

Buchanan County IRVM

Plan update 2017

By Sherlyn Hazen (Roadside Manager)

Table of Contents

- 1) Mission Statement
- 2) Definition of IRVM
- 3) Legislative Language
- 4) History
- 5) Management Plan
- 6) Primary Objectives
- 7) Annual Operations
- 8) Roadside Advisory Committee
- 9) Equipment Inventory
- 10) Job Descriptions
- 11) Permits
- 12) Maps

MISSION STATEMENT

Buchanan County Integrated Roadside Vegetation Management (IRVM) seeks to provide cost-effective, environmentally safe management of vegetation along public roads.

Primary Goals of IRVM are too economically:

1. Maintain a safe travel environment by reducing roadside hazards;
2. Control trees and noxious weeds and eventually reduce the amount of herbicides used;
3. Reduce mowing by increasing and preserving native vegetation;
4. Sustain water quality by controlling soil erosion.

In addition to these benefits, IRVM can:

1. Provide aesthetically pleasing roadsides;
2. Educate the public about the importance of sound land management;
3. Improve wildlife habitat.

DEFINITION OF IRVM

Roadside Vegetation performs many functions on the landscape. As a sustainable method of controlling erosion and sediment delivery, providing critical habitat and food sources for birds and pollinators, native vegetation in the right of way ensures safe, visible, attractive roadways across Iowa. According to the Iowa Legislature, Integrated Roadside Vegetation Management (IRVM) refers to a comprehensive program that:

- Maintains a safe travel environment.
- Serves 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.
- Is 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.

- Emphasizes the establishment of adaptable and long-lived vegetation, often native species, matched to the unique environment found in and adjacent to the roadside.
- Incorporates integrated management practices for the long-term control of damaging insect population, weeds, and invader plant species.
- Builds upon a public education program allowing input for adjacent landowners and general public.
- Accelerates 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.
- Incorporates 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.

LEGISLATIVE LANGUAGE

Buchanan County is consistent with the plan and goals established by the Department of Transportation in following the Iowa Codes IRVM and Noxious Weeds.

Section 314.22 of the Iowa Code, Integrated Vegetation Management, which states: 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.

Section 317.4 of Iowa Code, Noxious Weeds, which states: The following weeds are hereby declared to be noxious and shall be divided into two classes, namely:

1. Primary noxious weeds, which shall include Quack grass, perennial sow thistle, Canada thistle, bull thistle, European morning glory or field bindweed, horse nettle, leafy spurge, perennial pepper-grass, Russian knapweed, buckthorn, and all other species of thistles belonging in genera of *Cirsium* and *carduus*.
2. Secondary noxious weeds, which shall include butterprint annual, cocklebur annual, wild mustard annual, wild carrot biennial, buckthorn perennial, sheep sorrel perennial, sour dock perennial, smooth dock perennial, poison hemlock, multiflora rose, wild sunflower annual, puncture vine annual, teasel biennial, and shattercane annual.

HISTORY

When today's current road system was developed in the 1920's and 1930's, the adjacent landowners practiced roadside vegetation management. As the number of farms decreased and the size of farms increased, it became more and more difficult for landowners to keep up with noxious weeds and unwanted brush.

When the county took over management responsibility, broadcast spraying of herbicides was the main defense against noxious weeds and unwanted brush until 1979. The spraying was done largely on a contract basis and one half of the county was sprayed each year. In 1979 the county adopted a policy to only spot spray where landowners requested and in areas where large weed problems existed. The Weed Commissioner who was appointed by the Board of Supervisors supervised this spraying program.

The Weed Commissioner worked with the Secondary Road Department, which also mechanically cut brush in the winter months. For the most part, the program worked to keep the weed and brush problem from getting worse.

In 1988 an extensive vegetation inventory on every mile of roadside was done. This survey showed an abundance of native prairie vegetation and, also, an abundance noxious weeds that needed some form of management.

In 1989 Buchanan County hired a roadside manager on a part-time basis to implement an Integrated Roadside Vegetation Management program and in 1996 a full-time manager was hired. Since then a full time manager has been in place.

The Buchanan County Roadside Program is an independent department in which the Roadside Manager is supervised by the County Supervisors and is guided by the Roadside Advisory Committee.

