

**From:** [REDACTED]  
**To:** [Deegan, Ryan](#); [Robb, Michael](#)  
**Cc:** [Martin, Jim](#); [REDACTED]  
**Subject:** RE: Consent for discharge and pipe crossing for NI Water Emergency Overflow at Hunters Mill, Downpatrick.  
**Date:** 21 September 2016 12:12:44  
**Attachments:** [image001.png](#)  
[image002.png](#)  
[image003.jpg](#)  
[KS374 \(E1166\) Consent for discharge .msg](#)

---

Ryan/Robb

Ahead of the NIW/Rivers Agency meeting tomorrow and further to our meeting and additional information supplied as requested, have you been able to consider the Consent for discharge for NI Water Emergency Overflow at Hunters Mill, Downpatrick?

Thanks and Regards

[REDACTED]  
[REDACTED]  
Senior Project Sponsor  
**northern ireland water**  
Newry Office  
Carnbane Industrial Estate  
Tandragee Road  
Newry  
BT35 6QJ  
Tel: 028 90 354813 Ext 32227  
Mobile: [REDACTED]  
e-mail: [REDACTED]  
Web: [www.niwater.com](http://www.niwater.com)

**Stay Safe – Zero Harm**



---

**From:** Deegan, Ryan [mailto:[REDACTED]]  
**Sent:** 30 August 2016 09:58  
**To:** [REDACTED]  
**Cc:** [Martin, Jim](#); [Robb, Michael](#)  
**Subject:** RE: Consent for discharge and pipe crossing for NI Water Emergency Overflow at Hunters Mill, Downpatrick.

\*\*\*External Email\*\*\*

FAO: [REDACTED]

Just to confirm Rivers Agency will be attending the meeting tomorrow (31/8/16) at 10.30 to discuss discharge consent.

**Yours faithfully**



**Ryan Deegan  
Engineering Section**



**Ryan Deegan  
Engineering Section  
Ravarnet House,  
Altona Road,  
Lisburn, BT27 5QB**

**TEL: 028 9260 6100**

**Ext:** [REDACTED]

**From:** [REDACTED]  
**To:** [Deegan, Ryan](#); [Morhall, Walter](#)  
**Cc:** [REDACTED]  
**Subject:** FW: E1166 Discharge from Sewerage Works Downpatrick to Plank Drain- Notes of Site meeting, 31 August 2016  
**Date:** 26 September 2016 11:37:03  
**Attachments:** [image001.jpg](#)  
[E1166-100 General Arrangement As Built.pdf](#)  
[E1166-102A Rivers Connection Manhole.pdf](#)

