



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

Memorandum

Date: February 11, 2021
To: Urban Subcommittee
From: Tracy Zayac, Stormwater/Watershed Specialist
Subject: Urban Subcommittee Meeting Minutes – February 2021

The Urban Subcommittee met virtually at 5:30pm, on Tuesday, February 9, 2021. Subcommittee members participating included Tom Green, Christine Lamberty, Gary Aldridge, Bob Andersen, Luke Peterson, and Ray Stevens; Larry Ruth was absent. Others participating included NRD staff Paul Zillig, Dave Potter, Mike Murren, Al Langdale, Tracy Zayac and Jared Nelson; Deb Eagan; Greg Osborn, representing Wyuka Cemetery; John Royster with Big Muddy Workshop, Inc.; Ross Lawrence with JEO Consulting; and Mike Sotak with FYRA Engineering. Director Green called the meeting to order at 5:33pm and gave a brief welcome. The Subcommittee took action on two items and heard one report, as described below.

(a.) Consideration of Cost-Share Request from Wyuka Cemetery for Conceptual Design – Zayac described a request for cost-share assistance from Wyuka Cemetery, referring to the attached memo. She reviewed Wyuka’s struggle to manage incoming sediment and debris from stormwater draining from neighborhoods south of O Street toward Wyuka’s pond. The pond has lost most of its depth, and Wyuka is seeking solutions to handle stormwater, rehabilitate the pond, and create public greenspace with a bike trail along the drainage channel that runs north from the pond toward Vine Street. Wyuka proposes to work with Big Muddy Workshop and JEO on a conceptual design process, which will include stakeholder input on possible designs.

Greg Osborn with Wyuka further described the site’s history and summarized discussions Wyuka has had with Parks & Recreation regarding the proposed trail through the Wyuka property. Royster explained the role of a landscape architect, both in general and as related to the project. Lamberty asked questions regarding the stormwater component of the current site facilities, and Ross Lawrence provided information on how stormwater currently moves through the pond and channel, and the process that would be used to come up with new conceptual designs. Aldridge asked how often the pond had been dredged since 2010, when the City and NRD cost-shared on a previous stormwater project involving this location. Osborn responded that the pond has never been dredged in that time. The proposed housing development to the west of the drainage channel, on property that Wyuka is selling, was also discussed in relation to how stormwater from that development may affect the project. Zillig noted that the preliminary plans at this point show three detention ponds for that development.

It was moved by Andersen, seconded by Stevens, and unanimously approved by the Subcommittee to recommend that the Board of Directors approve the cost-share request from Wyuka Cemetery, for conceptual design for stormwater improvements, in an amount of 50% of the estimated cost, not to exceed \$20,950 of NRD funds.

(b.) Deadmans Run Flood Reduction Project, Consideration of Professional Services Contract to perform Work-In-Kind requested by the U.S. Corps of Engineers – Nelson described that the U.S. Army Corps of Engineers (USACE) contacted the District very recently and asked for the District’s assistance in completing some of the additional hydraulic modeling work needed for the “Section 205” channel widening portion of the Deadmans Run project, and has requested that the District perform this work as Work-In-Kind (creditable as a project cost). Nelson stated that FYRA Engineering will perform this work, along with the work they are already doing on this project. Sotak described the steps that would be involved in completing the tasks. The scope of the current requested modeling and the cost were provided to the Subcommittee for consideration; Nelson and Zillig stated that the contract would be attached to the meeting minutes.

It was moved by Stevens, seconded by Andersen, and approved by the Subcommittee to recommend that the Board of Directors approve the Professional Services Contract with FYRA Engineering, for additional U.S. Army Corps of Engineers requested work, for the Deadmans Run Flood Reduction Project – Hydrology and Hydraulics Updates, at a cost not to exceed \$50,908.

Ayes: **5.** Green, Lamberty, Andersen, Peterson, Stevens.

Not voting: **1.** Aldridge.

(c.) Review and Discussion of Table on Natural Resources Benefits – Next, Zillig reviewed the attached table of benefits to natural resources from the programs that the District offers. He briefly described the purpose of Lincoln’s Rainscaping Program and the District’s Rain-Ready Landscapes Program and their positive effects on water quality. Peterson asked if staff could expand the document to provide additional information. Zillig agreed. Stevens remarked on the simplicity of the table.

(d.) Reports: Ash Hollow Drainage Channel – Langdale reported that bids were received by Waverly to renovate the Ash Hollow Drainage Channel. Zillig explained that the District shares in the cost of maintenance of the channel with Waverly.

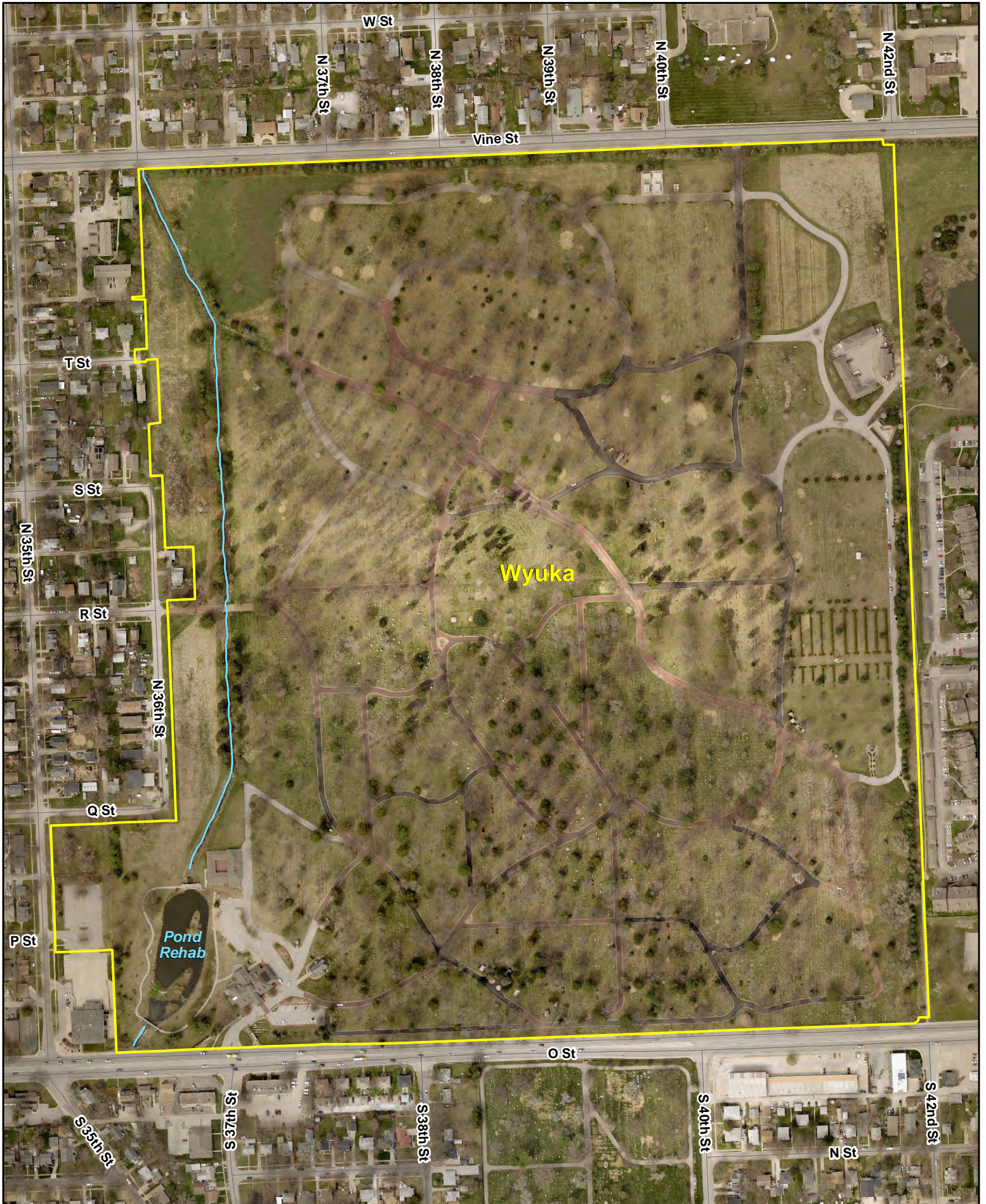
There being no further business the meeting adjourned at approximately 6:35 pm.

