Enbridge Line 5 Wisconsin Segment Relocation Project

Water Resources Application for Project Permits

March 6, 2020 WDNR Completeness Determination Data Request- Enbridge Responses

Data Request Question #1

Water Resources Application for Project Permits (WRAPP) Supplemental Information Attachment B (Aerial Route Maps/Delineated Wetlands and Waterbodies map) – Provide the following revisions to this map set:

a. Differentiate between installation methods (i.e. directional bore and trench).

b. Add labels and outline (including associated permanent access roads) for the 5 new mainline block valves, and provide each site an identifying name/number.

c. Add a label for the existing Ino station.

d. Add call-out boxes for the steep slope areas.

e. There appear to be some missing labels for waterways between Mileposts 39.4 and 39.2.

f. There are a few areas where it appears to be a single waterway intersection with the project, but multiple labels are shown (sasv001p and sasv007i on page 23, and sasa071p on page 21). If these are multiple crossings of the same waterway, please revise the labels (and corresponding waterway tables) to provide a different unique ID for account for each crossing.

g. There appear to be some missing labels for wetlands. Per WRAPP Supplemental Information Attachment F (wetland crossing table), the table shows 2 coniferous swamp wetlands (wasv019f2 and wasv019f1), but only f2 was found in the map.

Data Request Question #1 Responses

a. Enbridge has revised Attachment B of the Application Supplemental Information to differentiate the segments of the pipeline that are proposed to be installed using conventional installation methods and those segments proposed to be installed using the horizontal directional drill (HDD) method.

b. Enbridge has revised Attachment B of the Application Supplemental Information to include: labels and outlines for the five new mainline block valves; unique identifying labels; and labels for the associated permanent access roads to each mainline block valve. Enbridge continues to evaluate the location of mainline block valve sites and associated access roads to minimize resource impacts where practicable. Enbridge will provide the Wisconsin Department of Natural Resources (WDNR) with updated location information should a proposed mainline block valve location change.

c. Enbridge has revised Attachments A and B, the overview maps (Figure 2.0-1 in the Application Supplemental Materials, and Figure 1.1-1 in the Environmental Impact Report [EIR] to include the Ino Station location)

d. Enbridge has developed a separate set of maps showing the location of steep slope areas (greater than 20 percent slopes). To facilitate cross-referencing, Enbridge has produced these maps at the same scale as the maps included in Attachment B of the Application Supplemental Information. The steep slope maps have been incorporated as Attachment G-1 into the EIR.

e. Enbridge has revised Attachment B of the Application Supplemental Information to include the missing labels.

f. Enbridge has confirmed that the features with multiple labels are the same waterbody. Two labels were included in the applicable figures to label the waterbody segments split by an existing road/culvert. Enbridge has revised the figures to only include one label where a feature is bisected by an existing culvert.

g. Enbridge has revised Attachment B of the Application Supplemental Information to include the missing labels.

Data Request Question #2

WRAPP Supplemental Information Attachment D (Waterbody Crossing Table) – Provide the following edits to this and the corresponding waterbody crossing table in the Environmental Impact Report (EIR) Attachment H. The revised table should also be provided as an Excel version:

a. Revise the Location column for the waterways within the pipe yards and access roads to note which specific pipe yard (east or west) and access road. Add another column to note other regulated activities occurring, such as driving on the bed, bore tracking cable, placement of riprap, stream relocation, etc.). If any of these other regulated activities would be done for all waterways, add a footnote to the table to note that.

b. For the waterways where a navigability determination is requested, add the proposed crossing method and bridge type that would be used, until the navigability determination has been conducted by DNR.

c. Features sasa069i (2 rows in the table) and sird009p have crossing widths significantly greater than their water widths, please clarify. If this because they are waterways that meander within the ROW, creating several intersections of the same waterway, clarify with a footnote.

d. Per the WRAPP Supplemental Information Attachment B (Delineated Wetlands and Waterbodies map), page 1 of 47, feature WDH-01 is shown within workspace assumed to be for a new valve location (permanent structure). The table however lists WDH-01 as being located within the construction ROW and only lists an impact of a timber mat bridge. Clarify if the map or the table is correct and revise accordingly.

e. Several waterways meander in and out of the ROW (including off-ROW access roads). To ensure each intersection of each meander is accounted for and each meander location can easily be identified, make the following edits (note edits may also be required to corresponding maps):

    i. Feature WDH-102 appears to have 2 (possibly 3) meanders that intersect the pipeline centerline, but the table only includes 1 row for this feature. Add a row for each meander intersection and provide each row its own unique ID (i.e. WDH-102a, WDH-102b, etc.).

