

OFFICE OF THE  
*Appanoose County Auditor*

**KELLY HOWARD**

COURTHOUSE  
201 N. 12th St., Rm 11  
CENTERVILLE, IOWA 52544

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Meeting Agenda  
November 7, 2022

The Appanoose County Board of Supervisors will meet Monday, November 7, 2022 at 9:00 A.M. in the Boardroom of the Courthouse. Items on the agenda include:

1. Pledge
2. Declaration of items to be added to the agenda/Approve Agenda
3. Approve minutes of the October 17<sup>th</sup> & November 2<sup>nd</sup>, 2022 meetings
4. Approve reports (10/28 payroll, DHS Quarterly Report, Amended Bellair Township Financial, Ag Extension Financial Report, 9/22 Prisoner Room & Board)
5. Approve bills
6. Billy Thomas: Medical Examiner trip reimbursement request
7. Mike Schill, Natel: Broadband project update
8. Veteran Affairs Commission: Surplus SUV
9. 9:15 A.M. Public Hearing Final Plat Hefner Subdivision
10. Approve Resolution #2022-27: Final Plat Hefner Subdivision
11. Richard Keilig POW Flag Request
12. Accept Sheriff Office Resignation
13. Approve Recorder's Office Hiring
14. FYI- MMP Parks Finishing C2 LLC
15. Accept County Attorney's Compensation Board Appointment: Edward Cox
16. Approve 2023 County Weed Commissioner Certification Form & Report
17. Approve Family Farm Tax Credit Applications
18. Approve ISAC's Soil Analysis Contribution
19. John Hansen: Appanoose County Law Center (project progress update, review and approve change orders, review and approve pay request, discussions, and any necessary action)
20. County Engineer Report
  - a. Notice of public hearing to vacate a portion of an alley in Jerome in Block C of Sidle's 2<sup>nd</sup> Addition
  - b. Notice of public hearing to vacate lakeview Drive Lot B in Parkside Knolls Subdivision
  - c. Notice of public hearing to establish an Area Service "B" on a portion of 550<sup>th</sup> St west of Iowa Highway 5
  - d. Notice of public hearing to establish speed limits on Hwy J29 between County Highway J5T and Iowa Highway 5
21. Public Comments
22. Adjourn

Posted 11/3/2022

October 17, 2022

Appanoose County Board of Supervisors met in regular session October 17, 2022 at 9:00 A.M. in the Boardroom of the Courthouse. Present: Linda Demry, Chairperson, Mark McGill, and Jeff Kulmatycki Boardmembers. Absent: none.

The meeting started with the pledge.

McGill motioned to approve the agenda. Seconded by Kulmatycki. All voted aye.

Resolution #2022-22 approved during 10/3/2022 meeting needs corrected to #2022-23. McGill motioned to approve the amended minutes from the October 3, 2022 meeting. Seconded by Kulmatycki. All voted aye.

McGill motioned to approve 10/14 payroll, Auditor, Recorder, Sheriff and Veteran Affairs Quarterly Reports. Seconded by Kulmatycki. All voted aye.

Gary Messersmith spoke about the road conditions on 550<sup>th</sup> St West of Highway 5. After some discussion he will get Mr. Sutter's contact information to the County Engineer so all related parties can discuss what they would like done to the road.

McGill motioned to open the FY23 County Budget Amendment Public Hearing at 9:16 A.M. Seconded by Kulmatycki. All voted aye. There were no public comments. McGill motioned to close the public hearing at 9:16 A.M. Seconded by Kulmatycki. All voted aye. Kulmatycki motioned to approve Resolution #2022-25 (a copy is available in the Auditor's Office). Seconded by McGill. All voted aye.

Kulmatycki motioned to approve Resolution #2022-26. Seconded by McGill. All voted aye.

RESOLUTION NO 2022-26  
APPROPRIATIONS AMENDMENT

WHEREAS, Resolution No 2022-13 dated June 6, 2022 set appropriations by department for Fiscal Year 2023, and

NOW THEREFORE, BE IT RESOLVED, by the Board of Supervisors of Appanoose County, Iowa to amend department appropriations by the following amounts:

<u>Dept# &amp; Name</u>	<u>Amount</u>	<u>Dept# &amp; Name</u>	<u>Amount</u>
22-Conservation	\$113,500	51-Courthouse	\$200,000
57-E911	\$750,000	99-Nondept	\$1,215,431

The above and foregoing resolution was adopted by the Board of Supervisors of Appanoose County, Iowa on October 17, 2022, the vote thereon being as follows:

AYES: /s/Linda Demry, Mark McGill, Jeff Kulmatycki NAYS: none

Chairperson, Board of Supervisors

Attest: /s/Kelly Howard, Appanoose County Auditor

McGill motioned to continue the current arrangement of the American Legion supplying the POW Flag. Seconded by Kulmatycki. All voted aye.

McGill motioned to set the Public Hearing for the Final Plat for Hefner Subdivision for 11/7/2022 at 9:15 A.M. Seconded by Kulmatycki. All voted aye.

McGill motioned to approve Resolution 2022-24. Seconded by Kulmatycki. All voted aye.

Resolution 2022-24

Compensation of Members of Election Boards

WHEREAS, Iowa Code § 49.20 authorizes the county board of supervisors to establish the compensation of members of election boards, and

WHEREAS, it is vital to the Appanoose County elections process to build and maintain a strong pool of election board members;

WHEREAS, it is recommended by the State Auditor's Office the compensation rate be established on a yearly basis, and  
WHEREAS, Resolution 2022-23 was previously adopted October 3, 2022 setting On-Call Election workers, and

NOW, THEREFORE BE IT RESOLVED that the Appanoose County Board of Supervisors hereby authorizes that, effective October 17, 2022 and until the end of the calendar year the following:

Regular Election Officials: 7:00 A.M. Openings (all day): \$160, 12:00 P.M. Openings (half day): \$90; Chairpersons: 7:00 A.M. Openings (all day): \$180, 12:00 P.M. Openings (half day): \$100  
Absentee Board: \$13 per hour, maximum \$160; Election School Pay Rate: \$20; Post-Election Audit Pay Rate: \$20; Mileage Rate: \$0.45 per mile. Mileage is paid only when traveling more than five miles to the polls, election school, and picking up and returning election equipment.

PASSED and ADOPTED this 17<sup>th</sup> day of October, 2022.

Ayes: /s/Linda Demry, Mark McGill, Jeff Kulmatycki Naves: none

Attest: /s/ Kelly Howard, County Auditor

Kulmatycki motioned to accept the termination letter for Tim Wagner, Motor Grader Operator effective October 7, 2022. Seconded by McGill. All voted aye.

McGill motioned to table the Access Control System quote. Seconded by Kulmatycki. All voted aye.

John Hansen was not present.

County Engineer Brad Skinner, provided an update to the board. The final construction project currently for FY23 is starting. The Boothill Bridge Replacement contains no concrete so it can be done through winter. Depending on the budget they might want to move something up to this fiscal year. The work on T61 is done. A failed piling on 320<sup>th</sup> was replaced. There will be a few road/alley vacations to set public hearings for at the next board meeting. They've been on five 8-hour days for a few weeks now. They are working on getting a maintenance schedule prepared for each piece of equipment. There's been no progress with Wayne County on 100<sup>th</sup> Ave. McGill asked who is filling the vacant maintainer position. Skinner stated the route has been split between the adjoining operators. McGill requested he look at 160<sup>th</sup> South of Numa.

