

Monkton Ridge Complete Streets Project

Presentation to the
Addison county TAC
April 16th 2013

Developed by LandWorks and Resource Systems Group

Project Charge

“To conduct a feasibility study using a “Complete Streets” planning approach to improve traffic calming, bicycle & pedestrian mobility, and to plan for access and egress to an anticipated park-and-ride facility to be developed upon a parcel of land on the west side of the Village at the site of a new town administrative building.”

from ACRPC’s RFP

What is a “Complete Street?”

A roadway that safely accommodates all travelers, particularly public transit, bicyclists, pedestrians and motorists, to enable all travelers to use the roadway safely and efficiently.

“Complete Street” Examples



- Street Lighting
- Street Trees
- 11' Travel lane
- 5' sidewalk with curb
- Delineated Shoulder

“Complete Street” Examples



- Gateway
- Welcome Sign
- Constricted Travel lane
- Pedestrian Signage
- Delineated Shoulder

“Complete Street” Examples



- Radar Speed Check Sign
- Prior to Village Gateway / Entrance

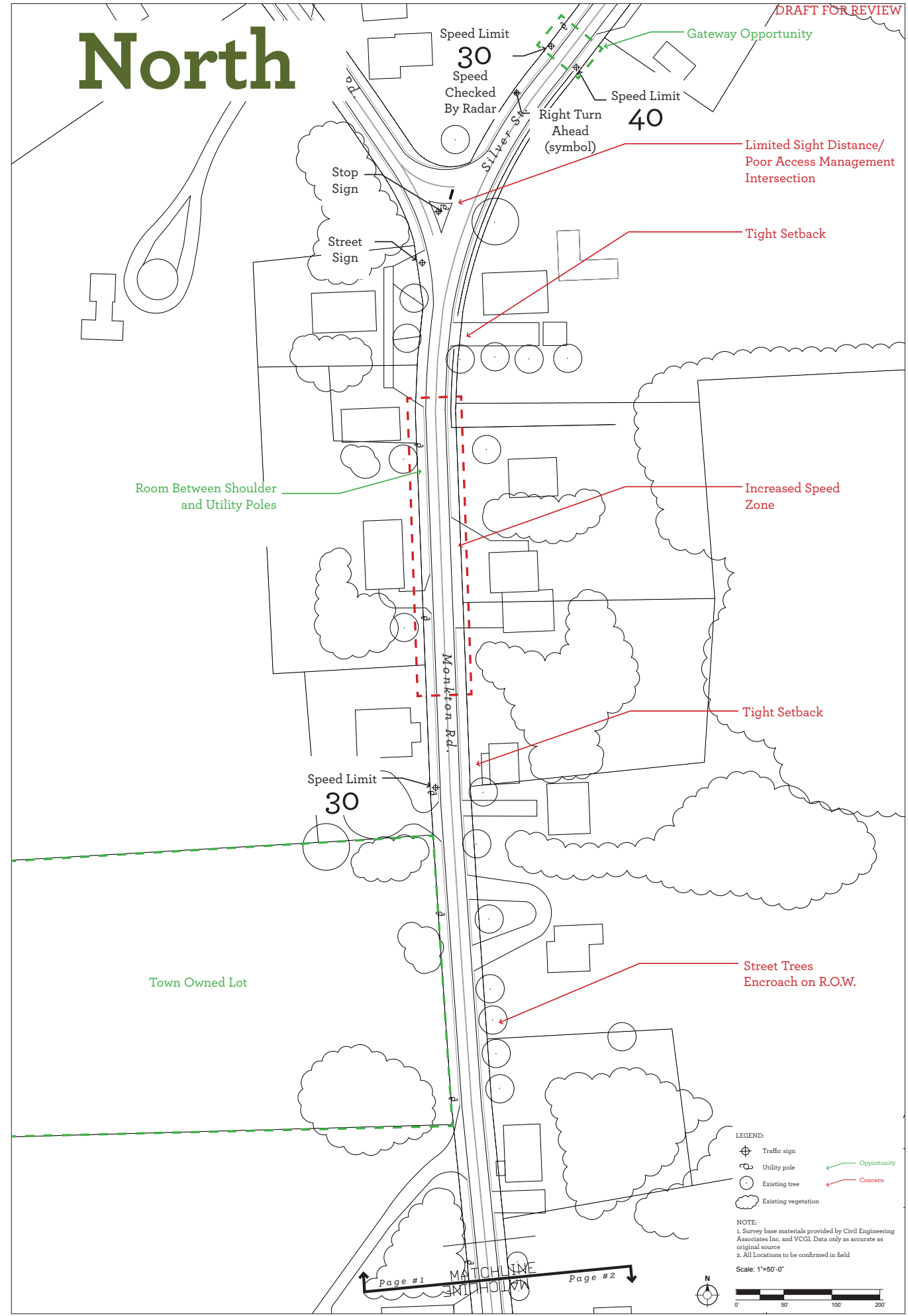
Initial Purpose Statement

Monkton Ridge serves as the municipal center of the Town of Monkton with the Town Hall, Library and nearby elementary school. As the town grows, and local and commuter traffic increases along the various roads coming in and out of the village area, the functional needs of the community as well traffic and pedestrian safety concerns must be addressed.

This “Complete Streets” initiative will focus on addressing all aspects of the village streetscape, planning a park and ride location and identifying short and long term solutions for traffic calming and village enhancement.

Existing Conditions, Issues and Opportunities

North



Issues



• Increased Speed Zone



• Tight Setback

Opportunities

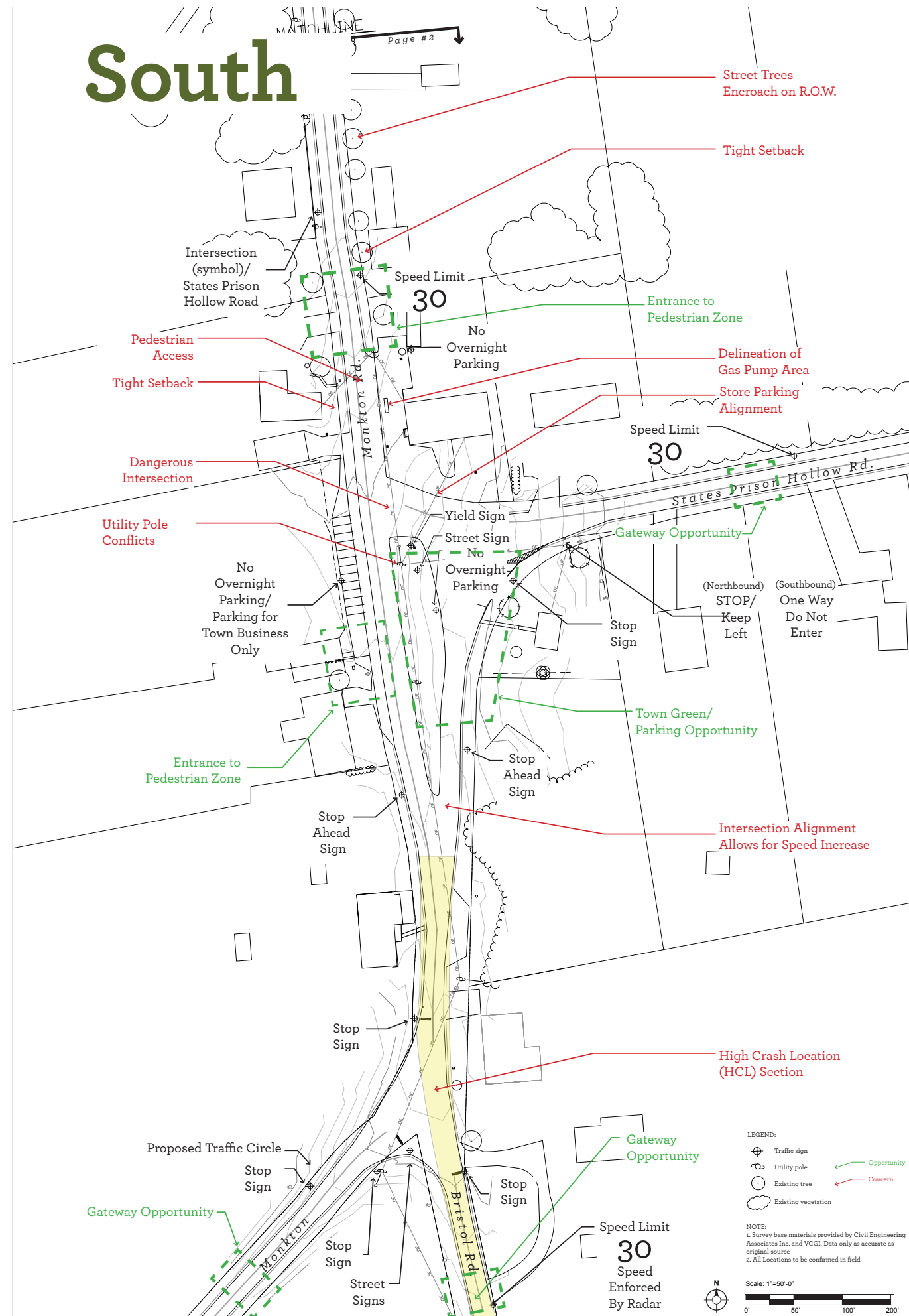


• Gateway



• Town Owned Lot

South



Issues



• Increased Speed Zone



• Tight Setback

Opportunities



• Gateway



• Town Owned Lot

Existing Conditions, Issues and Opportunities Continued



- Setback
- Delineated Shoulder
- Pedestrian Access
- Informal Parking
- General Store

Existing Conditions, Issues and Opportunities Continued



- 3-Way Stop
- Delineated Shoulder
- Traffic Circle
- Gateway
- Traffic Calming

Existing Conditions, Issues and Opportunities Continued



- Signage
- Public Parking
- Pedestrian Access
- Community Green
- Library Access

Existing Conditions, Issues and Opportunities Continued



• Fire Trucks • General Store Parking/Access • Pedestrian Access • Winter Travel • Snow Plow

Existing Conditions, Issues and Opportunities Continued



• Mid-Block Speed Zone • Wide Travel Lane • ROW Issues • Existing Vegetation • Pedestrian Area

Existing Conditions, Issues and Opportunities Continued



- Curb Cuts
- Park and Ride
- Wide Travel lane
- Existing Green Belt
- Non-Delineated Shoulder

Existing Conditions, Issues and Opportunities Continued



• Gateway • Welcome to Monkton Ridge • ROW Issues • Existing Vegetation • Pedestrian Connections

Aerial of Monkton Ridge



Design Alternatives Are Based On:

- **Prior Studies**
- **Feedback from 6.27.13 Local Concerns Meeting**
- **Fieldwork, analysis, and informal interviews**
- **“Complete Streets Design Guidelines” Funded by the Federal Highway Administration**
- **Vermont Pedestrian and Bicycle Facility Planning and Design Manual (VTANS)**

Option 1

- Option 1 provides design concepts that reflect the current character and conditions of Monkton Ridge. This option sets forth proposed improvements that are more modest and less costly than Option 2

