

PLANNING COMMISSION REPORT
Regular Agenda – Public Hearing Item

PC Staff Report
3/24/14

ITEM NO. 2: REVISION OF K-10 & FARMER'S TURNPIKE PLAN: 1700 SECTION OF E. 902 ROAD (JSC)

CPA-14-00005: Consider a Comprehensive Plan Amendment to *Horizon 2020* Chapter 7: Industrial Land Use, and Chapter 14: Specific Plans – *K-10 & Farmer's Turnpike Plan*, to revise the Future Land Use map, and include adjacent parcels for additional residential land use sections into the *K-10 & Farmer's Turnpike Plan*. Submitted by B.G. Consultants, Inc.

STAFF RECOMMENDATION: Staff recommends approval of a revised Comprehensive Plan Amendment to *Horizon 2020*, including the *K-10 & Farmer's Turnpike Plan*, to change and expand the designated land use map and recommends forwarding this Comprehensive Plan Amendment to the Lawrence City Commission and Douglas County Board of County Commissioners with a recommendation of approval.

If appropriate, authorize the Chair of the Planning Commission to sign Resolution PCR-14-00090.

KEY POINTS

1. The area within this proposed amendment is partially within the *K-10 & Farmer's Turnpike Plan* and partially outside of this planning area.
2. The request is being made, in part, to accommodate mini-warehouses development on a portion of the requested area.
3. Staff recommends a revised land use pattern and policies from this applicant's request in order to maintain compatible uses and to address the gateway corridor of K-10.

APPLICANT REQUEST

This Comprehensive Plan Amendment is requested by BG Consultants, Inc., on behalf of the property owners of record, in order to develop a mini-warehouse project on a piece of land between K-10 and E. 902 Road, west of the existing Westar utility substation. The *K-10 & Farmer's Turnpike Plan*, which is incorporated by reference into Chapter 14: Specific Plans, identifies this area as Residential/Office use and the requested mini-warehouse project would not be compatible with the present future land use designation. This amendment requests the consideration of reclassifying approximately 90 acres of approximately 101 total acres (89%) to Residential (51 acres), Utility (14 acres), and Limited Industrial (25 acres) uses (see Figure 2).

This amendment also includes 70 acres east of E. 902 Road to be added into the *K-10 & Farmer's Turnpike Plan* identified for residential use north of Rock Chalk Park.

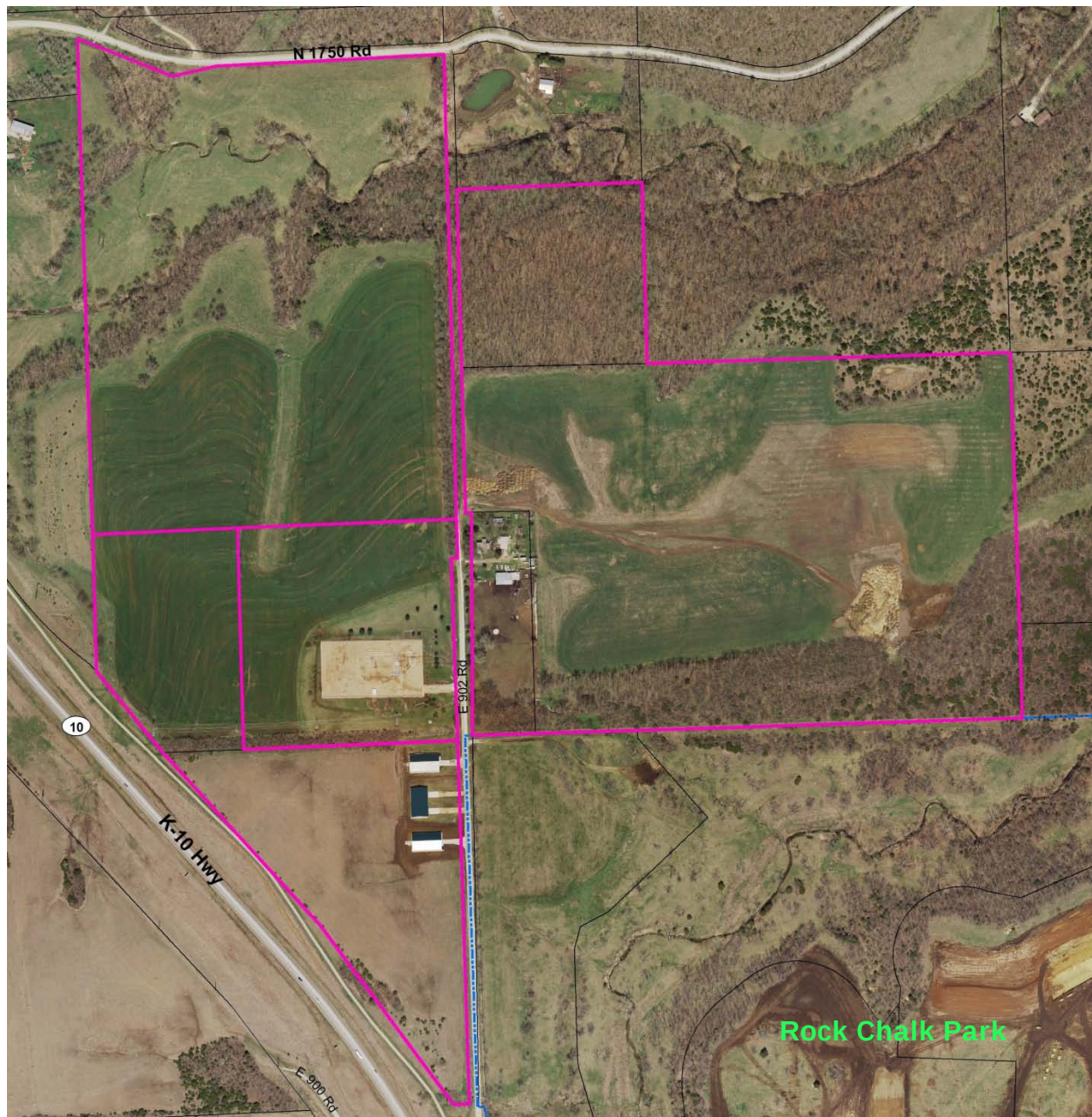


Figure 1: Aerial Photograph of Proposed Amendment.

STAFF REVIEW OF APPLICANT REQUEST

The land outlined within this amendment proposal spans between two different plans at present. The portion of the subject area to the west of E. 902 Road is within the *K-10 & Farmer's Turnpike Plan*; the portion east of E. 902 Road is within the *Northwest Area Plan*. Each plan has divergent foundations, but in this portion of the county they both have comparable recommendations.

Presently, the land is principally utilized for agricultural uses or in a wooded/native state, with one farmstead. Westar currently operates a utility substation within the request area.

Currently, Westar anticipates expanding this substation in the near future to meet the existing and expectant needs of its users.

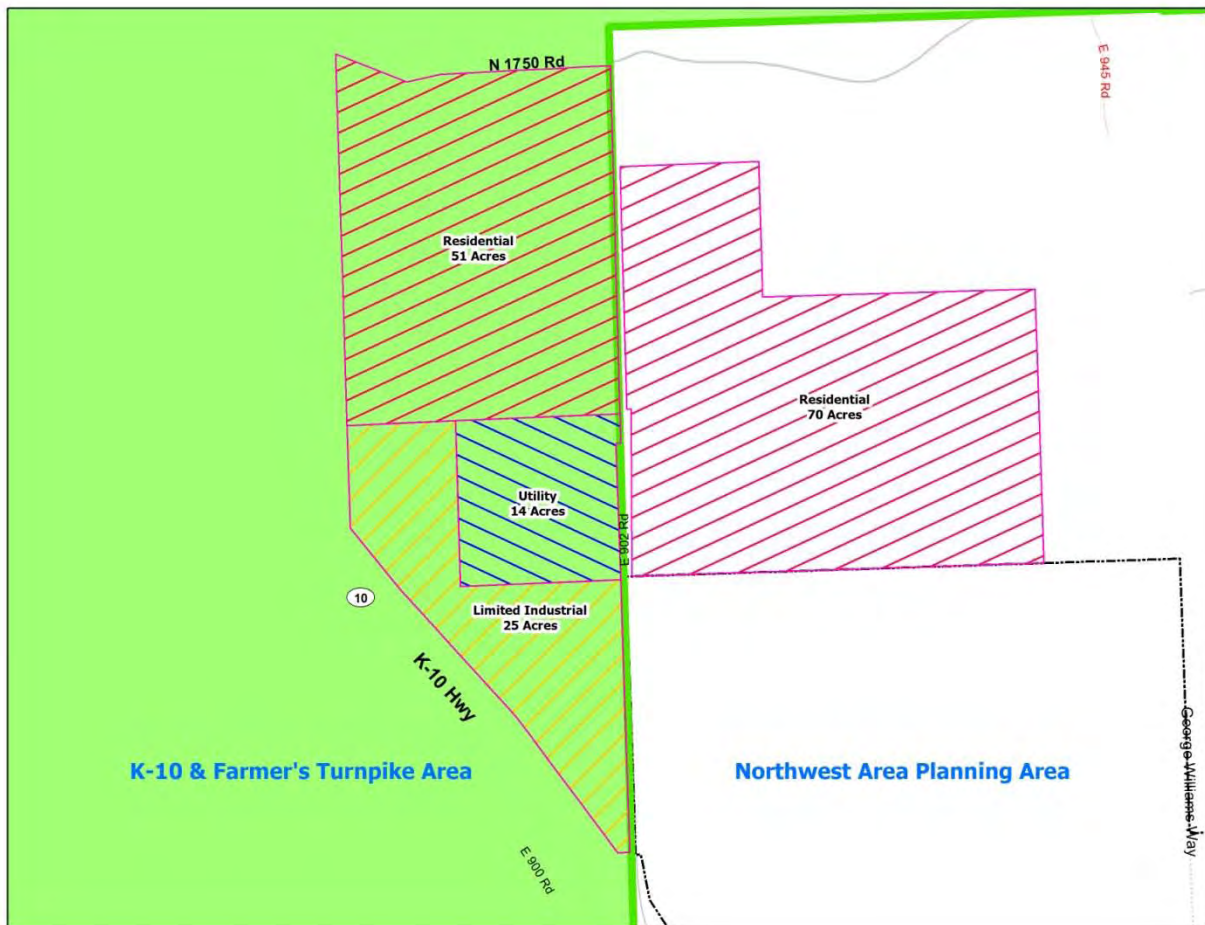


Figure 2: Plan Boundaries covering the Proposed Amendment Land with Applicant Requested Designations

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Figure 3: Requested Amendment Area in Larger Context

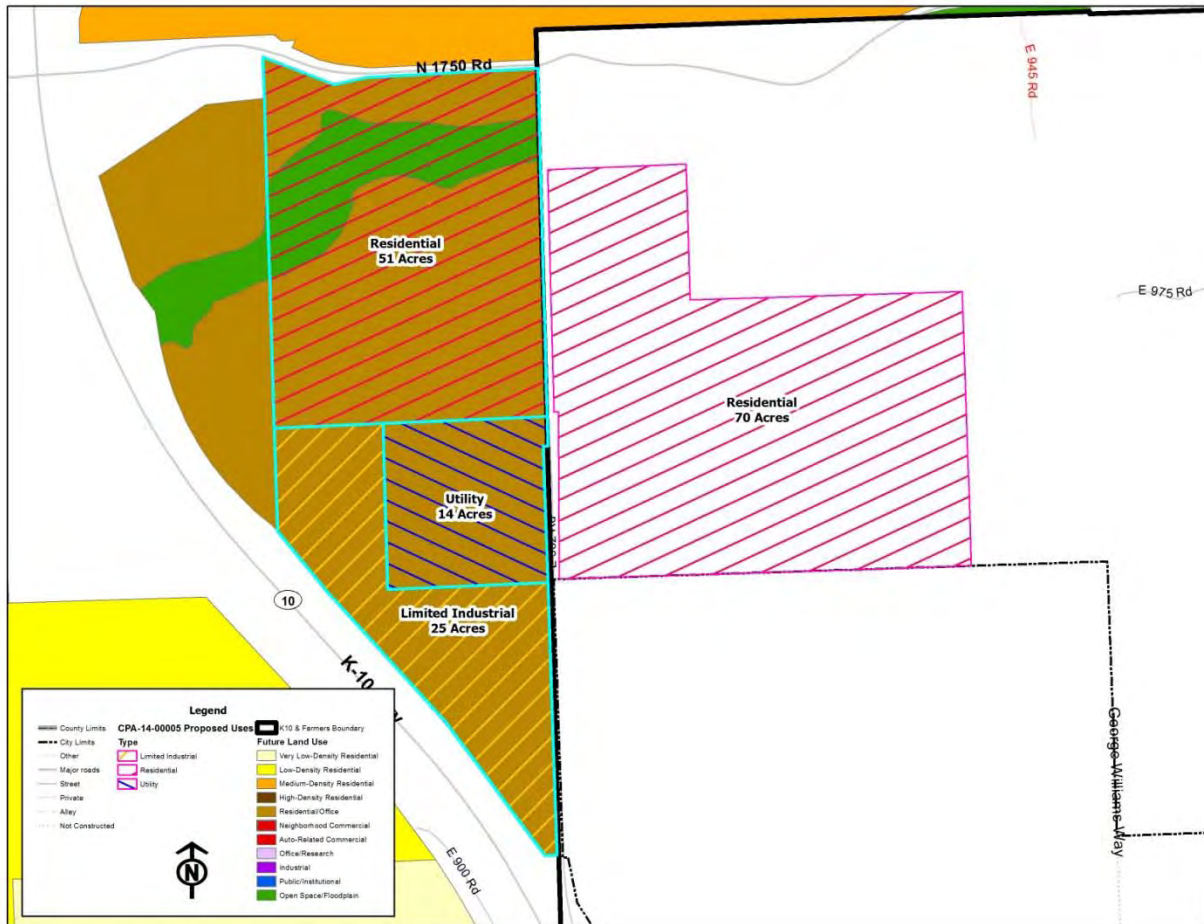


Figure 4: K-10 & Farmer's Turnpike with Proposed Application Overlay

Northwest Area Plan

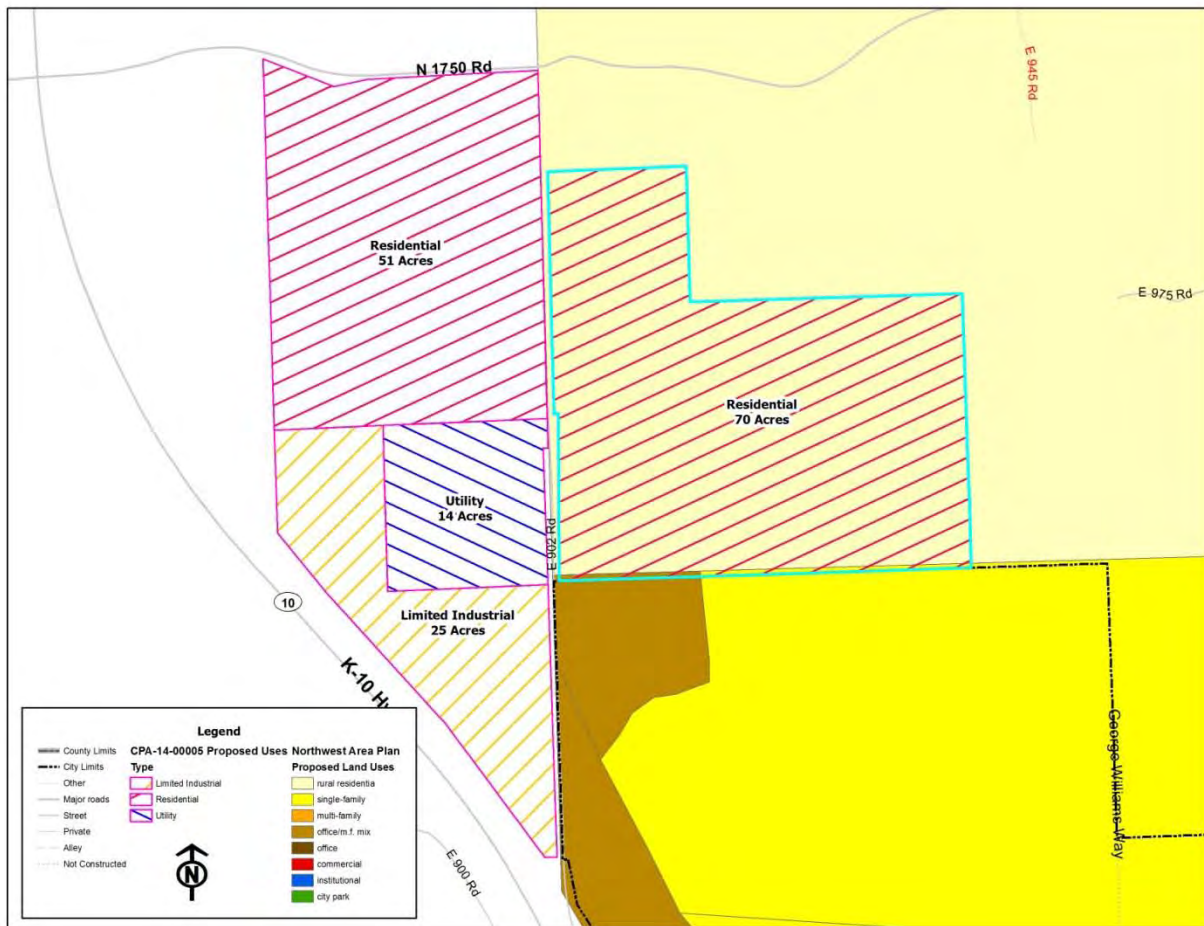


Figure 5: Northwest Area Plan with Applicant Requested Designations

The eastern portion of the proposed amendment is within the Northwest Area Plan as indicated in Figure 5. The Northwest Area Plan designated this tract of land as a rural/residential land use, principally focusing on single-family residential construction, with a density of 1 dwelling unit per acre. At present, the Northwest Area Plan is not incorporated into Chapter 14: Sector Plans of *Horizon 2020*, but is used to guide development in the area.

K-10 & Farmer's Turnpike Plan

The western portion of the proposed amendment is within the *K-10 & Farmer's Turnpike Plan* as indicated in Figure 5. The *K-10 & Farmer's Turnpike Plan* identified this tract of land for residential/office land use, principally focusing on accommodating mixed-use development of administrative and professional offices with varying degrees of residential. This could be achieved by the use of work/live units with a density of 6 to 22 dwelling units per acre. Fundamentally, the Residential/Office land uses allows for a mix of uses as a right, which can include residential-only development, live/work units, and mixed-use developments.

Area History:

Over the years, this portion of the county has principally stayed rural in character. Due to its proximity to the South Lawrence Trafficway branch from I-70, this area has had a long history of being included in several planning studies. Below is a timeline summary of planning and zoning recommendations over the past 35 years regarding this section of the county.

- Plan 95 – Approved: 1977. The plan is minimal in depth and detail for this portion of the City/County, but does prescribe low density residential uses with open space uses because of environmentally sensitive lands and flooding considerations.
- South Trafficway Plan – Approved: July 1986. Anticipated this portion of the Trafficway to be principally surrounded by agricultural uses. Principally short-term in scope, it did not anticipate growth immediately due to the construction of the Trafficway.
- South Lawrence Trafficway Corridor Land Use Plan – Approved: July 1989. The expectation was the surrounding land would remain agricultural due to a lack of utility services. There was anticipation that development pressures would increase in the future, with the long-term vision projecting low to medium-density residential or office park uses.
- Western Development Plan – Approved: March 1994. At that time, development was only envisioned along US-40/6th Street because of the availability of sanitary sewer service. While the plan did not outline any specific uses within this area, it did note, “Urban and suburban growth should proceed with care in order to preserve environmentally or ecologically sensitive land areas.”
- Northwest Area Plan – Approved: May 1998. The quadrant of this planning area that the subject properties fall within was delineated to be an urbanized area. The intent of the plan was to, “Direct higher intensive land uses toward Sixth Street and the South Lawrence Trafficway but direct lower intensive land uses toward the north of sections 28 and 29.” The placement of residential land uses was envisioned to have, “A variety of housing types and costs is encouraged in the southern part of sections 28 and 29. Single family residential is encouraged in the central and northern parts of sections 28 and 29.” The plan also recommends against locating industrial land uses within this area. This plan foresaw this area as principally residential.
- Horizon 2020 – Approved: May 1998. This section of the county is mapped within Service Area 2 of the Urban Growth Area, and in which, development is limited due to the lack water and sewer utilities to this portion of the Douglas County.
- K-10 & Farmer's Turnpike Plan – Approved: January 2009. The most recent and adopted guidance document for this area. The portion of land within this application was outlined in this plan to be residential/office land uses. This specific category was envisioned to encourage traditional neighborhood development, while not intending to foster the development of large-scale apartment type development. An overarching goal of the plan is to, “Maintain the rural character in existing areas until the time that

municipal services allow urban densities to develop.” There are also provisions for using open space between variations in progressing use intensities, which should be comprised of green spaces. This plan also outlines specific residential uses, and it does not intend to provide for large-scale apartment type developments. Residential/Office land use may include single-family dwellings, live/work units, and mixed-use developments.

The planning history reflects continuous support for the conservation of environmentally sensitive open spaces, especially in instances with floodplain encumbered lands, and also the forethought of residential uses in this portion of the City of Lawrence/Douglas County.

Horizon 2020:

Horizon 2020 states, “Plans prepared for specific areas, whether they are areas within the City of Lawrence or areas within unincorporated Douglas County contains detailed policy guidelines for those areas.” As this portion of the City of Lawrence/unincorporated Douglas County was beyond the scope of *Horizon 2020*’s future land use plan, the principal planning document for this section would be the *K-10 & Farmer’s Turnpike Plan*. When the *K-10 & Farmer’s Turnpike Plan* was approved (see Figure 5), this portion was determined to be a viable area for mixed-use space, principally oriented towards residential and office uses. This is further reinforced through the policy encouraging traditional neighborhood development/mixed-use development in this area. However, this plan does not extend east across E. 902 Road, which would have some stronger implications considering the recent approval and construction of Rock Chalk Park adjacent to the south of this segment.

As the development of Rock Chalk Park has progressed, it has strongly influenced the developmental and planning considerations within the area between the new development and the existing boundary of the *K-10 & Farmer’s Turnpike Plan*. In addition, the anticipated Westar substation expansion will also have an effect on the development pattern and character of this area. With this changing setting, the proposed addition to the future land use plan has merit.

The location for the proposed industrial land use complies with the location criteria as outlined in Chapter 7: Industrial and Employment-Related Land Use of *Horizon 2020*. Currently, Chapter 7 of *Horizon 2020* states, “Encourage site availability, site improvements, and community amenities which best respond to the market demands for industrial and business development while maintaining the community objectives for the type and quality of such development.” The existing electrical substation, and subsequent utility easements, creates a space that is delineated by this utility use and the right-of-way for the South Lawrence Trafficway/K-10. The proposed expansion of residential land uses to the east of E. 902 Road is also consistent with the applicable previous plans for the area currently outside of the present *K-10 & Farmer’s Turnpike Plan*. These similar movements of low density residential were envisioned within these areas in historic planning documents.

