4

TRANSPORTATION

Transportation

After gathering existing data and conducting discussions with stakeholders and officials along the corridor, the consultant team arrived at the following key conclusions and key issues with regard to Manchester Road's existing transportation conditions. The Appendix contains additional information and data concerning the existing transportation conditions along and near the Manchester Road corridor.

- While Manchester Road experiences significant traffic volumes between Baxter Road and Route 141, and around Clarkson Road, during rush hour periods, the overall impediment to improved transportation performance relates to access management problems. The significant number of curb cuts and intersecting residential streets along Manchester Road, and the lack of connectivity between individual retail parcels, funnels almost all traffic in the local area onto Manchester Road and creates conflict between travelers using the corridor to commute and those using it to access individual businesses. The significant number of vehicles turning into and out of individual parcels creates safety issues.
- The lack of a grid or more coordinated street network contributes to Manchester Road's transportation problems. In most parts of the Midwest, a grid of streets, including secondary streets running parallel to main arterials, helps to disperse traffic and relieve bottlenecks on main streets (such as Manchester Road). It also allows traffic (including shoppers, workers, etc.) to circulate within corridors such as Manchester Road without having to get back on the main road. In contrast, very few significant north-south arterials intersect Manchester Road. Very few roads run parallel to Manchester. As a result, almost all traffic in the area funnels onto Manchester Road, creating congestion at peak periods.
- The inconsistency in the quality and presence of sidewalks, crosswalks, and bicycle facilities discourages pedestrian and bike activity along – and near – Manchester Road.
- A significant excess inventory of parking decreases the visual quality of the corridor, and reduces the amount of land available for development.
- The presence of the center turn lane, allowing unobstructed left turns in all locations, contributes to confusion along the corridor and has contributed to a significant number of accidents over the years as motorists attempt left turns without protection from oncoming traffic.

The following provides a summary of the key transportation recommendations from the Manchester Road Great Streets Master Plan. The appendix contains additional details concerning these recommendations.

Key Recommendations for Transportation

Access Management Guidelines – Access management strategies along arterials such as Manchester Road provide for the safe and efficient access to individual properties while ensuring that traffic moves smoothly and efficiently along the corridor. In general, MoDOT will use the standards outlined for major arterials in approving changes to transportation and access management along the Manchester Road corridor, and will consider modifications to standards for major arterials on a case by case basis.

Establishing a Grid Network of Streets – The five communities should establish a network of north-south and east-west streets running parallel to and perpendicular to Manchester Road to improve the overall flow of traffic in the five communities and to relieve congestion along Manchester Road. The diagrams on the following pages illustrate the recommended plan for a network of streets along and near the Manchester Road corridor, and the key north-south connectors serving the area in the future.

Back Streets – The five communities and/or private developers should install streets running generally parallel to Manchester Road. These streets could function as "service roads" behind businesses or

could serve as “Main Streets” for shopping center or town center areas. Back streets could also run north-south, particularly in town center districts, in order to provide for a downtown-like grid of streets.

Connected Parking Lots and Cross Access Agreements – The five communities should call for the establishment of cross access agreements and the connecting of parking lots between adjacent parcels along Manchester Road in order to relieve the main travel lanes of Manchester Road of local traffic.

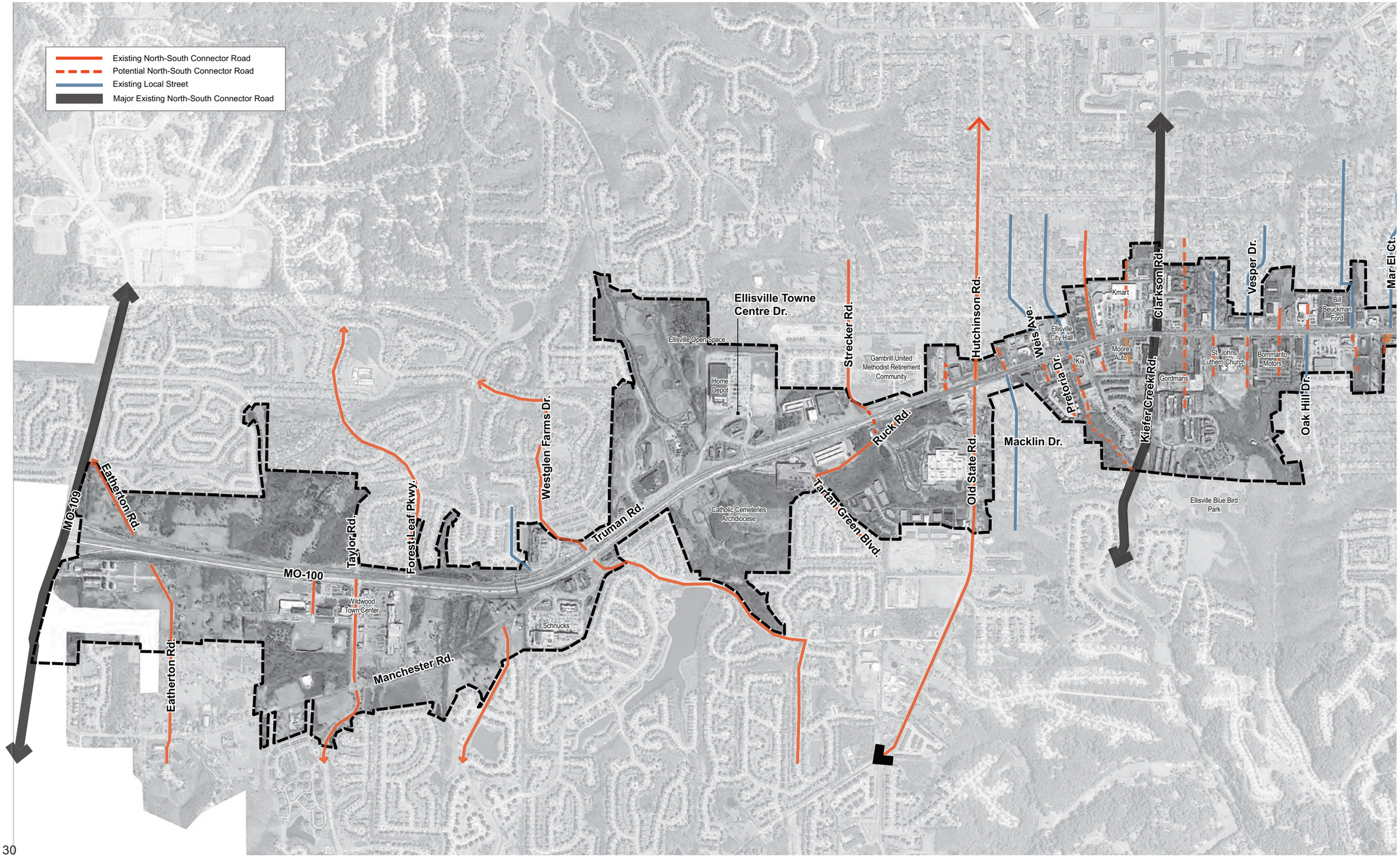
Extensions of Existing Service Roads – Extensions of existing service roads in Ellisville and Wildwood, such as Truman Road, would provide additional access to businesses and relieve traffic volume from Manchester Road.

