

EARTHWORK SUMMARY	
CUT	24,183 CY
FILL	20,290 CY
NET	3,893 CY CUT

RECORD DRAWING

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"100.00 100.10", "1.00% 1.15% slope", or "8-inch HDPE PVC pipe" are all typical examples of revisions that indicate that design data has been replaced with "as-built" information. All other data is as designed and has not been field verified.

Date: 8/8/2023
 Certified by: BAL
 Title: Design Engineer
 Firm: Schlager and Associates, P.A.

NOTE:

THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATIONS.

- 950 — DENOTES PROPOSED MAJOR CONTOUR
- 950 — DENOTES PROPOSED MINOR CONTOUR
- 950 — DENOTES EXISTING MAJOR CONTOUR
- 950 — DENOTES EXISTING MINOR CONTOUR
- 950 — DENOTES AS-BUILT MAJOR CONTOUR
- 950 — DENOTES AS-BUILT MINOR CONTOUR

MISSOURI GEOGRAPHIC REFERENCE SYSTEM BENCH MARK:

BM JA-148, IS A STAMPED KC METRO DISK SET IN CONCRETE LOCATED 2 MILES WEST OF THE INTERSECTION OF HIGHWAY 50 AND 3RD ST. IT IS 44 FT NORTH OF THE CENTER OF 3RD ST. AND 102.5 FT WEST OF THE CENTER OF THE EXIT FROM THE ADJACENT PARKING LOT.

ELEV. 935.18

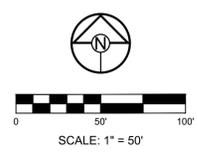
PROJECT BENCHMARK:

CHISELED "SQUARE" ON STORM CURB INLET AT NORTHWEST INTERSECTION OF SW. TOWER PARK DRIVE AND SW. LONGVIEW BOULEVARD.

NORTHING: 998893.4148
 EASTING: 2805318.5413
 ELEV. 1004.09

SURVEY NOTES

The bases of bearing and coordinates are base on the Missouri Coordinate System of 1983, West Zone (2003 Adjustment) with a Grid Factor of 0.9999020.

