

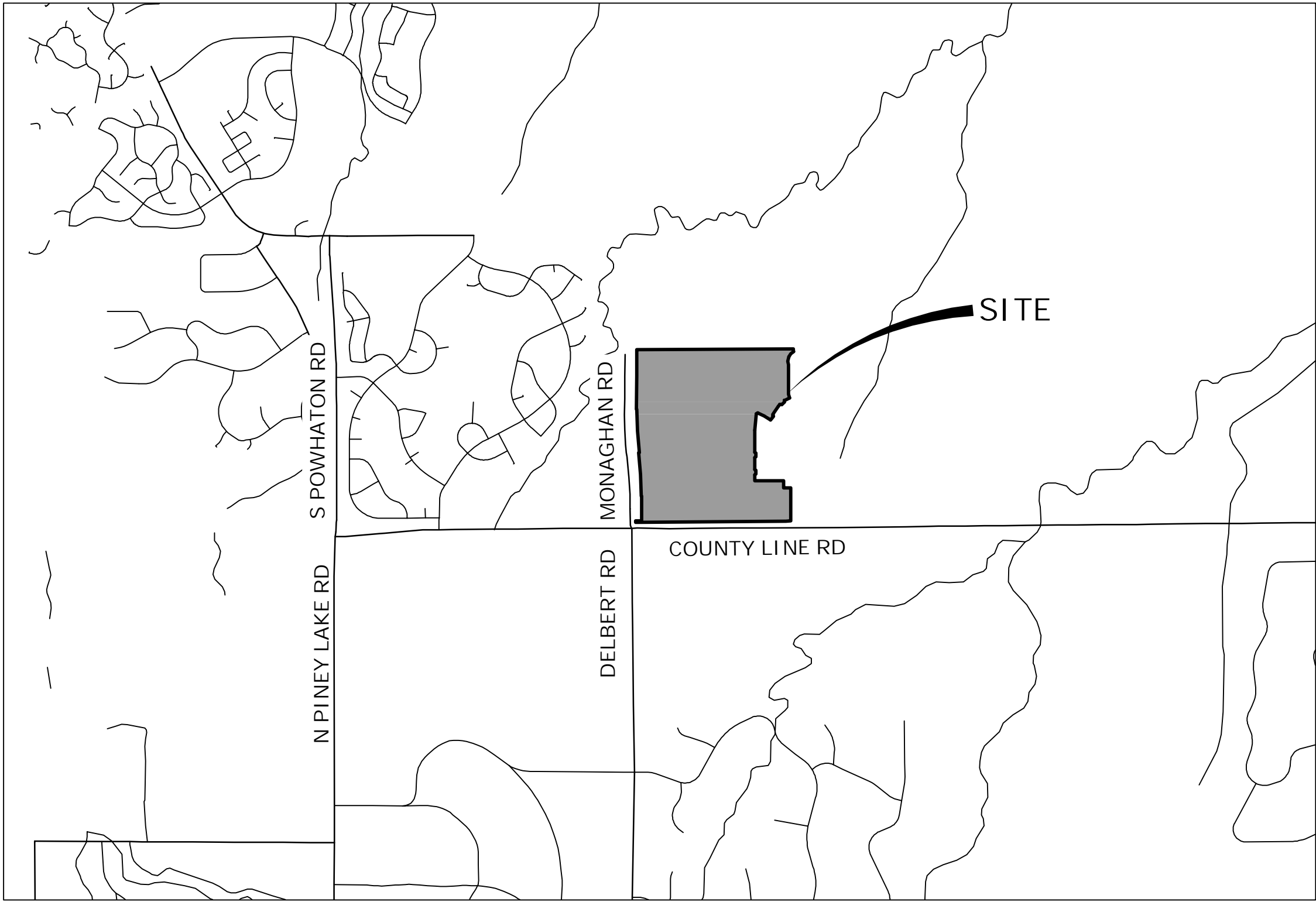
TRAILS AT OVERLAND RANCH - FILING NO. 1

FINAL DRAINAGE PLAN

BASIN SUMMARY TABLE							
Tributary Sub-basin	Area (acres)	Percent Impervious	C ₂	C ₁₀₀	t _c (min)	Q _s (cfs)	Q ₁₀₀ (cfs)
A1	1.39	5.0%	0.10	0.15	12.56	0.3	1.4
A2	1.32	60.7%	0.59	0.68	7.19	2.3	7.2
A3	0.45	90.4%	0.87	0.93	5.00	1.3	3.8
A4	6.00	32.0%	0.40	0.44	18.32	4.8	14.6
A5	1.03	40.7%	0.42	0.48	11.99	1.1	3.3
A6	1.09	15.9%	0.20	0.29	7.96	0.6	2.5
B1	1.36	90.0%	0.87	0.93	5.00	3.9	11.4
B2	1.54	90.0%	0.87	0.93	5.70	4.3	12.5
B3	8.43	14.5%	0.23	0.31	13.96	4.5	16.3
B4	2.30	62.1%	0.59	0.72	12.31	3.3	10.9
B5	1.50	63.0%	0.61	0.72	9.32	2.5	8.0
B6	1.46	60.4%	0.56	0.71	8.59	2.3	7.9
B7	2.66	57.7%	0.53	0.69	11.35	3.6	12.6
B8	1.76	59.6%	0.55	0.71	9.09	2.7	9.3
B9	1.53	57.9%	0.54	0.69	8.56	2.3	8.1
B10	2.40	59.3%	0.55	0.70	8.49	3.7	12.9
B11	0.44	64.4%	0.60	0.74	5.91	0.8	2.8
B12	0.48	75.0%	0.71	0.82	5.52	1.1	3.5
B13	2.33	37.5%	0.39	0.52	11.53	2.2	8.2
B14	1.54	90.0%	0.87	0.93	5.93	4.2	12.3
B15	2.20	5.0%	0.18	0.22	13.20	0.9	3.1
B16	0.66	74.3%	0.71	0.82	6.76	1.4	4.4
B17	0.37	90.0%	0.87	0.93	5.00	1.1	3.1
B18	1.97	54.5%	0.50	0.67	10.84	2.5	9.2
B19	1.28	61.2%	0.57	0.72	8.49	2.1	7.0
B20	0.66	67.5%	0.64	0.77	7.11	1.3	4.1
B21	2.61	54.1%	0.50	0.67	9.58	3.5	12.7
B22	1.45	62.1%	0.58	0.72	9.31	2.3	7.8
B23	22.95	14.4%	0.29	0.41	18.20	13.2	51.5
B24	3.41	52.1%	0.48	0.65	12.57	4.0	14.5
B25	2.35	55.6%	0.52	0.67	9.87	3.3	11.4
B26	3.57	53.2%	0.50	0.66	13.84	4.1	14.7
B27	1.47	65.5%	0.61	0.75	8.08	2.6	8.6
B28	1.62	58.1%	0.54	0.70	10.71	2.2	7.9
B29	1.19	56.7%	0.52	0.69	7.40	1.8	6.6
B30	2.80	48.6%	0.47	0.61	11.61	3.3	11.6
B31	1.87	55.6%	0.51	0.68	9.27	2.6	9.4
B32	0.20	83.3%	0.80	0.88	5.00	0.5	1.6
B33	0.21	79.5%	0.77	0.85	5.00	0.5	1.6
B33A	0.41	54.8%	0.58	0.64	6.75	0.7	2.2
B33B	0.21	73.8%	0.74	0.79	5.00	0.5	1.5
B34	1.53	51.4%	0.47	0.64	11.43	1.8	6.7
B35	0.98	65.2%	0.61	0.75	6.21	1.9	6.2
B36	1.24	60.2%	0.56	0.71	8.88	1.9	6.6
B37	1.74	55.8%	0.52	0.68	10.49	2.4	8.3
B38	1.12	56.7%	0.59	0.66	6.54	2.0	6.1
B39	0.78	59.5%	0.62	0.68	5.88	1.5	4.5
B39A	0.23	71.5%	0.72	0.78	5.00	0.5	1.6
B39B	0.26	90.0%	0.87	0.93	5.00	0.8	2.2
B40	1.94	60.3%	0.56	0.71	10.49	2.8	9.8
B41	0.80	63.0%	0.59	0.73	6.96	1.4	4.8
B42	2.98	57.5%	0.53	0.69	12.17	3.9	13.7
B43	1.40	65.6%	0.61	0.75	8.15	2.5	8.2
B44	0.22	85.9%	0.83	0.90	5.00	0.6	1.8
B45	2.01	52.6%	0.48	0.66	10.44	2.5	9.3
B46	1.56	61.0%	0.58	0.71	8.49	2.5	8.5
B47	2.80	53.0%	0.48	0.66	12.22	3.3	12.2
B48	1.29	61.5%	0.58	0.72	7.88	2.2	7.3
B49	6.16	5.0%	0.18	0.22	12.94	2.6	8.8
B50	0.46	90.0%	0.87	0.93	5.00	1.3	3.9
B51	0.85	90.0%	0.87	0.93	5.00	2.5	7.1
B52	0.96	63.8%	0.60	0.74	7.28	1.7	5.7
B53	1.33	61.9%	0.58	0.72	7.11	2.3	7.8
B54	0.56	62.7%	0.58	0.73	6.93	1.0	3.4
B55	3.16	57.0%	0.53	0.69	9.65	4.5	15.8
B56	1.09	62.3%	0.58	0.73	7.83	1.8	6.2
B57	0.79	63.2%	0.59	0.73	10.18	1.2	4.1
B58	2.16	70.3%	0.67	0.78	8.51	4.1	13.0
B58A	0.98	32.7%	0.31	0.47	10.75	0.8	3.2
B59	3.96	52.9%	0.49	0.65	13.93	4.5	16.2
B61	2.43	85.0%	0.60	0.80	7.33	4.3	15.6
B62	12.96	33.3%	0.38	0.44	11.97	12.0	38.3
C1	1.51	56.4%	0.53	0.68	10.65	2.1	7.2
C2	1.39	62.0%	0.58	0.72	9.98	2.1	7.2
C3	1.74	53.5%	0.49	0.66	11.99	2.1	7.7
C4	3.68	51.8%	0.48	0.65	12.30	4.3	15.7
C5	2.03	60.4%	0.57	0.71	9.77	3.1	10.4
C6	1.05	36.2%	0.35	0.52	9.40	1.0	4.0
C7	9.17	63.4%	0.59	0.73	14.36	12.3	41.5
C8	3.03	63.1%	0.59	0.73	9.53	4.8	16.3
C9	4.93	40.2%	0.41	0.52	10.34	5.4	18.1
D1	3.06	57.5%	0.53	0.69	10.82	4.2	14.7
D2	3.07	54.8%	0.51	0.67	11.28	4.0	14.0
D3	1.77	56.4%	0.52	0.68	8.25	2.6	9.4
D4	1.65	67.3%	0.69	0.74	8.23	3.2	9.5
D5	11.36	5.7%	0.18	0.23	16.83	4.2	14.8
OS1	21.79	17.3%	0.32	0.61	14.72	15.4	80.8
OS2	13.65	17.5%	0.32	0.61	13.87	10.0	52.1
OS3	0.14	58.6%	0.60	0.65	5.00	0.3	0.8
OS4	0.72	2.0%	0.15	0.20	7.73	0.3	1.1
OS5	1.69	15.7%	0.23	0.33	8.34	1.1	4.3

