Wetland Bank Easement Survey & Signage Requirements

A legal boundary survey is required as a part of every wetland bank perpetual conservation easement (Easement) that is conveyed to the State of Minnesota. The owner of the wetland bank property, their consultant, or other representative (Landowner) must work with the Minnesota Board of Water and Soil Resources (BWSR) to develop the Easement boundary. The Landowner must secure the services of a professional land surveyor (Surveyor) licensed and registered in the State of Minnesota to complete the boundary survey in accordance with the requirements described herein. The Landowner is responsible for providing these requirements to the Surveyor prior to commencing boundary survey field work.

The Easement legal boundary should not be surveyed until after the project's Wetland Mitigation Plan has been approved, unless otherwise advised by BWSR. Questions on survey and signage requirements should be directed toward the BWSR Easement Acquisition Specialist assigned to the easement. If unsure who that is, contact the <u>BWSR Wetland Specialist</u> for your area.

1. Summary of Survey Requirements

The Surveyor shall:

BWSR

- 1. Conduct a boundary survey of the Easement parcel(s)
- 2. Prepare a Certificate of Survey (Survey) and legal description
- 3. Provide the State with a GIS shapefile or CAD file of the surveyed Easement boundary
- 4. Monument and post the Easement boundary

The work and work product of the Surveyor must be in accordance with accepted professional land surveying standards of practice, relevant state statutes and administrative rules, and any applicable local ordinances. When required, and in consultation with other project partners, the Surveyor may need to establish an ingress/egress easement route and include this on the Certificate of Survey and legal description for the Easement.

2. Pre-Survey Communication & Research of Records

Prior to commencing the boundary survey, the Landowner and/or Surveyor must contact the BWSR Easement Acquisition Specialist to discuss and confirm the intended location of the Easement boundary and ingress/egress route. The easement boundary and ingress/egress locations must correlate with the approved Wetland Mitigation Plan unless otherwise advised by BWSR.

Prior to completing fieldwork, the Surveyor must gather existing information from available sources as needed to confirm property boundaries, road rights-of-way, and current ownership of the proposed Easement area and ingress/egress route location.

3. Identifying the Ingress/Egress Route

The Survey must identify how the Easement parcel(s) will be accessed from a public road right-of-way. If the Easement boundary abuts a public road and there is direct vehicular access between the Easement and the public road, then no separate ingress/egress route is needed. The Survey needs only to identify the area of abutment.

If the Easement does not have direct vehicular access to a public road, an Ingress/ Egress Easement between the Easement boundary and a public road must be identified and shown on the Survey. The ingress/egress easement shall be no less than 20 feet in width unless otherwise specified by the State.

If ingress/egress is by an existing recorded access easement, the Survey shall identify such existing easement by its recording information, shall show its location on the map, and include it in the Legal Description. The State must review the language of the existing recorded access easement to confirm that it will allow for perpetual non-exclusive use by BWSR and other applicable regulatory agencies.

In the case of a project that involves multiple adjacent Easements being established concurrently, access may be established jointly between and among the different Easement parcels.

4. Easement Boundary Survey Field Work

The Surveyor must locate the easement boundary angle points and record the description using bearings and distances as referenced to the National Spatial Reference System. The Easement boundary survey must be a complete traverse of the area and must be tied to a corner of a Public Land Survey (PLS) or a corner of a recorded property.

During field work, the Surveyor shall communicate with BWSR and the Landowner in the event of ownership or boundary issues or conflicts associated with the planned Easement, whether created by evidence of occupation, a recorded document, or otherwise. Additionally, the Surveyor shall:

- Perform the easement boundary survey in the appropriate county coordinate system.
- Identify potential encroachments or overlaps and report them with detailed measurements and descriptions. See <u>Appendix A</u> for potential methods to address common boundary issues.
- Delineate the edge of lakes or streams when used as a boundary of the Conservation Easement.
- Install permanent monuments at every corner of the Easement boundary. Monuments may be placed during the initial site visit or later depending on the current and planned land use. See <u>Section 7</u> for additional survey monument specifications and requirements.
- Install signposts and easement boundary signs at every corner/monument and every 500 feet along a straight boundary line. See <u>Section 8</u> for additional signage specifications and requirements. Depending on the landowner's preference, installation of the Easement boundary signs is not *required* until after the easement has been recorded.

