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See Sheet 1-A For Index of Sheets
See Sheet 1-B For Conventional Symbols

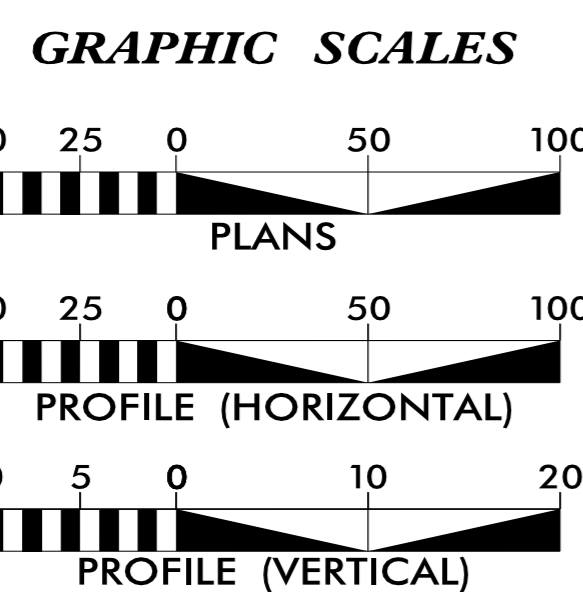
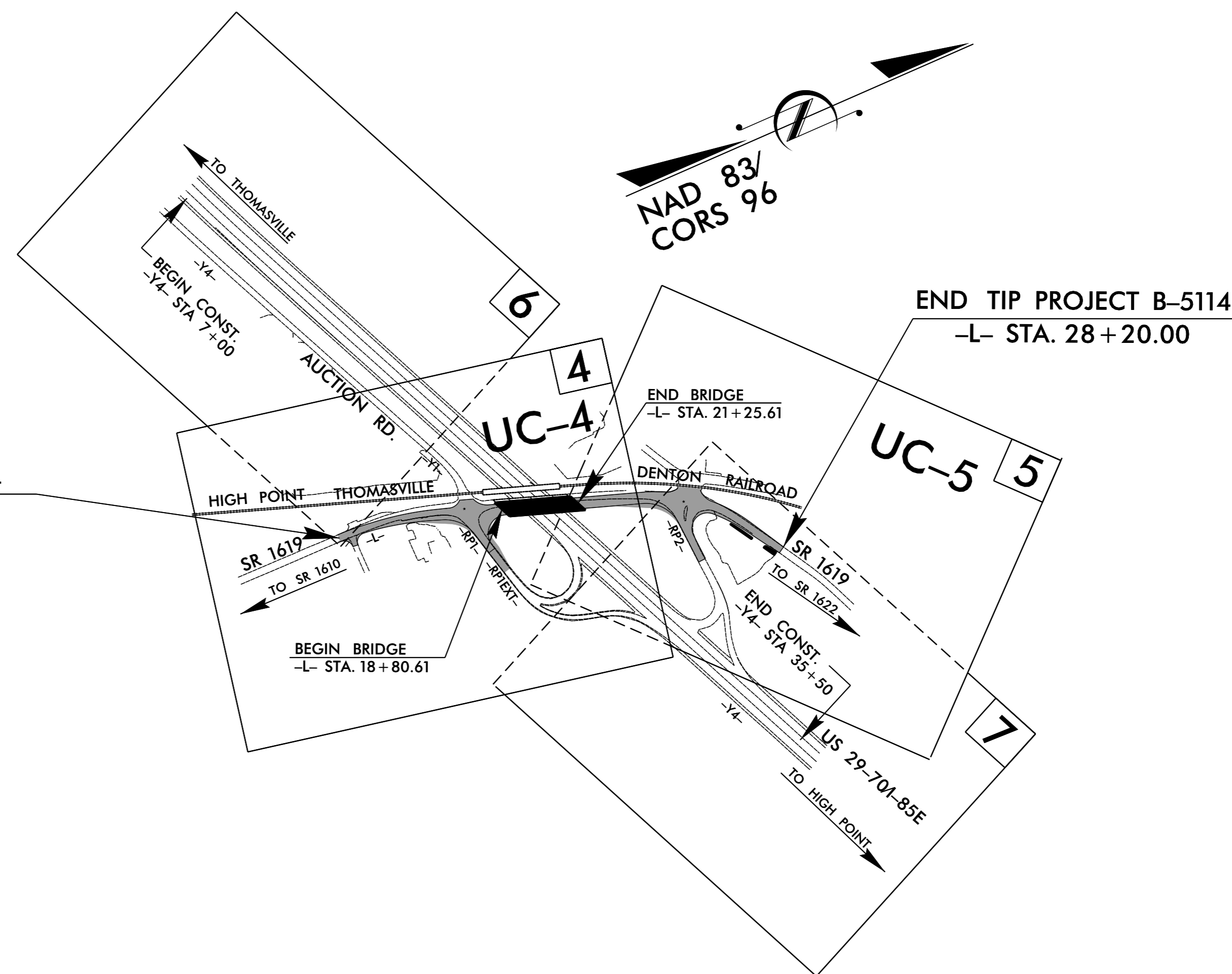
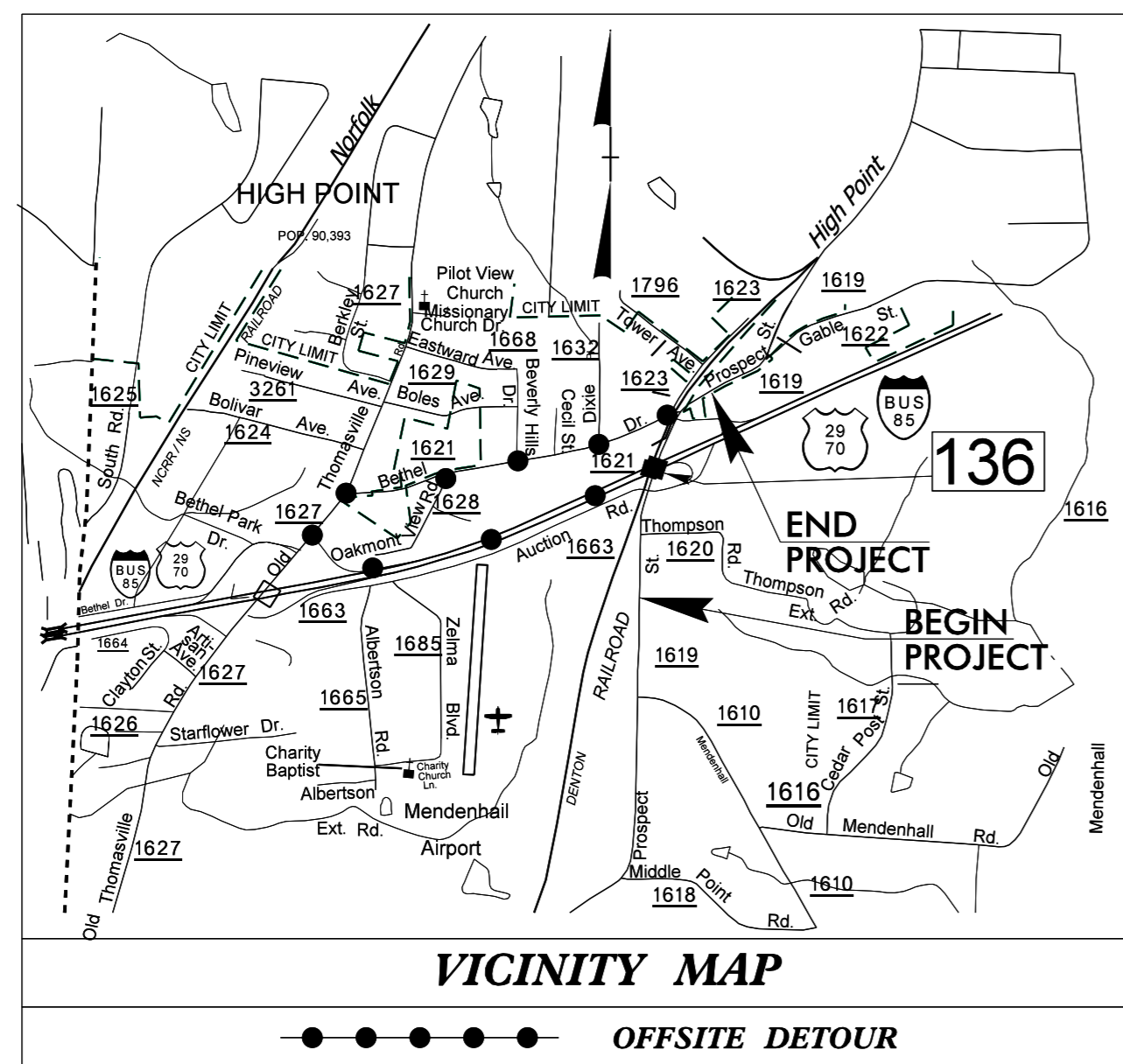
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