The applicant’s proposal would isolate a piece of land west of the request, but east of K-10 designated for Office/Research land use and would require access for the Office/Research development to be taken through the adjacent Low-Density Residential development that is part of the applicant’s request. This is not consistent with the policies outlined in the *K-10 & Farmer’s Turnpike Plan* Residential Land Uses, Section 3.1.2.2.1, and Industrial/Office/Research Land Uses, Section 3.1.2.5.2. The reassignment of the 90 acres between K-10, N. 1750 Road and E. 902 Road from Residential/Office, to a mixture of Very-Low Density Residential, Low Density Residential, and Office/Research is partially consistent with the surrounding

development patterns and existing activity in the vicinity, but would be most compatible if the Office/Research portion would remain the designated future land use, instead of switching that to Low Density Residential per the applicant's request.

Consideration should also be given to the weight and importance of the nearby 6th Street and K-10 interchange as a gateway to the community. The location of industrial/warehouse land uses does potentially allow for other uses beyond the piece proposed by the applicant. The *West of K-10 Plan* is the principal planning document for this key intersection, but the land to the north is accounted for within the *K-10 & Farmer's Turnpike Plan*. This stretch of land between the I-70 & K-10 interchange and the 6th Street/US-40 & K-10 interchange will serve as a visual entry gateway for visitors arriving to the community. While architectural design guidelines for industrial development are outlined within the Community Design Manual, the potential expansion of uses is a consideration that should be weighed within this proposal. Consideration should also be given to the applicable 50 foot buffer that will be required as part of the South Lawrence Trafficway (SLT) Overlay District, which is implemented to, "create an aesthetically pleasing corridor along the South Lawrence Trafficway, in keeping with the SLT policy of providing a park-like setting."¹

Due to the importance of this area as a gateway to the community and Rock Chalk Park, and the requested low-density residential land use not being compatible with the Office/Residential that will remain designated buffering K-10; staff is not able to support the applicant's request without modification and conditions.



Figure 6: View of Potential Mini-Warehouses location from K-10, facing north.

¹ City of Lawrence, Land Development Code, Section: 20-307 (a) (1).



Figure 7: Existing Overhead power lines presently on-site, facing north.

STAFF PROPOSAL

Staff would recommend modifying the applicant's request by retaining the already adopted Residential/Office land use in this center portion of the Future Land Use map (see Figure 8). Staff has concerns with reclassifying the entire portion as a low-density, residential-only use because this will, in-effect, isolate the existing Residential/Office land use that is west of the requested portion from the roadway network, principally E. 902 Road, as seen in Figure 4. This could isolate the remaining Residential/Office from E. 902 Road, which would require traffic to and from a higher intensity designated area to go through the residential-only, lower intensity, neighborhood.

With this potential development pattern in mind, staff recommends leaving the existing Residential/Office land use on that piece of land, as depicted in Figure 8, in this portion of the Future Land Use map to help mitigate these potential conflicts and potential isolation. Staff would also recommend a condition be included to maintain the continued preservation of the Open Space/Floodplain designation of the already adopted plan as mapped within the *K-10 & Farmer's Turnpike Plan* Future Land Use map 3-1; and to require including a 200-foot Open Space/Floodplain buffer between the proposed Office Research land use and the northerly adjacent Residential/Office land use in order to mitigate potential use and site conflicts that could arise between differing intensities of land use. To further ensure the integrity of the gateway entry to the community, staff would also recommend the condition that no exterior storage shall be permitted within the Office Research or Residential/Office designated areas included within this proposal to strengthen the gateway entry policies of both the *K-10 and Farmer's Turnpike Plan* and the *West of K-10 Plan*.



Figure 8: Staff Recommended Future Land Use Revision

Other Considerations:

Staff has made modifications to the following planning documents based on staff's recommendation:

- Chapter 7: Industrial and Employment-Related Land Use: The changes include revisions to page 7-23 regarding where additional industrial land use should be sited.
- Chapter 14: Specific Plans, including changes to *K-10 & Farmer's Turnpike Plan*: The changes to Chapter 14 include *K-10 & Farmer's Turnpike Plan*, Future Land Use maps 3-1, to change the current residential/office designation to the three requested uses, the expansion of the planned boundaries east of E. 902 Road to designate this land as Residential/Office, and the land use descriptions as to where the designations are revised.

Copies of the revised Chapter 7: Industrial and Employment-Related Land Use and Chapter 14: Specific Plans: *K-10 & Farmer's Turnpike Plan* are attached to this staff report with the changes outlined.

COMPREHENSIVE PLAN AMENDMENT REVIEW

- A. Does the proposed amendment result from changed circumstances or unforeseen conditions not understood or addressed at the time the Plan was adopted?

Applicant Response: Yes, Rock Chalk Park was unforeseen and has a great impact on the surrounding area. Westar also has plans to expand the existing substation and construct additional overhead power lines in this area.

Staff's Response: *Horizon 2020* anticipates changes and additions over time. The construction of Rock Chalk Park and the Lawrence Recreation Center were not anticipated at the time of the last revision of the pertinent chapters of *Horizon 2020*. *Horizon 2020* mainly foresaw development in this area when city utilities were available to provide service in this area. The scale of these adjacent projects will bring the infrastructure closer to the sections of land covered in this amendment, but service capacity would need to be determined as projects are brought forward for site plan consideration.

B. Does the proposed amendment advance a clear public purpose and is it consistent with the long-range goals and policies of the plan?

Applicant Response: Yes, there is a need for additional mini-warehouse units and single family residential housing. This amendment will provide areas for both.

Staff's Response: Staff's recommendation is consistent with the goals and policies outlined in *Horizon 2020* and the *K-10 & Farmer's Turnpike Plan*. As outlined, the previous planning documents envisioned this area as a lower-intensity residential area, while the most recently adopted plan envisions this area as a mixture of uses. The *K-10 & Farmer's Turnpike Plan* identifies the subject properties as Residential/Office, and this land use balance should be maintained in some manner to be consistent with the community vision for this portion of the planning area, and to help mitigate potential conflicts and potential isolation of the remaining Residential/Office land use adjacent to the west. The potential expansion of the *K-10 & Farmer's Turnpike Plan* across E. 902 Road is detailed in a consistent land-use vision with both adopted planning documents, as well as the historic planning vision for this area.

C. Does the proposed amendment a result of a clear change in public policy?

Applicant's Response: Yes. The recent approval of Rock Chalk Park and the Lawrence Recreation Center is a change in the plan for the area which has driven the proposed plan amendment.

Staff's Response: Public policy has not changed regarding policies with increasing available industrial use land. As the applicant has noted, the construction of Rock Chalk Park has modified the potential program for growth and development within this sector. Overall, the potential development within this portion of the *K-10 & Farmer's Turnpike Plan* was envisioned to be contingent on the availability of city utility services.

Public policy has also not changed regarding growth management and residential land uses. Development potential would need to be consistent with both the goals and policies included within *Horizon 2020* and *K-10 & Farmer's Turnpike Plan*.

In addition, the following shall be considered for any map amendments:

A. Will the proposed amendment affect the adequacy of existing or planned facilities and services?

Applicant's Response: The proposed amendment will not have an effect on existing or planned facilities and services as it is a minor change from the existing plan.

Staff's Response: The properties are currently not being served by existing City services. Further review would be completed as part of the platting and site planning process to address potential issues when the property is served.

B. Will the proposed change result in reasonably compatible land use relationships?

Applicant's Response: Yes. There is a small area where IL zoning is adjacent to R zoning but it will be separated using a green space buffer and the R zoning will "back up" to the IL zoning.

Staff's Response: As proposed, the application would have an intensity conflict with the potential placement of residential land uses directly adjacent to the utility/industrial uses. Staff's recommendation would meet Goal 2 in Chapter 6 of *Horizon 2020*, which ensures a compatible transition between the higher-intensity development and less-intensive uses. Under the initial request, there is no transition in land use or zoning to the proposed low-density residential and planned industrial land use. Staff's recommendation introduces a green space buffer to mitigate potential conflicts, while ensuring the preservation of utility easements also present within this portion of the area.

C. Will the proposed change advance the interests of the citizens of Lawrence and Douglas County as a whole, not solely those having immediate interest in the affected area?

Applicant's Response: Yes. The proposed plan will create quality development that will provide opportunities for tax base expansion and diversification. It will also provide an opportunity for a unique residential neighborhood and provide a higher use for an area designated residential/office that is not desirable for that use.

Staff's Response: The expansion of available industrial land would provide new opportunities for the community as a whole, as well as potentially attract businesses to this portion. This can be considered an advancement of the interests of the citizens of Lawrence and Douglas County if the potential is realized. Similarly, expansion of the residential land uses within the vicinity of this proposal, and its location adjacent to Rock Chalk Park, could potentially be a valuable contribution to the future growth and development of this part of the urban growth area once services are available.

PROFESSIONAL STAFF RECOMMENDATION

In staff's opinion the request is compatible with the existing land use designations of the *K-10 & Farmer's Turnpike Plan*, and revising the plan is appropriate for the reasons outlined in this report and when Comprehensive Plan policies are reviewed as a whole.

Staff recommends approval of this Comprehensive Plan Amendment to *Horizon 2020*, including the *K-10 & Farmer's Turnpike Plan*, to change the designated land use from Residential/Office to Very Low-Density Residential, Low-Density Residential, Residential/Office, and Office/Research uses for the property as mapped along E. 902 Road, and recommends forwarding this Comprehensive Plan Amendment to the Lawrence City Commission and Douglas County Board of County Commissioners with a recommendation of approval.

Findings for recommendation of approval, contingent upon the following conditions:

1. The expansion of the *K-10 & Farmer's Turnpike Plan* planning area is consistent with previous planning documents, and the proposed residential land use expansion is consistent with the policies of both *Horizon 2020* and *K-10 & Farmer's Turnpike Plan*;
2. Maintaining the Residential/Office land use is recommended to match the adopted community vision for this portion of the *K-10 & Farmer's Turnpike Plan*, and provide a transitional use to the Office/Research land uses;

In the event that the Commission desires to accommodate the proposed project, staff has provided draft language in order to make the necessary changes to *Horizon 2020*, including the *K-10 & Farmer's Turnpike Plan*.

K-10 & Farmer's Turnpike Plan

Lawrence-Douglas County Planning Office

Lawrence-Douglas County Planning Commission 11/17/08

Lawrence City Commission 12/9/08

Douglas County Board of County Commissioners 1/7/09



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Section 1: Introduction

1.1 Purpose

The purpose of the *K-10 & Farmer's Turnpike Plan* is to outline specific land use goals, policies and recommendations for the planning area shown on Map 1-1, while being consistent with the overall adopted comprehensive plan for the community. Portions of the planning area are adjacent to the city of Lawrence and because of its proximity to the city and interstate highways, it is likely to be an area of intense development pressure. The plan outlines future land uses for the planning area to be used as a guide for urban development only after annexation into the city of Lawrence occurs. This plan does not annex property nor does it rezone property upon adoption. These types of requests are typically requested by the property owners and/or developers that have stake in such property and wish to develop within the city of Lawrence.

The plan should fit like a puzzle piece into the larger context of the surrounding street, utility, and land use network of the entire community. Logical connections between the planning area and adjacent neighborhoods are a key factor in the development of the plan. The recommendations contained within this plan are intended to guide the area's growth patterns as the development of the K-10 Highway and Farmer's Turnpike area occurs within the city of Lawrence. The plan identifies appropriate land uses along an arterial road corridor and a highway interchange that aid in meeting a recognized need for industrial/employment center opportunities that will support the general health and prosperity of the region.

It is expected that development in the planning area will occur within the span of decades as the market demands and as urban services are able to be provided. It is anticipated that rural and agricultural uses will continue to be present as the planning area urbanizes. Because of the long timeframe of the plan, it should be reviewed on a regular basis.

1.2 Description of Planning Area

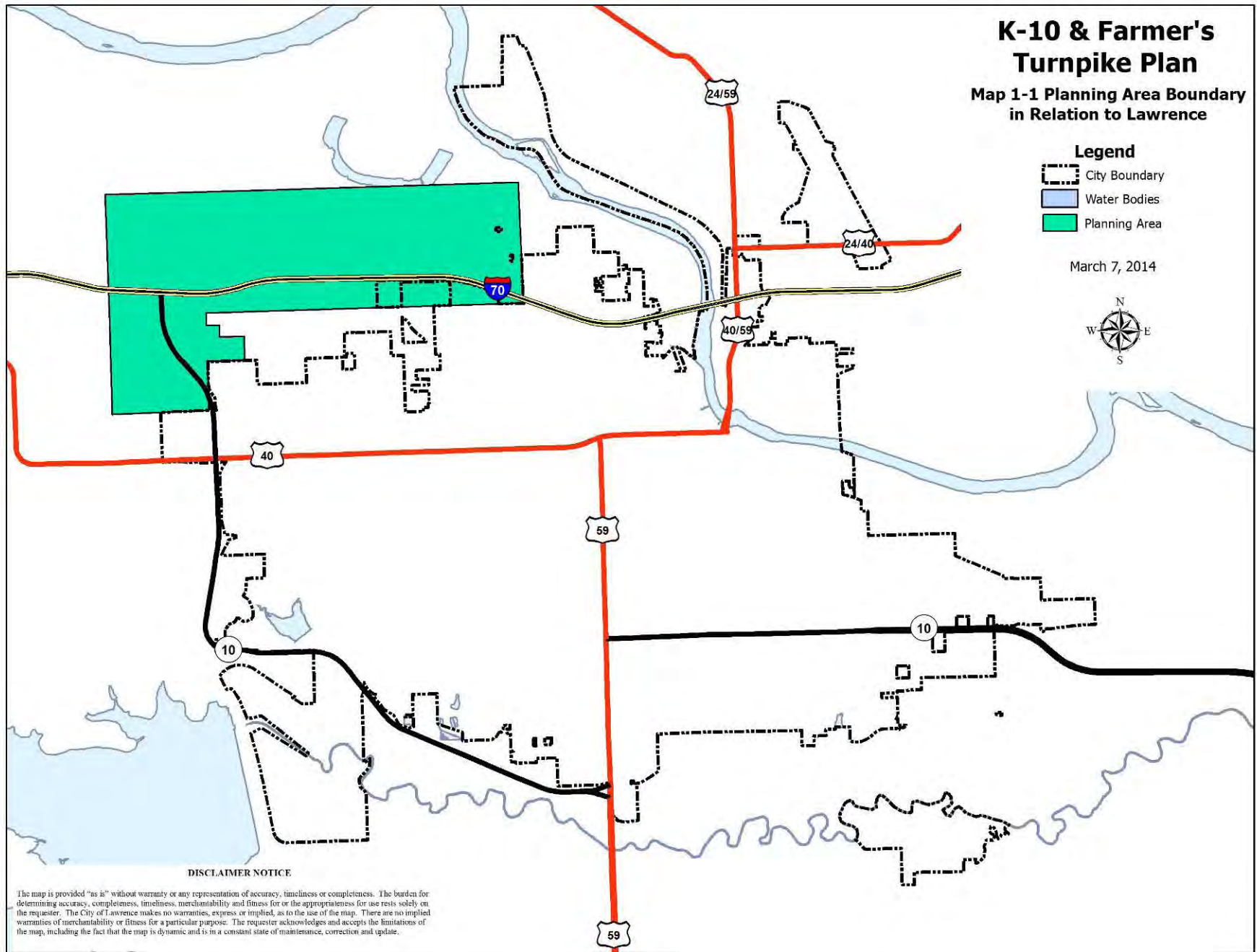
The *K-10 and Farmer's Turnpike Plan* planning area is located northwest of the city of Lawrence (see Map 1-1) and southeast of the city of Lecompton, in northern Douglas County, Kansas. The planning area contains approximately 4,075 acres and encompasses portions of Sections 17 and 18 of the Lecompton Township, portions of Sections 14, 15, 16, 21, 22, and 23 of the Wakarusa Township, and portions of Sections 19, 20, and 30 of the Kanwaka Township.

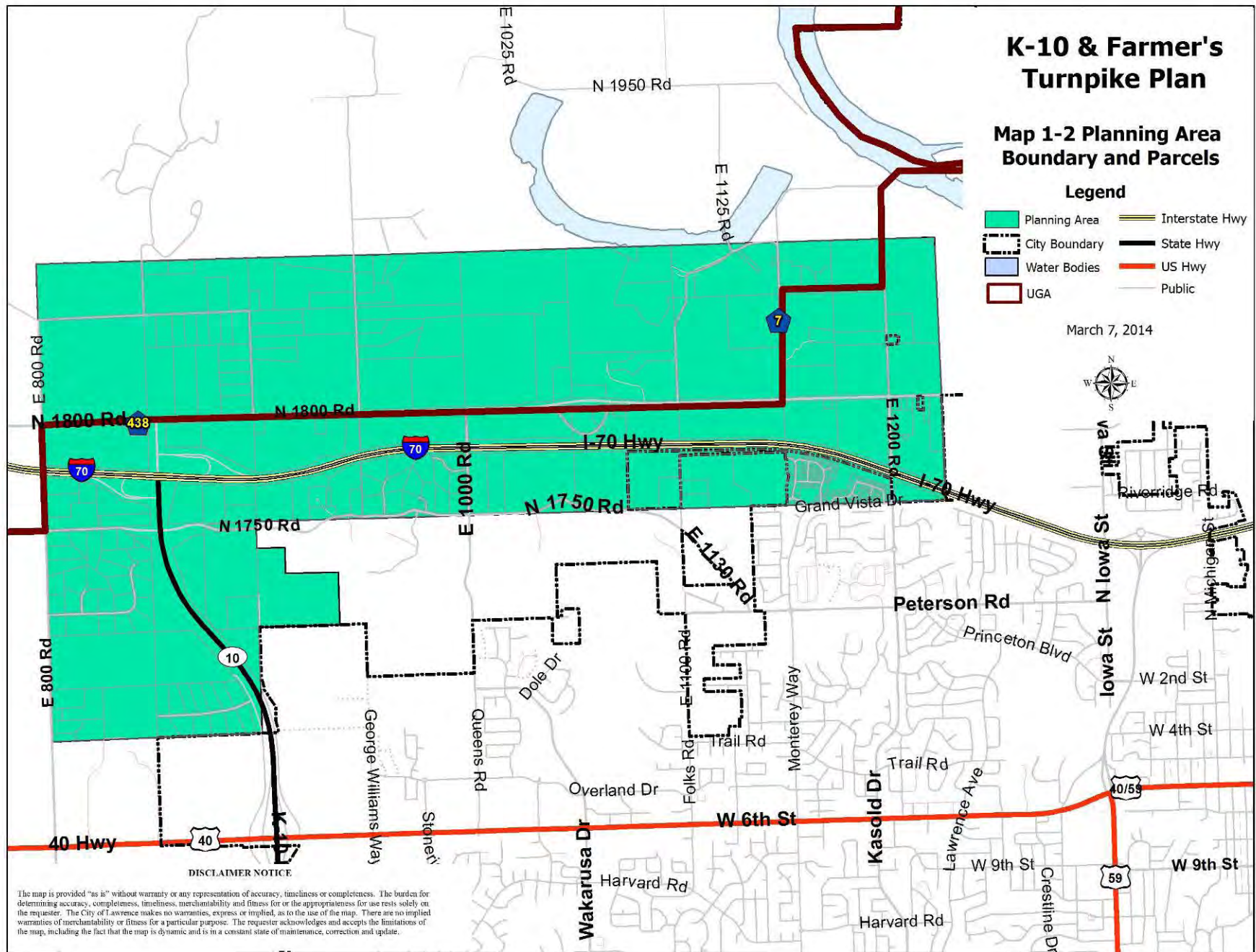
The planning area boundaries are: E 800 Road on the west, approximately $\frac{3}{4}$ of a mile north of the Farmer's Turnpike (N 1800 Road/County Hwy 438) on the north, approximately $\frac{1}{4}$ of a mile east of E 1200 Road from the north boundary to Grand Vista Drive extended on the east and E 902 Road from approximately N 1750 Road to approximately $\frac{1}{2}$ of a mile north of W. 6th Street (Hwy 40), and approximately N 1750 Road from E 902 Road to approximately $\frac{1}{4}$ of a mile east of E 1200 Road and approximately $\frac{1}{2}$ of a mile north of W. 6th Street (Hwy 40) from E 800 Road to E 900 Road on the south. See Map 1-1. Approximately half of the planning area is located outside the Lawrence Urban Growth Area (UGA), as currently identified in *Horizon 2020*. Those portions of the planning area that are located within the UGA, are located in service area 4 which is the outer most service area in *Horizon 2020*.



The dominant character of the planning area is rural in nature although a variety of uses surround the planning area. I-70 and a toll plaza are major elements within the area. North of the planning area is predominantly rural in nature with some rural residential uses and agriculture crop uses. East of the planning area is primarily industrial along with the Westar power plant. Urban density residential uses are south of the planning area, but mainly to the east. Rural uses are also south of the planning area, but the area is urbanizing from the south towards the planning area. West of the planning area is rural in nature. While the areas described are outside of the planning area boundaries, they can influence the land use development patterns within the K-10 Highway and Farmer's Turnpike area.

The planning area contains a wide range of ownership parcel sizes with the largest being approximately 186 acres to approximately 1,378 square feet. The planning area boundaries and parcel composition are illustrated in Map 1-2.





1.3 Background

The Kansas Turnpike travels through the planning area as it travels through Lawrence and Douglas County. The Kansas Turnpike is 50 years old and extends 236 miles from Kansas City, Kansas to the Oklahoma border south of Wichita. 32,755,932 vehicles traveled the Turnpike in 2006.¹ The Lecompton, Lawrence: K-10 interchange (Exit 197) opened in November of 1996 and is the western Kansas Turnpike interchange in Douglas County that serves the planning area. It connects the Kansas Turnpike to K-10 Highway which was also completed in November of 1996. K-10 Highway, also known as the South Lawrence Trafficway (SLT), takes traffic from the Kansas Turnpike and from US Hwy 40, south to US Hwy 59, south of Lawrence.

The city of Lecompton is a destination located approximately 3 miles northwest of the planning area. Lecompton has a long history beginning in 1854 when it was founded and originally called "Bald Eagle". Lecompton became the capital of the Kansas Territory in 1855. Its early history as the territorial capital revolved around gaining Kansas' entrance into the Union as a pro-slave state. That effort failed as the free-state supporters ultimately prevailed and lead to the political birth of the Civil War. The free-state leaders moved the capital to Topeka when Kansas became a state in 1861. Much of that early history is on display in Lecompton². Farmer's Turnpike (N 1800 Road) and the Lecompton interchange play an important role in directing tourists to Lecompton. The Farmer's Turnpike was the original highway between Lecompton and Lawrence before I-70 (Kansas Turnpike) was completed in 1956.

The Kansas Territory was opened to settlement in May of 1854. Soon after the territory was opened, abolitionists from New England rushed to the area in an effort to keep the territory from becoming pro-slavery. Lawrence is said to be one of the few cities founded purely for political reasons. The founding group named the town after the financier of the expedition, Amos Lawrence. Lawrence also acted as an important stop on the Underground Railroad, helping escaped slaves reach freedom safely. On August 21, 1863, William Quantrill assembled a group of men in Missouri and rode into Lawrence. The raiders entered the city "to burn every house and kill every man." Additionally, Lawrence is located between the two trails, the Oregon and the Santa Fe Trails. After the Civil War ended in 1865, railroads rapidly pushed across the Great Plains and wagon trails became obsolete³.

Most recently the city of Lawrence has been growing and developing to the south and west of the central city. Development proposals to the north and west of the city of Lawrence, within the Urban Growth Area (UGA), have become more frequent in recent years. The completion of Free State High School in 1997 also spurred development on the west side of Lawrence. *Horizon 2020* includes policies that encourage development to city standards within the UGA.

