

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

Memorandum

Date:

December 8, 2022

To:

Board of Directors

From:

Mike Murren Projects Coordinator MM

Subject:

Water Resources Subcommittee meeting minutes

The Water Resources Subcommittee met on Wednesday December 7, 2022, at 5:30 pm. Members present included Susan Seacrest, Bob Andersen, Larry Ruth, Christine Lamberty, Ken Vogel, Bruce Johnson, Chelsea Johnson, and Gary Hellerich. Others present were Dick Ehrman, Paul Zillig, Mike Murren, and Craig Matalka, all with the LPSNRD. Also present was legal Counsel Corey Wasserburger. Others present were Mike Sotak and Doug Hollie. There were three items the Subcommittee took action on and four reports. The meeting was called to order by Director Seacrest at 5:30 p.m.

10A. Consideration of bids for the Upper Salt 16-A "Kildeer" (NG&P WMA) and Upper Salt 27A pipe replacement project [Action] (Attachment)

Matulka explained that recent inspections of Upper Salt 16A-27A indicated the riser are rusted out and we need to replace the drawdown valve, riser, and principal spillway pipe. Huston/FYRA has completed the design and has provided the bid documents for two Upper Salt Creek Watershed projects. Matulka reported bids were opened on December 1,2022. There was a total of four bids submitted (bids are attached). Low bid of \$267,059.10 was received from Tim Sisco Construction of Sterling. Mike Sotak of Houston/FYRA Engineering has provided an engineer's recommendation to approve Tim Sisco Construction and that letter is attached.

It was moved by Andersen, seconded by Hellerich, and unanimously approved by the subcommittee to recommend that the Board of Directors approve the low bid of \$267,059.10 from Tim Sisco construction for the replacement of the riser, drawdown, and principal spillway pipe on Upper Salt 16A(Kildeer)& Upper Salt 27A pending legal counsel review.

10B. Consideration of a request from Cass County for assistance with the Alvo Road Bridge Replacement Project [Action] (Attachment)

Zillig reported that the Cass County Roads Department has sent a request for NRD assistance to help replace the Alvo Road Bridge with a larger box culvert due to the water that backs up from Weeping Water 6g. See the attached memo from Zillig to the Water Resources Subcommittee that has the details of the request.

It was moved by Vogel, seconded by Lamberty, and unanimously approved by the subcommittee to <u>recommend that the Board of Directors agree to budget \$81,069.80 in the FY24 NRD Budget for the Weeping Water 6g-Alvo Road Bridge Replacement Project, pending legal counsel approval of any required releases for the project.</u>

10C. Consideration of a professional service contract with Schemmer to update existing plans and obtain 404 permit for the Piening dam in northwest Lancaster County. [Action] (attachment)

Murren briefed the committee some of the history that has occurred with the Piening dam project. This project was designed and approved DNR in 2008 but failed to receive the required 404 permit for construction of the Piening Dam. Refer to the attachment that Murren provided for additional information on the project. Murren has been working with Schemmer Associates to update the old plans to new Dam safety criteria and obtain a 404 permit. That scope is attached.

It was moved by Andersen, seconded by Hellerich, and unanimously approved to <u>recommend</u> that the Board of Directors approve the Professional Service Agreement with Schemmer in the amount of \$136, 916.00 for the design, environmental permitting, and bidding of the <u>Piening Dam in northwest Lancaster County.</u>

10D. Update on GW Rules & Regulations

Ehrman reported that the required public hearing for the proposed revisions to the District's Groundwater Rules and Regulations has been scheduled for 3:00 PM, Thursday, January 5 at the NRD office. The notice will be published in the Lincoln Journal Star for three consecutive weeks as required by statute on December 9, 16, and 23. The revisions have also been sent to NDNR and NDEE as required for their comments. Hellerich requested that the information also be transmitted to the local papers; Ehrman will work with District I/E staff to do so. Once the hearing is held, the proposed revisions will be published again in the Journal Star for three consecutive weeks, and it is anticipated that the effective date of the revised regulations will be on or about March 1, 2023.

10E. Fall Water Levels

Ehrman reported that the fall groundwater level measurements have been completed. He gave a brief overview of drought conditions in the continental US and Nebraska (100% of the state is currently in some phase of drought) and overviewed the water levels in the various Groundwater Reservoirs in LPSNRD. Average levels across the district are down several feet, which is to be expected given the very dry conditions. The outlook through March 1, 2023, is for most of Nebraska and the middle and western portions of the US to remain at some level of drought conditions.

10F. DVB SMA Allocation Review Schedule

Ehrman reported that the required water use reports are coming in from the 400+ water well owners across the district; they are due by December 31. He also noted that the NRD has received notice of one violation of the allocation in the Dwight-Valparaiso-Brainard SMA. The owner of the well self-reported that he had pumped 0.03 acre-inches over the maximum allowable 9 acre-inches. The district will need to take action to assess the two times overage penalty for 2023 (0.03 \times 2 = 0.006-acre-inch penalty). However, it is notable that this violation was reported by the well owner and the overage was a very small amount, which is evidence that water users in the DVB SMA are paying close attention to their irrigation water use.

10G. GMDA

Ehrman reported that LPSNRD, like many NRDs, is a member of the Groundwater Management Districts Association, a national group of local and regional entities with authority and responsibility in groundwater management. GMDA typically has two meetings every year, in the winter and summer. The Winter 2023 meeting will be hosted by the Mississippi members January 23-26 at St. Simon's Island, Georgia. A draft agenda isn't available yet but will be provided to Board members when it is received. Unfortunately, these dates conflict with the NARD Legislative Conference, scheduled for January 24-25.

With no further business the meeting adjourned at 6:25pm.

Enc.

Cc: Steve Seglin

Corey Wasserburger



2 December 2022

Craig Matulka Lower Platte South NRD 3125 Portia Street Lincoln, NE 68521

Re: Upper Salt 16-A & 27-A Spillway Replacement – Engineer's Recommendation

Dear Craig:

The bid opening for the above-referenced project was held at the LPSNRD on 1 December 2022. The low bid of \$267,059.10 was received from Tim Sisco Construction of Sterling, NE. This bid was \$1,945.90 below the Engineer's Opinion of Probable Costs that totaled \$269,005.00. All required documents accompanied the bid. The other three bids are listed below:

Nebraska Digging\$299,904.35Pat Thomas Construction\$349,046.46Lipsey Construction\$429,370.00

I feel that the bid is right in line with what we would expect and hope to see.

FYRA has worked with Tim Sisco Construction in the past and believes that they are a quality contractor. Tim's recent work on Upper Salt 5-7 was positive for all involved, and with the work being done at Upper Salt 16-A and 27-A being highly similar to the work done on Upper Salt 5-7, Tim would be an excellent candidate.

For the reasons stated above, my recommendation is to award the project to Tim Sisco Construction and begin the contracting process upon Board approval. With Tim's current workload, he told me that he plans to start this project around April 1st. The current substantial completion date is 30 June 2023 as detailed in the contract documents. Except for wet weather, I believe as long as he orders materials ahead of time, I don't feel he will have trouble completing the project on time. As always, please feel free to contact me if you have any questions.

