Ashton to Stalybridge

River Flood Defence Inspection

Final September 2010

Prepared for

Revision Schedule

River Defence Inspection
July 2010

Rev	Date	Details	Prepared by	Reviewed by	Approved by
D01	August 2009	Draft	**Michael Gartside** Engineer	**Alpha Robinson** Principal Flood Risk Engineer	**Annette Lardeur** Associate
F02	July 2010	Final Draft	**Michael Gartside** Engineer	**Alpha Robinson** Principal Flood Risk Engineer	**Annette Lardeur** Associate
F03	September 2010	Final	**Michael Gartside** Engineer	**Alpha Robinson** Principal Flood Risk Engineer	**Annette Lardeur** Associate

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1 Introduction

1.1 Commission

Scott Wilson Ltd has been commissioned to undertake the Level 1 update and Level 2 Strategic Flood Risk Assessment (SFRA) for the combined administrative areas of Stockport Metropolitan Borough Council (SMBC) and Tameside Metropolitan Borough Council (TMBC).

This report constitutes the Defence Inspection Report for Ashton to Stalybridge area, the aims of which are outlined below.

1.2 Aims and Objectives

The primary aims of the Stockport and Tameside Level 2 SFRA are to:

- Ensure that sufficient information is provided to enable Stockport MBC and Tameside MBC to carry out the Sequential Test, in line with PPS25, in relation to their proposed spatial strategies including, as necessary, filling in data gaps identified in the Greater Manchester Sub-Regional / Level 1 SFRA.
- Ensure that sufficient information is provided to enable the Exception Test to be applied for those sites that have been identified as being at risk of flooding.

The specific aims of this River Flood Defence Inspection Report are to:

- Inspect and schedule the current condition of flood defence infrastructure.
- Present mitigation options and potential delivery mechanisms.

2 Previous Information

2.1 Level 1 SFRA

Figures compiled during the Level 1 SFRA (See Figure 5-1 in Appendix A) showing the flood zones and defence types were consulted before and during the inspection.

2.2 NFCDD Data

Environment Agency NFCDD data (See Figure 6-2 H in Appendix A) giving lengths and types of defence were obtained and consulted before the flood defence inspection work started.

3 Previous Defence Classification

3.1 Level 1 SFRA Classification

3.1.1 Section A – East of Back Knowl Street

Existing Classification

Left	Maintained Channel / Natural Channel
Right	Maintained Channel

Land Use

Left	Light industrial / waste management sites / housing
Right	Industrial

3.1.2 Section B – Back Knowl Street to Stamford Street

Existing Classification

Left	Maintained Channel / Raised Defence
Right	Natural Channel

Land Use

Left	Light industrial and residential
Right	Natural slope

3.1.3 Section C – Stamford Street to Caroline Street

Existing Classification

Left	Maintained Channel
Right	Maintained Channel / Raised Defence / Flood Defence Structure

Land Use

Left	Town centre mixed use
Right	Town centre mixed use

3.1.4 Section D – Caroline Street to Bayley Street

Existing Classification

Left	Raised Defence / Maintained Channel
Right	

Land Use

Left	Mixed industrial
Right	Mixed industrial

3.1.5 Section E – Bayley Street to Tame Street

Existing Classification

Left	Maintained Channel
Right	Maintained Channel / Raised Defence

Land Use

Left	Mixed industrial
Right	Mixed industrial

3.1.6 Section F – Tame Street to Clarence Bridge

Existing Classification

Left	Natural Channel / Raised Defence / Natural Channel
Right	Flood Defence Structure / Raised Defence / Natural Channel

Land Use

Left	Park Road / light industrial / housing
Right	Mixed industrial

3.1.7 Section G – Clarence Bridge to Riverside (Whitelands Bridge)

Existing Classification

Left	Maintained Channel / Natural Channel / Raised Defence / Natural Channel
Right	Maintained Channel / Raised Defence / Natural Channel

Land Use

Left	Industrial / Park Road/ Riverside
Right	Industrial (and associated land)

3.1.8 Section H – Riverside to Cavendish Street

Existing Classification

Left	Raised Defence / Natural Channel
Right	Natural Channel / Raised Defence / Natural Channel

Land Use

Left	Light industrial / informal recreation land
Right	Light industrial / railway embankment / informal recreation land

3.1.9 Section I – West of Cavendish Street

Existing Classification

Left	Maintained Channel
Right	Maintained Channel

Land Use

Left	Light industrial / commercial
Right	Light industrial / embankment to canal

4 Inspection

4.1 Inspection Conditions

Date of inspection	30th June 2009
Inspected by	Michael Gartside
Weather	Warm, overcast, occasional showers
Method of inspection	On foot

4.2 Classifications

Natural channel – lightly vegetated

Natural channel with grassed slopes, interspersed with light vegetation and occasional trees.

Natural channel – heavily vegetated

Natural channel with dense covering of bushes and trees.

Masonry-lined channel

Channel sides formed of a mixture of natural channel and vertical masonry walling, the height of the masonry ranging from less than 1m to full height. Note, the masonry does not extend above the bank and therefore does not constitute any form of defence.

Raised defence

Either earth embankment or masonry walling projecting above bank level.

Culvert

Underground channel, no access possible

4.3 Inspection schedule

4.3.1 Section A – East of Back Knowl Street (0m - 860m)

Chainage	Classification	Notes	
Right Channel			
0 - 860	Natural channel (heavily vegetated)	Natural channel, densely vegetated, relatively low profile, approximately 1 – 2m high No sign of instability due to erosion at base of bank or oversteep banks	
Left Channel			
0 - 585	Natural channel (heavily vegetated)	Natural channel, densely vegetated, relatively low profile, approximately 1 – 2m high but continues rising to the road No sign of instability due to erosion at base of bank or oversteep banks	
585 – 695	Masonry-lined channel	Vertical stone walling to rear of terraced housing, maximum 3m in height Excellent condition, no signs of vegetation but no raised defences	
695 - 860	Natural channel (heavily vegetated)	Natural channel, densely vegetated, bank height increasing from upstream section No sign of instability due to erosion at base of bank or oversteep banks	

4.3.2 Section B – Back Knowl Street to Stamford Street (860m – 1190m)

Chainage	Classification	Notes
Right Channel		

860 - 1190	Natural channel (heavily vegetated)	Natural channel, densely vegetated, bank height approximately 4 – 5m No sign of instability due to erosion at base of bank or oversteep banks	
Left Channel			
860 - 1040	Natural channel (heavily vegetated)	Natural channel, densely vegetated, bank height approximately 4 – 5m No sign of instability due to erosion at base of bank or oversteep banks	
1040 - 1190	Masonry-lined channel	Masonry wall approximately 4m in height, no protrusion above bank level Good condition, some vegetation growth at base level	

4.3.3 Section C – Stamford Street to Caroline Street (1190m – 1685m)

Chainage	**Classification**	**Notes**	
Right Channel			
1190 – 1225	Masonry lined channel	Inspection difficult due to lack of access Stone / brick vertical channel, varying height and condition but no signs of instability No raised defences along this section	
1225 - 1285	Natural channel (lightly vegetated)	Inspection difficult due to lack of access Lightly vegetated, bank height unknown	
1285 - 1685	Masonry lined channel	Inspection difficult due to lack of access Stone / brick vertical channel, varying height and condition but no signs of instability No raised defences along this section	
Left Channel			
1190 - 1685	Masonry lined channel	Inspection difficult due to lack of access	

		Stone / brick vertical channel, varying height and condition but no signs of instability No raised defences along this section	

4.3.4 Section D – Caroline Street to Bayley Street (1685m – 2310m)

Chainage	Classification	Notes	
Right Channel			
1685 - 1920	Masonry lined channel	Inspection difficult due to lack of access Stone / brick vertical channel, varying height and condition but no signs of instability No raised defences along this section	
1920 - 2310	Natural channel (heavily vegetated)	Natural channel, densely vegetated, bank height approximately 4m No sign of instability due to erosion at base of bank or oversteep banks	
Left Channel			
1685 - 1755	Raised defence		
1755 - 1940	Masonry lined channel	Inspection difficult due to lack of access Stone / brick vertical channel, varying height and condition but no signs of instability No raised defences along this section	
1940 - 2310	Natural channel (heavily vegetated)	Natural channel, densely vegetated, bank height approximately 4m No sign of instability due to erosion at base of bank or oversteep banks	

4.3.5 Section E – Bayley Street to Tame Street (2310m – 2645m)

Chainage	Classification	Notes	
Right Channel			
2310 - 2645	Masonry lined channel	Inspection difficult due to lack of access Stone / brick vertical channel, varying height and condition but no signs of instability No raised defences along this section	
Left Channel			
2310 - 2645	Masonry lined channel	Inspection difficult due to lack of access Stone / brick vertical channel, varying height and condition but no signs of instability No raised defences along this section	

4.3.6 Section F – Tame Street to Clarence Bridge (2645m – 2970m)

Chainage	Classification	Notes	
Right Channel			
2645 - 2710	Masonry lined channel	Brick wall approximately 2m in height, no protrusion above bank level Good condition, some vegetation growth at base level	
2710 - 2970	Natural channel (heavily vegetated)	Natural channel, densely vegetated, bank height approximately 3m No sign of instability due to erosion at base of bank or oversteep banks	
Left Channel			
2645 - 2970	Raised defence	Stone wall approximately 1m high, good condition Reach in wall at CH????, appears to be opening for old footbridge	

