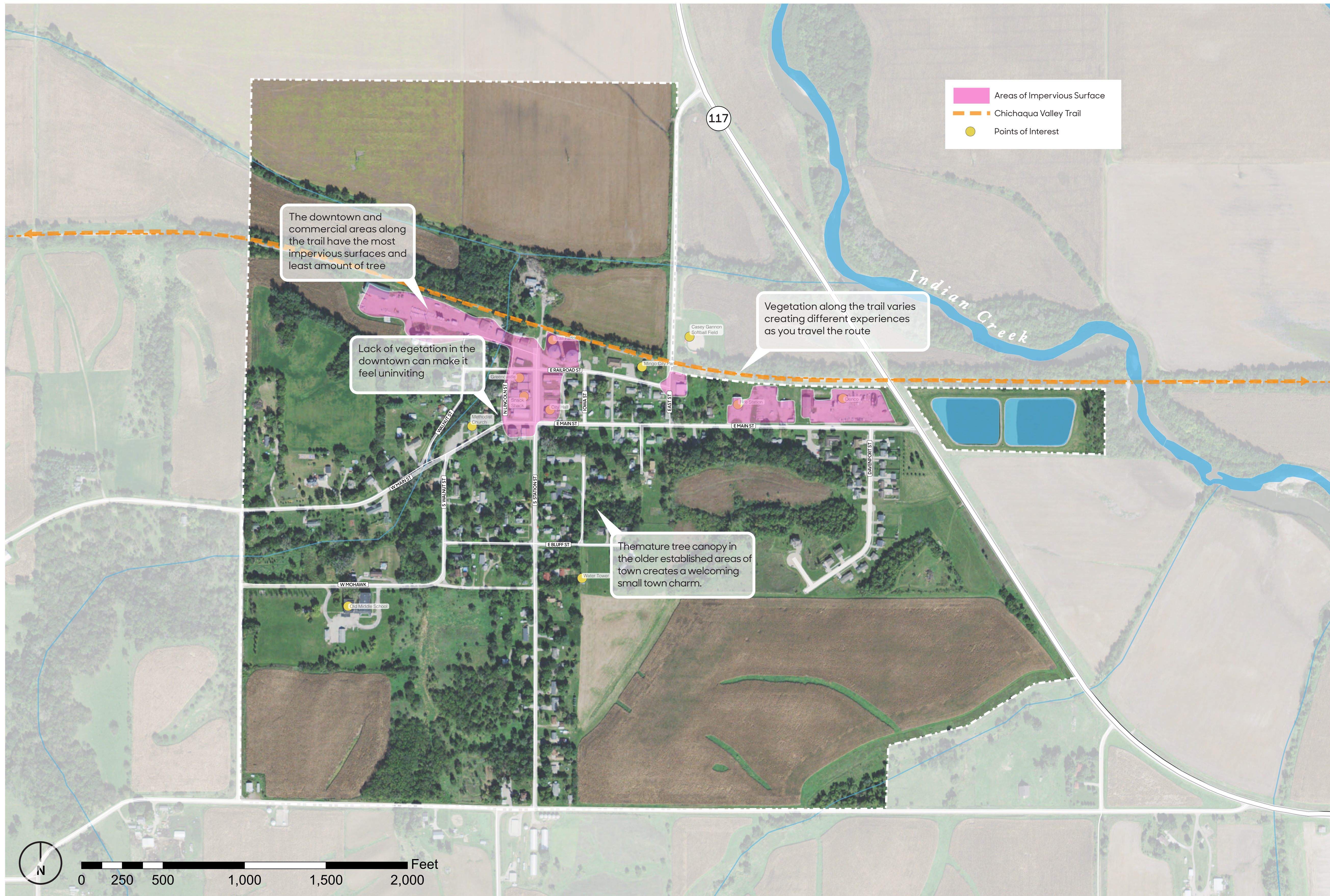


Mingo's primary in-town roads are Main Street and Station Street. These roads lead people into town, to the downtown community assets and to the trail head. The majority of people in Mingo live along these two streets or immediately adjacent. Although these are primary streets, there is limited sidewalks along these routes which impedes pedestrian accessibility.

For pedestrians and cyclists, the Chichaqua Valley Trail offers a great recreational amenity. It not only serves Mingo's residents, but also brings many visitors into town. The trail extends across the northern edge of the community, with access in the center of town. Additional access is needed for residents living on the east side of town.

Key nodes are created where these primary routes intersect. Updates and enhancements at these locations would have greater impact due to circulation patterns, visibility, and community assets. As a part of the visioning process these locations will be highlighted in the analysis and design concepts.

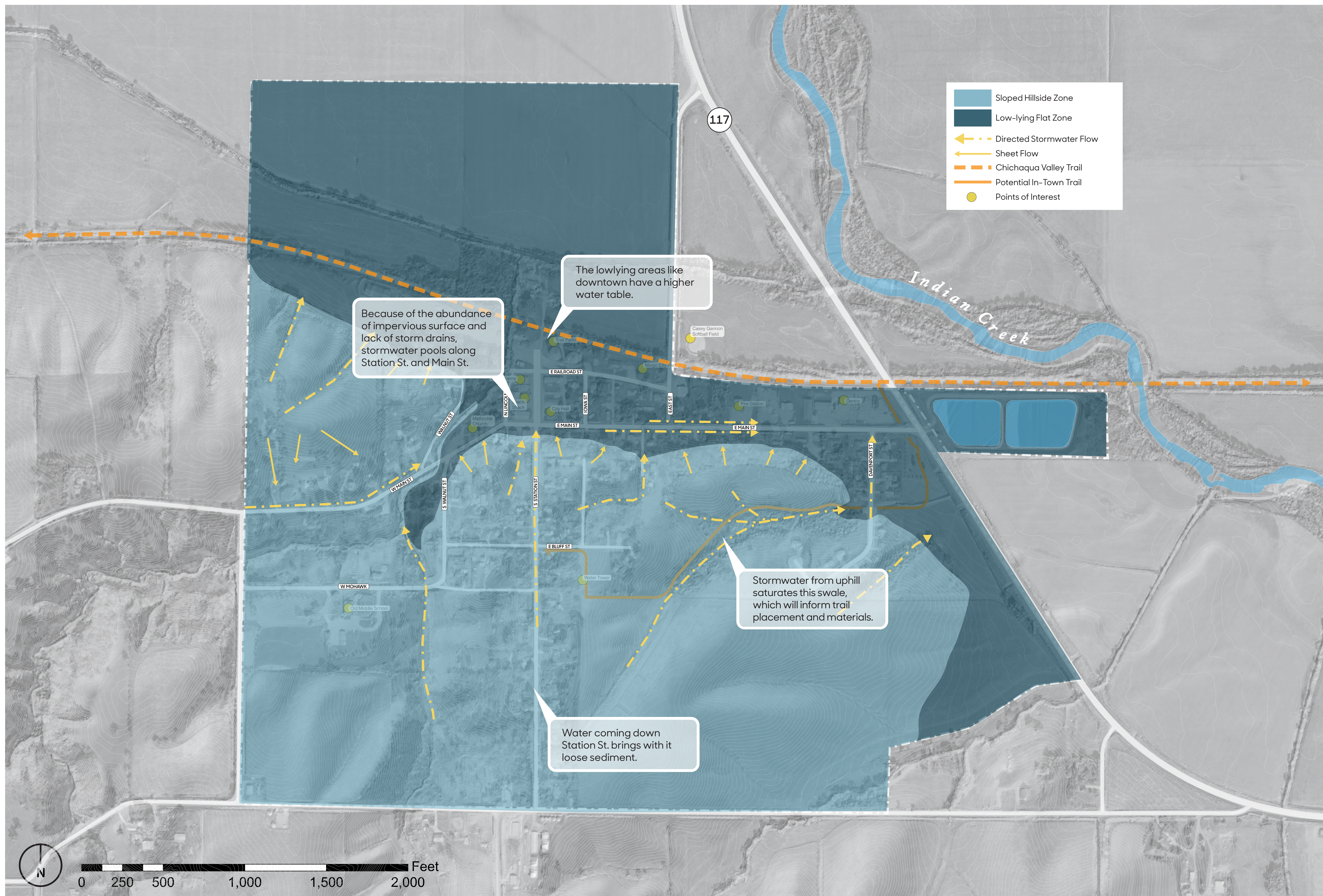


Mingo has a well developed tree canopy that extends across much of the hillside in the residential areas of town. This tree canopy helps create Mingo's small town, peaceful charm.