Sincerely,

Michael K. Sotak, P.E., D.WRE

Lower Platte South NRD Dam Site 16-A Rehabilitation 2022

SUMMARY TABLE OF QUANTITIES			Tim S	isco Constr	uction	Nebraska Digging Services		s Pat Thomas Construction		Lipsey Construction			
ITEM	Unit	Total	Unit Cost	Extension	Unit Cost	Extension	+/- Engra Est	Unit Cost	Extension	Unit Cost	Extension	Unit Cost	Extension
MOBILIZATION	LS	1	\$13,265.00	\$13,265.00	\$12,000.00	\$12,000.00	\$1,265.00	\$6,150.00	\$6,150.00	\$23,881,00	\$23,881.00	\$30,000.00	\$30,000,00
CLEARING AND GRUBBING	LS	1	\$3,000.00	\$3,000,00	\$5,000.00	\$5,000.00	\$2.000.00	\$3,555,00	\$3,555,00	\$4,000,00	\$4,000.00	\$5,500,00	\$5,500.00
SEDIMENT AND EROSION CONTROL	LS	1	\$3 000.00	\$3,000,00	\$8,000.00	\$8,000,00	\$5,000.00	\$4,500,00	\$4,500,00	\$2,000.00	\$2,000.00	\$5,000,00	\$5,000.00
HANDLING OF WATER	LS	1	\$1,500.00	\$1,500.00	\$10,000,00	\$10,000.00	\$8 500 00	\$3 500.00	\$3 500.00	\$16,500,00	\$16,500,00	\$5,000,00	\$5,000,00
STRIP, STOCKPILE AND REPLACE TOPSOIL	SY	1195	\$14,50	\$17.327.50	\$3.90	\$4,660.50	\$12,667,00	\$12.00	\$14.340.00	\$4,50	\$5,377,50	\$10.00	\$11,950,00
EXCAVATE STOCKPILE AND REPLACE DAM EMBANKMENT	CY	2922	\$10,00	\$29,220.00	\$8.00	\$23,376.00	\$5,844.00	\$17.00	\$49 674.00	\$14.78	\$43,187,16	\$20.00	\$58,440,00
PS PIPE REMOVAL/DISPOSAL	LF	145	\$25.00	\$3,625.00	\$25.00	\$3,625.00	\$0.00	\$23,00	\$3,335,00	\$20,00	\$2,900,00	\$25.00	\$3.625.00
PS RISER AND DRAWDOWN REMOVAL/DISPOSAL	EA	1	\$1,800.00	\$1,800,00	\$1,500.00	\$1,500,00	\$300,00	\$1,500,00	\$1,500.00	\$2,000,00	\$2,000,00	\$3,500,00	\$3,500,00
30" DIAMETER CMP, 8'-0" TALL RISER WITH 18" PIPE TEE AND 12" DRAWDOWN CONNECTION	EA	1	\$9,000,00	\$9,000.00	\$6,250,00	\$6,250.00	\$2,750.00	\$5.051,25	\$5.051.26	\$10.222,55	\$10,222.55	\$6,000,00	\$6,000,00
DEBRIS RACK FOR 30" DIAMETER RISER WITH ANTI-VORTEX	I EA	1 1	\$5,000.00	\$5,000.00	\$3,300,00	\$3,300.00	\$1,700.00	\$6 309.50	\$5.309.50	\$3,776,18	\$3,776,18	\$7,000,00	\$7,000,00
18" DIAMETER CMP PRINCIPAL SPILLWAY PIPE	LF	147	\$160.00	\$23,520.00	\$130,00	\$19,110,00	\$4,410,00	\$150,00	\$22,050.00	\$125,66	\$18,472,02	\$200,00	\$29,400,00
12" DIAMETER CMP DRAWDOWN PIPE WITH CONICAL DEBRIS RACK	LF	1 3B	\$140.00	\$5,320,00	\$92.00	\$3,496,00	\$1,824.00	\$125.00	\$4,750,00	\$85,90	\$3,264,20	\$150,00	\$5,700,00
12" DUCTILE IRON KNIFE GATE VALVE WITH FLOOR STAND AND STEM GUIDES	EA	1 1	\$6,000,00	\$6,000,00	\$18,500.00	\$18,500.00	\$12,500.90	\$18 000.00	\$18,000,00	\$16,799,85	\$16,799,85	\$20,000.00	\$20,000,00
CONCRETE FOR RISER BASE	CY	0.8	\$900.00	\$720.00	\$2,000.00	\$1,600.00	\$880,00	\$1 200.00	\$960.00	\$600.00	\$480.00	\$500.00	\$400.00
CONCRETE FOR PIPE SUPPORT	CY	1.11	\$900.00	\$999.00	\$2,000.00	\$2,220.00	\$1,221.00	\$1,200.00	\$1,332.00	\$1,200,00	\$1,332,00	\$750.00	\$832.50
STEEL REINFORCING BARS FOR RISER	LBS	26.7	\$10.00	\$267.00	\$4.00	\$106,80	\$160.20	\$6.00	\$213.60	\$2.75	\$73.43	\$5,00	\$133.50
STEEL REINFORCING BARS FOR PIPE SUPPORT	LBS	222.3	\$10.00	\$2,223.00	\$4.00	\$889.20	\$1,333,80	\$8.00	\$1,778.40	\$4.75	\$1,055.93	\$5.00	\$1,111,50
GROUTED ROCK RIPRAP	TN	11	\$200.00	\$2,200.00	\$120.00	\$1,320.00	\$880.00	\$170,00	\$1,870.00	\$115.00	\$1,265.00	\$150.00	\$1,650,00
CLASS "B" RIPRAP	TN	20	\$110.00	\$2,200.00	\$85.00	\$1,700.00	\$500.00	\$80,00	\$1,600,00	\$90.00	\$1,800.00	\$100.00	\$2,000,00
DIAPHRAGM FILTER AGGREGATE	TN	15	\$70.00	\$1,050.00	\$85.00	\$1,275.00	\$225.00	\$100.00	\$1,500.00	\$255.00	\$3,825.00	\$100.00	\$1,500.00
GEOTEXTILE FILTER FABRIC	SY	46	\$6.00	\$276.00	\$26,00	\$1,196.00	\$920.00	\$4.75	\$218.50	\$20.00	\$920.00	\$30,00	\$1,380.00
6" SOLID WALL PVC DIAPHRAGM FILTER DRAIN PIPE	LF	46	\$35.00	\$1,610.00	\$40.00	\$1,840,00	\$250.00	\$21,00	\$966.00	\$18.00	\$828.00	\$25.00	\$1,150,00
6" SLOTTED WALL PVC DIAPHRAGM FILTER DRAIN PIPE	LF	14	\$35.00	\$490,00	\$40,00	\$560.00	\$70,00	\$24,00	\$338.00	\$20,00	\$280,00	\$25.00	\$350,00
SEEDING	AC	4.1	\$3,000,00	\$12,300.00	\$1,600.00	\$6,560.00	\$5,740.00	\$2 500.00	\$10,250,00	\$4,500,00	\$18,450.00	\$3,000.00	\$12,300.00
		Conting	gencies @ 25%	\$145,912,50 \$36,478,13 \$182,390.63		\$138,084,50	J		\$163 739.25		\$182,689,81		\$213,922,50

