OHIO
HUDSON
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MEMORANDUM

Stopped Trains Detection Systems Cost Summary

Note: The City met with Norfolk and Southern on July 1, 2021, to discuss the possibility of stopping the trains in the northbound direction prior to Hines Hill Road and mitigating the need for detection of the stopped trains. They mentioned this is an operational issue with the railroad and they would review in the coming weeks after they meet with NS RR Operations in Atlanta, Georgia.

The Costs below are for a detection system and infrastructure needed that will work automatically when a train is stopped and alert the vehicle traffic at Valley View and the Walters Road intersections at Hines Hill Road.

The following is the cost breakdown our IT/VBB staff has estimated for the required work and options for detection:

1. **The total cost of installing the fiber infrastructure from the railroad crossing to Walters Road and Valley View Road: $ 84,795.00**
   (The cost includes all conduit, fiber lines, hardware, software, all labor, and equipment.)

2. **The Cost of the various options for detection of stopped trains are as follows:**

		Total Option Cost	Total Cost
Radar Detection Option #1:	(Includes all labor, material, and equipment)	**$14,145.00**	**$ 98,940.00**
Video Detection Option #2:	(Includes all labor, material, and equipment)	**$ 3,145.00**	**$ 87,940.00**
Hard-wired Detection Option #3:	(Includes all labor, material, and equipment)	**$ 5,045.00**	**$ 89,840.00**
Taazaa Video Detection Option #4:	Wireless, no fiber needed.	**$ 645.00**	**$ 60,645.00**

+ **$200/month charge**. (Includes all labor and material. City to provide equipment. Cost not known.)

Approximate installation schedules of the work:

Option #1, #2 and #4: These options are approximately 16 to 20 weeks following approval.

Option #3: This option is reliant upon the schedule by Norfolk and Southern RR, which is estimated to be 8 to 12 months.

Recommendations:

The City Staff recommends Option 3, the hard-wired connection to the railroad gates, as the most reliable and tested method of vehicle detection with the railroad. The implementation time on this option is the longest construction at 12 months. The cost is comparable to the other options.

The second option would be Option #1, Radar, if the above timing is an issue.

The other video options are still in design and may not be ready for implementation in the near future.

A 2nd Quarter appropriation would be needed for this work from the General Fund.