

**RATIO**



**MADISON MAIN STREET**  
**MASTER PLAN**







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# 01

## Acknowledgments

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- Deputy Mayor Mindy McGee
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- Tony Steinhardt III, Director of Economic Development

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Police Department

- John Wallace, Police Chief

Fire Department

- Bill DeVries, Fire Chief

Madison Main Street Program

- Austin Sims

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- John Wallace, Police Chief

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P.A.C.E Program

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RUPRI Center for Local and State Policy

- David Terrell, Executive Director

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- Brian Jackson, Public Works

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- Jessi & Corey Getz, Residents

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- Cynthia Sevier, Stretch Zone Massage

- Koko Heath, Scarlet Begonia

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- Marjorie Webb, Margie's Country Store
- Meredith Jacobs, Mane Attractions Hair Salon

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- Geri Cook, Just the Word

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- Bryant Ficek, Traffic Engineering, Inc.



# 02 Executive Summary

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The relinquishment of State Road 56 to the City of Madison presents a tremendous opportunity to update and redefine this important gateway into our community. Previously managed and regulated by INDOT, the corridor was subject to requirements that considered Main Street a piece of infrastructure intended primarily to convey vehicles safely and efficiently. A major goal of this project was to determine how Main Street could become a *place*.

## THE PROCESS

The planning process for the Main Street Master Plan started in 2020 and was led by RATIO, a planning and design firm from Indianapolis. The scope included a site analysis of the corridor, public engagement, a traffic study, and the development of plans and associated costs. Geographically, the scope included Main Street between Jefferson Street at the east end and the entry to Clifty Falls State Park on the west end. The process was guided by a Steering Committee composed of city leaders, residents, and business owners.

The project considered many ways that Main Street could be changed to make it more pedestrian friendly, safer, and more

attractive. Chief among the considerations was whether one or more vehicular travel lanes should be eliminated, and if so, how such a change would affect the design of our sidewalks and public spaces. Consideration was also given to the history of the corridor, materiality, identity, parking, delivery needs of businesses, trees, traffic calming, and utilities.

## KEY TAKEAWAYS

The engagement and design process led to some key takeaways:

- The number of travel lanes will remain the same between Jefferson Street and Broadway
- To calm traffic, a travel lane will be removed between Cragmont and Broadway
- Madison’s character is informed largely by the City’s wealth of beautifully preserved buildings. Any changes to Main Street should serve to enhance the character and not detract from or obscure it.
- Authenticity, and a measure of restraint, should guide material selections. To that end, materials requiring a significant investment (like brick pavers) were eschewed in favor of concrete pavement for sidewalks.

- The plan prioritizes safety as an outcome of changes to the corridor. To that end, street corners will be expanded to shorten crossing times, and create a more comfortable environment for pedestrians.
- The plan prioritizes addressing drainage problems and other infrastructure concerns under the ground. This means a significant amount of the anticipated cost is identified for new utilities and other considerations that might not appear to enhance character, but are nevertheless important to address.

## THE COST AND PHASING

In total, the process led to a probable cost of about \$25 million, if all of the proposed changes were made at once. Most likely, the plan will be implemented in phases over several years. Having the plan and its associated costs puts the City in the position to strategically pursue grants and other funding options.

## THERE IS MORE TO DO

This master plan is just the beginning. Next steps would include crafting a funding strategy, determining how much of the

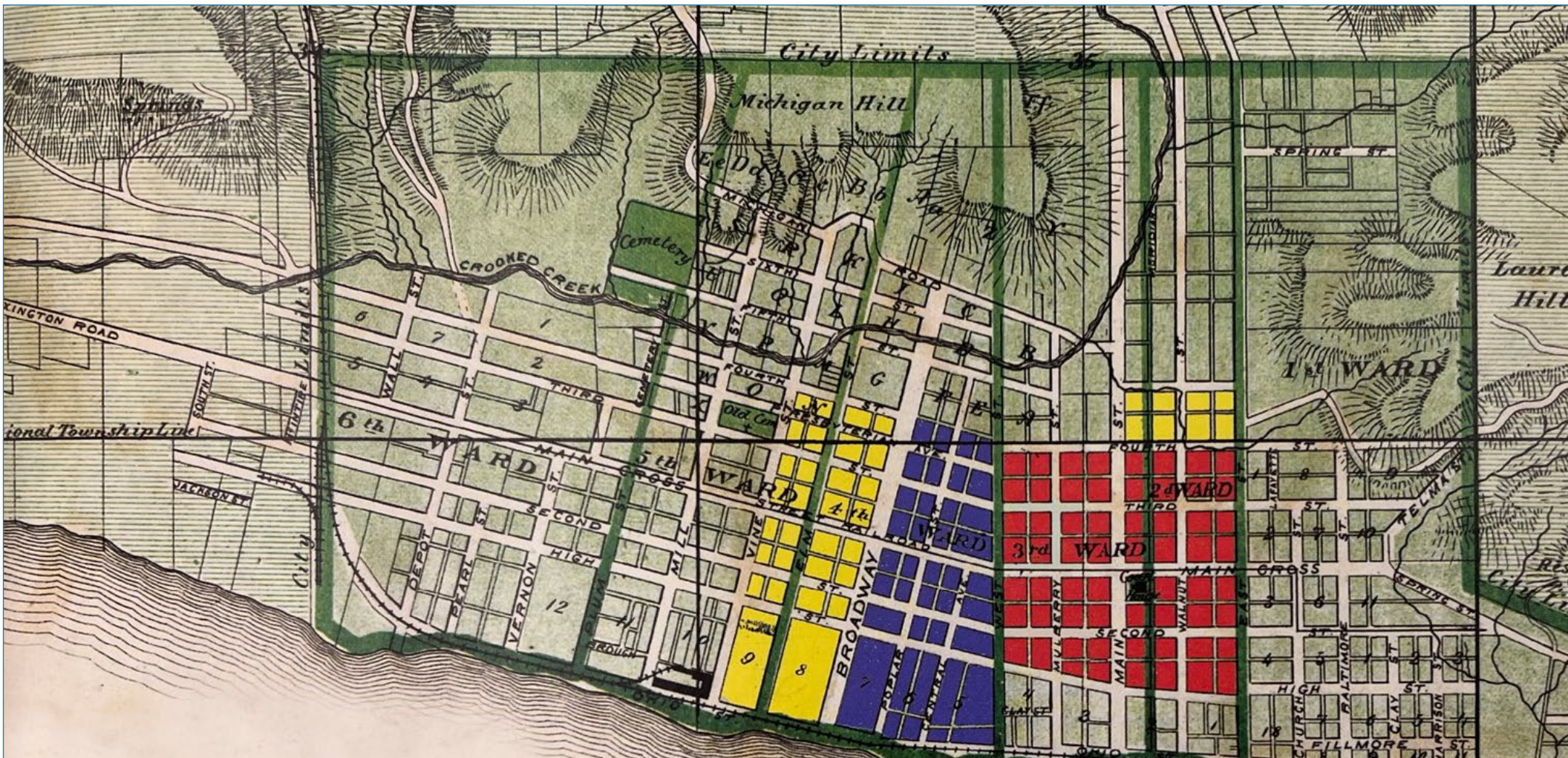
plan to invest in, and determining how the plan should be implemented. Once the answer to these questions is understood, the City would need to retain a team of design consultants to conduct a detailed topographic survey of the corridor, and develop construction documents for bidding. That design process typically requires 12-18 months depending on the final scope of the first phase and the funding source. Construction would likely require an additional 12-18 months, depending on scope.

This is an exciting time! It is not often that a City has an opportunity to imagine such a far-reaching and impactful change to its urban environment. The changes envisioned in the Main Street Master Plan would update the City's ageing infrastructure, capitalize on Madison's inherent beauty, support local businesses, and create a safer and more attractive public space for residents and visitors alike.

Thank you to the Steering Committee and all of the residents and business owners who made this plan happen. We couldn't have done it without you!

– Mayor Bob Courtney





# MADISON, IND.

CITY LIMITS AS OF 1876



= ORIGINAL TOWN PLATTED IN 1811
  = 1ST ADDITION 1815



# 03

## History

Madison has a rich history of urban design. When embarking on changes to the urban environment, it is prudent to review the inception and development of the City's layout.

To learn about the development of Main Street over time, the design team reviewed photos from the Lemen Collection located at the Jefferson County Public Library. The team also reviewed the books *Madison On The Ohio* and *Images of America: Madison*. The intent of the review was to gain a general understanding of how the street functioned and transitioned physically over time, what materials were used to construct the street and sidewalks, and whether these findings might suggest particular design directions.

Originally platted in 1811, the City plan was developed around an orderly arrangement of major and minor streets, alleys, blocks, and wards. Streets running east/west were numbered, and streets running generally north/south received names. What is now considered Main Street was evidently referred to as "Main Cross" and Jefferson Street/US 421 was called "Main Street."

### URBAN FORM

The design team did not find any maps showing specific dimensions of the corridor as it was originally platted. A review of Jefferson County GIS maps shows the corridor varies somewhat but has a general right of way of about 90 feet between Jefferson Street and Cragmont. From Cragmont to the west, the right of way varies from 65 feet to 80 feet depending on the location.

Between Jefferson Street and Broadway, the corridor was designed to be consistent in its organization and function. Buildings abutted the right of way, sidewalks created clean places for commerce and pedestrian circulation, and the remainder of the right of way was devoted to vehicular uses (initially, horse drawn buggies and carts, and an early form of public transportation). Curiously, the width of the sidewalk on the north side of the street is considerably narrower than the sidewalk on the south side of the street. The design team was not able to determine why this might be the case.

The street was designed to be about 65' wide between Jefferson and Broadway. This is quite wide for a City of Madison's size (Washington Street in Indianapolis is about 65'). This may be because some form of public transport was envisioned very early. Photos reveal that livestock was also driven through town along the corridor, presumably requiring a great deal of room.

At Broadway, the urban form begins to vary. Buildings are more frequently individual structures and sometimes set back a considerable distance from the street. The uses consist of a mix of commercial, institutional, and residential (with residential steadily increasing as the corridor heads west). At some point, tree lawns were introduced and became a relatively consistent part of the sidewalk design in this area. The street width is about 60' west of Broadway.

### MATERIALS

While there don't appear to be detailed records of changes to the street surface, photos suggest that

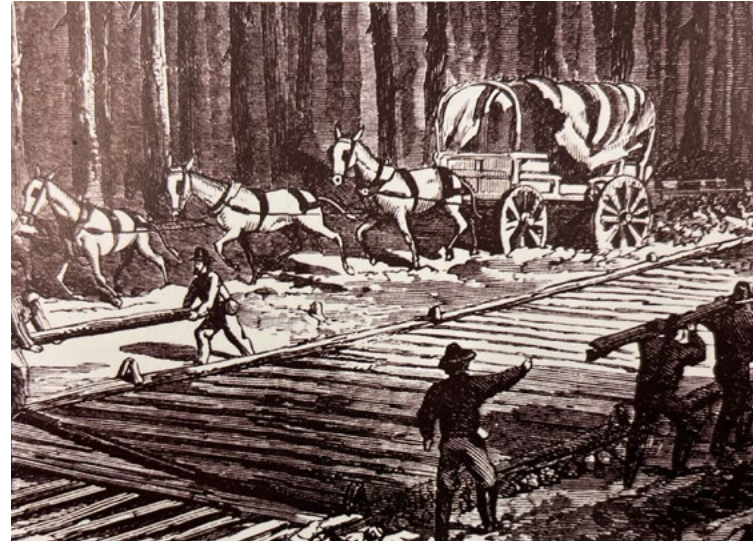
it was originally compacted soil. The first attempts at improving roads into Madison consisted of laying saplings and logs side by side in the dirt. These surfaces were called "Corduroy Roads" and while there doesn't appear to be evidence of this treatment on Main Street, it seems possible it might have been attempted. Photos from the 1920s appear to show that by that time, the street consisted of a combination of brick and asphalt (or a smooth surface of some kind).

It is difficult to tell in the earliest photos what the sidewalk surface was. It appears to have been elevated early on by a 6"-8" stone curb, and appears to have been paved with a combination of brick, stone panels, and concrete. One take away from this analysis is that the sidewalk was thought of as a place of commerce, or an extension of the adjacent stores. As such it was treated with a higher level of care and finish. By the 1940's, it appears that the sidewalks on Main Street were predominantly concrete and the street itself was predominantly asphalt. A takeaway from this is that Main Street's appeal as an urban place depended less on surface materials and more so on the architectural character of the edges and the human scale of the corridor.

## **PARKING**

The arrangement of parking varied over the early life of the corridor. Initially, it appears horse drawn carts parked in what we would today call a "parallel" parking fashion along the curb. Presumably, this facilitated the loading and unloading of supplies and merchandise onto the adjacent sidewalk.

When cars came along, the corridor was wide enough to allow head in or angled parking on both side of the street. Pictures from the 1920s show cars parked in the middle of the street and parallel parked cars along the curb. At this time, an electric trolley ran down the middle of the street, so a shared use condition existed depending on whether the trolley was running or not.



By the 1940s-1950s, the trolley was gone, and the typical arrangement was angled parking on each side of the street and several lanes of traffic in either direction. During this time, the City used (what appear to be) concrete domes placed in the street to help control the movement of cars and - perhaps create points of refuge for pedestrians crossing the unusually wide stretch of pavement.

At some point, angled parking became the (current condition) of parallel parking on both side of the street. The design team was not able to determine precisely when this change was made but presumably it has been this way for several decades.

### LIGHTING

Lighting has been a defining characteristic of the Main Street corridor since 1854, when the first gas lamps were introduced. From the 1920s to the early 1960's, the standard employed was a black fluted metal pole with an acorn top. It appears these were replaced in the early 1960s with cobra-head style high pressure sodium fixtures. The early 1990s saw a return to a more human scaled (and character giving) black fluted pole and acorn style top.

### TREES

Photos reveal that while trees were probably more prevalent west of Broadway, they did not appear to be thought of as essential amenities between Broadway and Jefferson. There were no tree lawns in this stretch, and the sidewalk was likely thought of as a utilitarian space needed for commerce, display of goods, and the safe conveyance of people. West of Broadway, larger green spaces and less need to use the sidewalks for commercial activities provided more room for trees to grow. This lent the west end of the corridor a more bucolic feel.





PHOTO 1



PHOTO 2



PHOTO 3



PHOTO 4



**PHOTO 5**



**PHOTO 6**

**PHOTO CAPTIONS**

Photo 1: Deliveries have always been an important part of Main Street commerce.

Photo 2: Main Street has always served competing uses.

Photo 3: Circa mid-19th century photo showing well developed architectural edge and compacted soil street surface.

Photo 4: The exact location on Main Street is unknown, but it reveals that brick was used on some portions of sidewalk.

Photo 5: A good reminder that the sidewalk has always been a place of commerce as well as pedestrian comfort and safety.

Photo 6: This circa 1940s image shows that angled parking was once common on Main Street.



PHOTO 7



PHOTO 8



PHOTO 9



**PHOTO 10**



**PHOTO 11**

**PHOTO CAPTIONS**

Photo 7: Circa 1920s image revealing that portions of Main Street were brick.

Photo 8: Circa 1920s image documenting that lighting has always been an important part of the identity of Main Street.

Photo 9: Circa 1940s image showing what appears to be traffic calming or pedestrian comfort measures (truncated concrete domes in street).

Photo 10: Sinclair Service Station circa 1940s, now the Main Street Comfort Station. By the 1940, it appears that Main Street was asphalt and sidewalks were concrete.

Photo 11: Mid 1950's image documenting asphalt street surface, concrete sidewalks, parallel parking and cobra head lighting.

# 04

## Public Engagement

Several groups were convened to guide the development of the Madison Main Street Master Plan. The planning process was guided by close consultation and regular feedback from Mayor Courtney, City planners and officials, a project Steering Committee, and informed by engagement with Stakeholder groups and local business owners. Feedback from over 50 Madison business owners was gathered via a survey conducted by the Madison Main Street Program organization, and community feedback was gathered at a Public Open House held at Brown Gym in November of 2021.

As concepts for the plan were conceived and adjustments made based upon feedback received, a set of priorities for the Main Street Master Plan began to emerge that became a set of Guiding Principles for the planning team.





# GUIDING PRINCIPLES

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## **Maintain Madison’s Historic Character.**

- Acknowledge and preserve historic streetscape elements and building façade details (downspouts, coal chute grates, cast iron manhole/water meter covers, brick drainage.)
- Ensure that street trees enhance character rather than obscure it.

## **Be authentic in the choice of materials.**

- Emphasize durability and timelessness. Streetscape elements (tree grates, benches, sidewalk furnishings) should remain grounded, practical, and relevant to the character of the corridor.
- Design Standards should focus on materials, colors, scale & proportion.

## **Prioritize infrastructure improvements (specifically stormwater & sewer.)**

## **Recognize the significance of the Main Street corridor as a business district AND a cultural district.**

- Place value on public art opportunities.
- Provide additional options for outdoor dining, sidewalk display of shop merchandise, live music opportunities that will enhance and not interfere with pedestrian circulation.
- Add public restroom facilities.
- Provide access to electricity for festival vendors.

## **Focus on connectivity, pedestrian safety, and multi-modalism.**

- Reduce traffic and speed on Main Street, increase safety at intersections.
- Addition of multi-modal paths for use by golf carts as well as cyclists – perhaps along a separate street corridor (2nd Street, 3rd Street) – would improve connectivity to the downtown from other neighborhoods.
- Consider how alleys might be used to enrich the pedestrian experience.
- Agreement that focusing early phases of improvements on western end of the corridor will increase connectivity and enhance the entry experience into town.
- Enthusiasm for the addition of Mulberry Street to the project scope.

## **Acknowledge the diversity of Madison’s population – economic, demographic, social**

## **Provide a framework for an ongoing maintenance plan.**

- Consider how a reduction to one traffic lane in either direction may affect logistics for utility repairs, delivery truck access, etc.
- Take into account how a change in traffic pattern along Main Street corridor may impact the surrounding streets, especially during festival times.

## **Explore creative methods for public engagement and establish a communications plan to keep the public informed once implementation begins**

## STAKEHOLDER ENGAGEMENT

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Throughout the planning process, the team engaged a number of Madison Stakeholders to help understand the way that the Main Street corridor functions, both on a day-to-day basis and during high-traffic times such as festivals and special events. Residents, business owners, and members of various Madison civic organizations participated in individual interviews as well as a survey prepared and distributed by the Madison Main Street Program organization.

Stakeholders were asked for their feedback on a number of issues that came up during meetings with the Steering Committee about the proposed improvements to the corridor. These included parking, product deliveries to Downtown Madison businesses, and the configuration of sidewalks and how they are used for things like outdoor seating, festivals, and product display.

The information gleaned from the stakeholder conversations and surveys helped the planning team to fine-tune the proposed concepts along the corridor, ranging from the downtown Central Business District to the less dense, more residential areas at the western end of the study corridor. The key takeaways are listed here and incorporated into the graphic concepts on the pages that follow.

- Traffic calming is desired!
- Curb bump-outs at intersections are desired to improve pedestrian safety, while maximizing the number of on-street parking spaces.
- Product deliveries to businesses seem to generally function well.
- Most feel there is an adequate quantity of parking downtown.
- There is a desire for more enforcement of current parking ordinances, and perhaps additional signage guiding Main Street residents and employees to lot parking behind buildings.
- Most restaurants and some businesses are in favor of expanding sidewalks.
- Most like the idea of accommodation for multi-modal transportation (perhaps off of the main corridor along 2nd or 3rd Streets,) and golf cart transport in the Downtown area being sanctioned.
- Widened sidewalks and curb bump-outs in the Central Business District could provide space for public art and performances during festivals and heavy traffic times.

