CITY COUNCIL PROCEEDINGS

December 9, 2020

The City Council of the City of David City, Nebraska, met in open public session at 7:00 p.m. in the lower level of the David City Auditorium at 699 Kansas Street, David City, Nebraska. The Public had been advised of the meeting by publication of notice in The Banner Press on December 3, 2020, and an affidavit of the publisher is on file in the office of the City Clerk. The Mayor and members of the City Council acknowledged advance notice of the meeting by signing the Agenda which is a part of these minutes. The advance notice to the Public, Mayor, and Council members conveyed the availability of the agenda, which was kept continuously current in the office of the City Clerk and was available for public inspection on the City's website. No new items were added to the agenda during the twenty-four hours immediately prior to the opening of the Council meeting. The meeting was held at the City Auditorium due to the COVID-19 pandemic so as to incorporate social distancing strategies. [It is recommended that individuals be kept at least 6 feet apart.]

Present for the meeting were: Mayor Alan Zavodny, Council members John Vandenberg, Tom Kobus, Pat Meysenburg, Bruce Meysenburg, Kevin Hotovy, City Attorney Jim Egr, City Administrator Clayton Keller and City Clerk Tami Comte.

Also present for the meeting were: David City Superintendent of Schools Dr. Chad Denker, Dr. Russell Heller, Jerry Kosch, Bob Kobza, Mary Ann Long, Dave Ziska and Craig Reinsch of Olsson, City Council member elect Jessica Betzen-Miller, City Council Adviser Dana Trowbridge, Interim Water Supervisor Aaron Gustin, Park/Auditorium employee Nathan Styskal, Building Inspector Michael Payne, Sheriff Tom Dion, and Banner-Press reporter Molly Hunter.

The meeting opened with the Pledge of Allegiance.

Mayor Zavodny informed the public of the "Open Meetings Act" posted on the east wall of the meeting room asked those present to please silence their cell phones.

Council member Kevin Hotovy made a motion to approve the minutes of the November 11, 2020 meeting as presented. Council Member Tom Kobus seconded the motion. The motion carried. Kevin Hotovy: Yea, Tom Kobus: Yea, Bruce Meysenburg: Yea, Pat Meysenburg: Yea, John Vandenberg: Yea, Alan Zavodny (Mayor): Yea
Yea: 6, Nay: 0

Council member Tom Kobus made a motion to approve the claims as presented. Council Member Bruce Meysenburg seconded the motion. The motion carried.
Kevin Hotovy: Yea, Tom Kobus: Yea, Bruce Meysenburg: Yea, Pat Meysenburg: Yea, John Vandenberg: Yea, Alan Zavodny (Mayor): Yea
Yea: 6, Nay: 0

City Administrator Clayton Keller reported that Bierman Contracting will do a final walk through and then submit the invoice for payment.

Mayor Zavodny stated that he wanted to thank the Street Department employees for a job well done. He stated that they went north and south and then east and west to pick up branches and then made another sweep of the town to pick up any remaining branches. Mayor Zavodny also commended the Electric Department employees for going above and beyond in their performance during and after the ice storm on November 9th and 10th.

Mayor Zavodny stated that the downtown looks nice with the lights on; it gives it a holiday appearance.

Council member Kevin Hotovy made a motion to approve committee and officers reports as presented. Council Member Tom Kobus seconded the motion. The motion carried.
Kevin Hotovy: Yea, Tom Kobus: Yea, Bruce Meysenburg: Yea, Pat Meysenburg: Yea, John Vandenberg: Yea, Alan Zavodny (Mayor): Yea
Yea: 6, Nay: 0

Council member Bruce Meysenburg stated that he had no problem with the mask mandate, he just didn't like that the Council was circumvented.

Council Adviser Dana Trowbridge stated that it was the right thing to do and thanked Mayor Zavodny for implementing the mask mandate.

Mayor Zavodny stated that he used the rules that were afforded to him and he was surprised how many people were in favor of the mask mandate. The number of people in favor was much larger than he expected.

Council member Bruce Meysenburg stated that he wanted to be clear, that he was not against wearing masks, in fact, he was wearing one, he wants people to wear a mask when they need to.

Mayor Zavodny declared a short four-minute recess at 7:11 p.m.

At 7:15 p.m. Mayor Zavodny reconvened the meeting stating the first order of business was to administer the Oath of Office to the newly elected Council members.

City Attorney Jim Egr gave the Oath of Office to Council members: Jessica J. Miller – 1st Ward; Patrick J. Meysenburg – 2nd Ward; and Bruce Meysenburg – 3rd Ward, and they were seated.

Present for the meeting were: Mayor Alan Zavodny, Council members Jessica Miller, John Vandenberg, Tom Kobus, Pat Meysenburg, Bruce Meysenburg, Kevin Hotovy, City Attorney Jim Egr, City Administrator Clayton Keller and City Clerk Tami Comte.

Mayor Zavodny asked for a nomination for City Council President for 2020-2021. Council member Pat Meysenburg nominated Kevin Hotovy for Council President.
Kevin Hotovy: Yea, Tom Kobus: Yea, Bruce Meysenburg: Yea, Pat Meysenburg: Yea, Jessica Miller: Yea, John Vandenberg: Yea
Yea: 6, Nay: 0 Kevin Hotovy was unanimously selected to be Council President for 2020 and 2021.

Mayor Zavodny asked for two Council members to serve on the Finance Committee. John Vandenberg and Pat Meysenburg volunteered to serve on the Finance Committee. Kevin Hotovy: Yea, Tom Kobus: Yea, Bruce Meysenburg: Yea, Pat Meysenburg: Yea, Jessica Miller: Yea, John Vandenberg: Yea
Yea: 6, Nay: 0

Mayor Zavodny asked for two Council members to serve on the Law Enforcement Committee. Bruce Meysenburg and Jessica Miller volunteered to serve on the Law Enforcement Committee. Kevin Hotovy: Yea, Tom Kobus: Yea, Bruce Meysenburg: Yea, Pat Meysenburg: Yea, Jessica Miller: Yea, John Vandenberg: Yea Yea: 6, Nay: 0

Mayor Zavodny asked for two Council members to serve on the Water Plant Update Committee. Tom Kobus and Kevin Hotovy volunteered to serve on the Water Plant Update Committee. Kevin Hotovy: Yea, Tom Kobus: Yea, Bruce Meysenburg: Yea, Pat Meysenburg: Yea, Jessica Miller: Yea, John Vandenberg: Yea Yea: 6, Nay: 0

Mayor Zavodny asked for two Council members to serve on the Airport Planning Firm Selection Committee. Tom Kobus and Kevin Hotovy volunteered to serve on the Airport Planning Firm Selection Committee. Kevin Hotovy: Yea, Tom Kobus: Yea, Bruce Meysenburg: Yea, Pat Meysenburg: Yea, Jessica Miller: Yea, John Vandenberg: Yea Yea: 6, Nay: 0

Mayor Zavodny asked for two Council members to serve on the Chauncey S. Taylor House Redevelopment Plan Committee. Pat Meysenburg and Bruce Meysenburg volunteered to serve on the Chauncey S. Taylor House Redevelopment Plan Committee. Kevin Hotovy: Yea, Tom Kobus: Yea, Bruce Meysenburg: Yea, Pat Meysenburg: Yea, Jessica Miller: Yea, John Vandenberg: Yea Yea: 6, Nay: 0

Mayor Zavodny asked for two Council members to serve on the Engineering Firm Selection Committee. Kevin Hotovy and John Vandenberg volunteered to serve on the Engineering Firm Selection Committee. Kevin Hotovy: Yea, Tom Kobus: Yea, Bruce Meysenburg: Yea, Pat Meysenburg: Yea, Jessica Miller: Yea, John Vandenberg: Yea Yea: 6, Nay: 0

Wastewater Operator Emmalyn Gaudio said, “So, I’ve handed out a packet that outlines the concerns as to why circulators would be a good thing to add, out there (the Wastewater Treatment Plant). After a recent meeting inspection with our DEE representative, Tim Lindeen, it came to my attention that the David City Wastewater Effluent has been out of compliance in regard to Ammonia on and off for over 4 years. This is an issue that needs to be addressed pretty quickly. There are many causes for high ammonia in lagoon treatment systems, the first of which we will discuss is **short circuiting** in the lagoons themselves. Short-Circuiting is an uneven flow distribution of wastewater in a pond/lagoon. Wastewater flows through the pond faster in some parts of the pond than in other parts and as a result, wastewater detention time is affected (reduced) with some wastewater getting little to no treatment. This is due to the initial design of the lagoons themselves. It is shown in Fig. A. Those were designed in 1959 and is probably party of why the design isn’t exactly conducive, so the water is basically flowing right out of one pipe and into the next and not using the majority of our lagoons. So, then the second cause of high ammonia is a **lack of oxygen transfer** in the lagoons. Oxygen transfer is the process by which oxygen is transferred from the gaseous to the liquid phase, and it is a vital part of wastewater treatment in a lagoon system. The functioning of aerobic processes is dependent upon sufficient oxygen transfer. Aerobic bacteria needs oxygen to survive and wastewater processes need aerobic bacteria to process out ammonia and other chemicals such as alkaline, phosphorous, etc. Typically, the primary source of oxygen in ponds/lagoons is the atmosphere, the air above the pond or the wind on the pond surface. Oxygen diffuses into the water from the air and the wind. The more surface area of water that comes into contact with the air the more the water is able to be treated. See Fig. B

Another cause of high ammonia is the buildup of old sludge. Sludge is the residual, semi-solid material that is produced as a by-product during sewage treatment of industrial and municipal wastewater. Wastewater lagoons produce billion of tons of biosolids/sludge each year. Traditional methods to remove biosolids/sludge from lagoons typically entail mechanical dredging, which is costly and only a temporary solution. Costs for this include the actual process of dredging the lagoons, and also the removal and disposal methods for the biosolids/sludge as well. Excessive buildup of sludge can increase the effluent concentrations of BOD, TSS, nutrients like Ammonia and pathogens. Old sludge itself can actually produce ammonia and

bleed it into the wastewater increasing the ammonia in the effluent, which is what currently happens in our cells. Biosolids/Sludge begin to having a noticeable build up at about 10 years after the lagoon is put into operation. Generally, after 15 years of treatment lagoons need to be dredged, and then need to be dredged every 15-20 years after. Ours were built in 1959 and I haven't found any evidence or any paperwork that they have ever been dredged. Having excess sludge not only produces ammonia but it decreases the detention time and processing time of the wastewater treatment plant itself. For example, every foot of a 3 acre, 5 ft. deep pond/lagoon contains about 1 million gallons (MG) or 50 days of detention time. For every foot of sludge that has accumulated, it reduces the detention time by 50 days (20%); 2 ft by 100 days (40%) and so on. So, the solution that I would like to see utilized would be the Vortex Designed Circulators. There's an example in Fig. C & D. So, basically, circulators are essentially giant mixers for ponds/lagoons. They are wind powered so there is low cost and minimal maintenance. Circulators float on top of pond/lagoon surfaces and churn the water, thus oxygenating deeper than just the surface and increasing oxygen transfer. Oxygenating the sediments and organic matter that collects on the pond bottom that normally produces sludge helps accelerate the microbial breakdown of the biosolids/sludge. It reduces them and the ammonia in the process. It will also help eat up some of the sludge that is on the bottom in that process, rather than just continue to build. Circulators will also decrease the short-circuiting in the lagoons as it forces the water off of its normal path and this causes the water to mix with all of the lagoon which increases the detention time, and utilizes more of the lagoon itself. The maintenance for these Circulators includes greasing the bearings annually, and replacing the polythene rope about every 5 years. The life span for these circulators can exceed 20 years. Generally, for best results 1 circulator is put onto the pond for every 2 acres, however any will help start bringing our ammonia level down. In Fig. E, these are the wind averages for each month in Nebraska, to show that we would have wind throughout the entire year and we could be utilizing the circulators throughout the year. The average wind is10.9 mph, which will actually produce 90 RPMs on the circulator. Fig F. is the quote for 7 circulators which I would like to utilize in "A" and "B" Cells. There is room for this project in the capital improvement budget which has a remaining balance of $120,000.00. Four of the circulators would be built new and two of them, I found parts of, out at the lagoons, in different places. I contacted Hank Rath and he looked at them and said that they could actually be rebuilt so we can save on some cost. One of them was one that he had made as an example, but it's in perfectly fine working condition and just because it's an example, it would be at a lower cost than a brand new one."