Should be Q2
JR-Column header
has been updated.

Preliminary
JR-Addressed.



VICINITY MAP
1"=2000'

ROUTED FLOWS			
DP #	Q ₂ -YR	Q ₁₀₀ -YR	
1.0	17.97	88.34	
1.1	13.02	61.04	
1.2	32.14	150.37	
1.3	5.52	18.06	
1.4	5.62	19.64	
1.5	41.39	181.79	
1.6	4.52	12.74	
1.7	8.69	30.67	
1.8	46.67	198.94	
1.9	3.10	10.85	
2.0	4.01	8.96	
2.1	6.18	22.20	
2.2	3.92	7.62	
2.3	9.65	28.88	
2.4	10.55	34.29	
2.5	7.79	21.73	
2.6	17.93	54.75	
2.7	60.24	238.16	
2.8	69.32	273.26	
2.9	6.92	17.26	
3.0	7.45	17.46	
3.1	11.30	40.71	
3.2	6.17	22.97	
3.3	22.12	78.19	
3.4	22.77	79.91	
3.5	3.33	11.63	
3.6	4.14	14.54	
3.5A	4.05	13.80	
3.8	26.61	92.04	
3.9	3.51	10.54	
3.9A	4.14	97.62	
4.0	3.96	12.31	
4.1	7.82	26.72	
4.2	10.48	39.25	
4.3	4.22	8.08	
4.4	14.39	46.60	
4.5	19.32	67.24	
4.6	3.52	11.53	
4.7	3.88	12.08	
4.8	3.29	11.12	
4.9	9.13	29.59	
5.0	6.16	21.58	
5.1	5.47	19.02	
5.2	8.69	29.11	
5.2A	9.13	31.71	
5.3	14.24	47.85	
5.3A	14.96	50.09	
5.4	33.38	115.26	
5.5	36.19	126.10	
5.6	121.07	457.15	
5.7	123.27	521.96	
7.0	2.47	11.69	
7.1	3.37	13.84	
7.2	7.44	21.96	
7.3	8.18	24.24	
7.4	8.53	25.75	
8.0	4.15	14.14	
8.1	6.26	22.10	
8.2	10.09	34.69	
8.3	12.86	43.69	
8.4	13.63	46.84	
8.5	28.82	99.39	
9.0	8.09	28.45	
9.1	12.99	44.48	
9.2	15.27	52.42	

JR-Notes have been revised to match the
Master Drainage Plan

Master Drainage
Plan calls for ponds
to be privately-
owned and
maintained. Other
private
infrastructure will
include swales and
area inlets. Please
revise note to
indicate privately-
owned
infrastructure are
indicated in
drainage plans



Know what's below.
Call before you dig.

BENCHMARK:

3" BRASS CAP ON THE SELY CORNER OF A CURB OPENING INLET STRUCTURE BEING ON THE EASTERLY SIDE OF SMOKY HILL ROAD AND BEING NEARLY ON A PROJECTED LINE WITH THE SELY BOUNDARY OF SERENITY RIDGE SUBD. FILING NO. 3 & THE NWLY BDY OF SERENITY RIDGE FILING NO. 1.

BASIS OF BEARINGS:

THE WEST LINE OF THE SOUTHWEST 1/4 OF SECTION 34, TOWNSHIP 5 SOUTH, RANGE 65 WEST OF THE 6TH P.M. BEING MONUMENTED BY A 3.25" ALUMINUM CAP STAMPED "LS 25942" AT THE WEST 1/4 CORNER AND A 3.25" ALUMINUM CAP STAMPED "LS 38098" AT THE SOUTHWEST CORNER, SAID LINE BEARING S00°23'41"W AS REFERENCED TO COLORADO STATE PLANE CENTRAL ZONE NAD(83).

NOTES:

- CITY OF AURORA PLAN REVIEW IS ONLY FOR GENERAL CONFORMANCE WITH CITY OF AURORA DESIGN CRITERIA AND THE CITY CODE. THE CITY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, OF DIMENSIONS AND ELEVATIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE. THE CITY OF AURORA, THROUGH THE APPROVAL OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY FOR THE COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.
- ALL PROPOSED STORM INFRASTRUCTURE SHALL BE PUBLIC AND WILL BE MAINTAINED BY THE CITY OF AURORA.
- ALL STORM INFRASTRUCTURE IS SIZED FOR THE 100 YEAR STORM EVENT.
- PIPE CLASS SHALL BE CLASS III.
- PIPE BEDDING MATERIAL SHALL BE CLASS B.
- ALL STORM SEWER LATERALS ARE 18" RCP UNLESS OTHERWISE NOTED.

JR-Addressed.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

KURTIS W. WILLIAMS, P.E.

DATE

COLORADO NO. 34270
FOR AND ON BEHALF OF JR ENGINEERING, LLC.

Approved For One Year From This Date

City Engineer

Date

Water Department

Date

BY DATE

No. REVISION

JR-Addressed.

