

**Enbridge Line 5 Wisconsin Segment Relocation Project**  
**Wisconsin Department of Natural Resources Information Request dated June 17, 2024**  
**Enbridge Responses**

**WDNR Information Request Question #1**

Enbridge has stated in their materials regarding blasting: *Following blasting, the fractured bedrock material will be removed from the trench. Clean granular fill (padding) will be placed on the bottom of the trench to protect the pipeline and prevent direct contact between the pipe and rock, which can damage the protective exterior pipeline coating. The pipe will then be lowered into the trench and additional clean granular backfill will be added to cover the sides and the top of the pipe. Native material will then be used to backfill the remainder of the excavation to original grade, including replacement of topsoil following backfilling to restore original wetland grade.*

- Please provide greater detail on the “native material” (origin, composition, etc.) that would be used as backfill for these areas. The original material for these areas would be bedrock, which would be removed from the trench after blasting.
- Please provide greater detail on how the use of the “native material” in areas of previous bedrock (which could be multiple feet deep) would support the restoration of wetland and waterway hydrology post-construction.

**Enbridge Response to WDNR Information Request Question #1**

As previously described, pipeline installation in shallow bedrock areas will require that the bedrock layer within the trench area be fractured and removed to the depth of excavation required to install the pipeline in accordance with PHMSA depth-of-cover requirements and with Enbridge’s internal depth-of-cover requirements.

The “native material” that is referenced includes the use of fractured bedrock material removed from the trench line following blasting as part of the backfill material. Where shallow bedrock is encountered, Enbridge will use clean sand obtained from nearby licensed sand/gravel facilities to backfill the trench to a level that covers the pipeline to protect the pipe and the pipe coating from damage. Fractured bedrock material will then be used as backfill material up to the existing bedrock level. The remainder of the backfill material above the bedrock level will be native subsoil removed from the trench line during the excavation process down to the bedrock layer. Native topsoil removed from the trenchline excavation area will then be re-spread across the excavation area.

Regarding restoration of hydrology, bedrock will still be present beneath the pipeline and potentially along the sides of the pipeline, depending on the depth of bedrock at a given location along the pipeline route. Groundwater will fill the interstitial space between the backfilled material until the water level reaches the bedrock-soil interface along the undisturbed walls of the excavation. Groundwater will then continue its natural flow path, similar to conditions occurring at the soil-bedrock interface prior to construction. Enbridge will install trench breakers at the end of sections backfilled with sand to minimize the potential for subsurface drainage along the backfilled trench in bedrock areas. Enbridge will install trench breakers (see description provided in Section 11 of Enbridge’s Environmental Protection Plan) to minimize the potential for subsurface drainage along the backfilled trench.