

Madison, Wisconsin

# CITY OF MADISON

## CITY ENGINEERING DIVISION

### DEPARTMENT OF PUBLIC WORKS

# PLAN OF PROPOSED IMPROVEMENT

PUBLIC IMPROVEMENT PROJECT APPROVED

September 4, 2018

BY THE COMMON COUNCIL OF MADISON, WISCONSIN

PUBLIC IMPROVEMENT DESIGN APPROVED BY:

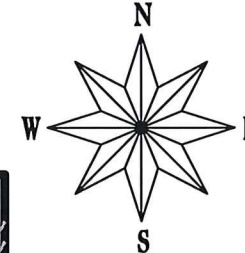
*[Signature]* 12/5/18  
City Engineer Date

#### INDEX OF SHEETS

SHEET NO.	TITLE
1	1
D-1	DETAIL
EC1-EC4	EROSION CONTROL
P1-P4	PLAN & PROFILE
U1-U4	SEWER PLAN & PROFILE
U5	SEWER SCHEDULES
PM1-PM2	PAVEMENT MARKING

## DARWIN ROAD RESURFACING WITH UTILITIES ASSESSMENT DISTRICT - 2019

CITY PROJECT NO. 11746  
8124

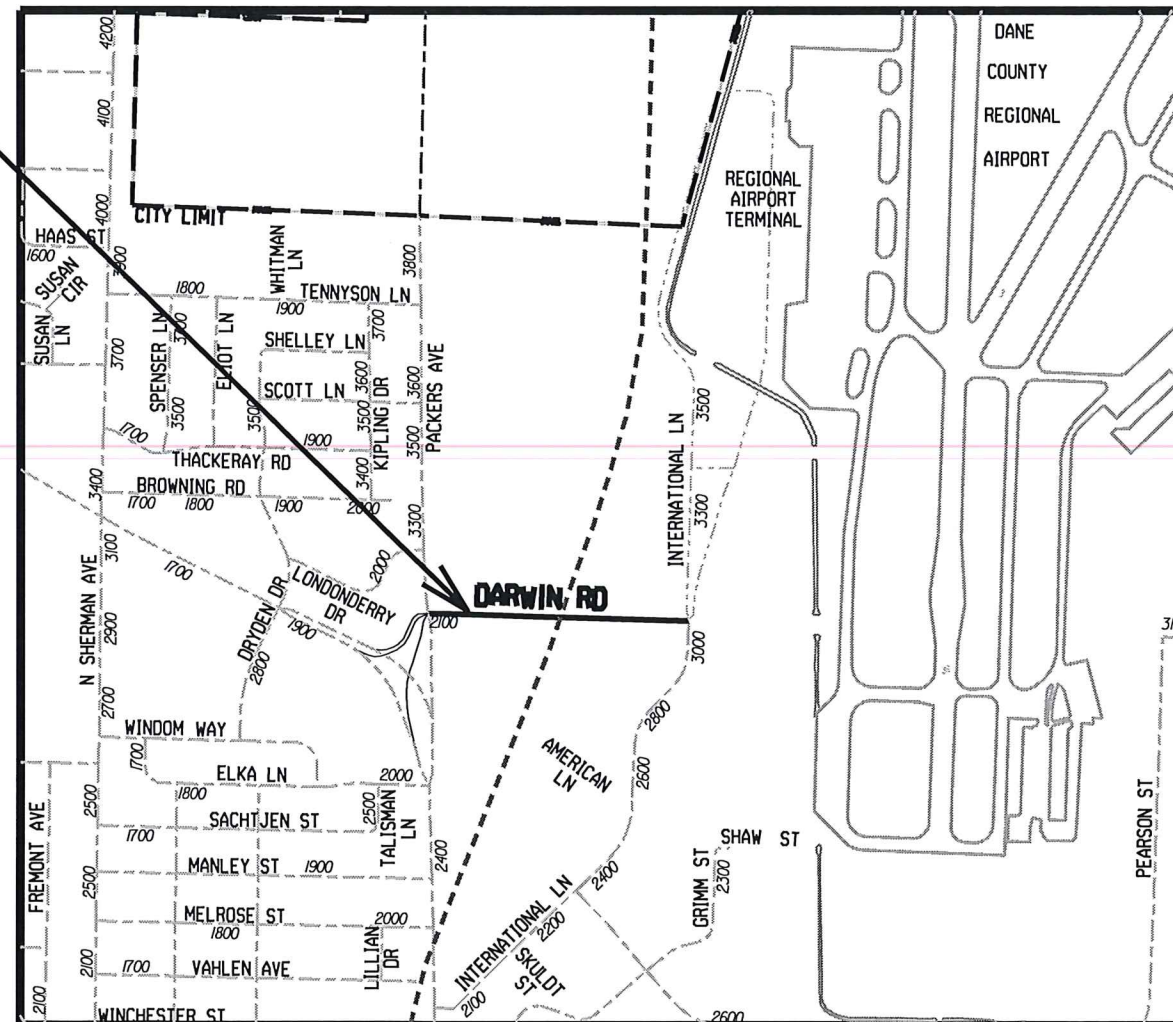


### CONSTRUCTION PROJECT LOCATION

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	■

**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 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:**  
 ESTIMATED UNDISTRIBUTED UNDERCUT..... 450.00 C.Y.  
 TOTAL UNCLASSIFIED EXCAVATION CUT..... 450.00 C.Y.

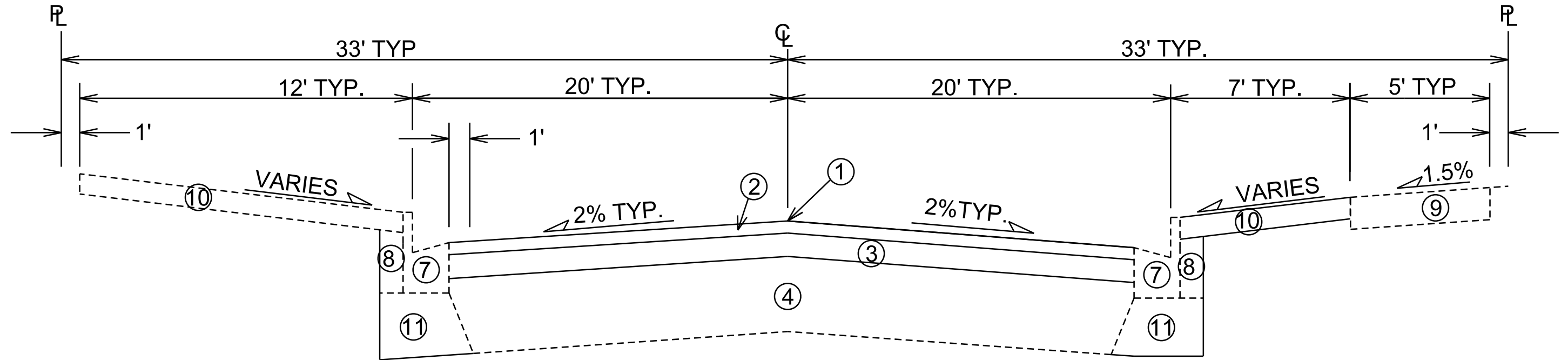


STREET DESIGNED BY:  
  
 STEVEN M. SONNTAG  
 E-38891  
 MADISON, WI  
 12/4/2018

SANITARY SEWER DESIGNED BY:  
  
 MARK D. MODER  
 E-33979  
 MADISON, WI  
 12/4/18

STORM SEWER DESIGNED BY:  
  
 JANET SCHMIDT  
 E-34681  
 MADISON, WI  
 12-5-18

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



TYPICAL SECTION  
DARWIN ROAD

- ① POINT REFERRED TO ON PROFILE
- ② 2.0" BITUMINOUS UPPER LAYER, 4 LT 58-28 S
- ③ 2.5" BITUMINOUS LOWER LAYER, 3 LT 58-28 S
- ④ PULVERIZED ASPAHLT AND EXISTING BASE
- ⑦ REMOVE & REPLACE CONCRETE CURB & GUTTER AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER
- ⑧ FILL, INCIDENTAL WHERE CURB IS REPLACED
- ⑨ 5" CONCRETE SIDEWALK, REMOVE & REPLACE AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER
- ⑩ RESTORE DISTURBED AREAS W/ 6" TOPSOIL, SEED & MAT
- ⑪ 4" MIN GRADATION 2 CRUSHED AGGREGATE AS NECESSARY FOR CURB REPLACEMENT

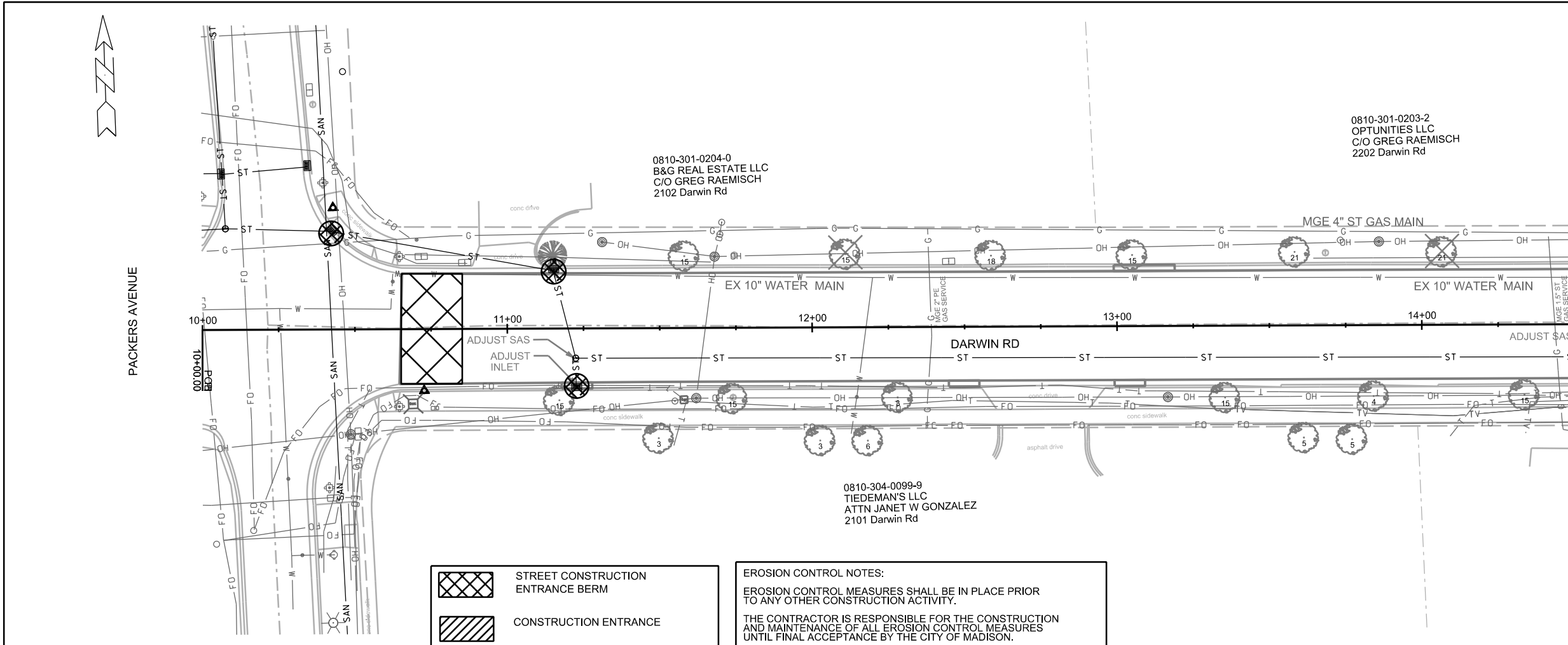
TYPICAL SECTION NOT TO SCALE

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

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- STREET CONSTRUCTION ENTRANCE BERM
- CONSTRUCTION ENTRANCE
- TYPE D HYBRID INLET PROTECTION
- TYPE C INLET PROTECTION
- SILT SOCK (VELOCITY CHECK)
- STREET CONSTRUCTION STONE BERM

