



State of Wisconsin
Governor Tony Evers

Department of Agriculture, Trade and Consumer Protection

July 2, 2021

Dane County Drainage Board
c/o John Mitby
PO Box 1528
Madison, WI 53701-1528

Subject: County AB Overpass/Interchange and Door Creek Drainage District

Mr. Mitby:

Thank you for your submittal of the technical memo for the referenced project. The technical memo provides a hydrological analysis of the project's potential impacts to Door Creek. The technical memo was submitted to the Wisconsin Department of Agriculture, Trade and Consumer Protection (hereafter Department) by Lisa Dreifuerst, P.E., Transportation Project Engineer with Wisconsin DOT, and received on June 14, 2021. The Dane County Drainage Board (hereafter Board) requested a review of the analysis and asked the Department to provide the Board with a recommendation in accordance with § 88.11, Wis. Stats.

The hydrologic technical memo analyzed the impacts to a tributary of Door Creek above and below the 12-ft x 8-ft box culvert crossing under US 12/18. The analysis concluded that proposed peak discharges were below the existing peak discharges for the 2-, 10-, 25-, and 100-yr design storm events. Flow durations were extended for proposed conditions, with increases of 0.7 cfs compared to existing conditions. Discharges are reduced to less than 0.2 cfs 24 hours after runoff is initiated. The small increases in discharge are assumed to have a negligible increase in headwater elevation at the culvert.

On June 22, 2021, Leonard Massie and I visited the project site to discuss the plans and identify any concerns. The tributary draining from the intersection of County Hwy AB and Sigglekow Road to the 12-ft x 8-ft box culvert and flowing northeast to its confluence with Door Creek on the north side of US 12/18 has a low gradient. The flow of water in the tributary appeared to be standing water, especially on the downstream reach of the culvert. Historic aerial photos supports this observation, as algal blooms can be seen in both the lateral ditch connecting the road ditch to the tributary and in the tributary above and below the culvert. Additionally, wetland indicators are present along the tributary and Door Creek in the vicinity of the project. There is a large riparian wetland at the confluence of the tributary and Door Creek between US 12/18 and Fermite Road.

There are no specifications for the Door Creek Drainage District (hereafter District). Without a baseline profile it is difficult to determine if the project will increase the water surface elevation to a level that will have adverse effects on the thoroughness or reliability of the drainage system. The lack of historic knowledge and understanding of this District and the operation of the drainage system poses a challenge for the Board.

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The Department recommends that the Board gather additional information by holding a drainage board business meeting to allow landowners to provide context and historic perspective of the Door Creek Drainage District.

Please note before the Board can take action to approve or disapprove the proposed connection of the private drain, the Board will be required to conduct a Public Hearing to allow landowners the opportunity to provide feedback regarding the District's operation and the proposed project in accordance with § ATCP 48.36(2), Wis. Adm. Code. If you have any questions regarding the Department's review process or if anything in this letter is unclear, please feel free to call me at (608) 224-4608 or you can email me at Barton.Chapman@Wisconsin.gov.

Barton T. Chapman, P.E.
State Drainage Engineer

Cc: Leonard Massie, Dane County Drainage Board Secretary (via email)
Paul Maly, Dane County Drainage Board Member (via email)
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