

EXETER DECENTRALIZED SEWER PROJECT

TOWN OF APPALACHIA

LENOWISCO Planning District

Project Background

There are 130 homes in the upper community of Exeter and 13 homes in the lower community. These two communities are located near the headwaters of Pigeon Creek and only 2.5 miles upstream from Imboden, where the Town of Appalachia owns and operates a decentralized sewer facility. The small lot size and type of soils in the vicinity preclude the use of conventional onsite treatment and disposal systems. Separate decentralized wastewater systems are proposed for these communities.

Proposed Facilities

The proposed combined facilities include over 9,300 linear feet of 3-inch sewer line, 6,000 linear feet of 4" and 6" sewer lines, 143 watertight septic tanks with access risers and effluent filters, and almost 30,000 gallons of treatment capacity and disposal field. The proposed treatment unit is the AdvanTex AX100 treatment module, identical to treatment used at Imboden. This treatment system will treat domestic wastewater to advanced secondary standards before disposing of it into the soil using either conventional trenches or drip disposal.

Project Costs

The preliminary probable project cost and annual operation and maintenance costs associated with the Exeter Decentralized Sewer Project are \$1,412,320 and \$31,746, respectively. These costs result in an approximate present worth of \$12,376 per equivalent connection.

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PRELIMINARY PROBABLE PROJECT COST

Construction Cost

9,360 L.F.	3-inch Sewer Line	\$10 /L.F.	\$93,600
3,020 L.F.	4-inch Sewer Line	\$14 /L.F.	\$42,280
2,840 L.F.	6-inch Sewer Line	\$18 /L.F.	\$51,120
10 EA.	Road Crossing	\$1,500 /EA.	\$15,000
4 EA.	Stream Crossing	\$1,500 /EA.	\$6,000
143 EA.	STEG System	\$2,000 /EA.	\$286,000
28,600 GAL.	Treatment System	\$10 /GAL	\$286,000
28,600 GAL.	Disposal System	\$8 /GAL	\$228,800

Total Construction Cost \$1,008,800

Related Cost

40 % Related Cost \$403,520

TOTAL PROJECT COST \$1,412,320

OPERATION AND MAINTENANCE (O&M) COST

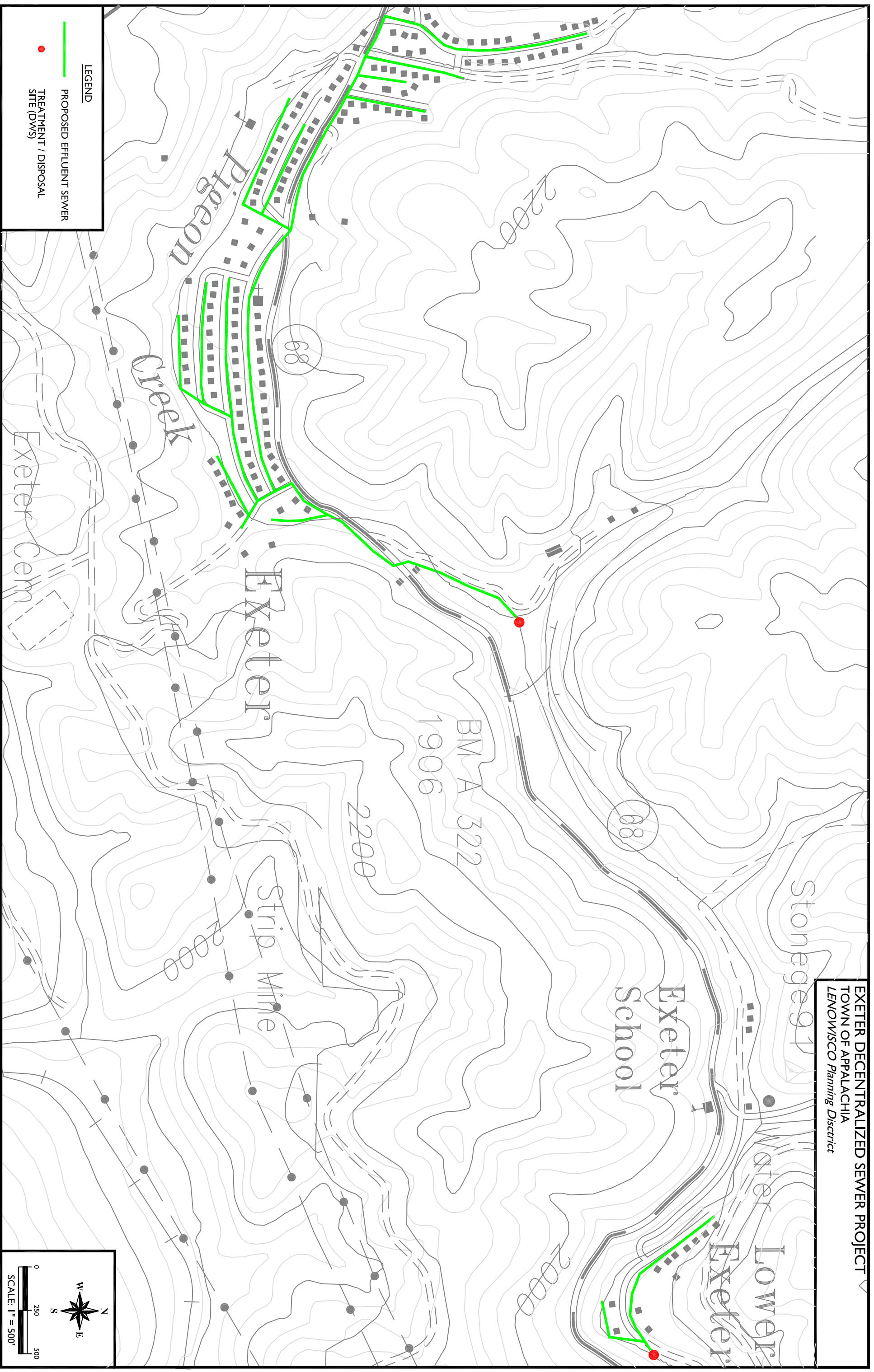
<u>CONN.</u>	<u>UNIT</u>	<u>DESCRIPTION</u>	<u>MONTHLY</u>	<u>ANNUALLY</u>
143 EA.		Routine Maint. & Monitoring	\$10.00	\$17,160
143 EA.		Pump Septic Tanks	\$2.50	\$4,290
143 EA.		Power & Telephone	\$3.50	\$6,006
143 EA.		Sampling	\$1.00	\$1,716
143 EA.		Breakdown Maintenance	\$1.50	\$2,574
		TOTAL O&M COST	\$18.50	\$31,746

PRESENT WORTH OF ANNUAL O&M COST (30 YEARS, 8%) \$357,390

TOTAL PROJECT PRESENT WORTH \$1,769,710

PRESENT WORTH PER CONNECTION (143 CONNECTIONS) \$12,376

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TOWN OF APPALACHIA
LENOX/SCO Planning District



LEGEND
PROPOSED EFFLUENT SEWER
TREATMENT / DISPOSAL SITE (DWS)

0 250 500
SCALE: 1" = 500'
N
W
E
S