¹ Kansas Turnpike Authority, <http://ksturnpike.com/history.shtml>

² Lecompton Kansas Historical Society, <http://lecomptonkansas.com/>

³ Lawrence Convention and Visitor's Bureau, <http://www.visitlawrence.com/>

1.4 Industrial and Employment Related Development

There is a recognized need to foster job creation and industrial space in the community, with a particular deficiency of large tract industrial space (approximately 100 acres and greater). *Horizon 2020*, the city and county's comprehensive long-range plan, identifies many goals, policies and strategies as to how to grow and develop the city of Lawrence and Douglas County as a whole. Chapter 7 – Industrial and Employment-Related Land Use of *Horizon 2020* lists a strategy of “increasing the community's involvement in economic development in order to secure a job growth goal of 20,000 total new jobs in Douglas County by the year 2020”. The K-10 & Farmer's Turnpike area can assist in reaching this goal by supporting areas for potential industrial and office/research development. The area lends itself as an ideal location for industrial and employment center development because of the access to both a federal interstate and a state highway. Additionally, there is an opportunity to develop large parcels on land that contains minimal slopes. The intent is not to locate all of those potential jobs within the planning area but to spread them out across the city and county in existing and new industrial areas to address the different needs of the potential employers.

Historically, industry has developed in clusters throughout the city. Some examples of existing industrial areas are the Santa Fe Industrial area, the Burroughs Creek Corridor, the Union Pacific Railroad Corridor and the East Hills Business Park. The East Hills Business Park specifically was developed in the 1980's by a partnership between the city of Lawrence, Douglas County and the Chamber of Commerce as a way to fulfill the need for industrial space. Presently, East Hills is almost fully built out, with only a few small lots available for development along with one large tract consisting of approximately 87 acres on the east side of the park.

ECO² is an advisory board to the Lawrence City Commission and Board of County Commissioners of Douglas County created in order to develop a long-term plan for the identification, evaluation and selection of land for both industrial/business parks and open space preservation. They presented their report in 2007 which outlines a long-term plan of public/private partnership that satisfies their goals of the advancement of industrial/business park and open space preservation. The ECO² report, in conjunction with *Horizon 2020* provides a methodology to weigh specific criteria to identify and recommend a number of new business and industrial development locations in the city of Lawrence and unincorporated Douglas County. Some of the criteria used to identify and recommend locations for industrial development include being generally located in close proximity to major transportation networks, contains land that has minimal average slope, be in an area that lies outside of the regulatory floodplain, and have the potential for large tract development.

1.5 Policy Framework

Horizon 2020 serves as the overall planning guide and policy document for this plan. In addition to *Horizon 2020*, guiding policy is also obtained in other adopted physical element plans. Together, these plans provide the general “umbrella” policies under which this plan is developed. Listed, these plans are:

- *Horizon 2020*, the Comprehensive Plan for Lawrence and Unincorporated Douglas County. Lawrence-Douglas County Metropolitan Planning Office. 1998 as amended.
- *Transportation 2030*, Lawrence/Douglas County Long Range Transportation Plan. Lawrence/ Douglas County Metropolitan Planning Office and Parsons Brinkerhoff. March 26, 2008.
- *Lawrence-Douglas County Bicycle Plan*, Lawrence/Douglas County Metropolitan Planning Office. May 2004.
- *Northwest Plan*, Lawrence/Douglas County Metropolitan Planning Office. January, 1997.
- *Lawrence Parks & Recreation Department A Comprehensive Master Plan*. Leon Younger & PROS. 2000.
- *City of Lawrence, Kansas Water Master Plan*. Black & Veatch. December 2003.
- *City of Lawrence, Kansas Wastewater Master Plan*. Black & Veatch. December 2003.
- *2008-2013 Capital Improvement Plan*. City of Lawrence. June 26, 2007.

Section 2 - Existing Conditions

The inventory and analysis of existing conditions in this plan are intended to serve as a resource and background for the recommendations included in Section 3 of this plan.

2.1 Land Uses

2.1.1 Existing Land Uses

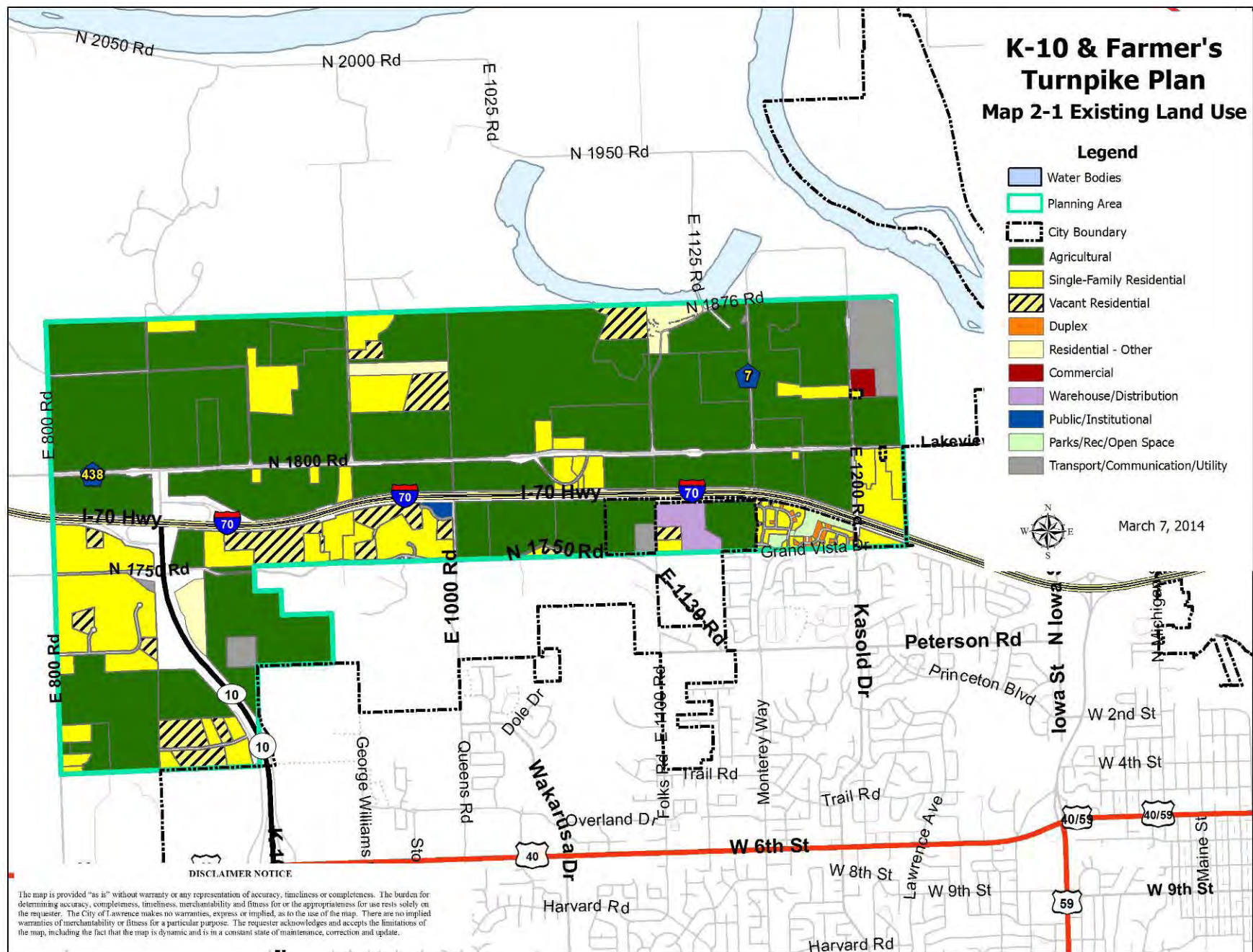
There are currently a variety of land uses within the planning area. The planning area has approximately 3,609-679 acres of land dedicated to uses other than public rights-of-way. The source information for the existing land use summary and map are based on the County Appraisers' land use code and updated by planning staff. Agricultural uses, in the form of row crops, pasturelands, and farms are the prominent land uses and encompass approximately 2,569 acres of land. As the area urbanizes, these agricultural uses will be reused for more urban uses and this category is not carried forward to the future land use map. Remaining open spaces in an urbanized environment are referred to as park or open space.

The second largest land use category is single-family residential use with approximately 593 acres. The single-family residential use category is property with one dwelling unit located on it. The *Land Development Code* defines a dwelling unit as, "one room, or a suite of two or more rooms, designed for or used by one family or housekeeping unit for living and sleeping purposes and having only one kitchen or kitchenette". The single-family residential use is seen within the planning area in both the rural and urban form. There are three rural subdivisions and two urban subdivisions platted within the planning area. The urban subdivisions are a mix of single-family and duplex residential uses.

The remaining land is designated a variety of uses ranging from open space to public/institutional uses. The category identified as residential-other is mainly used to identify a situation near Lakeview Lake where the property is owned by a homeowners association but the individual homes are privately owned. The existing land uses are shown on Map 2-1 and the planning area breakdown is described in Table 2-1.

TABLE 2-1: EXISTING LAND USE SUMMARY

Land use	Acres
Agricultural	2,568.60 2,634.85
Single-Family Residential	593.57 597.19
Vacant Residential	203.83
Duplex	6.00
Residential - Other	69.58
Commercial	9.980
Warehouse/Distribution	33.998
Public/Institutional	4.972
Parks/Rec/Open Space	22.69
Transport/Communication/Utility	95.72
TOTAL	3,608.94



2.1.1 Historic Resources

Currently, there are no sites or structures listed on the National, State or Local Register of Historic Places within the planning area. However some resources have been identified as having the potential to qualify for listing. At the time that these sites or structures are listed, those resources should be protected and preserved in accordance with local, state and national preservation law.

The planning area is located within the Freedom Frontier National Heritage Area. This is an area encompassing 41 counties in Kansas and Missouri. A National Heritage Area, as defined by the National Parks Service, U.S. Department of Interiors, is “a place designated by the United States Congress where natural, cultural, historic and recreational resources combine to form a cohesive, nationally-distinctive landscape arising from patterns of human activity shaped by geography. These areas tell nationally important stories about our nation and are representative of the national experience through both the physical features that remain and the traditions that have evolved within them.” Currently the Freedom Frontier National Heritage Area is in the process of completing a management plan to set out goals, objectives, suggest alternative approaches for development, management, preservation, conservation, interpretation, and/or marketing for the area.

The Lawrence-Douglas County region has been the epicenter of conflicts that still define American values, and its struggles to achieve them. The issues of slavery's abolition, the forced immigration of Native American nations and the inspiring resilience of those nations in the face of oppression, the voluntary immigration of settlers along the Santa Fe and Oregon Trails, and the final resolution of racial segregation in our public schools a century later – all these belong to the story of the Freedom's Frontier National Heritage Area. This story continues to evolve, to define and influence who we are today, in the region and as a nation.⁴

⁴ Freedom's Frontier National Heritage Area, <http://www.freedomsfrontier.org>

2.2 Zoning Patterns

The planning area encompasses approximately 4,075 acres of land including public rights-of-ways and most of which is located within the unincorporated area of Douglas County. The majority of the planning area that is located within unincorporated Douglas County is zoned A (Agriculture District). This is mainly used for row crops, pasture land and farm purposes. There are four areas zoned A-1 (Suburban Homes District) which are mainly large lot residential subdivisions. The remainder of the planning area within unincorporated Douglas County is zoned R-1 (Single-Family Residential), I-3 (Heavy Industrial) and VC (Valley Channel) Districts. See Map 2-2.

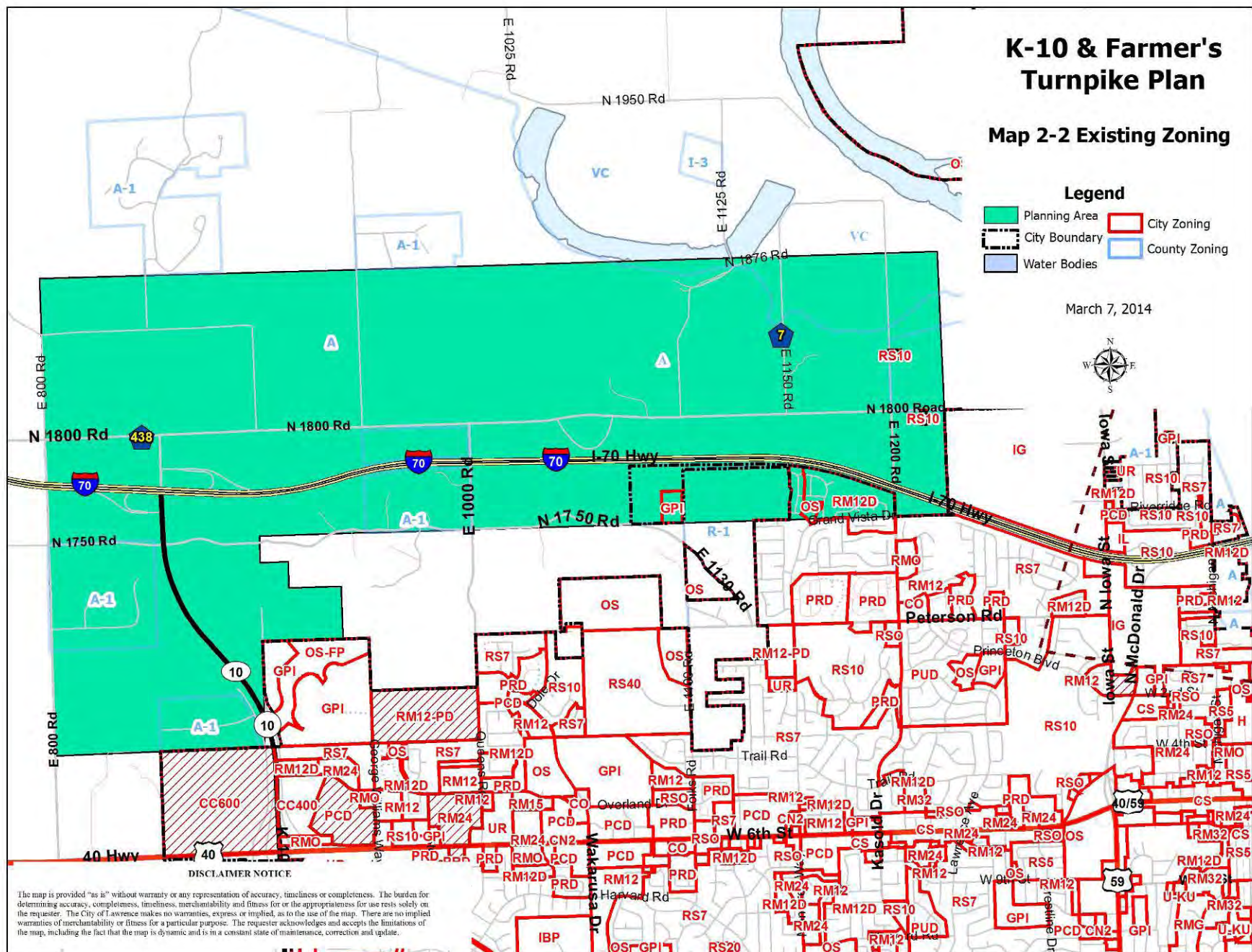
The planning area also includes three areas that are within the city of Lawrence. One area is developed with single-dwelling and multi-dwelling zoning districts. A second area is zoned GPI (General Public and Institutional) and OS (Open Space). These areas include park space and a sanitary sewer pump station. The third area within the city limits is located in the northwest portion of the planning area and is zoned for industrial uses. This area is not yet developed.

Table 2-2 County Zoning Classifications

County Zoning	District Name	Comprehensive Plan Designation
A	Agricultural	Agriculture
A-1	Suburban Homes	Very Low-Density Residential
R-1	Single-Family Residential	Low-Density Residential
I-3	Heavy Industrial	Industrial
VC	Valley Channel	N/A

Table 2-3 City Zoning Classifications

City Zoning	District Name	Comprehensive Plan Designation
RS10	Single-Dwelling Residential (10,000 sq. feet per dwelling unit)	Low-Density Residential
RS7	Single-Dwelling Residential (7,000 sq. feet per dwelling unit)	Low-Density Residential
RM12D	Multi-Dwelling Residential Duplex (12 dwelling units per acre)	Medium-Density Residential
IG	General Industrial	Warehouse and Distribution or Industrial
GPI	General Public and Institutional	N/A
OS	Open Space	N/A

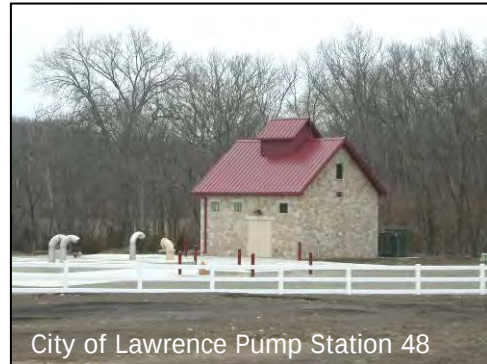


2.3 Infrastructure

2.3.1 Water and Wastewater Infrastructure

A summary of the existing water utilities is shown on Map 2-3 and wastewater utilities (sanitary sewer) is shown on Map 2-4. Municipal water and wastewater is provided to those properties that are within the current city limits. Properties that are within the planning area, but outside the city limits, are served by Douglas County Rural Water District #1, #6 or private wells, and private septic systems.

The city of Lawrence sanitary sewer infrastructure does not extend outside the current city limits. Pump Station 48 (PS 48) was recently completed to provide for growth in the northwest area of Lawrence and is located just south of E 1100 Road and I-70. The Department of Utilities is currently underway with a project to extend a gravity interceptor line west from PS 48 to the area within the city limits, north of W. 6th Street, between Queens Road and K-10 Highway. Based on the adopted sanitary sewer master plan, this interceptor line is being designed to allow for future service to the I-70 corridor within the current urban growth area (UGA) as identified in *Horizon 2020*. The currently adopted 2003 Water and Wastewater Master Plans do not address areas outside of the UGA. As such, the majority of the area north of N 1800 Road within the planning area has not yet been evaluated for water and sanitary sewer service as a part of utilities master plan. An update to the sanitary sewer master plan is in the preliminary stages at this time. The plan update will address the areas within the planning area that have not previously been evaluated.



The majority of the planning area, which is located outside of the Lawrence city limits, is currently served by Douglas County Rural Water District's #1 and #6. The city of Lawrence water distribution mains currently extend to the intersection of E 1200 Road (Kasold Drive) and N 1800 Road (Lakeview Road); Wakarusa Drive and E 1000 Road (Queens Road) and US Hwy 40 (W. 6th Street) and K-10 Highway.

2.3.2 Stormwater Infrastructure

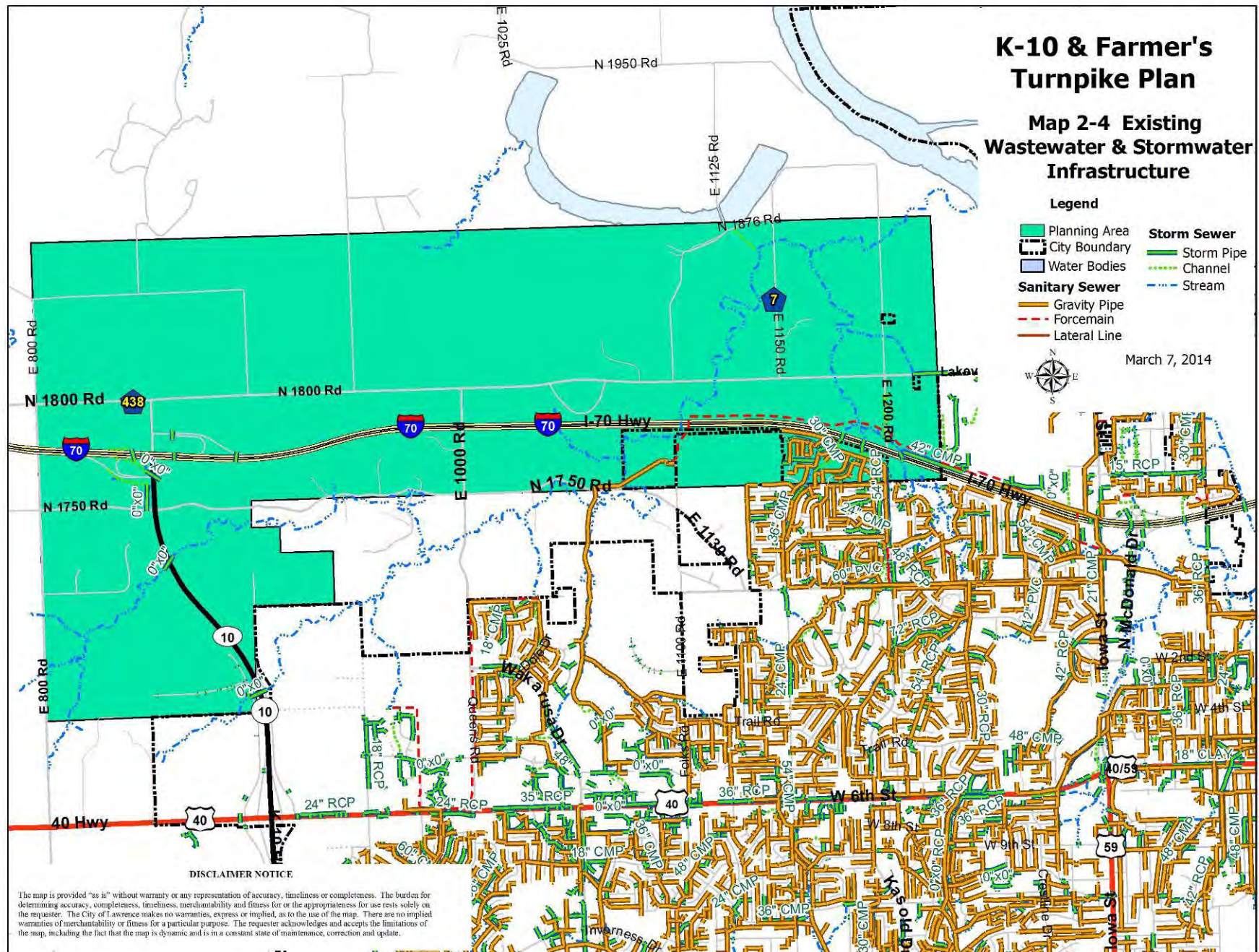
A summary of the existing stormwater utilities, channels, and natural streams are shown on Map 2-4. There is a small amount of stormwater collected by an enclosed stormwater pipe system within portions of the planning area that are within the city limits. The majority of the stormwater is handled by open channels and streams. The stormwater drains to the north, by way of the tributaries, to Lake View Lake and the Kansas River.

