

# AS-BUILT PLANS

## SANITARY SEWER IMPROVEMENTS

to serve

# BROOKFIELD SOUTH ADDITION & BROOKFIELD SOUTH 2ND ADDITION

## PHASE I

### CITY OF WICHITA, KANSAS

Paul Gunzelman, P.E., Interim City Engineer

Project Number 468-2022-012071 47268423 E3075

**Baughman Company Job Number: 23-08-E567**

### GENERAL NOTES:

- Contractor will be required to provide notice to utility companies a minimum of seventy-two (72) hours prior to any excavation, as follows:  

Kansas One-Call	687-2470
Cox Communications	262-4270
Kansas Gas Service	1-888-482-4950
Westar Energy	383-8650
Aquila Energy	1-800-303-0357
AT&T	268-2245
City of Wichita Water Dept.	268-4563
City of Wichita Sewer Maint.	268-4024
City of Wichita Storm Sewer Maint.	268-4090
City of Wichita Traffic Maint.	268-4034
Conoco Phillips Pipeline Co.	1-877-267-2290
Southern Star Pipeline Co.	529-6600
Kinder-Morgan Pipeline Co.	1-888-844-5658

The Contractor must notify the following in case of an emergency:
- All existing and proposed erosion control measures including silt fencing, erosion control mat, straw bales, inlet barriers, and const. entrance shall be maintained throughout construction by the contractor and until project is accepted by the City of Wichita. The on-site engineer shall complete weekly reports on the status of erosion control measures. The contractor shall be required to comply with maintenance and/or replacement of erosion control measures as determined by the on-site engineer until project is accepted by City of Wichita. Maintenance and/or replacement of erosion control measures to be paid by L.S. bid item "Maintain Existing BMP's."
- All excess excavation shall remain on-site and shall be stockpiled or spread at a location determined by the engineer.
- The Contractor shall be responsible for maintaining continuous flow of sewage through construction. Contractor's proposed method for maintaining sewage flow shall be approved by the Engineer. Cost of maintaining flow of sewage through construction will not be paid for directly and this cost shall be considered as subsidiary to the other pay items of work.
- All areas disturbed by construction are to be seeded as follows:  
 Seed --- Rye grass; 5 lbs./1000 Sq. Ft.  
 All costs associated with seeding including mobilization, preparation of ground, seeding, fertilizing, mulching, etc. shall be included in the L.S. bid item "Seeding".
- Trees and shrubs in the work area which are in direct conflict with proposed new construction shall be removed by the Contractor ONLY with the Developer or Baughman Company approval. Trees and shrubs which are not in direct conflict with proposed new construction shall be saved and protected from damage. If trimming is necessary, a chainsaw shall be used. Breaking limbs with equipment will not be allowed. An on-site pre-construction meeting will occur prior to any construction to discuss tree removal, tree protection, and tree trimming.
- The Developer for this project is Jeff Mullen  
 8100 E. 22nd St. N., Bldg. 1000, Wichita, KS 67272  
 PH(316) 684-7300 email: jeff@ritchidevelopment.com

**Pipe, SS 8" = 7,217 L.F.**  
**Pipe, SS 10" = 1,579 L.F.**  
**Pipe Stub, 8" = 6 EACH.**  
**Riser Assembly 4", MH Stub = 12 EACH.**  
**Riser Assembly 4", Vertical = 26 EACH.**  
**MH, Standard SS (4") = 32 EACH.**  
**MH, Standard SS (5") = 6 EACH.**  
**MH, Shallow SS (4") = 1 EACH.**  
**MH, Outside Drop SS (4") = 1 EACH.**  
**MH, Outside Drop SS (5") = 1 EACH.**

appearance will not be approved. All disposal sites must be approved by the Kansas Department of Health and Environment. Material either stockpiled or disposed of in a flood plain would require a Kansas State Board of Agriculture permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps of Engineers permitting regulations. Any material buried or stockpiled beyond approved construction limits would require additional archaeological investigations unless buried in a previously approved borrow location.

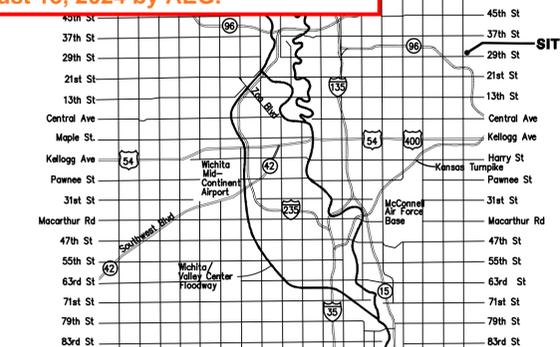
- Trees and shrubs in public right-of-way which are in direct conflict with proposed new construction shall be removed by the Contractor with the Engineer's approval. Trees and shrubs which are not in direct conflict with proposed new construction shall be saved and protected from damage.
- The Contractor shall give all property owners and/or tenants of developed property abutting the construction of this project a minimum of ten (10) days notice prior to start of construction.
- The Contractor shall be responsible for preserving property irons. The Contractor will be required to re-establish any property irons which are damaged or destroyed by his construction operations. Such irons shall be re-established by a licensed land surveyor in accordance with state laws.

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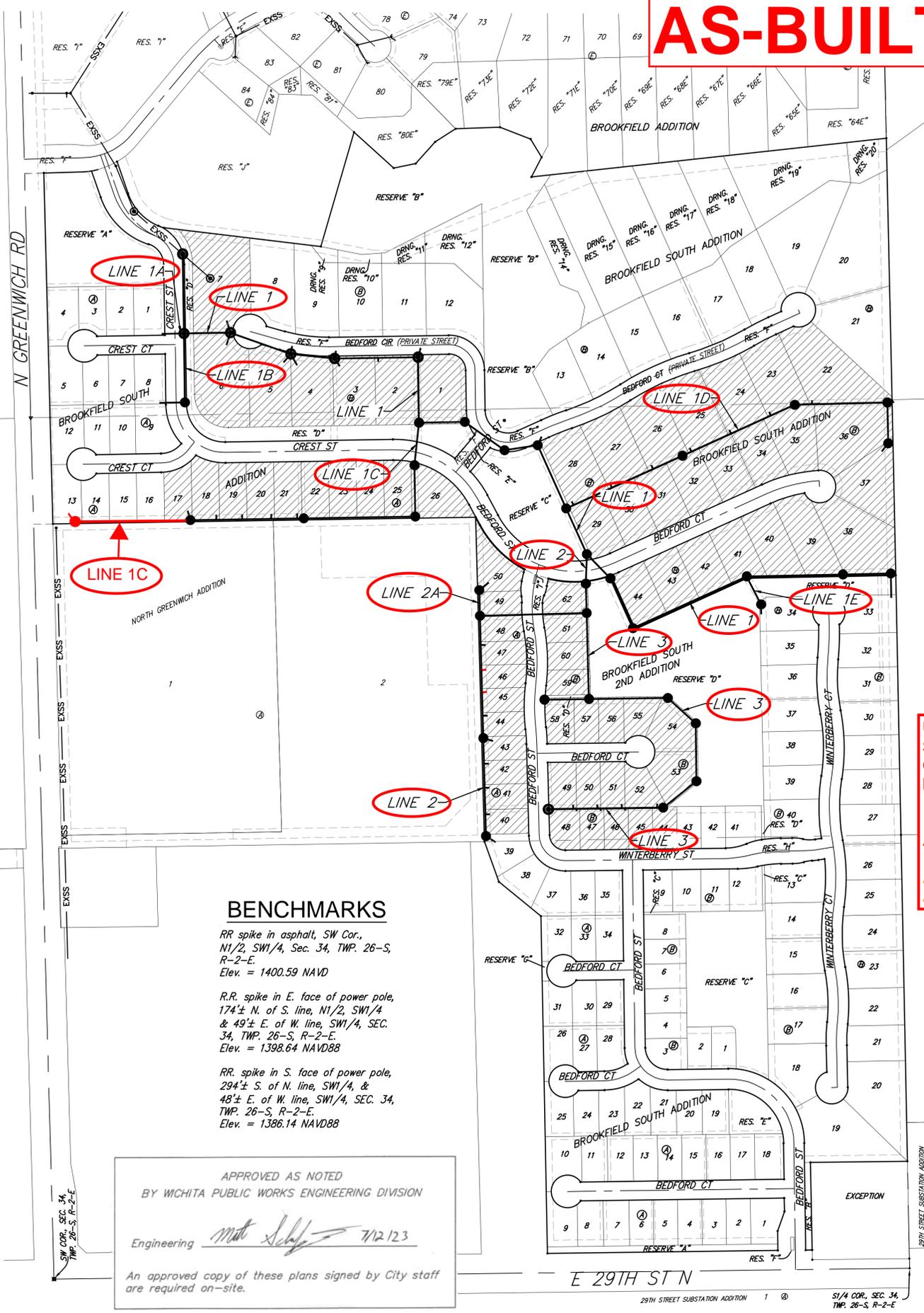
**Utility Contractor = Mies Construction**  
**Superintendent = Albert Williams**  
**Construction Staking = City of Wichita**  
**Inspector = Fred Smith - Baughman Company**

**As-Built Plans = FES & Larry Powell**  
**June 6, 2024**  
**Additional As-built information added August 13, 2024 by AEG.**



VICINITY MAP

BENEFIT DISTRICT



### BENCHMARKS

- RR spike in asphalt, SW Cor., N1/2, SW1/4, Sec. 34, TWP. 26-S, R-2-E. Elev. = 1400.59 NAVD
- R.R. spike in E. face of power pole, 174± N. of S. line, N1/2, SW1/4 & 49± E. of W. line, SW1/4, SEC. 34, TWP. 26-S, R-2-E. Elev. = 1398.64 NAVD88
- RR. spike in S. face of power pole, 294± S. of N. line, SW1/4, & 48± E. of W. line, SW1/4, SEC. 34, TWP. 26-S, R-2-E. Elev. = 1386.14 NAVD88

APPROVED AS NOTED  
 BY WICHITA PUBLIC WORKS ENGINEERING DIVISION

Engineering *Matt Schlegel* 7/12/23

An approved copy of these plans signed by City staff are required on-site.

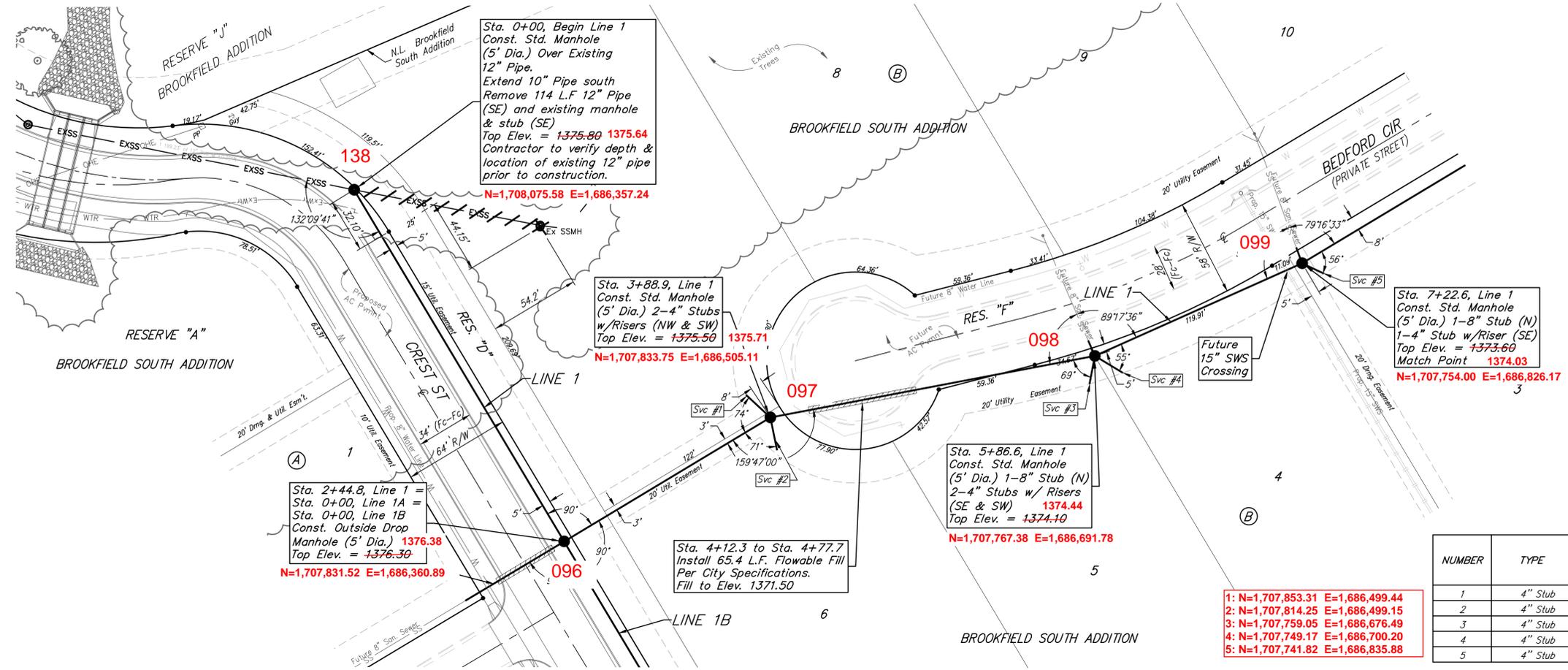


Jun. 19, 2023

**BAUGHMAN COMPANY**  
 315 Ellis St. Wichita, KS 67211 316-262-7271  
 BaughmanCo.com

C:\Projects\Brookfield South 2nd Addition\Engineering\Phase I\SS\_22-03-E143.dwg

**BENCHMARKS:**  
 RR spike in asphalt, SW Cor., N1/2, SW1/4, Sec. 34, TWP. 26-S, R-2-E. Elev. = 1400.59 NAVD  
 RR spike in E. face of power pole, 174± N. of S. line, N1/2, SW1/4 & 49± E. of W. line, SW1/4, SEC. 34, TWP. 26-S, R-2-E. Elev. = 1398.64 NAVD88  
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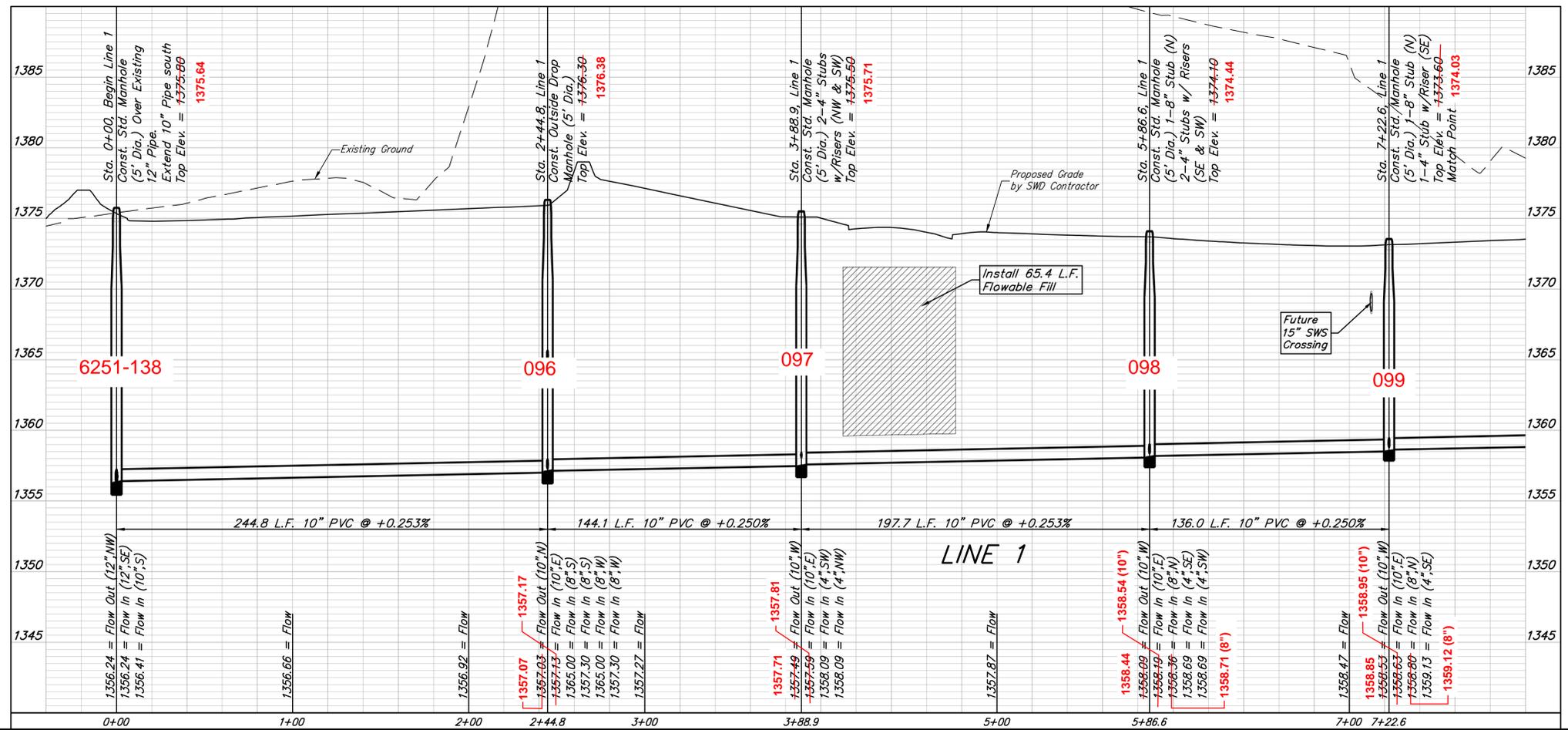


The Contractor shall be required to backfill trench with sand from Sta. 0+00 to Sta. 2+44.8 and from Sta. 4+77.7 to Sta. 7+22.6, Line 1. To be bid as "L.F. Fill, Sand, Flushed & Vibrated"

SEWER SERVICE TABLE

NUMBER	TYPE	LOCATION				FOR INFORMATION ONLY	
		LOT NO.	BLOCK NO.	LINE NO.	STATION/DIRECTION	APPROXIMATE LENGTH 4" PIPE	
						VERTICAL	HORIZONTAL
1	4" Stub	7	B	1	3+88.9/Lt.	13.8'	20'
2	4" Stub	6	B	1	3+88.9/Rt.	13.8'	20'
3	4" Stub	5	B	1	5+86.6/Rt.	11.6'	17'
4	4" Stub	4	B	1	5+86.6/Rt.	11.5'	20'
5	4" Stub	3	B	1	7+22.6/Rt.	10.8'	15'

1: N=1,707,853.31 E=1,686,499.44  
 2: N=1,707,814.25 E=1,686,499.15  
 3: N=1,707,759.05 E=1,686,676.49  
 4: N=1,707,749.17 E=1,686,700.20  
 5: N=1,707,741.82 E=1,686,835.88



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Brookfield South Addition & Brookfield South 2nd Addition Phase I

