Anderson Mill Road
Appendix A: Preliminary Plan

PART 5 - Drainage and Utility Maps

LEGEND

E1 4.73	ON-SITE DRAINAGE AREA (ac.)
O1 4.73	OFF-SITE DRAINAGE AREA (ac.)
	DRAINAGE AREA BOUNDARY
TC	TIME OF CONCENTRATION
SD	EX. STORM DRAIN

REV. NO.	BY	DATE	REVISION DESCRIPTION

PRELIMINARY

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CITY OF AUSTIN, TEXAS
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

ANDERSON MILL ROAD REGIONAL MOBILITY IMPROVEMENTS
SPICEWOOD PARKWAY TO US 183

EXISTING OVERALL DRAINAGE AREA MAP
SHEET 1 OF 2

NOTES	NAME	DATE
SURVEY BY	N/A	N/A
DRAWN BY	JT/EZ	4/17
DESIGNED BY	JT/EZ	4/17
CHECKED BY	EZ/CG	4/17
REVIEWED BY	ESD	4/17

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HORIZONTAL SCALE IN FEET

CH-101 | 32 OF 36

THIVAKARAN, JOTHIKA

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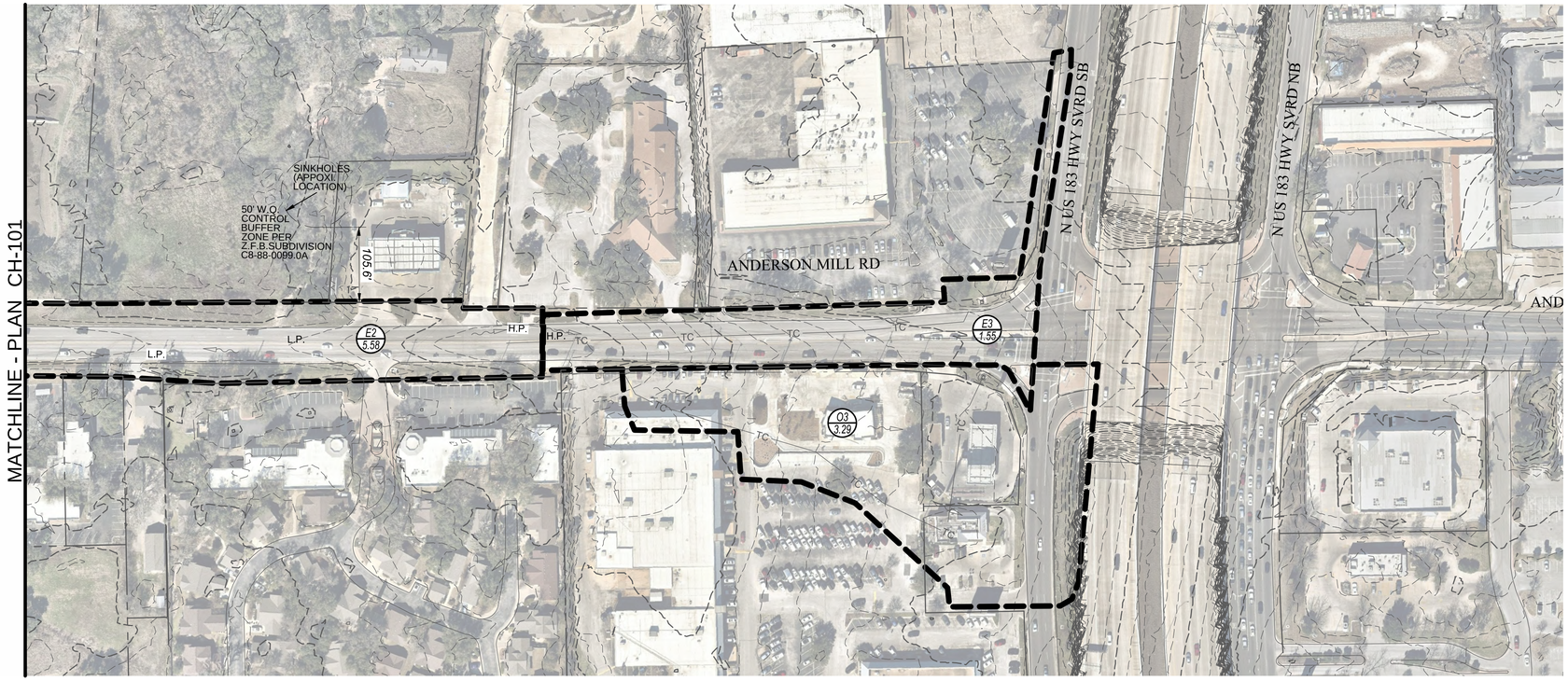

