



Downtown Loveland Streetscape Master Plan Report

August 19, 2022

Prepared for:



City of Loveland, Ohio

120 West Loveland Avenue

Loveland, Ohio 45140

513-683-0150

lovelandoh.gov

Prepared by:

KZF DESIGN

Designing Better Futures

700 Broadway Street
Cincinnati, Ohio 45202

Table of Contents

Introduction

Executive Summary	4
Existing Conditions	8
Guiding Principles	12
Design Guidelines	14

Corridors

W. Loveland Avenue	18
Karl Brown Way	24
E. Broadway Street	28
N. Second Street	32

Appendix A - Typical Sections	36
Appendix B - Tree Selection	38
Appendix C - Cost Estimates	40

Acknowledgments

Dave Kennedy, City Manager

Downtown Streetscape Committee:

Katie Coulson

Doug Gilbert

Mary Ann Lynn

John Robinson

Gloria Wilson

Executive Summary

The City of Loveland wishes to make pedestrian safety improvements and enhancements to the streetscape and landscaping in the Historic Downtown area. The City would like to create a consistent, appealing, and safe public environment, as well as make improvements that support economic redevelopment efforts in the City.

As part of this strategic process, the City of Loveland has developed the Downtown Loveland Streetscape Master Plan. The master plan provides:

- A vision for the major corridors in the Historic Downtown area
- Guiding principles and design concepts for each corridor
- Design guidelines to assist in implementing the vision

Project Background

The City of Loveland has seen major investment in its Historic Downtown in the past two decades. As it continues to be an increasingly popular destination, the City is attracting new businesses, developers, and residents. To build off this development, there is a desire to improve the Downtown area's streetscape to be more connected and visually cohesive. The existing brick sidewalks are in need of major repairs. Now is the time to enhance these areas and maximize the impact of future investments.

The Streetscape Design project area considers the Historic Downtown of Loveland, which is bounded by Karl Brown Way, Harrison Avenue, the northern portion of Railroad Avenue, N. Second Street, and E. Broadway Street. For the purposes of this study and to provide adequate consideration in design, the Downtown area has been divided into four (4) individual corridors:

- **W. Loveland Avenue** - from the bridge spanning over the Little Miami River to N. Second St.
- **Karl Brown Way** - from Nisbet Park to the Railroad Bridge
- **E. Broadway Street** - from Loveland Canoe & Kayak to the "Five Points" Intersection
- **N. Second Street** - from the "Five Points" Intersection to W. Loveland Ave.

Each corridor can be improved separately as part of a phased approach.



Figure 1. Historic Downtown Corridors Context Map

Project Process

The Downtown Loveland Streetscape Master Plan represents the outcome of a collaborative process between the City of Loveland, the Downtown Streetscape Committee, and the consultant team. The recommendations outlined in this document are built on the existing strengths and opportunities of the area. They can be executed over time and will help preserve and further enhance the unique identity of Loveland.

An initial inventory and basemapping of existing conditions was done to help identify project constraints and opportunities. This information was used in the proceeding Visioning Session with the Downtown Streetscape Committee to discuss and confirm the strengths, issues/constraints, and opportunities of Downtown Loveland, as well as explore ideas for a new Streetscape Design Concept. From this, a set of guiding principles and design concepts were developed and presented to the committee at a review meeting in January 2022. The design concepts were further refined and the Downtown Streetscape Master Plan was drafted.

Project Vision

The intent of the Downtown Loveland Streetscape Master Plan is to create a cohesive plan that considers the effectiveness and physical condition of the existing streetscape, identifies new ideas and opportunities for enhancements, and prioritizes future investments. This Master Plan outlines a strategy to achieve this through:

- A consistent and appealing Design Plan which outlines pedestrian safety improvements and strategic enhancements to the streetscape and landscaping in the historic downtown area which also support the City's economic redevelopment efforts.
- Preserving the city's character and providing a vibrant, welcoming public space.
- Further enhancing Loveland's "City Center Area" and expanding connectivity.
- Guidance for both short and long-term infrastructure and streetscape investments.

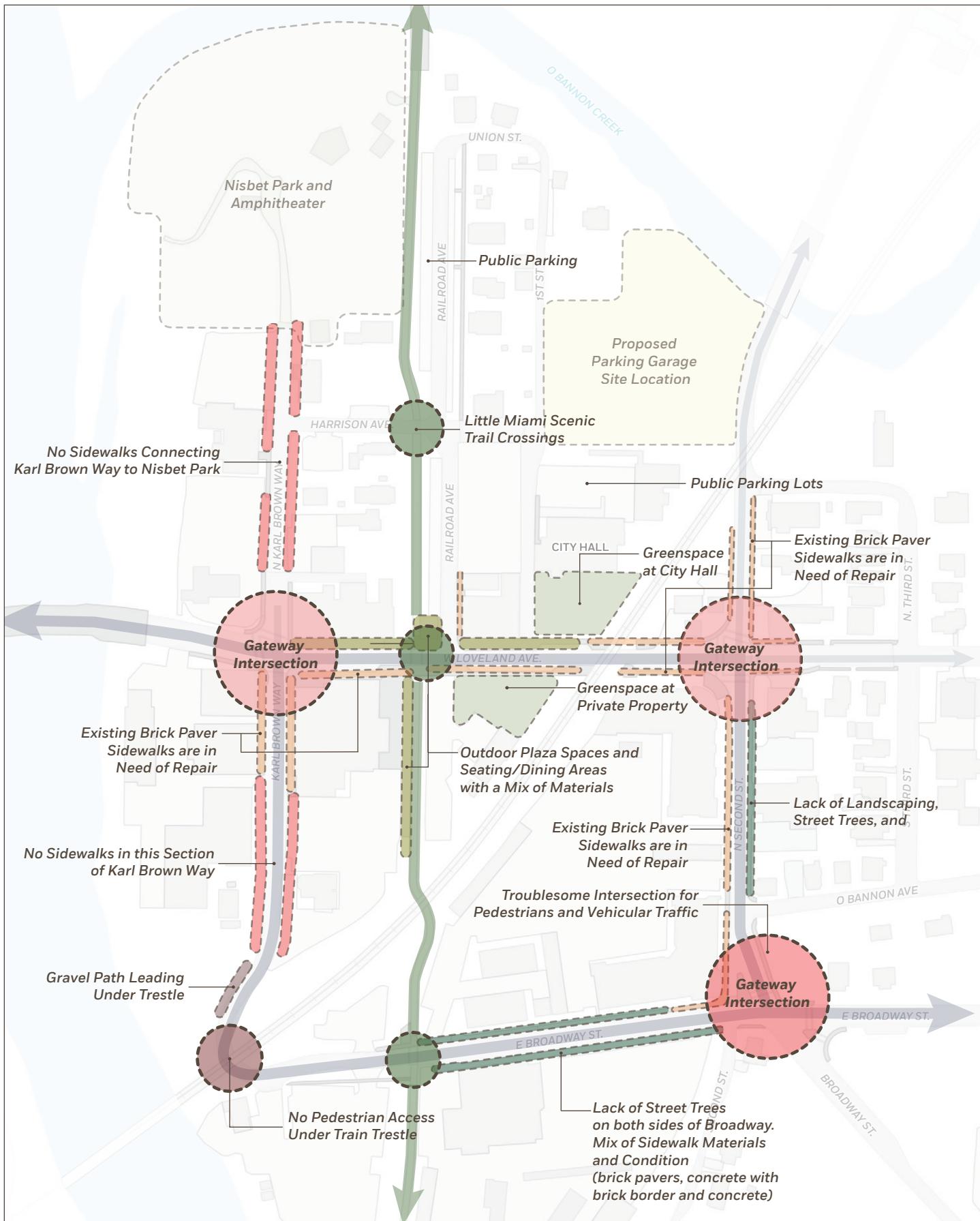


Figure 2. Site Observations Map

Existing Conditions

Downtown Loveland is a central gathering spot offering walkable amenities and convenient access to the Little Miami Scenic Bike Trail. With a distinct sense of history, eclectic mixed-use buildings, unique recreational amenities, several greenspaces, and a variety of outdoor dining spaces, the Downtown area has a magnitude of strengths and opportunities.

Several site visits were conducted to observe pedestrian activity, assess physical conditions, and document opportunities for improvement throughout the Historic Downtown area. The design team identified that there is a need for more sidewalk connections, consistent use of materials and site furnishings, improvements to existing public spaces, and a more formal gathering space in front of City Hall.

W. Loveland Avenue Corridor:

Two sidewalk styles are present along W. Loveland Avenue, including the typical brick paver strips and wide concrete sidewalks in front of Bishop's Quarter spanning to Ramsey's Trailside (See Image 1 on page 10). Outdoor dining spaces occupy the sidewalks in front of the businesses (See Image 2 on page 10) on the north-side of the street. There are existing pedestrian light poles, a mix of street furnishings, and street trees have been removed along both sides. The Little Miami Trail bisects this corridor, offering several gathering spaces along the trail, including the plaza around the iconic Loveland Clock.

Karl Brown Way Corridor:

Existing sidewalks along Karl Brown Way are narrow and all brick in a traditional herringbone pattern (See Image 3 on page 10). Several businesses are inaccessible via sidewalks along Karl Brown Way, requiring pedestrians to cut through parking lots or walk alongside the road to access establishments like Cindy's Friendly Tavern, Rodi Italian, TAHONA Kitchen+Bar Loveland, The Landing Event Center, and Rick Ogden Heating/AC (See Image 4 on page 10). The west side of the road is lacking proper crosswalks to access buildings. The southern half of the corridor lacks shade, opportunities to rest, and pedestrian lighting. There is also no pedestrian access leading under the train trestle bridge and the majority of the Corridor north of W. Loveland Avenue lacks pedestrian circulation.

Broadway Street Corridor:

There are varying sidewalk styles on both sides of Broadway Street. In front of the Broadway Brownstones is a 6'-0" concrete sidewalk with a brick border (See Image 5 on page 10). At Loveland Station and the Five Points intersection, the common brick pavers, like those on W. Loveland Avenue, spanning 6'-0" in width are used (See Image 6 on page 10). Street lights have been strategically positioned on the north-side of the corridor. 6'-0" concrete sidewalks are present on the south-side of Broadway in front of Eads Fence Company, Loveland Hardware General Store and Mile 42 Coffee.

N. Second Street Corridor:

Sidewalk conditions at the Five Points intersection have deteriorated as bricks have shifted and divots caused by vehicles have formed (See Image 7 on page 10). This Corridor also contains the brick pavers spanning 6'-0" in width. At certain locations, similar to the E. Broadway Street Corridor, street lights are positioned along the sidewalk allowing 38" for accessibility, meeting ADA compliance (See Image 8 on page 10). Additionally, large planters are located in front of Loveland Stage Company on the east.

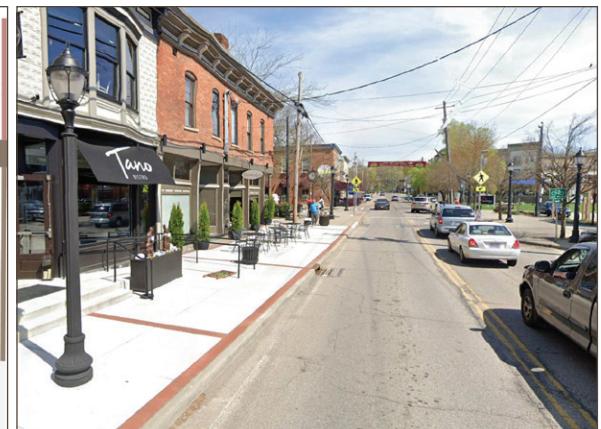


Figure 3. W. Loveland Avenue Corridor: Existing Conditions Section and Photo

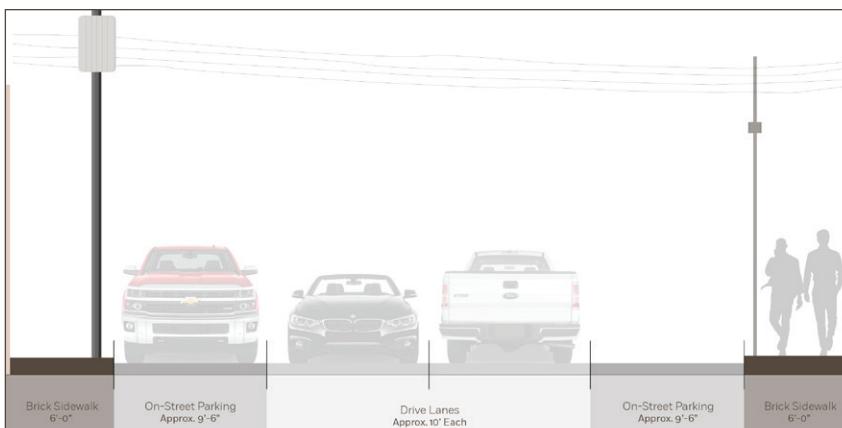


Figure 4. Karl Brown Way Corridor: Existing Conditions Section and Photo

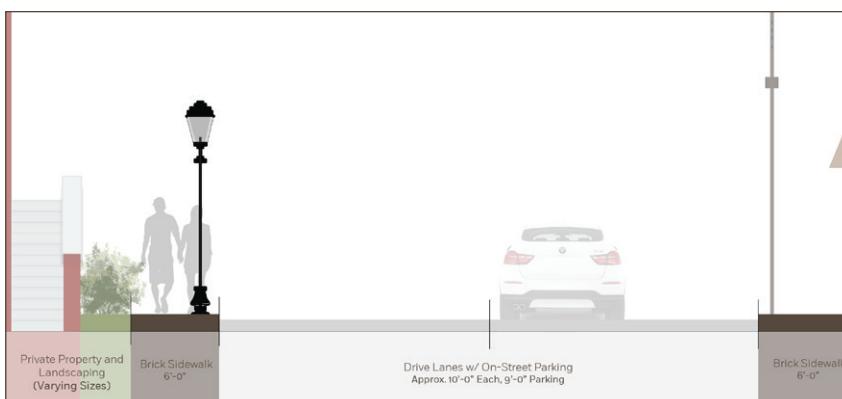


Figure 5. Broadway Street Corridor: Existing Conditions Section and Photo

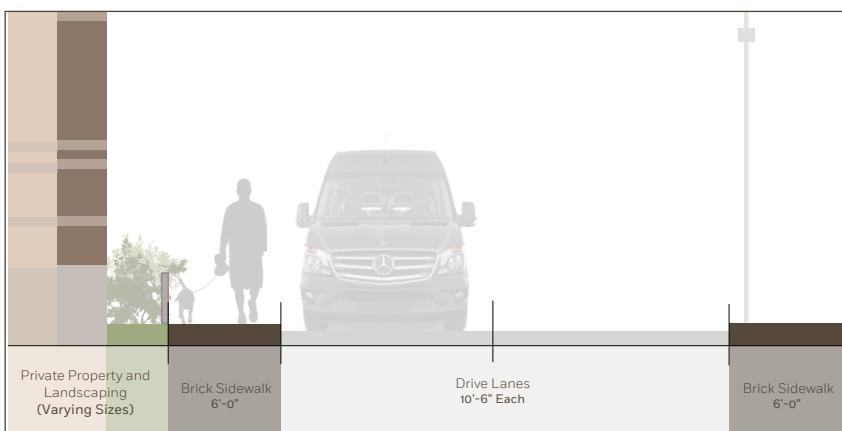


Figure 6. N. Second Street Corridor: Existing Conditions Section and Photo

The images below document existing sidewalk conditions in Downtown Loveland. Their locations are noted in figure 7 on the following page.

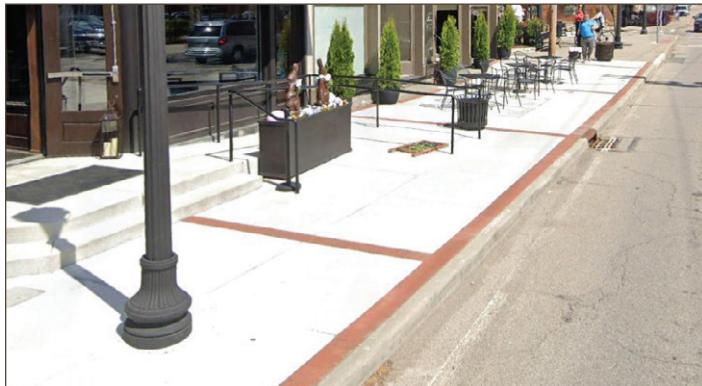


Image 1: New sidewalks along Loveland Avenue

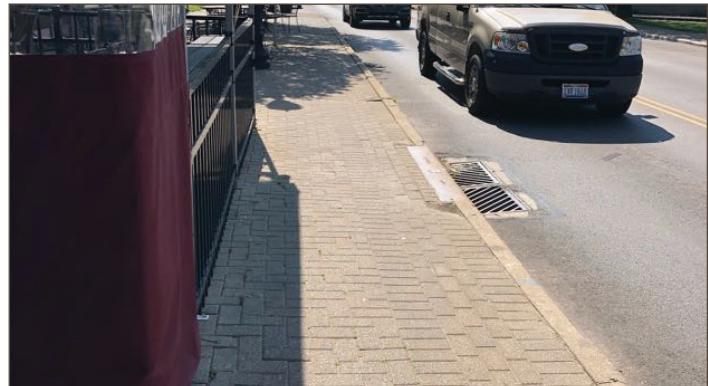


Image 2: Outdoor dining patio along Loveland Avenue



Image 3: Brick pavers along west-side of Karl Brown Way



Image 4: Driveway and sidewalk at TAHONA parking lot



Image 5: E. Broadway along the Broadway Brownstones

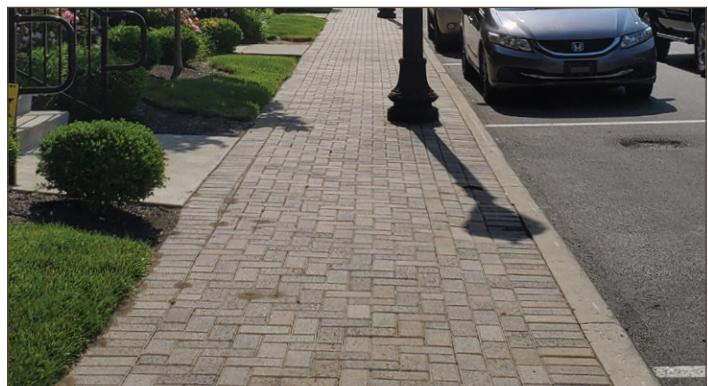


Image 6: E. Broadway along Loveland Station



Image 7: Conditions at Five Points/Loveland Station



Image 8: Sidewalk conditions along landscaping at Loveland Station

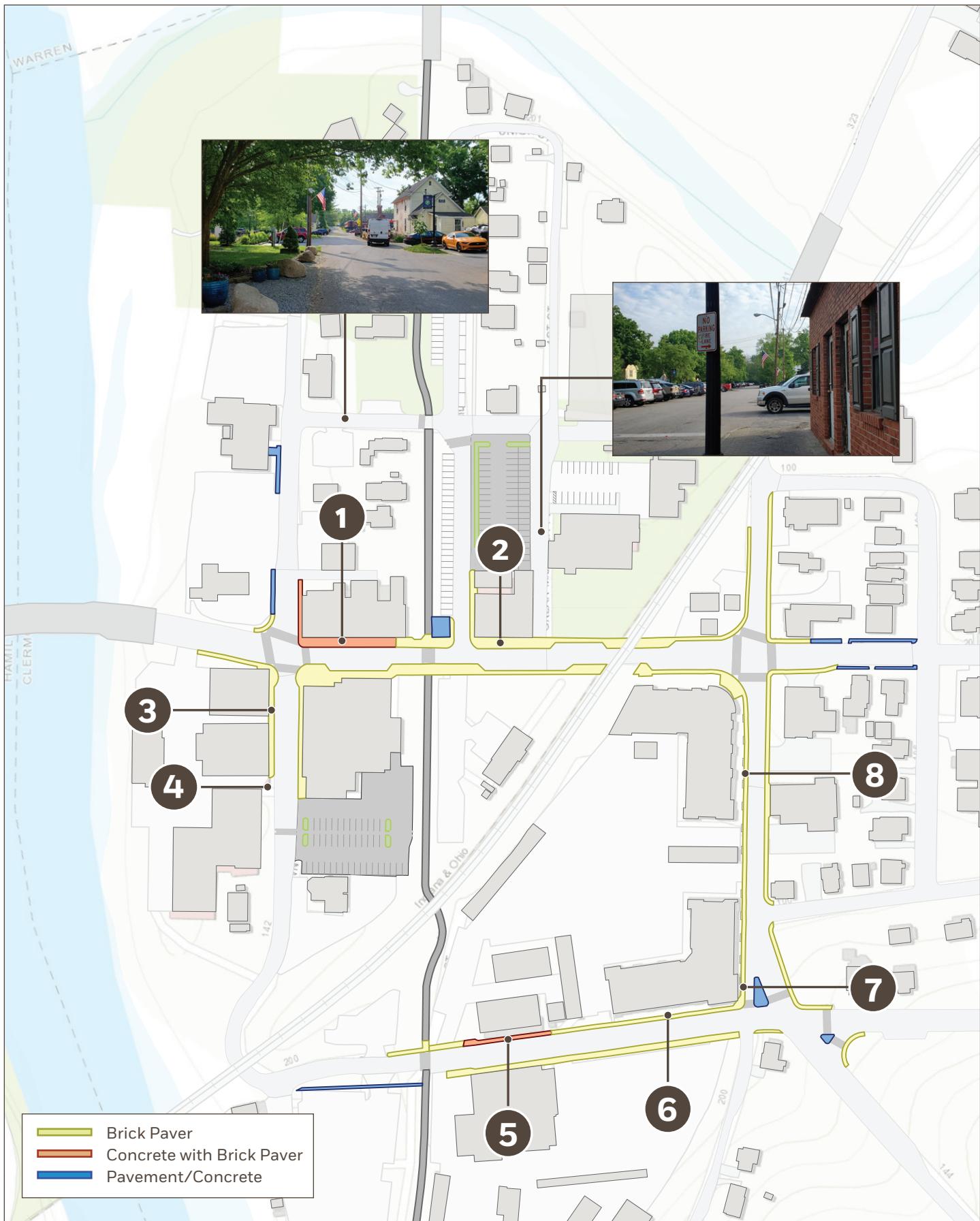


Figure 7. Existing Sidewalk Conditions and Materials Map

Guiding Principles

The following guiding principles were developed during the planning process as the core elements behind the concepts, recommendations, and strategy for the Downtown Loveland Streetscape Master Plan.