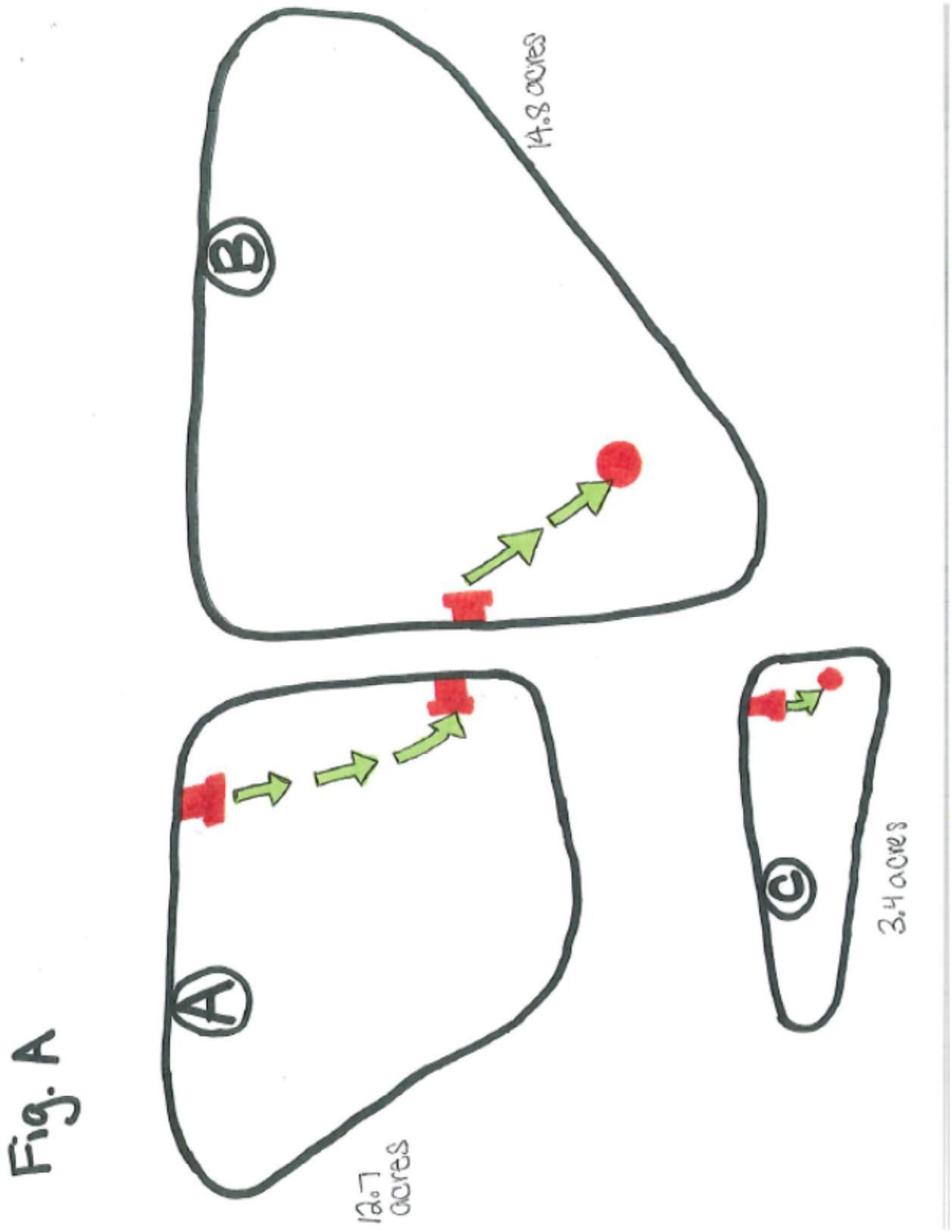
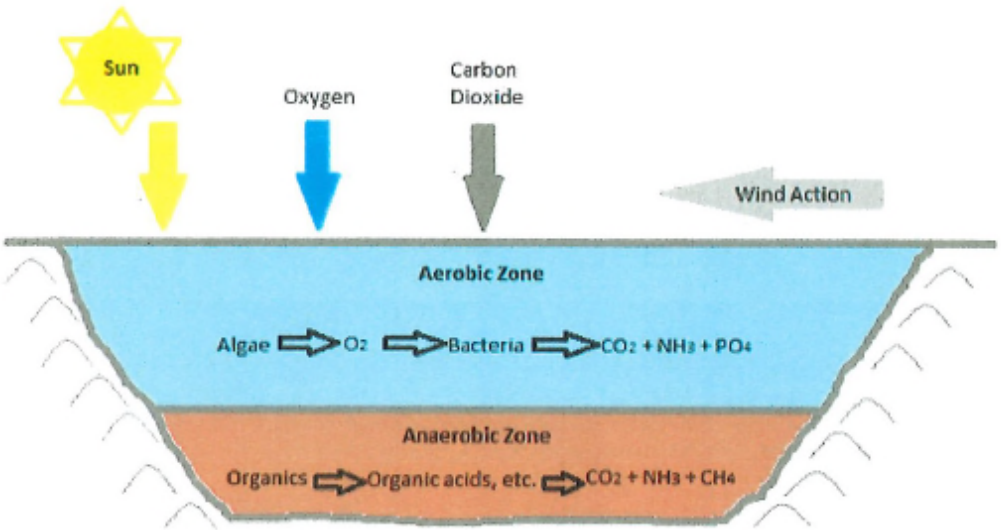


Fig. A
A
12.7 acres
B
14.8 acres
C
3.4 acres

Fig B


Sun
Oxygen
Carbon Dioxide
Wind Action
Aerobic Zone
Algae O2 Bacteria CO2 + NH3 + PO4
Anaerobic Zone
Organics Organic acids, etc. CO2 + NH3 + CH4

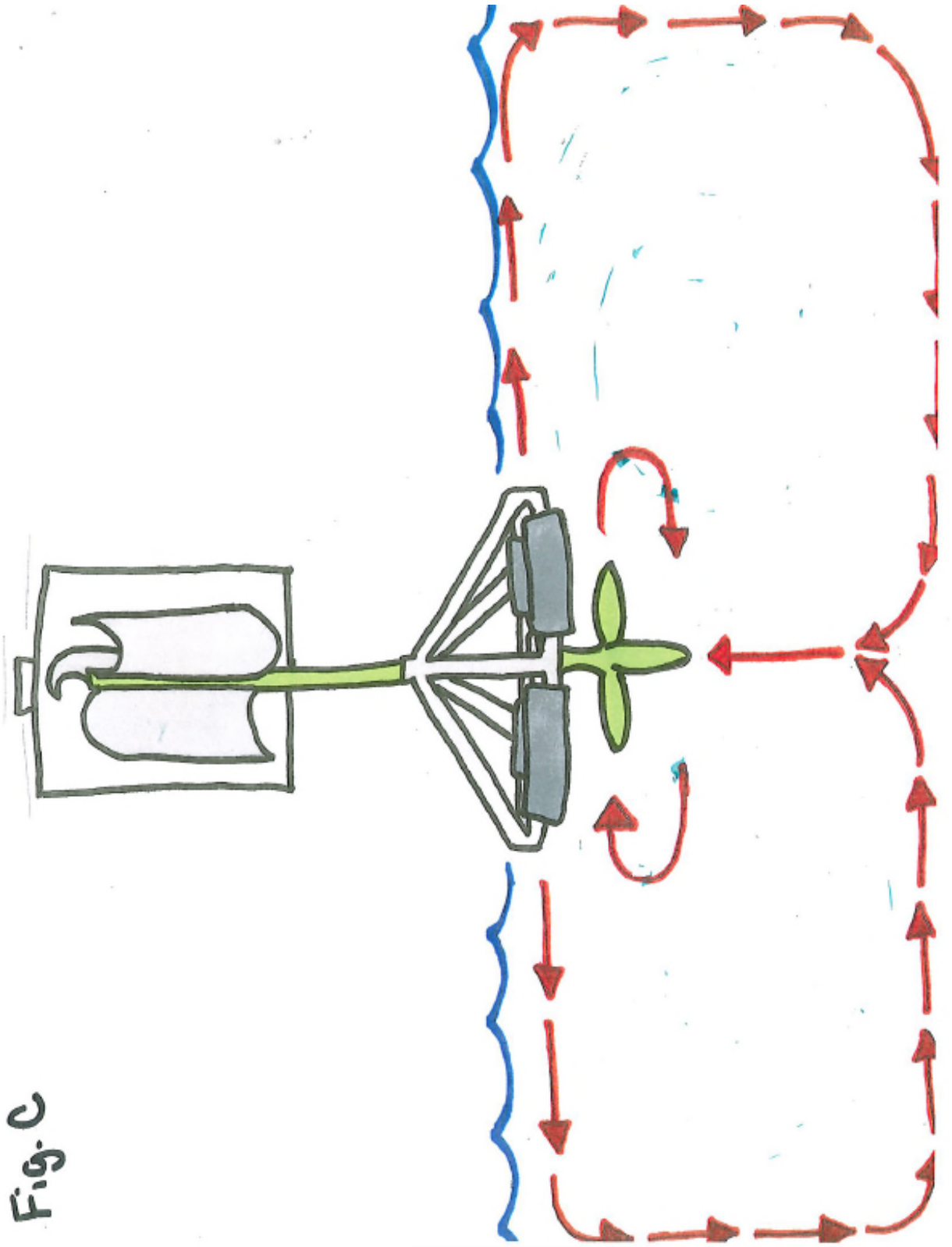


Fig. C


Fig. D

Fig. E

Based on National Oceanic and Atmospheric Administration, (NOAA) the average wind in MPH for Nebraska is as follows:

Jan.	10.8
Feb.	11.0
March	12.2
April	12.5
May	11.6
June	10.9
July	10.1
Aug.	9.9
Sept.	10.5
Oct.	10.1
Nov.	10.8
Dec.	11.0

Year Ave. 10.9

Wind at 10.9 MPH will produce 90 rpms on the circulator.

Council member Kobus said, “How do we know how much sludge is in those ponds?”

Wastewater Operator Emmalyn Gaudio said, “You can measure them with a sludge judge. By our estimation, ”C” Cell is at least three to four feet deep. Because it is so compacted and old, I think that the cost of dredging it and removing it would actually be terribly high, especially in comparison to the aerators, which could reduce, and would reduce, the current sludge that’s in there would slowly start to process and break it down.”

Council member Kobus said, “How can we be four years out of compliance?”

Wastewater Operator Emmalyn Gaudio said, “It’s been on and off for four years. That was my first meeting with DEE and with Tim Lindeen, and that is when it was brought to my attention, which is when I really jumped on this. I had already been considering circulators because I know that they’ve been cracking down on ammonia laws and lowering the allowances. When I talked to Tim, that’s when I decided to jump into the project quicker.”

Council President Kevin Hotovy said, “The four years comes into play about the time that our limits were dramatically lowered.”

Wastewater Operator Emmalyn Gaudio said, “They also were lowered across the state, I believe, about a year and a half ago. However, it was more than just four years that we were out of compliance. It wasn’t consistently, constantly out of compliance, and that’s why I think it hasn’t been as big of a threat, I guess, as it should have been. It’s been on and off for four years or more.”

Mayor Zavodny said, “But, that aligns with when they almost dropped us to zero.”

Council member Kobus said, “Didn’t we deal with that issue, ammonia, when we built the new cell?”

Wastewater Operator Emmalyn Gaudio said, “The anaerobic lagoon is more capable of dealing with B.O.D. and shock loads, so rather than ammonia. So, when a huge load gets sent in it, it would normally just shock my SBR’s and my basins and kill off all of my bugs or overload my systems and it kind of evens that out.”

Mayor Zavodny said, “You’re right. When Henningsen’s were getting the big loads….”

Wastewater Operator Emmalyn Gaudio said, “We would get a huge shock to the system and it would shut down all of my processing down and all of my bugs would die off and everything would have to stop and reseed and start over. So, that wasn’t really a fix for ammonia.

Mayor Zavodny said, “Well, I’m going to start by saying something really nice about you. You’ve studied this pretty in depth, and I appreciate that and I give you a lot of credit for that and I think that is what we need. Now, I’m saying what is our right thing here, and, it seems to me that we spent three or four thousand dollars at one time to try to put bugs back in, after we’d killed them off after a big load and that was an absolute waste of money. They were dead again the next time that we got a big load. We spent all of that money on enzymes and it did us no good.”

Wastewater Operator Emmalyn Gaudio said, “Was that prior to the anaerobic lagoon?”

Mayor Zavodny said, “I don’t know exactly when that was. Gosh, Gary was still here. It’s been quite a few years. We went out and bought a bunch of enzymes and it basically helped us for about fifteen minutes. So, that wasn’t a good solution. It just didn’t work out. It wasn’t his fault, it was just all that he could come up with, at the time. What I’m wondering about is, these circulators make a lot of sense, but don’t we need to do some dredging?”

Wastewater Operator Emmalyn Gaudio said, “My suggestion would actually be to bypass “C” Cell completely. So, “C” Cell is about 3.4 acres and it was originally constructed as a polishing pond, which is a smaller pond, which normally would polish and….”

Mayor Zavodny said, “After it went through the other two?”

Wastewater Operator Emmalyn Gaudio said, “Yes. We have had consistent issues with “C” Cell, I guess for years and years. It, being the smallest cell, it would not affect our capacity negatively. That is the cell that has the most sludge build-up. There was an estimate for dredging at a rural town in Nebraska that was for a 3-acre pond and the estimate just for removal was $25,000. That was just a 3-acre pond. “C” Cell is our smallest lagoon and it’s 3.4-acres. I don’t personally think that “C” Cell is worth trying to fix up to the point where it would be helping our process rather than hurting it. It’s currently hurting it.”

Mayor Zavodny said, “The reason that I raise that is that I think this Council has made a really important shift to try to…. I know we seem like we’re hypocrites because we’re always saying, gosh we’re spending money and we don’t want to spend money. But, doing it right will actually save us money in the long run. So, I don’t want you to stand here and feel like you have to choose the most cost-effective option. I want what will work.”

Wastewater Operator Emmalyn Gaudio said, “To be honest, I do actually think that the circulators would not only be the simplest solution, I do think that, for the layout that we have, I

think they would be the best. Also, bypassing "C" Cell allows us to utilize "A" and "B". Also, decreasing the amount of circulators that we get while increasing the treatment. Also, coming up in the future, DEE will be requiring UV treatment prior to effluents for all wastewater. So, cutting off "C" Cell now will actually allow the perfect placement for the UV treatment to be implemented."

Mayor Zavodny said, "OK. Looking ahead at that, how does that happen? Where would you put that?"