In the more public areas of the downtown and along Main Street, tree cover is limited. The downtown and other commercial locations such as the coop and the businesses located on the east side of town also create large amounts of impervious surfaces. In these areas stormwater has limited ability to infiltrate into the groundwater.

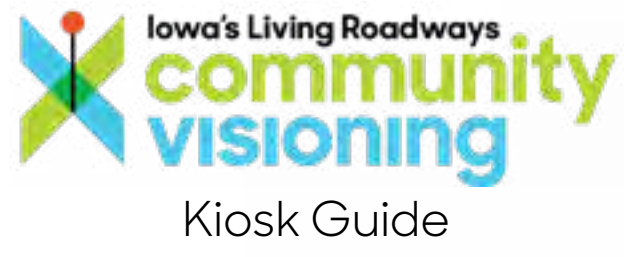
Lack of vegetation and vast areas of impervious surfaces can create spaces that feel unwelcoming. Plantings and street trees can help enhance the character of a space, reduce negative effects from harsh temperatures and weather, and help increase stormwater infiltration.

The experience along the Chichaqua Valley trail varies as it passes in and out of the trees and different parts of the community. Vegetation can be utilized along the south edge of the trail to buffer views that may be less desirable, and frame views into key moments of the community that should be highlighted, like the downtown and the new mural.

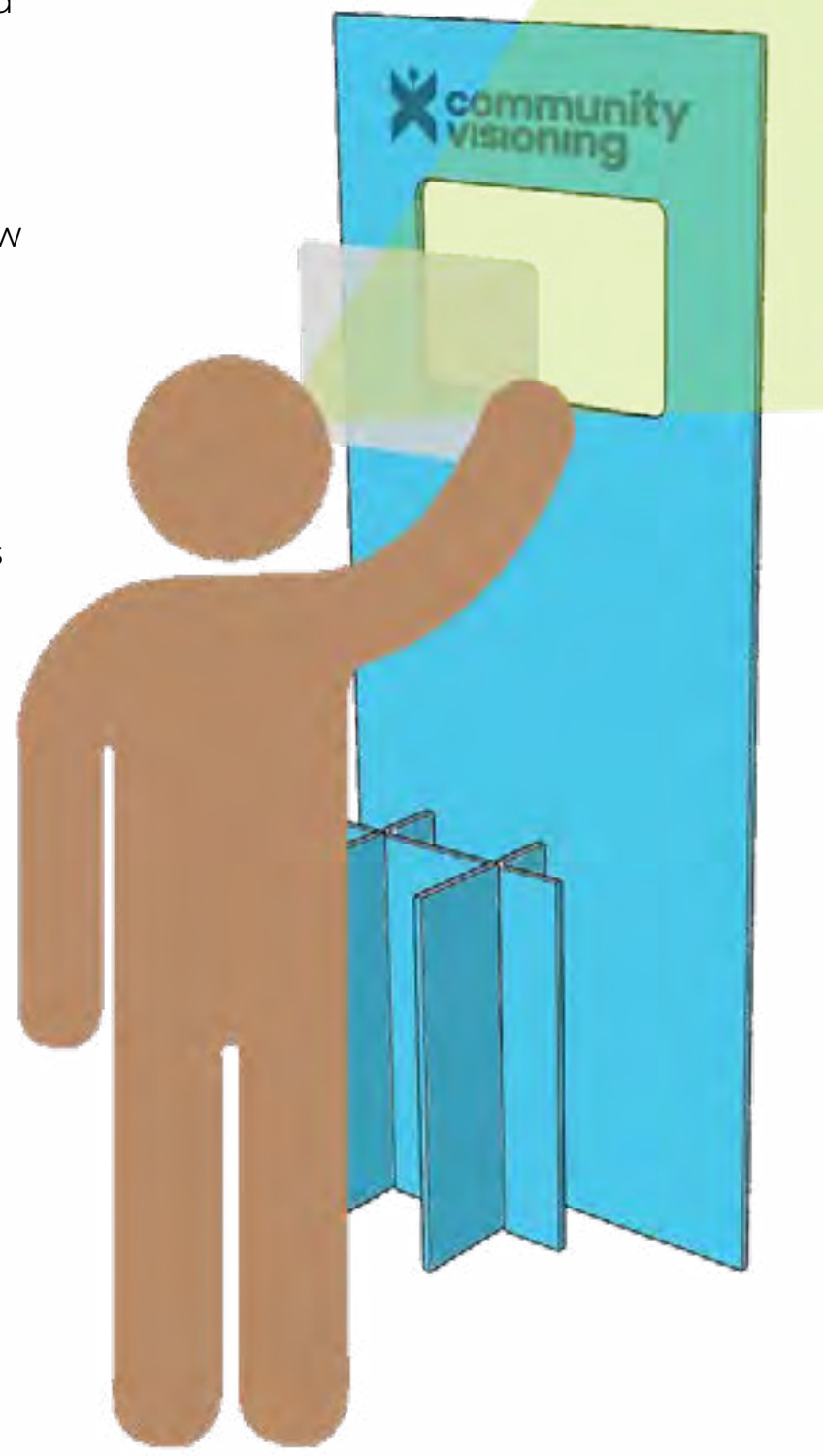


The community of Mingo is built on a glacial moraine. The majority of residents live on its north facing hill side. At the foot of the hill the land use gives over to mostly commercial and public spaces. Stormwater flows down from the residential hillside toward these commercial areas where there is less pervious surfaces for the stormwater to infiltrate into. The groundwater in these locations is much closer to the surface than it is on the hillside. These conditions can lead to ponding along roadways and erosion of swales and ditches where water is flowing quickly and in larger amounts. Moraines also contain lots of loose sediment which can erode and wash out during storm events and collect in low-lying areas.

There are locations on the hillside where water is being directed. These areas can also have higher water tables which can limit design options. The biggest areas of directed flow are in the ditches along Main Street. In some locations along Main St. there are concerns with water velocity, quantity and sediment build up.



- 1 At City Hall collect a packet containing a map, survey and design concepts to be utilized with this kiosk
- 2 Align yourself with the window on the kiosk
- 3 Hold the transparent overlay up to the frame to see the potential streetscape options
- 4 Return overlays to City Hall after you complete the "community tour" so they can be sanitized for further use



The result should look something like this. On the survey please provide us with your feedback regarding the two options and your concerns and goals related to downtown improvements. In both scenarios preserving ample parking is a priority along with the additional enhancements.

