



CITY OF

VERSAILLES
est. 1792

Lexington Road Streetscape

PLANNING REPORT

FEBRUARY 2024

PREPARED BY:



Engineering Planning

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LEXINGTON ROAD STREETScape OVERVIEW

PROJECT BACKGROUND

The City of Versailles has developed a strong and vibrant streetscape within their downtown Main Street corridor, complete with generously dimensioned pedestrian sidewalks and adjacent amenity zones, with a full complement of lighting, street trees and supporting street furnishings. The Main Street corridor also supports a balanced level of transportation infrastructure to support critical vehicular traffic patterns and areas of parallel parking to benefit and serve the concentrated downtown business core.

As an expansion of their success along Main Street, the city is now looking to explore potential improvements along “Lexington Road” - the intersecting primary crossroad corridor serving the downtown. The 0.85-mile study portion of US 60 known locally as Lexington Street and Lexington Road, begins at the downtown intersection with Main Street and extends east to its terminus with the US 60 Versailles By-Pass.

This study examines the varied conditions and character along the route and is intended to explore and provide conceptual options for multi-modal transportation improvements within unique segments of the corridor, which will later be used as the basis for future phased grant requests for corridor redesign and reconstruction. This study includes considerations for travel and turn lanes, intersection issues, and adjacent access control recommendations, while focusing on improvements to bicycle and pedestrian facilities that would provide stronger connectivity and mobility along the corridor.

Existing Conditions

The study section of US 60 is primarily a three-lane (10-12 feet lane width) east-west minor arterial roadway through relatively level terrain, with speed limits varied between 25 - 35 mph within the study area. The corridor begins as Lexington Street at its intersection with downtown Main Street and continues east for two blocks as an extension of the downtown commercial district. Within the initial two blocks, the corridor quickly transitions from downtown commercial into an area of residential land use, and transitions again a block further east beyond the Maple Street intersection

into an open area of undeveloped land on both the north and south sides of the corridor. Continuing further east to the intersection with Laval Heights, the land use changes once again to a consistent zone of dense business commercial development where the street name changes to Lexington Road and the study corridor meets its terminus with the US 60 By-Pass.

Traffic and Safety

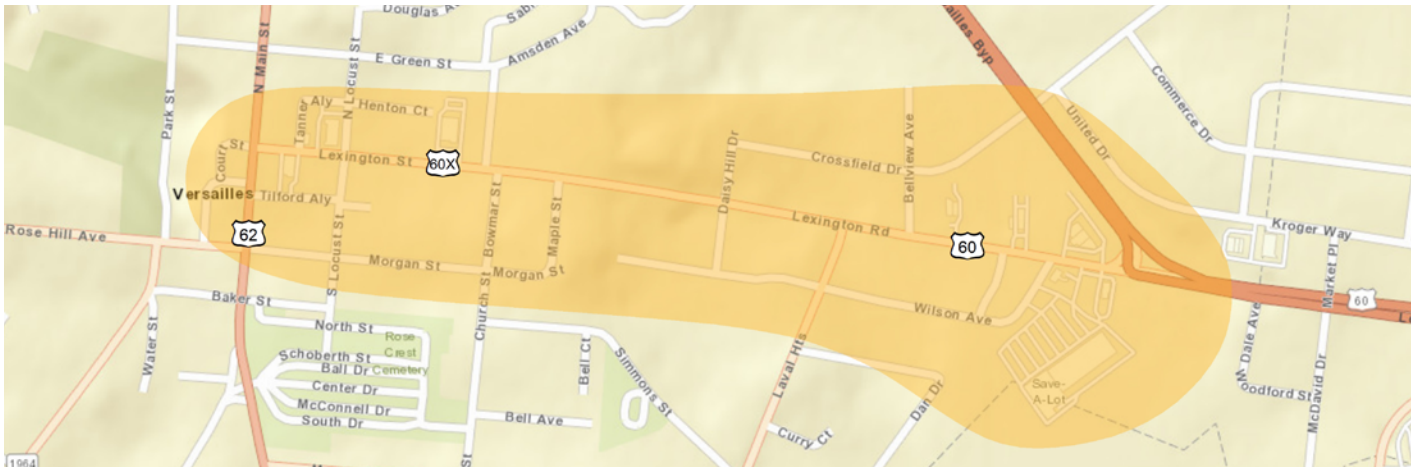
Traffic and safety specifics are addressed in detail on Page 4 of this report, but in general, the corridor receives heavy daily use with areas of concentrated accident history focused primarily within the two ends of the study, where the route connects to busy intersecting legs of US 60. Average daily traffic along the project ranges from 9,650 to 11,000 vehicles with about 5.5% trucks.

Environmental

While a detailed environmental study was not included in this study, an environmental overview was provided to map existing resources, and identify any sensitive features or “red flags” which might otherwise control or limit the conceptual improvements explored. Based on the overview conducted for this study, the anticipated National Environmental Policy Act (NEPA) document for a streetscape project in the described corridor would be a Categorical Exclusion Level 1 (CE-1). However, a detailed environmental study would be needed to determine what level of documentation is ultimately required for the purposes of federal funding. Further environmental details are provided at the end of this report.

Cost Estimates

Given the limited nature of this study and its recommendations for only concept-level improvements, detailed cost estimates were not provided. However, a Summary of Probable Construction Costs is provided at the end of this study to provide order-of-magnitude or “ballpark” estimates for the concepts proposed, based on similar corridor streetscape projects recently completed within the Commonwealth.



Study Area

STUDY CORRIDOR PURPOSE AND NEED

The purpose of the project is to improve safety and multi-modal connectivity for bicyclists and pedestrians to community resources along Lexington Road (US 60X) from Main Street (MP 0.94) to the US 60 Bypass (MP 1.79).

Lexington Road serves as the gateway to the heart of Versailles. It has historically experienced safety issues for both motorists and pedestrians and existing pedestrian and bicycle facilities do not effectively serve these users.

Safety

Safety and crash history issues along the project corridor are discussed in more detail in the section below under the heading SAFETY AND CRASH HISTORY on Page 4.

Multi-Modal Connectivity

Currently there are gaps in the sidewalk and bicycle network connecting to homes, community resources, and businesses along the corridor. Additionally, existing sidewalks do not meet current Americans with Disabilities Act (ADA) requirements and are in a state of disrepair. Existing bike lanes are discontinuous.

Logical Termini

While the western terminus at the Main Street intersection represents an obvious beginning point for the corridor study, the eastern terminus is not as obvious. However, there are conditions and metrics which clearly support the city's decision to end the project at the intersection with the US 60 By-Pass.

The majority of the corridor between Main and the By-Pass is configured as a 3-lane section, with the exception of the segment between Wilson Avenue and the By-Pass where the corridor transitions to a 4-lane section to align with the conditions further east beyond the intersection. Within this length, the speed limit ranges from 25 mph at the western terminus and 35 mph at the By-Pass intersection, where the speed increases to 45 mph to the east beyond the By-Pass.

Additionally, where the study corridor is classified as a minor arterial, the classification increases to a principal arterial roadway beyond the By-Pass; and from a traffic volume analysis, the Average Annual Daily Traffic (AADT) ranges from 11,000 vehicles at the intersection of Main Street to 9,650 just before the By-Pass intersection. Beyond the By-Pass to the east, the AADT increases above 23,500 vehicles. Given the comparative lane geometry, speed limits, roadway classifications, and traffic volumes, it is clear that the By-Pass intersection represents a logical terminus for the corridor study.

PROJECT GOALS

The goals of the Lexington Road streetscape project are to improve livability, mobility, and sustainability for all modes of transportation and create an aesthetically attractive corridor. These goals are similar to and reflect what is noted on Page 22 of the 2022 KYTC Complete Streets, Roads, and Highway Manual, which states "... effective street design involves balancing safety, mobility and preservation of scenic, aesthetic, historic, cultural and environmental resources..."

Livability, Mobility and Sustainability

While livability considerations are subjective and vary based on divergent individual priorities, most livability factors include easily accessible and safe pedestrian and bicycling facilities within urbanized areas and mobility provisions for all ages and abilities. These goals, along with the benefits of energy and environmental conservation, contribute to the long-term sustainability of Versailles and also factors into livability considerations.

Historic Preservation and Visual Continuity

Preservation of the historic character of Versailles and Woodford County, plus visual continuity, can be achieved through the use of aesthetic elements and streetscaping. This goal can be obtained throughout the project with the consistent use of aesthetic elements unique to the area, and by creating continuous links facilitating all modes of transportation.

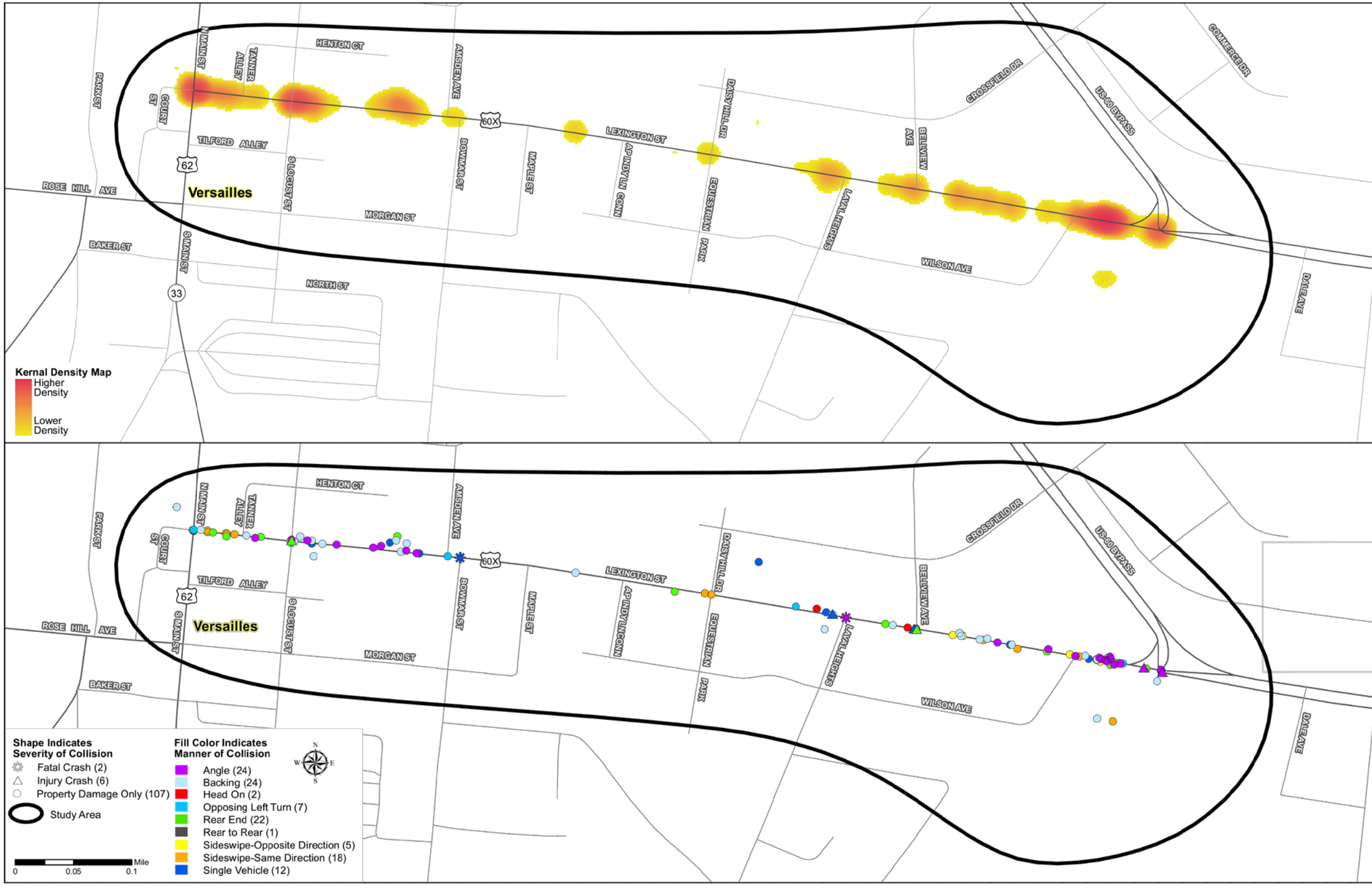
SAFETY AND CRASH HISTORY

Qk4 reviewed existing traffic information and obtained crash data from over the last three years (October 2020-September 2023) along the project.

As shown in the image below, this less than one-mile segment has experienced 115 crashes during the period, where six resulted in injuries and two fatalities. The top manners of collisions were angle (21%), backing (21%), and rear end (19%). A higher number of crashes occurred near both termini, where the corridor is more densely developed, with a higher number of access points.

As noted in the Purpose and Need section above, the walkways and bikeways along the project are discontinuous and in poor condition in some areas. Thus, the pedestrian and bike facilities do not safely and effectively serve these users. Additionally, as indicated by the 3-year crash data, the vehicular collisions are predominantly caused by drivers maneuvering in and out of parking areas (both parallel and perpendicular) directly into thru-traffic.

The subject streetscape plan is intended to address both the vehicular and non-vehicular safety issues noted above.



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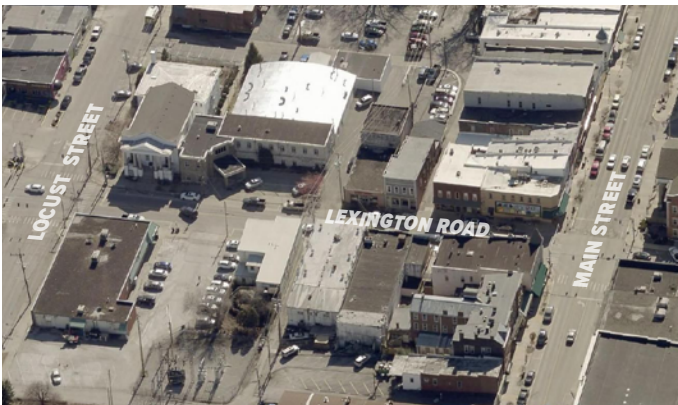
<p>City of Versailles Corridor Streetscape Concepts Lexington Street</p>		<p>Concept Plan Job No: 24300.000 Date: Dec 5, 2023 Scale: As Noted Drawn By: RTR Checked By: DJR</p>	
		<p>Qk4 Engineering Planning</p> <p>9920 Corporate Campus Drive, Suite 1200, Louisville, Ky 40223 Phone: 502-585-2222 Toll Free: 800-928-2222 Internet: www.qk4.com Kentucky • Indiana • Georgia • Tennessee</p>	<p>Drawing Title: Corridor Crash Data</p> <p>Drawing No: CD</p>

ORIGINAL SEGMENTS DEFINED BY THE CITY OF VERSAILLES

ORIGINAL PROJECT SCOPE AND LIMITS

The original project scope and limits defined by the City of Versailles included a 4,450 linear foot corridor along Lexington Road, beginning at the Main Street intersection and extending east to the intersection with the US 60 Bypass.

