US Army Corps
of Engineers
St Paul District

Public Notice

SPONSOR: *Wallace Danielson*

ISSUED: 24 September 2020
EXPIRES: 24 October 2020

REFER TO: *MVP-2018-00506-SRK*

SECTION: 404 - Clean Water Act

1. WETLAND COMPENSATORY MITIGATION BANK PROPOSAL

2. SPECIFIC INFORMATION

SPONSOR'S ADDRESS: Wallace Danielson
28200 County Highway 21
Callaway, Minnesota 56521

SPONSOR'S AGENT Mark Aanenson
Houston Engineering, Inc.
1401 21st Avenue North
Fargo, North Dakota 58102

PROJECT LOCATION: The project site is located in *Section 3, Township 140 North, Range 41 West*, Becker County, Minnesota. Latitude 46.971287, Longitude -95.850752.

BANK SERVICE AREA: The proposed bank service area is located within the Buffalo River Watershed (Bank Service Area 4).

DESCRIPTION OF PROJECT: The sponsor is proposing to develop Wallace Danielson Wetland Bank. The proposed bank site is approximately 190 acres in size, including upland buffer areas.

NEED AND OBJECTIVE OF PROJECT: The objective is to establish a wetland bank within the proposed easement by restoring the site's hydrology and vegetation to the pre-existing conditions. Sometime prior to 1920, the watercourse flowing through the site was channelized' which reduced the outlet elevation and lowered water levels within the wetland. Because the wetland hydrology was significantly altered/reduced in higher elevation areas, the plant communities within these areas eventually adapted to drier conditions and the wetland area was reduced over time. Rehabilitation efforts will be aimed at restoring the hydrology to reflood the pre-existing basins creating saturated soil conditions suitable for wetland plant communities to thrive. The preliminary design consists of ditch plugging and restoring hydrology to more natural conditions. The project will restore the site's ecosystem services while providing a functional lift. Ecosystem services restored include water filtration, flood control, sediment and nutrient retention, and fish and wildlife habitat.

ESTABLISHMENT, OPERATION AND MANAGEMENT: The quantity of water from the catchment area that enters the easement is adequate in providing the needed hydrology for rehabilitation of the sites hydrophytic vegetation and to develop hydric soils. The site consists of mapped soil units with a hydric rating between 85 % and 99 %. These soils are characterized by poorly to very poorly drained, low sloped soils with shallow water tables (0-25 cm). Drainage and channelization of the easement for agricultural practices has reduced the easements natural retention of hydrology. The lack natural hydrology and decades of haying has degraded the quality of hydrophytic vegetation and overall wetland conditions. The proposed design consists of four ditch plugs, four spillways, and mesic prairie

buffer restoration. Ditch plugs for the smaller pools will be constructed with 2’ of freeboard from the corresponding runout elevation. Ditch plugs will consist of a 10’ top, 6H:1V side-slope on the west side and a 4H:1V side-slope on the dry side. Spillways will consist of a 20’ bottom width and 5H:1V side-slopes. The ditch plug / outlet structure for main pool will be sized per TR-60 recommendations. Erosion concerns would consist of newly excavated spillway channels. Seeding/Mulching should occur soon after construction until a good stand of grass is established. The restoration of the landscape includes increased retention of surface hydrology in the wetland basin and enhancement of wetland vegetation by restoring the diversity of the wet meadow plant community. Restoring the sites hydrology will maintain soil saturation and hydrophytic vegetation. Over time, the site may naturally develop into shallow marsh communities that are more consistent with historic conditions and existing wetlands within the easement boundary.

OWNERSHIP AND LONG-TERM MANAGEMENT: The Bank is owned and will be managed by Wallace Danielson.

TECHNICAL FEASIBILITY AND QUALIFICATIONS: This project design is technically feasible while providing the desired mitigation. The ditch plug design is constructed to maintain the wetland pool elevation identified in the project design. The restoration methods have demonstrated to be reliable and successful methods within the state. The agent has shown to be successful in banking site restoration within the watershed including the Elkton Township Wetland Banking Project (Buffalo-Red River Watershed District), in addition to other restoration projects including the Manston Slough Restoration Project (Buffalo-Red River Watershed District). The sponsor has acquired the lands that are within the proposed wetland pool elevation through land trading with adjacent landowners. The land acquisition ensures that all lands impacted by reflooding are owned by the sponsor and that no adjacent landowners are impacted by the project. The Buffalo River Watershed is large enough to provide the hydrology needed maintain soil saturation and develop diverse wetland plant communities. A Minnesota Public Waters watercourse flows through the easement from the south end of the easement to the north end of the easement. Agricultural runoff into this watercourse upstream of the easement could impact the water quality at the easement site. The wetland bank would provide sinks for upstream nutrient runoff improving water quality and preventing eutrophic events downstream of the easement. The upland buffer is large enough to prevent encroachment of agricultural activities from adjacent landowners. The majority of the easement has upland buffers greater than the minimum 50-foot width. There are portions of the easement below the 50-foot buffer width. These are mainly located along the southern end of the easement with one located along the east side of the easement.

Staff at Houston Engineering Inc. are qualified to successfully complete the mitigation project proposed. Past activities and mitigation projects include the Carbody Slough Wetland Bank Site, Agassiz Wetland Banking Site, Elkton Wetland Banking Site, and Lake of the Woods Wetland Banking Site.

ECOLOGICAL SUITABILITY: Successful restoration of the project area will result in significant functional lift. Following the installation of the ditch plugs, the basins will retain surface water similar to the natural conditions present prior to its drainage. The site will produce a wetland complex of seasonally and semi-permanently flooded wetlands with surrounding upland buffer areas. Once restored, the site will maintain saturated soils for an adequate duration of the growing season to support and sustain diverse wetland plant communities. The surrounding upland buffers will be restored to a natural plant community following the cessation of agricultural practices within the easement boundary. The restoration of both the upland buffers and wetland areas will provide habitat to birds, amphibians, invertebrates, and other animals in the area. Similar to other projects, the site’s upland buffers will mitigate nutrient and sediment runoff from adjacent agricultural land. Runoff from

the surrounding landscape will flow over the buffers and infiltrate the soils rather than reaching the drainage ditch. The restored wetland basins will also
function as a sink for agricultural runoff.