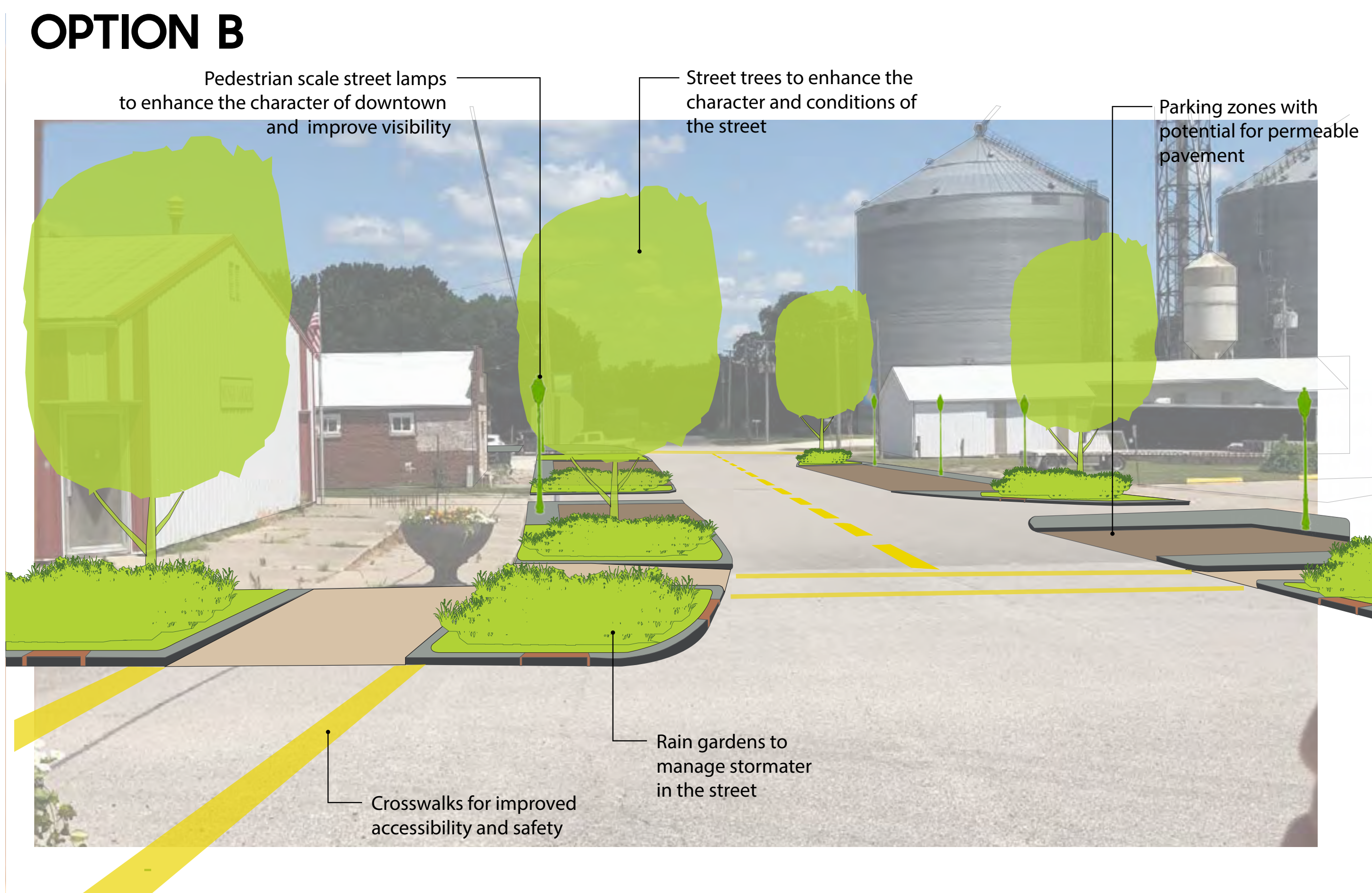


Concepts for streetscape enhancements are planned for Station Street from Main Street to Railroad Street and along the business portion of Main Street.

OPTION A



OPTION B



Iowa State University Community Design Lab

LA: Chad Hunter

Interns: Joe Anderson, Parmiss Sazgar, Clare Kiboko, Abby Schaffer & Minni Davis

Iowa State University | Trees Forever | Iowa Department of Transportation

Potential Streetscape Components



Bump-Outs

Bump-outs narrow the roadway to make it feel more comfortable and slower-paced and reduce the crossing width for pedestrians. They provide space for vegetation, lighting and social gathering. Bump-outs also help to define the parking zones and make exiting your car safer.

Suggested Use: At the corners of primary nodes such as Station Street where it intersects Main or Railroad Street. Smaller bump-outs can be introduced mid-block to increase planting areas and create other crossing opportunities. For Mingo, maintaining a wide turning radius will be important for accommodating larger vehicles.



Rain Gardens

Rain gardens and bioretention facilities use a combination of soil and plant material to capture and treat stormwater. Rain gardens are typically smaller systems that do not require engineering. They feature a planted or rock-based depression, designed to provide temporary rainwater storage and filter runoff. These are typically cost effective and easy to maintain options for both private and public land.

Suggested Use: Rain gardens should be implemented within the bump-outs for ample space. Plants used should require little water and maintenance. Decorative rocks/stones can be incorporated as well.



Permeable Pavement

Permeable pavement refers to surface treatment that is suitable for pedestrian or vehicular traffic and contains pore spaces or joints that allow stormwater to pass through to a stone base where it is infiltrated into the underlying native soil, or temporarily detained and conveyed to a stormwater management pond. Types of permeable pavement include: pervious concrete, porous asphalt, and permeable interlocking concrete pavers.

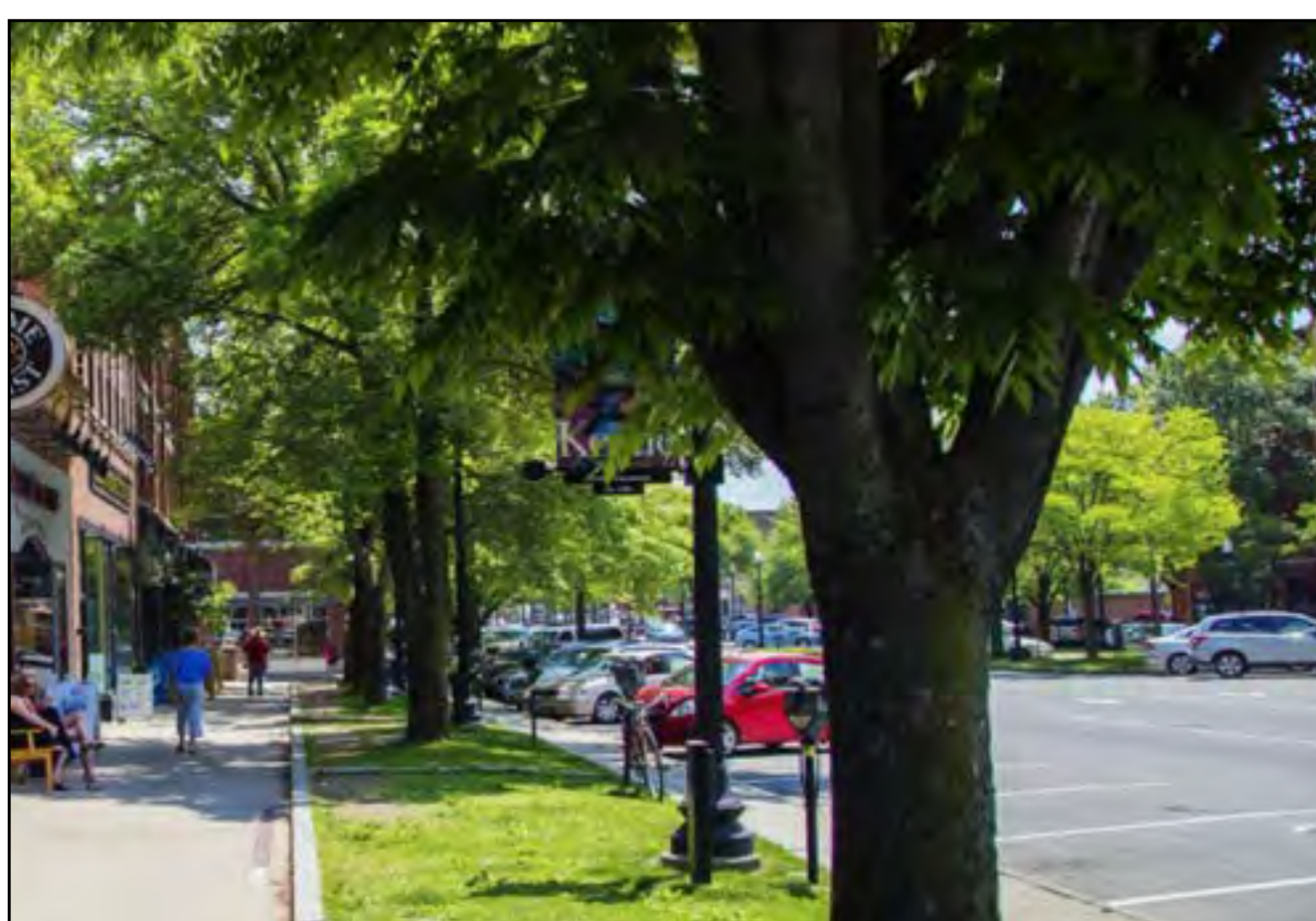
Suggested Use: Pavement changes create visual interest, which helps slow down traffic. Permeable pavers could be used to mark on-street parking or crosswalks. Place permeable pavement in a location that will not have high traffic speeds.



