VANTAGE WEST SPUR LATERAL PIPELINE
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The addendum has been prepared to address eight minor revisions in the route alignment that have occurred since the April 13, 2015 submittal. This addendum updates only the sections of the original application where information has changed due to the route revision.

4.0 Results

The wetland investigation resulted in the identification and mapping of wetlands within the 500 foot survey corridor of the revised route. A total of 70 wetlands are located within the 500-foot Vantage West Spur Lateral Pipeline survey corridor. Type 1 PEM and PFO wetlands, and one Type 6 PSS wetland were observed in the survey corridor. No Type 2, 3, 4 or 5 wetlands occur in the study corridor. Table 3 summarizes the identified wetlands within the 500 foot corridor by wetland type. Not all wetlands within the 500 foot corridor will be impacted, see Exhibit F.2.

Table 1. Wetlands by Type within the project 500-ft Corridor.[1]

CLASSIFICATION		WETLANDS OBSERVED		
		Revised Route		
Circular 39[2]	Cowardin[3]	Number	Area (acres) in 500 ft corridor	Area (acres) in workspace
1	PEM	68	24.96	1.53
1	PFO	1	0.5	0.07
6	PSS	1	0.6	0.0
Totals		70	26.06	1.6

[1] Includes only wetland area within the 500-foot pipeline corridor. Actual wetland boundaries may extend past the project limits and may be larger than indicated. Not all the wetlands within the 500 foot corridor will be impacted, see Exhibit F.2.
[2] Wetlands of the United States, Circular 39. (Shaw and Fredine, 1956)
[3] Classification of Wetlands and Deepwater Habitats of the United States. (Cowardin et al.1979)

4.1 Type 1 (Palustrine Emergent Wetland; Palustrine Forest Wetland): Seasonally Flooded Basins

A total of 69 Type 1 wetlands totaling 24.96 acres were identified in the revised route survey corridor. One Type 1 wetland was a PFO surrounding a PEM wetland, and the remaining Type 1 wetlands were PEM.

4.2 Waterbodies

A total of 12 waterbodies are within the route 500 foot survey corridor. However, 4 waterbodies on the route are avoided by routing within the 500 ft corridor ; therefore only 8 will be crossed (Exhibits F.3 and F.4). Of the eight waterbodies crossed by the route workspace, four are ephemeral drainages, three are intermittent drainages, and one is a perennial streams. Ephemeral drainages flow only in response to snowmelt or precipitation events. Intermittent streams flow seasonally and may or may not be flowing during the construction season. (Exhibit F.3)

5.0 Wetland and Waterbody Impacts

For the field investigation, a 500-foot corridor was surveyed for wetlands and waterbodies on the revised route (Exhibits F.2 through F.4). The field investigation resulted in the identification and mapping of 70 wetlands and 12 waterbodies are present within the preferred 500-foot corridor. Fifty-nine (59) wetlands and four (4) waterbodies would be avoided during construction by routing around the wetland or waterbody within the 500-ft corridor. Eleven (11) wetlands and 8 waterbodies would be within or on the

edge of the 30-foot permanent right-of-way. Overall, 1.6 acres of wetlands will be temporarily impacted on the revised route.

Eleven waterbodies are classified as ephemeral or intermittent waterways on the revised route, and 69 wetlands on the route are Type 1 (seasonally flooded) wetlands. Impacts to these areas will be minimized by constructing the pipeline during the dry season and implementing best management practices (BMP) as outlined in the Environmental Protection Plan (EPP).

Exhibit F.1: US Army Corp of Engineers Correspondence

The following jurisdictional determination letter was received from the USACE on June 24, 2015.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
NORTH DAKOTA REGULATORY OFFICE
1513 SOUTH 12TH STREET
BISMARCK ND 58504-6640

June 24, 2015

North Dakota Regulatory Office [NWO-2015-0635-BIS]

Vantage West Spur Pipeline c/o KC Harvey Environmental, LLC
Attn: Monica Pokorny
376 Gallatin Park Drive
Bozeman, Montana 59715

Dear Ms. Pokorny:

We have reviewed your request for a Department of the Army, Corps of Engineers jurisdictional determination (JD), on behalf of Vantage Pipelines US LP, for the proposed 8-inch diameter ethane pipeline system. The wetland delineation report identified 62 wetlands and 11 waterbodies within the 500-foot project corridor review area. Majority of these identified wetland features would be avoided during construction, based on the information that was submitted to this office. The project area is located in several Sections, Townships and Ranges, Divide and Williams Counties, North Dakota.

Based on the information that you provided, we have determined that the wetland areas you identified as (#9) W_KC1_DV_63, (#13) W_KC3_WM_6, (#14) W_KC3_WM_7 and (#15) W_KC3_WM_25 are **not** jurisdictional waters of the United States.

An approved JD has been completed for the wetlands identified and is enclosed for your information. The JD may also be viewed at our website located at: http://www.nwo.usace.army.mil /Missions/RegulatoryProgram/NorthDakota.aspx. The JD will be available on the website within 30 days. You may also request copies of the supporting materials the Corps used in determining this JD. If you are not in agreement with the JD, you may request an administrative appeal under Corps regulations found at 33 CFR 331. The request for appeal must be received within 60 days from the date of this correspondence (August 23, 2015). Enclosed you will find a Request for Appeal form. If you would like more information on the jurisdictional appeal process, contact this office. It is not necessary to submit a Request for Appeal if you do not object to the JD. The JD will be valid for a period of 5 years from the date of this letter.

In addition, we have prepared a preliminary JD for the 11remaining wetland sites (#1 thru #8 and #10, #11and #12) within the project corridor which is a written indication that the identified wetlands within the project area may be a jurisdictional Waters of the United States. Such waters have been treated as jurisdictional Waters of the US for

purposes of computation of impacts and compensatory mitigation requirements. If you concur with the findings of the enclosed preliminary JD, please sign it and return it to the letterhead address.

If you believe the preliminary JD is inaccurate, you may request this office complete an approved JD prior to the commencement of any work in a Water of the U.S. An approved JD is an official determination regarding the presence or absence of Waters of the US. Completion of an approved JD may require coordination with the US Environmental Protection Agency.

This determination was conducted to identify the limits of the Corps Clean Water Act jurisdiction for the particular site identified in this request. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenants are USDA program participants, or anticipate participation in the USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service, prior to starting work.

The Omaha District, Regulatory Branch is committed to providing quality and timely service to our customers. In an effort to improve customer service, please take a moment to complete our Customer Service Survey found on our website at http://www.nwo.usace.army.mil/Missions/RegulatoryProgram/ NorthDakota.aspx. If you do not have Internet access, you may call and request a paper copy of the survey that you can complete and return to us by mail or fax.

If you have any questions concerning this determination or jurisdiction, please feel free to contact Mr. Jason Renschler of this office at (701) 255-0015 ext. 2010 and reference project number **NWO-2015-0635-BIS**.

Sincerely,

Daniel E. Cimarosti
Regulatory Program Manager
North Dakota

Enclosures
- Approved JD
- Preliminary JD
- Appeal form

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 3 June 2015

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Omaha District; KC Harvey / Vantage Pipeline W.; NWO-2015-0635-BIS.

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: North Dakota. County/parish/borough: Divide and Williams. City: Hanks.

Center coordinates of site (lat/long in degree decimal format): Lat. 48.7469 Long. -103.6802 - #9 (W_KC1_DV_63).
Lat. 48.2696 Long. -103.9361 - #13 (W_KC3_WM_6).
Lat. 48.3371 Long. -103.9302 - #14 (W_KC3_WM_7).
Lat. 48.4242 Long. -103.9059 - #15 (W_KC3_WM_25).

Name of nearest waterbody: None.
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: None.
Name of watershed or Hydrologic Unit Code (HUC): Little Muddy - 10110102.

☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☒ Office (Desk) Determination. Date: May 5, 2015.
☐ Field Determination. Date(s):

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **are no** "*navigable waters of the U.S.*" within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]

☐ Waters subject to the ebb and flow of the tide.
☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **are no** "*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):** [1]
      ☐ TNWs, including territorial seas
      ☐ Wetlands adjacent to TNWs
      ☐ Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs
      ☐ Non-RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
      ☐ Impoundments of jurisdictional waters
      ☐ Isolated (interstate or intrastate) waters, including isolated wetland

   b. **Identify (estimate) size of waters of the U.S. in the review area:**
      Non-wetland waters: linear feet: width (ft) and/or
      Wetlands:

   c. **Limits (boundaries) of jurisdiction** based on: Pick List
      Elevation of established OHWM (if known):

2. **Non-regulated waters/wetlands (check if applicable):**[3]
   ☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: **These are 4 isolated wetlands identified within the proposed ethane pipeline project area. The wetlands identified are not jurisdictional; are not used for recreation or industrial purposes. There is no nexus to interstate**

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[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
[3] Supporting documentation is presented in Section III.F.

commerce. The wetlands lack a discernible surface connection to WoUS. The wetlands also lack sufficient evidence of hydrologic and ecological interaction with a WoUS.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. **TNW**
   Identify TNW:

   Summarize rationale supporting determination:

2. **Wetland adjacent to TNW**
   Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. **Characteristics of non-TNWs that flow directly or indirectly into TNW**

   (i) **General Area Conditions:**
   Watershed size: Pick List
   Drainage area:
   Average annual rainfall: inches
   Average annual snowfall: inches

   (ii) **Physical Characteristics:**
   (a) Relationship with TNW:
   ☐ Tributary flows directly into TNW.
   ☐ Tributary flows through tributary before entering TNW.

   Project waters are from TNW.
   Project waters are miles from RPW.
   Project waters are aerial (straight) miles from TNW.
   Project waters are aerial (straight) miles from RPW.
   Project waters cross or serve as state boundaries. Explain:

[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

Identify flow route to TNW[5]:
Tributary stream order, if known:

(b) General Tributary Characteristics (check all that apply):
Tributary is: ☐ Natural
☐ Artificial (man-made). Explain:
☐ Manipulated (man-altered). Explain:

Tributary properties with respect to top of bank (estimate):
Average width: feet
Average depth: feet
Average side slopes:

Primary tributary substrate composition (check all that apply):
☐ Silts ☐ Sands ☐ Concrete
☐ Cobbles ☐ Gravel ☐ Muck
☐ Bedrock ☐ Vegetation. Type/% cover:
☐ Other. Explain:

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry:
Tributary gradient (approximate average slope): %

(c) Flow:
Tributary provides for:
Estimate average number of flow events in review area/year:
Describe flow regime:
Other information on duration and volume:

Surface flow is: Characteristics:

Subsurface flow:. Explain findings:
☐ Dye (or other) test performed:

Tributary has (check all that apply):
☐ Bed and banks
☐ OHWM[6] (check all indicators that apply):
☐ clear, natural line impressed on the bank ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):
☐ High Tide Line indicated by: ☐ Mean High Water Mark indicated by:
☐ oil or scum line along shore objects ☐ survey to available datum;
☐ fine shell or debris deposits (foreshore) ☐ physical markings;
☐ physical markings/characteristics ☐ vegetation lines/changes in vegetation types.
☐ tidal gauges
☐ other (list):

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain:

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[5] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.
[6] A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
[7] Ibid.

Identify specific pollutants, if known:

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ Wetland fringe. Characteristics:
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings:
  - ☐ Fish/spawn areas. Explain findings:
  - ☐ Other environmentally-sensitive species. Explain findings:
  - ☐ Aquatic/wildlife diversity. Explain findings:

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size:

Wetland type. Explain:

Wetland quality. Explain:

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: Explain:

Surface flow is:

Characteristics:

Subsurface flow: Explain findings:

- ☐ Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

- ☐ Directly abutting
- ☐ Not directly abutting
  - ☐ Discrete wetland hydrologic connection. Explain:
  - ☐ Ecological connection. Explain:
  - ☐ Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are miles from TNW.

Project waters are aerial (straight) miles from TNW.

Flow is from:

Estimate approximate location of wetland as within the floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:

Identify specific pollutants, if known:

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

- ☐ Riparian buffer. Characteristics (type, average width):
- ☐ Vegetation type/percent cover. Explain:
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings:
  - ☐ Fish/spawn areas. Explain findings:
  - ☐ Other environmentally-sensitive species. Explain findings:
  - ☐ Aquatic/wildlife diversity. Explain findings:

3. **Characteristics of all wetlands adjacent to the tributary (if any)**

All wetland(s) being considered in the cumulative analysis:

Approximately ( ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)

Summarize overall biological, chemical and physical functions being performed: .

C. **SIGNIFICANT NEXUS DETERMINATION**

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D. **DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):**

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
   - ☐ TNWs: linear feet width (ft), Or, acres.
   - ☐ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**
   - ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
   - ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

   Provide estimates for jurisdictional waters in the review area (check all that apply):
   - ☐ Tributary waters: linear feet width (ft).
   - ☐ Other non-wetland waters: acres.
     Identify type(s) of waters: .

3. **Non-RPWs[8] that flow directly or indirectly into TNWs.**
☐ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
☐ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
☐ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
☐ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area:

7. **Impoundments of jurisdictional waters.[9]**
As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
☐ Demonstrate that impoundment was created from "waters of the U.S.," or
☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

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E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]
☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
☐ which are or could be used for industrial purposes by industries in interstate commerce.
☐ Interstate isolated waters. Explain: .
☐ Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .
Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .
☐ Wetlands: acres.

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[8] See Footnote # 3.
[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
[10] **Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.

☒ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.

☒ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).

☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .

☐ Other: (explain, if not covered above):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).

☐ Lakes/ponds: acres.

☐ Other non-wetland waters: acres. List type of aquatic resource: .

☒ Wetlands: **4 wetlands. Range in size .02 – 23-acres.**

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).

☐ Lakes/ponds: acres.

☐ Other non-wetland waters: acres. List type of aquatic resource: .

☐ Wetlands:

SECTION IV: DATA SOURCES.

A. **SUPPORTING DATA. Data reviewed for JD (check all that apply** - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: .

☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.

☐ Office concurs with data sheets/delineation report.

☐ Office does not concur with data sheets/delineation report.

☐ Data sheets prepared by the Corps: .

☐ Corps navigable waters' study: .

☐ U.S. Geological Survey Hydrologic Atlas: .

☐ USGS NHD data.

☒ USGS 8 and 12 digit HUC maps.

☒ U.S. Geological Survey map(s). Cite scale & quad name: **Several USGS along the +/-48-mile route.**

☐ USDA Natural Resources Conservation Service Soil Survey. Citation: .

☒ National wetlands inventory map(s). Cite name: **Several NWI maps along the +/- 48-mile route.**

☐ State/Local wetland inventory map(s): .

☐ FEMA/FIRM maps: .

☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

☐ Photographs: ☐ Aerial (Name & Date):

or ☐ Other (Name & Date):

☐ Previous determination(s). File no. and date of response letter: .

☐ Applicable/supporting case law: .