Preserve Loveland's Quaint and Unique Downtown Feeling:

- Continuity in design between new development and old areas downtown
- Traditional street furnishings
- More street trees and native landscaping
- Consistent signage and wayfinding, improved community informational signage
- Bring in unique and creative elements to create a sense of place

Walkable Streets and Intersections:

- Wider sidewalks, fill-in missing and narrow sidewalks
- Improved crosswalks, enhancements to the visibility and effectiveness of public crossings
- Traffic calming
- ADA compliance
- Seating with shade trees
- Active street frontages
- Connections between downtown, bike network, and proposed Downtown Parking Facility
- Create Gateways

Improve Outdoor Gathering Spaces:

- Add seating and landscape areas
- Outdoor dining areas
- Amenities such as benches, garbage, and recycling receptacles
- Improve existing gathering places - City Hall, Loveland Plaza, Connection to Nisbet Park, and along Little Miami Trail

Gateways at Important Intersections:

- Create a “sense of arrival” into downtown Loveland
- Emphasize and improve key intersections - Loveland & Karl Brown Way, Loveland & Second, and “Five Points”
- Further promote sense of place

Sustainable Design:

- LED lighting
- Native landscaping, perennials, vegetation that promote a healthy urban forest
- Incorporate “green” stormwater management
- Biodiversity concerns (e.g., pollinator habitat), and other ecosystem services
- Reuse brick pavers

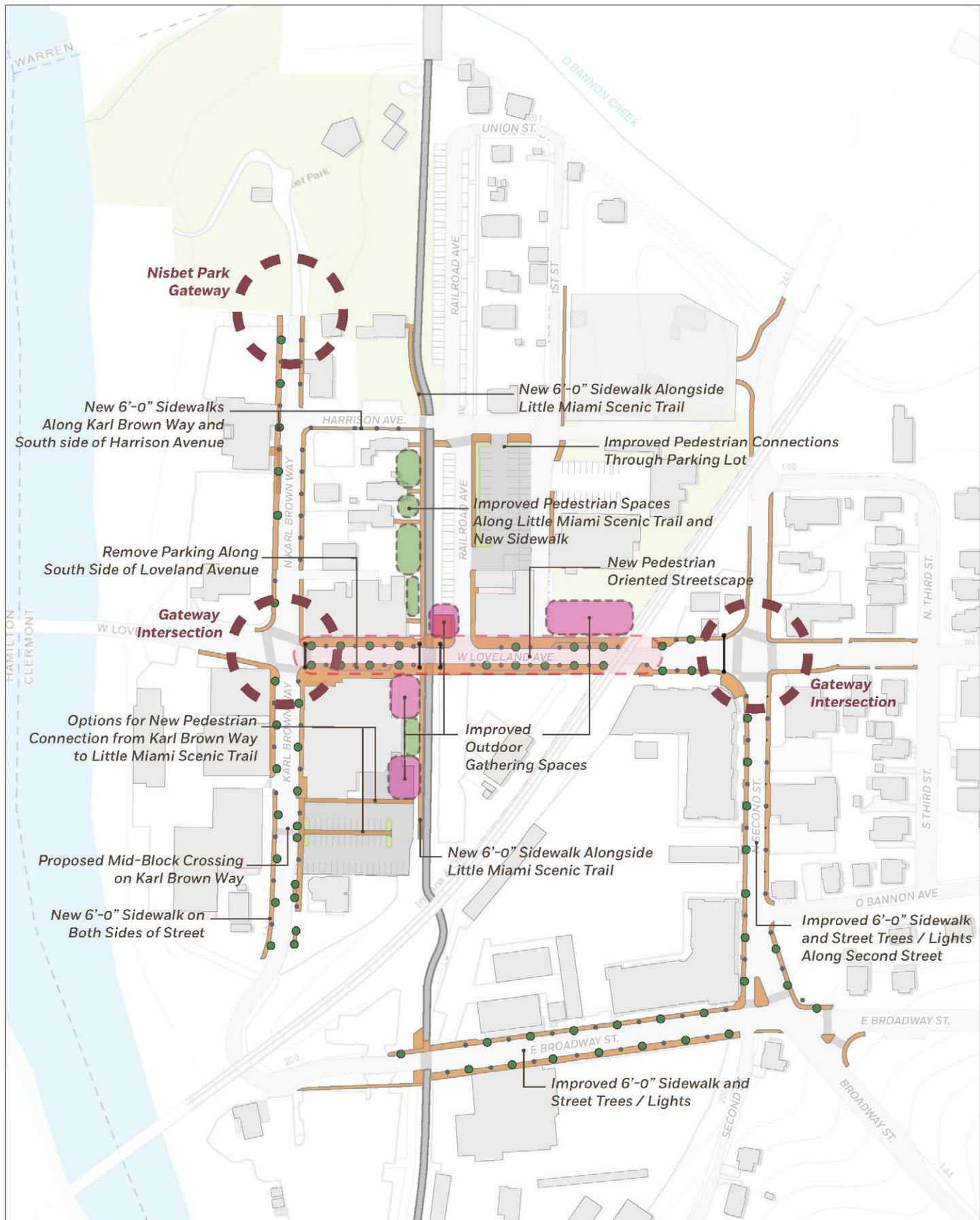


Figure 8. Conceptual Streetscape Plan

Design Guidelines

The following design guidelines outline recommendations and concepts that build on existing strengths and character, improve accessibility and pedestrian safety, promote public spaces, create a uniform aesthetic, and encourage placemaking in Downtown Loveland.

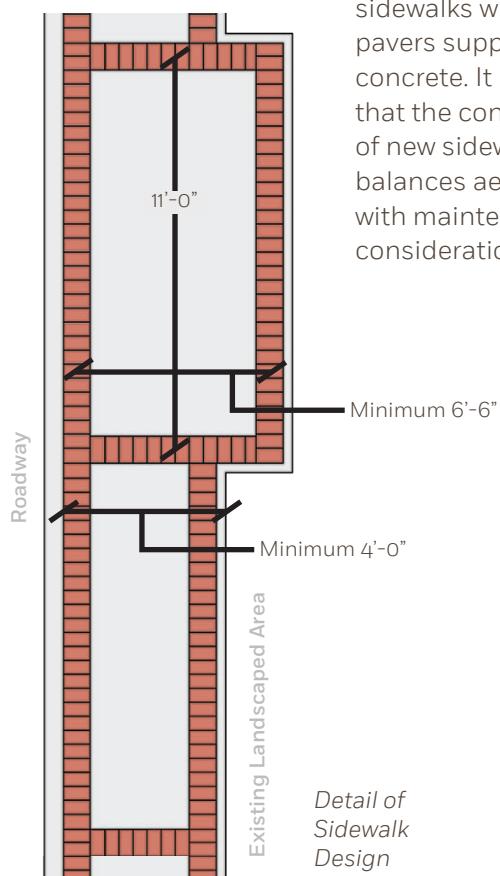
Sidewalks

In an effort to improve the pedestrian experience and create a uniform look that complements the historic environment, sidewalks within the Downtown Area should follow a standard pattern and have distinct zones.

Sidewalk Design

Brick pavers should be incorporated on all sidewalks in the form a paver strip. This paver strip should be one brick length in width running perpendicular to the roadway every 11'-0" on center. Another paver strip of one brick length should run parallel along the back of curb and along the edge of the sidewalk adjacent to private property. Along the Loveland Avenue Corridor, where areas of sidewalk span greater than 5'-0", a brick paver strip running parallel with the roadway should be placed every 8'-0" of sidewalk. It is recommended that the City uses best practices for the

construction of sidewalks with brick pavers supported by concrete. It is preferred that the construction of new sidewalks balances aesthetics with maintenance considerations.



Amenity and Utility Zone

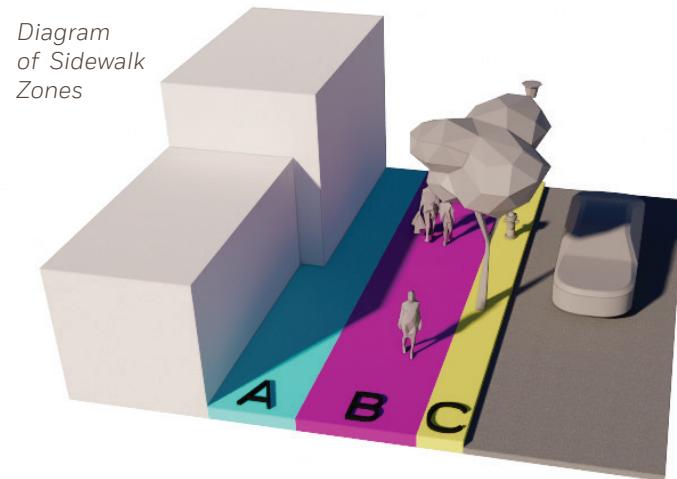
The Amenity and Utility Zone begins at the curb with a brick collector strip and can include electrical poles and utilities, pedestrian lighting, planters, signage, and street trees. The width of this zone will vary between corridors, from 2'-6" in the more narrow corridors to 3'-0" along Loveland Avenue, as the right of way allows for more space for improvements.

Pedestrian Zone

This Pedestrian Zone runs parallel to the Amenity and Utility Zone, which provides a buffer of streetscape elements and utilities between pedestrians and vehicles. Similar to the other zones, the size of the Pedestrian Zone will vary between corridors, but should provide a clear, ADA accessible path of at least 3'-8" and up to 8'-0" in width.

Business and Private Property Zone

The Business and Private Property Zone allows additional sidewalk space to be designed and utilized as places for gathering, outdoor dining, and creating an additional buffer along a corridor. Along Loveland Avenue, this space should be incorporated to provide a minimal barrier between outdoor dining and pedestrian traffic with the intention of promoting a historic, downtown character.



- A. Business and Private Property Zone
- B. Pedestrian Zone
- C. Amenity and Utility Zone

Site Furnishings

Streetscape furnishings should be of a similar look and quality as **Dumor Site Furnishings** to match the existing furniture that has been implemented throughout Downtown. Benches, bike racks, light poles, planters, trash receptacles, and additional site furnishings should contain decorative elements that enhance the existing character of the Corridor.

Lighting Layout

Along the Loveland Avenue Corridor, fixtures should be aligned directly across the street from one another at a spacing of 44'-0" from center. Driving down this Corridor will present a more formal, traditional downtown presence and can signal a reduction in vehicle speed from motorists. Other Corridors should incorporate staggered positioning of pedestrian lights spaced 66'-0" from center. Spacing is assuming that trees would be 33'-0" on center from every pedestrian light. To meet ADA accessibility requirements, sidewalk bump-outs into roadways or into existing landscaped areas will need to be constructed where light poles are placed on sidewalks that are less than 4'-0" in width. Banner arms, hanging planters, and spacing are encouraged along Corridors. Consider potential power connections to be used for holiday lighting and/or vendors. LED fixtures are encouraged and the City should consider measures to reduce light pollution.

Street Trees & Planters

Prior to any construction on a streetscape project, it is recommended to use a tree consultant to help guide tree selection during the design phase. Trees should be of a deciduous variety, visually permeable, and fast growing. Trees selected for W. Loveland Avenue should be taller and spaced 44'-0" on center with a pedestrian light in between. This pattern should be mirrored on both sides of the street for a boulevard effect. All other Corridors should incorporate a staggered spacing along the roadway with trees spaced every 66'-0" on center and pedestrian lights in between. Concrete planters with perennial, native plantings are to be used along streets where the Business Zone restricts widening of the Pedestrian Zone. Using concrete also provides opportunities for public artwork on the planters that can enhance the sense of place and identity of each Corridor. To meet ADA accessibility requirements, sidewalk bump-outs into roadways or into existing landscaped areas will need to be constructed where tree wells are placed on sidewalks that are less than 4'-0" in width. The City should keep maintenance and budget in mind when selecting appropriate landscaping.



Existing benches seen in Loveland



Existing pedestrian lighting examples currently in Downtown Loveland with mast arms to support banners, signage, and landscaping elements



L: Street trees detail

R: Decorative planter example

Design Guidelines Continued

High Visibility Crosswalks

Provide visually appealing crosswalks that enhance the pedestrian experience while meeting ODOT requirements. The City should consider enhancements to signalized intersections through colored concrete with a stamped brick pattern and high visibility white bands along the perimeter.



Example of a high visibility crosswalk

Pocket Parks & Plazas Along Bike Trail

Explore opportunities to incorporate additional greenspace in the form of small parks and plazas along W. Loveland Avenue and the Little Miami Scenic Bike Trail. It is ideal to first focus on developing parks and plazas on existing, publicly-owned properties. These spaces should be an extension of the streetscape design with the brick paver strip and concrete pavement pattern, pedestrian lighting, and furnishings to create a base level of uniformity throughout the Historic Downtown. They should include bicycle amenities, communal gathering and seating areas, and landscaping. It is encouraged to add a unique element to create an iconic space. Pocket parks and plazas will add additional texture and depth to Downtown Loveland and provide destination stops near local businesses for cyclists and pedestrians alike.



Example of Loveland Clock Tower Plaza Redevelopment

Gateways

The City is encouraged to incorporate gateway elements and make unique improvements, like focused landscaping, at major intersections that build on the existing design and architectural characteristics throughout the Historic Downtown area. It is recommended that these elements be a combination of brick and concrete with accents of black metal. Explore the potential of using lighting as a way to emphasize gateway elements. Gateways areas also provide a great opportunity to work with local artists or involve the community to create an iconic feature through public art. Refer to the City's ***Historic Preservation & Planning District Design Review Guidelines*** page 76 for specific guidelines on exterior art and murals.



Example of a gateway pillar for the intersection of W. Loveland Avenue & Karl Brown Way

Signage & Wayfinding

The City should consider branding when implementing signage and wayfinding elements throughout the Downtown Area, building on what is already existing. It is recommended to maintain a consistent look throughout roadway signage and place wayfinding signage in strategic locations to help pedestrians navigate Downtown with ease. A cohesive material, color, and style palette should be used implemented. The City is also encouraged to find a unique identifier, like a color or icon/symbol, to represent each Corridor which can then be used on the wayfinding elements to help further enhance the sense of place for visitors of the Downtown area.

For commercial signage, the *Historic Preservation & Planning District Design Review Guidelines* the City has adopted ([page 74 seen below](#)) align with the goals of this streetscape plan. It is recommended that the City revisit their zoning code and consider updating the code to reflect these new goals and help with implementation for future businesses.

SIGNS

On-premise business signs serve several important functions including serving as a communication device and prompting a purchase. Advertising is important and particularly necessary for independent businesses to compete against nationally recognized retailers. Independent businesses generally rely on their on-premise signage to attract attention and customers. In a historic downtown, the viability of the business is directly linked to the quality of its signage. It is the duty of these guidelines to balance the needs of the business with the integrity of the historic district and to determine compatibility between the sign and the specific building and the historic district as a whole.

Guidelines

- 1.** Wood, metal, MDO, acrylic, sign foam and any number of other materials that can be painted or finished in some manner may be used if the finish is deemed compatible with the historic district on the specific building.
- 2.** Sign colors should be consistent with the nature of the business and logo colors are important for branding businesses. Business owners are encouraged to add whimsy to their signs so that the signs showcase the nature of the business. Multiple colors are appropriate when they complement the color scheme of the building and fit the character of the business.
- 3.** Letters may be individually manufactured and applied directly to the side of a building or applied to a sign face, window or awning. Again, the material is less important than the finished look which should not look like plastic or be shiny. Therefore applied letters or painted letters may both be appropriate.
- 4.** The size of each sign and the total area of signs should be appropriate in scale to the building within the restrictions of the City of Loveland Zoning Ordinance. In general, while signs at or below eye-level should be 12-inch high letters for commercial structures and 6-inch high for residential structures, taller buildings may require taller letters or symbols.

Page from *Historic Preservation & Planning District Design Review Guidelines*
on signage for Downtown Loveland

W. LOVELAND AVENUE CORRIDOR



The W. Loveland Avenue Corridor is bounded by the bridge spanning the Little Miami River following W. Loveland Avenue to N. Second Street. It acts as a central spine of the Historic Downtown and sets itself apart from the other corridors with wider sidewalks, outdoor dining, and a few public gathering spaces where there is also access to the Little Miami Scenic Bike Trail. The main priorities for this corridor are emphasizing a boulevard-type feel, providing more greenspaces, improving existing public spaces, and creating a gateway into Historic Downtown Loveland. The following recommendations outline ways to achieve these goals:

Boulevard:

- Evenly spaced pedestrian lights and street trees at 22'-0" on center in an alternating pattern, mirrored on either side of the street.
- Maintaining an distinct outdoor seating or cafe-area zone on sidewalks.
- Providing additional benches in existing shaded areas of the sidewalks.
- Enhancing existing landscaped beds.

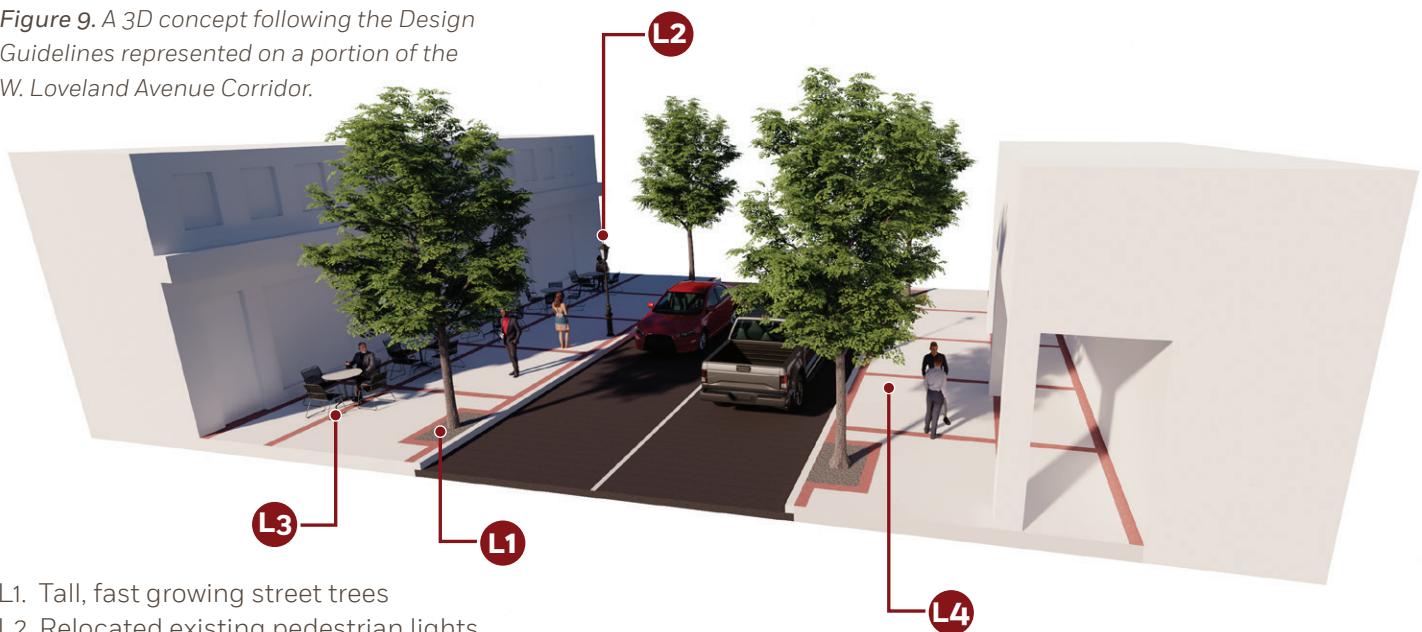
Greenspace:

- Expand the plaza space at Railroad and W. Loveland Avenues and incorporate the iconic Loveland Clock.
- Create a safer Bike Trail crossing over W. Loveland Avenue through advanced safety measures like flashing crosswalk lights.
- Provide a path for pedestrians along the Bike Trail separate from bicycle traffic.
- Improve pedestrian connectivity from parking lots on Railroad Avenue to the Bike Trail with paved walkways and stairs .
- Create a new greenspace in front of City Hall to be used as a community space. The City has already begun the process of developing this space.
- Seek out potential opportunities on privately-owned property such as the fountain area in front of JackRabbit Loveland - these spaces can include a mix of hardscape and landscape.

Gateway:

- Install a gateway sign after the crossing over the Little Miami River.
- Enhance intersections through unique crosswalk pavement designs using stamped concrete.
- Seek potential improvements at the rail crossing parallel to Loveland Station.

Figure 9. A 3D concept following the Design Guidelines represented on a portion of the W. Loveland Avenue Corridor.