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Ryan/Walter

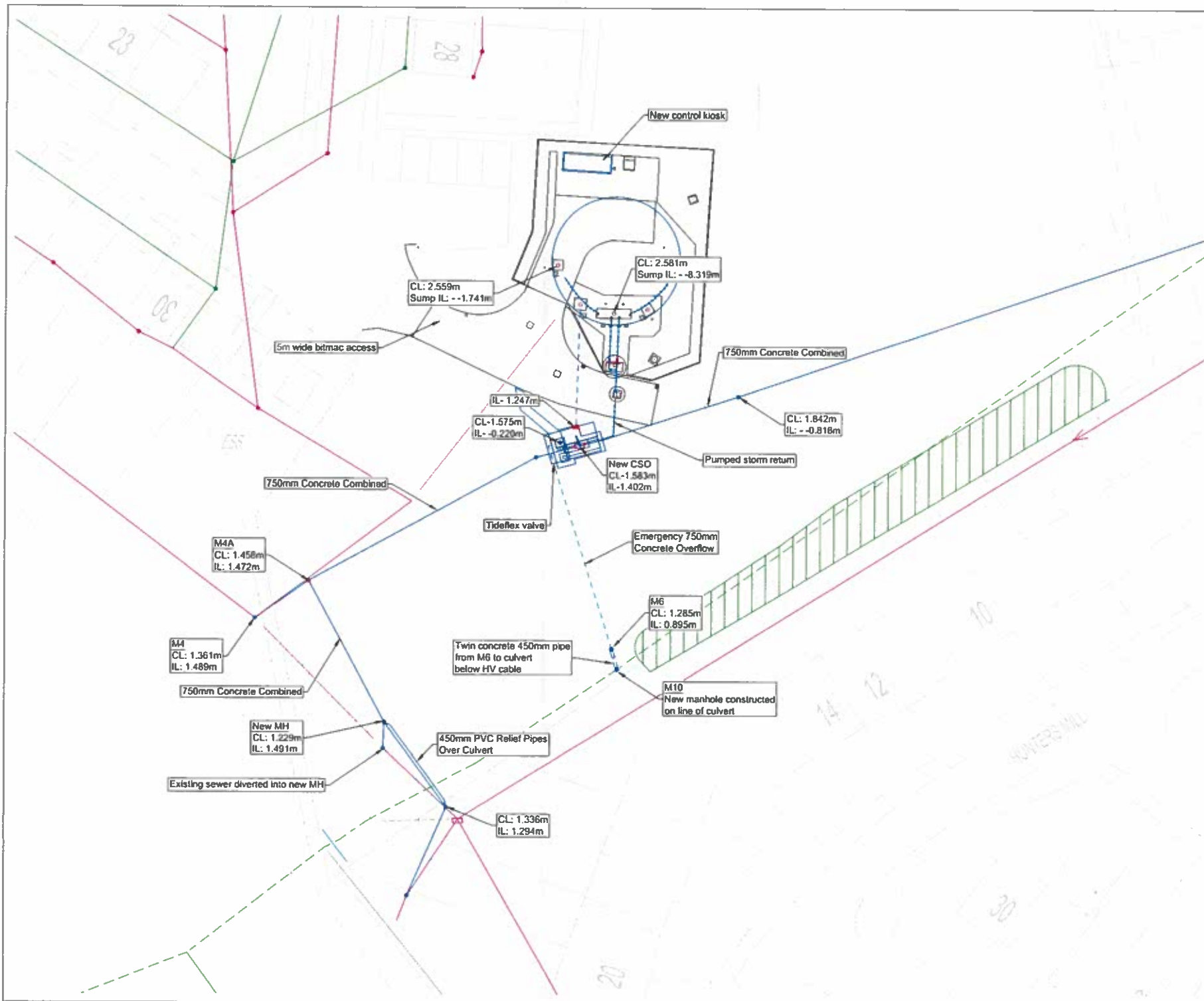
Please find attached up to date as built drawings for Hunters Mill Rivers Agency pipe connection as required.

If you need any further information please let me know.

Regards

[REDACTED] [REDACTED]  
Senior Project Sponsor  
**northern ireland water**  
Newry Office  
Carnbane Industrial Estate  
Tandragee Road  
Newry  
BT35 6QJ  
Tel: 028 90 354813 Ext 32227  
Mobile [REDACTED]  
e-mail: [REDACTED]  
Web: [www.niwater.com](http://www.niwater.com)

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- NOTES
- - - - - Overflow Pipeline
  - - - - - Proposed Return
  - Pumping Main
  - - - - - Storm Pipe
  - - - - - Combined Sewer
  - - - - - Abandoned Combined Sewer
  - - - - - Existing Foul Sewer

