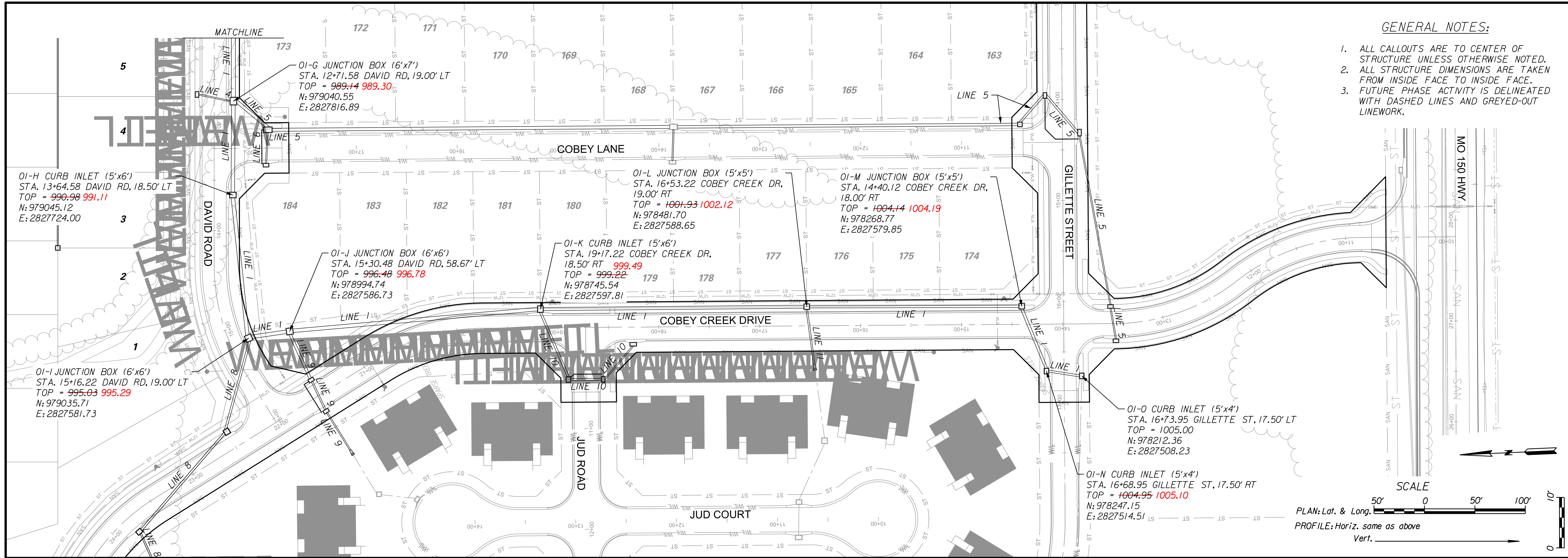
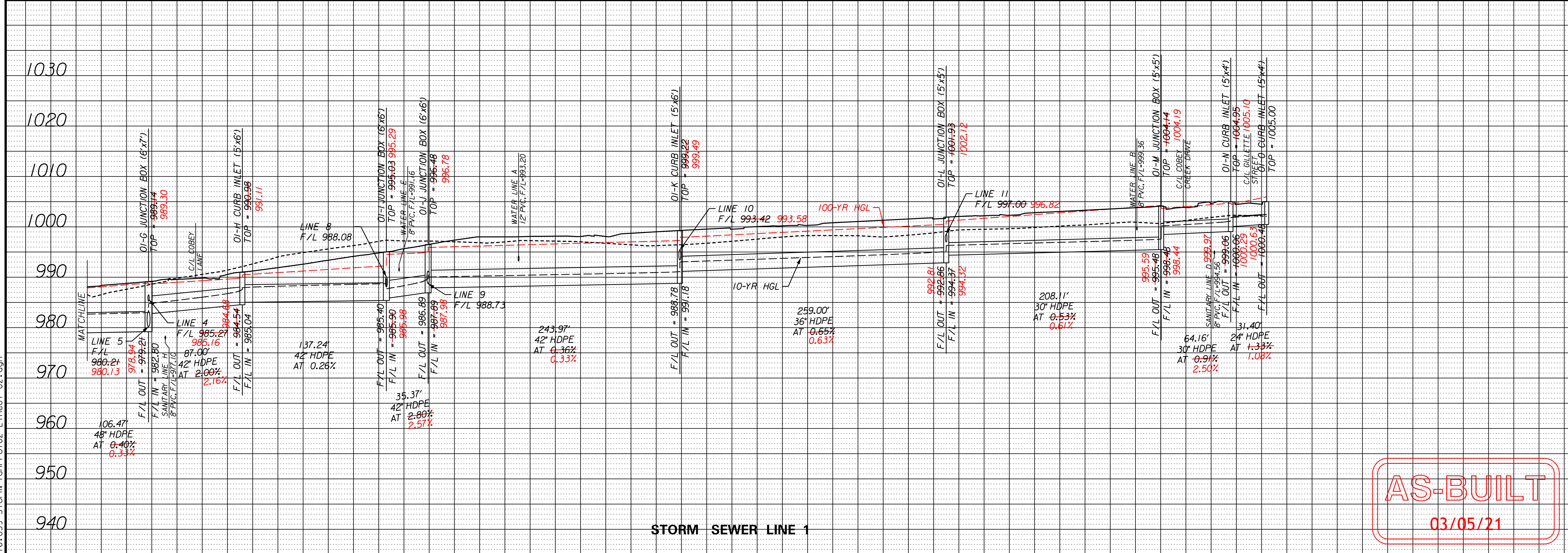
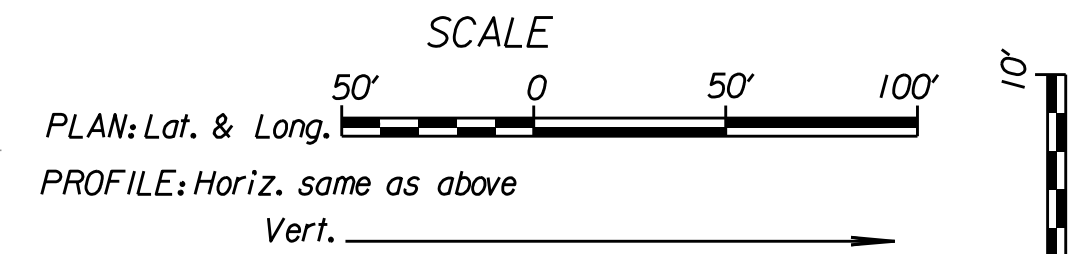


5/25/2021
16.059-StormPlanProf02-Line01-02.dgn



GENERAL NOTES:

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- ALL STRUCTURE DIMENSIONS ARE TAKEN FROM INSIDE FACE TO INSIDE FACE.
- FUTURE PHASE ACTIVITY IS DELINEATED WITH DASHED LINES AND GREYED-OUT LINEWORK.



AS-BUILT
03/05/21

NO.	BY	CHK/APP
1	RAM	RKS
2	RAM	RKS
3	RAM	RKS
4	RAM	RKS

DATE: 03/05/21
REVISION: 03/02/20

CHANGES TO STORM LINE 12
03/02/20
ADDRESS CITY COMMENTS DATED 3/20/19
3/27/19
ADDRESS CITY COMMENTS DATED 12/18/18
11/22/18
SUBMITTAL TO CITY OF LEE'S SUMMIT

