

WASHINGTON COUNTY INTEGRATED ROADSIDE VEGETATION MANAGEMENT GENERAL PLAN

I. Preface

A. Update/ Version I

B. Contributors to the Plan

- a. Bryan Horesowsky - Assistant Engineer
- b. Jacob Thorius - County Engineer
- c. Jack Seward Jr - Board of Supervisor’s Chairperson

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II. Executive Program

A. Goals

- a. Preserve and provide safe, functional and environmentally improved corridors of travel throughout the county.
- b. Utilize a long-term integrated management program that promotes desirable, self-sustaining plant communities. Encourage those plant communities that are native to Iowa through preservation and re-establish whenever practical.
- c. Make more efficient and effective use of chemicals as a control method of undesirable plants.
- d. Enhance the scenic qualities of the roadsides and their value as roadside habitat.

B. Program History

- a. Washington County implemented an IRVM plan in 2006 to better manage our roadside vegetation, while providing safe corridors for travel. As a result of additions to the equipment inventory and commitment to the plan, Washington County has been doing more stabilization projects and continues to find ways to improve our roadsides.

C. IRVM Decision Making Process

- a. County departments participating in the IRVM program continue to use the latest IRVM methodologies to most appropriately fix the problems at hand. Actions that are most consistent with the goals and concepts of roadside vegetation management in this plan are considered first priority.

D. Executive Summary

- a. Washington County’s vegetation management goals must meet certain safety and functional requirements before aesthetic, recreational, or economic considerations can be addressed. These are to maintain a clear zone recovery area, meet minimal sight distance requirements and provide for erosion control. We are also required by Iowa law to mow or otherwise control noxious weeds. Through the use of IRVM, we should be able to meet the prime purposes, provide a safe corridor for travel, and address other desirable uses for roadside vegetation.

E. Map

- a. Please refer to Figure 1 in the Appendix

F. Program Type

- a. Washington County’s IRVM program is housed in the Secondary Roads Department. The program is run through a joint effort from Secondary Roads, Conservation Department, Board of Supervisors, and the general public.

III. Jurisdictional Recognition and Approval

A. Management

- a. County Engineer - Makes decisions where road construction projects will take place throughout the county. Reviews IRVM funding and budgetary needs on an annual basis. Aides in deciding IRVM operations.
- b. Assistant County Engineer - Assists County Engineer with the planning and construction of projects. Applies for funding and materials through the LRTF (Living Roadway Trust Fund). Assists in overseeing IRVM operations.
- c. Maintenance Supervisor - Assigns tasks to maintenance employees on a daily basis. Helps to oversee field IRVM operations. Identifies roadway issues that require a corrective action.

Utilizes IRVM methodologies and practices to determine plan of action for a variety of erosion and seeding issues.

B. Board of Supervisors

- a. Please refer to program type and executive summary. Board of Supervisors aids in hearing public input in IRVM operations. Supervisors also, review and approve budget for IRVM operations on an annual basis.

C. State Laws and Regulations

- a. Iowa Law Section 314.17 Mowing
- b. Iowa Law Section 314.22 IRVM
- c. Iowa Law Chapter 317 Weeds

D. Permits

- a. Permits are filed in the County Engineer's Office. Permits are filled out by the applicant then submitted to the County Engineer for approval. The County Engineer has the authority to make necessary changes to the proposed application. Applications possibly affecting the IRVM program include and can be found in the Appendix:
 - i. Permit to Perform Work Within the County Right-of-Way
 - ii. Public Utility Construction Within the County Highway Corridor
 - iii. Application for Access
 - iv. Tile Crossing Permit

IV. Program Organizational Structure

A. Staff Organization Chart

- a. The County Engineer works with the Assistant Engineer and Maintenance Supervisor to distribute workload necessary to follow the plan. The hierarchy is as follows:
 - i. County Engineer
 - ii. Assistant Engineer
 - iii. Maintenance Supervisor
 - iv. Maintenance Staff
 - v. Part-time Staff

B. Staffing Needs

- a. Washington County's IRVM plan requires workers to be available for seeding, erosion control, mowing, and brush cutting. Workers will be utilized when schedules are free from typical road maintenance activities (ex. hauling gravel, blading, plowing snow, etc.).

