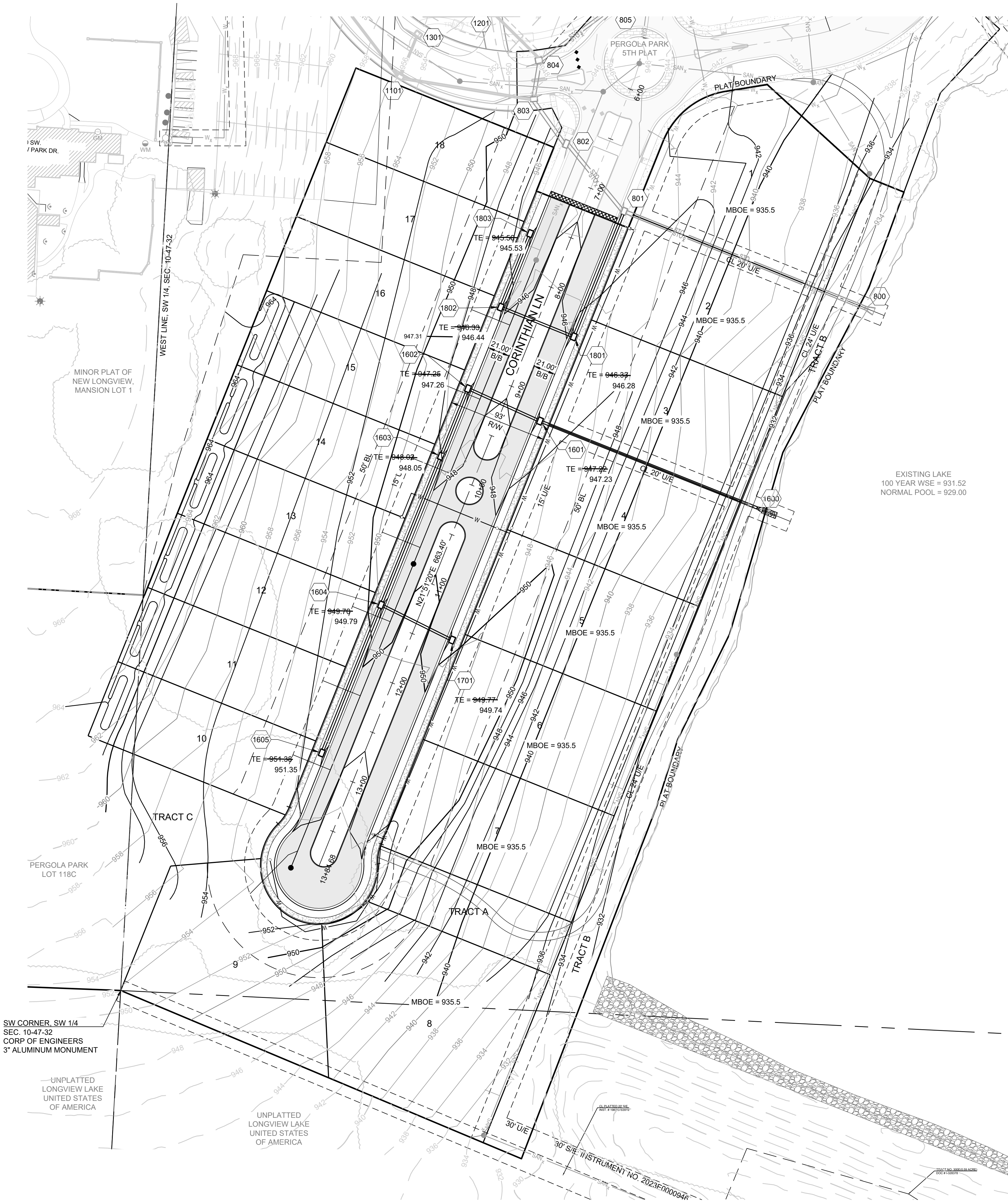


Accepted
Master Drainage Plan

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

RECORD DRAWING

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

NOTE:

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- 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

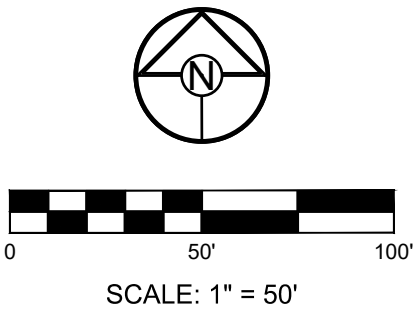
PROJECT BENCHMARK:

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

NORTHING: 998893.4148
EASTING: 2803318.5413
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.