Pedestrian-Scale Lighting

Lamp posts at this scale help to make streetscapes feel more welcoming and geared toward slower moving traffic. They bring more light to the sidewalk zone which help to make streets feel safe and increase accessibility. The design of the lighting should reinforce the character the intended character for that given environment.

Suggested Use: Pedestrian-scale lighting should be implemented where there is more likely to be foot traffic and cyclists present.



Street Trees

Street trees provide many benefits from reducing traffic speeds to improving environmental health. Trees make spaces feel more welcoming by providing shade and protection from weather. They enliven spaces and build community identity.

Suggested Use: Utilize throughout the downtown area within bump-outs or medians with plenty of growing space. When near utility lines select smaller species to avoid points of conflict with the wires.





Assets: Trail



"...anywhere along the {Chichaqua Valley} trail's pretty nice...especially in spring time or fall, because you can see everything budding and all the leaves falling off the trees and changing colors."

Barrier: Limited Trail Access



"It would be nice if somehow there could be an entrance on Davenport [St.] or somewhere along there to get to the bike trail."

Focus Group Results

User Types	Destinations and Activities			Desirable Qualities and Features			Undesirable Qualities and Features				Most Desired Improvements and Activities				
	City Park	Chichaqua Trail	Walking Dogs Around Town	Shade	Universal Access	Trail Amenities	Incomplete and Poor Sidewalks	Poor Lighting	Poor Visibility	Lack of Way-finding Signage	Underutilized Middle School Property	Trail Improvements	Lighting	Sidewalk Improvements	Way-finding Signage
Actives	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Mobility Impaired	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Older Adults	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Youth	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Parents	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Steering Committee	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

3e



Opportunities:

- Establish a trail connection on the east side of town
- Create new walking/ biking opportunities with an in-town trail
- Extend and update sidewalks
- Visually link the downtown to the trail to create awareness and encourage people to stop in Mingo
- Develop signage to inform visitors of community amenities

Community Impacts

See how other towns have enhanced their communities through streetscape and trail updates as part of the Community Visioning program.

Downtown Lisbon, Iowa



Streetscape

Street lamps with custom signs in downtown Lisbon create an identity for the town. Planted bump outs on the street corner slow traffic, frame the parking spaces, and create beauty downtown.

Trails

In Shellsburg, volunteers constructed an accessible trail throughout their Memorial Park. This project was made possible through community members' volunteer labor and equipment.



Memorial Park, Shellsburg, Iowa

Tripoli, Iowa



Trail Beautification

The pedestrian bridge along the trail in Tripoli creates a focal point that brings attention to the creek and frames views of the park to the west. There are similar opportunities in Mingo to enhance the experience and frame views into the community.

Stormwater Management: Bioswale

The first project that the Belle Plaine addressed was a wet area in their park that created maintenance issues. They turned this area into a bioswale, which consists of vegetation that does not need to be mowed and cleans stormwater.



