

Madison, Wisconsin

CITY OF MADISON

CITY ENGINEERING DIVISION

DEPARTMENT OF PUBLIC WORKS

PLAN OF PROPOSED IMPROVEMENT

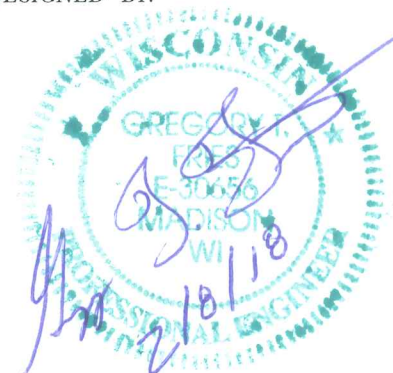
PUBLIC IMPROVEMENT PROJECT APPROVED

BY THE COMMON COUNCIL OF MADISON, WISCONSIN

PUBLIC IMPROVEMENT DESIGN APPROVED BY:

[Signature] 2/8/18
City Engineer Date

STORM SEWER DESIGNED BY:



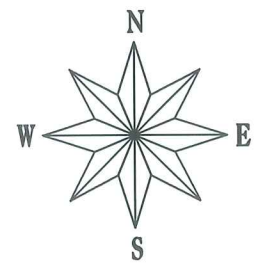
INDEX OF SHEETS

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RESURFACING 2018

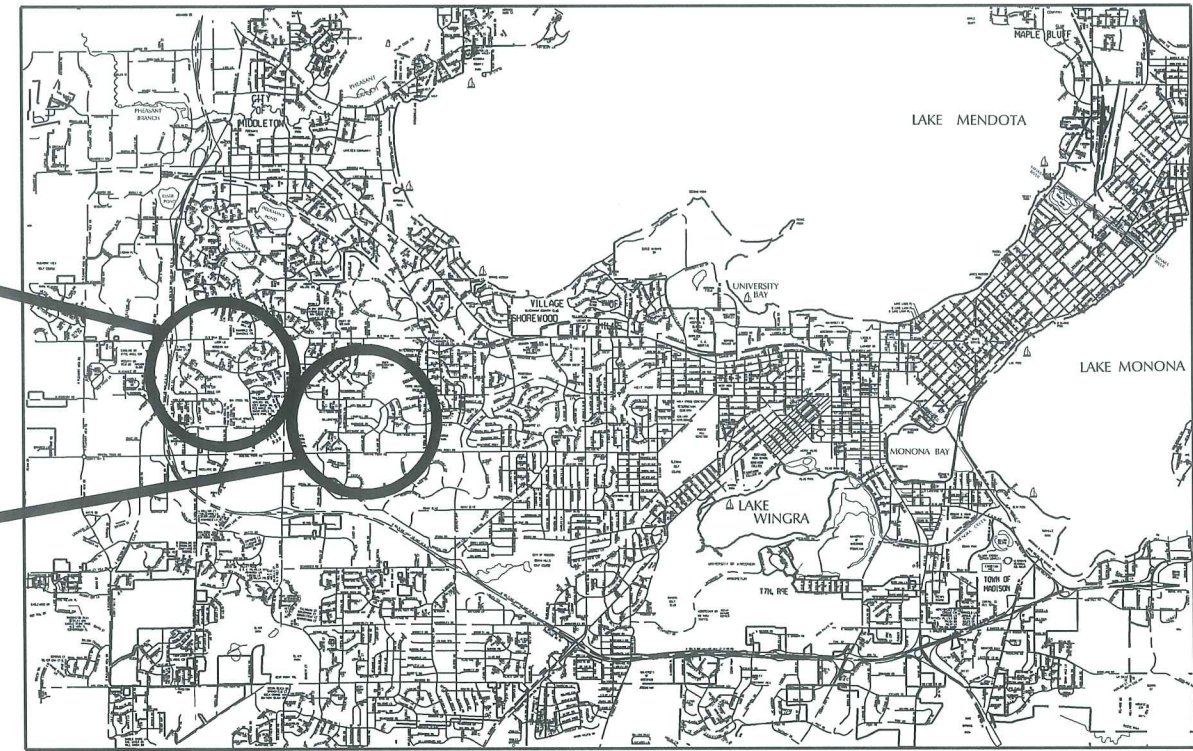
CURB & GUTTER AND CASTINGS (STORM SEWER)

CITY PROJECT NO. 11674
CONTRACT NO. 8098



FARMINGTON WAY
WALNUT GROVE DR
WHITACRE RD
N WESTFIELD RD

HAWSER RD



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	▤
COMBUSTIBLE FLUIDS	⚠

CONSTRUCTION PROJECT LOCATIONS

NOTES:

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

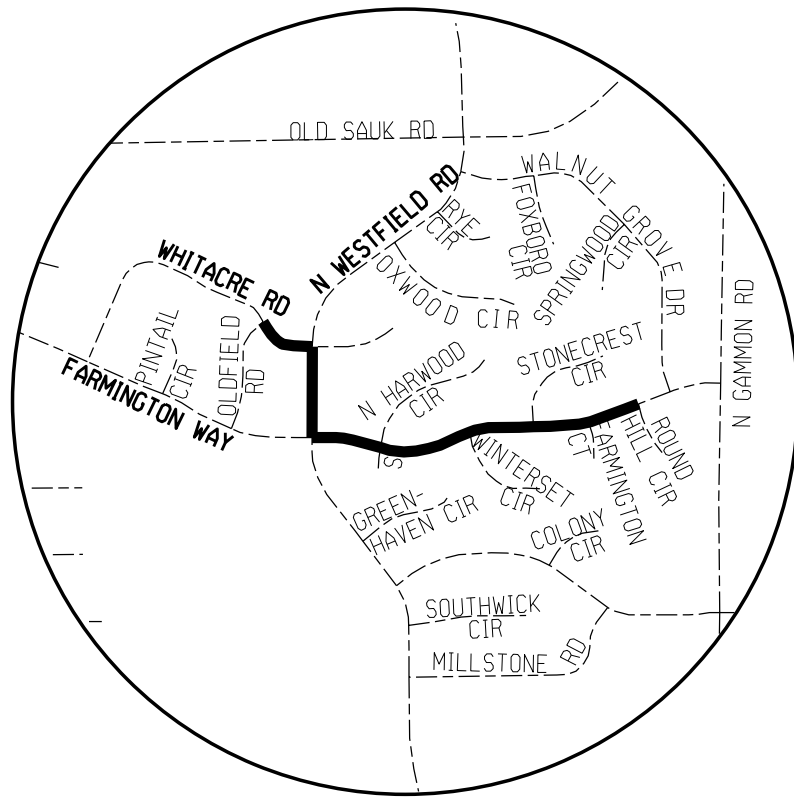
SIDEWALK RAMPS AND CURB THRU SIDEWALK RAMPS SHALL HAVE A MAXIMUM SLOPE OF 1" PER 12". SIDEWALK AND CURB RAMPS SHALL BE CONSTRUCTED WITH A SIDE SLOPE OF 2.00%. SIDEWALK SHALL HAVE A MINIMUM LONGITUDINAL SLOPE OF 0.50% AND A MAXIMUM LONGITUDINAL SLOPE OF 5.00% EXCEPT WHERE STREET GRADES EXCEED 5.00%.

PLOT SCALE:

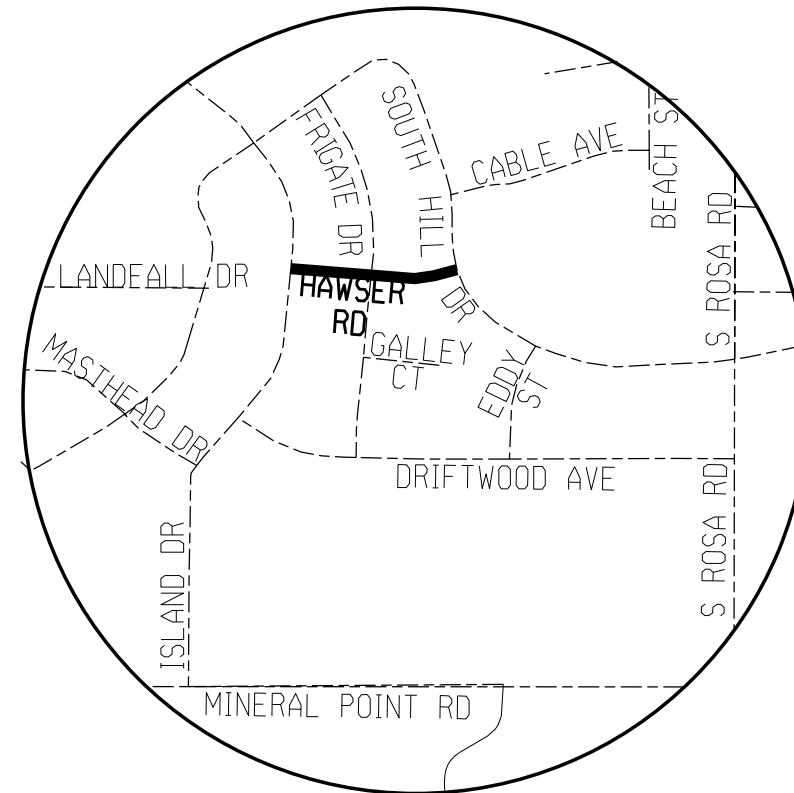
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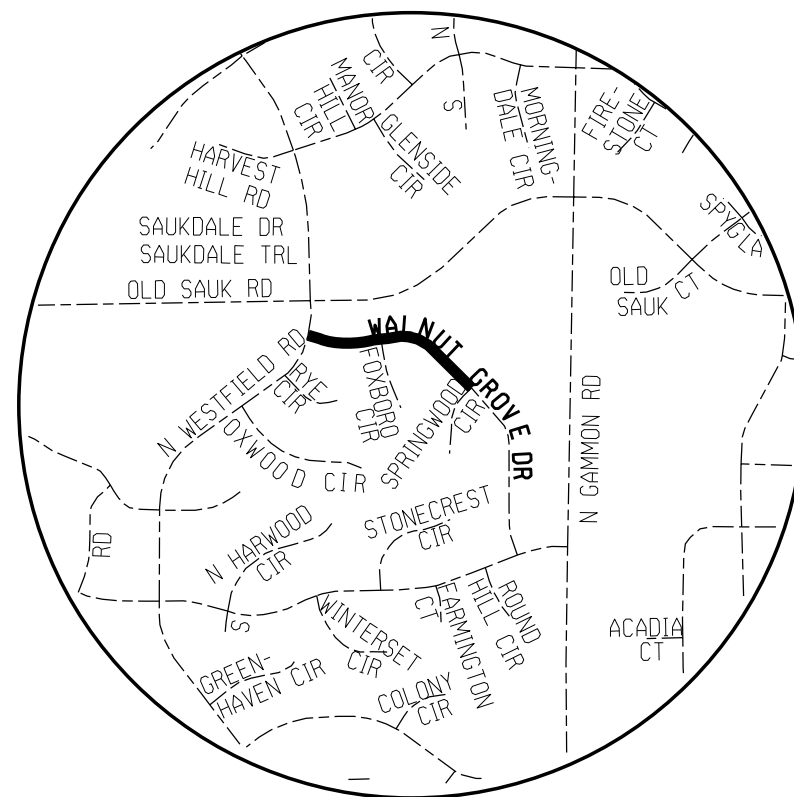
ORIGINATOR: CITY OF MADISON, STREETS DIVISION