V. Inventory and Analysis

A. Natural Resources

- a. Tools
 - i. GIS Mapping
 - ii. GPS Equipment
 - iii. Aerial Photography
 - iv. GEOTREE Prairie Seed Mapping
 - v. Record Keeping

b. Vegetation

- i. Inventory of roadside vegetation throughout the county is a continuous practice, mostly due to the ever changing roadside habitats. This inventory includes both official and unofficial records. The official inventory includes data collection and recording on a county wide basis to keep track of areas where vegetation has been planted and roadsides improved to minimize erosion and non-desirable plants. Unofficial inventory includes county staff identifying an issue in the road ditches then continuing to monitor the issue and ultimately coming up with a plan to correct the problem or addressing the problem with a solution.

B. Equipment

- a. Washington County has a variety of pieces of equipment that are used on a regular basis as part of our roadside management program. Our current equipment usually allows for having successful plantings and performing proper maintenance of the roadsides. The age of our equipment covers a wide range and will need to be replaced as repairs become uneconomical. Washington County's current IRVM equipment includes but is not limited to:
 - i. Broadcast Seeders
 - ii. Hydro Seeder
 - iii. Seed Drill
 - iv. 3 Point Soil Finisher
 - v. Side by Side Utility Vehicle (UTV)
 - vi. Mowers
 - vii. Brush Cutters
 - viii. Harrow
 - ix. Tractors
 - x. Pickup Trucks
 - xi. Disk Plow
 - xii. Harley Rake
 - xiii. Tracked Skid Loader
 - xiv. Chainsaws
- b. As other equipment is identified that can assist in our abilities to successfully and economically carry out our IRVM plan, they will be considered for additions to our fleet. A structure to store all of our small equipment/materials in one location out of the weather is a pressing need. This structure would also contain a climate controlled room for seed storage.

C. Soils

- a. Washington County utilizes NRCS Soil Mapping Index for a variety of tasks.

VI. Program Operations

A. Annual Operations

- a. January through March - Operations include but are not limited to: cutting trees and brush, repairing equipment, planning upcoming year's operations, ordering equipment and supplies.
- b. April through September - Operations include but are not limited to: seeding, erosion control projects, mowing, and spraying.
- c. October through December - Operations include but are not limited to: cutting trees and brush, equipment maintenance, dormant seeding, monitoring sites, and reviewing previous year's work.

B. Vegetation Types for Specific Uses

- a. Selection of vegetation types will be based upon plant performance, cost, availability, ease of use, and distinct benefits of each type of plant. Generally we utilize prairie seed mixture in areas that have steep slopes and are difficult to maintain. In relatively shallow slopes we will use Iowa DOT rural seed mixtures. Typically in front of households and areas mown regularly, Iowa DOT urban mixture is planted.

C. Special Projects

- a. Wetland Determination - Completed for construction projects to determine if any sort of mitigation is needed.
- b. Wetland Mitigation Seeding and Enhancement - Projects that address possible loss of habitat through construction by adding additional habitat area.

VII. Methods

A. Vegetation Establishment and Maintenance

- a. Procedures - As much as possible, procedures are used as prescribed by the Iowa DOT and the IRVM Technical Manual.
- b. Site Preparation - Equipment is used to level the soil surface by breaking up dirt clods and removing debris. This is either done with a UTV and harrow or a tractor mounted soil finisher. Washington County hopes to acquire a soil conditioner for our tracked skid loader for difficult access locations.
- c. Seed Mixtures and Rates - Seed mixtures for prairie plantings differ from year to year due to specific seed availability. Prairie seed is planted at the rate suggested by University of Northern Iowa's IRVM program. At steep slope locations the seeding rate is typically doubled.
- d. Seeding Techniques - Washington County determines on a site by site basis, what type of seeding method to use. Our three current methods are hydro seeding, broadcast seeding, and drilling.
- e. Erosion and Sediment Control - Multiple erosion control devices and practices are sometimes used in unison with each other. These include the following:
 - i. Permanent Native Seeding
 - ii. Straw Wattles
 - iii. Hydromulch
 - iv. Straw Mulch
 - v. Erosion Control Blankets
 - vi. Slit Fence
 - vii. Rock Check Dams
 - viii. Channel Slope Protection With Revetment
 - ix. Sediment Basins
 - x. Cover Crop Seeding
- f. Vegetation Establishment Maintenance - New and established seedings are actively monitored for further maintenance. Maintenance includes: mowing, planting of temporary cover crops, burning, and selective spot spraying.
- g. Planting Evaluation and Documentation - Paper copies and GEOTREE electronic copies are kept to record seeding dates, seed mixtures used, seeding rates, cover crop used, and planting conditions. These records are used to evaluate previous plantings and to better prepare future plantings.

