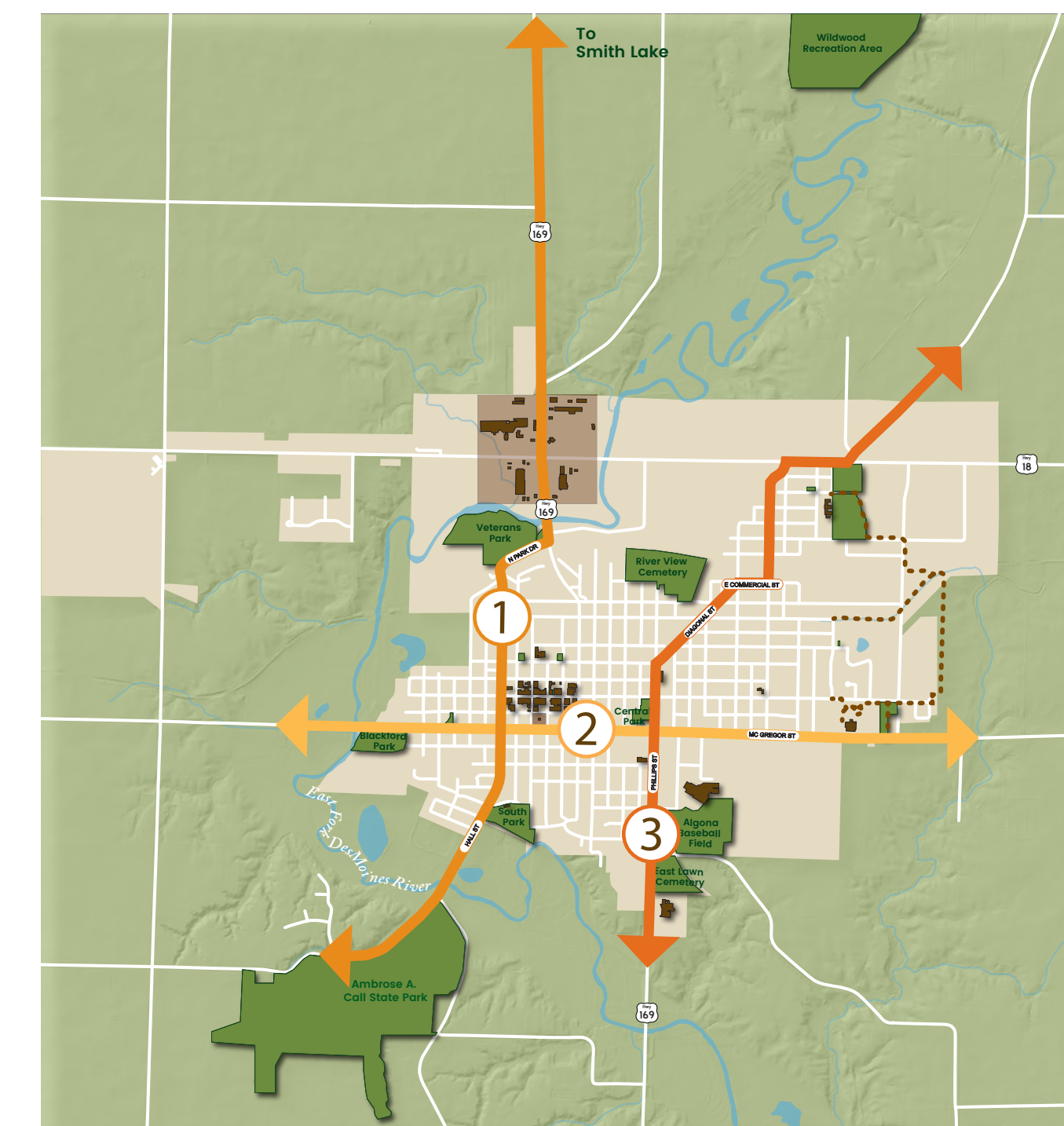


### Primary Network

The primary moves in the trail network expansion, as shown in the map below, utilizes three primary routes to link the city parks, the middle and high schools and the larger park areas outside of town. The three routes are as follows:

- 1** North-South route: Ambrose A. Call State Park to Smith Lake (Orton Road/Hall Street/ Northpark Drive/Highway 169)

  - Access under US 18 via viaduct to travel north on Highway 169 on a shoulder trail
  - Shared-use path on Hall Street transitions from East to West side of road at W Swetting Street heading south
  - East Fork Des Moines River crossing via bridge expansion or pedestrian bridge
  - Shared-use path from bridge to Call State Park; shoulder trail from bridge to Woodlyn Way neighborhood



