

BRIARGATE PARKWAY//UNION BOULEVARD MDDP DRAINAGE PLAN

CITY OF COLORADO SPRINGS, COUNTY OF EL PASO, STATE OF COLORADO

NOTES:

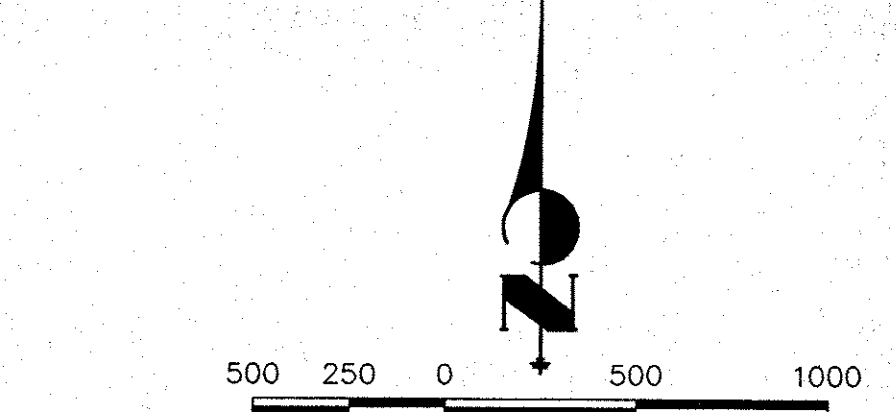
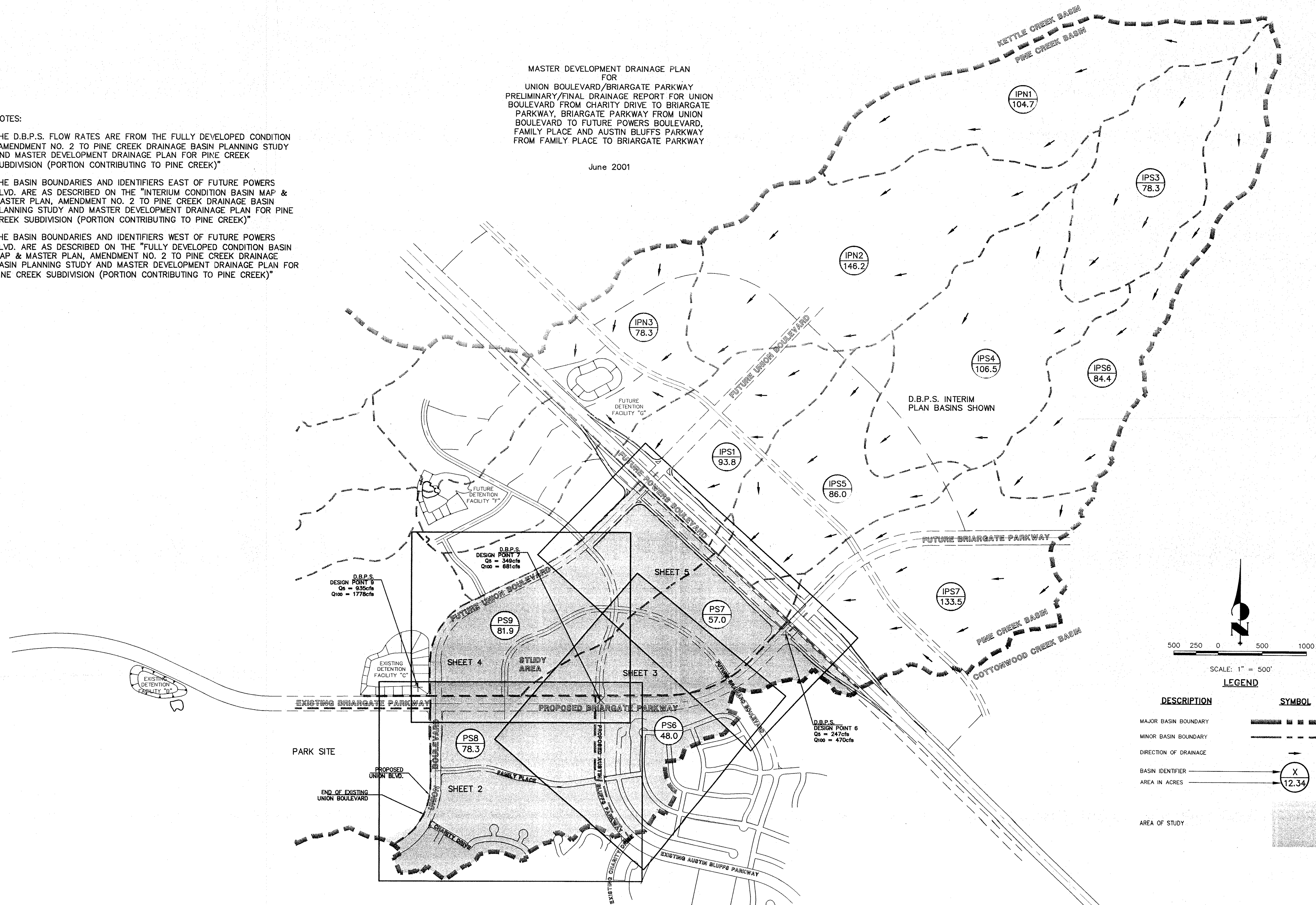
THE D.B.P.S. FLOW RATES ARE FROM THE FULLY DEVELOPED CONDITION "AMENDMENT NO. 2 TO PINE CREEK DRAINAGE BASIN PLANNING STUDY AND MASTER DEVELOPMENT DRAINAGE PLAN FOR PINE CREEK SUBDIVISION (PORTION CONTRIBUTING TO PINE CREEK)"

