

RECORD DRAWING

The information provided on this drawing conforms to construction records; it is not intended for construction, implementation or recording purposes; and it is solely based on information obtained by Schlager and Associates.

"400-00 100.10", "4-00% 1.15% slope", or "8-inch HDPE PVC pipe" are all typical examples of revisions that indicate that design data has been replaced with "as-built" information. All other data is as designed and has not been field verified.

Date: 05/14/2025
Certified by: JLL
Title: Senior Project Engineer
Firm: Schlager and Associates, P.A.

- NOTES:
- ALL CONSTRUCTION TO FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.
 - THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATION.
 - FOR ALL WATER LINES THE MAXIMUM DEPTH OF COVER IS SEVEN (7) FEET.

MISSOURI GEOGRAPHIC REFERENCE SYSTEM
BENCHMARK:

BM JA-45, IS A KC METRO ALUMINUM GRS DISK SET IN CONCRETE AND ABOUT 3 INCHES BELOW THE PAVEMENT ON THE SHOULDER OF SE RANSON ROAD. IT IS STAMPED JA45, 1987.

ELEV. = 1046.25

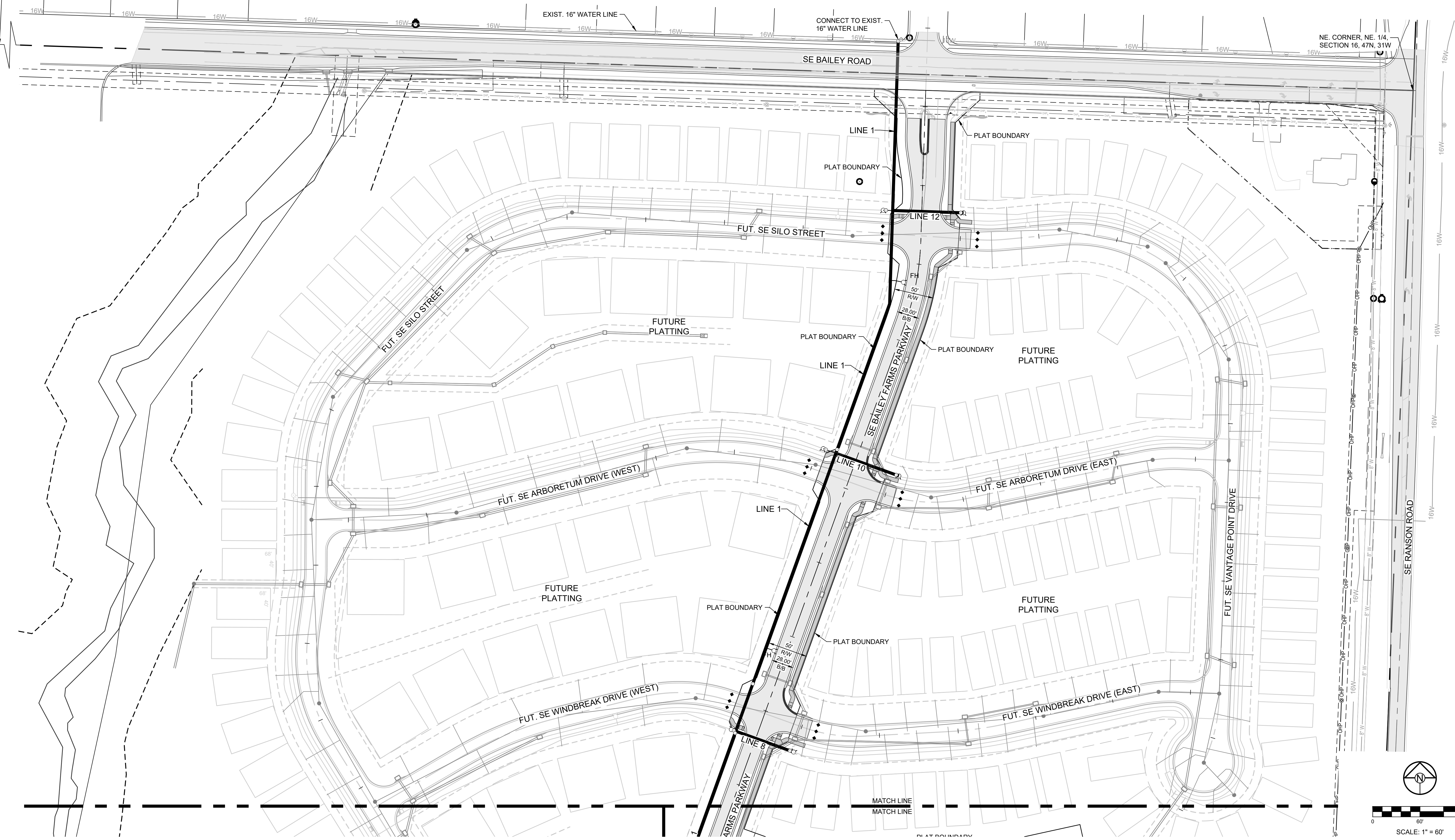
BASIS OF BEARINGS:

MISSOURI STATE PLANE COORDINATE SYSTEM
(NAD) 1983, MISSOURI, WEST ZONE

Record Drawing

NW CORNER, NE. 1/4,
SECTION 16, 47N, 31W

NE CORNER, NE. 1/4,
SECTION 16, 47N, 31W



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

PREPARED BY:

JAMES L. LONG
NUMBER PE-2014010495
DATE 04/24/2025
PROFESSIONAL ENGINEER

SCHLAGEL & ASSOCIATES, P.A.

MANOR AT BAILEY FARMS, FIRST PLAT
WATER LINE PLANS
SE BAILEY ROAD AND SE RANSON ROAD
LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION
01/24/2022	Per City Comments dated 11/19/2022
04/20/2022	Per City Comments dated 02/15/2022
05/31/2022	Per City Comments dated 05/24/2022
06/30/2022	Per City Comments dated 05/31/2022
10/27/2023	Revised Details to current 2023 Details
11/30/2023	Added "New City Requirement" note
05/14/2025	As-Built

DRAWN BY: MBH	CHECKED BY: JLL	DATE PREPARED: 11/05/2021	PROJ. NUMBER: 21-130
---------------	-----------------	---------------------------	----------------------

GENERAL LAYOUT - NORTH

SHEET 2

Record Drawing

**MISSOURI GEOGRAPHIC REFERENCE SYSTEM
BENCHMARK:**

BM JA-45, IS A KC METRO ALUMINUM GRS DISK SET IN CONCRETE AND ABOUT 3 INCHES BELOW THE PAVEMENT ON THE SHOULDER OF SE RANSON ROAD. IT IS STAMPED JA45, 1987.

ELEV. = 1046.25

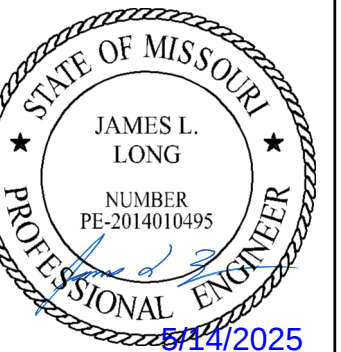
BASIS OF BEARINGS:

MISSOURI STATE PLANE COORDINATE SYSTEM
(NAD) 1983, MISSOURI, WEST ZONE

NOTES:

1. ALL CONSTRUCTION TO FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.
2. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATION.
3. FOR ALL WATER LINES THE MAXIMUM DEPTH OF COVER IS SEVEN (7) FEET.

REPAIRED BY:



CHLAGEL & ASSOCIATES, P.A.

MANOR AT BAILEY FARMS, FIRST PLANTATION
WATER LINE PLANS
SE BAILEY ROAD AND SE RANSON ROAD
LEE'S SUMMIT, MISSOURI

1	01/24/2022	Per City Comments dated 11/19/2022
2	04/20/2022	Per City Comments dated 02/15/2022
3	05/31/2022	Per City Comments dated 05/24/2022
4	6/30/2022	Per City Comments dated 05/31/2022
5	10/27/2023	Revised Details to current 2023 Details
6	11/30/2023	Added "New City Requirement" note
7	05/14/2025	As-Builts
8		
9		

GENERAL
LAYOUT - WEST

SHEET

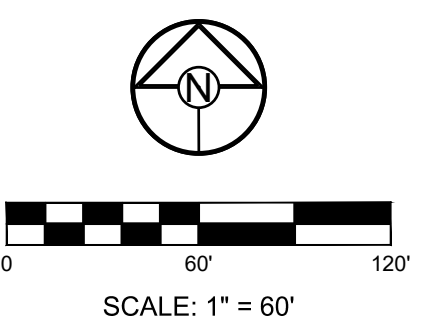
3

RECORD DRAWING

The information provided on this drawing conforms to construction records; it is not intended for construction, implementation or recording purposes; and it is solely based on information obtained by Schlager and Associates.

~~"100.00 100.10", "1.00% 1.15% slope", or "8-inch HDPE PVC pipe"~~ are all typical examples of revisions that indicate that design data has been replaced with "as-built" information. All other data is as designed and has not been field verified.

Date: 05/14/2025
 Certified by: JLL
 Title: Senior Project Engineer
 Firm: Schlagel and Associates, P.A.





MISSOURI GEOGRAPHIC REFERENCE SYSTEM BENCHMARK:

BM JA-45, IS A KC METRO ALUMINUM GRS DISK SET IN CONCRETE AND ABOUT 3 INCHES BELOW THE PAVEMENT ON THE SHOULDER OF SE RANSON ROAD. IT IS STAMPED JA45, 1987.

ELEV. = 1046.25

BASIS OF BEARINGS:

MISSOURI STATE PLANE COORDINATE SYSTEM (NAD) 1983, MISSOURI, WEST ZONE

NOTES:

1. ALL CONSTRUCTION TO FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.
2. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATION.
3. FOR ALL WATER LINES THE MAXIMUM DEPTH OF COVER IS SEVEN (7) FEET.

Record Drawing

SCHLAGEL
ENGINEERS PLANNERS SURVEYORS LANDSCAPE ARCHITECTS
14920 West 107th Street • Lenexa, Kansas 66215
(913) 492-5158 • Fax: (913) 492-8400
WWW.SCHLAGELASSOCIATES.COM
Missouri State Certificate of Authority
#E2002003600F #LAC2001005237 #LS200200859F

PREPARED BY:

JAMES L. LONG
NUMBER PE-2014010495
8/14/2025

SCHLAGEL & ASSOCIATES, P.A.

**MANOR AT BAILEY FARMS, FIRST PLAT
WATER LINE PLANS
SE BAILEY ROAD AND SE RANSON ROAD
LEE'S SUMMIT, MISSOURI**

REVISION	DATE	DESCRIPTION
1	01/24/2022	Per City Comments dated 11/19/2022
2	04/20/2022	Per City Comments dated 02/15/2022
3	05/31/2022	Per City Comments dated 05/24/2022
4	06/30/2022	Per City Comments dated 05/31/2022
5	10/27/2023	Revised Details to current 2023 Details
6	11/30/2023	Added "New City Requirement" note
7	05/14/2025	As-Built

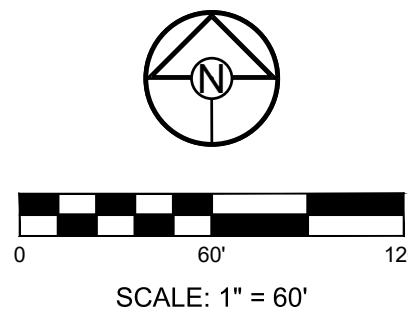
GENERAL LAYOUT - EAST

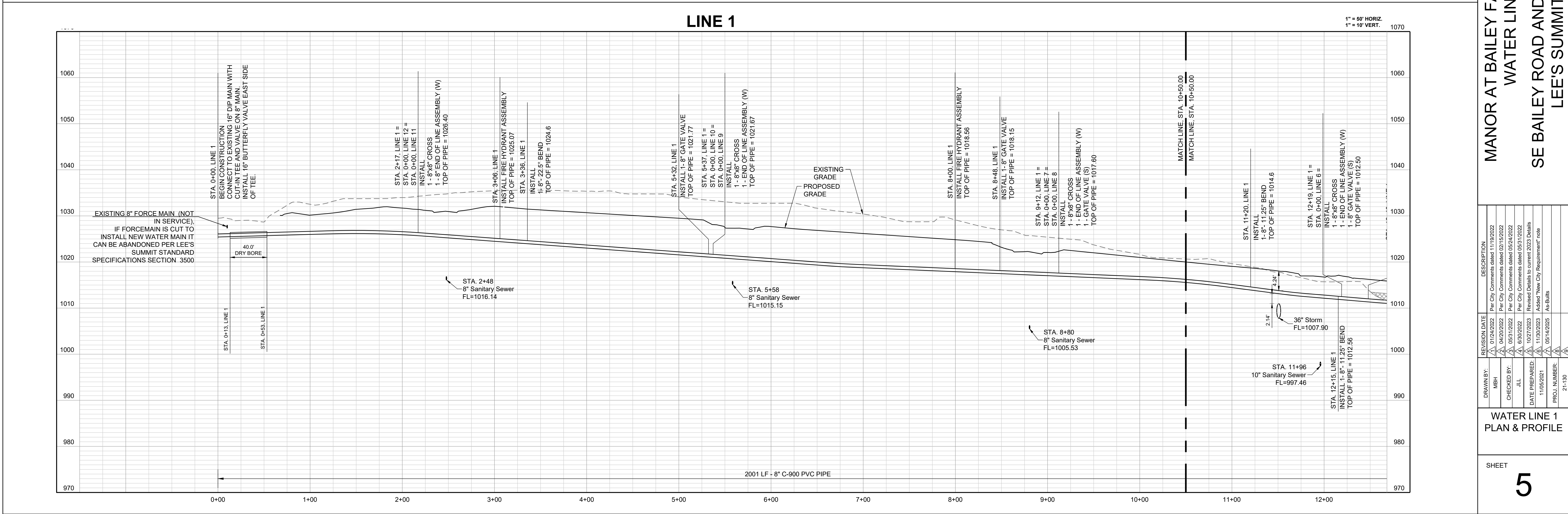
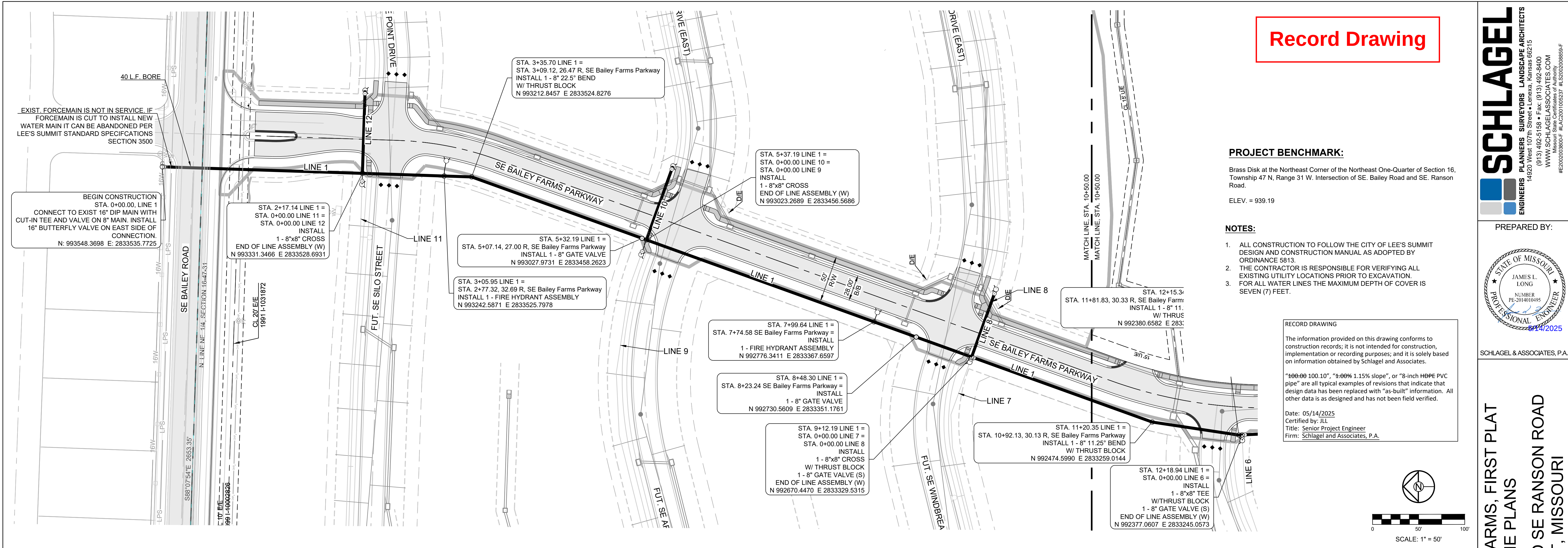
RECORD DRAWING

The information provided on this drawing conforms to construction records; it is not intended for construction, implementation or recording purposes; and it is solely based on information obtained by Schlager and Associates.

"100.00 100.10", "1.00% 1.15% slope", or "8-inch HDPE PVC pipe" are all typical examples of revisions that indicate that design data has been replaced with "as-built" information. All other data is as designed and has not been field verified.

Date: 05/14/2025
Certified by: JLL
Title: Senior Project Engineer
Firm: Schlager and Associates, P.A.





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

PREPARED BY:
JAMES L. LONG
PROFESSIONAL ENGINEER
NUMBER PE-2014010495
05/14/2025

SCHLAGEL & ASSOCIATES, P.A.

