HARDIN COUNTY
Board of Supervisors

Tuesday, June 30, 2020

NOTICE: Public attendance at public meetings is restricted due to COVID-19 concerns. To access and participate in the meetings remotely, please call 641-939-8108 for meeting information.

1. 9:00 A.M. Call To Order
   Courthouse Large Conference Room
2. Pledge Of Allegiance
3. Approval Of Agenda
4. Approval Of Minutes

   Documents:

   06-24-2020 MINUTES.PDF
5. Approval Of Claims For Payment

   Documents:

   VENDOR PUBLICATION REPORT 6-30-20.PDF
6. Utility Permits & Secondary Roads Department
7. FY 2021 Fuel
8. Pickup Quotes
9. Re-Appropriations Resolution FY 2020

   Documents:

   RE-APPROPRIATIONS AMENDMENT RESOLUTION.PDF
10. Proposals For Upgrades To Elevators At Courthouse And County Office Building

    Documents:

    HARDIN COUNTY 2020 CODE UPGRADES.PDF
11. Central Iowa Juvenile Detention Center Audit

    Documents:

    FY 19 CIJDC AUDIT FINAL.PDF
12. Tax Abatements: Ellsworth Neighborhood Investment Group

13. Recommendation To The DNR On Animal Feeding Operation Construction Permit Application: 110 Pork Shop Site, Section 6, Alden Township

    Documents:

    110 PORK SHOP APPLICATION.PDF

14. Application For Fireworks Permit – Union Betterment

    Documents:

    FIREWORKS PERMIT APPLICATION - UNION BETTERMENT.PDF

15. Application For Fireworks Permit – Larry Balvanz
16. Change Of Status – Auditor's Office
17. Changes Of Status – Secondary Roads

    Documents:

    CHANGES OF STATUS - SECONDARY ROADS.PDF

18. COVID-19 Update
19. Public Comments
20. Other Business
21. Adjournment/Recess
22. 9:30 A.M. Drainage
    VIEW REGULAR DRAINAGE MEETING AGENDA
    Courthouse Large Conference Room
23. 11:00 A.M. Work Session Re: Budgets And Appropriations & Safety Coordinator Position
    Courthouse Large Conference Room

HARDIN COUNTY BOARD OF SUPERVISORS
MINUTES – JUNE 24, 2020
WEDNESDAY - 9:00 A.M.
COURTHOUSE LARGE CONFERENCE ROOM

Chair Lance Granzow called the meeting to order. The meeting was held electronically due to COVID-19 public health risks. Also in attendance were Supervisors BJ Hoffman and Reneé McClellan; and Thomas Craighton, Connie Mesch, Curt Groen, Gene Newgaard, Dave McDaniel, Brian Ritland, Josh Odom, Lori Kadner, Megan Kirik, Laura Cunningham, JD Holmes, Justin Ites, Bette Dossman, Cody Smith, Bret Dublinske, Darla Kalous, Jody Anderson, Roger Nissly, Mark Buschkamp, Mariah Lynne, Nick Boeyink, Wes Wiese, Jake Ketzner, Max Friedman, Linn Adams, Abby Flatness, Machel Eichmeier, Kerri Johannsen, Cheryl Lawrence, Nick Schutt, Denise Smith, Seth Wengert, Brent Tripp, Jessica Lara, Michael Pearce, Taylor Roll, Jessica Sheridan, Angela De La Riva, Darrell Meyer, and Angela Silvey.

The Pledge of Allegiance was recited.

McClellan moved, Hoffman seconded to approve the agenda as posted. Motion carried.

Hoffman moved, McClellan seconded to table the second consideration of the amendment to Article XXIII of Ordinance No. 29 as modified by the Board of Supervisors until July 8, 2020 at 9:01 a.m. In the meantime, County and RWE Renewables representatives will meet. Motion carried.

No action was taken to set a time and date for final consideration and adoption of the amendment to Article XXIII of Ordinance No. 29 as modified by the Board of Supervisors.

McClellan moved, Hoffman seconded to approve the minutes of May 27, 2020 and June 17, 2020. Motion carried.

Hoffman moved, McClellan seconded to approve the June 24, 2020 claims for payment. Motion carried.

Utility Permits: None.

Secondary Roads:
County Engineer Taylor Roll advised he was notified of water over the road, and Maintenance Superintendent Greg Ringena is negotiating a land purchase in order to move a road due to erosion.

McClellan moved, Hoffman seconded that the following Resolution No. 2020-20, a resolution establishing GG Avenue, be adopted. Roll Call Vote: "Ayes" McClellan, Hoffman, and Granzow. "Nays" None. Resolution No. 2020-20 is hereby adopted as follows:

RESOLUTION 2020-20

WHEREAS, Hardin County has secured right-of-way easements from Patricia Warmbier for construction of a new roadway adjacent to her property in Section 12 of Buckeye Township; and

WHEREAS, said new roadway right-of-way having a width of 66 feet and whose east line runs along the west line of the SW ¼, SE ¼, Section 12, T-88N, R-22W, starting at 180th Street and extending northerly approximately 1,320 feet; and

WHEREAS, it is in Hardin County's best interest to accept and dedicate a new public roadway as described above; and

WHEREAS, said roadway shall be designated as GG Avenue for the purpose of E-911.

NOW, THEREFORE, BE IT RESOLVED by the Hardin County Board of Supervisors to accept and dedicate a new public roadway whose east line runs along the west line of the SW ¼,

SE ¼, Section 12, T-88N, R-22W, starting at 180th Street and extending northerly approximately 1,320 feet.

PASSED AND APPROVED this 24th day of June, 2020.

HARDIN COUNTY BOARD OF SUPERVISORS

/s/ Lance Granzow
Lance Granzow, Chair

ATTEST:

/s/ Jessica Lara
Jessica Lara, Hardin County Auditor

Hoffman moved, McClellan seconded to approve entering into a Government Equipment Lease-Purchase Agreement, Transaction 3900311, with CAT Financial for the lease-purchase of a CAT 323 Excavator. Roll Call Vote: "Ayes" Hoffman, McClellan, and Granzow. "Nays" None. Motion carried.

McClellan moved, Hoffman seconded to approve the Iowa DOT Agreement 1-20-HBP-SWAP-001 for Bridge 11009. Motion carried.

Hoffman moved, McClellan seconded to approve the Iowa DOT Agreement 1-20-HBP-SWAP-031 for Bridge 12015. Motion carried.

Community Services Director Linn Adams spoke about the Friendship Club becoming a new entity as of July 1, 2020, and usage of a bus purchased with donation, and the following action was taken:

Hoffman moved, McClellan seconded to relinquish interest in chattel property in possession of the Friendship Club, including the vehicles titled to the County, and directing the Board Chair or designee to execute any documents necessary to effectuate the relinquishment. Roll Call Vote: "Ayes" Hoffman, McClellan, and Granzow. "Nays" None. Motion carried.

Hoffman moved, McClellan seconded to appoint the following individuals as members of the Faith in Action Friendship Club Inc. Board of Directors for one- and two-year terms commencing July 1, 2020 as follows. Motion carried.

1 Year Term	2 Year Term
Robin England	Jerry Kramer
Tim Rogers	Joan Geil
Bev Dirksen	Robin Hartkopp
Sandi Butt	Eileen Kruse
Linn Adams	Miriam Webber
	Ruth Norem
	Dave Elerding

Hoffman moved, McClellan seconded to adopt and approve the updated Emergency Mode of Operations Plan for Community Services. Motion carried.

McClellan moved, Hoffman seconded to table action on Public Assistance Grant No. 4483 until 9:55 a.m. Motion carried.

McClellan moved, Hoffman seconded to approve the Board Chair to execute finance documents pursuant to Resolution 2019-14. Motion carried.

County Treasurer Machel Eichmeier spoke about a request from Craig, Smith & Cutler LLP to assign a tax sale certificate, and the following action was taken:

Hoffman moved, McClellan seconded that the following Resolution No. 2020-21, Agreement for Assignment of Certificates of Purchase at Tax Sale, be adopted. Roll Call Vote: "Ayes" Hoffman, McClellan, and Granzow. "Nays" None. Resolution No. 2020-21 is hereby adopted as follows:

HARDIN COUNTY RESOLUTION NO. 2020-21

AGREEMENT FOR ASSIGNMENT OF CERTIFICATES OF PURCHASE AT TAX SALE

The undersigned County of Hardin, State of Iowa, by authority of the Board of Supervisors of Hardin County, Iowa, hereinafter referred to as the "County"; and Jerome M. Coellner & Janet S. Coellner, hereinafter referred to as "Coellners", hereby enter into the following Agreement for the assignment of a certain certificate of purchase at tax sale.

WHEREAS, the County is the owner of a Certificate of Purchase at Tax Sale No. CH18005 for a parcel of real property located in the City of Eldora, Hardin County, Iowa, described as:

Lot 9, Auditor's Second Plat, Hubbard, Iowa, except the East 233 .0 feet thereof;
AND
The West (W) 10.25 feet of the East 233.0 feet of Lot 9, Auditor's Second Plat, Hubbard, Iowa, except the East 90.0 feet of the North 125.0 feet of said Lot 9; and

WHEREAS, Coellners anticipate becoming the neighboring landowner; and

WHEREAS, the County acquired the aforementioned tax sale certificate as public bidder on the tax sale per Iowa Code section 446.19 and the County desires to assign said certificate to Coellners for the amount of $68.00 and the assignment fee of $10.00 on the following conditions:

1. Said certificate may not be sold or assigned to a third party without prior written approval of the Board of Supervisors;
2. Upon assignment the assignees will pay any other delinquent real estate taxes on the property; and
3. In the event of a redemption by any party, all tax certifying bodies shall receive their proportionate interest; and

WHEREAS, the County agrees that should no party entitled by law to redeem said certificate in fact properly redeem said certificate and Coellners follow all statutory requirements for issuance of tax sale deed, the County Treasurer shall be authorized to issue said tax sale deed as contemplated by Chapters 447 and 448 of the Code of Iowa;

NOW THEREFORE, IT IS HEREBY AGREED that Hardin County shall and hereby does assign to Jerome M. Coellner and Janet S. Coellner the Certificate of Purchase at Tax Sale No. CH18005, the same to be signed by the Treasurer after receiving payment by Coellners of the sum of $78.00, which sum includes the fee of $10.00 as contemplated by Iowa Code section 446.31, provided that such assignment shall be without compromise as to the total amount due and provided further in the event of redemption by any party, all tax levying and certifying bodies having an interest in the funds represented by said Certificate of Purchase at Tax Sale No. CH18005 shall receive their proportionate share of any amount so received upon redemption.

Dated this 24th day of June, 2020.

HARDIN COUNTY, IOWA

By: /s/ Lance Granzow
Lance Granzow, Chairperson
Board of Supervisors

Attest:

/s/ Jessica Lara

Jessica Lara, Hardin County Auditor

Dated this ___ day of _____, 2020.

_____
Jerome M. Coellner

_____
Janet S. Coellner

WHEREUPON Board Member Hoffman moved that the following Resolution be adopted:

APPROPRIATIONS RESOLUTION AMENDMENT

RESOLUTION No. 2020-22

On April 22, 2020, a budget hearing for an amendment was held. The budget amendment was approved and the following appropriation amendments shall be made as deemed necessary:

Office or Department	Amended Appropriation Amount
General Services – Dept 50	+$225,000
Secondary Roads/Engineer	-$330,000

Motion was seconded by Board Member McClellan and after due consideration thereof, the roll was called and the following Board Members voted:

AYES: Hoffman, McClellan, and Granzow
NAYS: None
ABSENT: None
ABSTAIN: None

Whereupon, the Chair of the Board of Supervisors declared said Resolution duly passed and adopted this 24th day of June, 2020.

/s/ Lance Granzow
Lance Granzow, Chairman
Board of Supervisors

ATTEST:

/s/ Jessica Lara
Jessica Lara
Hardin County Auditor

WHEREUPON Board Member McClellan moved that the following Resolution be adopted:

RESOLUTION NO. 2020-23

APPROPRIATIONS RESOLUTION
2020/2021 FISCAL YEAR

WHEREAS, it is desired to make appropriations for each of the different offices and departments for the fiscal year beginning July 1, 2020, in accordance with Section 331.434, Subsection 6, Code of Iowa,

NOW, THEREFORE, be it resolved by the Board of Supervisors of Hardin County, Iowa, as follows:

Section 1. The amounts itemized by fund and by department or office on the attached schedule are hereby appropriated from the resources of each fund so itemized, to the department or office listed in the first column on the same line of the attached schedule.

Section 2. Subject to the provisions of other county procedures and regulations and applicable state law, the appropriations authorized under Section 1 shall constitute authorization for the department or officer listed to make expenditures or incur obligations from the itemized fund effective July 1, 2020.

Section 3. In accordance with Section 331.437, Code of Iowa, no department or officer shall expend or contract to expend any money or incur any liability, or enter into any contract which by its terms involves the expenditures of money for any purpose in excess of the amounts appropriated pursuant to this resolution.

Section 4. If at any time during the 2020/2021 budget year the Auditor shall ascertain that the available resources of a fund for that year will be less than said fund's total appropriations, she shall immediately so inform the Board and recommend appropriate corrective action.

Section 5. The Auditor shall establish separate accounts for the appropriations authorized in Section 1, each of which account shall indicate the amount of the appropriation, the amounts charged thereto, and the unencumbered balance. The Auditor shall report the status of such accounts to applicable departments and officers monthly during the 2020/2021 budget year.

Section 6. All appropriations authorized pursuant to this resolution lapse at the close of business June 30, 2021.

The appropriations schedule is as follows:

OFFICE OR DEPARTMENT	**50% APPROPRIATION AMOUNT**
Board of Supervisors	$297,317
Auditor	$234,559
Treasurer	$288,207
Attorney	$227,665
Sheriff	$2,437,110
Recorder	$115,219
Information Technology/GIS	$262,944
Economic Development	$81,198
County Engineer	$3,596,044
Veterans' Affairs	$39,232
Conservation Board	$425,928
Health Board	$193,580
IRVM	$124,317
General Assistance	$30,666
Clerk of Court	$32,675
Pioneer Cemetery	$12,750
General Services – Courthouse	$167,850
General Services – Misc.	$39,500
General Services – Co. Office Bldg.	$14,600
DHS	$4,263
Mental Health Admin.	$471,959
Chemical Dependency	$2,238
Insurance	$246,196
Non-departmental 89	$462,491
Debt Service	$814,955
Inter-fund Operating Transfers	$1,061,359
Non-Departmental 99	$144,992
SUBTOTAL	$11,829,814

Non-County Funds/Commissions

**Assessor	$179,198
**E911	$338,625
**Emergency Management	$73,017
TOTAL	$12,420,654

The motion was seconded by Board Member Hoffman and after due Consideration thereof, the roll was called and the following Board Members voted:

AYES: McClellan, Hoffman, and Granzow
NAYS: None
ABSENT: None
ABSTAIN: None

Whereupon, the Chair of the Board of Supervisors declared said Resolution duly passed And adopted this 24th day of June, 2020.

/s/ Lance Granzow
Lance Granzow, Chairman
Hardin County Board of Supervisors

ATTEST:

/s/ Jessica Lara
Jessica Lara
Hardin County Auditor

WHEREUPON Board Member McClellan moved that the following Resolution be adopted:

RESOLUTION No. 2020-24

RESOLUTION FOR INTER-FUND OPERATING TRANSFERS

WHEREAS, it is desired to authorize the Auditor to periodically transfer sums from the General Basic Fund to the Capital Projects Fund and Secondary Road Fund; and from the Rural Services Basic Fund to the Secondary Road Fund during the 2020/2021 fiscal budget year, and

WHEREAS, said transfers must be in accordance with Section 331.432, Code of Iowa,

NOW, THEREFORE, be it resolved by the Board of Supervisors of Hardin County, Iowa, as follows:

Section 1. The total maximum transfers from the General Basic Fund to Secondary Road Fund shall not exceed $172,095; and the total maximum transfer from Rural Services Basic Fund to the Secondary Road Fund shall not exceed the sum of $1,950,622; for fiscal year beginning July 1, 2020.

Section 2. When notified of the apportionment of current property taxes, state replacements against levied property taxes, mobile home taxes, military service tax credit replacements, or livestock credit replacements to the General Basic or Rural Services Basic funds, the Auditor shall order a transfer from said fund to the Secondary Road Fund.

Section 3. The amount of the transfer required by Section 2 shall be equal to the apportionment made under Section 2 to the General Basic or Rural Basic Fund, respectively, multiplied by the ratio of said fund's total maximum transfer to the Secondary Road Fund, to the sum of said fund's total current property tax levy, total mobile home taxes, total military service tax credit replacements, and total livestock credit replacements.

Section 4. Notwithstanding the provisions of Section 2 and 3 of this resolution, total transfers to the above mentioned funds shall not exceed the amount specified in Section 1.

Section 5. Notwithstanding the provisions of Sections 2 and 3, the amount of any transfer shall not exceed available fund balances in the transferring fund.

Section 6. The Auditor is directed to correct her books when said operating transfers are made and to notify the Treasurer and County Engineer of the amounts of said transfers.

The motion was seconded by Board Member Hoffman and after due consideration thereof, the roll was called and the following Board Members voted:

AYES:	McClellan, Hoffman, and Granzow
NAYS:	None
ABSENT:	None
ABSTAIN:	None

Whereupon, the Chair of the Board of Supervisors declared said Resolution duly passed and adopted this 24th day of June, 2020.

/s/ Lance Granzow
Lance Granzow, Chairman
Board of Supervisors

ATTEST:

/s/ Jessica Lara
Jessica Lara
Hardin County Auditor

WHEREUPON Board Member Hoffman moved that the following Resolution be adopted:

RESOLUTION NO. 2020-25

ADVANCE ISSUANCE OF PAYMENTS RESOLUTION
2020/2021 FISCAL YEAR

WHEREAS, The Board of Supervisors, pursuant to Section 331.506(3)(a and b), Code of Iowa, may authorize the County Auditor to issue payment when said Board is not in session for the following purposes:

1. Fixed charges including but not limited to, freight, express, postage, water, light, and telephone service or contracted services, after a bill is filed with the auditor.

2. Salaries and payrolls if the compensation has been fixed or approved by the Board. The salary or payroll shall be certified by the officer or supervisor under whose direction or supervision the compensation is earned.

NOW, THEREFORE, be it resolved by the Board of Supervisors of Hardin County, Iowa, the County Auditor is authorized to issue payments for the aforementioned when said Board is not in session during Fiscal Year 2020/2021.

BE IT FURTHER RESOLVED, all bills paid under provisions of Section 331.506 (3)(a and b), Code of Iowa, shall be submitted to the board for review and approval at its next meeting following the payment. The action of the board shall be recorded in the minutes of the board.

The motion was seconded by Board Member McClellan and after due Consideration thereof, the roll was called and the following Board Members voted:

AYES:	Hoffman, McClellan, and Granzow
NAYS:	None
ABSENT:	None
ABSTAIN:	None

Whereupon, the Chair of the Board of Supervisors declared said Resolution duly passed
And adopted this 24th day of June, 2020.

/s/ Lance Granzow
Lance Granzow, Chairman
Hardin County Board of Supervisors

ATTEST:

/s/ Jessica Lara
Jessica Lara
Hardin County Auditor

WHEREUPON Board Member McClellan moved that the following Resolution be adopted:

RESOLUTION No. 2020-26

RESOLUTION FOR BUDGET APPROPRIATION ADJUSTMENTS
WITHIN THE SAME SERVICE AREA

BE IT HEREBY RESOLVED by the Hardin County Board of Supervisors that the Hardin County Auditor is authorized to make the necessary budget appropriations within the ten service areas and the various organizations for the 2020/2021 fiscal year.

The motion was seconded by Board Member Hoffman, and after due consideration thereof, the roll was called and the following Board Members voted:

AYES:	McClellan, Hoffman, and Granzow
NAYS:	None
ABSENT:	None
ABSTAIN:	None

Whereupon, the Chair of the Board of Supervisors declared said Resolution duly passed and adopted this 24th day of June, 2020.

/s/ Lance Granzow
Lance Granzow, Chairman
Board of Supervisors

ATTEST:

/s/ Jessica Lara
Jessica Lara
Hardin County Auditor

Granzow read aloud a letter of request from Del Johnston, on behalf of Ferris Pork Site, Section 16, Ellis Township, and the following action was taken:

WHEREUPON Board Member McClellan moved that the following Resolution be adopted:

RESOLUTION No. 2020-27

Hardin County Board of Supervisors

June 24, 2020

APPROVAL OF WAIVER OF HARDIN COUNTY'S RIGHT TO APPEAL ISSUANCE OF FINAL CONSTRUCTION PERMIT FOR THE CONSTRUCTION OF CONFINED ANIMAL FEEDING OPERATION BY THE IOWA DEPARTMENT OF NATURAL RESOURCES.

BE IT RESOLVED by the Hardin County Board of Supervisors as follows:

Section 1 The Hardin County Board of Supervisors has received notice from the Iowa Department of Natural Resources (DNR) that Brock Ferris on behalf of Ferris Pork, LLC has been issued a draft permit for the construction of a confined animal feeding operation building(s) at 18400 JJ Ave., Iowa Falls, IA 50126 in unincorporated Hardin County.

Section 2 The Hardin County Board of Supervisors reviewed the construction permit application and the manure management plan and determined that both appeared to be in compliance with the requirements of the Master Matrix, Iowa Code Section 459 and Iowa DNR rules and recommended approval of said application on June 10, 2020.

Section 3 The Hardin County Board of Supervisors hereby waives its right to appeal the issuance of the final permit within the fourteen (14) day limit from the time of receipt of notice of the issuance of the draft permit.

Section 4 The Hardin County Board of Supervisors encourages the Iowa DNR to issue the Final Permit immediately upon notification of this waiver.

Section 5 The Hardin County Board of Supervisors authorizes the Board Chairman to notify the Iowa DNR of this waiver.

Section 6 This resolution shall take effect immediately.

The motion was seconded by Board Member Hoffman and after due consideration thereof, the roll was called and the following Board Members voted:

AYES: McClellan, Hoffman, and Granzow
NAYS: None
ABSENT: None
ABSTAIN: None

Whereupon, the Chair of the Board of Supervisors declared said Resolution duly passed and adopted this 24th day of June, 2020.

/s/ Lance Granzow
Lance Granzow, Chairman
Board of Supervisors

ATTEST:

/s/ Jessica Lara
Jessica Lara
Hardin County Auditor

Hoffman moved, McClellan seconded to approve the application for fireworks permit submitted by Gehrke's Lake and Campground, for July 4, 2020, at 19747 205th Street, Iowa Falls. Motion carried.

Hoffman moved, McClellan seconded to approve the application for liquor license for Pine Lake Country Club, Class C Liquor License, Outdoor Service and Sunday Sales, 7/17/2020 – 7/16/2021. Motion carried.

Hoffman moved, McClellan seconded to adopt the Hardin County Major Medical Plan. Motion carried.

Hoffman moved, McClellan seconded to approve the transfer of Parker Manning, Friendship Club Assistant-PRN, from County employment to FIA Friendship Club 501(c)(3) employment, effective 06/30/2020. Motion carried.

Hoffman moved, McClellan seconded to approve the transfer of Mary Nelson, Friendship Club Coordinator, from County employment to FIA Friendship Club 501(c)(3) employment, effective 06/30/2020. Motion carried.

Hoffman moved, McClellan seconded to approve the transfer of Kathy Vitasek, Friendship Club Assistant, from County employment to FIA Friendship Club 501(c)(3) employment, effective 06/30/2020. Motion carried.

McClellan moved, Hoffman seconded to approve the discharge of George Haefner, temporary/seasonal Park Aide Intern, due to end of seasonal work, effective 06/24/2020. Motion carried.

Hoffman moved, McClellan seconded to table a Change of Status for the Environmental Health/Zoning Department. Motion carried.

Hoffman moved, McClellan seconded to approve a pay increase for Jody Mesch, Property Manager, to a salary of $75,500/year, effective 07/01/2020. Discussion ensued on whether or not employees should be compensated in the event of staff shortages. "Ayes" None. "Nays" Hoffman, McClellan, and Granzow. Motion failed.

Hoffman moved, McClellan seconded to approve the discharge of Amy Robb, Dispatcher, effective 06/15/2020. Motion carried.

Hoffman moved, McClellan seconded to approve the resignation of Matthew Evans, Correctional Officer, effective 06/16/2020. Motion carried.

Hoffman moved, McClellan seconded to approve the discharge of Jacob Sweet, Correctional Officer, due to no-show for training. Motion carried.

COVID-19 Update:
Emergency Management Coordinator Thomas Craighton stated that public health agencies have sent out press releases reminding people COVID persists and to be diligent with prevention. Craighton continues to evaluate processes for opening County buildings and to look into grants. A large amount of PPE is still being processed to nursing homes and hospitals.

Public Comments:
A thank-you was received from Donna Juber.

Other Business: None.

Hoffman moved, McClellan seconded to recess. Motion carried.

At 9:55 a.m. Chair Granzow reconvened the meeting. The meeting was held electronically due to COVID-19 public health risks. Also in attendance: Supervisors Hoffman and McClellan; and Denise Smith, Mark Buschkamp, JD Holmes, Lori Kadner, Nick Schutt, Seth Wengert, Brian Ritland, Abby Flatness, Brent Tripp, Curt Groen, Bob Havens, Taylor Roll, Angela De La Riva, Jessica Sheridan, Michael Pearce, Thomas Craighton, and Angela Silvey.

Craighton, addressing the matter of Public Assistance Grant No. 4483, explained that both Emergency Management, as a separate entity, and the County are able to apply for federal funds for COVID response, but FEMA and State Public Assistance recommended that only one entity submit application.

McClellan moved, Hoffman seconded to approve the Public Assistance Grant No. 4483 to be administered through the Emergency Management Department, and Hardin County will relinquish its application for said grant. Motion carried.

Seth Wengert, on behalf of Tri-B Site Section 8, Section 8, Alden Township, made a verbal request to the Board, and the following action was taken:

WHEREUPON Board Member Hoffman moved that the following Resolution be adopted:

RESOLUTION No. 2020-28

Hardin County Board of Supervisors

June 24, 2020

APPROVAL OF WAIVER OF HARDIN COUNTY'S RIGHT TO APPEAL ISSUANCE OF FINAL CONSTRUCTION PERMIT FOR THE CONSTRUCTION OF CONFINED ANIMAL FEEDING OPERATION BY THE IOWA DEPARTMENT OF NATURAL RESOURCES.

BE IT RESOLVED by the Hardin County Board of Supervisors as follows:

Section 1 The Hardin County Board of Supervisors has received notice from the Iowa Department of Natural Resources (DNR) that Tri-B Farms, LLC has been issued a draft permit for the construction of a confined animal feeding operation building(s) at NE1/4, NE1/4, Section 8, Ellis Township in unincorporated Hardin County.

Section 2 The Hardin County Board of Supervisors reviewed the construction permit application and the manure management plan and determined that both appeared to be in compliance with the requirements of the Master Matrix, Iowa Code Section 459 and Iowa DNR rules and recommended approval of said application on June 10, 2020.

Section 3 The Hardin County Board of Supervisors hereby waives its right to appeal the issuance of the final permit within the fourteen (14) day limit from the time of receipt of notice of the issuance of the draft permit.

Section 4 The Hardin County Board of Supervisors encourages the Iowa DNR to issue the Final Permit immediately upon notification of this waiver.

Section 5 The Hardin County Board of Supervisors authorizes the Board Chairman to notify the Iowa DNR of this waiver.

Section 6 This resolution shall take effect immediately.

The motion was seconded by Board Member McClellan and after due consideration thereof, the roll was called and the following Board Members voted:

AYES: Hoffman, McClellan, and Granzow
NAYS: None
ABSENT: None
ABSTAIN: None

Whereupon, the Chair of the Board of Supervisors declared said Resolution duly passed and adopted this 24th day of June, 2020.

/s/ Lance Granzow
Lance Granzow, Chairman
Board of Supervisors

ATTEST:

/s/ Jessica Lara
Jessica Lara
Hardin County Auditor

Hoffman moved, McClellan seconded to adjourn. Motion carried.

At 10:11 a.m. Chair Granzow opened the public hearing on the Animal Feeding Operation Construction Permit – 110 Pork Shop Site, Section 6, Alden Township. The meeting was held electronically due to COVID-19 public health risks. Also in attendance: Supervisors Hoffman and McClellan; and Bob Havens, Brian Ritland, Curt Groen, Denise Smith, Lori Kadner, Nick Schutt, Seth Wengert, Michael Pearce, Jessica Sheridan, and Angela Silvey.

Proof of publication was verified by Jessica Sheridan, Environmental Health Specialist/Sanitarian.

Brian Ritland reviewed the construction permit application.

Oral comments were heard from Bob Havens on phosphorus index calculation, phosphorus application, and effect on Pine Lake Watershed, and from Nick Schutt on oversaturation of animal feeding operations in his area of the county.

No written comments were received.

There being no other comments or objections, Hoffman moved, McClellan seconded to close the public hearing. Motion carried.

Hoffman moved, McClellan seconded to adjourn. Motion carried.

At 1:00 p.m., the department heads/elected officials meeting was called to order. The meeting was held electronically due to COVID-19 public health risks. In attendance: Supervisors Granzow, Hoffman, and McClellan; and Wes Wiese, Jessica Lara, Matt Jones, Dave McDaniel, Machel Eichmeier, Don Knoell, Bernie Koehrsen, Linn Adams, Thomas Craighton, Michael Pearce, Taylor Roll, Angela De La Riva, Jody Mesch, Darrell Meyer, Lori Kadner, and Angela Silvey.

Department heads assessed the soft reopening of County buildings. Solutions to prevent overcrowding in the vestibule, particularly in adverse weather, were discussed. Thomas Craighton will confer with Carey Callaway, Quaker Security, on best practices.

Other Business:
Linn Adams provided an update on the County wellness program, and Taylor Roll and Adams shared information on activities planned for July and August.

Hoffman moved, McClellan seconded to adjourn. Motion carried.

_____
Lance Granzow, Chair
Board of Supervisors

_____
Jessica Lara
Hardin County Auditor

Claims Payable - June 30, 2020

Aaron Boeler	**$700.00**
Ackley Publishing Co. Inc	**$110.12**
Agri-Pro Enterprises of Iowa Inc	**$766.50**
Alliant Energy	**$22.49**
Angela De La Riva	**$131.40**
Barco Municipal Products	**$146.92**
Campbell Supply Co	**$239.28**
Carl Kruger	**$500.00**
Central Iowa Distr Inc	**$863.60**
CenturyLink	**$178.47**
City of Hubbard	**$60.76**
Coban Technologies, Inc	**$4,905.50**
Connie Sefcik	**$56.00**
Counsel Office & Document	**$13.69**
Country Car Shop	**$937.50**
DBI Services	**$47,261.63**
Dennis T Heetland	**$500.00**
Dubuque County Sheriff	**$30.00**
GATR of Des Moines, Inc	**$1,043.21**
GovConnection, Inc	**$8,723.71**
Gray Manufacturing Co., Inc.	**$1,521.00**
Guardian RFID	**$465.92**
Hamilton County Sheriff	**$258.75**
Hy-Vee	**$110.53**
Ia Dept of Public Safety	**$2,250.00**
Iowa County Attorneys Assoc	**$400.00**
Iowa Law Enforcement Academy	**$1,000.00**
Iowa Prison Industries	**$1,404.10**
Iowa State University	**$65.00**
ISAC	**$75.00**
Jody L Mesch	**$40.00**
Knight Sanitation	**$146.00**
LaVelle Lawn Care	**$473.00**
Marla Kay Williams	**$273.00**
Martin Marietta Aggregate	**$6,581.56**
Mary J Swartz	**$7.09**
Murphy Tractor & Equipment	**$415.54**
Paul Martin	**$75.00**
Pinecrest Mobile Home Park	**$200.00**
Quaker Security LLC	**$5,370.00**
R Comm Wireless	**$9,212.80**
Racom Corporation	**$58.74**
Roto Rooter	**$160.00**
Secretary of State	**$125.40**
Sidwell Company	**$6,344.10**
South Hardin Signal Review Inc	**$154.00**
Storey Kenworthy	**$337.86**
Summit Food Service LLC	**$3,723.16**
Thomson Reuters - West	**$54.56**
Times Citizen	**$337.02**
U.S. Post Office	**$220.00**
Van Wall Equipment Inc	**$419.02**
VISA	**$340.58**
Walmart Community	**$40.25**
William J Hoffman	**$106.96**
Windstream Communications	**$1,075.44**
Youth & Shelter Services Inc	**$886.35**

Grand Total	**$111,918.51**

Lance Granzow, Chair
Board of Supervisors

Jessica Lara
Hardin County Auditor

WHEREUPON Board Member _____moved that the following Resolution be adopted:

RE-APPROPRIATIONS AMENDMENT RESOLUTION

RESOLUTION No. 2020 - _____

Due to moving money in the same service area on June 25, 2020 the following appropriation amendments shall be made.

Office or Department	Amended Appropriation Amount
Health Board (SA3)	- $10,000
General Assistance (SA3)	+$10,000
Economic Development (SA10)	- $4,000
Debt Service (SA10)	+ $4,000

Motion was seconded by Board Member _____and after due consideration thereof, the roll was called and the following Board Members voted:

AYES: _____
NAYS: _____
ABSENT: _____
ABSTAIN: _____

Whereupon, the Chair of the Board of Supervisors declared said Resolution duly passed and adopted this _____day of _____, 2020.

