

Greetings, Chair and members of the House Energy and Natural Resources Committee. I am Matt Linneman, Deputy Director for Engineering for the North Dakota Department of Transportation (NDDOT). I'm here today to provide testimony in opposition to House Bill 1201.

The bill provides for an amendment of Section 61-16.1-43 of the North Dakota Century Code (NDCC) relating to drains intersecting with a roadway that is part of the state highway system. The bill proposes language that would require a control valve system on all culverts that facilitate drainage of a watershed that spans three or more counties and that intersects with a drain that flows under a roadway on the state highway system.

This proposed requirement raises several significant concerns for the NDDOT:

1. Adding control valves contradicts North Dakota Administrative Code (NDAC) 89-14-01, otherwise known as the *Stream Crossing Standards* which were created to allow for the natural flow and drainage of surface water through a highway. These standards were originally adopted in 1953 (NDCC 24-03-08) and refined in 1999 (NDAC 89-14-01).
2. If a control valve would be placed on a culvert through a state highway, the state highway would now be acting as a dam which is in direct contradiction to the Stream Crossing Standards. In addition, adding a control valve may require that many state highways be reconstructed to higher design standards and be subject to the Department of Water Resources Regulatory Program which is responsible for regulating the construction and modification of dams, dikes, and other devices, as authorized by NDCC 61-03, 61-04, and 61-16.1.
3. Furthermore, state highways are not designed to act as dams. Existing highway embankments do not include design features, such as an internal impervious core and necessary freeboard, required for a levee or other flood control structure. Fill material used in the construction of a typical highway embankment is not a sufficient barrier against water. Therefore, existing highway embankments would be subject to piping, seepage, and infiltration. Typical embankment construction does not require the same level of geotechnical engineering analysis as required for flood control structures.
4. Control valves that are installed on a culvert will result in water being impounded upstream of the crossing at certain times. Landowner agreements would be necessary for the impoundment and potential for inundation of the property.

5. Control valves, dams, and water impoundments do not advance a transportation purpose to safely moving people and goods. Therefore, federal funds and funds from the State Highway Fund are not eligible to be used on these types of features.
6. The bill does not specify who would be responsible for the design, construction, maintenance, monitoring, and operation of control valves proposed to be installed on structures within state highway right of way. It is assumed this would be the Water Resource Board as that is the section of code it is placed, but it is confusing as it would overlap with the responsibilities of the NDDOT. The operation and maintenance of flood control structures is not the purpose or within the purview of the NDDOT.

Thank you for the opportunity to testify, and I'm happy to answer any questions.