

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:	July 11, 2023
То:	Urban Subcommittee
From:	Mark Lindemann, District Engineer
Subject:	Urban Subcommittee Meeting Minutes – July 2023

The Urban Subcommittee met on July 11, 2023, at the NRD Office, at 5:00 pm. Subcommittee members participating included John Yoakum-committee chair, Gary Aldridge, Melissa Baker, Deborah Eagan, Larry Ruth, Susan Seacrest, Stacie Sinclair, and Ray Stevens. Others participating included Board Chair Dave Landis, NRD staff Paul Zillig, , Al Langdale, Mike Murren, Drew Ratkovec, and Mark Lindemann. Director Yoakum called the meeting to order at 5:00 pm. There were three (3) items the Subcommittee took action on and an update on two projects. A quorum was present for the meeting.

A. Consideration of Bids for the Lynn Creek Master Plan Stream Stability Project #9 – Near North 9th Street [ACTION] – Lindemann described the stream stability project is master plan project #9 for the Lynn Creek Watershed. The location is near North 9th and Nance Avenue, just 7 blocks west and 4 blocks south of the NRD office. This portion of Lynn Creek runs through the Parkview Apartments property and has undergone bank erosion and caused damage to a stormwater pipe outfall and irrigation lines. The apartment complex owners have been willing partners with the NRD on this project and have an agreement with the NRD for a temporary access easement during construction and also a permanent easement to maintain the channel in future. The NRD will also have a temporary easement in Roper Park with City Parks and Recreation for access and staging during construction. Intuition and Logic Engineering, Inc., who was involved in the original watershed master plan for Lynn Creek, developed the plans and specifications for the project. The advertisement for bids were posted in the Lincoln Journal Star on June 14<sup>th</sup>, 21<sup>st</sup>, and 28<sup>th</sup>, with the bid opening on July 6<sup>th</sup>, 2023, at 3:00 pm. Two bids received from contractors, with a low bid of \$240,960.00 from H.R. Bookstrom, Inc. The second bid from Yost Construction was \$318,190. Bids were reviewed by Mark Meyer at Intuition & Logic, who provided a bid recommendation memo noting that H.R. Bookstrom Construction, Inc. and its subcontractor have performed similar work and meets the qualifications for the project. Intuition & Logic has recommended the acceptance of the low bid of \$240,960.00 from Bookstrom Construction, Inc. Questions were asked if the project is budgeted for FY24 and possible reasons for the difference between the engineer's estimate and bids received. It was noted that the project is budgeted for FY24 and explained that inflation and increases in materials and construction costs and contractor availability continue to affect bid prices.

It was moved by Stevens, seconded by Baker, and unanimously approved by the Subcommittee to recommend that the Board of Directors approve the low bid of \$240,960.00 by H.R. Bookstrom Construction, Inc., for the Lynn Creek Master Plan Stream Stability Project #9.

**B.** Consideration of a Professional Services Agreement with Intuition & Logic Engineering, Inc. for Construction Management Services on Lynn Creek Master Plan Stream Stability Project #9 – Near North 9<sup>th</sup> Street [ACTION] – Lindemann noted that the stream stability project for Lynn Creek discussed in action item A will require construction management and observation services during construction. It was explained that in addition to typical construction methods (bank repair, rock armoring, and grade controls), installation of live stake planting and other vegetation are a critical component in the design for the project. The NRD has worked with Intuition and Logic Engineering, Inc. to provide a proposal for professional services, with a cost not to exceed \$37,740, to perform construction management and observation services through construction project completion. Questions were asked on the details of Intuition & Logic's scope that was provided in the proposal and their capabilities. It was noted that some of the generalized references in the scope refer to the more detailed specifications and that Intuition & Logic has had a very good track record with the NRD and City for stream stability projects.

It was moved by Seacrest, seconded by Stevens, and approved by the Subcommittee (7 voting "Yes", Aldridge "Not Voting") to recommend that the Board of Directors approve the Professional Services Agreement with Intuition & Logic Engineering, Inc., in an amount not to exceed \$37,740 for Construction Management and Observation Services for the Lynn Creek Master Plan Stream Stability Project #9, pending legal counsel review.

C. Consideration of a Contract Extension for Research Agreement #146033 with the University of Nebraska – Lincoln, Office of Sponsored Programs- Dead Man's Run Flume Model [ACTION] – Lindemann explained to the Directors that in July of 2022, the Board approved a Research Agreement with the University of Nebraska – Lincoln (UNL) to perform additional work on the flume model for the Deadmans Run Section 205 Flood Reduction Project (FRP). The U.S. Army Corps of Engineers (USACE) currently proposes constructing a flume beneath the two Railroad Bridges that cross Deadmans Run Channel west of 33<sup>rd</sup> Street. The existing bridges restrict flows during significant rain events and the flume helps to efficiently convey water flows through the bridges and avoid the backup of water upstream. The work by UNL involves modifying the model downstream of the flume to simulate different riprap sizes to control stream velocities and reduce scour potential. The results of analysis performed may reduce the current conservative riprap design sizing in the flume area and reduce project costs. Drone video footage from earlier work on the flume model was shared with the Directors to help explain the project. The Agreement with UNL expired June 30, 2023, and there have been delays in the ability perform the flume model work due to construction activities taking place in UNL's lab. Dr. Admiraal, the lead researcher, has asked for no-cost time extension to December 31, 2023, to complete the work. Directors asked questions on ownership and durability of the actual flume to be constructed for the Deadmans Run FRP. Lindemann noted that the NRD will take ownership and operate and maintain the project, including the flume, once construction is complete. He also noted that the design of the flume is very robust, consisting of concrete, steel, and pile foundations. Conversations with the Papio-Missouri River NRD, who own and operate two flumes constructed in the 1960's have required minimum maintenance. It was also noted that delays by UNL's work on the flume model will have no impact on the Deadmans Run FRP design and construction schedule.

It was moved by Stevens, seconded by Sinclair, and unanimously approved by the Subcommittee to recommend that the Board of Directors approve the no cost extension to Research Agreement #146033 with the University of Nebraska – Lincoln, Office of Sponsored Programs, pending legal counsel review.

#### Reports

#### Antelope Creek Bank Repair Project- 40th to Scott Avenue

Langdale provided an update of the Antelope Creek Bank Repair project status. Channel liner has been placed up to 39<sup>th</sup> Street and wall construction is about 70% complete. Because of recent rains, the water levels and flow rates of Antelope Creek have hindered the Contractor's ability to complete the three remaining concrete channel liner pours. Langdale has worked with the USACE to temporarily draw down Holmes Lake water levels about 1-1/2 feet. He explained that after the Corps drawdown is complete at the end of the week, Antelope Creek water levels decrease enough to allow the Contractor to finish the channel liner (pending any more significant rains). The Contractor remains on schedule and seeding is expected to be completed in September 2023.