L1. Tall, fast growing street trees

L2. Relocated existing pedestrian lights

L3. Updated sidewalk pattern following Guidelines

L4. Sidewalk expansion over existing on-street parking

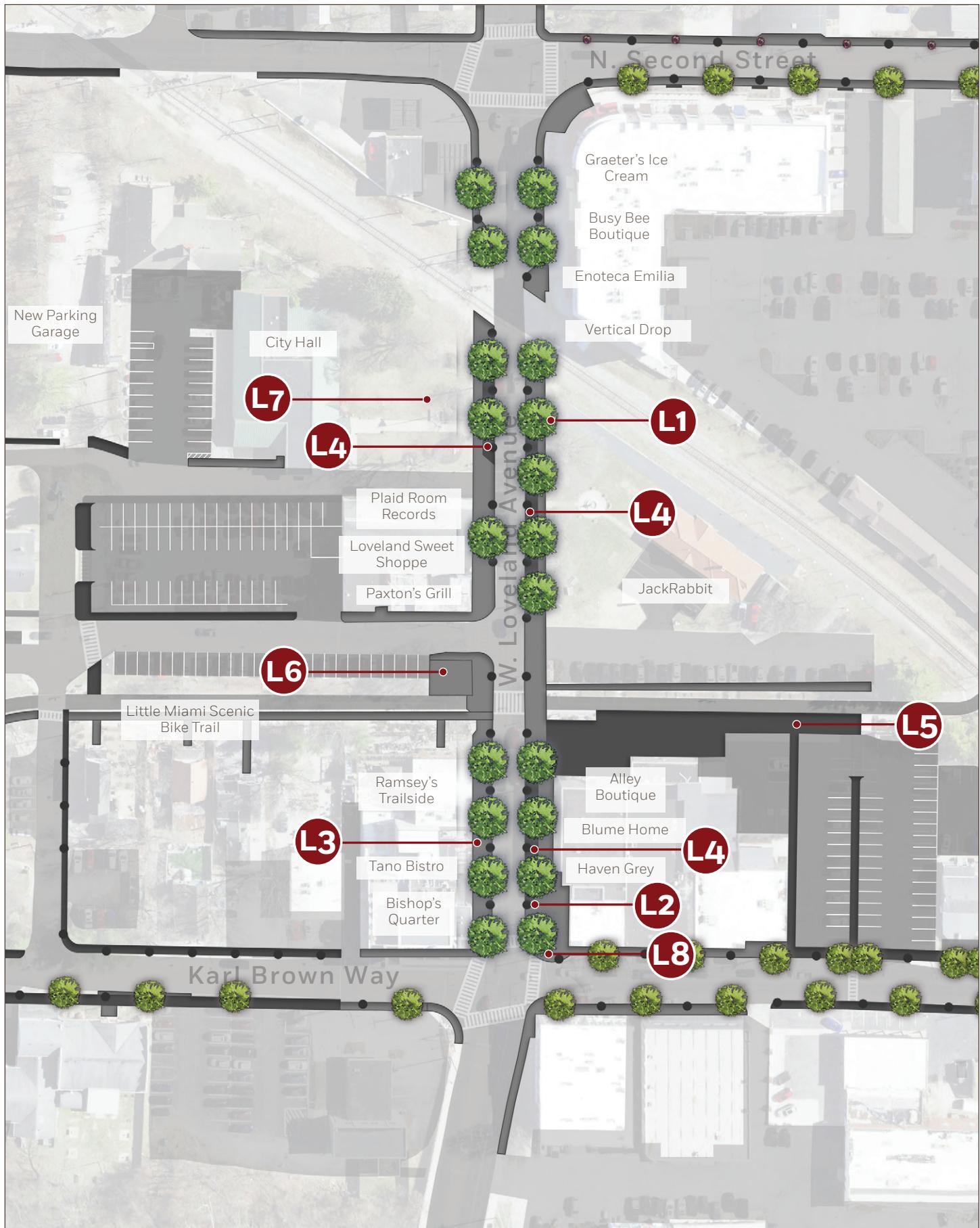


Figure 10. A conceptual plan for the entire W. Loveland Avenue Corridor.



Figure 11. A 3D graphic concept following the Design Guidelines showing a portion of the W. Loveland Avenue Corridor.

L1. Mature Street Trees

Street trees along W. Loveland Avenue should be tall, fast growing, and spaced closer together than other Corridors, at 44'-0" in an alternating pattern with pedestrian lights in between.

L2. Relocated Pedestrian Lighting

Relocating the existing pedestrian lights along the Corridor to follow the pattern and spacing outlined in the Design Guidelines will add to the overall desired aesthetic.

L3. Updated Sidewalk Design

Updating the brick pattern on existing sidewalks according to the Design Guidelines will create a cohesiveness throughout the Downtown area and delineate the Pedestrian Zone from the Business Zone, which will provide a designated space for cafe-style seating and restaurant waiting areas.

L4. Sidewalk Expansion

Expanding the sidewalk over existing on-street parking will allow for a wider Pedestrian Zone that matches the conditions throughout the Corridor. This will also improve traffic flow.

L5. Public Space Improvements

Improving the existing pavement adjacent to the Bike Trail and Alley Boutique to follow the brick pattern outlined in the guidelines will create a plaza and pedestrian connection to the Karl Brown Way Corridor, adding to the overall cohesiveness with the Downtown area.

L6. Loveland Clock Plaza Expansion

Expanding and improving the plaza around the Loveland Clock will create an iconic gathering place along the Bike Trail and in the heart of Downtown.

L7. New City Hall Plaza

Creating a new gathering space in front of City Hall is a great opportunity to add a community resource. This is currently being implemented by the City.

L8. Gateway Opportunity

Adding a gateway element near the intersection of Karl Brown Way and W. Loveland Corridor will create a landmark feature when entering Historic Downtown.



Figure 12. A 3D graphic concept following the Design Guidelines showing the redevelopment of the Loveland Clock Tower Plaza along the Little Miami Scenic Bike Trail.

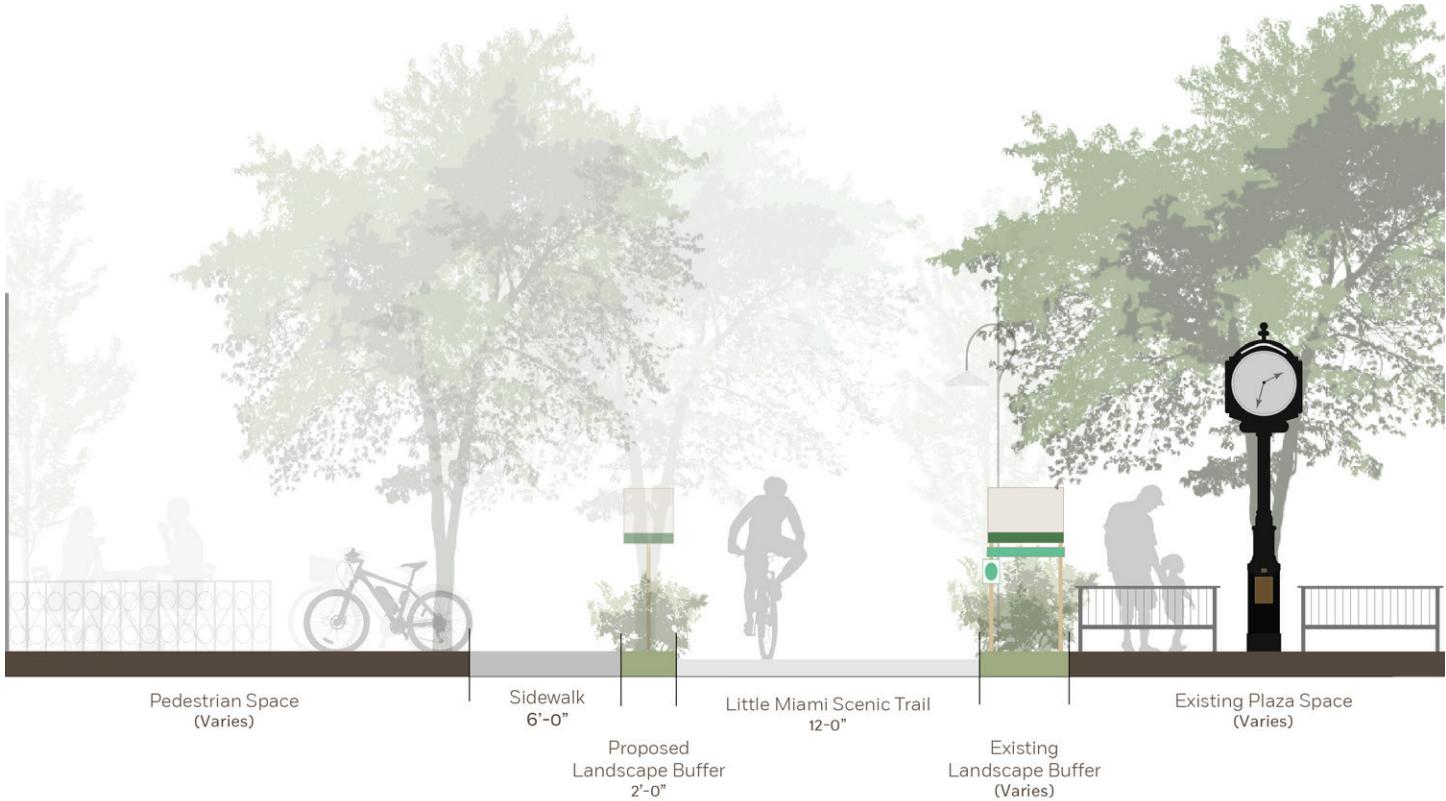


Figure 13. A section drawing of the proposed conceptual redevelopment along the Little Miami Scenic Bike Trail at the Loveland Clock Plaza.



Figure 14. A 3D graphic concept following the Design Guidelines showing public space improvements along the Little Miami Scenic Bike Trail south of W Loveland Avenue.



Figure 15. A section drawing of the proposed conceptual public space improvements along the Little Miami Scenic Bike Trail south of W Loveland Avenue.

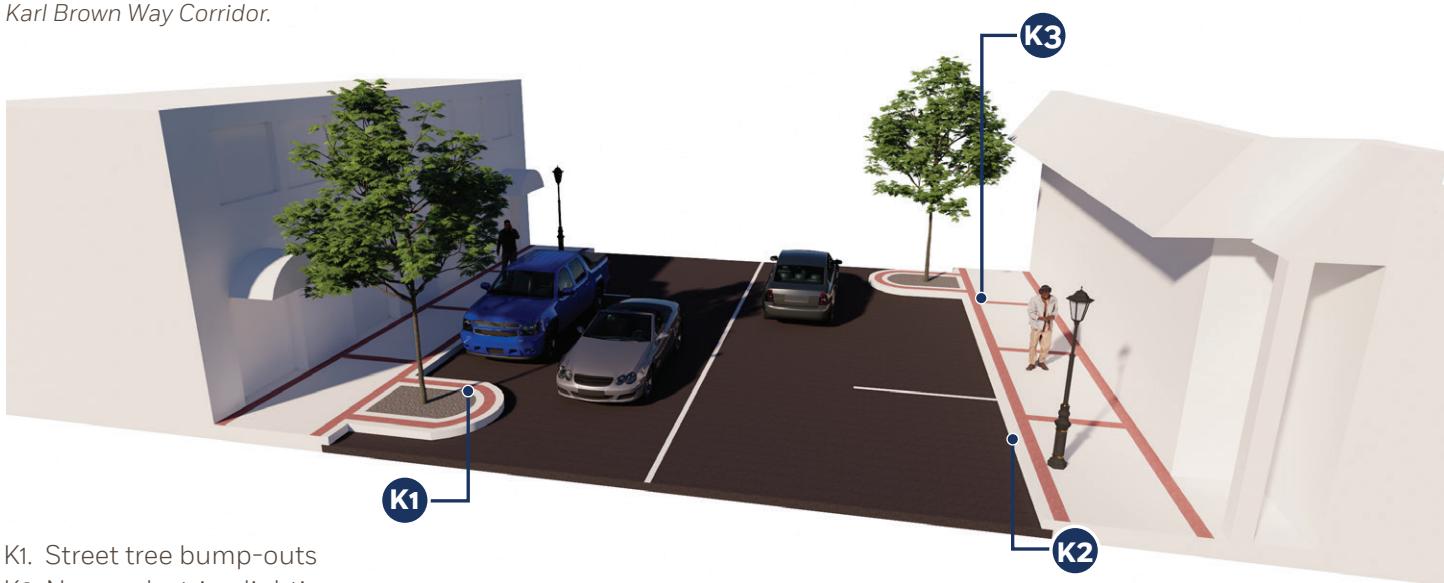
KARL BROWN WAY CORRIDOR



The Karl Brown Way Corridor extends from Nisbet Park to the Railroad Bridge. This corridor acts as the western boundary of the Historic Downtown area and offers a unique opportunity to connect pedestrians to both Nisbet Park to the north and local restaurants, event spaces, and other outdoor recreation amenities to the south. The main priority for this corridor is to establish a continuous, shaded pedestrian path from one end of the corridor to the other that also connects to the Little Miami Scenic Bike Trail. The following are recommendations to improve pedestrian connectivity throughout the Karl Brown Way Corridor:

- Construct new sidewalks from Nisbet Park to W. Loveland Avenue on both sides of Karl Brown Way and add street trees on the east side.
- Construct new sidewalk from Karl Brown Way along the south side of Harrison Avenue to connect to the Bike Trail.
- Re-introduce street trees at intersection of W. Loveland Avenue and Karl Brown Way where existing tree wells have been filled in.
- Add bump-outs for street trees south of W. Loveland Avenue where sidewalks are more narrow. The design of any bump-outs needs to consider stormwater management to make sure stormwater inlets are properly placed and debris does not build up in the bump-outs. May also consider removing on-street parking in these locations to create a wider sidewalk
- Introduce potted plants and landscaping under existing awnings on east side of Karl Brown Way south of W. Loveland Avenue.
- Continue existing sidewalks south of W. Loveland Avenue extending to the Landing Event Center's rear parking lot on other west side and to Cindy's Friendly Tavern on the east.
- Alternate between street trees and pedestrian lights at a spacing of 33'-0" on center.
- Add a sidewalk connection from Karl Brown Way to the Bike Trail through the parking lot south of Montgomery Cyclery's building to the plaza space hosting the Valentine Ladies of Loveland sculpture.
- Explore possibilities of reducing the roadway width through this Corridor to better incorporate a pedestrian friendly connection with street trees.
- Study locations for constructing a crosswalk to connect businesses on both sides of Karl Brown Way.

Figure 16. A 3D concept following the Design Guidelines represented on a portion of the Karl Brown Way Corridor.



- K1. Street tree bump-outs
- K2. New pedestrian lighting
- K3. Updated sidewalk pattern following Guidelines

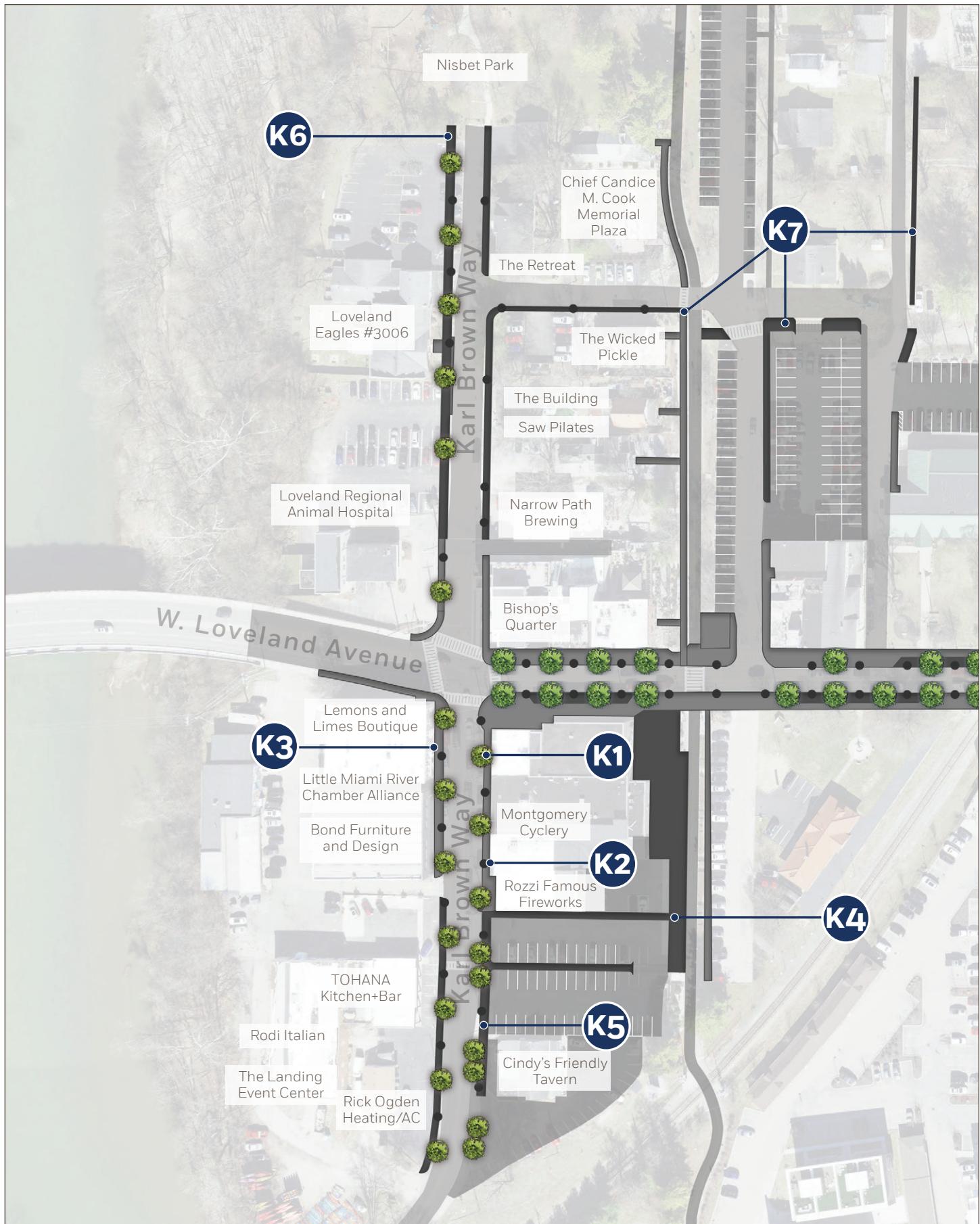


Figure 17. A conceptual plan for the entire Karl Brown Way Corridor.



Figure 18. A 3D graphic concept following the Design Guidelines showing a portion of the Karl Brown Way Corridor.

K1. Street Tree Bump-Outs

Adding street trees will provide shade along Karl Brown Way. To ensure ADA accessibility, Street trees should be placed in bump-outs along the south end of the Corridor. Spacing should follow the Design Guidelines and re-striping existing parking spaces will be necessary. The design of any bump-outs needs to consider stormwater management to make sure stormwater inlets are properly placed.

K2. New Pedestrian Lighting

Adding pedestrian lighting along all existing and new sidewalks following the spacing specified in the Guidelines will ensure overall Downtown cohesiveness and pedestrian safety throughout the Corridor,

K3. Updated Sidewalk Design

Updating the brick pattern on existing sidewalks according to the Design Guidelines will create a cohesiveness throughout the Downtown area Corridors.

K4. New Bike Trail Connection - Cyclery Building

Creating a connection to the Bike Trail on the south side of the Montgomery Cyclery Building will increase pedestrian connectivity on a local and regional level.

K5. Sidewalk Extension - Local Businesses

Continuing the existing sidewalk south to the Landing Event Center and Cindy's Friendly Tavern with a mid block crossing in front of TOHANA Kitchen+Bar will better connect those businesses to pedestrian traffic from W. Loveland Avenue. New sidewalks should follow Design Guidelines.

K6. Sidewalk Extension - Nisbet Park

Extending the existing sidewalks north to Nisbet Park will better connect pedestrians to a great community resource and outdoor recreation space. New sidewalks should follow Design Guidelines.

K7. New Bike Trail & Parking Garage Connection - Harrison Avenue

Creating a connection to the Bike Trail and new Parking Garage via Harrison and Railroad Avenues will increase pedestrian connectivity and re-striping the surrounding surface lots will make parking more efficient.

E. BROADWAY STREET CORRIDOR



The Broadway Street Corridor extends from Loveland Canoe & Kayak near the Railroad Bridge to the “Five Points” intersection. This corridor acts as the southern boundary of the Historic Downtown area and offers residents of the adjacent apartment complexes easy access to the Little Miami Scenic Bike Trail and the local businesses along Broadway Street. The main priorities for this corridor are to improve existing sidewalks and roads, enhance connection to businesses, explore opportunities for greenspace improvements, and incorporate a gateway element into the Downtown area. The following recommendations outline ways to achieve these goals:

Sidewalks:

- Add street trees to both sides of Broadway Street alternating with pedestrian light poles spaced 33'-0" apart.
 - Existing light poles on north side of corridor may need to be relocated.
- Construct sidewalk bump-outs on north side of corridor where there are trees, pedestrian lights, and utility poles to insure ADA accessibility.
- Widen sidewalk on south side of Broadway Street to the existing wall to allow room for street trees and pedestrian lighting.
- Implement sidewalk design standards outlined in this plan.
- Study driveway improvements closer to the “Five Points” intersection

Businesses:

- Consider implementing facade updates on the south side of Broadway Street.
- Encourage bistro-style seating where space allows.

