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Project: BakkenLink Pipeline
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Subject: Surface Impacts due to Pipe Diameter Change
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PCS Job: 14003

BakkenLink Pipeline is considering a change of diameter for the Phase 2 construction segment between the existing Dry Creek Terminal facility and Beaver Lodge, ND. The current design is to install a 12-inch pipeline. To increase throughput for the system, the desire is to now install at 16-inch pipeline. This memo is to address any change to the ground surface impacts during construction should the diameter be increased.

Pipeline construction workspace requirements are a function of pipe diameter, equipment size, slope conditions, bedrock, the location of construction (e.g. at road, waterbody, or pipeline crossings), the method of construction (e.g. conventional trenching, boring or Horizontal Directional Drill) and the existing soil conditions during construction. As the size of the pipeline being installed increases, trench depths and widths increase, which creates additional spoil material. Larger equipment is needed to handle the heavier pipe, thereby increasing the amount of construction workspace required.

When planning and defining the required workspace for pipeline installation activities pipe sizes between 12-inch and 18-inch are normally grouped in the same category. For planning purposes, the trench size, spoil storage, and required equipment for installation of these pipe sizes are nearly identical. Therefore, the project's surface impacts and construction workspaces will not need to be revised due to an increase in outer diameter of the proposed pipeline from 12-inch to 16-inch.

A change in pipe size from 12-inch to 16-inch for the BakkenLink Phase 2 construction would have no increase in the previously proposed surficial impacts as additional construction workspace would not be required.