4.3.7 Section G – Clarence Bridge to Riverside (2970m – 4430m)

Chainage	Classification	Notes	
Right Channel			
2970 - 3935	Natural channel (heavily vegetated)	Natural channel, densely vegetated, bank height approximately 3m No sign of instability due to erosion at base of bank or oversteep banks	
3935 - 4130	Masonry lined channel	Inspection difficult due to lack of access Masonry wall approximately 2m in height, no protrusion above bank level Good condition, some vegetation growth at base level	
4130 - 4430	Natural channel (heavily vegetated)	Natural channel, densely vegetated, bank height approximately 3m No sign of instability due to erosion at base of bank or oversteep banks	
Left Channel			
2970 - 3950	Natural channel (heavily vegetated)	Natural channel, densely vegetated, bank height approximately 3m No sign of instability due to erosion at base of bank or oversteep banks	
3950 - 4430	Raised defence	Stone wall at back of footpath, approximately 1m high, good condition Ties into industrial units at upstream end and bridge parapet at downstream end	

4.3.8 Section H – Riverside to Cavendish Street (4430m – 5080m)

Chainage	Classification	Notes	
Right Channel			
4430 - 4670	Masonry lined channel	Masonry wall approximately 3m in height, no protrusion	

		above bank level Good condition, some vegetation growth at base level	
4670 - 5080	Natural channel (heavily vegetated)	Natural channel, densely vegetated, bank height approximately 4 – 5m No sign of instability due to erosion at base of bank or oversteep banks	
Left Channel			
4430 - 5080	Natural channel (heavily vegetated)	Natural channel, densely vegetated, bank height of approximately 2m, plateau area, then further bank height of 2m No sign of instability due to erosion at base of bank or oversteep banks	

4.3.9 Section I – West of Cavendish Street (5080m – 5420m)

Chainage	**Classification**	**Notes**	
Right Channel			
5080 - 5420	Natural channel (heavily vegetated)	Natural channel, densely vegetated, bank height approximately 4 – 5m No sign of instability due to erosion at base of bank or oversteep banks	
Left Channel			
5080 - 5420	Natural channel (heavily vegetated)	Natural channel, densely vegetated, bank height approximately 4 – 5m No sign of instability due to erosion at base of bank or oversteep banks	

Figures

THIS DRAWING MAY BE USED ONLY FOR THE PURPOSE INTENDED AND ONLY WRITTEN DIMENSIONS SHALL BE USED

NOTES

KEY

- NATURAL CHANNEL - LIGHT VEGETATION
- NATURAL CHANNEL - HEAVY VEGETATION
- MASONRY - LINED CHANNEL
- RAISED DEFENCE
- CULVERT

Revision Details	By / Check	Date	Suffix

Drawing Number: FIGURE 1

Revision:

Project Title:

STOCKPORT & TAMESIDE LEVEL 2 SFRA

Drawing Title:

STALYBRIDGE PHOTOGRAPH LOCATIONS SHEET 1 OF 2

Scale at A3: 1:5000

Drawn	Detailed		Approved
MG			AR
Check	Tech Check	Det Check	Date
AHL			

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Plot Date :
AutoCAD File Name :
DB1V

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- RAISED DEFENCE
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Revision Details	By / Check	Date	Suffix

Drawing Number

FIGURE 2

Revision

Project Title

STOCKPORT & TAMESIDE LEVEL 2 SFRA

Drawing Title

STALYBRIDGE PHOTOGRAPH LOCATIONS SHEET 1 OF 2

Scale at A3: 1:5000

Drawn	Detailed		Approved
MG			AR
Check	**Tech Check**	**Det Check**	**Date**
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Revision Details	By / Check	Date	Suffix

Drawing Number: FIGURE 3 — Revision

Project Title: STOCKPORT & TAMESIDE LEVEL 2 SFRA

Drawing Title: STALYBRIDGE DEFENCE CLASSIFICATION SHEET 1 OF 2

Scale at A3: 1:5000

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- RAISED DEFENCE
- CULVERT

Revision Details	By / Check	Date	Suffix

Drawing Number

FIGURE 4

Revision

Project Title

STOCKPORT & TAMESIDE LEVEL 2 SFRA

Drawing Title

STALYBRIDGE DEFENCE CLASSIFICATION SHEET 2 OF 2

Scale at A3

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Drawn	Detailed		Approved
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Photographs

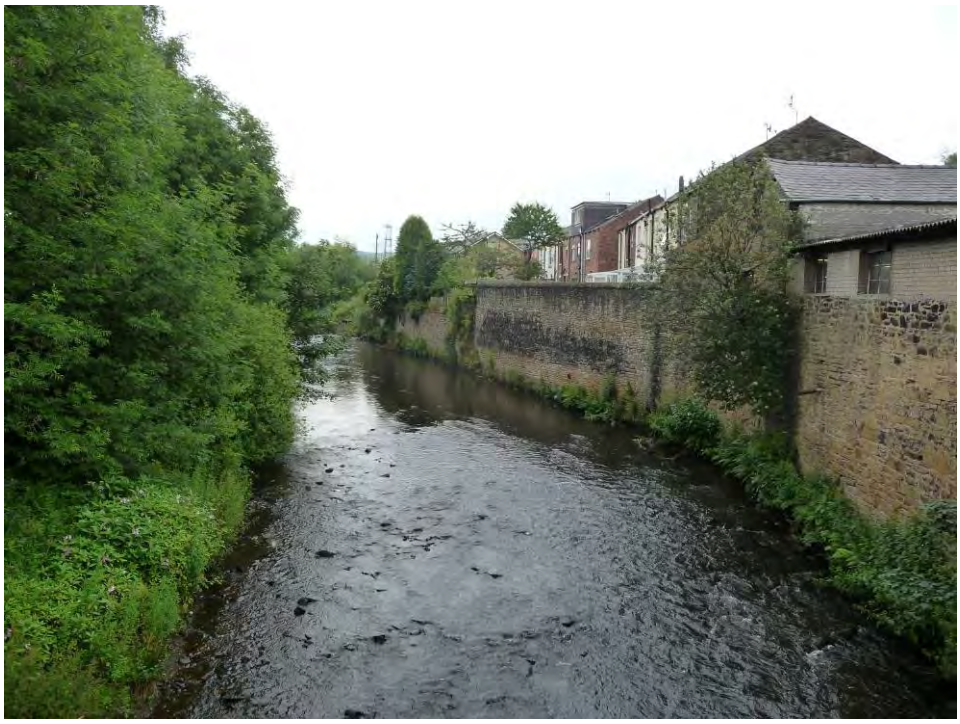

Plate 1 - View upstream from industrial estate vehicular access bridge off Northend Road

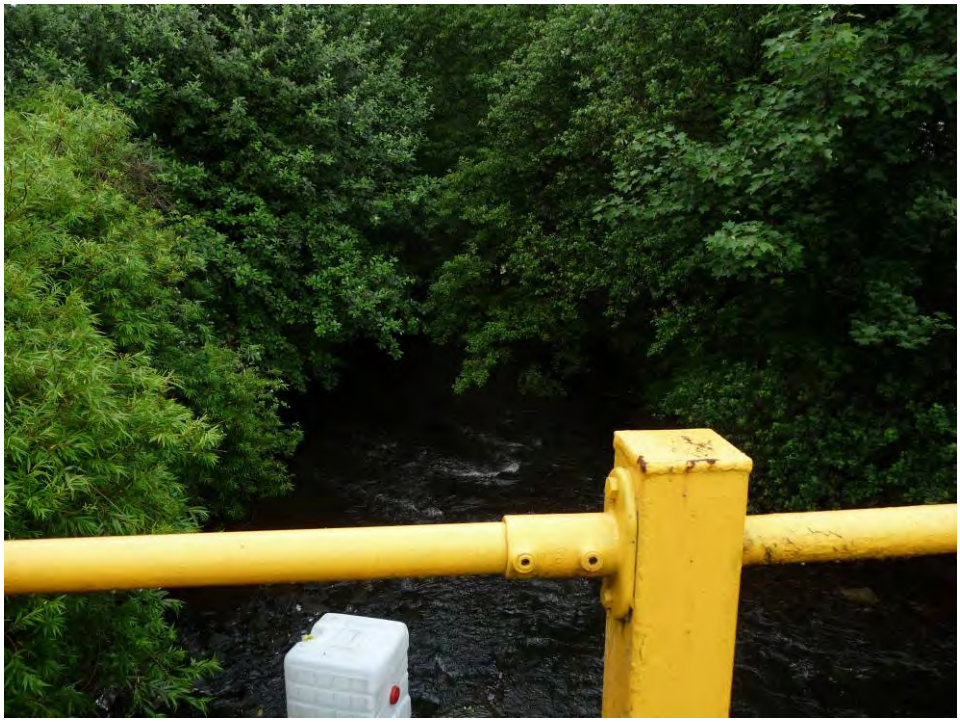

Plate 2 – View downstream from industrial estate vehicular access bridge off Northend Road