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): **Google Earth Pro.**

B. **ADDITIONAL COMMENTS TO SUPPORT JD: See attached maps (x4).**

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: **KC Harvey / Vantage West Spur Pipeline**	File Number: **2015-0635-BIS**	Date: **6/24/15**
Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
X	APPROVED JURISDICTIONAL DETERMINATION	D
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found in Corps regulations at 33 CFR Part 331, or at http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/FederalRegulation.aspx

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:	If you only have questions regarding the appeal process you may also contact:
Daniel.E.Cimarosti@usace.army.mil US Army Corps of Engineers, Omaha District North Dakota Regulatory Office Attn: Daniel Cimarosti, Regulatory Program Manager 1513 South 12th Street Telephone (701) 255-0015 Bismarck, North Dakota 58504	US Army Corps of Engineers, Northwestern Division Attn: Mary Hoffman, Regulatory Appeals Review Officer P.O. Box 2870 Portland, OR 97208-2870 Telephone (503) 808-3888 Mary.J.Hoffman@usace.army.mil

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

	Date:	Telephone number:
_____ Signature of appellant or agent.		

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

This preliminary JD finds that there *"may be"* waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

A. Report Completion Date for Preliminary Jurisdictional Determination (JD):

June 24, 2015

B. Name and Address of Person Requesting Preliminary JD:

Vantage West Spur Pipeline c/p KC Harvey Environmental, LLC.
Attn: Monica Pokorny
376 Gallatin Park Drive
Bozeman, MT 59715

C. District Office, File Name, and Number:

Omaha District; KC Harvey / Vantage Pipeline West Spur; NWO-2015-0635-BIS

D. PROJECT LOCATION(S), BACKGROUND INFORMATION, AND WATERS:

State: **North Dakota**
City: **Hanks**
County: **Divide and Williams**
Name of nearest waterbody: **Cow Creek, Cottonwood Creek, Scori Creek, Pats Coulee.**

Identify amount of waters in the review area: **+/- 10-acres.**

Name of any water bodies on the site that have been identified as Section 10 waters: **N/A.**
Tidal:
Non-Tidal:

Table 1 - Waters of the U.S.

Site #	Latitude	Longitude	Stream Flow	Cowardin Class	Estimated amount of aquatic resources in review area	Estimated amount of aquatic resource impact	Class of aquatic resource
1-S_KC1_WM2	48.5109	-103.8336	Permanent	Palustrine	.05-acres	.001-acres	Non-tidal
2-S_KC1_WM3	48.5097	-103.8348	Permanent	Palustrine	.01-acres	.001-acres	Non-tidal
3-S_KC1_WM4	48.3268	-103.9288	Permanent	Palustrine	.05-acres	.001-acres	Non-tidal
4-S_KC1_WM7	48.5750	-103.7870	Permanent	Palustrine	.03-acres	.01-acres	Non-tidal
5-S_KC1_WM8	48.4998	-103.8417	Permanent	Palustrine	.02-acres	.001-acres	Non-tidal
6-S_KC2_WM3	48.4190	-103.9060	Permanent	Palustrine	.01-acres	.001-acres	Non-tidal

7-S_KC3_WM3	48.3234	-103.9291	Permanent	Palustrine	.02-acres	.001-acres	Non-tidal
8-S_KC3_WM6	48.6127	-103.7966	Permanent	Palustrine	.01-acres	.01-acres	Non-tidal
10_KC1_WM46	48.5446	-103.8308	Permanent	Palustrine	.25-acres	.17-acres	Non-tidal
11_KC1_WM48	48.2770	-103.9353	Permanent	Palustrine	.25-acres	.03-acres	Non-tidal
12_KC2_WM1	48.4504	-103.8933	Permanent	Palustrine	.25-acres	.14-acres	Non-tidal

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

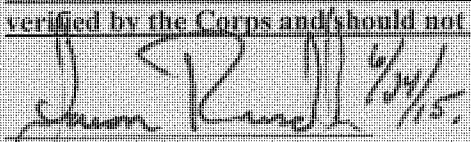
☒ Office (Desk) Determination. Date: **May 5, 2015**
☐ Field Determination. Date(s):

F. SUPPORTING DATA:

Data reviewed for preliminary JD (check all that apply - checked items should be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:
☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
  ☐ Office concurs with data sheets/delineation report.
  ☐ Office does not concur with data sheets/delineation report.
☐ Data sheets prepared by the Corps: .
☐ Corps navigable waters' study: .
☐ U.S. Geological Survey Hydrologic Atlas: .
  ☐ USGS NHD data.
  ☒ USGS 8 and 12 digit HUC maps.
☒ U.S. Geological Survey map(s). Cite quad name: Several along the +/-48-mile route.
☐ USDA Natural Resources Conservation Service Soil Survey.
☒ National wetlands inventory map(s). Cite name: Several along the +/-48-mile route.
☐ State/Local wetland inventory map(s): .
☐ FEMA/FIRM maps: .
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☐ Photographs: ☐ Aerial (Name & Date):
  or ☐ Other (Name & Date):
☐ Previous determination(s). File no. and date of response letter: .
☒ Other information (please specify): Google Earth Pro.

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.



Signature and date of
Regulatory Project Manager
(REQUIRED)

Signature and date of
person requesting preliminary JD
(REQUIRED, unless obtaining the
signature is impracticable)

G. EXPLANATION OF PRELIMINARY AND APPROVED JURISDICTIONAL DETERMINATIONS:

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable.

Exhibit F.2: Summary of Surveyed Wetlands

Wetland ID	Circular 39 Classification	Cowardin Classification	Hydrologic Water Type	Potential Impacts	Acres of Impact[1]
W_KC1_DV_20	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC1_DV_26	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC1_DV_35	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC1_DV_36	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC1_DV_37	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC1_DV_38	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC1_DV_39	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC1_DV_40	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC1_DV_42	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC1_DV_55	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC1_DV_56	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC1_DV_57	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC1_DV_58	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC1_DV_59	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC1_DV_60	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC1_DV_61	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC1_DV_65	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC1_DV_66	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC1_DV_67	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC1_DV_68	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC1_DV_69	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC1_DV_70	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC1_WM_4	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC1_WM_5	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC1_WM_7	1	PEM	ISOLATE	Avoided by routing within corridor	0

Wetland ID	Circular 39 Classification	Cowardin Classification	Hydrologic Water Type	Potential Impacts	Acres of Impact[1]
W_KC1_WM_16	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC1_WM_45	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC1_WM_46	1	PEM	ISOLATE	Short term impacts through wetland	0.17
W_KC1_WM_47	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC1_WM_48	1	PEM	ISOLATE	Short term impacts through wetland	0.03
W_KC1_WM_50	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC1_WM_54	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC1_WM_75	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC2_WM_1	1	PEM	ISOLATE	Short term impacts through wetland	0.14
W_KC2_WM_24	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC3_DV_11	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC3_DV_12	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC3_DV_13	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC3_DV_14	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC3_DV_15	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC3_DV_16	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC3_DV_20	6	PSS	ISOLATE	Avoided by routing within corridor	0
W_KC3_DV_41	1	PEM	ISOLATE	Short term impacts on edge of wetland	0.05
W_KC3_DV_42	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC3_DV_43	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC3_DV_44	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC3_DV_45	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC3_DV_46	1	PEM	ISOLATE	Short term impacts on edge of wetland	0.06
W_KC3_WM_6	1	PEM	ISOLATE	Short term impacts on edge of wetland	0.02
W_KC3_WM_7	1	PFO	ISOLATE	Short term impacts, missing treed area	0.07
W_KC3_WM_25	1	PEM	ISOLATE	Short term impacts on edge of wetland	0.23
W_KC3_WM_26	1	PEM	ISOLATE	Avoided by routing within corridor	0

Wetland ID	Circular 39 Classification	Cowardin Classification	Hydrologic Water Type	Potential Impacts	Acres of Impact[1]
W_KC3_WM_27	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC3_WM_28	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC3_WM_29	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC3_WM_30	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC3_WM_31	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC3_WM_37	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC3_WM_38	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC3_WM_47	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC3_WM_48	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC3_WM_49	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC3_WM_50	1	PEM	ISOLATE	Short term impacts through wetland	0.46
W_KC3_WM_51	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC3_WM_52	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC3_WM_53	1	PEM	ISOLATE	Short term impacts on edge of wetland	0.06
W_KC4_WM_1	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC4_WM_2	1	PEM	ISOLATE	Short term impacts through wetland	0.31
W_KC4_WM_3	1	PEM	ISOLATE	Avoided by routing within corridor	0
W_KC4_WM_4	1	PEM	ISOLATE	Avoided by routing within corridor	0

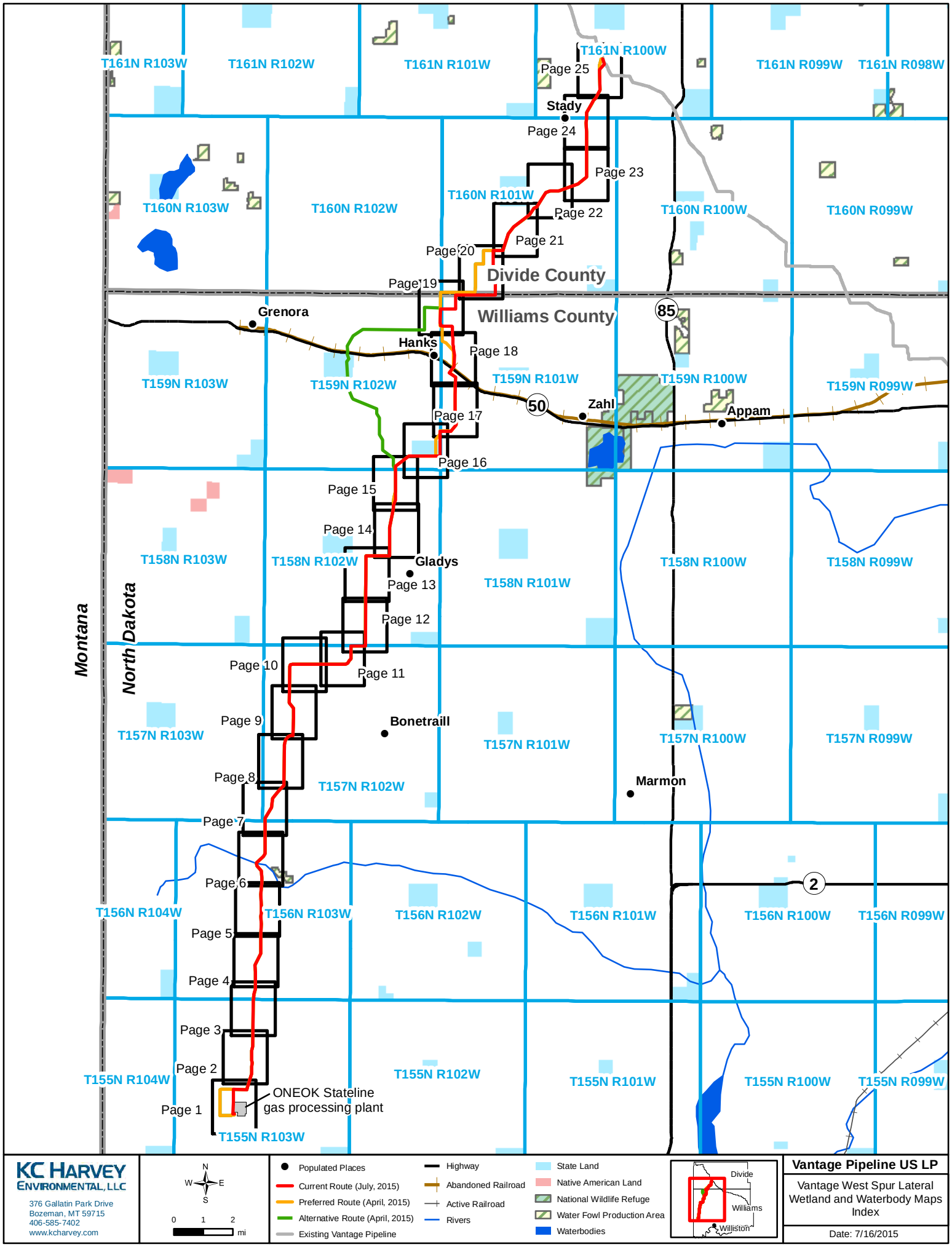
[1]Acres of impact is the wetland land area within the workspace.

Exhibit F.3: Summary of Surveyed Waterbodies

Waterbody ID	Classification (Flow Regime)[1]	Waterbody Name	AWD* at Centerline (ft)	OHWMW* at Centerline (ft)	Stream Bank Vegetation	Potential Impacts
S_KC1_WM_2	ED 1	Blacktail Creek	0.0	30.0	Reed canarygrass, smooth brome, Canada thistle, snowberry	Short term impacts
S_KC1_WM_3	ED 3	N Tributary Cow Creek	0.0	1.0	Smooth brome, prairie cordgrass	Short term impacts
S_KC1_WM_4	PS2	na	5.0	50.0	Reed canarygrass, cattail, prairie cordgrass	Short term impacts
S_KC1_WM_6	ED 1	na	1.0	10.0	Smooth brome, chokecherry, green ash, prairie cordgrass	Avoided by routing
S_KC1_WM_7	ED 1	na	0.0	20.0	Smooth brome, crested wheatgrass, Kentucky bluegrass, snowberry	Avoided by routing
S_KC1_WM_8	IS 2	na	1.0	25.0	Reed canarygrass, cattail, smooth brome, prairie cordgrass	Short term impacts
S_KC2_WM_3	IS 3	na	0.0	2.0	Foxtail barley	Short term impacts
S_KC2_WM_6	ED 1	na	0.0	40.0	Reed canarygrass,	Avoided by routing
S_KC2_WM_7	ED 3	na	0.5	2.0	Agricultural	Avoided by routing
S_KC3_WM_3	IS 3	Cow Creek	0.0	3.0	Prairie cordgrass	Short term impacts
S_KC4_WM_1	ED 2	na	0.0	9.0	Prairie cordgrass, Foxtail barley, Kentucky bluegrass, snowberry	Short term impacts
S_KC4_WM_2	ED 1	na	0.0	2.0	Prairie cordgrass, Foxtail barley	Short term impacts

[1]ED1: Ephemeral >10 ft wide; ED2: Ephemeral 3 – 10 ft wide; ED3: Ephemeral <3 ft wide IS2: Intermittent 10 – 100 feet wide; IS3: Intermittent <10 feet wide; PS2: Perennial 10 - 100 ft wide.
Note: OHWMW: Ordinary High Water Mark Width; AWD - Average Water Depth