    ii. Feature WDH-26 appears to have 3 meanders that intersect the pipeline centerline, but the table only includes 2 rows for this feature. Add a row for the third meander intersection and provide each row its own unique ID.

    iii. Feature sasa069i appears to have 4 meanders that intersect the pipeline centerline, but the table only includes 2 rows for this feature. Add a row for the third and fourth meander intersections and provide each row its own unique ID.

    iv. Feature sird009p appears to have 3 meanders that intersect the pipeline centerline, but the table only includes 1 row for this feature. Add a row for the

second and third meander intersections and provide each row its own unique ID.

v. Edit the 2 rows for feature WDH-10 to provide each row its own unique ID (i.e. WDH-10a, WDH-10b).

vi. Edit the 2 rows for feature WDH-13 to provide each row its own unique ID.

vii. Edit the 3 rows for feature WDH-27 to provide each row its own unique ID.

viii. Edit the 2 rows for feature WDH-107 to provide each row its own unique ID.

ix. Edit the 2 rows for feature sase005p to provide each row its own unique ID.

x. Edit the 3 rows for feature sasw011 to provide each row its own unique ID.

xi. Edit the 2 rows for feature sird010e to provide each row its own unique ID.

Data Request Question #2 Responses

a. Enbridge has revised Attachment D of the Application Supplemental Information to differentiate between the respective Project components (yards, access roads, pipeline right-of-way) and modifications to footnotes have been included. This revised table is provided in Excel file format. This revised table also replaces Attachment H of the Environmental Impact Report.

b. Enbridge has revised Attachment D of the Application Supplemental Information to include the proposed crossing method for those waterbodies where a navigability determination has been requested.

c. Enbridge has revised Attachment D of the Application Supplemental Information to include a footnote explaining why the "Crossing widths" listed in Attachment D may be greater than the waterbody "OHWM widths" which are also reported in the same table.

d. Enbridge's preliminary footprint for the new valve location intersects a WDH waterbody (WDH-01). Enbridge has not yet completed field surveys at this site to verify the location of WDH-01. Should field delineations verify the location of the waterbody within the proposed valve footprint, Enbridge will either modify the valve station footprint to avoid impacts to the waterbody or modify the location of the valve site. Enbridge will provide additional site details following completion of 2020 field surveys. Enbridge does not propose to relocate waterbody WDH-01.

e. Please see responses below:

i. Enbridge has revised Attachment D of the Application Supplemental Information and maps included in Attachment B accordingly.

ii. Enbridge has revised Attachment D of the Application Supplemental Information and maps included in Attachment B accordingly.

iii. Enbridge has revised Attachment D of the Application Supplemental Information and maps included in Attachment B accordingly.

iv. Enbridge has revised Attachment D of the Application Supplemental Information and maps included in Attachment B accordingly.

v. Enbridge has revised Attachment D of the Application Supplemental Information and maps included in Attachment B accordingly.

vi. Enbridge has revised Attachment D of the Application Supplemental Information and maps included in Attachment B accordingly.

vii. Enbridge has revised Attachment D of the Application Supplemental

Information and maps included in Attachment B accordingly.

viii. Enbridge has revised Attachment D of the Application Supplemental Information and maps included in Attachment B accordingly.

ix. Enbridge has revised Attachment D of the Application Supplemental Information and maps included in Attachment B accordingly.

x. Enbridge has revised Attachment D of the Application Supplemental Information and maps included in Attachment B accordingly.

xi. Enbridge has revised Attachment D of the Application Supplemental Information and maps included in Attachment B accordingly.

Data Request Question #3

WRAPP Supplemental Information Attachment F (Wetland Crossing Table) – Provide the following edits to this and the corresponding wetland crossing table in the Environmental Impact Report (EIR) Attachment H. The revised table should also be provided as an Excel version:

a. Combine tables F1 and F2 into 1 table and revise the table title to "Field Delineation and Desktop Mapped Wetlands Crossed or Affected by the Project Facilities".

b. Remove the wetland impacts – operation column.

c. Revise the Project Component Name column for the wetlands within the pipe yards to note which specific pipe yard (east or west).

d. The installation method is not noted. If some wetlands will be switched to directional bore installation, add a column to show the installation type (trench or bore). If no wetlands will be directionally bored, add a note to indicate all wetlands within the pipeline centerline will be trenched.

e. Columns "wetland impacts – construction" and "permanent/conversion impacts" do not provide the wetland impacts in enough detail. Revise the table to clearly note impact from each construction activity: construction matting, trenching, bore pits, grading outside of the trench line, temporary clearing, permanent clearing, and permanent fill.