TZ/tz

Enclosures;

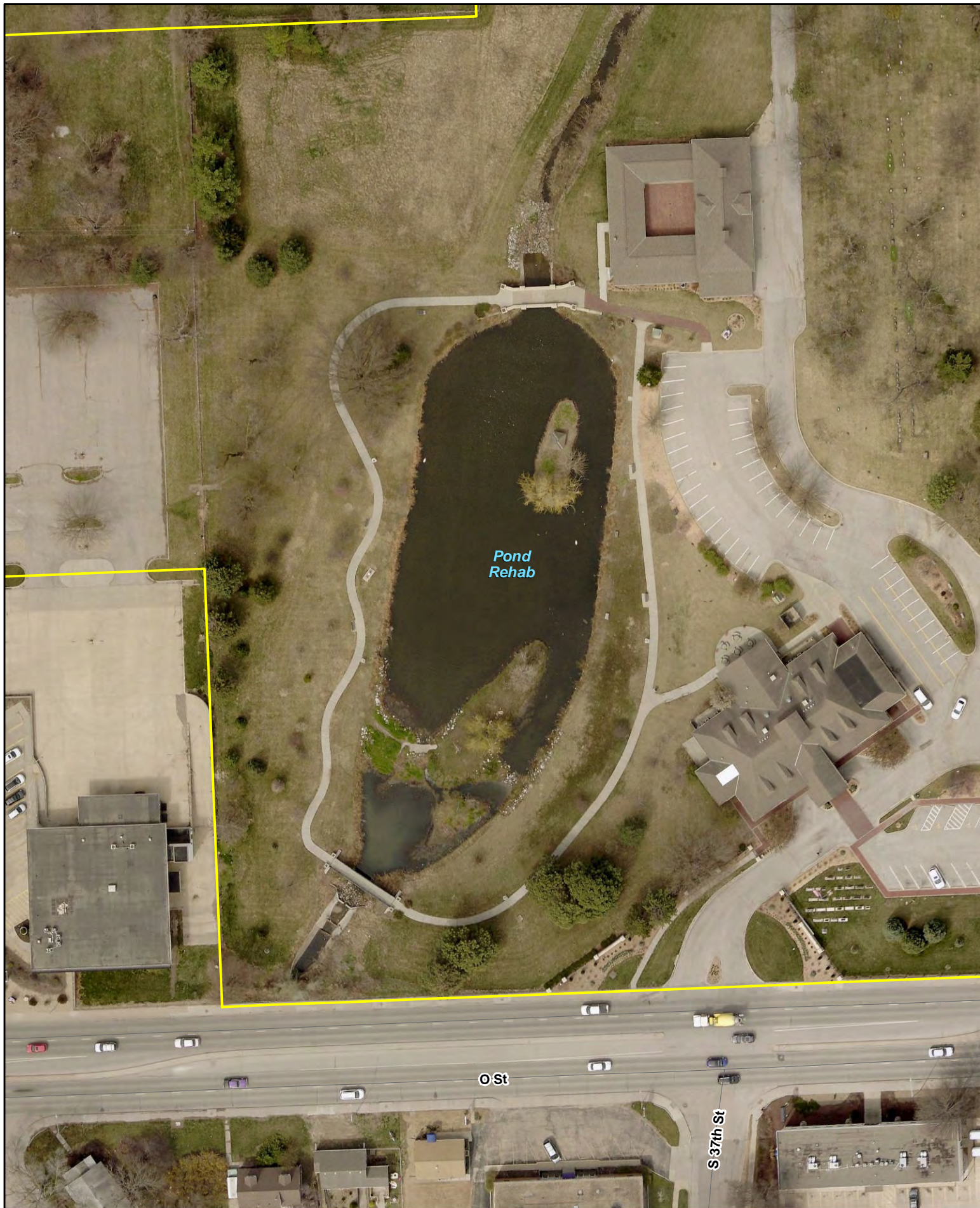


Wuyka Cemetery - Pond Restoration and Stormwater Design





Wuyka Cemetery - Pond Restoration





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Memorandum

Date: February 3, 2021
To: Urban Subcommittee
From: Tracy Zayac, Stormwater/Watershed Specialist
Subject: Wyuka project cost-share request for consideration at February 9, 2021, meeting

1. Wyuka cost-share assistance request: Wyuka Cemetery has approached the District with a request for cost-share assistance on a conceptual design for addressing stormwater routing through the cemetery property, as well as a restoration of the existing pond and green-space enhancement downstream of the pond. Wyuka previously completed a stormwater-related project with NRD assistance, and the solution implemented at that time has not met the Cemetery's needs. As a result, depth of the existing pond, which receives stormwater from approximately 255 acres of urban drainage, has been reduced from approximately 10 feet to 2 feet.

Wyuka has retained Big Muddy Workshop, Inc., to complete the conceptual design for the project, with the assistance of JEO. The total cost for this design phase is \$41,900, including subcontractor (JEO) costs. Wyuka has requested 50% cost-share assistance, in an amount not to exceed \$20,950 NRD funds.

Enc.: Wyuka Cemetery conceptual design request information



W Y U K A
a place of rest
Funeral Home - Cemetery - Park

February 1, 2021

Mr. Paul Zillig
General Manager
Lower Platte South NRD
P O Box: 83581
Lincoln, NE 68501-3581

RE: Cost Share Request Project

Dear Mr. Zillig:

As a follow up to previous discussions between Lower Platte South NRD staff and Mr. Greg Osborn, a representative for the Wyuka Cemetery Board of Trustees, Wyuka Cemetery and Funeral Home would like to formally request cost-share assistance from the Lower Platte South NRD for the preparation of the professional services agreement, which is included in this package, for the pond and drainageway which runs through the western edge of Wyuka Historic Cemetery. This professional services agreement will explore options on pond restoration and how to by-pass the majority of stormwater around the existing pond to decrease the sediment load into the pond. For the drainage channel downstream of the pond, the feasibility of maintaining sufficient water velocity to transport the sediment downstream will be assessed. The Scope of Service will also explore options to increase public access through Wyuka for the public. This would be accomplished by creating a park-like setting and extending a pedestrian/bike trail along the west side of the pond and downstream drainageway. This will provide a much-needed a pedestrian/bike trail between O Street and Vine Street, which the City is very favorable of.

A brief history of Wyuka Cemetery. Founded in 1869. Wyuka is owned by the State of Nebraska. It is a State Charter, not a department or agency, and receives no funding of any kind from the State, County or City. Wyuka must operate as an independent business using revenue generated by the sale of cemetery plots and funeral home and burial services. There are 5 Trustees appointed by the Governor to operate and manage Wyuka. The Trustee is a volunteer position. The Trustees hire a President/General Manager to manage the daily operations and hire staff. Wyuka served as Lincoln's first public park, as well as a final resting place. Wyuka is on the National Register of Historic Places for several of the structures and the cemetery itself. There are thousands of Veterans interned at Wyuka from the Civil War to present day conflicts.

