

WSDOT Projects

I-90 - Two-Way Transit and HOV Operations

Project Status

December 2007

- Crews continue paving the widening sections along the right shoulder of westbound I-90. In early December we were about 70 percent complete (almost to 77th Avenue SE). We'll continue this paving through December. We've also [constructed new barrier](#) from East Mercer Way to Shorewood Drive.
- We've started [paving the widening](#) of the Bellevue Way HOV ramp and hope to complete the base paving layers by mid-December. We'll place the final layer next spring or summer.
- Crews have installed all the [steel reinforcement](#) for the bottom slab and interior walls of the the new HOV ramp at 80th Avenue SE. We've had to postpone pouring concrete for the ramp for several weeks because of the cold and rainy weather, but we hope to get it poured this month.
- In December we plan to finish the retaining walls along the right side of westbound I-90. In early December they were 90 percent complete.
- Visit our [construction update report](#) for details on traffic closures required for work on this project.
- WSDOT contractor crews will be installing electrical systems on the I-90 floating bridges through early 2008. West shore Mercer Island residents may hear minimal noise from this work. This is not part of the Two-Way Transit and HOV Project. Contact: Steve Strand (425-814-7105).

Overview

WSDOT and Sound Transit plan to add HOV lanes to the I-90 outer roadway between Seattle and Bellevue. We will also build new I-90 HOV on and off-ramps on Mercer Island and will improve I-90 HOV access at Bellevue Way.

Why is WSDOT working with Sound Transit to add high occupancy vehicle (HOV) lanes to the I-90 outer roadway and new ramps on I-90 between Seattle and Bellevue?

I-90 has a two-lane reversible center roadway between Seattle and Bellevue for buses, carpools and vanpools only. Traffic travels westbound in the mornings and eastbound in the evenings on the center roadway. However, buses, carpools and vanpools that are traveling in the opposite direction of the center roadway are forced to use general-purpose lanes. This makes buses and other high occupancy vehicles traveling between Seattle and Bellevue run increasingly late during rush hours, and reduces the benefits of sharing the ride.

WSDOT and Sound Transit are teaming up to modify the outer roadways to provide an additional HOV lane in each direction. We will also build new direct access HOV on and off-ramps on Mercer Island at 80th and 77th Avenues SE, and we will modify the existing ramps at Bellevue Way to provide direct access to the HOV lane.

Stage 1

Improve westbound I-90, Bellevue to Mercer Island

Construction 2007-2009

- Add westbound I-90 HOV lane to outer roadway from East Mercer Way to 80th Ave. SE, which will complete the westbound outer-roadway HOV lane from Bellevue Way to 80th Ave. SE

- Build westbound I-90 HOV direct access exit ramp at 80th Ave. SE (connecting from new westbound HOV lane on outer roadway)
- Modify existing ramps at Bellevue Way for two-way HOV operation

Stage 2

Improve eastbound I-90, Mercer Island to Bellevue

Design 2007-2008

Construction to be determined

- Add eastbound I-90 HOV lane to outer roadway from 80th Ave. SE to East Mercer Way, which will complete the eastbound outer-roadway HOV lane from 80th Ave. SE to Bellevue Way
- Modify existing reversible HOV direct access ramp at 80th Ave. SE (This ramp is currently a reversible HOV on/off-ramp connected to the reversible center roadway. We will change it to an eastbound HOV on-ramp connecting to the new eastbound HOV lane in the outer roadway.)
- Add an eastbound I-90 lane between the East Mercer Way and I-405 interchanges to help drivers merge safely

Stage 3

Improve eastbound and westbound I-90 between Seattle and Mercer Island

Not funded – design and construction to be determined

- Add westbound I-90 HOV lane to outer roadway from 80th Ave. SE to Rainier Ave.
- Add eastbound I-90 HOV lane to outer roadway from Rainier Ave. to 80th Ave. SE
- Build eastbound HOV direct access exit ramp at 77th Ave. SE (connecting from new eastbound HOV lane in outer roadway)

Our Partners

This project is a partnership of WSDOT, [Sound Transit](#), the Federal Highway Administration, and the Federal Transit Administration.

The End Result

The completed project will provide improved speed, reliability and access for buses, carpools, and vanpools on I-90. The direct access ramps will allow high occupancy vehicles to enter and exit the freeway directly from the HOV lanes without having to merge through the other lanes of traffic.