**UTILITY CONSTRUCTION PLANS
RANDOLPH COUNTY**

**LOCATION: BRIDGE 136 OVER US 29-70/1-85 BUSINESS ON
SR 1619 (PROSPECT STREET) IN HIGH POINT**

TYPE OF WORK: UTILITIES

TIP PROJECT: B-5114



INDEX OF SHEETS

SHEET NO.	DESCRIPTION
UC-1	TITLE SHEET
UC-2	UTILITY SYMBOLOGY
UC-3	NOTES
UC-3A	DETAILS
UC-4 THRU UC-5	UTILITY CONSTRUCTION SHEETS
UC-6	PROFILE SHEETS

WATER AND SEWER OWNERS ON PROJECT

(1) WATER, Davidson Water Incorporated. (UC-4)
(2) WATER, City of High Point. (UC-5)

SEAL

PREPARED IN THE OFFICE OF:
**DIVISION OF HIGHWAYS
UTILITIES UNIT
UTILITIES ENGINEERING**

1555 MAIL SERVICES CENTER
RALEIGH NC 27699-1555
PHONE (919) 707-6690
FAX (919) 250-4151

Roger Worthington, P.E. UTILITIES SECTION ENGINEER
Steve McKee, P.E. UTILITIES SQUAD LEADER PROJECT ENGINEER
Jamshid Hafshejani UTILITIES PROJECT DESIGNER

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

UTILITIES PLAN SHEET SYMBOLS

PROPOSED WATER SYMBOLS

Water Line (Sized as Shown)	
11¼ Degree Bend	
22½ 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	

NOTE
PAY ITEM

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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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 2012.
2. THE EXISTING UTILITIES BELONG TO DAVIDSON WATER INC. AND THE CITY OF HIGH POINT.
3. ALL WATER LINES TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL AND NATURAL RESOURCES, 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 AND NATURAL RESOURCES, 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 OPPROTUNITY 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.