Option 2

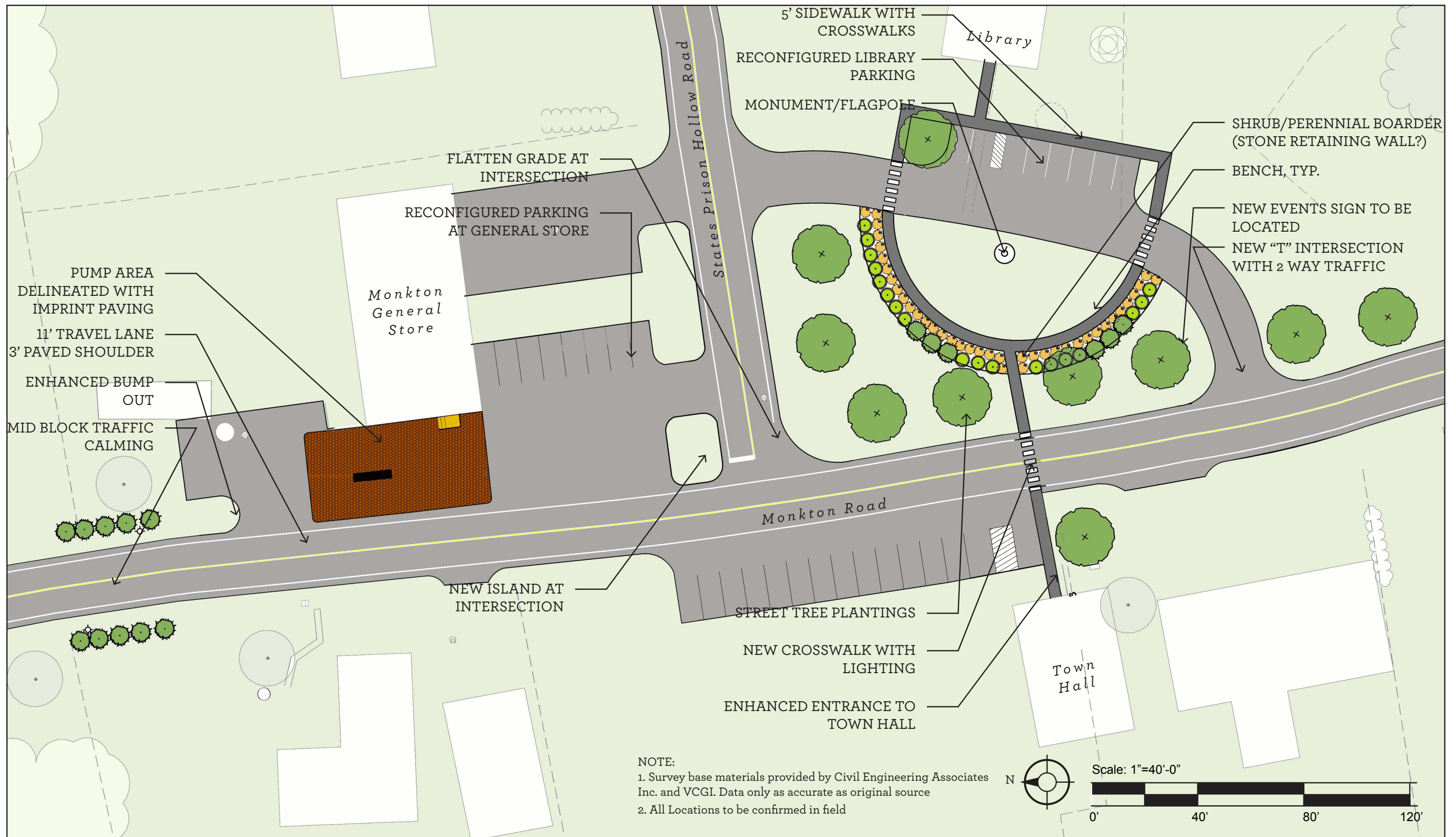
- Option 2 provides design concepts that are more extensive and employ a wider range of current traffic calming methods, with the intent to also maintain the rural village character

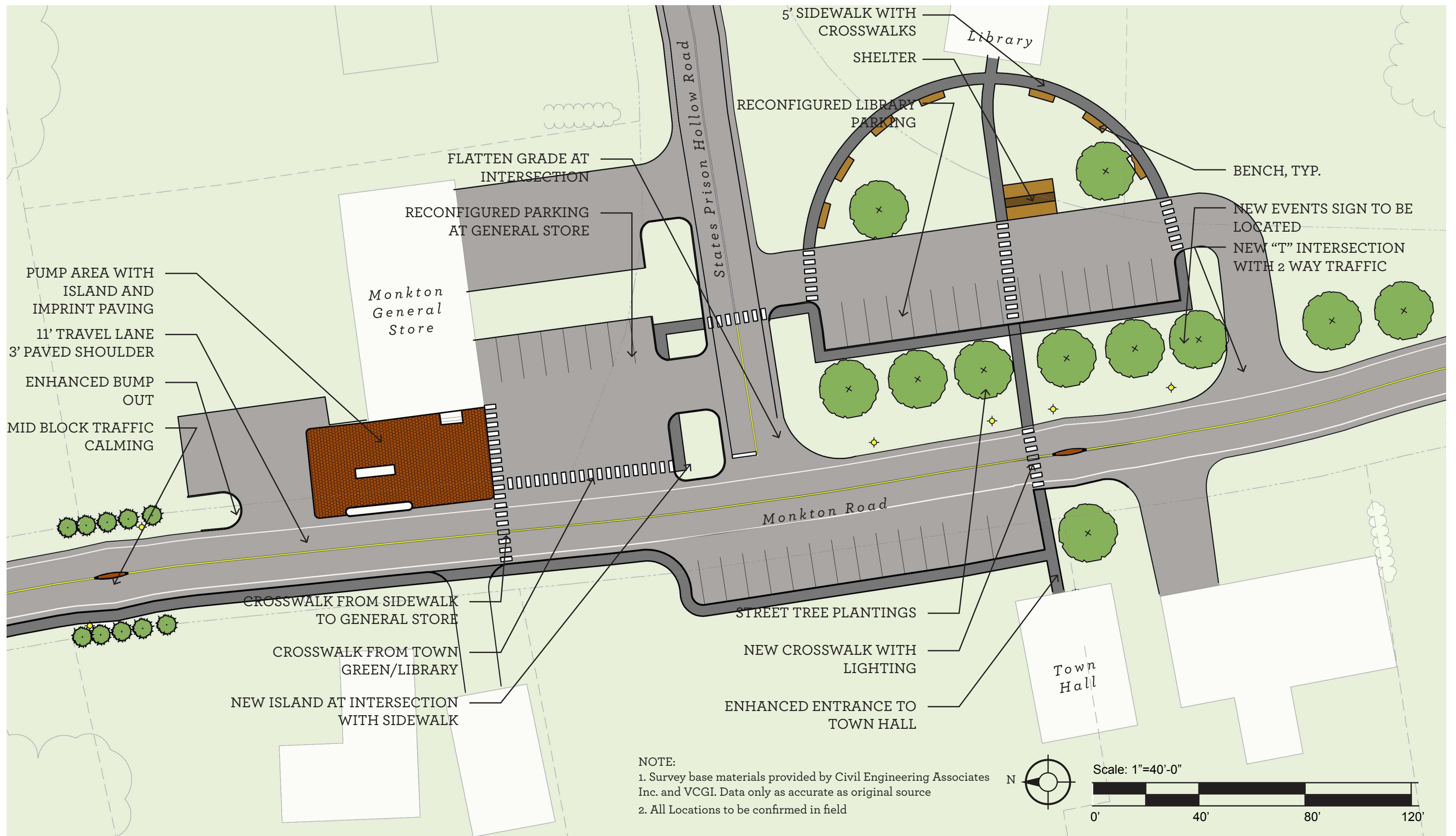
Alternative Design Areas

- **Town Green / General Store / SHPR**
- **Proposed Town Hall**
- **Monkton Road / Bristol Road Intersection**
- **Silver Street / Monkton Road / Davis Street**
- **Road Layout**
- **Mid-Block Traffic Calming**
- **Gateways**

Town Green





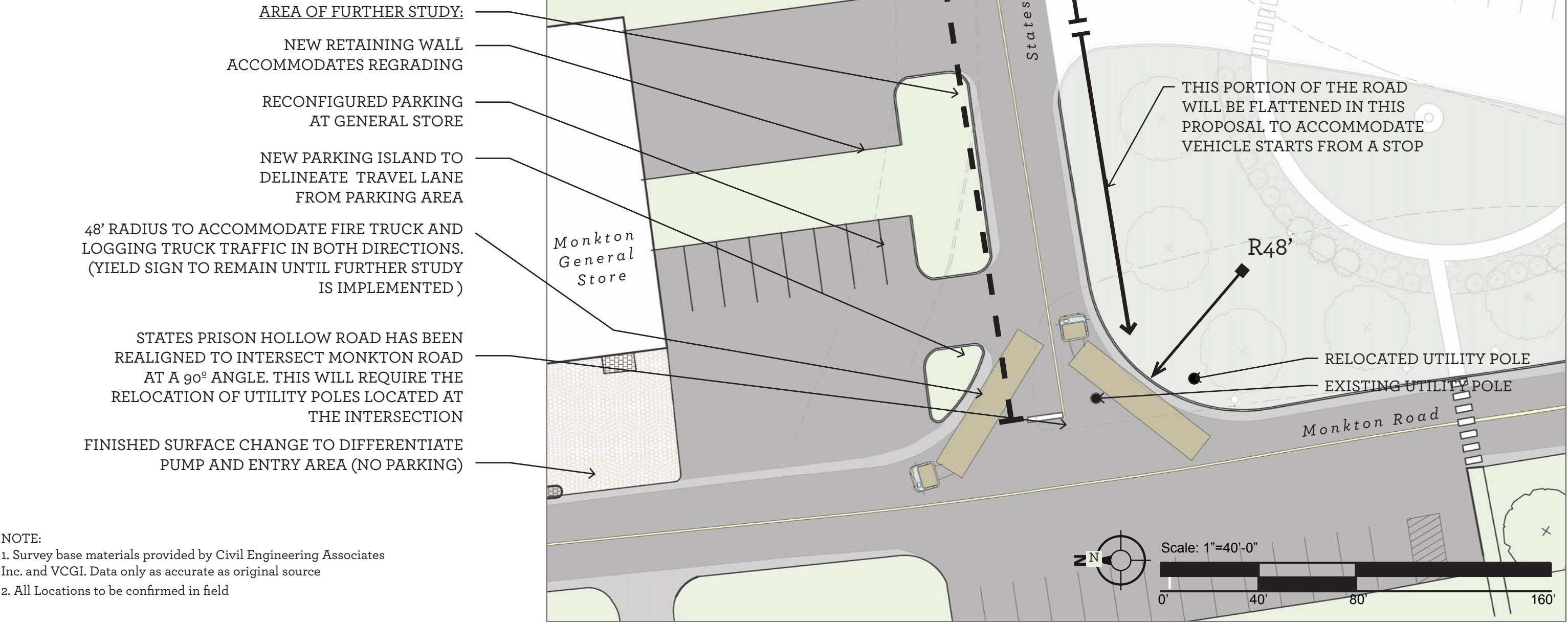


Appendix 13.4 - Conceptual Alternatives

f. States Prison Hollow Road Intersection

Pictured is a preliminary conceptual drawing designed to convey the reconfiguration of the intersection to:

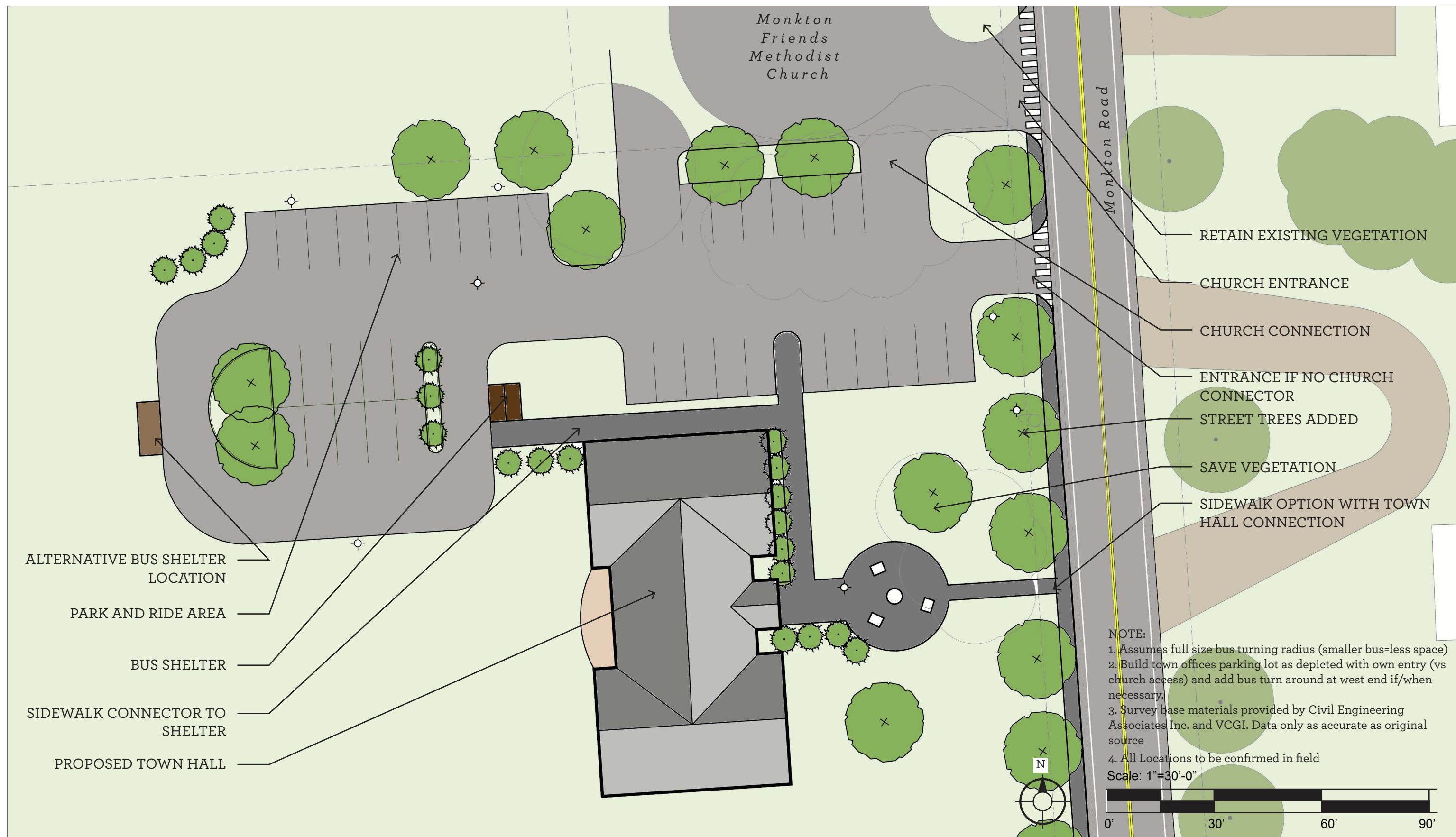
- 1. Provide for improved traffic safety and more expansive turning radii for larger trucks
- 2. A more level area on States Prison Hollow Road at the intersection with Monkton Rd.
- 3. More usable surface area and improved parking at the General Store along with some access modification elements to reduce the “continuous” curb-cut.