THE BASIN BOUNDARIES AND IDENTIFIERS EAST OF FUTURE POWERS BLVD. ARE AS DESCRIBED ON THE "INTERIUM CONDITION BASIN MAP & MASTER PLAN, AMENDMENT NO. 2 TO PINE CREEK DRAINAGE BASIN PLANNING STUDY AND MASTER DEVELOPMENT DRAINAGE PLAN FOR PINE CREEK SUBDIVISION (PORTION CONTRIBUTING TO PINE CREEK)"

THE BASIN BOUNDARIES AND IDENTIFIERS WEST OF FUTURE POWERS BLVD. ARE AS DESCRIBED ON THE "FULLY DEVELOPED CONDITION BASIN MAP & MASTER PLAN, AMENDMENT NO. 2 TO PINE CREEK DRAINAGE BASIN PLANNING STUDY AND MASTER DEVELOPMENT DRAINAGE PLAN FOR PINE CREEK SUBDIVISION (PORTION CONTRIBUTING TO PINE CREEK)"

MASTER DEVELOPMENT DRAINAGE PLAN FOR UNION BOULEVARD/BRIARGATE PARKWAY PRELIMINARY/FINAL DRAINAGE REPORT FOR UNION BOULEVARD FROM CHARITY DRIVE TO BRIARGATE PARKWAY, BRIARGATE PARKWAY FROM UNION BOULEVARD TO FUTURE POWERS BOULEVARD, FAMILY PLACE AND AUSTIN BLUFFS PARKWAY FROM FAMILY PLACE TO BRIARGATE PARKWAY

June 2001



LEGEND

DESCRIPTION	SYMBOL
MAJOR BASIN BOUNDARY	--- --- --- ---
MINOR BASIN BOUNDARY	- - - - -
DIRECTION OF DRAINAGE	→
BASIN IDENTIFIER	(X)
AREA IN ACRES	(12.34)
AREA OF STUDY	■

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE AGENCIES: JR ENGINEERING AND ARCHITECTURE, INC. ONLY OVER THE JRB/CES DESIGNATED BY WRITTEN AUTHORIZATION.

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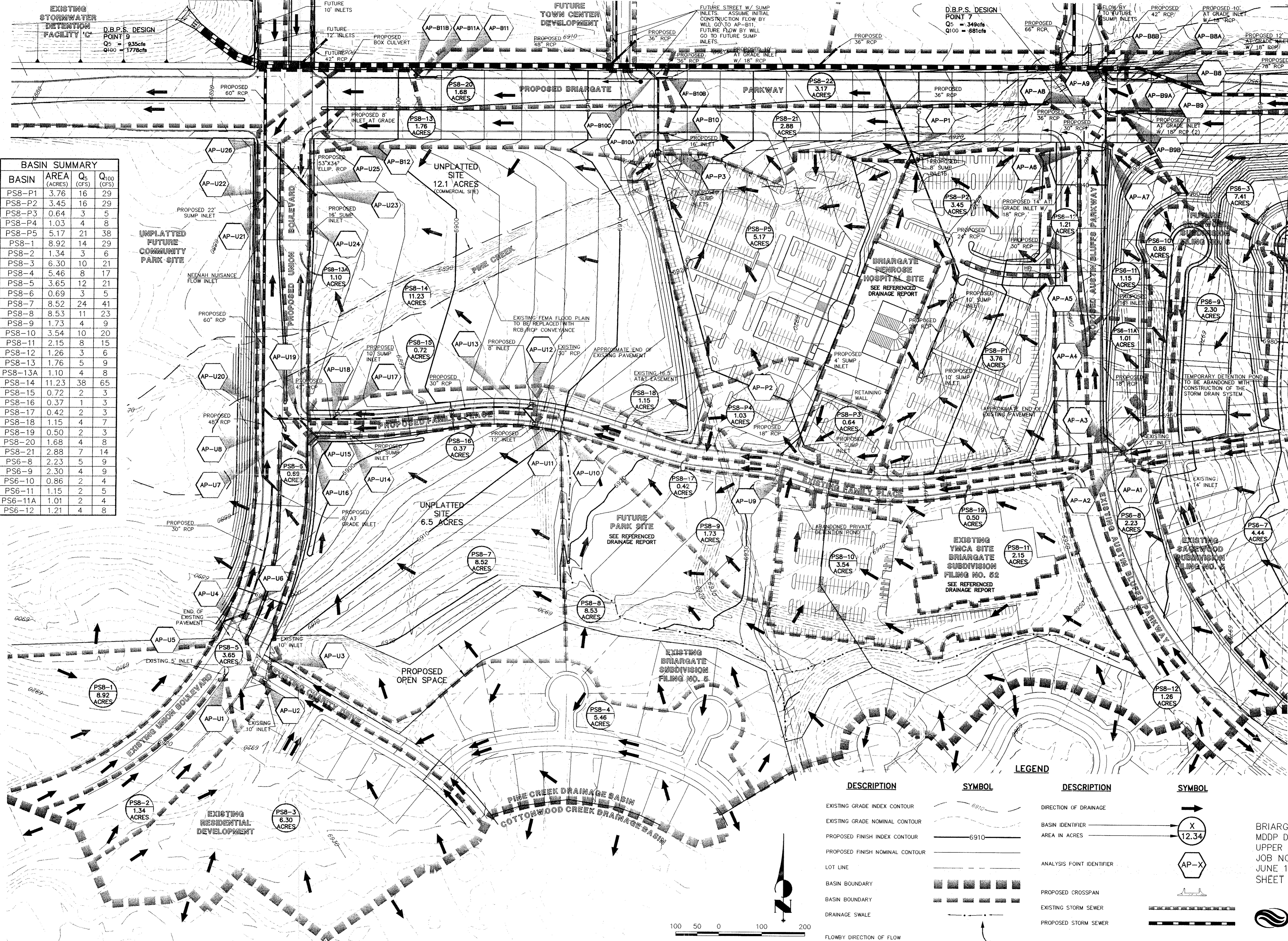
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No.	DATE

