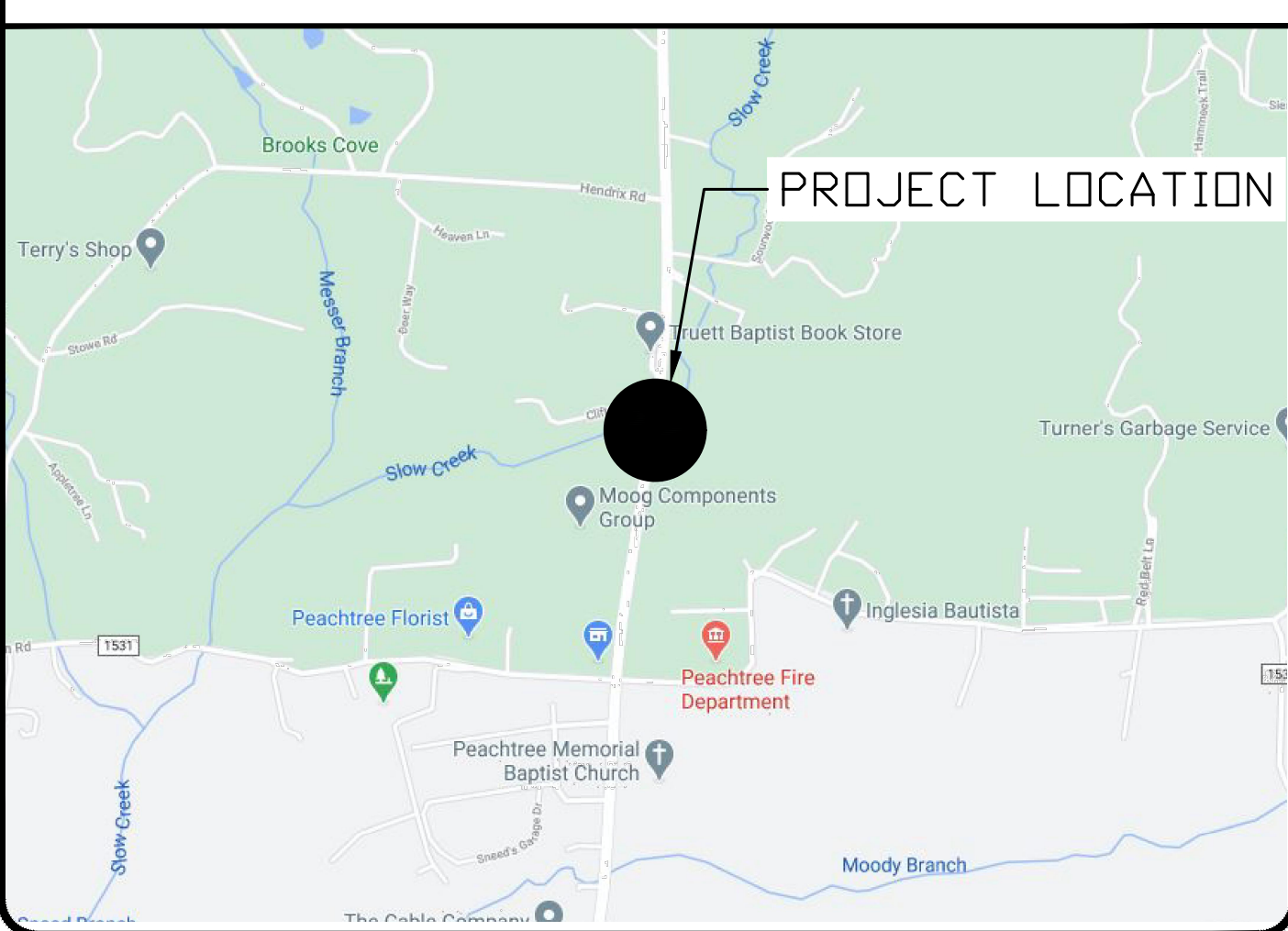


09/08/99

TIP PROJECT: BR-0011

T.I.P. NO.	SHEET NO.
BR-0011	UC-1

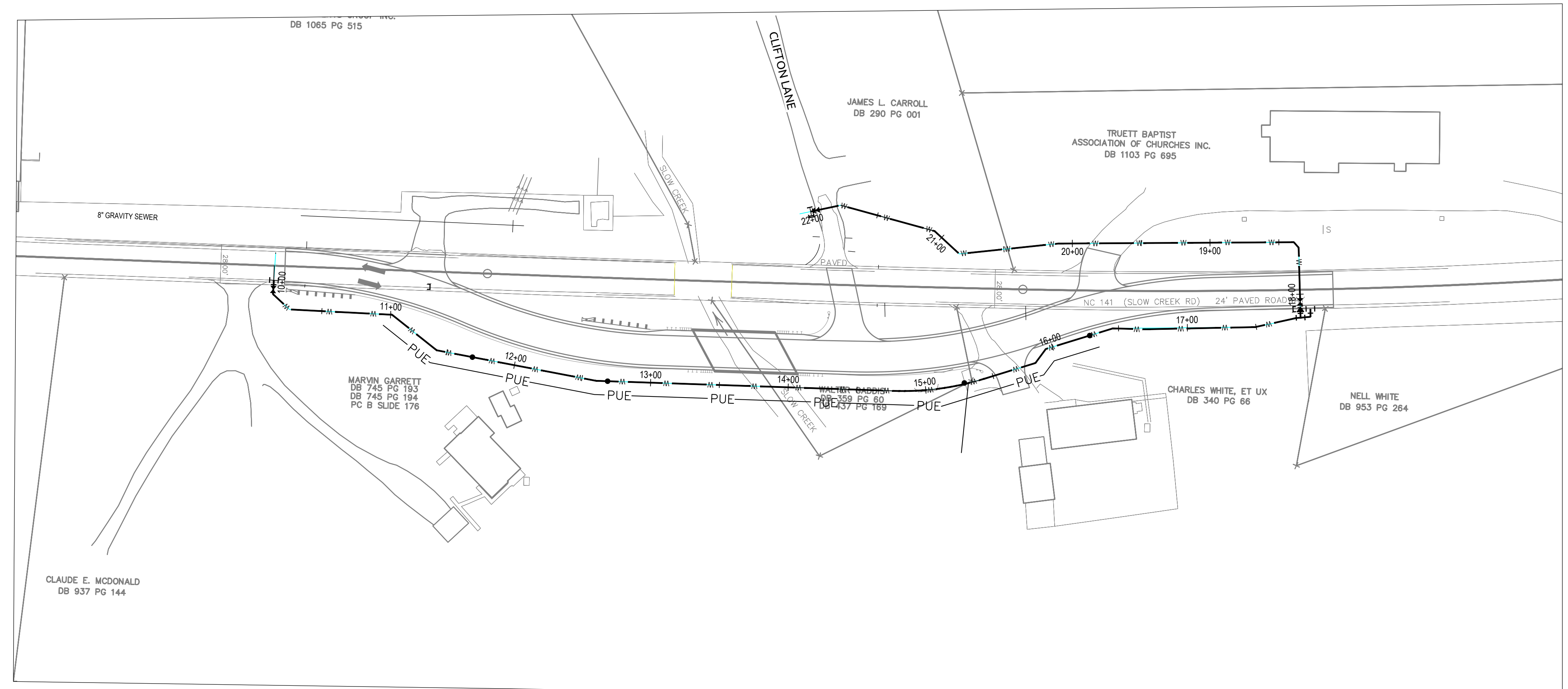


# STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

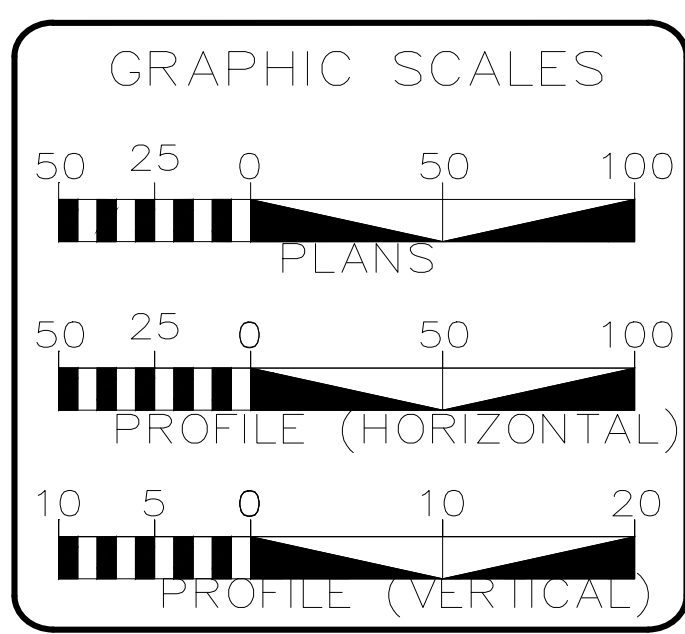
## UTILITY CONSTRUCTION PLANS CHEROKEE COUNTY

**LOCATION: NC 141 BETWEEN SR 1535 (UPPER PEACHTREE RD)  
AND WHITE MOUNTAIN ROAD**

**TYPE OF WORK: WATER LINE RELOCATION**



DOCUMENT NOT CONSIDERED FINAL  
UNTIL ALL SIGNATURES ARE COMPLETED



SHEET NO.:	DESCRIPTION:
UC-1	TITLE SHEET
UC-2	UTILITY SYMBOLOGY
UC-3	NOTES
UC-3A	DETAILS
UC-3B	DETAILS (CONT)
UC-4	UTILITY CONSTRUCTION SHEETS