HYDROLOGY SUMMARY (EXISTING CONDITIONS)

Storm Event			2 Year Storm Event			10 Year Storm Event			25 Year Storm Event			100 Year Storm Event		
Drainage Area Number	Drainage Area (acres)	Time of Concentration Tc (min)	Runoff Coefficient C2	Intensity I2	Design Flow Q2 (cfs)	Runoff Coefficient C10	Intensity I10	Design Flow Q10 (cfs)	Runoff Coefficient C25	Intensity I25	Design Flow Q25 (cfs)	Runoff Coefficient C100	Intensity I100	Design Flow Q100 (cfs)
O1	3.88	4.92	0.52	5.78	11.58	0.58	8.60	19.36	0.63	10.15	24.60	0.70	12.59	34.36
O2	0.82	5.93	0.50	5.50	2.24	0.56	8.19	3.75	0.60	9.68	4.78	0.68	12.07	6.73
O3	3.29	6.62	0.70	5.32	12.17	0.77	7.93	20.14	0.82	9.38	25.34	0.91	11.74	35.11
Subtotal	**7.98**				**26.00**			**43.25**			**54.72**			**76.21**
E1	4.73	8.17	0.58	4.97	13.67	0.65	7.41	22.79	0.70	8.79	28.94	0.78	11.08	40.80
E2	5.58	9.44	0.55	4.72	14.44	0.61	7.05	24.15	0.66	8.37	30.80	0.74	10.60	43.79
E3	1.66	3.50	0.61	6.23	6.34	0.68	9.27	10.52	0.73	10.91	13.23	0.82	13.41	18.13
Subtotal	**11.97**				**34.44**			**57.46**			**72.97**			**102.71**

IMPERVIOUS COVER CALCULATIONS

Drainage Input				Asphalt		Concrete		Grass	
Basin	Area (sf)	Existing %IC	Area IC (sf)	Asph. % of IC	Asph. Area (sf)	Conc. % of IC	Conc. Area (sf)	Grass Percentile	Grass Area (sf)
O1	168,902	45.25%	76,427	15.4%	25,962	29.88%	50,465	54.75%	92475.00
O2	35,563	41.24%	14,667	23.7%	8,424	17.55%	6,243	58.76%	20896.00
O3	143,312	89.62%	128,439	77.1%	110,563	12.47%	17,876	10.38%	14873.00
E1	205,987	62.69%	129,132	59.8%	123,120	2.92%	6,012	37.31%	76855.00
E2	243,279	54.03%	131,435	46.9%	114,099	7.13%	17,336	45.97%	111844.00
E3	72,156	70.77%	51,068	68.2%	49,192	2.60%	1,876	29.23%	21088.00

LEGEND

- E1 4.73 — ON-SITE DRAINAGE AREA (ac.)
- O1 4.73 — OFF-SITE DRAINAGE AREA (ac.)
- DRAINAGE AREA BOUNDARY
- TC — TIME OF CONCENTRATION
- SD — EX. STORM DRAIN

REV. NO.	BY	DATE	REVISION DESCRIPTION

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CITY OF AUSTIN, TEXAS
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