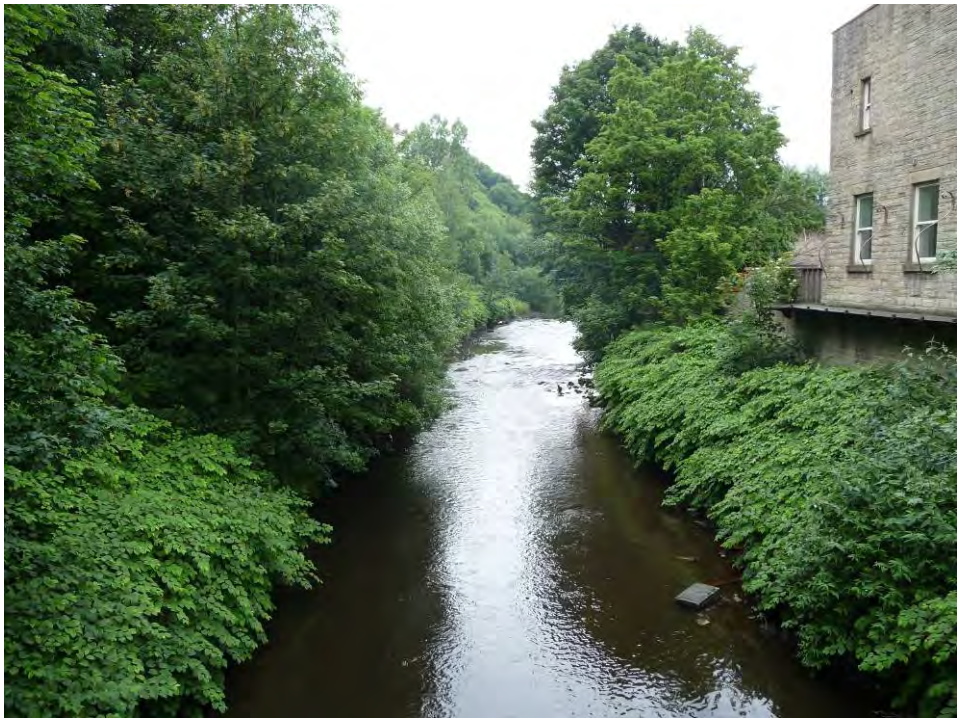

Plate 3 – View upstream from Stamford Street bridge

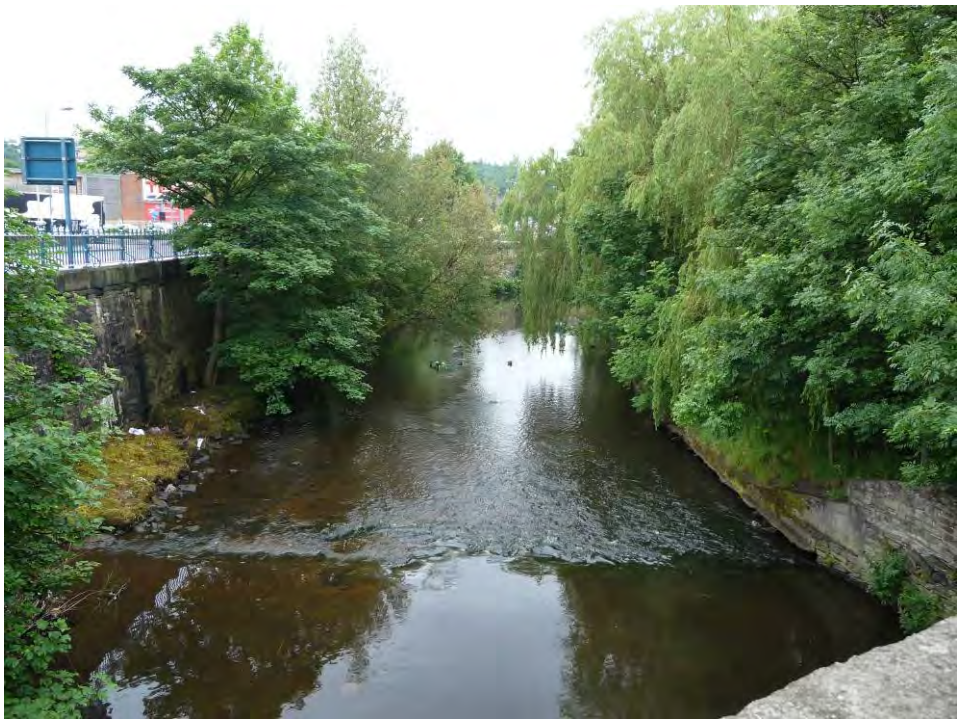

Plate 4 – View downstream from Stamford Street bridge

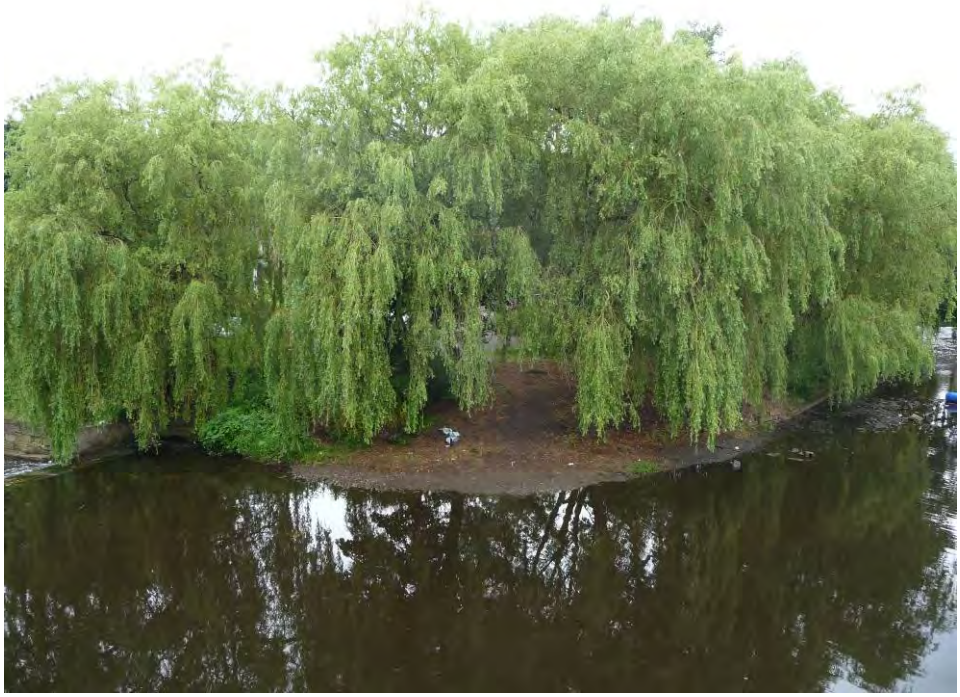

Plate 5 – Natural channel section opposite Corporation Street, possible low spot

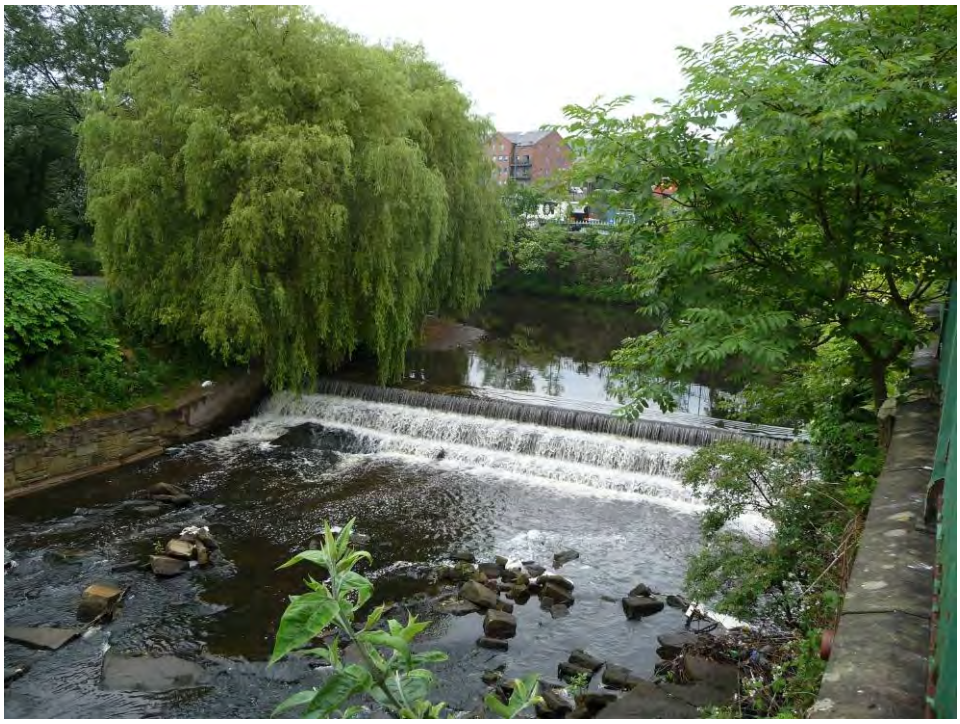

Plate 6 – Weir looking upstream from Corporation Street