**EROSION CONTROL NOTES:**

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

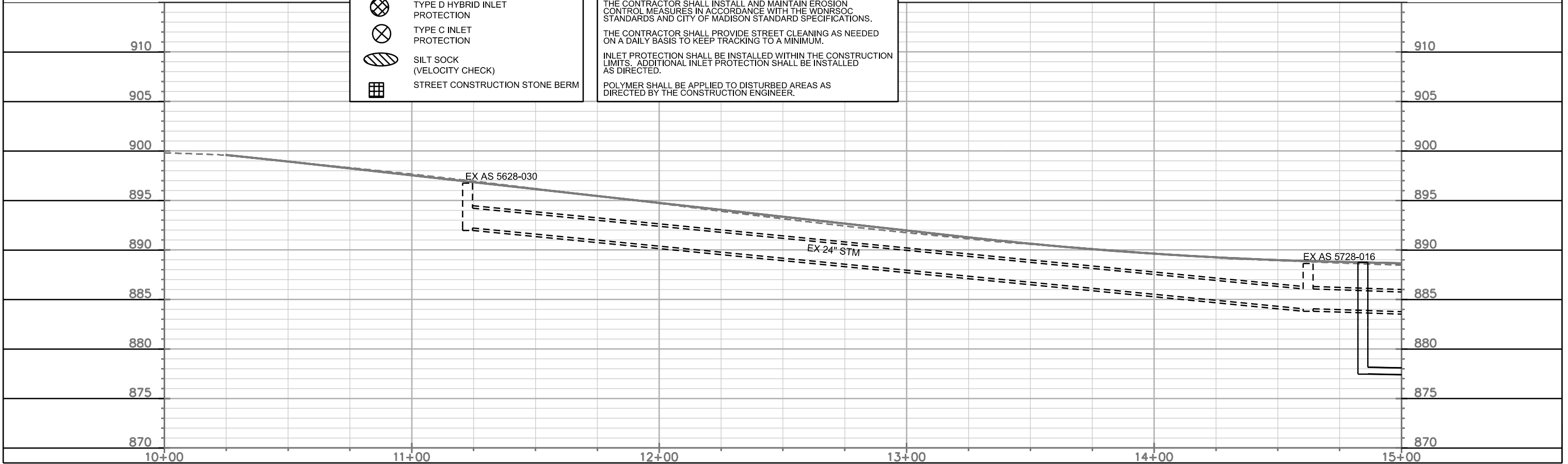
THE CONTRACTOR IS RESPONSIBLE FOR THE CONSTRUCTION AND MAINTENANCE OF ALL EROSION CONTROL MEASURES UNTIL FINAL ACCEPTANCE BY THE CITY OF MADISON.

THE CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE WDMRSOC 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.

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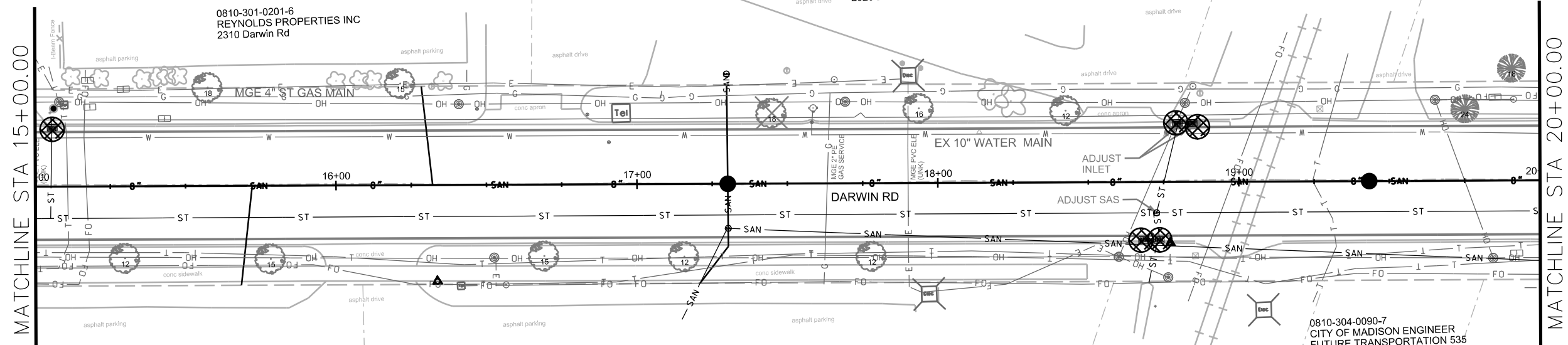


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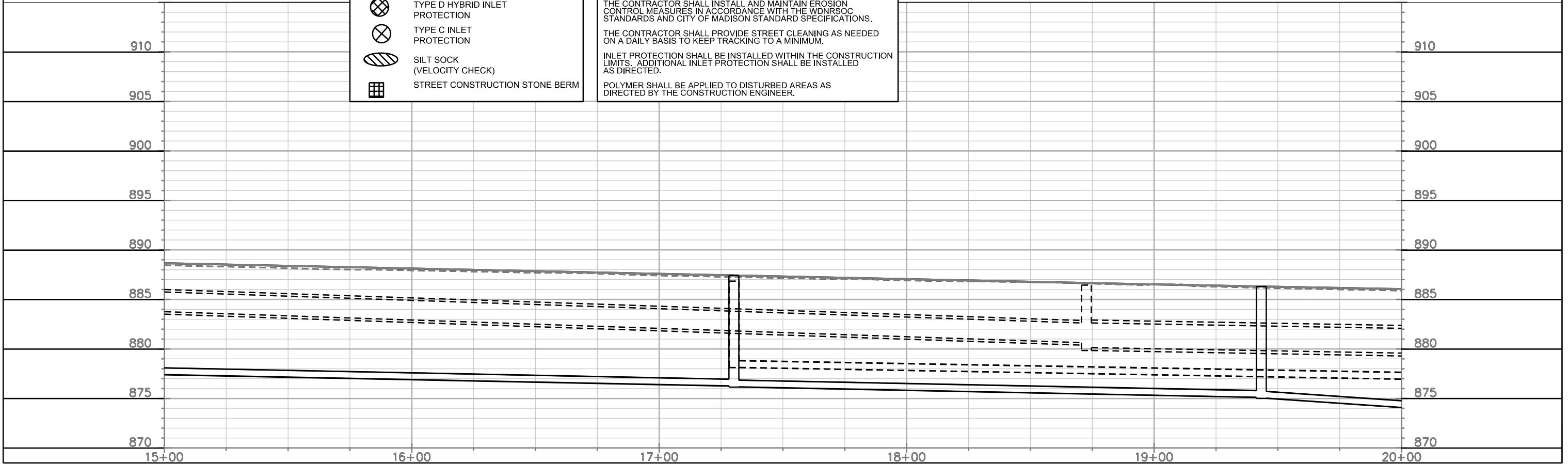
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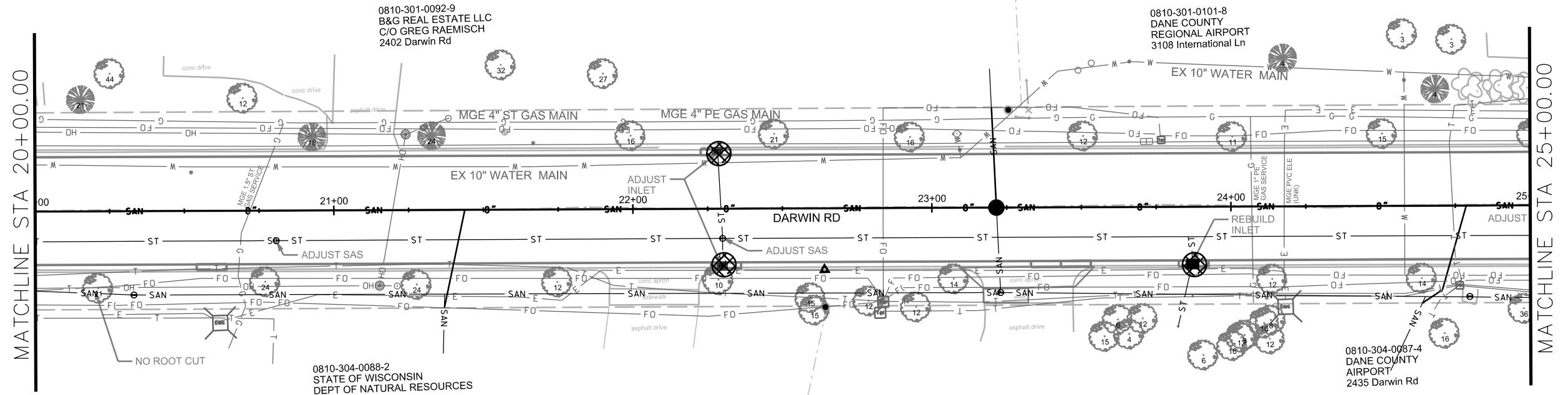








