

# CONSTRUCTION PLANS FOR SANITARY SEWER IMPROVEMENTS

TO SERVE

SWI-14

4347B

## CYPRESS GLEN ADDITION

### CITY OF WICHITA, KS

PAUL GUNZELMAN, P.E. - CITY ENGINEER

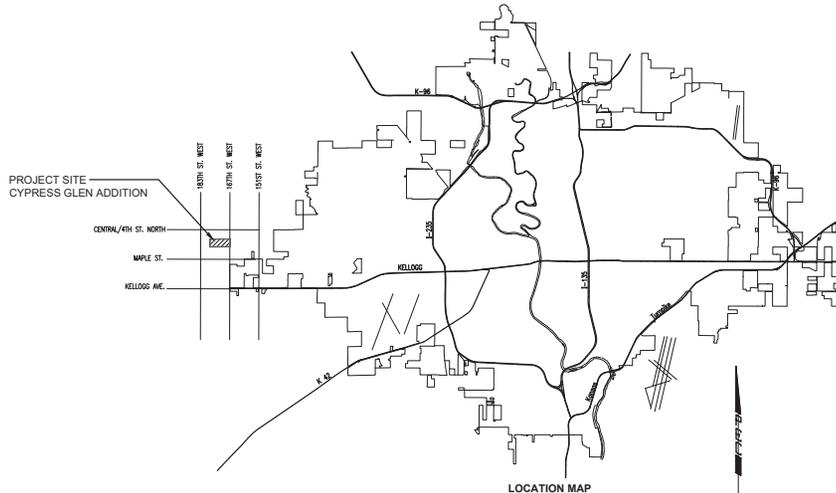
CITY OF WICHITA ENGINEERING PROJECT NO. 468-2023-016041

ORG CODE: 47269123

MUNIS NO.: E3105

DEVELOPER CONTACT  
MIKE MEYSING  
MEYSING PROPERTIES, LLC  
35601 EAST 157TH CT  
HUDSON, CO 80642  
502-693-0921

Apex Excavating - Contractor  
S. Lowe - City of Wichita, Field Project Engineer  
R. Canillo - City of Wichita, Inspector  
As-built  
Risers  
Release Date (for connection purposes only): 9/26/2024  
Completion Date:  
pdf. apr 4/14/2025



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SANITARY SEWER IMPROVEMENTS

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CYPRESS GLEN ADDITION

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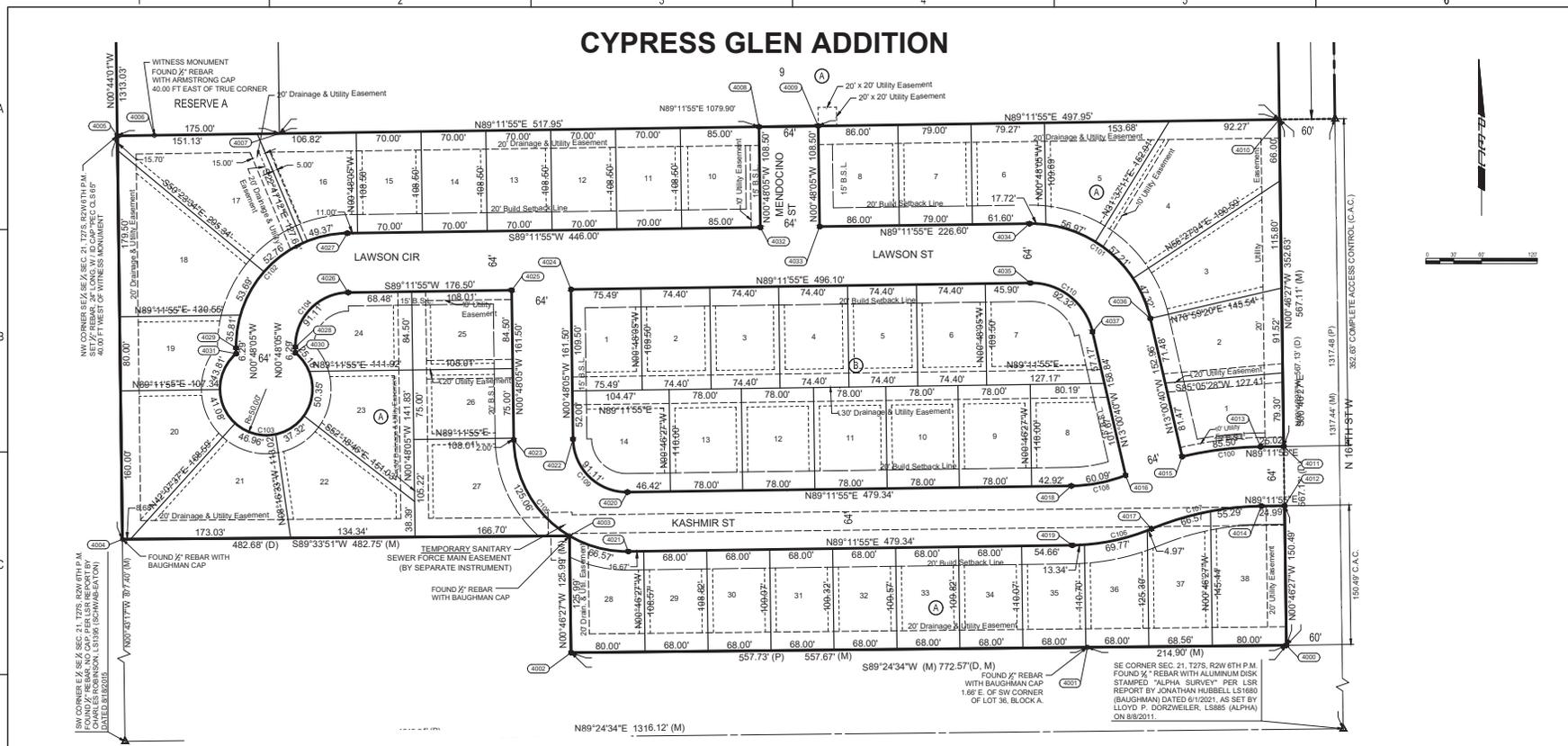
JOB NO.	210975-006
DATE	SEPTEMBER 2023
PM	GAS
DESIGNED BY	JJH
DRAWN BY	AJH
CHECKED BY	GAS

SANITARY SEWER TITLE SHEET

C-001  
1 OF 27

SAVED: 10/12/2023 2:02:10 PM BY KURTIS DEKAT  
PLOTTED: 10/17/2023 11:25:58 PM BY KURTIS DEKAT  
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# CYPRESS GLEN ADDITION



SANITARY SEWER IMPROVEMENTS  
TO SERVE  
CYPRESS GLEN ADDITION

PAUL GUNZELMAN, P.E. - CITY ENGINEER  
CITY OF WICHITA PROJECT NO. 466-2023-016041

CURVE TABLE				
CURVE NO.	RADIUS	DELTA	CHORD LENGTH	CHORD BEARING
C100	385.00'	17°43'28"	85.90'	S82°50'11"W
C101	132.00'	77°47'29"	179.22'	S51°54'22"E
C102	122.00'	90°00'00"	191.64'	S44°11'59"W
C103	50.00'	289°24'59"	244.71'	N89°11'59"E
C104	58.00'	90°00'00"	91.11'	S44°11'59"W
C105	122.00'	90°00'00"	191.64'	S45°48'09"E
C106	232.00'	21°45'00"	88.98'	N78°19'23"E
C107	321.00'	21°45'00"	121.86'	S78°19'23"W
C108	168.00'	20°29'42"	60.09'	N78°19'23"E
C109	58.00'	90°00'00"	91.11'	S45°48'09"E
C110	68.00'	77°47'29"	92.32'	N61°54'22"W

COORDINATE LIST			
POINT	NORTHING	EASTING	
4000	1,683,182.6076	1,591,748.2193	
4001	1,683,180.3925	1,591,533.3307	
4002	1,683,174.6444	1,590,975.6950	
4003	1,683,300.6228	1,590,973.9930	
4004	1,683,296.9498	1,590,491.2564	
4005	1,683,732.1194	1,590,485.7777	
4006	1,683,732.6788	1,590,525.7738	
4007	1,683,734.5671	1,590,660.7607	
4008	1,683,741.8109	1,591,178.6612	
4009	1,683,742.7060	1,591,242.6549	

COORDINATE LIST			
POINT	NORTHING	EASTING	
4010	1,683,749.6703	1,591,740.5576	
4011	1,683,397.0758	1,591,745.3216	
4012	1,683,333.0817	1,591,746.1862	
4013	1,683,396.7260	1,591,720.3088	
4014	1,683,332.7322	1,591,721.2035	
4015	1,683,386.0855	1,591,635.6481	
4016	1,683,365.9459	1,591,574.6154	
4017	1,683,308.2157	1,591,602.5789	
4018	1,683,354.4903	1,591,515.9486	
4019	1,683,290.4966	1,591,516.8437	

COORDINATE LIST			
POINT	NORTHING	EASTING	
4020	1,683,347.7863	1,591,036.6574	
4021	1,683,283.7926	1,591,037.5522	
4022	1,683,404.9695	1,590,977.8518	
4023	1,683,404.0744	1,590,913.8580	
4024	1,683,566.4537	1,590,975.5931	
4025	1,683,565.5586	1,590,911.5994	
4026	1,683,563.0901	1,590,735.1174	
4027	1,683,627.0727	1,590,734.2208	
4028	1,683,504.2846	1,590,677.9342	
4029	1,683,503.3895	1,590,613.9405	