The watershed upstream of the Cemetery is located south of "O" Street to Randolph and occupies approximately 255 acres. A large volume of sediment is transported annually downstream from this urbanized watershed. A stormwater project constructed in the 2010, created a forebay in the Cemetery's reconstructed pond to collect the sediment for later removal. The volume of sediment collected overwhelmed the forebay and subsequently sediment decreased the pond's depth from eight to ten feet to less than two feet.

Ofc: (402) 474-3600

Fax: (402) 474-2650
Email: contact@wyuka.com

Website: www.wyuka.com



The design process proposed for development of the schematic design is outlined in the included professional services agreement. The design process includes active participation of stakeholders this list may including the City of Lincoln, Lower Platte South NRD, Wyuka Cemetery, and Great Plains Trail Network. Additional stakeholders could be added to the planning group if other groups with interests need to be included.

The Cemetery Trustees requests that the Lower Platte South NRD consider a 50/50 cost share for the professional services agreement to complete the schematic design phase. The total cost of the planning and engineering services for the schematic design phase is \$41,900. LPSNRD amount not to exceed \$20950. This amount includes all professional fees for the professional service agreement included with this request.

The drainageway that runs through the Cemetery serves a public need within its stormwater watershed. In addition to the needed stormwater benefit, the greenspace that passes through the Cemetery can be re-envisioned to provide increased public benefit for active transportation and public enjoyment. We look forward to discussing this project at an upcoming Lower Platte South NRD Urban Sub-Committee meeting and the full Lower Platte South NRD Board Meeting. Should you have questions or recommendations regarding the scope, process or deliverables, Mr. Osborn will arrange a conference call with the consultants to discuss these items. Please feel free to call Mr. Greg Osborn 402-432-8121.

Sincerely,

Faye M. Osborn
Chair, Wyuka Cemetery Board of Trustees

Cc: Big Muddy Workshop, Inc.
JEO Consulting Group, Inc
Greg Osborn

An Agreement for the Provision of Limited Professional Services for
Wyuka Cemetery and Funeral Home
Wyuka Cemetery Pond & Drainageway Schematic Design
Lincoln, Nebraska

This agreement is for limited professional landscape architectural services (hereinafter referred to as "Agreement") to be provided by Big Muddy Workshop, Inc. (hereinafter referred to as "A/E") for Wyuka Cemetery and Funeral Home (hereinafter referred to as "Owner") on the project detailed under Article 1.

ARTICLE 1
SCOPE OF SERVICES

This Scope of Services outlines the professional services required to develop a schematic design to guide the future design and reconstruction of the existing pond and drainageway in Wyuka Cemetery in Lincoln, Nebraska (See Attachment 1). The project intent is to decrease the frequency and extent of periodic sediment removal from the pond near the cemetery entrance, as well as to improve the hydrologic function and biodiversity of the drainageway which runs north from the pond to Vine Street. Currently, sediment is trapped within a forebay in the pond. While this feature is intended to improve water-quality, it has resulted in the need to dredge the pond on a regular basis.

During the planning process, schematic design options will be explored that may eliminate the need to periodically dredge the pond. While no identified flooding issues are associated with the downstream drainageway, the channel's value as habitat and a visual amenity for the cemetery is very limited. The green space along the drainageway has the potential to become a passive recreation corridor that can serve cemetery visitors and residents of the surrounding neighborhoods. Development of a walking trail along the drainageway can provide a safe and enjoyable pedestrian connection from "O" and Vine Streets. Unused cemetery property west of the drainageway is currently under contract for possible sale as an affordable housing development.

The deliverables will include a preliminary hydrologic analysis and schematic design options to by-pass storm flows around the existing pond, to enhance to the linear green space and drainage channel within the cemetery, and to determine the alignment of a pedestrian trail along the drainage channel. This written documents and illustrations are intended to serve as the basis to raise funds to implement the project, as well serve as the basis for final design.

Big Muddy Workshop, Inc. will retain the engineering services of JEO Consulting Group, Inc. to provide engineering analysis and input during the planning process. The

JEO staff members working on the project will be under the direct supervisor of a Professional Engineer licensed by the State of Nebraska.

Planning Team

The Owner will appoint a group of interested individuals to work with the Architect/Engineer (A/E) during the planning process. This group will be empowered to make decisions regarding the project direction and provide input to the A/E during the process. To provide consistent guidance and move the project forward per the schedule, the appointed individuals need to commit to attending all three project planning team meetings. The number of team members should be no more than 10 persons, excluding A/E staff, to facilitate interaction between members. A suggested list of team members is listed as follows; however, it will be the Owner's responsibility to determine the actual team members:

- Wyuka Cemetery & Funeral Home Board of Trustees – two members
- Wyuka Board of Trustees – Designated Representative
- Wyuka Historical Foundation – one board members (President)
- Lower Platte South Natural Resources District – one or two staff members
- Lincoln Parks & Recreation Department staff member
- Neighborhood resident or another private person interested in the cemetery.

Data Collection:

- 1.1 Base Map & Past Study Review. The A/E will develop a base map for use in planning at an appropriate scale. This base map will be developed using publicly available aerial photography and City/County GIS data. The A/E will review the past planning studies completed to guide the cemetery's development.
Deliverable: Base map

- 1.2 Kick-off Meeting. The A/E will meet with the Planning Team to review the scope of services, project schedule, and review project deliverables. The Owner will provide an overview of the project's intent and current management challenges with the existing pond and drainageway, as well as vision for the unused property west of the drainageway. The A/E will lead a discussion on design options and solicit ideas for the pond, drainageway and passive recreation corridor from the Planning Team.
Deliverable: Meeting notes

- 1.3 Site Visits. The A/E will conduct a site visit to the project site to collect site information. Tasks will include:
 - generally verifying information shown on the base map,
 - view area landforms and drainage patterns,
 - view existing vegetation types and patterns,
 - analyzing potential connections (pedestrian, bicycle, motor vehicle),
 - noting the drainageway characteristics above and below the pond,

- analyzing cemetery edges, entries, and potential focal points with respect to adjacent land uses and aesthetics,
- determining areas where screening or other improvements may be necessary to improve aesthetics, and,
- documenting site conditions by taking select photographs of the project area.

Deliverable: None; In-house field notes and photographs for A/E's use

- 1.4 NRD Cost-Share Assistance. The A/E will assist the Owner with preparation of materials for a cost-share assistance request. The Owner's representative will coordinate this process directly with the NRD. The Owner's representative will present the request at a subcommittee and/or board meeting. The A/E will attend up to one subcommittee meeting and one board meeting to provide technical support during discussion regarding the request.

Deliverable: Cost-share request letter

- 1.5 Hydrologic and Hydraulic Modeling. The A/E will perform planning-level hydrologic and hydraulic (H&H) modeling to gain a general understanding of stormwater flows into and through the pond and downstream drainageway channel.

Deliverable: Design narrative will include a summary of H&H analysis relative to planning effort with recommendations regarding channel improvements or alterations

Program Development & Concept Design Options:

- 1.6 Design Charrette & Concept Designs. The A/E's engineers and landscape architects will conduct a two-hour design charrette at the A/E's Lincoln office to identify design options that will serve as the basis for one or more design concepts. The A/E will prepare two design concepts using the design options identified during the charrette. The A/E will prepare preliminary order of magnitude opinions of construction cost.

Deliverable: Two concept designs and preliminary costs

- 1.7 Concept Design Review Meeting. The A/E will attend a meeting with the Planning Team to review the two concept designs developed during the charrette along with the preliminary cost opinion for each option. The Team will select one concept, or portions of various concepts to form a composite concept for use in developing the preliminary schematic design.