**WATER AND SEWER OWNERS ON PROJECT**

(A) WATER - TOWN OF MURPHY

PREPARED IN THE OFFICE OF  
**WithersRavenel**  
 Engineers | Planners | Surveyors  
 94 COVE AVE. SUITE 200  
 ASHEVILLE, NC 28801  
 (828) 288-0313

**JACOB GRAY, PE** CONSULTANT CONTACT #1  
**RANDY HINTZ, PE** CONSULTANT CONTACT #2  
 CONSULTANT CONTACT #3

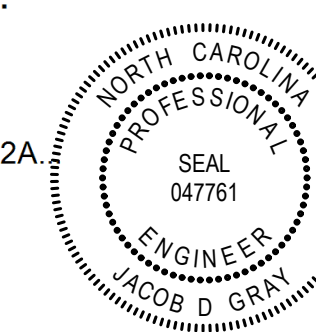
SEAL DocuSigned by:  
**Jacob Gray**  
 45958008210742A  
 PROFESSIONAL ENGINEER  
 SEAL 047761  
 JACOB D. GRAY

**DIVISION OF HIGHWAYS UTILITIES UNIT**  
 1555 MAIL SERVICES CENTER  
 RALEIGH, NC 27699-1555  
 PHONE (919) 707-6880  
 FAX (919) 230-4151

