
The Board may vote to go into Closed Session on any agenda item as allowed by State Law.

ROUTINE BUSINESS

1. Announcement of Open Meetings Act
2. Roll Call
3. Public Works Report

CONSENT AGENDA

1. Minutes Approval for December 21st, 2023
2. Agenda Approval
3. Claims Approval for December 4 through December 15, 2023
4. Consent Agenda

Any item listed on the Consent Agenda may, by the request of any single BOPW Member, be considered as a separate item under the Regular Agenda Section of the Agenda.

OLD BUSINESS

REGULAR BUSINESS

1. Discussion and Action –Recommend to City Council the award of Phase I Street Improvements Project to Constructors, LLC
2. Discussion and Action – Recommend to City Council the execution of Power Plant Arc Flash Study agreement in amount of \$21,600.00 to Farris Engineering
3. Discussion and Action – Rescheduling of regular BOPW meeting on July 4th, 2024 to July 3rd, 2024

ADJOURNMENT

Trevor Campbell, Public Works Director

REPORT TO BOARD OF PUBLIC WORKS MEMBERS

**FROM TREVOR CAMPBELL
PUBLIC WORKS DIRECTOR**

REGARDING Public Works Report – January 4th, 2024

DATE January 3rd, 2024

General Update

Streets:

- Street sweeper is out of commission and awaiting MacQueen to replace a conveyor motor and conveyor.
- Crews have been street sweeping and cleaning leaves.
- Street signs are being installed on streets on east side of Harlan St. Street signs are being removed from the median on Lane St and being installed in the ROW on both sides of Lane St. Street signs will be for sale on Municibid and will be advertised once the auctions are live.

Water:

- Main break at 15th and Abbott again on Dec 22nd. This makes 4 leaks in the same location. The crew tried to replace a section of pipe but were unsuccessful due to inability to isolate. Multiple valves were operated but no luck in slowing the leak enough to safely cut a section out so another wrap around was installed.
- Main break at 2615 Towle St on Dec 25th. Crews came in on Christmas Day to repair the 2" water main. They were able to cut out a section of main and splice in a piece of pvc.
- I am actively working on a plan to implement main replacements. I have been researching pipe bursting and it appears to be a realistic option for Falls City. I have been in contact with vendors, engineers and have reached out to Omaha who has begun the same type of trenchless replacement. I think we need to insert a valve/stopping equipment to isolate project extents. I will be looking into purchasing equipment for running water landlines which is simply a fire hose ran off a hydrant that back feeds homes through the spigot. This ensures the residents have an unimpacted water supply while the water main work occurs.
- Our GIS project is off to a good start. Staff has located many valves and curb stops and started surveying the locations and building our water map.
- I dug out water maps from the vault at Old City Hall and have sent them off to get scanned in. 1963 is the oldest set of prints I have been able to locate along with some from 1966 and 1978.

Sewer:

- There is a blower electrical ghost that we have been trying to identify for the past couple weeks. It has been narrowed down to a suspected controls issue. A second blow is having issues now. John Roland has been helping us narrow down the issue which appears to be with the soft start. We are getting pricing to make necessary replacements.
- If weather cooperates, we plan on burning off the reeds early this year.

Gas:

- Marc completed the DIMP (Distribution Integrity Management Plan). Outlines and identifies system impacts and improvements.
- Crews have completed working on our gas improvements project for the winter along Lane St from 6th to 10th.
- Working on preventative maintenance.
- Trying to find a utility body for the new F550.

Electric:

- Working on more secondary installations at Wilderness Falls III. There is only two units left to hook up.

Power Plant:

- Robert put together a quarterly run schedule which includes running two engines per month. We will run these engines for 2-4 hours depending on the engine.
- Nebraska City sent down staff on Dec 22nd to install digital pyrometer on Engine 7. Need to run engine to ensure it is working correctly.
- Continuing to work on inventory of engine parts and other components.

Community Development

- The power at Wilderness Falls III has been bored in and transformers set. Secondary is being installed as meters sockets are mounted.
- Looking at utility locations that will require main extensions for potential improvements to land at 6th and Reavis.
- MEI is working on 30% plans. It was previously approved by Council to spend remaining LB840 funds to start the infrastructure build out.
- The draft plan was reviewed last week and Olsson is working on a finalized version to be release in February. Olsson has presented their draft marketing video for EDGE to advertise the mega site. It will be released in the coming weeks along with the master plan report that will detail site concepts and infrastructure needs/costs.

Human Resources

Water Plant Operator Vacancy

Projects

2023 Street Improvements Project – Received one qualified bid and requesting to proceed with an award.

2022 Electrical Distribution System Improvements (4.16 Switchgear PDC Project) – General Excavating has completed installing conduit from the PDC site to the plant. They demobed as of yesterday.

2022 Electrical Distribution System Improvements (Primary Underground Project) – Final materials being procured. Contracts were awarded. This project was originally scheduled for a 2023 construction start but construction was postponed due to materials lead times. We are currently expecting a spring 2024 start. BOPW will need to make a decision on property owner cost reimbursement for interior electrical service component for effected properties. JEO will generate a form for customers to utilize to submit expenses.

2023 Northeast Force Main Replacement - Project is currently in preliminary design stages. Project consists of replacement of approximately 5000 linear feet of sewer force main along 652 Blvd from 15th Street to 27th Street. Currently working with landowners on easement needs in addition to awaiting a hopeful award of funding through the House Appropriations Committee. Funding notices will likely not be known until congressional budgets are approved which could be after December.

Tiger Trail Street Improvement Project – Weather has caused paving delays.

Water System SCADA System Upgrade – Working on an RFQ. Goal is to have this out in January with a consultant selected in February.

Respectfully,
Trevor Campbell
Public Works Director

2024 Engine Run Schedule

Run Dates	Engine	Duration	
Jan 11/2024	Engine #7	3hrs	
Jan 24/2024	Engine #8	3hrs	
Feb 7/2024	Engine #9	3hrs	
Feb 14/2024	Engine #3	2hrs	start #4
Mar 13/2024	Engine #5	2hrs	
Mar 20/2024	Engine #6	2hrs	
April 10/2024	Engine #7	3hrs	
April 17/2024	Engine #8	3hrs	
May 8/2024	Engine #9	3hrs	
May 29/2024	Engine #3	2hrs	
June 11/2024	Engine #5	2hrs	start #4
June 19/2024	Engine #6	2hrs	
July 10/2024	Engine #7	3hrs	
July 24/2024	Engine #8	3hrs	
Aug 7/2024	Engine #9	3hrs	
Aug 21/2024	Engine #3	2hrs	start #4
Sept 11/2024	Engine #5	2hrs	
Sept 25/2024	Engine #6	2hrs	
Oct 9/2024	Engine #7	3hrs	
Oct 23/2024	Engine #8	3hrs	
Nov 6/2024	Engine #9	3hrs	start #4
Nov 20/2024	Engine #3	2hrs	
Dec 11/2024	Engine #5	2hrs	
Dec 18/2024	Engine #6	2hrs	

REGULAR MEETING OF THE FALLS CITY BOARD OF PUBLIC WORKS

December 21, 2023

2307 Barada Street

Falls City, Nebraska

A regular meeting of the Board of Public Works of the City of Falls City, Nebraska, was held at the City Hall, 2307 Barada Street in said City on the 21st day of December, 2023, at 5:30 o'clock P.M. Present were: Board Members: Froeschl, Joy, Koopman, Rieger. Absent: Johansen. Trevor Campbell recorded the minutes of the meeting. Notice of the meeting was given in advance thereof by posting in three public places, a designated method for giving notice as shown by the Certificate of Posting Notice attached to these minutes. Notice of this meeting was given to the Board Chairman and all members of the Board and a copy of their acknowledgment of receipt of notice and the agenda is attached to the minutes. Availability of the agenda was communicated in the advance notice and in the notice to the Chairman and Board of this meeting. All proceedings hereafter shown were taken while the convened meeting was open to the attendance of the public. The Chairman publicly stated to all in attendance that a current copy of the Nebraska Open Meetings Act was available for review and indicated the location of such copy posted in the room where the meeting was being held.

CONSENT AGENDA

A motion was made by Joy and seconded by Froeschl to approve the consent agenda as follows: *WHEREAS*, certain business of the Board of Public Works of the City of Falls City (City) transpires on a regular and routine basis or is not of controversial nature; and *WHEREAS*, roll call votes on each individual issue greatly extend the meeting time. *NOW, THEREFORE, BE IT HEREBY RESOLVED BY* the Board of Public Works that in the interest of economizing time, yet complying with the Public Meeting Laws of the State of Nebraska, which require roll call voting, the following issues are hereby consolidated in this Consent Resolution: 1. *BE IT FURTHER RESOLVED BY* the Board of Public Works that the minutes from the December 7, 2023 regular meeting is hereby approved. 2. *BE IT FURTHER RESOLVED BY* the Board of Public Works that the agenda for December 21, 2023, is hereby approved. 3. *BE IT FURTHER RESOLVED BY* the Board of Public Works that the Claims through December 15, 2023, is hereby approved. 4. *BE IT FURTHER RESOLVED BY* the Board of Public Works that the Consent Agenda for December 21, 2023, is hereby approved. Roll was called on this motion and the members voted as follows: "YEA" Froeschl, Joy, Koopman, Rieger. "NAY" None. "ABSENT" Johansen. Motion carried.