			1		Tim S	isco Constr	uction	Nebraska Di	ging Services	Pat Thomas	Construction	Lipsey Co	nstruction
ITEM	Unit	Total	Unit Cost	Extension	Unit Cost	Extension	+/- Engrs Est.	Unit Cost	Extension	Unit Cost	Extension	Unit Cost	Extension
MOBILIZATION	LS	1	\$11,191.00	\$11,191.00	\$15,000.00	\$15,000.00	\$3,809.00	\$6,150,00	\$6,150.00	\$22,397,00	\$22,397.00	\$35,000.00	\$35,000.00
CLEARING AND GRUBBING	LS	1	\$3,000,00	\$3,000.00	\$5,000.00	\$5,000.00	\$2,000.00	\$2,500.00	\$2,500,00	\$6,000.00	\$6,000,00	\$20,000,00	\$20,000,00
SEDIMENT AND EROSION CONTROL	LS	1	\$3,000,00	\$3,000,00	\$7,500.00	\$7,500.00	\$4,500.00	\$4,500.00	\$4,500.00	\$2,000,00	\$2,000.00	\$5,000,00	\$5,000,00
HANDLING OF WATER	LS	1	\$1,500,00	\$1,500,00	\$5,000.00	\$5,000.00	\$3,500.00	\$3 500,00	\$3,500.00	\$14,500.00	\$14,500.00	\$15,000.00	\$15,000.00
STRIP, STOCKPILE AND REPLACE TOPSOIL	SY	897	\$14.50	\$13,006,50	\$7.00	\$6,279.00	\$6,727.50	\$12.00	\$10,764.00	\$4.50	\$4,036.50	\$10.00	\$8,970.00
EXCAVATE, STOCKPILE AND REPLACE DAM EMBANKMENT	CY	2196	\$10.00	\$21,960.00	\$9.00	\$19,764.00	\$2,196.00	\$17.00	\$37,332.00	\$17.50	\$38,430.00	\$20.00	\$43,920.00
PŠ PIPE REMOVAL/DISPOSAL	LF	107	\$25.00	\$2,675.00	\$25.00	\$2,675.00	\$0.00	\$23.00	\$2,461.00	\$20.00	\$2,140.00	\$25.00	\$2,675.00
PS RISER AND DRAWDOWN REMOVAL/DISPOSAL	EA	1	\$1,800.00	\$1,800.00	\$1,500.00	\$1,500.00	\$300.00	\$1,500.00	\$1,500.00	\$2,000.00	\$2,000.00	\$3,500.00	\$3,500.00
30" DIAMETER CMP, 8"-0" TALL RISER WITH 18" PIPE TEE AND 12" DRAWDOWN CONNECTION	EA	1	\$9,000.00	\$9,000.00	\$7,000.00	\$7,000.00	\$2,000.00	\$4,041.00	\$4.041.00	\$10,222.55	\$10,222,55	\$6,000.00	\$6,000.00
DEBRIS RACK FOR 30" DIAMETER RISER WITH ANTI-VORTEX	EA	1	\$5,000.00	\$5,000.00	\$3,800.00	\$3,800,00	\$1,200,00	\$5,047.60	\$5,047.60	\$1,200,00	\$1,200,00	\$7,000.00	\$7,000,00
18" DIAMETER CMP PRINCIPAL SPILLWAY PIPE	LF	118	\$160.00	\$18,880,00	\$125,00	\$14,750,00	\$4,130,00	\$150.00	\$17,700.00	\$132.92	\$15 684,56	\$200,00	\$23,600.00
12" DIAMETER CMP DRAWDOWN PIPE WITH CONICAL DEBRIS RACK	LF	18	\$140,00	\$2,520.00	\$92.00	\$1,656,00	\$854.00	\$125,00	\$2,250.00	\$90.38	\$1,626,84	\$150.00	\$2,700.00
12" DUCTILE IRON KNIFE GATE VALVE WITH FLOOR STAND AND STEM GLIDES	EA	1	\$6,000,00	\$6,000,00	\$18,000.00	518,000.00	\$12,000.00	\$18,000.00	\$18,000.00	\$16,799,85	\$16,799.85	\$20,000,00	\$20,000.00
CONCRETE FOR RISER BASE	CY	0,8	\$900.00	\$720,00	\$2,500,00	\$2,000,00	\$1,290.00	\$1,200,00	\$960.00	\$600,00	\$480.00	\$500.00	\$400.00
CONCRETE FOR PIPE SUPPORT	CY	1.11	\$900,00	\$999,00	\$2,500,00	\$2,775.00	\$1,776.00	\$1,200.00	\$1,332.00	\$1,200.00	\$1,332,00	\$750.00	\$832,50
STEEL REINFORCING BARS FOR RISER	LBS	26.7	\$10.00	\$267,00	\$4.00	\$106.80	\$160.20	\$8.00	\$213.60	\$2.75	\$73.43	\$5.00	\$133.50
STEEL REINFORCING BARS FOR PIPE SUPPORT	LBS	222.3	\$10.00	\$2,223.00	\$6.00	\$1,333.80	\$889.20	\$8.00	\$1,778.40	\$4.75	\$1,055.93	\$5.00	\$1,111.50
GROUTED ROCK RIPRAP	TN	11	\$200.00	\$2,200.00	\$195,00	\$2,145.00	\$55.00	\$170.00	\$1,870,00	\$115.00	\$1,265.00	\$150.00	\$1,650.00
CLASS "B" RIPRAP	TN	20	\$110.00	\$2,200.00	\$95.00	\$1,900.00	\$300.00	\$80.00	\$1,600.00	\$90.00	\$1,800.00	\$100.00	\$2,000.00
DIAPHRAGM FILTER AGGREGATE	TN	15	\$70.00	\$1,050.00	\$80.00	\$1,200.00	\$150.00	\$100.00	\$1,500.00	\$255.00	\$3,825.00	\$100.00	\$1,500.00
GEOTEXTILE FILTER FABRIC	SY	46	\$6.00	\$276.00	\$25.00	\$1,150.00	\$674.00	\$4.75	\$218.50	\$20.00	\$920.00	\$30.00	\$1,380.00
6" SOLID WALL PVC DIAPHRAGM FILTER DRAIN PIPE	LF	41	\$35.00	\$1,435,00	\$40.00	\$1,640.00	\$205.00	\$21.00	\$861.00	\$18.00	\$738.00	\$25,00	\$1,025.00
6" SLOTTED WALL PVC DIAPHRAGM FILTER DRAIN PIPE	LF	14	\$35.00	\$490.00	\$40.00	\$560.00	\$70.00	\$24,00	\$336,00	\$20.00	\$280,00	\$25.00	\$350.00
SEEDING	AC	3.9	\$3,000.00	\$11,700,00	\$1,600,00	\$6,240.00	\$5,460.00	\$2,500,00	\$9,750,00	\$4,500.00	\$17,550,00	\$3,000,00	\$11,700,00
			Sub-Total	\$123,092.50		\$128,974.50			\$136,165,10		\$166,356.65		\$215,447,5
		Conting	gencies @ 25%	\$30,773.13	TOTAL	\$267,059,10			\$299,904,35		\$349,046.46		\$429,370,0
Highlighted cells represent a math error that was corrected in accordance with the bid documents			Total	\$153,865,63									

Document Page #5



Memorandum

Date:

December 1, 2022

To:

Water Resources Subcommittee

From:

Paul Zillig, General Manager

Subject

Weeping Water 6g @ Alvo Road

Weeping Water 6g is one of 18 flood control dams constructed as part of the Weeping Water Watershed Project. The project reduced flood damages to agricultural land, roads & bridges, railroads, utilities and homes and businesses in the watershed. This dam is located 3 miles northwest of Elmwood. The dam was constructed in 1997 and it replaced an old Cass County road bridge on 286th Street, the dam's lake backed water up under the County's road bridge on Alvo Road (see map).

Prior to construction the NRD and our engineer (Mike Sotak of Olsson Associates) met with the County and made arrangements concerning both roads and bridges and proceeded to construct the project. The arrangements at that time were to remove the 286th Street bridge and construct the WW6g dam with the NRD responsible for those costs, landrights, and the operation and maintenance of the dam and the County responsible for the road surface. Alvo Road at that time was a "low traffic" road and the bridge/road was not required by the County to be replaced or elevated out of the flood pool (this was required for several other WW dams and in some cases Cass County decided to close the road). There is no record of who is responsible for any necessary improvements to the current Alvo Road bridge in the WW 6g floodpool.

We are now 25 years later and Cass County is in the process of replacing the County bridge on Alvo Road. The NRD has partnered with Cass County on dozens of projects, the circumstances surrounding this request is unique, unfortunately we don't have the option to go back 25 years and clarify what would be done given this situation.