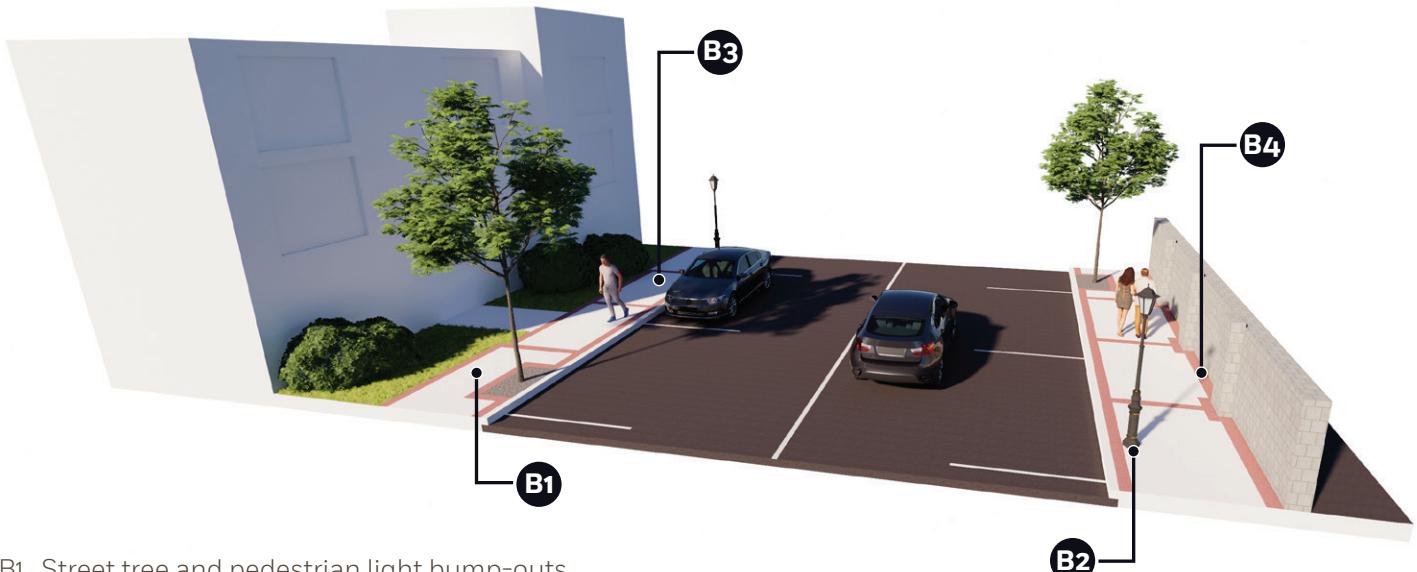
Greenspace:

- Explore improving greenspace at the Little Miami Scenic Bike Trail crossing to create a community resource.

Gateway:

- Consider a gateway element at the “Five Points” intersection like a monument pillar and/or focused landscaping.
- Enhance the “Five Points” intersection through unique crosswalk pavement designs using stamped concrete.
- Conduct a traffic study to re-configure the “Five Points” intersection to alleviate traffic back-up and improve pedestrian safety.

Figure 19. A 3D concept following the Design Guidelines represented on a portion of the E. Broadway Street Corridor.



- B1. Street tree and pedestrian light bump-outs
- B2. New pedestrian lighting
- B3. Updated sidewalk pattern following Guidelines
- B4. Sidewalk expansion to widen Pedestrian Zone

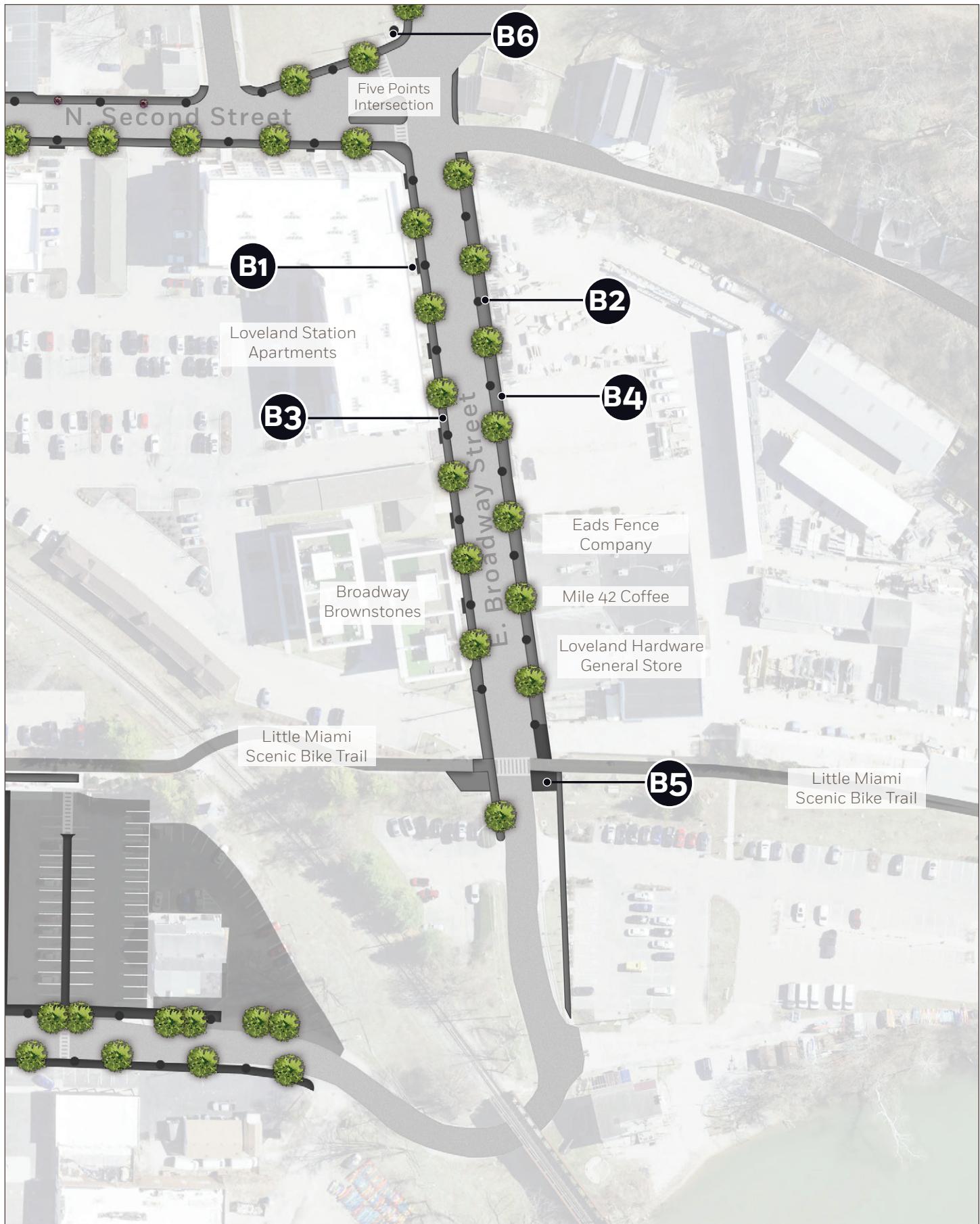


Figure 20. A conceptual plan for the entire E. Broadway Street Corridor.



Figure 21. A 3D graphic concept following the Design Guidelines showing a portion of the E. Broadway Street Corridor.

B1. Street Tree & Pedestrian Light Bump-Outs

Adding street trees along the north side of E. Broadway Street will require bump-outs to ensure ADA accessibility. Bump-outs should also be added when existing light poles are relocated to follow spacing outlined in the Design Guidelines to ensure ADA accessibility.

B2. New Pedestrian Lighting

Adding pedestrian lighting along the south side of the E. Broadway Street following spacing specified in the Guidelines will ensure overall cohesiveness down the Corridor and within Downtown, while increasing pedestrian safety.

B3. Updated Sidewalk Design

Updating the brick pattern on existing sidewalks according to the Design Guidelines will create a cohesiveness throughout the Downtown area Corridors.

B4. Sidewalk Expansion

Widening the sidewalk along the south side of E. Broadway Street to extend to the wall separating the sidewalk from Eads Fence Company's parking lot will ensure ADA accessibility when adding trees and pedestrian lighting on that side of the street.

B5. Greenspace Improvements

Creating a greenspace at the Little Miami Scenic Trail Crossing will add a community resource along this Corridor and compliment the public spaces along the Bike Trail to north within the W. Loveland Street Corridor.

B6. Gateway Opportunity

Adding a gateway element at the Five Points Intersection will create a landmark feature when entering Historic Downtown from the Southeast.

N. SECOND STREET CORRIDOR



The N. Second Street Corridor extends from W. Loveland Avenue to the “Five Points” intersection. This corridor acts as the eastern boundary of the Historic Downtown area and offers residents of the adjacent apartment complexes easy access to amenities along W. Loveland Avenue. Like Broadway Street, the main priorities for this corridor are to improve existing sidewalks and roads, enhance connection to businesses, and incorporate a gateway element into Downtown. The following recommendations outline ways to achieve these goals:

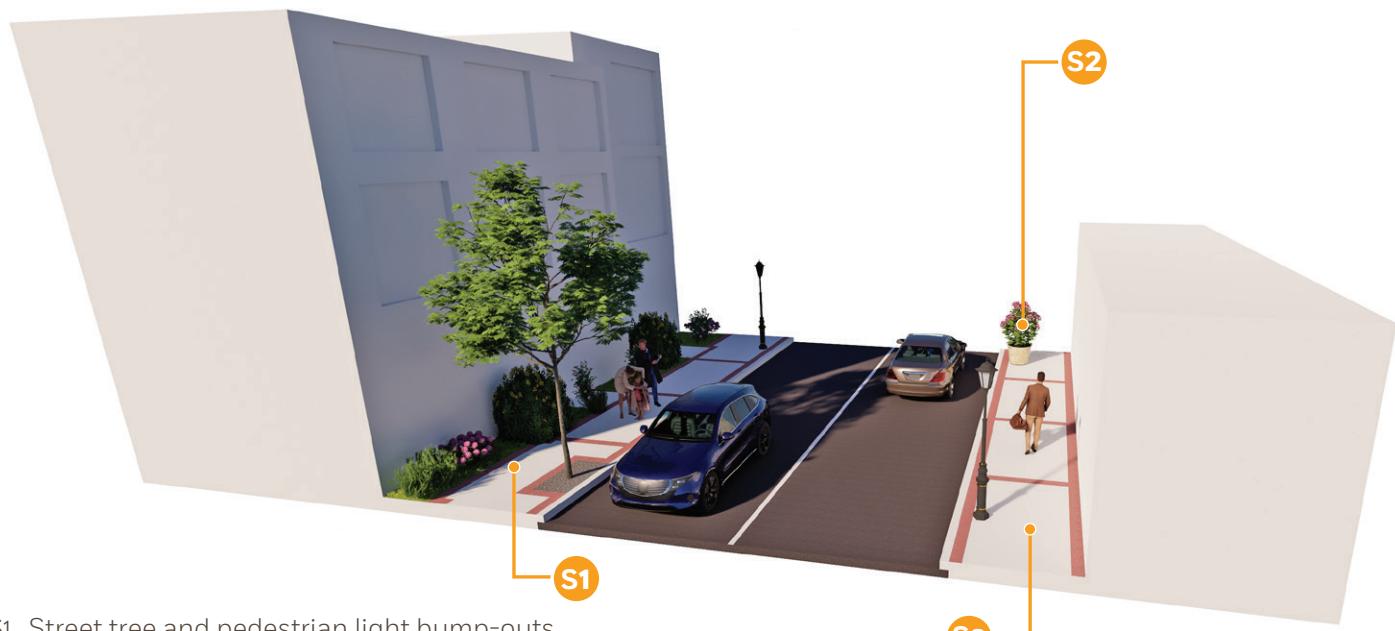
Sidewalks:

- Add street trees to the west side of N. Second Street alternating with pedestrian light poles spaced 33'-0" apart.
- Construct sidewalk bump-outs on west side of corridor where there are trees, pedestrian lights, and utility poles to ensure ADA accessibility.
- Add planters in place of trees to the east side of N. Second Street alternating with pedestrian light poles spaced 33'-0" apart.
- Consider knee walls or other engineering solutions where sidewalks are in disrepair and pose a safety hazard along Loveland Station Apartments.
- Implement sidewalk design standards outlined in this plan.

Gateway:

- Consider focused landscaping at the intersection of W. Loveland Avenue and N. Second Street to act as a gateway element.
- Enhance the W. Loveland Avenue and N. Second Street intersection through unique crosswalk pavement designs using stamped concrete.

Figure 22. A 3D concept following the Design Guidelines represented on a portion of the N. Second Street Corridor.



S1. Street tree and pedestrian light bump-outs
S2. Planters in place of street trees
S3. Updated sidewalk pattern following Guidelines



Figure 23. A conceptual plan for the entire N. Second Street Corridor.



Figure 24. A 3D graphic concept following the Design Guidelines showing a portion of the N. Second Street Corridor.

S1. Street Tree & Pedestrian Light Bump-Outs

Adding street trees along the west side of N. Second Street will require bump-outs to ensure ADA accessibility. Bump-outs should also be added when existing light poles are relocated to follow spacing outlined in the Design Guidelines to ensure ADA accessibility. Special care should be taken to make certain the Pedestrian Zone is ADA accessible when relocating the lighting on the east side of the street.

S2. Planters

Using planters in place of street trees should be required on the east side of the Corridor as sidewalk expansion is not possible.

S3. Updated Sidewalk Design

Updating the brick pattern on existing sidewalks according to the Design Guidelines will create a cohesiveness throughout the Downtown area Corridors.

S4. Gateway Opportunity

Adding a gateway element at the intersection of W. Loveland Avenue and N. Second Street will create a landmark feature when entering Historic Downtown from the East.

Appendix A - Typical Sections

The following graphics are sections of each Corridor that reflect a conceptual layout following the Downtown Streetscape Design Guidelines.

