



Figures above: Bicycle Infrastructure in the Netherlands

Sustainable Transportation Infrastructure

Applying Dutch design principles and lessons learned from the Georgia Institute of Technology's Civil and Environmental Engineering Sustainable Transportation study abroad in the Netherlands to Marietta Street in Atlanta, Georgia.

Marietta Street Atlanta, Georgia

Marietta Street NW is identified as an integral part of Atlanta's core bike network, but the lack of safe infrastructure and the heavy volume of vehicular traffic make it an uncomfortable place to walk and bike. In an effort to improve the street for cyclists, Cycle Atlanta: Phase 1 proposes to install 4 ft. on-street bike lanes, shared-lanes, and 9 ft. on-street buffered bike lanes. However, these typical American solutions will not necessarily attract a large number of people to use the corridor as a bicycle commute route.

Best Practices for Bicycle Infrastructure

The Netherlands, Denmark, Germany, Belgium, and the Scandinavian countries embrace the philosophy that the safest and most efficient transportation system is one where bikes and pedestrians, for the most part, are separated from vehicular traffic. Cycle tracks have become their standard bicycle facility on all four lane roads and streets with speeds greater than 31 mph.

The separation of bicycle and vehicular traffic has resulted in a high percentage of the population choosing to bike as a means of transportation. In 2008, 28% of all trips in the Netherlands were made by bike (Bueller and Pucker, 2012).

Problems with existing infrastructure and designs proposed in the Cycle Atlanta Phase 1 plan:

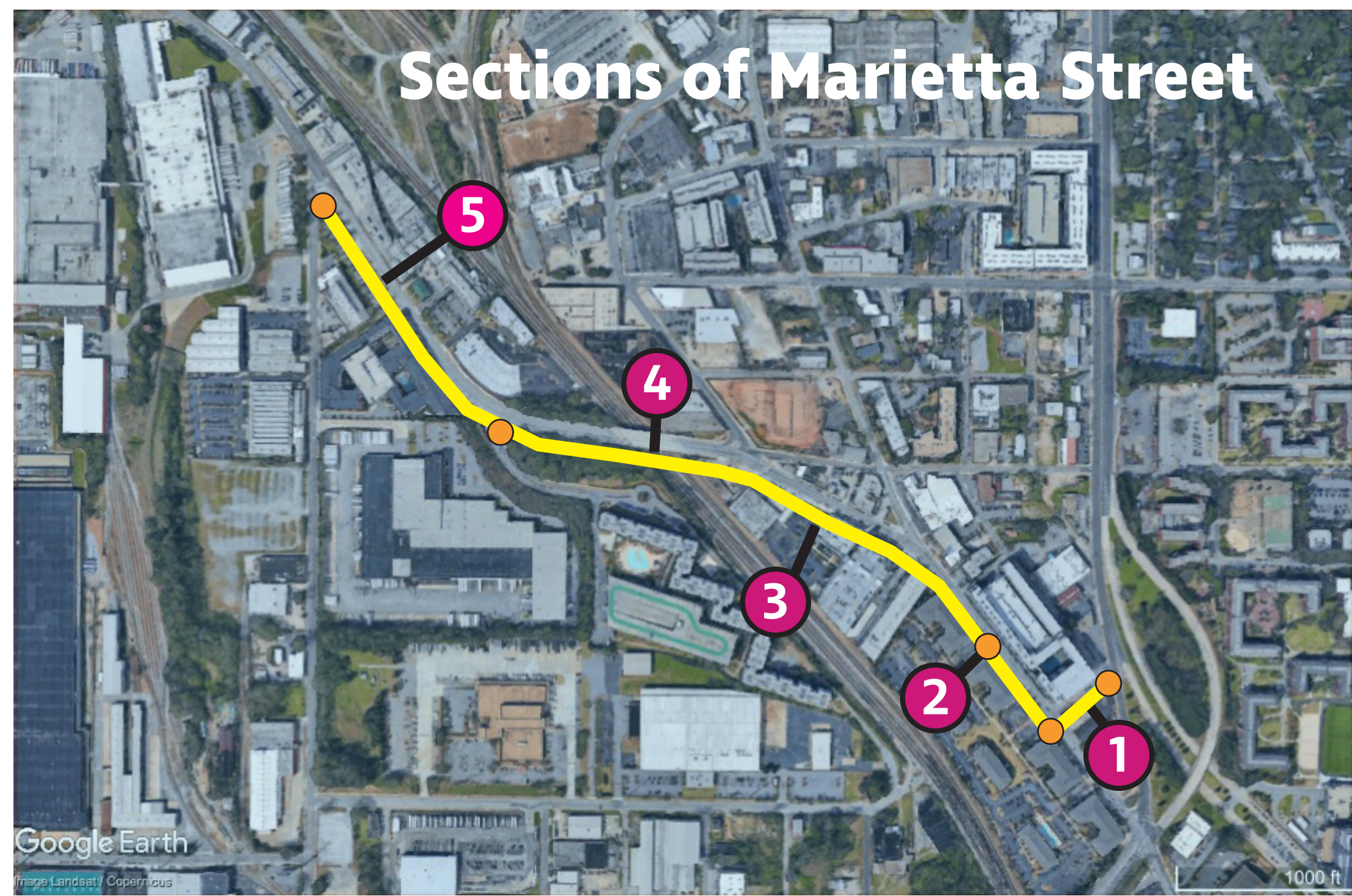
- Bicycles share the road with cars traveling 45+mph
- Heavy Traffic - nearly 20,000 vehicles per day
- No space dedicated for bicycles



