



LOWER PLATTE SOUTH natural resources district

3125 Portia Street | P.O. Box 83581 • Lincoln, Nebraska 68501-3581
P: 402.476.2729 • F: 402.476.6454 | www.lpsnrd.org

TO: Board of Directors
FROM: Dan Schulz, Resources Coordinator *DS*
DATE: October 16, 2020
SUBJECT: Minutes-Recreation, Forestry & Wildlife Subcommittee Meeting

On Thursday, October 15, 2020, the Recreation, Forestry and Wildlife Subcommittee held a virtual meeting at 7PM. Subcommittee members participating were Chair-Anthony Schutz, Gary Aldridge, Deb Eagan, Luke Peterson, and Ray Stevens. Others participating were Ariana Kennedy, David Potter, Larry Ruth, Dan Schulz, Jay Seaton and Paul Zillig.

The first agenda item was consideration of a right of entry agreement with UNL to conduct studies at the Marsh Wren and Whitehead Community Wetland Management Areas. Staff reviewed the attached materials (pages 1-13) and were instructed to make changes referencing exhibits to attachments and correct site names on page 10, see attached.

It was moved by Eagan and seconded by Peterson to recommend that the Lower Platte South NRD Board of Directors approve the University of Nebraska-Lincoln, Office of Sponsored Programs right of entry agreement #136557 to conduct saline wetland research at Whitehead and Marsh Wren Community Wetland Management Areas.

Voting in favor of the motion were Aldridge, Eagan, Peterson and Stevens.
Abstaining-Schutz.
Motion passed.

Another agenda item was consideration of a request by the Saline Wetland Conservation Partnership for assistance with the Haines Branch Stream Stability and Wetland Protection Project. Staff reviewed the attached materials (pages 34-43) and indicated an update in the amount being requested for the District to contribute had been reduced from \$135,000 to \$67,500 or 26% of the estimated

and Wetland Protection Project. Staff reviewed the attached materials (pages 34-43) and indicated an update in the amount being requested for the District to contribute had been reduced from \$135,000 to \$67,500 or 26% of the estimated project costs. The new proposed division for funding is now \$67,500-Lower Platte South NRD (26%), \$67,500-City of Lincoln watershed funds (26%), \$75,000-Saline Wetland Conservation Partnership (29%), and \$50,000-Prairie Corridor on Haines Branch Project funds (19%) for the estimated total project cost of \$260,379.35.

It was moved by Eagan, seconded by Stevens and unanimously approved to recommend that the Lower Platte South NRD Board of Directors agree to cost-share 26% of the Haines Branch Tributary Stabilization Project cost in Pioneers Park not to exceed \$67,500.00 of District funds.

Another agenda item was consider accepting title from the City of Lincoln for the Denton Prairie property in accordance with the Prairie Corridor on Haines Branch Agreement. Staff reviewed the attached materials (pages 14-19) about the letter and the intent of the City of Lincoln to request transfer of two additional property's over the next two fiscal years, Two Creeks Prairie and Bobcat Prairie respectively.

It was moved by Peterson, seconded by Stevens and unanimously approved to recommend that the Lower Platte South NRD Board of Directors accept fee title interest in the City of Lincoln's property for the Prairie Corridor on Haines Branch Project, located in the south one half of the northwest quarter of section 22, township nine north, range five east, Lancaster County, Nebraska, known as the Denton Prairie, subject to legal counsel review.

The next agenda item was consider designating the Stiefel-Johnson Trailhead and Denton Prairie as NRD conservation corridors properties for rules and regulation purposes. Staff reviewed the attached materials (pages 20-29) and explained why the conservation corridor regulations fit both of these properties. Staff was instructed to attach maps of the two areas see attached pages 17A & 18A.

It was moved by Stevens, seconded by Eagan and unanimously approved to recommend that the Lower Platte South NRD Board of Directors designate District conservation corridor regulations on the Denton Prairie and Stiefel-Johnson Trailheads.

The next agenda item was consider approval of the 2021 Conservation Forestry Program rates. Seaton reviewed the attached materials (pages 30-33) and explained why the program rates are recommended to not change for the current fiscal year.

It was moved by Schutz, seconded by Peterson and unanimously approved to recommend that the Lower Platte South NRD Board of Directors set the 2021 Conservation Forestry Program rates at 90 cents per seedling for orders of less than 100 seedlings and 85 cents per seedling for orders of a 100 or more seedlings.

The subcommittee meeting wrapped up with reports by Kennedy on the Lied Platte River Bridge and Oak Creek Trail landslide repairs and by Schulz on the consultant selection process for the Little Salt Creek Watershed PL-566 grant.

Schutz adjourned the meeting at 7:48PM.

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OFFICE OF SPONSORED PROGRAMS
AGREEMENT #136557
RIGHT OF ENTRY AGREEMENT

THIS RIGHT OF ENTRY AGREEMENT (the "Agreement") is entered into by and between the Lower Platte South Natural Resources District (the "District"), a political subdivision of the State of Nebraska, and the Board of Regents of the University of Nebraska on behalf of the University of Nebraska-Lincoln ("UNL"), collectively referred to as the "Parties".

Where the Agreement references the District, UNL, or the Parties, individually or collectively, such reference includes the party and its authorized representatives, including officers, directors, employees, contractors, subcontractors, and agents, as context dictates.

WITNESSETH:

WHEREAS, the Parties desire to enter into this Agreement for the purpose of permitting the installation, monitoring, and maintenance of sensors to be located on wetland properties owned by the District known as Whitehead Community Wetland Management Area and Marsh Wren Community Wetland Management Area, copies of maps showing the properties are attached hereto as ~~Exhibit~~ "A" and incorporated herein by reference (the "Wetlands").

Attachment

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

Attachment

1. The District hereby grants to UNL a right of entry onto the Wetlands for the purpose of the installation, monitoring, and maintenance of sensors at certain locations shown on ~~Exhibit~~ "A" and incorporated herein by reference; and to monitor and evaluate salinity status, hydrological interaction, and vegetation community of saline wetlands for UNL as further described in ~~Exhibit~~ "B" and incorporated herein by reference (the "Research").
- Attachment*
2. This Right of Entry is limited solely to UNL for the purposes described in this Agreement.
 3. The Research will be supervised by Dr. Zhenghong Tang (the "Principal Investigator"). If Dr. Tang is unable to continue to serve as Principal Investigator and a successor acceptable to both UNL and the District is not available, this Agreement may be terminated as provided in Article 10.
 4. The rights granted herein to UNL shall not interfere with or interrupt the performance of the duties and obligations of the District with respect to the Wetlands.

5. The District will provide UNL a key for access to the Wetlands, which may be used only by UNL and shall not be given to or used by any third party.
5. The District will permit UNL to provide, install, and display appropriate signage advising area visitors not to block access points necessary for ingress and egress by UNL to sensor locations as shown on ~~Exhibit~~ "A".
Attachment
6. Excessive travel in the Wetlands area, damage to service trails, or conflicts with public users on the Wetlands by UNL, may result in termination of this Right of Entry.
7. *Attachment* UNL may travel onto the Wetlands to the approved locations only as shown on ~~Exhibit~~ "A" and will be allowed access only for the purpose of the Research, including, installation, monitoring, and maintenance of sensors. UNL will not travel onto or access the Wetlands for business, for-profit activities, or for any purpose other than the Research.
8. To the extent permitted by law, UNL shall indemnify, defend, save and hold harmless the District from and against any and all losses, liabilities, damages, costs, and expenses, including reasonable attorneys' fees, suffered or incurred by the District in its performance of this Agreement. The District shall not be responsible for any damage whatsoever caused to UNL's equipment from the public's use of the Wetlands.
9. This Agreement shall become effective on the date it is fully executed by the Parties, and shall remain in effect through September 30, 2024 (the "Term").
10. This Agreement will remain in effect for the Term unless sooner terminated for cause by either party or by mutual consent.
11. If terminated for cause or by mutual consent, the terminating party or parties shall provide no less than (30) days written notice.
12. This Agreement may be renewed, extended, or amended by mutual written agreement.
13. Failure by one party to comply with this Agreement in a manner which the other party in its sole discretion shall deem sufficient may be considered cause for termination.
14. Nothing in this Agreement shall be construed as a delegation of authority of the District to UNL with respect to the Agreement nor shall UNL in any manner consider or represent itself to be an employee of the District. It is expressly understood by UNL that it is an independent contractor who shall provide, manage, and assume all obligations whatsoever which may occur or be required by the

Workers' Compensation Laws of the State of Nebraska and UNL shall save and hold harmless the District against any obligations relating to any such liability.

12. The Parties and their subcontractors shall comply with all applicable local, State, and Federal statutes and regulations regarding civil rights and equal employment opportunity. Neither Party nor their subcontractors shall discriminate against any employee or applicant for employment, to be employed in the performance of this Agreement, with respect to the employee or applicant's hire, tenure, terms, conditions, or privileges of employment because of the employee or applicants' race, color, religion, sex, disability, or national origin, in accordance with the Nebraska Fair Employment Practice Act, Neb. Rev. Stat. § 48-1122 *et seq.*, as amended.
13. UNL agrees to have in place, during the Term of this Agreement, a Drug Free Workplace Policy stating that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance in the workplace is prohibited. UNL agrees to provide a copy of its drug-free workplace policy at any time upon request by the District.
14. It is expressly understood that UNL assumes full liability for the acts of its authorized representatives assigned to perform UNL duties hereunder, and shall, to the fullest extent permitted by law, reimburse the District for any damage to District property, real or personal, which may be damaged by UNL or its authorized representatives in performance thereof.
15. UNL assumes all risk and liability to itself for any injury to persons or property resulting in any manner from performance under this Agreement, and for any loss, cost, damage, or expense resulting at any time from any and all causes due to any act or acts, negligence, or the failure to exercise proper precautions.
16. Nothing in this agreement shall be construed to be a waiver of the Parties' sovereign immunity or of the qualified immunity of any of the Parties' authorized representatives.
17. Each party agrees to comply with all applicable federal, state, and local laws, codes, regulations, rules, and orders.
18. This Agreement shall be governed by the laws of the State of Nebraska.
19. This Agreement, its Exhibits, and Attachments, embody the entire understanding between the Parties, and any prior or contemporaneous representations, either oral or written, are hereby superseded. No amendments or changes to this Agreement shall be effective unless made in writing and signed by authorized representatives of the Parties. In the event of any inconsistency between the terms of this Agreement and the documents referenced or incorporated into this Agreement, the terms of this Agreement prevail.

20. Neither Party shall be responsible to the other for failure to perform any of the obligations imposed by this Agreement, provided such failure shall be occasioned by fire, flood, explosion, lightning, windstorm, earthquake, subsidence of soil, failure or destruction, in whole or in part, of machinery or equipment, or failure of supply of materials, discontinuity in the supply of power, governmental interference, civil commotion, riot, war, strikes, labor disturbance, transportation difficulties, labor shortage, pandemic, or any cause beyond its reasonable control.
21. This Agreement may not be assigned without the prior written consent of the other party.
22. As of the date of the execution of this Agreement, UNL is self-insured pursuant to the University of Nebraska Self-Insurance Trust Program. Subject to the terms, conditions, exclusions, and limits of the Statement of Self-Insurance Coverage contained in the Program, UNL shall become legally obligated to pay as damages for liability occurrences, up to the limits of \$1,000,000 per liability occurrence and \$3,000,000 in the aggregate of liability occurrences in any fiscal year.

Upon request, UNL shall furnish a certificate of insurance with liability limits shown above. Insurer shall give notice of cancellation or non-renewal of any coverage to the Lower Platte South Natural Resources District 30 days before taking such action.

IN WITNESS WHEREOF the Parties by their authorized representatives have affixed their signature, the day and year last written.

LOWER PLATTE SOUTH NATURAL
RESOURCES DISTRICT,

Board of Regents of the University of
Nebraska,
By and on behalf of the University of
Nebraska-Lincoln

By: _____
Paul D. Zillig, General Manager

By: _____
David B. Doty, Director, Sponsored Programs

Date: _____

Date: _____

Attachment A: Property maps

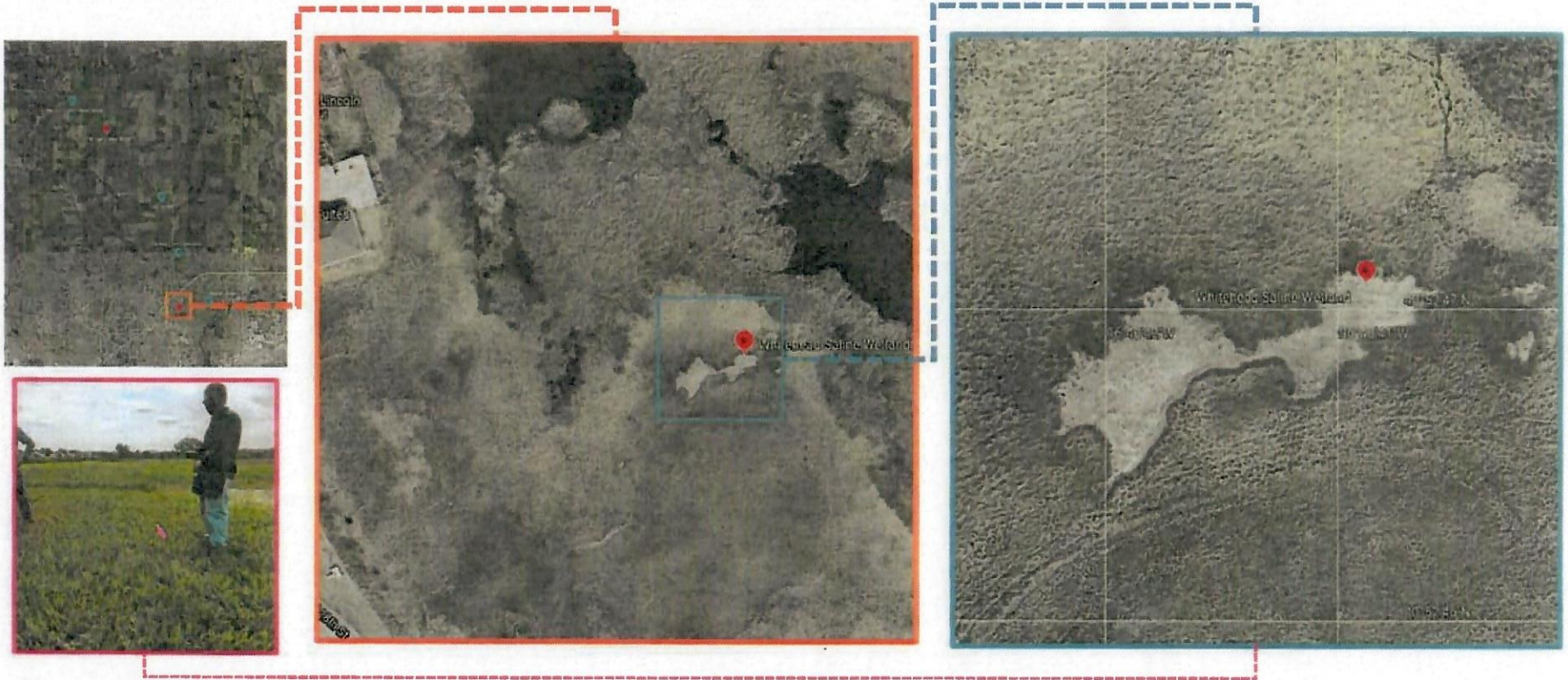


Whitehead Saline Wetland (Lower Platte South NRD)