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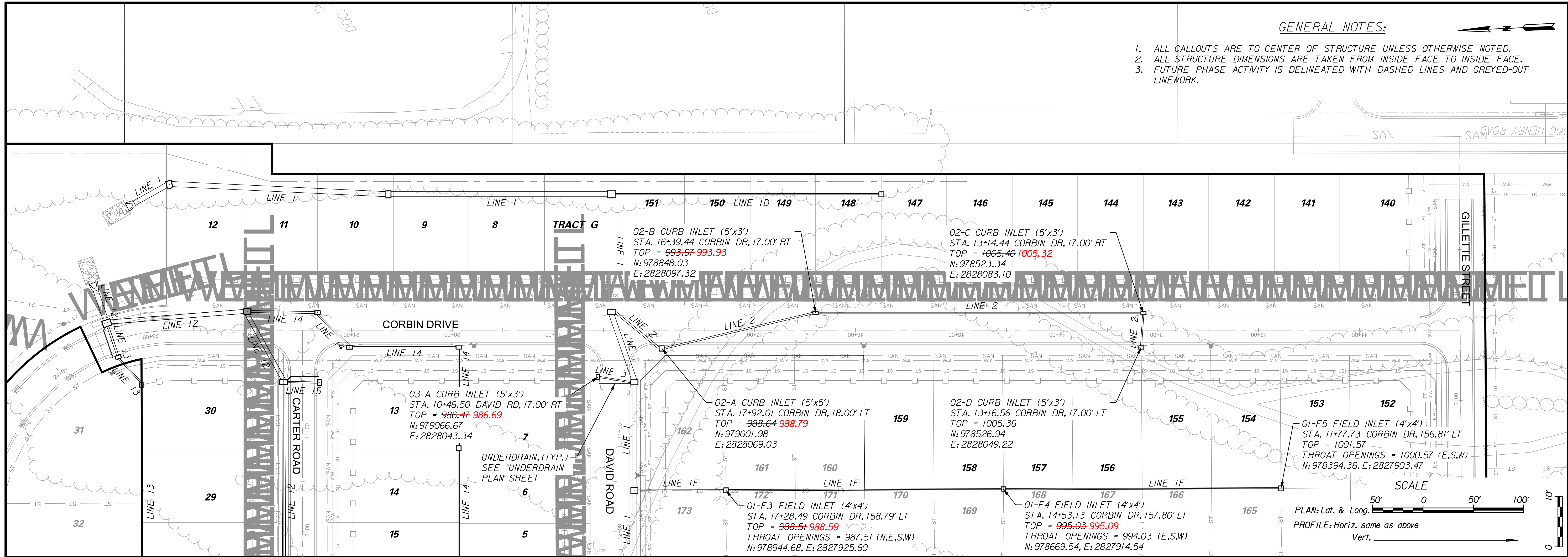
STORM SEWER LINE 1

COBEY CREEK

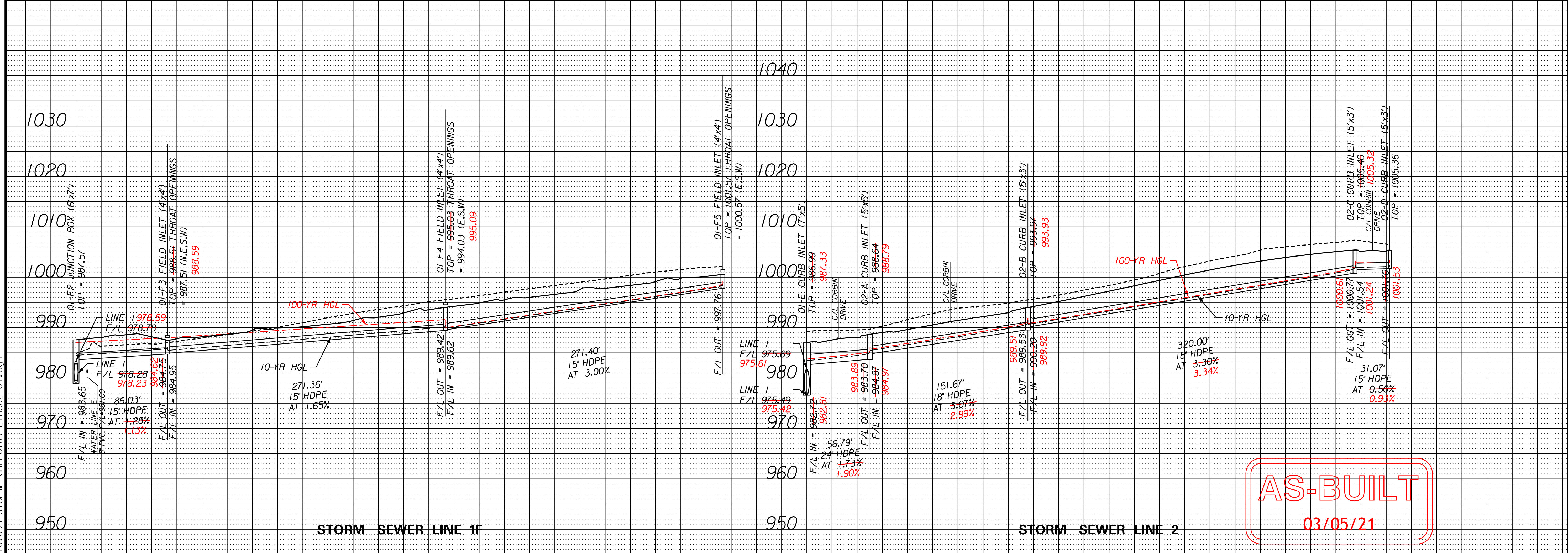
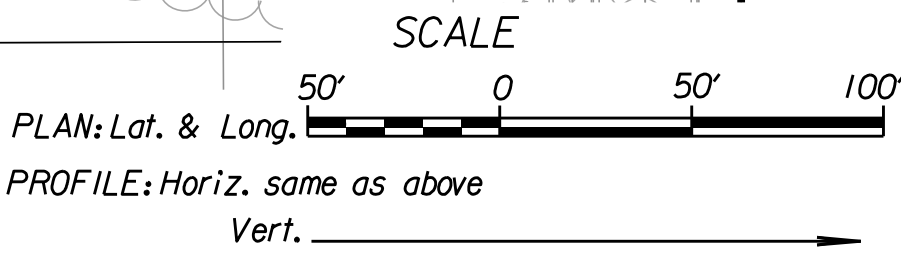
X-REF. NO. XXX
DRAWING NO. XXX
DATE March 27, 2019
JOB NO. 16.059.01

11 SHEET OF 53

5/25/2021
16_059-StormPlanProf03-Line02-01.dgn



- GENERAL NOTES:
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 3. FUTURE PHASE ACTIVITY IS DELINEATED WITH DASHED LINES AND GREYED-OUT LINEWORK.



AS-BUILT
03/05/21

NO.	BY	CHK/APP
1	RAM	RKS
2	RAM	RKS
3	RAM	RKS
4	RAM	RKS

03/05/21
AS-BUILT
CHANGES TO STORM LINE 12
03/02/20
ADDRESSED CITY COMMENTS DATED 3/20/19
3/27/19
ADDRESSED CITY COMMENTS DATED 12/18/18
3/8/19
SUBMITTAL TO CITY OF LEE'S SUMMIT
11/22/18

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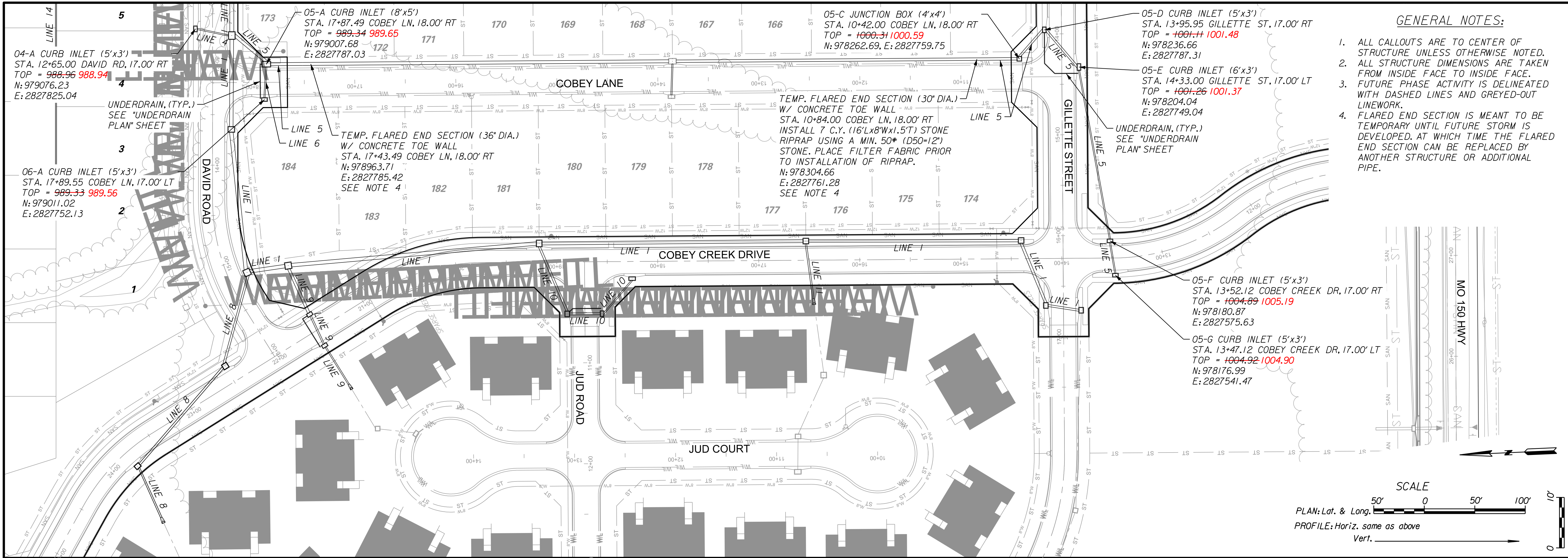
STORM SEWER LINES 1F, 2 AND 3