BRIARGATE PARKWAY/UNION BOULEVARD MDDP DRAINAGE PLAN
UPPER PINE CREEK - SOUTH FORK
TITLE SHEET
SHEET 1 OF 5
JOB NO. 8716.11

SEE SHEET 4



BASIN SUMMARY			
BASIN	AREA (ACRES)	Q _s (CFS)	Q ₁₀₀ (CFS)
PS8-P1	3.76	16	29
PS8-P2	3.45	16	29
PS8-P3	0.64	3	5
PS8-P4	1.03	4	8
PS8-P5	5.17	21	38
PS8-1	8.92	14	29
PS8-2	1.34	3	6
PS8-3	6.30	10	21
PS8-4	5.46	8	17
PS8-5	3.65	12	21
PS8-6	0.69	3	5
PS8-7	8.52	24	41
PS8-8	8.53	11	23
PS8-9	1.73	4	9
PS8-10	3.54	10	20
PS8-11	2.15	8	15
PS8-12	1.26	3	6
PS8-13	1.76	5	9
PS8-13A	1.10	4	8
PS8-14	11.23	38	65
PS8-15	0.72	2	3
PS8-16	0.37	1	3
PS8-17	0.42	2	3
PS8-18	1.15	4	7
PS8-19	0.50	2	3
PS8-20	1.68	4	8
PS8-21	2.88	7	14
PS6-8	2.23	5	9
PS6-9	2.30	4	9
PS6-10	0.86	2	4
PS6-11	1.15	2	5
PS6-11A	1.01	2	4
PS6-12	1.21	4	8

ANALYSIS POINT SUMMARY			
AP	AREA (ACRES)	Q _s (CFS)	Q ₁₀₀ (CFS)
AP-U1	1.34	3	6
AP-U2	6.30	10	21
AP-U3	5.46	8	17
AP-U4	4.47	9	14
AP-U5	8.92	18	38
AP-U6	8.92	26	48
AP-U7	0.69	10	26
AP-U8	30	52	
AP-U9	20	36	
AP-U10	8.53	11	23
AP-U11	2.3	4.3	
AP-U12	1.15	4	7
U11+U12	26	48	
AP-U13	24	43	
AP-U14	16	18	
AP-U15	8.52	24	41
AP-U16	39	58	
AP-U17	3	21	
AP-U18	26	63	
AP-U19	64	118	
AP-U20	92	167	
AP-U21	3.65	16	39
AP-U22	102	193	
AP-U23	11.23	38	65
AP-U24	9	29	
AP-U25	40	78	
AP-U26	141	270	
AP-A1	4.44	9	19
AP-A2	8.20	12	24
AP-A3	3.58	11	15
AP-A4	4.58	13	33
AP-A5	6.45	19	28
AP-A6	7	22	
AP-A7	23	38	
AP-A8	30	47	
AP-A9	43	63	
AP-B8	21	43	
AP-B8A	12	32	
AP-B8B	15	19	
AP-B9	13	26	
AP-B9A	9	20	
AP-B9B	8	11	
AP-P1	29	53	
AP-P3	27	48	