WHITACRE RD
N WESTFIELD RD
FARMINGTON WAY



HAWSER RD

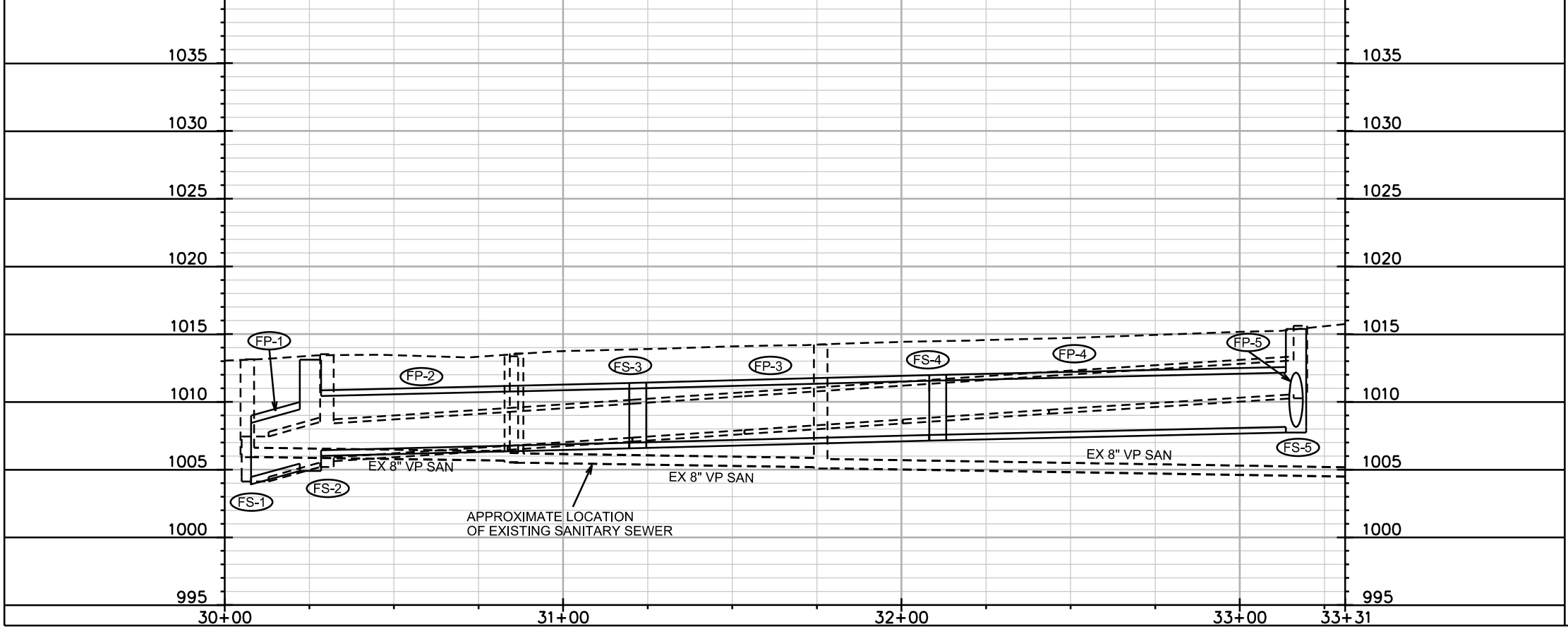
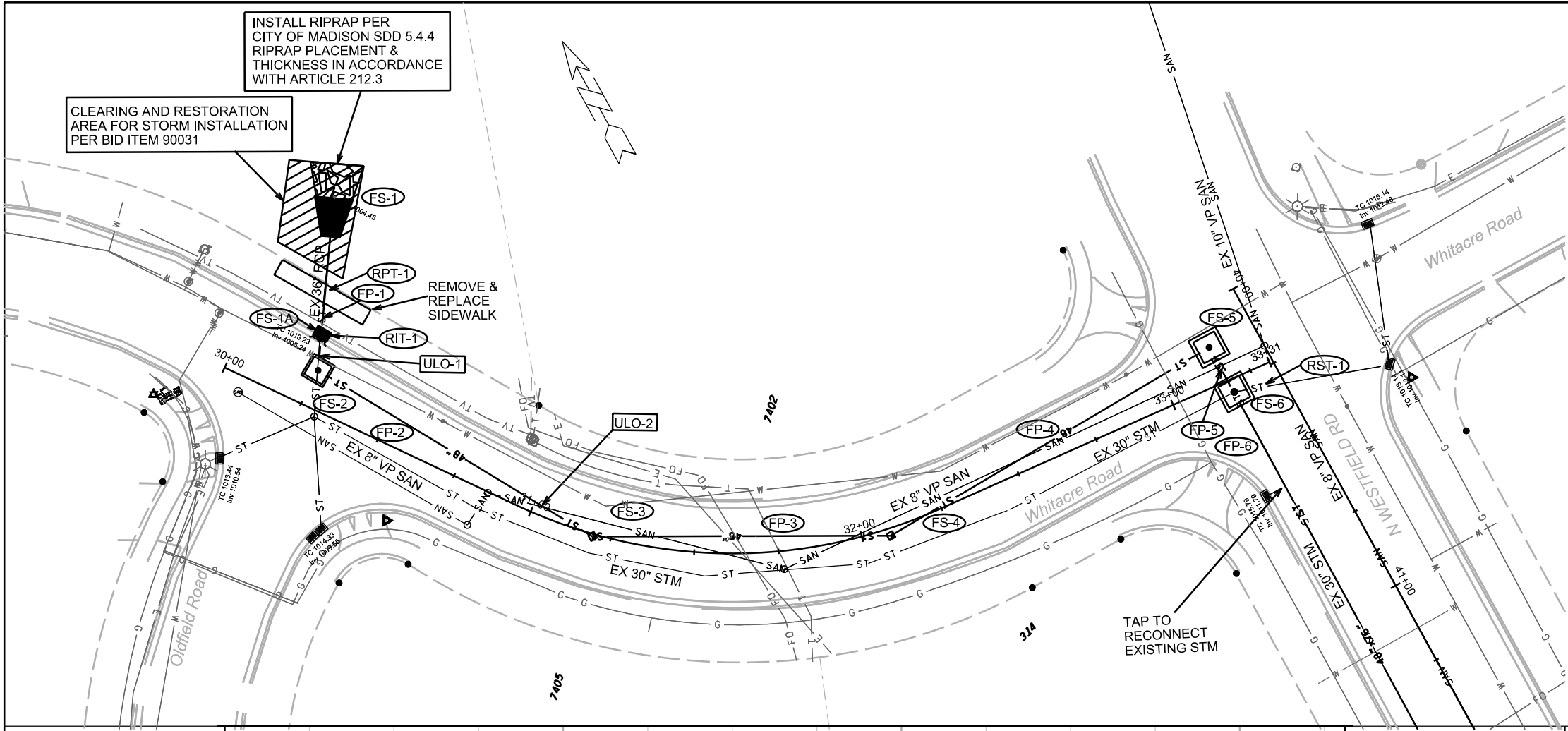