Signage directing people to public parking lots and enforcement of existing ordinances would go a long way toward eliminating some of the issues.

I would like to see consistent sidewalk materials, widths, and include planters and trees.”

Carefully consider the placement of accessible parking spaces and crosswalks! Currently they're located too far from ramps and the route to the public restrooms is not very direct

Main Street residents & employees take up too much prime parking. Reserved lot parking would prevent them from filling up spaces in front of businesses

I would like to have outdoor seating or expand the opportunity

Golf carts block us in/out and pull in wherever they please! Dedicate parking areas for them



## PUBLIC MEETING

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A Public Open House was held on November 15, 2021 at Brown Gym and was attended by approximately 50 people. The planning team presented a series of graphics that illustrated existing conditions and streetscape concepts informed by feedback from the Steering Committee and stakeholders.

The attendees were able to view and leave comments on a scaled print of the proposed updates to the entire 1.7-mile corridor, identifying significant areas, areas of suggested improvements, and allowing for reaction to others' comments. The feedback from the Public Meeting attendees included the following key takeaways:

Curb bump-outs and additional pedestrian crossings are desired, particularly within the Central Business District.

Street trees are desired, with species carefully selected and placed to enhance the historic character of the downtown building facades.

Dedicated bicycle / golf cart travel lanes and parking areas are a popular idea, however many (cyclists included) felt that these lanes may be more ideally located outside of the Main Street corridor to provide a buffer zone for parallel parking and safer passage for cyclists and golf carts on a less busy thoroughfare.

The location of accessible parking spaces should be carefully considered, in order to ensure that those with limited mobility, parents with strollers, and people using wheelchairs can exit their vehicles close to curb ramps and limit the distance they must travel to access public restrooms.

Existing ordinances related to parking, speed limits, and traffic laws should be enforced and would go a long way toward traffic calming, parking availability, and pedestrian safety.





# 05

## Inventory + Analysis

### INVENTORY

The design team conducted an inventory of existing conditions during three site visits in June, July and August of 2020. The visits were designed to document as many existing conditions as possible, and informed the approach to the master plan.

The site analysis revealed design challenges like drainage issues, accessibility concerns, and crumbling infrastructure; but it also provided inspiration to the design team through the study and documentation of facades and design details that make Madison unique. The team noted how sidewalks were used for commerce, gathering and relaxation. Trees were evaluated and mapped to understand how they benefitted or negatively affected the street, and important cultural landmarks were identified. Particular evaluation was given to the west end of the corridor, where significant grade changes, existing trees and in some cases lack of sufficient sidewalks revealed the importance of connecting this part of the corridor to points east and west.



**ANALYSIS**

The site inventory revealed several key conclusions. Curb extensions would serve to address drainage and accessibility concerns. Many existing trees in the corridor are Bradford Pear and should be replaced with more suitable species. Many pavement overlays have occurred that create dangerous conditions of offset grade at inlets. Several very large trees should be retained if possible, and incorporated into the final plan. The west end of the corridor lacks connectivity and there is a significant opportunity to provide a connection to the Heritage Trail. The corridor enjoys an abundance of decorative metal gateways that could serve as a precedent for metal railings that help tell Madison's story.



# TRAFFIC STUDY

A traffic study was conducted by Traffic Engineering, Inc. over two separate days, to examine existing corridor characteristics, traffic volumes & speeds at peak hours, and turning movements at key intersections within the study area. This examination of existing conditions provided the planning team with a baseline understanding of how the corridor operates today, and allowed for a comparison against changes.

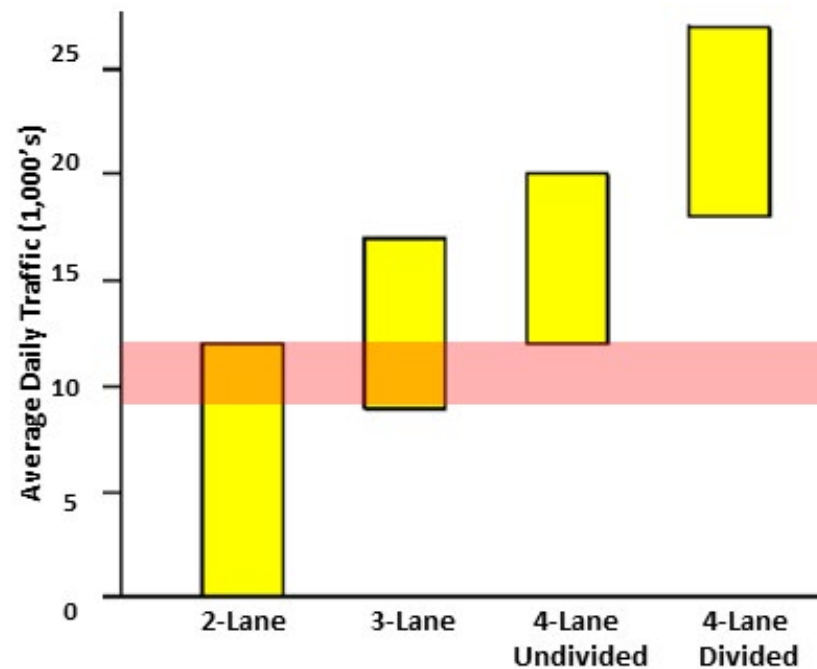
At the time of the study, the 1.7-mile corridor had the following characteristics:

- It is designated as a Principal Arterial, which, by definition, focuses on mobility as opposed to access.
- Previously designated as State Route 56, INDOT turned over control and maintenance of the corridor to the City of Madison in 2018.
- The corridor consists of a two-lane roadway from the west end to the Madison Railroad bridge, followed by a four-lane roadway from the bridge east to Jefferson Street.
- The posted speed limit transitions from 45 mph at the west end, slowing to 30 mph through a primarily residential section, to 20 mph in the central business district.
- Six intersections within the study area are controlled by traffic signals.
- Two intersections have marked pedestrian crossings over Main Street.
- On-street parallel parking is provided through the majority of the corridor.

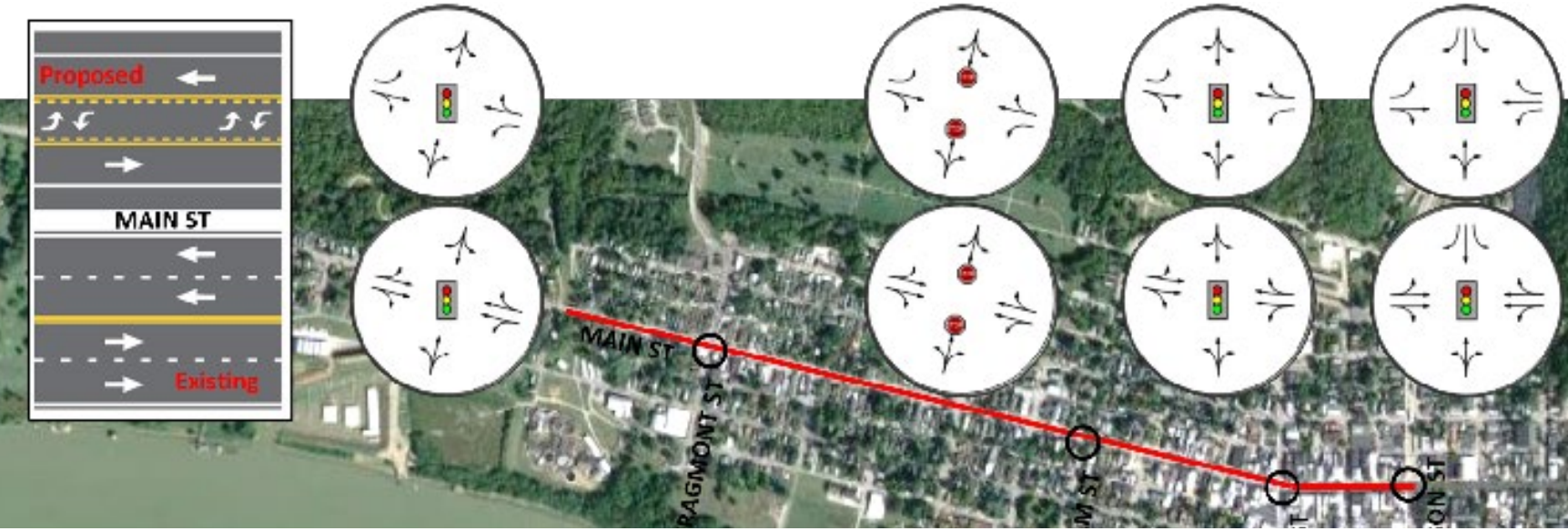
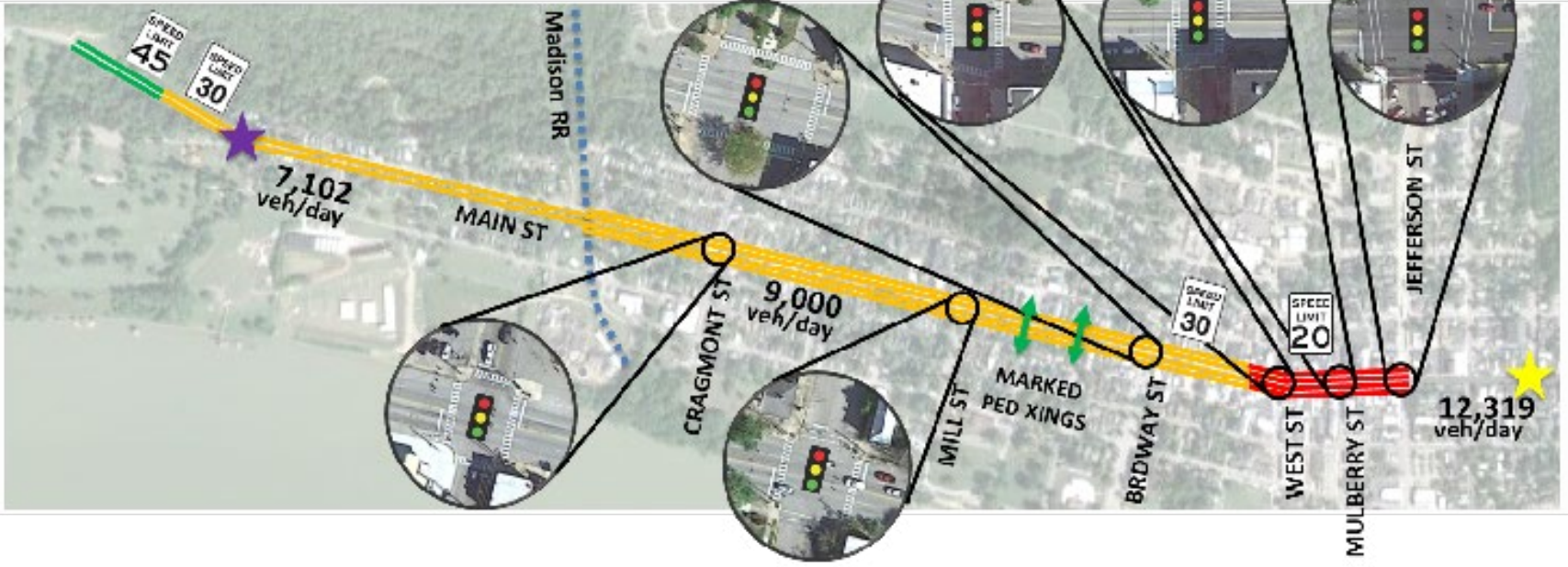
Once this data was collected, Traffic Engineering conducted an evaluation of how the volume, speed, and flow of traffic would be affected if the number of traffic lanes were to be reduced from four to three between the Railroad bridge and Jefferson Street. The results

of the study indicate that this section of Main Street would be a good candidate for a “road diet,” or a reduction from four traffic lanes (two in each direction) to three traffic lanes (one in each direction, with a shared center turning lane.) Even during peak traffic hours, the average speed and flow of traffic remain well within the acceptable range, and increased delays would be minimal.

Further to this, a reduction in vehicle speeds, shorter crossings at intersections provided by bump-outs, and adjustments to the timing of signals would be beneficial to the safety of pedestrians.







# 06

## Design Vision

### OVERALL APPROACH: RESTRAINT

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Streetscape enhancement projects present opportunities to significantly alter the form and character of the community. Some communities choose to close streets entirely, make radical adjustments to travel lane alignment, widen sidewalks, add trees, lighting, and furnishings, install decorative pavements, and remove the barrier of curbs to create “shared use streets.” When communities do this, it is often pursued with a goal of creating character where character may be lacking, or using the project as a catalyst to spur redevelopment.

Madison is unique in that it benefits from a long history of preservation. The focus on preservation in Madison has resulted in a highly appealing urban environment. The primary appeal of this environment is the nearly completely intact and well-maintained stock of historic buildings that frame the study corridor. Most of the buildings within the

Main Street corridor were constructed in the 19th century – a time when facades featured decorative elements, lots of glass, and charming details that made them appealing, and human scaled. In short: Madison doesn’t necessarily need a fancy streetscape project to make it charming. It already is.

The design team determined that what this means to the re-envisioning of Main Street is that an overall approach of restraint is appropriate. A few specific ramifications of this approach:

- Very early in the process, the notion of investing large amounts of money in decorative pavement (like brick) for the sidewalks was discussed, but not seriously considered. Concrete was actually more consistent with the historic treatment of sidewalks anyway.
- It was also determined quickly that using materials like colored and stamped concrete, or even concrete unit pavers, would be eschewed in order to champion the idea of authenticity.
- Using tried and true materials like concrete sidewalks meant that money that might otherwise be spent on decorative features could be invested in addressing infrastructure issues like drainage problems.
- The number of trees within the central business district would be reduced from current quantities to reveal as much of

the facades as possible while still creating moments of relief from the sun. This approach would also mean more money could be invested in creating the best growing conditions for the new trees.

Working from the Guiding Principles established through discussion with the Steering Committee and Stakeholders, the following approach to the plan was developed:

### CROSS SECTION

A fundamental consideration of the project, then, was whether to remove lanes of vehicular traffic in one or more portions of the corridor. The traffic analysis indicated that removing a lane would not be detrimental to the efficient flow of traffic. The benefit of removing a lane would result in about 12’ of dimension that could then be used to expand sidewalks, create wider planting areas, set up alternative transportation lanes, and generally recast the corridor as a more pedestrian-oriented space. Removal of a travel lane would also result in traffic calming.

The Community determined that a reduction of lanes was not desired between Broadway and Jefferson Street, citing concerns that a three-lane cross section would result in traffic backing up when deliveries were being made. The plan does propose a reduction in the widths of lanes in this section, which will help to calm traffic, shorten the crosswalk

dimension, and create opportunities for a modest expansion of sidewalks.

One significant concern is the speed of traffic between Cragmont and Broadway. In this section of the corridor, the Community agreed that reducing the cross section from four travel lanes to three (with the primary goal of calming traffic) would be welcomed. The extra dimension would then be used to create a striped buffer between parallel parking spaces and the adjacent travel lanes.

**CONNECTIVITY**

Madison’s proximity to the Ohio River and Clifty Falls State Park means that pedestrian and bike connectivity is particularly important. While the east end of the corridor generally enjoys good pedestrian connectivity from the

existing sidewalk and alley system, the west end of the corridor is less well connected. Sidewalks in the west end are narrow, in poor condition, and not always accessible - and at the very west end of the corridor, non-existent. A primary consideration of the plan was how to connect downtown to Clifty Falls State Park and/or the Madison Heritage Trail. An outcome of this was the proposal to create a boardwalk that would allow safe passage across the bridge to the Heritage Trailhead. Consideration was also given to a trail that would connect the west end of the boardwalk all the way to the Clifty Falls State Park entry, but this was ultimately removed from the plan because it was not certain that it would be used enough to justify the cost - and the entry into the Park is primarily a vehicular experience due to steep grades.

One of the most challenging areas of the plan from a connectivity standpoint was the north side of Main Street just east of the bridge where there are currently no pedestrian facilities. There are seven properties in this stretch, but no sidewalk exists to allow residents to walk safely to and from downtown should they wish to do so. Conversely, anyone wishing to walk from downtown to the west end of the Heritage Trail does not currently have a safe way to do so. The right of way location, existing conditions, and slopes mean that options are limited for implementing a connection in this area. The ability to create this connection will depend on working collaboratively with property owners, and potentially some right of way acquisition.



End of sidewalk on west side of Main St at West End



No pedestrian facilities exist at west end of corridor



Heritage Trail trailhead at west end of corridor

## CHARACTER AND IDENTITY

Streetscape projects tend to draw their character from elements like light fixtures, street furnishings, plantings, and traffic signals. In keeping with the tenets of preservation theory, the design team has proposed new elements that reference the past but are still clearly contemporary. There has specifically not been an attempt to select lighting and furnishings that "look old."

The plan proposes replacing the current light fixtures with a fixture that matches those used for the 421 project. This is a highly efficient, maintenance friendly LED fixture with a "cut-off" distribution pattern that is designed to minimize light pollution. The fixture gently references the acorn style lamps of the past while employing 21st century technology. Mast arm traffic signals are proposed to minimize the visual clutter of overhead cables that are more typical of strain pole systems. Benches and trash receptacles are proposed to match those used for the 421 project. Like the proposed light fixtures, these elements are intended to be a clean, durable contemporary interpretations of historic forms. All of the new elements are proposed to be painted black for consistency and as a reference to historic forms. The plan proposes the use of small decorative railings around the perimeter of planting beds as a nod to Madison's history as a producer of wrought iron.