APPROVAL OF ELECTRIC SYSTEM UPGRADES PROJECT CHANGE ORDER FOR INSTALLATION OF ADDITIONAL 6 INCH CONDUITS - IES

A motion was made by Froeschl and seconded by Joy to approve the change order as presented. Roll was called on this motion and the members voted as follows: "YEA" Froeschl, Joy, Koopman, Rieger. "NAY" None. "ABSENT" Johansen. Motion carried.

APPROVAL OF HIGHWAY MAINTENANCE AGREEMENTS WIT THE STATE - NDOT

A motion was made by Joy and seconded by Froeschl to approve agreements as presented. Roll was called on this motion and the members voted as follows: "YEA" Froeschl, Joy, Koopman, Rieger. "NAY" None. "ABSENT" Johansen. Motion carried.

MEETING ADJOURNED AT 6:05PM

I, the undersigned, City Clerk for the City of Falls City, Nebraska, hereby certify that the foregoing is a true and correct copy of proceedings had and done by the Chairman and Board on December 21, 2023 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 agenda items were sufficiently descriptive to give the public reasonable notice of the matters to be considered at the

meeting; that such subjects were contained in said agenda for at least twenty-four hours prior to said meeting; that at least one copy of all reproducible material discussed at the meeting was available at the meeting for examination and copying by members of the public; that the said minutes from which the foregoing proceedings have been extracted 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 advance notification of the time and place of said meeting and the subjects to be discussed at said meeting; and that a current copy of the Nebraska Open Meetings Act was available and accessible to members of the public, posted during such meeting in the room in which such meeting was held.

(SEAL)

CITY CLERK

SECRETARY

CHAIRMAN



Payment Dates 12/4/2023 - 12/15/2023

Vendor Name	Payable Number	Post Date	Description (Item)	Account Number	Amount
Fund: 190 - Streets					
MIDWEST SERVICE & SALES C	0034623	12/28/2023	Hiniker Joystick, Replaceable	190-03-31-52096	500.00
Forten Building Group	003/004	12/08/2023	champion crossing	190-03-31-53520	68,693.25
RULO TRANSPORTATION	11-15-2023	12/08/2023	ballest & hauling	190-03-31-52354	18,555.20
TITAN MACHINERY	18973889-gs	12/08/2023	replace yolk pinion - po49351	190-03-31-52096	2,761.62
UTILITY DEPARTMENT	2235	12/08/2023	Street	190-03-31-52018	353.56
UTILITY DEPARTMENT	2235	12/08/2023	Street	190-03-31-52019	50.65
UTILITY DEPARTMENT	2235	12/08/2023	Street	190-03-31-52020	215.93
UTILITY DEPARTMENT	2235	12/08/2023	Street	190-03-31-52333	69.00
UTILITY DEPARTMENT	2240	12/08/2023	Street	190-03-31-52005	6,827.46
UTILITY DEPARTMENT	2331	12/08/2023	street	190-03-31-52020	41.99
UTILITY DEPARTMENT	2346	12/08/2023	street	190-03-31-52020	42.25
UTILITY DEPARTMENT	2518	12/08/2023	street	190-03-31-52018	71.32
UTILITY DEPARTMENT	2518	12/08/2023	street	190-03-31-52020	145.08
OLSSON ASSOCIATES	478855	12/08/2023	phase 1 street improvements	190-03-31-52197	9,390.00
Southeast Nebraska Communi	667	12/08/2023	phone service	190-03-31-52011	51.45
CONCRETE INDUSTRIES, INC.	ij695617	12/08/2023	concrete	190-03-31-52003	1,978.21
CONCRETE INDUSTRIES, INC.	ij695630	12/08/2023	concrete	190-03-31-52003	1,140.40
CONCRETE INDUSTRIES, INC.	ij696427	12/08/2023	concrete	190-03-31-52003	1,048.48
GENERAL PETTY CASH	nov 2023	12/08/2023	postage	190-03-31-52387	66.00
HARMON'S O.K. TIRE STORE	54682	12/28/2023	Tire Replacement Unit 70	190-03-31-52015	355.00
HARMON'S O.K. TIRE STORE	54682	12/28/2023	Tire Replacement	190-03-31-52015	11.00
Fund 190 - Streets Total:					112,367.85
Fund: 600 - Electric					
CWA Dues	INV01070	12/01/2023	CWA Union Dues	600-07-00-21151	29.60
Nebraska Department of Reve	INV01088	12/01/2023	State W/H Tax	600-07-00-21151	817.74
CWA Dues	INV01094	12/01/2023	CWA Union Dues	600-07-00-21151	149.90
Nebraska Department of Reve	INV01131	12/01/2023	State W/H Tax	600-07-00-21151	2,163.65
WESTERN ENVIRONMENTAL S	0027144-in	12/08/2023	service	600-07-00-52199	13,845.00
FALLS CITY SANITATION SERVI	11-2023	12/08/2023	trash service	600-07-62-52085	286.00
Southeast Nebraska Communi	1387	12/08/2023	service	600-07-61-52011	344.82
JEO CONSULTING GROUP INC	145503	12/08/2023	project r191461.00	600-07-00-52197	10,399.13
JEO CONSULTING GROUP INC	146091	12/08/2023	project r191461.00	600-07-00-52197	1,330.00
NEBRASKA CITY UTILITIES	1849	12/08/2023	4 s test switch, 4 s meter sock	600-07-61-52429	259.33
JK ENERGY CONSULTING, LLC	2106	12/08/2023	service	600-07-00-52198	435.00
UTILITY DEPARTMENT	2234	12/08/2023	electric	600-07-00-52185	2.93
UTILITY DEPARTMENT	2234	12/08/2023	electric	600-07-61-52020	39.00
UTILITY DEPARTMENT	2243	12/08/2023	electric	600-07-00-52185	289.00
UTILITY DEPARTMENT	2243	12/08/2023	electric	600-07-61-52018	3,352.77
UTILITY DEPARTMENT	2243	12/08/2023	electric	600-07-61-52020	500.60
UTILITY DEPARTMENT	2243	12/08/2023	electric	600-07-61-52429	3.00
UTILITY DEPARTMENT	2244	12/08/2023	electric	600-07-00-52185	174.83
UTILITY DEPARTMENT	2244	12/08/2023	electric	600-07-61-52020	2,331.00
UTILITY DEPARTMENT	2245	12/08/2023	electric	600-07-00-52185	395.93
UTILITY DEPARTMENT	2245	12/08/2023	electric	600-07-61-52020	5,279.00
UTILITY DEPARTMENT	2246	12/08/2023	electric	600-07-00-52185	21.76
UTILITY DEPARTMENT	2246	12/08/2023	electric	600-07-61-52019	292.14
UTILITY DEPARTMENT	2248	12/08/2023	electric	600-07-00-52185	44.88
UTILITY DEPARTMENT	2248	12/08/2023	electric	600-07-61-52018	165.40
UTILITY DEPARTMENT	2248	12/08/2023	electric	600-07-61-52019	85.57
UTILITY DEPARTMENT	2248	12/08/2023	electric	600-07-61-52020	349.31
CCS, INC	2703	12/08/2023	transformer pads, pipes, pads	600-07-61-53550	11,916.00
MUNICIPAL ENERGY AGENCY	304829	12/08/2023	elec service	600-07-00-52303	105,699.56
UTILITY DEPARTMENT	3442	12/08/2023	electric	600-07-61-52018	559.31