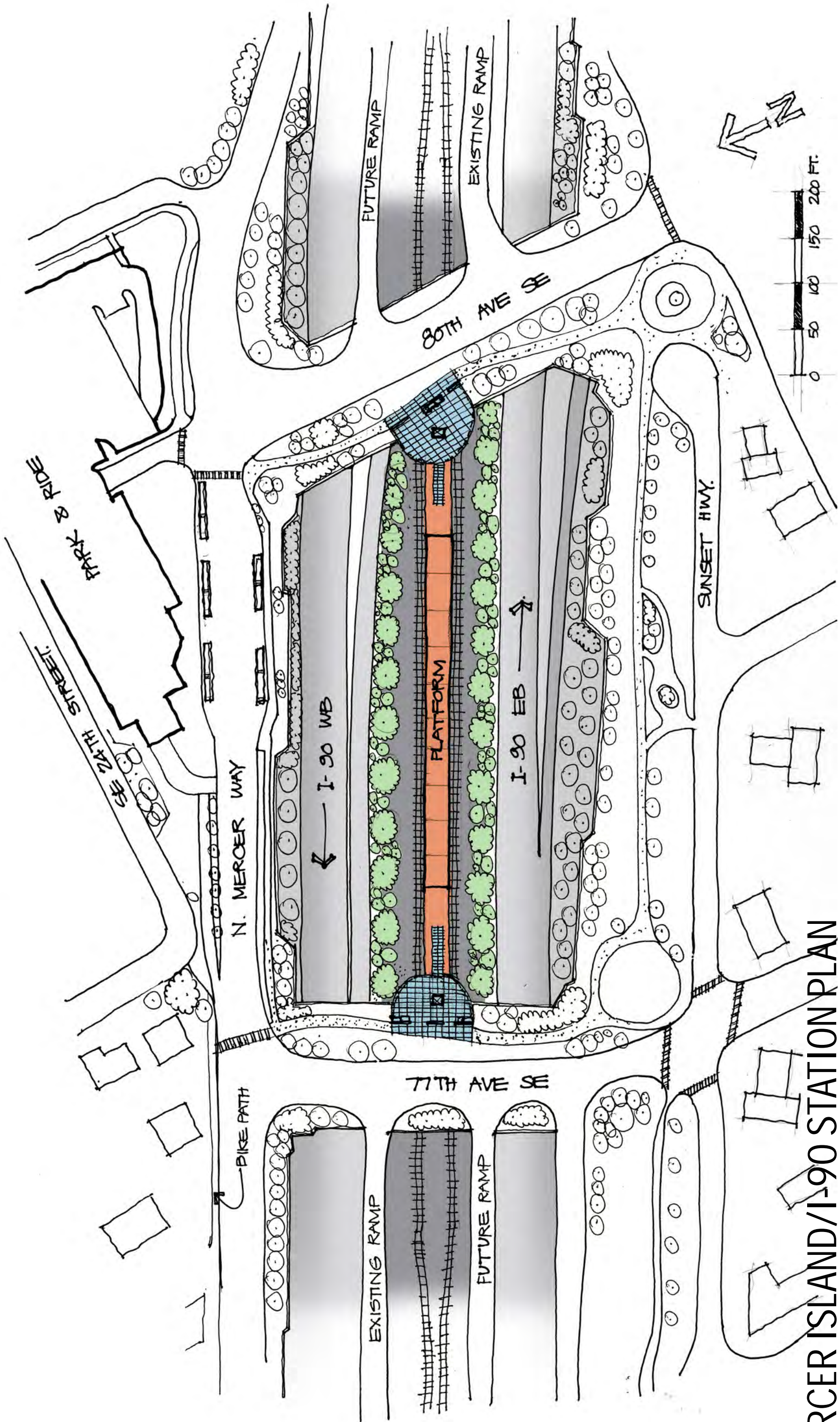
The project will also accommodate future plans to use the center roadway for high capacity transit. (High capacity transit is a public transit system, such as rail, that can accommodate large volumes of riders.)

