TO:

Board of Directors

FROM:

Dan Schulz, Resources Coordinator

DATE:

December 11, 2019

SUBJECT:

Recreation, Forestry & Wildlife Subcommittee Minutes

On Tuesday, December 10, 2019, the Recreation, Forestry and Wildlife Subcommittee met in the District conference room at 5PM. Subcommittee members present were Chair-Anthony Schutz, Gary Aldridge, Tom Green, Don Jacobson, Chelsea Johnson, Dan Steinkruger and Ray Stevens. Others present were Deb Eagan, Jocelyn Golden-Lincoln Assistant City Attorney, Sara Hartzell-Lincoln Park Planner, Ariana Kennedy, David Potter, Dan Schulz and Paul Zillig.

The first agenda item was the Honvlez conservation easement property right of first refusal. Schulz provided background on the acquisition of the Honvlez conservation easement for the Prairie Corridor on Haines Branch Project and the notification from Shannon Roberts, the owner of the Honvlez conservation easement property. Hartzell reviewed how this property is important to making a trail connection from Denton, Nebraska. Hartzell and Schulz provided information on the property listed for sale north of the conservation easement and its importance to the projects trail connection. They also indicated how City & District staff are working to have appraisal's ready for consideration on both property's in January (see attached maps).

Schulz discussed the timeline of the right of first refusal notification and the need to execute a 45 day extension to Robert's notification (see attached). Schulz

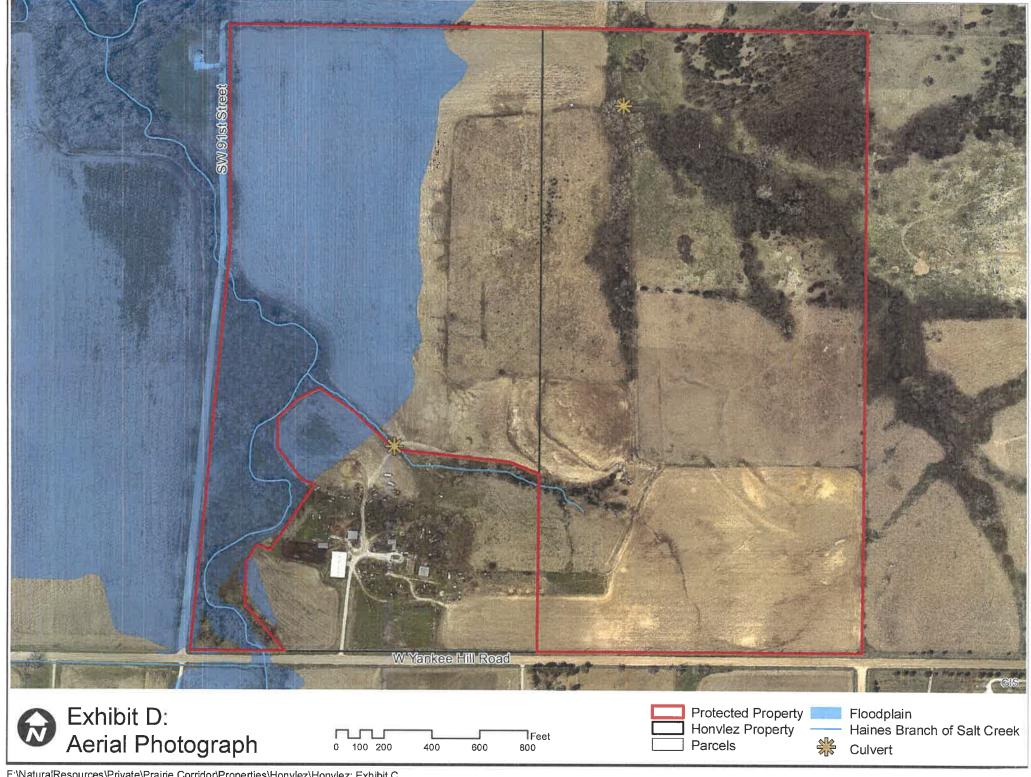
indicated Roberts had agreed to the extension and staff is working on setting up a meeting with Roberts to obtain her signature on the extension agreement.