Exhibit A



Location#5: Whitehead Saline Wetland



Latitude: **40.8797422°**

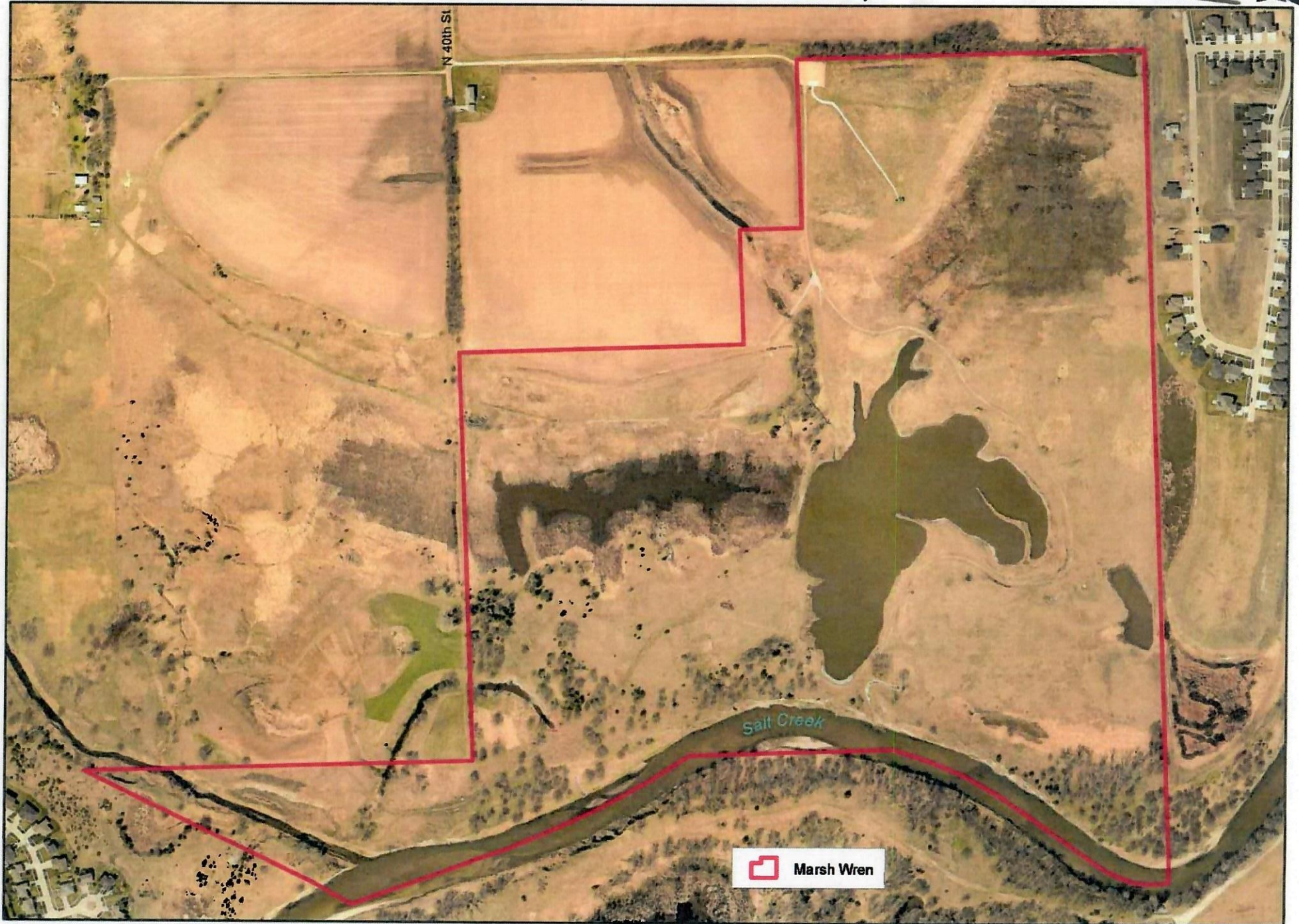
Longitude: **-96.6780228°**



Marsh Wren (Lower Platte South NRD)

Exhibit A

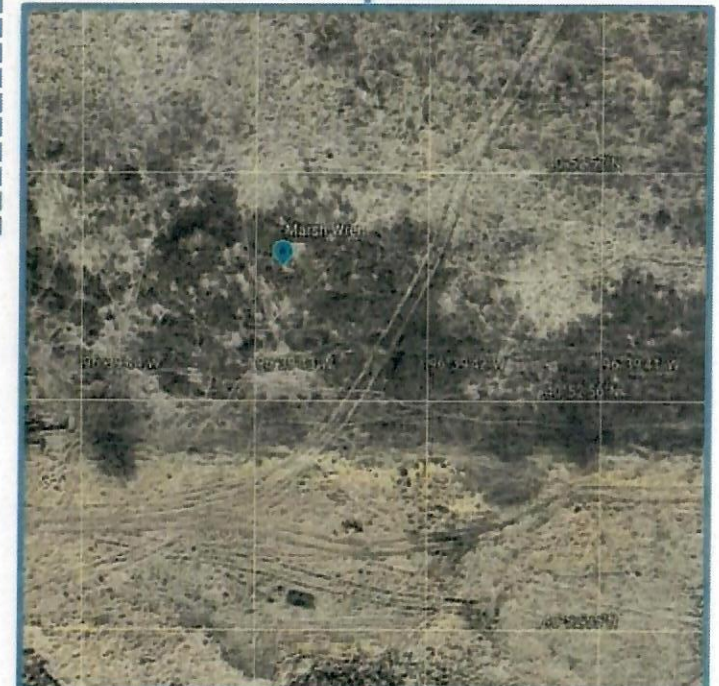
8



0 250 500 1,000 Feet

Map Updated: September 2020 - Lower Platte South NRD, sdr

Location#6: Marsh Wren



Latitude: **40.882382°**

Longitude: **-96.6619°**

Attachment B: Project Description

Name of Organization: Board of Regents, University of Nebraska for the University of Nebraska-Lincoln

Project Title: Monitoring and evaluating salinity status, hydrological interaction, and vegetation community for Nebraska's east saline wetlands (EPA Grant ID Number: CD 97770201; UNL WBS: 2502060069001)

Project Leader/Contact Information: Zhenghong Tang, Phone: (402) 472-9281; Email: ztang2@unl.edu

Expected project period: 10/01/2019 to 09/30/2024

Studying sites related to this agreement:

- ~~Little Salt Creek WMA~~ Marsh Wren Community Wetland Management Area
- ~~Little Salt Creek West WMA~~ Whitehead Community Wetland Management Area

Sensors that need to be installed in the studying sites:

- Hydro 21 Sensor System: to measure water depth, temperature, water electrical conductivity
- Teros 12 Sensor System: to measure volumetric water content, temperature, bulk electrical conductivity

project summary:

The overall goal of this project is to deploy wireless-based real-time sensor networks to monitor and evaluate salinity status, hydrological interaction, and vegetation community of saline wetlands under the context of rapidly urbanized watersheds in east Nebraska. Three specific tasks are included in this project: Task 1: Deploy wireless-based real-time sensor networks in the conserved saline wetlands to monitor the salinity status; Task 2: Analyze wetland salinity dynamics and hydrological interaction at watershed scale; Task 3: Evaluate wetland vegetation community conditions and existing conservation practices for best management practices. This project directly addresses the key actions and activities in the EPA-approved 2019-2023's Wetland Program Plan for Nebraska, the critical research needs and the scientific needs in the multiple conservation plans. The final deliverables of this project include: (1) A wireless-based monitoring system deployed in the 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 interaction, and vegetation community. (3) A geodatabase to document the conditions of salinity status, hydrological connectivity and vegetation distribution. This project is developed through the strong collaborations with the stakeholders in the Saline Wetland Conservation Partnership to enhance their capacity to improve the quality and quantity of saline wetlands. The deliverables will advance the knowledge on saline wetland ecosystems, and provide tools to achieve the long-term goal of restoring, protecting and increasing saline wetland area and functions.

(11)

Task 1: A wireless-based monitoring system deployed in the conserved saline wetlands

Method 1a: Identify the target wetlands for groundwater salinity monitoring stations:

The first step of this project is to work with the key partners to assess all of the conservation management areas to determine the feasibility for installation of the salinity monitoring sensor networks. Installation of salinity equipment needs to carefully consider a series of factors, including site representativeness, wetland soils, inundation areas, vegetation coverage, site accessibility, wireless signal strength, wildlife presence, existing equipment in groundwater wells, site structures, etc. Field surveys, spatial analysis, and joint discussions will be conducted to determine the installation solutions and potential suitable points for the target wetlands.

Method 1b: Install the sensor networks to collect the salinity-related data: The METER sensor system (including one TEROS 12 sensor, one HYDRO 21 sensor, the related ZL6 data logger, Zentra cloud Subscription) (METER Group, Inc. Pullman, WA, USA) will be installed in each site to monitor the electrical conductivity to track water salinity and soil salinity. The sensor network will record electrical conductivity measurements to reflect salinity dynamics. The data can be accessed from wireless-based sensor networks to internet-connected computers in near-real time. After the installation, the sensors should be able to be remotely operated through wireless signals. We only need to visit the study sites to double check the sensors when we find possible issues for data errors. Driving truck and walking will be necessary to access the sensor installation points. Each sensor will be protected by 3*3 feet fens around the installation point.

The research team at University of Nebraska-Lincoln will discuss with the Nebraska Game and Parks Commission to determine the best solutions for the sensors at the end of the project. The research team can remove all sensors and fens out of the study sites if the two parties will jointly decide to finish monitoring at the end of the project. If the two parties jointly agree to continue the monitoring activities after the project ending days, the sensors will be kept in the studying sites.

This deliverable of this task is the deployment of the wireless-based, real-time monitoring sensor networks in the selected saline wetlands. The advanced monitoring system will upgrade the current static field survey approach to the long-term/seamless plus the portable/dynamic monitoring approaches. The real-time observation data will assist our adaptive best management practices (e.g. pumping, sediment removing) for saline wetland conservation.

Task 2: Analyze wetland salinity dynamics and hydrological interaction at watershed scale

Method 2a: Use the monitoring data to analyze the salinity levels and hydro-periods: The HYDRO 21 sensor collects data for water depth and electrical conductivity for water body. The TEROS 12 sensor collects data for soil moisture and electrical conductivity for hydric soils. The time series and spatial patterns will be analyzed to discover the interactions of water salinity and soil salinity. The soil moisture data, water depth data, and salinity data can be used to re-construct the hydrological circle of saline wetlands.

Method 2b: Use geospatial datasets to evaluate hydrological interactions: The current salinity data will be compared with the available observation data (e.g. non-point source pollution monitoring data, water depths from ground water wells, pumping data, and stream gauge data) to examine groundwater movement to the surface and its interaction with surface hydrology and fresh groundwater. By using the high-resolution LiDAR data (15 cm vertical resolution) and 2-foot contour data, we will map the surface water connectivity along saline wetland corridors and also identify the vertical interactions between surface water system and

groundwater system. The hydrological connectivity and interaction maps can analyze channel entrenchment and impediments to upward movement of saline groundwater at the watershed scale.

The deliverable of this task is the geodatabase and a technical report to evaluate the salinity status, the hydro-periods, hydrological connectivity and interactions of the saline wetlands. The maps with scientific information of salinity status and hydrological conditions can serve as a decision-making support tool to assist conservation planning and restoration project design. The adaptive best management practices will be provided for each monitored wetland to restore saline hydrology to salt barrens and seeps.

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

Method 3a: Evaluate the changes of vegetation coverage at the watershed scale: We will use the USDA-NRCS's annual imageries from the 1-m resolution 4-band National Agricultural Imagery Program (NAIP) and the Google Earth with 0.31-0.65 m of horizontal resolutions from the WorldView or QuickBird imageries to analyze the vegetation coverage changes at watershed scale during the past decade. In addition, we will compare the observed salinity data with the site-level plant survey data from the restoration projects to understand the relationship of plan community/salt flat with hydro-periods and salinity.

Method 3b: Evaluate the effectiveness of existing conservation efforts for best management practices on saline wetland ecosystem: Many restoration practices, including the pumping, sediment removing, drains blocking, livestock grazing, and vegetation management, have been conducted in the saline wetland area. The observed salinity from this study will serve as scientific evidence to evaluate effectiveness of current conservation practices. The hydrology and vegetation conditions at each watershed scale can serve as a factual base to evaluate the impacts of urban development and agricultural practices. Based on the assessment results, the professional recommendations could be provided to support the restoration and maintenance of soil salinity, moisture regimes, and vegetation community.

The deliverable of this task is the technical report and the geodatabase to document the vegetation condition and conservation effectiveness on saline wetland ecosystems. The suggestions with best management practices will be provided to help wetland management agencies to prioritize saline wetland conservation programs and projects.

Milestone Schedule

This 3-year project will start on October 1, 2019, and expect to finish on September 30, 2024. The tasks interact with each other and we will concurrently work with three tasks. The milestone schedule below will give a general guidance on each task and sub-task.

Tasks	10-01-2019 to 09-30-2020	10-01-2020 to 09-30-2021	10-01-2021 to 09-30-2022	10-01-2022 to 09-30-2023	10-01-2023 to 09-30-2024
<i>Task 1a: Jointly determine sites for installation</i>	v	v			
<i>Task 1b: Deploy sensor networks</i>	v	v	v	v	v
<i>Task 2a: Analyze salinity datasets</i>		v	v	v	v
<i>Task 2b: Analyze hydrological conditions</i>			v	v	v
<i>Task 3a: Evaluate vegetation conditions</i>				v	v
<i>Task 3b: Prioritize conservation efforts</i>				v	v

Outputs (project products/deliverables):

The three outputs (project products/deliverables) of this project will directly contribute to increase the quality and quantity of wetlands. (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.

Outcomes (objectives/environmental improvements):

This project will contribute to the state and federal goal of "no-net-loss of wetlands" and increase the quality and quantity of wetlands in Nebraska through restoring and protecting the unique saline wetland resources. The specific outcomes include: (1) Upgraded wetland management capacity through a long-term, real-time monitoring system for saline wetlands: This project will add an advanced wireless-based monitoring system for wetland managers that can leverage their management capacity on saline wetland monitoring and assessment. (2) Increased understanding of the salinity and groundwater conditions in saline wetlands: The findings help us understand the salinity and groundwater hydroperiods at the daily, monthly, and yearly scale. The results also help improve the understanding on the mechanism of the interaction of saline ground water with fresh surface water mixing within the saline wetlands. The continuous observation data on salinity and soil moisture level that will further improve our understanding on the connection of groundwater levels and wetland salinity conditions. (3) Improved knowledge on urbanization impacts on saline wetland ecosystems: This project will be first comprehensive study to quantitatively measure the impacts from rapidly urbanized watersheds on saline wetland ecosystems, particularly the hydro-periods and vegetation community changes at the watershed scale. (4) Improved conservation effectiveness by addressing the critical research needs of multiple agencies: This research fills the critical research needs from multiple agencies and raises the level of understanding of the broad utility of saline wetlands.



LINCOLN PARKS & RECREATION DEPARTMENT
3131 "O" Street, Suite 300, Lincoln, NE 68510-1514
402-441-7847 fax: 402-441-9249 lincoln.ne.gov

September 11, 2020

Paul Zillig, General Manager
Lower Platte South NRD
PO Box 83581
Lincoln, NE 68521

RE: Prairie Corridor on Haines Branch Property Transfers

Dear Paul:

Thank you to the District for the multi-year partnership on the Prairie Corridor project. We are grateful for the collaboration, and very pleased with the success on the project to date. Per our discussions and the District's Long Range Implementation Plan, this letter is to request consideration of the phased transfer of three Prairie Corridor properties that lie outside the City's 3-mile ETJ from the City to the District: Denton Prairie, Two Creeks Prairie, and Bobcat Prairie (see attached map and table below). Consideration for a shift in title is appropriate based on the demonstrated success of the project, the division of ownership contemplated in the Interlocal Agreement, and our mutual pledge to share equally in the costs of land management responsibilities regardless of which agency owns the property. As our partnership continues to mature and we each plan for operations during upcoming budget cycles, we believe this is a good time to set forth a timeline for these property transfers.