PROJECT SPECIFIC NOTES:

1. ALL WATER LINE SHALL BE RESTRAINED JOINT DUCTILE IRON, PC 350. ALL FITTINGS SHALL BE RESTRAINED WITH RESTRAINED RETAINER GLANDS.
2. ALL WATER SERVICE PIPE SHALL BE TYPE K COPPER CONFORMING TO ASTM B-88.
3. CONTRACTOR'S ATTENTION IS DIRECTED TO SECTIONS 102, 107, AND 1550 OF THE STANDARD SPECIFICATIONS CONCERNING TRENCHLESS INSTALLATION. IT IS CONTRACTOR'S RESPONSIBILITY TO HAVE BORE DESIGNED AND SEALED BY A LICENSED NORTH CAROLINA PROFESSIONAL ENGINEER. NO DAMAGE IS ALLOWED TO RIVER, WETLANDS, OR BUFFER ZONES.

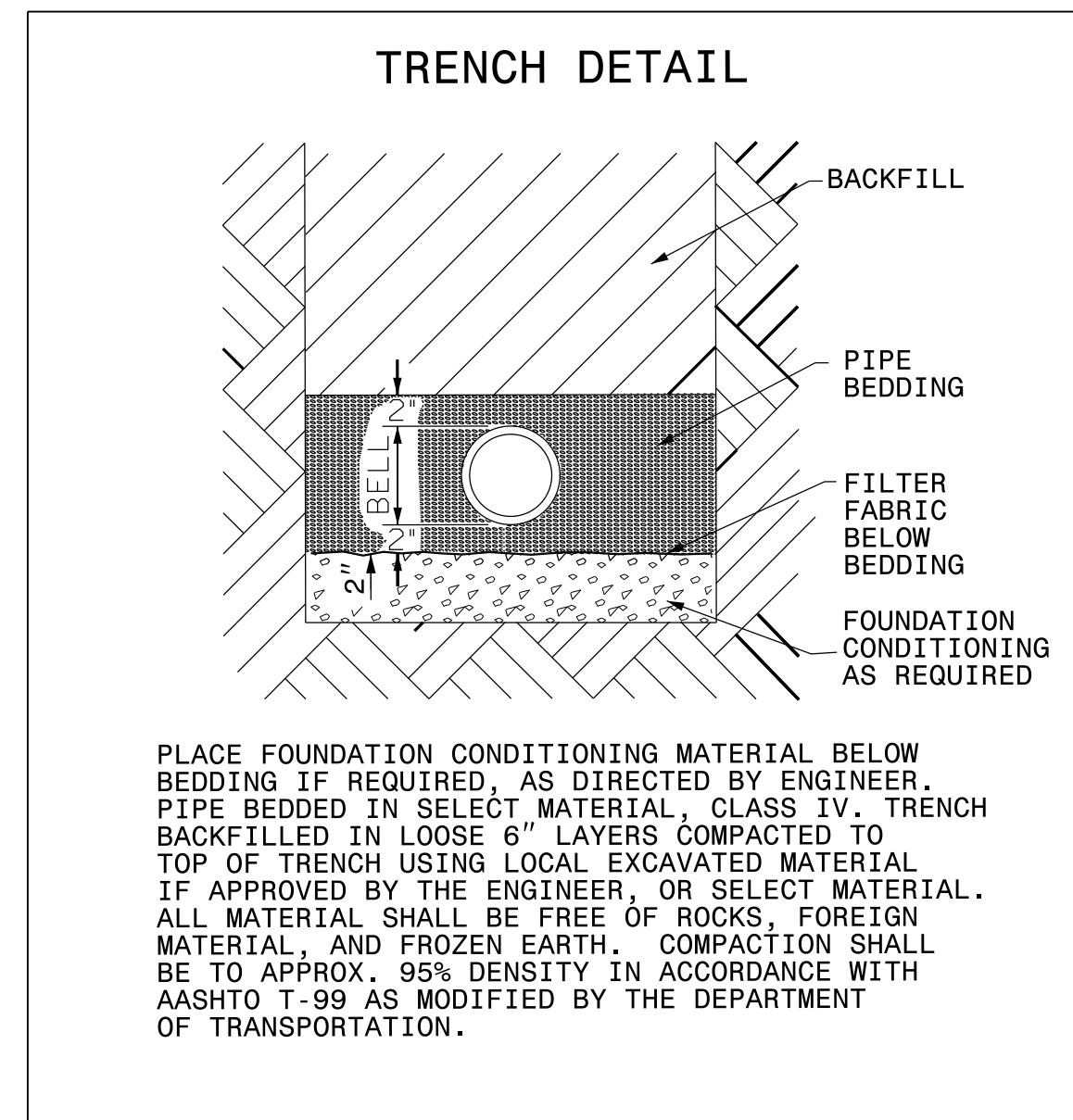
LIST OF STANDARD DRAWINGS

- 1515.01 WATER METER
- 1515.02 FIRE HYDRANT
- 1520.01 SEWER CLEAN OUT
- 1525.06 PRECAST CONCRETE SANITARY SEWER MANHOLE WITH CAST-IN-PLACE BOTTOM