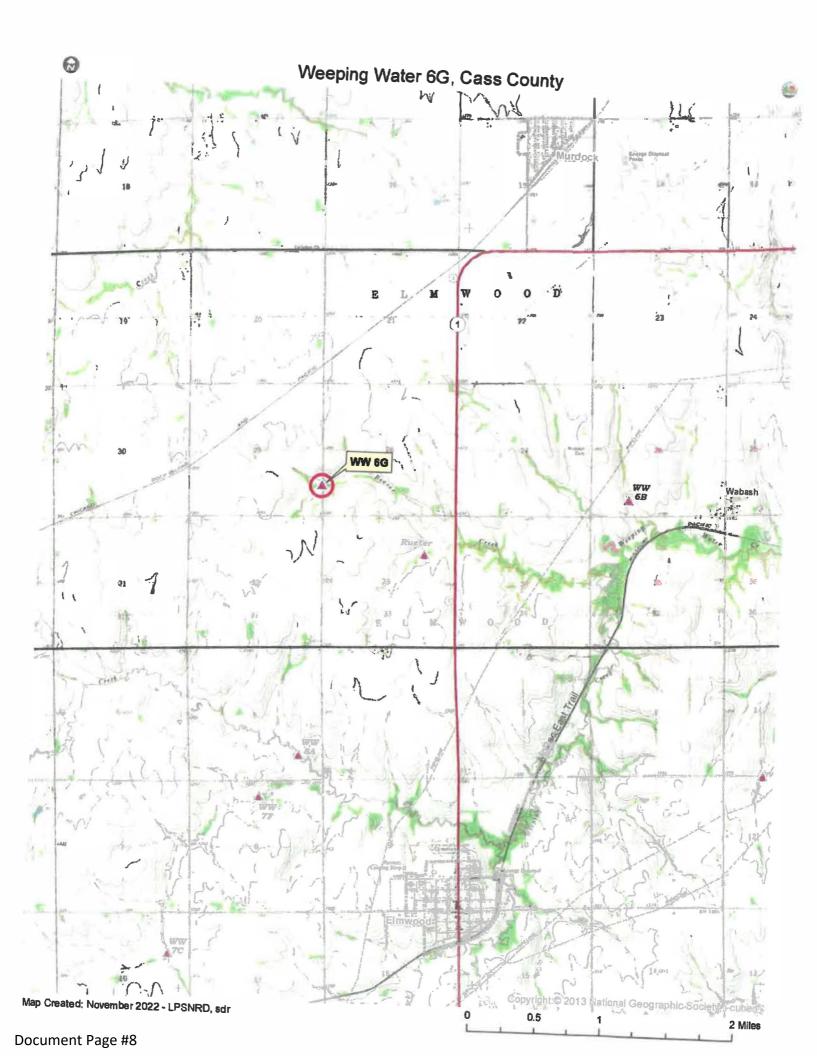
Attached is a letter from Cass County explaining the situation and their request for NRD assistance to replace the Alvo Road bridge with larger more expensive culverts due to water backed up from Weeping Water 6g. They have stated today's cost to replace the

bridge to be \$251K, and subtracted the savings from now not having to replace the 286th Street bridge (because the NRD takes care of the dam) and what the County's cost would be to replace the Alvo Road bridge if WW6g was not there. Cass County is requesting the NRD pay \$81,069.80 for this project.

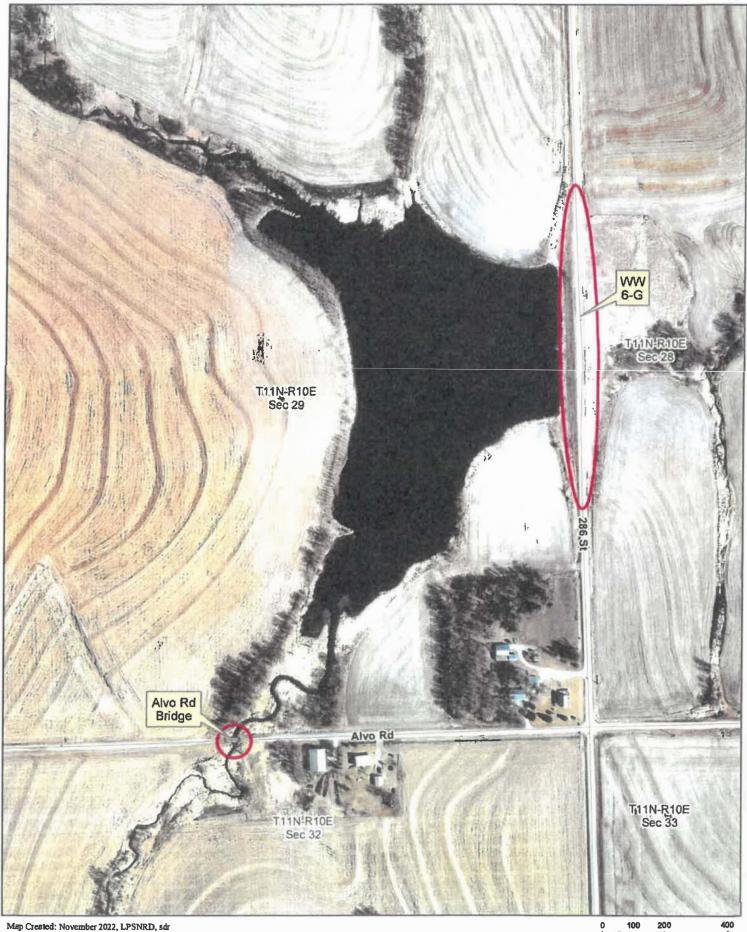
The purpose of the Weeping Water Watershed Project was to reduce flood damages, the NRD also assumed the responsibility to maintain 18 dams, four of which provided additional savings to the County by replacing bridges. I don't think there is a good way to determine if the NRD is responsible for these costs, and if so, what amount. The NRD has always attempted to partner with our local counties, communities and landowners on mutually beneficial projects. My recommendation is for the Subcommittee to recommend the Board of Directors agree to budget \$81,069.80 in the FY'24 NRD Budget for the Weeping Water 6g – Alvo Road Bridge Replacement Project, pending legal counsel approval of any required releases for the project.

PDZ/pz

encl









CASS COUNTY DEPARTMENT OF ROADS

LEONARD THORNE - HIGHWAY SUPERINTENDENT

7600 HWY 50

WEEPING WATER, NE 68463

PH: 402-296-9353 FAX: 402-297-0165

EMAIL: roads@cassne.org

October 21, 2022

Mr. Paul Zillig General Manager Lower Platte South Natural Resources District 31215 Portia Street P.O. Box 83581 Lincoln, NE 68501-3581

Subject: Dam No. 6g, Weeping Water Creek Watershed

Located north of the intersection of 286th st. and Alvo Road

Cass County

Dear Mr. Zillig,

Cass County has a single span 17' steel girder bridge with a timber deck that is located 1,150 feet west of the intersection of Alvo Road and 286th Street. Attached are aerials with the location shown and the front sheet of the Dam plans. This bridge was closed in the summer of 2017 due to abutment deterioration that was a direct result of the subject dam normal pool elevation backing water up through our structure. This also resulted in roadway overtopping at a much smaller storm event. The road elevation at the abutments is 998.7. The stream flowline elevation is 990.2. The water surface elevation is 994.3. All elevations are based on a localized datum and were not correlated to the elevations from the Dam plans. The increase in water surface elevation, due to the normal pool elevation of the Dam, is 4.1'.

We have gone thru the design process and have awarded the project at our September 27th Board meeting. The low bid for this project was \$251,069.80 (Van Kirk Brothers). After the letting, our Engineer was in Contact with Mr. David potter and Mr. Mark Lindeman concerning the cost share request. Based on that discussion, we have calculated the amount we feel is a result of the dam Construction and should be the responsibility of the LPSNRD:

If the Dam was not present:

The bridge we are currently replacing could have been replaced with triple 72"x44' corrugated metal pipes. The estimated cost of this structure cost of this structure is \$85,000.