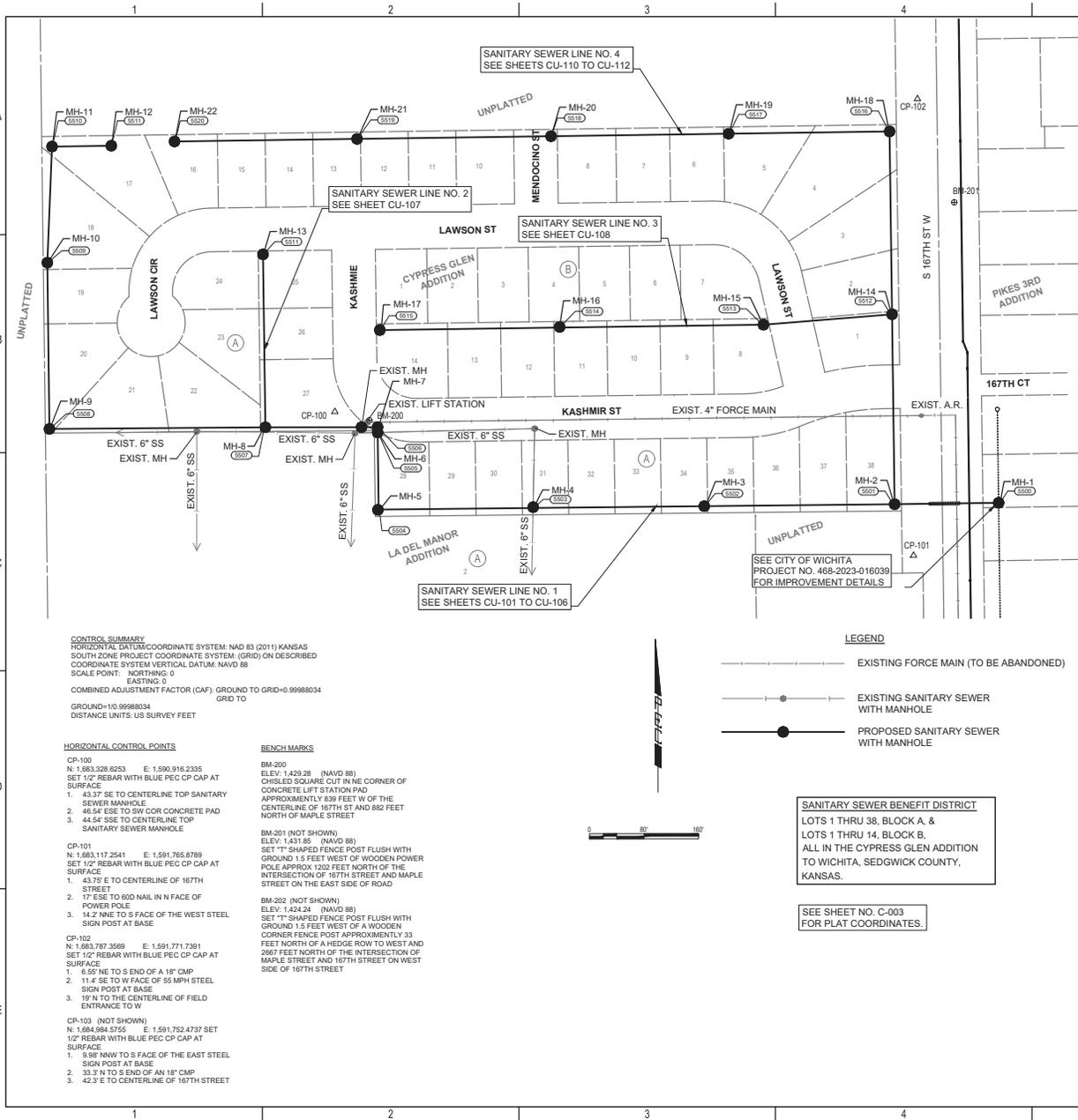
COORDINATE LIST			
POINT	NORTHING	EASTING	
4030	1,683,498.0001	1,590,678.0221	
4031	1,683,497.1050	1,590,614.0284	
4032	1,683,633.3215	1,591,180.1786	
4033	1,683,634.2166	1,591,244.1724	
4034	1,683,637.3859	1,591,470.7534	
4035	1,683,573.3921	1,591,471.6485	
4036	1,683,535.1175	1,591,601.2106	
4037	1,683,520.7084	1,591,538.8537	

JOB NO.	210975-006
DATE	SEPTEMBER 2023
PM	GAS
DESIGNED BY	JJH
DRAWN BY	AJH
CHECKED BY	GAS

PLAT BUBBLE MAP

C-003  
3 OF 27

SAVED 9/25/2023 9:48:46 AM BY CATHY LINK  
 PLOTTED 10/17/2023 11:13:04 PM BY KURTIS DEKAT  
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**CONTROL SUMMARY**  
 HORIZONTAL DATUM: COORDINATE SYSTEM, NAD 83 (2011) KANSAS  
 SOUTH ZONE PROJECT COORDINATE SYSTEM; (GRID) ON DESCRIBED  
 COORDINATE SYSTEM VERTICAL DATUM: NAVD 88  
 SCALE POINT: NORTHING: 0 EASTING: 0  
 COMBINED ADJUSTMENT FACTOR (CAF): GROUND TO GRID=0.99988034  
 GRID TO GROUND=1.000119696364  
 DISTANCE UNITS: US SURVEY FEET

**HORIZONTAL CONTROL POINTS**

CP-100  
 N: 1,883,328.6253 E: 1,590,916.2335  
 SET 1/2" REBAR WITH BLUE PEC CP CAP AT SURFACE  
 1. 43.37 SE TO CENTERLINE TOP SANITARY SEWER MANHOLE  
 2. 46.54 SSE TO SW COR CONCRETE PAD  
 3. 44.64 SSE TO CENTERLINE TOP SANITARY SEWER MANHOLE

CP-101  
 N: 1,883,117.2541 E: 1,591,765.8789  
 SET 1/2" REBAR WITH BLUE PEC CP CAP AT SURFACE  
 1. 43.75 E TO CENTERLINE OF 167TH STREET  
 2. 17' SE TO ROD NAIL IN N FACE OF POWER POLE  
 3. 14.2' INE TO S FACE OF THE WEST STEEL SIGN POST AT BASE

CP-102  
 N: 1,883,787.3569 E: 1,591,771.7391  
 SET 1/2" REBAR WITH BLUE PEC CP CAP AT SURFACE  
 1. 6.56' NE TO S END OF A 18" CMP  
 2. 11.4' SE TO W FACE OF 50 MPH STEEL SIGN POST AT BASE  
 3. 19' N TO THE CENTERLINE OF FIELD ENTRANCE TO W

CP-103 (NOT SHOWN)  
 N: 1,884,984.5755 E: 1,591,752.4737 SET  
 1/2" REBAR WITH BLUE PEC CP CAP AT SURFACE  
 1. 9.86' NW TO S FACE OF THE EAST STEEL SIGN POST AT BASE  
 2. 33.3' N TO S END OF AN 18" CMP  
 3. 42.3' E TO CENTERLINE OF 167TH STREET

**BENCH MARKS**

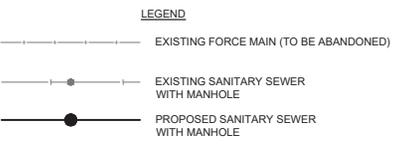
BM-200  
 ELEV: 1,429.28 (NAVD 88)  
 SET "T" SHAPED FENCE POST FLUSH WITH GROUND 1.5 FEET WEST OF WOODEN POLE APPROX. 1000 FEET NORTH OF THE INTERSECTION OF 167TH STREET AND MAPLE STREET ON THE EAST SIDE OF ROAD

BM-201 (NOT SHOWN)  
 ELEV: 1,431.85 (NAVD 88)  
 SET "T" SHAPED FENCE POST FLUSH WITH GROUND 1.5 FEET WEST OF A WOODEN CORNER FENCE POST APPROXIMATELY 33 FEET NORTH OF A HEDGE ROW TO WEST AND 280 FEET NORTH OF THE INTERSECTION OF MAPLE STREET AND 167TH STREET ON WEST SIDE OF 167TH STREET

BM-202 (NOT SHOWN)  
 ELEV: 1,424.24 (NAVD 88)  
 SET "T" SHAPED FENCE POST FLUSH WITH GROUND 1.5 FEET WEST OF A WOODEN CORNER FENCE POST APPROXIMATELY 33 FEET NORTH OF A HEDGE ROW TO WEST AND 280 FEET NORTH OF THE INTERSECTION OF MAPLE STREET AND 167TH STREET ON WEST SIDE OF 167TH STREET

**SANITARY SEWER BENEFIT DISTRICT**  
 LOTS 1 THRU 38, BLOCK A, &  
 LOTS 1 THRU 14, BLOCK B,  
 ALL IN THE CYPRESS GLEN ADDITION  
 TO WICHITA, SEDGWICK COUNTY,  
 KANSAS.

SEE SHEET NO. C-003  
 FOR PLAT COORDINATES.



**STRUCTURE TABLE**  
**SANITARY SEWER LINE NO. 1**

NAME	ID	STATION	COORDINATES	DESCRIPTION
MH-2	5501	11+52.7 SANITARY SEWER LINE NO. 1	N: 1,683,192.5169 E: 1,591,738.0852	5' DIAMETER MANHOLE
MH-3	5502	14+32.2 SANITARY SEWER LINE NO. 1	N: 1,683,189.6223 E: 1,591,458.5569	5' DIAMETER MANHOLE
MH-4	5503	16+83.6 SANITARY SEWER LINE NO. 1	N: 1,683,187.0314 E: 1,591,207.2086	5' DIAMETER DOGHOUSE MANHOLE OVER EXISTING 8" SEWER INSTALL OUTSIDE DROP FROM EXISTING SANITARY SEWER ONCE NEW LINE HAS BEEN TESTED AND IS IN SERVICE.
MH-5	5504	19+10.3 SANITARY SEWER LINE NO. 1	N: 1,683,184.6951 E: 1,590,980.5596	4' DIAMETER MANHOLE
MH-6	5505	20+23.4 SANITARY SEWER LINE NO. 1	N: 1,683,297.8174 E: 1,590,979.0312	4' DIAMETER MANHOLE
MH-7	5506	20+31.2 SANITARY SEWER LINE NO. 1	N: 1,683,305.5931 E: 1,590,978.9262	4' DIAMETER MANHOLE
MH-8	5507	21+95.9 SANITARY SEWER LINE NO. 1	N: 1,683,305.4053 E: 1,590,814.2135	4' DIAMETER MANHOLE
MH-9	5508	25+12.9 SANITARY SEWER LINE NO. 1	N: 1,683,302.9866 E: 1,590,497.1810	4' DIAMETER MANHOLE
MH-10	5509	27+57.0 SANITARY SEWER LINE NO. 1	N: 1,683,547.0139 E: 1,590,494.1015	4' DIAMETER MANHOLE
MH-11	5510	29+27.4 SANITARY SEWER LINE NO. 1	N: 1,683,717.3304 E: 1,590,500.9650	4' DIAMETER SHALLOW MANHOLE
MH-12	5511	30+14.4 SANITARY SEWER LINE NO. 1	N: 1,683,718.5470 E: 1,590,587.9498	4' DIAMETER SHALLOW MANHOLE