COBEY CREEK

CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

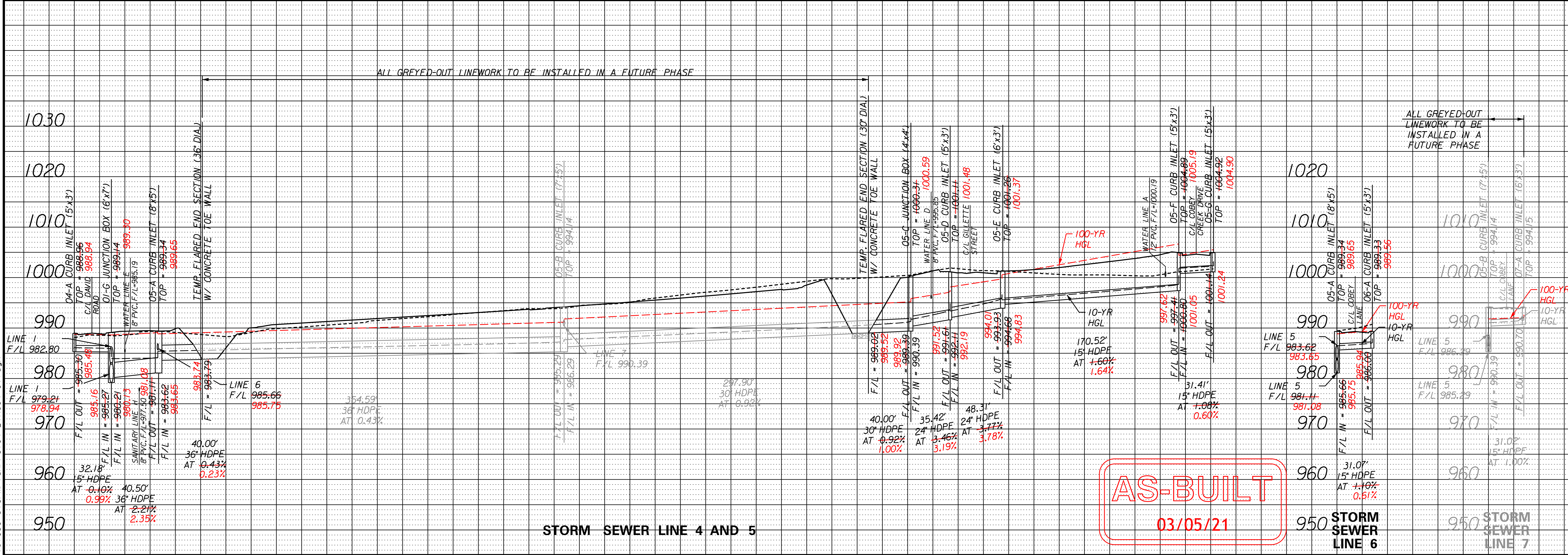
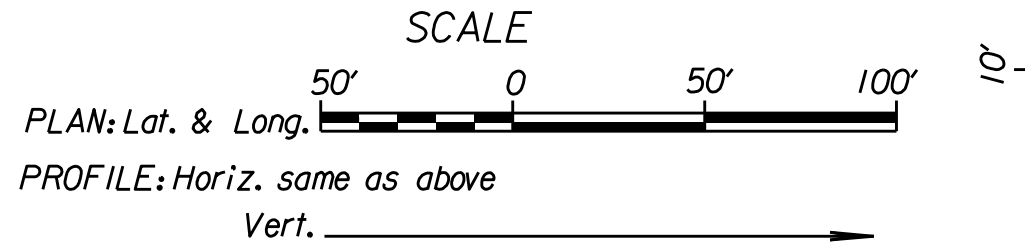
X-REF. NO.	DRAWING NO.	DATE	SHEET OF
XXX	XXX	March 27, 2019	12
			53

5/25/2021 16:05:59 StormPlanProf04-Lines04-01.dgn



GENERAL NOTES:

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NO.	BY	CHK/APP
1	RAM	RKS
2	RAM	RKS
3	RAM	RKS
4	RAM	RKS

DATE	REVISION
03/05/21	AS-BUILT
03/02/20	CHANGES TO STORM LINE 12 ENIT LINE 12
3/27/19	ADDRESS CITY COMMENTS DATED 3/20/19
3/8/19	ADDRESS CITY COMMENTS DATED 12/18/18
11/27/18	SUBMITTAL TO CITY OF LEE'S SUMMIT



03/02/20



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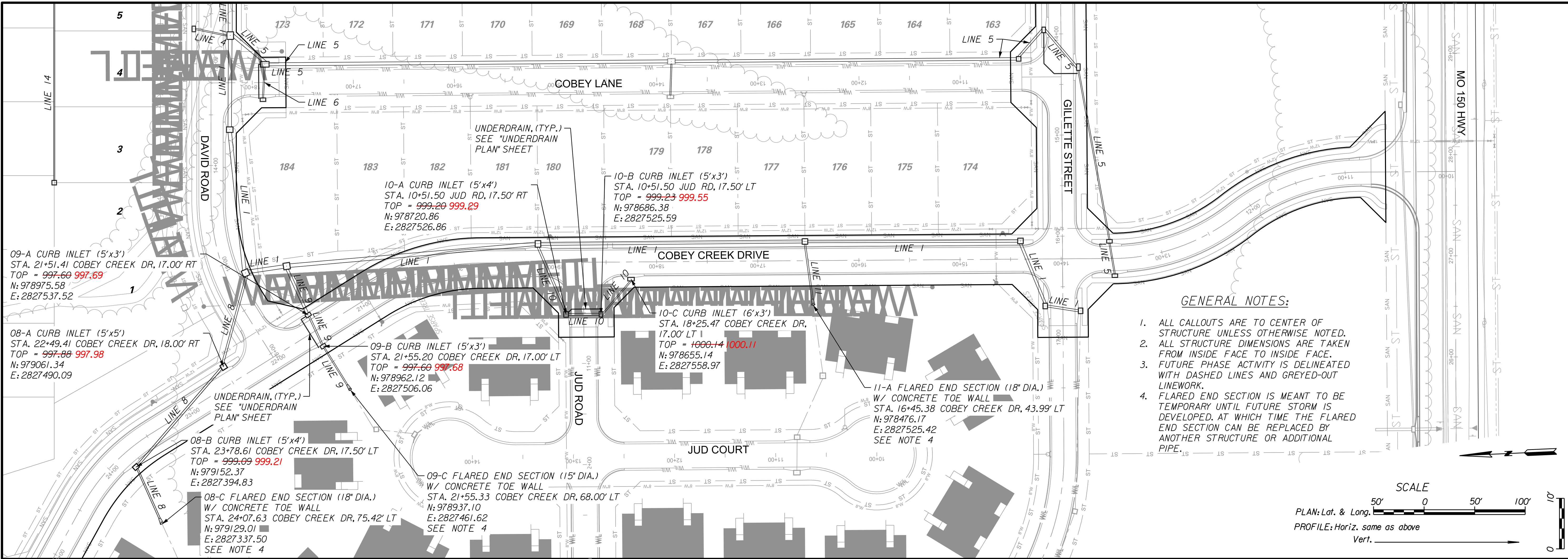
STORM SEWER LINES 4, 5, AND 6