- 2** East-West route: Blackford Park to Existing Trailhead in Tietz Park (McGregor Street)

  - Bike lane transitioning to a shared-use path at the intersection of Highway 169 with McGregor Street
- 3** North-South route: Access from US 18 and existing trail to Kossuth County Hospital (Highway 169/ Phillips Street/ Diagonal Street)

  - Usage of existing bike-lane on Diagonal Street
  - Shared-use path to begin south of the intersection of North Street and Phillips Street and extending to Minnesota Street

### Trail Network

Focus-group and survey participants expressed interest in developing additional trails in and surrounding Algona. The addition of these trail routes would accomplish the key goals of extending recreational opportunities and increasing accessibility to schools, parks, downtown, the hospital, and the river. During the design workshop, residents were asked what trail typologies would make their recreational experience more comfortable. Most participants hoped to see an increase

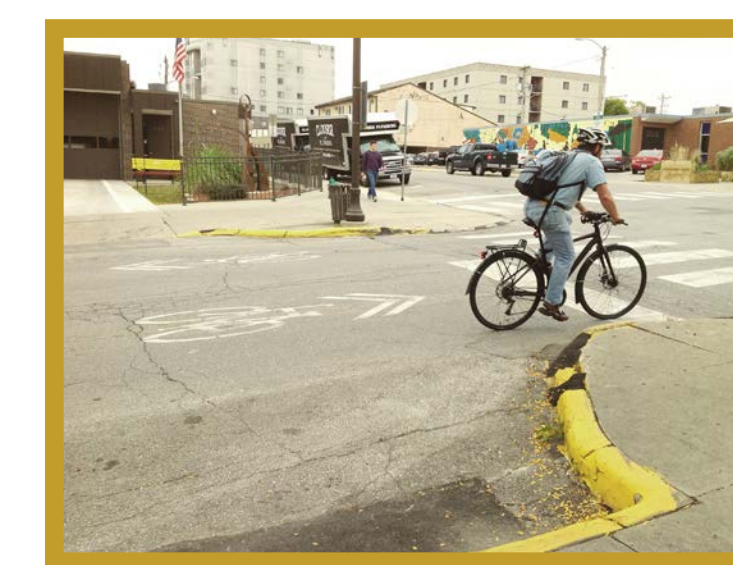
in shared-use paths that are buffered from the road. Separation from the roadway creates a safer and more accessible experience for cyclists of all ages and abilities. A recreation trail following the river is desired by many residents; a high water table, seasonal flooding and private lands limit this concepts feasibility. The proposed loop trail at Veteran's Park is an opportunity to experiment with new trail design methods on a smaller scale with the potential for future river trail development.

### Trail Typologies

Trails come in different forms and offer a range of experiences. To make strong and easily accessible connections between key destinations while also avoiding major changes to the right-of-way, a variety of trail typologies will be necessary for Algona's trail network. The following images represent examples of each typology used.



**Shared-use paths** or "Social Paths" can be near roadways, similar to a sidewalk, or be an independent right-of-way separate from roadways. Used primarily for recreation and fitness, these trails offer routes with a comfortable width to accommodate cyclist and pedestrian traffic in both directions.



Streets with **sharrows** give motorized vehicles and bikes equal importance in the roadway. Markings on the pavement alert drivers that bikes may be present and let cyclists know that the road is a designated cycle route.



Increasing **road-shoulder width**, whether paved or granular surface, is an important component for bike safety. These paths are typically used for recreation or destination activities, and many events such as RAGBRAI follow highways and rural roads.



**Bike lanes** are dedicated routes within the street for cyclists. They utilize markings and/or painted surfaces to bring attention and importance to the cyclist area. They can also be protected from traffic through barriers and buffers between the bike lane and adjacent traffic.