## SAFETY

Pedestrian comfort and safety was a significant consideration of the plan. One way this goal was realized was by reducing travel lanes where possible, and narrowing lanes where there was not a desire to remove them entirely. Another facet of the plan intended to result in a safer environment was the use of curb extensions at crosswalks. Expanding sidewalks at corners results in several beneficial outcomes:

- It creates more room to implement accessible routes and provide ADA-compliant curb ramps. This can be challenging to accomplish

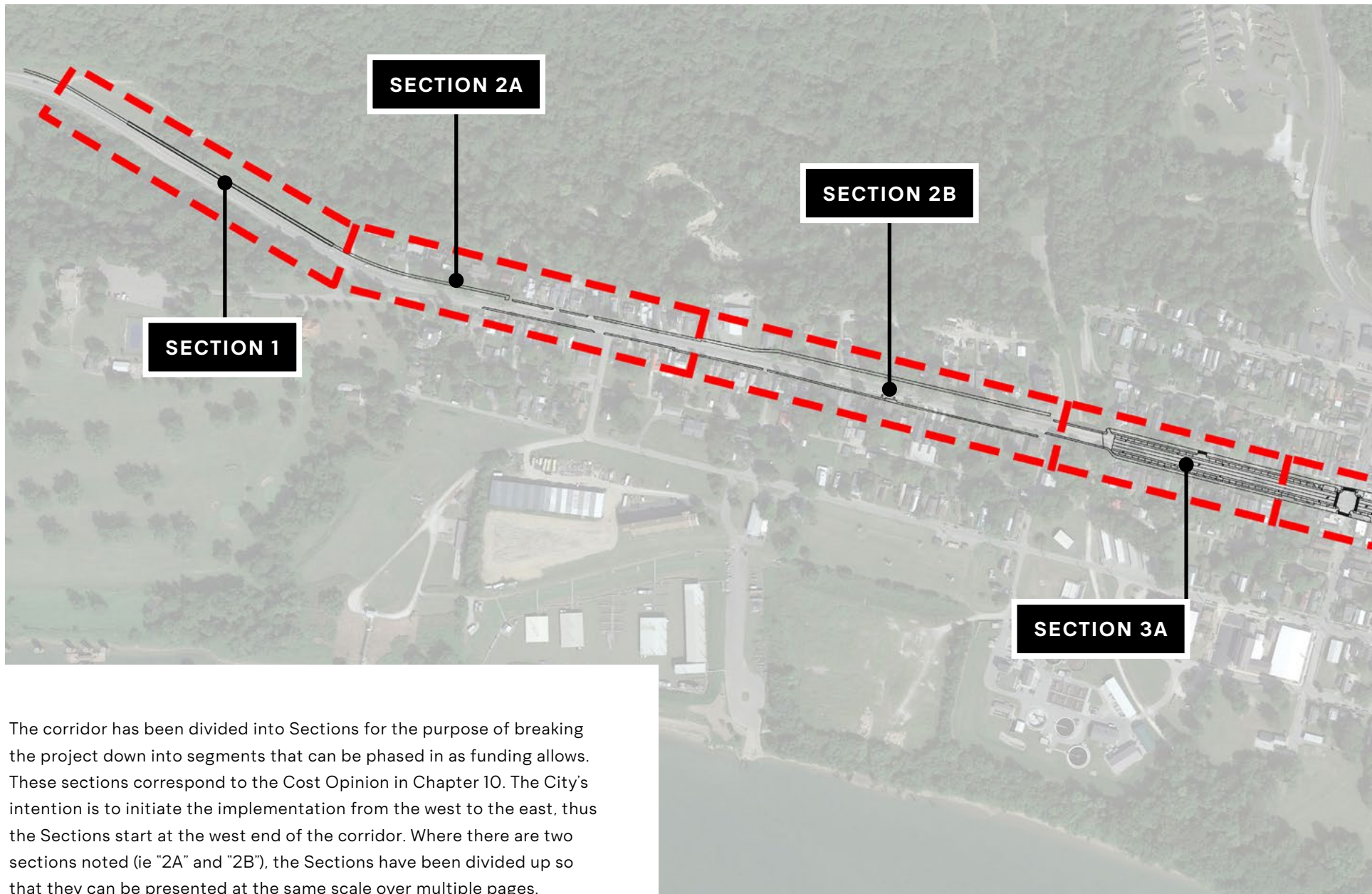
in older communities with established elevations at the street and at building entries.

- It shortens the distance pedestrians need to travel by 16' when crossing the street. For the elderly and young families in particular this can make a significant difference in the time required to get across.
- More room at corners means that elements that tend to be located there (traffic signals, meter pits, electrical vaults, inlets, trash receptacles, etc) can be organized so that they aren't in conflict with each other, don't impede pedestrian traffic flow, and don't negatively impact accessibility.
- Lighting is another component of a safe street environment. The fixtures proposed are intended to get light to the right places by using cut off fixtures that also create an even distribution pattern. A tenet of Crime Prevention Through Environmental Design advises that light fixtures not be "glare bombs" which might create blind spots. It is also advisable to design lighting so that faces are illuminated, revealing the disposition of someone approaching you on the sidewalk. The "color" of the light will also be a consideration. Some light sources can make a blue car look gray. LED light sources can be specified to result in a true color rendition, so that someone who may visually impaired can quickly and easily identify their vehicle.
- One of the most common forms of injury for the mobility impaired is falling on sidewalks. This is another reason that the proposed sidewalk material is concrete – unit paving tends to result in the potential for more edges and slight grade changes that can catch the toe of a shoe. A concrete surface tends to be more consistent, and the lighter surface reveals joints and small elevation changes that might be missed on a darker surface. Madison's sidewalks include a lot of access covers to underground vaults, grating, and utility hole covers. It will be important that all of these elements are carefully accounted for in future phases of design to make sure that they are ADA compliant.

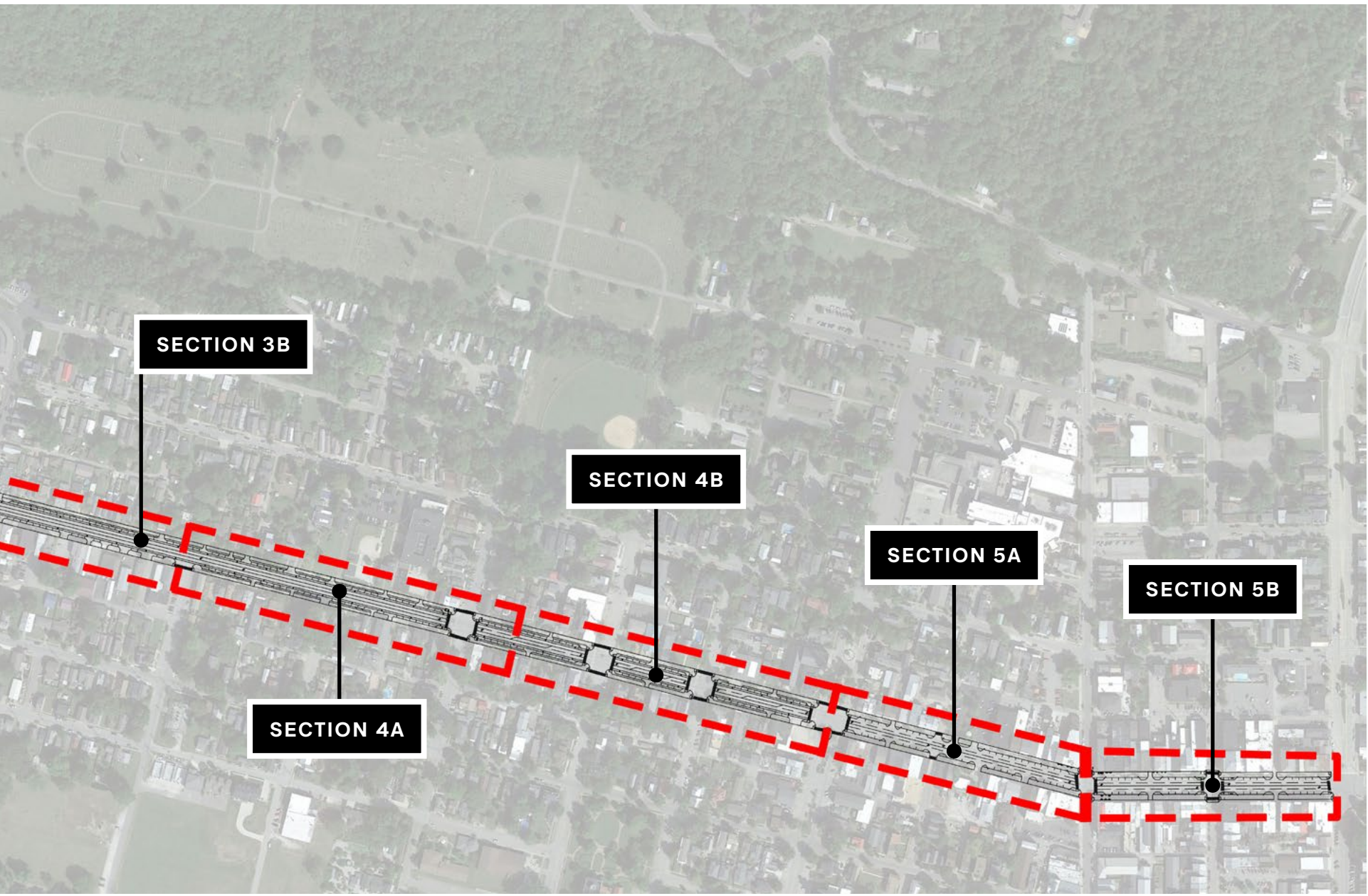


## TREES

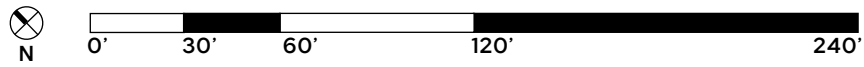
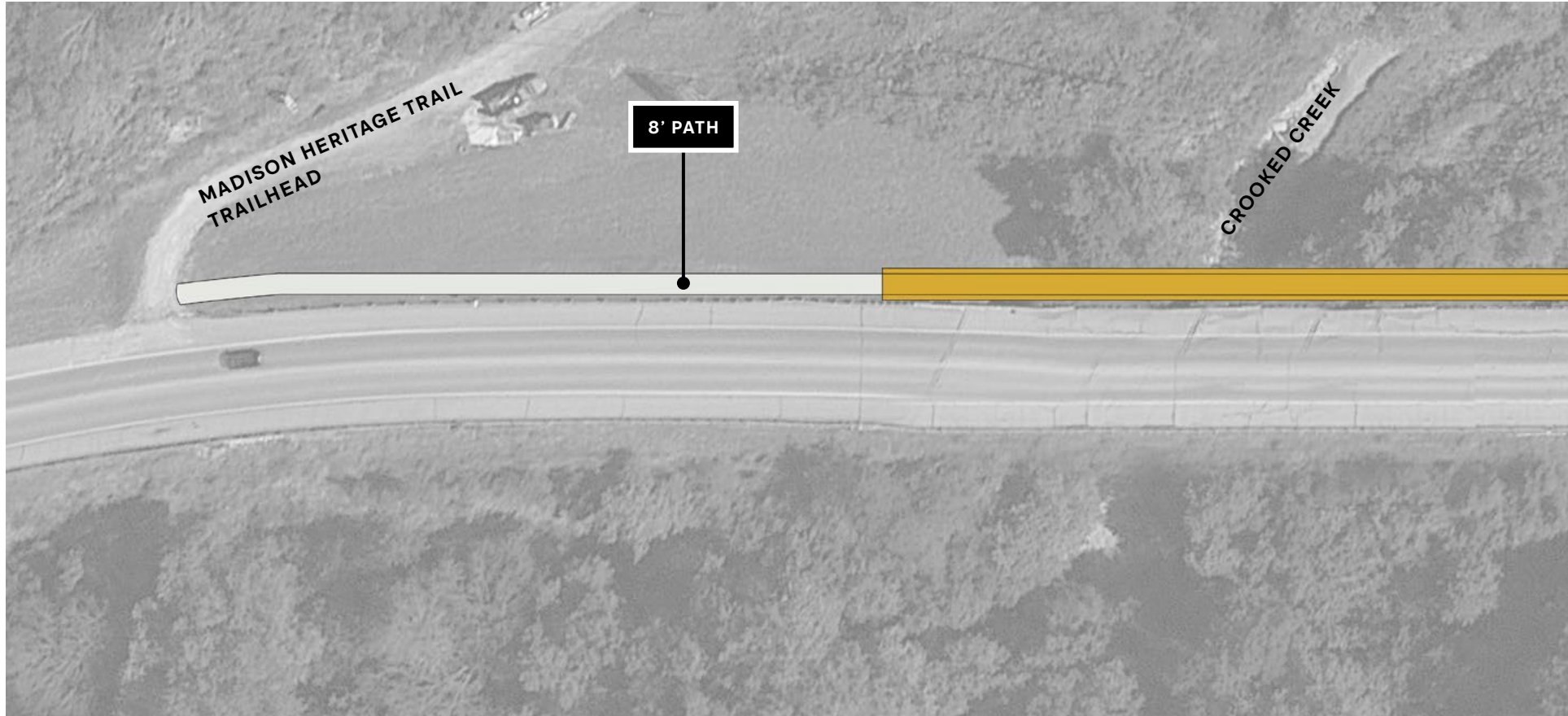
Trees play an important role in the character, comfort, and feel of the corridor. Many of the existing trees in the central business district are Bradford Pear, which was a popular urban tree in the 1990s. These trees have since been determined to be detrimental in a number of ways and are now not considered good choices for an urban environment (or any environment for that matter.) The plan proposes removing most of the trees in the Central Business District (CBD) and selective removal in blocks to the west of the CBD. Rather than replacing all of the removed trees in the CBD, the plan proposes planting fewer trees of a more appropriate species, and with more substantial subgrade infrastructure to support them. The subgrade infrastructure is intended to consist of designed/structural soils, irrigation, and accommodations for air flow to root zones. The idea will be to create great environments for fewer trees which will result healthier plants that will in turn make the downtown more attractive and reduce maintenance requirements.



The corridor has been divided into Sections for the purpose of breaking the project down into segments that can be phased in as funding allows. These sections correspond to the Cost Opinion in Chapter 10. The City's intention is to initiate the implementation from the west to the east, thus the Sections start at the west end of the corridor. Where there are two sections noted (ie "2A" and "2B"), the Sections have been divided up so that they can be presented at the same scale over multiple pages.



# SECTION 1







\*See View 01 rendering on page 34.

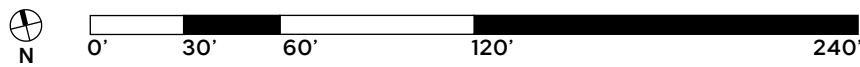
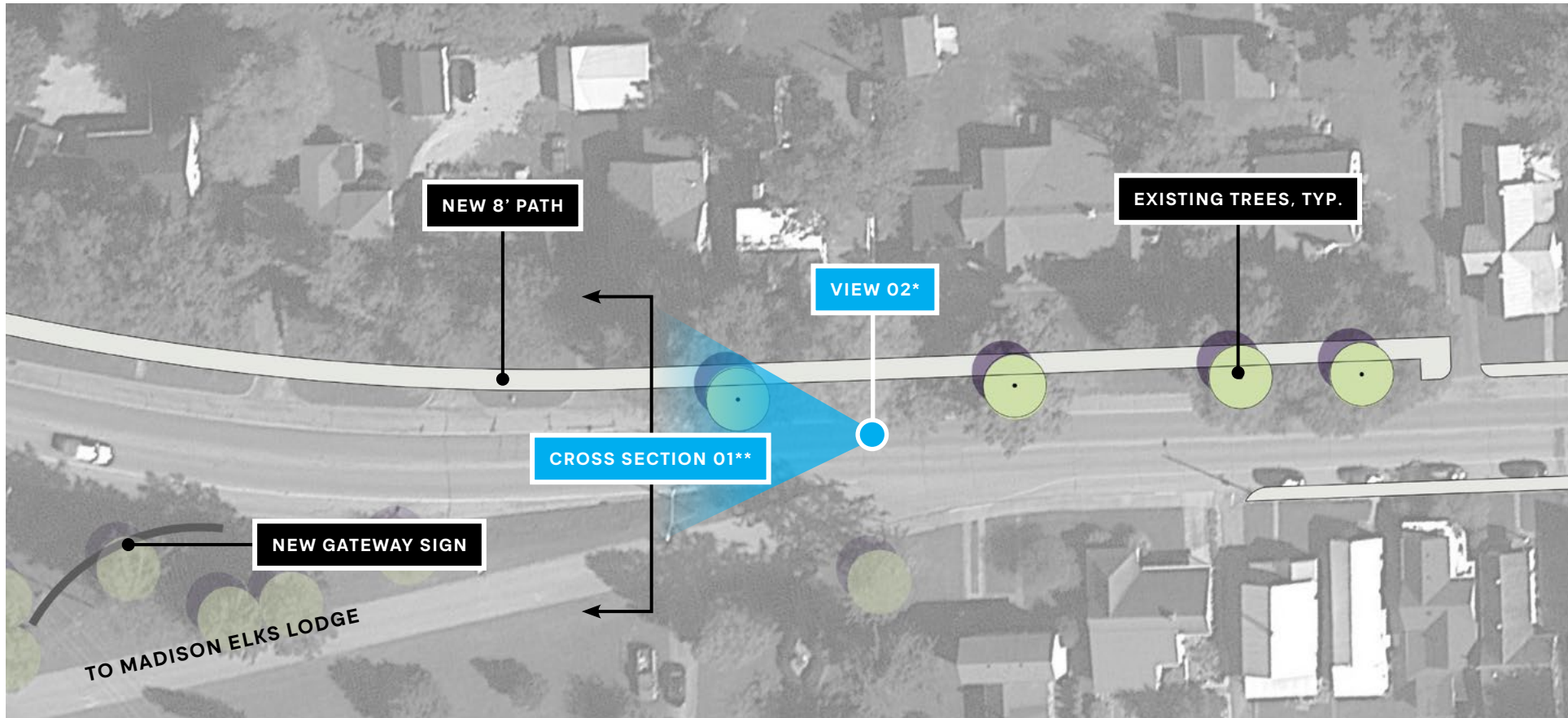


**VIEW 01 | BRIDGE OVER CROOKED CREEK EXISTING CONDITION**



**VIEW 01 | BRIDGE OVER CROOKED CREEK CONCEPT**

# SECTION 2A





\*See View 02 rendering on page 38.

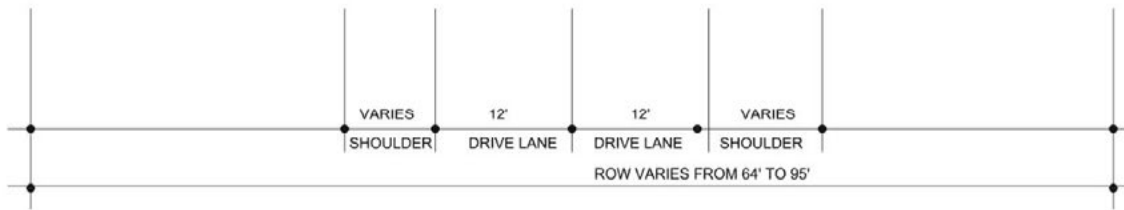
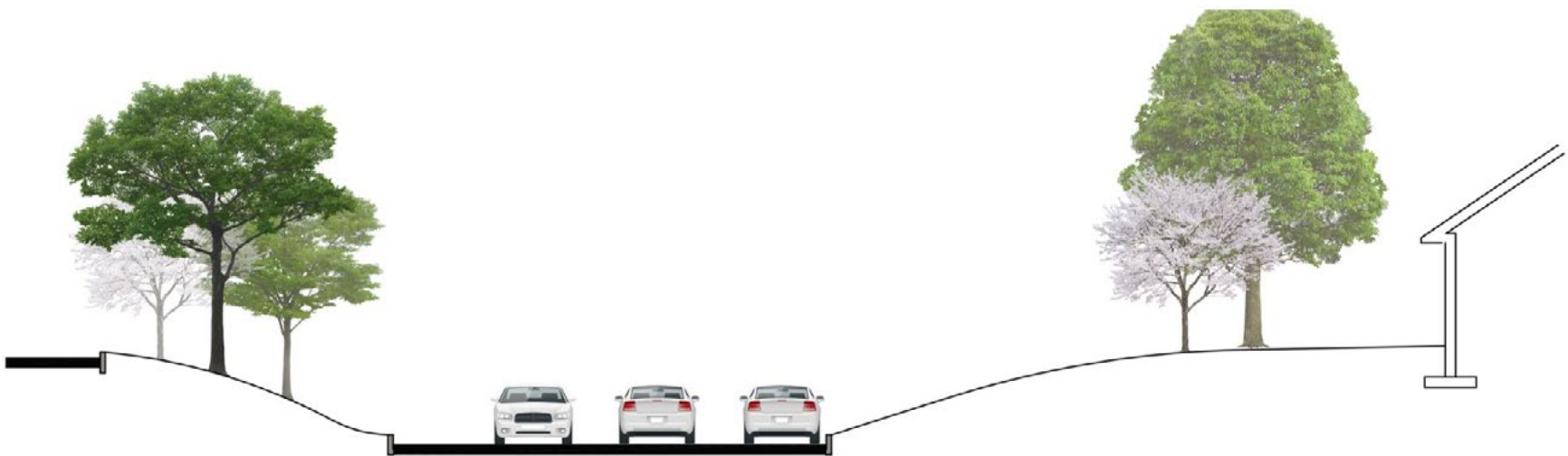
\*\*See Cross Section 01 diagram on page 40.