As you know, the Interlocal Agreement between the City and the District for the Prairie Corridor states that as a general practice, the City will acquire and hold land in areas that are within the City's 3-mile ETJ, and the District will acquire and hold land in areas that are outside the ETJ. It also indicates that in the long term, the District will serve as the primary agency in charge of land management. The agreement acknowledges there is land outside the ETJ that was acquired by the City prior to the effective date of the agreement, and states that the City will continue to hold that land unless otherwise agreed to by the parties. This request is for the District to indicate its intent to accept ownership of these properties according to a timeline for phased transfer as follows:



Year	Property	Acres	Notes
FY 2020-21	Denton Prairie	54	This property was acquired by the City of Lincoln in May 2013 and seeded to high-diversity tallgrass prairie in 2014. Haines Branch runs through this parcel with a wooded riparian corridor. It is adjacent to two parcels recently acquired by the District and seeded with native prairie: the Kapke and Honvlez properties. A trailhead was recently completed on Denton Prairie, and the City entered into an agreement with the Village of Denton to construct and maintain a driveway from Cass Ave – a responsibility which would transfer to the District with the Denton Prairie/Trailhead land transfer.
FY 2021-22	Two Creeks Prairie	100	Originally a 100-acre conservation easement acquired by the NRD in 2014, with fee simple acquisition of the property by the City of Lincoln in 2017. This property has a variety of grasslands (including 52 acres of re-established high diversity tallgrass prairie) and wooded riparian corridors. It also includes the confluence of Holmes Creek with the Haines Branch of Salt Creek, and a future railroad underpass to connect with the Stiefel-Johnson Trailhead owned by the District.
FY 2022-23	Bobcat Prairie	297	This includes 134 acres acquired in December 2013 ("Bobcat 1" – Stent property) and 163 acres acquired in September 2018 ("Bobcat 2" – Petersen property). This property has a combination of grassland (including 35 acres of virgin prairie), woodlands and a riparian corridor on the west end. About 25 acres in the central part of Bobcat 2 is part of a long-term prairie restoration experiment being conducted by the University of Nebraska-Lincoln School of Natural Resources. The NRD Board previously took action in 2018 in support of accepting the conveyance of Bobcat 2 on an unspecified timeline.

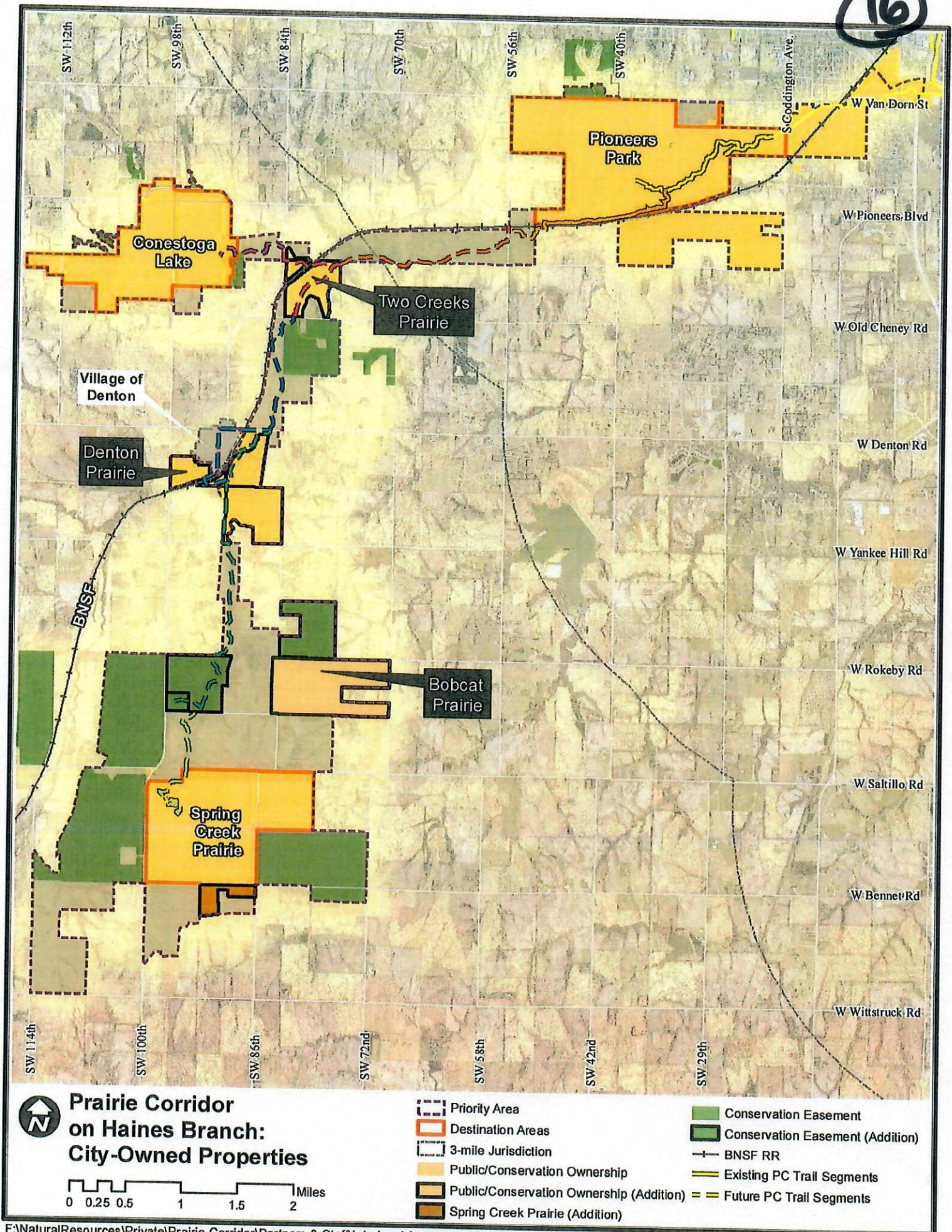
We envision having a continuing role in a cooperative approach to habitat development and other land management activities as these transfers occur. In addition, Lincoln Parks and Recreation will continue to lead improvement projects to complete the trail and trail connections. Please let us know if you have any questions or would like additional information.

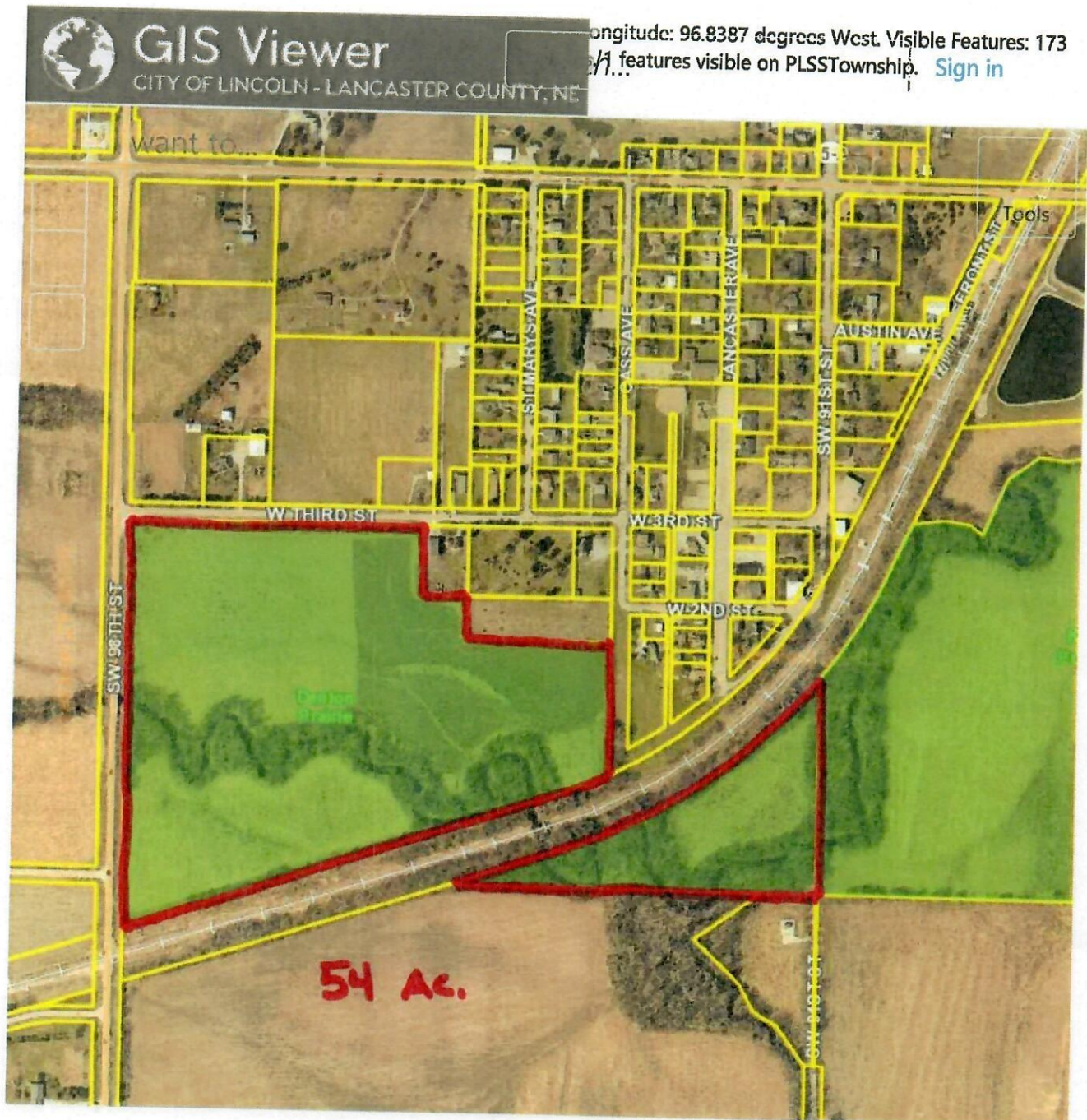
Sincerely,


Lynn Johnson, Director

Cc: Jennifer Brinkman – Mayor's Office
Nicole Fleck-Tooze – Lincoln Parks and Recreation
Dan Schulz – Lower Platte South NRD

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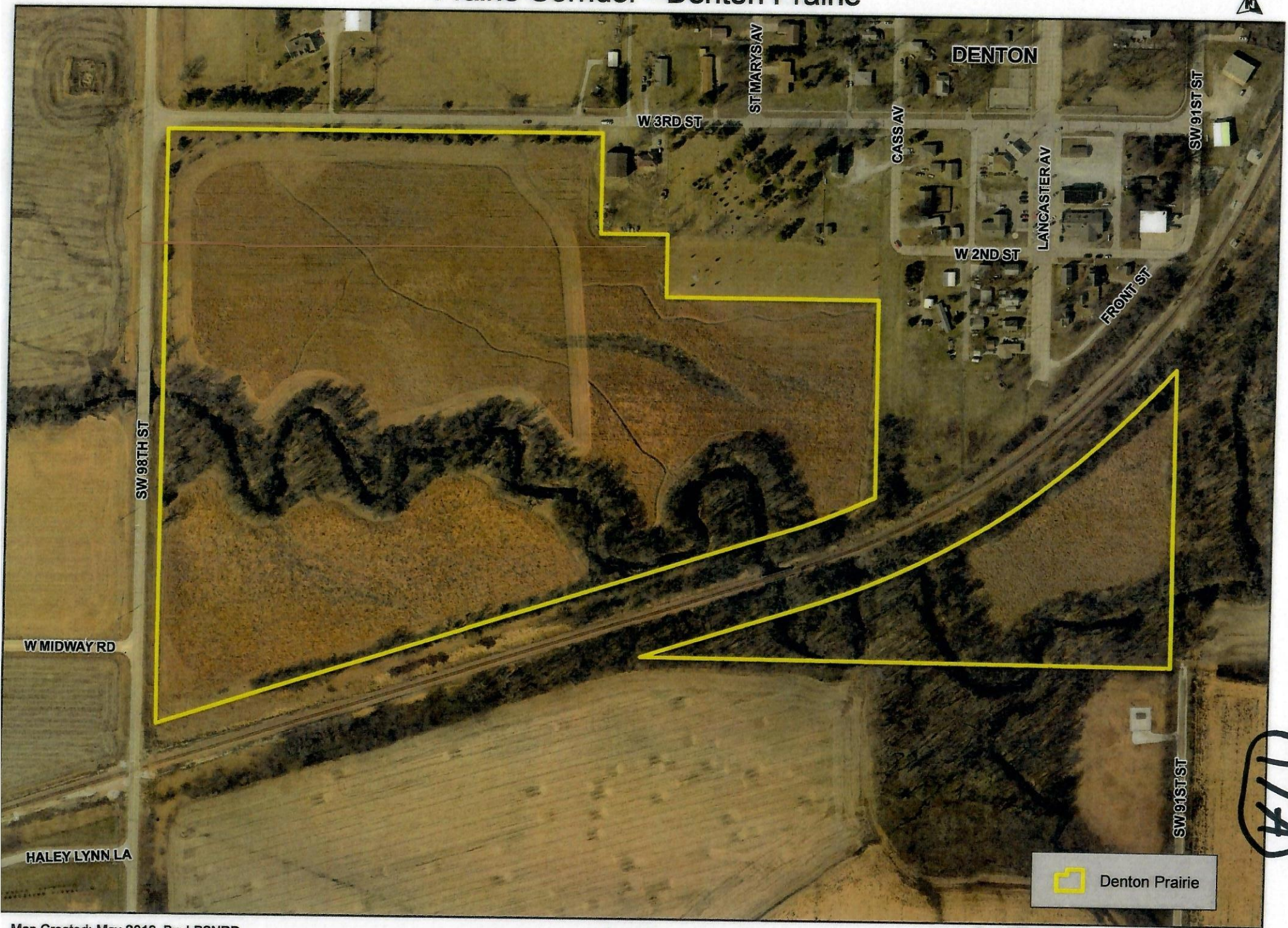




