



The open pit mine requires constant dewatering at a rate of about 800m³/h / hour. B&P was appointed to prepare designs & documents for dewatering pump mains from the mine pit discharging into a retention pond. 500mm HDPE class 6 & 16 pipes, flanged and welded, were installed for dewatering purposes. The bottom of the pit is dynamic and the design had to be flexible. From the bottom of the pit pipeline follows the haul road before traversing the steep pit sides, climbing 55m to a mid-landing area and then another 25m to the top of the pit. Therefore the pipe followed a combined above- and below ground installation of another 2300m. The design had to take into consideration the rapidly varying pressure head, pipe transients (Water Hammer), air valve design and pipe restraints challenge in the pit and along the steep embankments. Other design challenges include accommodating the high thermal expansion properties of the HDPE material.

Tschudi Copper Mine Dewatering

Tsumeb

PROJECT STATS

Value	NAD 6.99 million USD 0.43 million (ROE 16.24)
Location	Tsumeb, Namibia
Client	Weatherly Mining Namibia Limited
Start	06/2016
Finish	04/2017

Project Management

Civil

Structural



SERVICES

Civil & Structural Engineering Consulting Services
Project Management
Preliminary & Detail Design
Contract Documents