**MICHAEL BRIGHT** REGIONAL ENGINEER  
**JONG-TAE YOON, PE** UTILITIES ENGINEER  
**STEVE TREXLER** UTILITIES COORDINATOR

09/08/99

DocuSigned by:  
**Jacob Gray**  
45958708310742A



# STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

## UTILITIES PLAN SHEET SYMBOLS

### PROPOSED WATER SYMBOLS

Water Line (Sized as Shown)	
111/4 Degree Bend	
221/2 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	
Water Meter	
Relocate Water Meter	
Remove Water Meter	
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	A/G Gas
Power Manhole		*Underground Water Line	
Telephone Manhole		Aboveground Water Line	A/G Water
Sanitary Sewer Manhole		*Underground Gravity Sanitary Sewer Line	
Hand Hole for Cable		Aboveground Gravity Sanitary Sewer Line	A/G Sanitary Sewer
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)

5/14/20

REVISIONS

V:\19\19-09\01\190039-Town of Murphy Water Line Relocation\DWG\SHEETS-08190939.dwg - Tuesday, November 10, 2020 9:26:52 AM - GRAY, JACOB

# 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 THE TOWN OF MURPHY.
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 ENVIRONMENTAL 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.

PROJECT REFERENCE NO. BR-0011	SHEET NO. UC-3
DESIGNED BY: JDG	
DRAWN BY: JDG	
CHECKED BY: RDH	
APPROVED BY: JDG	
REVISED: 11/03/20	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (828)255-0313 FAX: (919)250-4151	

### UTILITY CONSTRUCTION



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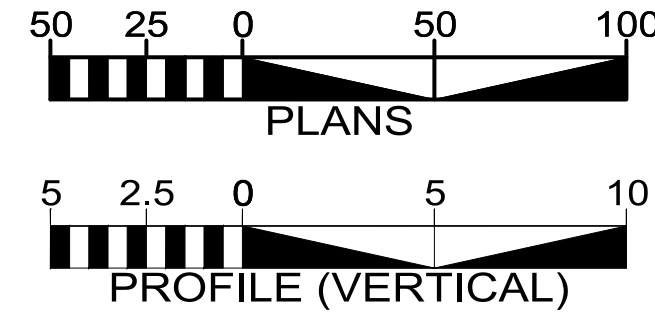
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DESIGNED BY:	JDG	DocuSigned by:	
DRAWN BY:	JDG	CHECKED BY:	RDH
APPROVED BY:	JDG	REVISION:	11/03/20
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		UTILITY CONSTRUCTION PLANS ONLY	
UTILITIES ENGINEERING SEC. PHONE: (828)255-0313 FAX: (919)250-4151		UTILITY CONSTRUCTION PLANS ONLY	

