



LOWER PLATTE SOUTH natural resources district

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Agenda Item #11

Memorandum

Date: April 9, 2020
To: Each Director
From: Paul D. Zillig, General Manager
RE: Water Resources Subcommittee Meeting Minutes.

The Water Resources Subcommittee met via video/teleconference at 5:30 p.m. on Monday, April 6, 2020. Subcommittee members participating included Bob Andersen, Karen Amen, Greg Osborn, David Landis, Chelsea Johnson, Vern Barrett, and Dan Steinkruger. Others accessing the meeting included Larry Ruth, Gary Hellerich, Kathy Hauschild, Nathan Kuhlman, Katie Cameron, Dick Ehrman, Maclane Scott, Chris Witthuhn, Dan Schulz, Mike Murren, David Potter, Jared Nelson, and myself.

Chair Andersen opened the meeting and called on Katie Cameron to present the proposed actions related to the Eastern Nebraska Water Resources Assessment (ENWRA). Cameron first reported that the ten NRDs are accomplishing a lot working together on this project along with the University of Nebraska Conservation & Survey Division (UNL CSD), the United States Geologic Survey (USGS) and a private consultant Aqua Geo Frameworks, LLC (AGF). Cameron reported on the attached four agreements related to the Nebraska GeoCloud project. prior to the Subcommittee taking action.

Cameron reported that the ten NRD Interlocal for the NEBRASKA GeoCloud (NGC) project needs to be extended two years, the cost to the participants will remain the same. It was moved by Steinkruger, seconded by Osborn, and unanimously approved by the Subcommittee to **recommend the Board of Directors authorize the General Manager to sign the Nebraska GeoCloud Interlocal Cooperative Agreement.**

The Subcommittee then discussed a two year extension of the agreement with UNL CSD to host the Nebraska GeoCloud project at a cost of \$94,100. It was moved by Barrett, seconded by Steinkruger, and unanimously approved by the Subcommittee to **recommend the Board of Directors authorize the General Manager to sign the Nebraska GeoCloud Sub-agreement with the University of Nebraska Conservation & Survey Division.**

The Subcommittee then considered the AEM Data Integration and Bedrock Mapping Project agreement with USGS, which extended the agreement two years at an additional cost of \$8,500. It was moved by Amen, seconded by Barrett, and unanimously approved by the Subcommittee to **recommend the Board of Directors authorize the General Manager to sign the Nebraska GeoCloud Sub-agreement with the United States Department of the Interior – Geologic Survey.**

The final of the four Nebraska GeoCloud agreements was to contract with Aqua Geo Frameworks for an additional \$7,200 of services. It was moved by Steinkruger, seconded by Barrett and unanimously approved by the Subcommittee to **recommend the Board of Directors authorize the General Manager to sign the Nebraska GeoCloud Sub-agreement for Professional Services with Aqua Geo Frameworks, LLC.**

The next two agreements related to extending ENWRA for an additional two years. A copy of those agreements are attached. The first agreement is between the six partnering NRDs to extend the Coordinator position. It was moved by Barrett, seconded by Osborn, and unanimously approved by the Subcommittee to **recommend the Board of Directors authorize the General Manager to sign the Eastern Nebraska Water Resources Assessment Interlocal Agreement Amendment No. 6 to continue ENWRA Coordinator services.**

The final ENWRA item was to approve an agreement with UNL CSD to extend the Coordinator position another 2 years. It was moved by Amen, seconded by Steinkruger, and unanimously approved by the Subcommittee to **recommend the Board of Directors authorize the General Manager to sign the Eastern Nebraska Water Resources Assessment Cooperative Agreement Amendment #1 with the University of Nebraska Conservation and Survey Division to provide 60 percent of the salary and benefits plus operating costs for the ENWRA Coordinator Position thru June 30, 2022.**

The next item on the agenda concerned the rehabilitation of the principal spillway at Plattsmouth Watershed Dam 7-C (see attached map). Staff reported that Plattsmouth is responsible for the routine maintenance and the NRD is responsible for the major maintenance, the rehabilitation of the principal spillway pipe is major maintenance. Murren reported that the rehabilitation required spraying a liner on the inside of the 110 foot long, 18 inch diameter pipe to re-inforce the pipe. Bids were opened last Friday and one bid in the amount of \$91,542 was received from C&L Water Solutions from Colorado. Murren reported C&L has done similar types of projects. A letter recommending approval of the bid from our engineer, FYRA Engineering, was distributed and is attached.

It was moved by Steinkruger, seconded by Osborn, and unanimously approved by the Subcommittee to **recommend the Board of Directors approve the bid of \$91,542 from C&L Water Solutions, Inc. for the Plattsmouth Dam 7-C Spillway Rehabilitation Project.**

The next item on the agenda was to consider approval of two additional utility relocation agreements required for the construction of the Upper Salt 3-A Rehabilitation/SW 2nd Street Relocation Project. The first agreement is for Norris Public Power District, a copy of the proposed agreement and two maps showing the location of the existing power lines is attached. The estimated cost to relocate the two lines is \$3,068.18. It was moved by Osborn, seconded by Amen, and unanimously approved by the Subcommittee to **recommend the Board of Directors approve the Removal and Replacement Agreement with Norris Public Power District for a power line relocation for the Upper Salt Creek 3-A Watershed Rehabilitation Project.**

The second agreement is with Windstream Communications for a line relocation on the west end of Upper Salt 3-A. Attached is a map showing the location of this utility and a copy of the agreement, there is no estimated cost at this time, it should be a minor amount. It was moved by C. Johnson, seconded by Amen, and unanimously approved by the Subcommittee to **recommend the Board of Directors approve the Removal and Replacement Agreement with Windstream Communications for a line relocation for the Upper Salt Creek 3-A Watershed Rehabilitation Project.**

The next item on the agenda was to consider a proposal to relocate and replace a hard surfaced driveway, fence, and gate system that must be moved to construct the Upper Salt Creek 3-A Watershed Rehabilitation Project. The Vergith's own the property at the southwest portion of the project and the driveway to their home will be closed during construction. Murren reviewed the attached proposal from Fulton Construction to do the required work. The subcommittee discussed the history and details of the proposal. It was moved by Steinkruger, seconded by Osborn, and unanimously approved by the Subcommittee to **recommend the Board of Directors approve the proposal from Fulton Construction to relocate and replace the Vergith driveway, fence, gates, mailbox, etc at an estimated cost of \$18,520.**

Staff also reported that Lancaster County Rural Water District No. 1 completed their cost estimate to replace nearly ½ mile of water line for the Upper Salt Watershed Rehabilitation/SW 2nd Street Relocation Project. The estimated cost is \$49,858.05. Last month the NRD entered into an agreement for LCRWD #1 to remove and replace the line. This work will begin early this summer.

The final action item was to consider a request from the City of Waverly for additional assistance with their wellhead protection efforts. Ehrman reported that Waverly continues with their pro-active approach to protecting their water supply. The NRD partnered with the nearly complete, wellhead protection study/plan. One action item identified was to establish a demonstration farm on the 60 acre well field farm owned by the City. Ehrman reviewed the attached project summary and reported that the City is requesting 50% cost-share for their \$10,000 cost of the project this year.

The subcommittee discussed the request and it was moved by Landis, seconded by Osborn, and unanimously approved by the Subcommittee to **recommend the Board of Directors approve 50% cost-share, not to exceed \$5,000 of NRD cost, with the City of Waverly for the Waverly Best Management Practice Demonstration Farm project.**

The final item were reports. Ehrman reported on the attached summary showing Lancaster County's amendments to the confined animal feeding operation (CAFO) rules (most recently for poultry applications) and highlighted those changed related to the NRD water well permitting process. Staff also updated the Subcommittee on the construction at Oak-Middle 82-B and the upcoming work to restore the top of the dam at North Oak 1-A/Wildwood.

There being no additional business the meeting adjourned at 6:50 pm.

PDZ/pz

cc: Steve Seglin
Corey Wasserburger

Memorandum

Date: April, 2020

To: Each Director

From: Katie Cameron, ENWRA Project Coordinator

Subject: Authorization for the General Manager to sign six agreements:

- 1) Nebraska GeoCloud (NGC):
 - a. Two Year Interlocal Agreement w/10 member NRDs (grant term ended)
 - b. NGC Agreement with University of Nebraska Conservation and Survey Division (UNL CSD)
 - c. NGC Agreement with U.S. Geological Survey (USGS)
 - d. NGC Agreement with Aqua Geo Frameworks, LLC (AGF)
- 2) Eastern Nebraska Water Resources Assessment (ENWRA) Interlocal:
 - a. Amendment #6 for Two Year Extension of the Coordinator Position with the University of Nebraska Conservation and Survey Division (UNL CSD)
 - b. Amendment #1 of the UNL CSD Coordinator Agreement extending the Coordinator position two years on behalf of ENWRA

Item #1: ENWRA's Water Sustainability Fund (WSF) grant #4164: *Nebraska GeoCloud and Airborne Electromagnetic (AEM) Data Integration* award of \$247,437.60 by the Natural Resources Recourses Commission (NRC) on December 12, 2016 is expected to close out this June 30, 2020. The current status of Accomplishments for the NGC is included as Exhibit A of Item #1 Interlocal Agreement (see **Attachment #1**). The two years of costs incorporated into the 10 NRD interlocal agreement (Table in Section 4.01), are anticipated to remain the same, or similar to, the annual amounts for each NRD that were outlined in the previous agreement. We no longer have WSF dollars but our previous annual local match breakdown will cover the anticipated costs in **Attachment 1**. With the approval of this agenda item, all of the necessary agreements and funding to operate and maintain the NGC (includes minor new developments and facilitation with NRD members) for the next two years will be in place.

Item #2: The ENWRA Coordinator position with UNL CSD is up for renewal at the end of Fiscal Year (FY) 2020 (June 30, 2020). **Attachment #2** includes both Amendment #1 to the UNL-CSD Agreement and Amendment #6 to the ENWRA Interlocal to cover the UNL CSD position extension for the ENWRA Coordinator. The ENWRA interlocal is in place through June 30, 2022 and already financially commits the 6 ENWRA NRDs. The annual dues will remain the same for all 6 Districts (Lower Platte South's annual dues are \$30,000).

Item #1: Recommend that the Lower Platte South NRD Board of Directors authorize the General Manager to sign the Nebraska Geocloud 10 NRD Interlocal agreement, the U.S. Geological Survey Agreement, the University of Nebraska Conservation and Survey

Division Agreement, and the Aqua Geo Frameworks, LLC Agreement to operate and maintain the Nebraska Geocloud for two years.

Item #2: Recommend the Lower Platte South NRD Board of Directors authorize the General Manager to sign the Eastern Nebraska Water Resources Assessment Interlocal Agreement Amendment #6 and the Cooperative Agreement Amendment #1 with the University of Nebraska Conservation and Survey Division to provide 60 percent of the salary and benefits plus operating costs for the ENWRA Coordinator Position through June 30, 2022.