MANAGEMENT PLAN

During the 1920's and 1930's, many of Iowa's narrow rural roads were modified to improve all-weather usage. These modifications included widening roads and rights-of-way, ditch excavation, road grading, and gravel surfacing. This new road design required less maintenance and provided a more stable surface for the increasing motor vehicle traffic of the day.

Following road grading work, the roadsides were generally reseeded to smooth brome. Brome was widely used for reseeding roadsides because of its availability and adaptability. Although brome could rapidly establish on most roadsides, it could not effectively compete against many invading noxious weeds.

In the 1950's, county road crews began broadcast spraying herbicides in an effort to eradicate roadside noxious weeds and brush. Although herbicides were fairly effective in destroying weeds, the weed problem could not be eliminated. After 30 years of extensive herbicide use, roadside weed problems have even worsened in many areas.

Since the late 80s, there has been a shift of philosophy on how to control roadside noxious weeds and brush. Instead of relying solely on the traditional method of broadcast herbicide spraying, the approach of replacing noxious weeds with more desirable, weed-resistant species has gained support. This basic approach has influenced the development of IRVM programs at both the state and county levels.

Section 314.22 of the Iowa Code declares it "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." This law, in conjunction with Section 317.26 addressing noxious weed control, and Section 314.19 addressing reseeding of open ditches with native vegetation, provides the legal basis for the development of IRVM programs.

IRVM is a systematic process of applying various techniques to provide cost-effective and environmentally safe management of vegetation along public rights-of-way. This management program promotes diverse plant communities, including cool-season introduced species, and long-lived native prairie plants. General goals of IRVM include maintaining a safe travel environment, controlling noxious weeds and soil erosion, sustaining water quality, improving wildlife habitat, and providing the public with aesthetically pleasing roadsides.

Buchanan County maintains 872 miles of roadway. On average, the roadside width is about 22 feet wide on each side. This adds up to approximately 4,800 acres of roadside.

PRIMARY OBJECTIVES

Safety

The number one priority for Buchanan County IRVM is to provide a safe travel environment. The elimination of potential hazards such as trees and vegetation obstructing

traffic and traffic signs is of utmost importance. Brush control and mowing policies that address potential hazards will be instated so that priorities can be set and objectives met.

Completion of duties by IRVM personnel in a safe and efficient manner will also be emphasized. OSHA regulations and county safety procedures will be practiced at all times.

Brush Control

Woody species such as Willow, Maple and Cottonwood thrive in Buchanan County roadsides. New growth of undesirable trees will create future safety problems if left untreated.

An herbicide treatment of trees while they are still small is a more efficient method of control when compared to mechanical cutting of woody vegetation. Cutting and removing trees that are too big to treat with herbicides will still have to be practiced.

Roadside Seeding's

One of the adaptive advantages of the native tallgrass prairie is plant diversity. By planting a variety of species along roadsides, there is greater adaptation to different soil types and climatic conditions and a better chance for long-term establishment. Once established, native grasses and forbs resist the invasion of weeds and brush and are very tolerant to adverse climactic conditions such as floods and drought.

Landowner Awareness of Soil Erosion

An important area of emphasis within Buchanan County's IRVM plan is promoting landowner awareness and cooperation in minimizing soil erosion into roadsides. As little as 1/8-inch of soil deposited in a road ditch is a sufficient disturbance to promote germination of new weeds. Unchecked soil deposition not only hampers ditch drainage, but can turn roadsides into vigorous "weed nurseries" capable of reinvading adjacent cropland.

Agricultural methods that benefit IRVM by reducing soil erosion into roadsides are conservation tillage and the establishment of permanent grass field borders. These methods may also benefit agriculture since IRVM practices will significantly reduce roadside weed invasion of cropland. Although we are not aware of published research studies concerning roadside weed invasion of cropland, literature reviews and on-site research that contribute data about the extent to which IRVM methods may benefit the landowner should be continually sought.

Noxious Weeds

The use of more environmental and user friendly herbicides will be used to more effectively control infestations of weeds such as Canada thistle and musk thistle. Spot spraying of weed patches instead of broadcast spraying will decrease the amount of herbicide used and decrease the potential of off-site damage to farm fields and gardens.