COBEY CREEK

CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

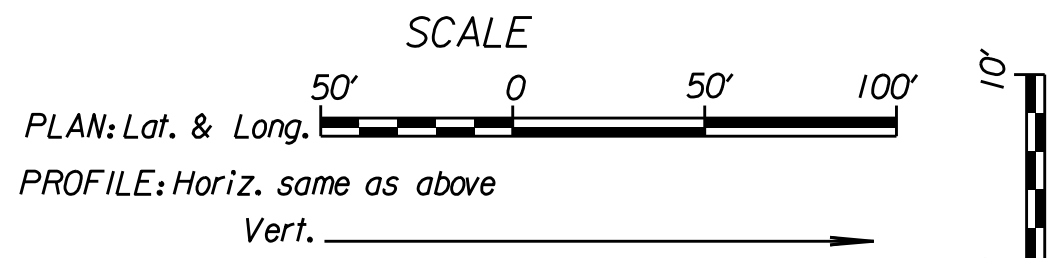
X-REF. NO. XXX	DRAWING NO. XXX
DATE March 27, 2019	JOB NO. 16,059.01
13	SHEET OF 53

5/25/2021 16.059-StormPlanProf05-Lines08-01.dgn

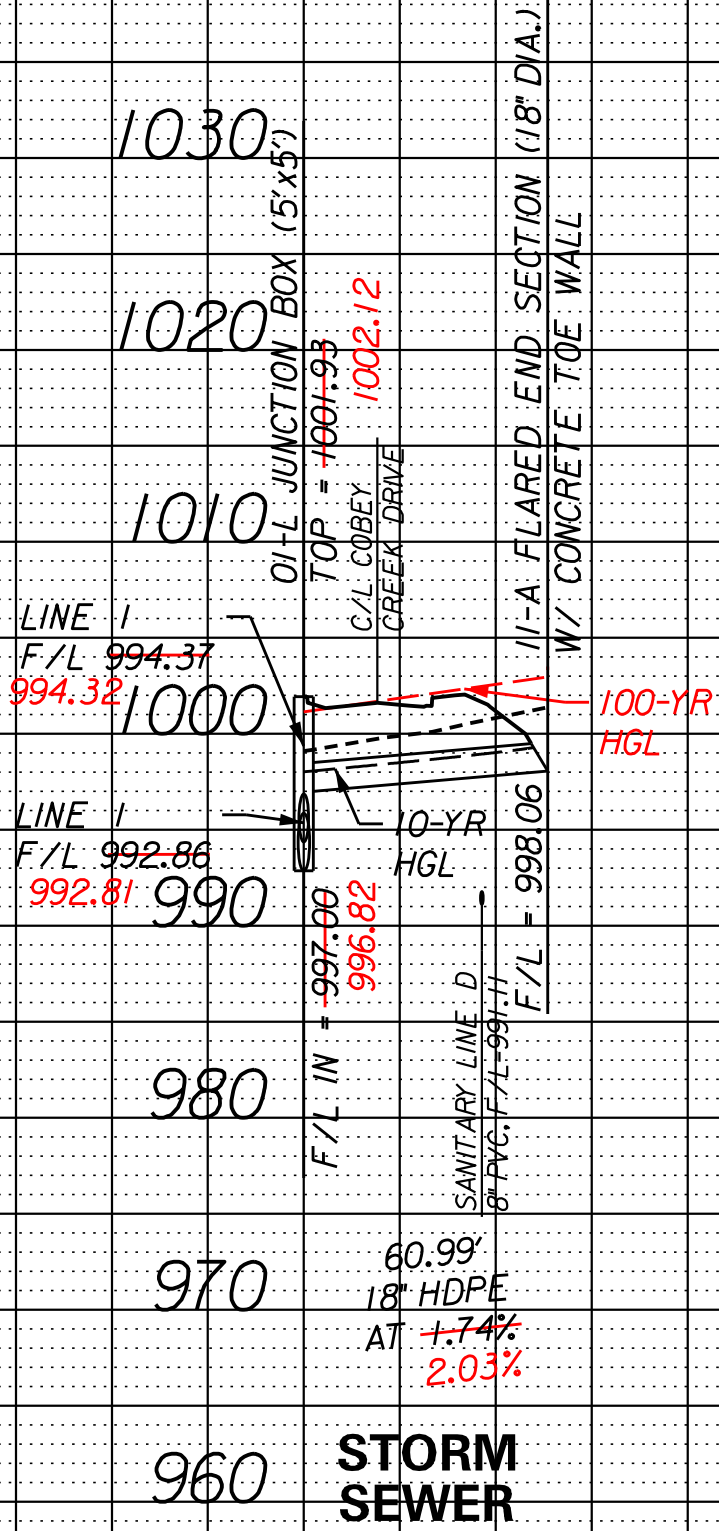
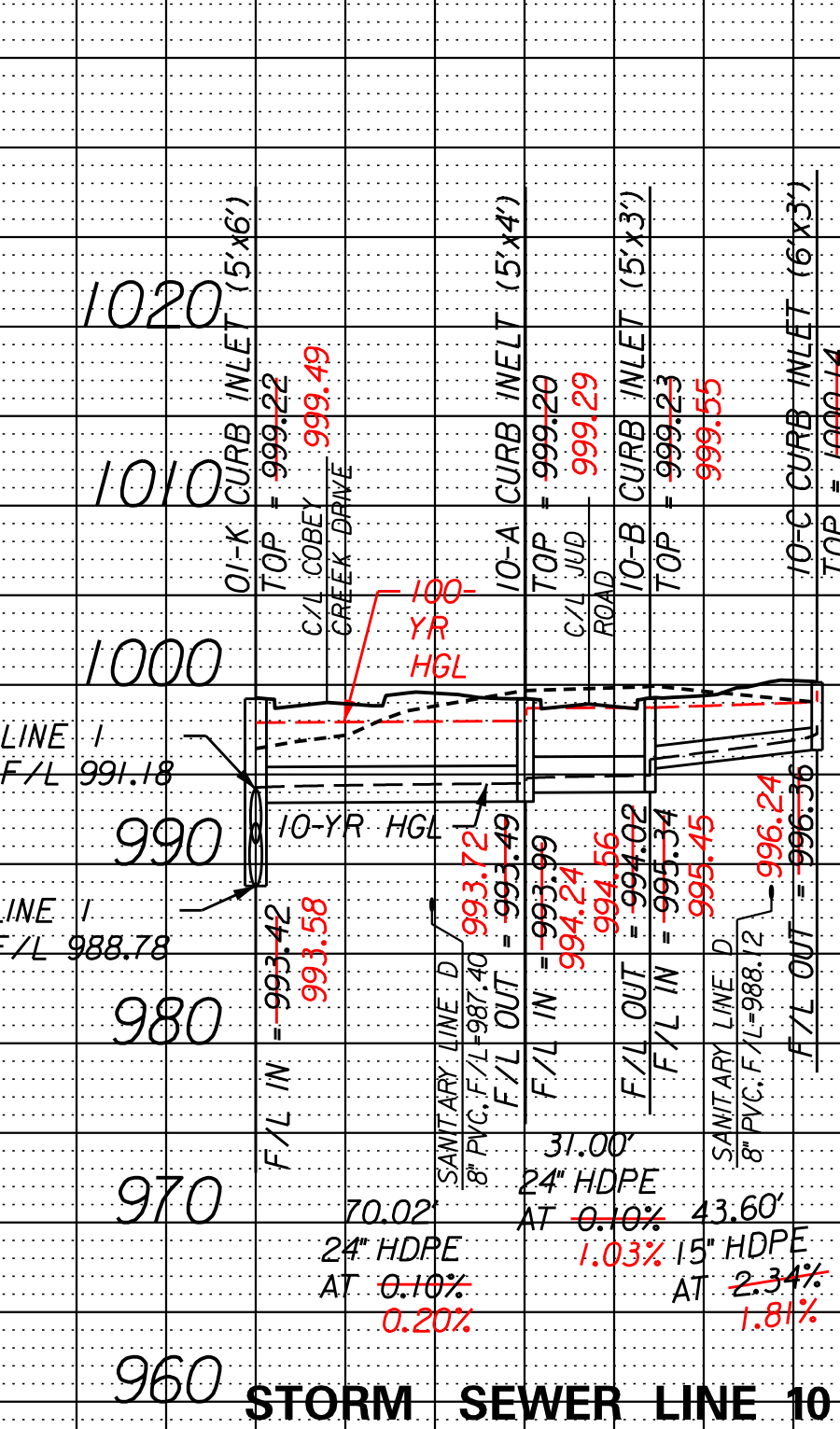
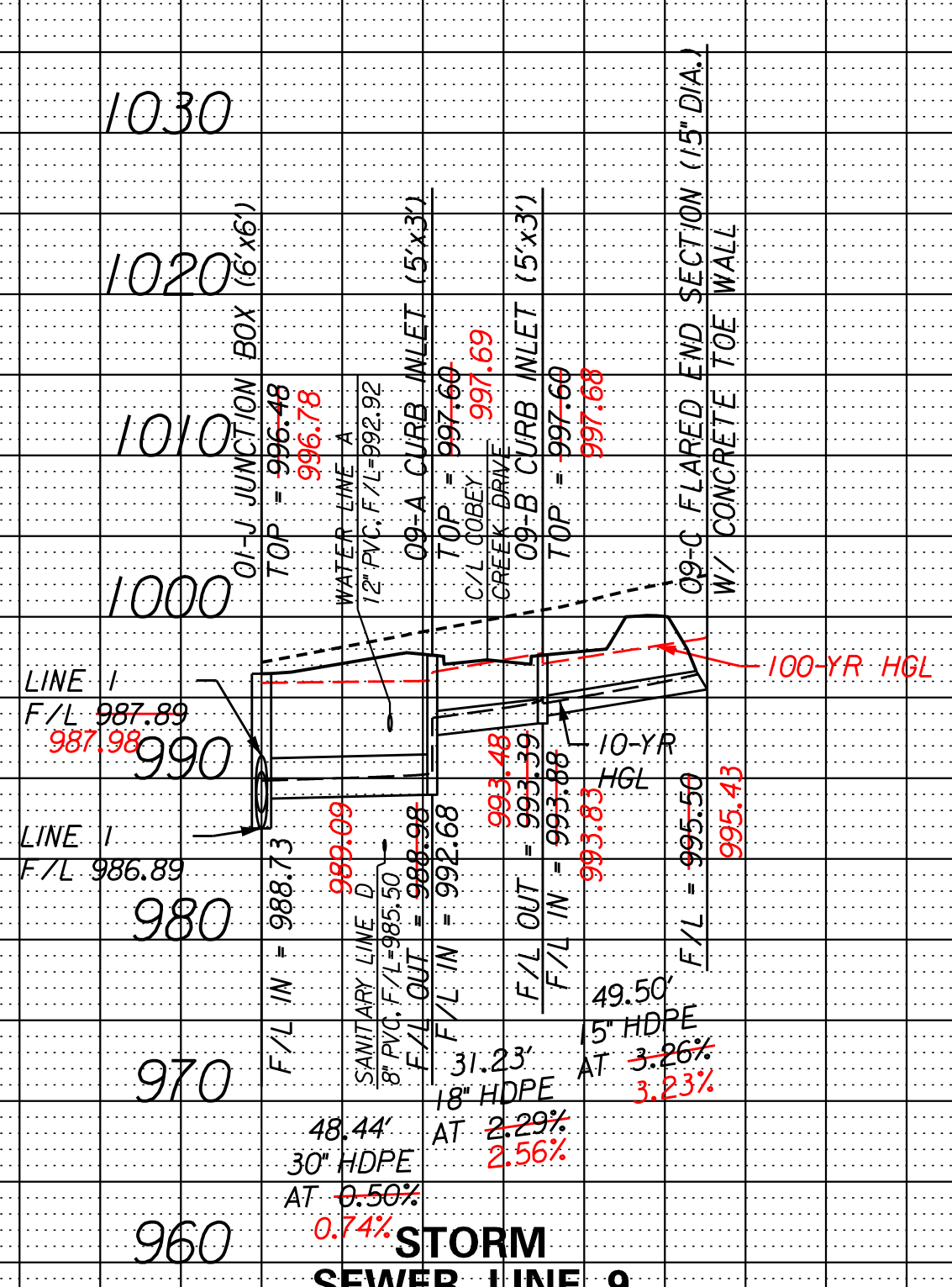
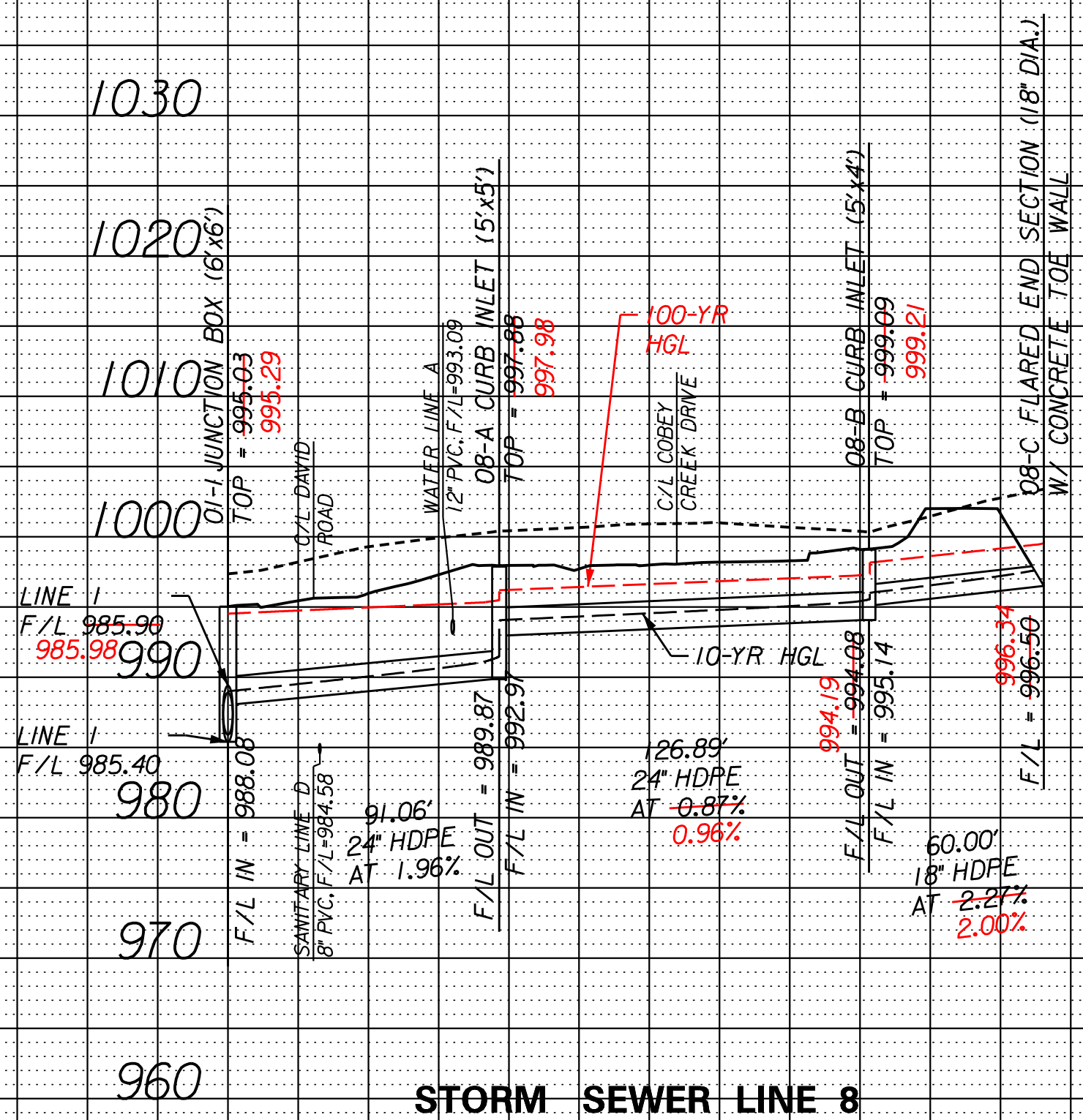


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AS-BUILT
03/05/21



NO.	BY	CHK/APP
1	RAM	RNS
2	RAM	RNS
3	RAM	RNS
4	RAM	RNS

CHANGES TO STORM LINE 12
03/02/20
ADDRESS CITY COMMENTS DATED 3/20/19
3/27/19
ADDRESS CITY COMMENTS DATED 12/18/18
11/27/18
SUBMITTAL TO CITY OF LEE'S SUMMIT

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03/02/20

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STORM SEWER LINES 8, 9, 10, AND 11