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ENGINEERS PLANNERS SURVEYORS LANDSCAPE ARCHITECTS

14920 West 107th Street • Lenexa, Kansas 66215
(913) 492-5158 • Fax: (913) 492-8400
WWW.SCHLAGELASSOCIATES.COM
Missouri State Certificates of Authority
#E2002003600-F #LAC2001005237 #LS2002008659-F

PREPARED BY:

STATE OF MISSOURI

MARK ALLEN BREUER

MEMBER

NO. 2005007268

PROFESSIONAL ENGINEER

09.06.2023

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
8-23-22	AS-BUILTS
8-31-23	AS-BUILT COMMENTS
9-1-23	AS-BUILT COMMENTS
9-1-23	AS-BUILT COMMENTS
9-1-23	AS-BUILT COMMENTS
9-1-23	AS-BUILT COMMENTS
9-1-23	AS-BUILT COMMENTS
9-1-23	AS-BUILT COMMENTS
9-1-23	AS-BUILT COMMENTS

MASTER
DRAINAGE PLAN
- GRADING PLAN

RECORD DRAWING

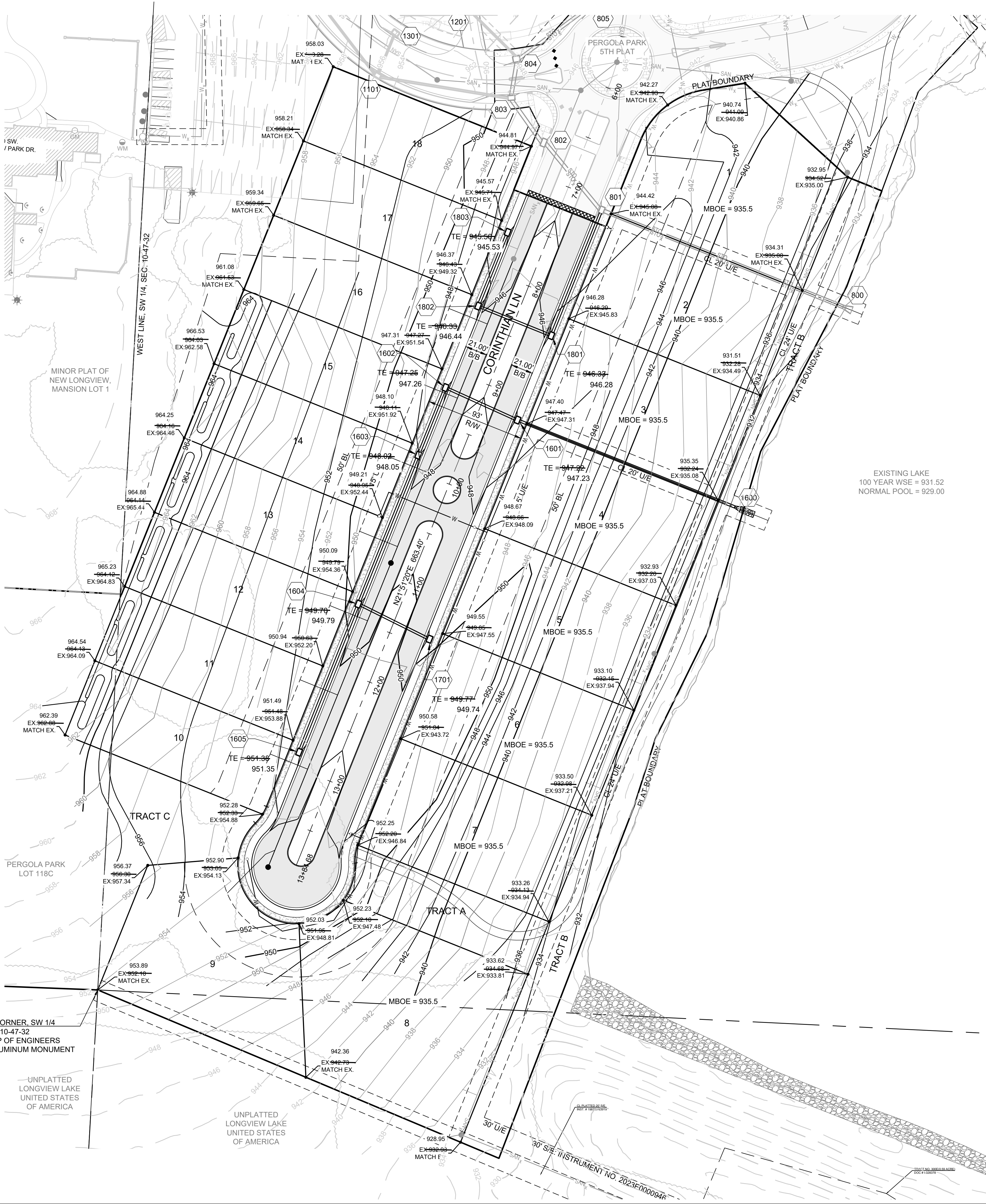
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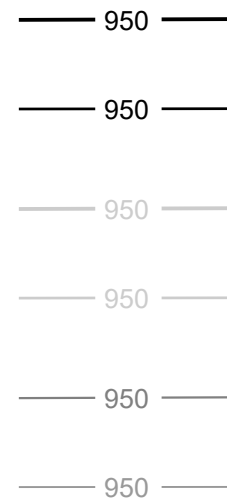


