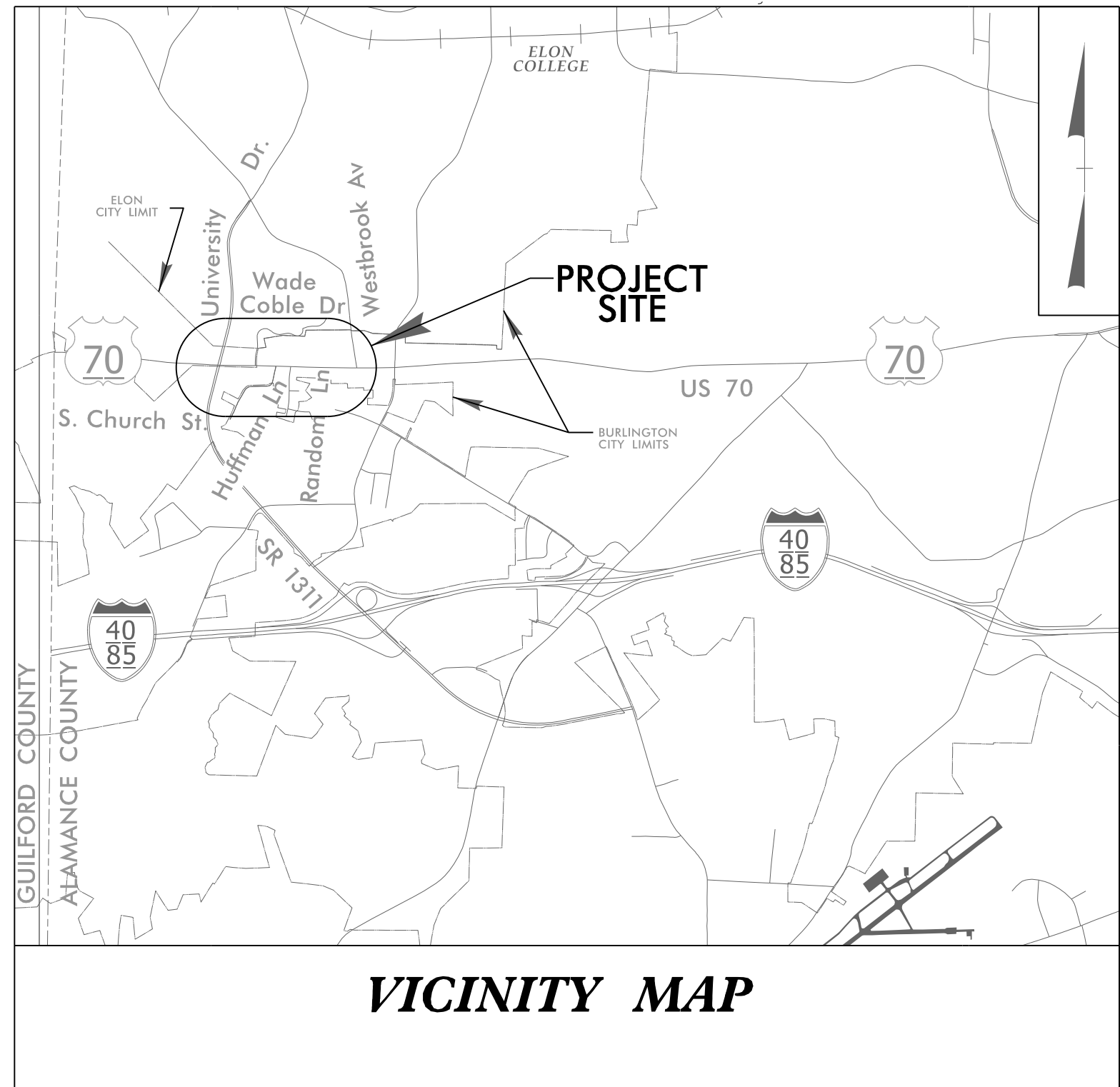


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TIP PROJECT: U-6010



VICINITY MAP

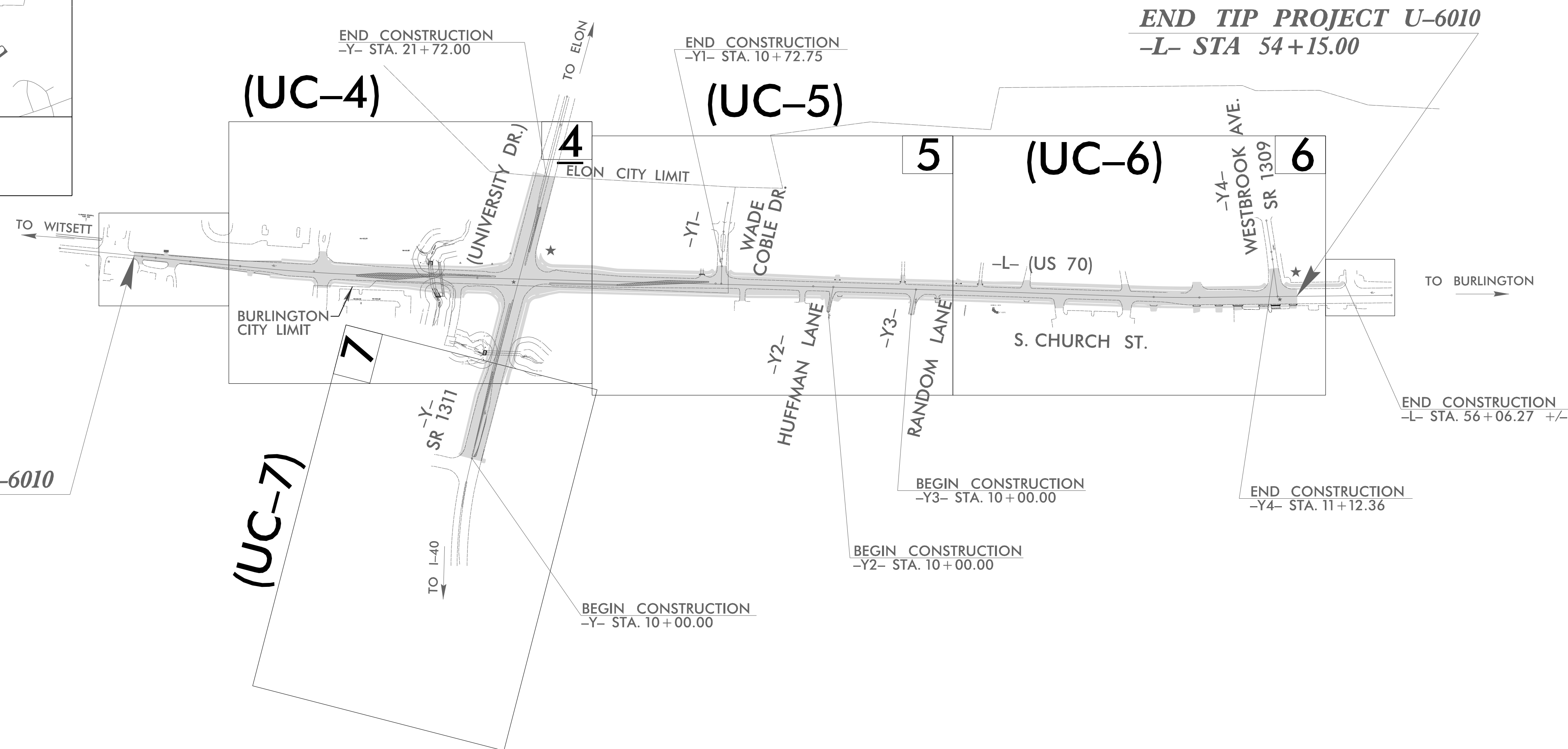
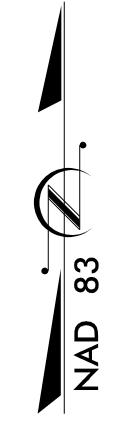
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

T.I.P. NO.	SHEET NO.
U-6010	UC-1

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

**UTILITY CONSTRUCTION PLANS
ALAMANCE COUNTY**

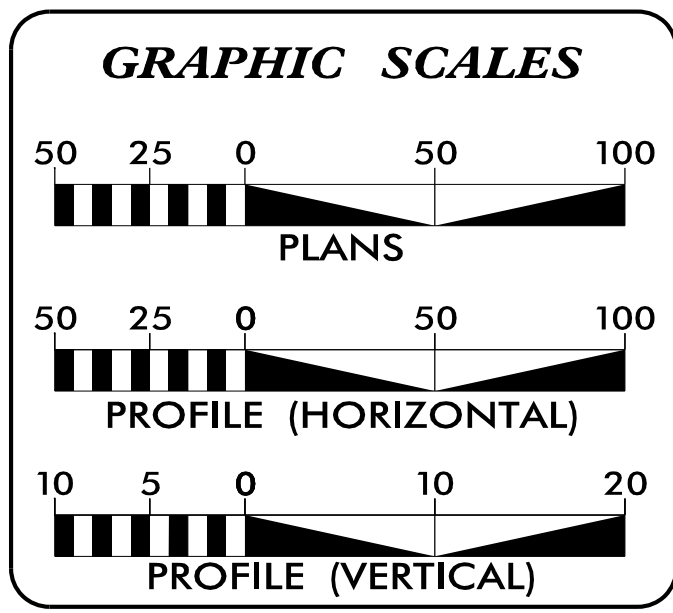
LOCATION: US 70 AT UNIVERSITY DRIVE IN BURLINGTON
TYPE OF WORK: WATER & SANITARY SEWER RELOCATIONS



BEGIN TIP PROJECT U-6010
-L- STA 7+50.00

END TIP PROJECT U-6010
-L- STA 54+15.00

★ DENOTES SIGNAL



INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
UC-1	TITLE SHEET
UC-2	UTILITY SYMBOLOGY
UC-3	NOTES
UC-3A THRU UC-3B	DETAILS
UC-4 THRU UC-7	UTILITY CONSTRUCTION SHEETS
UC-8 THRU UC-11	PROFILE SHEETS

WATER AND SEWER OWNERS ON PROJECT

(A) WATER - CITY OF BURLINGTON
(B) SEWER - CITY OF BURLINGTON

PREPARED IN THE OFFICE OF:

License No. C-2639
401 Harrison Oaks Blvd., Suite 220 Cary, NC 27513
Ph. (919) 853-0001

Clint L. Stevens, P.E. UTILITIES PROJECT MANAGER
Jordan K. Chapman UTILITIES PROJECT ENGINEER
James N. Arnold UTILITIES PROJECT DESIGNER

SEAL

**DIVISION OF HIGHWAYS
DIVISION 7**

1584 YANCEYVILLE STREET
GREENSBORO, NC 27415-4996
PHONE (336) 487-0000
FAX (336) 334-3637

Wright R. Archer, P.E. DIV. ENGINEER
Patty Eason, P.E. DIV. CONSTRUCTION ENGINEER
Chris Smitherman, P.E. PROJECT TEAM LEAD
Rob N. Weisz, P.E. PROJECT ENGINEER

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UTILITIES PLAN SHEET SYMBOLS

PROPOSED WATER SYMBOLS

Water Line (Sized as Shown)	
11 1/4 Degree Bend	
22 1/2 Degree Bend	
45 Degree Bend	
90 Degree Bend	
Plug	
Tee	
Cross	
Reducer	
Gate Valve	
Butterfly Valve	
Tapping Valve	
Line Stop	
Line Stop with Bypass	
Blow Off	
Fire Hydrant	
Relocate Fire Hydrant	
Remove Fire Hydrant	REM FH
Water Meter	
Relocate Water Meter	
Remove Water Meter	REM WM
Water Pump Station	
RPZ Backflow Preventer	
DCV Backflow Preventer	
Relocate RPZ Backflow Preventer	
Relocate DCV Backflow Preventer	

PROPOSED SEWER SYMBOLS

Gravity Sewer Line (Sized as Shown)	
Force Main Sewer Line (Sized as Shown)	
Manhole (Sized per Note)	
Sewer Pump Station	

PROPOSED MISCELLANEOUS UTILITIES SYMBOLS

Power Pole	
Telephone Pole	
Joint Use Pole	
Telephone Pedestal	
Utility Line by Others (Type as Shown)	
Trenchless Installation	
Encasement by Open Cut	
Encasement	

Thrust Block	
Air Release Valve	
Utility Vault	
Concrete Pier	
Steel Pier	
Plan Note	
Pay Item Note	

EXISTING UTILITIES SYMBOLS

Power Pole		*Underground Power Line	
Telephone Pole		*Underground Telephone Cable	
Joint Use Pole		*Underground Telephone Conduit	
Utility Pole		*Underground Fiber Optics Telephone Cable	
Utility Pole with Base		*Underground TV Cable	
H-Frame Pole		*Underground Fiber Optics TV Cable	
Power Transmission Line Tower		*Underground Gas Pipeline	
Water Manhole		Aboveground Gas Pipeline	
Power Manhole		*Underground Water Line	
Telephone Manhole		Aboveground Water Line	
Sanitary Sewer Manhole		*Underground Gravity Sanitary Sewer Line	
Hand Hole for Cable		Aboveground Gravity Sanitary Sewer Line	
Power Transformer		*Underground SS Forced Main Line	
Telephone Pedestal		Underground Unknown Utility Line	
CATV Pedestal		SUE Test Hole	
Gas Valve		Water Meter	
Gas Meter		Water Valve	
Located Miscellaneous Utility Object		Fire Hydrant	
Abandoned According to Utility Records	AATUR	Sanitary Sewer Cleanout	
End of Information	E.O.I.		

*For Existing Utilities
Utility Line Drawn from Record (Type as Shown)
Designated Utility Line (Type as Shown)

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 REV: 2/1/2012



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PROJECT REFERENCE NO. U-6010	SHEET NO. UC-3
DESIGNED BY: JKC	
DRAWN BY: JNA	
CHECKED BY: CLS	
APPROVED BY: CLS	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

UTILITY CONSTRUCTION

GENERAL NOTES:

1. THE PROPOSED UTILITY CONSTRUCTION SHALL MEET THE APPLICABLE REQUIREMENTS OF THE NC DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" DATED JANUARY 2018.

2. THE EXISTING UTILITIES BELONG TO CITY OF BURLINGTON. THE CONTACT PERSON IS:

W. TODD LAMBERT, PE
CITY ENGINEER
336-222-5050

IN THE EVENT OF A CONFLICT BETWEEN THE UTILITY OWNER'S TECHNICAL SPECIFICATIONS AND NCDOT STANDARD SPECIFICATIONS/PROJECT SPECIAL PROVISIONS, THE MOST STRINGENT SHALL GOVERN.

3. ALL WATER LINES TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF WATER RESOURCES, PUBLIC WATER SUPPLY SECTION. ALL SEWER LINES TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT QUALITY, DIVISION OF WATER RESOURCES, WATER QUALITY SECTION. PERFORM ALL WORK IN ACCORDANCE WITH THE APPLICABLE PLUMBING CODES.

4. THE UTILITY OWNER OWNS THE EXISTING UTILITY FACILITIES AND WILL OWN THE NEW UTILITY FACILITIES AFTER ACCEPTANCE BY THE DEPARTMENT. THE DEPARTMENT OWNS THE CONSTRUCTION CONTRACT AND HAS ADMINISTRATIVE AUTHORITY. COMMUNICATIONS AND DECISIONS BETWEEN THE CONTRACTOR AND UTILITY OWNER ARE NOT BINDING UPON THE DEPARTMENT OR THIS CONTRACT UNLESS AUTHORIZED BY THE ENGINEER. AGREEMENTS BETWEEN THE UTILITY OWNER AND CONTRACTOR FOR THE WORK THAT IS NOT PART OF THIS CONTRACT OR IS SECONDARY TO THIS CONTRACT ARE ALLOWED, BUT ARE NOT BINDING UPON THE DEPARTMENT.

5. PROVIDE ACCESS FOR THE DEPARTMENT PERSONNEL AND THE OWNER'S REPRESENTATIVES TO ALL PHASES OF CONSTRUCTION. NOTIFY DEPARTMENT PERSONNEL AND THE UTILITY OWNER TWO WEEKS PRIOR TO COMMENCEMENT OF ANY WORK AND ONE WEEK PRIOR TO SERVICE INTERRUPTION. KEEP UTILITY OWNERS' REPRESENTATIVES INFORMED OF WORK PROGRESS AND PROVIDE OPPORTUNITY FOR INSPECTION OF CONSTRUCTION AND TESTING.

6. THE PLANS DEPICT THE BEST AVAILABLE INFORMATION FOR THE LOCATION, SIZE, AND TYPE OF MATERIAL FOR ALL EXISTING UTILITIES. MAKE INVESTIGATIONS FOR DETERMINING THE EXACT LOCATION, SIZE, AND TYPE MATERIAL OF THE EXISTING FACILITIES AS NECESSARY FOR THE CONSTRUCTION OF THE PROPOSED UTILITIES AND FOR AVOIDING DAMAGE TO EXISTING FACILITIES. REPAIR ANY DAMAGE INCURRED TO EXISTING FACILITIES TO THE ORIGINAL OR BETTER CONDITION AT NO ADDITIONAL COST TO THE DEPARTMENT.

7. MAKE FINAL CONNECTIONS OF THE NEW WORK TO THE EXISTING SYSTEM WHERE INDICATED ON THE PLANS, AS REQUIRED TO FIT THE ACTUAL CONDITIONS, OR AS DIRECTED.

8. MAKE CONNECTIONS BETWEEN EXISTING AND PROPOSED UTILITIES AT TIMES MOST CONVENIENT TO THE PUBLIC, WITHOUT ENDANGERING THE UTILITY SERVICE, AND IN ACCORDANCE WITH THE UTILITY OWNER'S REQUIREMENTS. MAKE CONNECTIONS ON WEEKENDS, AT NIGHT, AND ON HOLIDAYS IF NECESSARY.

9. ALL UTILITY MATERIALS SHALL BE APPROVED PRIOR TO DELIVERY TO THE PROJECT. SEE 1500-7, " SUBMITTALS AND RECORDS" IN SECTION 1500 OF THE STANDARD SPECIFICATIONS.

10. ALL WATER LINE INSTALLED ON THIS PROJECT SHALL MEET THE REQUIREMENTS OF THE RULES GOVERNING PUBLIC WATER SYSTEMS. VERTICAL SEPARATION BETWEEN PROPOSED WATER MAINS AND STORM DRAINAGE SHALL BE A MINIMUM OF 18-INCHES PER RECOMMENDED STANDARDS OF WATER WORKS. ALL PROPOSED WATER LINE SHALL HAVE A MINIMUM COVER OF 36-INCHES. PROPOSED WATER MAINS SHALL HAVE A MINIMUM HORIZONTAL SEPARATION OF 10- FEET FROM SEWER MAINS (REF. RULE .0904, RULE.0906). UTILITIES BEING RELOCATED OR INSTALLED AS SHOWN ON THE UTILITY CONSTRUCTION PLANS MUST BE ADJUSTED ACCORDINGLY TO MEET THESE CRITERIA.