To further define and recognize the varied character along the corridor, the city divided the corridor into three basic segments, where the corridor differed in roadway section (urban vs. rural), geometrics, land-use, building setbacks, and overall aesthetic character, as shown below. Additionally, the city also outlined a basic scope of corridor improvements proposed for each of the segments defined, as follows:



Segment 1 aerial, looking south

SEGMENT 1

Main Street to Locust Street

1

This segment of Lexington Road is within the central business district, where sidewalk replacement, relocation of overhead utilities, and streetscape elements make up the basic proposed improvements.

SEGMENT 2

Locust Street to Maple Street

2

This segment of Lexington Road is primarily residential, where the corridor could benefit from wider sidewalks, access management changes, relocation of overhead utilities, and additional streetscape elements.

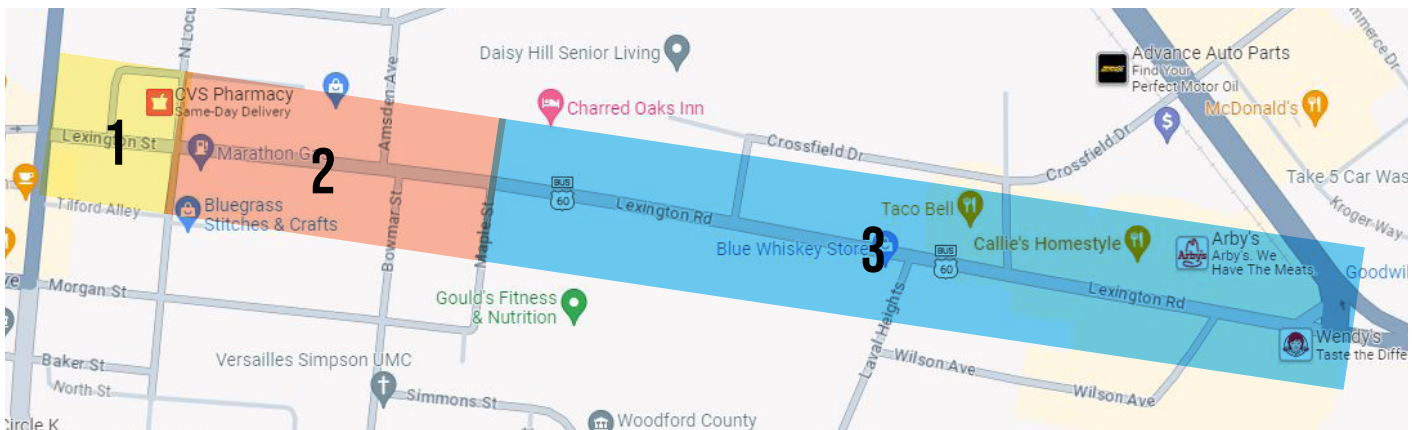
SEGMENT 3

Maple Street to US 60 Bypass

3

This segment of Lexington Road is primarily commercial, where a continuous pattern of wider sidewalks, access management changes, and adjustments to the streetscape to make it more pedestrian friendly, were the primary goals for conceptual improvements.

CITY'S ORIGINAL SEGMENTS



City's Original Segments

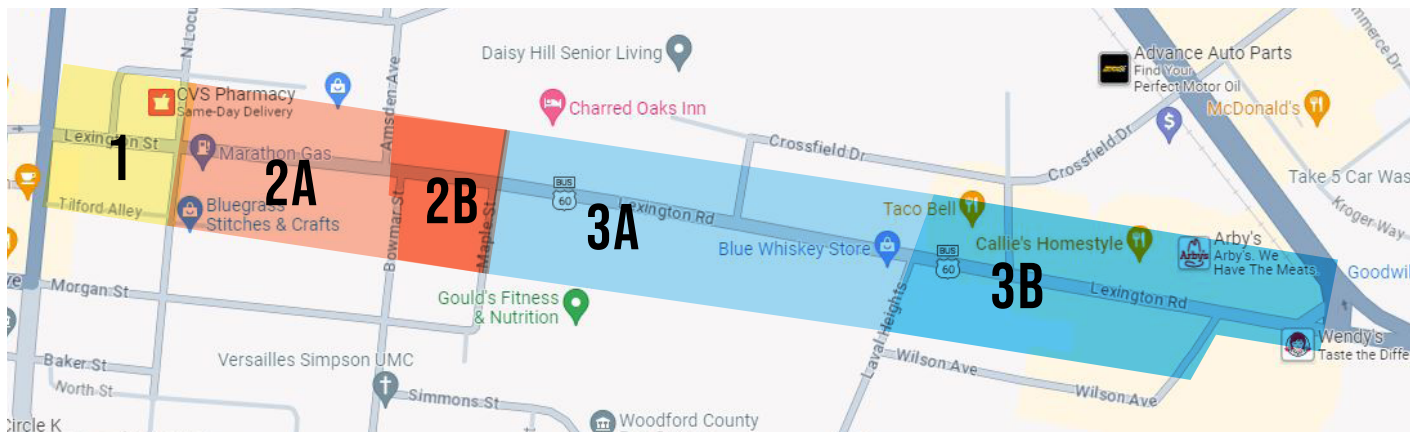
EXPANDED SEGMENTATION AND PROPOSED CONCEPTS

SUMMARY OF EXPANDED SEGMENTATION

Following detailed inventory and review, the initial segments were further divided into sub-sections where conditions were separate and unique due to roadway geometry or land-use character. Within the context of the study, these areas represent critical zones of corridor transition, or areas where streetscape patterns and conditions vary

and dictate unique concepts and solutions for improvement. The expanded segmentation includes the recognition of Segments 1, 2A, 2B, 3A, and 3B, as shown below.

EXPANDED SEGMENTATION



Expanded Segmentation

SEGMENT 1

1

The character of Segment 1 is an extension of the same architectural patterns and urban streetscape character present within the downtown blocks of Main Street Versailles. The consistency and quality of building facades is high, and it is appropriate for this area to be treated as an extension of the Main Street streetscape. This scope of work would include sidewalk replacement, introduction of a full range of streetscape features, and to the extent practical and affordable, the burial of underground utilities. *(See Figure 1 - Segment 1 Concepts, page 7).*

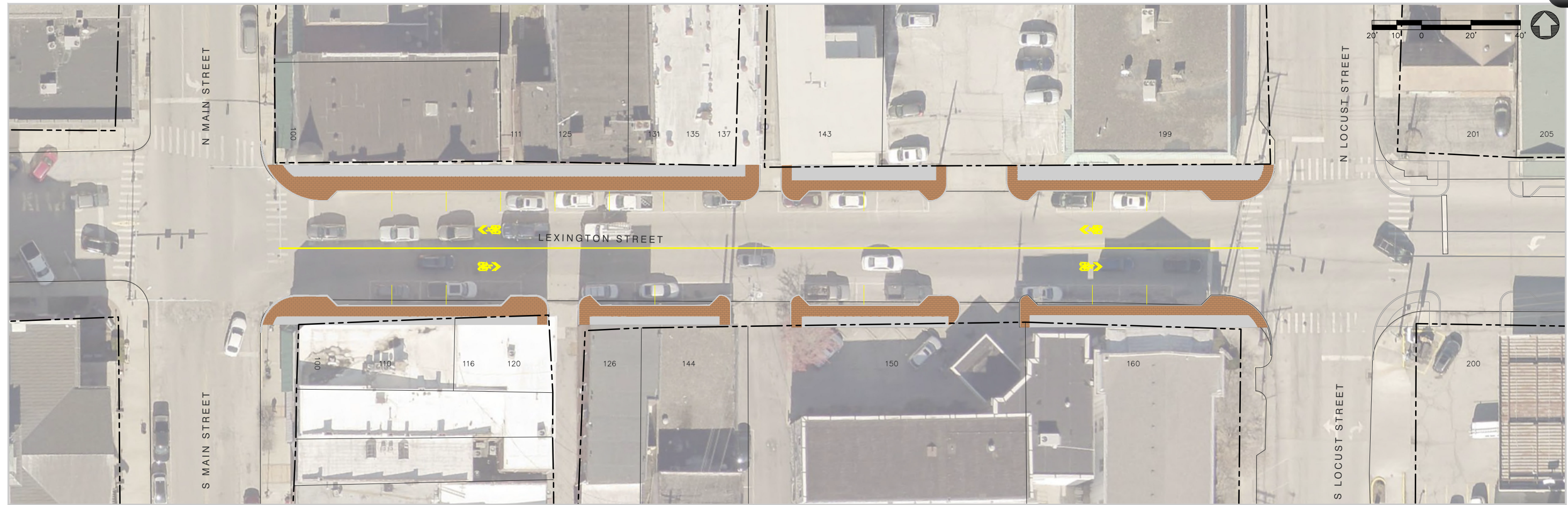
Pedestrian Improvements

While the previous streetscape improvements within the Main Street corridor have been successful in creating a pedestrian friendly and walkable downtown corridor, the city is reconsidering their previous use of decorative pavers within the primary sidewalk zone, due to failing installation details, resulting settlement of paver fields, and creation of trip hazards where sidewalk and pavers no longer align.

In response, the proposed concepts for the urban areas of Segments 1 and 2A include an uninterrupted sidewalk corridor, and an adjacent zone of contrasting pavement between the sidewalk and the back of curb.

The primary sidewalk should be constructed as a continuous pedestrian corridor of at least 5-foot width and ADA code compliant cross-slope - serving as the clear intended path of pedestrian movement. Where alleys or driveways interrupt the pedestrian path, accessibility should be provided through ramped sidewalk sections on either side, similar to corner ramps at primary intersections.

The contrasting paving or “verge” area is defined as an amenity zone, where street furnishings (planters, trash receptacles and bench seating) would be located, and where light poles and street trees are also coordinated. Within this new pattern of sidewalk replacement, the city will consider the use of brick or decorative (colored and textured) concrete, adjacent to the primary sidewalk of standard concrete mix with a lightly textured finish – cost estimates allow for a broad range of material and surface options.

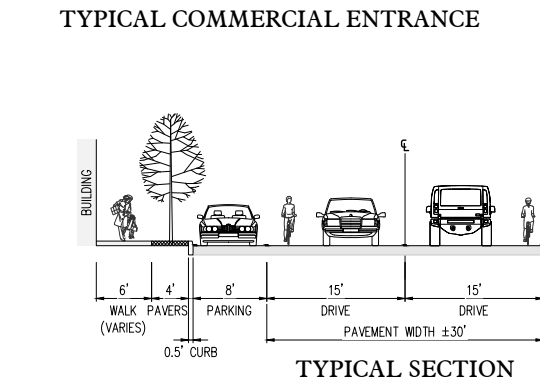
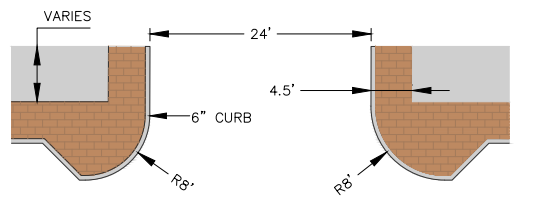
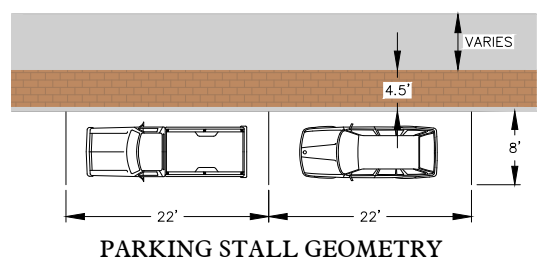


SUPPORTING DATA

- URBAN DOWNTOWN CHARACTER
- MIXED LAND USE, OFFICE, COMMERCIAL, INSTITUTIONAL
- PROPOSED IMPROVEMENTS:
 - SIDEWALK AND CURB REPLACEMENT STANDARD CONCRETE SIDEWALK WITH DECORATIVE CONCRETE VERGE
 - STREET TREES WITH TREE GRATES
 - LIGHT POLES WITH BANNERS AND HANGING BASKETS
 - PARALLEL PARKING
 - BENCHES AND TRASH RECEPTACLES
 - RELOCATED OVERHEAD UTILITIES
 - MAST ARM SIGNALIZATION (● LOCUST STREET)
 - SHARE THE ROAD BIKE LANES
- PARKING ANALYSIS:
 - EXISTING PARALLEL SPACES: 11 NORTH / 11 SOUTH / 22 TOTAL
 - PROPOSED PARALLEL SPACES: 12 NORTH / 10 SOUTH / 22 TOTAL

ESTIMATE OF PROBABLE COSTS	
SIDEWALK, PAVING, & CURBS	\$400,000
LIGHTING	\$200,000
LANDSCAPE & FURNISHINGS	\$40,000
SIGNALIZATION (MAST ARMS) ● LOCUST ST. & MAIN ST.	\$250,000
DRAINAGE MODIFICATIONS	\$50,000
CONSTRUCTION SUBTOTAL	\$940,000
CONSTRUCTION ENGINEERING & INSPECTION (CEI) (10%)	\$94,000
CONSTRUCTION TOTAL	\$1,034,000
DESIGN TOTAL (10% OF CONSTRUCTION SUBTOTAL)	\$94,000
UTILITY RELOCATION (OH ELEC & TELECOM, INCL. EASEMENTS)	\$1,543,000
UTILITY IMPROVEMENTS (CITY UTILITIES)	\$188,735
UTILITY RELOCATION TOTAL	\$1,731,735
RIGHT OF WAY & TEMPORARY CONSTRUCTION EASEMENT	\$0
TOTAL	\$2,859,735

SUPPORTING DIAGRAMS



REFERENCE EXAMPLES

SIDEWALK, CURB, DECORATIVE VERGE REPLACEMENT

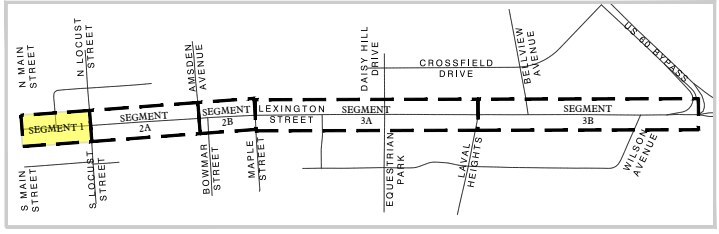
LIGHT POLES W/ BANNERS

STREET TREES W/ TREE GRATES

MAST ARM SIGNALIZATION

FURNISHINGS: BENCHES, TRASH RECEPTACLES AND PLANTERS

PARALLEL PARKING W/ CURBED BUMPOUTS



DISCLAIMER:
 THESE PROPOSED CORRIDOR IMPROVEMENTS REPRESENT CONCEPTUAL OPTIONS AND ALTERNATIVES ONLY. ANY RESULTING IMPACTS TO EXISTING PROPERTIES ALONG THE CORRIDOR FRONTAGE MAY BE SUBJECT TO COORDINATION WITH PROPERTY OWNERS AND THE PUBLIC INVOLVEMENT PROCESS. THE PUBLIC RIGHT OF WAY SHOWN IS APPROXIMATE AND WILL BE MORE CLEARLY DEFINED IN FUTURE PROJECT PHASES.