LEGEND

DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL
EXISTING GRADE INDEX CONTOUR		DIRECTION OF DRAINAGE	
EXISTING GRADE NOMINAL CONTOUR		BASIN IDENTIFIER	
PROPOSED FINISH INDEX CONTOUR		AREA IN ACRES	
PROPOSED FINISH NOMINAL CONTOUR		ANALYSIS POINT IDENTIFIER	
LOT LINE		PROPOSED CROSSSPAN	
BASIN BOUNDARY		EXISTING STORM SEWER	
BASIN BOUNDARY		PROPOSED STORM SEWER	
DRAINAGE SWALE			
FLOWBY DIRECTION OF FLOW			

SCALE: 1" = 100'

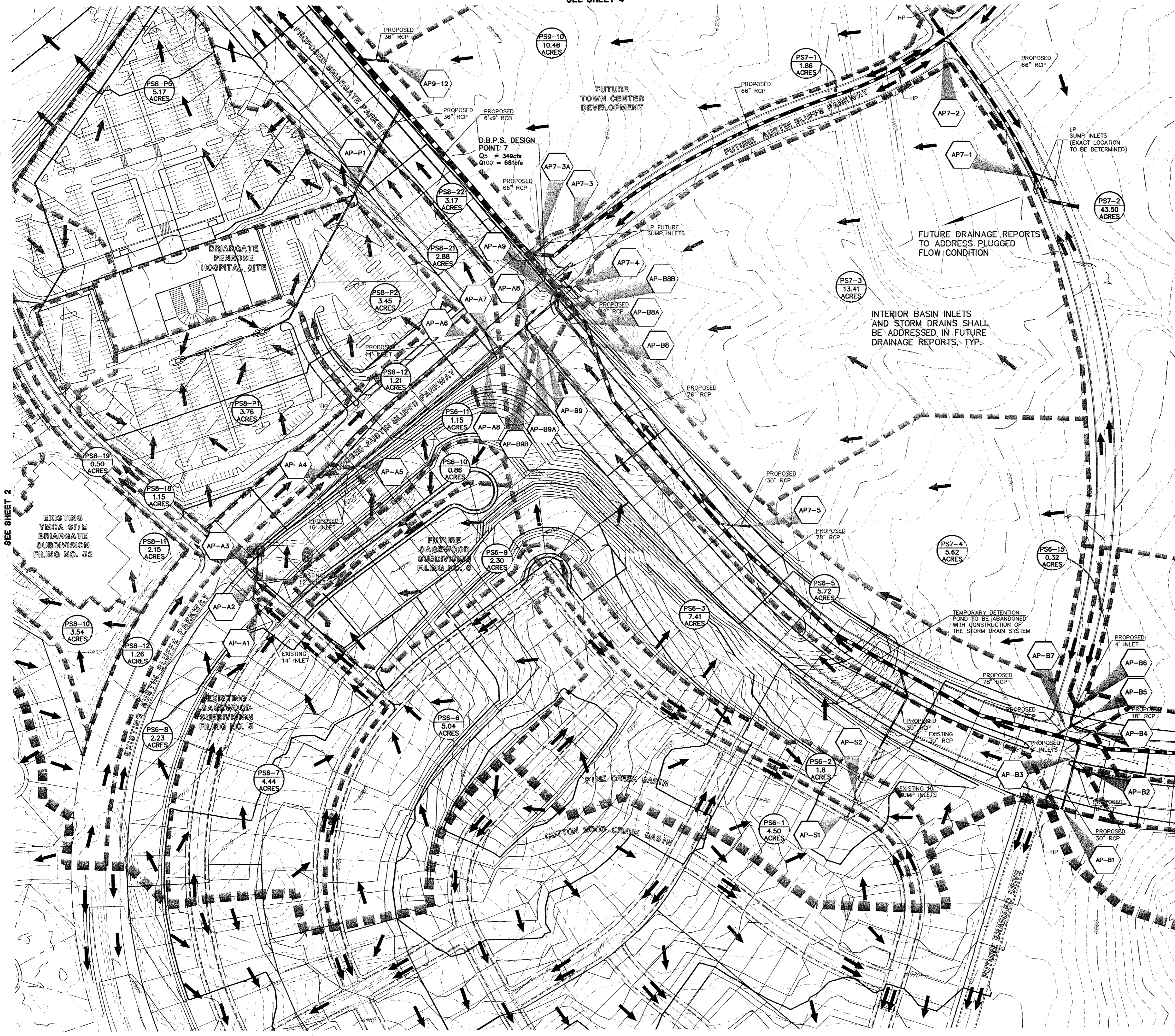
BRIARGATE PARKWAY/UNION BLVD
 MDDP DRAINAGE PLAN
 UPPER PINE CREEK - SOUTH FORK
 JOB NO. 8716.11
 JUNE 13, 2001
 SHEET 2 OF 5