Proposed Town Hall/Park And Ride



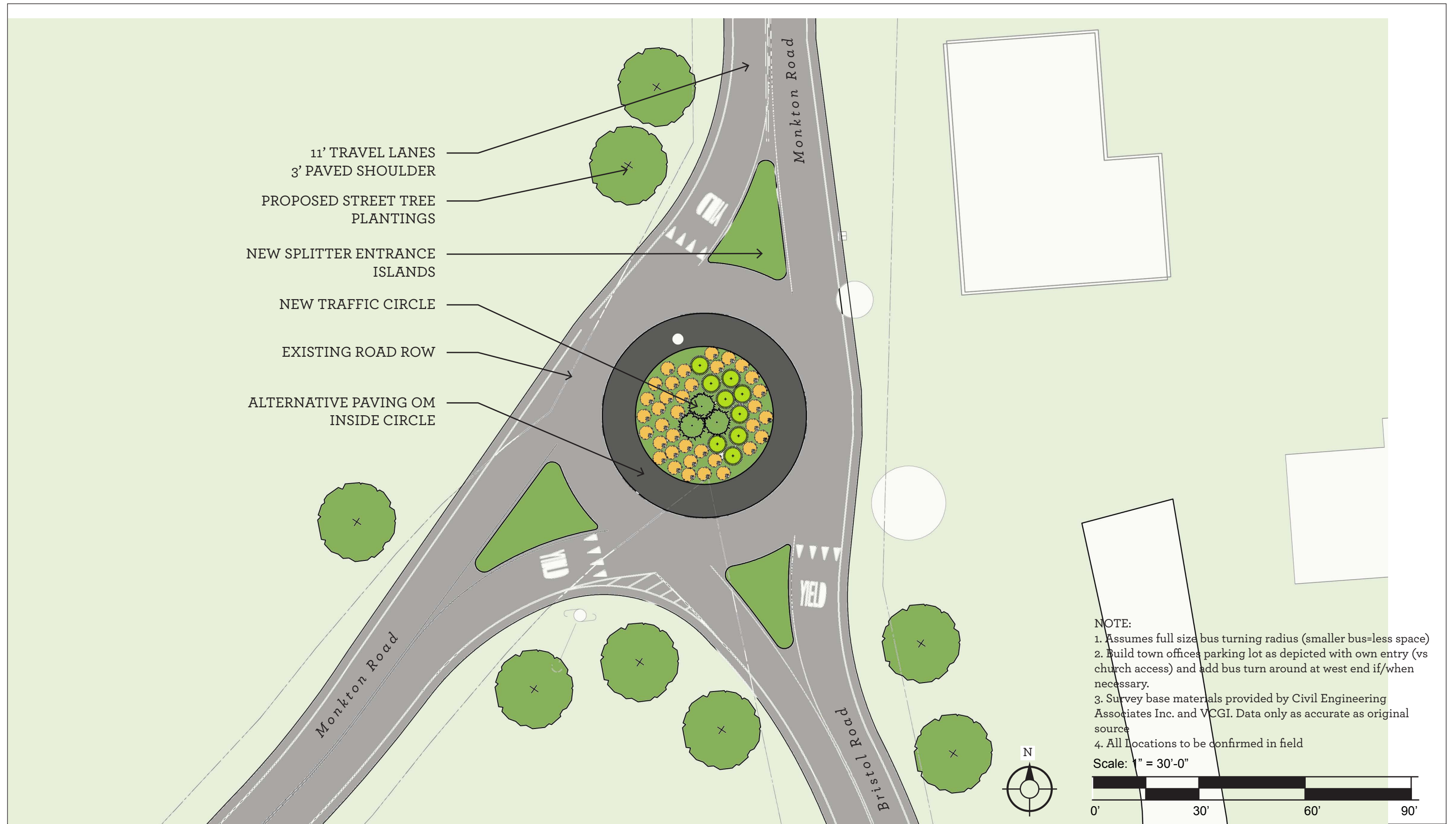




Monkton Road / Bristol Road Intersection



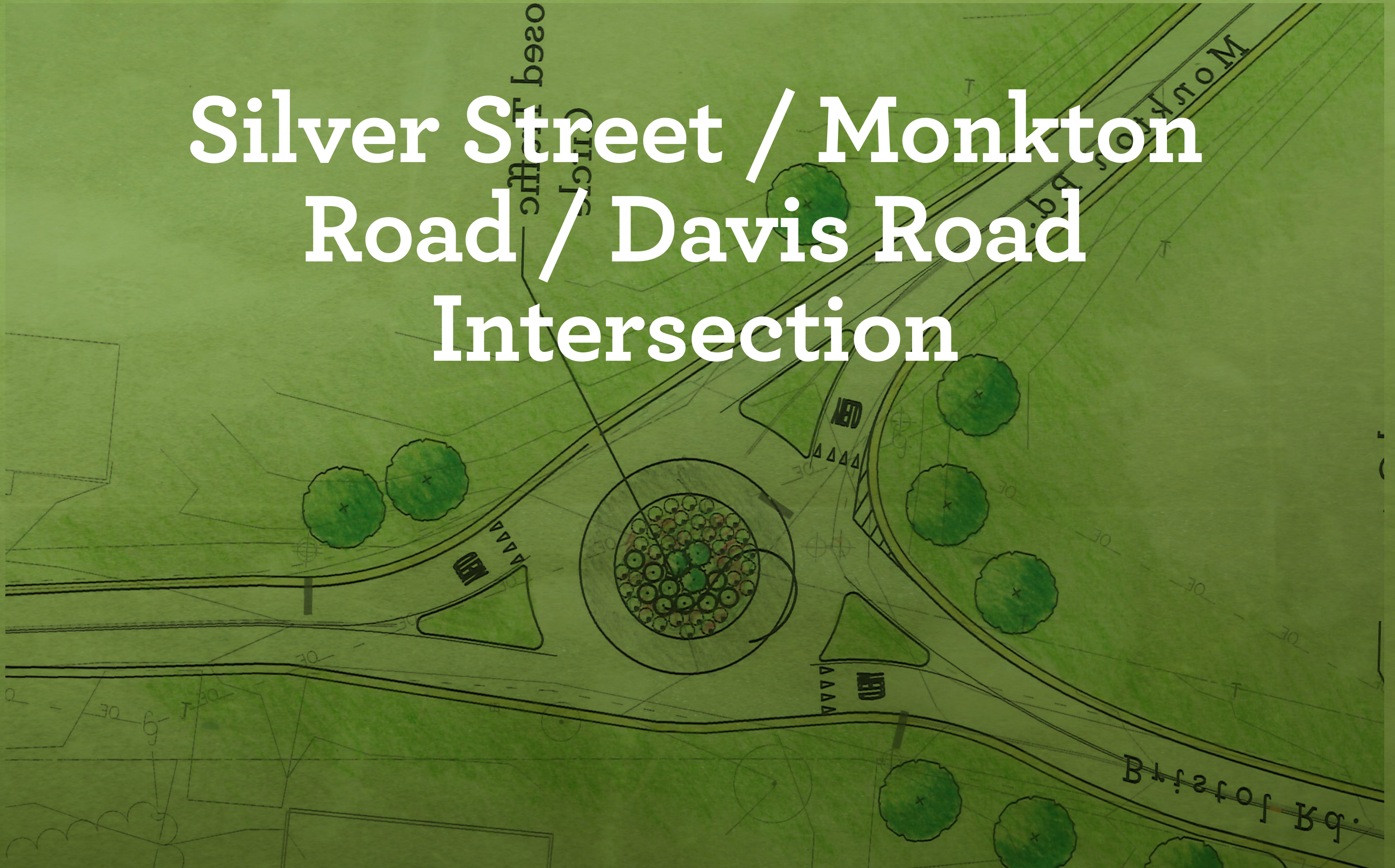


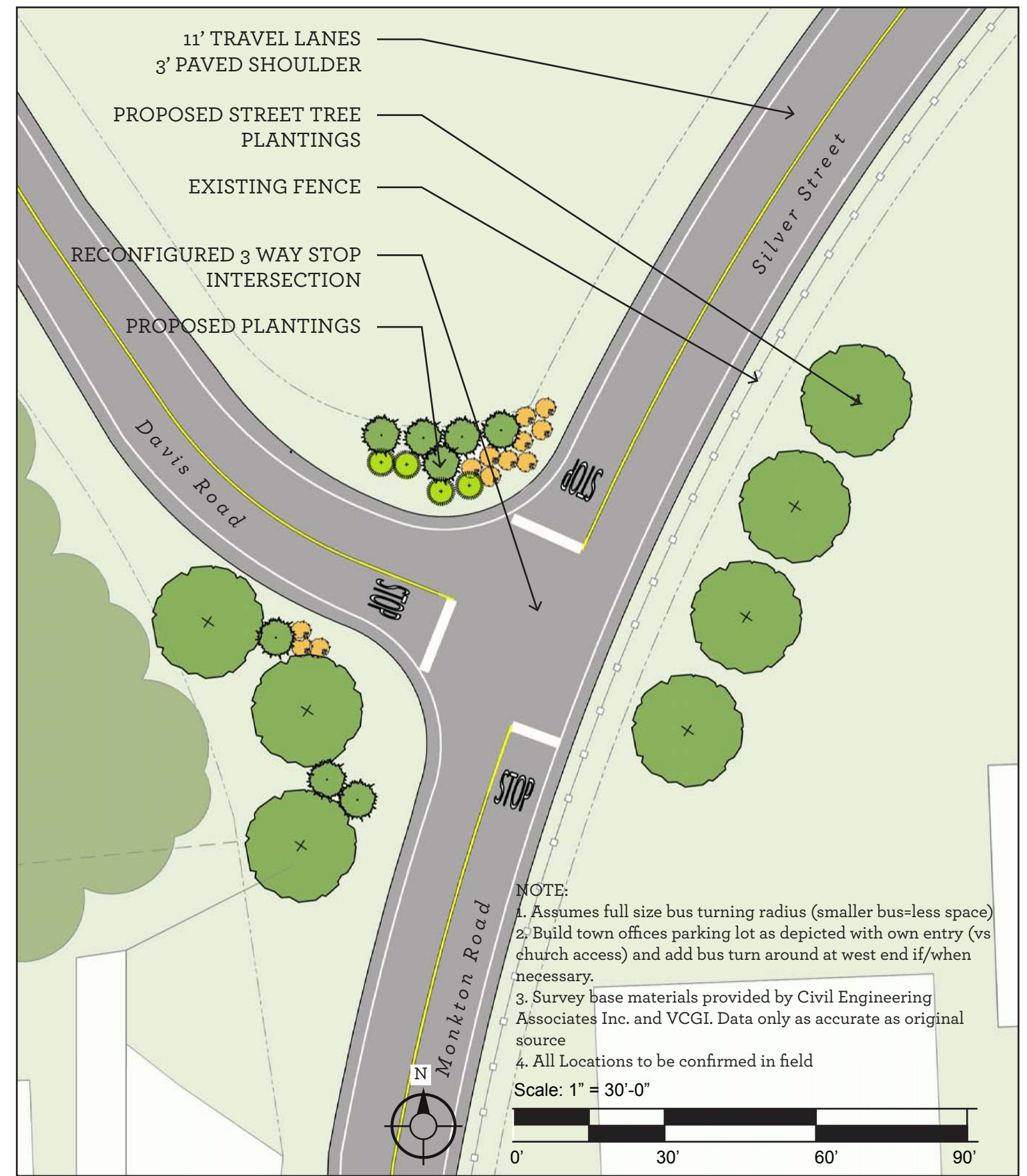
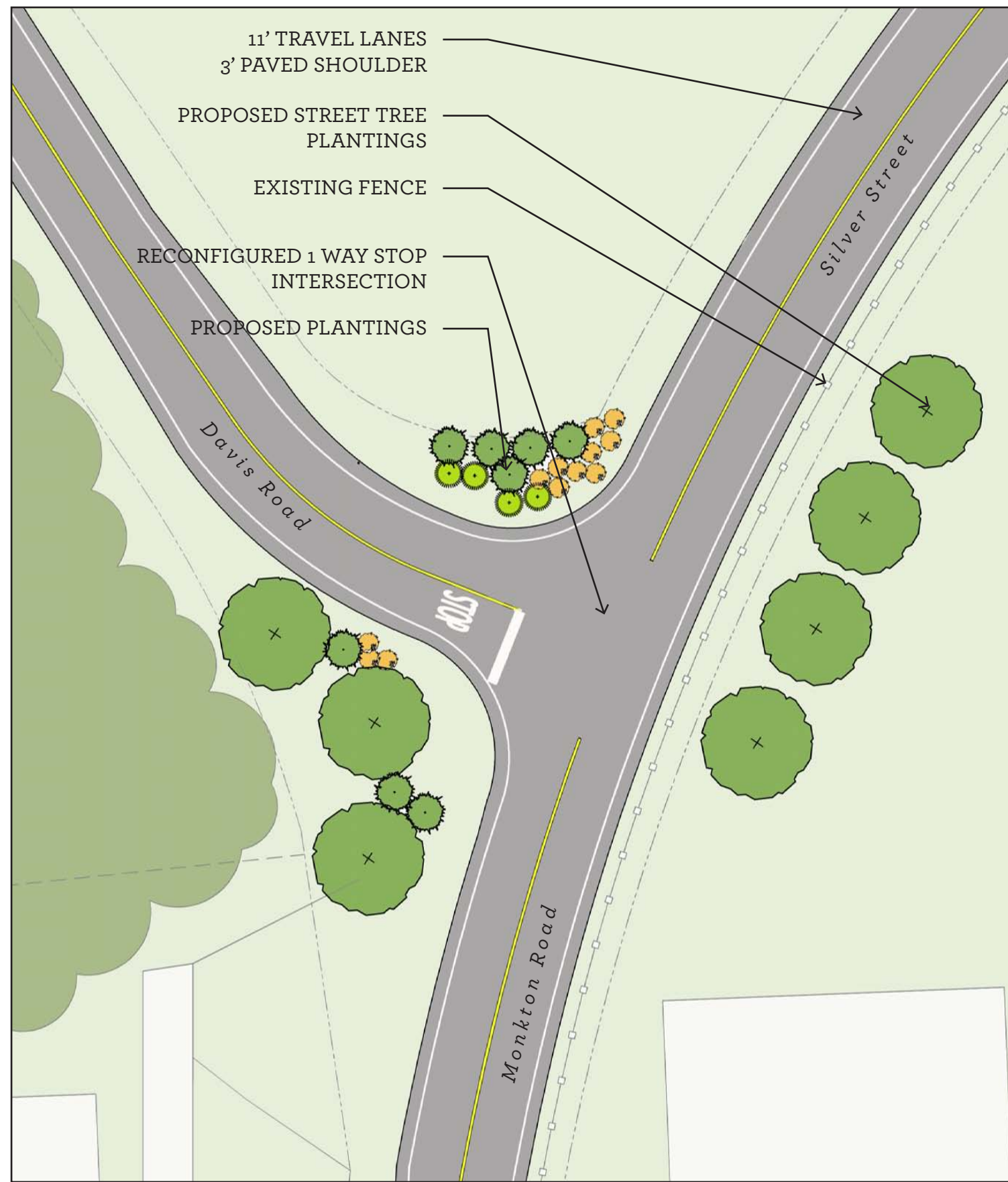