# Algona Trail Network

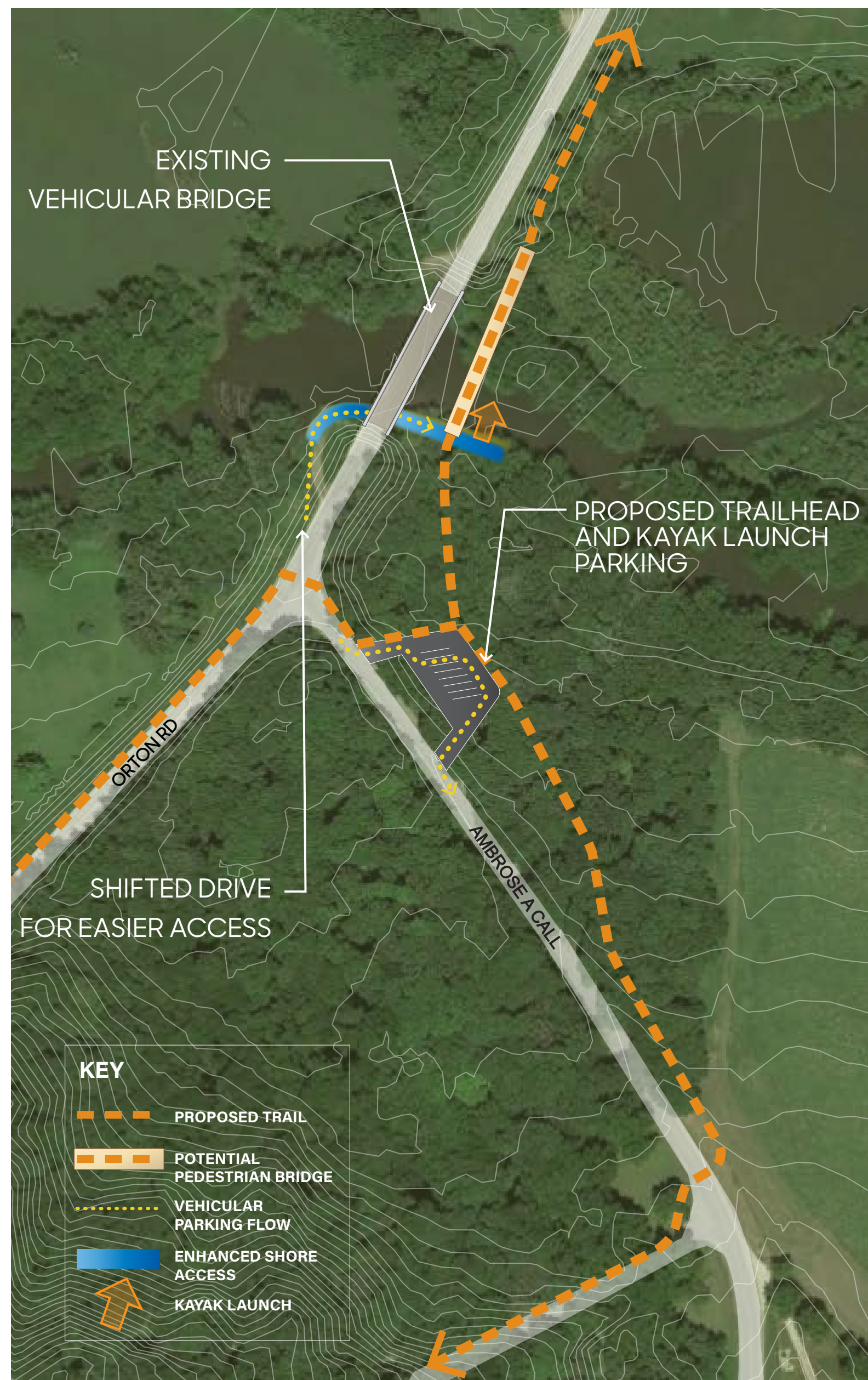
### ISU Community Design Lab

LAs: Carl Rogers and Chad Hunter

Interns: Britney Markhardt, Linus Larson, Trevor Smith and Jaelyn Waddle

Iowa State University | Trees Forever | Iowa Department of Transportation





Proposed trail connection with pedestrian bridge at river crossing



Potential Orton Road bridge expansion would accommodate a 6' wide bike lane on each side with a painted buffer



### River Crossing

Residents of all ages highly desire a pedestrian and bicyclist connection between Call State Park and South Park/Aquatic Center. The current bridge and roadway right-of-way on Orton Road/Hall Street is not wide enough to support a trail, to create this connection a river crossing update and modifications to the ditch on the east side of the road will be necessary. There is a potential that the existing vehicular bridge could support a wider deck, allowing bike lanes to be added to it. If the existing bridge cannot be modified to accommodate bike lanes, a new pedestrian bridge is proposed just east of the vehicular bridge.



