The background of the entire page is a photograph of a field of tall, golden-brown grasses, likely a roadside or prairie area, under a clear blue sky. The grasses are in the foreground and middle ground, with a line of green trees visible in the distance.

# ***O'Brien County***

## ***Integrated Roadside Management Plan***

***2018***

# **I. Preface**

## **A. Version**

1. O'Brien County IRVM Plan - Version 1.0 - February 1998
2. O'Brien County IRVM Plan - Version 2.0 – July 2005
3. O'Brien County IRVM Plan – Version 3.0 – January 2018

## **B. Plan Contributors**

1. Prepared by: Jay Anliker
2. Review and Comments: County Engineer, Board of Supervisors, and Weed Commissioner

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## II. Executive IRVM Elements

### A. The Goals of the Integrated Roadside Vegetation Plan are to:

- Preserve and provide safe, functional, and environmentally improved corridors of travel throughout the county.
- To utilize a long-term integrated management program that promotes and maintains desirable and self-sustaining plant communities that promote public safety, erosion reduction, and weed control in the county right-of-ways.
- To encourage plant populations which enhance the scenic qualities of the roadsides and their value as roadside habitat.
- Promote the use of native plant species whenever possible, and maintain existing native plant communities already present.
- Stabilize road and bridge construction projects by seeding and providing adequate erosion control.
- Make more efficient and effective use of chemicals as a control method of undesirable plants.
- Long-term cost savings with the establishment of competitive, deep rooted, native warm season vegetation.
- Enhance the efforts of the O'Brien County Conservation Board, O'Brien County Sportsman's Club, and the Iowa DNR to add additional wildlife habitat and native vegetation to the county.

### B. Program History

O'Brien County primarily used a blanket spray policy by private contractor for noxious weed control in the late 1960's and early 1970's. Sometime later, the county began a spot spray program using a pickup spray tank and eventually an FMC spray tank and folding boom mounted on a flatbed truck. In 1998, O'Brien County purchased and injection spray system with a boom less spray head that is still in use today.

Since 1990 the Iowa DNR along with the O'Brien County Sportsman's Club and Conservation Board have developed many areas of wildlife habitat and native vegetation in the county. In February 1998, the O'Brien County Secondary Roads, with approval from the County Supervisors, developed an Integrated Vegetation Management Plan. Since the plans inception, O'Brien County Secondary Roads has made a concerted effort to seed native varieties in the right-of- way in conjunction with the roadway construction program. All seeding has been on bare ground after a grading and/or bridge replacement projects. Weed control has been accomplished with controlled burns, mowing, and spot treatment with herbicides.

### C. IRVM Decision Making Process

The primary decision making process is the responsibility of the County Engineer's Office. Seeding projects are assigned by the County Engineer and carried out by Secondary Road employees or private contractors. Weed complaints are handled by the Weed Commissioner and/or the Engineer's Office. Budget decisions are managed jointly by the O'Brien County Engineer and the O'Brien County Supervisors.

#### **D. Executive Summary**

The O'Brien County IRVM program has been committed to performing IRVM practices since the implementation in 1998. These practices have included: noxious weed control, planting of native prairie plant communities, promoting wildlife habitat, controlling trees and brush invasion within the county right-of-ways, and providing for the public safety traveling along the local roadways.

#### **E. County Map, Wildlife Management and REAP projects**

See Appendices

### **III. Jurisdiction Recognition and Approval**

#### **A. Management**

##### **1. O'Brien County Secondary Roads:**

*County Engineer:* Administers the roadside program; prioritizes and oversees long-term and day-to-day goals and operations. Determines and submits roadside budget and equipment purchases. Carries out, along with the Secondary Roads employees, the vegetation management throughout county ROW including soil preparation, seeding, burning, mowing, and herbicide application.

##### **2. O'Brien County Conservation Board:**

*County Conservation Director:* Administers a separate program to establish native vegetation and wildlife habitat in the county parks and recreation areas.

#### **B. Board of Supervisors:**

The Board of Supervisors approves the IRVM program and budget. Annually the Board of Supervisors appoint a county resident as the County Weed Commissioner. The Weed Commissioner is responsible for answering weed complaints and filing annual reports to the Bureau of Land Stewardship.

#### **C. Iowa Code and Administrative Rules-State Laws and Regulations**

##### **Iowa Code**

Section 314.21 Living Roadway Trust Fund

Section 314.22 Integrated Roadside Vegetation Management

Section 314.17 Mowing on interstates, primary highways, and secondary roads

Section 317.11 Weeds on Roads - Harvesting of Grass

Section 318.3 Obstructions in ROW / Destruction of plants placed in ROW / Crops in ROW

Section 317.1A Noxious Weeds and Enforcement Procedures

#### **D. Local Laws and Regulations**

Local Laws, Regulations, and Policies pertaining to IRVM in O'Brien County reflect that of the Iowa Code, as well as any other State and Federal Regulations that are specific to management activities that occur within the jurisdiction of the O'Brien County Secondary Roads System.

#### **E. Permits**

Permits are available at the Engineer's Office in the O'Brien County Courthouse or via the county website. After the permit or request is completed with the necessary information and fees have

been collected, the permit or request is issued to the individual and a copy is filed with the county. Utility and tile applications require acceptance by the Board of Supervisors.

Permits relevant to the IRVM program include:

- Application for Utility Construction in Right-of-Way
- Application for Tile Crossing
- Driveway Application
- Driveway Ordinance

These permits are listed in the appendix of this document and at the O'Brien County web address:

<http://www.obriencounty.org/departments/engineer>

## **IV. Program Organizational Structure**

### **A. Staff Organization Chart**

- O'Brien County Board of Supervisors
- O'Brien County Engineer
- Secondary Roads Staff and/or Private Contractors

### **B. Staffing Needs and Training**

#### *Staffing*

- The assistance of O'Brien County Secondary Roads staff and potential contractors is required to carry out this IRVM plan. Specific staff numbers are dependent upon individual project scale and actions.
- Cooperation with the Weed Commissioner is essential to the program.

#### *Training*

- Pertinent O'Brien County personnel will carry an up to date Iowa Pesticide License in category 6.
- Annual continued education for the license will be coordinated with Iowa State Extension and Iowa Department of Agriculture and Land Stewardship.
- Additional education is available with conferences and supplier meetings.

## **V. Inventory and Analysis**

### **A. Natural Resources**

#### *1. Tools*

- Digital Camera – Year to year visual record keeping
- Garmin etrex GPS Unit – Mapping of treatment practices
- Paper spray records are filed indicating roads treated each day as well as weather conditions, chemicals used, and rate of application.
- High definition aerial photography from Pictometry.
- Paper inventory of the roadside vegetation. O'Brien County is new to the GIS community and development in the future can lead to a digitized inventory.

## 2. *Vegetation*

O'Brien County has a diverse landscape within its borders. Although row crops make up the majority of land; river bottoms, hilly terrain, and wooded areas are prevalent in the southeast portion of the county. The vegetation within county roadsides includes a mix of warm and cool season species. Most ditches are primarily brome grass and fescue with many areas having a great diversity of native grasses and forbs. Native remnants are in all areas of the county. In the southeastern portion of the county primarily along the Waterman watershed and Little Sioux River are many prairie remnants and established prairie tracts in and adjacent to the right-of-way.

