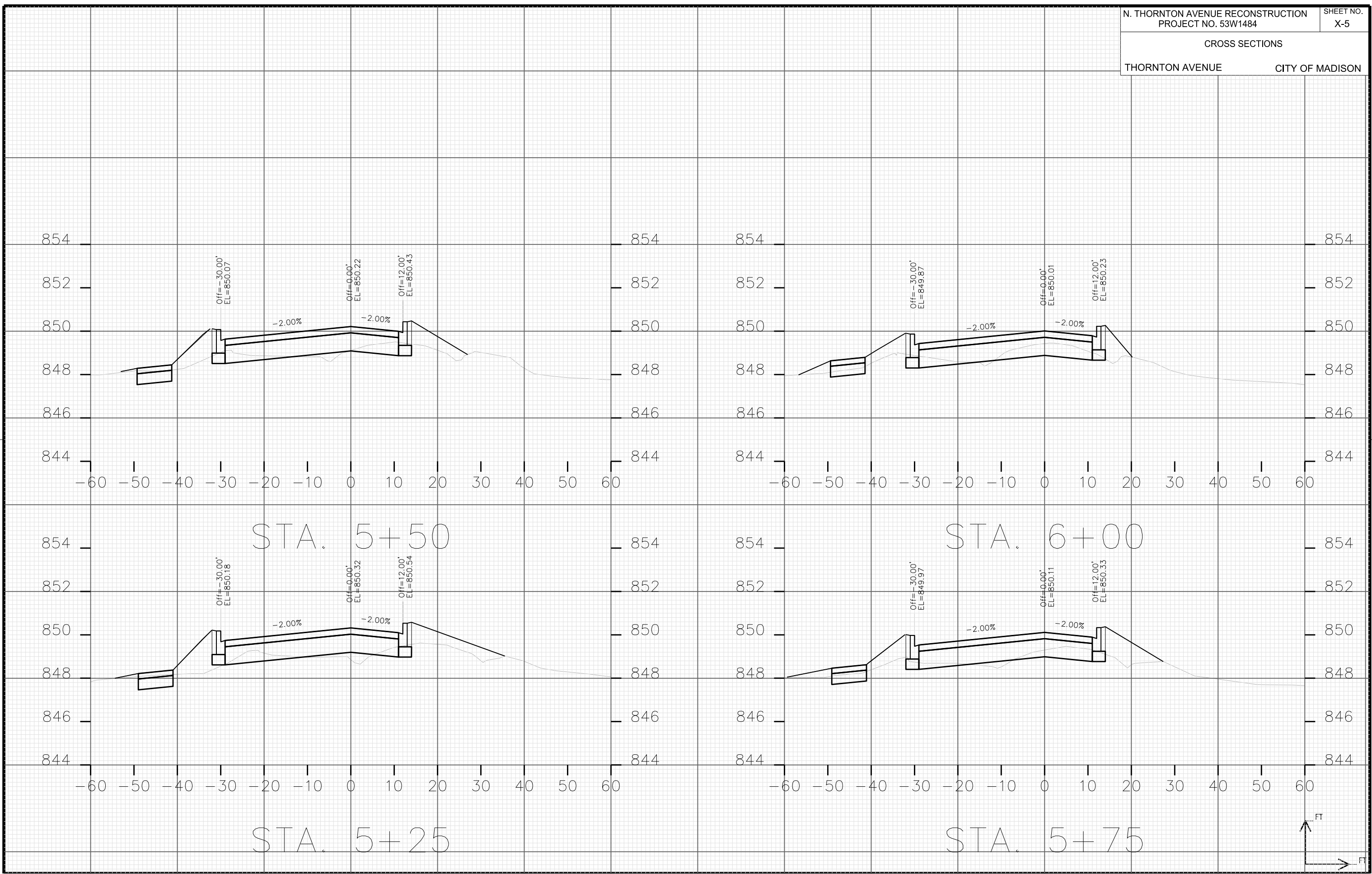


CROSS SECTIONS
THORNTON AVENUE CITY OF MADISON

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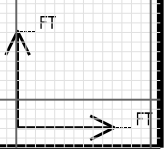