Box Park Bioswale, Belle Plaine, Iowa

Mingo

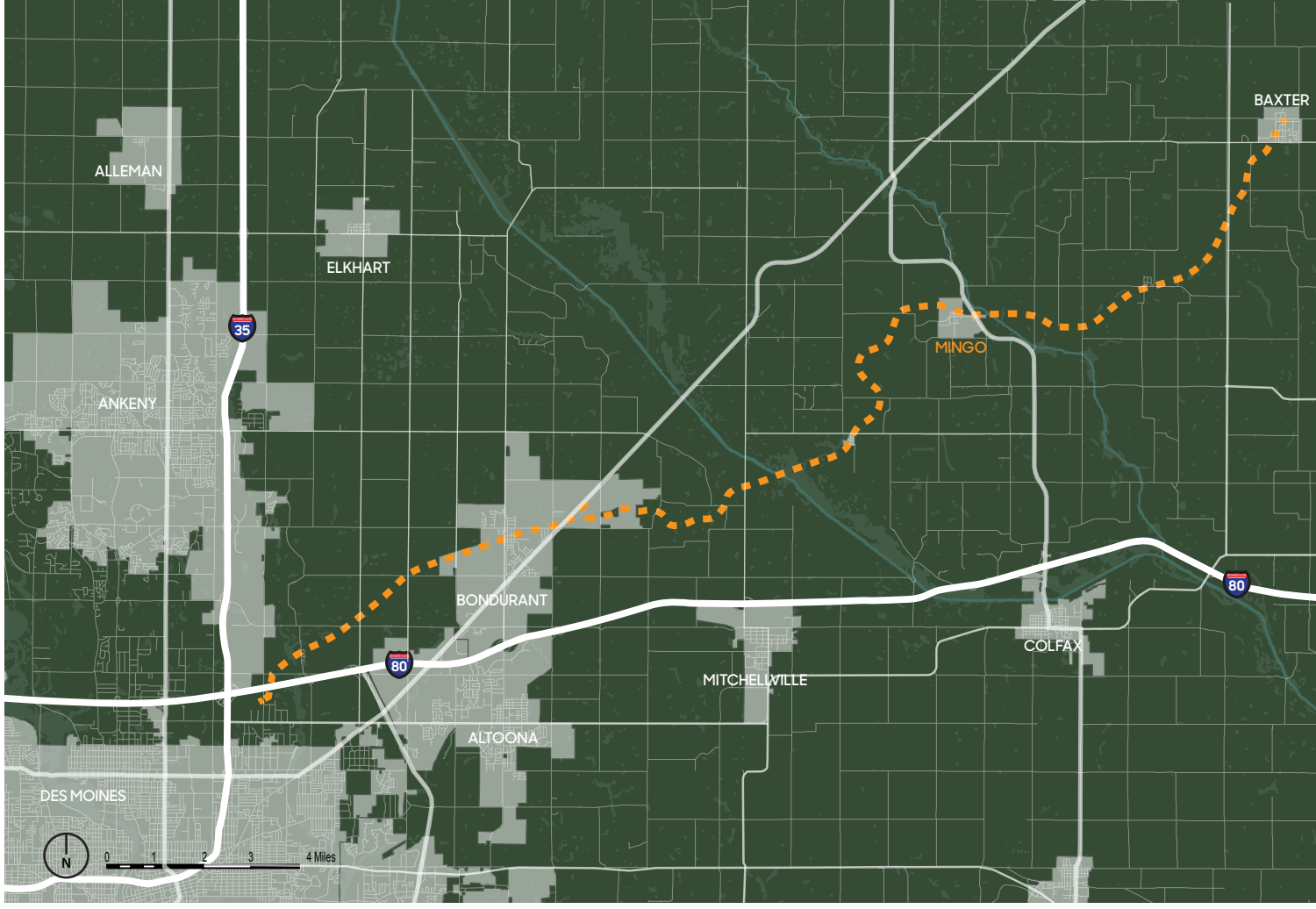


Iowa State University Community Design Lab

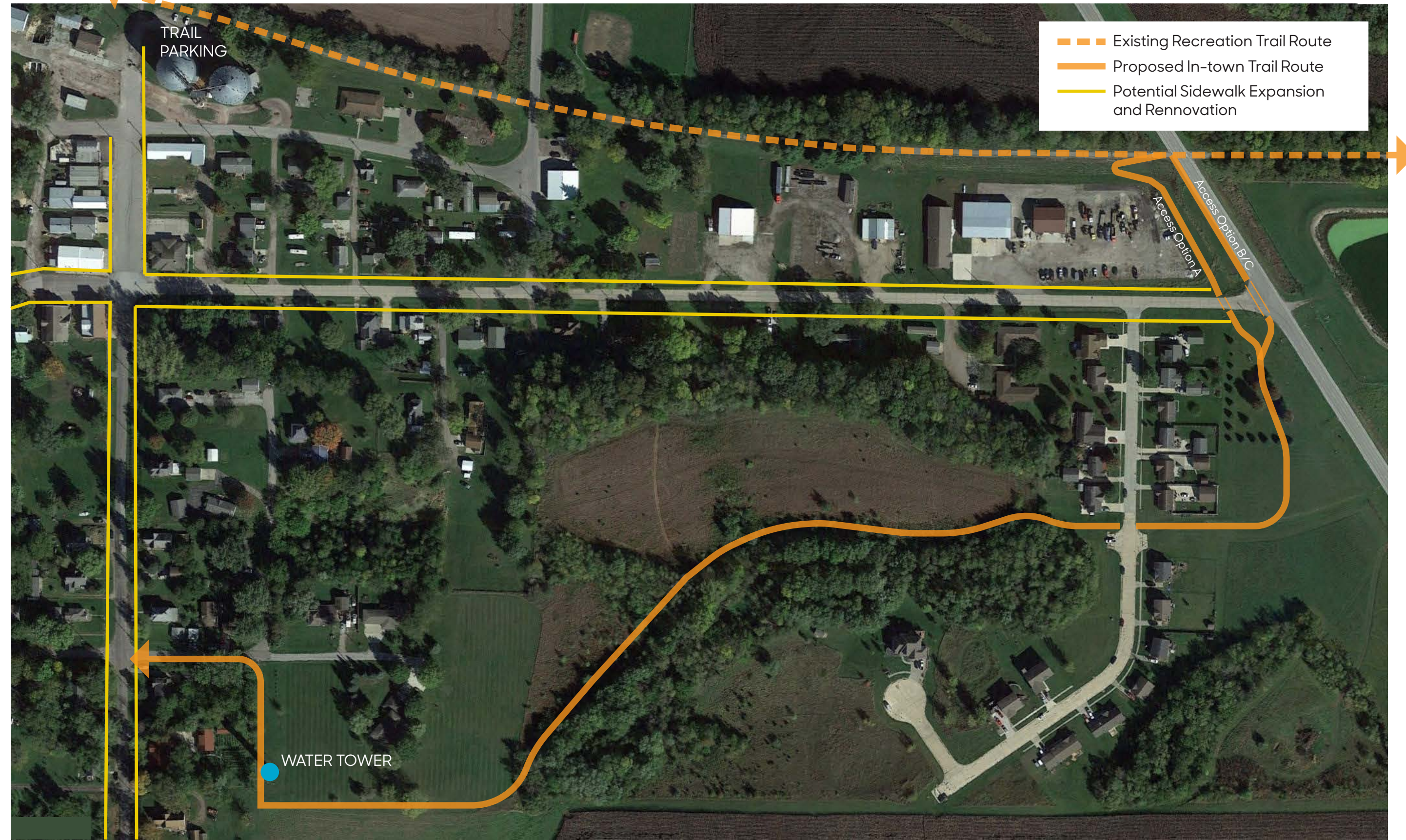
LA: Chad Hunter

Interns: Joe Anderson, Parmiss Sazgar, Clare Kiboko, Abby Schaffer & Minni Davis

Iowa State University | Trees Forever | Iowa Department of Transportation



The Chichaqua Valley Trail links many communities along its path from Des Moines' Norwoodville neighborhood on the upper east side to the town of Baxter northeast of Mingo. The trail is a major asset for the community, bringing people to and through town. The trail also provides a recreational link for Mingo's residents out to the surrounding communities and rural Iowa landscape. Once in Des Moines cyclists can link up with many other trails that connect into the city.



Within Mingo there is trail access and parking at Station Street and another access on East Street. These access points serve a large majority of residents, but access is limited for residents on the east side of town. Lack of sidewalks along Main Street further complicates access to the trail for these residents.

The trail is heavily used and cyclists along the route can be traveling quickly. An in-town trail route is being considered to provide a more slow paced route. This new route would provide an east side access and pedestrian connection between Station Street and Davenport Street.