**VIEW 02 | MAIN @ ELKS LODGE EXISTING CONDITION**

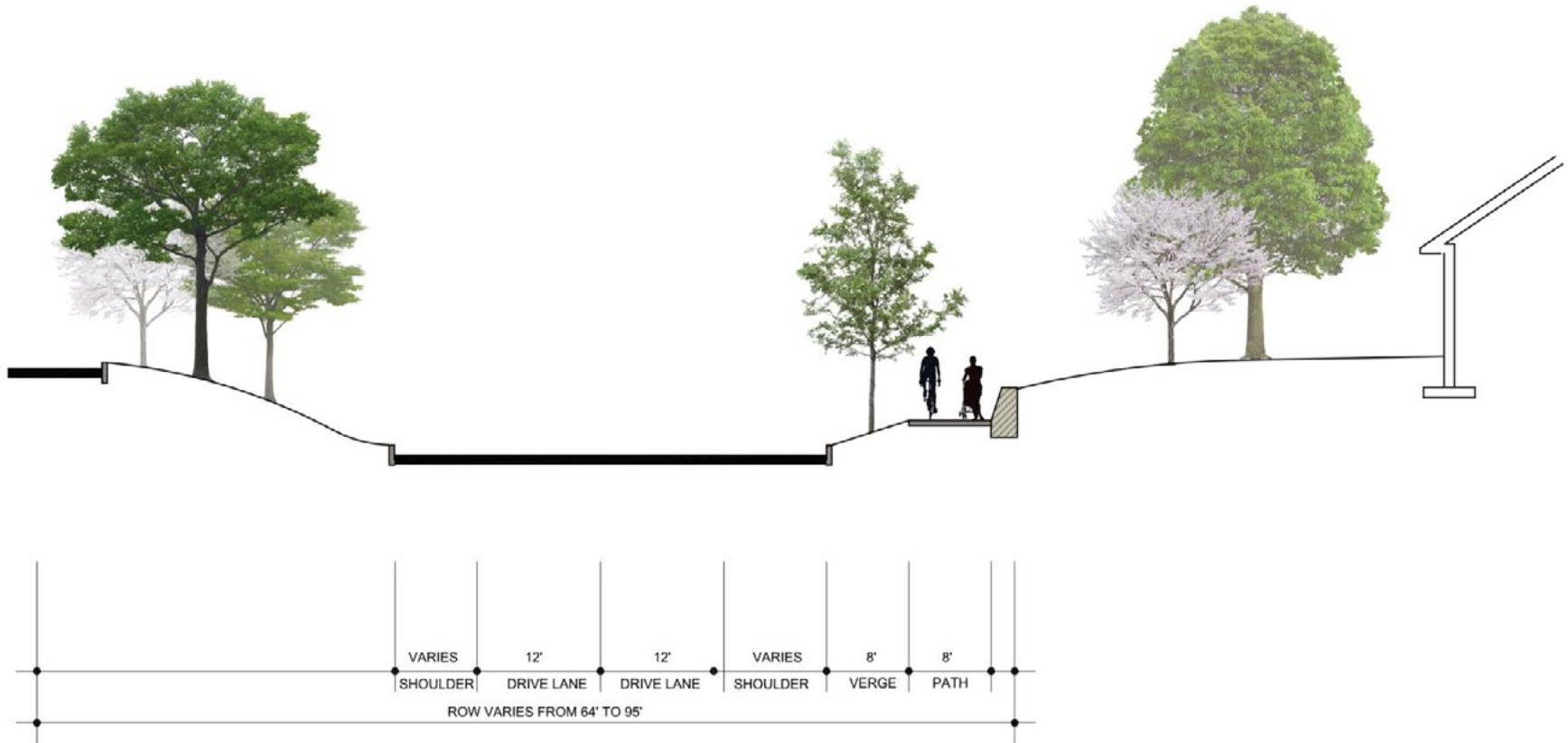


**VIEW 02 | MAIN @ ELKS LODGE CONCEPT**



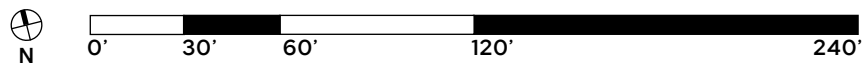
**CROSS SECTION 01 | NEAR ELKS LODGE EXISTING ROADWAY SECTION**





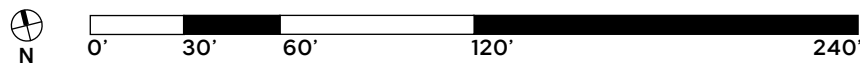
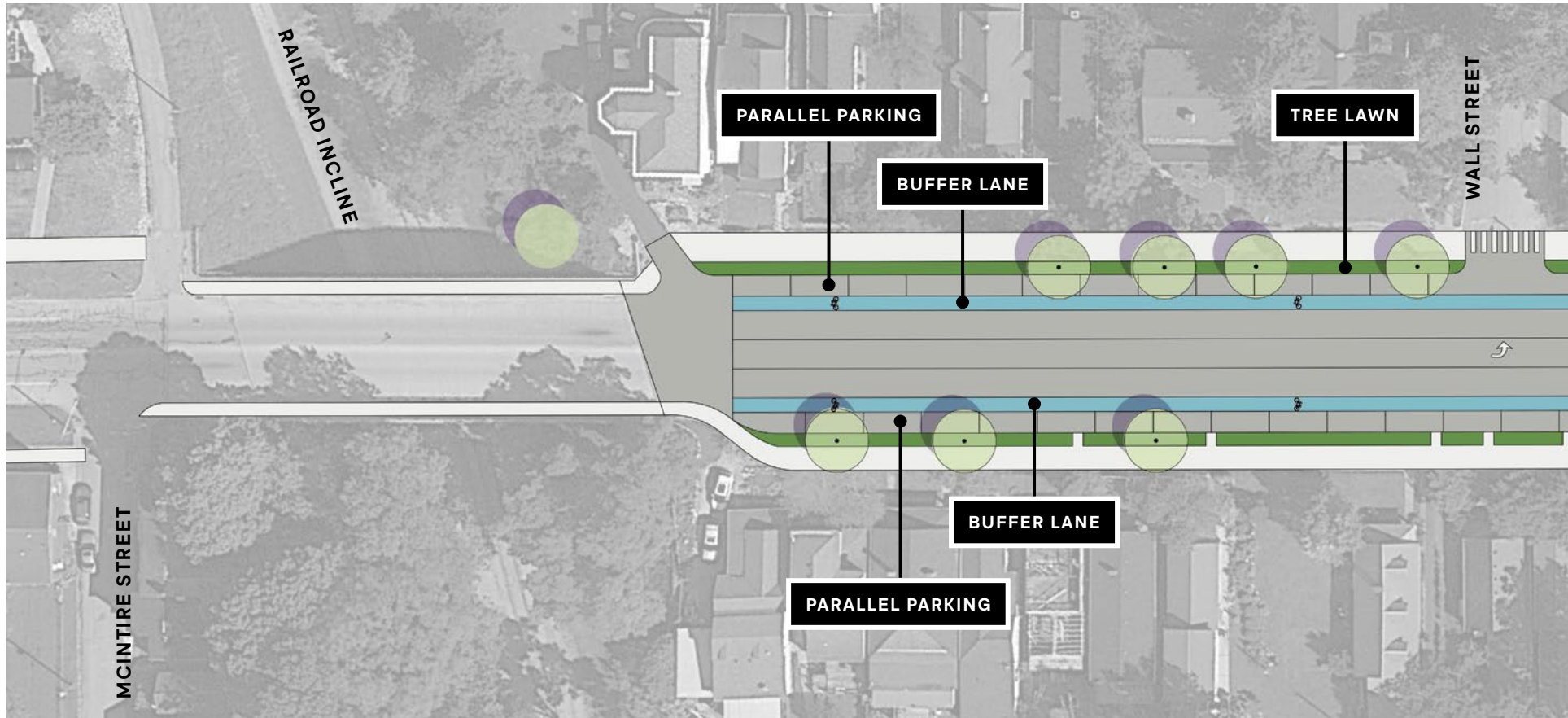
**CROSS SECTION 01 | NEAR ELKS LODGE PROPOSED ROADWAY SECTION**

# SECTION 2B



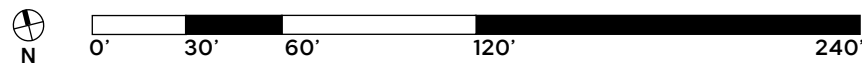
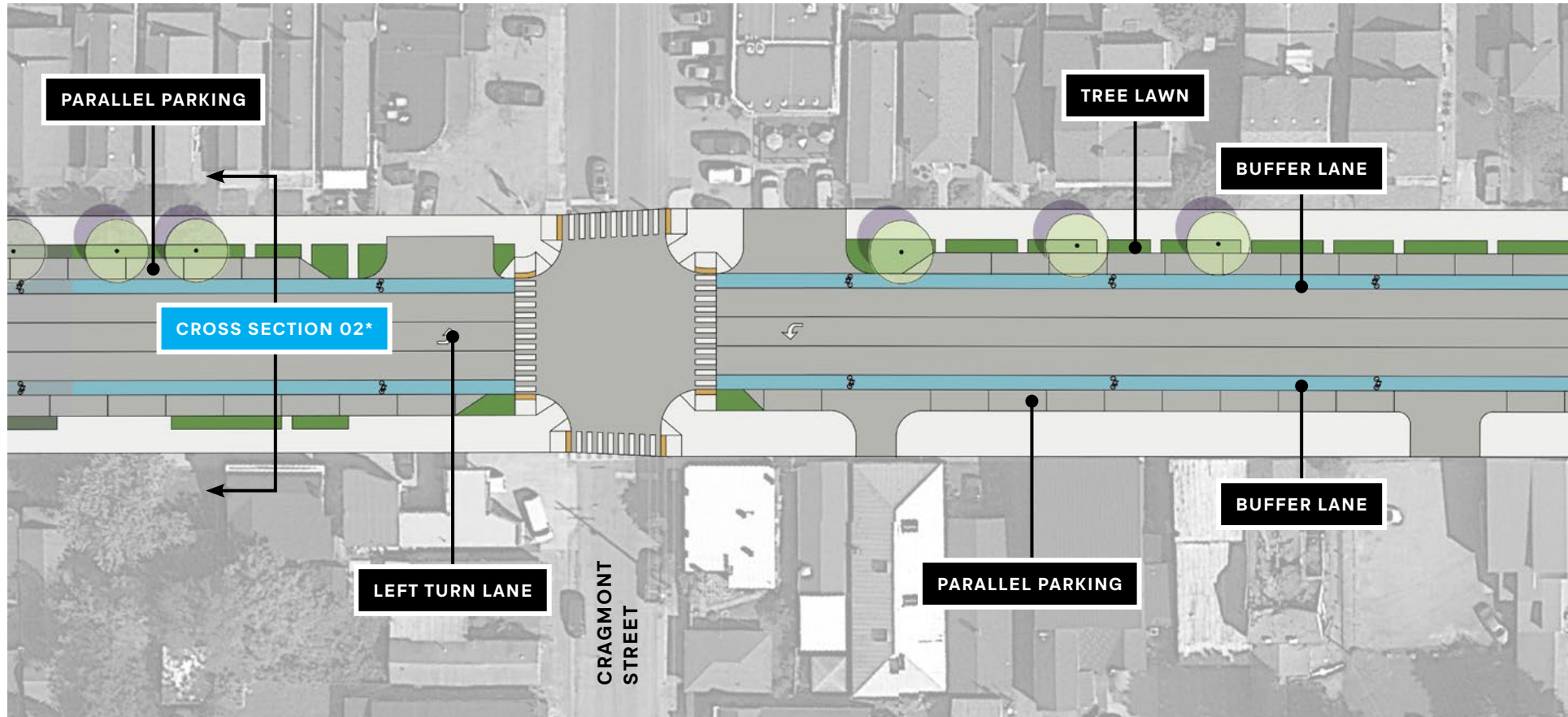