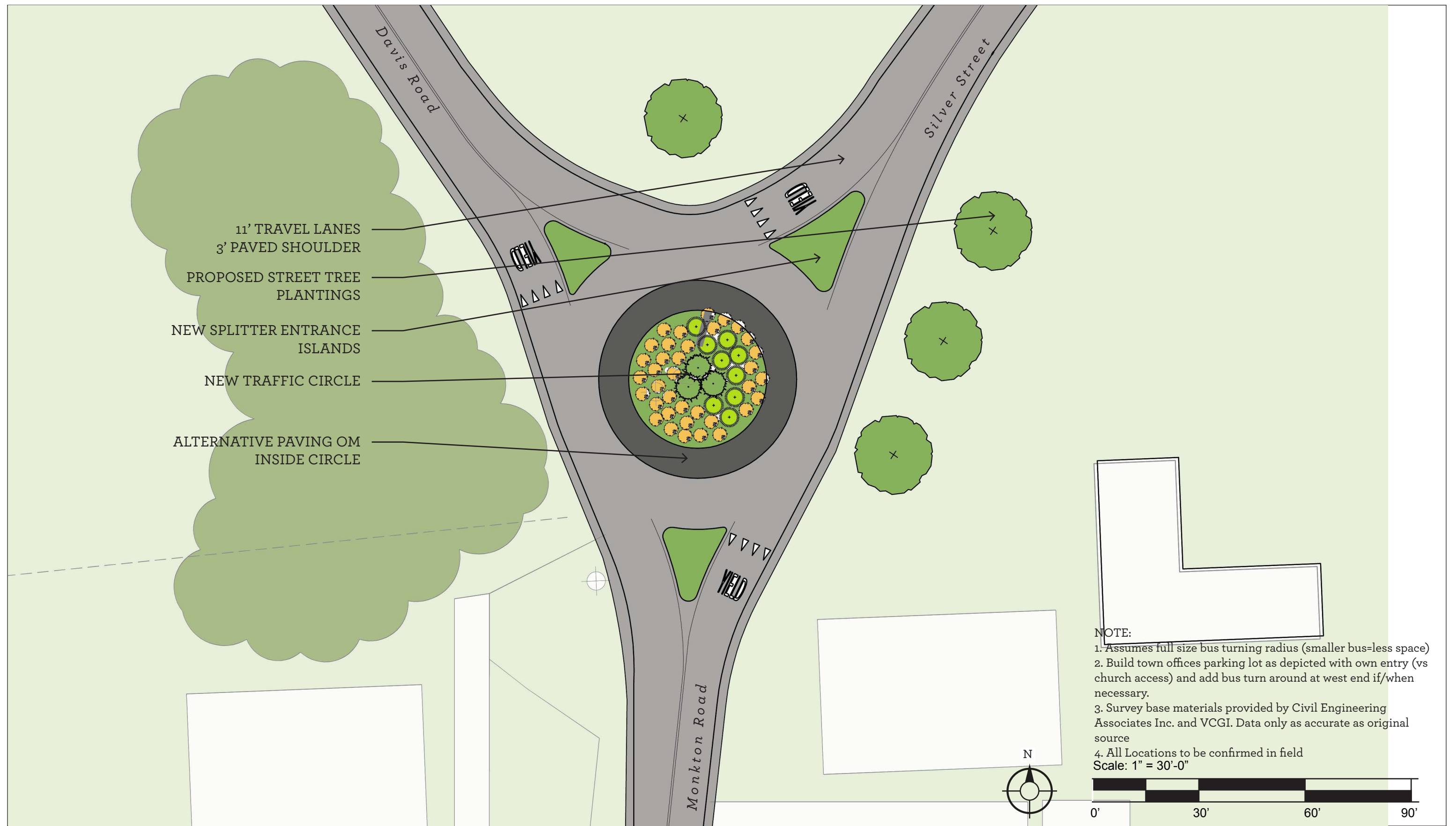
Example of Existing Roundabout



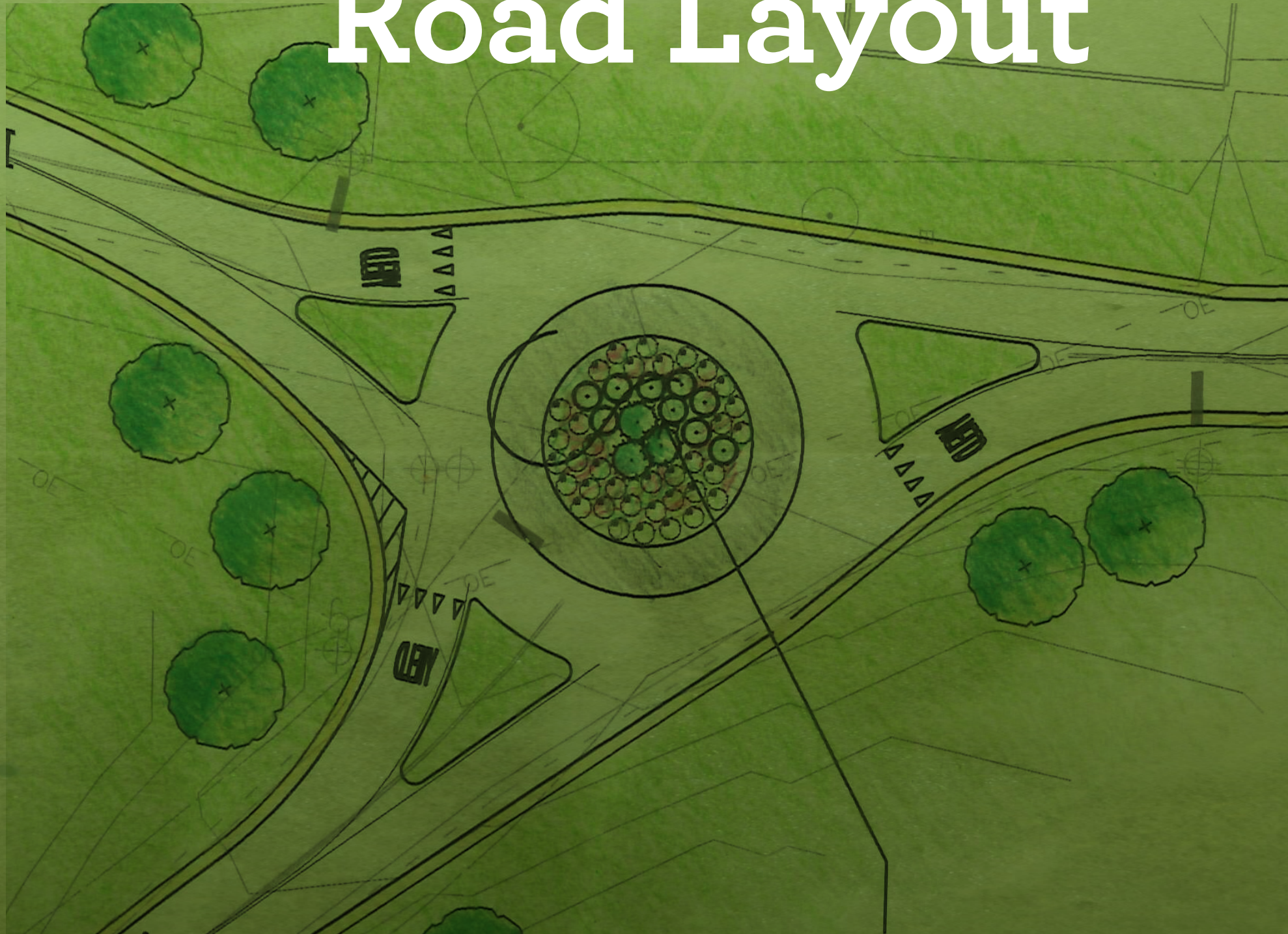
Silver Street / Monkton Road / Davis Road Intersection







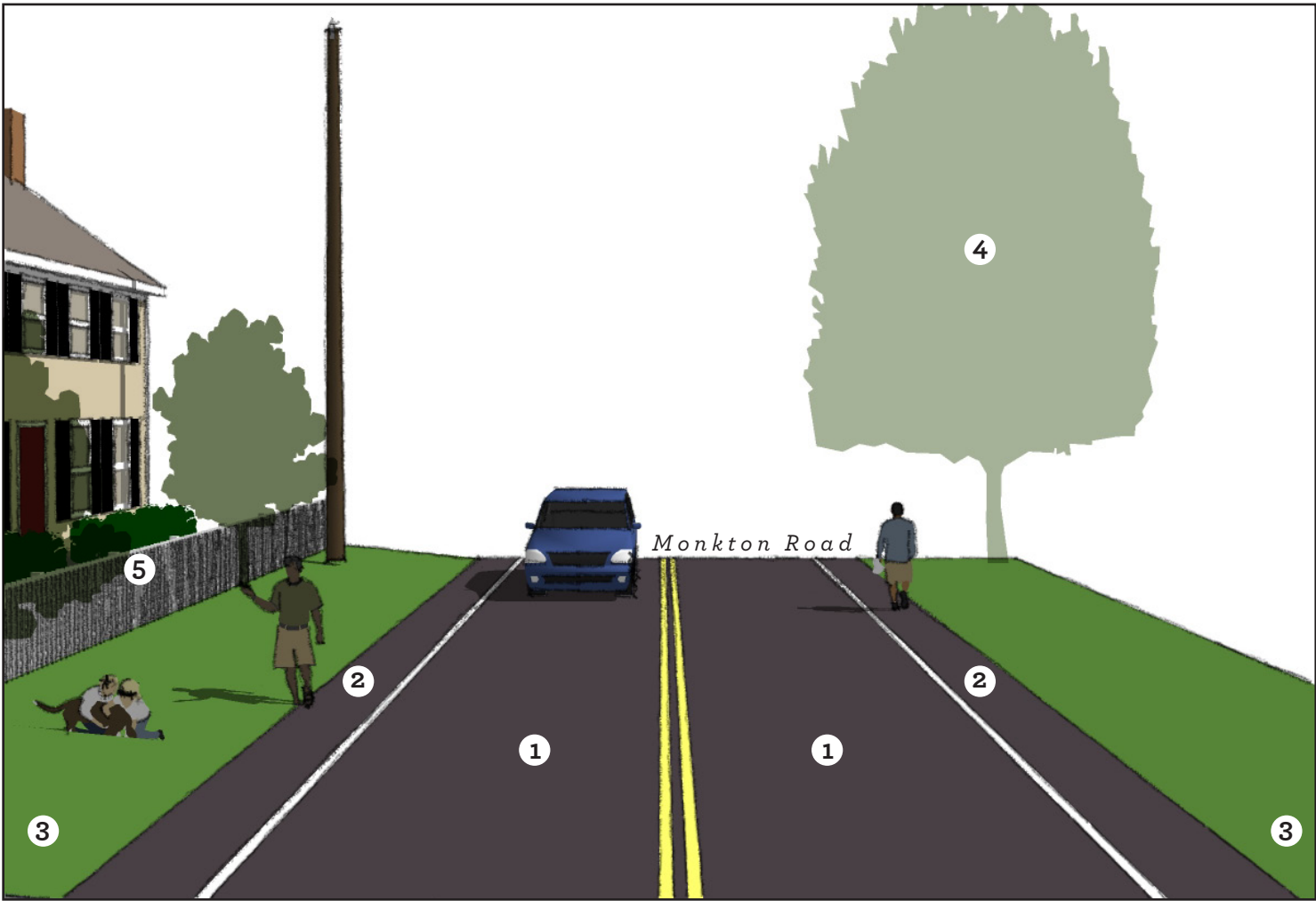
3-D Views of Proposed Road Layout



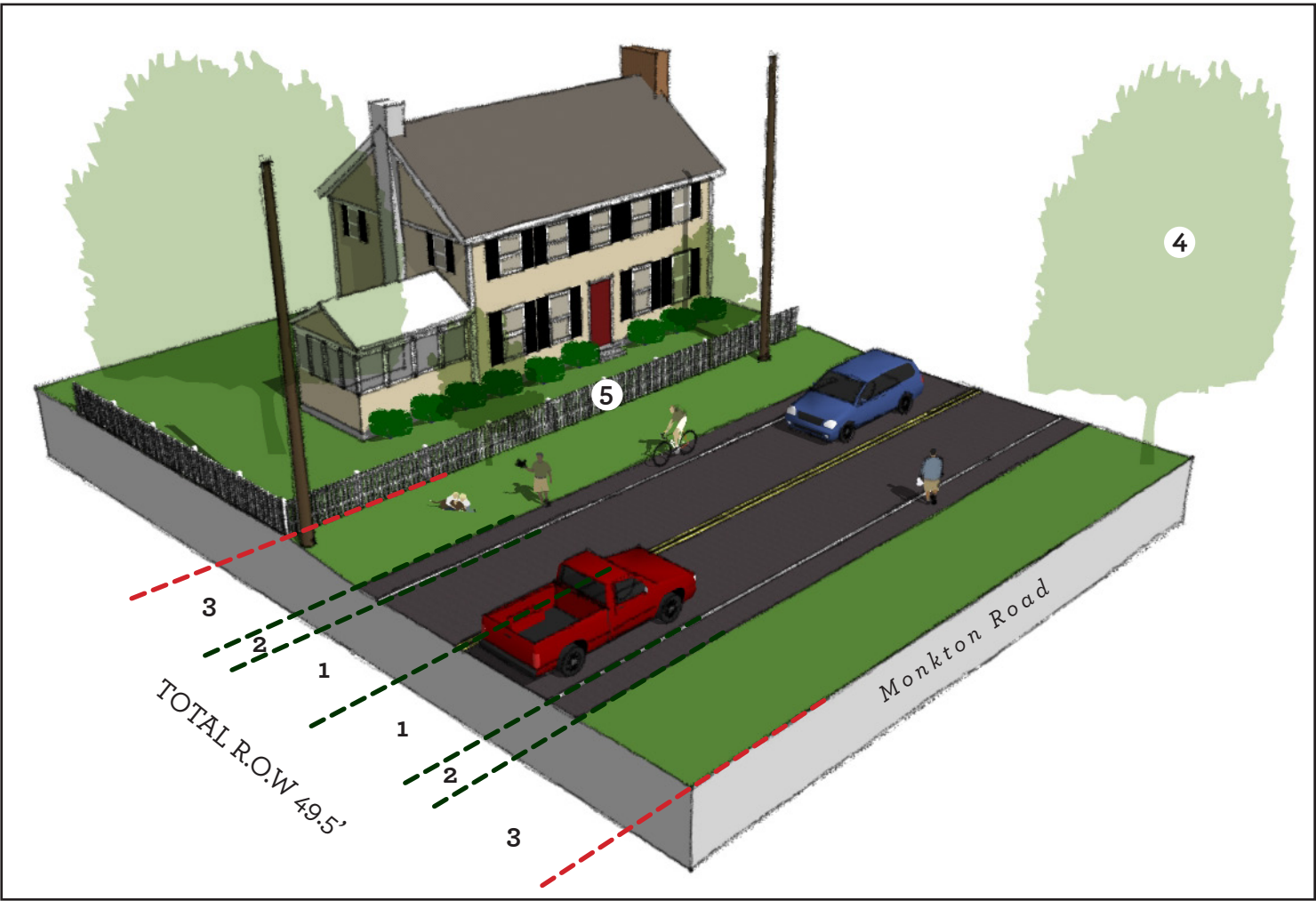
ROAD LAYOUT - OPTION 1 “LANE/SHOULDER REALIGNMENT”

By using the width of the current paved surface (12’ lanes 2’ shoulders - total 28’) and reallocating the amount of space in each lane, vehicular speed can be controlled and reduced through a village setting. Option 1 constricts the travel lane down 1’ from 12’ to 11’ while expanding the paved shoulder surface from 2’ to 3’. This will happen at the proposed gateways prior to the entrance of Monkton Ridge. The

reduction in travel lane size still allows for safe passage of all vehicles while reducing the amount of visual space decreasing overall speed. Expanding the shoulder surface to 3’ encourages alternative modes of transportation to be used throughout the area.



