# **CASE STUDY**



### **PROJECT**

BC Rail Intermodal Yard Expansion Project

### **LOCATION**

Delta, British Columbia

### **PRODUCT**

Tensar TriAx® TX160 geogrid

## **QUANTITY**

90,000 m2

# OWNER AND/OR DEVELOPER

BC Rail Properties Ltd.

#### **ENGINEER**

Hatch – Civil Engineer Tetra Tech – Geotechnical Engineer

#### **INSTALLATION DATE**

March to October 2018

### TYPICAL PAVEMENT SECTION

Tensar TriAx® TX160 geogrid was placed within the engineered fill reducing the total thickness of ballast, sub-ballast, fill and required excavation by about 50% or about 1m.

### **PROJECT DETAILS**

BC Rail owns and maintains the rail line that provides rail access to Roberts Bank terminal port facility in Delta, BC. Approximately 18 to 20 trains per day, operated by Canadian Pacific Railway (CPR), Canadian National Railway (CNR), and BNSF Railway currently operate over this track. The Project is required to support additional terminal container capacity. It is anticipated that future rail traffic will increase by an additional one or two trains per day, in and out of Roberts Bank. The Project consisted of adding 13,000 ft. of new siding track adjacent to the existing main line track and 12,000 ft. of new track within Roberts Bank Yard. Foundation Soils consisted of about 3.5m of soft to firm silt followed by loose to compact sand and silty sand. Additionally, the water table was estimated to be at 0.5m to 1.4m below ground surface. Without geogrid a much thicker granular structure would have been required. However, in order to excavate to the required unstabilized depth while at the same time complying with local safe excavation requirements, the side-slopes of the excavation would have encroached upon the existing track. While shoring was an option, a reduced geogrid stabilzed structure meant the safe excavation would not interfere with the existing track.

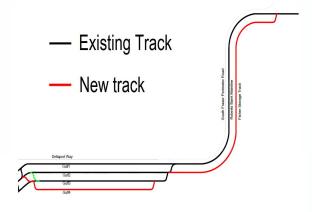


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# Delta, British Columbia









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