The bridge that was removed as a result of the dam construction would also have been replaced with triple 72"x44" corrugated metal pipes (both bridges were basically the same size). The estimated cost of that structure would have been \$85,000.



CASS COUNTY DEPARTMENT OF ROADS

LEONARD THORNE - HIGHWAY SUPERINTENDENT

7600 HWY 50

WEEPING WATER, NE 68463

PH: 402-296-9353 FAX: 402-297-0165

EMAIL: roads@cassne.org

Dam No. 6g, Weeping Water Creek Watershed Cost share request Structure cost with Dam present:

Required structure is a triple 10'x 8'x 42' Concrete Box Culvert. Larger structure was required due to the tailwater of the dam requiring the road grade to be raised which meant that the structure had to carry more flow to keep backwater effects within limits. Cost of this structure is \$251, 069.80.

At this time, we are requesting the Lower Platte South Natural Resources District to pay for the difference between these costs; specifically, \$251,069.80 - \$170,000 = \$81,069.80. We are not requesting any assistance for the engineering or construction engineering costs.

If you have any questions, feel free to contact us at any time.

Sincerely,

Mr. Leonard Thome, Jr., Cass County Highway Superintendent

Cc: Mainelli Wagner & Associates, Inc.



December 1, 2022

Mr. Mike Murren Lower Platte South NRD 3125 Portia St. Lincoln, NE. 68521

Re: Piening Dam Design Refresh and Permitting

Lancaster County, NE

Dear Mr. Murren:

The Schemmer Associates Inc. (Schemmer) proposes to provide professional services to the Lower Platte South NRD (Client or Owner) in association with preparing construction drawings for the proposed Piening Dam north of Highway 34 near the Seward/Lancaster County line. The development of this scope of services and compensation proposal is based in part on the following:

- Conversations with NRD and DNR staff along with HDR
- Review of existing plans

I. SCOPE OF SERVICES

A. GENERAL

Schemmer shall render for Owner professional engineering services in all phases of the Project to which this Agreement applies as hereinafter provided. These services will include serving as Owner's professional engineering representative for the Project, providing professional engineering consultation and advice and furnishing customary engineering services incidental thereto.

Generally, these services are to include reviewing the design and reproduction of construction drawings along with pursuing an individual 404 permit through a sub-consultant (HDR) to construct a dam north of Highway 34 east of the Seward/Lancaster County line. The project was previously designed and bid by Schemmer in 2006 but never awarded to a contractor. Several iterations of design and permitting processes have occurred since with the most recent work in 2016-2018.

B. DETAILED SCOPE OF SERVICES:

- 1. Project Management and Progress/Review Meetings
 - Schemmer will facilitate six (6) virtual meetings with HDR to coordinate the pre and post 404 permit submittal. Owner will be included as appropriate.
 - Schemmer will facilitate three (3) meetings with the Corps of Engineers to be attended by Owner and HDR. The purpose of these meetings will be to coordinate the 404 permit and are assumed to be at the Corps of Engineers office.

PHONE 402.488.2500 FAX 402.488.3221 Piening Dam Design Refresh and Permitting Lancaster County, NE December 1, 2022 Page 2

- Schemmer will attend one (1) meeting with the Owner and landowner to confirm the design intent and plans.
- Schemmer will prepare monthly invoices and progress reports and general project management. The project duration is assumed to last 12 months.

2. Data Collection and Site Visit

This task will consist of compiling past files and documentation for the project by Schemmer team members. One visit to the site by two individuals is included.

3. Existing Plan/Design Review

SCHEMMER will conduct a review of the design and recompile the existing plans.

4. Conduct Updated Breach Analysis

SCHEMMER will update a previously prepared breach analysis incorporating updated dam design characteristics and water levels.

5. Model Dam Hydraulics with NOAA 14 Rainfall Rates

SCHEMMER to update the hydraulic model of the principal spillway, spillway design hydrograph and freeboard hydrograph Incorporating the NOAA 14 rainfall intensities.

6. Dam Design Modifications

Schemmer does not anticipate significant changes to the design and details of the previously designed dam. Known modifications requiring design/plan changes are as follows:

- Prepare a drawing showing easement for the proposed dam.
- Design wing dikes on either side of the constructed outlet channel of the auxiliary spillway
- Review geotechnical report for identification of sand required to be removed and replaced near the auxiliary spillway.
- Review needs for additional drain outlets or a rock toe from the foundation drain depending on sand gradation.
- Modify foundation drain outlet detail at principal spillway and secondary foundation outlet
- Modify fence layout adjacent to auxiliary spillway

Piening Dam Design Refresh and Permitting Lancaster County, NE December 1, 2022 Page 3

7. Construction Specifications/front-end Documents

Schemmer will develop construction specifications and front-end documents for use by the Owner for project advertisement.

8. 404 Permit Support

In addition to meetings identified previously, Schemmer will provide design details and other data to support HDR's pursuit of an Individual 404 permit. This support does not include a detailed wetland/channel mitigation plan. The effort for the design of a mitigation plan shall be determined during the permitting process based on coordination and direction from the Corps of Engineers.

9. Department of Natural Resources (DNR) Permits

Schemmer will submit to the DNR an application for approval of the proposed dam and coordinate with the DNR for such approval.

Schemmer will submit to the DNR an application to impound surface water and coordinate with the DNR for such approval.

10. SWPPP Development and Notice of Intent Application

Schemmer will develop a SWPPP for use during construction and to support the Notice of Intent application.

11. Cost Estimate

Schemmer will develop a cost estimate for the project.

12. Individual 404 Permit

See attached scope from HDR

II. CRITERIA, ASSUMPTIONS AND EXCEPTIONS

- 1. Mitigation design is not included and will be incorporated as a contract amendment.
- 2. Permit fees are not included in the compensation below and are assumed to be paid directly by the Owner.
- 3. The scope of services assumes the hazard classification of the dam will not change to a high classification.

Piening Dam Design Refresh and Permitting Lancaster County, NE December 1, 2022 Page 4

III. COMPENSATION

- A. Basic Services: Our proposed fee for performing the basic services shall be paid on an hourly rate basis with a not-to-exceed amount of One-hundred thirty-six thousand nine-hundred sixteen dollars (\$136,916).
- B. Additional Services: Additional Services as approved and directed by Owner will be rendered by SCHEMMER on a lump sum or an hourly rate basis as agreed to at the time such services are requested. If services are to be provided per hourly rates, you will be invoiced in accordance with our Schedule of Hourly Rates in effect at the time the Additional Services are requested plus reimbursable expenses for such services.

IV. SCHEDULE

Schemmer shall commence services on the project immediately after receipt of Notice-to-Proceed and receipt of data/information from other parties as outlined herein.

Assumed NTP
Kickoff Meeting
Preliminary Plan Refresh
USACE Meeting #1
USACE Meeting #2
USACE Meeting #3
Section 404 Permit Submittal

Week of: December 26, 2022 January 2, 2023 February 6, 2022 March 20, 2023 May 22, 2023 June 26, 2023 July 31, 2023

If the foregoing Proposal and attached General Conditions are agreeable, please indicate your acceptance by signing and returning one copy of this proposal. SCHEMMER will consider the signed proposal an Agreement between Owner and SCHEMMER for the services described herein.

Sincerely.

