

John & Thomas Streets Crossing & Safety Improvements

The John/Thomas corridor from Broadway E to 23rd Ave E:

E John St From Broadway E to 15th Ave

E Thomas St from 15th Ave E to 21st Ave E

E John St from 21st Ave E to 23rd Ave E

Applicant Problem

The John/Thomas corridor across Capitol Hill is a key part of the transportation network, hosting Metro’s frequent routes 8 and 10, and providing a direct connection to Sound Transit’s Capitol Hill Station from areas to the east of the station. Unfortunately, the corridor is difficult and dangerous for people on foot to cross at the intersections lacking signalized crossings.

PROJECT TYPE

Pedestrian Improvements

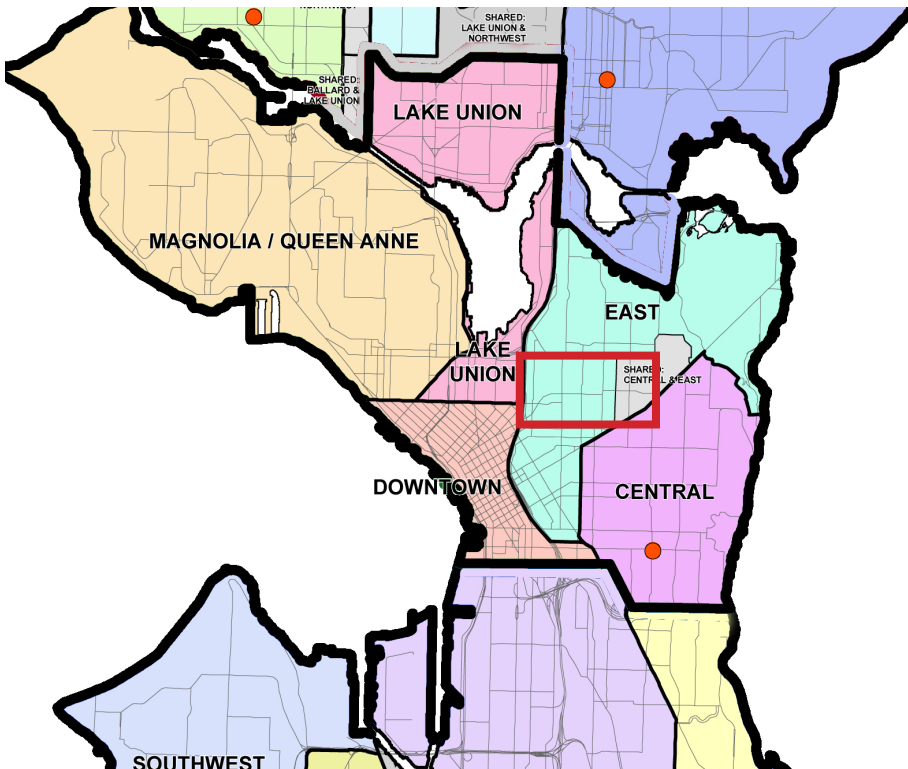
CURB BULBS ON THOMAS AND JOHN CORRIDOR:

SDOT NSF: \$945,000

SDOT PMP: \$100,000

20TH AVE E AND E THOMAS ST IMPROVEMENTS:

SDOT NSF: \$200,000



Many people driving fail to yield to pedestrians at the unmarked crosswalks along the corridor, and pedestrians are obscured behind cars parked near the intersections. John and Thomas are very wide streets, leading to high vehicle speeds and long crossing distances. This makes it hard to access bus stops along the corridor and to travel north/south to the many parks, businesses, and homes on Capitol Hill.

Specific areas of concern:

E John St & 10th Ave E: This intersection is close to the signalized intersection at Broadway so drivers are focused on the traffic lights there, or have just come through a green light. Many fail to yield to people trying to cross John. The East District Council ranked an NPSF proposal to construct a raised intersection here as their #2 priority.