Deliverable: Meeting notes

Plan Development:

- 1.8 Preliminary Schematic Design and Cost Statement. Using comments from the review meeting and the preferred concept design, the A/E will develop a preliminary schematic design drawing that illustrates the major improvements to be included in the project. The drawing will show the pond, drainageway corridor,

passive recreational improvements and general plantings or vegetation. The plan will include a grading concept that generally shows the landforms around the pond and along the stream. A preliminary opinion of probable construction costs will be developed to accompany the preliminary plan.

Deliverable: Preliminary color plan, Preliminary opinion of probable construction costs

1.9 Draft Design Narrative. The A/E will prepare a concise written document explaining the preliminary H&H analysis, preliminary schematic design, and opinion of construction costs.

Deliverable: Draft design narrative document

1.11 Preliminary Schematic & Costs Review Meeting. The A/E will conduct a meeting with the Planning Team to review the draft design narrative, preliminary schematic design, and preliminary opinion of probable construction costs. *Deliverable: Meeting notes*

1.12 Final Schematic Design, Costs & Design Narrative. The plan, opinion of probable construction costs and design narrative will be revised to reflect the direction received from the Planning Team during the preliminary design review meeting. The A/E will provide one hardcopy and a PDF file of the final deliverable documents.

Deliverable: Final design narrative – PDF & one hardcopy Final color plan – PDF & one full-size hardcopy Final opinion of probable construction costs – PDF & one hardcopy

1.13 Project Management. The A/E will provide project management services to coordinate the work of the design team. The A/E will schedule review meetings and respond to Owner inquiries. The A/E will provide quality assurance/quality control services during the planning process.

Deliverables: None

Owner-Supplied Information and Services

The Owner will provide the following information to the A/E:

- Copies of any past plans or studies pertinent to the planning effort.

The Owner will provide the following services at no cost the A/E:

- Notify Planning Team members of team meeting dates and times
- Prepare and publish meeting notices to meet state or local open meeting laws -
- Arrange for and provide meeting places for all Planning Team meetings.

Additional Services

Any services required in addition to those listed in the Scope of Services and including subsequent design phases for this project will be performed upon written authorization

from the Owner at the A/E's prevailing standard hourly billing rates plus reimbursable expenses as shown on Attachment "A".

Excluded Services

Services not set forth above as Basic Services or Additional Services and listed in Article 1 of this Agreement are excluded from the A/E's Scope of Services and the A/E assumes no responsibility to perform such services.

ARTICLE 2
FEE ARRANGEMENT

2.1 Project Fee Schedule. The A/E agrees to provide the described services on an hourly not-to-exceed basis as included in the following schedule:*

Data Collection.....	\$ 9,895
Program Development & Concept Design Options.....	\$11,205
Plan Development.....	<u>\$20,800</u>

Project Total: \$41,900

*The Project Fee Schedule is an estimate of the fee distribution between tasks. The A/E reserves the right to re-allocate fee between the tasks provided the total fee invoiced does not exceed the project total.

2.2 Payment. The A/E will bill the Owner monthly based on percent of work completed. Billings will be provided on dates necessary to meet the Owner's payment approval schedule. Payment terms are 30 days net. If payment is not received by the A/E within 30 calendar days of the invoice date, the Owner shall pay as interest an additional charge of one-and-one-half (1.5) percent of the PAST DUE amount per month.

ARTICLE 3
SPECIAL TERMS AND CONDITIONS

3.1 Access to Site. Unless otherwise stated, the A/E will have access to the site for activities necessary for the performance of the services at all reasonable hours.

3.2 Indemnification. The A/E agrees, to the fullest extent permitted by law, to indemnify and hold harmless the Owner, its officers, directors, employees and subconsultants (collectively, Owner) against all damages, liabilities, or costs, including reasonable attorneys' fees and defense costs, to the extent caused by the A/E's negligent performance of professional services under this Agreement and that of its

subconsultants or anyone for whom the A/E is legally liable. The Owner agrees, to the fullest extent permitted by law, to indemnify and hold harmless the A/E, its officers, directors, employees and subconsultants (collectively, A/E) against all damages, liabilities, or costs, including reasonable attorneys' fees and defense costs, to the extent caused by the Owner's negligent acts in connection with the Project and the acts of its contractors, subcontractors or consultants or anyone for whom the Owner is legally liable. Neither the Owner nor the A/E shall be obligated to indemnify the other party in any manner whatsoever for the other party's own negligence.

3.3 Dispute Resolution. In an effort to resolve any conflicts that arise during the design or construction of the project or following completion of the project, the Owner and the A/E agree that all disputes between them arising out of or relating to this Agreement shall be submitted to nonbinding mediation unless the parties mutually agree otherwise. The Owner and the A/E further agree to include a similar mediation provision in all agreements with independent contractors and consultants retained for the project and to require all independent contractors and consultants also to include a similar mediation provision in all agreements with subcontractors, subconsultants, suppliers or fabricators so retained, thereby providing for mediation as the primary method for dispute resolution between the parties to those agreements.

3.4 Limitation of Liability. In recognition of the relative risks and benefits of the project to both the Owner and the A/E, the risks have been allocated such that the Owner agrees, to the fullest extent permitted by law, to limit the liability of the A/E and his subconsultants to the Owner and to all construction contractors and subcontractors on the project for any and all claims, losses, costs, damages of any nature whatsoever or claims expenses from any cause or causes, including attorneys' fees and costs and expert witness fees and costs, so that the total aggregate liability of the A/E and his subconsultants to all those named shall not exceed **\$41,900** or the A/E's total fee for services rendered on this project, **whichever is greater**. It is intended that this limitation apply to any and all liability or cause of action however alleged or arising, unless otherwise prohibited by law.

3.5 Delays. The A/E is not responsible for delays caused by factors beyond the A/E's reasonable control, including but not limited to delays because of strikes, lockouts, work slowdowns or stoppages, accidents, acts of God, failure of any governmental or other regulatory authority to act in a timely manner, failure of the Owner to furnish timely information or approve or disapprove of the A/E's services or work product promptly, or delays caused by faulty performance by the Owner or by contractors of any level. When such delays beyond the A/E's reasonable control occur, the Owner agrees the A/E is not responsible for damages, nor shall the A/E be deemed to be in default of this Agreement.

3.6 Ownership of Documents. All reports, plans, specifications, field data and notes and other documents, including all documents on electronic media, prepared, or furnished by the A/E pursuant to this Agreement are instruments of the A/E's

professional service and A/E shall retain an ownership and property interest therein. A/E grants Owner a license to use instruments of A/E's professional service to conduct additional planning and design to implement the project. Reuse or modification of such documents by Owner, without A/E's written permission, shall be at Owner's sole risk and Owner agrees to indemnify and hold A/E harmless from all claims, damages, and expenses, including reasonable attorney's fees, arising out of such reuse by Owner or others acting through Owner.

3.7 Codes and Standards Compliance. The A/E shall put forth the reasonable efforts to comply with codes, regulations, laws, and statutes in effect as of the execution of this Agreement.

3.8 Opinions of Probable Cost. In providing opinions of probable construction cost, the Owner understands that the A/E has no control over costs or the price of labor, equipment, or materials, or over the Contractors' method or pricing, and that the opinions of probable construction cost provided herein are to be made on the basis of the A/E's qualifications and experience. The A/E makes no warranty, expressed or implied, as to the accuracy of such opinions as compared to bid or actual costs.

3.9 Construction Observation. These services are not required for this project phase and are thereby excluded from the A/E's Scope of Services.

3.10 Shop Drawing Review. These services are not required for this project phase and are thereby excluded from the A/E's Scope of Services.

3.11 Project Time Period. This proposal is valid until February 28, 2021. If not executed by that date, the proposal shall be considered null and void. The project is expected to require approximately four (4) months after the Kick-off Meeting has occurred. Should the timeframe exceed four months through no fault of the A/E, may an amendment to the Agreement.