**STRUCTURE TABLE**  
**SANITARY SEWER LINE NO. 2**

NAME	ID	STATION	COORDINATES	DESCRIPTION
MH-8	5507	21+95.9 SANITARY SEWER LINE NO. 1	N: 1,683,305.4053 E: 1,590,814.2135	4' DIAMETER MANHOLE
MH-13	5511	32+53.8 SANITARY SEWER LINE NO. 2	N: 1,683,559.1463 E: 1,590,810.6644	4' DIAMETER MANHOLE

**STRUCTURE TABLE**  
**SANITARY SEWER LINE NO. 3**

NAME	ID	STATION	COORDINATES	DESCRIPTION
MH-14	5512	40+00.0 SANITARY SEWER LINE NO. 3	N: 1,683,471.2138 E: 1,591,734.3097	5' DIAMETER MANHOLE
MH-15	5513	41+89.5 SANITARY SEWER LINE NO. 3	N: 1,683,455.9132 E: 1,591,545.4766	4' DIAMETER MANHOLE
MH-16	5514	44+89.5 SANITARY SEWER LINE NO. 3	N: 1,683,451.7239 E: 1,591,245.5059	4' DIAMETER MANHOLE MATCHPOINT
MH-17	5515	47+52.7 SANITARY SEWER LINE NO. 3	N: 1,683,448.0664 E: 1,590,982.2465	4' DIAMETER MANHOLE

**STRUCTURE TABLE**  
**SANITARY SEWER LINE NO. 4**

NAME	ID	STATION	COORDINATES	DESCRIPTION
MH-2	5501	11+52.7 SANITARY SEWER LINE NO. 1	N: 1,683,192.5169 E: 1,591,738.0852	5' DIAMETER MANHOLE
MH-14	5512	40+00.0 SANITARY SEWER LINE NO. 3	N: 1,683,471.2138 E: 1,591,734.3097	5' DIAMETER MANHOLE
MH-18	5516	35+47.1 SANITARY SEWER LINE NO. 4	N: 1,683,735.5312 E: 1,591,730.6844	5' DIAMETER MANHOLE
MH-19	5517	57+83.4 SANITARY SEWER LINE NO. 4	N: 1,683,736.2258 E: 1,591,494.3663	5' DIAMETER MANHOLE
MH-20	5518	60+44.2 SANITARY SEWER LINE NO. 4	N: 1,683,732.5778 E: 1,591,233.5545	4' DIAMETER MANHOLE
MH-21	5519	63+29.0 SANITARY SEWER LINE NO. 4	N: 1,683,728.5952 E: 1,590,948.8235	4' DIAMETER MANHOLE
MH-22	5520	65+97.0 SANITARY SEWER LINE NO. 4	N: 1,683,724.8469 E: 1,590,680.8497	4' DIAMETER MANHOLE



**SANITARY SEWER IMPROVEMENTS**  
 TO SERVE  
**CYPRESS GLEN ADDITION**  
 PAUL GUNZELMAN, P.E. - CITY ENGINEER  
 CITY OF WICHITA PROJECT NO. 466-2023-016041

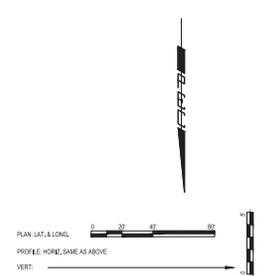
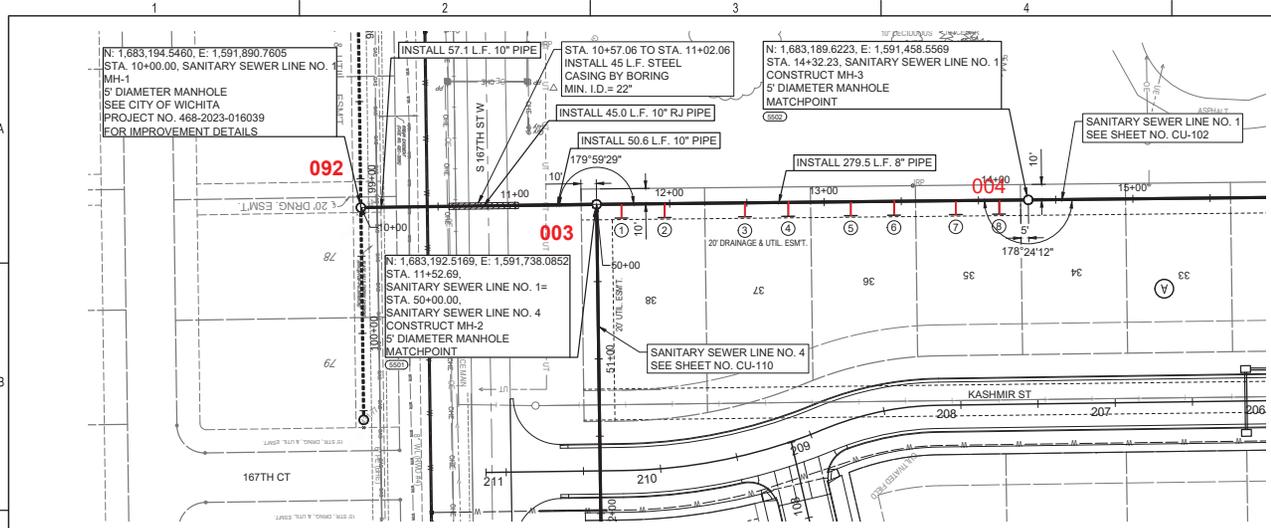
JOB NO. 210975-006  
 DATE SEPTEMBER 2023  
 PM GAS  
 DESIGNED BY JHH  
 DRAWN BY ALJH  
 CHECKED BY GAS

SANITARY SEWER BUBBLE MAP

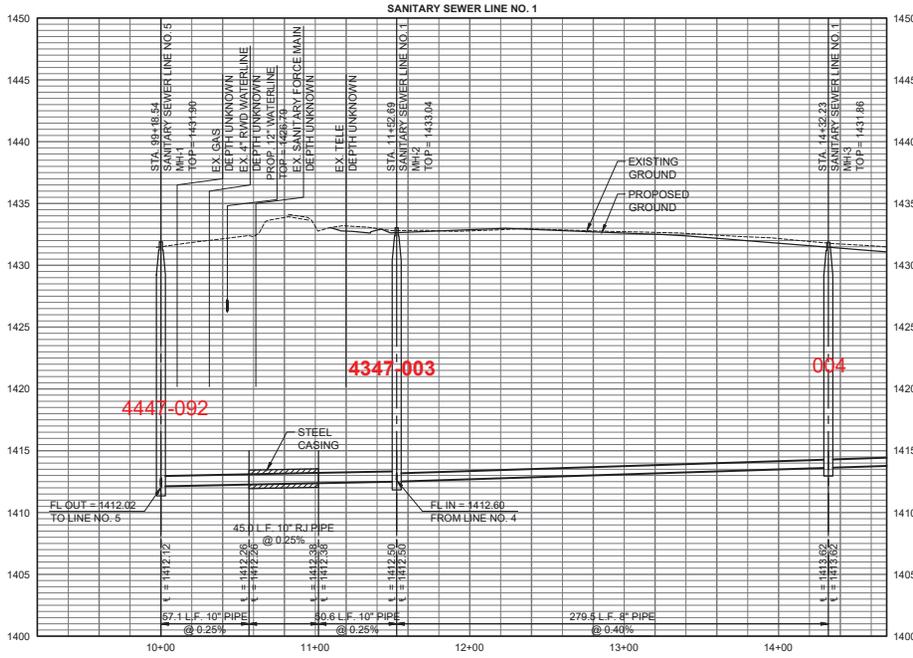
**CU-100**  
4 OF 27

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- LEGEND**
- ① - SEE SHEET NO. CU-100 FOR SANITARY SEWER COORDINATES (TYP.)
  - ② - DENOTES SEWER SERVICE. SEE THIS SHEET FOR SEWER SERVICE SCHEDULE AND SHEET NO. CU-503 FOR DETAILS.



SANITARY SEWER RISER TABLE								
NUMBER	TYPE	LOT NO.	BLOCK NO.	LINE NO.	STATION	DIRECTION	APPROXIMATE VERTICAL (FT)	APPROXIMATE HORIZONTAL (FT)
1	4" TEE	38	A	1	11+68	RT	16	9
2	4" TEE	38	A	1	11+96	RT	16	9
3	4" TEE	37	A	1	12+48	RT	16	9
4	4" TEE	37	A	1	12+76	RT	16	9
5	4" TEE	36	A	1	13+17	RT	15	9
6	4" TEE	36	A	1	13+45	RT	15	9
7	4" TEE	35	A	1	13+85	RT	14	9
8	4" TEE	35	A	1	14+13	RT	14	9

Riser Number	Distance from	
	Upstream MH	Downstream MH
1	9' Rt.	15'
2	9' Rt.	43'
3	9' Rt.	95'
4	9' Rt.	123'
5	9' Rt.	164'
6	9' Rt.	192'
7	9' Rt.	232'
8	9' Rt.	260'