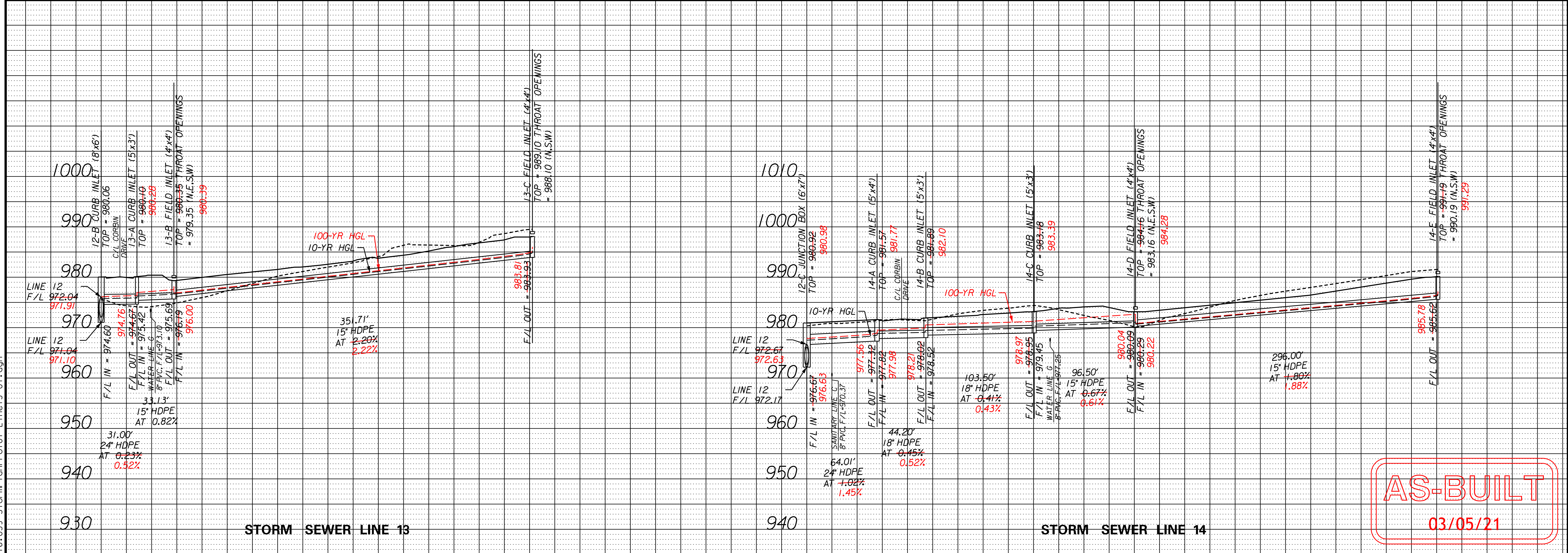
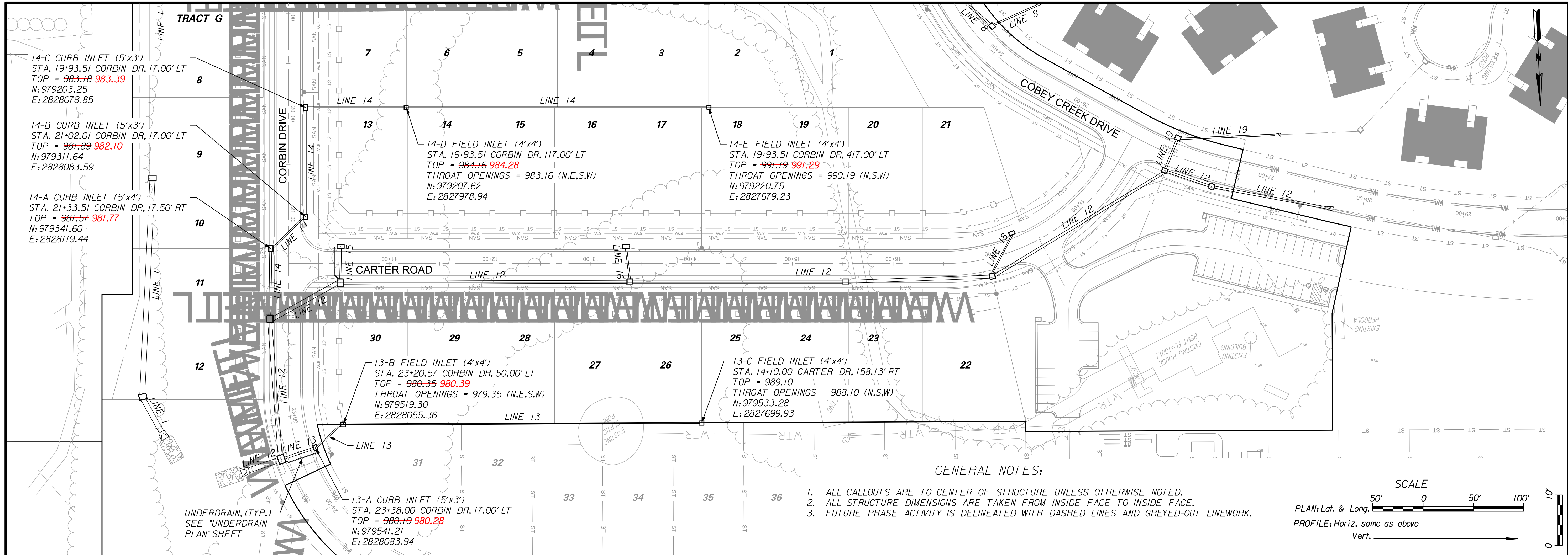
COBEY CREEK

CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

X-REF. NO. XXX
DRAWING NO. XXX
DATE
March 27, 2019
JOB NO.
16.059.01

14 SHEET OF 53

5/25/2021
16_059-StormPlanProf07-Line13-01.dgn



NO.	BY	DATE	REVISION
1	RAM	03/05/21	AS-BUILT
2	RAM	03/05/21	CHANGES TO STORM LINE 12
3	RAM	03/05/21	CHANGES TO STORM LINE 12
4	RAM	03/05/21	CHANGES TO STORM LINE 12

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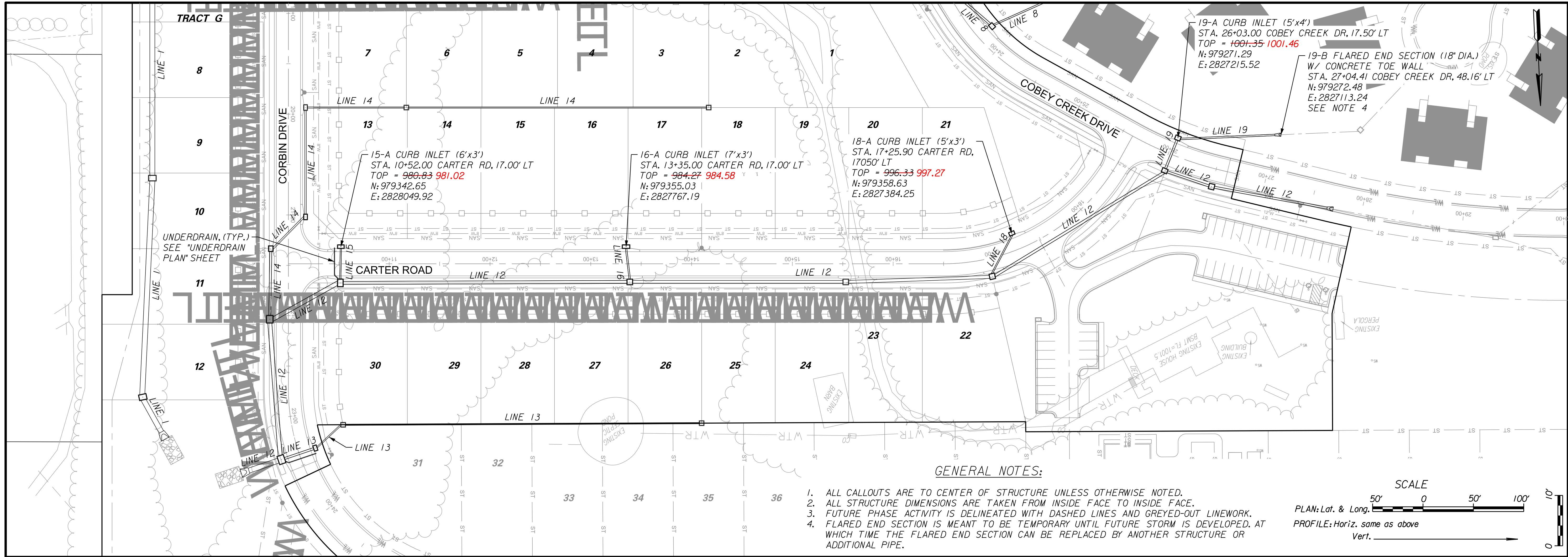
STORM SEWER LINES 13 AND 14