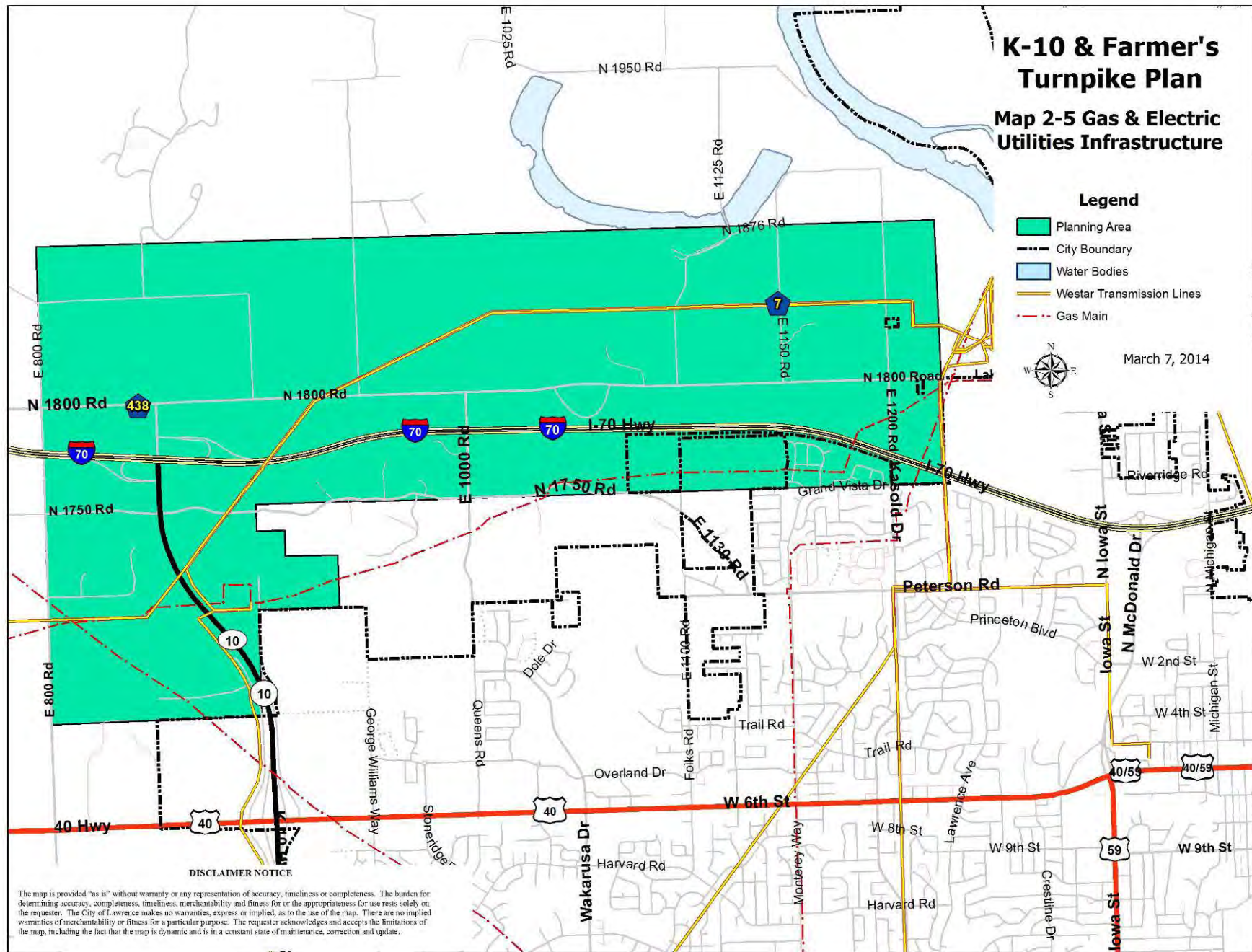
2.3.3 Gas Infrastructure

The planning area includes two natural gas lines. One is owned by Southern Star Gas and it crosses the southwestern portion of the planning area. The second is owned by Williams Natural Gas and it crosses the planning area on the southwest portion and crosses again on the eastern portion of the planning area. See Map 2-5.

2.3.4 Electric Infrastructure

There are currently two electric companies that service the planning area. Generally, Kaw Valley Electric services the western side of the planning area and Westar services the eastern side. Large electric transmission lines also travel through the planning area. See Map 2-5.





2.3.3 Transportation

2.3.3.1 Streets

Transportation 2030 (T2030) is the comprehensive, long-range transportation plan for the metropolitan area. T2030 designates streets according to their functional classification or their primary purpose. These functional classifications are shown on Map 2-6. The classification system can be described as a hierarchy from the lowest order, (local streets) that serve to provide direct access to adjacent property, to (collector streets) that carry traffic from local streets, to major thoroughfares (arterial streets) that carry traffic across the entire city. Freeways and expressways are the highest order of streets and are designed with limited access to provide the highest degree of mobility to serve large traffic volumes with long trip lengths.



T2030 does not identify collector streets for the entire planning area. T2030 is updated at least every 5 years. This area should be fully studied during the next update to address the future street network.

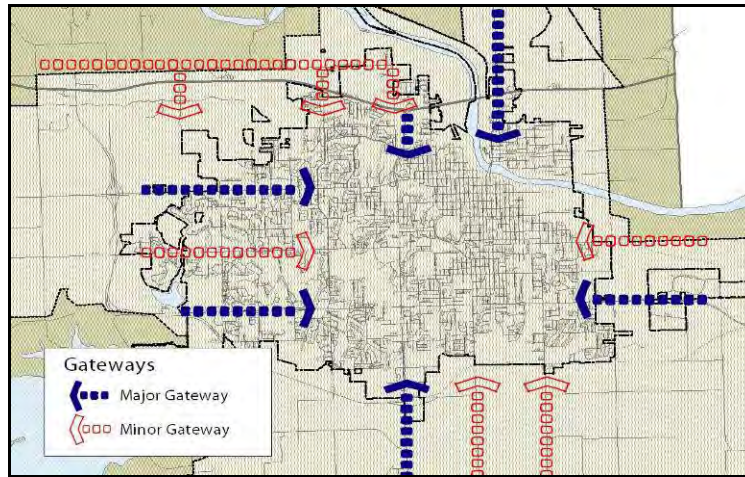
2.3.3.2 Gateways

Chapter 2 of T2030 discusses and identifies minor and major gateway into and out of Lawrence. T2030 states, "Gateways are locations on transportation corridors that define the entrances to cities. These provide visitors with a first impression of the city and often indicate the transition from rural to urban land uses. As such, cities desire to make these locations as attractive and informative as possible. As noted in T2030 in Figure 2.4, there are several roadways that represent gateways into the city of Lawrence or into smaller communities within the region that should be reviewed for aesthetic and informational enhancements when they are improved."

T2030 identifies Farmer's Turnpike (N 1800 Road/County Hwy 438) and E 1000 Road (Queen's Road) as minor gateways into Lawrence based on the corporate boundaries shown in Figure 2.4 of T2030. The interchange of K-10 Highway and I -70 will be a gateway into Lawrence when and as development occurs within the city, and provides the greatest opportunity to develop with quality site planning, building materials, signs and other elements that create a sense of place. Also, K-10 Highway and I-70 are identified as truck routes into and out of Lawrence.

Additionally the I-70/K-10 Highway interchange is a gateway into Lecompton. The "Lecompton Interchange", as it is referred to by the Kansas Turnpike Authority, is the only gateway into the city of Lecompton from I-70.

Lawrence Gateways



2.3.3.3 Transit



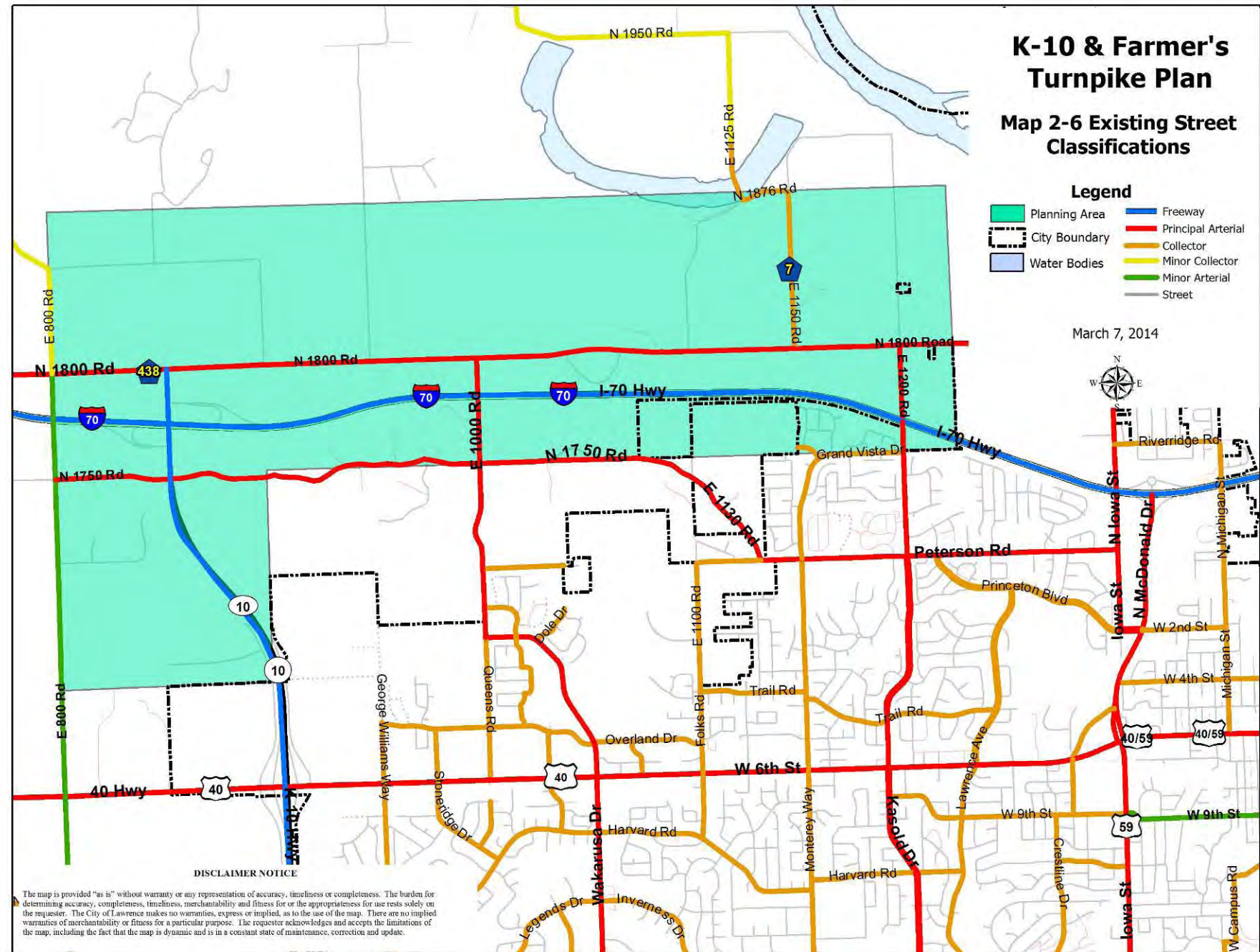
Lawrence has a public transportation system (The T) which operates throughout the city. This system allows people to travel to other areas of the city without relying on a personal automobile. There are currently no transit routes that travel into the planning area.

2.3.3.4 Bicycle Facilities

Lawrence and Douglas County have a joint bicycle plan for the community, the *Lawrence-Douglas County Bicycle Plan*. This plan identifies existing and future bicycle routes, lanes, and multi-use paths. A bicycle route is a network of streets to enable direct, convenient and safe access for bicyclists. A bicycle lane is a separate space designated with striping, signage or pavement markings for exclusive use by bicycles within a street. A multi-use path is a separate path adjacent to and independent of the street and is intended solely for non-motorized travel.



Currently, there is only one existing bicycle facility within the planning area. There is an existing multi-use path along the east side of K-10 Highway to E 1130 Road. There is a future bike lane identified to connect E 1100 Road (Folks Road) to Monterey Way by way of Hunters Hill Drive. Existing bike routes are identified along N 1800 Road (Farmer's Turnpike/County Hwy 438 and Lakeview Road) through the planning area and from N 1800 Road (Farmer's Turnpike and Lakeview Road) along E 1200 Road (Kasold Drive) to I-70. Future multi-use paths are identified along E 1130 Road, E 1000 Road (Queens Road) and Kasold Drive from I-70 to the south, out of the planning area. These facilities are shown on Map 2-7.



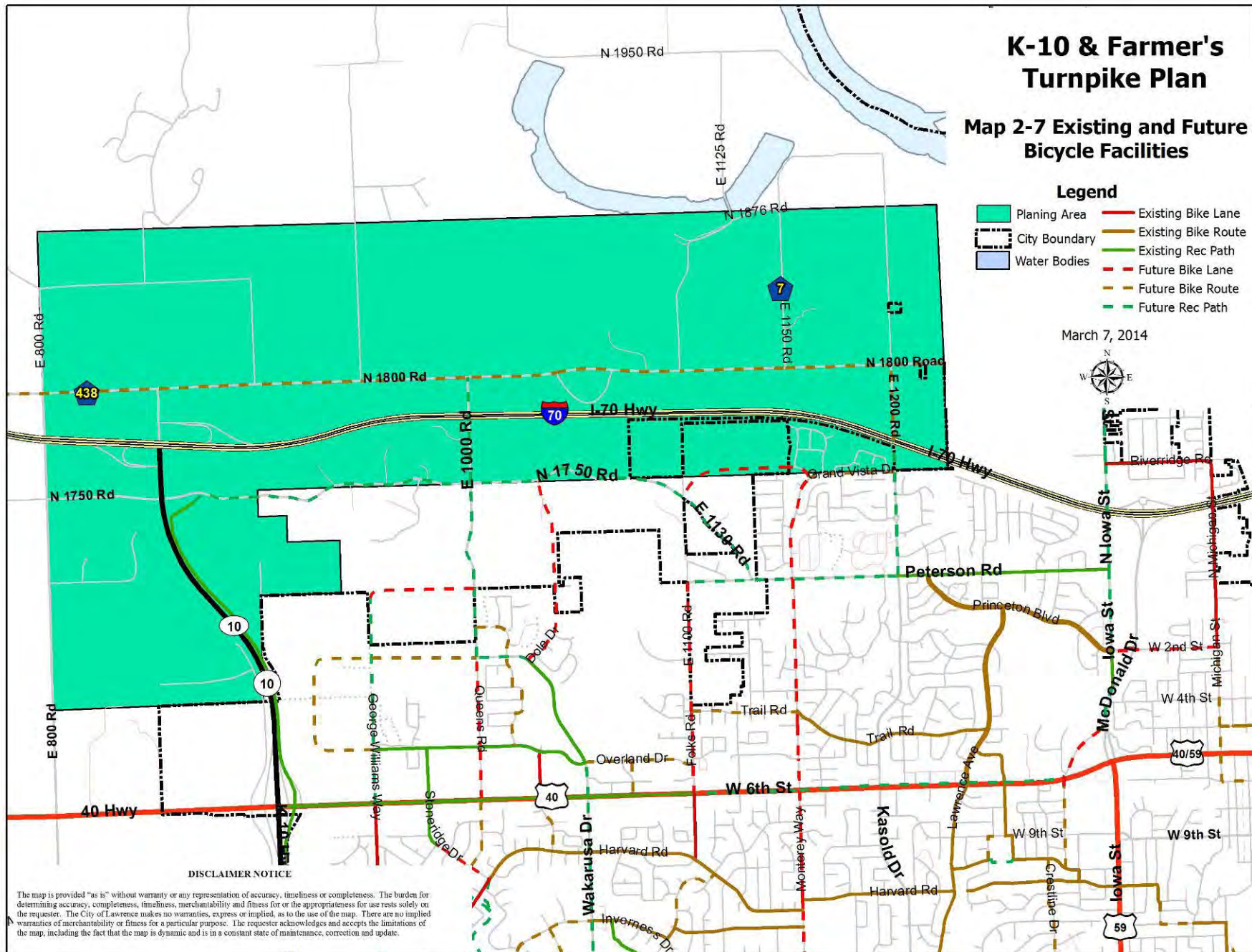
K-10 & Farmer's Turnpike Plan

Map 2-7 Existing and Future Bicycle Facilities

Legend

- Planing Area
- City Boundary
- Water Bodies
- Existing Bike Lane
- Existing Bike Route
- Existing Rec Path
- Future Bike Lane
- Future Bike Route
- Future Rec Path

March 7, 2014



2.4 Environmental Conditions

The planning area is made up of several drainage basins. The drainage basins drain into the Kansas River or Lake View Lake. There is Federal Emergency Management Agency (FEMA) designated floodplain and floodway located within the planning area. These are areas around Baldwin Creek, Deerfield Creek, Lake View Lake and the Kansas River. See Map 2-8. The floodplain is any land area susceptible to being inundated by flood waters from any source. The floodway is the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. Developing in the floodplain is allowed both in the city and in the county based on the corresponding regulations. No development is allowed in the floodway except for flood control structures, road improvements, easements and rights-of-way, or structures for bridging the floodway. This helps to protect drainage ways that lead to Lake View Lake and the Kansas River and wetland areas such as Lake View Lake.

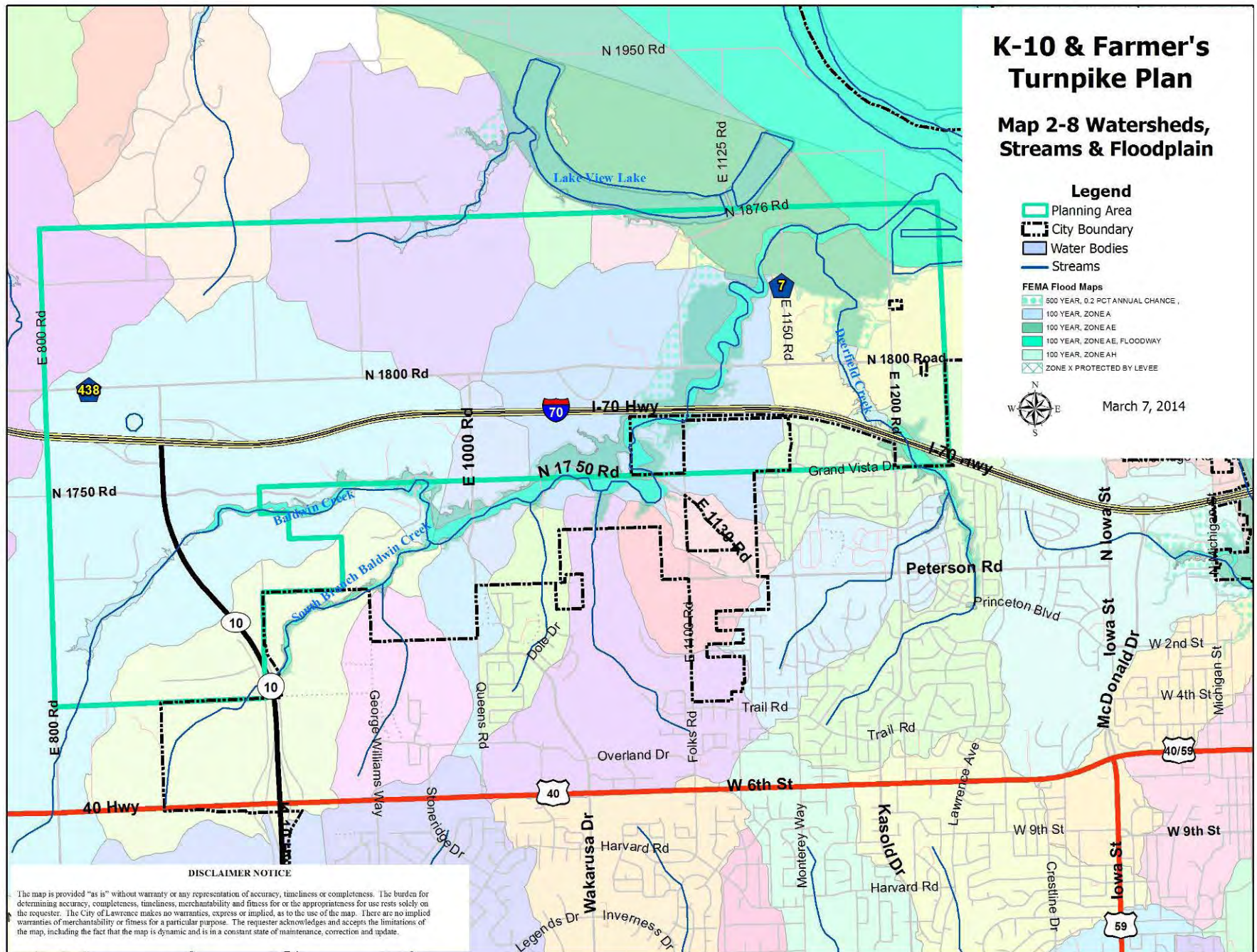
Three significant water features either run through or are in portions of the planning area. Lakeview Lake, a privately owned lake located in the northeast portion of the planning area, is an old oxbow of the Kansas River and one of Kansas's only naturally created lakes. This lake is shallow and contains areas of wetlands. Baldwin Creek and Deerfield Creek are both creeks that drain into the Kansas River and help take stormwater out of the planning area.

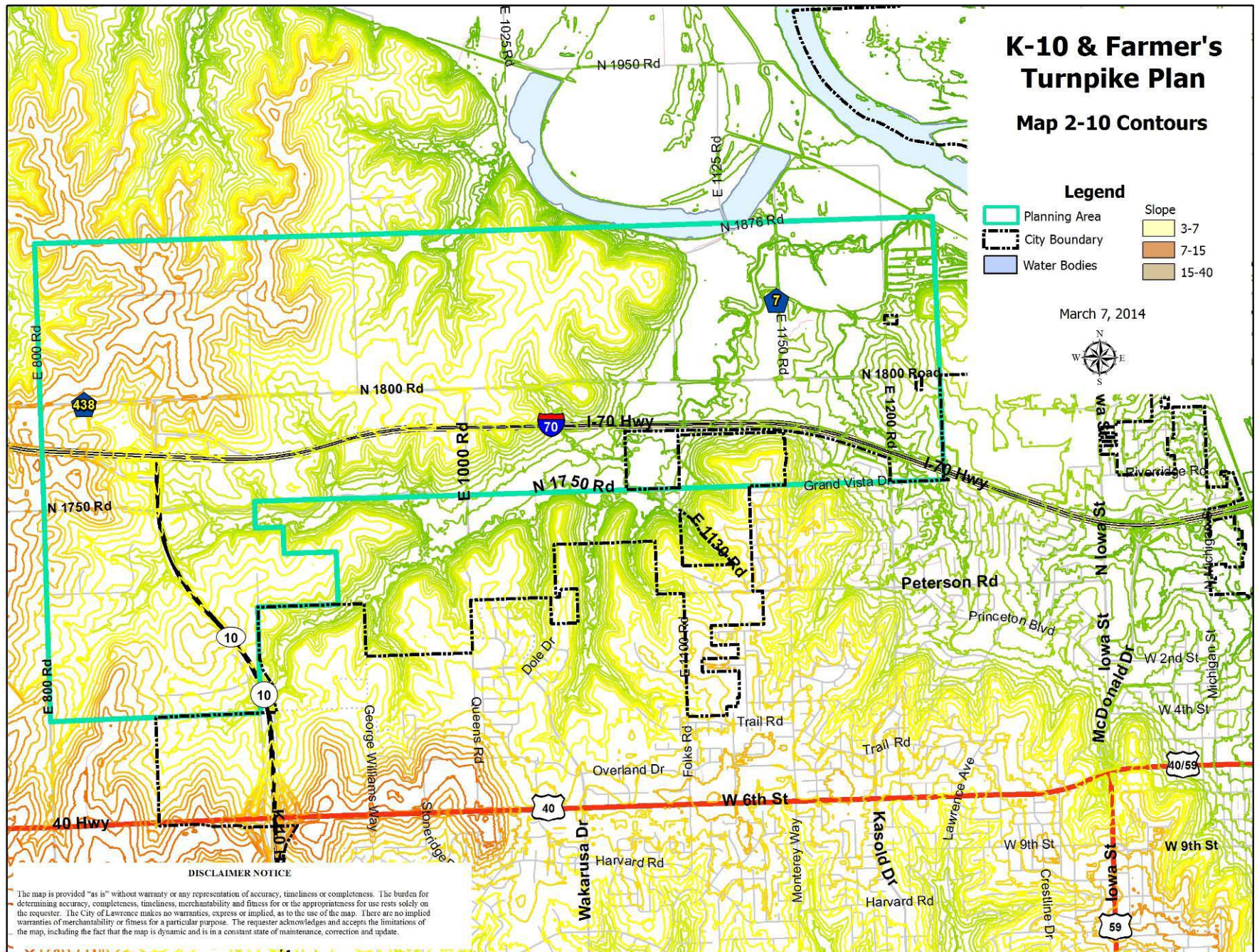
The majority of the undeveloped land within the planning area is either forest land or non-native grass land which is mainly used for cattle grazing. The planning area also contains areas of prairie, cultivated land and areas of land that are a part of the Conservation Reserve Program. See Map 2-9 for a summary and locations.