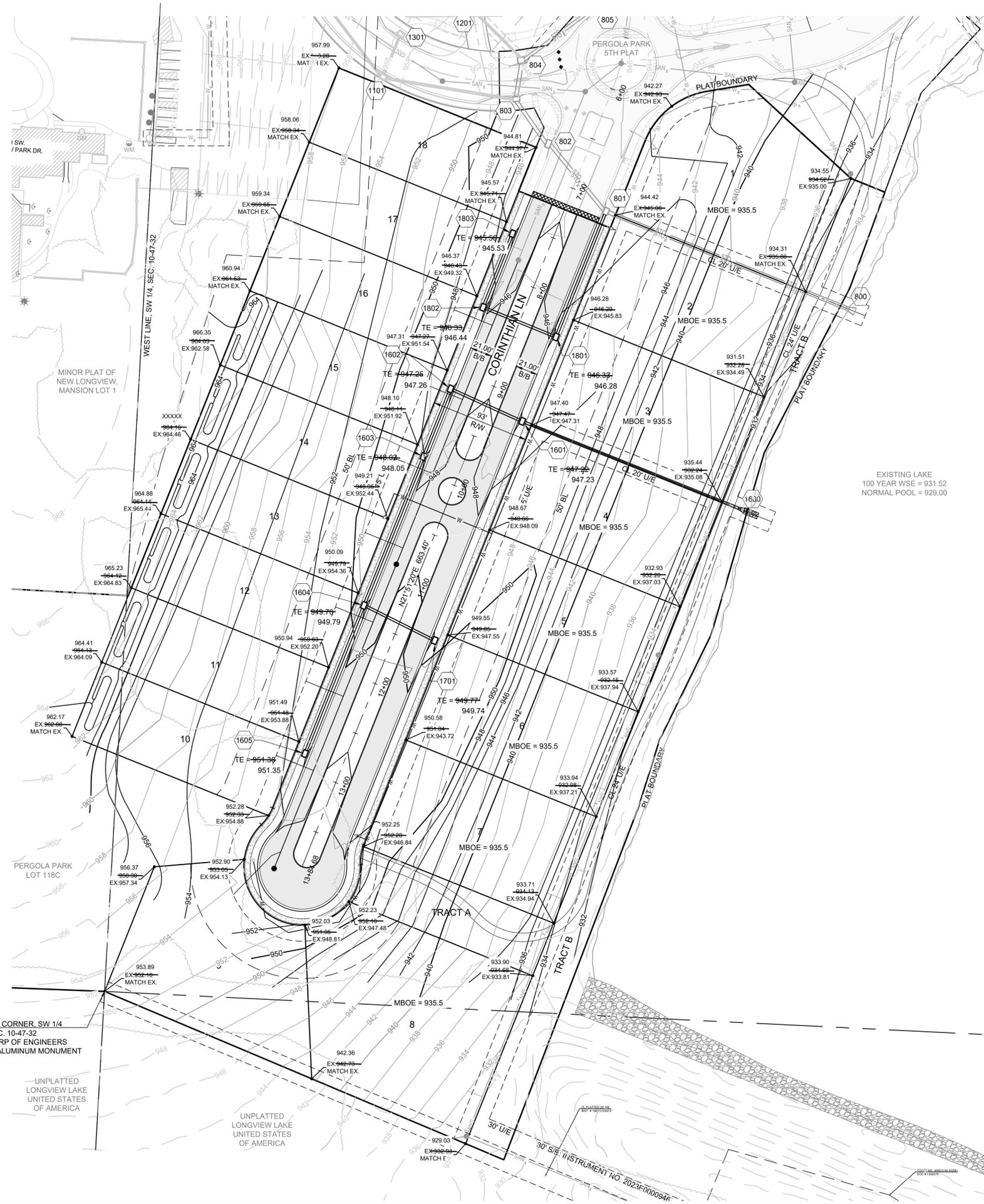


LUMBERMAN'S ROW STREET, STORMWATER, MASTER DRAINAGE PLAN & EROSION AND SEDIMENT CONTROL - LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION
8-12-22	CITY COMMENTS
8-8-23	AS-BUILTS

MASTER DRAINAGE PLAN - GRADING PLAN

I:\PROJECTS\2022\22-034\3.0 Design\3.0 DWG Plans\3.0 SS\22-034-SS-GRAD.dwg, 3 MASTER DRAINAGE PLAN - GRADING PLAN, 8/8/2023, 2:08:10 PM, 1:1



LOT TYPE TABLE

LOT #	BASEMENT TYPE	FRONT MBOE	REAR MBOE	AS-BUILT FRONT MBOE	AS-BUILT REAR MBOE
1	WALKOUT	945.60	935.50	944.90	935.50
2	WALKOUT	946.40	935.50	946.80	935.50
3	WALKOUT	948.00	935.50	947.90	935.50
4	WALKOUT	948.60	935.50	949.20	935.50
5	WALKOUT	950.40	935.50	950.05	935.50
6	WALKOUT	951.60	935.50	951.10	935.50
7	WALKOUT	947.40	935.50	952.75	935.50
8	WALKOUT	952.00	935.50	952.75	935.50
9	STANDARD	953.60	952.60	953.40	954.40
10	STANDARD	952.90	952.90	952.80	952.80
11	STANDARD	952.00	952.00	952.00	952.00
12	STANDARD	951.20	951.20	951.50	951.50
13	STANDARD	950.30	950.30	950.60	950.60
14	STANDARD	949.50	949.50	949.70	949.70
15	STANDARD	948.70	948.70	948.60	948.60
16	STANDARD	947.80	947.80	947.80	947.80
17	STANDARD	947.00	947.00	946.90	946.90
18	STANDARD	946.30	946.30	946.10	946.10

ALL LOTS TO REQUIRE AS-GRADED PLOT PLANS

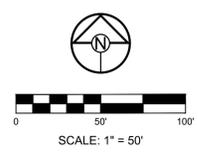
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LUMBERMAN'S ROW STREET, STORMWATER, MASTER DRAINAGE PLAN & EROSION AND SEDIMENT CONTROL - LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION
8-12-22	CITY COMMENTS
8-8-23	AS-BUILTS