HYDROLOGY: The Buffalo River Watershed has a 1,200 square mile drainage area that flows west into the Red River of the North. A MNDNR identified public water watercourse flows through the easement. This watercourse originates from the north end of Houg Lake flowing north through the easement eventually flowing into the Buffalo River. Within the easement boundary the watercourse was channelized/ditched sometime prior to the 1940s and provides hydrology throughout the growing season during normal climatic conditions. The site's elevation has resulted in a hydrology regime that creates pond wetlands surrounded by large areas of interconnected wet meadow and shallow marsh communities.

CURRENT LAND USES: The easement is located southwest of County Highway 21 and north of County Highway 26 to the south. A review of current National Land Cover Data (2016) shows the land bordering the wetlands are dominated by cultivated crops, deciduous forests, pasture/hay, and grassland/herbaceous. The wetlands at the easement were identified as emergent, shrub, forested, and pond wetlands (NWI,USFWS 2020). The site is located on a rolling hills landscape where agriculture fields are broken up by numerous streams, interconnected wetlands, and lakes. A public watercourse flows through the easement eventually merging with the Buffalo River. There are no structures within easement boundary, but several structures are located adjacent to the easement. A large farmstead owned by Wallace Danielson is located to the north of the easement. There are several residential properties located to the east and southeast of the easement. A review of the Minnesota Well Index managed by the Minnesota Department of Health shows several wells located near the wetland easement. There are seven domestic wells, two wells categorized as "other", and one sealed well located within a mile of the easement.

COORDINATION WITH RESOURCE AGENCIES: This project has been coordinated with the following members of the Interagency Review Team (IRT) and other resource agencies: Minnesota Department of Natural Resources, Minnesota Board of Water and Soil Resources, and U.S. Environmental Protection Agency.

3. FEDERALLY-LISTED THREATENED OR ENDANGERED WILDLIFE OR PLANTS OR THEIR CRITICAL HABITAT

None were identified by the bank sponsor or are known to exist in the action area. However, Becker County is within the known historic range for the following Federally-listed species:

Northern Long-Eared Bat	Hibernates in caves and mines – swarming in surrounding wooded areas in autumn. Roosts and forages in upland forests during spring and summer.
Gray Wolf	Northern Forest.

This notice is being coordinated with the U.S. Fish and Wildlife Service. Any comments it may have concerning Federally-listed threatened or endangered wildlife or plants or their critical habitat will be considered in our final assessment of the described work.

4. JURISDICTION

This proposal is being reviewed in accordance with the practices for documenting Corps jurisdiction under Sections 9 & 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act.

5. HISTORICAL/ARCHAEOLOGICAL

The Corps will review information on known cultural resources and/or historic properties within and adjacent to the project area. The Corps will also consider the potential effects of the project on any properties that have yet to be identified. The results of this review and the Corps' determination of effect will be coordinated with the State Historic Preservation Officer independent of this public notice. Any adverse effects on historic properties will be resolved prior to the Corps authorization of the work in connection with this project.

6. PUBLIC HEARING REQUESTS

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, in detail, the reasons for holding a public hearing. A request may be denied if substantive reasons for holding a hearing are not provided or if there is otherwise no valid interest to be served.

7. REPLIES/COMMENTS

Interested parties are invited to submit to this office written facts, arguments, or objections by the expiration date above. These statements should bear upon the suitability of the location and the adequacy of the project and should, if appropriate, suggest any changes believed to be desirable. Comments received may be forwarded to the applicant. A copy of the full prospectus submitted by the Sponsor is available to the public for review upon request.

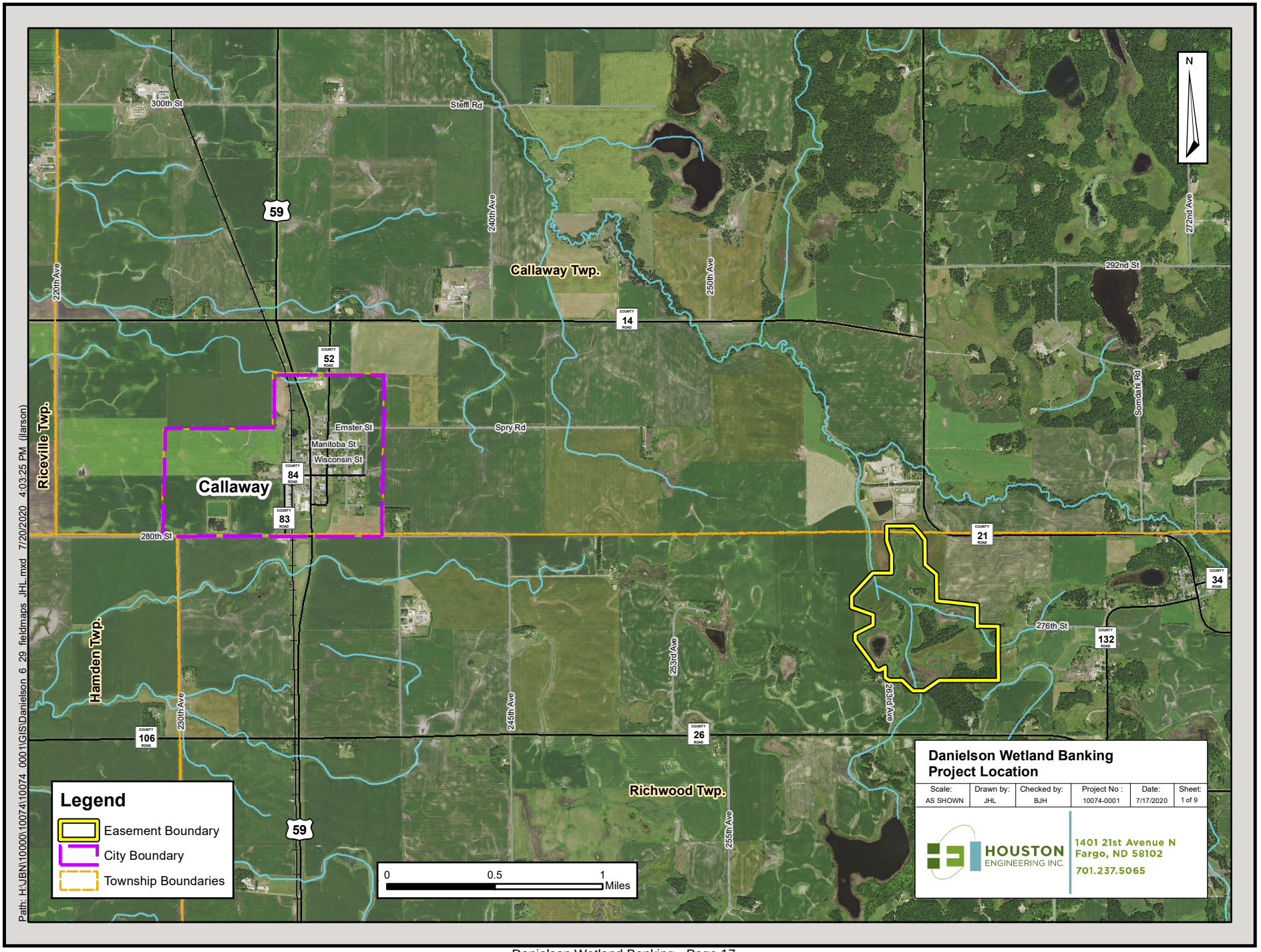
Replies may be addressed to:

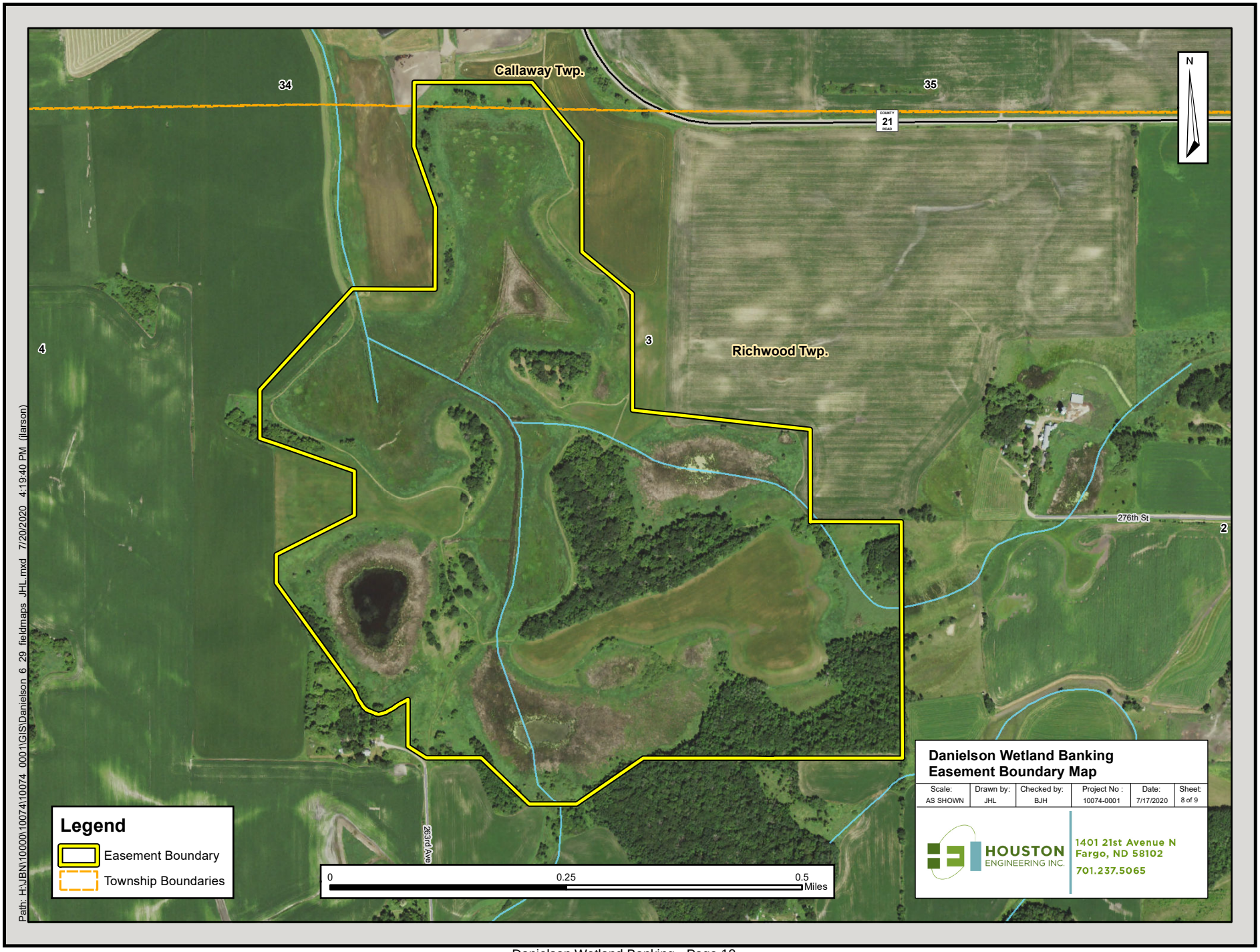
Regulatory Branch
St. Paul District Corps of Engineers
180 Fifth Street East, Suite 700
St. Paul, MN 55101-1678