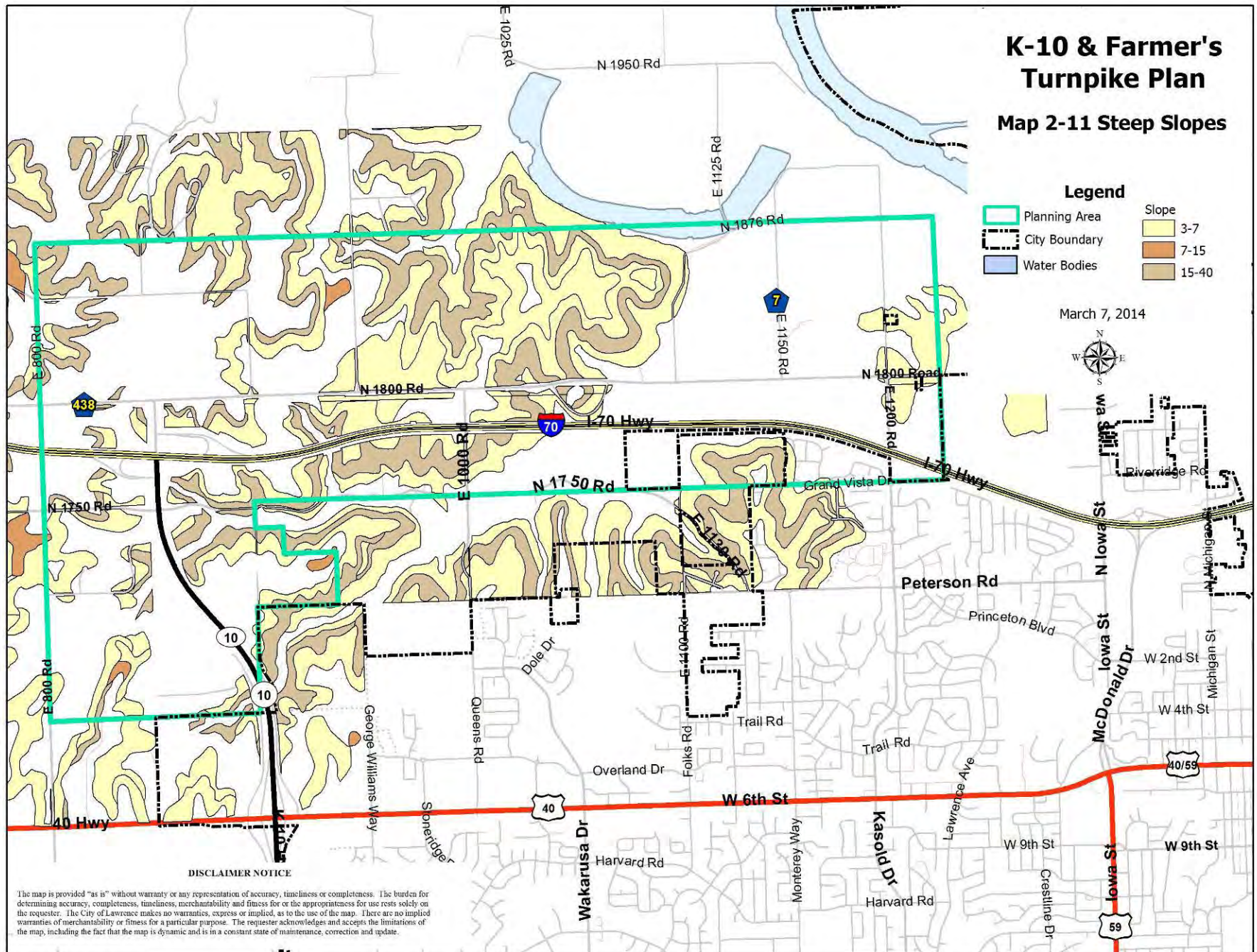


There is a wide range of topography within the planning area. The high points are along the western side of the planning area north of I-70 and in the southwestern portion around K-10 Highway. The low points are along the eastern side of the planning area where Baldwin Creek cuts through the planning area. The northeast corner of the planning area, which is also encumbered by floodplain, is relatively flat. The area in the middle contains the most abrupt grade change which continues with rolling hills to the west. A lack of steep slopes is

considered to be a beneficial factor for urban and industrial/employment center development. See Map 2-10 and Map 2-11. Detailed topographic surveys will be required as individual properties are developed.







2.5 Community Facilities

Community facilities are services provided either by government or non-government agencies for the benefit of, and use of, the community. Most of the community facilities including urban public services, schools, fire/medical, law enforcement, developed parks, etc., are located to the east and south of the planning area within the city of Lawrence. See Map 2-12.



The planning area is located within the Lawrence Public School District (USD 497) and the Perry-Lecompton School District (USD 343). The Lawrence School District covers the southwest portion and the northeast portion of the planning area. The students currently within the Lawrence School District attend either Langston

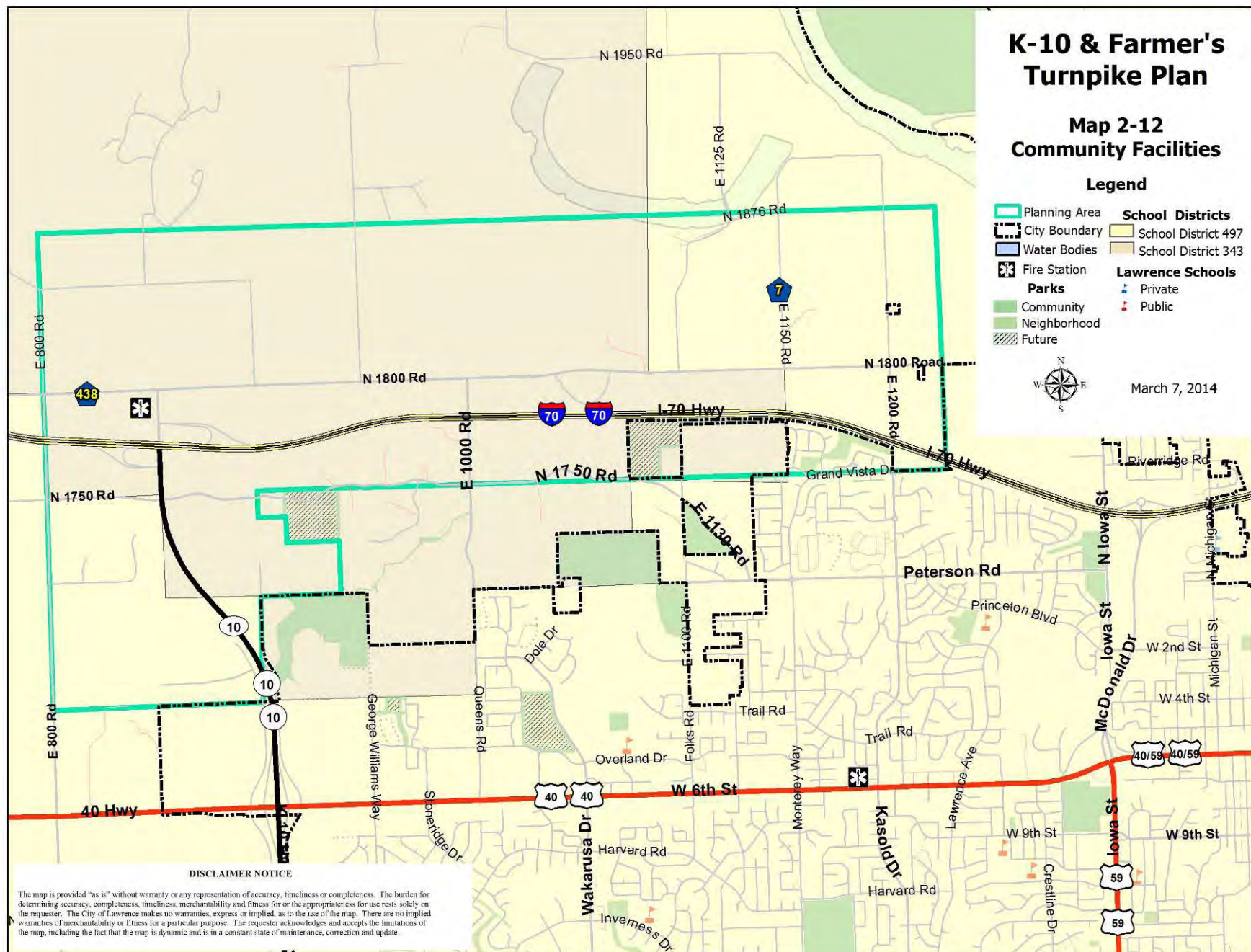
Hughes Elementary or Deerfield Elementary for elementary school; West Junior High or Central Junior High for junior high; and Free State High for high school. The students currently within the Perry-Lecompton school district attend Lecompton Elementary School, Perry-Lecompton Middle School and Perry-Lecompton High School.

Currently, there are three public or institutional land uses within the planning area. These uses include Stonegate Park, Lecompton Township fire department and Morning Star Christian Church. It is anticipated that additional park areas will be developed within the planning area, as the area urbanizes. There is currently land adjacent to the planning area to the south, along N 1750 Road which is owned by the city. This land is undeveloped and identified as a future park. This park would serve the planning area once developed.

The planning area will be served partially by Lawrence-Douglas County Fire & Medical Station Number 3, an existing facility located on W. 6th Street between Kasold and Monterey Way and partially by township fire departments. The Lecompton Township Fire Department has a station on N 1800 Road, northwest of the I-70/K-10 Highway interchange. A future Fire & Medical station location west of the intersection of K-10 Highway and W. 6th Street is identified for 2009-2010 in the city of Lawrence *2008-2013 Capital Improvement Plan*. A more in depth study will need to be conducted to ultimately locate the facility and to address emergency response time issues as the city grows and develops to the west.



Law enforcement would be shared between the City of Lawrence Police Department and the Douglas County Sheriff's Department, depending on whether the property is within the city or in the county. Both are located in the Law Enforcement Center in downtown Lawrence.



Section 3 – Recommendations

The K-10 & Farmer's Turnpike planning area is anticipated to develop with a wide range of uses and intensities that extend from very low-density residential to industrial uses. The more intensive industrial and commercial use areas are recommended where they are in close proximity to K-10 Highway, I-70 and Farmer's Turnpike, and arterial and collector streets. Residential uses are generally located in the southern and northern portions of the planning area.

3.1 Goals and Policies

Goals are broad statements of ideal future conditions that are desired by the community. Policies are guiding principles that provide direction for decisions to be made regarding the planning area in order to meet the goals. These policies are in addition to the policies in *Horizon 2020* and are only applicable to the property within the *K-10 & Farmer's Turnpike Plan* planning area.

3.1.1 Goals

- Goal 1:** Create quality development that will further support the city's efforts to promote additional employment opportunities for economic development and tax base expansion and diversification.
- Goal 2:** Maintain the rural character in existing areas until the time that municipal services allow urban densities to develop.
- Goal 3:** Create quality, mixed-use areas that encourage pedestrian friendly, work-live neighborhoods where appropriate.
- Goal 4:** Develop to urban densities over time while taking care to respect and protect the natural systems currently in place.
- Goal 5:** Provide ongoing infrastructure and public facilities improvements as the area develops.
- Goal 6:** Create viable and unique urban residential neighborhoods; develop sound commercial nodes, develop strong park/trail systems that are sustainable and remain viable over the long-term.

3.1.2 Policies

The following policy statements are for the development of the K-10 & Farmer's Turnpike area. "Shall" statements identify the items that are expected to be incorporated into development within the planning area. "Should" and "encouraged" statements identify the items that are strongly recommended to be incorporated into development within the planning area. "Shall" statements are stronger than "should" and "encouraged" statements.

3.1.2.1 General

1. Encourage maximum efficiency, low wattage, downward directional exterior lighting. The point source shall be screened from view off-site. Encourage limiting exterior lighting at night.
2. Quality, aesthetically pleasing building materials and quality architectural elements should be used.
3. Pedestrian friendly connectivity between land uses and properties should be incorporated.
4. Sensitive lands, as designated by the *Land Development Code* shall be preserved and protected per those standards identified in the code.
5. Landscaping that includes native and drought resistant materials is strongly encouraged to create a rural feel and to conserve water.

3.1.2.2 Residential Land Uses

1. Residential uses shall maintain a "back-to-back" relationship to more intense uses. Buffering shall include use of green space as a primary transition tool.
2. Residential streets shall be extended to undeveloped property and shall use a grid or modified grid pattern.
3. The medium-density residential use is not intended to provide for large-scale apartment type development but instead take the form of small lot, detached, attached, cluster type housing, or small scale multi-dwelling structures, such as two-story, 4-6-plexes containing residential architectural elements.
4. Transitioning should be accomplished by buffer yards, landscaping, setbacks and progression of use intensities.
5. Cluster development is strongly encouraged where environmentally sensitive areas are present.
6. Residential developments are encouraged to create a sense of rural living while achieving the designated density identified on the future land use map.

3.1.2.3 Residential/Office Land Use

1. Development shall include a residential use.
2. The residential/office use is not intended to provide for large-scale apartment type development.
3. Traditional Neighborhood Development (TND)/mixed use is encouraged.

3.1.2.4 Commercial Land Use

1. The neighborhood commercial centers shall be designed in accordance with policies and standards of *Horizon 2020*.
2. Commercial development shall be designed to facilitate pedestrian and non-motorized access from abutting areas.
3. The auto-related commercial center is intended to serve the immediate employment center area and passenger vehicles from I-70. It is not intended to

serve a significant amount of large truck traffic from the interstate as there are larger service facilities that exist along I-70.

4. The auto-related commercial center should include amenities that support tourism. Elements such as way finding signs, informational signs noting the history of the area, and a tourist information booth are strongly encouraged to be incorporated as amenities.
5. Transitioning should be accomplished by buffer yards, landscaping, setbacks and progression of use intensities.
6. Commercial development is intended to be nodal type development at the identified intersections. Areas identified for office/research uses along the N 1800 Road (Farmer's Turnpike) corridor are intended to support employment center type uses and discourage strip-type commercial development.
7. Native and drought resistant landscaping materials are strongly encouraged be utilized to filter drainage and stormwater runoff from large areas of pavement, conserve water, and to create a rural feeling.

3.1.2.5 Industrial/Office/Research Land Uses

1. Structures should be aesthetically pleasing from all sides and should incorporate quality building materials and quality architectural elements.
2. Transitions between uses should be accomplished by buffer yards, landscaping, setbacks, scale and massing, and transition of uses to include low-intensity industrial uses along the perimeter of the areas identified as industrial or office/research.
3. Sites should incorporate a variety of landscaping treatments to alleviate the potential for monotonous perimeter buffering.
4. Structures along N 1800 Road (Farmer's Turnpike) should present a front face to N 1800 Road (Farmer's Turnpike) to add to the high quality aesthetics encouraged in the gateway.
- 4.5. Structures with visible façades from K-10/South Lawrence Trafficway shall have high quality architecture to enhance and support in the gateway entries of this plan, as well as adjacent sector and area plans.
- 5.6. Access to major roads from the industrial or office/research development lots shall be limited. However, industrial users on large lots that are significant generators of traffic may directly access arterial roads if the size of the site is such that it allows internal circulation without the necessity of constructing local roads to direct that circulation to the arterial road. Such access shall be based on sound traffic engineering principles and shall be properly controlled with appropriate signalization and turn lanes. Smaller lots shall take access from local roads. Additional local roads that serve the site should be arranged to minimize development lot access to the future major roads.
- 6.7. Commercial uses shall not be permitted along the frontage of N 1800 Road (Farmer's Turnpike) except where commercial centers are identified in this plan. Areas identified for office/research uses along this corridor are intended to support employment center type uses and discourage strip-type commercial development.
8. Native and drought resistant landscaping materials are strongly encouraged be utilized to filter drainage and stormwater runoff from large areas of pavement, conserve water, and to create a rural feeling.
- 7.9. Exterior storage, fleet storage, and other similar exposed storage shall not be permitted

3.1.2.6 Public Facility/Open Space/ Floodplain Land Uses

1. Smaller parks should be located throughout the planning area as outlined in Chapter 9 of *Horizon 2020*.
2. Open space areas should be provided and/or acquired along major thoroughfares and along drainage ways for development of pedestrian and bicycle trails.
3. Regional detention should be utilized when possible within each corresponding watershed.
4. Streams should follow their natural paths and should not be rerouted or straightened.
5. Environmentally sensitive lands should be protected and maintained as natural areas per the *Land Development Code* standards.
6. Restrict uses within the regulatory floodplain that are dangerous to health, safety or property in times of flooding or that cause undue increases in flood heights or velocities.
7. Additional property should be obtained wherever possible for parks purposes when acquiring property or easements for utility use.

3.1.2.7 Gateways

1. The intersection of I-70/K-10 Highway/N 1800 Road (Farmer's Turnpike) shall be identified as a gateway to the city of Lawrence as the area urbanizes.
- ~~1-2.~~ The intersection of K-10 Highway/6th Street/US-40 shall be identified as a gateway to the city of Lawrence as the area urbanizes.
- ~~2-3.~~ Development shall enhance the gateway at the intersection of I-70/K-10 Highway/N 1800 Road (Farmer's Turnpike) by creating an aesthetically pleasing corridor.
- ~~3-4.~~ Gateway treatments shall be a priority in development and redevelopment of the area around the intersection of I-70/K-10 Highway/N 1800 Road (Farmer's Turnpike) and shall reflect the goals and policies stated in *Horizon 2020*.
- ~~4-5.~~ Aesthetically pleasing landscaped entryways should be required. Both public and private property owners are responsible for achieving and maintaining this aesthetically pleasing landscaping.
- ~~5-6.~~ Gateway development should include amenities that support tourism. Elements such as way finding signs, informational signs noting the history of the area, and a tourist information booth are strongly encouraged to be incorporated as amenities.

3.1.2.8 Transportation Facilities and Corridors

1. Sufficient area, outside of the required street rights-of-way, should be required to provide and shall be restricted in use to provide for: utility, berming, and landscaping needs.
2. No additional access to K-10, except as identified in *Transportation 2030*, shall be permitted.
3. Street networks should be interconnected through and beyond the planning area wherever possible.
4. Truck routes shall not be designated through areas identified for residential land uses and should be limited to N 1800 Road (Farmer's Turnpike), K-10 Highway and I-70 or as otherwise designated by the city.
5. Adequate rights-of-way shall be obtained at the time of platting to ensure for sufficient space for roads, utility and landscaping easement needs.
6. Topography should be taken into account when comparing different alignments for future roads.

7. Master planning areas identified as industrial and office/research is encouraged to provide an adequate street network that limits the number of access points to N 1800 Road (Farmer's Turnpike).

3.1.2.9 Utilities

1. The area north of N 1800 Road (Farmer's Turnpike) has not been evaluated in the currently adopted 2003 Water and Wastewater Master Plans. This area should be evaluated on a watershed basis with the upcoming plan update and an overall service plan developed with project costs for water and sanitary service prior to development requiring urban services.
2. Extension of water and sewer infrastructure should be coordinated with ultimate street right-of-way acquisition and construction to avoid reconstructing water and sewer lines as streets are improved to city standards.
3. Extension of water and sewer services to the area should follow adopted city policies for such.
4. Additional property should be obtained wherever possible for parks purposes when acquiring property or easements for utility use.

3.1.2.10 Traditional Neighborhood Design (TND)

1. Development under the *Lawrence SmartCode* is encouraged throughout the planning area wherever industrial or office/research is not designated. TND development can be used upon annexation and through the process outlined in the *Lawrence SmartCode*.
2. Development under the *Lawrence SmartCode*, Landowners/developers shall develop their own plans that conform to the *Lawrence SmartCode* in order to develop TND neighborhoods.
3. Development shall be developed as either a Cluster Land Development (CLD) or a Traditional Neighborhood Development (TND) community type as outlined in the *Lawrence SmartCode* in a Greenfield development situation. A minimum of 40 acres is required to develop a CLD neighborhood and a minimum of 60 acres is required to develop a new TND neighborhood.
4. A range of transects shall be incorporated into a CLD or TND community type.

3.1.2.11 Environmentally Sensitive Lands

1. Environmentally sensitive lands shall be protected as outline in the *Land Development Code*.
2. Street rights-of-way, public utility corridors and building sites should be located so as to minimize their impact on environmentally sensitive areas.
3. Where possible, environmentally sensitive areas to be protected should be located within designated public or private open space, either through dedication, a conservation easement, or control by a homeowner's association.
4. If a review indicates that it is not possible or reasonable to protect sensitive features, mitigation should be incorporated.

3.2 Land Use

This section outlines the recommended land uses for the planning area. The future land use maps (Map 3-1) and land use descriptions are explained on the subsequent pages. The map is an illustration to help visually identify the recommended land uses in the K-10 & Farmer's Turnpike planning area. The land use descriptions are more detailed information regarding the different land use categories. The official definitions and the permitted uses within each zoning district are outlined in the use tables that are located in the *Land Development Code* for the City of Lawrence. The map and text descriptions must be used in conjunction with one another in order to obtain the complete recommendation for each particular area. The map is not intended to provide a scaleable map for determining specific land use/zoning boundaries within this area.

3.2.1 Land Use Descriptions

3.2.1.1 Very Low-Density Residential

The intent of the very low-density residential use is to allow for large lot, single-dwelling type uses.

Density: 1 or fewer dwelling units per acre

Intensity: Very low

Applicable Area:

- Ranch Estates Subdivision, west of the intersection of N 1663 Road and E 900 Road.
- Oak Ridge Estates, area bounded to the north by I-70, to the south by N 1750 Road, to the west by E 950 Road extended and to the east by E 1000 Road.
- Area fronting N. 1750 Road, bounded by E. 902 Rd. to the east, and K-10 right-of-way on the west.

Zoning Districts: RS40 (Single-Dwelling Residential), PD (Planned Development Overlay)

Primary Uses: Detached dwellings, cluster dwellings, manufactured home residential-design, zero lot line dwellings, group home, public and civic uses

3.2.1.2 Low-Density Residential

The intent of the low-density residential use is to allow for single-dwelling, duplex, and attached dwellings but emphasis is placed on residential type uses.

Density: 6 or fewer dwelling units per acre

Intensity: Low

Applicable Areas:

- Area bounded by the planning area boundary on the north and west, N 1850 Road and N 1850 Road extended on the south and the FEMA designated floodplain on the east.
- Area generally southeast of the intersection of N 1850 Road and E 800 Road.
- Area bounded by N 1750 Road on the north, the southern boundary of the planning area on the south, E 800 Road on the west and K-10 Highway on the east; excluding Ranch Estates Subdivision.
- Area bounded by N 1850 Road extended on the north, N 1800 Road (Farmer's Turnpike) on the south, E 1000 Road extended on the west and the FEMA designated floodplain to the east; excluding the area bound approximately ¼ mile north of N 1800 Road (Farmer's Turnpike) on the

north, N 1800 Road (Farmer's Turnpike) on the south, E 1000 Road on the west and approximately ½ mile east of E 1000 Road on the east.

