MARION COUNTY, IOWA

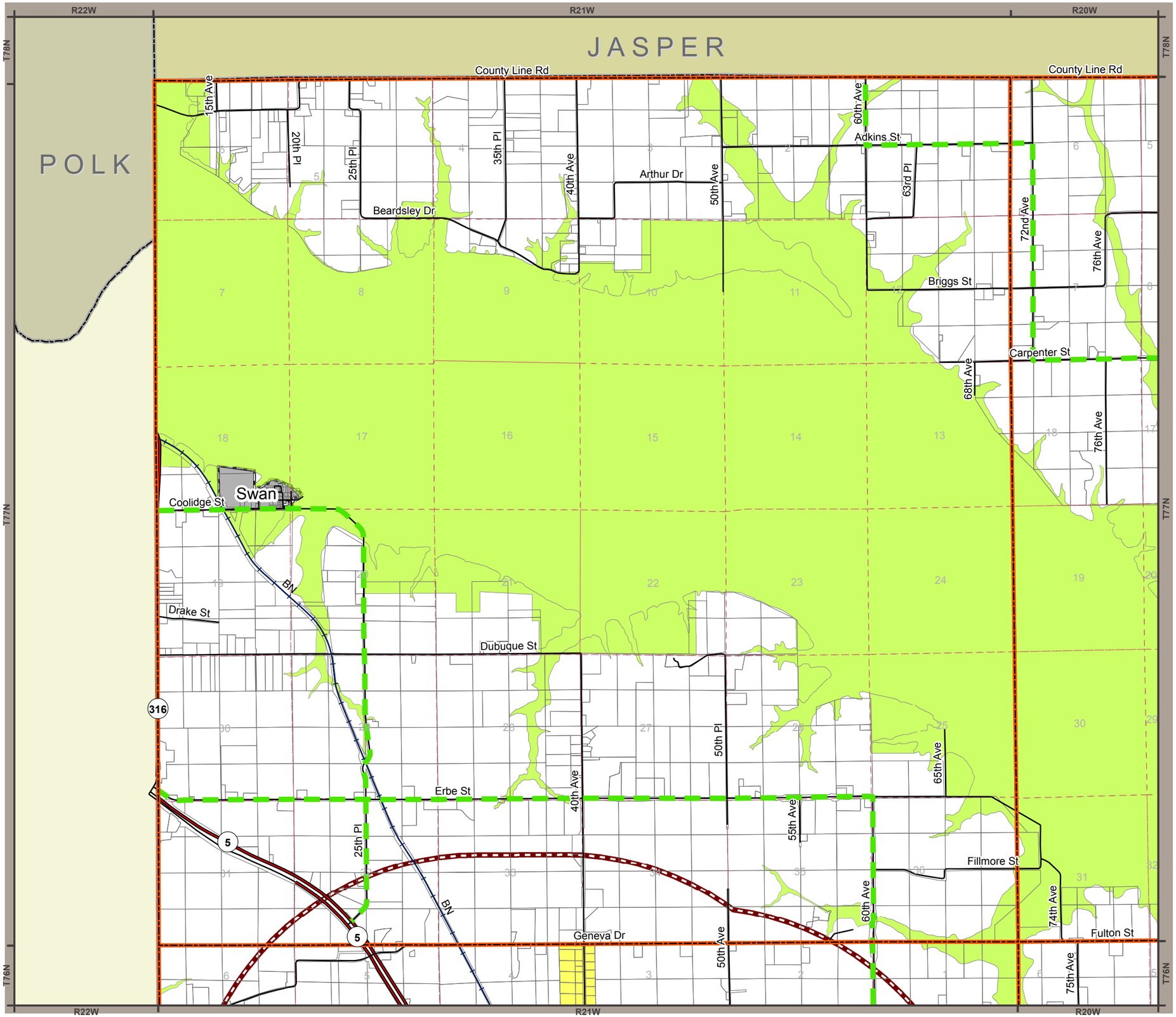
COMPREHENSIVE LAND USE PLAN

2013

SNYDER & ASSOCIATES
Engineers and Planners

Appendix

Future Land Use by Township



MARION COUNTY, IOWA

COMPREHENSIVE PLAN

FUTURE LAND USE

Legend

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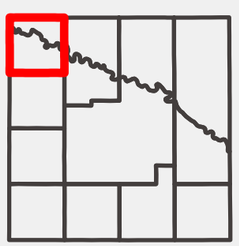
NORTH

0 3,500 7,000

Feet



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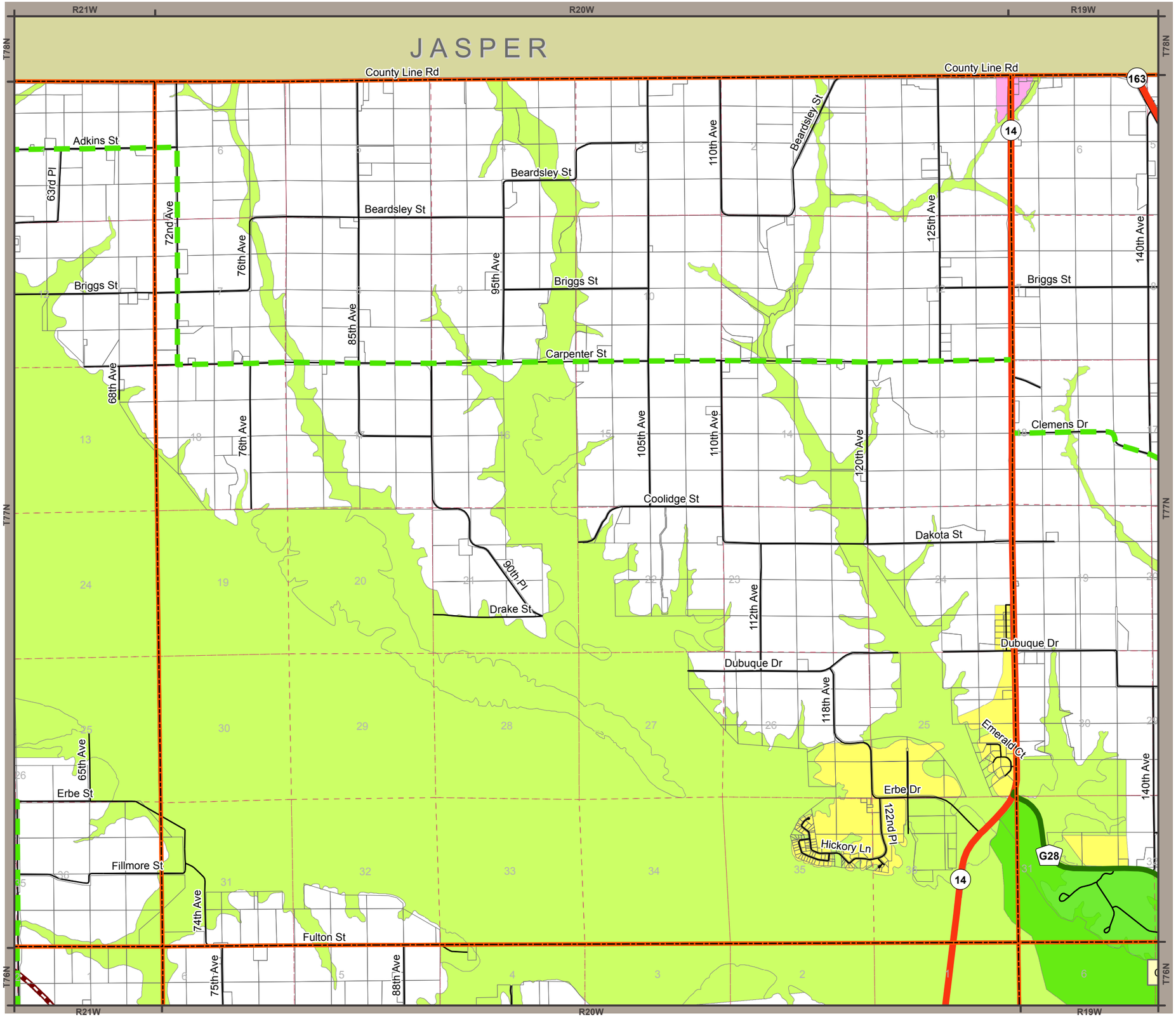

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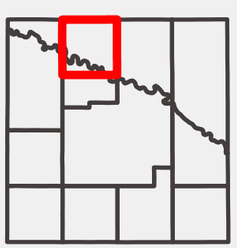

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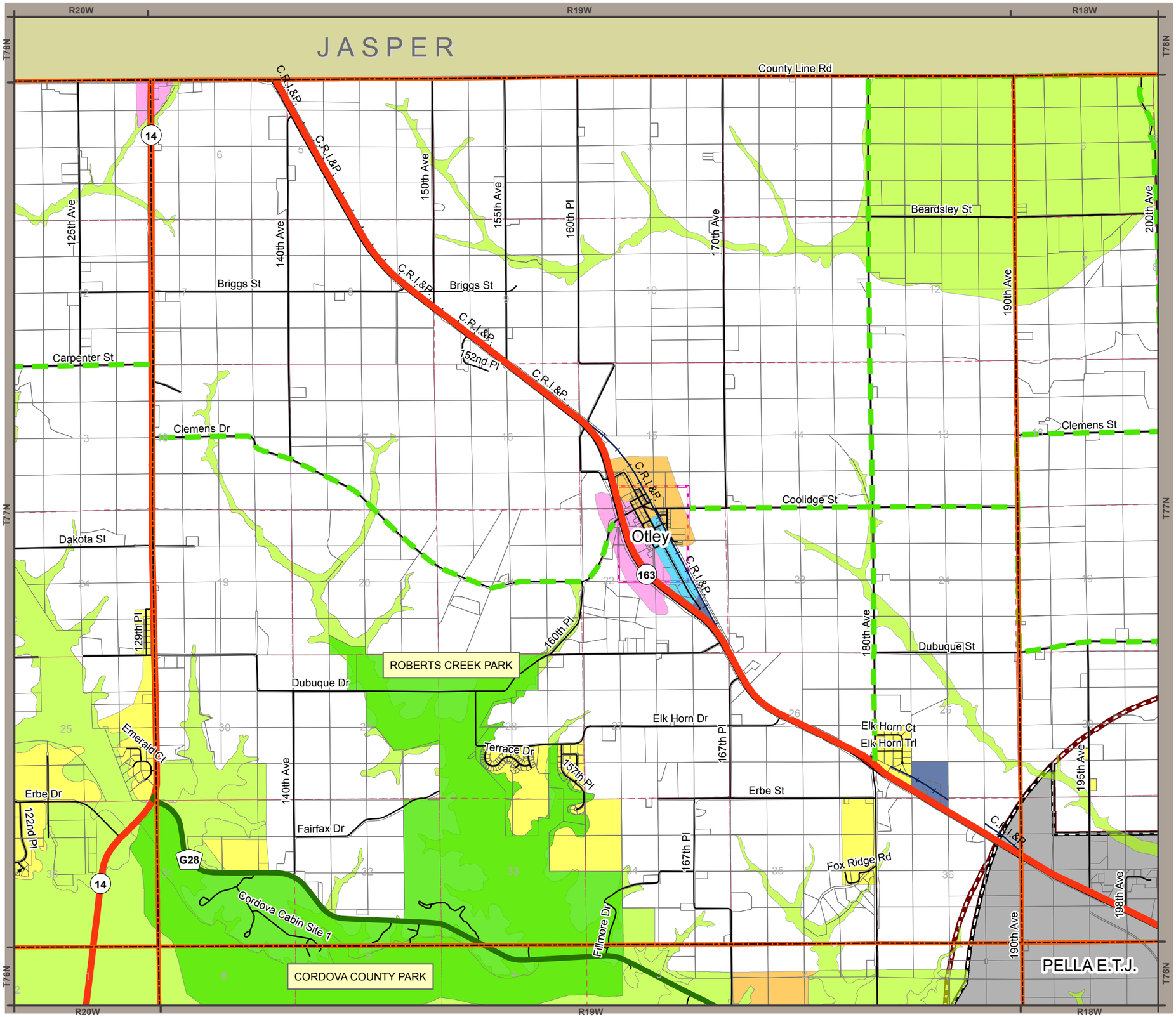

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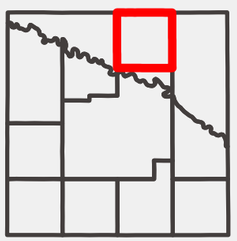

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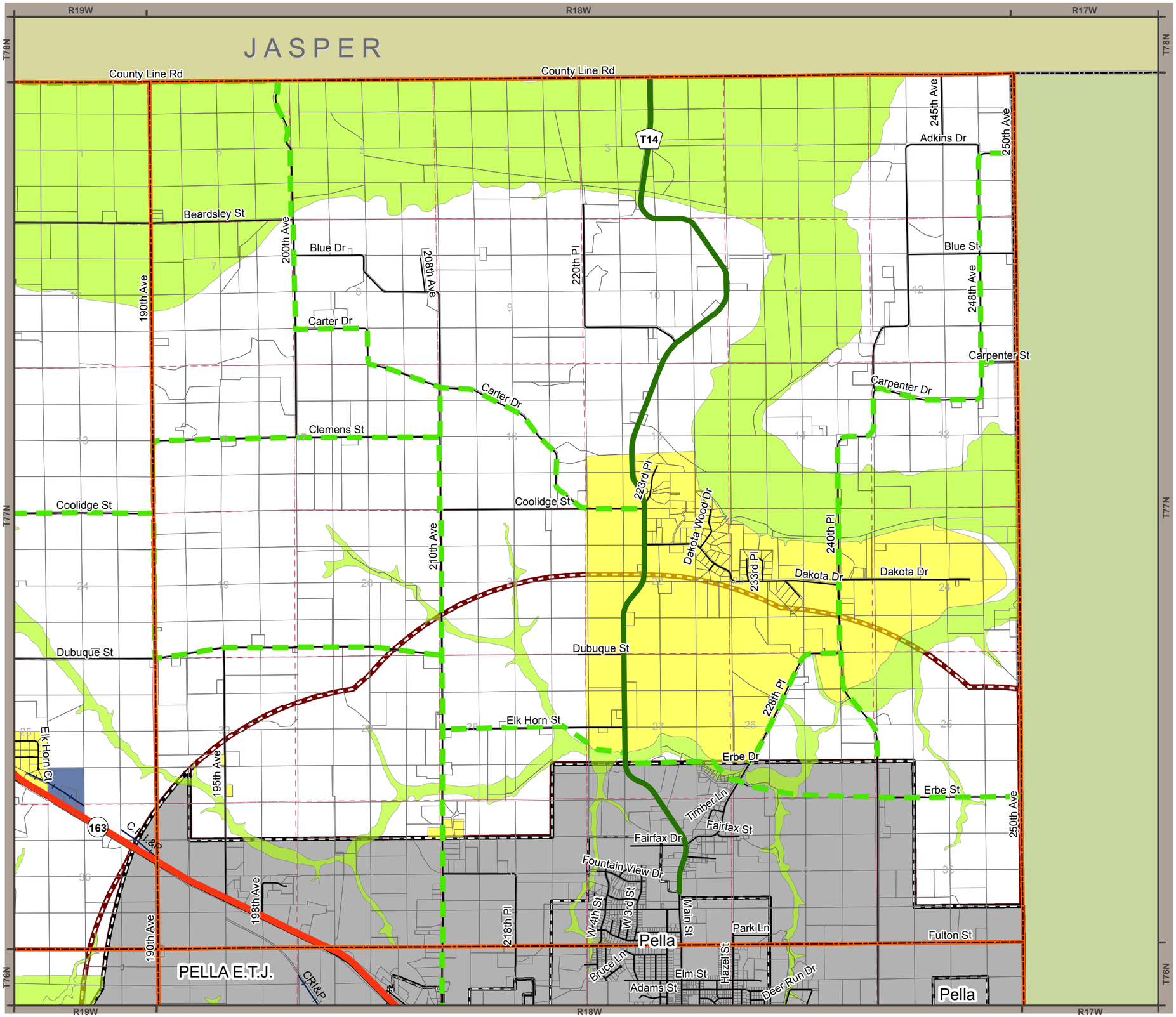

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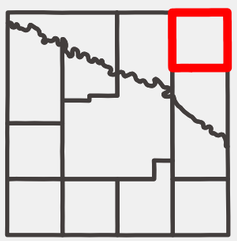