Since 1989 the Iowa DNR, O'Brien County Sportsman's Club, and O'Brien County Conservation Board have developed over 725 acres of land for wildlife habitat. Most of the areas have been seeded to native prairie species. O'Brien County Secondary roads has seeded an additional 200 acres of natives since 1998. The Sportsman's Club has planted over 12,000 trees for habitat.

O'Brien County has completed a roadside inventory in 1998 and 2005. The roadside manager and spray truck operator conduct less official inventories on a daily basis while conducting other business for secondary roads. They diligently look for existing native species, noxious weeds, and potential sites for re-establishment of native species.

## 3. *Watersheds*

Two major watersheds exist in O'Brien County including the Floyd River in the northwest portion of the county and the Little Sioux River watershed for the majority. Both basins drain to the Missouri River.

## **B. Equipment**

O'Brien County has many types of equipment available for performing yearly operations. The majority of equipment has been purchased by the Secondary Roads department with some use of Living Roadway Trust Funds. The following is a current equipment list that the O'Brien County staff use on a regular basis. See Appendices for a list of equipment obtained with LRTF Funding.

### 1. Fire Equipment

- 1975 - 750-gallon Ford Pierce Fire Truck (County)
- Backpack sprayers (County)
- Kubota UTV (LRTF)
- 50 gal water tank & pump for UTV (LRTF)

### 2. Spray Equipment

- 1998 Chevy 1-ton truck with Raven Spray System (County)
- Hand sprayers (County)
- Safety equipment (County)
- 1200-gallon POLY water tank (County)
- Transfer pump (County)

### 3. Seeding Equipment

- 1998 8-Foot Truax FLEXII Drill (LRTF)

- Herd GT-77 UTV Seeder (County)
- Harrow (County)
- 4. Brush Removal Equipment
  - Stihl Chainsaws (County)
  - Stihl brush cutters (County)
  - 1994 Vermeer Chipper (County)
  - Hand brush loppers (County)
  - Safety equipment chaps and helmets (County)
- 5. General Equipment
  - 2005 H & H Trailer (County)
  - 1981 JD 4640 Tractor (County)
  - 1978 Ford 6600 Tractor (County)
  - 2010 JD 7230 Tractor/Mower (County)
  - 1999 New Holland 8360 Tractor/Mower (County)
  - 1990 Ford 7710 Tractor/Mower (County)

## VI. Program Operation

### A. Annual Operations

*January to March* - Tree and brush removal, Weed Commissioner submittal of annual report, budget determination, equipment maintenance, ordering equipment and supplies, determine burn plans, write LRTF grants, compile maps.

*April to October* - Prescribed fire, seeding, erosion control of construction projects, spraying, and mowing.

*October to December* – Tree and brush removal, spraying, and dormant seeding.

### B. Work Area Types

*Rural* – This IRVM program is conducted only in rural settings.

- Rural areas adjacent to agriculture – Native and/or cool season seed mixes where appropriate, spot spraying, mowing, prescribed burns.
- Rural areas adjacent to non-agricultural – Native and or cool season seed mixes where appropriate, spot spraying, mowing, prescribed burns.
- Rural adjacent to homestead – Cool season grasses/lawn mixes, mowing. Spraying will not be used near homesteads.

*Urban* – Urban areas will not be included in this IRVM program

### C. Vegetation Types for Specific Uses

- *Rural areas adjacent to agriculture and non-agricultural* – Where feasible, seed mixtures from the Tall Grass Prairie Center will be sown within the Secondary Roads right-of way.

When deemed non-feasible, areas of right-of way will be seeded with cool season grasses including brome grass, perennial ryegrass, and fescue.

Cover crops of oats, annual rye, or winter wheat will be utilized with bare soil seeding and when dormant seeding.

- *Rural adjacent to homestead* – Cool season grasses/lawn mixes.

## **VII. Methods**

### **A. Vegetation Establishment**

Procedures for vegetation establishment will follow the IRVM Technical manual guidelines as listed at this link:

<https://tallgrassprairiecenter.org/sites/default/files/irvm-technical-manual-2015-200.pdf>

Vegetation establishment in O'Brien County is primarily bare-ground seeding in conjunction with construction projects.

### **B. Ongoing Maintenance**

- Control of noxious weeds will be performed by O'Brien County Secondary roads. Weed complaints will be managed by the County in coordination with the Weed Commissioner. Decisions concerning the spraying season, chemical selection, brush and tree spraying/removal, prescribed fire determination and implementation, and preservation of native plant communities within the county right-of-ways will be performed on annual basis.
- All spraying activities will be conducted by licensed personnel employed by O'Brien County Secondary Roads. This will include both herbicide applications of noxious weeds, invasive plants, and foliar brush treatment.
- All tree/brush cutting will be completed by seasonal and/or permanent maintenance employees. Tree and brush control will primarily be accomplished during the early spring, fall, and winter season when snow removal is not a priority. Once cut, a herbicide application will be applied to prevent regrowth. If a tree, or trees, are too large to safely remove them, then it will be the engineer's discretion to hire a private contractor for removal.
- It will be the responsibility of the O'Brien County Engineer's Office to maintain all records for the IRVM program. This will include daily spray records for both brush and noxious weeds. Records of chemicals purchased for the fiscal year and a yearly report to the Weed Commissioner of chemical usage. All end-of-year reports for state agencies and the O'Brien County Board of Supervisors will be submitted by the Weed Commissioner.

## **VIII. Material Procurement**

### **A. Sourcing**

Seed, herbicides, erosion control products, and other materials will be purchased by O'Brien County. Price and availability will factor into the determination of the source of materials. Erosion control products as part of any construction contract will be from an approved source and provided by the Contractor. Additionally, seed will be requested from the Tallgrass Prairie Center when available through the TAP program.

### **B. Material Handling and Storage**

Currently, O'Brien County does not have a dedicated climate controlled space for seed storage. Seed is normally obtained and planted as needed, with very small quantities carried over winter. Seed held at any time is contained in a rodent proof metal container.

Chemicals for the spray program along with the spray truck are stored at the maintenance shops in Primghar. Any chemicals with a non-freeze requirement are stored in the heated portion of the building that is designated for chemical storage.

The spray truck operator will handle all hazardous chemicals that require the proper license for application only.

All empty containers will be properly rinsed and disposed or recycled according to the chemical label and manufacturers' recommendations.