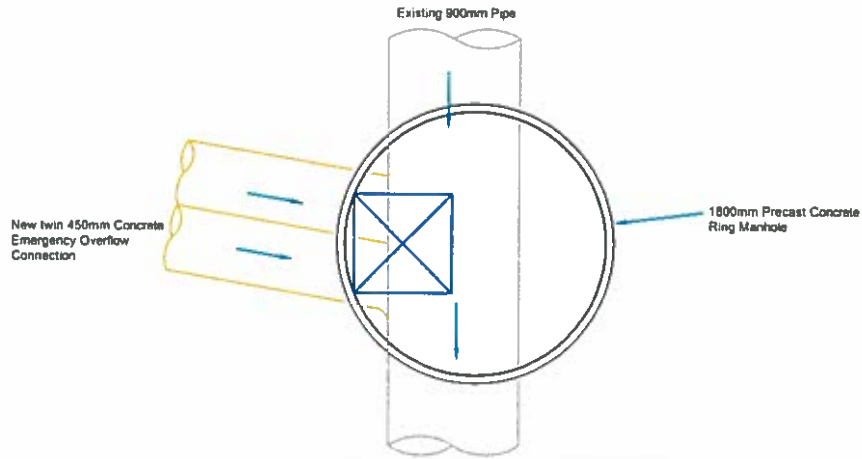
# AS BUILT

**WARNING**  
 The information provided on this drawing in respect of statutory or other services information cannot be guaranteed to be accurate. It is given for assistance and general guidance and neither the authors nor the client accept any responsibility for the information provided and does not warrant the accuracy of same.

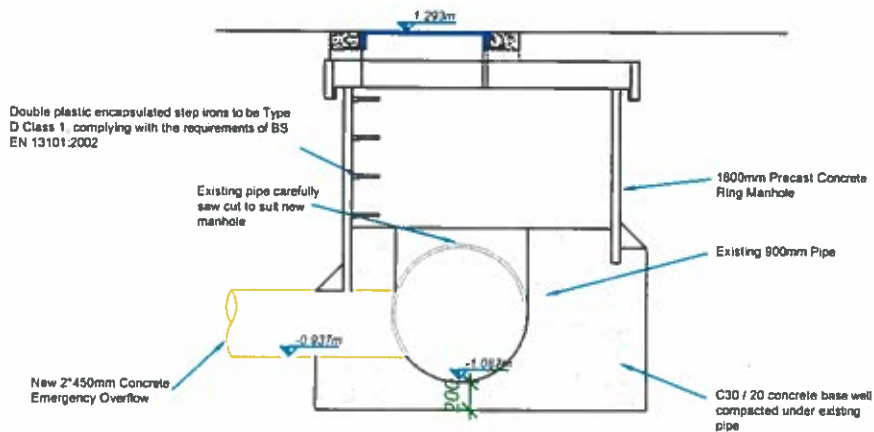
M ADAM  
 475 Colindale Avenue  
 London NW9 1BE  
 T: 020 8996 3000  
 F: 020 8996 4141  
 email@madamdesign.co.uk  
 www.madamdesign.co.uk

**STORAGE SCHEME GENERAL ARRANGEMENT AS BUILT**  
 1:500 @ A1  
 23/05/19  
 22/05/19  
 23/05/19

E1166  
 100



**HUNTERS MILL RIVERS AGENCY CONNECTION MANHOLE PLAN**  
1-50



**HUNTERS MILL RIVERS AGENCY CONNECTION MANHOLE SECTION**  
1-50



McAdam Design Ltd, 1c Montgomery House  
478 Castlereagh Road, BELFAST, BT5 6BG  
T 028 9040 2000 www.mcadamdesign.co.uk  
F 028 9079 4144 admin@mcadamdesign.co.uk

Client	NORTHERN IRELAND WATER
Project	HUNTERS MILL
Drawing	HUNTERS MILL RA CONNECTION MANHOLE
Scale	1:50 @A4

Rev	Date	Description	Des	Chk	App
A	26.09.16	Pipe size corrected	SW	NA	FK
Drawn	S.W	Checked	N.A	Approved	F.K
Date	22-08-16	Date	22-08-16	Date	22-08-16
Project No	E1166	Drawing No	102	Revision	A
All dimensions are in millimetres. Finished dimensions to be taken in preference to scaled dimensions. Dimensions to be checked on site. © 2010 McAdam Design Ltd					