Exhibit F.4: Wetland and Waterbody Maps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Page 1
ONEOK Stateline
gas processing plant
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KC HARVEY
ENVIRONMENTAL, LLC
376 Gallatin Park Drive
Bozeman, MT 59715
406-585-7402
www.kcharvey.com
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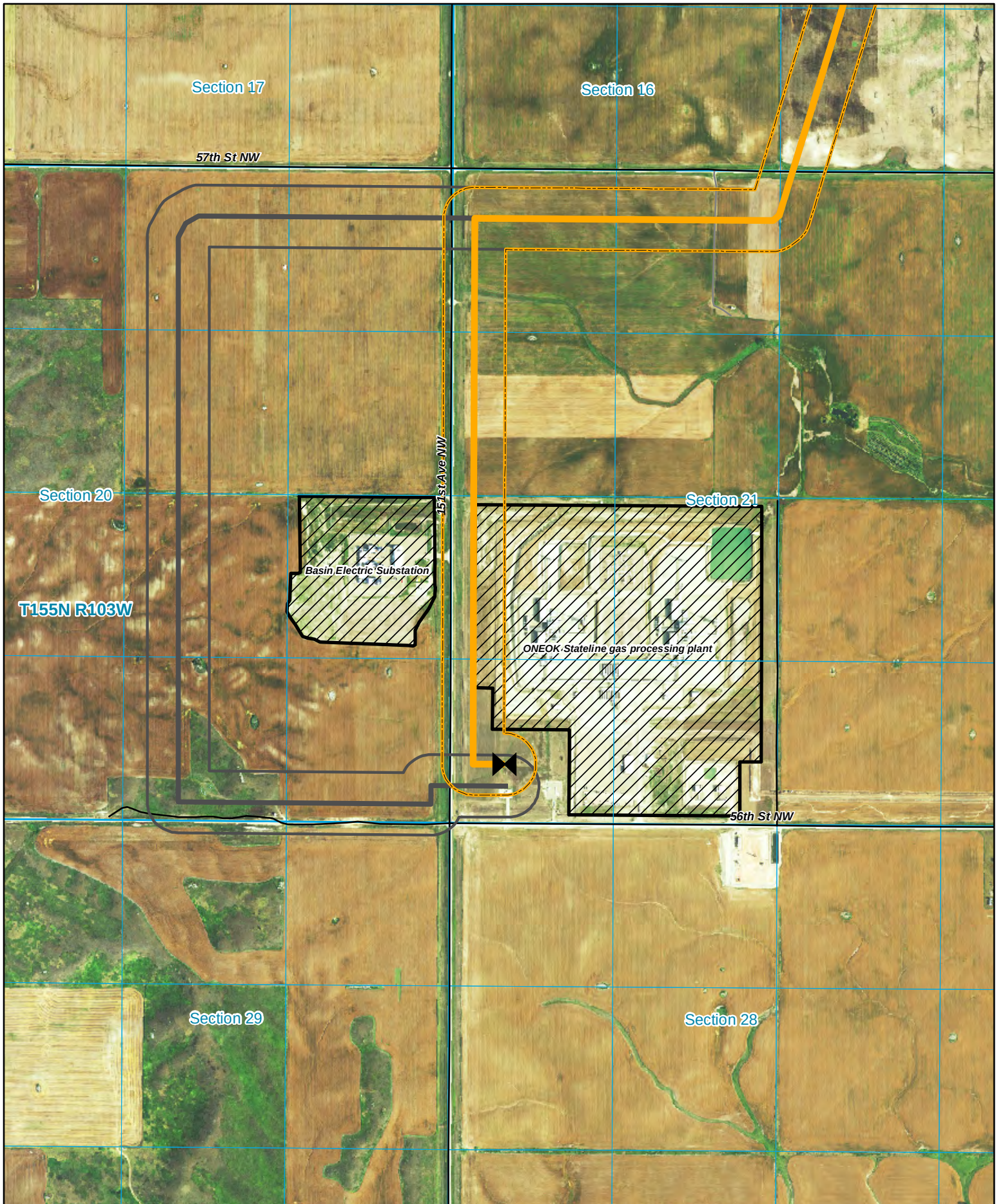
Populated Places
Current Route (July, 2015)
Preferred Route (April, 2015)
Alternative Route (April, 2015)
Existing Vantage Pipeline
Highway
Abandoned Railroad
Active Railroad
Rivers
State Land
Native American Land
National Wildlife Refuge
Water Fowl Production Area
Waterbodies
Divide
Williams
Williston
Vantage Pipeline US LP
Vantage West Spur Lateral
Wetland and Waterbody Maps
Index
Date: 7/16/2015



KC HARVEY ENVIRONMENTAL, LLC
376 Gallatin Park Drive
Bozeman, MT 59715
406-585-7402
www.kcharvey.com

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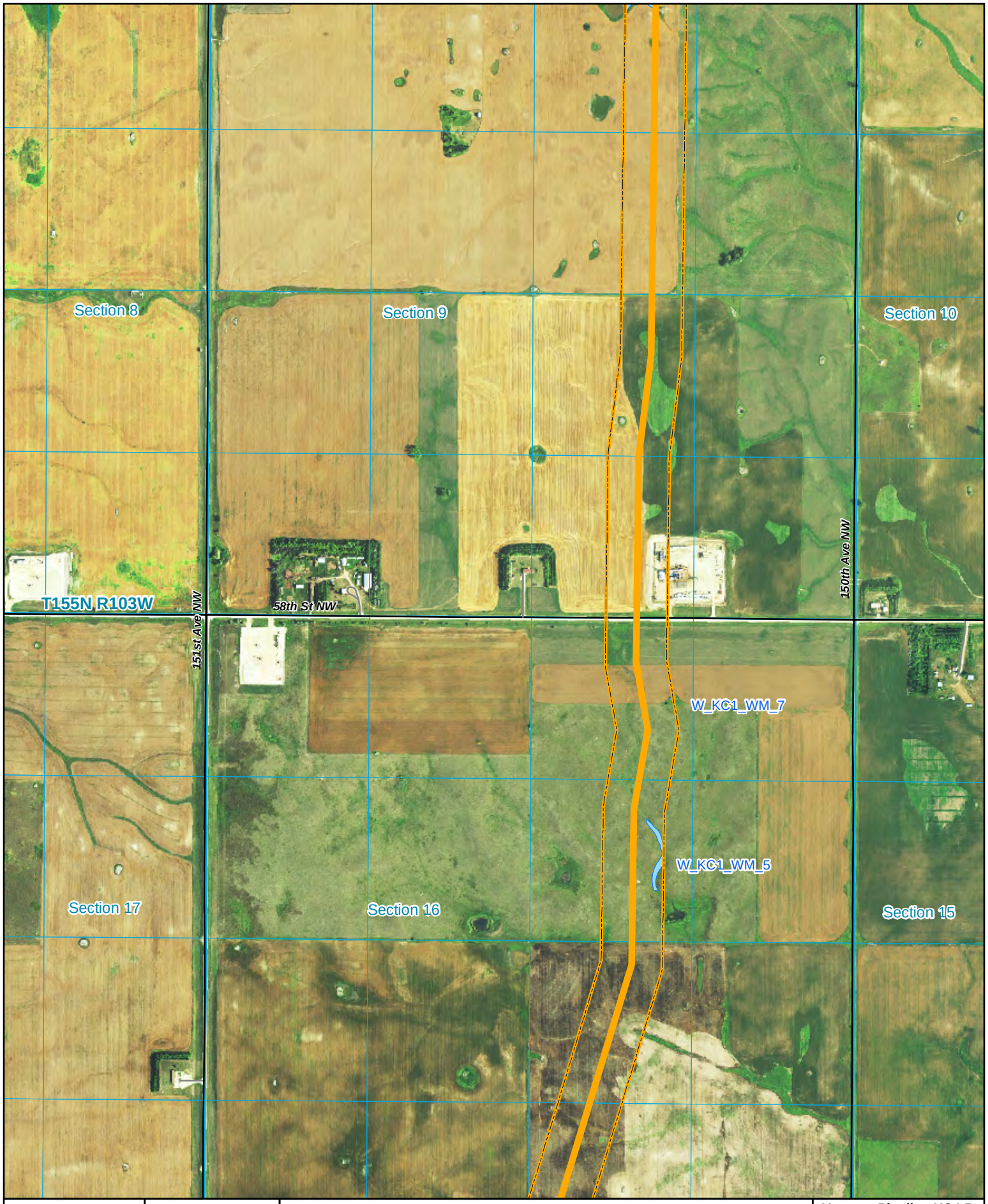
0 200 400 800 ft

- Current Route (July, 2015)
- Current Route Survey Corridor
- Preferred Route (April, 2015)
- Preferred Route Survey Corridor
- Existing Vantage Pipeline
- Highway
- Local Road
- Private Road
- Abandoned Railroad
- Active Railroad
- Mapped Wetlands
- Mapped Pond
- Mapped Stream

Vantage Pipeline US LP

West Spur Lateral Pipeline
Wetland and Waterbody Maps
12,000

Date: 7/16/2015



KC HARVEY ENVIRONMENTAL, LLC
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406-585-7402
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Current Route (July, 2015)
Current Route Survey Corridor
Preferred Route (April, 2015)
Preferred Route Survey Corridor
Existing Vantage Pipeline
Highway
Local Road
Private Road
Abandoned Railroad
Active Railroad
Mapped Wetlands
Mapped Pond
Mapped Stream

Vantage Pipeline US LP

West Spur Lateral Pipeline
Wetland and Waterbody Maps
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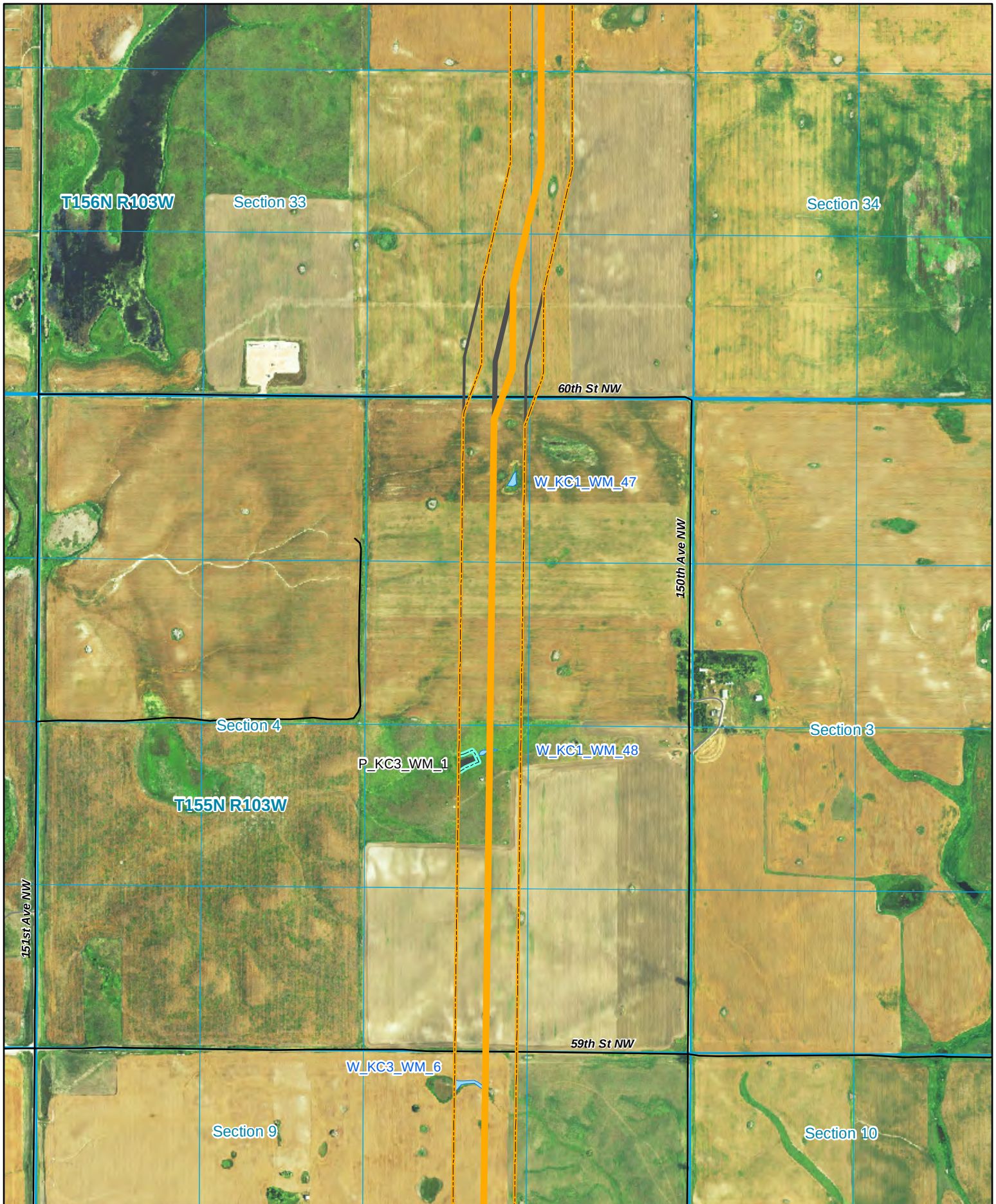
Date: 7/16/2015



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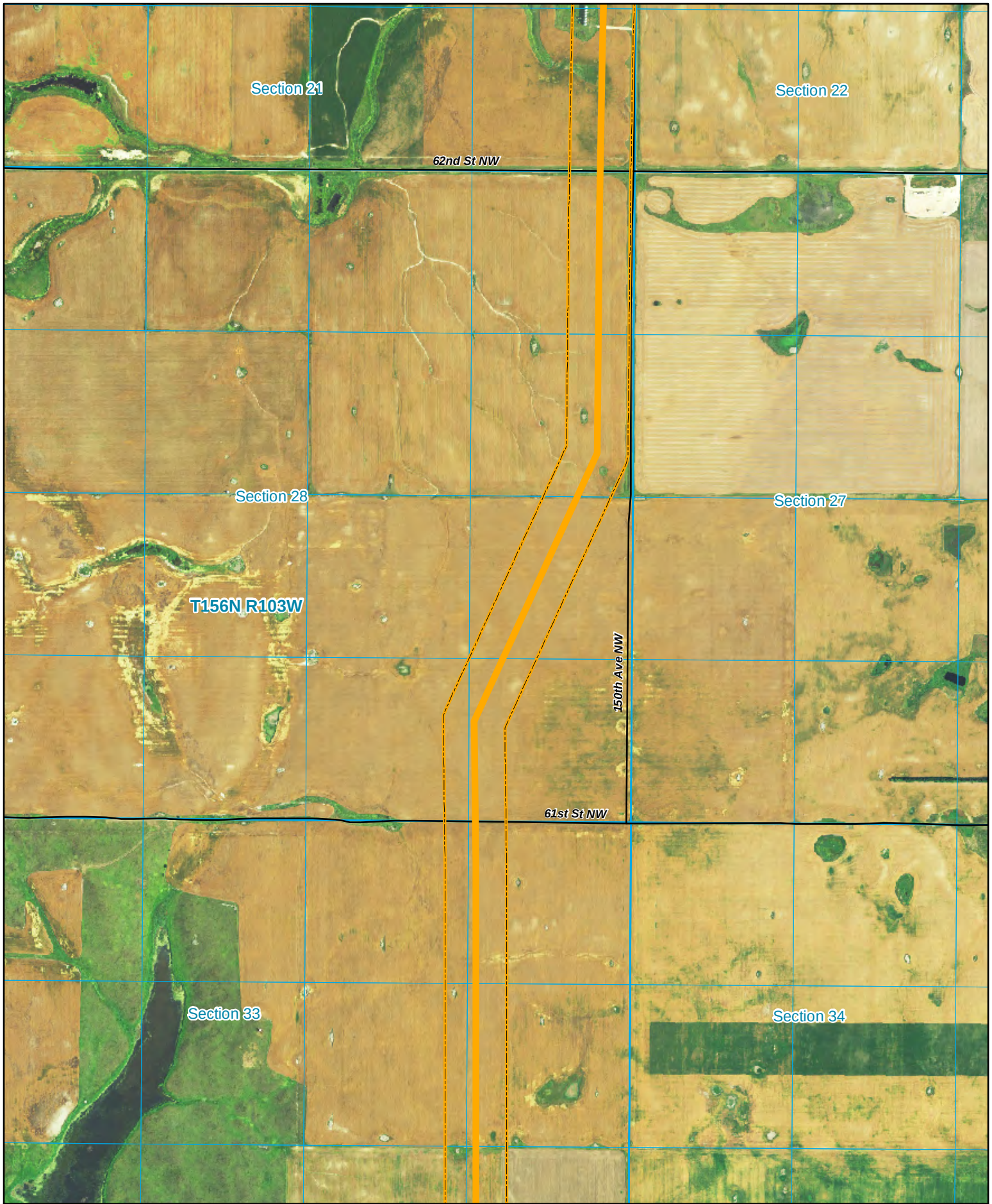