Conclusion

The goals of Buchanan County's Integrated Roadside Vegetation Management program will not be achieved overnight. IRVM is a systematic process that requires careful planning and a considerable investment of time to realize results. Some of the techniques needed for successful roadside management have been developed and tested, while others are still being researched. The preceding long-range plan reflects the general structure of Buchanan County's IRVM program. Each year's specific goals will be dictated by variables such as budget and new research findings.

ANNUAL OPERATIONS

Integrated Roadside Vegetation Management is a systematic process of applying various techniques to provide cost-effective and environmentally safe management of vegetation along public rights-of-way. This management program promotes diverse plant communities such as long-lived native prairie species. Important goals of IRVM include maintaining a safe travel environment, controlling noxious weeds and soil erosion, sustaining water quality, improving wildlife habitat, and providing the public with aesthetically pleasing roadsides.

Annual Work Plan

In an effort to achieve these goals in Buchanan county, a general IRVM work plan, including roadside burning, seeding, and brush and weed control efforts is outlined below.

I. January-March

- A. Meet with the Roadside Advisory Committee to discuss goals and objectives for the year and draft a specific annual plan for vegetation management.
- B. Coordinate roadside planting sites using ditch cleanout maps.
- C. Order prairie grass seed – determine type and quantity.
- D. Review chemicals from previous year and order for upcoming summer.
- E. Check and/or acquire necessary roadside vegetation management equipment.
- F. Develop new public relation programs, presentations – target landowners through co-operative newsletters and other agriculture channels.
- G. Cut brush, apply basal bark herbicide.

II. April-May

- A. Hire seasonal staff.
- B. Conduct prairie burns – discuss situations that may preclude burning; landowner notification, safety precautions, weather conditions, staffing levels, proper timing for controlled burns.
- C. Begin spring planting – monitor soil moisture and temperature for optimum warm-season grass planting conditions.
- D. Conduct seasonal employee safety training and certified applicator training.
- E. Begin herbicide treatments of noxious weeds.

III. June-July

- A. Continue prairie planting – monitor weather conditions in early to mid-July, determine cut-off date for warm-season grass seeding's.
- B. Herbicide treatment of noxious weeds.
- C. Mow roadsides for maintaining safe sight distances, removing weed competition from new roadside seeding's, and seed-set prevention of unsprayed weeds.
- D. Begin herbicides treatments of unwanted brush.

IV. August-October

- A. Herbicide treatment of unwanted brush.
- B. Plant cool-season grass mixtures.
- C. Attend meetings and conferences on prairie roadside management – North American Prairie Conference, Annual State Roadside Conference.
- D. Herbicide treatments of noxious weeds (thistles) – monitor weather conditions for optimum application on actively growing plants.
- E. Cut and stump treat unwanted brush.

V. November-December

- A. Cut and stump treat unwanted brush.
- B. Frost seed warm-season grasses and forbs.

ROADSIDE ADVISORY COMMITTEE

The Buchanan Roadside Advisory Committee (RAC) is made up of representatives of groups of people who have interests in the way roadsides are managed. The committee has an elected chairperson and Secretary (usually the roadside manager). The RAC makes recommendations to the roadside manager and the Board of Supervisors as to how the county roadsides are managed. Policy is still set by the Board of Supervisors. The RAC will hold at least one meeting per year or as often as the Roadside Manager, Board of Supervisors, or committee members see fit.

The RAC will consist of the following representatives:

- Board of Supervisors
- County Engineer
- Conservation Director
- Conservation Board Member
- Farm Bureau Member
- NRCS District Conservationist
- 2 Landowners/Taxpayers
- Roadside Manager
- Pheasants Forever
- Iowa Department of Natural Resources

The current committee is made up of the following members:

- Don Shonka, County Supervisor
- Garry Gissel, County Supervisor
- Clayton Ohrt, County Supervisor
- Brian Keierleber, County Engineer
- Dan Cohen, Conservation Director
- Roger Erickson, District Conservationist
- Nyle McMartin, Landowner
- Marlene Brown, Farm Bureau Representative
- Anita Miller, Landowner
- Ron Wolfe, Conservation Board Member
- Greg Schmitt, Iowa DNR
- Jim Klever, Pheasants Forever
- Sherlyn Hazen, Roadside Manager, Secretary

