

EWING/INDIAN CREEK DECENTRALIZED SEWER PROJECT

LEE COUNTY PUBLIC SERVICE AUTHORITY

LENOWISCO Planning District

Project Background

A small cluster of homes and businesses in this community are in desperate need of public sewer service. These structures are built either in the floodplain or on lots too small to support conventional onsite treatment and disposal. Raw and inadequately treated wastewater is entering Indian Creek creating health hazards. The Daniel Boone Soil & Water Conservation District and the Indian Creek Watershed Group have held several public meetings to discuss the problems. The residents appear ready to participate in a sewer project, but desire a reasonably priced sewer bill.

Proposed Facilities

The proposed facilities include approximately 4,000 linear feet of 3-inch force main sewer line and 15 watertight septic tanks with two access risers and pump system. The proposed treatment system consists of an AdvanTex AX100 treatment unit, with capacity to treat 25 homes at a typical flow rate of 200 gallons per day. This treatment unit will treat domestic wastewater to advanced secondary standards. The treated effluent will be disposed into the soil using either conventional trenches or a drip disposal system. This decentralized wastewater system will be monitored and controlled remotely to minimize labor costs. The Lee County PSA has agreed to own and operate the system when operational.

Project Costs

The preliminary probable project cost and annual operation and maintenance costs associated with the Indian Creek Decentralized Sewer Project are \$213,500 and \$4,500, respectively. These costs result in an approximate present worth of \$17,611 per equivalent connection.

EWING/INDIAN CREEK DECENTRALIZED SEWER PROJECT

LEE COUNTY PUBLIC SERVICE AUTHORITY

LENOWISCO Planning District

PRELIMINARY PROBABLE PROJECT COST

Construction Cost

4,000 L.F.	3-inch Force Main	\$10 /L.F.	\$40,000
15 EA.	STEP System	\$3,500 /EA.	\$52,500
3 EA.	Road Crossing	\$1,500 /EA.	\$4,500
1 EA.	Stream Crossing	\$1,500 /EA.	\$1,500
3,000 GAL.	Treatment System	\$10 /GAL.	\$30,000
3,000 GAL.	Disposal System	\$8 /GAL.	\$24,000

Total Construction Cost \$152,500

Related Cost

40 % Related Cost \$61,000

TOTAL PROJECT COST \$213,500

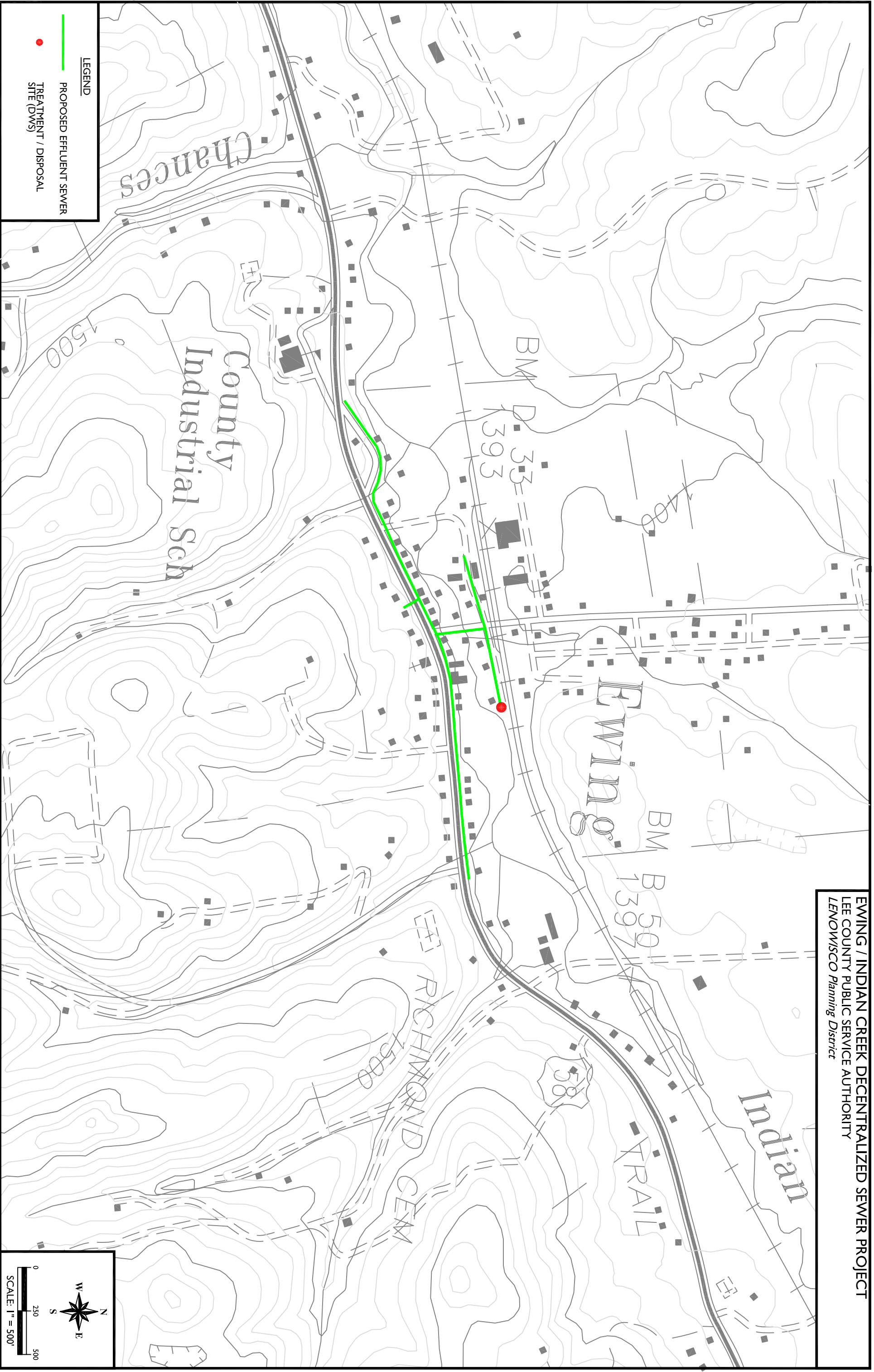
OPERATION AND MAINTENANCE (O&M) COST

<u>CONN.</u>	<u>UNIT</u>	<u>DESCRIPTION</u>	<u>MONTHLY</u>	<u>ANNUALLY</u>
15 EA.		Routine Maint. & Monitoring	\$12.50	\$2,250
15 EA.		Pump Septic Tanks	\$2.50	\$450
15 EA.		Power & Telephone	\$5.00	\$900
15 EA.		Sampling	\$2.50	\$450
15 EA.		Breakdown Maintenance	\$2.50	\$450
		TOTAL O&M COST	\$25.00	\$4,500

PRESENT WORTH OF ANNUAL O&M COST (30 YEARS, 8%) \$50,660

TOTAL PROJECT PRESENT WORTH \$264,160

PRESENT WORTH PER CONNECTION (15 CONNECTIONS) \$17,611



LEGEND
PROPOSED EFFLUENT SEWER
TREATMENT / DISPOSAL SITE (DWS)