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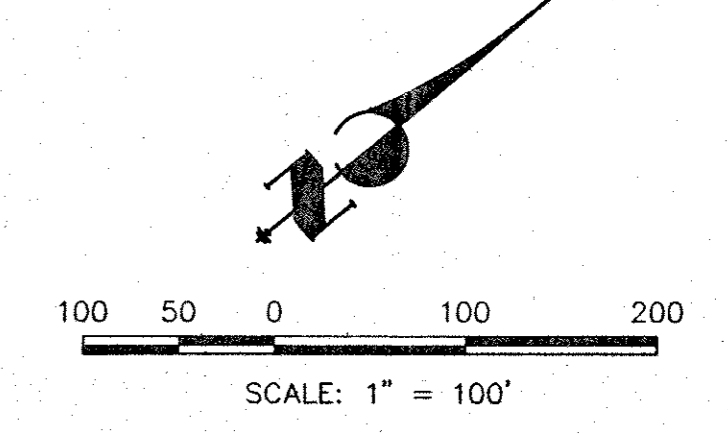
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SEE SHEET 4



ANALYSIS POINT SUMMARY			
AP	AREA (ACRES)	Q ₅ (CFS)	Q ₁₀₀ (CFS)
AP-A1	4.44	9	19
AP-A2	8.20	12	24
AP-A3		11	15
AP-A4		13	33
AP-A5		19	28
AP-A6		7	22
AP-A7		23	38
AP-A8		30	47
AP-A9		43	63
AP-B1	4.67	15	30
AP-B2	1.93	7	13
AP-B3	4.67	17	36
AP-B4	2.41	6	12
AP-B5	5.20	16	30
AP-B6	0.32	1	2
AP-B7	5.20	21	35
AP-B8	5.72	21	43
AP-B8A		12	32
AP-B8B		15	19
AP-B9	7.41	13	26
AP-B9A		9	20
AP-B9B		8	11
AP-S1	4.50	11	22
AP-S2	6.30	15	31
AP7-1	36.70	128	220
AP7-2		146	253
AP7-3		12	36
AP7-3A		152	277
AP7-4	13.41	36	72
AP7-5	5.62	18	35
AP9-12	10.48	30	61

BASIN SUMMARY			
BASIN	AREA (ACRES)	Q ₅ (CFS)	Q ₁₀₀ (CFS)
PS6-1	4.50	11	22
PS6-2	1.80	5	9
PS6-3	7.41	13	26
PS6-5	5.72	12	24
PS6-6	5.04	7	14
PS6-7	4.44	9	19
PS6-8	2.23	5	9
PS6-9	2.30	4	9
PS6-10	0.86	2	4
PS6-11	1.15	2	5
PS6-11A	1.01	2	4
PS6-12	1.21	4	8
PS7-1	1.86	6	12
PS7-2	36.70	128	220
PS7-3	13.41	36	72
PS7-4	5.62	18	35
PS8-P1	3.76	16	29
PS8-P2	3.45	16	29
PS8-10	3.54	10	20
PS8-11	2.15	8	15
PS8-12	1.26	3	6
PS8-18	1.15	4	7
PS8-19	0.50	2	3
PS8-21	2.88	7	14
PS8-22	3.17	9	16
PS9-10	10.48	30	61