EQUIPMENT INVENTORY

Equipment	Condition
2006 Ford F350 with spray system	Good
2007 Ford F350 with spray system	Good
2017Chevy 1500	Good
1982 Ford Diesel Truck, used with chipper	Fair
1991 Ford F800 Bucket truck	Fair
2002 Vermeer Chipper	Good
2014 Finn T-120 Hydro-seeder	Good
Truax Flex Native Grass Drill	Good
2007 Polaris Ranger with roll bar	Good
Trailer for Polaris Ranger	Good
ATV disc/cultipacker combo	Good
MS 250 Stihl chainsaw	Good
MS 362 Stihl chainsaw	Good
MS 441C Stihl chainsaw	Good
Stihl extendable poll-saw	Good
Burn supplies; flappers, racks, signs, and apparel	Good
Hand sprayers for cut stump treatments	Good

JOB DESCRIPTION

Roadside Manager

DEFINITION:

The Roadside Manager is hired by the Buchanan County Board of Supervisors to address the provisions of Section 314 of the Code of Iowa, the Integrated Roadside Vegetation Management (IRVM) Law, and Section 317, the Noxious Weed Law. The Manager shall administer, develop, plan, and conduct a program of vegetative habitat management that seeks to control unwanted vegetation and promote desirable vegetation on Buchanan County rights-of-way and public drainage ditches, and perform related duties as required by the Board of Supervisors.

DUTIES AND RESPONSIBILITIES:

The Roadside Manager and IRVM staff shall coordinate their activities with the Buchanan County Engineer and Secondary Road Department, as well as with the Buchanan County Conservation Board. This coordination will be overseen and insured by the Board of Supervisors. The Manager's responsibilities shall include, but not be limited to, the following:

1. Control of noxious weeds in rights-of-way and public drainage ditches, particularly Canada thistle.
2. Planting and maintenance of native and introduced grass/forb communities in newly graded, cleaned out, or otherwise disturbed sites on county rights-of-way.
3. Development of a program of public information and education to promote public understanding of IRVM, and wise land use that contributes to the goals of the IRVM program.
4. Inventorying and documenting plant communities and trends along county rights-of-way.
5. Managing those areas of native vegetation identified by the inventory process to improve their diversity and promote their continued health.
6. Remove all trees and brush causing safety concerns along county roadways.
7. All Weed Commissioner duties and responsibilities.

REQUIREMENTS:

The Roadside Manager shall:

1. Maintain a valid pesticide applicator's license in category 6, Right-of-way and category 1A, Agriculture.
2. Maintain a valid, Class B, Iowa driver's license.

3. Assume ongoing in-service training within budget limitations.
4. Maintain all necessary records and MSDS files on chemicals used.
5. Submit monthly and yearly reports to the Board of Supervisors.
6. Oversee maintenance and record keeping on all equipment and vehicles assigned to the IRVM program.
7. Have a minimum four-year college degree in a natural resource related field with major course work in botany and wildlife.

NECESSARY KNOWLEDGE AND SKILLS:

- Knowledge of principles of land use and the environmental, social, and economic problems that affect it.
- Ability to plan work, thinks conceptually, analyze data, observe and evaluate, and make sound decisions and recommendations.
- Ability to work well with the public and private sector.
- Ability to communicate effectively both orally and in writing.
- Ability to use a computer both in word processing and data management.
- Ability to identify native and introduced plant species, including weeds.
- Knowledge of the principles of wildlife management.
- Familiarity with traditional and new sustainable agricultural practices.
- Ability to supervise support staff engaged to carry out program.
- Ability to operate and maintain power equipment.

Roadside Technician

DEFINITION:

The Roadside Technician is hired by the Buchanan County Roadside Manager to assist in addressing the provisions of Section 314 of the Code of Iowa, the Integrated Roadside Vegetation Management (IRVM) Law, and Section 317, the Noxious Weed Law. The Technician will directly and indirectly assist the Roadside Manager in conducting a program of vegetative habitat management and assist in related duties as required by the Buchanan County Board of Supervisors.

