



## CCTV SURVEY INSPECTION REPORT

<b>Client:</b>	JBA Consulting
<b>Location:</b>	Gibb Syke Culvert, Cowling
<b>Date:</b>	23 <sup>rd</sup> January 2018



**Industrial Water Jetting Systems Ltd**

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## Inspection Summary

Project Name: 2017s6518 Gibb Syke culvert(JBA)	Project number: 2017s6518	Contact: David Barton	Date: 16/11/2017
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Total Length of sewer network .....	<b>302.70 m</b>
Inspected Length of sewer network .....	<b>302.70 m</b>
Not inspected Length of sewer network .....	<b>0.00 m</b>
Total Length of sewer network (abandoned) .....	<b>155.00 m</b>
Inspected Length of Sewer network (abandoned) .....	<b>42.90 m</b>
Not inspected Length of sewer network (abandoned) .....	<b>112.10 m</b>
Total Length of house connections (satellite) .....	<b>0.00 m</b>
Inspected Length of house connections (satellite) .....	<b>0.00 m</b>
Not inspected Length of house connections (satellite) .....	<b>0.00 m</b>
Number of Sections .....	<b>6</b>
Number of sections (abandoned) .....	<b>3</b>
Number of house connections .....	<b>0</b>
Number of Photos .....	<b>7</b>






## Inspection Summary

Project Name: 2017s6518 Gibb Syke culvert(JBA)	Project Number: 2017s6518	Contact: David Barton	Date: 16/11/2017
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Place: Cowling	Section length: 50.90 m
Road: Keighley Road	Pipe length:
U/S MH: MH2	Material: Concrete
D/S MH: MH3	Shape: Circular

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	<b>MH2</b>	0.00	MH	Start node type, manhole, reference number : MH2	0
		0.00	WL	Water level, 10% of the vertical dimension	0
	<b>MH3</b>	50.90	MHF	Finish node type, manhole reference number: MH3	0




Place: Cowling	Section length: 39.30 m
Road: Keighley Road	Pipe length:
U/S MH: MH3	Material: Concrete
D/S MH: MH4	Shape: Circular

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	<b>MH3</b>	0.00	MH	Start node type, manhole, reference number : MH3	0
		0.00	WL	Water level, 10% of the vertical dimension	0
	<b>MH4</b>	39.30	MHF	Finish node type, manhole reference number: MH4	0

Place: Cowling	Section length: 80.40 m
Road: Keighley Road	Pipe length:
U/S MH: MH4	Material: Concrete
D/S MH: MH5	Shape: Circular

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	<b>MH4</b>	0.00	MH	Start node type, manhole, reference number : MH4	0
		0.00	WL	Water level, 10% of the vertical dimension	0
		79.20	IGJ	Infiltration, gushing at joint, from 7 to 10 o'clock	0
	<b>MH5</b>	80.40	MHF	Finish node type, manhole reference number: MH5	0






## Inspection Summary

Project Name: 2017s6518 Gibb Syke culvert(JBA)	Project Number: 2017s6518	Contact: David Barton	Date: 16/11/2017
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Place: Cowling	Section length: 58.60 m
Road: Keighley Road	Pipe length:
U/S MH: MH5	Material: Concrete
D/S MH: MH6	Shape: Circular

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	<b>MH5</b>	<b>0.00</b>	MH	Start node type, manhole, reference number : MH5	0
		<b>0.00</b>	WL	Water level, 10% of the vertical dimension	0
	<b>MH6</b>	<b>58.60</b>	MHF	Finish node type, manhole reference number: MH6	0




Place: Cowling	Section length: 3.60 m
Road: Keighley Road	Pipe length:
U/S MH: MH1A	Material: Concrete
D/S MH: MH1	Shape: Circular

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	<b>MH1A</b>	<b>0.00</b>	MH	Start node type, manhole, reference number : MH1A	0
		<b>0.00</b>	WL	Water level, 10% of the vertical dimension	0
	<b>MH1</b>	<b>3.60</b>	MHF	Finish node type, manhole reference number: MH1	0

Place: Cowling	Section length: 69.90 m
Road: Keighley Road	Pipe length:
U/S MH: MH1	Material: Concrete
D/S MH: MH1B	Shape: Circular

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	<b>MH1</b>	<b>0.00</b>	MH	Start node type, manhole, reference number : MH1	0
		<b>0.00</b>	WL	Water level, 10% of the vertical dimension	0
	<b>MH1B</b>	<b>69.90</b>	MHF	Finish node type, manhole reference number: MH1B	0



## Project-information

Project name : <b>2017s6518 Gibb Syke culvert(JBA)</b>	Project Number : <b>2017s6518</b>	Contact : <b>David Barton</b>	Date : <b>16/11/2017</b>
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## Defect Grade Description

Project Name : 2017s6518 Gibb Syke culvert(JBA)	Project number : 2017s6518	Contact : David Barton	Date : 16/11/2017
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**1:** Brick: No Structural Defects  
 Pipe: No Structural Defects

**Acceptable Structural Condition**

**2:** Brick: Minor cracking, Surface mortar loss, Spalling slight, wear slight  
 Pipe: Circumferential crack, Moderate joint defects, Spalling slight, Wear slight

**Minor collapse risk in short term but potential for further deterioration**

**3:** Brick: Total mortarloss without other defects, single brick displaced, Deformation up to 5%, Spalling medium, Wear medium  
 Pipe: Fractures with deformation up to 5%, Longitudinal cracking or multiple cracking, Minor loss of level, More severe joint

**! Collapse unlikely in near future but future deterioration likely !**

**4:** Brick: Total mortarloss with deformation greater than 10%, Deformation up to 10% and fractured, Displaced/hanging brickwork, Small number of missing bricks  
 Pipe: Broken, Deformation up to 10% and broken,, Fractured with deformation 5 - 10%, Multipl

**!! Collapse likely in foreseeable future !!**

**5:** Brick: Already Collapsed, Missing invert, Deformation over 10% and fractured, Displaced/hanging brickwork and deformation over 10%, Extensive missing bricks  
 Pipe: Already collapsed, Deformation over 10% and broken, Extensive areas of fabric missin

**!!! Collapsed or collapse imminent !!!**



## Inspection report

Date : <b>16/11/2017</b>	Job number :	Section Type :	Operator : <b>MS</b>	Section number : <b>1</b>	PLR SUFFIX: <b>X</b>
Weather <b>rain</b>	Vehicle : <b>CE62UYP</b>	Camera : <b>Pan &amp; Tilt</b>	Preset :	Cleaned : <b>no</b>	Type of Drain : <b>Gravity drain/sewer</b>

Place : Road : Location Inspection	<b>Cowling</b> <b>Keighley Road</b> <b>Fields</b> <b>MH2 (U/S) MH1B</b>	Location details: Catchment: Pipe Shape : Pipe Length			U/S MH : U/S Depth : D/S MH : D/S Depth :	<b>MH1B</b> <b>2.3</b> <b>MH2</b> <b>1.8</b>
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Use: Year laid : Purpose : Total length :	<b>Culverted watercourse</b> <b>Z</b> <b>Sample survey to determine asset condition</b> <b>70.00 m</b>	Pipe Width : Pipe Diameter : Pipe material : Lining :	<b>900 mm</b> <b>Concrete</b>
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Comment : **Wrong u/s mh on m-peg**