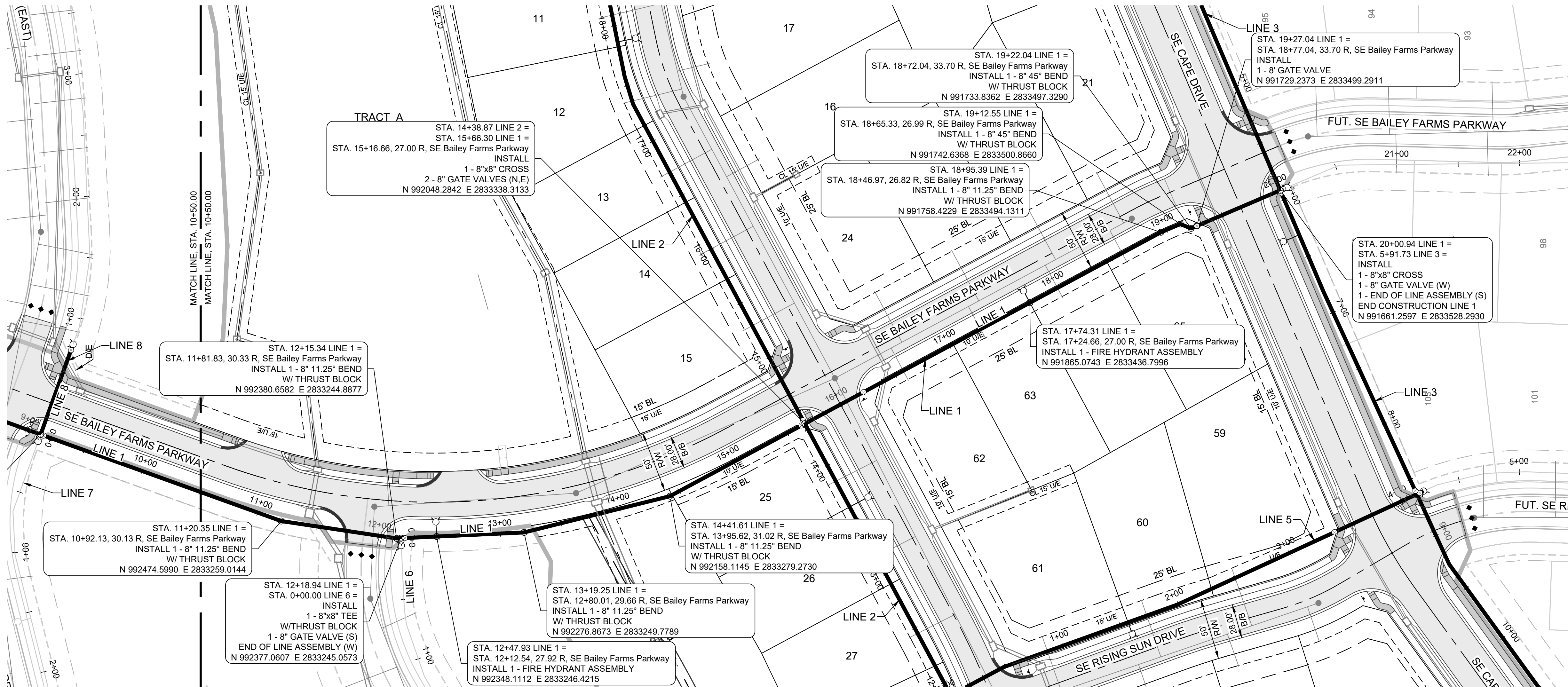
MANOR AT BAILEY FARMS, FIRST PLAT
WATER LINE PLANS
SE BAILEY ROAD AND SE RANSON ROAD
LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION
01/24/2022	Per City Comments dated 11/19/2022
04/20/2022	Per City Comments dated 02/15/2022
05/31/2022	Per City Comments dated 05/24/2022
06/30/2022	Per City Comments dated 05/31/2022
10/27/2023	Revised Details to current 2023 Details
11/30/2023	Added "New City Requirement" note
05/14/2025	As-Built

DRAWN BY: MBH	DATE PREPARED: 11/05/2021	PROJ. NUMBER: 21-130
CHECKED BY: JLL		

WATER LINE 1
PLAN & PROFILE

SHEET
5



PROJECT BENCHMARK:

Brass Disk at the Northeast Corner of the Northeast One-Quarter of Section 16, Township 47 N, Range 31 W, Intersection of SE. Bailey Road and SE. Ranson Road.

ELEV. = 939.19

NOTES:

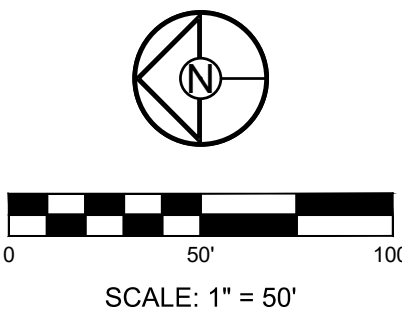
- ALL CONSTRUCTION TO FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATION.
- FOR ALL WATER LINES THE MAXIMUM DEPTH OF COVER IS SEVEN (7) FEET, EXCEPT WERE NOTED.

Record Drawing

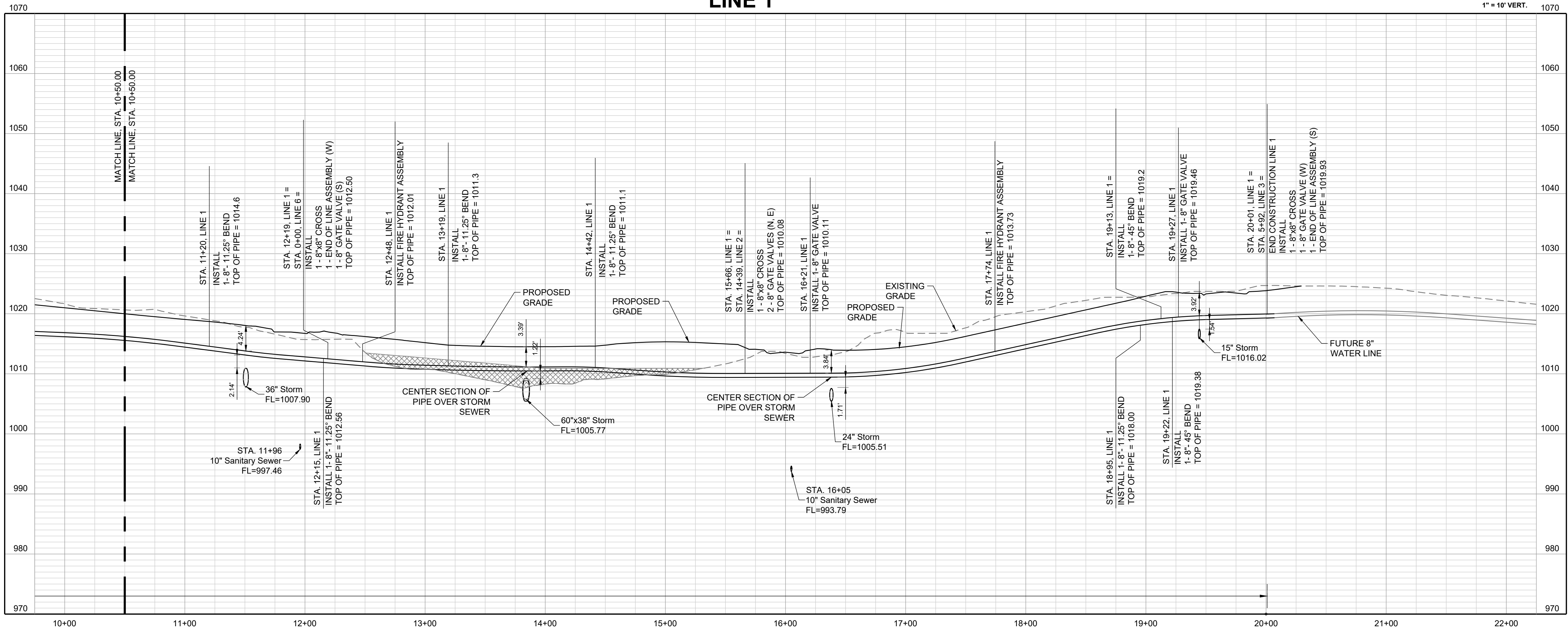
RECORD DRAWING

The information provided on this drawing conforms to construction records; it is not intended for construction, implementation or recording purposes; and it is solely based on information obtained by Schlager and Associates.

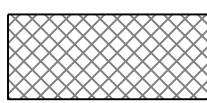
Date: 05/14/2025
Certified by: JLL
Title: Senior Project Engineer
Firm: Schlager and Associates, P.A.



LINE 1



COMPACTED FILL TO BE PLACED A MINIMUM OF 18" ABOVE TOP OF PIPE PRIOR TO PIPE EXCAVATION



MANOR AT BAILEY FARMS, FIRST PLAT
WATER LINE PLANS
SE BAILEY ROAD AND SE RANSON ROAD
LEE'S SUMMIT, MISSOURI



PREPARED BY:



SCHLAGER & ASSOCIATES, P.A.

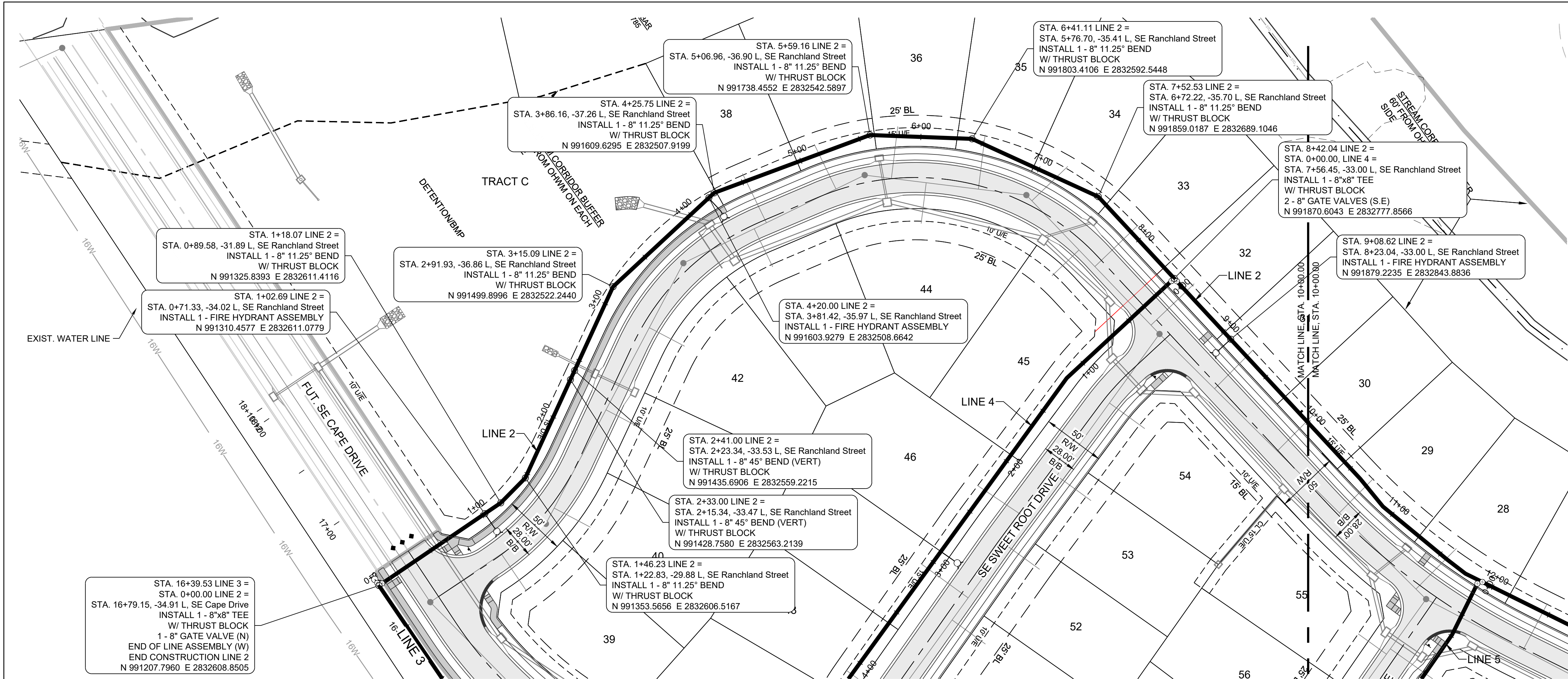
REVISION DATE	DESCRIPTION
01/24/2022	Per City Comments dated 11/19/2022
04/20/2022	Per City Comments dated 02/15/2022
05/31/2022	Per City Comments dated 05/24/2022
06/30/2022	Per City Comments dated 05/31/2022
10/27/2023	Revised Details to current 2023 Details
11/30/2023	Added "New City Requirement" note
05/14/2025	As-Built

DRAWN BY:	MBH
CHECKED BY:	JLL
DATE PREPARED:	11/05/2021
PROJ. NUMBER:	21-130

WATER LINE 1
PLAN & PROFILE
CONT'D

SHEET

6



PROJECT BENCHMARK:

Brass Disk at the Northeast Corner of the Northeast One-Quarter of Section 16, Township 47 N, Range 31 W. Intersection of SE. Bailey Road and SE. Ranson Road.

ELEV. = 939.19

NOTES:

- ALL CONSTRUCTION TO FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATION.
- FOR ALL WATER LINES THE MAXIMUM DEPTH OF COVER IS SEVEN (7) FEET, EXCEPT WHERE NOTED.

Record Drawing



PREPARED BY:



SCHLAGEL & ASSOCIATES, P.A.

MANOR AT BAILEY FARMS, FIRST PLAT
WATER LINE PLANS
SE BAILEY ROAD AND SE RANSON ROAD
LEE'S SUMMIT, MISSOURI

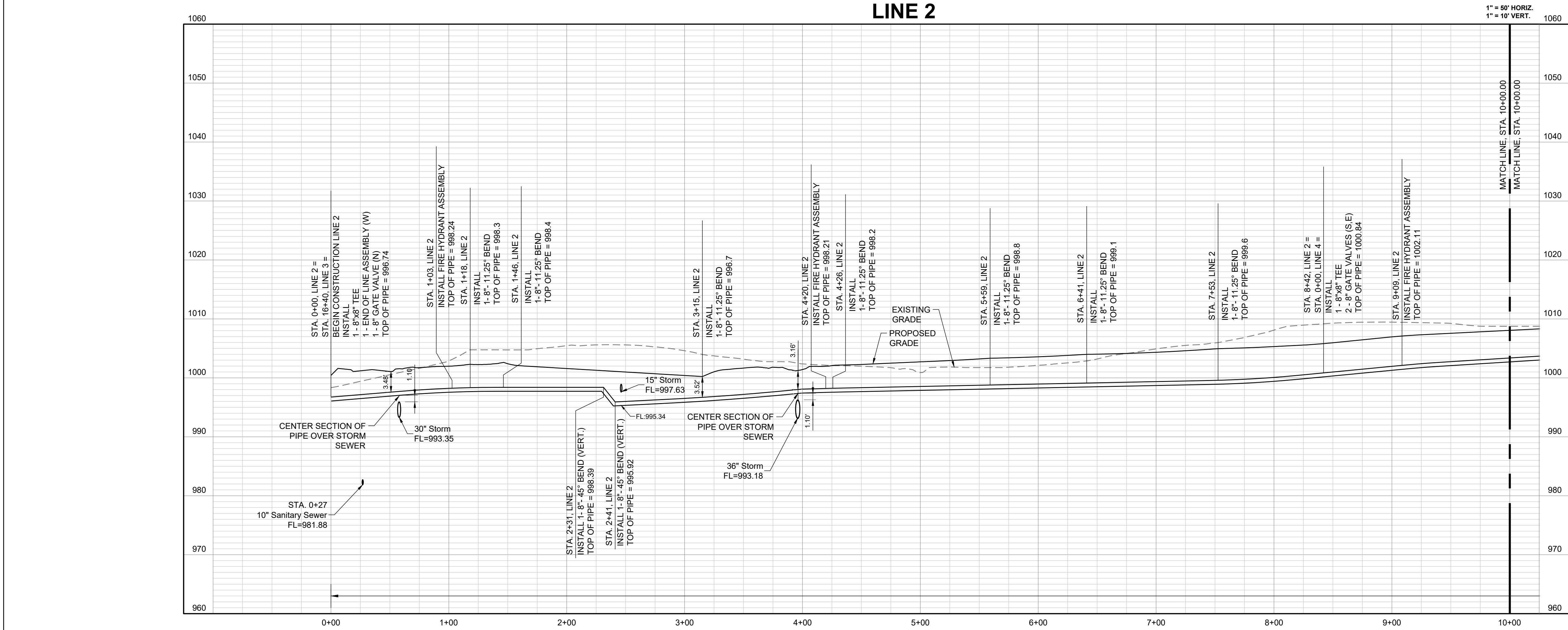
REVISION DATE	DESCRIPTION
01/24/2022	Per City Comments dated 11/19/2022
04/20/2022	Per City Comments dated 02/15/2022
05/31/2022	Per City Comments dated 05/24/2022
06/30/2022	Per City Comments dated 05/31/2022
10/27/2023	Revised Details to current 2023 Details
11/30/2023	Added "New City Requirement" note
05/14/2025	As-Built

DRAWN BY: MBH
CHECKED BY: JLL
DATE PREPARED: 11/05/2021
PROJ. NUMBER: 21-130

WATER LINE 2
PLAN & PROFILE

SHEET

7

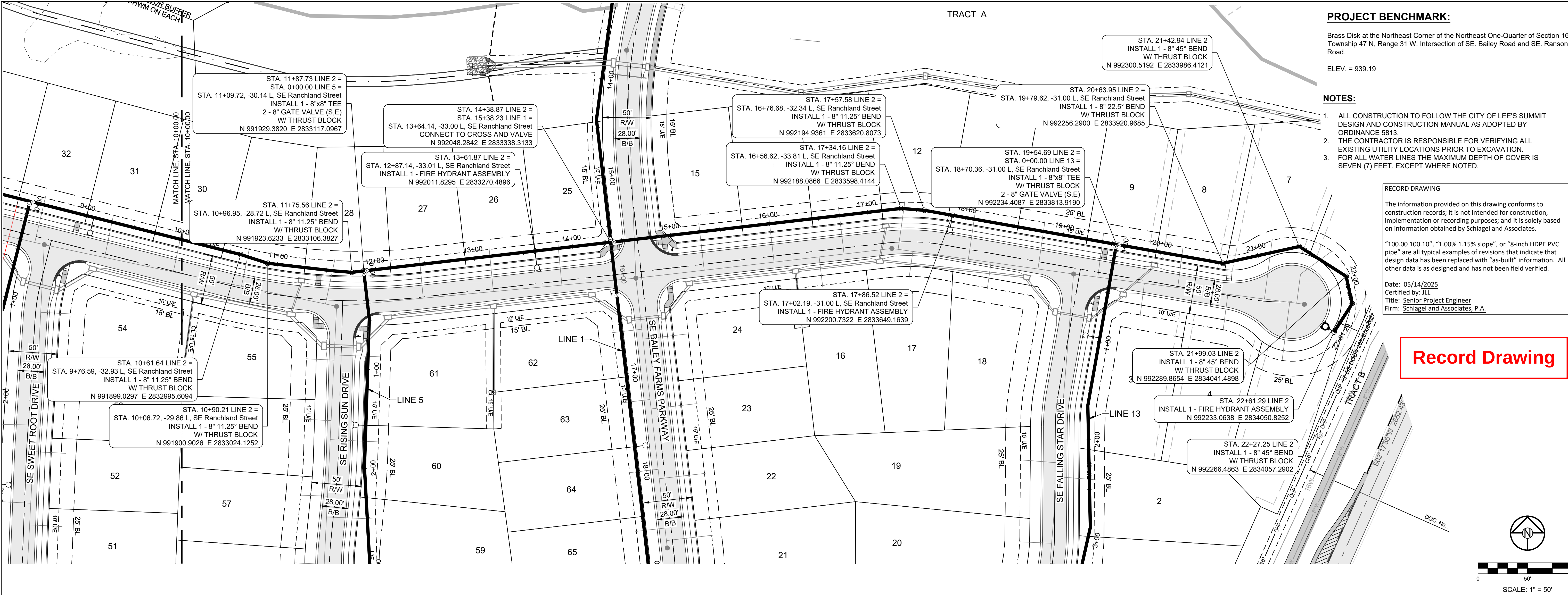


RECORD DRAWING

The information provided on this drawing conforms to construction records; it is not intended for construction, implementation or recording purposes; and it is solely based on information obtained by Schlagel and Associates.