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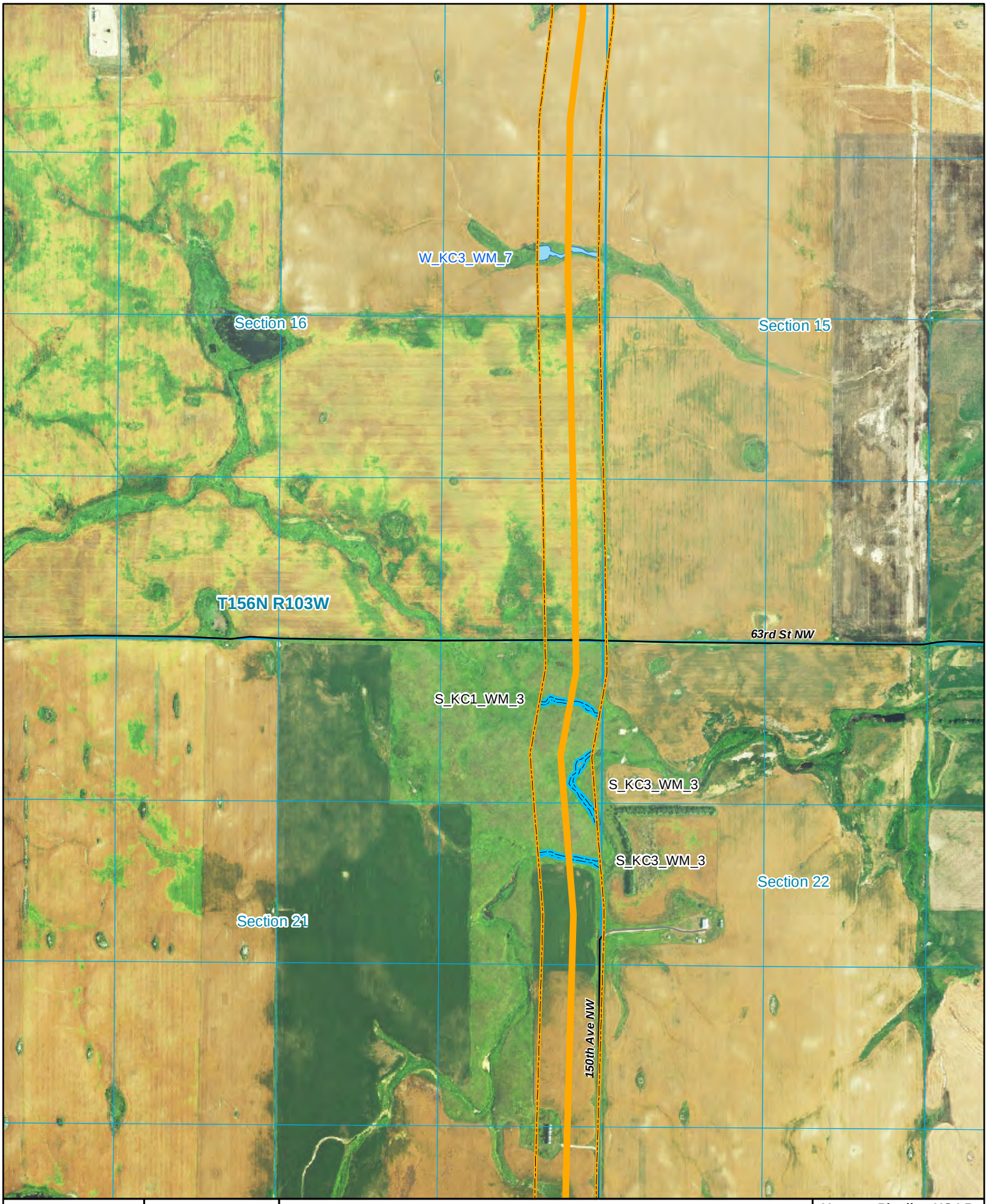

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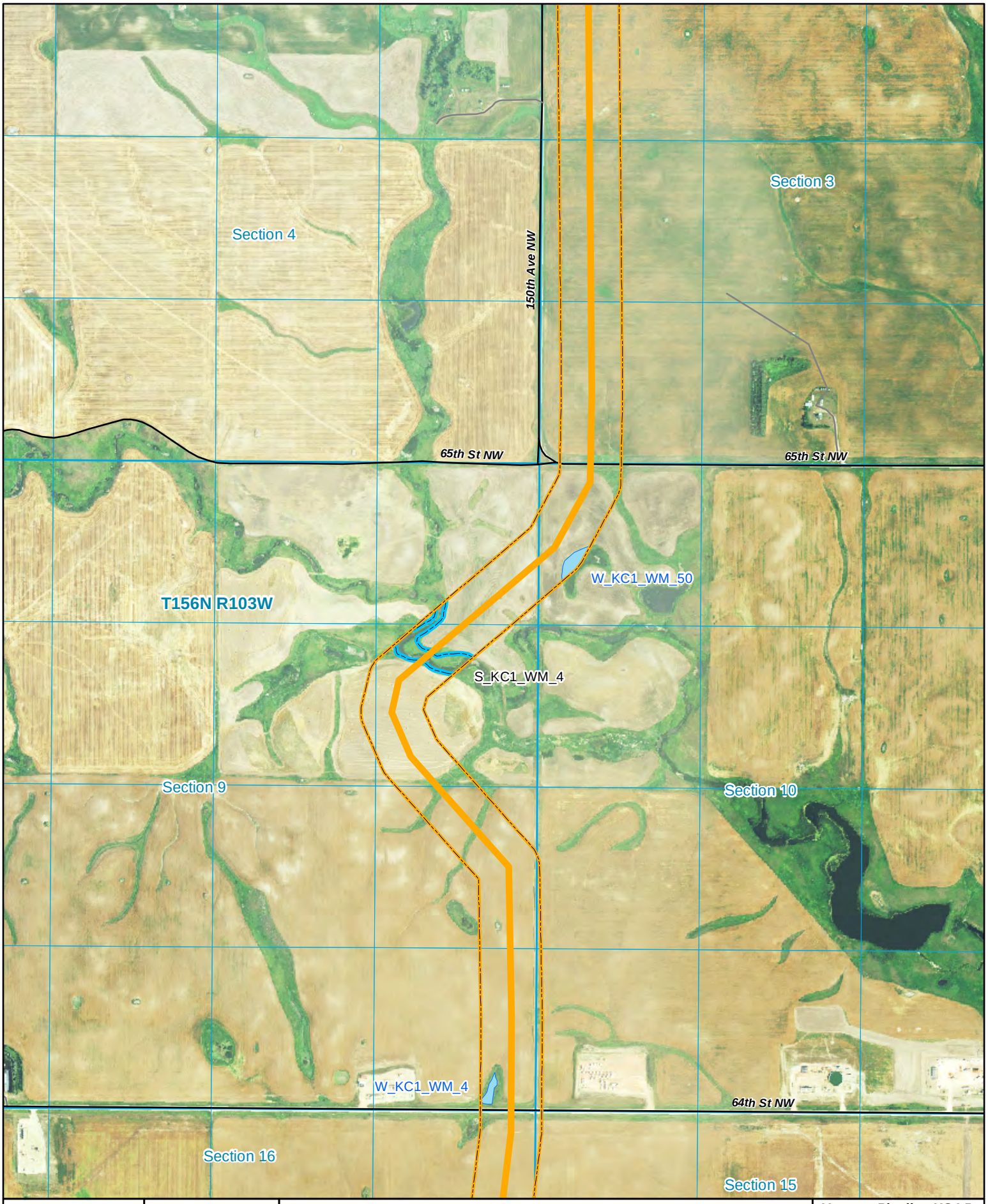

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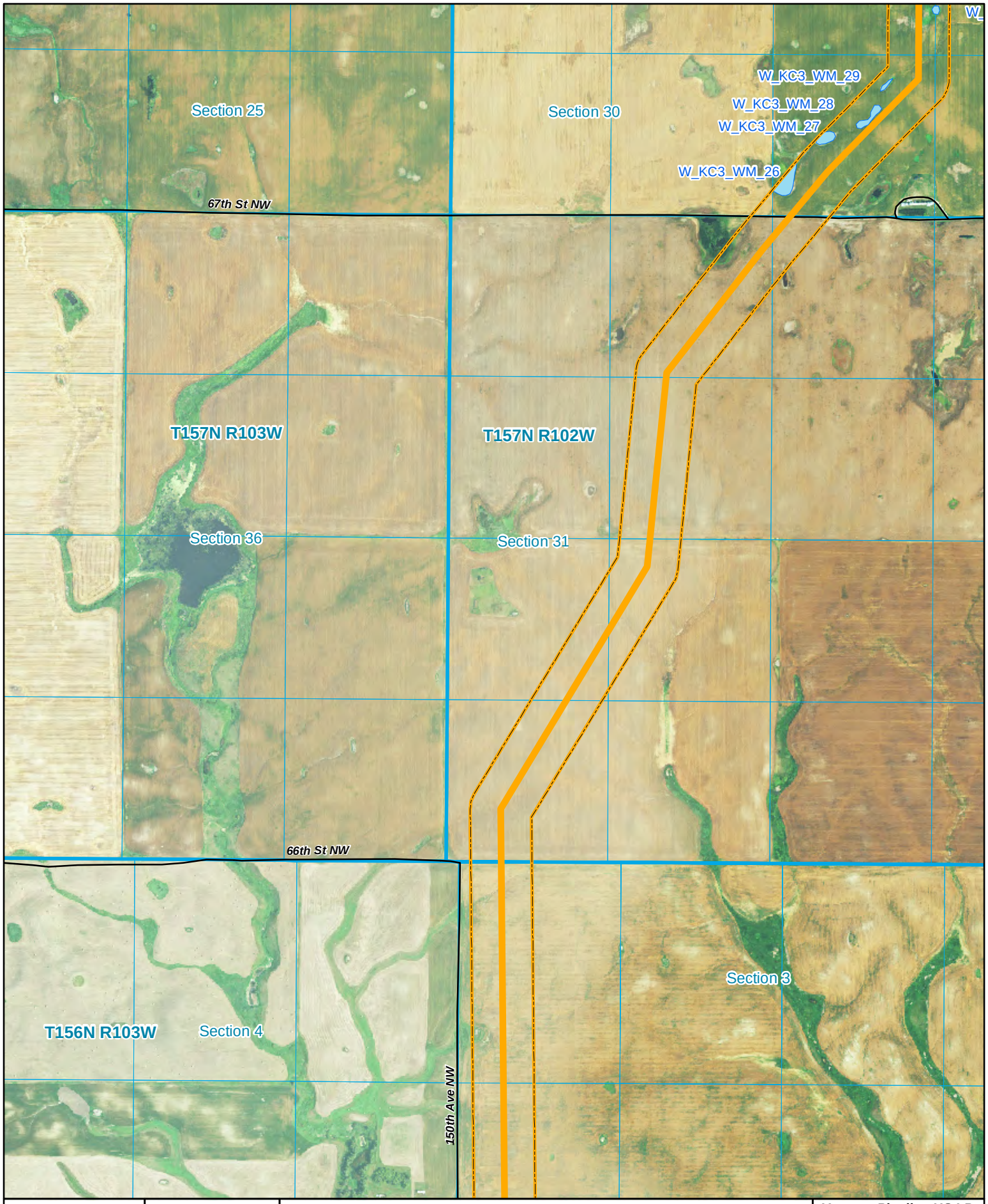

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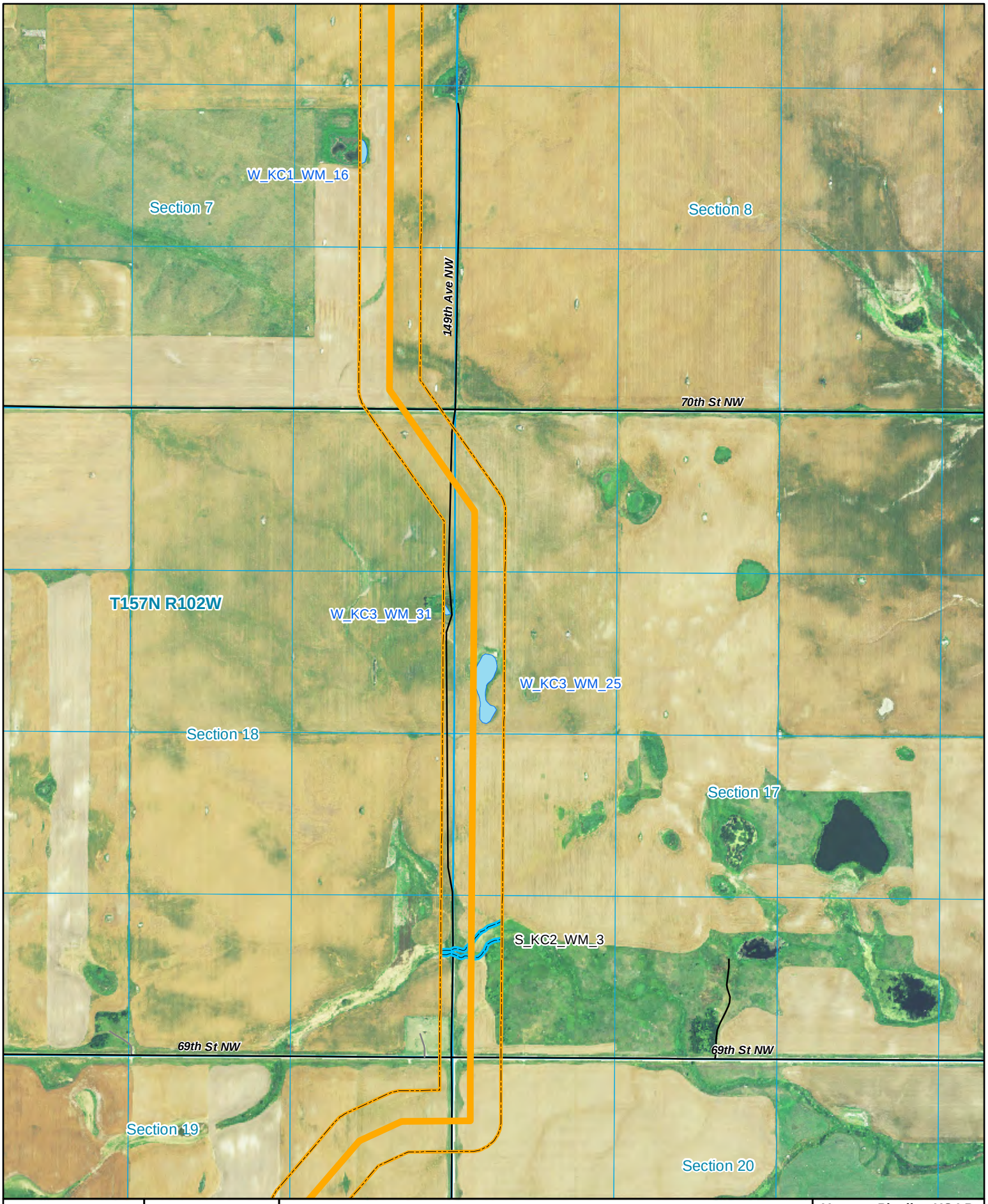