1:165	Position	Code	Observation	Photo	Grade
<b>Depth: 1.8</b>					
	0.00	MH	Start node type, manhole, reference number : MH2		0
	0.00	WL	Water level, 20% of the vertical dimension		0
	2.20	CXI	Connection intruding, at 10 o'clock, diameter 300mm, intrusion 20%		3
	2.90	DER	Settled deposits, coarse, 30% cross-sectional area loss	1_1_5_A.JPG	4
	4.30	OBB	Other obstacles, brick or masonry in invert, from 5 to 8 o'clock, 30% cross-sectional area loss	1_1_6_A.JPG	5
	7.20	S01 DER	Settled deposits, coarse, 30% cross-sectional area loss, Start	1_1_7_A.JPG	4
	7.20	WL	Water level, 30% of the vertical dimension		0
	13.50	F01 DER	Settled deposits, coarse, 30% cross-sectional area loss, End		4
	13.50	S02 DER	Settled deposits, coarse, 40% cross-sectional area loss, Start	1_1_10_A.JPG	4
	19.20	F02 DER	Settled deposits, coarse, 40% cross-sectional area loss, End		4
	19.20	S03 DER	Settled deposits, coarse, 50% cross-sectional area loss, Start	1_1_12_A.JPG	4
	19.30	F03 DER	Settled deposits, coarse, 50% cross-sectional area loss, End		4
	19.30	SA	Survey abandoned Remarks: Due to amount of debris	1_1_14_A.JPG	0

STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
0	0	0	0	1	6	20.8	4.03	77.8	5



## Inspection pictures

Place :  
**Cowling**

Road :  
**Keighley Road**

Date :  
**16/11/2017**

Section number :  
**1**

PLR Suffix :  
**X**



Photo: 1\_1\_5\_A.JPG  
 2.9m, Settled deposits, coarse, 30% cross-sectional area loss



Photo: 1\_1\_6\_A.JPG  
 4.3m, Other obstacles, brick or masonry in invert, from 5 to 8 o'clock, 30% cross-sectional area loss

## Inspection pictures

Place :  
**Cowling**

Road :  
**Keighley Road**

Date :  
**16/11/2017**

Section number :  
**1**

PLR Suffix :  
**X**



Photo: 1\_1\_7\_A.JPG  
 7.2m, Settled deposits, coarse, 30% cross-sectional area loss, Start



Photo: 1\_1\_10\_A.JPG  
 13.5m, Settled deposits, coarse, 40% cross-sectional area loss, Start

## Inspection pictures

Place :  
**Cowling**

Road :  
**Keighley Road**

Date :  
**16/11/2017**

Section number :  
**1**

PLR Suffix :  
**X**



Photo: 1\_1\_12\_A.JPG  
 19.2m, Settled deposits, coarse, 50% cross-sectional area loss, Start



Photo: 1\_1\_14\_A.JPG  
 19.3m, Survey abandoned



## Inspection report

Date : <b>16/11/2017</b>	Job number :	Section Type :	Operator : <b>MS</b>	Section number : <b>2</b>	PLR SUFFIX: <b>X</b>
Weather <b>rain</b>	Vehicle : <b>CE62UYP</b>	Camera : <b>Pan &amp; Tilt</b>	Preset :	Cleaned : <b>no</b>	Type of Drain : <b>Gravity drain/sewer</b>

Place : <b>Cowling</b>	Location details:	U/S MH : <b>MH2</b>
Road : <b>Keighley Road</b>	Catchment:	U/S Depth : <b>1.8</b>
Location <b>Fields</b>	Pipe Shape : <b>Circular</b>	D/S MH : <b>MH3</b>
Inspection <b>MH2 (D/S) MH3</b>	Pipe Length <b>2.50 m</b>	D/S Depth : <b>3.5</b>

Use: <b>Culverted watercourse</b>	Pipe Width :
Year laid : <b>Z</b>	Pipe Diameter : <b>900 mm</b>
Purpose : <b>Sample survey to determine asset condition</b>	Pipe material : <b>Concrete</b>
Total length : <b>50.90 m</b>	Lining :

Comment :

1:405 Depth: 1.8	Position	Code	Observation	Photo	Grade				
	0.00	MH	Start node type, manhole, reference number : MH2		0				
	0.00	WL	Water level, 10% of the vertical dimension		0				
	50.90	MHF	Finish node type, manhole reference number: MH3		0				
<b>Depth: 3.5</b>									
STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
0	0	0	0	1	0	0	0	0	1







## Inspection report

Date : <b>16/11/2017</b>	Job number :	Section Type :	Operator : <b>MS</b>	Section number : <b>3</b>	PLR SUFFIX: <b>X</b>
Weather <b>rain</b>	Vehicle : <b>CE62UYP</b>	Camera : <b>Pan &amp; Tilt</b>	Preset :	Cleaned : <b>no</b>	Type of Drain : <b>Gravity drain/sewer</b>

Place : <b>Cowling</b>	Location details:	U/S MH : <b>MH3</b>
Road : <b>Keighley Road</b>	Catchment:	U/S Depth : <b>3.5</b>
Location <b>Fields</b>	Pipe Shape : <b>Circular</b>	D/S MH : <b>MH4</b>
Inspection <b>MH3 (D/S) MH4</b>	Pipe Length <b>2.50 m</b>	D/S Depth : <b>4.23</b>

Use: <b>Culverted watercourse</b>	Pipe Width :
Year laid : <b>Z</b>	Pipe Diameter : <b>900 mm</b>
Purpose : <b>Sample survey to determine asset condition</b>	Pipe material : <b>Concrete</b>
Total length : <b>39.30 m</b>	Lining :

Comment :

1:315 Position	Code	Observation	Photo	Grade
<b>Depth: 3.5</b>				
	0.00	MH	Start node type, manhole, reference number : MH3	0
	0.00	WL	Water level, 10% of the vertical dimension	0
	39.30	MHF	Finish node type, manhole reference number: MH4	0
<b>Depth: 4.23</b>				
				

STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
0	0	0	0	1	0	0	0	0	1



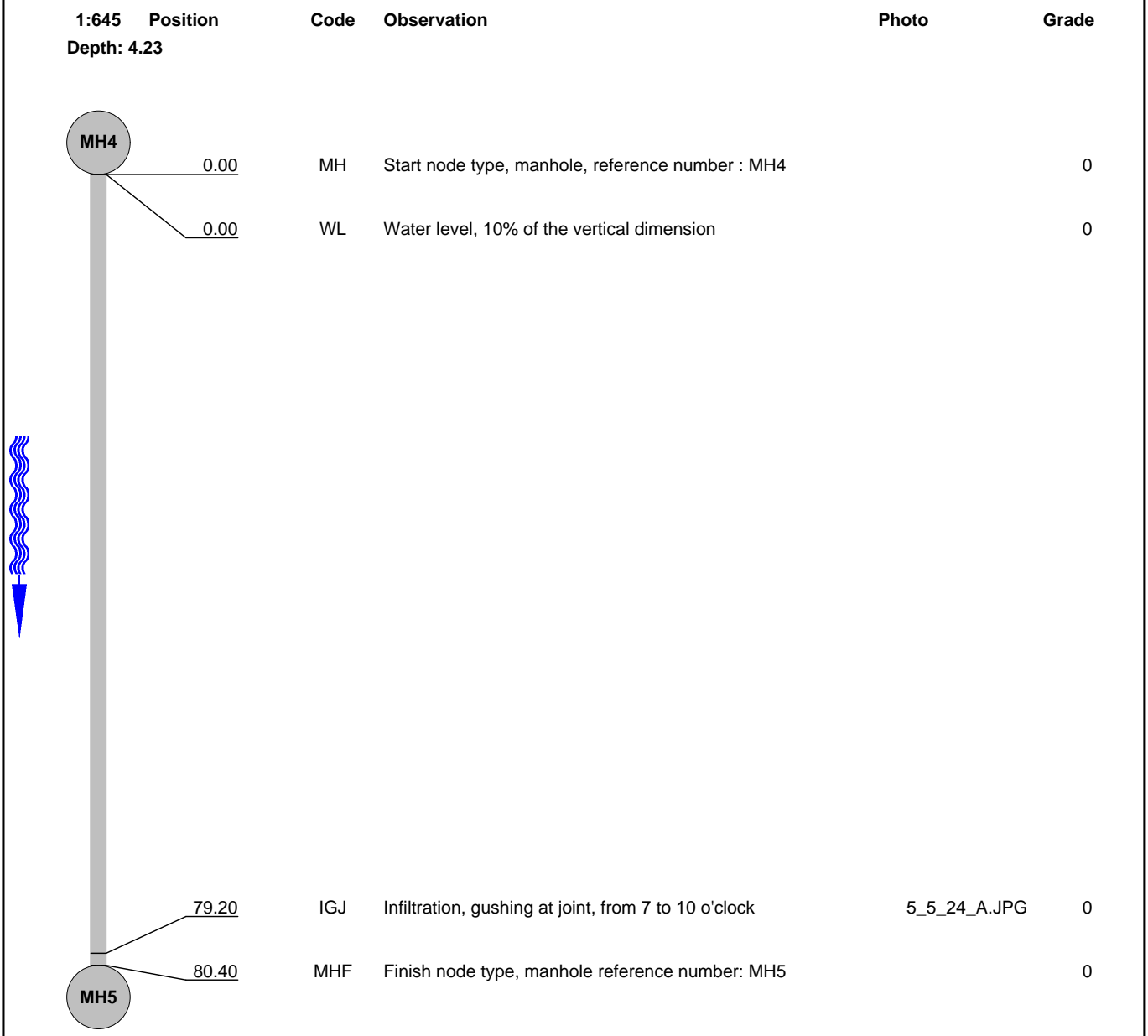
## Inspection report

Date : <b>16/11/2017</b>	Job number :	Section Type :	Operator : <b>MS</b>	Section number : <b>4</b>	PLR SUFFIX: <b>X</b>
Weather <b>rain</b>	Vehicle : <b>CE62UYP</b>	Camera : <b>Pan &amp; Tilt</b>	Preset :	Cleaned : <b>no</b>	Type of Drain : <b>Gravity drain/sewer</b>

Place : <b>Cowling</b>	Location details:	U/S MH : <b>MH4</b>
Road : <b>Keighley Road</b>	Catchment:	U/S Depth : <b>4.23</b>
Location <b>Fields</b>	Pipe Shape : <b>Circular</b>	D/S MH : <b>MH5</b>
Inspection <b>MH4 (D/S) MH5</b>	Pipe Length 2.50 m	D/S Depth : <b>4.53</b>

Use: <b>Culverted watercourse</b>	Pipe Width :
Year laid : <b>Z</b>	Pipe Diameter : <b>900 mm</b>
Purpose : <b>Sample survey to determine asset condition</b>	Pipe material : <b>Concrete</b>
Total length : <b>80.40 m</b>	Lining :

Comment :



STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
0	0	0	0	1	0	0	0	0	1

## Inspection pictures

Place :  
**Cowling**

Road :  
**Keighley Road**

Date :  
**16/11/2017**

Section number :  
**4**

PLR Suffix :  
**X**



Photo: 5\_5\_24\_A.JPG  
79.2m, Infiltration, gushing at joint, from 7 to 10 o'clock



## Inspection report

Date : <b>16/11/2017</b>	Job number :	Section Type :	Operator : <b>MS</b>	Section number : <b>5</b>	PLR SUFFIX: <b>X</b>
Weather <b>rain</b>	Vehicle : <b>CE62UYP</b>	Camera : <b>Pan &amp; Tilt</b>	Preset :	Cleaned : <b>no</b>	Type of Drain : <b>Gravity drain/sewer</b>

Place : <b>Cowling</b>	Location details:	U/S MH : <b>MH5</b>
Road : <b>Keighley Road</b>	Catchment:	U/S Depth : <b>4.53</b>
Location <b>Fields</b>	Pipe Shape : <b>Circular</b>	D/S MH : <b>MH6</b>
Inspection <b>MH5 (D/S) MH6</b>	Pipe Length <b>2.50 m</b>	D/S Depth : <b>1</b>

Use: <b>Culverted watercourse</b>	Pipe Width :
Year laid : <b>Z</b>	Pipe Diameter : <b>900 mm</b>
Purpose : <b>Sample survey to determine asset condition</b>	Pipe material : <b>Concrete</b>
Total length : <b>58.60 m</b>	Lining :

Comment :

1:465 Position	Code	Observation	Photo	Grade					
<b>Depth: 4.53</b>									
	MH	Start node type, manhole, reference number : MH5		0					
0.00	WL	Water level, 10% of the vertical dimension		0					
58.60	MHF	Finish node type, manhole reference number: MH6		0					
<b>Depth: 1</b>									
STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
0	0	0	0	1	0	0	0	0	1





## Inspection report

Date : <b>08/01/2018</b>	Job number :	Section Type :	Operator : <b>MS</b>	Section number : <b>6</b>	PLR SUFFIX: <b>X</b>
Weather <b>no rain or snow</b>	Vehicle : <b>CE62UYP</b>	Camera : <b>Pan &amp; Tilt</b>	Preset :	Cleaned : <b>no</b>	Type of Drain : <b>Gravity drain/sewer</b>

Place : Road : Location Inspection	<b>Cowling</b> <b>Keighley Road</b> <b>Fields</b> <b>MH6 (D/S) BRANCH</b>	Location details: Catchment: Pipe Shape : <b>Circular</b> Pipe Length 2.50 m	U/S MH : <b>MH6</b> U/S Depth : <b>1</b> D/S MH : <b>BRANCH</b> D/S Depth :
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Use: <b>Culverted watercourse</b> Year laid : <b>Z</b> Purpose : <b>Sample survey to determine asset condition</b> Total length : <b>15.00 m</b>	Pipe Width : Pipe Diameter : <b>900 mm</b> Pipe material : <b>Concrete</b> Lining :
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Comment :

1:105 Depth: 1	Position	Code	Observation	Photo	Grade
	0.00	MH	Start node type, manhole, reference number : MH6		0
	0.00	WL	Water level, 10% of the vertical dimension		0
	12.10	LD	Line deviates down		0
	12.10	REM	General remark Remarks: Possible cascade into branch of old culvert		0
12.10	SA	Survey abandoned Remarks: Due to cascade		0	

STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
0	0	0	0	1	0	0	0	0	1



## Inspection report

Date : <b>08/01/2018</b>	Job number :	Section Type :	Operator : <b>MS</b>	Section number : <b>7</b>	PLR SUFFIX: <b>X</b>
Weather <b>no rain or snow</b>	Vehicle : <b>CE62UYP</b>	Camera : <b>Pan &amp; Tilt</b>	Preset :	Cleaned : <b>no</b>	Type of Drain : <b>Gravity drain/sewer</b>

Place : Road : Location Inspection	<b>Cowling</b> <b>Keighley Road</b> <b>Gardens</b> <b>MH1A (D/S) MH1</b>	Location details: Catchment: Pipe Shape : <b>Circular</b> Pipe Length 2.50 m	U/S MH : <b>MH1A</b> U/S Depth : <b>2.33</b> D/S MH : <b>MH1</b> D/S Depth : <b>2.3</b>
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Use: <b>Culverted watercourse</b> Year laid : <b>Z</b> Purpose : <b>Sample survey to determine asset condition</b> Total length : <b>3.60 m</b>	Pipe Width : Pipe Diameter : <b>900 mm</b> Pipe material : <b>Concrete</b> Lining :
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Comment :

1:50	Position	Code	Observation	Photo	Grade
<b>Depth: 2.33</b>					
		0.00	MH	Start node type, manhole, reference number : MH1A	0
		0.00	WL	Water level, 10% of the vertical dimension	0
	3.60	MHF	Finish node type, manhole reference number: MH1		0
<b>Depth: 2.3</b>					

STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
0	0	0	0	1	0	0	0	0	1



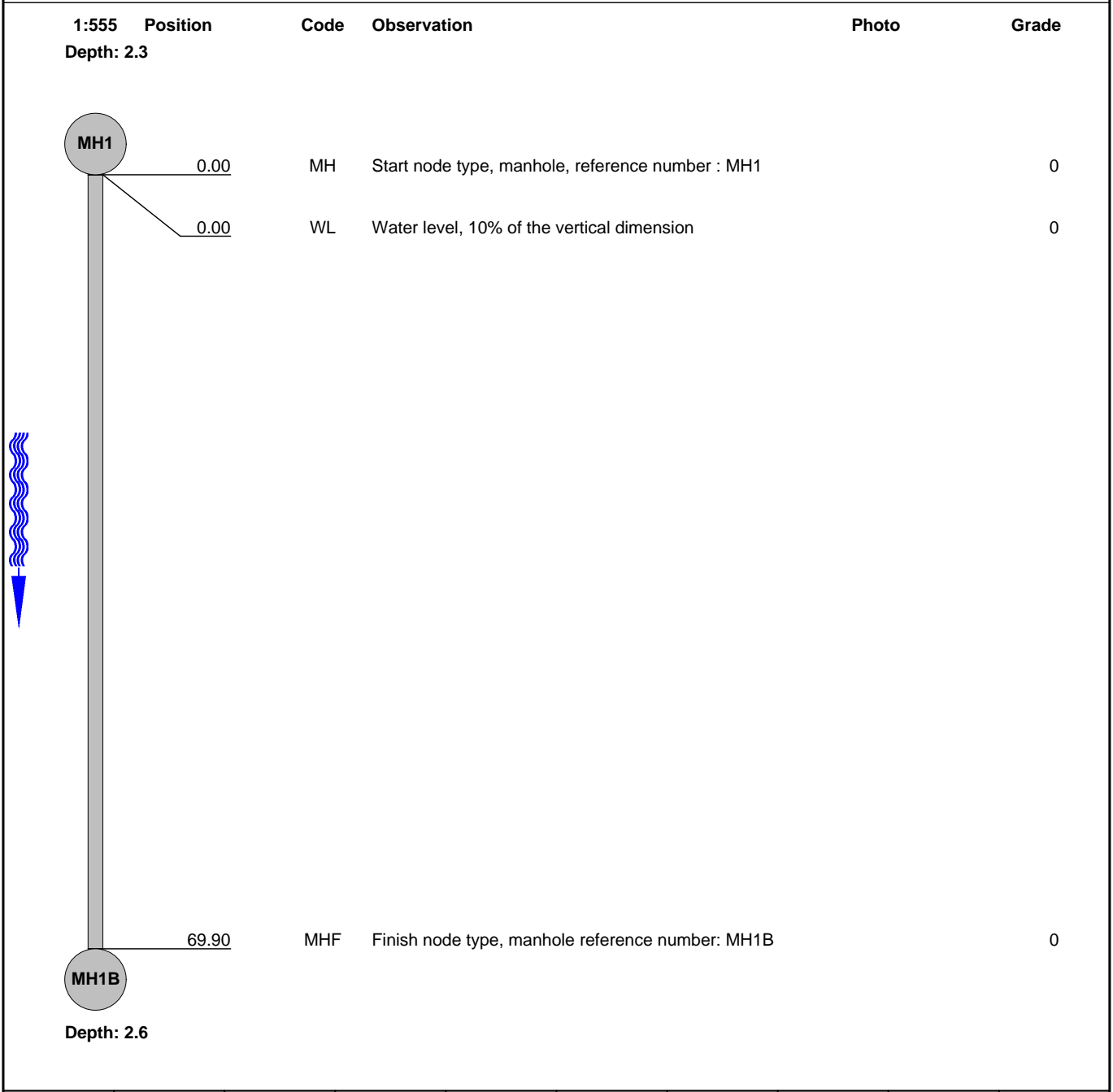
## Inspection report

Date : <b>08/01/2018</b>	Job number :	Section Type :	Operator : <b>MS</b>	Section number : <b>8</b>	PLR SUFFIX: <b>X</b>
Weather <b>no rain or snow</b>	Vehicle : <b>CE62UYP</b>	Camera : <b>Pan &amp; Tilt</b>	Preset :	Cleaned : <b>no</b>	Type of Drain : <b>Gravity drain/sewer</b>

Place : Road : Location Inspection	<b>Cowling</b> <b>Keighley Road</b> <b>Gardens</b> <b>MH1 (D/S) MH1B</b>	Location details: Catchment: Pipe Shape : <b>Circular</b> Pipe Length 2.50 m	U/S MH : <b>MH1</b> U/S Depth : <b>2.3</b> D/S MH : <b>MH1B</b> D/S Depth : <b>2.6</b>
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Use: <b>Culverted watercourse</b> Year laid : <b>Z</b> Purpose : <b>Sample survey to determine asset condition</b> Total length : <b>69.90 m</b>	Pipe Width : Pipe Diameter : <b>900 mm</b> Pipe material : <b>Concrete</b> Lining :
---	--

Comment : **Wrong d/s mh on m-peg**



STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
0	0	0	0	1	0	0	0	0	1



## Inspection report

Date : <b>08/01/2018</b>	Job number :	Section Type :	Operator : <b>MS</b>	Section number : <b>9</b>	PLR SUFFIX: <b>X</b>
Weather <b>no rain or snow</b>	Vehicle : <b>CE62UYP</b>	Camera : <b>Pan &amp; Tilt</b>	Preset :	Cleaned : <b>no</b>	Type of Drain : <b>Gravity drain/sewer</b>

Place : Road : Location Inspection	<b>Cowling</b> <b>Keighley Road</b> <b>Fields</b> <b>MH1B (D/S) MH2</b>	Location details: Catchment: Pipe Shape : Pipe Length			U/S MH : U/S Depth : D/S MH : D/S Depth :	<b>MH1B</b> <b>2.6</b> <b>MH2</b> <b>1.8</b>
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Use: Year laid : Purpose : Total length :	<b>Culverted watercourse</b> <b>Z</b> <b>Sample survey to determine asset condition</b> <b>70.00 m</b>	Pipe Width : Pipe Diameter : Pipe material : Lining :	<b>900 mm</b> <b>Concrete</b>
--	---	--	----------------------------------

Comment : **Attempted overlap**

1:105 Depth: 2.6	Position	Code	Observation	Photo	Grade				
	0.00	MH	Start node type, manhole, reference number : MH1B		0				
	0.00	WL	Water level, 10% of the vertical dimension		0				
	7.80	WL	Water level, 50% of the vertical dimension		0				
	11.10	CUW	Loss of vision, camera under water		0				
	11.20	REM	General remark Remarks: Possible debris under water		0				
	11.50	SA	Survey abandoned Remarks: Due to camera under water		0				
STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
0	0	0	0	1	0	0	0	0	1



## / Main sections

Project name : <b>2017s6518 Gibb Syke culvert(JBA)</b>	Project number : <b>2017s6518</b>	Contact : <b>David Barton</b>	Date : <b>16/11/2017</b>
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Nr.	US MH	DS MH	Date	Road	Tape No.	Material	m	(m)
1	MH1B	MH2	16/11/2017	Keighley Road		Concrete	70.00	<b>19.30</b>
2	MH2	MH3	16/11/2017	Keighley Road		Concrete	50.90	50.90
3	MH3	MH4	16/11/2017	Keighley Road		Concrete	39.30	39.30
4	MH4	MH5	16/11/2017	Keighley Road		Concrete	80.40	80.40
5	MH5	MH6	16/11/2017	Keighley Road		Concrete	58.60	58.60
6	MH6	BRANCH	08/01/2018	Keighley Road		Concrete	15.00	<b>12.10</b>
7	MH1A	MH1	08/01/2018	Keighley Road		Concrete	3.60	3.60
8	MH1	MH1B	08/01/2018	Keighley Road		Concrete	69.90	69.90
9	MH1B	MH2	08/01/2018	Keighley Road		Concrete	70.00	<b>11.50</b>

**Pipe size: CIRCULAR 900 = 457.7 m (345.6 m)**

**All sections = 457.7 m (345.6 m)**



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## Service / Operational Defects (SRM 4)