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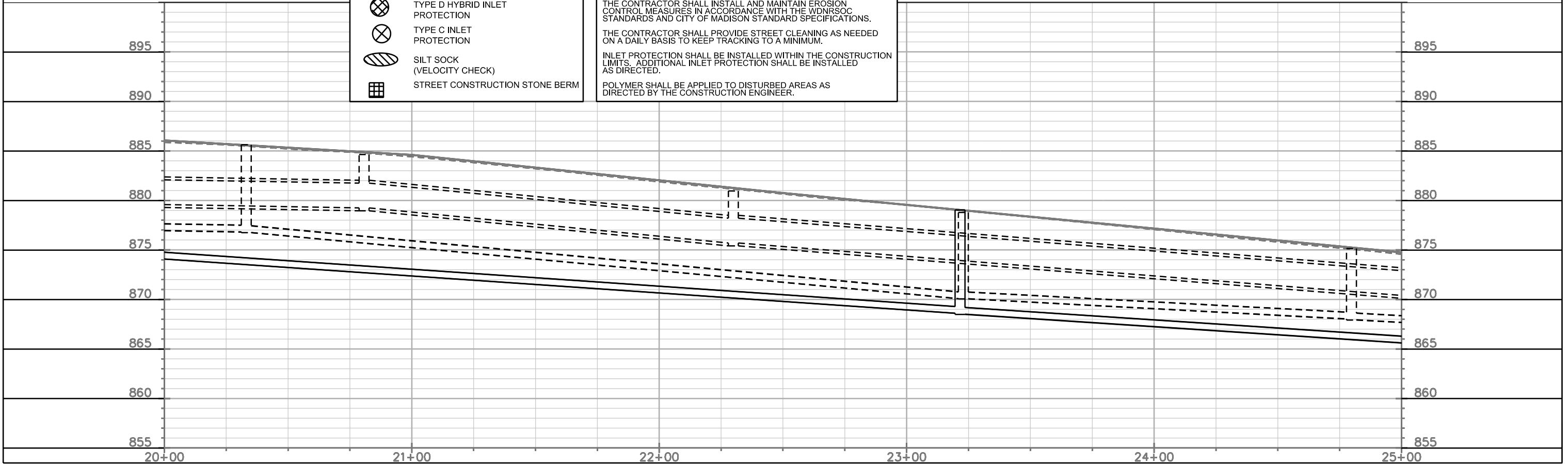
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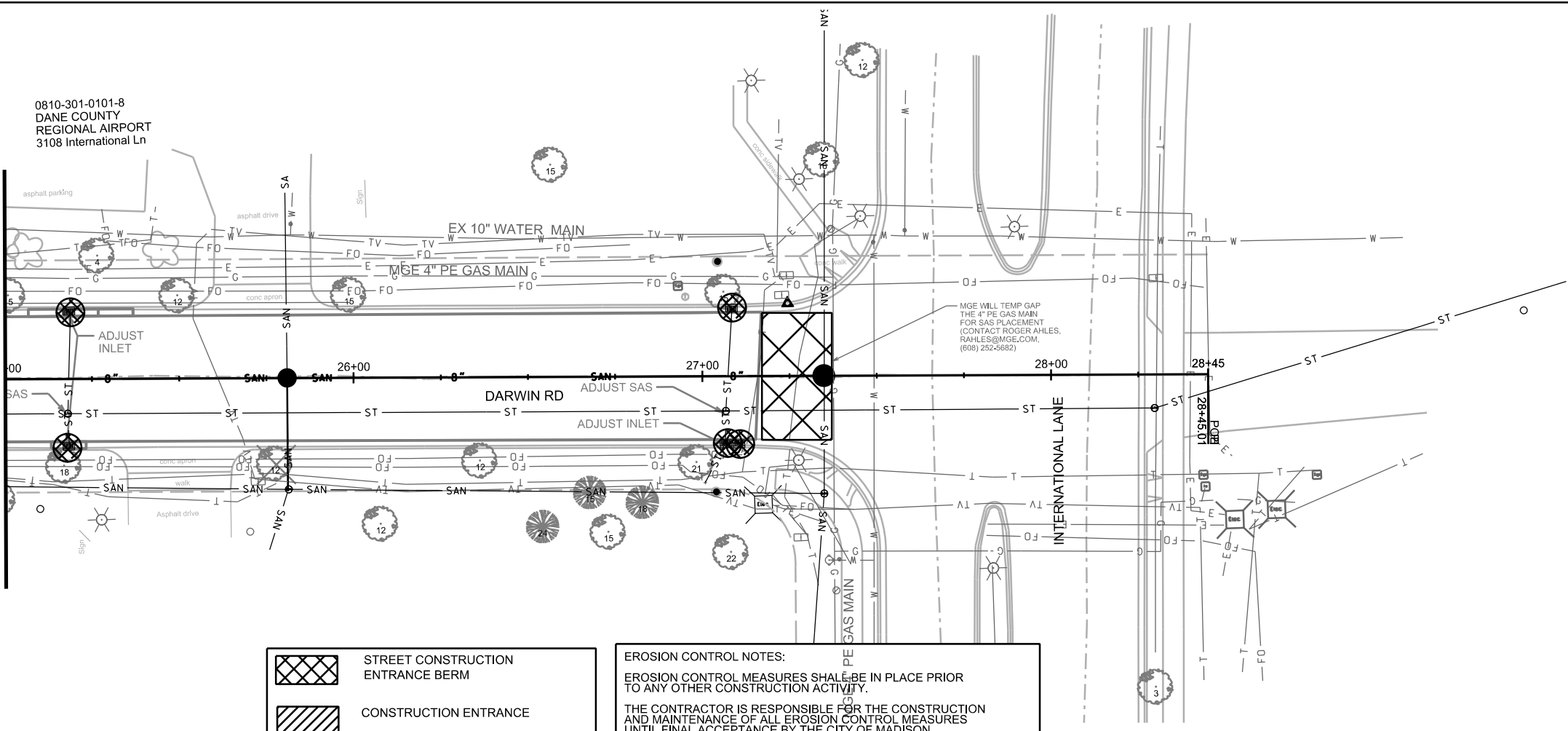
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




ORIGINATOR: CITY OF MADISON, STREETS DIVISION

0810-301-0101-8  
DANE COUNTY  
REGIONAL AIRPORT  
3108 International Ln

MATCHLINE STA 25+00.00



MGE WILL TEMP GAP  
THE 4" PE GAS MAIN  
FOR SAS PLACEMENT  
(CONTACT ROGER AHLES,  
RAHLES@MGE.COM,  
(608) 252-5682)

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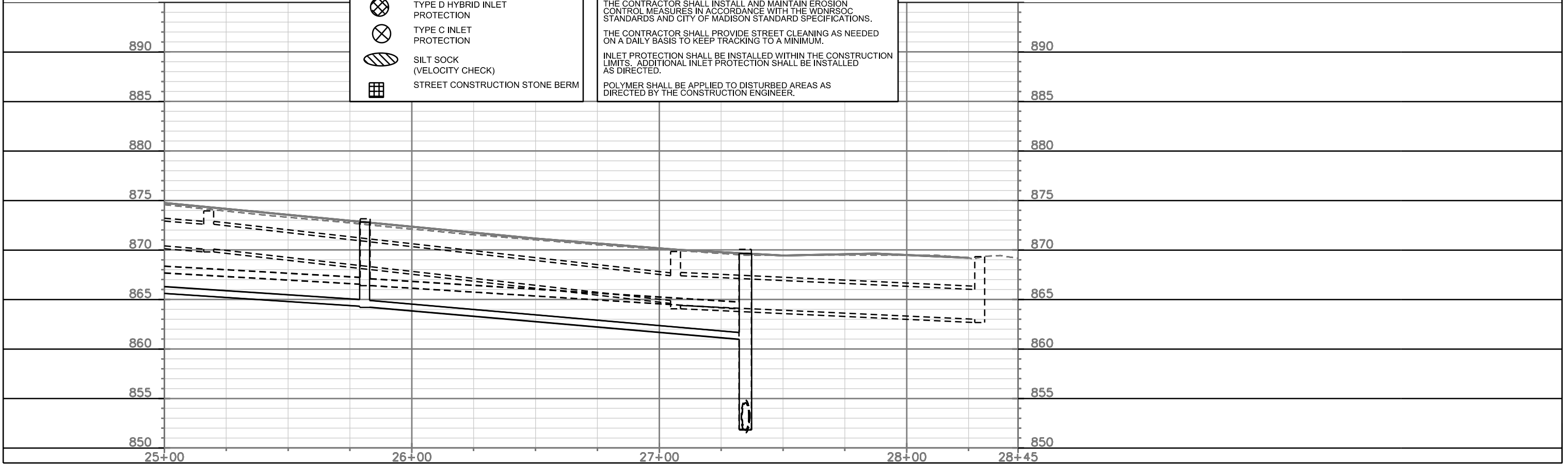
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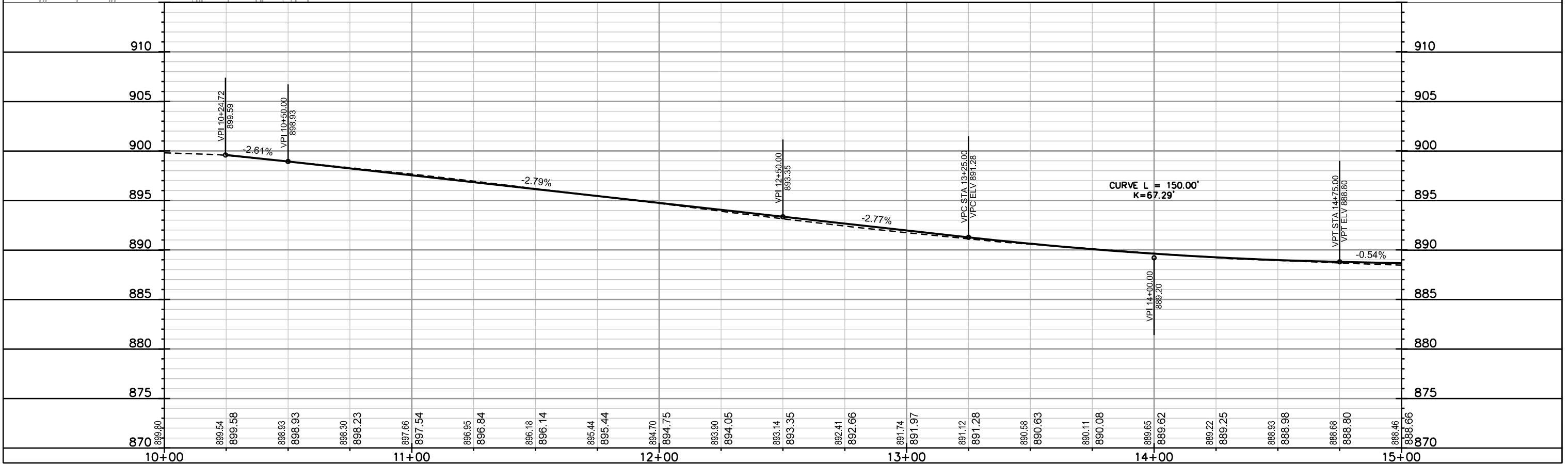
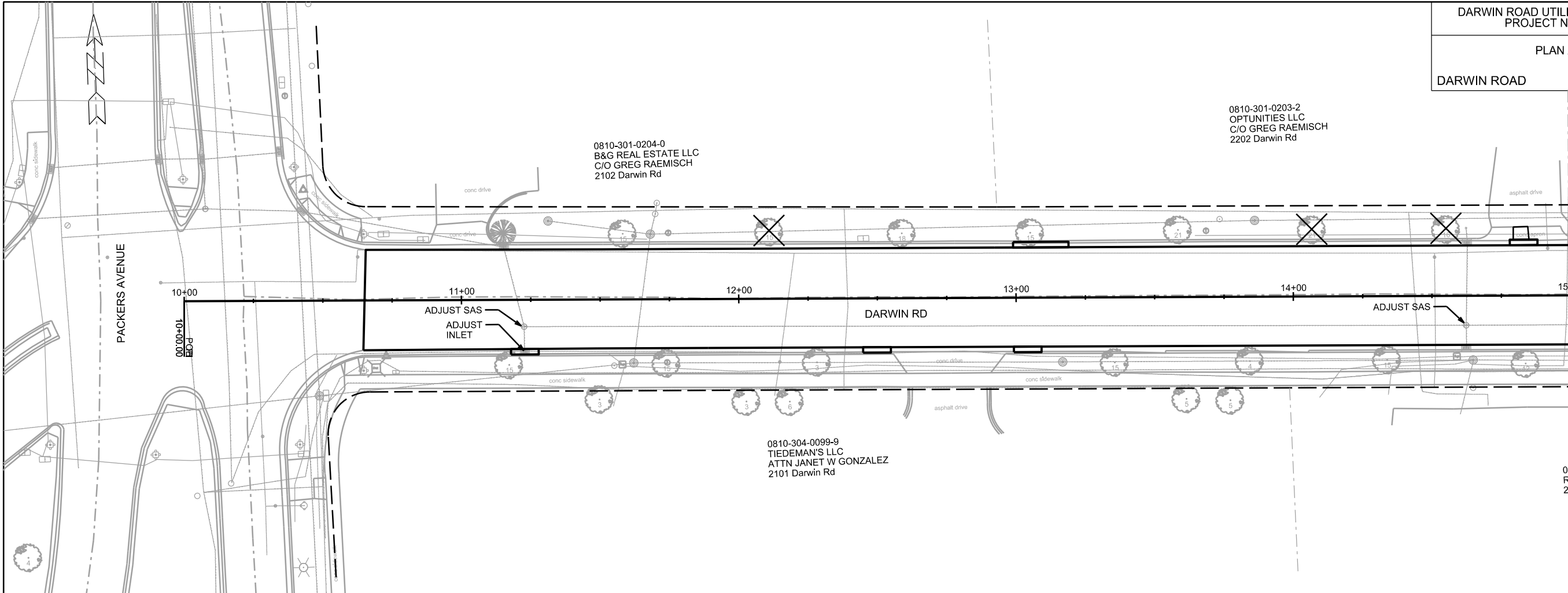


