

AGENDA
REGULAR DRAINAGE MEETING
Wednesday, April 22, 2020 9:30 AM
Large Conference Room

County Buildings are closed to the public due to Covid -19 concerns, this meeting will be open to the public via conference call only. The meeting date and time will remain the same. You may call at that time to access the hearing by following the instructions below: To access the meeting call: 1-(312)-626-6799, when prompted enter meeting ID code: 662 016 552

You can also access the meeting online at: <https://zoom.us/j/662016552>

1. Open Meeting
2. Approve Agenda
3. DD 102 - Discuss W Possible Action - Wetland Project #HAR862018C Rock Bedding Alternative & Reclassification

Documents:

[2020 HAR862018C -ROCK BEDDING DEPTH ON NUTRIENT REDUCTION WETLAND PROJECT DD 102.PDF](#)

4. DD 14 WO 291- Discuss W Possible Action - Plugged Main Tile / Lat 2
Jim Sweeney reports DD 14 Main tile is likely plugged in Jim/Ron Vierkandt's parcels, Sheldahl had been called in to pothole and explore tile on S side of D41 and is likely District main tile. Images are on S side of D41. Intake further east of D41 & S27 intersection where the tile goes under the road is broken and needs repair. Additional request made by Vierkandt's and Cynthia loger on poor drainage on Lat 2, see documents for more details.

Documents:

[DD 14 WO 291 IMAGES 1-9.PDF](#)
[DD 14 WO 291 MAP.PDF](#)
[DD 14 WO 291.PDF](#)
[DD 14 WO 291 REQUEST.PDF](#)

5. DD 25 WO 1 - Discuss W Possible Action - Claim For Crop Damages- Fincham

Documents:

[DRAINAGE CLAIM FOR DAMAGES 2020-2 DAVID FINCHAM DD 25.PDF](#)
[DD 25 - IMG 1 DAVID FINCHAM CROP DAMAGES 12_7_2019.PDF](#)
[DD 25 - IMG 2 DAVID FINCHAM CROP DAMAGES 12_7_2019.PDF](#)
[DD 25 - IMG 3 DAVID FINCHAM CROP DAMAGES 12_7_2019.PDF](#)
[DD 25 - IMG 4 DAVID FINCHAM CROP DAMAGES 12_7_2019.PDF](#)

6. WO - 2020-8 - Discuss W Possible Action - Midland Drainage Utility Permit Application
WO - 2020-8 DD's 123, 31, 20, 26, H-H 104-222 - Midland Power Coop - 4 Miles of overhead line rebuild, along Hwy D41, Buckeye Township, Sections 27, 28, 29, 30.

Documents:

[WO 2020-8 MIDLAND COOP DRAINAGE UTILITY PERMIT APPLICATION.PDF](#)
[WO 2020-8 MIDLAND COOP DRAINAGE UTILITY PERMIT MAP.PDF](#)
[WO 2020-8 MIDLAND POWER COOP DRAINAGE UTILITY PERMIT.PDF](#)

7. WO 2020-9 - Discuss W Possible Action - Midland Drainage Utility Permit Application
WO 2020-9 - DD 106 - Midland Power Coop - 2 Mile line rebuild along 240th St., Tipton
Twp, Sections 8 & 9.

Documents:

[WO 2020-9 MIDLAND COOP DRAINAGE UTILITY PERMIT APPLICATION.PDF](#)
[WO 2020-9 MIDLAND COOP DRAINAGE UTILITY PERMIT MAP.PDF](#)
[WO 2020-9 MIDLAND POWER DRAINAGE UTILITY PERMIT.PDF](#)

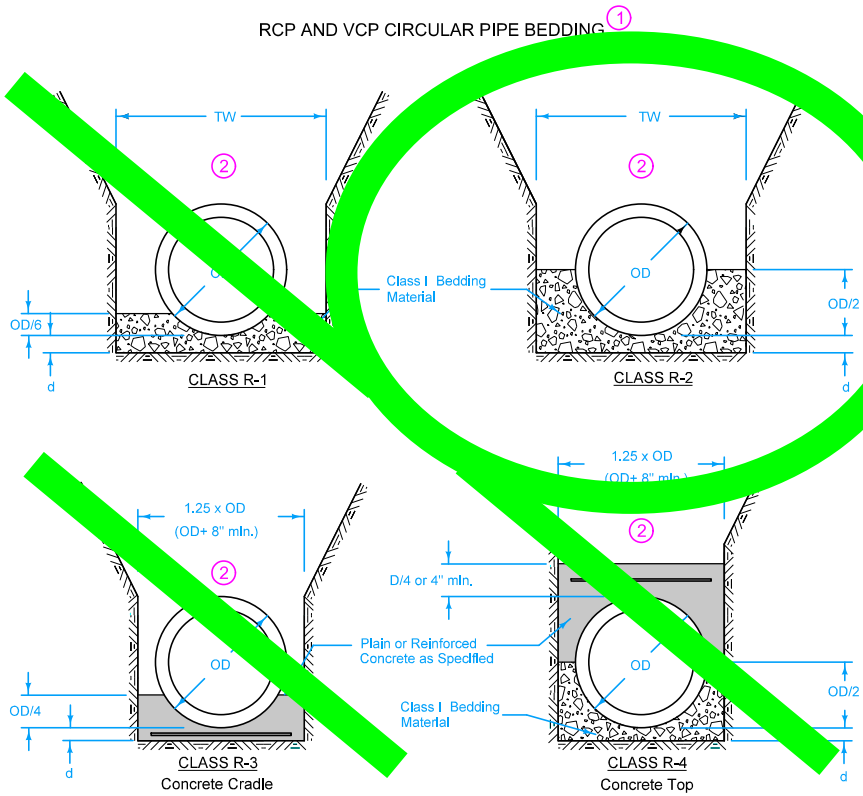
8. DD H-F WO 286 - Update From Franklin County

Documents:

[DD H-F 2 WO 286.PDF](#)
[DD H-F 2 WO 286 SIGNED FRANKLIN CO WAIVER.PDF](#)

9. Discuss W Possible Action - 2020 Drainage Assessments
10. Other Business
11. Adjourn Meeting

RCP AND VCP CIRCULAR PIPE BEDDING



Refer to sheet 2 for bury depth restrictions.

- ① Use Bedding Class R-1 or R-2 unless specified otherwise.
- ② Place remainder of bedding and backfill materials as specified in the contract documents.

Key

- OD = Outside diameter of pipe
- OS = Outside span of pipe
- TW = Trench width at top of pipe:
Min. = OD+18 Inches
Max. = 1.25xOD+12 inches OR 54 Inches (whichever is greater)
- d = Depth of bedding material below pipe:
OD/8 or OS/8, OR 4 inches (whichever is greater)

REINFORCED CONCRETE ARCH AND ELLIPTICAL PIPE BEDDING

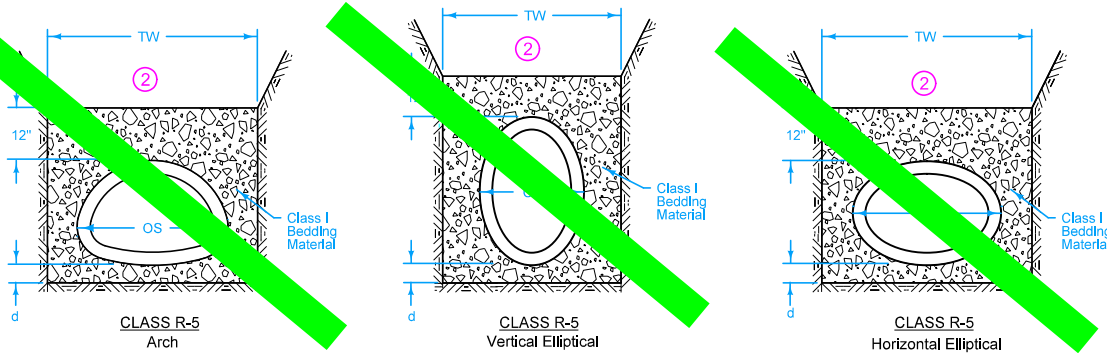


FIGURE 3010.102 SHEET 1 OF 2

SUDAS	IOWADOT	REVISION
		3 04-16-19
FIGURE 3010.102	STANDARD ROAD PLAN	SW-102
REVISIONS: Changed Class 1 to Class I in CLASS R-5 Vertical Elliptical detail.		SHEET 1 of 2
Paul D. Wigand SUDAS DIRECTOR		Steve Miller DESIGN METHODS ENGINEER
RIGID GRAVITY PIPE TRENCH BEDDING		

ALLOWABLE BURY DEPTH

CLASS III RCP

Pipe Diameter (in)	Class R-1 Bedding	Class R-2 Bedding	Class R-3 & R-4 Bedding		
			No Steel	As=0.4%	As=1.0%
12	7'	10'	15'	19'	27'
15	8'	10'	16'	19'	27'
18	8'	11'	16'	20'	40'
21	8'	11'	18'	26'	40'
24	8'	12'	23'	36'	40'
27	10'	15'	30'	40'	40'
30	11'	15'	29'	40'	40'
33	11'	15'	28'	40'	40'
36	11'	15'	27'	40'	40'
42	11'	15'	26'	38'	40'
48	11'	15'	26'	36'	40'
54	11'	15'	25'	34'	40'
60	11'	15'	25'	33'	40'
66	11'	15'	24'	32'	40'
72	11'	15'	24'	32'	40'

As = Area of Steel Reinforcing

CLASS IV RCP

Pipe Diameter (in)	Class R-1 Bedding	Class R-2 Bedding	Class R-3 & R-4 Bedding		
			No Steel	As=0.4%	As=1.0%
12	12'	15'	23'	28'	40'
15	12'	16'	23'	30'	40'
18	13'	16'	29'	40'	40'
21	13'	18'	40'	40'	40'
24	16'	23'	40'	40'	40'
27	19'	30'	40'	40'	40'
30	19'	29'	40'	40'	40'
33	19'	28'	40'	40'	40'
36	19'	28'	40'	40'	40'
42	18'	27'	40'	40'	40'
48	18'	26'	40'	40'	40'
54	18'	25'	40'	40'	40'
60	18'	25'	40'	40'	40'
66	18'	25'	40'	40'	40'
72	18'	24'	40'	40'	40'

As = Area of Steel Reinforcing

CLASS V RCP

Pipe Diameter (in)	Class R-1 Bedding	Class R-2 Bedding	Class R-3 & R-4 Bedding		
			No Steel	As=0.4%	As=1.0%
12	18'	23'	35'	40'	40'
15	19'	24'	40'	40'	40'
18	19'	30'	40'	40'	40'
21	25'	40'	40'	40'	40'
24	34'	40'	40'	40'	40'
27	40'	40'	40'	40'	40'
30	40'	40'	40'	40'	40'
33	40'	40'	40'	40'	40'
36	40'	40'	40'	40'	40'
42	37'	40'	40'	40'	40'
48	35'	40'	40'	40'	40'
54	33'	40'	40'	40'	40'
60	32'	40'	40'	40'	40'
66	31'	40'	40'	40'	40'
72	31'	40'	40'	40'	40'

As = Area of Steel Reinforcing

EXTRA STRENGTH VCP

Pipe Dia. (in)	Bedding Class				
	R-1	R-2	R-3 & R-4		
			No Steel	As=0.4%	As=1.0%
6	25'	30'	30'	30'	30'
8	20'	26'	30'	30'	30'
10	18'	23'	30'	30'	30'
12	16'	20'	30'	30'	30'
15	15'	19'	28'	30'	30'
18	14'	18'	30'	30'	30'
21	15'	22'	30'	30'	30'
24	18'	28'	30'	30'	30'
27	20'	30'	30'	30'	30'
30	19'	29'	30'	30'	30'
33	20'	30'	30'	30'	30'
36	20'	30'	30'	30'	30'
39	19'	29'	30'	30'	30'
42	18'	26'	30'	30'	30'