ARTICLE 4 **GENERAL TERMS AND CONDITIONS**

4.1 Governing Law. The laws of the State of Nebraska will govern the validity of this Agreement, its interpretation and performance. Any litigation arising in any way from this Agreement shall be brought in the courts of that State.

4.2 Standard of Care. Services provided by the A/E under this Agreement will be performed in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances.

4.3 Assignment. Neither party to this Agreement shall transfer, sublet, or assign any rights under or interest in this Agreement (including but not limited to monies that are due or monies that may be due) without the prior written consent of the other party.

4.4 Termination. Either the Owner or the A/E may terminate this Agreement at any time with or without cause upon giving the other party (10) calendar days prior written notice. The Owner shall within thirty (30) calendar days of termination pay the A/E for all services rendered and all costs incurred up to the date of termination, in accordance with Article Two of this Agreement.

4.5 Severability and Survival. Any provision of this Agreement later held to be unenforceable for any reason shall be deemed void, and all remaining provisions shall continue in full force and effect. Articles 3.2, 3.3, 3.4, and 3.6 shall survive the termination of this Agreement and shall remain enforceable between the parties.

4.6 Amendment. This Agreement shall not be amended except by written instrument signed by the parties hereto. This Agreement constitutes the entire and integrated agreement by and between the parties and supersedes any and all prior negotiations, whether written or oral.

4.7 Contract Representative. The A/E designates **John Royster, PLA** to serve as project manager and contact for the A/E for the project. The Owner designates _____ to serve as project manager and contact for the Owner for the project.

4.8 Authorization. The individual signing this agreement for and on behalf of both parties represents that he is a duly authorized agent of his respective principal.

Owner: Wyuka Cemetery & Funeral Home	A/E: Big Muddy Workshop, Inc.
Signature: _____	Signature: _____
Printed Name: <u>Faye M. Osborn</u>	Printed Name: <u>John Royster</u>
Title: <u>Chair, Wyuka Board of Trustees</u>	Title: <u>President &CEO</u>
Date: _____	Date: _____













DEADMANS RUN FLOOD REDUCTION PROJECT

Section 205 Project

Local Project

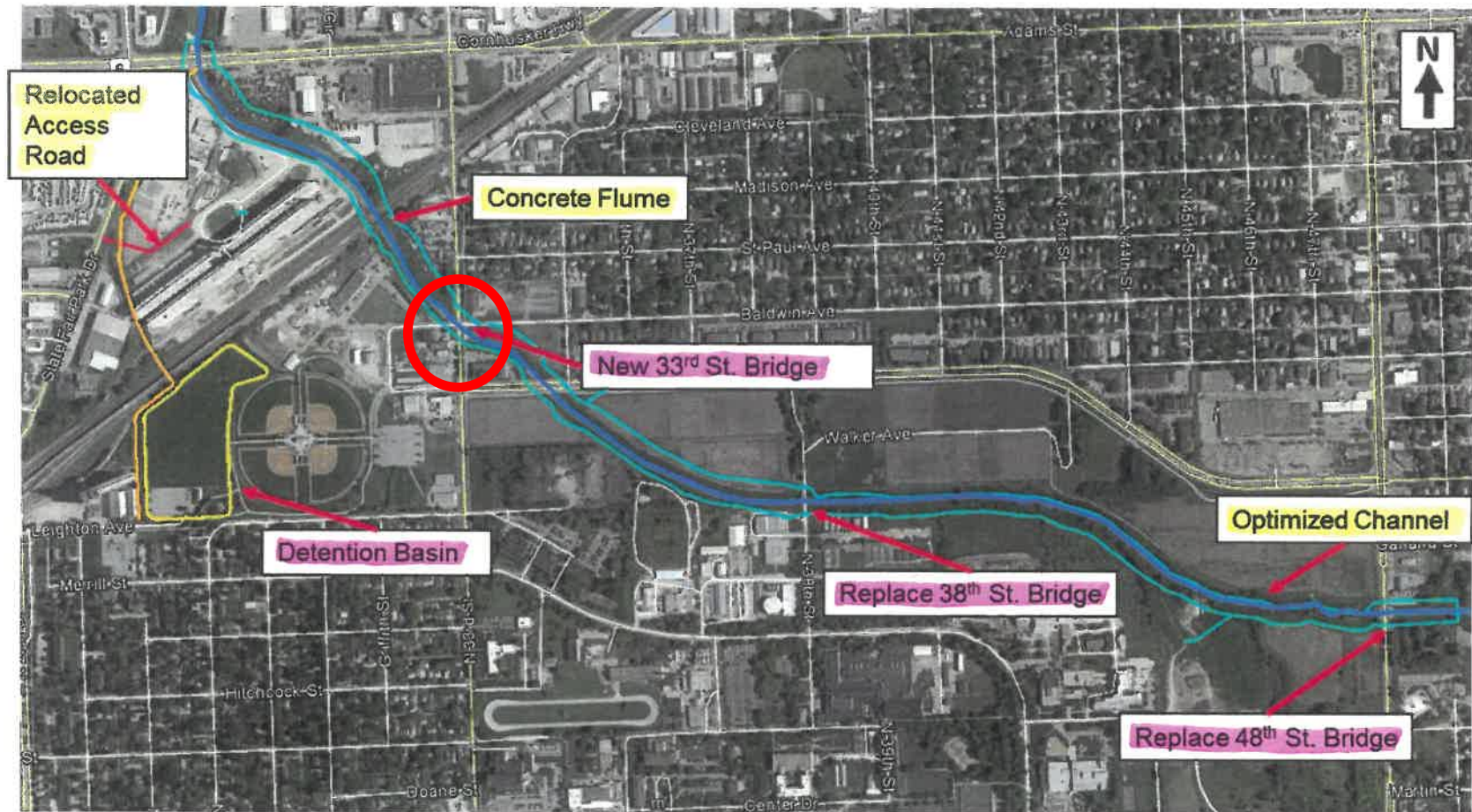


Figure 26. Optimized Recommended Plan

Deadmans Run Section 205 – Additional Work-In-Kind USACE Request

1. There is probably a need to an additional analysis of the flume alternatives within the NRD, 205 and City projects (after proposed physical modeling is completed)
2. Update channel cross section between 33rd St and Cornhusker to reflect that flood benches will be on both the right and left bank of the channel (the CDM/Solv model is not consistent with what USACE intended)
3. Confirm channel thalweg profile is correct and adjust if necessary (CDM changed the USACE profile, not sure if that was supposed to happen)
4. Be prepared to implement channel alignment alternatives between the Flume and 33rd (three options being looked at), pending findings of RTSD and real estate constraints.
5. Be prepared to update inflow location of culverts that enter channel near 33rd for large box culvert moved downstream of 33rd, pending final design of bridge
6. Hydraulic analysis of relocated 33rd st culvert and possible interior flooding due to tailwater surcharge. Provide USACE with depth grids for all 8 frequencies of flooding in the neighborhood for input into USACE's economic analysis.
7. Work with city to implement new bridge designs at 33rd St, 38th St and 48th Street. The 33rd St structure decision may require extra coordination due to RTSD involvement (neighborhood drainage, abutments, structure size)
8. Determine if Huntington bridge needs to be replaced or if overbank fill can be placed to avoid out of bank flows.
9. Secondary edits to the final model if changes made in final design for CLOMR.