#### Salt Creek Levee PL 84-99 Repair Project

Langdale briefed the subcommittee that the USACE had a bid opening this afternoon for the Salt Creek Levee PL 84-99 Bank Repair Project. This project will repair the left levee bank of Salt Creek near UNL's Soccer and Tennis complex and between Cornhusker Highway and 27<sup>th</sup> Street. These areas are locations from a 2019 PL 84-99 project where vegetation did not establish, and bank erosion has occurred. Langdale noted that the lowest bidder was Mount Farm Drainage, with a bid of \$392,886. USACE's estimate for construction was \$1,385,509. Construction is expected to start in September of 2023. Langdale noted that PL 84-99 projects are funded by the USACE.

Meeting adjourned at 5:46 pm.

cc: Dave Landis Steve Seglin Corey Wasserburger



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## Memorandum

Date:	July 10, 2023
То:	Urban Subcommittee
From:	Mark Lindemann, District Engineer
Subject:	Urban Subcommittee Background Information – June 2023

The Urban Subcommittee will be meeting on Tuesday, June 11, 2023, at the NRD Office, at 5:00 pm to review, discuss and take action on several items. The following summarizes the items to take action on at the meeting. Please find the attached background information on these items; the red letters shown on the upper right of the attachments help denote which item below they relate to.

A. Consideration of Bids for the Lynn Creek Master Plan Stream Stability Project #9 – Near North 9<sup>th</sup> Street [ACTION] – At the September 2022 Board Meeting, approval was given for a professional services agreement with Intuition & Logic Engineering, Inc., for the design, permitting, and plan development for the Lynn Creek Watershed Master Plan stream stability project #9. The master plan project is located on Lynn Creek near N. 9th Street and Nance Avenue. This section of the channel runs through the Parkview Apartments property has experienced some bank erosion that has caused damage to a pipe outfall and exposed property utilities. The NRD has a temporary easement with the Parkview Apartments ownership to allow for access and staging to complete the construction and a permanent easement for future operation and maintenance of the channel. The NRD also has a right of entry agreement with Lincoln Parks and Recreation for temporary access and staging on the Roper Park property to the north of the project. Construction is anticipated to start in the fall of 2023, and is to be completed by May 1, 2024. The construction project was advertised for bids on June 14th, 21st, and 28th, with a bid opening on July 6th, at 3:00 pm. The NRD received two (2) bids from contractors, with the low bid of \$240,960, from H.R. Bookstrom Construction, Inc. The second bid by Yost Construction, Inc. was \$318,190. Yost Construction has performed similar work for the NRD and meets the qualifications for the project. Mark Meyer, with Intuition & Logic, has reviewed the bids, Contractor and Subcontractor qualifications, and has recommended award of the Project to H.R. Bookstrom for the low bid of \$240,960. See the attached recommendation memo from Intuition & Logic and summary of the low bid.

# The Subcommittee will consider a motion to recommend that the Board of Directors approve the low bid of \$240,960, by H.R. Bookstrom Construction, Inc., for the Lynn Creek Master Plan Stream Stability Project <u>#9.</u>

**B.** Consideration of a Professional Services Agreement with Intuition & Logic Engineering, Inc. for Construction Management Services on Lynn Creek Master Plan Stream Stability Project #9 – Near North 9<sup>th</sup> Street [ACTION] – As discussed in Action Item A, the Lynn Creek Stream Stability Project (Watershed Master Plan Project #9) is expected to start construction in the fall of 2023. This project will require construction management and site observation services during active construction and vegetation establishment to ensure proper construction methods and the project is built to the plans and specifications. Intuition & Logic Engineering, Inc., the engineer of record for the project, is in the best position to perform these services and to interpret the plans and specifications. NRD staff has worked with Intuition and Logic to provide a scope and fee for professional services, at a cost not to exceed \$37,740. Attached is the professional services scope and fee from Intuition & Logic.

The Subcommittee will consider a motion to recommend that the Board of Directors approve the Professional Services Agreement with Intuition & Logic Engineering, Inc., for Construction Management and Observation Services for the Lynn Creek Master Plan Stream Stability Project #9, at an amount not to exceed \$37,740, pending legal counsel review.

C. Consideration of a Contract Extension for Research Agreement #146033 with the University of Nebraska – Lincoln, Office of Sponsored Programs- Dead Man's Run Flume Model [ACTION] – In July of 2022, the Board approved a Research Agreement with the University of Nebraska- Lincoln (UNL) to perform a second phase of analysis of the Deadmans Run Flume Model. The second phase includes modification of the existing model downstream of the flume to simulate different sizes of rip rap and record channel velocity and scour information. The results of this work will assist the U.S. Army Corps of Engineers (USACE) to better determine appropriate rip rap size for the flume at the two railroad bridges, with a potential for significant project cost savings. This research agreement expired June 30, 2023. Due to construction activities in UNL's laboratory where the flume model is located, there have been delays in completing the flume model work. Dr. Admiraal, the lead researcher, has asked for a modification to the contract to extend the end date to June 30, 2024 December 31, 2023. There are no cost changes with the contract extension. Currently, the NRD is awaiting the contract extension documents from UNL's Office of Special Projects. To avoid further delays, it is proposed to give authorization the General Manger to approve the contract modification (without a cost change) to extend the contract date to June 30, 2024, when the documents are received by the NRD. The extension request, photos of the flume model and the existing agreement are attached.

The Subcommittee will consider a motion to recommend that the Board of Directors approve the no cost extension to Research Agreement #146033 with the University of Nebraska – Lincoln, Office of Sponsored Programs, pending legal counsel review.

Enclosures;

cc: Dave Landis Steve Seglin Corey Wasserburger

Items A & B

Lynn Creek Master Plan Stream Stability Project #9 - N 9th Street, Lincoln NE



Document Page #6

Document: Q:\ArcGIS\_projects\Watershed\_Projects\Lynn\_Creek\LynnCr\_MPStreamStab\_Proj9\_propEasements.mxd - Map By: LPSNRD, sdr - February 2023

From:	Mark Meyer
To:	Mark Lindemann
Cc:	Tim Dean; Jenna StomBaugh; Al Langdale
Subject:	RE: Lynn Creek Bid Documents
Date:	Friday, July 7, 2023 5:03:14 PM
Attachments:	<u>image001.png</u> <u>HR Boodstrom Final Bid Tab.xlsx</u>

# **Caution:** This email originated from OUTSIDE the organization. Do not open suspicious links or attachments. Contact IT for assistance.