Data Request Question #3 Responses

a. Enbridge has revised Attachment F of the Application Supplemental Information to combine the wetland crossing tables. This revised table is provided in Excel file format. This revised table also replaces Attachment H of the Environmental Impact Report.

b. Enbridge has revised Attachment F of the Application Supplemental Information to remove the wetland impacts – operation column.

c. Enbridge has revised Attachment F of the Application Supplemental Information and maps included in Attachment B to differentiate wetlands within the proposed pipe yards.

d. Enbridge has revised Attachment F of the Application Supplemental Information to differentiate proposed pipeline installation methods.

e. As discussed in a conference call on March 12, 2020, due to the nature of linear construction, activities will occur within the proposed temporary construction workspace and will transition through the respective construction activities such as clearing, grading, trenching, and restoration. A wetland specific figure has been enclosed that illustrates the breakdown of how the construction workspace is used. Table H1/H2 has been revised to indicate proposed temporary and permanent impacts in each wetland.

Data Request Question #4

WRAPP Supplemental Information Attachment K (Landowners and Adjacent Landowners List) - Confirm if the street address for each landowner would be the same as the mailing address. If not, add a column for the mailing address.

Data Request Question #4 Response

Enbridge has confirmed that the information provided in Attachment K of the Application Supplemental Information is the respective landowner mailing addresses.

Data Request Question #5

Wetland Practicable Alternatives Analysis (PAA) – Create a dedicated Wetland PAA section to pull together the areas within several different narratives that discuss route siting and wetland impact minimization techniques. In this section, also provide additional discussion on the following:

a. Will frozen ground conditions be utilized to minimize wetland impact? If so, will frozen ground conditions be utilized in conjunction or in-lieu of construction matting?

b. How wetland trench widths were minimized (i.e. use of trench boxes, etc.).

c. Why no wetlands are proposed to be installed across via directional bore?

d. Can the directional bores planned at road and railroad crossings be extended to bore across adjacent wetlands?

e. Can the alternate temporary workspaces be reduced to minimize temporary fill and conversion?

f. Why permanent fill at new valve sites and permanent access roads cannot be avoided, and if cannot be avoided, how the permanent fill was minimized and will not impede wetland hydrology in the remaining wetland complex.

Data Request Question #5 Responses

a. Timing of construction will be dependent on receipt of all applicable permits and approvals. Enbridge anticipates construction starting during frozen conditions, but expects construction activities to continue into the summer. Matting will typically be used in most circumstances due to duration of construction and changing ground conditions. If frozen ground is present at the time of construction, Enbridge will evaluate the need for temporary construction matting, in conjunction with frozen ground conditions based on site conditions at the time of construction. Enbridge has also developed a reference table for wetland and waterbody impact mitigation measures as discussed in the EIR and the EPP (see below).

Line 5 Wisconsin Segment Relocation Project Wisconsin DNR Data Request Wetland/Waterbody Impact Mitigation Measure Reference Table	
Wetland/Waterbody Impact Mitigation Measure	**Reference**
Additional Temporary Workspace (ATWS) wetland/waterbody setbacks	EPP, Section 2.0; EIR, Section 4.5
Stump removal procedures in wetlands	EPP, Section 7.3
20-foot buffer adjacent to waterbodies during initial clearing	EPP, Section 7.4
Grading limited to trench in wetlands	EPP, Section 7.5
Tracking pad installation procedures in wetlands to minimize temporary impacts	EPP, Section 8.1
Temporary erosion control device installation adjacent to wetlands/waterbodies	EPP, Section 8.2; EIR Section 4.4
Trench-line only topsoil segregation in wetlands	EPP, Section 9.1; EIR, Section 4.2.2
Trench backfilling procedures in wetlands	EPP, Section 14.0; EIR Section 4.3.10
Wetland re-seeding	EPP, Section 21.6; EIR, Section 4.6.1
Streambank restoration	EPP, Section 21.7; EIR, Section 4.5.2
Stream and River Crossing General Requirements	EPP, Section 23.0; EIR, Section 4.5; EIR, Section 6.5.3.1
Wetland Crossing General Requirements	EPP, Section 24.0; EIR, Section 4.6
Wetland/Waterbody setback requirements for re-fueling operations, fuel storage, and maintenance activities	EPP, Section 26.9.3
Spill control in wetlands and waterbodies	EPP, Section 29.10
Alternative analysis	EIR, Section 3.0

