

Seattle, Washington

Central Link Light Rail Line and Mount Baker Station

CLIENT

Sound Transit
Seattle, Washington

REFERENCE

John Walser
Architect

PROJECT FEATURES

- 30,000-square-foot transit center
- 2,000-foot-long elevated guideway
- Nonlinear rail/structure interaction analysis

SERVICES BY BergerABAM

- Structural and Civil Engineering
- Design Coordination with Other Disciplines/Equipment Suppliers
- Construction Support

PROJECT DATES

2002 to 2003

KEY STAFF

Bob Griebenow
Susan Anderson
Brian Garrett
Myles Parrish



BergerABAM led the civil/structural design of the Mount Baker Station, gateway into Rainier Valley.

For the Sound Transit, Central Link Light Rail Line, McClellan Segment, BergerABAM, in coordination with three other civil and structural firm teams, led the civil and structural design of the 2,400-foot-long segment and the new Mount Baker Station, a 30,000-square-foot elevated transit center. The team supported the architectural design with creative, well-detailed solutions for the station structure and plaza.

For the elevated guideway structure, the BergerABAM team proposed a long-span, single-box alternative for this project. This alternative alleviated the need for large and unpopular straddle bents across Martin Luther King (MLK) Jr. Way, to support the dual-box girders in this urban-design-sensitive neighborhood of Rainier Valley. New roadway realignment was developed by the team to allow placement of columns for a 175-foot-long span to clear the southbound lanes of MLK Jr. Way. The design was accepted by Sound Transit and the resulting cast-in-place, single-box girder was used for the entire length of the elevated guideway, providing for an aesthetically pleasing structure for the project.

The BergerABAM team also designed street modifications to Cheasty Boulevard at Winthrop Street for Sound Transit. The modifications included upgrading the curbless, deteriorating asphalt roadway with a 200-foot-long landscaped boulevard from the intersection of MLK Jr. Way east to where Cheasty Boulevard curves to the south and makes its way up a hill. Engineering improvements included curb and gutter, landscaped median, tree-lined side boulevards, sidewalk/bicycle path, and drainage.

During construction, the BergerABAM team provided design services, including reviewing shop drawings, responding to requests for information, and making construction site visits to resolve construction issues.



Elevated guideway.

Cheasty Boulevard.

BergerABAM successfully carried out the complex analysis and design required to create a functional elevated light rail station that preserves the nature and style of this classic neighborhood.