Good afternoon Mark,

I&L found HR Bookstrom to be qualified with acceptable planting sub consultants and recommend them for award at the final bid price of \$240,960 as follows:

Bid Item #	Description	Unit	Quantity		Unit Cost		Sub Total
						Å	
SP-9	Mobilization	LUMP	1	\$	85,000.00	\$	85,000.00
SP-10	Clearing and Grubbing	LUMP	1	\$	20,000.00	\$	20,000.00
SP-11	Storm Water Pollution Prevention Plan	LUMP	1	\$	10,000.00	\$	10,000.00
SP-12	Removal of Improvements	LUMP	1	\$	4,500.00	\$	4,500.00
SP-13	Protection and Restoration of Site	LUMP	1	\$	4,500.00	\$	4,500.00
SP-14	Excavation	CY	268	\$	30.00	\$	8,040.00
SP-16	Pavement Striping	LF	50	\$	10.00	\$	500.00
SP-17	D90 = 24" Rock Grade Control	CY	23	\$	300.00	\$	6,900.00
SP-18	D90 = 24" Rock Toe Protection	CY	85	\$	300.00	\$	25,500.00
SP-19	D90 = 12" Rock Slope with 6" Soil Cap	CY	96	\$	300.00	\$	28,800.00
SP-20	4" Thick Granular Backfill	CY	22	\$	160.00	\$	3,520.00
SP-21	Storm Drainage Inlet	EACH	1	\$	12,000.00	\$	12,000.00
SP-22	18" RCP Storm Pipe	LF	9	\$	110.00	\$	990.00
SP-23	Curb & Gutter Removal and Replacement	LF	33	\$	70.00	\$	2,310.00
SP-24	Concrete Sidewalk Removal and Replacement	SY	4	\$	200.00	\$	800.00
SP-25	Asphalt Pavement Restoration	SY	31	\$	150.00	\$	4,650.00
SP-26	Sodding	SY	308	\$	45.00	\$	13,860.00
SP-28	Mirafi 600X Geotextile	SY	209	\$	10.00	\$	2,090.00
SP-29	Construction Staking	LUMP	1	\$	5,000.00	\$	5,000.00
SP-30	As-Built Survey	LUMP	1	\$	2,000.00	\$	2,000.00
				Subtota	l Cost Opinion =	\$	240,960
					TOTAL =	\$	240,960

I&L reviewed the bid documents and coordinated with HR Bookstrom to verify experience, sub contractors and bid tabulations. Great Plains Nursery is the planting sub consultant and I have attached the final bid tab with the final bid quantities for your use in award.

If you have any questions or would like to discuss, please do not hesitate to contact me. Have a great weekend!

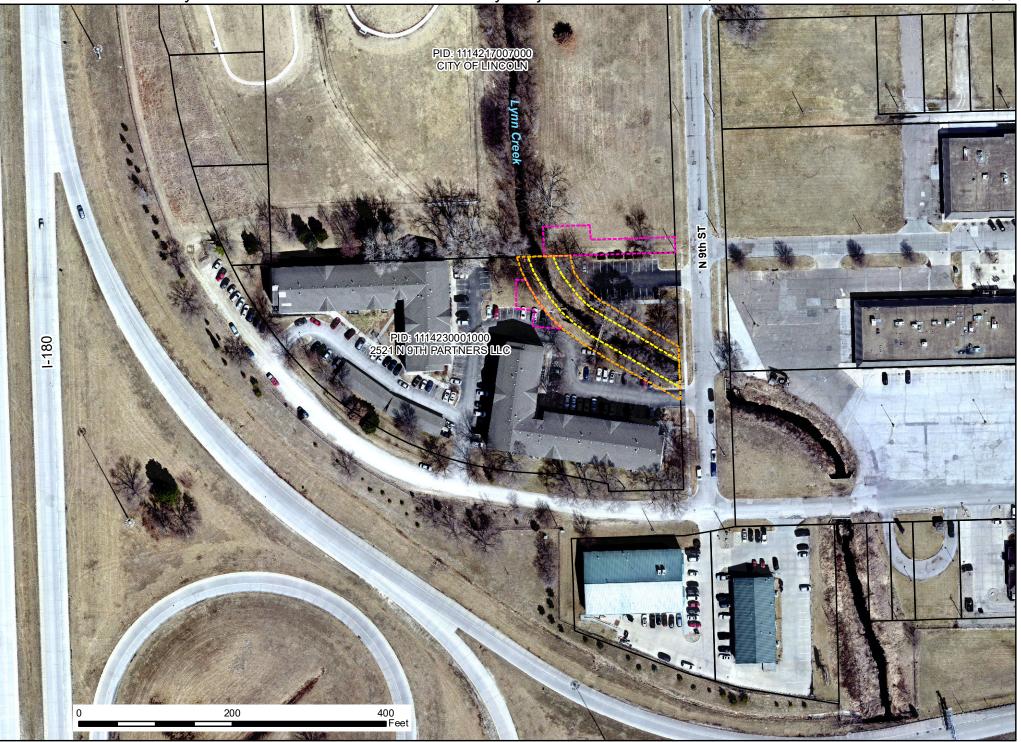
Mark Meyer, PE, CFM President Intuition & Logic Engineering, Inc.

H.R. Bookstrom

Bid Item #	Description	Unit	Quantity		Unit Cost	Sub Total
SP-9	Mobilization	LUMP	1	\$	85,000.00	\$ 85,000.00
SP-10	Clearing and Grubbing	LUMP	1	\$	20,000.00	\$ 20,000.00
SP-11	Storm Water Pollution Prevention Plan	LUMP	1	\$	10,000.00	\$ 10,000.00
SP-12	Removal of Improvements	LUMP	1	\$	4,500.00	\$ 4,500.00
SP-13	Protection and Restoration of Site	LUMP	1	\$	4,500.00	\$ 4,500.00
SP-14	Excavation	СҮ	268	\$	30.00	\$ 8,040.00
SP-16	Pavement Striping	LF	50	, \$	10.00	\$ 500.00
SP-17	D90 = 24" Rock Grade Control	СҮ	23	\$	300.00	\$ 6,900.00
SP-18	D90 = 24" Rock Toe Protection	CY	85	\$	300.00	\$ 25,500.00
SP-19	D90 = 12" Rock Slope with 6" Soil Cap	CY	96	\$	300.00	\$ 28,800.00
SP-20	4" Thick Granular Backfill	CY	22	\$	160.00	\$ 3,520.00
SP-21	Storm Drainage Inlet	EACH	1	\$	12,000.00	\$ 12,000.00
SP-22	18" RCP Storm Pipe	LF	9	\$	110.00	\$ 990.00
SP-23	Curb & Gutter Removal and Replacement	LF	33	\$	70.00	\$ 2,310.00
SP-24	Concrete Sidewalk Removal and Replacement	SY	4	\$	200.00	\$ 800.00
SP-25	Asphalt Pavement Restoration	SY	31	\$	150.00	\$ 4,650.00
SP-26	Sodding	SY	308	\$	45.00	\$ 13,860.00
SP-28	Mirafi 600X Geotextile	SY	209	\$	10.00	\$ 2,090.00
SP-29	Construction Staking	LUMP	1	\$	5,000.00	\$ 5,000.00
SP-30	As-Built Survey	LUMP	1	\$	2,000.00	\$ 2,000.00
			Su	btota	al Cost Opinion =	\$ 240,960
					TOTAL =	\$ 240,960

Items A & B

## Lynn Creek Master Plan Stream Stability Project #9 - N 9th Street, Lincoln NE



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## Lower Platte South Natural Resources District Construction Services – Lynn Creek at North 9<sup>th</sup> Channel Stabilization Scope of Services

The purpose of the following scope of services is to provide construction services as the Owners Representative to The Lower Platte South Natural Resources District for Lynn Creek at North 9<sup>th</sup> Channel Stabilization construction.