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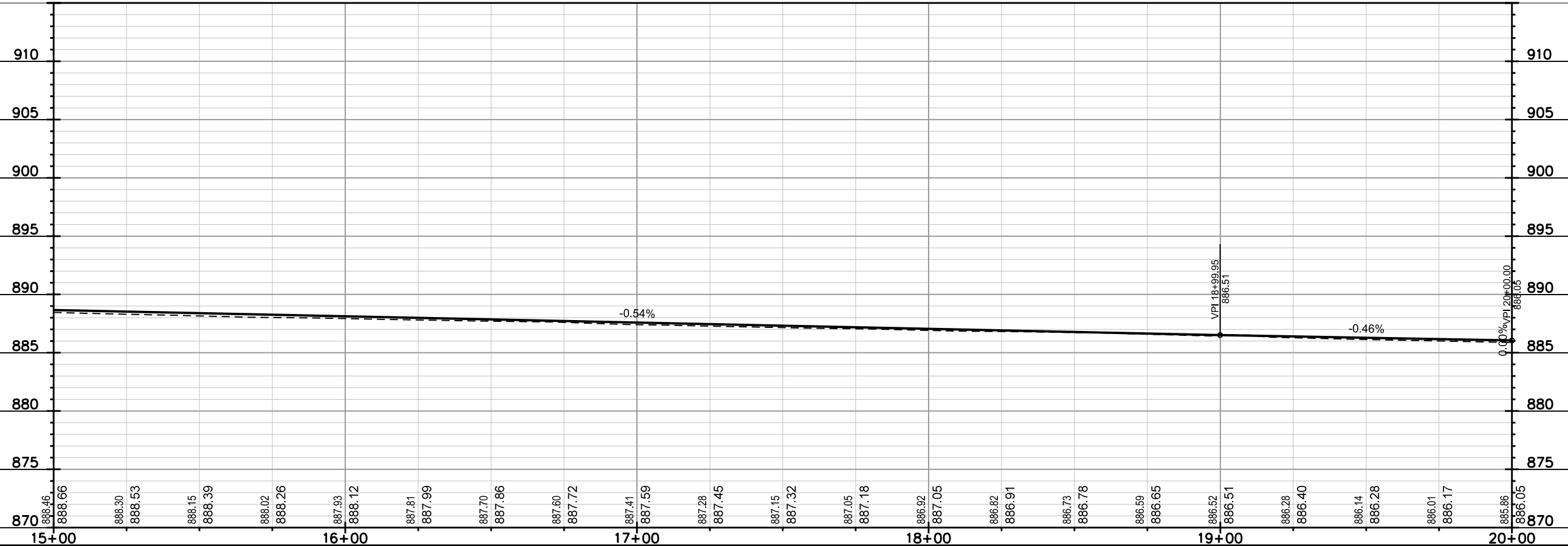
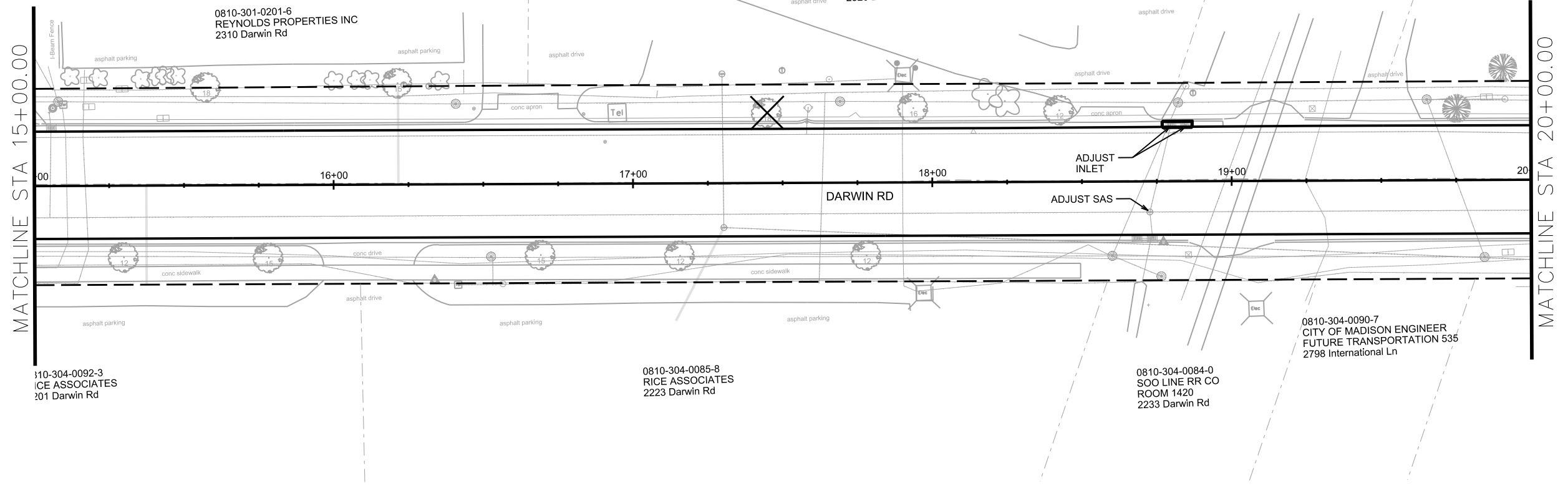
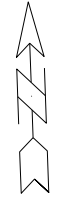


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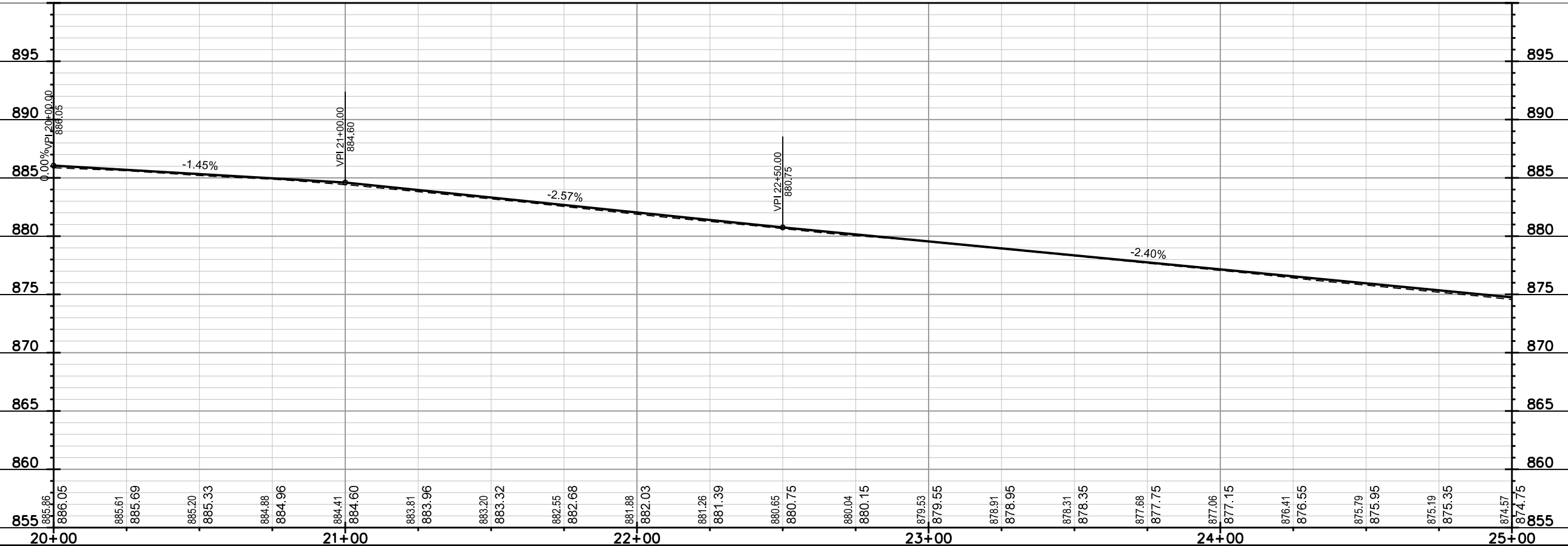
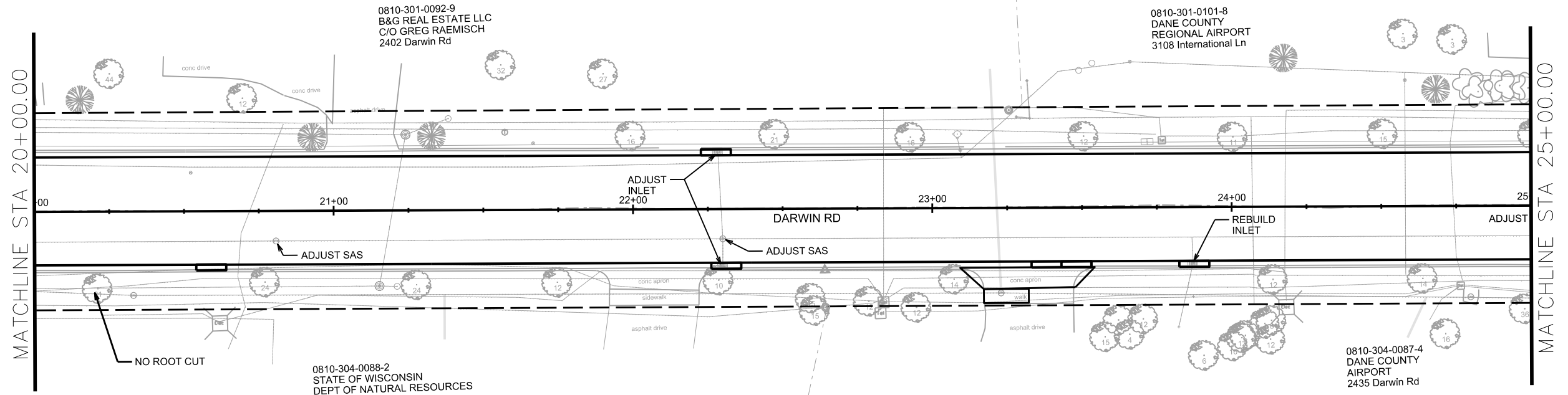
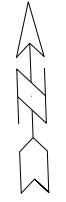
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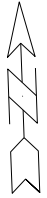