NATURAL RESOURCE BENEFITS OF PRACTICES & PROGRAMS

Lower Platte South NRD

(H= High M= Medium L= Low)

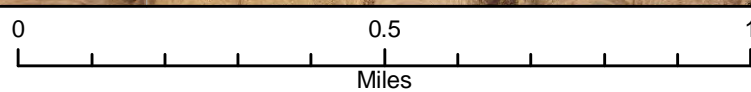
November 1 2020

RF&W	Urban	WRS	Land	Program & Practices	Ground Water Quality	Surface Water Quality	Water Conservation	Erosion Control	Changes in Climate/Carbon	Wildlife Habitat	Soil Health
X				Community Forestry	L	L	L	L	H	H	M
X				Conservation Forestry (Tree Seedlings)	L	M	M	H	H	H	M
			X	Cover Crop Program	M	H	M	H	M	M	H
			X	Farm Pond Cost share	M	H	H	H	M	H	L
		X		Fertilizer Flow Meter	H	M	L	L	M	L	M
			X	Filter/Buffer Strip Program	M	H	M	H	H	H	M
		X		Flood Control Structure Cost Share Program	M	H	H	M	M	H	L
		X		Irrigation Management Assistance Program	H	M	H	L	L	L	M
	X			Rain Scapes Program-Lincoln	M	H	M	M	M	M	L
	X			Rain Ready Landscapes Program	M	H	M	M	M	M	L
		X		Road Structure Program	M	H	H	M	M	H	L
		X		Spring Nitrogen Application Program (SNAP)	H	M	L	L	M	L	M
		X		Soil Sampling Cost-Share Program	H	H	L	L	L	L	M
		X		Well Decommissioning	H	L	L	L	L	L	L
				Ag BMP Cost-Share							
			X	• Terraces	M	H	M	H	L	L	M
			X	• Grassed Waterways	M	H	M	H	M	M	M
			X	• Pasture & Hay land Mgt.	L	M	M	M	H	M	H
			X	• Pasture & Hay land Planting	L	H	M	H	H	H	H

The Lower Platte South NRD provides assistance to landowners for a variety of practices and programs that benefit our natural resources. The Purpose of this table is to provide a general understanding of the level of natural resources benefits that we can expect from each conservation practice or program. Benefits such as improved groundwater and/or surface water quality, water conservation, erosion control, changes in climate/carbon, wildlife habitat and soil health, are listed in each of the columns. The conservation practices or programs (not a complete list) are listed in the far left column. For each program there is an estimated level of benefit, either H-High; M-Medium; or L-Low. The “changes in climate/carbon” benefit is associated with plants ability to store carbon in the plant or roots/soil and also utilizing lakes/wetlands as a carbon sink.



Ash Hollow Dry Dam to Confluence at Salt Creek





PROFESSIONAL SERVICES AGREEMENT

PROJECT: Deadman's Run – USACE WIK Modeling **FYRA Engineering, LLC JOB #:** 002-21-01

CLIENT: Lower Platte South NRD

ADDRESS: 3125 Portia Street, Lincoln, NE 68521

CONTACT: Paul Zillig **TEL:** 402.476.2729 **FAX:** 402.476.6454

CONSULTANT: FYRA Engineering, LLC

ADDRESS: 12702 Westport Pkwy, Suite 300, Omaha, NE 68138

CONTACT: Michael K. Sotak, P.E. **TEL:** 402.502.7131 **FAX:** 402.932.6940

PROJECT DESCRIPTION: Additional USACE requested Work-In-Kind modeling work related to DMRFRP Hydrology and Hydraulics Updates

SCOPE OF SERVICES (See Attachment) **SCHEDULE (See Original Agreement – No Change)**

COMPENSATION:

The total compensation under this Agreement shall not exceed the dollar amount indicated herein or the amount authorized by Amendment(s) and/or Notice(s) to Proceed (NTP), whichever is the lesser.

LUMP SUM. Compensation for these services shall be a Lump Sum of \$_____.

TIME AND MATERIALS. Compensation for these services will not exceed **\$50,908.00** without written authorization and will be based on the following option (per the attached Budget or List of Hourly Rates), and Reimbursable Expenses based on actual costs incurred and approved by FYRA Engineering, LLC and as authorized in writing by Client.

Subconsultant's Direct Job Wages times a factor of _____ Budget/List of Subconsultant's Hourly Rates.


COST PLUS FIXED FEE. Compensation for these services shall be Subconsultant Cost plus a fixed professional fee, including Reimbursable Expenses. The estimated compensation for services is \$_____ plus a fixed fee of \$_____ for a total of \$_____.

COMPENSATION DETAIL (See Following Pages)

SCHEDULE OF PAYMENTS (See Following Pages)

SERVICES AUTHORIZED BY: **Execution of Agreement** or **Amendment(s) and/or NTP**

EXECUTION: Execution of this document by duly authorized representatives of FYRA Engineering, LLC and CLIENT, including FYRA Engineering LLC's Standard Conditions (original Agreement) and any attachments, Additional Provisions as indicated, and addenda, represents the entire Agreement between the parties hereto and supersedes all prior negotiations, representations, or agreements, either written or oral. This Agreement may be amended or modified by written instrument, but such instrument is valid only upon signature by both parties.

CONSULTANT: <u>FYRA Engineering, LLC</u>	CLIENT: <u>Lower Platte South NRD</u>
BY: <u>Michael K. Sotak, P.E., D.WRE</u>	BY: <u>Paul Zillig</u>
SIGNATURE: 	SIGNATURE: _____
TITLE: <u>Owner/Principal</u>	TITLE: <u>General Manager</u>
DATE: <u>9 February 2021</u>	DATE: _____



FYRA ENGINEERING, LLC STANDARD CONDITIONS

SERVICES. FYRA Engineering will perform services for the Project as set forth in attachment and in accordance with these Terms & Conditions. FYRA Engineering has developed the Project scope of service, schedule, and compensation based on available information and various assumptions. The Client acknowledges that adjustments to the schedule and compensation may be necessary based on the actual circumstances encountered by FYRA Engineering in performing their services.

AUTHORIZED REPRESENTATIVES. The officer assigned to the Project by FYRA Engineering is the only authorized representative to make decisions or commitments on behalf of FYRA Engineering. The Client shall designate a representative with similar authority.

PROJECT REQUIREMENTS. The Client shall confirm the objectives, requirements, constraints, and criteria for the Project at its inception. If the Client has established design standards, they shall be furnished to FYRA Engineering at Project inception. FYRA Engineering will review the Client design standards and may recommend alternate standards considering the standard of care provision.

SITE ACCESS. The Client shall obtain all necessary approvals for FYRA Engineering to access the Project site(s).

PERIOD OF SERVICE. FYRA Engineering shall perform the services for the Project in a timely manner consistent with sound professional practice. FYRA Engineering will strive to perform its services according to the Project schedule set forth in attachment. The services of each task shall be considered complete when deliverables for the task have been presented to the Client. FYRA Engineering shall be entitled to an extension of time and compensation adjustment for any delay beyond FYRA Engineering control.

COMPENSATION. In consideration of the services performed by FYRA Engineering, the Client shall pay FYRA Engineering in the manner set forth in attachment. The parties acknowledge that terms of compensation are based on an orderly and continuous progress of the Project. Compensation shall be equitably adjusted for delays or extensions of time beyond the control of FYRA Engineering.

PAYMENT TERMS. FYRA Engineering shall submit monthly invoices for services performed and Client shall pay the full invoice amount within thirty (30) days of the invoice date. Invoices will be considered correct if not questioned in writing within ten (10) days of the invoice date. FYRA Engineering shall be entitled to a 2% per month administrative charge in the event of payment delay. Client payment to FYRA Engineering is not contingent on arrangement of project financing. Invoice payment delayed beyond sixty (60) days shall give FYRA Engineering the right to stop work until payments are current. Non-payment beyond seventy (70) days shall be just cause for termination by FYRA Engineering.

ADDITIONAL SERVICES. The Client and FYRA Engineering acknowledge that additional services may be necessary for the Project to address issues that may not be known at Project initiation or that may be required to address circumstances that were not foreseen. In that event, FYRA Engineering shall notify the Client of the need for additional services and the Client shall pay for such additional services in an amount and manner as the parties may subsequently agree.