Applicant Solution

We propose installing curb bulbs at the unsignalized intersections along the corridor in order to reduce crossing distances, improve visibility for people attempting to cross, and lower vehicle speeds. Ideally these bulbs could allow for more intersections to be improved.



E Thomas St and 22nd Ave E



E Thomas St and 19th Ave E



E Thomas St and 21st Ave E



E Thomas St and 18th Ave E

Seattle Department of Transportation (SDOT) Review

Project Description

E John Street and E Thomas Street are minor arterial streets that traverse Capitol Hill east-west. On both E John and E Thomas Streets, there are currently AM peak hour parking restrictions for westbound traffic. This is meant to facilitate traffic in the morning peaks, however, when reviewed, this second lane is not needed due to lower traffic volumes. As such, curb bulbs, concrete or painted, are feasible on the north side of either E John Street or E Thomas Street. Painted curb bulbs are suggested at some intersections, based on the applicant's priorities, to reduce project cost and in locations where new curb ramps have recently been installed.

This project includes pedestrian improvements to multiple locations on this corridor:

A. E John St and 10th Ave E

The intersection at E John St and 10th Ave E has stop sign control for traffic on 10th Ave E and an existing marked crosswalk on the east side of the intersection on E John St. 10th Ave E is a residential access street with parking allowed on one side of the roadway.

This conceptual design includes concrete curb bulbs installed on all four corners. The curb bulb on the northwest corner would be designed as a bus bulb and is currently planned for construction as part of King County Metro route 8 Transit Improvements. This bulb is not included in the cost estimate.

B. E John St and 11th Ave E

The intersection at E John St and 11th Ave E has stop sign control for traffic on 11th Ave E. 11th Ave E is a residential access street with parking allowed on one side of the street.

The intersection at E John St and 11th Ave E would have painted curb bulbs with flexible delineator posts installed on all 4 corners. The northeast and northwest corners have new curb ramps that would be torn out if a concrete bulb were installed.

C. E John St and 13th Ave E

The intersection at E John St and 13th Ave E has stop sign control for traffic on 13th Ave E. 13th Ave E is a residential access street with parking allowed on one side of the street.

The intersection at E John St and 13th Ave E would have painted curb bulbs with flexible delineator posts installed on all 4 corners. All corners have new curb ramps that would be torn out if a concrete bulb were installed.

D. E John St and 14th Ave E

The intersection at E John St and 14th Ave E has stop sign control for traffic on 14th Ave E. 14th Ave E is a residential access street with parking allowed on both sides of the street.

The intersection at E John St and 14th Ave E would have painted curb bulbs with flexible delineator posts installed on all 4 corners.

E. E Thomas St and 16th Ave E

The intersection at E Thomas St and 16th Ave E has stop sign control for traffic on 16th Ave E. 16th Ave E is a residential access street with parking allowed on one side of the street.

The intersection at E Thomas St and 16th Ave E would have concrete curb bulbs installed on all corners. There are currently bus zones on the northeast and southeast corners of this intersection. SDOT would work with King County Metro to determine final bus stop locations at this intersection and would construct them as bus bulbs. Design of this intersection would also take into account a potential future neighborhood greenway crossing.

F. E Thomas St and 17th Ave E

The intersection at E Thomas St and 17th Ave E has stop sign control for traffic on 17th Ave E. 17th Ave E is a residential access street with parking allowed on one side of the street.

The intersection at E Thomas St and 17th Ave E would have painted curb bulbs with flexible delineator posts installed on all 4 corners.

G. E Thomas St and 18th Ave E

The intersection at E Thomas St and 18th Ave E has stop sign control for traffic on 18th Ave E. 18th Ave E is a residential access street with parking allowed on one side of the street.

The intersection at E Thomas St and 18th Ave E would have painted curb bulbs with flexible delineator posts installed on all four corners.