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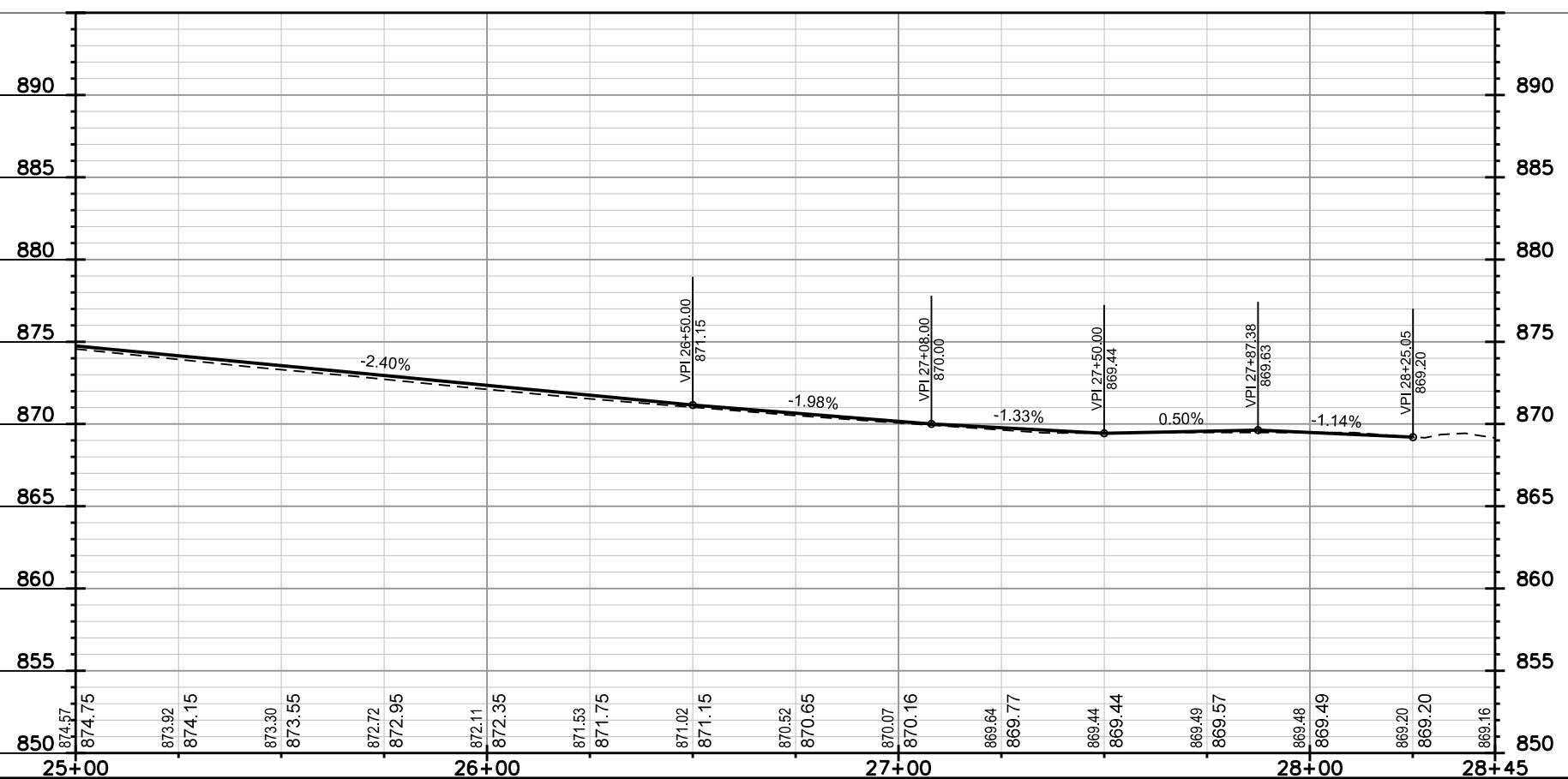
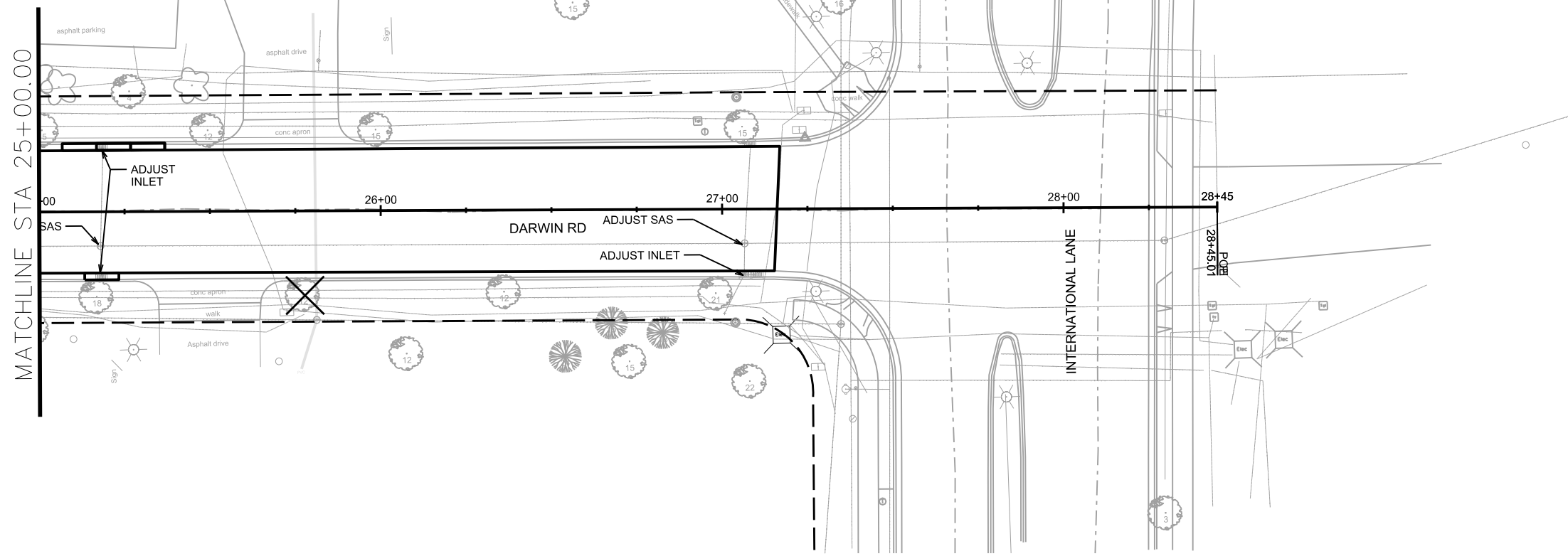
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0810-301-0101-8  
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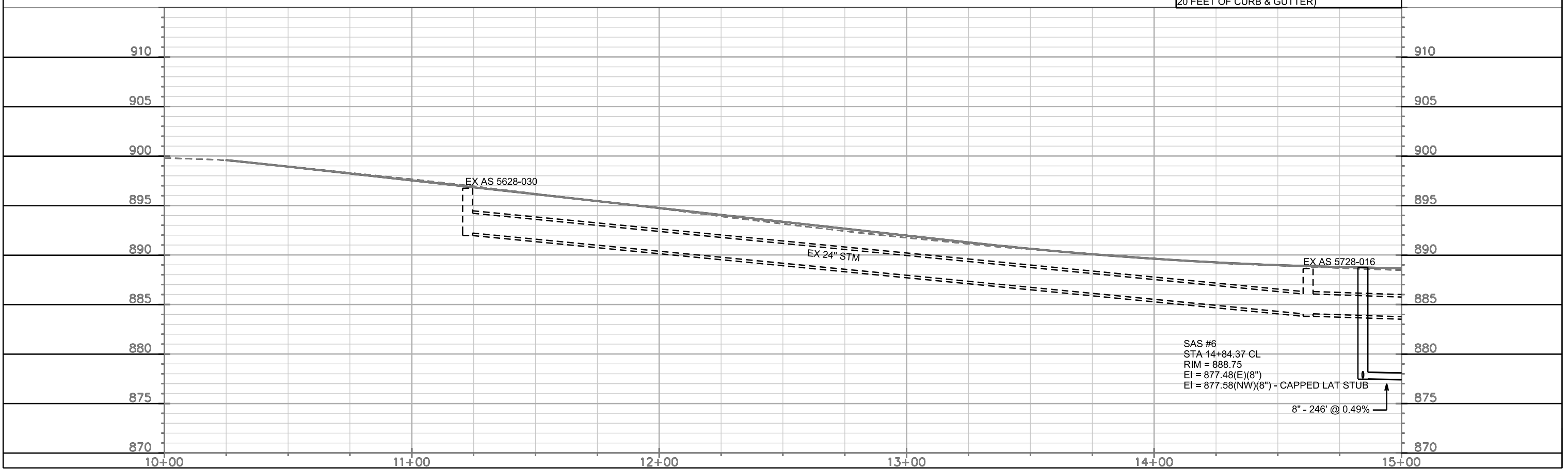
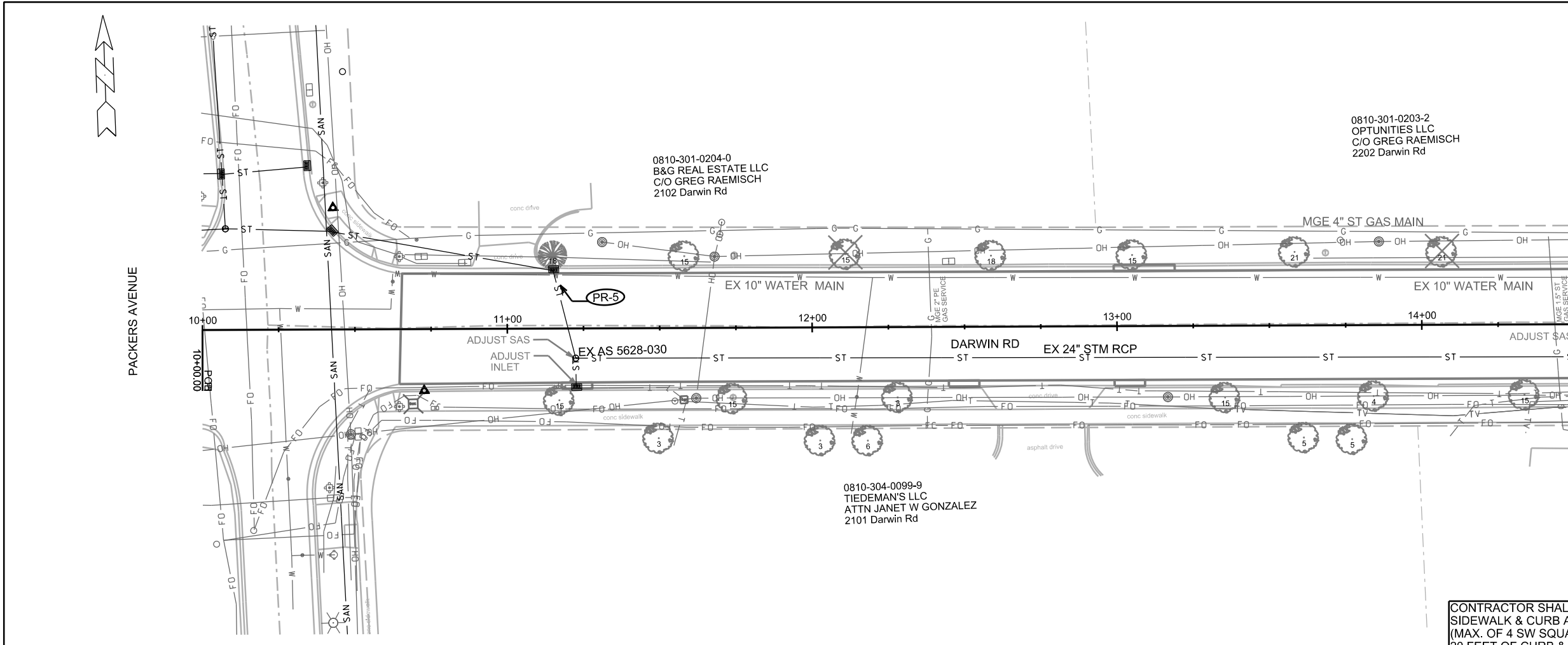