INDEPENDENT CONSULTANT. FYRA Engineering shall serve as an independent consultant for services provided under this agreement. FYRA Engineering shall retain control over the means and methods used in performing their services and may retain subconsultants to perform certain services as determined by FYRA Engineering.

STANDARD OF CARE. Services provided by FYRA Engineering will be performed with the care and skill ordinarily exercised by members of the same profession practicing under similar circumstances. FYRA Engineering will not be liable for the cost of any omission that adds value to the Project.

COMPLIANCE WITH LAWS. FYRA Engineering shall perform its services consistent with sound professional practice and endeavor to incorporate laws, regulations, codes, and standards applicable at the time the work is performed. In the event that standards of practice change during the Project, FYRA Engineering shall be entitled to additional compensation where additional services are needed to conform to the standard of practice.



PERMITS AND APPROVALS. FYRA Engineering will assist the Client in preparing applications and supporting documents for the Client to secure permits and approvals from agencies having jurisdiction over the Project. The Client agrees to pay all application and review fees.

OWNERSHIP OF DOCUMENTS. Documents prepared by FYRA Engineering for the Project are instruments of service and shall remain the property of FYRA Engineering. Record documents of service shall be based on the printed copy. FYRA Engineering will furnish documents electronically; however, the Client releases FYRA Engineering from any liability that may result from documents used in this form. FYRA Engineering shall not be held liable for reuse of documents for any purpose other than those intended under the Project.

INSURANCE. FYRA Engineering will maintain the following insurance and coverage limits during the period of service. The Client will be named as an additional insured on the Commercial General Liability and Automobile Liability policies.

<u>Workers' Compensation</u>	As required by applicable state statute.
<u>Umbrella or Excess Liability</u>	\$2,000,000
<u>Commercial General Liability</u>	\$1,000,000 per occurrence (bodily injury including death & property damage) \$2,000,000 aggregate.
<u>Automobile Liability</u>	\$1,000,000 combined single limit for bodily injury and property damage.
<u>Professional Liability</u>	\$1,000,000 each claim and in the aggregate.

The Client shall make arrangements for Builder's Risk, Protective Liability, Pollution Prevention, and other specific insurance coverage warranted for the Project in amounts appropriate to the Project value and risks. FYRA Engineering shall be a named insured on those policies where FYRA Engineering may be at risk. The Client shall obtain the counsel of others in setting insurance limits for construction contracts.

WAIVER OF SUBROGATION. FYRA Engineering, LLC affirmatively agrees to obtain waiver of subrogation against the client and name the client as an additional insured on the Commercial General Liability and Automobile policies.

INDEMNIFICATION AND HOLD HARMLESS. FYRA Engineering, LLC shall indemnify and hold harmless the Client and its employees and agents from any and all liability, settlements, loss, defense costs, and expenses in connection with any action, suit, or claim resulting from the negligent acts, errors, or omissions in services provided pursuant to this Agreement by FYRA Engineering, LLC its employees, or Subconsultants and/or subcontractors. Client shall indemnify and hold harmless FYRA Engineering, LLC and its employees and agents from any and all liability, settlements, loss, defense costs, and expenses in connection with any action, suit, or claim resulting from the negligent acts, errors, or omissions in services provided pursuant to this Agreement by the Client, its employees, or subconsultants and/or subcontractors. However, if any such liability, settlements, loss, defense costs or expenses result from the concurrent negligence of FYRA Engineering, LLC, and the Client this indemnification applies only to the extent of the negligence of FYRA Engineering, LLC.



LIMITATION OF LIABILITY. To the fullest extent permitted by law, a party's total liability to the other party and anyone claiming by, through, or under the other party for any cost, loss, or damages caused in part by the negligence of the party and in part by the negligence of the other party or any other negligent entity or individual, shall not exceed the percentage share that the party's negligence bears to the total negligence of Owner, Engineer, Subconsultant and all other negligent entities and individuals.

LEGAL EXPENSE. In the event that either party takes legal action against the other that is not prosecuted, is dismissed, or if the decision is rendered for the other party, the party taking legal action agrees to pay the other their attorney fees, court costs, and defense expenses that are allowable under Nebraska state law, within thirty (30) days of the court action.

CONSEQUENTIAL DAMAGES. Neither the Client nor FYRA Engineering shall be liable to the other for any consequential damages regardless of the nature or fault.

ENVIRONMENTAL MATTERS. The Client to its knowledge has disclosed all potential hazardous materials that may be encountered on the Project. In the event unknown hazardous materials are encountered, FYRA Engineering shall be entitled to additional compensation for appropriate actions to protect the health and safety of its personnel, and for additional services required to comply with applicable laws. The Client shall indemnify FYRA Engineering from any claim related to hazardous materials encountered on the Project except for those events caused by negligent acts of FYRA Engineering.

COST OPINIONS. If included in the scope of service, FYRA Engineering shall prepare cost opinions for the Project based on historical information that represents the judgment of a qualified professional. The Client and FYRA Engineering acknowledge that actual costs may vary from the cost opinions prepared and that FYRA Engineering offers no guarantee related to the Project cost.

INDEPENDENT COUNSEL. The Client agrees to obtain independent legal and financial counsel for the Project considering FYRA Engineering does not furnish these services.

CONTRACTOR SELECTION. FYRA Engineering may make recommendations concerning award of construction contracts and products. The Client acknowledges that the final selection of construction contractors and products is their sole responsibility.

SHOP DRAWING REVIEW. If included in the scope of service, FYRA Engineering shall review shop drawing submittals from the contractor solely for their conformance with the design intent of and performance criteria specified for the Project. FYRA Engineering shall not be liable for the performance of or consequential damages of any equipment furnished by the contractor under the Project.

CONSTRUCTION REVIEW. If included in the scope of service, FYRA Engineering shall observe the progress and content of the work to determine if the work is proceeding in general accordance with the Contract Documents. This construction review is intended to observe, document, and report information concerning the construction process. Observation of work at the Project site shall not make FYRA Engineering responsible for the work performed by another party; the means, methods, techniques, sequences, or procedures selected by another party; nor the safety precautions or programs of another party.

REJECTION OF WORK. FYRA Engineering may recommend that the Client reject work by construction contractors that does not conform to the requirements of the Project.

SAFETY. FYRA Engineering shall be responsible solely for the safety precautions or programs of its employees and no other party.

INFORMATION FROM OTHER PARTIES. The Client and FYRA Engineering acknowledge that FYRA Engineering will rely on information furnished by other parties in performing its services under the Project. FYRA Engineering shall not be liable for any damages that may be incurred by the Client in the use of third party information.



CONSTRUCTION RECORD DRAWINGS. If included in the scope of service, FYRA Engineering will deliver drawings to the Client incorporating information furnished by construction contractors. In that construction record drawings are based on information provided by others, FYRA Engineering cannot and does not warrant their accuracy.

FORCE MAJEURE. Neither party will hold the other responsible for damages or delay caused by Acts of God, acts of war, strikes, accidents, or other events beyond the other's control.

DISPUTE RESOLUTION. The Client and FYRA Engineering agree that they shall diligently pursue resolution of all disagreements within forty-five (45) days of either party's written notice using a mutually acceptable form of mediated dispute resolution prior to exercising their rights under law. FYRA Engineering shall continue to perform services for the Project and the Client shall pay for such services during the dispute resolution process unless the Client issues a written notice to suspend work.

SUSPENSION OF WORK. The Client may suspend services performed by FYRA Engineering with cause upon fourteen (14) days written notice. FYRA Engineering shall submit an invoice for services performed up to the effective date of the work suspension and the Client shall pay FYRA Engineering all outstanding invoices within fourteen (14) days. If the work suspension exceeds thirty (30) days from the effective work suspension date, FYRA Engineering shall be entitled to renegotiate the Project schedule and the compensation terms for the Project.