COBEY CREEK

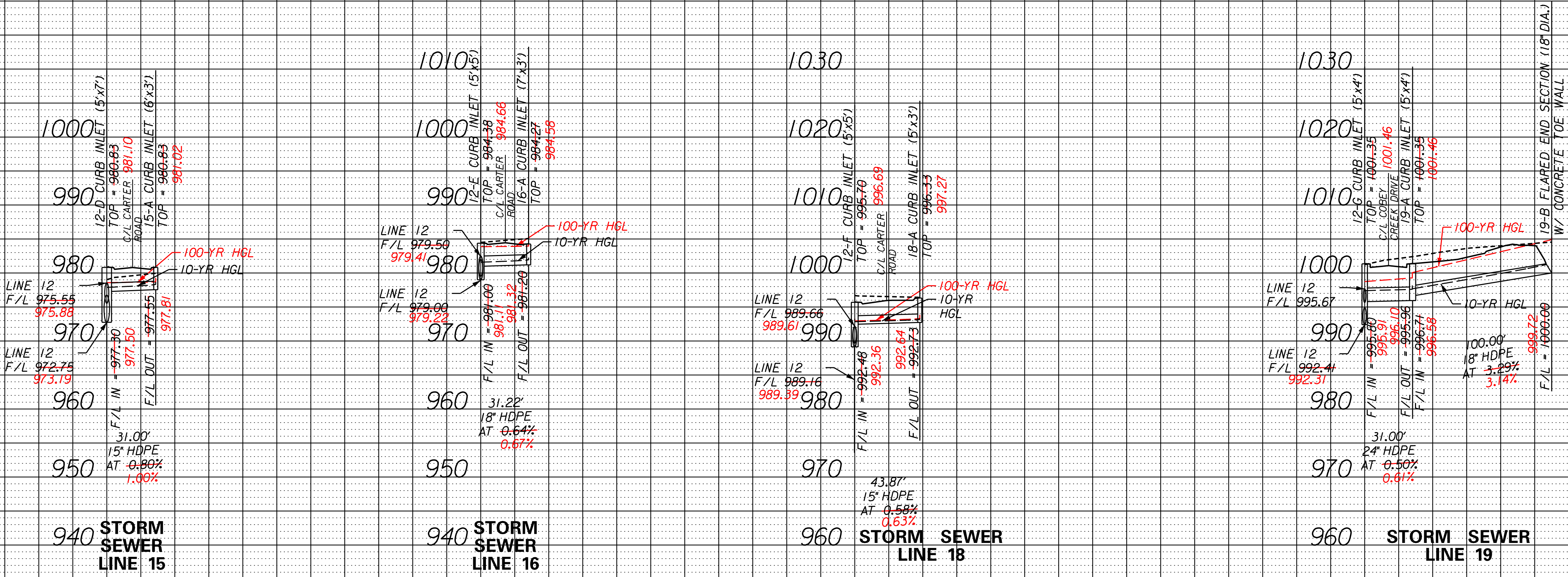
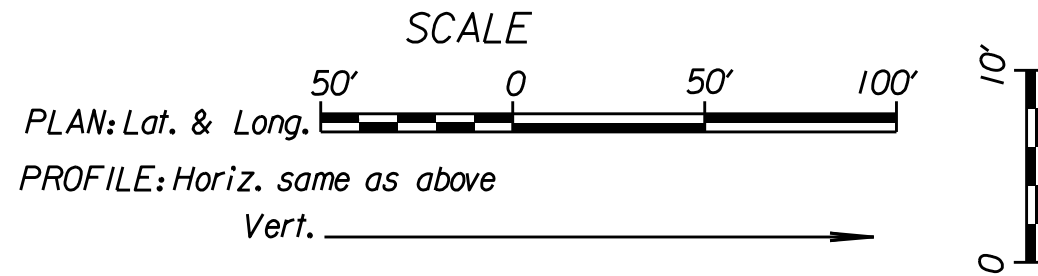
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

X-REF. NO. XXX
DRAWING NO. XXX
DATE March 27, 2019
JOB NO. 16_059_01
SHEET 53

5/25/2021
16_059-StormPlanProf08-Line15-01.dgn



- GENERAL NOTES:
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AS-BUILT
03/05/21

NO.	BY	DATE	REVISION
1	RAM	03/05/21	AS-BUILT
2	RAM	03/02/20	CHANGES TO STORM LINE 12
3	RAM	3/27/19	ADDRESS CITY COMMENTS DATED 3/20/19
4	RAM	3/27/19	ADDRESS CITY COMMENTS DATED 12/18/18
5	RAM	11/22/18	SUBMITTAL TO CITY OF LEE'S SUMMIT

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CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