As = Area of Steel Reinforcing

CONCRETE ARCH PIPE

Pipe Size (in x in)	Equiv. Dia. (in)	Pipe Class	
		A-III	A-IV
18 x 11	15	6'	11'
22 x 13	18	6'	11'
26 x 15	21	6'	13'
29 x 18	24	7'	15'
36 x 22	30	8'	15'
44 x 27	36	8'	14'
51 x 31	42	8'	15'
58 x 36	48	8'	15'
65 x 40	54	8'	15'
73 x 45	60	8'	14'
88 x 54	72	9'	14'

Based on Class R-5 bedding

HORIZONTAL ELLIPTICAL RCP

Pipe Size (in x in)	Equiv. Dia. (in)	Pipe Class	
		HE-III	HE-IV
14 x 23	18	12'	22'
19 x 30	24	15'	29'
22 x 34	27	15'	28'
24 x 38	30	15'	27'
27 x 42	33	15'	27'
29 x 45	36	15'	26'
32 x 49	39	15'	26'
34 x 54	42	15'	25'
38 x 60	48	15'	25'
43 x 68	54	15'	24'
48 x 76	60	15'	24'
53 x 83	66	15'	24'
58 x 91	72	15'	24'
63 x 98	78	15'	23'
68 x 106	84	15'	23'

Based on Class R-5 bedding

VERTICAL ELLIPTICAL RCP

Pipe Size (in x in)	Equiv. Dia. (in)	Pipe Class			
		VE-III	VE-IV	VE-V	VE-VI
23 x 14	18	10'	15'	22'	33'
30 x 19	24	10'	16'	34'	40'
34 x 22	27	11'	20'	40'	40'
38 x 24	30	12'	23'	40'	40'
42 x 27	33	15'	30'	40'	40'
45 x 29	36	15'	29'	40'	40'
49 x 32	39	15'	29'	40'	40'
54 x 34	42	15'	28'	40'	40'
60 x 38	48	15'	27'	40'	40'
68 x 43	54	15'	27'	40'	40'
76 x 48	60	15'	26'	40'	40'
83 x 53	66	15'	25'	40'	40'
91 x 58	72	15'	25'	40'	40'
98 x 63	78	15'	25'	40'	40'
106 x 68	84	15'	24'	40'	40'

Based on Class R-5 bedding

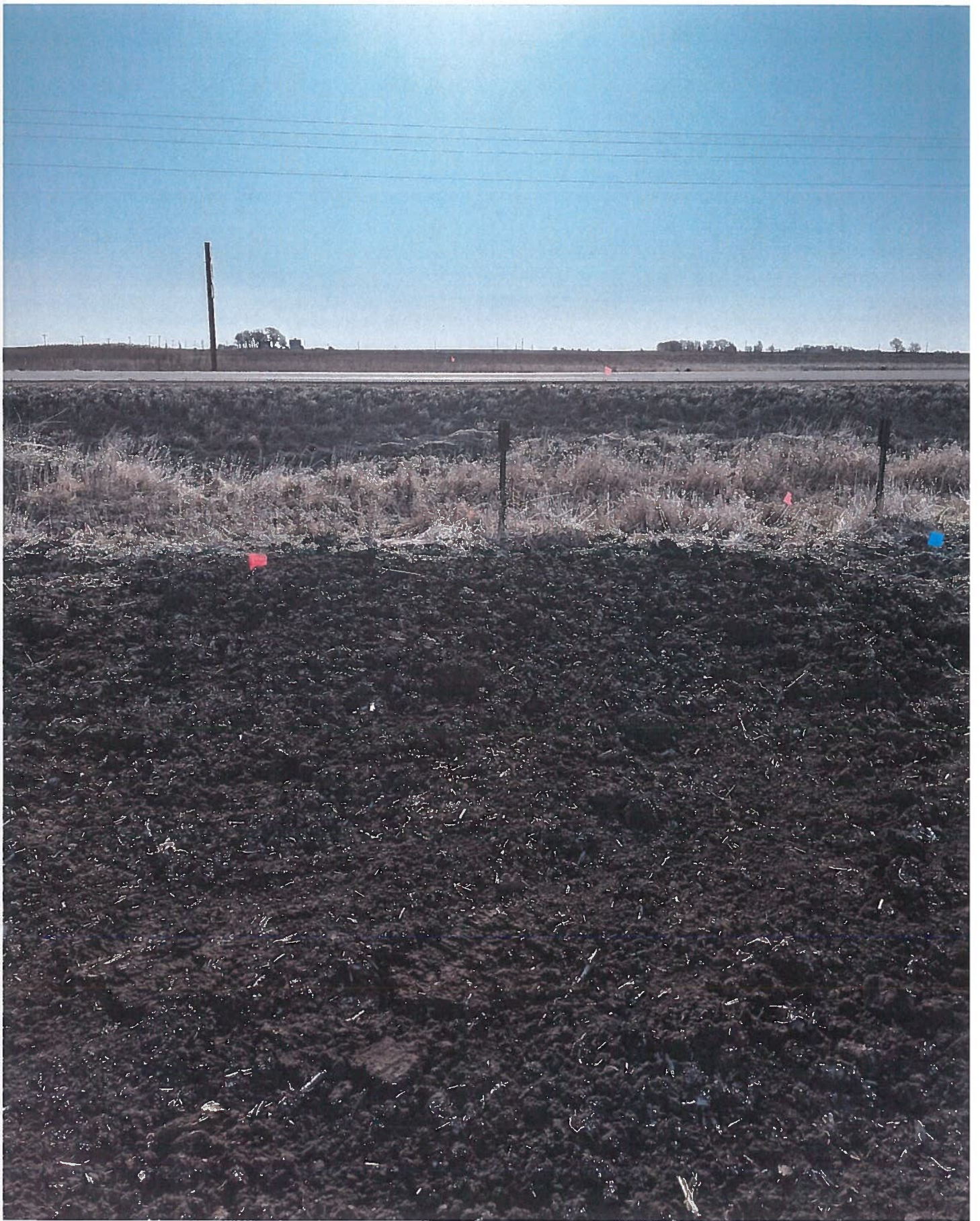
FIGURE 3010.102 SHEET 2 OF 2

		REVISION
		3 04-16-19
FIGURE 3010.102	STANDARD ROAD PLAN	SW-102
REVISIONS: Changed Class 1 to Class I in CLASS R-5 Vertical Elliptical detail.		SHEET 2 of 2
SUDAS DIRECTOR		DESIGN METHODS ENGINEER
RIGID GRAVITY PIPE TRENCH BEDDING		









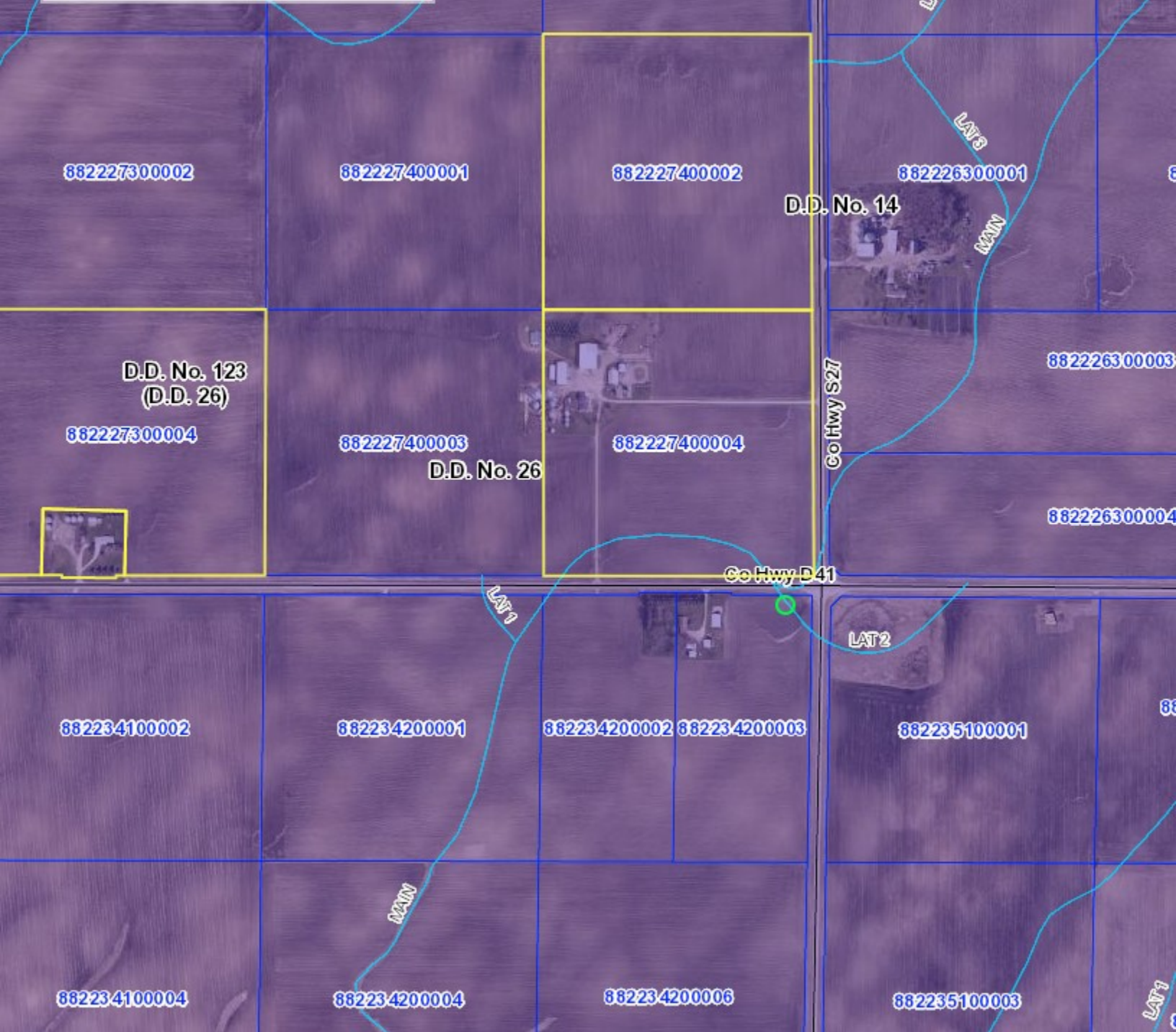












82226300002

D.D. No. 42

82235100002

MAN

82235100004



Drainage Work Order Request For Repair

Hardin County

Date: 4/15/2020

Work Order #: WO00000291

Drainage District: DDs\DD 14 (51027)

Sec-Twp-Rge: 34-88-22 **Qtr Sec:** E1/2 NE NE

Location/GIS: 88-22-34-200-003

Requested By: James Sweeney/Cynthia Ioger/Jim & Ron Vierkandt

Contact Phone: (641) 847-3273

Contact Email: jsweeney@cgaconsultants.com

Landowner (if different): Ron/Jim Vierkandt/Cynthia Ioger

Description:

DD 14- Sweeney reports plugged main tile in Jim & Ron's parcels, Sheldahl called in to pothole/explore tile on S side of D41, likely main tile. Intake further E of D41 & S27 intersection where tile goes under road needs repair. See Add'l Req in docs- lack of drg downstream of intersection of Lat 2/main tile. Last 3 years, Lat 2 has lacked enough drg to effectively farm area it should drain. Potholes dug by landowners in Sects 34/35 do not drain. Also, broken intake @ Lat 2 intersection w D41 in Sect. 35.