b. The width of the trench in wetlands is dependent on several factors including depth of the trench, soil type, and soil saturation. The bottom width of the trench will be sufficient to accommodate the pipeline. The width at the top of the trench will vary to allow the sides of the trench to be adapted to local conditions at the time of construction and to safely allow personnel into the trench where necessary. Enbridge will minimize the width of the trench through wetlands by minimizing the length of time the excavated ditch is open to reduce the potential for slumping and/or ditch cave-ins. Trench boxes may be used in limited site-specific conditions, such as at road bores, to minimize the potential for trench wall collapse. The use of trench boxes will be determined on a site-specific basis based on field conditions at the time of construction. The use of trench boxes for mainline pipeline installation, outside of the site-specific areas mentioned above, is not practicable and would likely not reduce wetland disturbance due to the additional trench width necessary to install trench boxes and additional disturbance duration required to install the pipeline through the trench boxes.

c. Enbridge has attempted to minimize wetland disturbance within riparian areas of waterbodies proposed to be crossed using the HDD method by extending the HDD, where feasible based on site conditions, to include riparian wetlands. Those wetlands are identified in the updated Attachment F. While HDDs reduce the potential impacts to wetlands associated with excavation, they require significantly larger workspace, which could increase impacts to other adjacent sensitive resource areas.

d. Conventional boring is typically limited to an installation distance of approximately 300 feet, depending on site factors including soils and topography. Enbridge has endeavored to extend bores to the extent practicable.

e. Enbridge reviewed additional temporary workspace (ATWS) size and locations needed to safely accommodate pipeline construction and provide necessary workspace in locations to complete site-specific activities (e.g., road crossings, wetland/waterbody crossings, HDDs). Where practicable, Enbridge has minimized resource impacts due to ATWS prior to submittal of the application. Further reduction of ATWS is not anticipated.

f. Permanent wetland fill is currently anticipated at only one valve site, RSV2. Permanent wetland fill will be required to establish an access road from Hegstrom Road into the valve site. The access road will cross wetland wasa039e. Based on field delineation, this is a roadside ditch wetland dominated by reed canary grass. Enbridge will install a culvert underneath the access road to maintain wetland hydrology. Additionally, the valve site will require 0.02 acre of permanent wetland fill (wasa040e). Based on field delineation, this is a swale feature dominated by reed canary grass that meanders through a hay field. Enbridge does not anticipate that the remaining 0.02 acre wetland fill at the edge of wetland wasa040e will impact hydrology of the remaining wetland complex. Enbridge's preliminary footprint for the valve RSV5 intersects PFO wetland (wird028f). Enbridge will either modify the valve station footprint to avoid impacts to the wetland or modify the location of the valve site. The wetland impacts have been included in the updated wetland table, Attachment F, and in table 6.4.2-1 of the EIR.

Data Request Question #6

Permanent wetland fill – The amount and location of permanent wetland fill is unclear:

a. WRAPP Supplemental Information Section 5.2 page 14 states "The Project will require permanent fill of less than 0.1 acre of PEM wetland associated with the installation of two mainline block valves near MP 33.09 and MP 2.53." However, EIR Section 6.4.2.1 page 101 states "The Project will require permanent fill of less than 0.1 acre of PEM wetland associated with the installation of one mainline block valve near MP 2.53". Clarify which is correct. Also include the amount of permanent wetland fill in square feet. Enbridge has verified that the EIR is correct, permanent fill of less than 0.1 acre (911.2 square feet) of PEM wetland associated with mainline block valve RSV2 near MP 2.53 will occur, as discussed in data request response 5.f above.

b. WRAPP Supplemental Information Attachment F (Wetland Crossing Table), under the permanent access roads row header, lists 2 wetlands (wasa039e and wasa040e) as impacted by access road RSV2. These wetlands correspond to page 5 of 47 in the WRAPP Supplemental Information Attachment B (Delineated Wetlands and Waterbodies map), but there is not a label near the wetlands for access road RSV2. Per the map, it's also unclear if this permanent access road is associated with a new valve location or not.