_____
Lance Granzow, Chairperson
Board of Supervisors

ATTEST:

_____
Jessica Lara
Hardin County Auditor

PROPOSAL
HARDIN COUNTY COURTHOUSE

PROJECT ID: SCH000017-2050 **DATE: 6/26/2020**

JOBSITE: **Hardin County Courthouse**
1215 Edgington
Eldora, IA 50627

BILL: **Hardin County Board of Supervisors**
1215 Edgington
Eldora, IA 50627

Attn: Angela Silvey

RE: A17.3 Code Required Elevator Upgrades – Original Compliance Date May 1, 2020

We propose to furnish labor and materials to complete the following required upgrades on your Schumacher Hydraulic Passenger Elevator (State ID 1008):

* Install car door restrictor (except freight & collapsible gate) [2.7.5]

The following is to be completed by customer:

* Machinery space clear of pipes and conduit [2.2.5]

We propose to hereby furnish labor and material - complete in accordance with the specifications outlined in this document for the sum of:

FOUR THOUSAND NINE HUNDRED TWENTY DOLLARS AND 0/100 **$4,920.00**

NOTICE: This proposal will be withdrawn by Schumacher Elevator Company if not accepted within 60 days. A binding contract agreement is required in order to commence work.

If you have any questions, please contact me at (319) 406-1266 or email me at ted.duffy@schumacherelevator.com.

Thank you,

Ted Duffy
Vice President Sales & Service

FOR INTERNAL USE: The attached scope of work is reconstruction to real property in the state of Iowa.

OBLIGATIONS OF OWNER

The following work is the responsibility of the Owner, and at no cost to Schumacher Elevator Company. All work to be performed per the latest revision of the applicable national code and/or local code.

GENERAL WORK

a. Provide all cutting of walls, floors or partitions, together with all repairs made necessary by such cutting or changes;
b. Provide a staging and storage area close to the elevator hoistway;
c. Provide for removal of all spoils and debris accumulated during excavation from the lowest landing of the premises as required;
d. Both legal hoistway and machine room must be maintained at a temperature range 55°F - 85°F;
e. Provide proper support and install inserts provided by Schumacher Elevator Company as shown on G-1 print of the approved drawings;
f. Provide a legal machine room of adequate size, properly ventilated, lighted and heated per Elevator Code;
g. Provide routing for hydraulic and electrical lines;
h. Provide and install heat and smoke detectors as required;
i. Complete all this work in such time as not to delay work of Schumacher Elevator Company;
j. The price and installation schedule of Schumacher Elevator Company is based on these jobsite conditions existing at the beginning and during installation of the elevator equipment;
k. Complete all work prior to state inspection, if reinspection is required, the cost will be shared by the parties involved.
l. Provide a fire extinguisher in the machine room or in a location convenient to the machine space.
m. In accordance with code, if sprinklers are installed in hoistway, machine room, control space or machine space, provide means to automatically disconnect the main line power supply of the affected elevator and any other power supplies used to move the elevator upon the application of water is required (***Not applicable in the state of Minnesota***);

HOISTWAY & PIT WORK

n. Provide a legal hoistway of proper size with adequate pit depth, overhead height and be constructed to withstand forces and loads resulting from the use of the elevator;
o. Provide code compliant means to extract water from the pit;
p. Provide a hoisting beam as required at top of hoistway for digging and hoisting;
q. Provide all necessary sill supports;
r. Fill in around jack hole in pit, build in around door frames and grout under sills, as required by elevator contractor;
s. Provide all cutting of walls, floors or partitions, together with all repairs made necessary by such cutting or changes;
t. Provide all painting including hoistway doors and frames furnished with prime finish;
u. Provide means to guard and protect the hoistway during the time the elevator is being installed;
v. Provide sump pump and sump pit in elevator hoistway floor;

ELECTRICAL WORK

w. Electrical disconnects, one for three phase and several single-phase power supplies, with properly sized wires, as require by the manufacturer;
x. Provide standby power unit and means for starting it, that will deliver enough regulated power to the elevator disconnect switches to operate one or more elevators at a time at full-rated speed;
y. Provide electrical power to machine room and connect to controller terminals, with an intervening fused disconnect properly located in machine room, including shunt trip breakers, if required;
z. Provide a transfer switch for each feeder for switching from normal power to standby power and a contact on each transfer switch closed on normal power supply with two wires from this contact to one elevator controller;
aa. Provide means for absorbing power regenerated by the elevator system when running with overhauling loads such as full load down;
bb. Provide any required emergency power of adequate size to include switch gear and preconditioning signals, which may be required;
cc. Provide without charge, adequate power for excavation and tools during construction, starting, testing, and adjusting of equipment;

dd. Provide a separate 110-volt AC, 15-amp circuit fused disconnect terminated at controller;
ee. Provide GFI outlet and guarded light and switch;
ff. Provide means to guard and protect the hoistway during the time the elevator is being installed;
gg. Hoistway lighting. If the controller for an elevator is being replaced, permanent lighting shall be installed in the hoistway of the elevator. Three-way switches to control the hoistway lighting shall be installed at the pit access door and the top landing access door. The lighting shall be sufficient to provide 10 foot- candles of light to the center of the elevator path measured when the car top lights are off. Engineering calculations that prove 10 foot- candles of light are provided to the center of the elevator path may be substituted for light meter measurements under circumstances such as a glass back car where use of a light meter is not practical. - **Iowa Chapter 73.8 (8);**

*Fire control panel by others- **per National Fire Alarm Code 6.15.3.2**

The owner agrees to indemnify and hold harmless Schumacher Elevator Company against all claims, damages, losses, expenses, fines, and penalties, including but not limited to attorneys' and/or consultants fees, arising out of or resulting from the failure of the owner to carry out any obligations of the owner outlined in the foregoing agreement.

CONTRACT ID: SA172050

SECTION 1 – PAYMENT TERMS

MILESTONE	*DESCRIPTION*	*PERCENTAGE VALUE*	*TIMING*
Initial Payment	Reserves spot on master schedule	**25%**	Billed upon execution of Agreement. Payment due upon receipt.
Final Payment	Completion of work	**Percentage of Completion**	Billed upon completion of work. Payment due Net 30 days.

- If payment is not made within 30 days of invoicing, the Supplier shall be relieved of the obligation to honor its warranty.
- Purchaser agrees to pay interest at the rate of 1.5% per month or 18% APR on all past due account balances.
- Purchaser agrees to pay all collection costs incurred to collect past due account balances. Collection costs include all reasonable attorney fees, collection agency fees, court costs, and litigation expenses.
- Purchaser agrees that should legal action become necessary to enforce collection of past due account balances, jurisdiction and venue shall be in the Iowa district court in Bremer County, Iowa.
- Any tax or other governmental charge imposed upon the sale of the goods shall be paid by Purchaser, and Purchaser's failure to pay any applicable tax shall be a breach of this entire agreement.

SECTION 2 – GENERAL TERMS & CONDITIONS

1. Supplier will complete the scope of work during regular working hours of 6:00 A.M. to 5:00 P.M. (not to exceed 8 hours per day for new construction and 10 hours per day for alteration of existing elevators and in either case not to exceed 40 hours in a work week) during regular working days of Monday to Friday, excluding holidays. Expedited work schedules can be arranged between the Supplier and the Purchaser with a fully executed change order specifying the additional compensation to be paid for the expedited work.
2. All work performed outside of the scope of this Agreement will be billed to Purchaser at a single worker rate of $200 per man hour for regular time (6am to 5 pm) and $375 per man hour for overtime (after 5pm and before 6am or over 8 hours per day or 40 hours in a workweek), plus any expenses. A team hour (a mechanic and an apprentice) will be billed at a rate of $350 per hour for regular time and $675 per hour for overtime, plus any expenses. Purchaser must enter into a change order describing the additional work and confirming the applicable rate before Supplier is required to perform work outside the scope of this Agreement.
3. The terms of this Agreement shall not be supplemented or amended by Purchaser's bid documents or a contract provided by Purchaser. This Agreement sets forth the entire agreement between the parties. If the Purchaser accepts the terms of this Agreement by issuing a purchase order, Supplier shall not be bound by any of the terms in the purchase order, and none of the terms in the purchase order shall have the effect of amending, modifying or nullifying any of the terms of this Agreement. In the event of a conflict between the terms of Purchaser's purchase order and this Agreement, the terms of this Agreement shall govern the contractual relationship between Supplier and Purchaser.
4. Neither party shall be liable to the other party hereunder for special, indirect, consequential, exemplary or incidental damages.
5. Supplier will secure and maintain minimum insurance coverage to protect against claims for bodily injury or death, or for damage to property, which may arise out of the operations by the Supplier or by anyone employed by them. Certificates of Workers' Compensation, Employer's Liability, and Commercial General Liability, Commercial Automobile Liability, and Umbrella/Excess Liability will be furnished to the Purchaser upon request.
6. If Purchaser terminates or cancels this Agreement, Purchaser shall be liable for all costs incurred by Supplier through the date of Supplier's receipt of Purchaser's written notice of cancellation. Purchaser agrees to pay any cancellation fees within ten (10) days of the cancellation date.

SECTION 3 – WARRANTY

There are two components to Supplier's warranty. Supplier warrants and guarantees it shall perform its labor in a skillful manner. Supplier also provides a limited warranty regarding the products manufactured by Supplier.

Supplier's labor (workmanship) is guaranteed for a period of (1) year from the date the work is completed. The workmanship warranty excludes ordinary wear and tear, improper use, vandalism, abuse, misuse, neglect, or any other causes beyond Supplier's control. **THIS EXPRESS LIMITED WARRANTY WITH RESPECT TO WORKMANSHIP IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A SPECIFIC PURPOSE.**

The terms of Supplier's limited warranty with respect to products manufactured by Supplier are set forth in the "Standard Warranty-Packages & Components" attached as **EXHIBIT A**.

SECTION 4 – INDEMNIFICATION

Supplier shall indemnify and hold Purchaser harmless from and against all claims, damages, losses and expenses arising out of or resulting from any negligent act or omission of Supplier, Supplier's Contractors, or anyone directly or indirectly employed by Supplier or Supplier's Contractors. Supplier shall not be obligated to indemnify or hold Purchaser harmless for any claims, damages, losses and expenses arising out of or caused in whole or in part by any act or omission of Purchaser, Purchaser's other contractors and Contractors, or anyone directly or indirectly employed by or supervised by Purchaser or Purchaser's other contractors or Contractors.

SECTION 5 – RISK OF LOSS

Risk of loss shall pass to Purchaser as soon as the materials and equipment are delivered to the jobsite. Purchaser shall pay all costs of insurance from the time that risk of loss passes to Purchaser.

SECTION 6 – FORCE MAJEURE

Supplier shall not be responsible for any delivery or failure to make delivery of all or any part of the goods purchased under this agreement due to federal, state, or municipal action, statute, ordinance, or regulation, strike or other labor trouble, acts of God or natural disasters, riot or other civil disturbance, inability to secure raw materials or supplies, or, without limiting the foregoing, by any other cause, contingency, or circumstance within or without the United States not subject to Supplier's control which prevents or hinders the manufacture or delivery of the goods sold hereunder. The provisions of this paragraph shall not be limited by any provision in which time is made of the essence.

CONTRACT ACCEPTANCE

Purchaser:		*Supplier:*	
Signature:		*Signature:*	
Printed Name:		*Printed Name:*	
Title:		*Title:*	
Date Signed:		*Date Signed:*	

DO YOU NEED TO ISSUE A PURCHASE ORDER? Select...

P.O. #

EXHIBIT A

STANDARD WARRANTY – PACKAGES & COMPONENTS

Schumacher Elevator Company warrants all manufactured products to be free of defects in material and workmanship under normal and intended use conditions for a period of 1 year from the date of shipment from our factory.

During the term of the warranty, Schumacher Elevator Company will replace any product manufactured by Schumacher Elevator Company which is confirmed to be defective in material and/or workmanship by inspection at our factory.

This warranty excludes ordinary wear and tear, improper installation, improper use, vandalism, abuse, misuse, neglect, or any other causes beyond the control of Schumacher Elevator Company.

This warranty is voided if products are improperly exposed to the elements. The warranty is also voided if the manufactured products are altered or modified in any manner, including modifications or alterations to the circuitry. This warranty is also voided if improper wiring methods are used during installation of the manufactured products.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A SPECIFIC PURPOSE.

Schumacher Elevator Company will not be liable for any contingent or consequential costs such as the cost of installation of replacement or repaired products, travel expense, or any other expense incurred in connection with the replacement or repair.

Schumacher Elevator Company will not be liable for loss of profits, or any other indirect, consequential, or incidental damages.

Products not manufactured by Schumacher Elevator Company are not covered by this warranty. If Schumacher Elevator Company has purchased products from another manufacturer and resold such products to the Purchaser, the standard warranty provided by the third-party manufacturer, if any, will apply. The Purchaser is encouraged to refer to the description of warranty terms offered by third-party manufacturers in their respective O&M Manual.

This warranty replaces and supersedes any and all previous warranties offered by Schumacher Elevator Company.

WARRANTY EXCHANGE – PACKAGES & COMPONENTS

To begin the warranty exchange process, the Purchaser should contact our inventory department to request troubleshooting assistance and to obtain a Return Material Authorization (RMA) number. If Schumacher Elevator Company determines that an exchange is necessary, the replacement product will be sent via the appropriate shipping method along with the RMA number.

The Purchaser will be responsible for the cost of shipping the product in question, freight prepaid, with the RMA number included, to our factory for evaluation within thirty (30) days of the RMA being issued.

If the product in question is not shipped to Schumacher Elevator within 30 days of Purchaser's receipt of the replacement product, the Purchaser will be invoiced the full purchase price of the replacement product. No credit will be offered if the product in question is not returned within 30 days.

Upon receipt of the product in question, Schumacher Elevator will perform a full evaluation to determine whether the product has any defects in material or workmanship not caused by exclusions to Schumacher Elevator Company's warranty. If the evaluation determines that there are no defects in material or workmanship or existing defects are the result of a warranty exclusion, the Purchaser will be invoiced the full purchase price of the replacement product.

When returning products to Schumacher Elevator Company, the Purchaser is encouraged to use a trackable shipping method. Schumacher Elevator Company is not responsible for products lost, stolen or damaged in the course of shipping the products to Schumacher Elevator Company.

PROPOSAL

HARDIN COUNTY OFFICE BUILDING

PROJECT ID: SCH000017-2051 **DATE: 6/26/2020**

JOBSITE: **Hardin County Office Building**
1215 Edgington
Eldora, IA 50627

BILL: **Hardin County Board of Supervisors**
1215 Edgington
Eldora, IA 50627

Attn: Angela Silvey

RE: A17.3 Code Required Elevator Upgrades – Original Compliance Date May 1, 2020

We propose to furnish labor and materials to complete the following required upgrades on your Montgomery Traction Passenger Elevator (State ID 1009):

* Install Pit Stop Switch [2.3.3]
* Install a platform guard (vertical face 21" min) [3.3.2]
* Install car top stop switch [3.10.4 (e)]
* Ensure car stop switch is either keyed or behind a locked cover [3.10.4 (t)]
* Install 2-way communication between car and outside hoistway. (elevators installed prior to 3/22/2002) [3.11.1 (a) (2)] NOTE: A working dedicated telephone line to the elevator controller in the elevator equipment room is to be supplied by the owner.

We propose to hereby furnish labor and material - complete in accordance with the specifications outlined in this document for the sum of:

SIX THOUSAND THREE HUNDRED FORTY DOLLARS AND 0/100 **$6,340.00**

NOTICE: This proposal will be withdrawn by Schumacher Elevator Company if not accepted within 60 days. A binding contract agreement is required in order to commence work.

If you have any questions, please contact me at (319) 406-1266 or email me at ted.duffy@schumacherelevator.com.

Thank you,

Ted Duffy
Vice President Sales & Service

FOR INTERNAL USE: The attached scope of work is reconstruction to real property in the state of Iowa.

OBLIGATIONS OF OWNER

The following work is the responsibility of the Owner, and at no cost to Schumacher Elevator Company. All work to be performed per the latest revision of the applicable national code and/or local code.

GENERAL WORK

a. Provide all cutting of walls, floors or partitions, together with all repairs made necessary by such cutting or changes;
b. Provide a staging and storage area close to the elevator hoistway;
c. Provide for removal of all spoils and debris accumulated during excavation from the lowest landing of the premises as required;
d. Both legal hoistway and machine room must be maintained at a temperature range 55°F - 85°F;
e. Provide proper support and install inserts provided by Schumacher Elevator Company as shown on G-1 print of the approved drawings;
f. Provide a legal machine room of adequate size, properly ventilated, lighted and heated per Elevator Code;
g. Provide routing for hydraulic and electrical lines;
h. Provide and install heat and smoke detectors as required;
i. Complete all this work in such time as not to delay work of Schumacher Elevator Company;
j. The price and installation schedule of Schumacher Elevator Company is based on these jobsite conditions existing at the beginning and during installation of the elevator equipment;
k. Complete all work prior to state inspection, if reinspection is required, the cost will be shared by the parties involved.
l. Provide a fire extinguisher in the machine room or in a location convenient to the machine space.
m. In accordance with code, if sprinklers are installed in hoistway, machine room, control space or machine space, provide means to automatically disconnect the main line power supply of the affected elevator and any other power supplies used to move the elevator upon the application of water is required (***Not applicable in the state of Minnesota***);

HOISTWAY & PIT WORK

n. Provide a legal hoistway of proper size with adequate pit depth, overhead height and be constructed to withstand forces and loads resulting from the use of the elevator;
o. Provide code compliant means to extract water from the pit;
p. Provide a hoisting beam as required at top of hoistway for digging and hoisting;
q. Provide all necessary sill supports;
r. Fill in around jack hole in pit, build in around door frames and grout under sills, as required by elevator contractor;
s. Provide all cutting of walls, floors or partitions, together with all repairs made necessary by such cutting or changes;
t. Provide all painting including hoistway doors and frames furnished with prime finish;
u. Provide means to guard and protect the hoistway during the time the elevator is being installed;
v. Provide sump pump and sump pit in elevator hoistway floor;

ELECTRICAL WORK

w. Electrical disconnects, one for three phase and several single-phase power supplies, with properly sized wires, as require by the manufacturer;
x. Provide standby power unit and means for starting it, that will deliver enough regulated power to the elevator disconnect switches to operate one or more elevators at a time at full-rated speed;
y. Provide electrical power to machine room and connect to controller terminals, with an intervening fused disconnect properly located in machine room, including shunt trip breakers, if required;
z. Provide a transfer switch for each feeder for switching from normal power to standby power and a contact on each transfer switch closed on normal power supply with two wires from this contact to one elevator controller;
aa. Provide means for absorbing power regenerated by the elevator system when running with overhauling loads such as full load down;
bb. Provide any required emergency power of adequate size to include switch gear and preconditioning signals, which may be required;
cc. Provide without charge, adequate power for excavation and tools during construction, starting, testing, and adjusting of equipment;

dd. Provide a separate 110-volt AC, 15-amp circuit fused disconnect terminated at controller;
ee. Provide GFI outlet and guarded light and switch;
ff. Provide means to guard and protect the hoistway during the time the elevator is being installed;
gg. Hoistway lighting. If the controller for an elevator is being replaced, permanent lighting shall be installed in the hoistway of the elevator. Three-way switches to control the hoistway lighting shall be installed at the pit access door and the top landing access door. The lighting shall be sufficient to provide 10 foot- candles of light to the center of the elevator path measured when the car top lights are off. Engineering calculations that prove 10 foot- candles of light are provided to the center of the elevator path may be substituted for light meter measurements under circumstances such as a glass back car where use of a light meter is not practical. - **Iowa Chapter 73.8 (8);**

*Fire control panel by others- **per National Fire Alarm Code 6.15.3.2**

The owner agrees to indemnify and hold harmless Schumacher Elevator Company against all claims, damages, losses, expenses, fines, and penalties, including but not limited to attorneys' and/or consultants fees, arising out of or resulting from the failure of the owner to carry out any obligations of the owner outlined in the foregoing agreement.

CONTRACT ID: SA172051

SECTION 1 – PAYMENT TERMS

MILESTONE	*DESCRIPTION*	*PERCENTAGE VALUE*	*TIMING*
Initial Payment	Reserves spot on master schedule	**25%**	Billed upon execution of Agreement. Payment due upon receipt.
Final Payment	Completion of work	**Percentage of Completion**	Billed upon completion of work. Payment due Net 30 days.

- If payment is not made within 30 days of invoicing, the Supplier shall be relieved of the obligation to honor its warranty.
- Purchaser agrees to pay interest at the rate of 1.5% per month or 18% APR on all past due account balances.
- Purchaser agrees to pay all collection costs incurred to collect past due account balances. Collection costs include all reasonable attorney fees, collection agency fees, court costs, and litigation expenses.
- Purchaser agrees that should legal action become necessary to enforce collection of past due account balances, jurisdiction and venue shall be in the Iowa district court in Bremer County, Iowa.
- Any tax or other governmental charge imposed upon the sale of the goods shall be paid by Purchaser, and Purchaser's failure to pay any applicable tax shall be a breach of this entire agreement.

SECTION 2 – GENERAL TERMS & CONDITIONS

1. Supplier will complete the scope of work during regular working hours of 6:00 A.M. to 5:00 P.M. (not to exceed 8 hours per day for new construction and 10 hours per day for alteration of existing elevators and in either case not to exceed 40 hours in a work week) during regular working days of Monday to Friday, excluding holidays. Expedited work schedules can be arranged between the Supplier and the Purchaser with a fully executed change order specifying the additional compensation to be paid for the expedited work.
2. All work performed outside of the scope of this Agreement will be billed to Purchaser at a single worker rate of $200 per man hour for regular time (6am to 5 pm) and $375 per man hour for overtime (after 5pm and before 6am or over 8 hours per day or 40 hours in a workweek), plus any expenses. A team hour (a mechanic and an apprentice) will be billed at a rate of $350 per hour for regular time and $675 per hour for overtime, plus any expenses. Purchaser must enter into a change order describing the additional work and confirming the applicable rate before Supplier is required to perform work outside the scope of this Agreement.
3. The terms of this Agreement shall not be supplemented or amended by Purchaser's bid documents or a contract provided by Purchaser. This Agreement sets forth the entire agreement between the parties. If the Purchaser accepts the terms of this Agreement by issuing a purchase order, Supplier shall not be bound by any of the terms in the purchase order, and none of the terms in the purchase order shall have the effect of amending, modifying or nullifying any of the terms of this Agreement. In the event of a conflict between the terms of Purchaser's purchase order and this Agreement, the terms of this Agreement shall govern the contractual relationship between Supplier and Purchaser.
4. Neither party shall be liable to the other party hereunder for special, indirect, consequential, exemplary or incidental damages.
5. Supplier will secure and maintain minimum insurance coverage to protect against claims for bodily injury or death, or for damage to property, which may arise out of the operations by the Supplier or by anyone employed by them. Certificates of Workers' Compensation, Employer's Liability, and Commercial General Liability, Commercial Automobile Liability, and Umbrella/Excess Liability will be furnished to the Purchaser upon request.
6. If Purchaser terminates or cancels this Agreement, Purchaser shall be liable for all costs incurred by Supplier through the date of Supplier's receipt of Purchaser's written notice of cancellation. Purchaser agrees to pay any cancellation fees within ten (10) days of the cancellation date.

SECTION 3 – WARRANTY

There are two components to Supplier's warranty. Supplier warrants and guarantees it shall perform its labor in a skillful manner. Supplier also provides a limited warranty regarding the products manufactured by Supplier.

Supplier's labor (workmanship) is guaranteed for a period of (1) year from the date the work is completed. The workmanship warranty excludes ordinary wear and tear, improper use, vandalism, abuse, misuse, neglect, or any other causes beyond Supplier's control. **THIS EXPRESS LIMITED WARRANTY WITH RESPECT TO WORKMANSHIP IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A SPECIFIC PURPOSE.**

The terms of Supplier's limited warranty with respect to products manufactured by Supplier are set forth in the "Standard Warranty-Packages & Components" attached as **EXHIBIT A**.

SECTION 4 – INDEMNIFICATION

Supplier shall indemnify and hold Purchaser harmless from and against all claims, damages, losses and expenses arising out of or resulting from any negligent act or omission of Supplier, Supplier's Contractors, or anyone directly or indirectly employed by Supplier or Supplier's Contractors. Supplier shall not be obligated to indemnify or hold Purchaser harmless for any claims, damages, losses and expenses arising out of or caused in whole or in part by any act or omission of Purchaser, Purchaser's other contractors and Contractors, or anyone directly or indirectly employed by or supervised by Purchaser or Purchaser's other contractors or Contractors.

SECTION 5 – RISK OF LOSS

Risk of loss shall pass to Purchaser as soon as the materials and equipment are delivered to the jobsite. Purchaser shall pay all costs of insurance from the time that risk of loss passes to Purchaser.

SECTION 6 – FORCE MAJEURE

Supplier shall not be responsible for any delivery or failure to make delivery of all or any part of the goods purchased under this agreement due to federal, state, or municipal action, statute, ordinance, or regulation, strike or other labor trouble, acts of God or natural disasters, riot or other civil disturbance, inability to secure raw materials or supplies, or, without limiting the foregoing, by any other cause, contingency, or circumstance within or without the United States not subject to Supplier's control which prevents or hinders the manufacture or delivery of the goods sold hereunder. The provisions of this paragraph shall not be limited by any provision in which time is made of the essence.

CONTRACT ACCEPTANCE

Purchaser:		*Supplier:*	
Signature:		*Signature:*	
Printed Name:		*Printed Name:*	
Title:		*Title:*	
Date Signed:		*Date Signed:*	

DO YOU NEED TO ISSUE A PURCHASE ORDER? Select...

P.O. #

EXHIBIT A

STANDARD WARRANTY – PACKAGES & COMPONENTS

Schumacher Elevator Company warrants all manufactured products to be free of defects in material and workmanship under normal and intended use conditions for a period of 1 year from the date of shipment from our factory.

During the term of the warranty, Schumacher Elevator Company will replace any product manufactured by Schumacher Elevator Company which is confirmed to be defective in material and/or workmanship by inspection at our factory.

This warranty excludes ordinary wear and tear, improper installation, improper use, vandalism, abuse, misuse, neglect, or any other causes beyond the control of Schumacher Elevator Company.

This warranty is voided if products are improperly exposed to the elements. The warranty is also voided if the manufactured products are altered or modified in any manner, including modifications or alterations to the circuitry. This warranty is also voided if improper wiring methods are used during installation of the manufactured products.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A SPECIFIC PURPOSE.

Schumacher Elevator Company will not be liable for any contingent or consequential costs such as the cost of installation of replacement or repaired products, travel expense, or any other expense incurred in connection with the replacement or repair.

Schumacher Elevator Company will not be liable for loss of profits, or any other indirect, consequential, or incidental damages.

Products not manufactured by Schumacher Elevator Company are not covered by this warranty. If Schumacher Elevator Company has purchased products from another manufacturer and resold such products to the Purchaser, the standard warranty provided by the third-party manufacturer, if any, will apply. The Purchaser is encouraged to refer to the description of warranty terms offered by third-party manufacturers in their respective O&M Manual.

This warranty replaces and supersedes any and all previous warranties offered by Schumacher Elevator Company.

WARRANTY EXCHANGE – PACKAGES & COMPONENTS

To begin the warranty exchange process, the Purchaser should contact our inventory department to request troubleshooting assistance and to obtain a Return Material Authorization (RMA) number. If Schumacher Elevator Company determines that an exchange is necessary, the replacement product will be sent via the appropriate shipping method along with the RMA number.

The Purchaser will be responsible for the cost of shipping the product in question, freight prepaid, with the RMA number included, to our factory for evaluation within thirty (30) days of the RMA being issued.

If the product in question is not shipped to Schumacher Elevator within 30 days of Purchaser's receipt of the replacement product, the Purchaser will be invoiced the full purchase price of the replacement product. No credit will be offered if the product in question is not returned within 30 days.

Upon receipt of the product in question, Schumacher Elevator will perform a full evaluation to determine whether the product has any defects in material or workmanship not caused by exclusions to Schumacher Elevator Company's warranty. If the evaluation determines that there are no defects in material or workmanship or existing defects are the result of a warranty exclusion, the Purchaser will be invoiced the full purchase price of the replacement product.

When returning products to Schumacher Elevator Company, the Purchaser is encouraged to use a trackable shipping method. Schumacher Elevator Company is not responsible for products lost, stolen or damaged in the course of shipping the products to Schumacher Elevator Company.

OFFICE OF AUDITOR OF STATE
STATE OF IOWA

Rob Sand
Auditor of State

State Capitol Building
Des Moines, Iowa 50319-0006

Telephone (515) 281-5834 Facsimile (515) 281-6518

NEWS RELEASE

Contact: Marlys Gaston
515/281-5834

FOR RELEASE June 15, 2020

Auditor of State Rob Sand today released an audit report on the Central Iowa Juvenile Detention Center in Eldora, Iowa.

FINANCIAL HIGHLIGHTS:

The Center had total receipts $10,822,876 for the year ended June 30, 2019, a 15.7% increase over the prior year. Disbursements for the year ended June 30, 2019 totaled $10,836,538, a 15.2% increase over the prior year. The significant increase in receipts is due primarily to increases in child welfare service fees and line of credit proceeds. The significant increase in disbursements is due primarily to an increase in community-based services salaries and benefits disbursements. The community-based services program added more fiscal services and the area served increased.

AUDIT FINDINGS:

Sand reported two findings related to the receipt and disbursement of taxpayer funds. They are found on page 27 of this report. The findings address noncompliance with Chapter 28E.6(3) of the Code of Iowa pertaining to publication of Board minutes and the Center securing loan agreements with government assets. Sand provided the Center with recommendations to address each of the findings.

The two findings discussed above are repeated from the prior year. The Central Iowa Juvenile Detention Center Board has a fiduciary responsibility to provide oversight of the Center's operations and financial transactions. Oversight is typically defined as the "watchful and responsible care" a governing body exercises in its fiduciary capacity.

A copy of the audit report is available for review on the Auditor of State's web site at https://auditor.iowa.gov/reports/audit-reports/.

# # #

CENTRAL IOWA JUVENILE DETENTION CENTER

INDEPENDENT AUDITOR'S REPORTS
BASIC FINANCIAL STATEMENT
AND OTHER INFORMATION
SCHEDULE OF FINDINGS

JUNE 30, 2019

Central Iowa Juvenile Detention Center

OFFICE OF AUDITOR OF STATE
STATE OF IOWA

Rob Sand
Auditor of State

State Capitol Building
Des Moines, Iowa 50319-0006

Telephone (515) 281-5834 Facsimile (515) 281-6518

March 15, 2020

Officials of the Central Iowa Juvenile Detention Center
Eldora, Iowa

Dear Board Members:

I am pleased to submit to you the financial and compliance audit report for the Central Iowa Juvenile Detention Center for the year ended June 30, 2019. The audit was performed pursuant to Chapter 11.6 of the Code of Iowa and in accordance with U.S. auditing standards and the standards applicable to financial audits contained in Government Auditing Standards.

I appreciate the cooperation and courtesy extended by the officials and employees of the Central Iowa Juvenile Detention Center throughout the audit. If I or this office can be of any further assistance, please contact me or my staff at 515-281-5834.

Sincerely,

Rob Sand
Auditor of State

Table of Contents

Central Iowa Juvenile Detention Center

Officials

Name	Title	Representing
Dave Thompson	Chair	Marshall County
Trevor White	1st Vice-Chair	Poweshiek County
Lance Granzow	2nd Vice-Chair	Hardin County
Dan Campidilli	Ex-Officio	Hamilton County
Mark Waits	Member	Appanoose County
Rick Primmer	Member	Benton County
Bill Zinnel	Member	Boone County
Don Shonka	Member	Buchanan County
Paul Merten	Member	Buena Vista County
Mike Cooper	Member	Calhoun County
Cecil Blum	Member	Crawford County
Dave Baker	Member	Dubuque County
Jeff Quastad	Member	Emmet County
Doug Kamm	Member	Floyd County
Gary McVicker	Member	Franklin County
Peter Bardole	Member	Greene County
Ron Sweers	Member	Hancock County
Bruce Reimers	Member	Humboldt County
John Gahring	Member	Iowa County
Doug Cupples	Member	Jasper County
Roger Tjarks	Member	Kossuth County
Larry Davis	Member	Lucas County
Mark Doland	Member	Mahaska County
Roger Faulstick	Member	Palo Alto County
Martin Chitty	Member	Story County
Larry Vest	Member	Tama County
Bob Thode	Member	Webster County
Mike Stensrud	Member	Winnebago County
Mark Smeby	Member	Worth County
Rick Rasmussen	Member	Wright County
Tony Reed	Executive Director	
Justin Cornish	Regulatory Director	
Kassie Ruth	Fiscal Director	

OFFICE OF AUDITOR OF STATE
STATE OF IOWA

Rob Sand
Auditor of State

State Capitol Building
Des Moines, Iowa 50319-0004

Telephone (515) 281-5834 Facsimile (515) 281-6518

Independent Auditor's Report

To the Members of the Central Iowa Juvenile Detention Center:

Report on the Financial Statement

We have audited the financial statement of the Central Iowa Juvenile Detention Center as of and for the year ended June 30, 2019, and the related Notes to Financial Statement.