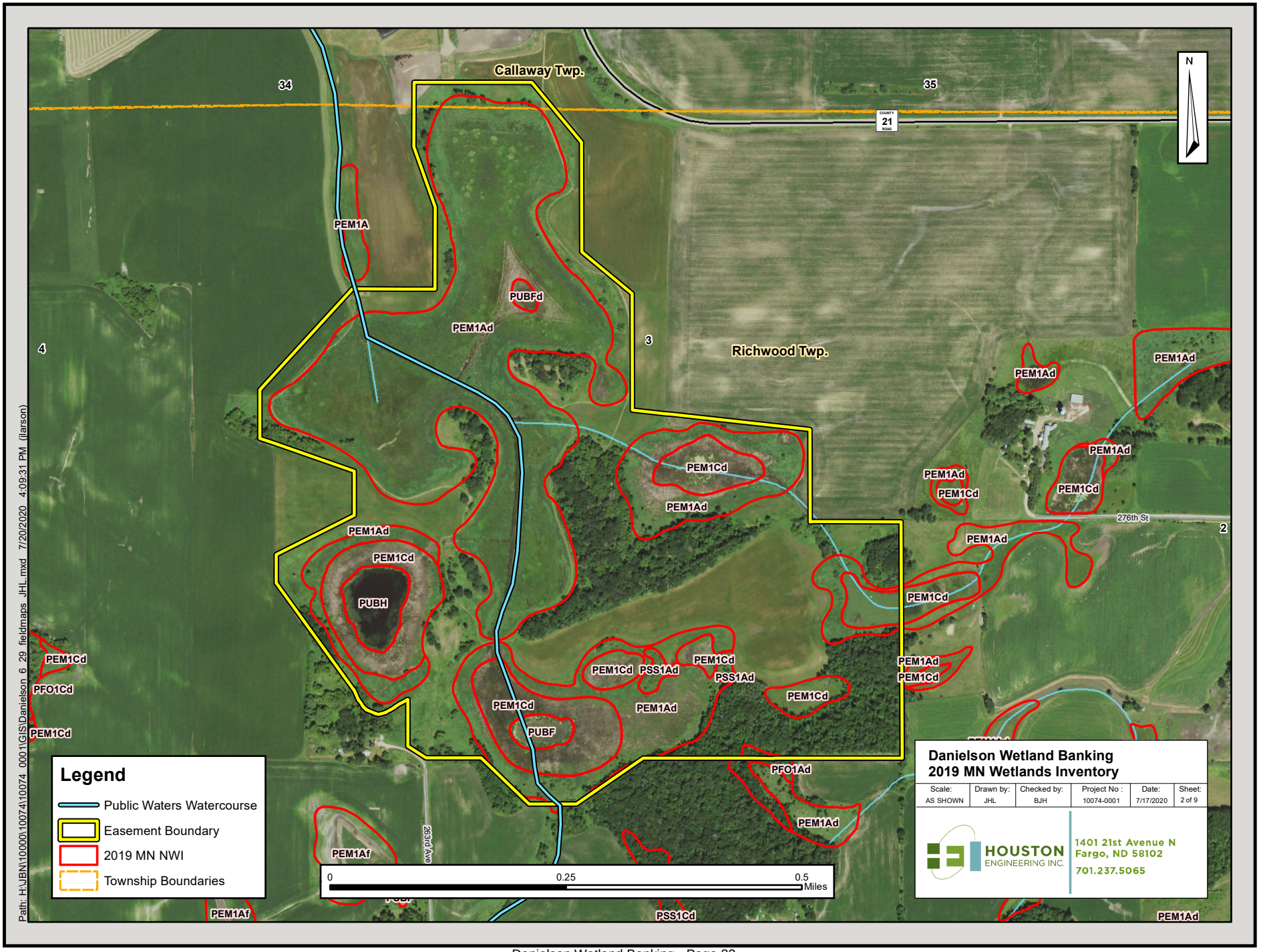
Or, IF YOU HAVE QUESTIONS ABOUT THE PROJECT, call Sean Kelly at the Brainerd office of the Corps, telephone number 651-290-5769 or email sean.r.kelly@usace.army.mil.

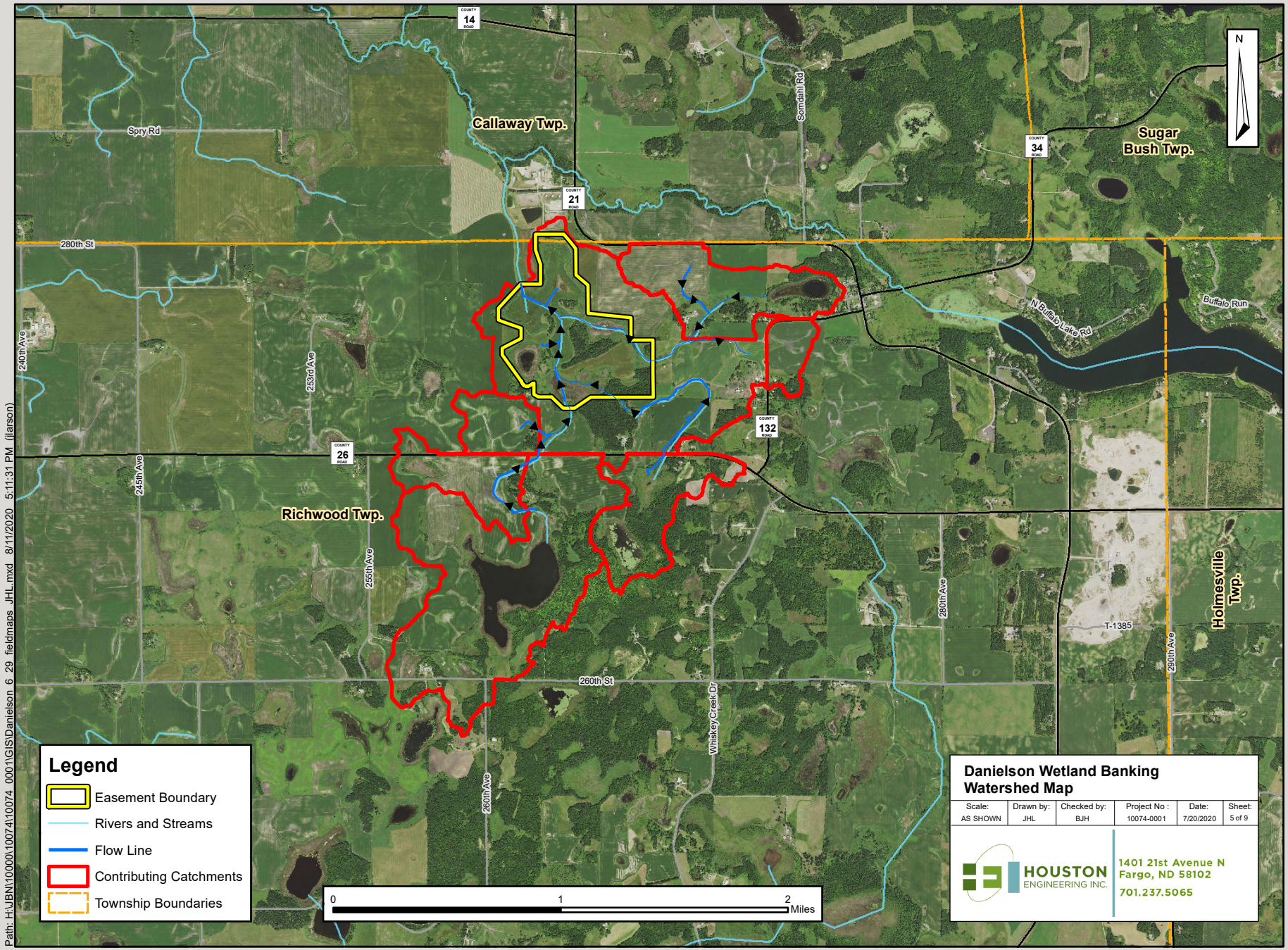
To receive Public Notices by e-mail, go to: http://mvp-extstp/list_server/ and add your information in the New Registration Box.