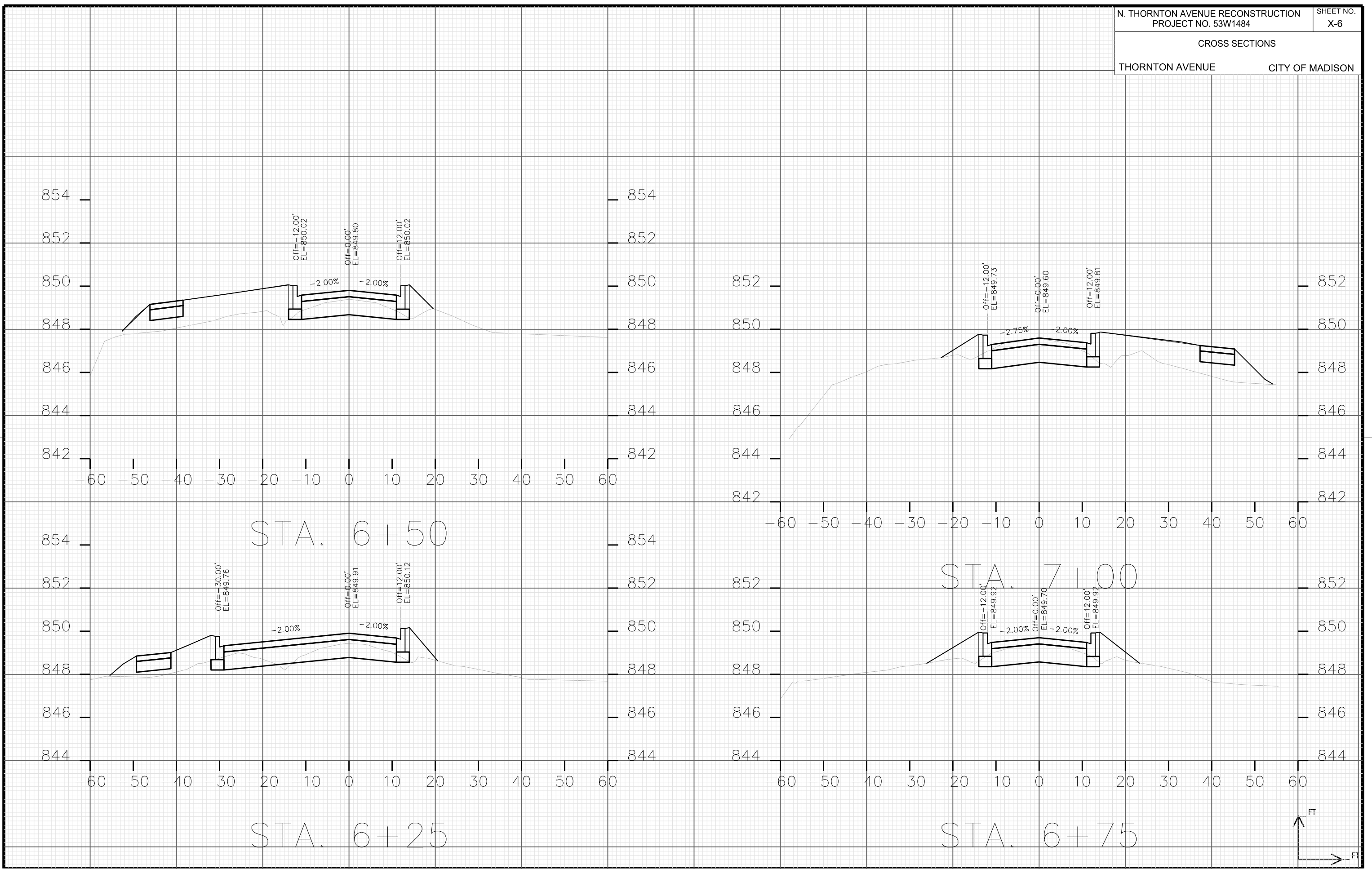
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PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