## IX. Iowa Noxious Weeds

### A. Iowa Primary Noxious Weeds

<u>Common Name</u>	<u>Genus and Species</u>
Buckthorn	<i>Rhamnus sp.L. except R. Frangula</i>
Bull thistle	<i>Cirsium vulgare [Savi] Tenora</i>
Canada thistle	<i>Cirsium arvense [L.] Scop</i>
Field bindweed	<i>Convolvulus arvensis L.</i>
Hoary cress (Perennial Pepper-grass)	<i>Cardaria draba [L.] Desv</i>
Horsenettle	<i>Solanum carolinense L.</i>
Leafy spurge	<i>Euphorbia esula L.</i>
Musk thistle	<i>Carduus nutans L.</i>
Perennial sowthistle	<i>Sonchus arvensis L.</i>
Quackgrass	<i>Agropyron repens [L.] Veauv</i>
Russian knapweed	<i>Centaurea repens L.</i>
Tall thistle	<i>Cirsium altissimum [L.] Spreng</i>

### B. Iowa Secondary Noxious Weeds

<u>Common Name</u>	<u>Genus and Species</u>
Buckhorn plantain	<i>Plantago lanceolata L.</i>

Cocklebur	<i>Xanthium strumarium L.</i>
Wild sunflower	<i>Helianthus annuus L</i>
Curly Dock	<i>Rumex crispus L.</i>
Poison hemlock	<i>Conium maculatum L.</i>
Puncturevine	<i>Tribulus terrestris L.</i>
Red sorrek (Sheep sorrel)	<i>Rumex acetosella L.</i>
Smooth dock	<i>Rumex latissimus Wood</i>
Teasel	<i>Dipsacus sp.</i>
Velvetleaf	<i>Abutilon theophrasti Medic</i>
Wild carrot	<i>Daucus carota L.</i>
Wild mustard	<i>Brassica kaber (DC)L.C. Wheeler var. Pinnatifida (Stokes) L.C. Wheeler</i>
Multiflora rose	<i>Rosa multiflora</i>

## **X. Appendices**

### **A. Permits**

- Application for Utility Construction in Right-of-Way
- Application for Tile Crossing
- Driveway Application
- Driveway Resolution

### **B. Iowa Code 314.22 – Integrated Roadside Vegetation Management**

### **C. Iowa Code 317.3 - Weed Commissioner**

### **D. Iowa DOT Map - O'Brien County**

### **E. O'Brien County REAP Projects & Waterman Prairie Wildlife Area**

### **F. O'Brien County LRTF Funding**

### **G. Spray Record Sheet**

**APPENDIX A: Permits - Application for Utility Construction in Right-of-Way**

**APPLICATION FOR APPROVAL OF UTILITY CONSTRUCTION**

**ON O'BRIEN COUNTY ROAD RIGHT-OF-WAY**

**Form No. 01-2013**

**APPLICANT:**

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Date \_\_\_\_\_ Name of Individual of Company \_\_\_\_\_ Tele. No. \_\_\_\_\_

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Address \_\_\_\_\_ City, State \_\_\_\_\_ Zip Code \_\_\_\_\_ Fax No. \_\_\_\_\_

Incorporated under the laws of the State of \_\_\_\_\_ with

principal place of business in \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

**Submit three (3) copies of this permit application and supporting data to:**

**O'Brien County  
c/o County Engineer,  
155 S. Hayes Box 410  
Primghar, Iowa 51245**

**Phone No. 712-957-3425  
Fax No. 712-957-4740  
E-mail: Engineers@obriencounty.org**

Approval is hereby requested for utility construction as follows: \_\_\_\_\_

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(describe fully, work contemplated)

PLAT OR AERIAL PHOTO SHOWING LOCATION OF PROPOSED PROJECT AND OTHER  
PERTINENT INFORMATION SHALL BE ATTACHED TO EACH COPY OF THE APPLICATION.

The proposed line will be located as per map attached, \_\_\_\_\_ County, \_\_\_\_\_ miles

\_\_\_\_\_ from \_\_\_\_\_ more specifically described as follows:

( N S E W ) (place, town, etc.)

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**AGREEMENTS: The applicant agrees that the following stipulations shall govern under this permit:**

1. Operations in the construction and maintenance of said utility lines or appurtenances shall be carried on in such a way as to not interfere with, or interrupt traffic on said roadway. Contractor shall follow current MUTCD regulations for traffic control, signing and OSHA safety guidelines. The applicant shall take all reasonable precautions during the construction of said utility lines or appurtenances to protect and safeguard the lives and property of the traveling public and adjacent property owners and shall save the County harmless of any damage or losses that may be sustained by the traveling public or adjacent property owners on account of said utility lines or appurtenances or the related construction operations. On paved roads, cable, pipe lines, and casing may be placed through the sub-grade by boring a hole just large enough to take the line. On roads not paved, an open trench may be dug and the cable, pipeline or tile line placed therein, and the trench backfilled over the line. **On all roads, when utility is placed in the ditch ROW, all entrances and intersections shall be bored or excavated to a depth of 3' below ditch elevation.** All backfilling of trenches shall be thoroughly compacted in layers of 6" or less in depth and with granular material. All work shall be done in a workman like manner, and the ground left in a neat condition satisfactory to the county engineer in charge. **Installation of underground utility lines near structures will be as shown on O'Brien County Typical Utility Layouts for bridges and culverts (attached).** The county shall be given adequate notice before the backfilling of any open trench in the roadway begins so that granular material may be delivered to the site by county forces.

The County Board of Supervisors will endeavor to give the applicant sufficient notice of any proposed construction or maintenance work, on either existing or newly acquired right-of-way, that is likely to expose, cover up, or disturb any utility appurtenances belonging to the applicant, in order that the applicant may arrange to protect his lines. The County Board of Supervisors will inform contractors, and others working in the highway right-of-way to make appropriate locate requests so that the location of the lines may be known, and so that reasonable care may be taken to avoid damaging the lines. The County assumes no responsibility, however, for failure to give such notice. It is an express condition of this permit that the applicant will assume all responsibility in the event it becomes necessary to relocate, reconstruct, or encase the applicant's lines or appurtenances in the course of the County's maintenance or construction operations.

2. The applicant will at any time, subsequent to placing the utility lines or appurtenances and at his own expense, relay, reconstruct or encase his lines as may become necessary to conform to new grades, structures, alignment, or widening of right-of-way, resulting from maintenance or construction operations by the County Board of Supervisors irrespective of whether or not additional right-of-way is acquired in connection with such highway improvement. The applicant agrees to do this promptly on order by the County Board of Supervisors, and without cost to the County. If the applicant is unable to comply promptly, the

County Board of Supervisors may cause the work to be done, and the applicant will pay the cost thereof upon receipt of statement. **Responsibility for the protection of the applicant's lines or appurtenances is hereby assumed by the applicant in the event said lines or appurtenances are endangered or threatened by the maintenance or construction of the Secondary Road System by the County. Utility agrees to provide on-site presence to assist in line protection when requested by the County Engineer for County projects.**

3. The applicant shall hold the County and Board of Supervisors harmless from any damage that may result to said roadway because of the construction or maintenance of said utility lines or appurtenances and shall reimburse the County for any expenditure that the County may have to make on said roadway on account of said applicant's utility lines or appurtenances having been constructed thereon. **All breaks in tile lines due to contractors work are to be repaired or replaced at contractor's expense. Any**

**damaged caused by utility contractor's work that has not been adequately repaired within 6 months of notice by county will be repaired and cost billed to utility.**

- 4. The applicant agrees to give the County Board of Supervisors forty-eight hours notice of its intention to start construction in the roadway right-of-way. Said notice shall be given to the County Engineer.
- 5. This permit is subject to any laws now in effect or any laws which may be hereafter enacted including regulations and administrative rules pertaining to utilities.
- 6. The County may make daily inspections of all underground utility installations.