ANDERSON MILL ROAD REGIONAL MOBILITY IMPROVEMENTS
SPICEWOOD PARKWAY TO US 183

EXISTING OVERALL DRAINAGE MAP
SHEET 2 OF 2

NOTES	NAME	DATE
SURVEY BY	N/A	N/A
DRAWN BY	JT/EZ	4/17
DESIGNED BY	JT/EZ	4/17
CHECKED BY	EZ/CG	4/17
REVIEWED BY	ESD	4/17

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HORIZONTAL SCALE IN FEET

THIVAKARAN, JOTHIKA
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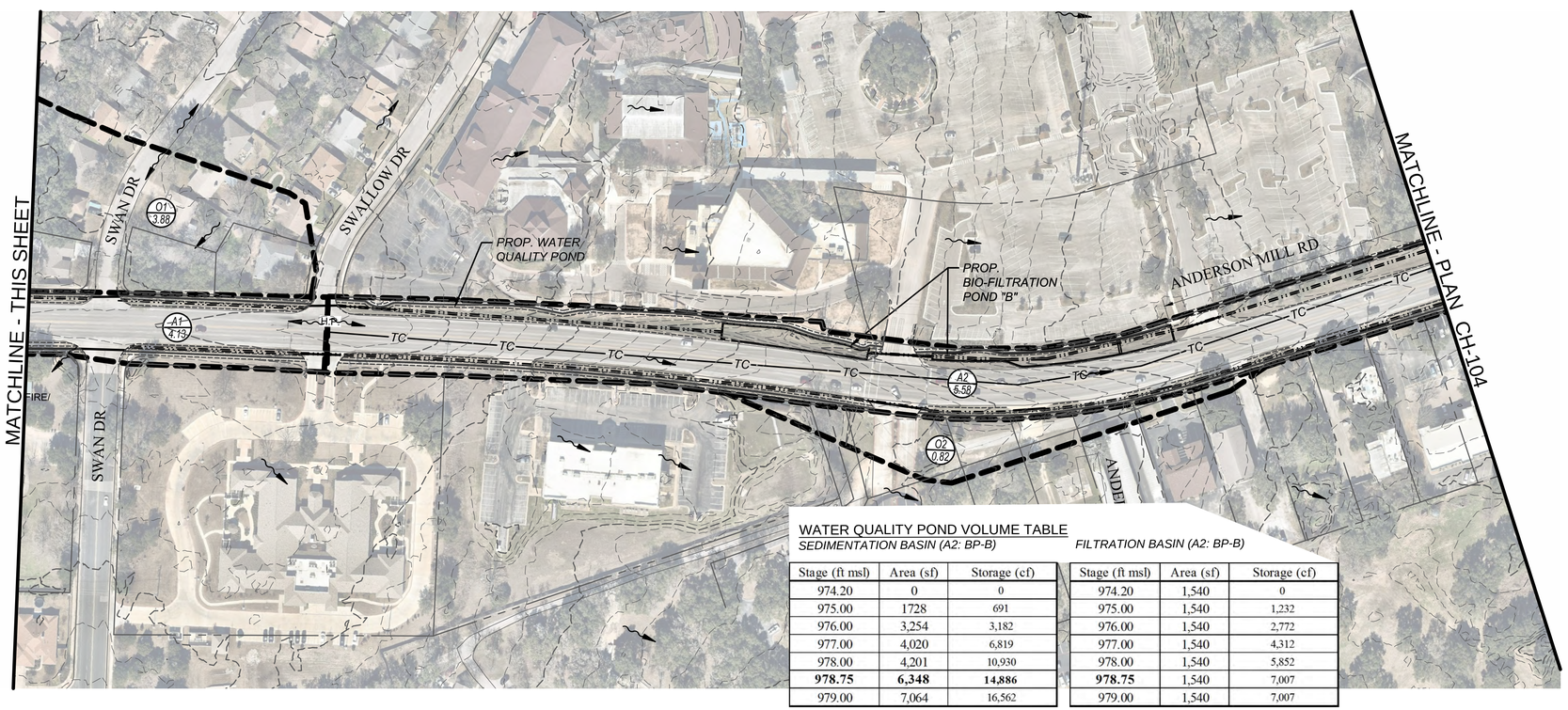
WATER QUALITY POND VOLUME TABLE

SEDIMENTATION BASIN (A1: BP-A)

Stage (ft msl)	Area (sf)	Storage (cf)
992.75	0	0
993.00	1512	189
994.00	4,545	3,218
995.00	5,250	8,115
995.50	**5,720**	**10,858**
996.00	6,190	13,835
997.00	6,686	20,273
997.75	7,000	25,405

FILTRATION BASIN (A1: BP-A)

Stage (ft msl)	Area (sf)	Storage (cf)
992.75	1,210	0
993.00	1,210	303
994.00	1,210	1,513
995.00	1,210	2,723
995.50	**1,210**	**3,328**
996.00	1,210	3,933
997.00	1,210	5,143
997.75	2801	6,647



WATER QUALITY POND VOLUME TABLE

SEDIMENTATION BASIN (A2: BP-B)