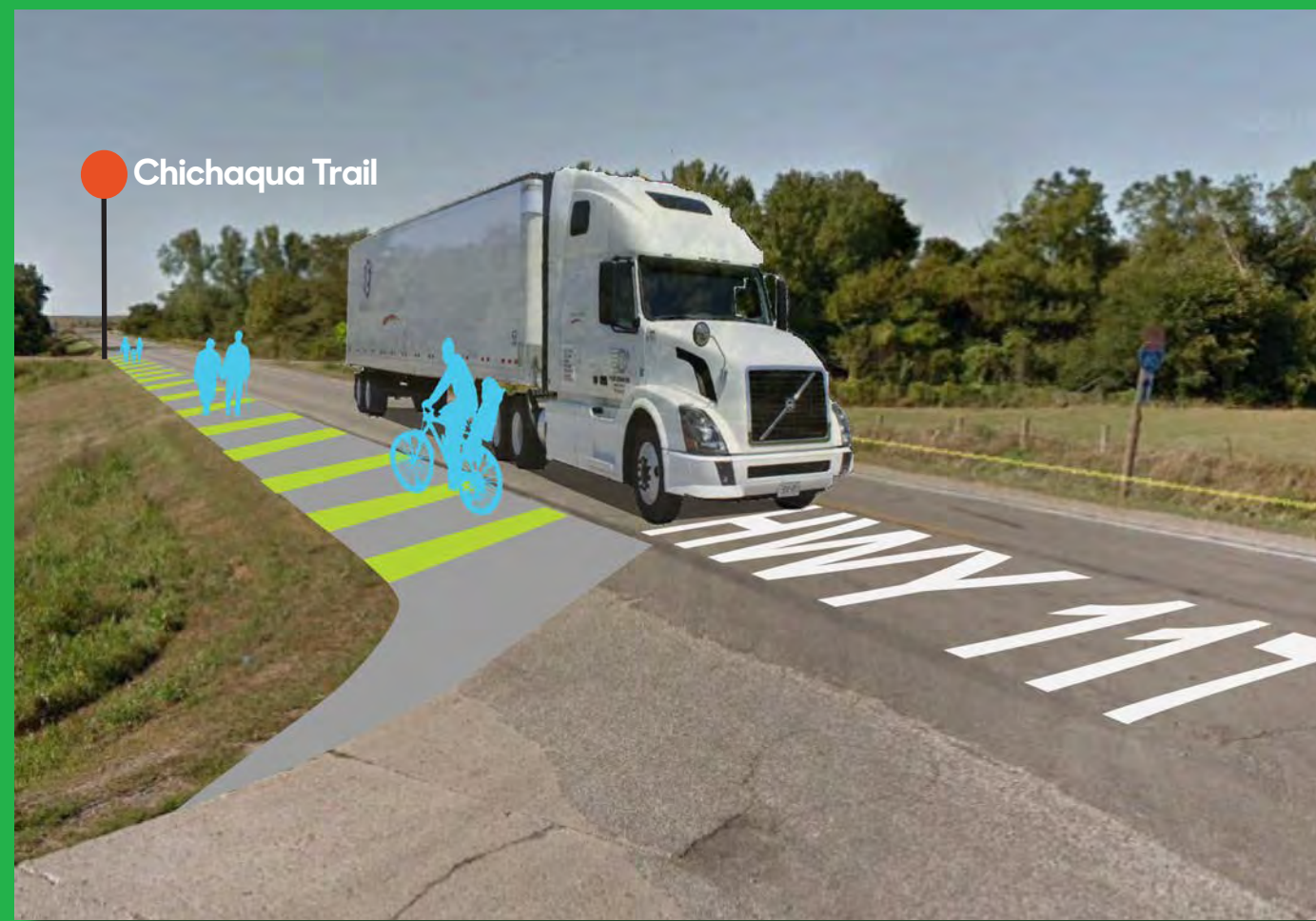
Trail Access at HWY117 Options

Option A: Off-road trail



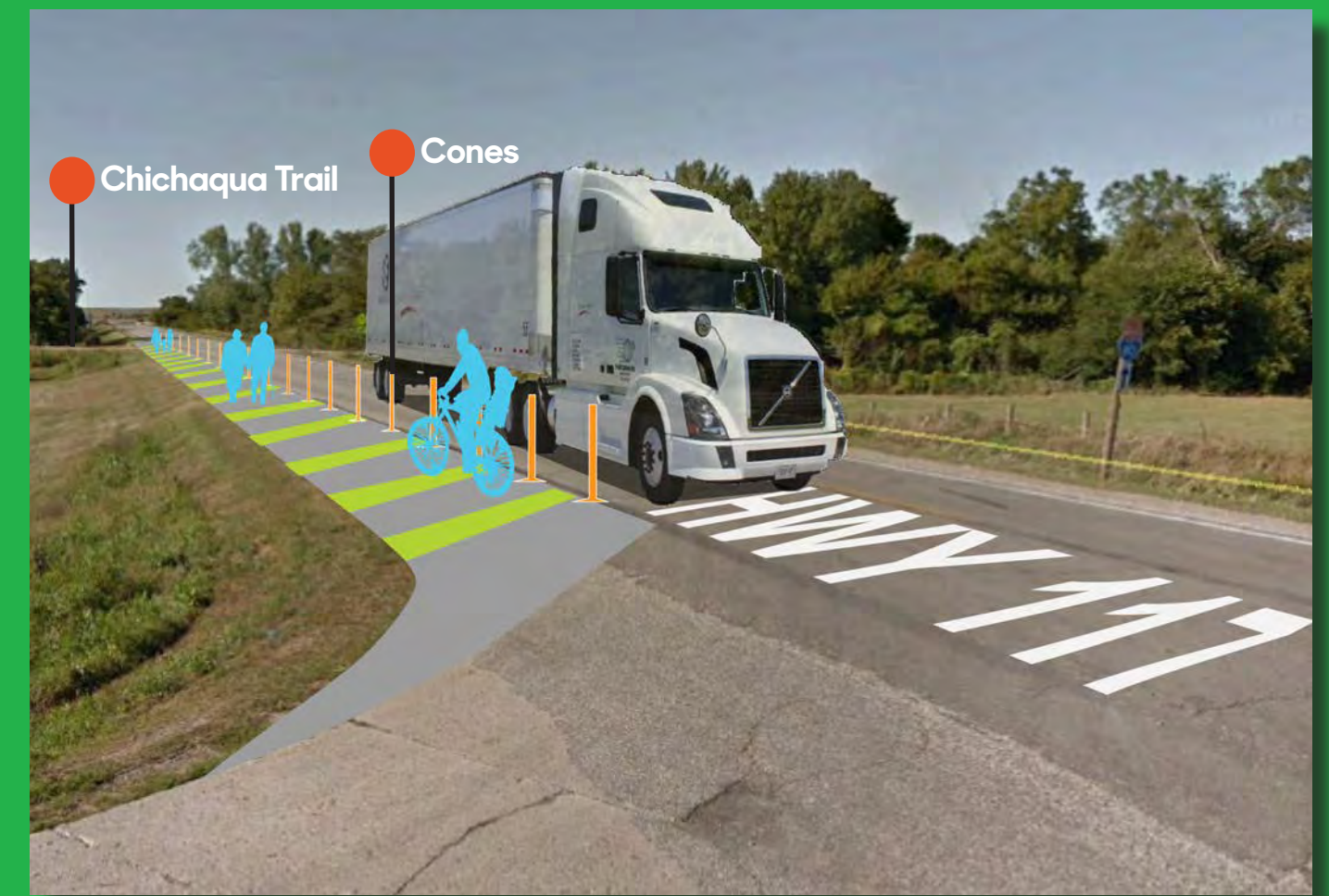
- Benefits:**
- Increased safety being away from the roadway
 - Potential for wider trail
- Concerns:**
- More intense earthwork required to get up and down from the existing trail
 - Earthwork and culverts needed to get across ditch along Main Street

Option B: Extended Shoulder



- Benefits:**
- Less work and materials required to extend shoulder
- Concerns:**
- No buffer from traffic along highway
 - Crossing at Main Street would need to occur adjacent to the highway

Option C: Protected Shoulder



- Benefits:**
- Less work and materials required to extend shoulder
 - Buffer creates safer environment for pedestrians and vehicles
- Concerns:**
- Crossing at Main Street would need to occur adjacent to the highway



Trail Head Parking Enhancements



Along the trail there are opportunities to bring attention to key locations in the community and buffer less desirable views. The trail head is a prime spot to engage visitors. Plantings and smaller structures can be used to enhance the character of the space and frame views into downtown and the new mural. This heightens the awareness of the community and its amenities as people are passing through town or starting they bike ride from the trail head.

Using native plantings will provide a low maintenance solution that fits the character and conditions of the site. Additionally, the design can respond to themes that are important to Mingo and its history. This design proposes materials and design elements that tie into Mingo's railroad past.



The green space located at HWY 117 and Main Street operates as Mingo's front porch. It welcomes residents and visitors entering and leaving town, as well as people passing by on the highway. It sits at the primary node of Mingo where its two most major roads intersect and the Chichaqua Valley Trail intersects the highway just to the north.

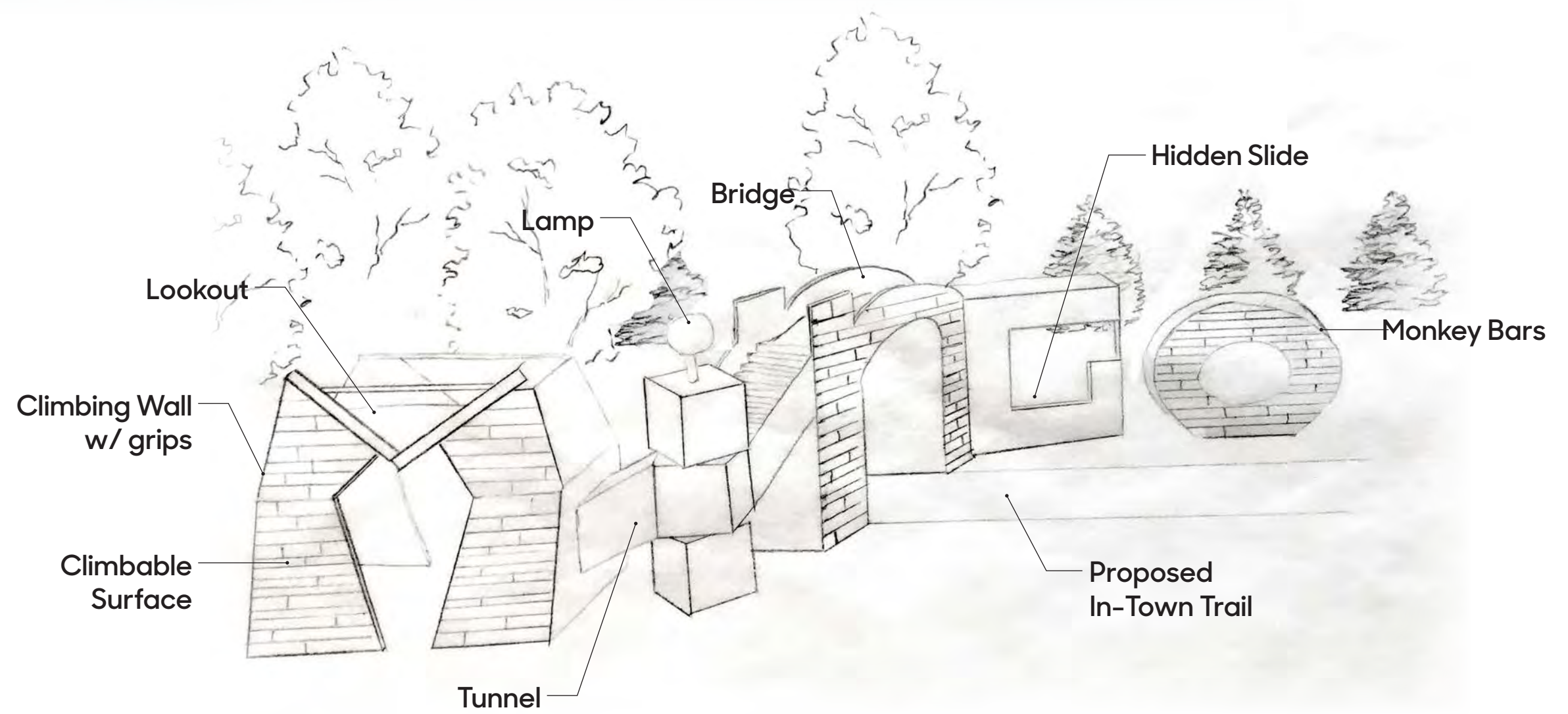
Through the visioning process it has become clear that residents take great pride in calling Mingo home. This green space provides opportunities to celebrate Mingo and to catch the attention of visitors and entice them in to explore your town.