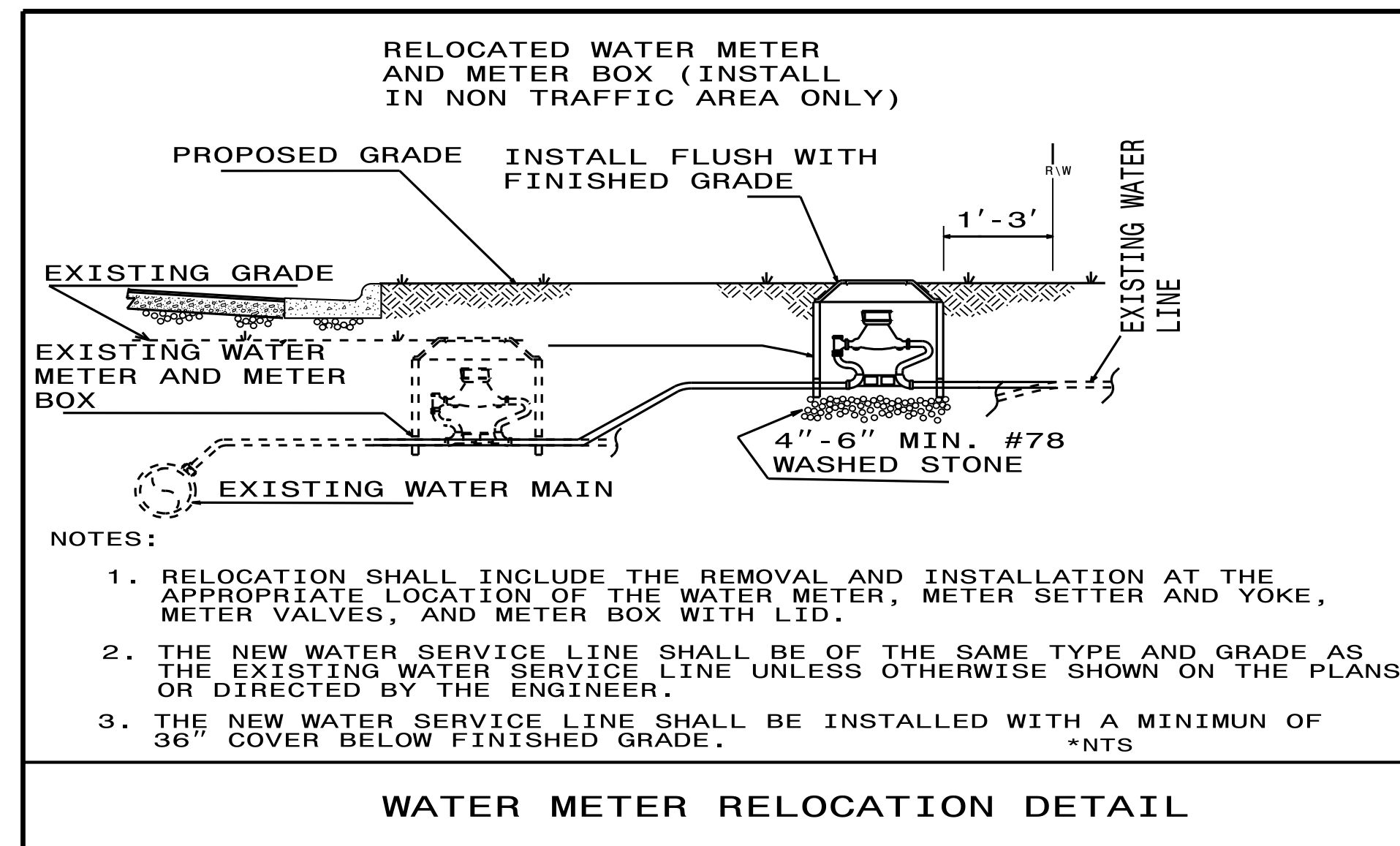
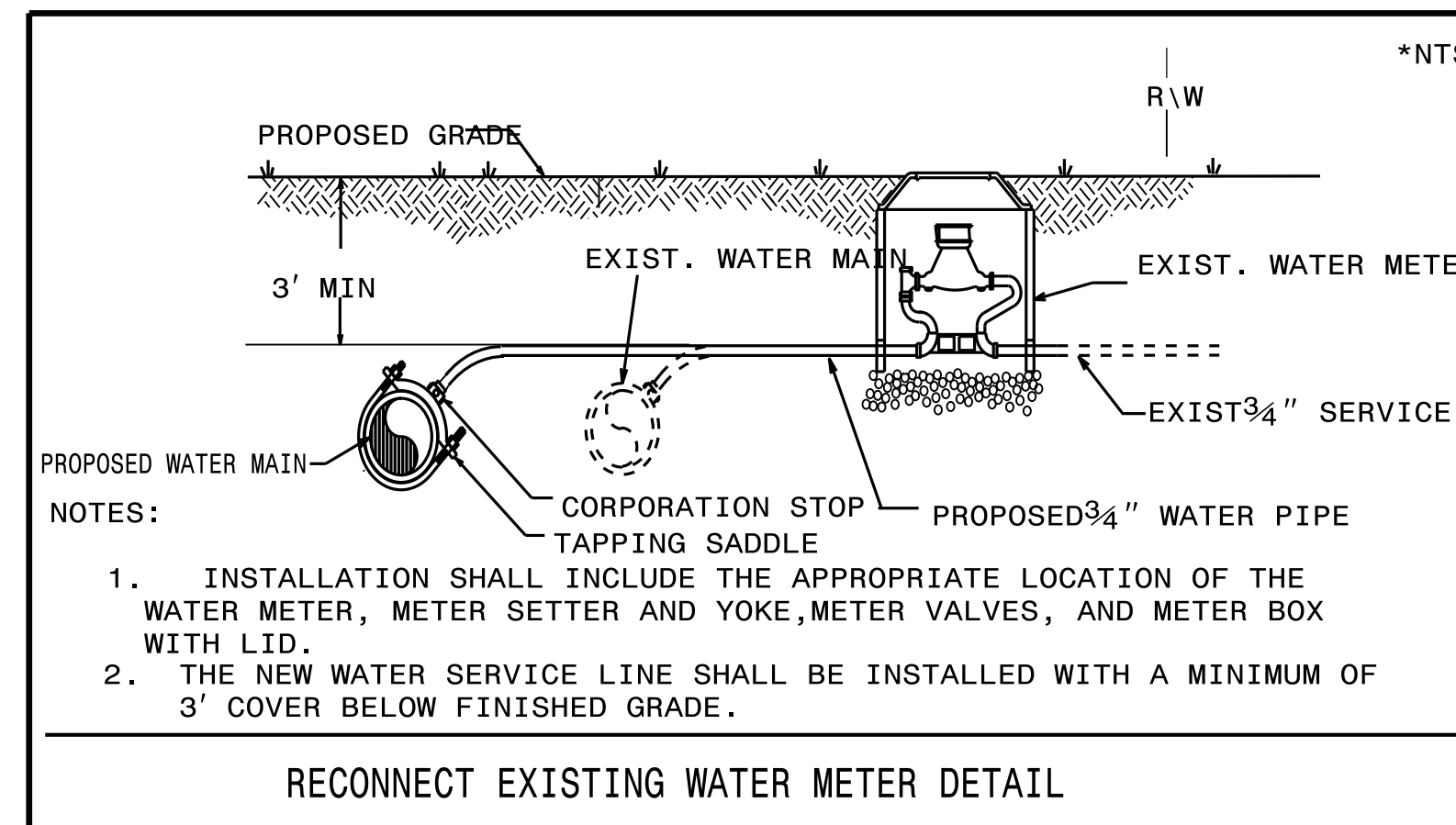
PROJECT REFERENCE NO.	SHEET NO.
B-5114	UC-3
DESIGNED BY: JH	
DRAWN BY: JH	
CHECKED BY: JSM	
APPROVED BY: JSM	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
2/27/2015 UTILITY CONSTRUCTION PLANS ONLY	