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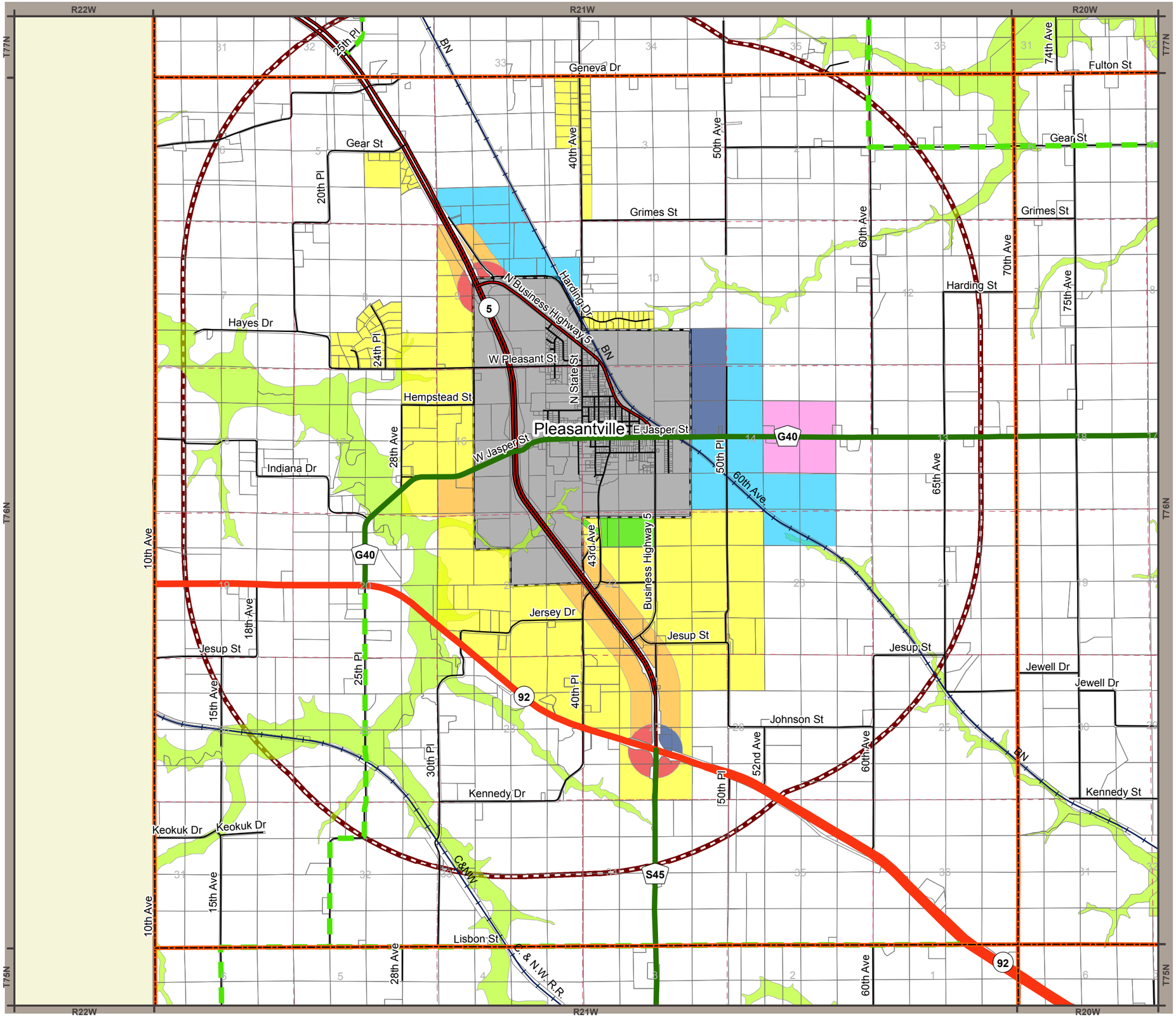

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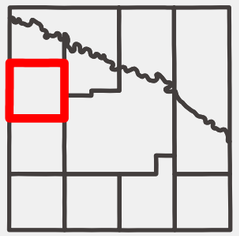

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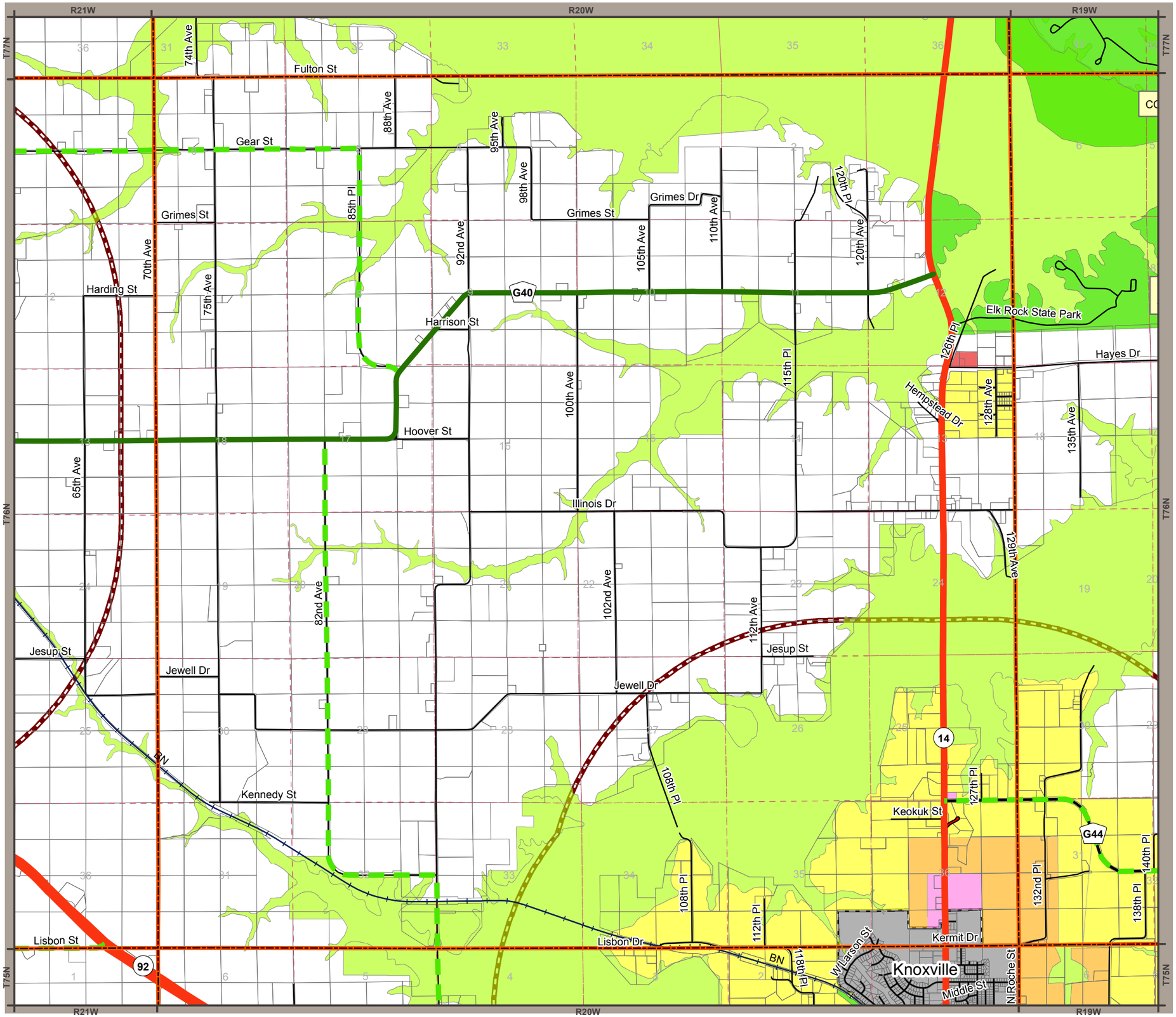

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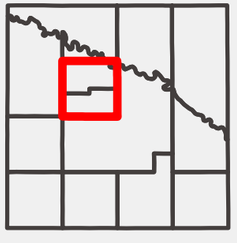

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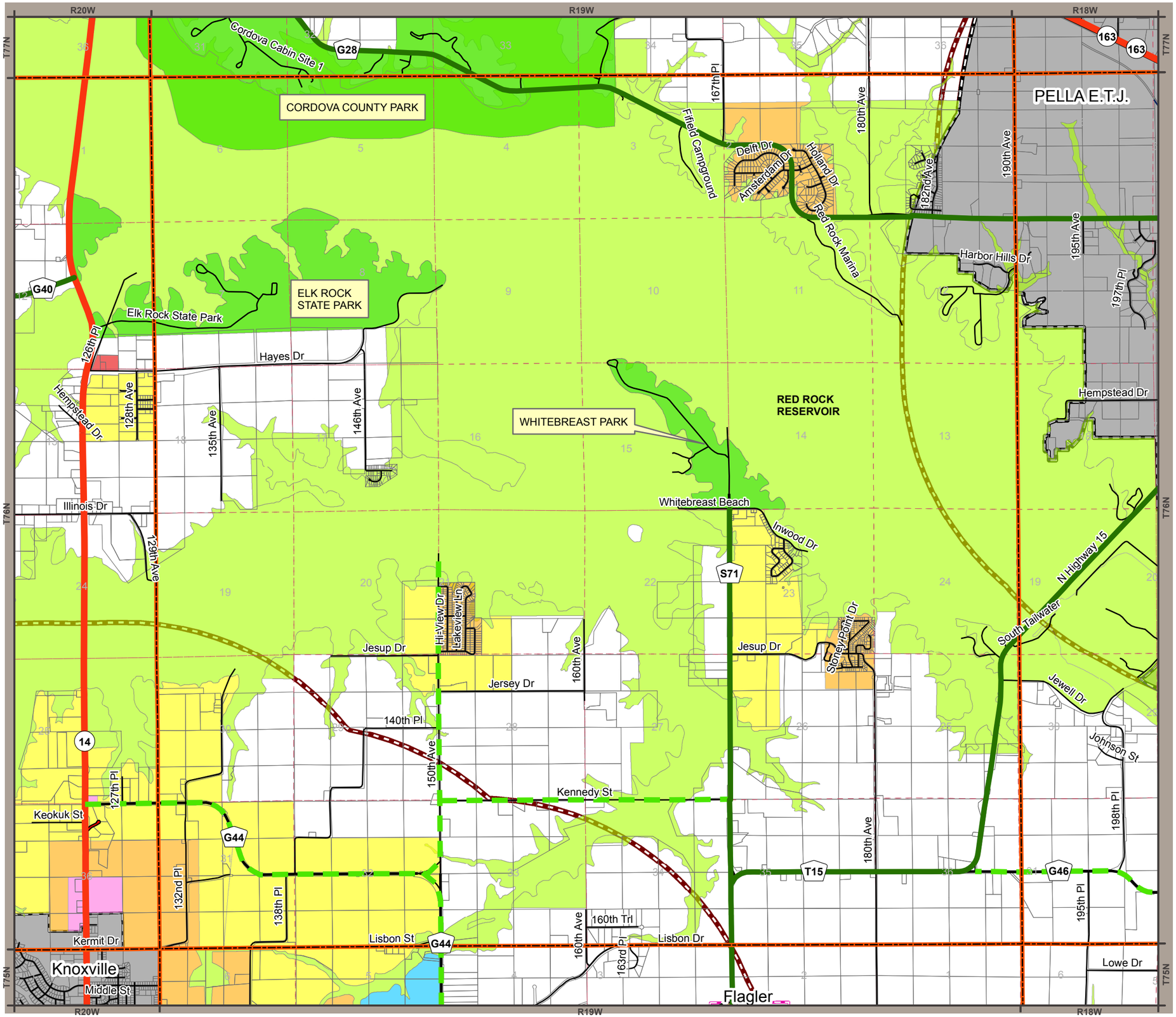

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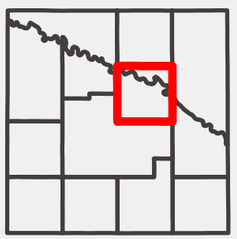

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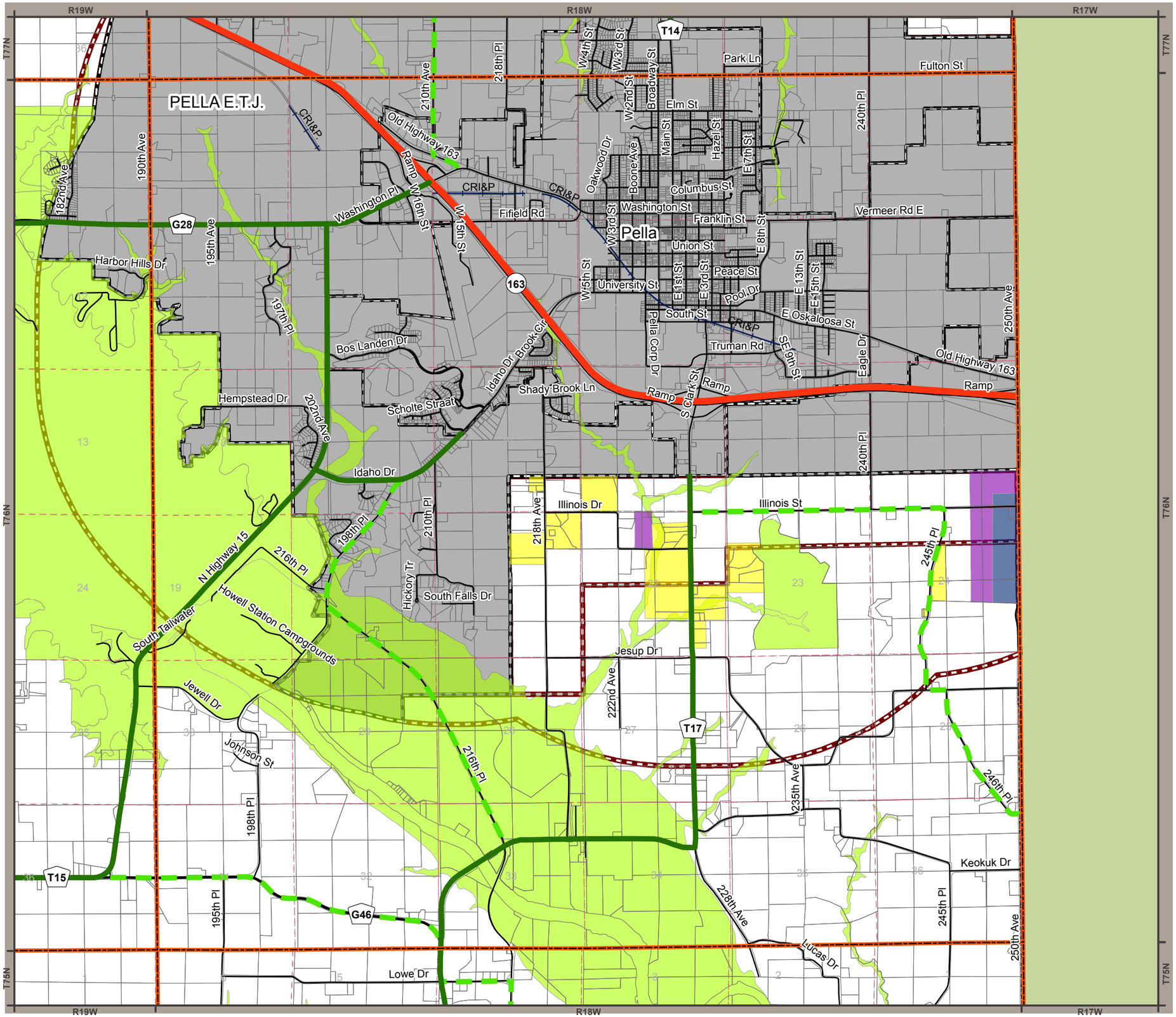

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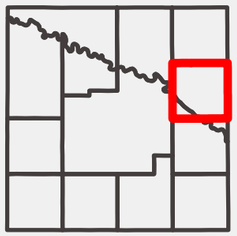

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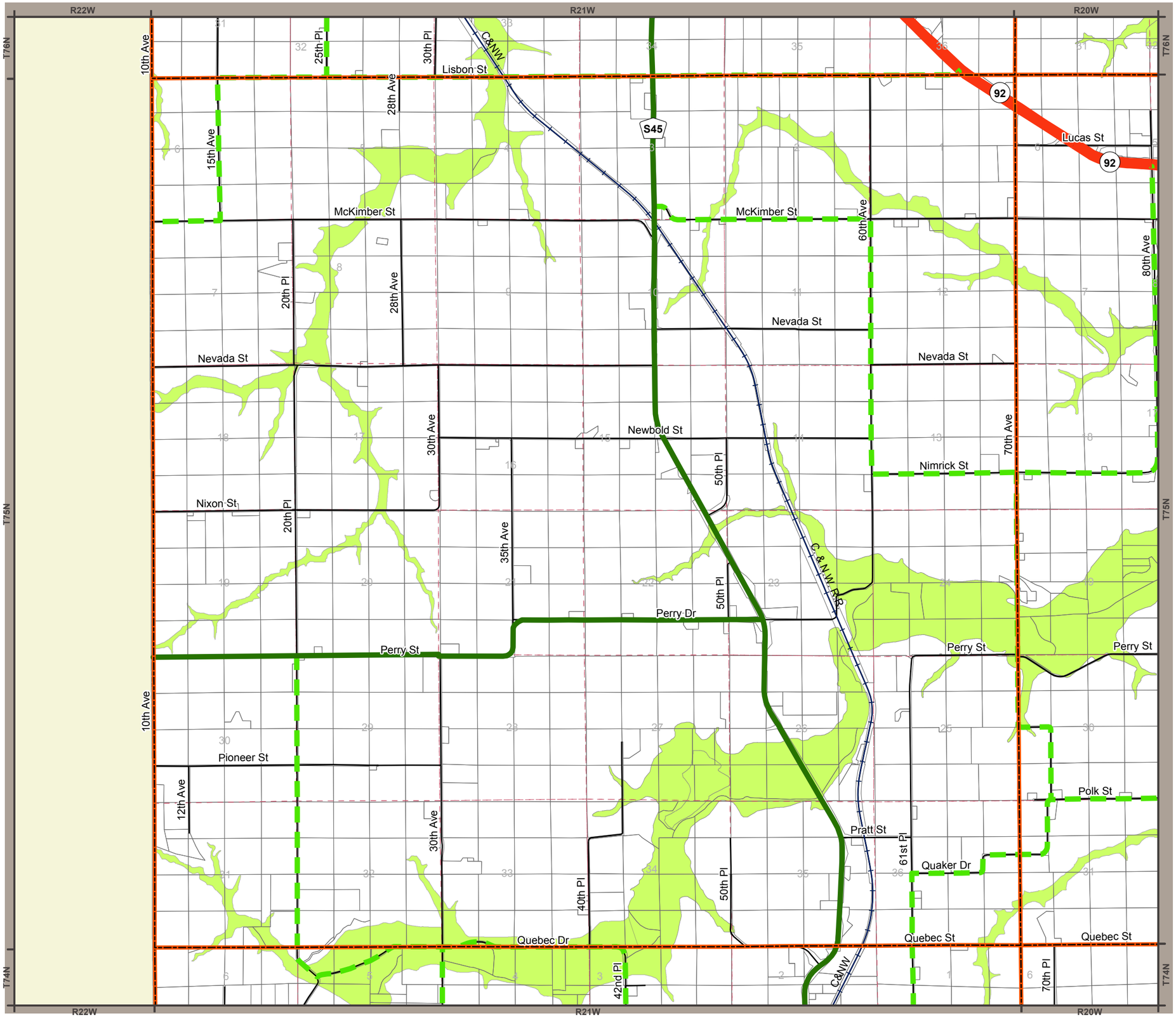