WALNUT GROVE DR



STORM SEWER QUANTITIES

ITEM NO.	TYPE OF WORK	UNIT	QUANTITIES				TOTAL
			<u>WHITACRE RD N WESTFIELD RD FARMINGTON WAY (FW1-6)</u>	<u>HAWSER RD (HR1-2)</u>	<u>WALNUT GROVE DR (WG1-2)</u>	<u>UNDISTRIBUTED</u>	
10702	TRAFFIC CONTROL FOR STORM SEWER INSTALLATION	LUMP SUM					1
10912	MOBILIZATION FOR STORM SEWER INSTALLATION	LUMP SUM					1
20230	HEAVY RIPRAP	TON	12				12
20233	RIPRAP FILTER FABRIC, TYPE HR	SY	24				24
20311	REMOVE SEWER ACCESS STRUCTURE	EACH	2				2
20313	REMOVE INLET	EACH	1	2			3
21013	STREET SWEEPING	LUMP SUM					1
21031	INLET PROTECTION, TYPE C - COMPLETE	EACH		2			2
21041	INLET PROTECTION, TYPE D - COMPLETE	EACH	32	5	11		48
40382	REMOVE & REPLACE CONCRETE CURB & GUTTER, HAND PLACED - RESURFACING	LF	440	140	260		840
40391	REMOVE & REPLACE 5 INCH CONCRETE SIDEWALK - RESURFACING	SF	150				150
50211	SELECT BACKFILL FOR STORM SEWER	TF	2956	763	1209		4928
50225	UTILITY TRENCH PATCH TYPE III	TF	449				449
50227	UTILITY TRENCH PATCH TYPE IV	TF	2507	763	1209		4479
50401	12 INCH TYPE I RCP STORM SEWER PIPE	LF			254		254
50402	15 INCH TYPE I RCP STORM SEWER PIPE	LF			584		584
50403	18 INCH TYPE I RCP STORM SEWER PIPE	LF			371		371
50404	21 INCH TYPE I RCP STORM SEWER PIPE	LF	474				474
50411	48 INCH TPE I RCP STORM SEWER PIPE	LF	309				309
50420	24 INCH X 38 INCH TYPE I HERCP STORM SEWER PIPE	LF	185				185
50425	48 INCH X 76 INCH TYPE I HERCP STORM SEWER PIPE	LF	484				484
50432	12 INCH TYPE II PAVEMENT STORM SEWER PIPE	LF	484	1			485
50433	15 INCH TYPE II PAVEMENT STORM SEWER PIPE	LF	267	763			1030
50434	18 INCH TYPE II PAVEMENT STORM SEWER PIPE	LF	607				607
50435	24 INCH TYPE II PAVEMENT STORM SEWER PIPE	LF	197				197
50455	FIELD BEND	EACH	2	1			3
50488	48 INCH X 76 INCH HERCP AE	EACH	1				1
50499	CONCRETE COLLAR	EACH		1			1
50628	48 INCH X 76 INCH HERCP AE GATE	EACH	1				1
50723	3'x3' STORM SAS	EACH	2	4	5		11
50724	4'x4' STORM SAS	EACH	7				7
50726	6'x6' STORM SAS	EACH	1				1
50741	TYPE 'H' INLET	EACH	14	6	7		27
50761	SADDLED INLET TYPE I	EACH	1				1
50769	TERRACE INLET TYPE 4	EACH	1				1
50792	STORM SEWER TAP	EACH	4	2			6
50801	UTILITY LINE OPENING (ULO)	EACH	3			5	8
90030	8'X5' STORM STRUCTURE	EACH	1				1
90031	CLEARING AND RESTORATION FOR STORM INSTALLATION	LUMP SUM	1				1
90032	7'X7' STORM SAS	EACH	3				3
90033	LOWER WATER SERVICE UNDER STORM SEWER	EACH	4				4



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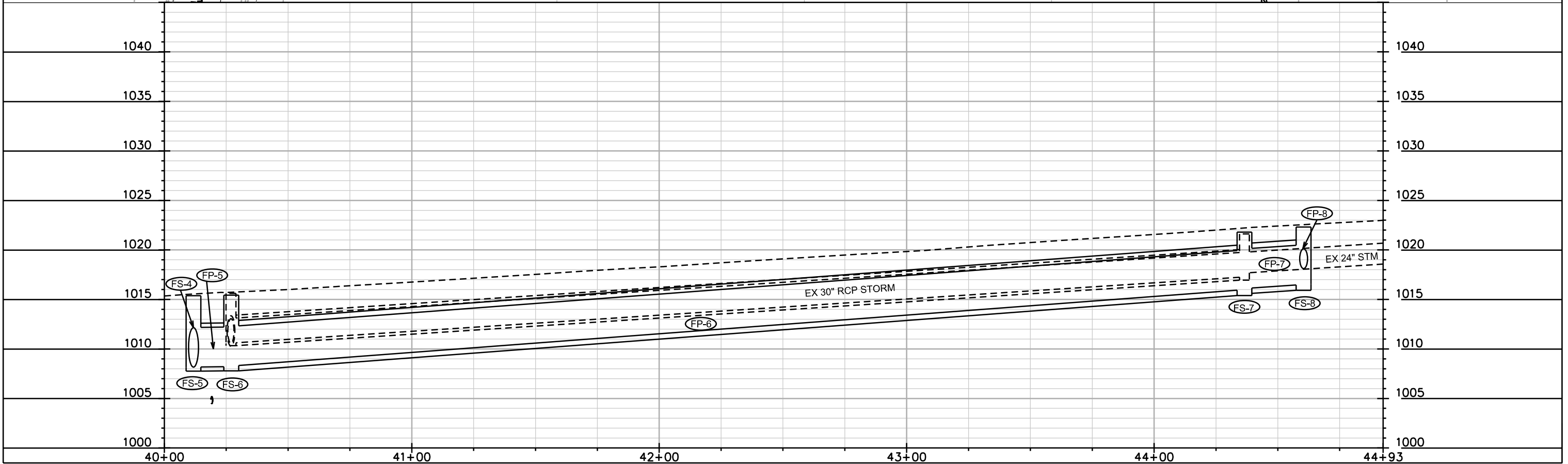
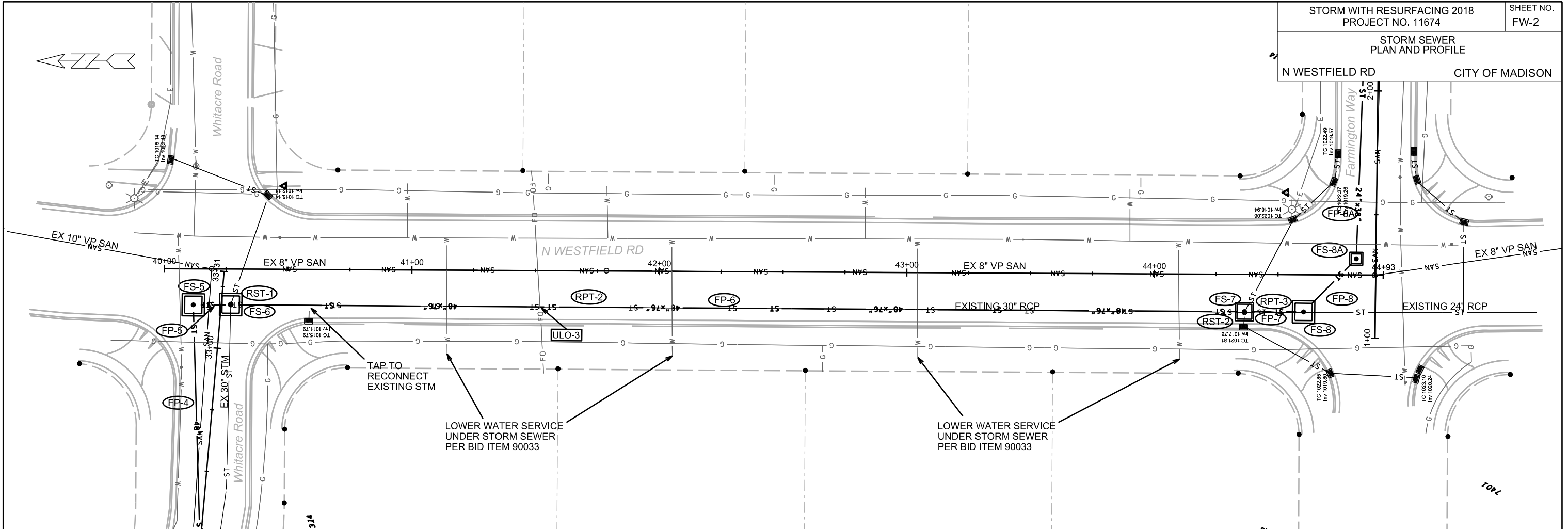
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ORIGINATOR: CITY OF MADISON, STREETS DIVISION