City of Versailles Corridor Streetscape Concepts Lexington Street Main Street to Locust Street	Concept Plan Job No: 24300.000 Date: Feb 23, 2024 Scale: 1" = 20' Drawn By: RTR Checked By: DJR
	OK4 Engineering Planning 9920 Corporate Campus Drive, Suite 1200, Louisville, Ky 40223 Phone: 502-585-2222 Toll Free: 800-928-2222 Internet: www.ok4.com Kentucky • Indiana • Georgia • Tennessee
Drawing Title: Corridor Segment 1 Drawing No: S1	

Figure 1 - Segment 1 Concepts

Parallel Parking and Curb Extensions

The concepts for Segments 1 and 2A also include the continuation of on-street parallel parking pattern – an area along the corridor where both the demand and utilization of on-street parking is currently high. Proposed curb alignments have been modified to include curb extensions or “bump-outs” at the primary intersections of Main and Locust, as well as interior alley intersections and private parking lot entrances. Curb extensions help to define the intersecting streets, alleys, and entrances, and offer an expanded area for pedestrians, where the length of intersections crosswalks can be reduced, and pedestrian safety enhanced. The final design geometry of intersection curb extensions should avoid negative impacts to vehicular turning movement geometrics; and although curb realignments will impact the quantity of on-street parking available, the loss of parking is minor (an estimated 10% loss on average).

Street Furnishings

The Main Street corridor is complete with examples of furnishings and the inclusion of benches, waste receptacles and planters. Recommendations for Segments 1 and 2A include a continuation of street furnishings, and as the use of furnishings within this area of downtown is expanded, care should be taken to select sturdy and sustainable selections that are maintenance friendly, readily available, and affordable – continuity is the key to establishing a unified and successful downtown streetscape environment.



Main Street curb extension

Street trees and lighting

Street Trees and Lighting

The Main Street corridor also offers a coordinated installation of street trees and lighting fixtures. Street trees with protective grates are critical for streetscapes to maintain pedestrian safety and minimization of trip hazards, especially where adjacent to the primary sidewalk, and space is limited. Lighting fixtures within Main Street are of a unique style and character and help to promote an individualized aesthetic for the downtown area. Existing light poles include a mix of decorative banner arms and hanging planters - cost estimates allow for a broad range of these feature options.

Drainage Modifications

The need for drainage modifications may be required to support the proposed curb extensions, especially in areas near the intersection corners, where drainage structures are prevalent – cost estimates

include an allowance for the relocation or extension of existing drainage infrastructure along the existing curb line.



Main Street mast arm signalization

Mast Arm Signalization

The intersection of Main and Lexington is served by a cantilevered mast arm signal pole structure, however, the Locust intersection is supported by a standard pole and wire-based installation. New concepts for this section include the conversion of the signalization pattern to a mast arm supported structure, to match the Main Street precedent.

Bicycle Accommodations – Share the Road

A comprehensive plan for bicycle use has been developed for the entire corridor, which includes the expansion of existing striped bike lanes within portions of the study corridor. The corridor bike use plan includes the continuation of bike lanes in some areas where appropriate, and in other areas – where vehicular traffic is heavy and congestion and documented accident history is high – the recommendations include either the addition of a shared use path (SUP), or share the road compliant signage, where conditions restrict the use of bike lanes or SUPs.

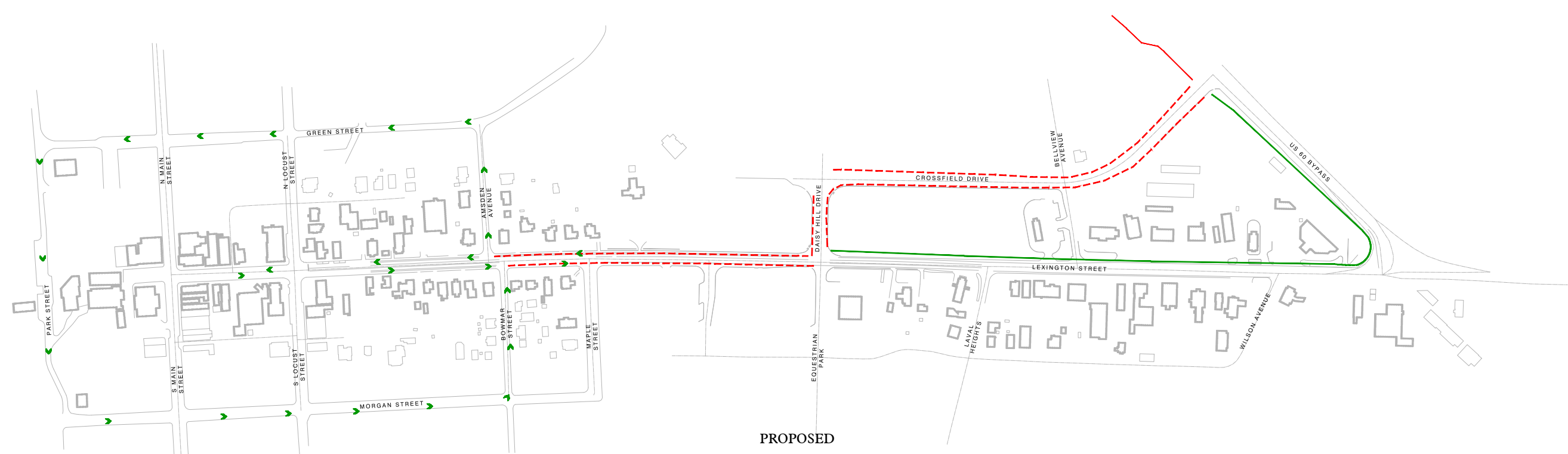
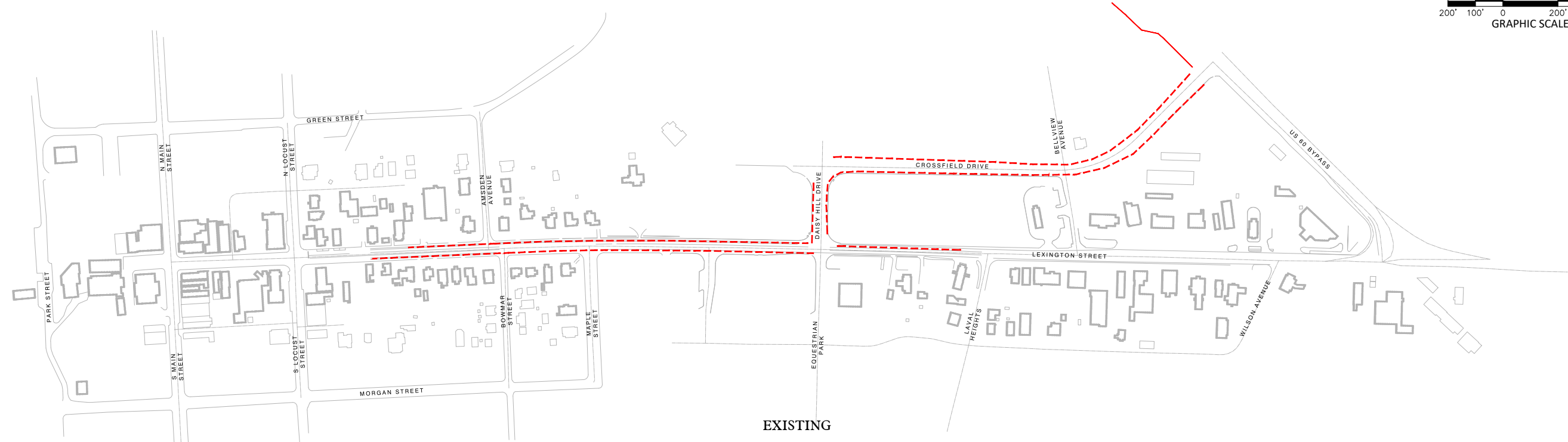
Within Segment 1, where the continuation of the existing parallel parking patterns is proposed, bike lanes are in potential conflict with opening car doors, threatening bicycle user safety. In this area, where traffic generally functions at slow speeds, a share the road solution is proposed to accommodate bicycle users ([See Figure 2 - Corridor Bicycle Use Plan, page 9](#)).

Utility Relocations

Utility providers serving the corridor have provided a cursory review of their existing infrastructure and offered concepts and relocation estimates. There are limited areas of relocation required for utilities already underground (primarily water, gas, sewer), however some providers have provided recommendations for facilities which need to be replaced or updated. In the case of overhead utility providers (KU Electric, and multiple telecommunication providers), each company has provided preliminary estimates to relocate existing overhead utilities underground and has provided budget costs for relocation. Utility relocations will be accommodated by the city where practical and affordable.

EXISTING

PROPOSED



LEGEND

	EXISTING SHARED USE PATH
	EXISTING BIKE LANE
	PROPOSED SHARED USE PATH
	PROPOSED SHARROW ROUTE (PARK LOOP)

To help organize, justify, and illustrate recommendations for bicycle facilities within the Lexington Road corridor, a comprehensive service plan was developed for the immediate area surrounding the study corridor. The purpose of the plan was not to serve as the comprehensive bike plan for the community, rather as a tool to examine the facilities within and immediately surrounding the Lexington Road corridor, and to provide context and organization for the expansion of bicycle facility concepts proposed along the study corridor. Using a variety of common bicycle facility types, the plan identifies existing and proposed

facilities and opportunities for connectivity and linkages, while recommending improvements which support safe bicycle routes and accommodate bicycle usage throughout the corridor.

The plan acknowledges the areas of existing bike lanes along Lexington Road, Daisy Hill Drive, and Crossfield Drives, as well as the current terminus for the shared use path (SUP) facility at the intersection of Crossfield Drive and the US 60 By-Pass. With a goal of expanding and connecting these existing facilities, the plan includes an extension of the SUP network along the

north side of Lexington Road beginning at Daisy Hill Drive, with a connecting leg proposed along the west shoulder of the US 60 By-Pass to provide linkage to the existing SUP at Crossfield Drive. To serve the west end of the Lexington Road corridor, the plan adds share the road facilities within the western blocks of the corridor, where geometry and parallel parking do not allow for the safe continuation of the bike lanes; and adds a share the road "Park Loop" route to connect to Big Spring Park using Amsden, Green, Park, Morgan and Bowmar as secondary roadways to serve the looping route.

<p>City of Versailles Corridor Streetscape Concepts Lexington Street</p>		<p>Concept Plan</p>	
		<p>Job No: 24300.000</p>	<p>Date: Jan 2, 2024</p>
<p>9920 Corporate Campus Drive, Suite 1200, Louisville, Ky 40223 Phone: 502-585-2222 Toll Free: 800-928-2222 Internet: www.ok4.com Kentucky • Indiana • Georgia • Tennessee</p>		<p>Scale: 1" = 200'</p>	<p>Drawn By: RTR</p>
		<p>Checked By: DJR</p>	<p>Drawing Title: Bicycle Facility Concepts</p>
		<p>Drawing No: BF</p>	

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Figure 2 - Corridor Bicycle Use Plan

SEGMENT 2A**2A**

The area between Locust and Maple to the east of Main continues as an urban commercial corridor but ultimately transitions in character – transforming into more of an urban residential zone further east prior to the Amsden and Bowmar intersections and becomes consistently residential in character between Bowmar and Maple. Because streetscape concepts in this area should acknowledge this transition of varied land-use and character, Segment 2 has been divided into Segments 2A and 2B.

Pedestrian Improvements

The concepts for Segment 2A generally follow the recommendations for Segment 1, as a continuation of the urban commercial character. *(See Figure 3 – Segment 2A Concepts, page 11)*. Suggested improvements of street and sidewalk zones are identical to Segment 1, including recommendations for street furnishings, street trees, and lighting, with similar allowances for possible drainage modifications. However, within this segment, where the adjoining buildings and character changes from commercial to residential, the proposed streetscape pattern has been modified, and the decorative paved verge material is substituted for a grass verge strip to match the adjacent residential lawns. Within this transition area, the frequency of street furnishings is reduced, and street trees are supported within the grass verge without need for tree grates.

Parallel Parking and Curb Extensions

Parallel parking and curb extensions are continued within Segment 2A throughout both the commercial and residential transitional areas of the corridor segment. Further east within this segment, new residential driveway aprons are proposed to match the varied widths of existing driveways, and curb extensions flank either side of the driveway entrances, allowing for safe separation between driveways and zones of adjacent parallel parking - conditions which benefit vehicular sight distance as well as the safety of pedestrians.

Access Control Recommendations

Within the west end of Segment 2A, existing conditions support excessively wide entrances for existing commercial businesses along both the north and south sides of the corridor. These conditions - concentrated toward the Locust Street intersection - create potential hazards for both vehicles and pedestrians, where vehicular patterns are widely varied and unpredictable, and areas of pedestrian refuge are limited along broken and missing sections of sidewalk supported by shallow curb depths. Access control recommendations include the addition of concrete entrance aprons at strategic locations to maintain ample access to existing businesses but limit the areas of access. The use of a standard entrance width offers predictability and allows for the establishment of a continuous sidewalk and full depth curb alongside remaining areas of adjacent parallel parking. These improvements are targeted to create safer conditions for both vehicular and pedestrian use within an area high in documented accident history.

Bicycle Accommodations – Share the Road

Like Segment 1, where parallel parking patterns create potential conflict with bike lane use, this area is proposed as a share the road zone to accommodate bicycle users along the corridor.

Utility Relocations

Utility providers serving the corridor have provided a cursory review of their existing infrastructure and offered concepts and relocation estimates. There are limited areas of relocation required for utilities already underground (primarily water, gas, sewer), however some providers have provided recommendations for facilities which need to be replaced or updated. In the case of overhead utility providers (KU Electric, and multiple telecommunication providers), each provider has provided preliminary estimates to relocate existing overhead utilities underground and has provided budget costs for relocation. Utility relocations will be accommodated by the city where practical and affordable.