**LINE 1**

SANITARY SEWER IMPROVEMENTS

PROJECT NUMBER: 468-2022-012071

DESIGN: AEG DRAWN: JAK

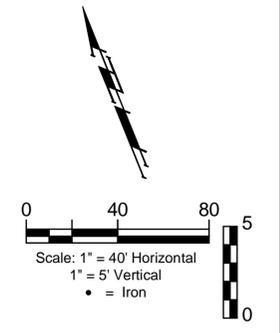
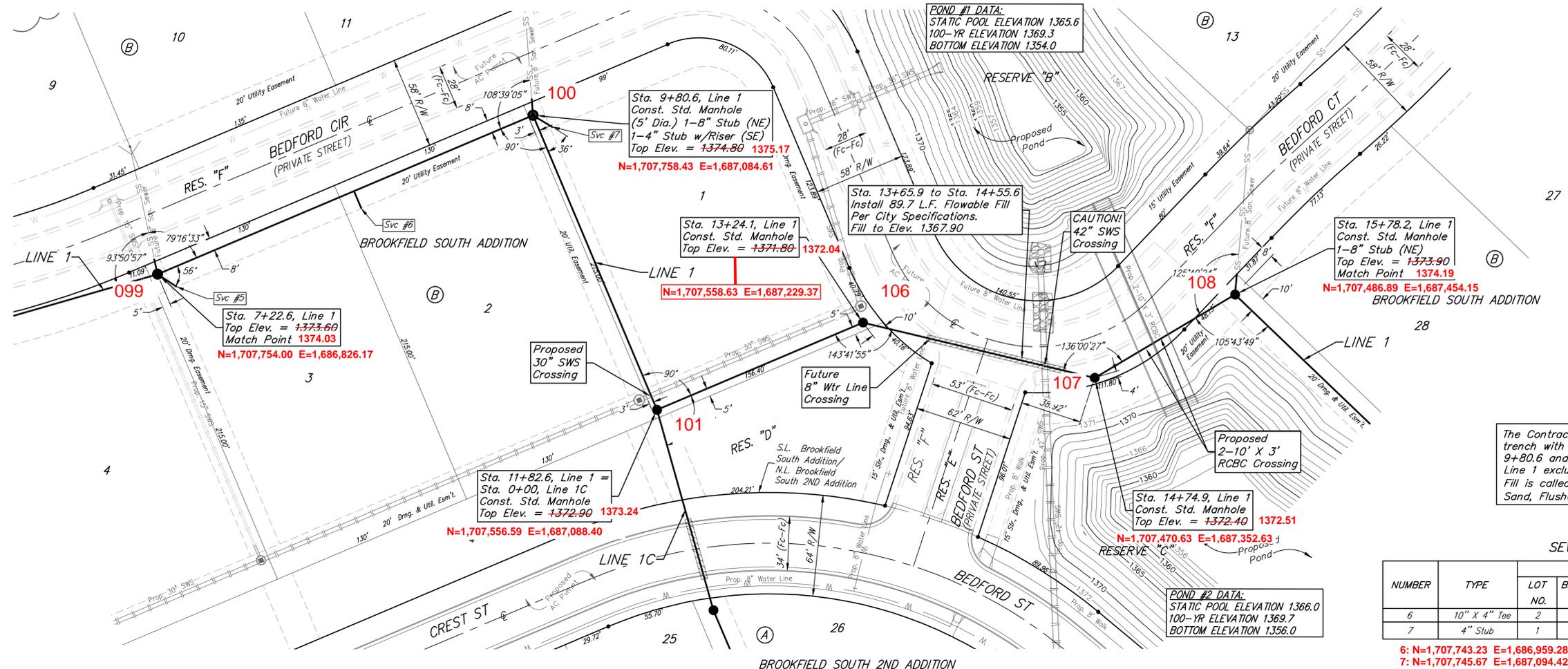
DATE: Jun. 19, 2023

SHEET 2 OF 28

**BENCHMARKS:**  
 RR spike in asphalt, SW Cor.,  
 N1/2, SW1/4, Sec. 34, TWP. 26-S,  
 R-2-E.  
 Elev. = 1400.59 NAVD

RR spike in E. face of power pole,  
 174± N. of S. line, N1/2, SW1/4  
 & 49± E. of W. line, SW1/4, SEC.  
 34, TWP. 26-S, R-2-E.  
 Elev. = 1398.64 NAVD88

RR spike in S. face of power pole,  
 294± S. of N. line, SW1/4, &  
 48± E. of W. line, SW1/4, SEC. 34,  
 TWP. 26-S, R-2-E.  
 Elev. = 1386.14 NAVD88

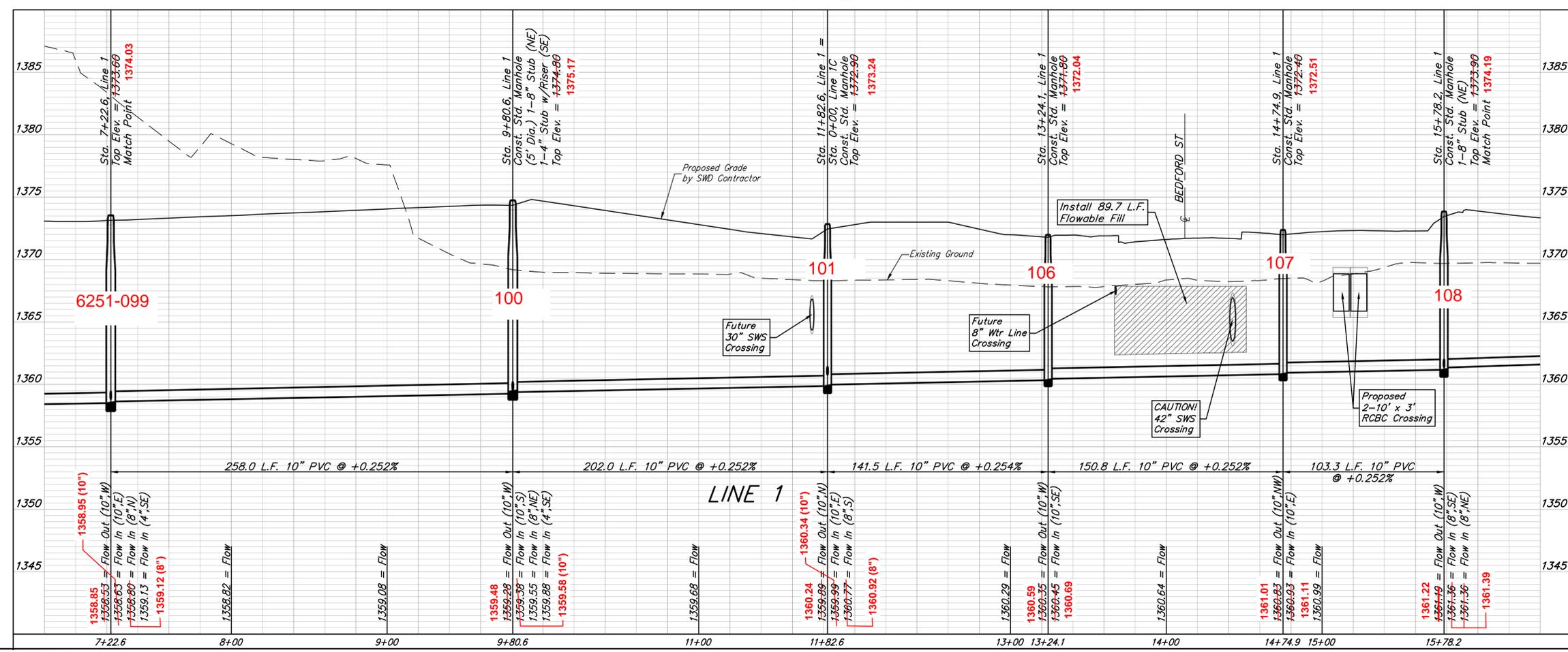


The Contractor shall be required to backfill trench with sand from Sta. 7+22.6 to Sta. 9+80.6 and Sta. 13+24.1 to Sta. 15+78.2, Line 1 excluding locations where Flowable Fill is called out. To be bid as "L.F. Fill, Sand, Flushed & Vibrated"

SEWER SERVICE TABLE

NUMBER	TYPE	LOCATION				FOR INFORMATION ONLY	
		LOT NO.	BLOCK NO.	LINE NO.	STATION/DIRECTION	APPROXIMATE LENGTH 4" PIPE	
6	10" X 4" Tee	2	B	1	8+57.6/Rt.	11.1'	12'
7	4" Stub	1	B	1	9+80.6/Lt.	11.2'	15'

6: N=1,707,743.23 E=1,686,959.28  
 7: N=1,707,745.67 E=1,687,094.42



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Brookfield South Addition &  
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 Phase I

**LINE 1**

SANITARY SEWER  
 IMPROVEMENTS

PROJECT NUMBER:  
 468-2022-012071

DESIGN: AEG DRAWN: JAK  
 DATE: Jun. 19, 2023

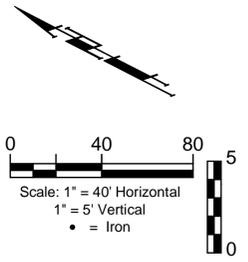
SHEET 3 OF 28

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 RR spike in asphalt, SW Cor.,  
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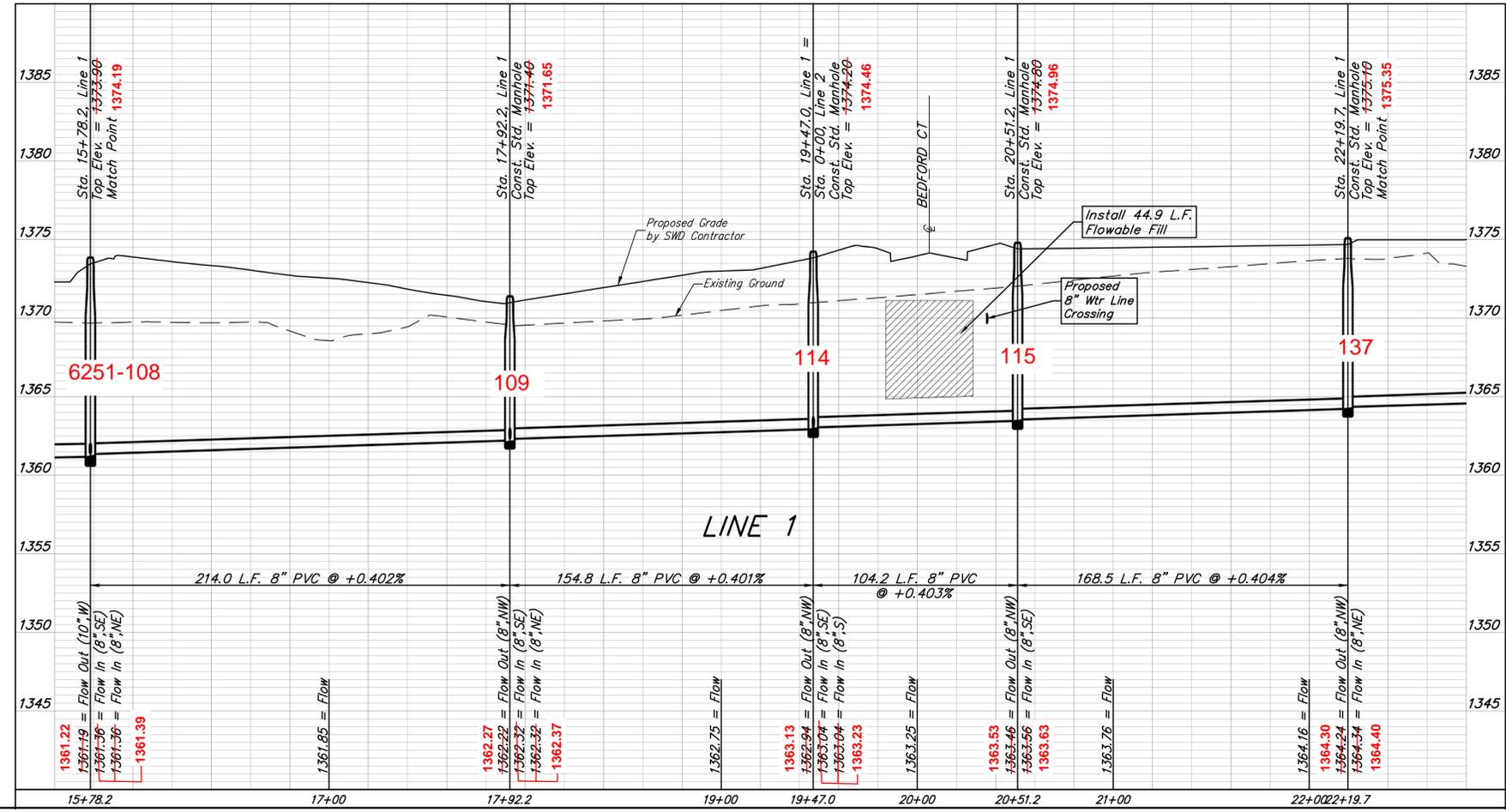
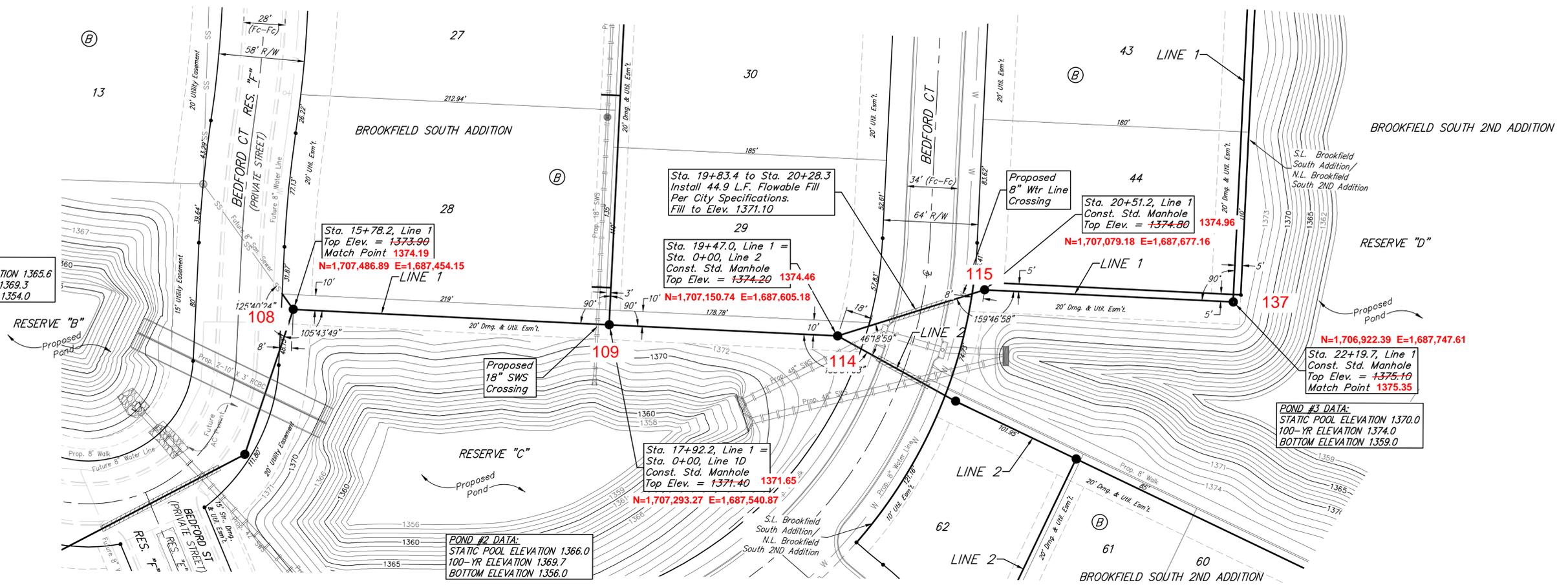
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 48± E. of W. line, SW1/4, SEC. 34,  
 TWP. 26-S, R-2-E.  
 Elev. = 1386.14 NAVD88



**POND #1 DATA:**  
 STATIC POOL ELEVATION 1365.6  
 100-YR ELEVATION 1369.3  
 BOTTOM ELEVATION 1354.0

**POND #3 DATA:**  
 STATIC POOL ELEVATION 1370.0  
 100-YR ELEVATION 1374.0  
 BOTTOM ELEVATION 1359.0

**POND #2 DATA:**  
 STATIC POOL ELEVATION 1366.0  
 100-YR ELEVATION 1369.7  
 BOTTOM ELEVATION 1356.0



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Brookfield South Addition &  
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 Phase I

**LINE 1**

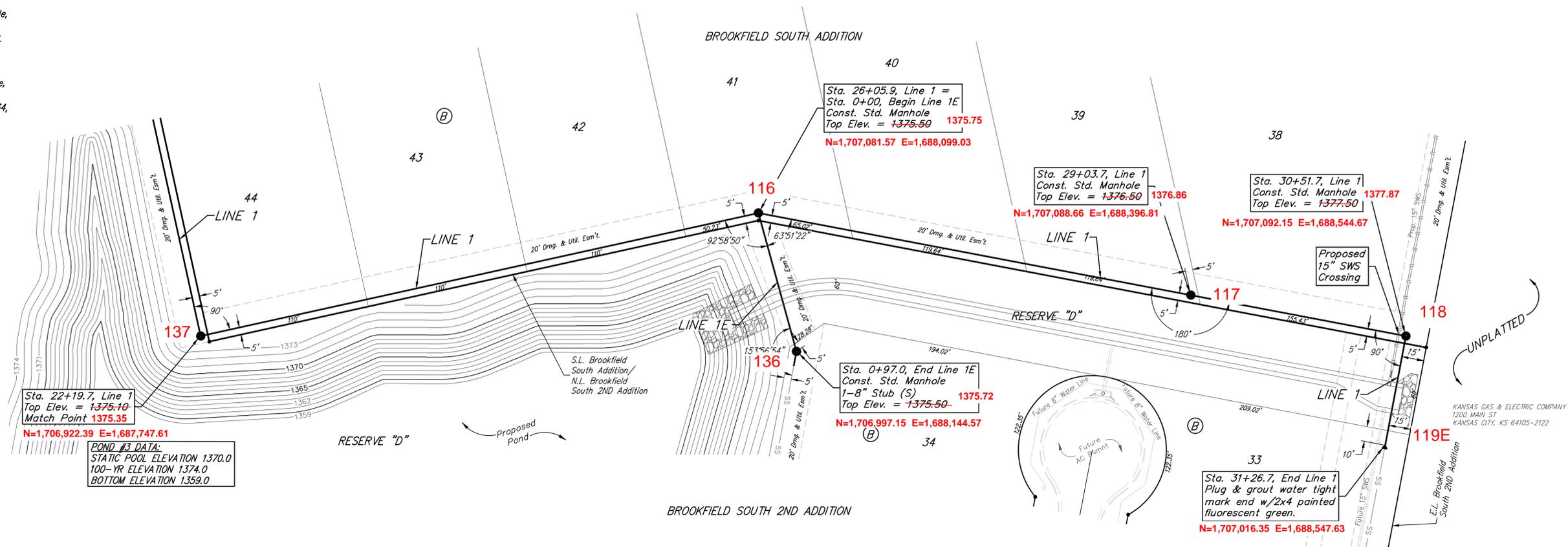
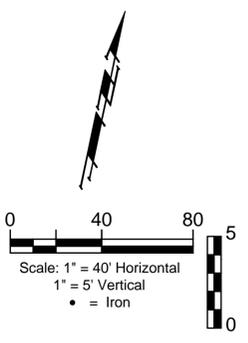
SANITARY SEWER  
 IMPROVEMENTS  
 PROJECT NUMBER:  
 468-2022-012071  
 DESIGN: AEG DRAWN: JAK  
 DATE: Jun. 19, 2023  
 SHEET OF  
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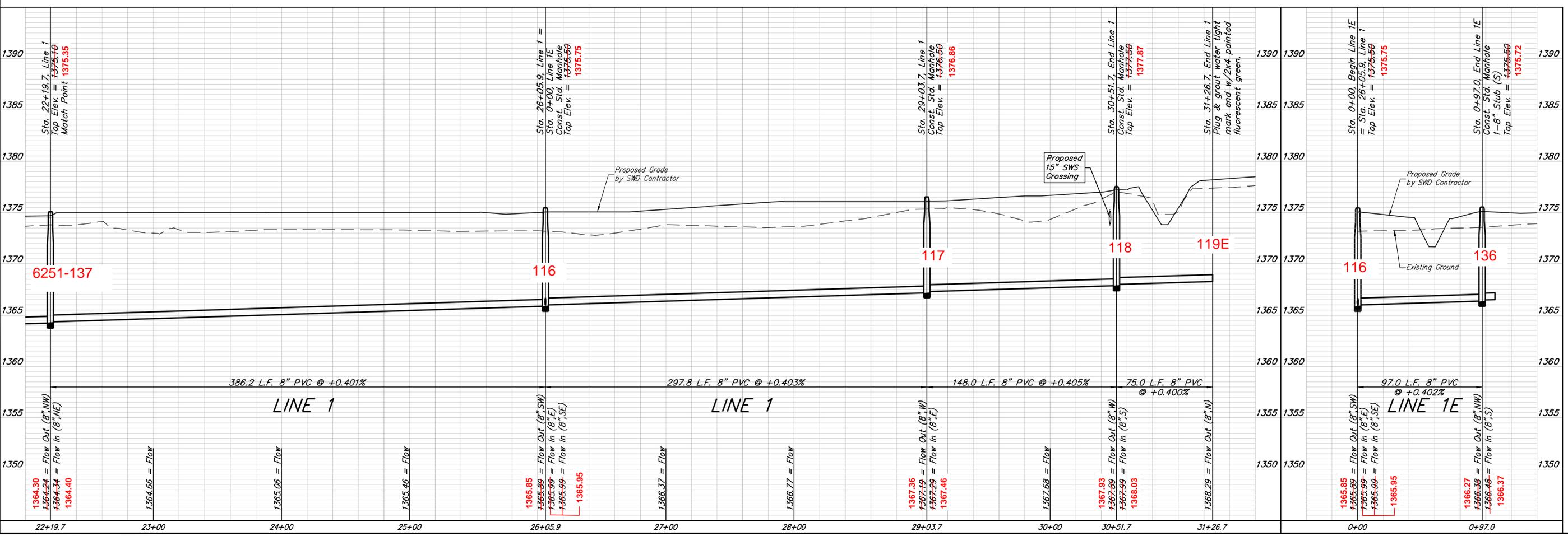
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 R-2-E.  
 Elev. = 1400.59 NAVD