Expense Approval Report

Payment Dates: 12/4/2023 - 12/15/2023

Vendor Name	Payable Number	Post Date	Description (Item)	Account Number	Amount
NDEE - PUBLIC WATER OPERA	39480	12/08/2023	Simpson Renewal	600-07-61-51310	115.00
NDEE - PUBLIC WATER OPERA	40241	12/08/2023	huppert renewal	600-07-62-51310	115.00
NDEE - PUBLIC WATER OPERA	40879	12/08/2023	Oiberding renewal	600-07-62-51310	115.00
NDEE - PUBLIC WATER OPERA	41004	12/08/2023	T Zimmerman-renewal	600-07-62-51310	115.00
NDEE - PUBLIC WATER OPERA	413090	12/08/2023	Kreifels - renewal	600-07-62-51310	115.00
NDEE - PUBLIC WATER OPERA	421272	12/08/2023	McHenry - renewal	600-07-62-51310	115.00
BROOKS BROTHERS TRAILER	50548	12/08/2023	prince valve part	600-07-61-52429	34.00
BROOKS BROTHERS TRAILER	50548	12/08/2023	handle knob	600-07-61-52429	37.08
HARMON'S O.K. TIRE STORE	53704	12/08/2023	tire repair	600-07-61-52015	20.00
GILMORE BELL PC	8050610	12/08/2023	municipal improvement bonds	600-07-00-54115	6,070.00
GRAINGER	831579891	12/08/2023	graduated cylinder	600-07-61-52093	61.88
UTILITY DEPARTMENT	9048	12/08/2023	electric	600-07-00-52185	306.00
UTILITY DEPARTMENT	9048	12/08/2023	electric	600-07-61-52018	617.91
UTILITY DEPARTMENT	9048	12/08/2023	electric	600-07-61-52020	4,080.00
ESRI, Inc	94600269	12/08/2023	annual subscription	600-07-61-51300	518.96
FARM AND CITY SUPPLY	980167	12/08/2023	mop	600-07-00-52185	1.35
FARM AND CITY SUPPLY	980167	12/08/2023	mop	600-07-62-52429	17.99
FARM AND CITY SUPPLY	980282	12/08/2023	8.8 hcs 24-3 bolt	600-07-00-52185	0.82
FARM AND CITY SUPPLY	980282	12/08/2023	8.8 hcs 24-3 bolt	600-07-61-52429	10.99
BOK FINANCIAL	fallctycur17	12/08/2023	principal, interest, fees	600-07-00-52198	200.00
BOK FINANCIAL	fallctycur17	12/08/2023	principal, interest, fees	600-07-00-54103	48,407.50
BOK FINANCIAL	fallctycur17	12/08/2023	principal, interest, fees	600-07-00-54110	175,000.00
BOK FINANCIAL	fallctycur21	12/08/2023	principal, interest, fees	600-07-00-52198	200.00
BOK FINANCIAL	fallctycur21	12/08/2023	principal, interest, fees	600-07-00-54103	24,543.75
BOK FINANCIAL	fallctycur21	12/08/2023	principal, interest, fees	600-07-00-54110	435,000.00
UTILITY DEPARTMENT/PETTY	misc	12/08/2023	misc	600-07-61-52387	235.75
UTILITY DEPARTMENT/PETTY	misc	12/08/2023	misc	600-07-62-52429	29.38
GENERAL FUND	nov 2023	12/08/2023	in lieu of tax	600-07-00-52187	40,566.21
DALE CAMPBELL	travel	12/08/2023	travel	600-07-61-51310	32.00
Indianola Municipal Utilities	INV-1726	12/13/2023	Generator Head R4- Enterpris	600-07-00-10500	15,000.00
Indianola Municipal Utilities	INV-1726	12/13/2023	Generator Head R4- Enterpris	600-07-00-10500	10,000.00
Collection Services Center	INV01221	12/15/2023	Child Support	600-07-00-21151	595.38
Dearborn Life Insurance Com	INV01222	12/15/2023	Life Insurance	600-07-00-21151	51.83
Nebraska Child Support Paym	INV01223	12/15/2023	Child Support	600-07-00-21151	216.01
AMERITAS	INV01225	12/15/2023	Pension 457 Pre-Tax	600-07-00-21151	250.00
AMERITAS	INV01226	12/15/2023	Retirement 501a	600-07-00-21151	354.52
AMERITAS	INV01227	12/15/2023	Retirement 501a	600-07-00-21151	25.24
AMERITAS	INV01228	12/15/2023	Retirement 501a	600-07-00-21151	282.34
AMERITAS	INV01229	12/15/2023	Retirement 501a	600-07-00-21151	253.82
AMERITAS	INV01230	12/15/2023	Retirement 501a	600-07-00-21151	263.14
AMERITAS	INV01231	12/15/2023	Retirement 501a	600-07-00-21151	207.16
AMERITAS	INV01232	12/15/2023	Retirement 501a	600-07-00-21151	10.52
Department of the Treasury	INV01233	12/15/2023	Medicare Tax	600-07-00-21151	495.86
Department of the Treasury	INV01234	12/15/2023	Social Security Tax	600-07-00-21151	2,120.14
Nebraska Department of Reve	INV01235	12/15/2023	State W/H Tax	600-07-00-21151	792.56
Department of the Treasury	INV01236	12/15/2023	Federal W/H	600-07-00-21151	1,550.03
AMERITAS BILLING	INV01237	12/15/2023	457 After Tax %	600-07-00-21151	321.34
AMERITAS BILLING	INV01238	12/15/2023	457 Pre Tax Percentage	600-07-00-21151	1,012.35
Aflac	INV01239	12/15/2023	AFLAC	600-07-00-21151	32.72
Aflac	INV01240	12/15/2023	AFLAC	600-07-00-21151	151.53
Dearborn Life Insurance Com	INV01242	12/15/2023	Life Insurance	600-07-00-21151	168.84
AMERITAS	INV01244	12/15/2023	Pension 457 Pre-Tax	600-07-00-21151	200.00
AMERITAS	INV01245	12/15/2023	Pension 457 Pre-Tax	600-07-00-21151	68.26
AMERITAS	INV01246	12/15/2023	Pension 457 Pre-Tax	600-07-00-21151	300.00
AMERITAS	INV01247	12/15/2023	Retirement 501a	600-07-00-21151	290.88
AMERITAS	INV01248	12/15/2023	Retirement 501a	600-07-00-21151	273.02
AMERITAS	INV01249	12/15/2023	Retirement 501a	600-07-00-21151	391.88
AMERITAS	INV01250	12/15/2023	Retirement 501a	600-07-00-21151	306.92
AMERITAS	INV01251	12/15/2023	Retirement 501a	600-07-00-21151	369.32
AMERITAS	INV01252	12/15/2023	Retirement 501a	600-07-00-21151	354.52

Expense Approval Report

Payment Dates: 12/4/2023 - 12/15/2023

Vendor Name	Payable Number	Post Date	Description (Item)	Account Number	Amount
AMERITAS	INV01253	12/15/2023	Retirement 501a	600-07-00-21151	263.24
AMERITAS	INV01254	12/15/2023	Retirement 501a	600-07-00-21151	262.46
AMERITAS	INV01255	12/15/2023	Retirement 501a	600-07-00-21151	298.22
AMERITAS	INV01256	12/15/2023	Retirement 501a	600-07-00-21151	281.14
AMERITAS	INV01257	12/15/2023	Retirement 501a	600-07-00-21151	288.44
AMERITAS	INV01258	12/15/2023	Retirement 501a	600-07-00-21151	182.98
AMERITAS	INV01259	12/15/2023	Retirement 501a	600-07-00-21151	306.58
AMERITAS	INV01260	12/15/2023	Retirement 501a	600-07-00-21151	216.82
AMERITAS	INV01261	12/15/2023	Retirement 501a	600-07-00-21151	428.44
AMERITAS	INV01262	12/15/2023	Retirement 501a	600-07-00-21151	227.76
AMERITAS	INV01263	12/15/2023	Retirement 501a	600-07-00-21151	198.24
AMERITAS	INV01264	12/15/2023	Retirement 501a	600-07-00-21151	261.52
AMERITAS	INV01265	12/15/2023	Retirement 501a	600-07-00-21151	346.80
AMERITAS	INV01266	12/15/2023	Retirement 501a	600-07-00-21151	401.42
AMERITAS	INV01267	12/15/2023	Retirement 501a	600-07-00-21151	484.16
AMERICAN NATIONAL BANK	INV01268	12/15/2023	HSA	600-07-00-21151	180.00
AMERICAN NATIONAL BANK	INV01269	12/15/2023	HSA	600-07-00-21151	71.00
AMERICAN NATIONAL BANK	INV01270	12/15/2023	HSA	600-07-00-21151	65.00
AMERICAN NATIONAL BANK	INV01271	12/15/2023	HSA	600-07-00-21151	160.00
AMERICAN NATIONAL BANK	INV01272	12/15/2023	HSA	600-07-00-21151	20.00
Department of the Treasury	INV01273	12/15/2023	Medicare Tax	600-07-00-21151	1,641.34
Department of the Treasury	INV01274	12/15/2023	Social Security Tax	600-07-00-21151	7,018.06
Nebraska Department of Reve	INV01275	12/15/2023	State W/H Tax	600-07-00-21151	2,311.53
Department of the Treasury	INV01276	12/15/2023	Federal W/H	600-07-00-21151	4,960.27
Fund 600 - Electric Total:					955,829.28

Fund: 610 - Water

Southeast Nebraska Communi	1387	12/08/2023	service	610-07-65-52011	155.90
MISSISSIPPI LIME CO.	1698286	12/08/2023	lime (23.49 ton)	610-07-65-52429	8,341.70
NEBRASKA CITY UTILITIES	1849	12/08/2023	switch	610-07-65-52420	82.50
Rega Engineering Group Inc	18763	12/08/2023	tiger trail	610-07-65-52199	6,405.00
UTILITY DEPARTMENT	2056	12/08/2023	water	610-07-65-52020	7,859.96
UTILITY DEPARTMENT	2056	12/08/2023	water	610-07-65-52185	3.27
UTILITY DEPARTMENT	2056	12/08/2023	water	610-07-65-52429	43.61
UTILITY DEPARTMENT	2239	12/08/2023	water	610-07-65-52020	278.15
UTILITY DEPARTMENT	2241	12/08/2023	water	610-07-65-52020	358.48
UTILITY DEPARTMENT	2241	12/08/2023	water	610-07-65-52185	26.89
UTILITY DEPARTMENT	2242	12/08/2023	water	610-07-65-52020	2,084.60
UTILITY DEPARTMENT	2242	12/08/2023	water	610-07-65-52185	156.34
MILLER & ASSOCIATES	23 1294	12/08/2023	project 495-c1-001	610-07-65-52197	9,843.93
NEBRASKA PUBLIC HEALTH	571701	12/08/2023	water sample testing	610-07-65-52198	101.00
UTILITY DEPARTMENT	691	12/08/2023	water	610-07-65-52020	103.74
UTILITY DEPARTMENT	691	12/08/2023	water	610-07-65-52185	7.78
FARM AND CITY SUPPLY	980359	12/08/2023	supplies	610-07-65-52185	1.12
FARM AND CITY SUPPLY	980359	12/08/2023	supplies	610-07-65-52429	7.99
FARM AND CITY SUPPLY	980359	12/08/2023	supplies	610-07-65-52429	6.99
BOK FINANCIAL	fallctygow19	12/08/2023	principal/intrest	610-07-65-52198	200.00
BOK FINANCIAL	fallctygow19	12/08/2023	principal/intrest	610-07-65-54103	28,918.75
BOK FINANCIAL	fallctygow19	12/08/2023	principal/intrest	610-07-65-54110	200,000.00
UTILITY DEPARTMENT/PETTY	misc	12/08/2023	misc	610-07-65-51310	354.00
UTILITY DEPARTMENT/PETTY	misc	12/08/2023	misc	610-07-65-52387	111.95
City of Falls City Solid Waste F	nov 2023	12/08/2023	November Excise Tax	610-07-65-52185	4,000.58
Forten Building Group	003/004-split	12/11/2023	Tiger Trail Project - Water Mai	610-07-65-53550	45,293.00
Fund 610 - Water Total:					314,747.23