LEGEND

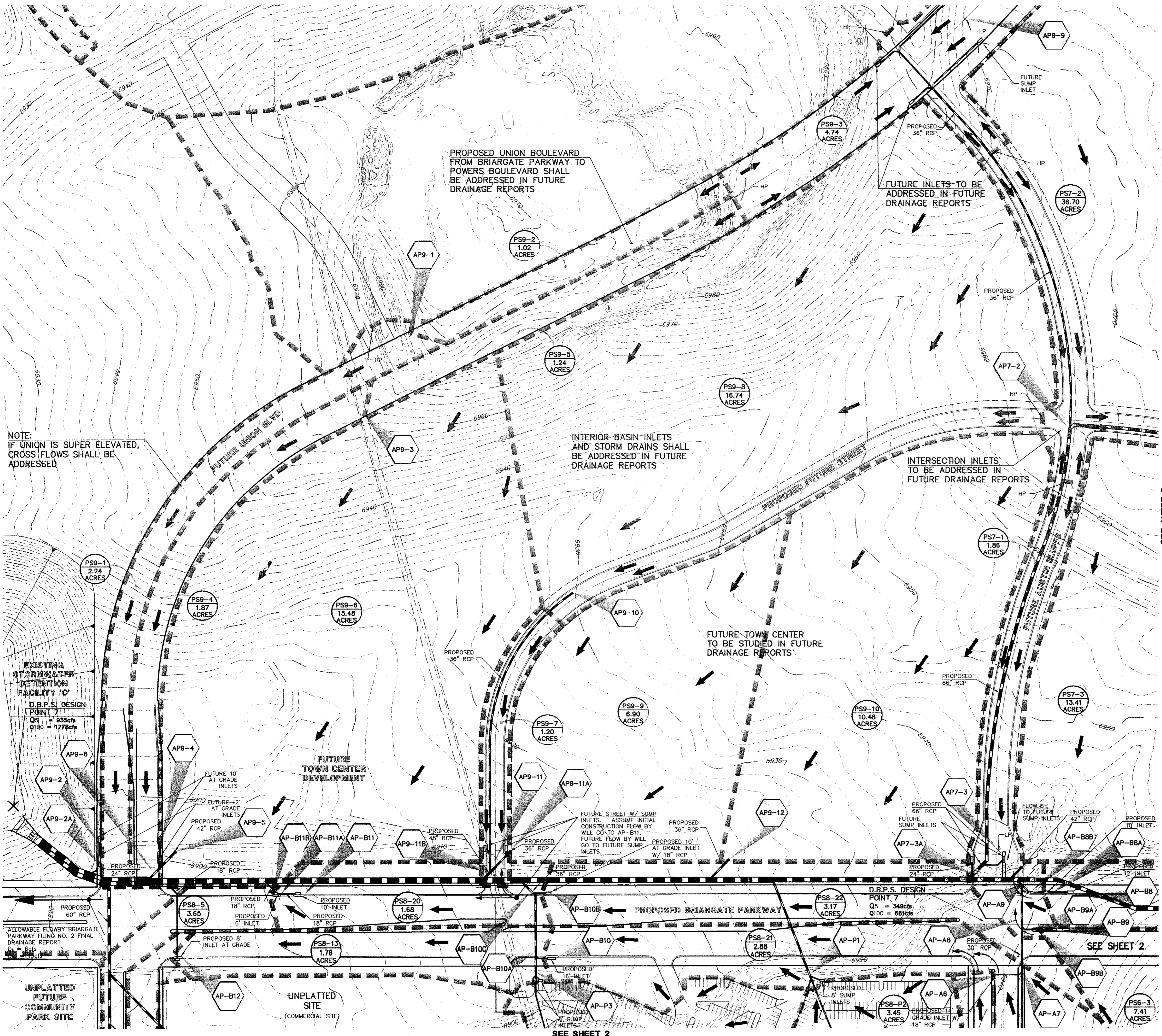
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EXISTING GRADE INDEX CONTOUR	
EXISTING GRADE NOMINAL CONTOUR	
PROPOSED FINISH INDEX CONTOUR	
PROPOSED FINISH NOMINAL CONTOUR	
SUBDIVISION BOUNDARY	
LOT LINE	
MAJOR BASIN BOUNDARY	
MINOR BASIN BOUNDARY	
DIRECTION OF DRAINAGE	
BASIN IDENTIFIER	
AREA IN ACRES	
ANALYSIS POINT IDENTIFIER	
PROPOSED CROSSSPAN	
EXISTING STORM SEWER	
PROPOSED STORM SEWER	
FLOWBY DIRECTION OF FLOW	