Seattle Department of Transportation (SDOT) Review

H. E Thomas St and 19th Ave E

The intersection at E Thomas St and 19th Ave E is controlled by an all-way stop with marked crosswalks across all legs. E Thomas St is a minor arterial and has 2 through lanes, 1 in each direction with street parking allowed on both sides of the street. 19th Ave E is a collector arterial street with parking allowed on both sides of the street. King County Metro routes 8 and 43 run on E Thomas Street and the route 12 runs on 19th Avenue E. This intersection is also immediately adjacent to the Miller Playfield located on the NE corner.

The intersection at E Thomas St and 19th Ave E would have concrete curb bulbs installed on all corners. Due to the presence of a bus stop on the east and west legs, curb bulbs installed on the NE or SW corners would be extended to bus bulbs. The curb bulb on the northwest corner would not extend into 19th Ave E in order to preserve access to existing garage entries.

I. E Thomas St and 20th Ave E

The intersection at E Thomas St and 20th Ave E is a tee intersection with a stop sign for control of traffic on 20th Ave E which meets E Thomas St from the south. 20th Ave E is a residential access street with parking allowed on both sides of the street.

Two designs are proposed for the intersection at E Thomas St and 20th Ave E. Project I includes painted curb bulbs on all 3 corners.

J. E Thomas St and 21st Ave E

The intersection at E Thomas St and 21st Ave E has stop sign control for traffic on 21st Ave E and an existing crosswalks on the west and east sides of the intersection on E Thomas St. 21st Ave E is a residential access street with parking allowed on both sides of the street. North of the intersection, 21st Ave E is restricted to southbound exiting traffic only. South of the intersection, there is no restriction. 21st Avenue E is a neighborhood greenway and improvements were recently made on the north side of the street.

The intersection at E Thomas St and 21st Ave E would have concrete curb bulbs on the southeast corner and a painted curb bulb with flexible delineator posts on the northwest corner.

K. E Thomas St and 22nd Ave E

The intersection at E Thomas St and 22nd Ave E has stop sign control for traffic on 22nd Ave E and an existing crosswalks on the west and east sides of the intersection

on E Thomas St. 22nd Ave E is a residential access street with parking allowed on both sides of the street.

The intersection at E Thomas St and 22nd Ave E would get painted curb bulbs on all corners except for the southeast corner.

L. E Thomas St and 20th Ave E

A separate cost estimate for the intersection of E Thomas St and 20th Ave E shows concrete curb bulbs installed on all corners. On the north side of E Thomas Street, the curb bulb would extend across the intersection to prevent illegal parking. On the southwest corner, the curb bulb will define the intersection which is currently being used as illegal parking. This will also allow the installation of a curb ramp to align with the unmarked crosswalk.

This project includes leveraging from the SDOT Pedestrian Master Plan Implementation Program.

Constructability

- Old drainage inlets are in place at almost all intersections. Replacement of these inlets, as needed for concrete curb bulbs, would involve the removal and replacement of the existing pavement.
- Minor re-grading is expected to ensure the new curb ramps are ADA-compliant.
- Some utility covers located near the curb bulbs locations will require adjustments to the curb bulb geometry