Management's Responsibility for the Financial Statement

Management is responsible for the preparation and fair presentation of the financial statement in accordance with the cash basis of accounting described in Note 1. This includes determining the cash basis of accounting is an acceptable basis for the preparation of the financial statement in the circumstances. This includes the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of a financial statement that is free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on the financial statement based on our audit. We conducted our audit in accordance with U.S. generally accepted auditing standards and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statement is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statement. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statement, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Center's preparation and fair presentation of the financial statement in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Center's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statement.

We believe the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statement referred to above presents fairly, in all material respects, the cash basis financial position of the Central Iowa Juvenile Detention Center as of June 30, 2019, and the changes in its cash basis financial position for the year then ended in accordance with the basis of accounting described in Note 1.

Basis of Accounting

As discussed in Note 1, the financial statement was prepared on the basis of cash receipts and disbursements, which is a basis of accounting other than U.S. generally accepted accounting principles. Our opinion is not modified with respect to this matter.

Other Matters

Other Information

The other information, the Schedule of the Center's Proportionate Share of the Net Pension Liability and the Schedule of Center Contributions on pages 19 through 23 has not been subjected to the auditing procedures applied in the audit of the financial statement and, accordingly, we do not express an opinion or provide any assurance on it.

Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated March 15, 2020 on our consideration of the Central Iowa Juvenile Detention Center's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the Central Iowa Juvenile Detention Center's internal control over financial reporting and compliance.

Marlys K. Gaston, CPA
Deputy Auditor of State

March 15, 2020

Central Iowa Juvenile Detention Center

Financial Statement

Central Iowa Juvenile Detention Center

Central Iowa Juvenile Detention Center

Statement of Cash Receipts, Disbursements
and Changes in Cash Balance

As of and for the year ended June 30, 2019

Operating receipts:		
Detention care fees		$ 1,219,135
State programs:		
Detention care	$ 721,816	
School lunch	64,498	786,314
Child welfare service and juvenile justice fees		6,308,510
Transportation services		975,320
Miscellaneous		206,154
Total operating receipts		9,495,433
Operating disbursements:		
Salaries:		
Detention care	2,156,583	
Community based services	2,744,445	4,901,028
Employee benefits:		
Detention care	987,681	
Community based services	997,909	1,985,590
Travel:		
Detention care	111,017	
Community based services	250,823	361,840
Resident meals		119,282
Building repairs		15,121
Utilities		107,747
Equipment		13,958
Vehicle purchase		112,736
Vehicle maintenance		168,464
Professional fees		170,956
Insurance		128,315
Supplies		106,026
Medical		167,352
Staff development		20,348
Information services		64,619
Community based services		875,082
Total operating disbursements		9,318,464
Excess of operating receipts over operating disbursements		176,969
Non-operating receipts (disbursements):		
Interest on investments		466
Line of credit proceeds		1,326,977
Debt service:		
Principal	(1,444,510)	
Interest	(73,564)	(1,518,074)
Net non-operating receipts (disbursements)		(190,631)
Change in cash balance		(13,662)
Cash balance beginning of year		188,980
Cash balance end of year		$ 175,318
Cash Basis Fund Balance		
Unrestricted		$ 175,318

See notes to financial statement.

(1) Summary of Significant Accounting Policies

The Central Iowa Juvenile Detention Center was formed in 1993 pursuant to Chapter 28E of the Code of Iowa. The Center is a voluntary joint undertaking of the Boards of Supervisors of the counties of Appanoose, Benton, Boone, Buchanan, Buena Vista, Calhoun, Crawford, Dubuque, Emmet, Floyd, Franklin, Greene, Hamilton, Hancock, Hardin, Humboldt, Iowa, Jasper, Kossuth, Lucas, Mahaska, Marshall, Palo Alto, Poweshiek, Story, Tama, Webster, Winnebago, Worth and Wright, Iowa. The primary purpose of this detention facility is to provide a physically secure, emotionally stable and safe environment in which juveniles can await court disposition.

A. Reporting Entity

For financial reporting purposes, the Central Iowa Juvenile Detention Center has included all funds, organizations, agencies, boards, commissions and authorities. The Center has also considered all potential component units for which it is financially accountable and other organizations for which the nature and significance of their relationship with the Center are such that exclusion would cause the Center's financial statement to be misleading or incomplete. The Governmental Accounting Standards Board has set forth criteria to be considered in determining financial accountability. These criteria include appointing a voting majority of an organization's governing body and (1) the ability of the Center to impose its will on that organization or (2) the potential for the organization to provide specific benefits to or impose specific financial burdens on the Center. The Center has no component units which meet the Governmental Accounting Standards Board criteria.

B. Basis of Presentation

The accounts of the Center are organized as an Enterprise Fund. Enterprise Funds are utilized to finance and account for the acquisition, operation and maintenance of governmental facilities and services supported by user charges.

Enterprise Funds distinguish operating receipts and disbursements from non-operating items. Operating receipts and disbursements generally result from providing services and producing and delivering goods in connection with an Enterprise Fund's principal ongoing operations. All receipts and disbursements not meeting this definition are reported as non-operating receipts and disbursements.

C. Basis of Accounting

The Center maintains its financial records on the basis of cash receipts and disbursements and the financial statement of the Center is prepared on that basis. The cash basis of accounting does not give effect to accounts receivable, accounts payable and accrued items. Accordingly, the financial statement does not present the financial position and results of operations of the Center in accordance with U.S. generally accepted accounting principles.

(2) Cash and Investments

The Center's deposits in banks at June 30, 2019 were entirely covered by federal depository insurance or by the State Sinking Fund in accordance with Chapter 12C of the Code of Iowa. This chapter provides for additional assessments against the depositories to ensure there will be no loss of public funds.

The Center is authorized by statute to invest public funds in obligations of the United States government, its agencies and instrumentalities; certificates of deposit or other evidences of deposit at federally insured depository institutions approved by the Center; prime eligible bankers acceptances; certain high rated commercial paper; perfected repurchase agreements; certain registered open-end management investment companies; certain joint investment trusts; and warrants or improvement certificates of a drainage district.

The Center had no investments meeting the disclosure requirements of Governmental Accounting Standards Board Statement No. 72.

(3) Short-Term and Long-Term Liabilities

A summary of changes in short-term and long-term liabilities and interest paid for the year ended June 30, 2019 is as follows:

	Line of Credit	Building Loan	Total
Balance beginning of year	$ 183,687	1,858,842	2,042,529
Increases	1,326,977	-	1,326,977
Decreases	760,664	683,846	1,444,510
Balance end of year	$ 750,000	1,174,996	1,924,996
Interest paid during the year	$ 18,502	55,062	73,564

Line of Credit

On September 13, 2016, the Center entered into a loan agreement with a local bank to borrow up to $750,000 for the payment of operating expenses. The loan agreement is evidenced by a promissory note, with a maturity date of September 10, 2017 and a variable interest rate equal to the Bank Prime Loan Rate as published in the Federal Reserve Statistical Bulletin (the Index). The variable interest rate is not to be less than 4.0% per annum or more than the lesser of 6.5% per annum or the maximum rate allowed by applicable law. The line of credit is to be paid when funds are received from operations. On December 8, 2017, the loan agreement was extended to September 1, 2018 with an interest rate of 4.75% per annum until maturity. The loan agreement was extended again on October 9, 2018 to March 15, 2019 with an interest rate of 5.75% per annum until maturity. On April 10, 2019 the Center entered into a new loan agreement for $750,000 with a maturity date of April 1, 2020 for the purpose of repaying the April 1, 2020 loan agreement extension. The variable interest rate is not to be less than 5.75% per annum or more than the lesser of 8.75% per annum or the maximum rate allowed by applicable law. On April 11, 2019 the Center transferred the remaining balance of the loan agreement to the new loan agreement and at June 30, 2019, the outstanding balance was $750,000. In fiscal year 2019, $1,326,977 was drawn on the loan agreements and $760,664 was repaid.

The loan agreement includes provisions that in the event of a default the total amount due will continue to accrue interest and the entire unpaid principal balance and accrued interest are due immediately. The Center has drawn the entire line of credit.

According to the loan agreement, the loan is secured by real estate collateral belonging to the Center.

Construction and Building Loans

On September 3, 2017, the Center entered into a loan agreement for $1,900,621 with a maturity date of October 20, 2037. The initial interest rate on the loan is 4.0% for the first 5 years and thereafter a variable interest rate subject to the monthly average of the weekly average yield on U.S. Treasury securities adjusted to a constant maturity of one year rounded to the nearest 0.001 (the Index). The variable interest rate is not to be less than 4.0% per annum or more than the lesser of 9.0% per annum or the maximum rate allowed by applicable law. In fiscal year 2019, $683,846 was repaid on the loan.

Annual debt service requirements to maturity under the loan agreement are as follows:

Year Ending June 30,	Interest Rates	Principal	Interest	Total
2020	4.00%	$ 93,613	45,296	138,909
2021	4.00	97,427	41,482	138,909
2022	4.00	101,396	37,513	138,909
2023	4.00-4.125	105,527	33,382	138,909
2024	4.125	109,826	29,082	138,908
2025-2029	4.125	667,207	74,940	742,147
Total		$ 1,174,996	261,695	1,436,691

According to the loan agreements, the loan is secured by real estate collateral belonging to the Center.

(4) Pension Plan

Plan Description – IPERS membership is mandatory for employees of the Center, except for those covered by another retirement system. Employees of the Center are provided with pensions through a cost-sharing multiple employer defined benefit pension plan administered by the Iowa Public Employees' Retirement System (IPERS). IPERS issues a stand-alone financial report which is available to the public by mail at PO Box 9117, Des Moines, Iowa 50306-9117 or at www.ipers.org.

IPERS benefits are established under Iowa Code Chapter 97B and the administrative rules thereunder. Chapter 97B and the administrative rules are the official plan documents. The following brief description is provided for general informational purposes only. Refer to the plan documents for more information.

Pension Benefits – A Regular member may retire at normal retirement age and receive monthly benefits without an early-retirement reduction. Normal retirement age is age 65, any time after reaching age 62 with 20 or more years of covered employment or when the member's years of service plus the member's age at the last birthday equals or exceeds 88, whichever comes first. These qualifications must be met on the member's first month of entitlement to benefits. Members cannot begin receiving retirement benefits before age 55. The formula used to calculate a Regular member's monthly IPERS benefit includes:

- A multiplier based on years of service.
- The member's highest five-year average salary, except members with service before June 30, 2012 will use the highest three-year average salary as of that date if it is greater than the highest five-year average salary.

If a member retires before normal retirement age, the member's monthly retirement benefit will be permanently reduced by an early-retirement reduction. The early-retirement reduction is calculated differently for service earned before and after July 1, 2012. For service earned before July 1, 2012, the reduction is 0.25% for each month the member receives benefits before the member's earliest normal retirement age. For service earned on or after July 1, 2012, the reduction is 0.50% for each month the member receives benefits before age 65.

Generally, once a member selects a benefit option, a monthly benefit is calculated and remains the same for the rest of the member's lifetime. However, to combat the effects of inflation, retirees who began receiving benefits prior to July 1990 receive a guaranteed dividend with their regular November benefit payments.

Disability and Death Benefits – A vested member who is awarded federal Social Security disability or Railroad Retirement disability benefits is eligible to claim IPERS benefits regardless of age. Disability benefits are not reduced for early retirement. If a member dies before retirement, the member's beneficiary will receive a lifetime annuity or a lump-sum payment equal to the present actuarial value of the member's accrued benefit or calculated with a set formula, whichever is greater. When a member dies after retirement, death benefits depend on the benefit option the member selected at retirement.

Contributions – Contribution rates are established by IPERS following the annual actuarial valuation which applies IPERS' Contribution Rate Funding Policy and Actuarial Amortization Method. State statute limits the amount rates can increase or decrease each year to 1 percentage point. IPERS Contribution Rate Funding Policy requires the actuarial contribution rate be determined using the "entry age normal" actuarial cost method and the actuarial assumptions and methods approved by the IPERS Investment Board. The actuarial contribution rate covers normal cost plus the unfunded actuarial liability payment based on a 30-year amortization period. The payment to amortize the unfunded actuarial liability is determined as a level percentage of payroll based on the Actuarial Amortization Method adopted by the Investment Board.

In fiscal year 2019, pursuant to the required rate, Regular members contributed 6.29% of covered payroll and the Center contributed 9.44% of covered payroll, for a total rate of 15.73%.

The Center's contributions to IPERS for the year ended June 30, 2019 totaled $411,506.

Net Pension Liability, Pension Expense, Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions – At June 30, 2019, the Center had a liability of $3,506,466 for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2018 and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. The Center's proportion of the net pension liability was based on the Center's share of contributions to IPERS relative to the contributions of all IPERS participating employers. At June 30, 2018, the Center's proportion was 0.055409%, which was an increase of 0.008448% over its proportion measured as of June 30, 2017.

For the year ended June 30, 2019, the Center's pension expense, deferred outflows of resources and deferred inflows of resources totaled $475,097, $928,007 and $584,161, respectively.

There were no non-employer contributing entities to IPERS.

Actuarial Assumptions – The total pension liability in the June 30, 2018 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Rate of inflation (effective June 30, 2017)	2.60% per annum.
Rates of salary increase (effective June 30, 2017)	3.25 to 16.25% average, including inflation. Rates vary by membership group.
Long-term investment rate of return (effective June 30, 2017)	7.00% compounded annually, net of investment expense, including inflation.
Wage growth (effective June 30, 2017)	3.25% per annum, based on 2.60% inflation and 0.65% real wage inflation.

The actuarial assumptions used in the June 30, 2018 valuation were based on the results of an economic assumption study dated March 24, 2017 and a demographic assumption study dated June 28, 2018.

Mortality rates used in the 2018 valuation were based on the RP-2014 Employee and Healthy Annuitant Tables with MP-2017 generational adjustments.

The long-term expected rate of return on IPERS' investments was determined using a building-block method in which best-estimate ranges of expected future real rates (expected returns, net of investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset Class	Asset Allocation	Long-Term Expected Real Rate of Return
Domestic equity	22.0%	6.01%
International equity	15.0	6.48
Global smart beta equity	3.0	6.23
Core plus fixed income	27.0	1.97
Public credit	3.5	3.93
Public real assets	7.0	2.91
Cash	1.0	(0.25)
Private equity	11.0	10.81
Private real assets	7.5	4.14
Private credit	3.0	3.11
Total	100.0%	

Discount Rate – The discount rate used to measure the total pension liability was 7.00%. The projection of cash flows used to determine the discount rate assumed employee contributions will be made at the contractually required rate and contributions from the Center will be made at contractually required rates, actuarially determined. Based on those assumptions, IPERS' fiduciary net position was projected to be available to make all projected future benefit payments to current active and inactive employees. Therefore, the long-term expected rate of return on IPERS' investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the Center's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate – The following presents the Center's proportionate share of the net pension liability calculated using the discount rate of 7.00%, as well as what the Center's proportionate share of the net pension liability would be if it were calculated using a discount rate 1% lower (6.00%) or 1% higher (8.00%) than the current rate.

	1% Decrease (6.00%)	Discount Rate (7.00%)	1% Increase (8.00%)
Center's proportionate share of the net pension liability	$ 5,951,177	3,506,466	1,455,716

IPERS' Fiduciary Net Position – Detailed information about IPERS' fiduciary net position is available in the separately issued IPERS financial report which is available on IPERS' website at www.ipers.org.

(5) Other Postemployment Benefits (OPEB)

Plan Description – The Center operates a single-employer benefit plan which provides medical and prescription drug benefits for employees, retirees and their spouses. Group insurance benefits are established under Iowa Code Chapter 509A.13. The Center currently finances the benefit plan on a pay-as-you-go basis. The most recent active member monthly premiums for health coverage for the Center and the plan members range from $353 for single coverage to $1,550 for family coverage. The most recent active member monthly premiums for dental coverage for the Center and the plan members range from $26 for single coverage to $79 for family coverage. For the year ended June 30, 2019, the Center contributed $213,255 and plan member eligible for benefits contributed $148,475 to the plan. At June 30, 2019, no assets have been accumulated in a trust that meets the criteria in paragraph 4 of GASB Statement No. 75.

OPEB Benefits – Individuals who are employed by Central Iowa Juvenile Detention Center and are eligible to participate in the group health plan are eligible to continue healthcare benefits upon retirement. Retirees under age 65 pay the same premium for the medical, prescription drug and dental benefits as active employees, which results in an implicit rate subsidy.

Retired participants must be age 55 or older at retirement, with the exception of special service participants who must be age 50 with 22 years of service. At June 30, 2019, there were 35 active employees covered by the benefit terms and no inactive employees or beneficiaries currently receiving benefit payments.

(6) Risk Management

The Center is exposed to various risks of loss related to torts; theft, damage to and destruction of assets; errors and omissions; injuries to employees; and natural disasters. These risks are covered by the purchase of commercial insurance. The Center assumes liability for any deductibles and claims in excess of coverage limitations. Settled claims from these risks have not exceeded commercial insurance coverage in any of the past three fiscal years.

(7) Compensated Absences

Center employees accumulate an established amount of earned personal time off based on the number of years of service for subsequent use or for payment upon termination, resignation, retirement or death. These accumulations are not recognized as disbursements by the Center until used or paid. The Center's approximate liability to employees for earned personal time off at June 30, 2019 is $297,000. This liability has been computed based on rates of pay in effect at June 30, 2019.

Other Information

Central Iowa Juvenile Detention Center

Central Iowa Juvenile Detention Center

Schedule of the Center's Proportionate Share of the Net Pension Liability

Iowa Public Employees' Retirement System
For the Last Five Years*
(In Thousands)

Other Information

	2019	2018	2017	2016	2015
Center's proportion of the net pension liability	0.055409%	0.046961%	0.045978%	0.040556%	0.038800%
Center's proportionate share of the net pension liability	$ 3,506	3,128	2,894	2,004	1,539
Center's covered payroll	$ 4,165	3,505	3,299	2,778	2,531
Center's proportionate share of the net pension liability as a percentage of its covered payroll	84.18%	89.24%	87.72%	72.14%	60.81%
IPERS' net position as a percentage of the total pension liability	83.62%	82.21%	81.82%	85.19%	87.61%

* In accordance with GASB Statement No. 68, the amounts presented for each fiscal year were determined as of June 30 of the preceding fiscal year.

See accompanying independent auditor's report.

Central Iowa Juvenile Detention Center

Schedule of Center Contributions

Iowa Public Employees' Retirement System
For the Last Ten Years
(In Thousands)

Other Information

		2019	2018	2017	2016
Statutorily required contribution	$	412	372	313	295
Contributions in relation to the statutorily required contribution		(412)	(372)	(313)	(295)
Contribution deficiency (excess)	$	-	-	-	-
Center's covered payroll	$	4,428	4,165	3,505	3,299
Contributions as a percentage of covered payroll		9.44%	8.93%	8.93%	8.93%

See accompanying independent auditor's report.

2015	2014	2013	2012	2011	2010
248	226	141	170	114	82
(248)	(226)	(141)	(170)	(114)	(82)
-	-	-	-	-	-
2,778	2,531	1,626	2,107	1,640	1,233
8.93%	8.93%	8.67%	8.07%	6.95%	6.65%

Central Iowa Juvenile Detention Center

Central Iowa Juvenile Detention Center

Notes to Other Information – Pension Liability

Year ended June 30, 2019

Changes of benefit terms:

Legislation enacted in 2010 modified benefit terms for Regular members. The definition of final average salary changed from the highest three to the highest five years of covered wages. The vesting requirement changed from four years of service to seven years. The early retirement reduction increased from 3% per year measured from the member's first unreduced retirement age to a 6% reduction for each year of retirement before age 65.

Changes of assumptions:

The 2018 valuation implemented the following refinements as a result of a demographic assumption study dated June 28, 2018:

- Changed mortality assumptions to the RP-2014 mortality tables with mortality improvements modeled using Scale MP-2017.
- Adjusted retirement rates.
- Lowered disability rates.
- Adjusted the probability of a vested Regular member electing to receive a deferred benefit.
- Adjusted the merit component of the salary increase assumption.

The 2017 valuation implemented the following refinements as a result of an experience study dated March 24, 2017:

- Decreased the inflation assumption from 3.00% to 2.60%.
- Decreased the assumed rate of interest on member accounts from 3.75% to 3.50% per year.
- Decreased the discount rate from 7.50% to 7.00%.
- Decreased the wage growth assumption from 4.00% to 3.25%.
- Decreased the payroll growth assumption from 4.00% to 3.25%.

The 2014 valuation implemented the following refinements as a result of a quadrennial experience study:

- Decreased the inflation assumption from 3.25% to 3.00%.
- Decreased the assumed rate of interest on member accounts from 4.00% to 3.75% per year.
- Adjusted male mortality rates for retirees in the Regular membership group.
- Moved from an open 30-year amortization period to a closed 30-year amortization period for the UAL (unfunded actuarial liability) beginning June 30, 2014. Each year thereafter, changes in the UAL from plan experience will be amortized on a separate closed 20-year period.

The 2010 valuation implemented the following refinements as a result of a quadrennial experience study:

- Adjusted retiree mortality assumptions.
- Modified retirement rates to reflect fewer retirements.
- Lowered disability rates at most ages.
- Lowered employment termination rates.
- Generally increased the probability of terminating members receiving a deferred retirement benefit.
- Modified salary increase assumptions based on various service duration.

OFFICE OF AUDITOR OF STATE
STATE OF IOWA

Rob Sand
Auditor of State

State Capitol Building
Des Moines, Iowa 50319-0004

Telephone (515) 281-5834 Facsimile (515) 281-6518

Independent Auditor's Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statement Performed in Accordance with Government Auditing Standards

To the Members of the Central Iowa Juvenile Detention Center:

We have audited in accordance with U.S. generally accepted auditing standards and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States, the financial statement of the Central Iowa Juvenile Detention Center as of and for the year ended June 30, 2019, and the related Notes to Financial Statement, and have issued our report thereon dated March 15, 2020. Our report expressed an unmodified opinion on the financial statement which was prepared on the basis of cash receipts and disbursements, a basis of accounting other than U.S. generally accepted accounting principles.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statement, we considered the Central Iowa Juvenile Detention Center's internal control over financial reporting to determine the audit procedures appropriate in the circumstances for the purpose of expressing our opinion on the financial statement, but not for the purpose of expressing an opinion on the effectiveness of the Central Iowa Juvenile Detention Center's internal control. Accordingly, we do not express an opinion on the effectiveness of the Central Iowa Juvenile Detention Center's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility a material misstatement of the Center's financial statement will not be prevented or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control which is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control we consider to be material weaknesses. However, material weaknesses may exist which have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Central Iowa Juvenile Detention Center's financial statement is free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, non-compliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of non-compliance or other matters that are required to be reported under Government Auditing Standards. However, we noted certain immaterial instances of non-compliance or other matters which are described in the accompanying Schedule of Findings.

Comments involving statutory and other legal matters about the Center's operations for the year ended June 30, 2019 are based exclusively on knowledge obtained from procedures performed during our audit of the financial statement of the Center. Since our audit was based on tests and samples, not all transactions that might have had an impact on the comments were necessarily audited. The comments involving statutory and other legal matters are not intended to constitute legal interpretations of those statutes.

The Central Iowa Juvenile Detention Center's Responses to the Findings

The Central Iowa Juvenile Detention Center's responses to the findings identified in our audit are described in the accompanying Schedule of Findings. The Central Iowa Juvenile Detention Center's responses were not subjected to the auditing procedures applies in the audit of the financial statement and, accordingly, we express no opinion on them.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing and not to provide an opinion on the effectiveness of the Center's internal control or on compliance. This report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the Center's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

We would like to acknowledge the many courtesies and assistance extended to us by personnel of the Central Iowa Juvenile Detention Center during the course of our audit. Should you have any questions concerning any of the above matters, we shall be pleased to discuss them with you at your convenience.

Marlys K. Gaston, CPA
Deputy Auditor of State

March 15, 2020

Findings Related to the Financial Statement:

INTERNAL CONTROL DEFICIENCY:

No material weaknesses in internal control over financial reporting were noted.

INSTANCE OF NON-COMPLIANCE:

No matters were noted.

Other Findings Related to Required Statutory Reporting:

(1) Questionable Disbursements – No disbursements we believe may not meet the requirements of public purpose as defined in an Attorney General's opinion dated April 25, 1979 were noted.

(2) Travel Expense – No disbursements of Center money for travel expenses of spouses of Center officials or employees were noted.

(3) Center Minutes – No transactions were found that we believe should have been approved in the Center minutes but were not. However, for 1 of 6 meetings during the fiscal year, the Center did not submit a summary of proceedings for publication within 20 days after the meeting.

Recommendation – The summary of proceedings should be submitted for publication within 20 days following adjournment of the meeting as required by Chapter 28E.6(3) of the Code of Iowa.

Response – The Center has made some internal changes to rectify this.

Conclusion – Response accepted.

(4) Deposits and Investments – No instances of non-compliance with the deposit and investment provisions of Chapters 12B and 12C of the Code of Iowa and the Center's investment policy were noted.

Staff

This audit was performed by:

Marlys K. Gaston, CPA, Deputy
Tammy A. Hollingsworth, CIA, Manager
Taran E. McCusker, Staff Auditor
Nathan A. DeWit, Assistant Auditor

pinnacle
Environmental Compliance
...for agriculture

620 Country Club Road Iowa Falls, Iowa 50126 Office: (641) 648-7300 Fax: (641) 648-7310 www.pinnacleiowa.com

June 2, 2020

Re: 110 Pork Shop Site

Attached you will find a Manure Management Plan, Construction Design Statement and Master Matrix for the 110 Pork Shop Site.

The site does require a Master Matrix that you will find enclosed with a passing score. We will be attending the site visit with the DNR and we will attend the Supervisor meeting and any public hearings. Please sign the enclosed county verification and fax back to 641-648-7310 or e-mail to jean@pinnacleiowa.com. In the meantime, if you have any questions please call us at 641-648-7300.

Thank You,

Kent Krause
Cell 515-571-7816

Please staple check here

Iowa Department of Natural Resources

Construction Permit Application Form

Confinement Feeding Operations

INSTRUCTIONS:

Prior to constructing, installing, modifying or expanding a confinement feeding operation structure[1], answer questions 1-8 on Item 3, Section A (page 2), to determine if a construction permit is required. To calculate the animal unit capacity (AUC) of the operation, complete Table 1 (page 4). If a construction permit is required, complete the rest of the form, have the applicant(s) sign it on pages 5 and 6. Mail to the DNR (see address on page 5) this application form, documents and fees requested in Checklist No. 1 or 2 (pages 10-15). See item 5 (page 5), to determine which checklist to use.

If a construction permit is not needed, some pre-construction requirements may still apply prior to the construction of a formed manure storage structure[2]. See page 5 for additional DNR contact information.

THIS APPLICATION IS FOR:

1. ☒ A new confinement feeding operation
2. ☐ An existing confinement feeding operation *(answer all of the following questions):*
   a) Facility ID No. (5 digit number): _____
   b) Date when the operation was first constructed: _____
   c) Date when the last construction, expansion or modification was completed: _____

(Not needed if the confinement operation has previously received a construction permit from DNR.)

d) Is this also an ownership change? ☐ Yes ☒ No If yes box is checked additional fees apply. See page 8

ITEM 1 – LOCATION AND CONTACT INFORMATION (***See page 17 for instructions and an example***):

A) Name of operation: 110 Pork Shop

Location:

SE	SW	06	T89N; R22W	Alden	Hardin
(¼ ¼)	(¼)	(Section)	(Tier & Range)	(Name of Township)	(County)

B) Applicant information:

Name: Anthony Heiden Title: _____

Address: 10212 110th Street Alden, IA 50006

Telephone: 515-689-0358 Fax: _____ Email: _____

C) Person to contact with questions about this application (if different than applicant):

Name: Brian Ritland Title: _____

Address: 620 Country Club Road Iowa Falls, IA 50126

Telephone: 641-648-7300 Fax: _____ Email: _____

☒ Enclose aerial photo or engineering drawing showing the proposed location of the confinement feeding operation structure[1] and all applicable separation distances, as requested in Attachment 1 (pages 11-12 or 14-15). See example of aerial photo on pages 18 to 19, at the end of this form.

☐ I manage or have a 10% or more ownership interest in another confinement feeding operation located within 2,500 feet of the proposed site. Please contact the DNR AFO Program staff at (712) 262-4177 to verify site adjacency requirements.

[1] Confinement feeding operation structure = animal feeding operation structure (confinement building, manure storage structure or egg washwater storage structure) that is part of a confinement feeding operation. Manure storage structures include formed and unformed manure storage structures.
[2] Formed manure storage structure = covered or uncovered concrete or steel tanks, and concrete pits below the building.

ITEM 2 – SITING INFORMATION:

A) Karst Determination: Go to DNR AFO Siting Atlas at http://programs.iowadnr.gov/maps/afo/. Search for your site by either scrolling into your location or entering an address or legal description in the bottom search bar. Left click on the location of your proposed structure. Make sure the karst layer box is checked on the map layers. If you cannot access the map, or if you have questions about this issue, contact the AFO Engineer at (712) 262-4177. Check one of the following:

- ☒ The site is not in karst or potential karst. Print and enclose the map with the name and location of the site clearly marked.
- ☐ The site is in karst. The upgraded concrete standards of 567 IAC 65.15(14)"c" must be used. Refer to "Applicant's submittal checklist" on page 10 for karst documentation.
- ☐ The site is within 1,000 feet of a known sinkhole, Secondary Containment Barrier is required in accordance with 567 IAC 65.15(17).

B) Alluvial Soils Determination: Go to the AFO Siting Atlas as described above. Make sure the alluvial layer box is checked on the map legend. If you cannot access the map, or if you have questions about this issue, contact DNR Flood Plain at (866) 849-0321. Check one of the following:

- ☒ The site is not in alluvial soils. Print and enclose the map with the name and location of the site clearly marked.
- ☐ The site is in alluvial soils. You will need to submit a request for a flood plain determination from DNR Flood Plain (866) 849-0321. After receiving determination submit one of the following:
- ☐ Not in 100-year floodplain or does not require a flood plain permit. Include correspondence from the DNR Flood Plain Section.
- ☐ Requires flood plain permit. Include flood plain permit.
- ☐ Documentation has been submitted to determine site is not in alluvial soils. Refer to "Applicant's Submittal Checklist" on page 10 for alluvial soils documentation.

ITEM 3 – OPERATION INFORMATION:

A) A construction permit is required prior to any of the following:

1. ☐ Constructing or modifying any unformed manure storage structure[3], constructing or modifying a confinement building that uses an unformed manure storage structure[3], or increasing animal units in a confinement building that uses an unformed manure storage structure.
2. ☒ Constructing, installing or modifying a confinement building or a formed manure storage structure[2] at a confinement feeding operation if, after construction, installation or expansion, the AUC of the operation is 1,000 animal units (AU) or more. This also applies to confinement feeding operations that store manure exclusively in a dry form.
3. ☐ Initiating a change that would result in an increase in the volume of manure or a modification in the manner in which manure is stored in any unformed manure storage structure[3], even if no construction or physical alteration is necessary. Increases in the volume of manure due to an increase in animal capacity, animal weight capacity or AUC up to the limits specified in a previously issued construction permit do not require a new construction permit.
4. ☐ Initiating a change, even if no construction or physical alteration is necessary, that would result in an increase in the volume of manure or a modification in the manner in which manure is stored in a formed manure storage structure[2] if, after the change, the AUC of the operation is 1,000 AU or more. Increases in the volume of manure due to an increase in animal capacity, animal weight capacity or AUC up to the limits specified in a previously issued construction permit do not require a new construction permit.
5. ☐ Constructing or modifying any egg washwater storage structure or a confinement building at a confinement feeding operation that includes an egg washwater storage structure.
6. ☐ Initiating a change that would result in an increase in the volume of egg washwater or a modification in the manner in which egg washwater is stored, even if no construction or physical alteration is necessary. Increases in the volume of egg washwater due to an increase in animal capacity, animal weight capacity or AUC up to the limits specified in a previously issued construction permit do not require a new construction permit.
7. ☐ Repopulating a confinement feeding operation if it was closed for 24 months or more and if any of the following apply:
   1. ☐ The confinement feeding operation uses an unformed manure storage structure[3] or egg washwater storage structure;
   2. ☐ The confinement feeding operation includes only confinement buildings and formed manure storage structures[2] and has an AUC of 1,000 AU or more.
8. ☐ Installing a permanent manure transfer piping system, unless the department determines that a construction permit is not required.

[3] Unformed manure storage structure = covered or uncovered anaerobic lagoon, earthen manure storage basin, aerobic earthen structure.

B) In your own words, describe in detail, the proposed construction, expansion, installation, modification or repair being proposed in this project.(Must be completed) Attach additional pages if necessary:

I will be constructing a one building site designed to house 4800 head of hogs.

C) Master Matrix *(must check one)*. If any of boxes 1 to 3 are checked, the operation is required to be evaluated with the master matrix if the county, where the confinement feeding operation structure[1] is or would be located, has adopted a 'Construction Evaluation Resolution' (CER). Select the one that best describes your confinement feeding operation:

1. ☒ A new confinement feeding operation proposed in a county that has adopted a CER.
2. ☐ An existing operation constructed on or after April 1, 2002, in a county that has adopted a CER.
3. ☐ An existing operation constructed prior to April 1, 2002, with a current or proposed AUC of 1,667 AU or more, in a county that has adopted a CER.
4. ☐ None of the above. Therefore, the master matrix evaluation is not required.