Add "Filing 01" to
title block and other
references
throughout plans

PLEASE CHANGE TO
"PRELIMINARY"
THROUGHOUT PLAN SET

TRAILS AT OVERLAND RANCH
FINAL DRAINAGE PLAN

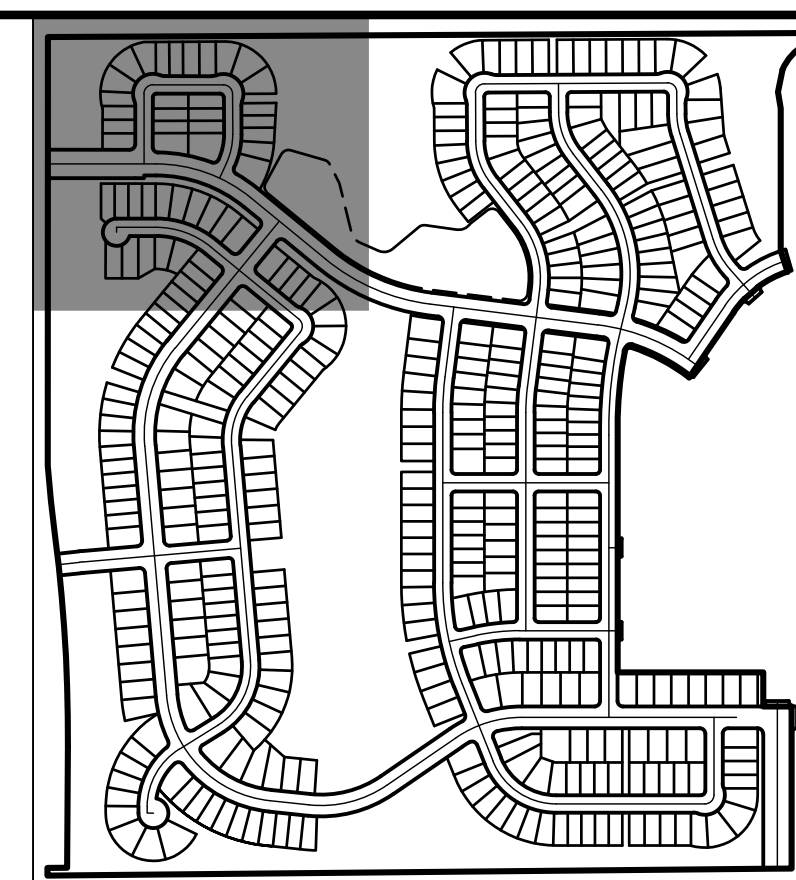
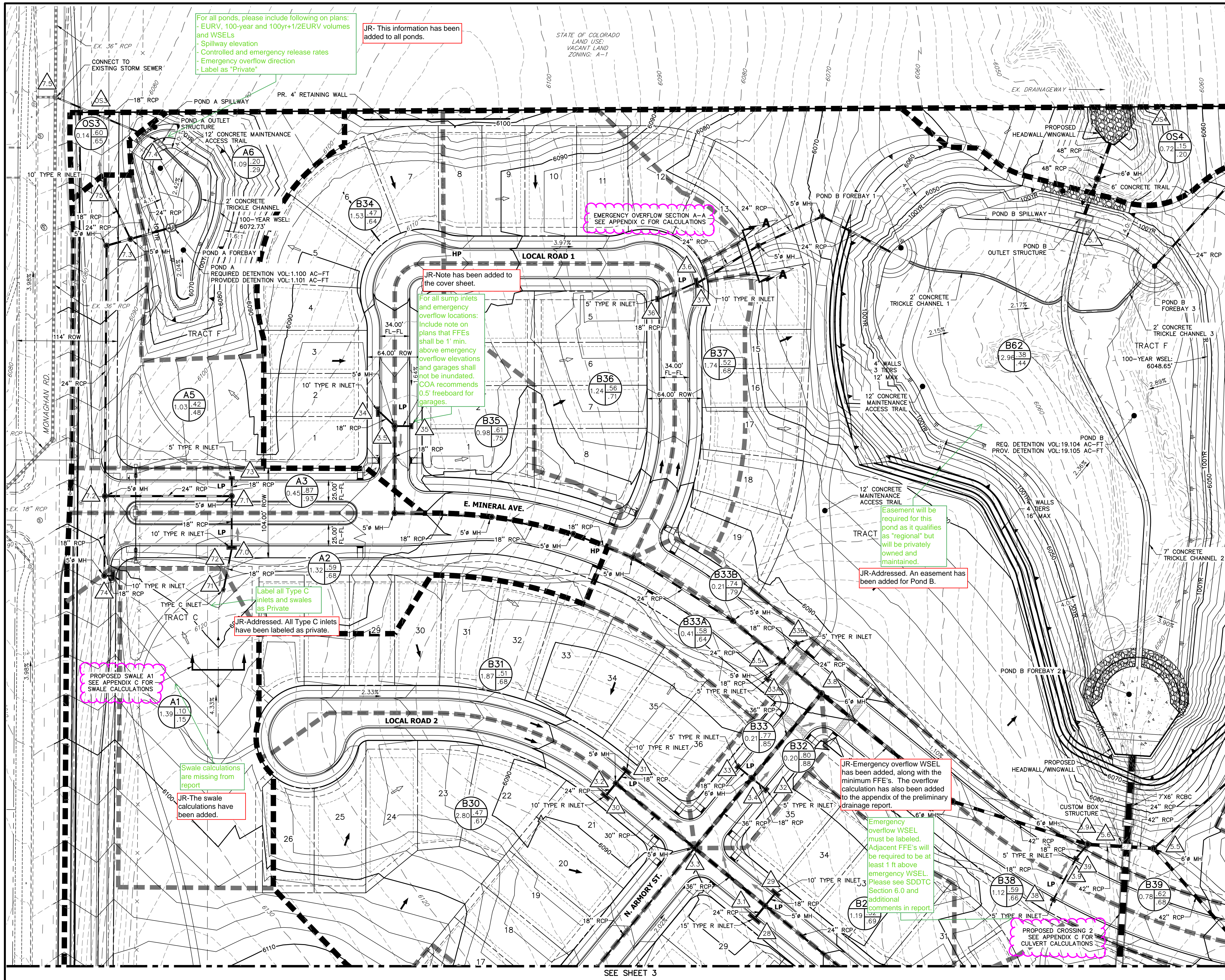
SHEET 1 OF 11

JOB NO. 16118.00

UNTIL SUCH TIME AS
THESE DRAWINGS ARE
APPROVED BY THE
APPROPRIATE REVIEWING
AGENCIES, JR ENGINEERING
APPROVES THEIR USE FOR
THE PROJECTS PURPOSES
DESIGNATED BY WRITTEN
AUTHORIZATION.

PREPARED FOR
RICHMOND AMERICAN HOMES
4350 S. MONACO STREET
DENVER, CO 80237
JERRY RICHMOND

J.R. ENGINEERING
A Westrian Company
Centennial 303-740-9883 • Colorado Springs 719-593-2593
Fort Collins 970-497-9888 • www.jrengineering.com



KEY MAP

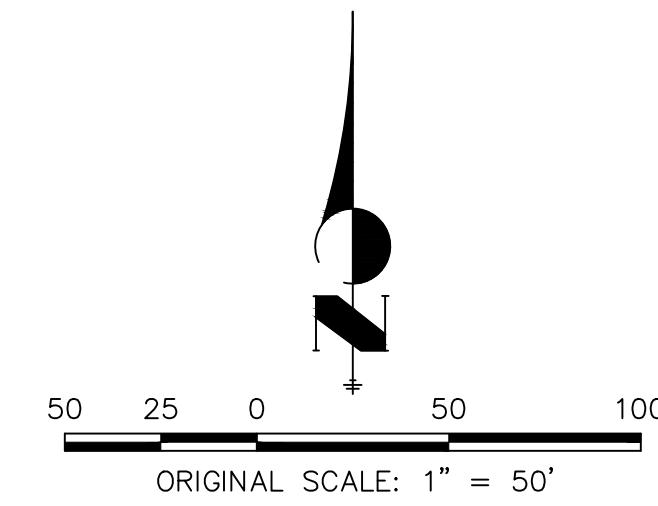
SCALE: 1"=700'



Know what's below.
Call before you dig.

LEGEND:

- PROPOSED STORM SEWER
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- DRAINAGE BASIN
- DRAINAGE SUB-BASIN
- A = BASIN DESIGNATION
- B = AREA IN ACRES
- C = 2-YR RUNOFF COEFFICIENT
- D = 100-YR RUNOFF COEFFICIENT
- DESIGN POINT
- HP HIGH POINT
- LP LOW POINT
- DRAINAGE ARROW
- EXISTING DRAINAGE ARROW
- EMERGENCY OVERFLOW PATH
- PROPOSED DRAINAGE SWALE
- 100YR PROPOSED DRAINAGE SWALE



Approved For One Year From This Date

City Engineer	Date
Water Department	Date

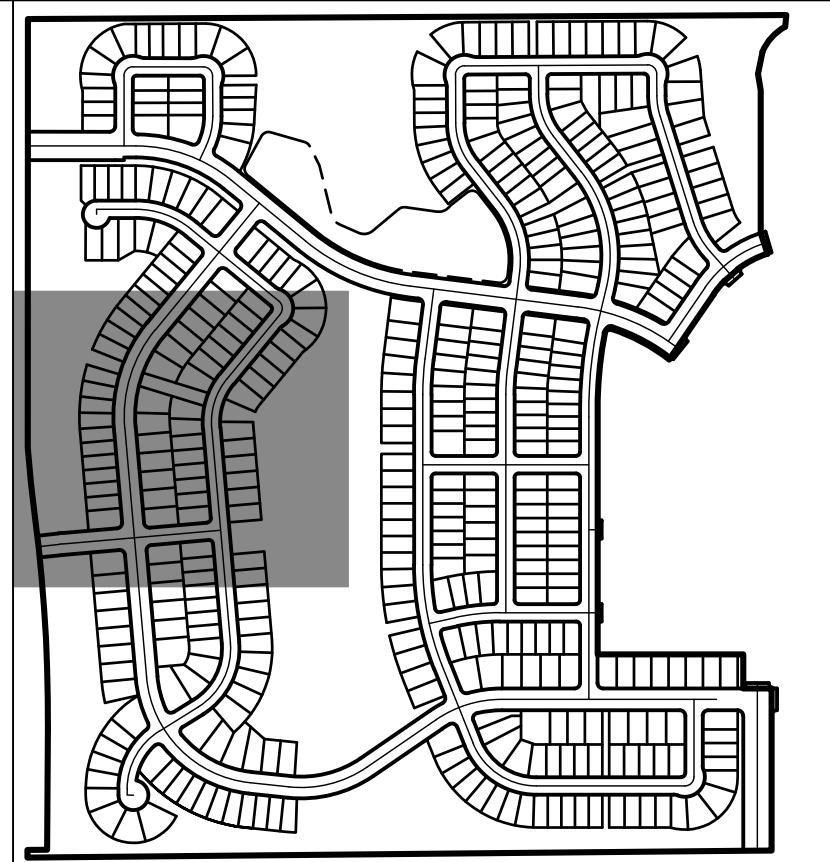
FINAL DRAINAGE PLAN
TRAILS AT OVERLAND RANCH
JOB NO. 16118.00
6/28/22
SHEET 2 OF 11