Wastewater Operator Emmalyn Gaudio said, "It would be by the current effluent station, where the water actually runs to Kaiser Creek. There is ample space for it to go right there because of the effluent."

Mayor Zavodny said, "You have to slow down for me. We're talking about at the end of the process?"

Wastewater Operator Emmalyn Gaudio said, "Yes. Effluent is the last part. The part that goes out to Kaiser Creek."

Mayor Zavodny said, "Do you know roughly what that is going to cost and how far out is that?

Wastewater Operator Emmalyn Gaudio said, "How far is the UV treatment? I'm not sure on the exact date for that, that is just what I was told. I was just thinking ahead."

Mayor Zavodny said, "I think that is something that we need to consider as we're looking at this. The overall picture to make it right. We're not just spending the money here, is where I want to be clear, this is part of a process and to get us to the end, we're going to have to spend more to get it right."

Wastewater Operator Emmalyn Gaudio said, "I agree with that. I would like a perfectly in-compliance effluent, or I'm not doing my job very well."

Mayor Zavodny said, "Is any sludge removal warranted?"

Wastewater Operator Emmalyn Gaudio said, "I think that some could be useful. If we were to remove sludge from "A" Cell or "B" Cell, could be useful. I don't think that it's worth it for "C" Cell."

Mayor Zavodny said, "Ok. Let's say that we accept your recommendation and we don't do "C" Cell because we've got other things. What about "A" or "B" or both?"

Wastewater Operator Emmalyn Gaudio said, "We could. I don't believe that the sludge build-up in "A" or "B" is the biggest problem. I believe that the ammonia is coming back into the water in "C" but in "A" and "B" our biggest problem is short-circuiting."

Mayor Zavodny said, "Your circulation fans address your biggest problem?"

Wastewater Operator Emmalyn Gaudio said, "Yes, they do. They also, by mixing the air to the bottom, it actually allows the micro-bacteria to eat the sludge. So, it could actually lower the depth of our sludge over time. In seventy-one days, at a different pond in Nebraska, I

believe they had lowered it about 2.6, which, in two months, is pretty decent considering that one foot is twenty percent on a 3-acre pond."

Mayor Zavodny said, "I don't expect you to know our whole history, but we spent millions of dollars on this wastewater plant. The twenty-five thousand, and it will be a little higher because of the surface area, the acreage, I don't think that's where we should be quibbling over."

Council member Hotovy said, "What did you say, '59 when the lagoons were built?"

Wastewater Operator Emmalyn Gaudio said, "1959 is when "A", "B" and "C" were built, and 1978 was when the rest was done."

Council member Hotovy said, "What are the ammonia allowances that were allowed in 1959 compared to today?"

Wastewater Operator Emmalyn Gaudio said, "It's a huge difference. Absolutely. It's not even comparable, almost."

Council member Hotovy said, "So, having to add something to enable us to be in compliance, doesn't shock me a lot, considering that those lagoons were designed fifty plus years ago."

Council member Kobus said, "I, myself, would hate to see one of those lagoons sit. What happens down the road if it is just sitting there?"

Wastewater Operator Emmalyn Gaudio said, "You can technically do a like a lagoon abandonment, I guess is what it would be. It would still be if there was an emergency and we needed to utilize the 3.4 acres, we could."

Council member Kobus said, "DEQ doesn't care?"

Wastewater Operator Emmalyn Gaudio said, "Honestly, from Tim Lindeen and the other experts, they all said the same thing that they would completely agree to bypass "C" Cell as it is actually hurting our process, rather than helping it. The shape that it was built and the placement of it, it has no air flow, the sludge itself is an issue and it's so very small, compared to the other ones. It's not like taking away "A" or "B". Just for comparison, "A" is twelve point seven acres of surface area and "B" is fourteen point eight acres of surface area and "C" is three point four acres of surface area."

Mayor Zavodny said, "I'm glad that you asked that. So, really, spending any money on that doesn't make any sense, so, spending the other money on dredging, to some extent, "A" and "B", seems to make some sense."

Wastewater Operator Emmalyn Gaudio said, "Yes, for the next ten years, if we do the circulators, they'll actually reduce that."

Mayor Zavodny said, "Ok. So, if I remember this wrong, just tell me. So, didn't I read that he said that we were getting winter pricing or something?"

Wastewater Operator Emmalyn Gaudio said, “Yes, if we order now, in order to put it in in early Spring. Putting them in the ice right now wouldn’t really work. It does say thirty days on there. I had spoken to Hank in regard to that because I wasn’t able to come to the meeting, as of then, and so he still honored that pricing.”

Mayor Zavodny said, “Ok. Here’s what my recommendation would be. I think that we commit to the circulators and have you, for our January meeting and see what we can do about dredging those other two and we forget about “C”. Does that seem like a reasonable course of action? Can you go secure bids for dredging of the other two by our next meeting or shortly after that?”

Wastewater Operator Emmalyn Gaudio said, “They may need to measure sludge in “A” and “B”.”

Mayor Zavodny said, “You gotta do what you gotta do.”

Wastewater Operator Emmalyn Gaudio said, “With the ice, it may take them a bit.”

Council member Kevin Hotovy made a motion to approve the acquisition of circulators for the Wastewater Treatment Plant. Council Member Tom Kobus seconded the motion. The motion carried.
Kevin Hotovy: Yea, Tom Kobus: Yea, Bruce Meysenburg: Yea, Pat Meysenburg: Yea, Jessica Miller: Yea, John Vandenberg: Yea
Yea: 6, Nay: 0

Building Inspector Michael Payne stated that Timpte would like the name of “S” Street changed to “Timpte Parkway” because when truck drivers put “S” Street into their GPS it converts “S” Street to “South” Street and then the trucks are not able to find Timpte. He explained that the only business with an “S” Street address is Region V Industries.

Mayor Zavodny asked if the change had been discussed with Region V Industries.

Building Inspector Michael Payne stated that they had not discussed the change with Region V Industries at this point in time.

Mayor Zavodny stated that he thinks that the County owns Region V and perhaps the County Board should be addressed.

Council member Bruce Meysenburg made a motion to approve changing the name of "S" Street to "Timpte Parkway". Council Member Tom Kobus seconded the motion. The motion carried.
Kevin Hotovy: Yea, Tom Kobus: Yea, Bruce Meysenburg: Yea, Pat Meysenburg: Yea, Jessica Miller: Yea, John Vandenberg: Yea
Yea: 6, Nay: 0

Interim Water Supervisor Aaron Gustin stated that at the last meeting he had discussed purchasing new Neptune water meters in lieu of Honeywell/Elster meters.

Mayor Zavodny had asked at the previous meeting about the half cent sales tax for the water department. City Clerk Comte had prepared a spreadsheet that showed that there is $967,000 that could be used for the project.

Alternate funding through USDA was discussed. It was decided that it didn't really make sense to pay on a forty-year loan for meters that have a lifespan of ten to fifteen years.

Council member Tom Kobus made a motion to approve purchasing water meters and associated read equipment from Municipal Supply of Nebraska. Council Member Pat Meysenburg seconded the motion. The motion carried.
Kevin Hotovy: Yea, Tom Kobus: Yea, Bruce Meysenburg: Yea, Pat Meysenburg: Yea, Jessica Miller: Yea, John Vandenberg: Yea
Yea: 6, Nay: 0

Municipal Supply, Inc.
Municipal, Contractors & Industrial Supplies
21644 William Circle Gretna, NE 68028
402-408-0500 1-844-417-7370
FAX 402-408-0499

December 3, 2020

David City Utilities
% Aaron Gustin
1220 E Street
David City, NE 68632

Dear Aaron:

Here are the system upgrade prices you requested.

Complete Drive-By System includes the following:

1	MRX920 v4 Mobile Data Collector and MX900 v5.1 13655-100	6,200.00
1	R900 Belt Clip Transceiver v3.0 13302-100	2,250.00
1	Neptune 360 Essential Module **Annual** SaaS **Year 3** - Subscription - AMR 13812-105	2,600.00
1	Neptune 360 Essential Module **Annual** SaaS **Year 2** - Subscription - AMR 13812-105	2,025.00
1	Neptune 360 Essential Module **Annual** SaaS **Year 1** - Subscription - AMR 13812-105	1,825.00
1	Neptune 360 Essentials Set-up Fee (one-time fee) (SaaS PF) 13812-001	1,700.00
1	On-site Training (8 hours) 13812-005	1,750.00
1	Additional Remote Training (4-hour training window)	850.00
	AMR Drive-By Reading System Total:	**$ 19,200.00**

Note: Customer supplies own Tablet or I-Pad

Neptune (optional) Annual System Maintenance
(Annual rate per item after 1 year warranty up)

1	R900 Belt Clip Transceiver	334.00
1	MRX Mobile Data Collector	1,413.40

Water Meters

1,109	⅝"x3/4" T-10 ProCoder)R900i Gal. Inside Set Meter	191.25	212,096.25
Any	⅝"x3/4" T-10 ProCoder)R900i Gal. Pit Set Meter	202.50 each	
21	¾" T-10 ProCoder)R900i Gal. Inside Set Meter	235.25	4,940.25
Any	¾" T-10 ProCoder)R900i Gal. Pit Set Meter	246.50 each	
123	1" T-10 ProCoder)R900i Gal. Inside Set Meter	296.00	36,408.00
Any	1" T-10 ProCoder)R900i Gal. Pit Set Meter	307.25 each	
15	1-½" x 13" MACH 10 R900i Gal. Ultrasonic Flg. Meter	662.50	9,937.50
21	2" x 17" MACH 10 R900i Gal. Ultrasonic Flg. Meter	787.50	16,537.50
9	3" x 17" MACH 10 R900i Gal. Ultrasonic Flg. Meter	2,300.00	20,700.00
3	4" x 20" MACH 10 R900i Gal. Ultrasonic Flg. Meter	2,925.00	8,775.00
1	6" x 24" MACH 10 R900i Gal. Ultrasonic Flg. Meter	4,875.00	4,875.00
Any	13749-200 Antenna Assembly 6' Cable R900 Lid Mount Slip On (For Pit Meters)	27.00 each	
Any	13749-300 Antenna Assembly 20' Cable R900 Lid Mount	33.50 each	

Water Meter Total: $ 318,169.50

Opportunity Number: A45461
Pricing Start Date: 12/1/2020
Pricing End Date: 6/30/2021

If you are interested in AMI it would add approximately 40-60 thousand dollars to the price of the system. Also you would have to install radio transmitters on the exterior of houses instead of being integrated with the meter register. Which will make meter and installation prices to be quite a bit more.

David City Utilities is responsible for purchasing a transfer file for their billing system. A transfer file from your billing software vendor may cost you around eight hundred dollars.

If you have any questions or if we can be of any further assistance, please do not hesitate to give us a call.

Sincerely,

Todd A. Speth
Territory Manager

CC: Nick Cline

Be Confident with Sustained Accuracy Over Time

Neptune® MACH 10® Ultrasonic Meter

The MACH 10® ultrasonic water meter features solid state metrology with no degradation of accuracy over time. Combined with a corrosion-resistant, lead free, high-copper alloy maincase, the MACH 10 is built to withstand demanding service conditions and deliver sustained accuracy over the life of the meter.

- Sizes 1½" and 2"
- Extended low-flow range and accuracy
- No maintenance
- Accuracy sustained over meter life
- Advanced ultrasonic technology
- Lead free, high-copper alloy maincase
- Certified to UL 327B (1 ½", 2") for residential fire service applications

NEPTUNE
TECHNOLOGY GROUP
#winyourday

Specifications

AWWA C715 Compliant

NSF/ANSI 61 Certified

UL 327B Certified
(Optional for 1 ½", 2")

Application

- Cold water measurement of flow in potable, combination potable and fire service, and reclaim/secondary water applications.

Maximum Operating Water Pressure

- 175 psi

Operating Water Temperature Range

- +33°F to +122°F (+0.5°C to +50°C)

Environmental Conditions

- Operating temperature: +14°F to +149°F (-10°C to +65°C)
- Storage temperature: -40°F to +158°F (-40°C to +70°C)

Options

Sizes

- 1½"
- 2"

Units of Measure

- U.S. gallons, Imperial gallons, cubic feet, cubic metres

Meter Options

- Potable water
- Reclaim water
- Residential fire service (combo or standalone meter service lines)

Warranty

- Neptune provides a limited warranty for performance, materials, and workmanship. See warranty statement for details.

System Compatibility

- Compatible with Neptune R900® and CMIU. Also available as MACH 10®)R900i™ for an integrated radio solution and MACH 10®)TC for Sensus Touch Coupler compatibility.

Operating Characteristics

Meter Size	Normal Operating Range @ 100% Accuracy (+/- 1.5%)	AWWA C715 Standard Type 1	Extended Low Flow @ 100% Accuracy (+/- 3.0%)
1½"	0.80 to 125 U.S. gpm	2.0 to 100 U.S. gpm	0.30 U.S. gpm
2"	1.50 to 160 U.S. gpm	2.5 to 50 U.S. gpm	0.50 U.S. gpm

Dimensions

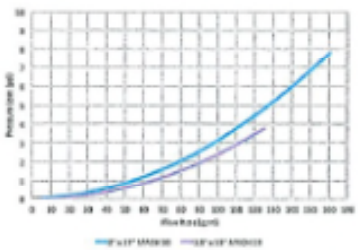
Meter Size	Length	Height	Flanges
1½"	10"	6¼"	Oval
	13"	6¼"	Oval
	12¾"	6¼"	Internal Thread
	12¾"	6¼"	External Thread
2"	10"	6½"	Oval
	15¼"	6½"	Oval
	17"	6½"	Oval
	15¼"	6½"	Internal Thread
	15¼"	6½"	External Thread

Registration

High Resolution (8-digit reading)		1½"	2"
1	U.S. Gallons	√	√
1	Imperial Gallons	√	√
0.1	Cubic Feet	√	√
0.01	Cubic Metres	√	√

Pressure Loss

This chart shows typical meter performance. Individual results may vary.