Memorandum

Date: March 16, 2020



To: Nebraska GeoCloud (NGC) Sponsors (SPONSORS):

LEWIS & CLARK NATURAL RESOURCES DISTRICT, LOWER ELKHORN NATURAL RESOURCES DISTRICT, LOWER PLATTE NORTH NATURAL RESOURCES DISTRICT, LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT, NEMAHA NATURAL RESOURCES DISTRICT, PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT, LOWER LOUP NATURAL RESOURCES DISTRICT, UPPER ELKHORN NATURAL RESOURCES DISTRICT, TWIN PLATTE NATURAL RESOURCES DISTRICT, and CENTRAL PLATTE NATURAL RESOURCES DISTRICT

From: The NGC team

Subject: Authorization for the Lower Platte South General Manager on behalf of the SPONSORS to sign a Two Year Interlocal Agreement (and necessary related sub-agreements) to continue operation, maintenance and coordination of the NGC Platform hosting the state-wide Airborne Electromagnetic Survey (AEM) and supporting datasets for the SPONSOR's data sharing and visualization needs:

- 1) Nebraska GeoCloud (NGC) Two Year Agreement w/10 member NRDs
 - a. NGC Sub-agreement with University of Nebraska Conservation and Survey Division (UNL CSD)
 - b. NGC Sub-joint funding agreement with U.S. Geological Survey (USGS) – (extension of original)
 - c. NGC Sub-agreement with Aqua Geo Frameworks, LLC (AGF)

Background: The SPONSOR's Water Sustainability Fund (WSF) award #4164: *Nebraska GeoCloud and Airborne Electromagnetic (AEM) Data Integration*, approved for \$247,437.60 in funding by the Natural Resources Recourses Commission (NRC) on December 12, 2016, is expected to close out this June 30, 2020. The WSF reimbursed 60% of eligible project costs and required a 40% local match (last claim and final reimbursement is expected this summer). The NGC Accomplishments to date are summarized in Exhibit A to the Interlocal Agreement. The Draft Interlocal, Exhibit A, and three sub-agreements (1a, 1b and 1c above) further describing scope and estimated costs are included as **Attachment #1**. The two year agreement costs incorporated into the 10 NRD interlocal agreement (Table in Section 4.01), are anticipated to remain the same or similar to the annual amounts for each NRD that were outlined in the previous agreement (we no longer have 60% WSF dollars but our previous annual 40% match breakdown should cover the anticipated operations and maintenance). The agreements have already been reviewed by Lower Platte South Natural Resources District's (LPSNRD's) legal representative and are on the agenda for consideration on your behalf at the upcoming April 2020 LPSNRD board meeting.

With the approval of this authorization, all of the necessary agreements to operate and maintain the NGC for the next two years will be in place (includes minor new developments and facilitation with SPONSORS). The NGC team plans to begin Nebraska Viewer training and discussions with potential "superusers", NGC representatives delegated by each of the individual SPONSOR's once the NGC goes live. The next workshop is tentatively scheduled for late summer or fall 2020. Thank you for your support and consideration. Feel free to contact us for further discussion or to schedule onsite sessions.

Jesse Korus, PhD, Assistant Professor



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ATTACHMENT 1

INTERLOCAL COOPERATIVE AGREEMENT

BETWEEN THE

**LEWIS & CLARK NATURAL RESOURCES DISTRICT
LOWER ELKHORN NATURAL RESOURCES DISTRICT
LOWER PLATTE NORTH NATURAL RESOURCES DISTRICT
LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT
NEMAHA NATURAL RESOURCES DISTRICT
PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT
LOWER LOUP NATURAL RESOURCES DISTRICT
UPPER ELKHORN NATURAL RESOURCES DISTRICT
TWIN PLATTE NATURAL RESOURCES DISTRICT
CENTRAL PLATTE NATURAL RESOURCES DISTRICT**

THIS AGREEMENT is made and entered into this ____ day of _____, 2020, by and between the between the Lewis & Clark Natural Resources District (“LCNRD”), Lower Elkhorn Natural Resources District (“LENRD”), Lower Platte North Natural Resources District (“LPNNRD”), Lower Platte South Natural Resources District (“LPSNRD”), Nemaha Natural Resources District (“NNRD”), Papio-Missouri River Natural Resources District (“P-MRNRD”), Lower Loup Natural Resources District (“LLNRD”), Upper Elkhorn Natural Resources District (“UENRD”), Twin Platte Natural Resources District (“TPNRD”), and Central Platte Natural Resources District (“CPNRD”), hereinafter referred to individually as “each District” or the individual District’s initials, for example, LPSNRD, or collectively as the “DISTRICTS” .

WITNESSETH:

RECITALS

A. The DISTRICTS are political subdivisions of the State of Nebraska organized and existing pursuant to *Neb. Rev. Stat.* §§ 2-3201, et seq., and have the authority, pursuant to *Neb. Rev. Stat.* § 2-3232(1), to make studies, investigations, or surveys and do research as may be necessary to carry out its authorized purposes, enter upon any land, after notifying the owner or occupier, for the purpose of conducting such studies, investigations, surveys, and research, and publish and disseminate the results.

B. Among the authorized purposes of the DISTRICTS, pursuant to *Neb. Rev. Stat.* § 2-3229, are water supply for any beneficial uses, and the development, management, utilization, and conservation of ground water and surface water.

C. The State or any local government may exercise any of its powers or perform any of its functions jointly or in cooperation with any other governmental entity as authorized by Article XV § 18 of the Nebraska Constitution. Any two or more public agencies (county, city, village, school district, agency of the State government, or political subdivision of this State) are authorized by *Neb. Rev. Stat.* §§ 13-801 to 13-827 to enter into interlocal agreements with one another for joint or cooperative action for any power or powers, privileges or authorities exercised or capable of exercise individually by such public agencies.

D. The DISTRICTS have a mutual interest in the study and stewardship of the hydrogeologic and groundwater resources in Nebraska.

E. The DISTRICTS, through a previous cooperative arrangement and Water Sustainability Fund (“WSF”) grant award (WSF#4164 - *the Nebraska GeoCloud and Airborne Electromagnetic [AEM] Data Integration*), have established the Nebraska GeoCloud platform (“NGC”) implemented by the University of Nebraska Conservation and Survey Division, School of Natural Resources (“CSD”), the U.S. Geological Survey, United States Department Of The Interior (“USGS”) and Nebraska’s Natural Resources Districts (“NRDs”). The DISTRICTS, CSD and USGS are at the “publish and disseminate the results” stage of the NGC cooperative effort (Exhibit “A” - WSF#4164 status report). The DISTRICTS, CSD and USGS are also approaching the end of the previous NGC agreement term (term closes June 30, 2020)

F. The DISTRICTS desire to establish this interlocal cooperative agreement (“ICA”), hereinafter referred to as “NGC ICA”, to sustain and maintain the AEM and supporting geologic data compiled under the NGC Platform investment for the next two years beyond the June 30, 2020 WSF#4164 grant award closeout. The NGC Platform requires server storage space, internet access and support from the NGC development team to facilitate data requests, potential NGC upload/download/input/output issues and continue outreach/workshop activities. Exhibit “A” attached to, and incorporated herein, by this reference further describes the NGC accomplishments and portal resources designed for federal, state and local agencies, the public, and the private sector.

NOW, THEREFORE, in consideration of the above Recitals and the mutual promises and covenants contained herein, the DISTRICTS agree as follows:

ARTICLE I

OBJECTIVES AND PURPOSES

Section 1.01

The objective and purpose of this NGC ICA is to establish a single uniform framework to provide \$109,800 for funding the NGC. The DISTRICTS will budget funds (individual DISTRICT funds) for Fiscal Years (July 1 to June 30) (FY) 2021 and FY 2022, all as shown in the table in Section 4.01.

Section 1.02

In order to attain the objective and purpose of this NGC ICA, each District shall perform its obligations and commitment under this Agreement in good faith and shall cooperate with the other DISTRICTS.

ARTICLE II

TERM OF AGREEMENT

Section 2.01

This NGC ICA shall become effective and binding upon its approval by appropriate action of the governing bodies of each District pursuant to Neb. Rev. Stat. § 13-1804(2) and execution by all of the DISTRICTS.

Section 2.02

Each District hereby agrees to participate with the other DISTRICTS in the conduct of the activities hereinafter described.

Section 2.03

In the event that a District fails to perform its obligations and commitments pursuant to this NGC ICA, the other DISTRICTS either individually or jointly, may legally seek to enforce such obligations and commitments in the appropriate court of law. .

Section 2.04

The term of this NGC ICA shall begin on the date of the last signatory District and continue until the end of the DISTRICTS FY2022 (June 30, 2022), unless further extended by the mutual agreement of all DISTRICTS. This NGC ICA shall survive a transition of the form of government of a District from one form to another. In the event that one or more Districts fails to perform their financial obligation and commitment under this Agreement, the remaining Districts, in addition to taking legal action to recover amounts in default, may at their option continue with the NGC for the remainder of the ICA term.

ARTICLE III

AGREEMENT ADMINISTRATION

Section 3.01

The NGC ICA Coordinator, is Kathleen Cameron: located at LPSNRD, PO Box #83581, Lincoln, NE 68501-3581, kcameron_enwra@lpsnrd.org, and will serve as the contact person for the overall coordination of the DISTRICTS' FY2021 and FY2022 financial obligation and commitment. .

Each District will provide a contact person to receive communications and local invoices related to the NGC ICA from the NGC ICA Coordinator.

Section 3.02

This Agreement does not establish a separate joint or legal entity. LPSNRD shall act as Administrator of the NGC ICA and shall be responsible for the administration of all funds (receivable and payable) and shall enter into all subcontracts/subagreements necessary to achieve the **ARTICLE 1 Objectives and Purposes** in its name as NGC ICA Administrator.

Section 3.03

The NGC ICA Coordinator shall obtain pre-approval for and subsequently provide copies of all NGC team subagreements/subcontracts under the NGC ICA to each District.

Section 3.04

Each District shall be responsible for the negligent acts or omissions of its own employees and shall not be responsible for the negligent acts or omissions of other DISTRICTS employees.

Section 3.05

LPSNRD shall prepare and send at the beginning of each FY a statement of the shared costs to be incurred for the upcoming FY for the NGC ICA for each District and each District shall pay its share of the costs within 45 days of the receipt of such statement.

Section 3.06

LPSNRD shall prepare and send to each District within 45 days of the close of each FY, a summary of the receipts and expenses of the NGC ICA.

ARTICLE IV

FUNDING

Section 4.01

Each District will budget funds for fiscal year FY2021 and FY2022 as follows:

Financial Sponsors	FY21	FY22	Total
LPSNRD	\$3,400	\$3,400	\$6,800
LPNNRD	\$3,400	\$3,400	\$6,800
P-MRNRD	\$3,400	\$3,400	\$6,800
LCNRD	\$1,000	\$1,000	\$2,000
LENRD	\$3,400	\$3,400	\$6,800
NNRD	\$3,400	\$3,400	\$6,800
LLNRD	\$3,400	\$3,400	\$6,800
UENRD	\$1,700	\$1,700	\$3,400
CPNRD	\$3,400	\$3,400	\$6,800
TPNRD	\$3,400	\$3,400	\$6,800
ENWRA (LCNRD, LENRD, LPNNRD, LPSNRD, NNRD, P-MRNRD)	\$25,000	\$25,000	\$50,000
TOTALS	\$54,900	\$54,900	\$109,800

ARTICLE V

POWERS

Section 5.01

The DISTRICTS shall have all of the powers and authorities pursuant to state statutes that are necessary to carryout the stated objective and purpose on behalf of the NGC ICA joint and cooperative effort.

Section 5.02

Each District shall have such other powers as are authorized under the Nebraska statutes that establish each such District, and under the Interlocal Cooperation Act, *Neb. Rev. Stat. §§ 13-801 to 13-827*, which are necessary and proper for the achievement of the stated objective and purpose as set forth in this NGC ICA.