SCHEMMER

ACCEPTED:

Lower Platte South NRD

Doug Molle, P.E. Project Manager

Date: December 1, 2022 Prepared by: DH



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Rates	Principal	PM	Reg. Eng.	LA	CE Tech	Survey Crew	Clerical	1					
	\$230	\$190	\$175	\$115	\$115	\$165	\$70	7					
	Separated Fee Hours												
Task	Principal	PM	Reg Eng.	LA	CE Tech	Simulay Cray	Clerical	Total Hours	Phase	Phase 1	Phase 2	Phase 3	
Project Management		38							2	0	0	0	
Meetings with LPSNRD/HDR		12	24		12				2	0	0	0	
Meetings with Corps of Engineers		. 9	9 1		6			1 1	2	0	0 1	0	
Meeting with Landowner	1 1		5 1		2	1 1			2	0	0 1	0	
Data Collection/Site Visit		6	1 12		18				2	0	0 1	0	
Existing Plan/Design Review	1 1	8	12		24	1		44	2	0	44	0	
Conduct Breach Analysis			16					16	2	0	16	0	
Model NOAA 14 Rainfall Intensities			24			1 1		24	2	0	24	0	
Dam Design Modifications		8	40		80	T I		128	2	0	128	0	
Construction Specifications/front-end Documents		4	16		8	1 1		28	2	0	28	0	
404 Permit Support		8	40		40	1 1		88	2	0	88	0	
DNR Permits		4	16		8			28	2	0	28	0	
SWPPP and NOI		2	8		8	1 1		18	2	0	18	0	
Cost Estimate		1	4 1		6	1 1		11	2	0	11 1	0	
			1 1		1			0	2	0	0 1	0	
			1		1			0	2	0	0	0	
			1 1		1	1 1		0 1	2	0	0 1	0	
						T 1		0	2	0	0	0	
	1		1			1 1		0	2	0	0	0	
								0	2	0	0	0	
						1 1		0 1	2	0	0 1	0	
						1 1		0	2	0	0 1	0	
Tota	0	98	226	0	210	0	0	385		0	385	0	

Assumptions:	Included	Excluded	Fee	Hrs. Ph 1	Hrs, Ph 2	Hrs. Ph 3	Phase 1	Phase 2	Phase 3	Total
On-Site Investigation		3	Principal	0	0	0	\$0	\$0	\$0	\$0
-			PM	0	98	0	\$0	\$18,620	\$0	\$18,620
Written Report or Narrative		3	Reg. Eng.	0	226	0 1	\$0	\$39,550	\$0	\$39,550
			LA	0	0	0	\$0	\$0	\$0	\$0
Conceptual Study		3	CE Tech	0	210	0	\$0	\$24,150	\$0	\$24,150
			Survey Crew	0	0	0	\$0		\$0	\$0
Schematic Design		Ø	Clerical	0	0	0	\$0	\$0	\$0	\$0
			Total Labor Fee	0	534	0	\$0	\$82,320	\$0	182.320
Final Design - Bid Documents	•			D	red Expens	es	Phese 1	Phase 2	Phase 3	Total
•				in House Pt	nolocopies	1				
Specifications	Ø			Consultani		- 1		\$ 54,471.00		\$ 54,471.00
				Reprograph	ic (Prints/Phi	otography)				- 1
Cost Estimating	4			Mileage				\$ 125.00	T	\$ 125.00
				Airlare					1	\$ -
Construction Reviews / Shop Drawings				Lodoing						
				Topographic	Survey				- 18	s -
On-Site Construction Observations				Final Plat		1				-
				Other (Fax,	Freight, Pho	ne)				-
Document Reviews		D)		Total Direct	Expenses		\$0	\$54,596	\$0	\$54,596
				Total Fee			\$0	\$136,916	\$0	\$136,916



Schemmer Piening Dam Section 404 CWA Permitting December 2, 2022

SCOPE OF SERVICES

Schemmer has requested a proposal from HDR Engineering, Inc. (HDR) to develop a Section 404 of the Clean Water Act individual permit application for the Piening Dam located north of US Highway 34 east of the Seward and Lancaster County line on a tributary to Middle Creek (the Project).

The Lower Platte South Natural Resources District (LPSNRD) is the sponsor of the Project. Schemmer has been involved in the design of the Project. Previous permitting efforts in 2016 did not produce a Section 404 permit for construction. The Project would be a private reservoir. Middle Creek is listed on the NDEE Section 303(d) list and has an established TMDL for Atrazine and is a tributary to Pawnee Lake which has a TMDL for sediment.

The subtasks below provide the activities necessary to complete the Project.

TASK SERIES 100 - PROJECT MANAGEMENT

Objective: Provide effective project communication and determine that Project

elements are being completed. Discover and disseminate project

information to internal team members and to Schemmer.

Activities: Conduct general project management tasks including the

development of a Project schedule, monthly invoicing, and monthly

progress report.

Coordinate project status meetings with Schemmer at key intervals

during Project implementation.

Meetings: Up to five general project management meetings with Schemmer

(teleconference) are anticipated.

Deliverables: Monthly invoices; progress reports; meeting agenda; and notes.

Key Understandings: The duration of the Project is anticipated to be 16 months.

TASK SERIES 200 – WETLAND DELINAETION VERIFICATION AND STREAM ASSESSMENT

Objective: Verify the existing wetland delineation and perform Nebraska Stream

Condition Assessment Procedure (NeSCAP). Complete a habitat survey for threatened and endangered (T&E) species concurrent with

the wetland and stream fieldwork.

Activities: Due the age of the existing wetland delineation report, a verification of

the findings of the report are required. This includes:

HDR Proposal

Piening Dam Section 404 CWA Permit



- Review report
- Implement the use of Natural Resources Conservation Service (NRCS) determinations of wetlands in agricultural environments.
- Conduct site visit to confirm and/or amend wetland areas.
- Provide addendum to the existing wetland delineation report.

HDR will also implement NeSCAP to document stream function. This procedure began to be implemented in 2018 and is used to document stream functional loss and required mitigation.

Deliverables:

Draft and final wetland delineation report addendum (electronic) and GIS shapefiles of amended wetland polygons, data points and photo points. NeSCAP report.

Key Understandings: The following key understandings are anticipated for this task:

- Schemmer will provide existing wetland delineation report and GIS shapefiles of wetland polygons, data points, and photo points.
- Up to ten (10) additional data points (wetland or upland) will be collected to confirm and/or modify wetland boundaries.
- Schemmer will coordinate right-of-entry.
- T&E habitat data will be presented in the individual permit application described in Task 300.

TASK SERIES 300 - INDIVIDUAL PERMIT APPLICATION

Objective:

Develop and submit a Section 404 of the Clean Water Act individual permit application for the Project.

Task 301 - DATA COLLECTION AND REVIEW

Activities:

Coordinate with Schemmer to obtain past Section 404 permit applications, design information, and pertinent communications.

Key Understandings: Schemmer will provide shapefiles of wetland delineation information and basic reservoir design information for purposes of review and confirmation of potential impacts on previously identified waters of the US.

Task 302 - AGENCY COORDINATION

Activities:

The following activities will be performed:

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- Prepare a coordination letter to Nebraska Department of Environment and Energy (NDEE) for Section 401 Water Quality Certification Coordination requesting a pre-filing meeting.
- Coordination meetings with USACE (and NDEE and/or other agencies if determined appropriate by either agency) at key milestones during development of the Individual Permit. The following provides the general agenda topics for each anticipated meeting:

HDR Proposal Piening Dam Section 404 CWA Permit



- Meeting #1 Project overview, re-statement of purpose and need, preliminary range of alternatives, screening methodology
- Meeting #2 Screening results, preliminary least environmentally damaging practicable alternative (LEDPA), minimization, and mitigation
- Meeting #3 Application review

Meetings: The following meetings are anticipated:

- Three pre-USACE coordination meeting calls with Schemmer
- Three USACE coordination meetings
- Three post-USACE coordination meeting calls with Schemmer

Deliverables: Agenda, meeting materials, and meeting notes for USACE

coordination meetings.

Key Understandings: The following key understandings are anticipated for this task:

- The existing USACE project manager will be contacted regarding meeting requests and coordination.
- Alternative screening and analysis will be presented in a matrix format that includes a range of alternatives, screening methodology, and screening results.
- Two HDR professionals to attend each meeting.
- USACE meetings may be at USACE Lake Wehrspann Field Office.
- No Project site meetings are anticipated.
- Schemmer will be advised and invited to participate in all meetings with USACE. Schemmer will coordinate with LPSNRD.