Stage (ft msl)	Area (sf)	Storage (cf)
974.20	0	0
975.00	1728	691
976.00	3,254	3,182
977.00	4,020	6,819
978.00	4,201	10,930
978.75	**6,348**	**14,886**
979.00	7,064	16,562

FILTRATION BASIN (A2: BP-B)

Stage (ft msl)	Area (sf)	Storage (cf)
974.20	1,540	0
975.00	1,540	1,232
976.00	1,540	2,772
977.00	1,540	4,312
978.00	1,540	5,852
978.75	1,540	7,007
979.00	1,540	7,007

LEGEND

- A1 4.73 — ON-SITE DRAINAGE AREA (ac.)
- O1 4.73 — OFF-SITE DRAINAGE AREA (ac.)
- DRAINAGE AREA BOUNDARY
- TC — TIME OF CONCENTRATION
- SD — EX. STORM DRAIN
- PROP. IMPROVEMENTS
- PROP. DITCH EDGE
- PROP. STORM DRAIN LINE
- PROP. D.E./W.Q. EASEMENT
- PROP. RIGHT OF WAY

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ANDERSON MILL ROAD REGIONAL MOBILITY IMPROVEMENTS
SPICEWOOD PARKWAY TO US 183

REDEVELOPED OVERALL DRAINAGE AREA MAP
SHEET 1 OF 2

NOTES	NAME	DATE
SURVEY BY	N/A	N/A
DRAWN BY	JT/EZ	4/17
DESIGNED BY	JT/EZ	4/17
CHECKED BY	EZ/CG	4/17
REVIEWED BY	ESD	4/17

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HORIZONTAL SCALE IN FEET

CH-103 | 34 OF 36

THIVAKARAN, JOTHIKA

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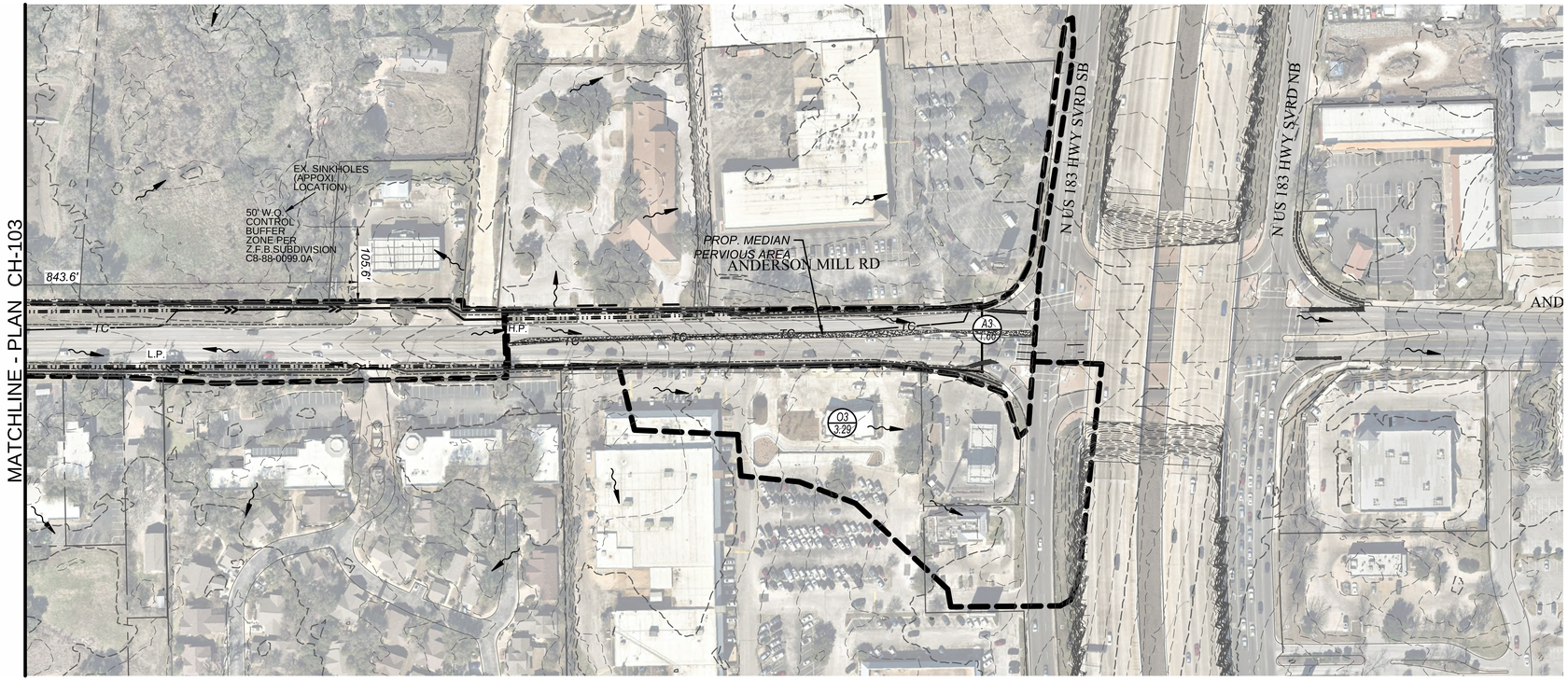