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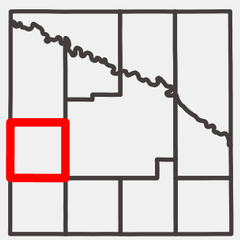

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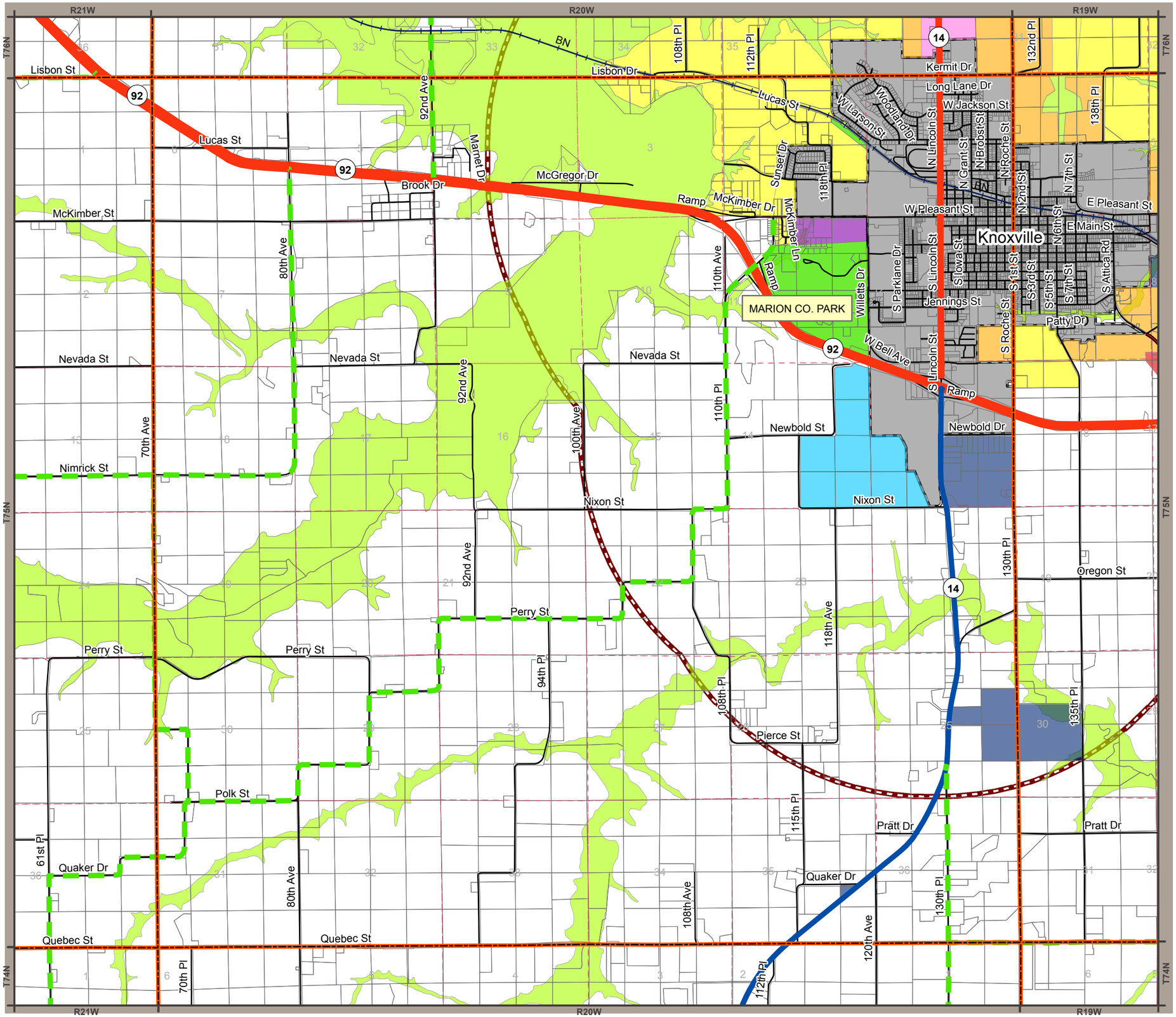

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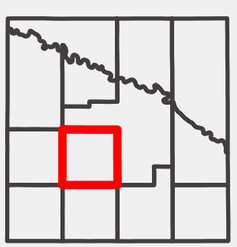

SHEET 10

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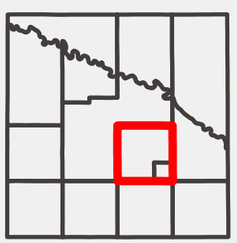


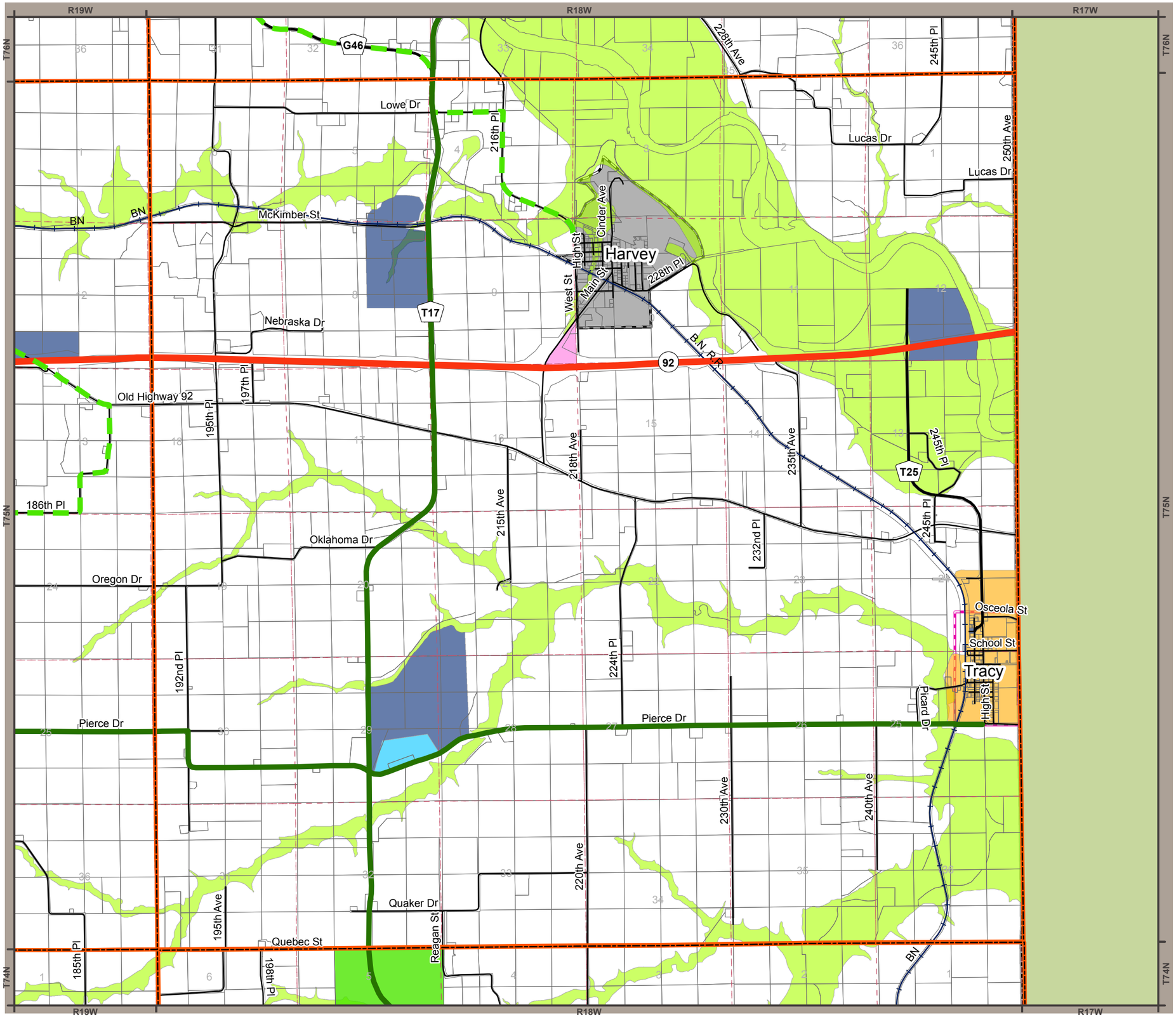
SHEET 11

R20W R19W R18W

T76N T75N T74N

Knoxville
Flagler
Pershing

Kermit Dr
Lisbon St
Lisbon Dr
160th Trl
160th Ave
163rd Pl
180th Ave
Lowe Dr
Lucas Dr
W Jackson St
Woodland Dr
N Lincoln St
N Grant St
N Brobst St
N Roche St
138th Pl
132nd Pl
N 7th St
N 2nd St
N 4th St
E Pleasant St
E Marion St
E Main St
W Robinson St
W South St
S Parklane Dr
Jennings St
S 1st St
S 3rd St
S 5th St
S 7th St
S Attica Rd
S Roche St
Patty Dr
South View Dr
East St
Lake Dr
Miners Ln
McKimber Dr
McKimber St
B.N.R.R.
BN
G44
T15
167th Ave
169th Ave
175th Pl
Nevada Dr
92
Old Highway 92
197th Pl
195th Pl
Ramp
S Lincoln St
Nevin Dr
Newbold Dr
165th Ave
186th Pl
Nixon St
150th Pl
130th Pl
Oregon St
Oregon Dr
Oklahoma Dr
14
Osceola Ln
170th Ave
192nd Pl
135th Pl
B Ave
185th Pl
Pierce Dr
G62
Pratt Dr
5
176th Pl
Quebec St
198th Pl



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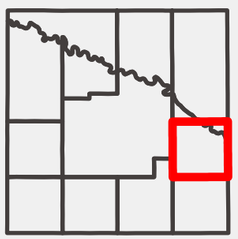

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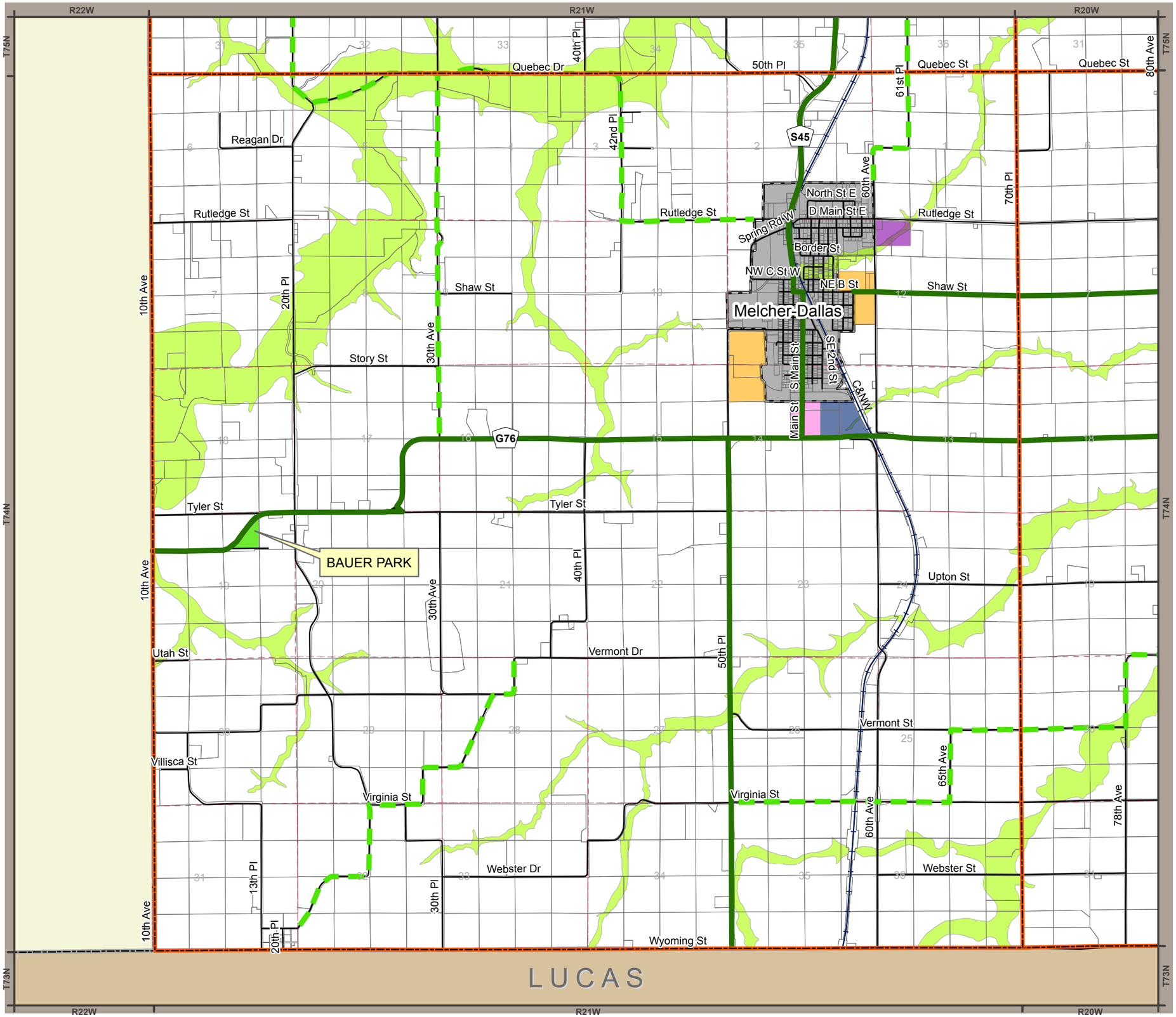

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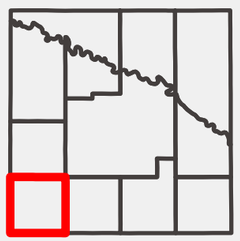

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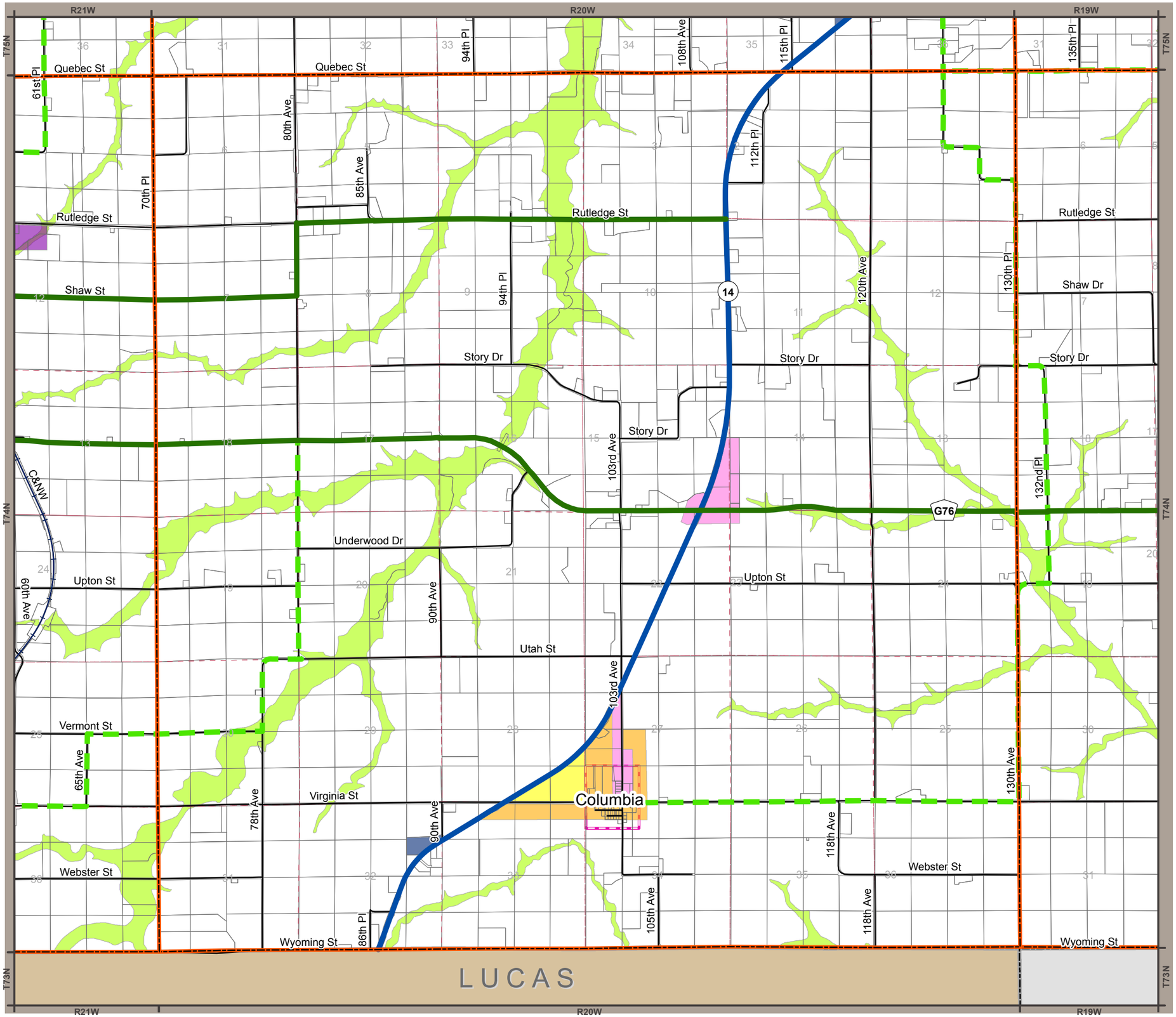