Aerials

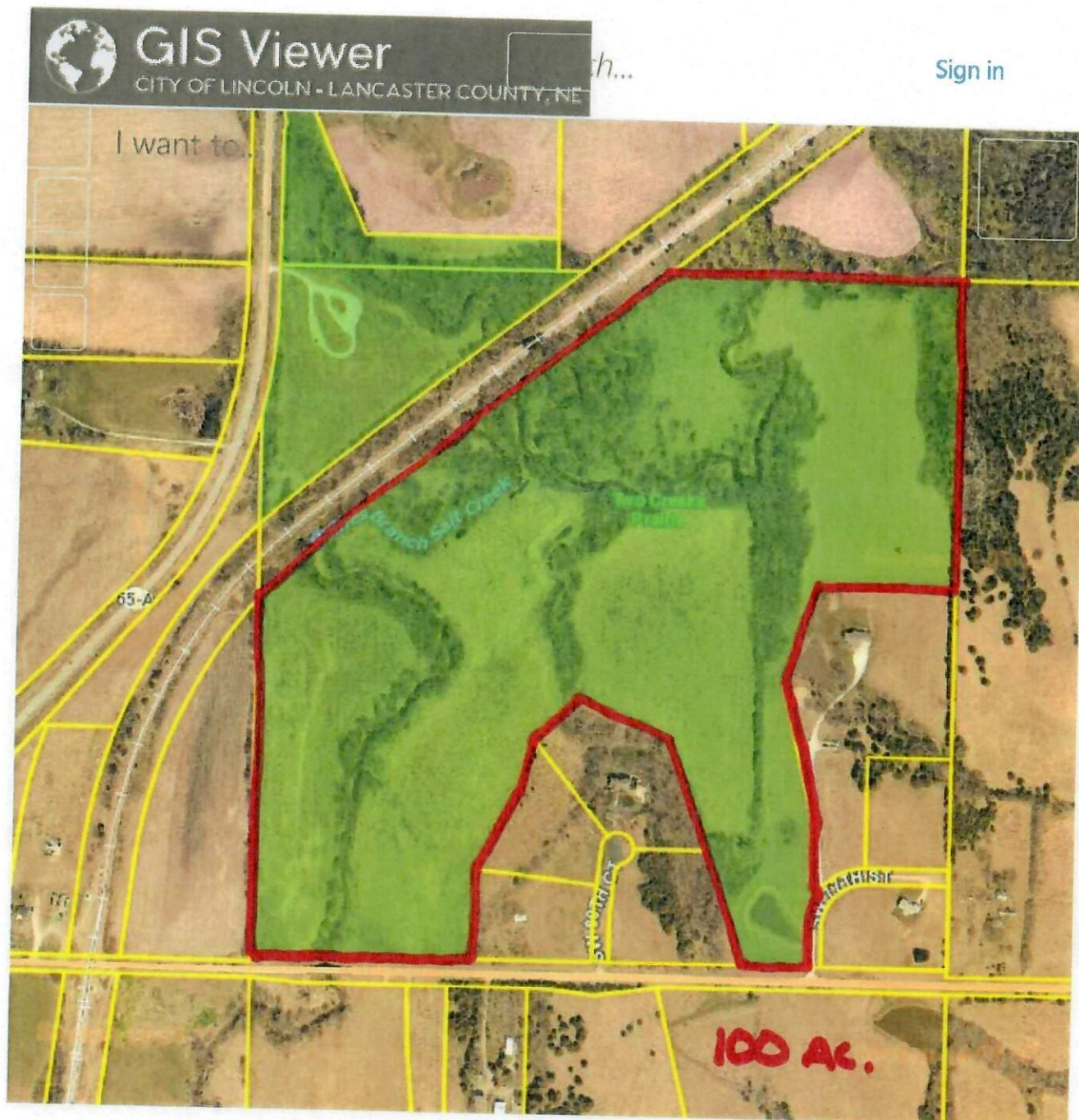


Prairie Corridor - Denton Prairie

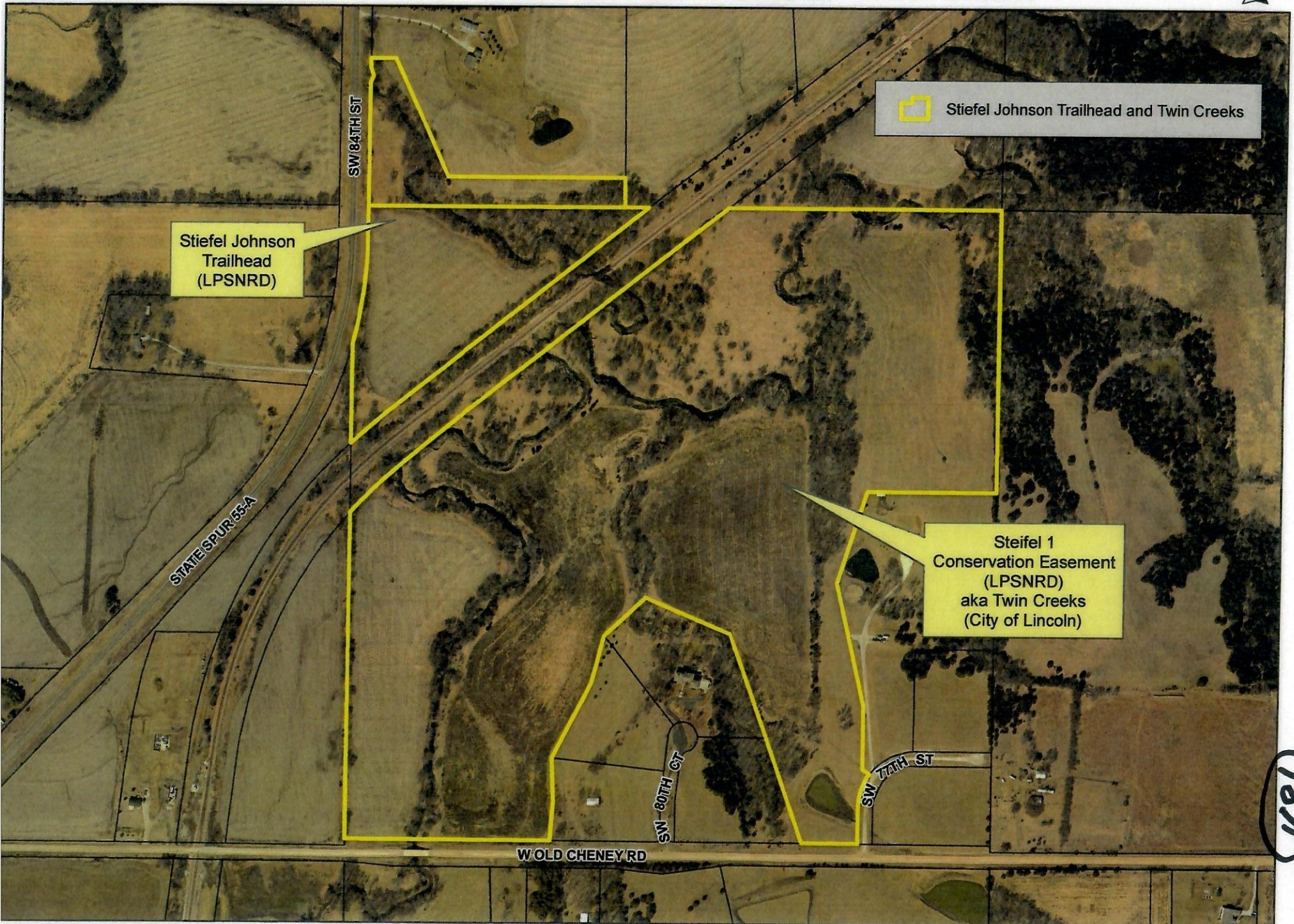


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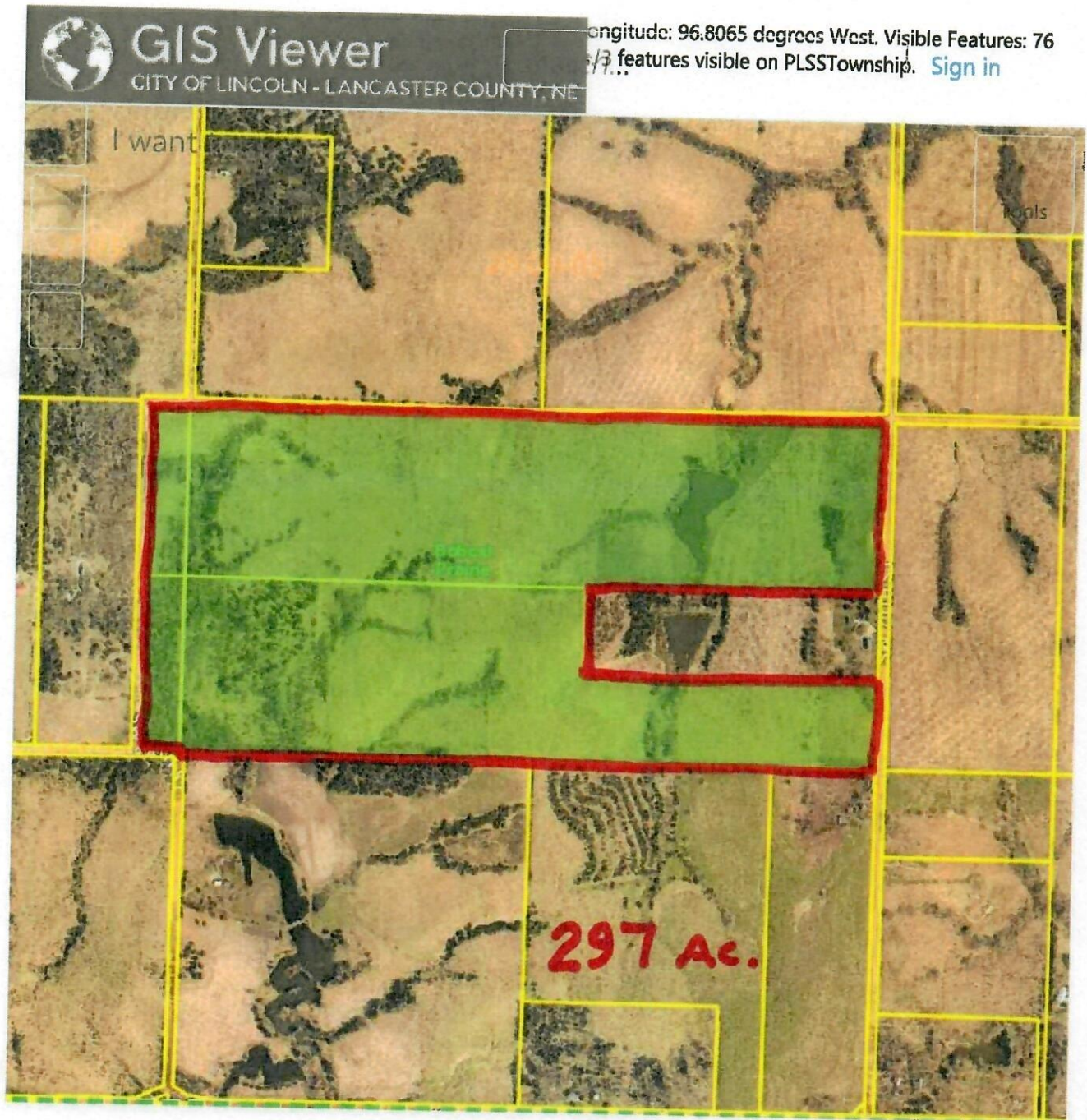


Prairie Corridor - Stiefel Johnson Trailhead + Twin Creeks



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LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT
DISTRICT CONSERVATION CORRIDOR REGULATIONS

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RESTATED FEBRUARY 2005

001 GENERAL REGULATIONS GOVERNING THE ADMINISTRATION AND USE OF DISTRICT PROPERTY.

Under the provisions of Sections 2-3290 through 2-32,101 of the Nebraska Statutes, the following rules and regulations are adopted and promulgated by the Lower Platte South Natural Resources District to govern the administration, use, maintenance, and protection of all recreational lands. These rules and regulations are effective August 21, 1991 and were restated in March of 2003.

DEFINITION

The following definitions shall apply to all regulations contained in this section.

- (a) District shall mean the Lower Platte South Natural Resources District.
- (b) Manager shall mean the Manager of the Lower Platte South Natural Resources District.
- (c) Law Enforcement Officer shall mean any duly constituted and credentialed officer, including but not limited to any Game and Parks Commission conservation officers or deputy conservation officer, local police officer, member of the State Patrol, sheriff or deputy sheriff.
- (d) Conservation Corridor shall mean land which the District owns, leases, or has an easement on, and which forms a passage way through private property, along water courses, streets or roads, or inactive railroad lines, and which the District has designated by separate action of the Board to be used by the public for recreational purposes.
- (e) Special Area Regulations are regulations adopted by the District Board of Directors for a particular recreational use.

001.01 ABANDONED PROPERTY

- 001.01A Abandonment of any vehicle or other personal property is prohibited and such property may be impounded by the Manager or Law Enforcement Officer.
- 001.01B Leaving any vehicle or other personal property unattended for longer than 24 hours without prior permission of the Manager is prohibited, and any property so left may be impounded by the Manager or Law Enforcement Officer.

In the event unattended property interferes with the safe or orderly management of District Conservation Corridor, it may be impounded at the expense of the owner.

001.01C Disposing of household or commercial garbage or trash brought as such from private property is prohibited.

001.02 CAMPING

001.02A Camping is prohibited on District Conservation Corridors.

001.03 CLOSURES

001.03A The District may establish a reasonable schedule or visiting hours for all or portions of a District Conservation Corridors and close to public use all or any portion of a specific Conservation Corridor when necessary for the protection of an area or the safety and welfare of person or property by the posting of appropriate signs indicating the extent and scope of such closure.

001.03B All persons shall observe and abide by officially posted signs designating closed areas and visiting hours.

001.04 FIRES AND FIREWORKS

001.04A Fires are prohibited on District Conservation Corridors, such as open fires, gasoline or propane stoves, charcoal grills, or similar devices.

001.04B The use of fireworks of any kind on District Conservation Corridors is prohibited, provided that management personnel are authorized to use fireworks, scare devices or similar materials for control or management of wildlife species.

001.05 FISHING, HUNTING, TRAPPING

001.05A Fishing is permitted on all District Conservation Corridors subject to State fishing regulations, provided that all or any portion of any area may be closed to fishing by the posting of appropriate signs.

001.05B Hunting or the use or possession of firearms, bow and arrow, or other projectile devices is prohibited on District Conservation Corridors. Firearms carried by credentialed law enforcement officer is exempt

001.05C Trapping is prohibited on District Conservation Corridors.

001.05D The use of and / or possession of paintball weapons of any type shall be prohibited in District Conservation Corridors

001.06 INTOXICATION: CONSUMPTION OF ALCOHOL

- 001.06A Consumption of alcoholic beverages on District Conservation Corridors is prohibited.
- 001.06B Presence in a District Conservation Corridors when under the influence of alcohol, to a degree that may endanger oneself or another person, property, or may cause unreasonable interference with another person's enjoyment of the area is prohibited.

001.07 DISORDERLY CONDUCT

- 001.07A Disorderly conduct is prohibited.
- 001.07B Disorderly conduct is committed when a person causes public alarm, nuisance, jeopardy or violence, or recklessly creates a risk thereof by:
 - 001.07B1 Engaging in fighting or threatening, or violent behavior; or
 - 001.07B2 Using language, an utterance, or gesture, or engaging in a display or act which is obscene, physically threatening or menacing, or done in a manner which is likely to inflict injury or incite an immediate breach of the peace; or
 - 001.07B3 Making noise which is unreasonable, considering the nature and purpose of the actor's conduct, location, time of day or night, and other factors which would govern the conduct of a reasonably prudent person under the circumstances; or
 - 001.07B4 Creating or maintaining a hazardous or physically offensive condition.
- 001.07C Persons committing disorderly conduct may be evicted from the area.

001.08 PERMITS, SPECIAL OCCASIONS

- 001.08A Sports events, pageants, reenactments, regattas, entertainments and the like, characterized as public spectator attractions or participant activities, are prohibited unless written permission therefore has been given by the General Manager. Such permits shall be issued only after a finding that the issuance of such permit will not be inconsistent with the purposes for which the Conservation Corridor is established and maintained and will cause the minimum possible interference of the use of the Conservation Corridor by the general public. The permit may contain such reasonable conditions and restrictions as to duration and area occupied as necessary for the protection of the Conservation Corridor and public use thereof.
- 001.08B Public meetings, assemblies, gatherings, demonstrations, parades, religious services and other expressions of views are prohibited unless written permission therefore has been given by the District.

- 001.08C The filming of still or motion pictures of lands, wildlife and facilities owned or controlled by the District for commercial purposes is prohibited unless written permission therefore has been given by the District.
- 001.08D Applications for a Special Occasion Permit shall be received by the District not later than thirty (30) days prior to the requested special activity and shall set forth the following: The name of the applicant, the date, time, duration, nature and place of the proposed activity, an estimate of the number of persons expected to attend, and a statement of equipment and facilities to be used in connection therewith.
- 001.08E As a condition of the permit issuance, the District may require filing of a bond with satisfactory surety payable to the District to cover costs such as restoration, rehabilitation and cleanup of the area used, and other costs resulting from the permittee's activity. In lieu of a bond, a permittee may elect to deposit cash equal to the amount of the required bond.