- 1. 11’ Travel lanes
- 2. 3’ Paved shoulder
- 3. Width to property line to be determined
- 4. Existing vegetation
- 5. Existing Fence and Residence



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- 2. 3’ Paved shoulder
- 3. Width to property line to be determined
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NOTE:
1. All Locations to be confirmed in field/
ROW is approximate only

Scale: not to scale

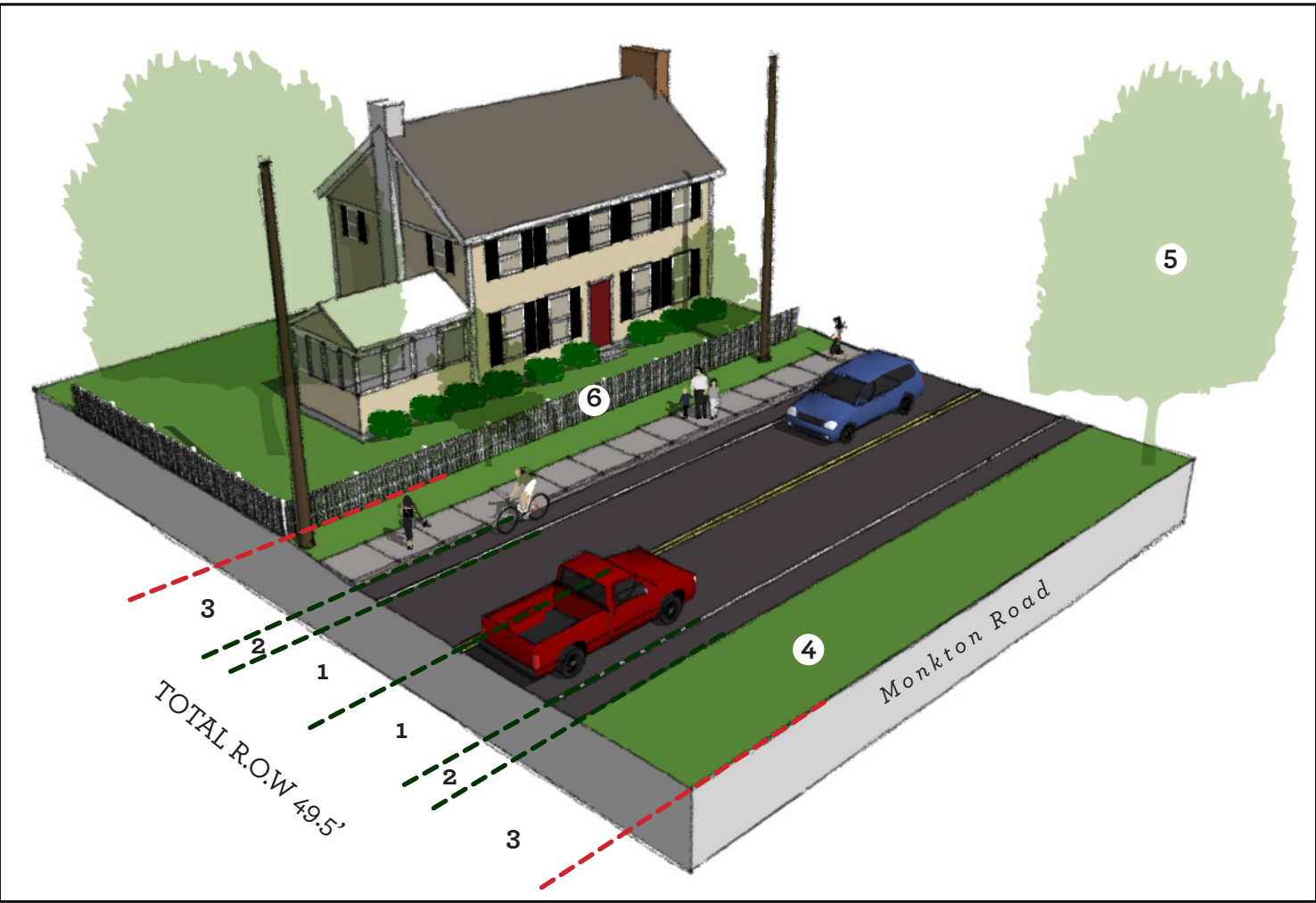
ROAD LAYOUT - OPTION 2 “5’ SIDEWALK”

A combination of street tree and shrub plantings along with appropriate lighting can be a successful tool in calming traffic at mid-block locations. Street plantings act as a visual queue and remind drivers to the village setting that they are currently traveling through. In Monkton Ridge a mixture of street trees and shrub plantings will be used depending on the existing roadside vegetation. Street lights continue

the feel of a village setting during the day and allow the design to function at night as well. Limiting the street lighting to a few mid block locations will keep in character with the rural setting.



- 1. 11’ Travel lanes
- 2. 3’ Paved shoulder
- 3. 5’ Sidewalk
- 4. Width to property line to be determined
- 5. Existing vegetation
- 6. Existing Fence and Residence



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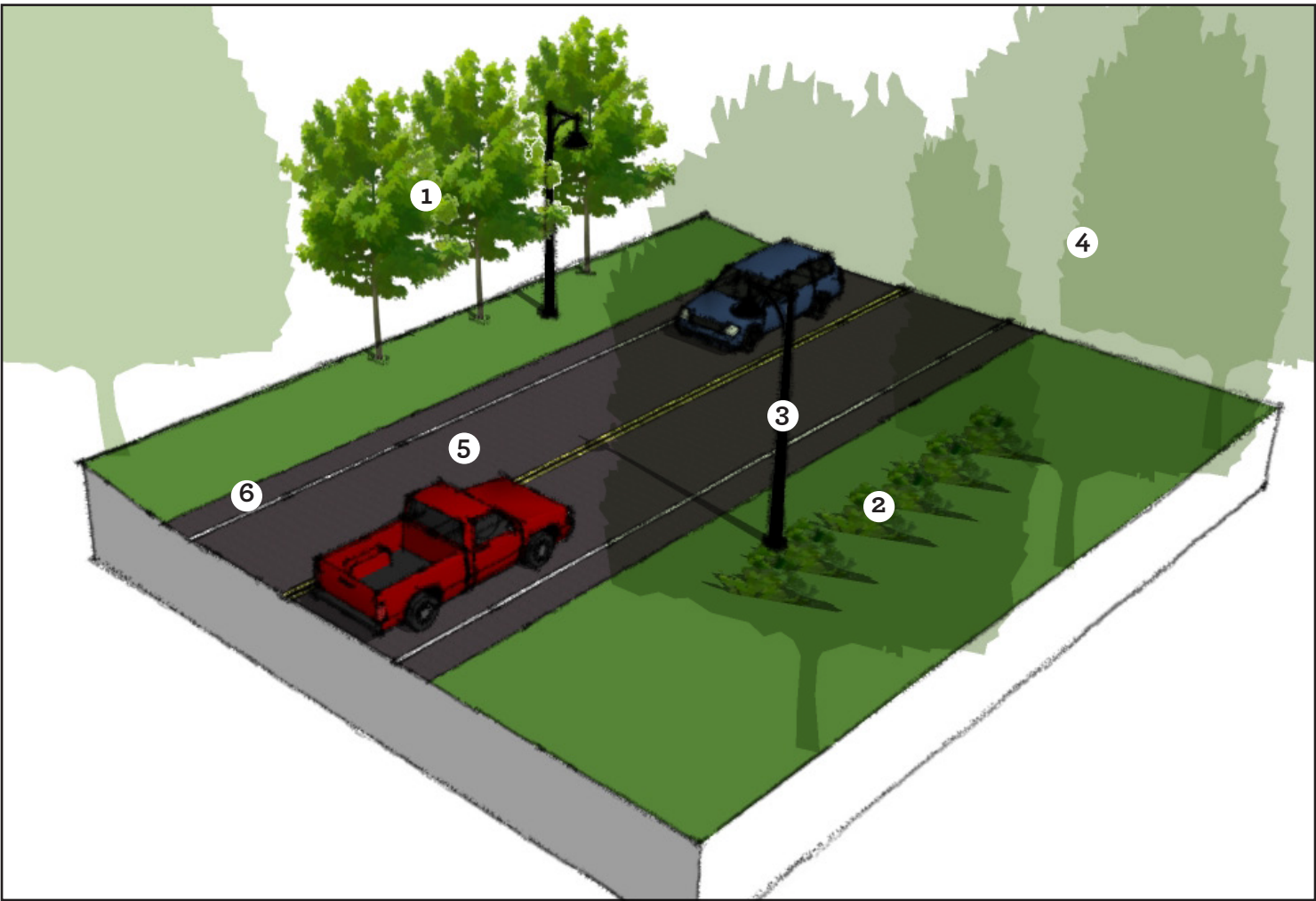
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3-D Views of Proposed Mid-Block Traffic Calming

MID-BLOCK TRAFFIC CALMING - OPTION 1 “PLANTING/LIGHTING”

A combination of street tree and shrub plantings along with appropriate lighting can be a successful tool in calming traffic at mid-block locations. Street plantings act as a visual queue and remind drivers to the village setting that they are currently traveling through. In Monkton Ridge a mixture of street trees and shrub plantings will be used depending on the existing roadside vegetation. Street lights continue

the feel of a village setting during the day and allow the design to function at night as well. Limiting the street lighting to a few mid block locations will keep in character with the rural setting.



- 1. Street tree planting.
- 2. Roadside shrub plantings will be used where existing vegetation limits ROW space and located back from roadside to allow for snow storage.
- 3. New LED street lighting. Set at a height suitable for village driving.

- 4. Existing roadside vegetation
- 5. 11' Travel lane.
- 6. 3' Shoulder.

