

# Euclid Creek Tunnel

The Northeast Ohio Regional Sewer District is engaged in an ambitious program to dramatically reduce the number of Combined Sewer Overflows (CSOs) in the Easterly service area during wet weather events. The Euclid Creek Storage Tunnel – Contract ECT – is the first project as part of this CSO program and will be the District's largest tunnel constructed to date.

For more information, please visit:

<http://www.neorsd.org/ect>

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### Project Highlights:

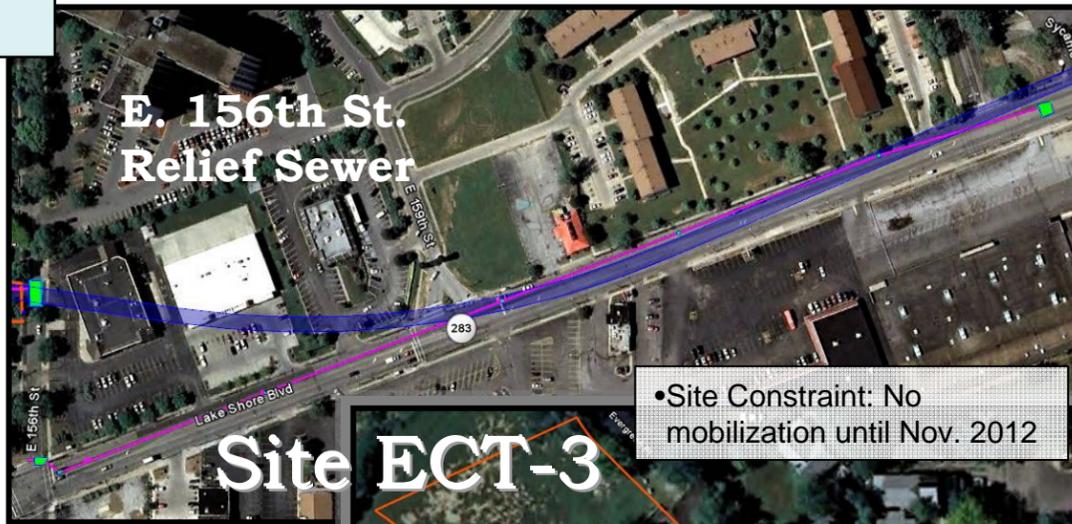
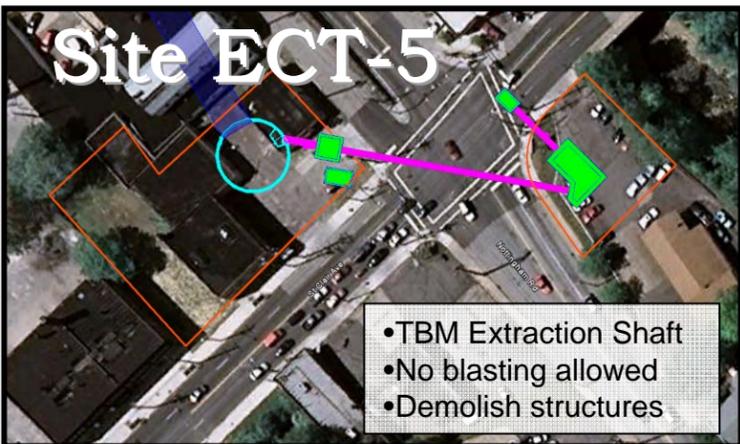
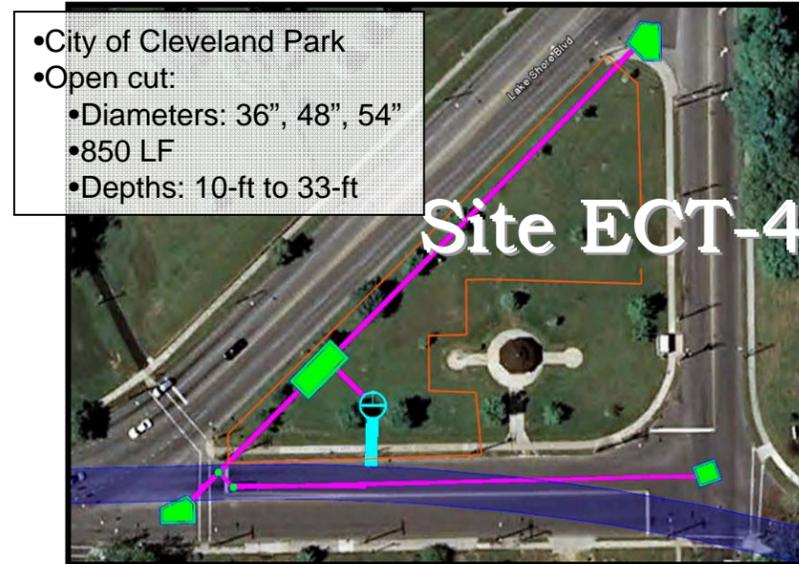
-  18,050 lf of 24-ft (finished) diameter tunnel in Chagrin Shale lined with bolted, gasted, pre-cast, steel-fiber-reinforced concrete segments; depths ranging from 190 ft to 220 ft below ground surface;
-  40-ft (finished) diameter mining shaft and a 50-ft (finished) diameter surge-relief / baffle drop shaft located at each end of the tunnel, respectively;