Repair labor, materials and equipment: _____

Repaired By: _____ **Date:** _____

Please reference work order # and send statement for services to:

Hardin County Auditor's Office
 Attn: Drainage Clerk
 1215 Edgington Ave, Suite 1
 Eldora, IA 50627
 Phone (641) 939-8111
 Fax (641) 939-8245

For Office Use Only

Approved: _____ **Date:** _____



Drainage Work Order Request For Repair

Hardin County

Date 4/20/2020 Work Order # _____

District # #14 Lateral Lat 2 & Main Fund # _____

Township _____ Section 27, 34, 35wp 88 Rge 22 Qtr Sec _____

Repair Requested By Cynthia Ioerger, Ronald Vierkandt, James Vierkandt

Address 15898 Co Hwy D41 Phone _____

Landowner Same

Address Same Phone _____

Request Taken By _____

Available for Repair Now? Yes Date Available _____

Problem Description

There is a lack of drainage somewhere downstream of the intersection of Lateral 2 and the main tile. Last three or so years the Lateral 2 tile has lacked enough drainage effectively farm the area it is supposed to drain. Pot-holes were dug by the landowners in sections 34 and 35, and water just sits in said holes without draining.

Also, there is a broken intake where Lateral 2 intersects D41 in section 35

Repair labor, materials and equipment _____

Potential Wetlands? Yes-Repair existing tile only No-Repair and maintain tile

Repaired By: _____

Date: _____

Please send statement for services to:

Phone (641) 939-8111
Fax (641) 939-8245

Hardin County Auditor's Office
Attn: Tina Schlemme
1215 Edgington Ave, Suite 1
Eldora, IA 50627

For Office Use Only

Approved: _____ Date: _____

Hardin County Drainage Claim for Damages

Claim # 2020-2 District # 25 Work Order # 209

Township Concord Section 27 Twp _____ Rge _____ Qtr Sec NE

Parcel Tax IDS 862227200003

Name David Fincham

Address 906 Yuma Ave.

Ames, IA 50014

Phone 515-292-6417

Email Address dafincham@mchsi.com

Landowner (if different) _____

Claim Type: Crop Damage

Crop Year 2019

Crop Year _____

Type of Crop Soybeans

Type of Crop _____

Acres Damaged 3 Reported (.76 CGA Verified)

Acres Damaged _____

Yield Per Acre _____

Yield Per Acre _____

NOTE: ½ of claim goes to David Fincham (\$203.87), ½ goes to Alvin Clark (\$203.87), 32786 Co Hwy S-27, Radcliffe, IA 50230 –

Other: _____

Desired Compensation – Please note if payment should be split between landlord/tenant.

Monetary Payment

Repair of Damages

Other: _____

Claimant Signature _____ Date _____

For Office Use Only

Unit Value \$ 9.25 /bushel Unit Value \$ _____ /bushel

Crop Damages (Verified Acres X Yield X Unit Value) \$ 407.74 \$ _____

Total Amount Approved \$ _____

Approved Signature _____ Date _____











HARDIN COUNTY

1215 EDGINGTON AVE., SUITE 1
ELDORA, IA 50627
(641) 939-8108

HARDIN COUNTY DRAINAGE DISTRICT UTILITY PERMIT APPLICATION

Applicant:

Midland Power Cooperative
Company Name

1005 E Lincoln Way
Address

Jefferson IA 50129
City State Zip

Applicant Contact:

Casey Huff (515) 386 - 5814
Name Phone

chuff@midlandpower.coop
Email

Utility Type:

Overhead Electrical Distribution

Drainage District(s) Crossed:

DD 123, DD 31, DD 20, DD 26, HH 104-222

Facilities Crossed (specific tile, open ditch):

Description of Work:

4 miles overhead line rebuild, along D41
Buckeye township, sections 27, 28, 29, 30

(Location plan of proposed utility must be attached.)

Pursuant to Code of Iowa Section 468.186, approval is hereby requested for the right, privilege and authority to construct, operate and maintain utilities on, over, across or beneath established Hardin County Drainage Districts, subject to the attached Requirements for Construction On, Over, Across or Beneath Established Drainage District. Failure to comply with said requirements shall be ground for revocation of the permit by the Hardin County Board of Supervisors.

[Signature]
Applicant Signature

4/17/20
Date

Submit Form and Location Plan To:

Hardin County Auditor's Office
Attn: Drainage Clerk
1215 Edgington Ave, Suite 1
Eldora, IA 50627
Fax (641) 939-8225
drainage@hardincountyia.gov

For Office Use Only

Application Approval:

By: _____
Board of Supervisor Chairman, Acting as Drainage District Trustee

Date: _____

APPROVED PERMIT #: _____

IOWA 93 MIDLAND POWER COOPERATIVE STAKING SHEET

Name 2 mile line rebuild 3Ø
 Location #: 1570--6727
 Address: Co Rd D41
 Phone#: _____

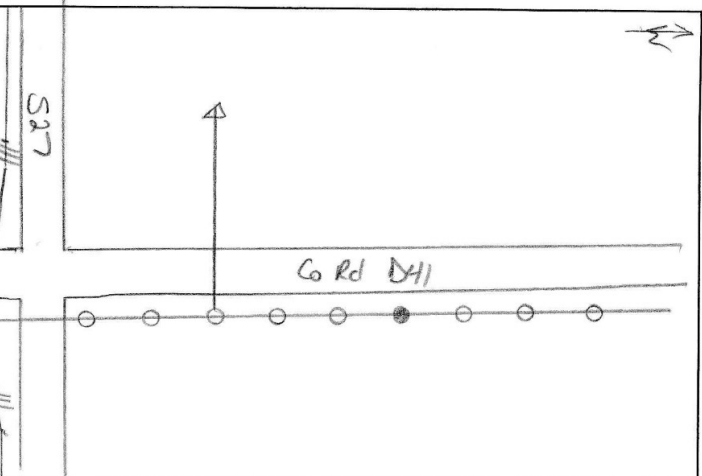
Sub 15
 Feeder 7
 Phase ABC
 Line Sec: _____

County: Hardin
 Township: Buckeye
 School Dist.: _____

WORK ORDER CODE	
New Construction	<input checked="" type="checkbox"/>
System Improvement	<input type="checkbox"/>
Replacement	<input type="checkbox"/>
Retire No. Replace	<input type="checkbox"/>

WORK ORDER NO. 13360
 740c# 301
 Staked By CH Date 4/4/20
 Sheet No. 1 of 10
 Comptid By _____ Date _____

SKETCH OF WORK Map Reference 67 Twp. 88N R 22W Sec. 27 Wire 3 Size 4/0 Kind ACSR



Pole No.	Pri. (Back) Span	Poles H & C		Pri. Unit Misc.	Line Angle	Trans. "G"	Ground "M2" Ohm	GUY		Anchor "E" No. J or K	SECONDARY		Misc. & Remarks	Unit	No.	
		Misc.	Misc.					Unit	310		Lead	Unit (Back) Span			Size Meter	CONSTR.
10	237	1	35-3	1	CL11P		H5.1							35-3	4	
9	237	1	35-3	1	CL11P		H5.1							40-3	3	
8	237	1	35-3	1	CL11P		H5.1							45-3	2	
7	249	1	35-3	1	CL11P	UCL	H4.1							CL11P	8	
6	248	1	40-3	1	CL11P		H5.1							Ce.21	3	
5	248	1	35-3	1	CL11P		H5.1							A5.1	1	
4	229	1	40-3	1	CL11P	A5.1	H4.1							H1.1	3	
3	229	1	40-3	1	CL11P		H5.1							P1.1	3	
2	229	1	45-3	1	CL11P		H4.1							FL12	3	
1	45-3	1	66-21	1	CL21		H1.1							H5.1	6	
TOTALS		3	611													

JOB BRIEFING

<input type="checkbox"/> Nominal Voltage	<input type="checkbox"/> Loc of Line Protective Dvc
<input type="checkbox"/> Fault Current Available	<input type="checkbox"/> Other Utilities in Area
<input type="checkbox"/> Hazardous Induced Volts	<input type="checkbox"/> Personal Protective Equip
<input type="checkbox"/> Presence Protective Grids	<input type="checkbox"/> Traffic Control
<input type="checkbox"/> Equipment Protective Grounds	<input type="checkbox"/> Job Procedure
<input type="checkbox"/> Pole Condition	<input type="checkbox"/> Individual Job Duties
<input type="checkbox"/> Environmental Condition	<input type="checkbox"/> Other Hazards

Crew Initials 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____

CONSTRUCTION

Conductor	Pri.	Sec.	O.H.	URD	Pole Line Ft.	No. of Wires	Total Feet
4/0	ACSR	X			2143	3	6621
1/2	ACSR	X			2143	1	2207
TOTALS							

RETIREMENT

Conductor	Pri.	Sec.	O.H.	URD	Pole Line Ft.	No. of Wires	Total Feet
TOTALS							

Const. Compt _____
 Retmt. Compt _____
 Material Ticket Compt _____
 500 BH 9-00

IOWA 93 MIDLAND POWER COOPERATIVE STAKING SHEET

Name 4 mile line rebuild 30
 Location #: 1570 - - 6727
 Address: Co Rd B41
 Phone#: _____

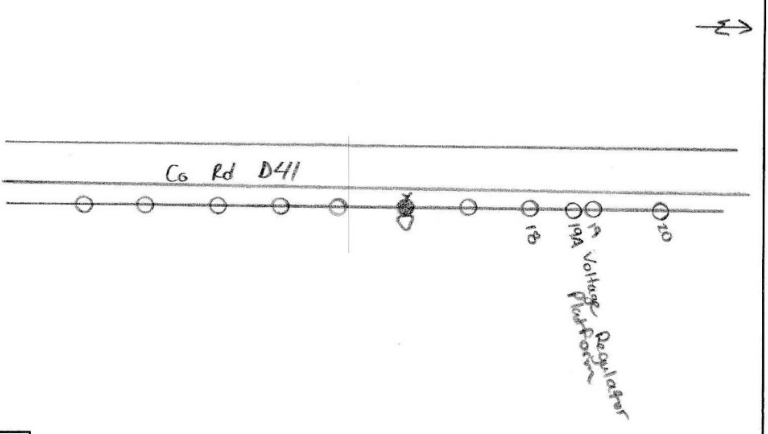
15 Sub
7 Feeder
ARC Phase
 Line Sec: _____

County: Hardin
 Township: Buckeye
 School Dist.: _____

WORK ORDER CODE	
New Construction	
System Improvement	✓
Replacement	
Retire No. Replace	

WORK ORDER NO. 13360
 740c# 301
 Staked By CH Date 4/9/20
 Sheet No. 2 of 10
 Comptd By _____ Date _____

SKETCH OF WORK Map Reference 67 Twp. 88N R. 22W Sec. 27 Wire 3 Size 4/0 Kind ACSR



Pole No.	Pri. (Back) Span.	Poles H & C		Pri. Unit	Line Angle	Trans. "G"	Ground "M2"	Ohm	GUY			Anchor "F"	SECONDARY		Misc. & Remarks	Unit	Size Meter	No. CONST.	No. RET.
		Misc.	Misc.						Unit	310	Lead		Unit No. J or K	(Back) Span					
20	221	1	35-3	1	CLIP		H1.1	P.1								35-3	4		
19A	11	1	40-3	1	CLIP	Y1.3	H1.1									40-3	6		
19	221	1	40-3	1	CLIP		H1.1									CLIP	10		
18	221	1	35-3	1	CLIP		H5.1									H1.1	5		
17	221	1	40-3	1	CLIP		H5.1									H5.1	5		
16	211	1	40-3	1	CLIP		H1.1									P.1	9		
15	237	1	40-3	1	CLIP		H1.1	P.1								Y1.3	1		
14	237	1	40-3	1	CLIP		H5.1												
13	237	1	35-3	1	CLIP		H5.1												
12	237	1	40-3	1	CLIP		H5.1												
11	237	1	35-3	1	CLIP		H1.1	P.1											