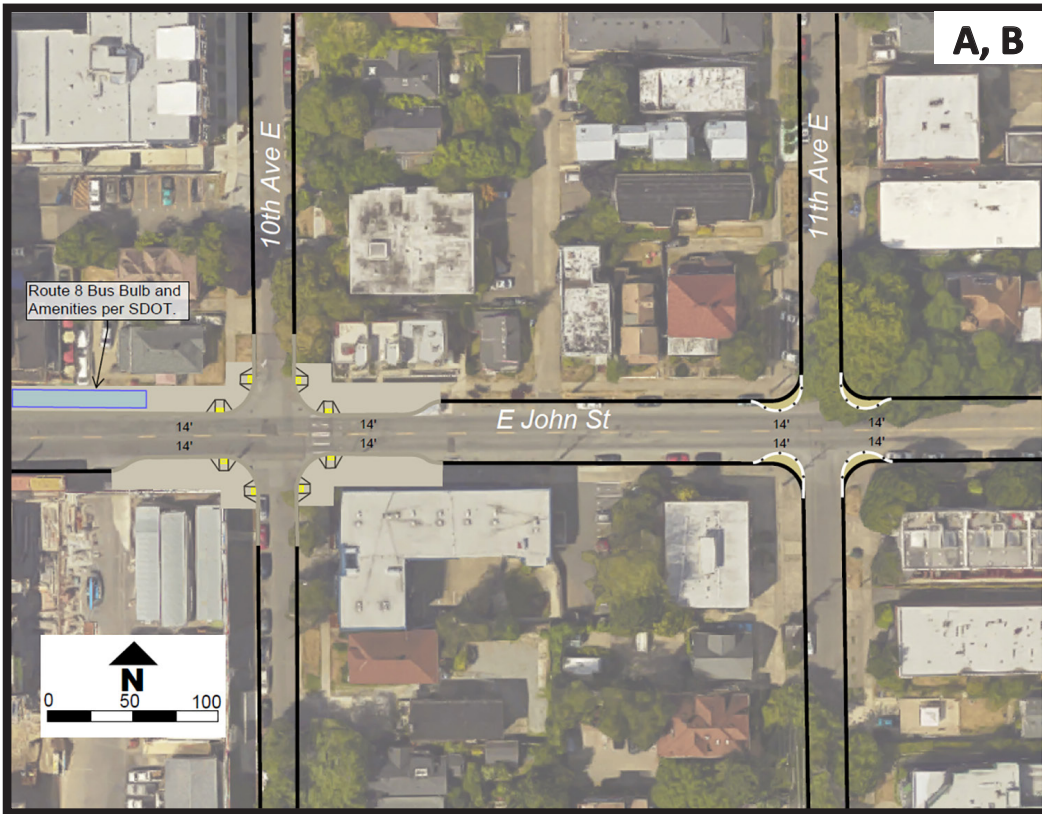
Impacts

- Parking will be restricted near intersections. While this parking is not legal, it may be perceived as parking loss. Installation of bus bulbs will increase delays to other motor vehicles as the bus will stop in traffic. However, reliability of the bus routes is expected to increase due to the installation.