Figures: Marietta Street NW (top row); Separated Bike Infrastructure, NE (bottom row)

Our recommendation, based on lessons learned through studying abroad in the Netherlands:

A continuous separated cycle track that runs along the west side of Marietta Street and spans from Hampton Street to Joseph E. Lowry.

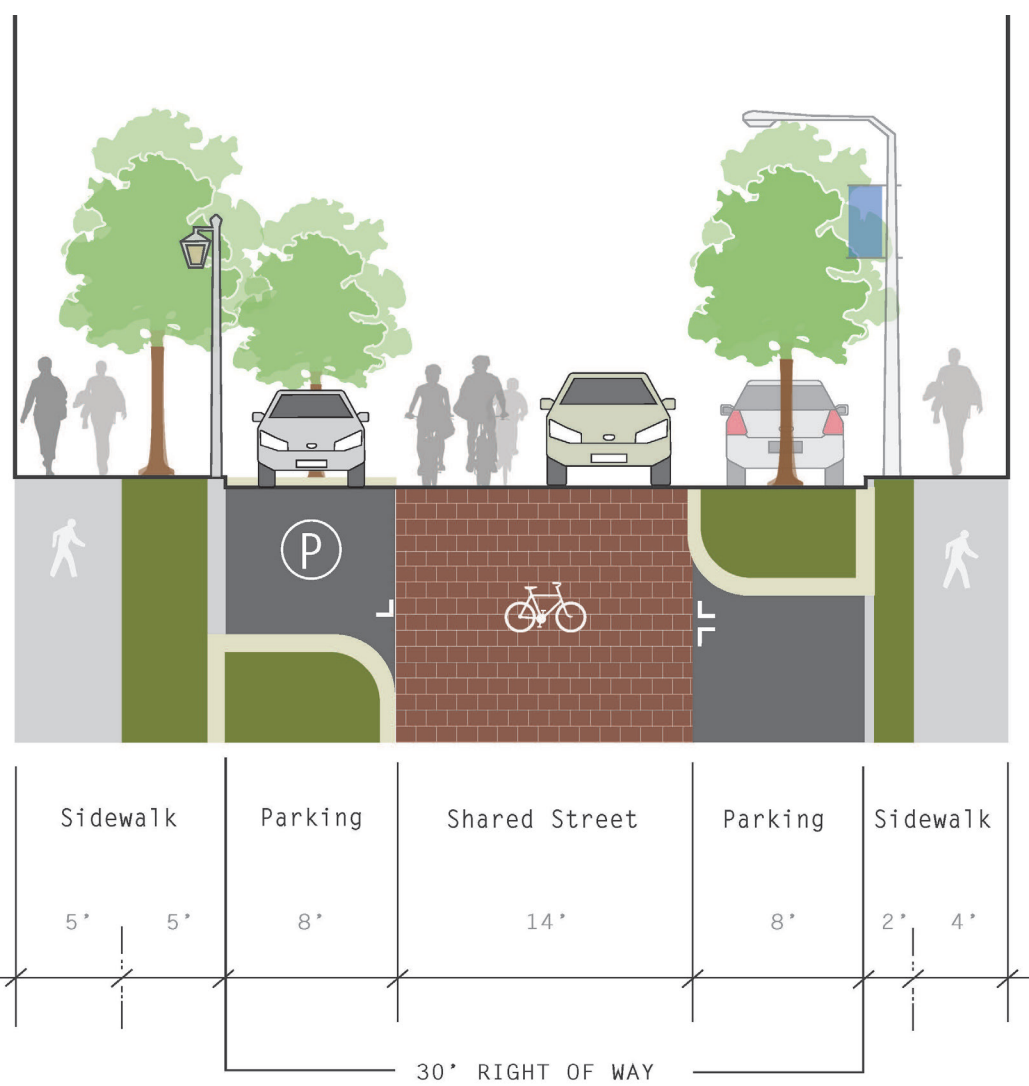


Hampton Street

Existing Conditions



Our Recommendations



Marietta Street from Hampton to Howell Mill Rd

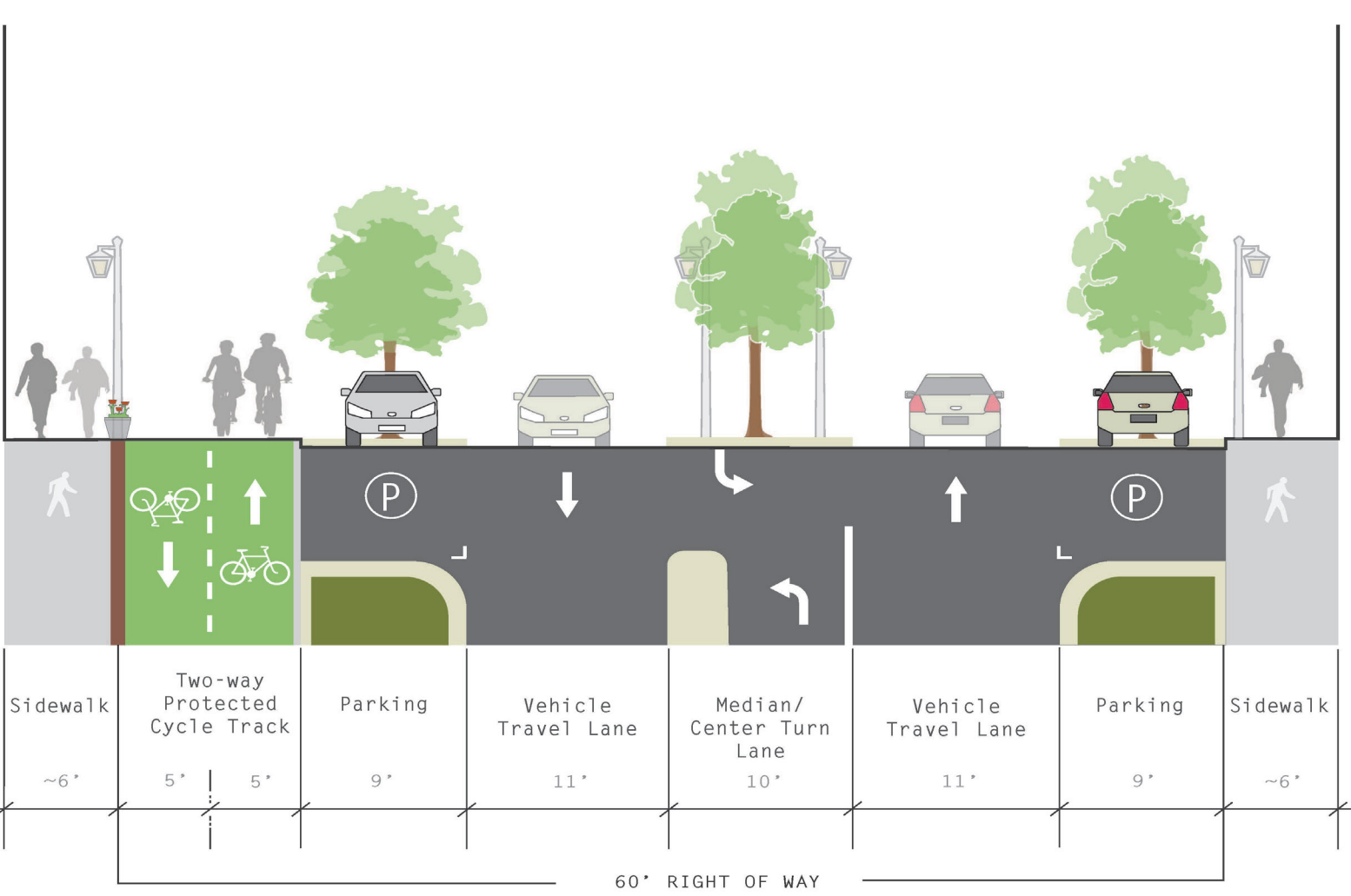
Existing Conditions



Cycle Atlanta Plans



Our Recommendations



