6.16

R – Existing Culvert Survey

Goatmill Road Enterprise Park

Existing Culvert Survey

March 2024



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Quality Management

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Checked by	Chris Purdie	Signature (for file)	
Authorised by	Gareth Williams	Signature (for file)	

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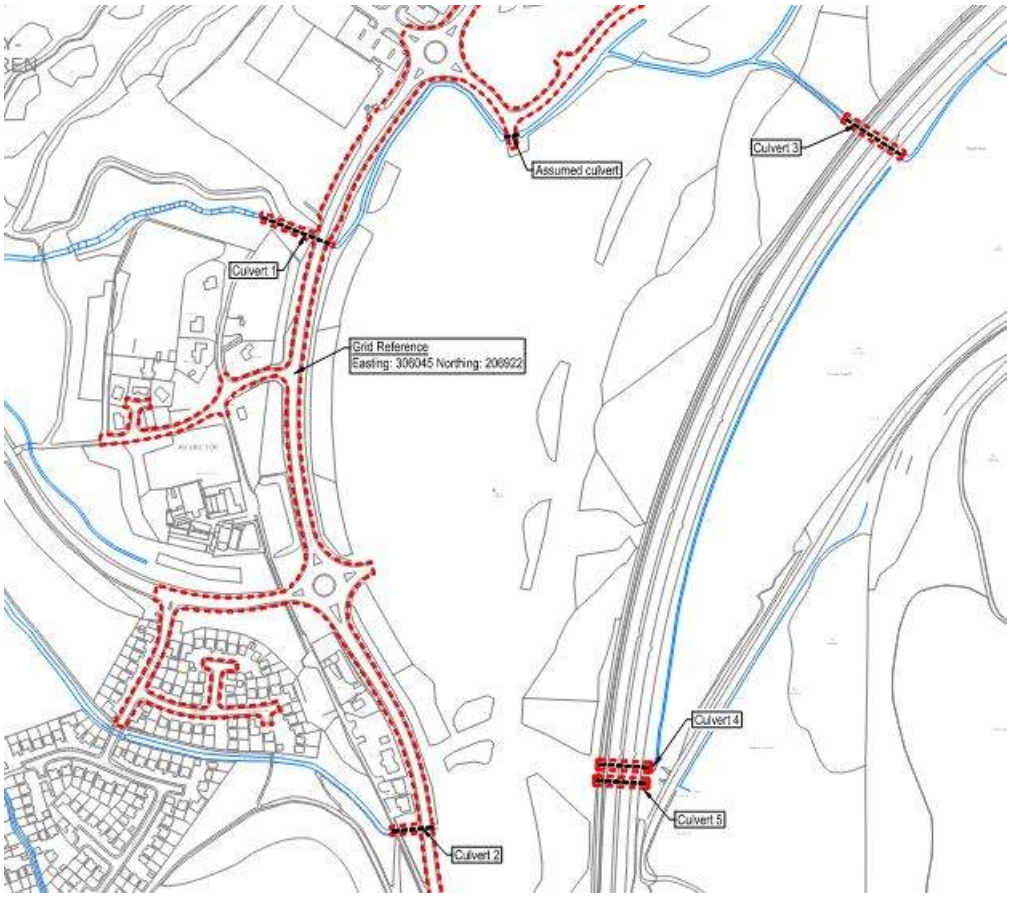
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1. Introduction

This report is the result of a visual inspection of 5 No culverts near Goatmill Road. These were carried out by Redstart on Wednesday 20 March. The weather was overcast with occasional rain.

Below is the locations of the culverts:



Culverts Location Plan

2. Culvert 1

2.1.1 Upstream Inlet

The culvert measured 1.65m and is made up of corrugated steel sections.

The top of the culvert looked as though it was depressed, and the culvert was not circular.

There is a trash screen approx. 2m long, with 12mm thick x 65mm deep bars at 150mm centres.

The trash screen was surcharged, and inlet was partially full of debris and silt with trees growing all round.



Photo of Culvert 1 Inlet

2.1.2 Downstream Outlet

The culvert measured 1.675m and is made up of corrugated steel sections.