Boulevards – Over time, the five communities should work to install a landscaped median along the center of Manchester Road in order to improve safety. However, the Manchester Road master plan recommends that the communities work first to develop a network of back streets and connected parking lots to improve access management and provide alternative routes to individual properties before proceeding with the installation of a center median in particular sections of the corridor. In addition, the communities may wish to wait to install a center median along particular sections of Manchester Road until redevelopment proceeds in a given area along the corridor.

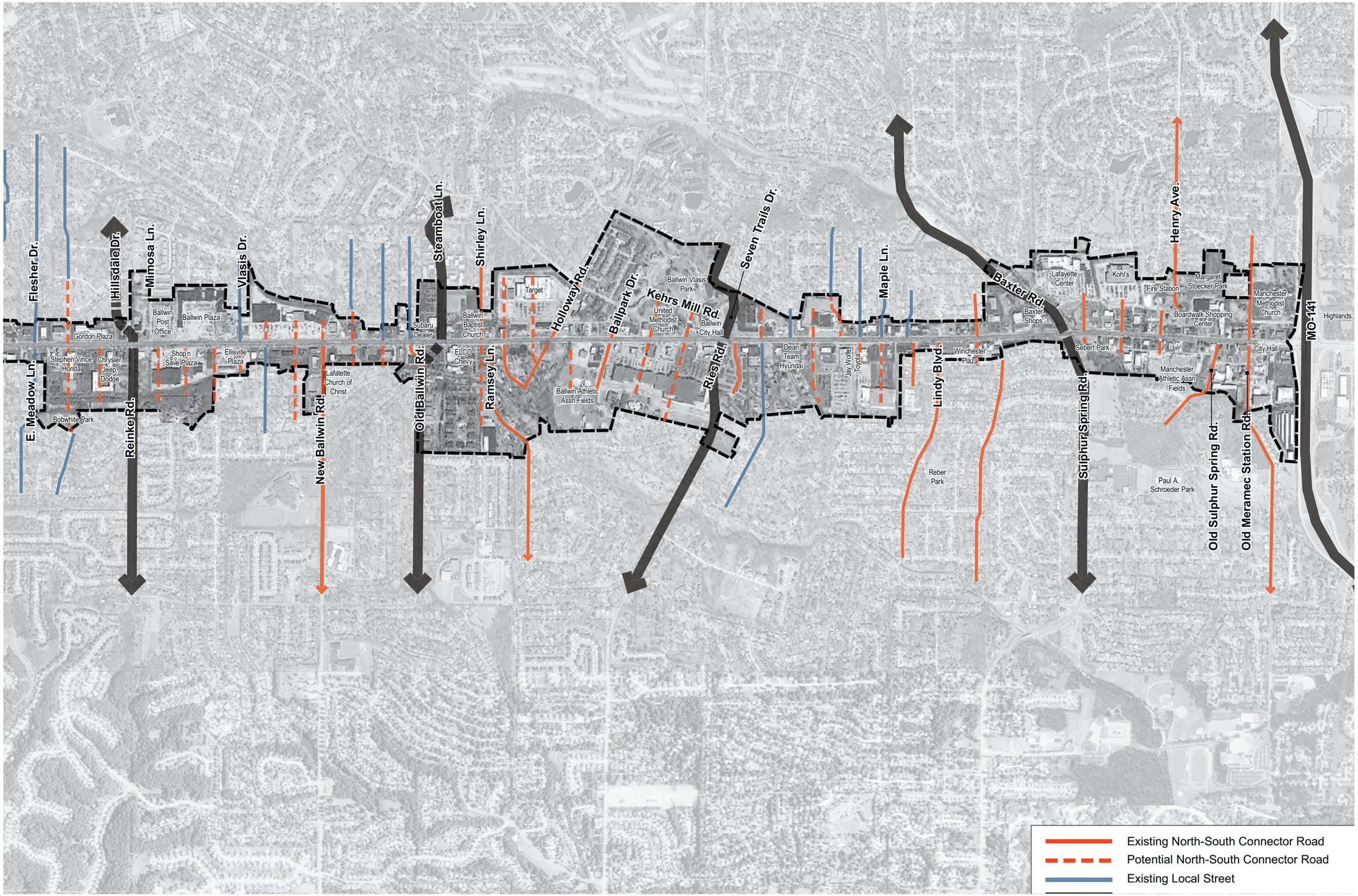
Traffic Signals – The Manchester Road Great Streets Master Plan calls for the installation of additional traffic signals at select locations in order to better manage traffic flow and to enhance the potential viability of individual businesses at and near these intersections. Prior to the approval of the installation of any additional traffic signals, especially at intersections spaced closer together than MoDOT standards, MoDOT would require the completion of progression analysis and other studies including signal warrants in order to agree to the installation of additional signals.