Data Request Question #6 Responses

a. Please see description of wetland impacts associated with mainline block valve RSV5 in response 5f.

b. The access road for RSV2 is within the construction workspace and runs north-south, connecting to Hegstrom Road. The wetlands are labeled on page 6 of Attachment B. The RSV2 workspace has been labeled in the new map set.

Data Request Question #7

EIR – The document's page numbers are no longer present past page 113 (end of Section 6.6.0), please revise.

Data Request Question #7 Response

Enbridge has provided an updated EIR that includes page numbers past page 113.

Data Request Question #8

EIR Section 4.3, page 36 – This section states "In the typical pipeline construction scenario, each construction crew will proceed along the pipeline right-of-way in one continuous operation from staking to backfilling and final grading. The process will be coordinated to minimize the total time an individual tract of land is disturbed to the extent practicable." Provide additional details regarding the construction sequencing in order to ensure resource impacts are minimized.

Data Request Question #8 Response

Total impacts can be minimized by performing construction in as linear a fashion as possible (each crew moving in sequence/phase as described per comments above) only deviating where necessary (such as to complete HDD segments or difficult terrain such as higher rock concentrations), minimizing the total time to construct and total duration of disturbance. As discussed in Section 4.3 of the EIR, construction involves a series of discrete activities typically conducted in a linear sequence, similar to an assembly line process. The process, as described in Section 4.3 includes clearing, grading, pipe stringing, bending/welding, trenching, lowering-in, backfilling, and cleanup-restoration. Each construction crew proceeds along the pipeline right-of-way in one continuous operation from staking to backfilling and final grading. Specialty crews will be used to install select areas including horizontal directional drills, road crossings, and railroad crossings. Each construction process is coordinated to minimize the total time an individual tract of land is disturbed to the extent practicable. As discussed in Section 15.0 of Enbridge's Environmental Protection Plan (EPP) clean-up will begin within 72 hours after backfilling the trench. Final grading, topsoil replacement, seeding, and installation of permanent erosion controls structures will be completed within 20 days after backfilling the trench. If these timeframes cannot be met based on site conditions (e.g. frozen ground conditions), temporary erosion and sediment controls will be installed and maintained until conditions allow completion of cleanup. Enbridge will install and maintain temporary erosion controls to protect sensitive resource areas until areas have been revegetated. Enbridge will remove temporary bridges and wetland matting as soon as practicable after access for construction in no longer required. This is typically completed as part of the final cleanup phase. Figure 4.3-1 from the EIR illustrates the pipeline construction sequencing, and has been included here for reference.

Data Request Question #9

EIR Section 4.3.2, page 36 – This section states "An environmental crew will also work in conjunction with the clearing crew to install erosion and sediment control devices following vegetation removal and prior to grubbing and grading activities." Considering factors such as the time of year the clearing will take place, type of clearing, type of vehicles, rutting potential, proximity to wetlands and waterways, slope steepness, and erosion potential, confirm erosion and sediment control devices would also be implemented prior to conducting clearing activities if there is potential for erosion and sediment discharge during or as a result of clearing activities.

Data Request Question #9 Response

As discussed in Section 3.0 of the EPP, Enbridge will post signs identifying the boundaries of sensitive resource areas, waterbodies, wetlands, or areas with special requirements. Enbridge will employ a team of Environmental Inspectors during construction who will be working with the construction crews to evaluate site conditions and the installation of resource protection measures, including during clearing activities. The Environmental Inspectors will have the authority to require the installation of erosion control measures prior to clearing where there is a higher risk of potential resource impact due to erosion and sediment discharge as a result of clearing activities.

Data Request Question #10

EIR Section 4.3.2, page 38 – This section appears to discuss grading and topsoil segregation activities within the right-of-way outside of the trench line, and states "The Contractor will segregate topsoil in croplands, hay fields, pastures, residential area, unsaturated wetlands…". Section 7.5 of the Environmental Protection Plan (EPP) states "Grading activities will be confined to the area of the trench". Clarify the following:

a. Where grading and topsoil segregation activities would occur in wetlands, either just within the trench or outside of the trench line as well. Also discuss if this activity would differ in wetlands actively row-cropped/hayed/pasture or for wetlands not actively cropped but surrounded by row cropped fields.

b. For wetlands where grading is confined to just the trench line, clarify this also means topsoil will be segregated from subsoil when trenching. If any wetlands wouldn't have soils segregated in the trench line (such as inundated wetlands, forested wetlands, etc.), clarify that as well.