Section 5.03

In every contract to which the state or any of its political subdivisions is a party, it shall contain a provision requiring the contractor and his or her subcontractors not to discriminate against any employee, or applicant for employment, to be employed in the performance of such contract, with respect to his or her hire, tenure, terms, conditions, or privileges of employment, because of his or her race, color, religion, sex, disability, or national origin, in accordance with the Nebraska Fair Employment Practices Act, *Ne. Rev. Stat. Section 48-1122, as amended*. The Districts are all political subdivisions of the State of Nebraska and therefore this provision is required to be included as a provision of this Agreement.

ARTICLE VI

AMENDMENTS

Section 6.01

Any District may propose an amendment to this NGC ICA by submitting it in writing to the other DISTRICTS, which shall immediately consider in good faith the proposed amendment; provided, however, that no such amendment shall, directly or

indirectly, affect or impair any written contracts or agreements entered into prior to the effective date of such amendment.

Section 6.02

No amendment or other modification to this NGC ICA shall be effective unless it is in writing and approved by all DISTRICTS. Such amendment shall become effective after all DISTRICTS have approved and executed the same.

Section 6.03

This agreement may be executed in two or more counterparts, each of which shall be an original but all of which shall constitute one and the same instrument. This Agreement is hereby approved and executed by the following DISTRICTS on the dates shown below.

IN WITNESS WHEREOF, each District has caused this NGC ICA to be executed by its duly authorized officer as of the date and year shown below.

LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT

BY: _____

DATE: _____

SIGNATURES
FOR
ALL
OTHERS
↓

Exhibit A

Report of Accomplishments for Nebraska GeoCloud (NGC) and Airborne Electromagnetic (AEM) Data Integration · WSF Application #4164

Data Inventory

- Approximately 30,000 kilometers of AEM data and project deliverables added to the NGC

Nebraska GeoCloud and GeoScene3D Developments

- Contract with I-GIS
- Expandable design for handling further developments and new projects
- Versatile database structures
 - AEM
 - 2D grids
 - 3D grids
 - Borehole drilling information (lithology, well construction, water levels)
 - Borehole geophysical logs
 - Point data
 - Shapefiles
- Nebraska GeoCloud Web user interfaces
 - Data administration (upload data files and associated metadata)
 - Data map (browse, explore, and download data through interactive map)
 - User administration (user role, permissions, new user invitation, and password reset)
 - Projects administration (create, upload, and share GeoScene3D projects, reports, and a variety of file types)
 - Projects map (browse, explore, and download GeoScene3D projects, reports, and a variety of file types)
- Customized Nebraska GeoScene3D viewer
 - Web data portal for connection to GeoCloud
 - Extended functionality for profile views and custom color scales

Training and Education

- Workshop 1 (August 15 – 17, 2017)
 - 2.5 day training on Nebraska GeoCloud and GeoScene3D in Lincoln, NE, featuring guests from I-GIS in Denmark
 - Attended by 32 groundwater professionals; 18 Continuing Education Units (CEUs) offered.
- Workshop 2 (August 7 – 8, 2018)
 - 2 day training on Nebraska GeoCloud and GeoScene3D in Gothenburg, NE

Exhibit A

- Attended by 28 groundwater professionals; 18 Continuing Education Units (CEUs) offered.
- Workshop 3 (April 1 – 2, 2019)
 - 2 day training on Nebraska GeoCloud and GeoScene3D in Lincoln, NE, featuring guests from I-GIS in Denmark
 - Attended by 21 groundwater professionals

Hydrogeologic Investigations

- Platte and Colfax Counties
 - Data assembled and checked for quality and consistency
 - GeoScene3D project created containing boreholes, AEM, groundwater levels, and supporting information
 - 2D and 3D grids created for selected areas
 - Project used in Workshop 2 for hands-on training
 - Completed validation study of hydrostratigraphic modeling methods (MS thesis)
 - Recommendations provided for future modeling efforts
- Bazile Groundwater Management Area (BGMA)
 - Data assembled and checked for quality and consistency
 - GeoScene3D project created containing boreholes, AEM, discrete groundwater levels, water-quality, and age tracer data
 - Released previously unpublished groundwater age tracer data
 - Interpreted continuous groundwater levels, water-quality, and age tracer data to understand water movement and groundwater vulnerability
 - Recommendations provided for future groundwater monitoring within the BGMA
 - Final report currently in review

Standards and Guidelines

- Finalized standards for coordinate system, AEM file naming and metadata
- Draft standards in progress for grids, shapefiles, boreholes, and point data
- Draft document in progress containing guidelines for AEM surveys and hydrogeological modeling
- Procedures developed for mapping the bedrock surface using boreholes and AEM data
- Procedures and codes developed for assigning keywords and hydraulic property estimates to borehole lithology descriptions

**NGC Sub-agreement 1a. with University of Nebraska Conservation and Survey Division
(UNL CSD)**

COOPERATIVE AGREEMENT

THIS COOPERATIVE AGREEMENT (the "Agreement") is made and entered into by and between the LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT ("DISTRICT"), acting as Administrator under an Interlocal Cooperative Agreement ("ICA") identified in Exhibit "1", and the BOARD OF REGENTS OF THE UNIVERSITY OF NEBRASKA ON BEHALF OF THE UNIVERSITY OF NEBRASKA-LINCOLN, SCHOOL OF NATURAL RESOURCES, CONSERVATION AND SURVEY DIVISION ("CSD"), collectively referred to herein as the "Parties."

WITNESSETH:

RECITALS

- A. The Parties have a mutual interest in the study and stewardship of the hydrogeologic and groundwater resources in Nebraska.
 - B. The Parties desire to maintain a cooperative working arrangement to enhance the study and stewardship of the hydrogeologic and groundwater resources in Nebraska through the continued hosting of Nebraska GeoCloud ("NGC") Platform created under the previous mutual agreement between the parties dated March 2017.
 - C. LPSNRD is acting as Administrator under the NGC ICA attached hereto as Exhibit "1" and incorporated herein by this reference.
1. NOW THEREFORE, in consideration of the above recitals and the mutual promises and covenants contained herein, the Parties agree as follows:

Effective Date. The Parties agree that this Agreement will become effective upon the signature of both Parties.

Term. The term of the Agreement shall be from the effective date hereof through the end of LPSNRD fiscal year 2022 (June 30, 2022) with the understanding that a 5 year renewal periods are planned thereafter as long as the NGC remains a viable source of statewide hydrogeologic datasets for Nebraska. In the event additional funds are needed for the renewal scopes, amendments shall be executed by both parties.

Responsibilities of the LPSNRD. The LPSNRD agrees to the following:

Administer the NGC ICA (Exhibit "1") funding for CSD's hosting of the NGC along with the U.S. Geological Survey (USGS) and other required subagreements/subcontracts on behalf of the participating Natural Resources Districts ("SPONSORS").

Provide an agreement administration coordinator for the NGC: Kathy Spence, Lower Platte South Natural Resources District, PO Box #83581, Lincoln, NE 68501-3581, email address kspence@lpsnrd.org.

LPSNRD will submit payment within 45 days of receipt of the CSD invoices, anticipated on a semi-annual frequency. LPSNRD policies do not allow payment of indirect costs. Anticipated fiscal year funding breakdown as follows:

	FY21	FY22	Total
CSD (workshops, travel, NGC operations, coordination and maintenance)	\$4,280.50	\$4,280.50	\$8,561.00
I-GIS Subagreement	\$42,769.50	\$42,769.50	\$85,539.00
TOTALS:	\$47,050.00	\$47,050.00	\$94,100.00

The following agreements, in addition to this agreement, are necessary for LPSNRD's administration of the funds for reference:

- NGC ICA providing \$109,800.00 for the two year continuance of the NGC
- Joint Funding Agreement (JFA) between the LPSNRD and the USGS for \$13,500.00 in technical assistance (\$8,500.00 from LPSNRD on behalf of NGC ICA and \$5,000.00 in USGS Cooperative federal dollars)
- Professional Services Agreement with Aqua Geo Frameworks (AGF), primary NGC dataset authors for periodic review and hourly consulting \$7,200

Responsibilities of the CSD. CSD agrees to the following:

Lead the NGC service hosting (through Professional Services agreements with I-GIS, includes providing users access to the data) in cooperation with the USGS and participating SPONSORS.

Submit an annual budget for the NGC hosting to the LPSNRD for inclusion in the DISTRICTS budget by May 1 of each year.

Invoice the LPSNRD, on a semi-annual basis, not more than \$94,100 throughout the term of the agreement herein for the NGC hosting as outlined in DISTRICTS annual fiscal budgets as per the table shown above.

Amendments. The Agreement may only be amended in writing signed by the Parties.

IN WITNESS WHEREOF the Parties have executed the Agreement by their authorized representatives on the date show below.

LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT, as Administrator, acting on behalf of the participating NGC ICA attached as Exhibit "1" hereto.

By: _____ Date _____

CONSERVATION & SURVEY DIVISION
OF THE UNIVERSITY OF NEBRASKA

By _____ Date _____

THE BOARD OF REGENTS OF THE
UNIVERSITY OF NEBRASKA

By _____ Date _____

DRAFT

EXHIBIT "1" is the interlocal agreement (page 2 to 21 of this PDF)

NGC Sub-agreement 1b. with U.S. Geological Survey (USGS)



United States Department of the Interior

U.S. GEOLOGICAL SURVEY
Water Resources Discipline
Nebraska Water Science Center
5231 South 19th Street
Lincoln, NE 68512-1271

March 13, 2020

Paul Zillig
Lower Platte South Natural Resources District
PO Box 83581
Lincoln, NE 68501-3581

Dear Mr. Zillig:

Enclosed are two copies of supplemental Joint Funding Agreement No. 17EMNE000240, modification 001, for the Airborne Electromagnetic Data Integration and Bedrock Mapping project. The total amount of the agreement is increased by \$13,500 or \$5,000 for the U.S. Geological Survey and \$8,500 for the Lower Platte South NRD. The agreement is extended to provide technical assistance with the next phase of the Nebraska Geocloud project. Please sign one copy of the agreement and return it to this office. The second copy is for your records.

Work performed with funds from this agreement will be conducted under the authority of Statute 43 USC 36C on a fixed-price basis. Billings will be rendered quarterly. The results of all work under this agreement will be available for publication by the U.S. Geological Survey.

Please contact Chris Hobza at 402-328-4133 if you have any questions concerning this agreement.

Sincerely,

Wesley W. Stone, Acting Director
Nebraska Water Science Center

2 Enclosures

DUNS No. 949286512

Agreement No. 17EMNE000240
Modification No. 001
Customer No. 6000000121
Cost Center GGEMNR0000
Project NR00GRB
TIN 47-0542969

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
SUPPLEMENTAL JOINT FUNDING AGREEMENT
FOR
WATER RESOURCES INVESTIGATIONS

THE GEOLOGICAL SURVEY, UNITED STATES DEPARTMENT OF THE INTERIOR, party of the first part, and the LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT, party of the second part, hereby agree to amend the Joint Funding Agreement No. 17EMNE000240 dated April 1, 2017 as follows:

Paragraph 2(a) is hereby increased by \$5,000 to read as follows:

- (a) \$55,500 by the party of the first part during the period April 1, 2017 to September 30, 2022

Paragraph 2(b) is hereby increased by \$8,500 to read as follows:

- (b) \$136,500 by the party of the second part during the period April 1, 2017 to September 30, 2022

The end date has been extended to September 30, 2022. Billing for this agreement will be rendered quarterly. Payments of bills are due within 60 days after billing date. If not paid by the due date, interest will be charged at the current Treasury rate for each 30-day period, or portion thereof, that the payment is delayed beyond the due date. (31 USC 3717; Comptroller General File B-212222, August 23, 1983.)