UTILITY CONSTRUCTION

PROJECT TYPICAL DETAILS



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



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PROJECT REFERENCE NO.	SHEET NO.
B-5114	UC-4
DESIGNED BY: JH	
DRAWN BY: JH	
CHECKED BY: JSM	
APPROVED BY: JSM	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SECTION PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

PROP. 492' OF 12" WATER LINE.
 1- WATER METER RELOCATION.
 1- FIRE HYDRANT RELOCATION.
 2- RECONNECT WATER METER.
 1- 6" GATE VALVE.
 2- 12" GATE VALVE.
 76' OF 24" STEEL ENCASEMENT.

BEGIN TIP PROJECT B-5114
 -L- STA. 13+34.42

BEGIN BRIDGE
 -L- STA. 18+80.61

BEGIN APPROACH SLAB
 STA. 18+56.99

76' OF 24" STEEL ENCASEMENT PIPE

END BRIDGE
 -L- STA. 21+25.61

END APPROACH SLAB
 -L- STA. 21+49.24

ROBERT G. JENKINS, JR. AND WIFE
 PENNY S. JENKINS
 DB 1952 PG 2102

REDUCER 12" TO 6"

C. VAN PIERCE, JR. AND WIFE
 PAIGE K. PIERCE
 DB 1422 PG 1425
 DB 1796 PG 2241
 PB 6T PG 43
 (NO CLAIM)

BOBBY L. GRUBB, TRUSTEE
 DB 1902 PG 307
 PB 1PG 107
 (NO CLAIM)

ERVIN R. DAVIS, SR.
 DB 806 PG 166
 PB 1PG 107

TAGABAA, INC.
 DB 2212 PG 1158

RONALD W. MCKAGUE AND WIFE
 JUDITH R. MCKAGUE
 DB 2040 PG 2255

NOTE:
 DURING EXCAVATION FOR WATER & GAS LINES CONTRACTOR SHOULD USE CAUTION IN THE VICINITY OF EXISTING TELEPHONE CABLES AND CONDUITS. TELEPHONE COMPANY SUPERVISOR SHOULD BE ON SITE DURING EXCAVATION.