D) Qualified Operation *(must check one)*. If any of boxes 1 to 4 are checked, the operation is also a 'qualified operation'. A qualified operation is required to use a manure storage structure that employs bacterial action which is maintained by the utilization of air or oxygen, and which shall include aeration equipment. However, this requirement does not apply if box 5 is checked. Select the one that best describes your confinement feeding operation:

1. ☐ A swine farrowing and gestating operation with an AUC of 2,500 AU or more. If the replacement breeding swine are raised and used at the operation, the animal units for those replacement animals do not count in the operations total AUC for the purpose of determining a qualified operation.
2. ☐ A swine farrow-to-finish operation with an AUC of 5,400 AU or more.
3. ☐ A cattle confinement feeding operation (including dairies) with an AUC of 8,500 AU or more.
4. ☐ Other confinement feeding operations with an AUC of 5,333 AU or more.
5. ☒ This is not a qualified operation because:
   a. ☒ It is below the limits shown on boxes 1 to 4.
   b. ☐ It includes a confinement feeding operation structure[1] constructed prior to May 31, 1995.
   c. ☐ It handles manure exclusively in a dry form (poultry).

ITEM 4 – ANIMAL UNIT CAPACITY (AUC) and, if applicable, ANIMAL WEIGHT CAPACITY (AWC):

A) Calculating AUC – Required for all operations

For each animal species, multiply the maximum number of animals that you would ever confine at one time by the appropriate factor, then add all AU together on Table 1 (page 4). Use the maximum market weight for the appropriate animal species to select the AU factor.

You must complete all applicable columns in Table 1. Use column a) to calculate the existing AUC, before permit for existing operations only. Use column b) to calculate the 'Total proposed AUC' (after a permit is issued) including new operations. The number obtained in column b) is the AUC of the operation and must be used to determine permit requirements. Use column c) to calculate the 'New AU' to be added to an existing operation. To calculate the indemnity fee (see page 7), also use column c), however, if the "Existing AUC" (column a) is 500 AU or less, enter the "Total proposed AUC" (column b) in the "New AU" (column c).

In calculating the AUC of a confinement feeding operation, you must include the AUC of all confinement buildings which are part of the confinement feeding operation, unless a confinement building has been abandoned. A confinement feeding operation structure[1] is abandoned if the confinement feeding operation structure[1] has been razed, removed from the site of a confinement feeding operation, filled in with earth, or converted to uses other than a confinement feeding operation structure[1] so that it cannot be used as a confinement feeding operation structure[1] without significant reconstruction. Therefore, in Table 1, enter the animal unit capacity of all the confinement buildings, including those that are from an "adjacent" operation located within 2,500 feet. For more information, contact the AFO Program at (712) 262-4177.

Table 1. Animal Unit Capacity (AUC): **(No. HEAD) x (FACTOR) = AUC**

Animal Species	a) Existing AUC (Before permit)			b) Total Proposed AUC (After permit)		
	(No. Head)	x (Factor)	= AUC	(No. Head)	x (Factor)	= AUC
laughter or feeder cattle		1.0			1.0	
Immature dairy cattle		1.0			1.0	
Mature dairy cattle		1.4			1.4	
Gestating sows		0.4			0.4	
Farrowing sows & litter		0.4			0.4	
Boars		0.4			0.4	
Gilts		0.4			0.4	
Finished (Market) hogs	0	0.4	0	4800	0.4	1920
Nursery pigs 15 lbs to 55 lbs		0.1			0.1	
Sheep and lambs		0.1			0.1	
Goats		0.1			0.1	
Horses		2.0			2.0	
Turkeys 7 lbs or more		0.018			0.018	
Turkeys less than 7 lbs		0.0085			0.0085	
Broiler/Layer chickens 3 lbs or more		0.01			0.01	
Broiler/Layer chickens less than 3 lbs		0.0025			0.0025	
Ducks		0.04			0.04	
Fish 25 grams or more		0.001			0.001	
Fish less than 25 grams		0.00006			0.00006	
TOTALS:	a) Existing AUC:		0	b) Total proposed AUC:		1920

Note: If the "Existing AUC" (column a) is 500 AU or less, enter the "Total proposed AUC" (column b) in the "New AU" (column c)

c) New AU = b) - a): 1920

(This is the AUC of the operation)

B) Calculating AWC - Only for operations first constructed prior to March 1, 2003

The AWC is needed for an operation that was first constructed prior to March 1, 2003, to determine some of the minimum separation distance requirements for construction or expansion.

The AWC is the product of multiplying the maximum number of animals that you would ever confine at any one time by their verage weight (lbs) during the production cycle. Then add the AWC if more than one animal species is present (examples on how to determine the AWC are provided in 567 IAC 65.1(455B).)

If the operation was first constructed prior to March 1, 2003, you must complete all applicable columns in Table 2:

Table 2. Animal Weight Capacity (AWC): **(No. head) * (Avg. weight, lbs) = AWC, lbs**

Animal Species	a) Existing AWC (Before Permit)			b) Proposed AWC (After permit)		
	(No. head) x	avg weight	= AWC	(No. head) x	avg weight	= AWC
Slaughter or feeder cattle						
Immature dairy cattle						
Mature dairy cattle						
Gestating sows						
Farrowing sows & litter						
Boars						
Gilts						
Finished (Market) hogs						
Nursery pigs 15 lbs to 55 lbs						
Sheep and lambs						
Goats						
Horses						
Turkeys 7lbs or more						
Turkeys less than 7 lbs						
Broiler/Layer chickens 3 lbs or more						
Broiler/Layer chickens less than 3 lbs						
ucks						
sh 25 grams or more						
Fish less than 25 grams						
TOTALS:	a) Existing AWC:			b) Total proposed AWC:		

c) New AWC = b) - a):

(This is the AWC of the operation)

ITEM 5 – SUBMITTAL REQUIREMENTS Checklists No. 1 or 2 (pages 10-15) describe the submittal requirements, which are based on the type of confinement feeding operation structure[1] and AUC proposed. To determine which checklist to use, choose the option that best describes your confinement feeding operation:

A) ☒ Formed manure storage structures[2]: The proposed confinement feeding operation structure[1] will be or will use a formed manure storage structure[2]. Check one of the following boxes:

1. ☐ A swine farrowing and gestating operation with an AUC of 1,250 AU or more. Use Submittal Checklist No. 2 (page 13).
2. ☐ A swine farrow-to-finish operation with an AUC of 2,750 AU or more. Use Submittal Checklist No. 2 (page 13).
3. ☐ A cattle confinement feeding operation (including dairies) with an AUC of 4,000 AU or more. Use Submittal Checklist No. 2 (page 13).
4. ☐ Other confinement feeding operations with an AUC of 3,000 AU or more. Use Submittal Checklist No. 2 (page 13).
5. ☒ None of the above. Use Submittal Checklist No. 1 (page 10).

If any of boxes 1 to 4 are checked, the operation meets the threshold requirements for an engineer[4] and a Professional Engineer (PE), licensed in Iowa, is required. For these cases, use Submittal Checklist No. 2 (page 13).

If you checked box 5, your operation is below threshold requirements for an engineer[4] and a Professional Engineer (PE) is not required. Use Submittal Checklist No. 1 (page 10).

B) ☐ Unformed manure storage structure[3]: The proposed confinement feeding operation structure[1], will be or will use an unformed manure storage structure[3] or an egg washwater storage structure. A Professional Engineer (PE) licensed in Iowa must design and sign the engineering documents for any size of operation. Use Submittal Checklist No. 2 (page 13) and Addendum "A" (page 16).

ITEM 6- UTILIZING RURAL WATER SYSTEM FOR WATER SUPPLY

☐ The proposed facility will utilize rural water and the providing rural water system has been notified and is aware of the proposed increase in water use.

ITEM 7 – SIGNATURE:

I hereby certify that the information contained in this application is complete and accurate.

Signature of Applicant(s): _____ Date: 5-29-20

_____ _____

MAILING INSTRUCTIONS:

To expedite the application process, follow the submittal requirements explained in Checklist No. 1 or 2 (pages 10 to 16), whichever applies. Page 1 of this form should be the first page of the package. Mail all documents and fees to:

Iowa DNR
AFO Program
1900 N Grand Ave
Gateway North, Ste E17
Spencer, IA 51301

(Note: Incomplete applications will be returned to the sender.)

Questions

Questions about construction permit requirements or regarding this form should be directed to an engineer of the animal feeding operations (AFO) Program at (712) 262-4177. To contact the appropriate DNR Field Office, go to http://www.iowadnr.gov/fieldoffice.

[4] Threshold requirements for an engineer apply to the construction of a formed manure storage structure[2]. Operations that meet or exceed the threshold requirements for an engineer are required to submit engineering documents signed by a professional engineer licensed in the state of Iowa. Please refer to Checklist No. 2 (pages 13-15).

ITEM 8

Interested Parties Form
Confinement Feeding Operation

Interest means ownership of a confinement feeding operation as a sole proprietor or a 10 percent or more ownership interest held by a person in a confinement feeding operation as a joint tenant, tenant in common, shareholder, partner, member, beneficiary or other equity interest holder. Ownership interest is an interest when it is held either directly or indirectly through a spouse or dependent child, or both.

INSTRUCTIONS:

Please list all persons (including corporations, partnerships, etc.) who have an interest in any part of the confinement feeding operation covered by this permit application.

Full Name	Address	City/State	Zip
Anthony Heiden	10212 110th Street	Alden, IA	50006

For each name above, please list below all other confinement feeding operations in Iowa in which that person has an interest. Check box "**None**", below, if there are no other confinement feeding operations in Iowa in which the above listed person(s) has or have an interest.

Operation Name	Location (¼ ¼, ¼, Section, Tier, Range, Township, County)	City
☐ **None** [There are no other confinements in Iowa in which the above listed person(s) has or have an interest].		
Young Ave Pork	SW, NW, Section 07, T89N, R22W, Hardin	Alden
Hansel Site	NW, NW, Section 30, T88N, R23W, Hamilton	Williams

I hereby certify that the information provided on this form is complete and accurate.

Signature of Applicant(s): Anthony Heiden Date: 5-29-20

ITEM 9

Manure Storage Indemnity Fee Form for Construction Permits

CASHIER'S USE ONLY
0474-542-474A-0431
Facility ID #
County

Credit fees to: Anthony Heiden

Name of operation: 110 Pork Shop

INSTRUCTIONS:

1) Use the 'Total Proposed AUC' from column b), Table 1 (page 4), to select the appropriate fee line in the table below. The 'Total Proposed AUC' is the AUC of the operation.
2) Select the animal specie and row number (see examples). Enter the 'New AU' from column c), Table 1 (page 4). The 'New AU' is the number of AU to be added to an existing operation or being proposed with a new operation. **Note**: If the "Existing AUC" (column a) is 500 AU or less, enter the "Total proposed AUC" (column b) in "New AU" (column c).
3) Multiply the 'New AU' by the appropriate 'Fee per AU'. The resulting number is the indemnity fee due.

- **Example 1**: An existing swine operation is expanding from an 'Existing AUC' of 1,000 AU to a 'Total Proposed AUC' of 1,800 AU, and has previously paid an indemnity fee for the existing 1,000 AU. Calculate the indemnity fee as follows: The 'Total Proposed AUC' is between 1,000 AU and 3,000 AU; the animal specie is other than poultry; enter 800 AU in the 'New AU' column, row 4, and multiply it by $ 0.15:

  (800 AU) x ($ 0.15 per AU) = $ 120.00

- **Example 2**: An existing poultry operation is expanding from an 'Existing AUC' of 250 AU to a 'Total Proposed AUC' of 2,000 AU and has not paid the indemnity fee for animals housed in the existing buildings. Calculate the indemnity fee as follows: The 'Total Proposed AUC' is between 1,000 AU and 3,000 AU; the animal specie is poultry and the indemnity fee has not previously been paid, enter 2,000 AU in the 'New AU' column on row 3, and multiply it by $0.06:

  (2,000 AU) x ($ 0.06 per AU) = $ 120.00

- **Example 3**: If you are proposing a new swine confinement feeding operation with a 'Total Proposed AUC' of 3,500 AU, enter 3,500 AU in the 'New AU' column, row 6 and multiply it by $ 0.20:

  (3,500 AU) x ($ 0.20 per AU) = $ 700.00

- **Example 4**: If you are applying for a construction permit but you are not increasing the AUC of the operation, and has previously paid the applicable indemnity for the animals housed in the existing buildings, there is no indemnity fee due ($ 0.00). If no indemnity fee is due, do not submit this page.

Indemnity Fee Table:

Total Proposed AUC (After Permit (from column B, Table 1)	Row	Animal species	New AU (from column C Table 1)	x	Fee per AU	Indemnity Fee
Less than 1,000 AU	1	Poultry		x	$ 0.04 =	
	2	Other		x	$ 0.10 =	
1,000 AU or more to less than 3,000 AU	3	Poultry		x	$ 0.06 =	
	4	Other	1920	x	$ 0.15 =	288
3,000 AU or more	5	Poultry		x	$ 0.08 =	
	6	Other		x	$ 0.20 =	

ITEM 9 (Cont.)

Filing Fees Form for Construction Permits

CASHIER'S USE ONLY
0473-542-473A-0431
0474-542-474A-0431
Facility ID #
County

Credit fees to: Anthony Heiden

Name of operation: 110 Pork Shop

INSTRUCTIONS:

1. If the operation is applying for a construction permit enclose a payment for the following:
   ☒ Construction application fee $250.00.
   (Note: This fee is non-refundable)

2. A manure management plan must be submitted with a filing fee.
   ☒ Manure management plan filing fee $250.00
   (Note: This fee is non-refundable)

3. If this is a change in ownership then indemnity fees must also be paid on the current (existing) total AUC at the appropriate rate on page 7.
   ☐ Indemnity fee due to ownership change $ _____

4. Total filing fees: Add the fees paid in items 1, 2 and 3 (above): $ 500.00

SUMMARY:

- Manure Storage Indemnity Fee (see previous page) to be deposited in the Manure Storage Indemnity Fee Fund (474)	$	288.00
- Total filing fees (see item 4 on this page) to be deposited in the Animal Agriculture Compliance Fund (473)	$	500.00
TOTAL DUE:	$	788.00

Make check payable to: Iowa Department of Natural Resources or Iowa DNR; and send it along with the construction application documents (See Submittal Checklist No. 1 or 2, pages 10-15.) Note: Do not send this fee to the county.

ITEM 10

COUNTY VERIFICATION RECEIPT OF DNR CONSTRUCTION PERMIT APPLICATION

This form provides proof that the County Board of Supervisors has been provided with a complete copy of the construction permit application documents (everything except the fees) for the confinement feeding operation or a complete MMP has been provided to the County because manure will be applied in that county:

Applicant: Anthony Heider Telephone: 515-689-0358

Name of operation: 110 Pork Shop

Location:

SE	SW	06	T89N; R22W	Alden	Hardin
(¼ ¼)	(¼)	(Section)	(Tier & Range)	(Name of Township)	(County)

Documents being submitted to the county:

- ☒ Construction permit application form: submit items 1 to 9 (see Submittal Checklist No. 1 or 2)
- ☒ Attachment 1 - Aerial photos: Must clearly show the location of the proposed confinement feeding operation structure[1] and that all the separation distances are met, including those claimed for points in the master matrix (if applicable).
- ☒ Attachment 2 - Statement of design certification, submit any of the following (see Checklist No. 1 or 2):
  - ☒ Construction Design Statement form
  - ☐ Professional Engineer (PE) Design Certification form
  - ☐ Engineering report, construction plans and technical specifications
  - ☐ In addition, if proposing an unformed manure storage structure[3] or an egg washwater storage structure submit documentation required in Addemdum "A" of this construction application form.
- ☒ Attachment 3 - Manure management plan (MMP).
- ☒ Attachment 4 - Master Matrix (if required). You must include supporting documents (see Checklist No. 1 or 2)

THIS SECTION IS RESERVED FOR THE COUNTY

As soon as DNR receives a construction permit application, the DNR will fax your County Auditor a "Courtesy reminder letter" explaining what actions your County Board of Supervisors must complete and the deadlines.

Public Notice is required for **all** construction permit applications, including those applications not required to be evaluated with the master matrix and applications in counties not participating in the Master matrix.

Counties participating in the master matrix: the county's master matrix evaluation and county's recommendation is required for the following cases:

- A new confinement feeding operation that is applying for a construction permit
- An existing confinement feeding operation that was first constructed on or after April 1, 2002 that is applying for a construction permit.
- An existing confinement feeding operation that was first constructed prior to April 1, 2002 that is applying for a construction permit with an animal unit capacity (AUC) is 1,667 animal units (AU) or more.

I have read and acknowledge the county's duty with this construction permit application, as specified in 567 IAC 65.10 and Iowa Code 459.304. On behalf of the Board of Supervisors for:

COUNTY: Hardin

NAME: Mindy McLeland

TITLE: Deputy Auditor

(Member of the County Board of Supervisors or its designated official/employee)

FILED
JUN - 4 2020
HARDIN COUNTY AUDITOR

Date: 6-4-, 20 20.

If you do not receive the courtesy reminder letter within a reasonable time, or if you have any questions, please contact the animal feeding operations (AFO) Program at (712) 262-4177 or visit www.IowaDNR.gov

Construction Design Statement (CDS)

Instructions:

1. This form is for new or expanding confinement feeding operations with an AUC[1] of more than 500 AU, not required to have a professional engineer (PE)[2], that are proposing to construct a formed manure storage structure[3].
2. Complete and submit Sections 1, 2 and 3 (pages 1 to 6).
3. Complete and submit Section 4 (page 6) only if you are applying for a construction permit and are constructing three or more confinement feeding operation structures[4].
4. Mail only pages 1 to 6, as instructed on page 6 and 7. Do not mail the remainder of this form.
5. If the site-specific design is sealed by a PE[2], do not use this CDS instead use DNR Form 542-8122.

Section 1 - Information about the proposed formed manure storage structure[3](s)

A) Information about the operation:

Name of operation: 110 Pork Shop Facility ID No.: N/A

Location:

SE	SW	06	T89N;R22W	Alden	Hardin
(¼ ¼)	(¼)	(Section)	(Tier & Range)	(Name of Township)	(County)

B) Description of the proposed formed manure storage structure[3]. Include dimensions (length, width, or diameter, depth). Indicate if it is aboveground or belowground; covered or uncovered, made of concrete or steel, address location of pit fans, if applicable, and address water line entry into buildings. If necessary attach more pages:

(1) 101'-10" x 399' x 8' deep covered and slatted below ground manure pit. There will be (16) 6' x 6' concrete pumpouts. All pit fans will be on pumpout covers. The waterline will enter through the wood framed wall. There will be no penetration of water lines through the pit wall.

C) Utilizing Rural Water System and Domestic Sewage Disposal

☐ The proposed facility will utilize rural water and the providing rural water system has been notified and is aware of the proposed increase in water use.

☒ I understand that no domestic wastewater (toilets, showers, or sinks) or laundry facilities can be discharged to the manure storage structure.

D) Aerial photos: Aerial photos must be submitted that clearly show the location of all existing and proposed confinement feeding operation structures and show at least a one-mile radius around the structures. The photos must either show roads on the north and south or east and west sides of a section (so that a mile distance is apparent), or include a distance scale.

The photo(s) must show that the proposed structures comply with all statutory minimum required separation distances to the objects listed below:

- Residences (not owned by the permit applicant), churches, businesses, schools, public use areas
- Water wells (depends on type)
- Major water sources, wellhead or cistern of an agricultural drainage well or known sinkholes
- Water sources (other than major water sources) and surface intakes of an agricultural drainage well
- Designated wetlands
- Road right-of-way

The separation distance to each of the above objects must be noted with a straight line between the proposed structure(s) and the object. If any of the above objects is not located within one mile from the proposed structures, note the fact on the photo(s) or use additional pages. (Example: "No agricultural drainage wells within one mile.")

All separation distances that are not clearly in excess of the required minimum separation distance must be measured according to 567 IAC 65.11(9) using standard survey methods. Go to the DNR Fact Sheet Page on our website and select DNR fact sheet "Distance Requirements for Construction" to find the required separation distances. Or, go directly to the Minimum Separation Distances for Construction or Expansion of Confinement Feeding Operation Structures Form. An example aerial photo can be found on pages 18 to 19 of the AFO Construction Permit Application (DNR Form 542-1428), or at the previously listed link.

---

[1] To determine the AUC see the 'Manure Storage Indemnity Fee' (Form 542-4021) or the 'Construction Permit Application' (Form 542-1428), or visit http://www.iowadnr.gov

[2] PE is a professional engineer licensed in the state of Iowa or a NRCS-Engineer working for the USDA-Natural Resources Conservation Service (NRCS).

[3] Formed manure storage structure means a covered or uncovered concrete or steel tank, including concrete pits below the floor.

[4] Confinement feeding operation structure = A confinement building, a formed or unformed manure storage structure, or an egg washwater storage structure.

Note: If a master matrix is required, the photos must also show that the additional separation distances required for any points claimed in matrix criteria one through ten will be met for the objects listed above. Note the additional separation distance by drawing a straight line between the proposed structures and the matrix item.

) **Karst Determination:** Go to DNR AFO Siting Atlas at http://programs.iowadnr.gov/maps/afo/. Search for your site by either scrolling into your location or entering an address or legal description in the bottom search bar. Left click on the location of your proposed structure. Make sure the karst layer box is checked on the map layers. If you cannot access the map, or if you have questions about this issue, contact the AFO Engineer at 712-262-4177. Check one of the following:

☒ The site is not in karst or potential karst. Print and enclose the map with the name and location of the site clearly marked.

☐ The Siting Atlas has indicated that the site is in karst. The upgraded concrete standards of 567 IAC 65.15(14)"c" must be used. Complete and sign Section 3.H (page 5).

F) Alluvial Soils Determination: Go to the AFO Siting Atlas as described above. Make sure the alluvial box is checked on the map layers. If you cannot access the map, or if you have questions about this issue, contact DNR Flood Plain at 866-849-0321. Check one of the following:

☒ The site is not in alluvial soils. Print and enclose the map with the name and location of the site clearly marked.

☐ If the site is in alluvial soils contact DNR Flood Plain at 866-849-0321. You will be required to submit a petition for a declaratory order if less than 1000 AU or request a flood plain determination if 1000 AU or greater. After receiving Flood Plain determination, submit one of the following:

☐ Include correspondence from the DNR showing the site is not in 100-year flood plain or does not require a Flood Plain permit.

☐ Include copy of the Flood Plain permit if a Flood Plain permit is required.

NOTE: You may not be in a flood plain per DNR, however in a County Flood Hazard Area and need a county permit.

Section 2 - Manure management plan:

☒ An original manure management plan (MMP) is enclosed with this form, even if a MMP was previously filed.

Owner's Name (print)	Owner's Signature	Date
Anthony Heiden	Anthony Heiden	5-29-20

Section 3 - Construction design standards: The person responsible for constructing the formed manure storage structure(s)[3] must complete Section 3.

A) Liquid and semi-liquid manure: The proposed formed manure storage structure[3] will be (check one):

A.1 ☒ A non-circular concrete tank, belowground, with walls laterally braced or below the building concrete pit designed according to 567 IAC Chapter 65, Appendix D.

A.2 ☐ A non-circular concrete tank, belowground, walls designed according to MidWest Plan Service (MWPS), publication MWPS-36. Include design calculations.

A.3 ☐ A circular concrete tank, walls designed according to MidWest Plan Service (MWPS), publication MWPS TR-9. Include design calculations.

A.4 ☐ Will be made of steel, constructed aboveground according to the manufacturer's recommendations.

B) Dry manure: The proposed formed manure storage structure[3] will be (check one):

B.1 ☐ An aboveground concrete tank, with walls designed according to MWPS-36. Include design calculations.

B.2 ☐ Will be made of steel, constructed aboveground according to the manufacturer's recommendations.

B.3 ☐ Will be a belowground or partially belowground concrete tank, with walls laterally braced designed according to 567 IAC Chapter 65, Appendix D or MWPS-36. Include design calculations.

C) **Details of the proposed design:** Submit an additional completed copy of this page 3 for each formed manure storage structure[3] that have <u>different</u> dimensions. Complete all of the following information:

Number of buildings: 1 Building name: 110 Pork Shop

Dimensions of proposed formed manure storage structure[3]

	Length	Width	Height or depth	Wall thickness	Diameter (circular tanks only)
Feet	399	101	8	0	
Inches	0	10	0	8	

To determine the appropriate vertical steel in walls, first check one of the following boxes (must check one):

a. ☐ To use Tables D-1 and D-2 (on pages 7-8), backfilling of walls shall be performed with gravel, sand, silt, and clay mixtures (less than 50 percent fines), with coarse sand with silt or clay (less than 50 percent fines), or cleaner granular material (see page 9 for the unified soils classification). You will need to submit a copy of a USDA soil survey map with the proposed location of the formed manure storage structures[3] clearly marked showing the unified soil classification; or a statement signed by a qualified organization or NRCS staff.

b. ☒ Use Tables D-3 and D-4 (on pages 8-9) if backfilling of walls will be performed with soils that are unknown or with low plasticity silts and clays with some sand or gravel (50 percent or more fines); or fine sands with silt or clay (less than 50 percent fines); or low to medium plasticity silts and clays with little sand or gravel (50 percent or more fines); or high plasticity silts and clays (see page 9 for unified soils classification). You must use Tables D-3 and D-4 if you do not submit the soils information requested in box "a", above.

Maximum spacing of steel, in inches

Description of reinforcing steel in walls	Proposed vertical steel in walls (see boxes "a" and "b", above)				Proposed horizontal steel in walls (use Table D-5)
	Walls where vehicles are <u>not</u> allowed within 5 feet (use Table D-1)[a]	All walls with pumpout ports and walls where vehicles are allowed within 5 feet (use Table D-2)[a]	Walls where vehicles are <u>not</u> allowed within 5 feet (use Table D-3)[b]	All walls with pumpout ports and walls where vehicles are allowed within 5 feet (use Table D-4)[b]	
Grade 40, No. 4					
Grade 40, No. 5					
Grade 60, No. 4			9	9	12
Grade 60, No. 5					

D) **Aboveground tanks or partially aboveground tanks:** Liquid and semi-liquid manure (check the following box):

☐ If the proposed tank is to be constructed <u>aboveground or partially aboveground</u> and will have an external outlet or inlet below the liquid level, the tank will also be constructed according to the 567 IAC 65.15(20).

E) **Steel Tanks:** Certification that the tank will be constructed according to the tank manufacturer's specifications:

Name of tank manufacturer company: _____

Address: _____

Telephone: _____ Fax: _____

F) **Additional construction design standards:**

To determine the additional requirements set forth in 567 IAC 65.15(14) that would apply to the proposed formed manure storage structure[3], check any of the following 3 boxes based on the information entered on Sections 3.A or 3.B (page 2):

☒ If you checked boxes A.1, A.2, A.3 or B.3 (on page 2) <u>all</u> of the following 15 additional requirements apply. Complete the numbered items 1 to 15 (below).

☐ If you checked box B.1 (on page 2), only the requirements of numbered items 1, 3, 4, 5, 6, 8 and 12 apply and need to check those boxes (below).

☐ If you checked boxes A.4 or B.2 (on page 2) and the steel tank will have a concrete floor, only the requirements of numbered items 1, 2, 3, 4, 5, 8, 9, 12, apply and need to check those boxes (below).

Additional Requirements that will be followed during construction of the formed manure storage structure(s)[3]:

1. Site preparation (check the following box):
   ☒ The finished subgrade of a formed manure storage structure shall be graded and compacted to provide a uniform and level base and shall be free of vegetation, manure and debris. For the purpose of this subrule, "uniform" means a finished subgrade with similar soils.

2. Groundwater separation requirements (check one of the following boxes):
   ☒ When the groundwater table, as determined in 65.15(7)"c," is above the bottom of the formed structure, a drain tile shall be installed along the footings to artificially lower the groundwater table pursuant to 65.15(7)"b"(2). The drain tile shall be placed within 3 feet of the footings as indicated in Appendix D, Figure D-1, at the end of this chapter and shall be covered with a minimum of 2 inches of gravel, granular material, fabric or a combination of these materials to prevent plugging the drain tile. A device to allow monitoring of the water in the drainage tile lines installed to lower the groundwater table and a device to allow shutoff of the drainage tile lines shall be installed if the drainage tile lines do not have a surface outlet accessible on the property where the formed manure storage structure is located. **Perimeter tiles must be tied into existing tile, day light, or have an operating sump pump installed in tile riser. Perimeter tiles CANNOT dead end at riser or monitoring port.**

   ☐ In lieu of the drain tile, a certification signed by a PE[2], a groundwater professional certified pursuant to 567 Chapter 134, or a qualified staff from NRCS, is being submitted indicating that the groundwater elevation, according to 65.15(7)"c", is below the bottom of the formed structure.

3. Minimum as-placed concrete compressive strength (check the following box):
   ☒ All concrete shall have the following minimum as-placed compressive strengths and shall meet American Society for Testing and Materials (ASTM) standard ASTM C 94: 4,000 pounds per square inch (psi) for walls, floors, beams, columns and pumpouts and 3,000 psi for the footings. The average concrete strength by testing shall not be below design strength. No single test result shall be more than 500 psi less than the minimum compressive strength.

4. Cement and aggregates specifications (check the following box):
   ☒ Cementitious materials shall consist of Portland cement conforming to ASTM C 150. Aggregates shall conform to ASTM C 33. Blended cements in conformance with ASTM C 595 are allowed only for concrete placed between March 15 and October 15. Portland-pozzolan cement or Portland blast furnace slag blended cements shall contain at least 75 percent, by mass, of Portland cement.

5. Concrete consolidation and vibration requirements (check the following box):
   ☒ All concrete placed for walls shall be consolidated or vibrated, by manual or mechanical means, or a combination, in a manner which meets ACI 309.

6. Minimum rebar specifications: (check the following box):
   ☒ All rebar used shall be a minimum of grade 40 steel. All rebar, with the exception of rebar dowels connecting the walls to the floor or footings, shall be secured and tied in place prior to the placing of concrete.

7. Wall reinforcement placement specifications (check the following box):
   ☒ All wall reinforcement shall be placed so as to have a rebar cover of 2 inches from the inside face of the wall for a belowground manure storage structure. Vertical wall reinforcement should be placed closest to the inside face. Rebar placement shall not exceed tolerances specified in ACI 318.

8. Minimum floor specifications. Complete part a) and b):
   a) Floor thickness requirements (check the following box):
      ☒ The floor slab shall be a minimum of 5 inches thick. Nondestructive methods to verify the floor slab thickness may be required by the department. The results shall indicate that at least 95 percent of the floor slab area meets the minimum required thickness. In no case shall the floor slab thickness be less than 4½ inches.

   b) The floor slab reinforcement shall be located in the middle of the thickness of the floor slab (check one of the following boxes):
      ☒ Formed manure storage structures with a depth of 4 feet or more shall have primary reinforcement consisting of a minimum of #4 rebar placed a maximum of 18 inches on center in each direction placed in a single mat.
      ☐ Formed manure storage structure with a depth less than 4 feet shall have shrinkage reinforcement consisting of a minimum of 6 × 6-W1.4 × W1.4 welded wire fabric.

9. Minimum footing specifications (check the following box):
   ☒ The footing or the area where the floor comes in contact with the walls and columns shall have a thickness equal to the wall thickness, but in no case be less than 8 inches, and the width shall be at least twice the thickness of the footing. All exterior walls shall have footings below the frostline. Tolerances shall not exceed -½ inch of the minimum footing dimensions.

10. Requirement to connect walls to footings (check one of the following boxes):
   ☐ The vertical steel of all walls shall be extended into the footing, and be bent at 90°, OR
   ☒ A separate dowel shall be installed as a #4 rebar that is bent at 90° with at least 20 inches of rebar in the wall and extended into the footing within 3 inches of the bottom of the footing and extended at least 3 inches horizontally, as indicated in Appendix D, Figure D-1 (page 10). Dowel spacing (bend or extended) shall be the same as the spacing for the vertical rebar.
   ☐ As an alternative to the 90°bend, the dowel may be extended at least 12 inches into the footing, with a minimum concrete cover of 3 inches at the bottom, as indicated in Appendix D, Figure D-1 (page 10). Dowel spacing (bend or extended) shall be the same as the spacing for the vertical rebar.
   ☐ In lieu of dowels, mechanical means or alternate methods may be used as anchorage of interior walls to footings. Please submit structural calculations and details of this proposal.

11. Concrete forms specifications (check the following box):
   ☒ All walls shall be formed with rigid forming systems and shall not be earth-formed. Form ties shall be non-removable.

12. Curing of concrete requirements (check the following box):
   ☒ All concrete shall be cured for at least seven days after placing, in a manner which meets ACI 308, by maintaining adequate moisture or preventing evaporation. Proper curing shall be done by ponding, spraying or fogging water; or by using a curing compound that meets ASTM C 309; or by using wet burlap, plastic sheets or similar materials.

13. Construction joints and waterstops specifications (check the following box):
   ☒ All construction joints in exterior walls shall be constructed to prevent discontinuity of steel and have properly spliced rebar placed through the joint. Waterstops shall be installed in all areas where fresh concrete will meet hardened concrete as indicated in Appendix D, Figures D-1 and D-2, at the end of this chapter. The waterstops shall be made of plastic, rolled bentonite or similar materials approved by the department.

14. Backfilling of walls specifications (check the following box):
   ☒ Backfilling of the walls shall not start until the floor slats or permanent bracing have been installed. Backfilling shall be performed with material free of vegetation, large rocks or debris.

15. Additional design requirements (check the following box, if applicable):
   ☐ A formed manure storage structure with a depth greater than 12 feet shall be designed by a PE or an NRCS engineer.