TERMINATION. The Client or FYRA Engineering may terminate services on the Project upon seven (7) days written notice in the event of substantial failure by the other party to fulfill its obligations of the terms hereunder. FYRA Engineering shall submit an invoice for services performed up to the effective date of termination and the Client shall pay FYRA Engineering all outstanding invoices within fourteen (14) days. The Client may withhold an amount for services that may be in dispute provided that the Client furnishes a written notice of the basis for their dispute and that the amount withheld represents a reasonable value.

GOVERNING LAW. The terms of agreement shall be governed by the laws of the state where the services are performed provided that nothing contained herein shall be interpreted in such a manner as to render it unenforceable under the laws of the state in which the Project resides.

ASSIGNMENT. Neither party shall assign its rights, interests, or obligations under the Project without the express written consent of the other party.

WAIVER OF RIGHTS. The failure of either party to enforce any provision of these terms and conditions shall not constitute a waiver of such provision nor diminish the right of either party to the remedies of such provision.

WARRANTY. FYRA Engineering warrants that it will deliver products under the Project within the standard of care. FYRA Engineering provides no other expressed or implied warranty.

SEVERABILITY. Any provision of these terms later held to violate any law shall be deemed void and all remaining provisions shall continue in force. In such event, the Client and FYRA Engineering will work in good faith to replace an invalid provision with one that is valid with as close to the original meaning as possible.

SURVIVAL. All provisions of these terms that allocate responsibility or liability between the Client and FYRA Engineering shall survive the completion or termination of services for the project.

NON-DISCRIMINATION. Consultant or their subcontractors shall not discriminate against any employee or applicant for employment, to be employed in the performance of this Agreement, with respect to their hire, tenure, terms, conditions, or privileges of employment, because of their race, color, religion, sex, sexual orientation, gender identity, disability, or national origin.



Deadmans Run - USACE WIK Modeling
Lower Platte South NRD
Lincoln, NE
FYRA Project No. 002-21-01

FYRA Engineering			
Prj Mgr	Prj Engr	El	
Sotak	Gregalunas	Kelley	
\$225	\$205	\$115	Expenses

Tasks

No.	Proposed Conditions Hydraulic Model Updates					Total
4.13	Coordination and Analysis of the Flume Alternatives	8	6	80	\$50	
4.14	Update Channel Cross Section between 33rd St and Cornhusker ¹		1	48		
4.15	Confirm Channel Thalweg Profile is Correct and Adjust if Necessary ²		1	32		
4.16*	Implement Channel Alignment Alternatives between the Flume and 33rd ³ (if needed)		1.5	24		
4.17*	Update Inflow Location of 33rd St Box Culvert (if needed)			2		
4.18	Hydraulic analysis of Relocated 33rd St Box Culvert and Interior Ponding		4	40		
4.19	Coordinate with City to Implement New Bridge Designs at 33rd St, 38th St and 48th Street	8	6	80	\$50	
4.20	Determine if Huntington Bridge Needs to be Replaced or if Overbank Fill can be Placed to Prevent out of Bank Flows	2	2	8		
4.21	Secondary Edits to the Final Model if Changes made in Final Design for CLOMR		8	40		
Proposed Conditions Hydraulic Model Updates Task Total		\$4,050	\$6,048	\$40,710	\$100	\$50,908
Subtotal Hours		18	29.5	354		
Subtotal Costs		\$4,050	\$6,048	\$40,710	\$100	\$50,908

*Tasks to be completed only if needed.

Assumptions

¹ FYRA will review the geometry files in the HEC-RAS model previously furnished by USACE and will request to review the HEC-RAS geometry files furnished for the physical flume modeling to complete the updates. If preliminary design drawings of the channel are available this information will also be considered.

² FYRA will notify the NRD/USACE if adjustments are found to be necessary prior to altering the profile

³ Assumes three alignment configurations are considered

Task Descriptions

4.13 Coordination and Analysis of the Flume Alternatives

USACE Request: *There is likely a need to an additional analysis of the flume alternatives within the NRD, 205 and City projects (after proposed physical modeling is completed)*

This task will include ongoing coordination involving the physical flume model. FYRA will assist with analysis of results from the flume and incorporate the results into the HEC-RAS model. An analysis of the interaction of the flume with other project elements will be completed to assist with selection of the preferred flume design.

4.14 Update Channel Cross Section between 33rd St and Cornhusker

USACE Request: *Update channel cross section between 33rd St and Cornhusker to reflect that flood benches will be on both the right and left bank of the channel (the CDM/Solv model is not consistent with what USACE intended)*

Update proposed conditions channel geometry and terrain layer to reflect proposed design conditions.

4.15 Confirm Channel Thalweg Profile is Correct and Adjust if Necessary

USACE Request: *Confirm channel thalweg profile is correct and adjust if necessary (CDM changed the USACE profile, not sure if that was supposed to happen)*

Confirm that the HEC-RAS geometry reflects proposed design conditions and adjust the profile if the profile is not correct. The profile will be assessed between Cornhusker and the pedestrian bridge upstream of 48th Street.

4.16 Implement Channel Alignment Alternatives between the Flume and 33rd

USACE Request: *Be prepared to implement channel alignment alternatives between the Flume and 33rd (three options being looked at), pending findings of RTSD and real estate constraints.*

Incorporate three potential channel straightening configurations with the HEC-RAS model and adjust stream length and bridge skew as appropriate. Determine hydraulic benefits upstream of the flume due to channel straightening.

4.17 Update Inflow Location of 33rd St Box Culvert

USACE Request: *Be prepared to update inflow location of culverts that enter channel near 33rd for large box culvert moved downstream of 33rd, pending final design of bridge*

Adjust the location of the 33rd box inflow hydrograph to the downstream side of the bridge and rerun project hydraulics.

4.18 Hydraulic analysis of Relocated 33rd St Box Culvert and Interior Ponding

USACE Request: *Hydraulic analysis of relocated 33rd st culvert and possible interior flooding due to tailwater surcharge. Provide USACE with existing conditions and with project conditions depth grids for all 8 frequencies of flooding in the neighborhood for input into USACE's economic analysis. Depth grids will be used to determine if there are induced damages.*

Determine gridded water surface elevations along the 33rd Street corridor south of DMR. Maximum inundation depths will be provided for all 8 frequencies for existing and proposed conditions with the box culvert under the 33rd and downstream of the 33rd.

4.19 Coordinate with City to Implement New Bridge Designs at 33rd St, 38th St and 48th Street

USACE Request: *Work with city to implement new bridge designs at 33rd St, 38th St and 48th Street. The 33rd St structure decision may require extra coordination due to RTSD involvement (neighborhood drainage, abutments, structure size)*

Support ongoing coordination for the RTSD project. Assess channel, flume and bridge improvements to identify hydraulic requirements are for each structure. This task will supplement additional efforts to determine structure sizes that satisfy project goals.

4.20 Determine if Huntington Bridge Needs to be Replaced or if Overbank Fill can be Placed to Prevent out of Bank Flows

USACE Request: *Determine if Huntington bridge needs to be replaced or if overbank fill can be placed to avoid out of bank flows.*

The updated proposed conditions hydraulics results at Huntington will be considered in the assessments completed in task 4.13 and 4.19. Alternatives in those assessments that require bridge replacement or overbank fill will be identified.

4.21 Secondary Edits to the Final Model if Changes made in Final Design for CLOMR

USACE Request: *Secondary edits to the final model if changes made in final design for CLOMR.*

Revisions made to project elements after submission of the modeling updates to USACE will be incorporated into the CLOMR model.