JOB BRIEFING

Nominal Voltage _____
 Fault Current Available _____
 Hazardous Induced Voltg _____
 Presence Protective Equip _____
 Equipment Grounds _____
 Pole Condition _____
 Environmental Condition _____

Loc of Line Protective Dvc _____
 Other Utilities in Area _____
 Personal Protective Equip _____
 Traffic Control _____
 Job Procedure _____
 Individual Job Duties _____
 Other Hazards _____

Crew Initials 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____

CONSTRUCTION

Conductor	Pri. Sec.	O.H. URD	Pole Line Ft.	No. of Wires	Total Feet
4/0 ACSR	X	X	2291	3	7079
4/0 ACSR	X	X	2291	1	2359
TOTALS					

RETIREMENT

Conductor	Pri. Sec.	O.H. URD	Pole Line Ft.	No. of Wires	Total Feet
TOTALS					

Const. Complt _____
 Retmt. Complt _____
 Material Ticket Complt _____
 500 BH 9-00

IOWA 93 MIDLAND POWER COOPERATIVE STAKING SHEET

Name Line Richard 4mi 3p
 Location # 1570 -- 6727
 Address: Co Rd D41
 Phone#: _____

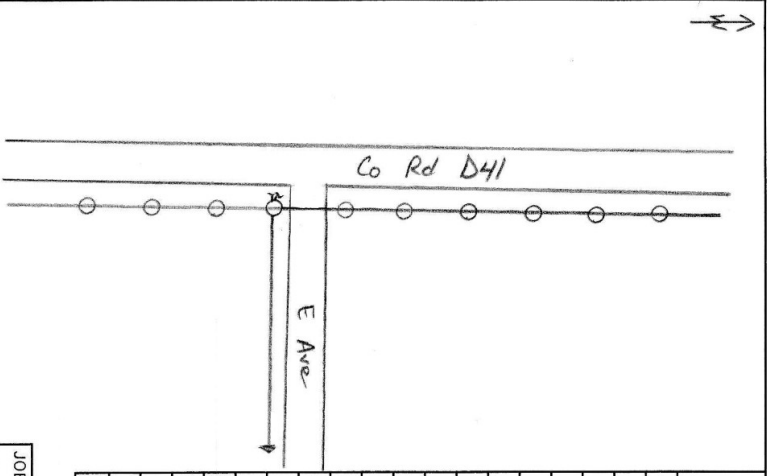
15 Sub
7 Feeder
ABC Phase
 Line Sec: _____

County: Hardin
 Township: Buckeye
 School Dist.: _____

WORK ORDER CODE	
New Construction	
System Improvement	<input checked="" type="checkbox"/>
Replacement	
Retire No. Replace	

WORK ORDER NO. 18360
 740# 301
 Staked By CH Date 4/9/20
 Sheet No. 3 of 10
 Compiled By _____ Date _____

SKETCH OF WORK Map Reference 67 Twp. 88N R 22W Sec. 27 Wire 3 Size 4/0 Kind ASR



Pole No.	Pri. (Back) Span.	Poles H & C		Pri. Unit	Line Angle	Trans. "G"	Ground "M2"	Ohm	GUY		Anchor "F"	SECONDARY		Misc. & Remarks	Unit	No.	
		Misc.	Misc.						No. Unit "E"	310		Lead	No. Unit J or K			(Back) Span	Size Meter
30	216	1	35-3	1	C11P		H5.1								35-3	2	
29	216	1	35-3	1	C11P		H1.1	P1.1							40-3	2	
28	216	1	35-3	1	C11P		H5.1								C2.21P	1	
27	216	1	35-3	1	C11P		H5.1								AS.1	1	
26	216	1	40-3	1	C11P		H5.1								H1.1	3	
25	216	1	40-3	1	C11P		H1.1	P1.1							H5.1	7	
24	221	1	35-3	1	C2.21P	AS.1	H1.1		2	E1.1	11" 11' S	FILE			P1.1	6	
23	221	1	35-3	1	C11P		H5.1								E1.1	2	
22	221	1	35-3	1	C11P		H5.1								E1.2	2	
21	221	1	35-3	1	C11P		H5.1										

JOB BRIEFING

Normal Voltage	Loc of Line Protective Dvc
Fault Current Available	Other Utilities in Area
Hazardous Induced Volting	Personal Protective Equip
Presence Protective Grds	Traffic Control
Equipment Grounds	Job Procedure
Pole Condition	Individual Job Duties
Environmental Condition	Other Hazards

Crew Initials 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____

CONSTRUCTION

Conductor	Pri. Sec.	O.H. URD	Pole Line Ft.	No. of Wires	Total Feet
4/0	X		2180	3	6736
1/0	X		2180	1	2245
ASR	X				
TOTALS	X	X	X	X	X

RETIREMENT

Conductor	Pri. Sec.	O.H. URD	Pole Line Ft.	No. of Wires	Total Feet
TOTALS	X	X	X	X	X

Const. Complt _____
 Retmt. Complt _____
 Material Ticket Complt _____
 500 BH 9-00

IOWA 93 MIDLAND POWER COOPERATIVE STAKING SHEET

Name Line Rebuild 4mi. 30
 Location #: 1570--6728
 Address: Co Rd D41
 Phone#: _____

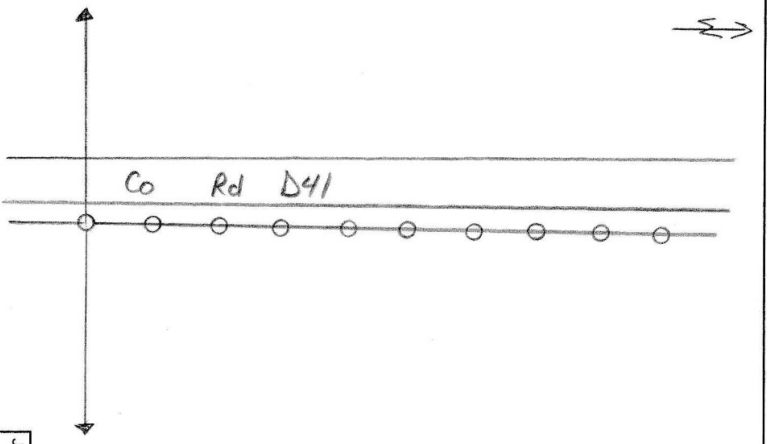
15 Sub
7 Feeder
ABC Phase
 Line Sec: _____

County: Hardin
 Township: Buckeye
 School Dist.: _____

WORK ORDER CODE	
New Construction	<input checked="" type="checkbox"/>
System Improvement	<input type="checkbox"/>
Replacement	<input type="checkbox"/>
Retire No. Replace	<input type="checkbox"/>

WORK ORDER NO. 13360
 740c# 301
 Staked By CH Date 4/2/20
 Sheet No. 4 of 10
 Comptd By _____ Date _____

SKETCH OF WORK Map Reference 67 Twp. 88N R 22W Sec. 28 Wire 3 Size 4/0 Kind ACSR



Pole No.	Pri. (Back) Span.	Poles H & C		Pri. Unit	Line Angle	Trans. "G"	Ground "M2" Ohm	GUY			Anchor "F" No. J or K	SECONDARY		Misc. & Remarks	Unit	No.	
		Misc.	Misc.					Unit	310	Lead		Unit (Back) Span	Size Meter			CONSTR.	RET.
40	226	1	40-3	1	CLIP		H5.1							35-3	1		
39	226	1	40-3	1	CLIP		H5.1							40-3	9		
38	226	1	40-3	1	CLIP		H5.1							CLIP	10		
37	226	1	40-3	1	CLIP		H5.1							AS.1	2		
36	226	1	40-3	1	CLIP		H5.1							H.1	3		
35	226	1	40-3	1	CLIP		H5.1							H5.1	7		
34	226	1	40-3	1	CLIP		H5.1							P.1	6		
33	180	1	40-3	1	CLIP		H5.1										
32	180	1	40-3	1	CLIP		H5.1										
31	216	1	40-3	1	CLIP		H5.1										

JOB BRIEFING

<input type="checkbox"/> Nominal Voltage	<input type="checkbox"/> Loc of Line Protective Dvc
<input type="checkbox"/> Fault Current Available	<input type="checkbox"/> Other Utilities in Area
<input type="checkbox"/> Hazardous Induced Voltg	<input type="checkbox"/> Personal Protective Equip
<input type="checkbox"/> Presence Protective Grds	<input type="checkbox"/> Traffic Control
<input type="checkbox"/> Equipment Grounds	<input type="checkbox"/> Job Procedure
<input type="checkbox"/> Pole Condition	<input type="checkbox"/> Individual Job Duties
<input type="checkbox"/> Environmental Condition	<input type="checkbox"/> Other Hazards

Crew Initials 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____

CONSTRUCTION

Conductor	Pri.	Sec.	O.H.	URD	Pole Line Ft.	No. of Wires	Total Feet
4/0	X		X		2158	3	6668
250	X		X		2158	1	2222
TOTALS							

RETIREMENT

Conductor	Pri.	Sec.	O.H.	URD	Pole Line Ft.	No. of Wires	Total Feet
TOTALS							

Const. Complt _____
 Retmt. Complt _____
 Material Ticket Complt _____
 500 BH 9-00

IOWA 93 MIDLAND POWER COOPERATIVE STAKING SHEET

Name Line Rebuild 4mi 30'
 Location #: 1570 -- 6728
 Address: Co Rd 541
 Phone#: _____

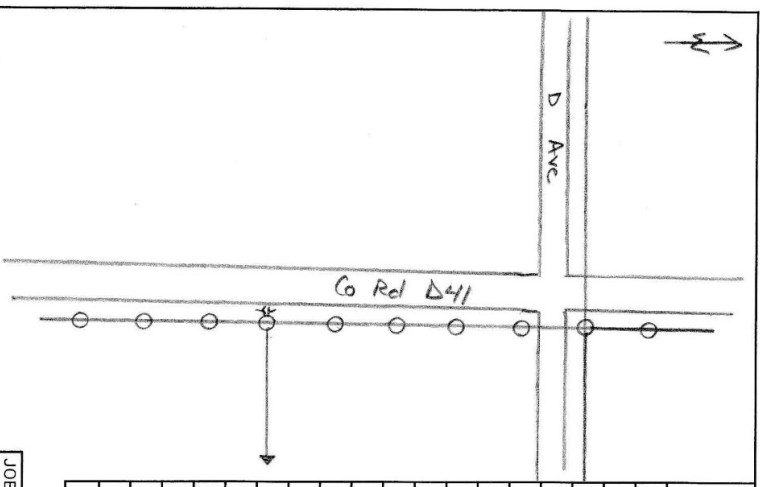
Sub 15
 Feeder 7
 Phase ABC
 Line Sec. _____

County: Hardin
 Township: Buckeye
 School Dist.: _____

WORK ORDER CODE	
New Construction	
System Improvement	<input checked="" type="checkbox"/>
Replacement	
Retire No. Replace	

WORK ORDER NO. 13360
 740c# 301
 Staked By CH Date 4/4/20
 Sheet No. 5 of 10
 Comptd By _____ Date _____