DO NOT DISTURB
 SANITARY SEWER
 DRAIN FIELD

SPECIAL CUT DITCH
 SEE DETAIL D
 ALSO SEE -L- X-SECTIONS
 STA. 21+00-LT. TO 24+00-LT.

AMERICAS PROPANE, L.P.
 DB 1423 PG 115

MATCH LINE -L- STA. 22+50.00 SEE SHEET UC-5

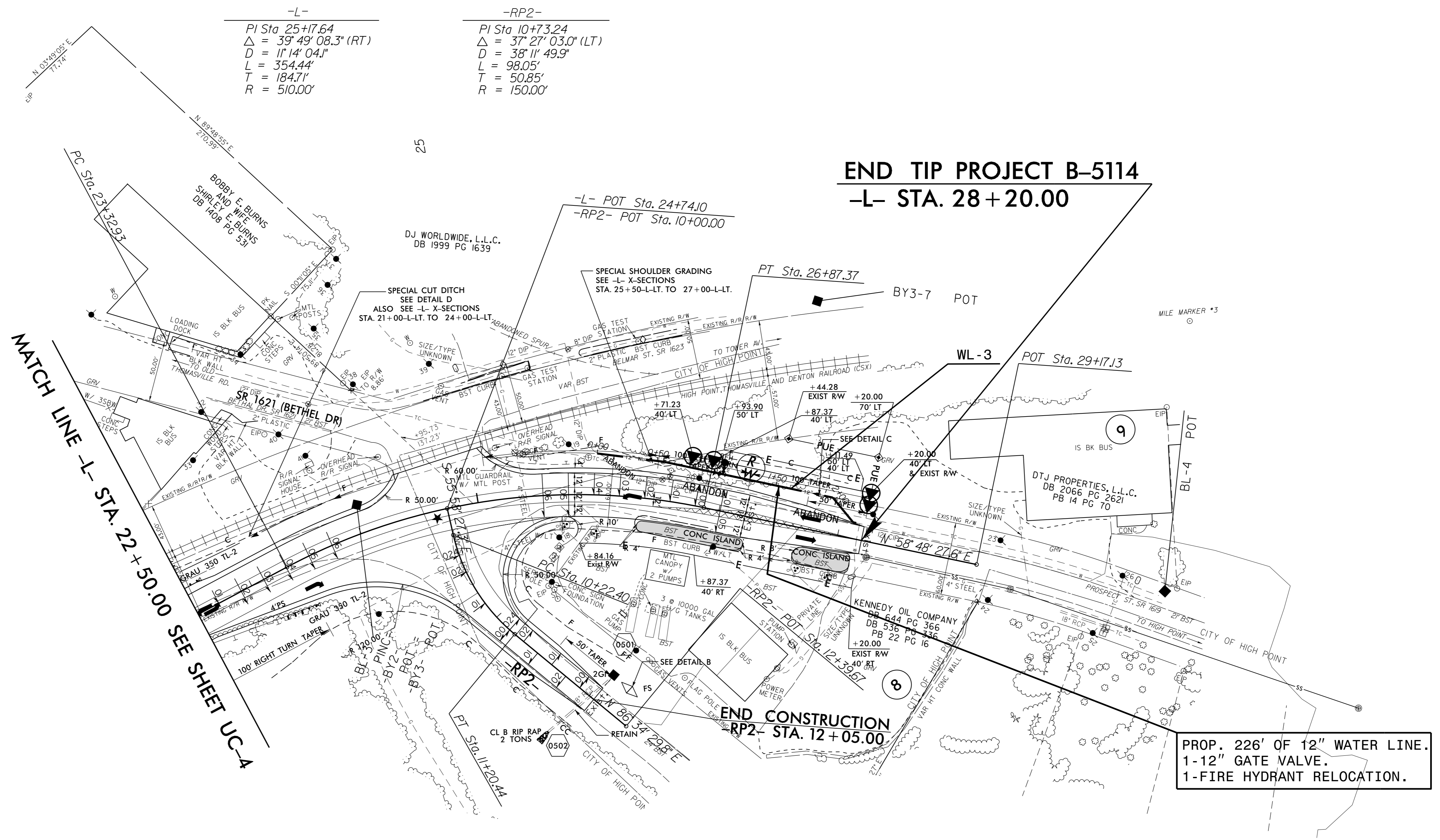
MATCH LINE -Y4- STA. 26+50.00
 SEE SHEET 7

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PROJECT REFERENCE NO.	SHEET NO.
B-5114	UC-5
DESIGNED BY: JH	
DRAWN BY: JH	
CHECKED BY: JSM	
APPROVED BY: JSM	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

UTILITY CONSTRUCTION



-L-
 PI Sta 25+17.64
 $\Delta = 39^\circ 49' 08.3''$ (RT)
 D = 11' 14" 04.1"
 L = 354.44'
 T = 184.71'
 R = 510.00'

-RP2-
 PI Sta 10+73.24
 $\Delta = 37^\circ 27' 03.0''$ (LT)
 D = 38' 11" 49.9"
 L = 98.05'
 T = 50.85'
 R = 150.00'