Segment 2A aerial, looking south

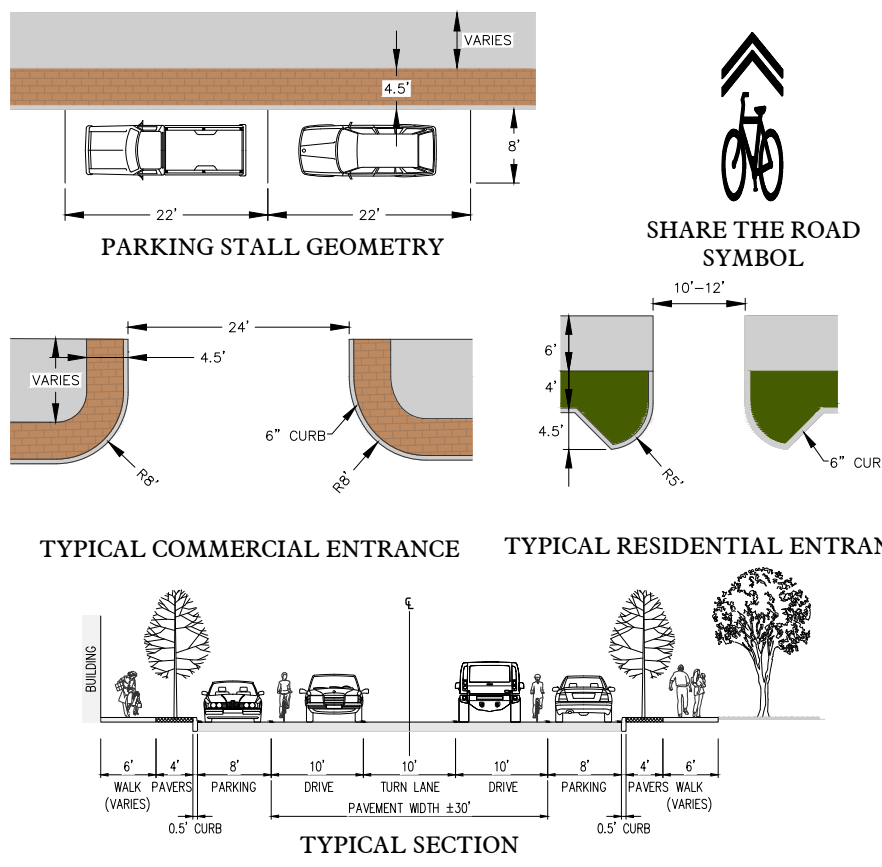


SUPPORTING DATA

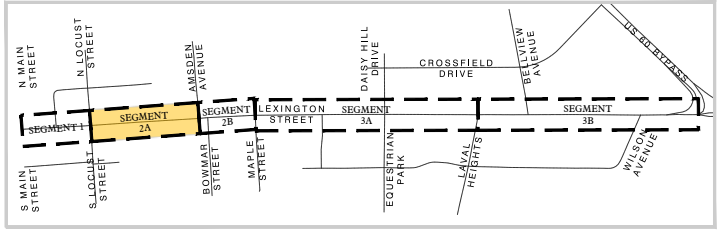
- URBAN DOWNTOWN CHARACTER
- MIXED LAND USE, OFFICE, COMMERCIAL, RESIDENTIAL
- PROPOSED IMPROVEMENTS:
 - SIDEWALK AND CURB REPLACEMENT STANDARD CONCRETE SIDEWALK WITH DECORATIVE CONCRETE VERGE & TRANSITION TO GRASS VERGE @ 221/222 ADDRESSES
 - STREET TREES WITH TREE GRATES
 - LIGHT POLES WITH BANNERS AND HANGING BASKETS
 - PARALLEL PARKING
 - BENCHES AND TRASH RECEPTACLES
 - RELOCATED OVERHEAD UTILITIES
 - MAST ARM SIGNALIZATION (@ LOCUST STREET)
 - SHARE THE ROAD BIKE LANES
- ON-STREET PARKING ANALYSIS:
 - EXISTING PARALLEL SPACES 15 NORTH / 19 SOUTH / 34 TOTAL
 - PROPOSED PARALLEL SPACES 14 NORTH / 17 SOUTH / 31 TOTAL

ESTIMATE OF PROBABLE COSTS	
SIDEWALK, PAVING, & CURBS	\$750,000
LIGHTING	\$375,000
LANDSCAPE & FURNISHINGS	\$80,000
DRAINAGE MODIFICATIONS	\$100,000
CONSTRUCTION SUBTOTAL	\$1,305,000
CONSTRUCTION ENGINEERING & INSPECTION (CEI) (10%)	\$130,500
CONSTRUCTION TOTAL	\$1,435,500
DESIGN TOTAL (10% OF CONSTRUCTION SUBTOTAL)	\$130,500
UTILITY RELOCATION (OH ELEC & TELECOM, INCL. EASEMENTS)	\$3,077,917
UTILITY IMPROVEMENTS (CITY UTILITIES)	\$280,210
UTILITY RELOCATION TOTAL	\$3,358,127
RIGHT OF WAY & TEMPORARY CONSTRUCTION EASEMENT	\$0
TOTAL	\$4,924,127

SUPPORTING DIAGRAMS



REFERENCE EXAMPLES



KEY MAP - LEXINGTON ROAD CORRIDOR

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<p>City of Versailles Corridor Streetscape Concepts Lexington Street Locust Street to Bowmar Street</p>	<p>Concept Plan Job No: 24300.000 Date: Feb 23, 2024 Scale: 1" = 30' Drawn By: RTR Checked By: DJR</p>
	<p>Engineering Planning 9920 Corporate Campus Drive, Suite 1200, Louisville, Ky 40223 Phone: 502-585-2222 Toll Free: 800-928-2222 Internet: www.qk4.com Kentucky • Indiana • Georgia • Tennessee</p>
<p>Drawing Title: Corridor Segment 2A</p>	<p>Drawing No: S2A</p>

Figure 3 - Segment 2A Concepts

SEGMENT 2B**2B**

Beyond the Amsden/Bowmar intersections, the corridor is consistently residential in character, and the streetscape pattern within the eastern portion of Segment 2A continues along this short block east to Maple Street (See *Figure 4 – Segment 2B Concepts, page 13*).

Pedestrian Improvements

Suggested improvements of street and sidewalk zones are identical to the eastern portion of Segment 2A, including recommendations for street furnishings, street trees, and lighting, with similar allowances for possible drainage modifications.

Bicycle Accommodations – Dedicated Bike Lanes

As depicted in the Corridor Bicycle Use Plan (See *Figure 2 – Corridor Bicycle Use Plan, page 9*), this area of the corridor is supported by the continuation of the dedicated bike lanes already existing within this segment. Eastbound, these bike lanes offer a dedicated area for cyclists transitioning from the share the road lanes in Segment 1 and 2A but are also fed by a proposed share the road route entering separately from the south within Bowmar Street. Similarly, the westbound bike lane within Segment 2B continues west as a share the road lane within Lexington Road but also joins a separately proposed share the road pattern to the north along Amsden Avenue, where the share the road concept continues along a new route following Amsden to Green, Green to Park, Park to Morgan and Morgan back to Bowmar – creating a fully connected “park loop” at the south end of the corridor.

Parallel Parking Alternative

As an alternative to the on-road bike lanes within Segment 2B as described above, an alternative for this segment includes the continuation of the Segment 2A cross section, where parallel parking is continued in place of dedicated bike lanes and bicycle users are accommodated by a continuation of the share the road lanes recommended for Segments 1 and 2A. These optional cross sections are for the most part “interchangeable” and allow the city to consider and balance the need for additional on-street parallel parking in this area, while still offering options for comprehensive bicycle facilities within and along the corridor. Estimated costs are similar for either parking alternative.

Utility Relocations

Utility providers with improvements along the corridor have provided a cursory review of their existing infrastructure and offered concepts and relocation estimates. There are limited areas of relocation required for utilities already underground (primarily water, gas, sewer), however some providers have provided recommendations for facilities which need to be replaced or updated. In the case of overhead utility providers (KU Electric, and multiple telecommunication providers), each company has provided preliminary estimates to relocate existing overhead utilities underground and has provided budget costs for relocation. Utility relocations will be accommodated by the city where practical and affordable.



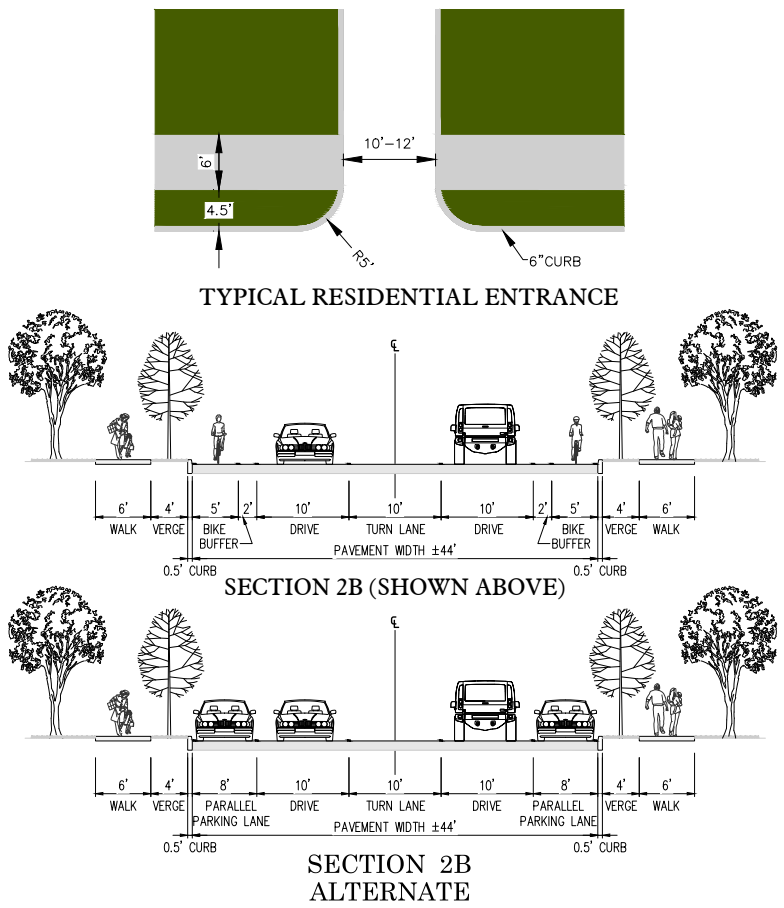
Segment 2B aerial, looking south



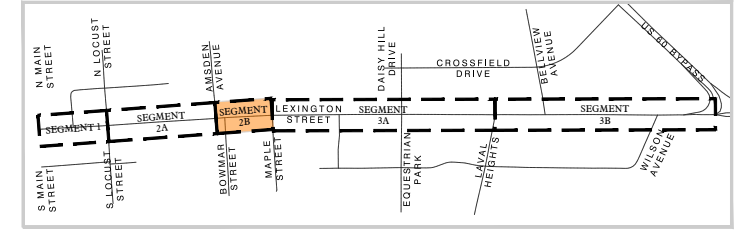
SUPPORTING DATA

- SUBURBAN CHARACTER
- PRIMARILY RESIDENTIAL LAND USE
- PROPOSED IMPROVEMENTS:
 - SIDEWALK AND CURB REPLACEMENT
STANDARD CONCRETE SIDEWALK WITH GRASS VERGE
 - STREET TREES IN GRASS VERGE
 - LIGHT POLES WITH BANNERS AND HANGING BASKETS
 - ON-ROAD BIKE LANES ENHANCED WITH STRIPED BUFFER
 - RELOCATED OVERHEAD UTILITIES
 - PARALLEL PARKING (ALTERNATE SECTION)
- PARKING ANALYSIS:
 - EXISTING PARALLEL SPACES
9 NORTH / 6 SOUTH / 15 TOTAL
 - PROPOSED PARALLEL SPACES
PARKING OMITTED (SEE ALTERNATE)

SUPPORTING DIAGRAMS



REFERENCE EXAMPLES



KEY MAP - LEXINGTON ROAD CORRIDOR

ESTIMATE OF PROBABLE COSTS	
SIDEWALK, PAVING, & CURBS	\$300,000
LIGHTING	\$150,000
LANDSCAPE & FURNISHINGS	\$15,000
DRAINAGE MODIFICATIONS	\$25,000
CONSTRUCTION SUBTOTAL	\$490,000
CONSTRUCTION ENGINEERING & INSPECTION (CEI) (10%)	\$49,000
CONSTRUCTION TOTAL	\$539,000
DESIGN TOTAL (10% OF CONSTRUCTION SUBTOTAL)	\$49,000
UTILITY RELOCATION (OH ELEC & TELECOM, INCL. EASEMENTS)	\$1,231,167
UTILITY IMPROVEMENTS (CITY UTILITIES)	\$157,830
UTILITY RELOCATION TOTAL	\$1,388,997
RIGHT OF WAY & TEMPORARY CONSTRUCTION EASEMENT	\$0
TOTAL	\$1,978,997

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<p>City of Versailles Corridor Streetscape Concepts Lexington Street Bowmar Street to Maple Street</p>	<p>Concept Plan Job No: 24300.000 Date: Feb 23, 2024 Scale: 1" = 20' Drawn By: RTR Checked By: DJR</p>
	<p>Drawing Title: Corridor Segment 2B Drawing No: S2B</p>
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Figure 4 - Segment 2B Concepts

SEGMENT 3A**3A**

The corridor between Maple and Laval Heights on the south side, and Bellview Avenue on the north side is an area that is only partially developed, and a central area within the overall corridor offering significant new development opportunities. This portion of the corridor represents a large flexible transition area between downtown to the west and the business commercial areas to the east.

This area is unique area and careful consideration should be provided for future development approvals to ensure that this portion of the corridor maintains the existing greenspace character, protects the integrity of the stable residential district to the west, and avoids the pavement-heavy commercial development patterns which dominate the far eastern end of the corridor.

The design of the streetscape improvements within this section can help set the tone for future development, and the concepts should maintain as much of the greenspace and buffered frontage as possible. Encouraged development features include generous building setbacks, bermed areas of landscape buffer, and low monument signage structures to match the precedent of the Daisy Hill development along the north side of the corridor, while avoiding the continuation of pole mounted signage seen along the remainder of the corridor to the east. On the north side of the road, development frontage solutions should also remain sensitive to the existing stone wall along the front of the Charred Oaks Inn parcel, which has been identified as a potential historic resource along the corridor.