Kulmatycki motioned to approve the bills. Seconded by McGill. All voted aye.

Access Sys	Off. Supplies & Forms	108.00
ADLM EM	Contrib. & Purchase Serv	3079.25
Agriland FS	Engineering Services	30562.25
Albia Motor	Engineering Services	147.85
Albia Newspapers	Office Equip. & Furniture	865.26
Alliant	Electric Light & Power	3772.32
Sec Rds	Fuels	3639.02
Serv Agency	Salary-Regular Employees	5148.75
App Co Treas	Off. Supplies & Forms	437.75
App Comm Care	Homemaker-Home Health Aid	4480.07
Axon Enterprise, Inc	Educational & Train.Serv.	375.00
Bailey Off	Off. Supplies & Forms	81.77
D Barnthouse	Building Repair & Maintce	100.00
Blue Sun Graphics LLC	Uniforms	118.00
Bob Barker	Jail Equip. & Furniture	58.10
Bratz Oil	Fuels	1984.88
Brown's Shoe	Engineering Services	255.82
C-D Supply	Off. Supplies & Forms	125.34
Calhoun Burns	Engineering Services	11976.28
Cantera Aggregates	Engineering Services	20588.62
Capital One	Custodial Supplies	267.32
Card Services	Park Maint. & Supplies	524.83

CarQuest	Engineering Services	797.28
Cville Wtrwks	Rent & Utility Payments	606.82
C'ville Produce & Feed	Park Maint. & Supplies	918.75
Centurylink	E911 Telephone Expense	33.95
Certified Power	Engineering Services	703.22
Chariton Valley Elec	Electric Light & Power	293.89
City Cville	Salary-Regular Employees	5846.62
CocoBeen Reptiles	Park Maint. & Supplies	150.00
Construction & Aggregate Prod	Engineering Services	2277.22
Dave's Tire Shop	Engineering Services	138.00
Davis Co Sch	Community Support Program	800.00
Davis Co Daycare	Community Support Program	1324.26
Davis Co Sheriff	Medical & Health Services	11317.21
Davis Co Tire	Engineering Services	187.53
S Dittmer	Legal Serv. Dep-Subp-Tran	78.30
Eastern IA Tire	Engineering Services	4013.28
Equipment Blades, Inc	Engineering Services	3227.00
Erman Corp	Bridge & Culvert Maint.	60000.00
Brian Felton	Rent Payments	500.00
Finish Line	Fuels	143.55
Fogle TV	Off. Equip Repair & Maint	269.05
Stacy Gray	Legal Serv. Dep-Subp-Tran	274.50
GreatAmerica	Off. Equip Repair & Maint	210.78
PJ Greufe	Health Insurance	1500.00
Hawkeye Truck Equip	Construction & Maint.	13500.00
Henderson Products	Engineering Services	1625.86
Blake Hershberger Ent	Engineering Services	742.88
Hills San	Building Perm. Improvemnt	1778.25
A Hoffman	Park Maint. & Supplies	30.59
Housby Mack	Engineering Services	20.69
Kelly Howard	Educational & Train.Serv.	23.85
Hy-Vee	Medical & Health Services	4800.02
IACME	Medical & Health Services	1000.00
Iowa Comm Assurance Pool	Community Support Program	2160.00
IA Law Enforcement Academy	Educational & Train.Serv.	625.00
IA Media Network	Off. Equip Repair & Maint	150.00
IA Prison Industries	Engineering Services	6987.70
IA Workforce	Off. Supplies & Forms	235.25
J & J Ready Mix	Bridges & Culverts	2610.00
J&K Rentals	Rent Payments	625.00
John Deere	Engineering Services	685.06
Kids World	Community Support Program	1652.00
Kimball	Engineering Services	1503.11
Kone	Heat-Cool-Elevator-Rpr-Mn	378.63
L&W Quarries	Park Maint. & Supplies	177.41
R Lamb	Medical & Health Services	605.13
Lee Co Hlth	Community Support Program	764.56
LexisNexis	Dues & Memberships	100.00
Lockridge	Engineering Services	2615.48
MARC	Engineering Services	241.46
J McElvain	Right of Way	2723.53
Mercy Med Ctr	Engineering Services	35.00
Midwest Construction	Building Perm. Improvemnt	18020.66
Midwest Wheel	Engineering Services	44.84
MMIT	Off. Equip Repair & Maint	98.84
Monroe Pub Hlth	Community Support Program	5319.81
Myers Custom Signs	Engineering Services	300.00

Natel	Telephone & Telegr.Serv.	55.00
Nat'l Pen	Contract Services	223.19
Noah Detention Const	Building Perm. Improvemnt	60781.00
O'Halloran Int'l	Engineering Services	370.07
O'Reilly	Engineering Services	81.48
Orchard Pl	Community Support Program	2406.22
Petty C-Sheriff	Building Repair & Maintce	65.32
R Pfannebecker	Mileage & Transp. Expense	137.62
Prof Computer	Off. Equip Repair & Maint	31.95
Quick Shop	Transportation	333.00
RACOM	E911 Other Capital Expens	6427.93
RASWC	Engineering Services	204.00
RRWA	Water & Sewer	27.00
River Hills	Medical & Health Services	130.00
G Roefer	Medical & Health Services	200.00
S.G. Construction	Building Perm. Improvemnt	34071.18
Safelite	Engineering Services	251.31
SCICAP	Community Support Program	27901.80
V Senter	Park Maint. & Supplies	17.66
Seymour Tire	Engineering Services	32.00
SIEDA	Community Support Program	2599.72
Sinclair NAPA	Engineering Services	862.93
B Skinner	Educational & Train.Serv.	142.20
Snap-On-Tools	Engineering Services	848.91
Soap Creek Watershed	Flood & Erosion	5186.00
State Public Defender	Legal & Ct-Related Serv.	10975.00
Storey Kenworthy	Election Supplies	664.56
Tony's Plumbing & Heating	Building Perm. Improvemnt	17171.72
Tri-County Fire Equip	Park Maint. & Supplies	92.00
UMB Bank, N.A.	G.O. Bonds Principal	139415.00
US Bank	Educational & Train.Serv.	14124.95
US Cellular	Off. Supplies & Forms	1072.67
Walker Welding	Engineering Services	1559.31
J Wells	Right of Way	1507.36
Wex Bank	Mileage & Transp. Expense	499.93
Wigwam Daycare & Preschool	Community Support Program	1362.74
Windstream	Off. Supplies & Forms	1979.95
Ziegler	Engineering Services	102928.43
5th Dist Aud Assn	Educational & Train.Serv.	25.00
Grand Total		693254.41

Public Comments: None.

McGill motioned to adjourn. Seconded by Kulmatycki. All voted aye.

The Board adjourned to meet the call of the Auditor at 9:33 A.M.