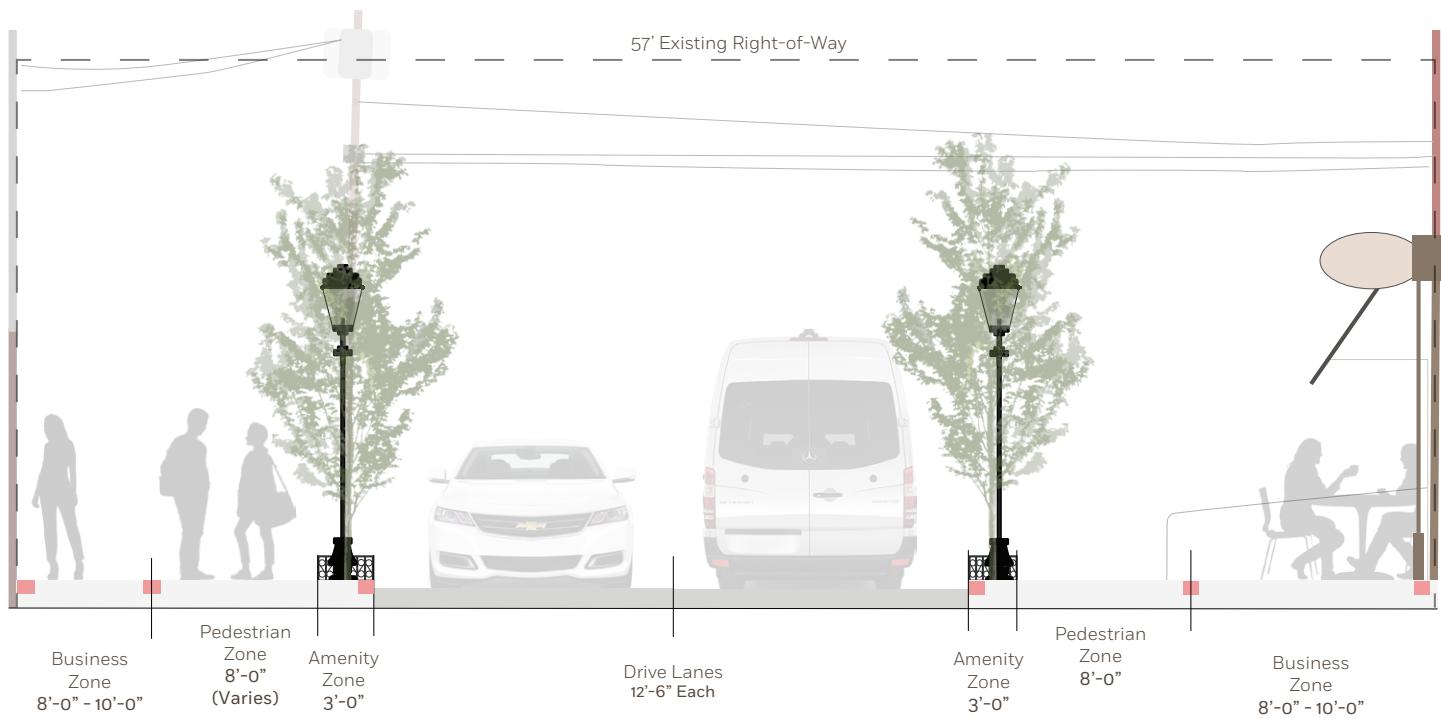


Figure A1. W. Loveland Avenue Corridor

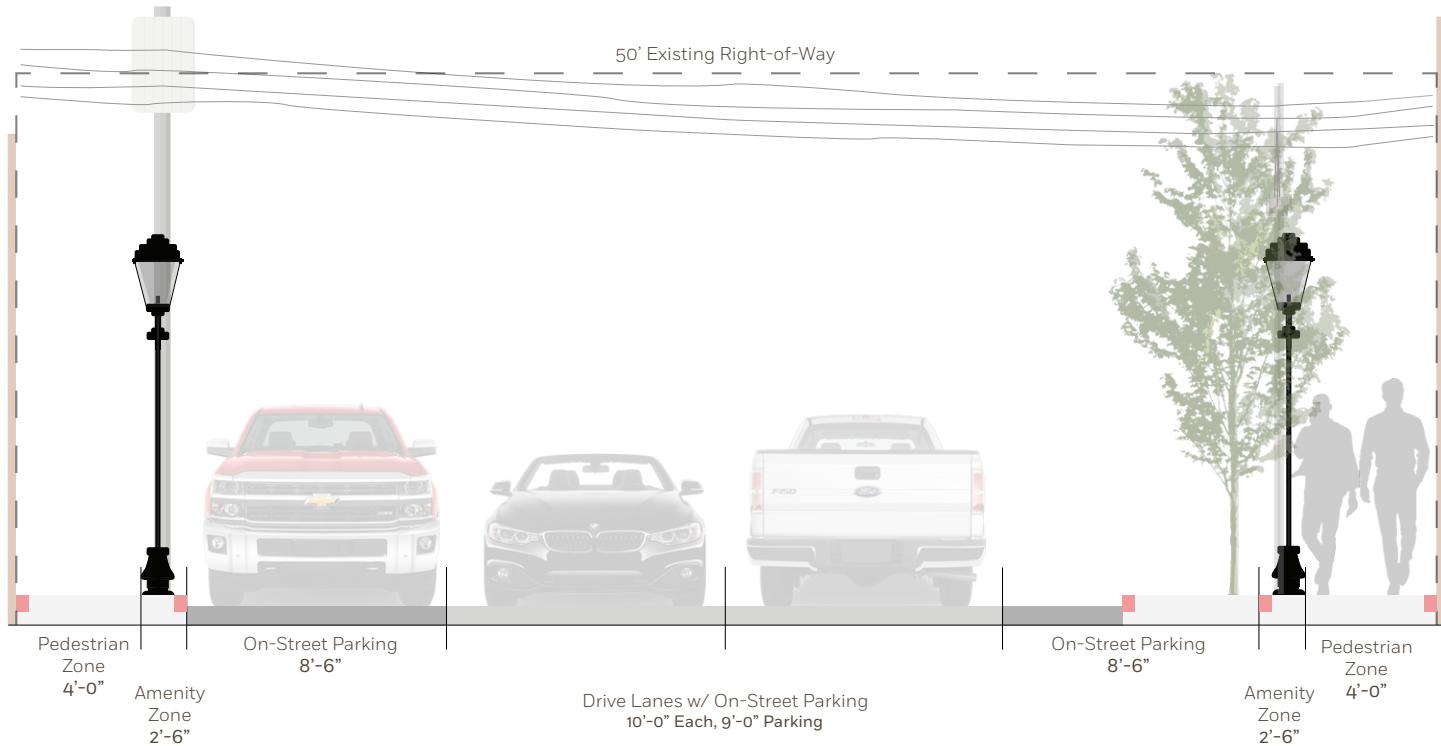


Figure A2. Karl Brown Way Corridor

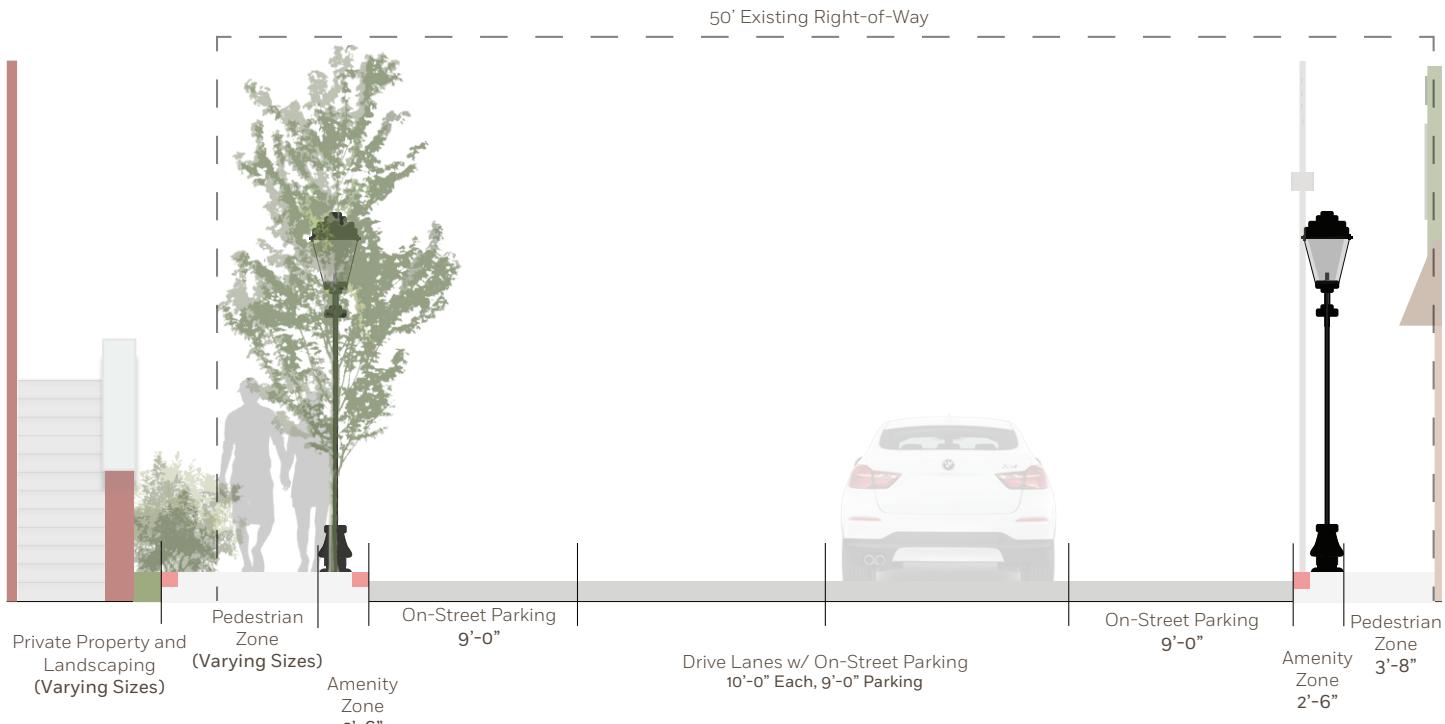


Figure A3. E. Broadway Street Corridor

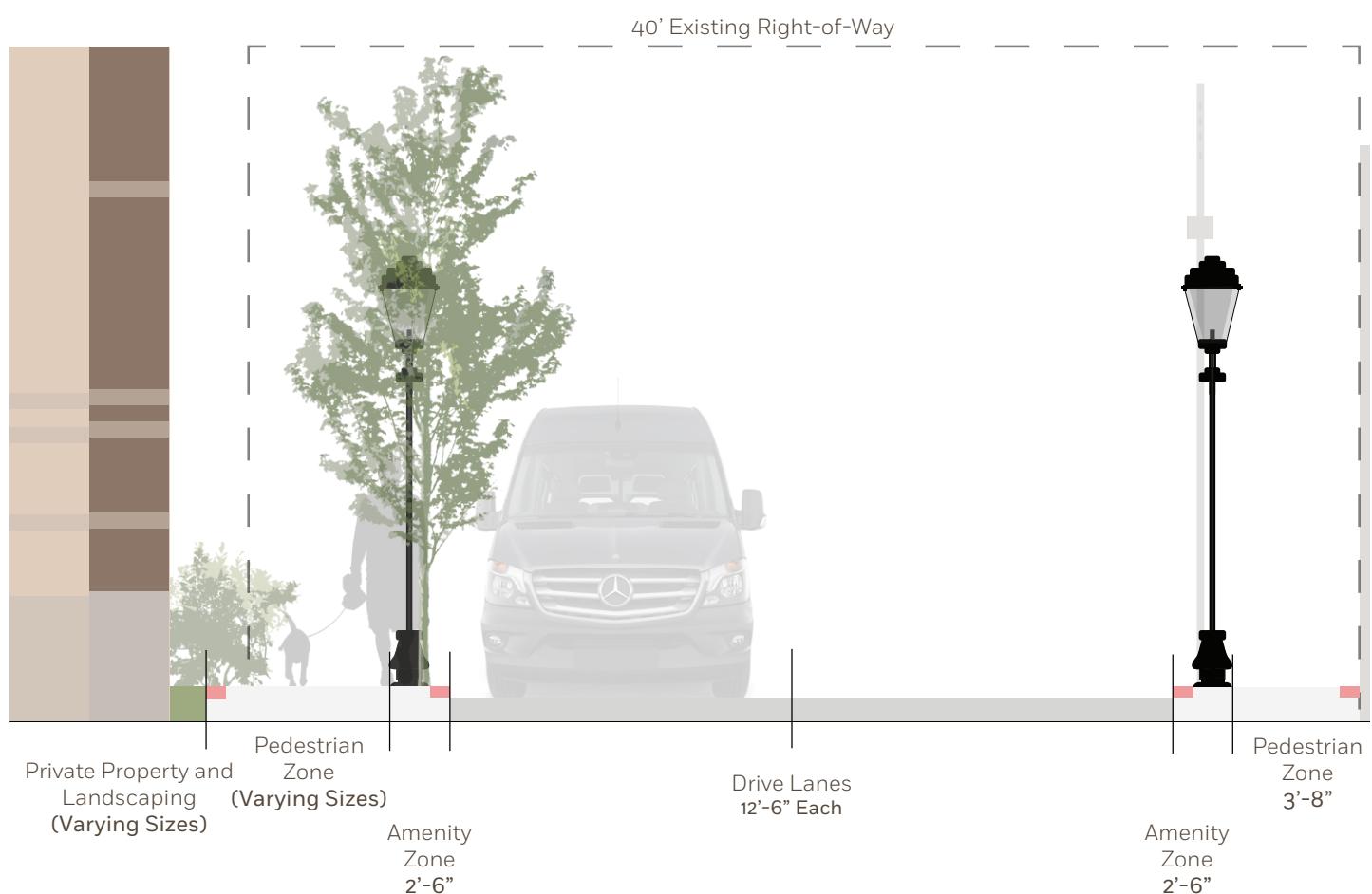


Figure A4. N. Second Street Corridor

Appendix B – Tree Selection

Tree selection can vary for each corridor. This will provide diversity and will allow tree selection to align with the desired look and size of the tree. The following are general guidelines when selecting the right tree for Loveland: Use trees that are known to do well in our region.

- The mature size, texture, and color of the tree should reflect the street design goals.
- The mature canopy should not interfere with street lighting, signage, or building fronts.
- The crown of the tree at maturity should not affect surrounding infrastructure or overhead high-voltage power lines.
- The root systems should not affect utilities, sidewalks, or curbs.
- Understand care and maintenance requirements. This is especially important for getting the trees established and making sure limbs are getting pruned to achieve the desired shape.

The following is a list of street trees, alphabetized and grouped by size, recommended for the Downtown Loveland Streetscape Master Plan, please refer to the following page for images of some of these species:

Medium/Large:

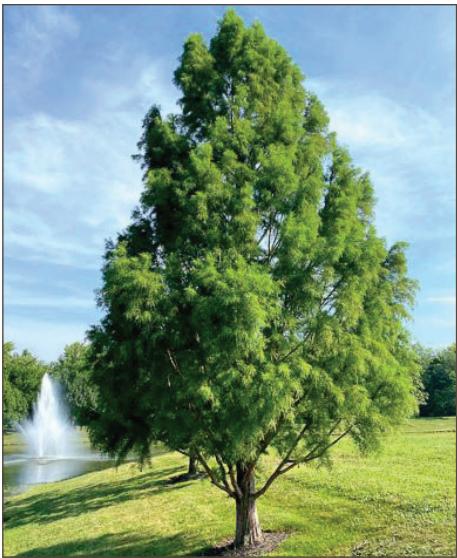
American Elm (“Princeton” or “Valley Forge”)
American Yellowwood
Bald Cypress
Brandywine Red Maple
EXCLAMATION! London planetree
Ginkgo/Maidenhair Tree
Greenspire Linden
Honeylocust Species
Japanese Zelkova
Lacebark Elm
Linden Species
Londonplane Tree
Native Oak Species (Bur Oak, White Oak, Red Oak, Shingle Oak)
Purple Robe black locust
Triumph American Elm
Tulip Tree

Small:

Eastern Redbud
Hawthorn Species
Magnolia Species
Pawpaw (sometimes hard to find)
Serviceberry
White Fringe Tree



American Elm



Bald Cypress



Brandywine Red Maple



EXCLAMATION! London planetree



Ginkgo/Maidenhair



Native Oak Species



Eastern Redbud



Magnolia Species



Serviceberry

Appendix C – Cost Estimates

Full cost estimates have been provided for each corridor in Downtown Loveland that include demolition of existing sidewalks, new construction, and various elements as detailed in the following pages. At the design level, these corridors and phases will need further detailed studies and refinement. The phasing areas detailed in *Figure C1* can also be further divided based on funding opportunities and the City's preference.

These cost estimates should be used by the City of Loveland as a starting point and used as a resource to assist in pursuing funding opportunities as well as to understand the overall investment needed to enhance the streetscape throughout the Downtown. Below is a summarized total of the cost estimates, by phase, as displayed in the following pages of Appendix C:

Phase 1: W. Loveland Avenue Corridor

- Phase 1A (North): \$1,022,310.30
- Phase 1B (South): \$1,002,799.89

Phase 2: Karl Brown Way Corridor

- Phase 2A (East): \$787,082.69
- Phase 2B (West): \$722,956.77

Phase 3: N. Second Street Corridor

- Phase 3A (West): \$577,978.67
- Phase 3B (East): \$579,837.16

Phase 4: E. Broadway Street Corridor

- Phase 4A (South): \$561,022.12
- Phase 4B (North): \$592,303.75

Phase 5: Harrison & Railroad Avenue Corridors

- Phase 5: \$503,569.90

Phase 6: Plaza South Area

- Phase 6: \$637,885.89

Estimated Total: \$6,987,747.14

Cost Considerations for Optional Scope Item of Burying Overhead Utility Lines:

The construction of the new sidewalks presents an opportunity to place overhead utilities such as power, telephone, telecommunication lines underground. Each overhead utility will have specific requirements as to whether they can be buried and how they can be buried. Primarily, the Duke Energy power lines can't be placed underground due to the 100-year flood plain in the downtown area. Individual building service power lines, telephone and telecommunications lines could be buried. This would reduce the overall number of utility poles as well as the amount of overhead lines that cross the street. The Loveland Station executed this approach and provides a good visual example.

The following costs, by phase, are rough order of magnitude estimates. The purpose of the estimates is to assist with planning. It should be noted that they include high contingency cost factors as this was not a part of the scope of work analyzed for this planning effort. Preliminary design and analysis would be required to develop more detailed estimates with a higher fidelity.

- Phase 1: \$475,275
- Phase 2: \$780,990
- Phase 3: \$169,301
- Phase 4: \$349,343
- Phase 5: \$776,985



Figure C-1. Phasing map for the Downtown Loveland area.

Loveland: Phase 1A - Loveland Ave North							
Qty	Description	Unit	Bare Mat.	Bare Labor	Bare Equip.	Total	Total Incl. O&P
80.000	Demolish, remove pavement & curb, remove bituminous pavement, 4" to 6" thick, excludes hauling and disposal fees	S.Y.	0.00	1,367.47	858.11	2,225.58	2,976.44
100.000	Demolish, remove pavement & curb, remove concrete curbs, reinforced, excludes hauling and disposal fees	L.F.	0.00	1,511.15	403.53	1,914.69	2,695.75
1.000	Utility removal, remove existing catch basin or manhole, masonry, excludes hauling	Ea.	0.00	1,036.93	274.20	1,311.12	1,850.10
10,000.000	Minor site demolition, sidewalk, brick set in mortar, 2-1/2" thick, remove, excludes hauling	S.Y.	0.00	224,726.50	59,667.70	284,394.20	415,853.80
1.000	Minor site demolition, sidewalk, concrete, plain, 4" thick, remove, excludes hauling	S.Y.	0.00	26.01	6.90	32.91	46.34
0.000	Minor site demolition, for congested sites or small quantities, excludes hauling, add up to	C.Y.				200.0%	200.0%
200.000	Minor site demolition, for disposal up to 5 miles, excludes hauling, add	C.Y.	0.00	3,928.29	5,932.28	9,860.57	12,357.78
110.000	Building footings and foundations demolition, add for disposal, up to 5 miles, excludes disposal costs and dump fees	C.Y.	0.00	660.00	1,226.50	1,886.50	2,310.00
100.000	Selective demolition, dump charges, typical urban city, building construction materials, includes tipping fees only	Ton	6,150.00	0.00	0.00	6,150.00	6,750.00
100.000	Selective demolition, saw cutting, asphalt, up to 3" deep	L.F.	27.99	286.66	200.04	514.69	680.47
100.000	Selective demolition, saw cutting, each additional inch of depth over 3"	L.F.	7.00	169.87	117.27	294.14	385.84
10.000	Selective concrete demolition, reinforcing more than 2% cross-sectional area, break up into small pieces, excludes shoring, bracing, saw or torch cutting, loading, hauling, dumping	C.Y.	0.00	6,264.03	1,396.85	7,660.88	10,753.86
650.000	Control joint, concrete floor slab, sawcut in green concrete, 1-1/2" depth	L.F.	38.97	350.12	84.77	473.86	653.30
500.000	Expansion joint, premolded, bituminous fiber, 1/2" x 6"	L.F.	299.80	684.86	0.00	984.66	1,345.52
400.000	Reinforcing steel, in place, dowels, smooth, 12" long, 3/4" diameter, A615, grade 60	Ea.	1,331.11	4,555.44	0.00	5,886.55	8,271.53
100.000	Concrete surface treatment, curing, sprayed membrane compound	C.S.F.	1,963.69	915.71	0.00	2,879.40	3,559.01
600.000	Concrete sawing, concrete slabs, plain, up to 3" deep, includes blade cost, layout and set up time	L.F.	209.94	1,316.51	1,179.56	2,706.01	3,509.58
10.000	Door/window accessories, area window well, galvanized steel, 20 ga. x 3-2" wide x 2" deep	Ea.	6,370.75	291.64	0.00	6,662.39	7,508.00
650.000	Wireway, to 10' high, 2-1/2" x 2-1/2", electrical demolition, remove, incl fittings and supports	L.F.	0.00	5,198.79	0.00	5,198.79	7,729.18
9.000	Metal light pole, 16' high, electrical demolition, remove, excludes concrete bases	Ea.	0.00	1,449.22	0.00	1,449.22	2,134.02
10.000	Underground feeder cable, copper with ground, #8, 3 conductor, type UF	C.L.F.	2,030.00	2,040.00	0.00	4,070.00	5,300.00
200.000	Hole drilling, concrete wall, 6" thick, 3/4" pipe size, to 10' high	Ea.	86.94	10,465.20	1,651.86	12,204.00	17,429.19
3.000	Light poles, anchor base, galvanized steel, 14' high, excl concrete bases	Ea.	3,237.84	604.83	0.00	3,842.67	4,498.88
12.000	Light poles, concrete base, max 6' buried, 2' exposed, 18" dia, average cost	Ea.	4,191.20	5,392.66	157.36	9,741.22	12,701.48
7.000	Clearing & grubbing, hardwood trees, 12" diameter, tree thinning, feller buncher	Ea.	0.00	98.84	218.49	317.34	387.62
7.000	Selective clearing and grubbing, 1-1/2 C.Y. excavator, 8" to 12" diameter, stump removal on site by hydraulic excavator	Ea.	0.00	990.92	1,798.65	2,789.57	3,441.36
10.000	Structural excavation for minor structures, bank measure, heavy soil or clay, 12' to 18' deep, hand pits	B.C.Y.	0.00	2,785.59	0.00	2,785.59	4,155.30
200.000	Structural excavation for minor structures, bank measure, for spread and mat footings, elevator pits, and small building foundations, sand & gravel, 3/4 C.Y. bucket, machine excavation, hydraulic backhoe	B.C.Y.	0.00	2,662.47	2,463.30	5,125.77	6,757.20
5.000	Backfill, heavy soil, by hand, no compaction	L.C.Y.	0.00	253.94	0.00	253.94	377.06
10,000.000	Sidewalks, driveways, and patios, sidewalk, concrete, cast-in-place with 6 x 6 - W1.4 x W1.4 mesh, broomed finish, 3,000 psi, 5" thick, excludes base	S.F.	44,220.50	34,781.40	0.00	79,001.90	109,516.00
1,200.000	Base course drainage layers, aggregate base course for roadways and large paved areas, stone base, compacted, 3/4" stone base, to 6" deep	S.Y.	7,483.01	849.53	1,251.94	9,584.47	10,867.96
3,300.000	Brick paving, brick on thick sand bed, laid flat, (4.5 brick/SF), 1" thick sand bed	S.F.	19,687.87	41,137.47	0.00	60,825.34	91,683.90
3,300.000	Brick paving, for 4" thick concrete bed and joints add	S.F.	9,596.60	6,957.82	0.00	16,554.42	22,933.85
100.000	Cast-in place concrete curbs & gutters, concrete, wood forms, straight, 6" x 18", includes concrete	L.F.	1,356.60	815.67	0.00	2,172.27	2,699.60
1.000	Manufactured stone curbs, granite, curb inlets, (guttermouth), straight	Ea.	259.33	106.19	29.70	395.22	475.14
10.000	Pavement, tactile warning tiles S.F.	S.F.	265.00	18.50	0.00	283.50	325.00
9.000	Deciduous trees, oak, balled & burlapped (B&B), 2-1/2"-3" caliper, in prepared beds	Ea.	3,642.57	3,670.52	1,525.80	8,838.88	11,146.65
1.000	Storm drainage manholes, frames and covers, concrete, precast, 4" ID, 6" deep, excludes footing, excavation, backfill, frame and cover	Ea.	1,499.00	807.98	121.72	2,426.69	2,987.21
0.000	Economic conditions, unfavorable, add, modifications to total project cost summaries	Project				5.0%	5.0%
0.000	Insurance, standard builders risk, maximum	Job				.8%	.8%
0.000	Main office expense, average for General Contractors as a percentage of annual volume, annual volume up to \$2,500,000	% Vol.				8.0%	
0.000	Mark-up, general Contractors mark-up on Change Orders, extra work by general contractor, add	%				15.0%	15.0%
0.000	Performance Bond, for buildings, minimum	Job				.6%	.6%
0.000	Permits rule of thumb, most cities, minimum	Job				.5%	.5%
24.000	Field personnel, project manager, maximum	Week	0.00	68,195.40	0.00	68,195.40	103,417.20
24.000	Field personnel, superintendent, maximum	Week	0.00	63,699.00	0.00	63,699.00	95,923.20
2.000	Field testing, for concrete or steel building, minimum	Week	0.00	0.00	0.00	8,350.00	9,150.00
6.000	Office trailer, furnished, rent per month, 20' x 8', excl. hookups	Ea.	1,146.00	0.00	0.00	1,146.00	1,260.00
6.000	Field office expense, office equipment rental, average	Month	1,362.00	0.00	0.00	1,362.00	1,506.00
100.000	Barricades, traffic cones, PVC, 28" high	Ea.	1,350.00	0.00	0.00	1,350.00	1,490.00
300.000	Barricades, guardrail, wooden, 3' high, 1" x 6" planks on 2" x 4" posts	L.F.	537.00	1,077.00	0.00	1,614.00	2,190.00
100.000	Detour sign, reflective aluminum, MUTCD, 24" x 24", post mounted	Ea.	331.00	1,455.00	0.00	1,786.00	2,500.00
120.000	Cleaning up, cleanup of floor area, continuous, per day, during construction	M.S.F.	388.80	3,300.00	412.80	4,101.60	5,820.00
Totals			\$119,070.51	\$506,905.11	\$80,979.32	\$715,304.93	\$1,022,310.30