- h. Mowing - Maintenance mowing of new prairie seeding projects is carried out as needed throughout the first and second year. Shoulder mowing along all paved county roads occurs twice a year and is performed by the Secondary Roads Department.
- i. Chemical Control for Noxious Weeds - Chemicals are used on a limited basis when noxious weeds are found to be present. This work must be contracted out since Washington County does not possess any spraying equipment. Chemical mixtures are determined through research and suggestions from other IRVM programs. Washington County hopes to transfer spraying to all in-house operations once additions of equipment can be made to our fleet.
- j. Tree and Brush Control - Washington County highly relies on mechanical methods, brush cutters and excavators, for tree and brush control. The addition of spraying equipment to our fleet would allow chemical control methods to be used as well.
- k. Prescribed Burning - Burning is typically done by adjacent landowners, and can be coordinated with the Conservation Department. Washington County does not possess the required burning equipment and tools.

VIII. Material Procurement

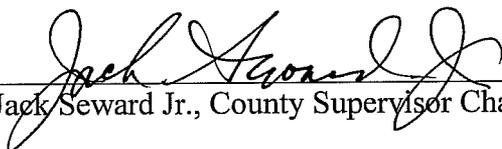
A. Sourcing

- a. Seed, fertilizer, mulch, and other materials needed for IRVM practices are purchased at fair market value through reliable vendors. Material pricing is reviewed annually after contacting the area vendors to provide quotes on the needed items for the coming year. This review is done to purchase the products at the best price possible and to meet our needs.

B. Material Handling and Storage

- a. Materials are to be stored in a sheltered area when possible. When availability is present, sensitive materials, such as seed, should be stored in an enclosed building at a minimum, with climate control being preferred.

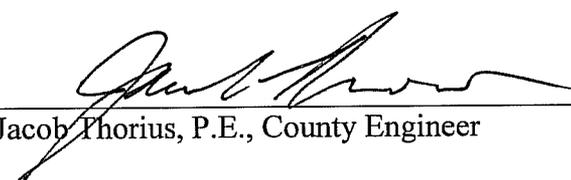
This is a flexible plan requiring common sense interpretations, with changes as necessary to fit the ever-changing complex circumstances realized in roadside vegetation management.