Task 303 - INDIVIDUAL PERMIT DEVELOPMENT

Activities: The following components of the individual permit will be developed:

- Project purpose and need
- Nature of activity
- Reason for discharge
- Type and amount of discharge
- Impacts on wetlands and other waters of the US
- Alternatives Analysis
- Environmental Analysis:
 - Wetlands and other waters of the US (including data developed to support permit decision)
 - Fish and wildlife
 - Threatened and endangered species
 - Water quality
 - Floodplain
 - Regulated materials
 - Cultural Resources
- Demonstration of compliance with Section 7 of the Endangered Species Act
- Project-related monitoring and reporting activities

A Section 401 Water Quality Certification request consisting of a cover letter and the individual permit application prepared for USACE will be submitted to NDEE.

HDR Proposal
Piening Dam Section 404 CWA Permit



Deliverables:

Draft and final individual permit and Section 401 Water Quality permit application.

Key Understandings: The following key understandings are anticipated for this task:

- NDEE has not typically held pre-filing meetings. However, one virtual meeting has been included. This meeting may occur with a USACE coordination meeting, but is not required to do so.
- It is assumed that the Project will be a single project purpose of water quality relative to addressing TMDL's of Middle Creek and Pawnee Lake. The LPSRD 319 Watershed Management Plan will be used as the basis for loading calculations. No modeling of nutrient load reduction is included.
- The alternatives analysis will include a screening matrix that reviews a range of alternatives that meet the project purpose.
- It is assumed LPSNRD will not use eminent domain for the purpose of meeting water quality objectives within their district.
- Schemmer would provide the relevant documentation pertaining to compliance with Section 106 of the Historic Preservation Act. No surveys for Section 106 compliance are included in this scope.
- Compliance with Section 7 of the Endangered Species Act and Nebraska Non-game Endangered Species Conservation Act includes use of USFWS IPaC report and Nebraska Game and Parks CERT tool. The development of a Biological Assessment is not included.
- Hazardous materials reporting is limited to publicly available databases. A hazardous materials survey/site visit is not included in this scope.
- Data collection will be limited to publicly available information. Analysis will be primarily qualitative. No modeling, geographic information system (GIS) analysis, functional assessments or onsite data collection are assumed necessary to complete the environmental review.
- Fees payable to USACE and/or NDEE are not included.
- All deliverables will be made electronically.

Task 304 - WETLAND AND STREAM MITIGATION PLAN

Activities:

The following components will be used to develop a wetland mitigation plan following the elements of 33 CFR Part 332.4(c)(2) through (c)(14) and the Mitigation Checklist contained within the Omaha District Corps of Engineers' Guidance for Compensatory Mitigation and Mitigation Banking are included within the scope to develop the mitigation plan for the Project:

- Data Collection Includes use of historic aerial imagery to document past site conditions.
- o Mitigation Plan elements from 33 CFR Part 332.4 (c)(2) -(c)(14) will be developed.

Deliverables:

Preliminary Compensatory Wetland and Stream Mitigation Plan in the Section 404 individual permit application

Key Understandings: The following key understandings are anticipated for this task:



- Wetland and stream mitigation will occur on-site.
- Schemmer will provide all of information related to the development and conceptual design of the on-site mitigation concepts for wetland and stream mitigation.

Task 305 - POST-APPLICATION COORDINATION

Activities: The following activities will be performed:

- Respond to public notice comments. A comment/response matrix will be prepared.
- Respond to USACE/NDEE comments on Individual Permit application.
- USACE coordination during USACE application review.

Deliverables: Response to USACE comments on application; Response to public

comments in a comment/response matrix; Conversation records with USACE.

Key Understandings: The following key understandings are anticipated for this task:

- After submittal of the permit application, the schedule for a permit
 decision is driven by the USACE permit review process, including
 the public notice. HDR will provide support to USACE related to
 responding to comments on the public notice. HDR will address
 questions from USACE during their permit decision review.
 However, the timing of and/or issuance of a permit is subject to the
 USACE timeframes and process.
- Even with pre-application coordination, it is anticipated that USACE will have comments on the individual permit application that will require clarifications and responses. It is not anticipated that this would include substantial revisions to the alternatives analysis or data developed to support the permit decision. Up to five unique comments are anticipated. Responses are assumed to be developed using existing information and/or collaboration with others.
- No new data is anticipated to be needed to address comments.
- Schemmer will assist with comment response to both public notice and USACE permit application comments as it relates to design, construction, and operations.
- Coordination with USACE during their review of the permit application will be coordinated with Schemmer. HDR outreach effort with USACE includes a maximum of bi-weekly phone calls or email correspondence for up to 12 weeks.
- Following assumed USACE authorization of the Project, permit modifications and/or amendments are not included in this scope of work but can be provided as additional services.
- Documentation and/or tracking of special permit conditions are not included in this scope of work but can be provided as additional services.

PROJECT SCHEDULE

The following represents the anticipated Project schedule for milestone activities:

HDR Proposal



Activity Anticipated Completion Date from NTP*

USACE Meeting #1	120 days
USACE Meeting #2	150 days
USACE Meeting #3	180 days
Section 404 Permit Submittal	210 days

^{*} The anticipated completion dates are dependent upon USACE availability and review and responses on submitted information.

PROFESSIONAL SERVICES FEE

HDR's anticipates completing the Services described in this Scope of Services for a Time and Materials fee not to exceed \$54,471.

The fee estimate and Level of Effort (LOE) assumptions represent HDR's professional judgment at this time. They are presented to allow a review of our approach. This fee is an estimate based on assumed LOE required. If additional scope items are requested or deemed necessary, HDR will estimate the cost of these activities and advise Schemmer of the fee and/or schedule impacts and obtain written approval prior to proceeding with any such modified efforts.

Schemmer
Piening Dam Section 404 Permitting

	Task 100 Project Management	Task 200 W etland Delineation	Task 300 Individual Permit Application Analysis	RESOURCE TOTALS
RESOURCE	HOURS	HOURS	HOURS	HOURS
Project Manager	40	0	60	100
Quality Control	0	2	6	8
Inv. Scientist II	0	32	158	190
nv. Scientist III	0	8	0	8
SIS Technician	0	10	16	26
dministrative	10	0	0	10
Subtotal Labor Hours and Costs	50	52	240	342

Task Cost				\$10,360 \$6,736						\$ 37,110	LABOR COST TOTAL \$54,206		
OTHER DIRECT COSTS (ODCs)		RATE		С	OST								
GPS (per day)	\$	50.00	0	\$	74	1	\$	50.00	0	\$ 4	1	\$	50.00
Mileage	\$	0.58	0	\$	()	0	\$	33	60	\$ 34.50	60	\$	34.50
Per Diem (per day per person)	\$	30.000	0	\$	+	2	\$	60.00	0	\$ *	2	\$	60.00
Rental Car	\$	60.00	0	\$	12	1	\$	60.00	0	\$ 2	1	\$	60.00
Fuel (gallons)	\$	4.00	0	\$	o ≜ c	15	\$	60.00	0	\$ 2	15	\$	60.00
Total ODCs				\$	0.00			\$230		 34.50			\$264.50
Total Task Cost				\$1	0,360			66,966		\$ 37,145			\$54,471