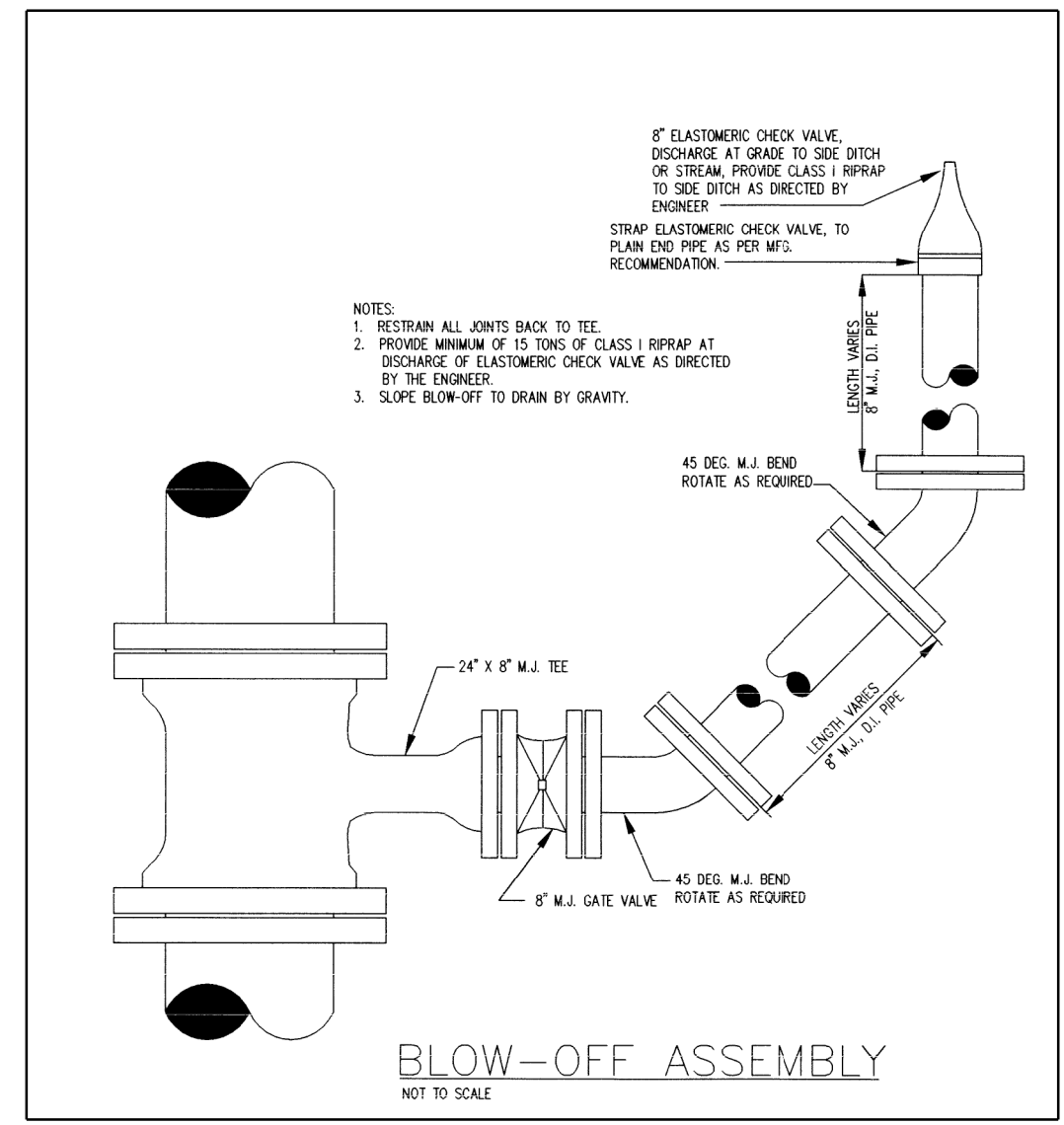
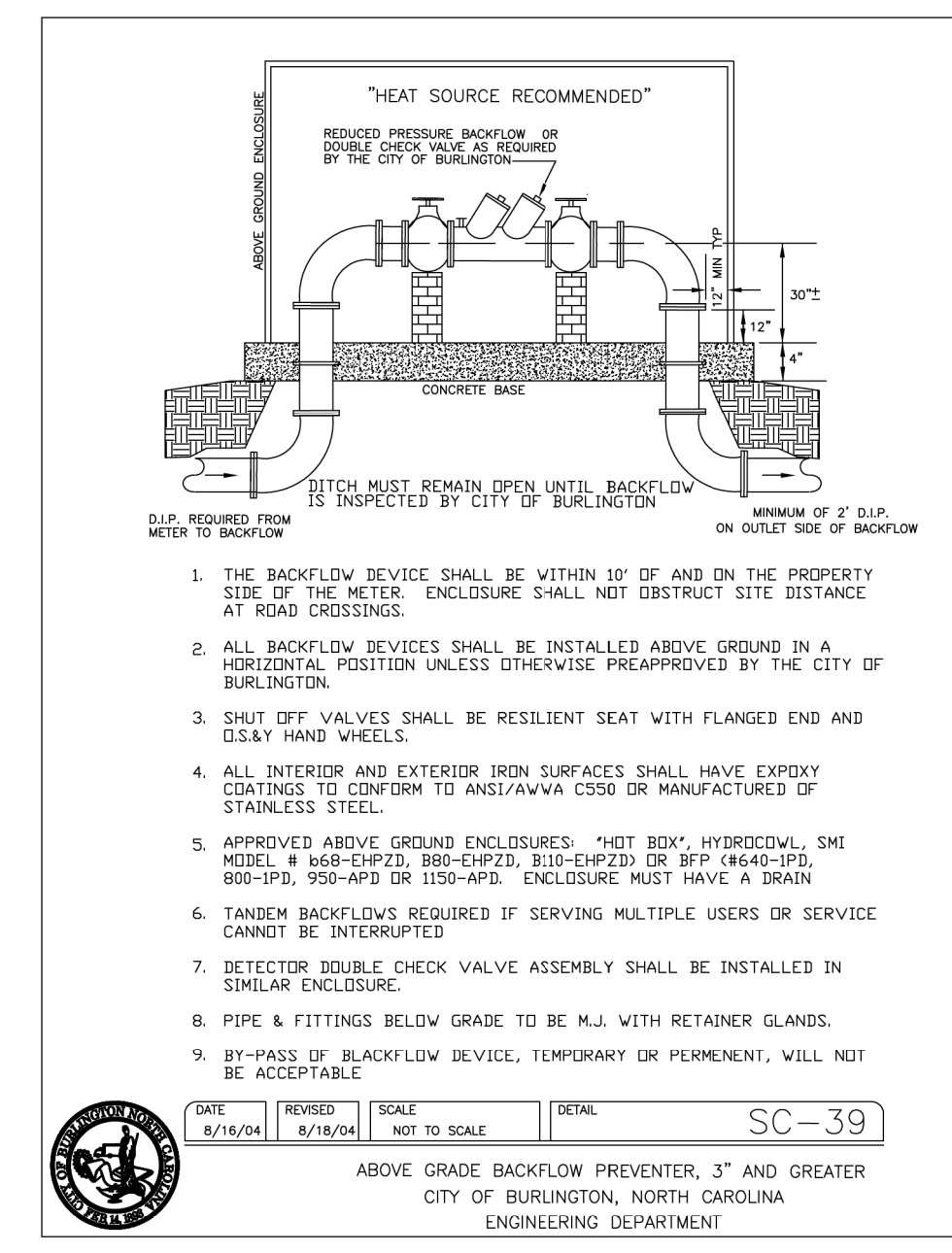
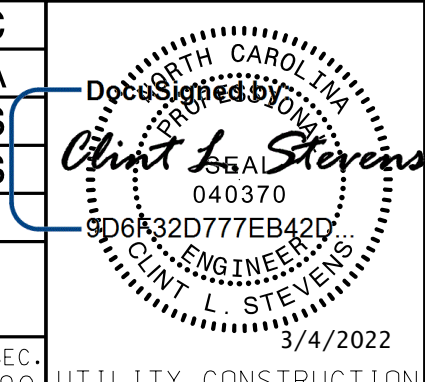
11. ALL DUCTILE IRON GRAVITY SEWER PIPE SHALL HAVE PROTECTO 401 EPOXY COATING.