STORM SEWER LINES 15, 16, 18, AND 19

COBEY CREEK

X-REF. NO. XXX
DRAWING NO. XXX
DATE March 27, 2019
JOB NO. 16_059_01

17 SHEET OF 53

5/25/2021
16:059-StormSewerCal.c.dgn

STORM SEWER CALCULATIONS																																					
COBEY CREEK PHASE 1																																					
STORM SEWER NO.	SEWER LOCATION		TRIBUTARY AREA (AC.)		COMPOSITE RUNOFF COEFFICIENT	TIME OF CONCENTRATION	INTENSITY [in/hr] i[10]	10-YEAR DESIGN (k = 1)										100-YEAR DESIGN (k = 1.25)										CURB INLET			PIPE DESIGN						
	FROM STRUCTURE NO.	TO STRUCTURE NO.	AREA DESIGNATION ACRES	TOTAL				Q[10]	RUNOFF [cfs]			IN PIPE DOWN-STREAM [CFS]	BY PASS OUT [CFS]	10-YR INLET CAPACITY [CFS]	10-YR INLET CAPACITY 80% [CFS]	10-YR SPREAD [FT]	10-YEAR HGL	INTENSITY [in/hr] i[10]	RUNOFF [cfs]				IN PIPE DOWN-STREAM [CFS]	BY PASS OUT [CFS]	100-YR INLET CAPACITY [CFS]	100-YR INLET CAPACITY 80% [CFS]	100-YEAR HGL	GUTTER SLOPE [%]	GUTTER CAPACITY [CFS]	INLET LENGTH [FT]	PIPE SIZE [in]	PIPE SLOPE [%]	PIPE TYPE	ROUGH. COEFF. [MANNINGS]	FULL VELOCITY [FPS]	FULL FLOW [CFS]	
									IN PIPE UPSTREAM [CFS]	BY PASS IN [CFS]	TOTAL Q[10]								Q[100]	IN PIPE UPSTREAM [CFS]	BY PASS IN [CFS]	TOTAL Q[100]															
LINE 1	NA	NA	01-O2	6.93		5.00	7.38	33.75	NA	NA	33.75	33.75	NA	NA	NA	10.32	59.00	NA	NA	59.00	59.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	01-O	01-N	01-O	0.14	7.08	0.51	5.00	7.38	0.53	33.75	0.00	34.28	34.28	0.00	21.85	21.85	1.32	1004.31	10.32	0.92	59.00	0.00	59.92	59.92	0.00	21.85	21.85	1005.94	NA	NA	5.00	2.00	1.33	HDPE	0.01	12.33	33.97
	01-N	01-M	01-N	0.74	7.82	0.51	5.00	7.38	2.79	34.28	0.00	37.07	37.07	0.00	2.80	2.79	6.31	1001.80	10.32	4.87	59.92	0.00	64.79	64.40	0.39	4.51	4.51	1004.68	1.00	32.45	5.00	2.50	0.91	HDPE	0.01	11.28	50.74
	01-M	01-L	NA	NA	7.82	NA	NA	NA	NA	37.07	0.00	37.07	37.07	0.00	NA	NA	NA	998.24	NA	NA	64.40	0.00	64.40	64.40	0.00	NA	NA	1004.25	NA	NA	NA	2.50	0.53	HDPE	0.01	9.05	38.96
	01-L	01-K	NA	NA	10.53	NA	NA	NA	NA	50.27	0.00	50.27	50.27	0.00	NA	NA	NA	995.49	NA	NA	87.47	0.00	87.47	87.47	0.00	NA	NA	1001.15	NA	NA	NA	3.00	0.65	HDPE	0.01	10.71	69.91
	01-K	01-J	01-K	0.29	11.99	0.51	5.00	7.38	1.09	55.97	0.00	57.06	57.06	0.00	1.08	1.07	1.77	991.84	10.32	1.91	97.83	0.00	99.73	99.73	0.00	1.88	1.88	997.90	1.00	32.45	6.00	3.50	0.36	HDPE	0.01	8.85	78.82
	01-J	01-I	NA	NA	15.07	NA	NA	NA	NA	72.06	0.00	72.06	72.06	0.00	NA	NA	NA	990.18	NA	NA	127.29	0.00	127.29	127.29	0.00	NA	NA	995.91	NA	NA	NA	3.50	2.80	HDPE	0.01	20.10	218.81
	01-I	01-H	NA	NA	18.42	NA	NA	NA	NA	88.08	0.00	88.08	88.08	0.00	NA	NA	NA	989.68	NA	NA	154.79	0.00	154.79	154.79	0.00	NA	NA	994.80	NA	NA	NA	3.50	0.26	HDPE	0.01	8.89	66.99
	01-H	01-G	01-H	0.37	18.79	0.51	5.00	7.38	1.39	88.08	0.00	89.47	89.47	0.00	1.38	1.37	1.59	987.64	10.32	2.43	154.79	0.00	157.22	157.22	0.00	2.41	2.41	991.24	2.96	16.39	6.00	3.50	2.00	HDPE	0.01	18.72	184.97
	01-G	01-F2	NA	NA	30.73	NA	NA	NA	NA	141.92	0.00	141.92	141.92	0.00	NA	NA	NA	984.60	NA	NA	230.21	0.00	230.21	230.21	0.00	NA	NA	989.01	NA	NA	NA	4.00	0.40	HDPE	0.01	10.83	118.67
	01-F2	01-F	NA	NA	32.85	NA	NA	NA	NA	149.86	0.00	149.86	149.86	0.00	NA	NA	NA	982.76	NA	NA	244.10	0.00	244.10	244.10	0.00	NA	NA	987.73	NA	NA	NA	4.00	0.40	HDPE	0.01	11.37	118.04
	01-F	01-E	01-F	0.64	33.82	0.51	5.00	7.38	2.41	151.10	0.03	153.54	153.54	0.00	21.85	21.85	4.77	981.50	10.32	4.21	246.57	0.47	251.25	251.25	0.00	21.85	21.85	985.86	NA	NA	5.00	5.00	0.10	HDPE	0.01	7.42	106.84
	01-E	01-D	01-E	0.48	37.07	0.51	5.00	7.38	1.81	163.56	0.41	165.78	165.78	0.00	2.20	2.19	1.85	981.37	10.32	3.16	266.60	2.47	272.22	271.78	0.44	5.16	5.16	984.56	3.30	17.31	7.00	5.00	0.20	HDPE	0.01	8.84	151.42
	01-D	01-C	01-D	0.22	37.55	0.51	5.00	7.38	0.83	166.72	0.00	167.55	167.55	0.00	48.30	48.30	3.42	980.76	10.32	1.45	273.43	0.00	274.88	274.88	0.00	48.30	48.30	982.93	NA	NA	21.00	5.00	0.20	HDPE	0.01	8.87	151.39
	01-C	01-B	01-C	0.19	37.74	0.51	5.00	7.38	0.72	167.55	0.00	168.26	168.26	0.00	39.10	39.10	0.60	978.89	10.32	1.25	274.88	0.00	276.13	276.13	0.00	39.10	39.10	980.81	NA	NA	17.00	5.00	0.10	HDPE	0.01	8.02	107.18
	01-B	01-A	01-B	0.19	37.93	0.51	5.00	7.38	0.72	168.26	0.00	168.98	168.98	0.00	39.10	39.10	3.47	978.49	10.32	1.25	276.13	0.00	277.38	277.38	0.00	39.10	39.10	978.91	NA	NA	17.00	5.00	0.40	HDPE	0.01	11.82	213.89
LINE 1D	01-D2	01-D	01-D2	0.25	0.25	0.51	5.00	7.38	0.94	0.00	0.00	0.94	0.94	0.00	27.60	27.60	5.31	996.93	10.32	1.64	0.00	0.00	1.64	1.64	0.00	27.60	27.60	997.83	NA	NA	12.00	1.25	3.01	HDPE	0.01	6.71	14.57
LINE 1F	01-F5	01-F4	01-F5	0.41	0.41	0.51	5.00	7.38	1.54	0.00	0.00	1.54	1.54	0.00	27.60	27.60	7.34	998.48	10.32	2.70	0.00	0.00	2.70	2.70	0.00	27.60	27.60	999.28	NA	NA	12.00	1.25	3.00	HDPE	0.01	7.73	14.55
	01-F4	01-F3	01-F4	0.75	1.16	0.51	5.00	7.38	2.82	1.54	0.00	4.37	4.37	0.00	27.60	27.60	10.92	990.40	10.32	4.93	2.70	0.00	7.63	7.63	0.00	27.60	27.60	991.59	NA	NA	12.00	1.25	1.65	HDPE	0.01	8.26	10.78
	01-F3	01-F2	01-F3	0.95	2.12	0.51	5.00	7.38	3.58	4.37	0.00	7.94	7.94	0.00	47.15	47.15	8.99	986.04	10.32	6.25	7.63	0.00	13.88	13.88	0.00	47.15	47.15	988.00	NA	NA	16.00	1.25	1.28	HDPE	0.01	8.60	9.49
LINE 2	02-D	02-C	02-D	0.34	0.34	0.51	5.00	7.38	1.28	0.00	0.00	1.28	1.28	0.00	1.28	1.27	1.73	1002.31	10.32	2.24	0.00	0.00	2.24	2.24	0.00	2.23	2.23	1003.41	1.61	12.09	5.00	1.25	0.50	HDPE	0.01	3.84	5.94
	02-C	02-B	02-C	0.95	1.29	0.51	5.00	7.38	3.58	1.28	0.00	4.86	4.70	0.16	3.43	3.42	6.37	1002.01	10.32	6.25	2.24	0.00	8.49	7.23	1.26	5.01	5.01	1003.19	1.61	12.09	5.00	1.50	3.30	HDPE	0.01	10.89	24.82
	02-B	02-A	02-B	0.91	2.20	0.51	5.00	7.38	3.43	4.70	0.16	8.28	7.87	0.41	3.16	3.15	3.46	991.15	10.32	5.99	7.23	1.26	14.47	12.00	2.47	4.75	4.75	991.87	3.84	18.67	5.00	1.50	3.07	HDPE	0.01	12.22	23.94
	02-A	01-E	02-A	0.58	2.78	0.51	5.00	7.38	2.18	7.87	0.00	10.05	10.02	0.03	2.17	2.16	1.85	985.21	10.32	3.82	12.00	0.00	15.82	15.35	0.47	3.37	3.37	986.12	3.30	17.31	5.00	2.00	1.73	HDPE	0.01	10.37	38.70
LINE 3	03-A	01-F	03-A	0.33	0.33	0.51	5.00	7.38	1.24	0.00	0.00	1.24	1.24	0.00	1.22	1.22	1.86	983.47	10.32	2.17	0.00	0.30	2.47	2.47	0.00	2.44	2.44	986.49	1.00	9.53	5.00	1.25	1.00	HDPE	0.01	4.87	8.40
LINE 4	04-A	01-G	04-A	0.70	0.70	0.51	5.00	7.38	2.63	0.00	0.00	2.63	2.63	0.00	2.64	2.63	5.94	986.26	10.32	4.61	0.00	0.00	4.61	4.31	0.30	4.32	4.32	988.75	1.00	9.53	5.00	1.25	0.10	HDPE	0.01	2.45	2.64
LINE 5	NA	NA	05-G2	1.40	1.40	0.81	5.00	7.38	8.37	NA	NA	8.37	8.37	NA	NA	NA	NA	10.32	14.63	NA	NA	14.63	14.63	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	05-G	05-F	05-G	0.11	1.51	0.51	5.00</																														