Marietta Street from Howell Mill Road to Brady Street

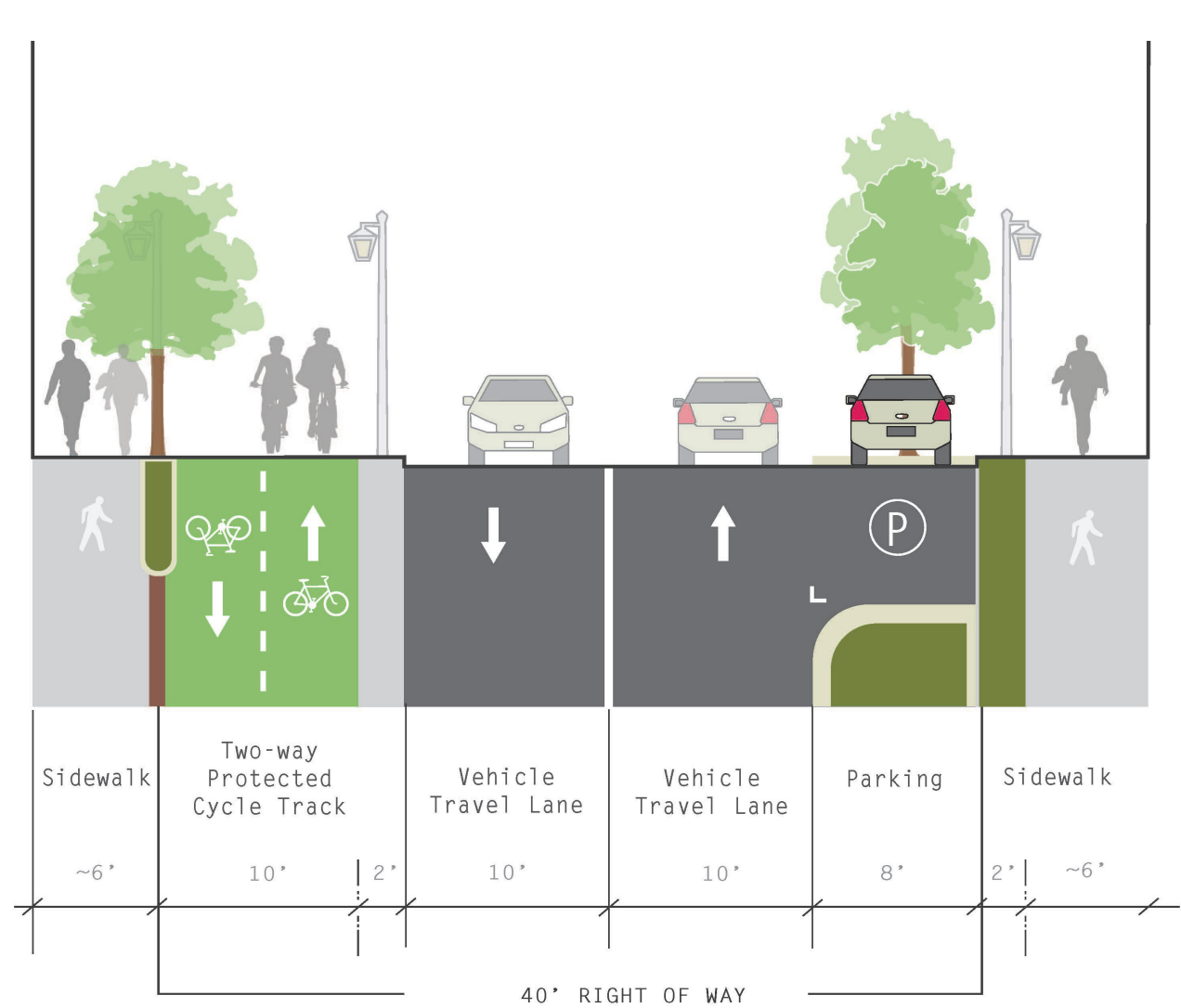
Existing Conditions



Cycle Atlanta Plans



Our Recommendations



Intersection along Hampton

Existing Conditions



Our Recommendation: Separate Signals



Existing Conditions



Our Recommendation: Raised Intersection