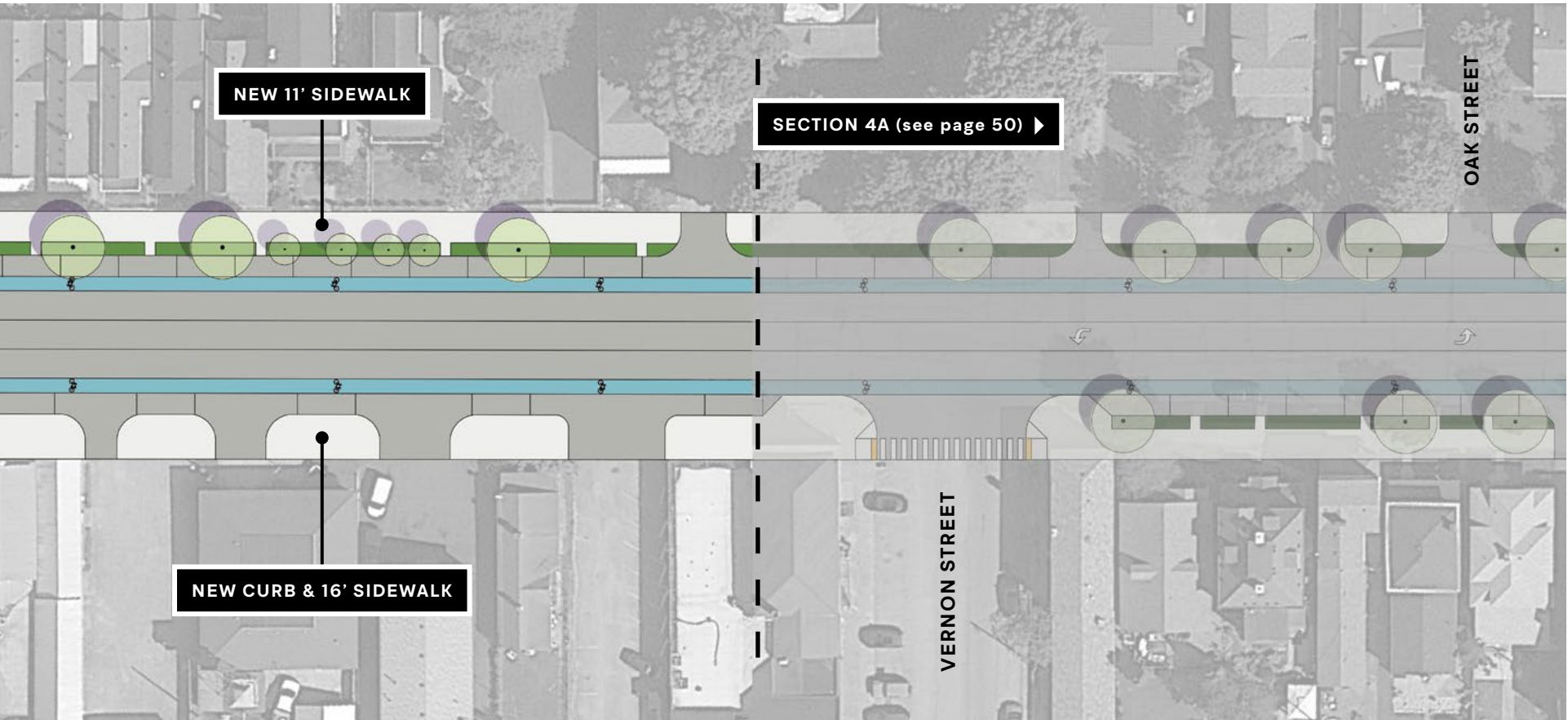
# SECTION 3A



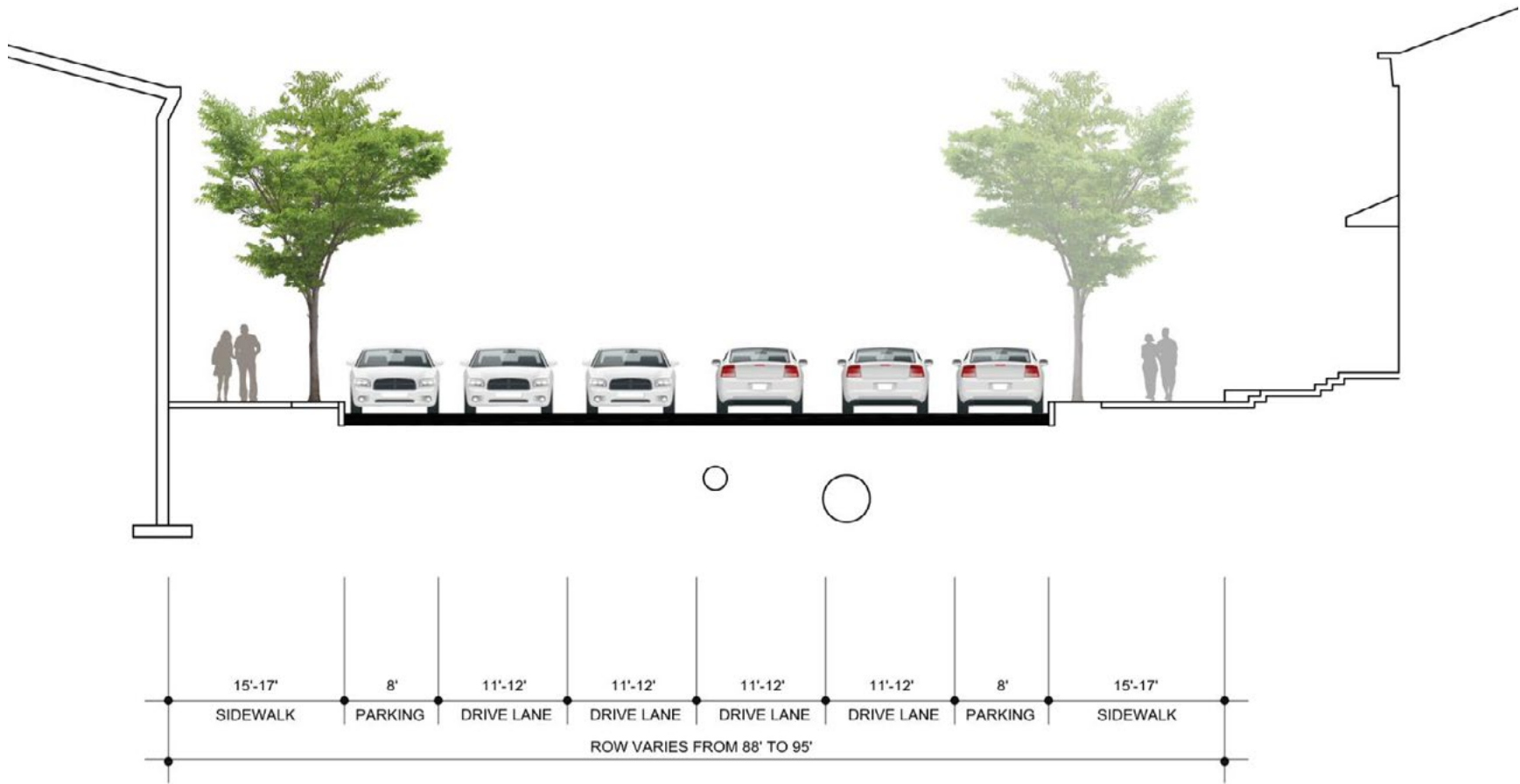


# SECTION 3B



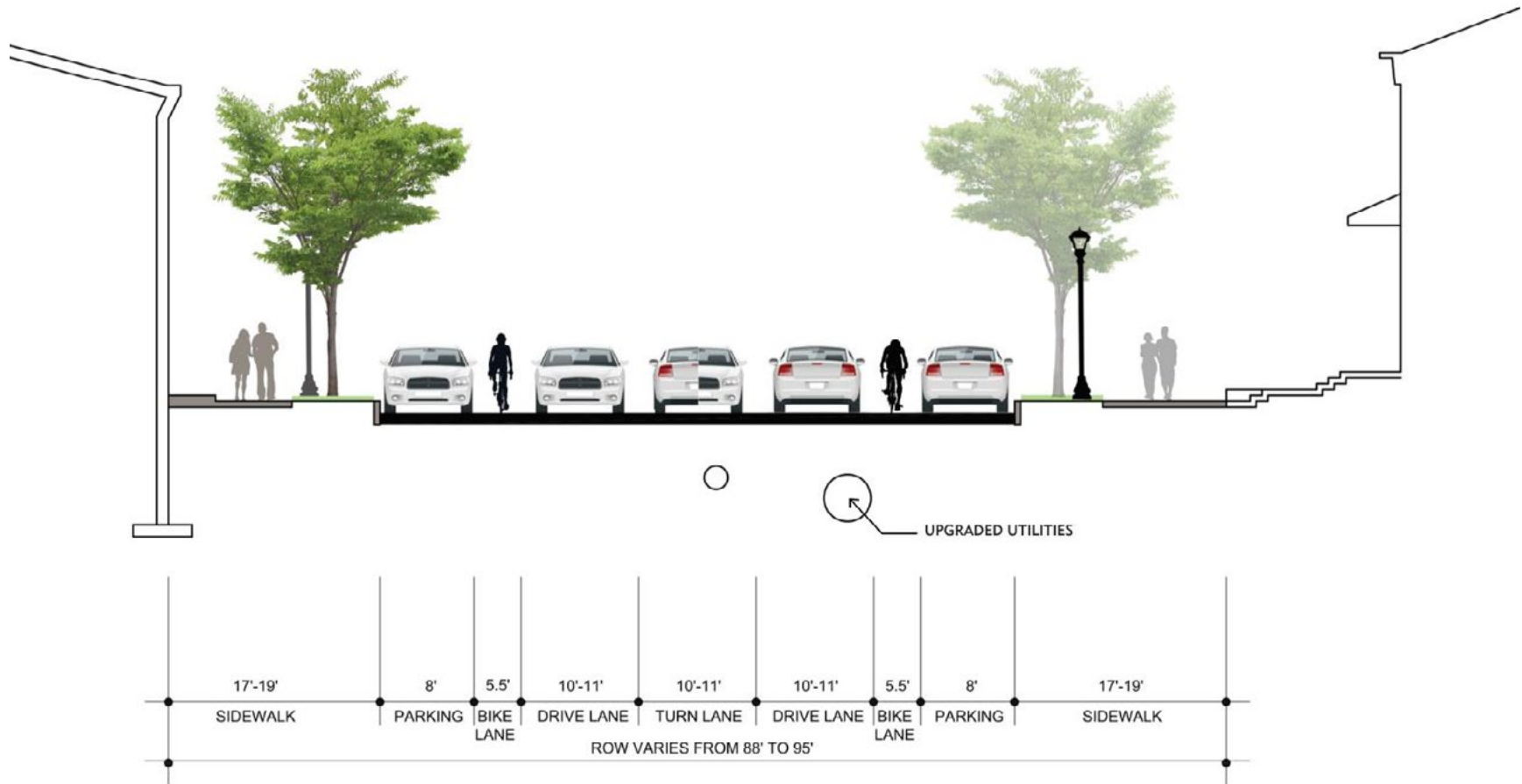


\*See Cross Section 02 diagram on page 48.



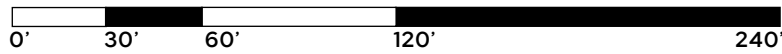
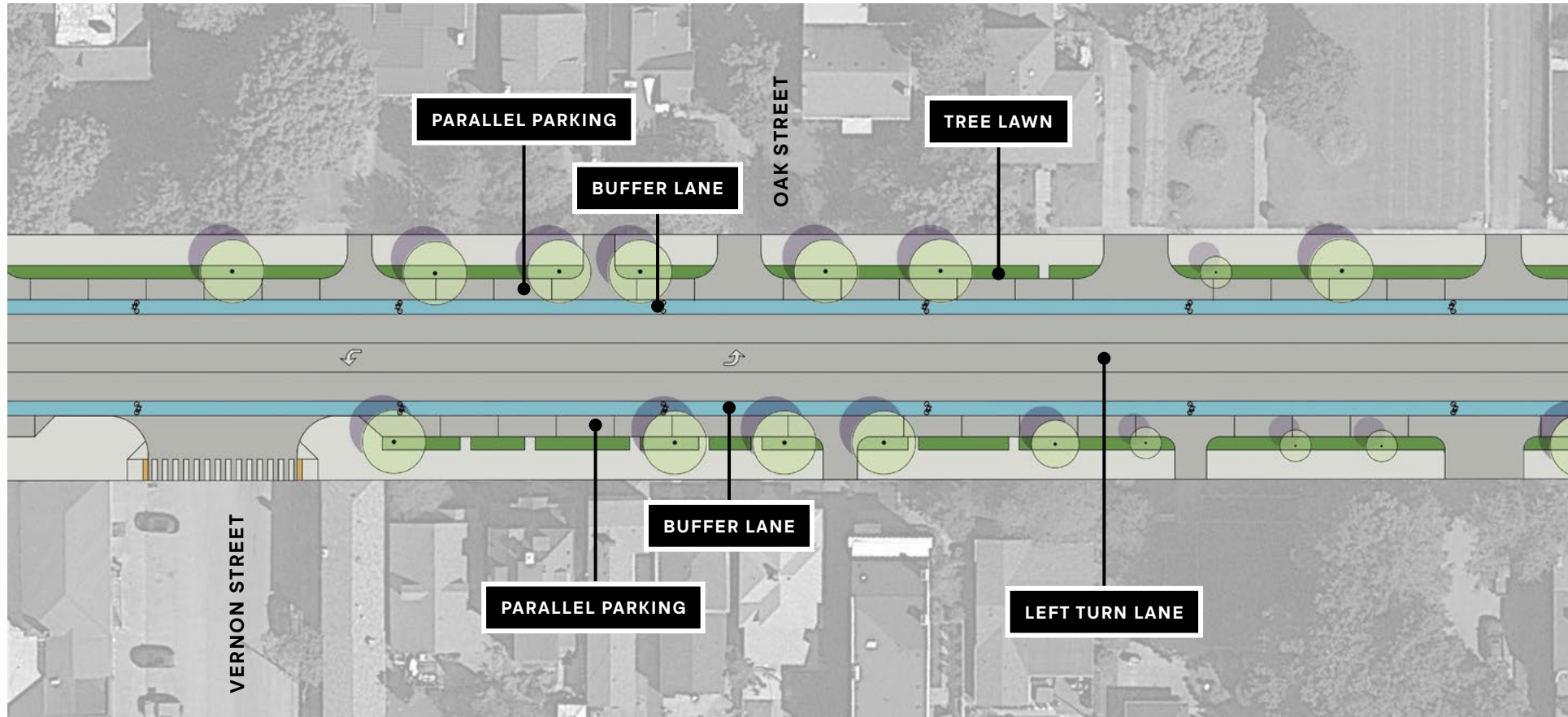
**CROSS SECTION 02 | CRAGMONT TO BROADWAY EXISTING ROADWAY SECTION**

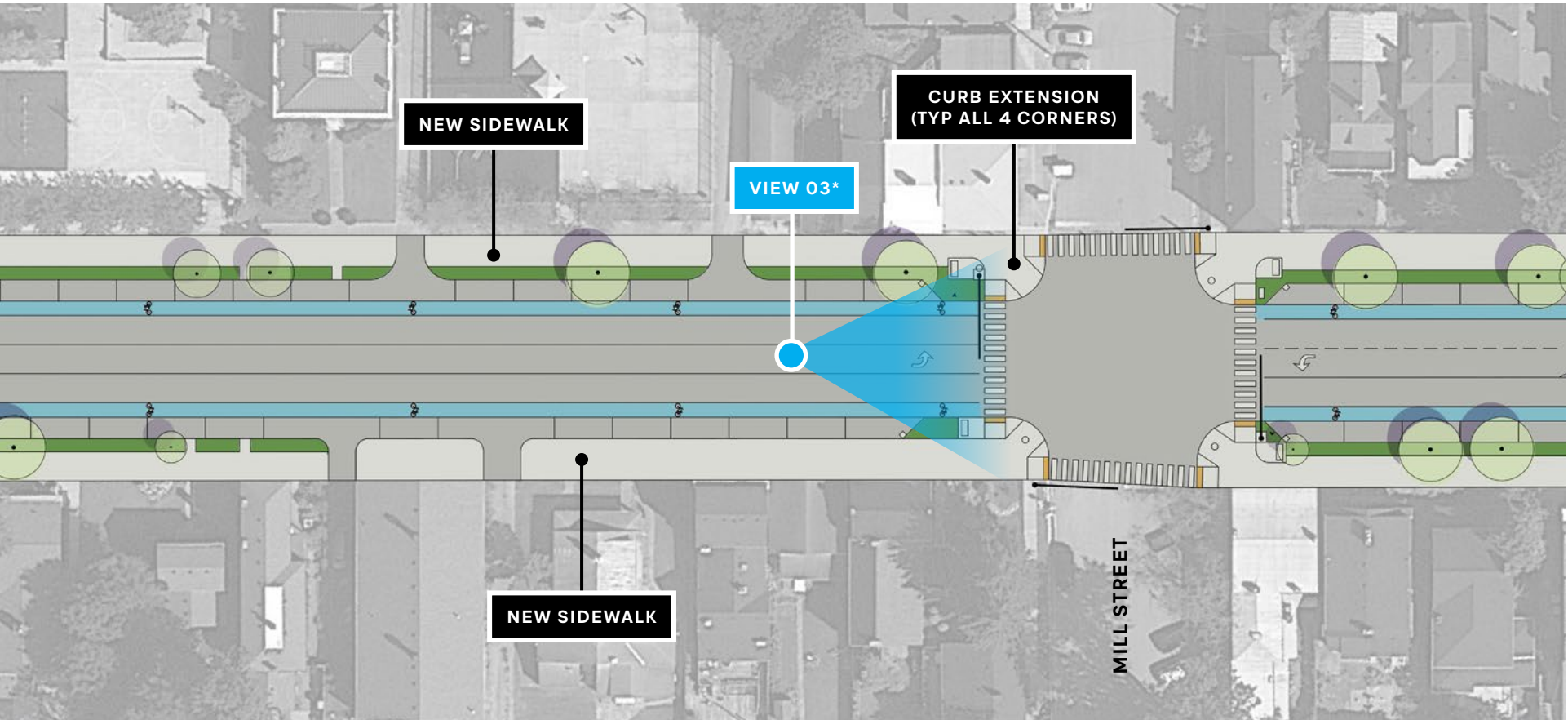




**CROSS SECTION 02 | BROADWAY TO CRAGMONT PROPOSED ROADWAY SECTION**

# SECTION 4A





\*\*See View 03 rendering on page 52.

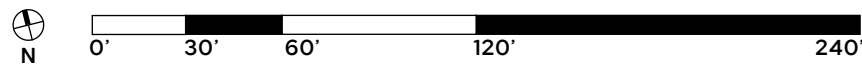
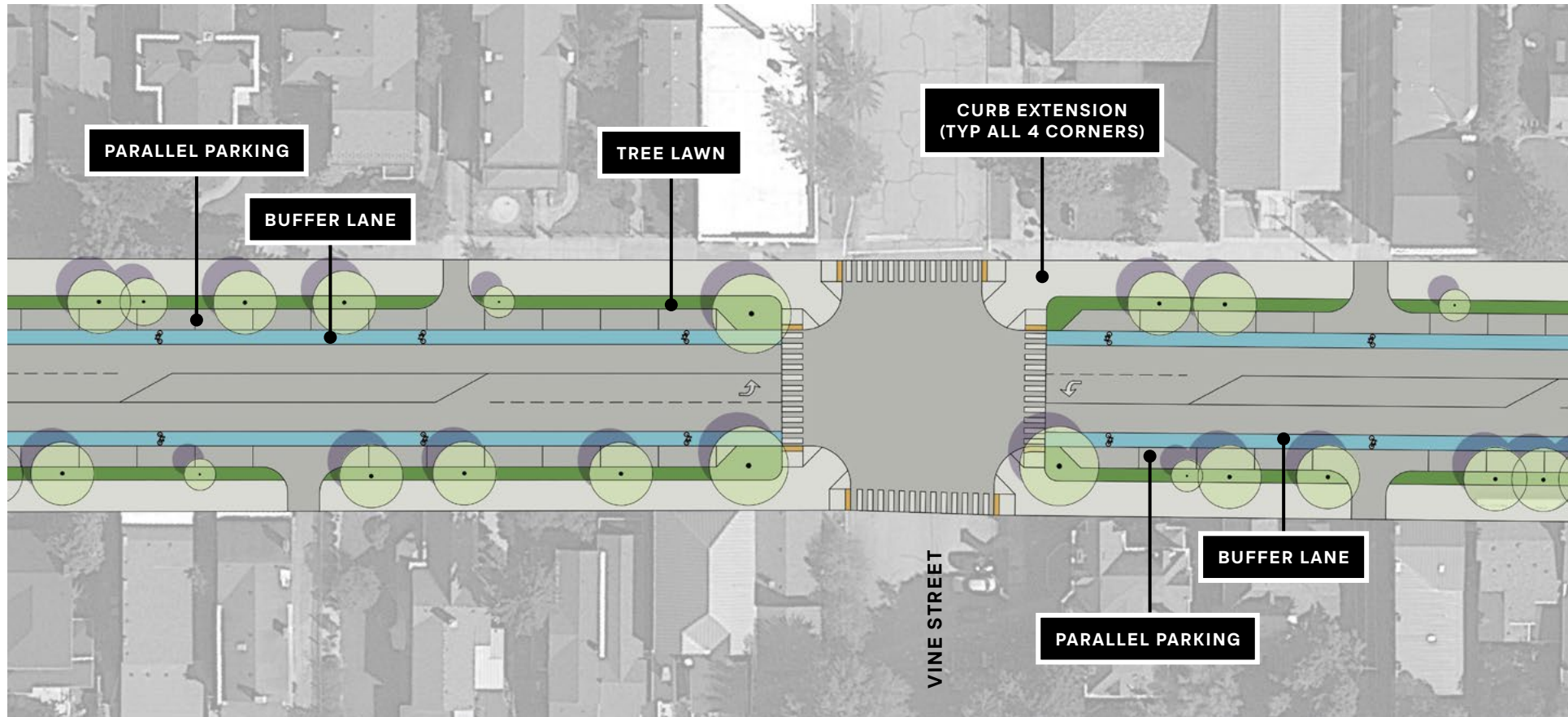


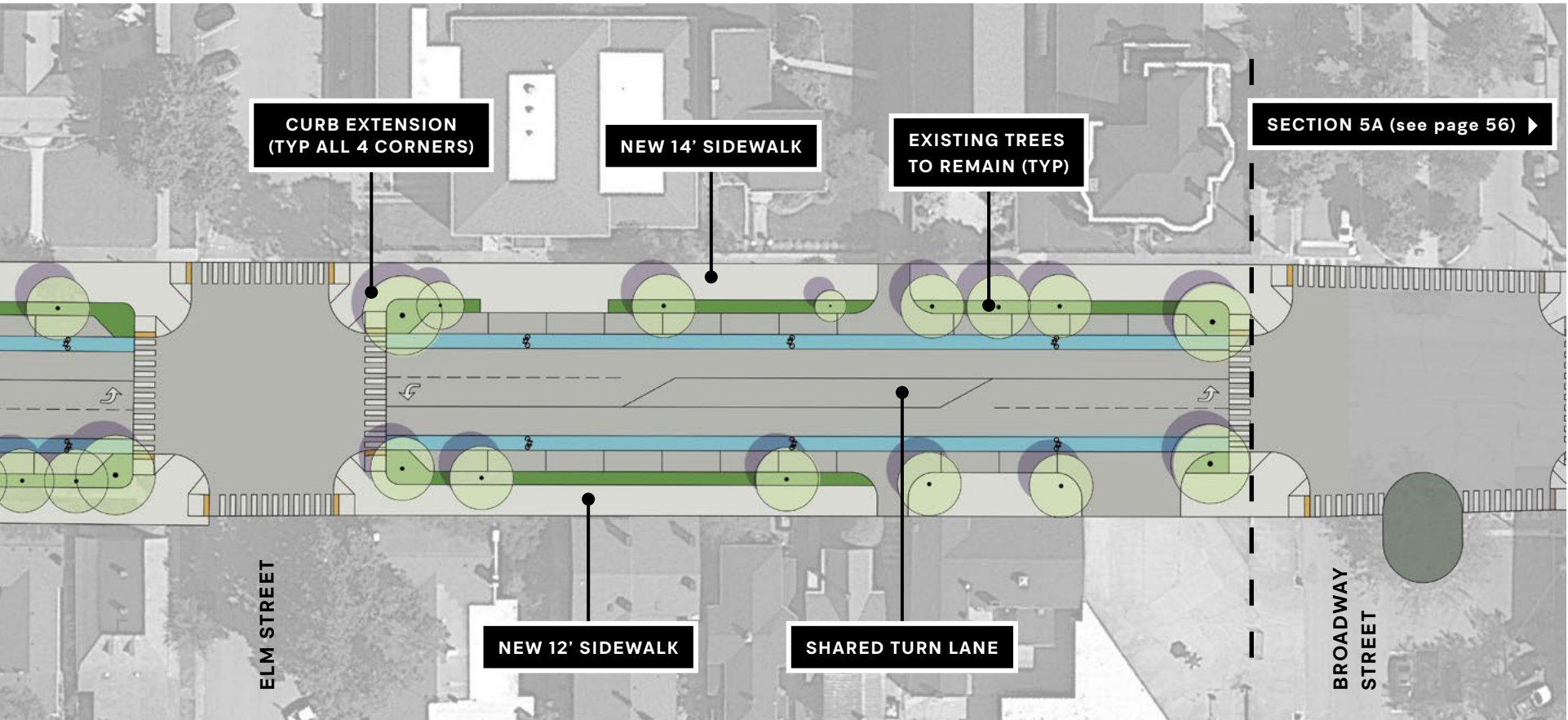
**VIEW 03 | MAIN & MILL EXISTING CONDITION**