"100-00 100.10", "1-00% 1.15% slope", or "8-inch HDPE PVC pipe" are all typical examples of revisions that indicate that design data has been replaced with "as-built" information. All other data is as designed and has not been field verified.

Date: 05/14/2025
Certified by: JLL
Title: Senior Project Engineer
Firm: Schlagel and Associates, P.A.



PROJECT BENCHMARK:

Brass Disk at the Northeast Corner of the Northeast One-Quarter of Section 16, Township 47 N, Range 31 W. Intersection of SE. Bailey Road and SE. Ranson Road.

ELEV. = 939.19

NOTES:

- ALL CONSTRUCTION TO FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATION.
- FOR ALL WATER LINES THE MAXIMUM DEPTH OF COVER IS SEVEN (7) FEET. EXCEPT WHERE NOTED.

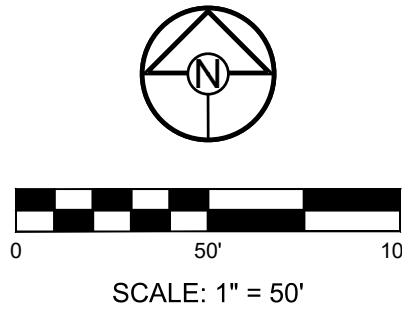
RECORD DRAWING

The information provided on this drawing conforms to construction records; it is not intended for construction, implementation or recording purposes; and it is solely based on information obtained by Schlager and Associates.

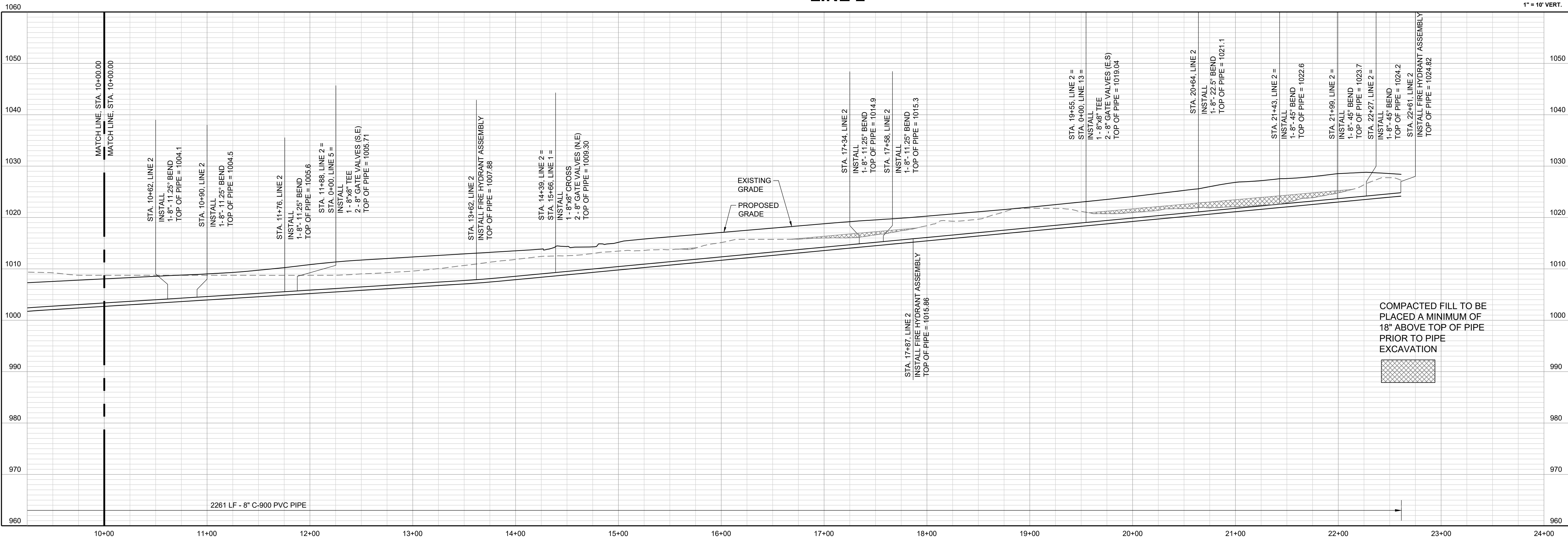
"4-00-00 100.10", "4-00% 1.15% slope", or "8-inch HDPE PVC pipe" are all typical examples of revisions that indicate that design data has been replaced with "as-built" information. All other data is as designed and has not been field verified.

Date: 05/14/2025
Certified by: JLL
Title: Senior Project Engineer
Firm: Schlager and Associates, P.A.

Record Drawing



LINE 2



PREPARED BY:



SCHLAGEL & ASSOCIATES, P.A.

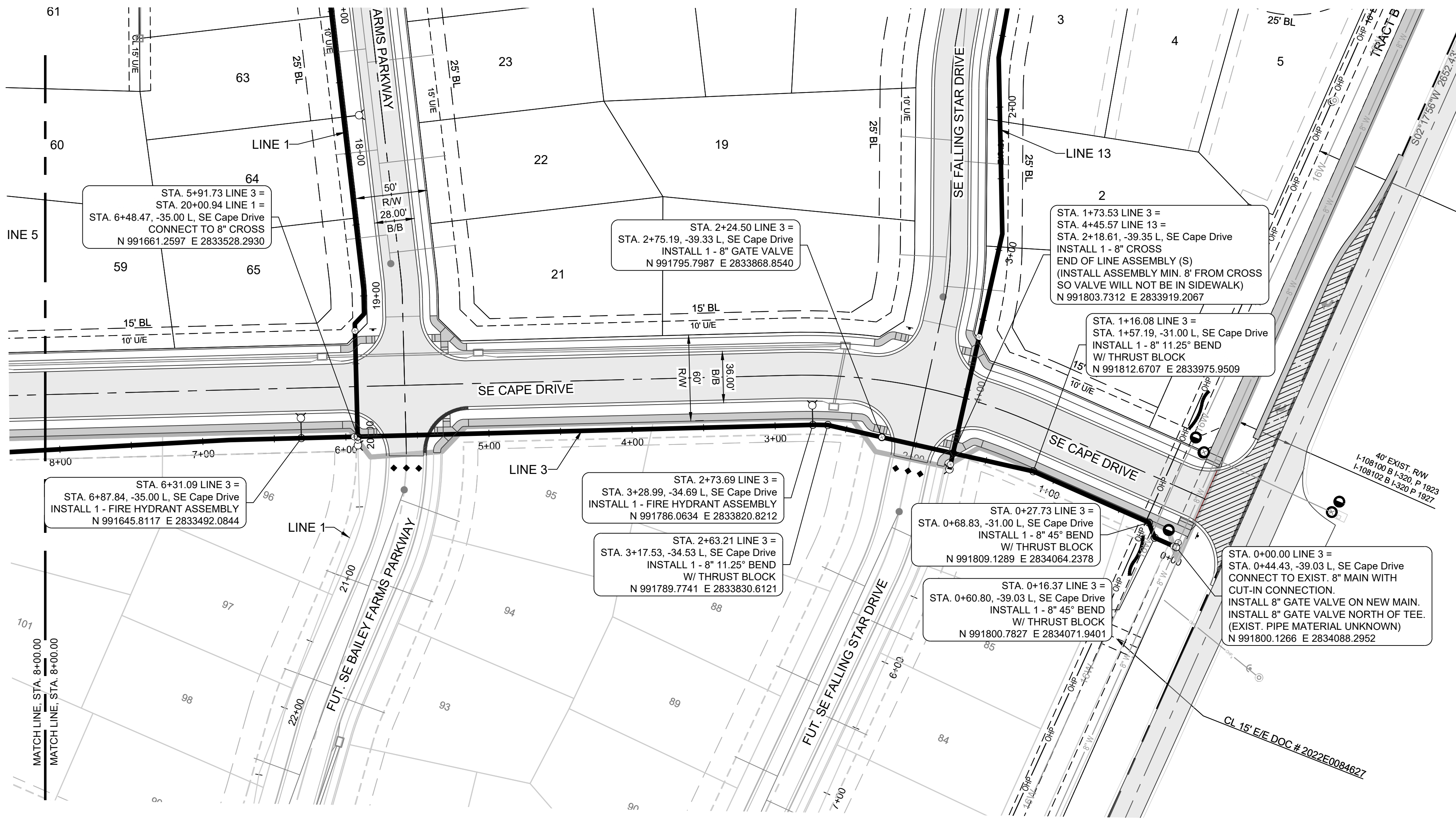
MANOR AT BAILEY FARMS, FIRST PLAT
WATER LINE PLANS
SE BAILEY ROAD AND SE RANSON ROAD
LEE'S SUMMIT, MISSOURI

REVISION	DATE	DESCRIPTION
1	01/24/2022	Per City Comments dated 11/19/2022
2	04/20/2022	Per City Comments dated 02/15/2022
3	05/31/2022	Per City Comments dated 05/24/2022
4	06/30/2022	Per City Comments dated 05/31/2022
5	10/27/2023	Revised Details to current 2023 Details
6	11/30/2023	Added "New City Requirement" note
7	05/14/2025	As-Built

WATER LINE 2
PLAN & PROFILE
CONT'D

SHEET

8



Record Drawing

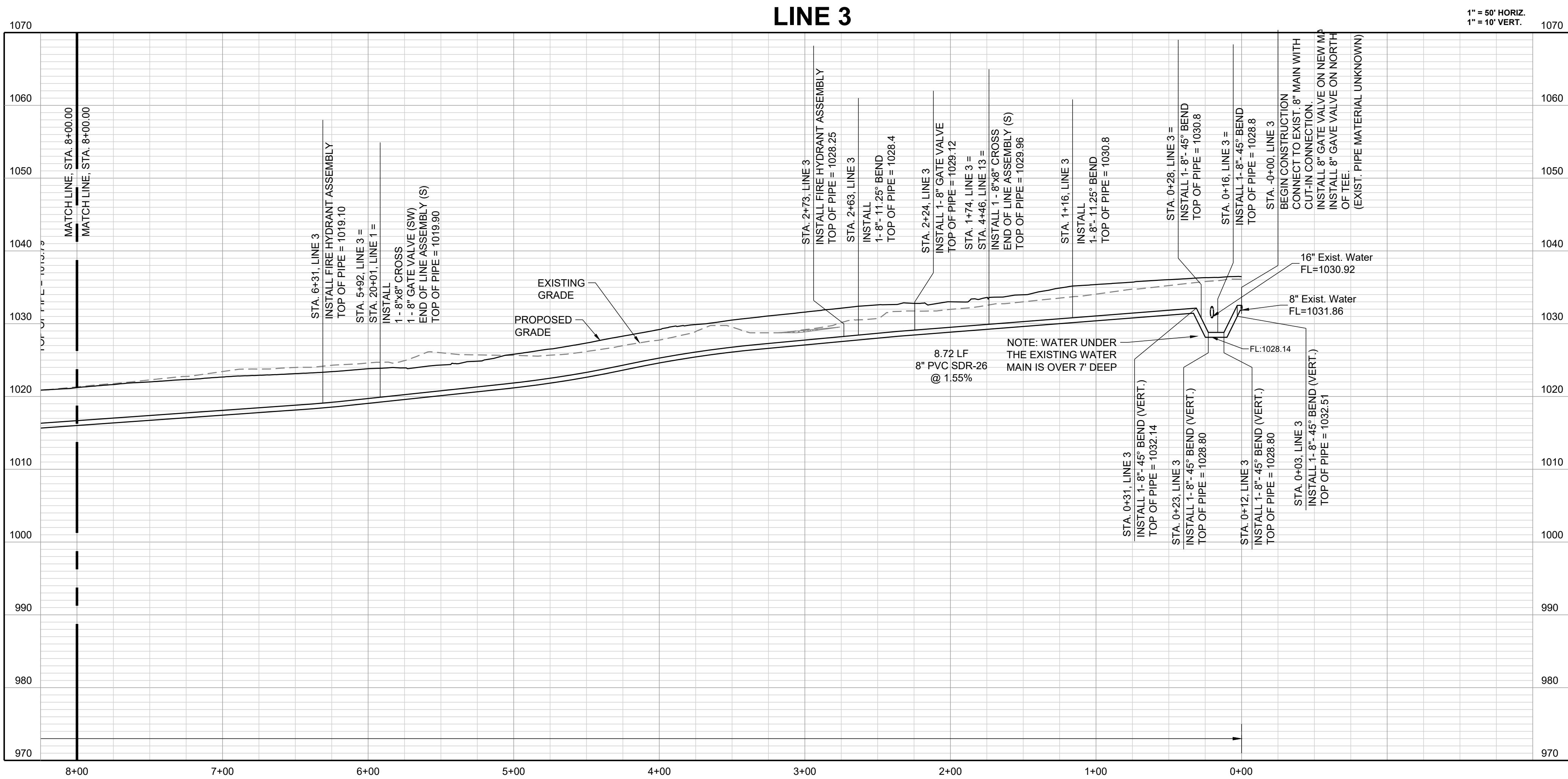
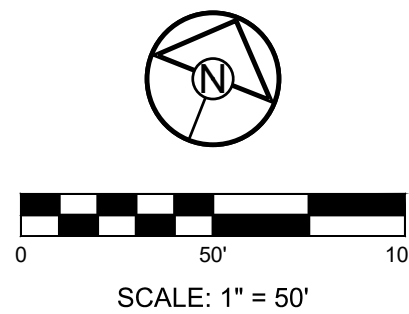
PROJECT BENCHMARK:

Brass Disk at the Northeast Corner of the Northeast One-Quarter of Section 16, Township 47 N, Range 31 W. Intersection of SE. Bailey Road and SE. Ranson Road.

ELEV. = 939.19

NOTES:

- ALL CONSTRUCTION TO FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATION.
- FOR ALL WATER LINES THE MAXIMUM DEPTH OF COVER IS SEVEN (7) FEET. UNLESS OTHERWISE NOTED.



COMPACTED FILL TO BE PLACED A MINIMUM OF 18" ABOVE TOP OF PIPE PRIOR TO PIPE EXCAVATION

RECORD DRAWING

The information provided on this drawing conforms to construction records; it is not intended for construction, implementation or recording purposes; and it is solely based on information obtained by Schlager and Associates.

"100-00 100.10", "3-00% 1.15% slope", or "8-inch HDPE PVC pipe" are all typical examples of revisions that indicate that design data has been replaced with "as-built" information. All other data is as designed and has not been field verified.

Date: 05/14/2025
Certified by: JLL
Title: Senior Project Engineer
Firm: Schlager and Associates, P.A.



PREPARED BY:



SCHLAGER & ASSOCIATES, P.A.