Loveland: Phase 1B - Loveland Ave South

Qty	Description	Unit	Bare Mat.	Bare Labor	Bare Equip.	Total	Total Incl. O&P
250.000	Demolish, remove pavement & curb, remove bituminous pavement, 4" to 6" thick, excludes hauling and disposal fees	S.Y.	0.00	4,442.39	2,790.45	7,232.84	9,672.38
260.000	Demolish, remove pavement & curb, remove concrete curbs, reinforced, excludes hauling and disposal fees	L.F.	0.00	4,084.43	1,091.77	5,176.20	7,287.42
4.000	Utility removal, remove existing catch basin or manhole, masonry, excludes hauling	Ea.	0.00	4,311.79	1,141.30	5,453.09	7,694.42
8,200.000	Minor site demolition, sidewalk, brick set in mortar, 2-1/2" thick, remove, excludes hauling	S.Y.	0.00	191,565.53	50,913.55	242,479.08	341,000.12
155.000	Minor site demolition, for disposal up to 5 miles, excludes hauling, add	C.Y.	0.00	3,164.86	4,784.14	7,949.00	9,961.37
110.000	Building footings and foundations demolition, add for disposal, up to 5 miles, excludes disposal costs and dump fees	C.Y.	0.00	891.00	1,618.98	2,509.98	3,078.03
100.000	Selective demolition, dump charges, typical urban city, building construction materials, includes tipping fees only	Ton	8,241.00	0.00	0.00	8,241.00	9,065.10
250.000	Selective demolition, saw cutting, asphalt, up to 3" deep	L.F.	72.78	745.00	520.41	1,338.18	1,769.08
250.000	Selective demolition, saw cutting, each additional inch of depth over 3"	L.F.	18.20	441.48	305.07	764.74	1,003.09
10,000	Selective concrete demolition, reinforcing more than 2% cross-sectional area, break up into small pieces, excludes shoring, bracing, saw or torch cutting, loading, hauling, dumping	C.Y.	0.00	6,511.83	1,453.55	7,965.38	11,180.86
650.000	Control joint, concrete floor slab, sawcut in green concrete, 1-1/2" depth	L.F.	42.61	381.97	92.96	517.54	713.36
500.000	Expansion joint, premolded, bituminous fiber, 1/2" x 6"	L.F.	327.80	747.16	0.00	1,074.96	1,468.72
400.000	Reinforcing steel, in place, dowels, smooth, 12" long, 3/4" diameter, A615, grade 60	Ea.	1,455.43	4,969.84	0.00	6,425.27	9,027.53
82.000	Concrete surface treatment, curing, sprayed membrane compound	C.S.F.	1,760.61	819.18	0.00	2,579.80	3,188.17
600.000	Concrete sawing, concrete slabs, plain, up to 3" deep, includes blade cost, layout and set up time	L.F.	218.34	1,368.59	1,227.44	2,814.37	3,649.86
11.000	Door/window accessories, area window well, galvanized steel, 20 ga. x 3-2" wide x 2' deep	Ea.	7,662.33	349.99	0.00	8,012.31	9,028.80
650.000	Wireway, to 10' high, 2-1/2" x 2-1/2", electrical demolition, remove, incl fittings and supports	L.F.	0.00	5,404.45	0.00	5,404.45	8,034.94
10.000	Metal light pole, 16' high, electrical demolition, remove, excludes concrete bases	Ea.	0.00	1,673.95	0.00	1,673.95	2,464.93
12.000	Underground feeder cable, copper with ground, #6, 3 conductor, type UF	C.L.F.	2,436.00	2,448.00	0.00	4,884.00	6,360.00
200.000	Hole drilling, concrete wall, 8" thick, 3/4" pipe size, to 10' high	Ea.	95.06	11,417.20	1,811.46	13,323.72	19,025.19
4.000	Light poles, anchor base, galvanized steel, 14' high, excl concrete bases	Ea.	4,720.32	879.80	0.00	5,600.12	6,555.70
14.000	Light poles, concrete base, max 6' buried, 2' exposed, 18" dia, average cost	Ea.	5,346.42	6,863.75	201.33	12,411.50	16,180.60
6.000	Clearing & grubbing, hardwood trees, 12" diameter, tree thinning, feller buncher	Ea.	0.00	88.08	194.88	282.96	345.60
6.000	Selective clearing and grubbing, 1-1/2 C.Y. excavator, 8" to 12" diameter, stump removal on site by hydraulic excavator	Ea.	0.00	882.96	1,604.28	2,487.24	3,068.18
12.000	Structural excavation for minor structures, bank measure, heavy soil or clay, 12' to 18' deep, hand pits	B.C.Y.	0.00	3,646.79	0.00	3,646.79	5,439.96
150.000	Structural excavation for minor structures, bank measure, for spread and mat footings, elevator pits, and small building foundations, sand & gravel, 3/4 C.Y. bucket, machine excavation, hydraulic backhoe	B.C.Y.	0.00	2,178.50	2,025.98	4,204.48	5,540.40
15.000	Backfill, heavy soil, by hand, no compaction	L.C.Y.	0.00	831.11	0.00	831.11	1,234.07
8,200.000	Sidewalks, driveways, and patios, sidewalk, concrete, cast-in-place with 6 x 6 x W1.4 mesh, broomed finish, 3,000 psi, 5" thick, excludes base	S.F.	39,647.41	31,115.23	0.00	70,762.64	89,803.12
900.000	Base course drainage layers, aggregate base course for roadways and large paved areas, stone base, compacted, 3/4" stone base, to 6" deep	S.Y.	6,136.42	695.11	1,029.67	7,861.19	8,913.27
2,700.000	Brick paving, brick on thick sand bed, laid flat, (4.5 brick/SF), 1" thick sand bed	S.F.	17,612.69	36,719.73	0.00	54,332.42	75,006.62
2,700.000	Brick paving, for 4" thick concrete bed and joints add	S.F.	8,585.08	6,210.62	0.00	14,795.70	18,764.06
250.000	Cast-in-place concrete curbs & gutters, concrete, wood forms, straight, 6" x 18", includes concrete	L.F.	3,708.24	2,224.68	0.00	5,932.91	7,372.00
4.000	Manufactured stone curbs, granite, curb inlets, (guttermouth), straight	Ea.	1,134.19	463.40	130.30	1,727.89	2,076.97
20.000	Pavement, tactile warning tiles S.F.	S.F.	530.00	37.00	0.00	567.00	650.00
11.000	Deciduous trees, oak, balled & burlapped (B&B), 2-1/2"-3" caliper, in prepared beds	Ea.	4,867.83	4,894.29	2,045.04	11,807.16	14,886.49
4.000	Storm drainage manholes, frames and covers, concrete, precast, 4" ID, 6" deep, excludes footing, excavation, backfill, frame and cover	Ea.	6,556.00	3,525.90	533.90	10,615.80	13,054.84
60.000	Public storm utility drainage piping, corrugated metal pipe, galvanized and bituminous coated with paved invert, 20' lengths, 16 ga., 15" diameter, excludes excavation and backfill	L.F.	1,193.94	733.05	125.93	2,052.92	2,538.55
0.000	Construction management fees, for work to \$1,000,000	Project				6.0%	6.0%
0.000	Engineering fees, landscaping & site development, maximum	Contract				6.0%	6.0%
0.000	Contingencies, at conceptual design stage	Project				20.0%	20.0%
0.000	Cost adjustment factors, cut & patch to match existing construction, add to construction costs for particular job requirements, minimum	Costs	2.0%	3.0%			
0.000	Economic conditions, unfavorable, add, modifications to total project cost summaries	Project				5.0%	5.0%
24.000	Field personnel, project manager, maximum	Week	0.00	79,115.40	0.00	79,115.40	119,977.20
24.000	Field personnel, superintendent, maximum	Week	0.00	76,959.00	0.00	76,959.00	115,891.20
0.000	Insurance, standard builders risk, maximum	Job				.8%	.8%
0.000	Main office expense, average for General Contractors as a percentage of annual volume, annual volume up to \$2,500,000	% Vol.				8.0%	
0.000	Mark-up, general Contractors mark-up on Change Orders, extra work by general contractor, add	%				15.0%	15.0%
0.000	Performance Bond, for buildings, minimum	Job				.6%	.6%
0.000	Permits rule of thumb, most cities, minimum	Job				.5%	.5%
2.000	Field testing, for concrete or steel building, minimum	Week	0.00	0.00	0.00	10,020.00	10,980.00
6.000	Office trailer, furnished, rent per month, 20' x 8', excl. hookups	Ea.	1,535.64	0.00	0.00	1,535.64	1,689.20
6.000	Field office expense, office equipment rental, average	Month	1,825.08	0.00	0.00	1,825.08	2,007.59
100.000	Barricades, traffic cones, PVC, 28" high	Ea.	1,809.00	0.00	0.00	1,809.00	1,989.90
300.000	Barricades, guardrail, wooden, 3' high, 1" x 6" planks on 2" x 4" posts	L.F.	719.58	1,453.95	0.00	2,173.53	2,950.59
100.000	Detour sign, reflective aluminum, MUTCD, 24" x 24", post mounted	Ea.	443.54	1,964.25	0.00	2,407.79	3,371.36
120.000	Cleaning up, cleanup of floor area, continuous, per day, during construction	M.S.F.	520.99	4,455.00	544.90	5,520.89	7,839.10
	Totals		\$129,222.53	\$511,676.20	\$76,187.27	\$727,106.01	\$1,002,799.89

Loveland: Phase 2A - Karl Brown Way East							
Qty	Description	Unit	Bare Mat.	Bare Labor	Bare Equip.	Total	Total Incl. O&P
600.000	Demolish, remove pavement & curb, remove bituminous pavement, 4" to 6" thick, excludes hauling and disposal fees	S.Y.	0.00	10,661.74	6,697.07	17,358.82	23,213.71
240.000	Minor site demolition, sidewalk, brick set in mortar, 2-1/2" thick, remove, excludes hauling	S.Y.	0.00	5,606.80	1,490.15	7,096.95	9,980.49
240.000	Minor site demolition, sidewalk, concrete, plain, 4" thick, remove, excludes hauling	S.Y.	0.00	6,489.76	1,722.72	8,212.48	11,563.40
80.000	Minor site demolition, for disposal up to 5 miles, excludes hauling, add	C.Y.	0.00	1,633.48	2,469.23	4,102.71	5,141.35
110.000	Building footings and foundations demolition, add for disposal, up to 5 miles, excludes disposal costs and dump fees	C.Y.	0.00	891.00	1,618.98	2,509.98	3,078.03
150.000	Selective demolition, dump charges, typical urban city, building construction materials, includes tipping fees only	Ton	12,361.50	0.00	0.00	12,361.50	13,597.65
1,150.000	Selective demolition, saw cutting, asphalt, up to 3" deep	L.F.	334.79	3,426.99	2,393.86	6,155.64	8,137.77
1,150.000	Selective demolition, saw cutting, each additional inch of depth over 3"	L.F.	83.70	2,030.81	1,403.30	3,517.80	4,614.21
1.000	Selective concrete demolition, reinforcing more than 2% cross-sectional area, break up into small pieces, excludes shoring, bracing, saw or torch cutting, loading, hauling, dumping	C.Y.	0.00	651.18	145.35	796.54	1,118.09
500.000	Control joint, concrete floor slab, sawcut in green concrete, 1-1/2" depth	L.F.	32.78	293.83	71.51	398.11	548.74
500.000	Expansion joint, premolded, bituminous fiber, 1/2" x 6"	L.F.	327.80	747.16	0.00	1,074.96	1,468.72
150.000	Reinforcing steel, in place, dowels, smooth, 12" long, 3/4" diameter, A615, grade 60	Ea.	545.79	1,863.69	0.00	2,409.48	3,385.32
75.000	Concrete surface treatment, curing, sprayed membrane compound	C.S.F.	1,610.32	749.25	0.00	2,359.57	2,916.01
600.000	Concrete sawing, concrete slabs, plain, up to 3" deep, includes blade cost, layout and set up time	L.F.	218.34	1,368.59	1,227.44	2,814.37	3,649.86
9.000	Door/window accessories, area window well, galvanized steel, 20 ga. x 3'-2" wide x 2' deep	Ea.	6,269.18	286.35	0.00	6,555.53	7,387.20
60.000	Wireway, to 10' high, 2-1/2" x 2-1/2", electrical demolition, remove, incl fittings and supports	L.F.	0.00	498.87	0.00	498.87	741.69
1.000	Metal light pole, 16' high, electrical demolition, remove, excludes concrete bases	Ea.	0.00	167.39	0.00	167.39	246.49
10.000	Underground feeder cable, copper with ground, #8, 3 conductor, type UF	C.L.F.	2,030.00	2,040.00	0.00	4,070.00	5,300.00
150.000	Hole drilling, concrete wall, 8" thick, 3/4" pipe size, to 10' high	Ea.	71.30	8,562.90	1,358.60	9,992.79	14,268.89
10.000	Light poles, anchor base, galvanized steel, 14' high, excl concrete bases	Ea.	11,800.80	2,199.49	0.00	14,000.29	16,389.25
10.000	Light poles, concrete base, max 6' buried, 2' exposed, 18" dia, average cost	Ea.	3,818.87	4,902.68	143.80	8,865.35	11,557.57
4.000	Clearing & grubbing, hardwood trees, 12" diameter, tree thinning, feller buncher	Ea.	0.00	58.72	129.92	188.64	230.40
6.000	Selective clearing and grubbing, 1-1/2 C.Y. excavator, 8" to 12" diameter, stump removal on site by hydraulic excavator	Ea.	0.00	882.96	1,604.28	2,487.24	3,068.18
9.000	Structural excavation for minor structures, bank measure, heavy soil or clay, 12' to 18' deep, hand pits	B.C.Y.	0.00	2,735.09	0.00	2,735.09	4,079.97
75.000	Structural excavation for minor structures, bank measure, for spread and mat footings, elevator pits, and small building foundations, sand & gravel, 3/4 C.Y. bucket, machine excavation, hydraulic backhoe	B.C.Y.	0.00	1,089.25	1,012.99	2,102.24	2,770.20
5.000	Backfill, heavy soil, by hand, no compaction	L.C.Y.	0.00	277.04	0.00	277.04	411.36
7,500.000	Sidewalks, driveways, and patios, sidewalk, concrete, cast-in-place with 6 x 6 - W1.4 x W1.4 mesh, broomed finish, 3,000 psi, 5" thick, excludes base	S.F.	36,262.88	28,459.05	0.00	64,721.93	82,137.00
850.000	Base course drainage layers, aggregate base course for roadways and large paved areas, stone base, compacted, 3/4" stone base, to 6" deep	S.Y.	5,795.50	656.49	972.47	7,424.46	8,418.09
2,256.000	Brick paving, brick on thick sand bed, laid flat, (4.5 brick/SF), 1" thick sand bed	S.F.	14,716.38	30,681.37	0.00	45,397.76	62,672.20
2,256.000	Brick paving, for 4" thick concrete bed and joints add	S.F.	7,173.31	5,189.32	0.00	12,362.63	15,678.41
1,200.000	Cast-in-place concrete curbs & gutters, concrete, wood forms, straight, 6" x 18", includes concrete	L.F.	17,799.54	10,678.44	0.00	28,477.98	35,385.60
40.000	Pavement, tactile warning tiles S.F.	S.F.	1,060.00	74.00	0.00	1,134.00	1,300.00
9.000	Deciduous trees, oak, balled & burlapped (B&B), 2-1/2"-3" caliper, in prepared beds	Ea.	3,982.77	4,004.42	1,673.22	9,660.40	12,179.85
0.000	Construction management fees, for work to \$1,000,000	Project				6.0%	6.0%
0.000	Engineering fees, landscaping & site development, maximum	Contract				6.0%	6.0%
0.000	Contingencies, at conceptual design stage	Project				20.0%	20.0%
0.000	Cost adjustment factors, cut & patch to match existing construction, add to construction costs for particular job requirements, minimum	Costs	2.0%	3.0%			
0.000	Economic conditions, unfavorable, add, modifications to total project cost summaries	Project				5.0%	5.0%
30.000	Field personnel, project manager, maximum	Week	0.00	98,894.25	0.00	98,894.25	149,971.50
30.000	Field personnel, superintendent, maximum	Week	0.00	96,198.75	0.00	96,198.75	144,864.00
0.000	Insurance, standard builders risk, maximum	Job				.8%	.8%
0.000	Main office expense, average for General Contractors as a percentage of annual volume, annual volume up to \$2,500,000	% Vol.				8.0%	
0.000	Mark-up, general Contractors mark-up on Change Orders, extra work by general contractor, add	%				15.0%	15.0%
0.000	Performance Bond, for buildings, minimum	Job				.6%	.6%
0.000	Permits rule of thumb, most cities, minimum	Job				.5%	.5%
2.000	Field testing, for concrete or steel building, minimum	Week	0.00	0.00	0.00	10,020.00	10,980.00
6.250	Office trailer, furnished, rent per month, 20' x 8', excl. hookups	Ea.	1,599.63	0.00	0.00	1,599.63	1,759.59
6.250	Field office expense, office equipment rental, average	Month	1,901.13	0.00	0.00	1,901.13	2,091.24
150.000	Barricades, traffic cones, PVC, 28" high	Ea.	2,713.50	0.00	0.00	2,713.50	2,984.85
300.000	Barricades, guardrail, wooden, 3' high, 1" x 6" planks on 2" x 4" posts	L.F.	719.58	1,453.95	0.00	2,173.53	2,950.59
100.000	Detour sign, reflective aluminum, MUTCD, 24" x 24", post mounted	Ea.	443.54	1,964.25	0.00	2,407.79	3,371.36
150.000	Cleaning up, cleanup of floor area, continuous, per day, during construction	M.S.F.	651.24	5,568.75	681.12	6,901.11	9,798.88
	Totals		\$134,324.15	\$343,938.04	\$26,816.02	\$515,098.21	\$787,082.69

Loveland: Phase 2B - Karl Brown Way West							
Qty	Description	Unit	Bare Mat.	Bare Labor	Bare Equip.	Total	Total Incl. O&P
525.000	Demolish, remove pavement & curb, remove bituminous pavement, 4" to 6" thick, excludes hauling and disposal fees	S.Y.	0.00	9,329.02	5,859.94	15,188.96	20,311.99
350.000	Minor site demolition, sidewalk, brick set in mortar, 2-1/2" thick, remove, excludes hauling	S.Y.	0.00	8,176.58	2,173.14	10,349.72	14,554.88
350.000	Minor site demolition, sidewalk, concrete, plain, 4" thick, remove, excludes hauling	S.Y.	0.00	9,464.23	2,512.30	11,976.53	16,863.30
25.000	Minor site demolition, for disposal up to 5 miles, excludes hauling, add	C.Y.	0.00	510.46	771.64	1,282.10	1,606.67
110.000	Building footings and foundations demolition, add for disposal, up to 5 miles, excludes disposal costs and dump fees	C.Y.	0.00	891.00	1,618.98	2,509.98	3,078.03
150.000	Selective demolition, dump charges, typical urban city, building construction materials, includes tipping fees only	Ton	12,361.50	0.00	0.00	12,361.50	13,597.65
1,300.000	Selective demolition, saw cutting, asphalt, up to 3" deep	L.F.	378.46	3,873.99	2,706.11	6,958.55	9,199.22
1,300.000	Selective demolition, saw cutting, each additional inch of depth over 3"	L.F.	94.61	2,295.70	1,586.34	3,976.65	5,216.07
450.000	Control joint, concrete floor slab, sawcut in green concrete, 1-1/2" depth	L.F.	29.50	264.44	64.35	358.30	493.86
500.000	Expansion joint, premolded, bituminous fiber, 1/2" x 6"	L.F.	327.80	747.16	0.00	1,074.96	1,468.72
180.000	Reinforcing steel, in place, dowels, smooth, 12" long, 3/4" diameter, A615, grade 60	Ea.	654.94	2,236.43	0.00	2,891.37	4,062.39
76.000	Concrete surface treatment, curing, sprayed membrane compound	C.S.F.	1,631.79	759.24	0.00	2,391.03	2,954.89
825.000	Concrete sawing, concrete slabs, plain, up to 3" deep, includes blade cost, layout and set up time	L.F.	300.22	1,881.81	1,687.73	3,869.75	5,018.56
13.000	Door/window accessories, area window well, galvanized steel, 20 ga. x 3-2" wide x 2' deep	Ea.	9,055.48	413.62	0.00	9,469.10	10,670.40
10.000	Underground feeder cable, copper with ground, #8, 3 conductor, type UF	C.L.F.	2,030.00	2,040.00	0.00	4,070.00	5,300.00
180.000	Hole drilling, concrete wall, 6" thick, 3/4" pipe size, to 10' high	Ea.	85.56	10,275.48	1,630.31	11,991.35	17,122.67
9.000	Light poles, anchor base, galvanized steel, 14' high, excl concrete bases	Ea.	10,620.72	1,979.54	0.00	12,600.26	14,750.33
9.000	Light poles, concrete base, max 6' buried, 2' exposed, 18" dia, average cost	Ea.	3,436.98	4,412.41	129.42	7,978.82	10,401.81
13.000	Structural excavation for minor structures, bank measure, heavy soil or clay, 12' to 18' deep, hand pits	B.C.Y.	0.00	3,950.69	0.00	3,950.69	5,893.29
50.000	Structural excavation for minor structures, bank measure, for spread and mat footings, elevator pits, and small building foundations, sand & gravel, 3/4 C.Y. bucket, machine excavation, hydraulic backhoe	B.C.Y.	0.00	726.17	675.33	1,401.49	1,846.80
5.000	Backfill, heavy soil, by hand, no compaction	L.C.Y.	0.00	277.04	0.00	277.04	411.36
7,600.000	Sidewalks, driveways, and patios, sidewalk, concrete, cast-in-place with 6 x 6 - W1.4 x W1.4 mesh, broomed finish, 3,000 psi, 5" thick, excludes base	S.F.	36,746.38	28,838.50	0.00	65,584.88	83,232.16
850.000	Base course drainage layers, aggregate base course for roadways and large paved areas, stone base, compacted, 3/4" stone base, to 6" deep	S.Y.	5,795.50	656.49	972.47	7,424.46	8,418.09
2,280.000	Brick paving, brick on thick sand bed, laid flat, (4.5 brick/SF), 1" thick sand bed	S.F.	14,872.94	31,007.77	0.00	45,880.71	63,338.92
2,280.000	Brick paving, for 4" thick concrete bed and joints add	S.F.	7,249.62	5,244.52	0.00	12,494.15	15,845.20
1,300.000	Cast-in place concrete curbs & gutters, concrete, wood forms, straight, 6" x 18", includes concrete	L.F.	19,282.84	11,568.31	0.00	30,851.15	38,334.40
80.000	Pavement, tactile warning tiles S.F.	S.F.	2,120.00	148.00	0.00	2,268.00	2,600.00
13.000	Deciduous trees, oak, balled & burlapped (B&B), 2-1/2"-3" caliper, in prepared beds	Ea.	5,752.89	5,784.16	2,416.87	13,953.91	17,593.12
0.000	Construction management fees, for work to \$1,000,000	Project				6.0%	6.0%
0.000	Engineering fees, landscaping & site development, maximum	Contract				6.0%	6.0%
0.000	Contingencies, at conceptual design stage	Project				20.0%	20.0%
0.000	Cost adjustment factors, cut & patch to match existing construction, add to construction costs for particular job requirements, minimum	Costs	2.0%	3.0%			
0.000	Economic conditions, unfavorable, add, modifications to total project cost summaries	Project				5.0%	5.0%
30.000	Field personnel, project manager, maximum	Week	0.00	98,894.25	0.00	98,894.25	149,971.50
30.000	Field personnel, superintendent, maximum	Week	0.00	96,198.75	0.00	96,198.75	144,864.00
0.000	Insurance, standard builders risk, maximum	Job				.8%	.8%
0.000	Main office expense, average for General Contractors as a percentage of annual volume, annual volume up to \$2,500,000	% Vol.				8.0%	
0.000	Mark-up, general Contractors mark-up on Change Orders, extra work by general contractor, add	%				15.0%	15.0%
0.000	Performance Bond, for buildings, minimum	Job				.6%	.6%
0.000	Permits rule of thumb, most cities, minimum	Job				.5%	.5%
2.000	Field testing, for concrete or steel building, minimum	Week	0.00	0.00	0.00	10,020.00	10,980.00
6.250	Office trailer, furnished, rent per month, 20' x 8', excl. hookups	Ea.	1,599.63	0.00	0.00	1,599.63	1,759.59
6.250	Field office expense, office equipment rental, average	Month	1,901.13	0.00	0.00	1,901.13	2,091.24
150.000	Barricades, traffic cones, PVC, 28" high	Ea.	2,713.50	0.00	0.00	2,713.50	2,984.85
300.000	Barricades, guardrail, wooden, 3' high, 1" x 6" planks on 2" x 4" posts	L.F.	719.58	1,453.95	0.00	2,173.53	2,950.59
100.000	Detour sign, reflective aluminum, MUTCD, 24" x 24", post mounted	Ea.	443.54	1,964.25	0.00	2,407.79	3,371.36
150.000	Cleaning up, cleanup of floor area, continuous, per day, during construction	M.S.F.	651.24	5,568.75	681.12	6,901.11	9,798.88
	Totals		\$132,827.73	\$147,752.75	\$24,804.92	\$305,385.40	\$722,956.77