Data Request Question #10 Responses

a. In unsaturated wetlands, topsoil segregation will occur in the trench-line only, as described in the EPP section 9.1 and as shown in figure 2 of the EPP. As described in section 7.5 of the EPP, grading would not occur outside of the trench line in wetlands unless required for safe operation of equipment, which will be determined based on conditions in the field at the time of construction. Topsoil segregation and grading would be the same for wetlands in actively row-cropped/hayed/pasture or for wetlands not actively cropped but surrounded by row cropped fields, unless the landowner requests a modification.

b. Topsoil segregation would occur in unsaturated wetlands only, regardless of wetland type (see above response to 10.a). It is not practicable to segregate topsoil in saturated wetlands.

Data Request Question #10

EIR Section 4.5, page 44 – State the anticipated width of the trench within waterways. If the width at the bottom of the trench would differ from the width at the top of the trench, indicate that as well.

Data Request Question #10 Response

Similar to the trench width through wetlands (see response to question 5.b), the width of the trench is dependent on several factors including depth of the trench, soil type, and soil saturation. Enbridge estimates that the width at the bottom of the trench would be a minimum of 42 inches up to approximately 72 inches. The width at the top of the trench would be a function of depth vs soil stability at that specific location, but may be approximately 15 to 20 feet in width. Enbridge will

minimize the width of the trench through waterbodies by minimizing the length of time the excavated ditch is open to reduce the potential for slumping and/or ditch cave-ins.

Data Request Question #11

EIR Section 4.5, page 44 – This section states "Enbridge proposes to use typical open cut (wet trench) construction techniques to cross waterbodies if no flow is present at the time of the crossing." However, the text written under the Applicability column for the wet trench method in Table 4.5-2 on page 47 seems contradictory, where it lists waterway types/regimes that can have perennial flow present. Clarify which statements are correct for waterways that would be wet trenched.

Data Request Question #11 Response

As stated in Table 4.5-2 in the EIR, the typical open cut (wet trench) crossing technique is a waterbody crossing technique that can be used to install pipelines across perennial waterbodies where associated permits have been acquired from applicable agencies with regulatory authority. However, Enbridge does not propose to use the open cut (wet trench) technique to cross perennial waterbodies as part of the Line 5 Wisconsin Relocation Project. Enbridge has revised Attachment D, Waterbody Crossing Table, to clarify the proposed crossing method of each waterbody.

Data Request Question #12

EIR Section 4.5, page 46 – Table 4.5-1 notes typical span type bridges may cause interference on navigable waterways. Confirm bridges will comply with the requirements in NR 320.04(3), Wis. Admin. Code, if a 5-foot clearance is not maintained.

Data Request Question #12 Response

Enbridge intends to comply with the requirements in NR 320.04(3), Wis. Admin. Code. Enbridge will work with the WDNR to establish reasonable portage or alternative access, if less than 5 feet of navigation clearance is proposed.

Data Request Question #13

EIR Section 4.5, page 46 – Table 4.5-1 notes typical span type bridges may require a cap. Explain what a cap is, and why utilizing a cap may cause sediment release.

Data Request Question #13 Response

The term "cap" refers to bridge decking installed over the primary bridge span supports. This decking is intended to provide a safe surface for construction equipment and personnel, and cover any gaps that may exist between bridging materials that could allow soil that may fall off equipment traveling across the bridge to enter the waterbody. Decking may consist of heavy plywood or comparable materials. If the decking is inadvertently dislodged, sediment could fall into the waterbody. To prevent this, Enbridge often utilizes sideboards with a poly underlayment between mat decking layers that is then wrapped up and around the sideboards to capture sediment that may be fall onto the decking during construction. This technique is often referred to as a diaper or cap.

Data Request Question #14

EIR Section 4.6, page 53 – State the anticipated width of the trench within wetland. If the width at the bottom of the trench would differ from the width at the top of the trench, indicate that as well.

Data Request Question #14 Response

Similar to the trench width through waterbodies (see response to question 11), the width of the trench in wetlands is dependent on several factors including depth of the trench, soil type, and soil saturation. Enbridge estimates that the width at the bottom of the trench would be a minimum of 42 inches up to approximately 72 inches. The width at the top of the trench would be a function of depth vs soil stability at that specific location, but may be approximately 15 feet in width. Enbridge will minimize the width of the trench through wetlands by minimizing the length of time the excavated ditch is open to reduce the potential for slumping and/or ditch cave-ins. Please also see response to question 5.b above.