**APPROVAL:**

**APPLICANT:** \_\_\_\_\_

**Official Name of Utility (Long Term Owner)**

**By:** \_\_\_\_\_

**By:** \_\_\_\_\_

**County Engineer**

**Authorized Signature**

**Date:** \_\_\_\_\_

\_\_\_\_\_

**Printed name of person above**

\_\_\_\_\_  
**Contact Person Phone No.**

\_\_\_\_\_  
**Name of Developer if different from Long Term Owner**

**By:** \_\_\_\_\_

\_\_\_\_\_

**Chairman, Board of Supervisors**

**Authorized Signature of Developer**

**Date** \_\_\_\_\_

**Date** \_\_\_\_\_

**APPENDIX A: Permits - Application for Tile Crossing**

# APPLICATION FOR PERMIT TO CONSTRUCT DRAIN TILE CROSSING ON O'BRIEN COUNTY SECONDARY ROAD RIGHT-OF-WAY

Applicant: \_\_\_\_\_ Location: \_\_\_\_\_ feet ( N S E W ) of \_\_\_\_\_ corner

Name: \_\_\_\_\_ Section: \_\_\_\_\_ Quarter Section: \_\_\_\_\_

Address: \_\_\_\_\_ Township: \_\_\_\_\_

City, State, Zip Code: \_\_\_\_\_ Avenue or Street: \_\_\_\_\_

Phone: \_\_\_\_\_ Tiling Contractor: \_\_\_\_\_

Tile Size: \_\_\_\_\_ inches Estimated Cost, tile and labor: \$ \_\_\_\_\_ Contractor's cell phone number: \_\_\_\_\_

Date: \_\_\_\_\_ Depth below bottom of road ditch: \_\_\_\_\_

**AGREEMENTS:**

The applicant agrees that the following stipulations shall govern under this permit:

1. The applicant or the contractor shall notify the county engineer's office in Primghar, phone 957-3425, a minimum of 24 hours prior to construction of the crossing. Also prior to construction, applicant will deliver or mail this application to the County Engineer's Office, P.O. Box 410, Primghar, Iowa 51245.
2. Tile crossings shall be non-perforated solid wall PVC pipe and constructed as follows:
  - a. Paved roads - tile lines are to be placed through the subgrade by jacking, or by boring a hole just large enough for the tile or pipe.
  - b. Gravel or dirt roads - tile lines may be placed in a open trench, to be back-filled with gravel and compacted.

The road surface, slopes, and road ditch shall be left in smooth condition, and shall be approved by the county engineer or his representative prior to the contractor leaving the project.

3. The applicant or the contractor shall implement the necessary precautions during the construction of said tile line to protect the traveling public and adjacent property owners, and save O'Brien County harmless of any damage or losses that may be sustained by the traveling public or adjacent property owners because to such construction operations.

This Permit does not constitute consent, implied or otherwise, to allow connections to existing drainage appurtenances.

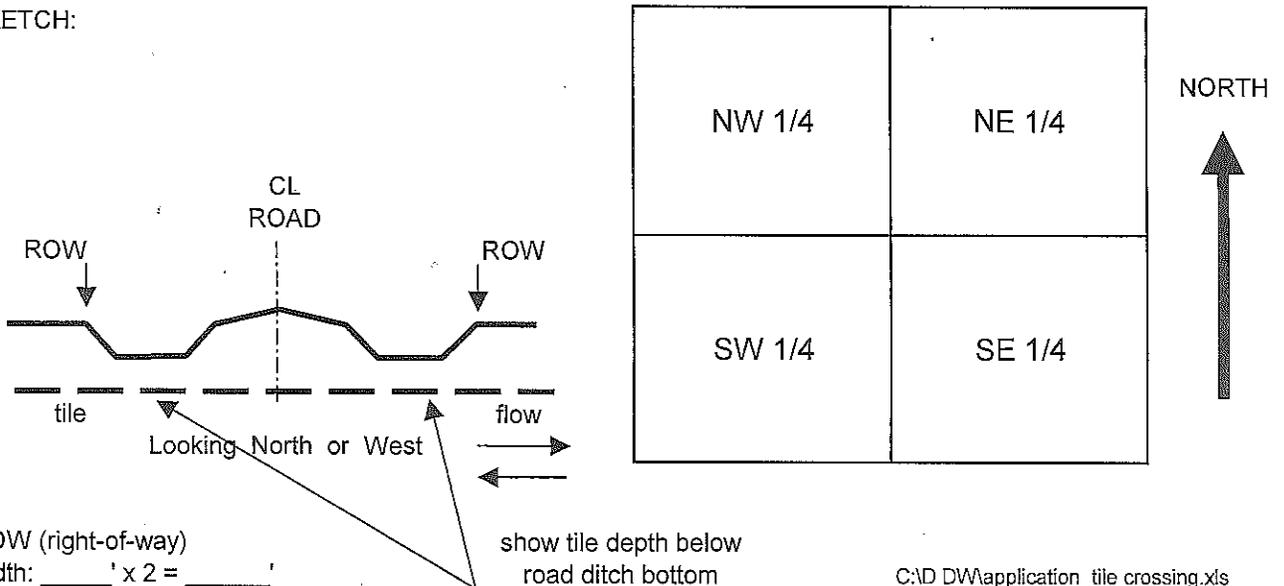
Upstream Landowner    print name    cell phone #	Downstream Landowner    print name    cell phone #
Upstream Landowner    signature    Date	Downstream Landowner    signature    Date
Upstream Tenant    print name    cell phone #	Downstream Tenant    print name    cell phone #

NOTE: Both upstream and downstream landowners MUST sign.

**APPROVAL:**

County Engineer    Date	Chairperson, Board of Supervisors    Date
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**SKETCH:**





**APPENDIX A: Permits - Driveway Resolution**

RESOLUTION FOR INSTALLATION OF FIELD ENTRANCES AND FARM HOUSE DRIVES February 11, 2014

Field entrances and farm house drives may be constructed by the property owner, occupant, or by O'Brien County with written approval by the County Engineer.

An approved Entrance Permit shall be obtained prior to constructing or widening any entrance. This entrance permit shall be processed by the County Engineer, who shall determine the diameter of pipe required. Work shall be completed as per instructions on the Entrance Permit. There will be no fee charged for processing this permit.

If the property owner or occupant constructs the entrance, he shall be responsible for the full cost of the entrance, including rock surfacing and furnishing and installation of the pipe culvert of a size (diameter) determined by the County Engineer. The minimum diameter of pipe culvert shall be 15 inches. All construction must meet final approval by the County Engineer.

The minimum length of pipe culverts on new installations shall be 24 feet for field entrances and 28 feet for occupied building sites. For entrances to animal confinement buildings the minimum top width shall be:

60 feet if closest point of the building or loading mechanism lies more than 200 feet from the County right-of-way line.

75 feet if closest point of the building or loading mechanism lies less than 200 feet but more than 125 feet from the County right-of-way line, 100 feet if closest point of the building or loading mechanism lies less than 125 feet from the County right-of-way line.

If O'Brien County constructs the entrance, a fee will be charged, based upon the fill and the size of pipe required for the entrance. The County Engineer will indicate on the approved Entrance Permit the fee due for the entrance.

Payment for the drive must be received before the entrance will be constructed by O'Brien County. Fees charged will be according to the following schedule:

Install Entrance or Extension <u>With</u> Pipe. (price per foot of pipe)	Gravel Road	Paved Road
15" Diameter	\$28.00	Not Used
18" Diameter	\$31.00	\$46.00
24" Diameter	\$35.00	\$52.00
30" Diameter	\$40.00	\$58.00
36" Diameter	\$46.00	\$63.00

Contact Engineer's office for prices on larger pipe sizes.