Road Sections – The Manchester Road Great Streets Master Plan generally recommends that Manchester Road utilize the existing road bed and continue to include two main travel lanes in each direction. Over time the center turn lane would convert to a boulevard median. Sidewalks and bike lanes would run along the sides of Manchester Road, with a separation of landscaping between the two main travel lanes and the bike / pedestrian lane. The diagrams that follow represent recommended sections for the various types of streets along the Manchester Road corridor. The consultant team recommends that the street plan and the recommended street sections integrate into the comprehensive plans and public works documents in all five communities.

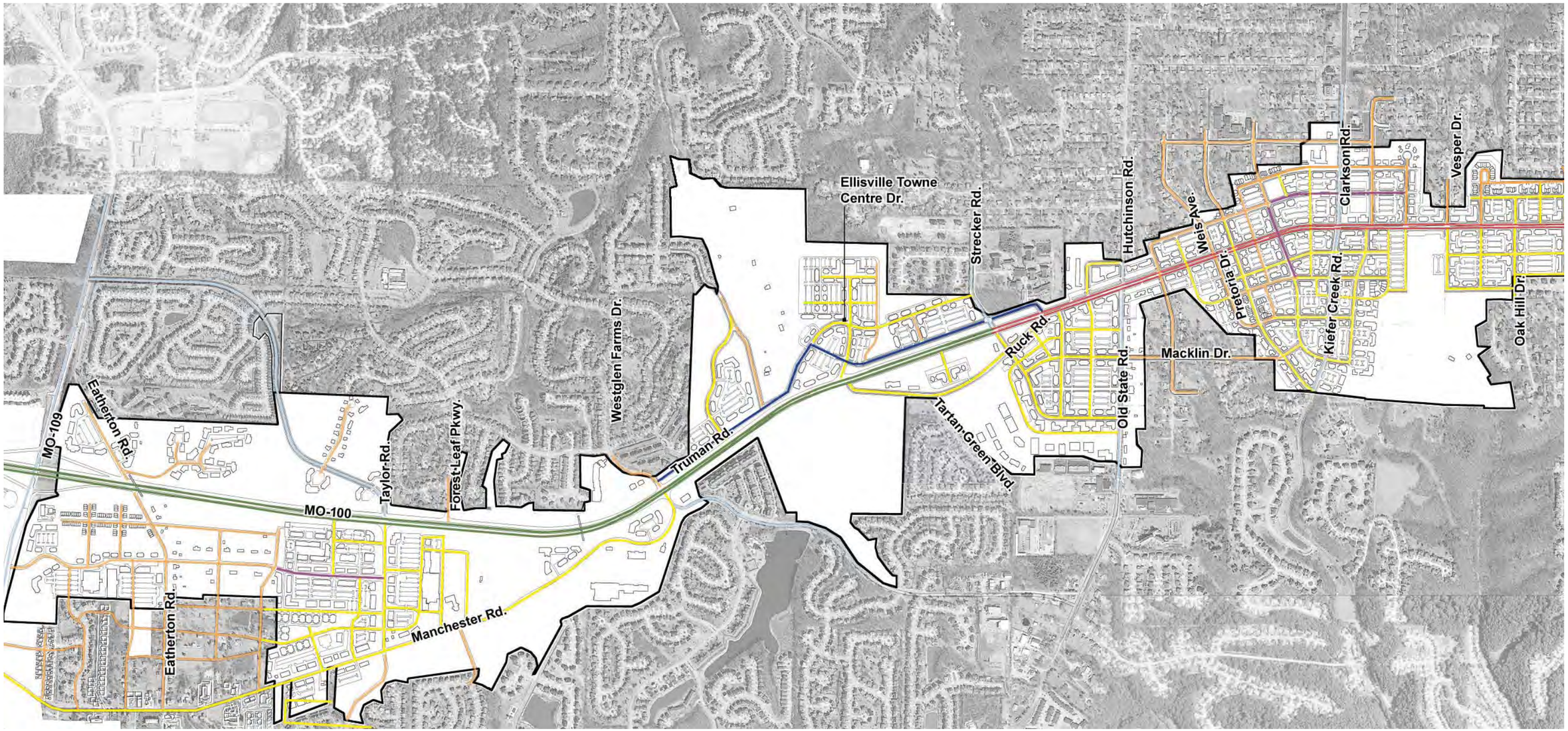
North-South Connectors - Western Segment