SKETCH OF WORK Map Reference 67 Twp. 82N R 22W Sec. 28 Wire 3 Size 4/0 Kind ACSR



Pole No.	Pri. (Back) Span	Poles H & C		Pri. Unit Misc.	Line Angle	Trans. "G"	Ground "M2" Ohm	GUY			Anchor "F" No. J or K	SECONDARY		Misc. & Remarks	Unit	No.		
		Misc.	Misc.					Unit	Unit	(Back) Span		Size Meter	CONSTR.			RET.		
50	216	1	40-3	1	CLIP		H1.1 (13) P1.1							35-3	6			
49	198	1	45-3	1	CLIP		H1.1							40-3	3			
48	198	1	40-3	1	CLIP		H1.1							45-3	1			
47	198	1	35-3	1	CLIP		H5.1							CLIP	9			
46	198	1	35-3	1	CLIP		H5.1							Change North tap to BØ	CLIP	9		
45	242	1	35-3	1	CLIP		H1.1 P1.1							2.21P	1			
44	213	1	35-3	1	CLIP	AS.1	H1.1							AS.1	3			
43	180	1	35-3	1	CLIP		H5.1							H1.1	5			
42	180	1	35-3	1	CLIP		H5.1							H5.1	5			
41	226	1	40-3	1	CLIP		H1.1 P1.1							CLIP	9			
1570-01B																		

JOB BRIEFING					
<input type="checkbox"/>	Nominal Voltage	<input type="checkbox"/>	Loc of Line Protective Dvc	<input type="checkbox"/>	1
<input type="checkbox"/>	Fault Current Available	<input type="checkbox"/>	Other Utilities in Area	<input type="checkbox"/>	2
<input type="checkbox"/>	Hazardous Induced Voltag	<input type="checkbox"/>	Personal Protective Equip	<input type="checkbox"/>	3
<input type="checkbox"/>	Presence Protective Grds	<input type="checkbox"/>	Traffic Control	<input type="checkbox"/>	4
<input type="checkbox"/>	Equipment Grounds	<input type="checkbox"/>	Job Procedure	<input type="checkbox"/>	5
<input type="checkbox"/>	Pole Condition	<input type="checkbox"/>	Individual Job Duties	<input type="checkbox"/>	6
<input type="checkbox"/>	Environmental Condition	<input type="checkbox"/>	Other Hazards		

CONSTRUCTION					
Conductor	Pri. Sec.	O.H. URD	Pole Line Ft.	No. of Wires	Total Feet
4/0 ACSR	X	X	2049	3	6331
1/0 ACSR	X	X	2049	1	2110
TOTALS	X	X		X	

RETIREMENT					
Conductor	Pri. Sec.	O.H. URD	Pole Line Ft.	No. of Wires	Total Feet
TOTALS	X	X		X	

Const. Compt _____
 Retrm. Compt _____
 Material Ticket Compt _____
 500 BH 9-00

IOWA 93 MIDLAND POWER COOPERATIVE STAKING SHEET

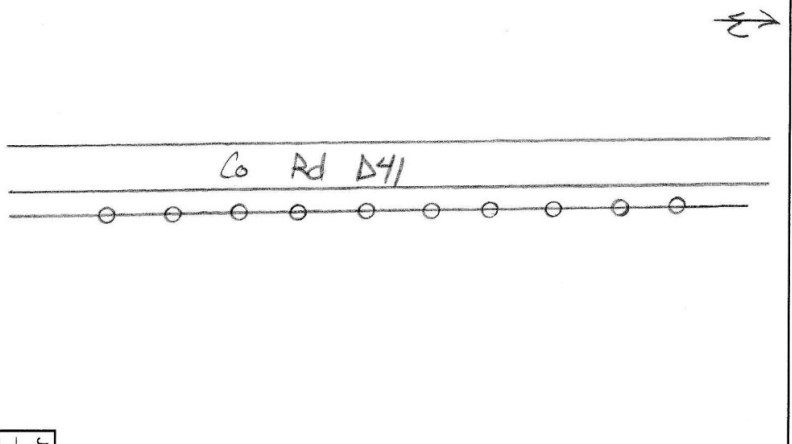
Name Line Rebuild 4m. 3p
 Location # 1570--6729
 Address: Co Rd D41
 Phone #: _____

Sub 15 Feeder 7 Phase ABC
 County: Hardin Township: Buckeye
 School Dist.: _____

New Construction	
System Improvement	<input checked="" type="checkbox"/>
Replacement	
Retire No. Replace	

WORK ORDER NO. 13600 740c# 301
 Staked By CH Date 4/1/20
 Sheet No. 6 of 10
 Comptd By _____ Date _____

SKETCH OF WORK Map Reference 67 Twp. 88N R 22W Sec. 29 Wire 3 Size 4/0 Kind ACSR



Pole No.	Pri. (Back) Span.	Poles H & C		Pri. Unit	Line Angle	Trans. "G"	Ground "M2"	Ohm No.	GUY			Anchor "F"	SECONDARY		Misc. & Remarks	Unit	No.	
		Misc.	Misc.						Unit	310	Lead		No. J or K	(Back) Span			Size Meter	CONSTR.
60	172	1	40-3	1			H5.1									35-3	6	
59	203	1	35-3	1			H5.1									40-3	4	
58	211	1	40-3	1			H1.1 (3) P.1									C11P	10	
57	211	1	35-3	1			H5.1									H1.1	2	
56	211	1	35-3	1			H5.1									H5.1	8	
55	211	1	35-3	1			H5.1									P.1.1	6	
54	216	1	35-3	1			H1.1 (3) P.1											
53	216	1	35-3	1			H5.1											
52	216	1	40-3	1			H5.1											
51	216	1	40-3	1			H5.1											

JOB BRIEFING

<input type="checkbox"/> Nominal Voltage	<input type="checkbox"/> Loc of Line Protective Dvc
<input type="checkbox"/> Fault Current Available	<input type="checkbox"/> Other Utilities in Area
<input type="checkbox"/> Hazardous Induced Voltg	<input type="checkbox"/> Personal Protective Equip
<input type="checkbox"/> Presence Protective Grds	<input type="checkbox"/> Traffic Control
<input type="checkbox"/> Equipment Grounds	<input type="checkbox"/> Job Procedure
<input type="checkbox"/> Pole Condition	<input type="checkbox"/> Individual Job Duties
<input type="checkbox"/> Environmental Condition	<input type="checkbox"/> Other Hazards

Crew Initials 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____

CONSTRUCTION

Conductor	Pri.	Sec.	O.H.	URD	Pole Line Ft.	No. of Wires	Total Feet
4/0 ACSR	X		X		2083	3	6436
1/2 ACSR	X		X		2083	1	2145
TOTALS	X	X	X	X			

RETIREMENT

Conductor	Pri.	Sec.	O.H.	URD	Pole Line Ft.	No. of Wires	Total Feet
TOTALS	X	X	X	X			

Const. Compt _____
 Retmt. Compt _____
 Material Ticket Compt _____
 500 BH 9-00

Name Line Rebuild 4mi 30'

Location # 1570--6729

Address: Co Rd D41

Phone #: _____

Sub 15

Feeder 7

Phase ABC

Line Sec: _____

County: Hardin

Township: Buckeye

School Dist.: _____

IOWA 93 MIDLAND POWER COOPERATIVE STAKING SHEET

WORK ORDER CODE

New Construction

System Improvement

Replacement

Retire No. Replace

WORK ORDER NO. 13360

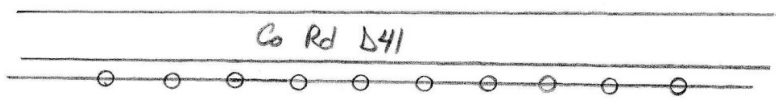
740c# 301

Staked By CH Date 4/9/70

Sheet No. 7 of 10

Compltd By _____ Date _____

SKETCH OF WORK Map Reference 67 Twp. 88N R 22W Sec. 29 Wire 3 Size 4/0 Kind ACSR



Pole No.	Pri. (Back) Span.	Poles H & C		Pri. Unit	Line Angle	Trans. "G"	Ground "M2" Ohm	GUY		Anchor "F" No.	SECONDARY		Misc. & Remarks	Unit	No.	
		Misc.	Misc.					Unit 310	Lead		Unit (Back) Span	Size Meter			CONST.	RET.
70	198	1	35-3	1	CLIP		H1.1 P1.1							35-3	8	
69	198	1	35-3	1	CLIP									40-3	2	
68	198	1	35-3	1	CLIP									CLIP	10	
67	198	1	35-3	1	CLIP									H1.1	3	
66	198	1	35-3	1	CLIP									H5.1	7	
65	214	1	35-3	1	CLIP									P1.1	9	
64	214	1	35-3	1	CLIP											
63	214	1	35-3	1	CLIP											
62	172	1	40-3	1	CLIP											
61	172	1	40-3	1	CLIP											

JOB BRIEFING

Normal Voltage _____

Fault Current Available _____

Hazardous Induced Voltag _____

Presence Protective Grids _____

Equipment Grounds _____

Pole Condition _____

Environmental Condition _____

Crew Initials 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____

CONSTRUCTION

Conductor	Pri. Sec.	O.H. URD	Pole Line Ft.	No. of Wires	Total Feet
4/0	X	X	1976	3	6105
1/0	X	X	1976	1	2035
TOTALS	X	X			

RETIREMENT

Conductor	Pri. Sec.	O.H. URD	Pole Line Ft.	No. of Wires	Total Feet
TOTALS					

Const. Complt _____

Retmt. Complt _____

Material Ticket Complt _____

500 BH 9-00

IOWA 93 MIDLAND POWER COOPERATIVE STAKING SHEET

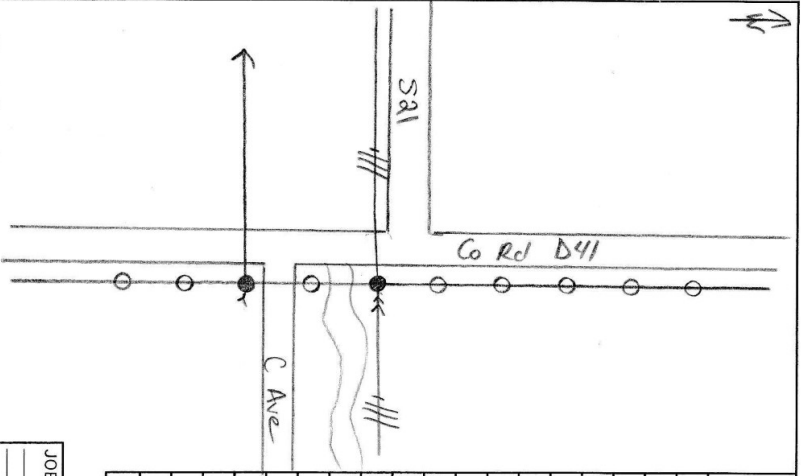
Name Line Rebuild 4mi. 30
 Location #: 1570--6730
 Address: Co Rd D41
 Phone#: _____

Sub 15 Feeder 7
 Phase ABC
 County: Hardin
 Township: Buckeye
 School Dist.: _____

WORK ORDER CODE	
New Construction	<input checked="" type="checkbox"/>
System Improvement	<input type="checkbox"/>
Replacement	<input type="checkbox"/>
Retire No. Replace	<input type="checkbox"/>

WORK ORDER NO. 13360
 740c# 301
 Staked By CH Date 4/16/20
 Sheet No. 8 of 10
 Comptd By _____ Date _____

SKETCH OF WORK Map Reference 67 Twp. 88N R 22W Sec. 30 Wire 3 Size 4/0 Kind ACSR



Pole No.	Pri. (Back) Span.	Poles H & C		Pri. Unit	Line Angle	Trans "G"	Ground "M2"	Ohm No.	Unit "E"	GUY 310	Lead	Anchor "F"	SECONDARY		Misc. & Remarks	Unit	No.	
		Misc.	Misc.										Unit No. J or K	(Back) Span			Size Meter	CONSTR.
80	238	1	35-3	CLIP			H51								35-3	4		
79	238	1	40-3	CLIP			H51								40-3	4		
78	238	1	35-3	CLIP			H11 P11								CLIP	8		
77	238	1	35-3	CLIP			H51								CLIP	8		
76	238	1	35-3	CLIP			H51								CLIP	8		
75	147	1	40-3	CLIP	66.21		H11	2	E11			F112			Replace Guy+ Guards			
74	185	1	40-3	CLIP	66.21		H11 P11											
73	199	1	45-3	CLIP	45.21		H11	1	E11			F112			1570-054			
72	199	1	40-3	CLIP			H51											
71	199	1	40-3	CLIP			H51											