**From:** [Morhall, Walter](#)  
**To:** [Deegan, Ryan](#)  
**Cc:** [Dalzell, Kenny](#); [Robb, Michael](#); [Martin, Jim](#)  
**Subject:** FW: E1166 Discharge from Sewerage Works Downpatrick to Plank Drain- Notes of Site meeting, 31 August 2016  
**Date:** 28 September 2016 08:47:45  
**Attachments:** [image001.jpg](#)  
[E1166-100 General Arrangement As Built.pdf](#)  
[E1166-102A Rivers Connection Manhole.pdf](#)

---

Ryan

Given that NI Water have provided the information requested, can you issue a Schedule 6 consent for their works.

Walter

---

**From:** [REDACTED]  
**Sent:** 26 September 2016 11:37  
**To:** Deegan, Ryan; Morhall, Walter  
**Cc:** Millar, Graham  
**Subject:** FW: E1166 Discharge from Sewerage Works Downpatrick to Plank Drain- Notes of Site meeting, 31 August 2016

Ryan/Walter

Please find attached up to date as built drawings for Hunters Mill Rivers Agency pipe connection as required.  
If you need any further information please let me know.

Regards

[REDACTED] [REDACTED]  
Senior Project Sponsor  
**northern ireland water**  
Newry Office  
Carnbane Industrial Estate  
Tandragee Road  
Newry  
BT35 6QJ  
Tel: 028 90 354813 Ext 32227  
Mobile: [REDACTED]  
e-mail: [REDACTED]  
Web: [www.niwater.com](http://www.niwater.com)

**Stay Safe – Zero Harm**





## Eastern Region / Rivers Agency Operations

██████████  
Senior Project Sponsor,  
Northern Ireland Water,  
Newry Office,  
Carnbane Industrial Estate  
Tandragee Road,  
Newry, BT35 6QJ

Dear ██████████

### **RE: CONSENT FOR NORTHERN IRELAND WATER EMERGENCY OVERFLOW AT HUNTERS MILL, DOWNPATRICK.**

Thank you for your e-mail dated the 26th September 2016 referring to the above. From a drainage aspect my comments are as follows.

This site is not affected by a watercourse which is designated within the meaning of the Drainage (Northern Ireland) Order 1973.

Rivers Agency consents to your proposal to discharge 358 l/s Emergency Overflow to the watercourse as per Drawing Number's E1166 100 and E1166 102 Rev A. This watercourse is designated within the meaning of the Drainage (Northern Ireland) Order 1973 and known to Rivers Agency as the Plank Drain (U3303).

The overflow pipe should be turned in the direction of flow and anti scour measures taken to prevent bank and bed erosion.

If you deem it necessary to fit a Tideflex valve the continuing maintenance of this valve will be the responsibility of Northern Ireland Water.

Rivers Agency cannot comment on the quality of discharge and you should seek consent / approval from the Northern Ireland Environment Agency (NIEA) in this regard.

In giving its consent the Agency would stress that it is your responsibility to ensure that the proposed works do not result in any obstruction to flow arising from blockage, structural failure, poor workmanship or any other reasons. Similarly, it is your responsibility to make provision for existing drainage. Moreover, if in the future, another landowner wishes to drain land adjoining this site and within the same catchment he should not be prevented from doing so.

This consent is valid for a period of 12 months from the date of this letter. If proposals are not completed within this period of time they should be resubmitted for further appraisal.