Enclosure(s)


N
300th St
Steffl Rd
59
240th Ave
Callaway Twp.
250th Ave
272nd Ave
292nd St
220th Ave
COUNTY 14 ROAD
COUNTY 52 ROAD
Riceville Twp.
Ernster St
Manitoba St
Wisconsin St
Spry Rd
Somdahl Rd
Callaway
COUNTY 84 ROAD
COUNTY 83 ROAD
280th St
COUNTY 21 ROAD
COUNTY 34 ROAD
276th St
COUNTY 132 ROAD
Hamden Twp.
253rd Ave
263rd Ave
230th Ave
245th Ave
COUNTY 106 ROAD
COUNTY 26 ROAD
Richwood Twp.
255th Ave
59
Legend
Easement Boundary
City Boundary
Township Boundaries
0
0.5
1
Miles
Danielson Wetland Banking
Project Location
Scale: AS SHOWN
Drawn by: JHL
Checked by: BJH
Project No : 10074-0001
Date: 7/17/2020
Sheet: 1 of 9
HOUSTON ENGINEERING INC.
1401 21st Avenue N
Fargo, ND 58102
701.237.5065
Path: H:\JBN\10000\10074\10074 0001\GIS\Danielson 6 29 fieldmaps JHL.mxd 7/20/2020 4:03:25 PM (larson)


Callaway Twp.
Richwood Twp.
34
35
3
4
2
276th St
236th Ave
COUNTY 21 ROAD
N
Legend
Easement Boundary
Township Boundaries
0
0.25
0.5
Miles
Danielson Wetland Banking
Easement Boundary Map
Scale: AS SHOWN
Drawn by: JHL
Checked by: BJH
Project No : 10074-0001
Date: 7/17/2020
Sheet: 8 of 9
HOUSTON ENGINEERING INC.
1401 21st Avenue N
Fargo, ND 58102
701.237.5065
Path: H:\JBN\10000\10074\10074 0001\GIS\Danielson 6 29 fieldmaps JHL.mxd 7/20/2020 4:19:40 PM (larson)