HYDROLOGY SUMMARY (REDEVELOPED CONDITIONS)

Storm Event			2 Year Storm Event			10 Year Storm Event			25 Year Storm Event			100 Year Storm Event		
Drainage Area Number	Drainage Area (acres)	Time of Concentration Tc (min)	Runoff Coefficient C2	Intensity I2	Design Flow Q2 (cfs)	Runoff Coefficient C10	Intensity I10	Design Flow Q10 (cfs)	Runoff Coefficient C25	Intensity I25	Design Flow Q25 (cfs)	Runoff Coefficient C100	Intensity I100	Design Flow Q100 (cfs)
O1	3.88	4.92	0.52	5.78	11.58	0.58	8.60	19.36	0.63	10.15	24.60	0.70	12.59	34.36
O2	0.82	5.93	0.50	5.50	2.24	0.56	8.19	3.75	0.60	9.68	4.78	0.68	12.07	6.73
O3	3.29	6.62	0.70	5.32	12.17	0.77	7.93	20.14	0.82	9.38	25.34	0.91	11.74	35.11
Subtotal	**7.98**				**26.00**			**43.25**			**54.72**			**76.21**
A1	4.73	8.17	0.63	4.97	14.80	0.70	7.41	24.66	0.75	8.79	31.29	0.84	11.08	44.06
A2	5.58	9.44	0.61	4.72	16.21	0.69	7.05	27.07	0.74	8.37	34.48	0.83	10.60	48.93
A3	1.66	3.50	0.69	6.23	7.09	0.76	9.27	11.74	0.81	10.91	14.72	0.90	13.41	20.08
Subtotal	**11.97**				**38.09**			**63.47**			**80.49**			**113.08**

IMPERVIOUS COVER CALCULATIONS

EXIST. IMPERVIOUS COVER:	311,635	s.f.
IMPERVIOUS COVER TO REMAIN*:	295,949	s.f.
EXIST. IMPERVIOUS COVER REMOVAL:	-15,686	s.f.
NEW PROPOSED IMPERVIOUS COVER*:	53,920	s.f.
TOTAL PROPOSED IMPERVIOUS COVER:	349,869	s.f.
TOTAL IMPERVIOUS COVER DIFFERENCE*	**38,234**	s.f.
	0.8777	ac.

NOTE: IMPERVIOUS COVER TO REMAIN IS FOR MAINTENANCE (MILL & OVERLAY). BIO-FILTRATION PONDS WERE SIZED TO TREAT NEW IMPERVIOUS COVER 53,920 s.f.

Drainage Input				Asphalt		Concrete		Grass	
Basin	Area (sf)	Total Proposed %IC	Total Area IC (sf)	Asph. % of IC	Asph. Area (sf)	Conc. % of IC	Conc. Area (sf)	Grass Percentile	Grass Area (sf)
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O3	143,312	17.94%	25,717	77.1%	110,563	12.47%	17,876	10.38%	14873.00
A1	205,987	69.16%	142,459	59.8%	128,229	2.92%	14,230	37.31%	76855.00
A2	243,279	63.11%	153,534	46.9%	127,980	7.13%	25,554	45.97%	111844.00
A3	72,156	74.67%	53,882	68.2%	48,740	2.60%	5,142	29.23%	21088.00