Department for

# Infrastructure

An Roinn

## Bonneagair

[www.infrastructure-ni.gov.uk](http://www.infrastructure-ni.gov.uk)

Ravarnet House  
36 Altona Road  
Lisburn, BT27 5QB  
Tel: 028 92 606 100  
Fax: 028 92 606 111

Your reference: E1166  
Our reference: DA2-13-1879

Date: 28th September 2016



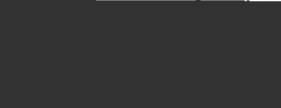
Applicants should note that, in accordance with Para 11 of Schedule 6 of the Drainage (NI) Order 1973, any consent/approvals given by Rivers Agency under Schedule 6 Shall not affect the liability of any applicant to comply with other legislation relevant to works undertaken in pursuit of such consents/approvals.

It is your responsibility to obtain all necessary way leaves to carry out these works.

Under the terms of Schedule 6 of the Drainage (Northern Ireland) Order 1973 the applicant must submit to Rivers Agency for its consent any proposal to carry out works which might affect a watercourse.

Please quote above reference number on any further correspondence

Yours faithfully



Ryan Deegan  
Engineering Section



**From:** [REDACTED]  
**To:** [Deegan, Ryan](#); [Morhall, Walter](#)  
**Cc:** [REDACTED]; [Robb, Michael](#)  
**Subject:** RE: E1166 Discharge from Sewerage Works Downpatrick to Plank Drain- Notes of Site meeting, 31 August 2016  
**Date:** 03 October 2016 15:37:37  
**Attachments:** [image001.jpg](#)

---

Ryan/Walter/Robb

I received the ERO discharge consent for Hunters Mill, Downpatrick.

Thank-you for your help in resolving this matter.

I note the maintenance issues and this will be highlighted to my Operational colleagues.

Regards

[REDACTED]  
[REDACTED]  
Senior Project Sponsor  
**northern ireland water**  
Newry Office  
Carnbane Industrial Estate  
Tandragee Road  
Newry  
BT35 6QJ  
Ext. [REDACTED]  
e-mail: [REDACTED]  
Web: [www.niwater.com](http://www.niwater.com)

***Stay Safe – Zero Harm***



---

**From:** [REDACTED]  
**Sent:** 26 September 2016 11:37  
**To:** [Deegan, Ryan](#); [REDACTED]; [Morhall, Walter](#)  
**CC:** [REDACTED]  
**Subject:** FW: E1166 Discharge from Sewerage Works Downpatrick to Plank Drain- Notes of Site meeting, 31 August 2016

Ryan/Walter

Please find attached up to date as built drawings for Hunters Mill Rivers Agency pipe connection as required.

If you need any further information please let me know.

Regards

[REDACTED]  
[REDACTED]

Senior Project Sponsor

**northern ireland water**

Newry Office

Carnbane Industrial Estate

Tandragee Road

Newry

BT35 6QJ

Tel:

Mobile

.com

Web: [www.niwater.com](http://www.niwater.com)

***Stay Safe – Zero Harm***



**From:** Deegan, Ryan [mailto: [REDACTED]]  
**Sent:** 21 September 2016 15:11  
**To:** [REDACTED]  
**Cc:** Morhall, Walter  
**Subject:** FW: Discharge from Sewerage Works Downpatrick to Plank Drain- Notes of Site meeting, 31 August 2016

\*\*\*External Email\*\*\*  
[REDACTED]

Further to your e-mail received earlier today, please see Mr Morhalls e-mail to Regional Engineer Mr Jim Martin who is currently on leave.

Regards,  
Ryan.

---

**From:** Morhall, Walter  
**Sent:** 21 September 2016 14:59  
**To:** Martin, Jim  
**Cc:** Robb, Michael; Deegan, Ryan  
**Subject:** RE: Discharge from Sewerage Works Downpatrick to Plank Drain- Notes of Site meeting, 31 August 2016

Jim

Based on Mr Robbs notes of his on site meeting with NIW and their consultant and previous emails indicating a reduction in volume and frequency of peak flows, while I would still have concerns about the capacity of the Plank Drain, given the circumstances I would be content to have Schedule 6 approval issued provided we receive up to date "as constructed" drawings of the connection etc.