MANOR AT BAILEY FARMS, FIRST PLAT
WATER LINE PLANS
SE BAILEY ROAD AND SE RANSON ROAD
LEE'S SUMMIT, MISSOURI

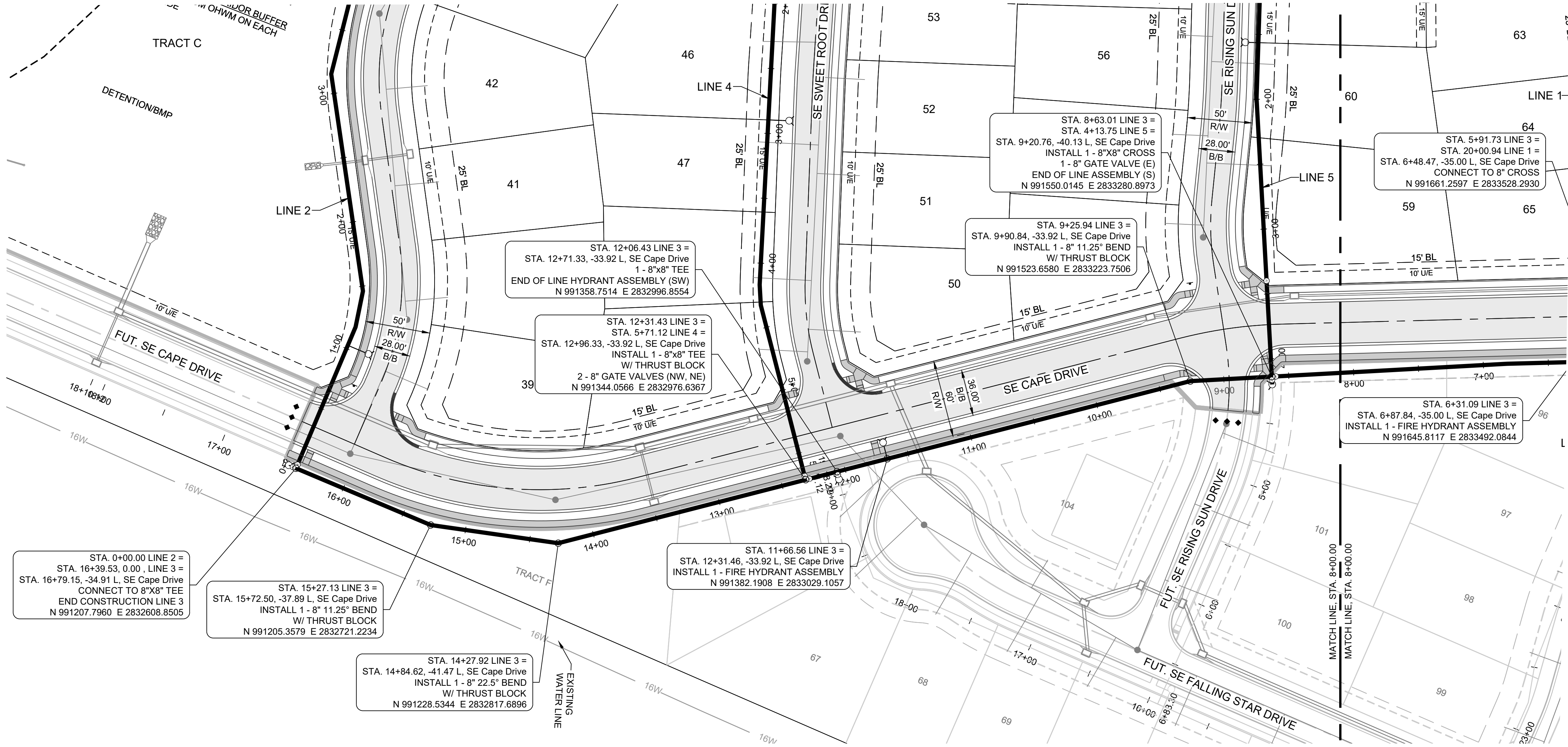
REVISION DATE	DESCRIPTION
01/24/2022	Per City Comments dated 11/19/2022
04/20/2022	Per City Comments dated 02/15/2022
05/31/2022	Per City Comments dated 05/24/2022
06/30/2022	Per City Comments dated 05/31/2022
10/27/2023	Revised Details to current 2023 Details
11/09/2023	Added "New City Requirement" note
05/14/2025	As-Built

DRAWN BY:	MBH
CHECKED BY:	JLL
DATE PREPARED:	11/05/2021
PROJ. NUMBER:	21-130

WATER LINE 3
PLAN & PROFILE

SHEET

9

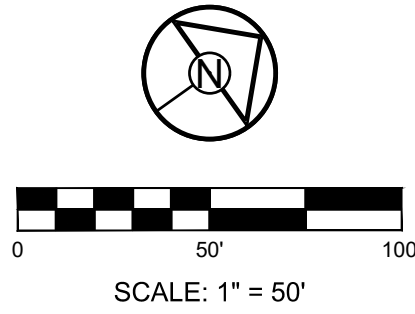


PROJECT BENCHMARK:
Brass Disk at the Northeast Corner of the Northeast One-Quarter of Section 16,
Township 47 N, Range 31 W, Intersection of SE. Bailey Road and SE. Ranson
Road.
ELEV. = 939.19

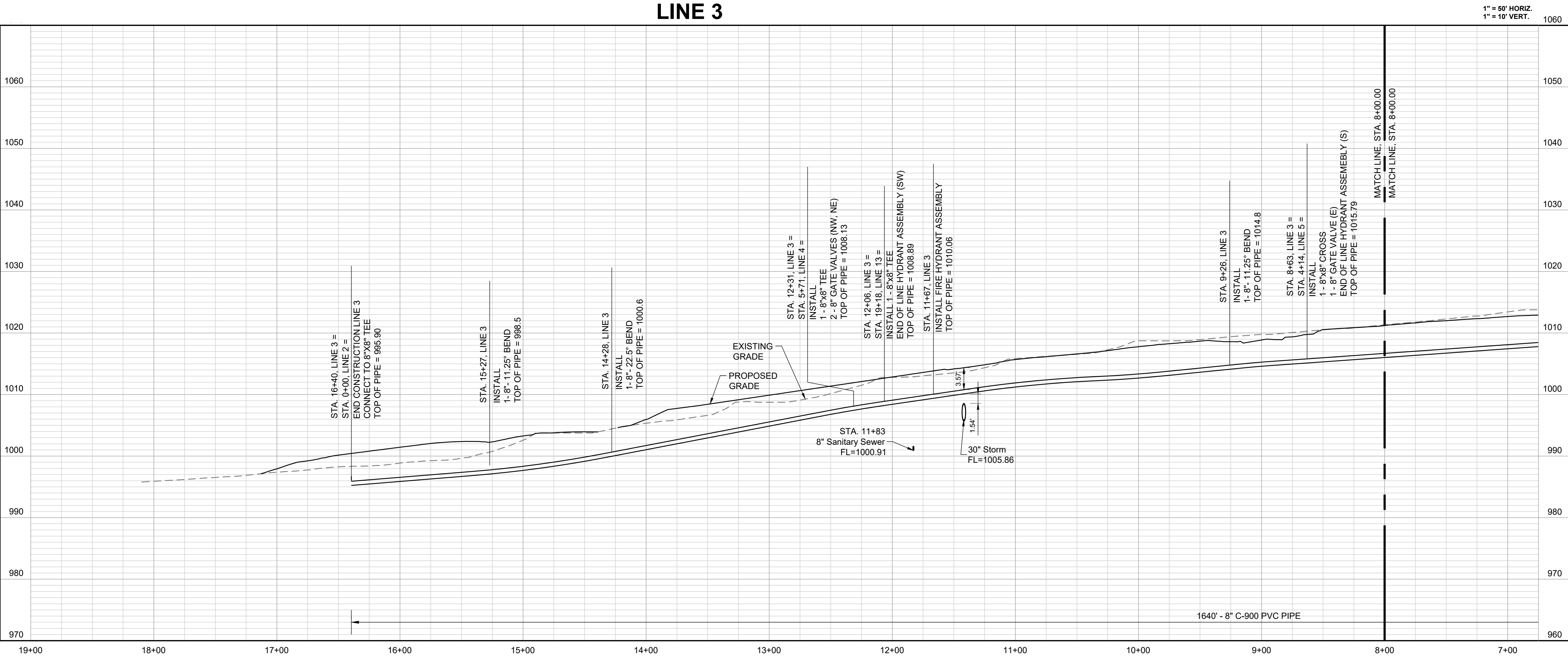
NOTES:

- ALL CONSTRUCTION TO FOLLOW THE CITY OF LEE'S SUMMIT
DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY
ORDINANCE 5813.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL
EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATION.
- FOR ALL WATER LINES THE MAXIMUM DEPTH OF COVER IS
SEVEN (7) FEET, UNLESS OTHERWISE NOTED.

Record Drawing



LINE 3



COMPACTED FILL TO BE PLACED A
MINIMUM OF 18" ABOVE TOP OF PIPE
PRIOR TO PIPE EXCAVATION

RECORD DRAWING

The information provided on this drawing conforms to construction records; it is not intended for construction, implementation or recording purposes; and it is solely based on information obtained by Schlagel and Associates.

Date: 05/14/2025
Certified by: JLL
Title: Senior Project Engineer
Firm: Schlagel and Associates, P.A.

SCHLAGEL
ENGINEERS PLANNERS SURVEYORS LANDSCAPE ARCHITECTS
14920 West 107th Street • Lenexa, Kansas 66215
(913) 492-5159 • Fax: (913) 492-8400
WWW.SCHLAGELASSOCIATES.COM
Missouri State Certificates of Authority
#E2002003600-F #LAC2001005237 #LS2002008659-F

PREPARED BY:

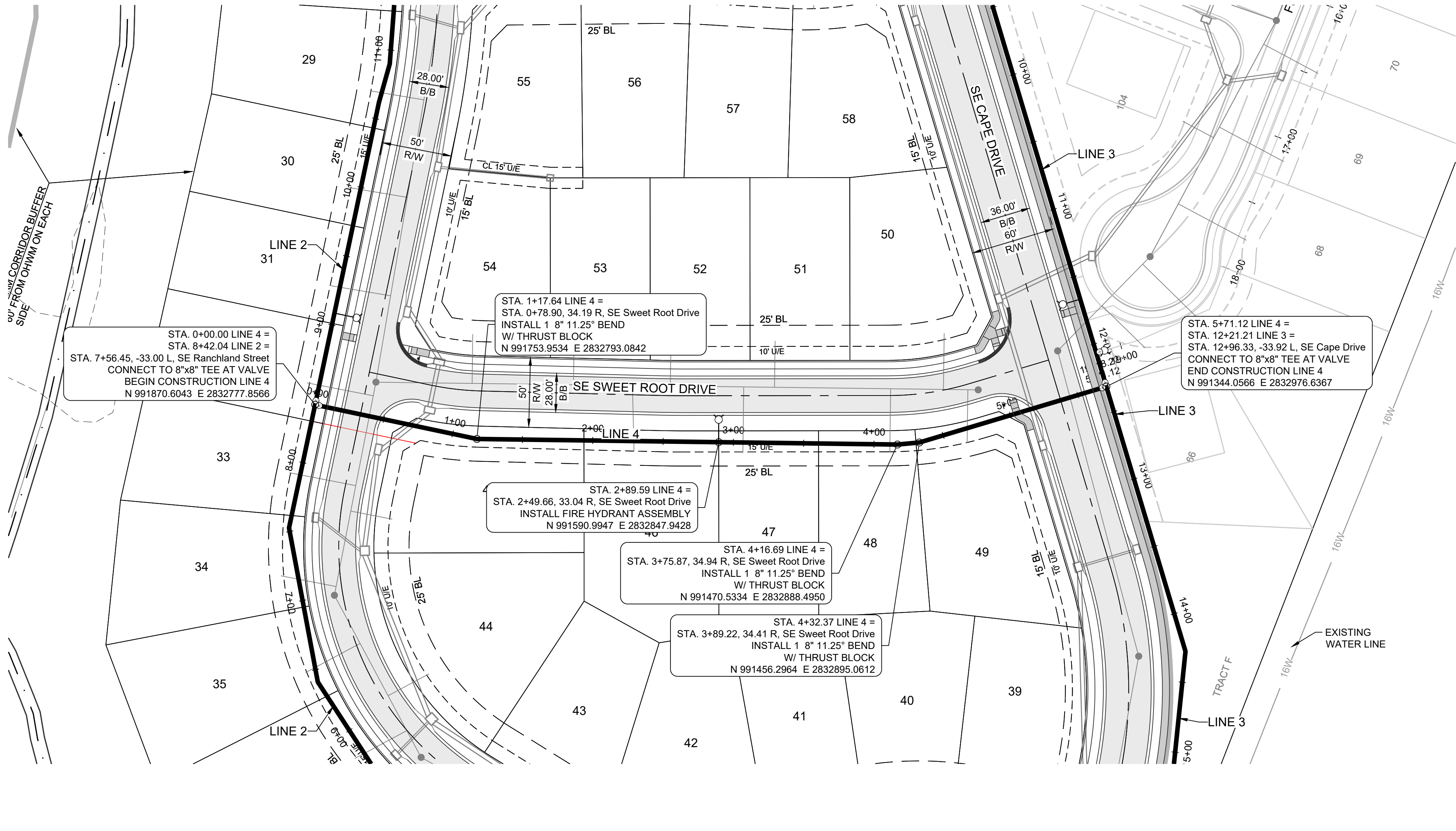
SCHLAGEL & ASSOCIATES, P.A.

MANOR AT BAILEY FARMS, FIRST PLAT
WATER LINE PLANS
SE BAILEY ROAD AND SE RANSON ROAD
LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION
01/24/2022	Per City Comments dated 11/19/2022
04/20/2022	Per City Comments dated 02/15/2022
05/31/2022	Per City Comments dated 05/24/2022
06/30/2022	Per City Comments dated 05/31/2022
10/27/2023	Revised Details to current 2023 Details
11/30/2023	Added "New City Requirement" note
05/14/2025	As-Built

DRAWN BY: MBH	CHECKED BY: JLL	DATE PREPARED: 11/05/2021	PROJ. NUMBER: 21-130
------------------	--------------------	------------------------------	-------------------------

WATER LINE 3 PLAN & PROFILE CONT'D
SHEET 10



PROJECT BENCHMARK:

Brass Disk at the Northeast Corner of the Northeast One-Quarter of Section 16, Township 47 N, Range 31 W, Intersection of SE. Bailey Road and SE. Ranson Road.

ELEV. = 939.19

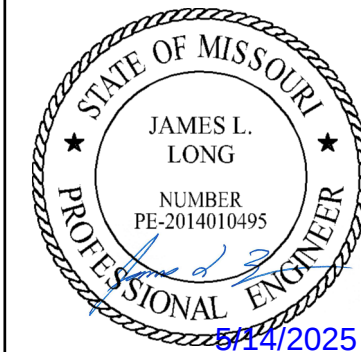
NOTES:

- ALL CONSTRUCTION TO FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATION.
- FOR ALL WATER LINES THE MAXIMUM DEPTH OF COVER IS SEVEN (7) FEET. UNLESS OTHERWISE NOTED.

Record Drawing

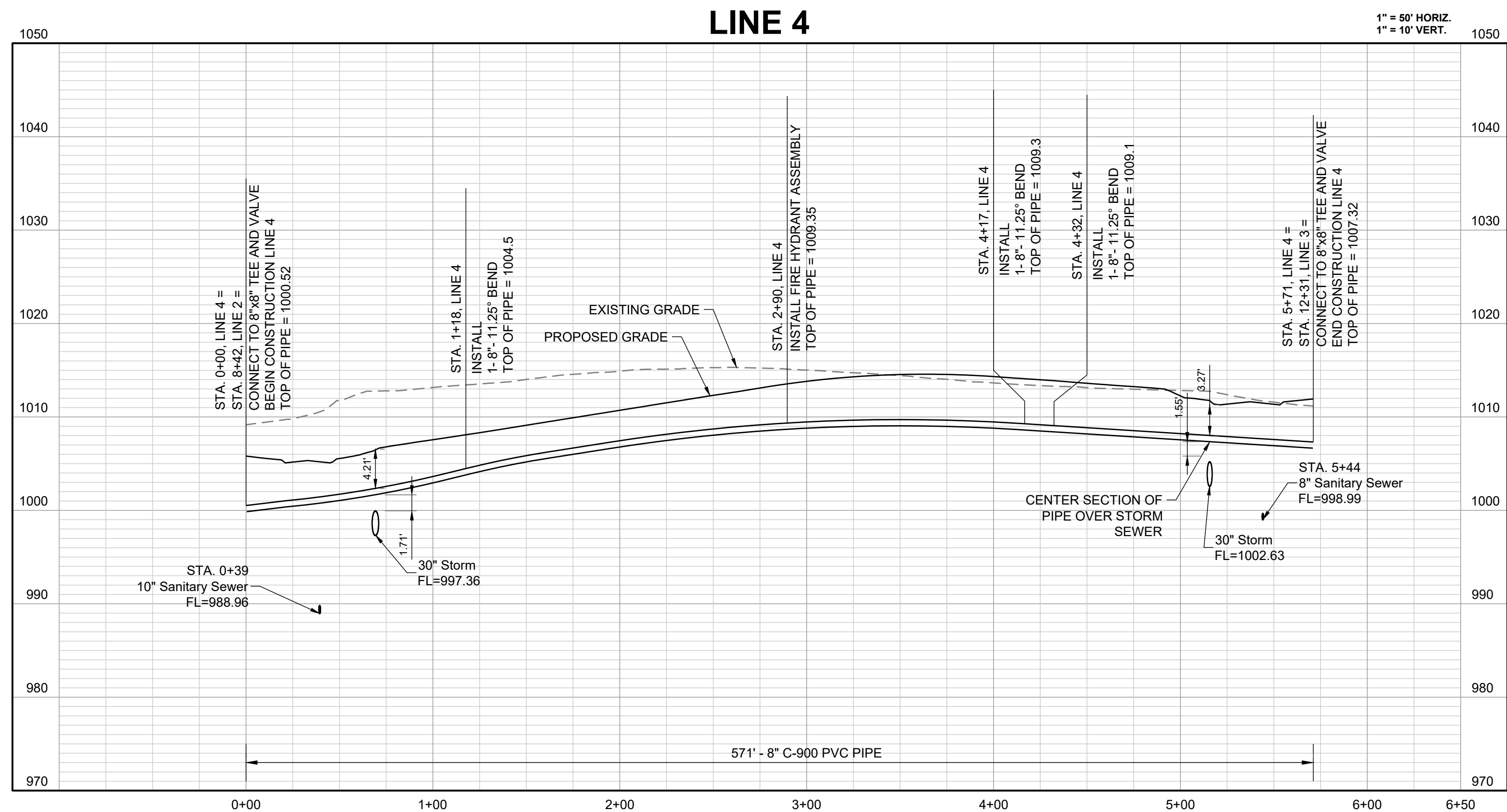


PREPARED BY:



SCHLAGEL & ASSOCIATES, P.A.

MANOR AT BAILEY FARMS, FIRST PLAT
WATER LINE PLANS
SE BAILEY ROAD AND SE RANSON ROAD
LEE'S SUMMIT, MISSOURI



RECORD DRAWING

The information provided on this drawing conforms to construction records; it is not intended for construction, implementation or recording purposes; and it is solely based on information obtained by Schlagel and Associates.