It was moved by Jacobson, seconded by Stevens and unanimously approved to recommend that the Recreation, Forestry and Wildlife Subcommittee direct the General Manager to sign the 45 day extension of the right of first refusal.

It was moved by Stevens, seconded by Johnson and unanimously approved to recommend that the Lower Platte South NRD Board of Directors concur to approve the extension of the right of first refusal for the purchase of the Honvlez conservation easement property in the Prairie Corridor on Haines Branch.

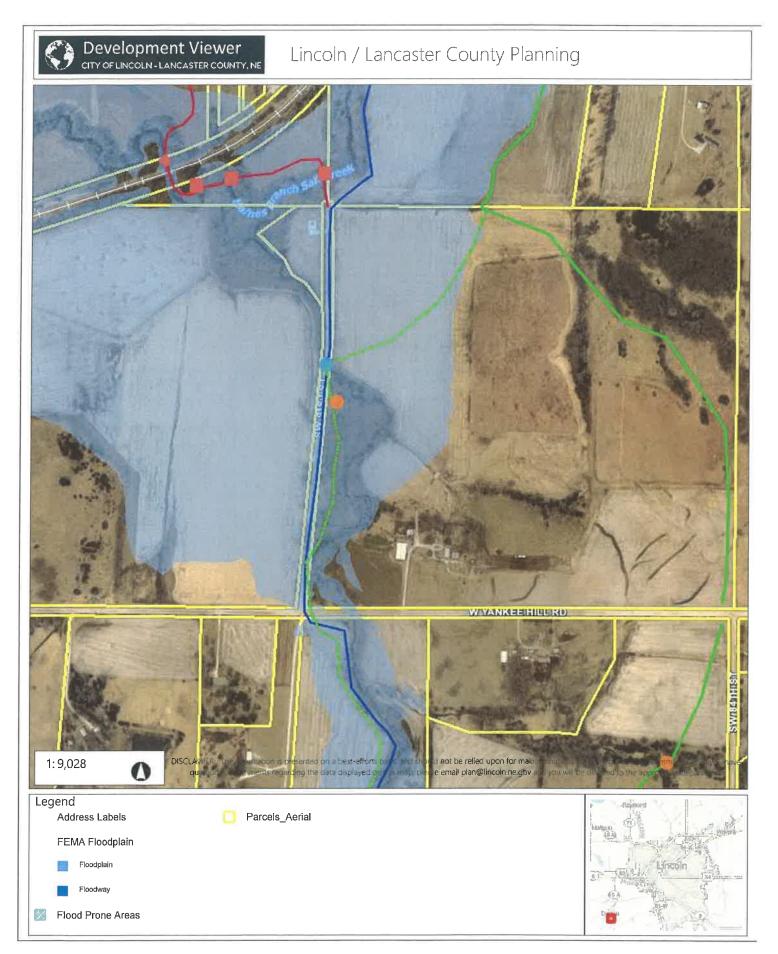
The last agenda item was staff reports and updates. Kennedy reported on the bids received for debris removal on the Lied Platte River Bridge (see attached). Kennedy also reported on the completion of trail bridges inspections and the 8th annual meeting for the Lincoln Sports Foundation motocross track. Schulz reported on the attached UNL saline wetland research grant from EPA. Schulz then gave updates on the Lincoln Saline Wetland Nature Center/Lincon Police Department borrow site and on USDA PL-566 Little Salt Creek Watershed grant application. He indicated the District was notified about receiving planning funds for the project and now waiting for the funds to be released.

Schutz adjourned the meeting at 6:08PM.



F:\NaturalResources\Private\Prairie Corridor\Properties\Honvlez\Honvlez: Exhibit C

Document Page #3





Lincoln / Lancaster County Planning



EXTENSION OF RIGHT OF FIRST REFUSAL

In consideration of Ten Dollars (\$10.00) and other valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Shannon Roberts, heir and successor in interest to John M. Honvlez ("Grantor"), sent written notice to the Lower Platte South Natural Resources District ("District") on October 30, 2019 of her intent to grant to District the Right of First Refusal to purchase the property as provided in paragraph 16 of the Conservation Easement between Grantor and the District, filed with the Lancaster County Register of Deeds on August 8, 2017, Instrument#2017032976.