BRIARGATE PARKWAY/UNION BLVD
MDDP DRAINAGE PLAN
UPPER PINE CREEK - SOUTH FORK
JOB NO. 8716.11
JUNE 13, 2001
SHEET 3 OF 5



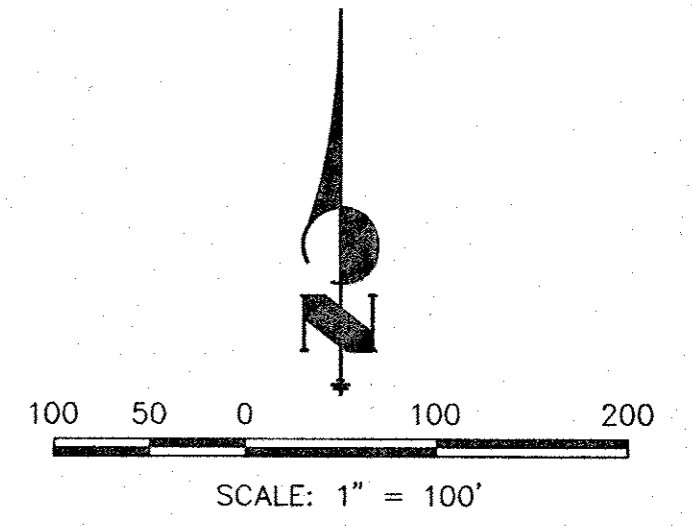
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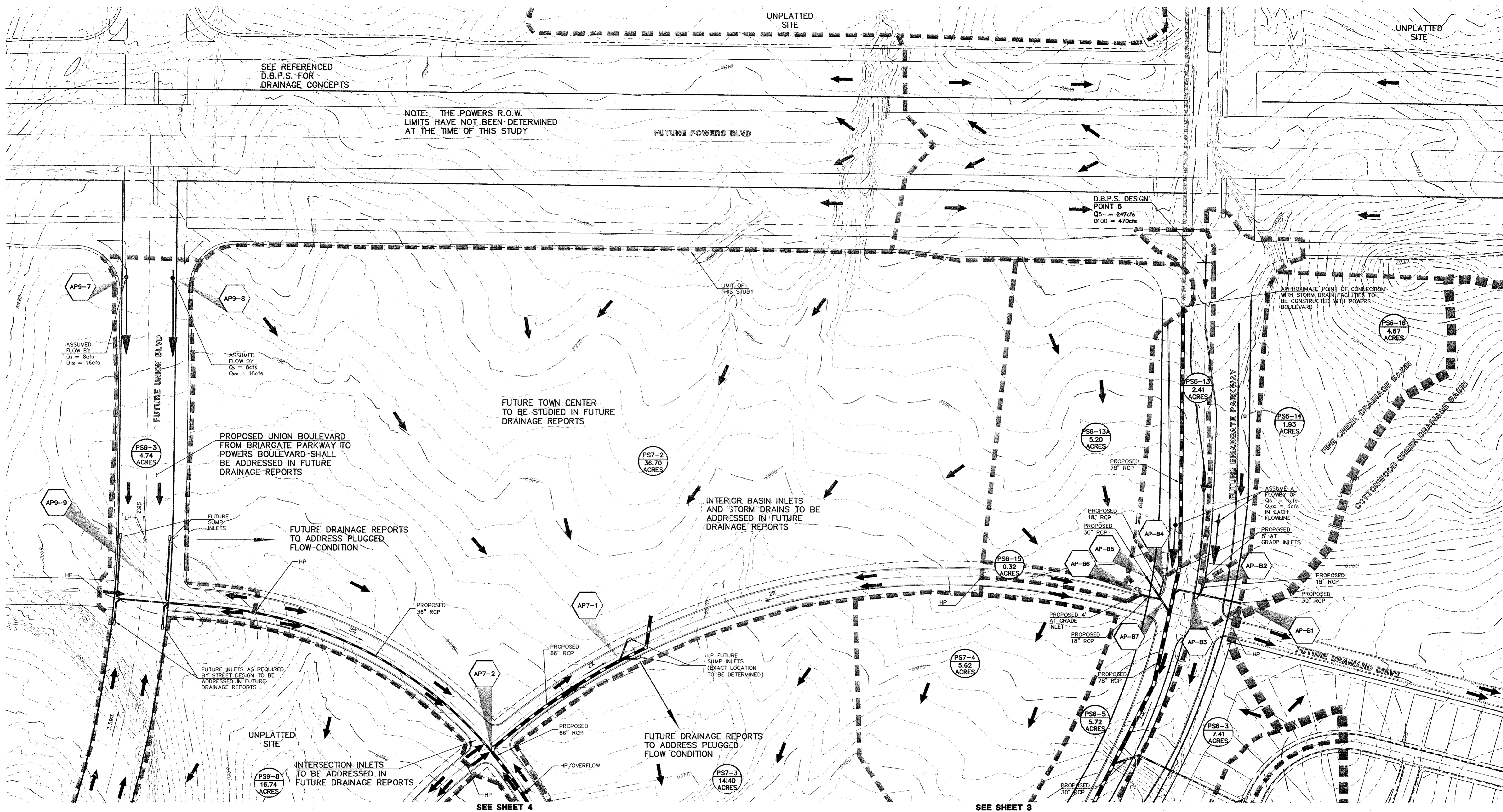
ANALYSIS POINT SUMMARY			
AP	AREA (ACRES)	Q ₅ (CFS)	Q ₁₀₀ (CFS)
AP-A9		43	63
AP-P1		29	53
AP-P3		27	48
AP-B10		14	39
AP-B10A		35	59
AP-B10B		9	16
AP-B10C		38	65
AP-B11		9	17
AP-B11A		4	10
AP-B11B		7	10
AP-B12		9	30
AP7-2		146	253
AP7-3		12	36
AP7-3A		152	277
AP7-4	13.41	36	72
AP9-1	1.02	4	7
AP9-2	3.26	10	19
AP9-2A		9	15
AP9-3	1.24	4	8
AP9-4	1.87	10	18
AP9-5	15.48	45	90
AP9-6		54	104
AP9-9		33	65
AP9-10	16.74	49	97
AP9-11		10	20
AP9-11A	6.90	21	42
AP9-11B		74	146
AP9-12	10.48	30	61

BASIN SUMMARY			
BASIN	AREA (ACRES)	Q ₅ (CFS)	Q ₁₀₀ (CFS)
PS7-1	1.86	6	12
PS7-2	36.70	128	220
PS7-3	13.41	36	72
PS8-P2	3.45	16	29
PS8-20	1.68	4	8
PS8-21	2.88	7	14
PS8-22	3.17	9	16
PS9-1	2.24	8	14
PS9-2	1.02	4	7
PS9-3	4.74	17	33
PS9-4	1.87	6	12
PS9-5	1.24	4	8
PS9-6	15.48	45	90
PS9-7	1.20	4	8
PS9-8	16.74	49	97
PS9-9	6.90	21	42
PS9-10	10.48	30	61