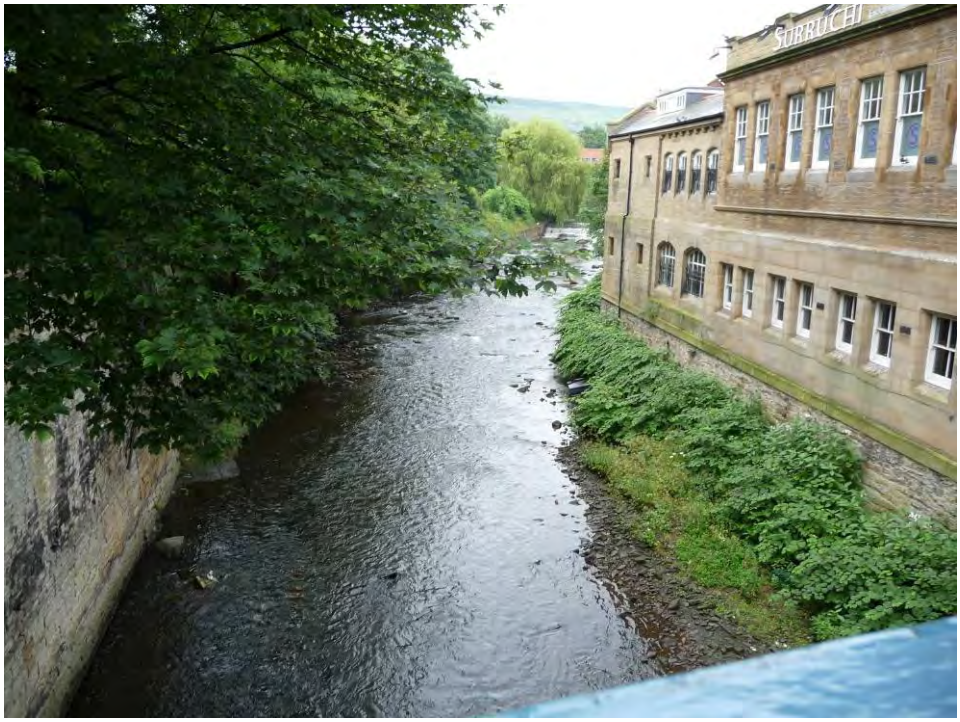

Plate 7 – View upstream from Trinity Street bridge

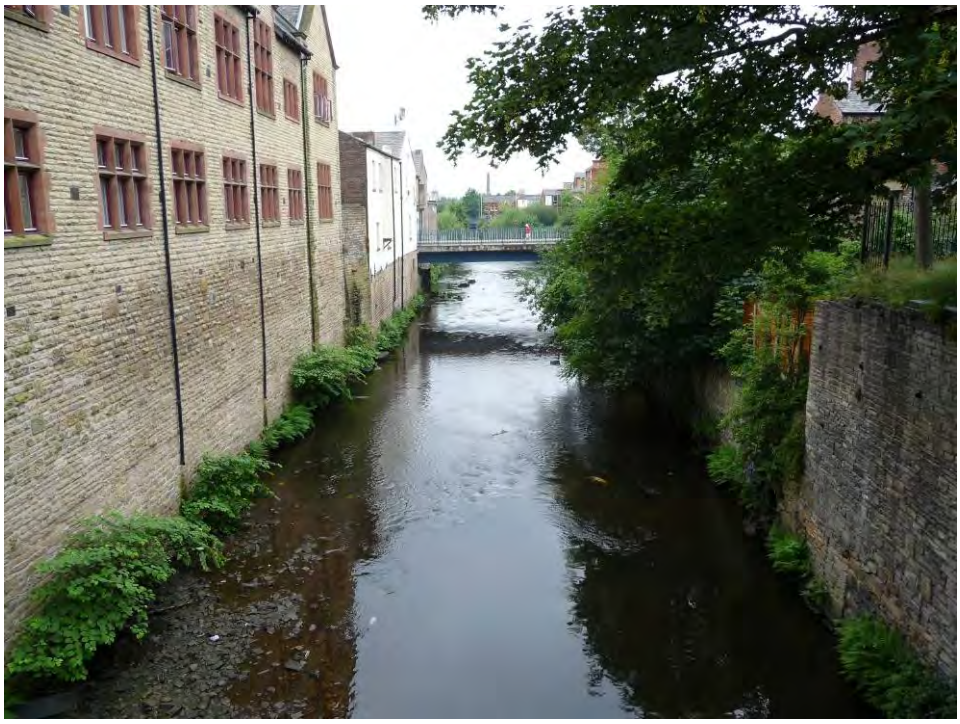

Plate 8 – View downstream from Trinity Street bridge

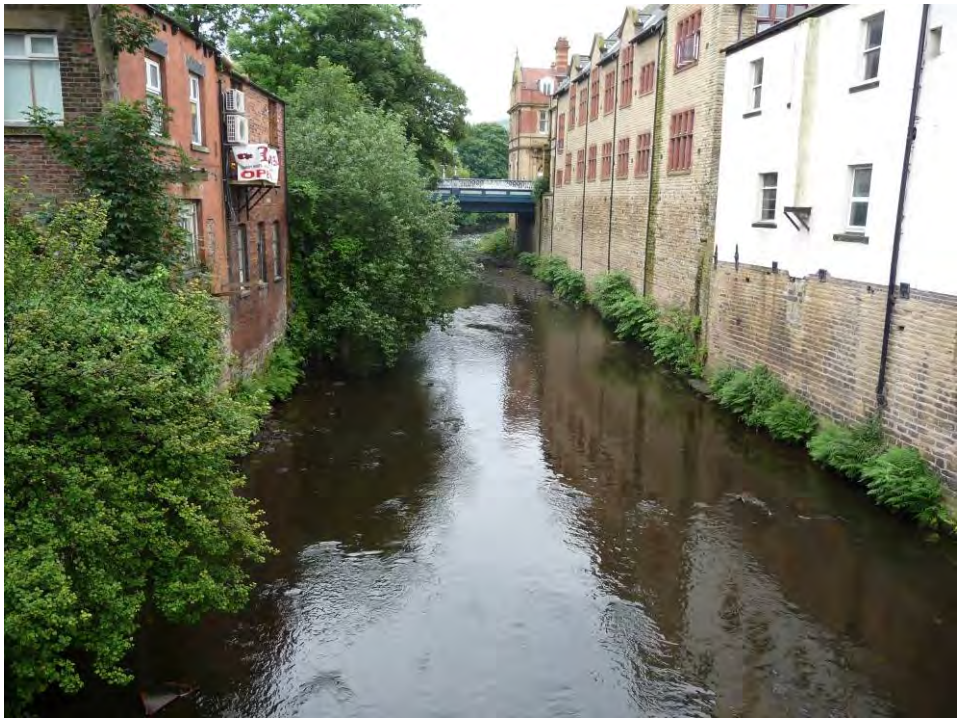

Plate 9 – View upstream from Melbourne Street bridge

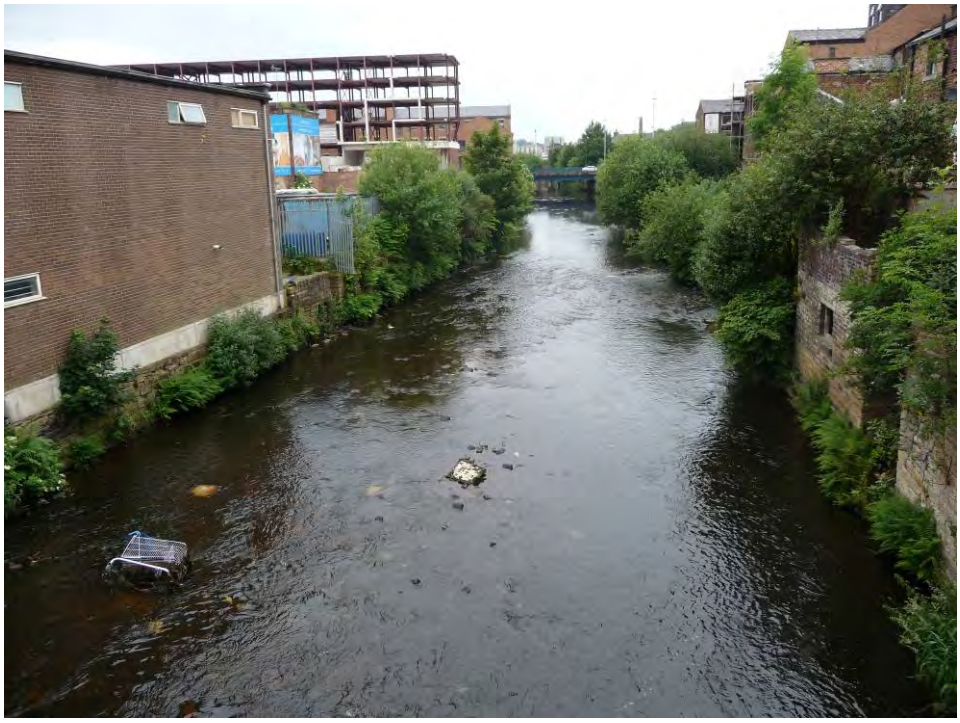

Plate 10 – View downstream from Melbourne Street bridge

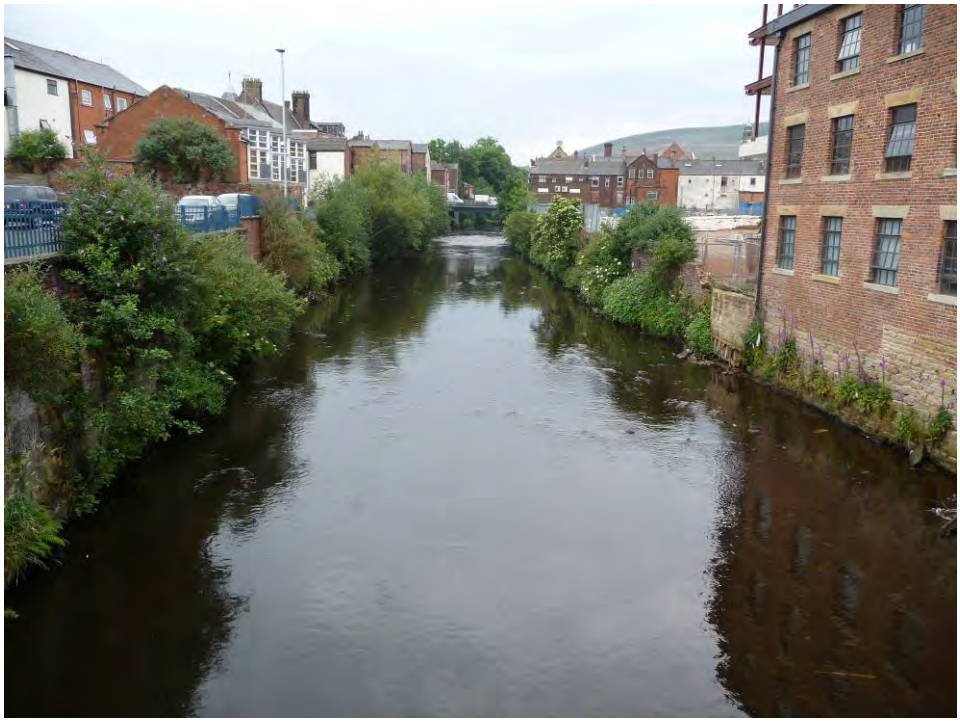