DUTIES AND RESPONSIBILITIES:

The Technician will coordinate his/her activities with the Roadside Manager. The technician's responsibilities shall include, but not be limited to, the following:

1. Control of noxious weeds in rights-of-way, particularly Canada thistle.
2. Control of trees and brush in rights-of-way.
3. Planting and maintenance of native and introduced grass/forb communities in newly graded, cleaned out, or otherwise disturbed sites on county rights-of-way.
4. Assist in a program of public information and education to promote public understanding of IRVM, and wise land use that contributes to the goals of the IRVM program.
5. Inventorying and documenting plant communities and trends along county rights-of-way.
6. Assist Weed Commissioner with duties and responsibilities.

REQUIREMENTS:

The Roadside Technician shall:

1. Maintain a valid pesticide applicator's license in Category 6, Right-of-way.
2. Assume ongoing in-service training.
3. Maintain all necessary records.

NECESSARY KNOWLEDGE AND SKILLS

- Ability to work well with the public and private sector.
- Ability to communicate effectively both orally and in writing.
- Ability to use a computer both in word processing, data management, and Geographical Information Systems.
- Ability to identify native and introduced plant species, including weeds.
- Ability to supervise support staff engaged to carry out program.
- Ability to operate and maintain power equipment.

Buchanan County

Roadside Maintenance Agreement

I (we) _____
Print name

ask Buchanan County Roadside Management not to apply herbicides within the right of way adjacent to property we own or rent at the following location.

Section _____ of _____ Township on the _____ side of _____.
N,S,E,W Road name

In return, I (we) agree to cut, burn, spray or otherwise destroy, as per state law, all listed noxious weeds and prevent new growth or regrowth of woody vegetation. This agreement does not prevent herbicide use by utility companies or any other entity. Also this agreement does not prevent any other maintenance practices (mowing, culverts, etc..) by the Buchanan County Secondary Roads Department or other approved entities.

I (we) understand it is our responsibility to post and maintain the approved “**No Spray**” sign provided by Buchanan County. If I (we) fail to post the area, maintain the signs, or do not control the noxious weeds and woody vegetation as stated above, Buchanan County reserves the right to apply herbicides to the described area above.

Applicant’s Signature

Address

Phone

Buchanan County Roadside Manager

Buchanan County Engineer

Starting Date

Expiration Date

ONE CALL 1-800-292-8989

BUCHANAN COUNTY SECONDARY ROAD DEPARTMENT

PERMIT TO PERFORM WORK WITHIN COUNTY ROAD RIGHT OF WAY

In accordance with Chapter 319 of the Code of Iowa "No billboard, advertising sign or devise, fence or other that right of way boundary fence, or other obstructions, except signs or devices authorized by law or approved by the highway authorities shall be placed or erected upon the right of way of any public highway...." And further, "A person shall not excavate, fill or make any physical change within the right of way of a public road or highway without obtaining a permit from the highway authority having jurisdiction of such public road or highway."

Permission is hereby requested to perform the following type of work within the right of way of the BUCHANAN COUNTY SECONDARY ROAD DEPARTMENT:

The site is located at _____
(Name of road)

near or at _____

TEMPORARY _____

PERMANENT _____

APPROVED:

County Engineer Date

Signature

Printed Name

Address

Phone

BUCHANAN COUNTY SECONDARY ROAD DEPARTMENT
Application for Permit to Construct Entrance

Applicant _____

Address _____

Telephone _____

Permission is hereby requested for the construction of entrance from right of way to county road traveled way, including necessary drainage structure thereunder. Proposed location is as follows:

Section _____ Township _____

MINIMUM REQUIRED PIPE SIZE _____

NO PLASTIC PIPE ALLOWED

GENERAL CONDITIONS

1. All backfill material shall be free from fieldstone, broken concrete, wire, etc.
2. Pipe shall be placed on a firm base or over excavated and filled to the flow line and compacted with rock.
3. All entrances installed on pavement shall have a 6:1 slope and be rocked.
4. New driveways on pavements shall be 150' away from the intersection of right of way.
5. Residential driveways shall be 400' apart when feasible.
6. The proposed entrance, including drainage structure, shall be constructed by the applicant at his expense, in accordance and in conformance with the standard specifications of the Iowa State Highway Commission, and shall thereafter be kept in repair and maintained by the applicant at his own expense. Nothing in this stipulation, however, precludes the Buchanan County Secondary Road Department from entering upon said entrance on highway right of way and performing necessary maintenance for the protection of the highway.
7. The construction of this entrance shall be completed by: _____ day of _____ 20 _____.
8. During construction and future repair and maintenance of said entrance, the applicant shall take all reasonable precautions to protect and safeguard the lives and property of any person and shall save Buchanan County and its Board of Supervisors harmless of any damage or losses that may be sustained by any person on account of such construction, repair and maintenance operations.
9. The construction, future repair, or maintenance of said entrance shall be carried on in such a way as to not interfere with or interrupt traffic on said road.
10. This permit is subject to any laws, now in effect, or any such laws that may be hereafter enacted.
11. This permit is subject to all the rules and regulations of the Buchanan County Board of Supervisors, and to revocation by the said Board at any time, when in the judgement of the Board it is necessary in the improvement or maintenance of the road or for any other reason.
12. All provisions herein relating to future repair and maintenance shall be binding on all successors or assigns of the applicant.