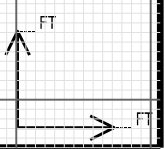
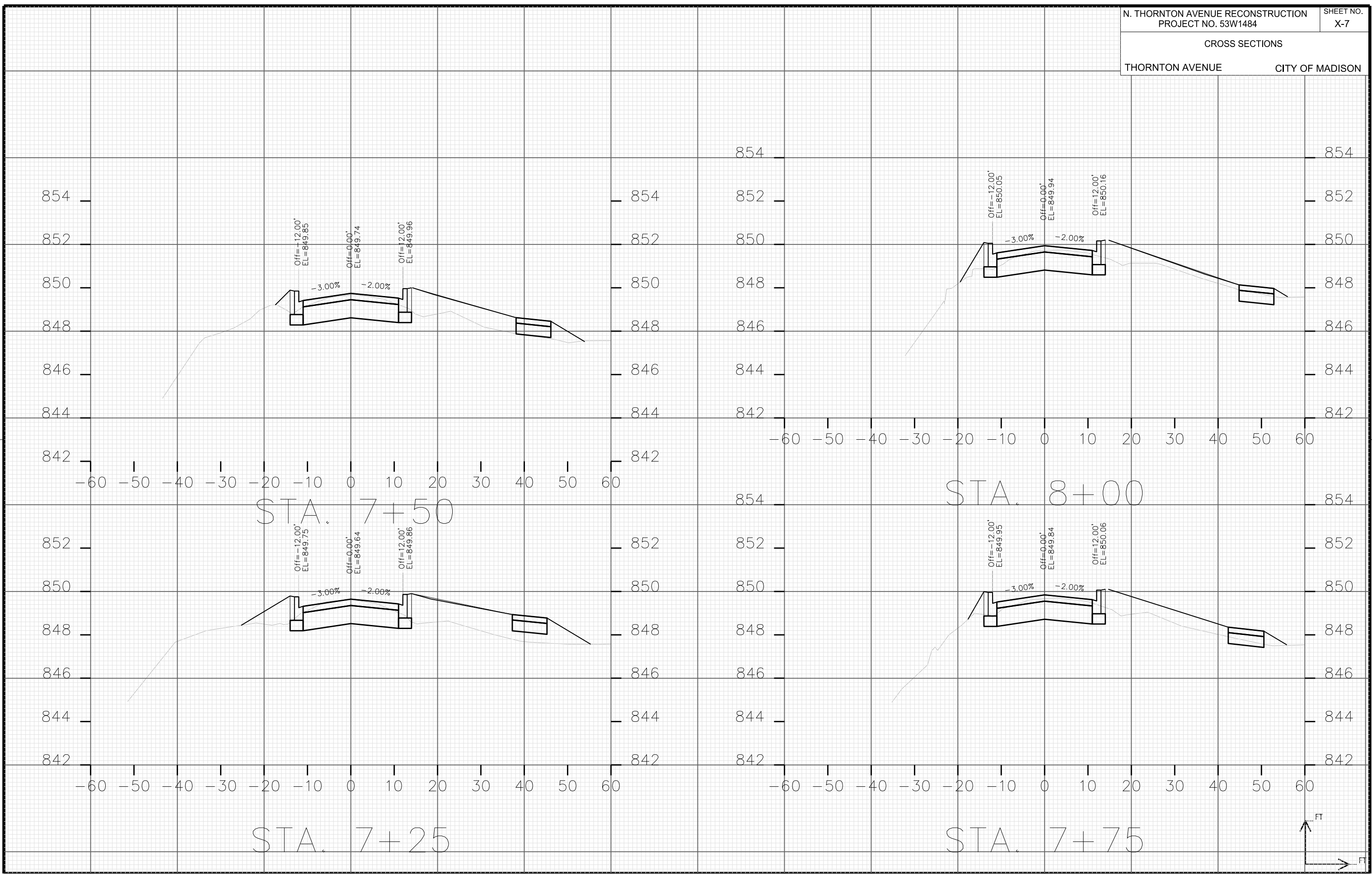