12. ALL PROPOSED WATER & SEWER PIPE SHALL HAVE A MANUFACTURE DATE NO GREATER THAN 12 MONTHS PRIOR TO INSTALLATION.

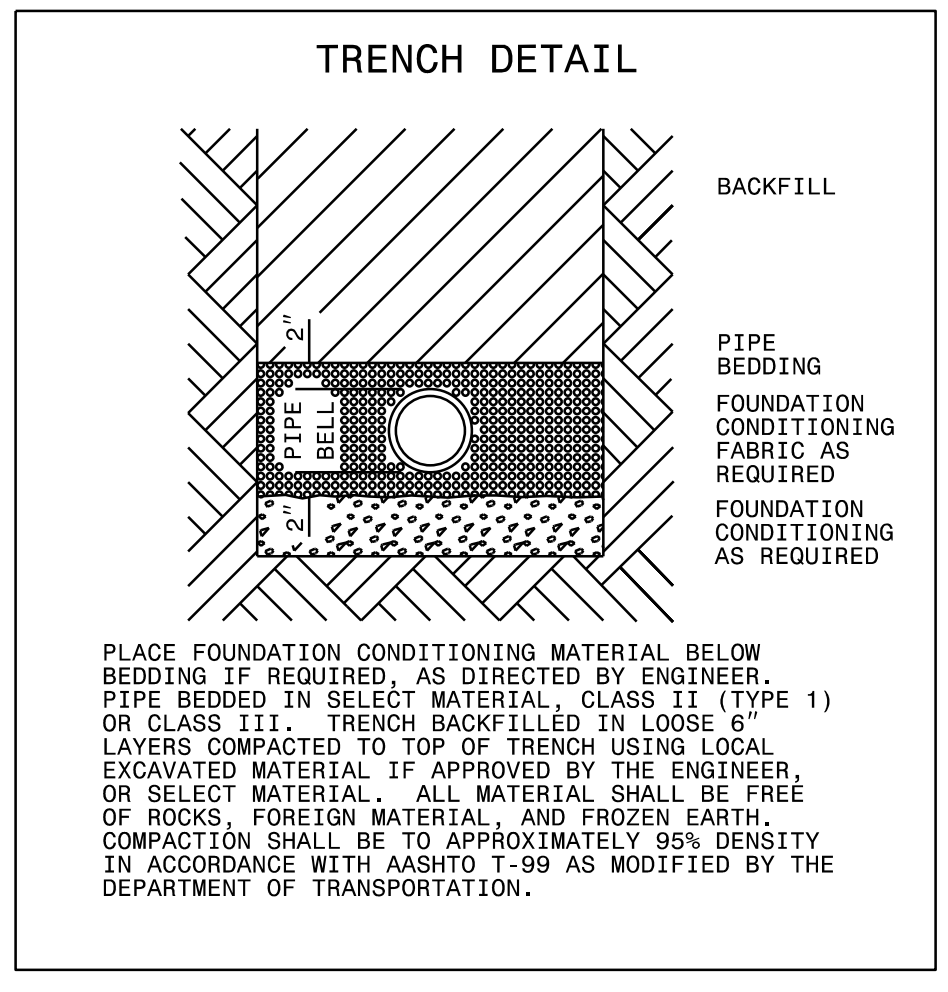
UTILITY CONSTRUCTION

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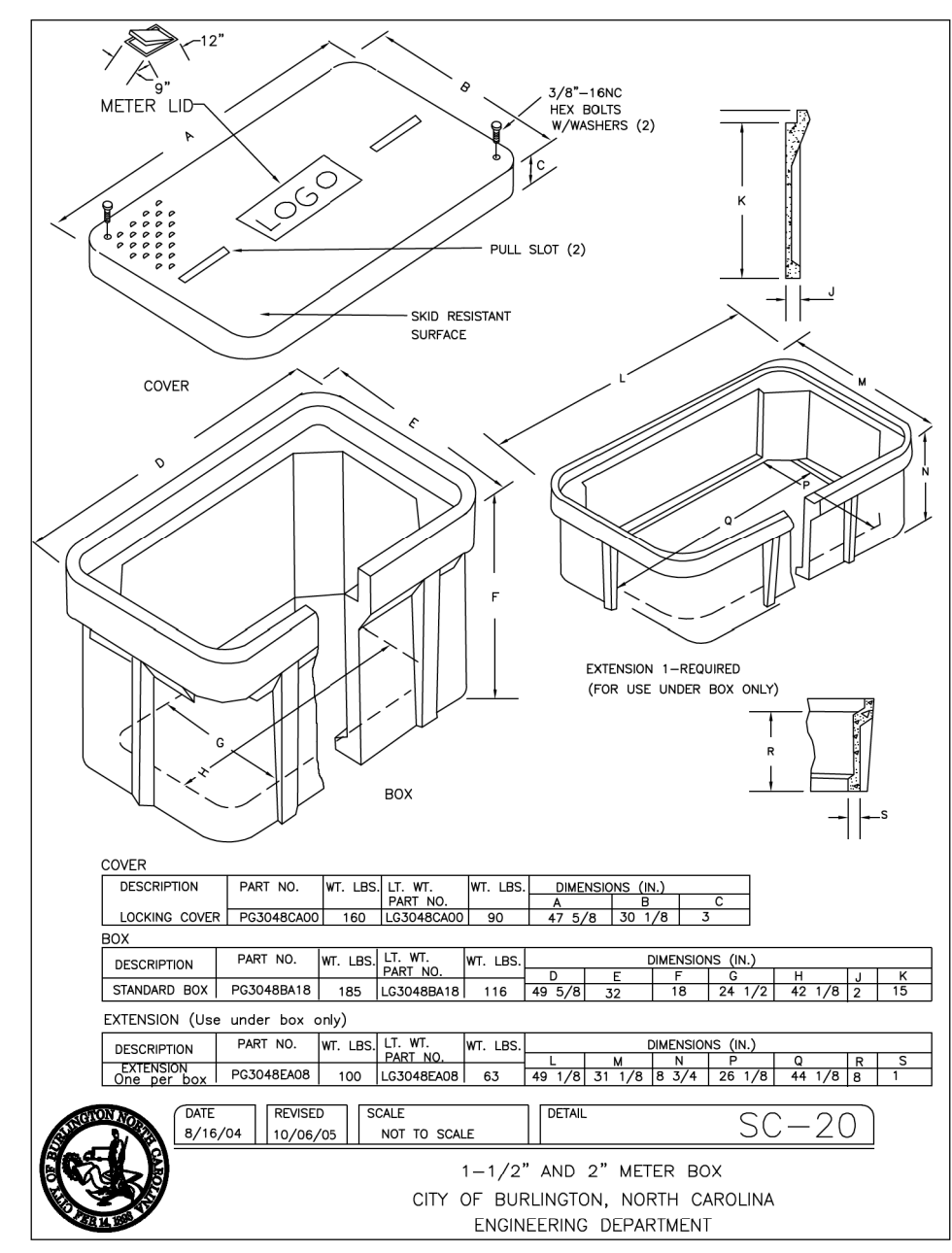
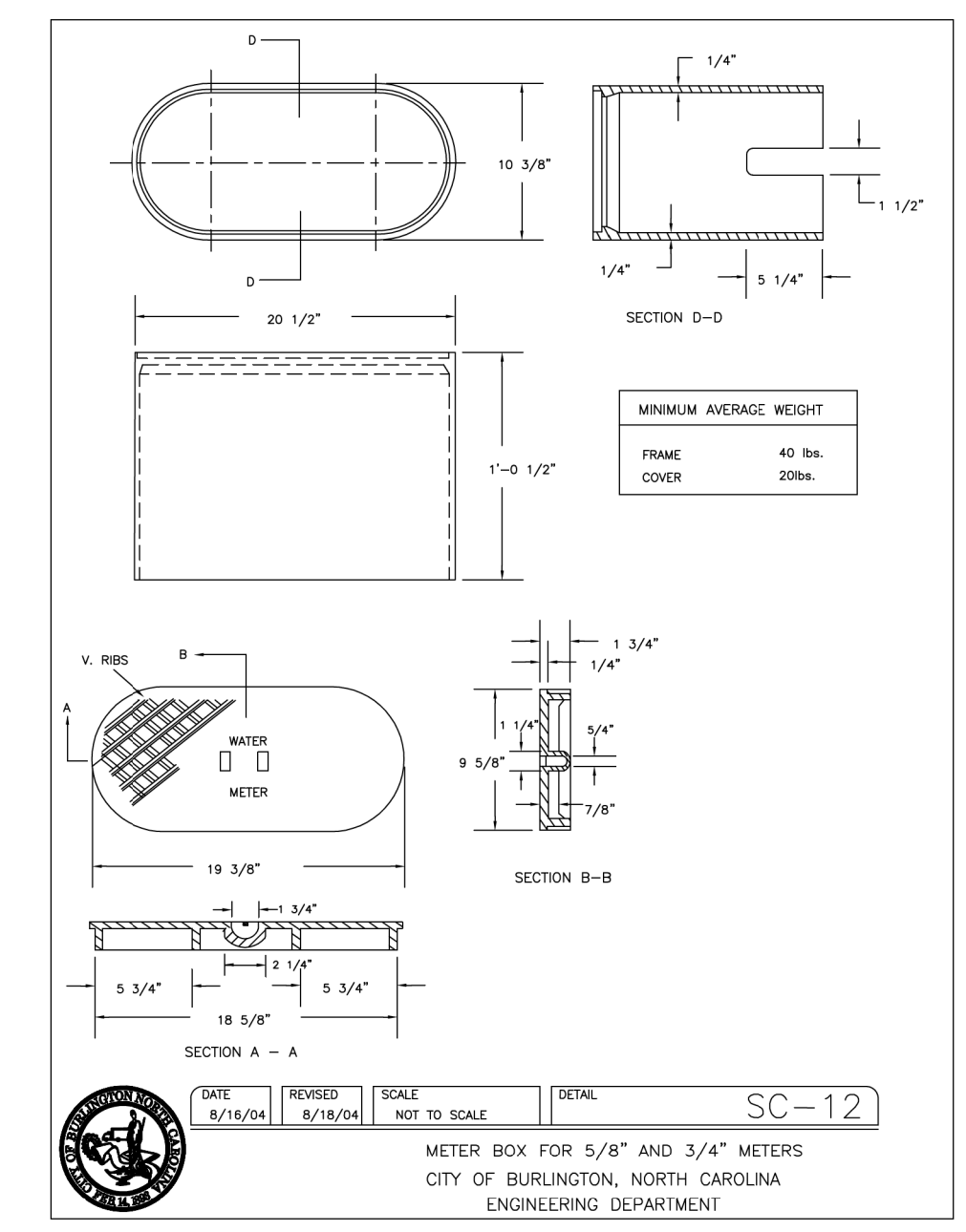
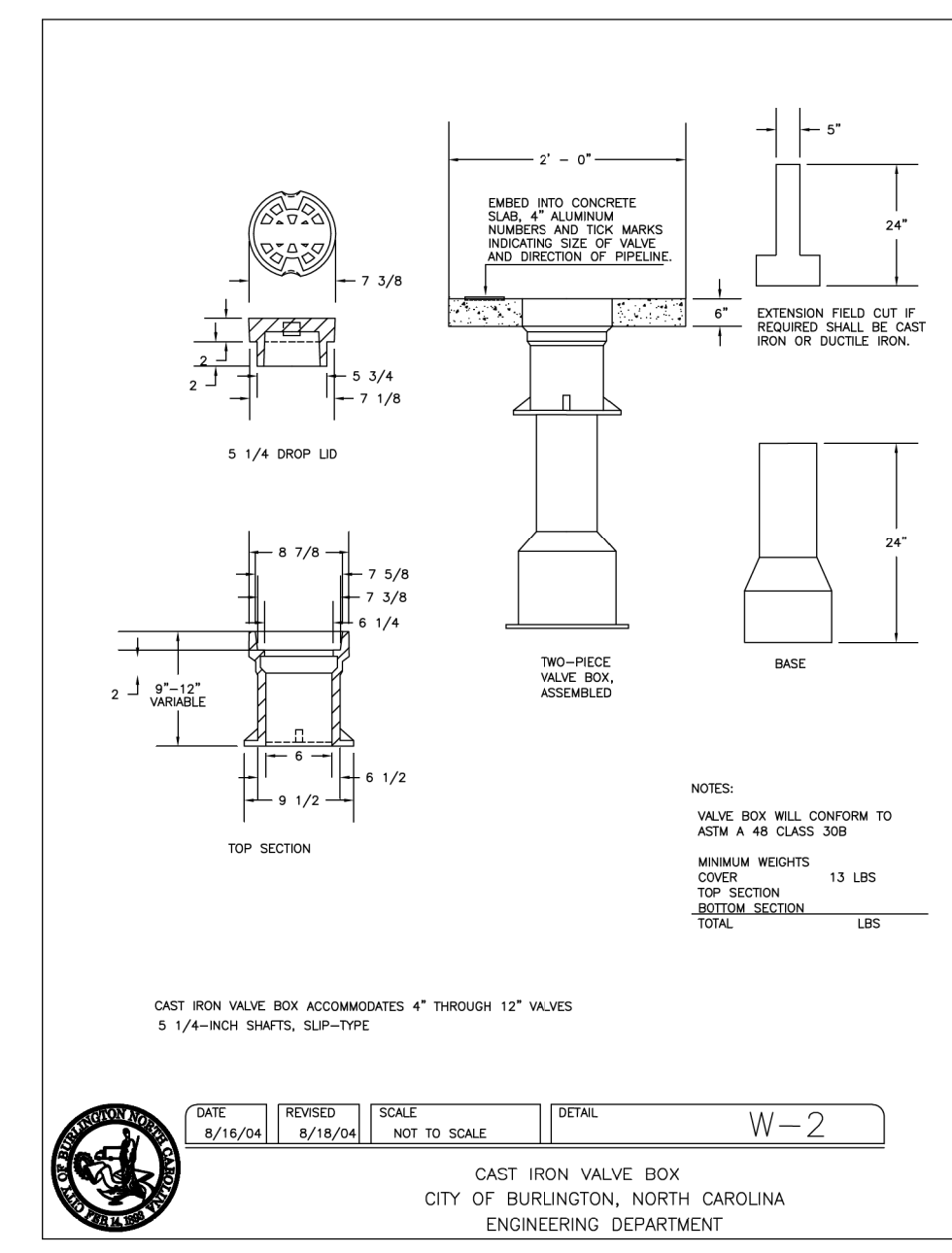
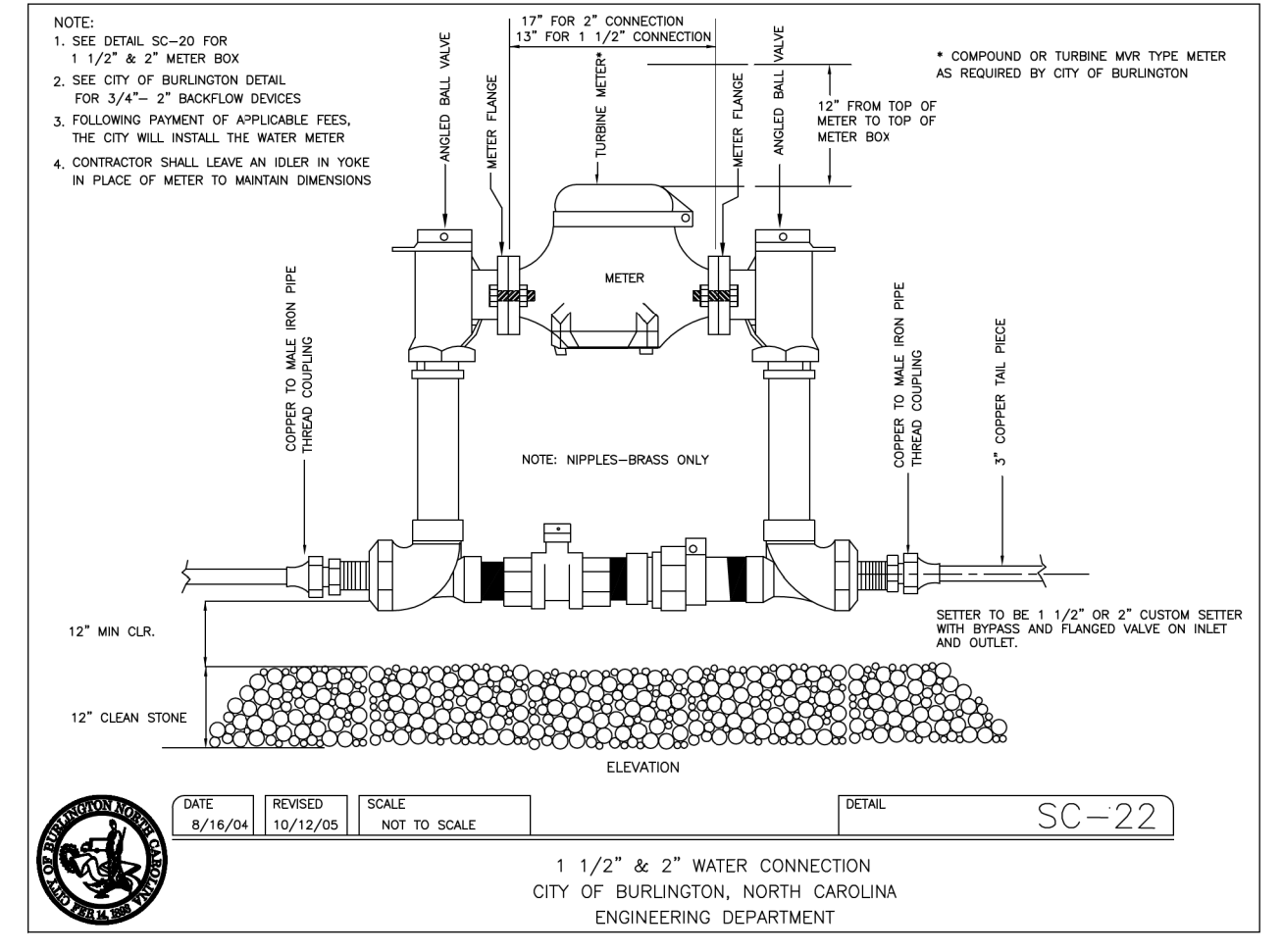
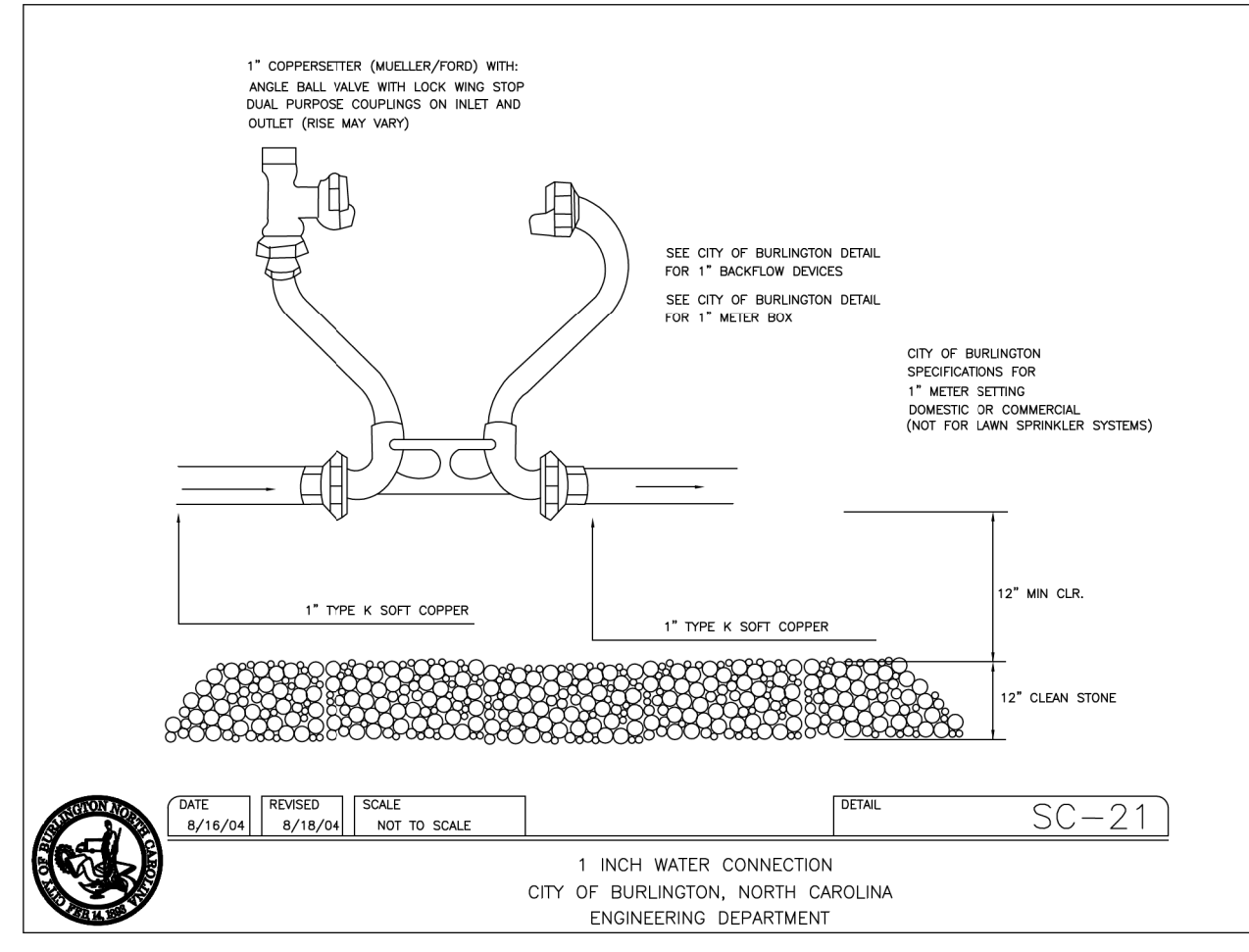
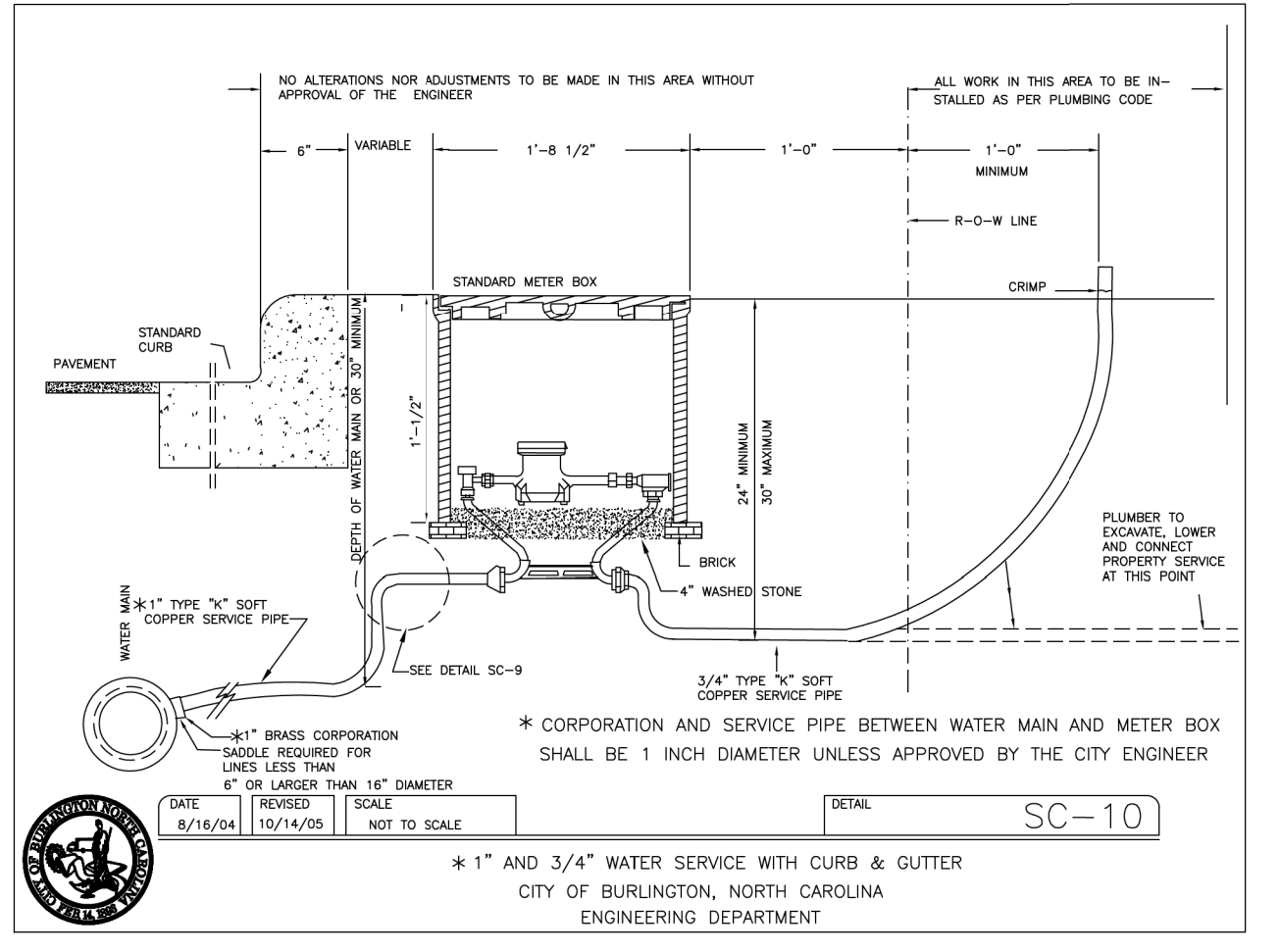
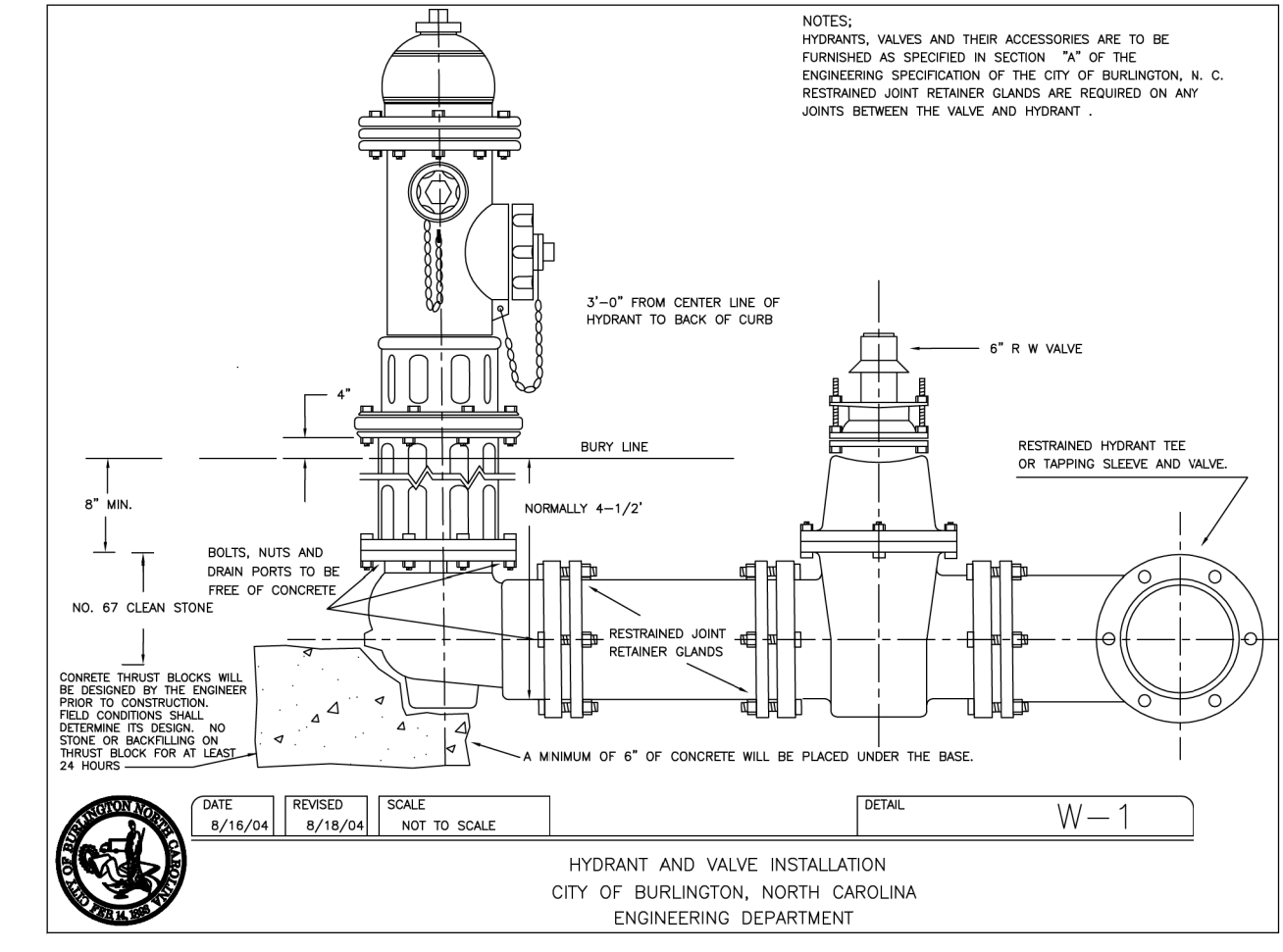
STANDARD WATER DETAILS



MAXIMUM TRENCH WIDTH AT TOP OF PIPE

NOMINAL PIPE SIZE (INCHES)	TRENCH WIDTH (INCHES)	NOMINAL PIPE SIZE (INCHES)	TRENCH WIDTH (INCHES)
4	28	20	44
6	30	24	48
8	32	30	54
10	34	36	60
12	36	42	66
14	38	48	72
16	40	54	78
18	42		

UTILITY CONSTRUCTION



REACTION BEARING AREAS FOR HORIZONTAL WATER PIPE BEDS

BASED ON TEST PRESSURE OF 200 P.S.I. (ALL AREA IN SQUARE FEET)

SIZE AND DEGREE OF BEND	STAYE THROUGHT IN POUNDS	TABLE NO. 14	TABLE NO. 15	TABLE NO. 16	TABLE NO. 17	TABLE NO. 18	TABLE NO. 19	
11 1/4"	13,315	3	7	8	2	2	3	13
22 1/2"	24,217	7	13	15	4	4	7	28
30"	40,864	23	45	53	12	12	23	88
36"	62,826	16	47	56	8	8	16	63
42"	89,253	18	35	42	9	9	18	70
48"	121,938	35	69	77	16	16	32	138
54"	160,955	23	66	66	12	12	23	97
60"	22,308	7	14	17	4	4	7	24
66"	35,163	14	28	34	7	7	14	46
72"	108,205	28	58	65	14	14	28	109
78"	189,800	50	100	121	25	25	50	200
84"	141,372	36	71	85	18	18	36	142
90"	19,967	15	40	48	10	10	15	65
96"	37,455	20	40	48	10	10	20	90
102"	155,816	38	78	94	18	18	38	156
108"	287,855	72	144	172	36	36	72	288
114"	425,215	51	102	122	26	26	51	204

REACTION BEARING AREAS ARE IN SQUARE FEET MEASURED IN A VERTICAL PLANE IN THE TRENCH SIDE AT AN ANGLE OF 90° TO THE THRUST VECTOR.

NOTE: REACTION BEARING AREAS ARE IN SQUARE FEET MEASURED IN A VERTICAL PLANE IN THE TRENCH SIDE AT AN ANGLE OF 90° TO THE THRUST VECTOR.

