

16th Avenue Trunk Sewer
Environmental Management Plan
Incident Report Form

SITE VISIT

Date: November 11, 2004
Location: 3855 Bethesda Side Road
Time: 2:30 PM
MacViro Field Staff: John Chadwick, Heather McGinnity
Other Representatives: Renato Pasqualine (Inspec-Sol/CRA)



Observations:

There are two pond areas on the property - one in front of the house (north) and one behind the house (south). These ponds used to be connected along the east side of the house. Both ponds were originally supported by an artesian well on the property, which also served as the potable water supply for the residence. Overflow from the ponds was directed to the drainage ditch along the south side of Bethesda Side Rd. According to Mr. Doug Pike, the artesian conditions ceased to exist in the well about a year and a half ago (Summer 2003). The northern pond perimeter was measured as 130 m originally (based on bank level); the current northern pond perimeter is measured as 112 m (based on water level). A survey of the water levels and the bank levels suggest that the water has dropped up to 0.75 m in the northern pond, and up to 0.88 m in the southern pond. According to Mr. Pike, the original depths of the north and south ponds were approximately 12 and 17 ft respectively.

Bull rushes, willows, and algae have been reported to grow in the pond since the well stopped flowing. Several coy (fish) that were stocked in the pond by Mr. Pike died in the spring. He collected a sample of the pond water and submitted it for analysis. It was determined that the dissolved oxygen concentration in the water was extremely low due to the increased vegetative growth. It is believed that the dissolved oxygen deficit caused the fish to die.

During the site visit, MacViro field staff became aware of water being discharged to the drainage ditch on the north side of Bethesda Side Road. It appeared to be coming from the property directly across the street from Mr. Pike (3880 Bethesda Side Road). The drainage ditch on the north side of Bethesda had water pooling in it and aquatic vegetation, while the drainage ditch on the south side of Bethesda was completely dry. At this point, it is unclear where the water is coming from. It is recommended that further investigations be conducted to determine the source.

A previous investigation was conducted by Inspec-Sol/CRA at this property and two neighbouring properties (3885 and 3985 Bethesda Side Road). Their report concluded that the well and pond on Mr. Pike's property was not impacted by the construction due to the distance of the property from the area of influence, and because they are at a separate, higher elevation. They felt that the well at this property utilized the shallow aquifer system, while dewatering is occurring in the deep confined aquifer.

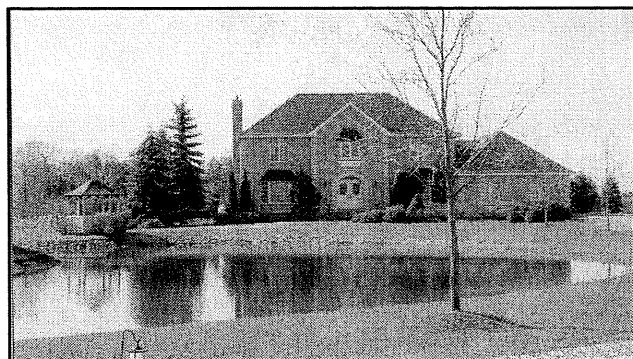


Photo 1

View of northern pond in prior to water loss

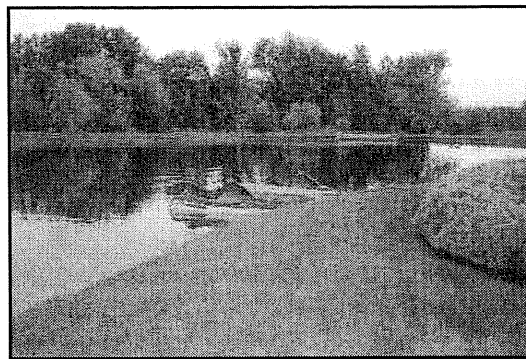


Photo 2

View of southern pond in prior to water loss

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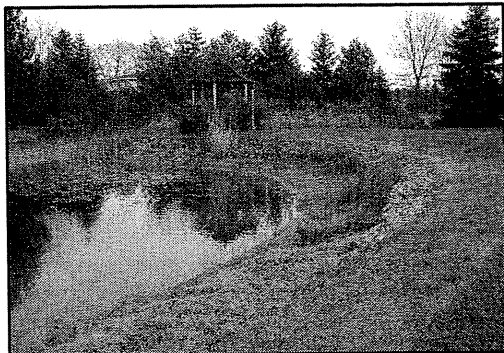


Photo 3

View of northern pond on November 11, 2004



Photo 4

View of southern pond on November 11, 2004



Photo 5

View of water discharging to drainage ditch on the north side of Bethesda Side Road

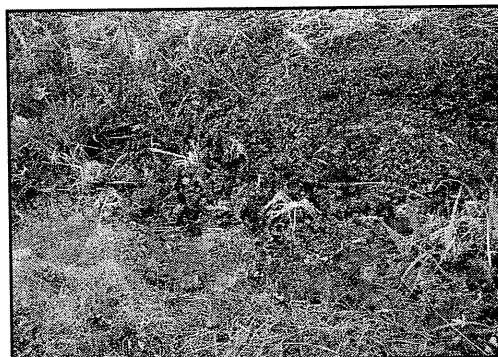


Photo 6

View of vegetation in drainage ditch on the north side of Bethesda Side Road

Conclusions:

It is recommended that further investigation be conducted to determine the following:

- The source of the water being discharged to the drainage ditch on the north side of Bethesda Side Road
- The change in water levels in the ponds and well over the next few months

Documented by:

H McGinnity
Heather McGinnity

Date:

17-Nov-04

Approved by:

Mu H Husain
Muin Husain

Date:

8-Nov-04

