MACOUPIN COUNTY HIGHWAY DEPARTMENT

21480 Route 4 . Carlinville, IL 62626-0165

Thomas A. Reinhart, P.E. County Engineer Phone (217) 854-6416 FAX (217) 854-6861

December 23, 2009

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Minois Commerce Commission RAIL SAFETY SECTION

Mr. Gary Thompson
Director of Maintenance - St. Louis Division
Union Pacific Railroad Company
100 N. Broadway, Suite 1500
St. Louis, MO 63103

Re: New Culvert under Union Pacific Tracks at Brighton, IL

Dear Mr. Thompson:

I had the opportunity to look at the recently installed 48" diameter steel pipe under the Union Pacific Railroad near crossing AAR/DOT #294 417H. Macoupin County appreciates your cooperation and quick response to try to alleviate the flooding that occurs on the Brighton-Bunker Hill Rd. and the neighboring residences during significant rain events.

I do have some concerns about the effectiveness of the new culvert, however. The invert of the new culvert is 3.1 ft. higher than the invert of the highway culvert directly across and upstream of the new pipe. The bottom of the new culvert is also 0.7 ft. higher than the top of the existing concrete box culvert under the tracks. As I recall from discussions at the October 26, 2009 meeting, you intend this pipe to function as an overflow pipe for the concrete box.

I have admittedly not performed a detailed hydraulic analysis of the site but I am concerned that this culvert relies on the creation of backwater from the hydraulic deficiency of the original box to be effective. The backwater has been the cause of the flooding in the area. By the time the water reaches a depth of approximately 2 ft. in the new culvert the houses across the highway will likely be experiencing some flooding. The culvert will reduce the length of time the water is up but the amount flow it will divert at that depth does not appear sufficient to prevent the flooding of the houses.

The County would still encourage the installation of additional waterway opening at the flowline of the ditch. Additionally, redirecting the water coming from the northeast quadrant of the railroad/township road intersection from going under the township road to going directly under the railroad north of the crossing would have a significant impact the efficiency of the drainage in the area, reducing the creation of backwater.

I appreciate your consideration of my concerns. Macoupin County values Union Pacific's continued assistance with this situation. If you have any questions or would like to discuss this further, please contact me at your convenience.

Sincerely, Thomas A Reinhart

Thomas A. Reinhart P.E.

Macoupin County Engineer

cc: Senator Demuzio
Representative Hannig
Chairman Manar
Mike Stead – ICC
Donnie and Karrie Stahl
Todd Bailey