Pedestrian Improvements

Suggested improvements along the perimeter sidewalk zones are identical to the recommendations in Segment 2B, including recommendations for grass verge areas to support street furnishings, street trees, and lighting, with similar allowances for possible drainage modifications to accommodate curb relocations proposed (See Figure 5 – Segment 3A Concepts, page 15).



Existing stone masonry wall

Bicycle Accommodations – Dedicated Bike Lanes

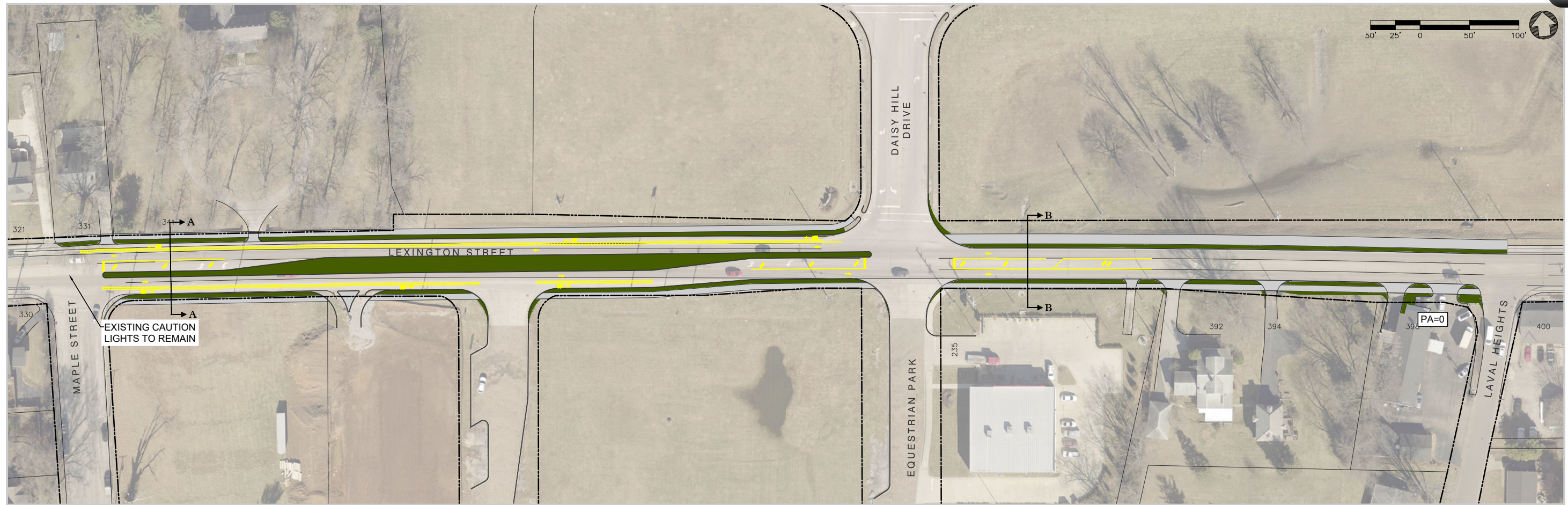
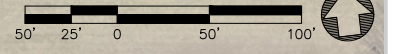
The majority of Segment 3A is supported by the continuation of the existing dedicated bike lanes identical to those within the Segment 2B cross section. These bike lanes extend to the Daisy Hill Drive intersection, where bike lanes turn north and continue along Daisy Hill. Beyond this intersection, a 10' wide shared use path (SUP) is proposed further east along the north side of the corridor. This SUP is another alternative facility type, which extends further into Segment 3B where its proposed alignment ultimately turns north along the west shoulder of the US 60 By-Pass and joins an existing SUP currently terminating at the north side of the Crossfield Drive intersection with the By-Pass.

Greenspace Center Median

A center greenspace median is proposed within Segment 3A between the Maple and Daisy Hill intersections, where each intersection is served by a dedicated left turn lane at the ends of the proposed median. Here, the median serves a dual purpose for Segment 3A - providing strategic access control for the development frontage on either side of the road, while also reinforcing the value and importance of the greenspace character within this central portion of the gateway corridor.



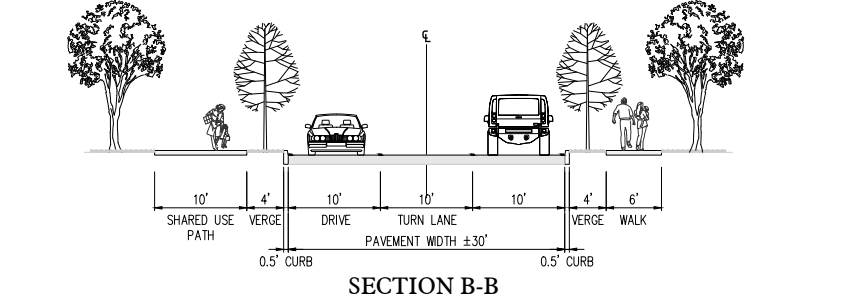
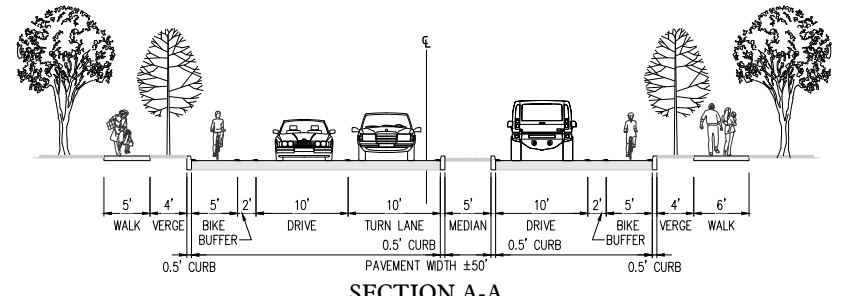
Segment 3A aerial, looking south



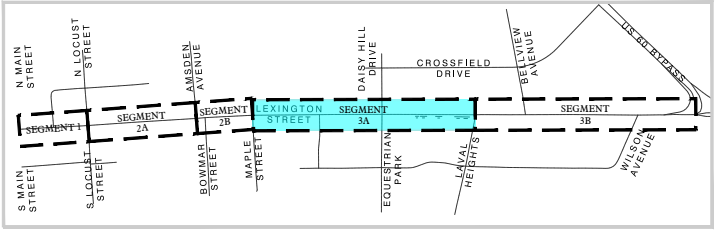
SUPPORTING DATA

- SUBURBAN CHARACTER
- MIXED LAND USE, UNDEVELOPED, RESIDENTIAL, COMMERCIAL
- PROPOSED IMPROVEMENTS:
 - SIDEWALK AND CURB REPLACEMENT
STANDARD CONCRETE SIDEWALK WITH EXPANDED GRASS VERGE
 - CONTROLLED ACCESS GRASS MEDIAN BETWEEN MAPLE AND DAISY
 - STREET TREES IN GRASS VERGE
 - LIGHT POLES WITH BANNERS
 - ON-ROAD BIKE LANES ENHANCED WITH 2' STRIPED BUFFER
 - RELOCATED OVERHEAD UTILITIES
- PARKING ANALYSIS:
 - N/A – NO EXISTING OR PROPOSED ON-STREET PARKING

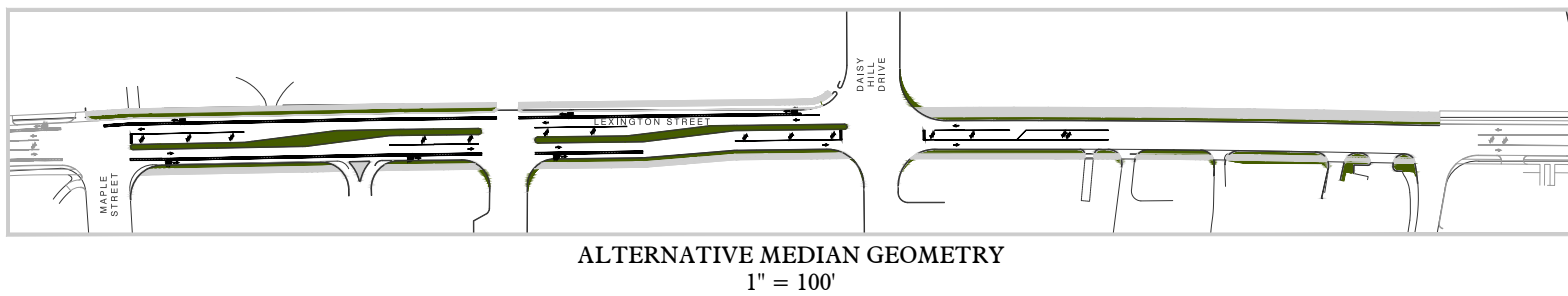
SUPPORTING DIAGRAMS



REFERENCE EXAMPLES



ESTIMATE OF PROBABLE COSTS	
SIDEWALK, PAVING, & CURBS	\$2,000,000
LIGHTING	\$750,000
LANDSCAPE & FURNISHINGS	\$75,000
DRAINAGE MODIFICATIONS	\$100,000
CONSTRUCTION SUBTOTAL	\$2,925,000
CONSTRUCTION ENGINEERING & INSPECTION (CEI) (10%)	\$292,500
CONSTRUCTION TOTAL	\$3,217,500
DESIGN TOTAL (10% OF CONSTRUCTION SUBTOTAL)	\$292,500
UTILITY RELOCATION (OH ELEC & TELECOM, INCL. EASEMENTS)	\$6,155,833
UTILITY IMPROVEMENTS (CITY UTILITIES)	\$465,440
UTILITY RELOCATION TOTAL	\$6,621,273
RIGHT OF WAY & TEMPORARY CONSTRUCTION EASEMENT	\$260,000
TOTAL	\$10,391,273

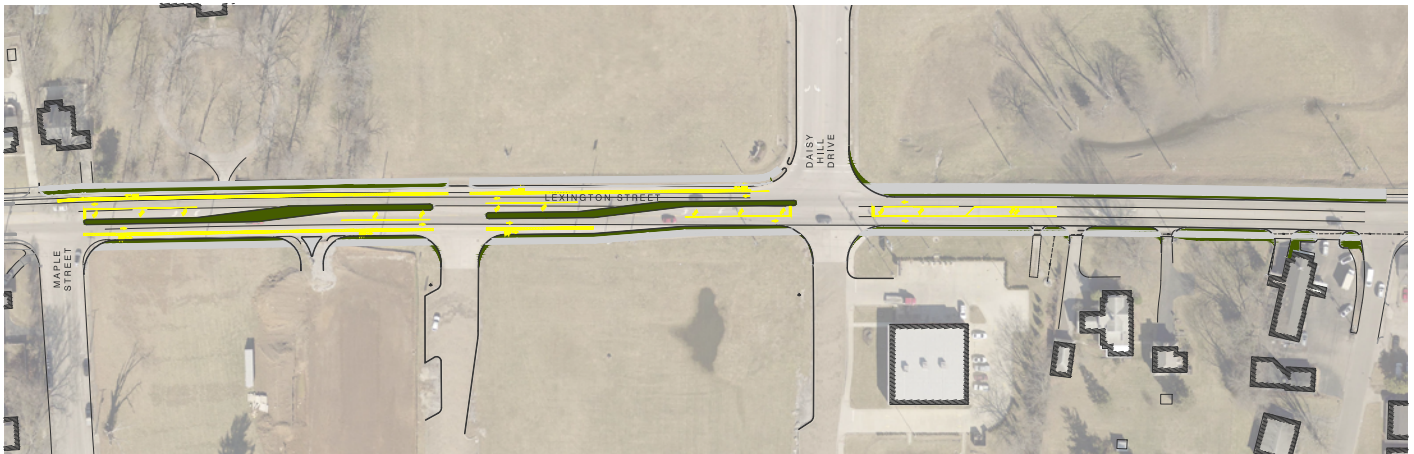


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<p>City of Versailles Corridor Streetscape Concepts Lexington Street Maple Street to Laval Heights</p>	<p>Concept Plan Job No: 24300.000 Date: Feb 23, 2024 Scale: 1" = 50' Drawn By: RTR Checked By: DJR</p>
	<p>Drawing Title: Corridor Segment 3A Drawing No: S3A</p>

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Figure 5 - Segment 3A Concepts



Median modification alternatives

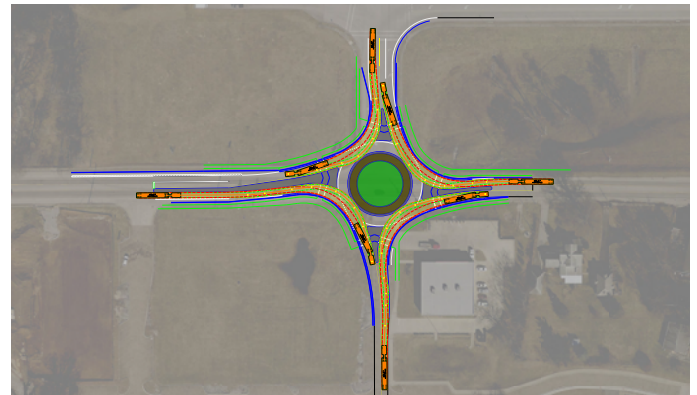
SEGMENT 3A (continued)

Future Median Modifications

Should conditions change or traffic volumes and development patterns create the need for more access options in this area, there are phased modifications available within the central portion of the median opposite A.P. Indy Drive, where a break in the median and additional left turn lanes can be constructed to accommodate future conditions and needs, as shown above.

Other Future Considerations

As the vacant areas within Segment 3A continue to develop and experience growth, the limited crash data history within this zone of the corridor may change, as volumes and turning movements at intersections and entrances increase. One of these predictable areas of concern is the intersection with Daisy Hill Drive and Equestrian Park, which provides primary access to the vacant development parcels on both sides of Lexington Road. Typically, as volumes increase and conditions change, this intersection may at some point warrant signalization.



Segment 3A Roundabout Option

One alternative to this common situation is to consider a roundabout, which can offer advantages over a standard signalized approach. The roundabout option is shown above. This option explored a roundabout that is sized to accommodate large commercial vehicles (WB-60) and encroaches on the existing commercial property entrance at the southeast corner of the intersection (O'Reilly's Auto Parts). While a smaller roundabout is possible and the encroachment could be reduced or mitigated, a reduced geometry may create operational issues for large vehicles or limit the capacity of the corridor and create other issues elsewhere. Given the current lack of need and dimensional challenges, a roundabout is not recommended at this time.