CROSS SECTIONS
THORNTON AVENUE CITY OF MADISON

PLOT SCALE: _____
PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



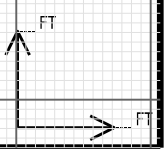
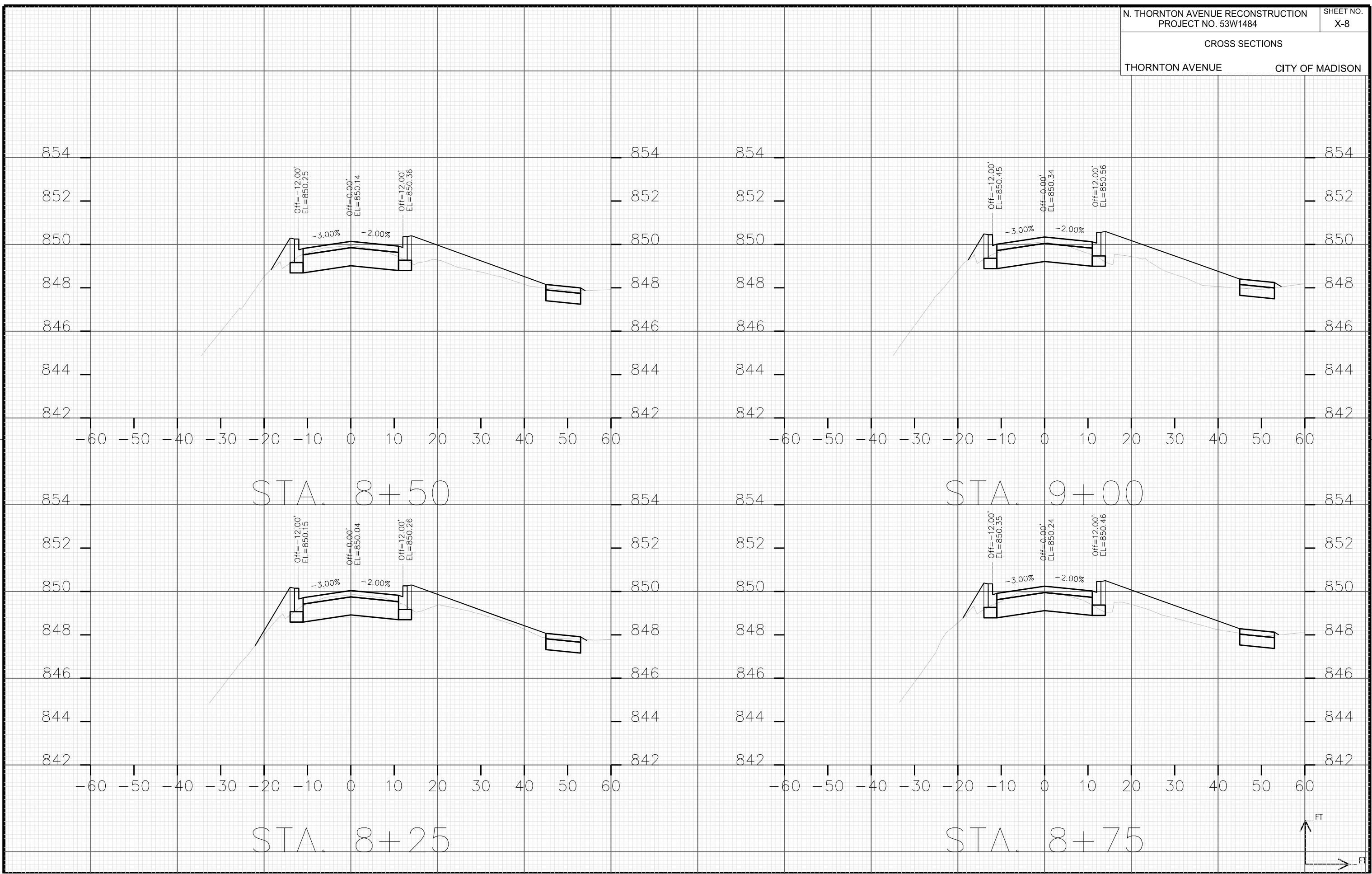
CROSS SECTIONS