Fund: 620 - Gas

Southeast Nebraska Communi	1387	12/08/2023	service	620-07-63-52011	223.55
UTILITY DEPARTMENT	164	12/08/2023	gas	620-07-63-52020	45.58
UTILITY DEPARTMENT	164	12/08/2023	gas	620-07-63-52185	2.51
UTILITY DEPARTMENT	2271	12/08/2023	gas	620-07-63-52020	65.60
UTILITY DEPARTMENT	2271	12/08/2023	gas	620-07-63-52185	3.61
UTILITY DEPARTMENT	2747	12/08/2023	gas	620-07-63-52020	79.51

Expense Approval Report

Payment Dates: 12/4/2023 - 12/15/2023

Vendor Name	Payable Number	Post Date	Description (Item)	Account Number	Amount
UTILITY DEPARTMENT	2747	12/08/2023	gas	620-07-63-52185	4.37
UTILITY DEPARTMENT	2783	12/08/2023	gas	620-07-63-52020	62.22
UTILITY DEPARTMENT	2783	12/08/2023	gas	620-07-63-52185	3.42
UTILITY DEPARTMENT	2834	12/08/2023	gas	620-07-63-52020	67.21
UTILITY DEPARTMENT	2834	12/08/2023	gas	620-07-63-52185	5.04
UTILITY DEPARTMENT	3060	12/08/2023	gas	620-07-63-52018	57.88
UTILITY DEPARTMENT	3060	12/08/2023	gas	620-07-63-52019	38.43
UTILITY DEPARTMENT	3060	12/08/2023	gas	620-07-63-52020	161.07
UTILITY DEPARTMENT	3060	12/08/2023	gas	620-07-63-52185	19.16
UTILITY DEPARTMENT	3060	12/08/2023	gas	620-07-63-52429	53.85
ONE CALL CONCEPTS INC	3100129	12/08/2023	locates	620-07-63-52199	166.92
UTILITY DEPARTMENT	5031	12/08/2023	gas	620-07-63-52020	77.35
UTILITY DEPARTMENT	5031	12/08/2023	gas	620-07-63-52185	5.80
ESRI, Inc	94600180	12/08/2023	annual subscription	620-07-63-51300	1,320.00
FARM AND CITY SUPPLY	980172	12/08/2023	supplies	620-07-63-52185	3.58
FARM AND CITY SUPPLY	980172	12/08/2023	grinding wheel	620-07-63-52429	13.98
FARM AND CITY SUPPLY	980172	12/08/2023	air filters	620-07-63-52429	13.18
FARM AND CITY SUPPLY	980172	12/08/2023	utility lighter	620-07-63-52429	9.99
FARM AND CITY SUPPLY	980172	12/08/2023	battery	620-07-63-52429	7.59
FARM AND CITY SUPPLY	980172	12/08/2023	a-12 mounted point	620-07-63-52429	2.99
UTILITY DEPARTMENT/PETTY	misc	12/08/2023	misc	620-07-63-52387	180.00
GENERAL FUND	nov 2023	12/08/2023	in lieu of tax	620-07-63-52187	7,646.69
Fund 620 - Gas Total:					10,341.08
Fund: 630 - Sewer					
FALLS CITY SANITATION SERVI	11-2023	12/08/2023	trash service	630-07-64-52085	90.00
Southeast Nebraska Communi	1131	12/08/2023	service	630-07-64-52011	111.26
MIDWEST LABORATORIES, INC	1157464	12/08/2023	analysis	630-07-64-52429	283.93
Amazon Capital Services	174j-g3gd-ykj1	12/08/2023	glass water bottle	630-07-64-52429	33.43
UTILITY DEPARTMENT	2619	12/08/2023	sewer	630-07-64-52019	11.58
UTILITY DEPARTMENT	2619	12/08/2023	sewer	630-07-64-52020	48.49
UTILITY DEPARTMENT	2748	12/08/2023	sewer	630-07-64-52018	225.21
UTILITY DEPARTMENT	2748	12/08/2023	sewer	630-07-64-52019	2,041.70
UTILITY DEPARTMENT	2748	12/08/2023	sewer	630-07-64-52020	8,040.96
UTILITY DEPARTMENT	2748	12/08/2023	sewer	630-07-64-52185	566.93
NSI LAB SOLUTIONS	427180	12/08/2023	water sample	630-07-64-52198	75.25
NDEE - FISCAL SERVICES	9074	12/08/2023	annual interest	630-07-64-54110	42,530.97
ESRI, Inc	94600180	12/08/2023	annual subscription	630-07-64-52941	1,202.03
USA BLUEBOOK	inv00179336	12/08/2023	couplings	630-07-64-52429	71.10
USA BLUEBOOK	inv00179336	12/08/2023	couplings	630-07-64-52429	86.95
Forten Building Group	003/004-split	12/11/2023	Tiger Trail Project - Sewer Mai	630-07-64-53550	61,480.36
Fund 630 - Sewer Total:					116,900.15
Grand Total:					1,510,185.59

Report Summary

Fund Summary

Fund	Expense Amount	Payment Amount
190 - Streets	112,367.85	111,501.85
600 - Electric	955,829.28	955,829.28
610 - Water	314,747.23	314,747.23
620 - Gas	10,341.08	10,341.08
630 - Sewer	116,900.15	116,900.15
Grand Total:	1,510,185.59	1,509,319.59

Account Summary

Account Number	Account Name	Expense Amount	Payment Amount
190-03-31-52003	Concrete	4,167.09	4,167.09
190-03-31-52005	Street Lighting	6,827.46	6,827.46
190-03-31-52011	Telephone	51.45	51.45
190-03-31-52015	Vehicle Repair	366.00	0.00
190-03-31-52018	Heat/Gas Expense	424.88	424.88
190-03-31-52019	Water/Sewer Expense	50.65	50.65
190-03-31-52020	Electricity Expense	445.25	445.25
190-03-31-52096	Operational Equipment	3,261.62	2,761.62
190-03-31-52197	Engineering Expense	9,390.00	9,390.00
190-03-31-52333	Uniforms/Safety Supplie	69.00	69.00
190-03-31-52354	Gravel & Barrow	18,555.20	18,555.20
190-03-31-52387	Postage/Freight	66.00	66.00
190-03-31-53520	Street-New Roadway	68,693.25	68,693.25
600-07-00-10500	Inventory-Electric Gener	25,000.00	25,000.00
600-07-00-21151	Payroll Deductions Paya	35,746.44	35,746.44
600-07-00-52185	Tax Expense	1,237.50	1,237.50
600-07-00-52187	PILOT Expense	40,566.21	40,566.21
600-07-00-52197	Engineering Expense	11,729.13	11,729.13
600-07-00-52198	Other Professional Servi	835.00	835.00
600-07-00-52199	Other Contractual Servic	13,845.00	13,845.00
600-07-00-52303	Commodity Purchase for	105,699.56	105,699.56
600-07-00-54103	Interest Expense	72,951.25	72,951.25
600-07-00-54110	Principal Payments	610,000.00	610,000.00
600-07-00-54115	Debt Service Fees	6,070.00	6,070.00
600-07-61-51300	Subscriptions & Educatio	518.96	518.96
600-07-61-51310	Training, Meetings & Co	147.00	147.00
600-07-61-52011	Telephone	344.82	344.82
600-07-61-52015	Vehicle Repair	20.00	20.00
600-07-61-52018	Heat/Gas Expense	4,695.39	4,695.39
600-07-61-52019	Water/Sewer Expense	377.71	377.71
600-07-61-52020	Electric Expense	12,578.91	12,578.91
600-07-61-52093	Building/Grounds Maint	61.88	61.88
600-07-61-52387	Postage/Shipping	235.75	235.75
600-07-61-52429	Supplies & Materials	344.40	344.40
600-07-61-53550	Utility Systems & Structu	11,916.00	11,916.00
600-07-62-51310	Training, Meetings & Co	575.00	575.00
600-07-62-52085	Refuse/Recycling	286.00	286.00
600-07-62-52429	Supplies & Materials	47.37	47.37
610-07-65-51310	Training, Meetings & Co	354.00	354.00
610-07-65-52011	Telephone	155.90	155.90
610-07-65-52020	Electric Expense	10,684.93	10,684.93
610-07-65-52185	Tax Expense	4,195.98	4,195.98
610-07-65-52197	Engineering Expense	9,843.93	9,843.93
610-07-65-52198	Other Professional Servi	301.00	301.00
610-07-65-52199	Other Contractual Servic	6,405.00	6,405.00
610-07-65-52387	Postage/Shipping	111.95	111.95
610-07-65-52420	Small Equipment	82.50	82.50
610-07-65-52429	Supplies & Materials	8,400.29	8,400.29