Data Request Question #15

EIR Section 4.6, page 53 – Provide the following:

a. Clarify the type of material that would be considered "hydro-axe debris".

b. Confirm if left in wetland, hydro-axe debris:

   i. will also not alter surface elevations and will not obstruct water flow, in addition to not restricting revegetation growth.

   ii. State how wetlands will be monitored to ensure revegetation, surface elevations, and water flow is not impacted.

   iii. If revegetation growth becomes impeded, surface elevations become altered, and/or water flow becomes obstructed, state how the impacts would be addressed and corrected.

c. State if clearing activities will be conducted in certain times of year to minimize impacts to wetlands and other sensitive resources.

Data Request Question #15 Responses

a. As part of the clearing process, Enbridge will cut vegetation and trees within wetlands at ground level leaving existing root systems intact. Large clearing debris will generally be removed from the wetland for disposal. Hydro-axe debris, or similar (material that is less than 1.5-inch diameter and/or 12 inches in length) can be left in the wetland if spread evenly in the construction workspace to a depth that will allow for normal revegetation (less than 2-inch thickness), as determined by the Environmental Inspector (EI).

b. Please see responses below:

   i. Please see response to data request question 16.a.

   ii. Enbridge will monitor wetlands impacted by construction in accordance with U.S. Army Corps of Engineers (USACE) and WDNR monitoring requirement yet to be defined for the Project. Enbridge will continue to consult with the WDNR and USACE regarding post-construction wetland monitoring requirements.

   iii. Enbridge will continue to consult with the WDNR and USACE regarding post-construction wetland monitoring requirements.

c. Enbridge would restrict clearing activities during select times of the year and in select locations to minimize the potential impact to protected species. Enbridge is working with WDNR to determine potential impacts and mitigation measures for state listed species, which may include timing restrictions on clearing activities. Those measures will be finalized upon completion of consultation and 2020 surveys. In addition,

Enbridge will implement no-activity restrictions as outlined in the Bald Eagle Management Guidelines, which may include clearing restrictions, for any active bald eagle nests identified during 2020 surveys. Also, see the response to data request 5.a. regarding wetland work in frozen conditions.

Data Request Question #16

EIR Section 4.6, page 53 – Regarding access in wetland:

a. Clarify when matting in would be placed (before which specific construction activity).

b. State the anticipated duration for matting in wetlands.

Data Request Question #16 Responses

a. Enbridge will conduct clearing activities using low ground-pressure equipment or operating off temporary construction mats. Temporary construction matting in wetlands will typically be installed following vegetation removal. In forested wetlands, mats will be installed following tree felling. Mat travel lanes are typically a single layer; however, there may be cases in saturated areas where more than one layer of mats must be placed to provide a stable working surface. If there are multiple layers of mats, Enbridge will probe the soil after mats have been removed to verify that no additional mats remain.

b. As stated above, temporary construction matting is typically installed during or immediately following clearing activities and remains in place until access through the wetland is no longer required for construction activities. Mats will typically be removed as part of the final restoration and clean-up phase of the Project. Temporary construction matting may remain in place in any specific wetland from weeks to months, depending on the location and the activities that are occurring in or near the specific wetland. Enbridge will restore these areas according to the EPP.

Data Request Question #17

EIR Section 4.6.1, page 54 – This section states "After backfilling the trench with subsoil, the Contractor will spread the previously segregated topsoil over the trench area and mound no more than 6 inches…". However, Section 14.0 of the EPP states mounding will be no more than 12 inches. Clarify which mounding measurement is correct, and if the mounding measurement would be modified per site specific conditions (i.e. soil type, time of year backfill occurs, etc.) or land type (i.e. wetlands, waterways, uplands, etc.).

Data Request Question #17 Response

The depth of mounding would be dependent on site specific conditions such as soil type, soil saturation, and time of year, but would be no more than 12 inches. The text in section 4.6.1 of the EIR was a typo and has been corrected.

Data Request Question #18

EIR Section 6.4.2, page 100 – Provide the results of the 2020 growing season wetland delineation survey, once completed.

Data Request Question #18 Response

Enbridge will submit an addendum wetland delineation report for areas surveyed in 2020 upon completion of field surveys.