#### 1.0 Pre-construction meeting

I&L will attend a pre-construction meeting with the selected contractor to review the plans and construction process. I&L will prepare a draft meeting agenda and submit it to the Lower Platte South Natural Resources District (LPSNRD) in electronic format via email.

- 2.0 On-Site Construction Observation I&L will be on site an average of two (2) days per week during eight (6) weeks of active construction. I&L will spot check slopes, layout geometry, excavation depths, planting and other activities against the project construction plans to check that the contractor is achieving the design lines and grades.
- 3.0 Construction Observation Memorandums I&L will summarize each construction observation site visit in a memorandum. The memo will contain observations, photos, conversation summaries and action items. The memos will be in PDF format and will be emailed to the LPSNRD and the Contractor within one calendar week of the observation date. I&L will track how each construction issue is addressed.
- 4.0 Coordination with Contractor I&L will coordinate with the contractor to discuss observations and contractor requests for information. All coordination will be documented via summary emailed submitted to the LPSNRD and contractor.
- 5.0 RFI's, Shop Drawings Review, and Change Orders
  I&L will review and respond to Request for Information (RFI) and shop drawing submittals, and prepare change orders as requested by the LPSNRD.
- 6.0 Invoice Review and Recommendations
   I&L will receive contractor invoices from the LPSNRD. I&L will review invoice amounts and quantities and compare them to I&L observed progress and associated observed percent complete. I&L will recommend modifications if the invoice amounts are disproportionate to observed progress or quantities. Invoice review comments and recommendations will be submitted to the LPSNRD via email.

  7.0 Final Walk Through and Punch List
- The Contractor will request the final walk through and punch list once they have reached substantial completion. Substantial completion means all items are constructed and restoration is complete. Upon request by the LPSNRD, I&L will schedule the final walk through with the LPSNRD and Contractor. During the final walk through, I&L will compile a punch list of items that were identified and discussed during the walk through. The punch list will be in PDF format and emailed to the LPSNRD and Contractor.

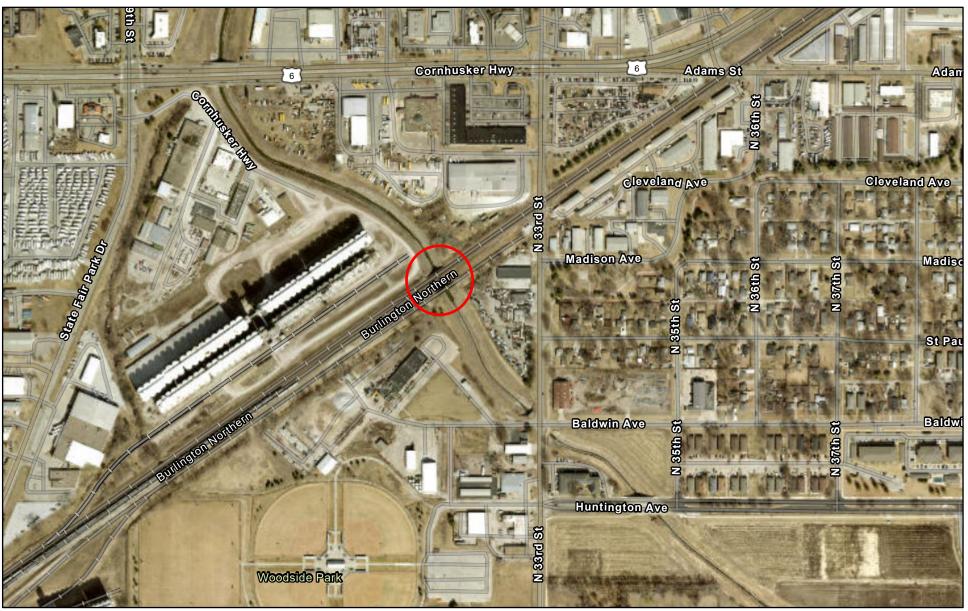
ower P	ower Platte South Natural Resources District - Lynn Creek at 9th Street Construction Services											
NTU	DI DI DO DI DO DI	Principal	Engineer El	Schemmer PM	Schemmer Senior Proj Rep	Schemmer Proj Rep	Schemmer Admin	Subtotal Hours	Subtotal Personnel Cost	Direct Expenses	Sub Consultant Expenses	Subtotal
1	Personnel Billing Rate	225.00	110.00	180.00	155.00	110.00	75.00					
I&I Conc	struction Services											
IQL COILS	struction services							-	\$ -			\$-
	Pre-Construction Meeting	2	4					6.00	\$ 890.00			\$ 890.
	Observation Memos (one hour per visit)	4	16					20.00	\$ 2,660.00			\$ 2,660.
	Coordination with Contractor	8	4					12.00	\$ 2,240.00			\$ 2,240.
	RFIs, Shop Drawings, Change Orders	4	8					12.00	\$ 1,780.00			\$ 1,780.
	nvoice Review and Recommendations	6	12					18.00	\$ 2,670.00			\$ 2,670.
N	Mid Construction Site Visit							-	\$-			\$-
	Plant Survival and Punch List Site Visit (combine site visit with SSC6)	2	4					6.00	\$ 890.00			\$ 890.
								-	\$-			\$-
								-	\$ -			\$ -
								-	\$ -	-		\$ -
	Subtotal =	26	48	0	0	0	0	74.00	\$ 11,130.00	Ş -	\$ -	\$ 11,130.
Cabanana	an Construction Convince											
Schemm	er Construction Services							-	\$-			\$ -
	Project Management			9				9.00	Ş -		\$ 1,620.00	\$ 1,620.
	Project Setup			5		4	1	5.00			\$ 515.00	\$ 1,020.
	Preconstruction Meeting				4	4	-	8.00			\$ 1,060.00	\$ 1,060.
	Construction Inspection					-		-			\$ -	\$ -
	Check Lines and Grades				4	72		76.00			\$ 8,540.00	
	Check Materials				4	38		42.00			\$ 4,800.00	\$ 4,800
	Review Progress and Schedule				1	10		11.00			\$ 1,255.00	\$ 1,255.
	SWPPP Inspections				2	8		10.00			\$ 1,190.00	\$ 1,190.
	Construction Observation Memorandums				5	24	1	30.00			\$ 3,490.00	
	Invoice Review				2	6	1	9.00			\$ 1,045.00	
	Final Walk Through and Punch List				8	8	1	17.00	-		\$ 2,195.00	\$ 2,195.
	Schemmer Mileage							-	\$ -		\$ 900.00	\$ 900.
						4.5.5		-	\$ -			\$ -
	Subtotal =	0	0	9	30	174	4	217.00	\$ -	\$-	\$ 26,610.00	\$ 26,610.
	Subtotal Hours	26.00	48.00	9.00	30.00	174.00	4.00	291.00	\$ 11,130.00	ć	\$ 26,610.00	\$ 37,740.
	Subtotal Personnel Cost	\$5,850	48.00 \$5,280	9.00 \$1,620	\$4,650	\$19,140	\$300	291.00 CHECK	\$ 36,840.00	ş -	\$ 20,010.00	ə 57,740.
		<i>+-</i> ,000	<i>+1,200</i>	<i>+</i> <u>-</u> ,0 <u>2</u> 0	÷ .,000	+-5,240	çõõ		+ 00,010.00		TOTAL =	\$ 37,740.0