Geological Survey
UNITED STATES
DEPARTMENT OF THE INTERIOR

By Wesley W. Stone
Wesley W. Stone, Acting Director
Nebraska Water Science Center

Date 3/13/2020

USGS DUNS: 949286512

LOWER PLATTE SOUTH
NATURAL RESOURCES DISTRICT

By _____

Date _____

NGC Sub-agreement 1c. with Aqua Geo Frameworks, LLC (AGF)

PROFESSIONAL SERVICES AGREEMENT

This Professional Services Agreement (this "Agreement") is made and entered into as of June X,2020 by and between the LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT, a political subdivision of the State of Nebraska, as administrator of the Nebraska GeoCloud Interlocal Cooperative Agreement (ICA) between multiple SPONSORS (listed in Exhibit 1), having an office at 3125 Portia Street, Lincoln, Nebraska, 68521 (hereinafter collectively called "District") and Aqua Geo Frameworks, LLC., a limited liability corporation of the State of Nebraska, having its principal office located at 130360 County Road D, Mitchell, NE 69357-2508 (hereinafter called "AGF" or the "Contractor"). The District and Contractor are sometimes referred to below as "Parties" and each of them as a "Party."

WITNESSETH:

RECITALS

A. The District desires to have the Consultant provide ongoing collaboration services with the District on the Nebraska GeoCloud Project (NGC).

B. AGF is a Company qualified and experienced in conducting and preparing the AEM Survey Data (AGF team members authored much of the original NGC contents) and agrees to contract with the District to provide collaboration services as further described below.

NOW THEREFORE, in consideration of the above recitals and the mutual promises and covenants contained below, the parties agree as follows:

1. SCOPE OF WORK

The Contractor shall provide periodic review of metadata for existing and planned files on the NGC and provide author-level insight on fixing any errors that might occur on behalf of the SPONSORS supporting the NGC. There will be no report for this work, only a transmittal letter and/or digital text file documenting NGC collaboration work completed.

2. SCHEDULE

The review and insight services are scheduled to match the term of the SPONSORS NGC ICA (Exhibit 1) dated **XXXX**, 2020.

3. COMPENSATION.

3.1 For the services satisfactorily rendered as set forth in this Agreement Section 1.0, the Contractor will be paid as described below:

3.1.1 The District shall pay a fee of \$ 7,200 (estimated 40 hours at \$180.00 per hour).

3.2 In no event shall the work described herein exceed \$7,200.00 unless authorized in writing by the District.

4. TERM AND TERMINATION

4.1 This Agreement is effective as of June 30, 2020 and shall continue until June 30, 2022, unless terminated earlier as provided for in the Agreement, or extended by mutual agreement of the Parties.

4.2 If AGF defaults in the performance of its material obligations, the District may, without prejudice to any other remedy it may have, give AGF written notice of its intent to terminate this Agreement, unless AGF remedies the default within ten (10) days after receiving such notice. If AGF has not remedied said default within such time, District may, upon written notice to AGF, terminate this Agreement.

4.3 The District may, at its option, terminate this Agreement for reasons other than AGF's default at any time prior to the completion of the Project upon giving AGF thirty (30) days written notice. If the District elects to terminate this Agreement prior to the completion of the Project, then the District shall pay to AGF all costs incurred by AGF, pursuant to this Agreement or for which AGF has become obligated to incur, prior to the date of termination.

5. INDEPENDENT CONTRACTOR

It is understood and agreed that AGF is, and shall be deemed and treated as an independent contractor while engaged in the performance of professional services to the District and none of its employees, agents or subcontractors shall be employees or agents of the District for any purpose. AGF maintains the absolute right to supervise, manage, and exclusively control the operation and safety of its personnel, facilities and other equipment and property and the manner and means of performing the rights and obligations under this Agreement. The District shall have no right of direction or control of AGF or its employees or agents, being only interested in the final results of the Project

except in accordance with Nebraska law, *Neb. Rev. Stat. Section 48-1122, as amended*, which provides that every contract to which the state or any of its political subdivisions is a party shall contain a provision requiring the contractor and his or her subcontractors not to discriminate against any employee or applicant for employment, to be employed in the performance of such contract, with respect to his or her hire, tenure, terms, conditions, or privileges of employment, because of his or her race, color, religion, sex disability, or national origin.

6. QUALIFICATION OF CONTRACTOR

The Contractor warrants and represents that it and all employees, agents, and subcontractors are qualified to perform the services described in this Agreement and in compliance with all applicable state and federal laws, policies, practices and procedures.

7. SUBCONTRACTORS

7.1 Contractor shall not otherwise transfer any rights, duties and/or obligations under this Agreement without prior written consent of the District. The duties and obligations of the Contractor shall not terminate or transfer upon the use of any subcontractor. The District acknowledges and agrees that to fully perform under this Agreement, the Contractor may use subcontractors for certain services. The Contractor will oversee all subcontractors' efforts and the District will not be liable or responsible for any actions of any subcontractor.

7.2 This Agreement is between the Contractor and the District and nothing herein is intended to create any third party benefit to subcontractors. The Contractor shall ensure that all financial obligations are met between the Contractor and subcontractor and shall ensure there are no liens upon the District or its property arising from subcontractor's actions or deliverables. Privity of contract only exists between the District and the Contractor. Separate privity of contract exists between the Contractor and subcontractor. These are mutually exclusive relationships; accordingly, there is no privity of contract between the District and the subcontractors.

8. GOVERNING LAW

This Agreement shall be governed, construed and interpreted by the laws of the

State of Nebraska, excluding any choice of law rules that would otherwise require the application of laws of any other jurisdiction. AGF irrevocably submits to the jurisdiction of the courts of the State of Nebraska including the federal court and waives any objection that it may have to either the jurisdiction, venue, or inconvenient forum of such courts.

9. INDEMNITY

9.1 To the fullest extent permitted by law, each Party (the “Indemnitor”) shall indemnify, defend, and hold harmless the other Party, including ENWRA, and its board members, officials, directors, officers, members, managers, agents, and employees (each an “Indemnified Party”) from and against all claims, damages, losses, fines, assessments, and expenses, including, but not limited to, attorneys’ fees if permitted by law (collectively, “Losses”), arising out of or resulting from: (a) a breach of this Agreement by the Indemnitor; (b) the unlawful acts of the Indemnitor or the Indemnitor’s subcontractors; or (c) the negligent or intentional acts or omissions of the Indemnitor or the Indemnitor’s subcontractors, provided that, in no event shall an Indemnitor be required to indemnify, defend, or hold harmless an Indemnified Party for Losses to the extent such Losses are caused by the negligent or intentional acts or omissions of the Indemnified Party.

9.2 If any claim covered by this indemnity is asserted by a third party, the Indemnified Party shall promptly give the Indemnitor notice of the claim and give the Indemnitor an opportunity to defend or settle the claim with counsel of its choice and at its expense, and the Indemnified Party shall extend its full cooperation in connection with the defense, subject to reimbursement for actual out-of-pocket expenses incurred by the Indemnified Party as the result of a request by the Indemnitor. If the Indemnitor fails to defend a claim within a reasonable time, the Indemnified Party shall be entitled to assume the defense and the Indemnitor shall be bound by the results obtained by the Indemnified Party with respect to the claim, and the Indemnitor shall be liable to the Indemnified Party for its expenses incurred in the defense, including, without limitation, reasonable attorney's fees if permitted by law and any settlement payments.

10. INSURANCE

At all times during the term of this Agreement, Contractor shall carry and

maintain at its own expense, work insurance protection of the kinds and the minimum amounts set forth below:

- 10.1 Commercial General Liability (CGL) Insurance in the sum of \$1,000,000.00 to any person and \$2,000,000.00 in the aggregate. Such insurance shall cover all operations in which the Data may be performed by AGF.
- 10.2 Professional Liability insurance to cover malpractice of AGF employees, agents or subcontractors in connection with the performance of this Agreement in an amount not less than \$2,000,000.
- 10.3 With respect to all such policies of insurance, AGF shall furnish evidence that AGF's insurers waive all rights of subrogation against the District, AGF shall also furnish evidence that the District is listed as an additional insured in such policies.
- 10.4 Upon execution of this Agreement, AGF shall furnish the District with certificates of insurance certifying that the insurance required under this Paragraph is in full force and effect. Each certificate shall contain a provision stating that the insurer agrees to give the District thirty (30) days prior written notice in the event of cancellation or material change in the insurance.
- 10.5 The Parties specifically recognize that certain federal or state statutory or case law may obligate or require modification to Paragraph 10 INSURANCE and Paragraph 9 INDEMNITY and that future changes in the law and interpretations of the law during the term of this Agreement may affect the validity or scope of those Paragraphs. Therefore, the Parties specifically agree that, if any provision of Paragraphs 10 or 9 is determined to be unenforceable or in contravention of any applicable law, such provision shall be deemed modified to the minimum extent required to bring such provision into compliance with said applicable law.

11. FORCE MAJEURE

Any delay or failure in the performance by either Party here under shall be excused if and to the extent caused by the occurrence of a Force Majeure. For purposes of this Agreement, Force Majeure shall mean a cause or event that is not reasonably foreseeable or otherwise caused by or under the control of the

Party claiming Force Majeure, including acts of God, fires, floods, explosions, riots, wars, hurricane, sabotage terrorism, vandalism, accident, restraint of government, governmental acts, injunctions, labor strikes that prevent Contractor from performing, and other like events that are beyond the reasonable anticipation and control of the Party affected thereby, despite such Party's reasonable efforts to prevent, avoid, delay, or mitigate the effect of such acts, events or occurrences, and which events or the effects thereof are not attributable to a Party's failure to perform its obligations under this Contract.

12. DISPUTE RESOLUTION

Notwithstanding the provisions of Paragraph 4.2 above, before a Party may bring suit in any court concerning any dispute arising out of or in connection with this Agreement, including any question regarding its existence, validity or termination, such Party must first seek in good faith to resolve the dispute through negotiation or other form of nonbinding alternate dispute resolution mutually acceptable to the Parties.

13. ACCESS TO RECORDS

The Contractor shall be granted reasonable access to the District's records as may be necessary to complete the scope of work.

14. CONFIDENTIALITY

14.1 AGF shall use its reasonable best efforts to keep confidential (a) data acquired from working with the Data to be conducted pursuant to this Agreement, (b) information relating to the location of the surveys and the type of work performed, and (c) information supplied by the District, which is not otherwise proprietary to AGF, and which is identified in writing by the District to AGF as being confidential. AGF shall not divulge to anyone other than its employees, subcontractors, and agents, and the District's representative, employees and agents, such confidential data or information unless previously authorized by the District in writing. AGF will require the same degree of confidentiality from its subcontractors.

14.2 Likewise, the District shall observe the above confidentiality obligation, insofar as it has access to and knowledge of the equipment, instruments, programs, and procedures of the operation hereof, which are the property

of and proprietary to AGF.

14.3 The foregoing obligation of confidentiality shall survive the termination of this Agreement but it shall not apply to information which (a) was or shall have been in the possession of the receiving Party prior to disclosure by the other Party, or (b) is acquired by the receiving Party from others who have no direct or indirect confidential commitment to the other Party with respect to same, or (c) are or become part of the public domain without the fault or participation of the receiving Party, or (d) as required by law.

15. CONFLICT OF INTEREST:

The Contractor warrants that he/she has no interest presently and shall not acquire any interest, direct or indirect, which would conflict in any manner with the performance of the services required under this Agreement.