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CONTRACTOR SHALL REM & REP  
SIDEWALK & CURB AS NEEDED FOR LATERALS  
(MAX. OF 4 SW SQUARES PER LATERAL &  
20 FEET OF CURB & GUTTER)

SAS #6  
STA 14+84.37 CL  
RIM = 888.75  
EI = 877.48(E)(8")  
EI = 877.58(NW)(8") - CAPPED LAT STUB

0810-301-0204-0  
B&G REAL ESTATE LLC  
C/O GREG RAEMISCH  
2102 Darwin Rd

0810-301-0203-2  
OPTUNITIES LLC  
C/O GREG RAEMISCH  
2202 Darwin Rd

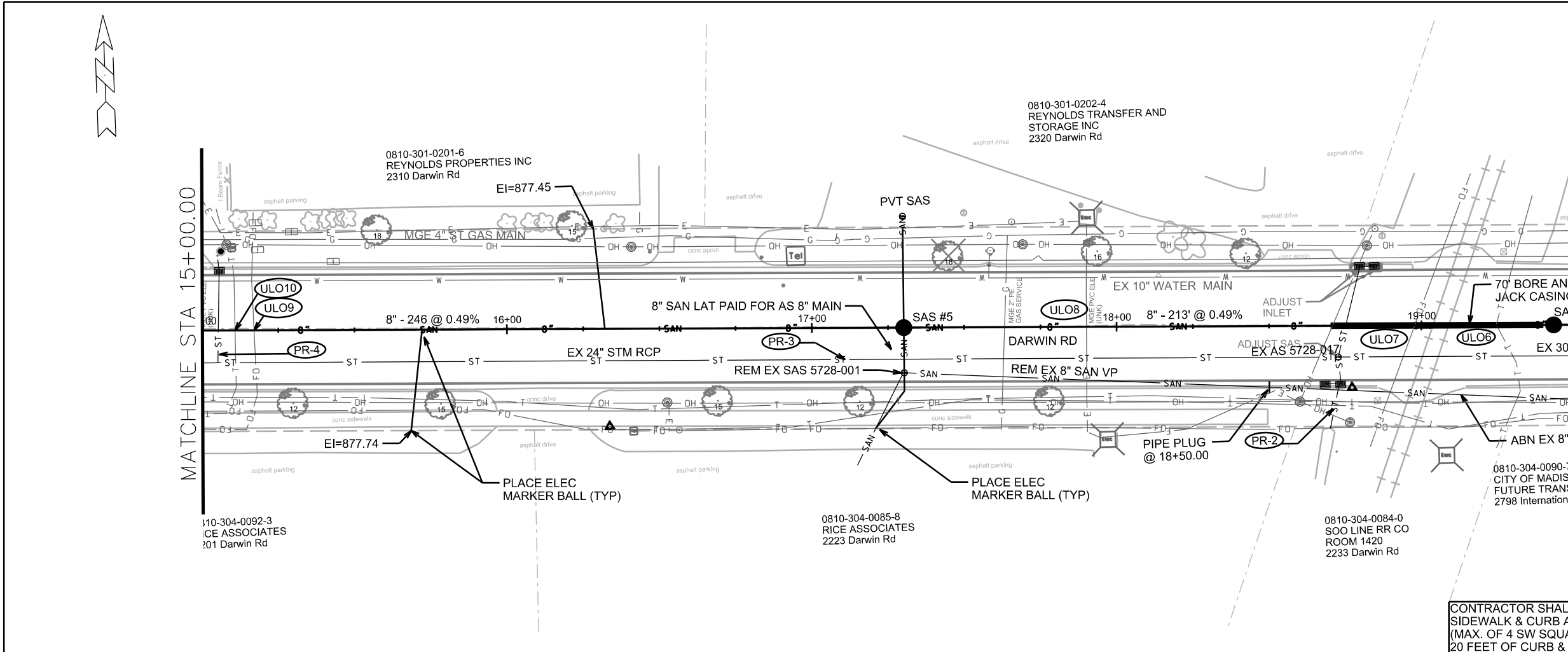
0810-304-0099-9  
TIEDEMAN'S LLC  
ATTN JANET W GONZALEZ  
2101 Darwin Rd

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

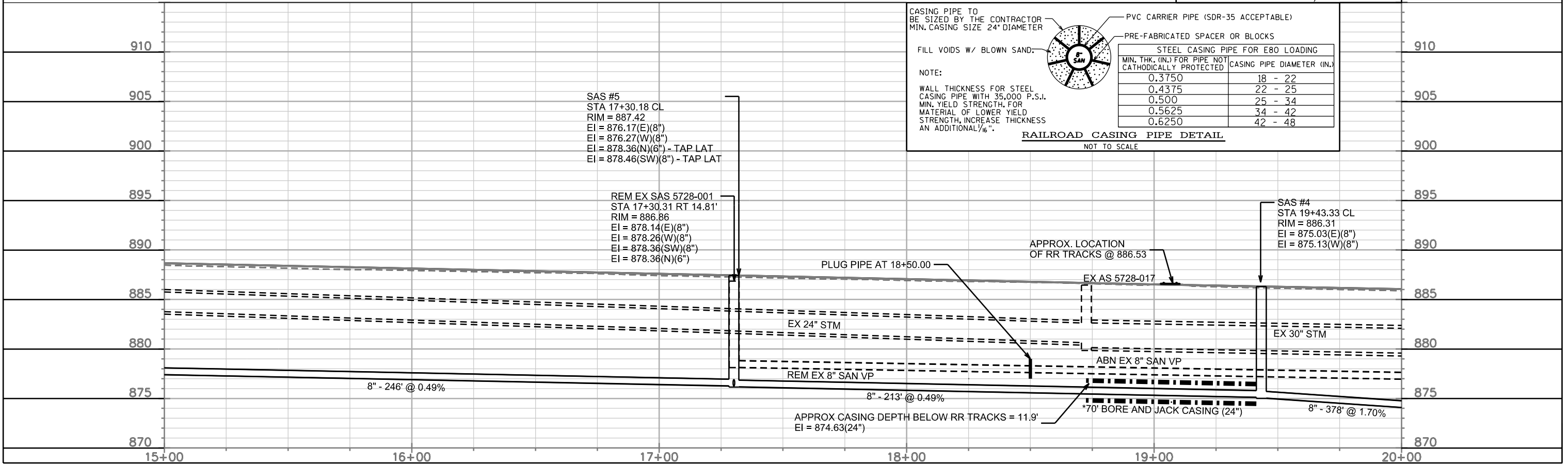
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CASING PIPE TO BE SIZED BY THE CONTRACTOR MIN. CASING SIZE 24\"/>

FILL VOIDS W/ BLOWN SAND.

NOTE:  
WALL THICKNESS FOR STEEL CASING PIPE WITH 35,000 P.S.I. MIN. YIELD STRENGTH. FOR MATERIAL OF LOWER YIELD STRENGTH, INCREASE THICKNESS AN ADDITIONAL 1/16\"/>

**RAILROAD CASING PIPE DETAIL**  
NOT TO SCALE

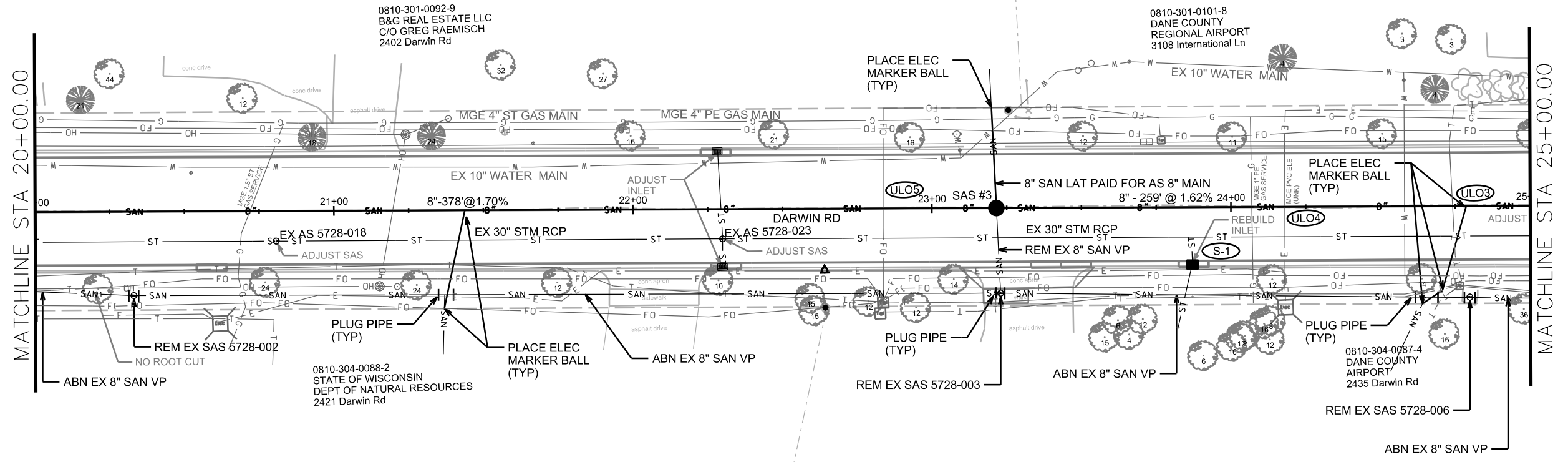
STEEL CASING PIPE FOR E80 LOADING	
MIN. THK. (IN.) FOR PIPE NOT CATHODICALLY PROTECTED	CASING PIPE DIAMETER (IN.)
0.3750	18 - 22
0.4375	22 - 25
0.500	25 - 34
0.5625	34 - 42
0.6250	42 - 48