The forty-five (45) days for the District to respond with its desire to purchase the property that is the subject of the Conservation Easement ends on December 14, 2019. The undersigned agree that District shall have an additional forty-five (45) days, for a total of ninety (90) days until January 28, 2020, for the District to update the appraisal previously provided by Grantor, allow for the review of the appraisal, and decide whether it will exercise the right to purchase the property.

The remaining terms of the Conservation Easement shall remain in force and effect as of the date of its original execution.

IN WITNESS WHEREOF, the parties hereto have executed this Extension.

LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT

By:	DATE:	
Its:		
STATE OF NEBRASKA)		
) ss. COUNTY OF LANCASTER)		
The foregoing instrument was acknowledged to the Lower Platt	nowledged before me this day of te South Natural Resources District.	
SHANNON ROBERTS	Notary Public	
By:	DATE:	
STATE OF NEBRASKA)		
) ss. COUNTY OF LANCASTER)		
The foregoing instrument was ackno 2019, by Shannon Roberts.	wledged before me this day of	
	Notary Public	

MEMORANDUM

TO:

Programs, Projects & Operations Subcommittee

FROM:

Eric Williams, Natural Resources Planner

DATE:

December 4, 2019

SUBJECT:

Lied Bridge Debris Removal Contract



The Papio-Missouri River NRD (District) collaborated with Lower Platte South NRD (LPSNRD) to construct the MoPac Trail along the former Missouri Pacific Railroad line, including construction of a trail over the bridge across the Platte River. This bridge is commonly referred to as the Lied Bridge, and normal operations and maintenance for the bridge and connecting trails segments is carried out by the Nebraska Game and Parks Commission (NGPC). During the catastrophic flooding event in March 2019, debris accumulated on the piers on the upstream side of the bridge which caused damage to the railing along the trail.

On November 5, 2019, the District opened bids for removing an estimated 2500 tons of debris by January 31, 2020 and received one bid in the amount of \$932,625. The Board rejected the bid at its November 14, 2019 meeting and directed that the project be rebid. Following feedback from contractors, staff expanded the debris removal period for final completion to October 2020, specified some priority debris removal locations by January 31, 2020 and requested an anticipated completion date in order to allow contractors flexibility in performing the work and hopefully providing lower bids.

On December 3, 2019, the District opened bids for the Lied Bridge Debris Removal project with the above mentioned changes. Six (6) bids were received ranging from \$211,250 to \$749,500. The apparent low bid of \$211,250 was submitted by National Concrete Cutting, Inc. from Council Bluffs, Iowa. Their anticipated completion date for the work is March 15, 2020. The bid summary is attached. NGPC provided the District with costs and amounts of debris removed in previous years and this price is in close proximity to what NGPC has paid in the past.

The District has not previously worked with this contractor, but references for past work were provided and contacted by staff. Based on those contacts, staff is confident that National Concrete Cutting, Inc. is a very reputable contractor with adequate equipment and personnel to satisfactorily complete the work as specified by March 15, 2020.

Per the Amendment to the Trail Over Platte River Bridge Agreement with NGPC and LPSNRD, the District will seek 75% federal funding for the project from FEMA, and the NGPC will reimburse the District for remaining 25% local cost of the project.

 Management recommends that the Subcommittee recommend to the Board of Directors that the General Manager be authorized to execute a contract with National Concrete Cutting, Inc. in an amount of \$211,250 for the Lied Bridge Debris Cleanup Project, subject to changes deemed necessary by the General Manager and approval as to form by District Legal Counsel.



Bid Opening

Date:

December 3, 2019

Project:

Lied Bridge Debris Removal

Company	Bond	Completion Date	Unit Price	Total Bid
Gana Trucking Martell, Nebr.	Yes	March 31, 2020	\$120.74	\$301,850.00
Hawkins Construction Omaha, Nebr.	Yes	March 1, 2020	\$182.30	\$455,750.00
Midwest Infrastructure Lincoln, Nebr.	Yes	April 30, 2020	\$299.80	\$749,500.00
National Concrete Cutting, Inc. Council Bluffs, Iowa	Yes	March 15, 2020	\$84.50	\$211,250.00
Tim Sisco Construction, LLC Sterling, Nebr.	Yes	October 15, 2020	\$136.80	\$342,800.00
Valley Corporation Valley, Nebr.	Yes	April 1, 2020	\$299.25	\$748,115.78