001.09 GEOCACHING ACTIVITIES, PERMITS

- 001.09A Cache Permits: Placement of a cache on Lower Platte South Natural Resources District (LPSNRD) property must be secured with a Special Occasion Permit.
- 001.09A1 The person applying for a permit must provide a valid address, telephone number, e-mail address, vehicle license number and the web site address on which the cache will be posted.
- 001.09A2 The location of the cache must be pre-approved by the General Manager whose main concern will be public safety and the prevention of undesirable impacts to natural and cultural resources. The General Manager will advise of any off limits areas, other permitted caches and possible prescribed burn areas for the calendar year.
- 001.09A3 Once the cache is placed, the applicant must return to the LPSNRD office to record the exact cache location, including GPS coordinates, which will be added to the permit.
- 001.09A4 All permits will be in effect for the calendar year. A new permit will need to be applied for and authorized each year. NOTE: If during the effective period of a permit, a permit holder wants to change the location of the cache, a new permit must be issued and the effective permit cancelled.
- 001.09A5 Upon the expiration of a permit, the permit holder is responsible for removing the cache and for removing the cache location from all web sites and any information source. If the permit holder fails to remove the cache, it will be removed by LPSNRD staff and held for ten (10) days

after which staff will dispose of the cache. Confiscation and disposal by staff will be recorded and filed.

001.09B Cache containers and contents.

001.09B1 Cache containers must be non-breakable, waterproof and have some form of latch or other closing mechanism to prohibit content exposure to wildlife. Cache containers must be marked "Geocache Container" on the outside of the container.

001.09B2 Caches may not contain inappropriate or dangerous items. Such items include, but are not limited to; food, medications, personal/hygiene products, pornography, weapons of any type, etc. Log books are encouraged in lieu of exchange items.

001.09B3 All caches are subject to random inspection by LPSNRD staff. Staff has the authority to immediately remove any item held in a cache deemed unacceptable. Non-permitted caches will be removed by area staff and held for 30 days. An attempt will be made to locate the cache owner. If the cache is not claimed in 30 days, staff will dispose of the cache.

001.09C Cache Locations. The location of a cache must be pre-approved by the General Manager.

001.09C1 Physical caches are prohibited inside or attached to any LPSNRD facility or structure. Caches may not be placed in locations that may lead to the creation of spur trails. Caches may not be placed in dangerous, inappropriate, or protected areas and habitats, on cliffs, underground or underwater.

001.09C2 No digging is permitted. Caches cannot be buried, nor may soil, vegetation or stones be disturbed to place a cache.

001.09D Compliance

001.09D1 The use of metal detectors in cache searches is expressly prohibited.

001.09D2 If geocaching activities as a whole are found to have negative impact on LPSNRD resources or if safety becomes an issue in geocache searches, the General Manager may ban geocaching from certain areas of LPSNRD property. Failure to comply with LPSNRD guidelines will result in the revocation of effective geocaching permits. Continued failure to comply with these guidelines will prevent the issuance of any further geocaching permits to the non-compliant group or individual.

VISIT: www.geocaching.com

001.10 PETS, LIVESTOCK, AND OTHER ANIMALS

- 001.10A It is unlawful to permit dogs, cats or other pets to range at large on any District Conservation Corridor, except by specific provisions as listed below.
- 001.10B Dogs, cats and other household type pets are permitted on District Conservation Corridors, provided they are physically restrained by leash, cage, crate or other such device, except where restricted by the posting of appropriate signs, or where prohibited by special area regulations.
- 001.10C Grazing or ranging domestic livestock or poultry is prohibited on District Conservation Corridors without prior written authorization by the District.
- 001.10D Horseback riding is permitted on District Conservation Corridors except where prohibited by appropriate signs.

001.11 PROPERTY

- 001.11A The possession, destruction, injury, defacement, removal, or disturbance of any building, bridge, sign, equipment, monument, statute, marker, or other structure, or of any animal or plant matter and direct or indirect products thereof, including but not limited to firewood, petrified wood, flower, cane, or fruit, egg, nest, den, or of any soil, rock or mineral formation, artifact, relic, historic or prehistoric feature, or of any other public property of any kind is prohibited in District Conservation Corridors. The District and other authorized management personnel may issue special permission or authorization where it is in the best interest of the public.

001.12 SANITATION

- 001.12A All garbage, papers, cans, bottles, waste materials and rubbish of any kind must be either removed from District Conservation Corridors or deposited in places or containers designated for the disposal thereof.
- 001.12B Draining or dumping refuse or waste from any trailer or other vehicle except in places or receptacles provided for such use is prohibited.
- 001.12C Polluting or contaminating in any manner in any watershed, water supplies, or water used for drinking purposes is prohibited.

001.13 SWIMMING AND WADING

- 001.13A Swimming is prohibited in all waters located on District Conservation Corridors.
- 001.13B Wading for the purpose of fishing is permitted on District Conservation Corridors at the sole risk of the participant, except that wading shall be prohibited on those areas that are posted with appropriate signs or where prohibited by special area regulations

001.14 TRAFFIC

- 001.14A It shall be unlawful for any person to operate a motorized vehicle on other than roadways, parking areas, or trails specifically designated for vehicle use. This shall include all trucks, automobiles, motorcycles, trail bikes, mini-bikes, snowmobiles, four-wheel drive vehicles, and all terrain vehicles, provided that nothing in this section shall prohibit management or emergency personnel from using these vehicles for emergency or management purposes.
- 001.14B On trails designated for vehicle use, it shall be unlawful for any person to operate any vehicle within the boundaries of any District Conservation Corridor at a speed greater than is reasonable and prudent under the prevailing conditions or in excess of any maximum posted speed limits.
- 001.14C It shall be the duty of each vehicle operator to obey all traffic regulatory signs as posted on each area.

001.15 VENDING

- 001.15A The vending of various goods, services, products, or commodities is prohibited on all District Conservation Corridors, except under the provisions of 001.08.

001.15 WINTER SPORTS

- 001.15A Skiing, sledding, tobogganing, snow-shoeing, skating, and similar winter sports are permitted except upon roads and parking areas when such roads and parking areas are open to motor vehicle traffic and in other places where these activities are prohibited by appropriate regulations and / or posted signs.
- 001.15B The towing of persons on skis, sleds, or other sliding devices by a motor vehicle or snowmobile is prohibited.
- 001.15C The operation and use of snowmobiles shall be prohibited except upon roads and parking areas when such roads and parking areas are open to motor vehicle traffic.

001.16 STANDARDS

- 001.16A The standards established in these regulations are in furtherance of the preservation and protection of the natural, scenic, historic, pastoral, fish and wildlife values and provide for the enhancement of the recreation values of the District Conservation Corridors.
- 001.16B Use and development of property will be in conformance with applicable federal, state, and local laws, regulations, and ordinances.

001.17 EXCEPTIONS TO REGULATIONS

- 001.17A Nothing in the foregoing shall be construed as prohibiting the Lower Platte South Natural Resources District or their duly appointed agents or employees from the conduct of their assigned duties in the administration, maintenance, and development of areas owned or controlled by the District.
- 001.17B In the event of natural disaster, state or national emergency, civil disorder, accident or other situation where in the conduct of activities otherwise permitted under these regulations may constitute a hazard to the public health, safety, or welfare, or inhibit rescue, recovery, post-disaster or development operations, General Manager of the District is herewith specifically empowered and directed to take such measures at their disposal to preserve the public health, safety and welfare and to expedite rescue, recovery and operations to include the temporary suspension of any or all activities contemplated in these regulations or any area or portion of any area owned, or controlled by the District and the temporary closure and/or evacuation of any such area.

001.18 EASEMENTS, LICENSES, AND PERMITS GRANTED BY THE DISTRICT

- 001.18A The District has granted, and may from time to time grant, easements, licenses, and permits over portions of District Conservation Corridors for various and sundry uses. Some of these uses, by way of illustration only, may be for utilities, water lines, pipelines, and ingress and egress by adjoining landowners. Any conflict between the public and the grantee of the easement, license, or permit, over the use of recreational lands shall be immediately brought to the attention of the General Manager who shall have the authority to resolve the conflict.



LOWER PLATTE SOUTH
natural resources district

3125 Portia Street | P.O. Box 83581 • Lincoln, Nebraska 68501-3581 | P: 402.476.2729 • F: 402.476.6454 | www.lpsnrd.org

TO: Recreation, Forestry & Wildlife LPSNRD Subcommittee
FROM: Jay Seaton, Forester
DATE: October 5, 2020
SUBJECT: Lower Platte South NRD FY 2021 Conservation Tree Program

Staff is warming up for the 2021 Conservation Tree Program. Landowners can start sending orders to the NRD starting November 4th. Prices for trees/shrubs this year will be \$0.90 per seedling for orders under 100 seedlings and \$0.85 per seedling for orders over 100 seedlings. No change in price from last year. We will be accepting both the mailed-in brochure with payment and the online system. The overall success of the online ordering system cannot be understated, with over 90% of all trees ordered online.

The ordering process will be the same as last year, with all orders being reviewed, processed and stored by the Forester. Kathy Spence will keep a backup accounting record of all income being received by the program. Kathy Hauschild will keep a back-up record of all orders received.

Attached is a list of all species being offered this year. Species will be removed based on changes in nursery availability throughout the ordering season. The bulk of the seedlings will be coming from the United States Forestry Service Bessey Nursery, Towner State Nursery (North Dakota) and the State of Iowa Department of Natural Resources Forest Nursery.

Sincerely,

Jay Seaton

Lower Platte South NRD Forester

Species are subject to change based on nursery availability throughout ordering season.

Conifers:

- Bald Cypress
- Black Hills Spruce – LIMITED
- Colorado Blue Spruce – LIMITED
- Eastern Red Cedar
- Eastern White Pine
- Jack Pine
- **Meyer Spruce** – LIMITED
- Norway Spruce - LIMITED
- Ponderosa Pine
- Southwestern White Pine

Deciduous:

- American Elm
- Amur Maple
- Apricot
- Black Cherry – LIMITED
- **Black Oak**
- Black Walnut
- Bur Oak
- Chinkapin Oak
- Cottonwood
- Crabapple
- Hackberry
- Northern Red Oak
- **Pin Oak**
- River Birch
- Silver Maple
- **Sugar Maple**
- Swamp White Oak
- Sycamore
- White Oak

Shrubs:

- American Plum
- Chokeberry, McKenzie
- Chokecherry
- Cotoneaster
- Elderberry
- **Golden Currant**
- Hazelnut - LIMITED
- Lilac
- Redosier Dogwood
- Serviceberry
- Silver Buffaloberry
- Skunkbush Sumac

*New species are in bold & underlined.

Species Removed:

- Red Pine
- Catalpa
- Kentucky Coffeetree
- Northern Pecan
- Nanking Cherry

Bessey Nursery Small Acreage Packages for Fiscal Year 2021

*Packages will contain 10 of each species.

East:

- Bur Oak
- Centennial Cotoneaster
- Swamp White Oak
- Crabapple
- McKenzie Chokeberry

Wildlife Package:

- Chokecherry
- Elderberry
- Woods Rose
- Golden Currant
- Redosier Dogwood

Flowering Package:

- Serviceberry
- Red-Osier Dogwood
- Common Lilac
- Crabapple
- Caragana

Conifers:

- Eastern Red Cedar
- Eastern White Pine
- Jack Pine
- Southwestern White Pine

Deciduous:

- American Elm
- Black Walnut
- Bur Oak
- Cottonwood
- Crabapple
- Hackberry
- Northern Red Oak
- Silver Maple
- Swamp White Oak

Shrubs:

- American Plum
- Chokecherry
- Cotoneaster
- Elderberry
- **Golden Currant**
- Lilac
- Redosier Dogwood
- Serviceberry
- Silver Buffaloberry
- Skunkbush Sumac

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LINCOLN PARKS & RECREATION DEPARTMENT
3131 "O" Street, Suite 300, Lincoln, NE 68510-1514
402-441-7847 fax: 402-441-9249 lincoln.ne.gov

COPY

September 29, 2020

Paul Zillig
General Manager
Lower Platte South Natural Resources District
P.O. Box 83581
Lincoln, Nebraska 68501-3581

RE: Haines Branch Stabilization Project

Dear Paul:

The City of Lincoln, on behalf of the Saline Wetlands Conservation Partnership (SWCP) recently completed an Engineering Design Plan along the Haines Branch located in the southwestern portion of Pioneers Park. The project will improve hydrology for both freshwater and saline wetlands and contains critical habitat along Haines Branch for the Salt Creek tiger beetle, a Federal and State listed endangered species.

The "Haines Branch Tributary Stabilization Project" was identified in the Haines Branch Watershed Master Plan (Capital Improvement Project HB-5). Engineering was funded by the City of Lincoln 2016 Nebraska Environmental Trust (NET) grant for eastern saline wetlands. The total cost for construction is estimated at \$260,379.35 (includes 10 percent contingency). The Engineering Design Plan and cost estimate is attached.

In September 2020, the SWCP met to discuss funding the project. The SWCP has committed \$75,000 of partner funds toward the project and the City of Lincoln Prairie Corridor project has agreed to match this with \$50,000 for a total of \$125,000. We are currently seeking an additional \$135,000 to begin the construction project. I have contacted Watershed Management and the Nebraska Game and Parks Commission (NGPC) for funds. Watershed Management has no funding available for the project and the NGPC funding will not likely be available for another year or two.

The SWCP is inquiring whether the Lower Platte South Natural Resources District would be willing to provide up to \$135,000 to complete this project. If the project does proceed, the City of Lincoln would be responsible for project administration and construction oversight.

I appreciate your consideration of this request. The SWCP acknowledges the Districts participation and continued support of the conservation of natural resources.

Sincerely,

A handwritten signature in blue ink, appearing to read "Tom", with a large, loopy flourish above it.

Tom Malmstrom
Natural Resources Coordinator / Park Planner II
Saline Wetlands Conservation Partnership

Enclosures

7.4.5 Project HB-5: Grade Control Knickpoint at Confluence on Tributary HB045R005 in Pioneers Park Nature Center

Problem description: Knickpoints and erosion in tributary HB045R005 from the main stem to the outfall at the fence line on the southwest side of the Nature Center is potentially threatening the outfall. Access for this project is through the Nature Center from the southwest corner of the Pioneer Park Golf Course. Potentially affected parcels are public property.

Recommendation: Construct multiple grade controls and associated bank stabilizations to stabilize the tributary and stop incision.



Figure 7-13: Knickpoint

Impact to Special Areas and Water Quality: Project is located within a Prairie Corridor, woodland, and Pioneers Park. The proposed access to the location runs near, but not through a designated wetland. Consideration during design and construction should be provided to minimize disturbance to special areas and reduce impacts to water quality to the greatest extent practical.