G) Construction Certification: The person responsible for constructing the formed manure storage structure[3] must sign this page. Any change(s) to the specifications of the formed manure storage structure must be first approved by DNR:

"I hereby certify that I have read and understand the minimum design and construction standards of Iowa Code chapter 459, Subchapter III, and the 567 Iowa Administrative Code (IAC) 65.15(14) "Minimum concrete standards" or 567 IAC 65 (if other than concrete)." The proposed formed manure storage structure(s)[3] at the operation:

Name of operation: 110 Pork Shop County: Hardin

Owner's name: Anthony Heiden

will be constructed in accordance with these minimum requirements. Included with this certification are:

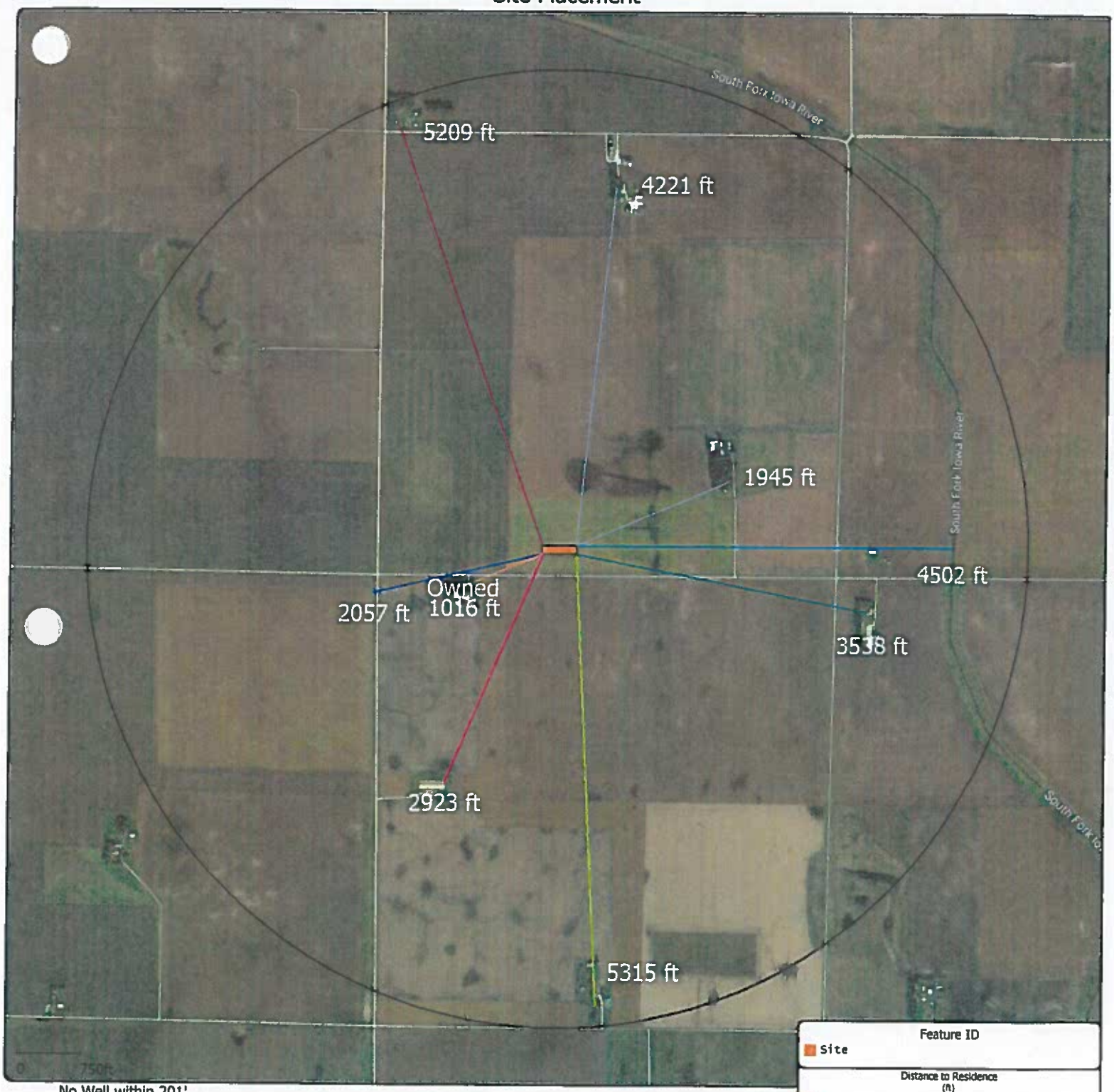
☒ Page 1-3, for each formed manure storage structure[3] that have different dimensions
☒ Pages 4 to 6 (applicable sections)
☐ Other documents (specify): _____

Matt Cunningham	[signature]	5-28-20
(Print name)	(Signature)	(Date)
Premier Ag Systems	105 Johnson St NE Elkader, IA 52043	563-245-9000
(Company)	(Address)	(Phone No.)

(See page 7 for mailing instructions)

110 Pork Shop

Site Placement



No Well within 201'
No Public Use within 4001'
No Educational, Religious, or Commercial Enterprise within 3376'
No Wetlands within 2500'
No HQ & Protected Water within 4000'

Date: 05/28/2020
110 Pork Shop
Hardin County, IA
Section 06, T89N, R22W

Latitude : 42.54422809

Longitude : -93.49201859

pinnacle
620 Country Club Road
Iowa Falls, Iowa 50126
Office: 641.648.7300
Fax: 641.648.7310
www.pinnacleiowa.com

Feature ID
- Site

Distance to Residence (ft)
- 1016
- 1945
- 5315
- 5209
- 4221
- 3538

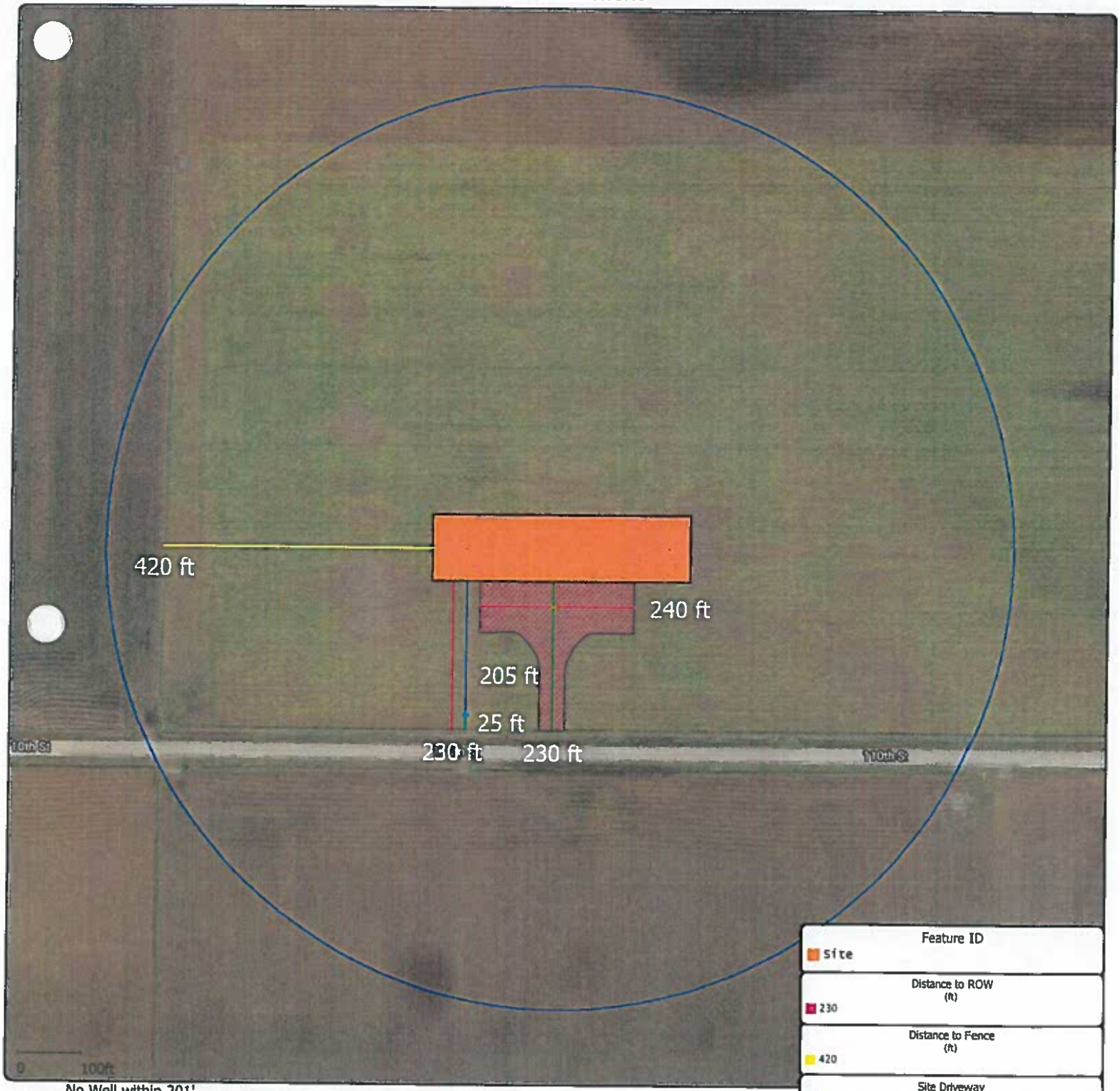
Distance to Water (ft)
- 4502
- 2057

Distance to CAFO (ft)
- 2923

1 Mile Buffer

110 Pork Shop

Site Placement



No Well within 201'
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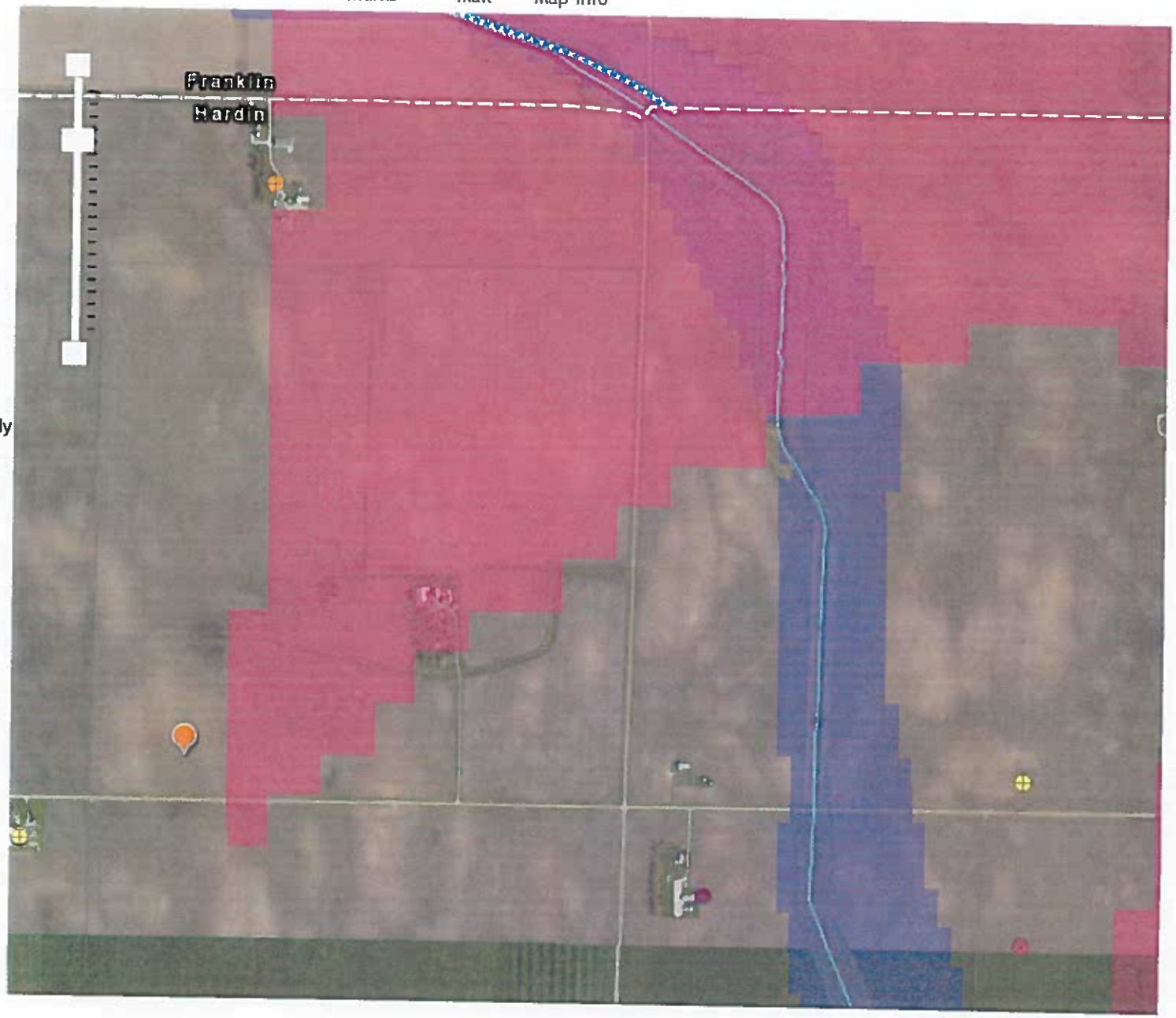
DNR IOWA
DEPARTMENT OF NATURAL RESOURCES

Basemaps Measure Bookmarks Mail Map Info

Map layers Legend

AFO Siting Data
- Sinkholes
- Ag Drainage Well
- Wells
- Animal Feeding Operation
- Public Drainage Infrastructure
- Drainage Districts
- High Qty Wtr Resource (Rivers)
- High Qty Wtr Resource (Waterbody
- Major Water Source (Rivers)
- Major Water Source (Lake)
- Surface Water
- Public Land
- Public Land Survey (PLSS)
- Sinkhole or Potential Karst
- Sinkhole w/ 1000 ft radius
- Karst and Potential Karst
- 100 Year Flood Plain

Alluvial Soils
- Alluvial Aquifer
- Alluvial Soils



National Flood Hazard Layer FIRMette

FEMA

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) Zone A, V, A99
- With BFE or Depth Zone AE, AO, AH, VE, AR
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
- Future Conditions 1% Annual Chance Flood Hazard Zone X
- Area with Reduced Flood Risk due to Levee. See Notes. Zone X
- Area with Flood Risk due to Levee Zone D

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard Zone X
- Effective LOMRs
- Area of Undetermined Flood Hazard Zone D

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represe an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/9/2020 at 10:25:01 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

APPENDIX C MASTER MATRIX

Proposed Site Characteristics

The following scoring criteria apply to the site of the proposed confinement feeding operation. Mark <u>one</u> score under each criterion selected by the applicant. The proposed site must obtain a minimum overall score of 440 and a score of 53.38 in the "air" subcategory, a score of 67.75 in the "water" subcategory and a score of 101.13 in the "community impacts" subcategory.

1. Additional separation distance, above minimum requirements, from proposed confinement structure to the closest:
   - * Residence not owned by the owner of the confinement feeding operation,
   - * Hospital,
   - * Nursing home, or
   - * Licensed or registered child care facility.

1945' - 1875' = 50'

0

	Score	Air	Water	Community
250 feet to 500 feet	25	16.25		8.75
501 feet to 750 feet	45	29.25		17.50
751 feet to 1,000 feet	65	42.25		22.75
1,001 feet to 1,250 feet	85	55.25		29.75
1,251 feet or more	100	65.00		35.00

(A) Refer to the construction permit application package to determine the animal unit capacity (or animal weight capacity if an expansion) of the proposed confinement feeding operation. Then refer to Table 6 of 567--Chapter 65 to determine minimum required separation distances.

(B) The department will award points only for the single building, of the four listed above, closest to the proposed confinement feeding operation.

(C) "Licensed child care center" -- a facility licensed by the department of human services providing child care or preschool services for seven or more children, except when the facility is registered as a child care home.

(D) "Registered child development homes" - child care providers certify that they comply with rules adopted by the department of human services. This process is voluntary for providers caring for five or fewer children and mandatory for providers caring for six or more children.

(E) A full listing of licensed and registered child care facilities is available at county offices of the department of human services.

2. Additional separation distance, above minimum requirements, from proposed confinement structure to the closest public use area.

2500' + 1501' = NONE WITHIN 4001'

	Score	Air	Water	Community
250 feet to 500 feet	5	2.00		3.00
501 feet to 750 feet	10	4.00		6.00
751 feet to 1,000 feet	15	6.00		9.00
1,001 feet to 1,250 feet	20	8.00		12.00
1,251 feet to 1,500	25	10.00		15.00
1,501 feet or more	30	12.00		18.00

(A) Refer to the construction permit application package to determine the animal unit capacity (or animal weight capacity if an expansion) of the proposed confinement feeding operation. Then refer to Table 6 of 567--Chapter 65 to determine minimum required separation distances.

(B) "Public use area" - a portion of land owned by the United States, the state, or a political subdivision with facilities which attract the public to congregate and remain in the area for significant periods of time. Facilities include, but are not limited to, picnic grounds, campgrounds, cemeteries, lodges, shelter houses, playground equipment, lakes as listed in Table 2 of 567--Chapter 65, and swimming beaches. It does not include a highway, road right-of-way, parking areas, recreational trails or other areas where the public passes through, but does not congregate or remain in the area for significant periods of time.

3. Additional separation distance, above minimum requirements, from proposed confinement structure to the closest:
   * Educational institution,
   * Religious institution, or
   * Commercial enterprise.

1875' + 1501' = NONE WITHIN 3376'

	Score	Air	Water	Community
250 feet to 500 feet	5	2.00		3.00
501 feet to 750 feet	10	4.00		6.00
751 feet to 1,000 feet	15	6.00		9.00
1,001 feet to 1,250 feet	20	8.00		12.00
1,251 feet to 1,500	25	10.00		15.00
1,501 feet or more	~~30~~	12.00		18.00

(A) Refer to the construction permit application package to determine the animal unit capacity (or animal weight capacity if an expansion) of the proposed confinement feeding operation. Then refer to Table 6 of 567--Chapter 65 to determine minimum required separation distances.
(B) The department will award points only for the single building, of the three listed above, closest to the proposed confinement feeding operation.
(C) "Educational institution" - a building in which an organized course of study or training is offered to students enrolled in kindergarten through grade 12 and served by local school districts, accredited or approved nonpublic schools, area educational agencies, community colleges, institutions of higher education under the control of the state board of regents, and accredited independent colleges and universities.
(D) "Religious institution" - a building in which an active congregation is devoted to worship.
(E) "Commercial enterprise" - a building which is used as a part of a business that manufactures goods, delivers services, or sells goods or services, which is customarily and regularly used by the general public during the entire calendar year and which is connected to electric, water, and sewer systems. A commercial enterprise does not include a farm operation.

4. Additional separation distance, above minimum requirement of 500 feet, from proposed confinement structure to the closest water source.

2057' - 500' = 1557'

	Score	Air	Water	Community
250 feet to 500 feet	5		5.00	
501 feet to 750 feet	10		10.00	
751 feet to 1,000 feet	15		15.00	
1,001 feet to 1,250 feet	20		20.00	
1,251 feet to 1,500	25		25.00	
1,501 feet or more	30		30.00	

"Water source" - a lake, river, reservoir, creek, stream, ditch, or other body of water or channel having definite banks and a bed with water flow, except lakes or ponds without an outlet to which only one landowner is riparian.

5. Separation distance of 300 feet or more from the proposed confinement structure to the nearest thoroughfare.

	Score	Air	Water	Community
300 feet or more	30	9.00		21.00

(A) "Thoroughfare" - a road, street, bridge, or highway open to the public and constructed or maintained by the state or a political subdivision.
(B) The 300-foot distance includes the 100-foot minimum setback plus additional 200 feet.

6. Additional separation distance, above minimum requirements, from proposed confinement structure to the closest critical public area.

2500' + 500' = NONE WITHIN 3000'

	~~Score~~	Air	Water	Community
500 feet or more	10	4.00		6.00

(A) All critical public areas as defined in 567--65.1(455B), are public use areas, and therefore subject to public use area minimum separation distances.
(B) Refer to the construction permit application package to determine the animal unit capacity (or animal weight capacity if an expansion) of the proposed confinement feeding operation. Then refer to Table 6 of 567--Chapter 65 to determine minimum required separation distance.

7. Proposed confinement structure is at least two times the minimum required separation distance from all private and public water wells.

DEEP WELL 100' X 2 = 200' NONE WITHIN 201'

	Score	Air	Water	Community
Two times the minimum separation distance	30		24.00	6.00

Refer to Table 6 of 567--Chapter 65 for minimum required separation distances to wells.

8. Additional separation distance, above the minimum requirement of 1,000 feet, from proposed confinement structure to the closest:

* Agricultural drainage well,
* Known sinkhole, or
* Major water source.

1000' + 2501' = NONE WITHIN 3501'

	Score	Air	Water	Community
250 feet to 500 feet	5	0.50	2.50	2.00
501 feet to 750 feet	10	1.00	5.00	4.00
751 feet to 1,000 feet	15	1.50	7.50	6.00
1,001 feet to 1,250 feet	20	2.00	10.00	8.00
1,251 feet to 1,500 feet	25	2.50	12.50	10.00
1,501 feet to 1,750 feet	30	3.00	15.00	12.00
1,751 feet to 2,000 feet	35	3.50	17.50	14.00
2,001 feet to 2,250 feet	40	4.00	20.00	16.00
2,251 feet to 2,500 feet	45	4.50	22.50	18.00
2,501 feet or more	50	5.00	25.00	20.00

(A) The department will award points only for the single item, of the three listed above, that is closest to the proposed confinement feeding operation.
(B) "Agricultural drainage wells" - include surface intakes, cisterns and wellheads of agricultural drainage wells.
(C) "Major water source" - a lake, reservoir, river or stream located within the territorial limits of the state, or any marginal river area adjacent to the state which can support a floating vessel capable of carrying one or more persons during a total of a six-month period in one out of ten years, excluding periods of flooding. Major water sources in the state are listed in Tables 1 and 2 in 567--Chapter 65.

9. Distance between the proposed confinement structure and the nearest confinement facility that has a submitted department manure management plan.

	Score	Air	Water	Community
Three-quarter of a mile or more (3,960 feet)	25	7.50	7.50	10.00

Confinement facilities include swine, poultry, and dairy and beef cattle.

10. Separation distance from proposed confinement structure to closest:

* High quality (HQ) waters,
* High quality resource (HQR) waters, or
* Protected water areas (PWA)

is at least two times the minimum required separation distance

1000' X 2 = 2000' NONE WITHIN 2001'

	Score	Air	Water	Community
Two times the minimum separation distance	30		22.50	7.50

(A) The department will award points only for the single item, of the three listed above, closest to the proposed confinement feeding operation.
(B) HQ waters are identified in 567--Chapter 61.
(C) HQR waters are identified in 567--Chapter 61.
(D) A listing of PWAs is available at:
http://www.iowadnr.gov/Recreation/CanoeingKayaking/StreamCare/ProtectedWaterAreas.aspx

11. Air quality modeling results demonstrating an annoyance level less than 2 percent of the time for residences within two times the minimum separation distance.

	Score	Air	Water	Community
University of Minnesota OFFSET model results demonstrating an annoyance level less than 2 percent of the time	10	6.00		4.00e

(A) OFFSET can be found at http://www.extension.umn.edu/agriculture/manure-management-and-air-quality/feedlots-and-manure-storage/offset-odor-from-feedlots/. For more information, contact Dr. Larry Jacobson, University of Minnesota, (612) 625-8288, jacob007@tc.umn.edu.
(B) A residence that has a signed waiver for the minimum separation distance cannot be included in the model. (C) Only the OFFSET model is acceptable until the department recognizes other air quality models

12. Liquid manure storage structure is covered.

	Score	Air	Water	Community
Covered liquid manure storage	30	27.00		3.00

(A) "Covered" - organic or inorganic material, placed upon an animal feeding operation structure used to store manure, which significantly reduces the exchange of gases between the stored manure and the outside air. Organic materials include, but are not limited to, a layer of chopped straw, other crop residue, or a naturally occurring crust on the surface of the stored manure. Inorganic materials include, but are not limited to, wood, steel, aluminum, rubber, plastic, or Styrofoam. The materials shall shield at least 90 percent of the surface area of the stored manure from the outside air. Cover shall include an organic or inorganic material which current scientific research shows reduces detectable odor by at least 75 percent. A formed manure storage structure directly beneath a floor where animals are housed in a confinement feeding operation is deemed to be covered.
(B) The design, operation and maintenance plan for the manure cover must be in the construction permit application and made a condition in the approved construction permit.

13. Construction permit application contains design, construction, operation and maintenance plan for emergency containment area at manure storage structure pump-out area.

	Score	Air	Water	Community
Emergency containment area	20		18.00	2.00

(A) The emergency containment area must be able to contain at least 5 percent of the total volume capacity of the manure storage structure.
(B) The emergency containment area must be constructed on soils that are fine-grained and have low permeability.
(C) If manure is spilled into the emergency containment area, the spill must be reported to the department within six hours of onset or discovery.
(D) The design, construction, operation and maintenance plan for the emergency containment area must be in the construction permit application and made a condition in the approved construction permit.

14. Installation of a filter(s) designed to reduce odors from confinement building(s) exhaust fan(s).

	Score	Air	Water	Community
Installation of filter(s)	10	8.00		2.00

The design, operation and maintenance plan for the filter(s) must be in the construction permit application and made a condition in the approved construction permit.

15. Utilization of landscaping around confinement structure.

	Score	Air	Water	Community
Utilization of Landscaping	20	10.00		10.00

The design, operation and maintenance plan for the landscaping must be in the construction permit application and made a condition in the approved construction permit. The design should contain at least three rows of trees and shrubs, of both fast and slow-growing species that are well suited for the site.

16. Enhancement, above minimum requirements, of structures used in stockpiling and composting activities, such as an impermeable pad and a roof or cover.

	Score	Air	Water	Community
Stockpile and compost facility enhancements	30	9.00	18.00	3.00

(A) The design, operation and maintenance plan for the stockpile or compost structure enhancements must be in the construction permit application and made a condition in the approved construction permit.
(B) The stockpile or compost structures must be located on land adjacent or contiguous to the confinement building.

17. Proposed manure storage structure is formed

	Score	Air	Water	Community
Formed manure storage structure	30		27.00	3.00

(A) "Formed manure storage structure" -a covered or uncovered impoundment used to store manure from an animal feeding operation, which has walls and a floor constructed of concrete, concrete block, wood, steel, or similar materials. Similar materials may include, but are not limited to, plastic, rubber, fiberglass, or other synthetic materials. Materials used in a formed manure storage structure shall have the structural integrity to withstand expected internal and external load pressures.
(B) The design, operation and maintenance plan for the formed manure storage structure must be in the construction permit application and made a condition in the approved construction permit.

18. Manure storage structure is aerated to meet departmental standards as an aerobic structure, if aeration is not already required by the department.

	Score	Air	Water	Community
Aerated manure storage structure	10	8.00		2.00

(A) Aerobic structure - an animal feeding operation structure other than an egg wash water storage structure which relies on aerobic bacterial action which is maintained by the utilization of air or oxygen and which includes aeration equipment to digest organic matter. Aeration equipment shall be used and shall be capable of providing oxygen at a rate sufficient to maintain an average of 2 milligrams per liter dissolved oxygen concentration in the upper 30 percent of the depth of manure in the structure at all times.

(B) The design, operation and maintenance plan for the aeration equipment must be in the construction permit application and made a condition in the approved construction permit.

19. Proposed confinement site has a suitable truck turnaround area so that semitrailers do not have to back into the facility from the road

	Score	Air	Water	Community
Truck turnaround	20			20.00

(A) The design, operation and maintenance plan for the truck turn around area must be in the construction permit application and made a condition in the approved construction permit.

(B) The turnaround area should be at least 120 feet in diameter and be adequately surfaced for traffic in inclement weather.

20. Construction permit applicant's animal feeding operation environmental and worker protection violation history for the last five years at all facilities in which the applicant has an interest.

	Score	Air	Water	Community
No history of Administrative Orders in last five years	30			30.00

(A) "Interest" - means ownership of a confinement feeding operation as a sole proprietor or a 10 percent or more ownership interest held by a person in a confinement feeding operation as a joint tenant, tenant in common, shareholder, partner, member, beneficiary or other equity interest holder. Ownership interest is an interest when it is held either directly, indirectly through a spouse or dependent child, or both.

(B) An environmental violation is a final Administrative Order (AO) from the department of natural resources or final court ruling against the construction permit applicant for environmental violations related to an animal feeding operation. A Notice of Violation (NOV) does not constitute a violation.

21. Construction permit applicant waives the right to claim a Pollution Control Tax Exemption for the life of the proposed confinement feeding operation structure.

	Score	Air	Water	Community
Permanent waiver of Pollution Control Tax Exemption	5			5.00

(A) Waiver of Pollution Control Tax Exemption is limited to the proposed structure(s) in the construction permit application.

(B) The department and county assessor will maintain a record of this waiver, and it must be in the construction permit application and made a condition in the approved construction permit.

22. Construction permit applicant can lawfully claim a Homestead Tax Exemption on the site where the proposed confinement structure is to be constructed
- OR -
the construction permit applicant is the closest resident to the proposed confinement structure.

	Score	Air	Water	Community
Site qualifies for Homestead Tax Exemption or permit applicant is closest resident to proposed structure	25			25.00

(A) Proof of Homestead Tax Exemption is required as part of the construction permit application.

(B) Applicant includes persons who have ownership interests. "Interest" - means ownership of a confinement feeding operation as a sole proprietor or a 10 percent or more ownership interest held by a person in a confinement feeding operation as a joint tenant, tenant in common, shareholder, partner, member, beneficiary or other equity interest holder. Ownership interest is an interest when it is held either directly, indirectly through a spouse or dependent child, or both.

23. Construction permit applicant can lawfully claim a Family Farm Tax Credit for agricultural land where the proposed confinement feeding operation is to be located pursuant to Iowa Code chapter 425A.

	Score	Air	Water	Community
Family Farm Tax Credit qualification	25			25.00

Applicant includes persons who have ownership interests. "Interest" - means ownership of a confinement feeding operation as a sole proprietor or a 10 percent or more ownership interest held by a person in a confinement feeding operation as a joint tenant, tenant in common, shareholder, partner, member, beneficiary or other equity interest holder. Ownership interest is an interest when it is held either directly, indirectly through a spouse or dependent child, or both.

24. Facility size.

4800 x 0.4 = 1,920 AU

	Score	Air	Water	Community
1 to 2,000 animal unit capacity	20			20.00
2,001 to 3,000 animal unit capacity	10			10.00
3,001 animal unit capacity or more	0			0.00

(A) Refer to the construction permit application package to determine the animal unit capacity of the proposed confinement structure at the completion of construction.

(B) If the proposed structure is part of an expansion, animal unit capacity (or animal weight capacity) must include all animals confined in adjacent confinement structures.

(C) Two or more animal feeding operations under common ownership or management are deemed to be a single animal feeding operation if they are adjacent or utilize a common area or system for manure disposal. In addition, for purposes of determining whether two or more confinement feeding operations are adjacent, all of the following must apply:

(a) At least one confinement feeding operation structure must be constructed on and after May 21, 1998.

(b) A confinement feeding operation structure which is part of one confinement feeding operation is separated by less than a minimum required distance from a confinement feeding operation structure which is part of the other confinement feeding operation. The minimum required distance shall be as follows:

(1) 1,250 feet for confinement feeding operations having a combined animal unit capacity of less than 1,000 animal units.

(2) 2,500 feet for confinement feeding operations having a combined animal unit capacity of 1,000 animal units or more.

25. Construction permit application includes livestock feeding and watering systems that significantly reduce manure volume.

	Score	Air	Water	Community
Wet/dry feeders or other feeding and watering systems that significantly reduce manure volume	25		12.50	12.50

The design, operation and maintenance plan for the feeding system must be in the construction permit application and made a condition in the approved construction permit.

Proposed Site Operation and Manure Management Practices

The following scoring criteria apply to the operation and manure management characteristics of the proposed confinement feeding operation. Mark <u>one</u> score under each criterion that best reflects the characteristics of the submitted manure management plan.

26. Liquid or dry manure (choose only one subsection from subsections "a" - "e" and mark one score in that subsection).

		Score	Air	Water	Community
a.	Bulk dry manure is sold under Iowa Code Chapter 200A and surface-applied	15		15.00	
	Bulk dry manure is sold under Iowa Code Chapter 200A and incorporated on the same date it is land-applied	30	12.00	12.00	6.00
b.	Dry manure is composted and land-applied under the requirements of an approved department manure management plan	10	4.00	4.00	2.00
	Dry manure is composted and sold so that no manure is applied under the requirements of an approved department manure management plan	30	12.00	12.00	6.00
c.	Methane digester is used to generate energy from manure and remaining manure is surface-applied under the requirements of an approved department manure management plan	10	3.00	3.00	4.00
	After methane digestion is complete, manure is injected or incorporated on the same date it is land-applied under the requirements of an approved department manure management plan	30	12.00	12.00	6.00
d.	Dry manure is completely burned to generate energy and no remaining manure is applied under the requirements of an approved department manure management plan	30	9.00	9.00	12.00
	Some dry manure is burned to generate energy, but remaining manure is land-applied and incorporated on the same date it is land applied	30	12.00	12.00	6.00
e.	Injection or incorporation of manure on the same date it is land-applied	30	12.00	12.00	6.00

(A) Choose only ONE line from subsection "a", "b," "c," "d," or "e" above and mark only one score in that subsection.
(B) The injection or incorporation of manure must be in the construction permit application and made a condition in the approved construction permit.
(C) If an emergency arises and injection or incorporation is not feasible, prior to land application of manure the applicant must receive a written approval for an emergency waiver from a department field office to surface-apply manure.
(D) Requirements pertaining to the sale of bulk dry manure under pursuant to Iowa Code chapter 200A must be incorporated into the construction permit application and made a condition of the approved construction permit.
(E) The design, operation and maintenance plan for utilization of manure as an energy source must be in the construction permit application and made a condition in the approved construction permit.
(F) The design, operation and maintenance plan for composting facilities must be in the construction permit application and made a condition in the approved construction permit.

