



LEED Renovation of Historic Freight Shed

PROJECT FACTS

Project Scope

The Alaska Railroad (ARRC) is renovating a historic freight shed located at 155 W. First Avenue in Anchorage's Ship Creek District. The project is remarkable in that it will be Alaska's first historic building to be reconstructed with the high environmental standards established by Leadership Energy and Environmental Design (LEED) criteria.

The project includes site improvements, utility upgrades, and selective demolition and renovation of the 36,000-square-foot structure. Originally built in 1941, the freight shed is primarily constructed with a heavy timber frame over a raised concrete slab. About 3,000 square feet are enclosed by masonry block with a flat roof.

Site improvements include a new raised and heated walkway (also known as a "plinth") for pedestrian access, along with installation of curb and cutter along First Avenue. Utility upgrades include new gas, water and wastewater services and relocation of the electrical services underground. The core-and-shell improvements include significant reinforcement to the structural supports, roof and wall systems, as well as upgrades to mechanical and electrical systems.

These renovations fall under the LEED "core and shell" category. As such, design and construction activity will meet stringent LEED standards with regard to site sustainability, water efficiency, energy conservations, material reuse, indoor environmental quality, among other certification requirements. The freight shed's historic designation is verified by the Alaska State Historic Preservation Officer (SHPO), and SHPO expertise will be used to maintain the building's historic integrity through the renovation.

Benefits

- The project offers Alaska businesses a unique, "green" commercial real estate option in lower downtown Anchorage.
- The Freight Shed is a cornerstone of the first phase of the Ship Creek revitalization plan, which aims to develop the area for multi-use and livability, and to promote a pedestrian destination for visitors and residents alike.
- Preserving a historic building helps to maintain a sense of place in the community that is important to future generations.



Figure 1. The architectural firm's rendition of a cross-section of the renovated freight shed, looking west from the east side of the building.

Project Status

- Anchorage architectural firm ECI/Hyer was hired in 2007 to develop a LEED-oriented design that also retained the building's historic nature.
- Conceptual design was complete by early 2008. Final design and engineering is expected by the end of 2008.
- Waterson Construction Inc. has been issued the construction contract. Demolition and indoor renovation is scheduled to begin in January 2009. Utility and utility relocation and major site work will begin in the spring as weather and ground conditions permit. Completion is expected in August 2009.
- Three tenants have committed to lease a portion of the freight shed. Lease holders have the opportunity to further renovate their space to meet business needs and further add to the green environment.

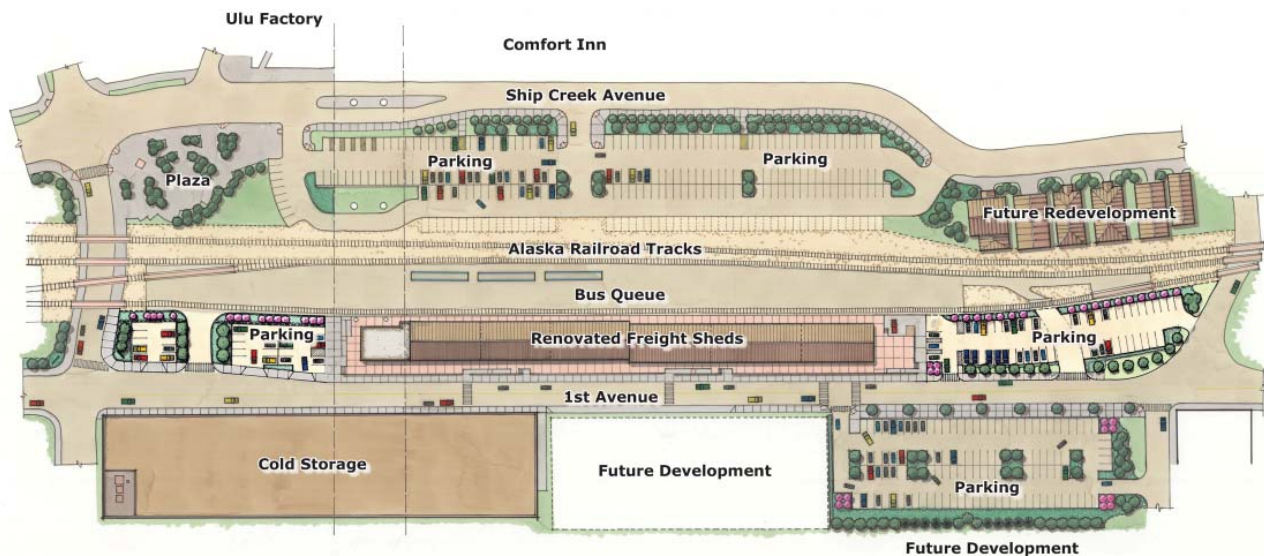
Project Cost

Cost for design and construction is estimated to be \$10.1 million, funded entirely by the Alaska Railroad.



Left: Renovation will raise and heat the sidewalk.

Below: Figure 2. The architectural firm's area site plan, to include proposed facility parking and area Ship Creek revitalization plans.



The Freight Shed is close to the ARRC Headquarters.



An open house was held in July 2008 to showcase the plans.