Estimated Project Cost: \$186,000

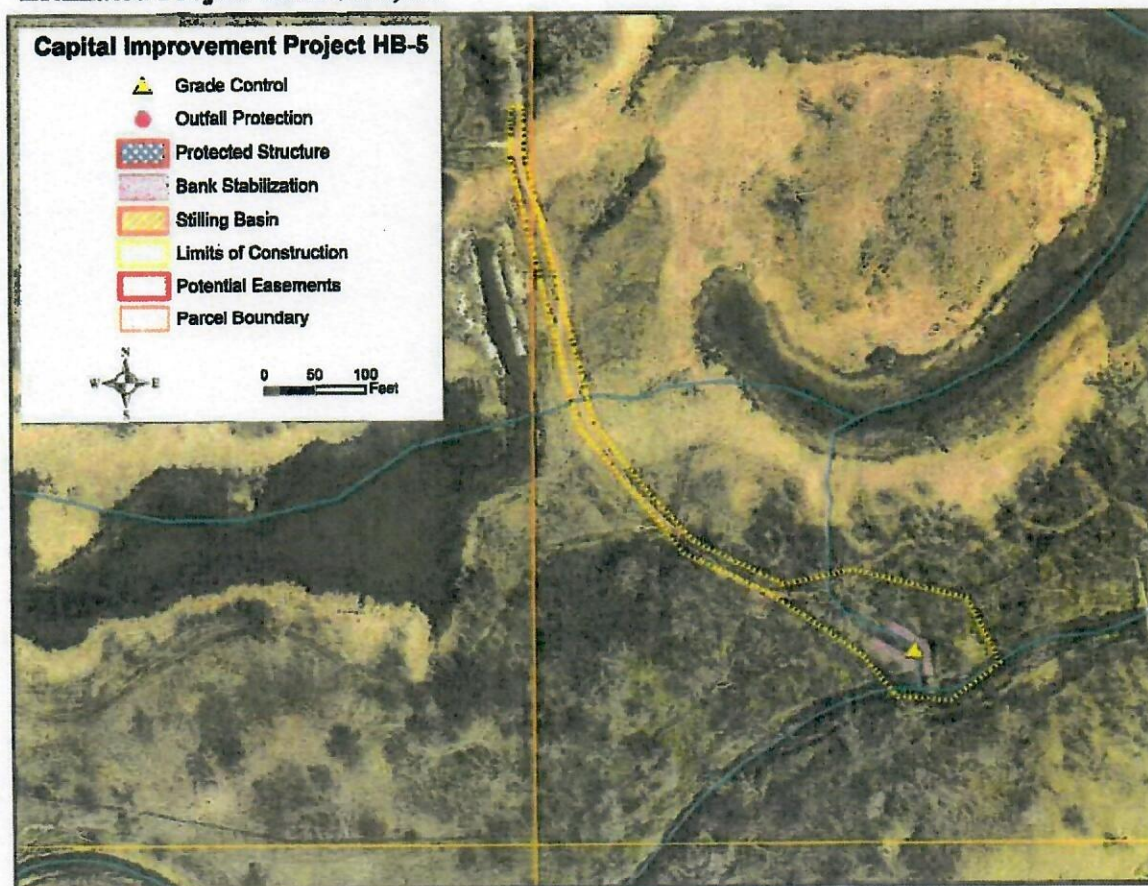


Figure 7-14: Conceptual Layout of HB-5

36

CITY OF LINCOLN, NE (2020)
HAINES BRANCH WATERSHED MASTER PLAN
CAPITOL IMPROVEMENT PROJECT HB-5
TRIBUTARY STABILIZATION PROJECT

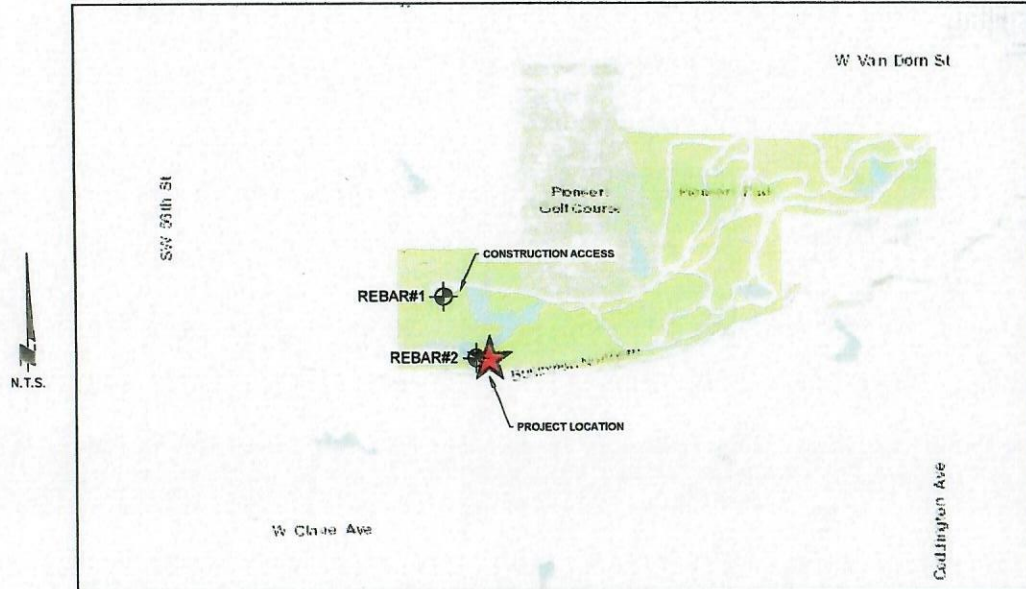


8200 Cindy Drive, Suite A
Lincoln, NE 68512
402-435-5441



PROJECT NO.	SHEET NO.
-	1
Date	6/26/2020
Drawn	STAFF
Scale	200' = 1"
Checked	RJK
Approved	JDC

SHT NO.	
1	COVER
2	GENERAL NOTES AND SCHEDULE OF QUANTITIES
3	SITE MAP
4	PLAN AND PROFILE
5	DETAILS
6	LINCOLN STANDARD PLAN NO. 160
7	LINCOLN STANDARD PLAN NO. 185



EXISTING MONUMENTS

REBAR#1
SURVEYED
N = 213336.8243'
E = 134117.8916'
ELEV = 1274.453'

REBAR#2
SURVEYED
N = 215984.6862'
E = 134136.9174'
ELEV = 1229.614'

PROJECT CONTACT

LINCOLN PARKS DEPARTMENT:
3140 N STREET, STE 300
LINCOLN, NE 68510
ATTN: TOM MALMSTROM....(402) 441-7063

PRIOR TO CONSTRUCTION:

CALL : 1-800-331-5666 FOR LOCATION OF
UNDERGROUND TELEPHONE, FIBER, ELECTRIC, GAS
MAINS, CABLE AND CITY OF LINCOLN UTILITIES.
NOTE: EXISTING UNDERGROUND AND OVERHEAD
UTILITIES AND DRAINAGE STRUCTURES HAVE BEEN
PLOTTED FROM AVAILABLE INFORMATION AND
THEREFORE, THEIR LOCATIONS MUST BE CONSIDERED
APPROXIMATE ONLY. IT IS THE RESPONSIBILITY OF
THE INDIVIDUAL CONTRACTORS TO EXACTLY LOCATE
AND PROTECT EACH EXISTING UTILITY BEFORE AND
DURING ACTUAL CONSTRUCTION.



CITY ENGINEER'S OFFICE

DATE

COVER

37

LEGEND - SURVEY (UTILITIES)

--- WOOD CHIP TRAIL
 --- CONCRETE WALL

LEGEND - SURVEY (LANDSCAPE)

--- TREE LINE
 --- FENCE (NS)

LEGEND - PROPOSED (MISC.)

TYPE C ROCK RIPRAP
 GRAVEL FOUNDATION
 CONCRETE
 --- LIMITS OF CONSTRUCTION

GENERAL NOTES:

ALL SURVEY WAS COMPLETED USING ELECTRONIC INSTRUMENT. ALL ELEVATIONS SHOWN ARE NAVD 88.

LOCATE AND PRESERVE ALL PROJECT CONTROL POINTS.

ALL WORK SHALL BE PERFORMED WITHIN THE LIMITS OF CONSTRUCTION. CONTRACTOR SHALL NOT DISTURB AREAS OUTSIDE THESE LIMITS.

CONSTRUCTION FENCE SHALL BE 4'-0" HIGH ORANGE SAFETY FENCE ATTACHED TO STEEL FENCE POSTS AT 8'-0" MAXIMUM SPACING.

2020 LINCOLN STANDARD PLANS (L.S.P.) AND 2020 LINCOLN STANDARD SPECIFICATIONS (L.S.S.) SHALL BE USED EXCEPT WHERE SPECIFIED. ALSO SEE SPECIAL PROVISIONS.

TREE REMOVAL NOTES:

CONTRACTOR SHALL CLEAR AND GRUB ALL TREES AND VEGETATION WITHIN THE GRADING LIMITS SHOWN ON THE PLANS.

CONTRACTOR SHALL NOT REMOVE OR TRIM TREES FROM JUNE 1 THROUGH JULY 31, WHICH CORRESPONDS TO THE ROOST SEASON OF THE NORTHERN LONG-EARED BAT.

CONTRACTOR SHALL NOT REMOVE OR TRIM TREES FROM APRIL 1 TO OCTOBER 31 WITHOUT PRIOR AUTHORIZATION BY THE ENGINEER.

ENGINEER WILL COORDINATE SURVEY FOR MIGRATORY BIRDS TO DEMONSTRATE TREES FOR REMOVAL ARE NOT IN USE.

CONTRACTOR SHALL PROTECT ALL TREES WITHIN OR ADJACENT TO WORK AREAS THAT ARE NOT DESIGNATED FOR REMOVAL, TO THE MAXIMUM EXTENT POSSIBLE. THE AREA OF PROTECTION SHALL BE AN APPROXIMATE DISTANCE FROM THE PROTECTED TREE EQUAL TO 6 INCHES PER INCH OF TRUNK DIAMETER. CONTRACTOR SHALL NOT OPERATE OR PARK VEHICLES OR OTHER HEAVY EQUIPMENT OR STORE MATERIALS WITHIN THE PROTECTED AREAS. TREES TO BE PROTECTED SHALL SUFFER NO ROOT DAMAGE WITHIN THE CRITICAL ROOT ZONE (AREA BENEATH THE TREE CANOPY). TREES TO BE PROTECTED SHALL SUFFER NO DAMAGE TO THE TRUNK, BRANCH, OR LIMBS. IF NECESSARY, CONTRACTOR SHALL PRUNE BRANCHES FOR EQUIPMENT CLEARANCE AT THE DIRECTION OF THE ENGINEER. SUCH PRUNING SHALL CONFORM TO STANDARDS ESTABLISHED BY THE NATIONAL ARBORIST ASSOCIATION. CONTRACTOR SHALL BE LIABLE FOR DAMAGE TO PROTECTED TREES. THE DOLLAR VALUE OF THE DAMAGE WILL BE DETERMINED BY THE CITY OF LINCOLN ARBORIST.

SCHEDULE OF QUANTITIES - BASE BID

GENERAL ITEMS			
01.00001	MOBILIZATION	LS	1
01.01001	CONST STAKING	LS	1

EARTHWORK ITEMS			
02.01001	GEN CLEARING AND GRUBBING	LS	1
02.05001	EXCAVATION	CY	1.971
02.06001	EXCAVATION - DISPOSAL	CY	1.956

UTILITY & STRUCTURE ITEMS			
20.07001	CONCRETE FOR HEADWALLS, IN PLACE	CY	4.9
20.05001	REINF STEEL FOR HEADWALLS, IN PLACE	CY	620

STORM DRAINAGE ITEMS			
21.14002	RIP-RAP W/ FILTER FABRIC	TON	951

EROSION CONTROL ITEMS			
30.07002	SEEDING, TY "B"	AC	0.1
30.07008	SEEDING, TY "H"	AC	0.5
32.03001	CONSTRUCTION ENTRANCE SURFACING	TON	73
32.12001	COIR FIBER LOG	LF	90

MISC ITEMS			
50.00001	REM AND DISPOSE OF RUBBLE	CY	102
50.00005	48" HPDE PIPE CULVERT, IN PLACE	LF	40
50.00005	WOOD CHIP TRAIL, 4" THICK	LF	120
50.00010	EARTH FILL COVER OVER RIPRAP	CY	15
50.00010	GRAVEL FOUNDATION MATERIAL	CY	111
50.00020	HYDROMULCH	AC	0.5

SCHEDULE OF QUANTITIES - ALTERNATE #1

PAVEMENT ITEMS			
4.09305	CONCRETE SIDEWALK, 5"	SF	480

SCHEDULE OF QUANTITIES - ALTERNATE #2

EARTHWORK ITEMS			
02.01001	GEN CLEARING AND GRUBBING	LS	1
02.05001	EXCAVATION	CY	344
02.06001	EXCAVATION - DISPOSAL	CY	256

STORM DRAINAGE ITEMS			
21.14002	RIP-RAP W/ FILTER FABRIC	TON	327

EROSION CONTROL ITEMS			
30.07008	SEEDING, TY "H"	AC	0.5

MISC ITEMS			
50.00010	EARTH FILL COVER OVER RIPRAP	CY	89
50.00010	GRAVEL FOUNDATION MATERIAL	CY	35
50.00020	HYDROMULCH	AC	0.1



CITY OF LINCOLN NEBRASKA		PROJECT NO. 1 SHEET NO. 2	
Date	02/20/2020	Drawn	STAFF
Scale	UNIFORM	Checked	RJK
		Approved	JDC



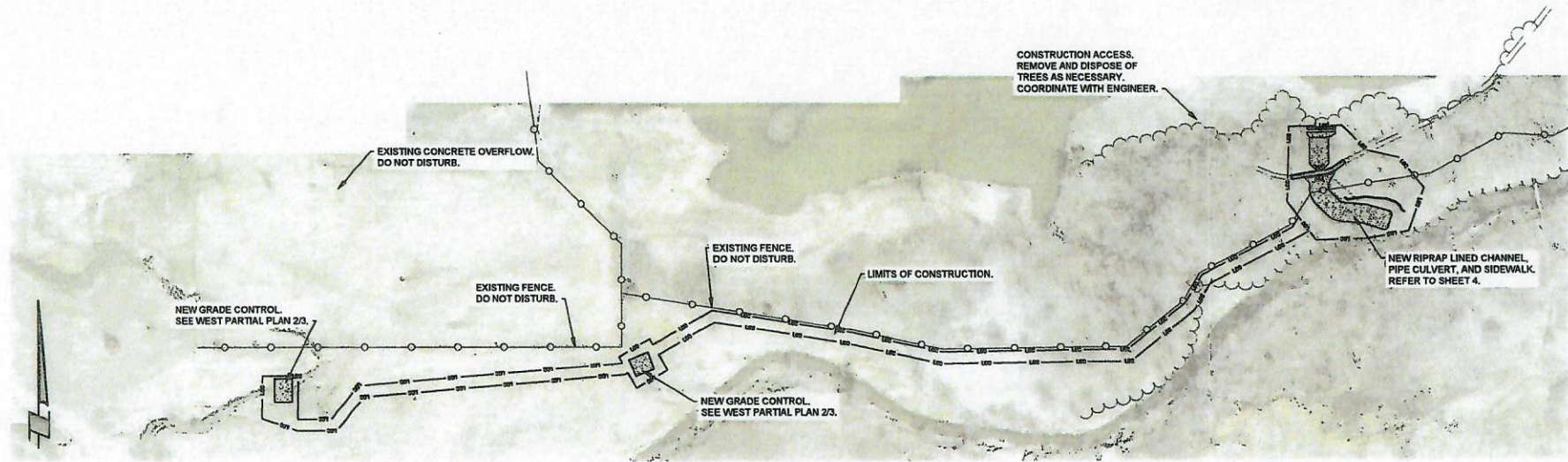
GENERAL NOTES AND SCHEDULE OF QUANTITIES



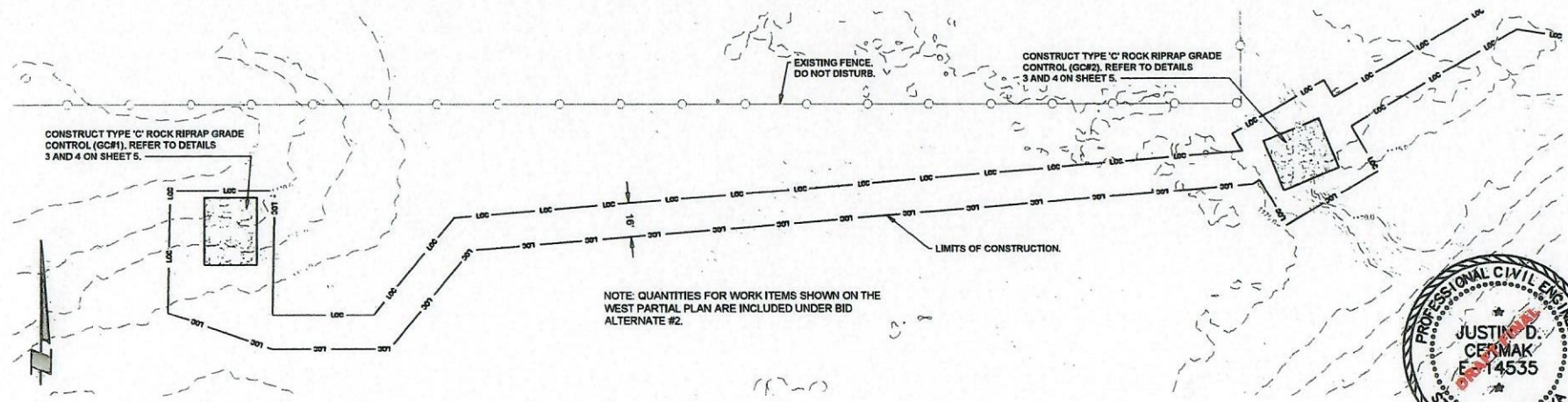
8200 Cady Drive, Suite A
Lincoln, NE 68512
402-435-4441