North-South Connectors - Eastern Segment



Thoroughfare Hierarchy - Western Segment



New Boulevard

Frontage Road

Historic Boulevard

Back Street

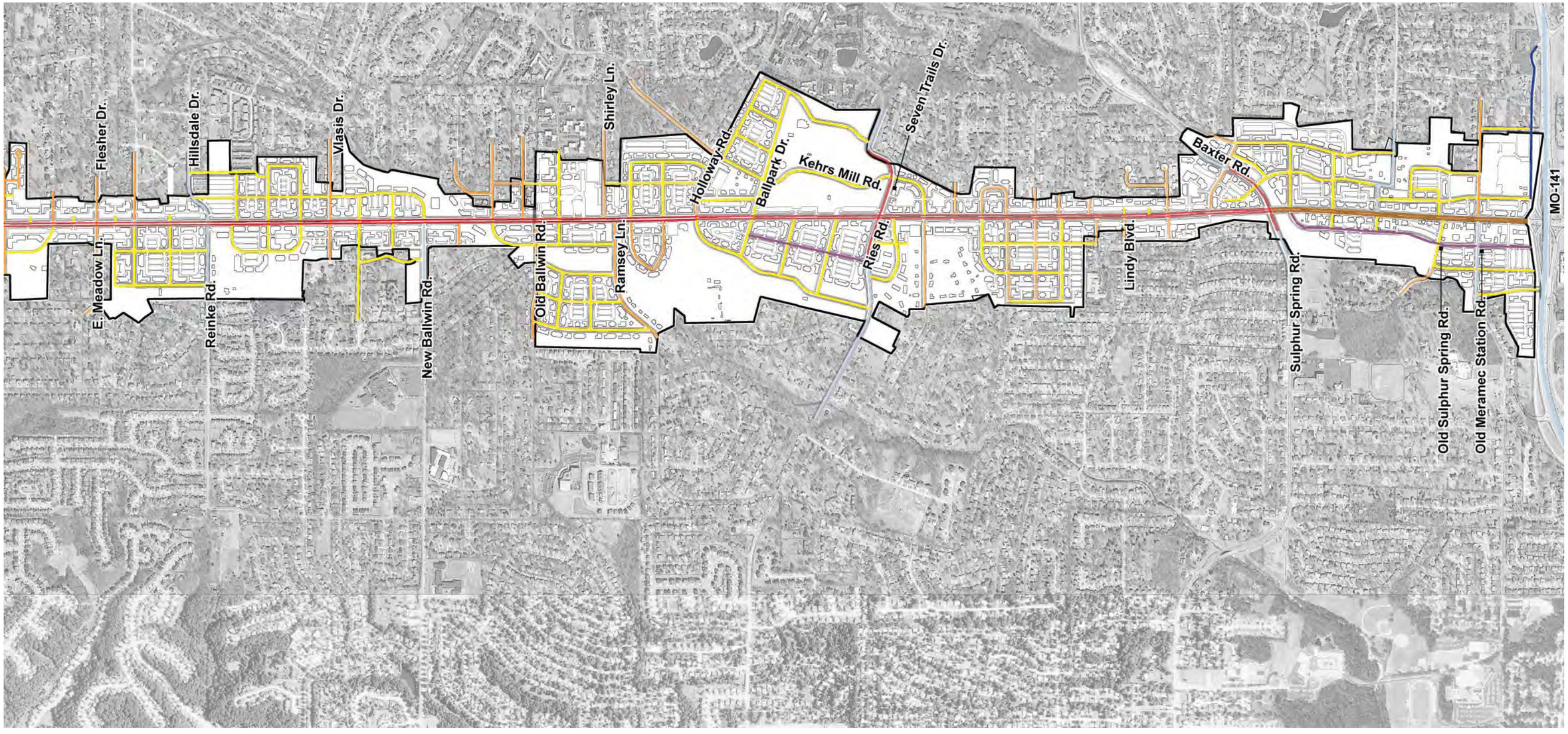
Main Street

North-South Arterial

Side Street

Parkway

Thoroughfare Hierarchy - Eastern Segment



New Boulevard

Historic Boulevard

Main Street

Side Street

Frontage Road

Back Street

North-South Arterial

Parkway

Backstreets, Option 1

Figure 14: *Section, Backstreets Option 1: Back streets would run parallel to or perpendicular to Manchester Road and would serve as relief routes for Manchester Road as well as streets serving retail, office, or residential uses throughout the study area. The recommended street sections call for one travel lane in each direction, a landscape zone of six feet between the travel lanes and areas of development, and sidewalk areas of at least 10 feet in width to facilitate retail and commercial activities. The streets should include bulb outs at intersections to shorten the distance pedestrians must travel from one side of the street to another. Parking may line the street on both sides in a parallel fashion or may orient in an angled fashion on one side, in order to increase the total number of parking spaces. Buildings of up to four stories may flank back streets. The exact form and orientation of buildings along back streets would depend on market forces and individual redevelopment concepts.*

Backstreets, Option 2

Figure 15: *Section, Backstreets Option 2*

Backstreets, Option 3 (Alley)

