

## DRAWING INDEX

1. KEY SHEET 2. PLAN & PROFILE STA 0+00 - 15+00 3. PLAN & PROFILE STA 14+00 - 29+00 4. PLAN & PROFILE STA 28+00 - 43+00 5. PLAN & PROFILE STA 42+00 - 57+00 6. PLAN & PROFILE STA 56+00 - 59+64 7. SUBMAIN "H" STA 0+00 - 6+50.8 8. SUBMAIN "I" STA 0+00 - 2+48

9. SUBMAIN "J" STA 0+00 - 1+87.2 10. SUBMAIN "K" STA 0+00 - 3+12.5 11. SANITARY SEWER DETAILS 12. SANITARY SEWER DETAILS

13. METERING MANHOLE SITE PLAN & DETAILS 14. EROSION & SEDIMENT CONTROL PLAN 15. EROSION & SEDIMENT CONTROL DETAILS 16. EROSION & SEDIMENT CONTROL DETAILS

## KEY CONTACTS

- 1. BOTETOURT COUNTY DEPT. OF PUBLIC WORKS COUNTY ENGINEER: KEVIN SHEARER, P.E. DIRECTOR OF PUBLIC WORKS: KURT HODGEN 540-473-8316
- 2. ENGINEERING CONCEPTS, INC. PROJECT ENGINEER: SEAN GOLDSMITH, EIT
- 540-473-1253 3. ROANOKE GAS COMPANY GARY FERGUSON 540-992-3981

## LEGEND

	ASPHALT ROAD
	GRAVEL ROAD
ACCUPATION OF STREET STREET, S	PROPERTY LINE
	RIGHT-OF-WAY
AND AND A DESTRUMENT A SECOND ASSESSMENT ASS	PERMANENT EASEMENT (30' WIDE TYPICAL)
	TEMPORARY CONSTRUCTION EASEMENT (60' WIDE TYPICAL)
ww	WATER LINE
G	GAS LINE
	SEWER LINE
X X X X	FENCE
OHEOHE	OVERHEAD ELECTRIC
SSFM	SANITARY SEWER FORCEMAIN (EXISTING)
SSFM	SANITARY SEWER FORCEMAIN (PROPOSED)