LEGEND

- A1 4.73 — ON-SITE DRAINAGE AREA (ac.)
- O1 4.73 — OFF-SITE DRAINAGE AREA (ac.)
- DRAINAGE AREA BOUNDARY
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ANDERSON MILL ROAD REGIONAL MOBILITY IMPROVEMENTS
SPICEWOOD PARKWAY TO US 183

REDEVELOPED OVERALL DRAINAGE AREA MAP
SHEET 2 OF 2

NOTES	NAME	DATE
SURVEY BY	N/A	N/A
DRAWN BY	JT/EZ	4/17
DESIGNED BY	JT/EZ	4/17
CHECKED BY	EZ/CG	4/17
REVIEWED BY	ESD	4/17

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HORIZONTAL SCALE IN FEET

THIVAKARAN, JOTHIKA

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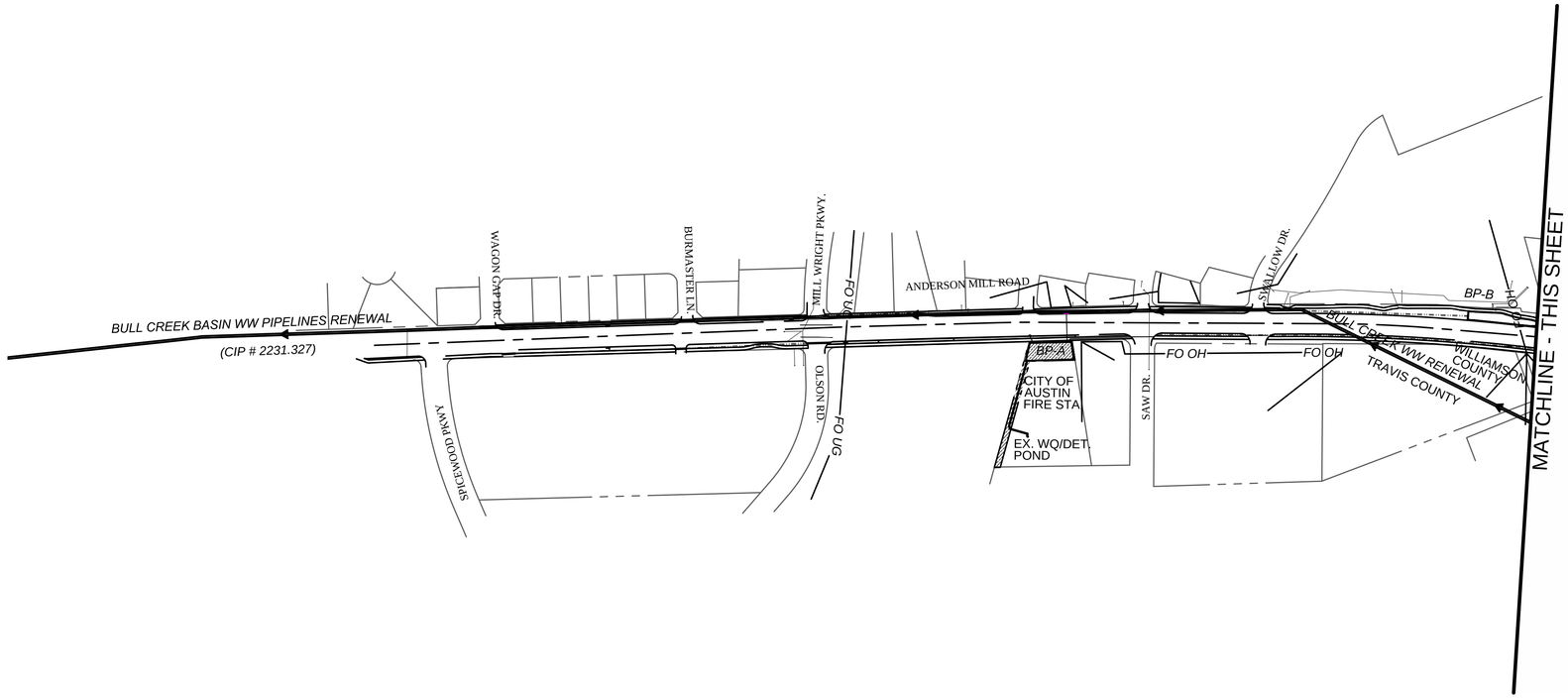