Marietta Street Marietta Street from Brady Street to

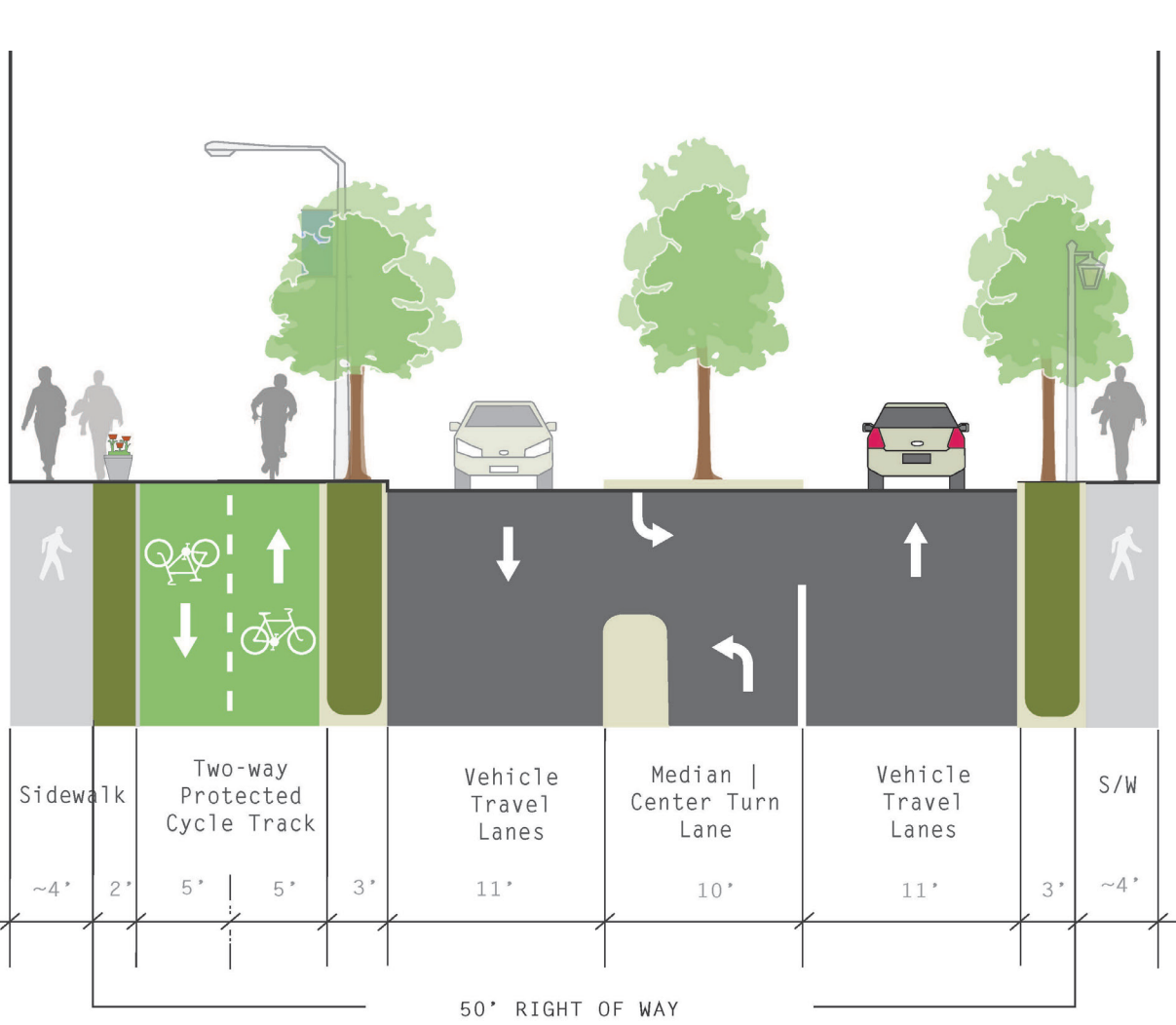
Existing Conditions



Cycle Atlanta Plans



Our Recommendations



Marietta Street from West Mar Apartments to Joseph

Existing Conditions



Cycle Atlanta Plans



Our Recommendations

