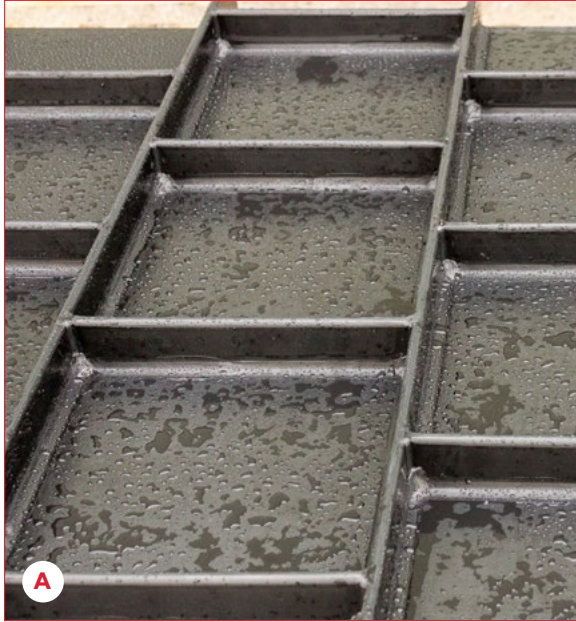


Work Profile

PE Culvert Fabrication - Page 1

JOB # PW2100
LOCATION
WA
CLIENT
Anon



A The Extrusion Welded Reinforcements: A complex, weld-heavy reinforcement grid was applied to the outer of the culvert to provide extra rigidity and strength.

B End shot: large bore PE end in the foreground shows transition to the rectangular central section.



We were initially contacted by our client to quote for the supply of Polyethylene PN10 pipe & fittings, however, after discussions with the client and an explanation of our fabrication capabilities, the quote expanded to include the fabrication of a culvert. Being able to communicate with one company for both the culvert fabrication and supply, was a major contributing factor for the client awarding to project to Fusion.

What is a culvert?

Culverts are most commonly used to divert water—and debris carried by water—underneath roads and other passages of transport. They come in a variety of shapes and materials depending on space restrictions (such as a roadways embankment height) and the application.

Challenges

For this project, the client supplied the design and requested a black HDPE culvert with circular openings, transitioning into a rectangular centre for fitting underneath an existing concrete culvert. The stiffness of HDPE, the number of braces in the design and the reinforcement of the conversion joints, ensured our fabrication team were in for a few challenges. It was also critical to fabricate a smooth transition from the culvert's circular ends into the rectangular centre, ensuring minimal obstruction to water flow.

Photos and text continue over the page

**One point of communication =
A faster & easier project completion.**

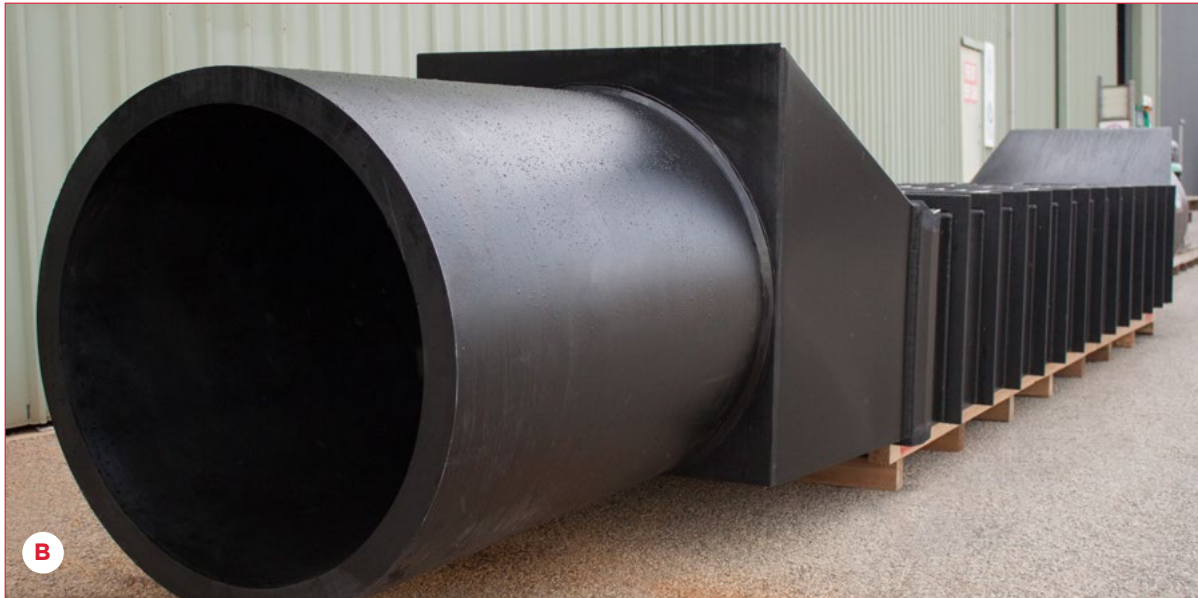
Work Profile

PE Culvert Fabrication - Page 2

JOB # PW2100
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A



B

Materials & Easier Transport

Typically culverts are made from pre-cast concrete or steel. When a plastic culvert is required, polyethylene (PE) is often the plastic of choice for its great weathering and corrosion resistance, light weight and flexibility. The final culvert design measured 5m long with a 1m x 0.5m HDPE rectangular section. The lightness of HDPE allows for this culvert to be easily lifted with a crane or forklift, making transport and installation relatively simple.

One Point Of Communication For the Entire Project

The client only needed to communicate with one company for the entire supply and fabrication of their design; making it much easier to coordinate deadlines, get status updates, eliminate part/materials shipping between 3rd parties and collaborate with Fusion's engineers, fabricators, installers and technical sales team.



C

A Overview photo: the entire PE culvert showing the circle to rectangular transitions.

B Left close-up photo: showing a large bore PE end.

C Back close-up: highlighting the gridded reinforcement.