Intuition & Logic Engineering, Inc. • 16253 Swingley Ridge Road • Chesterfield, MO 63017 • 636-777-3000

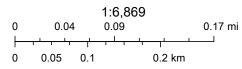
## Deadmans Run 205 Project- Flume







7/6/2023



Esri Community Maps Contributors, City of Lincoln/Lancaster County, Nebraska Game & Parks Commission, © OpenStreetMap, Microsoft, Esri,



July 10, 2023

Paul Zillig, General Manager Lower Platte South NRD 3125 Portia St. Lincoln, NE 68521 pzillig@lpsnrd.org

Re: #146033 - Railroad Bridge Flume Scour Model

Dear Mr. Zillig:

The University of Nebraska Lincoln requests a no cost extension for the above referenced project under the direction of Dr. David Admiraal until December 31, 2023.

Dr. Admiraal has been unable to work in the lab for many months due to the construction being done. The construction has caused many delays and interruptions. UNL therefore is requesting an extension of the award timeline with no increase of funding. During this extension period, UNL PI will focus on goals towards timely completion of this project.

If you have any questions regarding this request, Dr. Admiraal can be reached at (402) 472-8568 or <u>dadmiraal2@unl.edu</u>. Thank you for considering this request. We look forward to making continued progress with the project.

Sincerely,

Trudy Nienaber Digitally signed by Trudy Nienaber Date: 2023.07.10 08:07:28 -05'00'

Trudy Nienaber, Project Specialist UNL Office of Sponsored Programs <u>tnienaber2@unl.edu</u>

cc: David Admiraal project file





Document Page #15



#### UNIVERSTIY OF NEBRASKA-LINCOLN OFFICE OF SPONSORED PROGRAMS RESEARCH AGREEMENT #146033 DEADMAN'S RUN RAILROAD BRIDGE FLUME SCOUR MODEL

**RESEARCH AGREEMENT** (the "Agreement") between the **Board of Regents of the University of Nebraska on behalf of the University of Nebraska-Lincoln**, a non-profit, public educational institution of the State of Nebraska, hereinafter referred to as "UNL", and **Lower Platte South Natural Resource District**, hereinafter referred to as the "Sponsor". Party shall mean the Sponsor or UNL as the context dictates, and when used in the plural, shall mean the Sponsor and UNL.

**WHEREAS,** the research program contemplated by this Agreement is of mutual interest and benefit to UNL and to the Sponsor, and will further the instructional and research objectives of UNL in a manner consistent with its status as a non-profit, tax-exempt, educational institution.

NOW, THEREFORE, the Parties hereto agree as follows:

#### 1 <u>RESEARCH</u>

- 1.1 **STATEMENT OF WORK.** UNL agrees to use reasonable efforts to perform the research program as described in Attachment A (the "Research") which is incorporated and made part of this Agreement.
- 1.2 **PRINCIPAL INVESTIGATOR**. The Research will be supervised by Dr. David Admiraal the "Principal Investigator". If, for any reason, Dr. Admiraal is unable to continue to serve as Principal Investigator and a successor acceptable to both UNL and the Sponsor is not available, this Agreement shall be terminated as provided in Article 3.2.
- 1.3 **EXPENDABLES AND EQUIPMENT.** UNL owns all expendables and equipment purchased or fabricated to perform the Research.

#### 2 FINANCIAL

2.1 **DESIGNATION.** Sponsor will pay UNL up to a Cost of \$87,232.00, for the Research performed under this Agreement in accordance with Attachment B per Article 2.2 below. For the purposes of this Agreement, "Cost" is defined as all direct and indirect costs incurred by UNL in conducting the Research.

The parties estimate that the Cost is sufficient to support the Research. UNL may submit to Sponsor a revised budget requesting additional funds if Sponsor requests a change in the Research scope of work. Sponsor will not be liable for any payment in excess of Cost except as per Sponsor's written agreement. UNL has the authority to re-budget costs at the discretion of the Principal Investigator, as long as the re-budgeting is consistent with the goals of the Research.

2.2 **PAYMENT.** A payment equal to twenty-five percent (25%) of the Cost will be made upon signing. Thereafter, UNL shall submit reimbursement requests no less often than quarterly and no more often than monthly. Payment(s) shall be made to UNL by the Sponsor in U.S. dollars. Checks shall be made payable to the University of Nebraska-Lincoln (ID #47-0049123).

Checks shall be mailed to:	University of Nebraska-Lincoln Sponsored Programs
	151 Prem S. Paul Research Center
	2200 Vine Street
	PO Box 830861
	Lincoln, NE 68583-0861

For identification purposes, each payment shall include the Research Agreement number, title of the Research Project and the name of the Principal Investigator.

UNL will invoice the Sponsor for costs incurred, and the Sponsor will pay any undisputed invoice within thirty (30) days of receipt of that invoice by the Sponsor. Any amount not received by the due date so noted in the invoice will be subject to interest on the unpaid principal balance at the rate specified in Neb. Rev. Stat. § 45-104, as such rate may from time to time be adjusted.

The invoice may be sent to the sponsor by the	With copy to (optional):
following method(s):	
EMAIL: mlindemann@lpsnrd.org	EMAIL: pzillig@lpsnrd.org

#### UNL's institutional preference for sending invoices is via electronic mail

2.3 **TAXES.** UNL is a non-profit, public educational institution. Sponsor agrees that if this Agreement is subject to taxation by any governmental authority, Sponsor will pay these taxes in full. UNL will have no liability for payment of these taxes.

#### 3 TERM AND TERMINATION

- 3.1 **PERIOD OF PERFORMANCE.** The Research shall be conducted during the period August 1, 2022 (the "Effective Date") through June 30, 2023 (the "Completion Date"). The Completion Date may be modified or extended only by mutual written agreement of the Parties.
- 3.2 **TERMINATION.** Performance under this Agreement may be terminated by either Party upon ninety (90) days' prior written notice to the other Party. Upon termination by either Party, UNL will be reimbursed as specified in Article 2.2 for all costs and non-cancelable commitments incurred in the performance of the Research up to and including the effective date of termination, such reimbursement not to exceed the total estimated cost specified in Article 2.2. If any UNL student is supported under this Agreement, Sponsor will remain responsible for the full cost of the student support through the academic semester if this Agreement is terminated.