JOB BRIEFING

<input type="checkbox"/> Nominal Voltage	<input type="checkbox"/> Loc of Line Protective Dvc
<input type="checkbox"/> Fault Current Available	<input type="checkbox"/> Other Utilities in Area
<input type="checkbox"/> Hazardous Induced Voltag	<input type="checkbox"/> Personal Protective Equip
<input type="checkbox"/> Presence Protective Grds	<input type="checkbox"/> Traffic Control
<input type="checkbox"/> Equipment Grounds	<input type="checkbox"/> Job Procedure
<input type="checkbox"/> Pole Condition	<input type="checkbox"/> Individual Job Duties
<input type="checkbox"/> Environmental Condition	<input type="checkbox"/> Other Hazards

Crew Initials 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____

CONSTRUCTION

Conductor	Pri. Sec.	O.H. URD	Pole Line Ft.	No. of Wires	Total Feet
4/0	ACSR	X	2119	3	6547
1/2	ACSR	X	2119	1	2182
TOTALS					

RETIREMENT

Conductor	Pri. Sec.	O.H. URD	Pole Line Ft.	No. of Wires	Total Feet
TOTALS					

Const. Complt _____
 Remnt. Complt _____
 Material Ticket Complt _____
 500 BH 9-00

IOWA 93 MIDLAND POWER COOPERATIVE STAKING SHEET

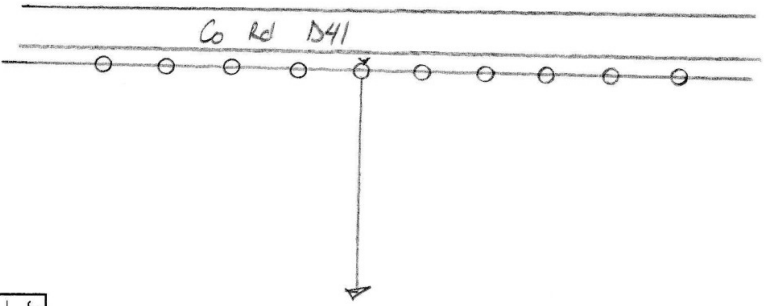
Name Line Rebuild 4mi 30
 Location #: 1570--6730
 Address: Co Rd D41
 Phone#: _____

15 Sub
7 Feeder
ABC Phase
 County: Hardin
 Township: Buckeye
 School Dist.: _____

WORK ORDER CODE	
New Construction	
System Improvement	<input checked="" type="checkbox"/>
Replacement	
Retire No. Replace	

WORK ORDER NO. 13360
 740c# 301
 Staked By CH Date 4/16/20
 Sheet No. 9 of 10
 Complied By _____ Date _____

SKETCH OF WORK Map Reference 67 Twp. 82N R 22W Sec. 30 Wire 3 Size 4/0 Kind ASR



Pole No.	Pri. (Back) Span.	Poles H & C		Pri. Unit	Line Angle	Trans. "G"	Ground "M2" Ohm	GUY		Anchor "F" No.	SECONDARY		Misc. & Remarks	Unit	No.	
		Misc.	Misc.					Unit 310	Lead		Unit No. J or K	(Back) Span			Size Meter	CONST.
90	225	40-3	1	CLIP			H11 P11						35-3	3		
89	225	40-3	1	CLIP			H51						40-3	7		
88	225	40-3	1	CLIP			H51						CLIP	10		
87	225	35-3	1	CLIP			H51						AS1	1		
86	225	35-3	1	CLIP			H11 P11						H11	4		
85	225	35-3	1	CLIP			H51						H51	4		
84	232	40-3	1	CLIP			H51						P11	9		
83	232	40-3	1	CLIP			H51						E11	1		
82	232	40-3	1	CLIP			H11 P11						E11	1		
81	232	40-3	1	CLIP			H51						1570-058			

JOB BRIEFING

<input type="checkbox"/> Nominal Voltage	<input type="checkbox"/> Loc of Line Protective Dvc
<input type="checkbox"/> Fault Current Available	<input type="checkbox"/> Other Utilities in Area
<input type="checkbox"/> Hazardous Induced Voltg	<input type="checkbox"/> Personal Protective Equip
<input type="checkbox"/> Presence Protective Grds	<input type="checkbox"/> Traffic Control
<input type="checkbox"/> Equipment Grounds	<input type="checkbox"/> Job Procedure
<input type="checkbox"/> Pole Condition	<input type="checkbox"/> Individual Job Duties
<input type="checkbox"/> Environmental Condition	<input type="checkbox"/> Other Hazards

Crew Initials 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____

CONSTRUCTION

Conductor	Pri.	Sec.	O.H.	URD	Pole Line Ft.	No. of Wires	Total Feet
H/O							
AS1	X				2285	3	7060
W/AS1	X				2285	1	2353
TOTALS	X	X	X	X			

RETIREMENT

Conductor	Pri.	Sec.	O.H.	URD	Pole Line Ft.	No. of Wires	Total Feet
TOTALS	X	X	X	X			

Const. Complt _____
 Retmt. Complt _____
 Material Ticket Complt _____
 500 BH 9-00

IOWA 93 MIDLAND POWER COOPERATIVE STAKING SHEET

Name Line Rebuild 4mi 3/4
 Location #: 1570--6730
 Address: Co Rd D41
 Phone#: _____

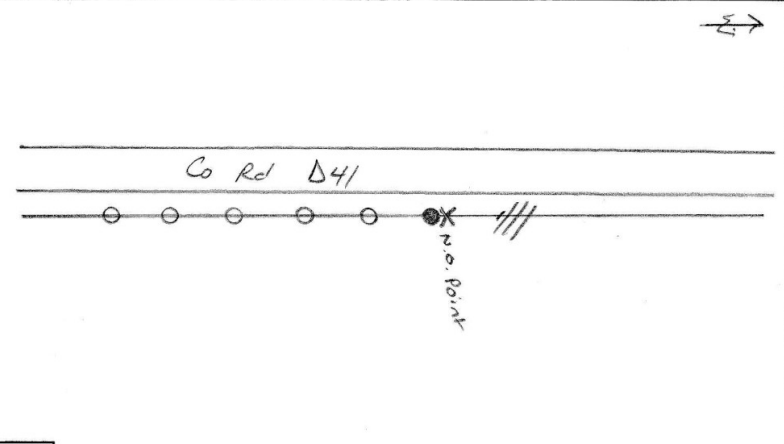
Sub 15
 Feeder 7
 Phase ABC
 Line Sec. _____

County: Hardin
 Township: Buckeye
 School Dist.: _____

WORK ORDER CODE	
New Construction	
System Improvement	<input checked="" type="checkbox"/>
Replacement	
Retire No. Replace	

WORK ORDER NO. 13360
 740C# 301
 Staked By CH Date 4/16/26
 Sheet No. 10 of 10
 Comptd By _____ Date _____

SKETCH OF WORK Map Reference 67 Twp. 88N R. 22W Sec. 30 Wire 3 Size 4/0 Kind ACSR



Pole No.	Pri. (Back) Span.	Poles H & C		Pri. Unit	Misc. Angle	Line Trans. "G"	Ground "M2" Ohm	GUY		Anchor "F" No. J or K	SECONDARY		Misc. & Remarks	Unit	No.	
		Misc.	Misc.					Unit 310	Lead		Unit (Back) Span	Size Meter			CONST.	RET.
90	188	40-3	5232				11.1						N.O. Point			
95	188	40-3					15.1									
94	188	40-3					11.1									
93	188	40-3					15.1									
92	215	40-3					15.1									
91	215	40-3					15.1									

JOB BRIEFING

<input type="checkbox"/> Nominal Voltage	<input type="checkbox"/> Loc of Line Protective Dvc
<input type="checkbox"/> Fault Current Available	<input type="checkbox"/> Other Utilities in Area
<input type="checkbox"/> Hazardous Induced Voltag	<input type="checkbox"/> Personal Protective Equip
<input type="checkbox"/> Presence Protective Grds	<input type="checkbox"/> Traffic Control
<input type="checkbox"/> Equipment Grounds	<input type="checkbox"/> Job Procedure
<input type="checkbox"/> Pole Condition	<input type="checkbox"/> Individual Job Duties
<input type="checkbox"/> Environmental Condition	<input type="checkbox"/> Other Hazards

Crew Initials 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____

CONSTRUCTION

Conductor	Pri. Sec.	O.H.	URD	Pole Line Ft.	No. of Wires	Total Feet
4/0	X			1182	3	3652
1/2 ACSR	X			1182	1	1217
TOTALS	X	X	X			

RETIREMENT

Conductor	Pri. Sec.	O.H.	URD	Pole Line Ft.	No. of Wires	Total Feet
TOTALS	X	X	X			

Const. Compt _____
 Retmt. Compt _____
 Material Ticket Compt _____
 500 BH 9-00



Drainage Utility Permit Application

Hardin County

Applicant: Midland Power Coop - Casey Huff

Contact Email: chuff@midlandpower.coop

Contact Phone: (515) 386-5814

Utility Type: N/A - Utility Permits Only

Drainage District: DDs\DD 31 (51055)

Description of Work: DD 's 123, 31, 20, 26, H-H 104-222 - WO 2020-8 Midland Coop - 4 miles overhead line rebuild along D41, Buckeye Twsp, Sections 27, 28, 29, 30.

Pursuant to Code of Iowa Section 468.186, approval is hereby requested for the right, privilege and authority to construct, operate and maintain utilities on, over, across or beneath established Hardin County Drainage Districts, subject to the attached Requirements for Construction On, Over, Across or Beneath Established Drainage Districts. Failure to comply with said requirements shall be ground for revocation of the permit by the Hardin County Board of Supervisors.

Applicant Signature

Date

Submit Form and Location Plan To: Hardin County Auditor's Office
Attn: Drainage Clerk
1215 Edgington Ave, Suite 1
Eldora, IA 50627
Phone (641) 939-8111
Fax (641) 939-8245
drainage@hardincountyia.gov

For Office Use Only

Application Approval:

By: _____ **Date:** _____
Board of Supervisor Chairman, Acting as Drainage District Trustee

APPROVED PERMIT # 2020-8

Application in TCM
 GIS Annotation
 Approval Emailed



HARDIN COUNTY

1215 EDGINGTON AVE., SUITE 1
ELDORA, IA 50627
(641) 939-8108

HARDIN COUNTY DRAINAGE DISTRICT UTILITY PERMIT APPLICATION

Applicant: Midland Power Cooperative
Company Name

1005 E Lincoln Way
Address

Jefferson IA 50129
City State Zip

Applicant Contact: Casey Huff (515) 386 - 5814
Name Phone

chuff@midlandpower.coop
Email

Utility Type: Overhead Electrical Distribution

Drainage District(s) Crossed: DD No 106

Facilities Crossed (specific tile, open ditch): _____

Description of Work: 2 mile line rebuild along 240th St.
Tipton Township, Sections 8 + 9.
(Location plan of proposed utility must be attached.)

Pursuant to Code of Iowa Section 468.186, approval is hereby requested for the right, privilege and authority to construct, operate and maintain utilities on, over, across or beneath established Hardin County Drainage Districts, subject to the attached Requirements for Construction On, Over, Across or Beneath Established Drainage District. Failure to comply with said requirements shall be ground for revocation of the permit by the Hardin County Board of Supervisors.