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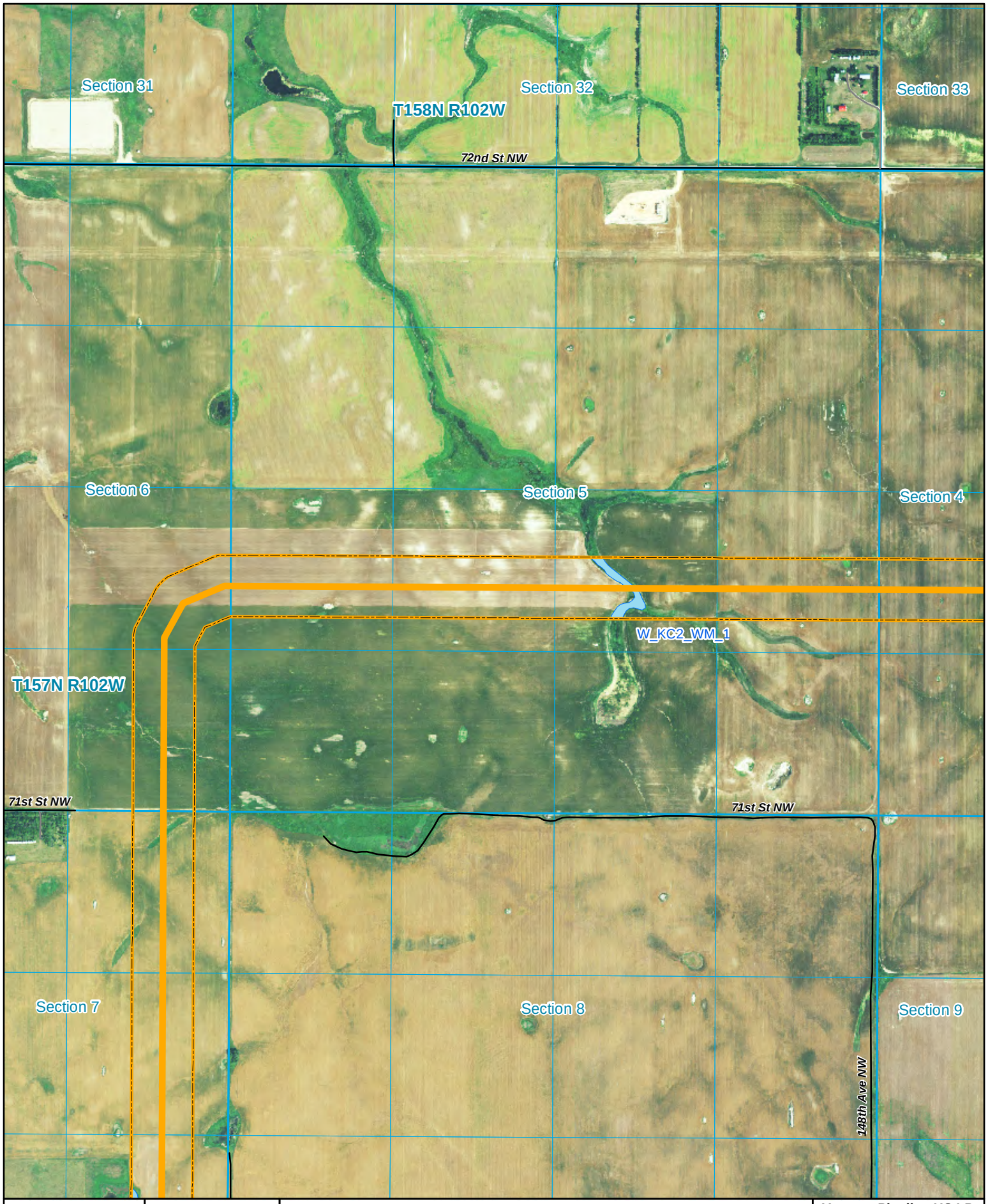

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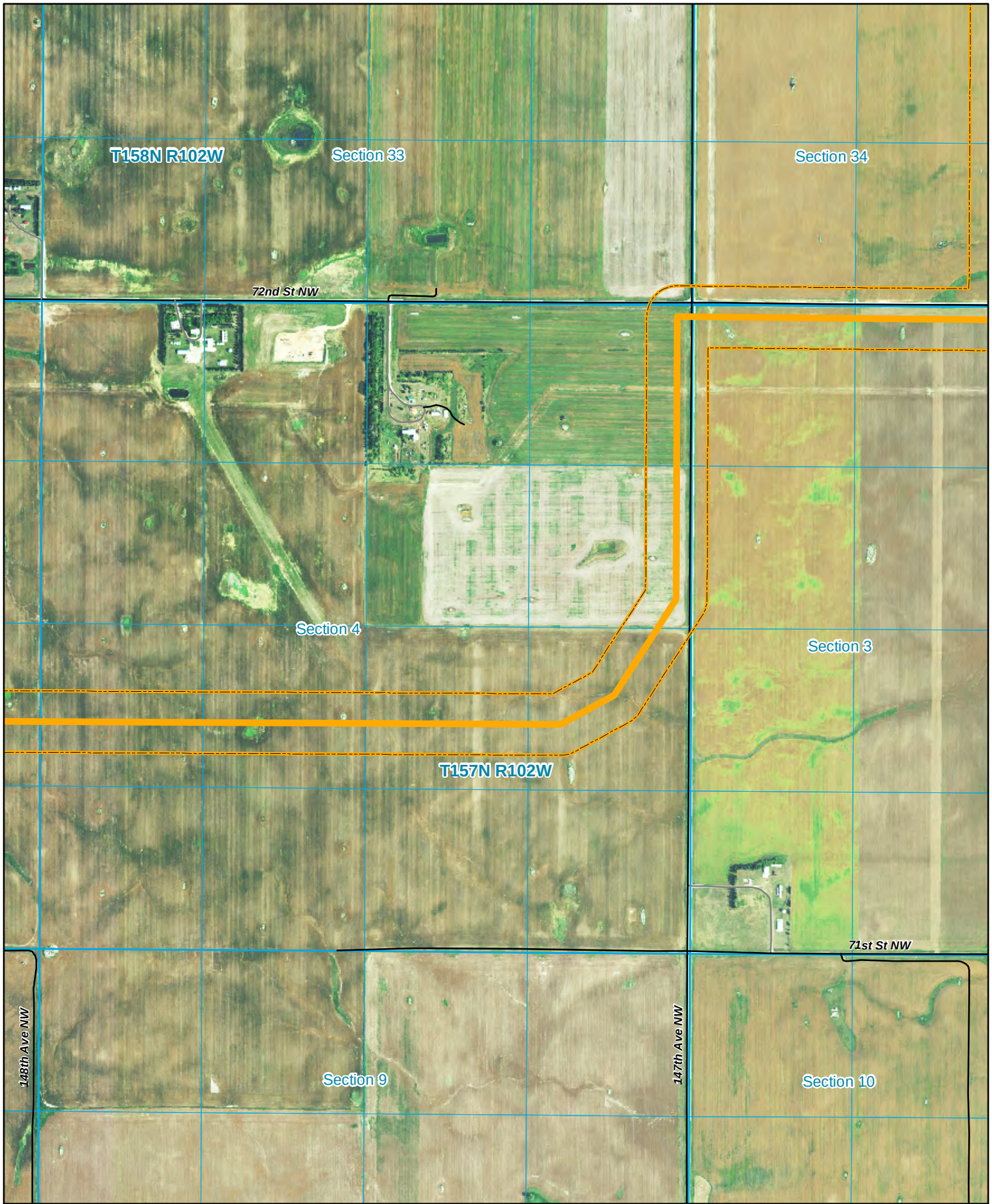

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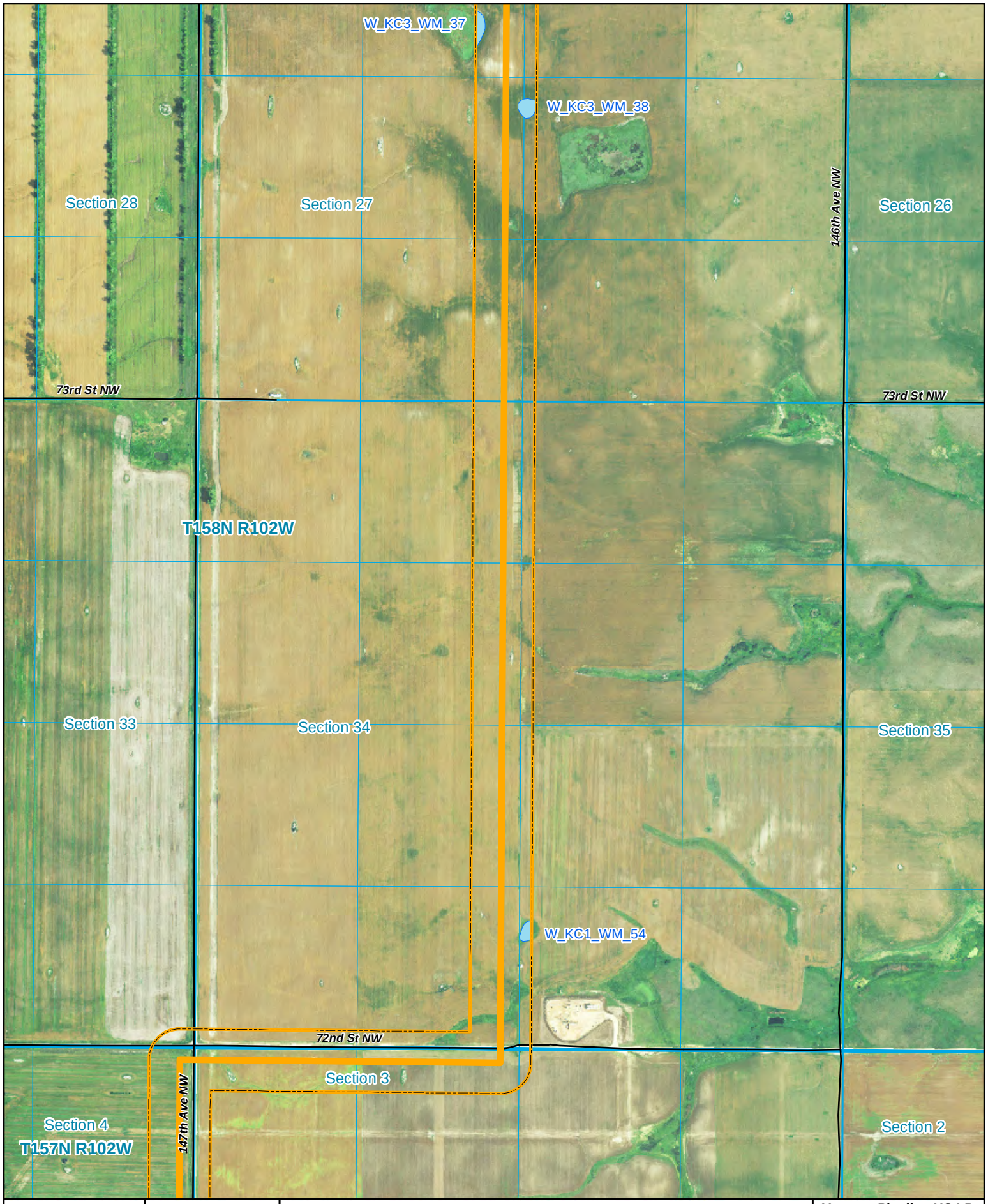

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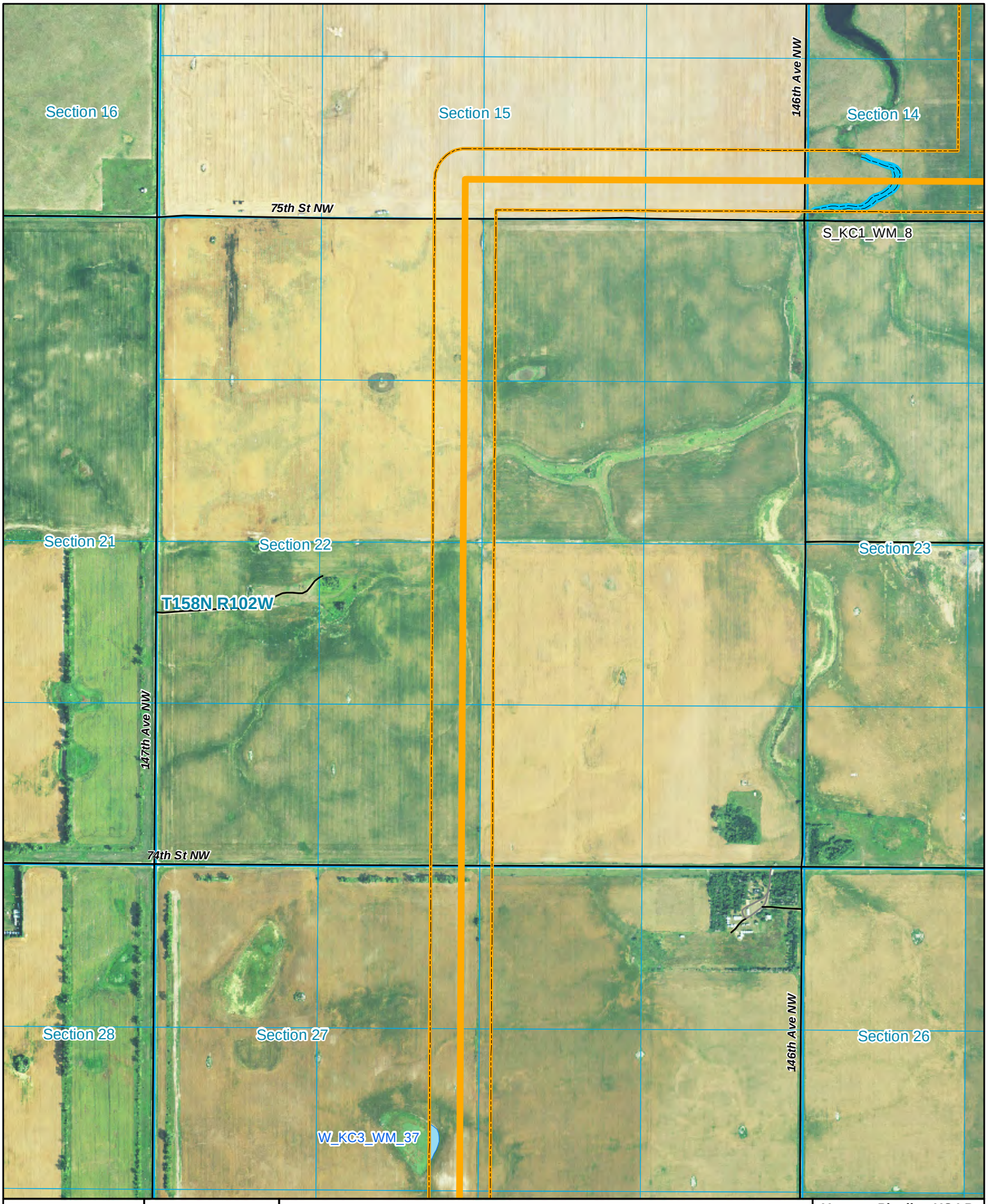