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SEE SHEET 2

SEE SHEET 4



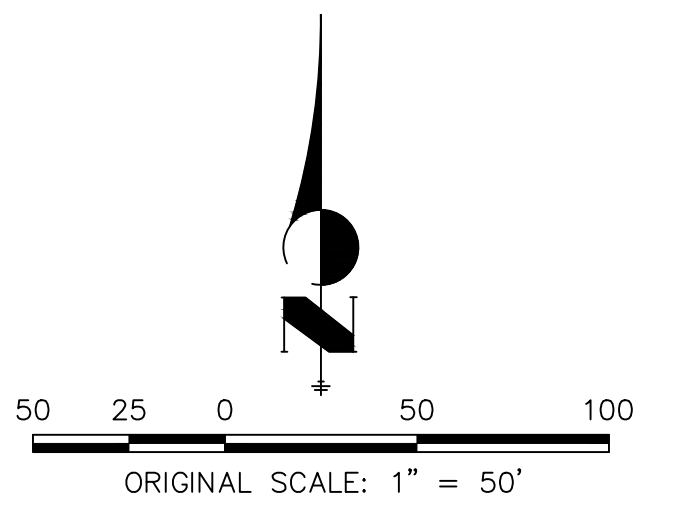
KEY MAP

SCALE: 1"=700'



LEGEND:

- PROPOSED STORM SEWER
- 6100 PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- 6100 EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
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- LP LOW POINT
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- EXISTING DRAINAGE ARROW
- EMERGENCY OVERFLOW PATH
- PROPOSED DRAINAGE SWALE
- 100YR PROPOSED DRAINAGE SWALE



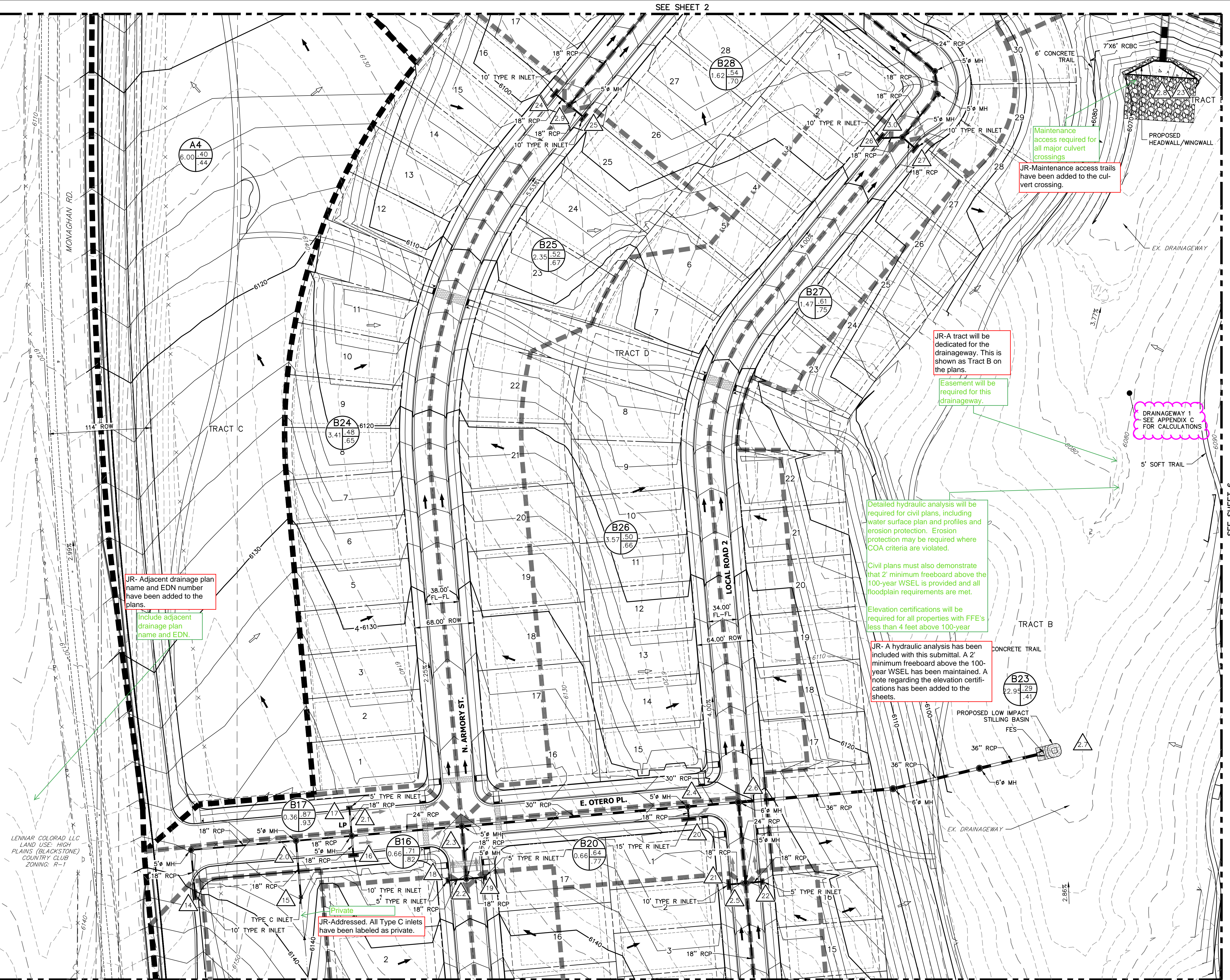
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City Engineer _____ Date _____
Water Department _____ Date _____