[Signature]
Applicant Signature

4/21/20
Date

Submit Form and Location Plan To: Hardin County Auditor's Office
Attn: Drainage Clerk
1215 Edgington Ave, Suite 1
Eldora, IA 50627
Fax (641) 939-8225
drainage@hardincountyia.gov

For Office Use Only

Application Approval:

By: _____
Board of Supervisor Chairman, Acting as Drainage District Trustee

Date: _____

APPROVED PERMIT #: _____

IOWA 93 MIDLAND POWER COOPERATIVE STAKING SHEET

Name Line Rebuild 2 mi. 3/4
 Location #: 1555 - - 7508
 Address: 2404 St
 Phone#: _____

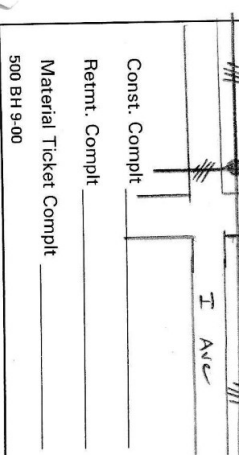
Sub 15 Feeder 5 Phase ABC
 County: Hardin
 Township: Tipton
 School Dist.: _____

WORK ORDER CODE	
New Construction	
System Improvement	<input checked="" type="checkbox"/>
Replacement	
Retire No. Replace	

WORK ORDER NO. 13374
 740c# 306
 Staked By CH Date 4/16/20
 Sheet No. 1 of 5
 Comptd By _____ Date _____

SKETCH OF WORK Map Reference 75 Twp. 87N R 21W Sec. 08 Wire 3 Size 1/2 Kind ACSR

Pole No.	Pri. (Back) Span.	Poles H & C		Pri. Unit	Line Angle	Trans. "G"	Ground "M2" Ohm	GUY		Anchor "F" No. J or K	SECONDARY		Misc. & Remarks	Unit	No.	
		Misc.	Misc.					Unit 310	Lead		Unit (Back) Span	Size Meter			CONST.	RET.
10	232	35-3	1	C11	UA1		H1.1						1555-001	35-3	4	
9	220	35-3	1	C11			H1.1 (3)							40-3	6	
8	220	35-3	1	C11			H1.1							C11	8	
7	220	35-3	1	C11			H1.1							C6.21	3	
6	220	40-3	1	C11			H5.1							UA1	1	
5	228	40-3	1	C6.21		R3.1	H1.1						(3) 50A 2A2B	E1.1	3	
4	228	40-3	1	C11			H5.1							F1.12	3	
3	217	40-3	1	C11			H5.1									
2	157	40-3	1	C11			H1.1 (3)									
1A	60	40-3	1	C6.21			H1.1									
1		40-3	1	C8.21			H1.1									



JOB BRIEFING					
<input type="checkbox"/>	Nominal Voltage	<input type="checkbox"/>	Other Line Protective Dvc	<input type="checkbox"/>	1
<input type="checkbox"/>	Fault Current Available	<input type="checkbox"/>	Personal Protective Equip	<input type="checkbox"/>	2
<input type="checkbox"/>	Hazardous Induced Voltg	<input type="checkbox"/>	Traffic Control	<input type="checkbox"/>	3
<input type="checkbox"/>	Presence Protective Grds	<input type="checkbox"/>	Job Procedure	<input type="checkbox"/>	4
<input type="checkbox"/>	Equipment Grounds	<input type="checkbox"/>	Individual Job Duties	<input type="checkbox"/>	5
<input type="checkbox"/>	Pole Condition	<input type="checkbox"/>	Other Hazards	<input type="checkbox"/>	6
<input type="checkbox"/>	Environmental Condition				
Crew Initials 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____					

CONSTRUCTION					
Conductor	Pri. Sec.	O.H. URD	Pole Line Ft.	No. of Wires	Total Feet
1/2 ACSR	X		2002	3	6186
#2 ACSR	X		2002	1	2062
TOTALS	X				

RETIREMENT					
Conductor	Pri. Sec.	O.H. URD	Pole Line Ft.	No. of Wires	Total Feet
TOTALS					

Const. Complt _____
 Retmt. Complt _____
 Material Ticket Complt _____
 500 BH 9-00

IOWA 93 MIDLAND POWER COOPERATIVE STAKING SHEET

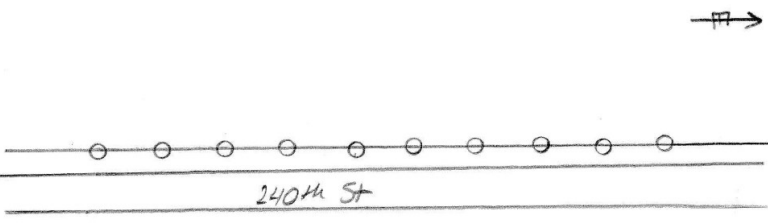
Name 2 mile line rebuild 3φ
 Location #: 1555--7508
 Address: 240th
 Phone#: _____

Sub 15 Feeder 5
 Phase ABC
 County: Hardin
 Township: Tipton
 School Dist.: _____

WORK ORDER CODE
New Construction
System Improvement
Replacement
Retire No. Replace

WORK ORDER NO. 13374
 740c# 306
 Staked By CH Date 4/16/20
 Sheet No. 2 of 5
 Complied By _____ Date _____

SKETCH OF WORK Map Reference 75 Twp. 87N R. 21W Sec. 08 Wire 3 Size 1/0 Kind ACSR



Pole No.	Pri. (Back) Span.	Poles H & C		Pri. Unit	Line Angle	Trans "G"	Ground "M2"	Omni No.	GUY		Anchor "F"	SECONDARY		Misc. & Remarks	Unit	No.	
		Misc.	Misc.						Unit "E"	310		Lead	No. J or K			(Back) Span	Size Meter
20	219	1	35-3	1	01.11		H5.1							35-3	9		
19	219	1	35-3	1	01.11		H5.1							45-3	1		
18	216	1	35-3	1	01.11		H1.1 (3) P1.1							01.11	10		
17	216	1	35-3	1	01.11		H5.1							H1.1	2		
16	216	1	35-3	1	01.11		H5.1							H5.1	8		
15	216	1	35-3	1	01.11		H5.1							P1.1	6		
14	240	1	35-3	1	01.11		H1.1 (2) P1.1										
13	240	1	35-3	1	01.11		H5.1										
12	240	1	45-3	1	01.11		H5.1										
11	240	1	35-3	1	01.11		H5.1										

JOB BRIEFING

Nominal Voltage
 Fault Current Available
 Hazardous Induced Volts
 Presence Prctive Grds
 Equipment Grounds
 Pole Condition
 Environmental Condition

Loc of Line Prctive Dvc
 Other Utilities in Area
 Personal Prctive Equip
 Traffic Control
 Job Procedure
 Individual Job Duties
 Other Hazards

Crew Initials 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____

CONSTRUCTION

Conductor	Pri.	Sec.	O.H.	URD	Pole Line Ft.	No. of Wires	Total Feet
1/0 ACSR	X		X		2262	3	6989
#2 ACSR	X		X		2262	1	2329
TOTALS	X	X	X	X			

RETIREMENT

Conductor	Pri.	Sec.	O.H.	URD	Pole Line Ft.	No. of Wires	Total Feet
TOTALS	X	X	X	X			

Const. Complt _____
 Retmt. Complt _____
 Material Ticket Complt _____
 500 BH 9-00

IOWA 93 MIDLAND POWER COOPERATIVE STAKING SHEET

Name 2 mile line rebuild 30
 Location #: 1555--7509
 Address: 240th
 Phone#: _____

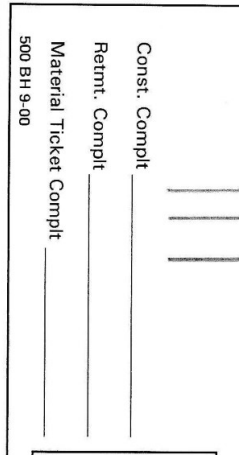
Sub 15
 Feeder 5
 Phase ABC
 Line Sec: _____

WORK ORDER CODE	
New Construction	
System Improvement	<input checked="" type="checkbox"/>
Replacement	
Retire No. Replace	

WORK ORDER NO. 13374
 740# 306
 Staked By CH Date 4/16/20
 Sheet No. 3 of 5
 Completed By _____ Date _____

SKETCH OF WORK Map Reference 75 Twp. 87N R. 21W Sec. 09 Wire 3 Size 1/0 Kind ACSR

Pole No.	Pri. (Back) Span.	Poles H & C			Pri. Unit	Line Angle	Trans. "G"	Ground "M2"	Ohm No.	GUY		Anchor "F"	SECONDARY		Misc. & Remarks	Unit	No.	
		Misc.	Misc.	Misc.						Unit "E"	310		Lead	Unit No. J or K			(Back) Span	Size Meter
30	215	1	40-3	1	0.11	61.3	H1.1		1	EL.1		FL12			35-3	4		
29	215	1	35-3	1	0.11		H5.1							1555-007	40-3	6		
28	215	1	40-3	1	0.11		H5.1								40-3	6		
27	215	1	40-3	1	0.11		H1.1 ¹³	PA1							CA11	8		
26	215	1	40-3	1	0.11		H5.1								CO.21	2		
25	215	1	40-3	1	0.21		H1.1								A5.1	1		
24	228	1	40-3	1	0.21		H1.1								61.3	1		
23	228	1	35-3	1	0.11		H1.1								AS.1	1		
22	219	1	35-3	1	0.11		H1.1								EL.1	7		
21	219	1	35-3	1	0.11		H5.1								FL12	1		



JOB BRIEFING

Nominal Voltage	_____	Loc of Line	Protective Dvc
Fault Current Available	_____	Other Utilities in Area	_____
Hazardous Induced Volting	_____	Personal Protective Equip	_____
Presence Protective Grids	_____	Traffic Control	_____
Equipment Grounds	_____	Job Procedure	_____
Pole Condition	_____	Individual Job Duties	_____
Environmental Condition	_____	Other Hazards	_____

Crew Initials 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____

CONSTRUCTION

Conductor	Pri.	Sec.	O.H.	URD	Pole Line Ft.	No. of Wires	Total Feet
1/0 ACSR	X		X		2184	3	6748
#2 ACSR	X		X		2184	1	2249
TOTALS	X	X	X	X			

RETIREMENT

Conductor	Pri.	Sec.	O.H.	URD	Pole Line Ft.	No. of Wires	Total Feet
TOTALS							

IOWA 93 MIDLAND POWER COOPERATIVE STAKING SHEET

Name 2 mile line rebuild 3P
 Location #: 1555 -- 7509
 Address: 240th
 Phone#: _____

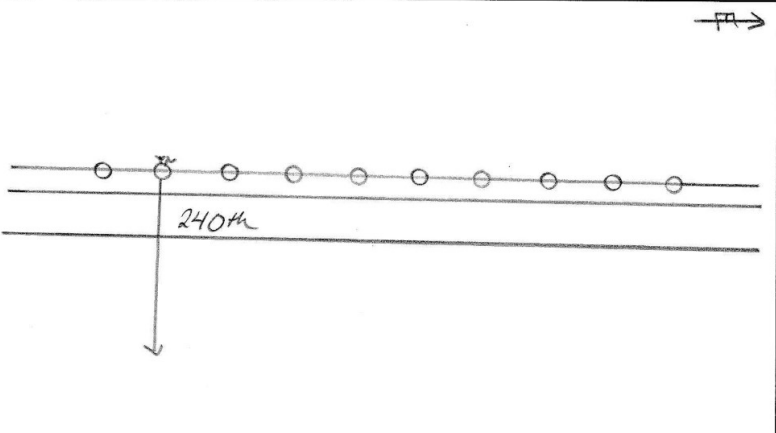
Sub 15
 Feeder 5
 Phase ABC
 Line Sec: _____