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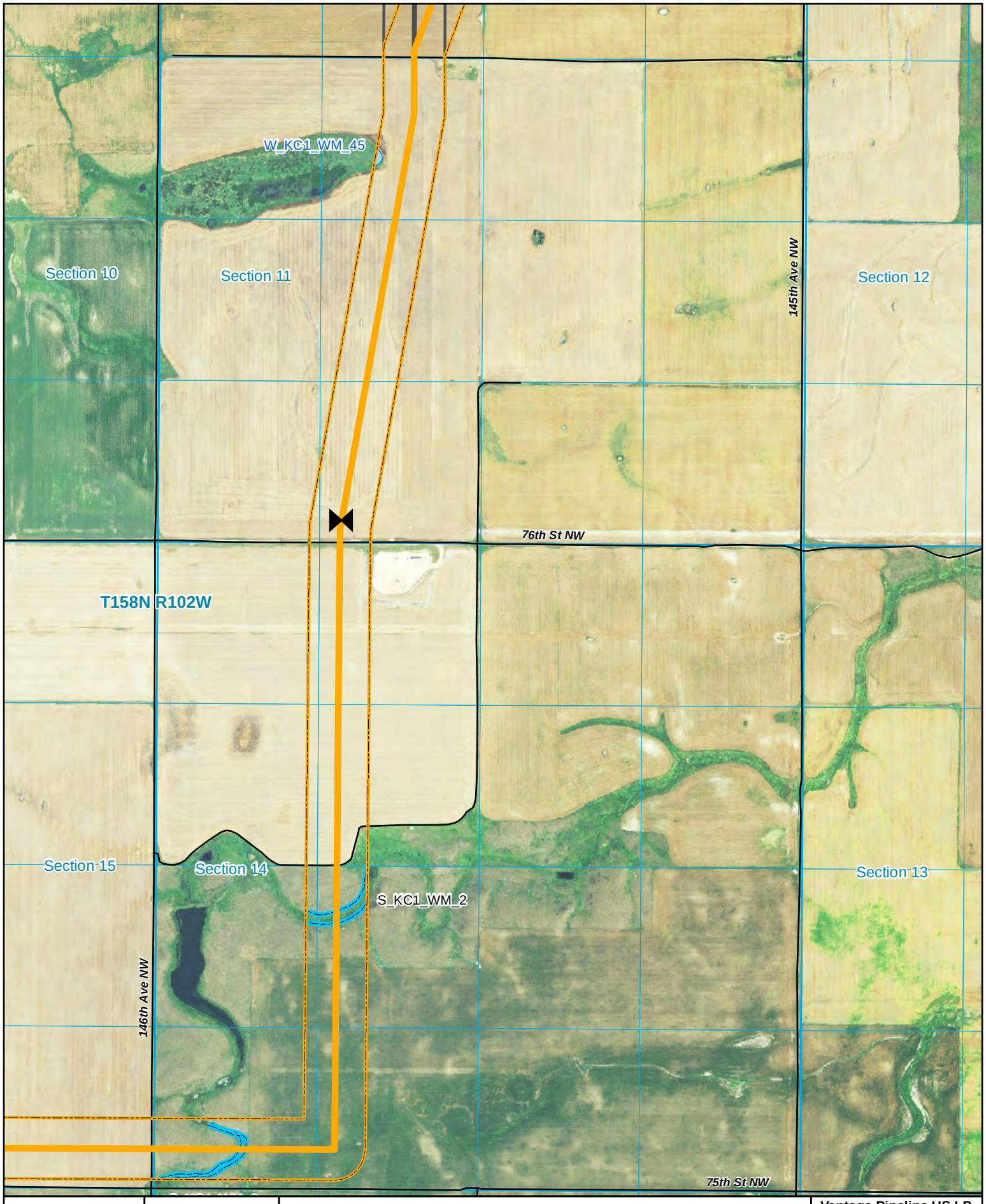

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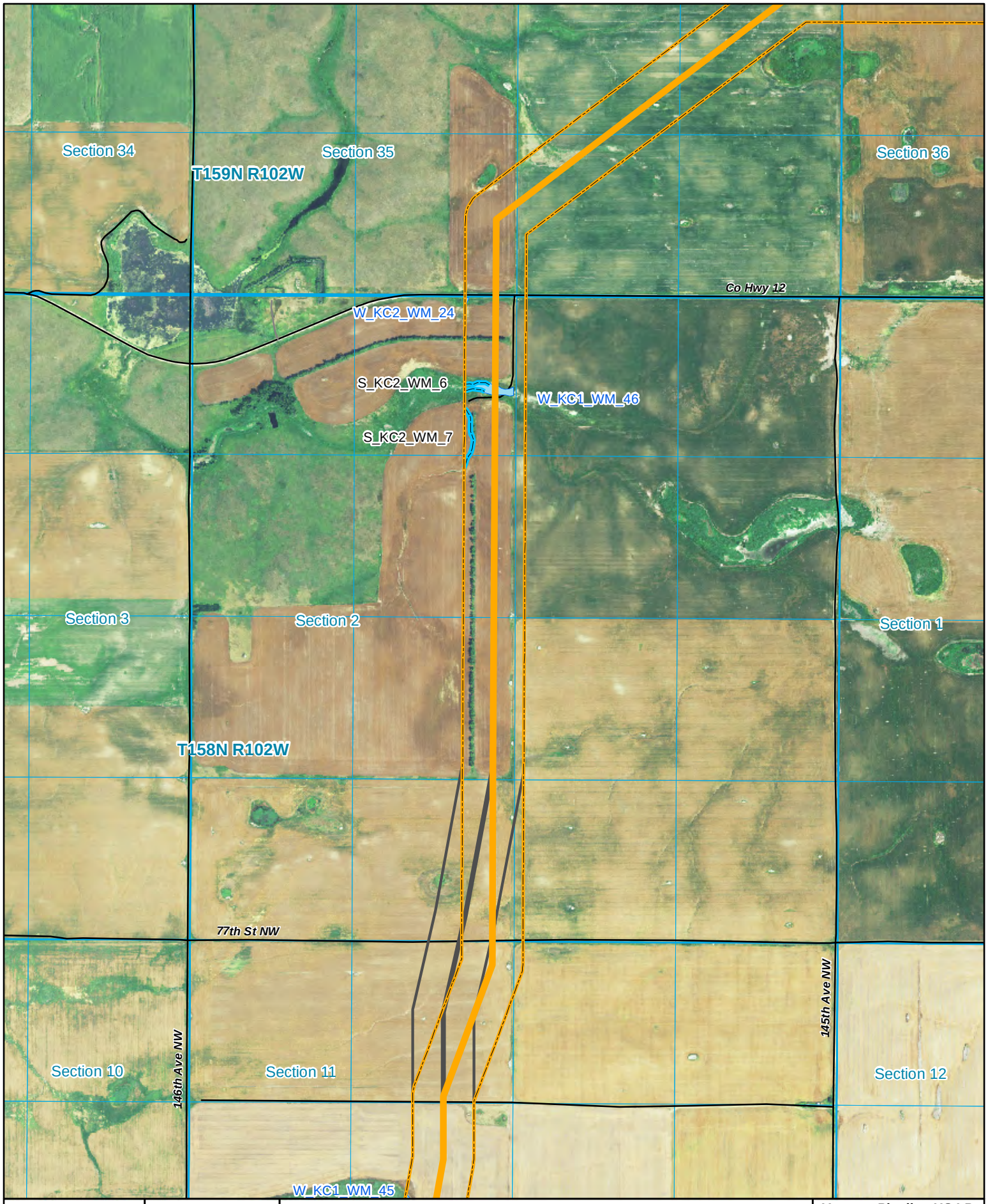

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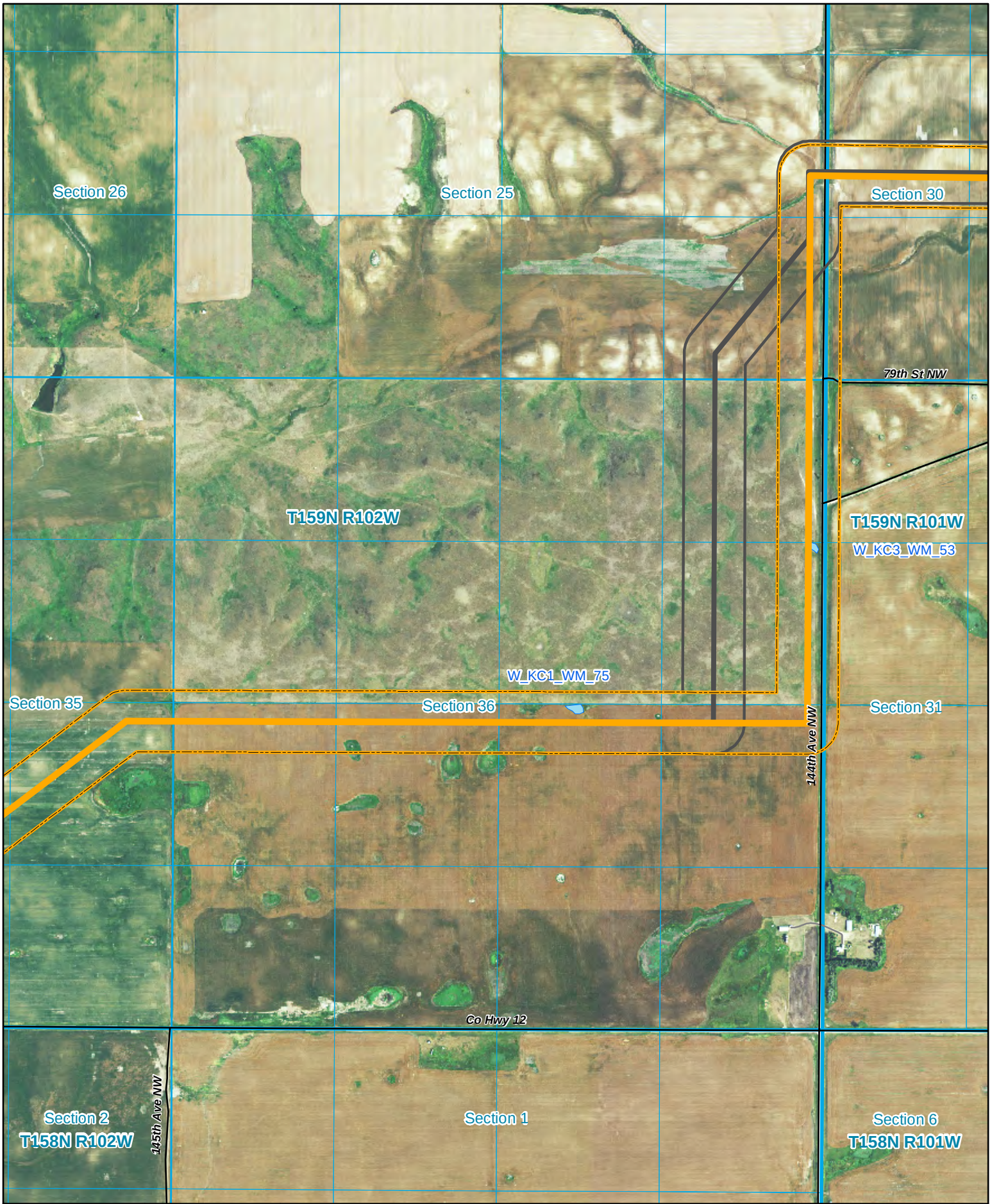

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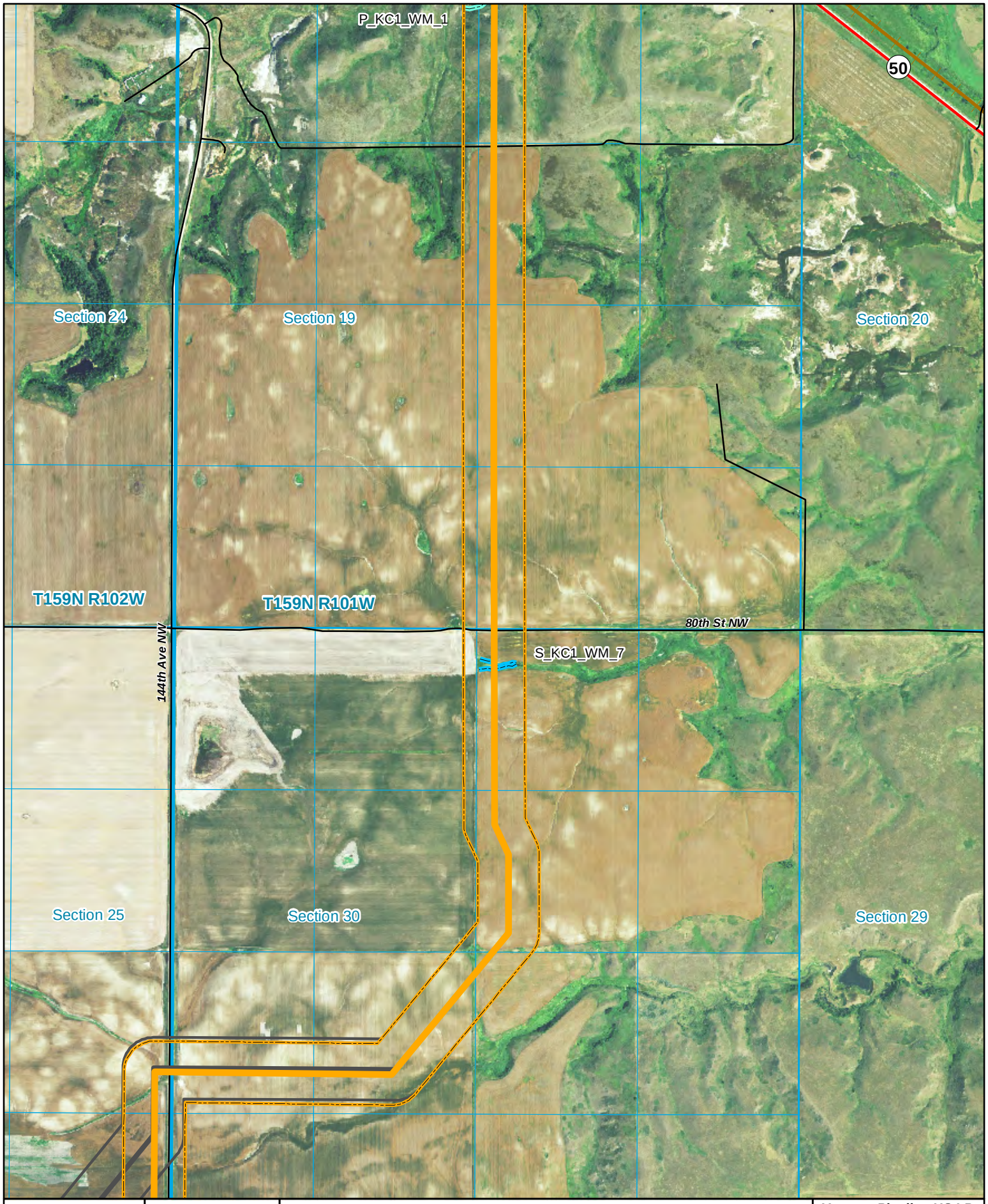