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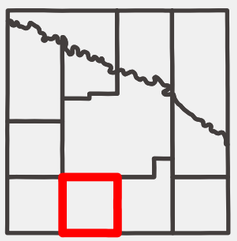

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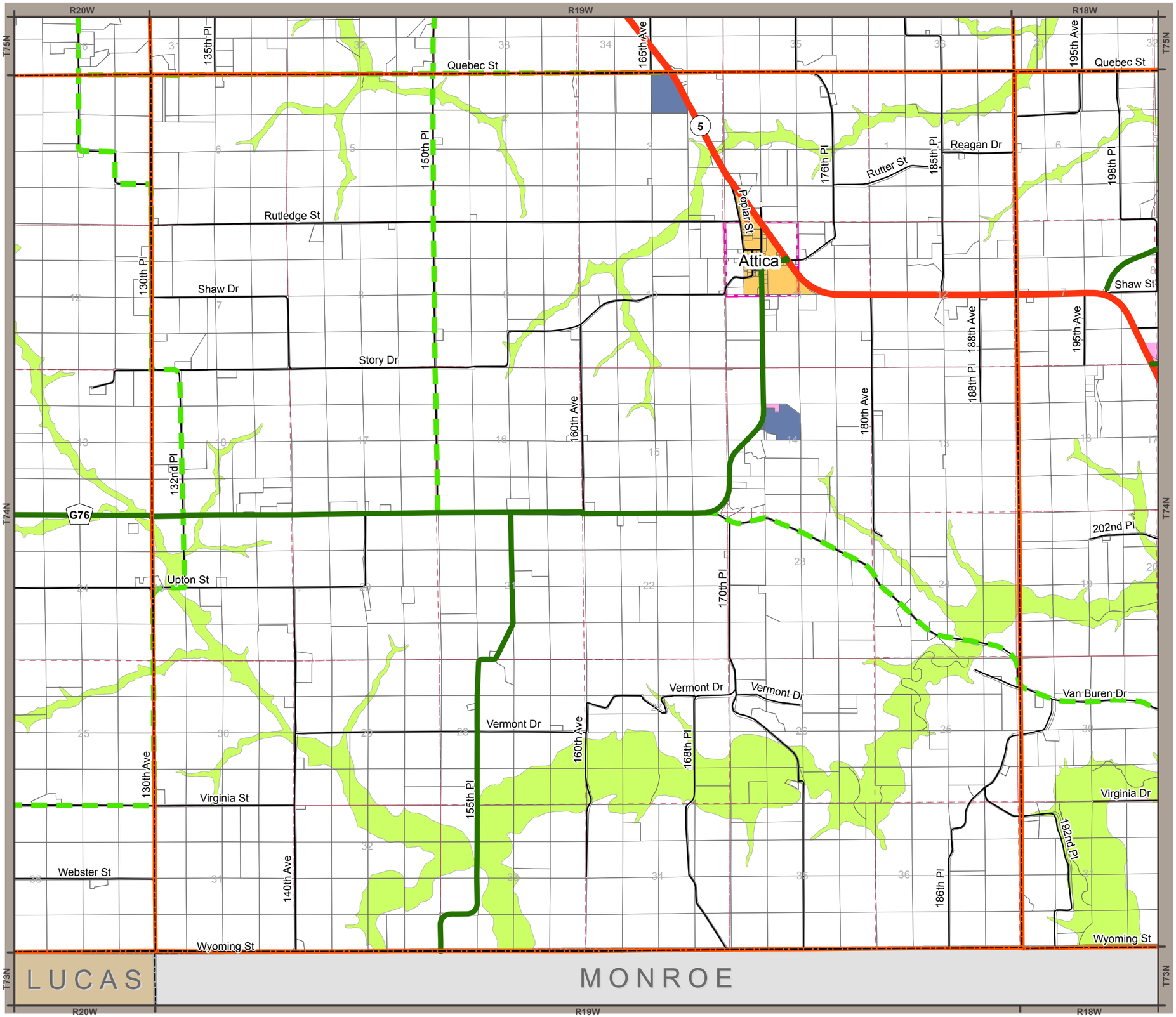

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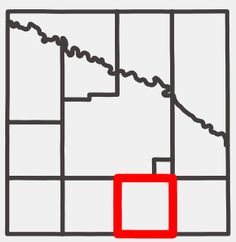

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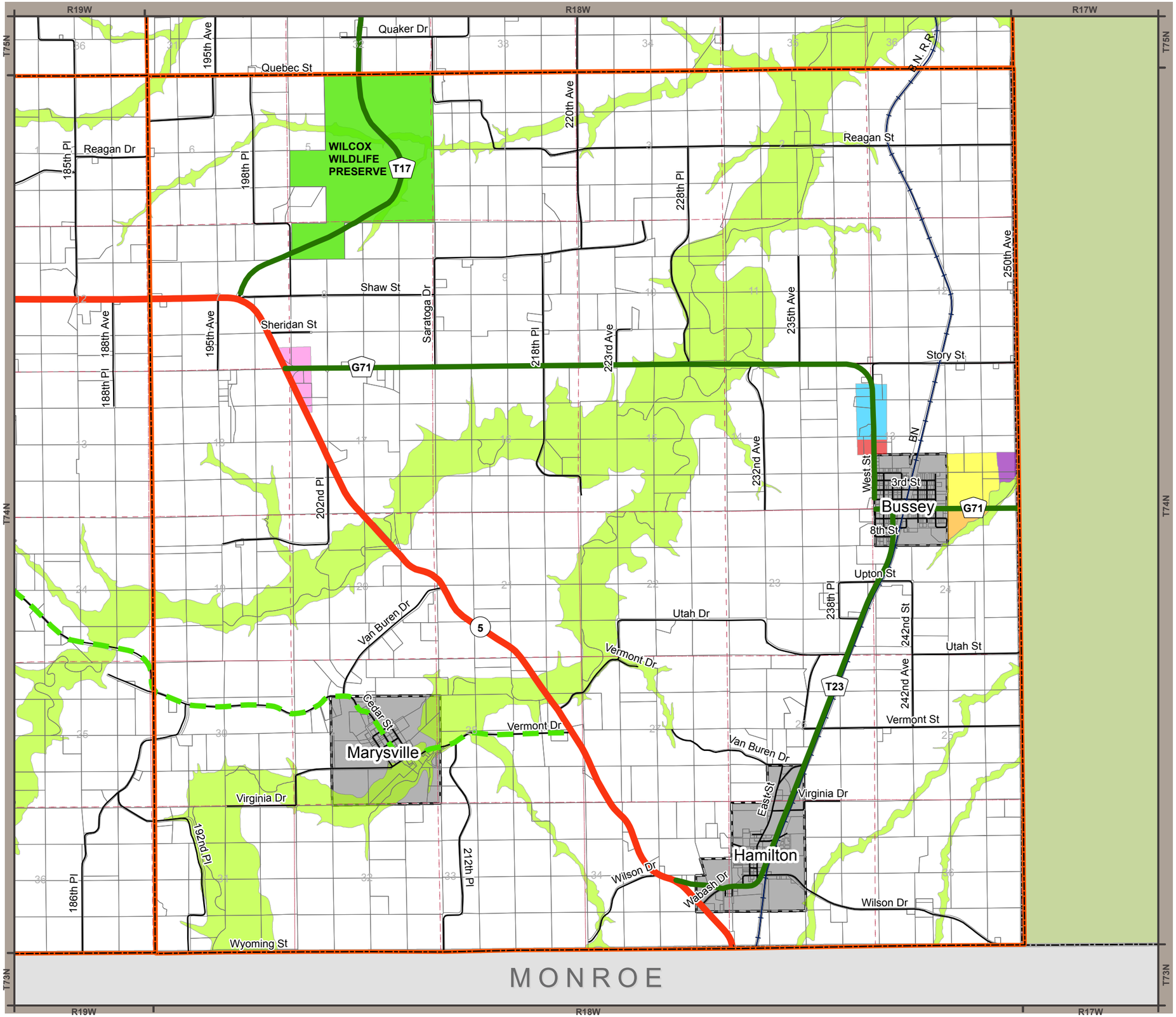

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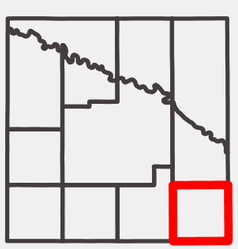

SHEET 16

Marion County, Iowa

Comprehensive Land Use Plan

Adopted November 12, 2013

Prepared with the Citizens of Marion County
By: Snyder & Associates, Inc.

A Comprehensive Land Use Plan
For Marion County, Iowa

Prepared with the Citizens of Marion County

By: Snyder & Associates, Inc.

ACKNOWLEDGEMENTS

Board of Supervisors

Jim Kingery, Chairman

Craig Agan

Mark Raymie

Steering Committee

Alan Terpstra, Zoning Commission

Sandra Agan, Zoning Commission

Keith Davis, Zoning Commission

Neulyn Miller, Zoning Commission

Larry De Zwarte, Zoning Commission

Larry De Vries, Developer

Ray Stone, Tracy Resident

John Franey, Pleasantville businessman

Abie Davis, Land Surveyor

Dylan Feik, City of Knoxville

George Wesselhoft, City of Pella

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Missy Poffenbarger, Planning & Zoning Department

Jake Grandia, County Auditor

Roger Schletzbaum, County Engineer

Carla Eysink, Economic Development Department

Jeff Anderson, Emergency Management

Steve Edwards, Conservation Department

Cory Frank, Environmental Health

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4-3 Iowa DOT Traffic Flow Map……. *4-7*

Appendix: Future Land Use by Township

Future Land Use Plans (Large Scale, by Township……*Appendix*

Chapter 1

Planning Process

INTRODUCTION

This Comprehensive Land Use Plan was developed through a Steering Committee consisting of members of the Zoning Commission, representatives from various cities within the county, and staff as well as the opportunity for input from citizens during public hearings.

The 2013 Comprehensive Land Use Plan is intended to update and supplement the 1996 Comprehensive Plan for Marion County. As such, this plan is a long-range policy guide to decisions about the physical development of the community but does not provide a detailed design for development of any specific site; instead it set out broad policy directions for growth, development and redevelopment. This plan analyzes and incorporates a wide variety of components, including topography, environmental constraints, current land use, and the existing street network. As a result, this Comprehensive Plan provides a vision of Marion County's future, helping to guide future development within the county.

This primary purpose of this plan is to provide a framework for land use regulations, recognizing that the people of a community live cooperatively and therefore have certain responsibilities to one another. These regulations determine how land is developed within unincorporated areas of the county as well as the extra-territorial jurisdiction areas of cities within the county. Under Iowa law, land use regulations such as zoning ordinances must be established and enforced in accordance with an approved Comprehensive Plan.

Comprehensive planning does not end with adoption of the plan so an important aspect of any plan is its implementation. This Comprehensive Plan presents an integrated action program that will help county officials and staff to implement the goals of the community.

FUTURE AMENDMENTS TO THE PLAN

The time frame of this Comprehensive Plan is an approximately thirty-year period. However, the Plan does not represent a picture of how Marion County will look at any specific year, since plan implementation will occur incrementally throughout the planning period. Nor does the Plan guarantee that areas designated for non-agricultural use will actually develop within that timeframe. However, the Future Land Use Plan indicates the most appropriate areas for residential, commercial and industrial uses to be located should that type of development occur. Furthermore, amendments to this Comprehensive Plan are likely to occur periodically during this time frame, as external forces and conditions change. An important task for the Zoning Commission and staff is to continually assess growth and development trends, identify priority issues and, when necessary, propose amendments or supplement to this Comprehensive Plan. Such amendments should be carefully prepared and evaluated, with ample opportunity for public input, as was the case with this Comprehensive Plan.

Chapter 2

Existing Conditions

GENERAL DESCRIPTION

Marion County is located in south central Iowa and covers approximately 570 square miles, of these approximately 16 square miles is water and the remaining 554 square miles is land. The county is divided into 16 congressional townships and 12 civil townships.

The City of Knoxville is centrally located in the county, on the south side of Redrock Reservoir and serves as the County Seat. Located on the north side of Lake Redrock, the City of Pella is the other major city in the county. Other incorporated cities in Marion County include Bussey, Hamilton, Harvey, Marysville, Melcher-Dallas, Pleasantville and Swan. The county also includes the unincorporated communities of Attica, Columbia, Flagler, Otley, Pershing and Tracy.

The 2010 U.S. Census recorded a total population of 33,309 in the county, with a population density of 60.1 persons per square mile. This represents a 3.9% increase in population since the 2000 census, at which time the county had a population of 32,052. Over the last twenty years, Marion County has experience an 11.0% growth in population, based on a population of 30,001 as recorded 1990 census.

NATURAL ENVIRONMENT

Marion County is rural in nature, with much of the prime agricultural land located in the northern portion of the county while the southern portion of the county has more hilly terrain. The northeast corner of the county drains toward the South Skunk River. However, the majority of the county is located within the Des Moines River Basin. The Des Moines River flows southeasterly across the north half of the county. Major tributaries, flowing northeasterly into the Des Moines River, include Whitebreast River, English Creek, North Cedar River and Cedar River.

A dam on the Des Moines River defines Lake Red Rock. This reservoir includes over 19,000 acres and 13 continuous miles of surface waters at normal pool level of 742 feet above sea level. Located on the Des Moines River in the north part of the County, the reservoir collects runoff and drainage from over 12,320 square miles of Iowa and southern Minnesota Land. The reservoir, which protects agricultural land and communities downstream from the lake, has a maximum flood control pool 890 feet above sea level. The maximum flood control pool is over 33 miles long extending upstream to metropolitan Des Moines, and covers an area of 65,500 acres.

Several recreation area administered by the Corp of Engineers have been developed along both sides of the lake near the downstream reaches and the dam. These facilities include camping and picnic areas, hiking trails, bike trails, swimming beaches, and boat ramps to the lake.

The topography in Marion County was influenced by the Kansan glacier and subsequent erosion of the river beds. A Topographic Map, illustrating terrain of the county, is included as Exhibit 2-1. The embankments along the rivers and streams are typically wooded, providing a habitat for birds and animals.