 Jack Seward Jr., County Supervisor Chairperson

5/12/15

 Date



 Jacob Phorius, P.E., County Engineer

5/12/15

 Date

X. Appendix

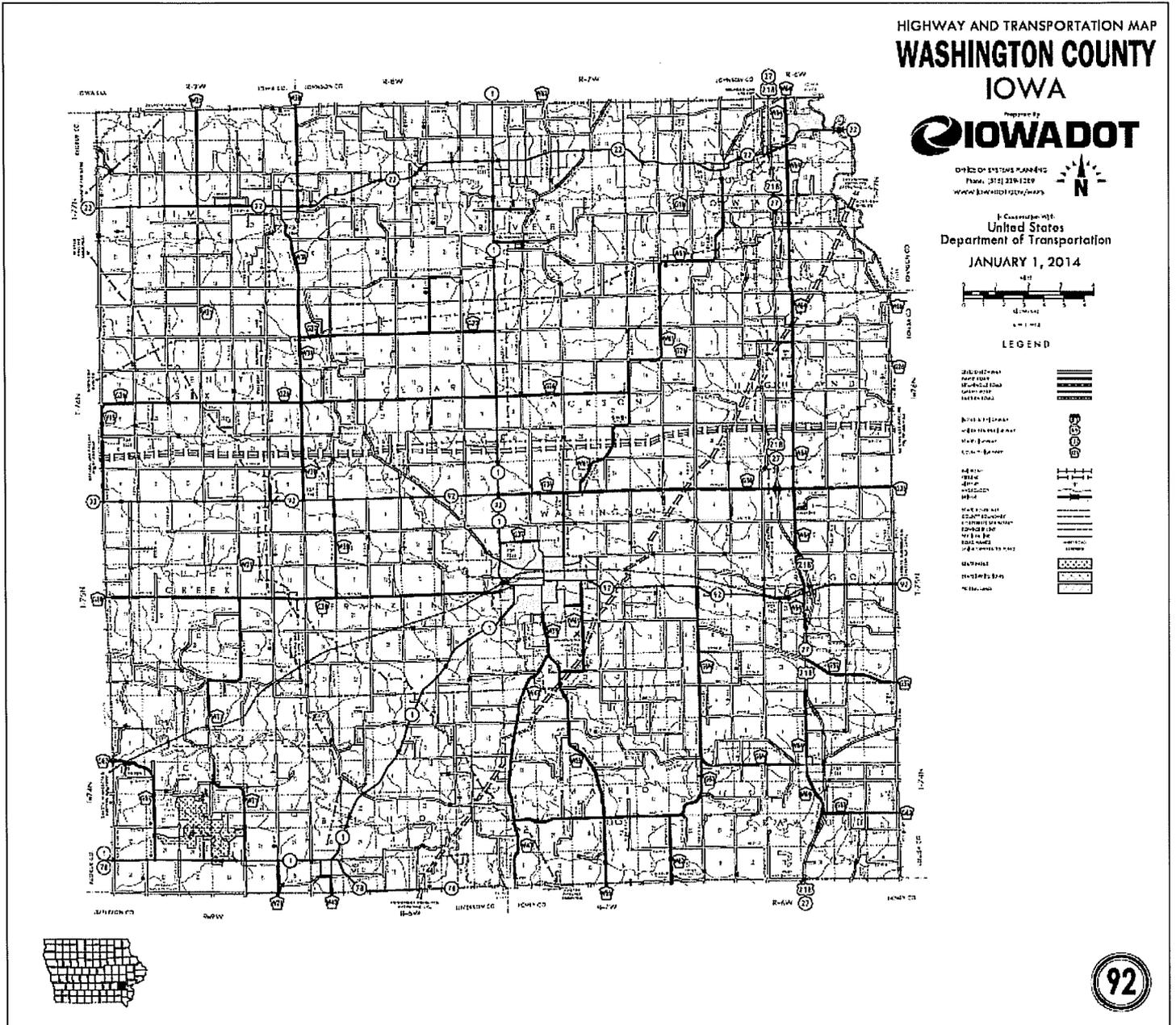


Figure 1: Washington County Highway and Transportation Map

Washington County Secondary Roads Permit to Perform Work Within the County Right-of-Way

Landowner Name _____ Date _____

Address _____ Phone _____

Work Location

Road Name _____ Installer/Contractor _____

Township _____ Sec _____ Qtr _____ Certificate of Insurance on file?

Description of work to be completed:

I have read Washington County's policy on performing work within the County Right-of-Way and am hereby requesting authorization from Washington County to perform the above described work at the above location.

Applicant Signature

Summary of Washington County's Policy on Work in the Right-of-Way

(For further details, see Section 14.08 in the Washington County Code of Ordinances)

1. Performing any excavation, fill, or physical changes within the County right-of-way requires a permit to be obtained from the Secondary Roads Department.
2. Examples of work requiring a permit include tile, sewer, waterline, terrace work, ponding or storing water, filling ditches, cleaning or digging ditches, brush or tree removal, constructing or enlarging or paving any entrance, and burning.
3. Work must conform to the specifications of the Secondary Roads Department.
4. Any work within the right-of-way that does not conform to the specifications that accompany this permit must be corrected.
5. Washington County may make any necessary changes and remit a statement of the cost to the name on this permit for reimbursement of all costs to Washington County.

For County Use:

Approved/Denied on (date) _____ Reviewed by _____

Notes _____

Return to: Washington County Engineers Office
210 W Main St, Ste 2
Washington, IA 52353

Ph: 319-653-7731
Fax: 319-653-7730
Email: messer@co.washington.ia.us

APPLICATION FOR APPROVAL OF PUBLIC UTILITY CONSTRUCTION

WITHIN THE WASHINGTON COUNTY HIGHWAY CORRIDOR

Applicant

Date _____

Name of individual or Company

Address

Incorporated under the laws of the State of _____ with principal place of business in _____ . Approval is hereby requested for public utility construction of

Describe fully work contemplated

AGREEMENTS. The Applicant agrees that the following stipulations shall govern this permit.

1. The Applicant will at any time subsequent to placing the public utility line, and at the Applicant's own expense, relay, reconstruct or encase such lines as may become necessary to conform to new grades, alignment or widening right-of-way, resulting from maintenance or construction operations by the County irrespective of whether or not additional right-of-way is required in connection with such highway improvement. The Applicant agrees to do this promptly on order by the County, and without cost to the County. If the Applicant is unable to comply promptly, the County may cause the work to be done, and the Applicant will pay the cost thereof upon receipt of statement.