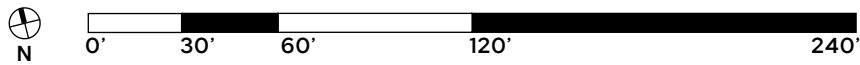
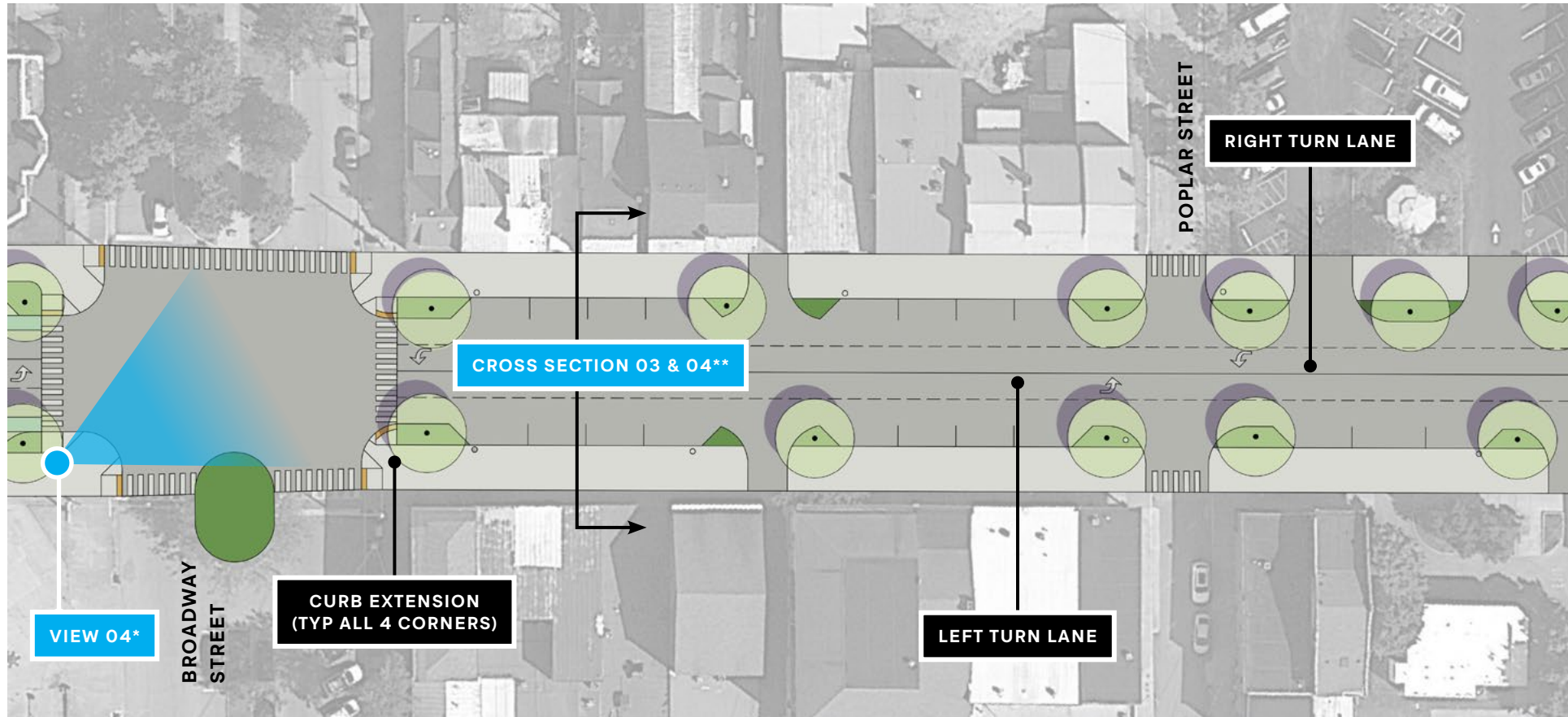
**VIEW 03 | MAIN & MILL CONCEPT**

# SECTION 4B

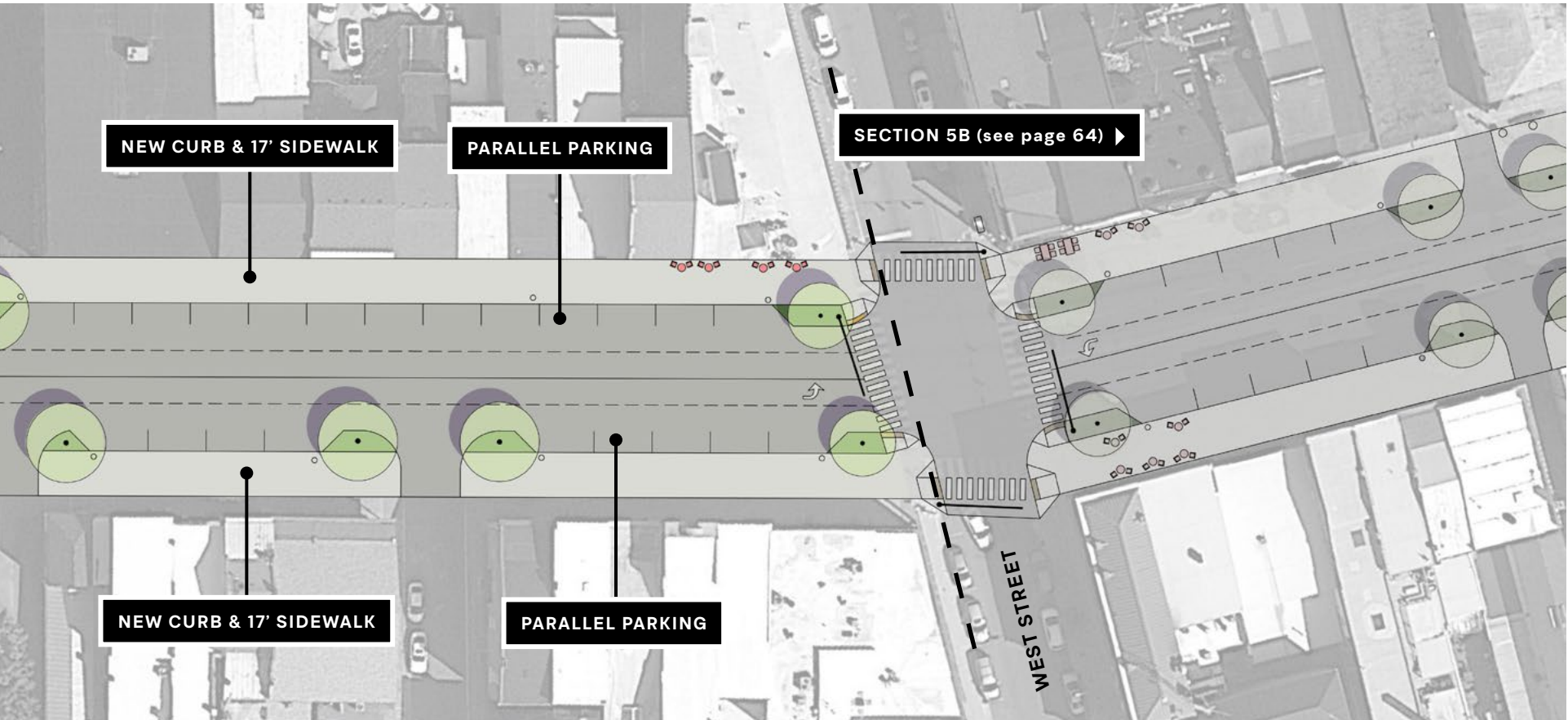




# SECTION 5A







\*See View 04 rendering on page 58.

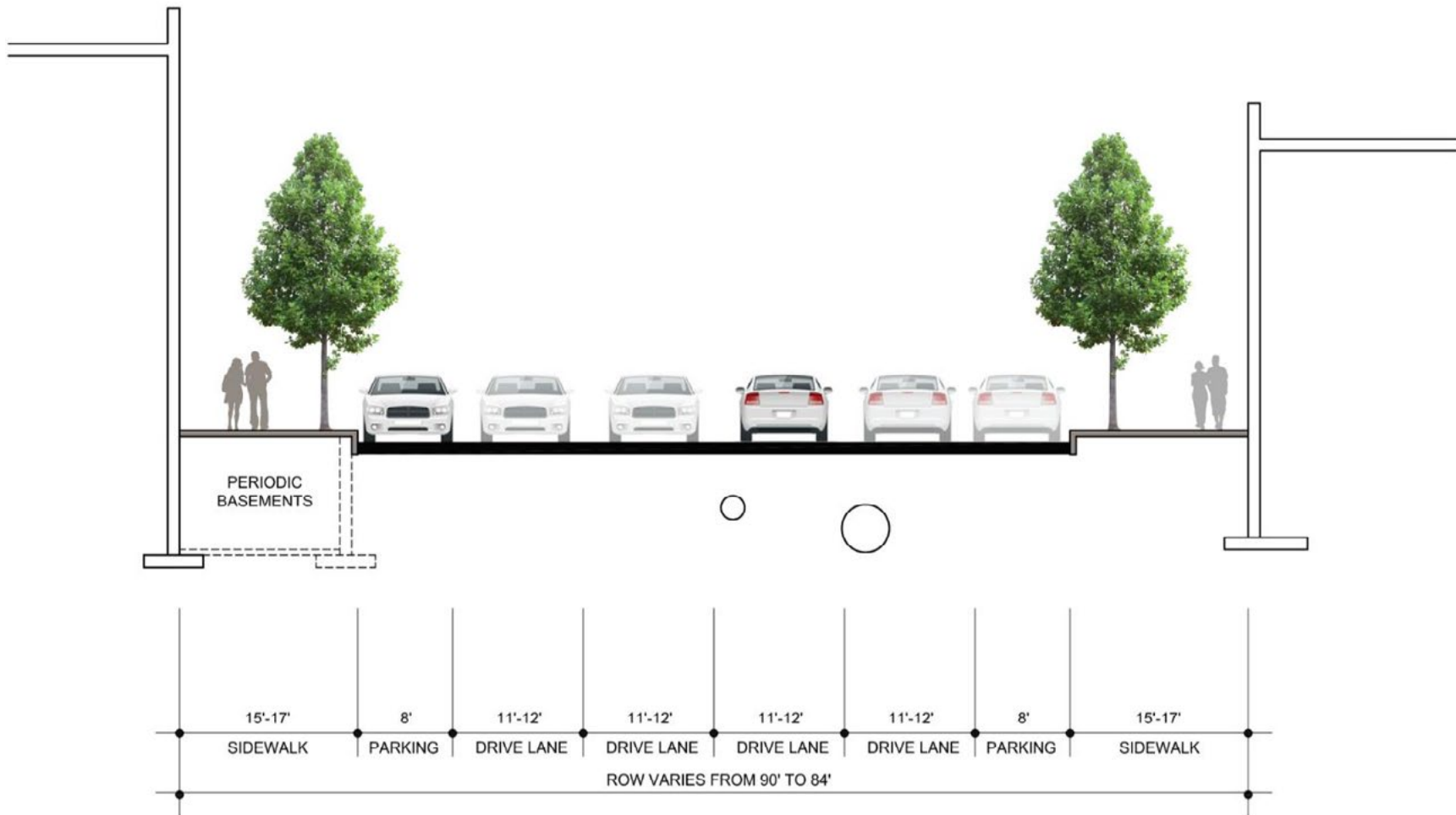
\*\*See Cross Section 03 & 04 diagram on pags 60-63.