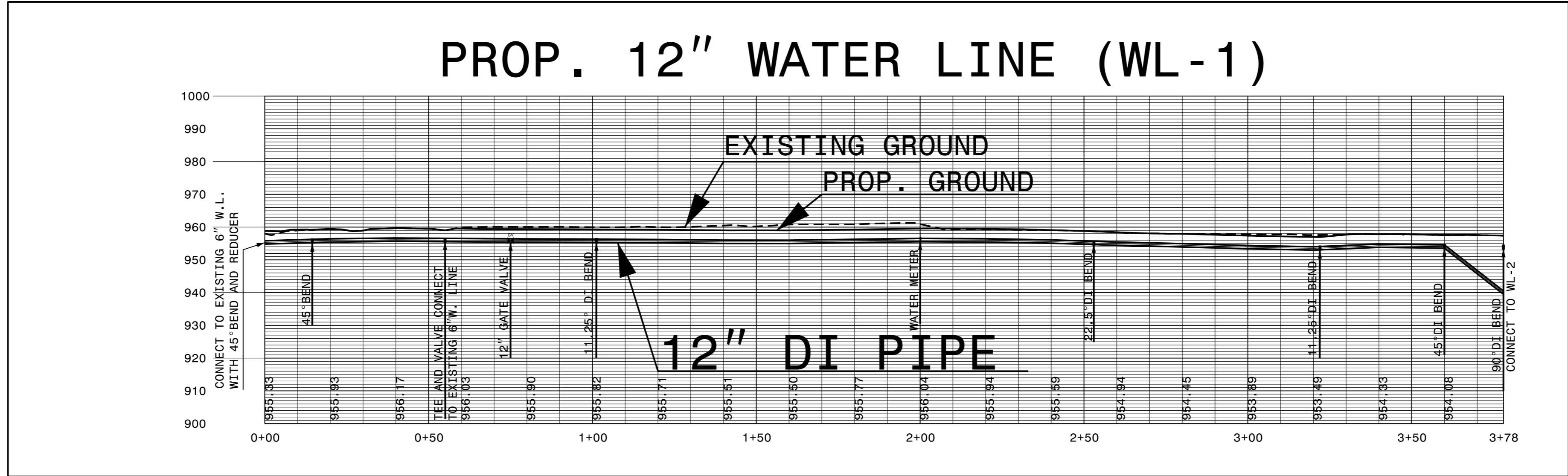
END TIP PROJECT B-5114
 -L- STA. 28 + 20.00

PROP. 226' OF 12" WATER LINE.
 1-12" GATE VALVE.
 1-FIRE HYDRANT RELOCATION.

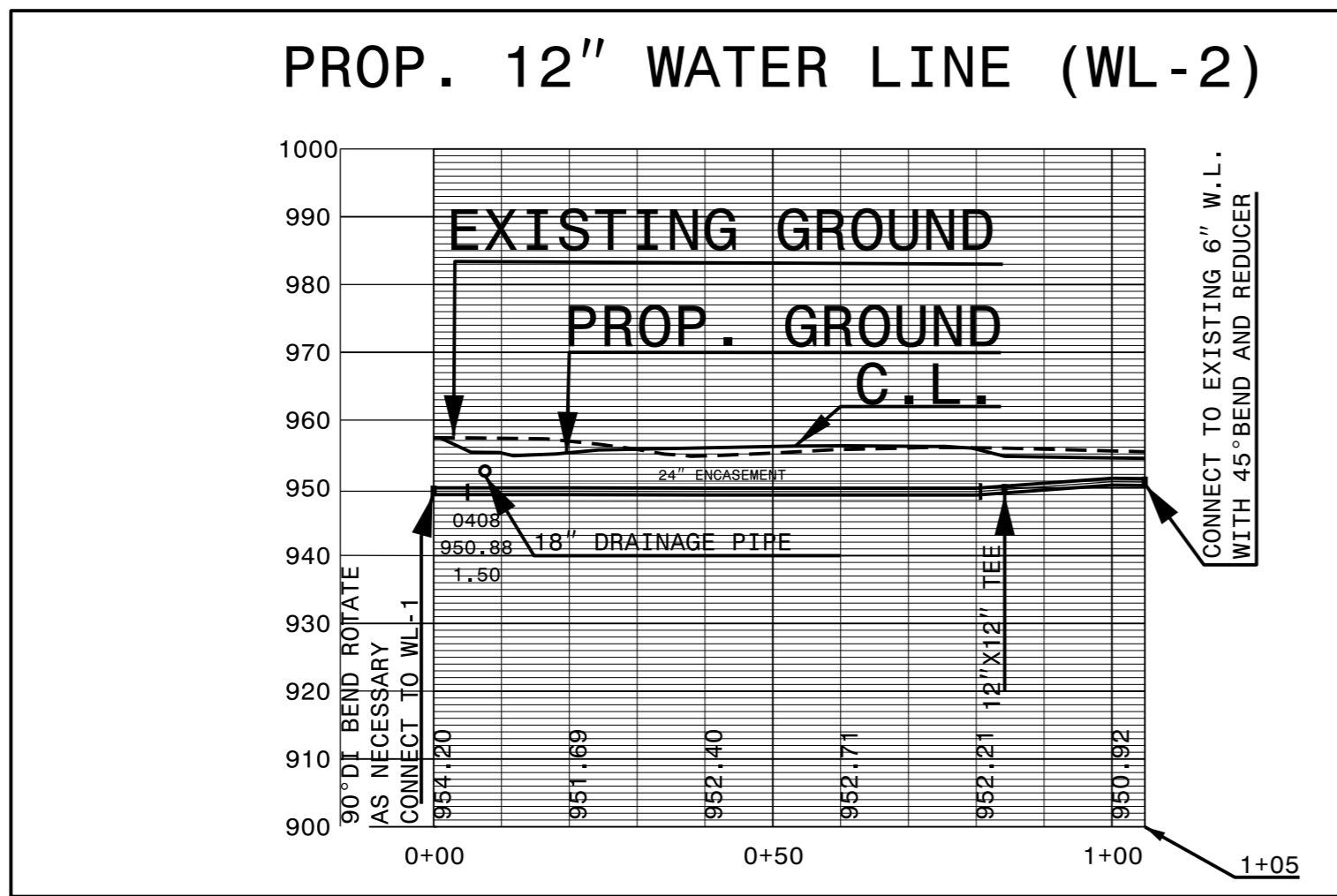
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PROJECT REFERENCE NO.	SHEET NO.
B-4114	UC-6
DESIGNED BY: JH	
DRAWN BY: JH	
CHECKED BY: JSM	
APPROVED BY: JSM	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