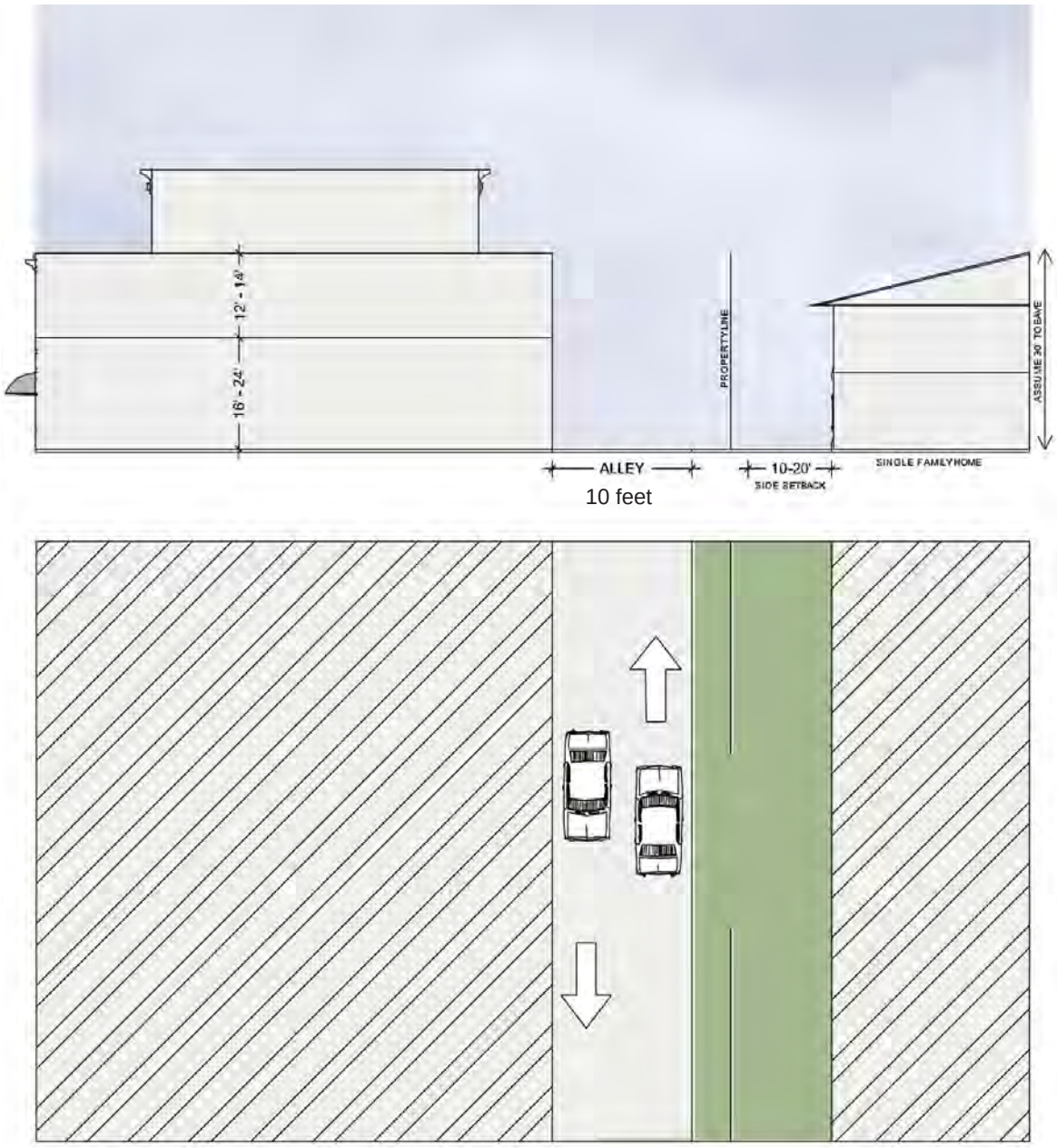


Figure 16: *Section, Building Height at Residential Property with Alley: The access management plan envisions the use of alleys in various locations throughout the corridor, and particularly in town center districts, in order to provide service access to commercial establishments or residences. The street sections depicted here outline the recommended setbacks from alleys for buildings along the corridor. The communities may plan for alleys to represent an alternative form for back streets running parallel to Manchester Road. Site plans for various locations within town center districts may include plans for alleys to be located between blocks (and running behind buildings), similar to the design of alleys in older American cities. The access management plan does not depict precise recommendations for locations of alleys (located behind buildings) as the design of these streets would be conducted and determined as the development of town centers progresses.*