FINAL DRAINAGE PLAN
TRAILS AT OVERLAND RANCH
JOB NO. 16118.00
6/28/22
SHEET 3 OF 11

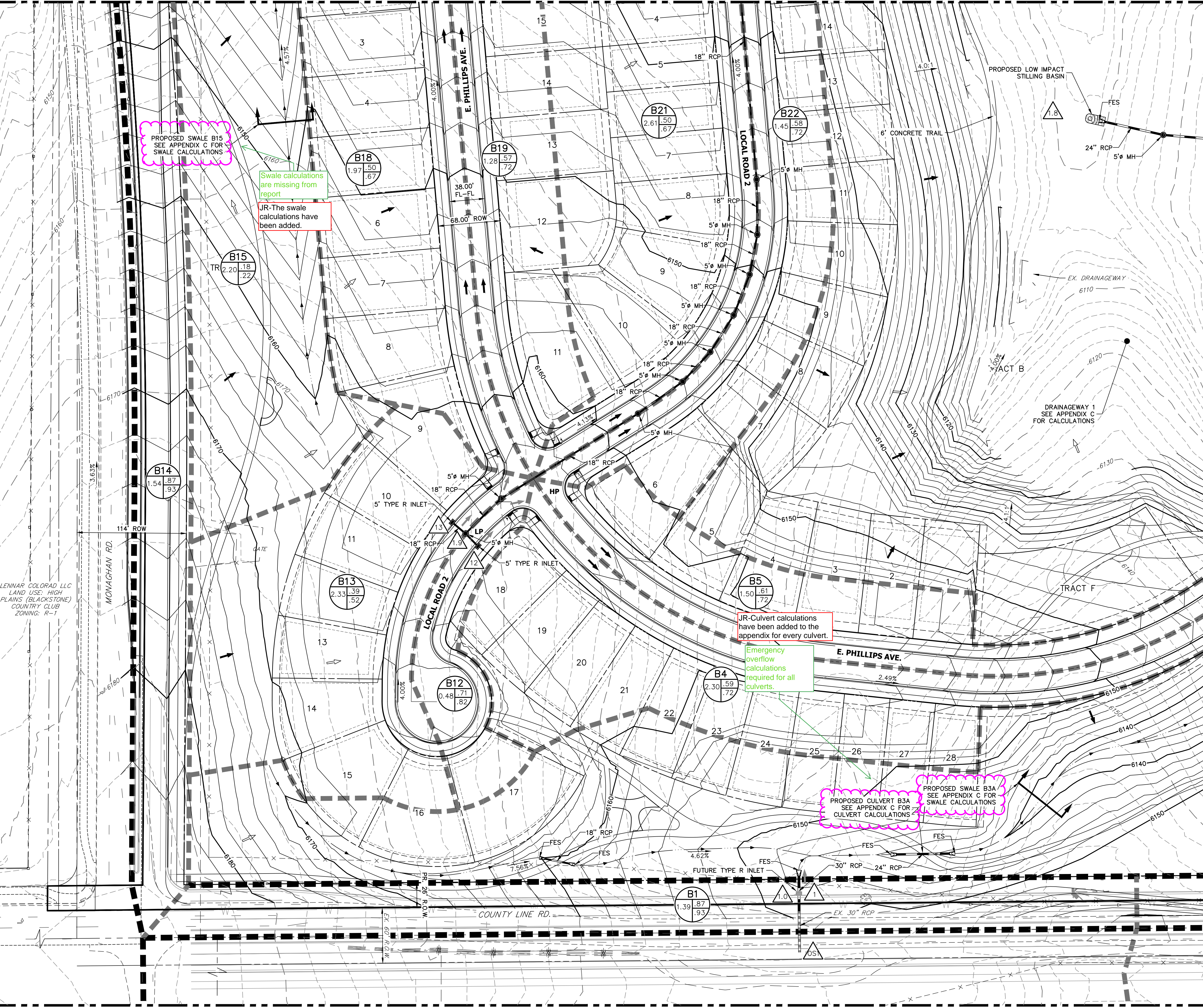


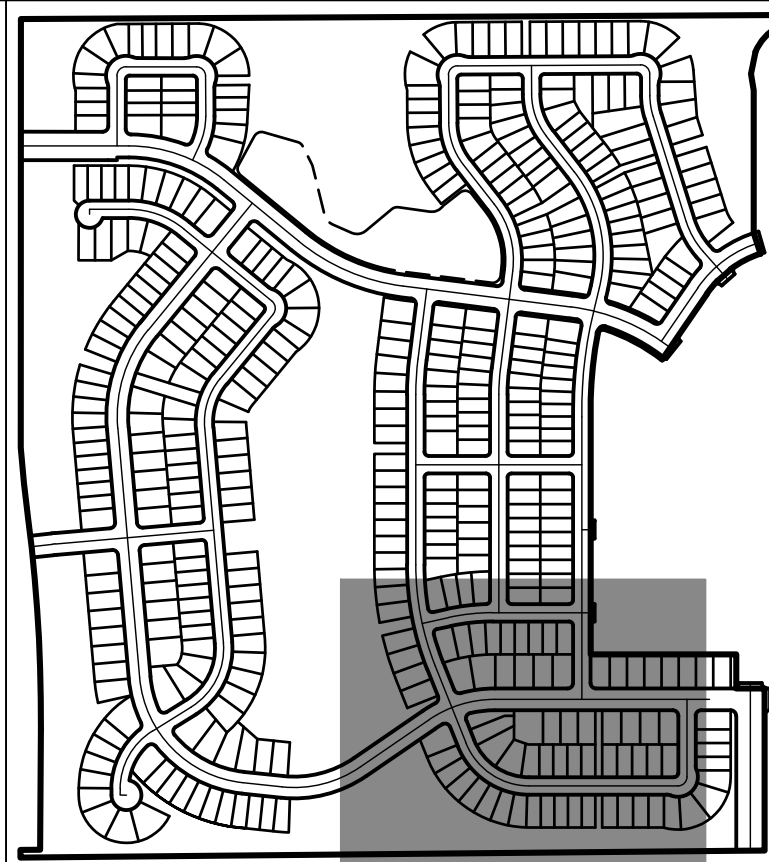
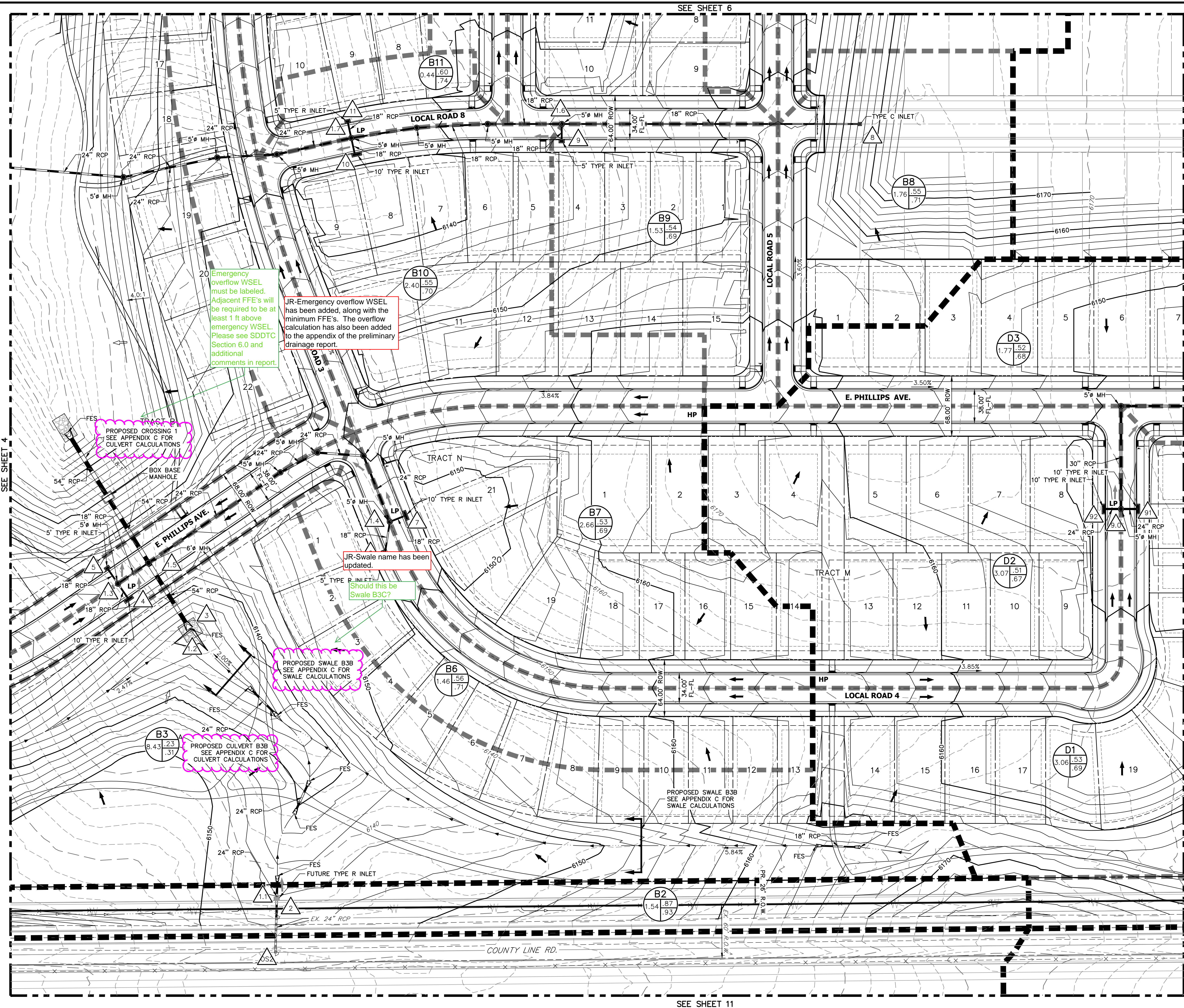
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SEE SHEET 6

SEE SHEET 3



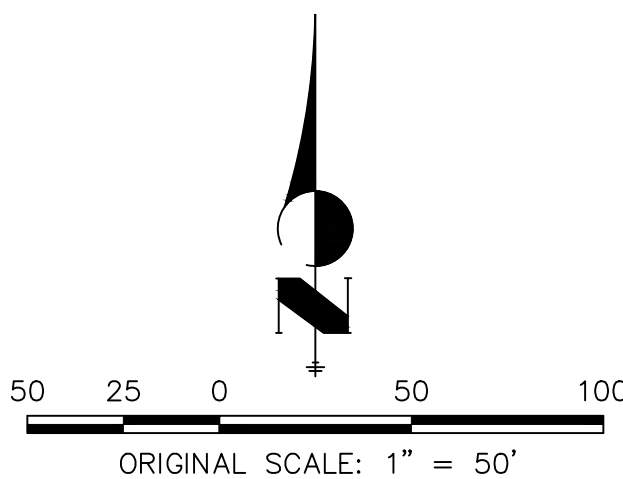


KEY MAP

SCALE: 1"=700'

LEGEND:

- PROPOSED STORM SEWER
- 6100 PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- 6100 EXISTING MAJOR CONTOUR
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- PROPOSED DRAINAGE SWALE
- 100YR PROPOSED DRAINAGE SWALE