100-00 100.10", "1-00% 1.15% slope", or "8-inch HDPE PVC pipe" are all typical examples of revisions that indicate that design data has been replaced with "as-built" information. All other data is as designed and has not been field verified.

Date: 05/14/2025
Certified by: JLL
Title: Senior Project Engineer
Firm: Schlagel and Associates, P.A.

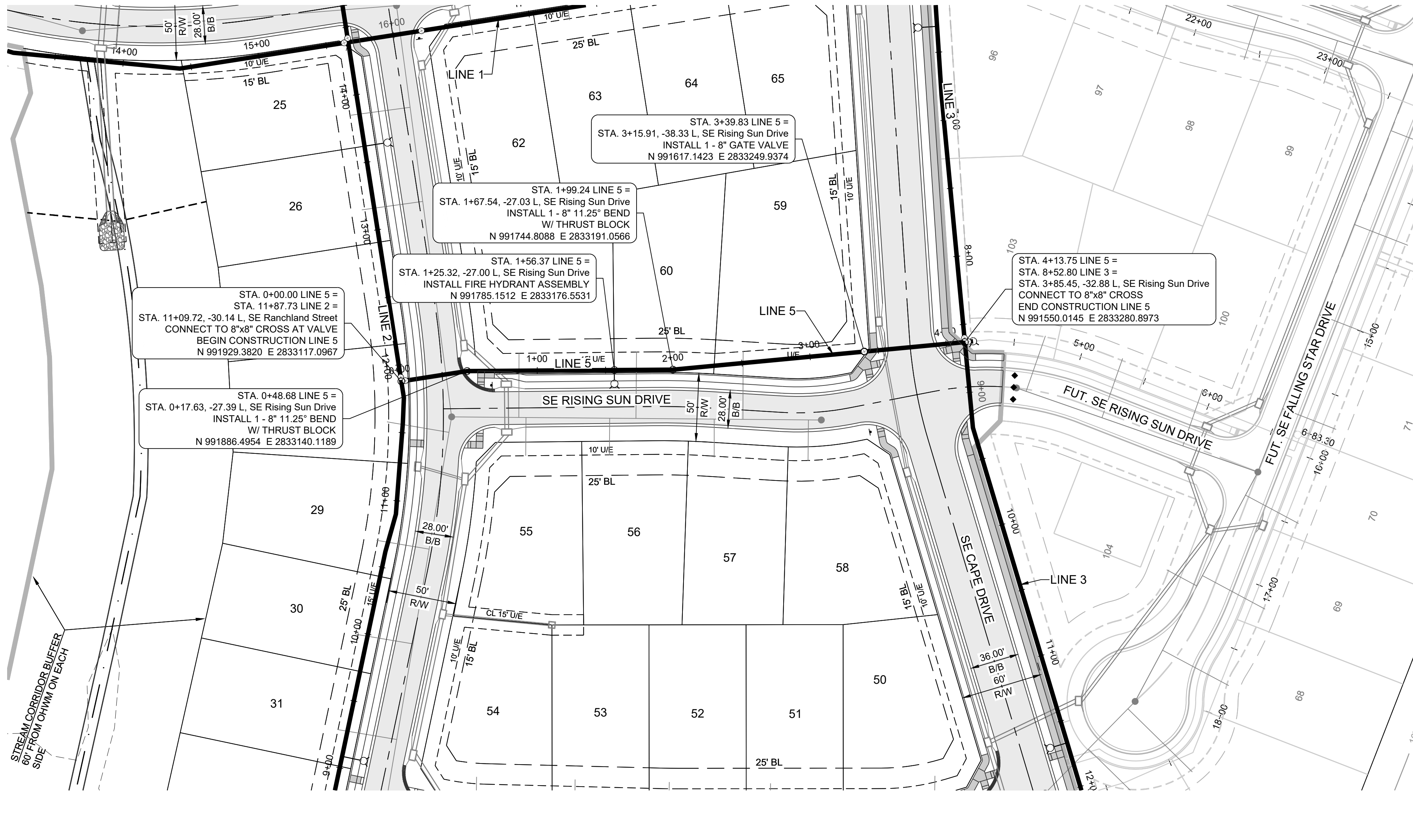
REVISION DATE	DESCRIPTION
01/24/2022	Per City Comments dated 11/19/2022
04/20/2022	Per City Comments dated 02/15/2022
05/31/2022	Per City Comments dated 05/24/2022
06/30/2022	Per City Comments dated 05/31/2022
10/27/2023	Revised Details to current 2023 Details
11/30/2023	Added "New City Requirement" note
05/14/2025	As-Built

DRAWN BY:	MBH
CHECKED BY:	JLL
DATE PREPARED:	11/05/2021
PROJ. NUMBER:	21-130

WATER LINE 4
PLAN & PROFILE

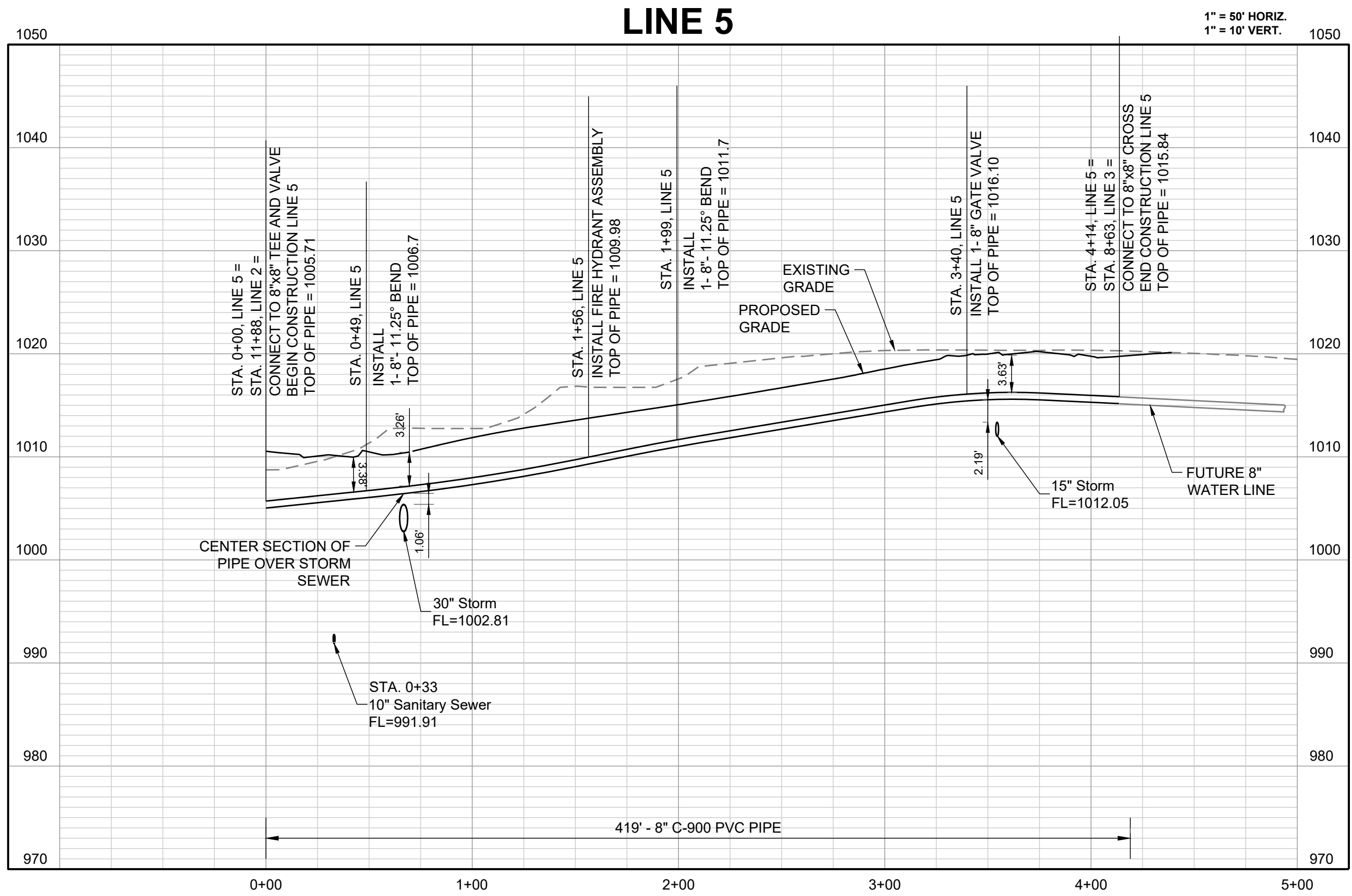
SHEET

11



- PROJECT BENCHMARK:**
- Brass Disk at the Northeast Corner of the Northeast One-Quarter of Section 16, Township 47 N, Range 31 W, Intersection of SE. Bailey Road and SE. Ranson Road.
- ELEV. = 939.19
- NOTES:**
- ALL CONSTRUCTION TO FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.
 - THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATION.
 - FOR ALL WATER LINES THE MAXIMUM DEPTH OF COVER IS SEVEN (7) FEET.

Record Drawing



RECORD DRAWING

The information provided on this drawing conforms to construction records; it is not intended for construction, implementation or recording purposes; and it is solely based on information obtained by Schlager and Associates.

“100-00 100.10”, “1-00% 1.15% slope”, or “8-inch HDPE PVC pipe” are all typical examples of revisions that indicate that design data has been replaced with “as-built” information. All other data is as designed and has not been field verified.

Date: 05/14/2025
Certified by: JLL
Title: Senior Project Engineer
Firm: Schlager and Associates, P.A.

SCHLAGEL
ENGINEERS PLANNERS SURVEYORS LANDSCAPE ARCHITECTS
14920 West 107th Street • Lenexa, Kansas 66215
(913) 492-5158 • Fax: (913) 492-8400
WWW.SCHLAGELASSOCIATES.COM
Missouri State Certificates of Authority
#E2002003600-F #LAC2001005237 #LS200200859-F

PREPARED BY:

JAMES L. LONG
NUMBER PE-2014010495
6/14/2025
PROFESSIONAL ENGINEER

SCHLAGEL & ASSOCIATES, P.A.

MANOR AT BAILEY FARMS, FIRST PLAT
WATER LINE PLANS
SE BAILEY ROAD AND SE RANSON ROAD
LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION
01/24/2022	Per City Comments dated 11/19/2022
04/20/2022	Per City Comments dated 02/15/2022
05/01/2022	Per City Comments dated 05/04/2022
06/30/2022	Per City Comments dated 05/31/2022
10/27/2023	Revised Details to current 2023 Details
11/30/2023	Added "New City Requirement" note
05/14/2025	As-Built

DRAWN BY: MBH
CHECKED BY: JLL
DATE PREPARED: 11/05/2021
PROJ. NUMBER: 21-130

WATER LINE 5
PLAN & PROFILE

SHEET
12

Record Drawing

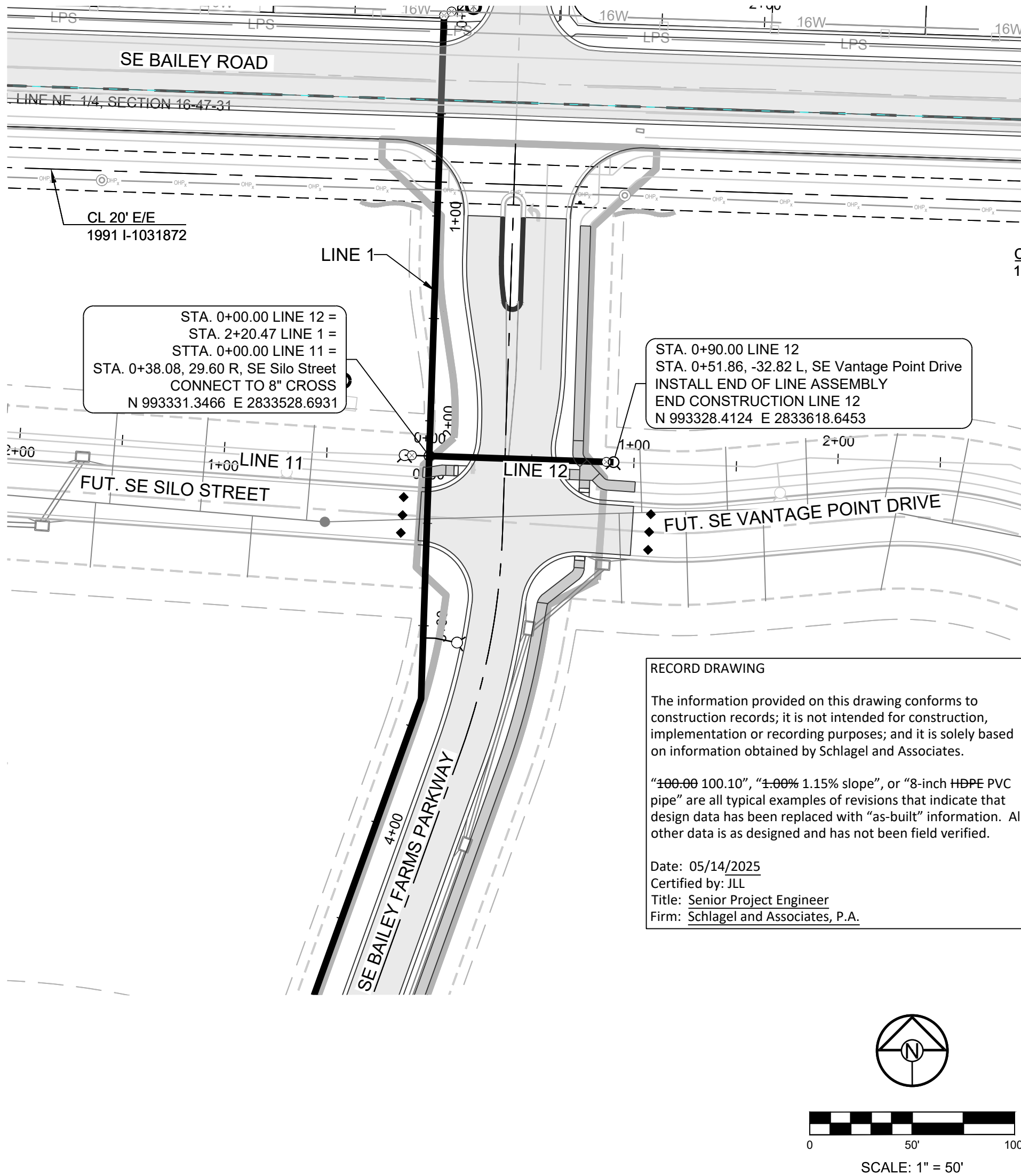
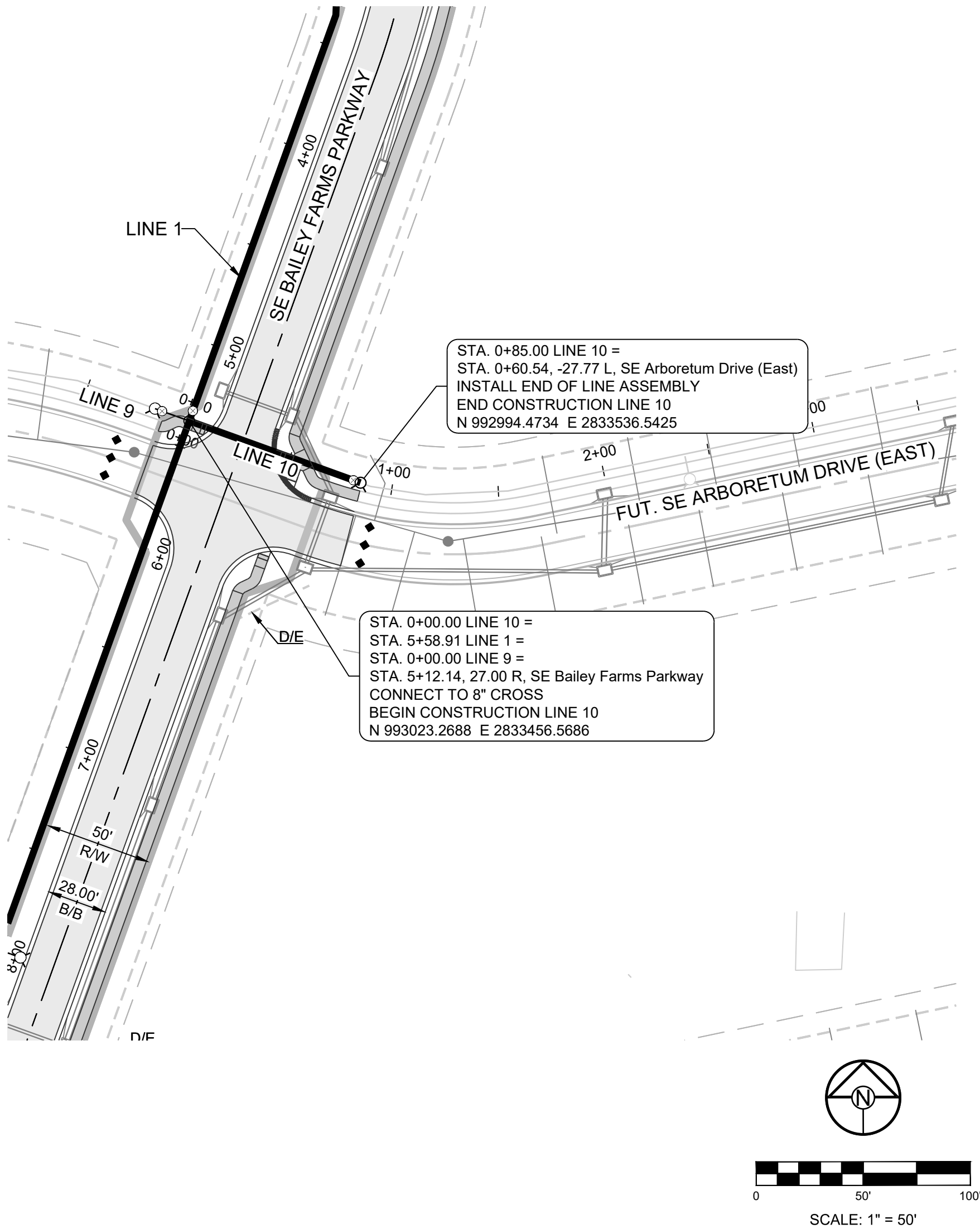
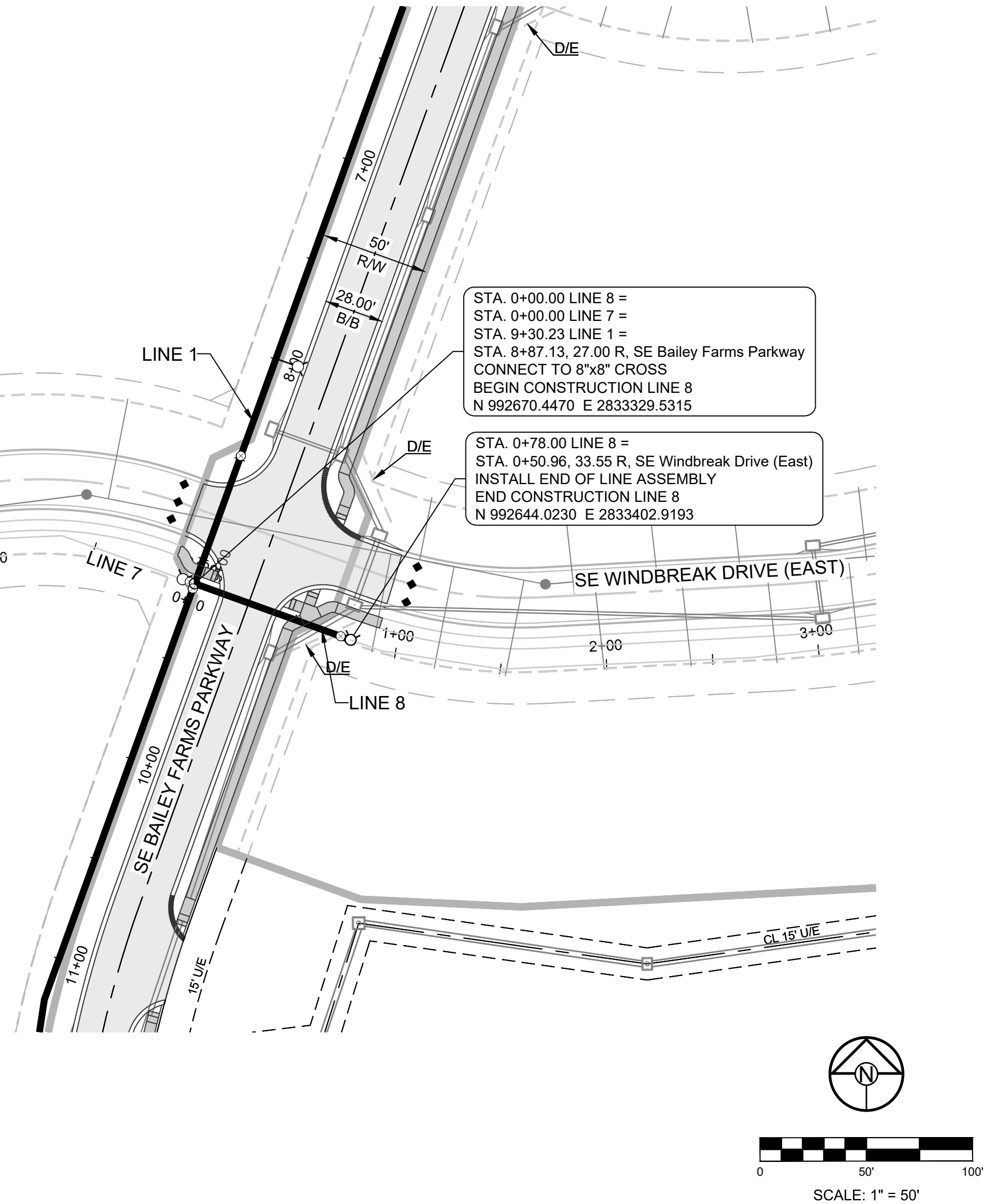
PROJECT BENCHMARK:

NOTES:

1. ALL CONSTRUCTION TO FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.
2. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATION.
3. FOR ALL WATER LINES THE MAXIMUM DEPTH OF COVER IS SEVEN (7) FEET. UNLESS OTHERWISE NOTED.

Brass Disk at the Northeast Corner of the Northeast One-Quarter of Section 16, Township 47 N, Range 31 W. Intersection of SE. Bailey Road and SE. Ranson Road.

ELEV. = 939.19

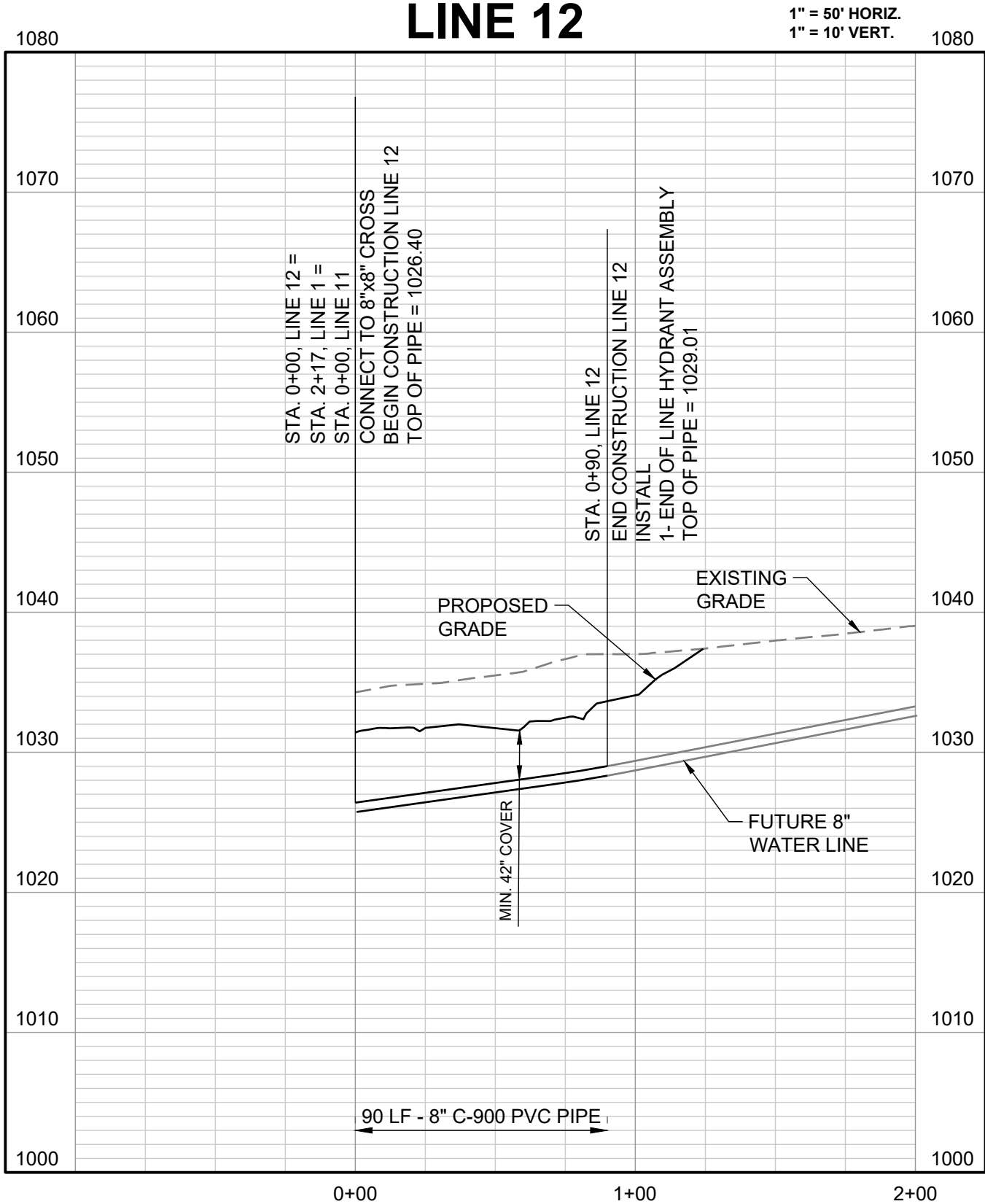
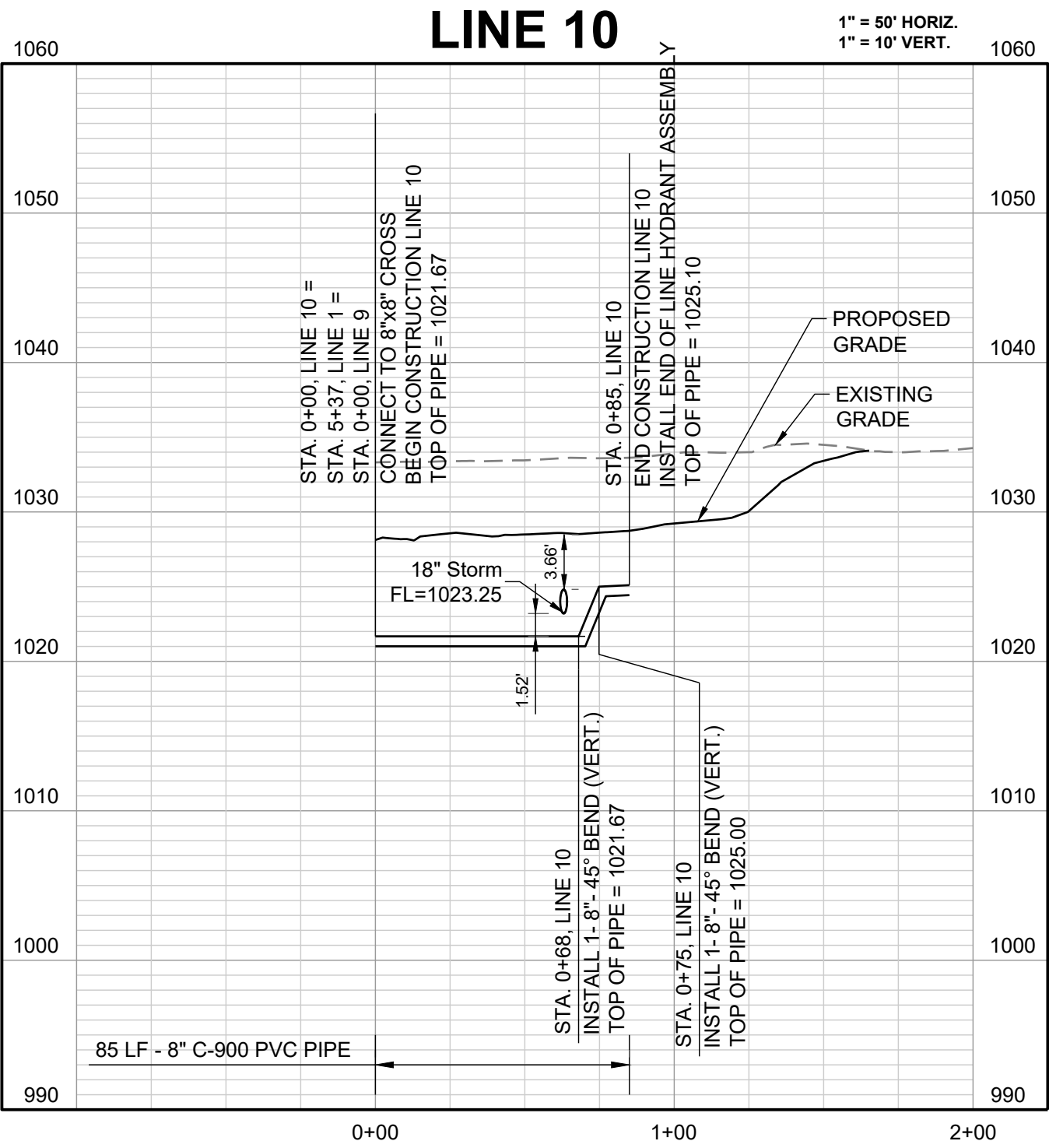
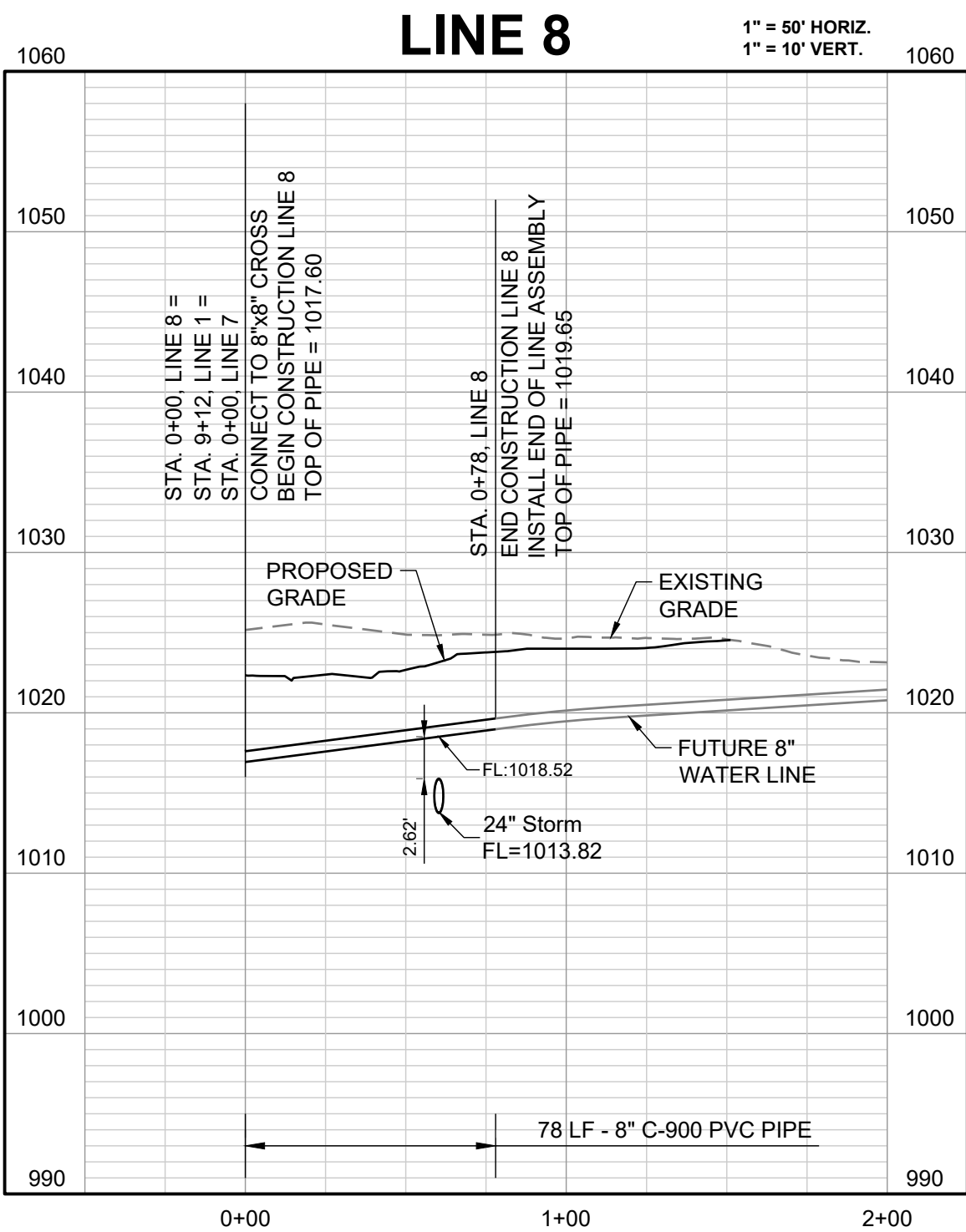


RECORD DRAWING

The information provided on this drawing conforms to construction records; it is not intended for construction, implementation or recording purposes; and it is solely based on information obtained by Schlagel and Associates.

"100-00 100.10", "1-00% 1.15% slope", or "8-inch HDPE PVC pipe" are all typical examples of revisions that indicate that design data has been replaced with "as-built" information. All other data is as designed and has not been field verified.

Date: 05/14/2025
Certified by: JLL
Title: Senior Project Engineer
Firm: Schlagel and Associates, P.A.