The space itself currently has park-like qualities and would require only minimal updates to transform into a social gathering space for the public. The following design concept provides a more bold approach with a sculptural sign that doubles as a playground. Offering a one-of-a-kind structure that is a celebration of Mingo.

The sign is a large structure intended to be seen by motorists traveling HWY 117 and pedestrians and cyclists utilizing the Chichaqua Valley Trail. The proposed in-town trail route would run through this park-like space and pass under the sculpture.



Some of the design influence for this concept came from a play structure at Ralph Klein Park in Calgary, Canada, designed by Earthscape. The color patterns build on the color palette utilized in the new mural in downtown Mingo.



Community Impacts

As part of the Community Visioning program, other towns throughout the state have created iconic entry features to welcome people into their communities.

Storm Lake, Iowa



Entry Lighthouse

Storm Lake's sculptural lighthouse has become a symbol of the community. It welcomes people from their main entry of HWY 71, over a mile from town. The lighthouse stands tall above a flowing "lake" of grasses

Meteorite Entry Sign

Manson recalls its prehistoric legacy of being the site of a meteorite impact. The sign also illustrates Manson's town slogan "Creating and Impact". The sign is visible to the many cars traveling daily on HWY 20.



Manson, Iowa



Iowa State University Community Design Lab

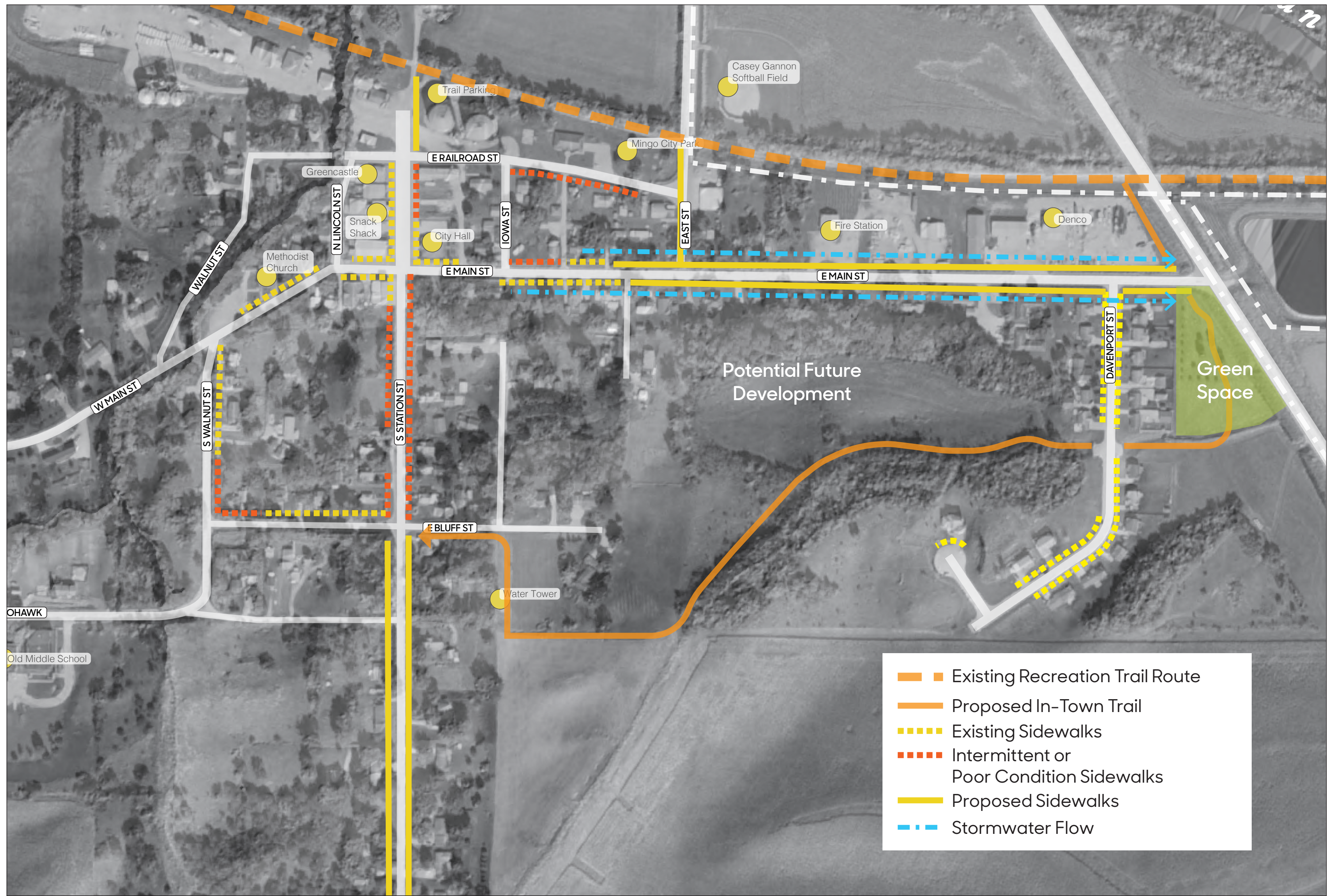
LA: Chad Hunter

Interns: Joe Anderson, Parmiss Sazgar, Clare Kiboko, Abby Schaffer & Minni Davis

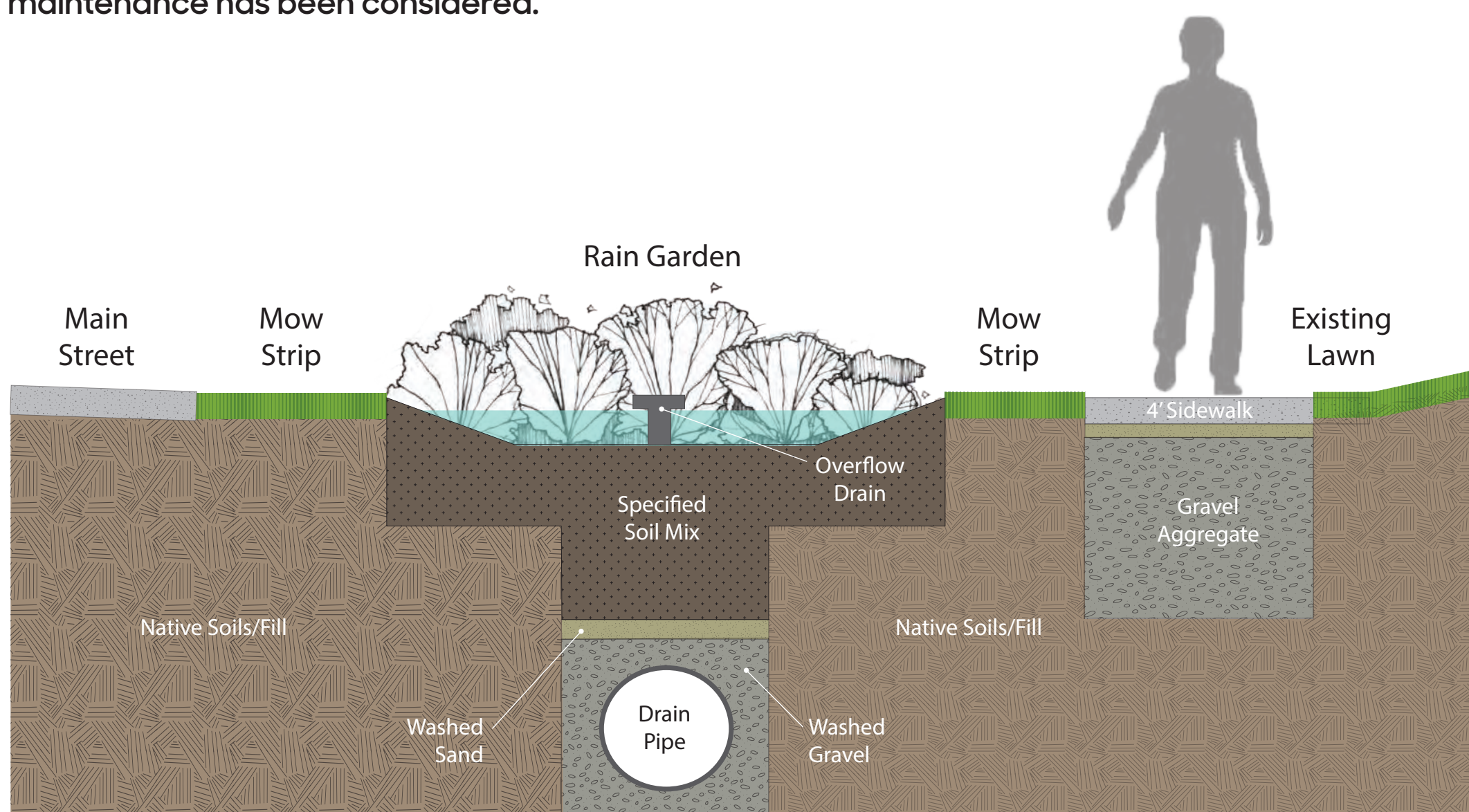
Iowa State University | Trees Forever | Iowa Department of Transportation