16. SEVERABILITY OF TERMS:

Should any provision of this Agreement be deemed invalid or unenforceable, that provision shall be deemed to be deleted from this Agreement and all remaining provisions shall remain in full force and effect.

17. DISTRICT REPRESENTATIVES

17.1 The District designates: Kathy Spence,
Phone: 402-476-2729, Email address: kspence@lpsnrd.org as its representative, to whom AGF's representative may deliver reports and other information and from whom AGF representative will receive instructions, provided such instructions are in accordance with the terms of this Agreement. AGF shall be entitled to rely on the apparent authority of such District representative on the District's behalf to inspect such activities and give instructions to AGF. Such instructions shall be related to the Project.

18. OWNERSHIP OF DATA

Upon AGF's receipt of the final payment, all information, documents, and data pertaining to the Data shall become the sole property of the District and shall be delivered to the District at the conclusion of the analysis. Subject to Paragraph 14 (Confidentiality), AGF reserves the right, but not the obligation to maintain a

digital backup of the data from the Project for archival purposes.

19. LAWS, RULES, AND LICENCES

AGF shall comply with all provisions of applicable law including, federal, state, and municipal laws, ordinances, rules and regulations relating to the performance of the Project. AGF warrants that it is duly licensed and authorized to perform the Project covered under this Agreement, if required by State, Federal or local laws, or that it will be so licensed and authorized prior to commencement thereof.

20. MECHANIC'S OR OTHER LIENS

AGF shall promptly pay all costs and charges incurred by it in connection with this Agreement and shall not suffer nor permit any Mechanic's lien or other liens attached to any property of the District.

21. ENFORCEMENT OF DISCIPLINE

AGF shall at all times enforce discipline and maintain good order among its employees and subcontractors, and shall not retain on the job any person not skilled in the task assigned to that person. AGF shall forthwith remove from the Project any employee of AGF or a subcontractor who is unacceptable, for good cause, to the District.

22. NOTICE

All notices, demands and consents required or permitted to be given under this Agreement shall be in writing and may be delivered personally, transmitted by facsimile or e-mail, or may be forwarded by first class prepaid certified mail, return receipt requested, to the addresses set forth below. Any notice shall be deemed given and received on the next business day after personal delivery or facsimile transmission or email, or if mailed, on the expiration of three (3) days after it is post marked, addressed as follows:

LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT
3125 Portia Street
Lincoln, NE 68501-3581

Attention: Mr. Paul D. Zillig
General Manager
Phone: 402-476-2729

AQUA GEO FRAMEWORKS, LLC
130360 County Road D
Mitchell, NE 69357-2508

Attention: James C. Cannia
Member Principle Geologist
Phone: 308-641-2635
Email address: jcannia@aquageoframeworks.com

23. WAIVER

The rights herein given to either Party may be exercised from time to time, singularly or in combination, and the waiver of one or more of such rights shall not be deemed to be a waiver of such right in the future or of any one or more of the other rights that the exercising Party may have. No waiver of any breach of a term, provision, or condition of this Agreement by one Party shall be deemed to have been made by the other Party unless such waiver is expressed in writing and signed by an authorized representative of such Party and failure of either Party to insist upon the strict performance of any term, provision, or condition of this Agreement or to exercise any option herein given shall not be construed as a waiver or relinquishment in the future of the same or any other term, provision, condition or option.

24. ENTIRE AGREEMENT

This Agreement contains the entire agreement between the Parties and supersedes and replaces any oral or written communication previously made between the Parties relating to the subject matter hereof. This Agreement shall not be amended except by written instrument executed by the duly authorized representatives of both parties.

25. ASSIGNMENT

Neither the Contractor nor the District shall assign, subcontract, pledge, mortgage or otherwise encumber any of its rights hereunder without the prior written consent of the other Party.

26. DISCLAIMER

AGF shall conduct this Project using the current standards of the geophysical

industry and will use in-house quality control standards to produce the converted geophysical survey products. AGF's services are performed consistent with the professional skill and care ordinarily provided by professional geophysicists under the same or similar circumstances. No other warranty or representation, either expressed or implied, is made by AGF in connection with its services unless in writing and signed by an authorized representative of AGF.

IN WITNESS WHEREOF, the Parties to this Agreement have caused it to be executed by their duly authorized representatives as of June 30, 2020.

AQUA GEO FRAMEWORKS, LLC

By:-----

James C. Cannia P.G., Member Principal
Geologist

LOWER PLATTE SOUTH
NATURAL RESOURCES
DISTRICT, as Administrator for the
Eastern Nebraska Water Resources
Assessment

By:-----

Paul D. Zillig, General Manager of the
Lower Platte South Natural Resources District

ITEM 2

INTERLOCAL COOPERATIVE AGREEMENT

BETWEEN THE

LEWIS & CLARK NATURAL RESOURCES DISTRICT
LOWER ELKHORN NATURAL RESOURCES DISTRICT
LOWER PLATTE NORTH NATURAL RESOURCES DISTRICT
LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT
NEMAHA NATURAL RESOURCES DISTRICT and
PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT

AMENDMENT #6

THIS AMENDMENT #6 is made and entered into by and between the above natural resources districts this ____ day of _____, 2020. The natural resources districts are hereinafter referred to collectively as the Districts. This Amendment supplements the original agreement effective as of January 18, 2007, and Amendments #1, #2, #3, #4 and #5 effective as of July 17, 2017.

Modification #1: Article III, Section 3.02, original agreement, as modified in Amendment #1,

Modification #1, Amendment #4, Modification #1 and Amendment #5, Modification #1:

The "Exhibit A" Cooperative Agreement references related to the coordinator position shall refer to the Amended Cooperative Agreement for the July 1, 2020 - June 30, 2022 term, attached hereto.

LEWIS AND CLARK NATURAL RESOURCES DISTRICT

BY: _____

DATE: _____

EXHIBIT A

AMENDMENT #1

TO THE

COOPERATIVE AGREEMENT (the "Agreement") made and entered into between the LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT ("DISTRICT"), acting as Administrator under an Interlocal Agreement identified in Exhibit "A", and the BOARD OF REGENTS OF THE UNIVERISTY OF NEBRASKA ON BEHALF OF THE UNIVERSITY OF NEBRASKA-LINCOLN THROUGH ITS CONSERVATION AND SURVEY DIVISION, SCHOOL OF NATURAL RESOURCES ("CSD"), collectively referred to herein as the "Parties."

The Parties to the above captioned agreement hereby agree to amend said agreement as follows:

- The Period of Performance is extended until June 30, 2022. The new Period of Performance with this amendment is July 1, 2020 to June 30, 2022 (Years 4 and 5).

All other terms of the Agreement remain unchanged.

Lower Platte South NRD Cooperative Agreement –BUDGET

YEAR FOUR (July 1, 2020 to June 30, 2021)	TOTAL YEAR FOUR
Budget Category	
Salary	42,657
<i>Benefits</i>	12,797
Total Personnel	55,454
Travel	3,125
Supplies	350
Operating	2,775
Total Direct Costs	6,250
Total	61,704

Budget justification: Salary will be used to support a geologist/hydrogeologist. Travel is for field work and for attendance at service/educational activities and meetings. Supplies are for software needed for model development and data analysis and various small laboratory and field supplies needed to complete the project. No equipment will be purchased as part of this project.

EXHIBIT A

IN WITNESS WHEREOF, the Parties, intending to be legally bound, have executed this Amendment as of the last date signed below by their respective duly authorized representatives.

LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT, as Administrator, acting on behalf of the participating DISTRICTS under an Interlocal Agreement attached as Exhibit "A" hereto.

By: _____
Paul D. Zillig

Date: _____

CONSERVATION AND SURVEY DIVISION

By: _____
Robert M. Joeckel

Date: _____

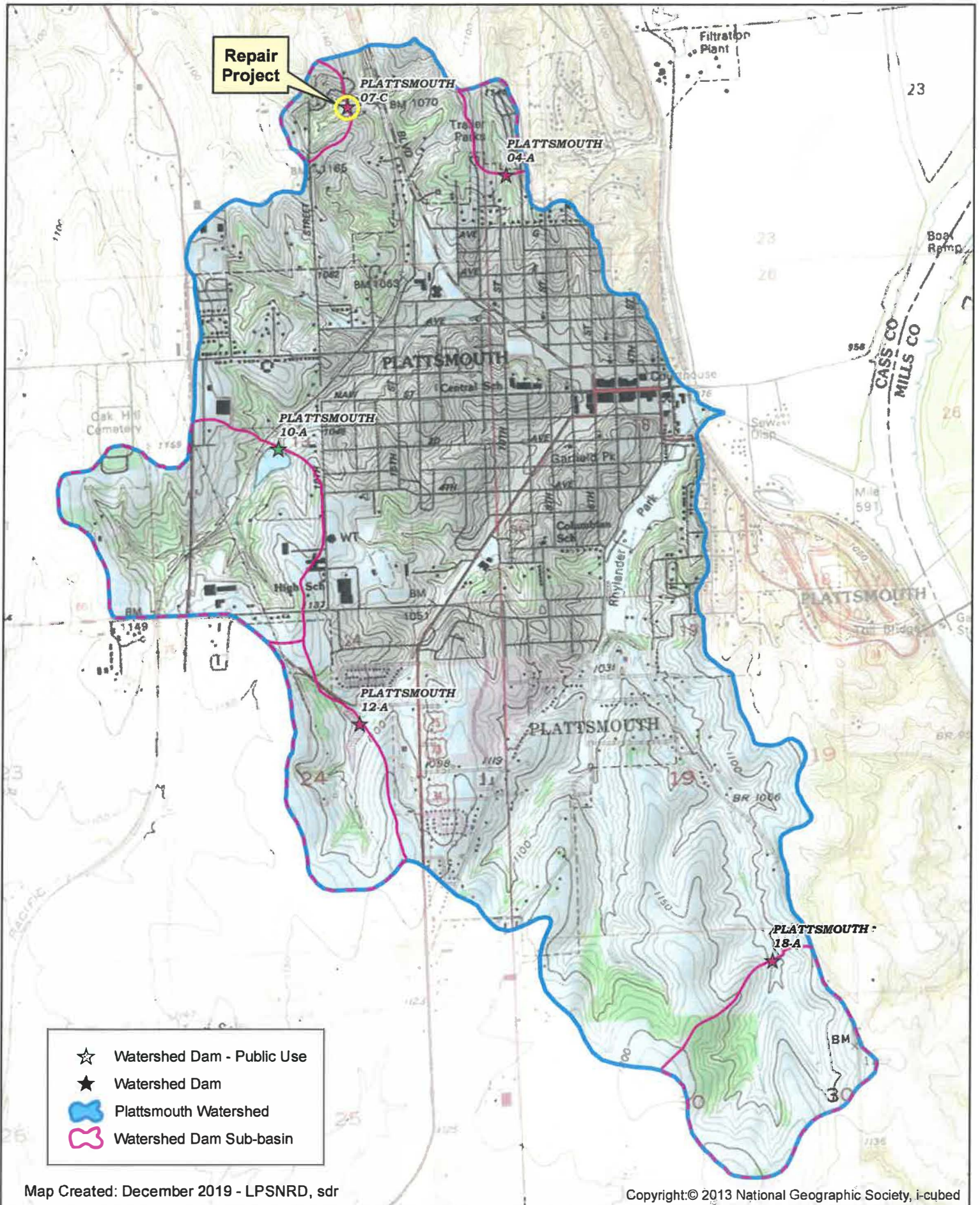
**BOARD OF REGENTS OF THE
UNIVERSITY OF NEBRASKA**

By: _____

Date: _____



Plattsmouth Watershed - Repair Project, Plattsmouth 7-C



Map Created: December 2019 - LPSNRD, sdr

Copyright:© 2013 National Geographic Society, i-cubed





3 April 2020

Jared Nelson, P.E.
District Engineer
Lower Platte South NRD
3125 Portia Street
Lincoln, NE 68521

Re: Plattsmouth Dam 7-C Spillway Rehabilitation – Engineer’s Recommendation

Dear Jared:

The bid opening for the above-referenced project was held at the P-MRNRD on 3 April 2020. The low bid of \$91,542.00 was received from C&L Water Solutions of Littleton, CO. Due to a lack of like bids, no formal engineer’s estimate was prepared. No other bids were received. C&L’s bid can be viewed on the attached bid form. All required documents accompanied the bid.