Appanoose County Board of Supervisors

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\_\_\_\_\_

Attest:

\_\_\_\_\_  
Kelly Howard, Appanoose County Auditor

November 2, 2022

Appanoose County Board of Supervisors met in special session November 2, 2022 at 11:00 A.M. in the Boardroom of the Courthouse. Present: Linda Demry, Mark McGill, and Jeff Kulmatycki (via phone). Absent: none.

McGill motioned to approve the agenda. Seconded by Kulmatycki. All voted aye.

McGill motioned to go into closed session per Iowa Code 21.5.1(j) at 11 A.M. Seconded by Kulmatycki. All voted aye.

McGill motioned to come out of closed session at 11:37 A.M. Seconded by Kulmatycki. All voted aye.

McGill motioned to authorize Assistant County Attorney Alan Wilson send a null and void broadband contract letter to Natel. Seconded by Kulmatycki. All voted aye.

McGill motioned to adjourn. Seconded by Kulmatycki. All voted aye.

The Board adjourned to meet at the call of the Auditor at 11:38 A.M.

Appanoose County Board of Supervisors

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Attest:

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Kelly Howard, Appanoose County Auditor

Iowa Department of Human Services  
 REPORT OF LOCAL ADMINISTRATIVE EXPENSE

**APPANOOSE COUNTY**

Payments from County General Fund

Quarter Ended 9/30/2022

Claim No.	Payee	Item	Warrant		Partic. Amount	Cost Center	St Office Use	FFP% Used
			Date	Num				
1	2	3	4	5	6	7	8	
%	Jessica Hinojosa	Janitor \$135.00	7/5/22	48240	\$11.53			
*	Ricoh USA	Additional Copies \$12.84	9/19/22	49654	\$12.51			
		Indirect costs for quarter ending 9/30/22			\$9,967.25			
*Indicates a partial payment of a shared bill 0.0256%								
% HHS pays a 8.54% of a total bill								
To: State Department of Human Services, Des Moines, Iowa					TOTAL	\$9,991.29		

I hereby certify that expenditure for local administrative expenses in the amounts shown above were made and entered on the records of the fund specified.

  
 \_\_\_\_\_  
 Date 10/18/22 Local Administrator

APPANOOSE COUNTY,

*Bellair*

TOWNSHIP

*Amended*

**SUMMARY STATEMENT OF RECEIPTS AND DISBURSEMENTS**

Fiscal Year July 1, 2021 thru June 30, 2022

**Code of Iowa 359.23 Receipts and Expenditures - Annual Statement** Each township clerk shall prepare, on or before September 30 of each year, a statement in writing, showing all receipts of money and disbursements in the clerk's office for each separate tax levy authorized by law for the preceding fiscal year, showing the current public debt of the township, and showing the balance as of June 30 of all separate reserve accounts held by the township, which shall be certified as correct by the trustees of the township. The statement shall be in a form prescribed by the county finance committee in consultation with the department of management. Each township clerk shall send a copy of this written statement to the county auditor no later than seven days after the statement is certified by the trustees. The county auditor shall post the statement or a summary of the statement in a prominent place in the building where the auditor's office is located. The county treasurer shall withhold disbursement of township taxes until the statement is filed with the county auditor. The county auditor shall notify the county treasurer if taxes are to be withheld.

SUMMARY		TOWNSHIP FUNDS					
		CEMETERY	FIRE				TOTAL
1							
2	BEGINNING FUND BALANCE JULY 1, <u>2021</u> add (+)	7,167.48	—	3,52			7171 <sup>00</sup>
3	TOTAL REVENUE less (-)	3,062.43	11,751.11	984.21			15,797.75
4	TOTAL DISBURSEMENTS equals (=)	4,185 <sup>00</sup>	6,606.27	1000 <sup>00</sup>			11,791.27
5	ENDING FUND BALANCE JUNE 30, <u>2022</u>	6,044.91	5,144.84	(12.27)			11,177.48
6	PUBLIC DEBT BALANCES AT YEAR END						
7	RESERVE FUND BALANCES AT YEAR END						

**CERTIFICATION**

To the County Auditor of the above-named County: We hereby certify that the above statements are correct as appears in the records of the township clerk.

RECEIVED APPANOOSE COUNTY AUDITOR  
OCT 17 2022 PM 4:18

*Bruce Clark*  
Township Clerk

10-8-22

Date

*Dick Keylich*  
*Nyle Cox*

Township Trustees





# Appanoose County Agricultural Extension District

## Published Report - Operating

07/01/2021 to 6/30/2022

FILED APP CO AUDIT  
OCT 28 '22 AM 10:28

### Beginning Balance and Receipts:

**Total Balance: July 1, 2021** **\$126,409.38**

### Receipts:

Grant Revenue	\$17,485.31
Interest Revenue	\$12.50
Other Revenue	\$409.53
Program Fee Revenue	\$23,637.85
Property Tax Revenue	\$160,801.37
Rental Revenue	\$30.00
Resale Revenue	\$703.00
<b>Total Receipts:</b>	<b>\$203,079.56</b>
<b>Total Beginning Balance and Receipts:</b>	<b>\$329,488.94</b>

### Disbursements:

4H Mall - Program Expense	\$38.85
A & T Industries - Program Expense	\$352.24
Alliant Energy - Facility Expense	\$1,102.99
Amazon - Program Expense	\$2,581.86
American Youth Foundation - Program Expense	\$50.00
Ammons & Butikofer - Facility Expense	\$7,800.00
Appanoose Weekly - Memberships, Dues Expense	\$84.00
Babbitt, Patricia - Program Expense	\$73.94
Brown, Tiffany - Program Expense	\$780.25
Case, Brenda - Program Expense	\$630.00
Casey's - Meeting Expense	\$19.98
Centerville Chamber Of Commerce - Memberships, Dues Expense	\$200.00
Cole, Susan - Program Expense	\$500.00
Cotton Gallery - Program Expense	\$4,176.08
Dannco, Inc - Program Expense	\$107.00
Deluxe Corporation - Supplies Expense	\$280.82
DeRosear, Amber - Net Wages and Travel	\$1,774.46
Dinn Bros. - Program Expense	\$3,946.10
Dollar Tree - Program Expense	\$21.00
Ewing, Denise - Program Expense	\$50.00
Facebook - Program Expense	\$12.91
Fareway - Meeting, Supplies Expense	\$875.86
Farm Bureau - Memberships, Dues Expense	\$45.00
Farm Bureau Property & Casualty Insurance - Insurance, Bond Expense	\$608.00
Firkins, Lynn M. - Net Wages and Travel	\$34,710.82
First Advantage Background Services - Background Checks Expense	\$1,232.69
Fogle True Value & Hardware - Equipment Expense	\$874.99