**UTILITY CONSTRUCTION**

**WithersRavenel**  
Engineers | Planners | Surveyors

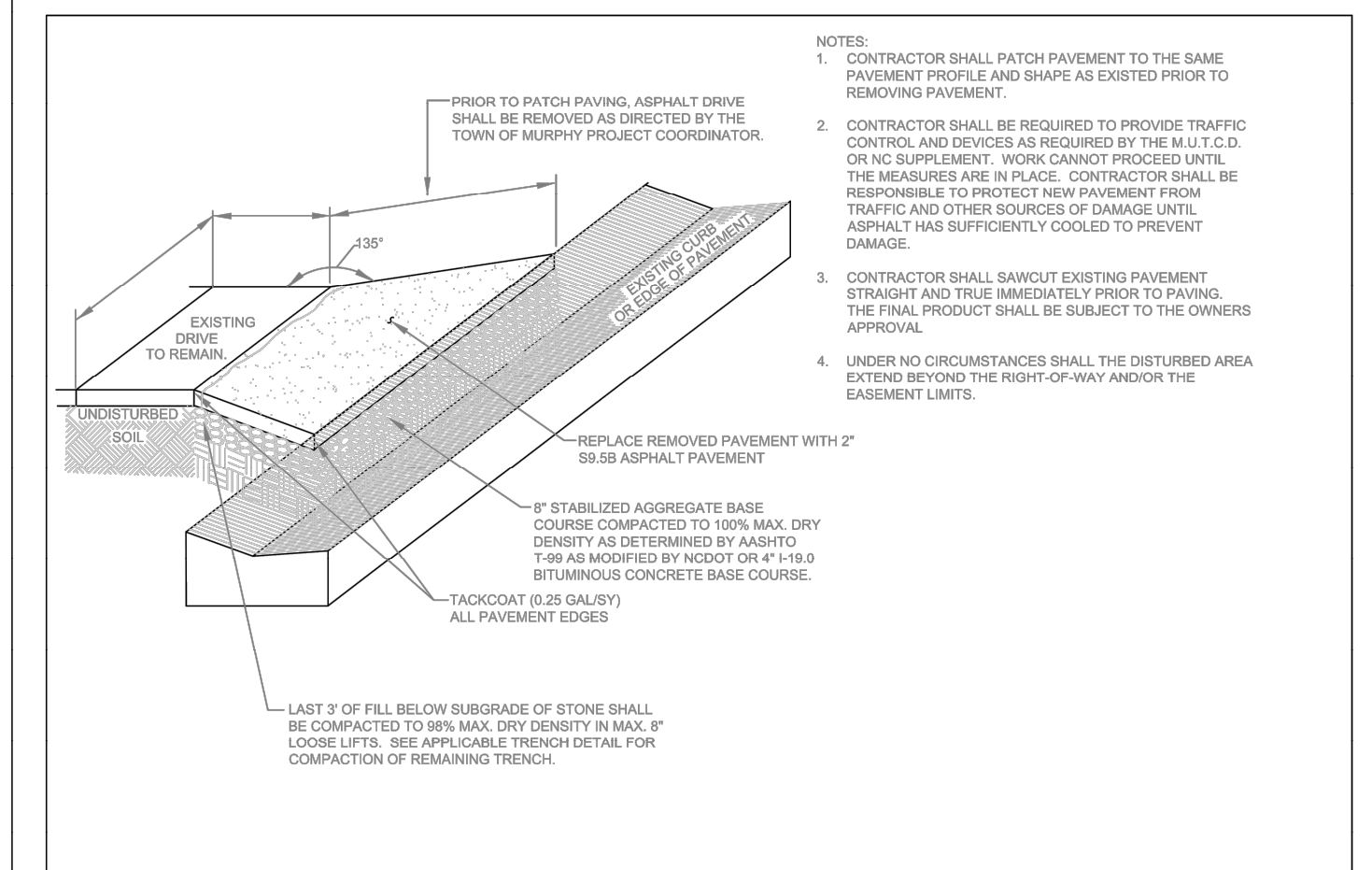
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- CONTRACTOR SHALL REPAIR ALL WATER LATERALS AND MAINS DAMAGED DURING CONSTRUCTION. THE CONTRACTOR SHALL REPORT IMMEDIATELY ALL WATER MAIN AND LATERAL BREAKS TO THE TOWN OF MURPHY PROJECT COORDINATOR. THE CONTRACTOR SHALL INITIATE IMMEDIATE REPAIRS IN ACCORDANCE WITH TOWN OF MURPHY STANDARDS. CONTRACTOR SHALL NOT OPERATE TOWN OF MURPHY WATER MAIN VALVES WITHOUT TOWN OF MURPHY APPROVAL. AND SHALL COORDINATE ALL VALVE CLOSINGS WITH THE TOWN OF MURPHY.
- CONTRACTOR SHALL NOT USE HOUSE HOSE BIBBS OR ANY OTHER METHOD OF BLOW OFF WHICH ALLOWS DOMESTIC WATER CONTAINING SEDIMENTS OR HIGH LEVELS OF CHLORINE TO PASS THROUGH RESIDENTS' METERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES RESULTING FROM ALLOWING "DIRTY" WATER TO ENTER RESIDENTS' PLUMBING SYSTEM, SUCH AS WATER HEATERS, STAINED CLOTHING, CLOGGED SCREENS, ETC.
- WATER MAINS AND LATERALS SHALL BE INSTALLED UTILIZING A TOWN OF MURPHY APPROVED CUT-SHEET INDICATING INSTALLATION DEPTH.
- TRANSFER OF WATER SERVICES SHALL BE ACCORDING TO THE FOLLOWING:
  - INSTALL TEST AND STERILIZE NEW MAIN AND LATERALS. LATERALS SHALL BE INSTALLED 18" INSIDE RIGHT-OF-WAY UNLESS OTHERWISE DIRECTED BY THE TOWN OF MURPHY.
  - TRANSFER EXISTING METER TO NEW METER BOX AND THE NEW WATER LATERAL TO EXISTING DOMESTIC SERVICE UTILIZING BRASS FITTINGS. SAME METER TRANSFER SHALL BE INSTALLED ON SAME ADDRESS AND/OR CUSTOMER. BLOW OFF SERVICE AT HOSE BIBB ON HOUSE ONLY AFTER METER HAS BEEN TRANSFERRED.
  - AFTER ALL SERVICES ARE TRANSFERRED TO THE NEW SYSTEM, SHUT OFF VALVE ON EXISTING SYSTEM AND ABANDON EXISTING MAINS IN ACCORDANCE WITH TOWN OF MURPHY DETAILS.
  - CONTRACTOR SHALL SUPPLY NEW METER BOXES AND DISPOSE OF EXISTING METER BOXES.
- WHEN MAIN IS NOT TO BE ABANDONED, CONTRACTOR SHALL UNCOVER OLD CORPORATION AT MAIN, CLOSE AND PLUG CORPORATION TO ABANDON OLD SERVICE.
- CONTRACTOR SHALL ABANDON ANY EXISTING WATER SERVICES THAT WILL NOT BE UTILIZED BY CUTTING THE SERVICE AT THE MAIN, PLUGGING THE CORPORATION, AND TURNING OFF THE CORPORATION. AT THE METER BOX, THE ABANDONED SERVICE IS TO BE CUT OR CRIMPED, AND BURIED A MINIMUM OF 3 FEET BELOW GRADE.
- ALL EXISTING UTILITIES IMPACTED BY CONSTRUCTION SHALL BE ADJUSTED TO FINISH GRADE, IN ACCORDANCE WITH TOWN OF MURPHY REQUIREMENTS.
- ALL WORK ON TOWN OF MURPHY WATER UTILITIES (MAINS, LATERALS, ETC) SHALL BE PERFORMED BY A LICENSED CONTRACTOR. THE TOWN OF MURPHY SHALL OBSERVE AND APPROVE ALL WORK ON TOWN OF MURPHY WATER UTILITIES. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH TOWN OF MURPHY REQUIREMENTS.