STORM SEWER
PLAN AND PROFILE

N WESTFIELD RD CITY OF MADISON

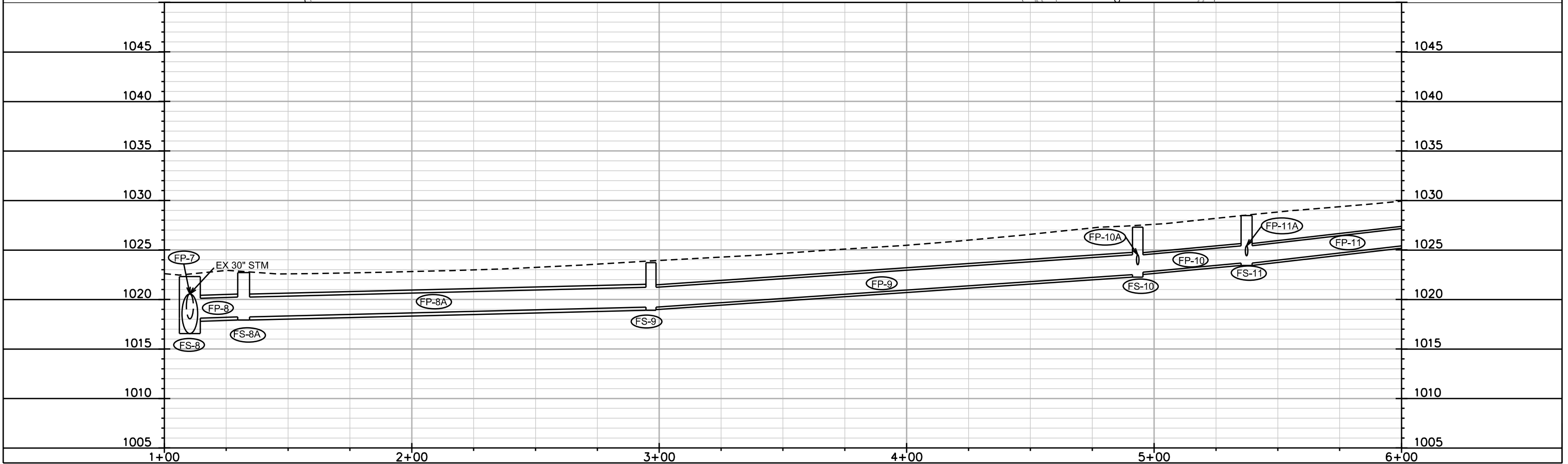
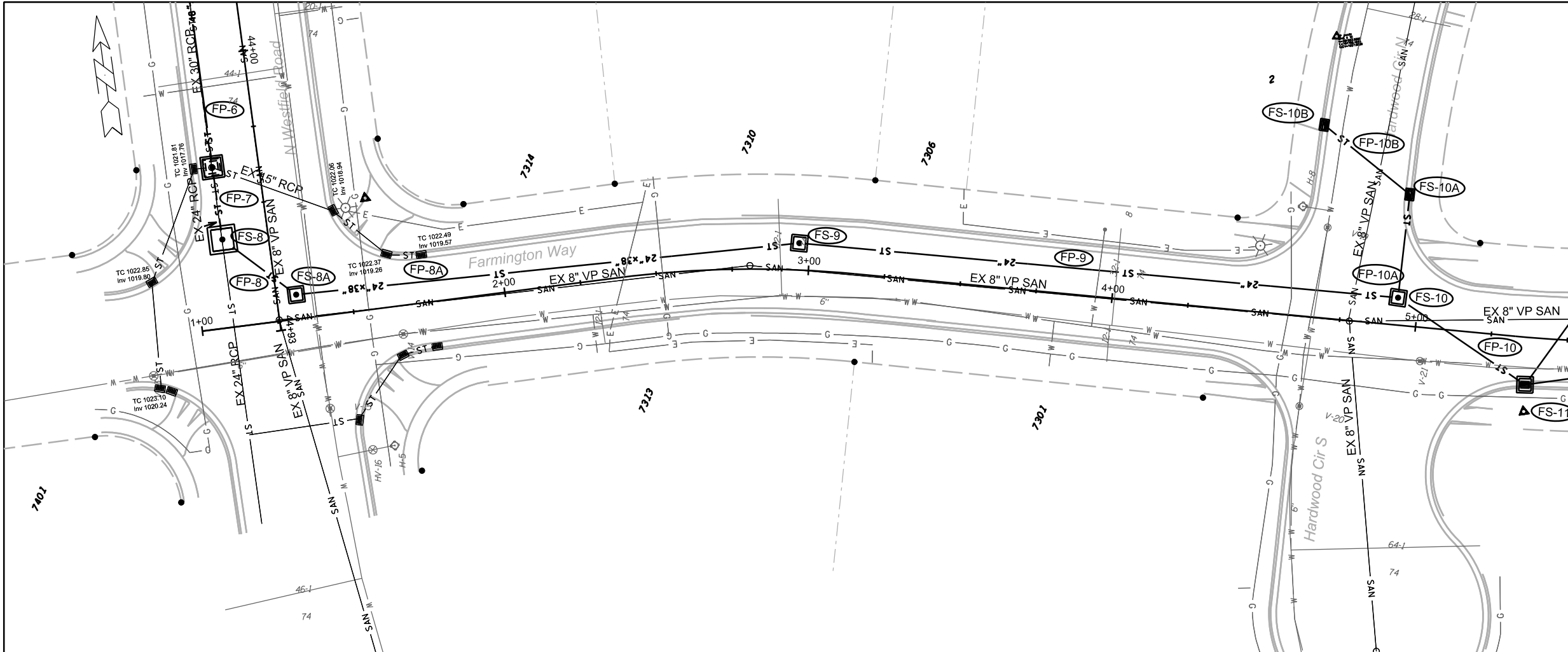


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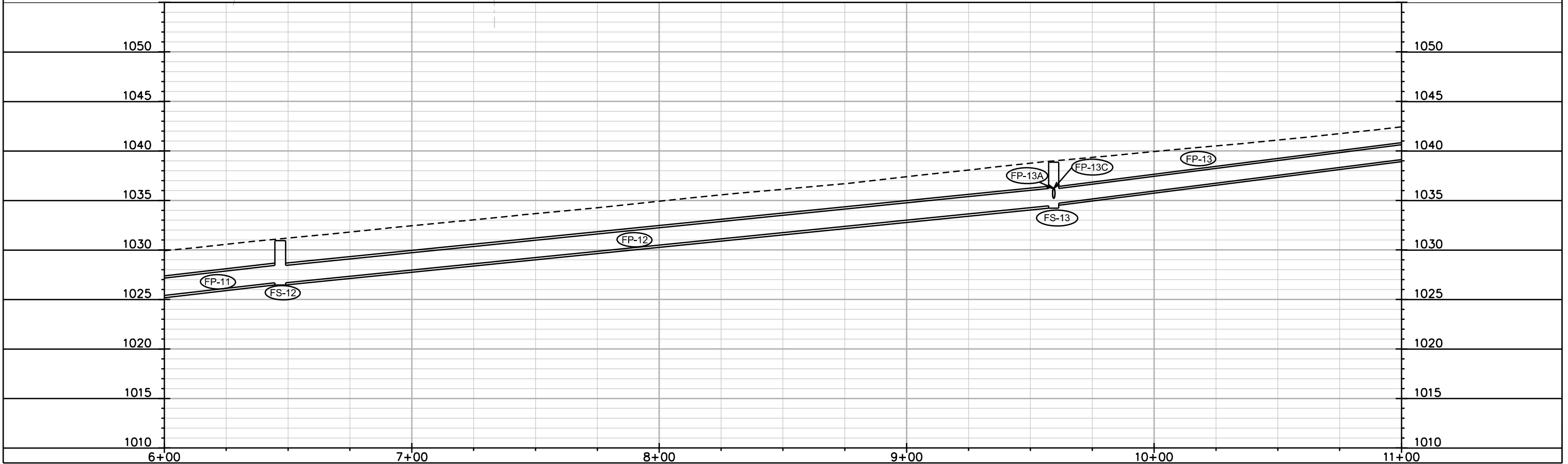
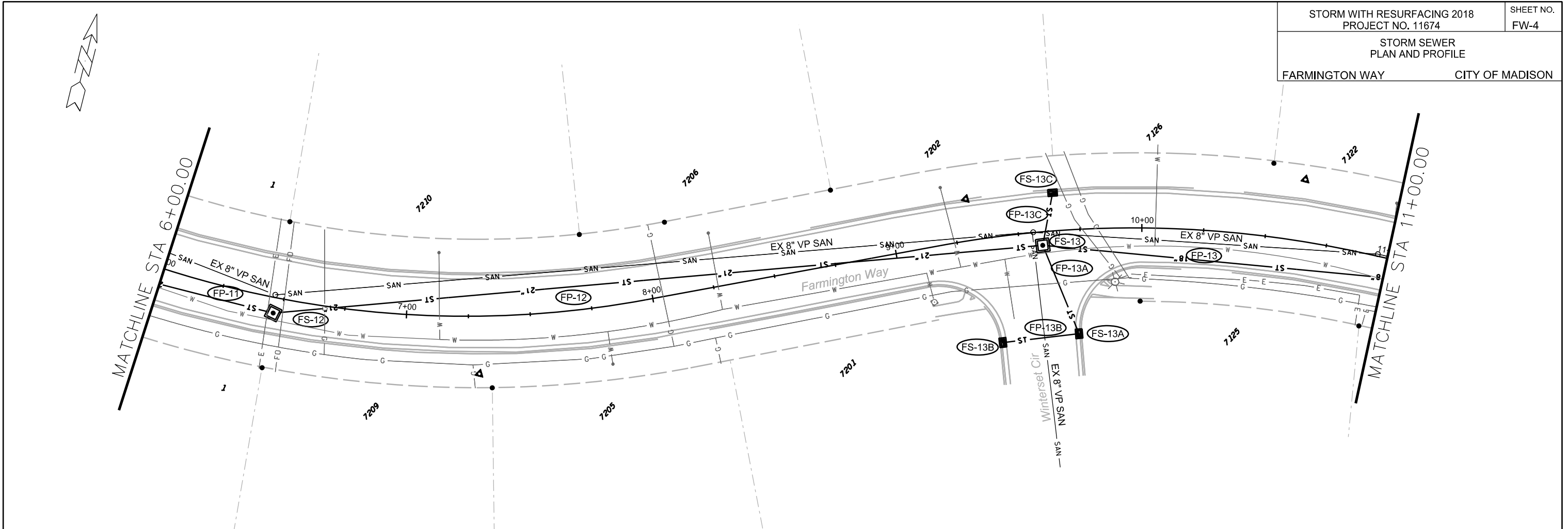