RR spike in E. face of power pole,  
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 & 49± E. of W. line, SW1/4, SEC.  
 34, TWP. 26-S, R-2-E.  
 Elev. = 1398.64 NAVD88

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 294± S. of N. line, SW1/4, &  
 48± E. of W. line, SW1/4, SEC. 34,  
 TWP. 26-S, R-2-E.  
 Elev. = 1386.14 NAVD88



**POND #3 DATA:**  
 STATIC POOL ELEVATION 1370.0  
 100-YR ELEVATION 1374.0  
 BOTTOM ELEVATION 1359.0



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Brookfield South Addition & Brookfield South 2nd Addition Phase I

**LINE 1 & LINE 1E**

SANITARY SEWER IMPROVEMENTS

PROJECT NUMBER:  
 468-2022-012071

DESIGN: AEG DRAWN: JAK

DATE: Jun. 19, 2023

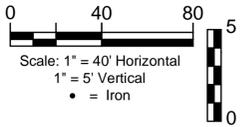
SHEET 5 OF 28

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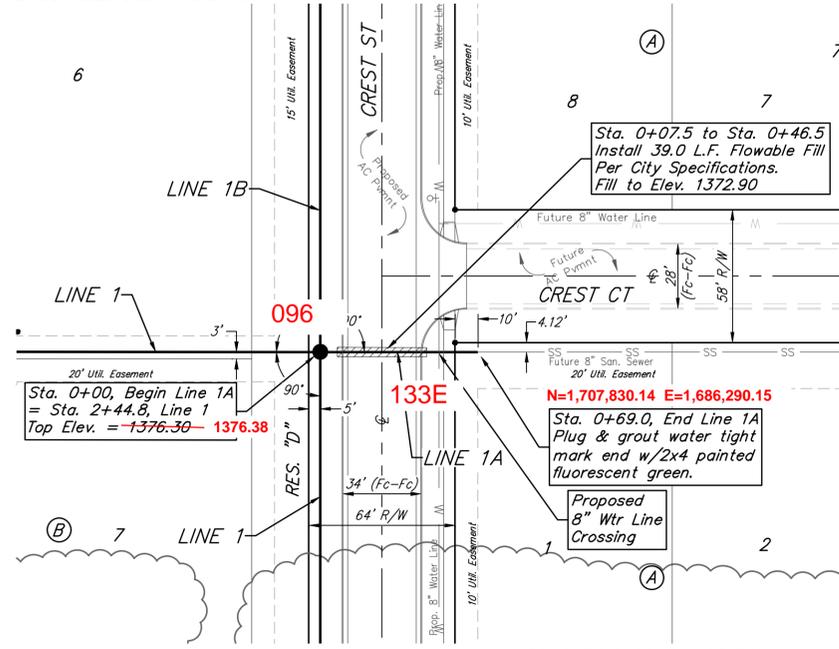
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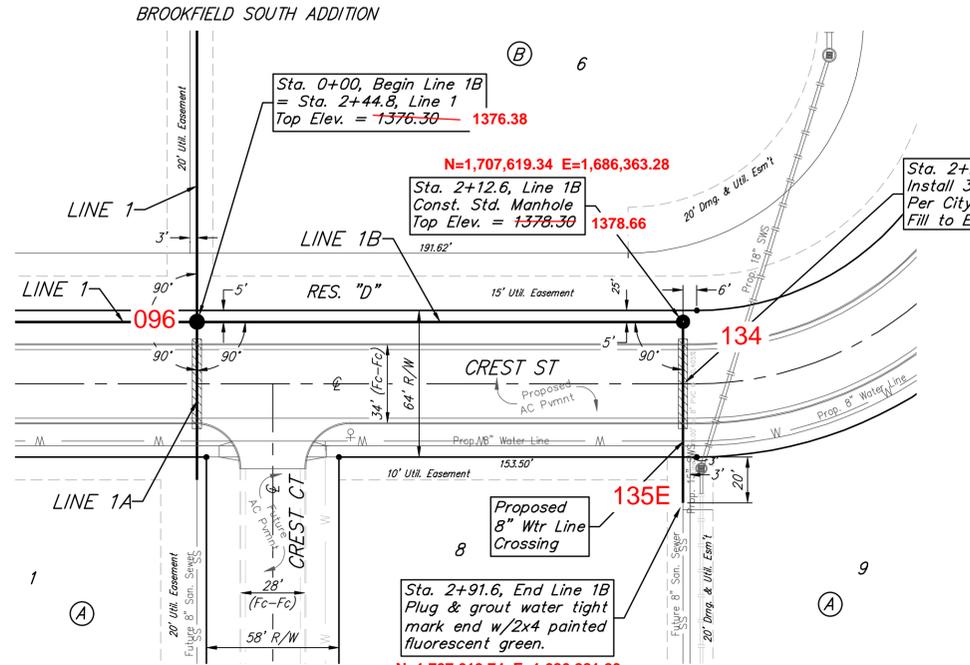
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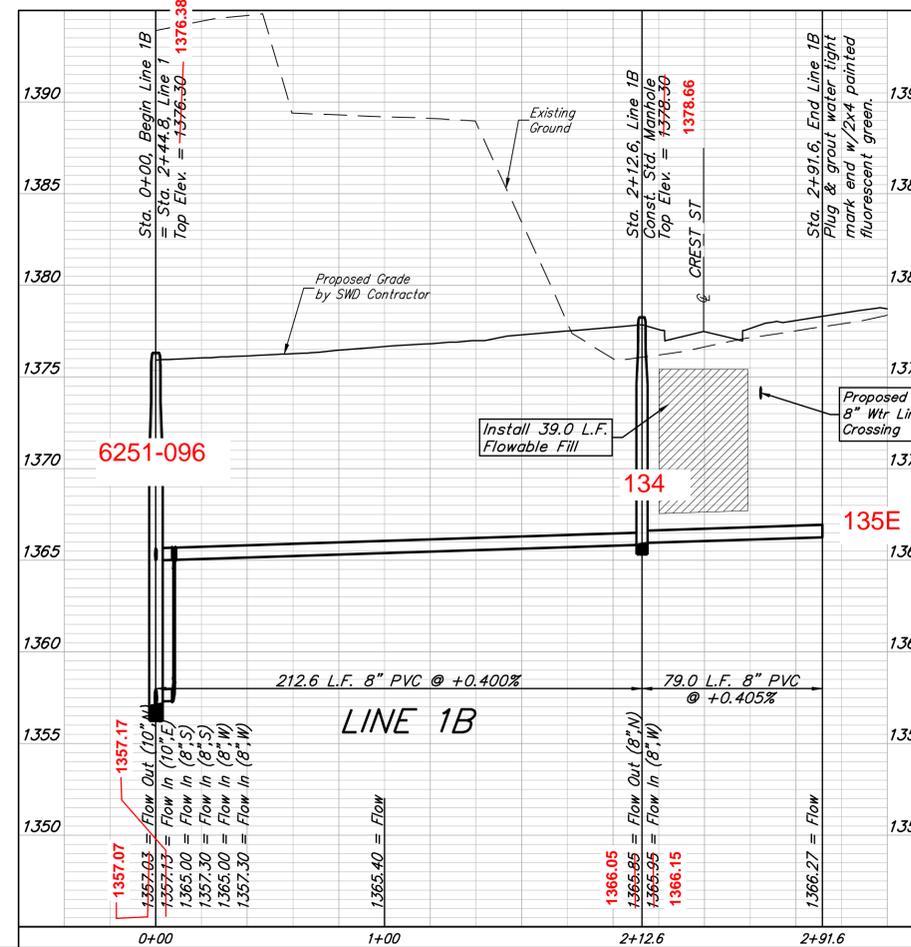
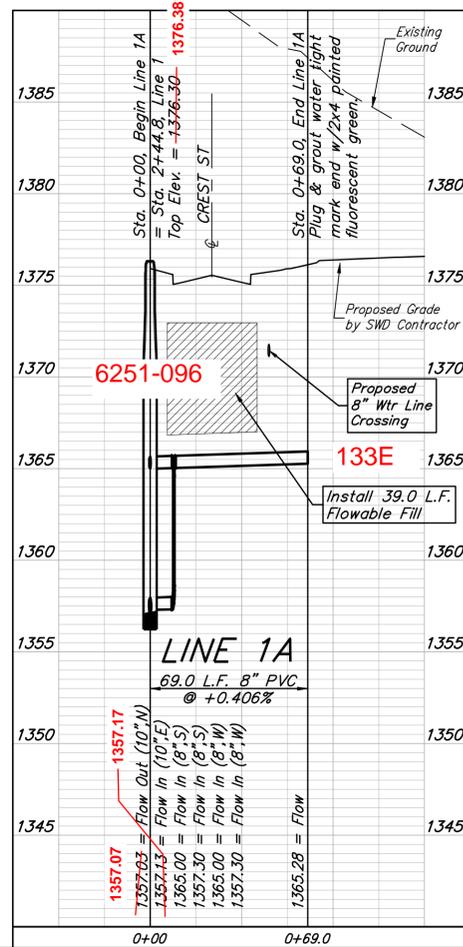
**BROOKFIELD SOUTH ADDITION**



**BROOKFIELD SOUTH ADDITION**



**BROOKFIELD SOUTH ADDITION**



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Brookfield South Addition &  
 Brookfield South 2nd Addition  
 Phase I

**LINE 1A &  
 LINE 1B**

SANITARY SEWER  
 IMPROVEMENTS  
 PROJECT NUMBER:  
 468-2022-012071  
 DESIGN: AEG DRAWN: JAK  
 DATE: Jun. 19, 2023  
 SHEET 6 OF 28

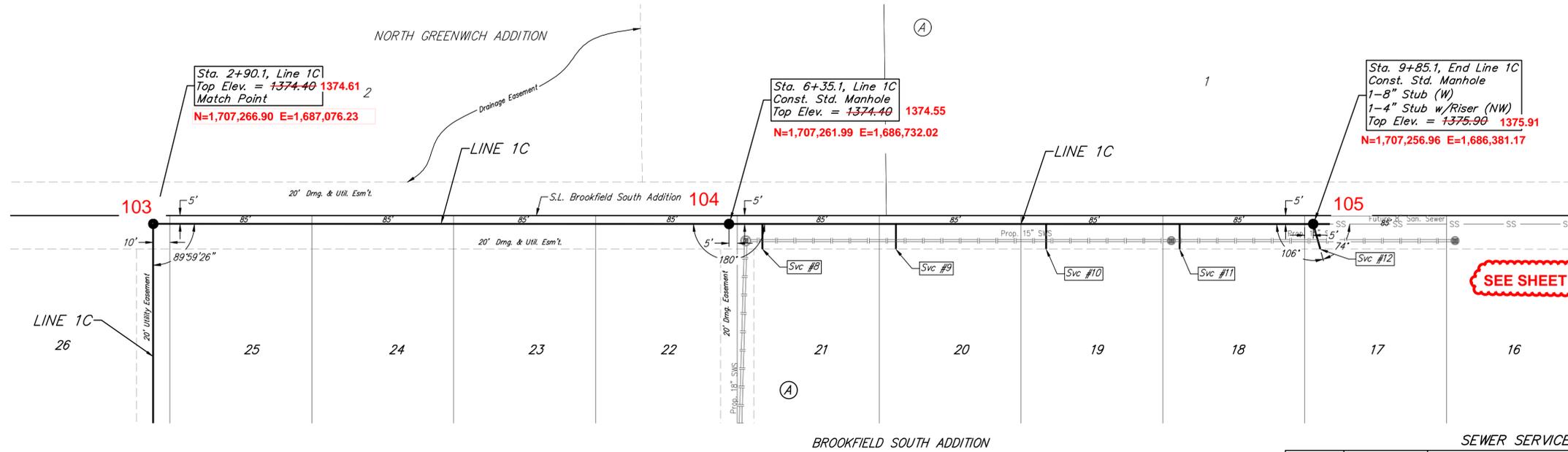
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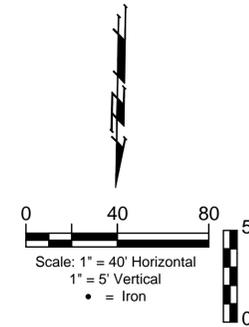
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 TWP. 26-S, R-2-E.  
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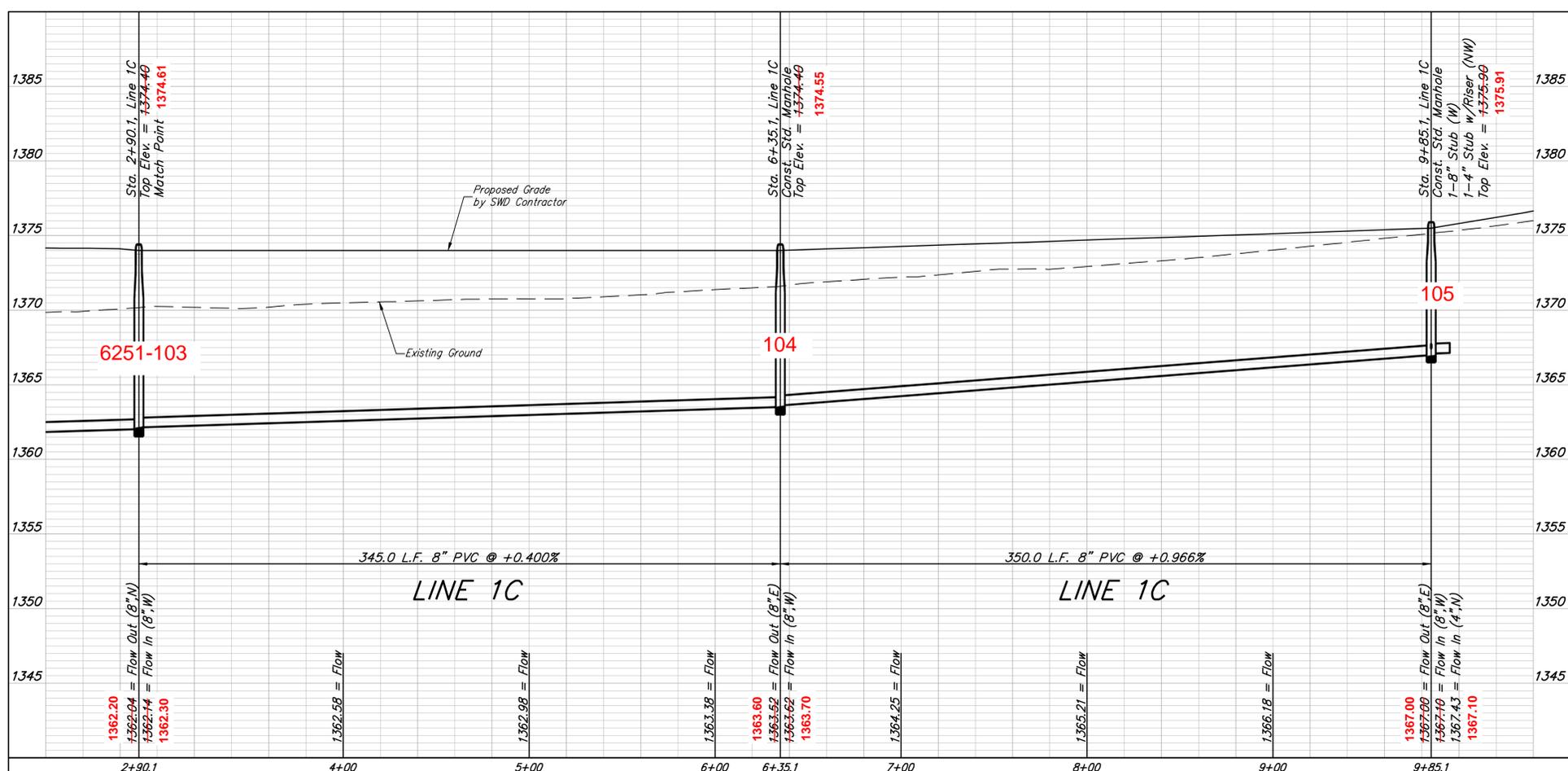
SEE SHEET 8R FOR EXTENSION OF LINE 1C



8: N=1,707,275.78 E=1,686,711.15  
 9: N=1,707,274.65 E=1,686,628.93  
 10: N=1,707,272.60 E=1,686,542.68  
 11: N=1,707,272.78 E=1,686,459.24  
 12: N=1,707,272.47 E=1,686,374.01

SEWER SERVICE TABLE

NUMBER	TYPE	LOCATION				FOR INFORMATION ONLY	
		LOT NO.	BLOCK NO.	LINE NO.	STATION/DIRECTION	APPROXIMATE LENGTH 4" PIPE	
8	8" X 4" Tee	21	A	1C	6+55.1/Rt.	2.7'	15'
9	8" X 4" Tee	20	A	1C	7+35.1/Rt.	3.4'	15'
10	8" X 4" Tee	19	A	1C	8+25.1/Rt.	2.5'	15'
11	8" X 4" Tee	18	A	1C	9+05.1/Rt.	3.3'	15'
12	4" Stub	17	A	1C	9+85.1/Rt.	4.2'	15'



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Brookfield South Addition &  
 Brookfield South 2nd Addition  
 Phase I

