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August 17, 2012

Mr. Todd Hileman Village Manager Village of Glenview 1225 Waukegan Rd. Glenview IL 60025

Mr. Richard A. Nahrstadt Village Manager Village of Northbrook 1225 Cedar Lane Northbrook, IL 60062

Subject: Union Pacific Railroad

UPRR Restoration at Shermer Road

Dear Messrs. Hileman and Nahrstadt:

Union Pacific Railroad has retained Alfred Benesch & Company (Benesch) to provide the following information regarding the derailment restoration at Shermer Road:

- Task 1: Monitor the top of rail profile and alignment daily (This frequency has been reduced to two days per week, Tuesday and Friday, effective July 30, 2012) to determine if the track is moving more than would typically be expected.
- Task 2 Prepare calculations to determine if utilities in the corridor are subject to additional load stresses due to the placement of temporary fill and railroad live load.
- Task 3 Prepare slope stability analysis to estimate the factor of safety of the temporary embankment.

## Summary of Benesch Activities and Findings – August 3 through August 10

### Task 1

Benesch initiated work for this assignment on July 6, and collected topographic field survey that included locating existing Shermer Road, the temporary stone embankment, and the top of rail for both main tracks. This information was used to develop our "Situation Plan", and the engineering model of the site.

The tops of rail of both main tracks were surveyed on August 3, 7 and 10. After our review of the survey data and plots that were prepared from that data, we have concluded that the ballast section (aggregate between the cross ties and top of temporary fill) has consolidated and the track profiles have stabilized significantly in the recent weeks. Benesch has been directed by UPRR to collect survey data two days a week (Tuesday and Friday) going forward unless there is some indication that we should collect more extensive data. We will continue to report to the Village on a weekly basis, generally Wednesday or Thursday.



## Task 2

There has not been any change to the utility stress calculation issue since the report of July 20.

#### Task 3

# Slope Stability & Settlement Calculations

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There has not been any change to the consolidation issue since the report of 7/20/2012.

On Wednesday, August 8, we submitted responses to the memo from Glenview dated July 27, 2012. We are including with this memo the updated Situation Plan, the last piece of information that was requested in that memo. The situation plan has been enhanced from the original plan with the addition of an aerial background for context, and utility information based on atlases and field locates. Please let me know if you have any questions or if we can be of further assistance.

EXPIRATION DATE 11-30-2013 DATE: \_\_\_\_07-13-2012

RICHARD D.

Richard D. Conrath, P.E. Vice President

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