The County 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 public utility belonging to the Applicant, in order that the Applicant may arrange to protect such lines. The County will inform contractors and others working on the job of the location of the lines so that reasonable care may be taken to avoid damaging the lines. The County assumes no responsibility, however, for failure to give such notice.

2. 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 the said cable or pipeline.

3. The Applicant shall take all reasonable precautions during the construction of said cable or pipeline to protect and safeguard the lives and property of the traveling public and adjacent property owners shall hold the County harmless from any damage or losses that may be sustained by the traveling public or adjacent property owners of such construction operations.

4. Operations in the construction and maintenance of said public utility line shall be carried on in such a way as not to interfere with or interrupt traffic on said highway.

5. The Applicant shall hold the County harmless from any damage that may result to said highway because of the construction or maintenance of said public utility line and shall reimburse the County for any expenditure that the County may have to make on said highway on a account of said Applicant's public utility line having been constructed thereon.

6. The Applicant agrees to give the County forty-eight (48) hours notice of its intention to start construction on or along the highway right-of-way.

7. Public utility lines crossing under paved roads shall be jacked or bored under the traveled roadway. On roads not paved, an open trench may be dug, and the public utility line placed therein and the trench backfilled over the line. All backfilling of trenches under the traveled roadway fill shall be thoroughly compacted in layers of six inches (6") or less in depth. Backfilling of trenches within the right-of-way but not under the traveled roadway shall be tamped sufficiently to avoid settlement. Replacement granular surfacing shall be placed on all trenches across gravel roadways. All work shall be done in a workmanlike manner and the right-of-way and roadway left in a neat condition, satisfactory to the County Engineer.

Name

Approved by:

Title

County Engineer

Name of Company

Date

(The County will keep one copy and return all other copies.)

Washington County Secondary Roads Application for Access

Landowner Name _____ Date _____

Address _____ Phone _____

Location of Access

Road Name: _____ Access into: (circle one)
 Township _____ Sec _____ Qtr _____ Field Home Business

Description of work to be completed:

I have read Washington County's policy on entrances onto County Roads and am hereby requesting authorization from Washington County to construct or widen an access driveway at the above location.

Applicant Signature

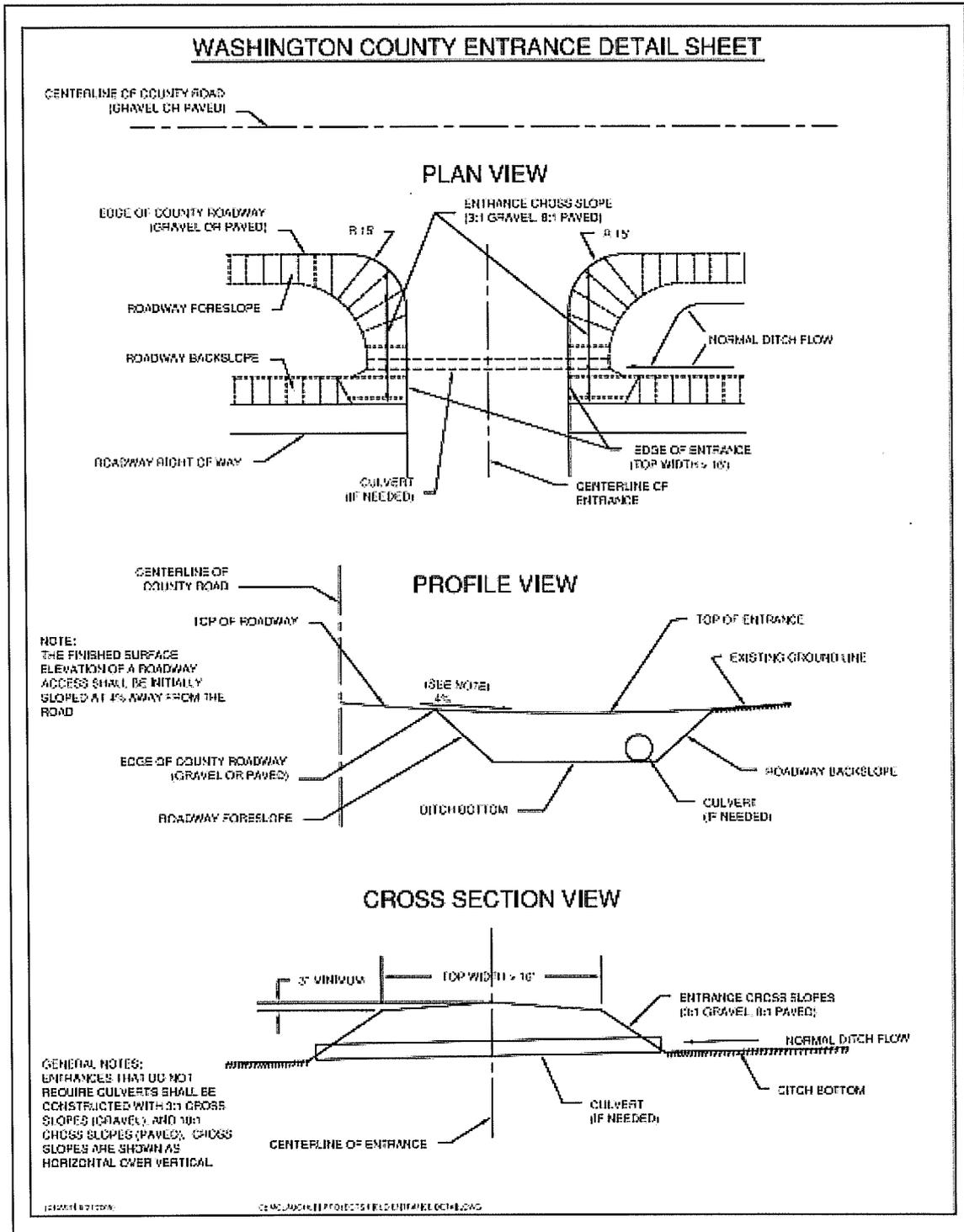
Summary of Washington County's Policy on Entrances