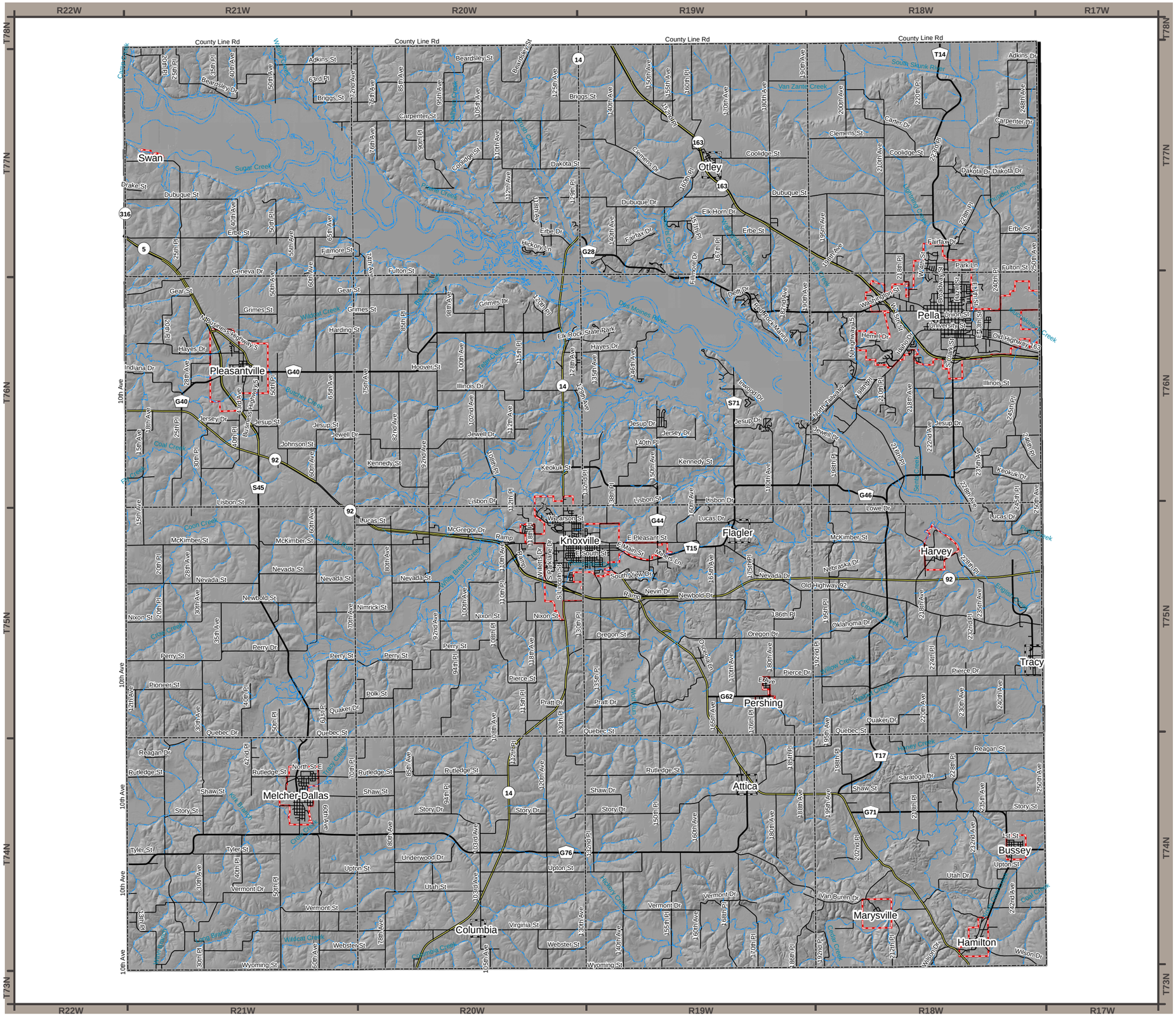
Critical natural environmental areas in Marion County include natural resources such as the wooded embankments along the rivers and streams that provide wildlife habitat. Other resources include parks, unique scenic and historic sites, geological formations and outcroppings. These natural resources have significant impact on future land use within the county, specifically including:

- ***Rugged Terrain.*** The terrain in Marion County is hilly, with significant grade changes between the uplands found in the southwest part of the county to the floodplains of the Des Moines River on the northeast. Given the number of rivers, streams and smaller tributaries, there are a number of steep embankments. Embankments having 10% or steeper slope can be difficult to develop, both in terms of construction and erosion protection. Areas having steep slopes have been identified on the Environmental Constrains Map included as Exhibit 2-2.
- ***Flood Plains.*** Along the county's rivers and streams are floodplains that may impact the development potential of specific parcels of land. The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) has identified floodway and floodway fringe areas within the county that are generally not suitable for development purposes. These areas are identified on the Environmental Constrains Map, Exhibit 2-2, and are reflected on the Future Land Use Map included in this plan. Some limited development in these areas may be acceptable if appropriately located and properly mitigated. For example, in flood fringe areas, recreational facilities may be permitted. Development should not increase the extent of the flood plain or cause damage or erosion to improvements along the creeks.
    - Any development within the floodplain must follow Marion County's flood plain ordinance as well as all applicable FEMA regulations.
- ***Soil Suitability.*** The glacial deposits in the area have been covered by wind blow particles or loess materials which dominate the topsoils of much of the county. Alluvial materials, covering or displacing the glacial and loess materials, have been deposited along rivers and streams.

  Though not specifically shown in this Comprehensive Land Use Plan, Soils Maps are available from the Natural Resources Conservation Service. Given the unique soils conditions and topography of Marion County, the potential for unsuitable soils exists. In certain areas, particularly those areas having steep slopes or in the flood plain,

exploration and analysis by a geotechnical engineer is recommended prior to development.

- ***Strip Mines.*** Geologic formations in the county include bedrock of the Pennsylvanian system. The bedrock primarily consists of shale, imbedded with limestone, sandstone, and coal seam. Past mining activity has left some portion of the land surface in the county scarred with acid spoil material. These areas do not readily support vegetation. Re-development of these areas should be carefully considered with respect to the suitability of the soils for the proposed use.



MARION COUNTY, IOWA

COMPREHENSIVE PLAN

TOPOGRAPHY MAP

Legend

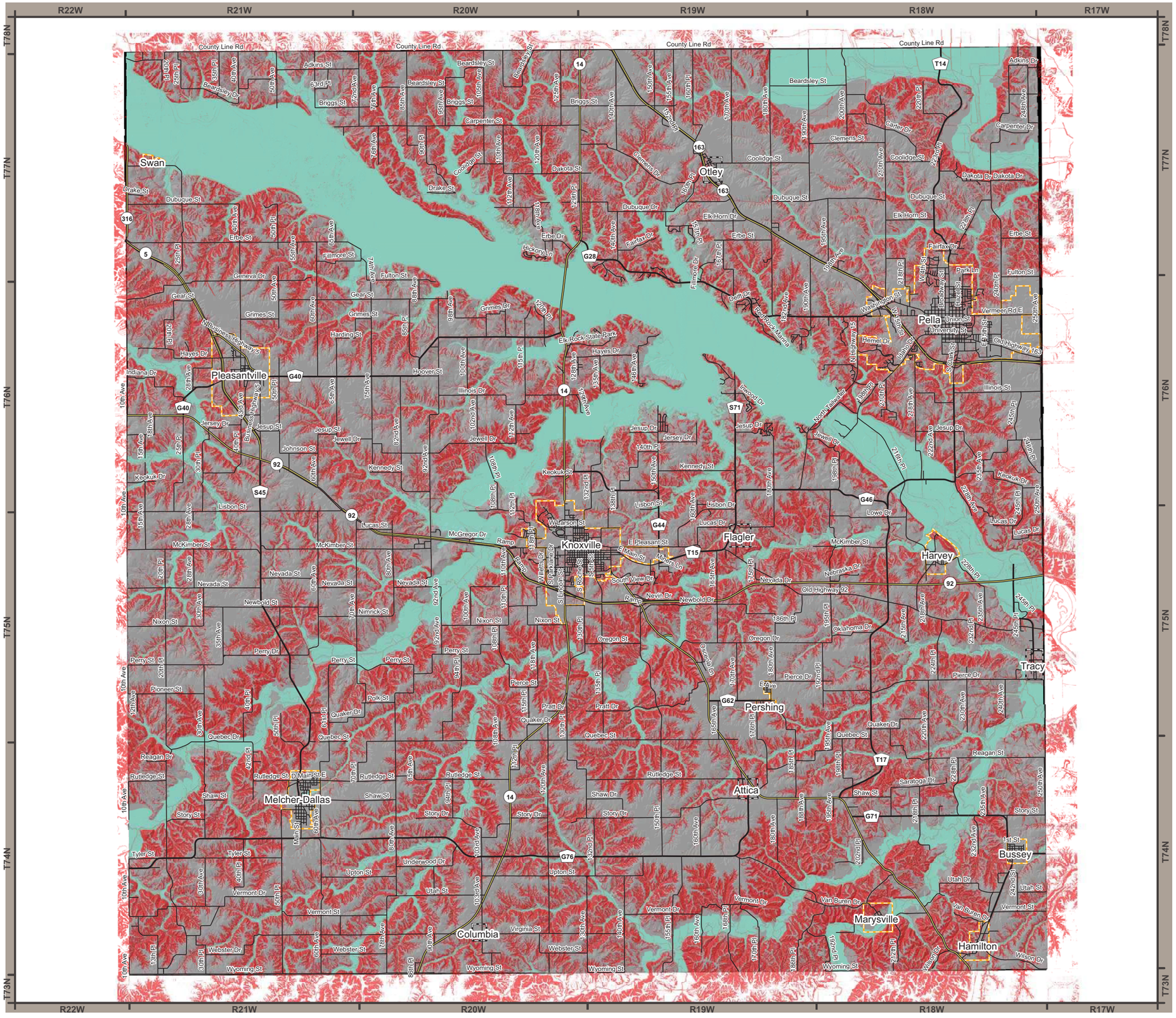
- Corporate Limits
- Unincorporated Cities

0 1.25 2.5 5

Miles

NORTH

EXHIBIT 2-1



MARION COUNTY, IOWA

COMPREHENSIVE PLAN

ENVIRONMENTAL CONSTRAINTS MAP

Legend

- Corporate Limits
- Unincorporated Cities
- General Floodplain District
- Greater than 10% Slope

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Miles

NORTH

EXHIBIT 2-2

RURAL WATER DISTRICTS

Marion County is served by three rural water districts. Central Iowa Regional Water Association (CIRWA) serves the northern portion of the county, lying north of the Des Moines River. The majority of the area lying south of the Des Moines River is served by Marion County Rural Water, with the exception of a relatively small area near the south central portion of the county which is served by Rathbun Regional Water Association. Exhibit 2-3 depicts the boundaries of these rural water districts.

NATURAL GAS SERVICE

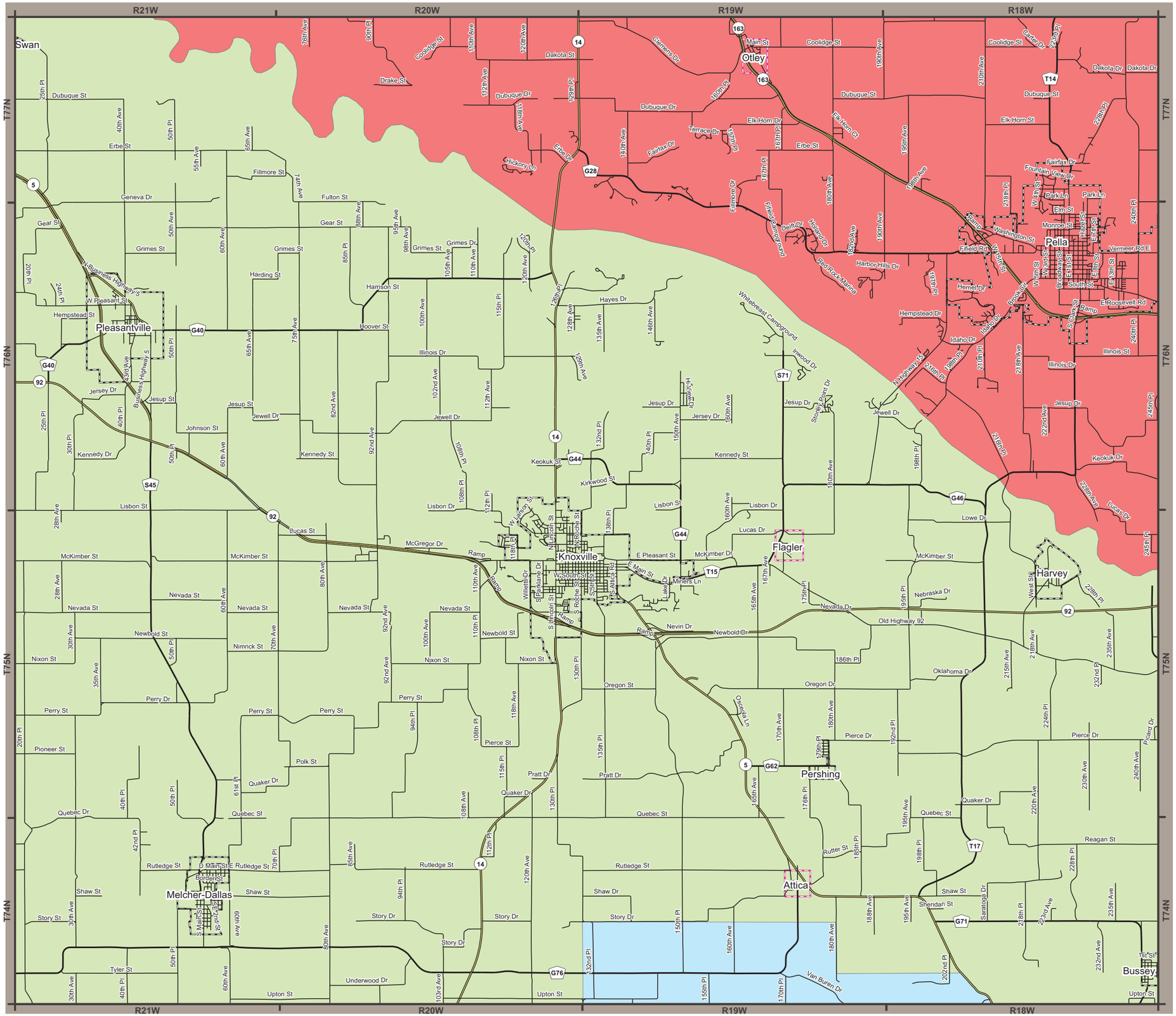
Several major gas pipelines cross Marion County, offering the potential for gas service for commercial and industrial use. Three major lines, owned by Natural Gas Pipeline Company of America, run east-west across the entire county in a location north of Melcher-Dallas and south of Knoxville and Harvey. MidAmerican Energy owns line that extend from these major lines into Pleasantville, Melcher-Dallas, Knoxville, Attica, Bussey and Hamilton as well as a line running between Knoxville and Pella. Alliant Energy owns a spur line that also serves Pella from Mahaska County. The location of these pipelines is illustrated on Exhibit 4-2 Iowa Department of Transportation Highway and Transportation Map, found in Chapter 4 of this report.

ELECTRICAL SERVICE

MidAmerican Energy provides electrical service to a large portion of Marion County. Rural Electrical Companies (REC) serve other portions of Marion County and include Pella Coop, Chariton Valley REC and Clark Electric. Pella Municipal provides electrical service to most, but not all, of Pella's incorporated area. Interstate Power and Light Company provides service to a small portion of Marion County near the southern border. Exhibit 2-4 is a reference map showing the service areas for each electrical service provider.

HAZARD MITIGATION PLAN

The Federal Department of Homeland Security (DHA) requires local jurisdictions to comply with the Disaster Mitigation Act of 2000. Working with the Iowa Homeland Security and Emergency Management Division, Marion County adopted an official Hazard Mitigation Plan on September 24, 2012. This Hazard Mitigation Plan is included in Marion County's Comprehensive Plan by reference.



MARION COUNTY, IOWA

COMPREHENSIVE PLAN

RURAL WATER DISTRICTS

Legend

- Marion County Corporate Limits
- Unincorporated Cities

Rural Water Districts

- Central Iowa Rural Water Association (CIRWA)
- Marion County Rural Water
- Rathbun Regional Water Association

0 1.25 2.5 5

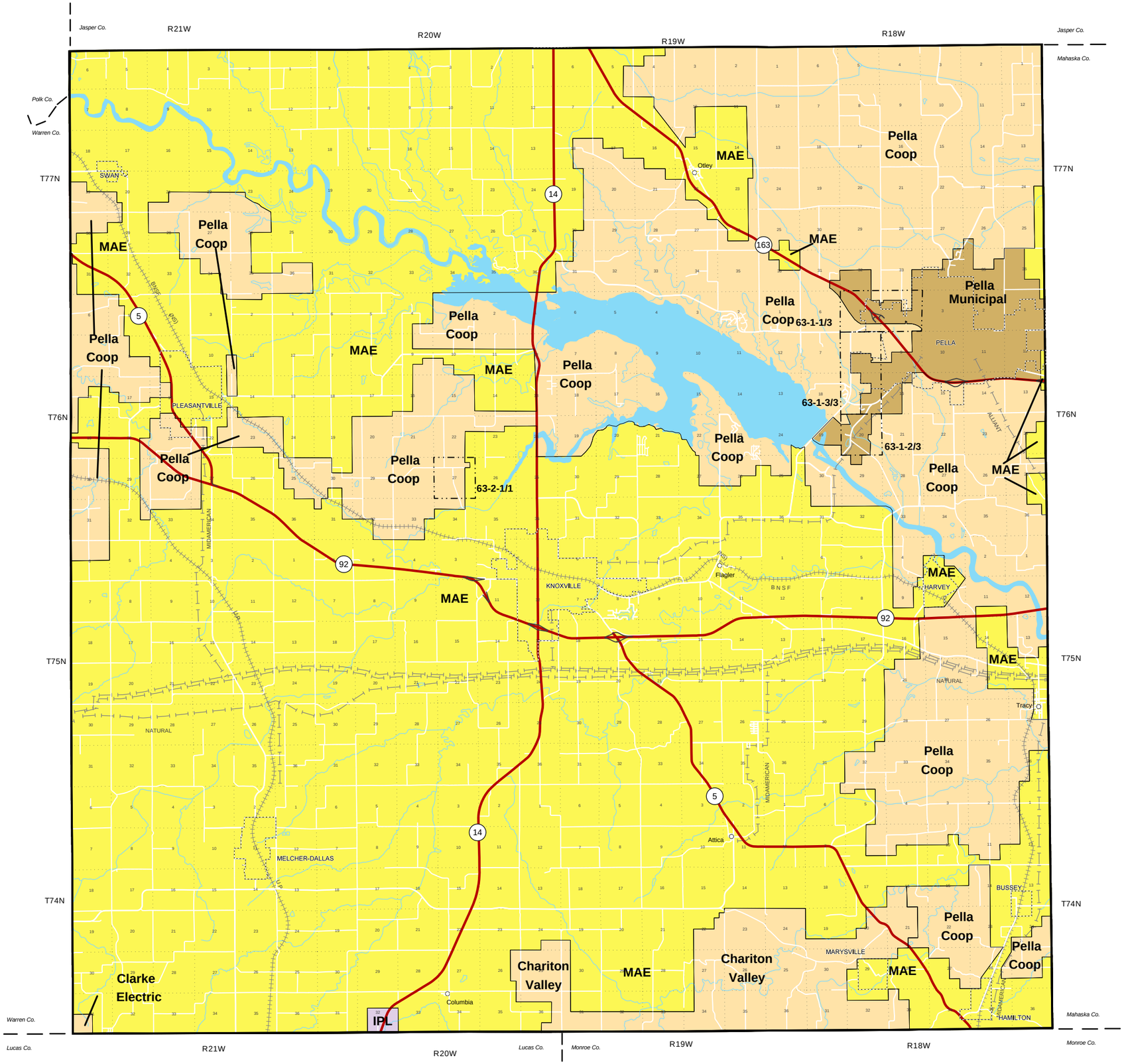
Miles

NORTH

EXHIBIT 2-3

IOWA UTILITIES BOARD
MARION COUNTY
ELECTRICAL SERVICE AREA REFERENCE MAP

Information as of: 01-Nov.-2011



Legend

- New REC Boundary 1999-2011
- Other Boundary Changes 1999-2011
- Municipal
- Interstate Power and Light Company (IPL)
- MidAmerican Energy (MAE)
- REC
- Amana Society Service
- Section Lines
- Corporation Lines
- See Detail Map

Boundaries follow section, half section, quarter section, or natural barriers except as dimensioned.
For updates and detail maps visit: www.state.ia.us/government/com/util/energy.