Fowler, Wade - Marketing Expense	\$258.25
Gateway Hotel - Travel Expense	\$380.80
Gay, Tom - Program Expense	\$350.00
Hodges Badge Co. - Program Expense	\$144.50
Hy-Vee - Meeting, Supplies Expense	\$81.78
Impressive Designs - Program Expense	\$335.00
Ink Made Productions - Program Expense	\$972.29
Iowa Agricultural Extension Assoc. - Program Expense	\$2,500.00
Iowa Extension Council Assoc. - Benefits Expense	\$365.00
Iowa Media Network - Advertising Expense	\$58.89
IPERS - Retirement Plan	\$14,833.09
Iowa State University - Shared Support, Program, Materials	\$19,312.56
Keokuk County Extension - Professional Development Expense	\$20.00
Kincaid, Nancy - Net Wages and Travel	\$4,159.21
Lain, McKinley - Net Wages and Travel	\$1,226.79
Lockridge, Inc. - Equipment Expense	\$378.88
Martsching, Shayla R. - Net Wages and Travel	\$28,219.44
McGill, Myra - Program Expense	\$414.20
Midwest Office Technology - Equipment Expense	\$1,471.61
Monroe County Extension - Program Expense	\$419.69
Moravia Fall Festival - Program Expense	\$50.00
Moravia Union - Program Expense	\$112.00
Natel - Telecommunications Expense	\$2,100.00
National 4-H Supply Service - Marketing Expense	\$50.65
Oriental Trading - Program Expense	\$38.27
Ottumwa Courier - Advertising Expense	\$135.75
Power Graphics - Program Expense	\$207.00
Quill Corporation - Program Expense	\$5,690.93
Raw Metal Works - Program Expense	\$860.00
RegistrationMax - Program Expense	\$500.00
Ryan, Anne - Program Expense	\$512.00
Sam's Club - Supplies, Program Expense	\$138.01
Schmell, Madeline - Program Expense	\$92.42
Self, Janiece - Net Wages and Travel	\$5,301.54
Sign Pro - Supplies Expense	\$114.00
Staples - Marketing Expense	\$129.11
State of Iowa - Audit Expense	\$802.50
Summit View Solutions, LLC - Program Expense	\$2,225.00
Thamke, Marcy - Program Expense	\$464.77
The Albia Newspapers, Inc - Advertising Expense	\$118.10
Treasurer, State of Iowa - Payroll Taxes	\$3,335.00
True Value - Program Expense	\$9.95
US Bank - Bank Charges Expense	\$132.39
US Department of the Treasury - Payroll Taxes	\$20,232.81
US Postal Service - Postage Expense	\$1,943.50
Walmart - Equipment, Supplies Expense	\$9,938.83
Weber, Laura - Program Expense	\$33.77

Webstaurant - Marketing Expense	\$48.03
Wells, Lydia - Program Expense	\$106.01
Y-Text - Program Expense	\$217.50
Total	\$194,471.66
<b>Total Disbursements:</b>	<b>\$194,471.66</b>
<b>Net Balance: June 30, 2022</b>	<b>\$135,017.28</b>

**STATE OF IOWA - Appanoose County**

I, Teddy Walker, Chair, and I, Melissa Neher, Treasurer of the Appanoose County Agricultural Extension Council, being duly sworn on oath, state to the best of our knowledge and belief, that the items included in the foregoing Financial Report are true and correct statement of receipts and expenditures of the Appanoose County Agricultural Extension Fund.

Signed Teddy Walker, Chair  
Teddy Walker

Signed Melissa Neher, Treasurer  
Melissa Neher

Subscribed and sworn to before me on this 12<sup>th</sup> day of August, 2022.

Maegan Messmaker  
 Notary Public



DISTRICT COURT OF APPANOOSE COUNTY

REPORT OF FEES COLLECTED

\*\*\*PRISONER ROOM AND BOARD\*\*\*

To the Board of Supervisors of Appanoose County:

I, Jamie Hosen, Clerk/Clerk's Designee of the District Court of the above named County and State, do hereby certify that the following is a true and correct statement of the fees collected by the Clerk of Court for the month of September, 2022, and The same has been paid to the County as per receipt attached.

COUNTY SHARE OF PRISONER ROOM & BOARD

1000-1000-4440-05-302	Total Prisoner Room & Board Reimbursement	
	100% General Basic	\$ <u>6247.21</u>
29000-01000-4440-05-301	60% Transfer to Sheriff	\$ <u>148.32</u>

Transfer authorized by Appanoose County Board of Supervisors this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

Signed: \_\_\_\_\_  
Chairperson

10/14/22 15:18:26

Miscellaneous Receipt  
Appanoose County Treasurer

10/14/2022

Receipt# 21297

Received from Customer R

500

Appanoose County Sheriff

<u>Payment Method</u>	<u>Amount</u>	<u>Check#</u>	<u>Paid by</u>
2 Check	1,247.21	53620	Appanoose Co Clerk of Court

#	Fund	Function	Rev	Dept	Prj	Sub	Post	Earned	Amount
1	01000	3	01000	4440	05	302	1	09/30/2022	1,247.21
								Prisoner Room & Board Reim.	
								40%-Gen. Basic	
								k-1247.21 Total Prisoner Room	
								& Board Reimbursement	
								100% General Basic	
								Sept 2022 JS	

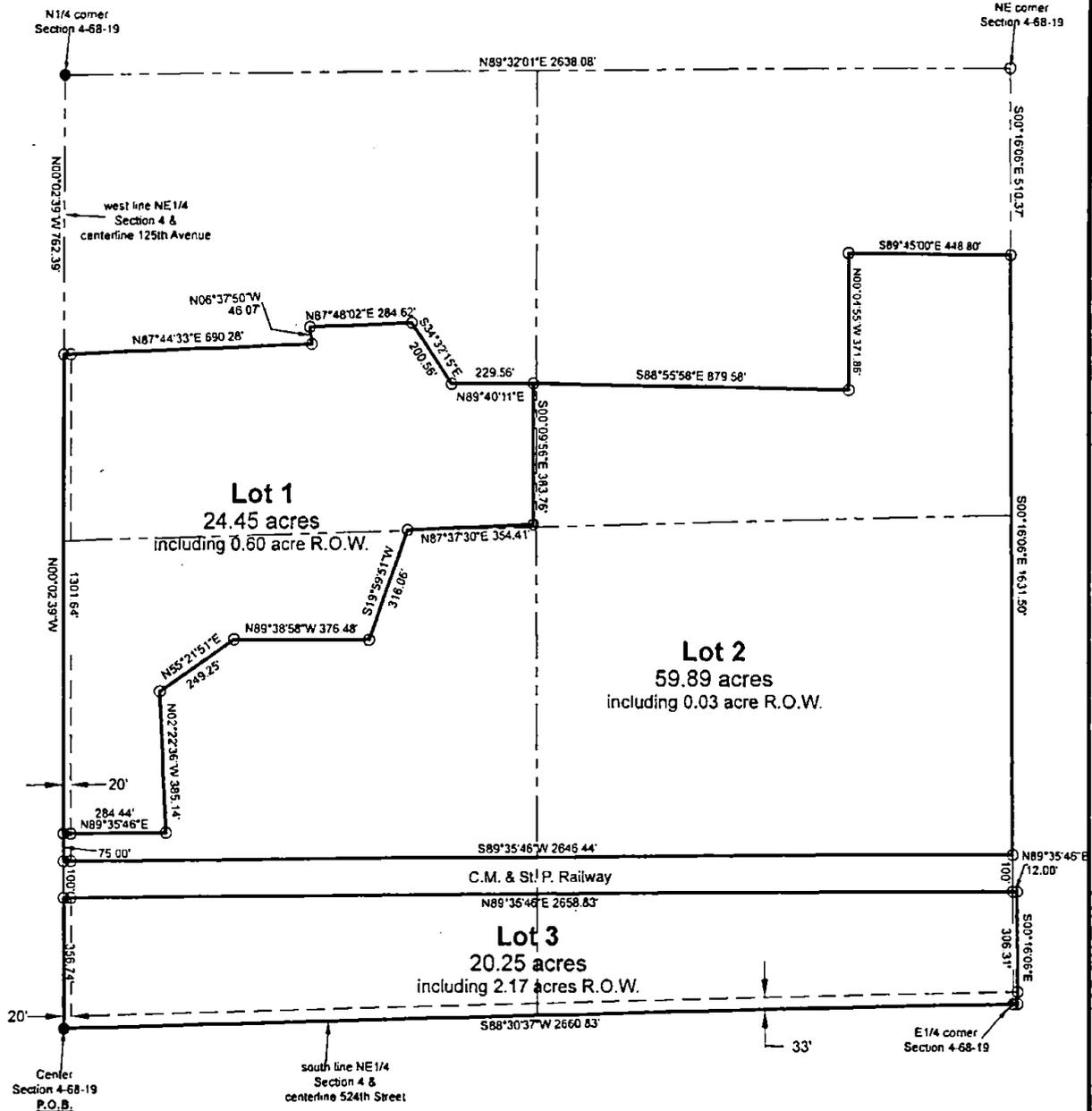
Total Amount	1,247.21
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# FINAL PLAT

