**CODED NOTES**

- 1 Continuous sewage flow must be maintained at all times. Contractor shall install and operate a temporary bypass pumping system rated at 120 gpm minimum firm capacity. Contractor shall submit a bypass pumping system installation and operation plan to Owner for approval at least five (5) business days prior to initiating demolition of the existing pump station. The bypass pumping system shall operate satisfactorily for a minimum of 12 hours prior to decommissioning the existing pump station.
- 2 Contractor shall coordinate disconnection of electrical and telephone service with Owner at least 14 days prior to decommissioning the pump station. Electrical and telephone service connections shall be demolished to the utility pole connections.
- 3 Contractor shall salvage selected equipment as directed by Owner.
- 4 Water connection shall be demolished to the meter vault. Water meter to be removed by Owner.
- 5 Pump station wet well and holding tank shall be flushed clean prior to demolition. Pump station shall be demolished to EL 1034. Remaining wet well and dry pit structure shall be filled with compacted #57 stone prior to backfilling. Cap existing force main with mechanical joint plug. Holding tank shall be demolished in its entirety.
- 6 Contractor shall install a temporary plug in the existing 8-inch sanitary sewer to allow bore and jack operation. Contractor shall protect the existing security fence during construction.
- 7 Carrier pipe within casing pipe shall be ductile iron, without exception.
- 8 Pipeline location sign shall be in accordance with Norfolk Southern's NSCE-8 Specifications. See detail for sign layout.
- 9 No excavation will be permitted within the railroad live load zone as defined by the theoretical railroad embankment lines. (See profile)

**EROSION AND SEDIMENT CONTROL MEASURES:**

### STANDARD AND SPECIFICATION 3.02 - CONSTRUCTION ENTRANCE (CE)

STANDARD AND SPECIFICATION 3.02 - CONSTRUCTION ENTRANCE (CE)  
A TEMPORARY CONSTRUCTION ENTRANCE SHALL BE INSTALLED WHERE THE CONSTRUCTION ACCESS ROAD LEAVES EXISTING PAVEMENT. DURING WET WEATHER CONDITIONS, DRIVERS OF CONSTRUCTION VEHICLES WILL BE REQUIRED TO WASH THEIR WHEELS BEFORE ENTERING THE STREET. WHEN CONSTRUCTION VEHICLES MUST ENTER DISTURBED AREAS, THE TIRES OF THE VEHICLE SHALL BE MANUALLY CLEANED PRIOR TO LEAVING THE SITE, IF NECESSARY.

STANDARD AND SPECIFICATION 3.05 - SILT FENCE (SF)  
SILT FENCE SHALL BE INSTALLED AT THE LOWER EDGE OF DISTURBED AREAS AS SHOWN ON THE PLAN. TWO TYPES OF SILT FENCE ARE SHOWN ON THE PLANS IN ACCORDANCE WITH VDOT STANDARDS. THE TALLER FENCE IS SPECIFIED AS SILT FENCE "SF". A SHORTER FENCE IS SPECIFIED AS FILTER BARRIER, "FB".

**STANDARD AND SPECIFICATION 3.32 - PERMANENT SEEDING (PS)**  
PERMANENT SEEDING SHALL BE INSTALLED ON ALL DISTURBED AREAS OF THE SITE NOT OTHERWISE STABILIZED.

## VDOT GENERAL NOTES

LIMITED ACCESS FENCE TO BE IN PLACE AT THE END OF EACH WORK DAY. THE SHOULDER CLOSURE SHALL NOT ENCROACH INTO THE TRAVEL LANE. ALL PERSONNEL SHALL REMAIN BEHIND THE GUARDRAIL BARRIER. ALL PERSONNEL SHALL WEAR PERSONAL PROTECTIVE EQUIPMENT TO INCLUDE VDOT APPROVED HARD HAT, CLASS II VEST AND STEEL TOE SAFETY SHOES.

CONTRACTOR SHALL FOLLOW TYPICAL TRAFFIC CONTROL (SEE SHEET 3 OF 3) FOR STATIONARY OPERATIONS ON ROADWAY SHOULDERS.