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

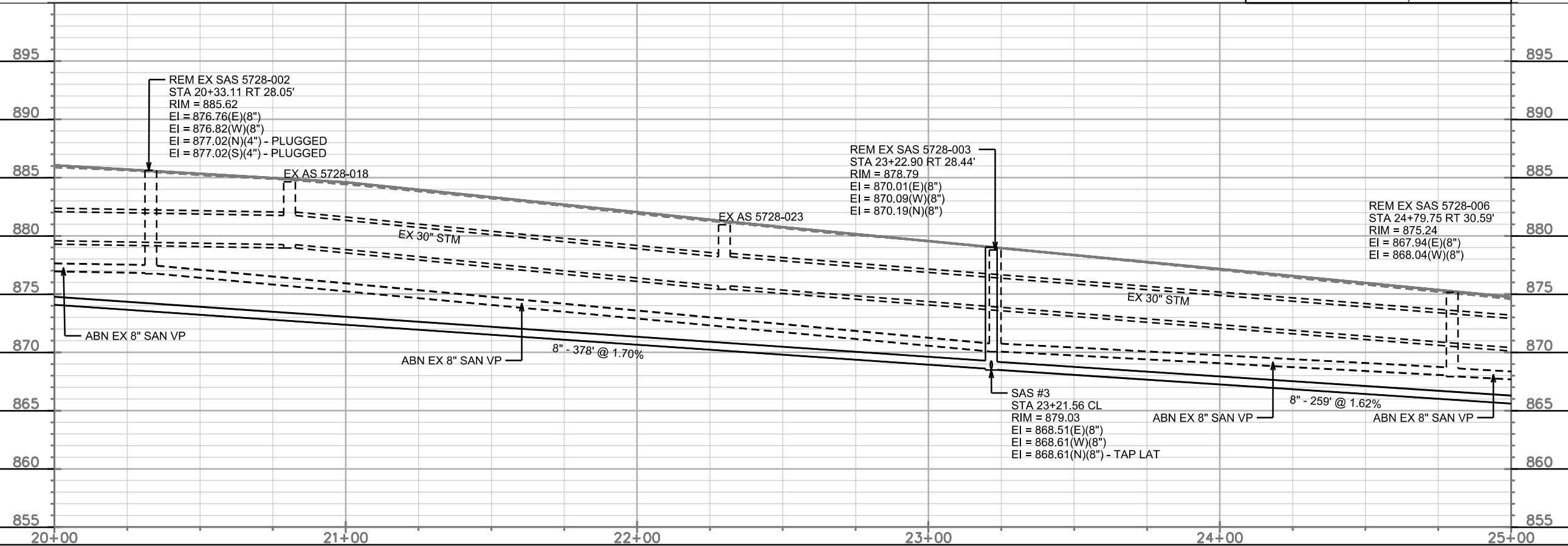
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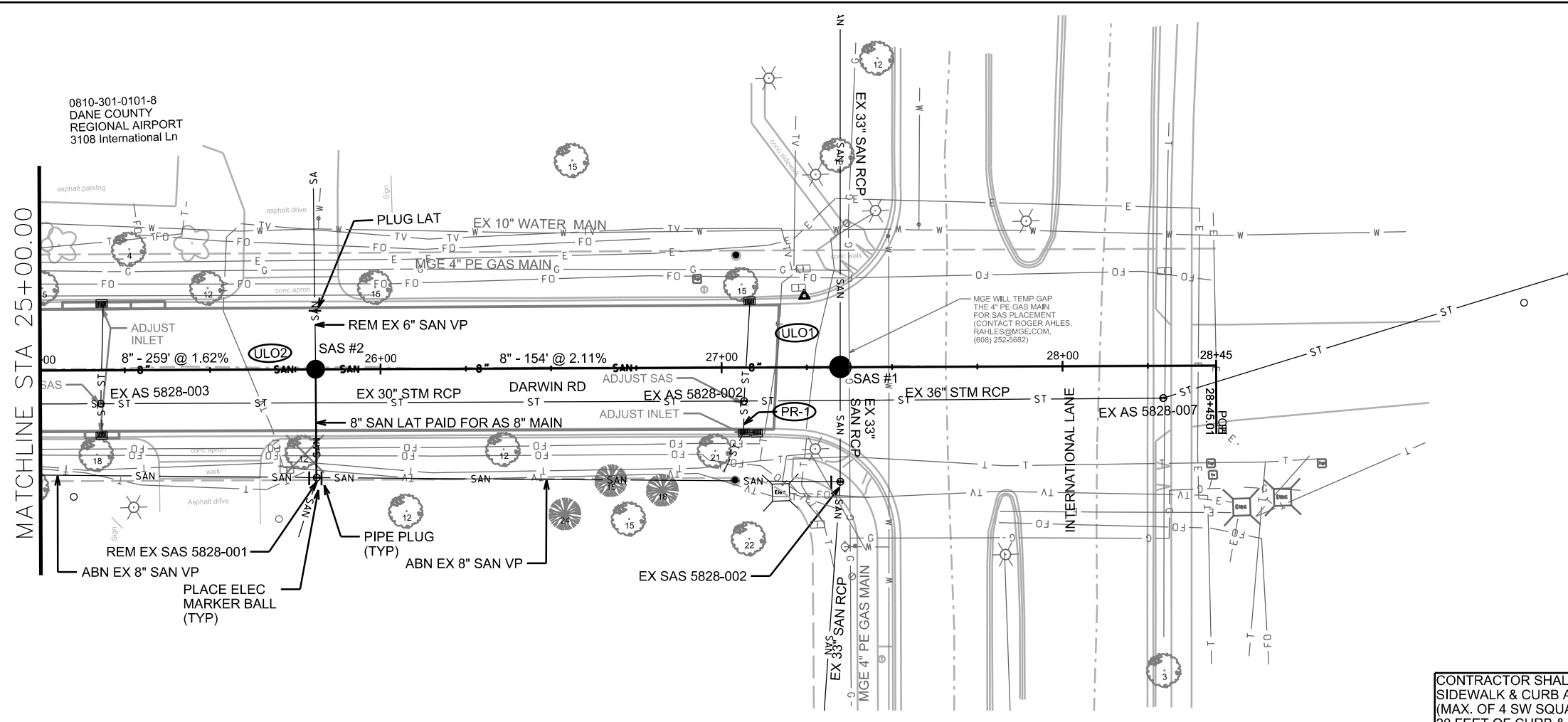


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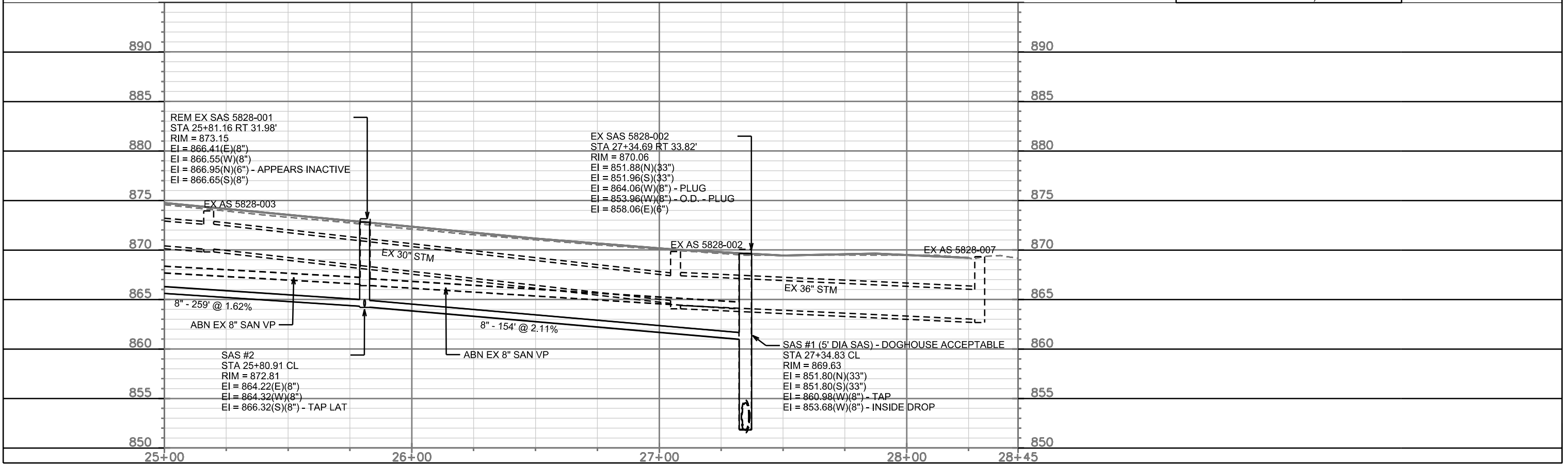
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# SEWER SCHEDULE

## PROPOSED SANITARY STRUCTURES

SAS NO.	STATION	LOCATION (OFFSET)	TOP OF CASTING	E.I.	DEPTH	NOTES
<b>DARWIN RD</b>						
SAS #1	27+34.83	CL	869.63	851.80	17.83	5' SAS; INSIDE DROP; DOGHOUSE MH ACCEPTABLE
SAS #2	25+80.91	CL	872.81	864.22	8.59	4' SAS
SAS #3	23+21.56	CL	879.03	868.51	10.52	4' SAS
SAS #4	19+43.33	CL	886.31	875.03	11.28	4' SAS
SAS #5	17+30.18	CL	887.42	876.17	11.25	4' SAS
SAS #6	14+84.37	CL	888.75	877.48	11.27	4' SAS

## REMOVE SANITARY STRUCTURES

SAS NO.	STATION	LOCATION (OFFSET)	EX TOP OF CASTING	EX E.I.	DEPTH	NOTES
<b>DARWIN RD</b>						
SAS 5828-001	25+81.16	RT-31.98	873.15	866.41	6.74	
SAS 5827-006	24+79.75	RT-30.59	875.15	867.94	7.21	
SAS 5728-003	23+22.90	RT-28.44	878.79	870.07	8.72	
SAS 5728-002	20+33.11	RT-28.05	885.62	876.76	8.86	
SAS 5728-001	17+30.31	RT-14.81	886.86	878.14	8.72	

## REBUILD STORM STRUCTURES

STRUC. NO.	STATION	LOCATION (OFFSET)	TYPE	TOP OF CASTING	E.I.	DEPTH	NOTES
<b>DARWIN RD</b>							
S-1	23+87.07	RT-19.16	H INLET	877.22	874.20	3.02	FP; W/3067-7004-V; (2)