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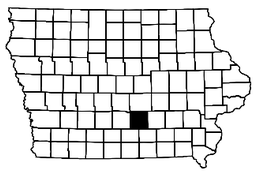


63

EXISTING LAND USE

Development of this Comprehensive Land Use Plan included an evaluation of the current land uses found in Marion County. Existing land uses were reviewed and, through careful consideration during the planning process, a determination was made regarding the suitability of the existing land use in meeting the county's long range vision for the future. The Existing Land Use Plan is included as Exhibit 2-5.

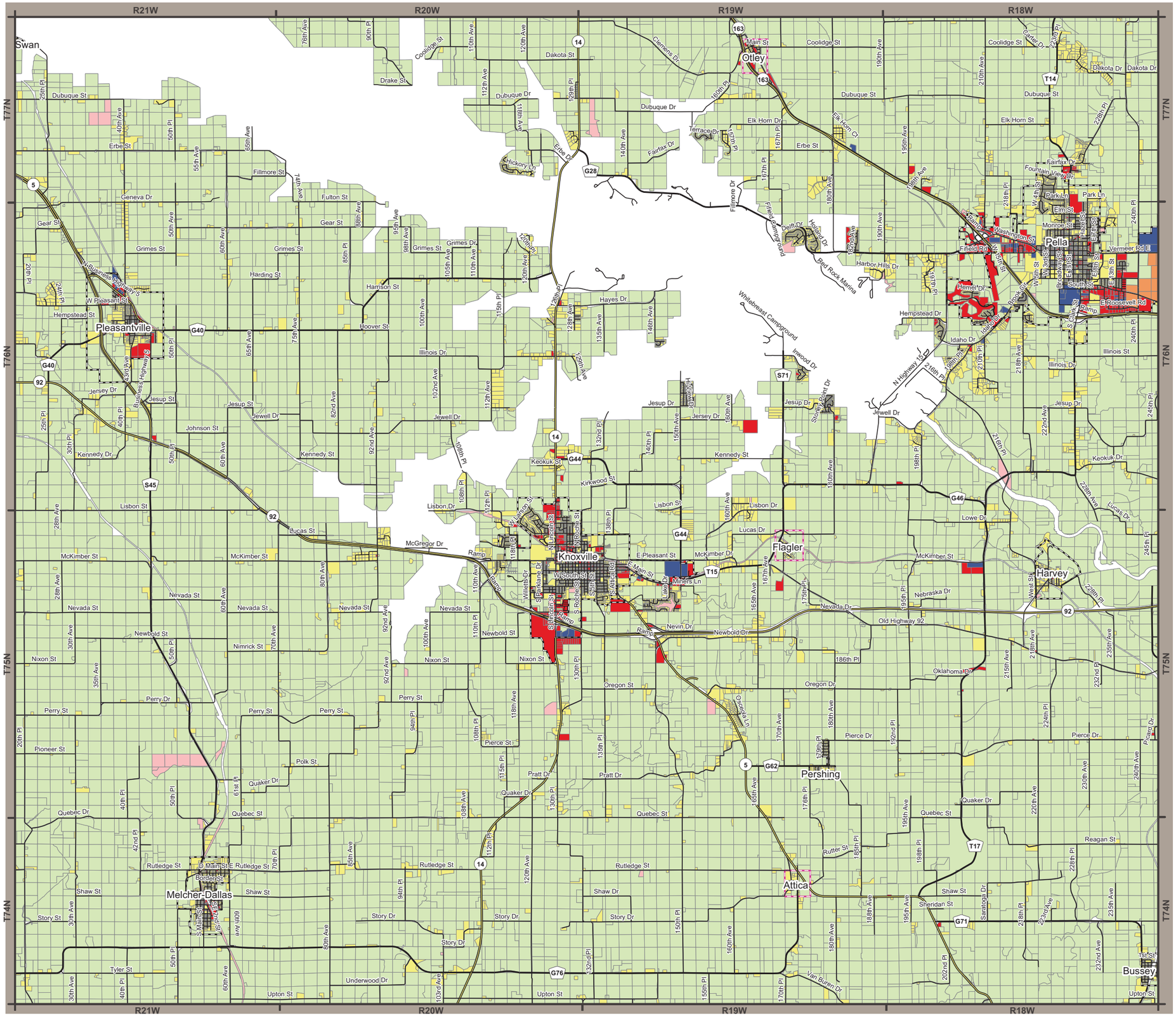
Existing land use was determined and mapped based on land use classifications established by the Marion County Assessor's office, designated in the county's geographic information system. Specific land uses were identified based on field review as well as local knowledge provided by the Steering Committee and Zoning Administrator. Not surprisingly, agriculture continues to be the dominant land use in Marion County. The 1995 Comprehensive Plan stated there were 317,710 acres in farms in 1970 and only 302,000 acres in farms in 1992, based on information provided by the Iowa Department of Agriculture. The 2013 Assessor's Abstract indicates there are currently 303,392.10 acres that are classified and taxed as agricultural use.

CURRENT ZONING

As this Comprehensive Land Use Plan was developed, future land use was developed in consideration of current zoning in effect. The current Zoning Map is included as Exhibit 2-6. For reference, Marion County's current zoning districts include:

A-1 Agricultural District
C-A Commercial-Agriculture District
A-R Agricultural Residential District
R-1 Single-Family Residential District
R-2 Single-Family and Two-Family Residential District
R-3 Multiple-Family Residential District
R-4 Mobile Home Park Residential District
C-1 General Commercial District
C-2 Highway Commercial District
M-1 Light Industrial District
M-2 Heavy Industrial District

While the Future Land Use designation for all parcels does not necessarily match the current zoning for those parcels, current zoning was given consideration. During the planning process, such parcels were evaluated and a future land use was then designated, based on the Committee's opinion of its highest and best use in the future.



MARION COUNTY, IOWA

COMPREHENSIVE PLAN

EXISTING LAND USE

Legend

- Corporate Limits
- Unincorporated Cities

Existing Land Use

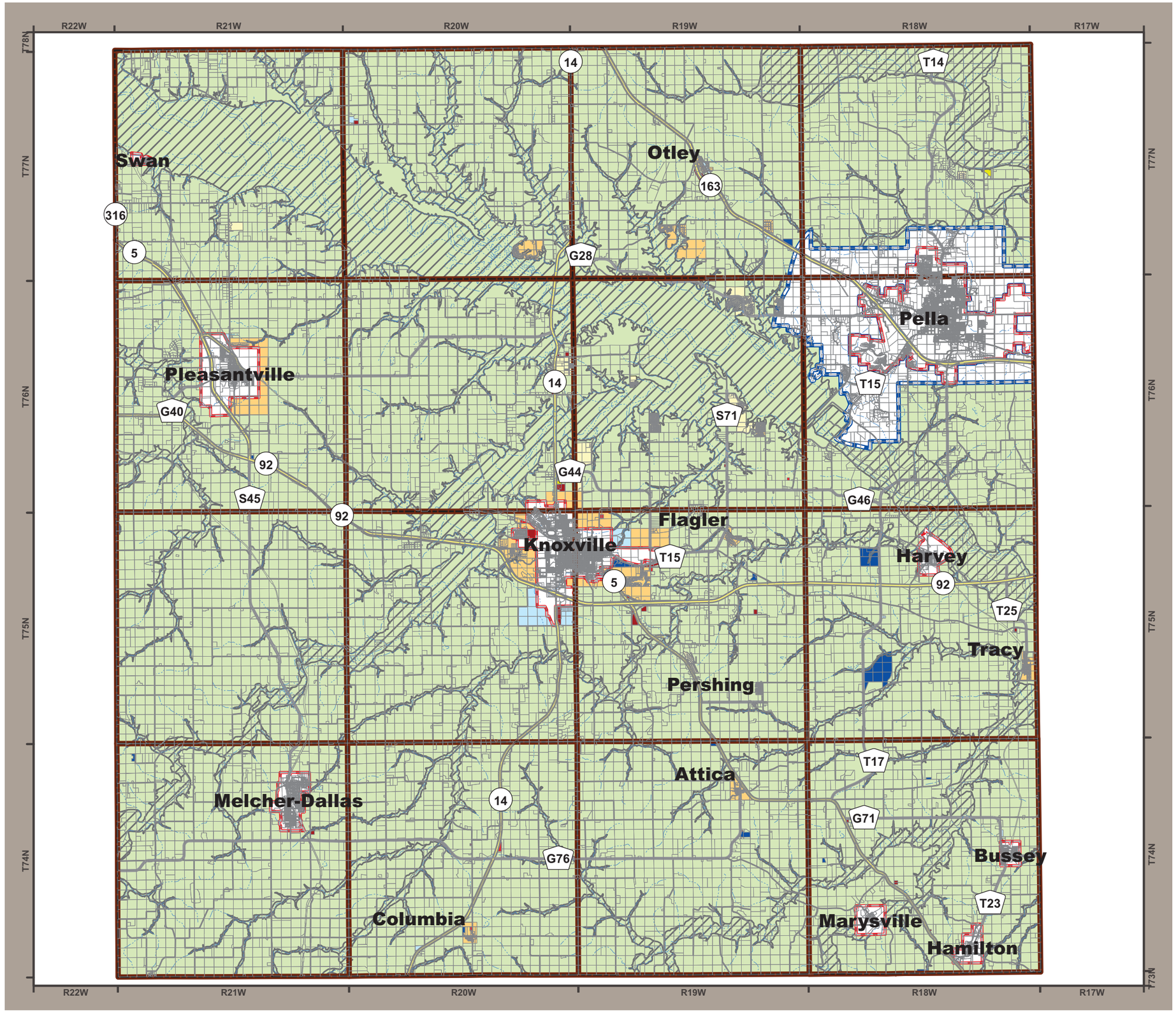
- Undesignated
- Agricultural
- Commercial
- Industrial
- Multiple
- Residential

0 1.25 2.5 5

Miles

NORTH

EXHIBIT 2-5



MARION COUNTY, IOWA

COMPREHENSIVE PLAN

COUNTY ZONING MAP

Legend

- Corporate Limits
- Pella ETJ Zoning
- FP, Floodplain Zone

Current Zoning

- A-1, Agricultural District
- C-A, Commercial-Agricultural District
- A-R, Agricultural-Residential
- R-1, Single Family Residential
- R-2, Single and Two Family Residential
- R-3, Multiple-Family Residential District
- R-4, Mobile Home Park Residential District
- C-1, General Commercial
- C-2, Highway Commercial
- M-1, Light Industrial
- M-2, Heavy Industrial

NORTH

0 1.25 2.5 5 Miles

EXHIBIT 2-6

Chapter 3

Future Land Use

The Future Land Use Plan reflects Marion County's vision for the future growth and development of their community. Developed with consideration given to environmental constraints, existing land use, transportation corridors, and the desires of the community based on input received, the Future Land Use Plan covers the entire unincorporated area of Marion County.

LAND USE GOALS

The Marion County Comprehensive Plan was prepared as a collaborative effort, taking into account the Iowa Smart Planning Principals. In order to successfully achieve the vision set forth by the Comprehensive Plan, and the Future Land Use Plan in particular, land use goals were developed. In addition, the plan provides a basis for decision-making by including concise and specific guidelines so decisions are made in a manner that is logical with respect to the dictates of the plan.

In considering land use needs and development patterns, Marion County should:

- ***Be consistent with the new Zoning Regulations recently adopted by Marion County.*** Future land use classifications should strongly correlate to designated Zoning Districts, with the exception of agribusinesses which are dispersed throughout the agricultural district.
- ***Provide for economic growth and development.*** Marion County should encourage sustainable growth that will expand the tax base of the rural county at a rate in keeping with its ability to provide services. The county may wish to consider incentives to improve the feasibility of development projects, including tax increment financing, tax abatement, and providing maintenance of new public streets.
- ***Promote the preservation of agricultural land as a primary natural resource.*** Zoning regulations and development design standards should be used to minimize conflicts with agricultural uses.
- **Preserve open space and critical environmental areas**. These would include those of aesthetic quality; archaeological, historic and cultural value; woodlands and wetlands; severe slopes; and Lake Red Rock and its environs.
- ***Include transitional land uses.*** Marion County's existing land use pattern includes some adjacent, incompatible land uses, primarily in the form of industrial uses abutting residential uses. The land use plan should reflect transitional land such that there is a gradual progression of land use intensity.

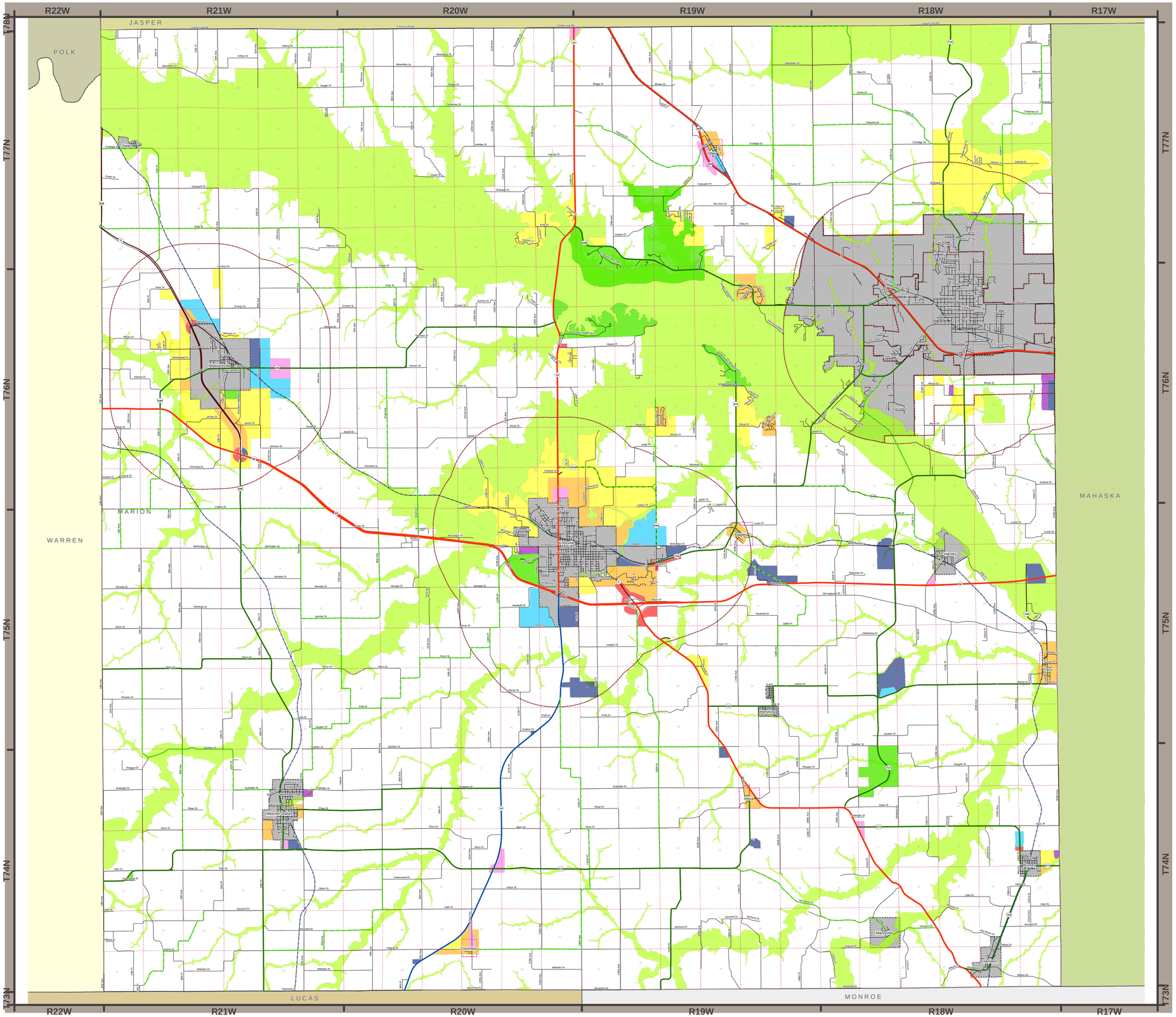
THE FUTURE LAND USE PLAN

The County's plan for Future land use is incorporated into the Comprehensive Plan Update as Future Land Use Plan. This Future Land Use Plan identifies more land for development purposes than has been forecasted for the planning period. Identification of more land for each use than is necessary provides flexibility, allowing for multiple development opportunities. A variety of choice avoids giving an unfair advantage to a limited number of property owners in the real estate market. Further, it provides more opportunity to developers if property owners are unwilling to sell their land, particularly farm land, for development purposes.