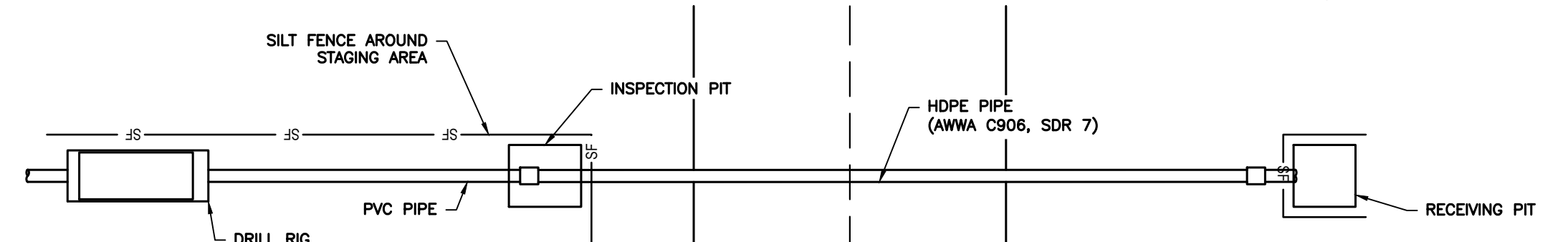
WATER UTILITY NOTES		TOWN OF MURPHY 5 WOFFORD STREET MURPHY, NC, 28906		NO.	DATE	REVISION
SHEET NO.	DWG. NO.	W.1	DWG. BY:	W.A.S.		
1 OF 2	DATE:	9/9/2019	APPROVED BY:	J.S.S.		



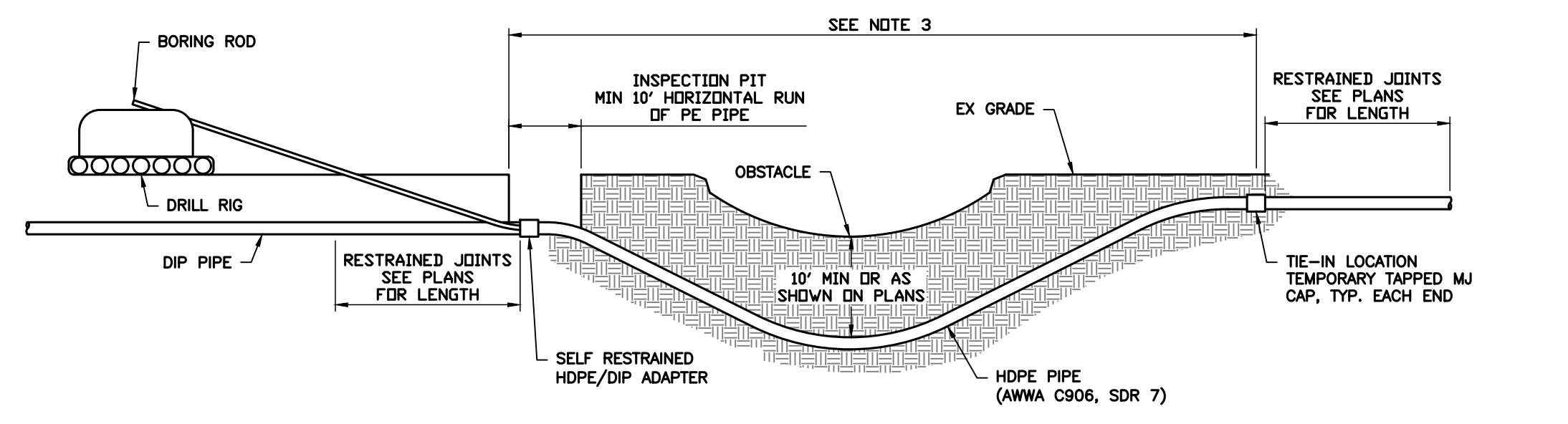
ASPHALT DRIVEWAY/PARKING LOT PATCH		TOWN OF MURPHY 5 WOFFORD STREET MURPHY, NC, 28906		NO.	DATE	REVISION
SHEET NO.	DWG. NO.	G.3	DWG. BY:	W.A.S.		
1 OF 1	DATE:	9/9/2019	APPROVED BY:	J.S.S.		