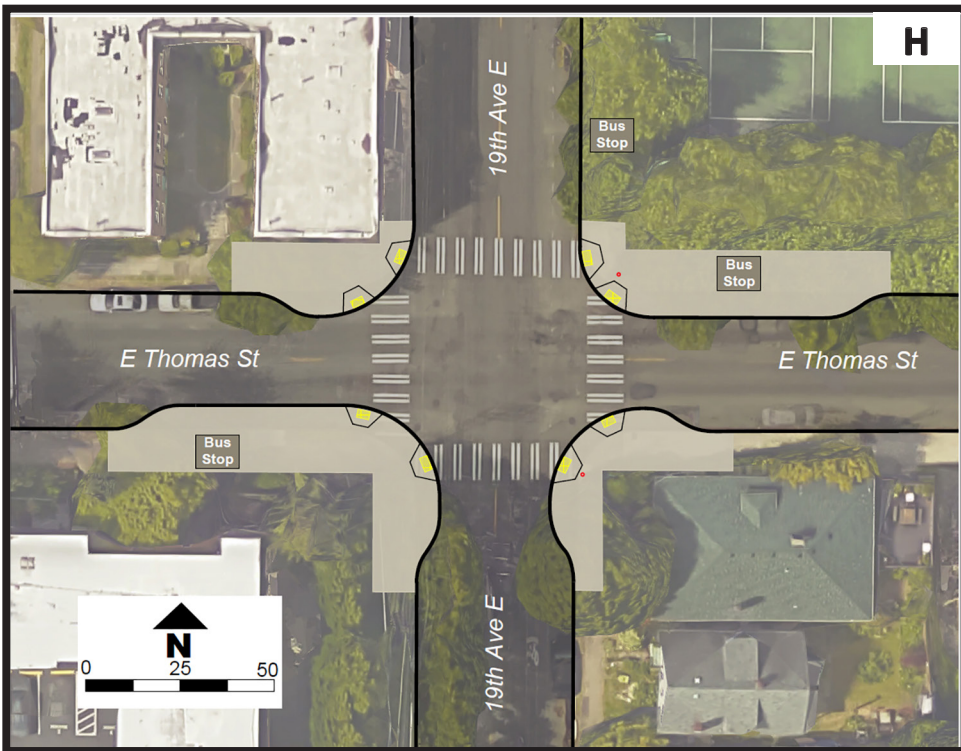
Benefits

- Increased safety for pedestrians by reducing the overall distance to cross and increase in visibility.

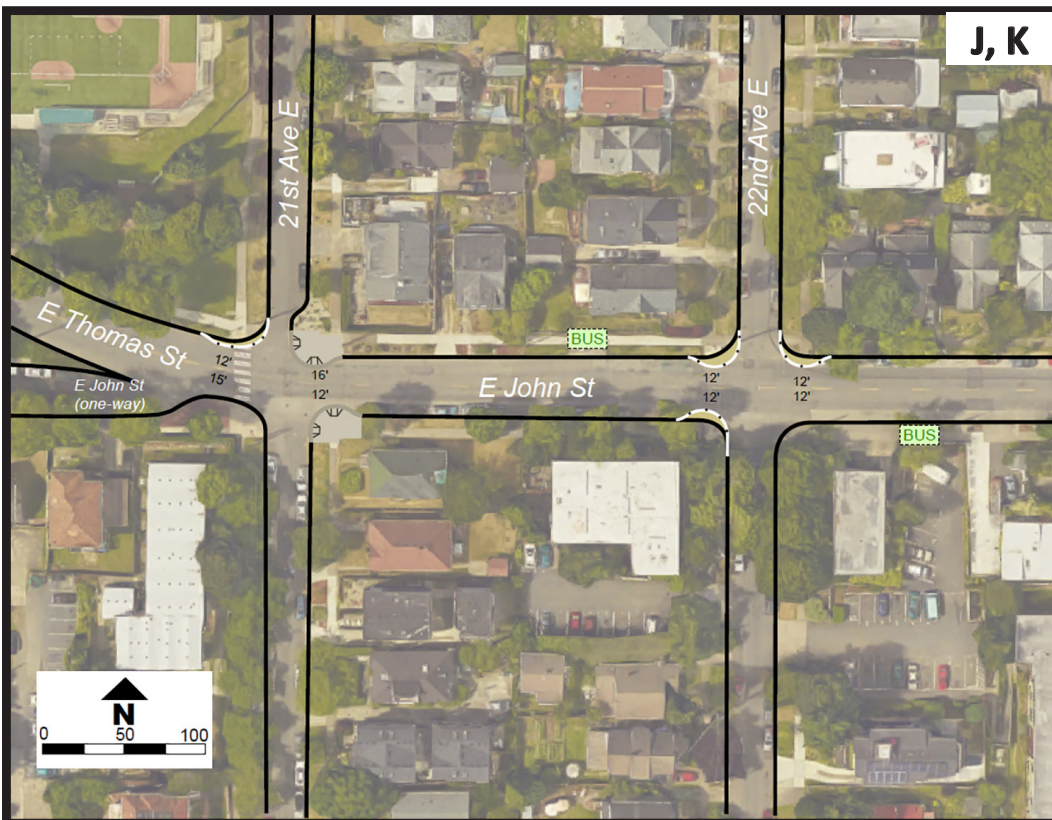
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