Frontage Road

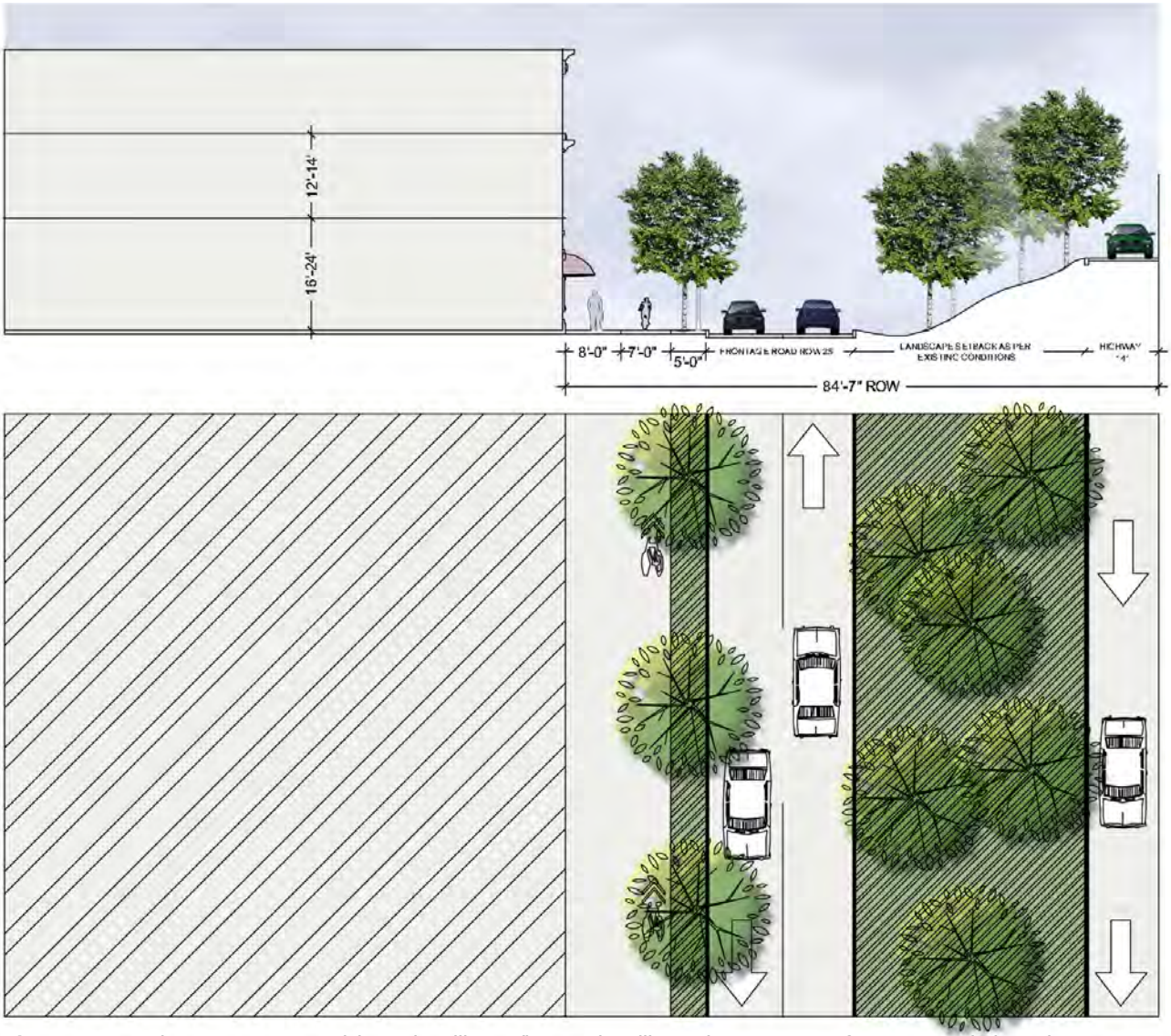


Figure 17: *Section, Frontage Road (Woods Mill Road): Woods Mill Road represents a frontage road along the west side of Route 141 in Manchester. The section below outlines the recommended setbacks from Route 141 and the setbacks from buildings to Woods Mill Road.*

“Main Street” Section

Figure 18: *Section, Main Street: The “Main Street” section represents the recommended design for primary main streets in the various town center districts along the Manchester Road corridor. The street section recommends angled parking along either side of a two lane road in order to increase the number of parking spaces along the street. A minimum 10-foot wide sidewalk along the main streets would help facilitate outdoor dining and accommodate greater numbers of pedestrians compared to side streets or back streets. Landscaping including street trees will line the Main Streets. The plan anticipates buildings of up to five stories in height on either side of Main Streets.*

“New Boulevard” Section

Figure 19: *Section, New Boulevard: The “New Boulevard” street section reflects the recommended design for most of Manchester Road, between Baxter and Old State. As mentioned elsewhere in the master plan, the boulevard would over time include a landscaped median as redevelopment proceeds along the corridor in order to improve aesthetic quality and improve safety. A combined sidewalk and bike lane would be separated from the main travel lanes on either side of Manchester Road by a landscape buffer. A shallow bay of parking would potentially flank buildings on either side of the road, but the majority of parking would locate to the rear or side of individual buildings.*

“Historic Boulevard” Section

Figure 20: *Section, Historic Boulevard: The “Historic Boulevard” street section reflects the recommended design for Manchester Road in the historic portion of Manchester. Over time, following the installation of back streets and other access management improvements, the community could install a landscaped median as redevelopment projects progress. A combined bike and pedestrian lane on either side of Manchester Road would provide for connectivity east and west and would also serve businesses and residences on either side of the street. Given the close proximity of existing buildings to Manchester Road, this street section does not anticipate providing parking in front of any structure. In contrast, parking would be provided to the rear or the side of individual buildings.*

Residential Street Section

Figure 21: *Section, Residential Street: Residential streets would serve as lower volume streets accessing residential developments in close proximity to Manchester Road. These streets would feature a lane of travel in each direction and parallel parking on each side. A landscape strip would separate the parallel parking area from sidewalks on either side.*

North South Arterial

Figure 22: *Section, North South Arterial: North-south arterials, including Clarkson Road and Baxter Road, would serve as primary transportation connectors with town center districts along the corridor and connect the area to other parts of St. Louis County. The recommended design for these streets resembles that for the boulevard along Manchester Road. A landscaped median would separate the north and south lanes of traffic (two lanes in each direction). Bike lanes would attach to the travel lanes, and a landscape strip would separate the bike lanes from nearby sidewalks.*