## ULOS

ULO NO.	STATION	LOC OFFSET	TYPE	NOTES
ULO1	27+15.72	CL	TEL	TO BE COMPLETED BY OTHERS
ULO2	25+60.91	CL	TEL	TO BE COMPLETED BY OTHERS
ULO3	24+74.12	CL	TEL	TO BE COMPLETED BY OTHERS
ULO4	24+17.82	CL	MGE ELE PVC, SIZE UNK	TO BE COMPLETED BY OTHERS
ULO5	22+83.70	CL	FO	TO BE COMPLETED BY OTHERS
ULO6	19+24.61	CL	TEL	
ULO7	18+97.76	CL	FO	
ULO8	17+90.09	CL	MGE ELE PVC, SIZE UNK	TO BE COMPLETED BY OTHERS
ULO9	15+17.05	CL	FO	TO BE COMPLETED BY OTHERS
ULO10	15+10.82	CL	TEL	TO BE COMPLETED BY OTHERS
ULO11	14+98.59	CL	MGE ELE PVC, SIZE UNK	TO BE COMPLETED BY OTHERS

## PROPOSED SANITARY PIPES

FROM (DNSTM)	TO (UPSTM)	DWNSTRM E.I.	UPSTRM E.I.	PLAN (PAY) LGTH (FT)	SLOPE (%)	PIPE SIZE	PVC TYPE	NOTES
<b>DARWIN RD</b>								
SAS #1	SAS #2	860.98	864.22	154	2.11%	8"	SDR-35	
SAS #2	SAS #3	864.32	868.51	259	1.62%	8"	SDR-35	
SAS #3	SAS #4	868.61	875.03	378	1.70%	8"	SDR-35	
SAS #4	SAS #5	875.13	876.17	213	0.49%	8"	SDR-35	(5)
SAS #5	SAS #6	876.27	877.48	246	0.49%	8"	SDR-35	

## ABANDON SANITARY PIPES

REMOVE FROM	REMOVE TO	LENGTH (ft)	PAID (Y/N)	SIZE (DIA)	PIPE TYPE	NOTES
<b>DARWIN RD</b>						
SAS 5828-002	SAS 5828-001	154	N	8"	VP	(1)
SAS 5828-001	SAS 5827-006	101	N	8"	VP	
SAS 5827-006	SAS 5728-003	157	N	8"	VP	
SAS 5728-003	18+25.00	170	N	8"	VP	

## REMOVE SANITARY PIPES

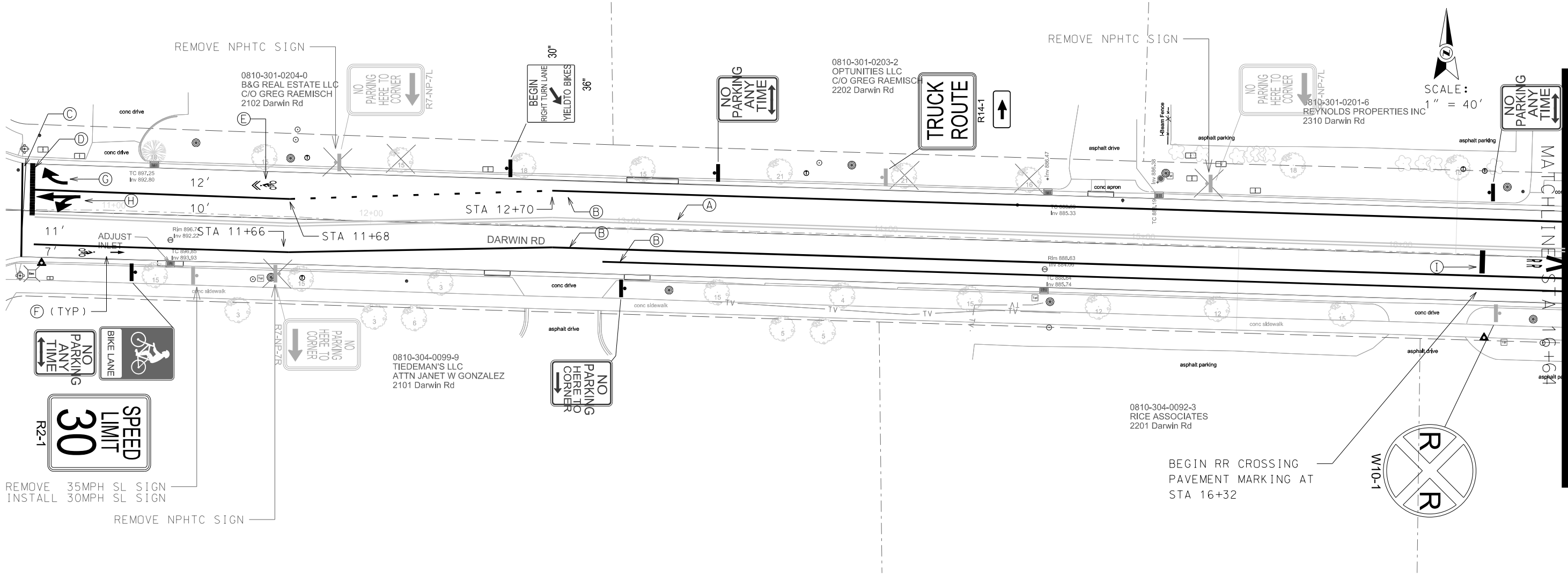
REMOVE FROM	REMOVE TO	LENGTH (ft)	PAID (Y/N)	SIZE (DIA)	PIPE TYPE	NOTES
<b>DARWIN RD</b>						
18+25.00	SAS 5728-001	120	Y	8"	VP	
23+21.93		28	Y	8"	VP	EX LAT
25+80.85		17	Y	6"	VP	EX LAT

## POINT REPAIR STORM PIPE

POINT REPAIR NO.	STATION	LOCATION (OFFSET)	SIZE (DIA)	PIPE TYPE	NOTES
<b>DARWIN RD</b>					
PR-1	27+06.45	RT-16.58	12"	RCP	JOINT SEPARATION; (4)
PR-2	18+71.35	RT-26.95	24"	RCP	JOINT SEPARATION; (4)
PR-3	17+10.90	RT-10.38	24"	RCP	JOINT SEPARATION; (4)
PR-4	15+05.20	RT-8.02	15"	RCP	JOINT SEPARATION/FRACTURE; (4)
PR-5	11+16.40	LT-14.48	24"	RCP	JOINT SEPARATION; (4)

## SPECIFIC NOTES

- (1) PLUG EX MAIN AND OUTSIDE DROP AT EX SAS 5828-002
- (2) PAID AS BID ITEM 40366 & 50793 ; PRIVATE STORM TYPE 1 RECONNECT 12" RCP
- (3) ADJUST INLET CASTING WITH CURB & GUTTER REHABILITATION
- (4) TO BE PAID AS 2 COLLARS, 4-FT SECTION OF PIPE AND SELECT FILL
- (5) 70' OF PIPE SHALL BE BORE AND JACK TO CROSS RAILROAD TRACKS



PLOT SCALE:  
 PLOT NAME:  
 REV. DATE:

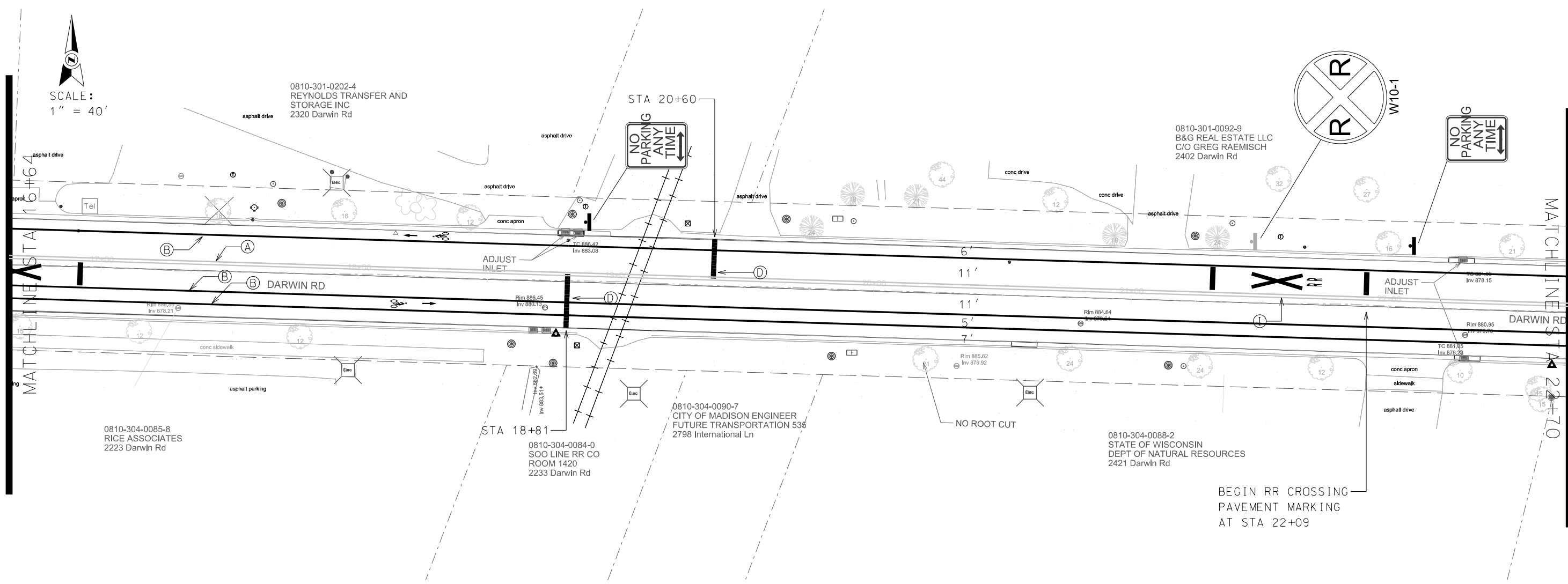
ORIGINATOR: CITY OF MADISON, TRAFFIC ENG. DIV.

**LEGEND**

(A)	PAVEMENT MARKING EPOXY, DOUBLE LINE, 4-INCH
(B)	PAVEMENT MARKING EPOXY, LINE, 6-INCH
(C)	PAVEMENT MARKING EPOXY, CROSSWALK, 6-INCH
(D)	PAVEMENT MARKING EPOXY, STOP LINE, 24-INCH
(E)	PAVEMENT MARKING EPOXY, SYMBOL, BIKE SHARROW
(F)	PAVMENT MARKING EPOXY, SYMBOL, BIKE LANE & STRAIGHT ARROW
(G)	PAVEMENT MARKING EPOXY, SYMBOL, RIGHT ARROW
(H)	PAVEMENT MARKING EPOXY, SYMBOL, STRAIGHT & LEFT ARROW
(I)	PAVEMENT MARKING EPOXY, SYMBOL, RAILROAD CROSSING



PLOT SCALE:  
PLOT NAME:  
REV. DATE:  
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BEGIN RR CROSSING  
PAVEMENT MARKING  
AT STA 22+09

PLOT SCALE:

PLOT NAME:

REV. DATE:

ORIGINATOR: CITY OF MADISON, TRAFFIC ENG. DIV.

