Consent Agenda

March 14, 2023

MET IN REGULAR SESSION
The Board of Supervisors met in regular session at 10:00 A.M. All members present. Chairman Shea presiding.

PLEDGE OF ALLEGIANCE

1. CONSENT AGENDA

After discussion was held by the Board, a Motion was made by Belt, and second by Miller, to approve:

A. March 7, 2023, Minutes as read.

UNANIMOUS VOTE. Motion Carried.

2. SCHEDULED SESSIONS

John Thomas/Director, Hungry Canyons Alliance, appeared before the Board to give a presentation on the Hungry Canyons Alliance program.
Discussion only. No action taken.

Motion by Wichman, second by Jorgensen, to move forward on development of an agreement for funding of road in Stoneybrook housing addition up to $420,000 from impact funds.
UNANIMOUS VOTE. Motion Carried.

Motion by Belt, second by Jorgensen, to approve proposal for storage area fencing and to accept Acreage Fences quote for 8' fence for $37,808.91.
UNANIMOUS VOTE. Motion Carried.

Motion by Miller, second by Belt, to approve up to $12,000 for shelving for storage areas.
UNANIMOUS VOTE. Motion Carried.

Motion by Belt, second by Jorgensen, to approve quote for window coverings from Craftsman Windows in the amount of $6,476 for Courthouse addition.
UNANIMOUS VOTE. Motion Carried.

3. OTHER BUSINESS

Motion by Wichman, second by Miller, to approve updated IT Support Definition Policy.
UNANIMOUS VOTE. Motion Carried.

Motion by Wichman, second by Belt, to approve the Workforce Development contract for FY24 in the amount of $50,000.
UNANIMOUS VOTE. Motion Carried.

4. COMMITTEE APPOINTMENTS

Board discussed Committee meetings from the past week.
Discussion only. No action taken.

5. PUBLIC COMMENTS

No Public Comments.

6. CLOSED SESSIONS

Motion by Wichman, second by Miller, to go into Closed Session pursuant to Iowa Code 21.5(1)(j) for discussion and/or decision on purchase or sale of particular real estate.
Roll Call Vote: AYES: Shea, Belt, Wichman, Miller, Jorgensen. Motion Carried.

Motion by Wichman, second by Miller, to go out of Closed Session.
Roll Call Vote: AYES: Shea, Belt, Wichman, Miller, Jorgensen. Motion Carried.

Motion by Jorgensen, second by Miller, to go into Closed Session pursuant to Iowa Code 20.17.(3) for discussion and/or decision on labor negotiations/collective bargaining matters.

Roll Call Vote: AYES: Shea, Belt, Wichman, Miller, Jorgensen. Motion Carried.

Motion by Wichman, second by Belt, to go out of Closed Session.
Roll Call Vote: AYES: Shea, Belt, Wichman, Miller, Jorgensen. Motion Carried.

7. BUDGET STUDY SESSION

Becky Lenihan/Tax and Finance Officer, Auditor's Office, appeared before the Board for a Budget Study Session. Discussion only. No Action Taken.

8. ADJOURN

Motion by Wichman, second by Miller, to adjourn meeting.

UNANIMOUS VOTE. Motion Carried.

THE BOARD ADJOURNED SUBJECT TO CALL AT 1:33 P. M

_____
Brian Shea, Chairman

ATTEST: _____
Melvyn Houser, County Auditor

APPROVED: March 21, 2023
PUBLISH: X

Scheduled Sessions

Becky Lenihan/Tax and Finance Officer, Auditor's Office

Discussion and/or decision on County FY 2023-24 Budget, and to set date for public hearing on said FY 2023-24.

John Rasmussen/Engineer

Discussion and/or decision to approve Resolution No. 19-2023 for the sale of the Avoca Shop and authorize the Chairman to sign closing documents.