USE 6"-90° BEND VALVE FOR HYDRANTS FOR ADDITIONAL SAFETY FACTOR

THRUST BLOCKING DESIGN QUANTITY TABLE (SH 1 OF 3)
CITY OF BURLINGTON, NORTH CAROLINA ENGINEERING DEPARTMENT

DATE: 8/16/04 REVISED: 8/18/04 SCALE: NOT TO SCALE DETAIL: W-10

REACTION BEARING AREAS FOR HORIZONTAL WATER PIPE BEDS

BASED ON TEST PRESSURE OF 200 P.S.I. (ALL AREA IN SQUARE FEET)

SIZE AND DEGREE OF BEND	STAYE THROUGHT IN POUNDS	TABLE NO. 14	TABLE NO. 15	TABLE NO. 16	TABLE NO. 17	TABLE NO. 18	TABLE NO. 19	
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102"	155,816	38	78	94	18	18	38	156
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USE 6"-90° BEND VALVE FOR HYDRANTS FOR ADDITIONAL SAFETY FACTOR

THRUST BLOCKING DESIGN QUANTITY TABLE (SH 2 OF 3)
CITY OF BURLINGTON, NORTH CAROLINA ENGINEERING DEPARTMENT

DATE: 8/16/04 REVISED: 8/18/04 SCALE: NOT TO SCALE DETAIL: W-11

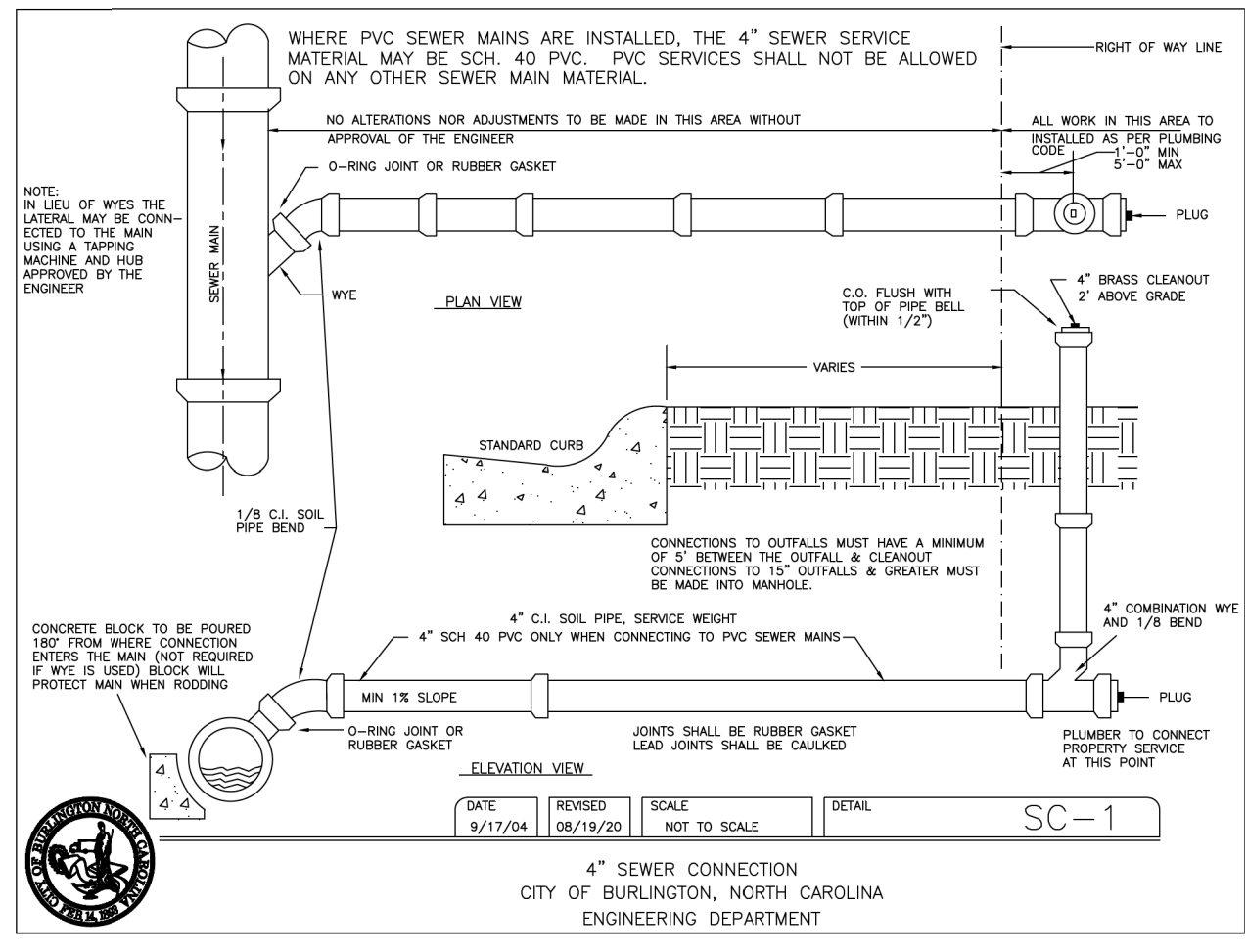
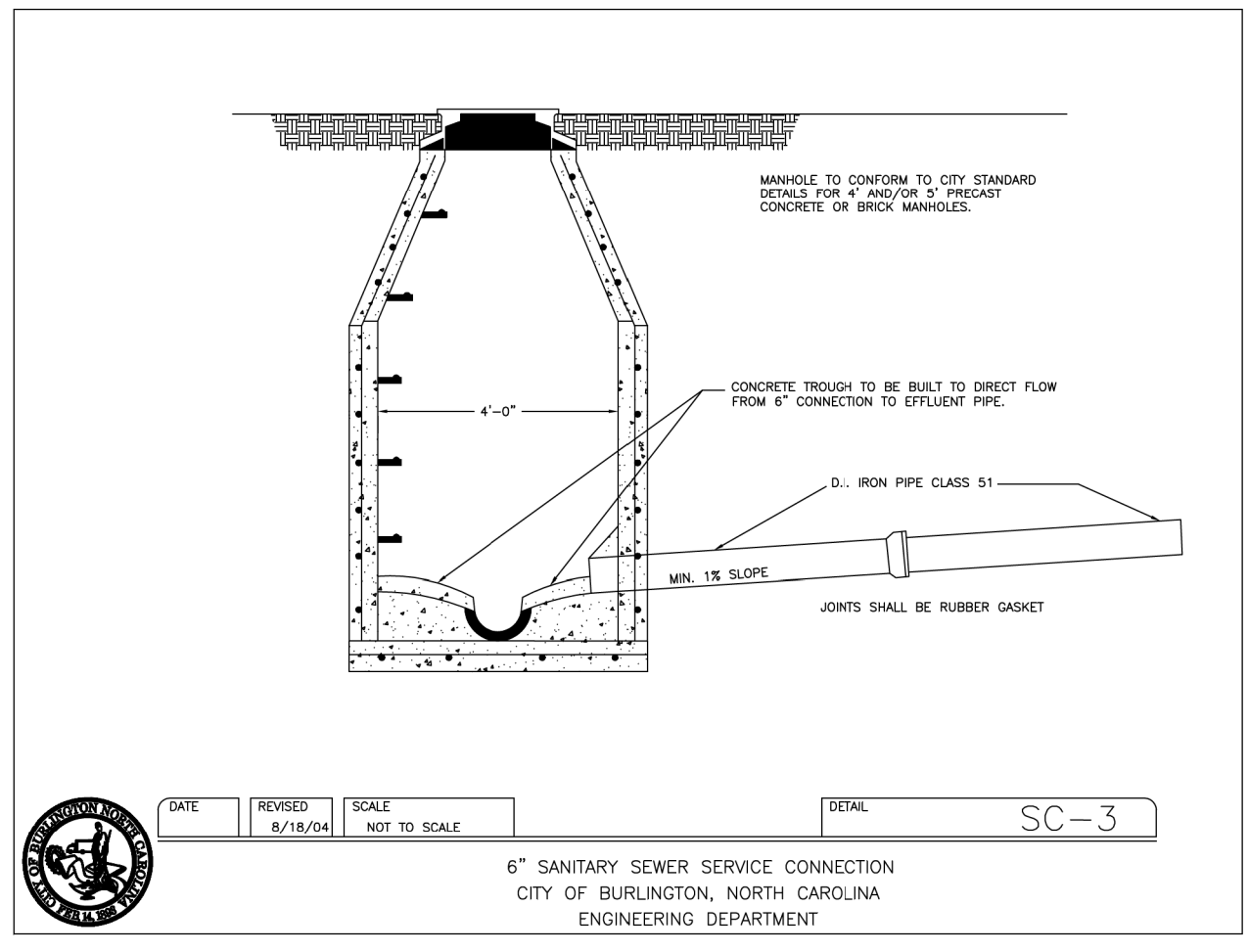
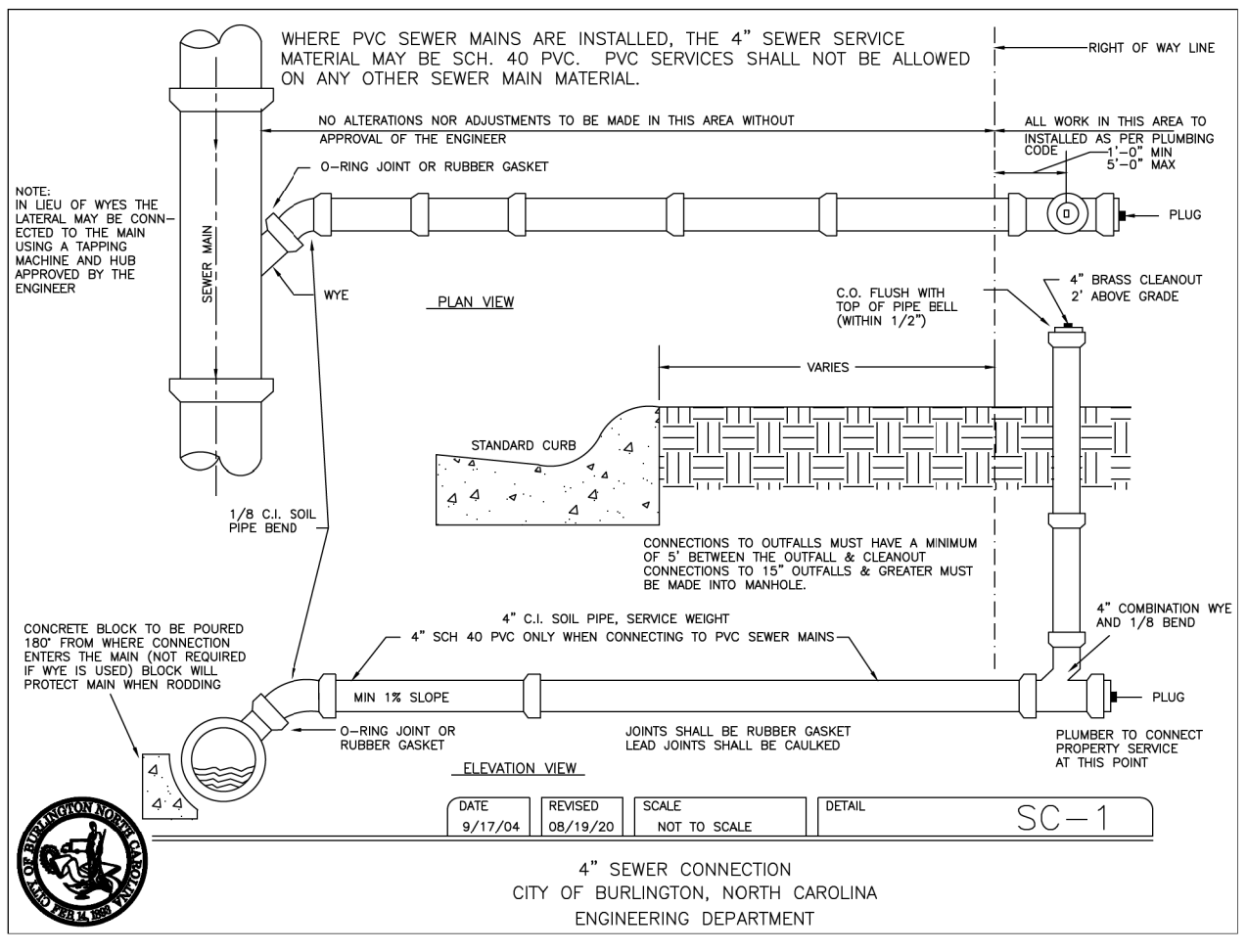
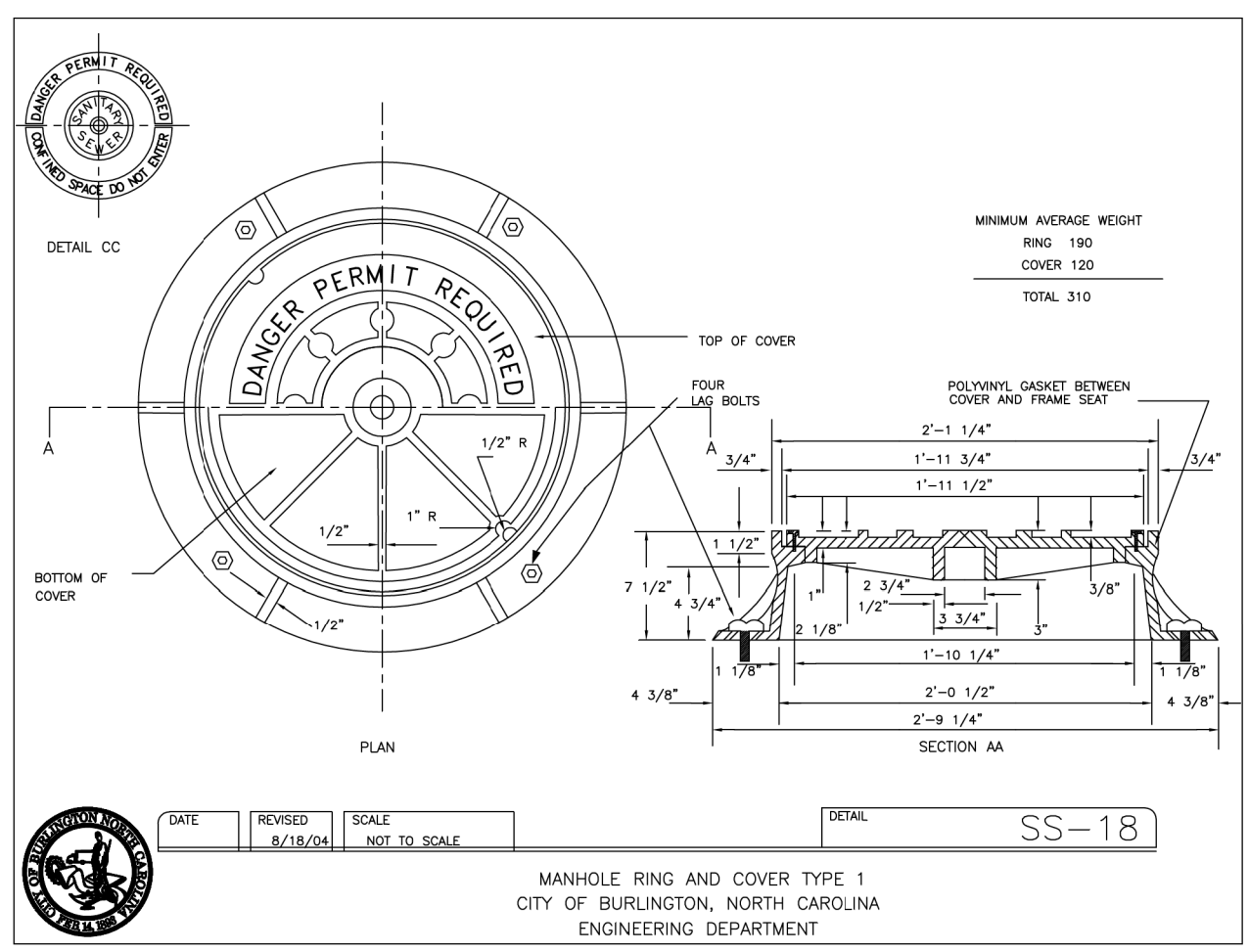
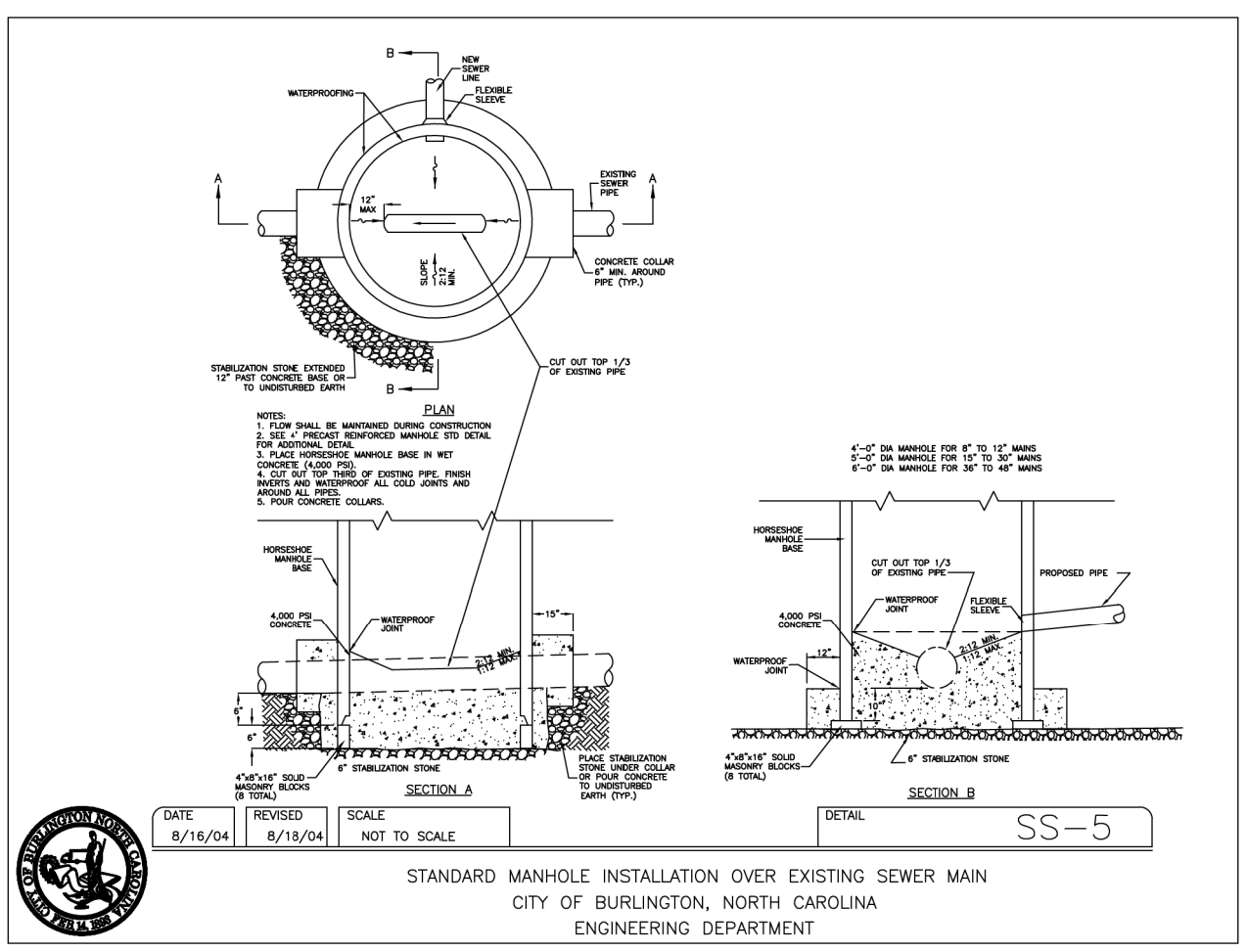
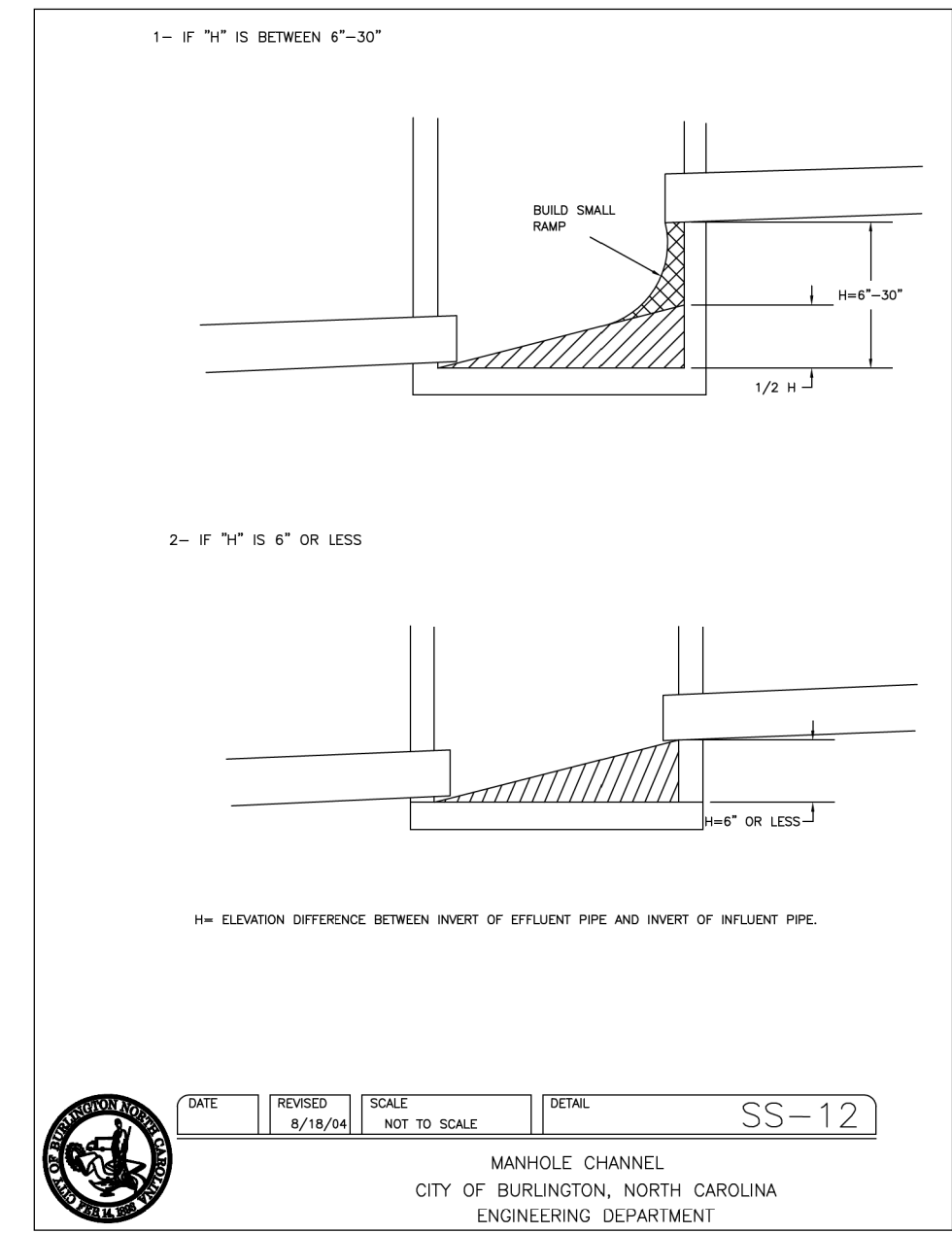
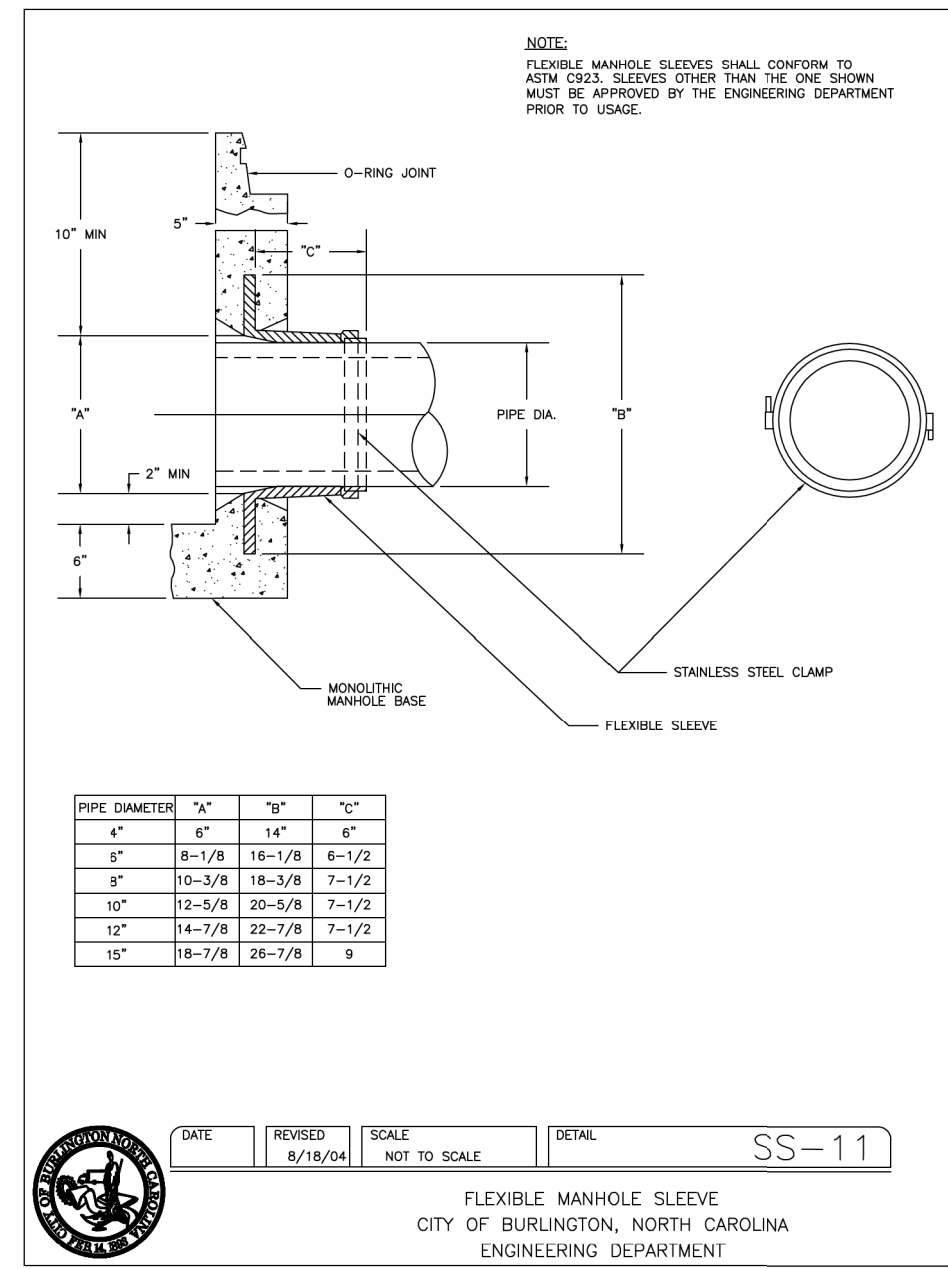
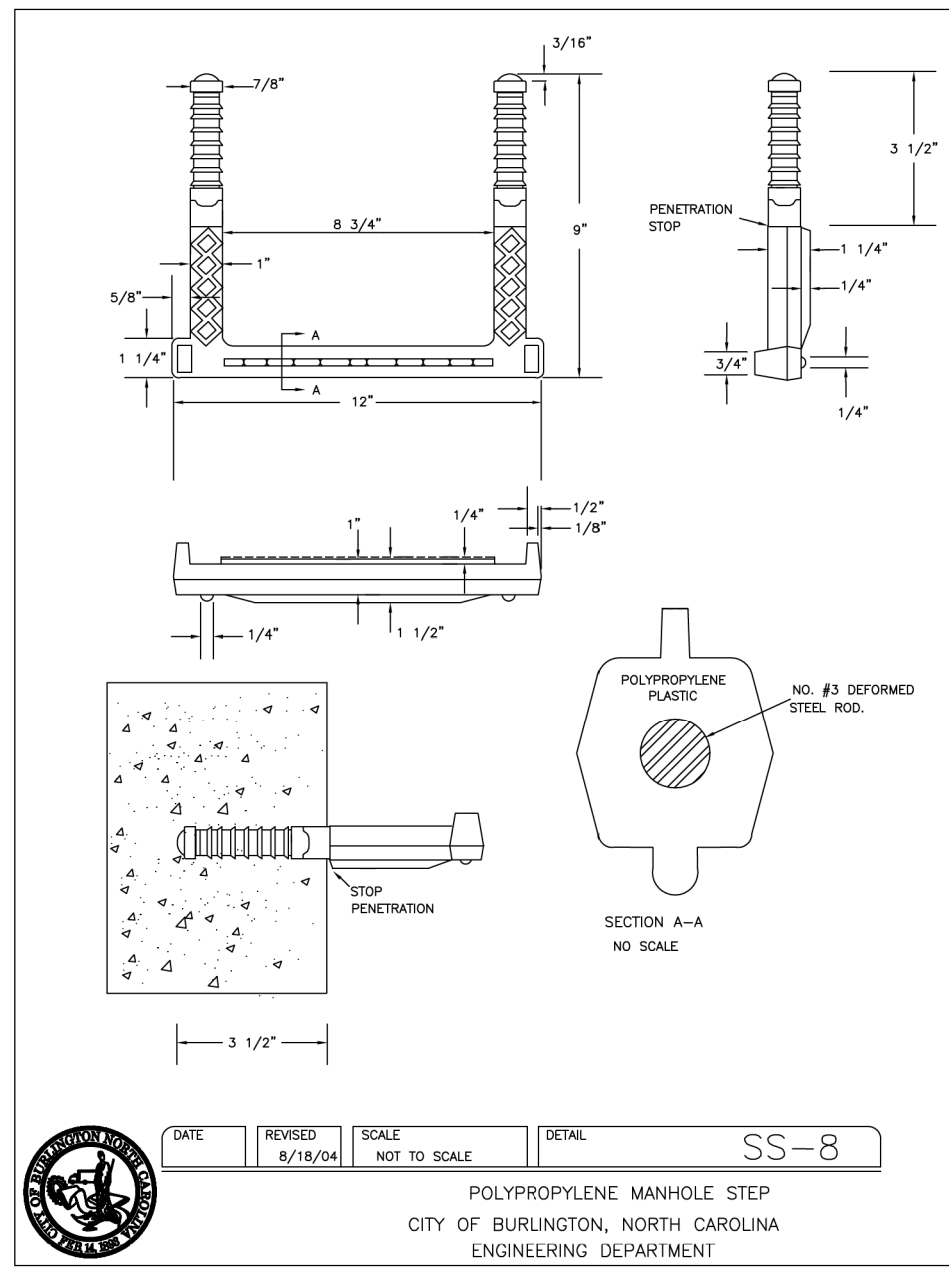
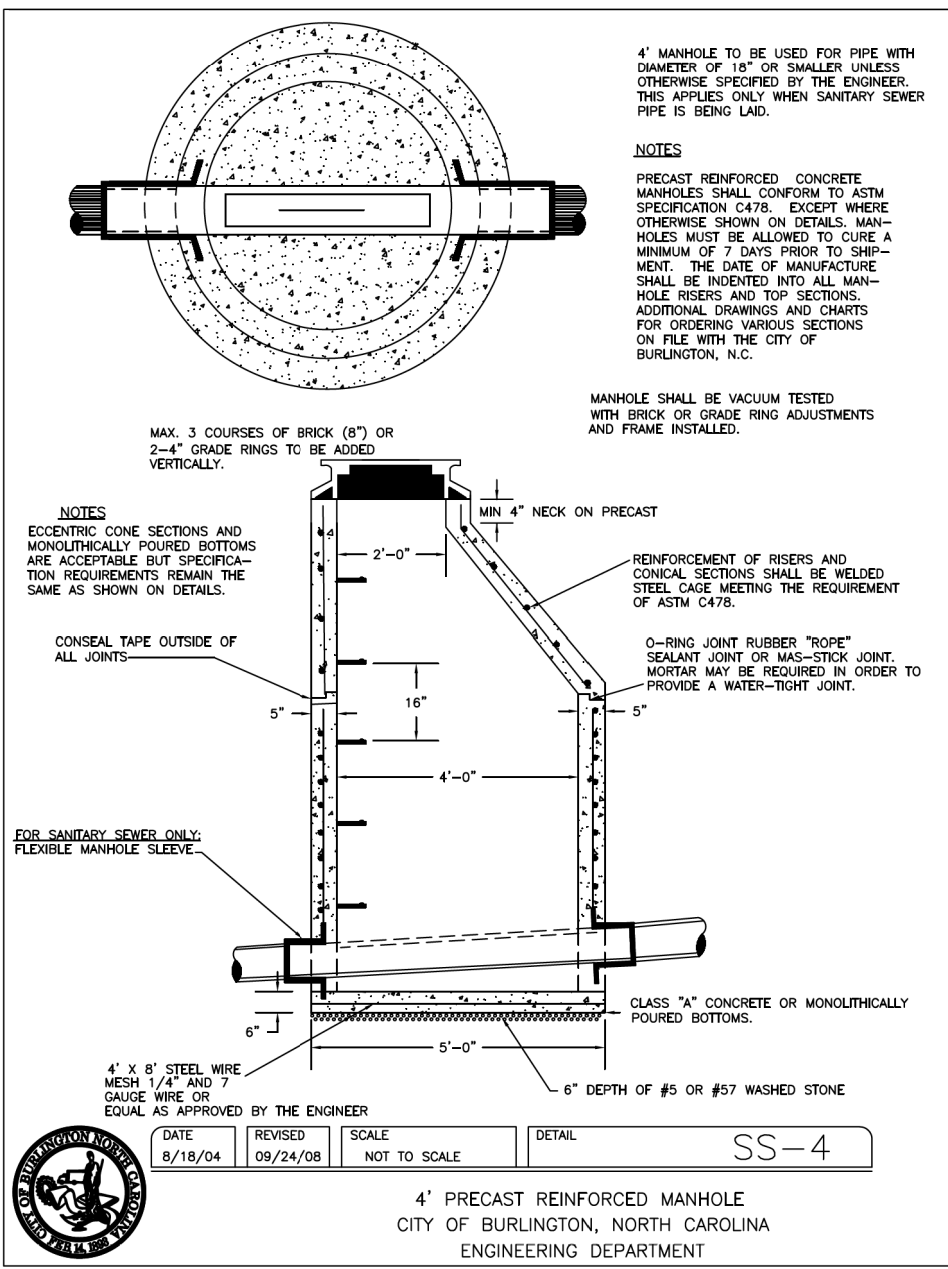
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STANDARD SEWER DETAILS