Walter

---

**From:** Robb, Michael  
**Sent:** 05 September 2016 12:48  
**To:** Morhall, Walter  
**Cc:** Martin, Jim; Deegan, Ryan  
**Subject:** Discharge from Sewerage Works Downpatrick to Plank Drain- Notes of Site meeting, 31 August 2016

Walter,

Please see attached notes of recent site meeting with NIW and their consulting engineer adjacent to the Plank Drain, Downpatrick.

Ryan, please liaise with [REDACTED] and file.

Michael

**From:** [Morhall, Walter](#)  
**To:** [Martin, Jim](#)  
**Cc:** [Robb, Michael](#); [Deegan, Ryan](#)  
**Subject:** RE: Discharge from Sewerage Works Downpatrick to Plank Drain- Notes of Site meeting, 31 August 2016  
**Date:** 21 September 2016 14:59:12

---

Jim

Based on Mr Robbs notes of his on site meeting with NIW and their consultant and previous emails indicating a reduction in volume and frequency of peak flows, while I would still have concerns about the capacity of the Plank Drain, given the circumstances I would be content to have Schedule 6 approval issued provided we receive up to date "as constructed" drawings of the connection etc.

Walter

---

**From:** Robb, Michael  
**Sent:** 05 September 2016 12:48  
**To:** Morhall, Walter  
**Cc:** Martin, Jim; Deegan, Ryan  
**Subject:** Discharge from Sewerage Works Downpatrick to Plank Drain- Notes of Site meeting, 31 August 2016

Walter,

Please see attached notes of recent site meeting with NIW and their consulting engineer adjacent to the Plank Drain, Downpatrick.

Ryan, please liaise with [REDACTED] and file.

Michael

**From:** [Morhall, Walter](#)  
**To:** [Deegan, Ryan](#); [Robb, Michael](#); [Dalzell, Kenny](#)  
**Subject:** FW: Discharge from Sewerage Works Downpatrick to Plank Drain- Notes of Site meeting, 31 August 2016  
**Date:** 26 September 2016 16:26:54

---

**From:** Martin, Jim  
**Sent:** 26 September 2016 09:00  
**To:** Morhall, Walter  
**Subject:** RE: Discharge from Sewerage Works Downpatrick to Plank Drain- Notes of Site meeting, 31 August 2016

Agreed Walter.

In the longer term a Pre Feasibility Study Request to HQ may be appropriate.

Discuss as necessary.

Jim

---

**From:** Morhall, Walter  
**Sent:** 21 September 2016 14:59  
**To:** Martin, Jim  
**Cc:** Robb, Michael; Deegan, Ryan  
**Subject:** RE: Discharge from Sewerage Works Downpatrick to Plank Drain- Notes of Site meeting, 31 August 2016

Jim

Based on Mr Robbs notes of his on site meeting with NIW and their consultant and previous emails indicating a reduction in volume and frequency of peak flows, while I would still have concerns about the capacity of the Plank Drain, given the circumstances I would be content to have Schedule 6 approval issued provided we receive up to date "as constructed" drawings of the connection etc.

Walter

---

**From:** Robb, Michael  
**Sent:** 05 September 2016 12:48  
**To:** Morhall, Walter  
**Cc:** Martin, Jim; Deegan, Ryan  
**Subject:** Discharge from Sewerage Works Downpatrick to Plank Drain- Notes of Site meeting, 31 August 2016

Walter,

Please see attached notes of recent site meeting with NIW and their consulting engineer adjacent to the Plank Drain, Downpatrick.

Ryan, please liaise with [REDACTED] and file.