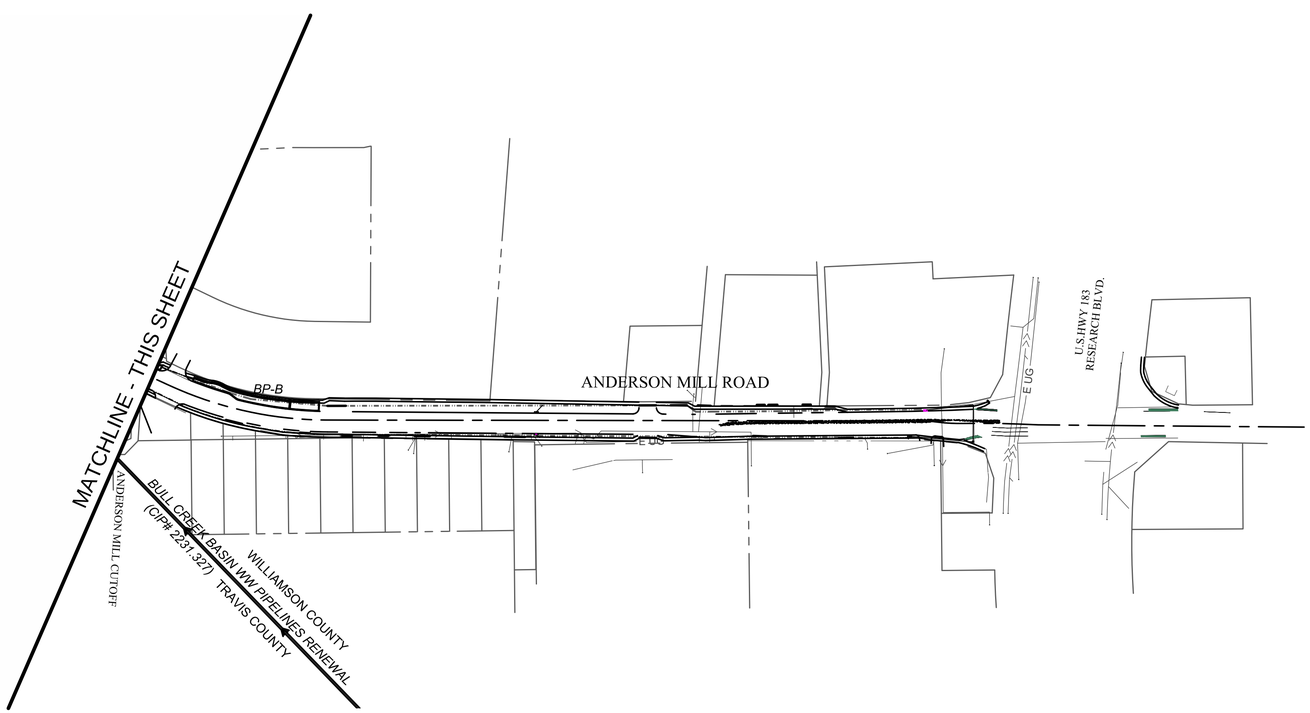

LEGEND

E OH	AE OVERHEAD LN
W	EX. WTR LN
WW	EX. WW LN
	PROP. WW LN
	EX. STORM DRAIN
G	EX. GAS LN
C CO	COMM LN (TIME WARNER CABLE)
	AE POLE
	AE POLE WITH LIGHT
E UG	AE UNDERGROUND LN
C UG	COMM. UNDERGROUND LN
FO UG	*PROP. GOOGLE FIBER UNDERGROUND*
	PROP. STORM DRAIN LINE
	PROP. EDGE OF PAVEMENT
	PROP. DITCH EDGE
	PROP. WATER QUALITY POND

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ENGINEERING SERVICES DIVISION

ANDERSON MILL ROAD REGIONAL MOBILITY IMPROVEMENTS
SPICEWOOD PARKWAY TO US 183

PROPOSED UTILITY IMPROVEMENTS

NOTES	NAME	DATE
SURVEY BY	N/A	N/A
DRAWN BY	JT/EZ	4/17
DESIGNED BY	JT/EZ	4/17
CHECKED BY	EZ/CG	4/17
REVIEWED BY	ESD	4/17

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HORIZONTAL SCALE IN FEET

CU-101 36 OF 36

THIVAKARAN, JOTHIKA

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