LCD Display

9-digit display for extra resolution on manual reads.

neptunetg.com

Neptune Technology Group
1600 Alabama Highway 229
Tallassee, AL 36078
800-633-8754 f 334-283-7293

Interim Water Supervisor Aaron Gustin stated that he got two bids for an underground utility locator. One was from Barco Municipal Products for $2,645 and the other was from

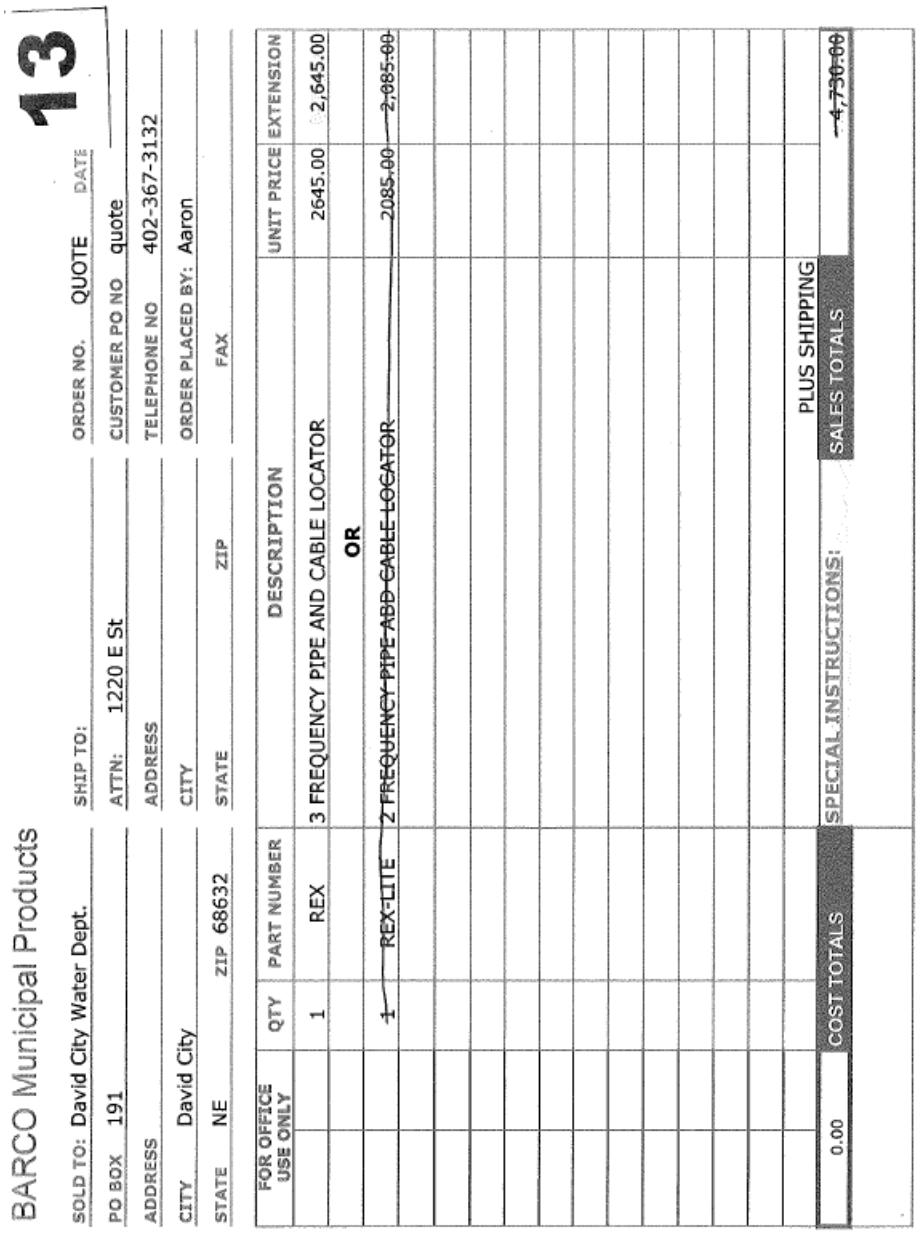
Rycom for $4,126.80. He stated that they didn't get to demo the two units that the quotes are for. He was able to call individuals that own these units. The less expensive unit from Barco was used by a gentleman in Kingley, Iowa. He told Aaron that he uses it and that he has had a few hiccups but he is generally pleased with it. It comes with some typical accuracy issues. Aaron Gustin spoke with a gentleman from the Lancaster Rural Water about the Rycom unit. He has five thousand locates on his unit just this year and he hasn't had a single hiccup.

Council member Kobus said, "What's the difference in cost?"

Mayor Zavodny said, "Not that much."

Council member Kobus said, "Then buy the good one."

Council member Tom Kobus made a motion to approve the purchase of a Rycom Pathfinder Precision Locating System from Rycom Instruments for the Water and Wastewater departments. Council Member Pat Meysenburg seconded the motion. The motion carried. Kevin Hotovy: Yea, Tom Kobus: Yea, Bruce Meysenburg: Yea, Pat Meysenburg: Yea, Jessica Miller: Yea, John Vandenberg: Yea
Yea: 6, Nay: 0



BARCO Municipal Products

13

SOLD TO: David City Water Dept.
PO BOX 191
ADDRESS
CITY David City
STATE NE ZIP 68632

SHIP TO:
ATTN: 1220 E St
ADDRESS
CITY
STATE ZIP

ORDER NO. QUOTE DATE
CUSTOMER PO NO quote
TELEPHONE NO 402-367-3132
ORDER PLACED BY: Aaron
FAX

FOR OFFICE USE ONLY	QTY	PART NUMBER	DESCRIPTION	UNIT PRICE	EXTENSION
	1	REX	3 FREQUENCY PIPE AND CABLE LOCATOR	2645.00	2,645.00
			OR		
	~~1~~	~~REX-LITE~~	~~2 FREQUENCY PIPE ABD CABLE LOCATOR~~	~~2085.00~~	~~2,085.00~~

0.00 COST TOTALS | SPECIAL INSTRUCTIONS: | PLUS SHIPPING | SALES TOTALS ~~4,730.00~~

Aaron,

Please see attached product sheet. Here's the prices that you requested.

1 -- Rycom Part Number 001 00700 00 Pathfinder Precision Locating System @ $4,126.80

FOB: Raytown,MO

Please let us know if we can be of service to you.

Thank you,

Interim Water Supervisor Aaron Gustin said, “Emmalyn provided some nice insight. The same year that those lagoons were built, in 1959, was the same year that this headworks building was built. So, it’s been talked about for many years. We do have the issues that most individuals around here have heard me speak about in regard to the flooding that occurs when there is an issue. I do want to say that some of the maintenance replacing the swing checks after Eriksen was in the building replacing the overhead valves and we replaced the swing check valves. We have not had, other than when the power went out, issues with those pumps since. However, say, if the power were to go out, we want to not have our dry well or our pump pit filled with raw sewage that I have to crawl into and try to get working. So, Craig was asked to do a safety assessment and he provided us with a document that, hopefully, everybody was able to access.”

Craig Reinsch, with Olsson, said, “So, the reason that the water collects in that pump pit is that it’s just the low spot of that whole area. Why it was designed that way, I’m not sure. Most of the sewer backups that we talked about can be addressed by maintenance. Adding the comminutor, taking care of the auger, taking care of the piping and the valves helps to minimize the sewer backups. So, that is going to help. Then, the off chance that the flow is high, and things of that nature, if the water goes outside of the channel, it’s also outside of the wet well and it’s going to collect in that area and it’s going to go to the lowest spot, which is this location. So, really, the only way to do that is to create a kind of berm or a dam or some way to raise that. Aaron and I spent some time talking through different ways to make this work. We proposed adding a vestibule to the front where, if you’ve been to the sight, there’s steps that come down from the road and then you walk on the sidewalk and then go down more steps. So, we would replace the wood steps with concrete steps that are a little wider. Go down, create kind of a raised area with grading, so that if the water raises, it can kind of flow underneath and around, but then that will be a straight walk into this vestibule area, which is basically a concrete addition to this structure, with some steps down that allows the water and the grading to be adjusted around there so the water doesn’t collect. Again, we don’t have exact measurements on how high that the water has gone, other than the water marks. So, we’re a step above that. There’s a little bit of contingency for that. Again, this is kind of a stop-gap. We’ve talked about, over the years with our work with the wastewater plant, at some point a new headworks facility will be needed and that is a discussion to have at a later time. This is more of a stop-gap between now and then. I think that the vestibule at this location avoids the new force-main that we just put in with the wastewater addition. It avoids the electrical modifications to the building, so we’re kind of working around what’s there in actually, a very tight spot. So, Aaron, if I may, one of the things that we talked about is getting equipment in and out. Even though you’d like to have more room, it’s still at least as much room as they have working in and around the door and around the stairs that are there, so it’s about four and a half feet of a landing area that they can get equipment in and out and turned and into that structure.”

Council member Kobus said, “Don’t you have a road to build there yet?”

Interim Water Supervisor Aaron Gustin said, “Yes. I do have some more to speak to that as soon as Craig is finished.”

Craig Reinsch, with Olsson, said, “Since it was built, it has just kind of stayed within this area, so it wouldn’t go anywhere else. This is just keeping it out of that building, is really the premise. Those are the major recommendations to keep the water out.”

Council member Kobus said, “I thought you had ground water problems?”

Interim Water Supervisor Aaron Gustin said, “There are ground water problems there, as well. But, the majority of the issues are when those pumps fail and lock up, and when I say lock up, they get air-locked. What comes from the City, in terms of raw sewage, has to go somewhere and if I don’t have an active pump, an active pump to push it, like I didn’t when the power went out, for whatever reason, but, in that split second, the air locked and it had no place to go. We also saw PLC failure out there for the first time since I’ve started working. It was electrical. It’s going to happen at some point in time. It’s extremely rare, according to Jared, with Scada. There is a ground water issue there, as well. I believe that is addressed in his assessment. There’s a sump pit that is right there, at the front. When I’m talking about working in the dry pit, with the pump, that typically is due to raw sewage flooding.”

Council member Kobus said, “How big is that pit?”

Interim Water Supervisor Aaron Gustin said, “It’s a 12’ x 15’ room, approximately. It’s one level, underground. I believe I showed Craig and Clayton a picture, a few months back, where raw sewage was at the top of those stairs.”

Council member Kobus said, “What do you do when you go in there and it’s full of raw sewage?”

Craig Reinsch, with Olsson, said, “Right now there’s a small sump pump that is in there for small spills and so, you kind of have to wait until it evacuates unless you throw in a trash pump.”

Interim Water Supervisor Aaron Gustin said, “We throw in a trash pump. We get a trash pump in there, if we need to. Once the trash pump does what it needs to do, there’s a pump, in a pit, below ground level in that room. There’s a secondary pump in the corner, above ground level, in that room.”

Council member Kobus said, “This sounds like a major headache to me. I don’t know why we can’t simplify that somehow. I argued when we built that other cell, why we couldn’t have done something with this at the same time.”

Mayor Zavodny said, “Didn’t we talk about moving this across the road, at one time?”

Interim Water Supervisor Aaron Gustin said, “From the documents and from speaking with Travis and Kevin, in the past, in regard to stuff that was in the talks, but never came to fruition.”

Council member Jessica Miller said, “Aaron, just so I know what we are talking about, so, this area that you have to work in, was flooded with raw sewage and you have to crawl down in there to do anything? So, the solution that you’re looking for is to build a shaft so that what you’re working on is higher so that you don’t have to go down into it?”

Interim Water Supervisor Aaron Gustin said, “No. We’re trying to mitigate, or redirect, so to speak, because he was speaking of a vestibule. What I would recommend is, after speaking with John is not doing a completely enclosed vestibule. If we are going to look into a new headworks building, a hundred and twenty-one thousand dollars is kind of a gut check that could be put towards a new building.”

Mayor Zavodny said, “How much is the vestibule? This is a 1959 problem that was put in the wrong place the very first time.”

Council member Kobus said, “This seems like a waste of money.”

Interim Water Supervisor Aaron Gustin said, “To do a new headworks building, we’re talking a million plus. Everything does need to be code compliant.”

Council member Kobus said, “You can’t raise everything up that flows into there?”

Craig Reinsch, with Olsson said, “Well, we can raise the walls. Again, there are two things to consider. Number one is how do we get what we have to work so that it is less of a challenge during an overflow. Recognizing and going back to why didn’t we move it a long time ago, that’s because we didn’t get the NEMA grant to do so, at that time that we were looking at that. So, we can still do that again. The next step would be to replace the structure. Aaron has talked about adding grit. We would have the screen, so this would be a structure that would be higher, and then that could still be in a similar location.”

Mayor Zavodny said, “How much higher? How much can you get us?”

Craig Reinsch, with Olsson said, “Well, the channel would be in the same spot. We haven’t laid that building out. We were starting to talk about what those elevations would be. It could be as high as the road.”

Council member Kobus said, “That’s what it needs to be and then if you get a four to five inch rain, that water is all going to go in there. You know that. It can’t get out that fast.”

Mayor Zavodny said, “Which is the problem that we’ve been continuously having.”

Craig Reinsch, with Olsson said, “One option would be to stay there and the other option would be to go back to the original or the previous wastewater plant, which would be on the other side of the road.”