Utility Relocations

Utility providers with improvements along the corridor have provided a cursory review of their existing infrastructure and offered concepts and relocation estimates. There are limited areas of relocation required for utilities already underground (primarily water, gas, sewer), however some providers have provided recommendations for facilities which need to be replaced or updated. In the case of overhead utility providers (KU Electric, and multiple telecommunication providers), each provider has offered concepts to relocate existing overhead utilities underground and has provided budget costs for relocation. Utility relocations will be accommodated by the city where practical and affordable.



Daisy Hill Drive intersection, looking east

SEGMENT 3B**3B**

Segment 3B is characterized as a densely developed business commercial area dominated by older commercial parcels, with a mixture of new or recently redeveloped parcels creating a transition toward a more modern pattern of development. This transition is occurring slowly, as evidenced by the increasing number of updated buildings - primarily located along the north side of Lexington Road.

Because the north and south sides of the corridor within Segment 3B offer distinctly different spatial and geometric conditions, the recommendations for improvement strategies within each side of the corridor are separate and varied.

3B - NORTH SIDE

The north side of the corridor from Bellview to the Bypass is comprised of nine parcels (including the Taco Bell restaurant on the west side of Bellview). Within this zone, the building setbacks are sufficiently deep (40-50 feet), served by adequate parking and maneuvering areas along the frontage, with many parcels containing areas of greenspace and landscaped buffers along the roadway. Five of the parcels offer an updated development pattern of business commercial land use and are clustered at both ends of the roadway segment – however, only one of these most recently improved parcels has an existing sidewalk improvement along the right of way frontage. The remaining four parcels within the center of this block are characterized by older buildings with limited attention to modern development standards. While the access patterns for the more recently developed and improved parcels offer standard commercial entrances, with most (4 of 5) served by a singular point of access, the access patterns for the remaining central parcels are served by multiple points of entry per parcel, with excessive pavement along the undefined entrance frontage and limited areas of greenspace buffer.

Pedestrian Improvements

Suggested improvements along the north side right of way frontage include the continuation of the 10' Shared Use Path (SUP) originating within Segment 3A, extending east along the north side of the corridor, and turning north along the shoulder of the US 60 By-Pass and joining an existing SUP currently terminating at the north side of the Crossfield

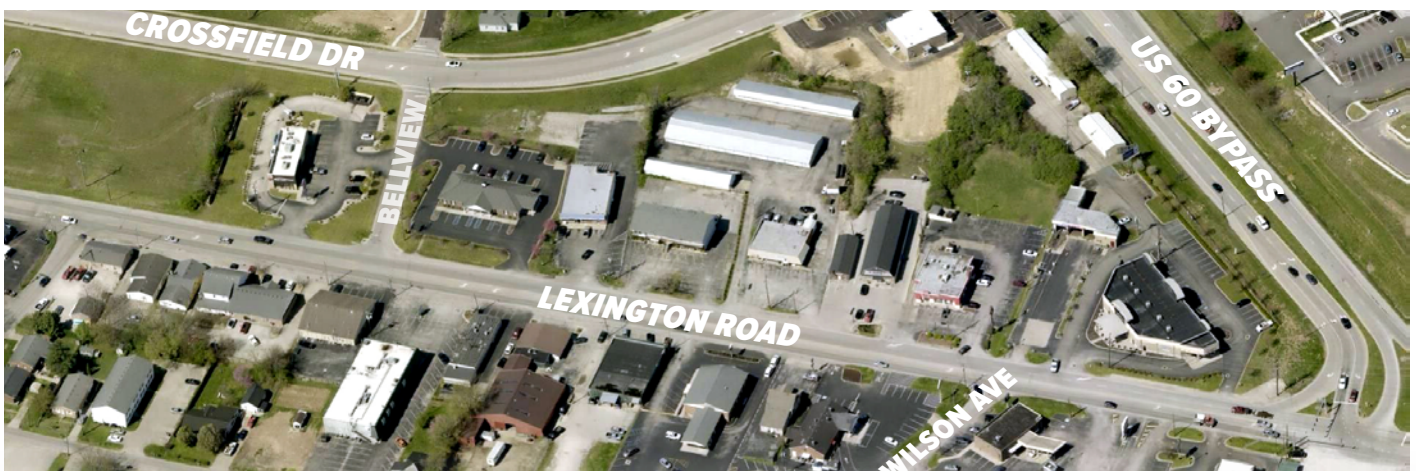
Drive intersection with the By-Pass. A continuous 4' grass verge and new curb is proposed along the roadway edge of pavement, as well as the continuation of lighting and street tree improvements, and allowances for drainage modifications along the new curb line (See *Figure 6 – Segment 3B Concepts, page 18*).

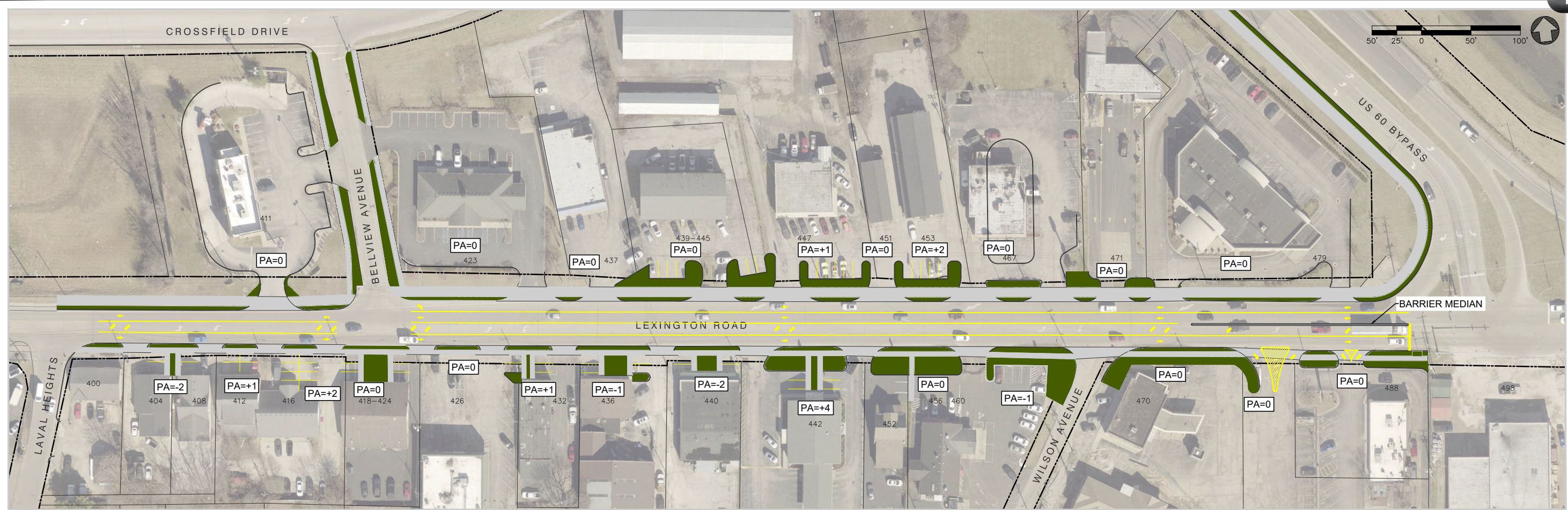
Access Control Recommendations

Within the center of the block, access control recommendations have been offered to reduce the number of commercial entrances and to standardize the entrance widths and reduce the large areas of pavement in this area. The recommendations are sensitive to those parcels with more than one point of entrance, with modified entrances located along common side property lines providing an opportunity for shared access between adjacent parcels. To maintain adequate parking within these parcels, additional improvements are proposed to ensure there is no loss in available parking for each parcel - in some cases resulting in a parking increase. These areas of reconstruction beyond the right of way within private property include new curbed parking islands and areas of repaving and striping, resulting in an upgrade to parking standards and overall property value. These standardized entrances and upgrades to modernized parking patterns offer predictability, allow for the establishment of the continuous SUP and curb along the frontage, and create safer conditions for both vehicular and pedestrian use within an area that has a high accident history.

Utility Relocations

Utility relocations may be critical to support some of the access control improvements proposed along the north side of the Segment 3B frontage. Utility providers with improvements along the corridor have provided a cursory review of their existing infrastructure and offered concepts and relocation estimates. There are limited areas of relocation required for utilities already underground (primarily water, gas, sewer), however some providers have provided recommendations for facilities which need to be replaced or updated. In the case of overhead utility providers (KU Electric, and multiple telecommunication providers), each provider has offered concepts to relocate existing overhead utilities underground and has provided budget costs for relocation. Utility relocations will be accommodated by the city where practical and affordable.



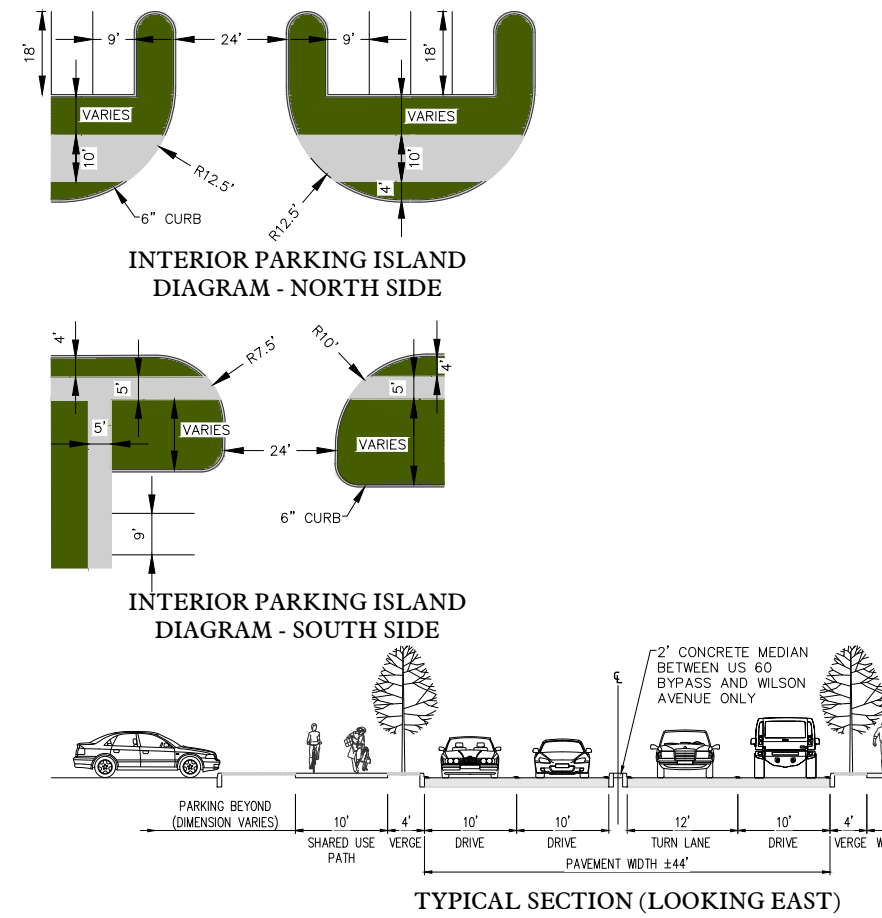


SUPPORTING DATA

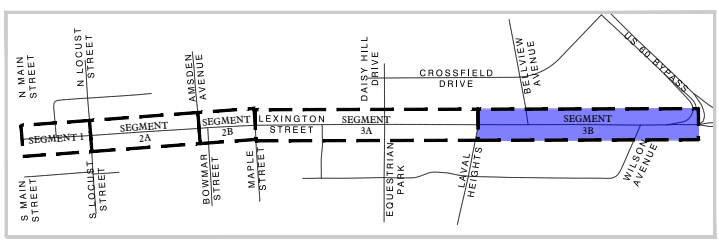
- SUBURBAN CHARACTER
- DENSE BUSINESS COMMERCIAL
- PROPOSED IMPROVEMENTS:
 - NEW SIDEWALK AND CURB INSTALLATION
 - NEW SIDEWALKS ALONG BELLVIEW
 - SHARED USE PATH CONNECTS TO CROSSFIELD DRIVE
 - NEW CONCRETE COMMERCIAL ENTRANCE APRONS
 - STREET TREES IN GRASS VERGE
 - LIGHT POLES WITH BANNERS
 - RELOCATED OVERHEAD UTILITIES
 - INTERIOR PARKING ISLAND IMPROVEMENTS
 - SAFETY – REDUCE CONFLICTS & COLLISIONS THROUGH ACCESS CONTROL
- PARKING ANALYSIS:
 - NOTED ON PLAN PER PARCEL AS "PA=+,-,0"

ESTIMATE OF PROBABLE COSTS	
SIDEWALK, PAVING, & CURBS	\$1,750,000
INTERIOR PAVING & CURBS	\$1,500,000
LIGHTING	\$1,500,000
LANDSCAPE & FURNISHINGS	\$150,000
DRAINAGE MODIFICATIONS	\$200,000
CONSTRUCTION SUBTOTAL	\$5,100,000
CONSTRUCTION ENGINEERING & INSPECTION (CEI) (10%)	\$510,000
CONSTRUCTION TOTAL	\$5,610,000
DESIGN TOTAL (10% OF CONSTRUCTION SUBTOTAL)	\$510,000
UTILITY RELOCATION (OH ELEC & TELECOM, INCL. EASEMENTS)	\$6,830,833
UTILITY IMPROVEMENTS (CITY UTILITIES)	\$724,680
UTILITY RELOCATION TOTAL	\$7,555,513
RIGHT OF WAY & TEMPORARY CONSTRUCTION EASEMENT	\$97,500
TOTAL	\$13,773,013

SUPPORTING DIAGRAMS



REFERENCE EXAMPLES



KEY MAP - LEXINGTON ROAD CORRIDOR

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<p>City of Versailles Corridor Streetscape Concepts Lexington Street Laval Heights to US 60 Bypass</p>	<p>Concept Plan Job No: 24300.000 Date: Feb 23, 2024 Scale: 1" = 50' Drawn By: RTR Checked By: DJR</p>
	<p>Drawing Title: Corridor Segment 3B Drawing No: S3B</p>

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Figure 6 - Segment 3B Concepts

3B – SOUTH SIDE

The south side of the corridor from Laval Heights to Wilson Avenue is comprised of 15 parcels. Within this zone, the building setbacks are extremely shallow, ranging from 10-30 feet, and nearly half of these parcels have setbacks of only 30 feet from building face to the edge of the eastbound drive lane. Only four of these parcels offer an updated pattern of business commercial land use and are clustered toward the east end of this block – and like the north side conditions, only one of the most recently improved parcels include sidewalk improvements along the right of way frontage. Most remaining parcels are characterized by older buildings with limited attention to modern development standards. The general access patterns along the south side are poor, with over half of these parcels served by direct pull-in/back-out maneuvering - which is an obsolete and dangerous pattern of access, as evidenced by a documented high rate of accident history within this segment. This pattern of development results in a roadway frontage characterized by a continuous zone of undefined pavement, with very few areas of greenspace or landscape buffer.