Stream Corridor

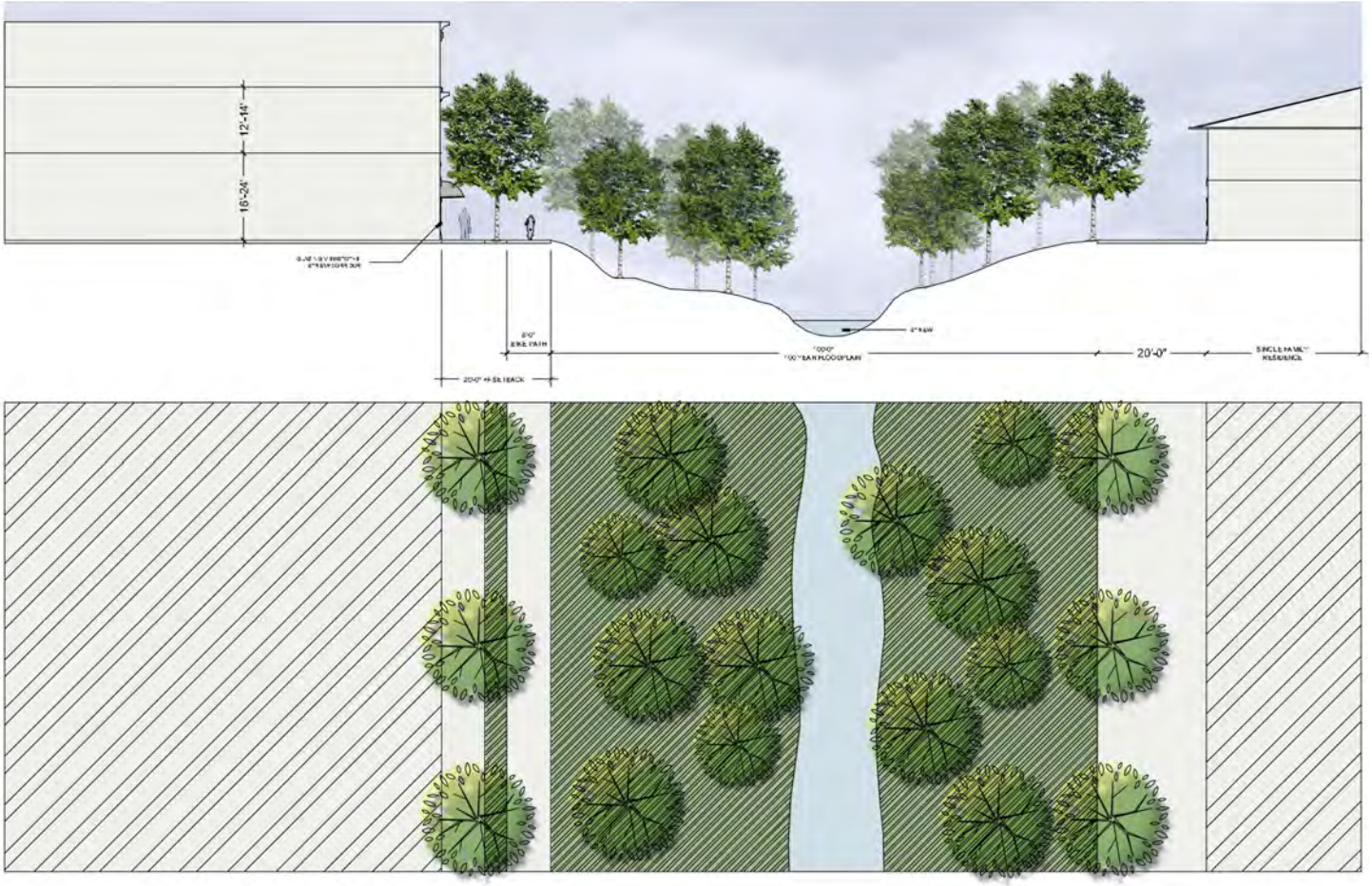


Figure 23: *Section, Stream Corridor: This section illustrates the recommended design for streamway corridors in the study area, including those flanking Grand Glaize and Fishpot creeks. The communities should provide sufficient setback from the streams to buildings, and the design for bike and pedestrian trails on either side should access buildings in the area and provide for transportation conduits along the streamway.*