Metal Pipe

1. Shall have little or no rust and be banded with the appropriate band.

Concrete Pipe

1. Shall be laid level and have ends intact or limited repairs made and the joint sealed with tar paper.

Acknowledged by:

Signature of Applicant:

Date _____ County Engineer _____

Permit Granted _____

Buchanan County

Roadside Maintenance Agreement

I (we) _____, Print name

ask Buchanan County Roadside Management not to apply herbicides within the right of way adjacent to property we own or rent at the following location.

Section _____ of _____ Township on the _____ side of _____.
N,S,E,W road name

In return, I (we) agree to cut, burn, spray or otherwise destroy, as per state law, all listed noxious weeds and prevent new growth or regrowth of woody vegetation. This agreement does not prevent herbicide use by utility companies or any other entity. Also this agreement does not prevent any other maintenance practices (mowing, culverts, etc..) by the Buchanan County Secondary Roads Department or other approved entities.

I (we) understand it is our responsibility to post and maintain the approved “**No Spray**” sign provided by Buchanan County. If I (we) fail to post the area, maintain the signs, or do not control the noxious weeds and woody vegetation as stated above, Buchanan County reserves the right to apply herbicides to the described area above.

Applicant's Signature

Address

Phone

Buchanan County Roadside Manager

Buchanan County Engineer

Starting Date

Expiration Date

BUCHANAN COUNTY, IOWA


- 1) Permits from the County are required before any underground installation can be made.
- 2) Any open trenches in the roadway embankment must be completely backfilled with Class A Crushed Rock in no more than six-inch lifts, and each lift thoroughly compacted before the next lift is placed.
- 3) Wires placed in the roadbed must not cross over culverts. They must be looped around the ends of culverts in a manner clearing the sides of the culvert a minimum of twenty feet.
- 4) The installation must be placed a minimum of thirty inches deep in the roadbed.
- 5) In the case of roads with high-type surfaces, (asphalt or portland cement concrete) open cuts will not be permitted until specific permission is received from the County Engineer.
- 6) Beginning with the effective date of these regulations, all time loss encountered by County crews due to underground facility installations will be charged to the permit holder involved. All repair work performed by County crews, which was necessary because of the installation of underground facilities, will be charged to the permit holder.
- 7) The County assumes no responsibility for damages to the applicant's property occasioned by any construction or maintenance operations on said highway, including new or additional right of way acquired in connection therewith, subsequent to the building of said facility.
- 8) The applicant shall take all reasonable precaution during the construction of said facility to protect and safeguard the lives and property of the traveling public and adjacent property owners and shall save the County harmless of any damages or losses that may be sustained by the traveling public or adjacent property owners of such construction operations. Proper warning signs and/or devices shall be used to alert the traveling public when men and/or machines are working on or near the roadbed. Such warning shall be in conformance with the current Manual on Uniform Traffic Control Devices for Streets and Highways. (See sheet 6-66)
- 9) The applicant shall hold the County harmless from any damage that may result to said highway because of the construction or maintenance of said facility and shall reimburse the County for any expenditure that the County may make on said highway on account of said applicant's installation.
- 10) The applicant agrees to give the County forty-eight (48) hours notice of its intention to start construction on highway right of way.

