State of Wisconsin DEPARTMENT OF NATURAL RESOURCES 101 S. Webster Street Box 7921 Madison WI 53707-7921

Scott Walker, Governor Daniel L. Meyer, Secretary Telephone 608-266-2621 Toll Free 1-888-936-7463 TTY Access via relay - 711



September 25, 2018

Bernard Lenz 4th Floor 400 La Crosse St. La Crosse WI 54601

Subject: Ebner Coulee methodology

Dear Bernie:

The methodology proposed by Brad Woznak of SEH, Inc. in his 8/27/18 letter for the new Ebner Coulee floodplain study appears to be acceptable.

Creating hydraulics and hydrology simultaneously to calibrate a model is acceptable. Not having a known flow but having highwater marks is the most common reason for back calibrating a hydrologic model. It is understood that the calibration to effective flows was done solely for comparison purposes and the results of that calibration will not be used in a final regulatory model.

Ultimately the final product will need an enforceable profile and floodway that meets the definition of a floodway in NR 116 and the city's floodplain ordinance. Regulating the base flood elevation (BFE) from a 2D model is not easily done with the regulatory rules currently in effect. It is understood that a 1D model will be run that will mimic the results of the 2D model. That 1D model will be the model that is used for regulatory purposes.

Please note that if there is any storage considered within the hydrologic or hydraulic models, this storage will need to be mapped and regulated as a floodplain storage district by the regulatory authority in which it resides.

Sincerely,

Chris Olds, P.E. Floodplain Engineer Madison Central Office Wisconsin DNR