Approved For One Year From This Date

City Engineer _____ Date _____

Water Department _____ Date _____

FINAL DRAINAGE PLAN
TRAILS AT OVERLAND RANCH
JOB NO. 16118.00
6/28/22
SHEET 5 OF 11



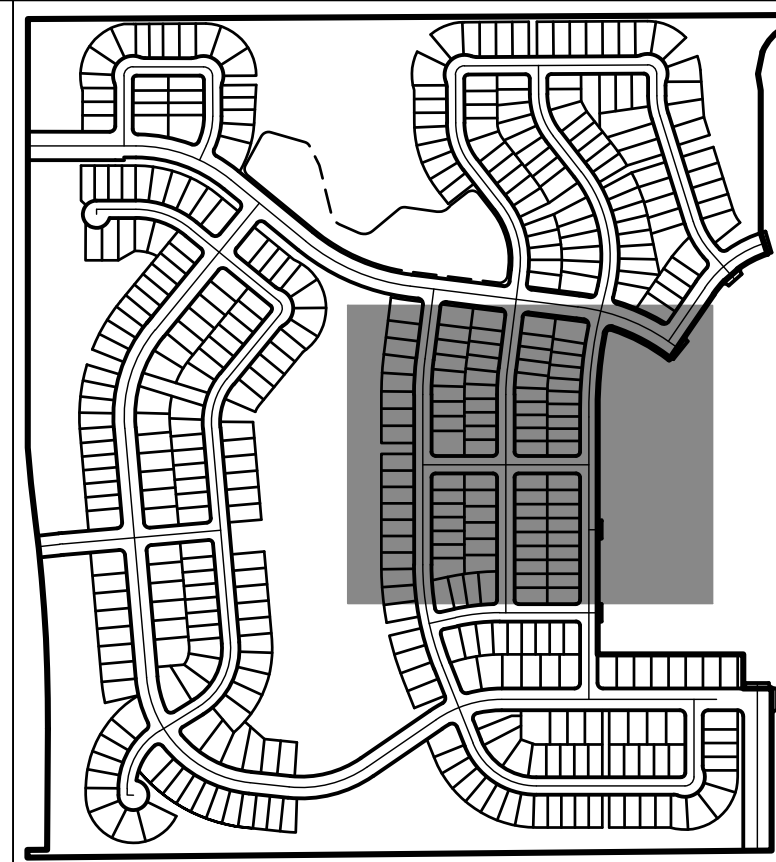
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SEE SHEET 7

SEE SHEET 5

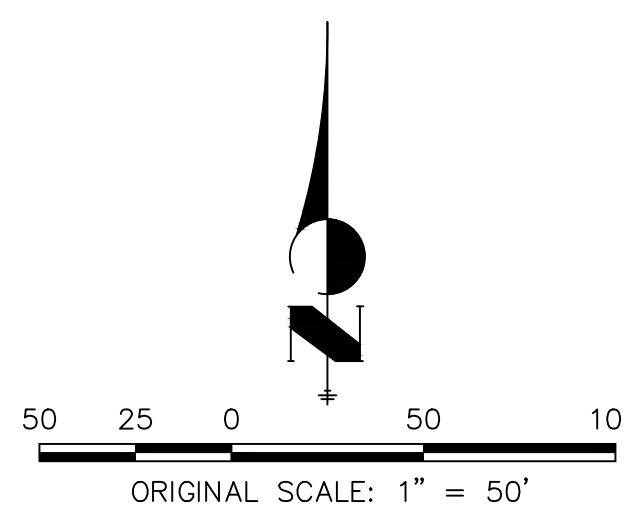


KEY MAP

SCALE: 1"=700'

LEGEND:

- PROPOSED STORM SEWER
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- EXISTING MAJOR CONTOUR
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- PROPOSED DRAINAGE SWALE
- 100YR PROPOSED DRAINAGE SWALE



Approved For One Year From This Date

City Engineer _____ Date _____
Water Department _____ Date _____

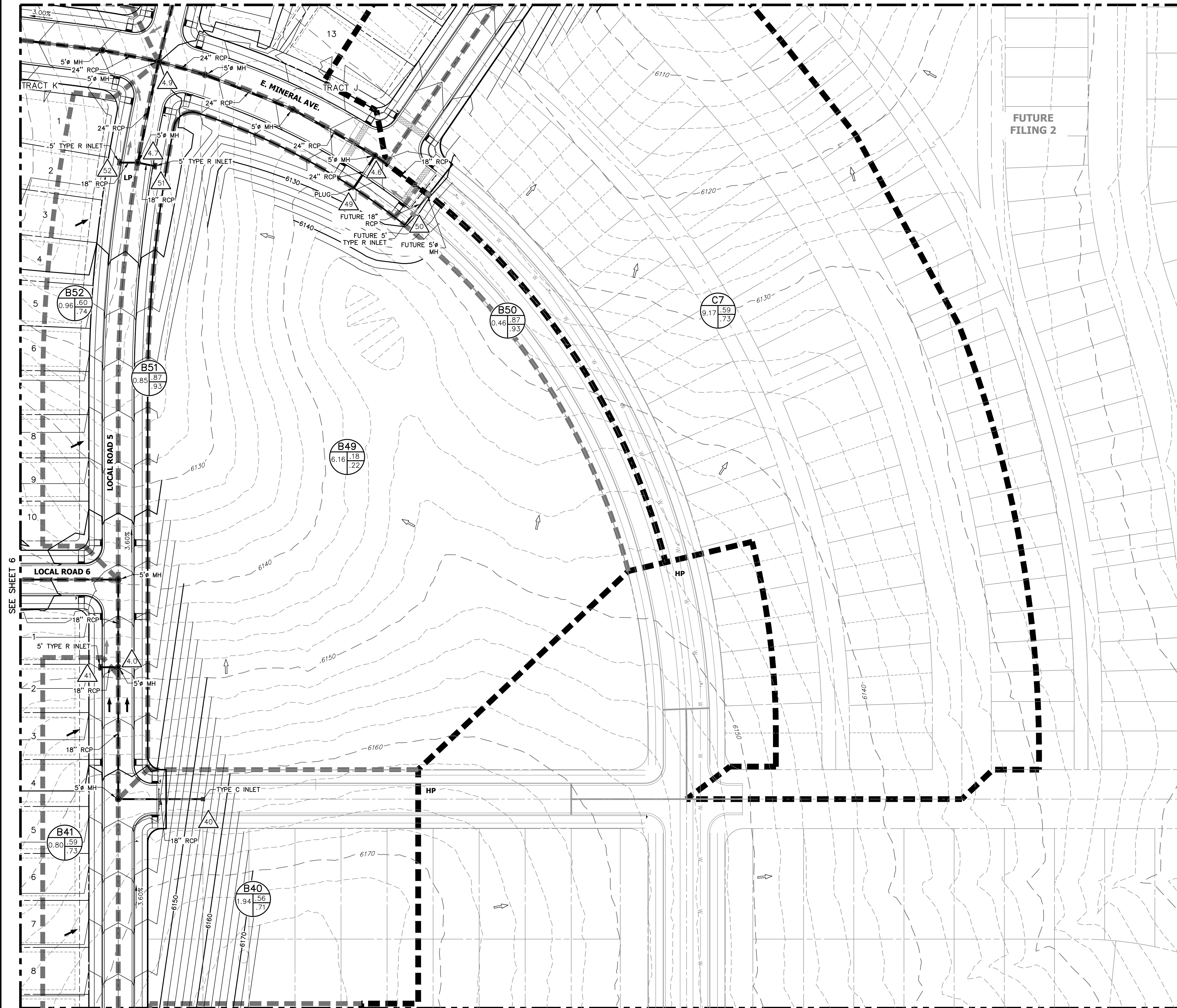
FINAL DRAINAGE PLAN
TRAILS AT OVERLAND RANCH
JOB NO. 16118.00
6/28/22
SHEET 6 OF 11



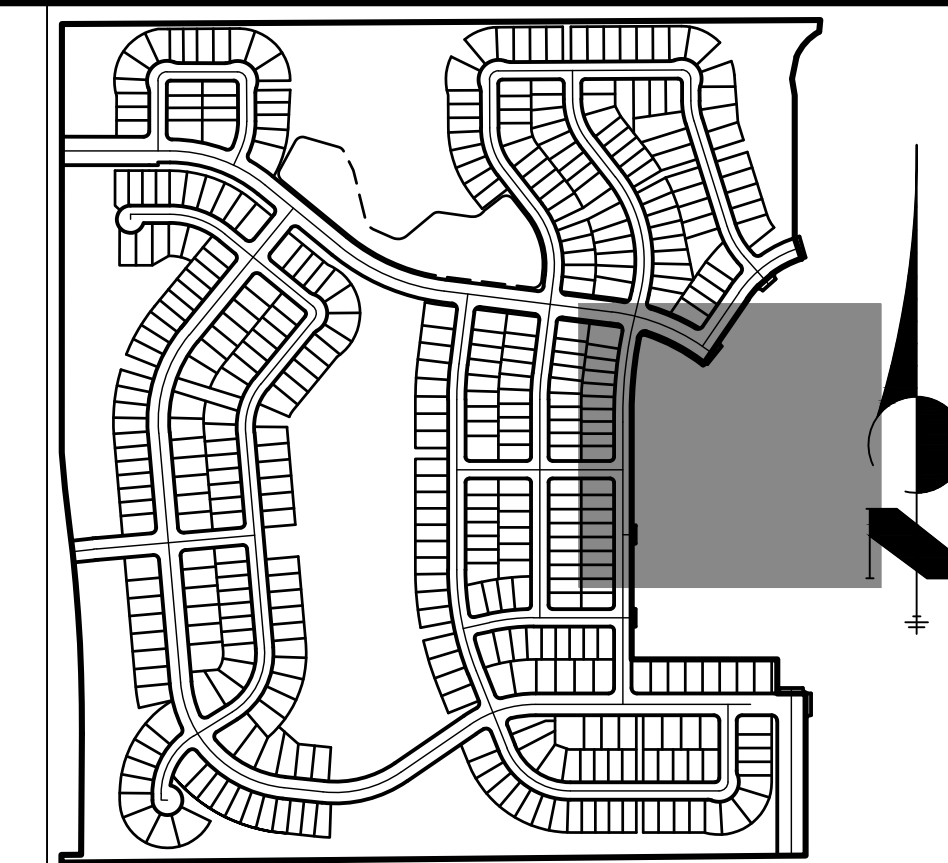
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SEE SHEET 8