Plate 11 - View upstream from Caroline Street bridge

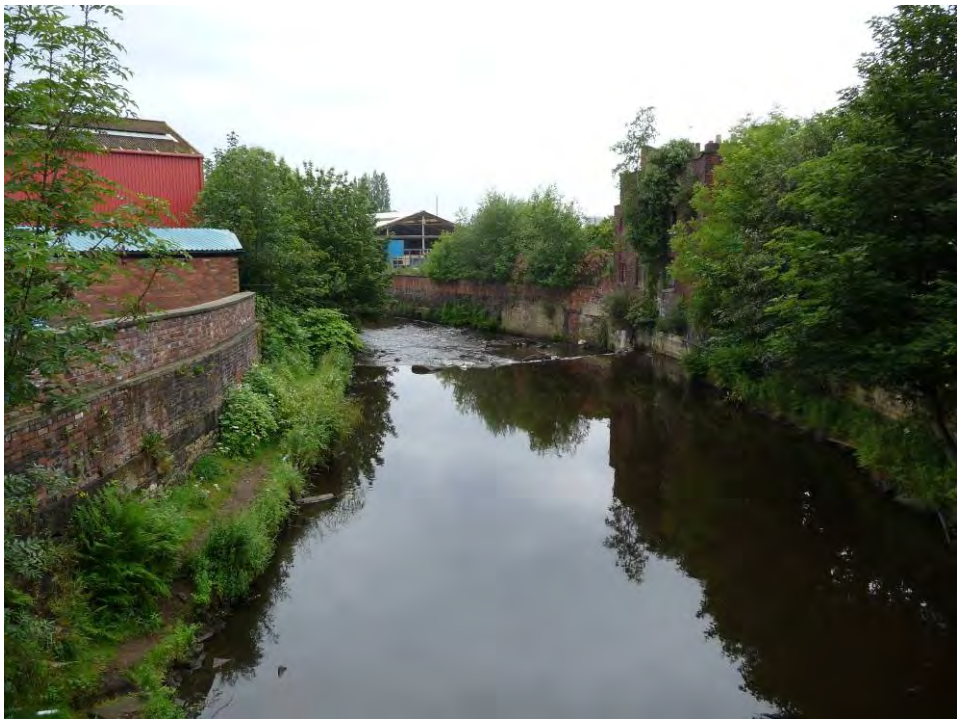

Plate 12 – View downstream from Caroline Street bridge

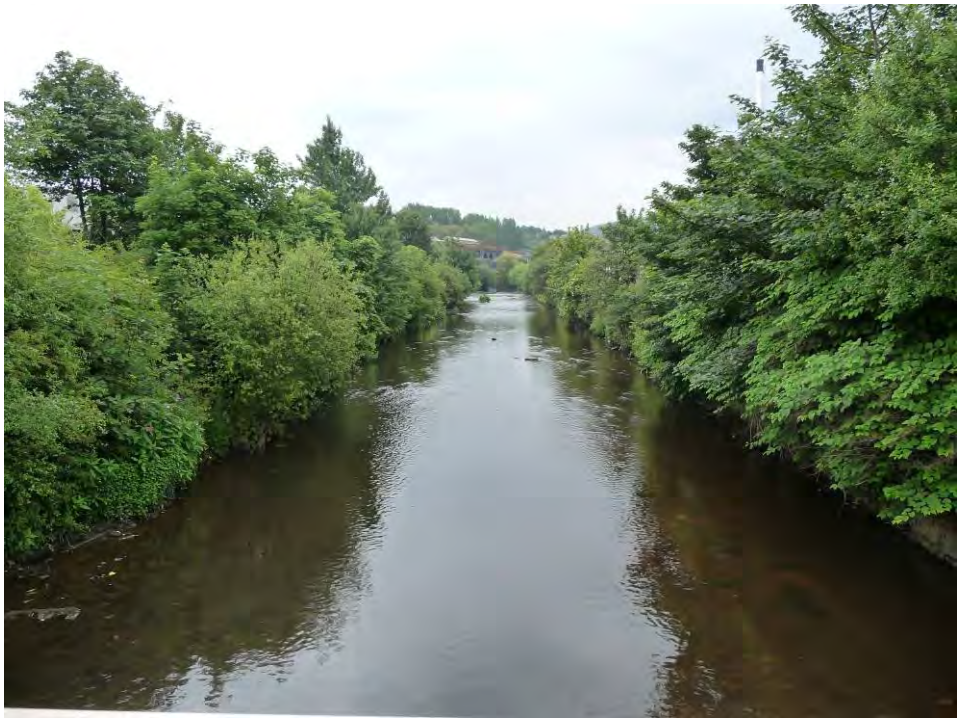

Plate 13 – View upstream from Bayley Street bridge

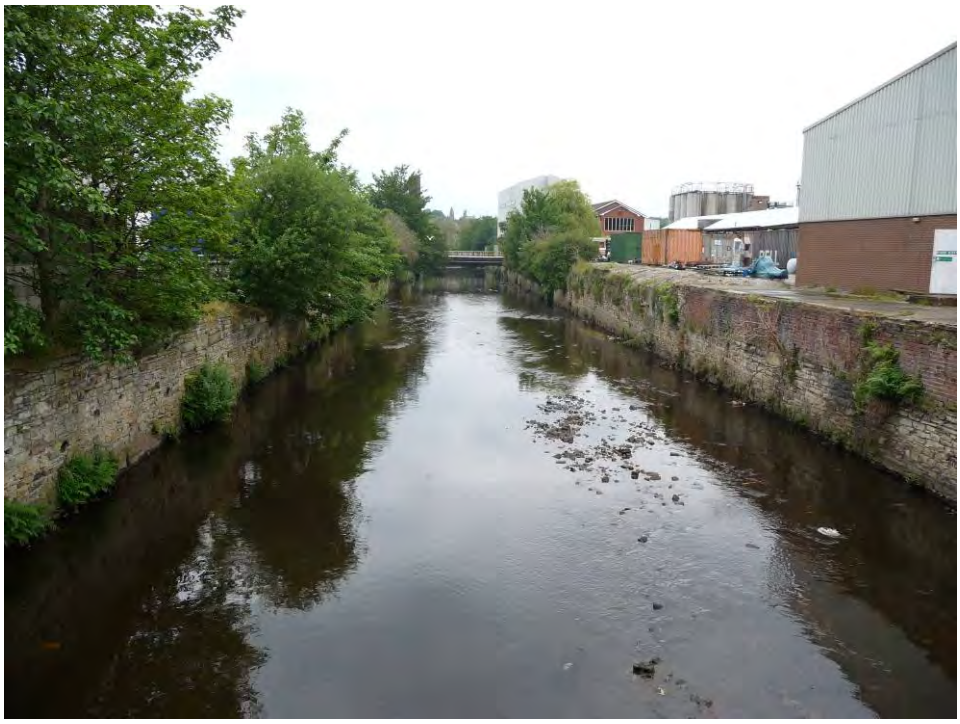

Plate 14 – View downstream from Bayley Street bridge

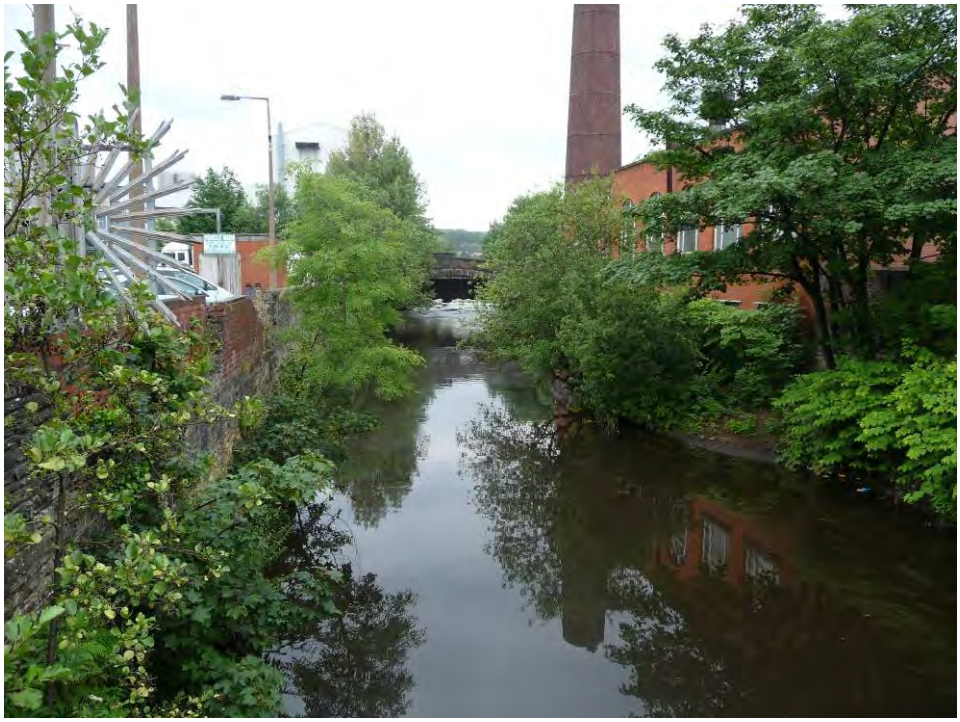

Plate 15 - View upstream from Tame Street bridge

