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Bob McAuliffe President RLM Construction Company, Inc. 3522 Frankfort Ave. Louisville, KY 40207

May 27, 2020

Project: 2050 Millvale - Bridge

Dear Mr. McAuliffe,

Based on our meeting at the site to review the existing bridge and the requirements for the loading on the bridge I have the following comments and recommendations.

- For the age of the bridge it is in remarkedly good condition, there are a few places where the stone work needs some tuck pointing and reconstruction but these are minor points and do not affect the structural integrity of the bridge, see attached photo #1.
- The roadway approaches to the bridge are earth fill with asphalt pavement contained by 30" +/- thick stone walls. The wall varies in height as the grade each side drop from the road elevation to the creek. There doesn't appear to be any distress or movement in the barrier walls, see attached photos #2 & 3.
- The entry and exit for the flow is a multi-wythe stone arched opening, the actual structure is a flat slab spanning approximately (9) feet to vertical walls concrete walls bearing on the rock creek bed, see attached photos #4 & #5.
- The slab and walls are in good condition. However, there is no economical way to determine the capacity of the existing slab for the support of the required 30 kip axle loading. I am proposing that the existing pavement, base course and whatever fill is above the exiting concrete slab be removed. The existing slab shall remain in place to provide a form for a new topping slab designed to carry the required 30 kip axle load.
- The new slab will be a 12" thick concrete reinforced slab and the reinforcement details are on the attached section.

In mv opinion with the addition of the new structural slab over the existing slab, this bridge will be more than adequate to support the required axle loads.

If you have any questions please feel free to call.