SEE SHEET 10

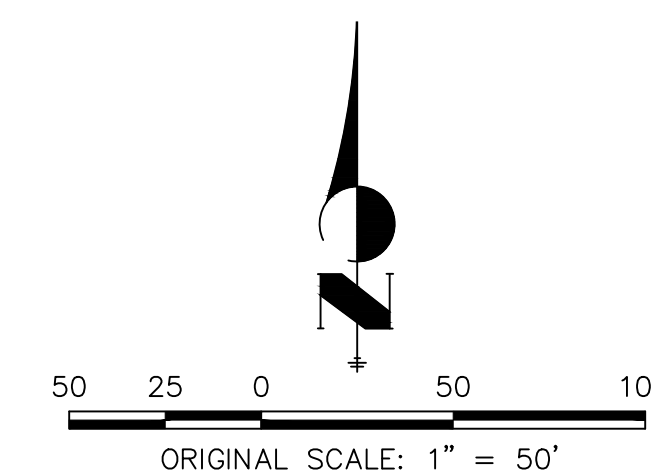


KEY MAP

SCALE: 1"=700'

LEGEND:

- PROPOSED STORM SEWER
- 6100 PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- 6100 EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- DRAINAGE BASIN
- DRAINAGE SUB-BASIN
- | | |
|---|--|
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City Engineer _____ Date _____

Water Department _____ Date _____

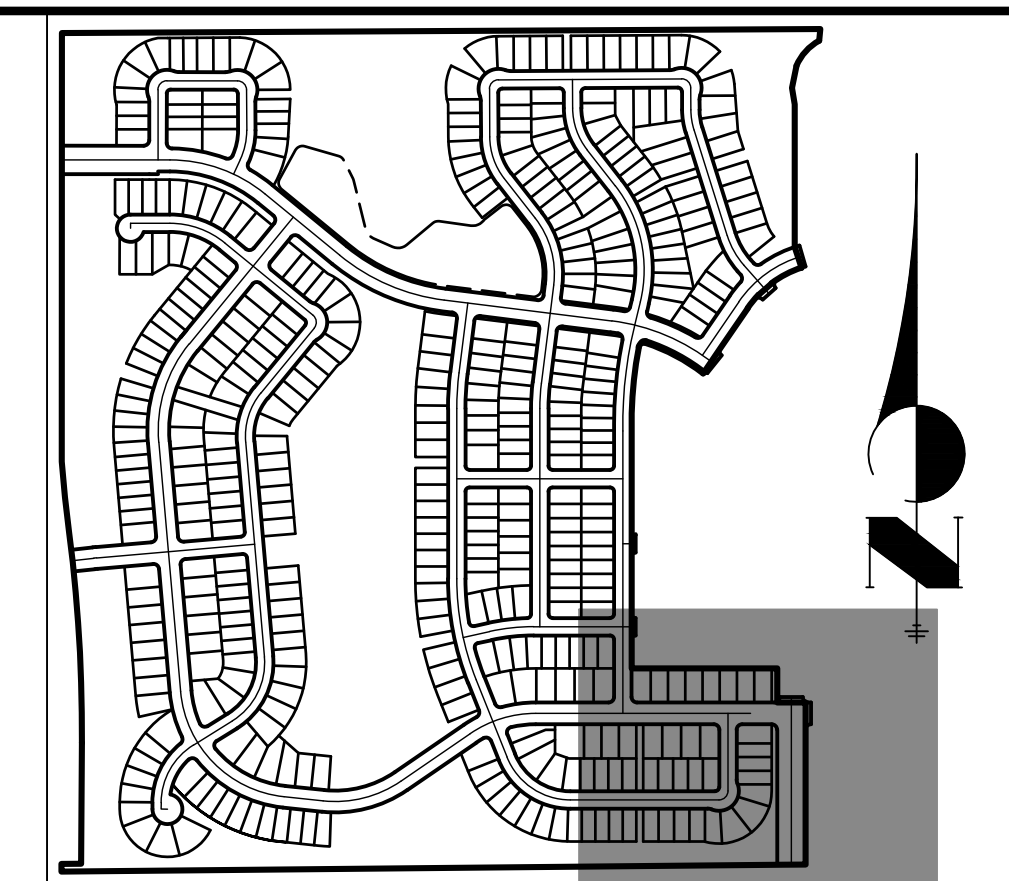
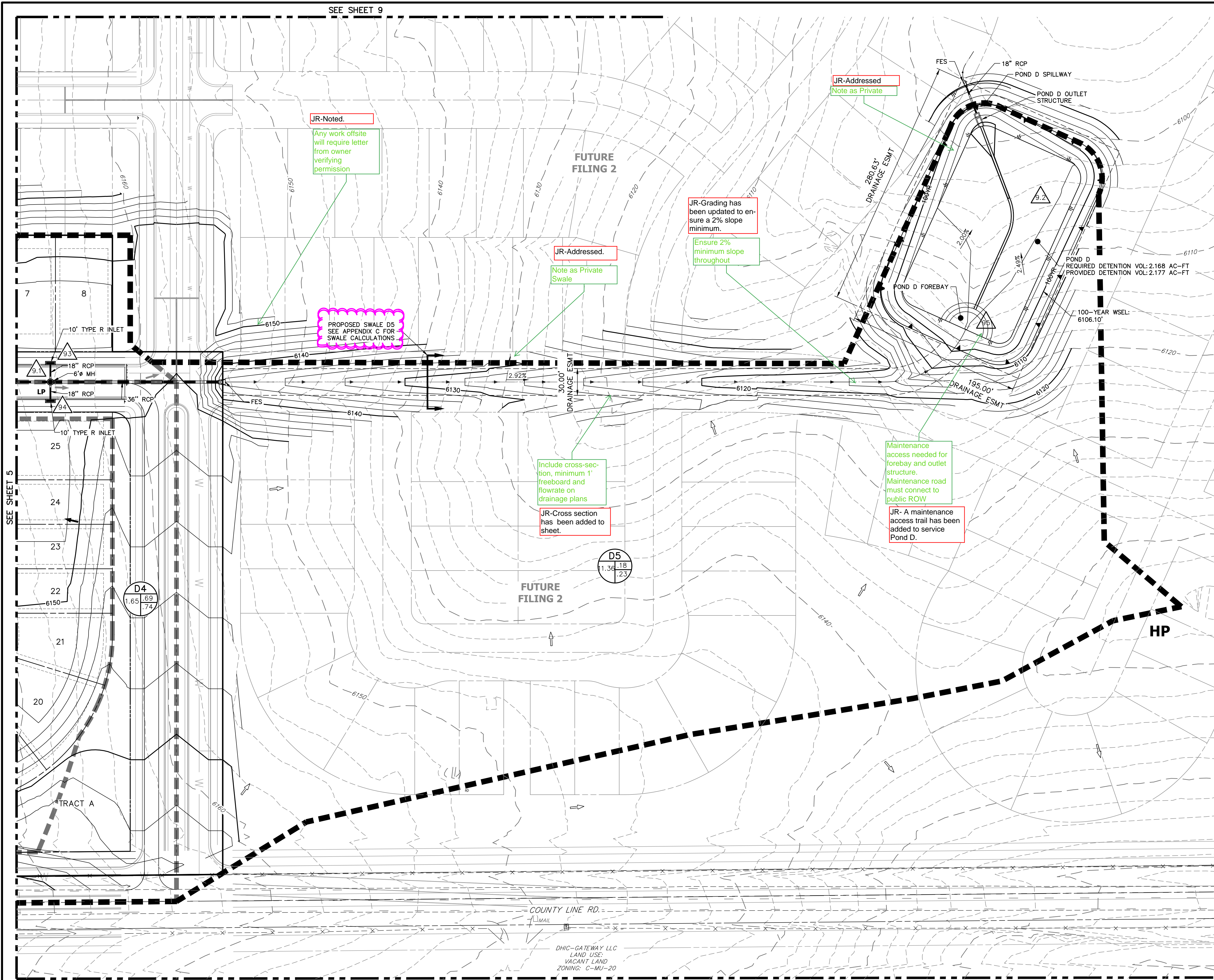
FINAL DRAINAGE PLAN
TRAILS AT OVERLAND RANCH
JOB NO. 16118.00
6/28/22
SHEET 9 OF 11