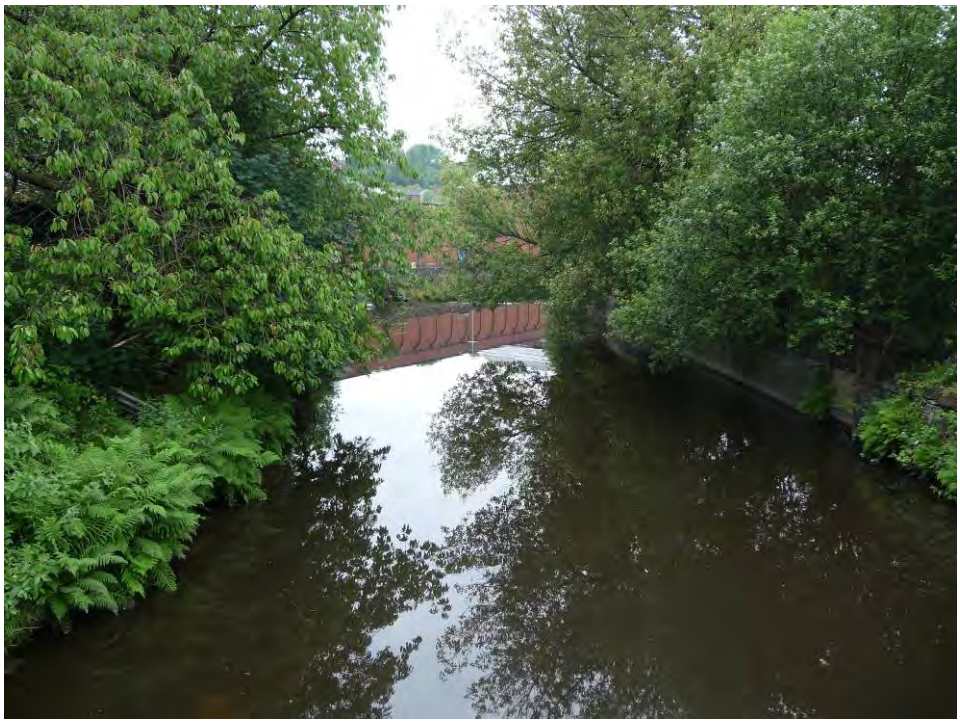

Plate 16 - View downstream from Tame Street bridge

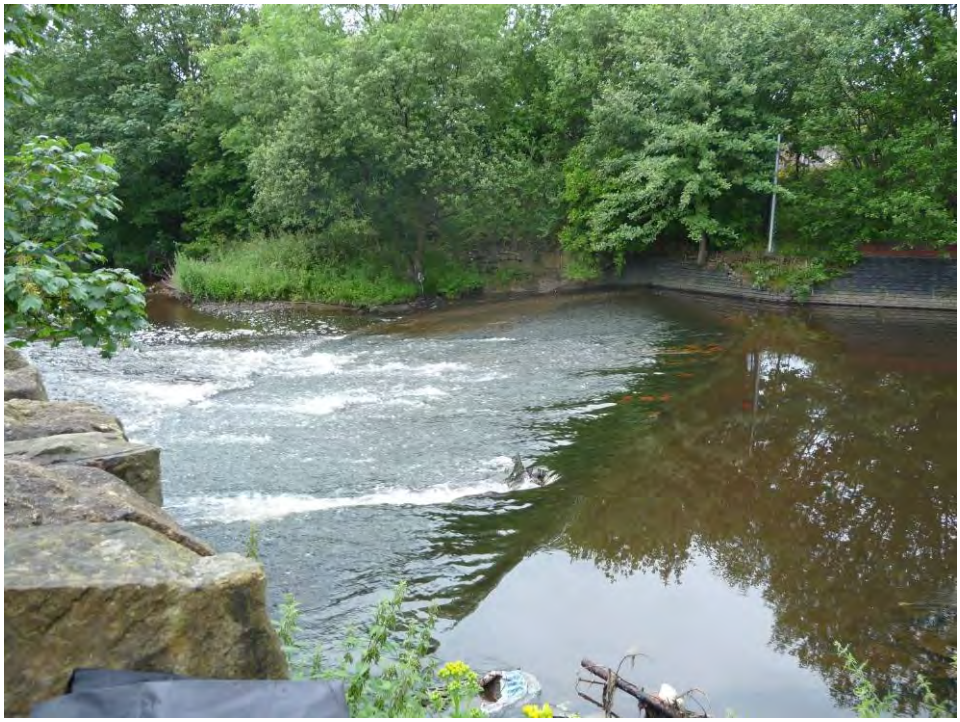

Plate 17 – Weir immediately downstream of Tame Street bridge

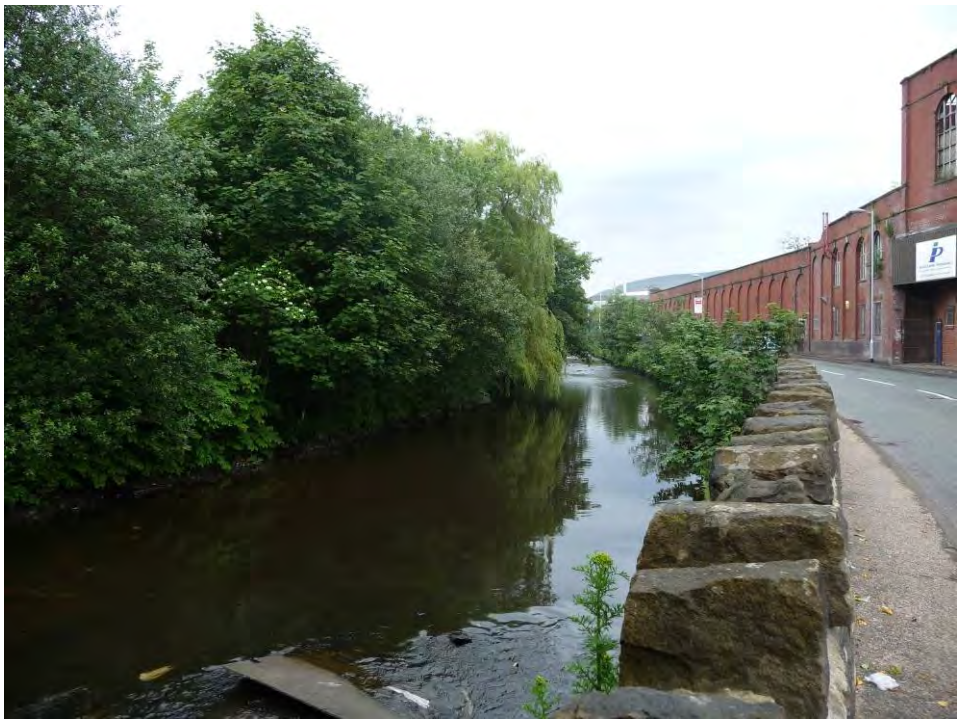

Plate 18 – View upstream from Park Road

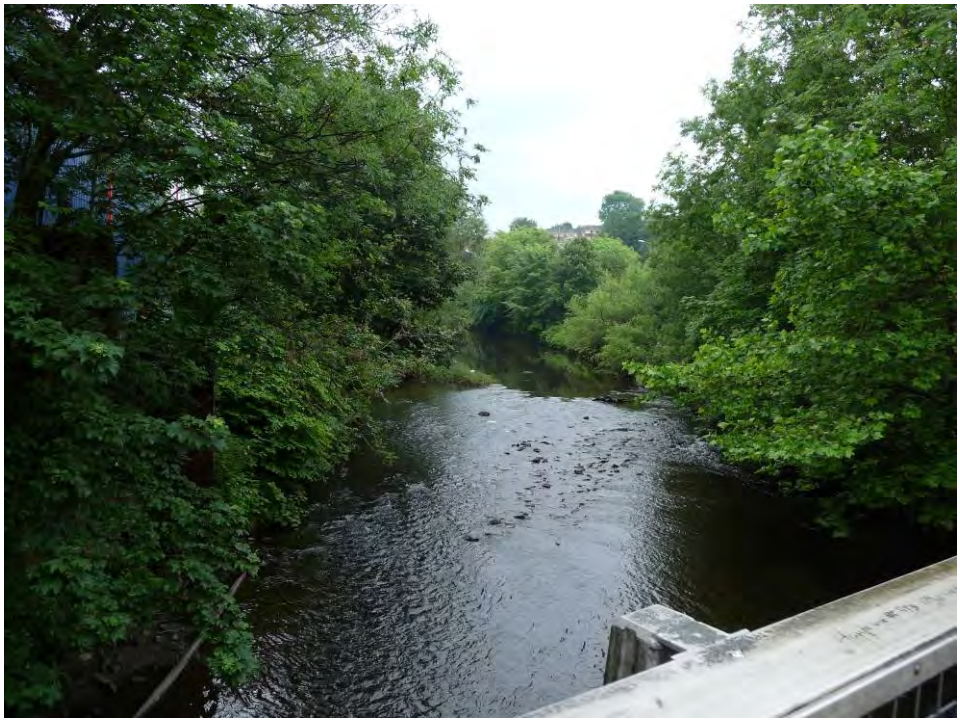

Plate 19 - View downstream from Clarence bridge

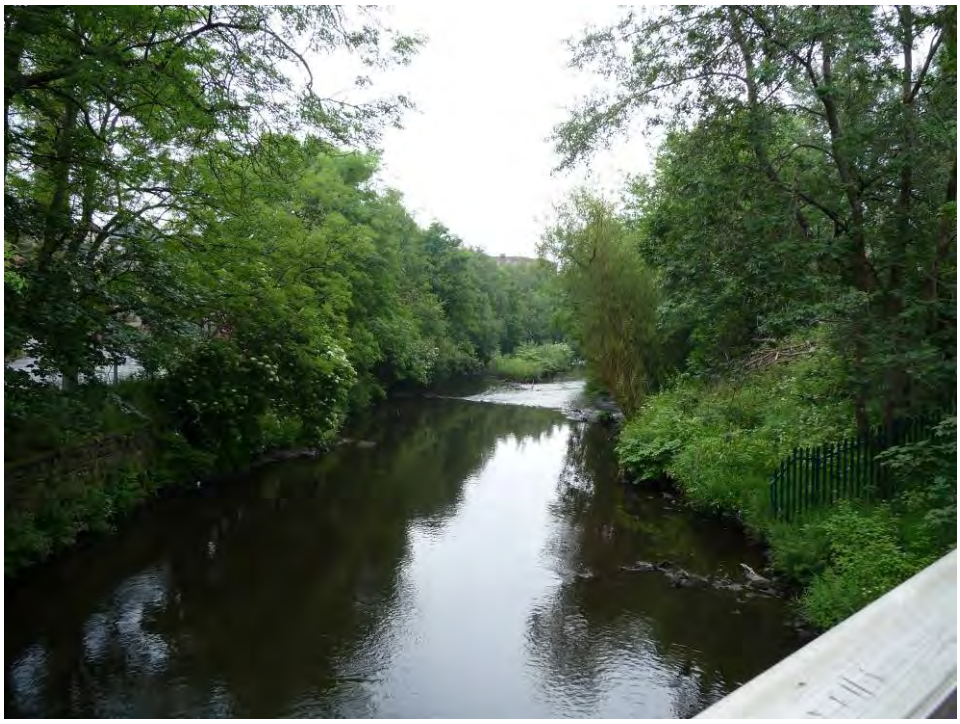