**LINE 1C**

SANITARY SEWER  
 IMPROVEMENTS

PROJECT NUMBER:  
 468-2022-012071

DESIGN: AEG DRAWN: JAK  
 DATE: Jun. 19, 2023

SHEET 8 OF 28

File: C:\Projects\Brookfield South 2nd Addition\Engineering\Phase 1\SS.22-03-E143.dwg

BENCHMARKS:  
RR spike in asphalt, SW Cor.,  
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R-2-E.  
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294± S. of N. line, SW1/4, &  
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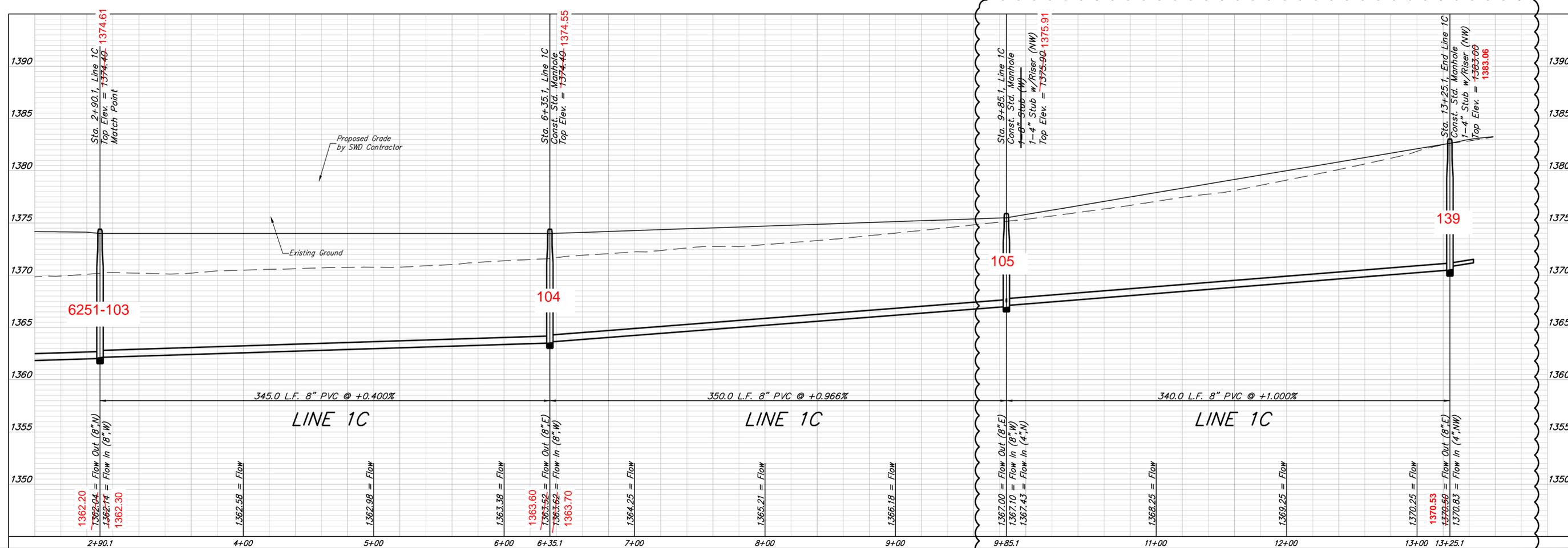
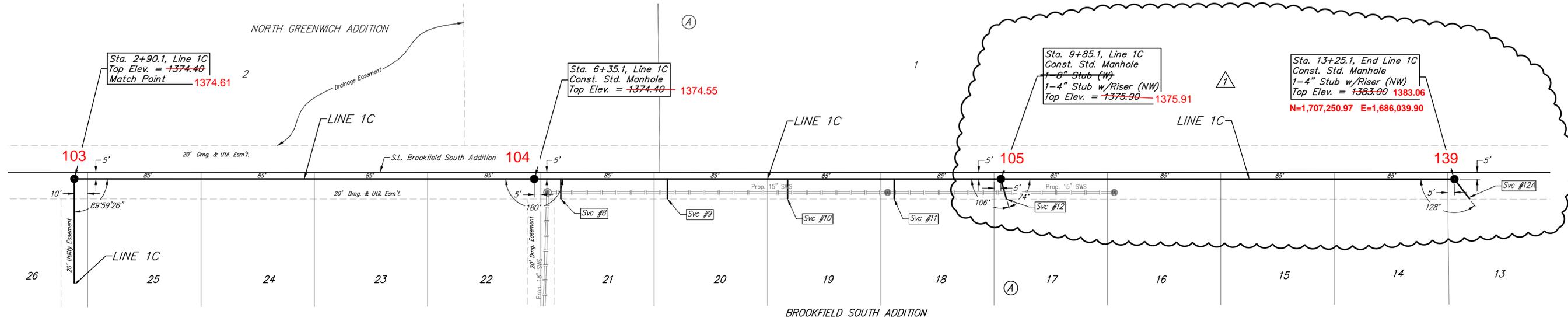
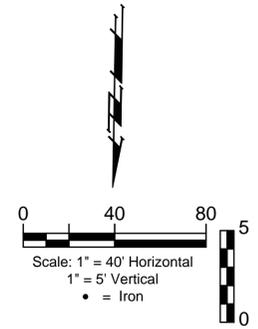
SEWER SERVICE TABLE

NUMBER	TYPE	LOCATION				FOR INFORMATION ONLY	
		LOT NO.	BLOCK NO.	LINE NO.	STATION/DIRECTION	APPROXIMATE LENGTH 4" PIPE	VERTICAL
8	8" X 4" Tee	21	A	1C	6+55.1/Rt.	2.7'	15'
9	8" X 4" Tee	20	A	1C	7+35.1/Rt.	3.4'	15'
10	8" X 4" Tee	19	A	1C	8+25.1/Rt.	2.5'	15'
11	8" X 4" Tee	18	A	1C	9+05.1/Rt.	3.3'	15'
12	4" Stub	17	A	1C	9+85.1/Rt.	4.2'	15'
12A	4" Stub	13	A	1C	13+25.1/Rt.	8.2'	19'

12A: N=1,707,265.17 E=1,686,029.21

REVISION RECORD

NO.	DATE	DESCRIPTION	DR.	BY
1	1/25/24	Addition of 1-Std. Manhole and 1-4" Stub w/Riser at Sta. 13+25.1, Line 1C and 340.0 L.F. 8" PVC from Sta. 9+85.1 to Sta. 13+25.1, Line 1C. Delete 1-8" Stub (W) at Sta. 9+85.1, Line 1C	JAK	AEG





**BAUGHMAN  
COMPANY**

315 Ellis St.  
Wichita, KS 67211  
316-262-7271  
BaughmanCo.com

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Brookfield South Addition &  
Brookfield South 2nd Addition  
Phase I

**LINE 1C**

SANITARY SEWER  
IMPROVEMENTS

PROJECT NUMBER:  
468-2022-012071

DESIGN: AEG DRAWN: JAK

DATE: Jun. 19, 2023

SHEET 8R OF 28

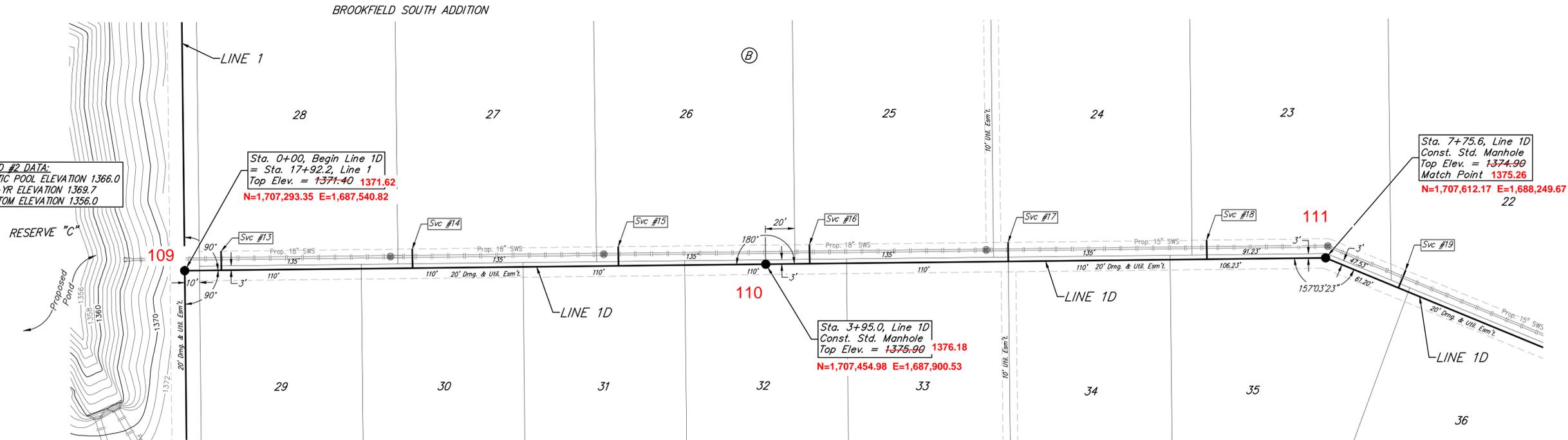
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**BENCHMARKS:**  
 RR spike in asphalt, SW Cor.,  
 N1/2, SW1/4, Sec. 34, TWP. 26-S,  
 R-2-E.  
 Elev. = 1400.59 NAVD

RR spike in E. face of power pole,  
 174± N. of S. line, N1/2, SW1/4  
 & 49± E. of W. line, SW1/4, SEC.  
 34, TWP. 26-S, R-2-E.  
 Elev. = 1398.64 NAVD88

RR spike in S. face of power pole,  
 294± S. of N. line, SW1/4, &  
 48± E. of W. line, SW1/4, SEC. 34,  
 TWP. 26-S, R-2-E.  
 Elev. = 1386.14 NAVD88

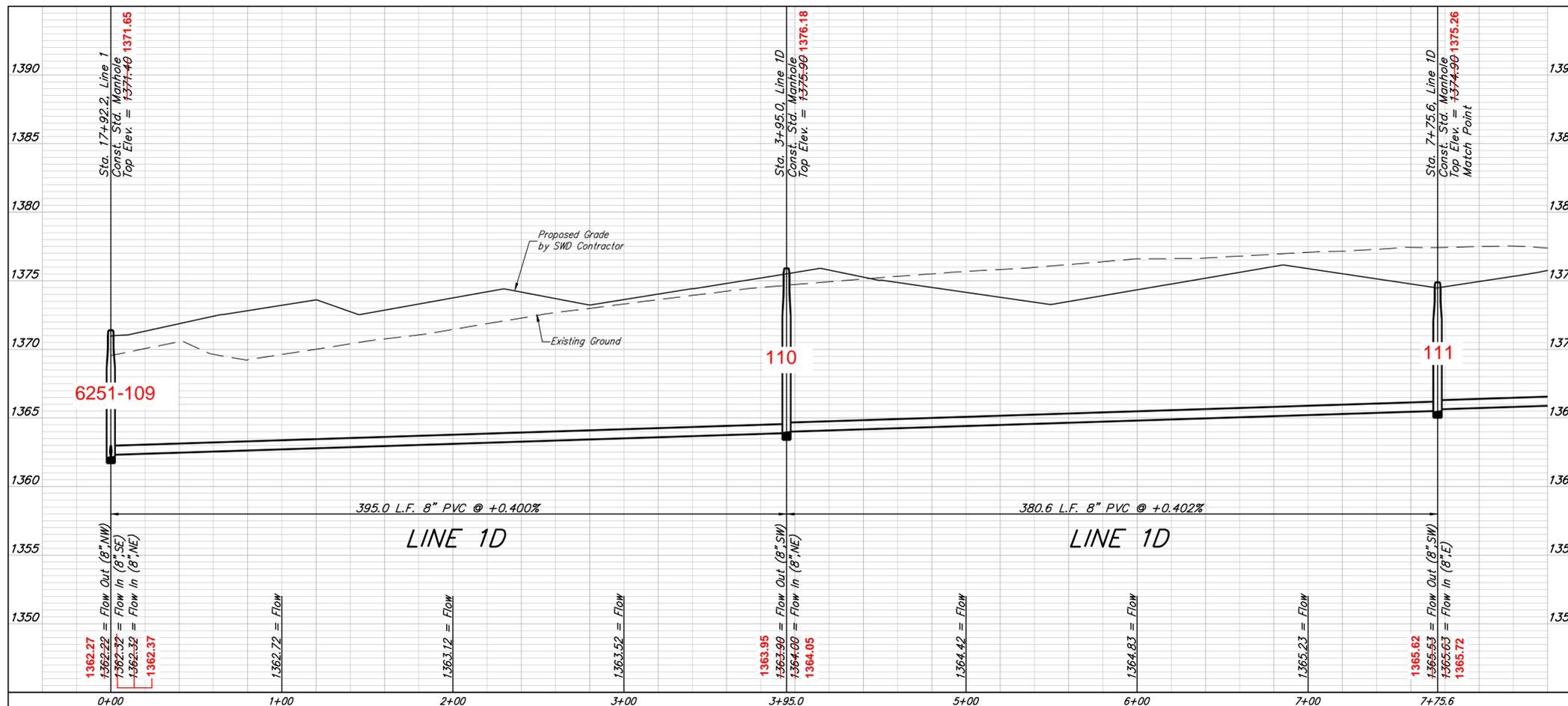
**POND #2 DATA:**  
 STATIC POOL ELEVATION 1366.0  
 100-YR ELEVATION 1369.7  
 BOTTOM ELEVATION 1356.0



SEWER SERVICE TABLE

NUMBER	TYPE	LOCATION			FOR INFORMATION ONLY	
		LOT NO.	BLOCK NO.	LINE NO.	STATION/DIRECTION	APPROXIMATE LENGTH 4" PIPE
13	8" X 4" Tee	28	B	1D	0+25.0/Lt.	4.9' 13'
14	8" X 4" Tee	27	B	1D	1+55.0/Lt.	5.7' 13'
15	8" X 4" Tee	26	B	1D	2+95.0/Lt.	5.9' 13'
16	8" X 4" Tee	25	B	1D	4+25.0/Lt.	7.6' 13'
17	8" X 4" Tee	24	B	1D	5+60.0/Lt.	4.5' 13'
18	8" X 4" Tee	23	B	1D	6+95.0/Lt.	6.2' 13'

13: N=1,707,315.02 E=1,687,558.22  
 14: N=1,707,368.92 E=1,687,677.48  
 15: N=1,707,426.50 E=1,687,804.55  
 16: N=1,707,479.86 E=1,687,922.45  
 17: N=1,707,530.05 E=1,688,036.28  
 18: N=1,707,590.87 E=1,688,168.93



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Brookfield South Addition &  
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 Phase I

**LINE 1D**

SANITARY SEWER  
 IMPROVEMENTS

PROJECT NUMBER:  
 468-2022-012071

DESIGN: AEG DRAWN: JAK

DATE: Jun. 19, 2023

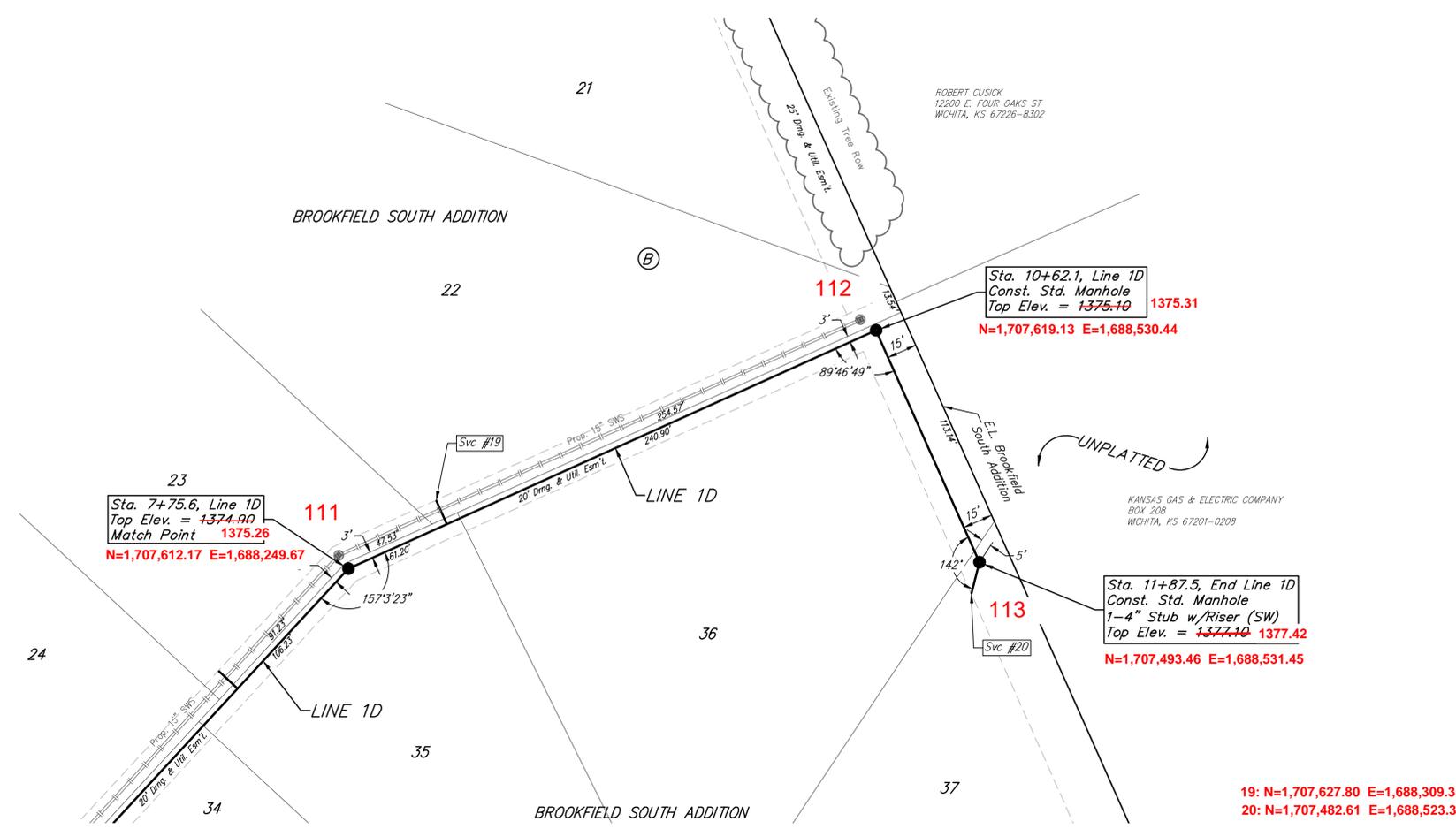
SHEET OF  
 9 28

File: E:\Projects\Brookfield South 2nd Addition\Engineering\Phase 1\SS-22-03-E143.dwg

**BENCHMARKS:**  
 RR spike in asphalt, SW Cor.,  
 N1/2, SW1/4, Sec. 34, TWP. 26-S,  
 R-2-E.  
 Elev. = 1400.59 NAVD

RR spike in E. face of power pole,  
 174± N. of S. line, N1/2, SW1/4  
 & 49± E. of W. line, SW1/4, SEC.  
 34, TWP. 26-S, R-2-E.  
 Elev. = 1398.64 NAVD88