- Area bound by I-70 on the north, N 1750 Road on the south, E 1000 Road on the west and the FEMA designated floodplain west of E 1100 Road on the east.
- Area north of the intersection of N 1800 Road (Farmer's Turnpike) and E 1150 Road, and bound to the north by the FEMA designated floodplain.
- Area bound by I-70 to the north, N 1750 Road extended on the south, E 1100 Road on the west and the west side of Stonegate III Addition on the east.
- Area generally south of I-70 and east of Kasold Drive.
- Area generally east of E. 902 Road, extending 0.2 miles north, and 0.3 miles east of 1712 E. 902 Rd.

Zoning Districts: RS10 (Single-Dwelling Residential), RS7 (Single-Dwelling Residential), RS5 (Single-Dwelling Residential), RM12D (Multi-Dwelling Duplex Residential), PD (Planned Development Overlay)

Primary Uses: Detached dwellings, attached dwellings, cluster dwellings, manufactured home residential-design, zero lot line dwellings, duplex, group home, public and civic uses

3.2.1.3 Medium-Density Residential

The intent of the medium-density residential use is to allow for a variety of types of residential options for the area.

Density: 7-15 dwelling units per acre

Intensity: Medium

Applicable Areas:

- Area bound by I-70 on the north, N 1750 Road on the south, E 800 Road on the west and K-10 Highway on the east.
- Area bound by I-70 on the north, N 1750 Road on the south, K-10 Highway on the west, and George Williams Way extended on the east.
- Area bound by N 1850 Road extended on the north, approximately 1/4 mile north of N 1800 Road (Farmer's Turnpike) on the south, E 900 Road on the west and E 1000 Road extended on the east.
- Area bound by N 1800 Road (Farmer's Turnpike) on the north, I-70 on the south, E 1043 Road on the west and the FEMA designated floodplain on the east.
- Area bound by I-70 on the north, Grand Vista Drive on the south, just west of Gunnison Way on the west and Kasold Drive on the east.

Zoning Districts: RS5 (Single-Dwelling Residential), RS3 (Single-Dwelling Residential), RM12 (Multiple-Dwelling Residential), RM12D (Multi-Dwelling Duplex Residential), RM15 (Multi-Dwelling Residential), PD (Planned Development Overlay)

Primary Uses: Detached dwellings, attached dwellings, cluster dwellings, manufactured home residential-design, zero lot line dwellings, duplex, multi-dwelling structures, boarding houses, group home, civic and public uses

3.2.1.4 High-Density Residential

The intent of the high-density residential use is to allow for compact residential development.

Density: 16+ dwelling units per acre

Intensity: High

Applicable Areas:

- Area bound by N 1800 Road (Farmer's Turnpike) on the north, I-70 on the south, and the FEMA designated floodplain on both the west and east.

Zoning Districts: RM12 (Multiple-Dwelling Residential), RM12D (Multi-Dwelling Duplex Residential), RM15 (Multi-Dwelling Residential), RM24 (Multi-Dwelling Residential), RM32 (Multi-Dwelling Residential), PD (Planned Development Overlay)

Primary Uses: Attached dwellings, zero lot line dwellings, duplex, boarding houses, multi-dwelling structures, group home, civic and public uses

3.2.1.5 Residential/Office

The intent of the residential/office use is to accommodate mixed use development of administrative and professional offices with varying degrees of residential. This may be achieved by the use of work/live units.

Density: 6-22 dwelling units per acre

Intensity: Medium-high

Applicable Areas:

- Area bound by ~~N-1750 Road~~mapped floodway on the north, K-10 highway on the west, and E 902 Road on the east, and approximately the future crossing near N. 1700 Rd. to the south.
- Area bound by N 1800 Road (Farmer's Turnpike) on the north, I-70 on the south, E 1000 Road on the west and E 1043 Road on the east.
- Area bound approximately ¼ mile north of N 1800 Road (Farmer's Turnpike) on the north, N 1800 Road (Farmer's Turnpike) on the south, E 1000 Road on the west and approximately ½ mile east of E 1000 Road on the east.

Zoning Districts: RSO (Single-Dwelling Residential-Office), RMO (Multi-Dwelling Residential-Office), MU (Mixed Use), PD (Planned Development Overlay)

Primary Uses: Work/live units, non-ground floor dwellings, attached dwellings, multi-dwelling structures, civic and public uses, veterinary office, administrative and professional offices, financial, insurance and real estate services, personal improvement, health care office, health care clinic, health care center

3.2.1.6 Commercial

The intent of the commercial use is to allow for retail and service uses. A Neighborhood Commercial Center provides for the sale of goods and services at the neighborhood level. An auto-related commercial center provides goods and services aimed toward those traveling by an auto. This commercial center is intended to serve the surrounding employment center area in addition to tourists traveling along I-70 and/or visiting Lecompton and Lawrence tourist attractions. *Horizon 2020*, Chapter 6 – Commercial Land Use offers more specific language regarding each commercial center.

Intensity: Medium-High

Applicable Areas:

- Area bound by N 1800 Road (Farmer's Turnpike) on the north, I-70 on the south, E 800 Road on the west and E 900 Road on the east. (Auto-Related Commercial Center)
- Area bound by N 1800 Road (Farmer's Turnpike) on the north, FEMA designated floodplain on the south and west and E 1200 Road on the east. (Neighborhood Commercial Center)
- One of the northern corners of the intersection of N 1800 Road (Farmer's Turnpike) and E 1000 Road. (Neighborhood Commercial Center)

- One corner of the intersection of N 1700 Road extended and E 800 Road. (Neighborhood Commercial Center)

Zoning Districts: MU (Mixed Use), CN1 (Inner Neighborhood Commercial District), CN2 (Neighborhood Commercial Center District), CC200 (Community Commercial District) (auto-related commercial center only), PD (Planned Development Overlay)

Primary Uses: non-ground floor dwellings, civic and public uses, eating and drinking establishments, general office, retail sales and services, hotels, motels, gas and fuel sales, car wash

3.2.1.7 Office/Research

The office/research use is characterized by businesses involved in technology, research and scientific-related activities and/or office, office research activities that are designed in a campus like setting. Light manufacturing and production uses are also acceptable within this use category. Areas identified for office/research uses along N 1800 Road (Farmer's Turnpike) are intended to support employment center type uses and not strip-type commercial development.

Intensity: Medium

Applicable Area:

- Area bound by approximately 1/4 mile north of N 1800 Road (Farmer's Turnpike) on the north, N 1800 Road (Farmer's Turnpike) on the south, E 900 Road on the west and E 1000 Road extended on the east.
- Area bound by the FEMA designated floodplain on the north, west and east and N 1800 Road (Farmer's Turnpike) on the south.
- Area bound by K-10 to the west, E. 902 Rd. to the East, and approximately the future crossing near N. 1700 Rd. to the north

Zoning Districts: IBP (Industrial and Business Park District), IL (Limited Industrial District), PD (Planned Development Overlay)

Primary Uses: Professional offices, research services, manufacturing and production limited and technology, light wholesale, storage and distribution

3.2.1.8 Industrial

The intent of the industrial use is to allow for moderate to high-impact uses including large scale or specialized industrial uses geared toward utilizing K-10 Highway and I-70 for materials transportation.

Intensity: Medium-High

Applicable Area:

- Area generally bound by N 1850 Road on the north, N 1800 Road (Farmer's Turnpike) on the south, E 800 Road on the west and E 950 Road on the east; excluding an area generally southeast of the intersection of N 1850 Road and E 800 Road .
- Area bound by N 1800 Road (Farmer's Turnpike) on the north, I-70 on the south, E 900 Road extended on the west and E 1000 Road on the east.
- Area bordered by N 1800 Road (Farmer's Turnpike) on the north, I-70 on the south, E 1200 Road on the west and the eastern boundary of the planning area on the east.

Zoning Districts: IBP (Industrial and Business Park District) IL (Limited Industrial District), IG (General Industrial District), PD (Planned Development Overlay)

Primary Uses: Utility facilities, building maintenance services, fleet storage, business support services, construction sales and service, industrial facilities,

wholesale, distribution, and storage, research services, manufacturing and production limited and technology

3.2.1.9 Public/Institutional

The intent of the public/institutional use is to allow for public, civic, and utility uses.

Intensity: Variable

Applicable Area:

- Area bound by the FEMA designated floodplain on the north and west, N 1750 Road extended on the south and E 1100 Road on the east.

Zoning Districts: GPI (General Public and Institutional)

Primary Uses: Cultural center/library, school, utilities, recreational facilities, utility services

3.2.1.10 Open Space/Floodplain

The intent of the open space/floodplain use is to provide space for public recreational facilities and natural area preservation.

Intensity: Low

Applicable Areas:

- Regulatory floodplain and floodway.
- Tributaries along the northern area of the planning area.

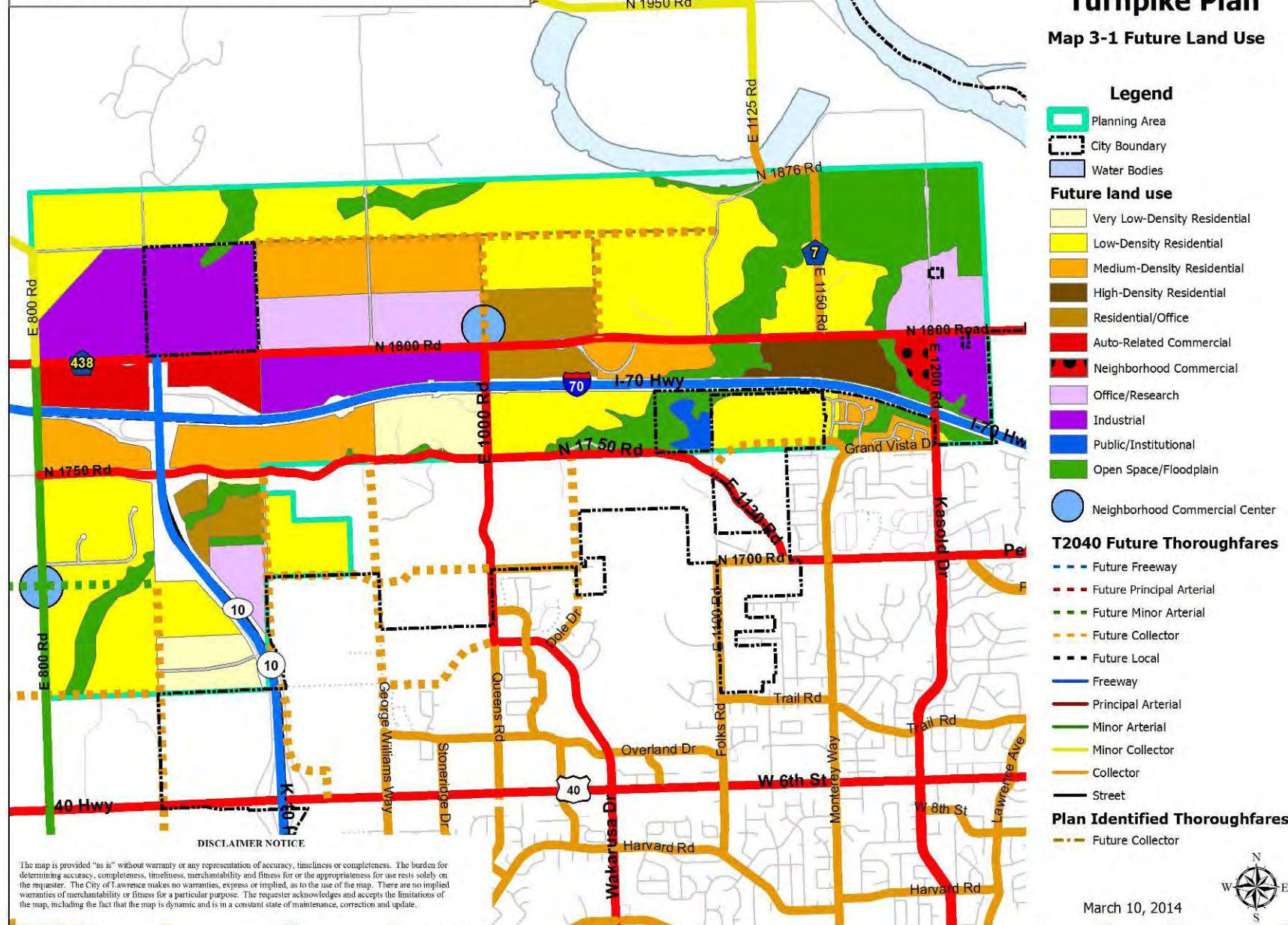
Zoning Districts: GPI (General Public and Institutional District), OS (Open Space), UR (Urban Reserve),

Primary Uses: crop agricultural, cultural center, schools, active recreation, passive recreation, nature preserve, entertainment and spectator sports, participant sports and recreation outdoor, private recreation

Please note: This map is intended to be used in conjunction with the plan text. The map is not scaleable.

K-10 & Farmer's Turnpike Plan

Map 3-1 Future Land Use



3.3 Implementation

1. Amend *Horizon 2020* Chapter 6 - Commercial Land Use to add a Neighborhood Commercial Center at the southwest corner of the intersection of N 1800 Road (Farmer's Turnpike) and E 1200 Road.
2. Amend *Horizon 2020* Chapter 6 - Commercial Land Use relocate the Neighborhood Commercial Center at the intersection of N 1750 Road and E 1000 Road to the northern portion of the intersection of N 1800 Road (Farmer's Turnpike) and E 1000 Road.
3. Update *Horizon 2020*, Chapter 7 – Industrial Land Use to reflect industrial land use locations as identified in this plan.
4. Reevaluate and update the Urban Growth Area (UGA) in *Horizon 2020*.
5. Adopt industrial design guidelines for industrially zoned areas to provide high quality, aesthetically pleasing industrial development.
6. Include the planning area in the future wastewater and water master plan updates.
7. Amend plan identified future streets into the future thoroughfares map in *Transportation 2030*.
8. Include the planning area in future long-range transportation plan updates.

Industrial and Employment- Related Land Use

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CHAPTER SEVEN

INDUSTRIAL AND EMPLOYMENT-RELATED LAND USE

Over time, the City of Lawrence and portions of unincorporated Douglas County have experienced business and industrial development and growth. In recent years, this growth and development has taken the form of new industrial and business development, as well as expansion of existing industries and businesses. As Douglas County continues to grow, and with more residents expected to commute outside of the community for employment, there is a recognized need that more industrial and business development is necessary to provide local job opportunities. Of particular interest to the community is the attraction of industries and employment-related uses that are based in biosciences, agriculture and natural resources, technology, and telecommunications.

Both Douglas County and the City of Lawrence consider a healthy natural environment, a diversified economy, and a fiscally stable government as being interdependent and further recognize that new industrial and employment-related land uses contribute to the local tax base and the creation of a full-service community where residents can live and work. Douglas County and the City of Lawrence are in the unique position of being able to fulfill this vision by tying into the needs and services related to the various University of Kansas research programs and technological developments. It is also recognized that growth in the greater Kansas City and Topeka metropolitan areas indicate the potential for substantial new future job opportunities and industrial development within Douglas County.

The ECO² Commission presented their report to both the City and County Commissions in 2007 that develops a long term plan of a public/private partnership for the advancement of industrial/business parks and open space preservation in Douglas County. This Comprehensive Plan, in conjunction with the ECO² report, provides a methodology to weigh specific criteria to identify and recommend a number of new business and industrial development locations in the City of Lawrence and unincorporated Douglas County.

While industrial land uses and employment-related land uses share some similar characteristics, such as the need for large areas of land and the ability to provide employment opportunities, they also each have distinct characteristics, such as locational requirements within the community in terms of compatibility with other land uses, as well as co-locational criteria with the specific types of services/industries provided. For this reason, this chapter has been divided into two sections. The first section deals with industrial land uses and the second section deals with employment-related land uses.

STRATEGIES: INDUSTRIAL AND EMPLOYMENT-RELATED LAND USE

The principal strategies for the identification, development, and maintenance of industrial and employment-related areas are:

- Increase the number and diversity of jobs available to the citizens of Douglas County to stabilize the future employment base and generate additional wealth in the community.

- Identify an adequate amount of available land in a number of locations in Douglas County to meet diverse industrial and business related development needs.
- Increase community involvement in economic development activities, by partnering with the local business community and area educational institutions to bring new technology and investment to the region for the purpose of meeting the economic development job growth goal of securing twenty thousand new jobs in Douglas County by 2020.
- Protect, enhance, and retain existing industrial-related land use areas serving the community.
- Continue to address the needs of existing businesses and industries to ensure their retention in the community and to help facilitate expansion plans of those businesses and industries for the future.
- Encourage site availability, site improvements, and community amenities which best respond to the market demands for industrial and business development while maintaining the community objectives for the type and quality of such development.
- Encourage bicycle, pedestrian and public transit access from neighborhoods to industrial and business employment centers.
- Minimize impacts to the natural environment in the identification of new industrial and business development areas or in the redevelopment of existing areas. Whenever possible, industrial and business development should encourage the retention of open space to serve a variety of purposes, including stormwater management, preservation of wildlife habitat and ecological functions, recreational opportunities, and reduction of visual impacts on surrounding areas.
- As new areas evolve, encourage development proposals to employ sound site planning and design principles. Interfacings with surrounding properties and neighborhoods are also encouraged to minimize negative impacts and employ appropriate and compatible industrial and business activities.

1. INDUSTRIAL LAND USE

INDUSTRIAL LAND USE CATEGORIES

Industrial development in Douglas County has taken on many shapes and forms in the past. This Comprehensive Plan recognizes this variety in development and establishes the following categories of industrial-related land use:

- **Warehouse and Distribution** - an area generally characterized by businesses involved in the warehousing and distribution of wholesale goods and supplies.

- **Industrial** - an area generally characterized by business activities that include manufacturing, assembly, processing, and similar operations.
- **Work-live Campus-type Center** – an area that is a campus-like setting with a mix of uses that are compatible which may include industrial, business, retail commercial and residential developments. These areas will be held to a higher standard of design that accents and complements the natural environment and provides a comfortable environment for a live-work relationship where pedestrian activity is planned for and encouraged.
- **Industrial/Business/Research Park** - an area generally characterized by a predominance of office, office research, warehouse and distribution, and/or industrial business activities that typically encompass a large area of land and are designed in a “campus” setting.

LAWRENCE - EXISTING INDUSTRIAL AREAS

The City of Lawrence has several major industrial areas providing employment opportunities to the community. These larger areas include: 1) Santa Fe Industrial Area; 2) East Hills Business Park; 3) Santa Fe Railroad corridor; 4) Union Pacific Railroad corridor; 5) Lawrence Municipal Airport; and 6) Southeast Industrial Area. A description and plan recommendations for these areas are discussed below. In addition to these primary industrial areas, the City of Lawrence also has a number of smaller industrial locations throughout the city. While not specifically addressed in this section, these smaller industrial areas play an important role in the overall industrial and business development composition of the community as a whole. Refer to Map 7-1, Map of Existing Industrial and Employment-Related Land Uses.

• **Santa Fe Industrial Area**

The Santa Fe Industrial Area, located north of the Kansas Turnpike/I-70 and south of the Kansas River in north central Lawrence, has developed as a large warehouse and distribution location. This Comprehensive Plan recommends an expanded role for this area in the future. The *K-10 & Farmer's Turnpike Plan* identifies 130 acres of industrial and office/research uses along the western side of this area. It is also recommended that as additional industrial-related uses develop, impacts on nearby residential development along Riverridge Road will need to be minimized. Additionally, street improvements may be needed and land use transition areas are recommended to protect residential uses in the area.

• **East Hills Business Park**

East Hills Business Park is located on the eastern edge of Lawrence on the north side of Kansas Highway 10. Planned and developed in the late 1980s and early 1990s, this is one of the community's first true industrial park developments. As this area reaches capacity, the closure of the Farmland Industries site (immediately to the west) makes expansion of East Hills Business Park a possibility and should be closely examined for such a purpose. East Hills Business Park serves as the eastern gateway to the community and the City should continue to examine future development plans for this area to ensure they reflect the image and quality the community seeks in gateway development.

- **Burroughs Creek Corridor**

The Burroughs Creek Corridor (the former Santa Fe Railroad Corridor) stretches from East 31st Street to the Kansas River in East Lawrence and includes a south and north segment. Parts of the corridor area offer smaller land parcels and provides opportunities for small business owners to coexist with neighboring residential uses. Future development of this area should be in accordance with the Burroughs Creek Corridor Plan.

- **Union Pacific Railroad Corridor**

The Union Pacific Railroad Corridor serves North Lawrence and has historically been the site of a variety of industrial uses. Industrial development patterns along the corridor are somewhat fragmented with interspersed residential and commercial land uses. Many industrially zoned sites have been developed with residential structures or represent vacant lots originally divided for residential purposes. This corridor may also offer opportunities for small business owners to establish smaller industrial operations within the community.

New development and redevelopment in the area should be encouraged to improve the appearance and image of the area. In general, Locust Street, Maple Street, and Lincoln Street west of North 7th Street should continue to serve as industrial collector streets in the neighborhood. Efforts to discourage non-residential traffic in other parts of the neighborhood are highly encouraged. It is also recommended that consolidation of industrial sites occur whenever possible to remove those residential and incompatible commercial uses located within predominantly industrial development land use patterns in a concentrated effort to minimize those impacts and conflicts between incompatible land uses. When the industrial usage of a particular property ceases and is no longer practical, it is recommended those properties be converted to residential and/or neighborhood commercial uses.

LAWRENCE - NEW INDUSTRIAL AREAS

This chapter sets out goals and policies to guide present and future industrial and employment development within Douglas County. A key part of the chapter is deciding where Industrial and Employment related development should be located. To assist in the identification of general locations throughout the City of Lawrence, its Urban Growth Area, and unincorporated Douglas County appropriate for industrial and employment park development, there are some basic locational criteria characteristics that should be considered. The following criteria strike a balance between industrial user needs and community interests, as well as being aligned with criteria developed through the ECO² process.

LOCATIONAL CRITERIA FOR INDUSTRIAL DEVELOPMENTS

A given site, whether located within City limits, in the UGA, or in unincorporated areas of Douglas County, should *substantially* meet the following **general** locational criteria:

- have feasible access to Federal and State transportation networks;
- be of adequate parcel size, generally over forty acres;

- lie primarily outside of the regulatory floodplain;
- have minimal average slopes.

After identifying a general location for potential industrial and employment park development, further site analysis and environmental suitability should be conducted considering site-specific criteria. Sites should *substantially* meet the following **specific** criteria on a site plan or development plan level:

- preserve environmentally sensitive areas, including vegetative cover and wildlife habitat, to act as buffers and site amenities;
- encourage natural stormwater management, including locations that permit direct discharge to the floodplain;
- have available and adequate utilities, infrastructure and services (i.e. police and fire protection) for the proposed use;
- be compatible with existing and future zoning/land use patterns, including the use of appropriate buffers between land uses;
- be annexed before development if adjacent to municipal boundaries.

Initial applications for site considerations should first be weighted against the general locational criteria, and then against the specific criteria as individual proposals move through the development process. A non-exclusive list of sites that substantially meet the general criteria are illustrated in Map 7-2, Map of Potential Locations for Future Industrial and Employment Related Land Use, and are detailed in descriptions below. Locations initiated through the planning process that are not on Map 7-2 will be weighted against the general locational criteria above.