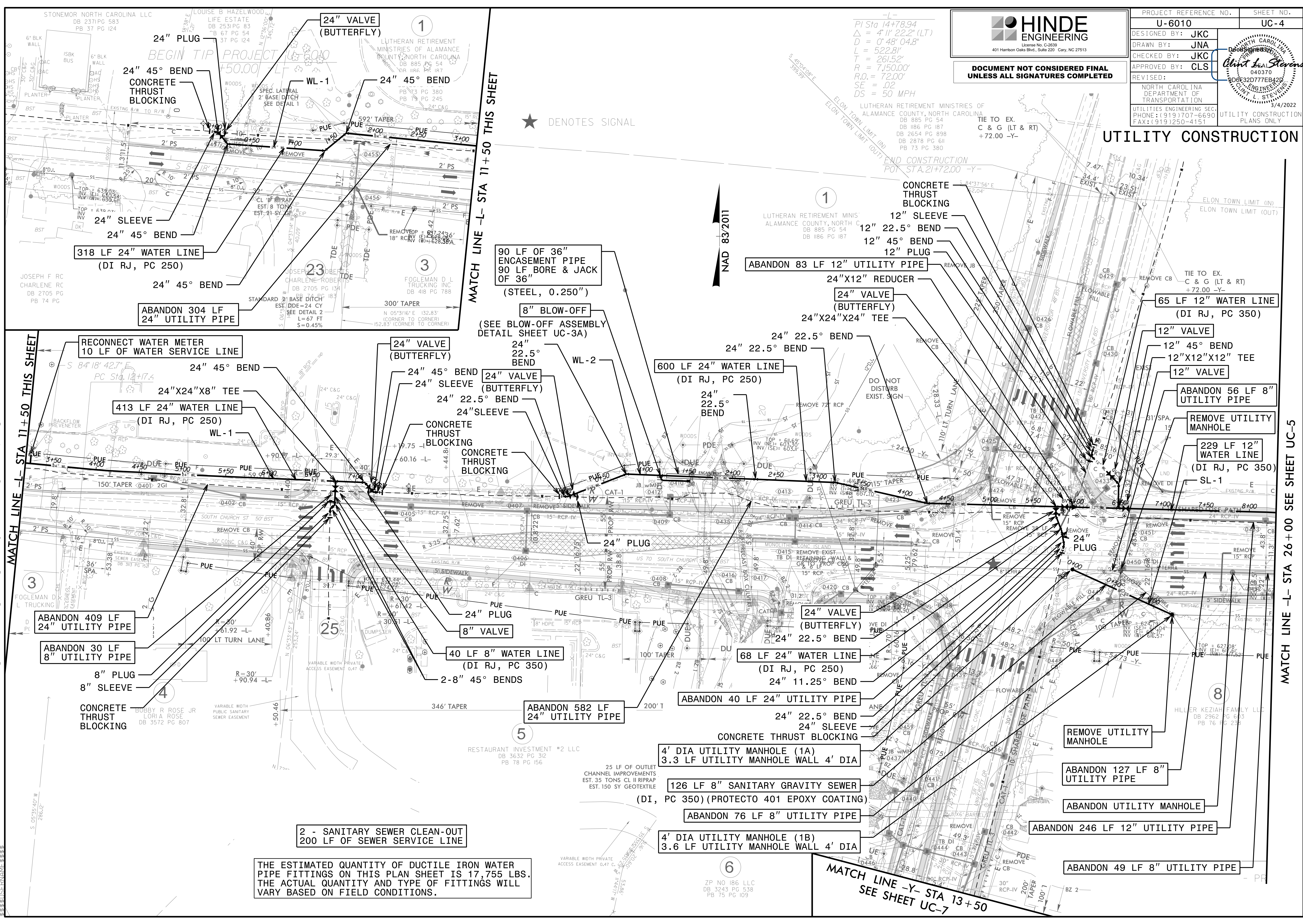
HINDE ENGINEERING
 License No. C-2639
 401 Harrison Oaks Blvd., Suite 220 Cary, NC 27513

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PROJECT REFERENCE NO. U-6010	SHEET NO. UC-3B
DESIGNED BY: JKC	
DRAWN BY: JNA	
CHECKED BY: CLS	
APPROVED BY: CLS	
REVISED:	DATE: 3/4/2022
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY	



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HINDE ENGINEERING
 License No. C-2639
 401 Harrison Oaks Blvd., Suite 220 Cary, NC 27513

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PROJECT REFERENCE NO.	SHEET NO.
U-6010	UC-4
DESIGNED BY: JKC	
DRAWN BY: JNA	
CHECKED BY: JKC	
APPROVED BY: CLS	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SECTION PHONE: (919) 707-6690 FAX: (919) 250-4151	
	UTILITY CONSTRUCTION PLANS ONLY

24-MAR-2022 14:08 PROJECTS\2019\AZ2019207.000_Parsons_U-6010\Design\Utilities\Engineering\UC-Proj\U-6010_Ut_rdy\04_UC04.psh.dgn
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THE ESTIMATED QUANTITY OF DUCTILE IRON WATER PIPE FITTINGS ON THIS PLAN SHEET IS 17,755 LBS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