Account Summary

Account Number	Account Name	Expense Amount	Payment Amount
610-07-65-53550	Utility Systems & Structu	45,293.00	45,293.00
610-07-65-54103	Interest Expense	28,918.75	28,918.75
610-07-65-54110	Principal Payments	200,000.00	200,000.00
620-07-63-51300	Subscriptions & Educatio	1,320.00	1,320.00
620-07-63-52011	Telephone	223.55	223.55
620-07-63-52018	Heat/Gas Expense	57.88	57.88
620-07-63-52019	Water/Sewer Expense	38.43	38.43
620-07-63-52020	Electric Expense	558.54	558.54
620-07-63-52185	Tax Expense	47.49	47.49
620-07-63-52187	PILOT Expense	7,646.69	7,646.69
620-07-63-52199	Other Contractual Servic	166.92	166.92
620-07-63-52387	Postage/Shipping	180.00	180.00
620-07-63-52429	Supplies & Materials	101.58	101.58
630-07-64-52011	Telephone	111.26	111.26
630-07-64-52018	Heat/Gas Expense	225.21	225.21
630-07-64-52019	Water/Sewer Expense	2,053.28	2,053.28
630-07-64-52020	Electric Expense	8,089.45	8,089.45
630-07-64-52085	Refuse/Recycling	90.00	90.00
630-07-64-52185	Tax Expense	566.93	566.93
630-07-64-52198	Other Professional Servi	75.25	75.25
630-07-64-52429	Supplies & Materials	475.41	475.41
630-07-64-52941	Subscriptions & Educatio	1,202.03	1,202.03
630-07-64-53550	Utility Systems & Structu	61,480.36	61,480.36
630-07-64-54110	Principal Payments	42,530.97	42,530.97
	Grand Total:	1,510,185.59	1,509,319.59

Project Account Summary

Project Account Key	Expense Amount	Payment Amount
None	1,510,185.59	1,509,319.59
Grand Total:	1,510,185.59	1,509,319.59



December 19, 2023

City of Falls City
Attn: Anthony Nussbaum
2307 Barada St
Falls City, NE 68355

Re: Falls City, Nebraska; Street Improvements - 2023
Falls City, Nebraska
Olsson Project No. A21-09057

Dear Mr. Nussbaum:

Bids were received on December 19, 2023, for the above referenced project. This letter is prepared to summarize the bids received and provide our recommendations for making an award on the project. A bid tabulation has been prepared for the project and is attached for your reference.

A total of one (1) bid was opened for the project. It was submitted by Constructors, Inc., located in Lincoln, NE for \$760,900.14.

Since this Contractor has been considered a responsive and responsible bidder, it is our recommendation that an award should be made to Constructors, Inc. for \$760,900.14.

Please feel free to contact us with any additional questions that you may have.

Sincerely,

A handwritten signature in blue ink that reads "Brian Schuele". The signature is fluid and cursive.

Brian Schuele, P.E.

enc: Bid Tabulation

cc: File



Falls City, Nebraska; Street Improvements - 2023 (#8843149)
City of Falls City, NE

Bid Date
Tuesday, December 19, 2023
Olsson Project No.
A21-09057

CONTRACTOR		CONSTRUCTORS, INC. Lincoln, NE			Unit Price	Extension	Unit Price	Extension
ITEM	UNIT	QTY.	Unit Price	Extension	Unit Price	Extension	Unit Price	Extension
1	Mobilization	LS	1	\$ 77,945.32	\$ 77,945.32			
2	Clearing and Grubbing	LS	1	\$ 4,817.93	\$ 4,817.93			
3	Removal and Replacement of Unsuitable Material (If Needed)	CY	100	\$ 78.19	\$ 7,819.00			
4	Furnishing and Placing Topsoil	LS	1	\$ 5,802.24	\$ 5,802.24			
5	Remove Pavement	SY	2,287	\$ 18.49	\$ 42,286.63			
6	Remove Brick Surface	SY	1,421	\$ 13.49	\$ 19,169.29			
7	Remove Combination Curb and Gutter	LF	328	\$ 33.04	\$ 10,837.12			
8	Remove Bollard	EA	1	\$ 154.86	\$ 154.86			
9	6" Crushed Rock Surface Course	SY	96	\$ 34.57	\$ 3,318.72			
10	Combination Concrete 12" Curb and Gutter 6"	LF	566	\$ 61.33	\$ 34,712.78			
11	Detectable Warning Panel	EA	4	\$ 295.09	\$ 1,180.36			
12	4" Concrete Pavement, Class 47B-3500 Sidewalk	SY	93	\$ 151.09	\$ 14,051.37			
13	6" Concrete Pavement, Class 47B-3500 (Base Course)	SY	77	\$ 132.01	\$ 10,164.77			
14	8" Concrete Pavement, Class 47B-3500	SY	1,297	\$ 130.72	\$ 169,543.84			
15	Adjust Manhole to Grade	EA	3	\$ 1,132.65	\$ 3,397.95			
16	Concrete Collar	EA	6	\$ 828.75	\$ 4,972.50			
17	Remove and Reinstall Sign	EA	2	\$ 314.12	\$ 628.24			
18	24" White Permanent Pavement Marking Paint	LF	12	\$ 75.54	\$ 906.48			
19	2" Asphaltic Concrete Overlay, Type SPR	TN	904	\$ 153.46	\$ 138,727.84			
20	6" Asphaltic Concrete, Type SPR	TN	692	\$ 200.41	\$ 138,683.72			
21	Crack Sealing Bituminous Surfacing	LF	4,790	\$ 6.85	\$ 32,811.50			
22	Cold Milling, Class 2	SY	6,996	\$ 4.73	\$ 33,091.08			
23	Seeding, Type B	LS	1	\$ 5,169.70	\$ 5,169.70			
24	Adjust Water Valve to Grade	EA	2	\$ 353.45	\$ 706.90			
					\$ 760,900.14			

Estimated Start Date	Estimated Start Date
Substantial Completion On or Before	Monday, September 30, 2024
Final Completion on or Before	Thursday, October 31, 2024
Addendum Remarks	n/a

December 8, 2023

Mr. Trevor Campbell
t.campbell@fallscityne.us
Public Works Director
City of Falls City
2307 Barada St.
Falls City, NE 68355

PROPOSAL

RE: City of Falls City - Arc Flash Study
P#232155

Dear Mr. Campbell:

In accord with your recent request and discussions, we are pleased to provide this Proposal outlining our intended involvement and proposed fee schedules for the referenced assignment.

Farris Engineering will provide Basic Services including a review of existing drawings and code compliance requirements for the following discipline of mechanical engineering.

PROJECT SCOPE PROPOSED BY FARRIS ENGINEERING (FE):

The basic services to be provided by the **CONSULTANT** under this agreement are further provided as follows:

Scope of work: The purpose of this study is to provide a comprehensive software model of Falls City Power Plant Building, Generation and Feeders Circuits to first termination point on the Distribution system. This will document compliance with NFPA 70E mandates, as described below. This will serve as an integral part of an ongoing safety program by providing arc flash calculations in compliance with NFPA-70E 2004 Article 130.1(A)(2).

1. Article 205.3, 120.2(F)(1): Updated and verified one-line diagram for Falls City Power Plant Building.
2. Article 400.5, 400.6: Updated short circuit and equipment duty verification study showing all electrical equipment is properly rated to withstand and interrupt the available short circuit duty per ANSI Standards and NEMA/UL/NEC requirements.
3. Article 130.3(A)(B), 110.8: Updated arc flash study providing maximum incident energies, arc flash boundaries, and PPE requirements for equipment in the Power Plant Building.
4. Article 130.16(E), 400.11, 400.14, 400.21(C)(2), 410.8: Updated labeling displaying the worst-case arc hazard values for equipment in the Power Plant Building.

Deliverables: The analysis shall consist of the following steps:

BRINGING YOUR BUILDINGS TO LIFE

402-330-5900 | 12700 W. Dodge Road, Omaha, NE 68154 | farris-usa.com

1. Field data collection by qualified personnel.
2. Data entry and system one-line modeling in commercially available power system software.
3. Model verification
4. Short Circuit and equipment verification study.
5. Protective device coordination study.
6. Arc flash hazard study.
7. Detailed report and findings of the analysis.
8. Electronic copies of the Project Report and the System Modeling Files.
9. Review of a draft copy of the report and presentation of the final copy of the report.
10. Hard copies of the project report shall be included in proposed project pricing.
 - a. The analysis and procedures shall comply with the following standards and recommended practices for power system studies.
 1. NFPA-70E, 2004 Standard for Electrical Safety in the Workplace
 2. IEEE-1584-2002
 3. IEEE-242 "Buff Book" Protection and Coordination of Industrial Power Systems
 4. IEEE-399 "Brown Book" Power System Analysis
 5. IEEE-141 "Red Book" Electric Power Distribution for Industrial Plants

BASIC SERVICES FEE:

We are proposing to provide these services outlined on a not to exceed for **Twenty-one Thousand Six Hundred and No Cents (\$21,600).**

ACCEPTANCE:

If you find that the terms of this Proposal are agreeable, please sign this letter below and the "Agreement for Services" and return one copy to us and provide a similar form of agreement (PO, etc.) acknowledging the terms noted in these documents.