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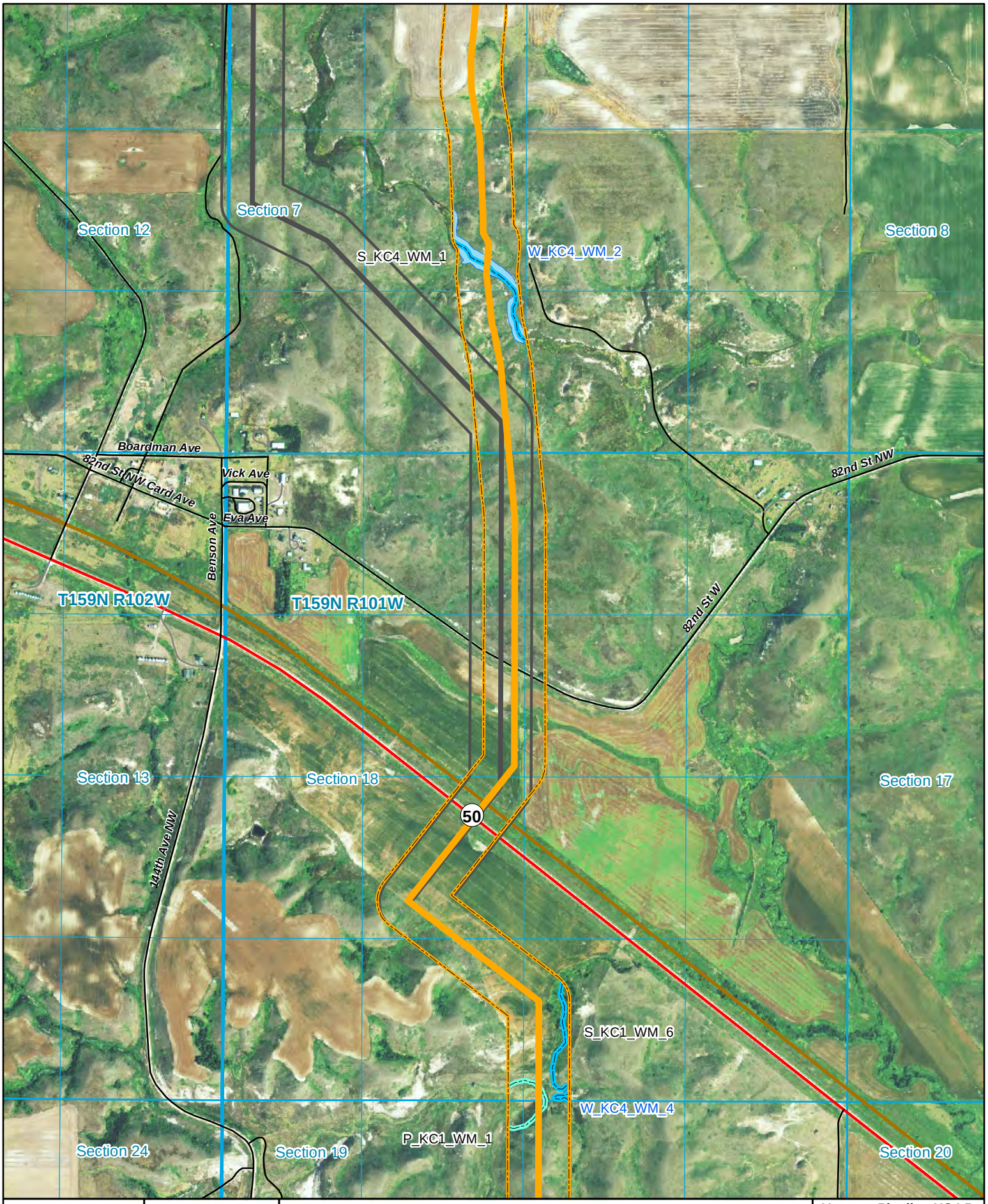

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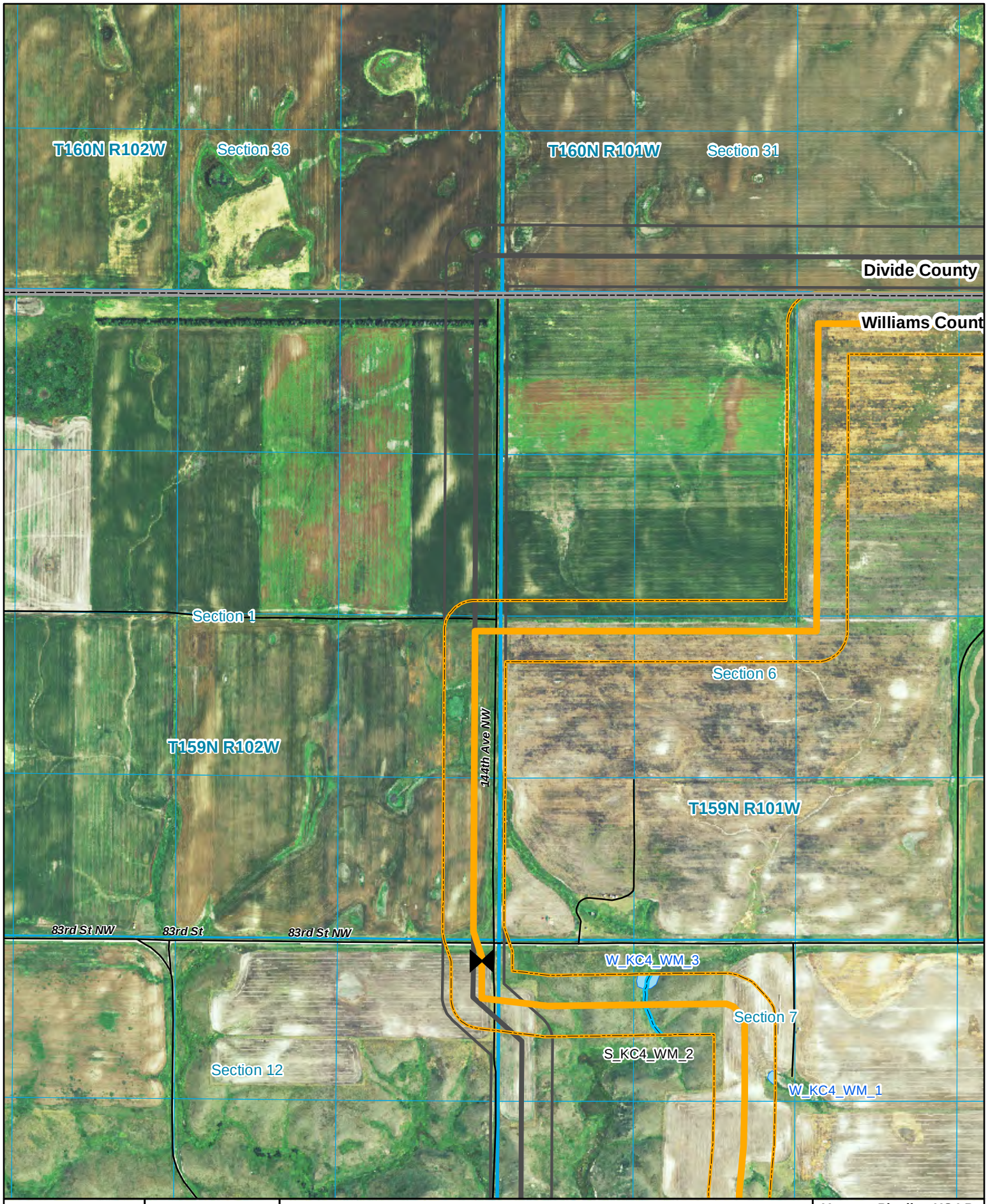

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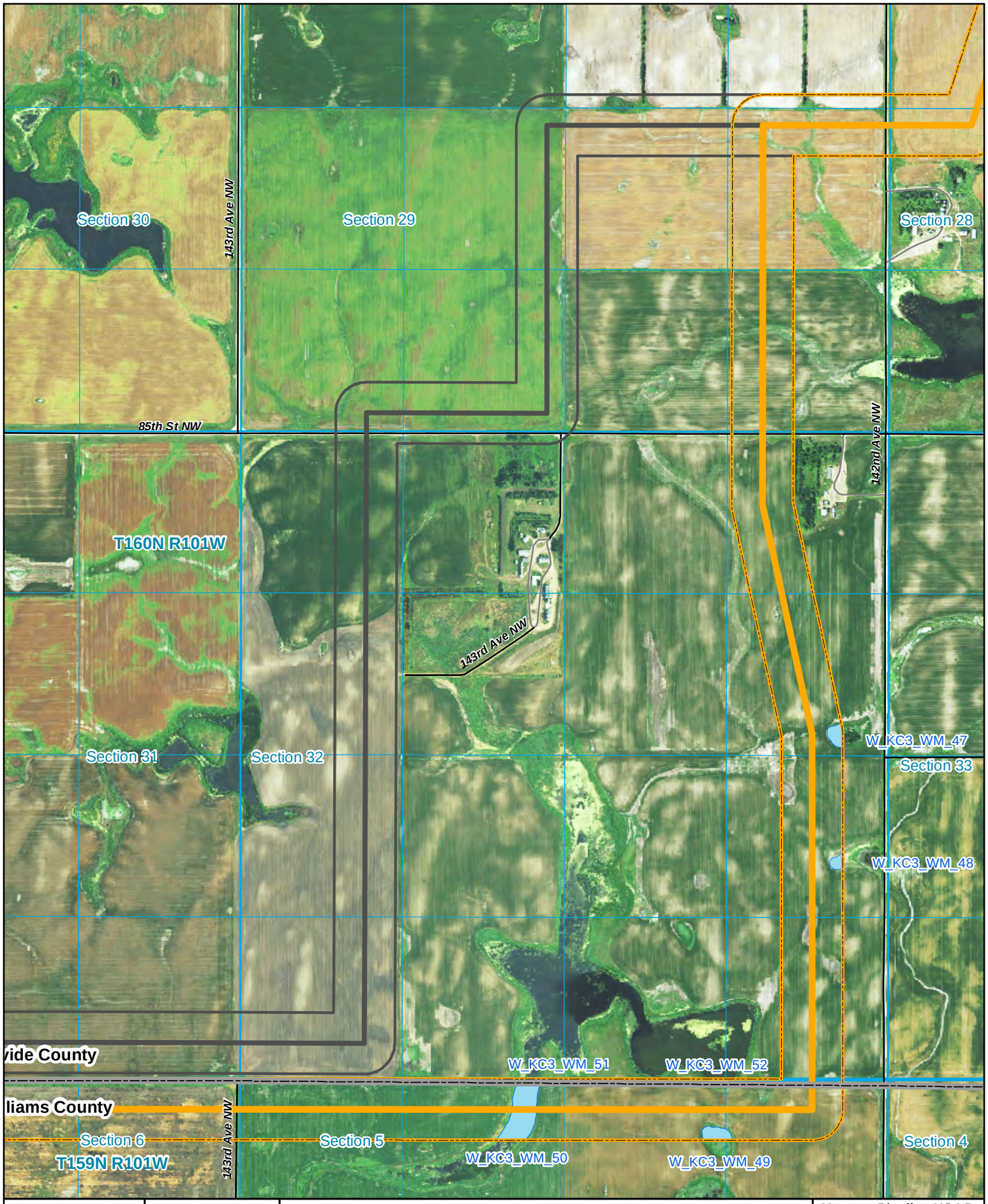

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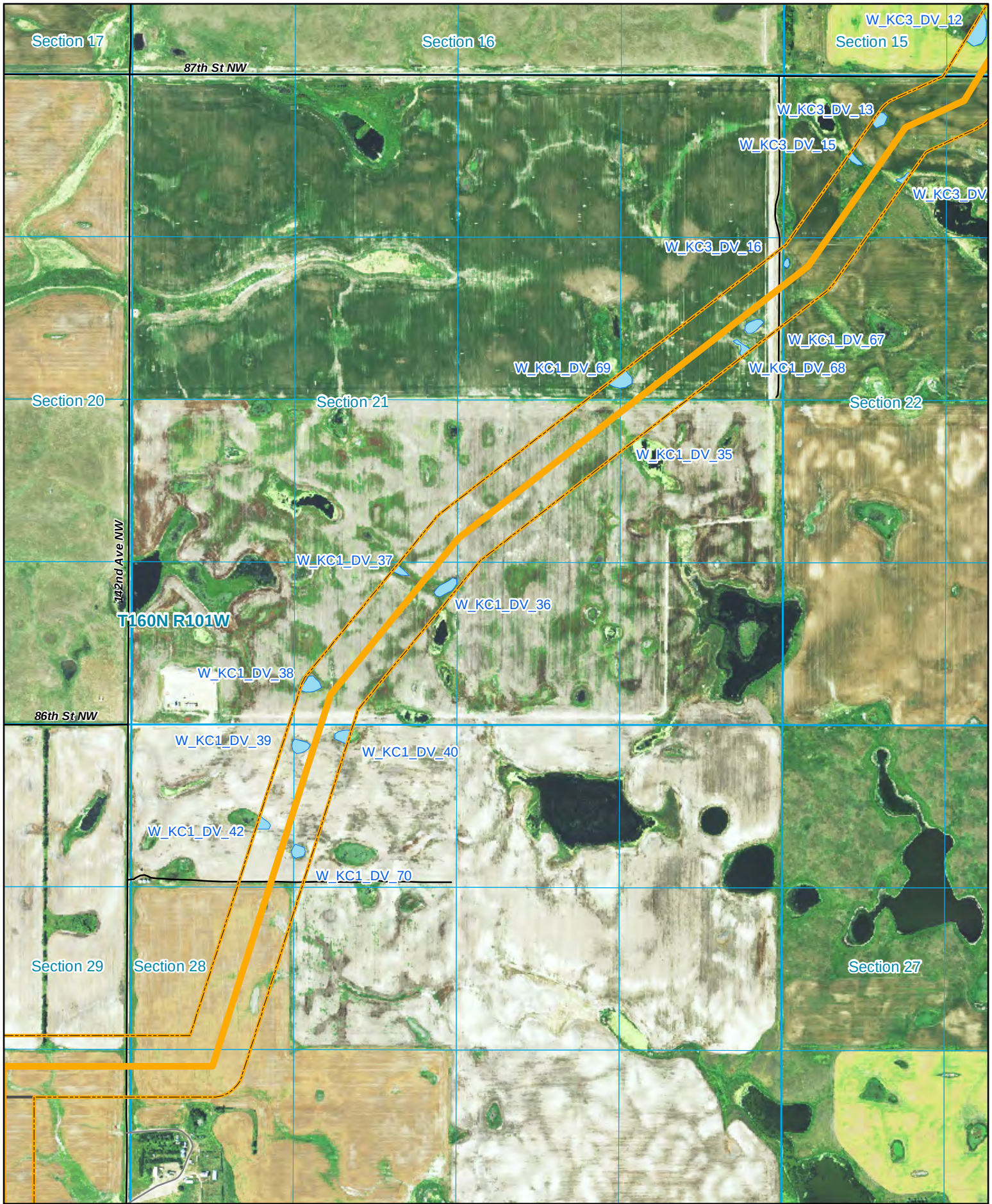