In the event that either Party hereto shall commit any breach of or default in any of the terms or conditions of the Agreement, and also shall fail to remedy such default or breach within thirty (30) days after receipt of written notice thereof from the other party hereto, the party giving notice may, at its option and in addition to any other remedies which it may have at law or in equity,

terminate this Agreement by sending notice of termination in writing to the other party to such effect. Such termination shall be effective as of the date of receipt of such notice.

Termination of this Agreement by either party for any reason shall not affect the rights and obligations of the parties accrued prior to the effective date of the termination of this Agreement. No termination of the Agreement, however effectuated, shall release the parties from their rights and obligations under Articles 1.3, 2.1-2.3, 3.2, 4, 5, 6, 7.1-7.2 and 7.6.

#### 4 **CONFIDENTIALITY**

4.1 **CONFIDENTIAL INFORMATION.** The University and the Sponsor agree that any "Confidential Information" as defined herein, shall be handled according to the following terms:

"Confidential Information" hereunder shall mean any materials, written information, and data marked "Confidential" by either party or non-written information and data disclosed by either party that is identified at the time of disclosure to the receiving party as confidential and is reduced to writing and transmitted to the receiving party within thirty (30) days of such non-written disclosure. Each party agrees to use the same degree of care it uses to protect its own confidential information and, to the extent permitted by law, to maintain as confidential for a period of three (3) years the Confidential Information. The obligations of confidentiality set forth herein shall not apply to any Information which is:

- A. possessed by the receiving party, other than through prior disclosure by the disclosing party, as evidenced by the receiving party's written records and which was not acquired directly or indirectly from the disclosing party;
- B. in the public knowledge at the time of disclosure;
- C. published or available to the general public after disclosure, otherwise than through a breach of this Agreement;
- D. obtained by the receiving party from a third party with a valid right to disclose such Information, provided that said third party is not under a confidentiality obligation to the disclosing party or any other third party;
- E. independently developed by the receiving party without reference to the disclosing party's Confidential Information as shown by the receiving party's written records; or
- F. required to be disclosed by legal process, or subject to the obligations of the University pursuant to the provisions of the Nebraska Public Records Act, Neb. Rev. Stat. §84-712 et. seq.
- 4.2 **USE OF NAMES**. Neither Party shall use the other Party's name or any variation, adaptation, or abbreviation thereof or any trademark owned by the other Party, in any publication, press release, website, promotional material or other form of publicity without the prior written approval of such Party. This prohibition shall not include internal documents available to the public that identify the existence of this Agreement.

Sponsor shall not use the name of any of UNL's trustees, officers, faculty members, students, employees, or agents and UNL shall not use the name of any of Sponsor's officers, agents or employees, in any publication, press release, website, promotional material or other form of publicity without the prior written approval of such Party. This prohibition shall not include internal documents available to the public that identify the existence of this Agreement.

#### 5 PUBLICATION

5.1 **PUBLICATIONS.** UNL will be free to publish the results of the Research in whole or in part, provided that UNL complies with this Article 5. UNL agrees to provide Sponsor with a copy of each manuscript, presentation, poster, and/or any other form of public disclosure intended to be presented visually or audibly or in writing to any third party or organization disclosing the Research ("Manuscript") at least thirty (30) days prior to its submission, presentation, and/or disclosure to any third party or organization ("Publication"). Within thirty (30) days of receipt of the Manuscript, Sponsor may request delay in Publication for a period not to exceed an additional sixty (60) days (or some longer period of time as agreed to by the Parties) from the date Sponsor gives notice to UNL that patentable subject matter is included in such Manuscript to allow for the filing of appropriate intellectual property protection. If Sponsor notifies UNL of subject matter in any such Manuscript that should be protected, UNL agrees to coordinate with Sponsor the disclosure, drafting and filing such intellectual property protection prior to Publication of the Manuscript as provided in Article 6.3 below within the time period referenced herein. If Sponsor does not make a written request for such delay within thirty (30) days after receipt of a Manuscript, UNL shall be free to publish the Manuscript at any time after the end of the thirty (30) days. UNL agree to remove any Sponsor Confidential Information (as defined in Article 4.1, or in Attachment C, as applicable) that is identified by Sponsor as Confidential Information prior to publication. Pursuant to the policies of UNL and traditional academic practice, the author(s) of such publications shall retain ownership of all copyright interest thereto.

#### 6 INTELLECTUAL PROPERTY

6.1 **SPONSOR INTELLECTUAL PROPERTY**. Title to any invention made solely by the Sponsor's personnel without the use of UNL administered funds or facilities ("Sponsor Invention") shall remain with the Sponsor. Title to and the right to determine the disposition of any copyrights or copyrightable material first produced or composed in the performance of the Research solely by employees of the Sponsor without the use of UNL administered funds or facilities ("Sponsor Copyright") shall remain with the Sponsor. Neither Sponsor Inventions nor Sponsor Copyrights shall be subject to the terms and conditions of this Agreement.

#### 6.2 JOINT INTELLECTUAL PROPERTY.

6.2.1 <u>TITLE TO JOINT INVENTIONS</u>. Inventions made jointly by employees and/or students of UNL and employees of the Sponsor in the performance of the Research or inventions made solely by employees of the Sponsor with use of UNL administered funds or facilities ("Joint Inventions") shall be jointly owned by both Parties. The Sponsor shall be notified of any Joint Invention promptly after an invention disclosure is received by UNL. UNL shall have

the first right to file a patent application on a Joint Invention in the names of both Parties. All expenses incurred in obtaining and maintaining any patent on such Joint Invention shall be equally shared except that if one Party declines to share in such expenses, the other Party may take over the prosecution and maintenance thereof, at its own expense, provided that title to the patent remains in the names of both Parties. It is agreed that any disputes in inventorship will be determined by a patent attorney mutually agreed upon by Sponsor and UNL.

- 6.2.2 <u>LICENSING OPTIONS</u>. Each Party shall have the independent, unrestricted right to license to third parties any such Joint Invention without accounting to the other Party, except that the Sponsor shall be entitled to elect an exclusive license to UNL's interest in a Joint Invention as provided under Article 6.3.2.2 below.
- 6.2.3 <u>JOINTLY DEVELOPED COPYRIGHTABLE MATERIALS</u>. Copyrightable materials, including computer software (but not including scholarly publications pursuant to Article 5.1), developed jointly in the performance of the Research by employees and/or students of UNL and employees of the Sponsor, or copyrightable materials, including software, developed solely by employees of the Sponsor with use of UNL administered funds or facilities, shall be jointly owned by both Parties, who shall each have the independent, unrestricted right to dispose of such copyrightable materials as they deem appropriate, without any obligation of accounting to the other Party.