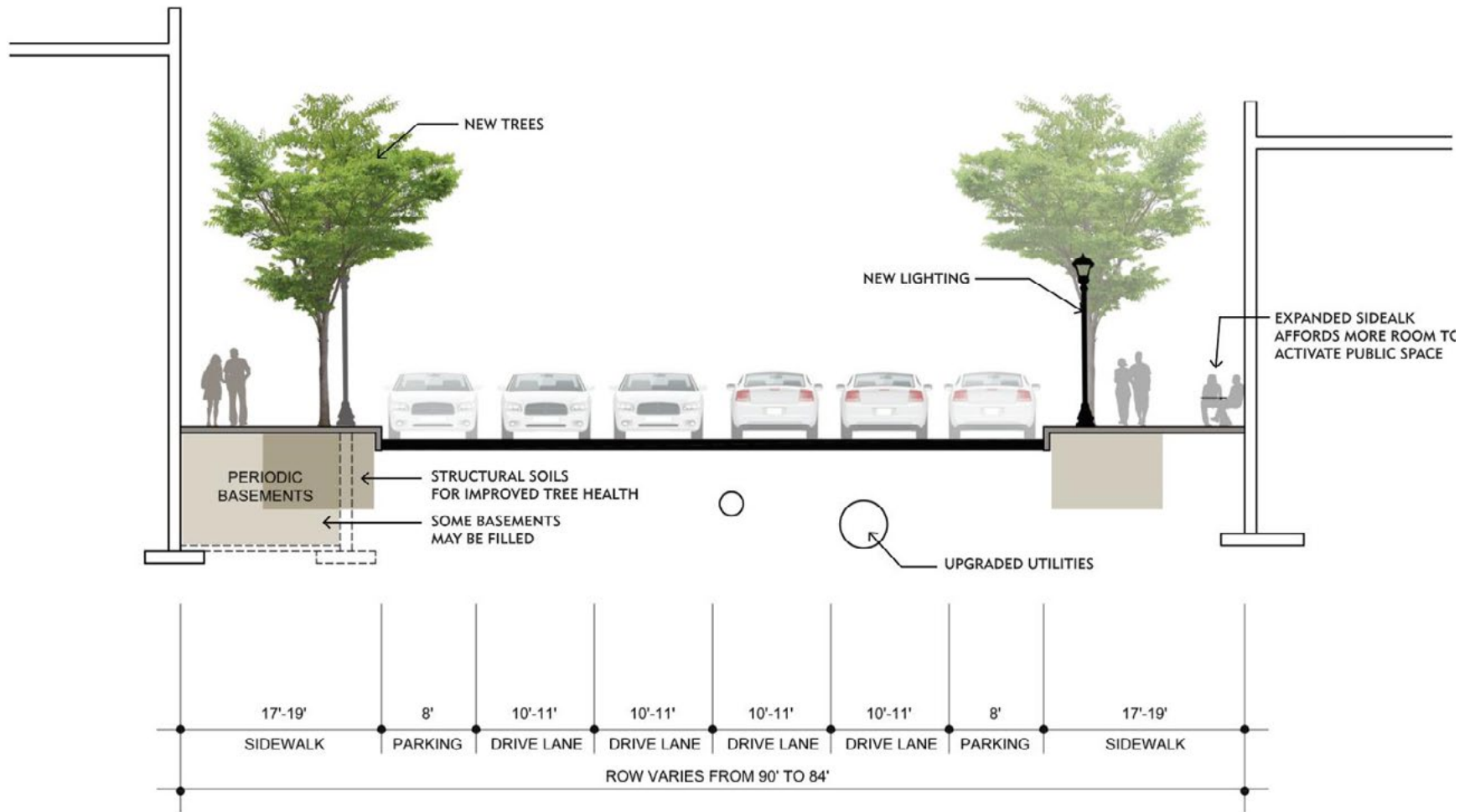
**VIEW 04 | MAIN & BROADWAY EXISTING**



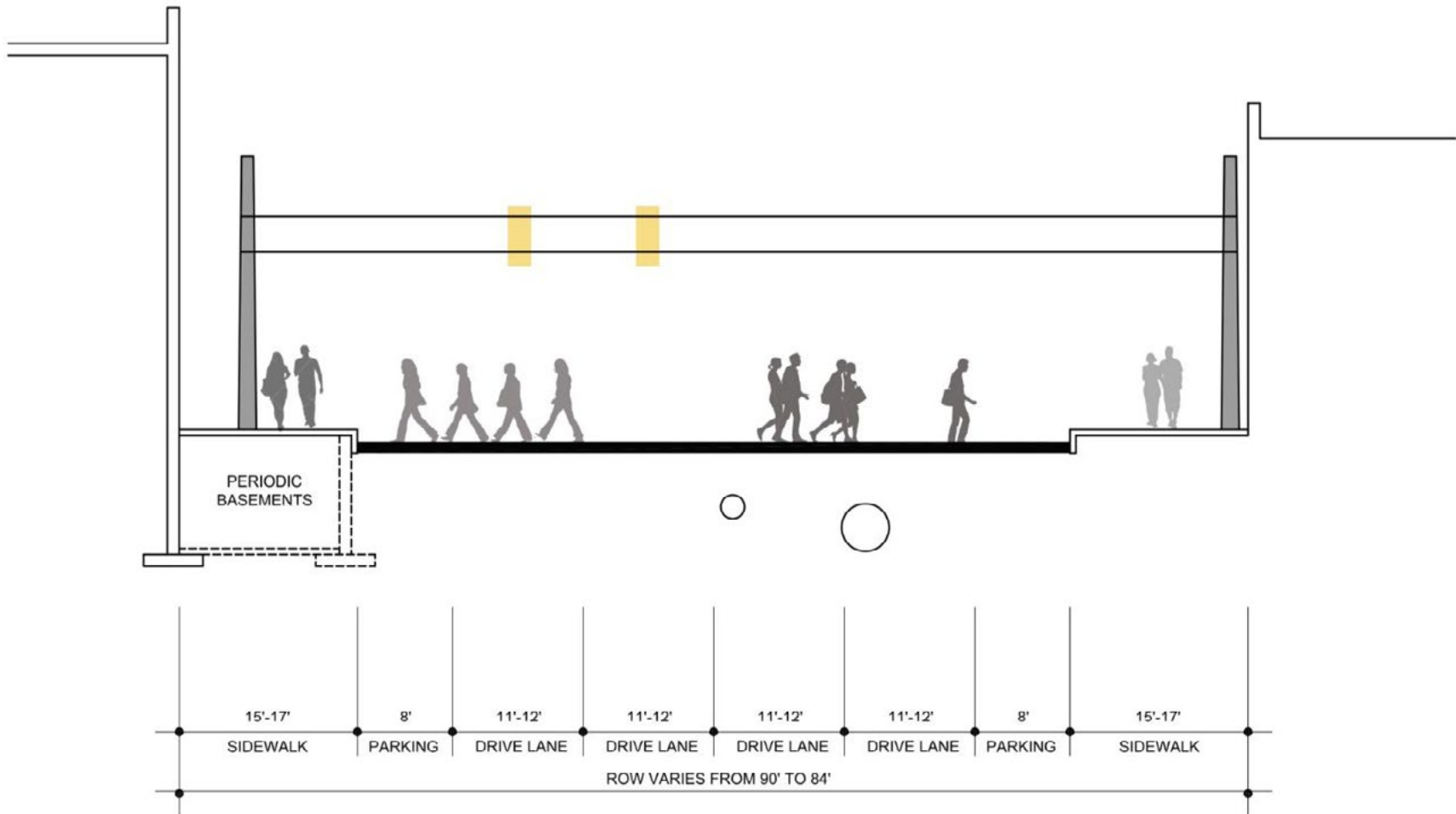
**VIEW 04 | MAIN & BROADWAY CONCEPT**



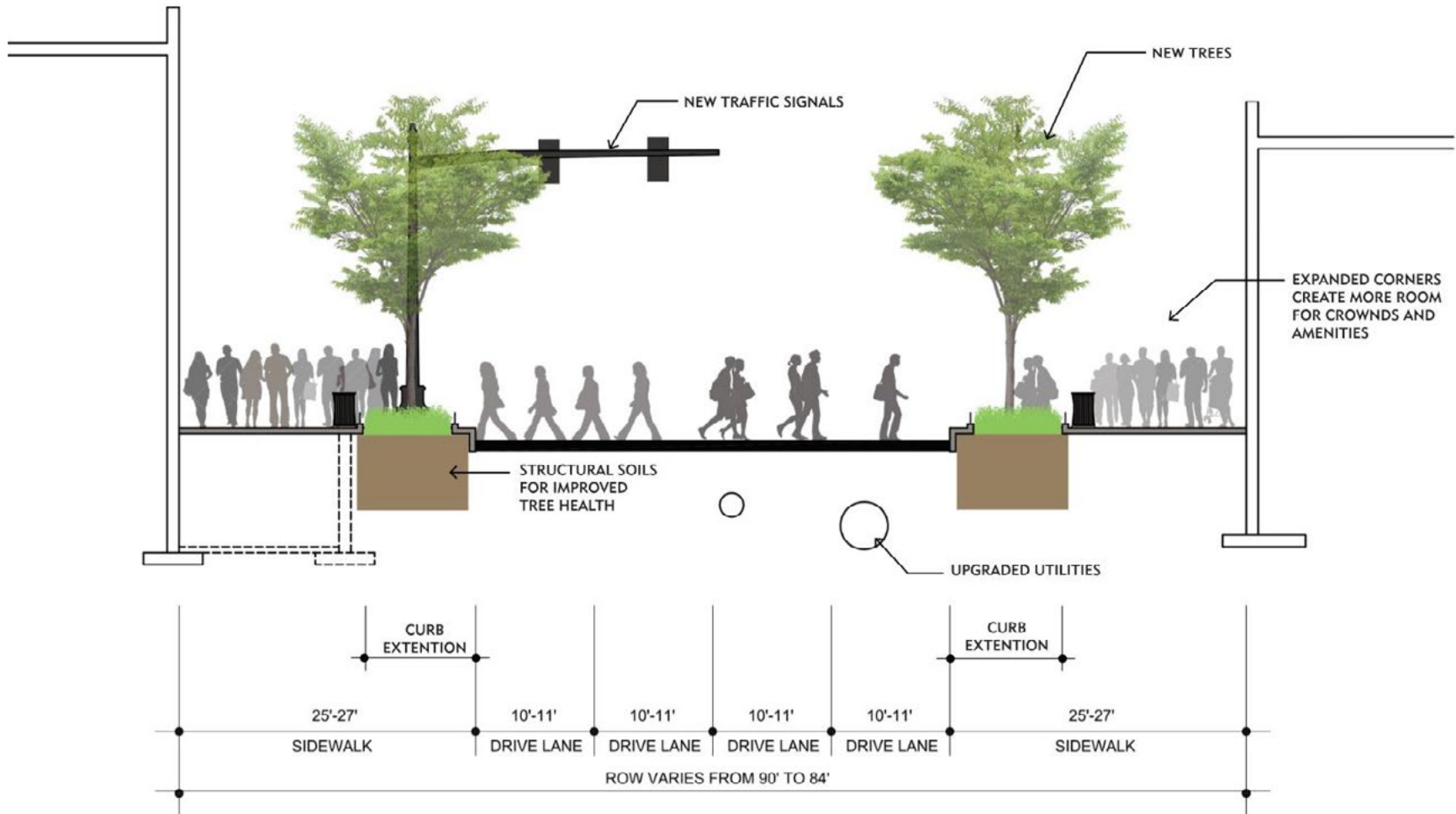
**CROSS SECTION 03 | BROADWAY TO JEFFERSON EXISTING ROADWAY SECTION**



**CROSS SECTION 03 | JEFFERSON TO BROADWAY PROPOSED ROADWAY SECTION**

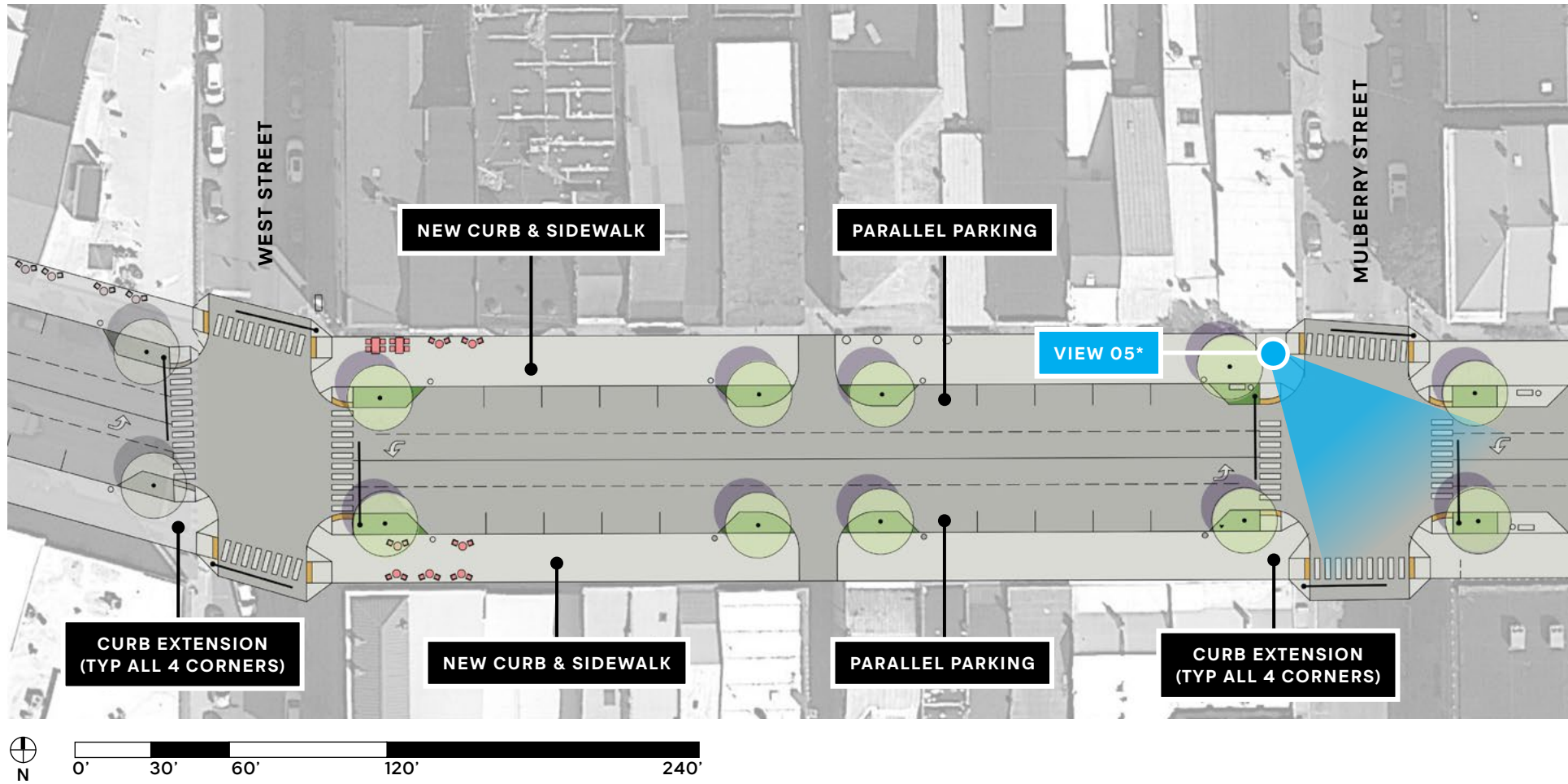


**CROSS SECTION 04 | JEFFERSON TO BROADWAY- SIGNALLED INTERSECTION**  
 EXISTING ROADWAY SECTION

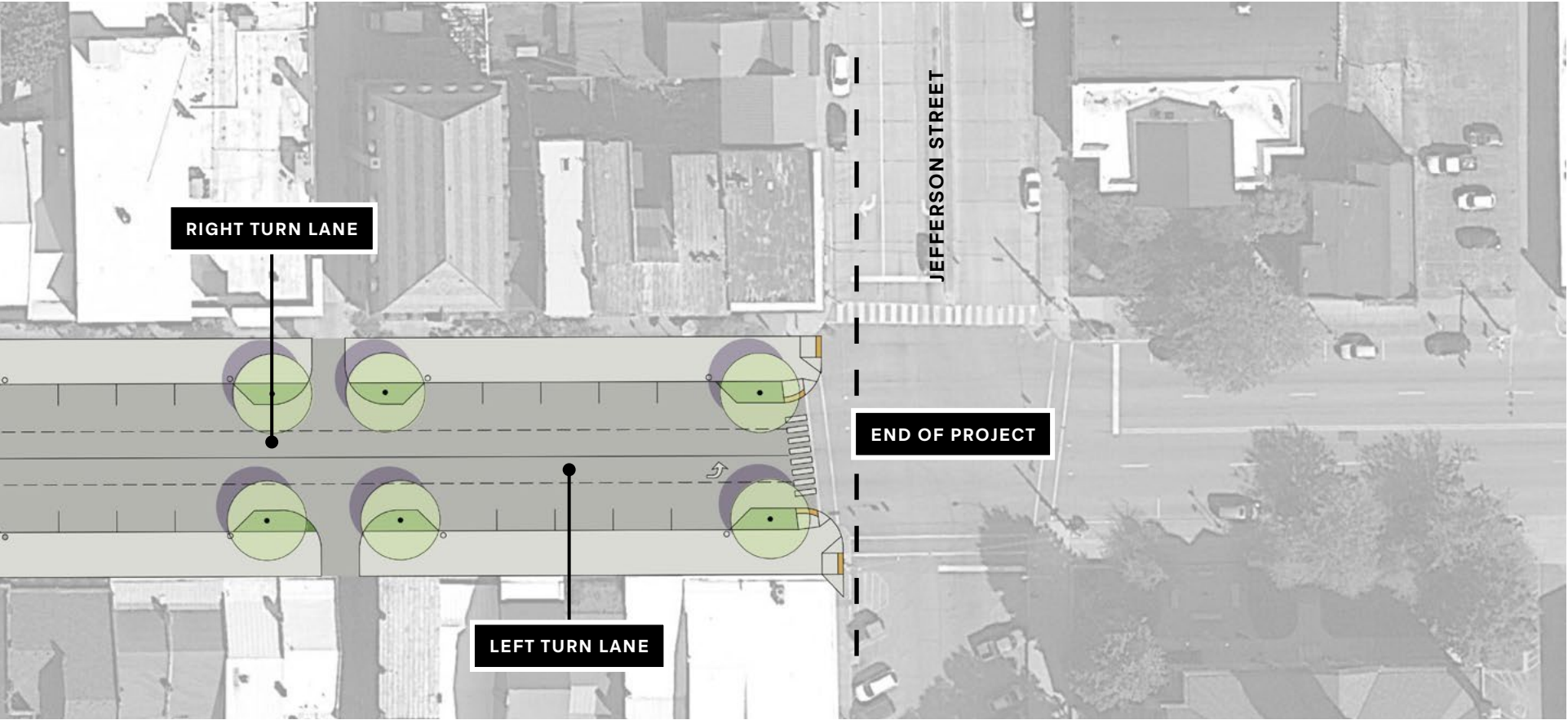


**CROSS SECTION 04 | JEFFERSON TO BROADWAY- SIGNALLED INTERSECTION**  
 PROPOSED ROADWAY SECTION

# SECTION 5B







\*See View 05 rendering on page 66.



**VIEW 05 | MAIN & MULBERRY EXISTING CONDITION**



**VIEW 05 | MAIN & MULBERRY CONCEPT**

# 07

## Identity

The identity of the corridor will be reinforced through the standardization of elements like lighting, street furnishings, signage and traffic signals. The plan proposes that these elements match what was selected through the public input process for the 421 project. The intention of the proposed style is to reference the past with somewhat traditional forms, while also communicating a forward-thinking approach to urban design. The light fixtures are LED cut off fixtures, which means greater efficiency as light is directed and controlled.



Plainwell Bench by Landscape Forms.



Plainwell Side Opening Trash Receptacle with Lid.



Architectural Area Lighting "Providence" fixture.



Architectural Area Lighting "Providence" fixture on 4" round black pole and fluted lack metal base.



Project 421 black decorative metal mast arm traffic signal. Design intent for Main Street is to match.



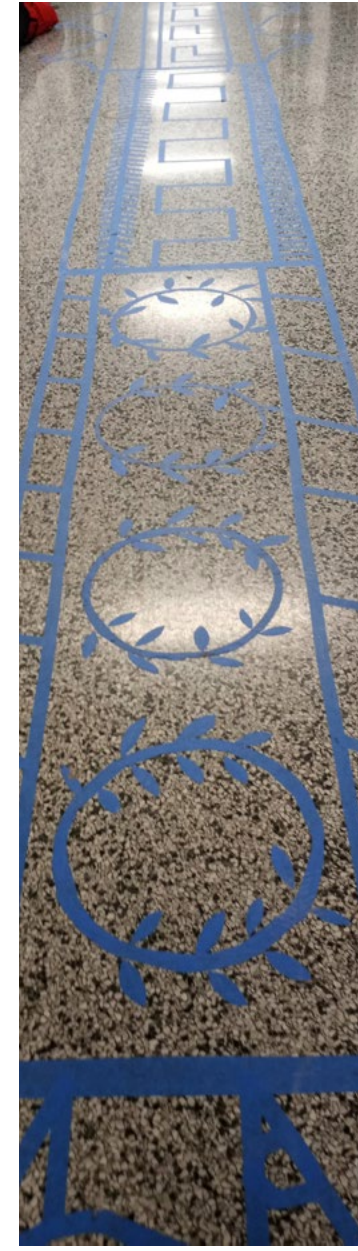


Madison has a rich history of wrought iron fabrication, and this legacy is evident to this day in the abundance of decorative metal fences, gates and columns that abut the sidewalks throughout the corridor. The plan proposes that these elements be retained, and celebrated by including small metal rails around new planting beds throughout the corridor. Another unique facet of the existing streetscape in Madison is the presence of utility manhole lids and drain covers of various sizes that occur in the sidewalk. Often decorative in nature, the lids are worn and convey a sense of permanence and history. The plan proposes that these castings be retained and incorporated. As the historic record shows, commerce has always been a very important part of Madison's Main Street identity. To this day, signage and goods for sale adorn the sidewalk and create an eclectic sense of activity and commercial vibrance. The plan has anticipated this condition; where possible, vehicle lanes have been reduced in width in order to create as much space in the sidewalk as possible for the display of goods while accommodating pedestrian circulation.

# 08

## Art

Madison has a flourishing arts program. The incorporation of creative elements and accommodation of art within the corridor will be important. One way this has been envisioned is through the use of decorative crosswalk treatments that could be installed with inlaid thermoplastic. During the course of the project, the Madison Area Arts Council solicited ideas from 7th and 8th grade students enrolled in the Fine Arts Academy at Madison Jr High School. The ideas developed are shared here. While they will require refinement, the exercise demonstrated the opportunity to use references to historic architectural elements. Precedents for this material are depicted on the opposite page.







Thermoplastic crosswalk precedents

Madison's creative energy is on display throughout the corridor. The plan encourages this character trait by expanding sidewalks where possible, and extending curbs at corners to provide additional room for three dimensional pieces.

# 09

## Accessibility

In 2019, the American Society for Landscape Architects (ASLA) released universal design guidelines for neighborhoods, streets, parks and plazas. These best practices help make it possible for everyone to participate in public life by considering the physical limitations that many people face, such as limited mobility, blindness, and deafness. Universally accessible public spaces are designed to be comfortable, predictable, and multi-sensory.

Streets with public seating, vegetation, bright lighting at night, tactile cues, and wide sidewalks provide a rhythm that adds to spatial understanding, and look beautiful. Universal Streets are multi-modal and include pedestrian islands. Wider sidewalks allow enough room for people in wheelchairs to turn around or rest, and for people using sign language to face each other and communicate without impeding foot traffic. They include frequent and flexible seating so that people can rest and choose where they want to sit, good lighting that minimizes shadows and glare, and visual patterns that make them easier to navigate.

One of the pieces of the puzzle that contributes to the Madison story is that the historic building facades did not require accessibility at the time that they were created. Building new sidewalks, accessible routes, and multi-modal lanes will require assessment of best practices and accessibility requirements for the existing buildings and businesses. The planning team heard from both the Steering Committee and the Public Meeting attendees that accessible parking spaces were not convenient for their users. During the Inventory & Analysis phase, we also saw that accessibility was not consistent for existing buildings and businesses.

Providing Universal Accessibility to the existing businesses on Madison's Main Street will present a challenge. Given the aged infrastructure, the deferred maintenance over a number of years, and the desire to maintain Madison's historic building facades, important decisions will need to be made about investments in infrastructure, streetscape elements, and access to public amenities.



# 10

## Cost Opinion

The intent of the Opinion of Probable Cost is to establish a rough order of magnitude of cost to implement the envisioned plan. Many variables and unknown factors contribute to the costs of construction. The cost of petroleum, the time of year the project is bid, unforeseen conditions, and how busy contractors are will all significantly affect the final cost. Depending on when the project is implemented, the costs may vary significantly (up or down) from what has been estimated.

This estimate was based on quantity take offs, but it is important to note that the plans were developed on top of aerial photography and not topographic survey information. This is an appropriate and suitable level of development for a master plan, but results in limited accuracy.

The estimates do include line items for soft costs (design services, surveys, permitting, etc) in addition to anticipated construction. Therefore, the final numbers can be considered total project costs.

The cost opinion has been developed based on sections to envision how the project might be phased. The sections were selected based on physical characteristics and a guess about how much scope the City might be willing to invest in at a time. The ultimate phasing of the implementation could vary significantly from what has been suggested, and could potentially even be completed as one large project. The more scope that is included in a project, the more favorable and competitive the bids will be.