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

PREPARED BY:
JAMES L. LONG
PE-2014010495
05/14/2025

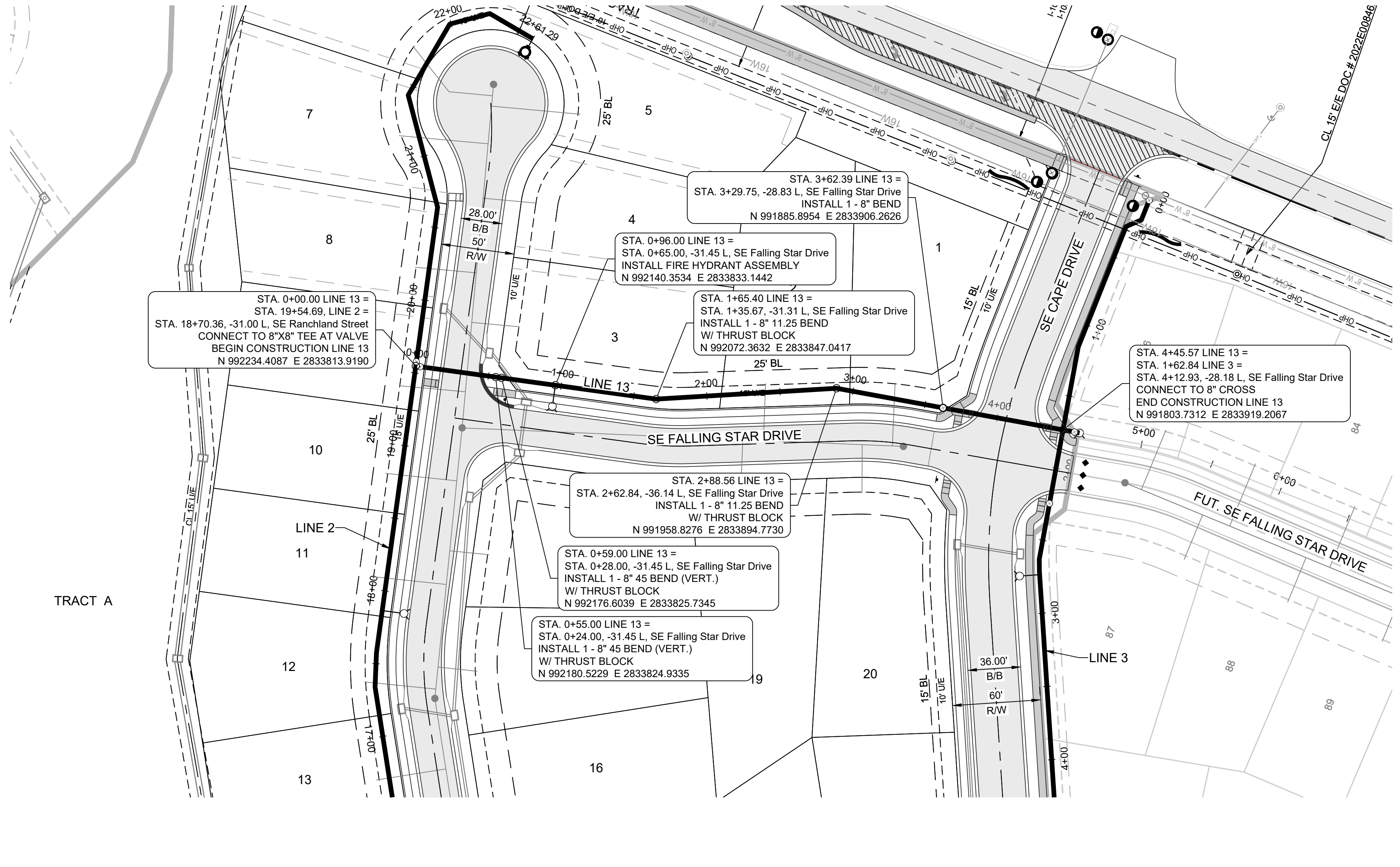
SCHLAGEL & ASSOCIATES, P.A.

MANOR AT BAILEY FARMS, FIRST PLAT
WATER LINE PLANS
SE BAILEY ROAD AND SE RANSON ROAD
LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION
01/24/2022	Per City Comments dated 11/19/2022
04/20/2022	Per City Comments dated 02/15/2022
05/31/2022	Per City Comments dated 05/24/2022
06/30/2022	Per City Comments dated 05/31/2022
10/27/2023	Revised Details to current 2023 Details
11/09/2023	Added "New City Requirement" note
05/14/2025	As-Built

DRAWN BY: MBH	DATE PREPARED: 11/05/2021	PROJ. NUMBER: 21-130
------------------	------------------------------	-------------------------

WATER LINE 8,
10, & 12 PLAN &
PROFILE



PROJECT BENCHMARK:

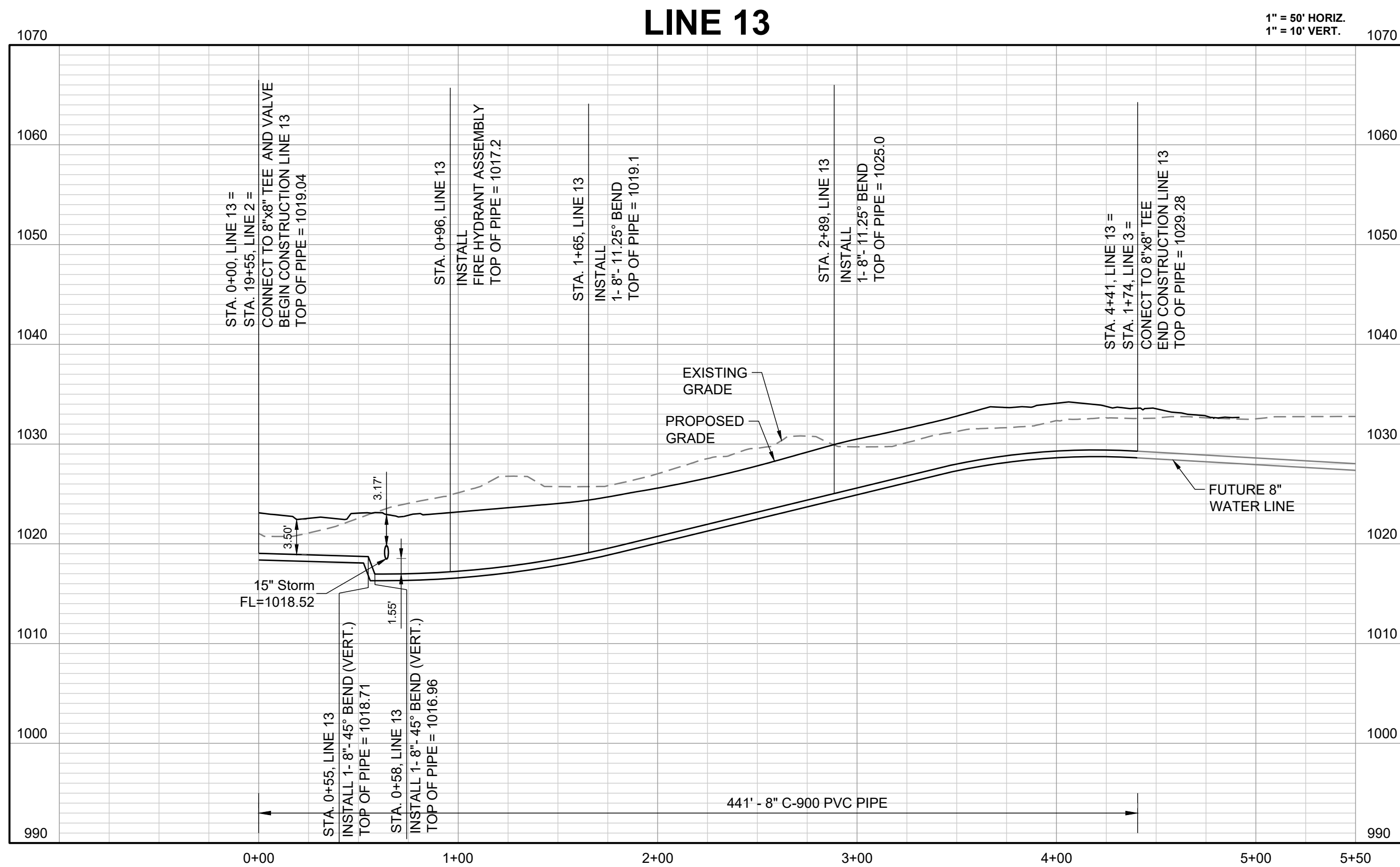
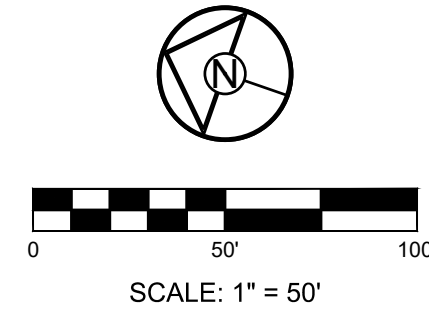
Brass Disk at the Northeast Corner of the Northeast One-Quarter of Section 16, Township 47 N, Range 31 W, Intersection of SE. Bailey Road and SE. Ranson Road.

ELEV. = 939.19

NOTES:

- ALL CONSTRUCTION TO FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATION.
- FOR ALL WATER LINES THE MAXIMUM DEPTH OF COVER IS SEVEN (7) FEET. UNLESS OTHERWISE NOTED

Record Drawing



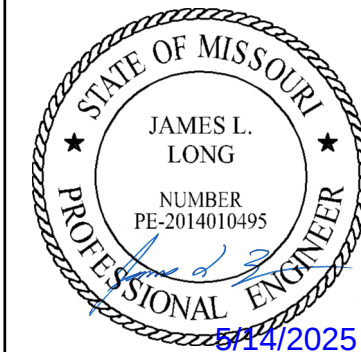
RECORD DRAWING

The information provided on this drawing conforms to construction records; it is not intended for construction, implementation or recording purposes; and it is solely based on information obtained by Schlager and Associates.

Date: 05/14/2025
Certified by: JLL
Title: Senior Project Engineer
Firm: Schlager and Associates, P.A.



PREPARED BY:



SCHLAGER & ASSOCIATES, P.A.

MANOR AT BAILEY FARMS, FIRST PLAT
WATER LINE PLANS
SE BAILEY ROAD AND SE RANSON ROAD
LEE'S SUMMIT, MISSOURI

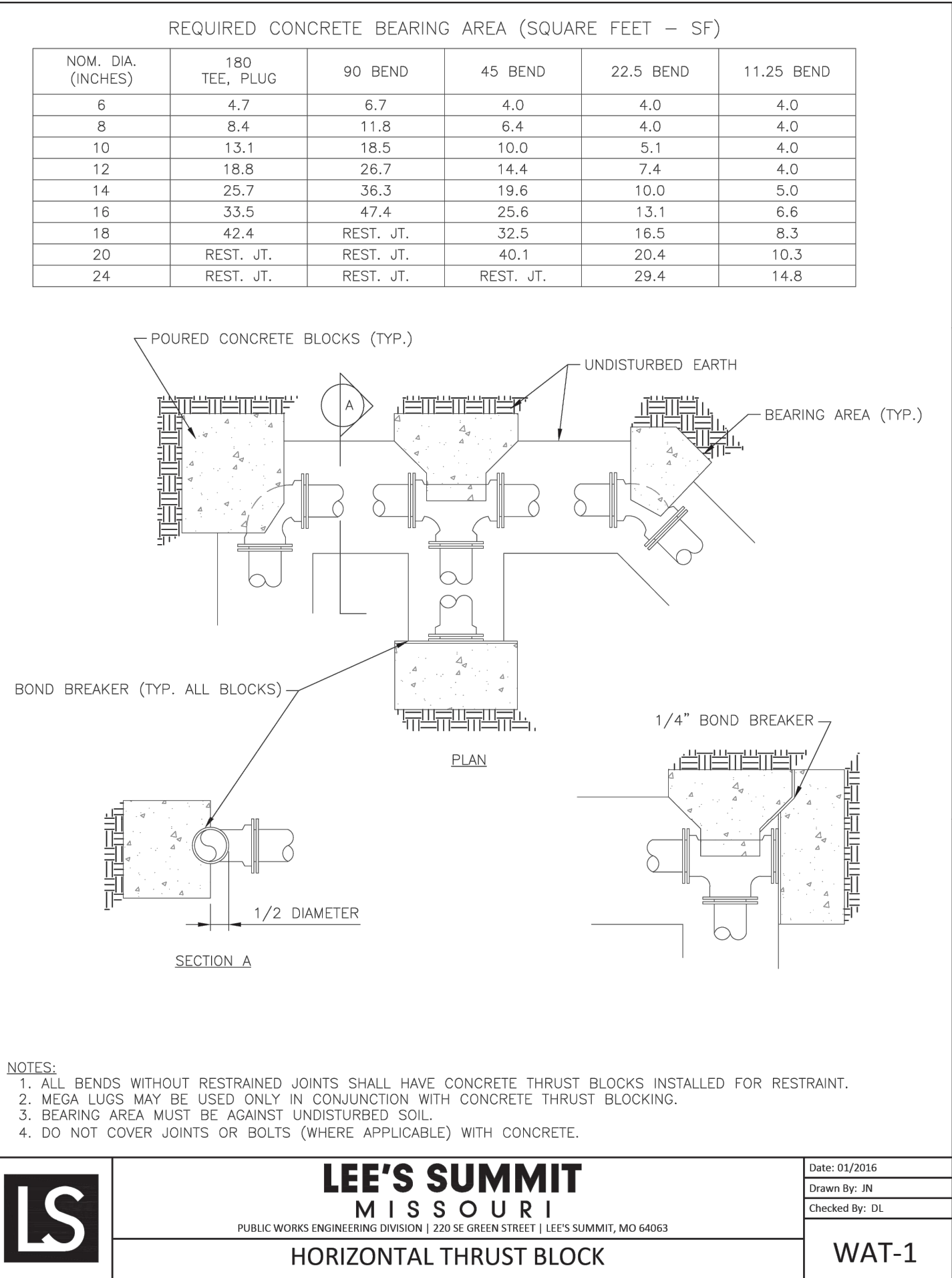
REVISION DATE	DESCRIPTION
01/24/2022	Per City Comments dated 11/19/2022
04/20/2022	Per City Comments dated 02/15/2022
05/01/2022	Per City Comments dated 05/04/2022
06/30/2022	Per City Comments dated 05/01/2022
10/27/2023	Revised Details to current 2023 Details
11/09/2023	Added "New City Requirement" note
05/14/2025	As-Built

DRAWN BY:	MBH
CHECKED BY:	JLL
DATE PREPARED:	11/05/2021
PROJ. NUMBER:	21-130

WATER LINE 13
PLAN & PROFILE

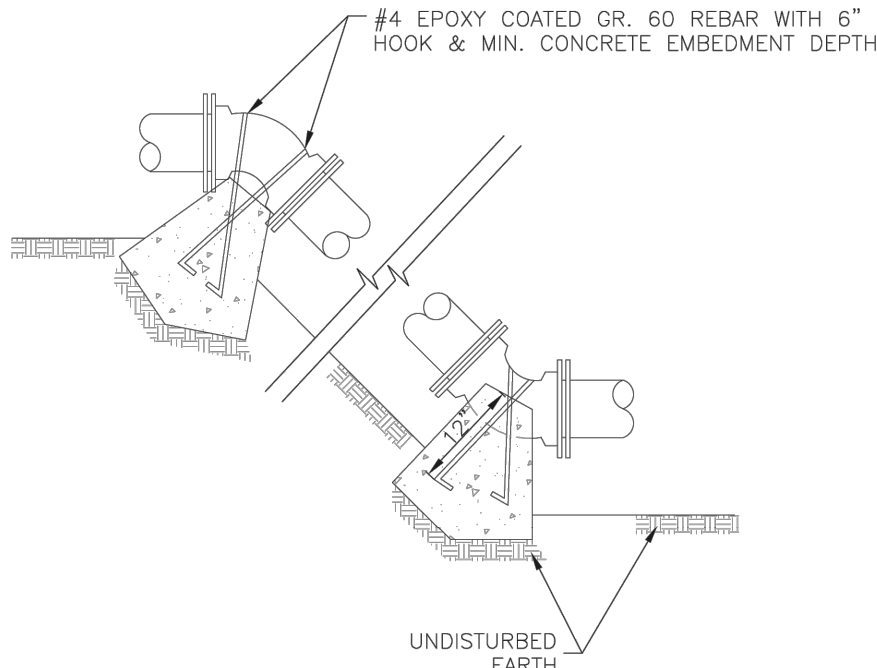
SHEET

14



REQUIRED CONCRETE VOLUME (CUBIC FEET – CF)

NOM. DIA. (INCHES)	180 TEE, PLUG	90 BEND	45 BEND	22.5 BEND	11.25 BEND
6	50.5	71.4	38.6	19.7	9.9
8	89.8	126.9	68.7	35.0	17.6
10	140.2	198.3	107.3	54.7	27.5
12	202.0	REST. JT.	154.6	78.8	39.6
14	REST. JT.	REST. JT.	210.4	107.3	53.9
16	REST. JT.	REST. JT.	REST. JT.	140.1	70.4
18	REST. JT.	REST. JT.	REST. JT.	177.3	89.1
20	REST. JT.	REST. JT.	REST. JT.	REST. JT.	110.0
24	REST. JT.	REST. JT.	REST. JT.	REST. JT.	158.4



- NOTES:
1. ALL BENDS WITHOUT RESTRAINED JOINTS SHALL HAVE CONCRETE THRUST BLOCKS INSTALLED FOR RESTRAINT.
 2. MEGA LUGS MAY BE USED ONLY IN CONJUNCTION WITH CONCRETE THRUST BLOCKING.
 3. BEARING MUST BE AGAINST UNDISTURBED SOIL.
 4. DO NOT COVER JOINTS OR BOLTS (WHERE APPLICABLE) WITH CONCRETE.