BID FORM

PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT

Lied Bridge Debris Removal 2019
Project No. 20191105

ARTICLE 1 - BID RECIPIENT

1.1 This Bid is submitted to:

Papio-Missouri River Natural Resources District 8901 South 154th Street, Omaha, NE 68138

1.2 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2 - BIDDER'S ACKNOWLEDGEMENTS

2.1 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 3 – BIDDER'S REPRESENTATIONS

- 3.1 In submitting this Bid, Bidder represents that:
 - A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

Addendum No.	Addendum, Date
	<u> </u>
	-

- B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.

This document is a MODIFIED VERSION of EJCDC® C-410, Bid Form for Construction Contracts.

- F. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs.
- G. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- H. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- Bidder has given Project Manager written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and confirms that the written resolution thereof by Project Manager is acceptable to Bidder.
- J. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.
- K. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 4 - BIDDER'S CERTIFICATION

4.1 Bidder certifies that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
 - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process;
 - "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;

- "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
- "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the e execution of the Contract.

ARTICLE 5 - BASIS OF BID

5.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price	
1	Removal of debris	Tons	2,500	84.50	211,250,00	
Total of	All Unit Price Bid Items				\$211,250,00	

Note: Division 2 – Site Work, Item 1.1.F. Work Times & Dates.

Anticipated Completion Date

MARCH 15th 2020

Bidder acknowledges that (1) each Bid Unit Price and Item Lump Sum includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and (2) estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

ARTICLE 6 - TIME OF COMPLETION

- 6.1 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.
- 6.2 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7 – ATTACHMENTS TO THIS BID

- 7.1 The following documents are submitted with and made a condition of this Bid:
 - A. Required Bid security; and
 - B. List of Proposed Subcontractors.

ARTICLE 8 -- DEFINED TERMS

8.1 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 9 – BID SUBMITTAL

BIDDER: [Indicate correct name of bidding entity]

NATIONAL CONCLETE CUTTING, INC.
By: [Signature]
[Printed name] _ CHRIS BRANT (If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)
Attest: [Signature]
[Printed name] _ A 5 FLOEHUCH
Title:
Submittal Date:12/3/19
Address for giving notices:
2427 SOUTH AVE,
COUNCIL BLUFFS, IA 51503
Telephone Number: 712-32 5 - 1125
Fax Number: 7/2 - 329 - 8989
Contact Name and e-mail address: AJ FROEHLICH
AT@ NATIONAL CONCLETE CUTTING. CO NE 9518541 (where applicable)

NOTE TO USER: Use in those states or other jurisdictions where applicable or required.

DIVISION 2 – SITE WORK

1.1. WORK INCLUDED

- A. The proposed work consists of the removal of debris from the Lied Bridge between Hwy 31 in Sarpy County and 328th Street in Cass County for the Papio-Missouri River NRD.
- B. Base Bid. Remove the Debris that is clogging the river and debris to prevent future flooding.

C. Procedure

- 1. The excavator needs to be in place over the pier that is being cleared.
- 2. The dump truck is backed into position to be loaded.
- 3. The dump truck moves to the next pier after the current pier is cleared.
- 4. The excavator follows the truck to the next pier after the dump truck has arrived at the next pier. Two vehicles shall not be mid-span simultaneously.
- 5. The preferred location of the excavator during removal is centered over the pier; however, 10 feet one side or the other is not cause for concern.

D. Equipment

- 1. Use the attached Bridge Inspection Reports provided by Kirkham Michael Consulting to determine acceptable machinery to be used for debris removal.
- 2. A backhoe should be capable of a 20-foot reach below the bridge deck.
- 3. Approved machinery used with previous debris removal projects at this location include:
 - i. Dump truck; GVWR=50,000 lbs
 - ii. Excavator weighing approximately 47,000 lbs

E. Documentation

- 1. Use load ticket requirement per FEMA regulations.
- A volume-weight conversion factor of <u>0.6 tons / yd3</u> shall be used for load ticket documentation based on a mixed debris assumption, with the wood being highly saturated. Using the factor, and imagery from spring 2019, an estimated **2,500 tons** of debris shall be removed.