DRAWN BY:	CHECKED BY:	DATE PREPARED:	PROJ. NUMBER:
BAL	MAB	8-22	22-534

MASTER DRAINAGE PLAN - LOT INFO



RECORD DRAWING

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- PROPOSED DRAINAGE
- EXISTING DRAINAGE
- FUTURE DRAINAGE

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CHISELED "SQUARE" ON STORM CURB INLET AT NORTHWEST INTERSECTION OF SW. TOWER PARK DRIVE AND SW. LONGVIEW BOULEVARD.

NORTHING: 998893.4148
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 ELEV. 1004.09



SCHLAGEL
 ENGINEERS PLANNERS SURVEYORS LANDSCAPE ARCHITECTS
 14920 West 107th Street • Lenexa, Kansas 66215
 (913) 492-5158 • Fax: (913) 492-8400
 WWW.SCHLAGELASSOCIATES.COM
 Missouri State Certificate of Authority
 #E220020360P #LAC201005237 #LS200208859F

PREPARED BY:

 08.08.2023

SCHLAGEL & ASSOCIATES, P.A.

LUMBERMAN'S ROW STREET, STORMWATER, MASTER DRAINAGE PLAN & EROSION AND SEDIMENT CONTROL - LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION
8-12-22	CITY COMMENTS
8-8-23	AS-BUILTS

MASTER DRAINAGE PLAN - DRAINAGE MAP

SHEET
5

PREPARED BY:



08.08.2023

SCHLAGEL & ASSOCIATES, P.A.