Project name : <b>2017s6518 Gibb Syke culvert(JBA)</b>	Project Number : <b>2017s6518</b>	Contact : <b>David Barton</b>	Date : <b>16/11/2017</b>
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No.	PLR	Dir.	Use	Shape / Size	Date	Mat.	Total Length	Insp. Length	Peak HWG	Peak Score	Grade	Mean Score	Total Score
1	MH1BX	U	W	C 900	16/11/2017	CO	70.00	19.30	3	20.8	5	4.03	77.8
2	MH2X	D	W	C 900	16/11/2017	CO	50.90	50.90	-	0	1	0	0
3	MH3X	D	W	C 900	16/11/2017	CO	39.30	39.30	-	0	1	0	0
4	MH4X	D	W	C 900	16/11/2017	CO	80.40	80.40	5	0	1	0	0
5	MH5X	D	W	C 900	16/11/2017	CO	58.60	58.60	-	0	1	0	0
6	MH6X	D	W	C 900	08/01/2018	CO	15.00	12.10	-	0	1	0	0
7	MH1AX	D	W	C 900	08/01/2018	CO	3.60	3.60	-	0	1	0	0
8	MH1X	D	W	C 900	08/01/2018	CO	69.90	69.90	-	0	1	0	0
9	MH1BX	D	W	C 900	08/01/2018	CO	70.00	11.50	-	0	1	0	0



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## Structural Defects (SRM 4)

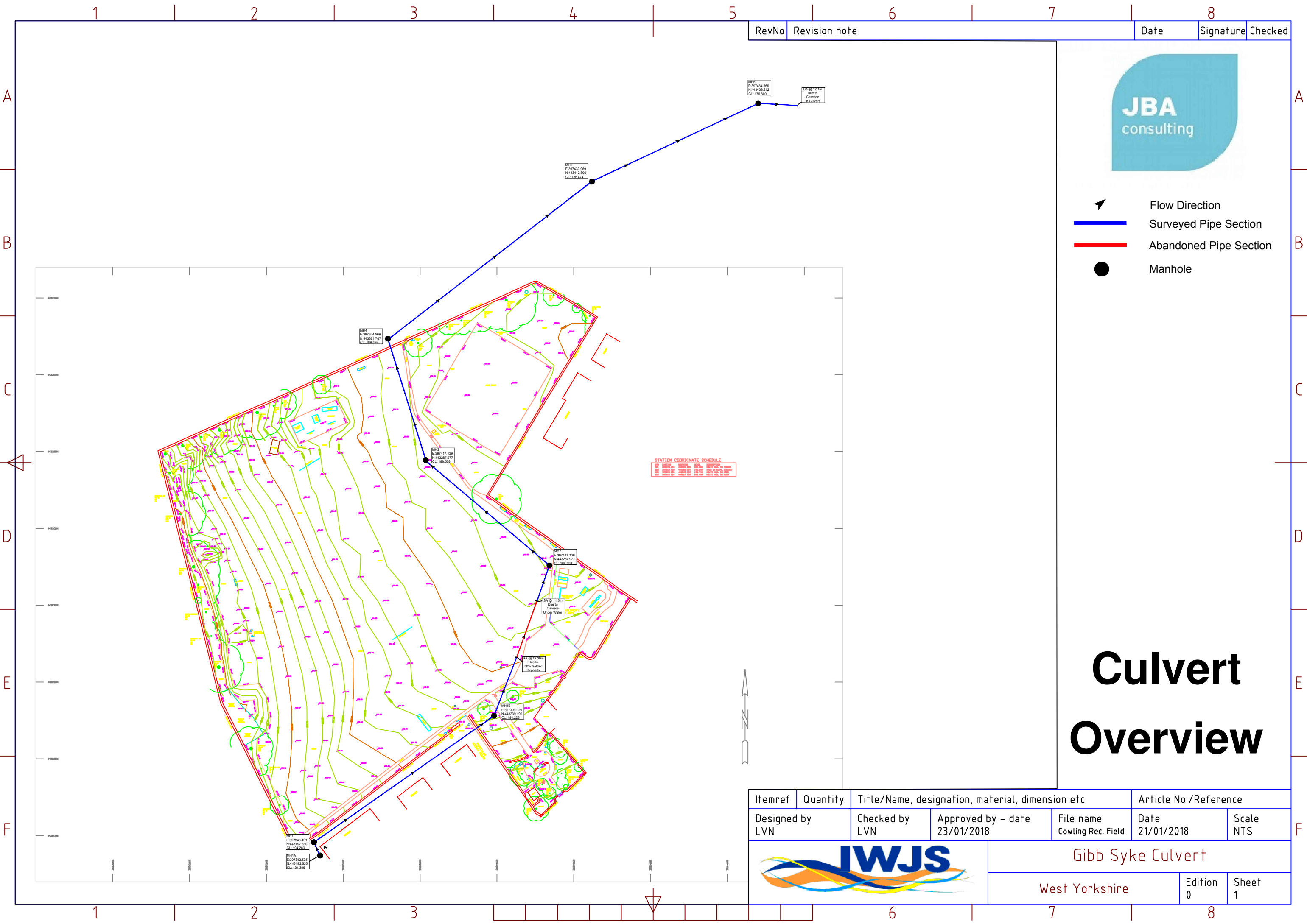
Project name : <b>2017s6518 Gibb Syke culvert(JBA)</b>	Project Number : <b>2017s6518</b>	Contact : <b>David Barton</b>	Date : <b>16/11/2017</b>
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No.	PLR	Dir.	Use	Shape / Size	Date	Mat.	Total Length	Insp. Length	Peak HWG	Peak Score	Grade	Mean Score	Total Score
1	MH1BX	U	W	C 900	16/11/2017	CO	70.00	19.30	-	0	1	0	0
2	MH2X	D	W	C 900	16/11/2017	CO	50.90	50.90	-	0	1	0	0
3	MH3X	D	W	C 900	16/11/2017	CO	39.30	39.30	-	0	1	0	0
4	MH4X	D	W	C 900	16/11/2017	CO	80.40	80.40	-	0	1	0	0
5	MH5X	D	W	C 900	16/11/2017	CO	58.60	58.60	-	0	1	0	0
6	MH6X	D	W	C 900	08/01/2018	CO	15.00	12.10	-	0	1	0	0
7	MH1AX	D	W	C 900	08/01/2018	CO	3.60	3.60	-	0	1	0	0
8	MH1X	D	W	C 900	08/01/2018	CO	69.90	69.90	-	0	1	0	0
9	MH1BX	D	W	C 900	08/01/2018	CO	70.00	11.50	-	0	1	0	0