Loveland: Phase 3A - N. Second Street A West							
Qty	Description	Unit	Bare Mat.	Bare Labor	Bare Equip.	Total	Total Incl. O&P
450.000	Minor site demolition, sidewalk, brick set in mortar, 2-1/2" thick, remove, excludes hauling	S.Y.	0.00	10,512.74	2,794.04	13,306.78	18,713.42
450.000	Minor site demolition, sidewalk, concrete, plain, 4" thick, remove, excludes hauling	S.Y.	0.00	12,168.29	3,230.10	15,398.39	21,681.38
25.000	Minor site demolition, for disposal up to 5 miles, excludes hauling, add	C.Y.	0.00	510.46	771.64	1,282.10	1,606.67
110.000	Building footings and foundations demolition, add for disposal, up to 5 miles, excludes disposal costs and dump fees	C.Y.	0.00	891.00	1,618.98	2,509.98	3,078.03
150.000	Selective demolition, dump charges, typical urban city, building construction materials, includes tipping fees only	Ton	12,361.50	0.00	0.00	12,361.50	13,597.65
4.000	Selective concrete demolition, reinforcing more than 2% cross-sectional area, break up into small pieces, excludes shoring, bracing, saw or torch cutting, loading, hauling, dumping	C.Y.	0.00	2,604.73	581.42	3,186.15	4,472.34
600.000	Control joint, concrete floor slab, sawcut in green concrete, 1-1/2" depth	L.F.	39.34	352.59	85.81	477.73	658.48
600.000	Expansion joint, premolded, bituminous fiber, 1/2" x 6"	L.F.	393.36	896.59	0.00	1,289.95	1,762.46
250.000	Reinforcing steel, in place, dowels, smooth, 12" long, 3/4" diameter, A615, grade 60	Ea.	909.65	3,106.15	0.00	4,015.80	5,642.21
39.000	Concrete surface treatment, curing, sprayed membrane compound	C.S.F.	837.37	389.61	0.00	1,226.98	1,516.32
1,000.000	Concrete sawing, concrete slabs, plain, up to 3" deep, includes blade cost, layout and set up time	L.F.	363.90	2,280.98	2,045.73	4,690.61	6,083.10
7.000	Door/window accessories, area window well, galvanized steel, 20 ga. x 3-2" wide x 2' deep	Ea.	4,876.03	222.72	0.00	5,098.74	5,745.60
100.000	Wireway, to 10' high, 2-1/2" x 2-1/2", electrical demolition, remove, incl fittings and supports	L.F.	0.00	831.45	0.00	831.45	1,236.14
4.000	Metal light pole, 16' high, electrical demolition, remove, excludes concrete bases	Ea.	0.00	669.58	0.00	669.58	985.97
10.000	Underground feeder cable, copper with ground, #8, 3 conductor, type UF	C.L.F.	2,030.00	2,040.00	0.00	4,070.00	5,300.00
250.000	Hole drilling, concrete wall, 8" thick, 3/4" pipe size, to 10' high	Ea.	118.83	14,271.50	2,264.33	16,654.65	23,781.49
6.000	Light poles, anchor base, galvanized steel, 14' high, excl concrete bases	Ea.	7,080.48	1,319.69	0.00	8,400.17	9,833.55
6.000	Light poles, concrete base, max 6' buried, 2' exposed, 18" dia, average cost	Ea.	2,291.32	2,941.61	86.28	5,319.21	6,934.54
7.000	Structural excavation for minor structures, bank measure, heavy soil or clay, 12' to 18' deep, hand pits	B.C.Y.	0.00	2,127.29	0.00	2,127.29	3,173.31
15.000	Structural excavation for minor structures, bank measure, for spread and mat footings, elevator pits, and small building foundations, sand & gravel, 3/4 C.Y. bucket, machine excavation, hydraulic backhoe	B.C.Y.	0.00	217.85	202.60	420.45	554.04
10.000	Backfill, heavy soil, by hand, no compaction	L.C.Y.	0.00	554.07	0.00	554.07	822.71
3,900.000	Sidewalks, driveways, and patios, sidewalk, concrete, cast-in-place with 6 x 6 - W1.4 x W1.4 mesh, broomed finish, 3,000 psi, 5" thick, excludes base	S.F.	18,856.70	14,798.71	0.00	33,655.40	42,711.24
150.000	Base course drainage layers, aggregate base course for roadways and large paved areas, stone base, compacted, 3/4" stone base, to 6" deep	S.Y.	1,022.74	115.85	171.61	1,310.20	1,485.54
1,200.000	Brick paving, brick on thick sand bed, laid flat, (4.5 brick/SF), 1" thick sand bed	S.F.	7,827.86	16,319.88	0.00	24,147.74	33,336.28
1,200.000	Brick paving, for 4" thick concrete bed and joints add	S.F.	3,815.59	2,760.28	0.00	6,575.87	8,339.58
500.000	Cast-in-place concrete curbs & gutters, concrete, wood forms, straight, 6" x 18", includes concrete	L.F.	7,416.48	4,449.35	0.00	11,865.83	14,744.00
80.000	Pavement, tactile warning tiles S.F.	S.F.	2,120.00	148.00	0.00	2,268.00	2,600.00
7.000	Deciduous trees, oak, balled & burlapped (B&B), 2-1/2"-3" caliper, in prepared beds	Ea.	3,097.71	3,114.55	1,301.39	7,513.65	9,473.22
0.000	Construction management fees, for work to \$1,000,000	Project				6.0%	6.0%
0.000	Engineering fees, landscaping & site development, maximum	Contract				6.0%	6.0%
0.000	Contingencies, at conceptual design stage	Project				20.0%	20.0%
0.000	Cost adjustment factors, cut & patch to match existing construction, add to construction costs for particular job requirements, minimum	Costs	2.0%	3.0%			
0.000	Economic conditions, unfavorable, add, modifications to total project cost summaries	Project				5.0%	5.0%
30.000	Field personnel, project manager, maximum	Week	0.00	98,894.25	0.00	98,894.25	149,971.50
30.000	Field personnel, superintendent, maximum	Week	0.00	96,198.75	0.00	96,198.75	144,864.00
0.000	Insurance, standard builders risk, maximum	Job				.8%	.8%
0.000	Main office expense, average for General Contractors as a percentage of annual volume, annual volume up to \$2,500,000	% Vol.				8.0%	
0.000	Mark-up, general Contractors mark-up on Change Orders, extra work by general contractor, add	%				15.0%	15.0%
0.000	Performance Bond, for buildings, minimum	Job				.6%	.6%
0.000	Permits rule of thumb, most cities, minimum	Job				.5%	.5%
2.000	Field testing, for concrete or steel building, minimum	Week	0.00	0.00	0.00	10,020.00	10,980.00
6.250	Office trailer, furnished, rent per month, 20' x 8', excl. hookups	Ea.	1,599.63	0.00	0.00	1,599.63	1,759.59
6.250	Field office expense, office equipment rental, average	Month	1,901.13	0.00	0.00	1,901.13	2,091.24
125.000	Barricades, traffic cones, PVC, 28" high	Ea.	2,261.25	0.00	0.00	2,261.25	2,487.38
250.000	Barricades, guardrail, wooden, 3' high, 1" x 6" planks on 2" x 4" posts	L.F.	599.65	1,211.63	0.00	1,811.28	2,458.83
100.000	Detour sign, reflective aluminum, MUTCD, 24" x 24", post mounted	Ea.	443.54	1,964.25	0.00	2,407.79	3,371.36
155.000	Cleaning up, cleanup of floor area, continuous, per day, during construction	M.S.F.	672.95	5,754.38	703.82	7,131.15	10,125.51
	Totals		\$82,936.97	\$304,638.77	\$15,857.74	\$413,453.48	\$577,978.67

Loveland: Phase 3B - N. Second Street A East							
Qty	Description	Unit	Bare Mat.	Bare Labor	Bare Equip.	Total	Total Incl. O&P
525.000	Minor site demolition, sidewalk, brick set in mortar, 2-1/2" thick, remove, excludes hauling	S.Y.	0.00	12,264.87	3,259.71	15,524.58	21,832.32
525.000	Minor site demolition, sidewalk, concrete, plain, 4" thick, remove, excludes hauling	S.Y.	0.00	14,196.34	3,768.45	17,964.79	25,294.95
25.000	Minor site demolition, for disposal up to 5 miles, excludes hauling, add	C.Y.	0.00	510.46	771.64	1,282.10	1,606.67
110.000	Building footings and foundations demolition, add for disposal, up to 5 miles, excludes disposal costs and dump fees	C.Y.	0.00	891.00	1,618.98	2,509.98	3,078.03
150.000	Selective demolition, dump charges, typical urban city, building construction materials, includes tipping fees only	Ton	12,361.50	0.00	0.00	12,361.50	13,597.65
8.000	Selective concrete demolition, reinforcing more than 2% cross-sectional area, break up into small pieces, exclude shoring, bracing, saw or torch cutting, loading, hauling, dumping	C.Y.	0.00	5,209.46	1,162.84	6,372.30	8,944.68
500.000	Control joint, concrete floor slab, sawcut in green concrete, 1-1/2" depth	L.F.	32.78	293.83	71.51	398.11	548.74
700.000	Expansion joint, premolded, bituminous fiber, 1/2" x 6"	L.F.	458.92	1,046.02	0.00	1,504.94	2,056.21
350.000	Reinforcing steel, in place, dowels, smooth, 12" long, 3/4" diameter, A615, grade 60	Ea.	1,273.50	4,348.61	0.00	5,622.11	7,899.09
39.000	Concrete surface treatment, curing, sprayed membrane compound	C.S.F.	837.37	389.61	0.00	1,226.98	1,516.32
500.000	Concrete sawing, concrete slabs, plain, up to 3" deep, includes blade cost, layout and set up time	L.F.	181.95	1,140.49	1,022.87	2,345.31	3,041.55
3.000	Door/window accessories, area window well, galvanized steel, 20 ga. x 3-2" wide x 2" deep	Ea.	2,089.73	95.45	0.00	2,185.18	2,462.40
200.000	Wireway, to 10' high, 2-1/2" x 2-1/2", electrical demolition, remove, incl fittings and supports	L.F.	0.00	1,662.91	0.00	1,662.91	2,472.29
8.000	Metal light pole, 16' high, electrical demolition, remove, excludes concrete bases	Ea.	0.00	1,339.16	0.00	1,339.16	1,971.94
10.000	Underground feeder cable, copper with ground, #8, 3 conductor, type UF	C.L.F.	2,030.00	2,040.00	0.00	4,070.00	5,300.00
350.000	Hole drilling, concrete wall, 8" thick, 3/4" pipe size, to 10' high	Ea.	166.36	19,980.10	3,170.06	23,316.51	33,294.08
8.000	Light poles, anchor base, galvanized steel, 14' high, excl concrete bases	Ea.	9,440.64	1,759.59	0.00	11,200.23	13,111.40
8.000	Light poles, concrete base, max 6' buried, 2' exposed, 18" dia, average cost	Ea.	3,055.10	3,922.14	115.04	7,092.28	9,246.06
3.000	Structural excavation for minor structures, bank measure, heavy soil or clay, 12' to 18' deep, hand pits	B.C.Y.	0.00	911.70	0.00	911.70	1,359.99
15.000	Structural excavation for minor structures, bank measure, for spread and mat footings, elevator pits, and small building foundations, sand & gravel, 3/4 C.Y. bucket, machine excavation, hydraulic backhoe	B.C.Y.	0.00	217.85	202.60	420.45	554.04
10.000	Backfill, heavy soil, by hand, no compaction	L.C.Y.	0.00	554.07	0.00	554.07	822.71
3,900.000	Sidewalks, driveways, and patios, sidewalk, concrete, cast-in-place with 6 x 6 - W1.4 x W1.4 mesh, broomed finish, 3,000 psi, 5" thick, excludes base	S.F.	18,856.70	14,798.71	0.00	33,655.40	42,711.24
140.000	Base course drainage layers, aggregate base course for roadways and large paved areas, stone base, compacted, 3/4" stone base, to 6" deep	S.Y.	954.55	108.13	160.17	1,222.85	1,386.51
1,170.000	Brick paving, brick on thick sand bed, laid flat, (4.5 brick/SF), 1" thick sand bed	S.F.	7,632.17	15,911.88	0.00	23,544.05	32,502.87
1,170.000	Brick paving, for 4" thick concrete bed and joints add	S.F.	3,720.20	2,691.27	0.00	6,411.47	8,131.09
90.000	Pavement, tactile warning tiles S.F.	S.F.	2,385.00	166.50	0.00	2,551.50	2,925.00
3.000	Deciduous trees, oak, balled & burlapped (B&B), 2-1/2"-3" caliper, in prepared beds	Ea.	1,327.59	1,334.81	557.74	3,220.13	4,059.95
0.000	Construction management fees, for work to \$1,000,000	Project				6.0%	6.0%
0.000	Engineering fees, landscaping & site development, maximum	Contract				6.0%	6.0%
0.000	Contingencies, at conceptual design stage	Project				20.0%	20.0%
0.000	Cost adjustment factors, cut & patch to match existing construction, add to construction costs for particular job requirements, minimum	Costs	2.0%	3.0%			
0.000	Economic conditions, unfavorable, add, modifications to total project cost summaries	Project				5.0%	5.0%
30.000	Field personnel, project manager, maximum	Week	0.00	98,894.25	0.00	98,894.25	149,971.50
30.000	Field personnel, superintendent, maximum	Week	0.00	96,198.75	0.00	96,198.75	144,864.00
0.000	Insurance, standard builders risk, maximum	Job				.8%	.8%
0.000	Main office expense, average for General Contractors as a percentage of annual volume, annual volume up to \$2,500,000	% Vol.				8.0%	
0.000	Mark-up, general Contractors mark-up on Change Orders, extra work by general contractor, add	%				15.0%	15.0%
0.000	Performance Bond, for buildings, minimum	Job				.6%	.6%
0.000	Permits rule of thumb, most cities, minimum	Job				.5%	.5%
2.000	Field testing, for concrete or steel building, minimum	Week	0.00	0.00	0.00	10,020.00	10,980.00
6.250	Office trailer, furnished, rent per month, 20' x 8', excl. hookups	Ea.	1,599.63	0.00	0.00	1,599.63	1,759.59
6.250	Field office expense, office equipment rental, average	Month	1,901.13	0.00	0.00	1,901.13	2,091.24
125.000	Barricades, traffic cones, PVC, 28" high	Ea.	2,261.25	0.00	0.00	2,261.25	2,487.38
250.000	Barricades, guardrail, wooden, 3' high, 1" x 6" planks on 2" x 4" posts	L.F.	599.65	1,211.63	0.00	1,811.28	2,458.83
100.000	Detour sign, reflective aluminum, MUTCD, 24" x 24", post mounted	Ea.	443.54	1,964.25	0.00	2,407.79	3,371.36
155.000	Cleaning up, cleanup of floor area, continuous, per day, during construction	M.S.F.	672.95	5,754.38	703.82	7,131.15	10,125.51
Totals			\$74,282.18	\$311,808.20	\$16,585.41	\$412,695.79	\$579,837.16

Loveland: Phase 4A - E. Broadway South							
Qty	Description	Unit	Bare Mat.	Bare Labor	Bare Equip.	Total	Total Incl. O&P
520.000	Minor site demolition, sidewalk, concrete, plain, 4" thick, remove, excludes hauling	S.Y.	0.00	14,061.14	3,732.56	17,793.70	25,054.04
25.000	Minor site demolition, for disposal up to 5 miles, excludes hauling, add	C.Y.	0.00	510.46	771.64	1,282.10	1,606.67
110.000	Building footings and foundations demolition, add for disposal, up to 5 miles, excludes disposal costs and dump fees	C.Y.	0.00	891.00	1,618.98	2,509.98	3,078.03
150.000	Selective demolition, dump charges, typical urban city, building construction materials, includes tipping fees only	Ton	12,361.50	0.00	0.00	12,361.50	13,597.65
335.000	Control joint, concrete floor slab, sawcut in green concrete, 1-1/2" depth	L.F.	21.96	196.86	47.91	266.73	367.65
500.000	Expansion joint, premolded, bimetallic fiber, 1/2" x 6"	L.F.	327.80	747.16	0.00	1,074.96	1,468.72
225.000	Reinforcing steel, in place, dowels, smooth, 12" long, 3/4" diameter, A615, grade 60	Ea.	818.68	2,795.54	0.00	3,614.22	5,077.98
47.000	Concrete surface treatment, curing, sprayed membrane compound	C.S.F.	1,009.13	469.53	0.00	1,478.66	1,827.36
1,500.000	Concrete sawing, concrete slabs, plain, up to 3" deep, includes blade cost, layout and set up time	L.F.	545.85	3,421.47	3,068.60	7,035.92	9,124.65
7.000	Door/window accessories, area window well, galvanized steel, 20 ga. x 3-2" wide x 2" deep	Ea.	4,876.03	222.72	0.00	5,098.74	5,745.60
10.000	Underground feeder cable, copper with ground, #8, 3 conductor, type UF	C.L.F.	2,030.00	2,040.00	0.00	4,070.00	5,300.00
225.000	Hole drilling, concrete wall, 8" thick, 3/4" pipe size, to 10' high	Ea.	106.94	12,844.35	2,037.89	14,989.19	21,403.34
7.000	Light poles, anchor base, galvanized steel, 14" high, excl concrete bases	Ea.	8,260.56	1,539.64	0.00	9,800.20	11,472.48
7.000	Light poles, concrete base, max 6' buried, 2' exposed, 18" dia, average cost	Ea.	2,673.21	3,431.88	100.66	6,205.75	8,090.30
7.000	Structural excavation for minor structures, bank measure, heavy soil or clay, 12' to 18' deep, hand pits	B.C.Y.	0.00	2,127.29	0.00	2,127.29	3,173.31
25.000	Structural excavation for minor structures, bank measure, for spread and mat footings, elevator pits, and small building foundations, sand & gravel, 3/4 C.Y. bucket, machine excavation, hydraulic backhoe	B.C.Y.	0.00	363.08	337.66	700.75	923.40
12.000	Backfill, heavy soil, by hand, no compaction	L.C.Y.	0.00	664.88	0.00	664.88	987.25
4,620.000	Sidewalks, driveways and patios, sidewalk, concrete, cast-in-place with 6 x 6 - W1.4 x W1.4 mesh, broomed finish, 3,000 psi, 5" thick, excludes base	S.F.	22,337.93	17,530.77	0.00	39,868.71	50,596.39
155.000	Base course drainage layers, aggregate base course for roadways and large paved areas, stone base, compacted, 3/4" stone base, to 6" deep	S.Y.	1,056.83	119.71	177.33	1,353.87	1,535.06
1,400.000	Brick paving, brick on thick sand bed, laid flat, (4.5 brick/SF), 1" thick sand bed	S.F.	9,132.51	19,039.86	0.00	28,172.37	38,892.32
1,420.000	Brick paving, for 4" thick concrete bed and joints add	S.F.	4,515.12	3,266.33	0.00	7,781.44	9,868.50
100.000	Cast-in-place concrete curbs & gutters, concrete, wood forms, straight, 6" x 18", includes concrete	L.F.	1,483.30	889.87	0.00	2,373.17	2,948.80
40.000	Pavement, tactile warning tiles S.F.	S.F.	1,060.00	74.00	0.00	1,134.00	1,300.00
7.000	Deciduous trees, oak, balled & burlapped (B&B), 2-1/2"-3" caliper, in prepared beds	Ea.	3,097.71	3,114.55	1,301.39	7,513.65	9,473.22
0.000	Construction management fees, for work to \$1,000,000	Project				6.0%	6.0%
0.000	Engineering fees, landscaping & site development, maximum	Contract				6.0%	6.0%
0.000	Contingencies, at conceptual design stage	Project				20.0%	20.0%
0.000	Cost adjustment factors, cut & patch to match existing construction, add to construction costs for particular job requirements, minimum	Costs	2.0%	3.0%			
0.000	Economic conditions, unfavorable, add, modifications to total project cost summaries	Project				5.0%	5.0%
30.000	Field personnel, project manager, maximum	Week	0.00	98,894.25	0.00	98,894.25	149,971.50
30.000	Field personnel, superintendent, maximum	Week	0.00	96,198.75	0.00	96,198.75	144,864.00
0.000	Insurance, standard builders risk, maximum	Job				.8%	.8%
0.000	Main office expense, average for General Contractors as a percentage of annual volume, annual volume up to \$2,500,000	% Vol.				8.0%	
0.000	Mark-up, general Contractors mark-up on Change Orders, extra work by general contractor, add	%				15.0%	15.0%
0.000	Performance Bond, for buildings, minimum	Job				.6%	.6%
0.000	Permits rule of thumb, most cities, minimum	Job				.5%	.5%
2.000	Field testing, for concrete or steel building, minimum	Week	0.00	0.00	0.00	10,020.00	10,980.00
6.250	Office trailer, furnished, rent per month, 20' x 8', excl. hookups	Ea.	1,599.63	0.00	0.00	1,599.63	1,759.59
6.250	Field office expense, office equipment rental, average	Month	1,901.13	0.00	0.00	1,901.13	2,091.24
125.000	Barricades, traffic cones, PVC, 28" high	Ea.	2,261.25	0.00	0.00	2,261.25	2,487.38
250.000	Barricades, guardrail, wooden, 3' high, 1" x 6" planks on 2" x 4" posts	L.F.	599.65	1,211.63	0.00	1,811.28	2,458.83
100.000	Detour sign, reflective aluminum, MUTCD, 24" x 24", post mounted	Ea.	443.54	1,964.25	0.00	2,407.79	3,371.36
155.000	Cleaning up, cleanup of floor area, continuous, per day, during construction	M.S.F.	672.95	5,754.38	703.82	7,131.15	10,125.51
	Totals		\$83,193.19	\$294,385.34	\$13,898.44	\$401,496.98	\$561,022.12