Project Benefits

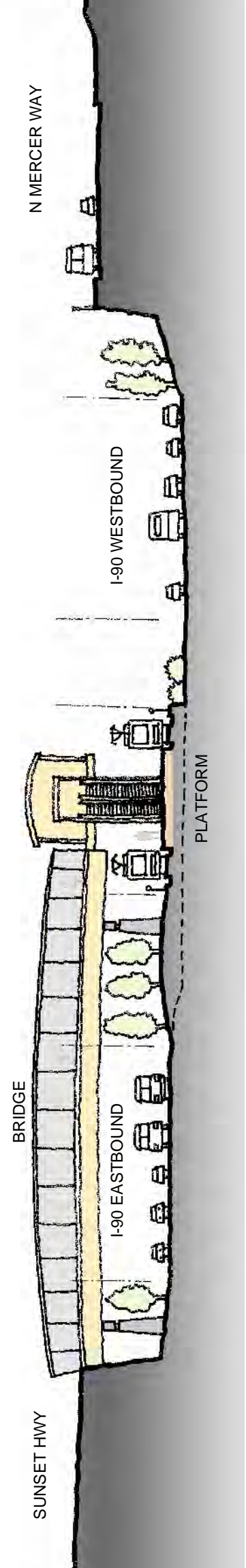
- **Safety.** Reduces weaving and merging on I-90. We will implement crash reduction measures to decrease the likelihood of collisions.
- **Congestion Relief.** Removes buses, carpools and vanpools from general-purpose lanes, resulting in improved transit schedule reliability and shorter commute times for all drivers. Reduces the likelihood of slowdowns caused by weaving or merging traffic.
- **Environment.** Adds to existing drainage and stormwater treatment systems to clean roadway runoff.

Mercer Island Light Rail Station Design Principles

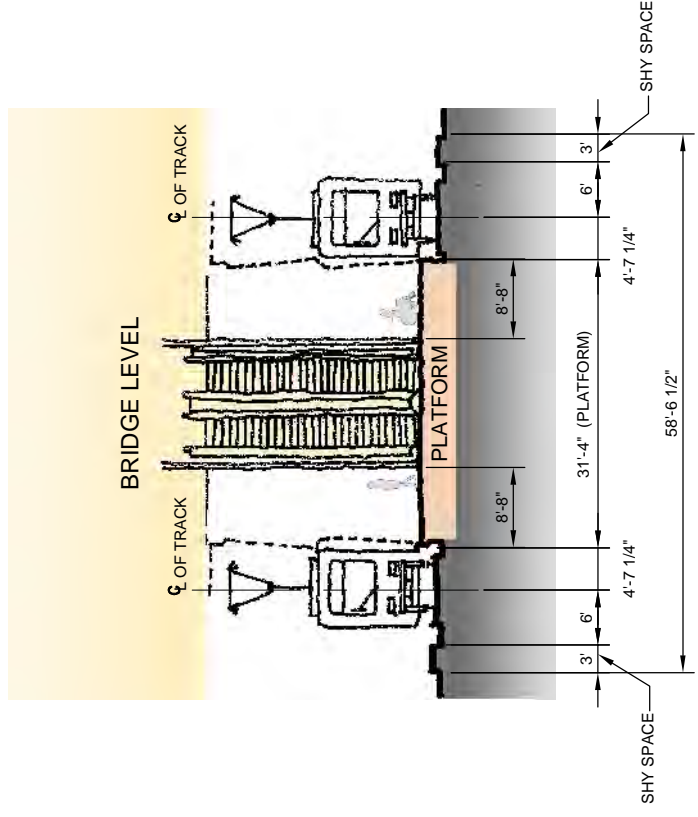
1. The design of the transit center should **strengthen the identity of the town center** as an urban, mixed-use, pedestrian-friendly place, with easy access to local and regional transit.
2. The transit center should have a **direct connection to 78th Avenue SE**, which is the principal pedestrian street within the town center.
3. The transit center should display **distinctive architectural forms** with particular attention to **artful expressions and details**, so that it serves as a strong element of civic design.
4. The transit center should embody **principles of CPTED (Crime Prevention Through Environmental Design)**, so that it is safe without seeming like a high security zone and should be a place that is pleasant and interesting to walk to and use.
5. The **approach** to the transit center should be **integrated into the surroundings** so that there is a seamless and graceful transition between the town center and the transit center.
6. **Wayfinding** methods should incorporate information both about the transit system and the town center, so that users can be easily oriented to local and regional destinations.
7. **Pedestrian bridges and staircases** should not be merely utilitarian, but should be elegant architectural features, with art integrated into their design.
8. Design should provide for convenient and weather protected **pedestrian access from park and ride** (to dissuade commuters from parking elsewhere).
9. Platform and pedestrian bridge should be designed to **minimize impact of traffic noise** on commuters.
10. There should be a **convenient and safe location for vehicles to stop and unload commuters** at all entrances to the light rail station.