<b>Grade Defect Report</b>								
	<b>No.</b>	<b>Street</b>	<b>Town or Village</b>	<b>Upstream MH</b>	<b>Inspection dir.</b>	<b>Downstream MH</b>	<b>Observation</b>	<b>Grade</b>
1	1	Keighley Road	Cowling	MH1B	MH2 (U/S) MH1B	MH2	Start node type, manhole,	0
2	1	Keighley Road	Cowling	MH1B	MH2 (U/S) MH1B	MH2	Water level, 20% of the ve	0
3	1	Keighley Road	Cowling	MH1B	MH2 (U/S) MH1B	MH2	Connection intruding, at 1	3
4	1	Keighley Road	Cowling	MH1B	MH2 (U/S) MH1B	MH2	Settled deposits, coarse, 3	4
5	1	Keighley Road	Cowling	MH1B	MH2 (U/S) MH1B	MH2	Other obstacles, brick or	5
6	1	Keighley Road	Cowling	MH1B	MH2 (U/S) MH1B	MH2	Settled deposits, coarse, 3	4
7	1	Keighley Road	Cowling	MH1B	MH2 (U/S) MH1B	MH2	Water level, 30% of the ve	0
8	1	Keighley Road	Cowling	MH1B	MH2 (U/S) MH1B	MH2	Settled deposits, coarse, 3	4
9	1	Keighley Road	Cowling	MH1B	MH2 (U/S) MH1B	MH2	Settled deposits, coarse, 4	4
10	1	Keighley Road	Cowling	MH1B	MH2 (U/S) MH1B	MH2	Settled deposits, coarse, 4	4
11	1	Keighley Road	Cowling	MH1B	MH2 (U/S) MH1B	MH2	Settled deposits, coarse, 5	4
12	1	Keighley Road	Cowling	MH1B	MH2 (U/S) MH1B	MH2	Settled deposits, coarse, 5	4
13	1	Keighley Road	Cowling	MH1B	MH2 (U/S) MH1B	MH2	Survey abandoned	0
14	2	Keighley Road	Cowling	MH2	MH2 (D/S) MH3	MH3	Start node type, manhole,	0
15	2	Keighley Road	Cowling	MH2	MH2 (D/S) MH3	MH3	Water level, 10% of the ve	0
16	2	Keighley Road	Cowling	MH2	MH2 (D/S) MH3	MH3	Finish node type, manhole	0
17	3	Keighley Road	Cowling	MH3	MH3 (D/S) MH4	MH4	Start node type, manhole,	0
18	3	Keighley Road	Cowling	MH3	MH3 (D/S) MH4	MH4	Water level, 10% of the ve	0
19	3	Keighley Road	Cowling	MH3	MH3 (D/S) MH4	MH4	Finish node type, manhole	0
20	4	Keighley Road	Cowling	MH4	MH4 (D/S) MH5	MH5	Start node type, manhole,	0
21	4	Keighley Road	Cowling	MH4	MH4 (D/S) MH5	MH5	Water level, 10% of the ve	0
22	4	Keighley Road	Cowling	MH4	MH4 (D/S) MH5	MH5	Infiltration, gushing at joint	0
23	4	Keighley Road	Cowling	MH4	MH4 (D/S) MH5	MH5	Finish node type, manhole	0
24	5	Keighley Road	Cowling	MH5	MH5 (D/S) MH6	MH6	Start node type, manhole,	0
25	5	Keighley Road	Cowling	MH5	MH5 (D/S) MH6	MH6	Water level, 10% of the ve	0
26	5	Keighley Road	Cowling	MH5	MH5 (D/S) MH6	MH6	Finish node type, manhole	0
27	6	Keighley Road	Cowling	MH6	MH6 (D/S) BRANCH	BRANCH	Start node type, manhole,	0
28	6	Keighley Road	Cowling	MH6	MH6 (D/S) BRANCH	BRANCH	Water level, 10% of the ve	0
29	6	Keighley Road	Cowling	MH6	MH6 (D/S) BRANCH	BRANCH	Line deviates down	0
30	6	Keighley Road	Cowling	MH6	MH6 (D/S) BRANCH	BRANCH	General remark	0
31	6	Keighley Road	Cowling	MH6	MH6 (D/S) BRANCH	BRANCH	Survey abandoned	0
32	7	Keighley Road	Cowling	MH1A	MH1A (D/S) MH1	MH1	Start node type, manhole,	0
33	7	Keighley Road	Cowling	MH1A	MH1A (D/S) MH1	MH1	Water level, 10% of the ve	0
34	7	Keighley Road	Cowling	MH1A	MH1A (D/S) MH1	MH1	Finish node type, manhole	0
35	8	Keighley Road	Cowling	MH1	MH1 (D/S) MH1B	MH1B	Start node type, manhole,	0
36	8	Keighley Road	Cowling	MH1	MH1 (D/S) MH1B	MH1B	Water level, 10% of the ve	0
37	8	Keighley Road	Cowling	MH1	MH1 (D/S) MH1B	MH1B	Finish node type, manhole	0
38	9	Keighley Road	Cowling	MH1B	MH1B (D/S) MH2	MH2	Start node type, manhole,	0
39	9	Keighley Road	Cowling	MH1B	MH1B (D/S) MH2	MH2	Water level, 10% of the ve	0



<b>Grade Defect Report</b>								
	<b>No.</b>	<b>Street</b>	<b>Town or Village</b>	<b>Upstream MH</b>	<b>Inspection dir.</b>	<b>Downstream MH</b>	<b>Observation</b>	<b>Grade</b>
40	9	Keighley Road	Cowling	MH1B	MH1B (D/S) MH2	MH2	Water level, 50% of the ve	0
41	9	Keighley Road	Cowling	MH1B	MH1B (D/S) MH2	MH2	Loss of vision, camera un	0
42	9	Keighley Road	Cowling	MH1B	MH1B (D/S) MH2	MH2	General remark	0
43	9	Keighley Road	Cowling	MH1B	MH1B (D/S) MH2	MH2	Survey abandoned	0



RevNo	Revision note	Date	Signature	Checked
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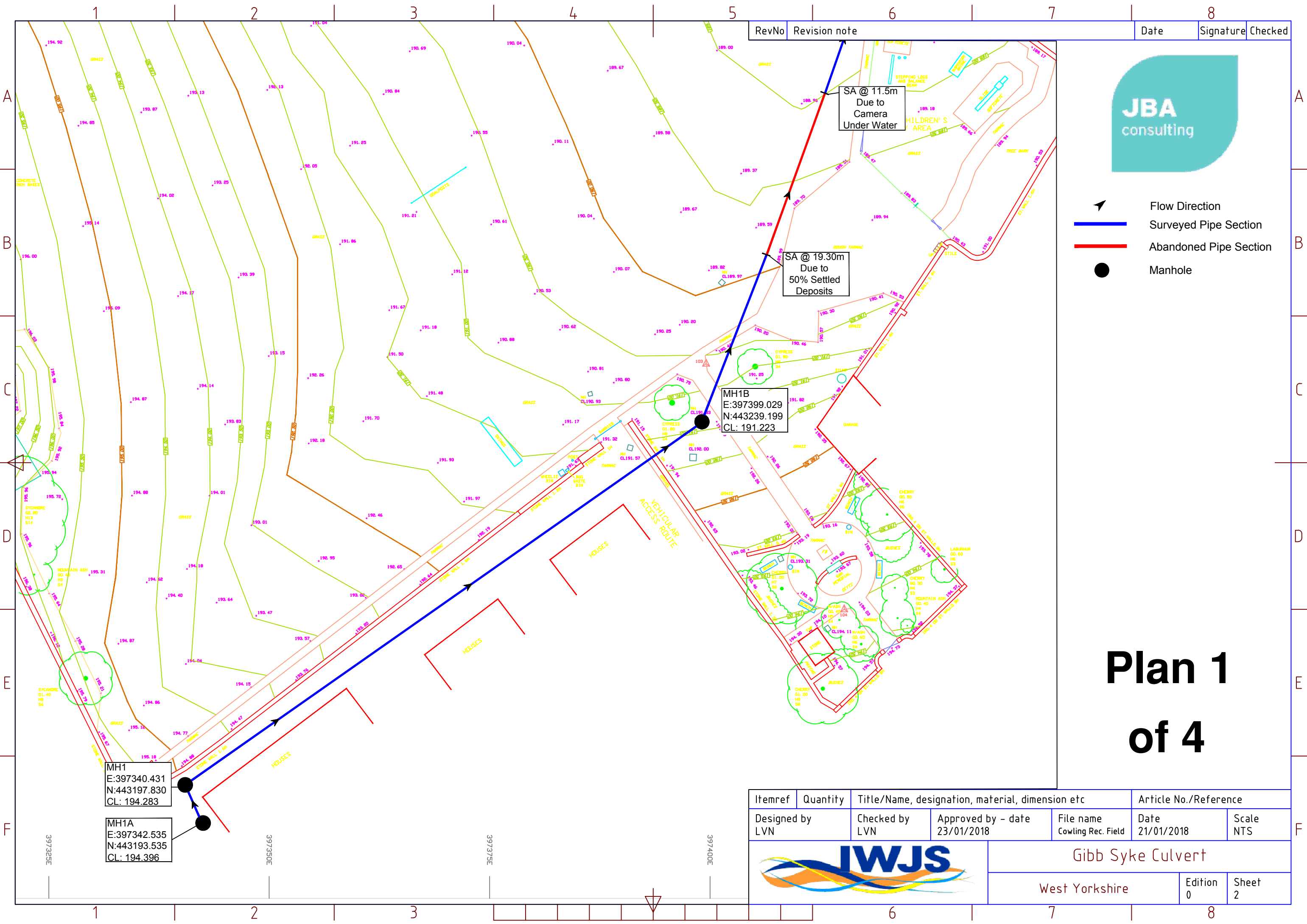
- Flow Direction
- Surveyed Pipe Section
- Abandoned Pipe Section
- Manhole