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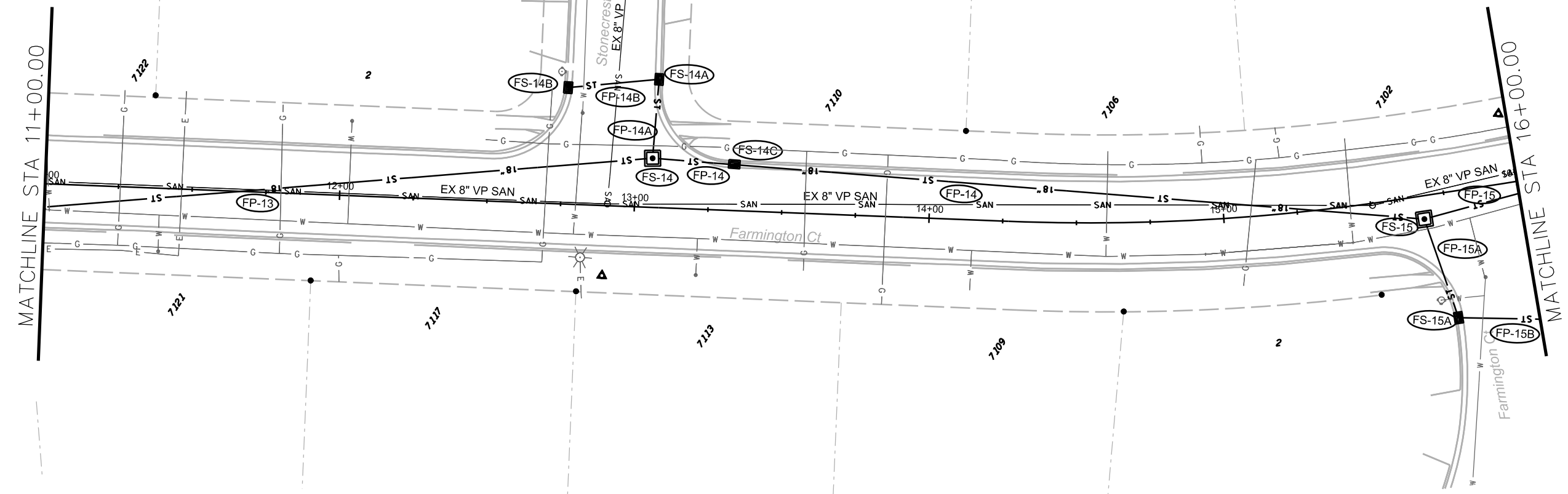


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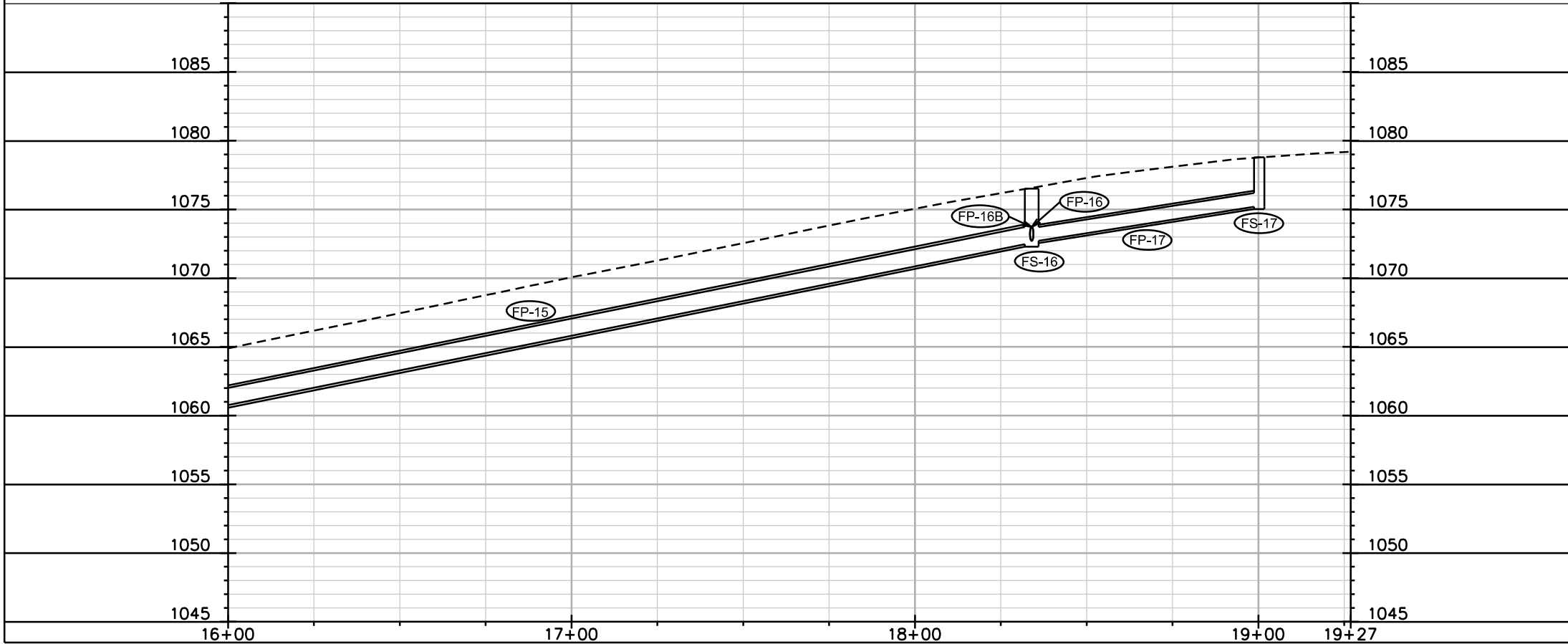
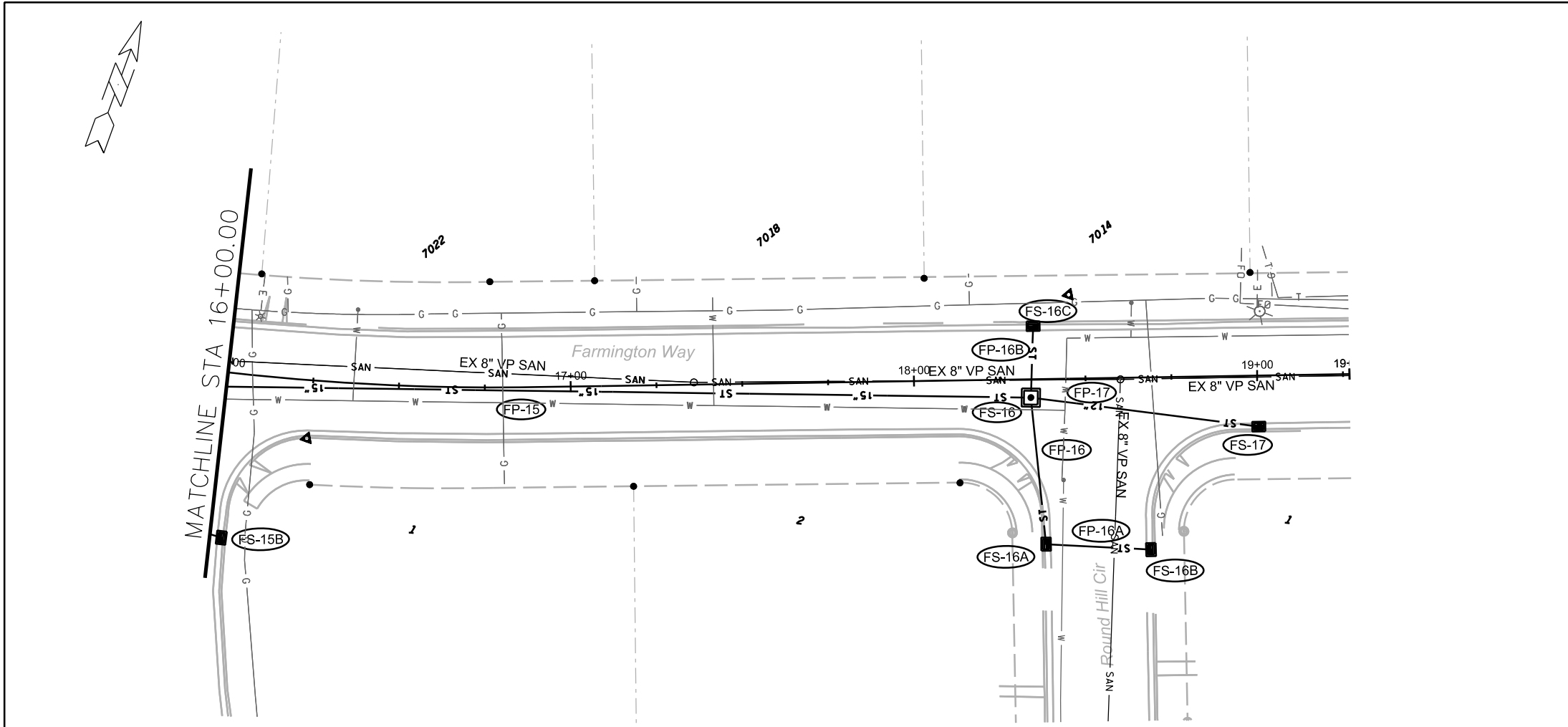
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STORM SEWER SCHEDULE

STORM WITH RESURFACING 2018		SHEET NO.
PROJECT NO. 11674		FW-8
REMOVALS & ULO SCHEDULE		
FARMINGTON AREA	CITY OF MADISON	

ULO SCHEDULE

STRUC. NO.	STATION	LOCATION (OFFSET)	TYPE	NOTES
ULO-1	30+24.00	LT-14.89	WATER	-
ULO-2	31+02.45	LT-3.30	SANITARY SEWER	-
ULO-3	41+51.98	RT-15.00	FO	-

STORM STRUCTURE REMOVALS

STRUC. NO.	ID NO.	STATION	LOCATION (OFFSET)	TYPE	NOTES
RIT-1	IN 2551-005	30+21.44	LT-20.50	SADDLED H INLET	-
RST-1	AS 2551-004	33+17.71	RT-4.14	4X4 STORM STRUCTURE	-
RST-2	AS 2551-010			4X4 STORM STRUCTURE	-