We are pleased to have the opportunity to partner with the City of Falls City. If we have misunderstood your directives in any way, please advise Michael Wallace (402.216.2169; mwallace@farris-usa.com) or Dave Hunter (402.414.0598; dhunter@farris-usa.com). Thank you.

Very truly yours,

FARRIS ENGINEERING



Michael D. Wallace
President

ACCEPTED BY

Trevor Campbell – Public Works Director; Falls City, NE

Printed or Typed Name

Signature



Enclosures:
Agreement for Services 2023-12-6

C.C. Dave Hunter and Darin Cielocha

SA as-needed;-dlc

Title

Date

This **AGREEMENT** is between the City of Falls City, NE – Public Works Department (“Client”) and Farris Engineering, Inc. (“Consultant”) for Services to be provided by Consultant for Data Collection and Arc flash Study Analysis (“Project”), as described in the Consultant’s Proposal(s) dated **December 8, 2023**, unless the Project is otherwise described in and/or included as an attachment to this Agreement.

1. **Scope of Services.** The scope of the Consultant’s services is described in the Consultant’s proposal unless Services are otherwise described and/or included as an attachment to this Agreement. The Consultant reserves the right to subcontract portions of the services described, subject to Client’s approval of sub-contractor(s).
2. **Acceptance.** The Client agrees that acceptance of this Agreement requires the Consultant to execute the Services, and if Services commence by the Consultant prior to acceptance of this Agreement as an accommodation for Client at Client’s request, both parties shall consider that commencement of Services constitutes formal acceptance of all terms and conditions of this Agreement. Any additional terms and conditions may not be added or changed unless written amendment to this Agreement is signed by both parties. In the event Client uses a purchase order, or any other Client supplied form to commence Services, that purchase order or other form assumes acceptance of this Agreement. Any additional or conflicting terms it contains are stricken.
3. **Standard of Care.** Consultant will perform the Services listed in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the same locale. Consultant makes no warranties or guarantees, express or implied, in relation to its Services.
4. **Compensation and Terms of Payment.** Client shall pay compensation for the Services performed at the fees delineated for all personnel and direct expenses under this Agreement, in the Proposal unless fees are otherwise stated and included in addition to this Agreement. Consultant will invoice Client monthly, and payment is due within 30 days of invoice date unless other payment terms have been agreed upon. Client shall notify Consultant in writing, within fifteen (15) days of the date of the invoice if Client objects to any portion of the charges on the invoice and shall promptly pay the undisputed portion. Chargeable time for Consultant’s personnel is that portion their time devoted to providing services requested by Client. If Client fails to make payment in full to consultant within sixty (60) days after the date of the undisputed invoice, Consultant may, after giving seven (7) days’ written notice to Client, suspend services under this Agreement until paid in full, including interest of 6% annum. Consultant shall have no liability to Client for delays or damages caused by such suspension of services. Client agrees to pay all costs of collection, including reasonable attorney’s fees, incurred by consultant because of Client’s failure to make payments in accordance with this Agreement. Unless noted otherwise, the fees included in the proposal for the subject project do not include sales, use, or similar taxes. If applicable to this agreement, those taxes will be added to the applicable invoices for the subject project. Consultant’s income and similar taxes are not liable for payment by the Client, and these and similar taxes will be paid by the consultant without additional reimbursement by the Client.
5. **Change Orders.** Client reserves the right to request changes to the scope of Services at any time. If Client so requests, Consultant will return to the Client a supplemental proposal of the change setting forth an adjustment to the Services and fees for the Change Order. Client must review and provide written acceptance of any supplemental proposals. If Client otherwise directs, authorizes, or permits Consultant to perform changes to its Scope of Services, the Consultant will be paid for this work according to the fees stated in the Consultant’s current fee schedule.
6. **Discovery of Unanticipated Pollutant and Hazardous Substance.** Environmental investigations and reports including asbestos detection and abatement procedures are provided by others. Consultant shall have no responsibility for discovery, presence, handling, removal, or disposal of or exposure of persons to hazardous materials or toxic substances in any form. Client agrees that the discovery of unanticipated pollutants and/or hazardous substances may delay or alter the schedule of project. Consultant agrees to notify Client as soon as practically possible upon encountering such pollutants or substances. Client agrees that all remedial actions necessary are the responsibility of the Client and are not included in consultants’ services. The client agrees to indemnify and hold harmless the Consultant of all damages arising from the discovery of hazardous materials.

7. **Limitation of Liability.** The Client and Consultant have agreed to the risks and rewards associated with this project. The total aggregate liability of the Consultant (and its employees) to client and third parties granted reliance is limited to its fee, for all injuries, damages, claims, losses, or expenses (including attorney and expert fees) arising out of consultant's services or this Agreement regardless of cause(s) or the theory of liability, including negligence, indemnity, or other recovery. This limitation shall not apply to the extent the damage is paid under Consultant's professional liability policy.
8. **Third Party Reliance.** This Agreement and the Services provided are for the Consultant and Client's sole benefit and exclusive use with no third-party beneficiaries intended. Reliance upon the Services and any work product is limited to Client and is not intended for third parties.
9. **Insurance.** Consultant represents that it carries, and will continue to carry Professional Liability Insurance, as well as all other insurances required by local laws. Certificate of insurance will be provided upon request. Consultant shall furnish Client a certificate of insurance upon request showing amounts and types of insurance carried by Consultant, which certificate shall contain a commitment by the Insurance Company that during the time any work is being performed by Consultant under this Agreement it will give Client ten (10) days advance notice of cancellation or change in the insurance coverage shown on such certificates.
10. **Ownership of Documents.** All documents including but not limited to drawings, specifications, reports, logs, data, notes, or calculations, prepared by the Consultant shall remain property of the Consultant. Concepts, systems, and ideas developed during performance of the Services shall also remain the sole property of the Consultant. Any unauthorized use of documents or ideas is subject to punishment under federal and local laws. Any authorization for use of Consultants documents or ideas must be approved in writing by the Consultant and does not permit use by any others than those specifically stated.
11. **Opinions of Construction Cost, and Financial Considerations and Schedules Relating to Cost.** In providing options of cost, financial analyses, economic feasibility projections, and schedules for the Project, the Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Contractor(s) methods of determining prices, or over competitive bidding or market conditions. Consultant's opinions of probable Total Project Costs and Construction Costs provided for herein as appropriate are made on the basis of Consultant's experience and qualifications and represent Consultant's judgments as an experienced and qualified professional consultant familiar with the construction industry. Consultant makes no warranty that the Client's actual Total Project or Construction Costs, financial aspects, economic feasibility, or schedules will not vary from the Consultant's opinions, analyses, projections, or estimates. If Client wishes greater assurance as to any element of the Total Project or Construction Cost, feasibility, or schedule, Client will employ an independent cost estimator, contractor, or other appropriate advisor.
12. **Project Services Performance Schedule.** Consultant will make every possible effort to work within project schedules for the project. Project delays caused by an act or neglect of Client, a contractor employed by the Client, by delay Client has authorized in writing, or by other causes that the Client determines may justify delay. Consultant shall not be in default under this proposal for delays in performing the work. Consultant shall, within a reasonable time-period of being prevented from performing tasks, give written notice to the Client describing the circumstances preventing continued performance and efforts being made to resume performance of basic services and Consultant may be entitled to equitable adjustments in schedule of performance and compensation in the event delays occur.
13. **Site Access and Safety.** Client shall provide all necessary site related approvals, permits, and consents necessary to commence and complete the Services. Consultant will be responsible for the supervision and site safety measures for its own employees but shall not be responsible for the supervision or health and safety precautions for any other parties, including Client's personnel, the Consultant's sub-consultants, or construction contractors and his/her subcontractors.
14. **Consequential Damages.** Under no circumstances will either party be liable to the other for loss of profits, revenue, or for any special, consequential, indirect, punitive, or exemplary damages.
15. **Dispute Resolution.** Client shall not be entitled to assert a Claim against Consultant based on any theory of professional negligence unless Client has obtained the written opinion from a registered, independent, and reputable engineer that

the Consultant has violated the standard of care applicable to Consultant's performance of the Services. Client shall provide this opinion to Consultant and the parties shall attempt to resolve the dispute within thirty (30) days through direct negotiation, after which Client may pursue its remedies at law.

16. **Indemnity.** The Consultant and its Client shall indemnify, and hold harmless the other, their agents, and any employees, from and against legal liability for claims, losses, damages, and expenses that were caused by either party negligent acts. Comparative fault principles shall be borne by each party in proportion to its own negligence.
17. **Termination.** Either party may terminate this Agreement or the Services for convenience upon thirty (30) days written notice to the other or for cause if either party fails substantially to perform through no fault of the other and does not commence and make a continuing effort to effect correction of such non-performance within seven (7) days of written notice. In such case, the Consultant shall be paid costs incurred, and fees earned, to the date written notice is received at the Consultant's office. In the event this Agreement is terminated by the Consultant, the Consultant will not be held responsible for any cost incurred by the Client after the date of termination.
18. **Severability.** If any of the provisions contained in this Agreement are held for any reason to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability will not affect any other provision, and this Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein.
19. **Governing Law.** This Agreement is to be governed by the laws of the State of Nebraska.