Install Entrance Without Pipe or Move

Existing Entrance \$25.00 \$30.00

Extend Entrance without pipe ----- (\$250.00 minimum charge)

Extend Entrance with pipe ————— (\$350.00 minimum charge)

The minimum length of 15" pipe is 28' for new entrances

The minimum length of driveway extensions with 1 1/2" metal pipe shall be 14' all other metal pipe shall be 12'.

County will supply pipe, dirt, and other cost to comply with 6:1 slope requirement as necessary on paved roads.

Materials only	Pipe Band	Pipe only per/ft (Delivered)
15" Diameter	\$22.00	\$12.00
18" Diameter	\$25.00	\$14.00
24" Diameter	\$32.00	\$17.00
30" Diameter	\$40.00	\$21.00
36" Diameter	\$50.00	\$28.00

To increase pipe size greater than existing pipe when moving a drive, landowner must pay the difference in 'pipe only/ cost.

Gravel surfacing is provided by O'Brien County on all entrances along paved roads and occupied building sites on gravel roads.

Furnish & placing gravel on field entrances along unpaved roads may be done by O'Brien County at a cost to landowner of \$200.00 per load.

All pipe culvert, whether installed by the property owner, occupant, or O'Brien County shall be new metal or concrete, unless the County Engineer approves the use of good used culvert. All pipe culvert shall conform to the current standards for entrance pipe of the Iowa Department of Transportation.

Motioned by seconded by to adopt this resolution, motion carried.

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CERTIFICATE OF AUDITOR I hereby certify that the above and foregoing Resolution was duly and legally adopted at a legal meeting of the Board of Supervisors of O'Brien County, Iowa: and properly journalized in the minutes thereof on the 11 day of February, 2014,

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Is/ Barbara  
Rohwer Secretary of the Board  
of Supervisors of O'Brien  
County, Iowa, and County

Auditor of O'Brien County, Iowa

## APPENDIX B: Iowa Code 314.22 – Integrated Roadside Vegetation Management 1

### ADMINISTRATIVE PROVISIONS FOR HIGHWAYS, §314.22

#### 314.22 Integrated roadside vegetation management.

1. *Objectives.* It is declared to be in the general public welfare of Iowa and a highway purpose for the vegetation of Iowa's roadsides to be preserved, planted, and maintained to be safe, visually interesting, ecologically integrated, and useful for many purposes. The state department of transportation shall provide an integrated roadside vegetation management plan and program which shall be designed to accomplish all of the following:

Maintain a safe travel environment.

Serve a variety of public purposes including erosion control, wildlife habitat, climate control, scenic qualities, weed control, utility easements, recreation uses, and sustenance of water quality.

- a. Be based on a systematic assessment of conditions existing in roadsides, preservation of valuable vegetation and habitats in the area, and the adoption of a comprehensive plan and strategies for cost-effective maintenance and vegetation planting.
  - b. Emphasize the establishment of adaptable and long-lived vegetation, often native species, matched to the unique environment found in and adjacent to the roadside.
  - c. Incorporate integrated management practices for the long-term control of damaging insect populations, weeds, and invader plant species.
  - d. Build upon a public education program allowing input from adjacent landowners and the general public.
  - e. Accelerate efforts toward increasing and expanding the effectiveness of plantings to reduce wind-induced and water-induced soil erosion and to increase deposition of snow in desired locations.
  - f. Incorporate integrated roadside vegetation management with other state agency planning and program activities including the recreation trails program, scenic highways, open space, and tourism development efforts. Agencies should annually report their progress in this area to the general assembly.
2. *Counties may adopt plans.* A county may adopt an integrated roadside vegetation management plan consistent with the integrated roadside vegetation management plan adopted by the department under [subsection 1](#).
3. *Integrated roadside vegetation management technical advisory committee.*
- a. The director of the department shall appoint members to an integrated roadside vegetation management technical advisory committee which is created to provide advice on the development and implementation of a statewide integrated roadside vegetation management plan and program and related projects. The department shall report annually in January to the general assembly regarding its activities and those of the committee. Activities of the committee may include, but are not limited to, providing advice and assistance in the following areas:
    - (1) Research efforts.
    - (2) Demonstration projects.
    - (3) Education and orientation efforts for property owners, public officials, and the general public.
    - (4) Activities of the integrated roadside vegetation management coordinator for integrated roadside vegetation management.
    - (5) Reviewing applications for funding assistance.
    - (6) Securing funding for research and demonstrations.
    - (7) Determining needs for revising the state weed law and other applicable Code sections.
    - (8) Liaison with the Iowa state association of counties, the Iowa league of cities, and other organizations for integrated roadside vegetation management purposes.
  - b. The director may appoint any number of persons to the committee but, at a minimum, the committee shall consist of all of the following:
    - (1) One member representing the utility industry.
    - (2) One member from the Iowa academy of sciences.
    - (3) One member representing county government.
    - (4) One member representing city government.
    - (5) Two members representing the private sector including community interest groups.
    - (6) One member representing soil conservation interests.

(7) One member representing the department of natural resources.

(8) One member representing county conservation boards.

c. Members of the committee shall serve without compensation, but may be reimbursed for allowable expenses from the living roadway trust fund created under [section 314.21](#). No more than a simple majority of the members of the committee shall be of the same gender as provided in [section 69.16A](#). The director of the department shall appoint the chair of the committee and shall establish a minimum schedule of meetings for the committee.

4. *Integrated roadside vegetation management coordinator.* The integrated roadside vegetation management coordinator shall administer the department's integrated roadside vegetation management plan and program. The department may create the position of integrated roadside vegetation management coordinator within the department or may contract for the services of the coordinator. The duties of the coordinator include, but are not limited to, the following:

a. Conducting education and awareness programs.

b. Providing technical advice to the department and the department of natural resources, counties, and cities.

c. Conducting demonstration projects.

d. Coordinating inventory and implementation activities.

e. Providing assistance to local community-based groups for undertaking community entryway projects.

f. Being a clearinghouse for information from Iowa projects as well as from other states.

g. Periodically distributing information related to integrated roadside vegetation management.

h. General coordination of research efforts.

i. Other duties assigned by the director of transportation.

5. *Education programs.* The department shall develop educational programs and provide educational materials for the general public, landowners, governmental employees, and board members as part of its program for integrated roadside vegetation management. The educational program shall provide all of the following:

a. The development of public service announcements and television programs about the importance of roadside vegetation in Iowa.

b. The expansion of existing training sessions and educational curriculum materials for county weed commissioners, government contract sprayers, maintenance staff, and others to include coverage of integrated roadside management topics such as basic species identification, vegetation preservation, vegetation inventory techniques, vegetation management and planning procedures, planting techniques, maintenance, communication, and public relations. County and municipal engineers, public works staffs, planning and zoning representatives, parks and habitat managers, and others should be encouraged to participate.

c. The conducting of statewide and regional conferences and seminars about integrated roadside vegetation management, community entryways, scenic values of land adjoining roadsides, and other topics relating to roadside vegetation.

d. The preparation, display, and distribution of a variety of public relations material, in order to better inform and educate the traveling public on roadside vegetation management activities. The public relations material shall inform motorists of a variety of roadside vegetation issues including all of the following:

(1) Benefits of various types of roadside vegetation.