THORNTON AVENUE CITY OF MADISON

PLOT SCALE: _____
PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



CROSS SECTIONS

THORNTON AVENUE

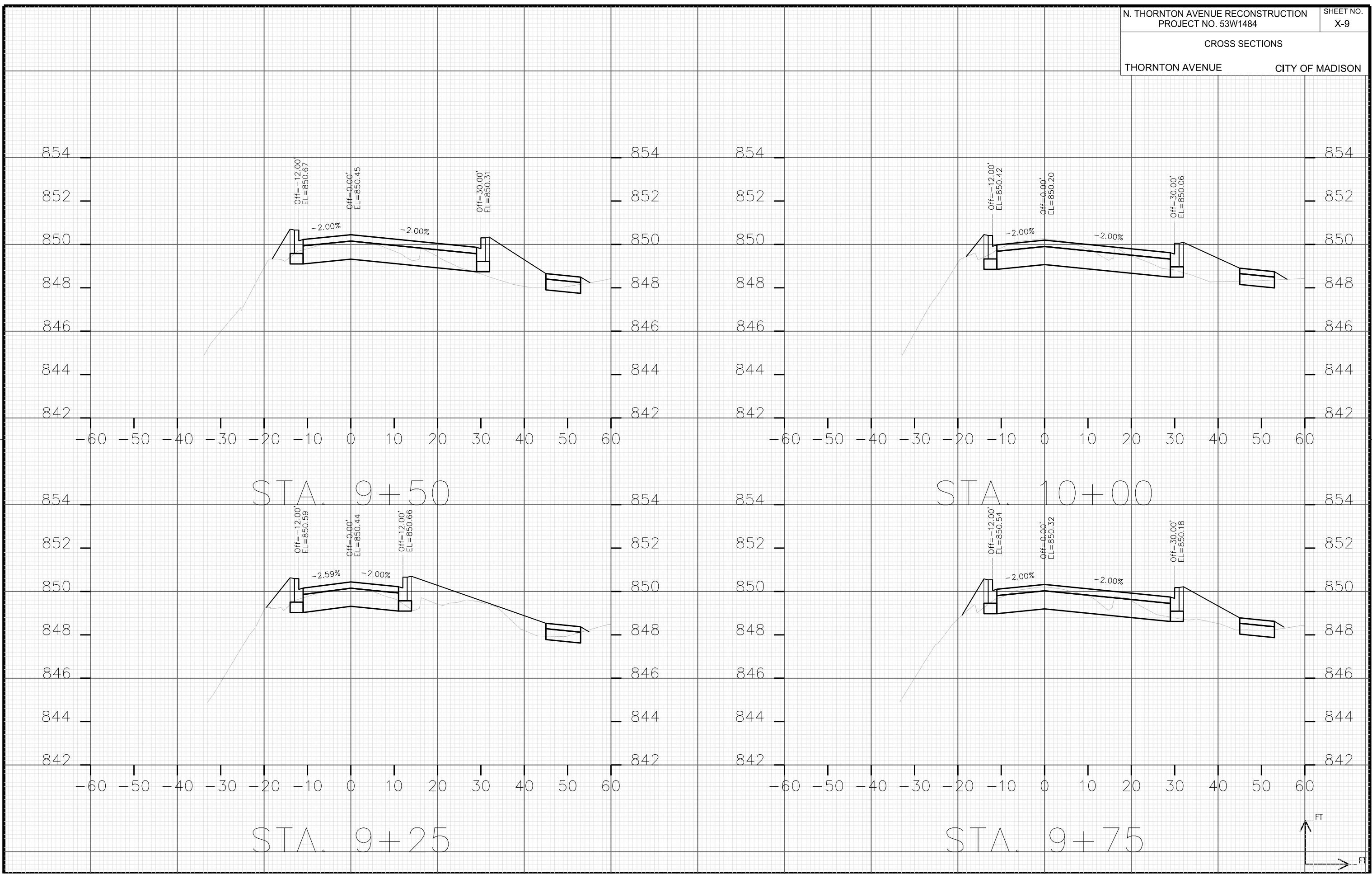
CITY OF MADISON

PLOT SCALE: _____

PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



CROSS SECTIONS
THORNTON AVENUE CITY OF MADISON

PLOT SCALE: _____
PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