- 3. To verify this factor, several truckloads should be tested, adjusting the factor corresponding to the test results.
- 4. This project will be bid based upon the amounts of tons of debris removed, which should be listed on each load ticket. Load tickets shall be submitted to NRD.

F. Additional notes

- 1. Both vehicles shall remain centered within the 14'0" width of the bridge deck to evenly distribute the loads to the deck and girders.
- 2. Placement of a temporary 3/4" plywood sheathing (or equivalent) to protect the concrete deck is recommended.
- 3. All debris, markings, staining, tire marks, or gouges that are left as a result of the project must be removed or repaired to original conditions, except for the railings damaged by the 2019 flood.
- 4. Maximum speed of 10 MPH on the deck to eliminate impact loading.
- 5. Removal of the bridge's safety railings, along with re-installing them after debris removal has been completed will be the responsibility of the contractor.
- 6. Debris disposal is the responsibility of the contractor, subsidiary to the contract, and such action must follow the associated rules, regulations and codes for such work.
- 7. Flood damaged railings shall be salvaged or removed as debris as determined by the NRD.

1.2. ENVIRONMENTAL IMPACT

- A. The Contractor shall be responsible for all work in or about the construction, storage and access areas, or damage to existing plantings, except that necessary to the completion of the work. Trees, shrubs, grasses and natural landscaping features not direct obstacles to the construction or completion of the project shall be protected.
- B. The Contractor shall not discharge wastes, into flowing streams, tributaries, or any body of ponded water. Disposal locations for such discharges require approval by the NRD. The Contractor must provide permits and erosion control as required under the National Pollutant Discharge Elimination System (NPDES).
- C. Control of Zebra Mussels: Due to the possible introduction of Zebra Mussels and other aquatic nuisance species, the Contractor is required to inspect and clean equipment prior to placement in water bodies:

- 1. <u>Always</u> inspect equipment (in the broadest sense, e.g. boats, trailers, anchors, scuba gear, etc.) for visible plants and animals before transporting.
- 2. <u>Always</u> remove visible plants and animals from equipment (expel plants, animals, and water from internal parts).
- 3. Always drain water from equipment before transporting.
- 4. <u>Always</u> clean equipment that has been in infested waters before placing in other waters.
- 5. <u>Always</u> report questionable species to the Nebraska Game & Parks Commission, Fisheries Division, (402) 471-5515, for identification. Information is available from many sources about identification of an aquatic nuisance species; however, specimens are needed to confirm sightings. Many jurisdictions have different rules regarding possession and transport of specimens. Always ask our agency's Fisheries Division representative for transportation instructions prior to transportation.
- 6. <u>Always</u> avoid transporting plants, animals, mud, or water to or from lakes, rivers, wetlands, and coastal waters.
- 7. <u>Always</u> avoid releasing animals or plants into the wild unless the release is made into the same waterbody or location where the species came from.
- D. Clean Air Act: Contractor compliance with the "Clean Air Act of 1970" (42 U.S.C. 1857 ET. SCQ.) is required.
- E. Federal Water Pollution Control Act: Contractor compliance with the Federal Water Pollution Control Act (33 U.S.C. 1251 ET. SCQ. as amended) Executive Order 11288 is required.
- F. Historical/Archeological Finds: If during the course of construction evidence of deposits of historical or archeological interest is found, the Contractor shall cease operations affecting the find and shall notify the NRD. No further disturbance of the deposits shall ensue until the Contractor has been notified by the Owner that he may proceed. The Owner will issue a Notice to Proceed after the State official has surveyed the find and made a determination of value and effect and reported such determination to the Owner.

1.3. USE OF OWNER'S EQUIPMENT

A. Obtain Owner's written permission prior to use of any equipment furnished under this contract or other contracts.

1.4. DOCUMENTS

A. Drawings: The drawings are diagrammatic in character and do not necessarily indicate every item.

1.5. PROGRESS MEETINGS

- A. Independent Contractor shall schedule and hold regular progress meetings at least monthly and at other times requested by the NRD or as required by the progress of the Work.
- B. Attendance shall include:
 - 1. Independent Contractor and Superintendent.
 - 2. Owner or Owner's Representative.
 - 3. Others as may be requested by Independent Contractor, Engineer, or Owner.
- C. Minimum agenda shall include:
 - 1. Review of work progress since last meeting.
 - 2. Identification and discussion of problems affecting progress.
 - 3. Review of any pending change orders.
 - 4. Revision of Construction Schedule as appropriate.
- D. Independent Contractor shall preside at meetings and record and distribute minutes to the participants.