**MATCH LINE -Y- STA 13+50
SEE SHEET UC-7**

MATCH LINE -L- STA 26+00 SEE SHEET UC-5

MATCH LINE -L- STA 11+50 THIS SHEET

MATCH LINE -L- STA 11+50 THIS SHEET

NAD 83/2011

★ DENOTES SIGNAL

2 - SANITARY SEWER CLEAN-OUT
200 LF OF SEWER SERVICE LINE

4' DIA UTILITY MANHOLE (1A)
3.3 LF UTILITY MANHOLE WALL 4' DIA

126 LF 8" SANITARY GRAVITY SEWER
(DI, PC 350) (PROTECTO 401 EPOXY COATING)

ABANDON 76 LF 8" UTILITY PIPE

ABANDON 49 LF 8" UTILITY PIPE

ABANDON 127 LF 8" UTILITY PIPE

ABANDON UTILITY MANHOLE

ABANDON 246 LF 12" UTILITY PIPE

REMOVE UTILITY MANHOLE

229 LF 12" WATER LINE
(DI RJ, PC 350)
SL-1

ABANDON 56 LF 8" UTILITY PIPE

12" VALVE

12" 45° BEND

12" X12" X12" TEE

12" VALVE

65 LF 12" WATER LINE
(DI RJ, PC 350)

TIE TO EX. C & G (LT & RT) +72.00 -Y-

UTILITY CONSTRUCTION

TIE TO EX. C & G (LT & RT) +72.00 -Y-

TIE TO EX. C & G (LT & RT) +72.00 -Y-

ABANDON 83 LF 12" UTILITY PIPE

24" X12" REDUCER

24" VALVE (BUTTERFLY)

24" X24" X24" TEE

24" 22.5° BEND

24" 22.5° BEND

600 LF 24" WATER LINE (DI RJ, PC 250)

24" 22.5° BEND

24" 22.5° BEND

24" 22.5° BEND

24" VALVE (BUTTERFLY)

24" 22.5° BEND

68 LF 24" WATER LINE (DI RJ, PC 250)

24" 11.25° BEND

ABANDON 40 LF 24" UTILITY PIPE

24" 22.5° BEND

24" SLEEVE

CONCRETE THRUST BLOCKING

4' DIA UTILITY MANHOLE (1B)
3.6 LF UTILITY MANHOLE WALL 4' DIA

90 LF OF 36" ENCASEMENT PIPE
90 LF BORE & JACK OF 36"
(STEEL, 0.250")

8" BLOW-OFF
(SEE BLOW-OFF ASSEMBLY
DETAIL SHEET UC-3A)

24" VALVE (BUTTERFLY)

24" 22.5° BEND

24" VALVE (BUTTERFLY)

24" SLEEVE

24" 22.5° BEND

24" SLEEVE

CONCRETE THRUST BLOCKING

CONCRETE THRUST BLOCKING

24" VALVE (BUTTERFLY)

24" 45° BEND

24" 45° BEND

24" SLEEVE

CONCRETE THRUST BLOCKING

24" VALVE (BUTTERFLY)

24" 45° BEND

24" 45° BEND

24" VALVE (BUTTERFLY)

24" 45° BEND

318 LF 24" WATER LINE (DI RJ, PC 250)

ABANDON 304 LF 24" UTILITY PIPE

24" 45° BEND

RECONNECT WATER METER
10 LF OF WATER SERVICE LINE

24" 45° BEND

24" X24" X8" TEE

413 LF 24" WATER LINE (DI RJ, PC 250)

24" X24" X8" TEE

24" 45° BEND

ABANDON 409 LF 24" UTILITY PIPE

ABANDON 30 LF 8" UTILITY PIPE

8" PLUG

8" SLEEVE

CONCRETE THRUST BLOCKING

CONCRETE THRUST BLOCKING

CONCRETE THRUST BLOCKING

CONCRETE THRUST BLOCKING

CONCRETE THRUST BLOCKING

CONCRETE THRUST BLOCKING

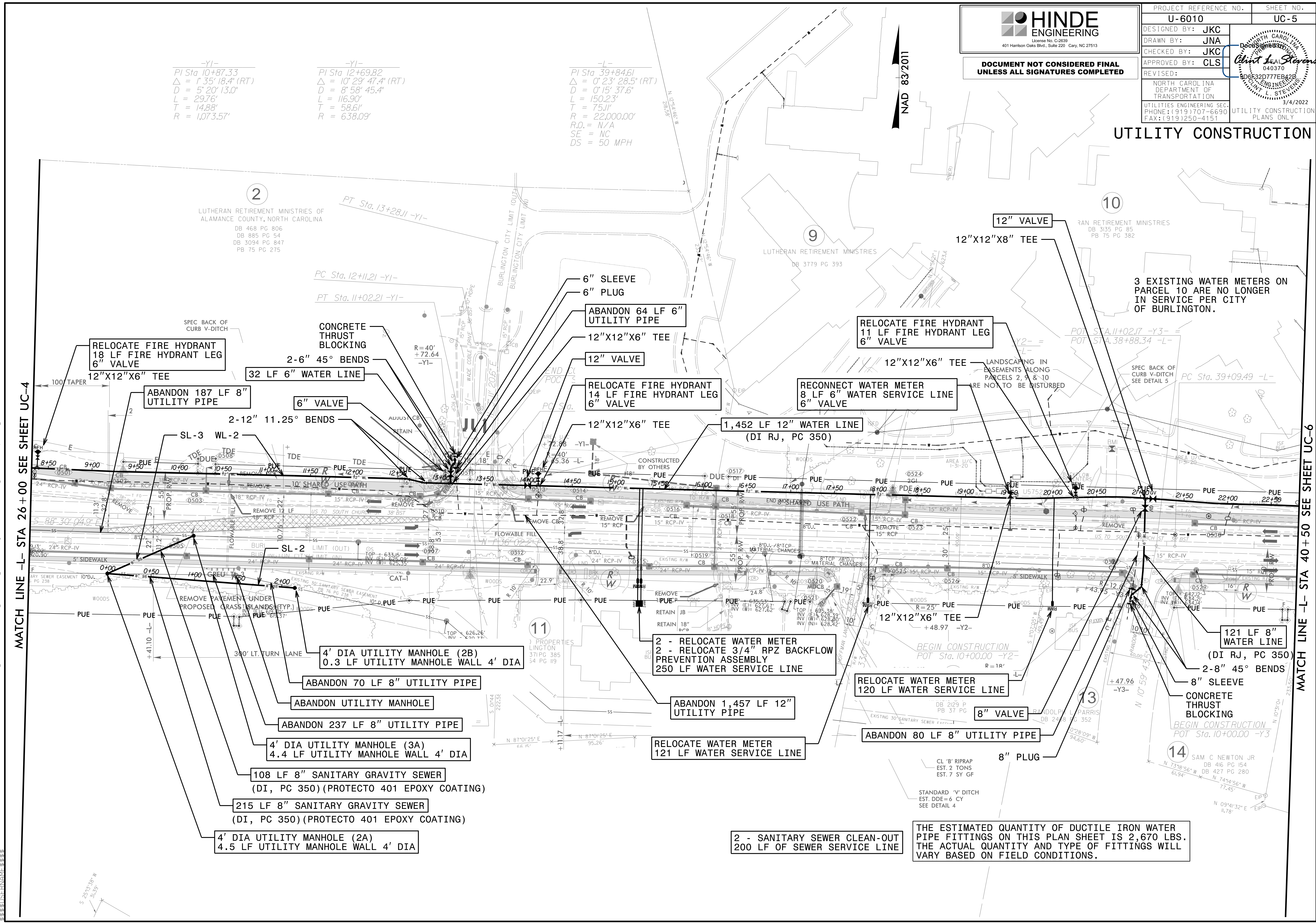
CONCRETE THRUST BLOCKING

HINDE ENGINEERING
 License No. C-2639
 401 Harrison Oaks Blvd., Suite 220 Cary, NC 27513

**DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED**

PROJECT REFERENCE NO. U-6010	SHEET NO. UC-5
DESIGNED BY: JKC	
DRAWN BY: JNA	
CHECKED BY: JKC	
APPROVED BY: CLS	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SECTION PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

UTILITY CONSTRUCTION



-Y1-
 PI Sta 10+87.33
 $\Delta = 1^{\circ}35'18.4''$ (RT)
 $D = 5^{\circ}20'13.0''$
 $L = 29.76'$
 $T = 14.88'$
 $R = 1,073.57'$

-Y1-
 PI Sta 12+69.82
 $\Delta = 10^{\circ}29'47.4''$ (RT)
 $D = 8^{\circ}58'45.4''$
 $L = 116.90'$
 $T = 58.61'$
 $R = 638.09'$

-L-
 PI Sta 39+84.61
 $\Delta = 0^{\circ}23'28.5''$ (RT)
 $D = 0^{\circ}15'37.6''$
 $L = 150.23'$
 $T = 75.11'$
 $R = 22,000.00'$
 $R.O. = N/A$
 $SE = NC$
 $DS = 50$ MPH

MATCH LINE -L- STA 26 + 00 SEE SHEET UC-4

MATCH LINE -L- STA 40 + 50 SEE SHEET UC-6

RELOCATE FIRE HYDRANT
 18 LF FIRE HYDRANT LEG
 6" VALVE
 12"X12"X6" TEE

ABANDON 187 LF 8" UTILITY PIPE
 2-12" 11.25° BENDS
 6" VALVE

CONCRETE THRUST BLOCKING
 2-6" 45° BENDS
 32 LF 6" WATER LINE

6" SLEEVE
 6" PLUG
 ABANDON 64 LF 6" UTILITY PIPE
 12"X12"X6" TEE

RELOCATE FIRE HYDRANT
 14 LF FIRE HYDRANT LEG
 6" VALVE
 12"X12"X6" TEE

RELOCATE FIRE HYDRANT
 11 LF FIRE HYDRANT LEG
 6" VALVE
 12"X12"X6" TEE

RECONNECT WATER METER
 8 LF 6" WATER SERVICE LINE
 6" VALVE
 1,452 LF 12" WATER LINE (DI RJ, PC 350)

4' DIA UTILITY MANHOLE (2B)
 0.3 LF UTILITY MANHOLE WALL 4' DIA

ABANDON 70 LF 8" UTILITY PIPE

ABANDON UTILITY MANHOLE

ABANDON 237 LF 8" UTILITY PIPE

4' DIA UTILITY MANHOLE (3A)
 4.4 LF UTILITY MANHOLE WALL 4' DIA

108 LF 8" SANITARY GRAVITY SEWER
 (DI, PC 350) (PROTECTO 401 EPOXY COATING)

215 LF 8" SANITARY GRAVITY SEWER
 (DI, PC 350) (PROTECTO 401 EPOXY COATING)

4' DIA UTILITY MANHOLE (2A)
 4.5 LF UTILITY MANHOLE WALL 4' DIA

2 - RELOCATE WATER METER
 2 - RELOCATE 3/4" RPZ BACKFLOW PREVENTION ASSEMBLY
 250 LF WATER SERVICE LINE

ABANDON 1,457 LF 12" UTILITY PIPE

RELOCATE WATER METER
 121 LF WATER SERVICE LINE

RELOCATE WATER METER
 120 LF WATER SERVICE LINE

ABANDON 80 LF 8" UTILITY PIPE

8" VALVE

8" PLUG

2 - SANITARY SEWER CLEAN-OUT
 200 LF OF SEWER SERVICE LINE

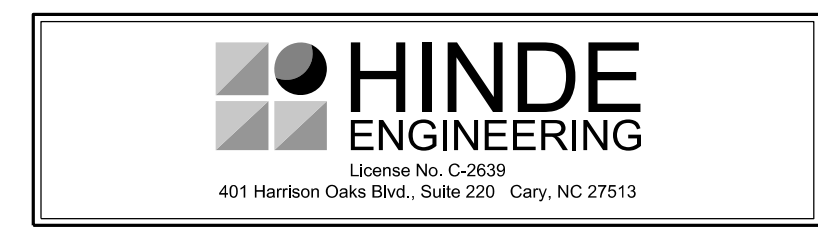
THE ESTIMATED QUANTITY OF DUCTILE IRON WATER PIPE FITTINGS ON THIS PLAN SHEET IS 2,670 LBS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

3 EXISTING WATER METERS ON PARCEL 10 ARE NO LONGER IN SERVICE PER CITY OF BURLINGTON.

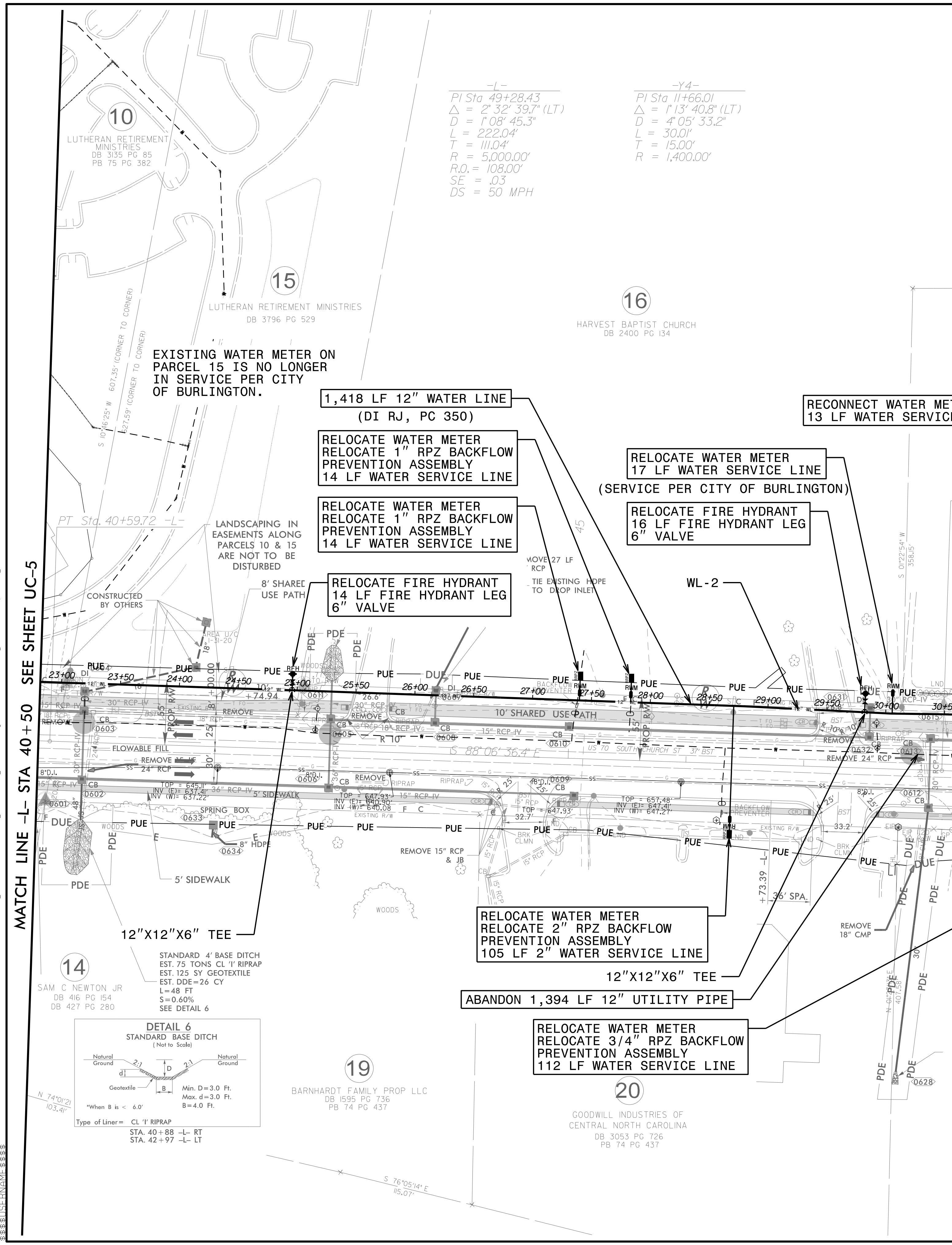
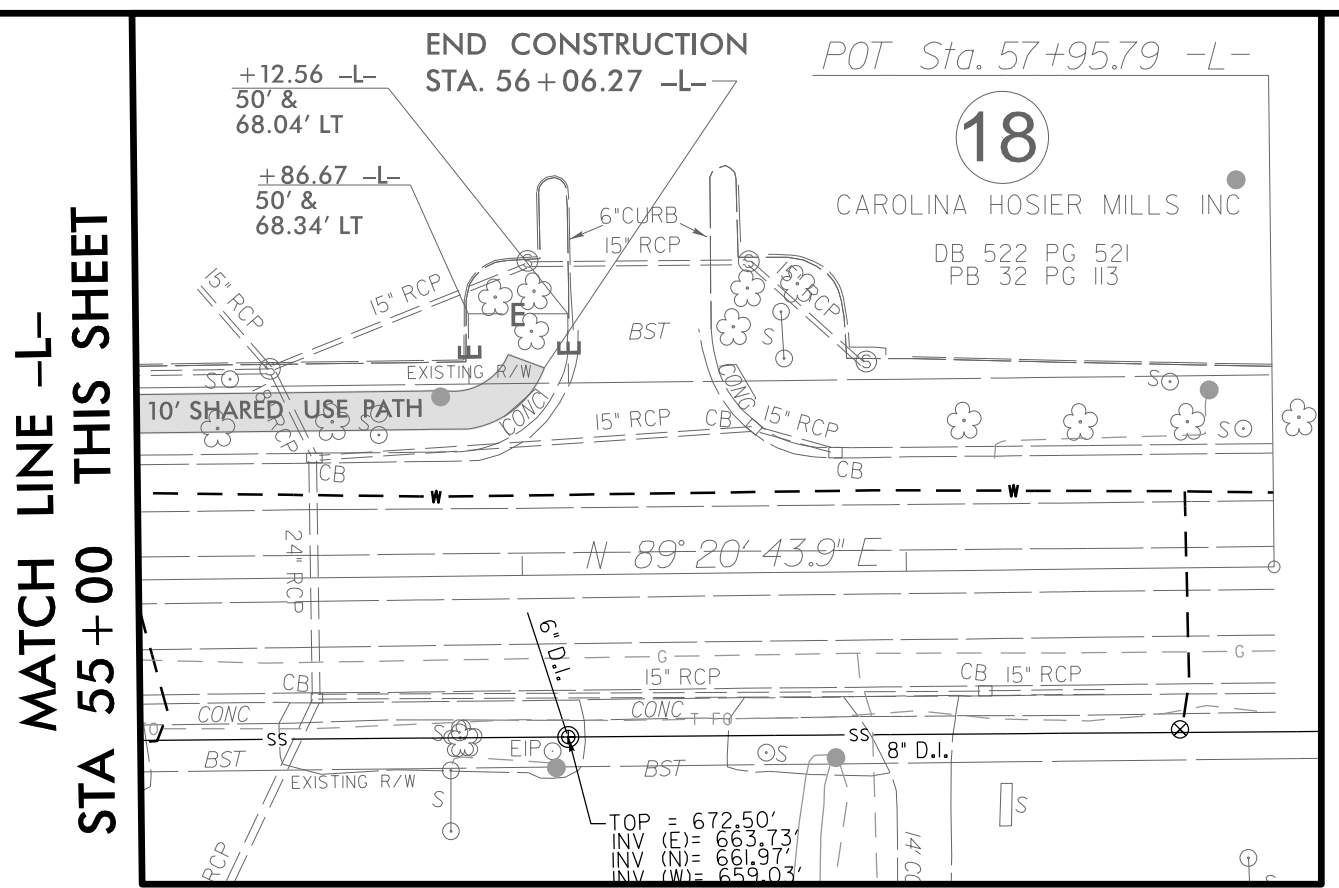
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 3/24/2022 14:00 PROJECTS\2019\AZ2019207.00_Parsons_U-6010\Design\Utilities\Engineering\UC\Pro\U-6010_Ut_rdy\05_UC05_psh.dgn

PROJECT REFERENCE NO.	SHEET NO.
U-6010	UC-6
DESIGNED BY: JKC	
DRAWN BY: JNA	
CHECKED BY: JKC	
APPROVED BY: CLS	
REVISER:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

UTILITY CONSTRUCTION



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



-L-
 PI Sta. 49+28.43
 $\Delta = 2' 32' 39.7''$ (LT)
 $D = 1' 08' 45.3''$
 $L = 222.04'$
 $T = 111.04'$
 $R = 5,000.00'$
 $R.O. = 108.00'$
 $SE = .03$
 $DS = 50$ MPH

-Y4-
 PI Sta. 11+66.01
 $\Delta = 1' 13' 40.8''$ (LT)
 $D = 4' 05' 33.2''$
 $L = 30.0'$
 $T = 15.00'$
 $R = 1,400.00'$

EXISTING WATER METER ON PARCEL 15 IS NO LONGER IN SERVICE PER CITY OF BURLINGTON.