## GENERAL NOTES

- 1. INFORMATION ON THESE DRAWINGS CONCERNING THE LOCATION AND ELEVATION OF EXISTING UTILITIES. STRUCTURES. AND OBSTRUCTIONS HAS BEEN PREPARED FROM THE MOST RELIABLE INFORMATION AVAILABLE TO THE ENGINEER. THE ACCURACY AND COMPLETENESS OF THIS INFORMATION ARE NOT GUARANTEED, HOWEVER, NOR DOES THE ENGINEER ACCEPT ANY RESPONSIBILITY WHATSOEVER FOR DEVIATIONS OF THE EXISTING UTILITIES, STRUCTURES, OTHER FACILITIES, AND OBSTRUCTIONS FROM THE LOCATIONS AND ELEVATIONS INDICATED OR FOR THE EXISTENCE OF UTILITIES, STRUCTURES, OTHER FACILITIES, AND OBSTRUCTIONS NOT INDICATED ON THESE DRAWINGS.
- 2. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION TO ELIMINATE ANY POSSIBILITY OF ANY DISTURBANCE OF OR DAMAGE TO PUBLIC AND PRIVATELY-OWNED UTILITIES, STRUCTURES, OTHER FACILITIES, AND OBSTRUCTION RESULTING FROM HIS ACTIVITIES. TO THIS END, CONTRACTOR SHALL, AT NO ADDITIONAL COST TO THE OWNER, TAKE ALL MEASURES NECESSARY TO PROVIDE, AND SHALL BE SOLELY RESPONSIBLE FOR, TEMPORARY SUPPORT AND SHORING, ADEQUATE PROTECTION, AND MAINTENANCE OF CONTINUOUS OPERATION OF ALL UNDERGROUND AND ABOVEGROUND WATER, SEWER, AND GAS MAINS AND SERVICE LINES; PETROLEUM LINES; TELEPHONE, TELEVISION, AND ELECTRICAL LINES, CABLES, AND POLES; EQUIPMENT CABLES AND CONDUITS: STORM SEWERS; BUILDINGS; TANKS; FENCES; AND ALL OTHER UTILITIES, STRUCTURES, BRIDGES, FACILITIES, AND OBSTRUCTIONS, WHETHER OR NOT INDICATED ON THESE DRAWINGS. ALL DISTURBED OR DAMAGED UTILITIES, STRUCTURES, BRIDGES, OTHER FACILITIES, AND OBSTRUCTIONS SHALL BE IMMEDIATELY REPAIRED, REPLACED, OR COMPENSATED FOR BY THE CONTRACTOR TO OWNER'S SATISFACTION, AND AT NO ADDITIONAL COST TO THE OWNER.
- 3. THE CONTRACTOR SHALL BEAR SOLE RESPONSIBILITY FOR THE CHARACTER AND ACTUAL LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES, STRUCTURES, BRIDGES, OTHER FACILITIES, AND OBSTRUCTIONS WITHIN THE PROJECT AREA. THE CONTRACTOR SHALL, AT NO ADDITIONAL COST TO THE OWNER, CONTACT THE OWNERS/OPERATORS OF ALL UTILITIES AND ARRANGE FOR THE VERIFICATION AND MARKING OF UTILITY LOCATIONS BY SAID OWNERS/OPERATORS. THE CONTRACTOR SHALL ASSIST THE UTILITY OWNERS/OPERATORS BY EVERY MEANS POSSIBLE TO DETERMINE THE LOCATION OF UTILITIES. THE CONTRACTOR SHALL BEAR SOLE RESPONSIBILITY FOR ALL DISTURBANCE OF ANY DAMAGE TO UTILITIES RESULTING FROM THE CONTRACTOR'S FAILURE TO ARRANGE FOR THE LOCATION OF UTILITIES BY THE OWNERS/ OPERATORS OF THE UTILITIES. CONTACT MISS UTILITY (800) 552-7001
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL NEW ABOVE AND BELOW GRADE PIPING, STRUCTURES, ELECTRICAL EQUIPMENT AND CONDUIT, AND OTHER FACILITIES AT THE PROJECT SITE, FROM ALL DISTURBANCE OR DAMAGE WHICH MAY RESULT FROM THE PERFORMANCE OF WORK ON THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE REPAIR OR REPLACEMENT OF ALL NEW ABOVE AND BELOW GRADE PIPING STRUCTURES, ELECTRICAL EQUIPMENT AND CONDUIT, AND OTHER FACILITIES AT THE PROJECT SITE WHICH MAY BE DISTURBED OR DAMAGED AS A RESULT OF THE PERFORMANCE OF WORK ON THIS
- 5. SITE CONDITIONS MAY NECESSITATE SLIGHT DEVIATIONS IN ALIGNMENT, GRADE. AND/OR LOCATION OF NEW FACILITIES FROM THE ALIGNMENT, GRADE. AND/OR LOCATION INDICATED ON THESE DRAWINGS. THE CONTRACTOR SHALL CONSTRUCT THE NEW FACILITIES TO SUCH DEVIATIONS AS DIRECTED BY THE ENGINEER WITHOUT INCREASE IN THE CONTRACT PRICE OR FINE.
- 6. THE CONTRACTOR SHALL MAINTAIN A CLEAR FLOW PATH TO AND THROUGH ALL SURFACE WATER AND STORM WATER DRAINAGE FACILITIES AT ALL TIMES.
- 7. THE CONTRACTOR SHALL GRADE, SEED, AND/OR SOD, AND MULCH THE ENTIRE AREA(S) DISTURBED BY CONSTRUCTION ACTIVITIES.
- 8. CONSTRUCTION AND START-UP OF ALL WORK SHALL NOT INTERFERE WITH THE OPERATION OF WATER AND SEWERAGE FACILITIES. THE CONTRACTOR SHALL COORDINATE AND SCHEDULE ALL WORK WITH THE OWNERS AS REQUIRED.
- 9. MINIMUM COVER ON ALL PIPE SHALL BE 3 FEET, UNLESS OTHERWISE SPECIFICALLY INDICATED ON THESE DRAWINGS. ALL PIPE SHALL BE INSTALLED WITH WARNING/CAUTION DETECTOR TAPE 18" FROM FINISHED GRADE.
- 10. WHERE IT IS NECESSARY TO DEFLECT PIPE EITHER HORIZONTALLY OR VERTICALLY, PIPE JOINT DEFLECTION OR BARREL BEND RADIUS SHALL NOT EXCEED 75% OF THE MANUFACTURER'S RECOMMENDED DEFLECTION ANGLE OR BEND RADIUS.
- 11. ALL PIPING SHALL BE PROPERLY SUPPORTED. ALL PIPING WHICH WILL BE PRESSURIZED DURING OPERATION SHALL BE PROPERLY RESTRAINED.
- 12. ALL CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE CURRENT BOCA AND/OR STATE AND LOCAL BUILDING CODES.
- 13. CONTRACTOR SHALL MAINTAIN THE CONSTRUCTION AREA IN A MANNER ACCEPTABLE TO OWNER AND SHALL BE RESPONSIBLE FOR REMEDIATING ANY DAMAGES RESULTING FROM FAILURE TO DO SO.
- 14. EXCEPT FOR ROCK, ALL EXCAVATION SHALL BE UNCLASSIFIED.
- 15. CONTRACTOR SHALL MAINTAIN LIMITS OF CONSTRUCTION WITHIN THE BOUNDARIES OF THE PROPERTY AND EASEMENTS AS INDICATED.
- 16. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND MAINTAINING COMPLIANCE WITH ALL NECESSARY PERMITS, INCLUDING BUT NOT LIMITED TO LAND DISTURBING PERMIT, VDOT ROAD CROSSING PERMITS AND BUILDING
- 17. ALL MANHOLE FRAMES AND COVERS SHALL BE WATERTIGHT UNLESS OTHERWISE NOTED.
- 18. ALL MANHOLES SHALL BE 48" DIAMETER UNLESS OTHERWISE NOTED.

ENGINEERING CONCEPTS, INC. 20 S. ROANOKE ST., PO BOX 619 FINCASTLE, VIRGINIA 24090 540.473.1253 FAX: 540.473.1254

AS-BUILT

GREENFIELD COLLECTOR EXTENSION Checked WPJ/JST KEYSHEET

SANITARY SEWER PROJECT MAY 1997 PROJECT: 97024 GENERAL NOTES AND

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