



Curry Quarry Development

PROJECT FACTS

Project Scope

The Alaska Railroad Corporation (ARRC) has developed a quarry site near Curry, located approximately 22 miles northeast of Talkeetna. Curry is a remote area, accessible only by train or by boat along the Talkeetna River. ARRC owns approximately 4,000 acres along the mainline track, known as the Curry Reserve. The quarry development includes the following:

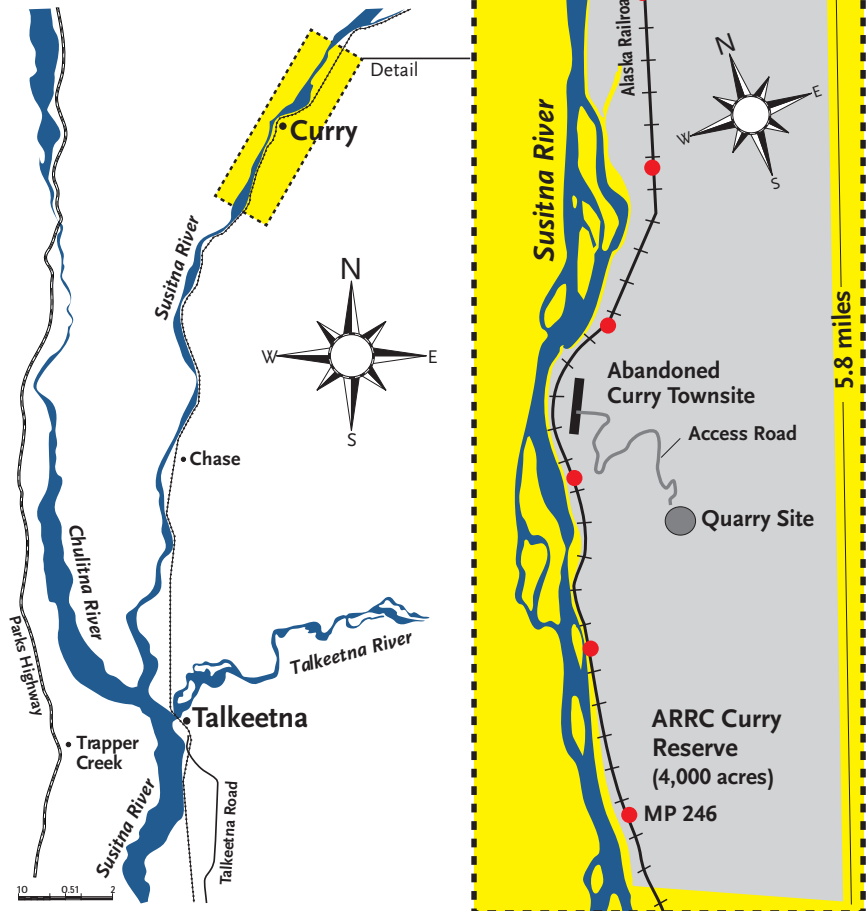
- **Quarry Site** – 25- to 40-acre area where rock mining will occur during a 50- to 100-year quarry life.
- **Quarry Access Corridor** – The existing road/trail was too steep. A wider mile-and-one-half long access road was constructed to accommodate mining truck traffic. The road leads from the track to the mine site several hundred feet above and behind Curry.
- **Laydown, Loadout, and Process Area** – This 41-acre area was leveled off and is used to process and stockpile mined rock from the quarry site.
- **Track Work** – The existing historic wye track was replaced with a loop track. The loop track complies with industry safety and operational preferences for curvature of 13 degrees or less, and reduced switching and coupling/uncoupling activity.

The quarry produces ballast, rip-rap, armor stone and other processed rock materials needed for construction projects and maintenance of the railroad's track bed. Some quarry rock materials are used on federally-funded projects.

Purpose and Need

The Alaska Railroad is developing a cost-effective and efficient source of high quality ballast and rip-rap. Ballast is comprised of small, jagged rocks that fit snugly together to form a stable bed

Figure 1.
Location of Curry, ARRC Curry Reserve and Quarry Site



to support the tremendous weight of a train, while still providing adequate drainage.

Current ballast sources cost ARRC between \$18 and \$28 per ton. The railroad uses nearly 100,000 tons of ballast material for track bed re-surfacing each year. In addition to the high cost of ballast, the lack of a railroad-owned quarry deprives ARRC of other useful quarry byproducts, such as rip-rap and other materials for construction.

Curry Quarry improves ballast quality because the rock is harder and more angular than other sources. Curry is located approximately mid-way along the railroad's 466-mile mainline track, offering a centrally located supply of ballast for both the north and south sections of the railbelt.

Curry is also situated in an area susceptible to flooding and washout conditions, due to the proximity of the Susitna River. Having a nearby rock source

facilitates faster response in repairing high water damages, and alleviating track outages caused by high water.

Status

The railroad pursued a three-year development approach. The access road was built in 2005 and 2006. In 2007, the railroad constructed new facility tracks and prepared the site for mining. A two-year contract with three option years was established for ballast and rip-rap production.

Cost and Funding

The project was 100% funded by the Alaska Railroad. The approximately \$4.2 million project included geo-technical work, engineering and construction, and was funded between 2005 and 2008.

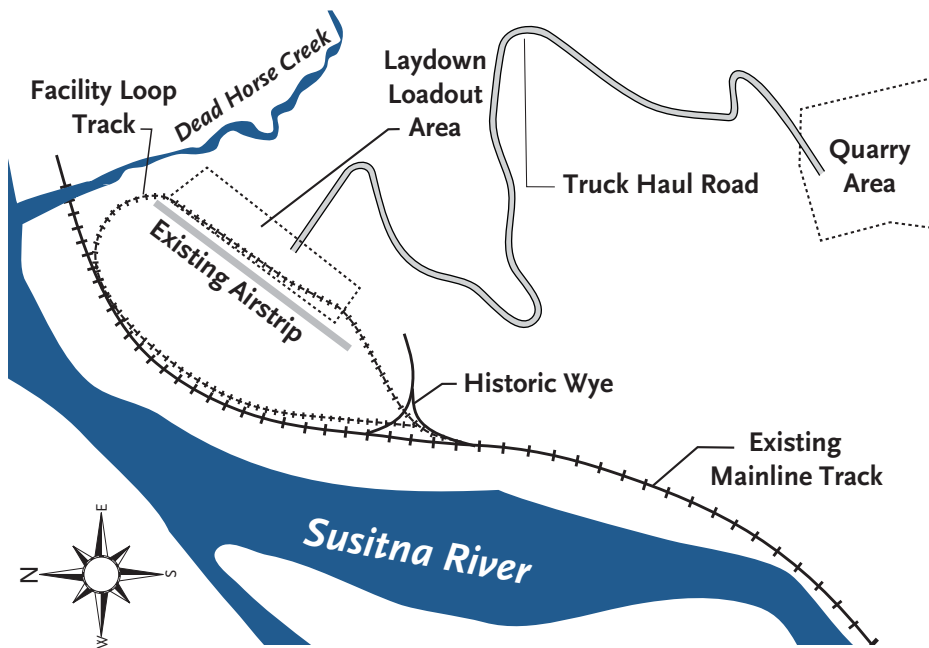


Figure 2. Quarry Site Development Plan

Photos below: Rock material production begins at Curry Quarry in 2008.