DESCRIPTION	SYMBOL
EXISTING GRADE INDEX CONTOUR	
EXISTING GRADE NOMINAL CONTOUR	
PROPOSED FINISH INDEX CONTOUR	
PROPOSED FINISH NOMINAL CONTOUR	
SUBDIVISION BOUNDARY	
LOT LINE	
MAJOR BASIN BOUNDARY	
MINOR BASIN BOUNDARY	
DIRECTION OF DRAINAGE	
BASIN IDENTIFIER	
AREA IN ACRES	
ANALYSIS POINT IDENTIFIER	
PROPOSED CROSSSPAN	
EXISTING STORM SEWER	
PROPOSED STORM SEWER	
FLOWBY DIRECTION OF FLOW	

BRIARGATE PARKWAY/UNION BLVD
 MDDP DRAINAGE PLAN
 UPPER PINE CREEK - SOUTH FORK
 JOB NO. 8716.11
 JUNE 13, 2001
 SHEET 4 OF 5



SEE REFERENCED
D.B.P.S. FOR
DRAINAGE CONCEPTS

NOTE: THE POWERS R.O.W.
LIMITS HAVE NOT BEEN DETERMINED
AT THE TIME OF THIS STUDY

D.B.P.S. DESIGN
POINT 6
Q₅ = 247cfs
Q₁₀₀ = 470cfs

PROPOSED UNION BOULEVARD
FROM BRIARGATE PARKWAY TO
POWERS BOULEVARD SHALL
BE ADDRESSED IN FUTURE
DRAINAGE REPORTS

FUTURE DRAINAGE REPORTS
TO ADDRESS PLUGGED
FLOW CONDITION

INTERIOR BASIN INLETS
AND STORM DRAINS TO BE
ADDRESSED IN FUTURE
DRAINAGE REPORTS

FUTURE INLETS AS REQUIRED,
BY STREET DESIGN TO BE
ADDRESSED IN FUTURE
DRAINAGE REPORTS

INTERSECTION INLETS
TO BE ADDRESSED IN
FUTURE DRAINAGE REPORTS

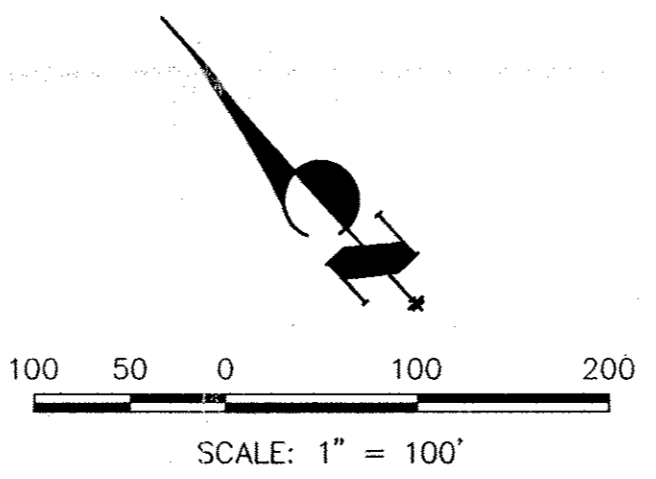
FUTURE DRAINAGE REPORTS
TO ADDRESS PLUGGED
FLOW CONDITION

SEE SHEET 4

SEE SHEET 3

BASIN SUMMARY			
BASIN	AREA (ACRES)	Q ₅ (CFS)	Q ₁₀₀ (CFS)
PS6-13	2.41	6	12
PS6-13A	5.20	16	30
PS6-14	1.93	7	13
PS6-15	0.32	1	2
PS6-16	4.67	15	30
PS7-2	36.70	128	220
PS7-3	13.41	36	72
PS7-4	5.62	18	35
PS9-3	4.74	17	33
PS9-8	16.74	49	97

ANALYSIS POINT SUMMARY			
AP	AREA (ACRES)	Q ₅ (CFS)	Q ₁₀₀ (CFS)
AP-B1	4.67	15	30
AP-B2	1.93	7	13
AP-B3		17	36
AP-B4	2.41	6	12
AP-B5	5.20	16	30
AP-B6	0.32	1	2
AP-B7	5.20	21	35
AP7-1	36.70	128	220
AP7-2		146	253
AP9-7		8	16
AP9-8		8	16
AP9-9		33	65



LEGEND	
DESCRIPTION	SYMBOL
EXISTING GRADE INDEX CONTOUR	
EXISTING GRADE NOMINAL CONTOUR	
PROPOSED FINISH INDEX CONTOUR	
PROPOSED FINISH NOMINAL CONTOUR	
SUBDIVISION BOUNDARY	
LOT LINE	
MAJOR BASIN BOUNDARY	
MINOR BASIN BOUNDARY	
DIRECTION OF DRAINAGE	
BASIN IDENTIFIER	
AREA IN ACRES	
ANALYSIS POINT IDENTIFIER	
PROPOSED CROSSSPAN	
FUTURE POWERS BOULEVARD STORM SEWER	
PROPOSED STORM SEWER	

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