County: Hardin
 Township: Tipton
 School Dist.: _____

WORK ORDER CODE	
New Construction	
System Improvement	<input checked="" type="checkbox"/>
Replacement	
Retire No. Replace	

WORK ORDER NO. 13374
 740c# 306
 Staked By CH Date 4/16/20
 Sheet No. 4 of 5
 Compt By _____ Date _____

SKETCH OF WORK Map Reference 75 Twp. 87N R 21W Sec. 09 Wire 3 Size 1/0 Kind ACSR



Pole No.	Pri. (Back) Span.	Poles H & C			Pri. Unit	Line Angle	Trans. "G"	Ground "M2"	Ohm No.	GUY			Anchor "F"	SECONDARY		Misc. & Remarks	Unit	No.	
		Misc.	Misc.	Misc.						Unit 310	Lead	No. J or K		Unit (Back) Span	Size (Meter)			CONST.	RET.
40	233	35-3	1	CL11			H5.1									35-3	10		
39	233	35-3	1	CL11			H1.1 (3) PL1									AS.1	1		
38	233	35-3	1	CL11			H5.1									H1.1	4		
37	233	35-3	1	CL11			H5.1									AS.1	6		
36	233	35-3	1	CL11			H5.1									PL.1	9		
35	233	35-3	1	CL11			H1.1 (3) PL1												
34	233	35-3	1	CL11			H5.1												
33	233	35-3	1	CL11			H5.1												
32	182	35-3	1	CL11	AS1		H1.1												
31	182	35-3	1	CL11			H1.1 (3) PL1												

JOB BRIEFING

<input type="checkbox"/> Nominal Voltage	<input type="checkbox"/> Loc of Line Protective Dvc
<input type="checkbox"/> Fault Current Available	<input type="checkbox"/> Other Utilities in Area
<input type="checkbox"/> Hazardous Induced Volting	<input type="checkbox"/> Personal Protective Equip
<input type="checkbox"/> Presence Protective Grids	<input type="checkbox"/> Traffic Control
<input type="checkbox"/> Equipment Grounds	<input type="checkbox"/> Job Procedure
<input type="checkbox"/> Pole Condition	<input type="checkbox"/> Individual Job Duties
<input type="checkbox"/> Environmental Condition	<input type="checkbox"/> Other Hazards

Crew Initials 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____

CONSTRUCTION

Conductor	Pri. Sec.	O.H. URD	Pole Line Ft.	No. of Wires	Total Feet
1/2 ACSR	X		2228	3	6684
#2 ACSR	X		2228	1	2294
TOTALS	X	X			

RETIREMENT

Conductor	Pri. Sec.	O.H. URD	Pole Line Ft.	No. of Wires	Total Feet
TOTALS	X	X			

Const. Complt _____
 Retm. Complt _____
 Material Ticket Complt _____
 500 BH 9-00

IOWA 93 MIDLAND POWER COOPERATIVE STAKING SHEET

Name 2 mile line rebuild 3p
 Location #: 1555 -- 7509
 Address: 240m
 Phone#: _____

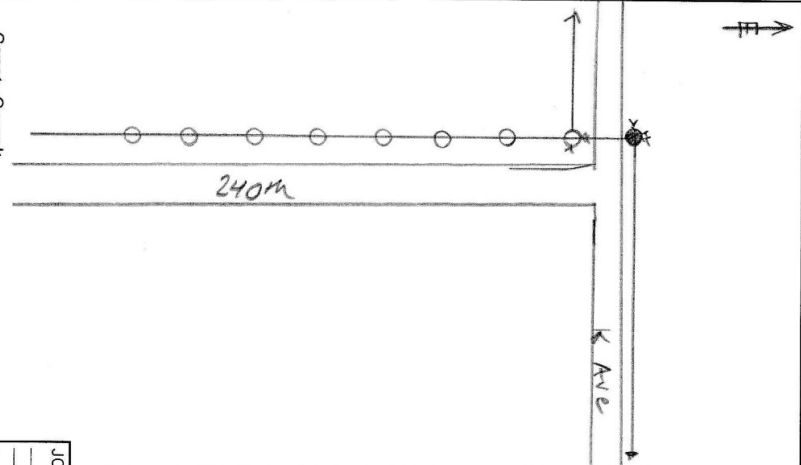
15 Sub
5 Feeder
ABC Phase
 Line Sec: _____

County: Hardin
 Township: Tipton
 School Dist.: _____

WORK ORDER CODE	
New Construction	
System Improvement	<input checked="" type="checkbox"/>
Replacement	
Retire No. Replace	

WORK ORDER NO. 13374
 740c# 306
 Staked By CH Date 4/16/20
 Sheet No. 5 of 5
 Completed By _____ Date _____

SKETCH OF WORK
 Map Reference 75 Twp. 87N R 21W Sec. 09 Wire 3 Size 1/0 Kind ACR



Pole No.	Pri. (Back) Span.	Poles H & C Misc.	Pri. Unit Misc.	Line Angle	Trans. "G"	Ground "M2" Ohm	GUY Unit "E"	Lead	Anchor "F"	SECONDARY		Misc. & Remarks	Unit	No.	
										Unit "J or K"	(Back) Span			Size Meter	CONST.
49	102	1 40-3	1 07.1	AS.1	H.1.1		3 E.1.1	F.1.2					35-3	4	
48	218	1 40-3	1 C.1.1	AS.1	H.1.1		2 E.1.1	F.1.2					40-3	4	
47	218	1 40-3	1 C.1.1		H.1.1		1 E.1.1	F.1.2					C.1.1	8	
46	218	1 35-3	1 C.1.1		H.1.1								C.1.1	1	
45	218	1 35-3	1 C.1.1		H.1.1								AS.1	1	
44	218	1 40-3	1 C.1.1		H.1.1								H.1.1	3	
43	218	1 40-3	1 C.1.1		H.1.1								P.1.1	5	
42	233	1 35-3	1 C.1.1		H.1.1								E.1.1	6	
41	233	1 35-3	1 C.1.1		H.1.1								F.1.2	2	

JOB BRIEFING

<input type="checkbox"/> Nominal Voltage	<input type="checkbox"/> Loc of Line Protective Dvc
<input type="checkbox"/> Fault Current Available	<input type="checkbox"/> Personal Utilities in Area
<input type="checkbox"/> Hazardous Induced Voltag	<input type="checkbox"/> Presence Protective Equip
<input type="checkbox"/> Equipment Grounds	<input type="checkbox"/> Traffic Control
<input type="checkbox"/> Pole Condition	<input type="checkbox"/> Job Procedure
<input type="checkbox"/> Environmental Condition	<input type="checkbox"/> Individual Job Duties
<input type="checkbox"/> Other Hazards	<input type="checkbox"/> Other Hazards

Crew Initials 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____

CONSTRUCTION

Conductor	Pri.	Sec.	O.H.	URD	Pole Line Ft.	No. of Wires	Total Feet
1/0 ACSL	X		X		1876	3	5796
#2 ACSL	X		X		1876	1	1932
TOTALS	X	X	X	X			

RETIREMENT

Conductor	Pri.	Sec.	O.H.	URD	Pole Line Ft.	No. of Wires	Total Feet
TOTALS	X	X	X	X			

Const. Complt _____
 Retmt. Complt _____
 Material Ticket Complt _____
 500 BH 9-00



Drainage Utility Permit Application

Hardin County

Applicant: Midland Power Coop - Casey Huff

Contact Email: chuff@midlandpower.coop

Contact Phone: (515) 386-5814

Utility Type: N/A - Utility Permits Only

Drainage District: DDs\DD 106 (51247)

Description of Work: DD 106 - Midland Power Coop - 2 Mile line rebuild along 240th St, Tipton Twsp, Sections 8 & 9.

Pursuant to Code of Iowa Section 468.186, approval is hereby requested for the right, privilege and authority to construct, operate and maintain utilities on, over, across or beneath established Hardin County Drainage Districts, subject to the attached Requirements for Construction On, Over, Across or Beneath Established Drainage Districts. Failure to comply with said requirements shall be ground for revocation of the permit by the Hardin County Board of Supervisors.

Applicant Signature

Date

Submit Form and Location Plan To: Hardin County Auditor's Office
Attn: Drainage Clerk
1215 Edgington Ave, Suite 1
Eldora, IA 50627
Phone (641) 939-8111
Fax (641) 939-8245
drainage@hardincountyia.gov

For Office Use Only

Application Approval:

By: _____ **Date:** _____
Board of Supervisor Chairman, Acting as Drainage District Trustee

APPROVED PERMIT # 2020-9

Application in TCM
 GIS Annotation
 Approval Emailed



Drainage Work Order Request For Repair

Hardin County

Date: 3/5/2020

Work Order #: WO00000286

Drainage District: DDs\DD H-F 2 (51211)

Sec-Twp-Rge: 01-89-21 **Qtr Sec:** NW Corner, SW Corner

Location/GIS: 89-21-01-200-001

Requested By: Landon Aldinger

Contact Phone: (515) 689-1842

Contact Email: laldinger@gmail.com

Landowner (if different): Arlene Hamilton

Description:

DD H-F 2 - Landon Aldinger reports tile is not flowing like it should, and has had standing water at odd times of the year, and excessive water this past season, unlike years past. Landon included a crop yield map. Landon is requesting investigation.

Repair labor, materials and equipment: _____

Repaired By: _____ **Date:** _____

Please reference work order # and send statement for services to:

Hardin County Auditor's Office
 Attn: Drainage Clerk
 1215 Edgington Ave, Suite 1
 Eldora, IA 50627
 Phone (641) 939-8111
 Fax (641) 939-8245

For Office Use Only

Approved: _____ **Date:** _____

RESOLUTION 2016-18

FRANKLIN COUNTY
INVESTIGATION OF DRAINAGE DISTRICTS PER REQUESTS

NOW, on this 31st day of May, 2016, the following resolution was presented to the Board of Supervisors acting as Drainage District Trustees:

WHEREAS, said Trustees believe that it is in the best interests of drainage districts that individuals, landowners, or entities making requests for district investigation of repairs be responsible for the costs of those investigations in the event that the source of the need for repairs would be privately owned tile and not part of the drainage district facilities or no problem is found and the drainage district facility is anything other than open ditch.

BE IT RESOLVED that in the event any individual or entity makes a request to the drainage district to investigate proposed repairs which require the district to expend funds to determine the location of needed repairs, feasibility of repairs, or any other costs incurred in connection with investigating the request and that in the event in the course of investigation it is discovered that the drainage tile or related structures needing repair are not under the drainage district's control, then the individual, landowner, or entity requesting the investigation shall be responsible for payment of any expenses incurred by the district. If said investigation results in no problem discovered, said requestor is responsible for payment of any expenses incurred by the district. This does not apply to drainage district facilities that are open ditches. If the investigation in the district finds a problem with district facilities, then said district will be responsible for payment of any expenses incurred by the district as allowed by Iowa Code.

The Board of Supervisors acting as Drainage District Trustees authorize the Franklin County Auditor to prepare the necessary form for the individual, landowner, or entity to execute prior to any investigation (except open ditches) in a form necessary to carry out the intent of this resolution.

BE IT DULY ADOPTED this 31st day of May, 2016, with the vote thereon being as follows:

AYES: Eberling, McVicker, Nolte

NAYS:

ABSENT/NOT VOTING:

FRANKLIN COUNTY BOARD OF SUPERVISORS

Corey Eberling
Corey Eberling, Chairman

Gary McVicker
Gary McVicker

Michael Nolte
Michael Nolte

I have read and agree to the terms of this Resolution:

Arlene Hamilton by Tim Mitchell FNC
Requestor

4-1-20
Date

Drainage District

ATTEST:
Michelle S. Giddings
Michelle S. Giddings, Auditor & Clerk to Board