This Future Land Use Plan is intended to provide general guidelines for future land use. Land uses boundaries are conceptual in nature, with the emphasis being on the relationship between adjoining land uses and physical features. The Future Land Use Plan should not be considered too literally since land use boundaries do not necessarily follow property lines as do zoning district boundary lines on a zoning map.

Agribusiness land use has not been specifically identified on the Future Land Use Plan since it may be interspersed throughout agricultural land uses, provided certain design criteria are met, such as the need for a paved street or other criteria identified in the zoning ordinance.

The Future Land Use Plan covering all of Marion County is included as Exhibit 3-1 of this report. Larger scale Future Land Use Plans, based on survey townships, are included in the Appendix of this plan.



MARION COUNTY, IOWA

COMPREHENSIVE PLAN

FUTURE LAND USE

Legend

Future Land Use

- Agriculture
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Civic
- General Commerical
- Highway Commercial
- Light Industrial
- General Industrial
- Open_Space
- Parks
- Non-Jurisdictional
- 2 Mile Buffer

Major Streets

- Major Collector
- Minor Arterial
- Principal Arterial
- Minor Collector
- Railroads

NORTH

0 1.25 2.5 5

Miles

EXHIBIT

3-1

LAND USE DESIGNATIONS

The Future Land Use Plan designates a variety of types of land uses. To fully understand the intent of the Future Land Use Plan, these land uses must be defined in a manner that is understood by county officials, staff and general public. Table 3-1 below establishes specific criteria for each land use classification as a framework for appropriate review of rezoning and development projects. Density ranges are indicated for each residential land use clarifications to provide a practical means of differentiating between these classes. Specific land uses, as listed below, are to be considered representative.

Table 3-1: Land Use Designations

Class	Uses	Density	Application
Agricultural	· Farms: cropland and livestock operations. · Limited number of rural residential acreages. · Agribusinesses, including wineries, may be interspersed though-out the agricultural land use provided such uses are on a paved street when appropriate based on traffic and buffered from non-compatible uses. · Commercial feed lots and confinements with required separation distance to residential uses. · Wind farms, cell phone towers and utility uses. · Airports and mining operations provided specific design criteria are met; should be located on a paved street. · FEMA floodway and floodway fringe areas.	Maximum of 4 dwelling units per 40-acre tract	· Zoning: A-1 Agricultural, C-A Agribusiness, A-R Ag Residential. · Zoning overlays: FP Flood Plain. · Applies to new agribusiness and other new uses. · Agribusinesses may need to be located on paved road. · Development within Floodplain must be in conformance to the Marion County Flood Plain Management Ordinance. · When appropriate, developer shall obtain all necessary permits prior to County approval of said use.
Low Density Residential	· Restrictive land uses, primarily single-family detached dwellings in rural setting. · Farms: cropland and domestic livestock except feedlots, dairies, or confinements. · Civic uses and churches may be allowed if compatibility standards are met. · Open spaces, parks, recreation and trails should be encouraged. · Large lot rural subdivisions should be avoided where obstructive to future development.	Up to 1 dwelling per acre	· Zoning: R-1 single family or R-2 single and two family residential. · Applies to new acreages and estate residential uses. · May require buffering from adjoining incompatible land uses.
Medium Density Residential	· Restrictive land uses, primarily single-family or duplex dwellings in suburban setting. · Common water supply and wastewater treatment facilities may be required. · Farms: cropland only. · Civic uses and churches may be allowed if compatibility standards are met. · Open spaces, parks, recreation, and trails should be encouraged. · Large lot rural subdivisions should be avoided where obstructive to future development.	Up to 4 dwellings per acre	· Zoning: R-1 single family or R-2 single and two-family residential. · Applies to new and existing residential subdivisions. · May need to be on paved street. · May require buffering to other land uses.

High Density Residential	· Residential uses including single-family, duplex, rowhouses, townhomes in an urban setting. · Apartments and condos, up to 12 units/per building, if compatibility standards are met. · Group homes, detention facilities permitted. · Common water supply and wastewater treatment facilities are required. · Farms: cropland only. · Civic uses and churches may be allowed if compatibility standards are met. · Open spaces, parks, recreation areas, swimming pools, and trails should be encouraged. · Large lot rural subdivisions should be avoided where obstructive to future development.	Maximum of 12 dwellings per acre	· Zoning: R-2 two family Residential, R-3 Multiple-family Residential or R-4 Mobile Home Park. · Applies to new and existing residential subdivisions. · Must be located on paved arterial or collector street. · Off-street parking for residents and guests. · May serve as transition from single-family to less compatible land uses.
Civic	· Schools · Churches and Religious institutions · Libraries, Museums · Community centers and other public facilities that act as centers of community activity		· Zoning: varies, typically C-1 general commercial · May be permitted in residential zoning districts · Applies to new & existing uses. · May need to be located on paved street. · Off-street parking required. · May serve as transition from single-family to less compatible land uses. · When appropriate, developer shall obtain all necessary permits prior to County approval of said use.
General Commercial	· Retail, office, consumer services, and similar commercial uses serving the local community. · Civic organizations, museums funeral homes, and religious uses. · Restaurants and taverns. · Bed and Breakfast inns. · Campgrounds and RV parks provided certain design criteria are met. · Should not include residential dwellings. · Trails permitted where required for connectivity.	-	· Zoning: C-1 General Commercial. · Applies to new and existing commercial uses. · Must be located on paved street. · Must provide off-street parking. · May serve as transition from residential to more intensive highway commercial uses. · When appropriate, developer shall obtain all necessary permits prior to County approval of said use.
Highway Commercial	· "Big Box" retail, home improvement, similar large retail uses serving a regional community. · Large office buildings and complexes. · Civic organizations, museums, religious uses. · Wineries and Farmer's Markets. · Restaurants and taverns. · Hotels and motels. · Campgrounds and RV parks provided certain design criteria are met. · Should not include residential dwellings. · Trails permitted if required for connectivity.	-	· Zoning: C-2 Highway Commercial. · Applies to new and existing commercial uses. · Must be located on paved arterial or collector street. · May serve as transition from agricultural or general commercial uses to industrial land uses. · When appropriate, developer shall obtain all necessary permits prior to County approval of said use.

Light Industrial	· Includes uses of a light industrial nature having limited environmental impacts. · Office/Warehouse and distribution centers. · Print shops and laboratories. · Assembly shops. · Contractor equipment and storage yards. · Major automotive repair garages. · Certain agribusiness uses. · Includes industrial uses of a light industrial nature having limited environmental impacts · Does not include residential dwellings, other than night watchmen's residences. · Trails should be encouraged where required for connectivity.	-	· Zoning: M-1 Light Industrial. · Applies to new and existing commercial uses. · Must be located on paved arterial or collector street. · May serve as transition from agricultural or commercial uses to heavy industrial land uses. · When appropriate, developer shall obtain all necessary permits prior to County approval of said use.
General Industrial	· Includes manufacturing and processing uses having significant environmental impacts, including odors, noise, air and water quality issues. · Concrete mixing, aggregate crushing. · Storage and salvage yards provided design standards are met. · Sanitary landfills provided design standards are met. · Does not include residential dwellings, other than night watchmen's residences. · Trails should be encouraged where required for connectivity.	-	· Zoning: M-2 Heavy Industrial. · Applies to new and existing commercial uses. · Must be located on paved arterial or collector street. · Should not be adjacent to residential uses. · When appropriate, developer shall obtain all necessary permits prior to County approval of said use.
Parks and Open Space	· State Parks, Forests and Preserves; County Parks · Restricted land uses in the floodplain; uses having few or no structures such as recreational trail systems, sports fields and brush composting · Use must comply with Floodplain Development regulations FEMA floodway to remain undeveloped · FEMA floodway fringe areas to be protected to an elevation 1.0' above the base flood elevation and in conformance	-	· Zoning: Varies · Zoning Overlays: FP Flood plain · Applies to FEMA floodplain · Applies to areas of significant environmental constraints including Loess hills. · Development within Floodplain must be in conformance to the Marion County Flood Plain Management Ordinance. · When appropriate, developer shall obtain all necessary permits prior to County approval of said use.
Corporate Limits / Non-Jurisdictional	· Marion County has no jurisdiction within the limits of incorporated cities. · Marion County has no zoning or land use jurisdiction within Pershing. · Cities may adopt regulations regarding municipal review of subdivisions within 2 miles of their corporate limits.	-	· Zoning: not applicable

COMPATIBILITY GUIDELINES

The Future Land Use Plan strives to avoid creating new areas of incompatibility between adjoining land uses, primarily through incorporating transitional land uses which reduce the degree of incongruity. Where incompatibility exists, planning techniques may be applied to minimize negative impacts to less intensive uses. These techniques incorporate the use of buffers, screening in the form of landscaping or opaque fencing, berms or a combination thereof.

Table 3-2, found on the following page, ranks the relative compatibility between each of the land uses found in the Future land Use Plan with a compatibility code based on degree of incompatibility.

When reviewing development projects, including rezoning, plats and site plans; the proposed land use for a specific property should be studied for compatibility with the current adjacent land uses as well as with the future land uses as designated on the Future Land Use map.

Table 3-2: Land Use Compatibility Guidelines

Classification		A	B	C	D	E	F	G	H	I	J	K
Parks, Open Space	**A**	-	1	4	1	1	1	2	3	4	4	5
Agricultural	**B**	1	-	2	2	2	2	2	2	2	2	2
Agribusiness	**C**	4	2	-	5	5	5	5	3	2	2	1
Low Density Residential	**D**	1	2	5	-	1	2	3	3	4	4	5
Medium Density Residential	**E**	1	2	5	1	-	2	3	3	4	4	5
High Density Residential	**F**	1	2	5	2	2	-	2	3	4	4	5
Civic	**G**	2	2	5	3	3	2	-	2	3	3	4
General Commercial	**H**	3	2	3	3	3	3	2	-	2	2	3
Highway Commercial	**I**	4	2	2	4	4	4	3	2	-	2	3
Light Industrial	**J**	4	2	2	4	4	4	3	2	2	-	3
General Industrial	**K**	5	2	1	5	5	5	4	3	3	3	-

Compatibility Code:

1. Proposed land use is identical to or is **completely compatible** with adjacent land uses. Developments should be designed based on good planning practices.
2. Proposed land use is **reasonably compatible** with adjacent land uses. Structures should be consistent with the surrounding buildings in character, massing and scale. Traffic from higher intensity uses should be directed away from lower intensity uses. Dust and odors from surrounding uses may be in conflict with residential uses.
3. Proposed land use may have **possible conflicts** with the adjacent land uses that may be mitigated through proper planning and design. Orientation of structures, landscaping, buffering, and screening should be utilized to minimize negative impacts to adjoining parcels. Traffic, parking areas, noise, light pollution, dumpsters, service doors, dust, odors and other influences should be directed away from lower intensity uses.
4. Proposed land use has **significant conflicts** with adjacent land uses. These considerable impacts must be positively mitigated to avoid detrimental effects on adjacent land uses. If the impacts cannot be property mitigated, the proposed use should not be permitted.
5. Proposed land use is **potentially incompatible** with adjacent land uses. Generally, proposed land uses with this level of conflict will not be permitted.

LAND USE DECISIONS

The Future Land Use Plan provides the basis for the formulation of land use and zoning regulations. Since the Future Land Use Plan cannot be expected to predict the design of each future development, nor can it contemplate each individual request for rezoning that may come before the County, it must therefore provide the framework necessary to aid the county in making land use decisions. Used in conjunction with the Future Land Use map, the Land Use Designation table and the Land Use Compatibility table together form a powerful tool in the review of prospective development projects.

RECOMMENDATIONS

Recommendations for achieving the goals of the Future Land Use Plan are:

- ***Consider Future Land Use Plan prior to approving any rezoning.*** Whenever a property owner or developer presents a petition for rezoning, the first issue to be taken into consideration by Zoning Commission and Board of Supervisors should be the intended future land use of the property as designated by this Comprehensive Land Use Plan. Once it has been determined the proposed rezoning conforms with the Future Land Use Plan, the rezoning should then be reviewed in consideration of other site-specific criteria, as well as other considerations and concerns the Zoning Commission, Board of Supervisors, adjoining property owners and general public may voice.
- ***Consider greater impacts when considering a change in land use.*** Whenever the County considers amending the Future Land Use Plan, whether such change is related to a specific development project or general changes in the county such as a modification to the street network, the Zoning Commission and Board of Supervisors should consider the impact of such change on the surrounding land uses in the area. As a result, one change in land use may create the need for larger scale change to mitigate issues such as incompatible land uses or to increase/decrease specific surrounding uses in a logical and thoughtful manner.
- ***Consider the appropriate design criteria when reviewing development projects.*** When a developer presents a petition for rezoning or requests approval of a site plan, subdivision or building permit, specific design criteria for the proposed use should be considered prior to approval of the project. Design criteria may include the need for a paved street for access and traffic circulation; including consideration for street continuity to retain the future development potential of adjoining parcels. Other design criteria include the potential need to install for buffering between non-compatible uses such as evergreen streets to screen lights, noise and view of a retail building from residential uses. This design criteria is identified in Table 3-2 and more detailed criteria is specified in the Zoning Regulations.

Chapter 4

Transportation Plan

The air, rail, and roadway transportations system were detailed in the 1996 Comprehensive Plan for Marion County. However, understanding these transportation systems is an important component of Marion County's Comprehensive Land Use Plan update.

AIR TRANSPORTATION SYSTEM

Marion County is served by two general aviation airports, one is located on the southwest side of Knoxville and the other is located on the southwest side of Pella. The county is also served by the Des Moines International Airport, located approximately 35 miles northwest of Knoxville.

The City of Pella, jointly with the City of Oskaloosa, is considering the need for a potential regional airport. To this end, the South-Central Regional Airport Agency has been established and is responsible for ushering the evaluation, construction and operations of this future airport. The search area for the airport site currently falls in Mahaska County, between the two cities.

RAILROAD TRANSPORTATION SYSTEM

Marion County is served by two railroads; the Burlington Northern Santa Fe (BNSF) and the Union Pacific (UP) lines.

The BNSF line runs from Des Moines to St. Louis where it connects to further destinations. This line runs from the northwest to the southeast across Marion County, through the cities of Swan, Pleasantville, Knoxville, Flagler, Harvey, Tracy, Bussey and Hamilton. According to the Iowa Department of Transportation's 2012 Railroad Service Map, trackage rights for this line belong to BNSF in the area north of Swan, but to Norfolk Southern (NS) south of Swan.

The UP line runs from Des Moines to Kansas City, and points beyond. The UP runs along the western portion of Marion County, entering the county just south of Pleasantville, and then running through Melcher-Dallas to Lucas County. Trackage rights for this line also belong to UP.

The old Chicago, Rock Island, and Union Pacific railroad (C.R.I. & P), running through Otley and Pella, in one of many railroad lines that has been abandoned since 1970.

STREET SYSTEM

The street network in the county provides the primary transportation system for County residents, as well as through traffic from the surrounding region. These streets provide for truck traffic and personal vehicle use. As such, the street network is intimately related to the Land Use Plan as it forms the means of connection between residences, employment locations, shopping trips and recreation opportunities. Existing streets will form the primary

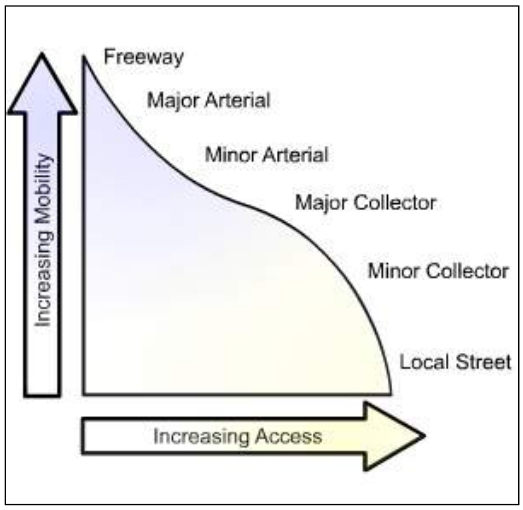
network off of which future development can build. Therefore, it is important to recognize the function that current streets provide in the county that provide access, continuity, ease of movement to future development.

FEDERAL FUNCTIONAL CLASSIFICATION

The Iowa Department of Transportation (DOT) develops a Federal Functional Classification (FFC) map for each county with the input of local government, traffic volumes and statewide network planning. The Major Streets Plan was developed based upon Iowa DOT FFC map and attached at the end of this chapter.