-  3 baffle drop shafts, ranging in size from 16 to 32 ft. diameter, with adit connections to the tunnel will convey flows from near-surface consolidation sewers into the tunnel;
-  30+ "Near Surface" structures for flow regulation, interception and diversion of flow, and screening and control of flow entering the tunnel;
-  5,000+ LF of consolidation sewers ranging in diameter from 36" to 90", installed by both trenchless and open-cut methods.
-  Advertisement – July 2010



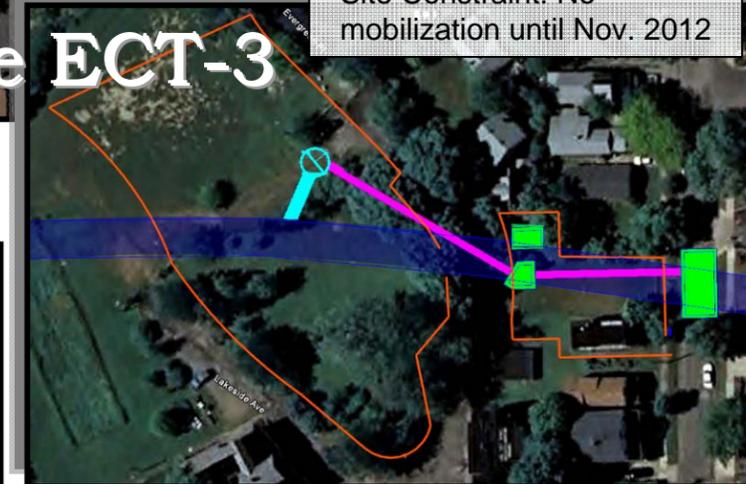
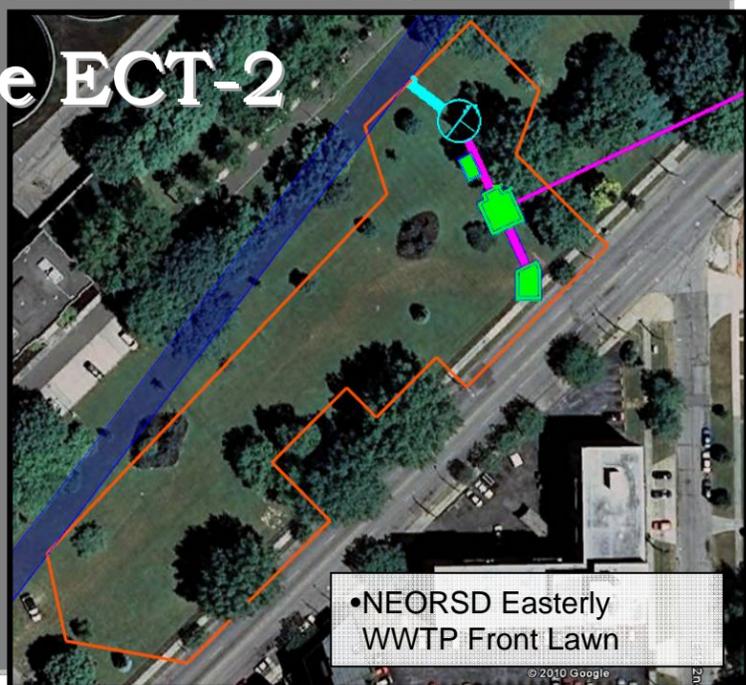
### DEEP SHAFT SUMMARY

Shaft	Type	Fin. Dia.	Overburden		Add'l Notes
			Support	Depth	
1-1	Mining / Access	40'	Liner plate (dewatering)	94'	Multiple layers of rapidly dilatant soils
2-1	Baffle	32'	Liner plate (dewatering)	101'	Multiple layers of rapidly dilatant soils
3-1	Baffle	16'	Secant Pile	99'	Multiple layers of rapidly dilatant soils
4-1	Baffle	16'	Liner Plate	56'	--
5-1	Baffle / Surge	50'	Liner Plate	8'	Blasting precluded



### TRENCHLESS SUMMARY

Site	Sewer Name	Method	Diameter	Length	Geology
ECT-2	Lakeshore Blvd. Consolidation Sewer	Microtunneling	42" FRP or 48" RCP	2,116 LF	Glaciolacustrine (silty-clay & clayey-silt); 500-ft mixed w/ rapidly dilatant Beach/Terrace Deposits
	ECT-2 Consolidation Sewer	Pipe Jacking (one pass)	90" FRP	81 LF	Glaciolacustrine (silty-clay & clayey-silt)
ECT-3	ECT-3 Consolidation Sewer	Microtunneling	72" FRP	268 LF	Glaciolacustrine (silty-clay & clayey-silt)
ECT-5	ECT-5 Consolidation Sewer	Pipe Jacking (two pass)	60" FRP inside 80" Steel Casing	336 LF	Weathered Chagrin Shale



**LEGEND:**

- Consolidation Sewer (Pink line)
- Main Tunnel (Blue line)
- Near surface structure (Green rectangle)
- Site limits (Orange outline)
- Deep Shaft (Cyan circle)

**\*\*Provided for informational purposes only. Detailed information provided in the Contract Documents. Prospective bidders shall not rely on this information when preparing their bids.**