## NORFOLK SOUTHERN GENERAL NOTES

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

PIPE LINE AND CROSSING TO 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

NORFOLK SOUTHERN ACTIVITY No. 1091323

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 OUR VIRGINIA DIVISION ENGINEER'S OFFICE. TELEPHONE (540) 981-4274

F.R. IRBY, GEN. SUPV. COMMUNICATIONS &amp; SIGNALS. (540) 981-4776

ONCE CONTACTED, THE DIVISION ENGINEER REQUIRES 72 HOURS TO REVIEW THE NEED FOR AND AVAILABILITY OF FLAGMEN FOR THIS PROJECT AND WILL ADVISE THE CONTRACTOR OF THE COST OF SAID FLAGMEN. NO WORK IS PERMITTED ON RAILWAY RIGHT OF WAY WITHOUT A FLAGMAN OR THE DIVISION ENGINEER'S AGREEMENT TO WAIVE THE FLAG PROTECTION REQUIREMENT. ENTRY ONTO RAILWAY PROPERTY WITHOUT THE DIVISION ENGINEER'S PRIOR APPROVAL IS CONSIDERED TRESPASSING.

**GENERAL NOTES:**

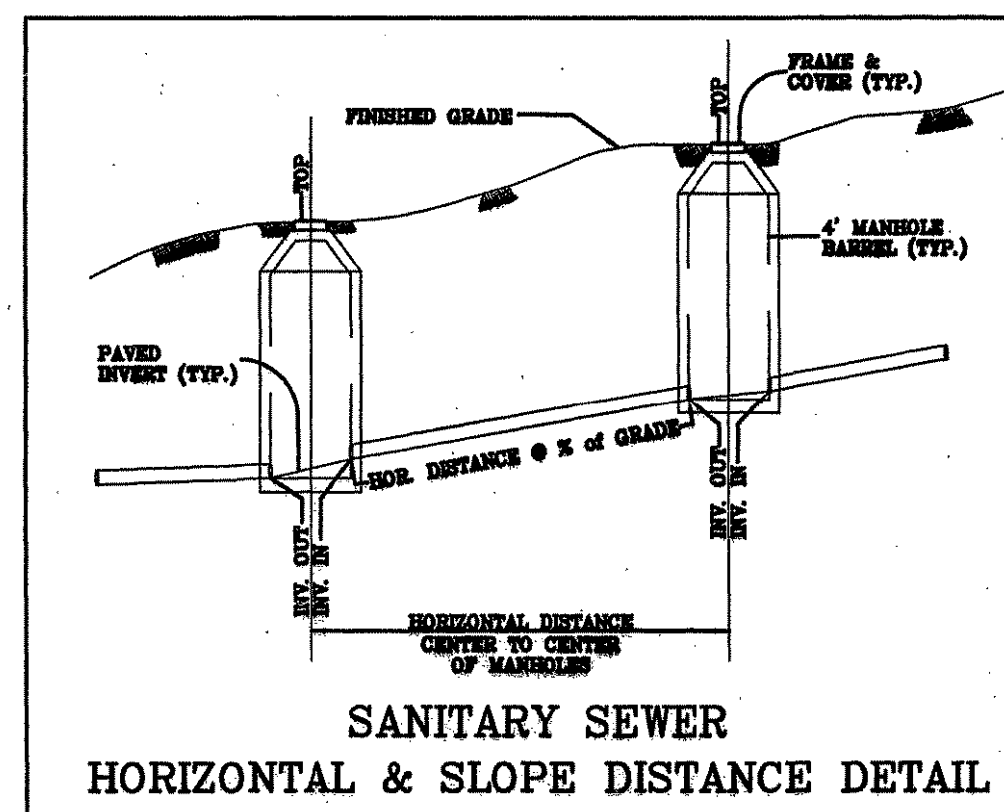
1. THE BOUNDARY IS THE DIRECT RESULT OF A FIELD SURVEY BY LUMSDEN ASSOCIATES, P.C.
2. TOPOGRAPHIC DATA BASED ON A FIELD SURVEY PERFORMED BY LUMSDEN ASSOCIATES, P.C.
3. NO TITLE REPORT FURNISHED FOR THIS PROPERTY.
4. ANY EXISTING IMPROVEMENTS (FENCES, CONCRETE PADS, ETC.) DAMAGED DUE TO CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE OWNER'S SATISFACTION.