BUCHANAN COUNTY

IOWA

Prepared By


 **IOWA DOT**




JANUARY 1, 2017

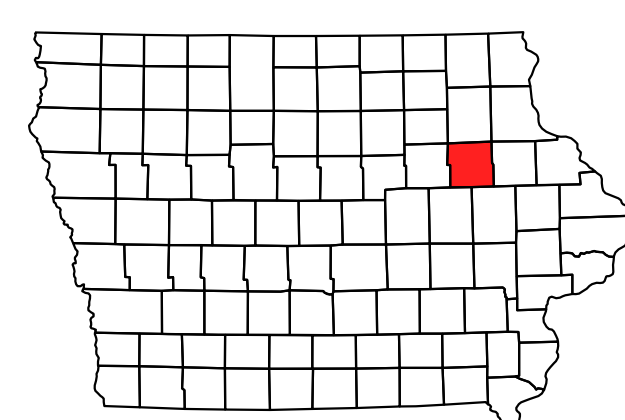


-

- 

-
- Diagram illustrating the Elwood station area, showing the station platform, tracks, and surrounding infrastructure.

- 



**INTEGRATED ROADSIDE VEGETATION MANAGEMENT
STATEMENT OF SUPPORT**

The Buchanan County Board of Supervisors, the Buchanan County Engineer, and the Buchanan County Integrated Roadside Vegetation Management Department come together in cooperation, common goals and shared ideas to manage roadsides in Buchanan County by and through Integrated Roadside Vegetation Management (I.R.V.M) principals.

We realize that I.R.V.M. will be beneficial to our roadside management goals including increased brush and weed control, while being economically and environmentally beneficial. We also realize the increasing importance of public education programs, public participation, input and involvement in understanding roadside management practices.

We understand that working in unison toward improving roadside vegetation is the most efficient way to accomplish the goal of improved, safe, and weed free roadsides. These roadsides will also add to the habitat and natural beauty of Buchanan County.

We hereby agree to manage Buchanan County roadsides according to the provisions described within this management plan.

Buchanan County Board of Supervisors

By: Clayton Ohrt
Chairperson, Clayton Ohrt

Date: 1-15-2018

Buchanan County Engineer

Brian Keierleber
Brian Keierleber, P.E.-Engineer

Date: 2/30/18

Buchanan County Roadside Manager

Sherlyn Hazen
Sherlyn Hazen, Director

Date: 1/30/18

Buchanan County LRTF Funding History through FY 2018

DOTProjectNumber	Applicant	Award	FiscalYear Description	Type
90-10-LRTF-101	Buchanan County	\$ 12,404.00	1991 Native grass seed	County
90-10-LRTF-401	Buchanan County	\$ 1,000.00	1994 Equipment - Specialized seeder	County
90-10-LRTF-402	Buchanan County	\$ 5,000.00	1994 Native grass seed	County
90-10-LRTF-801	Buchanan County	\$ 10,890.00	1998 Equipment - Hydro seeder	County
90-10-LRTF-901	Buchanan County	\$ 10,000.00	1999 Equipment - Truax drill	County
90-10-LRTF-001	Buchanan County	\$ 4,500.00	2000 Equipment - GPS hand held for inventory	County
90-10-LRTF-002	Buchanan County	\$ 131.00	2000 Wildflower planting	County
90-10-LRTF-501	Buchanan County IRVM	\$ 1,500.00	2005 Equipment - Storage shed for seed	County
90-10-LRTF-601	Buchanan County IRVM	\$ 5,839.00	2006 Equipment - Spraytronics sprayer unit	County
90-10-LRTF-701	Buchanan County IRVM	\$ 4,375.00	2007 Equipment - Polaris Ranger 4x4 with roll bar	County
90-10-LRTF-801	Buchanan County IRVM	\$ 686.92	2008 Equipment - Burn supplies	County
90-10-LRTF-001	Buchanan County IRVM	\$ 1,600.00	2010 Equipment - ATV disc/cultipacker combo	County
90-10-LRTF-101	Buchanan County IRVM	\$ 3,040.00	2011 Equipment - GPS/GIS	County
90-10-LR15-(306)	Buchanan County IRVM	\$ 24,000.00	2015 Equipment - Hydroseeder	County
90-10-LR15-(307)	Buchanan County Conservation Board	\$ 15,000.00	2015 Quigly-Slaterry Heritage Prairie Acquisition	County

Total LRTF Funding Awarded FY1990 - FY2018	\$ 99,965.92
--	--------------