GENERAL CONDITIONS

- 1. REUSE OF DOCUMENTS. All documents including, but not limited to, drawings, specifications and CADD data on electronic media furnished by The Schemmer Associates Inc. pursuant to this Agreement are Instruments of Service in respect to the project identified in the Agreement. They are not intended or represented to be suitable for use on extensions of this project or on any other project for any purpose without the specific written permission of The Schemmer Associates Inc., which may be withheld in The Schemmer Associates Inc.'s sole discretion. The Schemmer Associates Inc. may, in its sole discretion, condition permission on payment of additional compensation to The Schemmer Associates Inc. Any use without permission shall be at the user's sole risk and without liability to The Schemmer Associates Inc. Client agrees that it will indemnify and hold harmless The Schemmer Associates Inc. from all claims, damages, losses and expenses including attorneys' fees arising out of or resulting therefrom.
- 2. ESTIMATES. Since The Schemmer Associates Inc. has no control over the cost of labor, materials or equipment or over the contractor(s)' methods of determining prices, or over competitive bidding or market conditions, estimates of project cost are made on the basis of experience and qualifications and represent the best judgment of design professionals familiar with the industry, but The Schemmer Associates Inc. cannot and does not guarantee that proposals, bids or project costs will not vary from estimates of cost prepared by The Schemmer Associates Inc.
- 3. SUSPENSION OR ABANDONMENT. If the project is suspended for more than three months or abandoned in whole or in part, The Schemmer Associates Inc. shall be paid compensation for services performed prior to receipt of written notice of such suspension or abandonment, together with reimbursable expenses then due. If, after a period of suspension, the project is restarted, The Schemmer Associates Inc. shall be entitled to payment for any increased costs it incurs as a result of the suspension.
- 4. TERMINATION. This Agreement may be terminated by either party upon seven days' written notice should either party fail substantially to perform in accordance with its terms through no fault of the other. In the event of termination due to the fault of others than The Schemmer Associates Inc., The Schemmer Associates Inc. shall be paid for services performed prior to termination, including reimbursable expenses.

- 5. SUCCESSORS AND ASSIGNS. Each party to this Agreement binds him/herself, his/her partners, successors, assigns and legal representatives to the other party, his/her partners, successors, assigns and legal representatives with respect to all covenants of this Agreement. Neither party shall assign, sublet or transfer his/her interest in this Agreement without the written consent of the other, which consent may be withheld in the sole discretion of the non-assigning party.
- 6. **PAYMENTS.** Payments due The Schemmer Associates Inc. under this Agreement shall be payable within thirty (30) days of the date of billing. If full payment is not received within sixty (60) days of the date of billing, the unpaid amount shall bear interest at the highest rate permitted by law but not exceeding eighteen percent (18%) from the date of billing.
- 7. **DELINQUENT PAYMENTS**. If any payment due hereunder remains unpaid for a period of sixty (60) days after invoice, The Schemmer Associates Inc. may, in its sole discretion, cease providing services and not resume providing services until all amounts owing have been paid in full. Cessation of service for nonpayment shall not constitute breach by The Schemmer Associates Inc. of this agreement, or an election of remedies, and Client shall fully indemnify The Schemmer Associates Inc. for any liability or damages caused thereby. All mechanics lien rights available to The Schemmer Associates Inc. may be exercised within the time period allowed by law.
- 8. TAX. The amount of any excise, gross receipts or sales tax that may be due as a result of the work performed by The Schemmer Associates Inc. shall be invoiced to Client as a reimbursable expense.
- 9. HAZARDOUS MATERIALS. Unless otherwise provided in this Agreement, The Schemmer Associates and The Schemmer Associates' consultants shall have no responsibility for the discovery, presence, handling, removal or disposal of or exposure of persons to hazardous materials in any form, including but not limited to asbestos, asbestos products, polychlorinated biphenyl (PCB) or other toxic substances. Client shall indemnify and hold The Schemmer Associates Inc. harmless from and against all claims arising out of or related in any way to hazardous materials.
- 10. NOTICE OF LIMITATION OF AGENTS'
 AUTHORITY. Client understands and agrees that
 no agent, officer, or principal of The Schemmer
 Associates Inc. is authorized to vary the terms of this

- agreement in any way except by a writing, expressly varying the terms of this Agreement.
- 11. INVALIDATION OF PROFESSIONAL LIABILITY INSURANCE. The Schemmer Associates Inc. agrees that it shall not knowingly take any action which shall cause loss of The Schemmer Associates' professional liability insurance coverage for this project or any aspect of it.
- 12. LIMITATION OF LIABILITY. To the fullest extent permitted by law, the Client agrees that The Schemmer Associates Inc.'s liability to Client for damages arising out of or in any way related to its work in connection with the project or any error or deficiency in the Instruments of Service for the project, whether arising in contract, tort or otherwise, including, but not limited to, claims for indemnity or contribution shall be limited to the sum of \$50,000 or the amount paid to The Schemmer Associates Inc. as fees under this Agreement, whichever is greater. This limitation shall apply regardless of the cause of action or legal theory asserted.
- 13. COMPUTER AIDED DESIGN/DRAFTING (CADD). CADD may be utilized to prepare drawings, specifications, calculations, and other instruments of service prepared by The Schemmer Associates Inc. Submitted data files are intended to work only as described in the agreement and are compatible only with the original hardware and software used to create the files.
- 13.1 Electronic files will be submitted to the Client for a 30-day acceptance period ("the Acceptance Period"). During this period, the Client may review and examine the files. Any errors discovered during the Acceptance Period will be corrected by The Schemmer Associates Inc. at no additional cost to Client. Any work associated with errors discovered or changes requested after the Acceptance Period will be considered additional services and will be performed on a time and materials basis, at The Schemmer Associates Inc.'s customary charge for the work requested. The Schemmer Associates Inc. will not maintain copies of the electronic files beyond the end of the Acceptance Period.
- 13.2 Because data stored on electronic media can deteriorate undetected or be modified without the knowledge of The Schemmer Associates Inc., Client agrees to accept responsibility for the completeness, correctness, and readability of the electronic media after the end of the Acceptance Period. Client agrees that it will indemnify and save harmless The Schemmer Associates Inc. from any and all claims, losses, costs, damages, awards, or judgments arising from use of the electronic media files or output

- generated from them. Upon the expiration of the Acceptance Period, The Schemmer Associates Inc. agrees that it is responsible for the accuracy of the sealed hard copy drawings that are submitted by it to Client. "Accuracy" as used in this paragraph is defined as meeting the care and skill ordinarily used by members of the professional practicing under similar conditions at the same time and in the same locality.
- 13.3 The Owner shall be permitted to retain copies of the drawings and specifications prepared in CADD format for the Owner's information. Due to the potential that the information set forth on the electronic media can be modified by the Owner, unintentionally or otherwise, The Schemmer Associates Inc. reserves the right to remove all indicia of its ownership and/or involvement from each electronic file.
- 13.4 Any use or reuse of electronic files by the Owner or others without written authorization from The Schemmer Associates Inc. for the specific purpose intended will be at the Owner's risk. The Schemmer Associates Inc. may refuse authorization in its sole discretion or condition authorization on CADD adaptation by The Schemmer Associates Inc. Any such authorization or CADD adaptation by the Owner will entitle The Schemmer Associates Inc. to additional compensation at the rates established as part of the agreement for the project. Owner will, to the fullest extent permitted by law, defend, indemnify and hold The Schemmer Associates Inc. harmless from any and all claims, suits, liability, demands, or costs arising out of or resulting from use or reuse of electronic files without written authorization from The Schemmer Associates Inc.
- 14. LIMITATION OF WARRANTY. The Schemmer Associates Inc. makes no warranties, express or implied, under this agreement or otherwise, in connection with the services provided.
- 15. GEOTECHNICAL MATERIALS TESTING SERVICE. In the case that geotechnical and/or materials testing services are provided by The Schemmer Associates Inc., our supplementary General Conditions for Geotechnical and Materials Testing shall be considered a part of this document.
- 16. CONSTRUCTION STAKING. In the case that construction staking services are provided by The Schemmer Associates Inc., our supplementary General Conditions for Construction Staking shall be considered a part of this document.