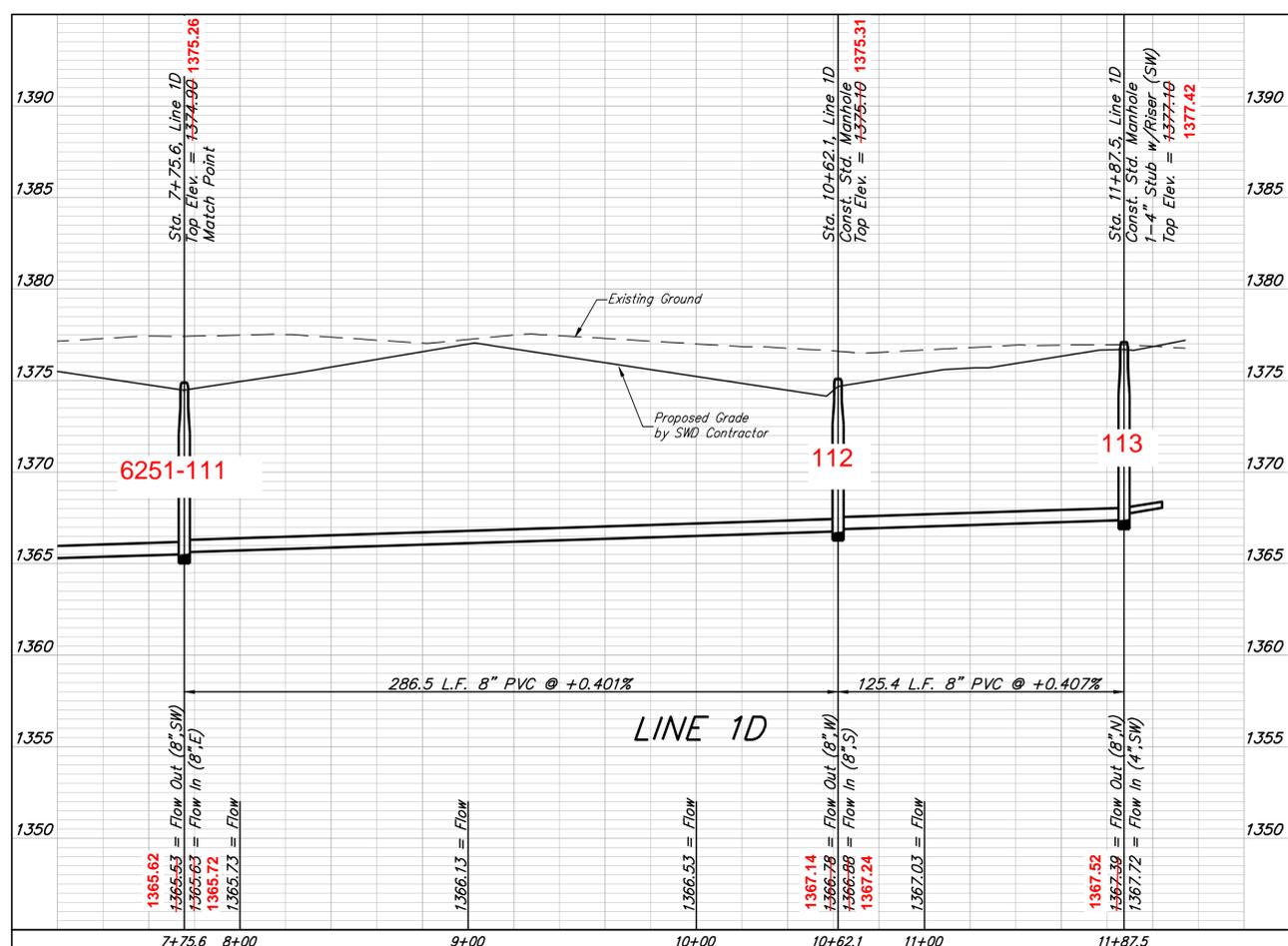
RR spike in S. face of power pole,  
 294± S. of N. line, SW1/4, &  
 48± E. of W. line, SW1/4, SEC. 34,  
 TWP. 26-S, R-2-E.  
 Elev. = 1386.14 NAVD88



**SEWER SERVICE TABLE**

NUMBER	TYPE	LOCATION				FOR INFORMATION ONLY	
		LOT NO.	BLOCK NO.	LINE NO.	STATION/DIRECTION	APPROXIMATE LENGTH 4" PIPE	
						VERTICAL	HORIZONTAL
19	8" X 4" Tee	22	B	1D	8+29.2/Lt.	6'	13'
20	4" Stub	37	B	1D	11+87.5/Rt.	4.6'	16'

19: N=1,707,627.80 E=1,688,309.35  
 20: N=1,707,482.61 E=1,688,523.35



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Brookfield South Addition &  
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 Phase I

**LINE 1D**

SANITARY SEWER  
 IMPROVEMENTS

PROJECT NUMBER:  
 468-2022-012071

DESIGN: AEG DRAWN: JAK

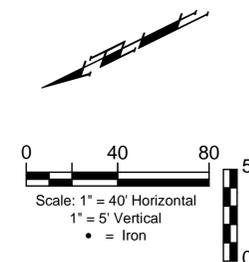
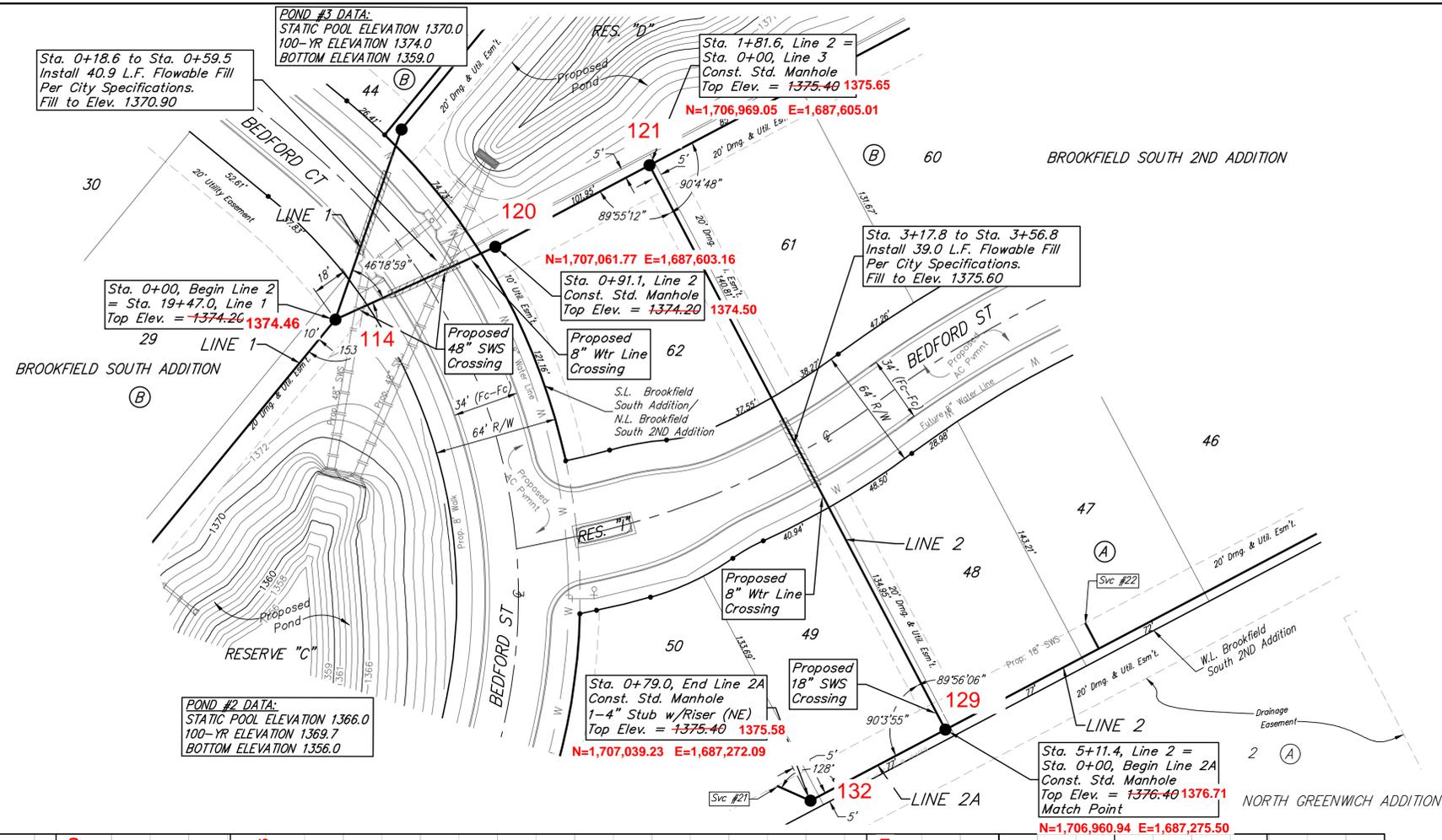
DATE: Jun. 19, 2023

SHEET 10 OF 28

**BENCHMARKS:**  
 RR spike in asphalt, SW Cor.,  
 N1/2, SW1/4, Sec. 34, TWP. 26-S,  
 R-2-E.  
 Elev. = 1400.59 NAVD

R.R. spike in E. face of power pole,  
 174'± N. of S. line, N1/2, SW1/4  
 & 49'± E. of W. line, SW1/4, SEC.  
 34, TWP. 26-S, R-2-E.  
 Elev. = 1398.64 NAVD88

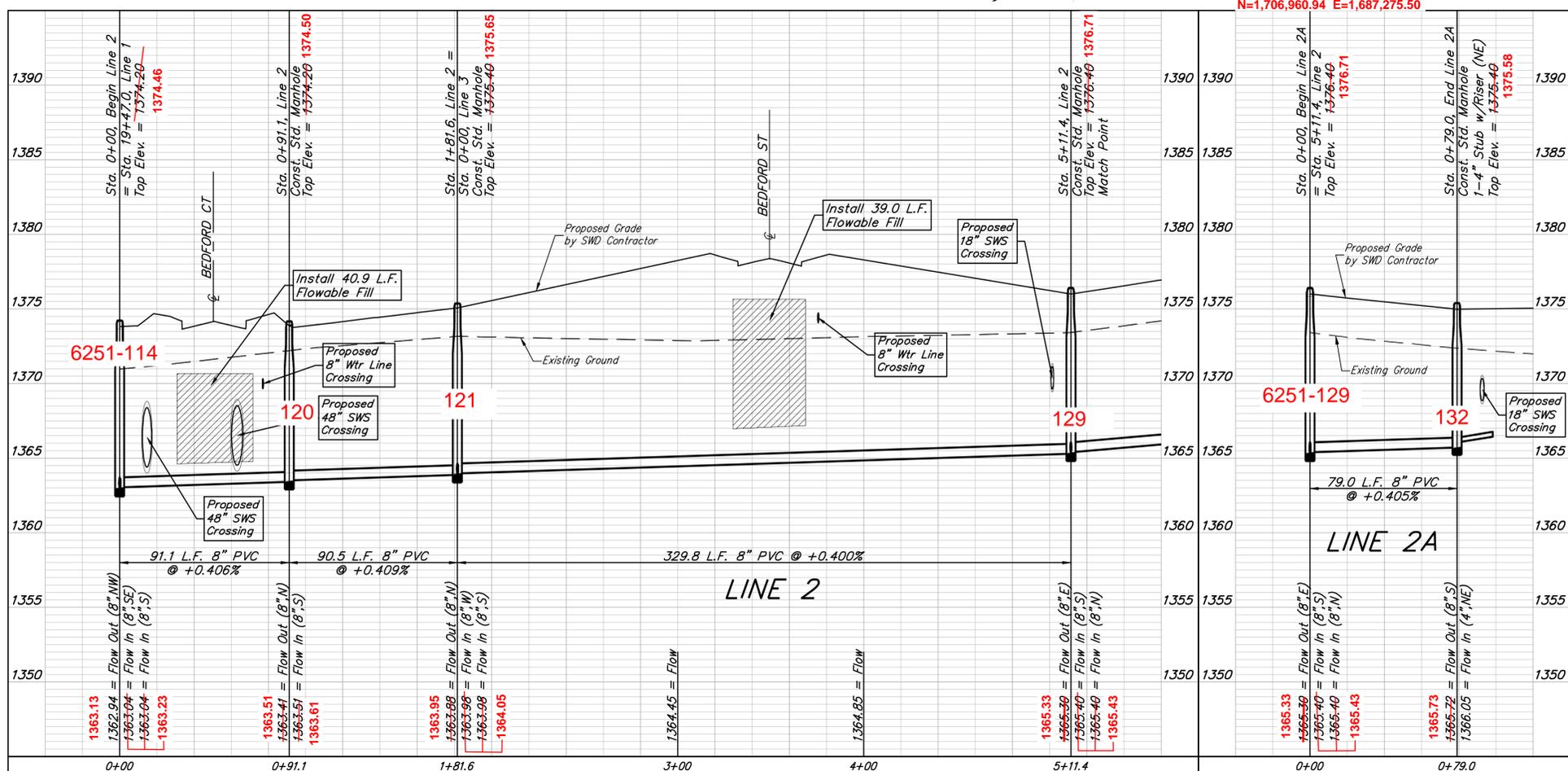
R.R. spike in S. face of power pole,  
 294'± S. of N. line, SW1/4, &  
 48'± E. of W. line, SW1/4, SEC. 34,  
 TWP. 26-S, R-2-E.  
 Elev. = 1386.14 NAVD88



SEWER SERVICE TABLE

NUMBER	TYPE	LOCATION				FOR INFORMATION ONLY	
		LOT NO.	BLOCK NO.	LINE NO.	STATION/ DIRECTION	APPROXIMATE LENGTH 4" PIPE	VERTICAL
21	4" Stub	50	A	2A	0+77.0/Rt.	1'	19'

21: N=1,707,052.73 E=1,687,287.73



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Brookfield South Addition &  
 Brookfield South 2nd Addition  
 Phase I

**LINE 2 & LINE 2A**

SANITARY SEWER IMPROVEMENTS

PROJECT NUMBER:  
 468-2022-012071

DESIGN: AEG DRAWN: JAK

DATE: Jun. 19, 2023

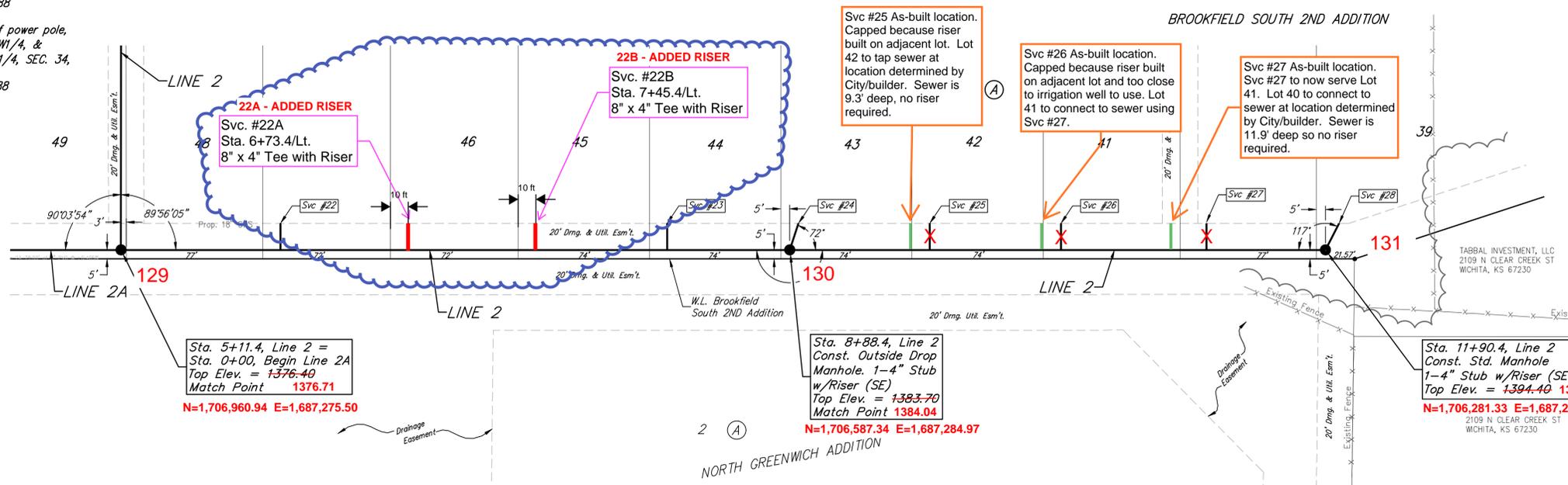
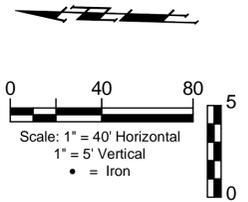
SHEET 11 OF 28

File: E:\Projects\Brookfield South 2nd Addition\Engineering\Phase 1\SS-22-03-E143.dwg

**BENCHMARKS:**  
 RR spike in asphalt, SW Cor.,  
 N1/2, SW1/4, Sec. 34, TWP. 26-S,  
 R-2-E.  
 Elev. = 1400.59 NAVD

R.R. spike in E. face of power pole,  
 174± N. of S. line, N1/2, SW1/4  
 & 49± E. of W. line, SW1/4, SEC.  
 34, TWP. 26-S, R-2-E.  
 Elev. = 1398.64 NAVD88

RR. spike in S. face of power pole,  
 294± S. of N. line, SW1/4, &  
 48± E. of W. line, SW1/4, SEC. 34,  
 TWP. 26-S, R-2-E.  
 Elev. = 1386.14 NAVD88



Sta. 5+11.4, Line 2 =  
 Sta. 0+00, Begin Line 2A  
 Top Elev. = 1376.40  
 Match Point 1376.71  
 N=1,706,960.94 E=1,687,275.50

Sta. 8+88.4, Line 2  
 Const. Outside Drop  
 Manhole. 1-4" Stub  
 w/Riser (SE)  
 Top Elev. = 1383.70  
 Match Point 1384.04  
 N=1,706,587.34 E=1,687,284.97

Sta. 11+90.4, Line 2  
 Const. Std. Manhole  
 1-4" Stub w/Riser (SE)  
 Top Elev. = 1394.40 1394.41  
 N=1,706,281.33 E=1,687,294.02  
 2109 N CLEAR CREEK ST  
 WICHITA, KS 67230

Services #25 & 26  
 Risers built in wrong location, capped upstream of 8" x 4" tee fitting.  
 Builder to tap 8" line and construct service where desired.