1.6. COORDINATION CONFERENCES

- A. Hold conferences for coordination of the Work when necessary.
- B. NRD may hold coordination conferences to be attended by all involved when Independent Contractor's operations affect, or is affected by the work of others.
 - 1. Independent Contractor shall participate in such conferences accompanied by Subcontractors as required by NRD.

1.7 CONSTRUCTION GUARANTEE

A. The Contractor shall guarantee the workmanship incorporated with this project for a period of one (1) year following the date of final acceptance by the Owner. This guarantee includes, but is not limited to, the guard rails of the bridge.





Document Page #19



Document Page #20

Deploying Wireless Sensor Network for Monitoring and Evaluating Salinity Status, Hydrological Interaction, and Vegetation Community for Nebraska's Eastern Saline Wetlands

Zhenghong Tang, Ph.D

University of Nebraska-Lincoln

11-24-2019

Project introduction

Team:

- Zhenghong Tang, Ph.D;
- Frank Bai, Ph.D;
- Jason Cyboron (MCRP);
- Ligang Zhang (Ph.D student in SNR);
- Qiao Hu (Ph.D student in SNR)

Project cost:

• \$150,000 from EPA

Period:

• 3-year project (from 10-01-2019 to 09-30-2022)

Goal and Deliverables

Overall goal:

• To deploy wireless-based real-time sensor networks to monitor and evaluate salinity status, hydrological interaction, and vegetation community of saline wetlands

Three deliverables:

- 1. A wireless-based monitoring system deployed in conserved saline wetlands to collect real-time salinity data;
- 2. A technical report to evaluate the status of saline wetland ecosystems, including salinity status, hydrological dynamics, and vegetation conditions.
- 3. A geodatabase to document the conditions of salinity status, hydrological connectivity/interactions and vegetation distribution.

Three Tasks

Task 1: Deploy wireless-based real-time sensor networks to monitor the salinity status

- Task 1a: Jointly determine sites for installation;
- Task 1b: Deploy sensor networks;

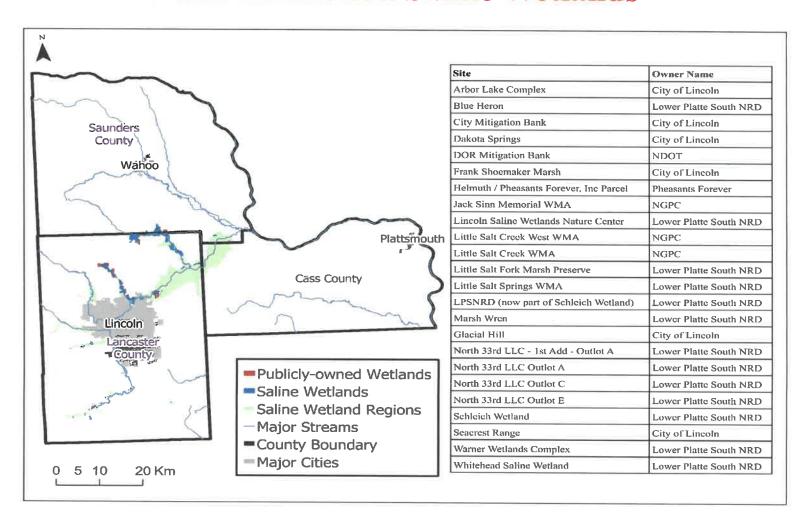
Task 2: Analyze wetland salinity dynamics and hydrological interaction