STORM PIPE REMOVALS

REMOVE NO.	REMOVE FROM	REMOVE TO	LGTH (FT)	PIPE SIZE	PIPE TYPE	PAID (Y/N)	NOTES
RPT-1	TS-1	TS-2	51	36"	RCP	N	-
RPT-2	RST-1	RST-2	412	30"	RCP	N	-
RPT-3	RST-2	FS-1	24	24"	RCP	N	-

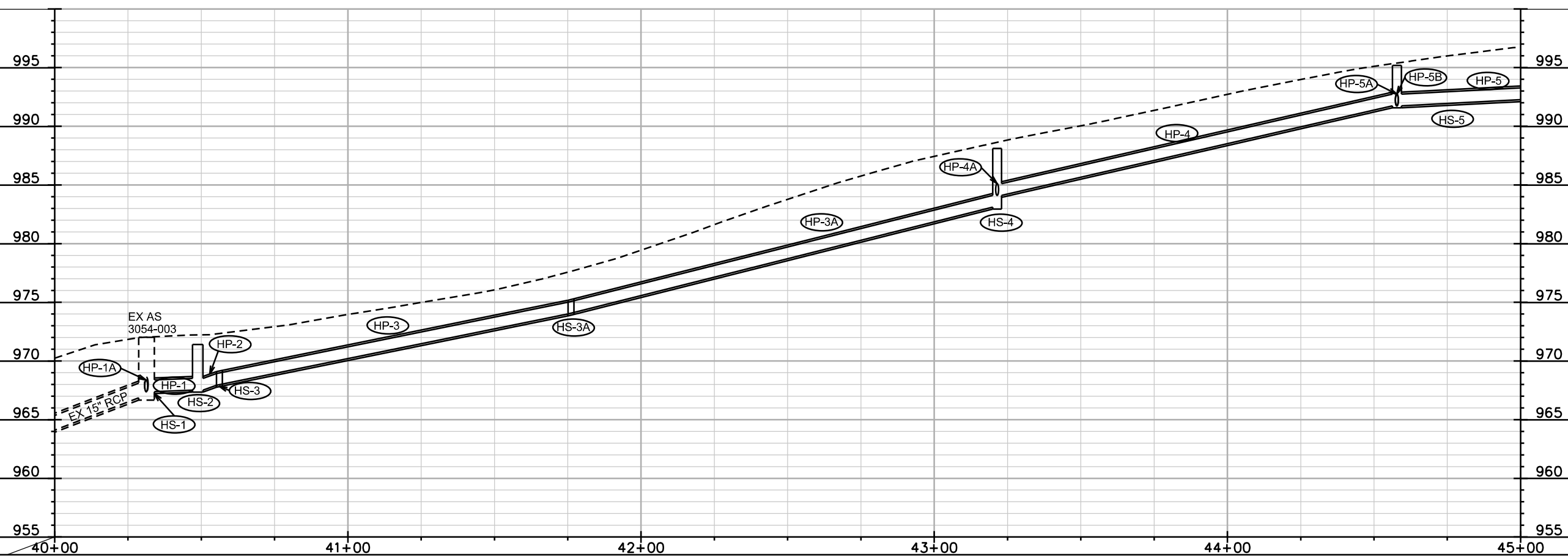
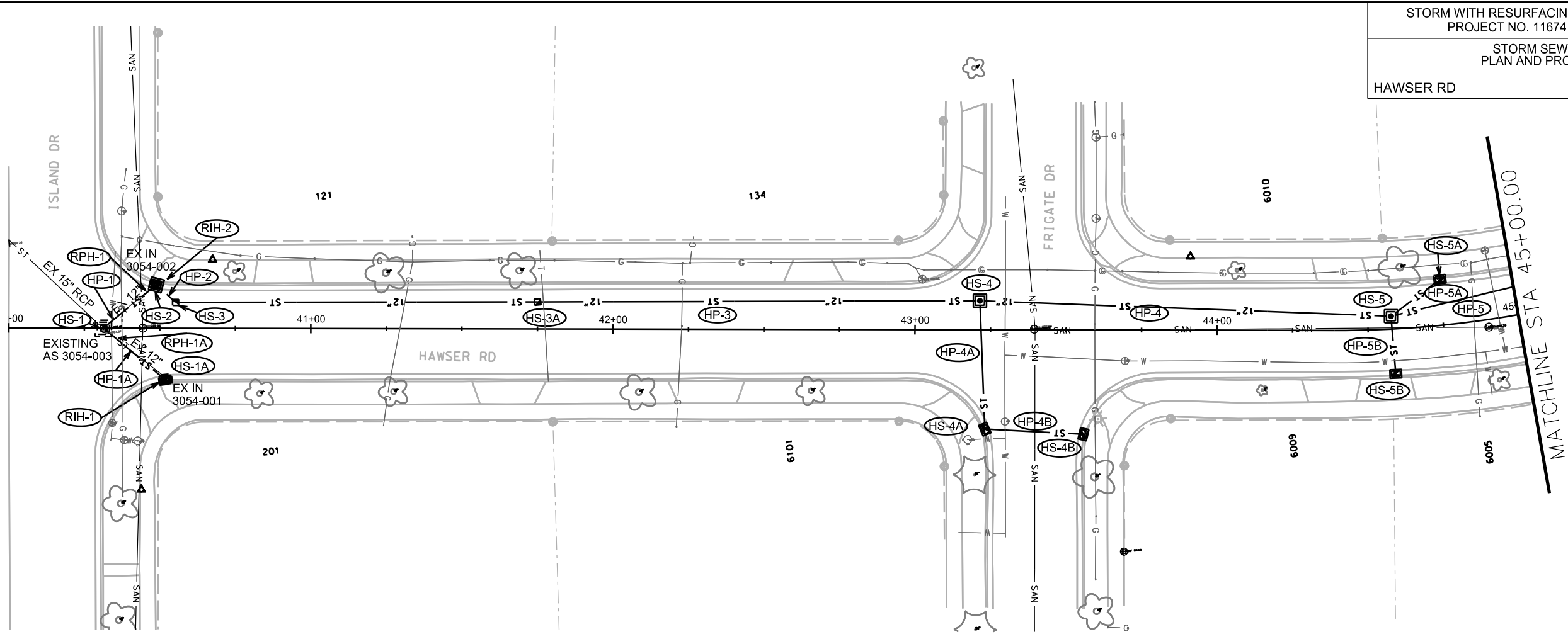
STANDARD NOTES:

- 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 ELIA E. ACOSTA OF CITY ENGINEERING AT (608) 266-4096 FOR PRECAST APPROVALS, FAX SHOP DRAWINGS TO (608)264-9275, OR EMAIL SHOP DRAWINGS TO EACOSTA@CITYOFMADISON.COM.