LS

LEE'S SUMMIT

MISSOURI

PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Date: 01/2016

Drawn By: JM

Checked By: DL

WAT-1

LEE'S SUMMIT

MISSOURI

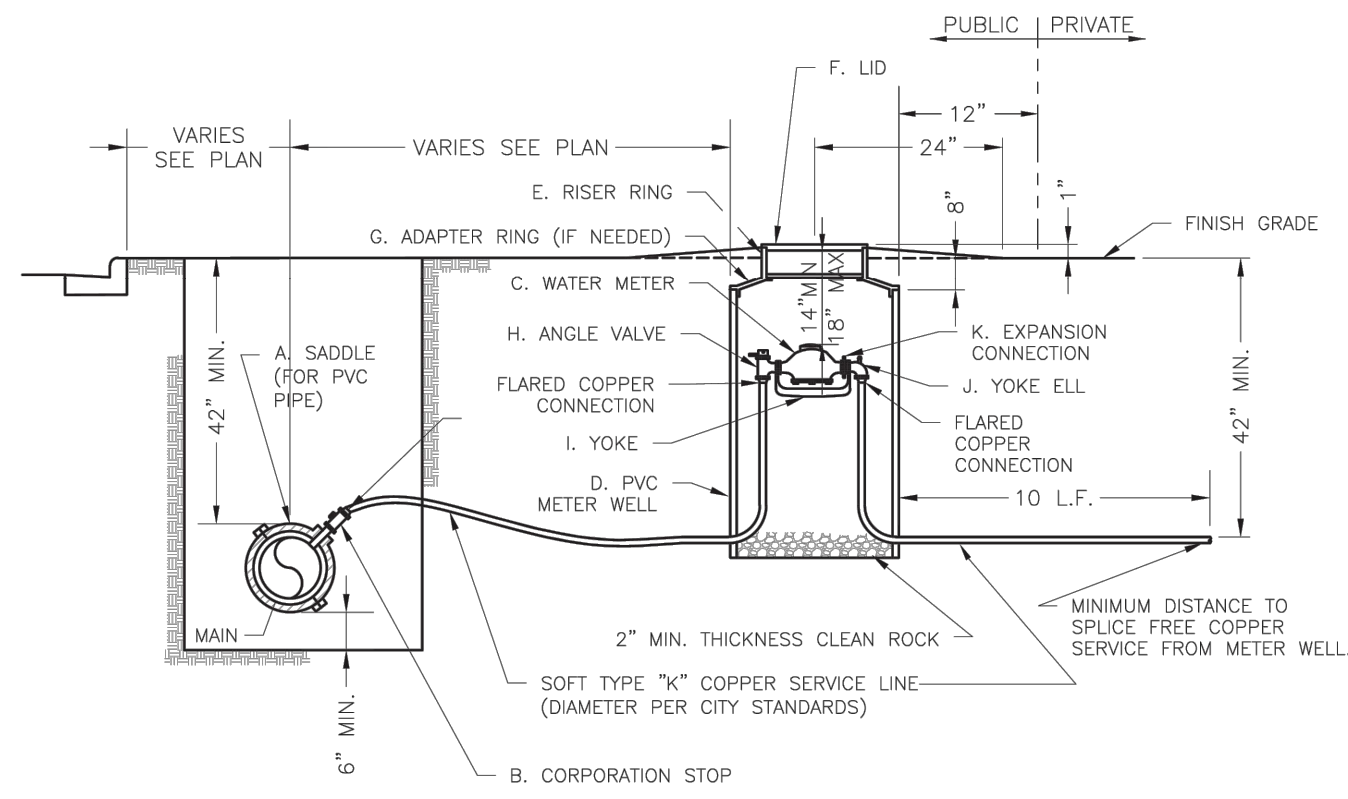
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Date: WAT-2

Drawn By: JM

Checked By: DL

WAT-2



- NOTES:
1. METER INSTALLATION SHALL NOT BE LOCATED IN AREAS SUBJECT TO VEHICULAR TRAFFIC OR IN CONCRETE PAVEMENT WITHOUT CITY APPROVAL.
 2. IF METER IS TO BE LOCATED OTHER THAN IN FRONT OF PROPERTY LINE, CITY APPROVAL SHALL BE OBTAINED.
 3. CITY TO FURNISH ITEMS A–K.
 4. NO OTHER EQUIPMENT SHALL BE INSTALLED IN THIS PIT.
 5. 42" MINIMUM BURY DEPTH FOR ALL SERVICE LINES.
 6. EXCAVATION FOR TAP TO EXPOSE 4' LINEAR FEET OF MAIN.
 7. NO SPLICES ALLOWED BETWEEN METER AND MAIN.
 8. SERVICE CONNECTION TAP AT APPROXIMATELY 45 DEGREES.
 9. LID AND RISER RING SHALL BE SET SO THAT GROUND WATER WILL DRAIN AWAY FROM THE WELL.
 10. CONTACT WATER UTILITIES, 816–969–1900, FOR REQUIREMENTS OF A METER LARGER THAN 2"

LS

LEE'S SUMMIT

MISSOURI

PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Date: 06/2015

Drawn By: JM

Checked By: DL

WAT-11

LEE'S SUMMIT

MISSOURI

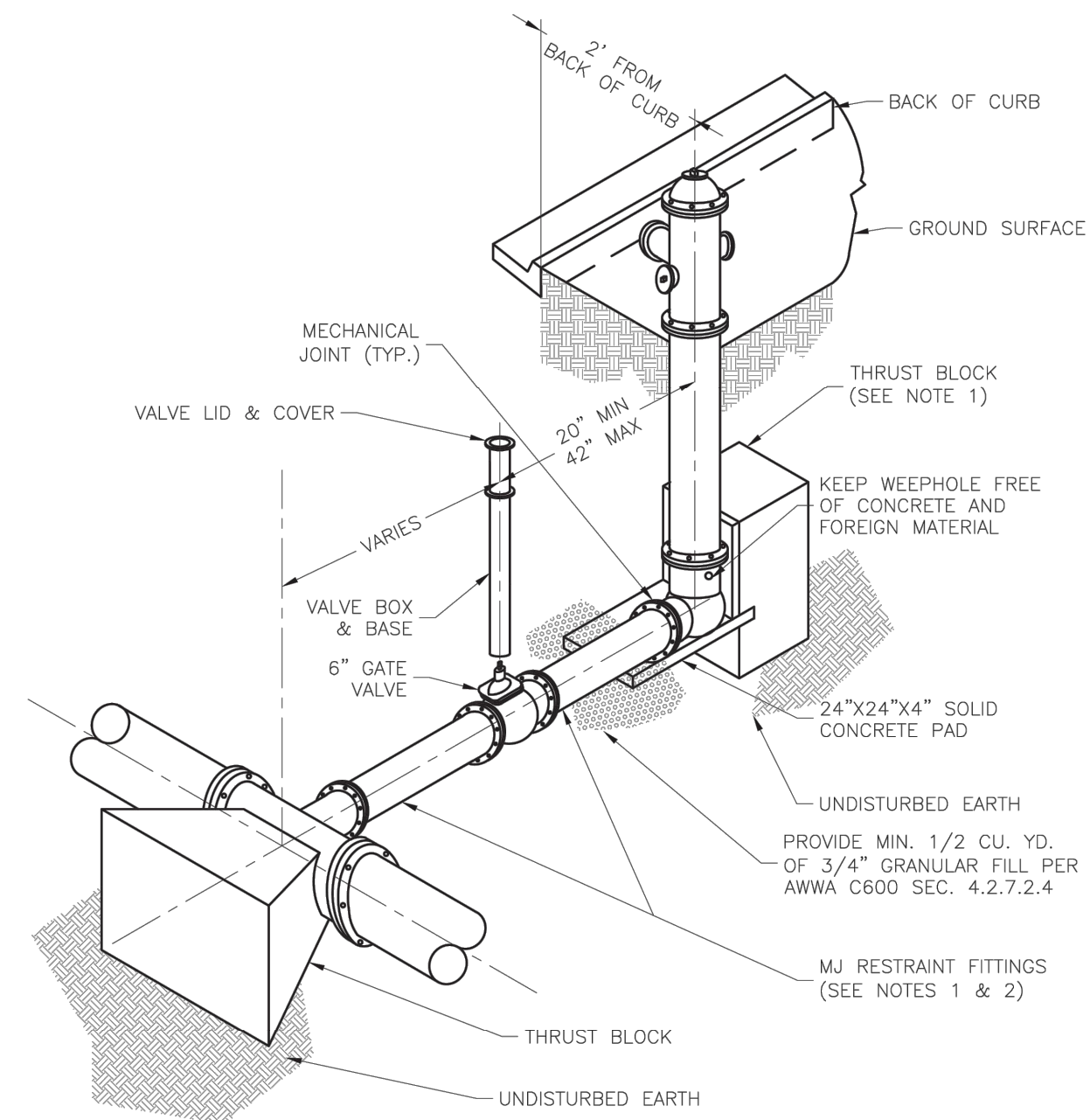
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Date: WAT-7

Drawn By: JM

Checked By: DL

WAT-7



- NOTES:
1. WHEN RETAINER GLANDS ARE USED IN LIEU OF MECHANICAL JOINT (MJ) RESTRAINT FITTINGS, HORIZONTAL THRUST BLOCKS ARE REQUIRED.
 2. GATE VALVE MAY BE BOLTED DIRECTLY TO MJ RESTRAINT TEE.
 3. SEE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR FIRE HYDRANT, VALVES, VALVE BOX LID, AND COVER.
 4. BOTTOM HYDRANT FLANGE SHALL BE 2" TO 6" ABOVE FINISHED GRADE.
 5. FOR STREETS WITHOUT CURBS FIRE HYDRANTS SHALL BE PLACED WITHIN 1 FOOT OF THE R/W LINE, BUT NOT MORE THAN 10' FROM EDGE OF PAVEMENT. FIRE HYDRANT SHALL NOT BE PLACED IN BOTTOM OF DITCH.
 6. HYDRANT SHALL BE ROTATED AS DIRECTED BY INSPECTOR.

LS

LEE'S SUMMIT

MISSOURI

PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Date: 01/2016

Drawn By: JM

Checked By: DL

WAT-7

LEE'S SUMMIT

MISSOURI

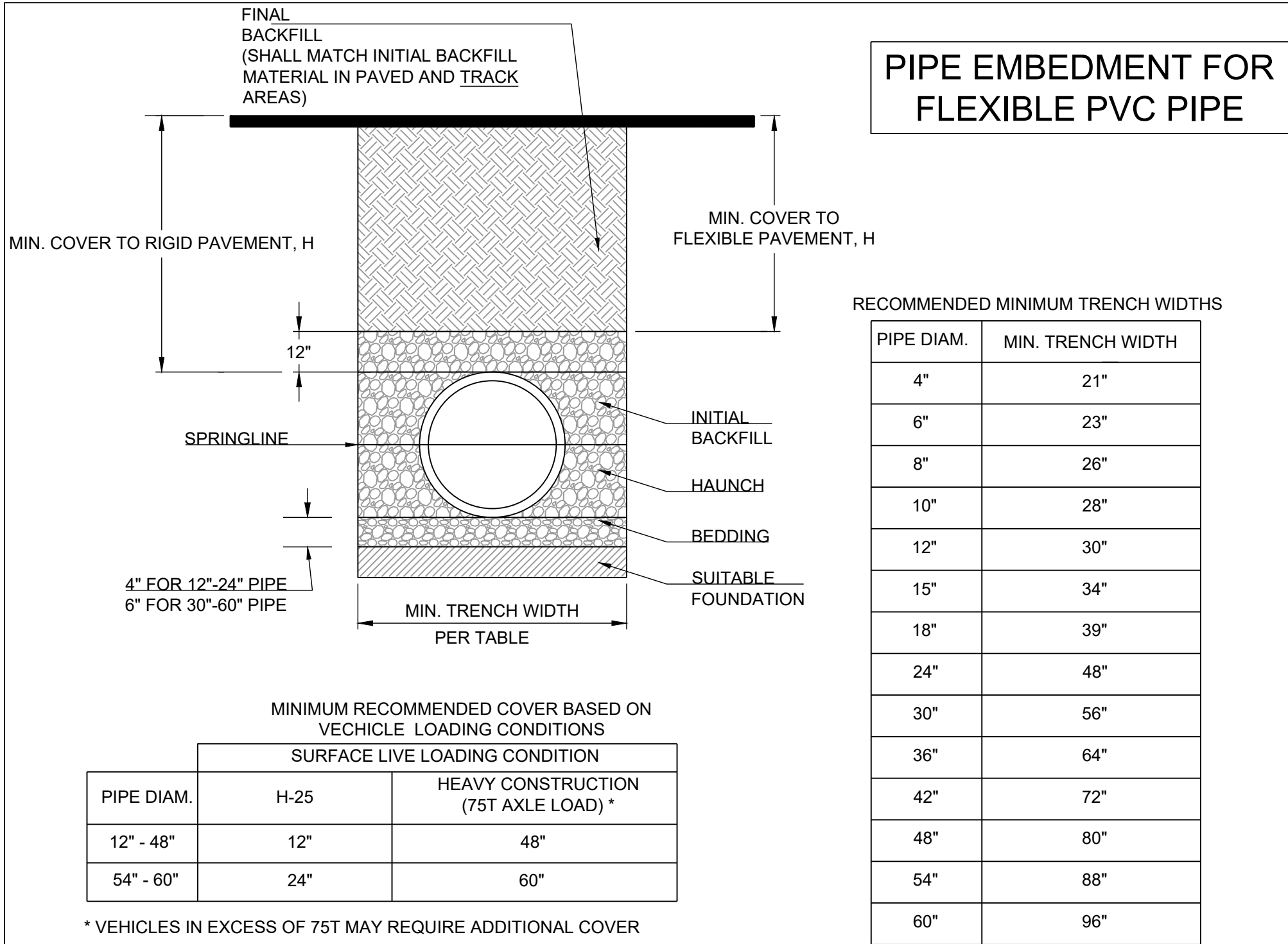
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Date: WAT-7

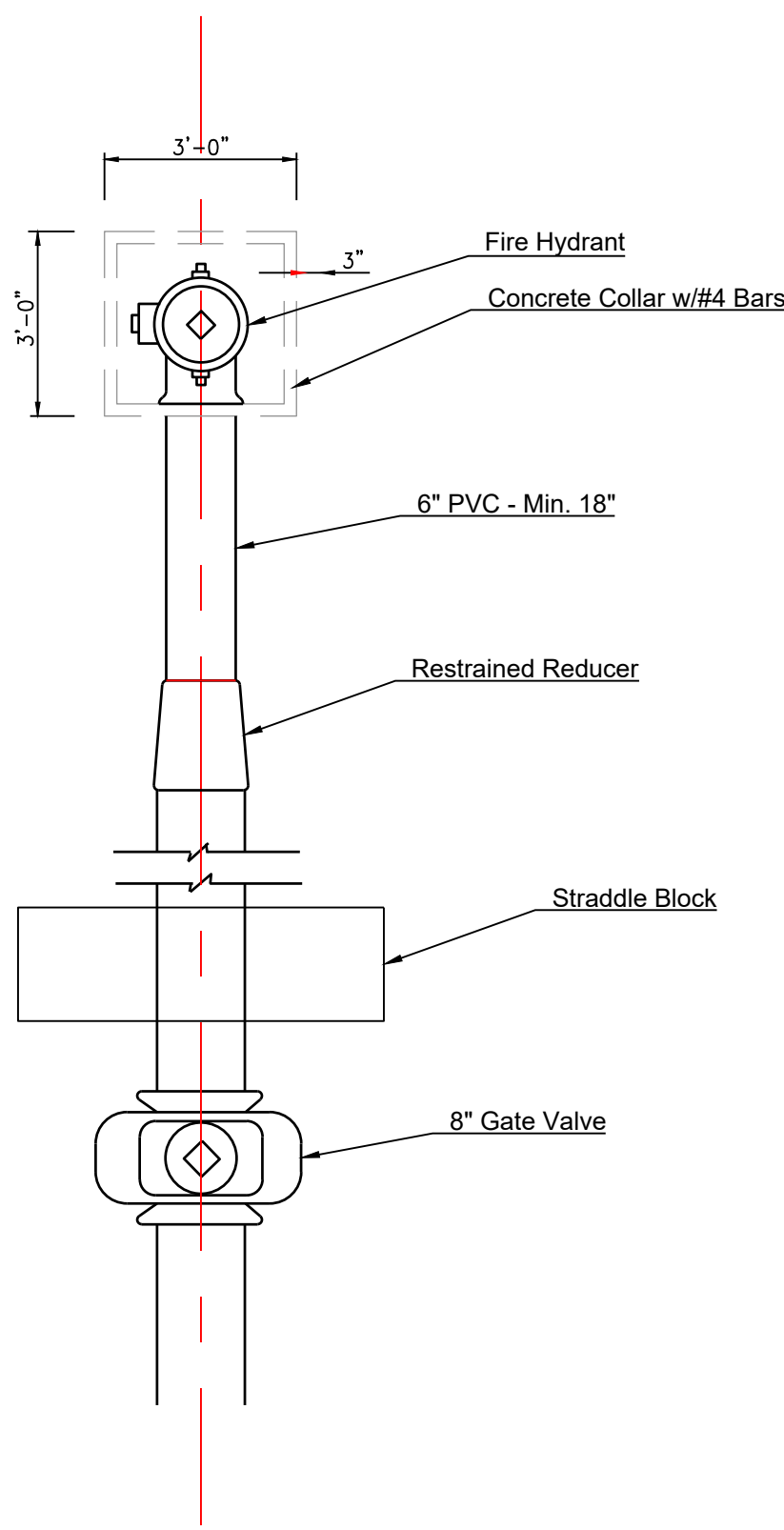
Drawn By: JM

Checked By: DL

WAT-7



- NOTES:
1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION
 2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
 3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
 4. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-900mm).
 5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
 6. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54"-60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.



END OF LINE ASSEMBLY

Record Drawing

RECORD DRAWING

The information provided on this drawing conforms to construction records; it is not intended for construction, implementation or recording purposes, and it is solely based on information obtained by Schlager and Associates.

Date: 05/14/2025
Certified by: JLL
Title: Senior Project Engineer
Firm: Schlager and Associates, P.A.

SCHLAGEL

ENGINEERS

PLANNERS

SURVEYORS

LANDSCAPE ARCHITECTS

14920 West 107th Street • Lenexa, Kansas 66215
(913) 492-5158 • Fax: (913) 492-8400
WWW.SCHLAGELASSOCIATES.COM

14920 West 107th Street • Lenexa, Kansas 66215
#20202008890-F #20202008890-F #20202008890-F

PREPARED BY:

STATE OF MISSOURI

JAMES L. LONG

NUMBER PE-2014010495

8/14/2025

PROFESSIONAL ENGINEER

SCHLAGEL & ASSOCIATES, P.A.

MANOR AT BAILEY FARMS, FIRST PLAT
WATER LINE PLANS
SE BAILEY ROAD AND SE RANSON ROAD
LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION	REVISION DATE	DESCRIPTION
11/19/2022	Per City Comments dated 11/19/2022	11/19/2022	Per City Comments dated 11/19/2022
02/15/2022	Per City Comments dated 02/15/2022	02/15/2022	Per City Comments dated 02/15/2022
05/24/2022	Per City Comments dated 05/24/2022	05/24/2022	Per City Comments dated 05/24/2022
05/01/2022	Per City Comments dated 05/01/2022	05/01/2022	Per City Comments dated 05/01/2022
05/03/2022	Per City Comments dated 05/03/2022	05/03/2022	Per City Comments dated 05/03/2022
02/27/2023	Revised Details to current 2023 Details	02/27/2023	Revised Details to current 2023 Details
11/02/2021	Added "New City Requirement" note	11/02/2021	Added "New City Requirement" note
05/14/2025	As-Built	05/14/2025	As-Built

WATER LINE DETAILS

SHEET

15