

Depression Adjacent to Route 352 near Anne Drive/Bow Tree Drive East Goshen Township, Chester County

The Pennsylvania Department of Transportation performed excavation of a depression on the west side of Route 352 just south of the intersection of Anne Drive/Bow Tree Drive in East Goshen Township, Chester County, on Wednesday, December 23, 2020.

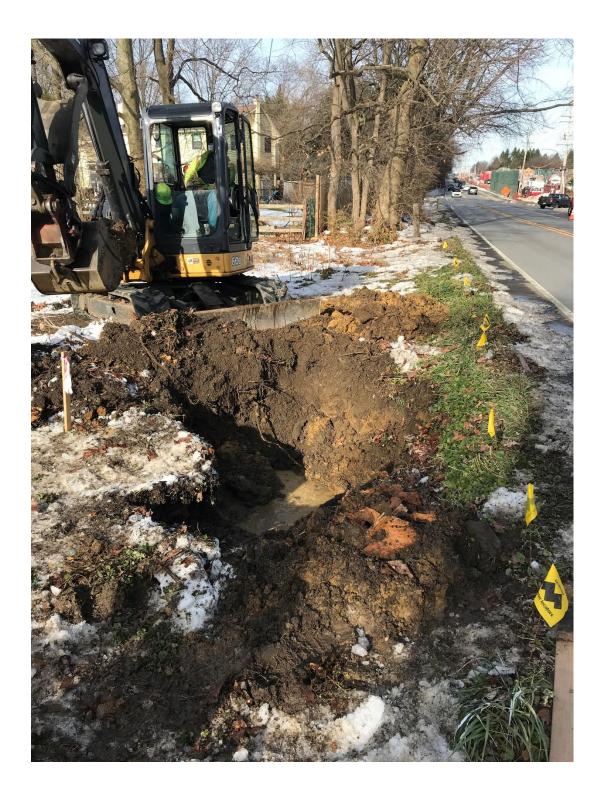
The subsidence adjacent to the southbound shoulder of Route 352 appears to be caused by the presence of silty clay at a depth of 2.3 feet below the road grade. This conclusion was reached based on careful excavation of a 7-foot-by11-foot test pit (TP-1) roughly centered on the location of the depression. In addition to the silty clay, a tree stump was excavated from the test pit. Decay of the stump may also have contributed to the subsidence at this location. During the excavation, surface water was observed running along the top of the silty clay layer. Perched surface water can also potentially contribute to subsidence. Additionally, there was no evidence of subsidence or distress on the adjacent roadway.

The result of the investigation found that moving surface water and a decaying tree stump were likely the causes of the depression. In the department's professional view, the subsidence was not a risk to the safety and stability of the state roadway.

Any questions can be directed to Sarah McInnes, P.E., PennDOT District 6 Geotechnical Engineer at (610) 205-6544 or Paula Callahan, P.G., PennDOT District 6 Geologist at (610) 205-6543.







Test Pit No: TP Project Information FEMS# (1352) District 0 County: Chester SR/Sect.: 352	Pit Dimension Ground Elevation (ft.): *** ft. Depth: **** 3.7		Sheet		
	Width: 1 1 1 Length: Water Level Reading ▼ 0 hr. ▼ 24 hr. Depth: NR 0 hr. NR 24 hr. 1 3 1	Sheet <u>1</u> of <u>2</u>			
Baseline: Station/Offset: / Coordinates: N E Latitude	Field Logged By: Inspector: Poular Callahan Cert. Number: D20-D13 Drilling Company: Pena DoT	PG/PE S	eal, Signature	-	
Longitude NOTE: All graphical plots are for info	Excavation Date: 12-23-2620 Backfill Date: 12-23-2620	Name: _ Date:	Спеске	а ву:	_
START I' below ROAD GRADE	2.4 from 838	DEPTH (ft.)	BAG SAMPLE NUMBER	POCKET PEN. (lsf.)	TORVANE (Ist.)
	+opsoil, wet	0			
SI SIIT I I LEA	MAFACE, REACHED Water o	top	of Si	LT, C	lay
+ree stump	2.7' BOTTOM OF	2 -	0		
tree s tump same Ease of Excavation mod	TEST PIT	3 -			
Ease of Excavation	in = easy with	4 -			100
	water seepingin	- 5 -	* 1	74	
		6 -			
T12.18.2013 PM GOT -12/19/13 13.41-	10	7			V
2		8 -		1	
DOS - PERMICOT G		9 -		-	
10		- 10			
WATER level of the oni toris	hole		1700	100	
BOTTOM OF HO FROM GRADE	LF = 3,3'3-60				