#### 6.3 UNL INTELLECTUAL PROPERTY.

- 6.3.1 <u>TITLE TO INVENTIONS</u>. Title to any invention conceived or first reduced to practice solely by employees and/or students of UNL in the performance of the Research ("UNL Invention") shall remain with UNL. The Sponsor shall be notified of any UNL Invention promptly after a disclosure is received by UNL. UNL (i) may file a patent application at its own discretion or (ii) shall do so at the request of the Sponsor and at the Sponsor's expense.
- 6.3.2 <u>LICENSING OPTIONS</u>. In the event that a patent application on a UNL Invention is filed by UNL, for each UNL Invention, UNL hereby grants the Sponsor a non-exclusive, non-transferable, royalty-free license for internal research purposes. The Sponsor shall further be entitled to elect one of the following license options by notice in writing to UNL within four (4) months after UNL's notification to the Sponsor that a patent application has been filed:
  - 6.3.2.1 a non-exclusive, non-transferable, world-wide, royalty-free license without the right to sublicense (in a designated field of use, where appropriate) to the Sponsor to make, have made, use, lease, sell and import products embodying or produced through the use of such invention, provided that the Sponsor agrees to (i) demonstrate reasonable efforts to commercialize the technology in the public interest and (ii) pay all patent prosecution and maintenance costs in all countries, including the United States, in which the Sponsor is granted a non-exclusive license right under this Article; or
  - 6.3.2.2 a royalty-bearing, limited-term, exclusive license (subject to third party rights, if any) to the Sponsor, including the right to sublicense, in the United States and/or any

foreign country elected by the Sponsor (subject to Article 6.3.3 below), to make, have made, use, lease, sell and import (in a designated field of use, where appropriate) products embodying or produced through the use of such invention, provided that the Sponsor agrees to reimburse UNL for the costs of patent prosecution and maintenance in the United States and any elected foreign country and further agrees that any products produced pursuant to this license, and that are sold in the United States, shall be substantially manufactured in the United States. This license option is subject to UNL's concurrence and the negotiation of commercially reasonable terms and conditions within three (3) months after selection of this option.

- 6.3.3 <u>FOREIGN FILING ELECTION</u>. If the Sponsor elects a license under Article 6.3.2.1 or Article 6.3.2.2, the Sponsor shall notify UNL of those foreign countries in which it desires a license in sufficient time for UNL to satisfy the patent law requirements of those countries. The Sponsor will reimburse UNL for the out-of-pocket costs, including patent filing, prosecution and maintenance fees, related to those foreign filings.
- 6.3.4 <u>CONFIDENTIALITY OF INVENTION DISCLOSURES</u>. The Sponsor shall retain all invention disclosures submitted to the Sponsor by UNL in confidence and use its best efforts to prevent their disclosure to third parties. The Sponsor shall be relieved of this obligation only when this information becomes publicly available through no fault of the Sponsor.
- 6.3.5 <u>COPYRIGHT OWNERSHIP AND LICENSES</u>. Excluding scholarly publications dealt with pursuant to Article 5.1 above, Title to and the right to determine the disposition of any other copyrights or copyrightable material first produced or composed in the performance of the Research solely by employees and/or students of UNL shall remain with UNL.
- 6.3.6 For any copyrights or copyrightable material other than computer software and its documentation and/or informational databases required to be delivered in accordance with Attachment A, the Sponsor is hereby granted an irrevocable, royalty-free, non-transferable, non-exclusive right and license to use, reproduce, make derivative works, display, distribute and perform all such copyrightable materials for the Sponsor's internal purposes.
- 6.3.7 For a period of four (4) months following UNL's notification or delivery to the Sponsor of computer software and its documentation and/or informational databases required to be delivered to the Sponsor in accordance with Attachment A, the Sponsor shall be entitled to elect a royalty-free, non-transferable, non-exclusive right and license to use, reproduce, make derivative works, display, and distribute to end users, such computer software and its documentation and/or databases for internal and/or commercial purposes. If the use of the software would infringe claims of a patent application filed pursuant to Article 6.3.1 above, then the Sponsor will need to exercise its license rights in such patent as set forth in Article 6.3.2 above. If such computer software is a derivative of UNL software existing prior to the start of the Research, then such license may not be royalty-free.
- 6.3.8 <u>RIGHTS IN TRP</u>. In the event that UNL elects to establish property rights other than patents to any tangible research property (TRP), including but not limited to biological materials,

developed during the course of the Research, UNL and the Sponsor will determine the disposition of rights to such property by separate agreement. UNL will, at a minimum, reserve the right to use and distribute TRP for non-commercial research purposes.

- 6.3.9 <u>LICENSE EFFECTIVE DATE</u>. All licenses elected by the Sponsor pursuant to Sections 6.3.2, 6.3.5 and 6.3.8 of this Article 6.3 become effective as of the date the Parties sign a subsequent license agreement.
- 6.3.10 <u>BACKGROUND INTELLECTUAL PROPERTY</u>. UNL shall retain full right, title, and interest in and to all UNL intellectual property in existence prior to the execution of (and not arising out of) this Agreement.
- 6.3.11 <u>NUTECH VENTURES</u>. UNL has entered into an agreement with NUtech Ventures ("NUtech"), a 501(c)(3) supporting organization of UNL, whereby upon assignment from UNL NUtech has the exclusive worldwide rights to market and commercialize any UNL patent rights, copyrights, inventions or discoveries and technology derived therefrom ("UNL IP"). NUtech is also responsible for obtaining patent or copyright protection, or otherwise protecting or disposing of UNL IP as it sees fit. UNL may assign its interest to UNL IP under this Agreement to NUtech without further approval from Sponsor.

#### 7 GENERAL PROVISIONS

7.1 **REPRESENTATIONS AND WARRANTIES**. UNL MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, CONCERNING THE RESEARCH OR ANY INTELLECTUAL PROPERTY RIGHTS, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT, VALIDITY OF ANY INTELLECTUAL PROPERTY RIGHTS OR CLAIMS, WHETHER ISSUED OR PENDING, AND THE ABSENCE OF LATENT OR OTHER DEFECTS, WHETHER OR NOT DISCOVERABLE. SPECIFICALLY, AND NOT TO LIMIT THE FOREGOING, UNL MAKES NO WARRANTY OR REPRESENTATION (I) REGARDING THE VALIDITY OR SCOPE OF THE RESEARCH OR ANY INTELLECTUAL PROPERTY RIGHTS OPTIONED OR GRANTED HEREUNDER AND (II) THAT THE EXPLOITATION OF THE RESEARCH OR ANY INTELLECTUAL PROPERTY RIGHTS WILL NOT INFRINGE ANY PATENTS OR OTHER INTELLECTUAL PROPERTY RIGHTS OF UNL OR OF A THIRD PARTY.