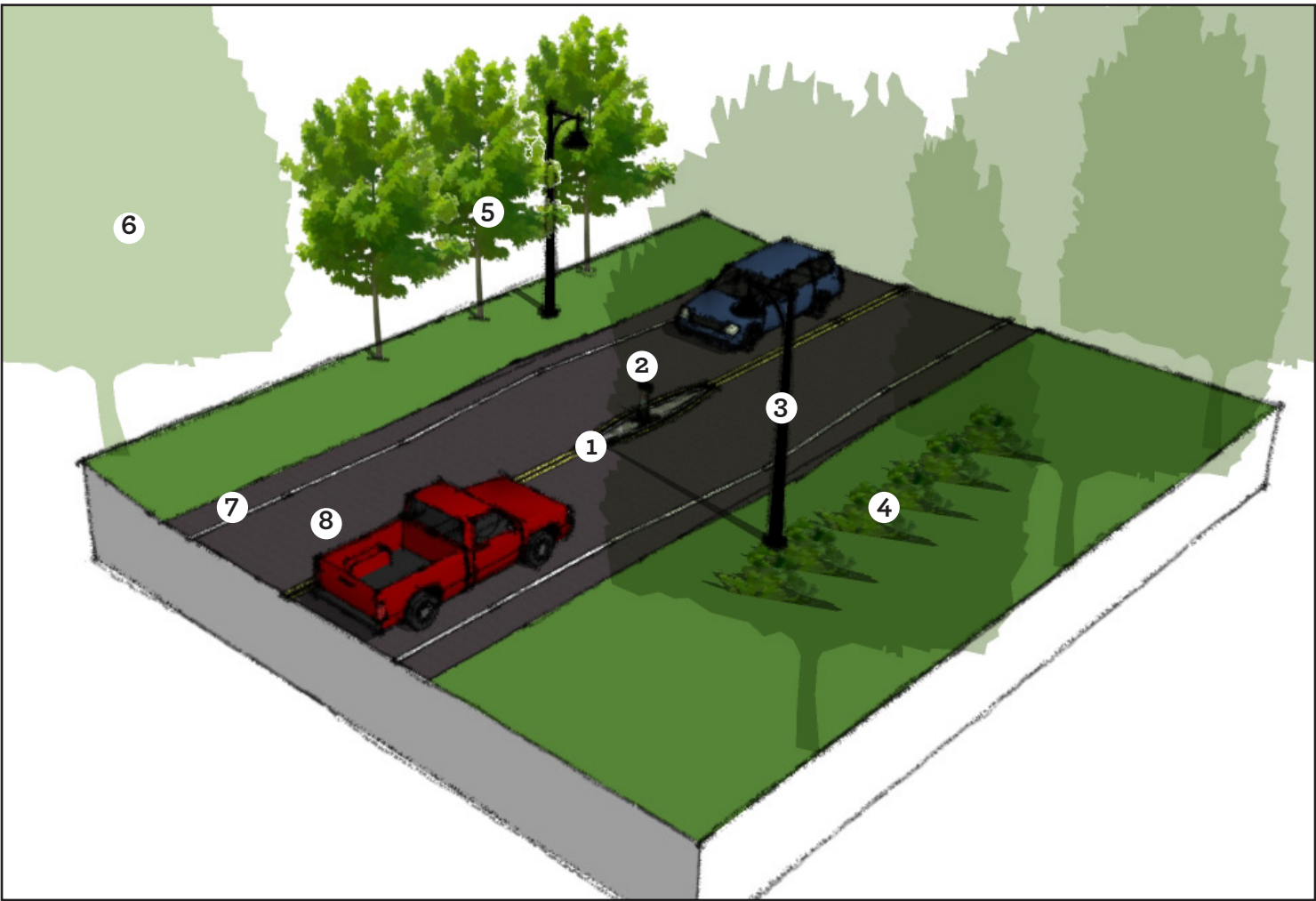
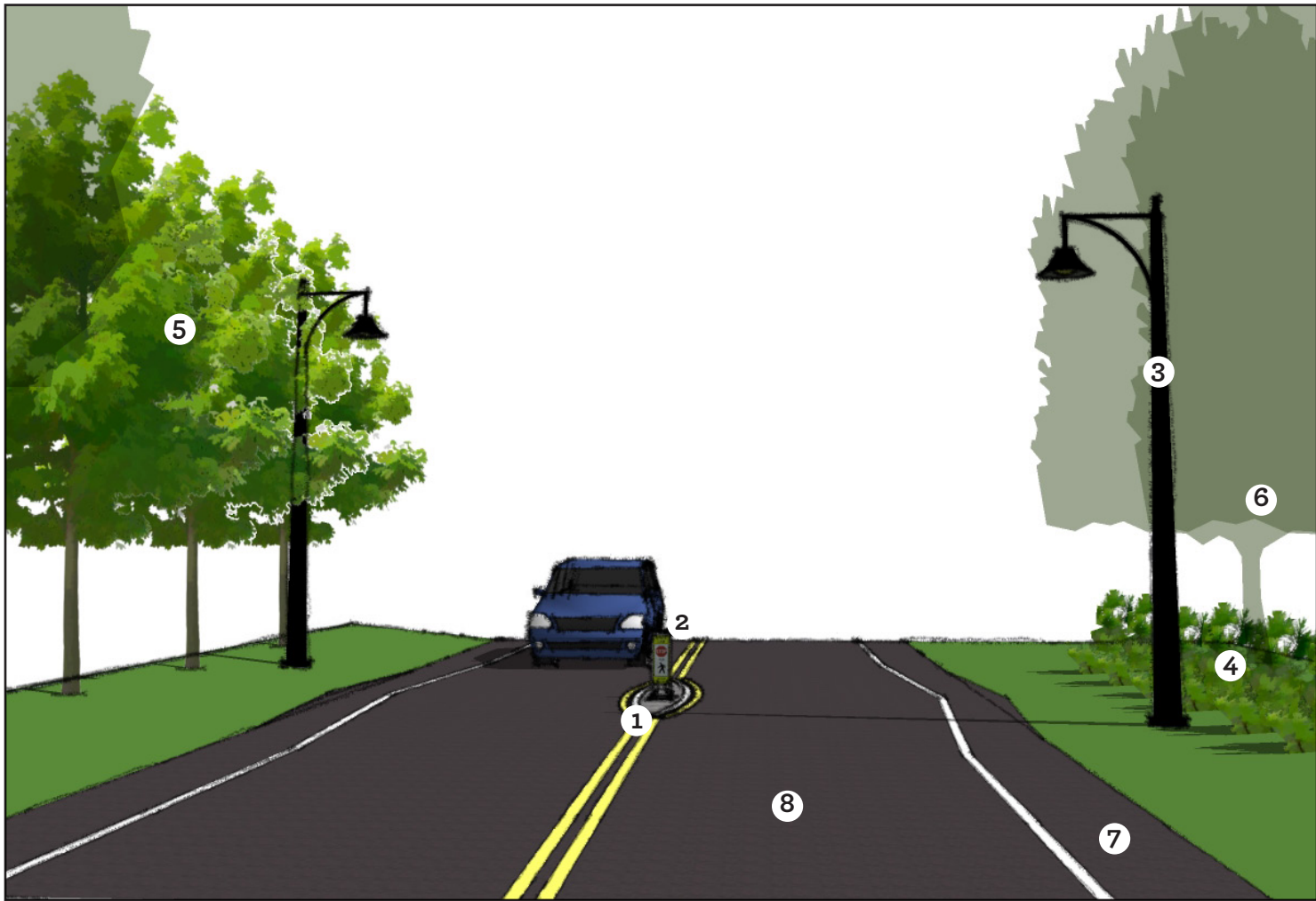
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MID-BLOCK TRAFFIC CALMING - OPTION 2 “AT-GRADE MEDIAN”

The “At-Grade Median” is designed as a traffic calming measure to slow vehicles at mid-block locations. The movement of the travel lane alerts drivers and encourages them to slow down and navigate what is ahead. When combined with a remove able pedestrian sign for the summer months, roadside plantings and street lighting (option 1) the “At-Grade Median” is a minimally obtrusive functional option for

slowing traffic in a mid block situation. Because the median is not raised from the road surface there are no impediments for plowing and winter maintenance. This option works well both with or without a sidewalk.



- 1. At-grade median constructed with Imprint paving or granite curbing and cobble stones.
- 2. Removable pedestrian warning sign, used during summer months, as per MUTCD
- 3. New LED street lighting. Set at a height suitable for village driving.
- 4. Roadside shrub plantings can be used where existing vegetation limits ROW space.
- 5. Street tree plantings where space allows contributes to traffic calming

- 6. Existing roadside vegetation
- 7. 3' paved shoulder
- 8. 11' travel lane

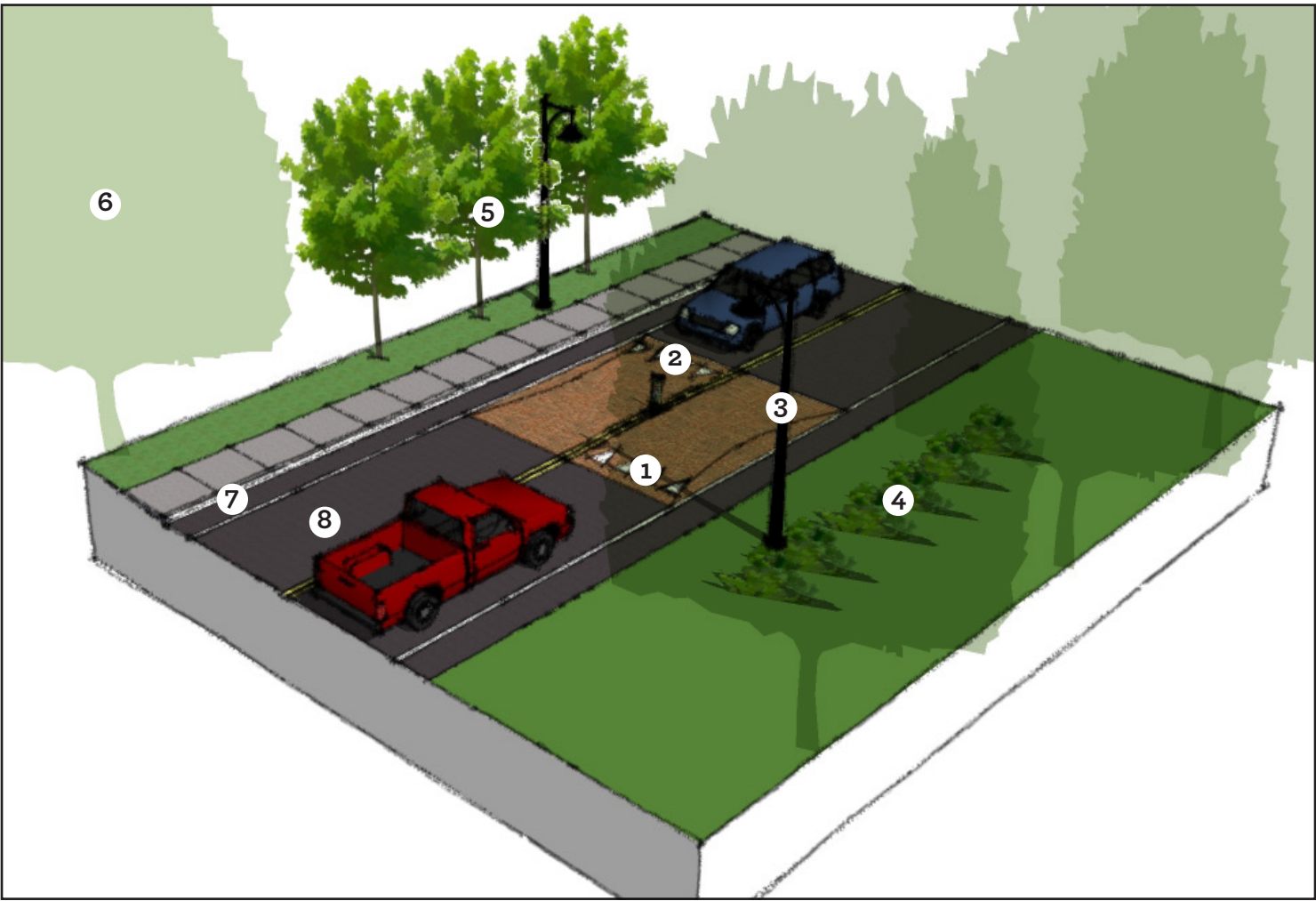
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MID-BLOCK TRAFFIC CALMING - OPTION 3 “RAISED SPEED TABLE”

The “Raised Speed Table” is designed as a traffic calming measure to slow vehicles at mid-block locations. They are effective in calming traffic on streets where the speed limit needs to be maintained rather than slowing cars more significantly. A change in pavement color and texture along with a slight raise promote speed awareness while still maintaining a straight road surface. The elevated platform

design of the speed tables ensures that speeding cars slow down while safe drivers can continue driving at typical village speed limits. Used in tandem with a remove able pedestrian sign for the summer months and option 1 “Planting/Lighting” option 3 provides the highest level of traffic calming.