Loveland: Phase 4B - E. Broadway North							
Qty	Description	Unit	Bare Mat.	Bare Labor	Bare Equip.	Total	Total Incl. O&P
350.000	Minor site demolition, sidewalk, brick set in mortar, 2-1/2" thick, remove, excludes hauling	S.Y.	0.00	8,176.58	2,173.14	10,349.72	14,554.88
450.000	Minor site demolition, sidewalk, concrete, plain, 4" thick, remove, excludes hauling	S.Y.	0.00	12,168.29	3,230.10	15,398.39	21,681.38
50.000	Minor site demolition, for disposal up to 5 miles, excludes hauling, add	C.Y.	0.00	1,020.92	1,543.27	2,564.19	3,213.35
110.000	Building footings and foundations demolition, add for disposal, up to 5 miles, excludes disposal costs and dump fees	C.Y.	0.00	891.00	1,618.98	2,509.98	3,078.03
150.000	Selective demolition, dump charges, typical urban city, building construction materials, includes tipping fees only	Ton	12,361.50	0.00	0.00	12,361.50	13,597.65
25.000	Selective concrete demolition, reinforcing more than 2% cross-sectional area, break up into small pieces, excludes shoring, bracing, saw or torch cutting, loading, hauling, dumping	C.Y.	0.00	16,279.58	3,633.86	19,913.44	27,952.14
350.000	Control joint, concrete floor slab, sawcut in green concrete, 1-1/2" depth	L.F.	22.95	205.68	50.05	278.68	384.11
300.000	Expansion joint, premolded, bituminous fiber, 1/2" x 6"	L.F.	196.68	448.29	0.00	644.97	881.23
200.000	Reinforcing steel, in place, dowels, smooth, 12" long, 3/4" diameter, A615, grade 60	Ea.	727.72	2,484.92	0.00	3,212.64	4,513.76
49.000	Concrete surface treatment, curing, sprayed membrane compound	C.S.F.	1,052.07	489.51	0.00	1,541.59	1,905.12
1,200.000	Concrete sawing, concrete slabs, plain, up to 3" deep, includes blade cost, layout and set up time	L.F.	436.68	2,737.18	2,454.88	5,628.73	7,299.72
7.000	Door/window accessories, area window well, galvanized steel, 20 ga. x 3-2" wide x 2' deep	Ea.	4,876.03	222.72	0.00	5,098.74	5,745.60
600.000	Wireway, to 10' high, 2-1/2" x 2-1/2", electrical demolition, remove, incl fittings and supports	L.F.	0.00	4,988.72	0.00	4,988.72	7,416.86
8.000	Metal light pole, 16' high, electrical demolition, remove, excludes concrete bases	Ea.	0.00	1,339.16	0.00	1,339.16	1,971.94
10.000	Underground feeder cable, copper with ground, #8, 3 conductor, type UF	C.L.F.	2,030.00	2,040.00	0.00	4,070.00	5,300.00
200.000	Hole drilling, concrete wall, 8" thick, 3/4" pipe size, to 10' high	Ea.	95.06	11,417.20	1,811.46	13,323.72	19,025.19
7.000	Light poles, concrete base, max 6' buried, 2' exposed, 18" dia, average cost	Ea.	2,673.21	3,431.88	100.66	6,205.75	8,090.30
3.000	Clearing & grubbing, hardwood trees, 12" diameter, tree thinning, feller buncher	Ea.	0.00	44.04	97.44	141.48	172.80
3.000	Selective clearing and grubbing, 1-1/2 C.Y. excavator, 8" to 12" diameter, stump removal on site by hydraulic excavator	Ea.	0.00	441.48	802.14	1,243.62	1,534.09
7.000	Structural excavation for minor structures, bank measure, heavy soil or clay, 12' to 18' deep, hand pits	B.C.Y.	0.00	2,127.29	0.00	2,127.29	3,173.31
40.000	Structural excavation for minor structures, bank measure, for spread and mat footings, elevator pits, and small building foundations, sand & gravel, 3/4 C.Y. bucket, machine excavation, hydraulic backhoe	B.C.Y.	0.00	580.93	540.26	1,121.19	1,477.44
12.000	Backfill, heavy soil, by hand, no compaction	L.C.Y.	0.00	664.88	0.00	664.88	987.25
4,900.000	Sidewalks, driveways, and patios, sidewalk, concrete, cast-in-place with 6 x 6 - W1.4 x W1.4 mesh, broomed finish, 3,000 psi, 5" thick, excludes base	S.F.	23,691.75	18,593.25	0.00	42,284.99	53,662.84
130.000	Base course drainage layers, aggregate base course for roadways and large paved areas, stone base, compacted, 3/4" stone base, to 6" deep	S.Y.	886.37	100.40	148.73	1,135.51	1,287.47
1,140.000	Brick paving, brick on thick sand bed, laid flat, (4.5 brick/SF), 1" thick sand bed	S.F.	7,436.47	15,503.89	0.00	22,940.36	31,669.46
1,140.000	Brick paving, for 4" thick concrete bed and joints add	S.F.	3,624.81	2,622.26	0.00	6,247.07	7,922.60
200.000	Cast-in-place concrete curbs & gutters, concrete, wood forms, straight, 6" x 18", includes concrete	L.F.	2,966.59	1,779.74	0.00	4,746.33	5,897.60
10.000	Pavement, tactile warning tiles S.F.	S.F.	265.00	18.50	0.00	283.50	325.00
7.000	Deciduous trees, oak, balled & burlapped (B&B), 2-1/2"-3" caliper, in prepared beds	Ea.	3,097.71	3,114.55	1,301.39	7,513.65	9,473.22
0.000	Construction management fees, for work to \$1,000,000	Project				6.0%	6.0%
0.000	Engineering fees, landscaping & site development, maximum	Contract				6.0%	6.0%
0.000	Contingencies, at conceptual design stage	Project				20.0%	20.0%
0.000	Cost adjustment factors, cut & patch to match existing construction, add to construction costs for particular job requirements, minimum	Costs	2.0%	3.0%			
0.000	Economic conditions, unfavorable, add, modifications to total project cost summaries	Project				5.0%	5.0%
30.000	Field personnel, project manager, maximum	Week	0.00	98,894.25	0.00	98,894.25	149,971.50
30.000	Field personnel, superintendent, maximum	Week	0.00	96,198.75	0.00	96,198.75	144,864.00
0.000	Insurance, standard builders risk, maximum	Job				.8%	.8%
0.000	Main office expense, average for General Contractors as a percentage of annual volume, annual volume up to \$2,500,000	% Vol.				8.0%	
0.000	Mark-up, general Contractors mark-up on Change Orders, extra work by general contractor, add	%				15.0%	15.0%
0.000	Performance Bond, for buildings, minimum	Job				.6%	.6%
0.000	Permits rule of thumb, most cities, minimum	Job				.5%	.5%
2.000	Field testing, for concrete or steel building, minimum	Week	0.00	0.00	0.00	10,020.00	10,980.00
6.250	Office trailer, furnished, rent per month, 20' x 8', excl. hookups	Ea.	1,599.63	0.00	0.00	1,599.63	1,759.59
6.250	Field office expense, office equipment rental, average	Month	1,901.13	0.00	0.00	1,901.13	2,091.24
125.000	Barricades, traffic cones, PVC, 28" high	Ea.	2,261.25	0.00	0.00	2,261.25	2,487.38
250.000	Barricades, guardrail, wooden, 3' high, 1" x 6" planks on 2" x 4" posts	L.F.	599.65	1,211.63	0.00	1,811.28	2,458.83
100.000	Detour sign, reflective aluminum, MUTCD, 24" x 24", post mounted	Ea.	443.54	1,964.25	0.00	2,407.79	3,371.36
155.000	Cleaning up, cleanup of floor area, continuous, per day, during construction	M.S.F.	672.95	5,754.38	703.82	7,131.15	10,125.51
	Totals		\$73,918.73	\$317,956.08	\$20,210.19	\$422,105.01	\$592,303.75

Loveland: Phase 5 - Harrison/Railroad Avenues							
Qty	Description	Unit	Bare Mat.	Bare Labor	Bare Equip.	Total	Total Incl. O&P
225.000	Demolish, remove pavement & curb, remove bituminous pavement, 4" to 6" thick, excludes hauling and disposal fees	S.Y.	0.00	3,998.15	2,511.40	6,509.56	8,705.14
650.000	Selective demolition, saw cutting, asphalt, up to 3" deep	L.F.	189.23	1,936.99	1,353.05	3,479.27	4,599.61
650.000	Selective demolition, saw cutting, each additional inch of depth over 3"	L.F.	47.31	1,147.85	793.17	1,988.32	2,608.03
1,200.000	Concrete sawing, concrete slabs, plain, up to 3" deep, includes blade cost, layout and set up time	L.F.	436.68	2,737.18	2,454.88	5,628.73	7,299.72
160.000	Structural excavation for minor structures, bank measure, for spread and mat footings, elevator pits, and small building foundations, sand & gravel, 3/4 C.Y. bucket, machine excavation, hydraulic backhoe	B.C.Y.	0.00	2,323.74	2,161.04	4,484.78	5,909.76
200.000	Reinforcing steel, in place, dowels, smooth, 12" long, 3/4" diameter, A615, grade 60	Ea.	727.72	2,484.92	0.00	3,212.64	4,513.76
200.000	Hole drilling, concrete wall, 8" thick, 3/4" pipe size, to 10' high	Ea.	95.06	11,417.20	1,811.46	13,323.72	19,025.19
200.000	Cast-in place concrete curbs & gutters, concrete, wood forms, straight, 6" x 18", includes concrete	L.F.	2,966.59	1,779.74	0.00	4,746.33	5,897.60
1,830.000	Brick paving, brick on thick sand bed, laid flat, (4.5 brick/SF), 1" thick sand bed	S.F.	11,937.49	24,887.82	0.00	36,825.31	50,837.82
1,830.000	Brick paving, for 4" thick concrete bed and joints add	S.F.	5,818.78	4,209.42	0.00	10,028.20	12,717.86
677.000	Base course drainage layers, aggregate base course for roadways and large paved areas, stone base, compacted, 3/4" stone base, to 6" deep	S.Y.	4,615.95	522.87	774.54	5,913.36	6,704.76
15.000	Structural excavation for minor structures, bank measure, heavy soil or clay, 12' to 18' deep, hand pits	B.C.Y.	0.00	4,558.49	0.00	4,558.49	6,799.95
12.000	Backfill, heavy soil, by hand, no compaction	L.C.Y.	0.00	664.88	0.00	664.88	987.25
400.000	Control joint, concrete floor slab, sawcut in green concrete, 1-1/2" depth	L.F.	26.22	235.06	57.20	318.49	438.99
300.000	Expansion joint, premolded, bituminous fiber, 1/2" x 6"	L.F.	196.68	448.29	0.00	644.97	881.23
6,100.000	Sidewalks, driveways, and patios, sidewalk, concrete, cast-in-place with 6 x 6 - W1.4 x W1.4 mesh, broomed finish, 3,000 psi, 5" thick, excludes base	S.F.	29,493.81	23,146.69	0.00	52,640.50	66,804.76
61.000	Concrete surface treatment, curing, sprayed membrane compound	C.S.F.	1,309.72	609.39	0.00	1,919.12	2,371.69
0.000	Economic conditions, unfavorable, add, modifications to total project cost summaries	Project				5.0%	5.0%
25.000	Field personnel, superintendent, maximum	Week	0.00	80,165.63	0.00	80,165.63	120,720.00
25.000	Field personnel, project manager, maximum	Week	0.00	82,411.88	0.00	82,411.88	124,976.25
0.000	Insurance, standard builders risk, maximum	Job				.8%	.8%
0.000	Main office expense, average for General Contractors as a percentage of annual volume, annual volume up to \$2,500,000	% Vol.				8.0%	
0.000	Mark-up, general Contractors mark-up on Change Orders, extra work by general contractor, add	%				15.0%	15.0%
0.000	Performance Bond, for buildings, minimum	Job				.6%	.6%
0.000	Permits rule of thumb, most cities, minimum	Job				.5%	.5%
2.000	Field testing, for concrete or steel building, minimum	Week	0.00	0.00	0.00	10,020.00	10,980.00
6.000	Office trailer, furnished, rent per month, 20' x 8', excl. hookups	Ea.	1,535.64	0.00	0.00	1,535.64	1,689.20
6.000	Field office expense, office equipment rental, average	Month	1,825.08	0.00	0.00	1,825.08	2,007.59
125.000	Barricades, traffic cones, PVC, 28" high	Ea.	2,261.25	0.00	0.00	2,261.25	2,487.38
250.000	Barricades, guardrail, wooden, 3' high, 1" x 6" planks on 2" x 4" posts	L.F.	599.65	1,211.63	0.00	1,811.28	2,458.83
100.000	Detour sign, reflective aluminum, MUTCD, 24" x 24", post mounted	Ea.	443.54	1,964.25	0.00	2,407.79	3,371.36
155.000	Cleaning up, cleanup of floor area, continuous, per day, during construction	M.S.F.	672.95	5,754.38	703.82	7,131.15	10,125.51
150.000	Selective demolition, dump charges, typical urban city, building construction materials, includes tipping fees only	Ton	12,361.50	0.00	0.00	12,361.50	13,597.65
110.000	Building footings and foundations demolition, add for disposal, up to 5 miles, excludes disposal costs and dump fees	C.Y.	0.00	891.00	1,618.98	2,509.98	3,078.03
0.000	Public storm utility drainage piping, corrugated metal pipe, galvanized and bituminous coated with paved invert, 20' lengths, 16 ga., 15" diameter, excludes excavation and backfill	L.F.	0.00	0.00	0.00	0.00	0.00
0.000	Engineering fees, landscaping & site development, maximum	Contrd				6.0%	6.0%
0.000	Cost adjustment factors, cut & patch to match existing construction, add to construction costs for particular job requirements, minimum	Costs	2.0%	3.0%			
0.000	Construction management fees, for work to \$1,000,000	Project				6.0%	6.0%
0.000	Contingencies, at conceptual design stage	Project				20.0%	20.0%
0.000	Underground feeder cable, copper with ground, #8, 3 conductor, type UF	C.L.F.	0.00	0.00	0.00	0.00	0.00
30.000	Pavement, tactile warning tiles S.F.	S.F.	795.00	55.50	0.00	850.50	975.00
	Totals		\$78,355.84	\$259,562.94	\$14,239.55	\$362,178.33	\$503,569.90

Loveland: Phase 6 Plaza South							
Qty	Description	Unit	Bare Mat.	Bare Labor	Bare Equip.	Total	Total Incl. O&P
1,200.000	Demolish, remove pavement & curb, remove bituminous pavement, 4" to 6" thick, excludes hauling and disposal fees	S.Y.	0.00	21,323.48	13,394.15	34,717.63	46,427.41
110.000	Building footings and foundations demolition, add for disposal, up to 5 miles, excludes disposal costs and dump fees	C.Y.	0.00	891.00	1,618.98	2,509.98	3,078.03
150.000	Selective demolition, dump charges, typical urban city, building construction materials, includes tipping fees only	Ton	12,361.50	0.00	0.00	12,361.50	13,597.65
1,200.000	Selective demolition, saw cutting, asphalt, up to 3" deep	L.F.	349.34	3,575.99	2,497.94	6,423.28	8,491.58
1,200.000	Selective demolition, saw cutting, each additional inch of depth over 3"	L.F.	87.34	2,119.10	1,464.31	3,670.75	4,814.83
600.000	Control joint, concrete floor slab, sawcut in green concrete, 1-1/2" depth	L.F.	39.34	352.59	85.81	477.73	658.48
500.000	Expansion joint, premolded, bituminous fiber, 1/2" x 6"	L.F.	327.80	747.16	0.00	1,074.96	1,468.72
300.000	Reinforcing steel, in place, dowels, smooth, 12" long, 3/4" diameter, A615, grade 60	Ea.	1,091.57	3,727.38	0.00	4,818.95	6,770.65
93.000	Concrete surface treatment, curing, sprayed membrane compound	C.S.F.	1,996.79	929.07	0.00	2,925.87	3,615.85
600.000	Concrete sawing, concrete slabs, plain, up to 3" deep, includes blade cost, layout and set up time	L.F.	218.34	1,368.59	1,227.44	2,814.37	3,649.86
300.000	Hole drilling, concrete wall, 8" thick, 3/4" pipe size, to 10' high	Ea.	142.59	17,125.80	2,717.19	19,985.58	28,537.78
18.000	Structural excavation for minor structures, bank measure, heavy soil or clay, 12' to 18' deep, hand pits	B.C.Y.	0.00	5,470.18	0.00	5,470.18	8,159.94
200.000	Structural excavation for minor structures, bank measure, for spread and mat footings, elevator pits, and small building foundations, sand & gravel, 3/4 C.Y. bucket, machine excavation, hydraulic backhoe	B.C.Y.	0.00	2,904.67	2,701.30	5,605.97	7,387.20
25.000	Backfill, heavy soil, by hand, no compaction	L.C.Y.	0.00	1,385.18	0.00	1,385.18	2,056.78
9,300.000	Sidewalks, driveways, and patios, sidewalk, concrete, cast-in-place with 6 x 6 - W1.4 x W1.4 mesh, broomed finish, 3,000 psi, 5" thick, excludes base	S.F.	44,965.97	35,289.22	0.00	80,255.19	101,849.88
1,033.000	Base course drainage layers, aggregate base course for roadways and large paved areas, stone base, compacted, 3/4" stone base, to 6" deep	S.Y.	7,043.24	797.83	1,181.83	9,022.90	10,230.45
2,790.000	Brick paving, brick on thick sand bed, laid flat, (4.5 brick/SF), 1" thick sand bed	S.F.	18,199.78	37,943.72	0.00	56,143.50	77,506.84
2,790.000	Brick paving, for 4" thick concrete bed and joints add	S.F.	8,871.25	6,417.64	0.00	15,288.89	19,389.52
500.000	Cast-in-place concrete curbs & gutters, concrete, wood forms, straight, 6" x 18", includes concrete	L.F.	7,416.48	4,449.35	0.00	11,865.83	14,744.00
0.000	Construction management fees, for work to \$1,000,000	Project				6.0%	6.0%
0.000	Engineering fees, landscaping & site development, maximum	Contract				6.0%	6.0%
0.000	Contingencies, at conceptual design stage	Project				20.0%	20.0%
0.000	Cost adjustment factors, cut & patch to match existing construction, add to construction costs for particular job requirements, minimum	Costs	2.0%	3.0%			
0.000	Economic conditions, unfavorable, add, modifications to total project cost summaries	Project				5.0%	5.0%
25.000	Field personnel, project manager, maximum	Week	0.00	82,411.88	0.00	82,411.88	124,976.25
25.000	Field personnel, superintendent, maximum	Week	0.00	80,165.63	0.00	80,165.63	120,720.00
0.000	Insurance, standard builders risk, maximum	Job				.8%	.8%
0.000	Main office expense, average for General Contractors as a percentage of annual volume, annual volume up to \$2,500,000	% Vol.				8.0%	
0.000	Mark-up, general Contractors mark-up on Change Orders, extra work by general contractor, add	%				15.0%	15.0%
0.000	Performance Bond, for buildings, minimum	Job				.6%	.6%
0.000	Permits rule of thumb, most cities, minimum	Job				.5%	.5%
2.000	Field testing, for concrete or steel building, minimum	Week	0.00	0.00	0.00	10,020.00	10,980.00
6.000	Office trailer, furnished, rent per month, 20' x 8', excl. hookups	Ea.	1,535.64	0.00	0.00	1,535.64	1,689.20
6.000	Field office expense, office equipment rental, average	Month	1,825.08	0.00	0.00	1,825.08	2,007.59
90.000	Barricades, traffic cones, PVC, 28" high	Ea.	1,628.10	0.00	0.00	1,628.10	1,790.91
150.000	Barricades, guardrail, wooden, 3' high, 1" x 6" planks on 2" x 4" posts	L.F.	359.79	726.98	0.00	1,086.77	1,475.30
50.000	Detour sign, reflective aluminum, MUTCD, 24" x 24", post mounted	Ea.	221.77	982.13	0.00	1,203.90	1,685.68
155.000	Cleaning up, cleanup of floor area, continuous, per day, during construction	M.S.F.	672.95	5,754.38	703.82	7,131.15	10,125.51
	Totals		\$109,354.66	\$316,858.93	\$27,592.78	\$463,826.37	\$637,885.89

THIS PAGE INTENTIONALLY LEFT BLANK

Contact us:

City of Loveland

120 West Loveland Avenue

Loveland, Ohio 45140

513-683-0150

lovelandoh.gov