- WATER OUTAGES: THE CONTRACTOR SHALL SCHEDULE A COORDINATION MEETING WITH THE TOWN OF MURPHY PROJECT COORDINATOR AND PROJECT ENGINEER A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO ANY PLANNED WATER OUTAGE. THE COORDINATION MEETING SHALL BE CONDUCTED PRIOR TO ANY NOTICES BEING ISSUED. ADDITIONALLY, THE CONTRACTOR SHALL LOCATE VERTICALLY AND HORIZONTALLY ANY UTILITIES WITHIN THE WORK AREA IN ACCORDANCE WITH THESE CONTRACT DOCUMENTS. THE LOCATIONS OF ALL UTILITIES WITHIN THE WORK AREA SHALL BE DETERMINED PRIOR TO THE COORDINATION MEETING. ANY CONFLICTS WITH THE DETERMINED WORK AND THE EXISTING UTILITIES SHALL BE IDENTIFIED AND A PLAN FOR RESOLVING ANY CONFLICTS SHALL BE PRESENTED. THE PURPOSE OF THIS COORDINATION MEETING IS TO ENSURE THAT THE CONTRACTOR HAS A GOOD UNDERSTANDING OF THE REQUIREMENTS RELATED TO THE PENDING OUTAGE, VERIFY THAT THERE ARE NO UTILITY CONFLICTS THAT WILL PREVENT THE WORK FROM BEING COMPLETED, ALL EQUIPMENT IS IN GOOD WORKING ORDER, ALL EQUIPMENT IS FUNCTIONAL, ALL MATERIALS ARE ON SITE, ALL NECESSARY TOOLS ARE ON SITE, DISCUSS ANY NECESSARY CONTINGENCY PLANS, AND ANY OTHER ITEMS NECESSARY TO ENSURE THAT THE TOWN OF MURPHY HAS CONFIDENCE THAT THE WORK CAN BE ACCOMPLISHED WITHIN THE GIVEN TIME PERIOD. SHOULD, FOR ANY REASON, THE TOWN OF MURPHY DEEM THAT THE CONTRACTOR IS NOT PREPARED FOR THE PROPOSED OUTAGE, THE OUTAGE NOTIFICATIONS WILL NOT BE DISTRIBUTED AND THE OUTAGE SHALL BE POSTPONED A MINIMUM OF TWO (2) WEEKS. THE TOWN OF MURPHY WILL PROVIDE WRITTEN NOTIFICATION TO THE CONTRACTOR OF THIS DECISION. NO ADDITIONAL CONTRACT TIME WILL BE GRANTED FOR THIS DELAY.
- ONCE THE WATER OUTAGE NOTIFICATIONS HAVE BEEN ISSUED, A FOLLOW-UP COORDINATION MEETING WITH THE TOWN OF MURPHY PROJECT COORDINATOR AND PROJECT ENGINEER SHALL BE HELD A MINIMUM OF 24 HOURS PRIOR TO THE SCHEDULED OUTAGE. THE PURPOSE OF THIS MEETING IS TO VERIFY THAT THE CONTRACTOR IS PREPARED TO PROCEED WITH THE OUTAGE, AND THAT ALL EQUIPMENT, MATERIALS, TOOLS, AND ALL OTHER INCIDENTALS ARE ON THE PROJECT SITE AND FUNCTIONING. IF FOR ANY REASON THE TOWN OF MURPHY DEEMS THAT THE CONTRACTOR IS NOT PREPARED, THE OUTAGE SHALL BE POSTPONED AND ALL CUSTOMERS IMMEDIATELY NOTIFIED OF THE CANCELLATION. THE OUTAGE SHALL BE POSTPONED A MINIMUM OF TWO (2) WEEKS.

WATER UTILITY NOTES		TOWN OF MURPHY 5 WOFFORD STREET MURPHY, NC, 28906		NO.	DATE	REVISION
SHEET NO.	DWG. NO.	W.1	DWG. BY:	W.A.S.		
2 OF 2	DATE:	9/9/2019	APPROVED BY:	J.S.S.		



- NOTES:
- A PLAN & PROFILE SHALL BE PROVIDED FROM ENTRY TO EXIT FOR EACH DIRECTIONAL BORE SECTION BY THE BORE CONTRACTOR.
  - ALL BORE SECTIONS SHALL BE HYDROSTATICALLY TESTED PER SPECIFICATIONS UPON COMPLETION OF INSTALLATION & PRIOR TO PLACING THE PIPELINE INTO SERVICE.
  - LENGTH OF CROSSING, LOCATION OF INSPECTION PIT, NUMBER OF HDPE PIPE JOINTS, LOCATION OF BORE MACHINE, AUGER ENTRANCE LOCATION, & TIE-IN POINTS ARE TO BE APPROVED BY ENGINEER PRIOR TO START OF WORK.
  - THE BORE DEVELOPED FOR THE LEAD-IN END OF THE PIPE SHALL BE KEPT TO A MINIMUM DIAMETER FOR THE PIPE INSTALLATION. THE LEAD-IN END SHALL BE PULLED THROUGH WITHOUT THE MH FLANGE ATTACHED FOR LARGER THAN 6" PIPE INSTALLATIONS. THE MJ FLANGE FOR SAID LEAD-IN END SHALL BE INSTALLED AFTER THE PIPE INSTALLATION WITH THE USE OF A SPLIT MH FLANGE.



HORIZONTAL DIRECTIONAL DRILL  
NOT TO SCALE

REVISIONS

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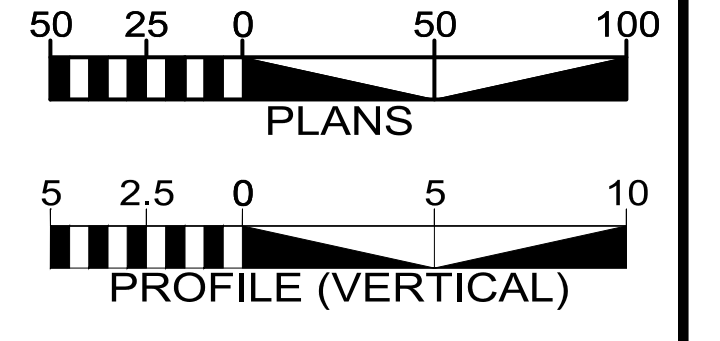
PROJECT REFERENCE NO.	SHEET NO.
BR-0011	UC-3B
DESIGNED BY: JDG	DocuSigned by: <b>Jacob Gray</b>
DRAWN BY: JDG	CAROLINA PROFESSIONAL SEAL
CHECKED BY: RDH	45958708310742A 047761
APPROVED BY: JDG	ENGINEER JACOB D GRAY
REVISED: 11/03/20	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (828)255-0313 FAX: (919)250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

**UTILITY CONSTRUCTION**

**WithersRavenel**  
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**GATE VALVE**  
N.T.S.

TOWN OF MURPHY  
5 WOFFORD STREET  
MURPHY, NC, 28906

NO.	DATE	REVISION

DATE: 9/9/2019 APPROVED BY: J.S.S.