MERCER ISLAND/I-90 STATION PLAN



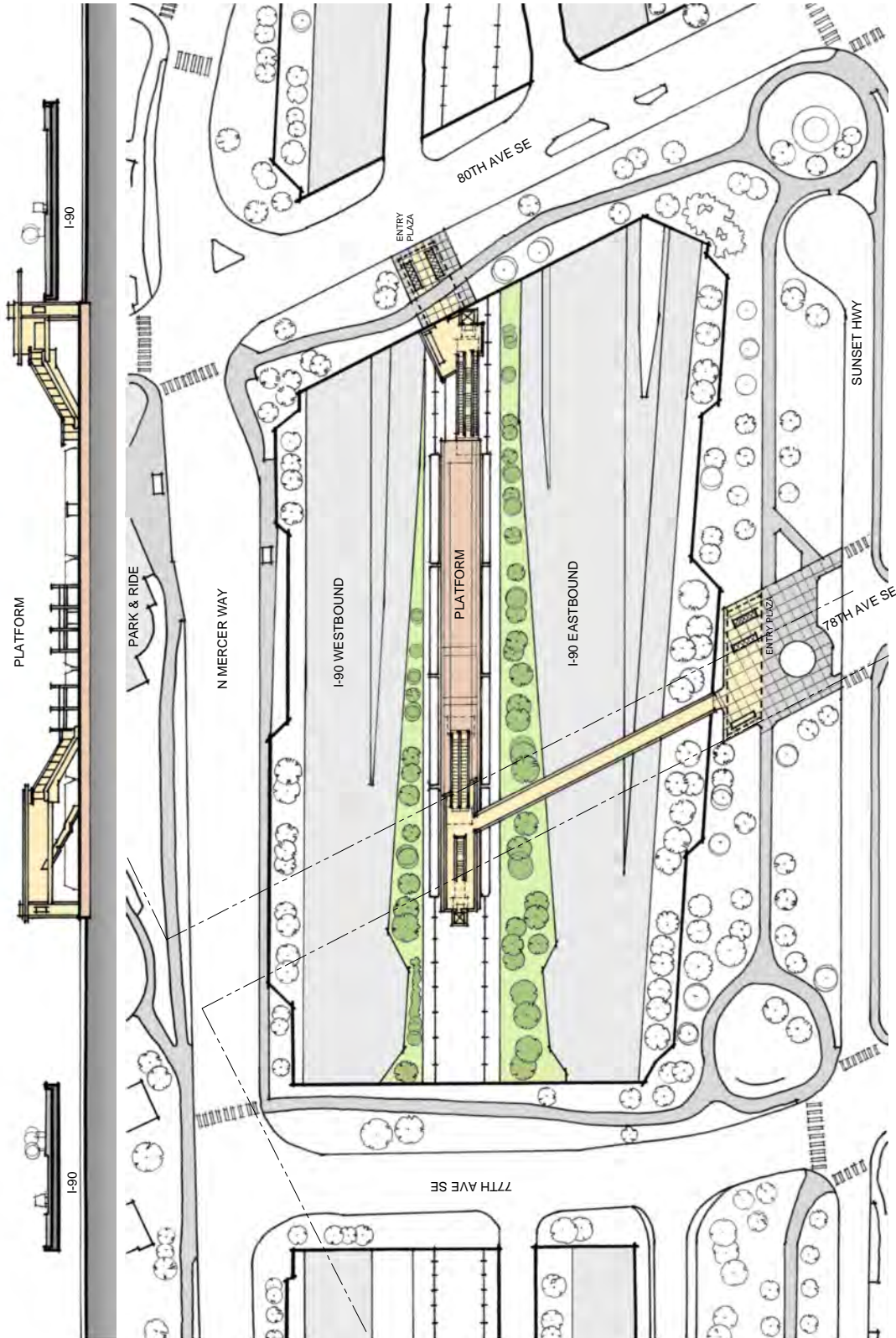
SECTION
SCALE: 1" = 20'



SECTION
SCALE: 1" = 10'