**LUMBERMAN'S ROW
 STREET, STORMWATER, MASTER DRAINAGE
 PLAN & EROSION AND SEDIMENT CONTROL
 - LEE'S SUMMIT, MISSOURI**

GUTTER SPREAD AND INLET CAPACITY CALCULATIONS - LUMBERMAN'S ROW

DESIGN STORM: 10
 "K" FACTOR: 1.00
 CURB TYPE "A" = LAZY BACK
 CURB TYPE "B" = HIGH BACK

RUNOFF CALCULATIONS											INLET DESIGN										GUTTER DESIGN			
INLET #	COMPOSITE "C"	AREA	INLET Tc	INTENSITY	RUNOFF	UPSTREAM INLET	UPSTREAM INLET	UPSTREAM INLET	UPSTREAM INLET	BYPASS FROM UPSTREAM INLET	TOTAL RUNOFF	STREET GRADE	STREET CROSS SLOPE	CURB TYPE	INLET LENGTH	EFFECTIVE LENGTH	INLET INTERCEPTION	BYPASS TO DOWNSTREAM INLET	STREET GRADE	STREET CROSS SLOPE	DEPTH AT CURB	SPREAD OF FLOW		
EXISTING LINE 400																								
401	0.66	2.40	5	7.35	11.64	801	802	803		0.79	12.43	SUMP	2.08	A	8	6.4	17.92	0.00	SUMP	2.08	< 0.21	< 10.50		
402	0.66	0.04	5	7.35	0.19	403				0.02	0.21	3.24	2.08	A	6	4.8	0.20	0.00	3.24	2.08	0.06	3.48		
403	0.66	0.07	5	7.35	0.34	404				0.01	0.35	3.24	2.08	A	6	4.8	0.33	0.02	3.24	2.08	0.08	4.12		
404	0.66	0.06	5	7.35	0.29					0.00	0.29	3.24	2.08	A	6	4.8	0.28	0.01	3.24	2.08	0.07	3.88		
EXISTING LINE 500																								
501	0.66	1.06	5	7.35	5.14	402	502			1.09	6.24	SUMP	2.08	A	6	4.8	13.44	0.00	SUMP	2.08	< 0.21	< 10.50		
502	0.66	0.57	5	7.35	2.77	804	503	806	901	0.84	3.61	1.95	2.08	A	6	4.8	2.52	1.09	1.95	2.08	0.20	10.05		
503	0.66	0.26	5	7.35	1.26	504				0.33	1.59	1.49	2.08	A	4	3.2	1.33	0.26	1.49	2.08	0.15	7.89		
504	0.66	0.29	5	7.35	1.41	505				0.40	1.81	1.49	2.08	A	4	3.2	1.48	0.33	1.49	2.08	0.16	8.25		
505	0.66	0.33	5	7.35	1.60	506				0.41	2.01	1.49	2.08	A	4	3.2	1.61	0.40	1.49	2.08	0.17	8.57		
506	0.66	0.29	5	7.35	1.41	507				0.63	2.03	1.49	2.08	A	4	3.2	1.63	0.41	1.49	2.08	0.17	8.60		
507	0.66	0.58	5	7.35	2.81					0.00	2.81	1.13	2.08	A	4	3.2	2.19	0.63	1.13	2.08	0.20	10.14		
EXISTING LINE 800																								
801	0.51	0.29	5	7.35	1.09	1601	1801			0.25	1.34	1.12	2.08	A	6	4.8	1.25	0.08	1.12	2.08	0.15	7.80		
802	0.51	0.51	5	7.35	1.91	1701				0.12	2.04	1.12	2.08	A	6	4.8	1.82	0.21	1.12	2.08	0.18	9.05		
803	0.66	0.12	5	7.35	0.58	1101				1.61	2.19	3.00	2.08	A	6	4.8	1.70	0.49	3.00	2.08	0.15	7.81		
804	0.66	0.22	5	7.35	1.07	1301	1201			0.67	1.74	3.00	2.08	A	6	4.8	1.43	0.31	3.00	2.08	0.14	7.20		
805	0.66	0.12	5	7.35	0.58					0.00	0.58	3.00	2.08	A	6	4.8	0.55	0.03	3.00	2.08	0.09	4.94		
806	0.66	0.40	5	7.35	1.94	807				0.23	2.17	1.28	2.08	A	6	4.8	1.90	0.27	1.28	2.08	0.18	9.04		
807	0.66	0.40	5	7.35	1.94	808				0.07	2.01	1.28	2.08	A	6	4.8	1.78	0.23	1.28	2.08	0.17	8.80		
808	0.66	0.19	5	7.35	0.92	809				0.24	1.16	1.28	2.08	A	6	4.8	1.09	0.07	1.28	2.08	0.14	7.25		
809	0.66	0.32	5	7.35	1.55					0.00	1.55	2.75	2.08	A	6	4.8	1.32	0.24	2.75	2.08	0.14	7.03		
810	0.66	0.21	5	7.35	1.02	1106				0.00	1.02	2.75	2.08	A	6	4.8	0.92	0.10	2.75	2.08	0.12	6.08		
811	0.66	2.32	5	7.35	11.25	810				0.10	11.35	SUMP	2.08	A	6	4.8	16.80	0.00	SUMP	2.08	< 0.21	< 10.50		
812	0.66	0.13	5	7.35	0.63					0.00	0.63	SUMP	2.08	A	6	4.8	16.80	0.00	SUMP	2.08	< 0.21	< 10.50		