Parkway Street Section

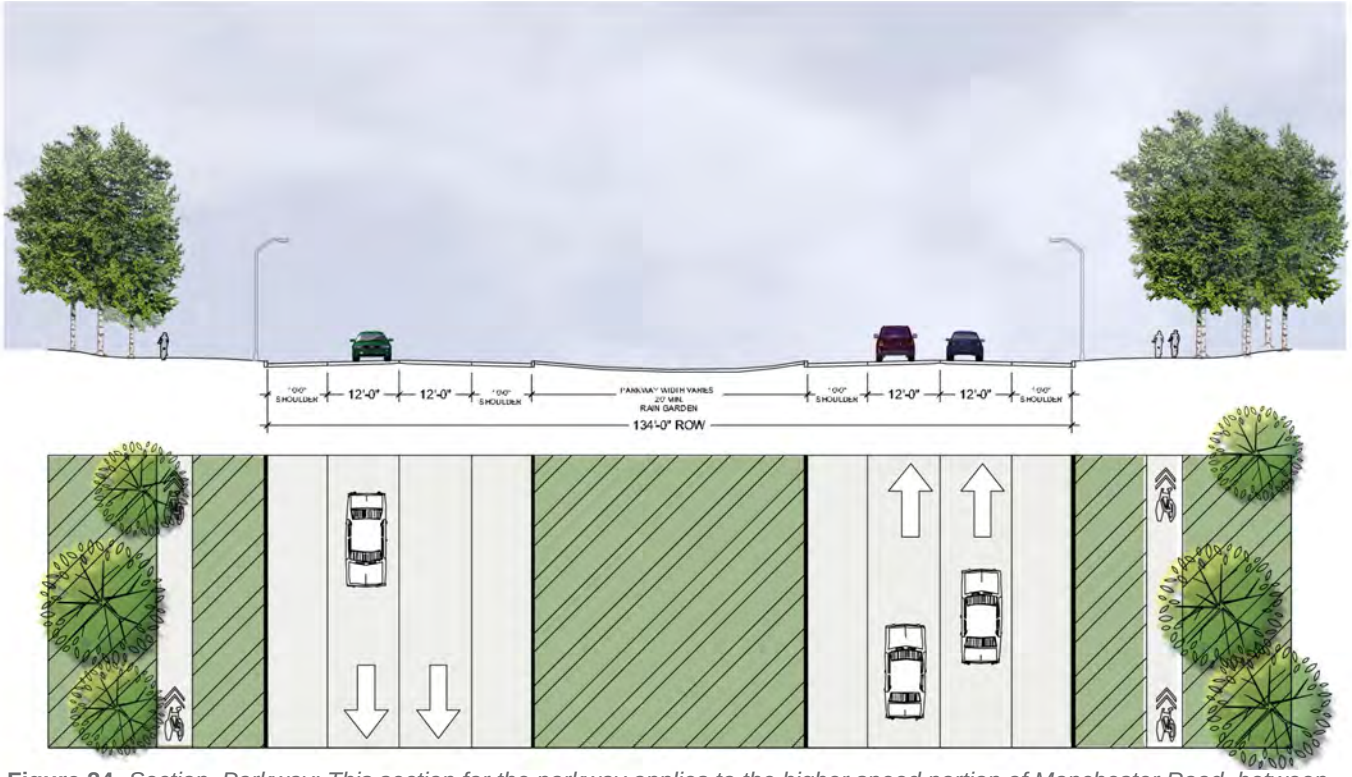


Figure 24: *Section, Parkway: This section for the parkway applies to the higher speed portion of Manchester Road, between Old State and Route 109. The recommended section retains the basics of the design of this road. It maintains bike lanes as separated facilities on either side of the road. Importantly, though, the section calls for additional tree plantings and landscaping on either side to improve the aesthetic quality of this portion of the corridor.*

Side Street at Left Turn Locations

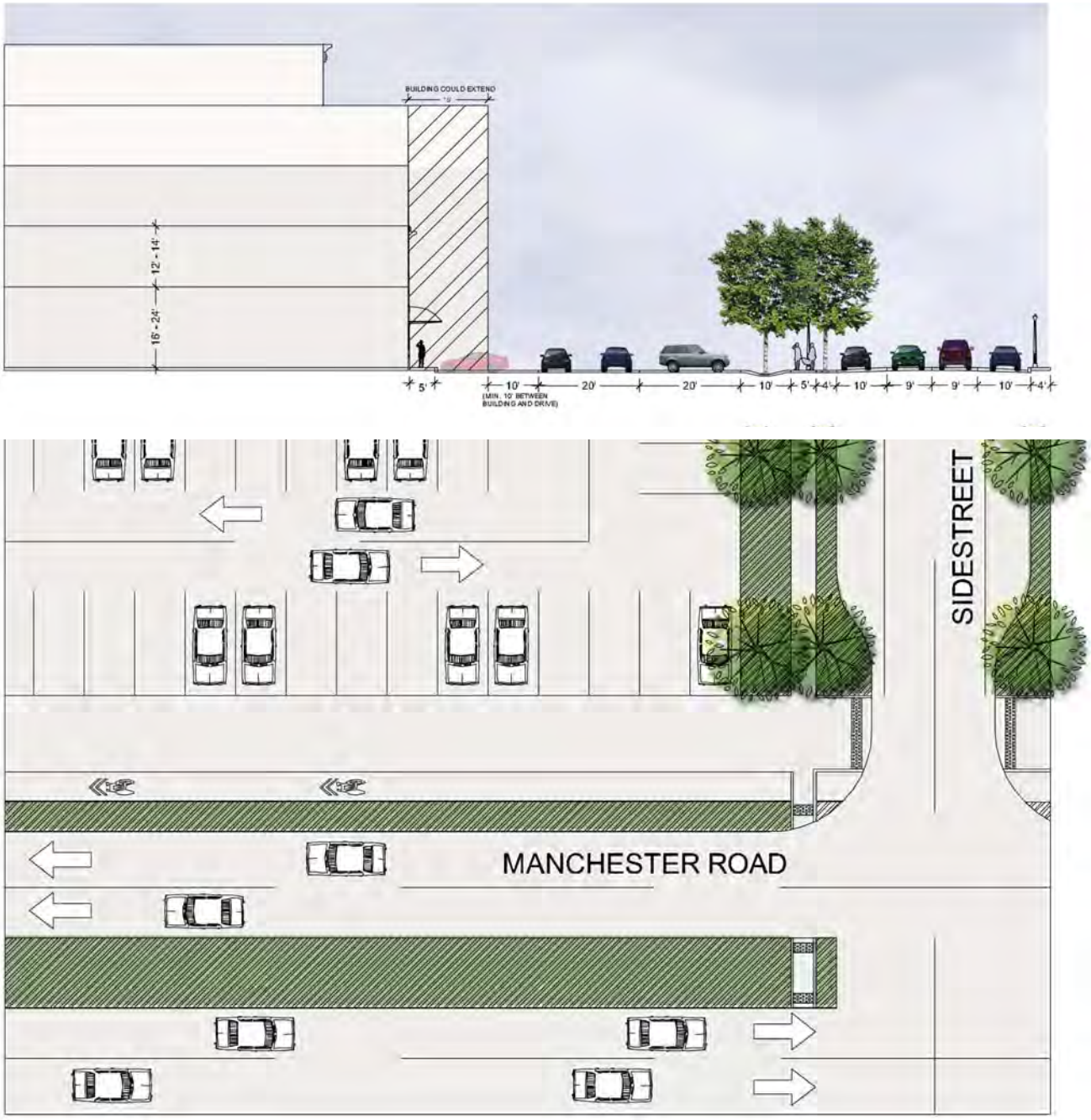


Figure 25: *Section, Side Street at Left Turn Locations: This section in plan and elevation view depicts the recommended design for the intersections of the main boulevards along Manchester Road and the side streets running north-south.*