The top of the culvert looked as though it was depressed, and the culvert was not circular.

The was minor siltation in the base of the culvert and at the outlet.



Photo of Culvert 1 Outlet

3. Culvert 2

3.1.1 Upstream Inlet

The culvert is 1.675m diameter and is made up of corrugated steel sections.

There is 2 No trash screens approx. 2m long, with 12mm thick x 65mm deep bars at 150mm centres, bolted together.

The trash screen was surcharged, and inlet was full of debris and silt.

The area was heavily overgrown with vegetation and trees and was difficult to access.

There was a duct and cable but it did not appear to run through the culvert.



Photograph of Culvert 2 Inlet

3.1.2 Downstream Outlet

The culvert is 1.675m diameter and is made up of corrugated steel sections.

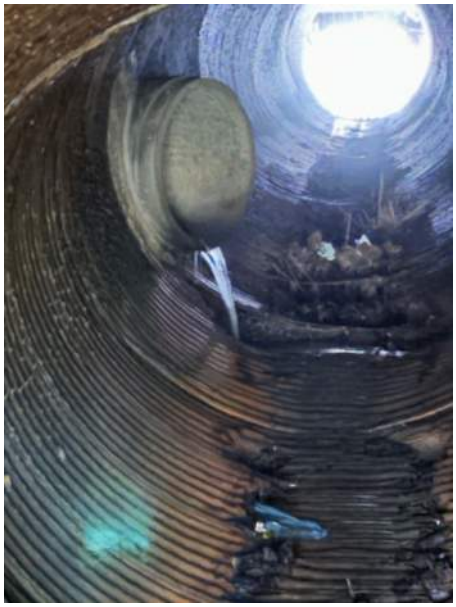
There is a spur connection part way up the culvert which protrudes. There was an odour of sewerage at the outlet.

The base of the culvert had worn away.

There was minor debris within the culvert.



Picture of Culvert 2 Outlet



Picture of spur connection

4. Culvert 3

4.1.1 Upstream Inlet

The culvert is 1.800m diameter and is made up of corrugated steel sections.

Heavy metal gate across the opening, does not look secured.

Heavy sediment at along inlet.



Photograph of Culvert 3 Inlet

4.1.2 Downstream Outlet

The culvert is 1.800m diameter and is made up of corrugated steel sections.

The headwall is reinforced concrete.

The culvert section is larger than the concrete collar at the end, this provides a sort of silt trap.

Silt along the bottom of the culvert.

The outlets carries on at similar gradient to culvert for approx. 15m then drops down steep embankment along cascade.



Photograph of Culvert 3 outlet



Photograph of cascade down steep embankment

5. Culvert 4

5.1.1 Upstream Inlet

The culvert is 1.800m diameter and is made up of corrugated steel sections.

Heavy metal gate across the opening, looks secured.

Heavily blinded with silt and shale backed up from inlet.



Photograph of Culvert 4 Inlet

5.1.2 Downstream Outlet

The culvert is 1.800m diameter and is made up of corrugated steel sections.

A tree that was growing out of the bank downstream of the headwall has fallen and is across the outlet sections.

The bottom section of the culverts appears to have failed and there is shale and silt along the extent of the culvert.



Photograph of Culvert 4 Outlet



Close up of Culvert 4 Outlet

6. Culvert 5

6.1.1 Upstream Inlet

The culvert is 1.800m high x 2.1m wide and is made up of corrugated steel sections. The shape of the culvert could be due to failure of a circular pipe, and it has compressed with the weight above.

Large metal

There doesn't appear that there is much flow within.

Debris and overgrowth along the length of the pipe.



Photo of Culvert 5 inlet with
Large metal secure grille

6.1.2 Downstream Outlet

The culvert is 1.800m high x 2.1m wide and is made up of corrugated steel sections.

There is graffiti within the end of the culvert and from the rubbish around it is visited regularly.

There is overgrowth within the end of the culvert.

There is no stream or ditch downstream of the culvert.



Photo of downstream Culvert 5

REDSTART

Quest House
St Mellons Business Park
Fortran Rd, St. Mellons
Cardiff
CF3 0EY

www.redstartwales.com