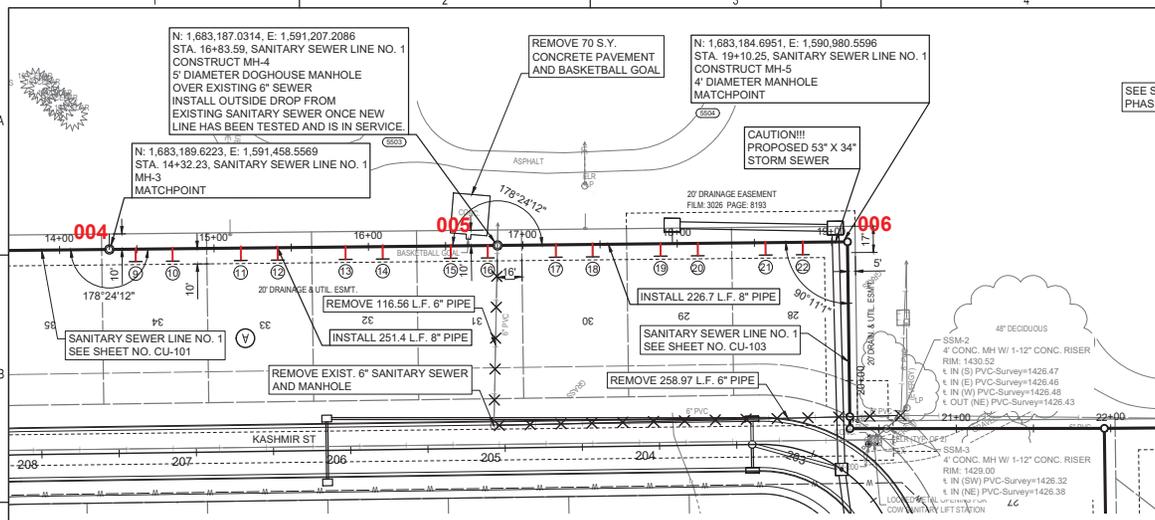
SANITARY SEWER IMPROVEMENTS  
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CYPRESS GLEN ADDITION

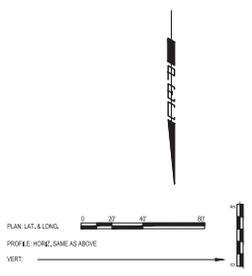
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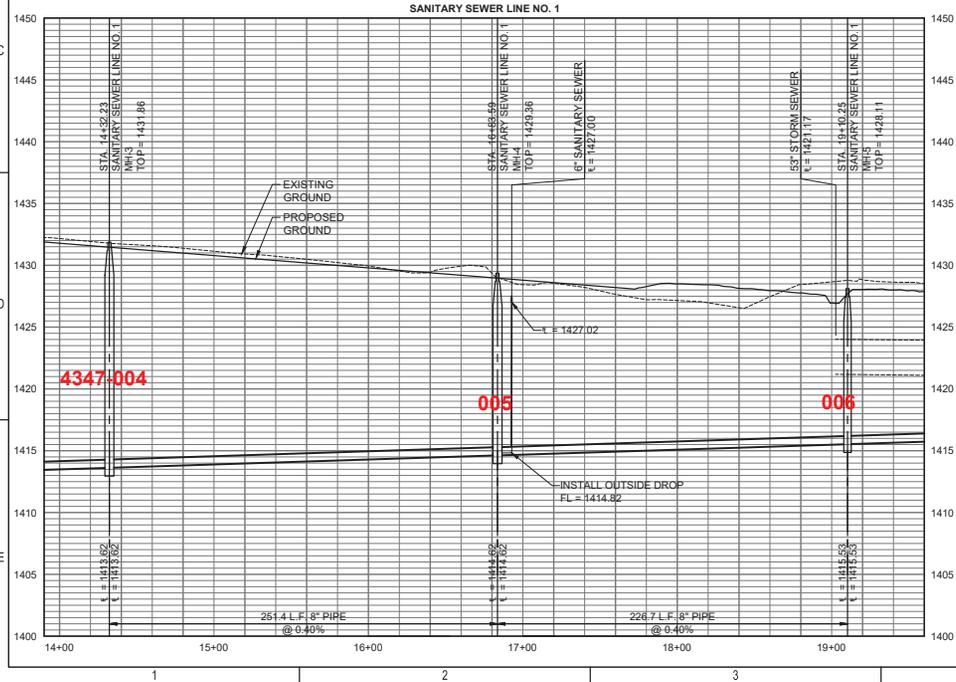
SANITARY SEWER LINE NO. 1  
**CU-101**  
5 OF 27



SEE SHEET C-002 FOR PROJECT PHASING NOTES



- LEGEND**
- ① - SEE SHEET NO. CU-100 FOR SANITARY SEWER COORDINATES (TYP.)
  - ① - DENOTES SEWER SERVICE. SEE THIS SHEET FOR SEWER SERVICE SCHEDULE AND SHEET NO. CU-503 FOR DETAILS.
  - X - DENOTES SANITARY SEWER TO BE REMOVED.



SANITARY SEWER RISER TABLE								
NUMBER	TYPE	LOT NO.	BLOCK NO.	LINE NO.	STATION	DIRECTION	APPROXIMATE VERTICAL (FT)	APPROXIMATE HORIZONTAL (FT)
9	4" TEE	34	A	1	14+49	RT	14	9
10	4" TEE	34	A	1	14+73	RT	13	9
11	4" TEE	33	A	1	15+17	RT	13	9
12	4" TEE	33	A	1	15+41	RT	12	9
13	4" TEE	32	A	1	15+85	RT	12	9
14	4" TEE	32	A	1	16+09	RT	11	9
15	4" TEE	31	A	1	16+53	RT	11	9
16	4" TEE	31	A	1	16+77	RT	10	9
17	4" TEE	30	A	1	17+21	RT	10	9
18	4" TEE	30	A	1	17+45	RT	10	9
19	4" TEE	29	A	1	17+89	RT	9	9
20	4" TEE	29	A	1	18+13	RT	9	9
21	4" TEE	28	A	1	18+57	RT	9	9
22	4" TEE	28	A	1	18+81	RT	8	9

Riser Number	Distance from Main to Riser (L/L/RT)	Distance from	
		Upstream MH	Downstream MH
9	9' R/L	17'	229'
10	9' R/L	41'	205'
11	9' R/L	85'	161'
12	9' R/L	109'	137'
13	9' R/L	153'	93'
14	9' R/L	177'	69'
15	9' R/L	221'	25'
16	9' R/L	243'	3'
17	9' R/L	43'	189'
18	9' R/L	67'	165'
19	9' R/L	111'	121'
20	9' R/L	135'	97'
21	9' R/L	179'	53'
22	9' R/L	203'	29'



SANITARY SEWER IMPROVEMENTS

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CYPRESS GLEN ADDITION

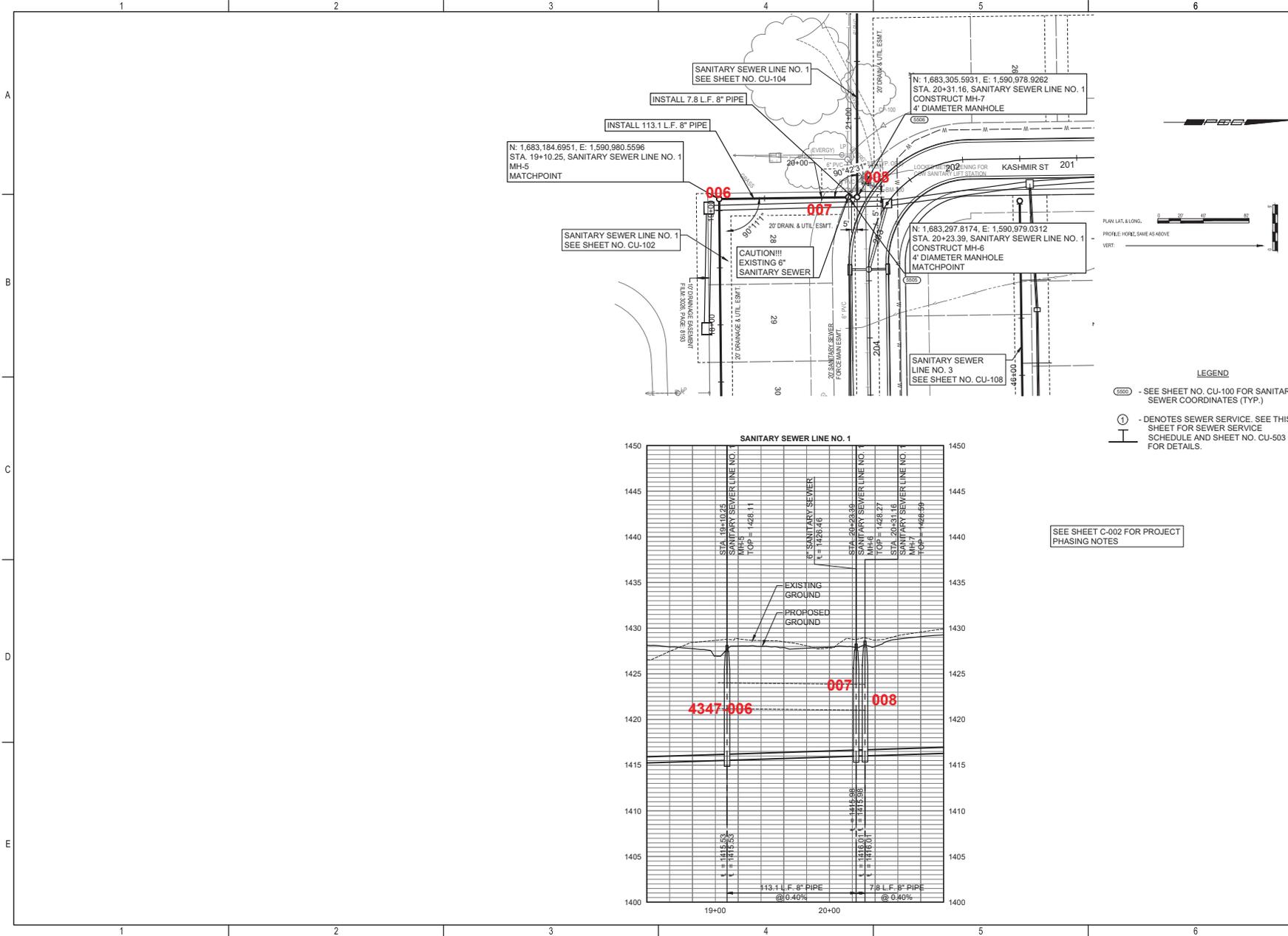
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DESIGNED BY JJH  
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SANITARY SEWER LINE NO. 1  
**CU-102**  
6 OF 27