27. Land application of manure is based on a two-year crop rotation phosphorus uptake level.

	Score	Air	Water	Community
Two-year phosphorus crop uptake application rate	10		10.00	

(A) Land application of manure cannot exceed phosphorus crop usage levels for a two-year crop rotation cycle.
(B) The phosphorus uptake application rates must be in the construction permit application and made a condition in the approved construction permit.

28. Land application of manure to farmland that has USDA Natural Resources Conservation Service (NRCS) approved buffer strips contiguous to all water sources traversing or adjacent to the fields listed in the manure management plan.

	Score	Air	Water	Community
Manure application on farmland with buffer strips	10		8.00	2.00

(A) The department may request NRCS maintenance agreements to ensure proper design, installation and maintenance of filter strips. If a filter strip is present but not designed by NRCS, it must meet NRCS standard specifications.
(B) The application field does not need to be owned by the confinement facility owner to receive points.
(C) On current and future manure management plans, the requirement for buffer strips on all land application areas must be in the construction permit application and made a condition in the approved construction permit.

29. Land application of manure does not occur on highly erodible land (HEL), as classified by the USDA NRCS.

	Score	Air	Water	Community
No manure application on HEL farmland	10		10.00	

Manure application on non-HEL farmland must be in the construction permit application and made a condition in the approved construction permit.

30. Additional separation distance, above minimum requirements (0 or 750 feet, see below), for the land application of manure to the closest:

* Residence not owned by the owner of the confinement feeding operation,
* Hospital,
* Nursing home, or
* Licensed or registered child care facility.

	Score	Air	Water	Community
Additional separation distance of 200 feet	5	3.25		1.75
Additional separation distance of 500 feet	10	6.50		3.50

(A) The department will award points only for the single building, of the four listed above, closest to the proposed confinement feeding operation.
(B) Minimum separation distance for land application of manure injected or incorporated on the same date as application: 0 feet.
(C) Minimum separation distance for land application of manure broadcast on soil surface: 750 feet.
(D) The additional separation distances must be in the construction permit application and made a condition in the approved construction permit.
(E) "Licensed child care center" – a facility licensed by the department of human services providing child care or preschool services for seven or more children, except when the facility is registered as a child care home.
(F) "Registered child development homes" - child care providers certify that they comply with rules adopted by the department of human services. This process is voluntary for providers caring for five or fewer children and mandatory for providers caring for six or more children.
(G) A full listing of licensed and registered child care facilities is available at county offices of the Department of Human Services

31. Additional separation distance, above minimum requirements (0 or 750 feet, see below), for land application of manure to closest public use area.

	Score	Air	Water	Community
Additional separation distance of 200 feet	5	2.00		3.00

(A) "Public use area" - a portion of land owned by the United States, the state, or a political subdivision with facilities which attract the public to congregate and remain in the area for significant periods of time. Facilities include, but are not limited to, picnic grounds, campgrounds, cemeteries, lodges, shelter houses, playground equipment, lakes as listed in Table 2 in 567--Chapter 65, and swimming beaches. It does not include a highway, road right-of-way, parking areas, recreational trails or other areas where the public passes through, but does not congregate or remain in the area for significant periods of time.
(B) Minimum separation distance for land application of manure injected or incorporated on the same date as application: 0 feet.
(C) Minimum separation distance for land application of manure broadcast on soil surface: 750 feet.
(D) The additional separation distances must be in the construction permit application and made a condition in the approved construction permit.

32. Additional separation distance, above minimum requirements (0 or 750 feet, see below), for the land application of manure to the closest:
    * Educational institution,
    * Religious institution, or
    * Commercial enterprise.

	Score	Air	Water	Community
Additional separation distance of 200 feet	5	2.00		3.00

(A) Minimum separation distance for land application of manure broadcast on soil surface: 750 feet.
(B) Minimum separation distance for land application of manure injected or incorporated on same date as application: 0 feet.
(C) The additional separation distances must be in the construction permit application and made a condition in the approved construction permit.
(D) "Educational institution" - a building in which an organized course of study or training is offered to students enrolled in kindergarten through grade 12 and served by local school districts, accredited or approved nonpublic schools, area educational agencies, community colleges, institutions of higher education under the control of the state board of regents, and accredited independent colleges and universities.
(E) "Religious institution" - a building in which an active congregation is devoted to worship.
(F) "Commercial enterprise" - a building which is used as a part of a business that manufactures goods, delivers services, or sells goods or services, which is customarily and regularly used by the general public during the entire calendar year and which is connected to electric, water, and sewer systems. A commercial enterprise does not include a farm operation.

33. Additional separation distance of 50 feet, above minimum requirements (0 or 200 feet, see below), for the land application of manure to the closest private drinking water well or public drinking water well - OR well is properly closed under supervision of county health officials.

	Score	Air	Water	Community
Additional separation distance of 50 feet or well is properly closed	10		8.00	2.00

(A) Minimum separation distance for land application of manure injected or incorporated on the same date as application or 50-foot vegetation buffer exists around well and manure is not applied to the buffer: 0 feet.
(B) Minimum separation distance for land application of manure broadcast on soil surface: 200 feet.
(C) If applicant chooses to close the well; the well closure must be incorporated into the construction permit application and made a condition in the approved construction permit.

34. Additional separation distance, above minimum requirements, for the land application of manure to the closest:
    * Agricultural drainage well,
    * Known sinkhole,
    * Major water source, or
    * Water source

	Score	Air	Water	Community
Additional separation distance of 200 feet	5	0.50	2.50	2.00
Additional separation distance of 400 feet	10	1.00	5.00	4.00

(A) "Agricultural drainage wells" - include surface intakes, cisterns and wellheads of agricultural drainage wells.
(B) "Major water source" - a lake, reservoir, river or stream located within the territorial limits of the state, or any marginal river area adjacent to the state, which can support a floating vessel capable of carrying one or more persons during a total of a six-month period in one out of ten years, excluding periods of flooding. Major water sources in the state are listed in Tables 1 and 2 in 567--Chapter 65.
(C) "Water source" - a lake, river, reservoir, creek, stream, ditch, or other body of water or channel having definite banks and a bed with water flow, except lakes or ponds without an outlet to which only one landowner is riparian.
(D) The additional separation distances must be in the construction permit application and made a condition in the approved construction permit.

35. Additional separation distance above minimum requirements, for the land application of manure, to the closest:

* High quality (HQ) water,
* High quality resource (HQR) water, or
* Protected water area (PWA).

	Score	Air	Water	Community
Additional separation distance of 200 feet	5		3.75	1.25
Additional separation distance of 400 feet	10		7.50	2.50

(A) HQ waters are identified in 567--Chapter 61.
(B) HQR waters are identified in 567--Chapter 61.
(C) A listing of PWAs is available at:
http://www.iowadnr.gov/Recreation/CanoeingKayaking/StreamCare/ProtectedWaterAreas.aspx.

36. Demonstrated community support.

	Score	Air	Water	Community
Written approval of 100% of the property owners within a one mile radius	20			20.00

37. Worker safety and protection plan is submitted with the construction permit application.

	Score	Air	Water	Community
Submission of worker safety and protection plan	10			10.00

(A) The worker safety and protection plan must be in the construction permit application and made a condition in the approved construction permit.
(B) The worker safety and protection plan and subsequent records must be kept on site with the manure management plan records.

38. Applicant signs a waiver of confidentiality allowing public to view confidential manure management plan land application records

	Score	Air	Water	Community
Manure management plan confidentiality waiver	5			5.00

The waiver of confidentiality must be in the construction permit application and made a condition in the approved construction permit. The applicant may limit public inspection to reasonable times and places.

39. Added economic value based on quality job development (number of full time equivalent (FTE) positions), and salary equal to or above Iowa department of workforce development median (45-2093)
-OR-
the proposed structure increases commercial property tax base in the county.

	Score	Air	Water	Community
Economic value to local community	10			10.00

The Iowa Department of Workforce Development regional profiles are available at http://www.iowaworkforce.org/centers/regionalsites.htm. Select the appropriate region and then select "Regional Profile."

40. Construction permit application contains an emergency action plan.

	Score	Air	Water	Community
Emergency action plan	5		2.50	2.50

(A) Iowa State University Extension publication PM 1859 lists the components of an emergency action plan. The emergency action plan submitted should parallel the components listed in the publication.
(B) The posting and implementation of an emergency action plan must be in the construction permit application and made a condition in the approved construction permit.
(C) The emergency action plan and subsequent records must be kept on site with the manure management plan records.

41. Construction permit application contains a closure plan.

	Score	Air	Water	Community
Closure Plan	5		2.50	2.50

(A) The closure plan must be in the construction permit application and made a condition in the approved construction permit.
(B) The closure plan must be kept on site with the manure management plan records.

42. Adoption and implementation of an environmental management system (EMS) recognized by the department.

	Score	Air	Water	Community
EMS	15	4.50	4.50	6.00

(A) The EMS must be in the construction permit application and made a condition in the approved construction permit.
(B) The EMS must be recognized by the department as an acceptable EMS for use with confinement operations.

43. Adoption and implementation of NRCS approved Comprehensive Nutrient Management Plan (CNMP).

	Score	Air	Water	Community
CNMP	10	3.00	3.00	4.00

The implementation and continuation of a CNMP must be in the construction permit application and made a condition in the approved construction permit.

44. Groundwater monitoring wells installed near manure storage structure, and applicant agrees to provide data to the department.

	Score	Air	Water	Community
Groundwater monitoring	15		10.50	4.50

(A) Monitoring well location, sampling and data submission must meet department requirements.
(B) The design, operation and maintenance plan for the groundwater monitoring wells, and data transfer to the department, must be in the construction permit application and made a condition in the approved construction permit.

	Total Score	Air	Water	Community
	880	213.50	271.00	404.50
Score to pass	440	53.38	67.75	101.13

Site: 110 Pork Shop - Anthony Heiden

Date: 05/28/2020

APPENDIX C
MASTER MATRIX

Question	Score	Air	Water	Community	
1	0	0	0	0	
2	30	12	0	18	
3	30	12	0	18	
4	30	0	30	0	
5	0	0	0	0	
6	10	4	0	6	
7	30	0	24	6	
8	50	5	25	20	
9	0	0	0	0	
10	30	0	22.5	7.5	
11	0	0	0	0	
12	30	27	0	3	
13	0	0	0	0	
14	0	0	0	0	
15	0	0	0	0	
16	0	0	0	0	
17	30	0	27	3	
18	0	0	0	0	
19	20	0	0	20	
20	30	0	0	30	
21	0	0	0	0	
22	25	0	0	25	
23	0	0	0	0	
24	20	0	0	20	
25	25	0	12.5	12.5	
26	30	12	12	6	Only for: "b,c, or d" Only for "a & e"
27	0	0	0	0	
28	0	0	0	0	
29	10	0	10	0	
30	0	0	0	0	
31	5	2	0	3	
32	0	0	0	0	
33	0	0	0	0	
34	0	0	0	0	
35	0	0	0	0	
36	0	0	0	0	
37	0	0	0	0	
38	0	0	0	0	
39	0	0	0	0	
40	5	0	2.5	2.5	
41	5	0	2.5	2.5	
42	0	0	0	0	
43	0	0	0	0	
44	0	0	0	0	
Total	**445**	**74**	**168**	**203**	
Total to Pass	**440**	**53.38**	**67.75**	**101.13**	

Requires: "Design, Operation, and Maintenance Plan"

Requires: "Supporting Documentation

110 Pork Shop

Site Placement

No Well within 201'
No Public Use within 4001'
No Educational, Religious, or Commercial Enterprise within 3376'
No Wetlands within 2500'
No HQ & Protected Water within 4000'

Date: 05/28/2020
110 Pork Shop
Hardin County, IA
Section 06, T89N, R22W

Latitude : 42.54422809

Longitude : -93.49201859

pinnacle
620 Country Club Road
Iowa Falls, Iowa 50126
Office: 641.648.7300
Fax: 641.648.7310
www.pinnacleiowa.com

Feature ID
Site

Distance to ROW (ft)
230

Distance to Fence (ft)
420

Site Driveway

Drive Dimensions (ft)
230
240

Well

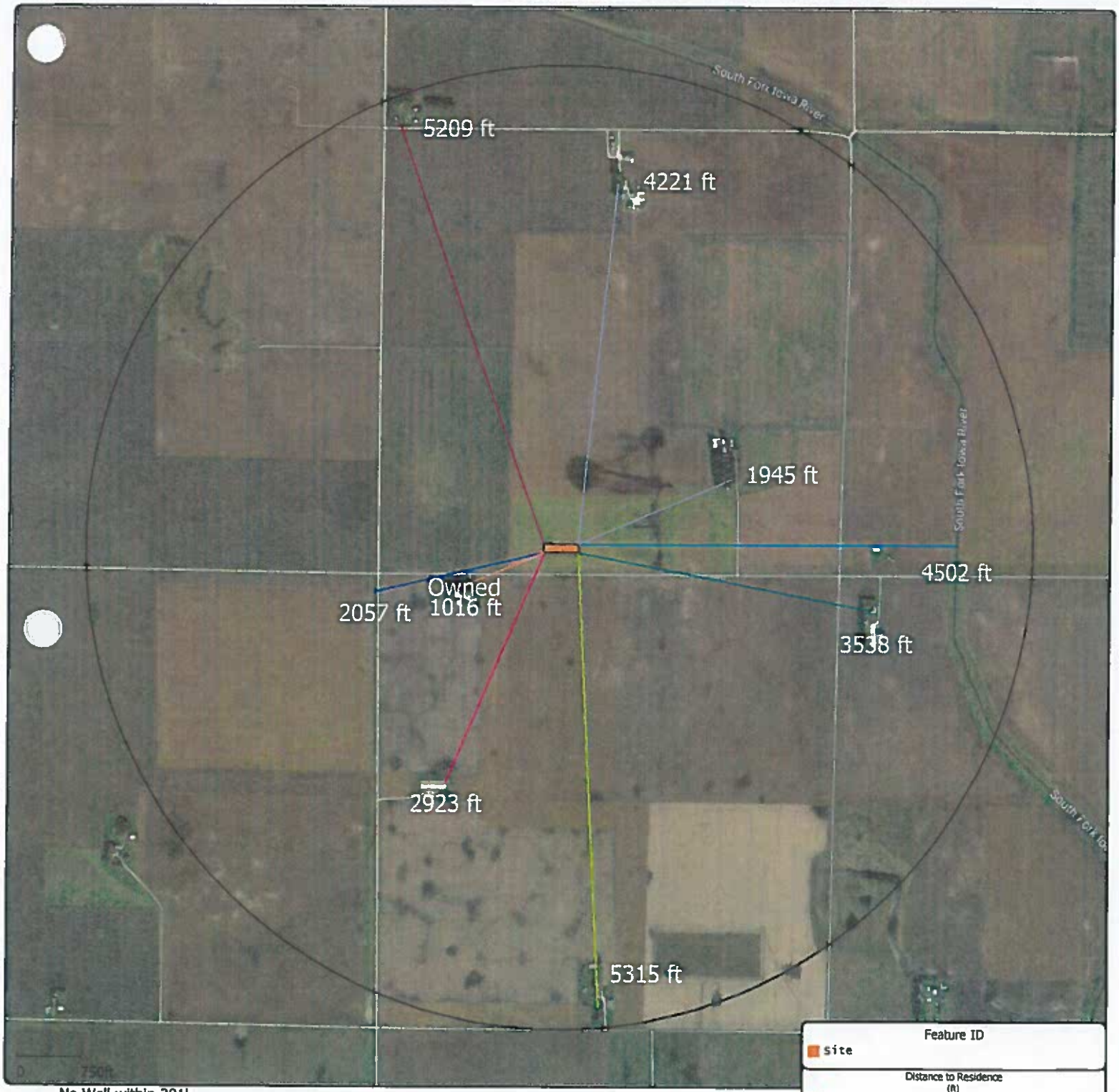
Distance to Deep Well (ft)
205

Distance to Well ROW (ft)
25

500 ft Water Buffer

110 Pork Shop

Site Placement



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www.pinnacleiowa.com

Feature ID
Site

Distance to Residence (ft)
1016
1945
5315
5209
4221
3538

Distance to Water (ft)
4502
2057

Distance to CAFO (ft)
2923

1 Mile Buffer

Design, Operating, & Maintenance Plans & Supporting Documentation

SITE NAME – 110 Pork Shop

Master Matrix #2
The swine facility is located at least an additional **1,501 feet,** above the required **2,500 feet**, away from the closest Public Use Area; defined as a portion of land owned by the United States, the state, or a political subdivision with facilities which attract the public to congregate and remain in the area for significant periods of time. Refer to site map.
Credits of **30** pts have been counted in the Master Matrix for **Item 2**.

Master Matrix #3
The swine facility is located at least an additional **1,501 feet**, above the required **1,875 feet**, away from the closest Educational Institute, Religious Institution, or Commercial Enterprise. Refer to site map.
Credits of **30** pts have been counted in the Master Matrix for **Item 3**.

Master Matrix #4
The swine facility is located an additional **1,557 feet**, above the required **500 feet**, away from the closest water source. Refer to site map.
Credits of **30** pts have been counted in the Master Matrix for **Item 4**.

Master Matrix #6
The swine facility is located an additional **500 feet**, above the required **2,500 feet**, away from the closest critical public area. Refer to site map.
Credits of **10** pts have been counted in the Master Matrix for **Item 6**.

Master Matrix #7
The manure storage structure will not be within 200' to the closest "deep", or 400' to the closest "shallow" public and private drinking water well.
Credits of **30** points have been counted in the Master Matrix for **Item 7**

Master Matrix #8
The swine facility is located an additional **2,501 feet**, above the required **1,000 feet**, away from the closest Agricultural drainage well, known sinkhole, or major water source. Refer to site map.
Credits of **50** pts have been counted in the Master Matrix for **Item 8**.

Master Matrix #10
The swine facility is located at lease two times the minimum separation distance of **1000 feet**, from the closest high quality water, high quality resource water, or protected water areas. Refer to site map.
Credits of **30** pts have been counted in the Master Matrix for **Item 10**.

Master Matrix #12

Points: We are claiming 30 points because this Manure Storage Structure has a cover. Iowa Code states that "a formed manure storage structure directly beneath a floor where animals are housed in a confinement feeding operation is deemed to be covered." On this Site the building roof is the cover.

Design: The site will consist of **one** swine finishing building that have manure storage pits directly beneath the roof and floor where the pigs are housed, as required by DNR rules to be considered covered liquid manure storage. The roof has been designed and warranted using ribbed painted, or galvanized steel to withstand appropriate snow and wind loads for **Hardin** County, Iowa.

Operation: The roof is part of the Structure and has no moving parts, therefore it does not require an operating plan.

Maintenance: Each building's roof and floor will be maintained to provide coverage of the manure storage structure. Maintenance of this cover will be minimal since it consists of steel. This facility will have a caretaker on site and in the buildings daily, if there is evidence of storm damage, or any holes/water leaks, which would be evidence of a hole; if found, they will be immediately repaired with appropriate materials to achieve as-built condition.

Credits of **30** points have been counted in the Master Matrix for **Item 12**.

Master Matrix # 17

Points: We are claiming 30 points because the manure storage structure is formed. The pit is "cast in place" reinforced concrete.

Design: The site will utilize an 8' deep cast in place reinforced concrete pit. The reinforced cast in place structure meets requirements of Chapter 65 for manure storage, the housing of swine, and the support of roof, slats and walls. Tables for steel grade, size and spacing are reviewed by a DNR engineer through the permitting process. Wall and floor thickness, concrete strength, backfill soil categories, and traffic patterns are also reviewed. There will be a wall poured over an approved footing and floor incorporating a water stop that prevents infiltration/exfiltration. Refer to the Construction Design Statement for specifics. The Construction Design Statement has been completed and signed by the building contractor and contains a Construction Certification stating that it was designed in accordance with DNR rules.

Operation: The Manure Storage Structure is static and has no moving parts. The pit will be cleaned and inspected before animals are placed in building looking for any defects, such as cracks or honeycombing, and if discovered will be repaired to industry standards. The facility will be operated as a below building concrete pit. There will be a Caretaker on site and in the buildings daily and will visually monitor manure levels. In addition, water usage meters are routinely monitored by the caretaker to insure the ample water supply to pigs, and will also be used to identify excessive usage or leaks. The concrete walls of the manure storage pit are designed for heavy equipment to be operated no less than 5 feet from the walls. The pump-out pits are designed to allow heavy equipment to be operated closer than 5 feet and are constructed using stronger design specifications. Perimeter Tile are requirement of this CDS and every tile outlet will have a monitoring location consisting of either a monitoring port including a valve in case of leak, or an outlet to the surface.

Maintenance: Due to the concrete design and specifications for the formed structure, maintenance is expected to be minimal for this structure. As a requirement of the CDS all concrete will be cured to minimize shrinking and cracking. Approximately 12" of pit will be exposed above the soil surface. There will be a Caretaker on site and in the buildings daily and will routinely looking for cracks in the walls. The building contractor will be notified if any cracking is discovered.

The Caretaker will make routine observations of the perimeter footing tile discharge point, or monitoring port for signs of contamination; such as manure odor, visual discoloration, excessive liquid in the tile during dry periods, and dead foliage. If contamination is observed, an immediate investigation will be conducted to locate the source and the problem will immediately be corrected. A groundwater and/or structural expert will direct the investigation, and the investigation will include closing the tile shutoff valve and taking water samples for visual and laboratory analysis.

Initial Settling of soils will be monitored and corrected to eliminate standing water next to the manure storage structure.

Credits of **30** pts have been counted in the Master Matrix for **Item 17.**

Master Matrix # 19

Design: The site will have a truck turnaround area at least 120 feet in diameter and adequately surfaced for traffic in inclement weather. The site will have a truck turnaround area allowing the trucks to pull in to the site completely off of the road and turn around.

Operation: The driveway will be operated to provide for safe entrance and exit to the property for delivery vehicles and not obstruct the public thoroughfare.

Maintenance: The driveway will be maintained to a level that will support regular truck traffic. The driveway will be constructed with a 2-3 inch base. Road rock gravel will be used as a road surface that will be monitored for the purposes of leveling, filling potholes, and adequate snow removal.

Credits of **20** pts have been counted in the Master Matrix for **Item 19.**

Master Matrix #20

The construction permit applicant has no history of Administrative Orders in the last five years at any site in which the applicant has any interest.

Credits of **30** pts have been counted in the Master Matrix for **Item 20.**

Master Matrix # 22

The construction permit applicant, **Anthony Heiden,** is the closest resident to the proposed confinement structure.

Credits of **25** pts have been counted in the Master Matrix for **Item 22**

Master Matrix #24
The facility has a capacity of **1 to 2,000** animal units. Refer to Construction Permit Application, page 3.
Credits of **20** pts have been counted in the Master Matrix for **Item 24**.

Master Matrix #25
Design: The buildings on the site will utilize a wet/dry feeder, dry feeder with watering cups, or swinging nipples. Industry wide accepted data shows significant water savings from any of the three options as compared to a gate mounted watering nipple. Please refer to the attached scientific article illustrating the water savings and benefits any of the three methods mentioned above.
Operation: Feeders, watering cups, or swinging nipples will be adjusted to reduce waste and optimize feed efficiency for the facility. The water savings result in reducing the gallons of water in the pit that later has to be hauled out onto farm fields.
Maintenance: The feeders, watering cups, or swinging nipples will be inspected on a regular basis and adjusted as needed. Water flow will be monitored and adjusted to control waste and excess manure volume.
Credits of **25** pts have been counted in the Master Matrix for **item 25**.

Master Matrix # 26 "e"
All manure will be injected or incorporated on the same date that it is applied.
Credits of **30** pts have been counted in the Master Matrix for **Item 26e**.

Master Matrix #29
Land application of manure does not occur on highly erodible land (HEL), as classified by the USDA NRCS. Refer to Manure Management Plan field aerials.
Credits of **10** pts have been counted in the Master Matrix for **Item 29**.

Master Matrix # 31
Matrix item 26e states that all manure will be Injected or Incorporated.
There are no "public use areas" within 200 feet of any of the fields included in the Manure Management Plan. There will be no manure applied within 200' of a public use area.
Credits of **5** pts have been counted in the Master Matrix for **Item 31**.

Master Matrix #32
A separation distance of **200 feet** from the closest educational institution, religious institution, or commercial enterprise, will be kept when land application of manure occurs.
Credits of **5 pts** have been counted in the Master Matrix for **Item 32**.

Master Matrix #40
An Emergency Action Plan in compliance with the Iowa State University Extension publication PM 1859 was submitted with the construction permit application and was made a condition in the construction permit. **The emergency action plan and subsequent records will be kept on site with the manure management plan records.**
Credits of **5** pts have been counted in the Master Matrix for **Item 40**.

Master Matrix #41

THIS CLOSURE PLAN MUST BE KEPT ON SITE WITH ALL OTHER MMP DOCUMENTS. Closure Plan as of **05/28/2020**. This plan has been written in accordance with NRCS Conservation Practice Standard "Closure of Waste Impoundments". The closure plan is based on NRCS Code #360. This also meets the standards and requirements, which are set forth by the Iowa DNR. The closure shall comply with all federal, State of Iowa, local, and tribal laws, rules and regulations that are in place at the time of the closure. **Anthony Heiden** will notify the DNR Filed office of their intent to close the structures on this farm which consists of one 8' deep pit barns, subsequent to six (6) months of the structure being empty of livestock. Applicant will follow any closure rules that may be established at that time that is more stringent than this closure plan. **Anthony Heiden** and the DNR will establish a time line of completion for the closure plan.

1. Manure should be well agitated to try to remove as much manure as possible. The effluent, solids and any sludge will have an analysis for both nitrogen and phosphorus. This analysis will be used in determining the amount of material to be applied on a per acre basis according to the Manure Management Plan.
2. Non-concrete construction material should be removed and disposed of following DNR guidelines.
3. Slats should be removed for pit cleaning. Slates can be broken and added back after the pit is clean and walls have been knocked in.
4. All solids left in concrete containment shall be removed and field applied using agronomic rates.
5. After concrete containment is cleaned, applicant shall contact the DNR Field Office for visual inspection if DNR so advises. If DNR determines containment is clean enough to no create environmental impact, applicant may proceed to the next step.
6. Floor of containment shall be broken up so as to not impound water. Sub drain tile may be removed. Containment walls will be broken up and pulled into pit area. Demolished building materials shall be placed on top of concrete if not disposed of in another way.
7. Materials are to be covered with soil to a settled depth of one foot, and the backfill be sufficiently mounded such that runoff will be diverted from the site after the backfill settles.
8. Measures shall be taken during the construction to minimize site erosion and pollution of downstream water resources. This may include such items as silt fences, hag able barriers, temporary vegetation, and mulching.

Credits of 5 pts have been taken for **Item 41**.

Original research

Impact of feeders and drinker devices on pig performance, water use, and manure volume

Michael C. Brumm, MS, PhD; James M. Dahlquist, MS; Jill M. Heemstra, MS

Summary

Objective: To determine the impact of feeder and drinker designs on pig performance, water use, and manure volume.

Methods: Experiment One compared a wet/dry feeder to a dry feeder with wall-mounted nipple drinker. Experiment Two compared a swinging nipple drinker to a gate-mounted nipple, and Experiment Three compared a bowl drinker to the swinging drinker of Experiment Two. In all experiments, pigs were housed in pens of 20–24 pigs per pen in partially slatted, mechanically ventilated facilities.

Results: In Experiment One, water disappearance (L per pig per day) was 4.49 for the wet/dry feeder versus 6.06 for the dry feeder plus nipple drinker. In Experiment Two, water disappearance was 4.90 L per pig per day for the swinging drinker versus 5.50 for the gate-mounted drinker. In Experiment Three, water disappearance was 3.78 for the bowl versus 5.01 for the swinging drinker. Summer manure production in Experiment One was 4.96 L per pig per day for the wet-dry feeder versus 7.02 for the nipple drinker. Winter manure production was 3.96 L per pig per day for the swinging drinker versus 4.59 for the nipple drinker in Experiment Two.

Implications: These results document the wide range in water use and manure volume associated with feeder and drinker devices installed in swine facilities. They also suggest lower amounts of total water use and manure volume than those currently cited in the literature or used by regulatory officials.

For the overall experiment, pigs on wet/dry feeders used 1 kg of water less per kg of feed than did pigs on the conventional system.

The overall W:F ratio was lowest for the wet/dry feeder (1.78; Experiment One) and similar to the bowl drinker (1.89; Experiment Three).

In observations consistent with ours in Experiment One, Maton and Daelemans[14] concluded that all wet feeders included in their experiments reduced water spillage so that water consumption was only 70%–80% of that observed from conventional feeders and nipple drinkers. In addition, slurry (manure) volume was reduced by 20%–30% in their study.

Table 2: Manure production

	Experiment One (summer)		Experiment Two	
	Dry	Wet/dry	Swing	Nipple
Per pig per day				
Volume	7.02 L (1.85 gal)	4.96 L (1.31 gal)	3.96 L (1.05 gal)	4.59 L (1.21 gal)
Mass*	7.0 kg (15.4 lb)	4.9 kg (10.8 lb)	3.9 kg (8.6 lb)	4.5 kg (9.9 lb)
Per 1000 kg bodyweight				
Mass	109 kg (240 lb)	76 kg (167 lb)	61 kg (134 lb)	70 kg (154 lb)

* 990 kg per m^3 (61.8 lb per cu. foot); ASAE[8]

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9. National Pork Producers Council. *Procedures to Evaluate Market Hogs* (3rd Ed.) Des Moines, Iowa: National Pork Producers Council. 1991.

20. Nebraska DEQ. Form WP-42 (6/96), Confined Feeding or Dairy Barn Applications for Permit to Construct and Operate a Livestock Waste Control Facility. Nebraska Dept of Environmental Quality, Lincoln. 1996.

Emergency Action Plan

1) **A plan of action to prevent the release of manure or prevent environmental contamination.**

   - The building will be designed with cup waters, wet/dry feeders, or swinging nipple waters which will result in a significant reduction in annual manure production.
   - There will be a Caretaker on site and in the barns daily, and will visually inspect and monitor manure levels.
   - During the manure removal process, it will be our plan to cap any agitation pumps and never leave any loading pumps with load stands unattended.

2) **A detailed map of the site and application fields.**

   - A map of the proposed site layout is attached.
   - A plat map of the application fields is attached.

3) **A list of contact names and numbers included with the plan and posted near the phone.**

   - Attached

4) **A clean-up plan**

   - In the event of a manure spill we will use any appropriate means to prevent the manure from leaving the site, or reaching any water. Contained liquids will be sucked up using pump and applied as a slurry according to the MMP. Wood chips or straw will be used as a final drying agent where possible, and then will also be applied per the MMP.

Emergency Action Plans

Emergency action plans provide detailed information on what to do if you have an accident or emergency at your livestock facility, such as a manure spill. While Emergency Action Plans are not required, it is a good idea to keep a copy of the plan with your manure management plan or records, production records, or somewhere that is easily located by you, family members, or employees. A well-designed and implemented emergency action plan can reduce the severity of emergencies, the risk to humans and animals, the economic losses, and the potential of environmental pollution.

This fact sheet is designed to address emergency action plans in the event of a manure leak or spill. In addition to developing an emergency action plan to address manure management, you might consider developing additional plans to address mass animal mortalities; weather-related emergencies; or electrical, plumbing, or other mechanical failures.

An emergency action plan should contain four items:

1) a plan of action to prevent the release of manure or prevent environmental contamination

2) a detailed map of the site and application fields

3) a list of contact names and numbers included with the plan and posted near the phone

4) a clean-up plan

This fact sheet is not designed to be a "fill-in-the-blank" form. It is designed to give you the basic information needed to prepare an emergency action plan. The plan you design will be specific to your livestock facility and your management practices. You may want to work with your local emergency management coordinator when developing your emergency action plan. The coordinator can help you identify resources and file any necessary notifications needed in the response of an accident or spill.

PLAN OF ACTION

A plan of action should be developed for each livestock facility. Review the plan of action every six months and make sure all personnel involved with the livestock facility are familiar with the plan. Items to consider for a plan of action include:

- Assess the situation, know what factors are at risk (human health, animal welfare, the environment, livestock structures)
- Reduce risk through implementation of planned steps
  - Prevent spills or discharges by maintaining equipment and following plans
  - Eliminate the source of manure if spill or discharge occur
  - Contain the spill
- Contact appropriate authorities to report emergencies or accidents
- Assess damages

In the event of a manure spill or leak, every effort possible should be made to prevent movement of manure off-site. If necessary, contact neighbors or nearby contractors with earth-moving equipment available to assist with containment. If tile intakes are present, have devices on hand to prevent manure from entering the tile lines. Contact neighbors with manure handling equipment to land apply the manure. Prevent manure from entering bodies of water or other environmentally sensitive areas, such as sinkholes and ag drainage wells. For assistance, contact your local sheriff's department or other emergency response personnel in your county. **State law requires that you report manure spills or leaks to the Iowa Department of Natural Resources as soon as possible, but not later than 6 hours from onset or discovery of the problem (see *Contact Names and Numbers*).**

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Emergency Action Plans

SITE MAP

A good planning tool for emergency action plans is a site map of the livestock facility. A site map can be of assistance to new employees, delivery personnel, and emergency response personnel. A site map should include the following information.