5. Draft Certificate of Survey & Boundary

The Surveyor shall prepare and submit a draft Certificate of Survey to the BWSR Easement Acquisition Specialist in accordance with the below format specifications. BWSR will review the draft, provide comments as appropriate, and request a final signed version upon approval.

The Surveyor shall also provide BWSR a GIS shapefile or CAD file of the surveyed boundary at this time. GIS shapefiles must be projected in the UTM Zone 15 North (NAD83 meters) coordinate system. If unable to provide a shapefile in this coordinate system, please provide a CAD file of the easement boundary to be converted as needed.

The following items must be shown on the Certificate:

1. Easement ID Number must be shown on the top right corner of all pages of the Certificate (to be provided by BWSR).

- 2. Clearly label the extent of the conservation easement area as "Easement Parcel". If Conservation Easement consists of more than one distinct parcel, label as "Easement Parcel A", "Easement Parcel B", etc. on the Certificate and reference as such in the Legal Description.
- 3. Include surveyed size of Easement Parcel(s) to the nearest tenth (0.1) of an acre or more.
- 4. Locations of monuments found, set, or to be set.
- 5. Road right-of-way lines and names of all adjacent roadways.
- 6. Label all Public Waters that are within or adjacent to the Conservation Easement.
- 7. Label Ingress/Egress Easement (if required) on certificate, show in legal description, and include document recording information.
- 8. Show and label other features as requested by BWSR
- 9. The Surveyor shall determine the appropriate size and format of the Certificate of Survey. It does not need to be a size that is suitable for attaching to and recording with the Easement.

6. Final Certificate of Survey

Upon BWSR's review and approval of the Draft, the Surveyor shall provide BWSR with a Final Certificate of Survey for use in creating the Easement document for recording. The Certificate will be referenced in the easement document as "on file in the office of the Board of Water and Soil Resources". It will not be recorded unless required by a specific County. The Final Certificate must be submitted electronically and be accompanied by the Legal Description in a separate word processing file (i.e. Word document).

7. Permanent Easement Boundary Monuments

The Surveyor shall set permanent monuments at every corner of the Easement boundary. Monuments must be a 5/8-inch outside diameter steel pipe or rod with a minimum length of 24 inches. The pipe or rod shall be set flush with ground and capped as per requirements of state law.

If a boundary corner is submerged, the monuments shall be placed on the boundary according to the figure on the right. The location of the corner shall be mathematically offset and shown on the Certificate of survey as such.

WATER WATER

The timing for setting permanent monuments may depend on the current land use and restoration activities with which permanent monuments may interfere, as follows:

- A. If farming practices, restoration activities, or other land uses are not an issue and will be unaffected by the Easement monuments, then the Surveyor may set the permanent monuments during the initial field survey of the easement boundary, as site conditions warrant.
- B. If farming practices, restoration activities, or other land use activities will continue within the Easement boundary for an extended period and the Easement monuments will affect those activities, then all or portions of the Easement boundary shall be marked with temporary markers until the relevant land use activities have ceased. Such temporary markers shall be of a kind that do not cause damage to farm equipment, livestock, construction equipment, etc. Upon termination or completion of these activities, the Surveyor must return to the site to set any remaining permanent monuments.

8. Permanent Easement Boundary Posts and Signs

The Surveyor shall also set signposts at every monument/corner **and** every 500 feet along a straight Easement boundary, with the following exceptions:

- Signposts are only required at corners along road or railroad rights-of-way
- Signposts are not to be set along easement boundaries that follow a meandering stream or lake edge
- Signposts are not to be set along ingress/egress routes

Signpost Specifications:

Posts shall be steel, "U" channel posts, painted green (ideally), with a minimum length of seventy-eight (72) inches and a minimum weight of 1.12 lbs. per foot, embedded a minimum of 24" in the ground, and oriented such that a sign affixed to the post will be displayed perpendicular to the Easement boundary.

Sign Specifications:

Easement boundary signs must be attached to the top of each signpost. Installation of the signs is not *required* until after the easement has been recorded.