Consultant: Farris Engineering, Inc.
 12700 West Dodge Road
 Omaha, NE 68154
 (402) 330-5900

Client: _____
 Address: _____

 Phone: _____

Name: Michael D. Wallace

Name: _____

Title: President

Title: _____

Signature: _____



Signature: _____

Date: December 8, 2023

Date: _____

Farris Engineering Project #: P232155

Agreement for Services City of Falls City, NE / Public Works Department_p01dlc

Farris Engineering Reference Document: Why do I need an Arc Flash Study?

The purpose of an arc flash study is to identify potential electrical hazards and violations of safety regulations within your facility. The study calculates the amount of energy that could be released during an arc flash incident and evaluates the potential risks to workers.

An Arc Flash Assessment / Analysis is a study of the facility's power system to determine the incident energy available at specific electrical devices that employees would be exposed to while "interacting with" the electrical equipment at the facility. The output of the Assessment/ Analysis is a determination and labeling of the PPE required of the electrical devices, suitability of the devices for service as installed and if there are any mis-coordination issues involved as the system is currently installed.

A short circuit current available analysis and the clearing times of the overcurrent devices involved is required to determine the incident energy at the various points in the system.

OSHA 1910.132 requires that employers identify and protect their workers from workplace hazards. Every industrial / commercial power system includes inherent risks – specifically electrical shock and arc flash, anytime employees are "interacting with" electrical equipment while energized. Interacting with electrical equipment includes operation of fully enclosed switches and power circuit breakers as well as any exposure to energized equipment or circuit parts, including all energized testing or troubleshooting activities.

NFPA 70E – Standard for Electrical Safety in the Workplace, Section 110.1 – requires "The employer shall implement and document an overall electrical safety program that directs activity appropriate to the risk of electrical hazards. The electrical safety program shall be implemented as part of the employer's overall occupational health and safety management system, when one exists." Section specifically includes identifying and quantifying the risks of both shock and arc flash hazards before work begins.

NFPA 70E, Section 130.5 Arc Flash Analysis – requires an arc flash risk assessment shall be performed to determine the risk, safety related work practices required, the arc flash boundary, the incident energy at the working distance, and the PPE that people within the arc flash boundary shall use. This assessment shall be reviewed at intervals not to exceed 5 years.

NFPA 70E Section 130.5 (H) Labeling – requires all equipment "likely to require examination, adjustment, servicing, or maintenance while energized shall be field marked" ... with a label containing arc flash risk identification, severity of the risk, arc flash boundary and required PPE level among other things. This includes any energized testing or troubleshooting activity.

NFPA 70E, Section 110.3 (A) Host Employer Responsibilities – requires that host employers of contractors or outside service personnel are responsible for notifying the contractor of the hazards they may encounter in the performance of their work. This holds the host employer / facility owner responsible for identifying the hazards a contractor may encounter on the site. Therefore, using contract maintenance and electrical workers does not reduce the need for arc flash analysis.

It is impossible to know what level of arc flash hazard risk is inherent in your power system without assessment by knowledgeable technical resources. However, it is a true statement that every industrial / commercial electrical system has some level of inherent arc flash hazard. To protect the safety of your employees or contract employees working on or operating your electrical equipment an arc flash assessment must be completed and the equipment appropriately labeled.

Farris Engineering Reference Document: Scope of Work for Arc Flash Study

I. GENERAL Outline:

- a. The purpose of this study is to provide a comprehensive software model of Falls City Power Plant Building, Generation and Feeders Circuits to first termination point on the Distribution system. This will document compliance with NFPA 70E mandates, as described below. This will serve as an integral part of an ongoing safety program by providing arc flash calculations in compliance with NFPA-70E 2004 Article 130.1(A)(2).
 - 1. Article 205.3, 120.2(F)(1): Updated and verified one-line diagram for Falls City Power Plant Building.
 - 2. Article 400.5, 400.6: Updated short circuit and equipment duty verification study showing all electrical equipment is properly rated to withstand and interrupt the available short circuit duty per ANSI Standards and NEMA/UL/NEC requirements.
 - 3. Article 130.3(A)(B), 110.8: Updated arc flash study providing maximum incident energies, arc flash boundaries, and PPE requirements for equipment in the Power Plant Building.
 - 4. Article 130.16(E), 400.11, 400.14, 400.21(C)(2), 410.8: Updated labeling displaying the worst-case arc hazard values for equipment in the Power Plant Building.

- b. The analysis shall consist of the following:
 - 1. Field data collection by qualified personnel.
 - 2. Data entry and system one-line modeling in commercially available power system software.
 - 3. Model verification
 - 4. Short Circuit and equipment verification study.
 - 5. Protective device coordination study.
 - 6. Arc flash hazard study.
 - 7. Detailed report and findings of the analysis.
 - 8. Electronic copies of the Project Report and the System Modeling Files.
 - 9. Review of a draft copy of the report and presentation of the final copy of the report.
 - 10. Hard copies of the project report shall be included in proposed project pricing.

- c. The analysis and procedures shall comply with the following standards and recommended practices for power system studies.
 - 1. NFPA-70E, 2004 Standard for Electrical Safety in the Workplace
 - 2. IEEE-1584-2002

3. IEEE-242 "Buff Book" Protection and Coordination of Industrial Power Systems
4. IEEE-399 "Brown Book" Power System Analysis
5. IEEE-141 "Red Book" Electric Power Distribution for Industrial Plants

II. DATA COLLECTION

1. Field data collection shall be performed by a qualified consultant to ensure accurate equipment modeling.
2. The consultant shall review all the safety requirements and shall comply with all requirements.
3. Equipment shall be visually inspected to collect the necessary nameplate data used in the analysis. Consultant is responsible for visual verification of this data, including transformers, switchgear and breakers, relays, direct-acting trip units, etc. Data that may not be readily accessible or may not have nameplate data such as conductors, busway, etc. will be provided by the Falls City.
4. The Falls City shall provide qualified personnel to show consultant equipment location and to open all equipment doors, locks, etc. necessary to collect nameplate data.

III. SYSTEM MODELING

1. The system model shall be developed using a commercially available, fully integrated software package that meets the performance specifications to ensure compliance with NFPA-70E 2004, ANSI, and IEEE Standards, and OSHA mandates.
2. System model shall be laid out in one drawing/view and in a manner that provides for easy viewing of all analysis results. The one drawing/view requirement ensures that problem areas found and highlighted by the program are easily seen and not hidden or buried in multiple drawings, eliminating potential human errors where multiple drawing verification is required.
3. All one-line symbols shall be spaced properly to facilitate viewing results on the one-line.
4. Falls City Utility will have multiple operating conditions, including, but not limited to, generation on/off, shutdown, bus-ties, start-up, emergency operation, etc. Consultant shall discuss facility operation with designated staff to determine the possible operating modes of the system. Each of the operating modes shall be documented and modeled in the software to determine the worst-case arc flash hazard and associated parameters for the electrical equipment.
5. All relay data shall be modeled based on the actual nameplate data including manufacturer, type, style, trip device, and actual settings. Generic substitutions or assumptions shall not be allowed unless data cannot be field verified. All assumptions shall be documented in the report.



6. All overcurrent relay types for the distribution system shall be modeled on the one-line diagram (and database) including phase and ground overcurrent, differential, residual, ground neutral, etc. to establish a complete and detailed system model where protective device data can be easily modified and updated by the facility and all data is available for a comprehensive protective device coordination study if required in the future.
7. Relay models shall depict the actual connection requirements.
8. Multi-function relays shall have all their overcurrent devices modeled in a single device and shall be able to accept multiple CT's.
9. All equipment modeling must have a corresponding one-line diagram symbol.
10. All system modeling shall conform to accepted modeling practices as outlined in IEEE-399 "Brown Book". Consultant may provide more advanced modeling techniques where compliance with the specification is maintained.

IV. SHORT CIRCUIT STUDY

- A. A short circuit study shall be performed to verify all equipment duties. The calculations shall comply with ANSI C37.010, C37.13, C37.5, IEEE-141, and IEEE-399. The short circuit study shall verify the system electrical equipment is properly rated to withstand and interrupt the expected bolted and arcing faults in the system. Improperly rated and applied equipment may not protect personnel against arc flash hazards even if properly applied PPE is used. The software program must comply with the above standards in order to properly verify equipment.
- B. The equipment duty verification shall determine both the line side and load side fault current through each equipment and use the highest current to verify equipment ratings. Standard bus faults are not acceptable for protective devices in that they do not accurately model the current through the device and consequently they provide erroneous results. For solidly grounded systems, both three-phase and single-line-to-ground faults should be modeled. For other grounding configurations only a three-phase fault is required.
- C. Equipment duty results shall be graphically displayed on the electrical one-line as well as tabular report format.
- D. The results of the equipment duty verification tabular format report shall provide the following data:
 1. Equipment name and kV
 2. Manufacture, type, style, and ratings of the device
 3. Actual line or load side currents through the device and percent over/under duty

4. Flag for the device showing VIOLATION or WARNING level for visual identification.
5. A report of all problem areas shall be provided. A recommended action list shall be provided for all underrated equipment in each system.