W5-GATEVALVE.dwg

**DUCTILE IRON TAPPING SLEEVE**  
N.T.S.

TOWN OF MURPHY  
5 WOFFORD STREET  
MURPHY, NC, 28906

NO.	DATE	REVISION

DATE: 9/9/2019 APPROVED BY: J.S.S.

W9-M.J.-TAPPING-SLEEVE.dwg

**VALVE BOX**  
N.T.S.

TOWN OF MURPHY  
5 WOFFORD STREET  
MURPHY, NC, 28906

NO.	DATE	REVISION

DATE: 9/9/2019 APPROVED BY: J.S.S.

W6-VALVEBOX.dwg

**CONCRETE THRUST BLOCK DETAIL**  
N.T.S.

TOWN OF MURPHY  
5 WOFFORD STREET  
MURPHY, NC, 28906

NO.	DATE	REVISION

DATE: 9/9/2019 APPROVED BY: J.S.S.

W14-THRUSTBLOCK.dwg

**TAPPING VALVE**  
N.T.S.

TOWN OF MURPHY  
5 WOFFORD STREET  
MURPHY, NC, 28906

NO.	DATE	REVISION

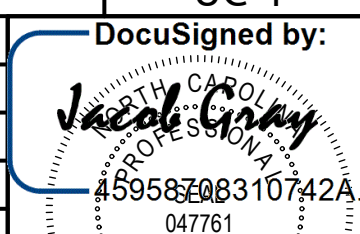
DATE: 9/9/2019 APPROVED BY: J.S.S.

W8-M.J.-TAPPING-VALVE.dwg

VALVE SIZE	A	B	C	D	E	F	G	H	J	K	L	M	N	R	S	T	WEIGHT W/ACC
4	4.38	8.25	12.12	11.12	9	7.12	4.78	4.28	2.12	7.12	9	8	12.18	8	8.34	11.4	175
6	6.78	11.14	15.01	13.98	11	9.12	6.78	6.28	3.12	9.12	11	17.58	11.34	11.34	11.4	21	175
8	8.18	13.98	17.84	16.78	13	11.14	9.12	8.62	4.12	11.14	13	21.18	14.14	14.14	14.14	25	175
10	10.58	16.82	20.68	19.62	15	13.14	11.14	10.62	5.12	13.14	15	24.98	17.14	17.14	17.14	29	175
12	12.98	19.66	23.52	22.46	17	15.14	13.14	12.62	6.12	15.14	17	28.78	19.14	19.14	19.14	33	175
14	15.38	22.50	26.36	25.30	19	17.14	15.14	14.62	7.12	17.14	19	32.58	21.14	21.14	21.14	37	175
16	17.78	25.34	29.20	28.14	21	19.14	17.14	16.62	8.12	19.14	21	36.38	23.14	23.14	23.14	41	175
18	20.18	28.18	32.04	30.98	23	21.14	19.14	18.62	9.12	21.14	23	40.18	25.14	25.14	25.14	45	175
20	22.58	31.02	34.88	33.82	25	23.14	21.14	20.62	10.12	23.14	25	43.98	27.14	27.14	27.14	49	175

REVISIONS

V:\1919-09\01\B0039-Town of Murphy Water Line Relocation\DWG\SHEETS-08190939.dwg - Tuesday, November 10, 2020 9:28:31 AM - GRAY, JACOB

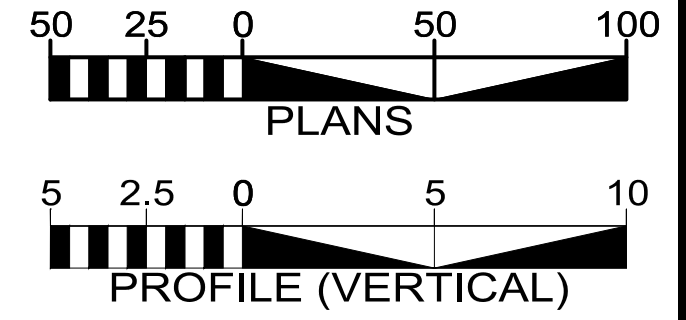
PROJECT REFERENCE NO.	BR-0011	SHEET NO.	UC-4
DESIGNED BY:	JDG	DocuSigned by:	
DRAWN BY:	JDG	CHECKED BY:	RDH
APPROVED BY:	JDG	APPROVED:	01/25/21
REVISIONS:		UTILITY ENGINEERING SEC.	UTILITY CONSTRUCTION PLANS ONLY
		PHONE: (828) 255-0313	
		FAX: (919) 250-4151	