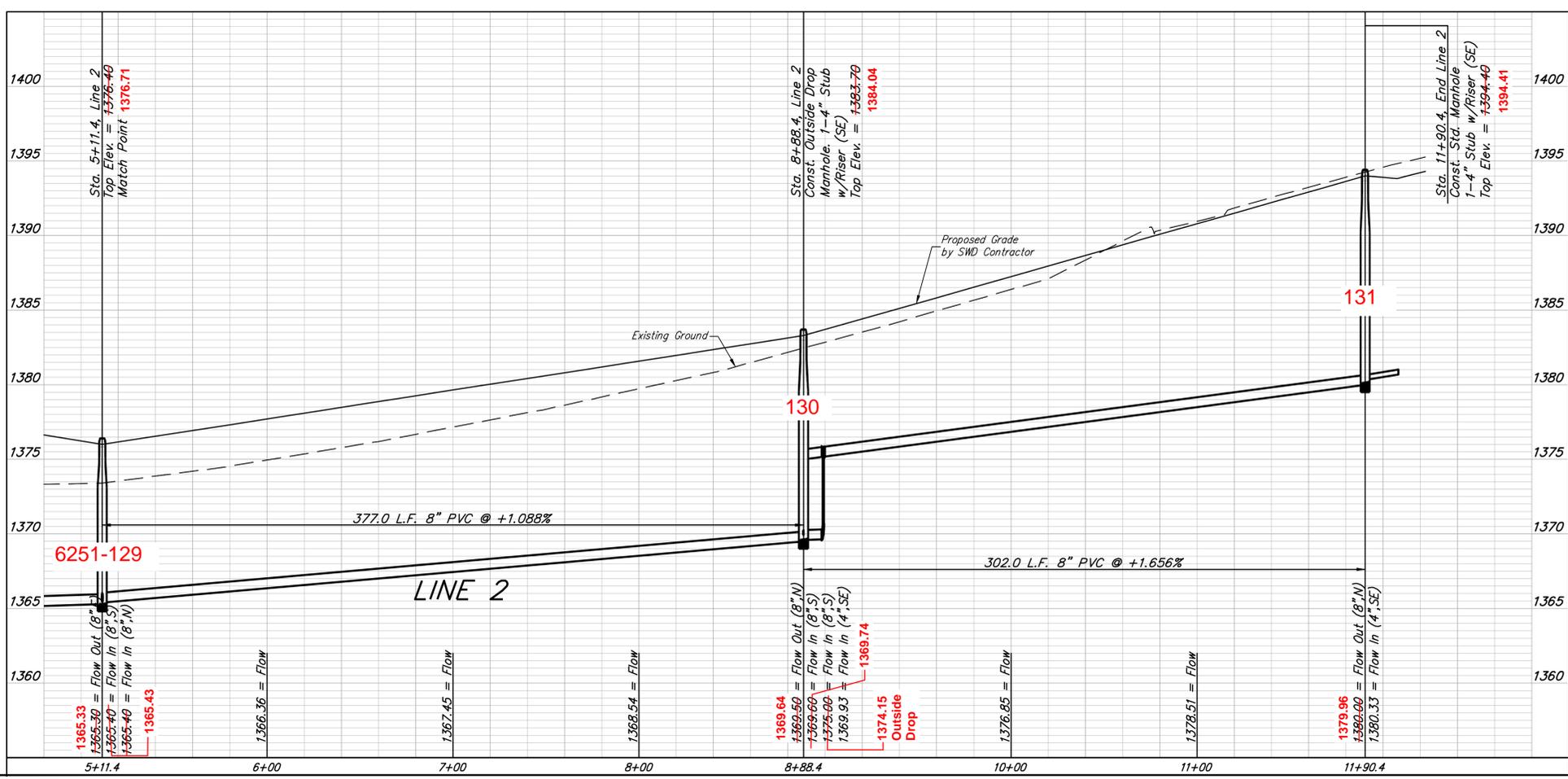
22: N=1,706,871.30 E=1,687,292.29  
 23: N=1,706,652.64 E=1,687,298.91  
 24: N=1,706,581.57 E=1,687,298.96  
 25: N=1,706,546.86 E=1,687,309.88  
 26: N=1,706,442.80 E=1,687,304.40  
 27: N=1,706,370.61 E=1,687,305.19  
 28: N=1,706,275.25 E=1,687,309.05

SEWER SERVICE TABLE

NUMBER	TYPE	LOCATION				FOR INFORMATION ONLY	
		LOT NO.	BLOCK NO.	LINE NO.	STATION/DIRECTION	APPROXIMATE LENGTH 4" PIPE	
22	8" X 4" Tee	47	A	2	6+01.4/Lt.	VERTICAL	HORIZONTAL
23	8" X 4" Tee	44	A	2	8+19.4/Lt.	4.7'	15'
24	4" Stub	43	A	2	8+31.1/Lt.	10.0'	15'
24	4" Stub	43	A	2	8+31.1/Lt.	5.7'	13'
25	8" X 4" Tee	42	A	2	9+57.1/Lt.	7.2'	15'
26	8" X 4" Tee	41	A	2	10+31.1/Lt.	7.8'	15'
27	8" X 4" Tee	41	A	2	11+03.1/Lt.	9.2'	15'
28	4" Stub	39	A	2	11+95.9/Lt.	10.4'	17'

22A: N=1,706,799.83 E=1,687,295.63  
 22B: N=1,706,726.78 E=1,687,296.36

Svc #27 As-built riser location within Lot 41, so Lot 41 will connect to this service riser.



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Brookfield South Addition &  
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 Phase I

**LINE 2**

SANITARY SEWER  
 IMPROVEMENTS  
 PROJECT NUMBER:  
 468-2022-012071

DESIGN: AEG DRAWN: JAK  
 DATE: Jun. 19, 2023

SHEET 12 OF 28

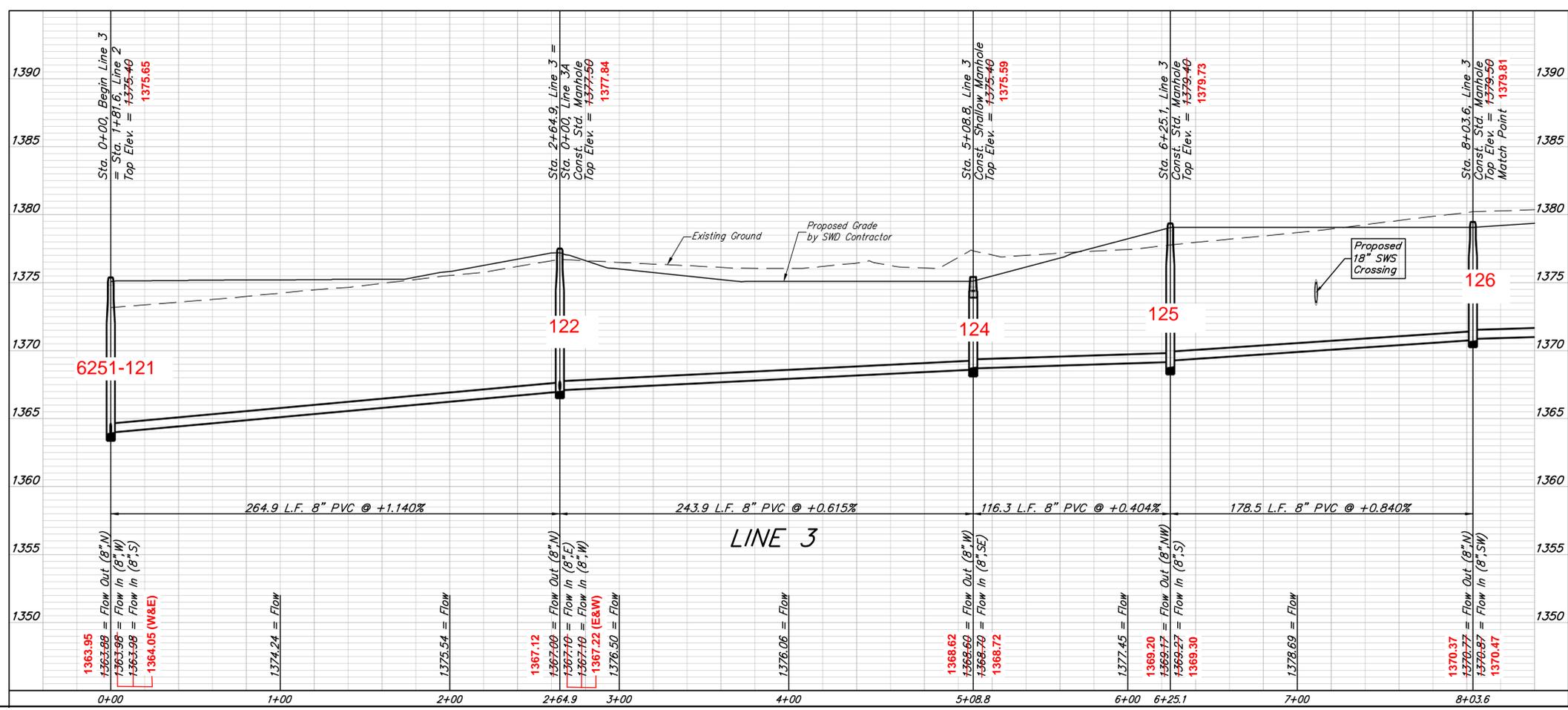
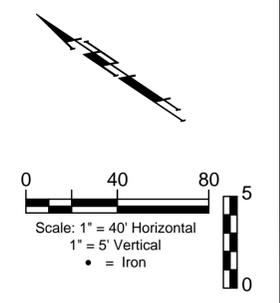
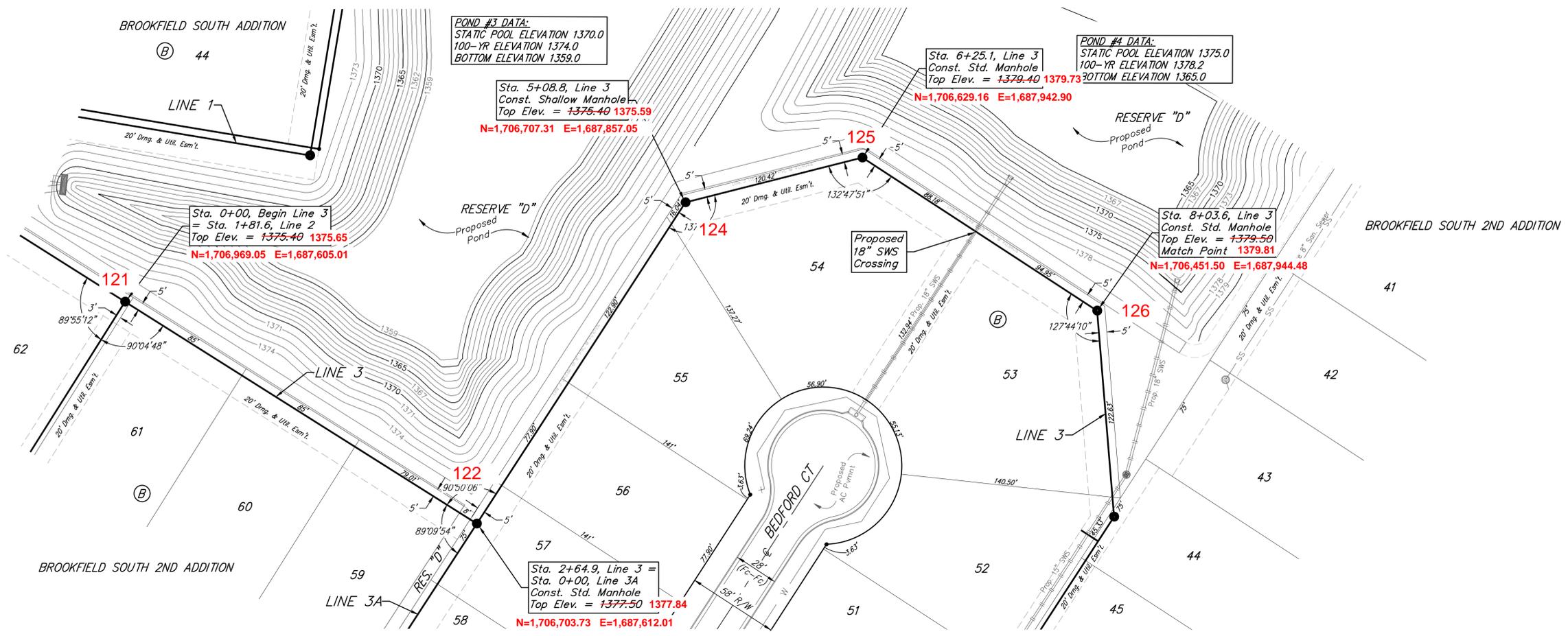
Additional as-built information added 8/13/2024 by AEG.  
 Rev. 11/1/2023, Added Risers to Lots 45-46, Blk A - AEG

File: C:\Projects\Brookfield South 2nd Addition\Engineering\Phase 1\SS-22-03-E143.dwg

**BENCHMARKS:**  
 RR spike in asphalt, SW Cor.,  
 N1/2, SW1/4, Sec. 34, TWP. 26-S,  
 R-2-E.  
 Elev. = 1400.59 NAVD

RR spike in E. face of power pole,  
 174'± N. of S. line, N1/2, SW1/4  
 & 49'± E. of W. line, SW1/4, SEC.  
 34, TWP. 26-S, R-2-E.  
 Elev. = 1398.64 NAVD88

RR spike in S. face of power pole,  
 294'± S. of N. line, SW1/4, &  
 48'± E. of W. line, SW1/4, SEC. 34,  
 TWP. 26-S, R-2-E.  
 Elev. = 1386.14 NAVD88



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Brookfield South Addition &  
 Brookfield South 2nd Addition  
 Phase I

**LINE 3**

SANITARY SEWER  
 IMPROVEMENTS

PROJECT NUMBER:  
 468-2022-012071

DESIGN: AEG DRAWN: JAK

DATE: Jun. 19, 2023

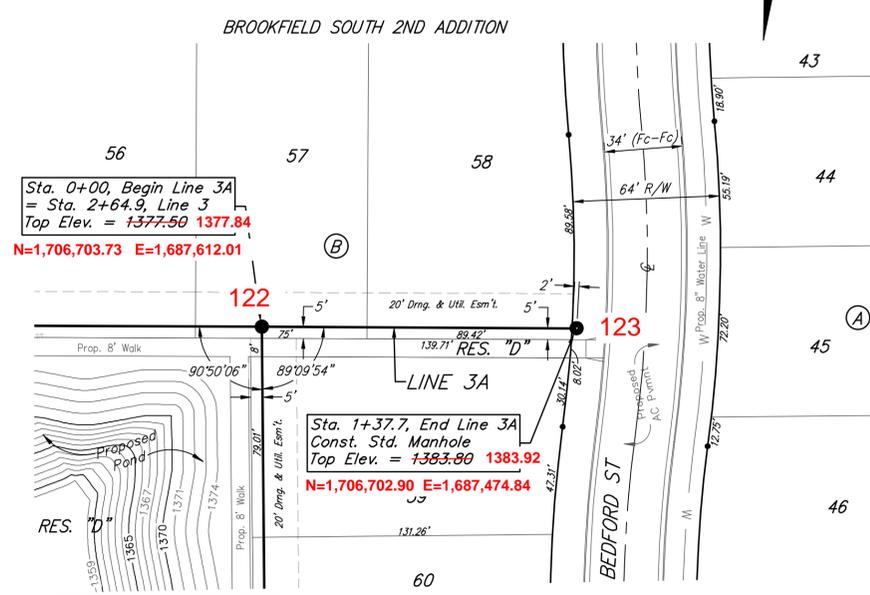
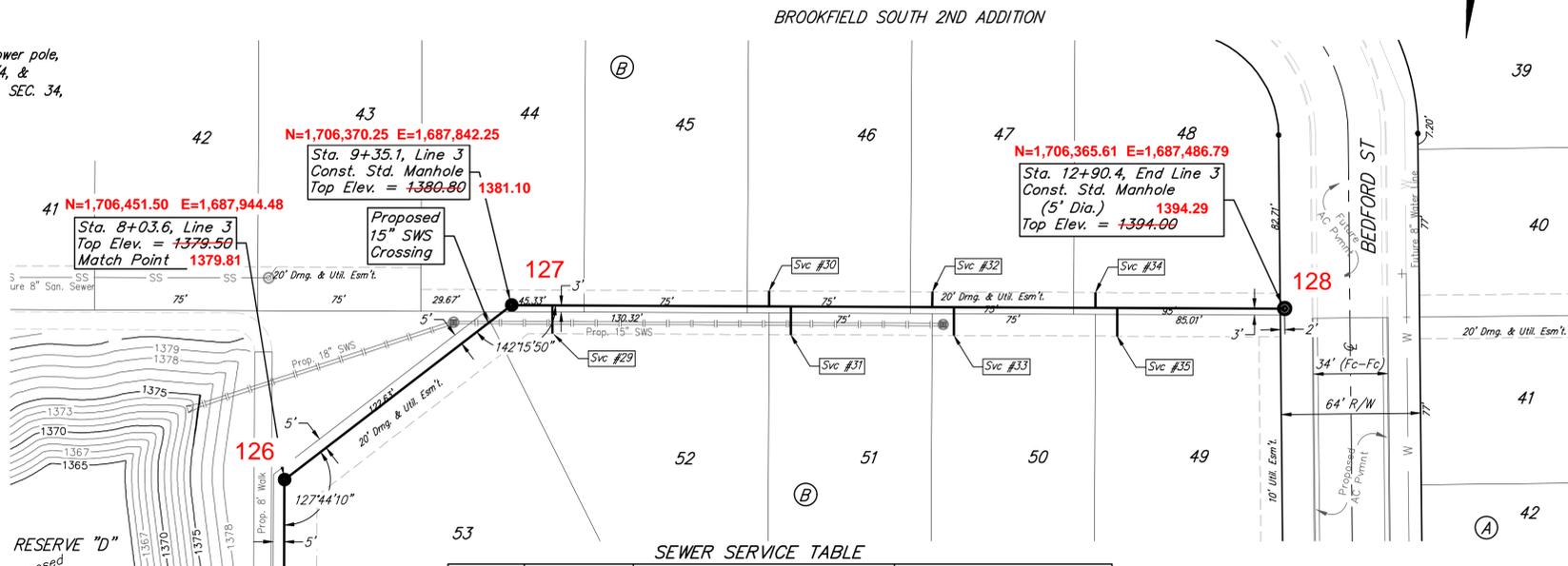
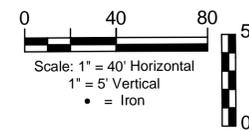
SHEET 13 OF 28

File: E:\Projects\Brookfield South 2nd Addition\Engineering\Phase 1\SS-22-03-E143.dwg

**BENCHMARKS:**  
 RR spike in asphalt, SW Cor.,  
 N1/2, SW1/4, Sec. 34, TWP. 26-S,  
 R-2-E.  
 Elev. = 1400.59 NAVD

RR spike in E. face of power pole,  
 174± N. of S. line, N1/2, SW1/4  
 & 49± E. of W. line, SW1/4, SEC.  
 34, TWP. 26-S, R-2-E.  
 Elev. = 1398.64 NAVD88

RR spike in S. face of power pole,  
 294± S. of N. line, SW1/4, &  
 48± E. of W. line, SW1/4, SEC. 34,  
 TWP. 26-S, R-2-E.  
 Elev. = 1386.14 NAVD88