IN NO EVENT SHALL EITHER PARTY, ITS TRUSTEES, DIRECTORS, OFFICERS, EMPLOYEES, STUDENTS AND AFFILIATES, BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND, INCLUDING ECONOMIC DAMAGES OR INJURY TO PERSONS OR PROPERTY AND LOST PROFITS, REGARDLESS OF WHETHER THE PARTY WAS ADVISED, HAD OTHER REASON TO KNOW OR IN FACT KNEW OF THE POSSIBILITY OF THE FOREGOING. ARTICLE 6.3 SHALL SURVIVE THE EXPIRATION OR ANY EARLIER TERMINATION OF THIS AGREEMENT.

7.2 **LIABILITY.** Each Party agrees that it will be responsible for its own acts and the results thereof and shall not be responsible for the acts of the other party and the results thereof. Each Party therefore agrees that it will assume all risk and liability to itself, its agents or employees for any injury to persons or property resulting in any manner from the conduct of its own operations and the operations of its agents or employees under this Agreement, and for any loss, cost, or damage caused thereby during the performance of this Agreement. Nothing contained in this

clause or other clauses of this Agreement shall be construed to be a waiver of any sovereign or governmental immunity rights or defenses by either of the Parties.

7.3 **NOTICES.** Any notices required to be given or which shall be given under this Agreement shall be in writing and be addressed to the Parties as shown below. Notices shall be deemed to have been given or made as of the date received.

If to UNL:	University of Nebraska - Lincoln Director, OSP 151 Prem S. Paul Research Center 2200 Vine Street PO Box 830861 Lincoln, NE 68583-0861 unlosp@unl.edu
With copy to:	Dr. David Admiraal University of Nebraska-Lincoln W150F Nebraska Hall 900 N 16th Street Lincoln, NE 68588-0531 dadmiraal@unl.edu
If to Sponsor:	Lower Platte South NRD 3125 Portia St Lincoln, NE 68521
With copy to:	Paul Zillig General Manager pzillig@lpsnrd.org

- 7.4 **ASSIGNMENT.** Neither party shall assign this Agreement to another without the prior written consent of the other party hereto. Any other purported assignment shall be voidable.
- 7.5 **INDEPENDENT CONTRACTOR**. In the performance of all activities hereunder, (i) UNL shall be deemed to be and shall be an independent contractor, and as such, shall not be entitled to any benefits applicable to employees of the Sponsor, and (ii) neither party is authorized or empowered to act as agent for the other for any purpose and shall not on behalf of the other enter into any contract, warranty, or representation as to any matter. Neither party shall be bound by the acts or conduct of the other.
- 7.6 GOVERNING LAW. This Agreement shall be governed by the laws of the State of Nebraska.
- 7.7 **FORCE MAJEURE.** 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, pandemic, strikes,

labor disturbance, transportation difficulties, labor shortage or any cause beyond its reasonable control.

- 7.8 **EXPORT CONTROLS.** UNL is subject to United States laws and regulations controlling the export of goods, software and technology including technical data, laboratory prototypes and other commodities. UNL's policy is to comply with all applicable laws and regulations including the Arms Export Control Act, the International Traffic in Arms Regulations ("ITAR"), the Export Administration Regulations ("EAR") and the laws and regulations implemented by the Office of Foreign Assets Control, U.S. Department of the Treasury ("OFAC"). Diversion contrary to U.S. law is prohibited. The transfer of certain technical data, services and commodities may require a license from the cognizant agency of the United States Government and/or written assurances by the Sponsor that the Sponsor will not re-export or retransfer the data or commodities, other than prohibited information, to certain foreign countries without prior approval of the cognizant U.S. government agency. While UNL agrees to cooperate in securing any license which the cognizant agency deems necessary in connection with this Agreement, UNL cannot guarantee that such licenses will be granted. The Sponsor agrees to obtain permission from the U.S. government to re-transfer or re-export for any goods, software and technology that requires such authorization and will not allow any U.S.-origin goods, software or technology to be used for any purposes prohibited by United States law, including, without limitation, support for terrorism or for the development, design, manufacture or production of nuclear, chemical or biological weapons of mass destruction.
- 7.9 ENTIRE AGREEMENT. Unless otherwise specified, this Agreement and its Attachments embody the entire understanding between UNL and the Sponsor for the Research, and any prior or contemporaneous representations, either oral or written, are hereby superseded. No amendments or changes to this Agreement, including without limitation; changes in the statement of work, period of performance or total estimated cost, 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.
- 7.10 **COUNTERPARTS.** This Agreement and any amendment hereto may be executed in counterparts and all such counterparts taken together shall be deemed to constitute one and the same instrument. If this Agreement is executed in counterparts, no signatory hereto will be bound until all the Parties named below have duly executed a counterpart of this Agreement.
- 7.11 **COMPLIANCE WITH CIVIL RIGHTS LAWS AND EQUAL OPPORTUNITY EMPLOYMENT.** Sponsor shall comply with all applicable local, State and Federal statutes and regulations regarding civil rights laws and equal opportunity employment. Neither Sponsor nor any 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 his or her race, color, religion, sex, disability or national origin.
- 7.12 **ELECTRONIC SIGNATURES.** Each party agrees that the electronic signatures, whether digital or encrypted, of the parties included in this Agreement are intended to authenticate this writing and to have the same force and effect as manual signatures. Delivery of a copy of this Agreement

or any other document contemplated hereby bearing an original or electronic signature by facsimile transmission (whether directly from one facsimile device to another by means of a dialup connection or whether mediated by the worldwide web), by electronic mail in "portable document format" (".pdf") form, or by any other electronic means intended to preserve the original graphic and pictorial appearance of a document, will have the same effect as physical delivery of the paper document bearing an original or electronic signature. The parties further waive any right to challenge the admissibility or authenticity of this Agreement in a court of law based solely on the absence of an original signature.

**IN WITNESS WHEREOF**, the Sponsor and UNL, intending to be legally bound, have executed this Agreement as of the Effective Date by their respective duly authorized representatives.

# LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT

#### BOARD OF REGENTS OF THE UNIVERSITY OF NEBRASKA ON BEHALF OF THE UNIVERSITY OF NEBRASKA-LINCOLN

( JBZI-

By:			
Dy.			

Name: David B. Doty

Date: \_\_\_\_\_

Title: Director, Office of Sponsored Programs University of Nebraska-Lincoln 07/22/22 | 14:11 CDT

07/22/22 | 12:27 PDT Date: \_\_\_\_\_

And D Folger

Name: Paul Zillig

Title: General Manager

By:

#### Principal Investigator's Acknowledgement:

I have read this Agreement and agree to perform my obligations as Principal Investigator under this Agreement. I will inform students and other participants performing research services of the terms and conditions of this Agreement.

Signature: \_\_\_\_\_

Name: Dr. David Admiraal

07/22/22 | 12:52 CDT Date: \_\_\_\_\_