Plate 20 – View downstream from Clarence bridge

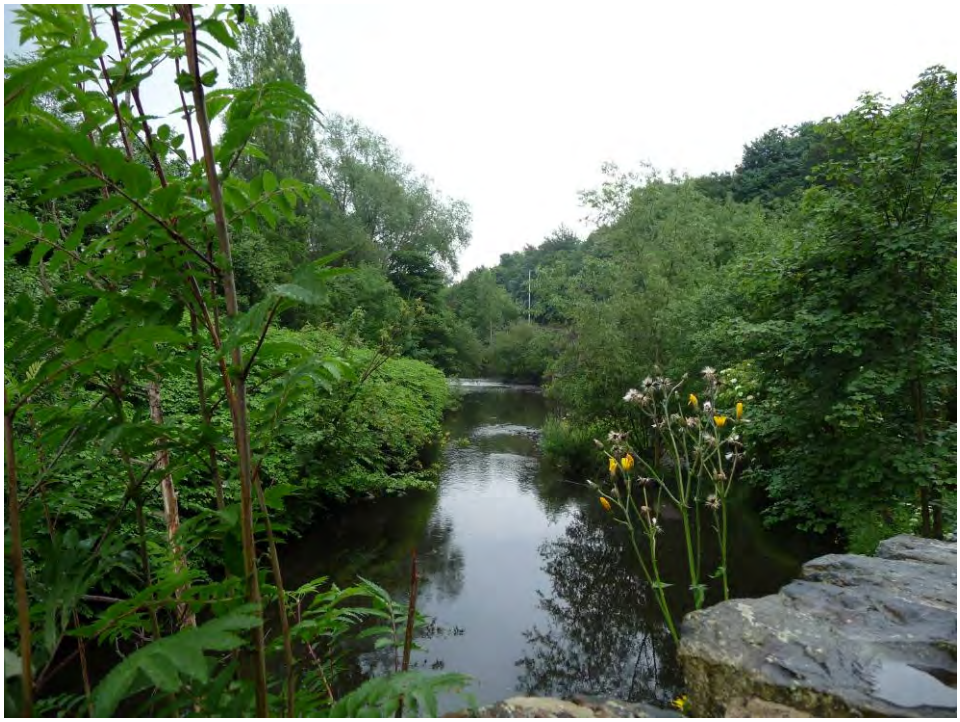

Plate 21 – View upstream from Riverside

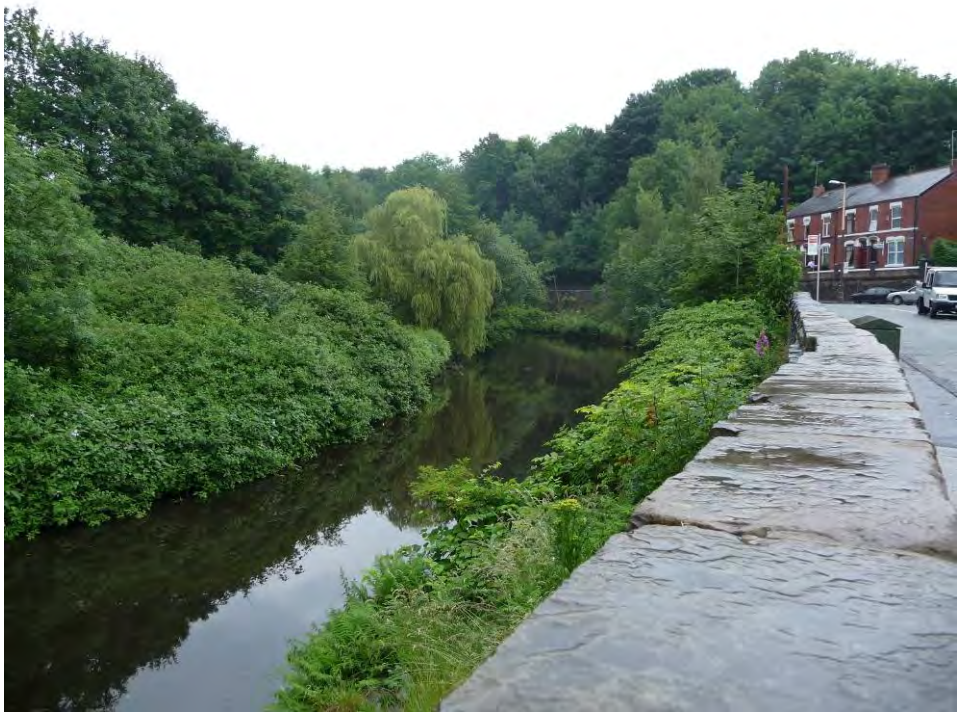

Plate 22 – View upstream from Riverside

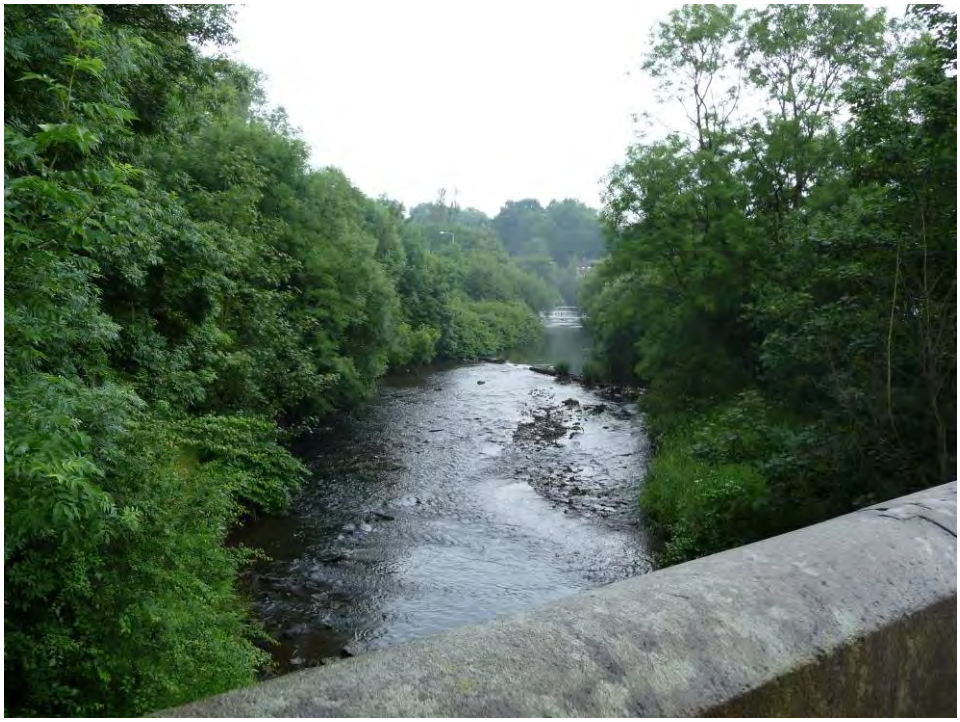

Plate 23 - View upstream from Whitelands bridge

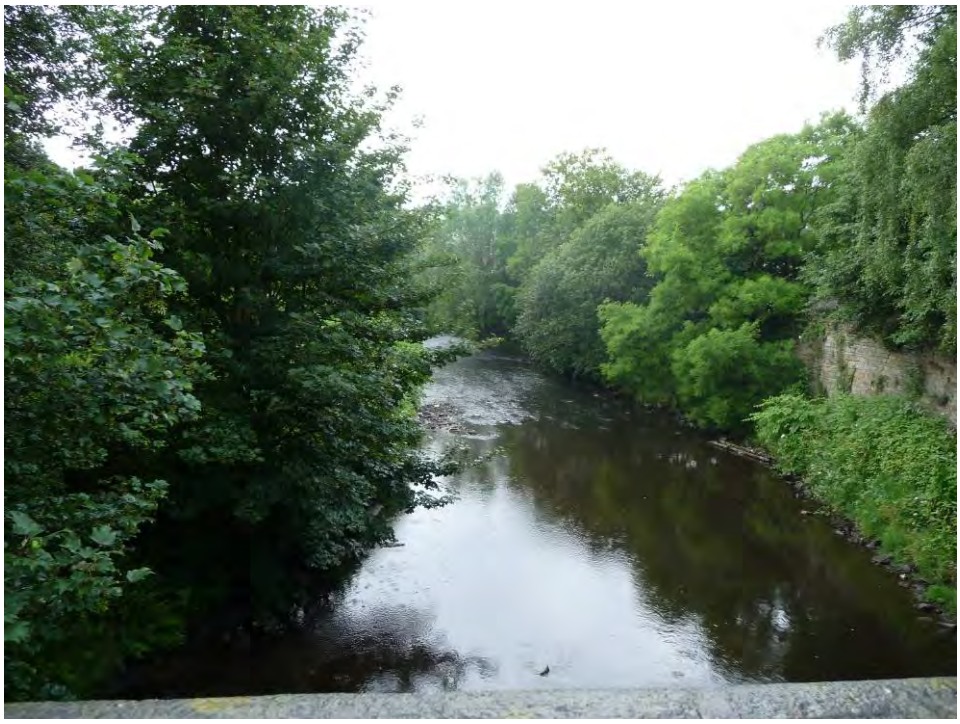

Plate 24 – View downstream from Whitelands bridge