- Facility address and location (including e911 address)
- Building locations
- Electrical service boxes
- Water main connections and shut-off valves
- Identification of the manure storage structure with associated pump-out ports, valves, pumps, etc…
- Location of wellheads
- Identification of nearby tile intakes, sinkholes, ag drainage wells, streams, lakes or other environmentally sensitive areas
- Drainage and water movement indications
- Identification of property boundaries
- First aid kit
- Fire extinguisher(s)

In addition to a site map for livestock facilities, copies of maps of fields for land application of manure should be included. If you already have these maps filed with your manure management plans, an extra set could be filed with your emergency action plan. These maps should include manure application setback distances, designated areas, watercourses, and property boundaries. It is also helpful to include the location of field access roads and gates. You may wish to file a site map with your DNR regional field office.

CONTACT NAMES AND NUMBERS

See attached sheets.

CLEAN-UP PLAN

A clean-up plan should include methods of proper manure removal and land application of manure at agronomic rates. Manure applications from a spill should also be recorded in your manure management plan if you are required to have one. You should consult DNR field staff for appropriate clean-up methods. You may be required to file a report following a manure spill, leak or other incident.

This fact sheet was developed by the Iowa Manure Management Action Group (IMMAG). Special thanks to Don Peterson and Paul Miller, NRCS, Karen Grimes and Kathie Lee, DNR staff, and Jeff Lorimor and Angela Rieck-Hinz, ISU, for development of this material. Members of IMMAG include: Natural Resource Conservation Service (NRCS), Iowa Environmental Council, Agribusiness Association of Iowa, Iowa Farm Bureau, Iowa Pork Producers Association, Iowa Cattlemen's Association, Iowa Poultry Association, Conservation Districts of Iowa, Farm Credit Services of America, Iowa Department of Natural Resources (DNR) Division of Soil Conservation of the Iowa Department of Agriculture and Land Stewardship (DSC-IDALS), Iowa Beef Center, Iowa Pork Industry Center and Iowa State University Extension, and the College of Agriculture.

Special thanks to the DNR field staff, Extension field staff, and State Emergency Response personnel for assistance.

PM 1859 January 2001
File: Environmental Quality 4-1 [A]

IOWA STATE UNIVERSITY
University Extension

Contact Names and Numbers

A list of contact names and numbers should be filed with the emergency action plan and a copy posted by the phone for emergencies.

Site Name

110 Pork Shop

Owner/Operator

Name: Anthony Heiden

Phone: 515-689-0358

Site Address (including e911 address)

110th Street, Alden, IA 50006

(approx. 10750)

Specific Directions to the Site

From Alden, head West on County Road D20 for 5 miles. Turn North onto A Avenue for 2 miles. Turn West onto 110th Street and drive approximately 0.6 miles and the site will be on the right.

HUMAN INJURY

Explain that self-contained breathing apparatus may be required if someone has been overcome by gases.

Rescue Unit/Ambulance

Phone: 911

Doctor or Physician

Name: Hansen Family Hospital

Phone: 641-648-7300

Hospital or Medical Clinic

Name: Hansen Family Hospital

Phone: 641-648-7300

Fire Department

Phone: 911 ; 515-859-3344

County Sheriff

Name: Dave McDaniel

Phone: 641-939-8189

County Health Official

Name: Jessica Sheridan

Phone: 641-849-7372

Poison Control Center

Phone: 1-800-222-1222

Others

Name:

Phone:

Name:

Phone:

Post by the telephone for reference.

IOWA STATE UNIVERSITY
University Extension

Contact Names and Numbers

Manure Leaks or Spills

IOWA DEPARTMENT OF NATURAL RESOURCES FIELD OFFICE

State law requires that you report manure spills or leaks to the Iowa Department of Natural Resources as soon as possible, but not later than 6 hours from onset or discovery of the problem (see *Contact Names and Numbers*).

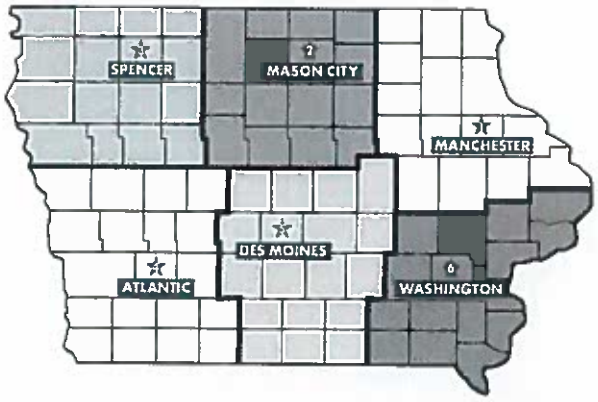
Work Days 8 a.m. - 4:30 p.m.

Phone: 641-424-4073

Weekends, Holidays, and After Business Hours

Phone: (515) 281-8694

FIELD OFFICE LOCATIONS
ENVIRONMENTAL PROTECTION DIVISION



FIELD OFFICE	LOCATION	PHONE NUMBER
1	909 W. Main, Suite 4 • Manchester, IA 52057	319-927-2640
2	2300 15th St. SW • Mason City, IA 50401	641-424-4073
3	1900 North Grand Ave. • Spencer, IA 51301	712-262-4177
4	1401 Sunnyside Lane • Atlantic, IA 50022	712-243-1934
5	401 SW 7th St., Suite I • Des Moines, IA 50309	515-725-0268
6	1004 West Madison • Washington, IA 52353	319-653-2135

COUNTY SHERIFF

Name: Dave McDaniel

Phone: 641-939-8189

CONTRACTOR

Earth Moving

Name: Travis Gembrling

Phone: 712-830-2319

Pumping Equipment

Name: Hemken Land : Livestock

Phone: 515-859-3018

Hauling Equipment

Name: Hemken Land : Livestock

Phone: 515-859-3018

Equipment Owners

Name: Hemken Land : Livestock

Phone: 515-859-3018

County Engineer

Name: Taylor Roll

Phone: 641-858-5058

Others

Name:

Phone:

Post by the telephone for reference.

IOWA STATE UNIVERSITY
University Extension

Contact Names and Numbers

PARTIAL SYSTEM FAILURE

Equipment suppliers and technicians:

Electricity

Name: Premier Ag Systems

Phone: 563-245-9000

Plumbing

Name: Premier Ag Systems

Phone: 563-245-9000

Ventilation

Name: Premier Ag Systems

Phone: 563-245-9000

Heating

Name: Premier Ag Systems

Phone: 563-245-9000

Feed

Name: Premier Ag Systems

Phone: 563-245-9000

Veterinarian

Name: Hanor Veterinarian

Phone: 608-459-0564

Mortality Disposal

Name: Darling Ingredients

Phone: 515-265-0381

Insurance Carrier

Name: _____

Phone: _____

Policy: _____

Other

_____

_____

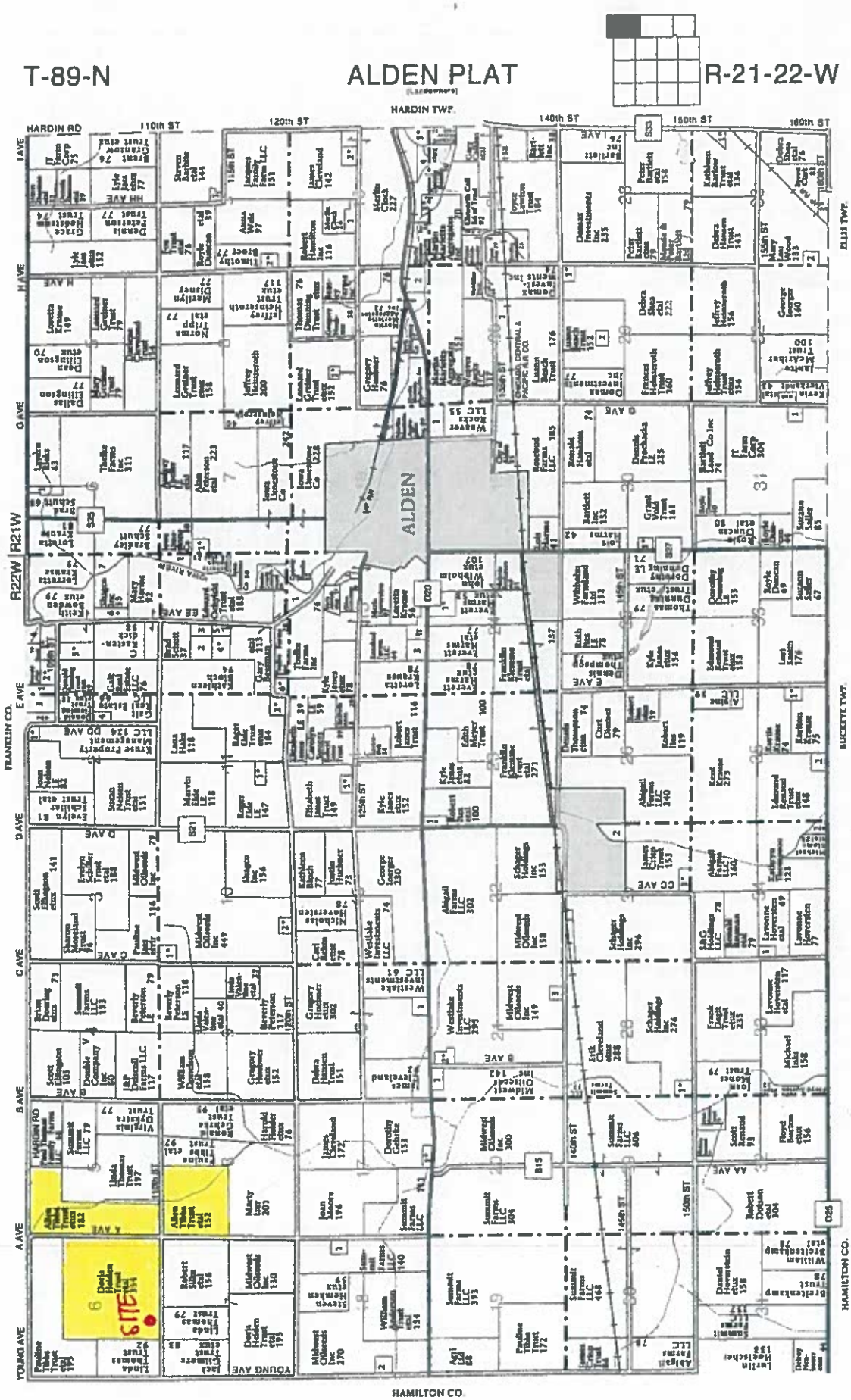
_____

Post by the telephone for reference.

T-89-N

ALDEN PLAT

R-21-22-W



SEE PAGE 84 FOR ADDITIONAL

Manure Management Plan Form
Animal Feeding Operation Information

Instructions: Complete this form for your animal feeding operation. Footnotes are provided on page 4.

The information within this form, and the attachments, describes my animal feeding operation, my manure storage and handling system, and my planned manure management system. I (we) will manage the manure, and the nutrients it contains, as described within this manure management plan (MMP) and any revisions of the plan, individual field information, and field summary sheet, and in accordance with current rules and regulations. Deviations permitted by Iowa law will be documented and maintained in my records.

Signed: Anthony Heiden (Signature) (Print name) **Date:** 5-14-20

Name of operation: 110 Pork Shop **Facility ID No.** N/A

Location of the operation: 110th Street (911 address)

Alden (Town) IA (State) 50006 (Zip)

SE (1/4 1/4) 1/4 of the SW (1/4) 1/4 of Sec 6 (Section) T 89N R 22W (Tier & Range) Alden (Township Name) Hardin (County)

Owner and contacts of the animal feeding operation:

Owner Anthony Heiden Phone 515-689-0358

Address 10212 110th Street Alden, IA 50006

E-mail address (optional) _____ Cell phone (optional) _____

Contact person (if different than owner) Brian Ritland Phone 641-648-7300

Address 620 Country Club Road Iowa Falls, IA 50126

E-mail address (optional) britland@pinnacleiowa.com Cell phone (optional) _____

Contract company (if applicable) _____ Phone _____

Address _____

This manure management plan is for: (check one)

___ existing operation, not expanding ___ existing operation, expanding ___ existing operation, new owner X new operation

Construction and Expansion Dates: _____ date of initial construction and all expansions

_____ _____ _____

Table 1. Information about livestock production and manure management system

1	2	3	4	5	6	7	8
Animal type/ Production phase[a]	Max # of animals confined	Manure Storage Structure[b]	N[c]	P_2O_5[c]	gal/space/dy[d]	Days/yr Facility occupied	Annual Manure Produced[e]
Wean/ finish (wet/ dry)	4800	BBP	56	38	0.7	365	1,226,400
Select production phase			0	0	0.0		000
Select production phase			0	0	0.0		000
						Total Gallons	**1,226,400**

Estimated annual animal production: 9,600 animals/year

Source of Manure Nutrient Content Data (standard tables, manure analysis, other): Standard Tables

Manure Management Plan Form

Determining Maximum Allowable Manure Application Rates

Instructions: Complete a worksheet for each unique combination of the following factors (crop rotation, optimum crop yield, manure nutrient concentration, remaining crop N need, method of application) that occurs at this operation. Complete form by filling in blanks, yellow-colored cells, and drop down menus. Gray shaded cells will calculate automatically. Footnotes are given on pages 4, 5 and 6.

Management Identification (Mgt ID)[f] Corn-Soybeans, N-Rate (A)
(identify this application scenario by letter)

Method to determine optimum crop yield[g] USDA Iowa Ag Statistics County yields — **Timing of application** Spring/Fall

Method of application[i] Knifed in or soil injection of liquid manure — **Application loss factor** 0.98

If spray irrigation is used, identify method[l]

Table 2. Manure nutrient concentration

Manure Nutrient Content (lbs/1000gal or lbs/ton)[j]					
Total N	56		P_2O_5	38	
%TN Available 1st year[k]	90%	2nd year	0%	3rd year	0%
Available N 1st year[l]	49.4	2nd year[m]	0.0	3rd year[n]	0.0

Table 3. Crop usage rates[o]

lb/bu or lb/ton	N	P_2O_5
Corn	1.2	0.32
Soybean	3.8	0.72
Alfalfa	50	13
Other crop	0	0

*Use blank space above to add crop not listed.

Table 4. Calculations for rate based on nitrogen (always required)

			Corn	Soybean	Corn	Soybean
1	Applying Manure For (crop to be grown)[p]					
2	Optimum Crop Yield [g]	bu or ton/acre	228	63	228	63
3	P_2O_5 removed with crop by harvest [q]	lb/acre	73.0	45.4	73.0	45.4
4	Crop N utilization [r]	lb/acre	274	239	274	239
5a	Legume N credit [s]	lb/acre	50.00	0	50	0
5b	Commercial N planned[t]	lb/acre	0	0	0	0
5c	Manure N carryover credit [u]	lb/acre	0	0.0	0.0	0.0
6	Remaining crop N need [v]	lb/acre	224	239	224	239
7	Manure rate to supply remaining N [w]	gal/acre	4527	4847	4527	4847
8	P_2O_5 applied with N-based rate [x]	lb/acre	172	184	172	184

Table 5. Calculations for rate based on phosphorus (fill out only if P-based rates are planned)

9	Commercial P_2O_5 planned [y]	lb/acre	0	0	0	0
10	Manure rate to supply P removal [z]	gal/acre	1920	1194	1920	1194
11	Manure rate for P based plan [aa]	gal/acre	3114	0	3114	0
12	Manure N applied with P-based plan [bb]	lb/acree	154	0	154	0

Table 6. Application rates that will be carried over to page 3

13	Planned manure application rate [cc]	gal/acre	4527	0	4527	0

When applicable, manure application rates must be based on the P index value as follows:
(0-2) N-based manure management.
(2-5) N-based manure management but P application rate cannot exceed two times the P removal rate of the crop schedule.
(>5-15) No manure application until practices are adopted to reduce P index to 5 or below.
(>15) No manure application.

42892205P5500B

Grower : 110 Pork Shop

Farm : Fields

Field : 42892205P5500B

Latitude : 42.54494724

Longitude : -93.47873705

pinnacle
620 Country Club Road
Iowa Falls, Iowa 50126
Office: 641.648.7300
Fax: 641.648.7310
www.pinnacleiowa.com

Feature ID

Total Acres (114.91 ac)

42892205P5500C

Grower : 110 Pork Shop

Farm : Fields

Field : 42892205P5500C

Latitude : 42.55441794

Longitude : -93.47416505

pinnacle
620 Country Club Road
Iowa Falls, Iowa 50126
Office: 641.648.7300
Fax: 641.648.7310
www.pinnacleiowa.com

Feature ID

Total Acres(48.55 ac)

42892206P4000

Grower : 110 Pork Shop

Farm : Fields

Field : 42892206P4000

Latitude : 42.54451498

Longitude : -93.49341230

pinnacle
620 Country Club Road
Iowa Falls, Iowa 50126
Office: 641.648.7300
Fax: 641.648.7310
www.pinnacleiowa.com

Feature ID

Total Acres (338.72 ac)

42892208P2000B

Grower : 110 Pork Shop

Farm : Fields

Field : 42892208P2000B

Latitude : 42.53633186

Longitude : -93.47908243

pinnacle
620 Country Club Road
Iowa Falls, Iowa 50126
Office: 641.648.7300
Fax: 641.648.7310
www.pinnacleiowa.com

Feature ID

Total Acres(94.11 ac)

42892208P2000C

Grower : 110 Pork Shop

Farm : Fields

Field : 42892208P2000C

Latitude : 42.53903729

Longitude : -93.47206845

pinnacle
620 Country Club Road
Iowa Falls, Iowa 50126
Office: 641.648.7300
Fax: 641.648.7310
www.pinnacleiowa.com

Feature ID

Total Acres(40.77 ac)

Manure Management Plan Form

Year by Year Manure Management Plan Summary

Instructions: Complete this form for each of the next four growing seasons, to demonstrate sufficient land base to apply manure over multiple crop years. If this page is identical for multiple years (e.g. every other year), submit only once for the identical years, and indicate which years the form represents. Footnotes are given on

Crop year(s): 2020, 2022

1	2	3	4	5	6	7	8	9	10	11
Field Designation [ee]	Field Location ___1/4 of the___ 1/4 Sec___ T___ R___ Townsip Name______, County Name ______	Mgt Id [ff]	Planned Crop	Acres receiving manure[gg]	Own, rent, agreement (include length of agreement) [hh]	P index value [ii]	HEL (Y/N)[jj]	Planned Application gal/acre	Planned Application gal/field [kk]	Correct Soil Test for P[ll] (Yes or No)
42892205P5500B	W1/2, NW & W1/2, SW, 05, 89, 22, Alden, Hardin	A	Corn	114.9	Agreement	0.48	N	4527	520152	No
42892205P5500C	N1/2, NW, 05, 89, 22, Alden, Hardin	A	Corn	48.6	Agreement	0.49	N	4527	220012	No
42892206P4000	SE, NW; S1/2, NE; E1/2, SW & SE, 06, 89, 22, Alden, Hardin	A	Beans	145.3	Own	0.42	N	0	0	No
42892206P4000	SE, NW; S1/2, NE; E1/2, SW & SE, 06, 89, 22, Alden, Hardin	A	Corn	193.4	Own	0.42	N	4527	875522	No
42892208P2000B	NW, 08, 89, 22, Alden, Hardin	A	Beans	94.1	Agreement	0.51	N	0	0	No
42892208P2000C	NW, 08, 89, 22, Alden, Hardin	A	Beans	40.8	Agreement	0.63	N	0	0	No
									0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	

Total acres available for manure application 637.1

Total gallons that could be applied 1615686

Manure Management Plan Form

Year by Year Manure Management Plan Summary

Instructions: Complete this form for each of the next four growing seasons, to demonstrate sufficient land base to apply manure over multiple crop years. If this page is identical for multiple years (e.g. every other year), submit only once for the identical years, and indicate which years the form represents. Footnotes are given on

Crop year(s): 2021, 2023

1	2	3	4	5	6	7	8	9	10	11
Field Designation [ee]	Field Location ___1/4 of the___ 1/4 Sec___ T___ R___ Townsip Name_______, County Name ______	Mgt Id [ff]	Planned Crop	Acres receiving manure[gg]	Own, rent, agreement (include length of agreement) [hh]	P index value [ii]	HEL (Y/N)[jj]	Planned Application gal/acre	Planned Application gal/field [kk]	Correct Soil Test for P[ll] (Yes or No)
42892205P5500B	W1/2, NW & W1/2, SW, 05, 89, 22, Alden, Hardin	A	Beans	114.9	Agreement	0.48	N	0	0	No
42892205P5500C	N1/2, NW, 05, 89, 22, Alden, Hardin	A	Beans	48.6	Agreement	0.49	N	0	0	No
42892206P4000	SE, NW; S1/2, NE; E1/2, SW & SE, 06, 89, 22, Alden, Hardin	A	Corn	145.3	Own	0.42	N	4527	657773	No
42892206P4000	SE, NW; S1/2, NE; E1/2, SW & SE, 06, 89, 22, Alden, Hardin	A	Beans	193.4	Own	0.42	N	0	0	No
42892208P2000B	NW, 08, 89, 22, Alden, Hardin	A	Corn	94.1	Agreement	0.51	N	4527	425991	No
42892208P2000C	NW, 08, 89, 22, Alden, Hardin	A	Corn	40.8	Agreement	0.63	N	4527	184702	No
									0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	
									0	
			Total acres available for manure application	637.1			Total gallons that could be applied		1268465	

USDA NRCS

RUSLE2 Profile Erosion Calculation Record

Info: 42892205P5500B

File: profiles\default

Inputs:
Location: USA\Iowa\Hardin County
Soil: SSURGO\Hardin County, Iowa\138B Clarion loam, 2 to 6 percent slopes\Clarion Loam 85%
Slope length (horiz): 98 ft
Avg. slope steepness: 3.0 %

Management	*Vegetation*	*Yield units*	*# yield units, #/ac*
managements\CMZ 04\c.Other Local Mgt Records*CB North	vegetations\Corn, grain, high yield	bushels	222.00
managements\CMZ 04\c.Other Local Mgt Records*CB North	vegetations\Soybean, mw 30 in rows	bu	64.000

Contouring: a. rows up-and-down hill
Strips/barriers: (none)
Diversion/terrace, sediment basin: (none)
Subsurface drainage: (none)
Adjust res. burial level: Normal res. burial

Outputs:
T value: 5.0 t/ac/yr
Soil loss erod. portion: 1.2 t/ac/yr
Detachment on slope: 1.2 t/ac/yr
Soil loss for cons. plan: 1.2 t/ac/yr
Sediment delivery: 1.2 t/ac/yr

Crit. slope length: 98 ft
Surf. cover after planting: -- %
Avg. ann. total biomass removal: 0 lb/ac

Date	*Operation*	*Vegetation*	*Surf. res. cov. after op, %*
10/25/0	Manure injector, liquid high disturb.30 inch		76
4/12/1	Cultivator, field 6-12 in sweeps		53
4/15/1	Planter, double disk opnr w/fluted coulter	Corn, grain, high yield	52
10/30/1	Harvest, killing crop 50pct standing stubble		88
11/2/1	Chisel, st. pt.		66
4/25/2	Cultivator, field 6-12 in sweeps		66
4/28/2	Planter, double disk opnr w/fluted coulter	Soybean, mw 30 in rows	69
10/20/2	Harvest, killing crop 30pct standing stubble		87

USDA NRCS

v. 1/22/2007

Iowa Phosphorus Index

Credits: Iowa State University
USDA National Soil Tilth Laboratory
USDA Natural Resource Conservation Service

Field Number	Erosion										Runoff					Tile / Subsurface Recharge				Overall
	Gross Erosion	x	Sediment Trap Factor	x	SDR	x	Buffer Factor	x	Enrichment Factor	x	STP Factor	=	Erosion PI	+	RCN Factor	x (STP Factor	+ P App Factor) =	Runoff PI	+	Flow Factor	x	STP Factor	=	Tile/Sub PI	=	P Index
42892205P5500B --	1.20		1.00		0.12		1.00		1.10		0.76		0.12		1.32	0.13	0.09	0.28		1.00		0.07		0.07		0.48

USL NRCS

RUSLE2 Profile Erosion Calculation Record

Info: 42892205P5500C

File: profiles\default

Inputs:
Location: USA\Iowa\Hardin County
Soil: SSURGO\Hardin County, Iowa\828B Zenor sandy loam, 1 to 5 percent slopes\Zenor Sandy loam 100%
Slope length (horiz): 98 ft
Avg. slope steepness: 4.0 %

Management	*Vegetation*	*Yield units*	*# yield units, #/ac*
managements\CMZ 04\c.Other Local Mgt Records*CB North	vegetations\Corn, grain, high yield	bushels	162.00
managements\CMZ 04\c.Other Local Mgt Records*CB North	vegetations\Soybean, mw 30 in rows	bu	47.000

Contouring: a. rows up-and-down hill
Strips/barriers: (none)
Diversion/terrace, sediment basin: (none)
Subsurface drainage: (none)
Adjust res. burial level: Normal res. burial

Outputs:
T value: 3.0 t/ac/yr
Soil loss erod. portion: 1.5 t/ac/yr
Detachment on slope: 1.5 t/ac/yr
Soil loss for cons. plan: 1.5 t/ac/yr
Sediment delivery: 1.5 t/ac/yr

Crit. slope length: 98 ft
Surf. cover after planting: -- %
Avg. ann. total biomass removal: 0 lb/ac

Date	*Operation*	*Vegetation*	*Surf. res. cov. after op, %*
10/25/0	Manure injector, liquid high disturb.30 inch		65
4/12/1	Cultivator, field 6-12 in sweeps		44
4/15/1	Planter, double disk opnr w/fluted coulter	Corn, grain, high yield	42
10/30/1	Harvest, killing crop 50pct standing stubble		81
11/2/1	Chisel, st. pt.		57
4/25/2	Cultivator, field 6-12 in sweeps		57
4/28/2	Planter, double disk opnr w/fluted coulter	Soybean, mw 30 in rows	60
10/20/2	Harvest, killing crop 30pct standing stubble		79

USDA NRCS

v. 1/22/2007

Iowa Phosphorus Index

Credits: Iowa State University
USDA National Soil Tilth Laboratory
USDA Natural Resource Conservation Service

Field Number	Erosion										Runoff					Tile / Subsurface Recharge				Overall
	Gross Erosion	x	Sediment Trap Factor	x	SDR	x	Buffer Factor	x	Enrichment Factor	x	STP Factor	=	Erosion PI	RCN Factor	x (STP Factor | + P App Factor) =	Runoff PI	Flow Factor	x STP Factor =	Tile/Sub PI	P Index
42892205P5500C --	1.50		1.00		0.12		1.00		1.10		0.75		0.15	1.32	0.12	0.09	0.27	1.00	0.07	0.07	0.49

USDA NRCS

RUSLE2 Profile Erosion Calculation Record

Info: 42892206P4000

File: profiles\default

Inputs:
Location: USA\Iowa\Hardin County
Soil: SSURGO\Hardin County, Iowa\138B Clarion loam, 2 to 6 percent slopes\Clarion Loam 85%
Slope length (horiz): 98 ft
Avg. slope steepness: 3.0 %

Management	*Vegetation*	*Yield units*	*# yield units, #/ac*
managements\CMZ 04\c.Other Local Mgt Records*CB North	vegetations\Corn, grain, high yield	bushels	222.00
managements\CMZ 04\c.Other Local Mgt Records*CB North	vegetations\Soybean, mw 30 in rows	bu	64.000

Contouring: a. rows up-and-down hill
Strips/barriers: (none)
Diversion/terrace, sediment basin: (none)
Subsurface drainage: (none)
Adjust res. burial level: Normal res. burial

Outputs:
T value: 5.0 t/ac/yr
Soil loss erod. portion: 1.2 t/ac/yr
Detachment on slope: 1.2 t/ac/yr
Soil loss for cons. plan: 1.2 t/ac/yr
Sediment delivery: 1.2 t/ac/yr

Crit. slope length: 98 ft
Surf. cover after planting: -- %
Avg. ann. total biomass removal: 0 lb/ac

Date	*Operation*	*Vegetation*	*Surf. res. cov. after op, %*
10/25/0	Manure injector, liquid high disturb.30 inch		76
4/12/1	Cultivator, field 6-12 in sweeps		53
4/15/1	Planter, double disk opnr w/fluted coulter	Corn, grain, high yield	52
10/30/1	Harvest, killing crop 50pct standing stubble		88
11/2/1	Chisel, st. pt.		66
4/25/2	Cultivator, field 6-12 in sweeps		66
4/28/2	Planter, double disk opnr w/fluted coulter	Soybean, mw 30 in rows	69
10/20/2	Harvest, killing crop 30pct standing stubble		87

USDA NRCS

v. 1/22/2007

Iowa Phosphorus Index

Credits: Iowa State University
USDA National Soil Tilth Laboratory
USDA Natural Resource Conservation Service

Field Number	Erosion										Runoff					Tile / Subsurface Recharge				Overall
	Gross Erosion	x	Sediment Trap Factor	x	SDR	x	Buffer Factor	x	Enrichment Factor	x	STP Factor	=	Erosion PI	RCN Factor	x (STP Factor +	P App Factor) =	Runoff PI	Flow Factor	x	STP Factor =	Tile/Sub PI	P Index
42892206P4000 –	1.20		1.00		0.07		1.00		1.10		0.76		0.07	1.32	0.12	0.09	0.27	1.00		0.07	0.07	0.42

USL NRCS

RUSLE2 Profile Erosion Calculation Record

Info: 42892208P2000B

File: profiles\default

Inputs:
Location: USA\Iowa\Hardin County
Soil: SSURGO\Hardin County, Iowa\138B Clarion loam, 2 to 6 percent slopes\Clarion Loam 85%
Slope length (horiz): 98 ft
Avg. slope steepness: 3.0 %

Management	*Vegetation*	*Yield units*	*# yield units, #/ac*
managements\CMZ 04\c.Other Local Mgt Records*CB North	vegetations\Corn, grain, high yield	bushels	222.00
managements\CMZ 04\c.Other Local Mgt Records*CB North	vegetations\Soybean, mw 30 in rows	bu	64.000

Contouring: a. rows up-and-down hill
Strips/barriers: (none)
Diversion/terrace, sediment basin: (none)
Subsurface drainage: (none)
Adjust res. burial level: Normal res. burial

Outputs:
T value: 5.0 t/ac/yr
Soil loss erod. portion: 1.2 t/ac/yr
Detachment on slope: 1.2 t/ac/yr
Soil loss for cons. plan: 1.2 t/ac/yr
Sediment delivery: 1.2 t/ac/yr

Crit. slope length: 98 ft
Surf. cover after planting: -- %
Avg. ann. total biomass removal: 0 lb/ac

Date	*Operation*	*Vegetation*	*Surf. res. cov. after op, %*
10/25/0	Manure injector, liquid high disturb.30 inch		76
4/12/1	Cultivator, field 6-12 in sweeps		53
4/15/1	Planter, double disk opnr w/fluted coulter	Corn, grain, high yield	52
10/30/1	Harvest, killing crop 50pct standing stubble		88
11/2/1	Chisel, st. pt.		66
4/25/2	Cultivator, field 6-12 in sweeps		66
4/28/2	Planter, double disk opnr w/fluted coulter	Soybean, mw 30 in rows	69
10/20/2	Harvest, killing crop 30pct standing stubble		87

USDA NRCS

v. 1/22/2007

Iowa Phosphorus Index

Credits: Iowa State University
USDA National Soil Tilth Laboratory
USDA Natural Resource Conservation Service

Field Number	Erosion										Runoff					Tile / Subsurface Recharge				Overall
	Gross Erosion	x	Sediment Trap Factor	x	SDR	x	Buffer Factor	x	Enrichment Factor	x	STP Factor	=	Erosion PI	+	RCN Factor	x (STP Factor +	P App Factor) =	Runoff PI	+	Flow Factor	x	STP Factor =	Tile/Sub PI	=	P Index
42892208P2000B --	1.20		1.00		0.11		1.00		1.10		0.79		0.12		1.32	0.16	0.09	0.32		1.00		0.07	0.07		0.51

USDA NRCS

RUSLE2 Profile Erosion Calculation Record

Info: 42892208P2000C

File: profiles\default

Inputs:
Location: USA\Iowa\Hardin County
Soil: SSURGO\Hardin County, Iowa\138B Clarion loam, 2 to 6 percent slopes\Clarion Loam 85%
Slope length (horiz): 98 ft
Avg. slope steepness: 3.0 %

Management	*Vegetation*	*Yield units*	*# yield units, #/ac*
managements\CMZ 04\c.Other Local Mgt Records*CB North	vegetations\Corn, grain, high yield	bushels	222.00
managements\CMZ 04\c.Other Local Mgt Records*CB North	vegetations\Soybean, mw 30 in rows	bu	64.000

Contouring: a. rows up-and-down hill
Strips/barriers: (none)
Diversion/terrace, sediment basin: (none)
Subsurface drainage: (none)
Adjust res. burial level: Normal res. burial

Outputs:
T value: 5.0 t/ac/yr
Soil loss erod. portion: 1.2 t/ac/yr
Detachment on slope: 1.2 t/ac/yr
Soil loss for cons. plan: 1.2 t/ac/yr
Sediment delivery: 1.2 t/ac/yr

Crit. slope length: 98 ft
Surf. cover after planting: -- %
Avg. ann. total biomass removal: 0 lb/ac

Date	*Operation*	*Vegetation*	*Surf. res. cov. after op, %*
10/25/0	Manure injector, liquid high disturb.30 inch		76
4/12/1	Cultivator, field 6-12 in sweeps		53
4/15/1	Planter, double disk opnr w/fluted coulter	Corn, grain, high yield	52
10/30/1	Harvest, killing crop 50pct standing stubble		88
11/2/1	Chisel, st. pt.		66
4/25/2	Cultivator, field 6-12 in sweeps		66
4/28/2	Planter, double disk opnr w/fluted coulter	Soybean, mw 30 in rows	69
10/20/2	Harvest, killing crop 30pct standing stubble		87

USDA NRCS

v. 1/22/2007

Iowa Phosphorus Index

Credits: Iowa State University
USDA National Soil Tilth Laboratory
USDA Natural Resource Conservation Service

Field Number	Erosion										Runoff					Tile / Subsurface Recharge				Overall
	Gross Erosion	x	Sediment Trap Factor	x	SDR	x	Buffer Factor	x	Enrichment Factor	x	STP Factor	=	Erosion PI	+	RCN Factor	x (STP Factor	+ P App Factor) =	Runoff PI	+	Flow Factor	x	STP Factor	=	Tile/Sub PI	=	P Index
42892208P2000C --	1.20		1.00		0.14		1.00		1.10		0.84		0.15		1.32	0.22	0.09	0.40		1.00		0.07		0.07		0.63

Manure Application Lease/Fertilizer Consent Form

I Allen Tibbs (Land Owner) give Anthony Heiden (Site Owner) permission to apply manure from

110 Pork Shop (Site Number/Name) site, during calendar year 2020 and any succeeding year until

canceled by written notice on:

+/- 182.0 acres in the N1/2, NW & W1/2, NW & W1/2, SW of Section 05, T89N (Alden), R22W of the 5th P.M., Hardin County, Iowa

+/- 152.0 acres in the NW, Section 08, T89N (Alden), R22W of the 5th P.M., Hardin County, Iowa

I as land owner, or operator, agree that I will apply any additional commercial or organic fertilizers according to current DNR Manure Management Plan requirements specified for the site listed above. I plan to apply 0 pounds of Commercial Nitrogen Fertilizer and 0 pounds of Commercial Phosphorus Fertilizer to this field (described above), which is 0 pounds of ---------- (type of fertilizer). This application rate will remain in effect for calendar year 2020, and each succeeding year until amended or canceled by written notice.