For the green space along HWY 117 to become a significant social space, pedestrian connections to this location should be enhanced. Currently Main Street is the primary route here, but sidewalks access is limited.

The map on the right highlights where sidewalks exist and where they will need to be updated or where new ones should be implemented to improve connectivity in Mingo. The proposed in-town trail would make a connection between the green space and Station Street at Bluff Street using undeveloped property south of Main Street.

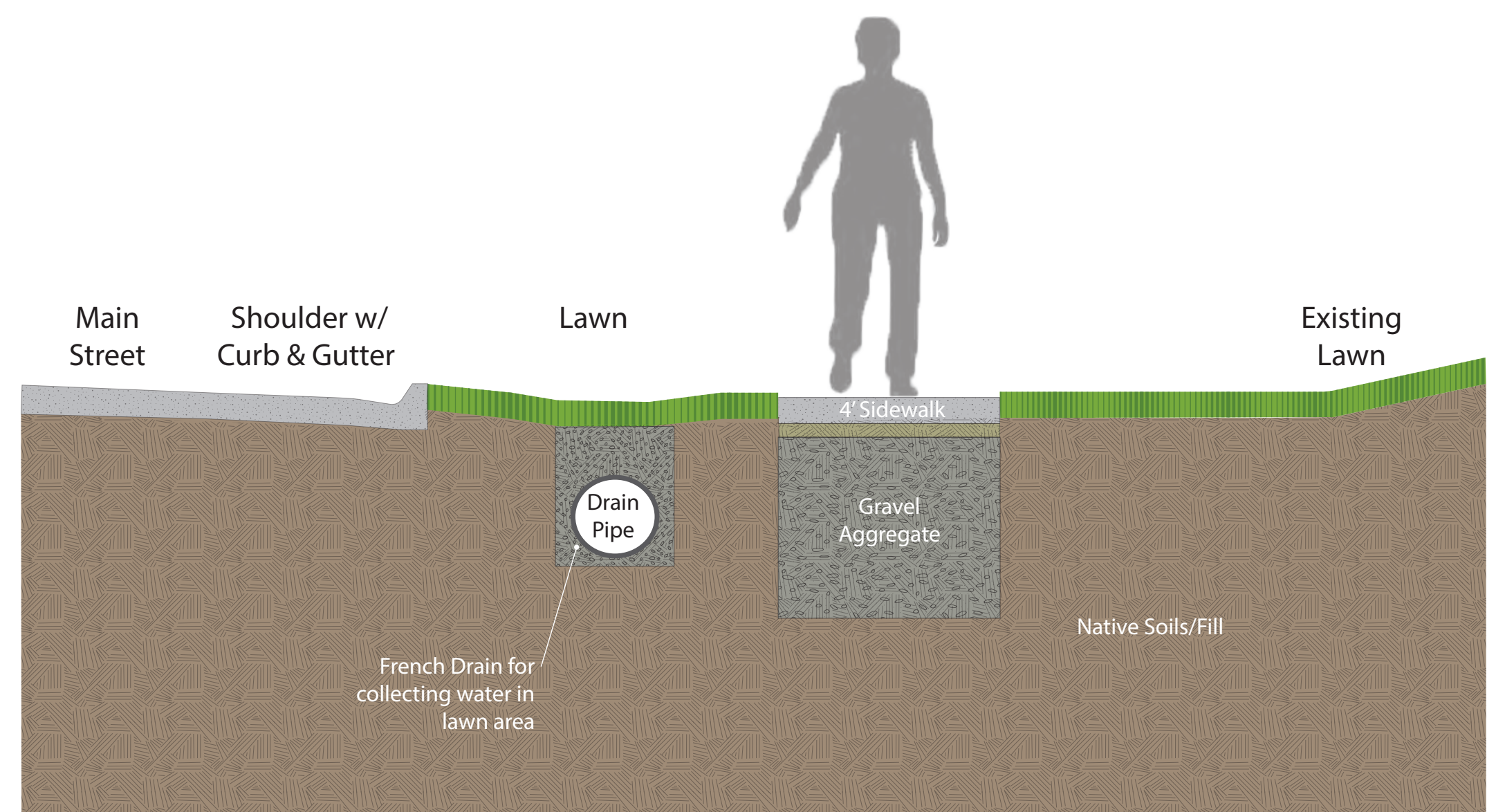


To accommodate sidewalks along Main Street, changes to the right-of-way would be required. Currently there are ditches used to convey stormwater running adjacent to the roadway. The following images show a couple of options for implementing sidewalks while still maintaining the ability to capture and convey stormwater. In both scenarios, ease for lawn maintenance has been considered.



Scenario A: Bioswale/Rain Garden

This scenario utilizes a rain garden to help with infiltration and cleaning of stormwater. Here water is captured from both the road as well as the surrounding property. A mow strip along the roadway acts as a shoulder for extending the roadway width.



Scenario B: Curb & Gutter

Scenario B provides a typical street detail with curb and gutter along the roadway. In this scenario the roadway has been widened to incorporate a paved shoulder. Lawn areas have been leveled which would ease in mowing. The water being conveyed by the curb and gutter would be collected in

storm drains along the road. Daylighting this water into a detention pond is recommended and could become a beneficial landscape feature within the green space.

Green Infrastructure



image: Civil Design Inc

Detention Basin

Detention basins temporarily store stormwater. By using native plantings and specified soil mixes these basins help to filter water and infiltrate stormwater. The basin is used to reduce the quantity of stormwater and delay it from entering nearby streams too quickly and causing erosion. They can also become beautiful features in the landscape that increase biodiversity and provide habitat for pollinators and small mammals

Suggested Use: A detention basin in the green space along HWY 117 could collect runoff from the bioswales or storm drains running along Main Street. Native plantings combined with the basin would enhance the entry landscape into Mingo.



image: C-Ville Weekly

Bioswales/Rain Garden

Swales are shallow vegetated open channels designed to convey, reduce, and filter runoff. A wet swale includes design features that improve the contaminant removal and runoff reduction functions of a simple roadside ditch. Swales are often combined with rain gardens.

Rain gardens and bioretention facilities use a combination of soil and plant material to capture and treat stormwater. They feature a planted or rock-based depression, designed to provide temporary rainwater storage and filter runoff. These are typically cost effective and easy to maintain options for both private and public land.

Suggested Use: Incorporate along E Main Street. These features could be used further west on Main Street and along Station Street



Mingo



Iowa State University Community Design Lab

LA: Chad Hunter

Interns: Joe Anderson, Parmiss Sazgar, Clare Kiboko, Abby Schaffer & Minni Davis

Iowa State University | Trees Forever | Iowa Department of Transportation