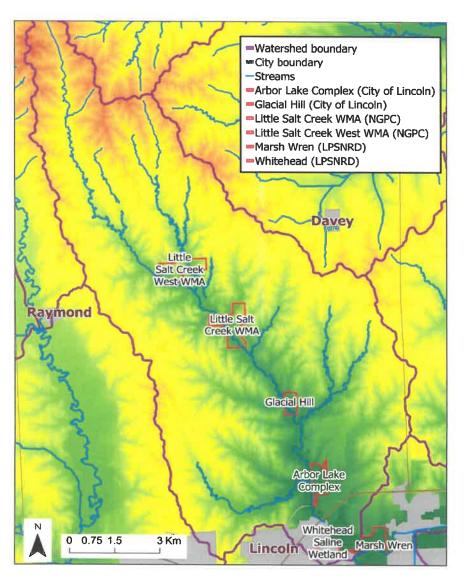
- Task 2a: Analyze salinity datasets;
- Task 2b: Analyze hydrological conditions;

Task 3: Evaluate wetland vegetation community conditions and existing conservation practices for best management practices

- Task 3a: Evaluate vegetation conditions;
- Task 3b: Prioritize conservation efforts;

Nebraska Eastern Saline Wetlands





Site Selection Process

Site selection criteria

- 1) Wetland soils
- 2) Inundation areas
- 3) Vegetation coverage
- 4) Endangered species
- 5) Hydrology condition

- 6) Site representativeness
- 7) Site accessibility
- 8) Land ownership
- 9) Wireless signal strength
- 10) Conservation activities

Selected six sites

Site name	Owner name
Arbor Lake Complex	City of Lincoln
Glacial Hill	City of Lincoln
Little Salt Creek WMA	Nebraska Game and Parks Commission
Little Salt Creek West WMA	Nebraska Game and Parks Commission
Marsh Wren	Lower Platte South Natural Resources District
Whitehead Saline Wetland	Lower Platte South Natural Resources District

Sensors



o Hydro 21 Sensor System (6 sets)

Sensor: \$491

ZL6: \$650

Zentra Cloud Service Fee: \$540



o Teros 12 Sensor System (6 sets)

Sensor: \$300

ZL6: \$650

Zentra Cloud Service Fee: \$540

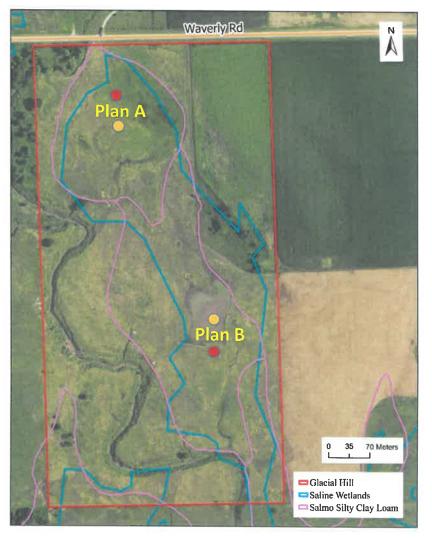


HYDRO 21 sensor	TEROS 12 sensor				
(Deploy at surface water in saline wetlands) • Water depth: 0-10 m	(Deploy at 20 cm of salty soils) • Volumetric water content (VWC): 0.00–0.70 m ³ /m ³				
 Temperature: -11-49 °C Electrical conductivity: 0 to 120 dS/m 	 Temperature: -40 to 60 ° C Bulk electrical conductivity (EC_b): 0 to 20 dS/m (bulk) 				

Arbor Lake Complex

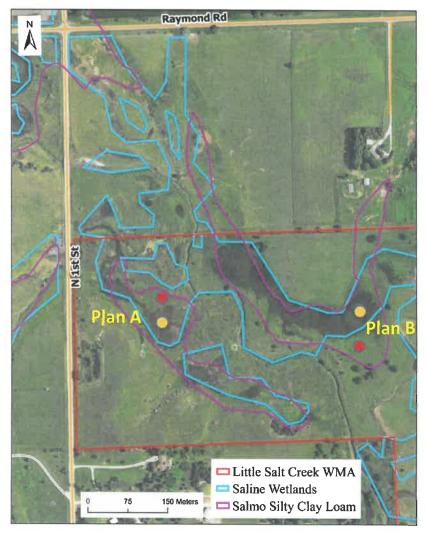
Plan A N 27th St Plan B Arbor Lake Complex Saline Wetlands 110 Meters Salmo Silty Clay Loam