Interim Water Supervisor Aaron Gustin said, “That is the more costly option, right?”

Mayor Zavodny said, “We don’t have a funding mechanism for that, at all.”

Craig Reinsch, with Olsson said, “Which is why we’re trying to look at this existing structure to see what we can do in the short term, until we do something more permanent.”

Mayor Zavodny said, “Being abundantly honest, don’t you think that is just throwing good money after bad?”

Council member Kobus said, “Look how many years we have fought that.”

Craig Reinsch, with Olsson said, “It does take care of the problem. It could be used for something else, if you are going to move toward a new headworks building, or a different building. Again, we were looking for kind of a stop-gap. Something to do within the next five years.”

Mayor Zavodny said, “Here’s the other problem, this Council has a responsibility for the safety of our employees. Knowing that we have such a stupid situation right now and allowing it to continue, that’s on us and we can’t let that happen.”

Council member Hotovy said, “We’re complicit in it.”

Mayor Zavodny said, “Exactly.”

Council member Kobus said, “I would like to see that whole thing raised as high as it is supposed to be. I can’t see that it would cost that much. All of the piping could stay there, couldn’t it?”

Dana Trowbridge said, “The original design of the upgrade that was done pre-2008, it’s in the Council minutes, it called for moving that headworks building. Someone, in the government, was going to pay seventy-five percent of that, if we did it in a certain period of time. We did not do it and therefore, they were out. We knew, going into the new design work, that it was too low and would do this. Am I correct?”

Council member Kobus said, “We mentioned that.”

Dana Trowbridge said, “Ok. So, now we’ve got a problem. The problem may be diminished by the flow of our repaired delivery system, that we’re not going to have the seepage into it, because you were just overcome with water and that’s when everything went bad. So, if that works, if the slip lining works like it should, there should be fewer incidents happening out there where you’re up to your ears in effluent. But, what do we do in the meantime, when that happens? Because what we end up doing is having to shut the thing down and we have to dump it into Kaiser Creek. Am I wrong?”

Mayor Zavodny said, “Right now, we’re guessing that we’ve addressed our infiltration problem, to a degree. What degree, we don’t know exactly yet.”

Dana Trowbridge said, “How do we design it so it’s safe for people to work here? Is there anything that we can do?”

Mayor Zavodny said, “That’s the bottom line.”

Craig Reinsch, with Olsson said, “That’s outlined here and that’s why we’re saying if we raise this portion up, that will keep the water out. There are also some other things, adding the gas meters, taking care of some of the older electrical items that are in there, those are smaller items, comparatively speaking, but there are some other things that you can do, as well. This safety assessment was looking at one specific thing. It looks like, if the Council’s desire is to move forward and, one of the challenges that we had when we were talking with NEMA, during that time frame, was their definition of relocation was physically picking up what was there and moving it, which is not going to work. But, if the Council’s wish is to look at raising or moving to a new location, obviously that is going to be quite a bit more than what we’re looking at to take care of what’s there. So, the two are separate decisions.”

Council member Kobus said, “I don’t think that you have to move to a new location, just raise everything up that’s supposed to be raised up, there, to the right level. Even if you build that road, you’re going to have to have a guard rail there to keep yourself from sliding off of there. You guys slid off of there last year. You couldn’t even get up that hill.”

Mayor Zavodny said, “So, given the discussion tonight, can you go back to the lab and figure this out and come with a proposal to maximize lifting it the best we can?”

Craig Reinsch, with Olsson said, “So, to clarify, the question is do we use what is there now or do we start over?”

Council member Kobus said, “Just use what’s there now and raise everything.”

Craig Reinsch, with Olsson said, “If we use what’s there, we’re basically ripping buildings apart and we’re raising those buildings while keeping flow in action. Which is possible, but has its own challenges also. Both the blocks and the headworks are harder to add to… one of the things that’s in here is that you have a structure that has block walls, partial, and then the rest is stick frame, so to raise those things, we’re going to have to start over again.”

Council member Kobus said, “That’s not that big of a building, is it?”

Craig Reinsch, with Olsson said, “It’s not, but it depends on how high we raise it and what we do with the channel. So, we can take a look at raising it. I guess my question is, do I compare using the existing versus starting new?”

Mayor Zavodny said, “I think that for this Council to make an informed decision, we have to be able to compare the two, and I go back to we’re trying to solve the original problem, which was that is was put in the wrong place, probably from the beginning in 1959. I’m cringing hearing a million plus, but if it saves one employee from having a terrible outcome, then that is a ridiculous argument. The money doesn’t matter. It’s about having a safe, functional building, in the right location that doesn’t end up costing an arm and a leg.”

Council member Kobus said, “You shouldn’t have to go down in there. You should be able to have some kind of a pump that you can turn on so that you don’t have to go down in there.”

Interim Water Supervisor Aaron Gustin said, “That would be ideal. I don’t enjoy going down in there. We’ve been doing what we’ve been doing for a little bit and making do with what we have.”

Mayor Zavodny said, “We’re going to table this and have you go back and evaluate all of our options, so this Council can make an informed decision.”

Council member Tom Kobus made a motion to table the Wastewater Plant Headworks Safety Evaluation to evaluate the options. Council Member Pat Meysenburg seconded the motion. The motion carried.
Kevin Hotovy: Yea, Tom Kobus: Yea, Bruce Meysenburg: Yea, Pat Meysenburg: Yea, Jessica Miller: Yea, John Vandenberg: Yea
Yea: 6, Nay: 0

MEMO

PROFESSIONAL CIVIL ENGINEER
CRAIG A. REINSCH
E-12625
12/2/2020
STATE OF NEBRASKA

olsson

☐	Overnight
☐	Regular Mail
☐	Hand Delivery
☒	Other: Email

TO:	Mr. Clayton Keller, City Administrator
FROM:	Craig Reinsch, PE
RE:	WWTP Lift Station Safety Assessment
DATE:	December 2, 2020
OLSSON PROJECT #:	020-0028

OVERVIEW

Olsson has prepared a safety assessment of the influent pumping station at the City's wastewater treatment plant (WWTP), as requested by the City. The City's WWTP is located at 3461 M Road, or southwest of the City. The City's concern has been frequent sewage overflows at the influent pumping station due to high flows, equipment (screen, pump, valve) blockage, or related events. This assessment includes physical and electrical considerations. These events have occurred at this facility intermittently for many years. Several potential recommendations will be presented for consideration by the City.

GENERAL SAFETY CONSIDERATIONS

The existing and supplemental operation and maintenance manual for the WWTP contains a section on worker safety. Specific concerns are exposure to sewer gases, sewage from overflows, and electricity in contact with wastewater. Sewage overflows are a concern both for operator contact and environmental impacts. The operator exposure to pathogens, bacteria, and electricity contact concerns will be the primary focus of this document.

PHYSICAL CONSIDERATIONS

The existing lift station is located within a bermed area that was put into place to contain overflows, as shown in Figure 1. Based on Olsson's records, the station was constructed in the late 1950's or early 1960's at the time that the previous mechanical plant (east side of M Road) was abandoned and the 12" sewer line was installed to the present location. Previous (1977 and 1998) WWTP improvement plan sets show the berm and lift station/headworks as existing. A 1974 project also showed the building as existing. This was when the 18-inch gravity sewer was added to the City's collection system as was the second (10-inch) force main was added from the structure to the lagoons, and now sequencing batch reactors (SBRs). For reference, Cells D and E were added in 1977. The SBRs were added in 1998. Based on our most recent survey data, the lowest berm elevation is 1578.

601 P Street / Suite 200 / Lincoln, NE 68508
O 402.474.6311 / olsson.com

The most recent base flood elevations (BFE) determination, completed by the Nebraska Department of Natural Resources for the project, expired in June 2017. This document showed a flood elevation of 1576 just north of the access road. This shows that the berm exceeded the flood elevation at that time.

Figure 1: Site Layout

The lift station is divided between three different components; the headworks, wet well, and building/pump dry pit. These structures have common walls, with minimal connectivity. The headworks is a covered wood frame structure with partial block (concrete masonry unit (CMU)) walls, primarily on the north (single course until it connects with the building/pump dry pit) and west (5 courses or 40-inches). For reference, the high sewage water mark in the headworks building is to the top of the 2nd course, or 16-inches (1.33 feet). The building and sewage water mark are shown as Figure 2.

Figure 2: Headworks and Pump Building Exterior, Wet Well (left) and Headworks High Water Mark (Interior; right)

The headworks building is technically open to the elements via a screened 9' by 7' opening. The reason the building is kept open is to prevent the space from being classified as explosive, requiring additional electrical modifications to the structure. The headworks contains the open influent channel, which includes a comminutor (grinder), auger screen with water wash, and a bypass channel.

The wet well structure, shown previously with Figure 2 has concrete walls and floor, and a grated top that is open to the atmosphere. The east wall of the wet well is shared with the dry pit located in the basement of the adjacent building. The pump suction lines pass through the shared wall. The wet well doesn't share a common wall with any other structure, with the exception of serving as the north foundation wall of the headworks building. A sidewalk bounds the north and west side of the wet well, with approximately a 12-inch step down from the concrete to removeable bar grating that covers the entire wet well.

The building/pump dry pit is a single story structure with a basement. Electrical, sampling, and controls are housed on the main level. Pumps, pump suction, valves/piping, and associated components are located in the lower, or basement, level. A sump pump is located at the northwest corner of the building, north of the sidewalk, to help control groundwater. A sump pump is located in the building basement. Both pumps convey liquid to the wetwell. The sump pump discharges are now located above the top of the wetwell. Staining on the walls of the basement shows that the lower level has been completely full of sewage. This has occurred several times a year for the last several years. The basis for this is shown in the following table. A summary of the finished floor or wall elevations for these different parts of the structure are summarized in the following table.

Table 1 – Headworks Elevation Summary

Structure	Finished Floor Elevation	Top of Wall Elevation
Headworks	1575.80	-
Wet Well	-	1575.80
Building/Pump Dry Pit	1574.75	-
Approximate High Water or "Flood" Elevation	1577.13	-

Any time wastewater escapes the influent flow channel in the headworks or the wet well, it is likely that water will collect to the lowest point. This is the pump dry pit, located in the basement of the building. The building finished floor elevation, including the access door, is approximately 1 foot lower than the perimeter sidewalk and top of the wet well wall. It is a similar elevation lower than the surrounding grade. Two steps were installed to get from the upper sidewalk to enter the building. The total height of both steps is approximately 1 foot. This arrangement is shown in Figure 3. Based on information obtained from the City, flooding last occurred in June 2020, and has happened approximately every other month, or over 4 times during the last year. Water can also enter the building during heavy rain events.

Figure 3: Pump Station Entry and Sidewalk (North Side)

Figure 3 shows the high water mark on the building exterior, the steps down, and the sump discharge piping into the wet well.

Other potential sources of the dry pit flooding are pump, valve, or piping malfunctions or breaks. Pumps and piping can be jammed, clogged, or can overheat. Since the area around the pump station was designed to keep water out, it also keeps water in. Exterior sump or area pumps are in place to evacuate groundwater or surface water out of the area outside of the pump station. A new sump pump is located in the dry pit area to evacuate the lower level. This pump keeps up fairly well, but if enough water flows in, it takes time to pump the water level down.

Causes of plugged pumps or piping is primarily due to the effectiveness of the comminutor and/or screen with auger removal. These items were recently replaced or repaired to function properly. The effects of not having this equipment was the collection of debris in the SBR's, which was removed in early 2020 as part of late additions to the wastewater treatment project, funded by USDA-Rural Development.

City employees have been working to get caught up on maintenance items to minimize these occurrences, including the replacement of check valves and rebuilding pumps. Both of these activities occurred in mid-2020.

Another concern is prevalence of toxic gases in the dry pit area. These toxic gases are prevalent in sewer collection, pumping, and treatment stations, and include hydrogen sulfide, ammonia, carbon monoxide, and others. According to 10 States Standards for Wastewater Facilities (2014 Edition), it does reference equipment for confined space entry should be provided for wastewater pumping stations. The same standards require mechanical ventilation for dry wells located below the ground surface. This is already provided with an intake louver, exhaust fan, and ductwork located at 12-inches above the finished floor. The exhaust fan and ductwork are located in the southeast portion of the pump station building. However, the exhaust fan is only run when the lights are turned on, or intermittently. However, there is a possibility that the fan could run during a flood condition (i.e. if the lights are turned on).

In summary, the main concerns are flooding of the dry pit area due to high water events that escape the influent channel or wet well. These events also occur with pump, valve, or piping malfunctions or breaks. Electrical concerns due to flooding should also be considered, as is presented in the next section. The presence of unknown levels of toxic gas in the dry pit is also of concern.

ELECTRICAL AND CONTROLS CONSIDERATIONS

The following conditions were observed during a site visit to the lift station. During large rain events the lower lever of the lift station floods. There are several electrical devices located in the lower level that are submerged during a flooding event and could create a shock hazard for the operators.

A receptacle is located on the north wall intended to power the sump pump. This receptacle is not currently being used as the cord for the sump pump is routed through the floor to a receptacle on the main level.

A unit heater is set on a shelf in the lower level at the base of the stairs. This unit is very rusted and not in an operating condition. The unit heater on the main level maintains the temperature in the lift station above freezing.

There is a porcelain light socket with a bare incandescent bulb that is mounted to the structure that lights the lower level. The conduit and j-box that serves this light is heavily rusted. The light is not rated for submersion in water.

