



## Den Chai to Chiang Rai Railway Line State Railway of Thailand

**Location:** Den Chai, Thailand

**Date:** 2011

**Structure:** Railway Tunnel

**Length:** 8.7 miles (14 kilometers)

**Geology:** Primarily Rock with Maximum Overburden of Approximately 525 feet (160 meters)

**Cross Section:** 27 feet (8.3 meters) Width, Single Track

**Cost:** --

**Client:** EPSILON Co., Ltd.

**Owner:** State Railway of Thailand (SRT)



**Figure 1.** Proposed alignment alternative for Den Chai to Chiang Mai to Chiang Rai railway extension.

### Expert Advice During Detailed Design Study:

The State Railway of Thailand (SRT) plans to launch a new railway extension of 246 kilometers in the northern corridor of Thailand from Den Chai district in Phrae to Chiang Saen in Chiang Rai. The planned extension includes four tunnels with a total length of approximately 8.7 miles (14 kilometers), primarily through rock formations. Multiple shafts for ventilation and emergency access / egress will be built.

Gall Zeidler Consultants (GZ) provided detailed design documents and expert advice services to the consultancy consortium in the fields construction, geotechnical aspects, fire-life safety considerations, cost, and programming.



**Figure 2.** A north Thailand SRT railway station.