## INDEX LEGEND

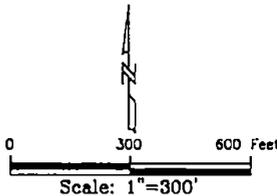
Property Location: part NE 1/4 Section 4, Township 68 North, Range 19 West  
 Appanoose County, Iowa  
 Surveyor: Robert H. Lance, Iowa P.L.S. #21980, rob@lancesurveying.com  
 Return Document to: Lance Surveying Services (319) 985-6779  
 1505 North Broadway Street, Mt. Pleasant, IA 52541  
 Survey Requested by: John Probasco  
 Preparator: Norman W. Hefner  
 Survey Completed: 8 September 2022  
 Sheet 1/2 | Basis of Bearing: IA RTK, ISPS Zone | Hefner Trust dwg

## Hefner Subdivision



**Certification**  
 I hereby certify that this land surveying document was prepared, and the related survey work was performed by me or under my direct personal supervision, and that I am a duly licensed Professional Land Surveyor, under the laws of the State of Iowa.

Robert H. Lance  
 Iowa Professional Land Surveyor #21980  
 License renewal date: December 31, 2023  
 Pages covered by this sheet: 2



- Legend:**
- set 1/2"x30" rebar/orange cap #21980
  - found 5/8" rebar
  - ⊗ found 1/2" rebar
  - - - county road R.O.W. line
  - property line
  - (#) dimension from previous record

# FINAL PLAT

## INDEX LEGEND

Property Location: part NE1/4 Section 4, Township 68 North, Range 19 West  
Appanoose County, Iowa  
Surveyor: Robert H. Lance, Iowa P.L.S. #21980, rob@lancesurveying.com  
Return Document to: Lance Surveying Services (319) 986-6779  
1505 North Broadway Street, Mt. Pleasant, IA 52641  
Survey Requested by: John Probasco  
Proprietor: Norman W Hefner  
Survey Completed: 8 September 2022  
Sheet 2/2 | Basis of Bearing: IA RTK, ISPS Zone | Hefner Trust.dwg

## Hefner Subdivision

In part of the NE1/4 Section 4, Township 68 North, Range 19 West of the 5th P.M., Appanoose County, Iowa, described as follows:

Commencing at the Center of Section 4, said point being also the **POINT OF BEGINNING**;

thence North 00°02'39" West, along the west line of the NE1/4 of Section 4, a distance of 1,833.38 feet;  
thence North 87°44'33" East, 690.28 feet;  
thence North 06°37'50" West, 46.07 feet;  
thence North 87°48'02" East, 284.62 feet;  
thence South 34°32'15" East, 200.56 feet;  
thence North 89°40'11" East, 229.56 feet;  
thence South 88°55'58" East, 879.58 feet;  
thence North 00°04'55" West, 371.86 feet;  
thence South 89°45'00" East, 448.80 feet to a point on the east line of the NE1/4 of Section 4;  
thence, along said line, South 00°16'06" East, 1,731.50 feet;  
thence North 89°35'46" East, along the south line of the C.M. & St. P. Railway, 12.00 feet;  
thence South 00°16'06" East, along the east line of the west 12 feet of the SW1/4 of the NW1/4 of Section 3, a distance of 306.31 feet to the SE corner of said 12 feet, on the centerline of 524th Street;  
thence South 88°30'37" West, along said centerline and the south line of the NE1/4 of Section 4, a distance of 2,660.83 feet to the **POINT OF BEGINNING, EXCEPT the right of way of C.M. & St. P. Ry.** containing 104.59 acres, of which, 2.80 acres are public road right-of-way.

The above bearings are based on Iowa State Plane South Coordinates and all distances are horizontal ground distances.

End of Description

RESOLUTION NO. 2022-27

**RESOLUTION APPROVING FINAL PLAT  
OF HEFNER SUBDIVISION**

WHEREAS, the final plat and accompanying materials for Hefner Subdivision have been filed with the Appanoose County Auditor; and

WHEREAS, the plat of Hefner Subdivision as filed is found to be correct and complies in all respects with the requirements of the Appanoose County and the laws of the State of Iowa;

WHEREAS, The Norman W. Hefner Revocable Trust U/A dated September 5, 2014, as owner and proprietor, seeks final approval of the Plat.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF SUPERVISORS OF APPANOOSE COUNTY, IOWA, that the plat of Hefner Subdivision is hereby approved and accepted by the Board of Supervisors of Appanoose County, Iowa.

BE IT FURTHER RESOLVED THAT THE Appanoose County Auditor is authorized and directed to file the final plat of Hefner Subdivision, as well as any other documents related thereto, with the Appanoose County Recorder.

Passed and approved this \_\_\_\_\_ day of \_\_\_\_\_, 2022.

\_\_\_\_\_  
Linda Demry, Chairman of the Board of Supervisors

Attest:

\_\_\_\_\_  
Kelly Howard, Appanoose County Auditor

**CERTIFICATE**

STATE OF IOWA, COUNTY OF APPANOOSE, SS.

We, Linda Demry, Chairman of the Appanoose County Board of Supervisors, and Kelly Howard, Appanoose County Auditor, do hereby certify that the above and foregoing resolution is a true and correct copy of that certain Resolution passed by the Appanoose County Board of Supervisors on the \_\_\_\_ day of \_\_\_\_\_, 2022.

\_\_\_\_\_  
Linda Demry, Chairman

\_\_\_\_\_  
Kelly Howard, Auditor

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 2022.