Michael

# **Manhole Survey Report**

**Selection**

**16 December 2022**

**WRc Standard**

## Manhole Condition Summary:

Number of Manholes: 2

Condition (Y if attention required)

Manhole Number	Function	Cover	Irons	Shaft	Chamber	Benching	Other	Remarks
SJ48438901	S	-	-	-	-	-	-	-
SJ48448002	S	-	-	-	-	-	-	-



# MANHOLE RECORD CARD

Powered by



NODE REFERENCE	SJ48438901
COORDINATES (m)	348807 31,343985 63
DRAINAGE AREA CODE	-
SURVEY DATE	29 May 2013

LOCATION	Carpark
----------	---------

YEAR LAID	-	STATUS	WC	FUNCTION	S	NODE TYPE	M	COND ITION	SIZE (mm)			TOXIC ATMOSPHERE	N	
COVER	SHAPE	S	HINGED	Y	LOCK	N	DUTY	H	-	600	X	600	GAS TYPE	-
SHAFT	SIDE ENTRY	N	REGULAT COURSES	3	DEPTH (mm)	400			-	600	X	600	EVIDENCE OF VERMIN	N
CHAMBER	SOFFIT	-	STEPS	10	LADDERS	0	LNDGS	1	-	1200	X	1200	CONSTRUCTI ON CODE	P

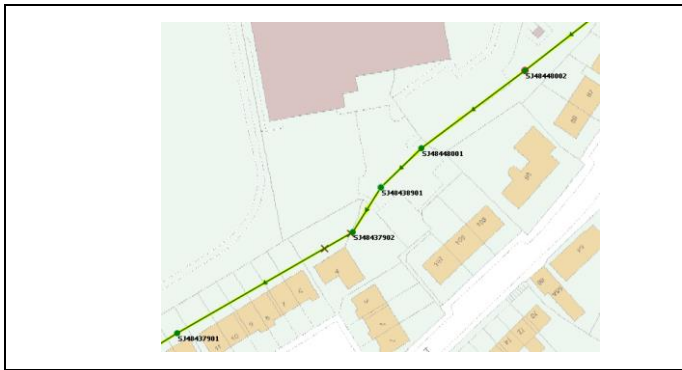
STRUCTURAL CONDITION	-	MAINTENANCE CONDITION	-	DEPTH OF FLOW (mm)	-	DEPTH OF SILT (mm)	-	HEIGHT SURCH (mm)	-	COVER LEVEL (m AD)	-
----------------------	---	-----------------------	---	--------------------	---	--------------------	---	-------------------	---	--------------------	---

INCOMING PIPES	UPSTREAM REFERENCE	PIPE SHAPE	PIPE SIZE (mm)		BACKDROP DIAM (mm)	PIPE MATERIA L		LINING	DEPTH FROM COVER (m)	INVERT LEVEL (m AD)
A	SJ48448001	C	300	X	-	CO	-	-	4 300	
B				X						
C				X						
D				X						
E				X						
F				X						

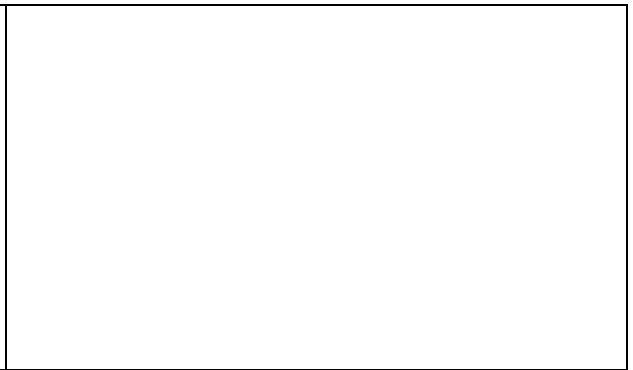
OUTGOING PIPES	DOWNSTREAM REFERENCE	PIPE SHAPE	PIPE SIZE (mm)		BACKDROP DIAM (mm)	COND	CRITY	PIPE MATERIA L		LINING	DEPTH FROM COVER (m)	INVERT LEVEL (m AD)
X	SJ48437902	C	450	X	-	-	-	CO	-	-	4 300	
Y				X								