STORM SEWER
PLAN AND PROFILE

HAWSER RD

CITY OF MADISON

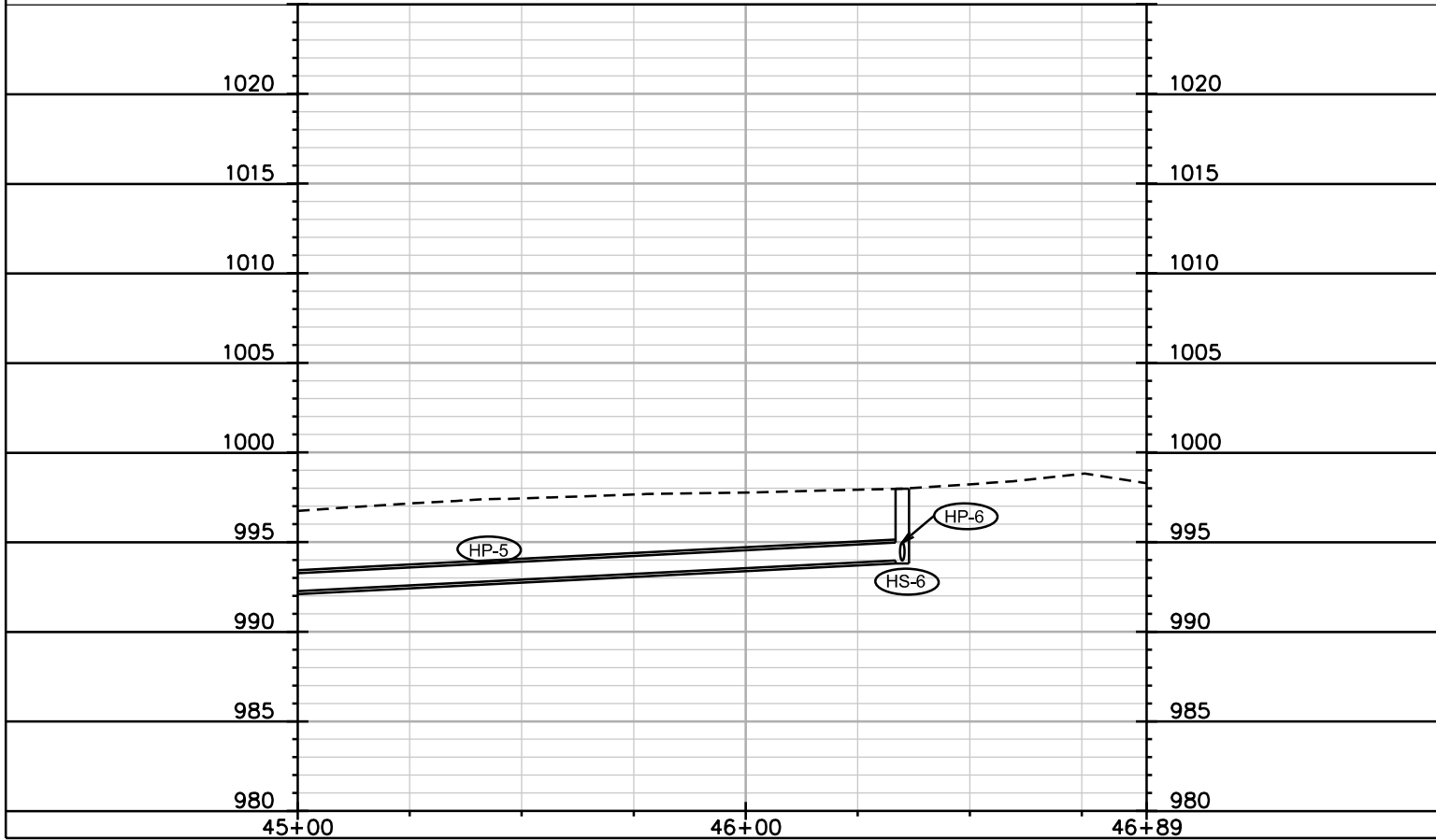
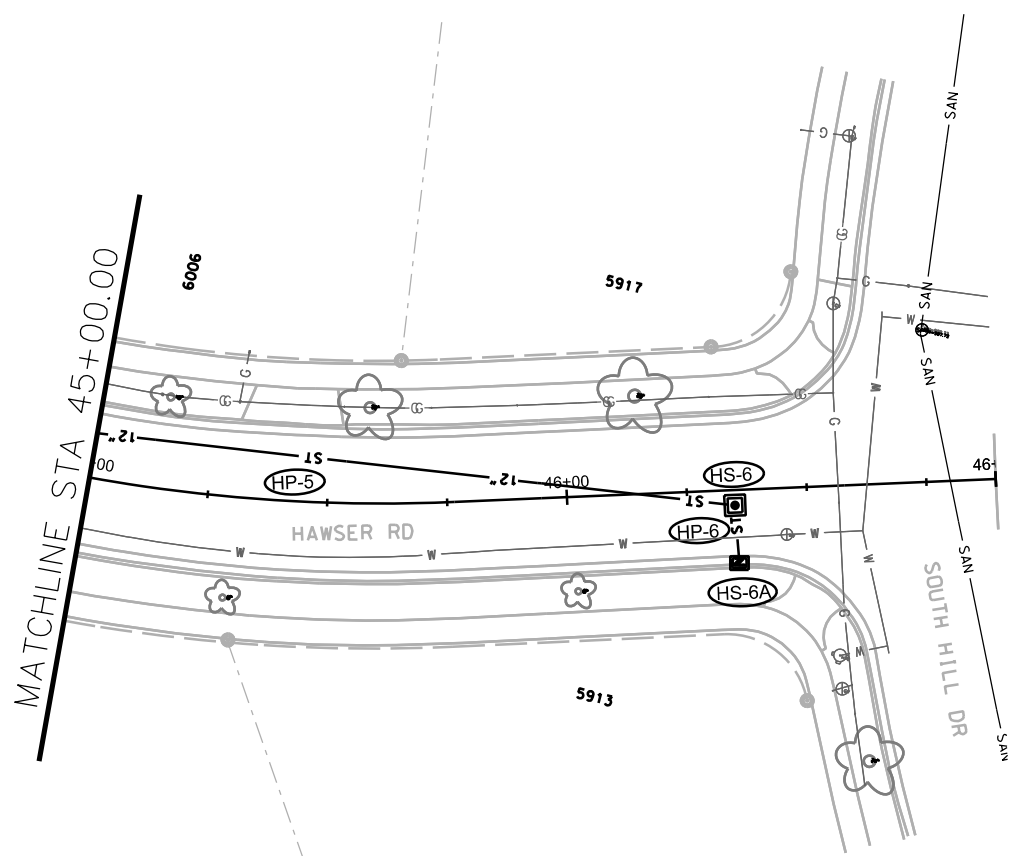


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STORM SEWER SCHEDULE

STORM WITH RESURFACING 2018		SHEET NO.
PROJECT NO. 11674		HR-3
STORM SEWER SCHEDULE		
HAWSER RD	CITY OF MADISON	

PROPOSED STORM STRUCTURES

HAWSER RD

STRUC. NO.	STATION	LOCATION (OFFSET)	TYPE	TOP OF CASTING	E.I.	DEPTH	NOTES
HS-1	40+31.47	CL	TAP * 2	-	967.37	-	TAP EX AS 3054-003
HS-1A	40+51.87	RT-17.13	H INLET	972.59	968.99	3.60	W/ R-3067-7004-VB
HS-2	40+48.81	LT-14.36	3X3 SAS	971.41	967.51	3.90	W/ R-3067-7004-VB
HS-3	40+55.19	LT-8.55	FIELD BEND	-	967.93	-	-
HS-3A	41+75.00	LT-8.93	CONCRETE COLLAR	-	974.00	-	-
HS-4	43+21.47	LT-9.60	3X3 SAS	988.11	983.11	5.00	W/ R-1550
HS-4A	43+23.17	RT-32.88	H INLET	989.96	986.56	3.40	W/ R-3067-7004-VB
HS-4B	43+56.20	RT-34.38	H INLET	991.00	987.60	3.40	W/ R-3067-7004-VB
HS-5	44+75.80	LT-5.94	3X3 SAS	995.19	991.74	3.45	W/ R-1550
HS-5A	44+75.37	LT-15.20	H INLET	995.73	992.13	3.60	W/ R-3067-7004-VB
HS-5B	44+58.37	RT-14.88	H INLET	995.73	992.13	3.60	W/ R-3067-7004-VB
HS-6	46+34.93	RT-3.17	3X3 SAS	997.97	993.97	4.00	W/ R-1550
HS-6A	46+35.32	RT-15.24	H INLET	998.39	994.79	3.60	W/ R-3067-7004-VB

PROPOSED STORM PIPES

PIPE NO.	FROM (DNSTM)	TO (UPSTM)	DISCH. E.I.	INLET E.I.	PLAN (PAY) LGTH (FT)	PIPE LGTH (FT)	SLOPE (%)	PIPE SIZE	TYPE	NOTES
HP-1	HS-1	S-2	967.37	967.51	23	21	0.67%	12"	TYPE II	-
HP-1A	HS-1	HS-1A	967.37	968.99	27	25	6.48%	12"	TYPE II	-
HP-2	HS-2	HS-3	967.51	967.93	9	7	6.00%	12"	TYPE II	-
HP-3	HS-3	HS-3A	967.93	974.00	120	120	5.06%	12"	TYPE II	-
HP-3A	HS-3A	HS-4	974.00	983.11	146	145	6.28%	12"	TYPE II	-
HP-4	HS-4	HS-5	984.11	991.74	136	133	5.74%	12"	TYPE II	INSIDE DROP
HP-4A	HS-4	HS-4A	984.11	986.56	41	38	6.45%	12"	TYPE II	-
HP-4B	HS-4A	HS-4B	986.56	987.60	34	32	3.25%	12"	TYPE II	-
HP-5	HS-5	HS-6	991.74	993.97	176	173	1.29%	12"	TYPE II	-
HP-5A	HS-5	HS-5A	991.74	992.13	20	17	2.29%	12"	TYPE II	-
HP-5B	HS-5	HS-5B	991.74	992.13	19	17	2.29%	12"	TYPE II	-
HP-6	HS-6	HS-6A	993.97	994.79	12	10	8.20%	12"	TYPE II	-

STORM STRUCTURE REMOVALS

STRUC. NO.	ID NO.	STATION	LOCATION (OFFSET)	TYPE	NOTES
RIH-1	IN 3054-001	40+51.87	RT-17.13	TUB INLET -	
RIH-2	IN 3054-002	40+48.81	LT-14.36	TUB INLET -	

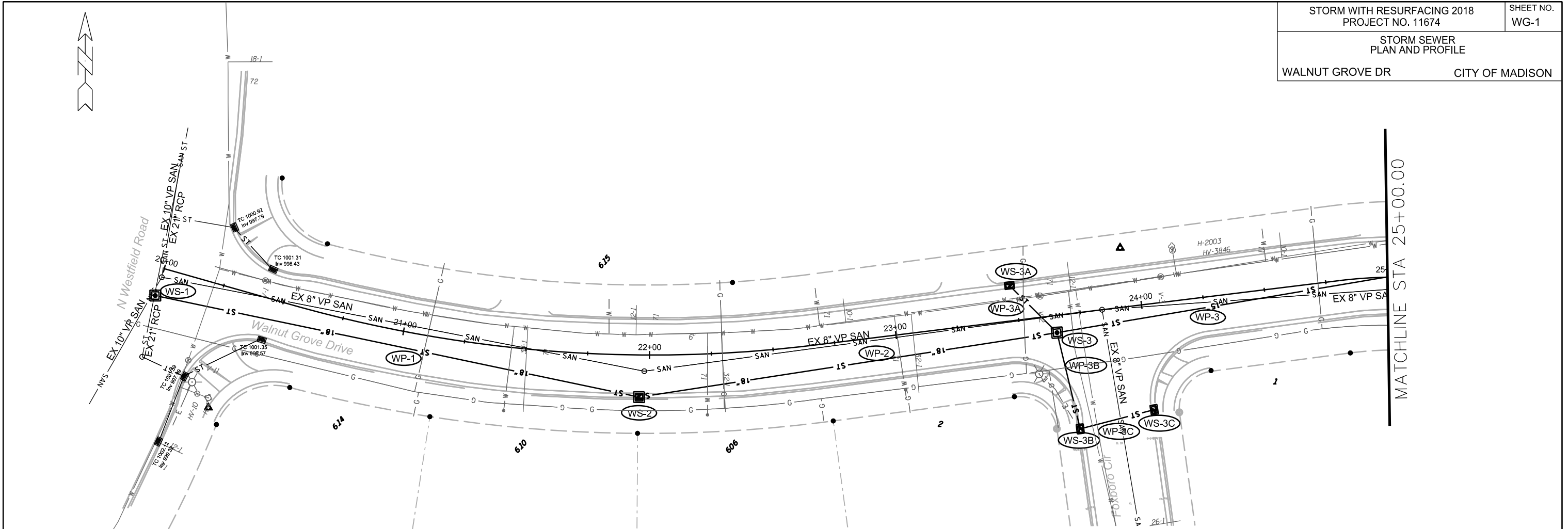
STORM PIPE REMOVALS

REMOVE NO.	REMOVE FROM	REMOVE TO	LGTH (FT)	PIPE SIZE	PAID (Y/N)	NOTES
RPH-1	HS-1	HS-2	23	12"	N	-
RPH-1A	HS-1	HS-1A	27	12"	N	-