\_\_\_\_\_  
Notary Public in and for the State of Iowa

**Gary D. Anderson**

---

**From:** Lonny Floen <lfloen@gmail.com>  
**Sent:** Friday, October 28, 2022 16:09  
**To:** Gary D. Anderson  
**Subject:** Resignation

\*\*\*\*\* CAUTION: This email originated from an outside source. Do not click links or open attachments unless you know they are safe. \*\*\*\*\*

Effective immediately I no longer work for Appanoose County. I spoke with Printy and told him I have a badge and a department ID which will be mailed to your P.O. Box on Monday.

Lonny Floen

Received and accepted on Friday, October 28, 2022  
by: Gary D. Anderson, Sher. FF.

*Gary D. Anderson, Sher. FF*

**TEDDY WALKER**  
Recorder

**MAEGAN MESSAMAKER**  
Deputy

Office of  
**APPANOOSE COUNTY RECORDER**  
c/o Courthouse  
201 N. 12th Street  
Centerville, Iowa 52544

November 1, 2022

APPANOOSE COUNTY BOARD OF SUPERVISORS  
COURTHOUSE  
CENTERVILLE, IOWA 52544

Please approve the full time hiring of Stephanie McDonald in the Recorder's Office at the salary of \$15.00 per hour starting November 1, 2022.

Thank you,



Teddy Walker

Appanoose County Recorder



**Facility**

Parks Finishing C10 LLC # 67988  
16226 Arbor Blvd  
Unionville, IA 52594

**Date Due:**  
11/01/2022

**Date Received:**  
10/11/2022

**Date Approved:**  
10/26/2022

**Owner**

Parks Finishing C2 LLC

**Contact**

Brian Ritland- Pinnacle Group

Prior to making changes in manure management practices, update the on-site copy to show actual changes. Please select changes below and include all changes in your current, on-site MMP.

- I have made no changes to my MMP
- I have added acres
- Change Crop Rotation or Optimum Yields
- Changed Application Method
- Used manure analysis
- I am electing to be a small animal feeding operation (SAFO) or facility capacity has changed
- I have made other changes to my MMP Describe :

Updated Phosphorous Index

- I sell all manure with a Chapter 200A license through the Iowa Department of Agriculture and Land Stewardship.
- In addition to selling manure as indicated above, I also apply manure to fields using a manure management plan.

**County Notifications**

The following counties have been notified:

Appanoose

Davis

**Animal Unit Capacity / Payment Summary**

Animal Type	Head	AUC	Amount (AUC * 0.15)
Swine Wean to Finish	2480	992.00	\$148.80
<b>Total</b>	<b>2480</b>	<b>992.00</b>	<b>\$148.80</b>

I, Brian Ritland , attest that the information indicated above is accurate and complete.

**Comments**

Susan C. Cole  
County Attorney  
Telephone: 641-437-7178  
Fax: 641-437-4850



APPANOOSE COUNTY  
COURTHOUSE  
Centerville, Iowa 52544

## APPANOOSE COUNTY ATTORNEY

Board of Supervisors  
Appanoose County Courthouse  
Centerville, IA 52544

October 27, 2022

Re: Compensation Board

Dear Board of Supervisors:

Per Iowa Code section 331.905, I appoint Edward Cox to the Appanoose County Compensation Board for a 4-year term, beginning January 1, 2023.

Sincerely,

A handwritten signature in cursive script that reads "SCole". The signature is written in black ink and is positioned below the word "Sincerely,".

Susan C. Cole



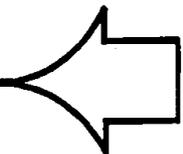
# 2023 COUNTY WEED COMMISSIONER CERTIFICATION FORM

For the County of: Appanoose

### Weed Commissioner's Contact Information:

Name Dianna Daly-Husted	Year Appointed 2019
Mailing Address 12307 Highway 5, P.O. Box 399	Telephone 641-724-3511
City, Zip Code Moravia, IA 52541	Alternate Telephone 641-777-7512
Email Address ddaly-husted@adlmcounties.com	Pesticide Certificate # 25128

Signed: \_\_\_\_\_ Date: \_\_\_\_\_  
Chair/President, County Board of Supervisors



PLEASE RETURN THIS FORM TO:

**IOWA DEPARTMENT OF AGRICULTURE AND LAND STEWARDSHIP**  
State Weed Commissioner  
2230 South Ankeny Boulevard  
Ankeny, IA 50023-9093

### 317.3 Weed commissioner -- standards for noxious weed control.

The board of supervisors of each county may annually appoint a county weed commissioner who may be a person otherwise employed by the county and who passes minimum standards established by the department of agriculture and land stewardship for noxious weed identification and the recognized methods for noxious weed control and elimination. The county weed commissioner's appointment shall be effective as of March 1 and shall continue for a term at the discretion of the board of supervisors unless the commissioner is removed from office as provided for by law. The county weed commissioner may, with the approval of the board of supervisors, require that commercial applicators and their appropriate employees pass the same standards for noxious weed identification as established by the department of agriculture and land stewardship. The name and address of the person appointed as county weed commissioner shall be certified to the county auditor and to the secretary of agriculture within ten days of the appointment. The board of supervisors shall fix the compensation of the county weed commissioner and deputies. In addition to compensation, the commissioner and deputies shall be paid their necessary travel expenses. At the discretion of the board of supervisors, the weed commissioner shall attend a seminar or school conducted or approved by the department of agriculture and land stewardship relating to the identification, control, and elimination of noxious weeds.

The board of supervisors shall prescribe the time of year the weed commissioner shall perform the powers and duties of county weed commissioner under this chapter which may be during that time of year when noxious weeds can effectively be killed. Compensation shall be for the period of actual work only although a weed commissioner assigned other duties not related to weed eradication may receive an annual salary. The board of supervisors shall likewise determine whether employment shall be by hour, day or month and the rate of pay for the employment time.



# 2022 WEED COMMISSIONER'S REPORT

For the County of: Appanoose

Submit to County Board of Supervisors by: November 1, 2022  
 Return copy to the IDALS office by: December 1, 2022

## Weed Commissioner's Contact Information:

Name Dianna Daly-Husted	Year Appointed 2019
Address 12307 Highway 5, P.O. Box 399	Telephone 641-724-3511
City, Zip Code Moravia, IA 52571	Alternate Telephone 641-777-7512
Email Address ddaly-husted@adlmcounties.com	Pesticide Certificate # 25128

## Which of the noxious weeds have you found in your county?

- 1 - Found, a problem in my county
- 2 - Found, but not a problem

- 3 - Not known in my county
- ? - If you cannot identify this plant

<i>Primary Noxious Weeds</i>	<i>Answer</i>	<i>Secondary Noxious Weeds</i>	<i>Answer</i>
Buckthorn	2	Buckhorn Plantain	3
Bull Thistle	1	Cocklebur	1
Canada Thistle	1	Curly Dock (Sour Dock)	2
Field Bindweed	2	Multiflora Rose	1
Hoary Cress (Perennial Pepper-grass)	3	Poison Hemlock	3
Horse Nettle	3	Puncturevine	3
Leafy Spurge	2	Red Sorrel (Sheep sorrel)	3
Musk Thistle	1	Shattercane	2
Palmer Amaranth	3	Smooth Dock	2
Perennial Sow Thistle	3	Teasel	1
Quackgrass	3	Velvetleaf (Butterprint)	1
Russian Knapweed	3	Wild Carrot	2
		Wild Mustard	2
		Wild Sunflower	1

