

1. EXISTING PAVEMENT SHALL BE RESTORED TO EXACT PRE-CONSTRUCTION CONDITION. EXISTING PAVEMENT IS 2" SM9.5A WITH 6" COMPACTED #21A BASE COMPACTED TO 95% MODIFIED PROCTOR. CONTRACTOR IS STRONGLY ENCOURAGED TO USE RUBBER-TRACKED EXCAVATORS.
2. CONTRACTOR SHALL MAINTAIN CONTINUOUS SEWER FLOW VIA BYPASS PUMPING. USE OF "FLOW-THROUGH" PLUGS WILL BE ACCEPTABLE PROVIDING PROPER COORDINATION WITH OWNER.

NORFOLK AND SOUTHERN GENERAL NOTES:

CONTRACTOR SHALL FOLLOW ALL REQUIREMENTS OF NORFOLK SOUTHERN'S NSCE-8 SPECIFICATIONS.

PIPE LINE SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH LAST APPROVED AMERICAN RAILWAY ENGINEERING AND MAINTENANCE OF WAY ASSOCIATION SPECIFICATIONS FOR PIPELINES CONVEYING FLAMMABLE AND NON-FLAMMABLE SUBSTANCES.

**BLASTING NOT PERMITTED.**

PRIOR TO START OF WORK ON RAILWAY RIGHT OF WAY, THE CONTRACTOR IS REQUIRED TO CONTACT THE FOLLOWING FOR SCHEDULING OF FLAG PROTECTION AND INSPECTION:

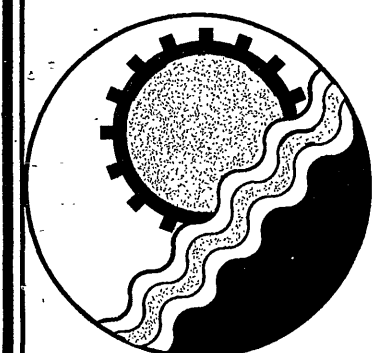
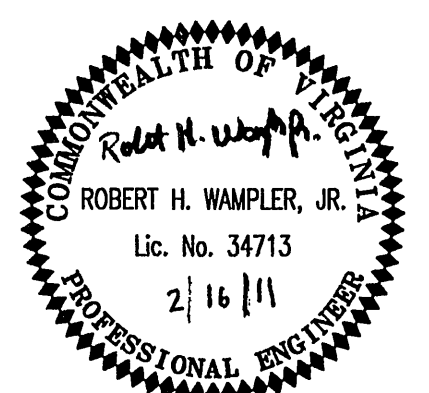
A.S. SNOW OF VIRGINIA'S DIVISIONS ENGINEER'S OFFICE, TELEPHONE (540) 981-4274

F.R. IRBY, GENERAL SUPERVISOR OF COMMUNICATIONS AND SIGNALS, TELEPHONE (540) 981-4776

**NOTE:**  
WORK IN THIS AREA IS TO BE PERFORMED PER THE CITY OF  
ROANOKE RIGHT OF WAY EXCAVATION AND RESTORATION  
STANDARDS.

| Existing Pipe Table |      |        |       |           |           |
|---------------------|------|--------|-------|-----------|-----------|
| Pipe Name           | Size | Length | Slope | Min Cover | Max Cover |
| Pipe                | 12"  | 48.1'  | 18.5% | 3.7'      | 15.5'     |

**NOTE:**  
REPAIR EXISTING MANHOLE WITH NON-SHRINK GROUT, BASF  
"MASTERFLOW 555" OR APPROVED EQUAL. INSTALL HYDROPHILIC  
RUBBER WATERSTOP ON UNDISTURBED CONCRETE SURFACE AND  
PIPE EXTERIOR, ADEKA "ULTRA SEAL" OR APPROVED EQUAL.



**ENGINEERING CONCEPTS, INC.**

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WESTERN VIRGINIA  
WATER AUTHORITY

|          |     |                                                                    |                   |
|----------|-----|--------------------------------------------------------------------|-------------------|
| Drawn    | JSC | <b>9TH ST. &amp; FERNCLIFF AVE.<br/>SANITARY SEWER PROJECTS</b>    | SCALE: AS NOTED   |
| Designed | JSC |                                                                    | FEBRUARY 16, 2011 |
| Checked  | RHW | <b>WESTERN VA. WATER AUTHORITY<br/>9TH STREET PLAN AND PROFILE</b> | PROJECT: 09001    |
| Approved | RHW |                                                                    | <b>3</b>          |