EXISTING LINE 1000																								
1001	0.66	0.31	5	7.35	1.50					0.00	1.50	1.28	2.08	A	6	4.8	1.38	0.12	1.28	2.08	0.15	7.94		
FUTURE LINE 1100																								
1101	0.66	0.55	5	7.35	2.67	1102				0.77	3.44	6.02	2.08	A	6	4.8	1.83	1.61	6.02	2.08	0.16	8.09		
1102	0.66	0.34	5	7.35	1.65	1103				0.59	2.24	6.02	2.08	A	6	4.8	1.47	0.77	6.02	2.08	0.13	6.97		
1103	0.66	0.56	5	7.35	2.72	1104				0.15	2.87	1.80	2.08	A	6	4.8	2.28	0.59	1.80	2.08	0.19	9.40		
1104	0.66	0.30	5	7.35	1.46	1105				0.01	1.46	1.80	2.08	A	6	4.8	1.31	0.15	1.80	2.08	0.14	7.41		
1105	0.66	0.09	5	7.35	0.44					0.00	0.44	1.50	2.08	A	6	4.8	0.43	0.01	1.50	2.08	0.09	5.04		
1106	0.66	0.07	5	7.35	0.34					0.00	0.34	1.50	2.08	A	6	4.8	0.34	0.00	1.50	2.08	0.09	4.64		
FUTURE LINE 1200																								
1201	0.66	0.35	5	7.35	1.70	1202				0.49	2.19	2.45	2.08	A	4	3.2	1.64	0.55	2.45	2.08	0.16	8.08		
1202	0.66	0.38	5	7.35	1.84	1203				0.20	2.05	2.45	2.08	A	4	3.2	1.56	0.49	2.45	2.08	0.15	7.90		
1203	0.66	0.25	5	7.35	1.21	1204				0.07	1.28	2.45	2.08	A	4	3.2	1.08	0.20	2.45	2.08	0.13	6.71		
1204	0.66	0.15	5	7.35	0.73					0.00	0.73	2.45	2.08	A	4	3.2	0.66	0.07	2.45	2.08	0.10	5.52		
FUTURE LINE 1300																								
1301	0.66	0.17	5	7.35	0.82	1401				0.03	0.86	6.02	2.08	A	6	4.8	0.73	0.12	6.02	2.08	0.09	5.01		
FUTURE LINE 1400																								
1401	0.66	0.15	5	7.35	0.73	1501				0.01	0.74	1.80	2.08	A	6	4.8	0.70	0.03	1.80	2.08	0.11	5.84		
FUTURE LINE 1500																								
1501	0.66	0.09	5	7.35	0.44					0.00	0.44	1.80	2.08	A	6	4.8	0.43	0.01	1.80	2.08	0.09	4.89		
LINE 1600																								
1601	0.51	0.47	5	7.35	1.76	1701				0.25	2.01	1.12	2.08	A	6	6	1.81	0.21	1.12	2.08	0.18	9.01		
1602	0.51	0.84	5	7.35	3.15	1603				1.47	4.62	1.12	2.08	A	6	6	3.53	1.09	1.12	2.08	0.24	12.13		
1603	0.51	1.22	5	7.35	4.57	1604				0.85	5.43	1.12	2.08	A	6	6	3.95	1.47	1.12	2.08	0.26	12.85		
1604	0.51	0.96	5	7.35	3.60	1605				0.47	4.07	1.12	2.08	A	6	6	3.21	0.85	1.12	2.08	0.23	11.58		
1605	0.51	0.80	5	7.35	3.00					0.00	3.00	1.12	2.08	A	6	6	2.53	0.47	1.12	2.08	0.21	10.39		
LINE 1700																								
1701	0.51	0.59	5	7.35	2.21					0.00	2.21	1.12	2.08	A	6	6	1.96	0.25	1.12	2.08	0.18	9.32		
LINE 1800																								
1801	0.51	0.20	5	7.35	0.75	1601				0.21	0.96	1.12	2.08	A	6	6	0.92	0.04	1.12	2.08	0.13	6.94		
1802	0.51	0.86	5	7.35	3.22	1602				1.09	4.31	1.12	2.08	A	6	6	3.36	0.96	1.12	2.08	0.24	11.83		
1803	0.51	0.51	5	7.35	1.91	1802				0.96	2.87	1.12	2.08	A	6	6	2.44	0.43	1.12	2.08	0.20	10.22		

NOTES:
 1. CAPACITY OF INLETS ON GRADE DETERMINED USING ROUTINE OUTLINED ON PGS 56-95 TO 56-97, SECTION 5600 APWA
 2. CAPACITY OF SUMP INLETS CALCULATED USING FIGURE 5604-21, SECTION 5600 APWA
 3. MANNINGS "n" VALUE FOR COMBINED ASPHALT PAVEMENT AND CONCRETE CURB - 0.014

EXISTING 5TH PLAT

FUTURE 6TH PLAT

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8-8-23	AS-BUILTS

DRAWN BY: BAL
 CHECKED BY: MAB
 DATE PREPARED: 8-8-23
 PROJ. NUMBER: 22-034

MASTER DRAINAGE PLAN - DRAINAGE CALCS CONT SHEET