(2) Long-term results expected from planting and maintenance practices.

(3) Purposes for short-term disturbances in the roadside landscapes.

(4) Interesting aspects of the Iowa landscape and individual landscape regions.

(5) Other aspects relating to wildlife and soil erosion.

e. Preparation and distribution of educational material designed to inform adjoining property owners, farm operators, and others of the importance of roadside vegetation and their responsibilities of proper stewardship of that vegetation resource.

6. *Research and demonstration projects.* The department, as part of its plan to provide integrated roadside vegetation management, shall conduct research and feasibility studies including demonstration projects of different kinds at a variety of locations around the state. The research and feasibility studies may be conducted in, but are not limited to, any of the following areas:

a. Cost effectiveness or comparison of planting, establishing and maintaining alternative or warm-season, native grass and forb roadside vegetation and traditional cool-season nonnative vegetation.

b. Identification of the relationship that roadsides and roadside vegetation have to maintaining water quality, through drainage wells, sediment and pollutant collection and filtration, and other means.

c. Impacts of burning as an alternative vegetation management tool on all categories of roads.

d. Techniques for more quickly establishing erosion control and permanent vegetative cover on recently disturbed ground as well as interplanting native species in existing vegetative cover.

e. Effectiveness of techniques for reduced or selected use of herbicides to control weeds.

f. Identification of cross section and slope steepness design standards which provide for motorist safety as well as for improved establishment, maintenance, and replacement of different types of vegetation.

g. Identification of a uniform inventory and assessment technique which could be used by many counties in establishing integrated roadside management programs.

- h. Equipment innovations for seeding and harvesting grasses in difficult terrain settings, roadway ditches, and fore-slopes and back-slopes.
  - i. Identification of the perceptions of motorists and landowners to various types of roadside vegetation and configuration of plantings.
  - j. Market or economic feasibility studies for native seed, forb, and woody plant production and propagation.
  - k. Impacts of vegetation modifications on increasing or decreasing wildlife populations in rural and urban areas.
  - l. Effects of vegetation on the number and location of wildlife road-kills in rural and urban areas.
  - m. Costs to the public for improper off-site resource management adjacent to roadsides.
  - n. Advantages, disadvantages, and techniques of establishing pedestrian access adjacent to highways and their impacts on vegetation management.
  - o. Identification of alternative techniques for snow catchment on farmland adjacent to roadsides.
7. *Gateways program.* The department shall develop a gateways program to provide meaningful visual impacts including major new plantings at the important highway entry points to the state and its communities. Substantial and distinctive plantings shall also be designed and installed at these points. Creative and artistic design solutions shall be sought for these improvements. Communications about these projects shall be provided to local groups in order to build community involvement, support, and understanding of their importance. Consideration shall be given to a requirement that gateways projects produce a local match contribution toward the overall project cost.
8. *Vegetation inventories and strategies.*
- a. The department shall coordinate and compile integrated roadside vegetation inventories, classification systems, plans, and implementation strategies for roadsides. Areas of increased program and project emphasis may include, but are not limited to, all of the following:
    - (1) Additional development and funding of state gateways projects.
    - (2) Accelerated replacement of dead and unhealthy plants with native and hardy trees and shrubs.
    - (3) Special interest plantings at selected highly visible locations along primary and interstate highways.
    - (4) Pilot and demonstration projects.
    - (5) Additional snow and erosion control plantings.
    - (6) Welcome center and rest area plantings with native and aesthetically interesting species to create mini-arboretums around the state.
  - b. The department shall coordinate and compile a reconnaissance of lands to develop an inventory of sites having the potential of being harvested for native grass, forb, and woody plant material seed and growing stock. Highway right-of-ways, parks and recreation areas, converted railroad right-of-ways, state board of regents' property, lands owned by counties, and other types of public property shall be surveyed and documented for seed source potential. Sites volunteered by private organizations may also be included in the inventory. Inventory information shall be made available to state agencies' staffs, county engineers, county conservation board directors, and others.

89 Acts, ch 246, §6; 95 Acts, ch 3, §2; 2010 Acts, ch 1061, §107

Referred to in §314.13, §314.21, §317.11

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

Universal Citation: [IA Code § 317.3 \(2016\)](#)

317.3

Weed commissioner — standards for noxious weed control.

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

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

[S13, §1565-c, -d, -f; C24, 27, §4817; C31, 35, §4817, 4817-d1; C39, §4829.03; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §317.3]

83 Acts, ch 123, §119, 209; 85 Acts, ch 160, §1; 94 Acts, ch 1173, §14

Referred to in §331.321

**APPENDIX D: Iowa DOT Map - O'Brien County**

# O'BRIEN COUNTY IOWA



Office of Systems Planning  
Phone: (515) 239-1664  
www.iowadot.gov/maps



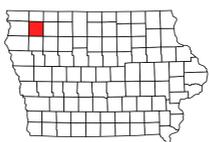
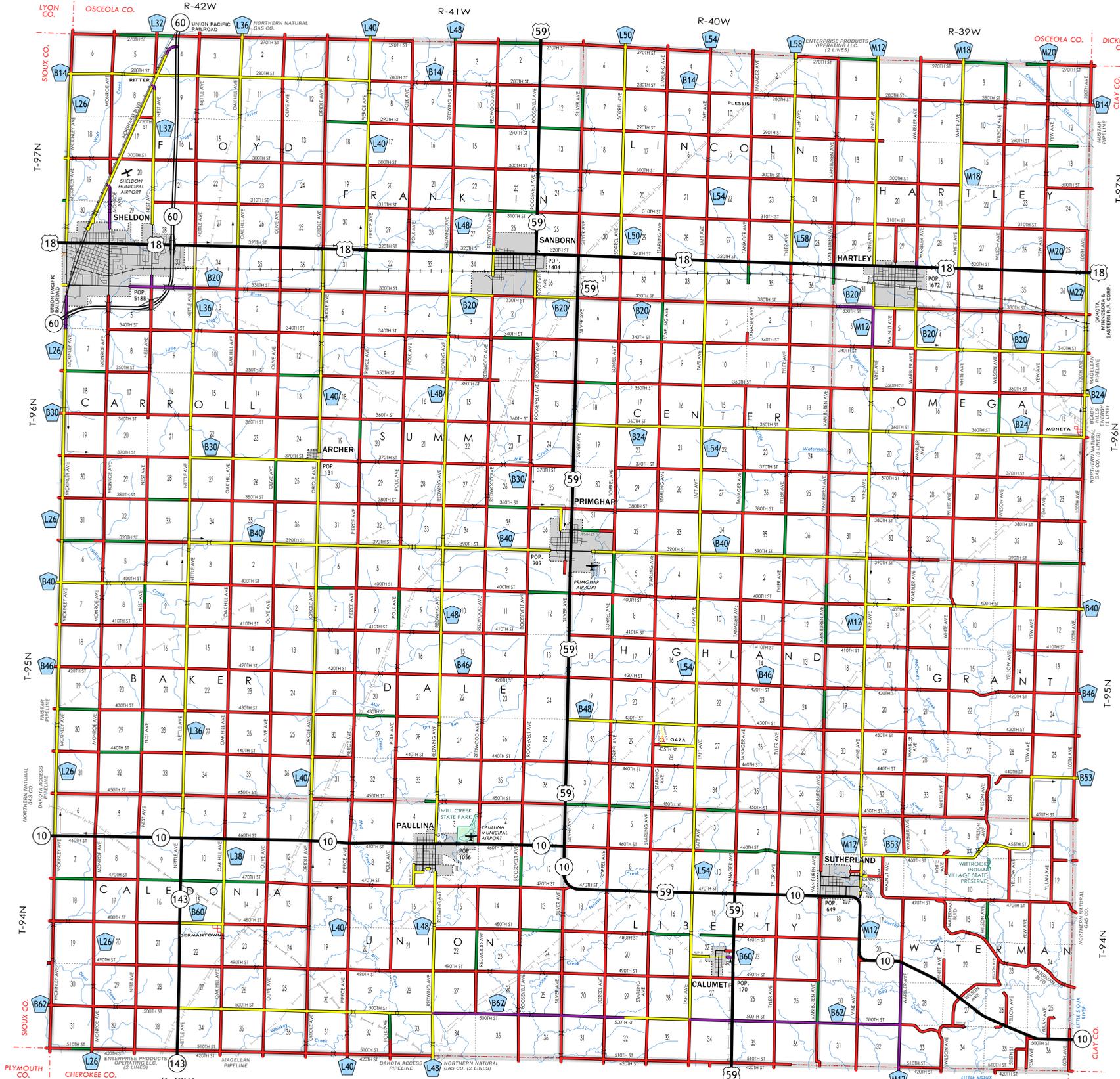
In Cooperation With  
**United States  
Department of Transportation**