Limited setback examples along south side

Pedestrian Improvements

Suggested improvements along the south side right of way frontage include the creation of a continuous 5’ sidewalk, 4’ grass verge and new curb along the roadway edge of pavement – these improvements are supported by the access control recommendations discussed below. Continuation of lighting and street tree improvements, and allowances for drainage modifications along the new curb line are also proposed **(See Figure 6 – Segment 3B Concepts, page 18)**.



New sidewalk along south side, looking west

Access Control Recommendations

Access control modifications are proposed along the entire south side frontage, and while some areas are addressed in different ways, all recommendations are targeting improvements in both vehicular and pedestrian safety within an area of high documented accident history.

Between Laval Heights and Wilson Avenue, access control recommendations include the standardization of commercial entrances within this block to reduce the excessive pavement in this area. The new access and parking concept proposed includes relocating entrances along the common side property lines, providing an opportunity for shared access between parcels and still allowing for parking in front of the buildings – but now in a pattern that is perpendicular to new shared entrances and parallel to the building faces. This pattern eliminates all the existing unsafe pull-in/back-out parking and allows for the construction of a sidewalk and verge along the buffered frontage. Balancing the potential loss of parking was more challenging and more varied than the north side, but individual parking analysis per parcel still results in only a few parcels with less parking, some with more parking, and an overall net increase across the 12-parcel block. Like the north side, these areas of reconstruction beyond the right of way within private property include new curbed parking islands and areas of repaving and striping, resulting in an upgrade to parking standards and overall property value. These standardized entrances and upgrades to modernized parking patterns offer predictability, allow for the establishment of the continuous sidewalk and curb along the frontage, and create safer conditions for both vehicular and pedestrian use.



Preferred parking pattern along south side

Between Wilson Avenue and the US 60 By-Pass, the traffic conditions are different and unique. Here the proximity to the busy and congested By-Pass intersection and multiple travel lanes in each direction create challenges for those desiring to turn left into the two properties along the south frontage - Wendy’s and the Woodford Plaza shopping mall (where the entrance geometry is an excessive 4-lanes wide). Review of historical accident history in this specific area shows a high volume of accidents (20+ accidents over 3-year span), with many of these identified as “angled” types of collisions – typically occurring in congested areas where vehicles are turning

across one or multiple lanes of opposing traffic. In response to this heavy concentration or “hot spot” of accidents, options for improving safety were considered. In areas where commercial entrances serve as the only means of access to property, severe restrictions and modifications of access patterns can be detrimental to the success of the business – but in this case, both properties share alternative access from Wilson Avenue - a less-traveled, secondary 2-lane roadway, with an entrance that is far-removed from the Lexington Road corridor and an overall safer access option. Initial recommendations included reducing the size and geometry of the Woodford Plaza entrance, and a conversion of this excessively wide entrance into right-in/right-out only geometries (*see exhibit on lower right*). However, new curbing, striping, and signage improvements alone are primarily deterrents and not always effective, as they still allow for westbound traffic to attempt the restricted left turn maneuver. To guard against this possibility and reinforce the proposed turning restrictions, a barrier (curbed median or equal) is proposed along the roadway centerline to prohibit the problem left-turn movement.



US 60 Bypass intersection, looking north

Alternative Traffic Management Concepts

Currently, the Lexington District of the Kentucky Transportation Cabinet (KYTC-D7) is considering modifications for the By-Pass intersection, which is immediately east and adjacent to the Lexington Road study area. One concept discussed in relation to this study is to consider the elimination of the free-flow right-turn lane from the southbound By-Pass onto westbound Lexington Road. The closure of the free-flow lane and creation of a standard right-angled stop condition for this movement would address multiple issues within this congested area of the Lexington Road corridor. A stop condition combined with a “no-turn-on-red” restriction would reduce conflicts with westbound Lexington Road traffic which now has to compete with merging traffic from the free-flow lane; and the signalized stop condition would allow for the construction of a pedestrian crosswalk across Lexington Road, allowing bikes and pedestrians to cross safely at this location, as shown to the right. Although the volumes along the existing free-flow turn lane may be high at times, the alternative access from the southbound By-Pass to westbound Lexington Road is provided via Crossfield Drive, where access to Lexington Road further west is available via Bellview Avenue or Daisy Hill Drive.

Utility Relocations

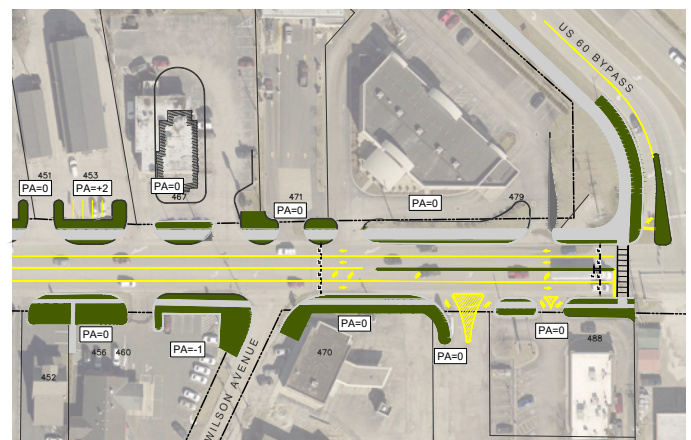
Utility relocations will be critical to support most of the access control improvements proposed along the Segment 3B south side frontage.

Utility providers with improvements along the corridor have provided a cursory review of their existing infrastructure and offered concepts and relocation estimates. There are limited areas of relocation required for utilities already underground (primarily water, gas, sewer), however some providers have provided recommendations for facilities which need to be replaced or updated. In the case of overhead utility providers (KU Electric, and multiple telecommunication providers), each provider has offered concepts to relocate existing overhead utilities underground and has provided budget costs for relocation. Utility relocations will be accommodated by the city where practical and affordable.

Other Improvement Options

Besides the concepts proposed for the south side of Segment 3B between Laval Heights and Wilson Avenue, there are limited opportunities to overcome the outdated patterns of development which exist – aside from the typical cycle of owner/developer redevelopment and improvement which tends to occur naturally over time. Potential options for city-sponsored investment and redevelopment initiatives include the purchase of a single strategic parcel for re-use as a common area parking facility; or a much broader and ambitious program of redevelopment, whereby the city may sponsor the purchase and assembly of multiple parcels and select a market-proven developer to provide a wholesale redevelopment solution for the area. Either of these options involve substantial investment by the city.

The growth in popularity of electronic vehicles (EVs) combined with the lack of public EV charging stations in Versailles highlights another opportunity created by the Streetscape project. Building the infrastructure, which includes both power supply and physical parking spaces with EV charging stations, could be accomplished through city-sponsored investment and/or through partnerships with private development and redevelopment initiatives. Additionally, the Federal Bipartisan Infrastructure Law (BIL) passed in November 2021 provides funding for states to develop and deploy EV Charging programs across the country.



Alternative traffic management concept, US 60 Bypass

ENVIRONMENTAL OVERVIEW

A red flag environmental overview was completed for this streetscape planning study. This overview is based on a field walk-thru and publicly available database search. This was prepared for planning purposes only. This information informs the level of National Environmental Policy Act (NEPA) documentation anticipated and potential environmental red flags for project team consideration. Potential environmental red flags are mapped in the exhibit (*See Figure 7 on page 22*)

This exhibit was prepared from publicly accessible databases, as such, it may not be an accurate representation of all potential environmental resources. Official agency coordination and subject matter expert field assessments may identify additional environmental resources.

Contrastingly, environmental resources mapped may no longer be of concern. For example, some structures within the Maple Street Historic District may no longer be extant and the National Register of Historic Places (NRHP) boundary may be adjusted based on historian review and coordination with the State Historic Preservation Officer (SHPO). Similarly, some potential hazmat concerns may have since been properly remediated and may no longer contain potential hazardous materials.



Potential HAZMAT Concern

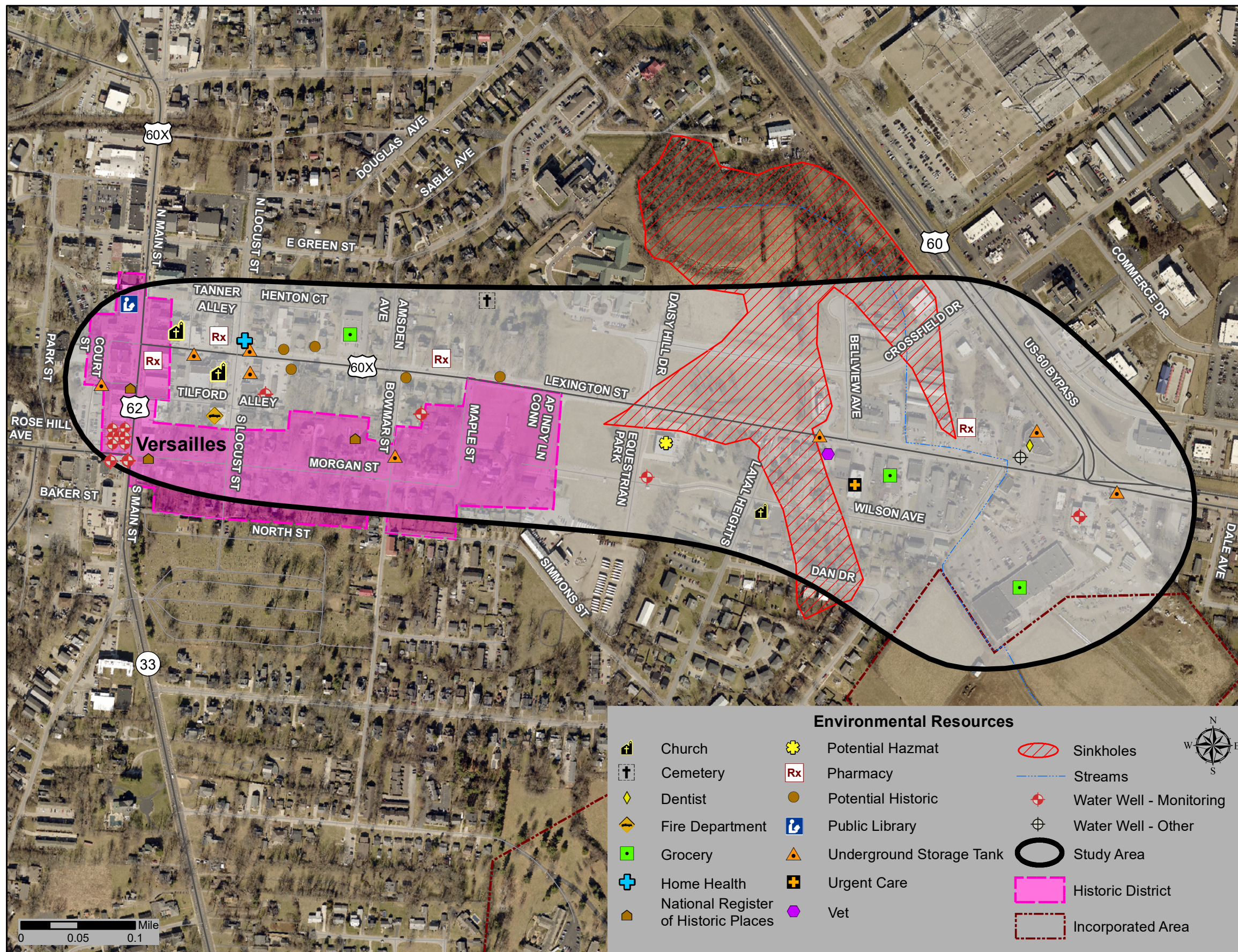
Key environmental red flags to consider include:

- The Marathon Gas Station (above) may have contaminated soils.
- Environmental Justice (EJ) populations (low-income and minority) may be present.
 - » According to the Environmental Protection Agency’s (EPA) EJSscreen Report, the study area, as shown on page 22, has 25% low-income and 12% people of color (primarily Hispanic). The field visit identified an ethnic grocery, place of worship, and other minority businesses (shown below).

- ENVIRONMENTAL OVERVIEW continued on Page 23



Ethnic Facilities



Environmental Red Flags

Figure 7 - Environmental Red Flags

ENVIRONMENTAL OVERVIEW *(continued from page 21)*

- Historic resources are currently listed in the National Register of Historic Places (NRHP). There are additional properties adjacent to the project area which may be considered historic (shown bottom right).
 - » Specifically, there are two NRHP listed historic districts:
 - Downtown Versailles Historic District – both sides of Main St between Rose Hill Ave and Green St, <https://catalog.archives.gov/id/123852115>
 - Morgan Street Historic District, <https://catalog.archives.gov/id/123852137>
 - » Additionally, the field assessment noted the stone walls may potentially be historic. Representative pictures of potential historic stone walls are shown in below.
 - » Also, several properties closer to downtown may be historic. “Potential Historic” icons have been added to items on Figure 1 which appeared particularly concerning due to their proximity to the sidewalk (stone walls and close houses). The residential area starting at Maple St into town may also be considered a historic district. Contrastingly, some of the properties included in the Morgan Street Historic District are no longer extant. Some of the potential historic properties in close proximity are shown below.

If there is a federal nexus (e.g., federal funds, lands, permits, etc.) on a future project, then the procedures established from the National Environmental Policy Act (NEPA) must be followed. NEPA requires, to the fullest practicable extent, that federal actions be interpreted and administered in accordance with its environmental protection goals. It requires an interdisciplinary approach in planning and decision-making for any action that adversely impacts the environment. The potential environmental impacts and need for safe and efficient transportation must be considered to reach a decision that is in the best overall public interest.

Should a future project have a federal nexus, the anticipated NEPA document for a streetscape project in this area would be a Categorical Exclusion Level 1 (CE-1). However, a known NRHP historic district abuts the project area and there are several potential historic properties in the area. If the State Historic Preservation Office (SHPO) determines the project will have an Adverse Effect to NRHP eligible properties, the NEPA document level would be elevated to a CE-3.



Existing Stone Masonry Wall



Potential Historic Stone Walls



Potential Historic Properties

PROBABLE CONSTRUCTION COSTS

Estimates of probable construction costs have been summarized below to assist the City of Versailles with budgeting for future projects along the study corridor. The estimates are organized by segment and coincide with the summary tables on each of the segment summary sheets (Figures 1, 3, 4, 5, and 6).