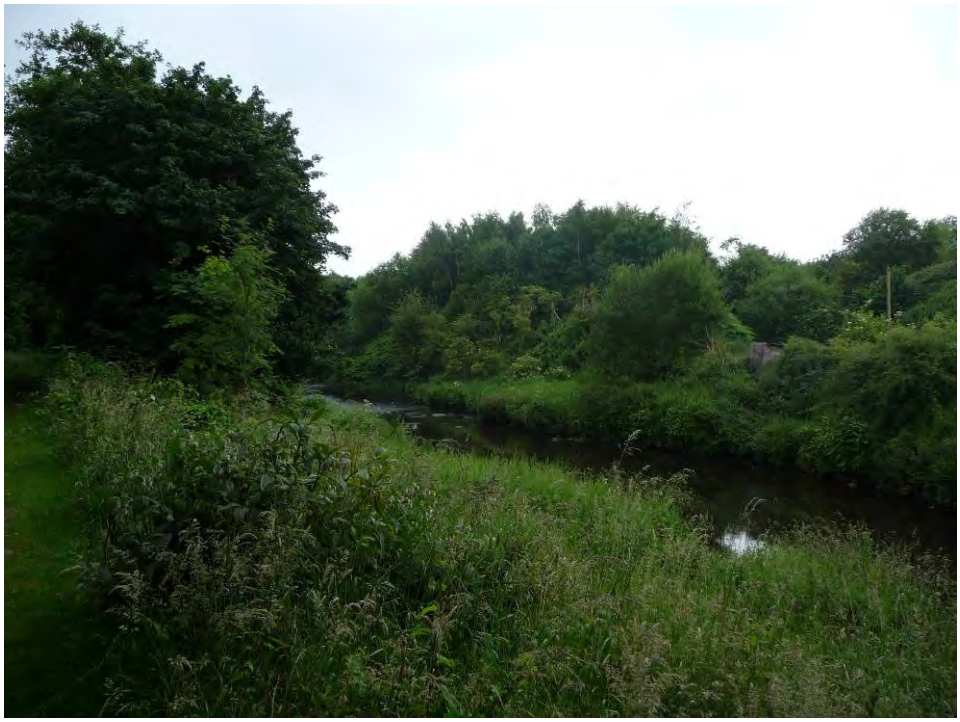

Plate 25 – View downstream from footpath between Cavendish Street and Whitelands

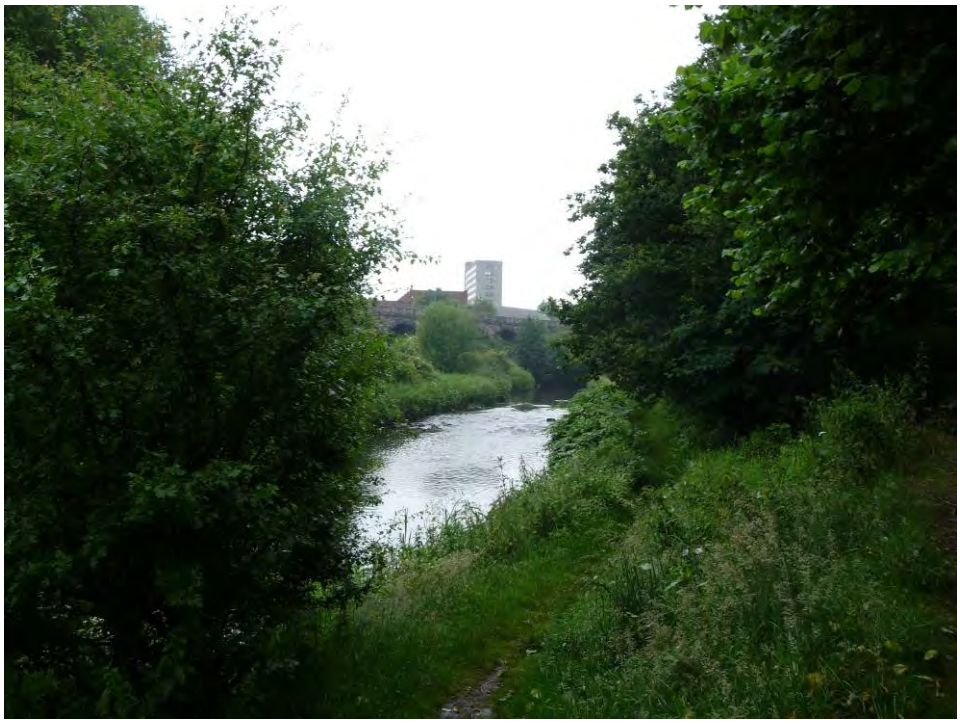

Plate 26 – View upstream from footpath between Cavendish Street and Whitelands

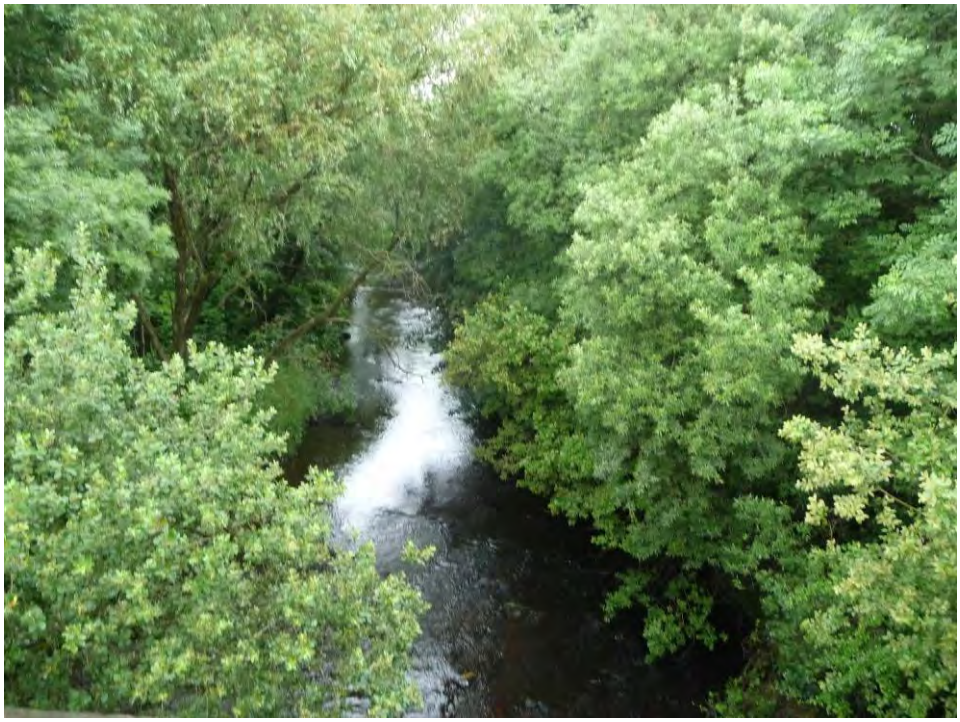

Plate 27 – View upstream from Cavendish Street bridge

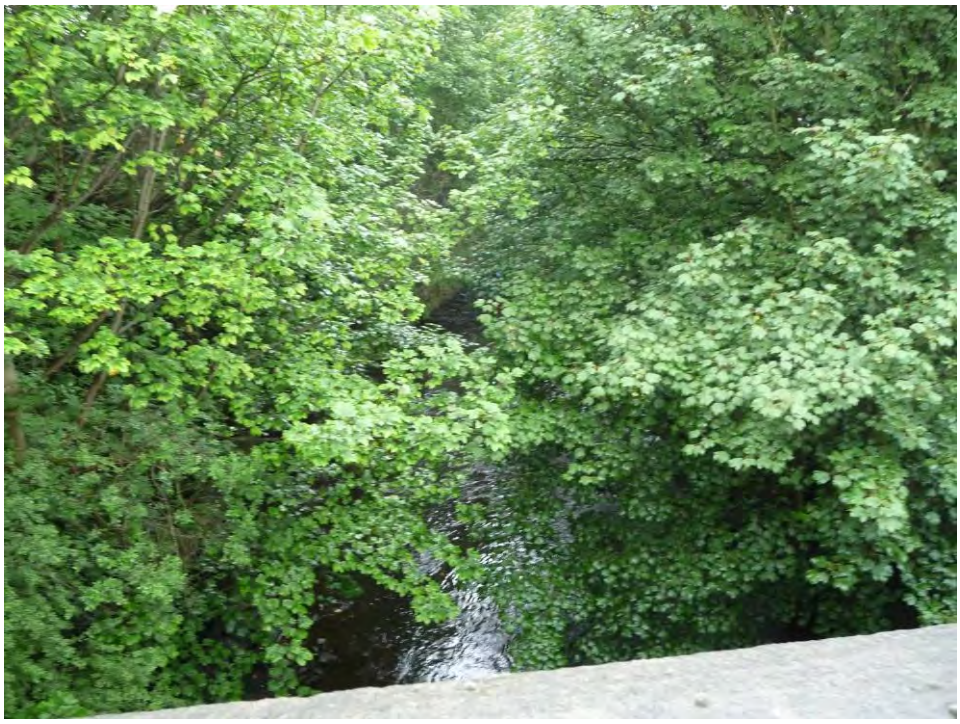

Plate 28 – View downstream from Cavendish Street bridge