SAVED: 10/17/2023 1:07:36 PM BY KURTIS DEKAT  
PLOTTED: 10/17/2023 1:15:56 PM BY KURTIS DEKAT  
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**SANITARY SEWER IMPROVEMENTS**  
 TO SERVICE  
**CYPRESS GLEN ADDITION**  
 PAUL GUNZELMAN, P.E. - CITY ENGINEER  
 CITY OF WICHITA PROJECT NO. 466-2023-016041

JOB NO.	210975-006
DATE	SEPTEMBER 2023
PM	GAS
DESIGNED BY	JJH
DRAWN BY	AJH
CHECKED BY	GAS

SANITARY SEWER LINE NO. 1  
**CU-103**  
 7 OF 27

A

B

C

D

E

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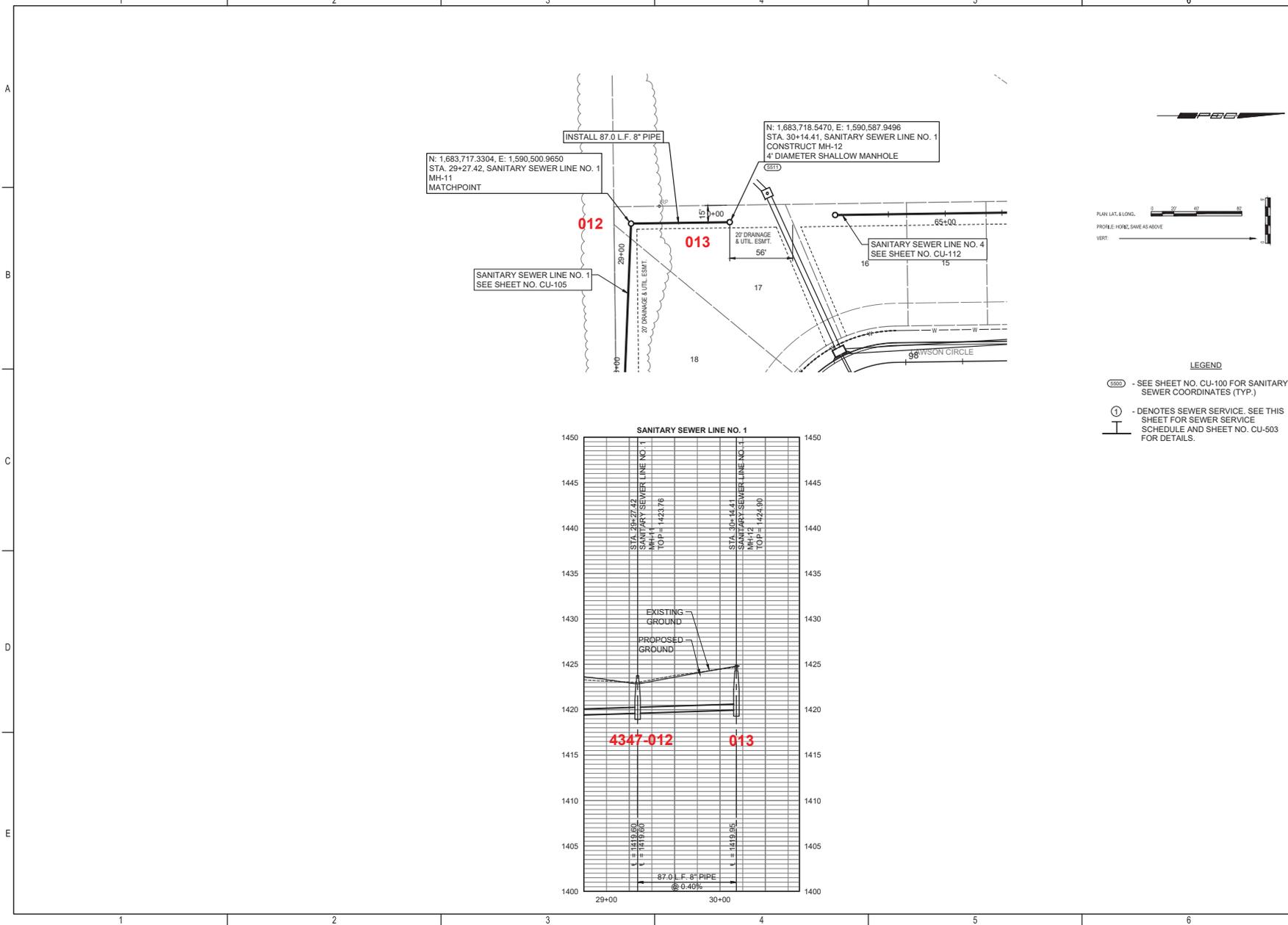
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**SANITARY SEWER IMPROVEMENTS**  
 TO SERVE  
**CYPRESS GLEN ADDITION**

PAUL GUNZELMAN, P.E. - CITY ENGINEER  
 CITY OF WICHITA PROJECT NO. 466-2023-016041

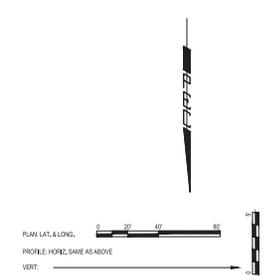
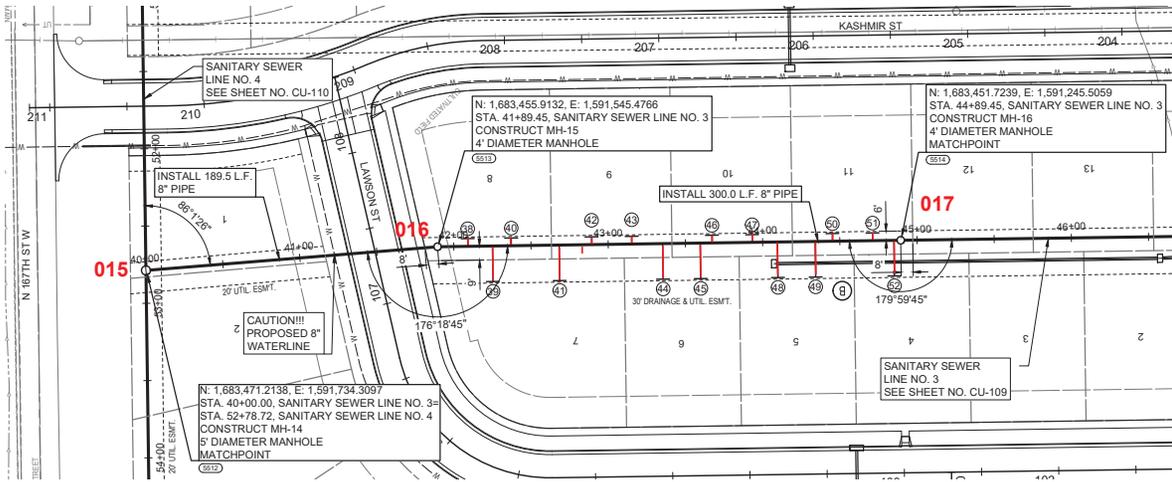
JOB NO.	210975-006
DATE	SEPTEMBER 2023
PM	GAS
DESIGNED BY	JJH
DRAWN BY	AJH
CHECKED BY	GAS

SANITARY SEWER LINE NO. 1

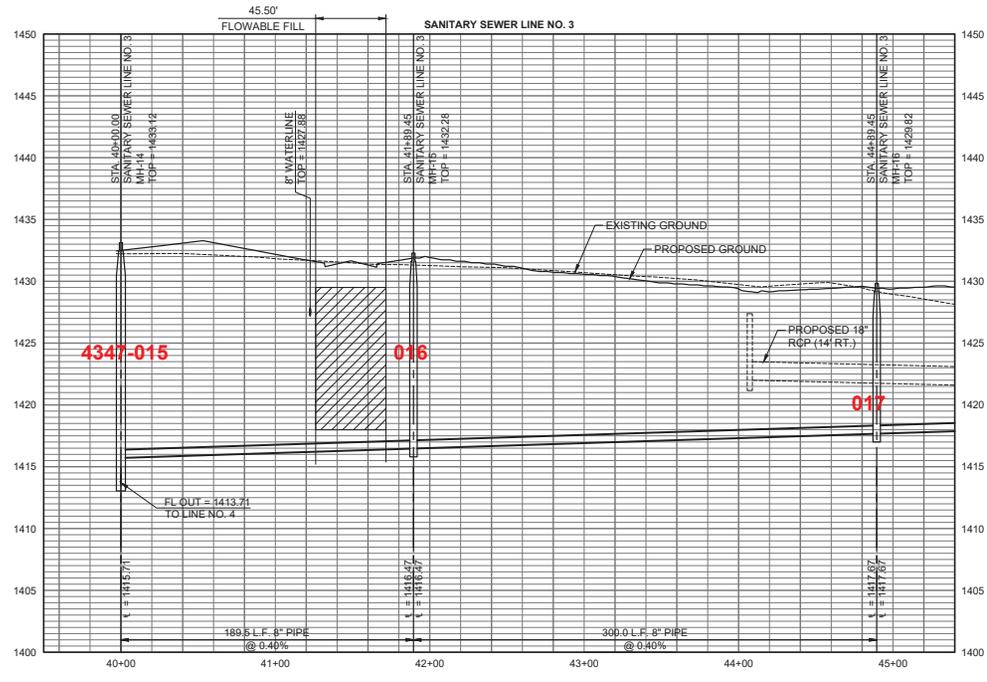
**CU-106**  
 10 OF 27



1 2 3 4 5 6



- LEGEND**
- ① - SEE SHEET NO. CU-100 FOR SANITARY SEWER COORDINATES (TYP.)
  - ① - DENOTES SEWER SERVICE. SEE THIS SHEET FOR SEWER SERVICE SCHEDULE AND SHEET NO. CU-503 FOR DETAILS.