PROJECT NO.		SHEET NO.	
-		3	
Date:	8/26/2020	Drawn:	STAFF
Scale:	1" = 100'	Checked:	RJK
		Approved:	JDC



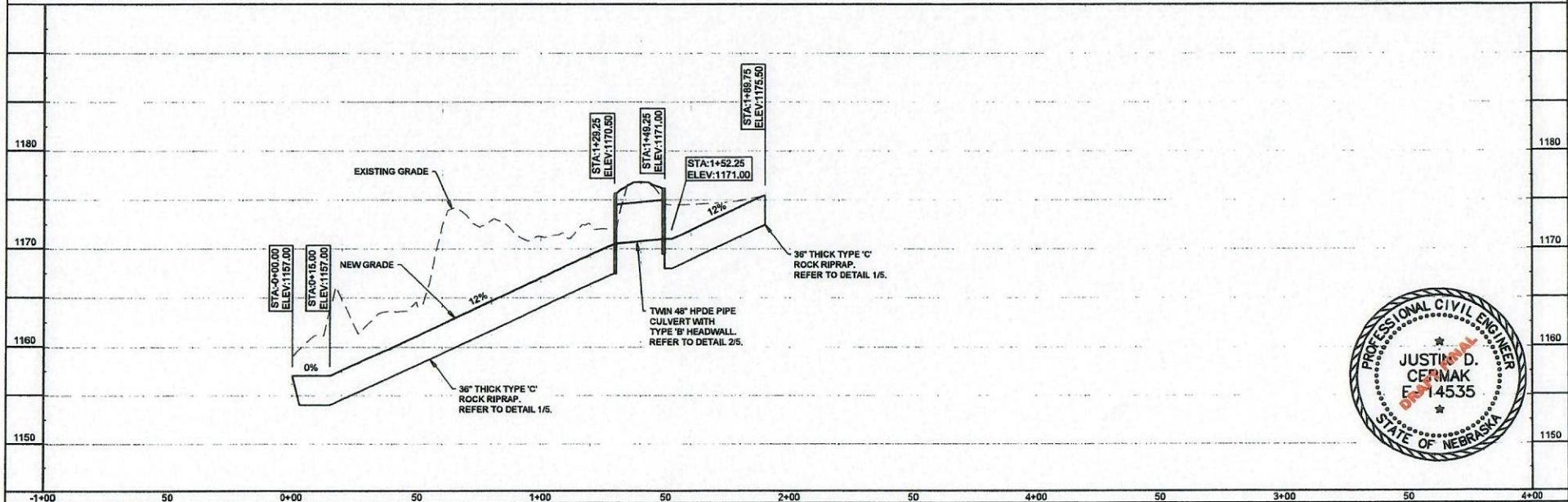
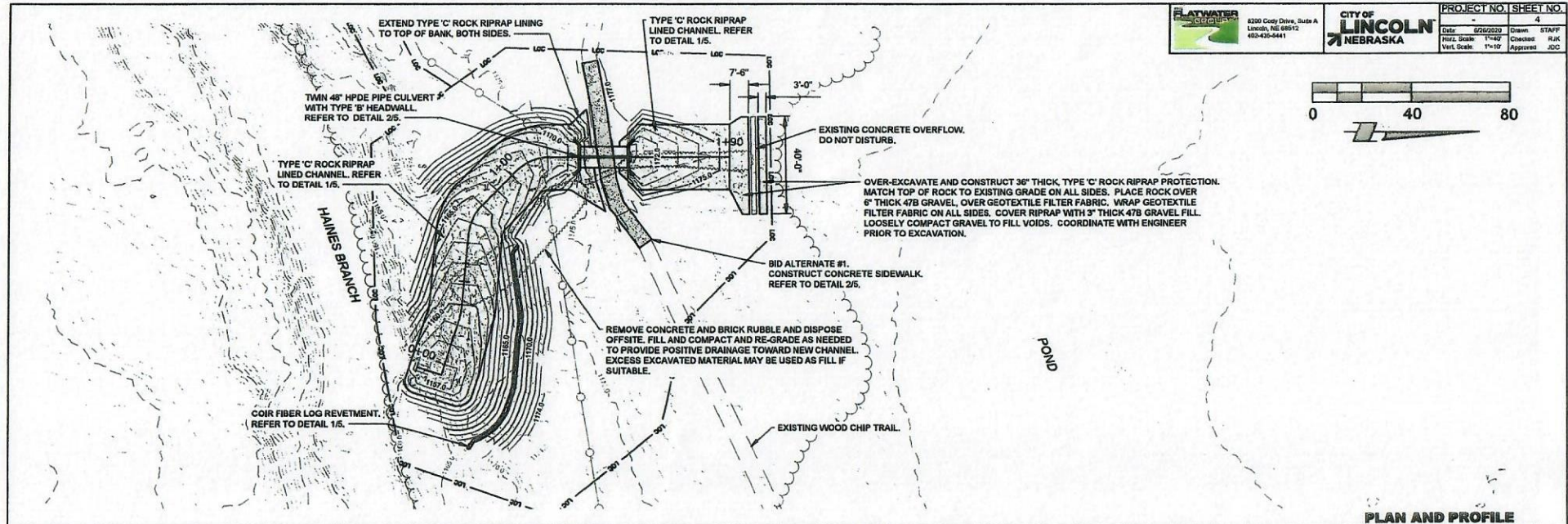
1 SITE MAP
SCALE: 1" = 150'



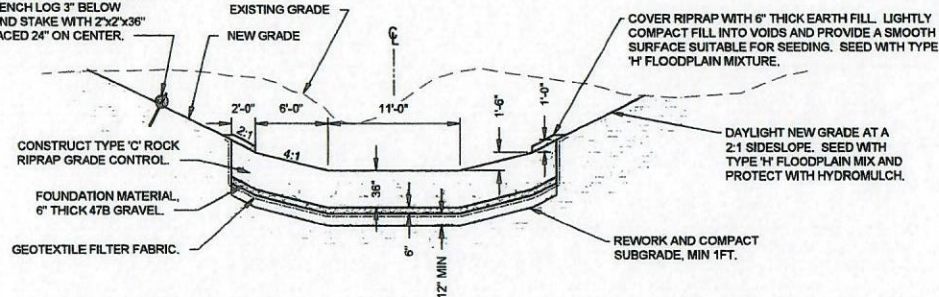
2 WEST PARTIAL PLAN
SCALE: 1" = 150'



SITE MAP

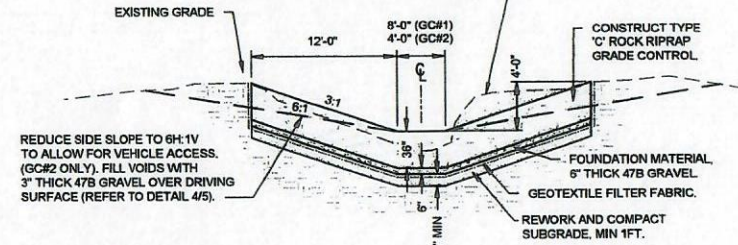


INSTALL COIR FIBER LOG REVETMENT ALONG CONTOUR WHERE SHOWN ON PLANS, REFER TO L.S.S. 32.11. TRENCH LOG 3" BELOW FINISHED GRADE AND STAKE WITH 2"x2"x36" WOOD STAKES SPACED 24" ON CENTER.



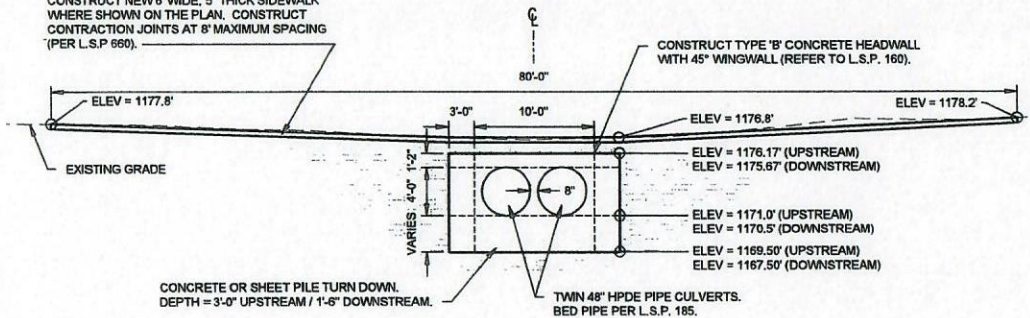
1 RIPRAP LINED CHANNEL DETAIL
SCALE: 1" = 10'

COVER RIPRAP TO MATCH ORIGINAL GRADE. LIGHTLY COMPACT FILL INTO VOIDS AND PROVIDE A SMOOTH SURFACE SUITABLE FOR SEEDING. SEED WITH TYPE 'H' FLOODPLAIN MIXTURE.



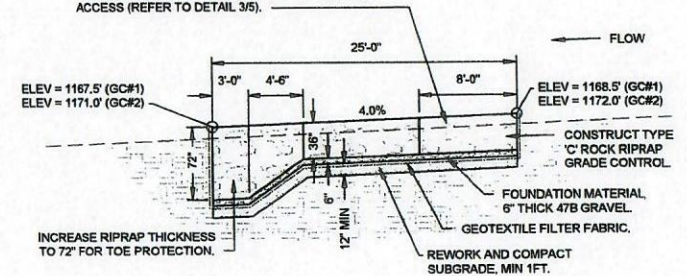
3 RIPRAP GRADE CONTROL DETAIL
SCALE: 1" = 10'

CONSTRUCT NEW 6" WIDE, 5" THICK SIDEWALK WHERE SHOWN ON THE PLAN. CONSTRUCT CONTRACTION JOINTS AT 8' MAXIMUM SPACING (PER L.S.P. 660).



2 PIPE CULVERT TRAIL CROSSING
SCALE: 1" = 10'

FILL VOIDS WITH 3" THICK 47B GRAVEL OVER DRIVING SURFACE (GC#2 ONLY). TRANSITION CROSS SECTION SIDESLOPE FROM 3:1 AT TOE TO 6:1 FOR VEHICLE ACCESS (REFER TO DETAIL 3/5).



2 RIPRAP GRADE CONTROL PROFILE
SCALE: 1" = 10'

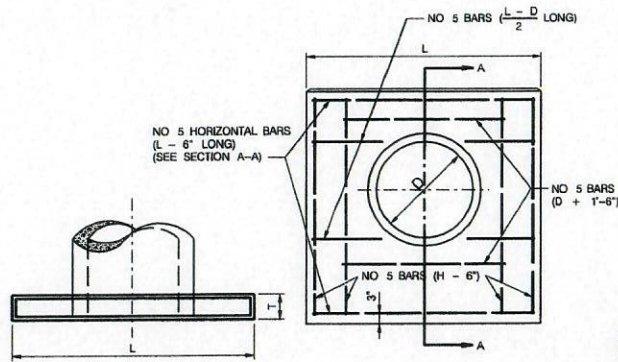


DETAILS

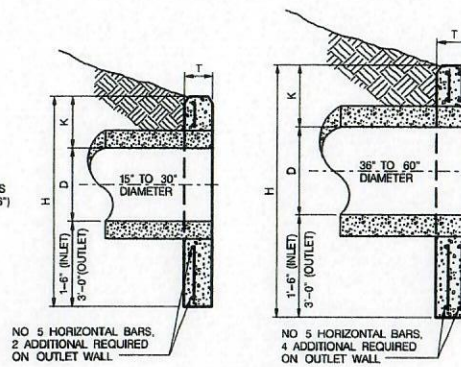

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PROJ: No Project.ctg
PEN:  --\nailes\pen\SW_PENTABLE.tbl
USER:  aicpd
DATE:  11/27/2019
DGN:  --\2020 DGN Files\LSP_160.dgn

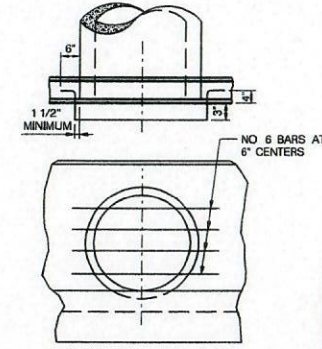
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TYPE "A" HEADWALL



SECTION A-A

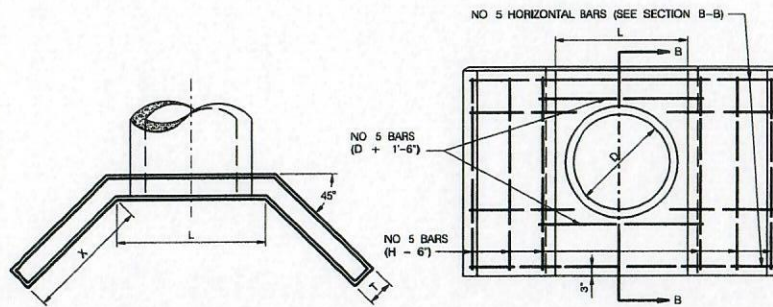


R.C. PIPE END GUARD

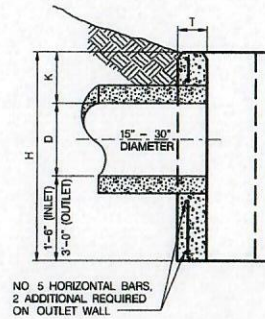
END GUARD			
PIPE SIZE D	NUMBER OF VERTICAL BARS	NUMBER OF HORIZONTAL BARS	POUNDS OF STEEL EACH HEADWALL
15"	0	2	14
18"	0	2	15
21"	1	2	24
24"	1	3	34
30"	1	4	46
36"	1	5	61
42"	2	6	88
48"	2	7	107
54"	3	8	127
60"	3	9	163

TYPE "A" HEADWALL									
DIMENSIONS					INLET		OUTLET		
D	H	INLET OUTLET	L	K	T	CONCRETE CURB FOOTINGS	STEEL PLATES	CONCRETE CURB FOOTINGS	STEEL PLATES
15"	3'-9"	5'-3"	3'-3"	1'-0"	6"	0.21	31	0.21	43
18"	4'-0"	5'-6"	3'-6"	1'-0"	6"	0.25	33	0.30	46
21"	4'-3"	5'-9"	4'-6"	1'-0"	6"	0.28	38	0.41	53
24"	4'-6"	6'-0"	4'-10"	1'-0"	6"	0.31	41	0.47	55
30"	5'-1"	6'-7"	5'-10"	1'-1"	6"	0.34	47	0.57	65
36"	5'-7"	7'-1"	6'-8"	1'-1"	8"	0.66	105	0.91	145
42"	6'-2"	7'-8"	7'-10"	1'-2"	8"	0.85	120	1.13	164
48"	6'-7"	8'-1"	8'-0"	1'-3"	8"	1.01	134	1.26	183
54"	7'-2"	8'-8"	8'-10"	1'-3"	8"	1.22	149	1.65	202
60"	7'-9"	9'-3"	11'-2"	1'-3"	8"	1.44	161	1.65	219

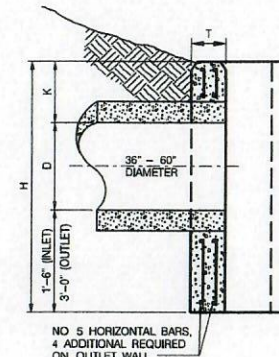
NOTE: ALL REINFORCING STEEL SHALL BE NO. 5 BARS, PLACED AS SHOWN.