JANUARY 1, 2018

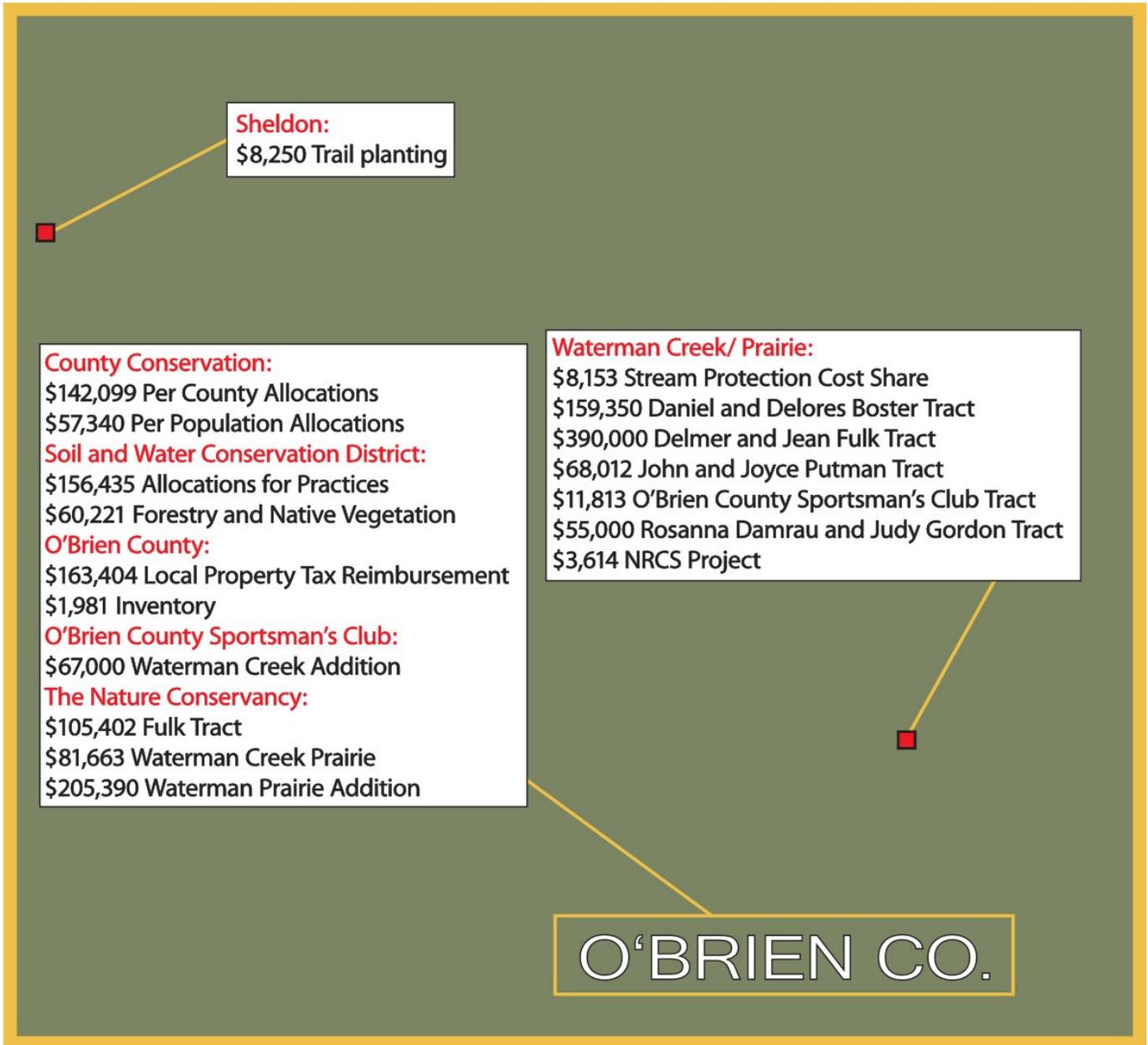


### LEGEND

- INTERSTATE HIGHWAY
- PRIMARY HIGHWAY-DIVIDED
- PRIMARY HIGHWAY-CONCRETE ROAD
- ASPHALT ROAD
- BITUMINOUS ROAD
- GRAVEL ROAD
- EARTHEN ROAD
- INTERSTATE HIGHWAY
- UNITED STATES HIGHWAY
- STATE HIGHWAY
- COUNTY HIGHWAY
- RAILROAD
- PIPELINE
- AIRPORT
- HYDROLOGY
- BRIDGE
- STATE BOUNDARY
- COUNTY BOUNDARY
- CORPORATE BOUNDARY
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- SECTION LINE
- ROAD NAMES
- UNINCORPORATED PLACE
- STATE PARKS
- STATE INSTITUTIONS
- FEDERAL LAND