**SEWER SERVICE TABLE**

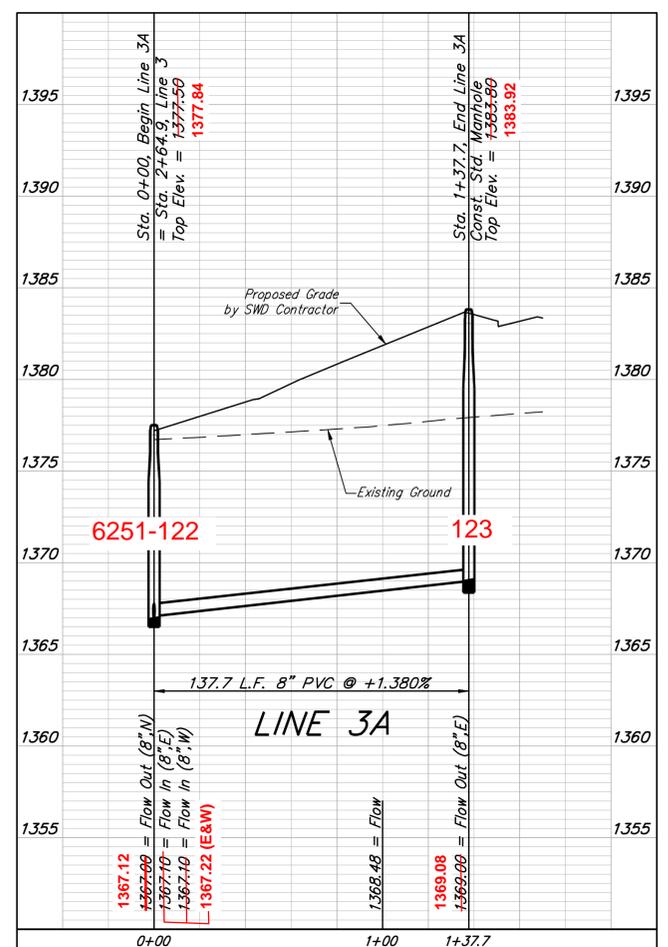
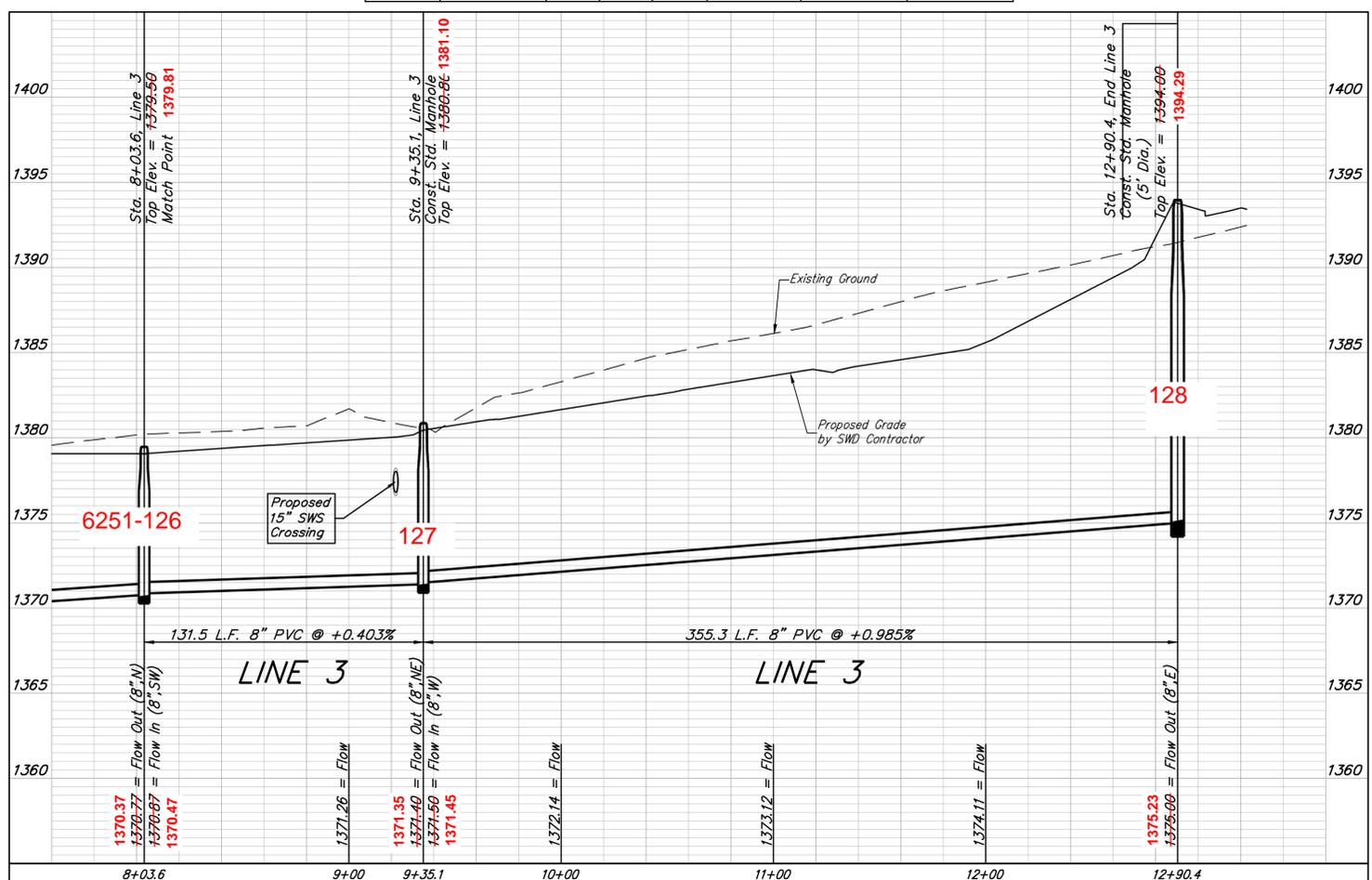
NUMBER	TYPE	LOCATION			FOR INFORMATION ONLY	
		LOT NO.	BLOCK NO.	LINE NO.	STATION/DIRECTION	APPROXIMATE LENGTH 4" PIPE
29	8" X 4" Tee	52	B	3	9+53.9/Rt.	4.6' 13'
30	8" X 4" Tee	46	B	3	10+53.4/Lt.	6.1' 7'
31	8" X 4" Tee	51	B	3	10+63.4/Rt.	5.7' 13'
32	8" X 4" Tee	47	B	3	11+28.4/Lt.	6.8' 7'
33	8" X 4" Tee	50	B	3	11+38.4/Rt.	5.8' 13'
34	8" X 4" Tee	48	B	3	12+03.4/Lt.	8.2' 7'
35	8" X 4" Tee	49	B	3	12+13.4/Rt.	7.6' 13'

**POND #4 DATA:**  
 STATIC POOL ELEVATION 1375.0  
 100-YR ELEVATION 1378.2  
 BOTTOM ELEVATION 1365.0

**BROOKFIELD SOUTH 2ND ADDITION**

29: N=1,706,382.91 E=1,687,824.04  
 30: N=1,706,362.01 E=1,687,724.56  
 31: N=1,706,381.57 E=1,687,715.07  
 32: N=1,706,360.09 E=1,687,648.47  
 33: N=1,706,380.74 E=1,687,638.60  
 34: N=1,706,359.71 E=1,687,574.26  
 35: N=1,706,379.53 E=1,687,564.26

**POND #3 DATA:**  
 STATIC POOL ELEVATION 1370.0  
 100-YR ELEVATION 1374.0  
 BOTTOM ELEVATION 1359.0



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Brookfield South Addition &  
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 Phase I

**LINE 3 &  
 LINE 3A**

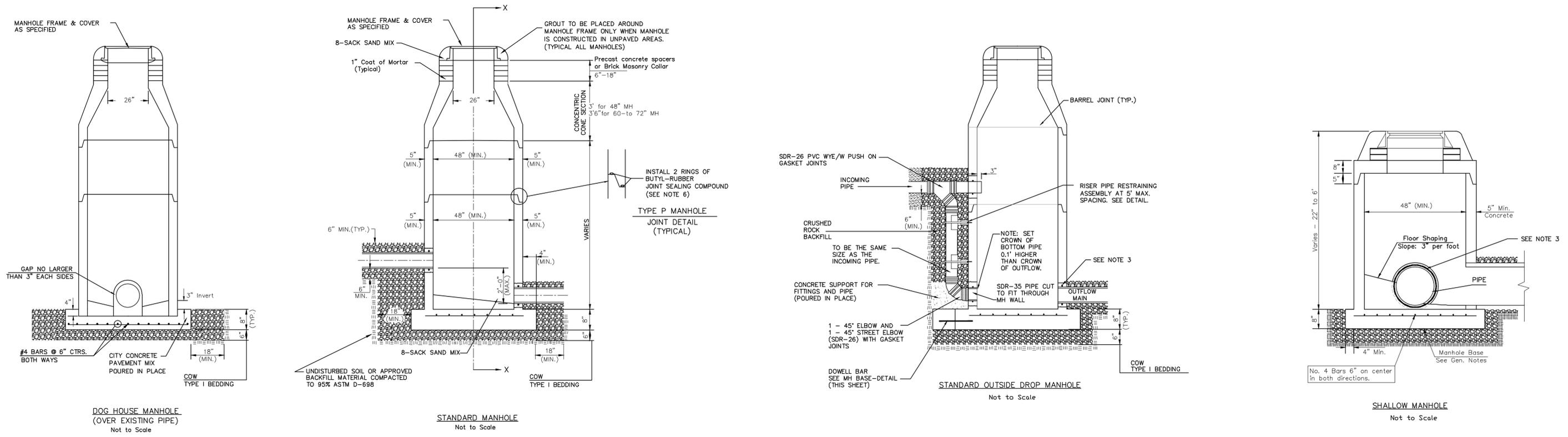
SANITARY SEWER  
 IMPROVEMENTS

PROJECT NUMBER:  
 468-2022-012071

DESIGN: AEG DRAWN: JAK

DATE: Jun. 19, 2023

SHEET 14 OF 28



**DOG HOUSE MANHOLE**  
(OVER EXISTING PIPE)  
Not to Scale

**STANDARD MANHOLE**  
Not to Scale

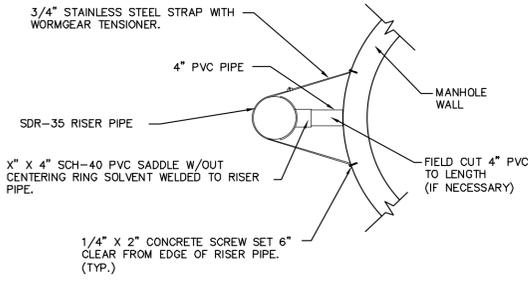
**STANDARD OUTSIDE DROP MANHOLE**  
Not to Scale

**SHALLOW MANHOLE**  
Not to Scale

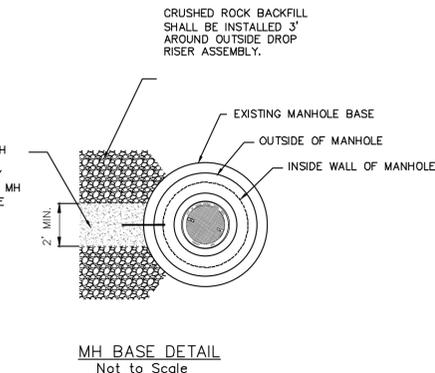
= COW TYPE I BEDDING      = UNDISTURBED SOIL

### PRECAST MANHOLE GENERAL NOTES

- ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISIONS OF A.S.T.M. C478 AS MODIFIED BY THE SPECIFICATIONS.
- NON-SHRINK GROUT SHALL BE NON-METALLIC TYPE.
- APPROVED FLEXIBLE WATERSTOP SHALL BE INSTALLED TO JOIN THE SEWER PIPE TO THE MANHOLE WALL. THE SEWER PIPE SHALL BE SUPPORTED WITH CRUSHED ROCK A MINIMUM OF 3 FEET FROM THE MANHOLE WALL AND TO THE FIRST JOINT FOR V.C.P. SUCH THAT THE JOINT REMAINS FLEXIBLE.
- ALL INSIDE SURFACES OF THE CONCRETE MANHOLE WHICH WOULD BE EXPOSED TO SEWER GAS SHALL BE COATED PER SECTION 804.4 OF STANDARD SPECIFICATIONS.
- EXTERIOR MANHOLE WALLS SHALL BE COATED PER SECTION 804.4 OF STANDARD SPECIFICATIONS.
- JOINT SEALING COMPOUND SHALL BE PER 804.4 OF STANDARD SPECIFICATIONS.
- ALL MANHOLE SECTION JOINTS THAT WILL BE IN GROUNDWATER OR GREATER THAN 12' DEEP SHALL BE WRAPPED WITH AN EXTERNAL JOINT SEAL PER SECTION 804.4 OF STANDARD SPECIFICATIONS AS INDICATED BY THE PLANS.
- PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO THE MANHOLE BASE FOR DOG HOUSE MANHOLES.
- TOP OF MANHOLE FLOOR SLAB SHALL BE AT LEAST 3 INCHES BELOW THE FLOW LINE OF THE OUTLET PIPE TO INSURE SUFFICIENT MINIMUM THICKNESS OF SHAPED INVERT.
- LIFTING HOLES SHALL BE FILLED WITH NON-SHRINK GROUT AND THE INTERIOR SURFACE COATED AS SPECIFIED.
- MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 8 SACKS OF CEMENT PER CUBIC YARD. CONCRETE USED IN MANHOLE BASES SHALL CONFORM TO THE REQUIREMENTS OF CONCRETE FOR CONCRETE PAVEMENT CONSTRUCTION AS SPECIFIED IN THE CITY STANDARD PAVING SPECIFICATIONS USING CITY CONCRETE PAVEMENT MIX WITHOUT AIR ENTRAINING ADMIXTURE. MORTAR SHALL BE PLACED AROUND THE MANHOLE RING AS SHOWN ON THE DRAWINGS WHEN MANHOLES ARE CONSTRUCTED IN UNPAVED AREAS. COMPLETED MANHOLE SHALL BE WITHOUT LEAKS AND WATER TIGHT.
- REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASES AND SHALL CONSIST OF NO.4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. THE MANHOLE BASE REINFORCEMENT SHALL BE PLACED AT LEAST 3" ABOVE THE BOTTOM OF THE MANHOLE BASE. ALL COSTS FOR FURNISHING AND INSTALLING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
- WALL THICKNESS SHALL BE 1" GREATER THAN MANHOLE DIAMETER IN FEET.
- OPENINGS SHALL BE CORE DRILLED INTO THE MANHOLE WALL WHEN OUTSIDE DROPS ARE CONSTRUCTED ON EXISTING MANHOLES. SUCH OPENINGS DRILLED INTO EXISTING MANHOLES SHALL BE AS SMALL AS PRACTICAL TO FACILITATE INSTALLING AND GROUTING THE NEW PIPE IN PLACE. WATERSTOP GASKETS SHALL BE USED WITH P.V.C. PIPE. THE NEW PIPE SHALL BE GROUTED INTO THE OPENING USING AN APPROVED NONSHRINK GROUT FOR THE FULL MANHOLE WALL THICKNESS. THE EXTERIOR OF THE COMPLETED CONNECTION SHALL BE SEALED WITH AN APPROVED BITUMINOUS COATING SUCH THAT THE CONNECTION WILL BE WATER TIGHT. FLOOR OF MANHOLE SHALL BE MODIFIED TO FORM NEW FLOW CHANNEL FOR THE NEW CONNECTION AS INDICATED BY THE DRAWING. THIS WORK, INCLUDING MODIFICATION OF MANHOLE FLOOR, SHALL BE PAID FOR AT THE UNIT PRICE BID FOR OUTSIDE DROP STACK CONSTRUCTED ON EXISTING MANHOLE.
- THE FLOORS OF ALL MANHOLES SHALL BE SHAPED WITH FLOW CHANNELS SUCH THAT THE MANHOLES WILL BE SELF CLEANING AND FREE OF AREAS WHERE SOLIDS COULD BE DEPOSITED AS SEWAGE FLOWS THROUGH THE MANHOLE FROM ALL INLET PIPES TO THE OUTLET PIPE. FLOW CHANNELS SHALL BE FORMED TO MATCH THE BOTTOM HALVES OF THE INFLOWING PIPES AND THE OUTFLOWING PIPE AS SHOWN BY THE DRAWINGS. MANHOLE FLOORS SHALL HAVE SLOPES OF 3 INCHES PER FOOT IN THE AREAS OUTSIDE OF THE FLOW CHANNELS SLOPED TOWARD THE FLOW CHANNELS. PIPES LAID THROUGH MANHOLES SHALL HAVE THE TOP HALF REMOVED TO NEAT LINES FOR THE FULL INSIDE DIAMETER OF THE MANHOLE. MANHOLE FLOORS SHALL THEN BE SHAPED AROUND THE BOTTOM HALF OF THE PIPE WHICH FORMS THE FLOW CHANNEL.
- MANHOLE COVER CASTINGS AND MANHOLE FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE STANDARD DETAIL DRAWING.
- THE VERTICAL DROP IN STANDARD MANHOLES SHALL NOT EXCEED 2' REGARDLESS OF PIPE SIZE. THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
- STANDARD MANHOLES SHALL BE BID AS STANDARD MANHOLES FOR THE TYPE AND DIAMETER INDICATED. OUTSIDE DROP MANHOLES SHALL BE BID AS STANDARD OUTSIDE DROP MANHOLES FOR THE TYPE AND DIAMETER INDICATED. ALL MANHOLE DIAMETERS WILL BE 4' UNLESS INDICATED OTHERWISE.
- PRECAST CONCRETE SPACERS OR BRICK MASONRY COLLAR SHALL BE INSTALLED BETWEEN THE CAST IRON FRAME AND THE CONCENTRIC CONE. THE COLLAR WILL HAVE 8" WALLS AND A VERTICAL HEIGHT OF 6" MINIMUM AND 18" MAXIMUM. A 1" COAT OF MORTAR WILL BE PLASTERED ON THE OUTSIDE OF THE COLLAR. THE USE OF PRE-CAST CONCRETE SPACERS FOR MANHOLE TOP ADJUSTMENT IS ALSO ALLOWED.
- THE FULL DIAMETER OF THE MANHOLE SHALL EXTEND THE ENTIRE DEPTH OF THE MANHOLE TO THE CONE SECTION. NO REDUCTION IN MANHOLE DIAMETER WILL BE ALLOWED.