SANITARY SEWER RISER TABLE								
NUMBER	TYPE	LOT NO.	BLOCK NO.	LINE NO.	STATION	DIRECTION	APPROXIMATE VERTICAL (FT)	APPROXIMATE HORIZONTAL (FT)
38	4" TEE	8	B	3	42+09	LT	11	6
39	4" TEE	7	B	3	42+25	RT	11	24
40	4" TEE	8	B	3	42+37	LT	11	6
41	4" TEE	7	B	3	42+68	RT	10	24
42	4" TEE	9	B	3	42+89	LT	10	6
43	4" TEE	9	B	3	43+15	LT	9	6
44	4" TEE	6	B	3	43+35	RT	9	24
45	4" TEE	6	B	3	43+59	RT	9	24
46	4" TEE	10	B	3	43+67	LT	7	6
47	4" TEE	10	B	3	43+93	LT	8	6
48	4" TEE	5	B	3	44+10	RT	8	24
49	4" TEE	5	B	3	44+34	RT	8	24
50	4" TEE	11	B	3	44+45	LT	8	6
51	4" TEE	11	B	3	44+71	LT	8	6
52	4" TEE	4	B	3	44+85	RT	8	24

Riser Number	Distance from Main to Riser (L./Rt.)	Distance from	
		Upstream MH	Downstream MH
38	6' Lt.	20'	280'
39	24' Rt.	36'	264'
40	6' Lt.	48'	252'
41	24' Rt.	79'	221'
42	6' Lt.	100'	200'
43	6' Lt.	126'	174'
44	24' Rt.	146'	154'
45	24' Rt.	170'	130'
46	6' Lt.	178'	122'
47	6' Lt.	204'	196'
48	24' Rt.	221'	79'
49	24' Rt.	245'	55'
50	6' Lt.	256'	44'
51	6' Lt.	282'	18'
52	24' Rt.	296'	4'

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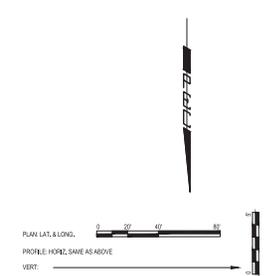
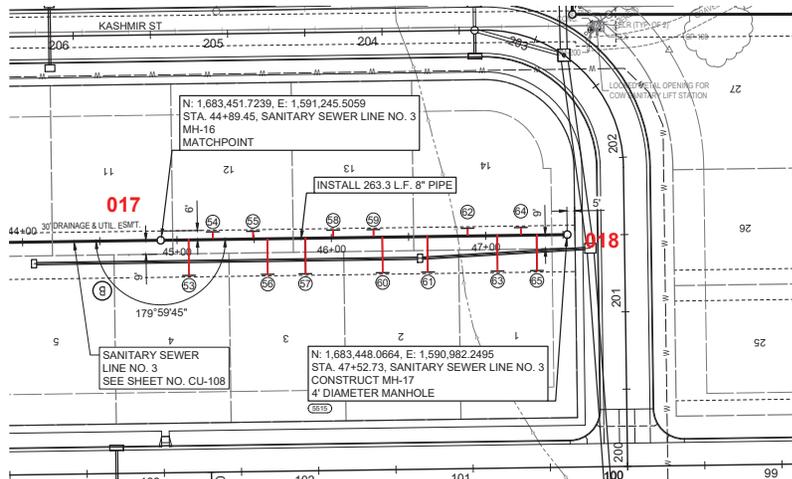
SANITARY SEWER IMPROVEMENTS  
 TO SERVE  
 CYPRESS GLEN ADDITION

PAUL GUNZELMAN, P.E. - CITY ENGINEER  
 CITY OF WICHITA PROJECT NO. 466-2023-016041

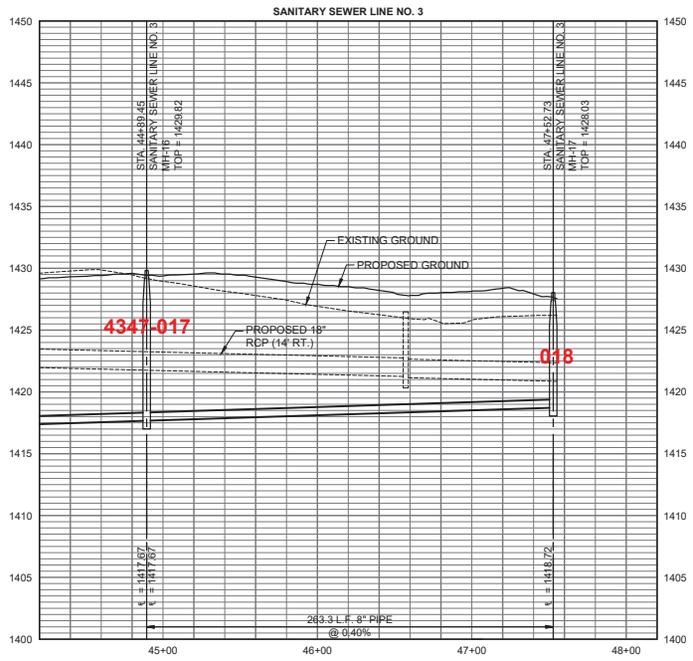
JOB NO. 210975-006  
 DATE SEPTEMBER 2023  
 PM GAS  
 DESIGNED BY JHH  
 DRAWN BY AJH  
 CHECKED BY GAS

SANITARY SEWER LINE NO. 3

**CU-108**  
 12 OF 27



- LEGEND**
- ① - SEE SHEET NO. CU-100 FOR SANITARY SEWER COORDINATES (TYP.)
  - ② - DENOTES SEWER SERVICE. SEE THIS SHEET FOR SEWER SERVICE SCHEDULE AND SHEET NO. CU-503 FOR DETAILS.



SANITARY SEWER RISER TABLE								
NUMBER	TYPE	LOT NO.	BLOCK NO.	LINE NO.	STATION	DIRECTION	APPROXIMATE VERTICAL (FT)	APPROXIMATE HORIZONTAL (FT)
53	4" TEE	4	B	3	45+07	RT	8	24
54	4" TEE	12	B	3	45+23	LT	8	6
55	4" TEE	12	B	3	45+29	LT	8	6
56	4" TEE	3	B	3	45+58	RT	7	24
57	4" TEE	3	B	3	45+82	RT	7	24
58	4" TEE	13	B	3	46+01	LT	7	6
59	4" TEE	13	B	3	46+27	LT	6	6
60	4" TEE	2	B	3	46+33	RT	6	24
61	4" TEE	2	B	3	46+62	RT	6	24
62	4" TEE	14	B	3	46+88	LT	6	6
63	4" TEE	1	B	3	47+07	RT	6	24
64	4" TEE	14	B	3	47+22	LT	6	6
65	4" TEE	1	B	3	47+32	RT	6	24

Riser Number	Distance from Main to Riser (L/R)	Distance from	
		Upstream MH	Downstream MH
53	24' Rt.	18'	246'
54	6' Lt.	34'	230'
55	6' Lt.	40'	224'
56	24' Rt.	69'	195'
57	24' Rt.	93'	171'
58	6' Lt.	112'	152'
59	6' Lt.	138'	126'
60	24' Rt.	144'	120'
61	24' Rt.	173'	91'
62	6' Lt.	199'	165'
63	24' Rt.	218'	46'
64	6' Lt.	233'	31'
65	24' Rt.	243'	21'



SANITARY SEWER IMPROVEMENTS

TO SERVE  
CYPRESS GLEN ADDITION

PAUL GUNZELMAN, P.E. - CITY ENGINEER  
CITY OF WICHITA PROJECT NO. 466-2023-016041

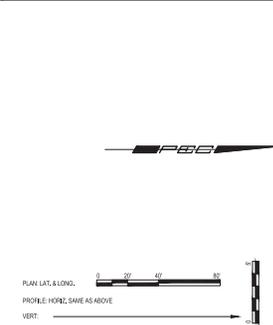
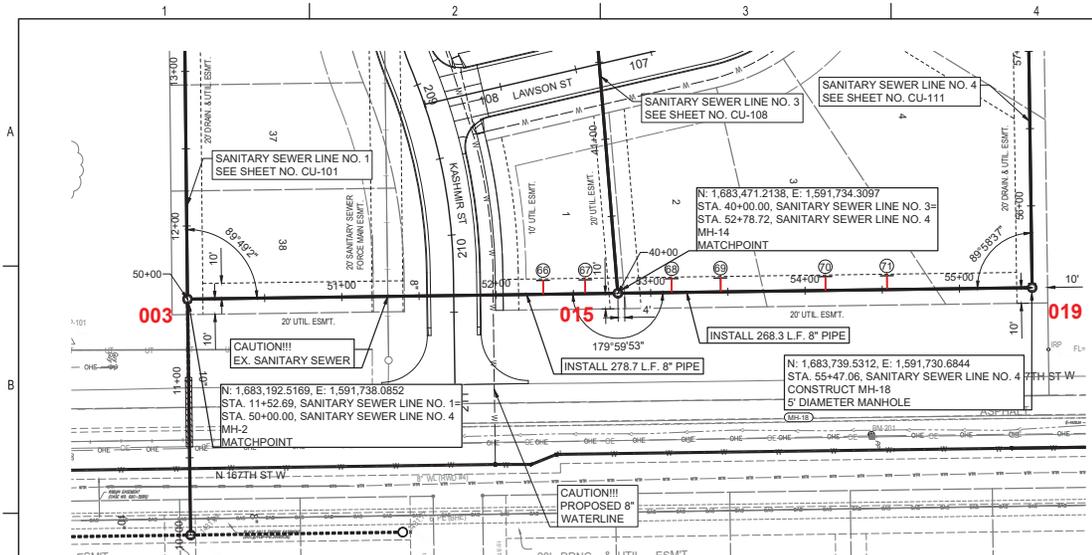
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DATE	SEPTEMBER 2023
PM	GAS
DESIGNED BY	JJH
DRAWN BY	AJH
CHECKED BY	GAS