View of proposed pedestrian bridge and kayak launch on the south side of the river

The bridge landing on the south side of the river would feature shore access with a canoe/kayak launch area. The trail would link the proposed parking area just off Call Park Drive. The parking lot would serve as both a trailhead and a parking area for people using the launch or fishing from the shore. The trail and parking lot shown are located within state owned property. Further development of these concepts in collaboration with the Iowa DNR would be necessary. The location of the parking lot is approximately 200 feet from the shore, which serves to reduce impact on the river and the surrounding habitat, and will allow the lot to stay at the high end of the 100-year floodplain and out of areas with high water tables that can impair the parking surface.

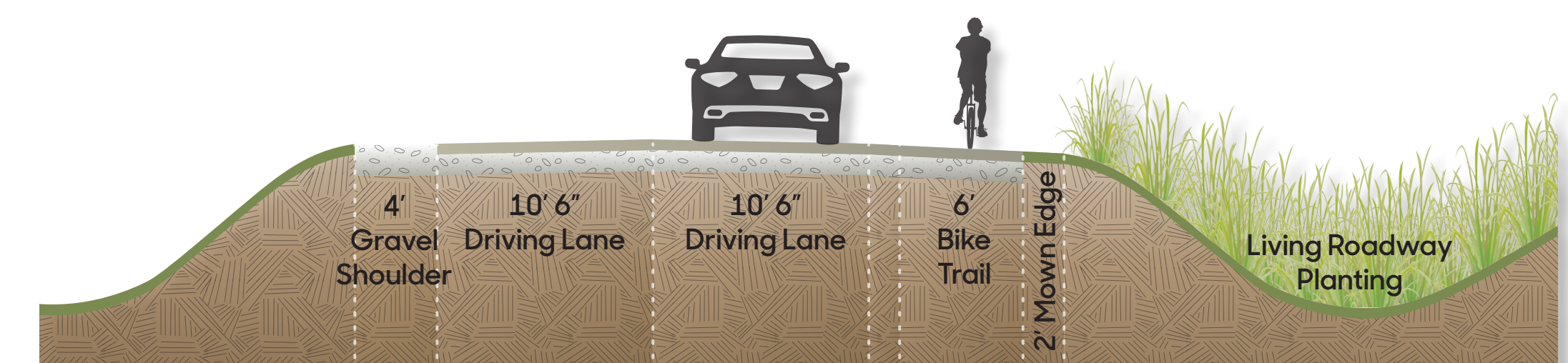
There is currently a drive down to the water on the east side of Orton Road that could be made more accessible by reducing the slope. This can be achieved by adding length to the drive. The entry would allow vehicles easy access to the launch.



### Hall Street

Making the needed trail connection along Hall Street/Orton Road and across the river will require utilization of the right-of-way on the east side of the road. Due to the recent widening of this street, the proposed trail can be implemented without major revisions to the roadway. This concept includes reducing travel lane-widths on Hall Street from 12 feet to 10.5 feet and paving the existing four-foot shoulder. A rumble strip paired with a painted buffer in addition to painted bike-lane markers on the shoulder help to alert drivers of possible trail users sharing

the road space. These safety features are on the road surface which, allows larger vehicles access to this road by using some of the shoulder when trail users are not present. The trail in this stretch, from the bridge to W Tietz Street, would be six feet wide, allowing the slope on the east side of the street to be unaltered while developing this trail. Planting native grasses and wildflowers in the existing ditch will create a bioswale. Bioswales reduce erosion and pollution by slowing stormwater from the roadway and field and filtering it before it reaches the river.



Proposed road/shoulder trail section for Hall Street

### McGregor Street Route to School

Connecting the existing recreational trail to Algona's public middle and high school was identified as a primary objective of the trail network expansion. The existing trail ends in Teitz Park on the far east side of town. E McGregor Street is the most direct connection between the school and the trail. The north side of E McGregor Street has a wide right-of-way that currently supports a four-foot-wide sidewalk. The large right-of-way allows for widening the path to eight feet while keeping a significant buffer from the road and minimizing the need for removing existing tree canopy that helps create an inviting corridor.