**CONSTRUCTION NOTES:**

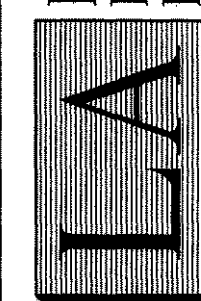
1. CONTRACTOR SHALL VERIFY LATERAL LOCATIONS. ASSURE STRUCTURAL INTEGRITY OF PIPE TO REMAIN. NEW  
LATERALS SHALL BE SDR-35 PVC.

## SEWER NOTES:

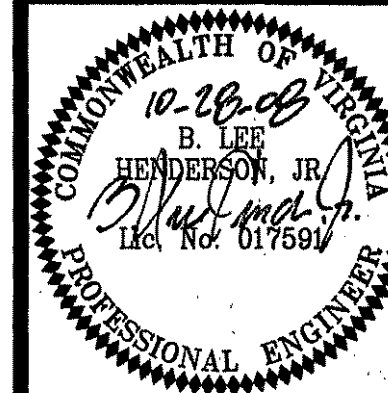
1. ALL SANITARY SEWER CONNECTIONS TO EXISTING LINES SHALL BE COORDINATED WITH AND PERFORMED BY THE WESTERN VIRGINIA WATER AUTHORITY.
2. ALL SANITARY SEWER FACILITIES ARE TO BE INSTALLED ACCORDING TO THE WESTERN VIRGINIA WATER AUTHORITY DESIGN AND CONSTRUCTION STANDARDS.
3. A MINIMUM COVER OF THREE (3) FEET IS REQUIRED OVER PROPOSED LINES.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND UNCOVERING ALL MANHOLES AFTER PAVING. MANHOLE TOPS SHALL BE AT LEAST 4" BELOW FINISHED GRADE.
5. ALL EXISTING UTILITIES MAY NOT BE SHOWN OR MAY NOT BE SHOWN IN THE EXACT LOCATION. THE CONTRACTOR SHALL COMPLY WITH STATE WATER WORKS REGULATIONS, SECTION 12.05.03, WHERE LINES CROSS.
6. HOUSE CONNECTIONS ARE TO BE MADE WITH 4" PIPE INSTALLED AT A MINIMUM GRADE OF 1/4 INCH TO 1 FOOT IN R/W.
7. LATERALS FROM MANHOLES SHALL BE PVC OR DUCTILE IRON OF SUFFICIENT LENGTH TO PROVIDE TWO (2) FEET OF BEARING ON NATURAL GROUND. THE TRANSITION FROM DUCTILE IRON TO ASBESTOS CEMENT OR CONCRETE PIPE SHALL BE MADE WITH AN ADAPTER COUPLING IN R/W.
8. ALL TRENCHES IN EXISTING OR FUTURE RIGHTS-OF-WAY SHALL BE COMPACTED ACCORDING TO V.D.O.T. STANDARDS.
9. LINES SHALL BE STAKED PRIOR TO CONSTRUCTION.



**LUMSDEN ASSOCIATES, P.C.**  
ENGINEERS-SURVEYORS-PLANNERS  
ROANOKE, VIRGINIA



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**SANITARY SEWER  
PLAN AND PROFILE  
(JEFFERSON HILLS)**

**LOWER MURRAY RUN  
SEWER IMPROVEMENTS**  
PREPARED FOR  
**WESTERN VIRGINIA WATER AUTHORITY**  
ROANOKE, VIRGINIA

REVISIONS		DESCRIPTION
NO.	DATE	
1		
2		
3		
4		
5		

DATE: October 28, 2001

SCALE: AS NOTED

COMMISSION NO: 06-03

SHEET 2 OF 5