LOT TYPE TABLE					
LOT #	BASEMENT TYPE	FRONT MBOE	REAR MBOE	AS-BUILT FRONT MBOE	AS-BUILT REAR MBOE
1	WALKOUT	945.60	935.50	944.90	935.50
2	WALKOUT	946.40	935.50	946.80	935.50
3	WALKOUT	948.00	935.50	947.90	935.50
4	WALKOUT	948.60	935.50	949.20	935.50
5	WALKOUT	950.40	935.50	950.05	935.50
6	WALKOUT	951.60	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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ELEV. 935.18

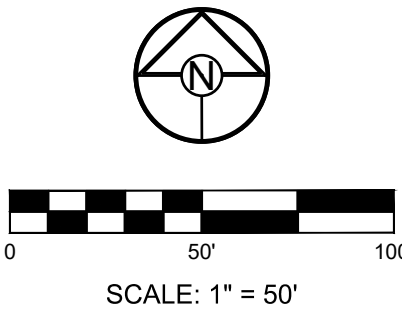
PROJECT BENCHMARK:

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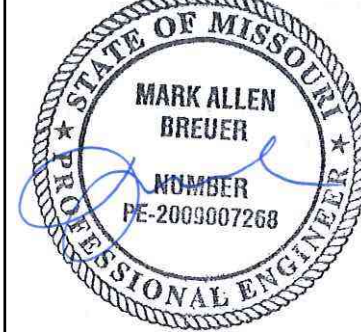
NORTHING: 998893.4148
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SURVEY NOTES

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PREPARED BY:



09.06.2023

SCHLAGEL & ASSOCIATES, P.A.