TYPE "B" HEADWALL

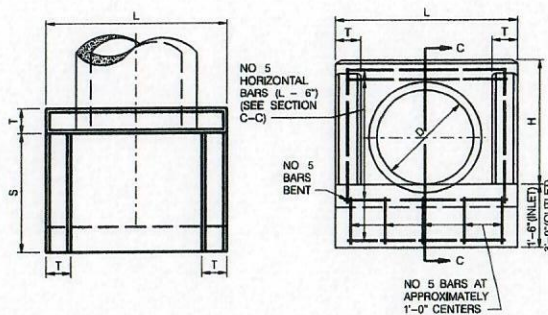


SECTION B-B

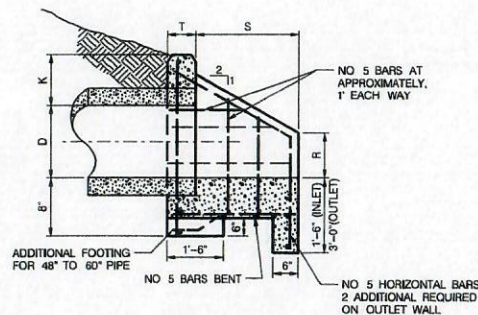


TYPE "B" HEADWALL										
DIMENSIONS						INLET		OUTLET		
D	H		L	K	X	T	CONCRETE	STEEL	CONCRETE	STEEL
	INLET	OUTLET					CURB, YARDS	FOUNDS	CURB, YARDS	FOUNDS
15"	3'-0"	5'-3"	2'-2"	1'-0"	1'-0"	6"	0.29	43	0.42	64
18"	4'-0"	5'-6"	2'-5"	1'-0"	1'-0"	6"	0.32	46	0.46	68
21"	4'-3"	5'-9"	2'-9"	1'-0"	1'-3"	6"	0.39	51	0.55	75
24"	4'-6"	6'-0"	3'-0"	1'-0"	1'-6"	6"	0.46	55	0.64	81
30"	5'-1"	6'-7"	3'-7"	1'-1"	2'-0"	6"	0.63	66	0.86	87
36"	5'-7"	7'-1"	4'-2"	1'-1"	2'-0"	8"	0.95	146	1.27	205
42"	6'-2"	7'-8"	4'-9"	1'-2"	2'-8"	8"	1.22	163	1.60	234
48"	6'-7"	8'-3"	5'-4"	1'-3"	3'-0"	8"	1.51	185	1.85	262
54"	7'-2"	8'-9"	5'-11"	1'-3"	3'-6"	8"	1.85	203	2.30	297
60"	7'-9"	9'-3"	6'-6"	1'-3"	3'-6"	8"	2.00	214	2.52	303

NOTE: ALL REINFORCING STEEL SHALL BE NO. 5 BARS, PLACED AS SHOWN.



TYPE "C" HEADWALL



SECTION C-C

TYPE "C" HEADWALL										
DIMENSIONS						INLET		OUTLET		
D	H	L	K	S	R	T	CONCRETE CURBS YARDS	STEEL PLATE	CONCRETE CURBS YARDS	STEEL PLATE
15"	2'-3"	3'-2"	1'-0"	1'-10"	1'-0"	6"	0.43	50	0.82	70
18"	3'-0"	3'-5"	1'-0"	2'-1"	1'-2"	6"	0.51	59	0.80	72
21"	3'-2"	3'-9"	1'-0"	2'-4"	1'-3"	6"	0.60	73	0.71	87
24"	3'-4"	4'-0"	1'-0"	2'-6"	1'-5"	6"	0.68	79	0.79	93
30"	3'-7"	4'-4"	1'-3"	3'-1"	1'-8"	6"	0.93	102	1.05	119
36"	4'-1"	5'-6"	1'-4"	4'-0"	1'-6"	8"	1.56	150	1.71	171
42"	4'-8"	6'-1"	1'-2"	4'-10"	1'-11"	8"	2.02	189	2.19	213
48"	5'-0"	6'-8"	1'-2"	5'-9"	2'-0"	8"	2.72	245	2.90	269
54"	5'-2"	7'-5"	1'-2"	6'-7"	2'-3"	8"	3.32	305	3.32	329
60"	6'-3"	7'-10"	1'-3"	4'-2"	2'-3"	8"	3.88	334	4.10	365

NOTE: ALL REINFORCING STEEL SHALL BE NO. 5 BARS. PLACED AS SHOWN.

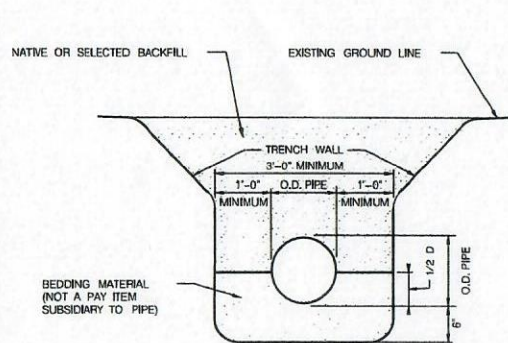
GENERAL NOTES:
ALL REINFORCING STEEL SHALL BE DEFORMED BARS
CONFORMING TO A.S.T.M. SERIAL DESIGNATION A-305-507
AND SHALL SATISFY THE BEND TEST REQUIREMENTS FOR
STRUCTURAL GRADE STEEL IN ACCORDANCE WITH THE
REQUIREMENTS.
ALL CONCRETE SHALL BE L3500.
MINIMUM DEPTH OF EMBEDMENT FOR REINFORCING
STEEL SHALL BE 2" UNLESS OTHERWISE INDICATED.
GROOVE END OF CONCRETE PIPE TO BE UPSTREAM.
ALL REINFORCING STEEL SHALL BE EPOXY COATED.
INSTALL END GUARD ON INLET ENDS OF STORM
SEWER SYSTEM ONLY.



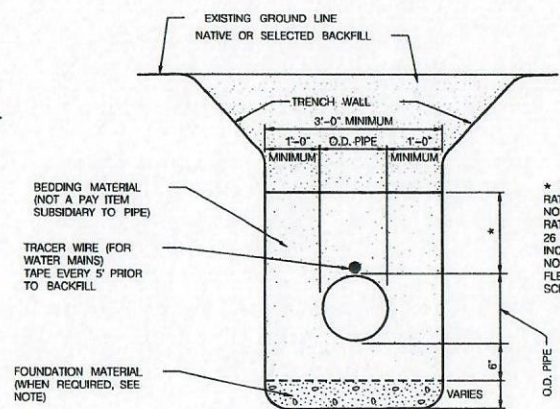
HEADWALLS, TYPE 'A', 'B' AND 'C'

42

PLAN NO.	SHEET NO.
LSP 185	1
Date: 01/25/2019	Drawn: JMH/CA
Rev: Scale: NONE	Checked: Approved:

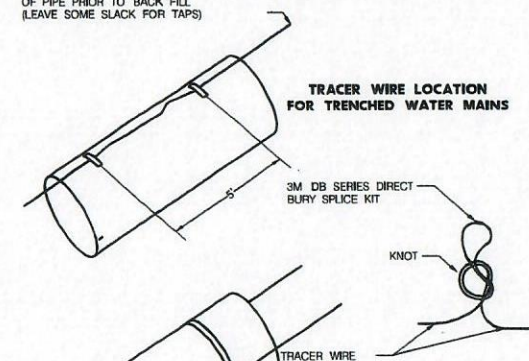


PIPE BEDDING FOR DUCTILE IRON, VITRIFIED CLAY AND REINFORCED CONCRETE PIPE 15" DIAMETER AND LARGER

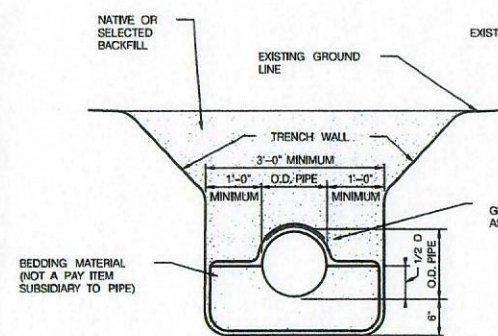


PIPE BEDDING AND FOUNDATION MATERIAL FOR ALL PIPE EXCEPT DUCTILE IRON, VITRIFIED CLAY, AND REINFORCED CONCRETE

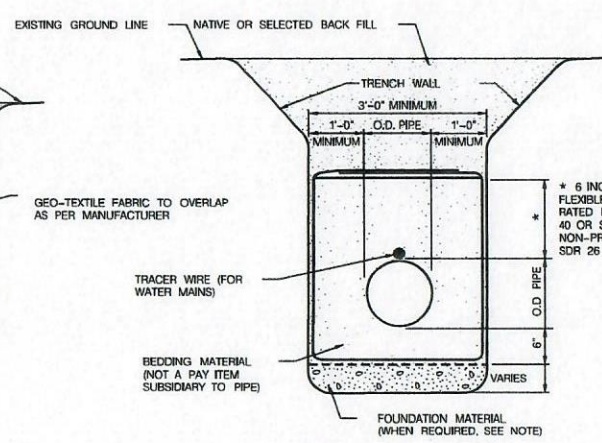
TRACER WIRE (FOR WATER MAINS) TAPE EVERY 5' TO TOP OF PIPE PRIOR TO BACK FILL (LEAVE SOME SLACK FOR TAPS)



TRACER WIRE LOCATION FOR TRENCHED WATER MAINS

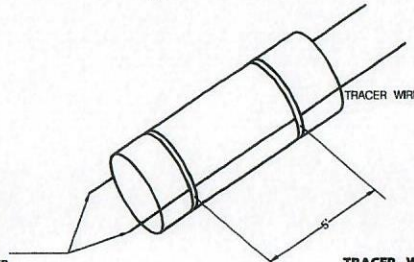


PIPE BEDDING FOR DUCTILE IRON AND REINFORCED CONCRETE PIPE 15" DIAMETER AND LARGER WITH GEO-TEXTILE FABRIC



PIPE BEDDING AND FOUNDATION MATERIAL FOR ALL PIPE EXCEPT DUCTILE IRON AND REINFORCED CONCRETE WITH GEO-TEXTILE FABRIC

TRACER WIRES ON OPPOSITE SIDES OF THE PIPE (FOR WATER MAINS) TAPE EVERY 5' AROUND THE ENTIRE CIRCUMFERENCE PRIOR TO BACK FILL



TRACER WIRE LOCATION FOR WATER MAIN BORED IN PLACE

GENERAL NOTES:

1. WHEN "FOUNDATION MATERIAL" IS REQUIRED/APPROVED BY THE CONTRACT ADMINISTRATOR, IT SHALL BE PAID AT AN AGREED UNIT PRICE OF \$35 PER CUBIC YARD AT THE TIME OF INSTALLATION, BASED ON THE INCREASED DIMENSIONS OF THE MATERIAL ADDED TO STABILIZE THE TRENCH BOTTOM.
2. WHEN REQUIRED BY THE CITY'S PROJECT MANAGER, WATER SHALL BE ADDED TO THE MATERIAL EXCAVATED FROM THE TRENCH WHEN NECESSARY TO MEET SPECIFICATIONS, DURING COMPACTION, AT THE AGREED UNIT PRICE OF \$50 PER 100 CUBIC FEET OF WATER APPLIED TO COMPLETE THE COMPACTION.
3. WIRE SPLICES SHALL BE 3M DBR CONNECTORS, SEALED WITH SILICONE SEALANT, OR EQUAL AND COVERED WITH SCOTCH #33 ELECTRICAL TAPE.



HAINES BRANCH TRIBUTARY STABILIZATION
CITY OF LINCOLN
Draft Final Submittal

BASE BID					
ITEM #	ACTIVITY	UNIT	UNIT COST	QUANTITY	EXTENDED COST
1.00001	MOBILIZATION	LS	\$ 20,000.00	1	\$ 20,000.00
1.01001	CONST STAKING	LS	\$ 5,000.00	1	\$ 5,000.00
2.01001	GEN CLEARING & GRUBBING	LS	\$ 7,500.00	1	\$ 7,500.00
2.05001	EXCAVATION	CY	\$ 13.94	1,971	\$ 27,467.86
2.06001	EXCAVATION - DISPOSAL	CY	\$ 12.69	1,956	\$ 24,817.73
20.07001	CONCRETE FOR HEADWALLS, IN PLACE	CY	\$ 964.60	4.9	\$ 4,726.54
20.07002	REINF STEEL FOR HEADWALLS, IN PLACE	LBS	\$ 2.41	620	\$ 1,491.10
21.14006	RIP-RAP, TYP 'C' W/ FABRIC FILTER	TON	\$ 75.14	951	\$ 71,458.14
30.07002	SEEDING, TY "B"	AC	\$ 4,300.38	0.1	\$ 430.04
30.07008	SEEDING, TY "H"	AC	\$ 3,419.52	0.5	\$ 1,709.76
32.03001	CONSTRUCTION ENTRANCE SURFACING	TON	\$ 56.67	73	\$ 4,136.69
32.12001	COIR FIBER LOG	LF	\$ 11.30	90	\$ 1,016.95
50.00010	REM AND DISPOSE OF RUBBLE	CY	\$ 64.48	102	\$ 6,576.96
50.00005	48" HPDE PIPE CULVERT, IN PLACE	LF	\$ 78.00	40	\$ 3,120.00
50.00005	REPLACE WOOD CHIP TRAIL	LF	\$ 5.00	120	\$ 600.00
50.00010	EARTH FILL COVER OVER RIPRAP	CY	\$ 29.64	15	\$ 444.60
50.00010	GRAVEL FOUNDATION MATERIAL	CY	\$ 62.40	111	\$ 6,926.40
50.00020	HYDROMULCH	AC	\$ 7,406.49	0.5	\$ 3,703.25
	PROJECT TOTAL				\$ 191,126.01
	10% CONTINGENCY				\$ 19,112.60
	PROJECT ESTIMATE				\$ 210,238.61

BID ALTERNATE #1 - CONCRETE SIDEWALK					
ITEM #	ACTIVITY	UNIT	UNIT COST	QUANTITY	EXTENDED COST
4.09305	CONCRETE SIDEWALK, 5"	SF	\$ 5.95	480	\$ 2,855.28
	PROJECT TOTAL				\$ 2,855.28
	10% CONTINGENCY				\$ 285.53
	PROJECT ESTIMATE				\$ 3,140.81

BID ALTERNATE #2 - RIPRAP GRADE CONTROLS					
ITEM #	ACTIVITY	UNIT	UNIT COST	QUANTITY	EXTENDED COST
2.01001	GEN CLEARING & GRUBBING	LS	\$ 2,500.00	1	\$ 2,500.00
2.05001	EXCAVATION	CY	\$ 13.94	344	\$ 4,793.98
2.06001	EXCAVATION - DISPOSAL	CY	\$ 12.69	256	\$ 3,248.13
21.14002	RIP-RAP W/FILTER FABRIC	TON	\$ 75.14	327	\$ 24,570.78
30.07008	SEEDING, TY "H"	AC	\$ 3,419.52	0.6	\$ 2,051.71
50.00010	EARTH FILL COVER OVER RIPRAP	CY	\$ 29.64	89	\$ 2,637.96
50.00010	GRAVEL FOUNDATION MATERIAL	CY	\$ 62.40	35	\$ 2,184.00
50.00020	HYDROMULCH	AC	\$ 7,406.49	0.1	\$ 740.65
	PROJECT TOTAL				\$ 42,727.21
	10% CONTINGENCY				\$ 4,272.72
	PROJECT ESTIMATE				\$ 46,999.93