- 1. Raised Speed Table with Imprint paving.
- 2. Removable pedestrian warning sign, used during summer months.
- 3. New LED street lighting. Set at a height suitable for village driving, not speed.
- 4. Roadside shrub plantings will be used where existing vegetation limits ROW space.
- 5. Street tree plantings where space allows furthers the drivers awareness of a village

- setting.
- 6. Existing roadside vegetation
- 7. 3’ paved shoulder
- 8. 11’ travel lane

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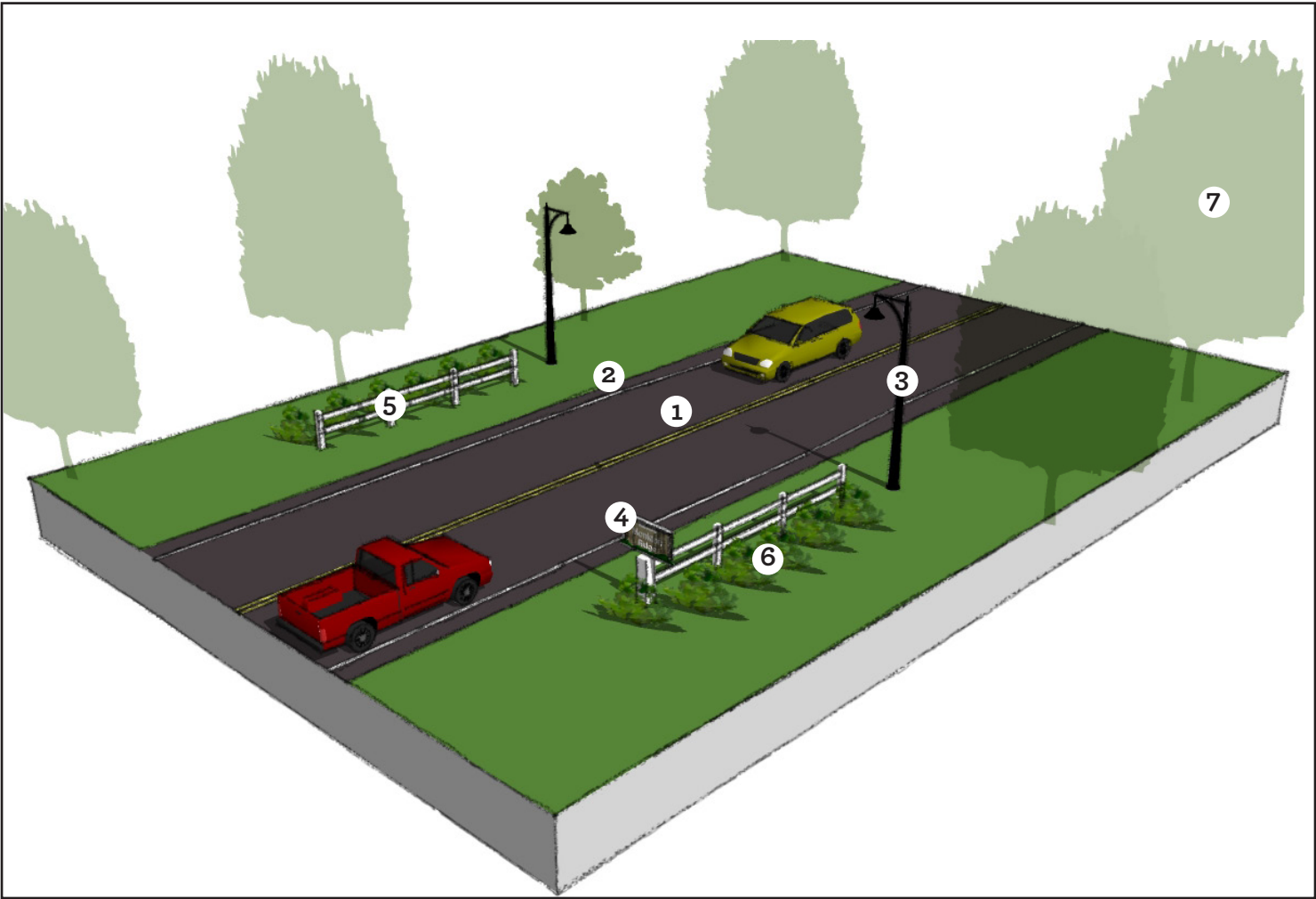
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3-D Views of Proposed Gateways

GATEWAY - OPTION 1 “ROAD ALIGNMENT WITH AMENITIES”

The option one gateway is designed as a welcome area announcing Monkton Ridge to the traveler prior to their arrival. Included in the design is a neck-down of the travel lane from 12’ to 11’ partnered with an expansion of the shoulder from 2’ +/- to 3’ paved. The constriction of the travel lane encourages traffic to slow down and proceed with more caution into the village ahead. Having an expanded shoulder promotes

safer travel for pedestrians and bicycles traveling on the roadway. Amenities included in the gateway that further announce the village entrance include a 24’ section of fencing on both sides of the road with a Monkton Ridge welcome sign, street lighting and plantings.



- 1. Travel lane neck-down 12’ to 11’.
- 2. Shoulder expansion 2’ to 3’
- 3. New LED street lighting. Set at a height suitable for village driving.
- 4. Monkton Ridge Welcome sign

- 5. Gateway fence
- 6. Gateway plantings
- 7. Existing roadside vegetation
- 8. 11’ travel lane

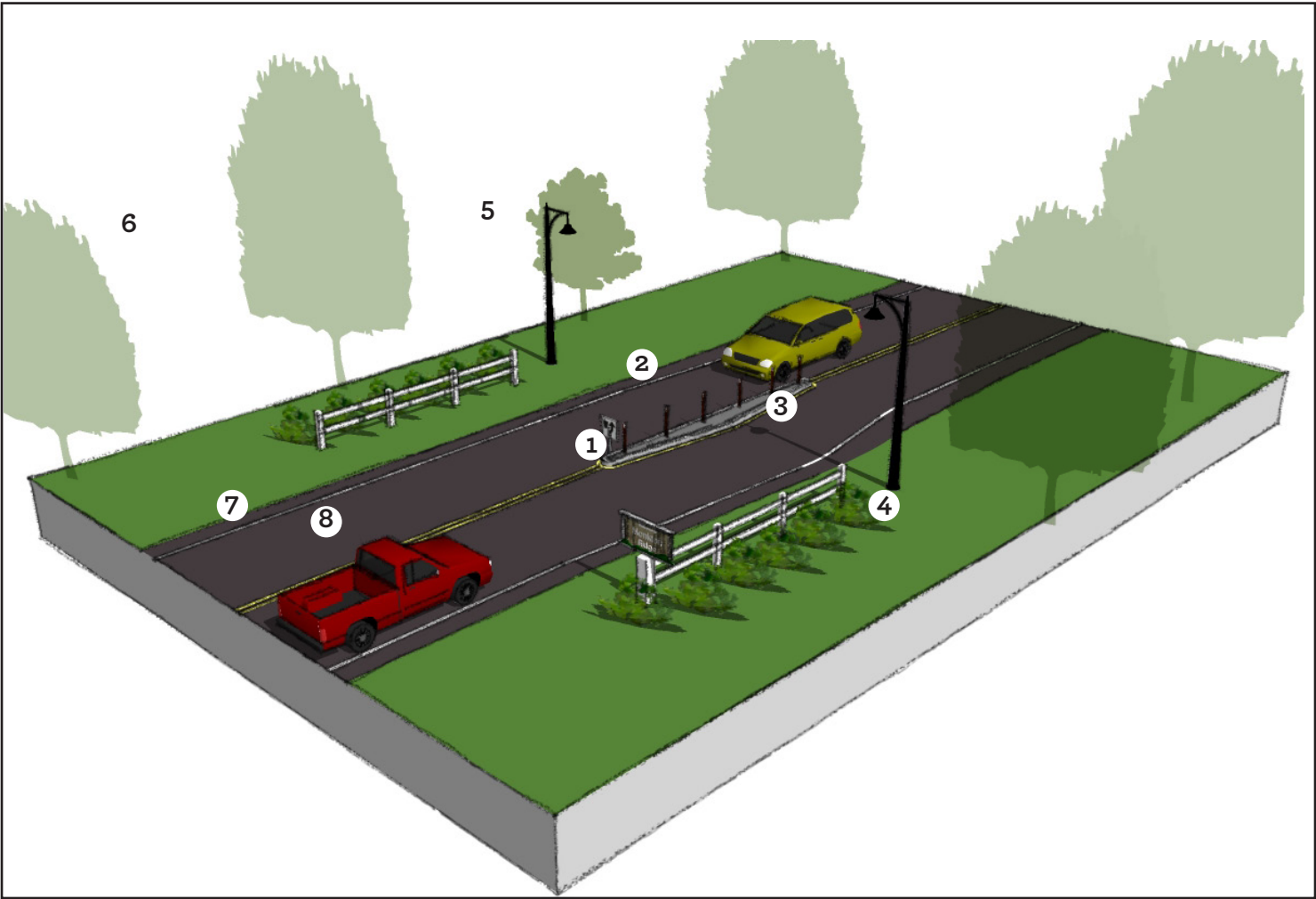
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GATEWAY - OPTION 2 “SPLITTER ISLAND”

The Option 2 Gateway incorporates all of the features included in option 1 and adds a splitter island. The island is located at the point where the travel lane is constricted and the shoulder expanded. This further encourages traffic to slow down and proceed with more caution into the village ahead. The splitter island is designed to have a straight edge for the traffic leaving the village and a bumped out edge for incoming

traffic. This allows for a smooth traffic flow while still providing a high level of traffic calming. Limited space at the gateway locations and a desire to retain the rural character of the area also were contributing factors to the splitter island being designed in this fashion.



- 1. Travel lane neck-down 12’ to 11’.
- 2. Shoulder expansion 2’ to 3’
- 3. New LED street lighting. Set at a height suitable for village driving.
- 4. Monkton Ridge Welcome sign

- 5. Gateway fence
- 6. Gateway plantings
- 7. Existing roadside vegetation
- 8. Splitter island

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Scale: not to scale

**No Right / Wrong
Option for Town**

**A Unique Combination of
Alternative Options**

Thank you for Coming!