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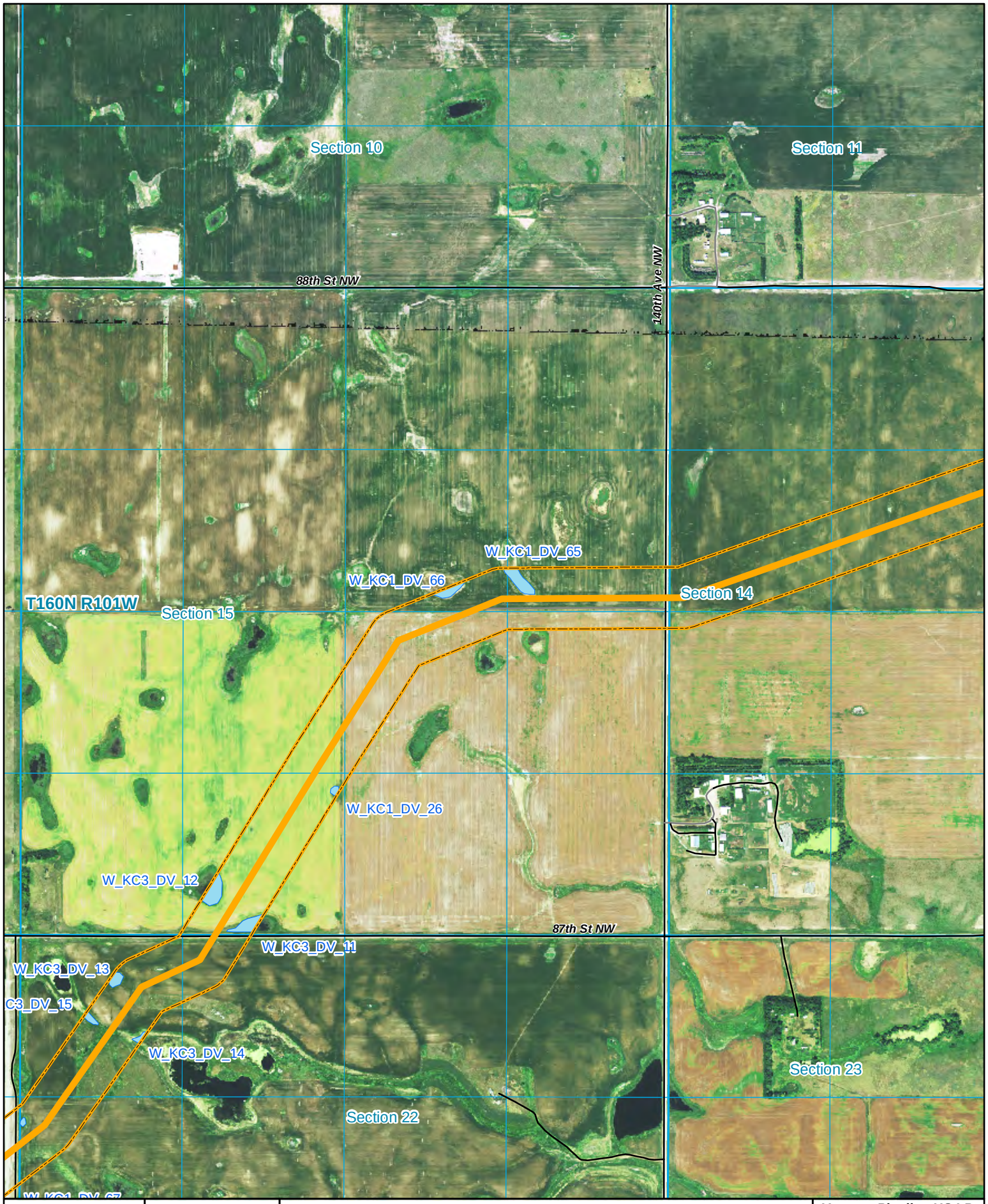

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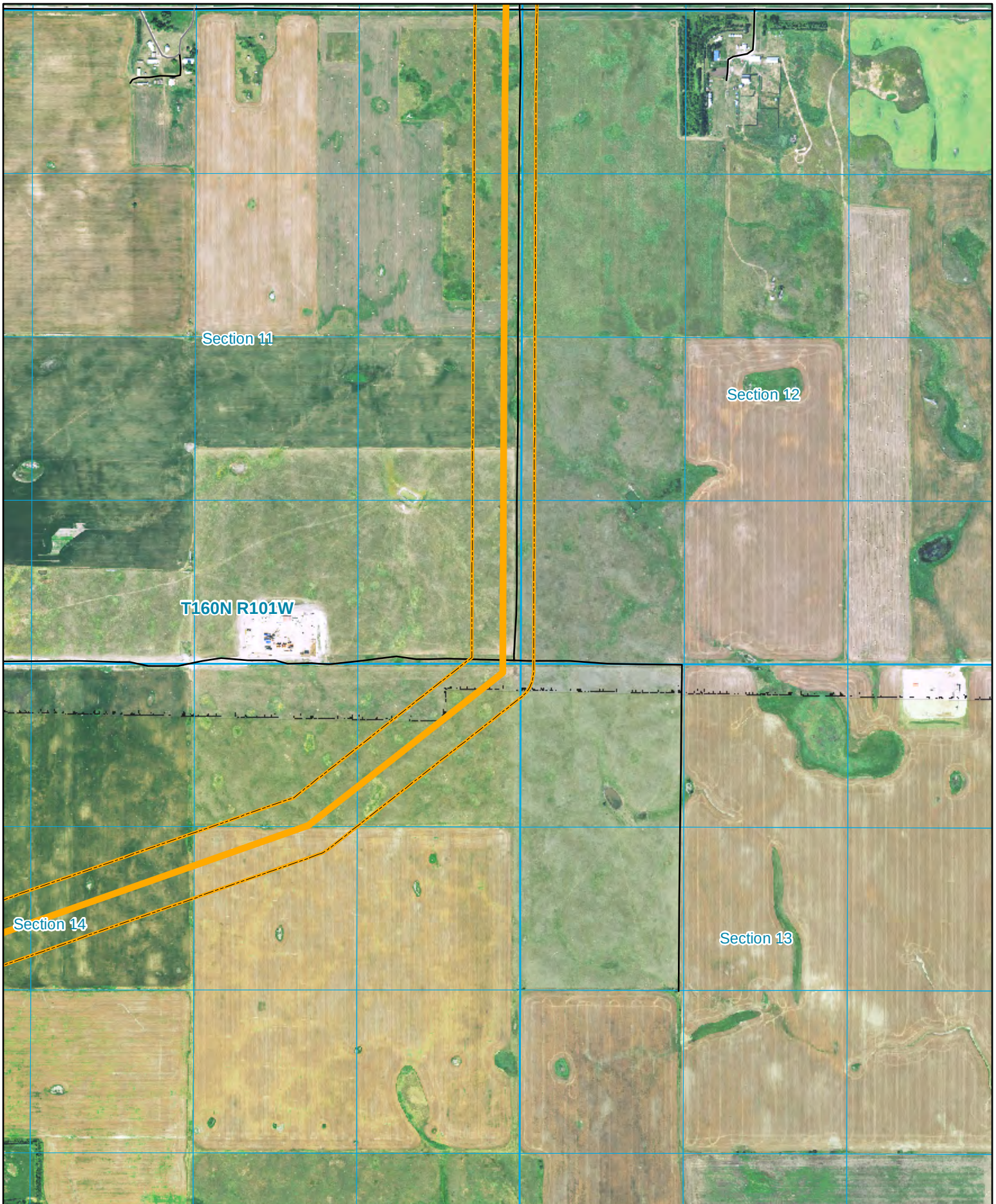

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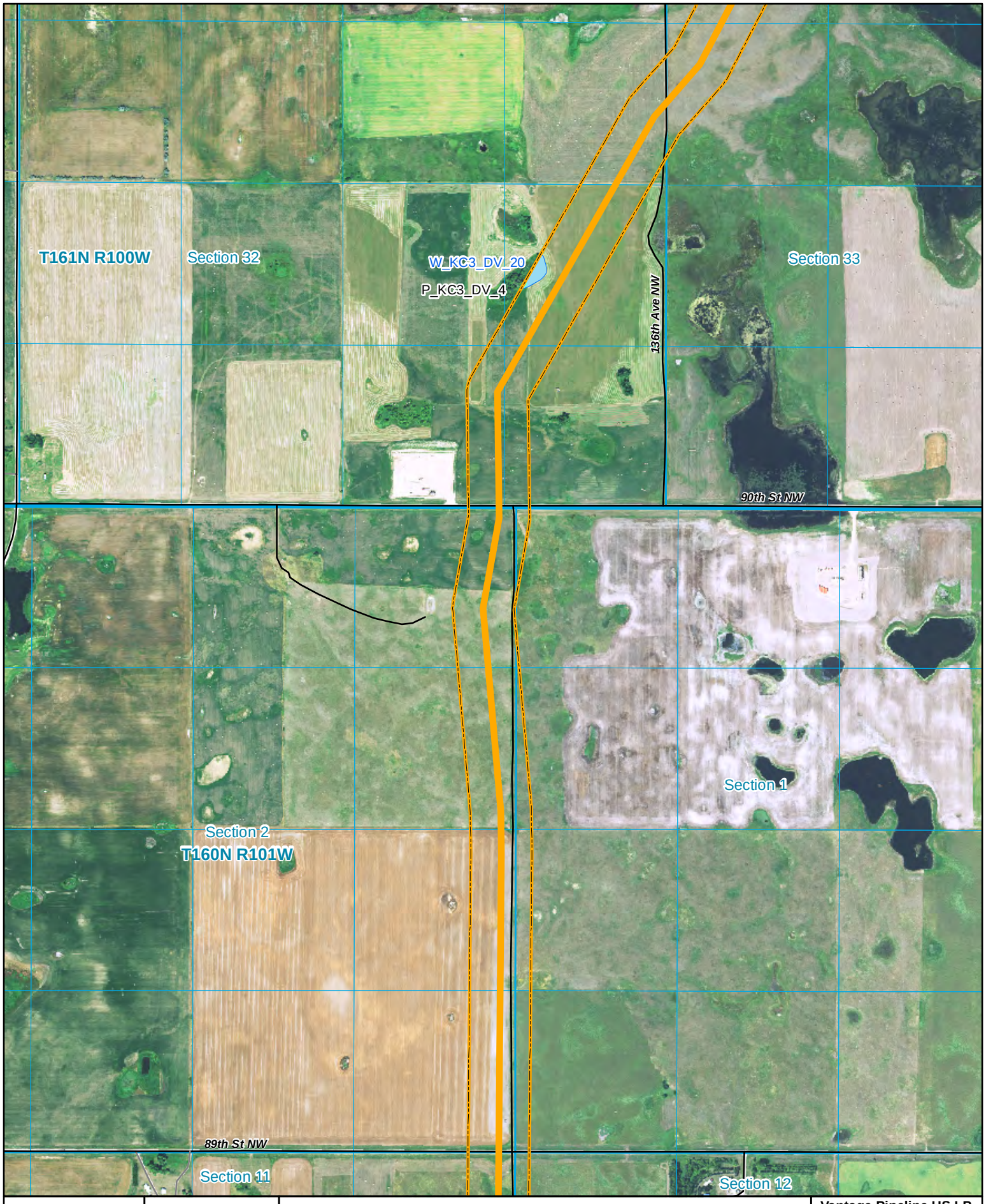

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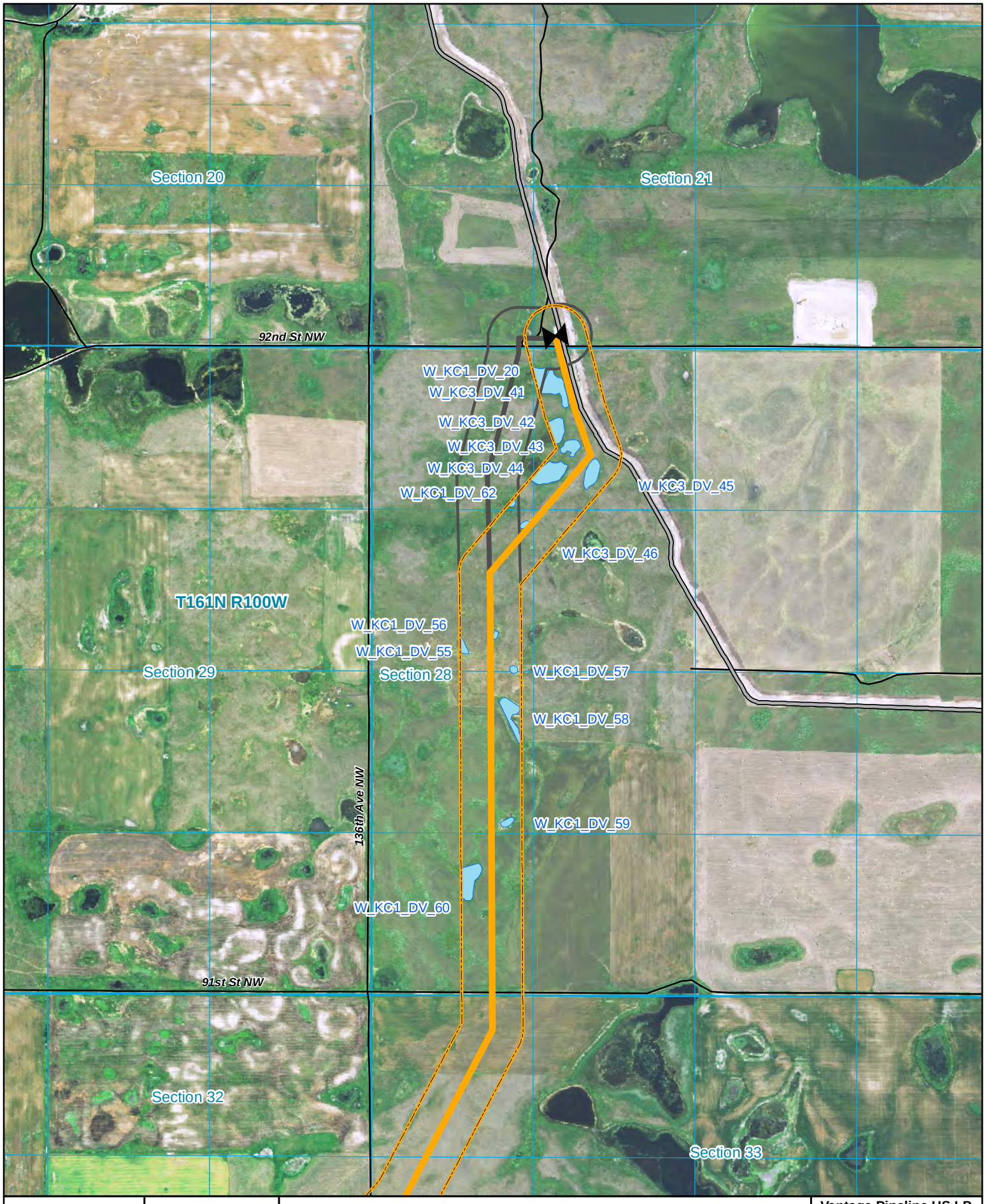

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