<i>Invasive Prohibited Plants</i>	Answer		
Garlic Mustard	3		
Japanese Hop	3		
Japanese Knotweed	3		
Oriental Bittersweet	3		
Purple Loosestrife	1		

**Please list any other plants which are a problem or a concern in your county:**

---

**As County Weed Commissioner, do your duties include roadside spraying?**

Yes  No

**Did your county publish a Notice of Program for weed control pursuant to the provisions of Title VIII Chapter 317 Section 317.14?**

Yes  No

**Did your county employ contract spraying during 2022?**

Yes  No

If yes, what percentage of your total spray program is contracted? \_\_\_\_\_%

If possible, please list the contract rates. \$/mile \_\_\_\_\_

Total contract cost \$ \_\_\_\_\_

**In the past year how much did your county spend on purchasing herbicides?**

\$ \_\_\_\_\_

**How many times during 2022 was it necessary to serve a noxious weed notice?**

Private (written) 0 Public (written) (DOT, DNR, CCB) 0

**How many times did you contact individuals personally, rather than sending them a weed control notice?**

Private (verbal) 0 Public (verbal) (DOT, DNR, CCB) 0

**How many times did you actually enter private or public land, control weeds, and assess the cost to the owner?**

0

**How many months were you employed as weed commissioner in 2022?**

10 months

**Are your duties as weed commissioner incorporated into another county job?**

Yes  No  If Yes, what? Director of Environmental Public Health

Weed Comm. Duties 1% IRVM Duties 0%

Other County Duties 99%

**How does the overall county weed situation compare with last year?**

Improved  Unchanged  Worse

**Comments?** \_\_\_\_\_

**Is brush control included in your weed commissioner duties?**

Yes  No

**If yes**, what method(s) do you use? *(Circle all that apply):*

Spraying  Cutting  Stump treatment  Basal bark

Other, explain \_\_\_\_\_

**What are your suggestions and/or recommendations which may improve your county weed and brush infestations?**

**What herbicides did your county use in your weed control program? Be specific, please list brand name and quantity of each. Please do not list surfactants or adjuvants. If the spray program is contracted in your county, ask your contractor for this information. Add another page if necessary.**

Herbicide usage table:

CHEMICAL/BRAND	RATE USED	QUANTITY USED	TO CONTROL?
<i>(Example)</i> <i>Milestone</i>	4 fluid ounces per acre	3.32 gallons	Thistle and teasel on roadside

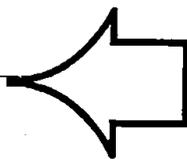
← IMPOI

The above report is true to the best of my knowledge.

Signature Sianna Ray-Husted  
County Weed Commissioner

10/17/22  
Date

Signature \_\_\_\_\_  
Chairman, County Board of Supervisors

\_\_\_\_\_ Date 

Please return a copy to:

Iowa Department of Agriculture and Land Stewardship  
Attn: State Weed Commissioner  
2230 S Ankeny Blvd  
Ankeny, IA 50023-9093

**2022 ISAC Executive Committee**

**PRESIDENT**  
Richard Crouch  
Mills County Supervisor

**1ST VICE PRESIDENT**  
Brian Gardner  
Linn County Sheriff

**2ND VICE PRESIDENT**  
Bobby Anderson  
Clay County Supervisor

**3RD VICE PRESIDENT**  
John Werden  
Carroll County Attorney

**2022 ISAC Board of Directors**

**ASSESSOR**  
Carissa Sisson  
Franklin County

**AUDITOR**  
Ryan Dettler  
Sioux County

**COMMUNITY SERVICES**  
Donette Bruce  
Mills County

**CONSERVATION**  
Matt Cosgrove  
Weber County

**EMERGENCY MANAGEMENT**  
A J Mumm  
Polk County

**ENGINEER**  
Brad Skinner  
Appanoose County

**ENVIRONMENTAL HEALTH**  
Shane Walter  
Sioux County

**INFORMATION TECHNOLOGY**  
Mican Van Maanen  
Sioux County

**PLANNING AND ZONING**  
Brian McDonough  
Polk County

**PUBLIC HEALTH**  
Kevin Grieme  
Woodbury County

**RECORDER**  
Mary Ward  
Cass County

**SUPERVISOR**  
Tim Neil  
Bremer County

**TREASURER**  
Linda Tuercher  
Clayton County

**VETERANS AFFAIRS**  
Elizabeth Ledvina  
Tama County

**PAST PRESIDENTS**  
Carla Becker  
Delaware County Auditor

Burlin Matthews  
Clay County Supervisor

Jean McColman  
Linn County Recorder

**NACo BOARD MEMBER**  
Grant Veeder  
Black Hawk County Auditor

**NACo BOARD REPRESENTATIVE**  
Richard Crouch  
Mills County Supervisor

**ISAC Executive Director**  
William R. Peterson

October 4, 2022

To: Iowa County Boards of Supervisors

From: William R. Peterson, Executive Director

Re: Procedures and Standards for Minimizing Soil Compaction on Agricultural Lands During Utility Construction on Wet Soils

The Iowa State Association of Counties (ISAC) and Iowa State Association of County Supervisors Association (ISACS) have been requested to contract for an analysis that will allow for the development of procedures and standards to assist in the mitigation of soil compaction on agricultural lands caused by utility construction occurring on wet soils. The Principal Investigator for this analysis will be Dr. Mehari Tekeste, Association Professor, Agricultural and Biosystems Engineering at Iowa State University in Ames, Iowa.

The analysis will investigate the methods to determine field soil wetness and establish a relationship between in-situ (field) soil water, precipitation from real-time data, and degree of soil bearing capacity for minimizing heavy-load induced rutting. Soil samples will be collected from the previous Dakota Access Pipeline impacted soils and four other locations with different drainage classes on sites where new construction activities will be carried out.

The specific objectives of the study are as follows:

1. Determine in-situ (field) soil moisture and wetness at various soil consistency from field sampled soils at top and subsoil layers. The soil cone penetrometer will be measured at the sampling sites to document the in-situ degree of soil compaction before construction activities.
2. Measure soil testing on mechanical and physical properties according to ASTM International and the American Society of Agricultural and Biological Engineers (ASABE) standards for establishing the degree of soil consistency (plastic limit, liquid limit) and proctor density levels.
3. Mathematically estimate the rainfall event that creates soil wetness and weak soil bearing capacity for excessive rutting and estimate the number of days allowing the soil to regain its load-bearing support with less soil rutting.

The findings from this research will be published in scientific journals and presented at organized extension meetings and professional conferences. The outcome of the results will assist in developing inspection standards for utility construction activities on wet soil conditions, and later after feedback from field technicians, the findings can be incorporated into state regulations for minimizing soil compaction and protection of agricultural lands (for example Iowa Utilities Board (IUB) Code on Chapter-9 6.8).