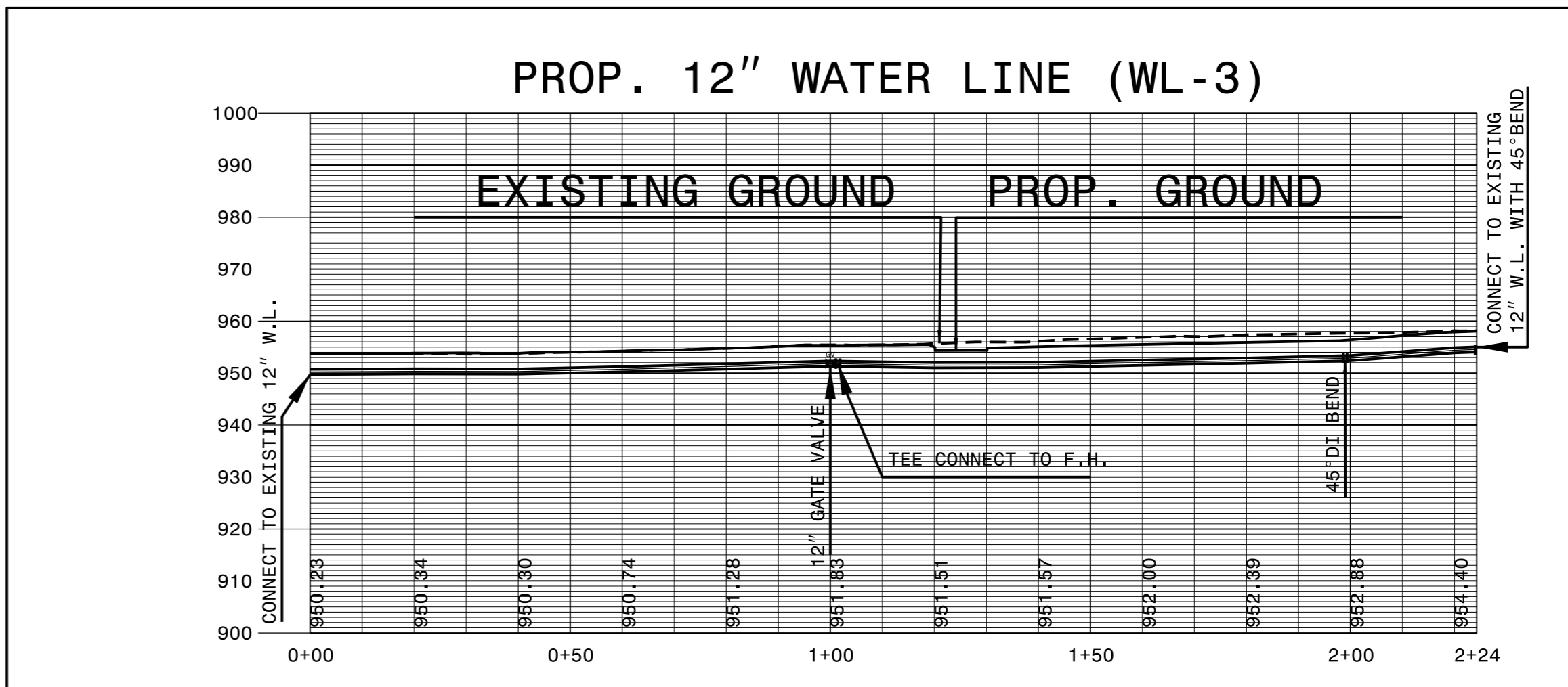
PROP. 12" WATER LINE (WL-1)



PROP. 12" WATER LINE (WL-2)



PROP. 12" WATER LINE (WL-3)



5/14/99

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