**RISER PIPE RESTRAINING ASSEMBLY**  
Not to Scale

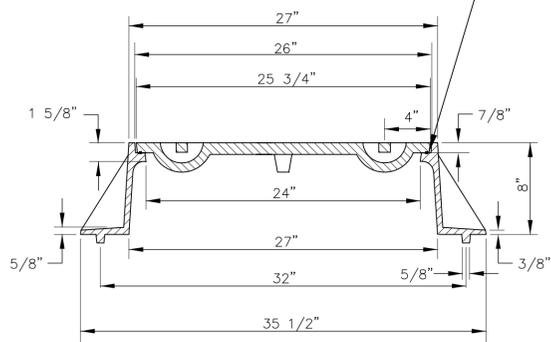
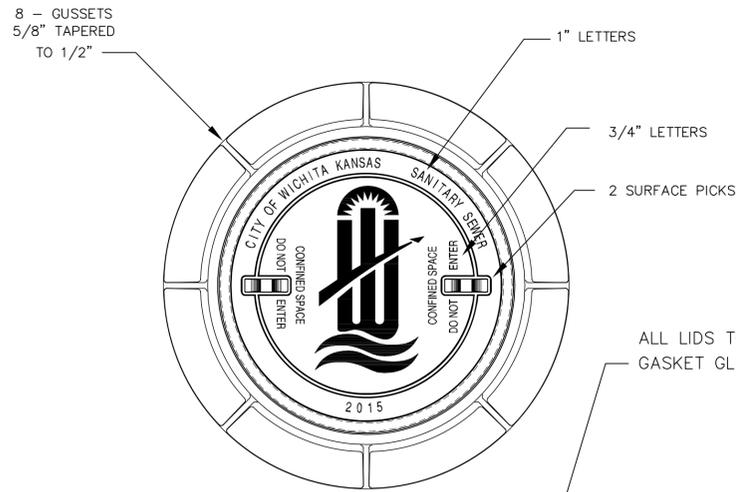


**MH BASE DETAIL**  
Not to Scale

SANITARY SEWER MANHOLE DIAMETERS		
DIAMETER	DEPTH	PIPE SIZE
4'	0'-15'	8"-18"
5'	>15'-30'	21"-30"
6'	>30'	36"-60"

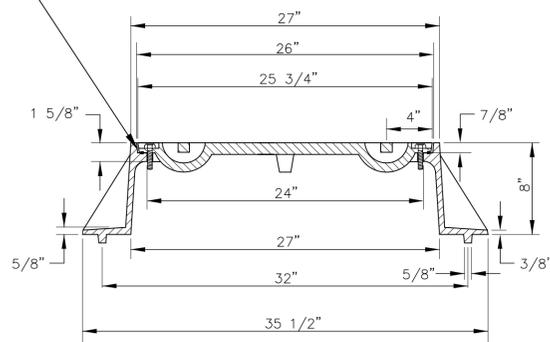
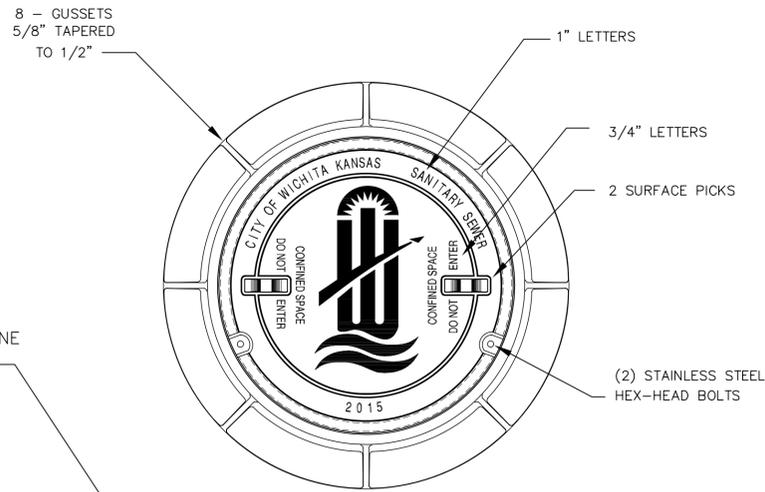


REVISION NOVEMBER 2019	RISER PIPE RESTRAINING ASSEMBLY REVISED ON MANHOLE DRAWING		
<p><b>CITY OF WICHITA</b> PUBLIC WORKS &amp; UTILITIES ENGINEERING DIVISION</p>	<p><b>PRECAST SANITARY SEWER MANHOLE</b></p> <p>CITY ENGINEER <b>GARY JANZEN, P.E.</b></p>		
	PROJECT NUMBER	OCA NUMBER	DATE
	CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET <b>21 of 28</b>



STANDARD MANHOLE FRAME & COVER  
DEETER #1261 OR EJIW #1936-Z1

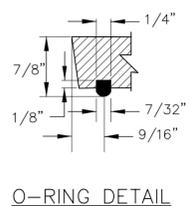
NOTE:  
1. FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACE.



BOLT DOWN MANHOLE FRAME & COVER  
DEETER #1261 OR EJIW #1936-Z1

NOTE:  
1. FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACE.

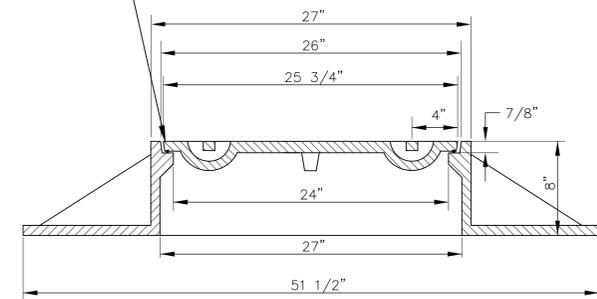
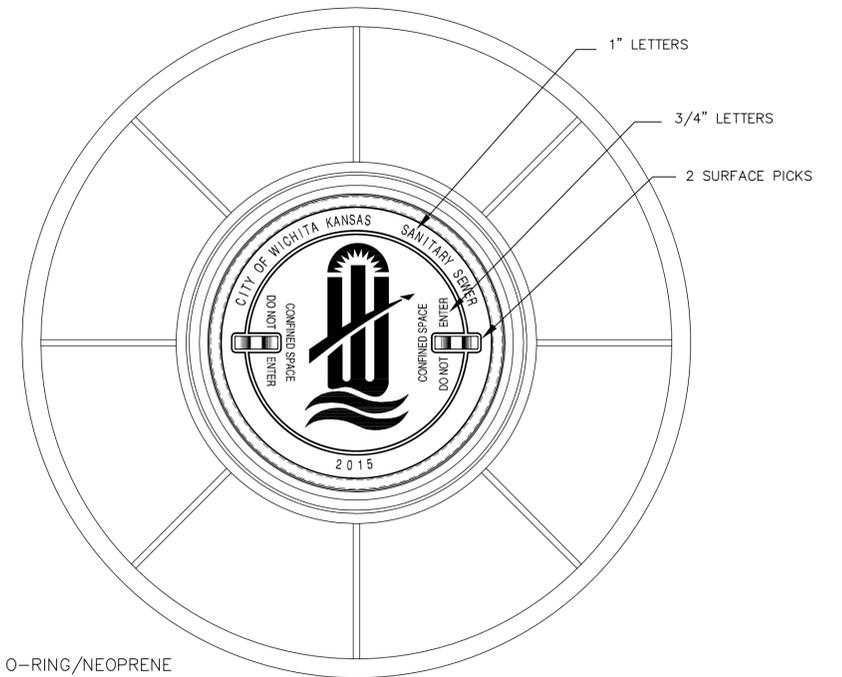
ALL LIDS TO BE FURNISHED WITH O-RING/NEOPRENE GASKET GLUED IN THE COVER BEARING SURFACE.



GENERAL NOTES

- MANHOLE CASTINGS SHALL BE MANUFACTURED USING GOOD QUALITY GRAY IRON CONFORMING TO CLASS 30 OF A.S.T.M. DESIGNATION A-48. DIMENSIONS SHOWN ON THE DETAILED DRAWINGS SHALL BE CONSIDERED AS MINIMUM REQUIREMENTS AND ANY DEVIATIONS FROM THE DIMENSIONS SHOWN MUST BE SPECIFICALLY APPROVED. THE FINISHED CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE DISTORTIONS OR OTHER DEFECTS.
- MANHOLE CASTINGS SHALL BE MANUFACTURED SUCH THAT A COVER MANUFACTURED BY ANY ONE FOUNDRY WILL FIT INTERCHANGEABLY INTO A FRAME MANUFACTURED BY ANOTHER FOUNDRY AND STILL MEET ALLOWABLE CLEARANCES AND NON-ROCKING REQUIREMENTS. THIS WILL REQUIRE MANUFACTURING OF THE MATCHING FACES ON THE COVER AND THE FRAME TO CLOSE TOLERANCES.
- THE OUTSIDE CIRCUMFERENCE OF THE VERTICAL FACE OF THE COVER AND THE INSIDE CIRCUMFERENCE OF THE VERTICAL FACE IN THE FRAME RECESS SHALL BE MANUFACTURED TO TOLERANCES SUCH THAT THE CLEARANCE BETWEEN THE COVER AND FRAME WILL NOT EXCEED 1/8" AT ANY POINT AROUND THE CIRCUMFERENCE OF THE COVER. THE SEATING SURFACES BETWEEN THE COVER AND FRAME SHALL BE MACHINED SUCH THAT THESE SEATING SURFACES SHALL MAKE FULL CONTACT FOR THEIR FULL CIRCUMFERENCE TO PRECLUDE THE COVER FROM ROCKING IN THE FRAME.
- THE MANHOLE FRAME AND COVER SHALL BE MARKED WITH LETTERING INDICATING THE NAME OF THE MANUFACTURER AND THE YEAR WHEN THE COVER OR FRAME WAS CAST. THE COVER SHALL BE FURTHER IDENTIFIED WITH REGARDS TO OWNERSHIP USING LETTERS AT LEAST 1" IN HEIGHT. THIS IDENTIFICATION SHALL BE "CITY OF WICHITA SANITARY SEWER". THE TOP SURFACE OF THE COVER SHALL BE MANUFACTURED IN WITH CITY OF WICHITA DESIGN AS INDICATED ON THE DRAWINGS. SMOOTH BLOCKOUTS SHALL BE UTILIZED TO HIGHLIGHT THE LETTERING ON THE COVER SURFACE. THE TOTAL AREA OF SMOOTH SURFACE BLOCKOUT SHALL NOT EXCEED THE AREA AS INDICATED ON THE DRAWING. POSITIONING OF SMOOTH BLOCKOUTS AND LETTERING MAY VARY FROM THAT SHOWN ON THE DETAILED DRAWING.

ALL LIDS TO BE FURNISHED WITH O-RING/NEOPRENE GASKET GLUED IN THE COVER BEARING SURFACE.



WIDE FLANGED FRAME & COVER

DEETER #1261A

NOTE:  
1. FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACE.

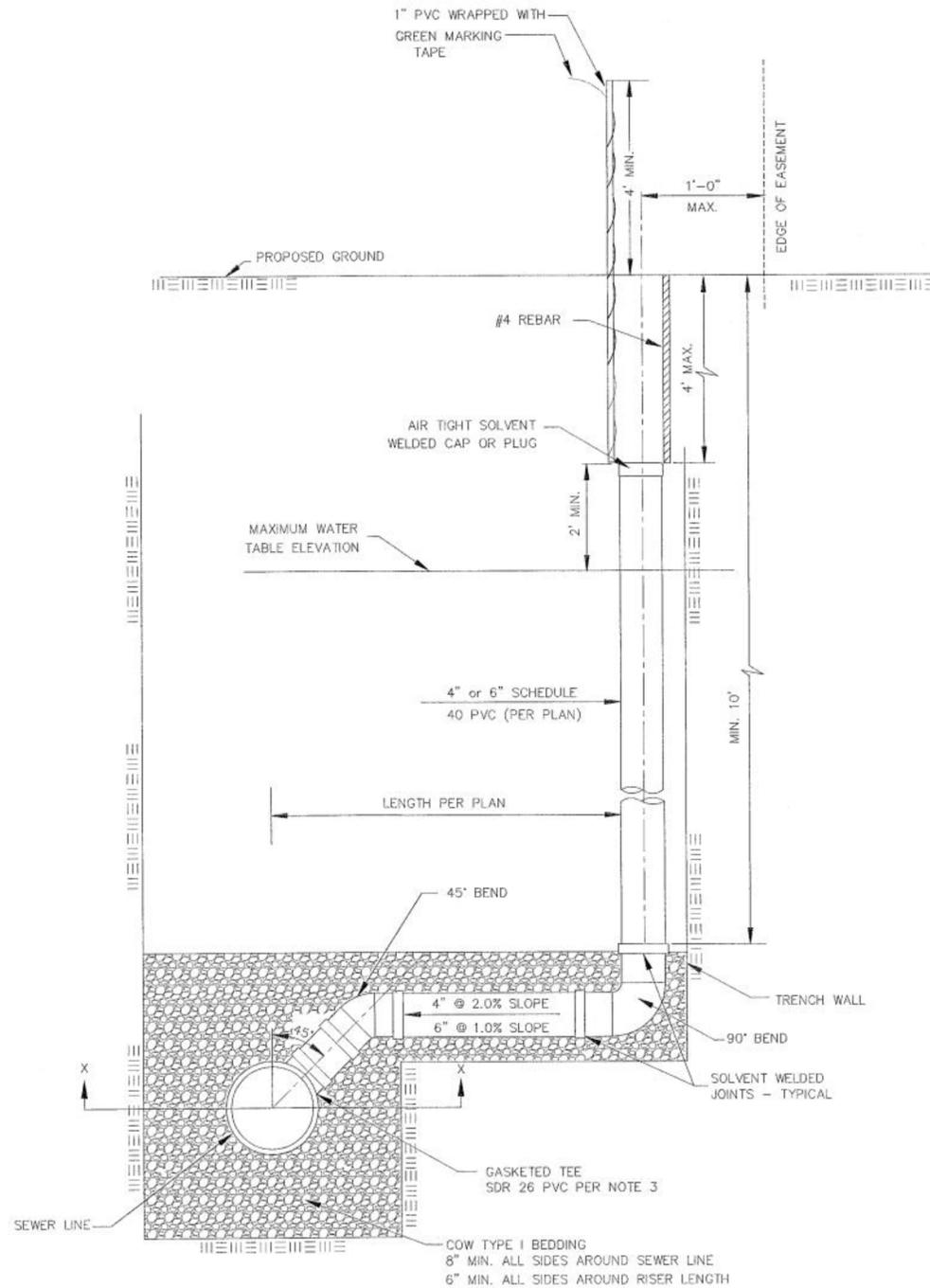


REVISED: MARCH 2016

<b>MANHOLE FRAME AND COVER (SANITARY SEWER)</b>		
CITY ENGINEER <b>GARY JANZEN, P.E.</b>		
PROJECT NUMBER	OCA NUMBER	DATE
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET <b>22 of 28</b>

**GENERAL NOTES**

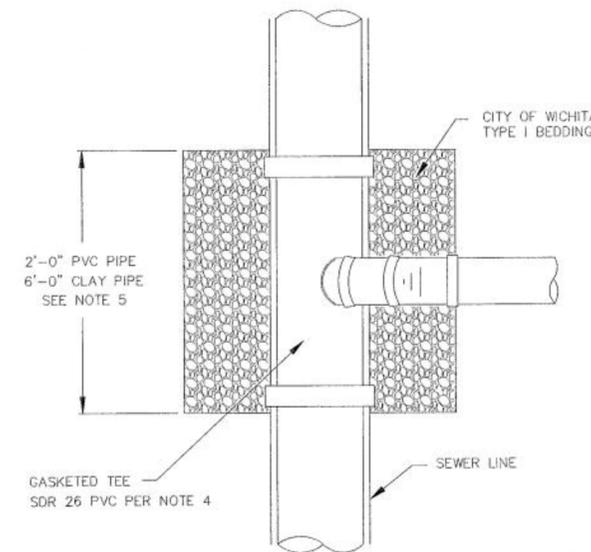
- APPLICATION.** Risers shall be installed to serve all lots or tracts where the sanitary sewer main is below the water table, where the sanitary sewer main depth is greater than 12' below the proposed ground elevation, where the main is adjacent to a pond or wherever service lines would have to cross under storm sewer pipe. Installation of risers because of field conditions shall be as approved by the City Engineer. The location of the risers to serve developed property shall be approved by the property owner and the Construction Engineer.
- MANHOLE STUB RISERS.** Manhole stub risers be installed in manholes where locations of manholes will provide satisfactory service connection as determined by the Construction Engineer. The vertical distance between the flowline of the manhole stub and the flowline of the sanitary sewer line out of the manhole shall not exceed 2'. Risers shall be utilized at manholes as indicated in Note 1. Manhole stub riser shall be set such that the top of the stub is not lower than the top of the sanitary sewer line.
- SIZING.** Risers shall be sized according to the plans and riser table where risers are indicated by the plans. Where risers are required because of field conditions, the risers shall be 6" diameter for commercial or industrial properties and 4" or 6" diameter for residential properties, based on lot size and sanitary sewer main depth. Sizing of risers shall be approved by the construction Engineer prior to installation.
- RISER MATERIAL.** Risers shall be constructed of Schedule 40 PVC Pipe, meeting the requirement of the latest revision of A.S.T.M.. All pipe joints shall be solvent welded. Full body tee shall be SDR 26 PVC pipe.
- ROCK ENCASUREMENT.** Riser connection to clay pipe sanitary sewers shall be rock encased both ways from the riser centerline. The rock encasement shall extend three feet from the riser centerline or stop at the first sanitary sewer pipe joint within three feet of the riser centerline. Riser connections to PVC Sanitary sewer mains shall be rock encased one foot each way from the riser centerline. Crushed rock shall conform to ASTM C-33, Gradation No. 67, and shall meet all requirements for Portland Cement Concrete pavement Coarse Aggregate, Section 406.2, City of Wichita Standard Specifications.
- BEDDING.** Beyond the limits of the rock encasement, bedding around the sanitary sewer riser shall be compacted Pipe Bedding Type 1 or 2. The bedding shall be placed and compacted from the depth of the sanitary sewer main to the top of the sanitary sewer riser pipe. Compacted Pipe Bedding Type 1 or 2 shall be required for all risers whether constructed in vertical wall or sloped wall trenches. Bedding material and construction practices shall be approved by the Construction Engineer prior to installation.
- SUPPORT OF RISERS.** Sanitary sewer riser pipe shall be supported during trench backfill. The riser pipe shall be held in a vertical position at all times until trench backfill and compaction has been completed. Contractor's methods for supporting and back filling the riser pie shall be approved by the Construction Engineer.
- PLUGGING.** The ends of the riser pipes and manhole stubs shall be plugged using an airtight solvent welded cap or plug. Cap or plug fittings shall be approved by the Construction Engineer prior to installation. Caps or plugs which do not provide an airtight seal will not be accepted.
- TOP OF THE RISER PIPE.** The top elevation of the sanitary sewer riser pipe shall be built per plan elevations, unless otherwise directed by the Construction Engineer. where riser elevations are not shown on the plans, the top of the risers shall be set at an elevation four feet below the proposed ground surface. If ground water is encountered, the top of the riser pipe shall be set at an elevation 2' (min.) above the maximum water table elevation, regardless of the riser elevation shown on the plans.
- MARKING.** Locations of the ends of the sanitary sewer riser pipe shall be marked by installing 1" PVC from the top of the riser to a minimum of 4" above the top of finished grade. No. 4 rebar shall be placed centered over the riser from the cap to the existing ground. The 1" PVC pipe shall be wrapped with green colored plastic tape, for the full length above ground surface. The green tape shall be 4 mil Polyethylene film with a minimum width of three inches, specifically manufactured for the purpose of identification of underground sewers.
- LOCATION MEASURES.** The project inspector shall record and document the location of all risers constructed as measured from the nearest manhole, indicate the direction from the manhole, the direction and distance from the main, riser size, and elevation of the top of the riser in tabular format.
- RISER LOCATION.** the riser shall be located per plan if shown. If not shown on the plan, the riser shall be located at the center of the lot, within one foot of the property side of the easement for the lot being served. All riser locations shall be approved by the Construction Engineer prior to installation.
- PAYMENT.** "Riser Assembly, Vertical " shall be paid for at the contract unit price per each, which shall be full compensation for all pipe, fittings, marking tape, length of backfill, labor, site restoration, and any other items necessary to complete the work.  
  
"Riser Assembly, Manhole Stub" shall be paid for at the contract unit price per each, which shall be full compensation for all labor material and incidentals necessary to complete the work including all pipe, fittings, rock encasement, and all other items as required and listed for "Riser Assembly, Vertical "



NOTE: RISER PIPE REQUIREMENTS AT MANHOLE CONNECTION SHALL BE SIMILAR TO THOSE SHOWN ABOVE.

SANITARY SEWER RISER TABLE							FOR INFORMATION ONLY	
NUMBER	TYPE	LOCATION			STATION	DIRECTION	APPROXIMATE LENGTH	
		LOT NO.	BLOCK NO.	LINE NO.			VERTICAL (Ft)	HORIZONTAL (Ft)
1	4" MANHOLE CONNECTION							
2	6" MANHOLE CONNECTION							
3	4" TEE							
4	6" TEE							

NOTE: TABLE FOR REFERENCE ONLY AND SHOULD BE ON EACH APPLICABLE PLAN SHEET.



NOTE: NON SHEAR COUPLING TO BE USED WHEN HOOKING TO CLAY PIPE.

TYPICAL SECTION X-X



**CITY OF WICHITA**  
PUBLIC WORKS & UTILITIES  
ENGINEERING DIVISION

**VERTICAL RISER ASSEMBLY SEWER DETAIL**  
CITY ENGINEER  
**GARY JANZEN, P.E.**

PROJECT NUMBER	OCA NUMBER	DATE
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET <b>23 of 28</b>