Allen A. Tibbs
(Land Owner)

(Land Tenant/Operator)

Anthony Heiden
(Site Owner)

CROP YEAR 2021

Manure Management Plan Form

Appendix A8: Iowa Ag Statistics County Corn and Soybean Yield Averages, 2015-2019

County	Corn			Soybeans		
	5-yr. avg. yield (bu/ac)	5-yr. ave. yield + 10% (bu/ac)	Avg. yield of 4 highest (bu/ac)	5-yr. avg. yield (bu/ac)	5-yr. ave. yield + 10% (bu/ac)	Avg. yield of 4 highest (bu/ac)
Adair	174	191	180	54	59	55
Adams	179	197	182	54	59	55
Allamakee	193	212	197	55	60	55
Appanoose	164	180	169	50	55	51
Audubon	201	221	206	58	63	59
Benton	203	223	207	59	65	59
Black Hawk	204	224	207	58	63	59
Boone	196	216	197	56	61	56
Bremer	210	231	212	58	63	59
Buchanan	209	230	213	57	63	58
Buena Vista	195	215	197	57	63	58
Butler	207	227	210	57	63	57
Calhoun	198	218	199	57	62	58
Carroll	208	228	211	59	65	59
Cass	191	210	197	57	62	58
Cedar	208	229	213	59	65	60
Cerro Gordo	195	215	198	55	61	56
Cherokee	211	232	213	64	70	65
Chickasaw	202	222	204	54	59	55
Clarke	152	167	158	46	51	36
Clay	189	208	197	57	62	58
Clayton	203	224	206	59	65	59
Clinton	204	225	209	59	65	60
Crawford	217	238	221	62	68	62
Dallas	189	207	192	55	61	56
Davis	155	171	167	50	55	53
Decatur	160	176	167	49	54	50
Delaware	209	230	212	61	67	62
Des Moines	192	211	196	59	65	60
Dickinson	182	200	187	54	60	55
Dubuque	210	231	214	60	66	60
Emmet	192	211	201	55	61	57
Fayette	201	221	203	57	63	58
Floyd	197	216	200	55	60	56
Franklin	204	224	204	58	63	58
Fremont	190	209	193	55	60	56
Greene	200	220	203	57	62	57
Grundy	210	231	213	61	68	63
Guthrie	193	212	196	56	61	57
Hamilton	198	218	200	55	60	56
Hancock	194	214	199	56	62	58
Hardin	208	228	210	58	63	59

Manure Management Plan Form

Appendix A8: Iowa Ag Statistics County Corn and Soybean Yield Averages, 2015-2019

(continued)

County	Corn			Soybeans		
	5-yr. avg. yield (bu/ac)	5-yr. ave. yield + 10% (bu/ac)	Avg. yield of 4 highest (bu/ac)	5-yr. avg. yield (bu/ac)	5-yr. ave. yield + 10% (bu/ac)	Avg. yield of 4 highest (bu/ac)
Harrison	183	201	191	54	60	55
Henry	186	204	191	59	64	59
Howard	197	217	200	55	60	56
Humboldt	193	212	200	56	62	58
Ida	213	235	216	62	68	63
Iowa	206	226	210	56	61	57
Jackson	197	216	199	58	64	59
Jasper	209	230	212	59	65	60
Jefferson	178	196	182	53	59	55
Johnson	197	216	200	57	62	57
Jones	203	224	208	58	63	58
Keokuk	189	208	192	55	61	56
Kossuth	198	217	202	59	65	61
Lee	178	196	187	56	62	59
Linn	209	230	214	57	63	58
Louisa	194	213	199	57	63	58
[illegible]cas	151	166	156	47	52	49
Lyon	200	220	204	61	67	63
Madison	174	192	176	53	59	54
Mahaska	194	213	198	57	62	57
Marion	185	203	188	56	61	56
Marshall	215	237	220	62	68	62
Mills	190	209	195	54	59	55
Mitchell	200	221	202	56	62	58
Monona	187	206	191	55	61	56
Monroe	169	186	170	53	58	54
Montgomery	193	213	195	55	61	56
Muscatine	194	213	199	59	65	60
O'Brien	207	228	209	61	67	62
Osceola	197	216	201	57	62	58
Page	185	203	190	54	59	55
Palo Alto	189	208	197	56	62	58
Plymouth	207	228	211	60	66	62
Pocahontas	195	214	199	56	62	58
Polk	194	213	196	54	59	55
Pottawattamie	203	223	205	57	63	59
Poweshiek	209	230	212	56	62	57
[illegible]ggold	160	176	163	49	54	51
[illegible]	210	230	213	60	66	61
Scott	207	228	211	63	69	63
Shelby	205	225	209	58	64	59
Sioux	208	229	212	64	71	65

Manure Management Plan Form

Appendix A8: Iowa Ag Statistics County Corn and Soybean Yield Averages, 2015-2019

(continued)

	Corn			Soybeans		
County	5-yr. avg. yield (bu/ac)	5-yr. ave. yield + 10% (bu/ac)	Avg. yield of 4 highest (bu/ac)	5-yr. avg. yield (bu/ac)	5-yr. ave. yield + 10% (bu/ac)	Avg. yield of 4 highest (bu/ac)
Story	196	216	198	54	59	55
Tama	210	230	215	59	65	60
Taylor	165	181	167	51	56	52
Union	164	180	168	50	55	51
Van Buren	165	182	175	49	54	53
Wapello	173	190	177	53	59	56
Warren	171	188	175	52	58	53
Washington	203	224	209	59	64	59
Wayne	157	173	164	49	54	50
Webster	198	218	201	54	60	56
Winnebago	198	218	203	58	63	59
Winneshiek	199	219	202	55	61	56
Woodbury	209	230	211	58	64	59
Worth	194	213	197	55	61	57
Wright	197	216	201	56	62	57

Using Manure Nutrients for Crop Production

Nutrients in Animal Manure

Manure can supply nutrients required by crops and replenish nutrients removed from soil by crop harvest. Since manure contains multiple nutrients, applications should consider not only what is needed for the crop to be grown but also how the ratio of nutrients in manure could affect soil test levels. This ensures adequate nutrient supply and reduces potential for over- or under-application and subsequent buildup or depletion in the soil. Good manure nutrient management should consider short-term and long-term impacts on crop nutrient supply and soil resources.

Manure has characteristics that make nutrient management different and sometimes more complicated than fertilizer. These include a mix of organic and inorganic nutrient forms; variation in nutrient concentration and forms; variation in dry matter and resultant handling as a liquid or solid; and relatively low nutrient concentration requiring large application volumes. Since manure nutrient composition can vary significantly, sampling and laboratory analysis are always needed, while with fertilizer nutrient concentrations are provided at a guaranteed analysis.

The manure nutrient concentration varies considerably between animal species; dietary options; animal genetics; animal performance; production management and facility type; and collection, bedding, storage, handling, and agitation for land application. Use of average or "book" nutrient values can be helpful for designing a new facility and creating manure management plans but is not very helpful in determining specific manure nutrient supply or application rates due to wide variation in nutrient concentrations between production facilities. For example, a recent sampling across swine finishing facilities found a range in total N from 32 to 79 lb N/1,000 gal, P from 17 to 54 lb P_2O_5/1,000 gal, and K from 23 to 48 lb K_2O/1,000 gal. A similar or larger range can be found with other manure types. Nutrient analyses often vary greatly as storage facilities are emptied or manure is stockpiled, and also among multiple samples collected from loads during land application. Therefore, collecting multiple manure samples and maintaining a history of analysis results will improve use of manure nutrients.

For determining manure application rates and equating to crop fertilization requirements, it is most helpful if manure analyses give N, P_2O_5, and K_2O based on an as-received or wet basis in lb per ton or lb per 1,000 gal units. It is beyond the scope of this publication to give detailed manure sampling and laboratory analysis

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recommendations. Those can be found in the extension materials listed on page 7. If manure analyses are provided from the laboratory in other units, they must be converted to these units. See the ISU Extension manure sampling publication for appropriate conversion factors. If manure average nutrient values or methods to estimate manure nutrient concentrations based on excretion are of interest or needed for planning purposes, those can be found in the Midwest Plan Service bulletins listed on page 7.

Manure Nutrient Availability for Crops

Nutrient management guidelines use the words "manure nutrient availability" when suggesting manure applications to supply nutrients needed by crops. However, the meaning of "availability" for manure nutrients often is not clear or its use not consistent. Available is defined as present or ready for immediate use, or present in such chemical or physical form as to be usable (as by a plant). The main reasoning for using the term "available" in describing manure nutrients is that some portions are in forms that cannot be used by plants immediately upon application to soil and have to be converted to a form that plants can take up. The term "available" is not typically applied to fertilizers because most include chemical forms that plants can take up or are quickly converted upon application to soil. According to this definition, most inorganic fertilizers contain basically 100 percent crop-available nutrients. For example, anhydrous ammonia dissolves in water and rapidly changes to ammonium, urea hydrolyzes to ammonium within a few days, and ammonium is further transformed to nitrate by soil microorganisms. Monoammonium phosphate (MAP) and diammonium phosphate (DAP) are highly soluble in water and dissolve to ammonium and orthophosphate. Potassium chloride (KCl, potash), dissolves in water to potassium (K^+) and chloride (Cl^-) ions. Both orthophosphate and K ions are taken up by plants. Because all K contained in manure is in the K^+ ionic form, manure K is readily crop available in all manure sources.

For manure N and P, there is usually a mix of organic and inorganic materials that varies among manure sources, production systems, bedding, storage, and handling. This variety in forms of N and P in manure contributes to greater uncertainty in manure nutrient management compared with fertilizers. The ratio of inorganic (mainly ammonium) and organic N varies considerably with the manure source. This was shown, for example, by on-farm research that included manure sampling and analysis from swine and poultry operations. The fraction of total N as ammonium N was almost 100 percent for swine manure from the liquid portion of anaerobic lagoons, 65 to 100 percent (average 84 percent) for liquid swine manure from under-building pits or storage tanks, and 10 to 40 percent (average 20 percent) for solid poultry manure. The large ammonium-N concentration and organic-N fraction that is easily mineralized after application to soil explain why N in liquid swine manure is considered "highly" crop available and almost comparable to fertilizer N. Other manures have lower ammonium-N concentrations and greater (and tougher to degrade)

organic materials due to bedding and feed materials. Considerable P in swine manure is orthophosphate and calcium phosphate compounds (derived both from feed and mineral supplements added to rations) that are soluble or dissolve quickly once applied to soil. The rest is organic P, which varies greatly in complexity and reaction in soil. Testing manure for ammonium-N or water-soluble N can be a way of estimating immediately available N. Unfortunately, a similarly useful test does not exist for P. Therefore, the availability estimate for manure N and P can be, and often is, less than 100 percent of total N and P.

Manure Nutrient Supply

There is a clear difference between crop availability of nutrients in fertilizer or manure and season-long supply of nutrients. Significant amounts of plant usable forms of nutrients in both fertilizer and manure might be lost and became unavailable to crops after application. For example, N can be lost through processes such as leaching, volatilization, or denitrification while P can be lost through erosion and surface runoff. Also, these nutrients can be converted for short or long periods of time into forms not usable by plants through processes such as immobilization to organic materials for N and retention by soil mineral constituents for P. Nutrient loss issues are not as pertinent for P and K as for N in Iowa soils as long as there is little soil erosion and surface runoff.

The immediate or long-term fate of plant usable nutrients in soil can be similar for manure and fertilizer. However, variation in manure nutrient concentration, application rate, and application distribution affect nutrient supply and contribute to increased uncertainty with manure management. Application rate and distribution uncertainties affect all applied nutrient sources but are more difficult to manage with manure than with fertilizer. With careful manure sampling, pre-application nutrient analysis, study of nutrient analysis history, and calibration of application equipment, reasonable manure nutrient application rates can be achieved. Due to material characteristics, and sampling and analysis variability, field distribution and application rate variability often is greater for dry manure sources.

These supply issues can be important for N, P, and K, although typically are of greater concern with N. There are several reasons, including manure usually is applied for corn production where N supply is critical, many Iowa soils have optimum or higher P and K test levels where need for and response to P and K is much less than with N, and crop deficiency symptoms and yield loss resulting from nutrient supply problems are more obvious for N.

Manure nutrient loss, application rate, and distribution uncertainties usually are not included in crop nutrient availability estimates. Instead, they are handled by suggested management practices. Not all published guidelines are consistent in this regard and, therefore, suggested crop nutrient availabilities do vary between states and regions. In this publication, use of "availability" refers to manure nutrients potentially available for plant uptake (with no losses) by the first crop after application or beyond, and percent nutrient availability values provided correlate to those for commonly used fertilizers. The guidelines in this publication assume supply issues are handled in the best way possible as is done with fertilizers. It is important to understand that for successful manure nutrient management, in many instances supply issues are as, or more, critical than estimates of nutrient availability.

Improving crop nutrient supply with manure can be achieved by understanding the issues related to manure nutrient analysis, application rate, application distribution, and the benefits and risks related to management practices such as application timing and placement that influence potential losses. Additionally, use of available tools to determine initial soil nutrient levels and adjust application rates can help provide for adequate season-long nutrient supply when either manure or fertilizer is used. These tools include commonly used pre-plant soil testing for P and K, estimates of N application rate need based on response trial data (such as the *Corn Nitrogen Rate Calculator*), and tools to help determine need for

additional N after planting corn such as the late-spring soil nitrate test and in-season crop sensing for N stress.

Manure Nutrient Application Recommendations

To determine manure application rates, the following information is required: needed crop nutrient fertilization rate for N, P, K, or other deficient nutrients; manure type; nutrient analysis; nutrient crop availability; and method of application. Nutrient recommendations for crops are provided in other Iowa State University Extension publications and are not repeated here (see list on page 7). Once the needed nutrient application rate is determined, the manure rate to supply crop available nutrients is calculated based on the specific manure source being used.

An additional consideration is what portion of the needed fertilization will be supplied from manure—to meet the full crop nutrient requirement, or a partial requirement from manure and the remaining from fertilizer. This is an important consideration because manure contains multiple nutrients and a manure rate to supply the most deficient nutrient can over-supply other nutrients. Also, manure application to meet the least deficient or most environmentally restrictive nutrient application can result in under-supply of other nutrients.

In these cases, use of fertilizers in addition to manure application is necessary to appropriately meet all nutrient application requirements.

Manure Nutrient Availability Values

Many of the manure N, P, and K crop availability estimates listed in Table 1 are derived from research trials conducted in Iowa. However, when local research is lacking, applicable information was taken from research conducted in other states. For manure sources not listed in the table, values based on manure with similar characteristics can provide a reasonable estimate. The ranges in nutrient availability are provided to account for variation in the proportion of organic and inorganic N and P forms, bedding type and amount, manure sampling and analysis variation, and application importance at different P and K soil test levels. See the footnote in Table 1 for further information on variability in manure nutrient availability.

First-Year Availability Estimates

Table 1. First-year nutrient availability for different animal manure sources.

Manure Source	Nitrogen[1]	Phosphorus[2]	Potassium[2]
	Percent of Total Nutrient Applied		
Beef cattle (solid or liquid)	30–50	80–100	90–100
Dairy (solid or liquid)	30–50	80–100	90–100
Liquid swine (anaerobic pit)	90–100	90–100	90–100
Liquid swine (anaerobic lagoon)	90–100[3]	90–100[3]	90–100
Poultry (all species)	50–60	90–100	90–100

[1]The estimates for N availability do not account for potential volatile N losses during and after land application. Correction factors for volatile loss are given in Table 2. The ranges are provided to account for variation in the proportion of ammonium N (and for poultry manure also uric acid), bedding type and amount, and both sampling and analysis.

[2]The ranges in P and K availability are provided to account for variation in sampling and analysis, and for needed P and K supply with different soil test levels. A small portion of manure P may not be available immediately after application, but all P is potentially available over time. Use lower P and K availability values for soils testing in the Very Low and Low soil test interpretation categories, where large yield loss could occur if insufficient P or K is applied and a reasonable buildup is desirable. Use 100% when manure is applied to maintain soil-test P and K in the Optimum soil test category, when the probability of a yield response is small.

[3]Values apply for the liquid portion of swine manure in lagoons; the N and P availability will be less and difficult to estimate with settled solids.

Second- and Third-Year Availability Estimates

While manure N may become crop available over multiple years for some sources, there should not be an expectation that all of the manure N will eventually become crop available. This happens because some of the N is in difficult to degrade organic forms (recalcitrant) and will become part of the soil organic matter. For some manure sources, such as with bedded systems, not all of the manure N should be accounted for in manure plans over multiple years and the first-, second-, or third-year availability may not add up to 100 percent.

Animal manure that has considerable organic material can have some residual-N availability in the second or third year after application. The second-year N availability estimate for beef cattle and dairy manure is 10 percent, and 5 percent for the third year. Other manures that have similar organic N and bedding could have similar second- and third-year N availability. Manure sources that have low organic N will not have second-year crop available N. These include liquid systems like swine manure stored in under-building pits and above-ground tanks, and anaerobic lagoons. Poultry manure, since it has considerable organic material, has some but low second-year (0–10 percent) availability and no third-year N availability.

The P and K contained in animal manure are estimated at 100 percent crop available over a long term. Residual effects of P and K not used in the year of application will be reflected in soil tests and crop use, just like fertilizer P and K applied for one year or for multiple years.

Adjusting for Manure Nitrogen Volatilization

The estimates for manure N availability in Table 1 do not consider potential volatile N losses during or after application. Losses are from various volatile N compounds in manure, such as ammonia, and ammonia that is produced when urea, uric acid, or other compounds convert to ammonium. These are similar losses that can occur from some N fertilizers such as anhydrous ammonia, urea, and urea-ammonium nitrate (UAN) solutions. If manure is left on the soil surface, losses may occur until N is moved into the soil with rainfall or incorporated with tillage. Many factors affect the rate and amount of volatile loss, such as temperature, humidity, rainfall, soil moisture, soil pH, surface residue cover, and days to incorporation. Volatile losses at or after application often are difficult to predict accurately. However, losses can be significant, and, therefore, it is important to make an adjustment for volatile N losses from applied manure and for manure management planning purposes. Values given in Table 2 provide guidance on potential volatile losses. The correction factors in Table 2 do not account for N losses during storage and handling (time from excretion to sampling for analysis) and assume a reasonable time period from sampling to land application so that the manure analysis represents the manure being applied. To estimate manure N remaining in soil after application, multiply the applied manure N rate by the appropriate correction factor.

Table 2. Correction factors to account for N volatilization losses during and after land application of animal manure.[1]

Application Method	Incorporation	Volatilization Correction Factor[2]
Direct injection	—	0.98–1.00
Broadcast (liquid/solid)	Immediate incorporation	0.95–0.99
Broadcast (liquid)	No incorporation	0.75–0.90
Broadcast (solid)	No incorporation	0.70–0.85
Irrigation	No incorporation	0.60–0.75

[1]Adapted from Midwest Plan Service MWPS-18, Third Edition. Nitrogen losses during and within four days of application.

[2]Multiply the manure total N rate applied times the volatilization correction factor to determine the portion of total manure N remaining.

Considerations for Time of Application

The time of application influences nutrient availability and potential manure and nutrient loss from soil. Fall applications allow more time for organic N and P portions of manure to mineralize so they are available for plant uptake the next crop season. This is more important for N in manures with high organic matter content, such as bedded systems. Iowa research has shown that fall versus springtime P and K application usually is not an agronomic issue for fertilizers or manure. The increased time for organic N mineralization with fall application also allows for nitrification of ammonium and therefore more potential nitrate loss through leaching or denitrification with excessively wet spring conditions. This is a more important issue for manure with large ammonium-N concentration, such as liquid swine manure. Coarse-textured soils, with high permeability, are the most likely to have leaching losses. Fine- and moderately fine-textured soils, prone to excess wetness, are most likely to have denitrification losses. Manure applied in the spring has less time for organic N and P mineralization before crop uptake. Delayed mineralization can be an important issue for manure with high organic matter content, especially in cold springs. With manure that contains a large portion of N as ammonium, spring application allows for better timing of nitrification to nitrate and subsequent crop use, and less chance of N loss.

As a general rule, do not apply manure in the fall unless the soil temperature is 50° F and cooling at the four-inch soil depth. This will slow the mineralization and nitrification processes and is an especially important consideration for manure containing a large portion of N as ammonium.

Broadcasting manure onto frozen, snow-covered, water-saturated soils increases the potential for nutrient losses with rainfall or snowmelt runoff to surface water systems. If manure must be applied in these conditions, it should be applied on relatively flat land, slopes less than 5 percent, and well away from streams and waterways (see Iowa Department of Natural Resources rules on setback distances).

Example Calculation of Manure Application Rates

***Note:** The N, P, and K fertilization requirements in these examples are determined from appropriate extension publications and Web-based tools listed at the right.*

Example 1

- Manure source: liquid swine manure, finishing under-building pit.
- Manure analysis: 40 lb N/1,000 gal, 25 lb P_2O_5/1,000 gal, 35 lb K_2O/1,000 gal.
- Intended crop: corn in a corn-soybean rotation.
- Soil tests: 19 ppm Bray P-1 (Optimum), 165 ppm Ammonium Acetate K (Optimum).
- Crop yield and P and K removal for determining nutrient rates needed to maintain the Optimum soil test category: 200 bu/acre corn yield; 75 lb P_2O_5/acre and 60 lb K_2O removal.
- Manure rate: based on corn N fertilization requirement at 125 lb N/acre.
- Manure application: injected late fall.
- Manure nutrient availability: 100 percent for N, P, and K.
- Manure N volatilization correction factor: 0.98.
- Manure rate: 125 lb N/acre ÷ (40 lb N/1,000 gal × 0.98) = 3,200 gal/acre.
- Manure available P and K nutrients applied: 3,200 gal/acre × (25 lb P_2O_5/1,000 gal × 1.00) = 80 lb P_2O_5/acre; and 3,200 gal/acre × (35 lb K_2O/1,000 gal × 1.00) = 112 lb K_2O/acre.
- Phosphorus and K applied with the manure are adequate for P (slightly more than expected corn removal) and will supply more than needed K. The extra P and K can be used by the next crop and should be accounted for. However, additional P and K will need to be applied for the following soybean crop.

Example 2

- Manure source: solid layer manure.
- Manure analysis: 72 lb N/ton, 69 lb P_2O_5/ton, 54 lb K_2O/ton.
- Intended crop: corn-soybean rotation.
- Soil tests: 18 ppm Bray P-1 (Optimum), 120 ppm Ammonium Acetate K (Low).
- Manure rate: based on P requirement for the crop rotation at 120 lb P_2O_5/acre.
- Manure application: late fall, incorporated after four days.
- Manure nutrient availability: 55 percent for N, 100 percent for P and K.
- Manure N volatilization correction factor: 0.80.
- Manure rate: 120 lb P_2O_5/acre ÷ (69 lb P_2O_5/ton × 1.00) = 1.7 ton/acre.
- Manure available N and K nutrients applied: 1.7 ton/acre × (72 lb N/ton × 0.60 × 0.80) = 60 lb N/acre; and 1.7 ton/acre × (54 lb K_2O/ton × 1.00) = 92 lb K_2O/acre.
- Corn N fertilization need and K needed for the corn and soybean crops with a Low soil test category: 130 lb N/acre and 172 lb K_2O/acre.
- Crop available N and K applied with manure is not adequate for N, need additional 70 lb fertilizer N/acre (130 lb N/acre – 60 lb N/acre); and applied K is not adequate for the corn and soybean crops, need additional 80 lb K_2O/acre (172 – 92 lb K_2O/acre) from fertilizer.

Additional Resources

CROP 3073 *Nitrogen use in Iowa Crop Production*

PM 1688 *A General Guide for Crop Nutrient and Limestone Recommendations in Iowa*

PM 287 *Take a Good Sample to Help Make Good Decisions*

PM 2015 *Concepts and Rationale for Regional Nitrogen Rate Guidelines for Corn*

PM 1714 *Nitrogen Fertilizer Recommendations for Corn in Iowa*

PM 2026 *Sensing Nitrogen Stress in Corn*

PM 1584 *Cornstalk Testing to Evaluate Nitrogen Management*

PM 1588 *How to Sample Manure for Nutrient Analysis*

A3769 *Recommended Methods of Manure Analysis* (University of Wisconsin)

MWPS-18-S1 *Manure Characteristics: Section 1* (Midwest Plan Service)

MWPS-18 *Livestock Waste Facilities Handbook, Third Edition* (Midwest Plan Service)

Corn Nitrogen Rate Calculator, http://cnrc.agron.iastate.edu/

Using Manure Nutrients for Crop Production

Summary

- Carefully manage the nutrients in animal manure as you would manage fertilizer.
- Have representative manure samples analyzed to determine nutrient concentration. At a minimum, samples should be analyzed for moisture (dry matter) and total N, P, and K. For additional information on N composition, samples can be analyzed for ammonium. Maintain a manure analysis history for production facilities.
- Set the manure application rate according to crop fertilization requirements and for the crop availability of manure N, P, and K.
- Adjust manure rates for estimated N volatilization.
- For manure application rates, consider the crop N, P, and K fertilization requirements and field P-Index ratings, but do not exceed the crop N fertilization need.
- Consider the nutrient needs of crop rotations rather than just individual crops, which is especially important for P and K management.
- Allocate manure to fields based on soil tests and crops to be grown.
- Fall applications of manure should not be made until the soil temperature is 50° F and cooling, especially for manure sources that have a large portion of N as ammonium.
- Do not apply manure to snow-covered, frozen, or water-saturated sloping ground to reduce risk of nutrient loss and water quality impairment.

Prepared by John E. Sawyer and Antonio P. Mallarino, professors of agronomy and extension soil fertility specialists, Iowa State University.

Expert Reviewed This publication was peer-reviewed by three independent reviewers using a double-blind process.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914 in cooperation with the U.S. Department of Agriculture. Cathann A. Kress, director, Cooperative Extension Service, Iowa State University of Science and Technology, Ames, Iowa

Fireworks Permit Application

Applicant Name	Tony Keller
Address	34829 270th St
City	Eldora
State	IA
Zip Code	50627
Phone Number	
Email Address	
Name of organization applying for permit to explode fireworks:	Union Betterment
Name of person or organization that shall be the operator or operators of exploding the fireworks:	Tony Keller, Junior Prusha
List previous experience of the operator or operators in exploding the fireworks:	Tony Keller: assisted Dan Hauser with numerous firework displays including 4th of July, union tar heel days, and whitten days.
Has the operator or operators had any training in exploding fireworks?	No
If so, what has this consisted of?	*Field not completed.*
Date(s) on which the fireworks display shall take place:	August 1,, 2020
Location at which the fireworks shall be exploded:	South Hardin Recreation (hole 9 tee block)
City	Union
State	Iowa

Zip Code	50258
Will any emergency medical treatment be available at the location of where the fireworks will be displayed?	Yes
If so, what will this consist of?	Junior Prusha- Union EMT
Will any fire protection be available at the location of the fireworks display?	Yes
If so, what will this consist of?	Water sprayer near by as well as Union Fire Department will be present.
Will you notify your local fire department regarding the date, time, and location of the fireworks display?	Yes
Will any search be conducted after the fireworks display for unexploded fireworks?	Yes
Will people be restricted from the area until the search is completed?	Yes
Will the location where the fireworks display is conducted be wetted down after the fireworks display?	Yes
Will the operator and the permitee be covered by insurance for their fireworks display?	Yes

Iowa Code Section

Iowa Code Section 331.304(9) and Section 727.2, allow fireworks permits but (1) only upon an application made in writing; (2) only to municipalities, fair associations, amusement parks, and other organizations or groups of individuals approved by the County Board of Supervisors; (3) and only when the fireworks display will be handled by a competent operator.

These two statutes do not allow a County Board of Supervisors to issue a permit to an individual person.

If your area is under burn ban on the planned date of your fireworks display, this permit is void.

Applicant Signature	Tony Keller
Date	6/29/2020

(Section Break)

Submit Completed Application
Submit applications by United States Postal Service to:
Hardin County Board of Supervisors
1215 Edgington Avenue, Suite 1
Eldora, IA 50627

Submit completed application by fax to:
Fax: 641-939-8223

Submit completed application by email to:
Angela Silvey, asilvey@hardincountyia.gov

HARDIN COUNTY
Courthouse

HARDIN COUNTY COURTHOUSE
1215 EDGINGTON AVE.
ELDORA, IA 50627

HARDIN COUNTY
Employee Change of Status Report

Please enter the following change(s) as of 06/30/2020
Date

Name: Samuel Shindelar

Address: _____

Eldora (City) IA (State) 50627 (Zip Code)

Department: Secondary Roads

Position: Seasonal Laborer

Salary/Hourly Rate: $11/hour

Fund: 20000 - Secondary Road Fund

Status: ☐ Full-time ☐ Permanent Part-time ☒ Temporary/Seasonal Part-time

Reason of Change:

- ☐ Hired
- ☐ Promotion
- ☐ Demotion
- ☐ Pay Increase
- ☐ Leave of Absence _____ (Dates)
- ☐ Resignation
- ☐ Retirement
- ☒ Layoff
- ☐ Discharge

Other: Employee was on-call/seasonal basis

Dates of Employment: 05/22/2017 (From) to 06/30/2020 (To)

Last Day of Work _____ (if applicable)

Beyond the last day of work, the following vacation time was (or will be paid): _____ (From) to _____ (To)

Authorized by: _____ (Elected Official or Department Head) _____ (Date)

Authorized by: _____ (Board of Supervisors) _____ (Date)

HARDIN COUNTY
Courthouse

HARDIN COUNTY COURTHOUSE
1215 EDGINGTON AVE.
ELDORA, IA 50627

HARDIN COUNTY
Employee Change of Status Report

Please enter the following change(s) as of 06/30/2020
Date

Name: Benjamin Stanish

Address: _____

Eldora (City) IA (State) 50627 (Zip Code)

Fund: 20000 - Secondary Road Fund

Department: Secondary Roads

Position: Seasonal Laborer

Salary/Hourly Rate: $11/hour

Status: ☐ Full-time ☐ Permanent Part-time ☒ Temporary/Seasonal Part-time

Reason of Change:

- ☐ Hired
- ☐ Promotion
- ☐ Demotion
- ☐ Pay Increase
- ☐ Leave of Absence _____ (Dates)
- ☐ Resignation
- ☐ Retirement
- ☒ Layoff
- ☐ Discharge

Other: Employee was on-call/seasonal basis

Dates of Employment: 05/13/2019 (From) to 06/30/2020 (To)

Last Day of Work _____ (if applicable)

Beyond the last day of work, the following vacation time was (or will be paid): _____ (From) to _____ (To)

Authorized by: _____ (Elected Official or Department Head) _____ (Date)

Authorized by: _____ (Board of Supervisors) _____ (Date)