(For further details, see Section 14.09 in the Washington County Code of Ordinances)

1. The property owner or tenant is responsible for installation and providing all materials for the initial entrance construction or modification of existing driveways.
2. The access location must provide adequate sight distance and must meet the entrance specifications provided on the attached detail sheet.
3. The County Engineer will determine the required pipe diameter if required. Culvert pipe must be corrugated metal, tied reinforced concrete, PVC plastic, or High Q plastic pipe. After installation, the culvert pipe shall become the property of Washington County.
4. Entrances shall be constructed using compaction, shall not interfere with the traveled roadway, and shall be guaranteed by the applicant for three (3) years.
5. The County Engineer shall approve the completed installation before accepting it.
6. Washington County will maintain any entrance within the right-of-way that has been installed with an approved permit and constructed according to County specification.
7. Washington County does not furnish, maintain, nor pay for any driveway surfacing for roadway accesses.

For County Use:

Pipe Size & Length _____	Approved/Denied on (date) _____
Sight Distance _____	Reviewed by _____
Notes _____	



Washington County Secondary Roads Tile Crossing Permit

Landowner Name _____ Date _____
Address _____ Phone _____
City, ST _____ Cell _____

Crossing Location

Road Name: _____ Tile type: _____ (circle one below)
Township _____ Sec _____ Qtr _____ Open (trench) Crossing Bored Crossing
Additional directions:

Map included? Flags provided?

Contractor Information

Name: _____ Phone: _____
 Insurance certificate on file?

NRCS Staff Review

Is the proposed tile crossing part of an overall drainage improvement project in which your office has been involved in the coordination and design?

Yes No What diameter pipe is recommended? _____ inch

By: _____ Title: _____
Date: _____

Signature of Landowner

The undersigned requests a permit for the tile crossing described above and agrees to comply with the requirements of the Washington County Tile Crossing Policy and terms of the permit.

Name: _____ Date: _____

County Approval

Name: _____ Date: _____

HIGHWAY AND TRANSPORTATION MAP

WASHINGTON COUNTY

IOWA



Prepared By
IOWA DOT
 OFFICE OF SYSTEMS PLANNING
 Phone: (515) 239-1289
WWW.IOWADOT.GOV/MAPS



In Cooperation With
United States
 Department of Transportation

JANUARY 1, 2014



LEGEND

- INTERSTATE HIGHWAY
- PRIMARY HIGHWAY-DIVIDED
- PRIMARY HIGHWAY
- PORTLAND CEMENT 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
- TOWNSHIP LINE
- SECTION LINE
- ROAD NAMES
- UNINCORPORATED PLACE
- STATE PARKS
- STATE INSTITUTIONS
- FEDERAL LAND