Glacial Hill



- Teros 12
- Hydro 21

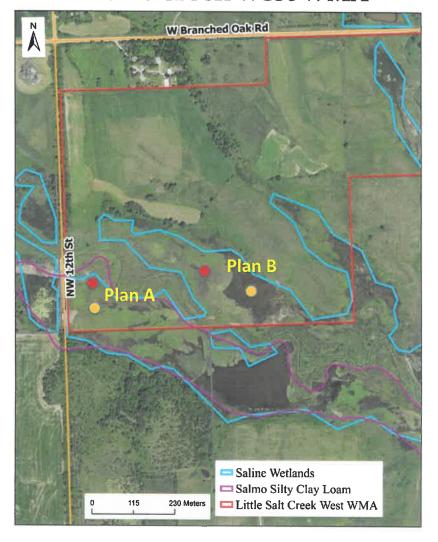
Little Salt Creek WMA



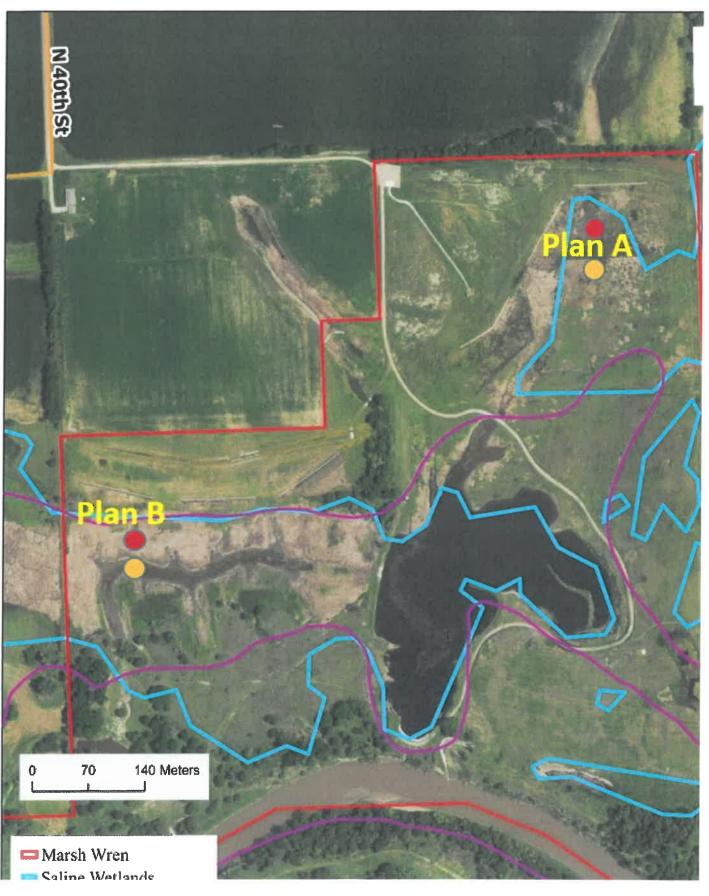
Little Salt Creek West WMA

Teros 12

Hydro 21



Marsh Wren



Marsh Wren

N/40th/St lan A Marsh Wren Saline Wetlands Salmo Silty Clay Loam

Whitehead Saline Wetland



Teros 12

Hydro 21

Timelines

Time	10-01-	01-01-	04-01-	07-01-	10-01-	01-01-	04-01-	07-01-	10-01-	01-01-	04-01-	07-01-
	2019	2020	2020	2020	2020	2021	2021	2021	2021	2022	2022	2022
	to	to	to	to	to	to	to	to	to	to	to	to
	12-31-	03-30-	06-30-	09-30-	12-31-	03-30-	06-30-	09-30-	12-31-	03-30-	06-30-	09-30-
	2019	2020	2020	2020	2020	2021	2021	2021	2021	2022	2022	2022
Task	QAPP submission	QAPP review and approval	Field work for installation of the sensors	First annual report update	Salinity, hydrology, and vegetation analysis	Salinity, hydrology, and vegetation analysis	Salinity, hydrology, and vegetation analysis	Second annual report update	Salinity, hydrology, and vegetation analysis	Salinity, hydrology, and vegetation analysis	Initial report	Final report submission