SANITARY SEWER LINE NO. 3

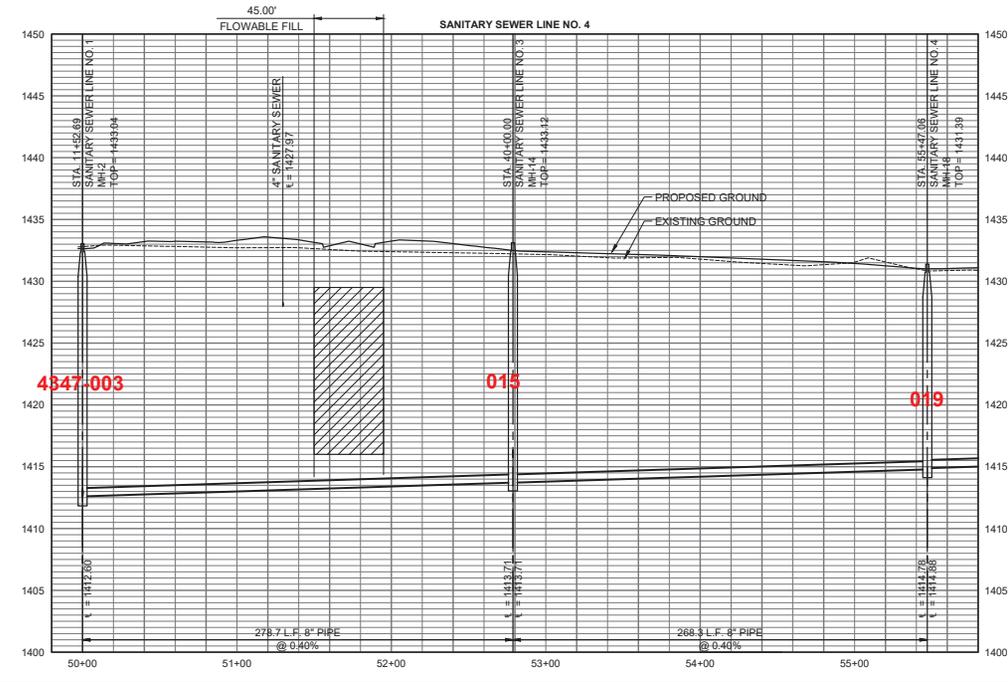
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- LEGEND**
- ① - SEE SHEET NO. CU-100 FOR SANITARY SEWER COORDINATES (TYP.)
  - ② - DENOTES SEWER SERVICE. SEE THIS SHEET FOR SEWER SERVICE SCHEDULE AND SHEET NO. CU-503 FOR DETAILS.



SANITARY SEWER RISER TABLE								
NUMBER	TYPE	LOT NO.	BLOCK NO.	LINE NO.	STATION	DIRECTION	APPROXIMATE VERTICAL (FT)	APPROXIMATE HORIZONTAL (FT)
66	4" TEE	1	A	4	52+30	LT	16	10
67	4" TEE	1	A	4	52+57	LT	15	10
68	4" TEE	2	A	4	53+13	LT	14	10
69	4" TEE	2	A	4	53+45	LT	14	10
70	4" TEE	3	A	4	54+13	LT	14	10
71	4" TEE	3	A	4	54+53	LT	13	10

Riser Number	Distance from Main to Riser (L/R)	Distance from	
		Upstream MH	Downstream MH
66	10' LT.	230'	49'
67	10' LT.	257'	22'
68	10' LT.	234'	34'
69	10' LT.	202'	66'
70	10' LT.	134'	134'
71	10' LT.	94'	174'



PROFESSIONAL ENGINEER CONSULTANTS  
 303 SOUTH TOPSICA  
 WICHITA, KS 67202  
 316-262-2891 www.pec1.com



CITY OF WICHITA



PAUL GUNZELMAN  
 28774  
 PROFESSIONAL ENGINEER  
 KANSAS

**SANITARY SEWER IMPROVEMENTS**  
 TO SERVE  
**CYPRESS GLEN ADDITION**

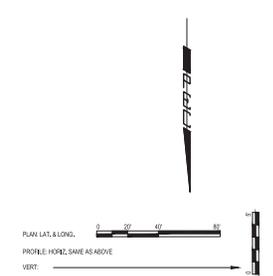
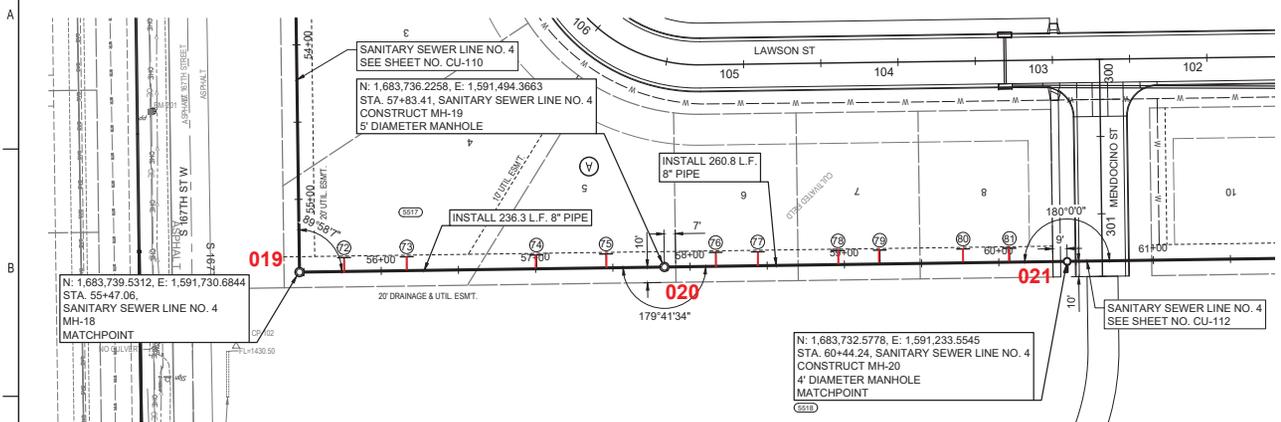
PAUL GUNZELMAN, P.E. - CITY ENGINEER  
 CITY OF WICHITA PROJECT NO. 466-2023-016041

JOB NO.	210975-006
DATE	SEPTEMBER 2023
PM	GAS
DESIGNED BY	JJH
DRAWN BY	AJH
CHECKED BY	GAS

**SANITARY SEWER LINE NO. 4**

**CU-110**  
14 OF 27

1 2 3 4 5 6



N: 1,683,739.5312, E: 1,591,730.6844  
 STA. 55+47.06  
 SANITARY SEWER LINE NO. 4  
 MH-18  
 MATCHPOINT

N: 1,683,732.5778, E: 1,591,233.5545  
 STA. 60+44.24, SANITARY SEWER LINE NO. 4  
 CONSTRUCT MH-20  
 4' DIAMETER MANHOLE  
 MATCHPOINT

LEGEND

- ① - SEE SHEET NO. CU-100 FOR SANITARY SEWER COORDINATES (TYP.)
- ② - DENOTES SEWER SERVICE. SEE THIS SHEET FOR SEWER SERVICE SCHEDULE AND SHEET NO. CU-503 FOR DETAILS.



SANITARY SEWER LINE NO. 4



SANITARY SEWER RISER TABLE								
NUMBER	TYPE	LOT NO.	BLOCK NO.	LINE NO.	STATION	DIRECTION	APPROXIMATE VERTICAL (FT)	APPROXIMATE HORIZONTAL (FT)
72	4" TEE	4	A	4	55+76	LT	12	10
73	4" TEE	4	A	4	56+17	LT	12	10
74	4" TEE	5	A	4	57+01	LT	12	10
75	4" TEE	5	A	4	57+46	LT	11	10
76	4" TEE	6	A	4	58+17	LT	10	10
77	4" TEE	6	A	4	58+44	LT	10	10
78	4" TEE	7	A	4	58+96	LT	10	10
79	4" TEE	7	A	4	59+23	LT	9	10
80	4" TEE	8	A	4	59+77	LT	9	10
81	4" TEE	8	A	4	60+07	LT	8	10

Riser Number	Distance from Main to Riser (L/R)	Distance from	
		Upstream MH	Downstream MH
72	10' Lt.	29'	207'
73	10' Lt.	70'	166'
74	10' Lt.	154'	182'
75	10' Lt.	199'	37'
76	10' Lt.	34'	227'
77	10' Lt.	61'	200'
78	10' Lt.	110'	148'
79	10' Lt.	140'	121'
80	10' Lt.	194'	67'
81	10' Lt.	224'	37'

SANITARY SEWER IMPROVEMENTS TO SERVE CYPRESS GLEN ADDITION

PAUL GUNZELMAN, P.E. - CITY ENGINEER  
 CITY OF WICHITA PROJECT NO. 466-2023-016041

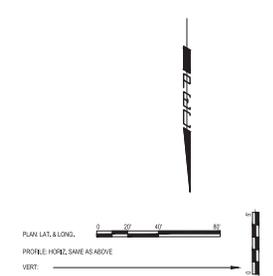
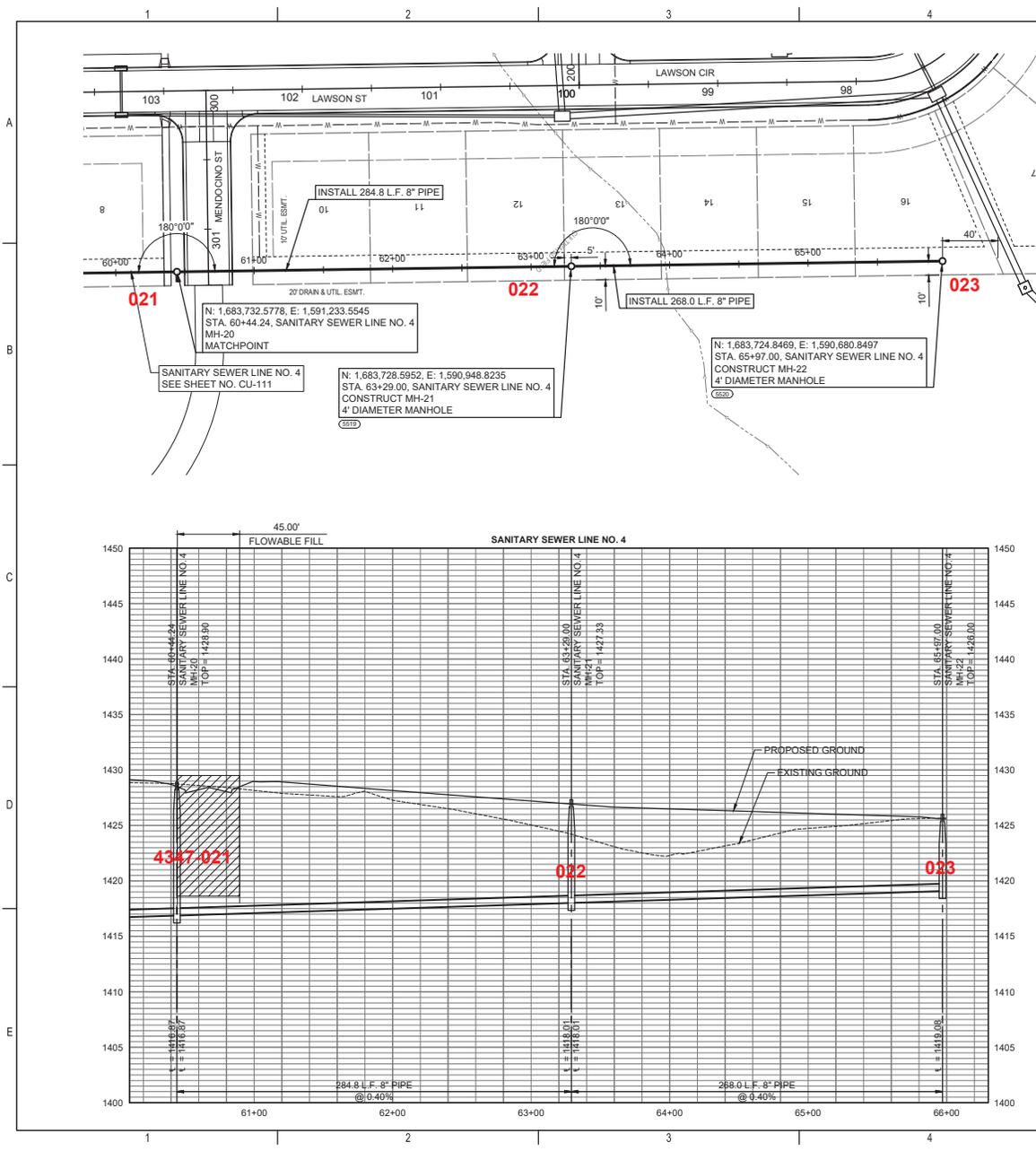
JOB NO.	210975-006
DATE	SEPTEMBER 2023
PM	GAS
DESIGNED BY	JJH
DRAWN BY	AJH
CHECKED BY	GAS