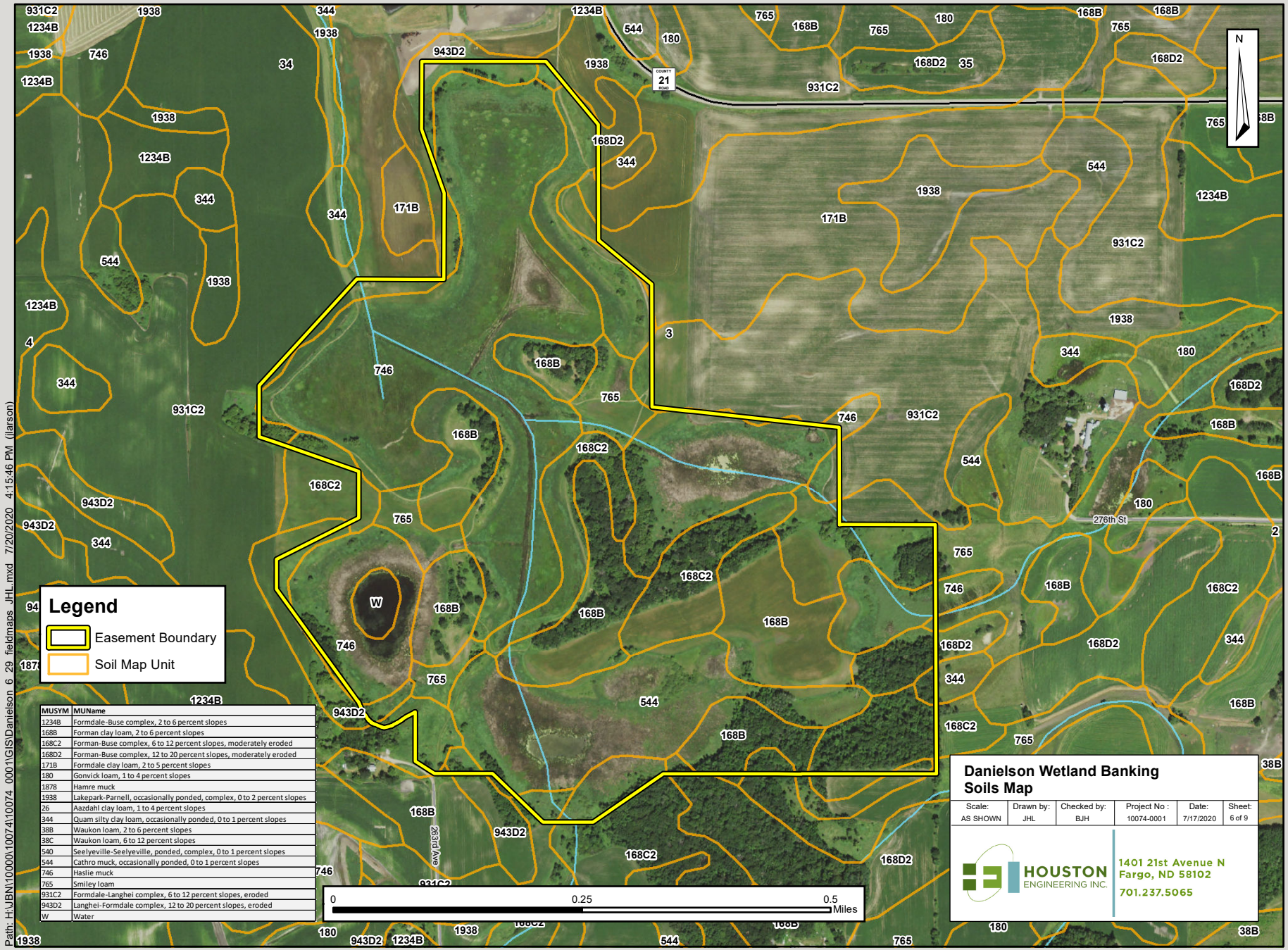

Callaway Twp.
Richwood Twp.
34
35
3
4
2
N
COUNTY 21 ROAD
276th St
265rd Ave
PEM1A
PUBFd
PEM1Ad
PEM1Cd
PUBH
PUBF
PSS1Ad
PSS1Cd
PFO1Cd
PFO1Ad
PEM1Af
Legend
Public Waters Watercourse
Easement Boundary
2019 MN NWI
Township Boundaries
0
0.25
0.5
Miles
Danielson Wetland Banking
2019 MN Wetlands Inventory
Scale: AS SHOWN
Drawn by: JHL
Checked by: BJH
Project No : 10074-0001
Date: 7/17/2020
Sheet: 2 of 9
HOUSTON ENGINEERING INC.
1401 21st Avenue N
Fargo, ND 58102
701.237.5065
Path: H:\JBN\10000\10074\10074 0001\GIS\Danielson 6 29 fieldmaps JHL.mxd 7/20/2020 4:09:31 PM (larson)