1,418 LF 12" WATER LINE (DI RJ, PC 350)

RELOCATE WATER METER RELOCATE 1" RPZ BACKFLOW PREVENTION ASSEMBLY 14 LF WATER SERVICE LINE

RELOCATE WATER METER RELOCATE 1" RPZ BACKFLOW PREVENTION ASSEMBLY 14 LF WATER SERVICE LINE

RELOCATE FIRE HYDRANT 14 LF FIRE HYDRANT LEG 6" VALVE

RECONNECT WATER METER 13 LF WATER SERVICE LINE

RELOCATE WATER METER 17 LF WATER SERVICE LINE (SERVICE PER CITY OF BURLINGTON)

RELOCATE FIRE HYDRANT 16 LF FIRE HYDRANT LEG 6" VALVE

CONCRETE THRUST BLOCK 12" 45° BEND

63 LF 12" WATER LINE (DI RJ, PC 350) 12" 45° BEND

12" VALVE

12"X12"X12" TEE

12" 45° BEND

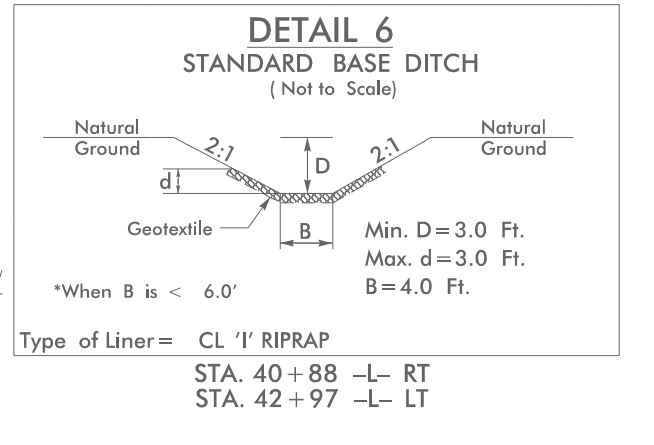
12" 45° BEND

12" VALVE

12"X12"X6" TEE

ABANDON 10 LF 12" UTILITY PIPE

14 SAM C NEWTON JR DB 416 PG 154 DB 427 PG 280



19 BARNHARDT FAMILY PROP LLC DB 1595 PG 736 PB 74 PG 437

RELOCATE WATER METER RELOCATE 3/4" RPZ BACKFLOW PREVENTION ASSEMBLY 112 LF WATER SERVICE LINE

ABANDON 1,394 LF 12" UTILITY PIPE

20 GOODWILL INDUSTRIES OF CENTRAL NORTH CAROLINA DB 3053 PG 726 PB 74 PG 437

RECONNECT WATER METER 74 LF WATER SERVICE LINE

125 LF 6" WATER LINE (DI RJ, PC 350)

6" VALVE

6" PLUG

3-RECONNECT WATER METERS 75 LF WATER SERVICE LINE

RELOCATE FIRE HYDRANT 8 LF FIRE HYDRANT LEG 6" VALVE

12"X12"X6" TEE

12" 45° BEND

12" VALVE

12" PLUG

12" 45° BEND

12" SLEEVE

CONCRETE THRUST BLOCKING

2 - SANITARY SEWER CLEAN-OUT 200 LF OF SEWER SERVICE LINE

THE ESTIMATED QUANTITY OF DUCTILE IRON WATER PIPE FITTINGS ON THIS PLAN SHEET IS 4,065 LBS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

END TIP PROJECT U-6010 POT STA. 54+15.00 -L-

MATCH LINE -L- STA 40+50 SEE SHEET UC-5

MATCH LINE -L- STA 55+00 THIS SHEET

MATCH LINE -L- STA 55+00 THIS SHEET

NAD 83/2011

24-MAR-2022 14:09 S:\S\PROJECTS\2019\A2019207.00_Parsons_U-6010\Design\Utilities\Engineering\UC\ProJ\U-6010_Ur_dwg\06_UC06_psh.dgn

HINDE ENGINEERING
 License No. C-2639
 401 Harrison Oaks Blvd., Suite 220 Cary, NC 27513

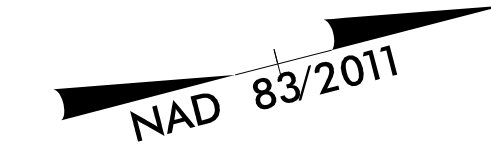
**DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED**

PROJECT REFERENCE NO. U-6010	SHEET NO. UC-7
DESIGNED BY: JKC	
DRAWN BY: JNA	
CHECKED BY: JKC	
APPROVED BY: CLS	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

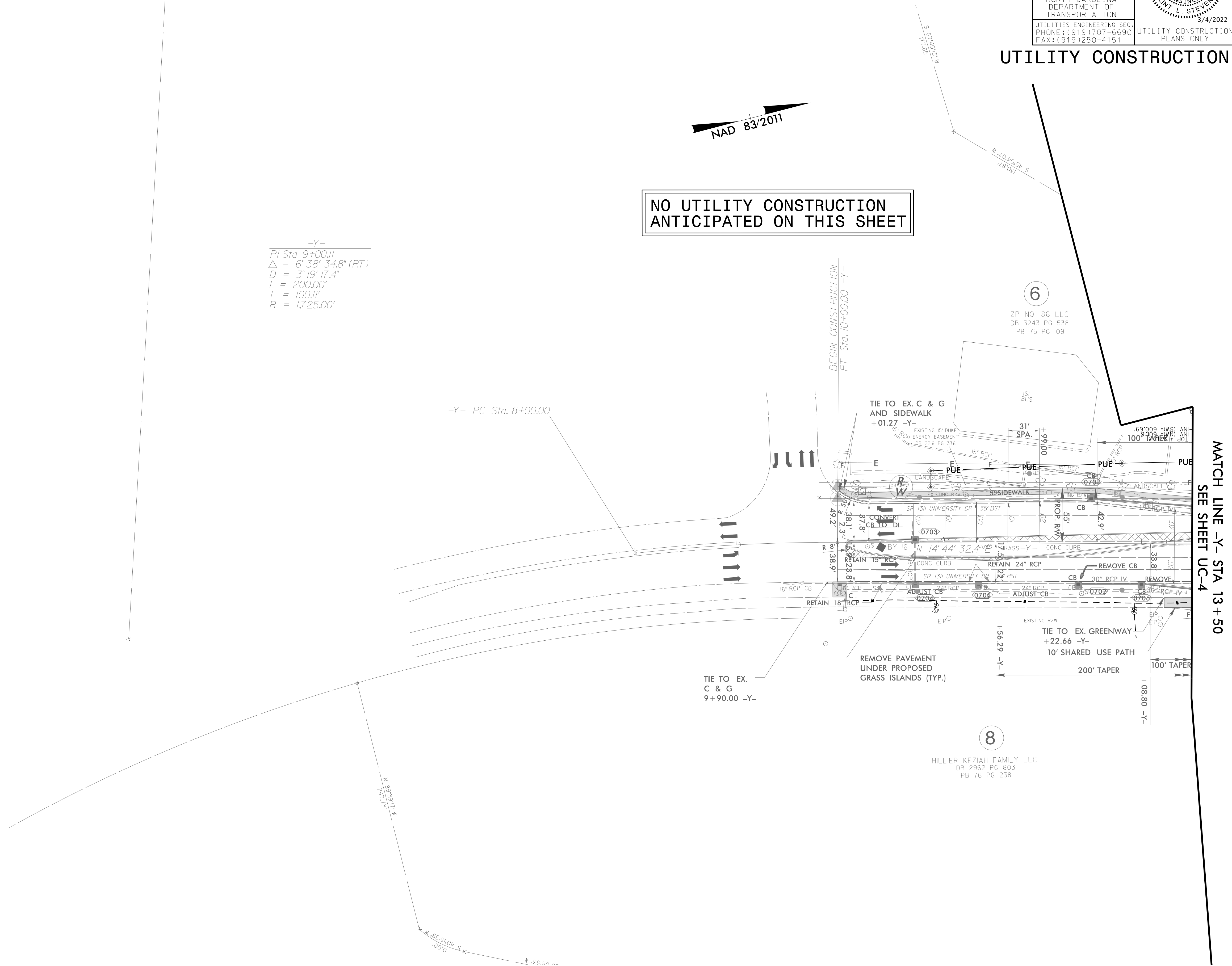
UTILITY CONSTRUCTION

NO UTILITY CONSTRUCTION ANTICIPATED ON THIS SHEET

-Y-
 PI Sta. 9+00.11
 $\Delta = 6^{\circ} 38' 34.8" (RT)$
 $D = 3^{\circ} 19' 17.4"$
 $L = 200.00'$
 $T = 100.11'$
 $R = 1,725.00'$



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6

ZP NO 186 LLC
DB 3243 PG 538
PB 75 PG 109

8

HILLIER KEZIAH FAMILY LLC
DB 2962 PG 603
PB 76 PG 238

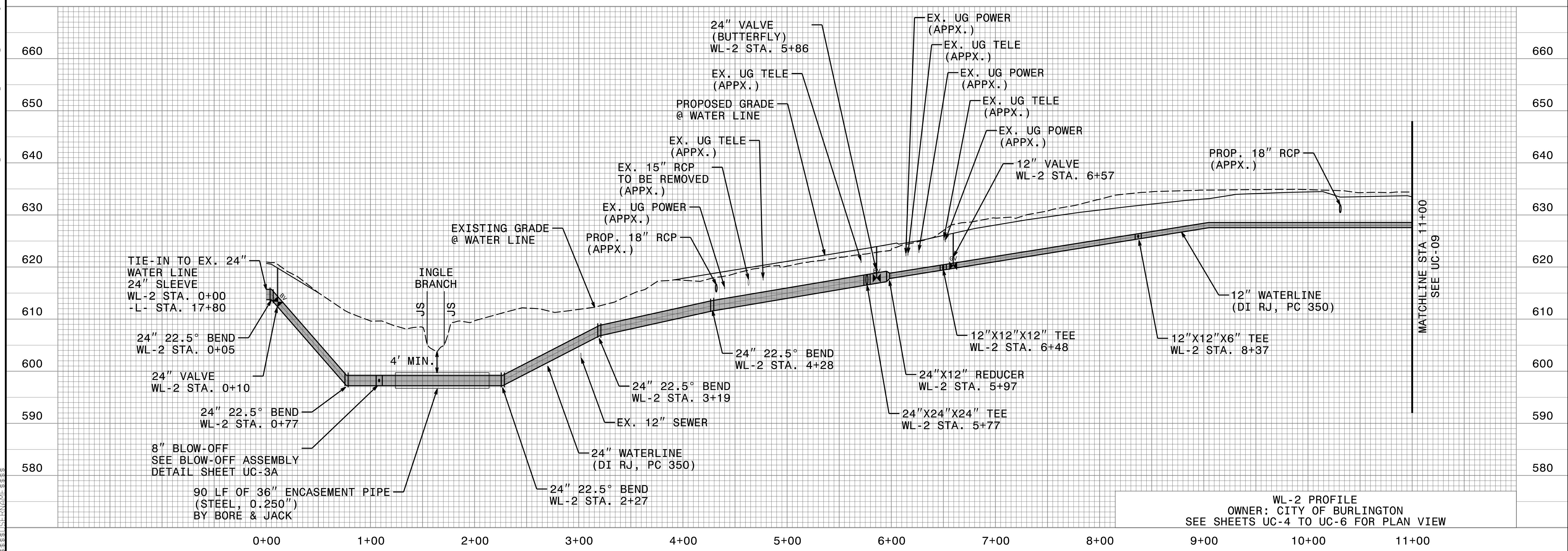
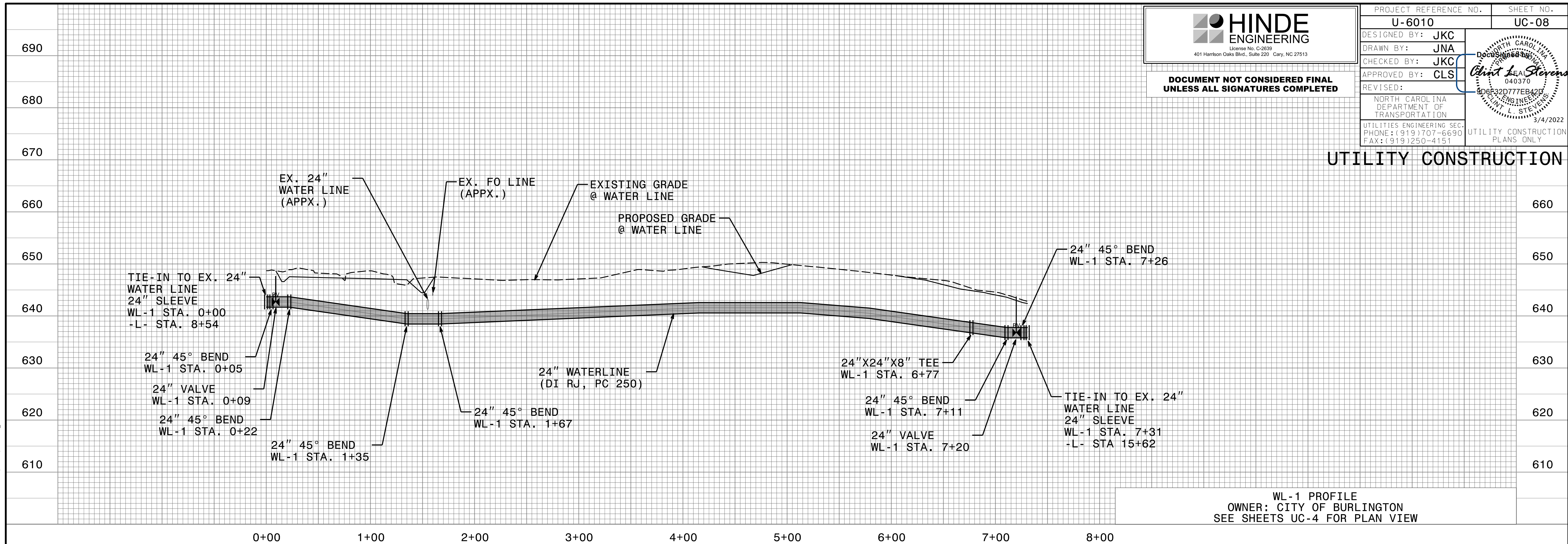
MATCH LINE -Y- STA 13+50
SEE SHEET UC-4



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PROJECT REFERENCE NO. U-6010	SHEET NO. UC-08
DESIGNED BY: JKC	
DRAWN BY: JNA	
CHECKED BY: JKC	
APPROVED BY: CLS	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

UTILITY CONSTRUCTION



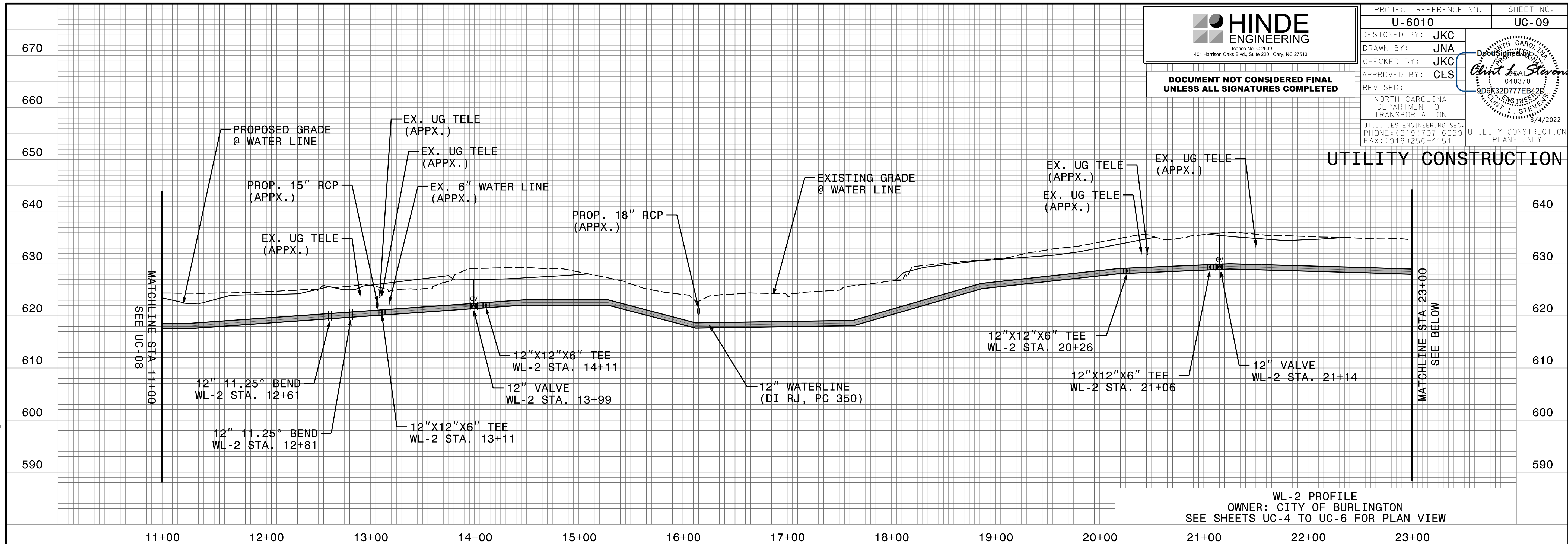
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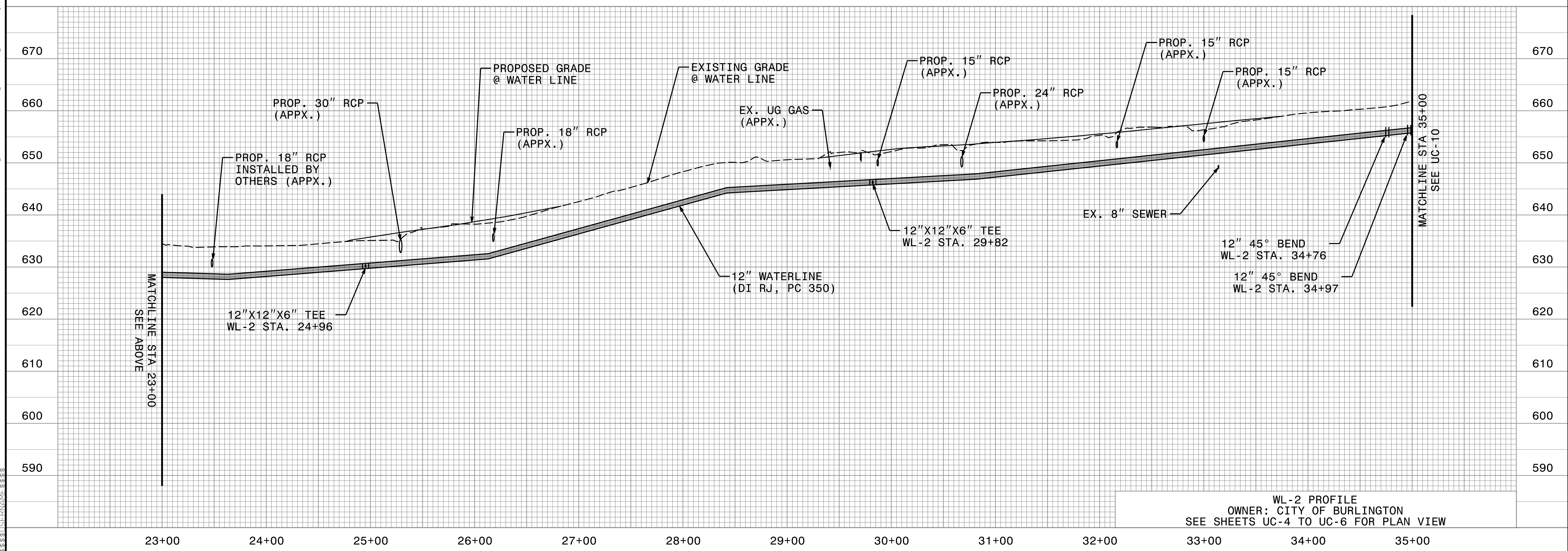
PROJECT REFERENCE NO.	SHEET NO.
U-6010	UC-09
DESIGNED BY: JKC	
DRAWN BY: JNA	
CHECKED BY: JKC	
APPROVED BY: CLS	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