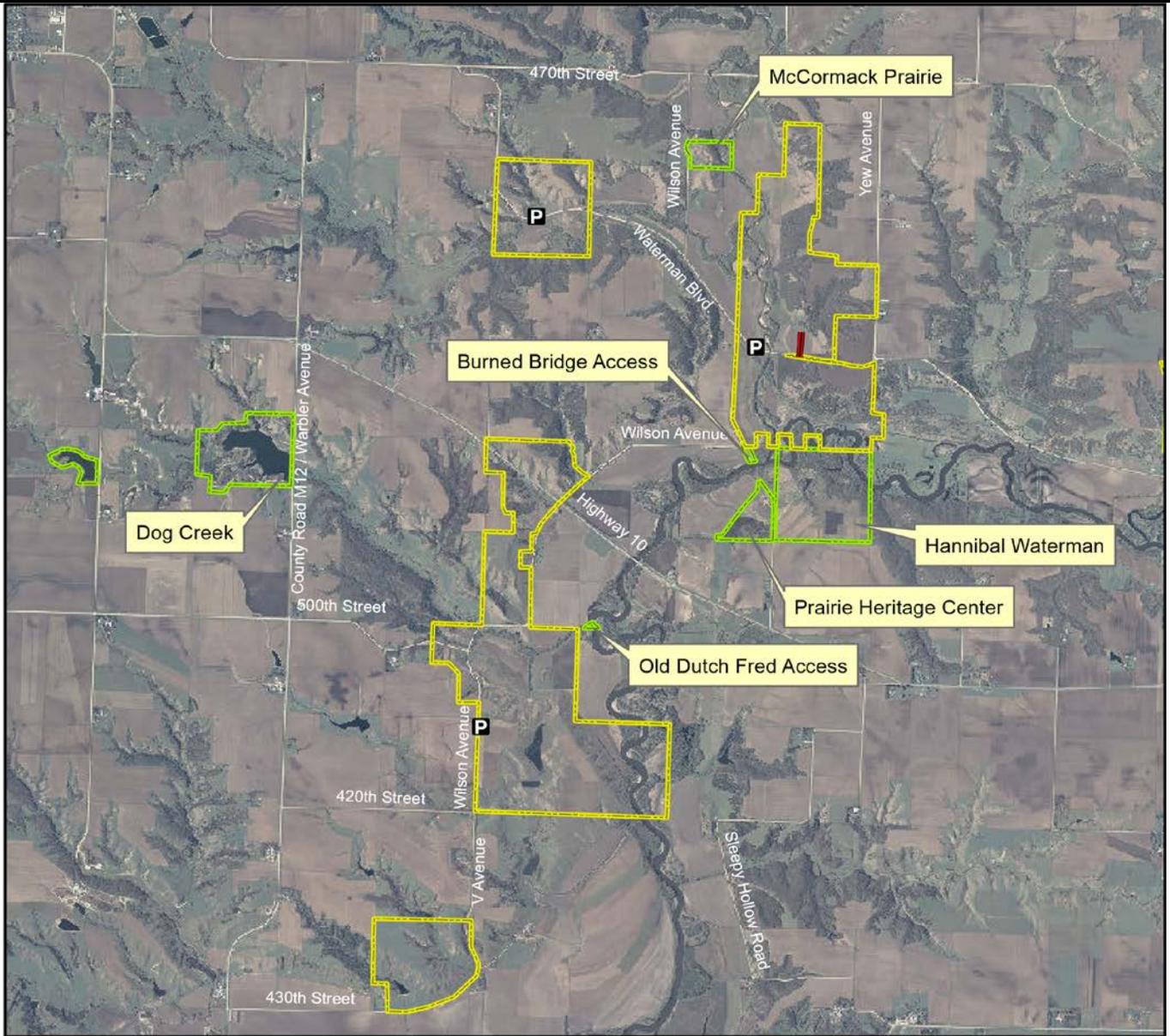


## REAP at work in O'BRIEN County \$1,909,962 since 1990



Natural Resource plates support habitat, water quality, city, county and state parks, wildlife species of special concern, and more. These plates are added to state gaming revenues to finance REAP. For more information visit: [www.iowareap.com](http://www.iowareap.com)

# Waterman Prairie Wildlife Management



Legend	
State Areas open to hunting	WMA Boundary
P Parking Lot	Other Public Land
2007 Aerial Photography	
Map Creation Date: 9/2011	

Acres: 1,571
Habitat: Prairie, Timber, Stream
Species: Deer, Turkey, Pheasant, Dove
Contact: Chris LaRue Great Lakes Wildlife Unit 712-330-4543

O'Brien & Cherokee Counties, Iowa  
T-94&94N, R-39W,  
Sections 4,14-15,23,27,33-34

*Directions: 3.5 miles SE of Sutherland on Hwy 10, 2 miles N on Wilson.*

## Appendix F: O'Brien County LRTF Funding

### O'Brien County LRTF Funding History through FY 2018

<b>DOT Project Number</b>	<b>Applicant</b>	<b>\$ Awarded</b>	<b>FY</b>	<b>Description</b>	<b>Condition</b>
90-71-LFTF-801	O'Brien County	\$13,080.00	1998	Truax Drill	poor
90-71-LRTF-601	O'Brien County	\$4,500.00	2005	Roadside Inventory	NA
90-71-LRTF-701	O'Brien County	\$4,600.00	2007	Kubota ATV, Water Pump Canon Power Shot S3 IS	good
90-71-LRTF-801	O'Brien County	\$300.00	2007	Camera	good
90-71-LRTF-601	O'Brien County	\$4,500.00	2007	Roadside Inventory	NA

## O'Brien County LRTF Funding History through FY 2019

<b>DOTProjectNumber</b>	<b>Applicant</b>	<b>Award</b>	<b>FiscalYear</b>	<b>Description</b>	<b>Type</b>
90-00-LRTF-112	State Roadside Office	\$ 837.00	2001	Seed	City
90-71-LRTF-601	O'Brien County	\$ 4,500.00	2006	Inventory	County
90-71-LRTF-701	O'Brien County	\$ 4,600.00	2007	Equipment - Kawasaki Mule 3010 4x4 with roll bar, water tank and pump	County
90-71-LRTF-801	O'Brien County	\$ 300.00	2008	Equipment - Canon digital camera	County

<b>Total LRTF Funding Awarded FY1990 - FY2019</b>	<b>\$ 10,237.00</b>
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**Appendix G: Spray Record Sheet**

DAILY SPRAY RECORDS

APPLICATIONS \_\_\_\_\_ LICENSE NUMBER \_\_\_\_\_

PESTICIDE(S) USED \_\_\_\_\_ EPA REG. NO. \_\_\_\_\_

TOTAL AMOUNT OF PESTICIDE APPLIED \_\_\_\_\_  
(gallons per acre)

PESTICIDE APPLICATION RATE \_\_\_\_\_  
(active ingredient per acre)

APPLICATION EQUIPMENT USED \_\_\_\_\_

PESTICIDE MIXTURE \_\_\_\_\_

DATE \_\_\_\_\_

WEATHER CONDITIONS:

TIME	6	8	10	12	2	4	6	8
WIND DIRECTION								
WIND SPEED								
TEMPERATURE								

LOCATION OF APPLICATION:

COMMENTS:

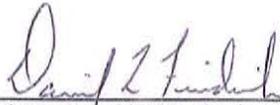
# O'Brien County IRVM Plan

Version 3.0 – 2018

## *Statement of Support*

The O'Brien County Board of Supervisors, O'Brien County Engineer, and the O'Brien County IRVM Manager, in spirit of cooperation, common goals, and shared vision to manage roadsides and vegetation within O'Brien County by use of integrated roadside principals.

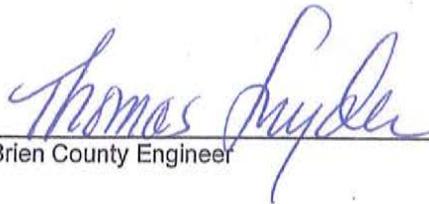
Being consistent with Iowa Code Chapter 314.22, O'Brien County recognizes the roadside management goals to preserve, plant, and maintain safe, visually interesting, and ecologically integrated corridors of travel throughout the County.



Chairperson: O'Brien County Board of Supervisors

2-13-18

Date



O'Brien County Engineer

02/09/2018

Date