Data Request Question #19

EIR Section 6.5.3.1, page 107 - Add discussion regarding feature WDH-01, which is shown on the WRAPP Supplemental Information Attachment B (Delineated Wetlands and Waterbodies map), page 1 of 47, as being within workspace assumed to be for a new valve location (permanent structure). If this indeed is a new valve location, describe if the valve station would be relocated or the footprint modified to avoid impacting this waterway (if determined to be a navigable waterway). As discussed in data request question 2.d.

Data Request Question #19 Response

Enbridge's preliminary footprint for the new valve location intersects a WDH waterbody (WDH-01). Enbridge has not yet completed field surveys at this location to verify the location of WDH-01. Should field delineations verify the location of the waterbody within the proposed valve location, Enbridge will either modify the valve station footprint to avoid impacts to the waterbody or modify the location of the valve site. Enbridge will provide additional site details following completion of 2020 field surveys. Enbridge does not propose to relocate WDH-01.

Data Request Question #20

EIR Section 6.5.3.1 page 108 – The timing restriction listed for "all other waterbodies" is incorrect. The correct restriction period is March 1 to June 15, please revise.

Data Request Question #20 Response

Enbridge included the restriction dates of April 1 through June 1 based on Wisconsin Code NR 345.04 for Dredging. However, based on new information provided by WDNR, the timing restrictions dates have been updated. Section 6.5.3.1 of the EIR has been updated to reflect the recommended timing restriction of March 1 through June 15 for all non-trout waterbodies.

Data Request Question #21

EIR Section 6.5.4.2, pages 110-111 – When describing rare species locations, location information can only be provided on a township or higher level when providing the specific species name. There are several instances where a specific species name is provided and is associated with a specific Milepost location. As Mileposts are shown on the project maps, the language in this section needs to be revised to protect confidentiality of rare species data.

Data Request Question #21 Response

Section 6.5.4.2 of the EIR has been updated to identify species locations to the township level only.

Data Request Question #22

EIR Section 6.8.4 – Provide the results of the additional archaeological surveys to be completed in 2020, once completed.

Data Request Question #22 Response

Enbridge will submit an addendum archaeological survey report for areas surveyed in 2020 upon completion of field surveys.

Data Request Question #23

EIR Attachment C (Route Alternative Maps) – Revise this map to add parcel boundaries and landowner names. The map scale may need to be modified to show parcel data clearly.

Data Request Question #23 Response

Enbridge has revised maps included in Attachment C of the EIR to show parcel data information. This ownership information was acquired from public data sources and has not been verified through County land record searches.

Data Request Question #24

EIR Attachment D (Environmental Protection Plan) Sections 23.3.2 and 23.3.3 - Provide details on how dry trenching across wide waterways (such as sasc039i, sase022p, and sirb012p) would be accomplished (i.e. staged cofferdam systems, working during low flow conditions, etc

Data Request Question #24 Response

As described in Section 23.3 of the EPP, Enbridge would construct temporary dams using sandbags, inflatable dams, aqua-dams, sheet piling, and/or steel plates both upstream and downstream of the proposed trenchline to isolate the work area from the stream flow. The dams will extend across the entire streambed and will be built to a height to withstand the highest water levels anticipated at the time of construction. Water will either be pumped around the isolated work zone or will be directed into flume pipes extending through the temporary dams and across the isolated area to maintain downstream flow throughout the construction process. Enbridge does not propose to cross any waterbodies using a cofferdam system as this method introduces higher safety risks with having personnel in an open excavation within the streambed to complete tie-in welds. Enbridge will attempt to cross larger waterbodies proposed as a dry crossing technique under either normal or low flow conditions. Enbridge will delay initiating a crossing under high flow conditions. Enbridge proposes to cross smaller intermittent waterbodies with flowing water at the time of construction using similar methods as those described above.

Data Request Question #25

EIR Attachment E (Blasting Plan) – Provide the following:

a. State if any wetlands are anticipated to require blasting, given the information known at this time.

b. Understanding that a more specific Blasting Plan will be developed by the Contractor, are there any requirements Enbridge would consider necessary for the Contractor's Plan in regard to minimizing impacts to wetlands and waterways?

c. Clarify if local approvals would be required for this activity per local ordinances.

Data Request Question #25 Responses

a. Based on publicly available soils and geology information, Enbridge anticipates the need to conduct blasting in wetlands with shallow depth to bedrock**.**

b. Blasting mats may be utilized when appropriate, specific considerations such as this will be included in the project-specific blasting plan developed by the Contractor.

c. Enbridge has not identified any local ordinances specific to blasting. Enbridge will be working with the respective local agencies regarding compliance with construction noise ordinances.