The Surveyor and/or Landowner are responsible for acquiring Easement boundary signs from a sign manufacturer, with such signs conforming to the specifications stated and depicted on the following page:

- <u>Color</u>: white background, no colored border.
- <u>Text</u>: dark blue lettering, centered, Arial font, larger lettering font size 44, smaller lettering font size 28.
- <u>Material</u>: aluminum -- new stock, shall conform to the requirements of ASTM B209 for alloy 5052-H38 or 6061-T6 aluminum.
- <u>Thickness</u>: .063 inches.
- <u>Corner radii</u>: ½ inch.
- <u>Hole size</u>: 3/8 inch pre-drilled holes for field post mounting; center of holes shall be approximately 3 inches apart from each other and 3" from top and bottom edges and centered from the left/right edges.
- <u>Attaching signs</u>: Signs must be attached to each witness post using a galvanized nut and bolt for each predrilled hole in the Easement sign.
- <u>Paint/ink coating system</u>: white background is an exterior grade enamel capable of withstanding 7-10 years of outdoor exposure; blue text layer is either (i) an exterior grade ink applied via the silk screen printing method or (ii) exterior grade premium vinyl lettering with an estimated outdoor field life of 7-10 years. No UV curable inks and no digital printing (i.e., flatbed inkjet printing) shall be used.

CONSERVATION EASEMENT BOUNDARY

Land Protected by Minnesota Board of Water & Soil Resources Wetland Bank Easement

0

Landowner Permission Required to Access

6 inches

9 inches

Appendix A: Addressing Boundary Issues

A.1. Property Line Conflicts/Encroachments

Evidence of possible encroachments of the property being surveyed for an Easement may indicate a disputed or uncertain boundary or potential property ownership conflict. Indications of encroachments include but are not limited to:

- Fence lines, fence posts, signposts, or other physical indications of occupation that conflict with the deeded property's surveyed boundary.
- Evidence of certain land uses, such as cropping that encroach onto or off of the deeded property's surveyed boundary.

In the course of establishing the Easement boundary (<u>Section 4</u>), if the Surveyor finds any evidence of encroachments onto or off of the property being surveyed, such evidence must be brought to the attention of the Landowner and BWSR. The Surveyor must provide sufficient detail regarding such encroachments so that the Landowner may appropriately evaluate the issue and decide whether to pursue possible remedies.

Under <u>no circumstances shall</u> the proposed easement area be located on land that is either (a) not owned by the party granting the Easement or (b) for which there is field evidence that the land may be subject to a conflict regarding its ownership.

A.2. Road Rights-of-Way

Neither the Easement, nor any ingress/egress easement area, shall include any land lying within the right-of-way of any public road. In some cases, existing and/or proposed private roads, drives, access lanes, etc. and their associated rights-of-way will also need to be excluded from the Easement. Questionable situations should be brought to the attention of the Landowner and BWSR for a decision on potential exclusions. When required exclusions for rights-of-way are not already legally established, the Surveyor must consult with the Landowner and determine a suitable right-of-way for said access feature. The survey map and written legal description must clearly reflect that any such road right-of-way area is outside both the Easement area and any ingress/egress easement area.

A.3. Riparian Barriers/Boundaries

Natural or manmade barriers, including but not limited to; ditches, streams, creeks, rivers, or other natural water bodies, will occasionally be used as boundary lines in the Easement's description. When riparian features are being used as a boundary line for the Easement, the following general guidance must be followed when establishing the Easement boundary:

Streams, creeks, rivers, or other natural water bodies - for purposes of defining the Easement boundary, the Surveyor must create a survey line by traversing along the top bank of such stream, creek, river, or other water body. In the absence of a top bank, the Surveyor must traverse along a mark left by wave action at the preceding high water elevation, as determined by simple observation or at the ordinary high water mark established by the Minnesota Department of Natural Resources. In cases where the Surveyor is unable to determine the Easement boundary line, BWSR will be contacted for assistance.

In some instances, corner points for the Easement survey may be submerged. In this event, a mark left on the bank by wave action at the preceding high water, as determined by simple observation, shall be surveyed and the location for the Easement corners shall be mathematically offset from that line.

Drainage ditches - for purposes of defining the Easement boundary, the Surveyor shall first determine, in consultation with the Landowner and BWSR, if any drainage ditches that border or traverse thru the property are intended to be excluded from the Easement. In many cases, drainage ditches along or thru a planned Easement will be left as is and will continue to function and benefit surrounding properties. In such situations, there may be a desire to not include the drainage ditch or its right-of-way for access and maintenance within the Easement due to a conflict of easement rights.

In such situations, the Surveyor must determine the legally established right-of-way for the ditch and use said right-of-way line for the purposes of describing and establishing the Easement boundary. Where no legally established right-of-way exists, the Surveyor must determine a right-of-way using the guidance in the following diagram.