SPECIFIC NOTES

STANDARD NOTES:

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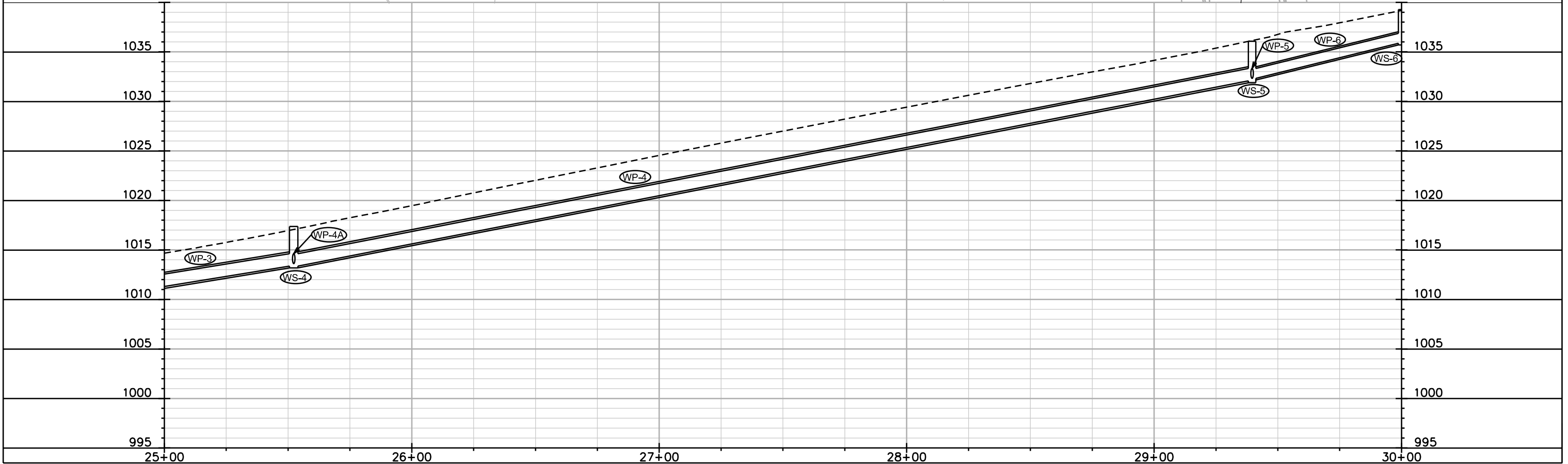
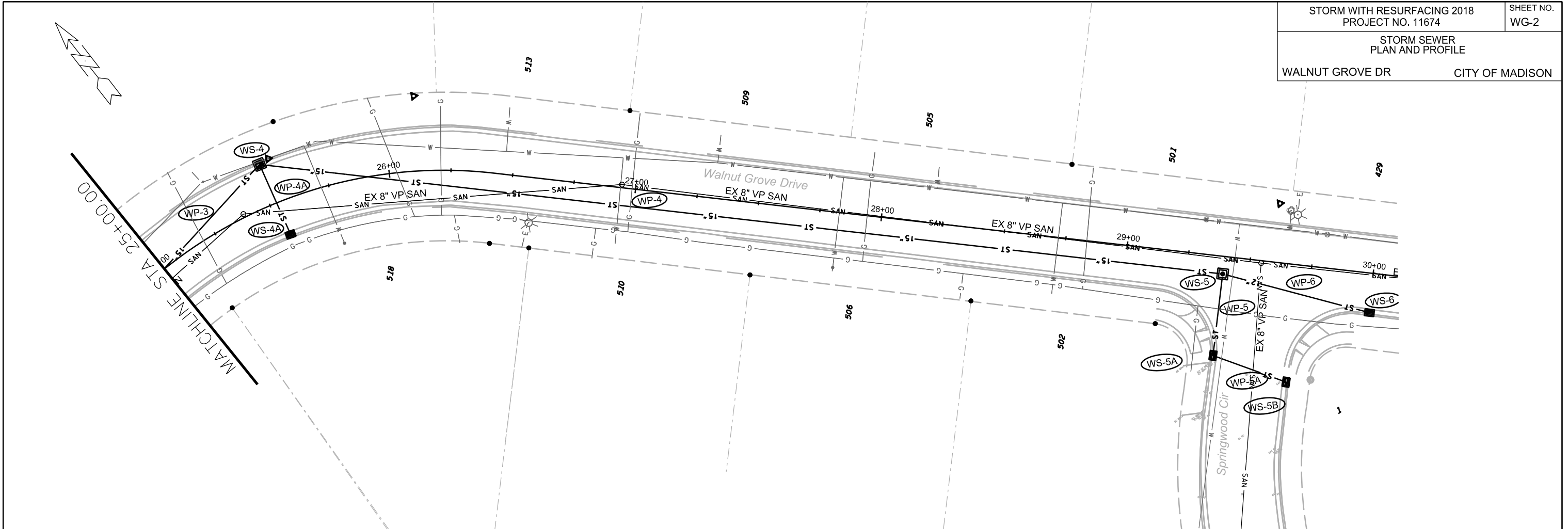


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STORM SEWER SCHEDULE

STORM WITH RESURFACING 2018		SHEET NO.
PROJECT NO. 11674		WG-3
STORM SEWER SCHEDULE		
WALNUT GROVE DR		CITY OF MADISON

PROPOSED STORM STRUCTURES

WALNUT GROVE DR

STRUC. NO.	STATION	LOCATION (OFFSET)	TYPE	TOP OF CASTING	E.I.	DEPTH	NOTES
WS-1	20+00.00	RT-13.00	3X3 SAS	1001.87	997.50	4.37	W/ R-1550
WS-2	21+95.83	RT-16.50	3X3 SAS	1005.27	1000.47	4.80	W/ R-3067-7004-VB
WS-3	23+64.74	RT-6.98	3X3 SAS	1009.84	1005.59	4.25	W/ R-1550
WS-3A	23+47.97	LT-14.31	H INLET	1009.64	1006.25	3.39	W/ R-3067-7004-VB
WS-3B	23+69.30	RT-46.76	H INLET	1010.58	1007.18	3.40	W/ R-3067-7004-VB
WS-3C	23+99.90	RT-42.68	H INLET	1011.29	1007.89	3.40	W/ R-3067-7004-VB
WS-4	25+52.28	LT-16.50	3X3 SAS	1017.37	1013.37	4.00	W/ R-3067-7004-VB
WS-4A	25+53.32	RT-13.92	H INLET	1017.18	1013.79	3.39	W/ R-3067-7004-VB
WS-5	29+39.58	RT-7.10	3X3 SAS	1036.07	1032.07	4.00	W/ R-1550
WS-5A	29+39.43	RT-40.26	H INLET	1036.81	1033.41	3.40	W/ R-3067-7004-VB
WS-5B	29+70.00	RT-47.60	H INLET	1037.87	1034.47	3.40	W/ R-3067-7004-VB
WS-6	30+00.26	RT-15.91	H INLET	1039.27	1035.87	3.40	W/ R-3067-7004-VB

PROPOSED STORM PIPES

PIPE NO.	FROM (DNSTM)	TO (UPSTM)	DISCH. E.I.	INLET E.I.	PLAN (PAY) LGTH (FT)	PIPE LGTH (FT)	SLOPE (%)	PIPE SIZE	TYPE	NOTES
WP-1	WS-1	WS-2	997.50	1000.47	200	197	1.51%	18"	RCP	-
WP-2	WS-2	WS-3	1001.50	1005.59	171	168	2.43%	18"	RCP	INSIDE DROP
WP-3	WS-3	WS-4	1005.84	1013.37	192	189	3.98%	15"	RCP	-
WP-3A	WS-3	WS-3A	1006.09	1006.25	27	24	0.67%	12"	RCP	-
WP-3B	WS-3	WS-3B	1006.09	1007.18	40	37	2.95%	12"	RCP	-
WP-3C	WS-3B	WS-3C	1007.18	1007.89	31	29	2.45%	12"	RCP	-
WP-4	WS-4	WS-5	1013.37	1032.07	392	389	4.81%	15"	RCP	-
WP-4A	WS-4	WS-4A	1013.62	1013.79	31	28	0.61%	12"	RCP	-
WP-5	WS-5	WS-5A	1032.32	1033.41	33	30	3.63%	12"	RCP	-
WP-5A	WS-5A	WS-5B	1033.41	1034.47	31	29	3.66%	12"	RCP	-
WP-6	WS-5	WS-6	1032.32	1035.87	61	58	6.12%	12"	RCP	-

SPECIFIC NOTES

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 ELIA E. ACOSTA OF CITY ENGINEERING AT (608) 266-4096 FOR PRECAST APPROVALS, FAX SHOP DRAWINGS TO (608)264-9275, OR EMAIL SHOP DRAWINGS TO EACOSTA@CITYOFMADISON.COM.