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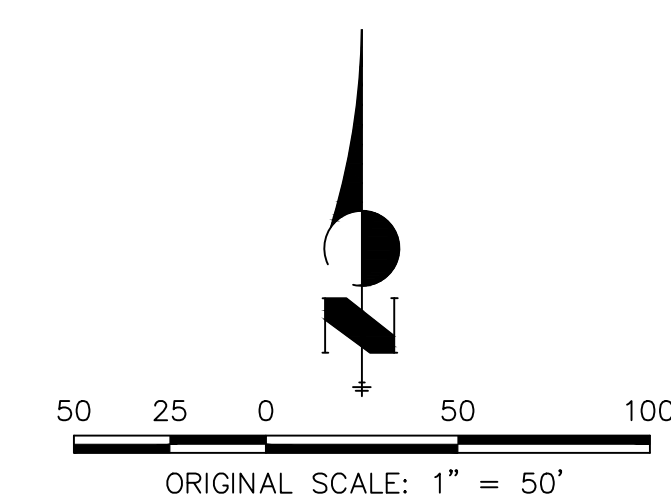


KEY MAP

SCALE: 1"=700'

LEGEND:

- PROPOSED STORM SEWER
 - PROPOSED MAJOR CONTOUR
 - PROPOSED MINOR CONTOUR
 - EXISTING MAJOR CONTOUR
 - EXISTING MINOR CONTOUR
 - DRAINAGE BASIN
 - DRAINAGE SUB-BASIN
 - DESIGN POINT
 - HIGH POINT
 - LOW POINT
 - DRAINAGE ARROW
 - EXISTING DRAINAGE ARROW
 - EMERGENCY OVERFLOW PATH
 - PROPOSED DRAINAGE SWALE
 - 100YR PROPOSED DRAINAGE SWALE
- A = BASIN DESIGNATION
B = AREA IN ACRES
C = 2-YR RUNOFF COEFFICIENT
D = 100-YR RUNOFF COEFFICIENT



Approved For One Year From This Date

City Engineer _____ Date _____

Water Department _____ Date _____

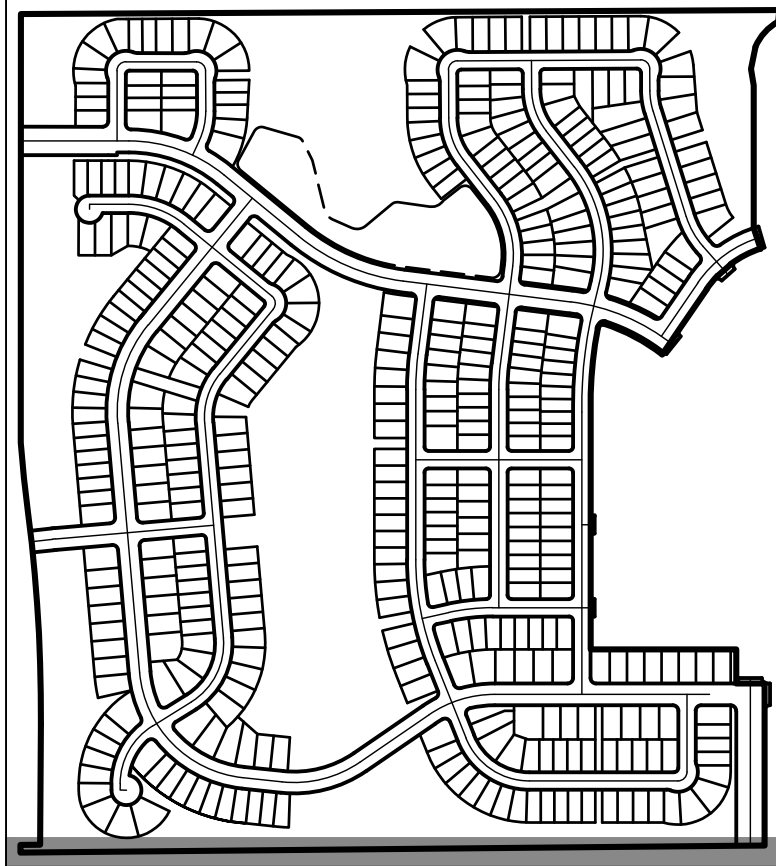
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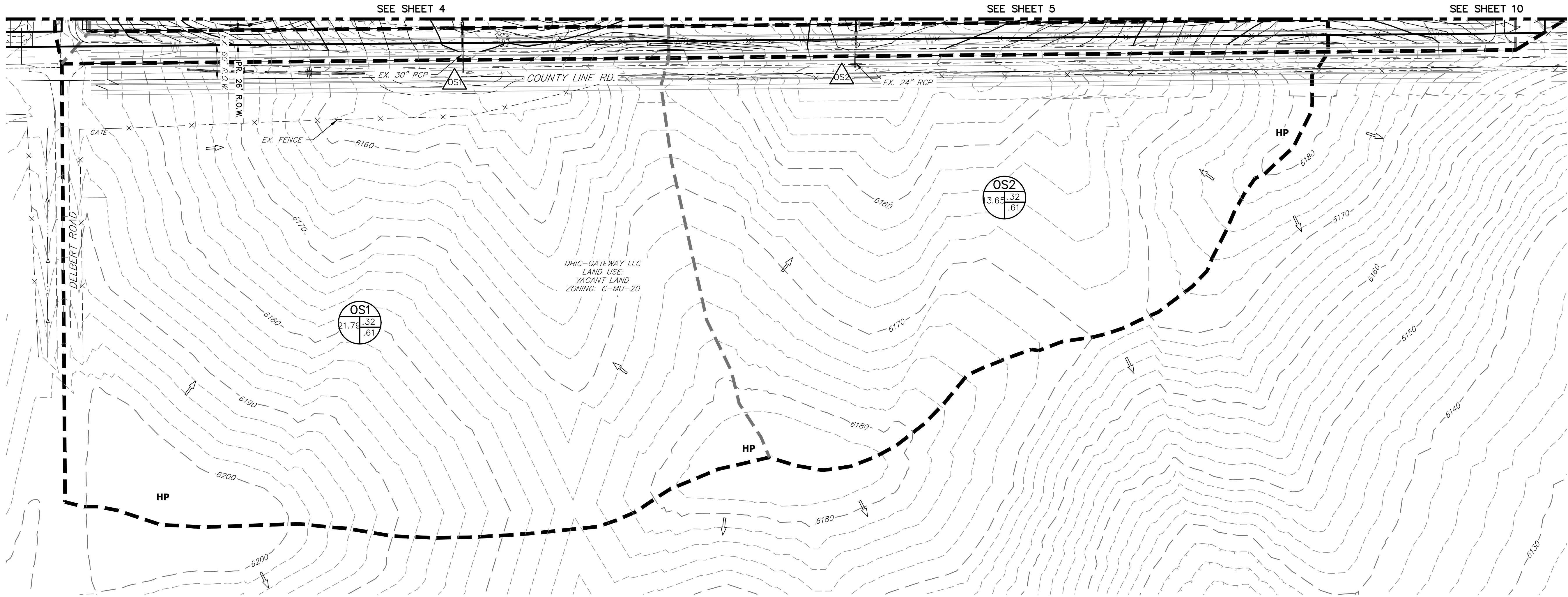
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KEY MAP

SCALE: 1"=700'

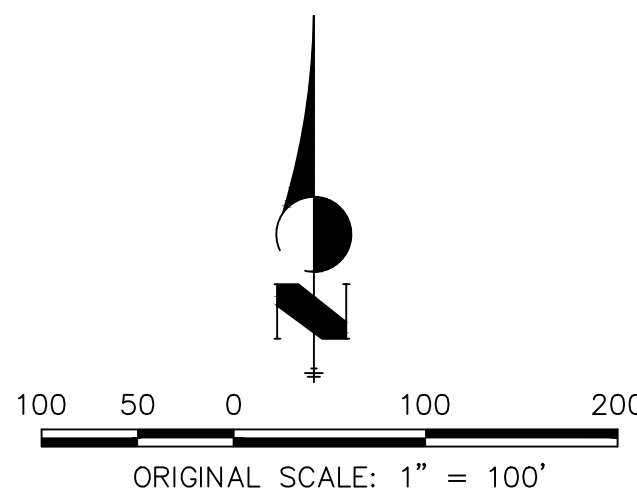


LEGEND:

- PROPOSED STORM SEWER
- 6100 PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- 6100 EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- DRAINAGE BASIN
- DRAINAGE SUB-BASIN
- | | |
|---|---|
| A | C |
| B | D |

 A = BASIN DESIGNATION
B = AREA IN ACRES
C = 2-YR RUNOFF COEFFICIENT
D = 100-YR RUNOFF COEFFICIENT
- | |
|---|
| 1 |
|---|

 DESIGN POINT
- HP HIGH POINT
- LP LOW POINT
- DRAINAGE ARROW
- EXISTING DRAINAGE ARROW
- EMERGENCY OVERFLOW PATH
- PROPOSED DRAINAGE SWALE
- 100YR PROPOSED DRAINAGE SWALE



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