The pump submersible cables in the dry pit area are designed to be submerged, and protected in such a way to provide this protection. This was confirmed with Electric Pump who stated that "ALL Flygt pumps are submersible", and to make sure that the junction boxes are on the top level, which is the case in this structure. This arrangement allows for field modification/replacement of the cable. A typical diagram of the grommet sealed cable arrangement is provided below as Figure 4.

1. Entrance cover
2. O-ring
3. Entrance flange

Figure 4: Pump Cable Entrance Diagram (Flygt)

However, the main concern with these cables is if they are unintentionally nicked or cut. The best remedy for this is to group the cable in a "ladder" type arrangement that will keep the wiring away from the pumps, but still allow for simple removal of the cable wiring. This is something that the City can provide as part of their maintenance program.

The headworks also floods during large rain events and has several electrical controls and power feeders that get submerged. The power feeder for the grinder and circuiting for several sensors are routed along the floor along the channel and penetrate the wall into the lift station allowing high wastewater conditions to enter the lift station. The conduits serve as a potential path for water travel, so sealing the outside would not provide the fully desired protection.

The control level sensors in the headworks building appear to be submersible for a short period of time. The control panels and components are higher than "normal" high water events, or approximately 4 CMU courses above finished floor, or 32-inches. However, if the wastewater would go high enough, the control panels are not water tight.

RECOMMENDATIONS

Several options exist to address the physical concerns at the existing pumping station, which are primarily the flooding of the lower dry pit area, sewer gases, and electrical.

Sewer gases can be monitored using portable or permanently mounted devices. Permanent gas monitors were added to the gas management building, located just east of the pump station, as part of the wastewater treatment improvements project. A similar set-up could be provided at the lift station to monitor H2S, lower explosive limit (LEL), and oxygen. Sensors are typically not submersion rated. If a sensor were located in the lower dry pit area and a flooding event would occur, then the sensor would need to be replaced. A second sensor could be installed at the main floor level, but would not be effective for the lower portion.

Two sensors could be provided. One for the lower level and one for the upper level, in case the lower sensor is flooded, or as a backup. The sensors and alarm would be tied to the SCADA via ethernet/IP to the PLC, and could be interlocked with the exhaust fan to run if the levels are too high. The City has already procured a gas monitoring system, and are looking at different ways that it could be interlocked to SCADA, the exhaust fan, or a float in the lower level to provide additional information regarding the presence of gases.

Portable personnel units can be worn, as an alternate. However, these units require calibration once or twice a year, and typically only last for a few years. This system requires vigilant maintenance to keep the system functional, but it could be used for other locations, such as manhole or other confined space entry. The City will have to decide which of these systems, or a combination thereof, will work the best for them. Both units will need to be used and calibrated per the manufacturer's specifications.

If the permanent gas monitors are selected, and interlocked with the fan, there is the possibility that the fan could be called to run during high water conditions. If this happens, the exhaust fan could attempt to pull air through a submerged duct, which can damage the system. A secondary air inlet above the main floor with a backdraft damper could be added to save the

ductwork from imploding. Another option would be to add a float or alarm for high water conditions that would prevent the fan from running during flood conditions.

The most challenging issue is the flooding of the pump dry pit, which is due to how the building and site were set up initially. There are two potential options that could be considered by the City, which will be described from least to most invasive. The least invasive option would be to address water getting into the pump dry pit. The most invasive option would be to contain the water within the headworks building, wet well, and pump dry pit.

To address water getting into the dry pump pit, the entry door into the building needs to be raised so that it is above the elevation of the wet well wall. This would mean raising the door by 1.5 to 2 CMU block courses. This would require raising the roof, moving the door, and adding steps inside the structure. Another similar option would be to create an entry vestibule to the north side of the building. This would allow for a raised "hall way" to enter the building. There would be a step up (or two) from the existing sidewalk, which would keep the door to the entry vestibule above the wet-well walls and would preclude sewage backups. A perimeter wall would be added to tie into the existing walls. The interface between new and existing walls will need to be waterproofed. This wall and roof connection would need to be sealed to be water tight. This entry vestibule would be a way to address the exterior site components of the low grade around the building, the groundwater sump, and other components. The drawback to this would be the potential limitation for City staff to remove or install equipment into the building with a longer hallway. However, the space provided is similar to the existing constraints provided by the existing entryway door and railing around the stairs.

Coordination of existing electrical service, conduits, and sewer force main will be necessary. These conduits run vertically along the north face of the wall between 26 and 35 inches east of the northwest corner of the pump station. The vestibule could be started just east of the main electrical service entrance, to better work around the existing utilities. The area would still need to be filled in and concrete modified to accommodate the new entry. A concrete ramp could be installed in lieu of the stairs, if desired. The existing sidewalk would be removed to facilitate the new building and foundation. The new 12-inch force main will be very close to the proposed footing and building wall. The WWTP improvements record drawings show the pipe center line 7.5' north of the existing building exterior wall, or approximately 1.25 to 1.5 feet of separation from the edge of the wall. Field verification of items such as thrust blocks will be needed as the structure is laid out, and the wall or foundation location adjusted if necessary.

An access door or wall opening could be provided to allow for more of a direct entry into the building, instead of turning a corner. However, the City's existing equipment would not be able to lower equipment successfully to the ground while staying above the raised wall portion.

A proposed layout is provided as a separate figure, as Figure 5. The proposed vestibule with access stairs has exterior dimensions of 9'-4" by 5'-4" (50 SF) with a 3.5-feet wide access door. This layout includes new concrete stairs from the existing berm roadway, new steps down to existing concrete, railing on the steps and for raised areas near the wet well, and elevated grating to allow for access and drainage during high water events. The selected elevation is approximately 6.6-inches (0.55 feet) above the observed high water levels, referenced herein to provide a measure of redundancy.

A second option would be to create similar modifications around the entire pumping station and headworks structure. This modification includes replacing the bottom half of the headworks building walls with CMU, which would result in a complete rebuild of the structure.

The existing structure is approximately 39-feet by 17-feet. Construction is primarily wood framed with siding, with CMU along the west wall functioning as a retaining wall, and part of the north wall that is shared with the primary pumping station. Three courses of CMU would be added to the bottom of the building after removing the structure. The entry doors would also be raised, with steps into and out of the building. This will contain potential high water events, based on previous flow events. However, previous events would flood the surrounding berm. If the structure is raised to create a sewage containment area, it is anticipated that the water levels would continue to rise over the levels previously observed. Therefore, the City should consider focusing on raising the access to the pumping station, and continue to operate the headworks per their current protocols. Other modifications could be addressed when the facility is upgraded, when determined by the City. Sewage overflows into the bermed area would need to be addressed so they are not pumped into the creek. Currently, the existing area sump pump is only used for stormwater. The existing sump discharge piping could have a connection for temporary hose to be used to redirect the overflow back into the wet well. This overflow typically stays in the low spot for upwards of 30 days, until seeping into the ground.

If the headworks structure would be completely rebuilt, it would be in addition to the pump station modification. Should the City choose to include additional processes, such as grit removal, a different screening process, or similar arrangements, a new structure and layout would be needed. This structure could be placed just east of the existing structure. This location would allow for a tie-in to existing sewer lines, and a similar layout could be used. The structure and surrounding area would be raised to address the issues with the current facility, while being close to existing facilities. The influent channel would be deeper and the wet well increased in size to account for these back-ups. The setbacks from the existing gas main would need to be maintained, as determined during the recent WWTP expansion.

Electrical recommendations should be considered as follows:

- Remove the unused receptacle and conduit for the sump pump from the lower dry pit area.
- Remove the inoperable unit heater and conduit from the lower dry pit area.

- Replace the light fixture and conduit in the lower dry pit area with a fixture that is rated IP66/67. The estimated costs for these first three bullet point items is $3,500.

- Reroute conduit in headworks building from floor to ceiling and provide disconnect plugs with strain reliefs for cord drops to sensors and motors to allow for A frame hoist to travel along channel.
- Reroute conduit to penetrate wall from the headworks building into lift station above flood level and plug all openings in existing wall below flood level.
- The estimated costs for the last two bullet point items is $5,500.

OPINION OF PROBABLE CONSTRUCTION COST

A summary of the anticipated construction costs are as follows:

Table 1 – Opinion of Probable Construction Costs: Reuse Existing Clarifier Basin

Item	Total
Mobilization/Demobilization/Bonds/Insurance	$7,810.00
Demolition, General Grading and Site Work, Seeding, etc	$12,750.00
New Entry Vestibule	$52,970.00
Electrical and Utility Work	$10,500.00
Subtotal	$84,030.00
Contingency (20%)	$16,805.00
Engineering, Admin, etc	$20,165.00
Project Total	$121,000.00

These costs were prepared anticipating work to be done by a contractor through a bid process. If the City chooses to proceed with doing some or all of the work on their own, then these anticipated costs will be on the higher side, depending on how the work is divided. The final layout should be completed using engineered drawings to coordinate the desired site components, beyond the preliminary layout provided with this memo.

SUMMARY

A summary of the safety recommendations contained herein are as follows:

1. Most of the safety concerns have to do with high water events due to sewage flow, either from more flow than normal entering the sewage collection system, or backing up due to equipment or piping/valve malfunctions.

2. Proper screening of the raw sewage will help to reduce these events. It is anticipated that the recently procured communitor and repaired auger screen will assist greatly in this reduction.

3. Ongoing and preventive maintenance is needed to limit high water events due to pump, piping/valve, or other component failures. This maintenance combined with addressing Item #2 is anticipated to greatly reduce the amount of overflows.

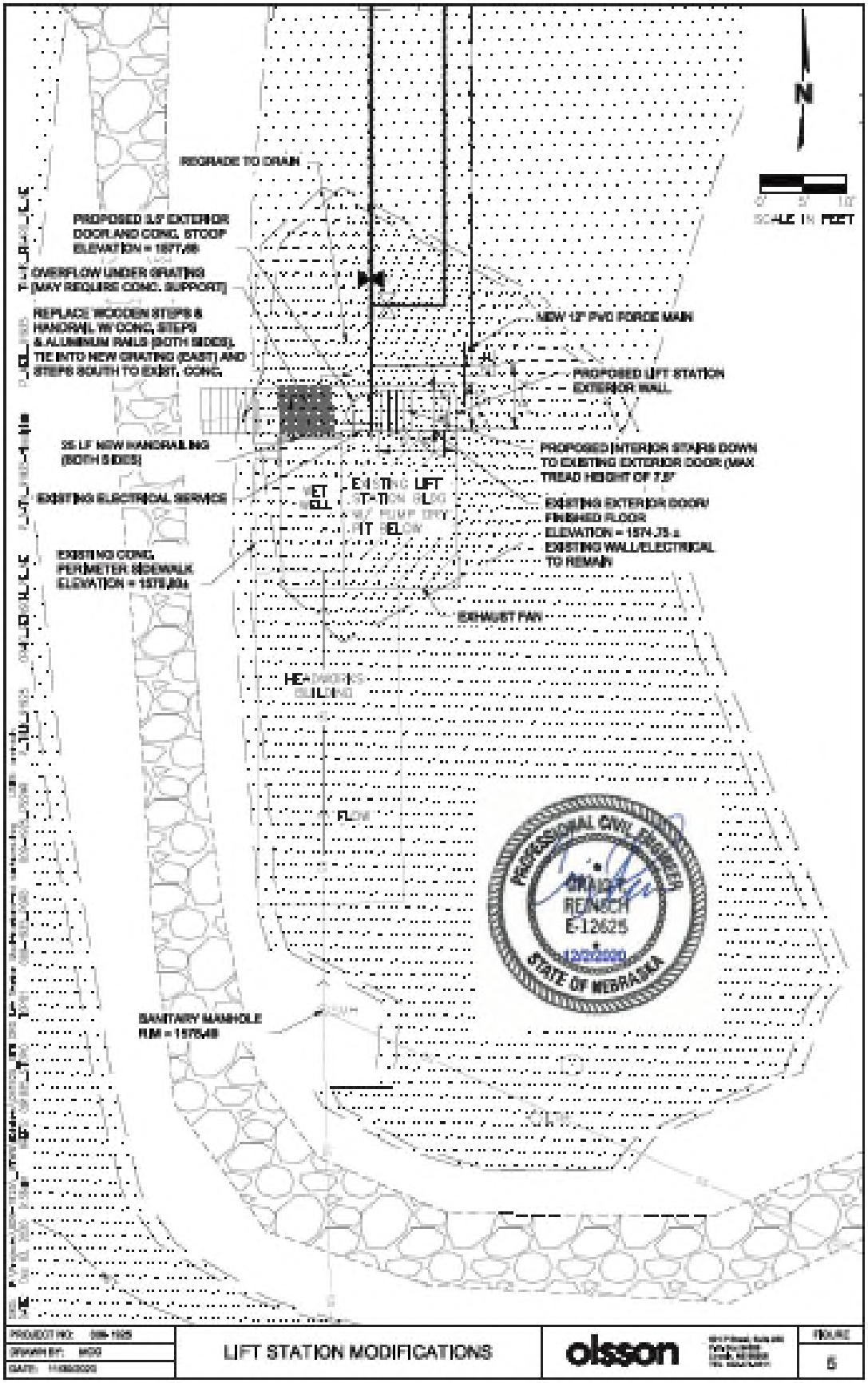
4. The City has discussed procuring gas monitors, either portable or fixed, in the past. It is recommended that the City determine which configuration makes the most sense for their current operational practices, and determine the best use of their purchased equipment (i.e. linked to SCADA, and HVAC, etc).

5. Electrical modifications should be completed per the recommended list provided. Many of these items could be completed within the current budget. If additional funds are needed, these could be requested as part of the next budget. The City did mention the option of foregoing some of the modifications in the headworks, based on limited building use during high water events. The desired items were included in the estimate, and could be modified based on the cost information and format.