### Madison Main Street Master Plan

#### Opinion of Probable Cost

SECTION	PROBABLE COST
Section 1	\$ 2,672,859
Section 2	\$ 3,964,495
Section 3	\$ 4,093,910
Section 4	\$ 6,685,621
Section 5	\$ 6,657,434
<b>Total Probable Cost</b>	<b>\$ 24,074,319</b>

**SECTION 1**

Est Const Cost Subttl	\$	1,670,537
Const Contingency	15%	\$ 250,581
<b>Est Const Cost</b>	<b>\$</b>	<b>1,921,118</b>
Design Contingency	15%	\$ 250,581
Contractor Fee	5%	\$ 83,527
Soft Costs	25%	\$ 417,634
<b>Est Project Cost</b>	<b>\$</b>	<b>2,672,859</b>

Element	Qty	Units	Unit Cost	Subttl
<b>Maintenance of Traffic</b> \$ 266,053				
	Qty	Units	Unit Cost	Subttl
MOT	1	Allow	\$ 100,000	\$ 100,000
<b>Site Removals</b> \$ 166,053				
	Qty	Units	Unit Cost	Subttl
Curbs	5351	LF	\$ 3	\$ 16,053
Sidewalk	0.00	SF	\$ 5	\$ -
Surface Milling	0	SF	\$ 3	\$ -
Trees	100	Each	\$ 1,500	\$ 150,000
<b>Utilities</b> \$ 84,000				
	Qty	Units	Unit Cost	Subttl
Storm sewer Replacement	1	Allow	\$ 10,000	\$ 10,000
Sanitary Sewer	1	Allow	\$ -	\$ -
Gas Distribution	1	Allow	\$ -	\$ -
Electrical Distribution	1	Allow	\$ 50,000	\$ 50,000
Water Distribution	1	Allow	\$ -	\$ -
Inlets	12	Each	\$ 2,000	\$ 24,000
<b>Concrete / Boardwalk</b> \$ 699,335				
	Qty	Units	Unit Cost	Subttl
Curbs	5351	LF	\$ 25	\$ 133,775
Sidewalk	0.00	SF	\$ 10	\$ -
Streets	0	SF	\$ 10	\$ -
Decorative Concrete/Public Spaces	0	SF	\$ 10	\$ -
Flowable Fill	0	CY	\$ 10	\$ -
Boardwalk	9426	SF	\$ 60	\$ 565,560
<b>HMA Pavement</b> \$ 265,096				
	Qty	Units	Unit Cost	Subttl
Street Resurface	0	SY	\$ 10	\$ -
Street Full Depth	12409.33	SY	\$ 20	\$ 248,187
Sidepath	1409.111	SY	\$ 12	\$ 16,909
Decorative Thermoplastic Crosswalks	0	SF	\$ 10	\$ -
Standard Thermoplastic Strioine	0	LF	\$ 10	\$ -

Element	Qty	Units	Unit Cost	Subttl
<b>Plant Material and Soils</b> \$ 102,500				
	Qty	Units	Unit Cost	Subttl
Trees	100	Each	\$ 1,000	\$ 100,000
Lawn	5000	SF	\$0.50	\$ 2,500
Imported Topsoil	0	CY	\$ 30	\$ -
Structural Soil	0	CY	\$ 60	\$ -
Shrubs	0	Each	\$ 50	\$ -
Perennials	0	SF	\$ 12	\$ -
Irrigation	0	SF	\$ 3	\$ -
<b>Signalling</b> \$ 37,500				
	Qty	Units	Unit Cost	Subttl
Mast Arms	0	Each	\$ 50,000	\$ -
Hawk Signals	0	Each	\$ 20,000	\$ -
Stop Signs	0	Each	\$ 2,500	\$ -
Yield Signs	0	Each	\$ 2,500	\$ -
Directional Signage	5	Each	\$ 5,000	\$ 25,000
Street Signage	5	Each	\$ 2,500	\$ 12,500
<b>Street Furnishings</b> \$ -				
	Qty	Units	Unit Cost	Subttl
Benches	0	Each	\$ 3,500	\$ -
Decorative Metal Fences and Rails	0	LF	\$ 200	\$ -
Interpretive Signage	0	Each	\$ 2,500	\$ -
Trash Receptacles	0	Each	\$ 500	\$ -
Recycling Receptacles	0	Each	\$ 500	\$ -
Railings	0	LF	\$ 50	\$ -
<b>Lighting</b> \$ 50,000				
	Qty	Units	Unit Cost	Subttl
Pedestrian Scale Lighting	0	Each	\$ 4,500	\$ -
Street Lighting	0	Each	\$ 8,000	\$ -
Decorative Lighting	1	Allow	\$ 50,000	\$ 50,000

**SECTION 2**

Est Const Cost Subttl	\$	2,477,809
Const Contingency	15%	\$ 371,671
<b>Est Const Cost</b>	<b>\$</b>	<b>2,849,481</b>
Design Contingency	15%	\$ 371,671
Contractor Fee	5%	\$ 123,890
<b>Soft Costs</b>	<b>25%</b>	<b>\$ 619,452</b>
<b>Est Project Cost</b>	<b>\$</b>	<b>3,964,495</b>

Element	Qty	Units	Unit Cost	Subttl
<b>Maintenance of Traffic</b>				
				\$ 440,988
	Qty	Units	Unit Cost	Subttl
MOT	1	Allow	\$ 100,000	\$ 100,000
Element	0	SF	\$ 10	\$ -
Element	0	SY	\$ 10	\$ -
<b>Site Removals</b>				
				\$ 340,988
	Qty	Units	Unit Cost	Subttl
Curbs	5741	LF	\$ 3	\$ 17,223
Sidewalk	34753	SF	\$ 5	\$ 173,765
Surface Milling	0	SF	\$ 3	\$ -
Trees	100	Each	\$ 1,500	\$ 150,000
<b>Utilities</b>				
				\$ 354,000
	Qty	Units	Unit Cost	Subttl
Storm sewer Replacement	1	Allow	\$ 100,000	\$ 100,000
Sanitary Sewer	1	Allow	\$ 100,000	\$ 100,000
Gas Distribution	1	Allow	\$ 50,000	\$ 50,000
Electrical Distribution	1	Allow	\$ 50,000	\$ 50,000
Water Distribution	1	Allow	\$ 30,000	\$ 30,000
Inlets	12	Each	\$ 2,000	\$ 24,000
<b>Concrete</b>				
				\$ 404,940
	Qty	Units	Unit Cost	Subttl
Curbs	5741	LF	\$ 10	\$ 57,410
Sidewalk	34753	SF	\$ 10	\$ 347,530
Streets	0	SF	\$ 10	\$ -
Decorative Concrete/Public Spaces	0	SF	\$ 10	\$ -
Flowable Fill	0	CY	\$ 10	\$ -
<b>HMA Pavement</b>				
				\$ 408,893
	Qty	Units	Unit Cost	Subttl
Street Resurface	0	SY	\$ 10	\$ -
Street Full Depth	17444.67	SY	\$ 20	\$ 348,893
Sidepath	0	SY	\$ 10	\$ -
Decorative Thermoplastic Crosswalks	0	SF	\$ 10	\$ -
Standard Thermoplastic Striping	10000	LF	\$ 6	\$ 60,000

**Plant Material and Soils** \$ 83,000

	Qty	Units	Unit Cost	Subttl
Trees	50	Each	\$ 1,000	\$ 50,000
Lawn	10000	SF	\$ 3	\$ 30,000
Imported Topsoil	100	CY	\$ 30	\$ 3,000
Structural Soil	0	CY	\$ 60	\$ -
Shrubs	0	Each	\$ 50	\$ -
Perennials	0	SF	\$ 12	\$ -
Irrigation	0	SF	\$ 3	\$ -

**Signalling** \$ 62,500

	Qty	Units	Unit Cost	Subttl
Mast Arms	0	Each	\$ 50,000	\$ -
Hawk Signals	0	Each	\$ 20,000	\$ -
Stop Signs	0	Each	\$ 2,500	\$ -
Yield Signs	0	Each	\$ 2,500	\$ -
Directional Signage	10	Each	\$ 5,000	\$ 50,000
Street Signage	5	Each	\$ 2,500	\$ 12,500

**Street Furnishings** \$ 42,500

	Qty	Units	Unit Cost	Subttl
Benches	5	Each	\$ 3,500	\$ 17,500
Decorative Metal Fences and Rails	0	LF	\$ 200	\$ -
Interpretive Signage	0	Each	\$ 2,500	\$ -
Trash Receptacles	5	Each	\$ 500	\$ 2,500
Recycling Receptacles	5	Each	\$ 500	\$ 2,500
Railings	400	LF	\$ 50	\$ 20,000

**Lighting** \$ 340,000

	Qty	Units	Unit Cost	Subttl
Pedestrian Scale Lighting	40	Each	\$ 4,500	\$ 180,000
Street Lighting	20	Each	\$ 8,000	\$ 160,000
Decorative Lighting	0	Each	\$ 50,000	\$ -

**SECTION 3**

Est Const Cost Subttl		\$	2,558,694
Const Contingency	15%	\$	383,804
<b>Est Const Cost</b>		\$	<b>2,942,498</b>
Design Contingency	15%	\$	383,804
Contractor Fee	5%	\$	127,935
Soft Costs	25%	\$	639,673
<b>Est Project Cost</b>		\$	<b>4,093,910</b>

Element	Qty	Units	Unit Cost	Subttl
<b>Maintenance of Traffic</b>				\$ 421,096
	Qty	Units	Unit Cost	Subttl
MOT	1	Allow	\$ 100,000	\$ 100,000
<b>Site Removals</b>				\$ 321,096
	Qty	Units	Unit Cost	Subttl
Curbs	4107	LF	\$ 3	\$ 12,321
Sidewalk	31755	SF	\$ 5	\$ 158,775
Surface Milling	0	SF	\$ 3	\$ -
Trees	100	Each	\$ 1,500	\$ 150,000
<b>Utilities</b>				\$ 354,000
	Qty	Units	Unit Cost	Subttl
Storm sewer Replacement	1	Allow	\$ 100,000	\$ 100,000
Sanitary Sewer	1	Allow	\$ 100,000	\$ 100,000
Gas Distribution	1	Allow	\$ 50,000	\$ 50,000
Electrical Distribution	1	Allow	\$ 50,000	\$ 50,000
Water Distribution	1	Allow	\$ 30,000	\$ 30,000
Inlets	12	Each	\$ 2,000	\$ 24,000
<b>Concrete</b>				\$ 421,725
	Qty	Units	Unit Cost	Subttl
Curbs	4107	LF	\$ 25	\$ 102,675
Sidewalk	31755	SF	\$ 10	\$ 317,550
Streets	0	SF	\$ 10	\$ -
Decorative Concrete/Public Spaces	0	SF	\$ 10	\$ -
Flowable Fill	50	CY	\$ 30	\$ 1,500
<b>HMA Pavement</b>				\$ 411,777
	Qty	Units	Unit Cost	Subttl
Street Resurface	0	SF	\$ 10	\$ 119,339
Street Full Depth	11933.8889	SY	\$ 20	\$ 238,678
Sidepath	0	SY	\$ 12	\$ -
Decorative Thermoplastic Crosswalks	1056	SF	\$ 10	\$ 10,560
Standard Thermoplastic Striping	7200	LF	\$ 6	\$ 43,200

**Plant Material and Soils** \$ 44,000

	Qty	Units	Unit Cost	Subttl
Trees	20	Each	\$ 1,000	\$ 20,000
Lawn	5000	SF	\$ 3	\$ 15,000
Imported Topsoil	100	CY	\$ 30	\$ 3,000
Structural Soil	100	CY	\$ 60	\$ 6,000
Shrubs	0	Each	\$ 50	\$ -
Perennials	0	SF	\$ 12	\$ -
Irrigation	0	SF	\$ 3	\$ -

**Signalling** \$ 235,000

	Qty	Units	Unit Cost	Subttl
Mast Arms	4	Each	\$ 50,000	\$ 200,000
Hawk Signals	0	Each	\$ 20,000	\$ -
Stop Signs	0	Each	\$ 2,500	\$ -
Yield Signs	0	Each	\$ 2,500	\$ -
Directional Signage	5	Each	\$ 5,000	\$ 25,000
Street Signage	4	Each	\$ 2,500	\$ 10,000

**Street Furnishings** \$ 95,000

	Qty	Units	Unit Cost	Subttl
Benches	10	Each	\$ 3,500	\$ 35,000
Decorative Metal Fences and Rails	200	LF	\$ 200	\$ 40,000
Interpretive Signage	4	Each	\$ 2,500	\$ 10,000
Trash Receptacles	10	Each	\$ 500	\$ 5,000
Recycling Receptacles	10	Each	\$ 500	\$ 5,000
Railings	0	LF	\$ 50	\$ -

**Lighting** \$ 255,000

	Qty	Units	Unit Cost	Subttl
Pedestrian Scale Lighting	30	Each	\$ 4,500	\$ 135,000
Street Lighting	15	Each	\$ 8,000	\$ 120,000
Decorative Lighting	0	Allow	\$ 50,000	\$ -
Element	0	Each	\$ 10	\$ -
Element	0	Each	\$ 10	\$ -
Element	0	Each	\$ 10	\$ -

**SECTION 4**

Est Const Cost Subttl		\$	4,178,513
Const Contingency	15%	\$	626,777
<b>Est Const Cost</b>		\$	<b>4,805,290</b>
Design Contingency	15%	\$	626,777
Contractor Fee	5%	\$	208,926
Soft Costs	25%	\$	1,044,628
<b>Est Project Cost</b>		\$	<b>6,685,621</b>

Element	Qty	Units	Unit Cost	Subttl
<b>Maintenance of Traffic</b>				\$ 465,341
	Qty	Units	Unit Cost	Subttl
MOT	1	Allow	\$ 100,000	\$ 100,000
<b>Site Removals</b>				\$ 365,341
	Qty	Units	Unit Cost	Subttl
Curbs	5442	LF	\$ 3	\$ 16,326
Sidewalk	39803	SF	\$ 5	\$ 199,015
Surface Milling	0	SF	\$ 3	\$ -
Trees	100	Each	\$ 1,500	\$ 150,000
<b>Utilities</b>				\$ 642,000
	Qty	Units	Unit Cost	Subttl
Storm sewer Replacement	1	Allow	\$ 200,000	\$ 200,000
Sanitary Sewer	1	Allow	\$ 200,000	\$ 200,000
Gas Distribution	1	Allow	\$ 75,000	\$ 75,000
Electrical Distribution	1	Allow	\$ 75,000	\$ 75,000
Water Distribution	1	Allow	\$ 60,000	\$ 60,000
Inlets	16	Each	\$ 2,000	\$ 32,000
<b>Concrete</b>				\$ 924,080
	Qty	Units	Unit Cost	Subttl
Curbs	5442	LF	\$ 25	\$ 136,050
Sidewalk	39803	SF	\$ 10	\$ 398,030
Streets	0	SF	\$ 10	\$ -
Decorative Concrete/Public Spaces	15000	SF	\$ 25	\$ 375,000
Flowable Fill	500	CY	\$ 30	\$ 15,000
<b>HMA Pavement</b>				\$ 410,751
	Qty	Units	Unit Cost	Subttl
Street Resurface	0	SF	\$ 10	\$ -
Street Full Depth	15953.5556	SY	\$ 20	\$ 319,071
Sidewalk	0	SY	\$ 12	\$ -
Decorative Thermoplastic Crosswalks	3168	SF	\$ 10	\$ 31,680
Standard Thermoplastic Striping	10000	LF	\$ 6	\$ 60,000

<b>Plant Material and Soils</b>					\$ 134,000
	Qty	Units	Unit Cost	Subttl	
Trees	50	Each	\$ 1,000	\$ 50,000	
Lawn	10000	SF	\$ 3	\$ 30,000	
Imported Topsoil	200	CY	\$ 30	\$ 6,000	
Structural Soil	200	CY	\$ 60	\$ 12,000	
Shrubs	0	Each	\$ 50	\$ -	
Perennials	3000	SF	\$ 12	\$ 36,000	
Irrigation	3000	SF	\$ 8	\$ 24,000	
<b>Signalling</b>					\$ 670,000
	Qty	Units	Unit Cost	Subttl	
Mast Arms	12	Each	\$ 50,000	\$ 600,000	
Hawk Signals	0	Each	\$ 20,000	\$ -	
Stop Signs	0	Each	\$ 2,500	\$ -	
Yield Signs	0	Each	\$ 2,500	\$ -	
Directional Signage	10	Each	\$ 5,000	\$ 50,000	
Street Signage	8	Each	\$ 2,500	\$ 20,000	
<b>Street Furnishings</b>					\$ 185,000
	Qty	Units	Unit Cost	Subttl	
Benches	20	Each	\$ 3,500	\$ 70,000	
Decorative Metal Fences and Rails	400	LF	\$ 200	\$ 80,000	
Interpretive Signage	6	Each	\$ 2,500	\$ 15,000	
Trash Receptacles	20	Each	\$ 500	\$ 10,000	
Recycling Receptacles	20	Each	\$ 500	\$ 10,000	
Railings	0	LF	\$ 50	\$ -	
<b>Lighting</b>					\$ 382,000
	Qty	Units	Unit Cost	Subttl	
Pedestrian Scale Lighting	42	Each	\$ 4,500	\$ 189,000	
Street Lighting	21	Each	\$ 8,000	\$ 168,000	
Decorative Lighting	1	Allow	\$ 25,000	\$ 25,000	



**SECTION 5**

Est Const Cost Subttl		\$	4,160,896
Const Contingency	15%	\$	624,134
<b>Est Const Cost</b>		\$	<b>4,785,031</b>
Design Contingency	15%	\$	624,134
Contractor Fee	5%	\$	208,045
Soft Costs	25%	\$	1,040,224
<b>Est Project Cost</b>		\$	<b>6,657,434</b>

Element	Qty	Units	Unit Cost	Subttl
<b>Maintenance of Traffic</b>				\$ 489,579
	Qty	Units	Unit Cost	Subttl
MOT	1	Allow	\$ 100,000	\$ 100,000
<b>Site Removals</b>				\$ 389,579
	Qty	Units	Unit Cost	Subttl
Curbs	3993	LF	\$ 3	\$ 11,979
Sidewalk	45520	SF	\$ 5	\$ 227,600
Surface Milling	0	SF	\$ 3	\$ -
Trees	100	Each	\$ 1,500	\$ 150,000
<b>Utilities</b>				\$ 1,082,000
	Qty	Units	Unit Cost	Subttl
Storm sewer Replacement	1	Allow	\$ 300,000	\$ 300,000
Sanitary Sewer	1	Allow	\$ 300,000	\$ 300,000
Gas Distribution	1	Allow	\$ 150,000	\$ 150,000
Electrical Distribution	1	Allow	\$ 150,000	\$ 150,000
Water Distribution	1	Allow	\$ 150,000	\$ 150,000
Inlets	16	Each	\$ 2,000	\$ 32,000
<b>Concrete</b>				\$ 582,025
	Qty	Units	Unit Cost	Subttl
Curbs	3993	LF	\$ 25	\$ 99,825
Sidewalk	45520	SF	\$ 10	\$ 455,200
Streets	0	SF	\$ 10	\$ -
Decorative Concrete/Public Spaces	0	SF	\$ 25	\$ -
Flowable Fill	900	CY	\$ 30	\$ 27,000
<b>HMA Pavement</b>				\$ 286,602
	Qty	Units	Unit Cost	Subttl
Street Resurface	0	SF	\$ 10	\$ -
Street Full Depth	10900.111	SY	\$ 20	\$ 218,002
Sidepath	0	SY	\$ 12	\$ -
Decorative Thermoplastic Crosswalks	3500	SF	\$ 10	\$ 35,000
Standard Thermoplastic Striping	5600	LF	\$ 6	\$ 33,600
Element	0	LF	\$ 10	\$ -

<b>Plant Material and Soils</b>					\$ 184,111
	Qty	Units	Unit Cost	Subttl	
Trees	20	Each	\$ 1,000	\$ 20,000	
Lawn	0	SF	\$ 3	\$ -	
Silva Cells (or similar)	1111.1111	CY	\$ 100	\$ 111,111	
Structural Soil	0	CY	\$ 60	\$ -	
Shrubs	100	Each	\$ 50	\$ 5,000	
Perennials	4000	SF	\$ 12	\$ 48,000	
Irrigation	4000	SF	\$ 8	\$ 32,000	
<b>Signalling</b>					\$ 680,000
	Qty	Units	Unit Cost	Subttl	
Mast Arms	12	Each	\$ 50,000	\$ 600,000	
Hawk Signals	0	Each	\$ 20,000	\$ -	
Stop Signs	4	Each	\$ 2,500	\$ 10,000	
Yield Signs	0	Each	\$ 2,500	\$ -	
Directional Signage	10	Each	\$ 5,000	\$ 50,000	
Street Signage	8	Each	\$ 2,500	\$ 20,000	
<b>Street Furnishings</b>					\$ 213,000
	Qty	Units	Unit Cost	Subttl	
Benches	24	Each	\$ 3,500	\$ 84,000	
Decorative Metal Fences and Rails	400	LF	\$ 200	\$ 80,000	
Interpretive Signage	6	Each	\$ 2,500	\$ 15,000	
Trash Receptacles	24	Each	\$ 500	\$ 12,000	
Recycling Receptacles	24	Each	\$ 500	\$ 12,000	
Railings	200	LF	\$ 50	\$ 10,000	
<b>Lighting</b>					\$ 254,000
	Qty	Units	Unit Cost	Subttl	
Pedestrian Scale Lighting	24	Each	\$ 4,500	\$ 108,000	
Street Lighting	12	Each	\$ 8,000	\$ 96,000	
Decorative Lighting	1	Allow	\$ 50,000	\$ 50,000	

**Design  
for  
Impact.**

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**AFFILIATES**

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