UTILITY CONSTRUCTION



WL-2 PROFILE
OWNER: CITY OF BURLINGTON
SEE SHEETS UC-4 TO UC-6 FOR PLAN VIEW



WL-2 PROFILE
OWNER: CITY OF BURLINGTON
SEE SHEETS UC-4 TO UC-6 FOR PLAN VIEW

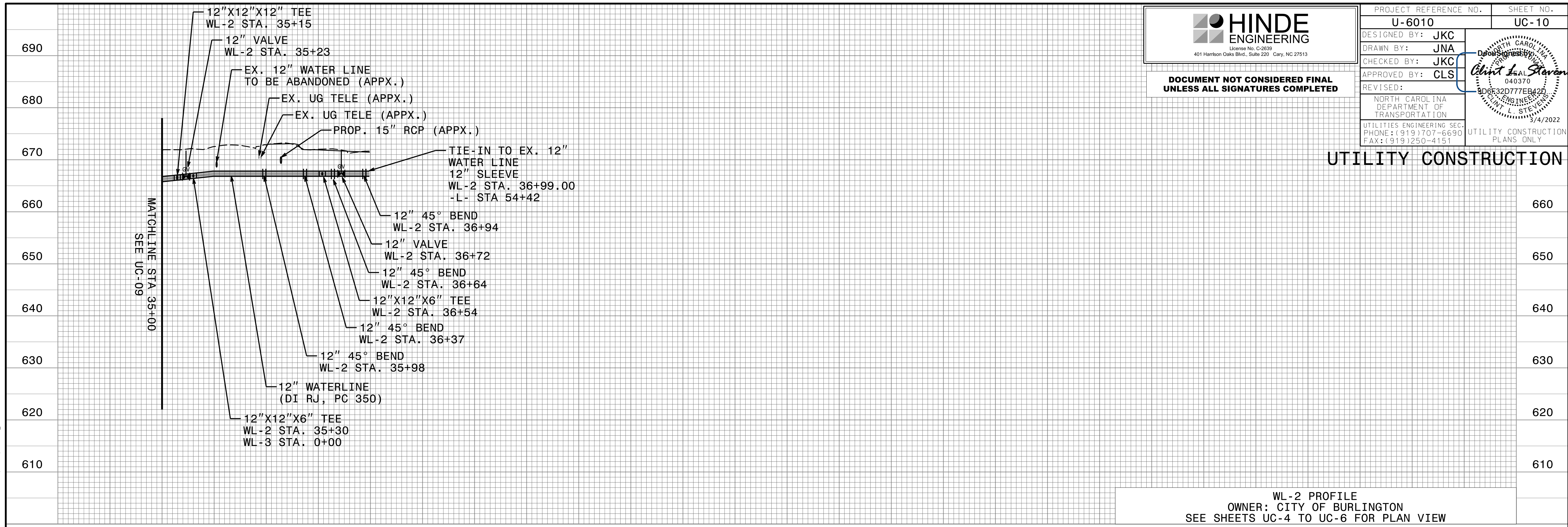
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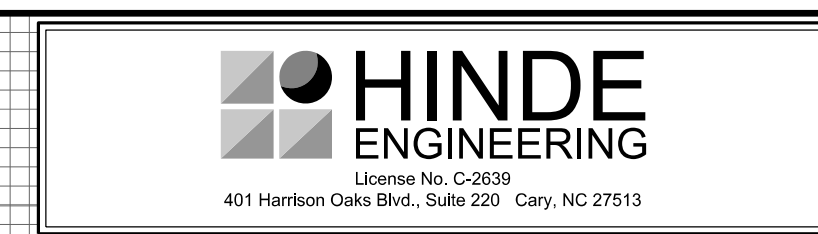
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PROJECT REFERENCE NO. U-6010	SHEET NO. UC-10
DESIGNED BY: JKC	
DRAWN BY: JNA	
CHECKED BY: JKC	
APPROVED BY: CLS	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
3/4/2022	
UTILITY CONSTRUCTION PLANS ONLY	

UTILITY CONSTRUCTION

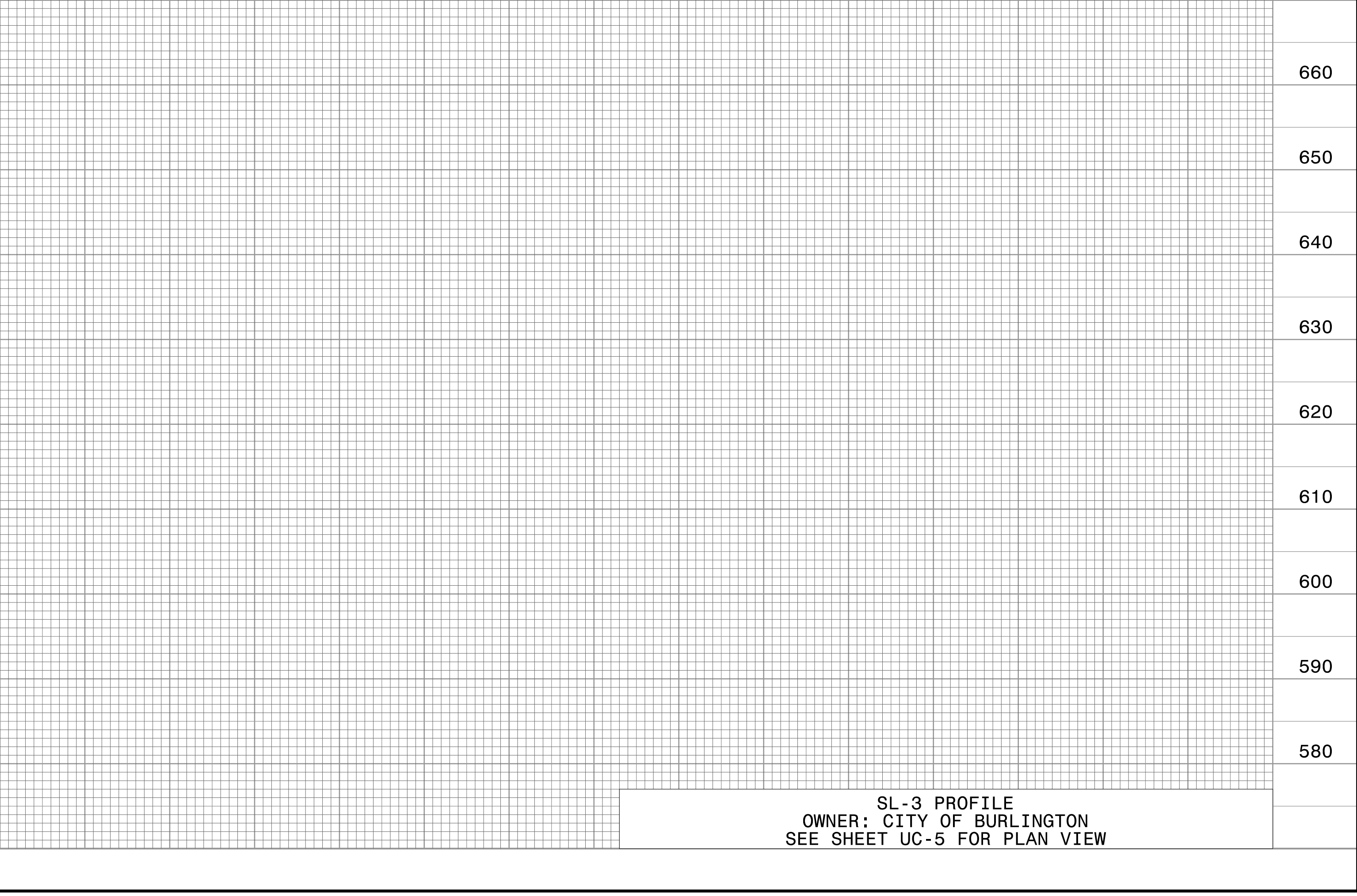
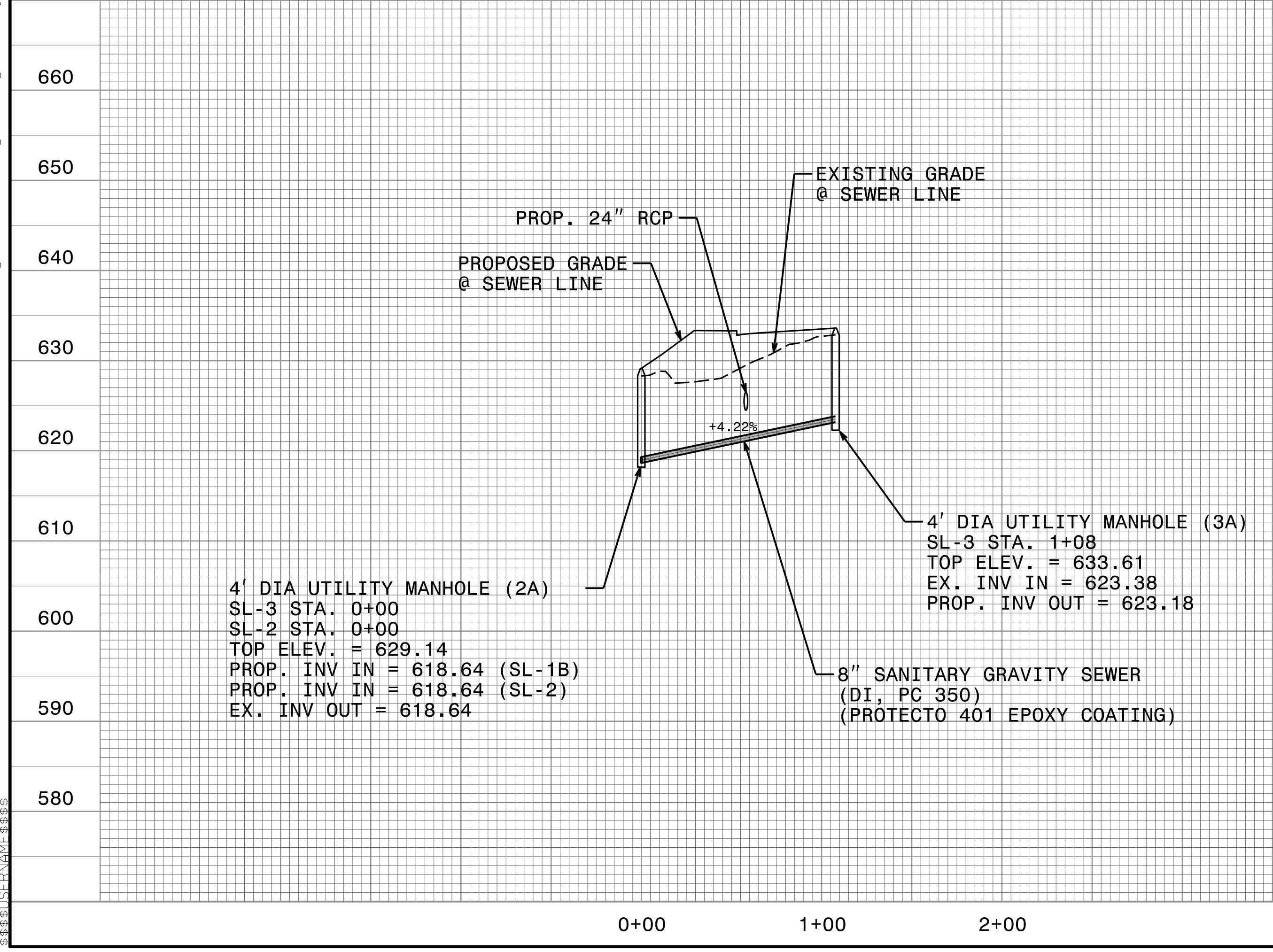
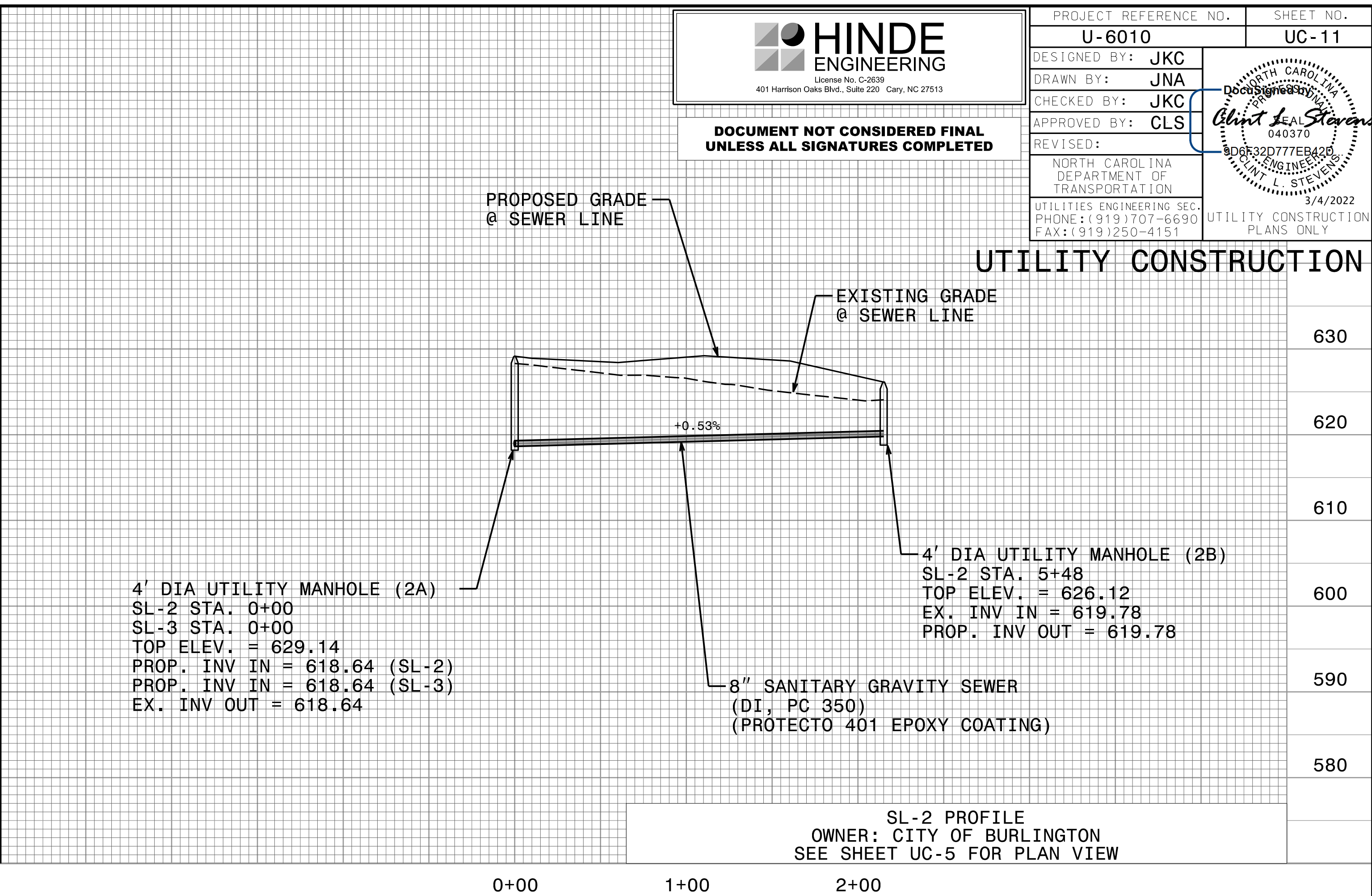
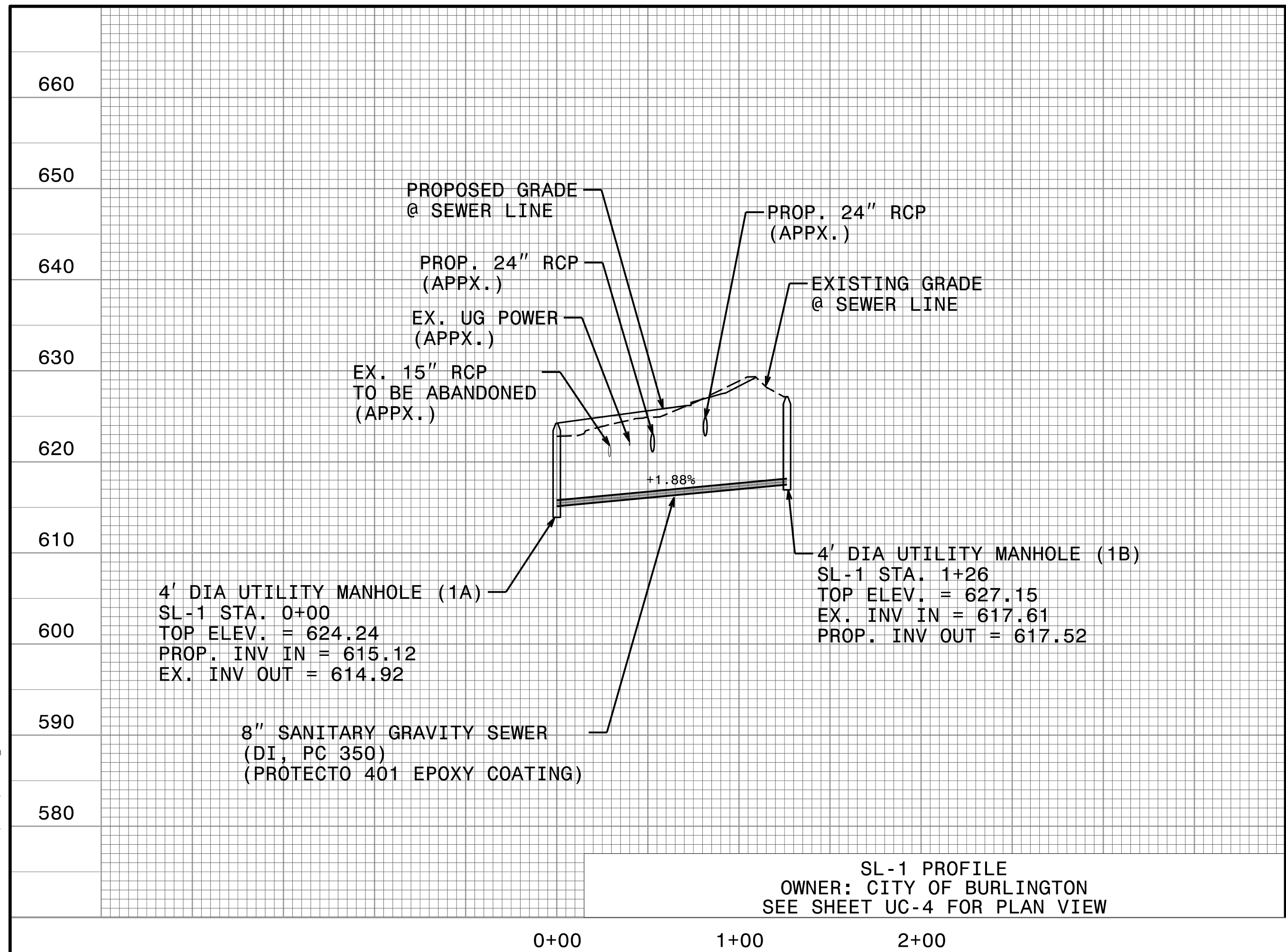


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DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PROJECT REFERENCE NO. U-6010	SHEET NO. UC-11
DESIGNED BY: JKC	
DRAWN BY: JNA	
CHECKED BY: JKC	
APPROVED BY: CLS	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY 3/4/2022	



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