RESOLUTION NO. 19-2023

A RESOLUTION AUTHORIZING DISPOSAL OF AN INTEREST IN COUNTY-OWNED PROPERTY AS PROVIDED UNDER IOWA CODE SECTION 331.361

WHEREAS, the Board of Supervisors has provided legal notice of and held a public hearing for the disposal of an interest in county-owned property on November 22, 2022, and is described below:

Avoca Shop; 358 Elm Street, Avoca, Iowa

Legal Description: Lots 1,2, and 3 in Block 19 Original Town of Avoca, Pottawattamie County, Iowa

and,

WHEREAS, the Board of Supervisors believes it to be in the best interests of Pottawattamie County to dispose of these county-owned parcels; and,

WHEREAS, the Secondary Roads Facility plan has consolidated shops to reduce operating costs and no longer serve the needs of the Secondary Roads Department; and,

WHEREAS, these properties will be listed and sold by Real Estate Agent to private buyers; or be gifted, or be sold to an Iowa Governmental Subdivision at the appraised value as determined by the Board. The expenses incurred by any sale will be at the buyer's cost; and,

WHEREAS, the highest responsible offer has been submitted, presented, and determined; and,

NOW THEREFORE BE IT RESOLVED, by the Board of Supervisors of Pottawattamie County, Iowa, that the Board of Supervisors does hereby authorize the disposal of Pottawattamie County, Iowa's interest in the aforementioned properties by sale to the highest responsible offer.

Dated this 21st day of March, 2023.

ROLL CALL VOTE

	AYE	NAY	ABSTAIN	ABSENT
_____ Brian Shea, Chairman	○	○	○	○
_____ Scott Belt	○	○	○	○
_____ Tim Wichman	○	○	○	○
_____ Susan Miller	○	○	○	○
_____ Jeff Jorgensen	○	○	○	○

ATTEST: _____
Melvyn Houser, County Auditor

Other Business

Melvyn Houser/Auditor

Discussion and/or decision to approve a request for ISAC for $600 to support the Soil Compaction Study by Iowa State University.

5500 Westown Parkway, Suite 190
West Des Moines, IA 50266
PHONE: 515.244.7181
FAX: 515.244.6397
www.iowacounties.org

ISAC
Iowa State Association of Counties

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 or cell phone at 515.240.1562.

Richard Crouch
ISAC President
Mills County Supervisor

Tim Neil
ISACS President
Bremer County Supervisor

William R. Peterson
ISAC Executive Director

Attachment B

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 ; 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/m3 (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 CO2 in Iowa, approximately *ninety thousand tonnages* of topsoil could be removed.

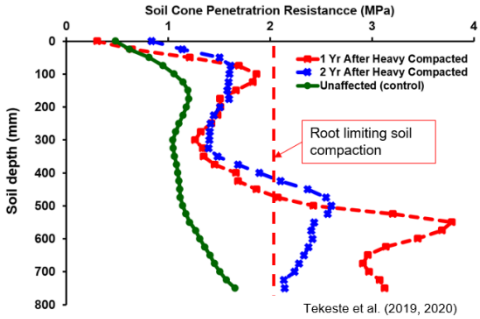

Figure-1 Soil penetration resistance after deep tillage (500-800 mm) applied in 2016

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

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)

Invoice	ISACSTD006235
Date	3/16/2023
Due Date	

Bill To:

POTTAWATTAMIE COUNTY
227 S 6th St
Council Bluffs IA 51501

Description	Qty	Price	Total Cost
COUNTY CONTRIBUTIONS-Soil Compaction	1	$600.00	$600.00
		Total	$600.00

Make checks payable to:
Iowa State Association of Counties
PO Box 4546
Des Moines, IA 50305
Ph: (515) 244-7181
Email: bholtan@iowacounties.org

Jana Lemrick/Director, Human Resources

Discussion and/or decision pertaining to the appointment of a representative to the Southern Iowa Regional Housing Authority (SIRHA) Board of Commissioners.

Committee Appointments

Update from Board members on Committee meetings from the past week.

Received/Filed

Public Comments

Closed Session

BUDGET STUDY SESSIONS