V. PROTECTIVE DEVICE COORDINATION (PDC) REVIEW

- A. PDC review shall be performed to determine if protection characteristics are sufficient to provide reliable power to the facility. The PDC review will also determine if the existing settings entered in the software will provide proper personnel protection in the arc flash portion of this study. At locations where only instantaneous breakers or fuses are used, this section may not apply.
- B. The PDC review shall consist of selecting several key areas in each system and plotting the time-current curves (TCC's) to verify proper selective operation of the protective devices. The review should also determine if the settings could be enhanced to provide increased personnel/equipment protection without sacrificing selective coordination. The consultant shall determine in conjunction with the (Utility Name) the areas to be reviewed.
- C. The consultant shall notify Falls City of any potential problems in the protective device settings that affect either selective operation and reliability or personnel protection before continuing with the study. Falls City may then opt to continue with the study using existing settings or to extend the contract for a complete PDC study to correct the settings before continuing with the arc flash study.
- D. As specified in the data collection and modeling sections, all PDC data shall be modeled on the one-line diagram and in the equipment database.
- E. TCC Specifics: The TCC's shall graphically illustrate on log-log paper that adequate time separation exists between series over current protective devices. The specific time-current characteristics of each protective device shall be plotted in such a manner that sufficient upstream devices will be clearly depicted on one sheet to prove selective coordination.
 - a. TCC's shall include a system one-line diagram and protective device coordination curves for each device in the selected area. The TCC shall be printed in color on 8 ½ x 11" paper – full size portrait mode, using a log-log scale. The one-line diagram shall be part of the TCC and include all protective devices, equipment names, and short circuit currents calculated from the main one-line. The purpose of this requirement is to provide all necessary information on one sheet, in a format easily readable and standard to the industry.
 - b. TCC's shall be developed for both phase and ground protective devices. One phase and one ground TCC should be developed for each substation. The



TCC should show the largest feeder protective device up through the switchgear/switchboard feeder breaker, transformer, unit substation primary fuse, and feeder breaker.

VI. ARC FLASH STUDY

- A. A detailed arc flash study to determine potential arc flash incident energies, arc flash boundaries, shock hazard boundaries and proper personal protective equipment (PPE) for all energized electrical system equipment. The calculations shall comply with NFPA-70E 2004, and IEEE-1584. Bolted short circuit calculations used in the above standards shall comply with ANSI C37.010, C37.13, C37.5, IEEE-141, and IEEE-399. The purpose of this study is to determine arc flash hazards in conformance with NFPA-70E and the BPW's ongoing safety program, and to provide a comprehensive software model of the electrical distribution system, which provides arc flash calculations in compliance with NFPA 70E Article 130.1(A)(2) for all equipment. The software program used in this study shall comply with the above standards. No substitutions in calculation methods will be allowed.
- B. The arc flash study shall determine the following results for various modes of operation developed in Section 1- H. The results shall be provided in spreadsheet format for each mode and electrical system location to provide easy viewing and comparison. Worst-case arc flash energy levels shall be flagged, and the spreadsheet comparison table shall be capable of providing its output directly to high quality vinyl label printers. The spreadsheet results shall include:
 - a. Equipment name and voltage.
 - b. Upstream equipment device name and ANSI function, i.e., 51/50, etc.
 - c. Equipment type, i.e., switchgear, MCC, Panel, VFD, etc.
 - d. Equipment arc gap.
 - e. Bolted and estimated arcing fault current at the fault point (equipment) in symmetrical amperes. The estimated arcing current should be based on the arcing current equations used.
 - f. Trip time, opening time, and total clearing time (total Arc time) of the protective device.
 - g. Worst-case arc flash boundary for each bus/equipment in the model.
 - h. Worst-case arc flash hazard incident energy in cal/cm² for each bus/equipment in the model.
 - i. Worst-case personal protective equipment (PPE) for each bus/equipment in the model.

- j. Working distances for up to five different distances showing items 7, 8, and 9 for each distance.
 - k. Indicate “Danger/Hazardous” areas where incident energy is greater than 40 cal/cm² and provide recommendations to reduced arc flash energy levels for these areas.
 - l. Flag results where 85% arcing current provided worst-case results.
 - C. Each mode of operation shall include a detailed write-up indicating areas where incident energy calculations and PPE requirements are higher than calculated in the normal operating mode.
 - D. Consultant shall provide a detailed arc flash analysis report including as a minimum:
 - a. Introduction.
 - b. Methodology.
 - c. Information Sources.
 - d. Key Assumptions.
 - e. Arc Flash Energy and other considerations for various System Modes of Operation (maintenance mode, bus-tie, co-gen on/off, etc.).
 - f. Arc Energy at 100% and reduced currents.
 - g. Over current Protective Device Changes, Replacements or Setting Changes implemented in study to reduce arc flash hazard exposure of Data in Arc Flash Hazard Report Tables.
 - E. NFPA 70E Information.
 - A. Shock Hazards with covers removed.
 - B. Shock Hazard Approach Boundaries.
 - C. Limited Approach Boundary.
 - D. Restricted Approach Boundary.
 - E. Prohibited Approach Boundary.
 - F. Arc Flash Hazard Boundaries.
 - F. Results of Arc flash Hazard Analysis for all voltages including:
 - A. Working distances.
 - B. Energy Levels.

- C. PPE Requirements.
- D. Recommendations to reduce arc flash hazard energy and exposure.
- G. Arc Flash Hazard Report.
 - A. 5 Hard Copies.
 - B. 1 Electronic Copy in Adobe Acrobat format.
 - C. Electronic file for Power System Modeling Software as developed and utilized for this analysis.
 - D. Consultant shall provide an option to print labels for the (Utility Name) (see Project Options section below) or for the (Utility Name) to print labels for all equipment in the system from the project study file. Assume three (3) labels per equipment/bus in the estimate using 4" x 6" labels or one (1) 6" x 8" label per equipment bus. The labels shall be UV resistant vinyl labels (white with orange warning strip and black letters) conforming to ANSI-Z535.
- H. Software Requirements: The software shall provide complete integration of the one-line database, short circuit, PDC and Arc flash functions. Software using separate short circuits, PDC, TCC or arc flash programs is not allowed. Spreadsheet calculations are not allowed. The purpose of this section is to ensure that the arc flash hazard calculations comply with NFPA-70E and IEEE-1584, and that the calculations are programmed with necessary requirements to help eliminate possible errors in the arc flash calculations. The additional purpose is to establish a detailed software model for each of the (Utility Name) owned facilities, which will document the (Utility Name) compliance with the OSHA requirements and NFPA 70E mandates. These models will serve as an integral part of the BPW's ongoing safety program by providing arc flash calculations in compliance with NFPA-70E Article 130.1(A)(2).
 - A. Arc flash calculations shall be performed with enhanced IEEE-1584 equations, which eliminate voltage discontinuities and the non-conservative/average results of the standard equations. The purpose of this requirement is to ensure that the calculated incident energies are closer to actual test results ensuring a conservative calculation minimizing personnel risk.
 - B. The arc flash calculations including arc flash boundary, incident energy, PPE requirements, and working distance shall be displayed on the software one-line diagram and TCC simultaneously.
 - C. The arc flash calculations shall include four (4) calculation options to ensure that the software provides the flexibility required to meet any system configuration requirement that may be considered. Each

calculation option shall comply with the graphic and spreadsheet display requirements of this section. Each option is more specifically described below.

1. The detailed option shall provide the let-through energy for each protective device in the system or on selected equipment. This is the energy on the load side of the protective device. The equipment shall be highlighted when the let-through energy exceeds a user defined threshold-clothing limit.
2. Worst-case including main protective device. This option shall provide the worst-case arc-hazard energy for the equipment based on the let-through energy of the equipment's main protective device. If the equipment is not equipped with a main device, the program must traverse back the entire system to determine the fastest series upstream protective device. The equipment shall be highlighted when the let-through energy exceeds a user defined threshold-clothing limit.
3. Worst-case excluding main protective device. This option shall provide the worst-case arc-hazard energy for the equipment based on the let-through energy of the fastest upstream series protective device in the system. The program shall traverse back the entire system to determine the fastest upstream protective device. The equipment shall be highlighted when the let-through energy exceeds a user defined threshold-clothing limit.
4. Worst-case excluding and including the main protective device. A combination of options 'b' and 'c' as stated above.

VII. REPORTING AND ANALYSIS SUMMARY

Provide a detailed written report that includes the following:

1. Executive Summary: The executive summary shall be brief, 1-2 pages maximum and cover at an executive level the findings of the study, recommendations, and requirements for maintaining NFPA-70E compliance.
2. Scope of studies performed: The scope shall provide details of what actions were intended to be performed for each aspect of each study, including short circuit, protective device coordination, and arc flash.
3. Description of each facility's system and explanation of bus and branch numbering system.
4. Modes of operation studied: Each scenario/plant operating condition shall be thoroughly documented.

5. Detailed report and results of short circuit, coordination, and arc flash studies including:
 - a. Recommendations and additions to equipment ratings and/or PDC characteristics.
 - b. Recommendations to reduce arc flash hazards for equipment with incident energies over 40 cal/cm².
6. Prioritized recommendations for all studies.

VIII. QUALITY ASSURANCE

- A. The studies shall be in conformance with the NFPA and ANSI Standards, and IEEE recommended practices detailed in this section. No substitutions in study methods or software conformance will be allowed.
- B. The consultant is responsible for compliance with all performance specifications in this proposal. Any deviation from complete compliance must be noted on the performance specification submitted for review and approved before work begins.
- C. Consultant shall indicate compliance with The Board of Public Works insurance requirements as outlined in the attached insurance requirements document.