INDIVIDUAL SITE ANALYSIS:

- **Farmland Industries**

Transportation: State Highway and Rail access

Parcel Size: 275+ acres

Floodplain: None

Slope: Mostly minimal (0-3%) with some 3-7% and higher

Generally this area is located north of K-10, west of East Hills Business Park, south of N 1500 Road, and west of E 1575 Road. While the entire site contains roughly 400+ acres, the proposed Farmland Industries Redevelopment Plan, currently working through the approval process, identifies approximately 275 acres of land for industrial uses. The site has access to K-10 Highway, as well as possible future connections to East Hills Business Park. In addition the site has direct access to rail lines that exist on the north end of the property. The site lies outside of the 100-year floodplain and is generally covered by minimal (0-3%) slopes, with a few areas having 3-7% and higher slopes. Portions of the site pose some challenges related to environmental clean-up from the prior use that needs to be addressed before re-development, but would be a good site for Warehouse and Distribution, Office Research and Industrial uses, especially when combined in a collaborative park setting.

- **Southeast Area**

Transportation: State Highway access
Parcel Size: 200+ acres (with an additional 30 identified for Warehouse)
Floodplain: None
Slope: Minimal (0-3%)

The Southeast Industrial Area is located on the south side of East 23rd Street/Kansas Highway 10, south of East Hills Business Park. This area consists of general industrial land uses and it is anticipated this area will experience increased industrial development as noted in the Southeast Area Plan. That plan recommends less intense Industrial uses, such as Warehouse and Distribution and Office Research for approximately 30 acres south of N 1360 Road between E 1700 Road and E 1750 Road. The plan recommends more intense industrial uses for the roughly 200 acres for the area northwest of the intersection of 25th Terrace and Franklin Road, the area east of Franklin Road, north of E. 25th Street and N. 1360 Road, west of E. 1750 Road (Noria Road), and south of E. 23rd Street/K-10 Highway and the area north and south of Franklin Park Circle. Like East Hills Business Park, the Southeast Industrial Area will serve as the eastern gateway to the community. This site has access to Kansas Highway 10 and lies outside of the 100-year floodplain. The area is generally covered by minimal (0-3%) slopes.

- **Airport**

Transportation: Federal Interstate, State Highway, Air access
Parcel Size: 230+ acres
Floodplain: Approximately 10% of those 230 acres
Slope: Minimal; 0-3%

The Lawrence Municipal Airport, located in North Lawrence along US-24/40/59, is a newly developing industrial area of the community. Aviation enterprises are present and there is the potential for additional aviation and related enterprises. Currently, the airport is an island surrounded by some county industrial land use, but mostly agricultural land uses. As development continues to occur in neighboring Leavenworth County, the US-24/40/59 corridor will become a major thoroughfare. As the City begins initiating long-range planning activities for improved municipal services to and stormwater management within this area, development pressures will increase for this area. It is recommended by this Comprehensive Plan that annexation be a part of any industrial development proposed for this area. As this area evolves into a community gateway, development proposals are also encouraged to employ sound site planning and design principles to make this area an attractive one. Interfacings with surrounding properties and neighborhoods are also encouraged to minimize negative impacts and employ appropriate and compatible industrial and business activities.

The area around the Lawrence Municipal Airport best suited for industrial development generally lies southwest of the airport and North of I-70 and encompasses roughly 230 acres. This site has access to I-70, Highways 24 and 40, and the Lawrence Municipal Airport. The majority of the site lies outside of the regulatory floodplain; however, this site has unique challenges related to stormwater management that would need to be addressed during the development process. Slopes in this area are minimal (0-3%).

- **I-70 and K-10**

Transportation: Federal Interstate and State Highway access
Parcel Size: ~~540-565~~ acres, with possibility of more
Floodplain: None
Slope: Mainly 0-3%

The I-70 and K-10 area lies generally north of N 1800 Road (Farmer's Turnpike) near the intersection of Kansas Highway 10 and I-70. The proposed area contains roughly ~~540-565~~ acres of industrial and office/research uses as identified in the *K-10 & Farmer's Turnpike Plan*. The area contains land of minimal slope (0-3%) and also lies outside of the 100-year floodplain. This area substantially meets the general locational criteria and will be an important future economic development area for the Lawrence community because of its prime location near the I-70 interchange, which also acts as the primary access point for the City of Lecompton. It may be possible to develop the site to a limited extent prior to the availability of urban services; however, intense development should wait until such time that the land is annexed and urban services are able to be provided. Over time, as this area develops, it will serve as a gateway to the City of Lawrence and would best be suited for Warehouse and Distribution uses, Industrial uses, Work-live Campus type centers and Industrial/Business/Research parks.

- **K-10 and Highway 40**

Transportation: State Highways (access to Federal Interstate within 2 miles)
Parcel Size: 300 Acres (split north and south of Highway 40)
Floodplain: None
Slope: Mainly 0-3%, with some 3-7%

This area generally lies to the west of K-10 Highway on both the north and south sides of Highway 40 and is detailed in the West 6th Street/K-10 Nodal Plan. The area contains approximately 300 acres and lies outside of the 100-year floodplain. The area is located adjacent to both Highway 40 and K-10 Highway, as well as being in close proximity to I-70. The site has mostly minimal slopes (0-3%) with some 3-7% slopes. Over time, as this area develops, it will serve as a gateway to the City of Lawrence and would be best suited for Warehouse and Distribution uses, Industrial uses, Work-live Campus type centers and Industrial/Business/Research parks.

- **Eudora North & Eudora South**

Areas have been generally identified on the east side of Eudora, both north and south of K-10 Highway that would be appropriate for Industrial development. It is recommended that Eudora annex both areas prior to development.

- **Baldwin City**

The Comprehensive Plan already identifies that a general area to the west of the current Baldwin City limits would be ideal for industrial development at such time that the City of Baldwin is able to provide utilities to the site. Baldwin City is currently in the process of drafting and adopting a comprehensive plan and therefore any decisions regarding specific locations for this site should wait until that process is complete.

- **Highway 56 and Highway 59**

The Comprehensive Plan identifies that a general area near the proposed intersection of Highways 56 and 59 would be ideal for industrial development in the future. It may be possible to develop the site to a limited extent prior to the availability of urban services; however, intense development should wait until such time that urban services are able to be provided.

- **Midland Junction**

This area generally lies near the intersection of N 2000 Road and Highway 24/59 north of Lawrence. While the area is located within the Urban Growth Area for the City of Lawrence, development is not anticipated for more than 30 years. This area is located in proximity to transportation networks and meets the general location criteria making it ideal for industrial development in the future. Intense development should wait until such time that urban services are able to be provided, and transportation infrastructure is upgraded to ensure safe access.

- **Highway 56 and K-33**

The Comprehensive Plan identifies that a general area near the intersection of Highways 56 and K-33 would be ideal for industrial development in the future due to its proximity to the proposed Gardner Intermodal Facility. It may be possible to develop the site to a limited extent prior to the availability of urban services; however, intense development should wait until such time that urban services are able to be provided.

The preservation of high-quality agricultural land, which has been recognized as a finite resource that is important to the regional economy, is of important value to the community. High-quality agricultural land is generally defined as available land that has good soil quality and produces high yields of crops. Within Douglas County these are *capability class* (non-irrigated) I and II, as identified by the National Resources Conservation Service.

At least one of the sites identified above (Airport) has some amount of high-quality agricultural land. Soil conserving agri-industry businesses that will protect the quality of existing high-quality agricultural land either through agricultural use or preservation for future agricultural use should be encouraged to locate in these areas. Future Industrial and Employment land use sites not included on Map 7-2, Potential Locations for Future Industrial and Employment Related Development, should balance the agricultural significance on the site against the need for industrial and employment related development.”

2. EMPLOYMENT-RELATED LAND USE

EMPLOYMENT-RELATED LAND USE CATEGORIES

Employment-related and business park development in Douglas County has taken on many shapes and forms in the past. This Comprehensive Plan recognizes this variety in development and establishes the following categories of employment-related land use:

- **Office** - an area generally characterized by a predominance of professional offices and service uses that are typically located in commercial areas.
- **Office Research** - an area generally characterized by businesses involved in technology, research, and scientific-related activities, although it may also include traditional light industrial uses, such as manufacturing or assembly.
- **Work-live Campus-type Center** – an area that is a campus-like setting with a mix of uses that are compatible which may include industrial, business, retail commercial and residential developments. These areas will be held to a higher standard of design that accents and complements the natural environment and provides a comfortable environment for a live-work relationship where pedestrian activity is planned for and encouraged.
- **Industrial/Business/Research Park** - an area generally characterized by a predominance of office, office research, warehouse and distribution, and/or industrial business activities that typically encompass a large area of land and are designed in a “campus” setting.

LAWRENCE - EXISTING EMPLOYMENT-RELATED AREAS

The City of Lawrence has several business areas providing employment opportunities to the community. Three of the larger areas include: 1) the University of Kansas; 2) downtown Lawrence; and 3) Oread West Research Park. A description and plan recommendations for these areas are discussed below. In addition to these primary employment-related areas, the City of Lawrence also has a number of smaller business locations throughout the city. While not specifically addressed in this section, these smaller business centers play an important role in the overall employment and business development composition of the community as a whole. Refer to Map 7-1, Map of Existing Industrial and Employment-Related Land Uses.

- **The University of Kansas**

The University of Kansas, with its main campus on the east side and its west campus on the west side of US-59/Iowa Street, serves as a major employment center for the City of Lawrence and Douglas County. As the university continues to grow and expand its research and technological abilities, opportunities for new and expanded related industrial and business development are a possibility and highly encouraged.

- **Downtown Lawrence**

Downtown Lawrence encompasses a significant number of non-retail employees and geographically represents a major employment area for the community as well. A substantial number of office and service employees are located in this area. The development of new major office employment centers within the community needs to be evaluated to determine the potential effect on downtown Lawrence. A critical assessment should be made to determine that such proposed development will not have a significant negative impact on the Downtown.

- **Oread West Research Park**

The Oread West Research Park, located at the intersection of Wakarusa Drive and Bob Billings Parkway (formerly West 15th Street) in West Lawrence, is one of the City's newest employment areas offering a high-quality development setting. Although this area has experienced continued development, vacant land still exists and this Comprehensive Plan recommends continued emphasis on office and research use for this area. The location has strong potential for new technology-related industries and should be the focus of an "industrial cluster" as described in the Economic Development element. This park has ties to the University of Kansas and a continued partnership in technological and research-based industrial and business opportunities is encouraged.

LAWRENCE - NEW EMPLOYMENT-RELATED AREAS

This Comprehensive Plan recognizes the need for smaller scale business development opportunities. The following discussion relates to the office and office/research uses of the employment-related land use classifications mentioned earlier.

- **Office**

New office uses will generally be restricted to existing areas of the city, or new areas that are appropriately identified on future land use maps. Future office uses should only locate in new industrial areas in partnership with office research areas, so that office uses independent of industrial uses do not take up valuable industrial land.

It is desirable that a mix of uses be established for these areas in a planned and unified manner. Like other locations visible from major street corridors, development of these areas should express a high quality living and working environment. Consideration of good site planning and design principles that minimize unnecessary impacts to surrounding neighborhoods and promote compatible land use activities and appropriate neighborhood connections and interfacings are encouraged for any development proposed for this area.

- **Office Research**

Office research uses have been recommended as an appropriate land use activity at gateways into the community. Developments occurring at gateways to the community are required to be of high-quality design and visual character utilizing best management practices for site planning and design. Such developments are intended to promote an integrated and contextual design approach that minimizes unnecessary impacts, such as noise, odor, glare, or other similar intrusions to the community and surrounding neighborhoods.

For information related to Work-Live Campus-type Centers and Industrial/Business/Research Park refer to the text in Section 1 - Industrial Land Use for recommendations relating to this type of land use.

INDUSTRIAL AND EMPLOYMENT-RELATED LAND USE GOALS AND POLICIES

Guidelines and incentives are needed to allow for the retention and expansion of development in established industrial and employment-related areas of the City of Lawrence and unincorporated Douglas County.

GOAL 1: Development in Established Industrial and Employment-Related Areas

Encourage the retention, redevelopment and expansion of established industrial and employment-related areas.

Policy 1.1: Retain Established Development and Encourage New Development in Existing Industrial and Employment-Related Areas

- a. Work with the Lawrence Chamber of Commerce to actively market undeveloped sites in a manner which will stabilize long-term development patterns.
- b. Encourage parcel consolidation to provide infill sites for redevelopment and expansion opportunities.
- c. Provide incentives for expansion of existing facilities and redevelopment of vacant facilities and/or land.

Policy 1.2: Ensure Compatibility of Development

- a. Establish design guidelines and standards for redevelopment of existing sites and facilities to ensure high quality development.
- b. Encourage best management practices for site planning and design that include, but are not limited to, building placement and orientation, vehicular and pedestrian circulation patterns, open space, landscaping, lighting, stormwater management, and interfacing with adjacent neighborhoods and development, and appropriate accommodation of the design to the site's natural features.
- c. Encourage building design techniques that include, but are not limited to, the consideration of facade and exterior wall articulation, materials and colors, rooflines, entryways, signage, and energy and resource conservation.

Policy 1.3: Concentrate Industrial and Employment-Related Development

- a. Maintain an appropriate supply of industrially zoned land so that site choices are available and infrastructure expansion can occur in an efficient and orderly manner.
- b. Services to existing industrial and employment-related areas should be improved and upgraded as required to support redevelopment opportunities. Overall

stormwater management, vehicular and pedestrian access, water and wastewater abilities, and site maintenance should be undertaken where necessary. Encourage partnerships for redevelopment and improvements.

Policy 1.4: Provide Opportunities for Limited Industrial and Employment-Related Development in the Unincorporated Areas of Douglas County

Encourage redevelopment and limited expansion of existing industrial and employment-related areas where specific criteria (p. 7-5) can be met.

Guidelines are needed to provide direction on how much, where and at what scale industrial and employment-related development is appropriate for the market it is intended to serve.

GOAL 2: Criteria for Location of New Industrial and Employment-Related Development

Provide industrial and employment-related areas to meet the economic needs of the community.

Policy 2.1: Utilize Locational Criteria for All Industrial and Employment-Related Development

1. A given site, whether located within City limits, in the UGA, or in unincorporated areas of Douglas County, should *substantially* meet the following **general** locational criteria:
 - a. have feasible access to Federal and State transportation networks;
 - b. be of adequate parcel size, generally over forty acres;
 - c. lie primarily outside of the regulatory floodplain;
 - d. have minimal average slopes.
2. After identifying a general location for potential industrial and employment park development, further site analysis and environmental suitability should be conducted considering site-specific criteria. Sites should *substantially* meet the following **specific** criteria on a site plan or development plan level:
 - a. preserve environmentally sensitive areas, including vegetative cover and wildlife habitat, to act as buffers and site amenities;
 - b. encourage natural stormwater management, including locations that permit direct discharge to the floodplain;
 - c. have available and adequate utilities, infrastructure and services for the proposed use;
 - d. be compatible with existing and future zoning/land use patterns, including the use of appropriate buffers between land uses;
 - e. be annexed before development if adjacent to municipal boundaries.
 - f. utilize the following general locational criteria in reviewing industrial and employment-related development request.

Policy 2.2: Review Public Incentive Requests for Compliance with City Adopted Policies

Review public incentive requests to ensure compliance with city adopted policies.

Policy 2.3: Adhere to Designated Land Uses

- a. Locate the development of planned industrial, office research and warehouse distribution facilities in accordance with the general locational criteria listed on p. 7-5. Additionally, sites that meet those criteria are identified on Map 7-2. Require annexation of sites that are adjacent to the City of Lawrence limits.

- b. Designate new industrial, office research and warehouse distribution areas to support job creation. Ensure that new industrial, office research and warehouse distribution developments are concentrated in areas with similar compatible uses.
- c. Large-scale industrial and employment-related development should be located in planned parks to help ensure coordination of circulation systems, lot configuration, site layout [building, parking and access facilities], and environmental amenities.

Policy 2.4: Maintain an Inventory of Industrial and Employment-Related Land Uses and Develop a Method to Monitor Related Growth

- a. Maintain a methodology for site selection that takes into consideration industrial user's needs and the best interests of the community.
- b. Identify and plan for an appropriate supply of industrially zoned land.
- c. Develop a technique to monitor the aggregate size of industrial and employment-related developments within the community.

Policy 2.5: Ensure Compatibility of Development

- a. Establish design guidelines and standards for new industrial and employment-related development.
- b. Encourage best management practices for site planning and design that include, but are not limited to, the consideration of natural site features, building placement and orientation, vehicular and pedestrian circulation patterns, open space, landscaping, lighting, stormwater management, and interfacing with adjacent neighborhoods and development.
- c. Encourage building design techniques that include, but are not limited to, the consideration of facade and exterior wall articulation, materials and colors, rooflines, entryways, signage, and energy and resource conservation.
- d. Major entrances into industrial and business parks should be identified by attractive "gateway" features. Gateways should include special signage, landscaping and accent lighting, and/or a common sculptural feature and should be located outside the public street rights-of-way.
- e. Access to individual building sites within industrial and business parks should be from an internal circulation system. Site access from peripheral arterial and collector streets should be limited to major entrances serving the overall development area. However, industrial users on large lots that are significant generators of traffic may directly access arterial roads if the size of the site is such that it allows internal circulation without the necessity of constructing local roads to direct that circulation to the arterial road. Such access shall be based on sound traffic engineering principles and shall be properly controlled with appropriate signalization and turn lanes. Industrial and employment-related

traffic and related conditions should not adversely affect other nearby land use areas.

Guidelines are needed to allow for compatible transition from industrial and employment-related development to other less intensive land uses. This framework is needed both in existing areas and new development areas.

GOAL 3: Compatible Transition from Industrial and Employment-Related Development to Less Intensive Uses

Ensure a compatible transition between industrial and employment-related developments and less intensive land uses.

Policy 3.1: Use Appropriate Transitional Methods

- a. Encourage industrial, office research and warehouse distribution facilities to have a positive impact on neighboring land uses through the use of natural area separations, broad landscaped yards or other means of buffering.
- b. New industrial, office research and warehouse distribution facilities should be designed and developed so that offices, showrooms, and similar uses occupy high-visibility locations around park peripheries.
- c. Less compatible development should be located to the interior of industrial and employment-related development sites or adjacent to arterial streets rather than adjacent or in close proximity to residential neighborhoods or incompatible commercial uses. A use may be considered less compatible because of height, massing, parking, and light, noise, traffic generation or hours of operation.
- d. Compatible transition and appropriate interfacings from industrial and employment-related development to less intensive land uses should consider:
 1. Site Orientation
 - a. Site design should be oriented toward major streets.
 - b. Site access should be from collector or access/frontage streets to arterials. However, industrial users on large lots that are significant generators of traffic may directly access arterial roads if the size of the site is such that it allows internal circulation without the necessity of constructing local roads to direct that circulation to the arterial road. Such access shall be based on sound traffic engineering principles and shall be properly controlled with appropriate signalization and turn lanes.
 - c. Streets which are designed with elements to provide visual or physical buffering may be used as boundaries between industrial

and employment-related development and commercial or higher-density residential land uses.

- d. Encourage the consolidation of access and driveways serving two or more uses within the industrial/business park development.

2. Building Relationships

- a. A back-to-back relationship is preferable between industrial-related and residential uses, and may require substantial screening to provide compatibility. A front-to-front relationship is encouraged for all non-residential uses.
- b. Industrial and employment-related buildings and parking areas should have greater setbacks than the required setbacks of abutting residential uses.
- c. The height and massing of industrial and employment-related buildings and accessory structures should be oriented away from residential neighborhoods to avoid creating a negative visual effect. Industrial building height and massing should be complementary and reflect the residential architecture and neighborhood character when adjacent to such development.

3. Land Features

- a. Retain mature trees, natural vegetation, natural and environmentally sensitive areas to naturally separate industrial and employment-related developments from residential land uses.
- b. Use existing topography to naturally separate industrial and employment-related developments and other less intensive land uses.

4. Screening and Landscaping

- a. Encourage the creative and extensive use of landscaping and berming techniques for effective buffering between differing intensities of land uses.
- b. Fences shall not be used as a sole method of providing screening and buffering. Where fencing is proposed, additional landscaping may be required to soften the monotonous effect of a fenceline.
- c. Encourage the use of existing vegetation, such as stands of mature trees, and other natural site features into the landscape design as natural buffers or focal points.

- d. Use high quality materials in the construction of screening and landscaping to decrease long-term maintenance costs. Quality of site landscaping shall mirror the quality of the overall development.
- e. Unsightly views and light trespass should be screened from neighboring properties and the public right-of-way. Building materials or structures incompatible with the image of a high-quality development, such as chain-link fences, outdoor storage facilities, etc., should not be the means of screening areas visible from public streets or adjacent parcels.

5. Lighting

Any lighting used to illuminate parking areas, signs or structures shall be placed to deflect light away from any adjoining property or from public streets through fixture type, height and location.

Policy 3.2: Consideration of Transitional Uses

- a. Consider low-intensity commercial or office development as a transition between industrial and employment-related development and low-density residential neighborhoods. The low-intensity commercial or office development should include:
 - 1. Design elements such as: height, massing, and scale compatible with the surrounding low-density residential uses;
 - 2. Site design compatible with surrounding residential neighborhoods with consideration given to extensive screening, building and parking orientation, and preservation of natural site amenities; and
 - 3. Site access provided from arterial, collector or access/frontage streets and traffic directed away from surrounding residential areas.
- b. Encourage the integration of higher-density residential development through compatible design with industrial and employment-related developments and the surrounding low-density residential neighborhoods. Compatible design includes proper building transition and buffers.
- c. Utilize medium- or high-intensity recreational facilities as a transitional use to lesser-intensity uses. Encourage the joint use of parking facilities to serve the recreational uses.
- d. Incorporate open spaces and natural site features as a transitional use between industrial and employment-related development and low-density residential development.

Policy 3.3: Consider Image and Appearance in Site Layout

- a. Establish design guidelines and standards for new industrial and employment-related development.
- b. Encourage best management practices for site planning and design that include, but are not limited to, the consideration of natural site features, building placement and orientation, vehicular and pedestrian circulation patterns, open space, landscaping, lighting, stormwater management, and interfacing with adjacent neighborhoods and development.
- c. Encourage building design techniques that include, but are not limited to, the consideration of facade and exterior wall articulation, materials and colors, rooflines, entryways, signage, and energy and resource conservation.

Traffic impacts continue to be a major concern in industrial and employment-related developments, with much of the concern related to ensuring safe and efficient access and circulation within and around industrial and employment-related areas.

GOAL 4: Transportation Considerations

Promote a multi-modal transportation system which provides or improves access and circulation within and adjacent to industrial and employment-related areas.

Policy 4.1: Level of Service

Permit the expansion of existing or construction of new industrial and employment-related development in areas where the additional traffic generated by such development would result in an acceptable Level of Service.

Policy 4.2: Evaluate Traffic Impacts

An evaluation of the traffic impacts of a development on the surrounding area should consider the existing and projected traffic conditions and their impact on the existing transportation system and should be based on planned improvements which are identified in the Capital Improvement Plan (CIP), the Comprehensive Plan, or the Long-Range Transportation Plan. The Capital Improvement Plan, the Comprehensive Plan, and the Long-Range Transportation Plan shall be updated periodically to recognize changes in priorities and to add new projects with designated priorities.