6. The existing pumping station structure will need to be modified to keep sewage overflows from entering the pump dry pit, as stated herein. Since the entry door is lower than the wet well and headworks flow channel, the flow will collect to the lowest point, which is currently the door, and then into the pump dry pit inside the building. These modifications will keep future overflows within the containment berm, as designed, and out of the pump dry pit, as desired. Further modifications to existing buildings will result in increased water levels during these events, as opposed to using the bermed area.

These recommendations were based on our understanding of the City's request to improve safety considerations at the existing pumping station. The City should consider these recommendations as part of their overall safety considerations at this and their other facilities.

F:\Projects\009-1925\Documents\Reports\Lift Station safety assessment\20-12-02_WWTP Lift Station Safety Review.docx


REGRADE TO DRAIN
PROPOSED 3.5' EXTERIOR DOOR AND CONC. STOOP ELEVATION = 1577.66
OVERFLOW UNDER GRATING (MAY REQUIRE CONC. SUPPORT)
REPLACE WOODEN STEPS & HANDRAIL W/ CONC. STEPS & ALUMINUM RAILS (BOTH SIDES). TIE INTO NEW GRATING (EAST) AND STEPS SOUTH TO EXIST. CONC.
NEW 12" PVC FORCE MAIN
PROPOSED LIFT STATION EXTERIOR WALL
35 LF NEW HANDRAILING (BOTH SIDES)
PROPOSED INTERIOR STAIRS DOWN TO EXISTING EXTERIOR DOOR (MAX TREAD HEIGHT OF 7.5")
EXISTING ELECTRICAL SERVICE
EXISTING LIFT STATION BLDG
EXISTING EXTERIOR DOOR FINISHED FLOOR ELEVATION = 1574.75 ±
EXISTING WALL/ELECTRICAL TO REMAIN
EXISTING CONC. PERIMETER SIDEWALK ELEVATION = 1575.93±
EXHAUST FAN
FLOW
SANITARY MANHOLE RIM = 1575.48
N
SCALE IN FEET
PROFESSIONAL CIVIL ENGINEER
CRAIG A. REINSCH
E-12625
STATE OF NEBRASKA
LIFT STATION MODIFICATIONS
olsson
FIGURE
5

Dr. Chad Denker was present to discuss purchasing new scoreboards for the auditorium. He stated that the scoreboards were from the 60's and really didn't work well anymore. He stated that the school would be happy to cost share in the project. Dr. Denker said that one scoreboard would be black and red and the other one would be black and gold to represent both schools in the community.

Mayor Zavodny stated that he was able to get sponsorship for the scoreboards from Bank of the Valley and Vandenberg Electric. There would be some wiring that the city would need to provide.

It was decided that this item is just for information purposes since the item was voted on and passed at the previous meeting.

Council member Kevin Hotovy made a motion to pass and adopt Resolution No. 33-2020 approving the Execution of an Agency Agreement with the Department of Transportation, Aeronautics Division for Grant No. 3-31-0025-013-2021 and authorize the Mayor to sign the Agency Agreement. Council Member John Vandenberg seconded the motion. The motion carried.
Kevin Hotovy: Yea, Tom Kobus: Yea, Bruce Meysenburg: Yea, Pat Meysenburg: Yea, Jessica Miller: Yea, John Vandenberg: Yea
Yea: 6, Nay: 0

Resolution No. 33-2020

EXTRACT FROM THE MINUTES OF AN OFFICIAL MEETING OF THE CITY COUNCIL OF DAVID CITY, NEBRASKA, SPONSOR OF DAVID CITY MUNICIPAL AIRPORT, HELD ON December 9, 2020.

The following resolution was introduced by Councilman Hotovy, read in full, seconded by Councilman Vandenberg and considered:

A RESOLUTION ADOPTING AND APPROVING THE EXECUTION OF AN AGENCY AGREEMENT WITH NEBRASKA DEPARTMENT OF TRANSPORTATION, AERONAUTICS DIVISION FOR GRANT NO. 3-31-0025-013-2021 TO BE SUBMITTED BY THE DEPARTMENT TO THE FEDERAL AVIATION ADMINISTRATION TO OBTAIN FEDERAL ASSISTANCE FOR THE DEVELOPMENT OF THE AIRPORT:

Be it resolved by the Mayor and members of the City Council of David City, Nebraska, that:

1. The City of David City shall enter into an Agency Agreement with the Department of Transportation, Aeronautics Division for Grant No. 3-31-0025-013-2021 for the purpose of obtaining Federal assistance for the Airport and that such agreement shall be set forth hereinbelow.
2. The Mayor of the City of David City is hereby authorized and directed to execute said Agency Agreement on behalf of the City of David City, and the City Clerk is hereby authorized to attest said execution.
3. The said agreement, referred to hereinabove, is inserted in full and attached herewith, and made a part hereof as Exhibit "O".

Upon calling for a vote on the resolution, 6 voted yea, and 0 voted nay, and the resolution therefore was declared passed and approved on December 9, 2020.

ATTEST: Tami L. Comte
Clerk

Mayor

EXHIBIT "O"

AGENCY AGREEMENT

Project No. 3-31-0025-013-2021 (M01)

This is an agreement between the City Council of David City, Nebraska, hereinafter referred to as the "Airport Sponsor" and the Nebraska Department of Transportation- Division of Aeronautics, hereinafter referred to as the "Division," made and entered into in accordance with, and for the purpose of, complying with the laws of the State of Nebraska.

The Airport Sponsor desires to develop the David City Municipal Airport and to use federal airport aid funds available for that purpose. Therefore, the Airport Sponsor hereby designates the Division as its agent in accordance with §3-124 and §3-239, Neb. Rev. Stat. (Reissue 2016), and the Division hereby accepts such designation and agrees to act as the agent of the Airport Sponsor.

It is mutually understood and agreed between the parties that the Airport Sponsor has submitted to the Division its proposed project for the development of said airport, and that such project has been approved by the Division, in accordance with §3-239, Neb. Rev. Stat. (Reissue 2016).

The Airport Sponsor hereby warrants, undertakes and agrees that if the Federal Aviation Administration makes a grant offer, and the Airport Sponsor executes a Grant Agreement, it will develop and manage said airport in the manner set forth in the Grant Agreement and abide by the conditions, rules and regulations of the Federal Aviation Administration.

The terms and conditions of this Agency Agreement and the respective duties, undertakings and agreements of the parties with respect to this Agency Agreement and with respect to the project of airport development, are as follows:

A. The Division shall accept, receive, receipt for, and disburse all funds granted by the United States for airport aid in accordance with federal laws, rules and regulations and in accordance with §3-101 to §3-154 and §3-239, Neb. Rev. Stat. (Reissue 2016), as the agent of the Airport Sponsor.

B. Upon receipt of such federal funds, the Division shall deposit them in the State Treasury, according to law, and shall cause disbursement to be made therefrom as follows:

   FIRST: If the Division advances funds to the Airport Sponsor as the equivalent of the United States' share of allowable project cost, the Division shall reimburse itself for any such advancement out of such federal funds thereafter received.

   SECOND: The Division shall cause the balance of such federal funds due the Airport Sponsor to be paid promptly to the Airport Sponsor.

C. The Division shall maintain accurate records of all the funds received and expended by it in connection with the project. These records shall be open to inspection by the Airport Sponsor, the Federal Aviation Administration and their authorized representatives in the offices of the Division at all reasonable times.

D. The Airport Sponsor reserves the right, power and authority to execute the Application for Federal Assistance, the federal Grant Agreement, all construction and engineering contracts, all agreements related to the purchase of land and all amendments to these items. Aside from the matters so reserved, the Division shall, as agent for the Airport Sponsor, process, execute and submit to the Federal Aviation Administration all papers, forms and documents required by that agency for the approval, carrying out and completion of the project.

E. The Airport Sponsor agrees to reimburse the Division for its administrative costs of furnishing all services performed by it as agent of the Airport Sponsor, including, but not limited to, the services set forth in the attached Exhibit A, "Administrative Services". Division administrative costs charged to the project are considered allowable costs for federal and state participation. These costs will be charged according to the "Schedule of Fees and Charges" shown in the attached Exhibit B, which schedule shall be subject to change upon notification in writing by the Division to the Airport Sponsor.

As used herein, the following words, terms and phrases shall have the meanings herein given:

"Application for Federal Assistance" means the document prepared as the formal application submitted to the Federal Aviation Administration for a grant of federal funds.

"Develop" means to plan, construct or improve the airport as defined in the Application for Federal Assistance.

"Project" means a plan of action for the accomplishment of specific airport developments.

"Grant Agreement" means the contract between the United States of America and the Airport Sponsor in which the Federal Aviation Administration, on behalf of the United States, agrees to pay a portion of the allowable costs of the project.

Executed by the Nebraska Department of Transportation, Aeronautics Division this 17th day of November, 2020.

(SEAL)

NDOT DIVISION OF AERONAUTICS

Director

Executed by the Airport Sponsor this ___ day of _____, 20____.

RESOLUTION
DO NOT SIGN

Clerk

RESOLUTION
DO NOT SIGN

Mayor

EXHIBIT A
AGENCY AGREEMENT
ADMINISTRATIVE SERVICES

1. Conduct airport site inspections.
2. Review and secure federal approval of Airport Layout Plans (ALP).
3. Prepare and process CIP Data Sheets and related documents used to request an allocation of federal funds, if requested by the Sponsor.
4. Assist in the preparation and processing of Environmental Impact Statements and other environmental studies.
5. Review and process land acquisition documents, title opinions, sponsor certifications and audit reports.
6. Prepare an independent cost analysis of consultant costs, if requested by the Sponsor.
7. Prepare a Disadvantaged Business Enterprise (DBE) Program, if requested by the Sponsor and represent the Sponsor in the DBE Unified Certification Program.
8. Review, process, and secure federal approval of all contracts and agreements, change orders and amendments to these agreements.
9. Attend pre-design conferences and conduct design (plan-in-hand) inspections.
10. Review and process the plans, specifications, special provisions and contract documents. Provide U.S. Labor Department wage rate determinations.
11. Attend pre-bid and pre-construction conferences.
12. Prepare and secure execution of Applications for Federal Assistance and associated documents. Prepare and process program changes.
13. Process Grant Agreements and amendments.
14. Review periodic pay estimates and forward federal funds to the Airport Sponsor.
15. Prepare applications, requests, transfers or letters of credit for Grant Agreement payments.
16. Conduct or participate in periodic and final inspections.
17. Prepare and/or process other federal documents not otherwise specifically covered above.

EXHIBIT B
AGENCY AGREEMENT
SCHEDULE OF FEES AND CHARGES

A. Salary Costs. Charges will be the monthly rate worked times an overhead/benefits factor for the following positions:

Engineer VI	Engineering Associate (all)*
Engineer V	Engineering Aide (all)*
Engineer IV	Accountant (all)
Engineer III	Accounting Clerk*
Engineer II*	Attorney (all)
Engineer I*	Drafter (all)*

The overhead/benefits factor will be determined annually based on an audit performed in accordance with OMB Circular A87, "Cost Principles for State, Local and Indian Tribal Governments".

* Employees in these positions receive time and one half for time worked over 40 hours per week.

B. Living Costs and Outside Expenses. Actual.

Charges will be actual expenses and shall include meals, lodging, telephone calls, etc. normally paid by Division.

C. Materials, Supplies, & Rental Equipment. Actual.

Charges will be actual costs and shall be charged in accordance with invoices, billings, contracts or agreements.

D. Transportation. Actual.

Charges will be those established by Division policy for all users for operating a state automobile or using a state aircraft.

AGENCY AGREEMENT

Project No. 3-31-0025-013-2021 (M01)

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Executed by the Nebraska Department of Transportation, Aeronautics Division this 17th day of November, 2020.

(SEAL)

NDOT DIVISION OF AERONAUTICS

Director

Executed by the Airport Sponsor this 9th day of December, 2020.

Clerk

Mayor

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Charges will be actual costs and shall be charged in accordance with invoices, billings, contracts or agreements.

D. Transportation. Actual.

Charges will be those established by Division policy for all users for operating a state automobile or using a state aircraft.

Mayor Zavodny stated that the next item on the agenda was consideration of purchasing Zegers 1st Addition, Lots 1-16 (owned by GDC Properties).

Mayor Zavodny said, "This came about from some discussions with Butler County Development and with what is going on with Timpte. You know we've had some challenges and I hope that we are close to signing the agreement to use the TIF money to purchase the land so that we can develop it along the highway north and around Timpte. That is a great project for this community and it's something that we need to do. If you go to some other communities, they have industrial parks and they have areas to develop. We don't really have that. That led us to an unusual situation. We have the land across from Aquinas that was looking to be developed by private owners and it put us in a position where the City is competing with a private entity. There are some issues with fairness, because is a City going to push what they own north? And we've had interest from a variety of different places that are asking if they have somewhere that they could build. Part of the reason that was purchased over there was that Cory was initially going to put up a brand new building and then ended up buying what he has now and buying that ground around there. So, the dilemma that we find ourselves in right now is, does this start a precedent?. You know, the City can't be a developer on everything. The fact that these are the two commercial properties that are available right now, both on very good locations, I don't really think that it's fair to put the City in a competitive place with these owners. So, the question was, would we make an offer and become the developer, using TIF. Again, if there's no way to pay for it, it's pretty hard to convince me that we should consider doing something. Using TIF, like we're doing to the north, to pay for the ground and then the City becomes the developer because that's really the only other commercial tract that is in play right now. That lays out for you the issue that I think that we're facing. I wanted to have the discussion; how do you feel about it? The City owning property, I've always said, is not a great idea. It's not the best deal in the world, but we can develop it better and we do have the TIF money and we have some people who are not, rightfully, not super happy that would be competing against the City. Your thoughts?"