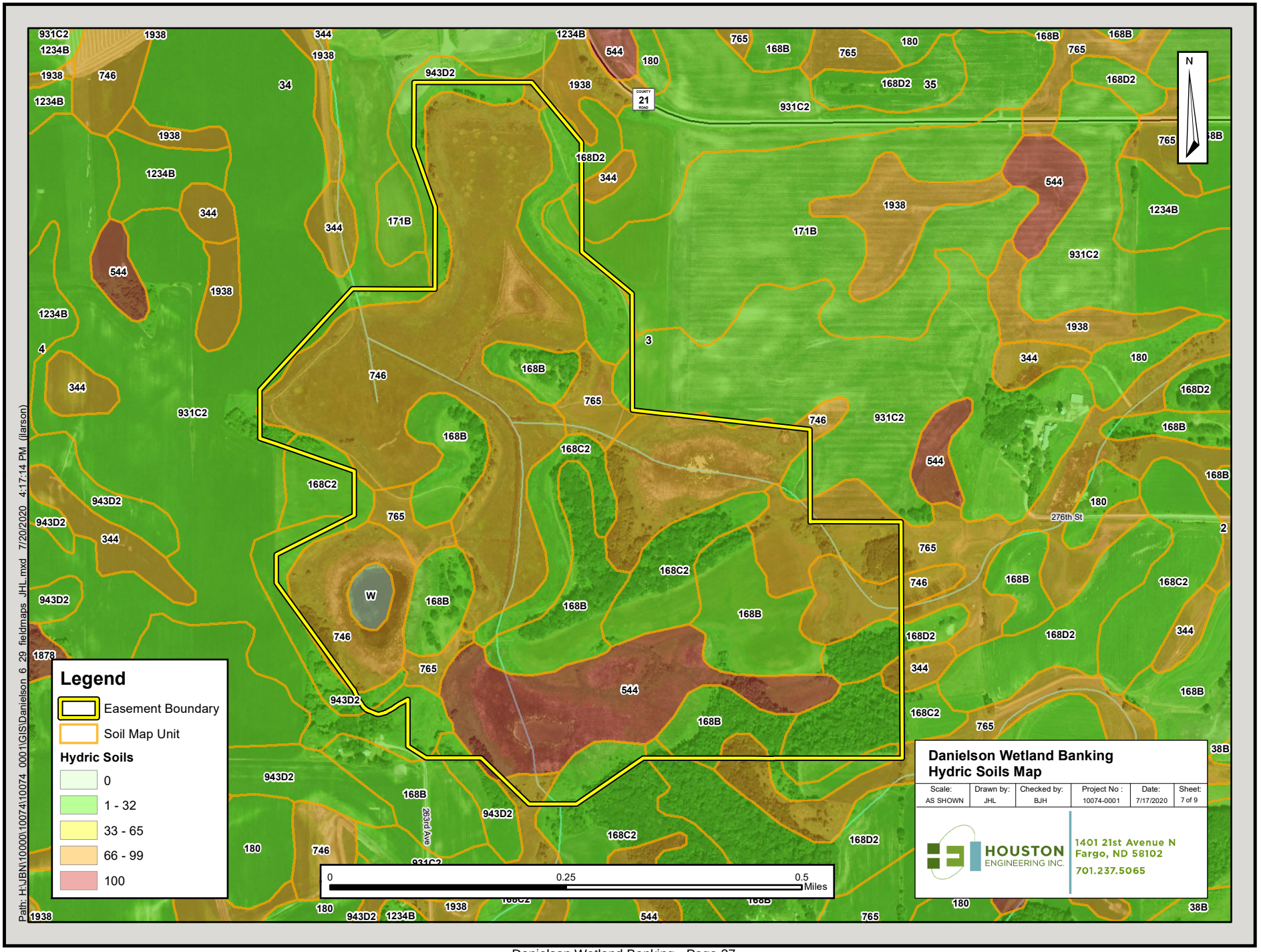


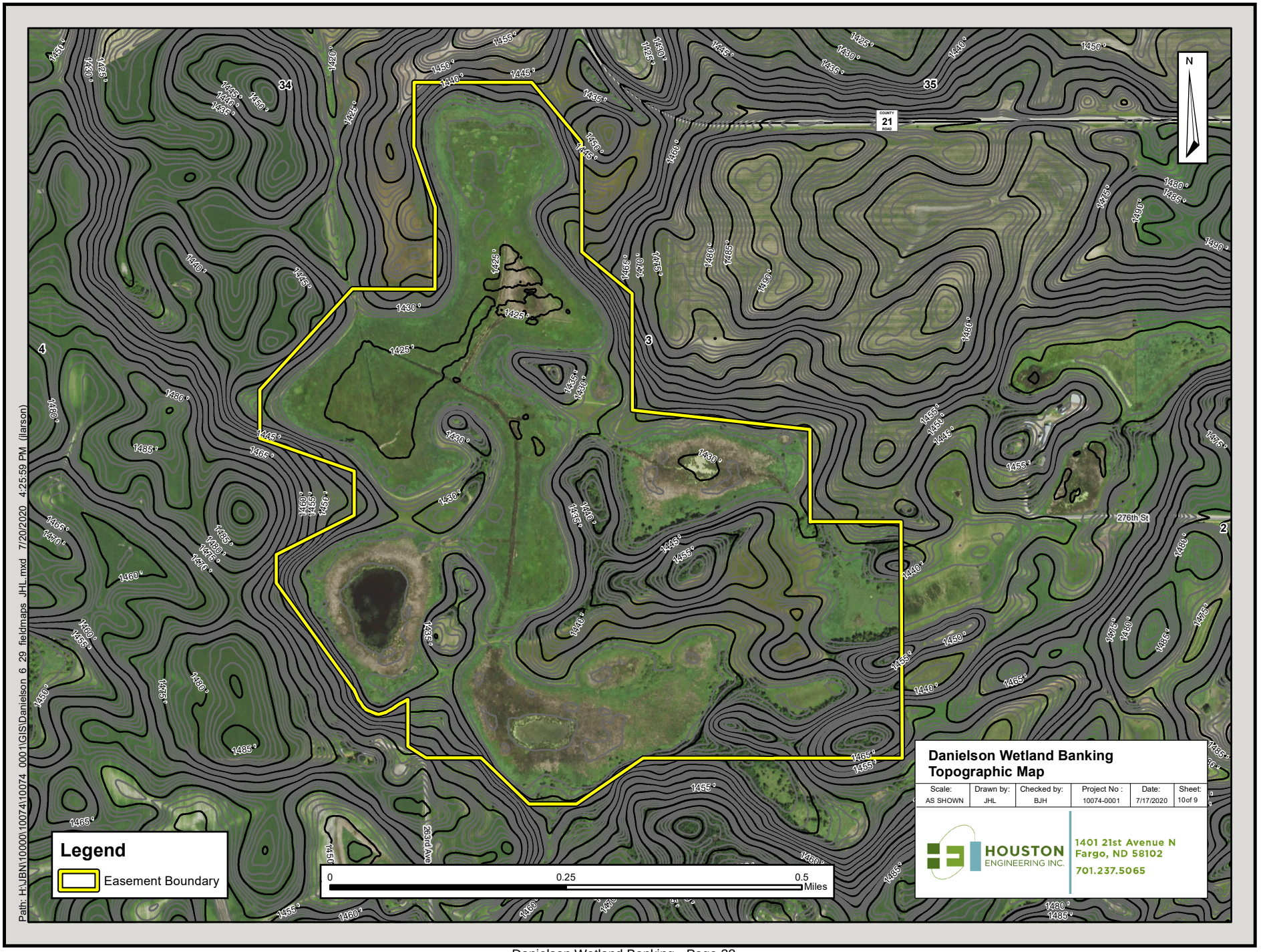
Danielson Wetland Banking Watershed Map

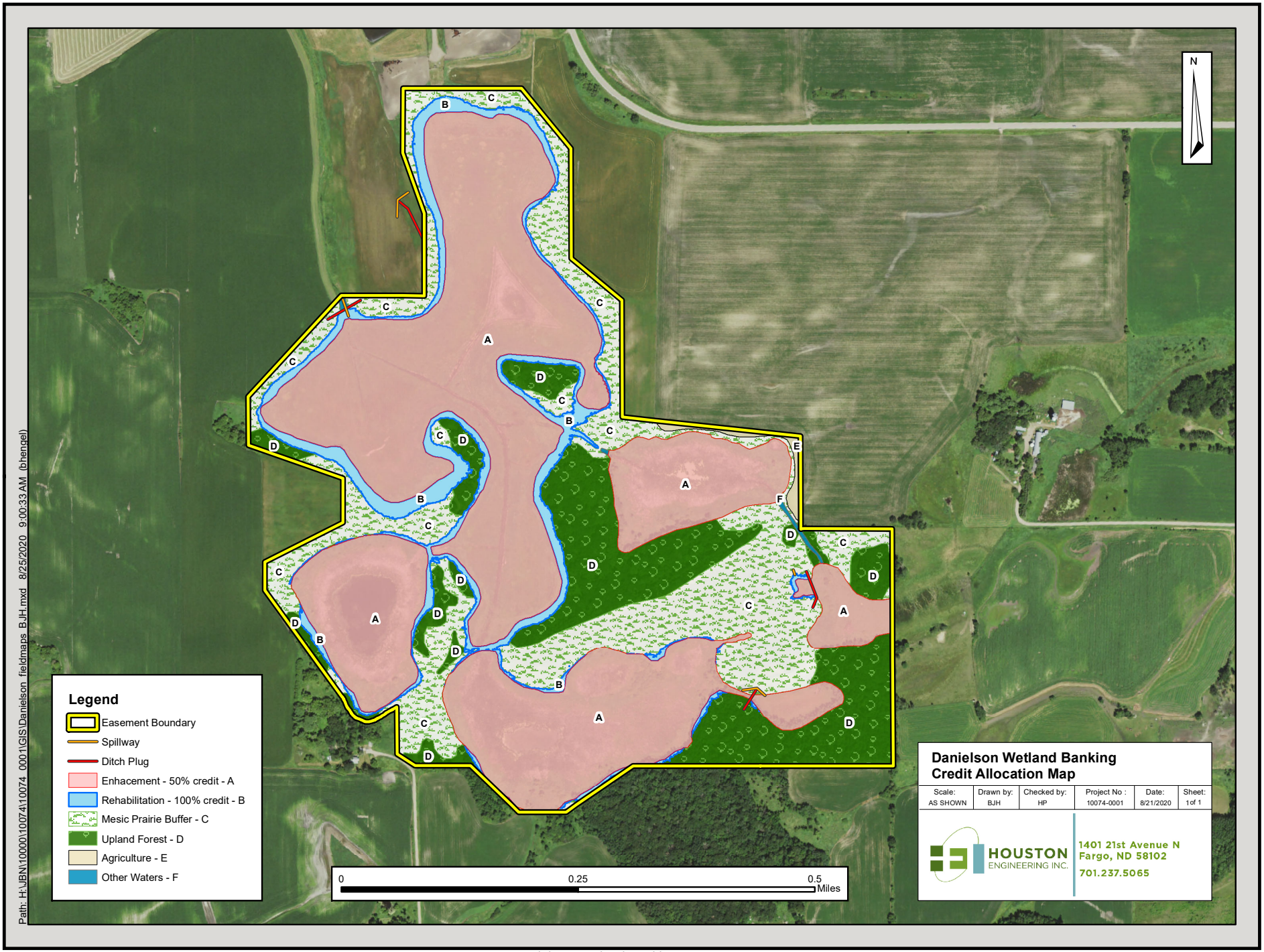
Scale:	Drawn by:	Checked by:	Project No :	Date:	Sheet:
AS SHOWN	JHL	BJH	10074-0001	7/20/2020	5 of 9