Last year, I worked with C&L on the lining of the spillway at Oliver Reservoir in Kimball County, NE for the South Platte NRD. In comparing bids, the mobilization and unit costs are similar, but due to spillway length and size, that project was about twice the cost of this project. That bid is attached for your reference. The mobilization cost appears high, but they do have to mobilize specialty equipment for their liner process.

C&L provided a list of similar projects and references of which I vetted on the Oliver Reservoir project and from working with them, I can attest that they do high quality work and provide an excellent product. Their schedule provided indicates that they would plan to do the project in the summer months. They have also acknowledged the current COVID-19 situation and will adjust accordingly.

My recommendation is to award the project to C&L Water Solutions Construction and begin the contracting process upon Board approval. Please feel free to contact me if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'M. Sotak', with a long, sweeping flourish extending to the right.

Michael K. Sotak, P.E.

**SPECIFICATIONS
AND
TECHNICAL DOCUMENTS
FOR**

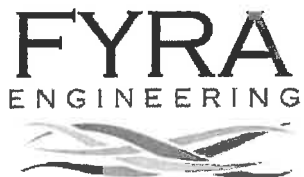
Lower Platte South NRD

**Plattsmouth Dam 7-C Spillway
Rehabilitation Project**

CASS COUNTY, NEBRASKA



PREPARED BY:



FYRA Engineering, LLC
12702 Westport Parkway, Suite 300
Omaha, NE 68138
Phone: 402.502.7131
Fax: 402.932.6940

**SECTION 00410
BID FORM**

Project: **Plattsmouth Dam 7-C Spillway Rehabilitation Project**
Place: **Cass County, Nebraska**
Date: 4-3-2020

1. In compliance with your REQUEST FOR PROPOSALS dated April 3, 2020, and subject to all conditions thereof, the undersigned CTL Water Solutions, Inc. a Corporation incorporated in the State of Colorado, hereby proposes to furnish and do everything required by the Contract Documents to which this refers at the lump sum or unit prices shown for each bid item on the following Bid Schedule. (The Bid Schedule lists the various divisions of construction contemplated in the Contract Documents, together with an estimate of the units of each for unit price items. With these units as the basis for unit cost items, the bidder will extend each item, using the cost he inserts in the unit column. Any total cost found inconsistent with the unit cost when the bids are examined will be deemed in error and corrected to agree with the unit cost which shall be considered correct.)
2. The undersigned bidder does hereby declare and stipulate that this proposal is made in good faith, without collusion or connection with any other person or persons bidding for the same Work, and that it is made in pursuance of and subject to all the terms and conditions of the Invitation to Bid and Instructions to Bidders, the Agreement, the Contract Drawings, and the Specifications pertaining to the Work to be done, all of which have been examined by the undersigned.
3. The undersigned has examined the location of the proposed Work, the Drawings, Specifications, and other Contract Documents and is familiar with the local conditions at the place where the Work is to be performed.
4. The undersigned bidder agrees to execute the Agreement and a Performance Bond and a Payment Bond for the amount of the total of this Bid within ten (10) calendar days from the date when the written Notice of the Award of the Agreement is delivered to him at the address given on this Bid. The name and address of the corporate surety with which the Bidder proposes to furnish the specified Performance and Payment Bonds is as follows:
Great American Insurance Company
Great American Tower 24
301 E. Fourth Street Cincinnati, OH 45202
5. All the various phases of Work enumerated in the Contract Documents with their individual jobs and overhead, whether specifically mentioned, included by implication or appurtenant thereto, are to be performed by the Contractor under one of the items listed in the Bid Schedule, irrespective of whether it is named in said list.

00410-1

6. Payment for Work performed will be in accordance with the Bid Schedule subject to changes as provided in the Contract Documents.
7. The undersigned Bidder hereby acknowledges Addenda No. 1 through 1.

PRICES:

The foregoing prices shall include all labor, materials, equipment, transportation, shoring, removal, dewatering, overhead, profit, insurance, permits, taxes, etc., to cover the completed Work in place of the several kinds called for.

BIDDER acknowledges that the Owner has the right to delete items in the Bid or change quantities at his sole discretion without affecting the Agreement or prices of any item so long as the deletion or change does not exceed twenty-five percent (25%) of the total Contract Amount.

QUANTITIES:

The approximate quantities of Work to be completed in place under the Agreement at unit prices are identified in the "Bid Schedule" and are for the purpose of comparing bids. These quantities have been estimated from the Contract Documents. The quantities used are for the general information of the bidder and represent the major items of the work to be done. Minor items and minor details are not listed but shall be part of the complete Agreement.

BID SCHEDULE:

SUMMARY OF APPROXIMATE QUANTITIES				
GENERAL BID ITEM DESCRIPTION:	QUANTITY	UNIT	UNIT PRICE	EXTENSION
Mobilization	1	LS	33,968.00	33,968.00
Pipe Cleaning	1	LS	3,024.00	3,024.00
CIPP Pipe Rehabilitation	110	LF	471.00	51,810.00
Remove/Repair Rubber Gasket	1	EA	2,740.00	2,740.00
			TOTAL	91,542.00

RESPECTFULLY SUBMITTED:



Signature

4-3-2020

Date

Chief Operations Officer

Title

NA

License Number (if applicable)

(SEAL - IF BID is by a corporation)

Attest

Christella Larson

Address:

12249 Mead Way

Littleton, CO. 80125

Telephone:

303-791-2521

00410-3

12249 Mead Way, Littleton, CO 80125
303.791.2521 phone 303.791.2524 fax

1178 West 17th Street, Marriott-Slaterville, UT 84404
303.791.2521 phone 303.791.2524 fax



Proposal

DATE: 11-28-2018
CUSTOMER NAME: South Platte Natural Resources District
ATTN: Ethan Allen, FYRA
JOB NAME: Oliver Reservoir Spillway and Stilling Basin Rehabilitation Project

Base Bid Summary of Approximate Quantities					
	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	Mobilization	1	LS	\$44,848.00	\$44,848.00
2	Pipe Cleaning	1	LS	\$2,938.00	\$2,938.00
3	ALT CIPP Rehabilitation of Arch Pipe: Item includes fillet installation, CIPP design, LMK Insignia gaskets between host pipe and liner, 13mm CIPP Installation, post CCTV Inspection, CIPP liner material testing for flexural strength and water porosity.	178.5	LF	\$426.00	\$76,041.00
4	Tower Rehabilitation	505	SF	\$77.00	\$38,885.00
5	Diaphragm Filter	1	LS	\$14,988.00	\$14,988.00
BASE BID TOTAL					\$177,700.00

NOTES:

Costs include warranty, payment and material bonds.

TERMS & CONDITIONS:

Per Contract Documents for the Projects

SIGNATURE: _____
C & L WATER SOLUTIONS, INC.

DATE: _____

PRINTED NAME: _____

CUSTOMER APPROVAL: _____

DATE: _____

PRINTED NAME: _____

REMOVAL AND REPLACEMENT AGREEMENT

This Agreement made and entered into on _____, 20__ by and between **LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT**, a political subdivision of the State of Nebraska (the "District") and **Norris Public Power District**, a political subdivision of the State of Nebraska ("NPPD"), hereinafter collectively referred to as the Parties.

RECITALS

- A. Upper Salt 3-A is one of 26 floodwater retarding structures built in Lancaster County as part of the Upper Salt Creek Watershed, Watershed Protection and Flood Prevention, as required by the Watershed Work.
- B. The District intends to rehabilitate structure 3-A by upgrading the site to current design criteria for a high hazard dam by increasing the auxiliary spillway capacity, raising the top of the dam, flattening the side slopes, and replacing the conduit and principal spillway riser ("Rehabilitation Project"). In addition the rehabilitation project will include the realignment of a portion of SW 2nd Street. The Rehabilitation Project requires additional land which the District has acquired.
- C. NPPD has an existing overhead power line that lies within Lancaster County ROW and will interfere with the realignment of SW 2nd Street and the construction of the Rehabilitation Project.
- D. The Rehabilitation Project will cause the realignment of SW 2nd Street, as shown on Exhibit "A" attached hereto and incorporated herein by this reference. The realignment in turn will necessitate the relocation of a single overhead power pole.
- E. The Parties desire to provide for the removal of the power line in its present location and replace it with a new power line in a different location within what will be the new Lancaster County ROW.

NOW, THEREFORE, in consideration of the above Recitals and the mutual promises and covenants contained herein the parties agree as follows:

- 1. NPPD will remove and relocate its existing power pole and line on or before a date agreed upon in writing by the Parties. The District agrees to reimburse NPPD for the cost of removal as indicated in work order #4590-2222 in the amount of \$3068.18 as shown on Exhibit B, within 30 days after receipt, review and approval of an itemized statement.
- 2. NPPD also has an underground power line shown on exhibit C on the West end of the Dam that crosses Stagecoach road. If deemed necessary to relocate the said power line in accordance with Nebraska Department of Natural Resources – Dam Safety Engineer, a new estimate to relocate will be added as Exhibit D to the agreement. The District will reimburse NPPD for the cost of relocation of said underground within 30 days after receipt, review and approval of an itemized statement.