**UTILITY CONSTRUCTION**

**WithersRavenel**  
Engineers | Planners | Surveyors

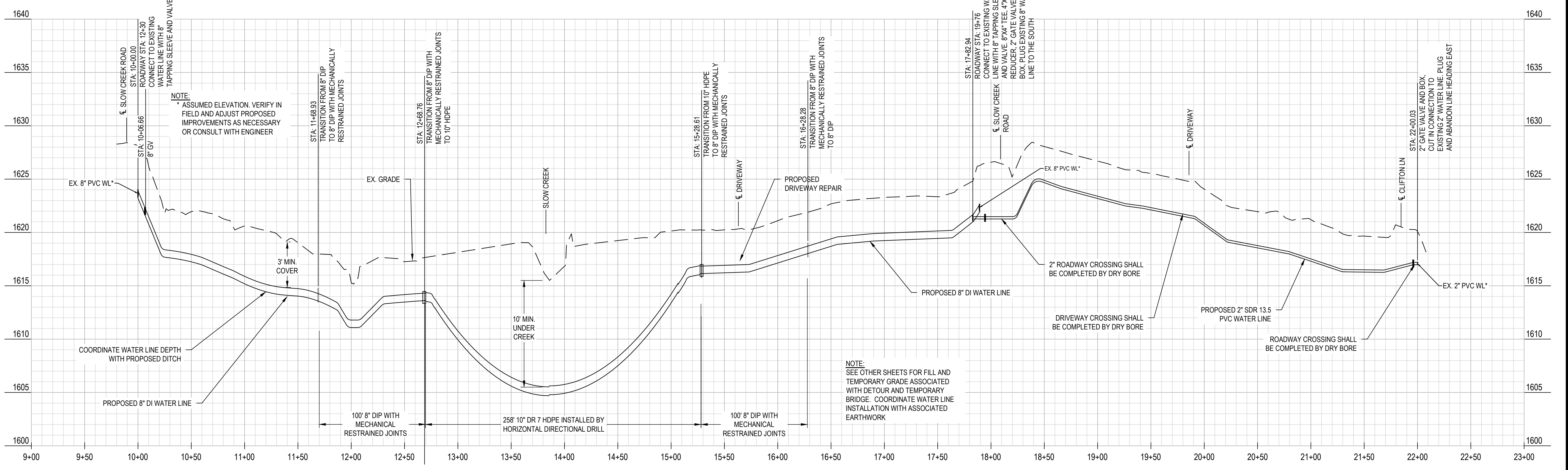
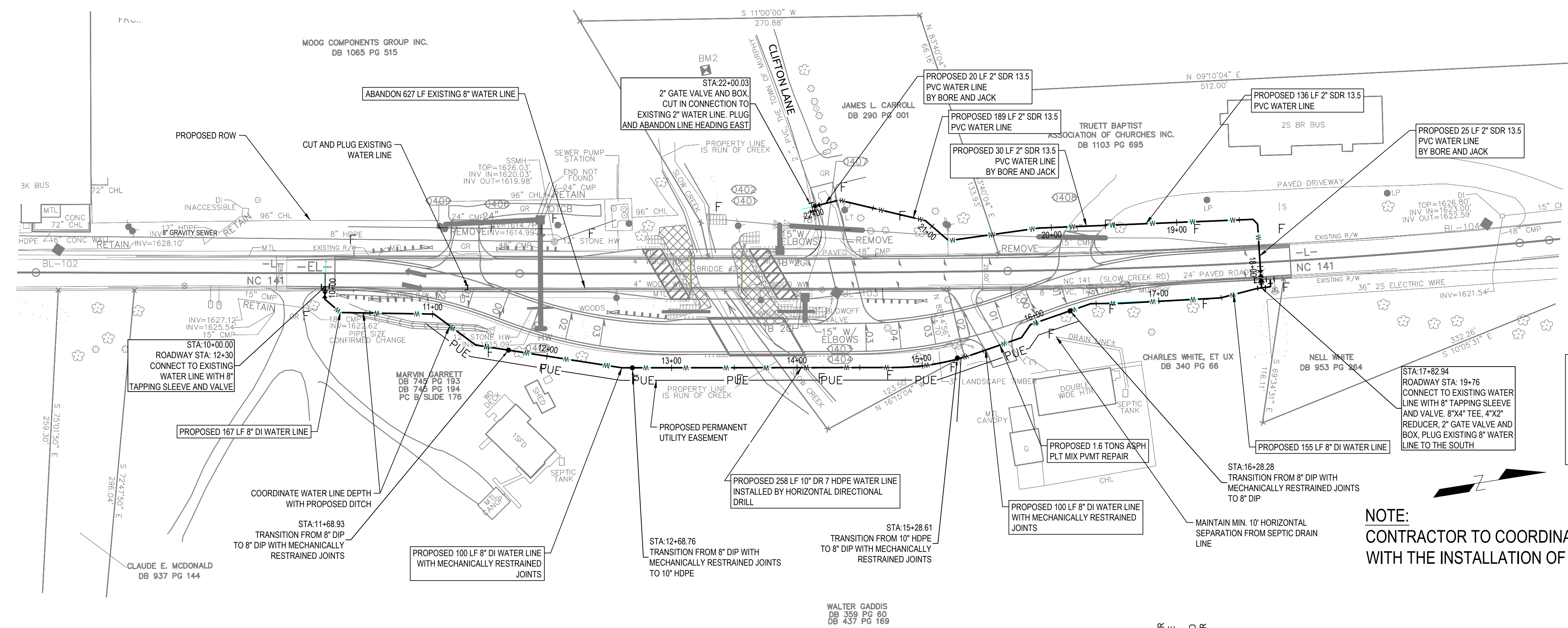
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**NOTE:**  
THE ESTIMATED QUANTITY OF DUCTILE IRON PIPE FITTINGS ON THE IS PLAN SHEET IS 500 LBS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS. (250# MIN WP)

**NOTE:**  
CONTRACTOR TO COORDINATE WL INSTALLATION WITHIN PUE WITH THE INSTALLATION OF TEMPORARY BRIDGE/DETOUR.



REVISIONS

V:\1919-09-30\190039-Town of Murphy Water Line Relocation\CAD\SHEETS-08190939.dwg - Tuesday, January 26, 2021 9:12:54 AM - GRK, JACB