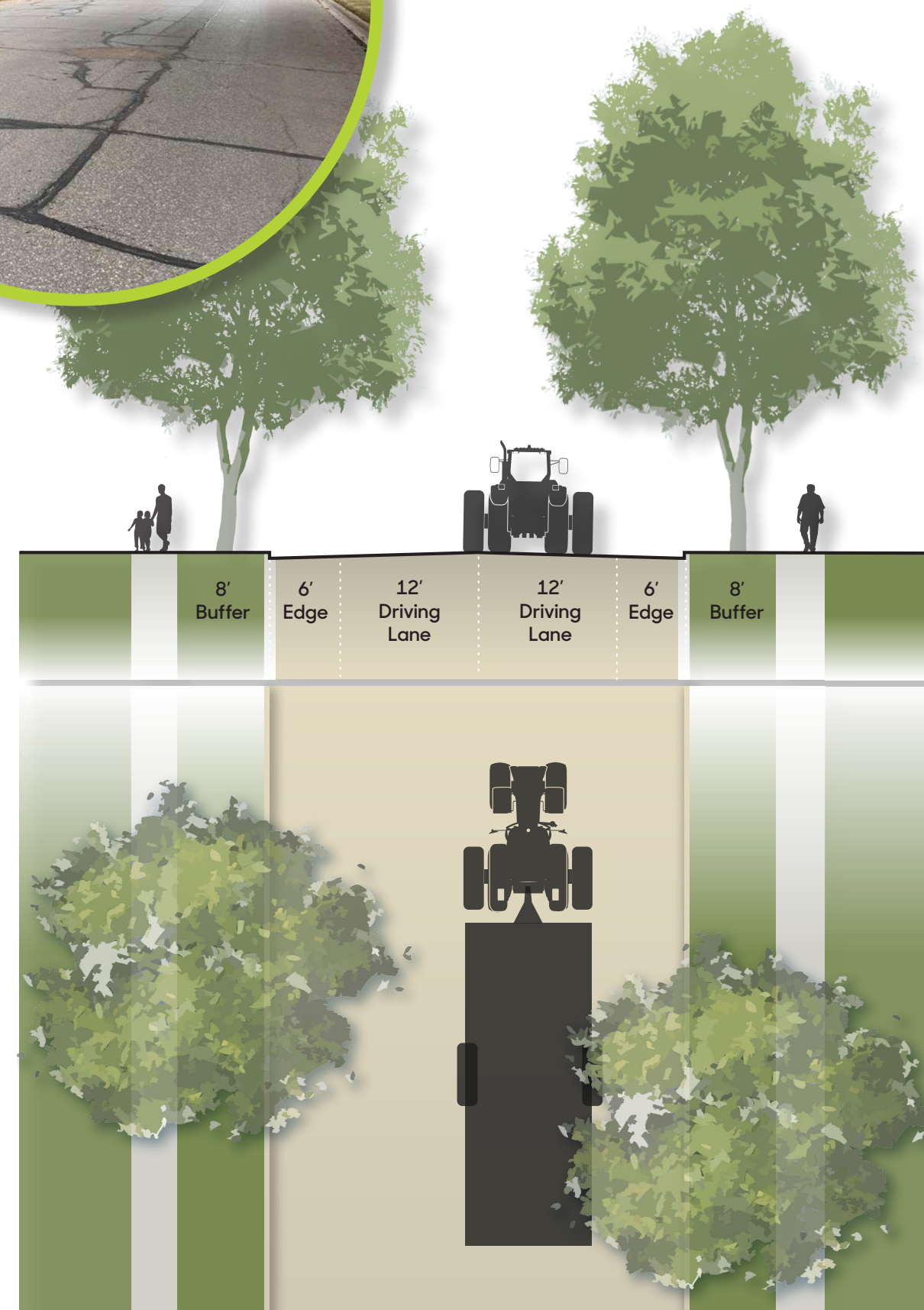


### School Access

At S Hale Street a marked crossing with a flashing warning sign to alert drivers of kids walking to school already exists. In the trail concept, sidewalks along the west side of S Hale Street would be widened to eight feet. Some trees would need to be removed to accommodate that change. The trail would then extend to the school cutting through the existing parking lot island and linking a high-visibility crosswalk and pedestrian zone.