Policy 4.3: Vehicular Circulation and Access

- a. Require, wherever possible, vehicular circulation within compatible developments that allows internal access to adjacent industrial and employment-related buildings and developments.
- b. Prohibit direct vehicular access from industrial and employment-related developments to local residential streets. Industrial and employment-related traffic through residential areas is strongly discouraged.
- c. Limit the principal access for industrial and employment-related centers to arterial, collector or access/frontage roads. Industrial users on large lots that are significant generators of traffic may directly access arterial roads if the size of the site is such that it allows internal circulation without the necessity of constructing local roads to direct that circulation to the arterial road. Such access shall be based on sound traffic engineering principles and shall be properly controlled with appropriate signalization and turn lanes.
- d. Adequate ingress and egress from industrial and employment-related centers should strive to provide a minimum of two access points.

- e. Encourage shared access between adjacent industrial and employment-related developments. Plan for coordinated traffic circulation within and adjacent to proposed development areas.

Policy 4.4: Pedestrian Access and Circulation

- a. Provide sidewalks on both sides of all streets (public and private).
- b. Provide safe, convenient pedestrian access from parking areas and avoid pedestrian and vehicular conflicts within these industrial and employment-related developments.
- c. Include bicycle access, or the potential for such access, within industrial and employment-related developments, between major employment areas within the community, and with the community's overall bicycle network.
- d. Strongly consider public transit facilities and pedestrian-related facilities as a requirement of industrial and business park development.
- e. Encourage public transit.

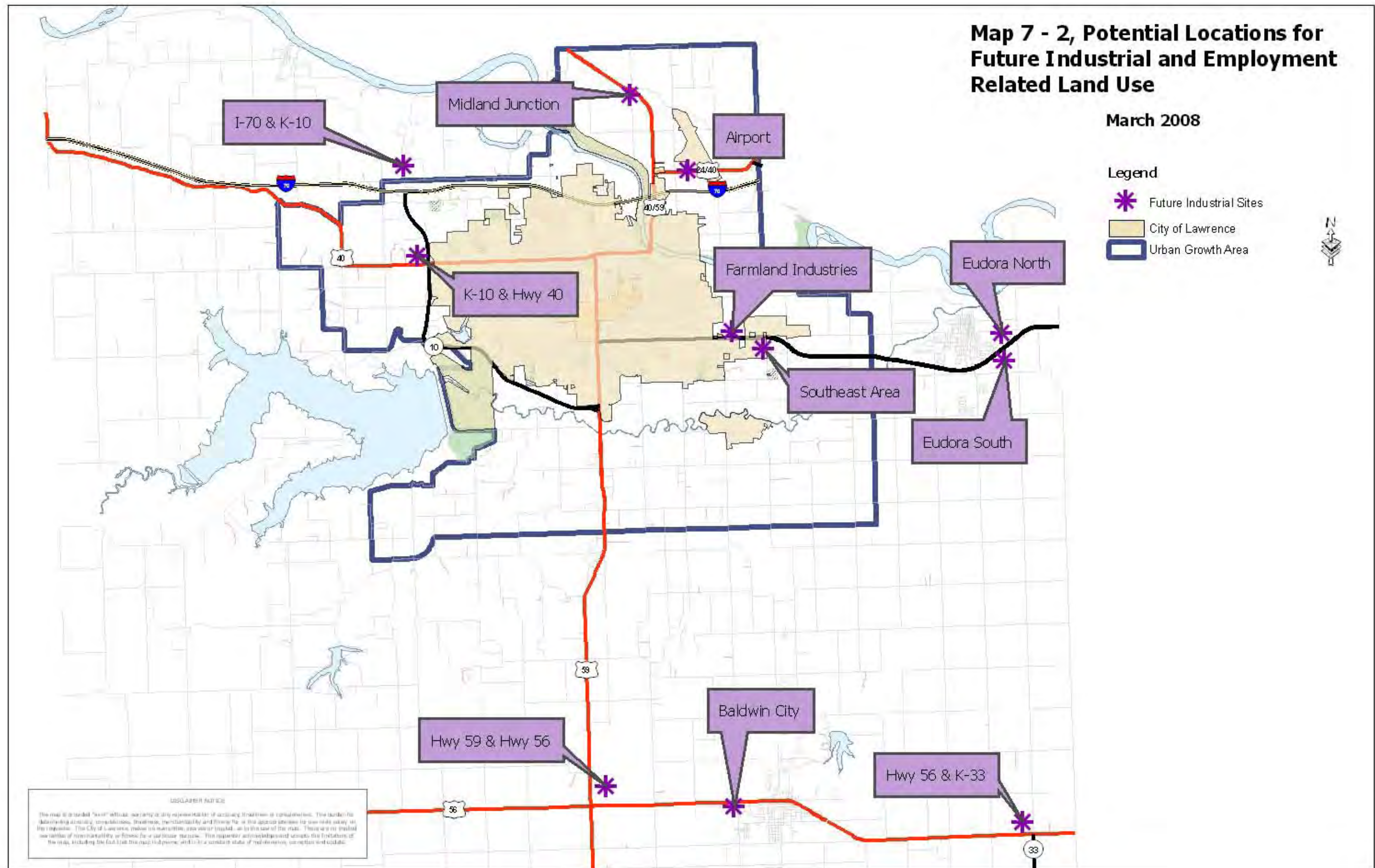
Policy 4.5: Parking and Loading

- a. Develop parking areas in convenient locations to support industrial and employment-related traffic.
- b. Identify potential parking areas which will serve mass transit and carpooling.
- c. Ensure adequate loading space, within a building or a side or rear yard, in such a way that all storage, standing and maneuvering of trucks will take place solely on private property and be screened or buffered from adjacent lower-intensity uses.

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APPENDICES FOR SUPPLEMENTAL REPORTS

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CHAPTER FOURTEEN – SPECIFIC PLANS

Purpose

Long-range planning in an area specific manner is an important aspect of the overall community planning process. Specific plans provide the focused guidance necessary for proper decision making regarding an area's future. Chapter 14 references adopted specific plans and provides guidance, through the Hierarchy of Plans, for completing the proper type of plan for an area.

The plans referenced below have been adopted through a Comprehensive Plan process, as described on pages 17-8 and 17-9. As such, these plans are considered Comprehensive Plan policy and are an element of *Horizon 2020*. The plans are separate documents from *Horizon 2020* and can be accessed online at <http://www.lawrenceplanning.org> or copies can be obtained by contacting the Lawrence-Douglas County Planning Department.

Plans prepared for specific areas, whether they are areas within the City of Lawrence or areas within unincorporated Douglas County contain detailed policy guidance for those areas. The plans, when adopted through a Comprehensive Plan process, and referenced in this chapter, become the official Comprehensive Plan policy for the respective areas. The policy contained in the plans take precedence over other policy found in *Horizon 2020*, unless specifically stated otherwise in the Plans.

Plan Review

Plans can eventually lose their relevance to a specific area. Additionally, some plans will require review to confirm if policies are being followed, goals are being met, and implementation is occurring.

Therefore, it is necessary to ensure plans are reviewed on a regular basis to update them or to rotate them out of the Comprehensive Plan if they have lost their relevance. Each plan listed below has a date which will trigger a review of that plan. Planning Staff will review the plan to determine if it meets one of the following criteria and needs the required action:

1. Plan remains relevant - no action necessary.
2. Plan has been superseded by another plan - remove from Chapter 14.
3. Plan is out of date and no longer relevant – remove from Chapter 14.
4. Plan requires updating – staff will update and forward recommendations for Commission consideration.

Staff will report on the review of a specific plan to the Planning Commission along with a recommendation for action, if necessary. If an update is required, staff will provide the Planning Commission a plan to complete the update. A Comprehensive Plan Amendment will be required to remove a specific plan from Chapter 14 or to update a specific plan.

Specific Plans

- **6th and Wakarusa Area Plan**

Location: The intersection of 6th Street and Wakarusa Drive

Adoption Date: December 2, 2003 by Lawrence City Commission

REVISED

July 10, 2012 by Lawrence City Commission

Review Date: 2017

- **HOP District Plan**

Location: Bordered by W. 5th St. on the north, California St. on the west, W. 7th St. on the south and Alabama St. on the east.

Adoption Date: May 10, 2005 by Lawrence City Commission

Review Date: 2010

- **Burroughs Creek Corridor Plan**

Location: Area around the former BNSF railroad corridor between E. 9th St. and E 31st St.

Adoption Date: February 14, 2006 by Lawrence City Commission

Review Date: 2011

- **East Lawrence Neighborhood Revitalization Plan**

Location: Bordered by the Kansas River on the North; Rhode Island Street from the Kansas River to E. 9th Street, New Hampshire Street from E. 9th Street to approximately E. 11th Street, Massachusetts Street from approximately E. 11th Street to E. 15th Street on the west; E. 15th Street on the south; BNSF railroad on the east.

Adoption Date: November 21, 2000 by Lawrence City Commission

Review Date: 2010

- **Revised Southern Development Plan**

Location: Bounded roughly to the north by W. 31st Street and the properties north of W. 31st Street between Ousdahl Road and Louisiana Street; to the west by E. 1150 Road extended(Kasold Drive); to the south by the north side of the Wakarusa River; and to the east by E. 1500 Road (Haskell Avenue).

Adoption Date: December 18, 2007 by Lawrence City Commission

January 7, 2008 by Douglas County Board of Commissioners

REVISED

June 18, 2013 by Lawrence City Commission

June 12, 2013 by Douglas County Board of Commissioners

Review Date: 2017

- **Southeast Area Plan**

Location: Bounded roughly to the north by E. 23rd Street/K-10 Highway; to the west by O'Connell Road; to the south by the northern boundary of the FEMA designated floodplain for the Wakarusa River; and to the east by E. 1750 Road (Noria Road).

Adoption Date: January 8, 2008 by Lawrence City Commission
 January 28, 2008 by the Douglas County Board of Commissioners
 REVISED
 June 14, 2008 by Lawrence City Commission
 July 24, 2008 by Douglas County Board of Commissioners
 REVISED
 October 7, 2008 by Lawrence City Commission
 November 10, 2008 by Douglas County Board of Commissioners
 UPDATED
 September 27, 2011 by Lawrence City Commission
 November 11, 2011 by Douglas County Board of Commissioners

Review Date: 2021

- **Farmland Industries Redevelopment Plan**

Location: The former Farmland Industries property is located east of Lawrence along K-10 Highway and just west of the East Hills Business Park. It is approximately one half mile south of the Kansas River.

Adoption Date: March 11, 2008 by Lawrence City Commission
 March 31, 2008 by Douglas County Board of Commissioners

Review Date: 2013

- **K-10 & Farmer's Turnpike Plan**

Location: Generally located around the intersection of I-70 and K-10 and to the east approximately four miles.

Adoption Date: December 9, 2008 by Lawrence City Commission
 January 7, 2009 by Douglas County Board of Commissioners

REVISED

<Adoption Date> by the Lawrence City Commission

<Adoption Date> by the Douglas County Board of

Commissioners

Review Date: 2019

- **Lawrence SmartCode Infill Plan**

Location: General areas are: 19th St. and Haskell Ave., 23rd St. and Louisiana St.

Adoption Date: January 27, 2009 by Lawrence City Commission
 February 23, 2009 by Douglas County Board of Commissioners

Review Date: 2019

- **West of K-10 Plan**

Location: Generally located north and south of Highway 40 and west of K-10 Highway. It does contain some land east of K-10 Highway

Adoption Date: June 9, 2009 by Lawrence City Commission

May 6, 2009 by Douglas County Board of Commissioners
REVISED

March 26, 2013 by Lawrence City Commission

April 10, 2013 by Douglas County Board of Commissioners

Review Date: 2019

- **Oread Neighborhood Plan**

Location: Generally located between W. 9th Street and W. 17th Street and between the KU campus and Massachusetts Street.

Adoption Date: September 28, 2010 by Lawrence City Commission

Review Date: 2020

- **Inverness Park District Plan**

Location: Generally located south of Clinton Parkway between Inverness and Crossgate Drives, and north of K-10 Highway.

Adoption Date: September 20, 2011 by Lawrence City Commission

November 12, 2011 by Douglas County Board of Commissioners
REVISED

May 15, 2012 by Lawrence City Commission

June 13, 2012 by Douglas County Board of Commissioners

Review Date: 2021

- **Northeast Sector Plan**

Location: Generally located north and east of Lawrence and north of the Kansas River to the Douglas County line.

Adoption Date: September 11, 2012 by Lawrence City Commission

June 13, 2012 by Douglas County Board of Commissioners

Review Date: 2022

Hierarchy of Plans

The following Hierarchy of Plans describes the types of plans that can be used for the long-range planning of the community. The Hierarchy also provides guidance as to when it is appropriate to use each type of plan and the typical process used to complete a type of plan. The Hierarchy of Plans was adopted by the Lawrence-Douglas County Planning Commission on June 26, 2006, by the Lawrence City Commission on August 15, 2006, and by the Board of County Commissioners on September 11, 2006. Figure 14-1 provides an abbreviated description of each type of plan.

Comprehensive Plan

A Comprehensive Plan expresses a community's desires about the future image of the community. It provides the foundation and framework for making physical development and policy decisions in the future. The Comprehensive Plan is a policy guide which describes in text and displays in graphics the community's vision for directing future land development. A Plan includes several components:

- It is a policy plan, stating the community's desires for directing land use decisions through the identified goals and policies.
- It provides a physical plan component by mapping generalized land uses and describing in policies the relationships between different land uses.
- It is long-range, considering a community's expected growth in the future. Future land use maps graphically display the potential development of the community.
- It is comprehensive, considering issues such as demographic, economic and transportation factors which have shaped and will continue to influence land development in a community.

How is the comprehensive plan used?

The Comprehensive Plan provides a vision for the community. It is used as a policy guide that identifies the community's goals for directing future land use decisions. The Plan is also used by property owners to identify where and how development should occur; by residents to understand what the city and county anticipates for future land uses within the community; and by the city, county and other public agencies to plan for future improvements to serve the growing population of the community.

Specifically, the city and county use the Comprehensive Plan to evaluate development proposals; to coordinate development at the fringes of the county's cities; to form the foundation for specific area plans; to project future service and facilities needs; and to meet the requirements for federal and state grant programs. The Comprehensive Plan is used most often as a tool to assist the community's decision makers in evaluating the appropriateness of land development proposals. The Comprehensive Plan allows the decision makers to look at the entire community and the effects of land use decisions on the community as a whole to determine whether individual proposals are consistent with the overall goals of the community.

Typical Process

The typical process of a comprehensive plan and the plan itself could include any of the following:

- Identify the study area boundary
- Identify key stakeholders
- Public meetings
- Inventory survey and data analysis
- Goals, visions, policies, and objectives
- Plan drafts
- Adoption process
- Maps of existing and proposed land use

Watershed or Sub-basin Plan

A watershed or sub-basin plan is a document that studies stormwater runoff and the potential for flooding and environmental impact of a particular watershed or sub-basin, before and after potential development, which drains into a river or other body of water. This plan has boundaries defined by the natural watershed basin or sub-basin of the area. It uses multiple layers of information pertaining to the natural and built environment to develop a comprehensive picture of the carrying capacity of the land for urban densities of development.

This is the second largest and most challenging type of plan to develop. A watershed or sub-basin plan is similar to the development of a comprehensive land use plan in its level and intensity of work. This type of plan could take 24 to 36 months to complete.

When is a watershed or sub-basin plan appropriate?

This type of plan is commonly used to study greenfield, undeveloped, natural, or agriculturally used areas on the fringe of urban development. A watershed or sub-basin plan is used to determine the long-term future (potential) for urban densities of development and their impact on the natural environment.

Purpose or reasons to use a watershed or sub-basin plan are to:

1. Provide information regarding the impact of the natural environment on the potential for future development.
2. Determine any environmental constraints and hazards for future development.
3. Provide a shared vision for area's residents/owners and local government entities.
4. Provide information regarding the area's needs, priorities, and proposed projects.
5. Provide guidance on matters of land use, development, and site layout to possible area residents or investors.
6. Determine if development proposals and land use changes are in accordance with the community's long term vision.
7. Provide implementation recommendations for coordination of development with adequate public facility's goals.
8. Provide a framework to guide an area's development efforts and track development trends and progress.
9. Provide maps showing existing information and proposed information.

Typical Process of a Watershed Plan

- Identify the study area boundary
- Identify key stakeholders
- Public meetings
- Inventory survey and data analysis
- Goals, visions, policies, and objectives
- Plan drafts
- Adoption process

Sector Plan

A sector plan covers one or more sections of land and uses geographic and demographic information to develop a detailed land use vision for future development or redevelopment of the study area. Boundaries are generally based on physical features such as arterial thoroughfares, rivers, or other natural geographic elements.

In the hierarchy of plans, a sector or area plan is the third tier. Based on the size of the area being studied, one or more sections of land, it could take between 18 and 24 months to develop.

When is a sector plan appropriate?

This type of plan is used to forecast development trends or future development patterns for building out or redeveloping an area. This planning tool is most useful when an area is largely undeveloped and/or on the edges of current development.

Purpose or reasons to use a sector plan are to:

1. Provide guidance on matters of land use, development and site layout to possible area residents or investors.
2. Provide implementation recommendations for coordination of development with adequate public facility's goals.
3. Provide information regarding the area's needs, priorities, and proposed projects.
4. Determine if development proposals and land use changes are in accordance with the community's long term vision.
5. Provide a shared vision for area's residents/owners and local government entities.
6. Provide a framework to guide an area's development efforts and track development trends and progress.

Typical Process

The typical process of a sector plan and the plan itself could include any of the following:

- Identify the study area boundary
- Identify key stakeholders
- Public meetings
- Inventory survey and data analysis
- Goals, visions, policies, and objectives
- Plan drafts
- Adoption process
- Maps of existing and proposed land use

Neighborhood Plan

A neighborhood plan is a document that studies the issues of a specific, established neighborhood association, or an area that could be covered by a neighborhood association. If a neighborhood association exists, the boundaries of the neighborhood plan shall conform to those of the neighborhood association. If no neighborhood association exists, the boundaries of the neighborhood plan shall be defined using other methods such as natural features and/ or streets. Neighborhood plans use geographic and demographic information to develop a detailed land use vision for the future development or redevelopment of the neighborhood.

A neighborhood plan is the fourth tier in the hierarchy of plans. Depending on the amount of current development, a neighborhood plan could take from 9 to 12 months to develop.

When is a neighborhood plan appropriate?

A neighborhood plan is appropriate when there are traffic issues or significant development, redevelopment, or infill development in a neighborhood.

Purpose or reasons to use a neighborhood plan are to:

1. Provide guidance on matters of land use, development and site layout to possible area residents or investors.
2. Provide implementation recommendations for coordination of development with adequate public facility's goals.
3. Provide information regarding the area's needs, priorities, and proposed projects.
4. Determine if development proposals and land use changes are in accordance with the community's long term vision.
5. Provide a shared vision for area's residents/owners and local government entities.
6. Provide a framework to guide an area's development efforts and track development trends and progress.

Typical Process

The typical process of a neighborhood plan and the plan itself could include any of the following:

- Identify the study area boundary
- Identify key stakeholders
- Public meetings
- Inventory survey and data analysis
- Goals, visions, policies, and objectives
- Plan drafts
- Adoption process
- Maps of existing and proposed land use

Nodal Plan

A nodal plan is a document based on a prescribed radius around the intersection of two or more major thoroughfares. This plan studies specifically defined criteria such as vehicular and pedestrian circulation and connectivity in association with the density and intensity of proposed land uses.

In the hierarchy of plans, a nodal plan is under the category of “special area” plans. This plan's level of study and detail is restricted because the boundaries are restricted. The process could take 6 to 12 months.

When is a nodal plan appropriate?

Examples when this type of plan is useful are:

- The study of major road intersections where large-scale commercial developments are proposed.
- A siting study is requested for a public facility, branch libraries or community building, where the service area radiates outward from the site.

Purpose or reasons to use a nodal plan are to:

1. Provide guidance on matters of land use, development and site layout to possible area residents or investors.
2. Provide implementation recommendations for coordination of development with adequate public facility's goals.
3. Provide information regarding the area's needs, priorities, and proposed projects.
4. Determine if development proposals and land use changes are in accordance with the community's long term vision.
5. Provide a shared vision for area's residents/owners and local government entities.
6. Provide a framework to guide an area's development efforts and track development trends and progress.

Typical Process

The typical process of a nodal plan and the plan itself could include any of the following:

- Identify the study area boundary
- Identify key stakeholders
- Public meetings
- Traffic counts
- Inventory survey and data analysis
- Goals, visions, policies, and objectives
- Plan drafts
- Adoption process
- Maps of existing and proposed land use

Corridor Plan

A corridor plan is a document that studies a linear development, natural or man-made, and the adjacent area bounding this feature. A corridor plan is used to develop an integrated vision that coordinates multiple planning disciplines such as transportation, environmental, and/or land use.

The corridor plan is a type of a “specific issue” plan because it is predominately used to assess transportation and land use planning issues. The timeline of completion of this type of plan varies depending on the length of the corridor and the level of development that have already occurred along the corridor. This process could take 9 to 24 months.

When is a corridor plan appropriate?

Examples when this type of plan is useful are:

- Along major arterial streets
- When studying access management
- When studying riverine, riparian, and wildlife habitat areas
- Along abandoned railroad corridors for rails-to-trails applications

Purpose or reasons to use a corridor plan are to:

1. Provide guidance on matters of land use, development and site layout to possible area residents or investors.
2. Provide implementation recommendations for coordination of development with adequate public facility's goals.
3. Provide information regarding the area's needs, priorities, and proposed projects.
4. Determine if development proposals and land use changes are in accordance with the community's long term vision.
5. Provide a shared vision for area's residents/owners and local government entities.
6. Provide a framework to guide an area's development efforts and track development trends and progress.

Typical Process

The typical process of a corridor plan and the plan itself could include any of the following:

- Identify the study area boundary
- Identify key stakeholders
- Public meetings
- Inventory survey and data analysis
- Goals, visions, policies, and objectives
- Plan drafts
- Adoption process
- Maps of existing and proposed land use

Specific Issue/District Plan

A specific issue or district plan is a document that is developed to address a defined geographic area, development proposal, the coordination of the extension of public services, or infrastructures as part of a unilateral annexation, or land use issue that does not clearly fall in one of the other plan categories.

In the hierarchy of plans, a specific issue/district plan falls under “special area” plans. The level of detail in this plan is concentrated on a specific subject based on the study issues identified. This type of plan could take 6 to 12 months to develop.

When is a specific issue or district plan appropriate? Examples where these types of plan are useful are:

- When the study of a sub-area of a neighborhood is needed to evaluate a rise in housing types [rental housing vs. owner-occupied]
- When there is significant redevelopment in an established neighborhood
- When there is a request for a predominate change in land use
- When a major redevelopment plan is proposed
- When there is a conflict between land use and zoning
- Where there is concern that an area is underserved by parks or other public facilities

Purpose or reasons to use a specific issue or district plan are to:

1. Provide guidance on matters of land use, development and site layout to possible area residents or investors.
2. Provide implementation recommendations for coordination of development with adequate public facility's goals.
3. Provide information regarding the area's needs, priorities, and proposed projects.
4. Determine if development proposals and land use changes are in accordance with the community's long term vision.
5. Provide a shared vision for area's residents/owners and local government entities.
6. Provide a framework to guide an area's development efforts and track development trends and progress.

Typical Process

The typical process of a specific issue/district plan and the plan itself could include any of the following:

- Identify the study area boundary
- Identify key stakeholders
- Public meetings
- Inventory survey and data analysis
- Goals, visions, policies, and objectives
- Plan drafts
- Adoption process
- Maps of existing and proposed land use

Figure 14-1