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

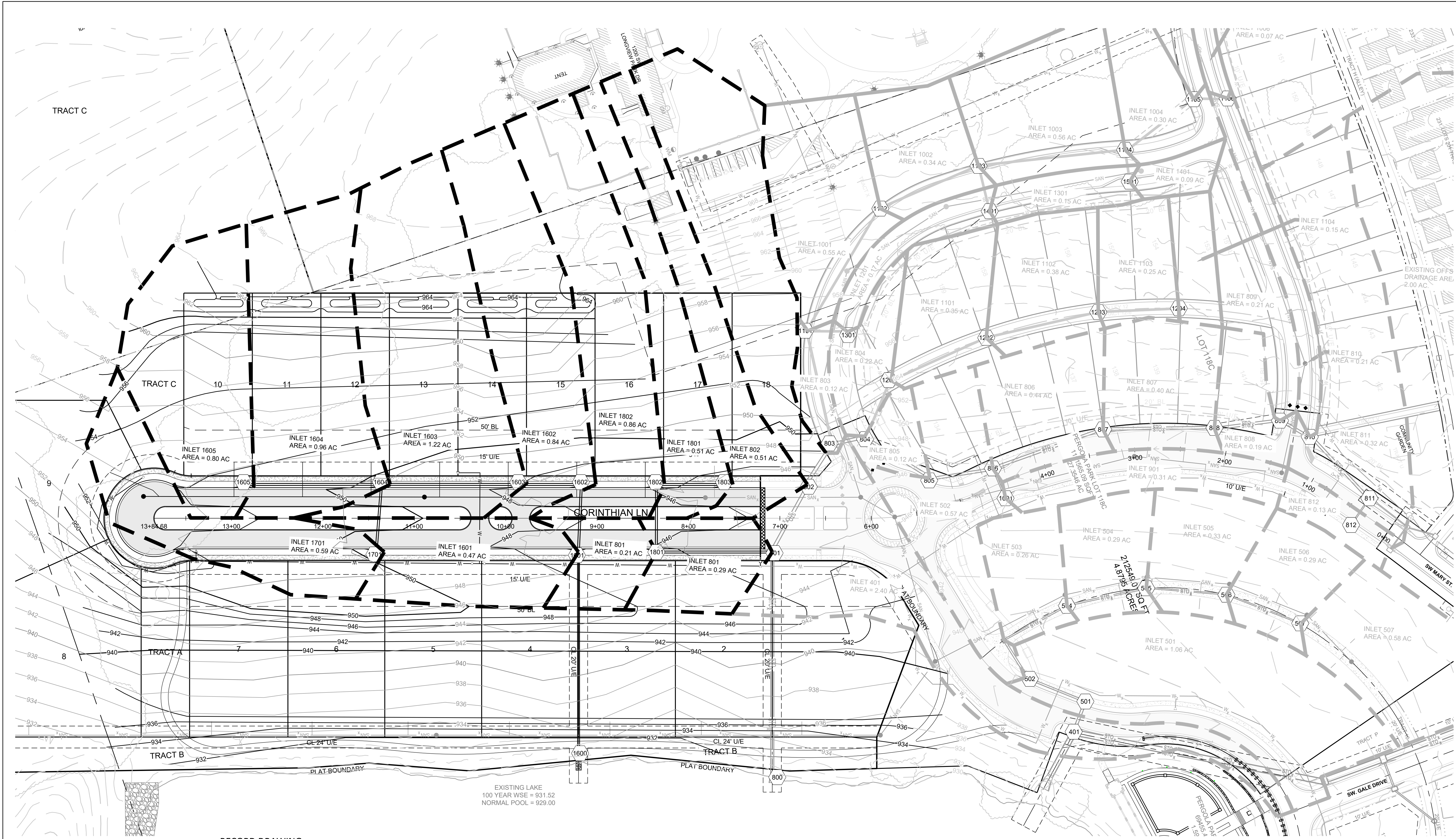
REVISION DATE	DESCRIPTION
8-12-22	CITY COMMENTS
8-23-22	AS-BUILTS
8-31-23	AS-BUILT COMMENTS
9-1-23	
9-1-23	
9-1-23	
9-1-23	
9-1-23	
9-1-23	
9-1-23	
9-1-23	

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

MASTER DRAINAGE PLAN - LOT INFO

SHEET

4



RECORD DRAWING

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

- PROPOSED DRAINAGE
- EXISTING DRAINAGE
- FUTURE DRAINAGE

Accepted
Master Drainage Plan

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PREPARED BY:

MARK ALLEN BREUER
REGISTERED PROFESSIONAL ENGINEER
09.06.2023

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LUMBERMAN'S ROW
STREET, STORMWATER, MASTER DRAINAGE
PLAN & EROSION AND SEDIMENT CONTROL
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REVISION DATE	DESCRIPTION	CITY COMMENTS	AS-BUILTS
8-12-22			
8-8-23			
8-31-23			
8-22			
22-03-24			

DRAWN BY:	BAL
CHECKED BY:	MAB
DATE PREPARED:	8-22
PROJ. NUMBER:	22-03-24

MASTER
DRAINAGE PLAN
- DRAINAGE MAP

SHEET

5

6

FUTURE 6TH PLAT

FUTURE 6TH PLAT

FUTURE 6TH PLAT

FUTURE 6TH PLAT

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I:\PROJECTS\2022\22-04\3.0 DWG Plans\6.0 SS\22-04-SS-DRAINAGE.dwg, 7 DRAINAGE CALCS CONT, 9/7/2023 3:17:41 PM, 1:1

GUTTER SPREAD AND INLET CAPACITY CALCULATIONS - LUMBERMAN'S ROW																						
DESIGN STORM			10	CURB TYPE "A" = LAZY BACK																		
"K" FACTOR			1.00	CURB TYPE "B" = HIGH BACK																		
RUNOFF CALCULATIONS												INLET DESIGN								GUTTER DESIGN		
INLET #	COMPOSITE "C"	AREA	INLET T _c	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		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	1801				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	1802				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																						