Cost estimates are based on similar recently completed KYTC grant-funded streetscape projects, which were competitively bid using state wage rates and federal procurement standards (per KYTC LPA Guidelines Document). Similarly, the design and construction engineering and inspection (CEI) costs are based on KYTC LPA guideline standards.

The utility relocation cost estimates were based on input received from local utility providers (LGE/KU, Charter (Spectrum), Metronet, Windstream, and Columbia Gas. Cost estimates for water and sewer related improvements were provided by the City of Versailles.

VERSAILLES LEXINGTON ROAD CONCEPTUAL IMPROVEMENTS						
Segment	1	2A	2B	3A	3B	Total
Sidewalk, Paving and Curbs	\$400,000	\$750,000	\$300,000	\$2,000,000	\$1,750,000	\$5,200,000
Interior Paving and Curbs	\$0	\$0	\$0	\$0	\$1,500,000	\$1,500,000
Lighting	\$200,000	\$375,000	\$150,000	\$750,000	\$1,500,000	\$2,975,000
Landscape and Furnishings	\$40,000	\$80,000	\$15,000	\$75,000	\$150,000	\$360,000
Signalization (Mast Arms)	\$250,000	\$0	\$0	\$0	\$0	\$250,000
Drainage Modifications	\$50,000	\$100,000	\$25,000	\$100,000	\$200,000	\$475,000
Construction Subtotal	\$940,000	\$1,305,000	\$490,000	\$2,925,000	\$5,100,000	\$10,760,000
Construction Engineering & Inspection (CEI) (10%)	\$94,000	\$130,500	\$49,000	\$292,500	\$510,000	\$1,076,000
CONSTRUCTION TOTAL	\$1,034,000	\$1,435,500	\$539,000	\$3,217,500	\$5,610,000	\$11,836,000
DESIGN TOTAL (10% of Construction Subtotal)	\$94,000	\$130,500	\$49,000	\$292,500	\$510,000	\$1,076,000
Utility Relocation (OH ELEC and TELECOM - incl. esmts)	\$1,543,000	\$3,077,917	\$1,231,167	\$6,155,833	\$6,830,833	\$18,838,750
Utility Improvements (City Utilities)	\$188,735	\$280,210	\$157,830	\$465,440	\$724,680	\$1,816,895
UTILITY RELOCATION TOTAL	\$1,731,735	\$3,358,127	\$1,388,997	\$6,621,273	\$7,555,513	\$20,655,645
RIGHT OF WAY TOTAL	\$0	\$0	\$0	\$260,000	\$97,500	\$357,500
TOTAL *	\$2,859,735	\$4,924,127	\$1,976,997	\$10,391,273	\$13,773,013	\$33,925,145

* **Note:** Estimates shown are total projected costs and do not account for any potential grant funding.

APPENDIX

Meeting Minutes, October 24, 2023

Project Kickoff 26-27

Meeting Minutes, November 14, 2023

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Meeting Minutes, December 5, 2023

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Groundbreaking by Design.



Lexington Road Streetscape Project

Versailles, KY

October 24, 2023

10:00 AM

Project Kick-Off Meeting

Meeting Minutes

Attendees:

Brian Traugott – Versailles Mayor

Ann Miller – Versailles City Council

Bart Miller – Versailles Public Works Director

Mary Beth Robson – Versailles-Midway-Woodford County Planning Commission

Dan Knight – Versailles Public Works Assistant Director

Jennifer Sharp – Property Owner Representative

Brent Sweger – KYTC Central Office Planning

Casey Smith – KYTC District 7 Planning

David Kratt – Qk4, Project Manager

David Reed – Qk4, Principle in Charge

Following introductions, the status of the to-be-signed agreement between the City and Qk4 was discussed. Qk4 will submit a standard form contract along with the previously provided letter agreement. Mayor Traugott will then sign off on the agreement. Qk4 would likely submit invoicing following the end of November, then after the submittal of the final documents after the end of December.

Next, the City delineated lines of communications for reporting to and from Qk4. Mary Beth is to be the primary point of contact with Dan Knight copied on emails and submittals.

Overview of Project Scope and Concepts

David Reed proceeded with the review of the “Approach” pages from Qk4’s RFQ response, with a goal to a) confirm concepts presented were favored or acceptable; b) determine whether further alternative concepts were needed; or c) to identify ideas, concepts or scope of work items which the city does not support or desire to address.

- Overhead Utility Relocation – the group confirmed the relocation of overhead utilities (either underground or within a parallel corridor to US 60) is a high priority for the city, and concepts should be based on and supported by this assumption. The city would like the utility information presented in the form of KYTC standard “Utility Notes” format (typical RR and Utility Notes which accompany LPA projects).
- Parallel on-street parking concepts – the group supports parallel on-street parking within the entirety of defined Sections 1 and 2 of the study area (Main to Maple).
- Bump-outs or Corner Curb Extensions – to the extent that they are effective in defining limits of on-street parking and reducing the width of pedestrian crosswalks where needed, the introduction of bump-outs is supported if the new extended curb geometry does not block or impede large truck turning movements – specifically at the Main and Locust intersections, where truck traffic is common.
- Bike Lanes and Shared Use Paths – although the existing on-road bike lanes within the central portion of the corridor (between Locust and Laval Heights) are not highly utilized, the city would like to retain these features to promote a complete street corridor and would also like to explore options for the expansion of the City’s shared use path network. KYTC recommended the addition of striped “buffers” to further separate the bike lanes from vehicular travel lanes.
- Median Islands – in addition to the further refinement of concepts presented which extended the roadway curb line to the edge of the existing on-road bike lane, the city would like to explore an alternative reallocation of the roadway pavement which introduces a center landscape median within the corridor. Considering the number and frequency of entrances along the corridor, the city understands this alternative is only practical within the central portion of the corridor between Maple and Laval Heights.
- Corridor Vision and Character – the city agreed that the overall character of the corridor would largely be driven by the existing zoning classifications – which is primarily business commercial, with areas of existing residential and mixed used commercial residential zoning and land-use present within the central portion of the corridor. The city confirmed the large low open space along the north side of the corridor between Daisy Hill and Bellview is undevelopable and dedicated to stormwater management (owned and maintained by the city).
- Section 3 Access Control Concepts - the city agreed the heavy business commercial area between Laval Heights and the Versailles Bypass represents the most challenging portion of the corridor study area, and generally supported the concepts for access control improvements which Qk4 offered within their RFQ response. The city further advised

Qk4 to offer final concepts for access control as a series of larger comprehensive exhibits, rather than a parcel-by-parcel series of exhibits as originally outlined within the RFQ. The city also encouraged Qk4 to address other alternative solutions for this area in the form of written narratives and generic concepts, rather than offering specific examples or detailed exhibits (to avoid the focus on one parcel or another).

- Laval Heights Development – the city noted that this vacant parcel (and possibly adjacent parcels) was the subject of an ongoing redevelopment proposal and requested that Qk4 provide early recommendations for this area if possible.
 - The city provided a preliminary development plan for the property previously for review prior to submittal of the RFQ response.
- Versailles Bypass US 60 Intersection – the city confirmed that the area of the intersection with Lexington Street was currently under study by KYTC-D7 and serves as a logical terminus for Qk4's scope of work. Thus, the scope of the Streetscaping study will terminate at the western side of the intersection.
 - Following the meeting the city provided KYTC's preliminary plans for the intersection improvements for information purposes only.

The Deliverables from the RFQ were reviewed and agreed to by all parties.

The following schedule was proposed with the approximate dates as follows:

- 50% Progress meeting – Wednesday, November 15
- 90% Progress meeting – Tuesday, December 5
- Submittal – Friday, December 29
 - Mary Beth will coordinate schedules with those who will participate in these meetings and provide them to David Kratt. Meeting invitations will then be sent out to confirm the actual date and time.

Other topics included the discussion of safety and accident history along the corridor, where the city reported 3 fatalities over the past 5 years.

The city also noted that plans from the Main Street streetscaping project are available in printed format for review if needed.



Groundbreaking by Design.



Lexington Road Streetscape Project Versailles, KY

Woodford County Chamber of Commerce Conference Room

November 14, 2023

1:30 PM

50% Progress Review Meeting

Meeting Minutes

Attendees:

Brian Traugott – Versailles Mayor

Ann Miller – Versailles City Council

Bart Miller – Versailles Public Works Director

Mary Beth Robson – Versailles-Midway-Woodford County Planning Commission

Dan Knight – Versailles Public Works Assistant Director

Jennifer Sharp – Property Owner Representative

Casey Smith – KYTC District 7 Planning

David Kratt – Qk4, Project Manager

David Reed – Qk4, Principle in Charge

The Committee reviewed the following information and exhibits presented by Qk4:

- Environmental Resources map - No significant red flags or concerns were identified. Comments are noted below:
 - Concern was expressed regarding the eastern limits of the historic district shown near Maple Street.
 - The City will double check what was provided as historic district overlay in the GIS data.
 - Cemetery at rear of the Charred Oaks B&B property not shown (wooded area well outside focus corridor).

- The rock wall at the Charred Oaks B&B may be added as a potential environmental resource.
 - The background imagery will be updated to match the imagery contained in the City GIS data.
- Accident Data Heat Map – The map was produced using the last three years of accident data and shows concentrations of accidents at the two ends of the corridor.
 - Casey Smith noted that the map would likely be similar to Excess Expected Crash data and would follow up if there is a notable difference.
- Existing utilities map:
 - Relocation to the rear of properties does not look promising do the lack of a contiguous corridor on the north or south side of Lexington Street.
 - Qk4 reviewed the corridor for free areas for relocation. The south side of the eastbound drive lane appears to be the best option for burying utilities. This will be the area to focus on for utility relocations.
- A median alternative was reviewed along with potential impacts to existing/permitted entrances. Without left turn access for west bound traffic, entrances would be reduced to right-in-right-out entrances.
- Review of a draft purpose and need statement focused on connectivity and multi modal transportation and improvement of safety for all transportation users. Elements for beautification enhancements within the corridor would be a goal of the project.
- The group reviewed urban area concepts, bump outs and revised parallel parking patterns and trade-offs. Qk4 will review further and include options in the next submittal.
- The group discussed an overall bike lane network including a connection to Crossfield Drive and the Crossfield Drive-Bypass intersection as the preferred route for bikes to cross the bypass. Qk4 will develop a map for review at the next submittal.
- The group discussed both vehicular and pedestrian & bicycle traffic through the bypass intersection, which is not included in this study.
- Section 3B and 3C concepts – The committee provided favorable comments for the access and parking modifications shown in the 3C option.
- The group discussed the potential for purchasing parcels for enhanced parking: If the City elects to pursue this option, property(ies) which are centrally located, have a 60' minimum width, and can potentially connect through the back to Wilson Avenue would be good candidates to consider.

Next steps:

- Requests will be sent out tomorrow to all identified utility providers for relocation estimates for buried lines in the eastbound lanes.
- The City will provide water, sewer and storm sewer needs within the corridor.

The next meeting is tentatively scheduled for December 5, 2023 at a time and location TBD.



Groundbreaking by Design.



Lexington Road Streetscape Project Versailles, KY

Woodford County Courthouse Basement Conference Room

December 5, 2023

1:30 PM

90% Progress Review Meeting

Meeting Minutes

Attendees:

Brian Traugott – Versailles Mayor

Ann Miller – Versailles City Council

Bart Miller – Versailles Public Works Director

Mary Beth Robson – Versailles-Midway-Woodford County Planning Commission

Dan Knight – Versailles Public Works Assistant Director

Jennifer Sharp – Property Owner Representative

Casey Smith – KYTC District 7 Planning

Brent Sweger – KYTC Central Office Planning

David Kratt – Qk4, Project Manager

David Reed – Qk4, Principle in Charge

The Committee reviewed the following information and exhibits presented by Qk4:

- Review of the draft Purpose and Need Statement - It was noted how Qk4 is suggesting incorporating the esthetic elements as part of the project goals to support the purpose of the project, which is to 1) improve safety for both vehicular as well as pedestrian & bicycle traffic, and 2) improve connectivity by enhancing pedestrian & bicycle facilities and eliminate existing gaps along the corridor.
- Review of updated environmental overview:

- In summary, although there are items identified that would have to be evaluated in a subsequent environmental study, we see no red flags or issues that would preclude the project concepts proposed from moving forward.
- The City is still questioning the limits of the State Historic Preservation Office's (SHPO) historic boundary extending to Morgan Street (area of the old school site) and what the City overlay now recognizes. Mary Beth is following up with the SHPO. Resolving this discrepancy would need to be the subject of the next level of effort.
- The City recommends removal the two LWCF Projects from the Environmental Resources map and legend since there are not impacted by the project and may lead to confusion
- Aesthetic treatments envisioned by the City include:
 - The removal of the overhead utilities
 - Continuation of stone wall features, but not brick features
 - Light fixtures
 - Decorative fencing options
 - Electric sources (on poles)
 - Options for traditional grass verge as well as xeriscape plantings (an example of xeriscape is the recently completed Lexington Town Branch rain gardens). Discussion will be added in the narrative
- Review of sheet-by-sheet concepts:
 - Use the word SEGMENT to reference the subdivided parts identified along the project (S1, S2A&B, S3A,B and C) and the word SECTION to reference cross section elements shown on the exhibits
 - Check for delivery truck access at the Marathon gas station at the corner of Locust Street
 - Consider noting Existing and Proposed Parking in Segments 1 and 2 in the same way as shown in Segment 3
 - Reference Equestrian Park and AP Indy Way on the Segment 3A exhibit
 - KYTC asked if a small roundabout would be considered at the Equestrian Park / Daisy Hill intersection with Lexington Road. Qk4 completed a preliminary review of an appropriately sized roundabout at this location and does not recommend further study. Qk4 will review again and report back to the City
 - KYTC asked if eliminating left turns between Wilson Avenue and the Bypass would be considered to potentially reduce crashes in the section. Qk4 will review and report back to the City

Next steps:

- Digital versions of the exhibits presented at the meeting will be shared on a OneDrive with the committee for further review and comments. In order to address any comments and complete the study, comments are to be sent to Mary Beth and Qk4 no later than close of business on December 12th.
- The City will provide water, sewer and storm sewer estimates within the corridor.
- Qk4 will continue to develop and refine exhibits and prepare a supporting narrative to include in the final report.

Follow-up comments were provided on marked-up plans by the City on December 12 and discussed on a TEAM's call on December 13 with Mary Beth Robson, David Reed and David Kratt.

Comments from KYTC were received by email December 13 and Qk4 offered draft responses to Mary Beth the same day.



Engineering Planning

Groundbreaking by Design.

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