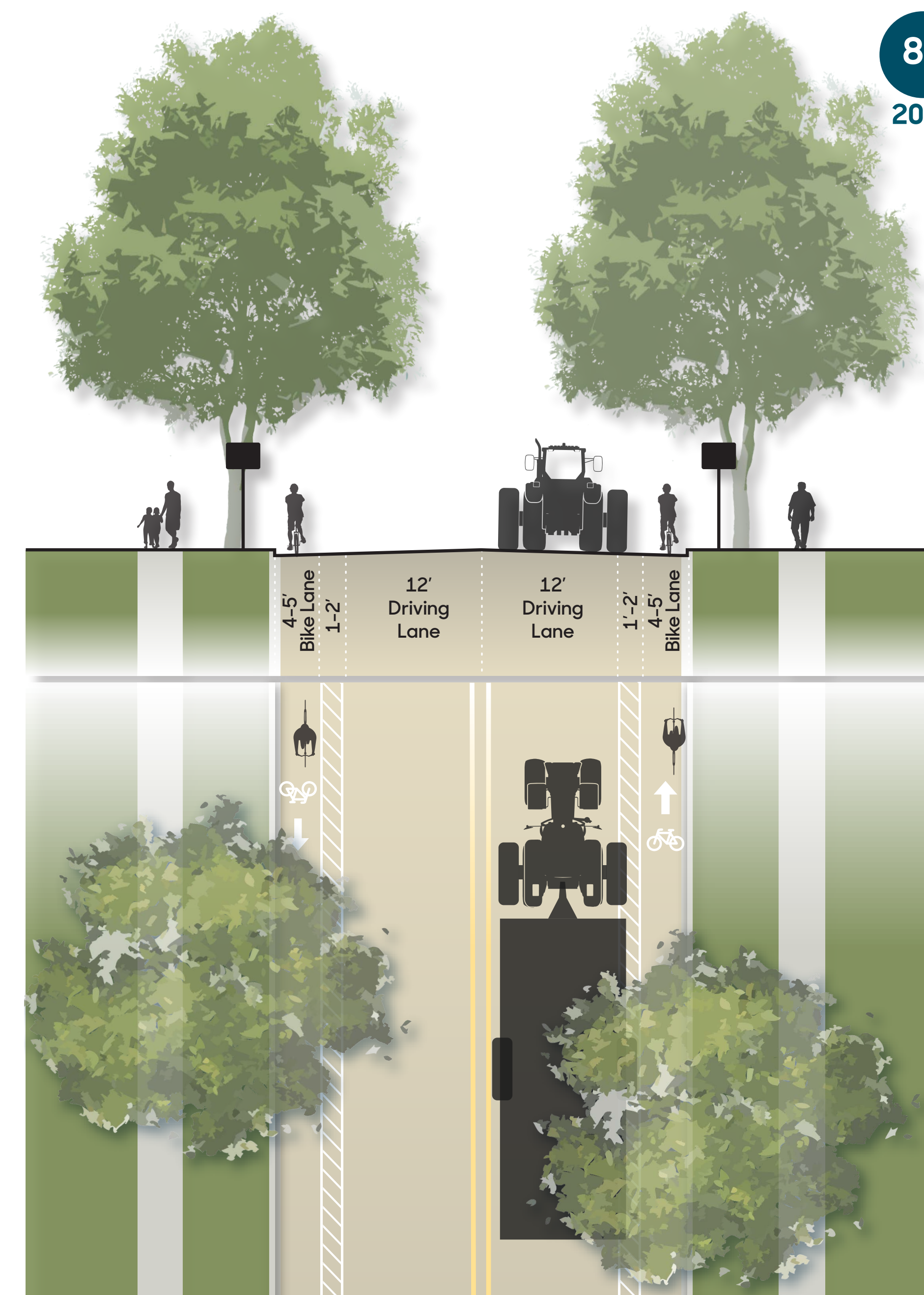
View looking south toward the school on the Hale Street trail



Typical section of existing road conditions on W McGregor Street

### W McGregor Street

McGregor Street is a vital east-west axis in Algona. It feels welcoming with its large, mature trees and its links to many destinations. Blackford Park, Maple Park, Carnegie Centre for the Arts, Central Park, the YMCA, Tietz Park, the existing trail, and the S Hale Street route to school are all located on or at most a block away from this important street. McGregor Street is extra wide because it used to support on-street parking. That underutilized road width offers potential for bicycle infrastructure. However, many participants in the focus groups and design workshop expressed concerns over sharing the road with the fast-moving and large vehicles that use this route. There are also concerns that making trail updates to the road would limit its farm-to-market capacity. To address these concerns, this design proposes a minimum four-foot-wide, marked bike lane with



Proposed bicycle enhancements and lane width alterations

a one-to two-foot-wide painted buffer to help alert drivers to cyclists on the road. Because these features are all on the road surface, larger vehicles using the farm-to-market route could easily get over into the bike-lane zone when needed if cyclists are not present. If desired, additional vertical barriers, such as flexible bike-lane safety posts, could be implemented. The road width varies along the length of W McGregor Street. Where the road is wider, the buffer and the bike-lane widths should be expanded. Pedestrians would continue to use the sidewalks that line both sides of the street.