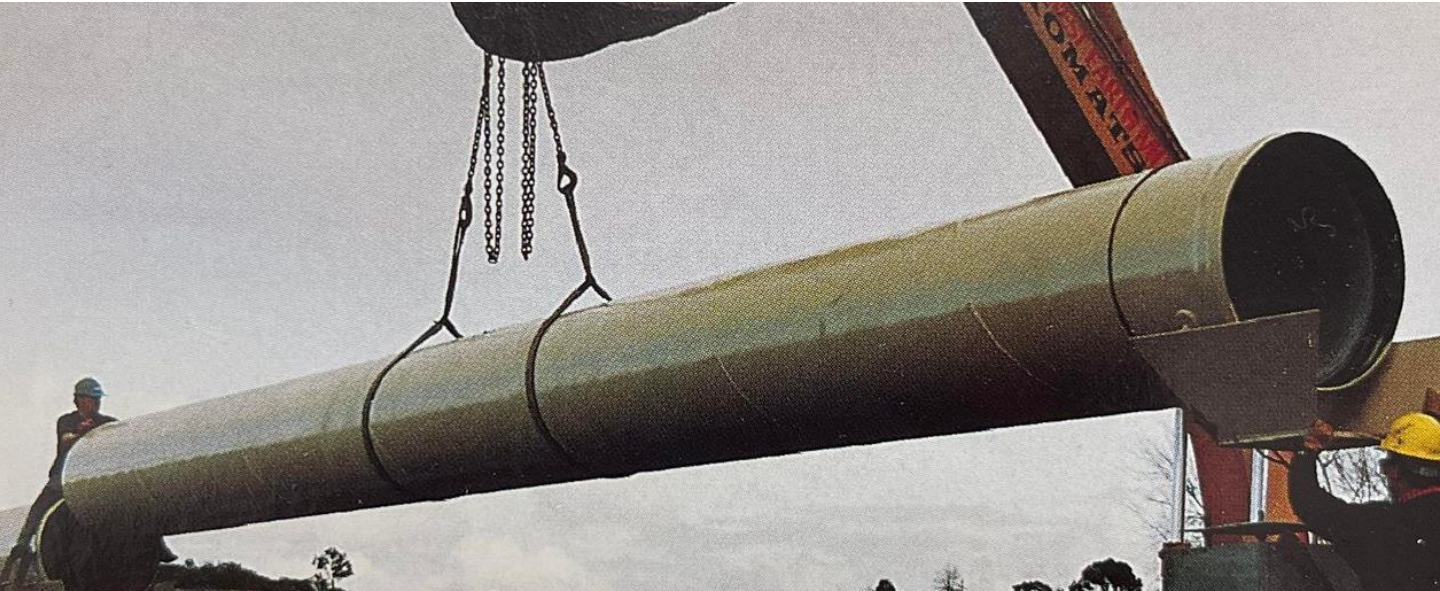


Humffray Street South Aqueduct – Ballarat VIC

New aqueduct has the strength of RRJ Steel



Humffray Street South Aqueduct

Client	Ballarat Water Board (Central Highlands Water)
Project	Humffray St. South Aqueduct Renewal
Pipeline	240m of 914 OD x 10mm WT RRJ MSCL Pipe
Construction	Midwest Earth Movers Pty Ltd
Construction Period	June - July 1992

Objectives:

Corroded concrete and the inevitable need for greater capacity were the factors behind Ballarat Water Board's (Central Highlands Water) decision to renew an ageing aqueduct. As a starting point on the project, Gutteridge Haskins & Davey Pty Ltd (GHD), the consulting engineers, put their heads together with Steel Mains engineering staff to find a solution which would meet specifications while saving time and money.

Challenge/Solution:

RRJ makes the grade

The entire 240m route of the pipeline traverses a valley, and because the pipeline is gravity-fed, it was essential that the line be laid precisely to grade. With advice from Steel Mains, GHD opted for large- diameter Rubber Ring Joint pipe above ground on concrete columns. It was clear that RRJ could be installed more quickly and more cheaply than a conventional welded pipeline. Because the line would have the structural strength of steel, the engineers were confident that they could achieve spans of 12m.

Saddled up and in the air

To facilitate the mounting of the pipe onto concrete columns, the pipe was supplied with pre-welded saddles. In addition to this unique feature of the pipe itself, there was something special about the laying of the line. The Rubber Ring Joint was assembled above ground in an operation which relied equally on high tech components, heavy machinery, skilled workmen and a very ordinary ladder.