DRAFT

14 NOV 2007



DRAFT



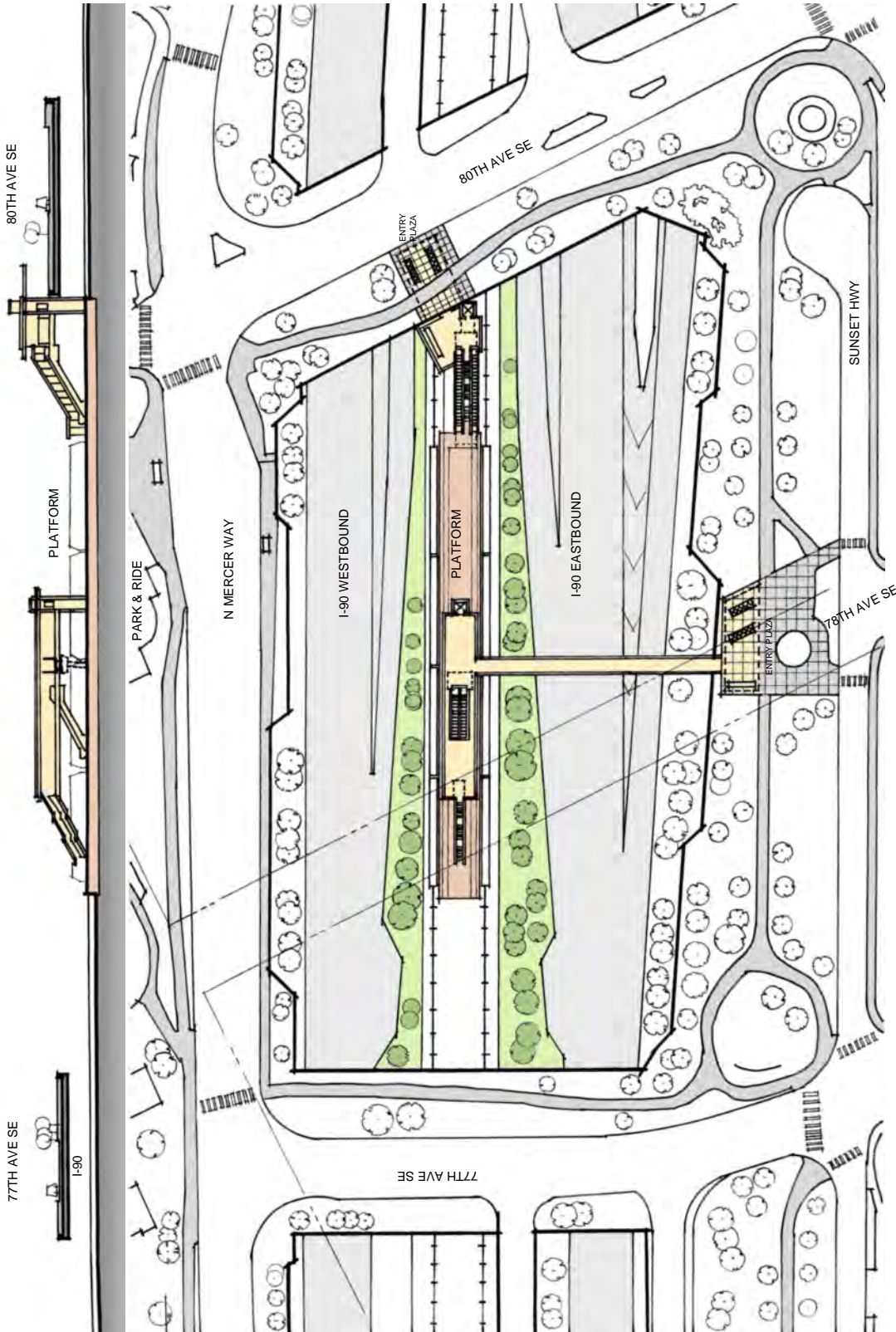
SCALE IN FEET
40 20 0 40 80

**Sound Transit East Corridor
High Capacity Transit Services**

**MERCER ISLAND STATION
(ALTERNATIVE #1)**

CH2M HILL Eastlink Team
IBI Group
Havitt-Architects
Streeter
Nakano Associates

14 NOV 2007



DRAFT



SCALE IN FEET
40 20 0 40 80

MERCER ISLAND STATION (ALTERNATIVE #2)

Sound Transit East Corridor High Capacity Transit Services



CH2M HILL EastLink Team
IBI Group
Hewitt-Architects
Streeter
Nakano Associates