STATION COORDINATE SCHEDULE

Station	Easting	Northing	Chainage
MP10	397399.029	443225.199	191.223
MP11	397340.431	443197.828	194.283
MP12	397417.139	443287.877	198.658
MP13	397430.999	443412.936	199.624
MP14	397364.569	443281.797	199.858
MP15	397454.899	443438.312	179.899

# Culvert Overview

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference		
Designed by LVN	Checked by LVN	Approved by - date 23/01/2018	File name Cowling Rec. Field	Date 21/01/2018	Scale NTS
		Gibb Syke Culvert			
		West Yorkshire	Edition 0	Sheet 1	



RevNo	Revision note	Date	Signature	Checked
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- Flow Direction
- Surveyed Pipe Section
- Abandoned Pipe Section
- Manhole

# Plan 1 of 4

MH1  
E:397340.431  
N:443197.830  
CL: 194.283

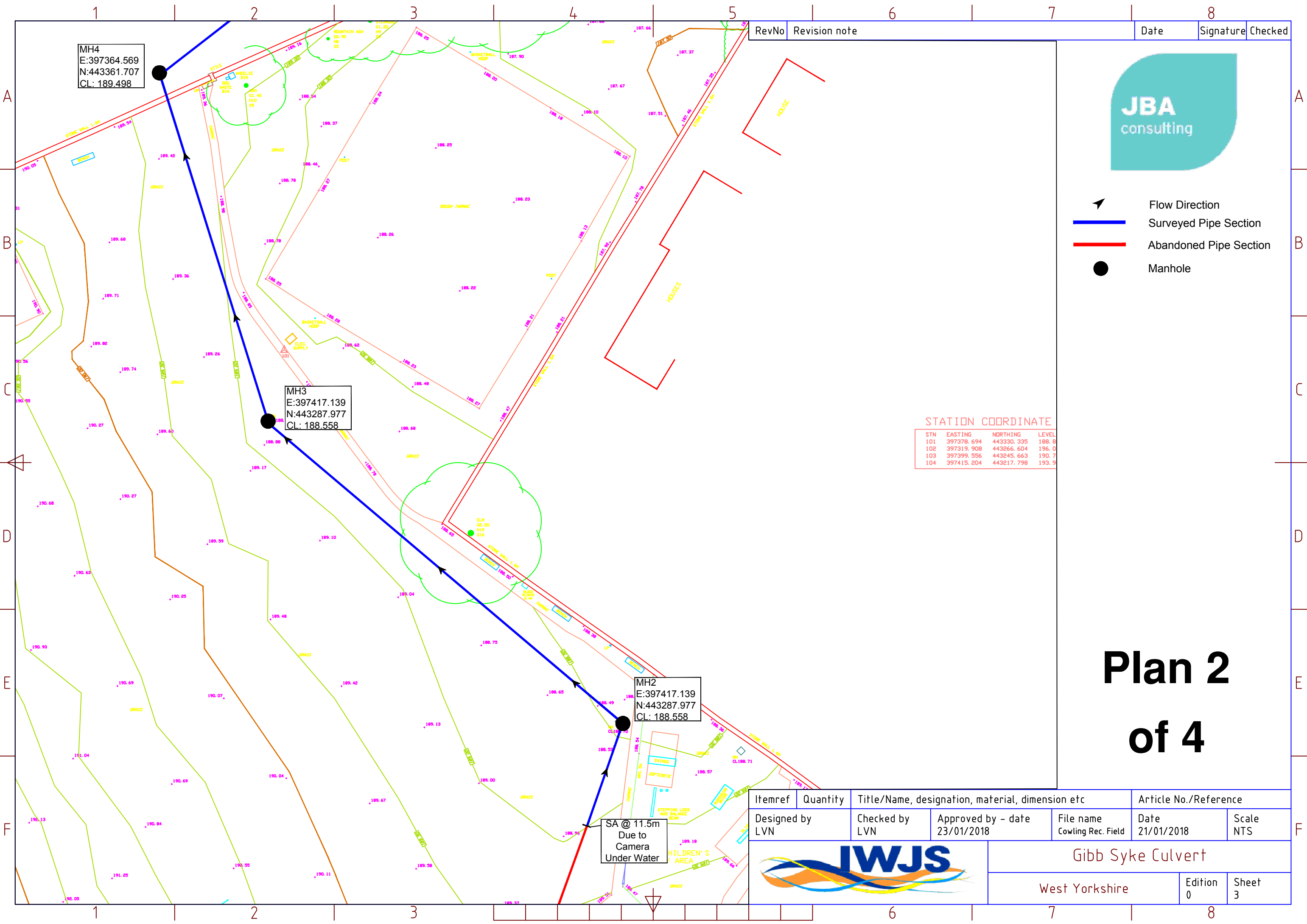
MH1A  
E:397342.535  
N:443193.535  
CL: 194.396

SA @ 11.5m  
Due to  
Camera  
Under Water

SA @ 19.30m  
Due to  
50% Settled  
Deposits

MH1B  
E:397399.029  
N:443239.199  
CL: 191.223

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference		
Designed by LVN	Checked by LVN	Approved by - date 23/01/2018	File name Cowling Rec. Field	Date 21/01/2018	Scale NTS
		Gibb Syke Culvert			
		West Yorkshire	Edition 0	Sheet 2	



RevNo	Revision note	Date	Signature	Checked
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- Flow Direction
- Surveyed Pipe Section
- Abandoned Pipe Section
- Manhole

STATION COORDINATE

STN	EASTING	NORTHING	LEVEL
101	397378.694	443330.335	188.8
102	397319.908	443266.604	196.0
103	397399.556	443245.663	190.7
104	397415.204	443217.798	193.9