Figure 4-1

Functional Classification of Streets



As its name indicates, this plan focuses on the major routes that provide countywide connectivity and will provide access to future development. These include Interstates/Principal arterials, minor arterials, major collectors, and minor collectors. The county development process must ensure that future residential developments provide local streets that result in continuity with existing street system and avoid 'dead-end' streets, as to ensure commercial and industrial developments provide internal site circulation, support cross-site access and comply with access restrictions on the major streets.

INTERSTATES/ PRINCIPAL ARTERIALS

Major Arterials are high capacity roadways that primarily provide for the movement of through traffic and limit access to adjacent land. When the road is part of the State or County road system, they serve to move regional through traffic. Principal arterials typically provide four to five lanes for traffic and turn lanes, are often spaced 1 mile to 2 miles apart, have a higher speed limit from 35 mph to 55 mph, and

limited access spacing with lower capacity roads and site entrances, generally between 1/2 mile to 1/4 mile spacing.

In Marion County, principal arterials include Iowa Highway 5, Iowa Highway 14, Iowa Highway 92, Iowa Highway 163, and Iowa Highway 316.

MINOR ARTERIALS

Minor Arterials are moderate to high capacity streets that primarily provide for the movement of through traffic and some access to adjacent land, primarily by access to lower capacity collector streets. Minor arterials provide continuous routes, typically between the larger cities in Marion County. Desirable access spacing on minor arterials is 1/8 mile (660 ft). Traffic will generally flow freely on these streets and lower classification roads will be STOP controlled when intersecting. Minor arterial intersections with major arterials will generally be controlled with a traffic signal or modern roundabout. These streets will have more access than major arterials, and may have two or four lanes, and may provide turn lanes at intersections and will have speed limit from 25 mph to 55 mph. Access spacing should be controlled, in accordance with Iowa Department of Transportation (Iowa DOT) requirements. Where Iowa DOT approval is not required, access spacing should follow the Statewide Urban Design Standards (SUDAS).

MAJOR COLLECTORS

Major Collectors are moderate capacity streets that primarily serve to connect the local street network to arterials. Such roadways will typically have two lanes for traffic with a speed limit between 25 mph to 55 mph. Minor arterials provide continuous routes, typically connecting the smaller cities. Future extensions of these streets should avoid this pattern, and desirable minimum access spacing should follow the Statewide Urban Design Standards (SUDAS).

MINOR COLLECTORS

The minor collectors designated on this plan are primarily farm to market roads through the county. These corridors generally have lower speed limits, though they are generally paved.

TRANSPORATION MAPS

The Iowa Department of Transportation (Iowa DOT) prepares the Federal Functional Classification Map in cooperation with the Federal Highway Administration. This map, included as Exhibit 4-1, illustrates the classification of the county's roadway system and is used to set priorities for federally funded road projects. Marion County is part of the Central

Iowa Regional Transportation Alliance (CIRTPA) which sets priorities for federally funded projects in the eight county area. Marion County also adopts its own 5-Year Plan for projects that are funded through county resources.

The Iowa DOT Highway and Transportation Map illustrates the various roadway surface materials for public streets within the County. This surfacing is described as Portland cement concrete, asphalt, bituminous, gravel, or earthen roads. This map is included as Exhibit 4-2 of this report.

Traffic volumes can be an important consideration when a business group or developer is evaluating sites for prospective commercial and industrial land uses. The Iowa DOT Traffic Flow Map showing 2010 annual average daily traffic volumes on various county roads. This map is included as Exhibit 4-3 of this report.

Federal Functional Classification Map

Marion County
IOWA

Prepared by

IOWA DEPARTMENT OF TRANSPORTATION

Phone (515) 239–1669

In Cooperation With

United States Department of Transportation

FEDERAL HIGHWAY ADMINISTRATION

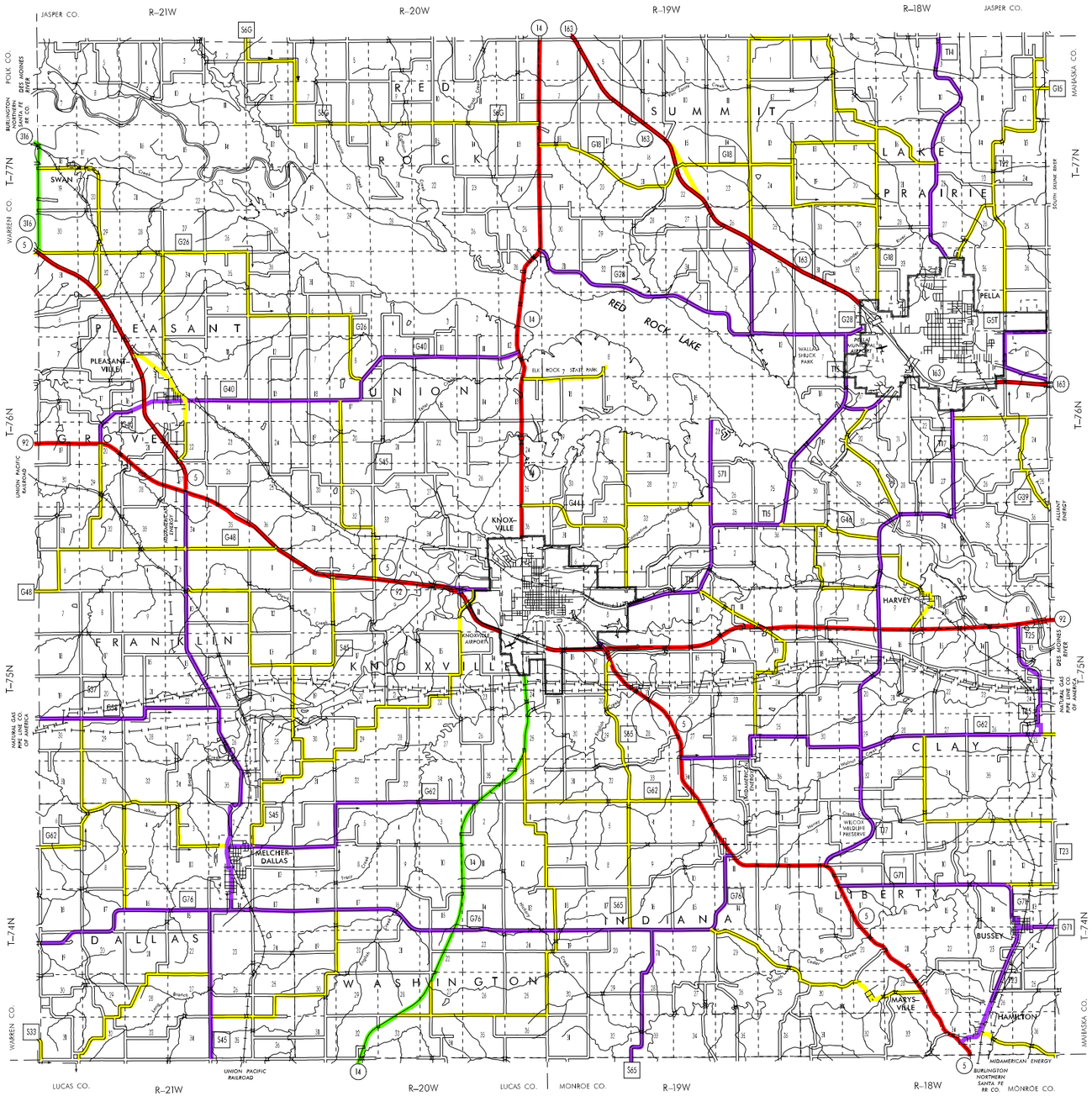
DECEMBER 31, 1992

REVISED JANUARY 12, 2009

SCALE IN MILES

SCALE IN KILOMETERS

PRODUCED WITH CADD 01-14-09 Systems Planning



RURAL FEDERAL FUNCTIONAL CLASSIFICATIONS

- Interstate
- Other Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- Local

Future classified routes shown as dashed lines.

County line roads on the south and east are classified by the adjacent county.

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rffc63.wms

Federal Functional Classification Map

HIGHWAY AND TRANSPORTATION MAP

MARION COUNTY
IOWA

Prepared By
Iowa Department of Transportation

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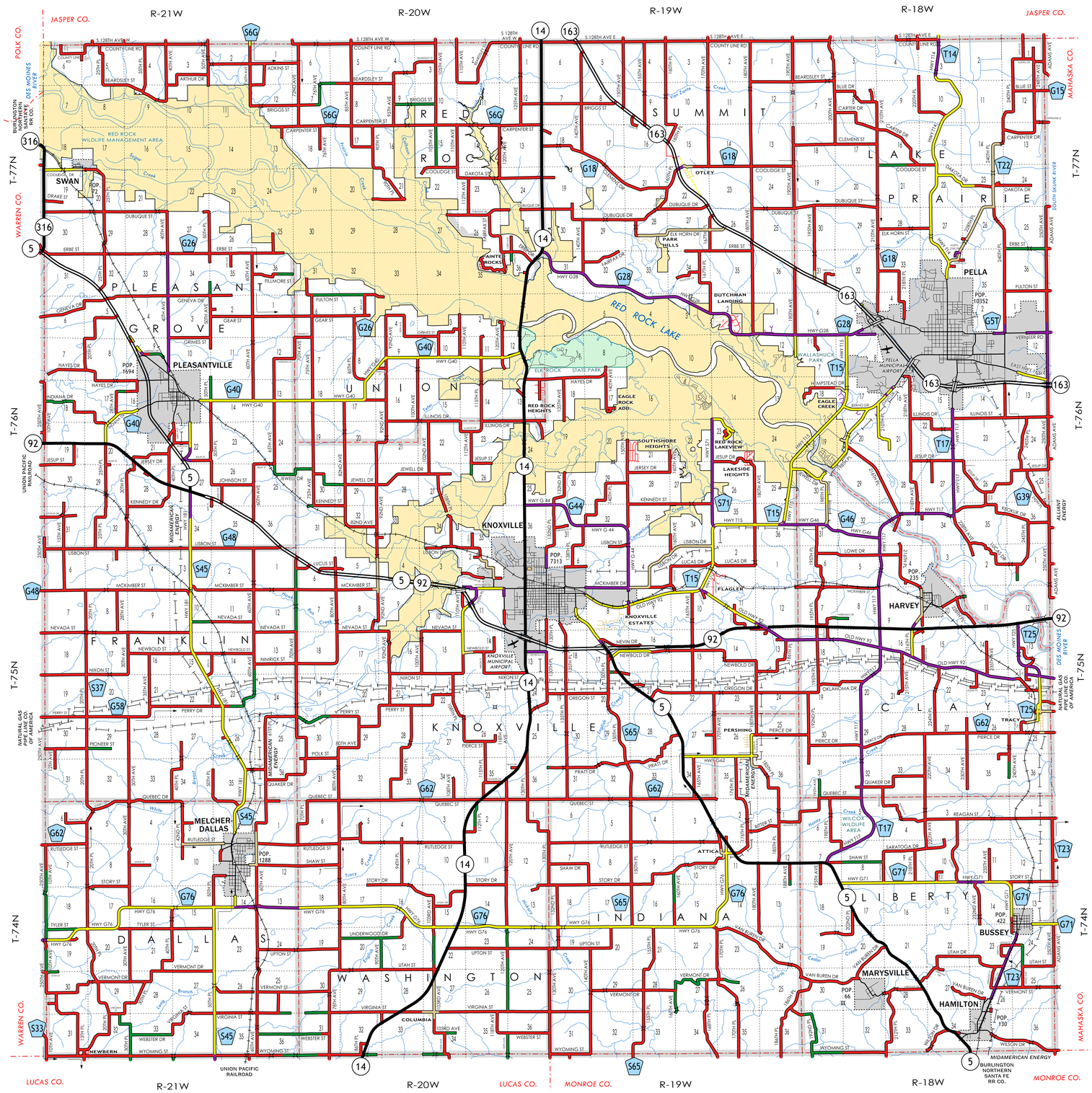
Phone: (515) 239-1289
WWW.IOWADOT.GOV/MAPS

In Cooperation With
United States Department of Transportation

JANUARY 1, 2012



LEGEND

- INTERSTATE HIGHWAY
- PRIMARY HIGHWAY-DIVIDED
- PRIMARY HIGHWAY
- PORTLAND CEMENT CONCRETE ROAD
- ASPHALT ROAD
- BITUMINOUS ROAD
- GRAVEL ROAD
- EARTHEN ROAD
- INTERSTATE HIGHWAY (80)
- UNITED STATES HIGHWAY (65)
- STATE HIGHWAY (237)
- COUNTY HIGHWAY (S27)
- RAILROAD
- PIPELINE
- AIRPORT
- HYDROLOGY
- BRIDGE
- STATE BOUNDARY
- COUNTY BOUNDARY
- CORPORATE BOUNDARY
- TOWNSHIP LINE
- SECTION LINE
- ROAD NAMES — ABBEY ROAD
- UNINCORPORATED PLACE — ELWOOD
- STATE PARKS
- STATE INSTITUTIONS
- FEDERAL LAND

(2010) ANNUAL AVERAGE DAILY TRAFFIC
2006 ANNUAL AVERAGE DAILY TRAFFIC

TRAFFIC FLOW MAP OF
MARION COUNTY
IOWA

Prepared By
Iowa Department of Transportation

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JANUARY 1, 2010

MILES 0 1 2 3 4
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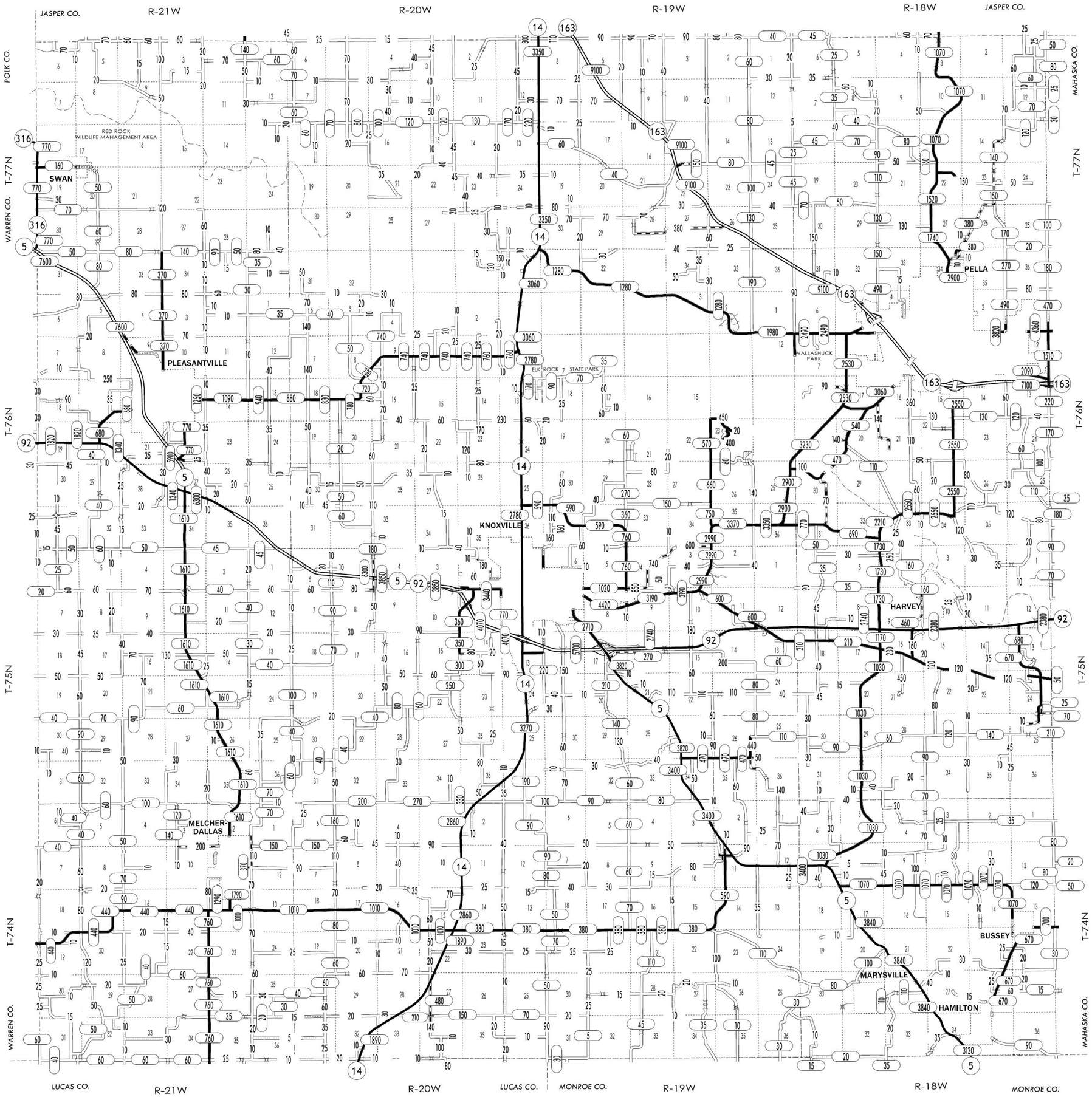
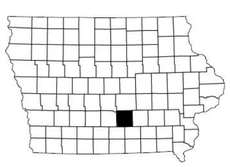


LEGEND

- DIVIDED HIGHWAY
- PAVED ROAD
- BITUMINOUS ROAD
- GRAVEL ROAD
- EARTHEN ROAD
- LEGAL NOT OPEN ROAD



2010

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