SANITARY SEWER LINE NO. 4

CU-111  
 15 OF 27

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- LEGEND**
- 0220 - SEE SHEET NO. CU-100 FOR SANITARY SEWER COORDINATES (TYP.)
  - ① - DENOTES SEWER SERVICE. SEE THIS SHEET FOR SEWER SERVICE SCHEDULE AND SHEET NO. CU-503 FOR DETAILS.



SANITARY SEWER IMPROVEMENTS

TO SERVE  
 CYPRESS GLEN ADDITION

PAUL GUNZELMAN, P.E. - CITY ENGINEER  
 CITY OF WICHITA PROJECT NO. 466-2023-016041

JOB NO.	210975-006
DATE	SEPTEMBER 2023
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SANITARY SEWER LINE NO. 4

**DEMOLITION NOTES**

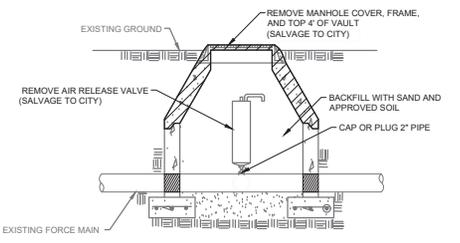
- PRIOR TO BEGINNING ANY SALVAGE/DEMOLITION WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANIES (EVERGY, ETC.) AND REQUEST THAT ALL UTILITY SERVICES BE DISCONNECTED. ANY COSTS INCURRED BY THE UTILITY COMPANIES SHALL BE PAID BY THE CONTRACTOR.
- LIFT STATION CONCRETE PAD SHALL BE REMOVED BY THE CONTRACTOR.
- CONCRETE RUBBLE, OTHER DEBRIS, AND UNSALVAGEABLE MATERIALS SHALL BE DISPOSED AS APPROVED AND DIRECTED BY THE CITY ENGINEER.
- STRUCTURES AND FOOTINGS TO BE ABANDONED SHALL BE COMPLETELY REMOVED TO AN ELEVATION OF 3' BELOW FINISHED GRADE. THE BOTTOM OF THE STRUCTURE SHALL BE BROKEN TO ALLOW FOR DRAINAGE, AND THE REMAINING PORTION OF THE ABANDONED STRUCTURES SHALL BE BACKFILLED WITH SAND OR FLOWABLE FILL TO AN ELEVATION OF 2' BELOW GRADE. THE TOP 2' OF THE EXCAVATION SHALL BE BACKFILLED WITH COMPACTED MATERIAL SIMILAR TO THE ADJACENT SURFACE TO 95% OF ASTM D698.
- AFTER BACKFILLING, THE ENTIRE SITE DISTURBED BY DEMOLITION SHALL BE CLEARED OF ALL DEBRIS, CONCRETE RUBBLE, ETC., GRADED TO DRAIN, AND RESEEDED.
- PRIOR TO ANY LIFT STATION OR FORCE MAIN ABANDONMENT OR REMOVAL THE CONTRACTOR SHALL GIVE 48 HOURS (MIN.) NOTICE TO THE CITY. ANY ITEMS TO BE SALVAGED SHALL BE CLEANED AND DELIVERED TO THE CITY. ITEMS TO BE DISPOSED OF AS DIRECTED BY THE CITY SHALL BE DISPOSED OF IN AN ACCEPTABLE LOCATION. CONTACT JAMIE BELDEN AT 316-303-8721.
- CONTRACTOR SHALL NOT DIVERT ANY SEWAGE FLOW THROUGH NEW PIPE OR MANHOLES UNTIL TESTING HAS BEEN COMPLETED AND ACCEPTED.
- CONTRACTOR SHALL VISIT THE LIFT STATION SITE AND BECOME FAMILIAR WITH THE EXISTING LIFT STATION AND EQUIPMENT AND SUBSEQUENT DEMOLITION PRIOR TO BIDDING.
- CONTRACTOR SHALL COORDINATE TRANSFORMER, UTILITY POLE REMOVAL WITH THE PROPER UTILITY.

EVERGY:  
HEIDE BRYAN 316-261-6354

- PRIOR TO ABANDONING REMAINING FORCE MAIN, CONTRACTOR SHALL THOROUGHLY FLUSH PIPES.

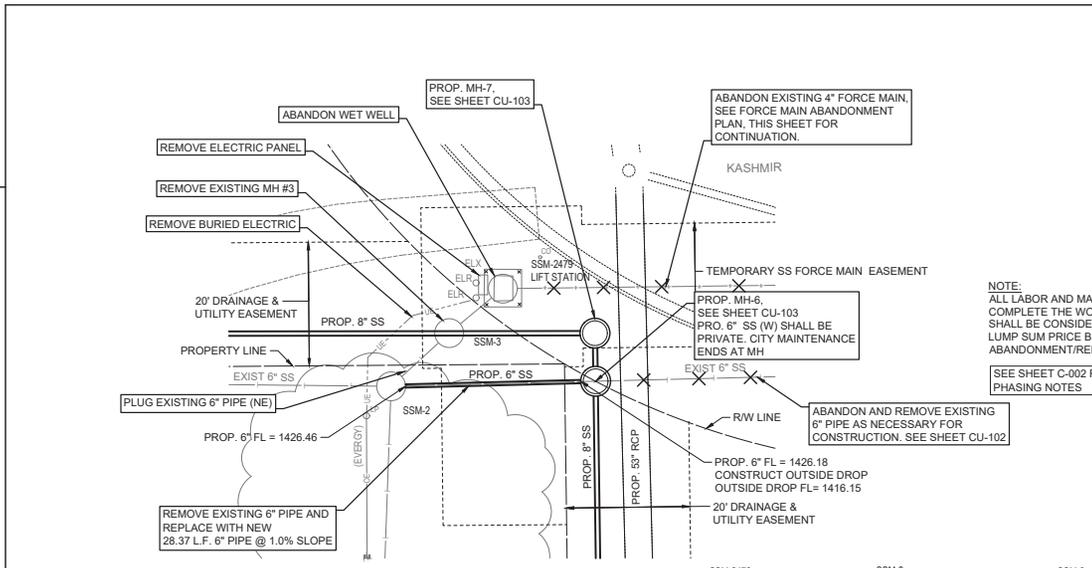


**FORCE MAIN ABANDONMENT**



**AIR RELEASE VALVE ABANDONMENT**  
NOT TO SCALE

CONTRACTOR SHALL REMOVE THE AIR RELEASE VALVE, MISCELLANEOUS PIPING AND THE TOP PORTION OF THE AIR RELEASE VAULT (TO BE A MINIMUM OF 4' BELOW FINISH GRADE), INCLUDING FRAME AND COVER, ADJUSTING RINGS, AND CONE. THEN BACKFILL VAULT WITH SAND TO 2' BELOW GRADE. THE REMAINING 2' SHALL BE BACKFILLED AND COMPACTED TO 95% OF ASTM D-698 WITH APPROVED SOIL. ALL MATERIALS OTHER THAN THOSE SPECIFICALLY CALLED OUT TO BE SALVAGED SHALL BE DISPOSED OF BY THE CONTRACTOR PROPERLY.



**LIFT STATION ABANDONMENT**

SSM-2479 LIFT STATION NO ACCESS, LOCKED MH TOP OF SEWER VALVE=1426.63 RIM: 1429.21	SSM-2 4\"/>
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**NOTE:**  
ALL LABOR AND MATERIALS NECESSARY TO COMPLETE THE WORK SHOWN ON THIS SHEET SHALL BE CONSIDERED SUBSIDIARY TO THE LUMP SUM PRICE BID FOR "LIFT STATION ABANDONMENT/REMOVAL".  
SEE SHEET C-002 FOR PROJECT PHASING NOTES

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**SANITARY SEWER IMPROVEMENTS**

**TO SERVE  
CYPRESS GLEN ADDITION**

PAUL GUNZELMAN, P.E. - CITY ENGINEER  
CITY OF WICHITA PROJECT NO. 4665-2023-016041

JOB NO.	210975-006
DATE	SEPTEMBER 2023
PM	GAS
DESIGNED BY	JJH
DRAWN BY	AJH
CHECKED BY	GAS

**LIFT STATION ABANDONMENT PLAN**

**CU-113**  
17 OF 27