The ISAC and ISACS Executive Committees have agreed to contract with Iowa State for the analysis and request voluntary contributions from Iowa's 99 counties to pay for the project. The cost of the project is \$51,098. There are currently three companies planning construction of carbon sequestration pipelines. These pipelines will cross a total of 70 counties in Iowa; however, the finding of this research will benefit agricultural landowners in all future utility construction activities. In anticipation that not all counties will agree to the voluntary participation, the Executive Committees have recommended that all counties contribute \$600. Counties making a voluntary contribution should send their contributions by November 15, 2022 to:

Iowa State Association of Counties  
Soil Compaction Project  
5500 Westown Parkway, Suite 190  
West Des Moines, Iowa 50266

All funds for this project will be accounted for separately.

I have attached a copy of the research proposal for your review. If you have questions, please do not hesitate to contact me at [bpeterson@iowacounties.org](mailto:bpeterson@iowacounties.org) or cell phone at 515.240.1562.

*Richard Crouch*

Richard Crouch  
ISAC President  
Mills County Supervisor

*Tim Neil*

Tim Neil  
ISACS President  
Bremer County Supervisor

*William R. Peterson*

William R. Peterson  
ISAC Executive Director

**Procedure for Determining Soil Wetness during Construction of Underground Utilities to Minimize Excessive Soil Compaction on Farm Soils**

**Principal Investigator (PI): Mehari Tekeste**, Associate Professor, Agricultural and Biosystems Engineering, Iowa State University, 2331 Elings Hall, Ames, Iowa, 50011.; 515-686-7102; [mtekeste@iastate.edu](mailto:mtekeste@iastate.edu) ; and **CO-PI: Mark Hanna**, Retired Professor, Agricultural and Biosystems Engineering, Iowa State University

**I. Brief Project Justification and Rationale:**

ISU investigated the impacts of pipeline construction activities on soil and corn-soybean yield from Dakota Access, LLC (DAPL) project, where a 30-inches diameter pipe was installed over 1,886 km (1172 miles) to transfer crude oil in the USA from North Dakota to Illinois. At the ISU experimental study site along the DAPL with a dominant soil series of Clarion loam, the pipe was buried at 1.2 m deep from the top soil surface after earth machinery work, consisting of topsoil (20-inches) removal and separation of the subsoil from topsoil. Heavy-axle load machinery operation in the Right-of-Way (ROW) on wet soil conditions (21.5% dry basis) resulted in a mean soil bulk density of 1.67 Mg/m<sup>3</sup> (at 96% of Proctor compaction density) in year-one after pipeline installation. After subsoil tillage to remediate the excessive soil compaction induced from the machinery trafficking during construction, the magnitude of soil compaction exceeded root-limiting soil compaction (2.0 MPa (290 pounds per square inch (PSI)) at the subsoil layer, as shown in Figure 1. Soybean-corn yield measured at the study site showed percent losses of soybean by 18% (year-one; 2017) and 22% (year-three; 2019); and percent losses of corn by 11% (year two; 2018) and 19% (year four; 2020). Detailed results on soil and crop data from the pipeline study at ISU are available in our published articles (Tekeste et al., 2019 & 2020, Ebrahim et al., 2022). Based on our six-year study on soybean-corn rotation farms impacted by the DAPL pipeline construction activities and our previous study on soil compaction from agricultural machinery, measurement of the soil wetness in relationship to the equipment size and soil types and limiting heavy-machinery traffic intensity at low soil bearing capacity is very important. Working on wet soil conditions and soil mixing were identified as the major factors affecting the soil health properties during construction. From the DAPL project along the 347 miles pipeline installed in Iowa, approximately 57 tons per mile of topsoil was removed and backfilled to the ROW. With the new proposed total pipeline mileage of 1580 miles from Summit Carbon Solutions and Navigator CO<sub>2</sub> in Iowa, approximately *ninety thousand tonnages* of topsoil could be removed.

Future construction utility activities, including pipeline, solar and wind projects, on high-productive soils in the Corn-Soybean belt of the USA farms should have methods to quantitatively determine the degree of soil wetness that field technicians or inspectors could use for limiting or delaying heavy-machinery traffic. The IUB code chapter-9 6.8 does not address the wet soil working conditions, a crucial management strategy to minimize excessive soil compaction. Due to the limited scientific study on the relationship between soil wetness of agricultural soils impacted by construction utilities activities and its impacts on restoring the farmlands along the pipeline lanes to normal food production, further research is needed to determine the field methods for measuring wet soil conditions, and define its relationship to soil

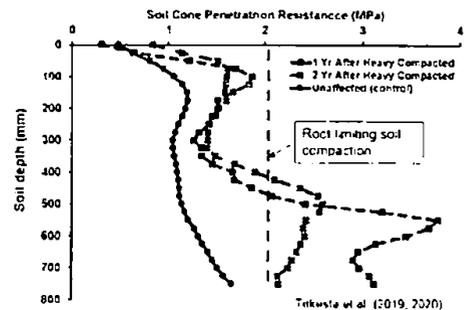


Figure-1 Soil penetration resistance after deep tillage (500-800 mm) applied in 2016

bearing capacity. The study's outcome will benefit state regulator institutions and constructors working on agricultural farms with heavy machinery for construction utilities installation for generating decision support to reduce excessive soil compaction.

**II. Brief Description of Proposed Research:**

The proposed study will investigate the methods to determine field soil wetness and establish a relationship between in-situ soil water, precipitation from real-time data, and degree of soil bearing capacity for minimizing heavy-load induced rutting. Soil samples will be collected from the previous DAPL impacted soils and four other locations with different drainage classes on sites where new construction activities will be carried out.

*Specifically, the objectives of the study are;*

- (1) Determine in-situ (field) soil moisture and wetness at various soil consistency from field sampled soils at top and subsoil layers. Measurement of soil cone penetrometer will be done at the sampling sites to document the in-situ degree of soil compaction before construction activities.
- (2) Measure soil testing on mechanical and physical properties according to ASTM and ASABE standards for establishing the degree of soil consistency (plastic limit and liquid limit) and proctor density levels.
- (3) Mathematically estimate the rainfall event that creates soil wetness and weak soil bearing capacity for excessive rutting, and estimate the number of days allowing the soil to regain its loading bearing support with less soil rutting.

**Statement of Communication and Outreach Strategies**

The findings from this research will be published in scientific reporting and presented at organized extension meetings and professional conferences. The outcome of the results will assist inspection of construction utilities activities on wet soil conditions, and later after feedback from field technicians, the findings can be incorporated to state regulations in minimizing soil compaction (for example IUB Code on Chapter-9 6.8).

**III. Proposed budget:**

The budget for professional & scientific (faculty, technician and students) (salary & fringe benefits) materials and supplies, soil analysis services and travel is estimated \$51,098.

**IV. Proposed Project Period:**

- a. Meeting for Reviewing Project Deliverables (Sept-9, 2022)
- b. Field Soil Sampling (Oct-15, 2022)
- c. Soil testing (Jan-30, 2022)
- d. Data analysis (rainfall, soil properties, and mathematical modeling) (April-15, 2023)
- e. Reporting (June 15, 2023)