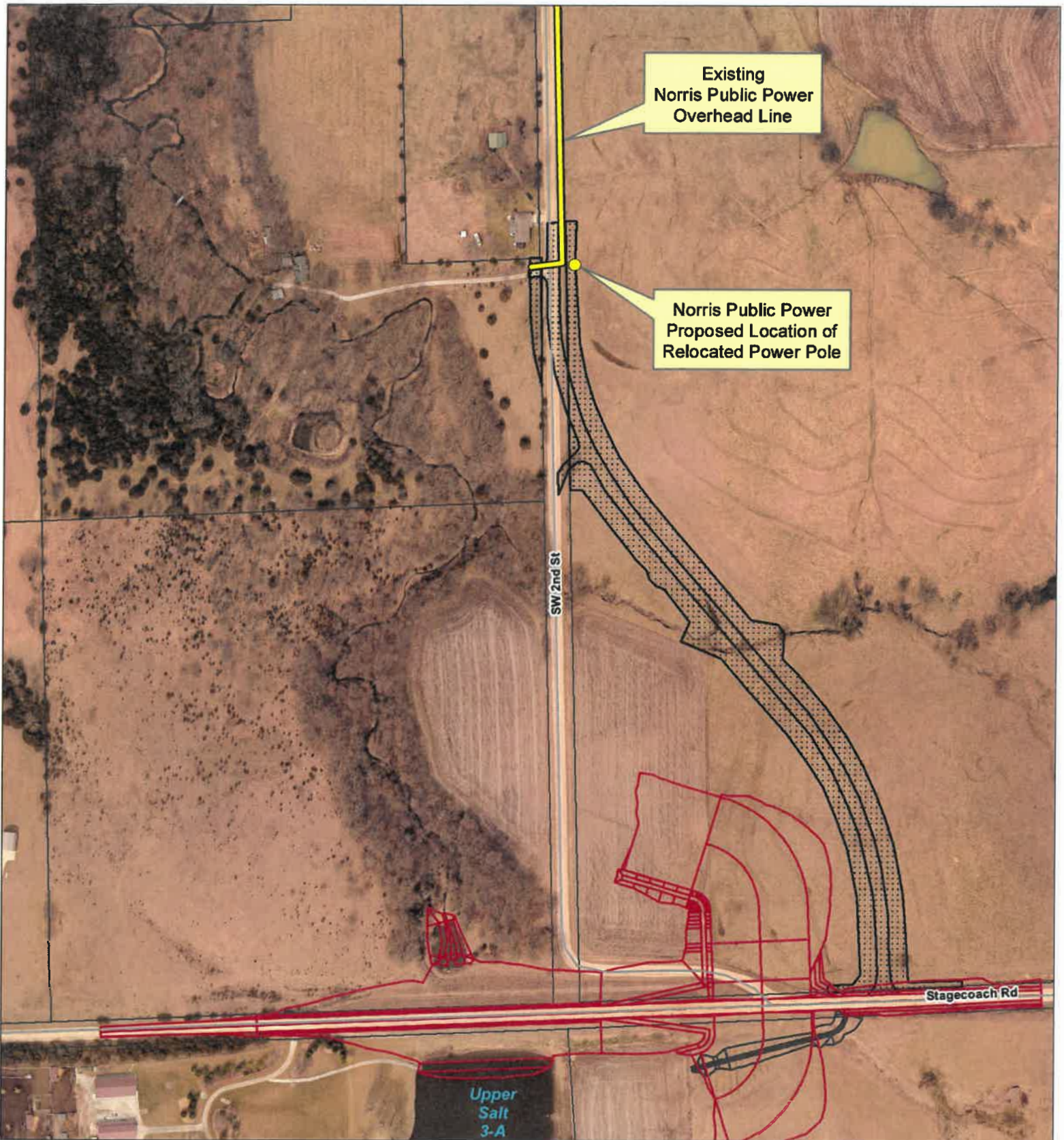
IN WITNESS WHEREOF, the Parties hereto have executed this Agreement by their duly authorized representatives on _____, 2020.

LOWER PLATTE SOUTH NATURAL RESOURCES
District,

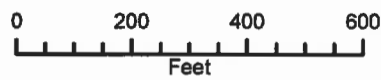
Norris Public Power District

BY: _____
Paul D. Zillig, General Manager

BY: _____
Authorized Representative



Upper Salt Creek 3-A Rehab Project - Sections 2 + 3, T7N-R6E and Sections 34 +35, T8N-R6E - Lancaster County



Mike Murren

From: Cory Lamprecht <clamprecht@norrispower.com>
Sent: Wednesday, April 1, 2020 2:40 PM
To: Mike Murren
Subject: RE: Staking of SW 2nd Street

This will be work order 4590-2222. They will schedule this after we receive payment. Figure a few weeks after that!

This is a break down of the cost. It is not exact, since our computer does the estimate and that info probably wouldn't make sense to you guys. So I broke it down the best I could. This is figured at 6 hours of labor.

\$672.00- 6 Hours of contractor backhoe at \$112. Per hour

\$344.67 Retirement cost

\$1170.00 Norris Labor

\$881.51 Materials

Total of \$3,068.18

Hope that helps!

Thanks Cory

Cory Lamprecht
Assistant Area Supervisor
15801 Sw 14th Street
Roca, NE 68430
Office 402-794-9900
Direct 402-228-2872



From: Mike Murren <mmurren@lpsnrd.org>
Sent: Wednesday, April 1, 2020 11:57 AM
To: Cory Lamprecht <clamprecht@norrispower.com>
Subject: Re: Staking of SW 2nd Street

Lets move forward can you give a little more breakdown and mention as soon as paid work will be scheduled. always nice because board members ask. Create the work order! will be paid after our APR 15th board meeting.

Thanks Mike

From: Cory Lamprecht <clamprecht@norrispower.com>
Sent: Wednesday, April 1, 2020 8:29:08 AM
To: Mike Murren; David Potter
Subject: RE: Staking of SW 2nd Street

Mike and David,



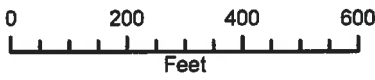
Existing
Norris Public Power
Underground Line

Stagecoach Rd

SW 2nd St

Upper
Salt
3-A

Upper Salt Creek 3-A Rehab Project - Sections 2 + 3, T7N-R6E and Sections 34 +35, T8N-R6E - Lancaster County



REMOVAL AND REPLACEMENT AGREEMENT

This Agreement made and entered into on _____, 20__ by and between **LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT**, a political subdivision of the State of Nebraska (the "District") and **Windstream Communications**, hereinafter collectively referred to as the Parties.

RECITALS

- A. Upper Salt 3-A is one of 26 floodwater retarding structures built in Lancaster County as part of the Upper Salt Creek Watershed, Watershed Protection and Flood Prevention, as required by the Watershed Work.
- B. The District intends to rehabilitate structure 3-A by upgrading the site to current design criteria for a high hazard dam by increasing the auxiliary spillway capacity, raising the top of the dam, flattening the side slopes, and replacing the conduit and principal spillway riser ("Rehabilitation Project"). The Rehabilitation Project requires additional land which the District has acquired.
- C. Windstream Communications has an existing phone line that lies within the land acquired by the District or public ROW and will interfere with the construction of the Rehabilitation Project.
- D. The Dam Rehabilitation Project may cause infrastructure owned by Windstream to be impacted, as shown on Exhibit "A" attached hereto and incorporated herein by this reference. The Dam rehabilitation project involves a phone pedestal and a phone line that crosses Stagecoach Rd. to a private residence on the west end of Dam located in the road right of way.
- E. The Parties desire to provide for the removal of the phone line in its present location and replace with a new line in an agreed upon location.

NOW, THEREFORE, in consideration of the above Recitals and the mutual promises and covenants contained herein the parties agree as follows:

- 1. Windstream Communications will remove and relocate its existing infrastructure stated above on or before a date agreed upon in writing by the Parties. The District agrees to reimburse Windstream Communications for the cost of removal and relocation of all infrastructure that impacts to the project as shown in within Exhibit A, 30 days after receipt, review and approval of an itemized statement.
- 2. Windstream Communications will relocate all equipment deemed necessary in accordance with Nebraska Department of Natural Resources – Dam Safety Engineer that falls within the project limits and an estimate to relocate will be attached as Exhibit B to the agreement.

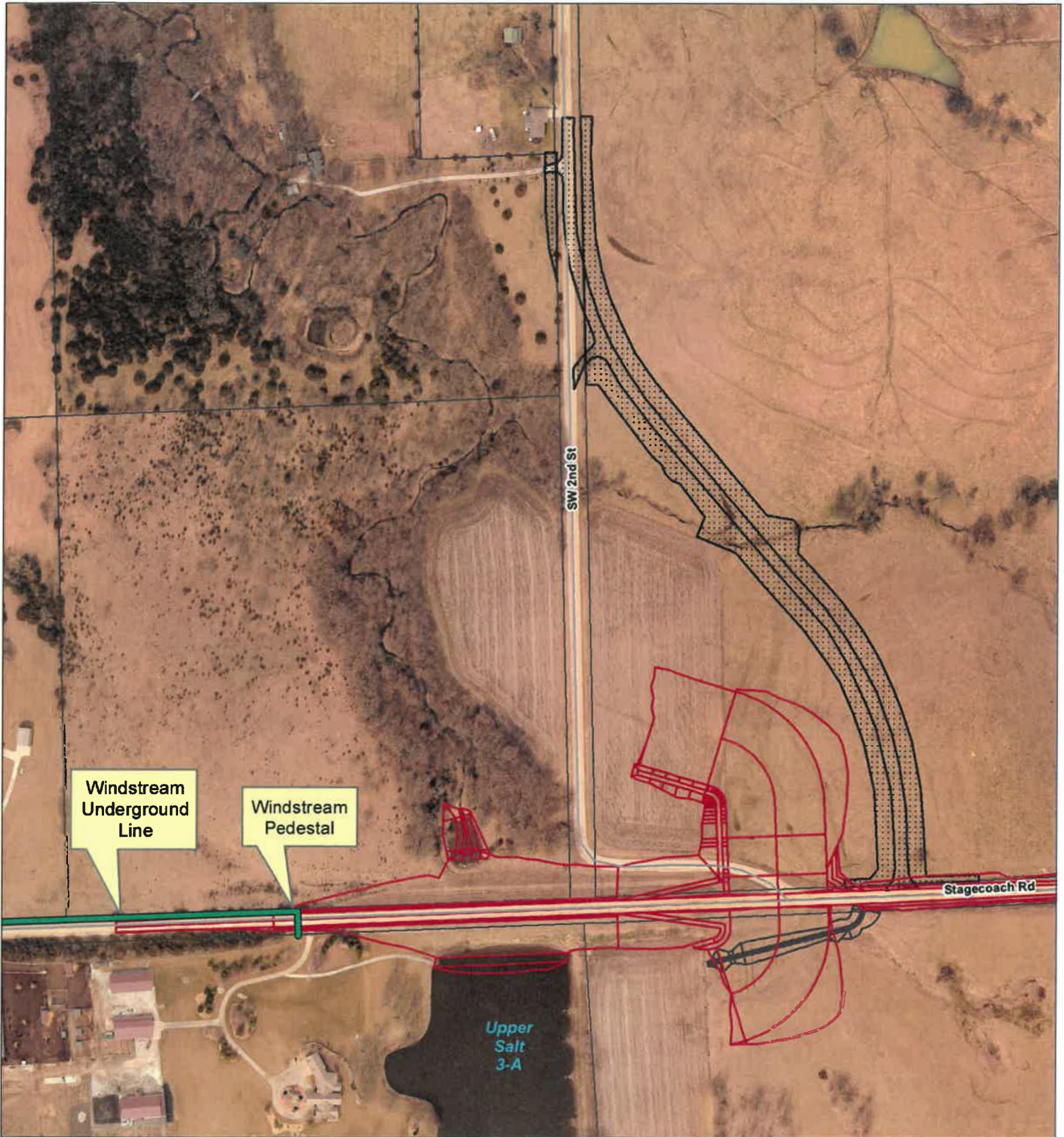
IN WITNESS WHEREOF, the Parties hereto have executed this Agreement by their duly authorized representatives on _____, 2020.