# Plan 2 of 4

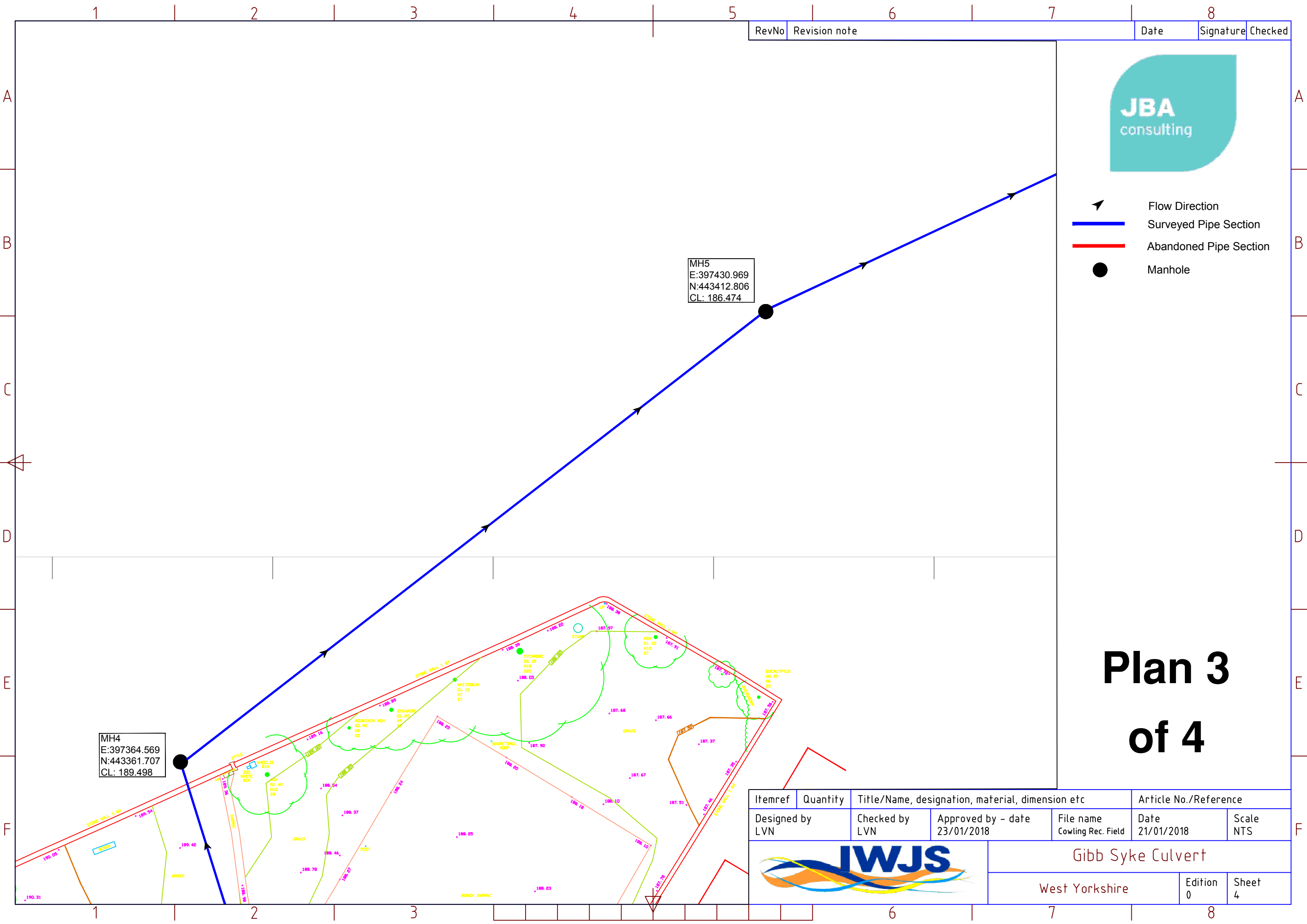
Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference		
Designed by LVN	Checked by LVN	Approved by - date 23/01/2018	File name Cowling Rec. Field	Date 21/01/2018	Scale NTS
		Gibb Syke Culvert			
		West Yorkshire	Edition 0	Sheet 3	

MH4  
E:397364.569  
N:443361.707  
CL: 189.498

MH3  
E:397417.139  
N:443287.977  
CL: 188.558

MH2  
E:397417.139  
N:443287.977  
CL: 188.558

SA @ 11.5m  
Due to  
Camera  
Under Water



RevNo	Revision note	Date	Signature	Checked
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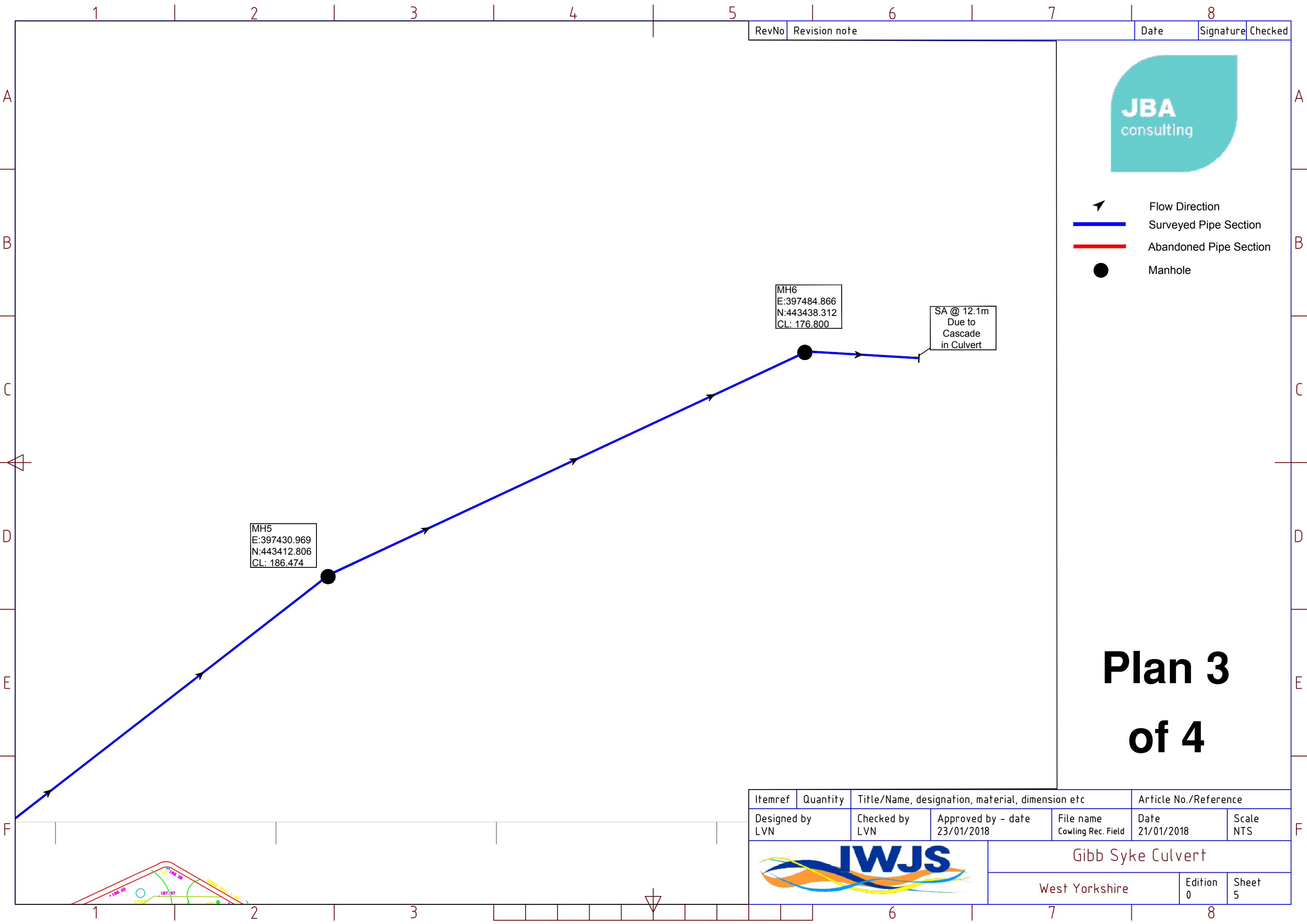
- Flow Direction
- Surveyed Pipe Section
- Abandoned Pipe Section
- Manhole

MH5  
 E:397430.969  
 N:443412.806  
 CL: 186.474

MH4  
 E:397364.569  
 N:443361.707  
 CL: 189.498





# Plan 3 of 4

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference		
Designed by LVN	Checked by LVN	Approved by - date 23/01/2018	File name Cowling Rec. Field	Date 21/01/2018	Scale NTS
		Gibb Syke Culvert			
		West Yorkshire	Edition 0	Sheet 4	



RevNo	Revision note	Date	Signature	Checked
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-  Flow Direction
-  Surveyed Pipe Section
-  Abandoned Pipe Section
-  Manhole

MH6  
E: 397484.866  
N: 443438.312  
CL: 176.800

SA @ 12.1m  
Due to  
Cascade  
in Culvert

MH5  
E: 397430.969  
N: 443412.806  
CL: 186.474

# Plan 3 of 4

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference		
Designed by LVN	Checked by LVN	Approved by - date 23/01/2018	File name Cowling Rec. Field	Date 21/01/2018	Scale NTS
		Gibb Syke Culvert			
		West Yorkshire	Edition 0	Sheet 5	