HOUSTON ENGINEERING INC.
1401 21st Avenue N
Fargo, ND 58102
701.237.5065


Legend
Easement Boundary
Soil Map Unit
MUSYM | MUName
1234B | Formdale-Buse complex, 2 to 6 percent slopes
168B | Forman clay loam, 2 to 6 percent slopes
168C2 | Forman-Buse complex, 6 to 12 percent slopes, moderately eroded
168D2 | Forman-Buse complex, 12 to 20 percent slopes, moderately eroded
171B | Formdale clay loam, 2 to 5 percent slopes
180 | Gonvick loam, 1 to 4 percent slopes
1878 | Hamre muck
1938 | Lakepark-Parnell, occasionally ponded, complex, 0 to 2 percent slopes
26 | Aazdahl clay loam, 1 to 4 percent slopes
344 | Quam silty clay loam, occasionally ponded, 0 to 1 percent slopes
38B | Waukon loam, 2 to 6 percent slopes
38C | Waukon loam, 6 to 12 percent slopes
540 | Seelyeville-Seelyeville, ponded, complex, 0 to 1 percent slopes
544 | Cathro muck, occasionally ponded, 0 to 1 percent slopes
746 | Haslie muck
765 | Smiley loam
931C2 | Formdale-Langhei complex, 6 to 12 percent slopes, eroded
943D2 | Langhei-Formdale complex, 12 to 20 percent slopes, eroded
W | Water
0
0.25
0.5
Miles
N
COUNTY 21 ROAD
276th St
233rd Ave
Danielson Wetland Banking
Soils Map
Scale: AS SHOWN
Drawn by: JHL
Checked by: BJH
Project No : 10074-0001
Date: 7/17/2020
Sheet: 6 of 9
HOUSTON ENGINEERING INC.
1401 21st Avenue N
Fargo, ND 58102
701.237.5065
Path: H:\JBN\10000\10074\10074_0001\GIS\Danielson_6_29_fieldmaps_JHL.mxd 7/20/2020 4:15:46 PM (larson)


Legend
Easement Boundary
Soil Map Unit
Hydric Soils
0
1 - 32
33 - 65
66 - 99
100
0
0.25
0.5
Miles
N
276th St
263rd Ave
COUNTY 21 ROAD
Danielson Wetland Banking
Hydric Soils Map
Scale: AS SHOWN
Drawn by: JHL
Checked by: BJH
Project No : 10074-0001
Date: 7/17/2020
Sheet: 7 of 9
HOUSTON ENGINEERING INC.
1401 21st Avenue N
Fargo, ND 58102
701.237.5065
Path: H:\JBN\10000\10074\10074_0001\GIS\Danielson_6_29_fieldmaps_JHL.mxd 7/20/2020 4:17:14 PM (jlarson)


Legend
Easement Boundary
0
0.25
0.5
Miles
N
34
35
3
4
2
276th St
COUNTY 21 ROAD
Danielson Wetland Banking
Topographic Map
Scale: AS SHOWN
Drawn by: JHL
Checked by: BJH
Project No : 10074-0001
Date: 7/17/2020
Sheet: 10of 9
HOUSTON ENGINEERING INC.
1401 21st Avenue N
Fargo, ND 58102
701.237.5065
Path: H:\JBN\10000\10074\10074 0001\GIS\Danielson 6 29 fieldmaps JHL.mxd 7/20/2020 4:25:59 PM (ilarson)


N
Legend
Easement Boundary
Spillway
Ditch Plug
Enhacement - 50% credit - A
Rehabilitation - 100% credit - B
Mesic Prairie Buffer - C
Upland Forest - D
Agriculture - E
Other Waters - F
0
0.25
0.5
Miles
Path: H:\JBN\10000\10074\10074 0001\GIS\Danielson fieldmaps BJH.mxd 8/25/2020 9:00:33 AM (bhengel)
Danielson Wetland Banking
Credit Allocation Map
Scale: AS SHOWN
Drawn by: BJH
Checked by: HP
Project No : 10074-0001
Date: 8/21/2020
Sheet: 1of 1
HOUSTON ENGINEERING INC.
1401 21st Avenue N
Fargo, ND 58102
701.237.5065