Dana Trowbridge said, "There is a significant difference because we're trying to compare an apple to an orange. There is no risk for any taxpayer money in David City, Nebraska on this north project. That TIF is a done deal. We will know within thirty minutes of calculations how much money will flow into that account over the next fifteen years. The money has not been spent, so, therefore, we are in complete control. We don't put anybody at risk. We don't put any taxpayer money at risk. The other part of it is that TIF will come when something gets built. After four years of sitting there, nothing has gotten built. So, where does the half million dollars or thereabouts, to buy that property come from? You can tell me that it comes from TIF, later. Well, maybe. Because, in order for TIF to fund that on a fifteen-year payback, you're going to need at least four million dollars' worth of valuation out there. Four million dollars of valuation is probably six million dollars' worth of buildings. That is a lot of buildings. We found out that a fifteen-million-dollar project put about half of that on the tax rolls. I'm not against it. We need to grow. There's no two ways about it. But, I say, if we want to own land, then we want to own land where we don't put anyone at risk."

Council member Hotovy said, "Do we even know a price?"

Mayor Zavodny said, "No. I wanted to have this discussion first. I did get an email from Scott Obrist, who is one of the guys that has an interest in it, say that they would entertain an offer. Because this isn't the only thing that we have that we're going to have to consider down the road. Once the airport plan is put together, then if we're going to extend our airport, we're going to have to do something. That's something that we have to think about going on. Now, again, to fund it, I think that I have some ideas of how we can fund that. But, when that comes

up, we're not there yet. So, we've got some other things to consider, moving forward. The thing that struck me, as to why we should have the discussion is the competition fair, and I think that the points that you made are extremely valid. We don't have value to necessarily do it, yet. It's kind of almost like Seward did and some other communities, with the industrial park idea. You're taking a risk. Getting something on the tax rolls there, over the long term, another rate payer, those things are benefits that, looking forward, you have to consider if those are worth the investment."

Council member Kobus said, "We can't buy that land with TIF money?"

Dana Trowbridge said, "The north land? We'll have money beyond buying land."

Mayor Zavodny said, "This one? You can buy it with TIF, but the value isn't there, right now. There's nothing sitting there that we can say, we've increased the value this much and we have TIF money."

Council member Hotovy said, "The gain in the value is what you collect TIF on. If there were to be anything built on that land, then you can collect TIF money on the improvements."

Mayor Zavodny said, "Otherwise, I think that it is a valid point, we're speculating to some extent. One of the problems that people run into is the cost of development and that's where I think the challenge is going to be. The beauty of that one is that we have a lot of TIF that we know is coming and then by the time that we sell tracts, as we move along, there's additional money put into it. So, that one is a good lucrative one for the ratepayers of David City for the City to increase valuations, those kinds of things and have some new ratepayers."

Dana Trowbridge said, "One other thing, the north project, any land that would be purchased up there, is purchased with somebody else's money, basically, free money for the citizens of David City. So, then, when you sell the land that you bought to an industrial firm, the City of David City has another three to four hundred thousand dollars in the kitty because you've got nobody to pay back because you own it and you own it with somebody else's money. So that's the good part of working TIF, from that perspective, but we were fortunate because somebody else built the fifteen-million-dollars worth of valuation. One thing that we need to look at is how can we help develop this piece? What can the City do? I think that one thing the City can do is that we can look at housing, because I believe that housing draws business. There's the chicken and the egg. If you have people, you draw businesses. If you draw businesses, it isn't necessarily going to draw people."

Council member Kobus said, "You can't do housing over here?" (across from Aquinas)

Council member Meysenburg said, "It would have to be rezoned and replatted."

Mayor Zavodny said, "Housing is a need that we have."

Dana Trowbridge said, "The housing part of it, we may be able to blend some of this north TIF project into leveraging workforce housing money, which, as you look at how you can leverage it, a hundred to two hundred thousand dollars in the kitty, can turn into the better part of a million with the State of Nebraska and Uncle Sam. So, maybe we can leverage some of those funds into a housing project, which will help us grow and that's going to help us attract business."

Council member Bruce Meysenburg said, “Let me understand this, now. If Vandenberg wouldn’t have bought that to develop, would the City have considered purchasing it? Would we have gone down that road or do you think we would have stayed out to the north?”

Mayor Zavodny said, “Well, the north property was a no-brainer because Timpte had already invested such a large amount of money, that the money was there to do what needs to be done. We’re still not one hundred percent sure what that is going to look like if Timpte has any other ideas whatsoever. At one point, there was some of the people that supply Timpte said that it would be better to be closer to our final destination and source ourselves there. So, we don’t know what it’s going to look like but I probably wouldn’t have sat here and thought that we should start an industrial park there, if that was available.”

Council member Bruce Meysenburg said, “My point is that he took the risk to get started up there and it never took hold. Are we coming in to bail somebody out because nothing worked out for him?”

Mayor Zavodny said, “That’s a fair question because I had the same thought. The reason that I wanted to bring it here is because I don’t want the perception to be that there’s an unfair playing field because the City is developing some ground. That’s why I wanted to have the discussion. I think those are some legitimate questions and the questions that need to be asked. The question is – would we be able to develop it and is there somebody that wants to go there?”

Council member Bruce Meysenburg said, “I think that housing would be a better fit than commercial.”

Council members Kobus and Miller both agreed with Council member Bruce Meysenburg.

Council member Kobus said, “I would think that a housing development would go there before industrial. Industrial sounds great to the north.”

Mayor Zavodny said, “So, this is probably worth discussing a little more. Dana Point is starting to sell some of their lots because they initially cut their plan in half. They are probably not going to develop the other lots; they are selling them. We are a little bit landlocked. We need housing. We keep hearing it from Timpte, we’ve heard it from Michael Foods, our two biggest employers. I can attest to, early in the morning, I’ve been having to make trips here lately, the amount of cars at four o’clock in the morning is mind boggling, coming from Columbus and Schuyler area.”

Council member Hotovy said, “Also, when you’re leaving town at quarter after five, the traffic is incredible.”

Mayor Zavodny said, “Ok. So, how do we make housing work there? Do you think that we can leverage the workforce housing?”

Council member Bruce Meysenburg said, “Do we start with infrastructure and leave the rest to him?”

City Clerk Comte said, “The first thing that you’d have to do is to rezone it from Flex Space to Residential and also have it replatted. It is platted for Industrial lots.”

Mayor Zavodny said, “I think that is doable. It addresses the housing which we haven’t been able to touch forever. I don’t even know where we would go with housing, at this point. It gets pretty wet when you go across the highway from what we’re looking to develop. I know that R.J. (Hein) put in some drainage tile and stuff to address that. With the census, we’ll be lucky to stay the size that we are because we haven’t had added any housing, really. Lots are at a premium around because when there’s a lot, the builders are trying to see if they can access it.”

Council member Kobus said, “I bet in three years you’d have that full over there with people building.”

Mayor Zavodny said, “We know that we have a housing study that shows that we are way short.”

Council member Kobus said, “Buy the land and develop it and, there, you’ve got your tax dollars.”

Mayor Zavodny said, “Housing is less of a risk.”

Dana Trowbridge said, “It is. Workforce housing is going to look a bit different than normal housing on 12th Street. I don’t believe that it will be in little square chunks. I believe that it’s going to be, maybe houses with crawl spaces, without basements, because of the water problems. Maybe it’s 4,000 square foot lots versus 10,000 square foot lots. Maybe it is a meandering street that has more buildings of community than a grid.”

Mayor Zavodny said, “Or buildings on a slab, like the townhouses, with the tornado shelters as hollow blocks.”

Dana Trowbridge said, “It’s not going to be 2,200 square foot houses. But I think we’ve got a good start because we’re talking about it. Clayton has done some investigating. We’ve started down the path already. We’ve got to figure out how to fund it.”

Mayor Zavodny said, “This has gone one hundred and eighty degrees from where I expected this conversation to go, but it’s actually better. Those are some good ideas.”

Council member Kobus said, “What are you talking about 2,200 square foot?”

Dana Trowbridge said, “A normal city lot is around 9,000 to 12,000 square feet, somewhere in there. A city block is three hundred by three hundred, so if you have four lots, they are one hundred and fifty by one hundred and fifty so that’s 22,000 in a quarter of a block. You don’t need that. It’s almost a bungalow type of concept, back in the days from the 30’s, when housing was built along those lines.”

Mayor Zavodny said, “We might even have a lot of interest from our local builders who might do a spec house here or there.”

Council member Hotovy said, “You don’t have to put near as much outlay out if you’re doing fourteen hundred square feet or eleven hundred and fifty square feet as compared to two thousand or three thousand.”

Dana Trowbridge said, “I think that twelve or thirteen hundred, if it’s done right, will serve a family.”

Council member Hotovy said, “My starter home, the first home that I bought was twelve hundred square feet.”

Mayor Zavodny said, “That makes sense. Can I ask one question, just because he’s here? Houses are selling as fast as you can list them, kind of, aren’t they?”

Realtor Bob Kobza said, “I worked on this project, to develop this up in the commercial. The biggest problem that we ran into is the turn-off lane off of the state highway. As that two lane merges into four, you have to have a center turn lane put in at the Aquinas driveway, just like we have the three lanes in town and then you have to add another lane, plus a shoulder, to the west side, if it is going to stay as commercial. That was around a hundred and fifty thousand dollar project, if it’s going to stay as commercial. If it would stay as a residential, you still need a turn lane, but you don’t have all of that truck traffic and to design it and have the state work on that.”

Mayor Zavodny said, “In your professional opinion, it seems to me that there is enough demand.”

Realtor Bob Kobza said, “For housing, I agree a hundred percent. We’ve sold several in David City in the three hundred thousand dollar range, here lately. That demand is there and people want nice stuff and with the low rates, I don’t see that letting up. But the problem is, we don’t have empty lots to build a home on and we have a deed restriction and a building tied to the lots in the Sabata new addition. We have people that want, for instance, Shelby Lumber or Tony Novak or Craig Svoboda to build them a specific house and they want to pick their builder. We see more of that than you think, in David City, where people want to pick that builder. I think that we need somewhere for it to go. We sold a lot over on 11th and E Street with a terrible house for forty thousand dollars that they are going to build a new home on now. So, he’s going to have fifty grand in that lot, so that should be what our market is in a new subdivision, probably at least. I just think that the demand is there. Right now, to give you an idea of the demand, we have twelve qualified buyers above three hundred thousand that are waiting for a home in David City. The demand is there. Our schools are the reason that people want to come here and that’s a tribute, not because Mr. Denker is sitting here, but our schools are why people want to come here. That is the biggest thing that we hear.”

Council member Miller said, “I’m just happy that Aquinas finally would get their turn lane. They’ve been wanting a turn lane because it is hazardous. They need that turn lane because when you have buses that are trying to turn and you have people that are trying to go around the buses and they aren’t even in the turn lane and are almost causing head-on collisions. We’re lucky that we haven’t had more of those over there.”

Realtor Bob Kobza said, “Once again, the demand is there. We need somewhere to build.”

Mayor Zavodny said, “Ok. Thank you, Bob. Here’s what we’re going to do. This went a totally different direction tonight, but it makes a lot of sense. Why don’t we investigate a way that we can probably do that? I think that the good thing is that we can handle the zoning piece pretty easily with our Planning Commission and us.”

Council member Bruce Meysenburg said, “I think the big thing is that David City needs people before they need anything else, as far as convenience stores or gas stations. If we can get one or two thousand more people in this town, that would be awesome.”

Mayor Zavodny said, “I don’t think that you’re wrong. I just wasn’t thinking that way. In Butler County Development, we talked about actually brining a truck stop in that actually has truck stop type things. If you want to get right down to it, our need for housing is greater than additional need for business because where are the people who are going to work there going to live? Let’s investigate it and revisit this in January. Very few times have I been totally surprised at the outcome and that one did it.”

Dave Ziska and Craig Reinsch, from Olsson, gave a presentation on the fact that Olsson has been working with the City of David City since 1959 and they value the relationship that has been built in those years and they wish to see the relationship continue. They have plans to improve their communications with both the City Administrator and the City Council, along with the department heads.

There being no further business to come before the Council, Council member Hotovy made a motion to adjourn. Council member Vandenberg seconded the motion. Kevin Hotovy: Yea, Tom Kobus: Yea, Bruce Meysenburg: Yea, Jessica Miller: Yea, Pat Meysenburg: Yea, John Vandenberg: Yea, Alan Zavodny (Mayor): Yea Yea: 6, Nay: 0, Absent: 0 The motion carried and Mayor Zavodny declared the meeting adjourned at 9:12 p.m.

CERTIFICATION OF MINUTES

December 9, 2020

I, Tami Comte, duly qualified and acting City Clerk for the City of David City, Nebraska, do hereby certify with regard to all proceedings of December 9, 2020; that all of the subjects included in the foregoing proceedings were contained in the agenda for the meeting, kept continually current and available for public inspection at the office of the City Clerk; that such subjects were contained in said agenda for at least twenty-four hours prior to said meeting; that the minutes of the meeting of the City Council of the City of David City, Nebraska, were in written form and available for public inspection within ten working days and prior to the next convened meeting of said body; that all news media requesting notification concerning meetings of said body were provided with advance notification of the time and place of said meeting and the subjects to be discussed at said meeting.

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Tami Comte, City Clerk