LOWER PLATTE SOUTH NATURAL RESOURCES
District,

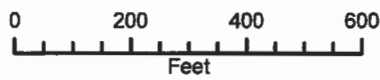
Windstream

BY: _____
Paul D. Zillig, General Manager

BY: _____
Authorized Representative



Upper Salt Creek 3-A Rehab Project - Sections 2 + 3, T7N-R6E and Sections 34 +35, T8N-R6E - Lancaster County





**Dan & Patricia Vergith/NRD
355 W. Stagecoach Rd**

RE: Entry Gate	6-Apr-20
Remove 560 sq. ft. of existing driveway and replace with 5" concrete (current location)	\$ 4,690.00
Remove reinstall gate, sensors, replace operator	\$ 12,830.00
Electrical/Phone wiring	\$ 1,000.00
Remove and replace 85 LF of split rail fence at west of drive and 165 LF east of drive	\$ 5,985.00
	<u>24,505.00</u>

Culvert replacement is not included

Bid assumes new driveway is built up to final grade elevation

This proposal and pricing is good through September 30, 2020

Terms: 2 Payments of \$12,252.50

First payment due when project is 50% complete, final payment due upon project completion

Signed this _____ day of April, 2020

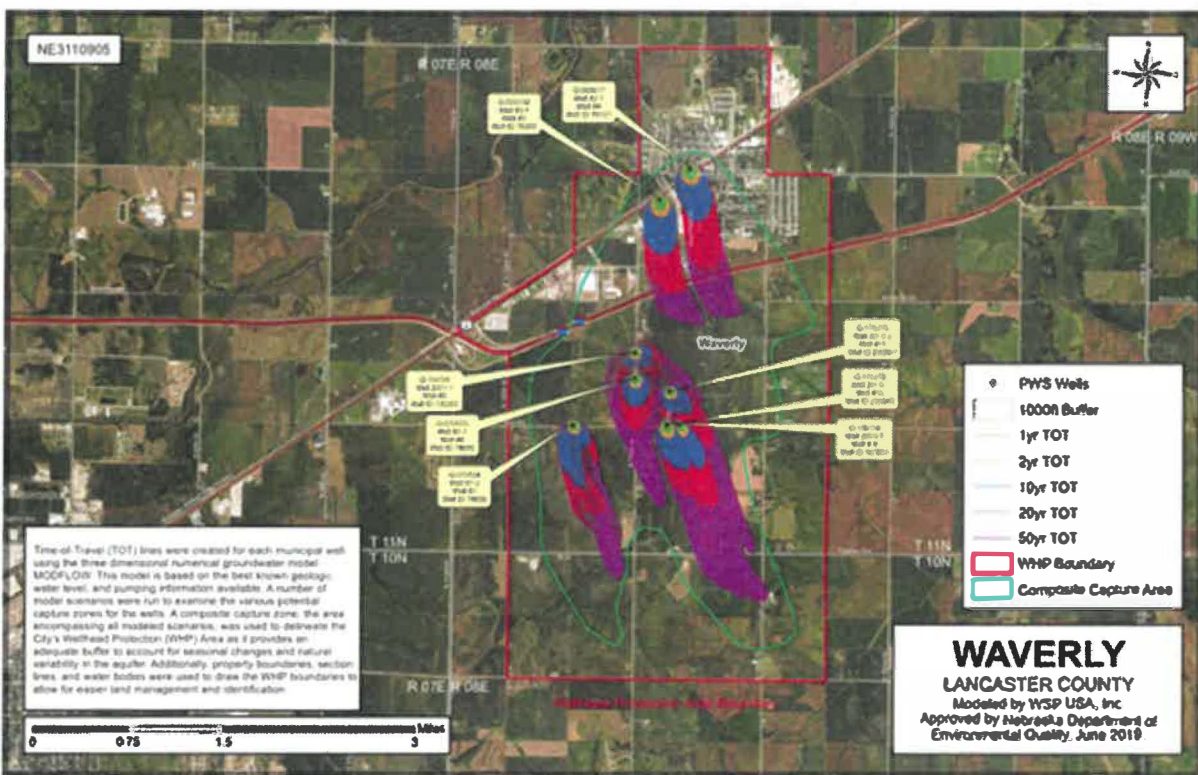
Dan Vergith Date

Patricia Vergith Date

Mike Murren, NRD Date

PROJECT SUMMARY
Waverly Best Management Practice Demonstration Farm Project
April, 2020

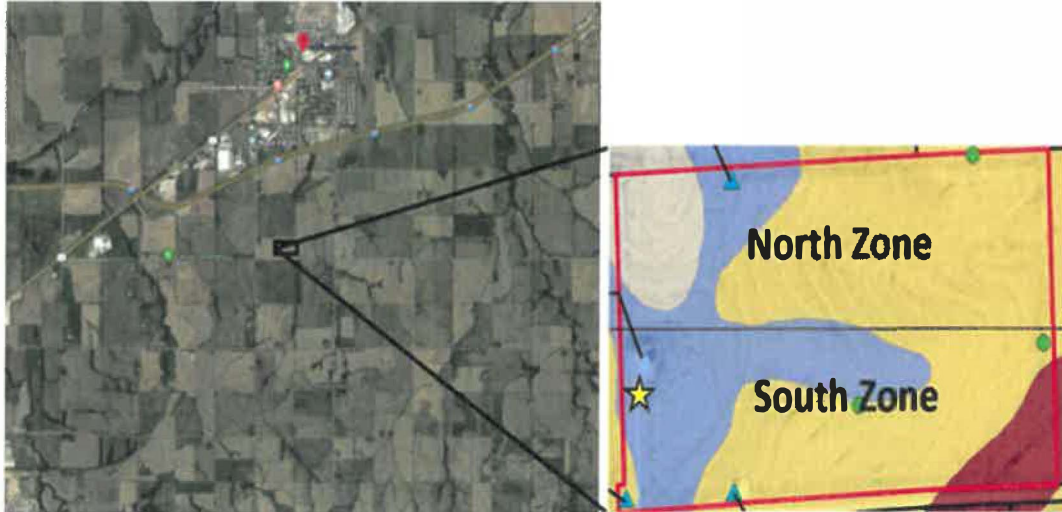
For the past several years, LPSNRD has been cooperating with the City of Waverly, UNL, the Nebraska Dept. of Environment and Energy, private consultants, and various landowners on efforts to protect the City’s source of drinking water. Historically, this drinking water has exhibited elevated levels of nitrate, and the City wants to implement programs which can deal with this issue. A large portion of this drinking water is supplied by several ground water wells south of Waverly and Interstate 80. Here is a map of the Wellhead Protection Area (which is similar to LPSNRD’s CWSPA), delineated by NDEE. The curving colored lines represent the estimated flow paths of ground water to the various wells; the straight red lines represent the boundaries of the WHPA:



The City owns a 60-acre tract of land surrounding several of the new wells—this area is roughly in the center of the above map, north of Alvo Road between 134th and 148th Streets. Historically, this land has been rented to different farmers who have raised traditional crops such as corn and soybeans. As the drinking water protection project has progressed, the City has expressed interest in converting this 60 acres to a “demonstration farm” whereby various best management practices (BMPs) could be implemented, and the effectiveness of those practices in protecting ground water quality could be evaluated.

Toward that end, a team of individuals led by Dr. Javed Iqbal at UNL have begun discussing possible actions to establish such a demonstration farm, and Dr. Iqbal has proposed a project for that purpose. In general, the project would divide the 60 acres into roughly two halves, one to the north and one to

the south. The south half would be farmed by the renter using traditional methods, while the north half would consist of a variety of plots utilizing BMPs such as cover crops, variable rate fertilization, soil sample analysis, etc. Here is a map of the proposed plot (the different colors reflect varying soil types):



UNL is applying for a \$15,000 Section 319 grant from NDEE to initiate the project. Section 319 requires a 40% local match for that funding, so they have asked the City and LPSNRD each to contribute \$5,000 as that local match. Here is a proposed timeline with tasks for the first year of the project; LPSNRD’s contribution would be dedicated toward accomplishing these tasks:

Task	April-May	June-Oct.	Nov-Apr.
Designing plots layout, soil sample collection and analysis			
Crop canopy sensing and fertilizer application			
Soil samples collection and analysis			
Data analysis, presentations, publications			
Project report to NDEE			

LPSNRD would reimburse the City directly for the requested \$5,000 in accordance with past requests. Also, the City of Waverly has agreed that, if the project can be established with this first year funding, that they will assume all local funding for the demonstration farm for the future. LPSNRD would, of course, continue to assist the City in its drinking water protection efforts through cost-share, ground water and vadose zone monitoring, etc.

**SUMMARY OF AMENDMENTS TO LANCASTER COUNTY
CONFINED ANIMAL FEEDING OPERATION (CAFO) RULES**

April, 2020

1. After a hearing on January 8, 2020, the Lancaster County Planning Commission voted 9-0 to approve the proposed text amendments, which are summarized in #s 2-6 below. During a public meeting on February 4, 2020, the Board of Commissioners voted to approve the text amendments with additional changes, summarized in #7 below. **Those changes directly involving the NRD water well permitting process are highlighted in red.**
2. Adopts definitions of large, medium, and small animal feeding operations (AFOs) as per current NDEE definitions (the following entails stabling or confining the animals in some way)

Species	Large AFO	Medium AFO	Small AFO
Dairy Cattle	700+	200-699	For all categories, any AFO which is not a Large or Medium AFO is categorized as Small
Cattle/Calves	1,000+	300-999	
Swine (55 lbs+)	2,500+	750-2,499	
Swine (<55 lbs)	10,000+	3,000-9,999	
Horses	500+	150-499	
Sheep/Lambs	10,000+	3,000-9,999	
Turkeys	55,000+	16,500-54,999	
Laying Hens/Broilers (w/ liquid manure)	30,000+	9,000-29,999	
Other Chickens (w/ other than liquid manure)	125,000+	37,500-124,999	
Laying hens (w/ other than liquid manure)	82,000+	25,000-81,999	
Ducks (w/ liquid manure)	5,000+	1,500-4,999	
Ducks (w/ other than liquid manure)	30,000+	10,000-29,999	

3. Open AFOs are those that aren't stabled or confined (i.e. no or partial protection from the elements)
4. Commercial Feedlots (Medium/Large AFOs) are allowed in the AG zoning district, and require site plans, NDEE Construction/operating permit, road maintenance agreement w/ Lancaster County, Siting Assessment Matrix, and the following setbacks:
 - a. Residence/Residential Low Density area: Open AFO 1 mile; Enclosed AFO ½ mile
 - b. Schools, churches, public parks, etc.: Large AFO 1 ½ miles; Medium AFO 1 mile
5. Decommissioning plan and bond can be required (facilities can be defined as abandoned if not used for at least 45 days in a 12-month period)

6. Shelter belt buffer required around the perimeter of application area or lot on which AFO is located; trees must be at least 15' high at maturity
7. On February 4, 2020, the Board of Commissioners in their public meeting approved the text amendments with the following changes:
 - a. Specify that the requirements apply to special permit applications filed after March 10, 2020
 - b. Increase the Large Enclosed AFO setback to ¾ mile (from ½ mile)
 - c. Make a decommissioning bond a requirement of the application process for Large AFOs
 - d. **Require water well permits from the NRD to be included in the application**
 - i. **Adopted the following definition: "Ground Water Reservoir" shall mean a designated area of land under which a major aquifer is known to exist and which has been delineated by the Lower Platte South Natural Resources District."**
 - ii. **Require that "a water well permit issued by the applicable Nebraska Natural Resources District (NRD), or water well design documentation showing a water well permit isn't required by the applicable NRD, shall be submitted with the application."**
 - iii. **Since Lancaster County occupies parts of both the Lower Platte South NRD and Nemaha NRD, the regulations state that**
 1. **For wells located within the LPSNRD, the application must include a copy of the well permit and any results from tests completed as part of the water well permitting process. They then cite LPSNRD's four classes of water wells based on location within or outside of a Ground Water Reservoir. Note that "any results from tests completed as part of the water well permitting process" would include results from water quality testing (which is sampling for water quality parameters after pumping the well for 24 hours) as well as from water supply testing (an aquifer test, which means observing drawdown and recovery and estimating the ability of the aquifer to supply the desired amount of water) as per LPSNRD's regulations.**
 2. **The regulations then reference NNRD's well permitting process, which is similar but has somewhat different definitions.**

IN SUMMARY: All applicants for Commercial Feedlot special permits must have a permit for any water well(s) necessary for the operation prior to applying for the special permit, and that permit must be supplied with the special permit application.