CONDITION (Y if action required)	COVER	N	IRONS / LADDER S	N	SHAFT	N	CHAMBE R	N	BENCHING	N	OTHER	N
----------------------------------	-------	---	------------------	---	-------	---	----------	---	----------	---	-------	---

**REMARKS**  
-  
depth from surface to landing 3400mm



LOCATION SKETCH -



PLAN SKETCH -



LOCATION IMAGE -



INTERNAL IMAGE -

# MANHOLE RECORD CARD

Powered by



NODE REFERENCE	SJ48448002
COORDINATES (m)	348851 03,344021 01
DRAINAGE AREA CODE	-
SURVEY DATE	29 May 2013

LOCATION	Beside sub station
----------	--------------------

YEAR LAID	-	STATUS	WC	FUNCTION	S	NODE TYPE	M	COND ITION	SIZE (mm)			TOXIC ATMOSPHERE	N	
COVER	SHAPE	S	HINGED	Y	LOCK	N	DUTY	H	-	600	X	600	GAS TYPE	-
SHAFT	SIDE ENTRY	N	REGULAT COURSES	0	DEPTH (mm)	330			-	600	X	600	EVIDENCE OF VERMIN	N
CHAMBER	SOFFIT	-	STEPS	4	LADDERS	0	LNDGS	1	-	1250	X	1250	CONSTRUCTI ON CODE	P

STRUCTURAL CONDITION	-	MAINTENANCE CONDITION	-	DEPTH OF FLOW (mm)	-	DEPTH OF SILT (mm)	-	HEIGHT SURCH (mm)	-	COVER LEVEL (m AD)	-
----------------------	---	-----------------------	---	--------------------	---	--------------------	---	-------------------	---	--------------------	---

INCOMING PIPES	UPSTREAM REFERENCE	PIPE SHAPE	PIPE SIZE (mm)		BACKDROP DIAM (mm)	PIPE MATERIA L		DEPTH FROM COVER (m)	INVERT LEVEL (m AD)
						L	LINING		
A	SJ48449001	C	300	X	-	CO	-	2 370	
B				X					
C				X					
D				X					
E				X					
F				X					

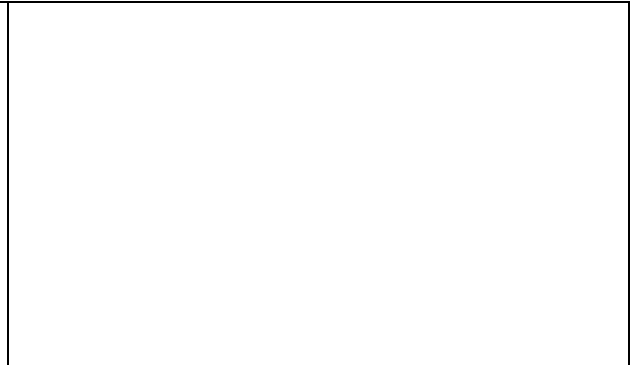
OUTGOING PIPES	DOWNSTREAM REFERENCE	PIPE SHAPE	PIPE SIZE (mm)		BACKDROP DIAM (mm)	COND	CRITY	PIPE MATERIA L		DEPTH FROM COVER (m)	INVERT LEVEL (m AD)
								L	LINING		
X	SJ48448001	C	300	X	-	-	CO	-	2 370		
Y				X							

CONDITION (Y if action required)	COVER	N	IRONS / LADDER	N	SHAFT	N	CHAMBE R	N	BENCHING	N	OTHER	N
----------------------------------	-------	---	----------------	---	-------	---	----------	---	----------	---	-------	---

**REMARKS**  
 -  
 DEPTH FROM SURFACE TO LANDING 1330mm



LOCATION SKETCH -



PLAN SKETCH -



LOCATION IMAGE -



INTERNAL IMAGE -

## Validation Report:

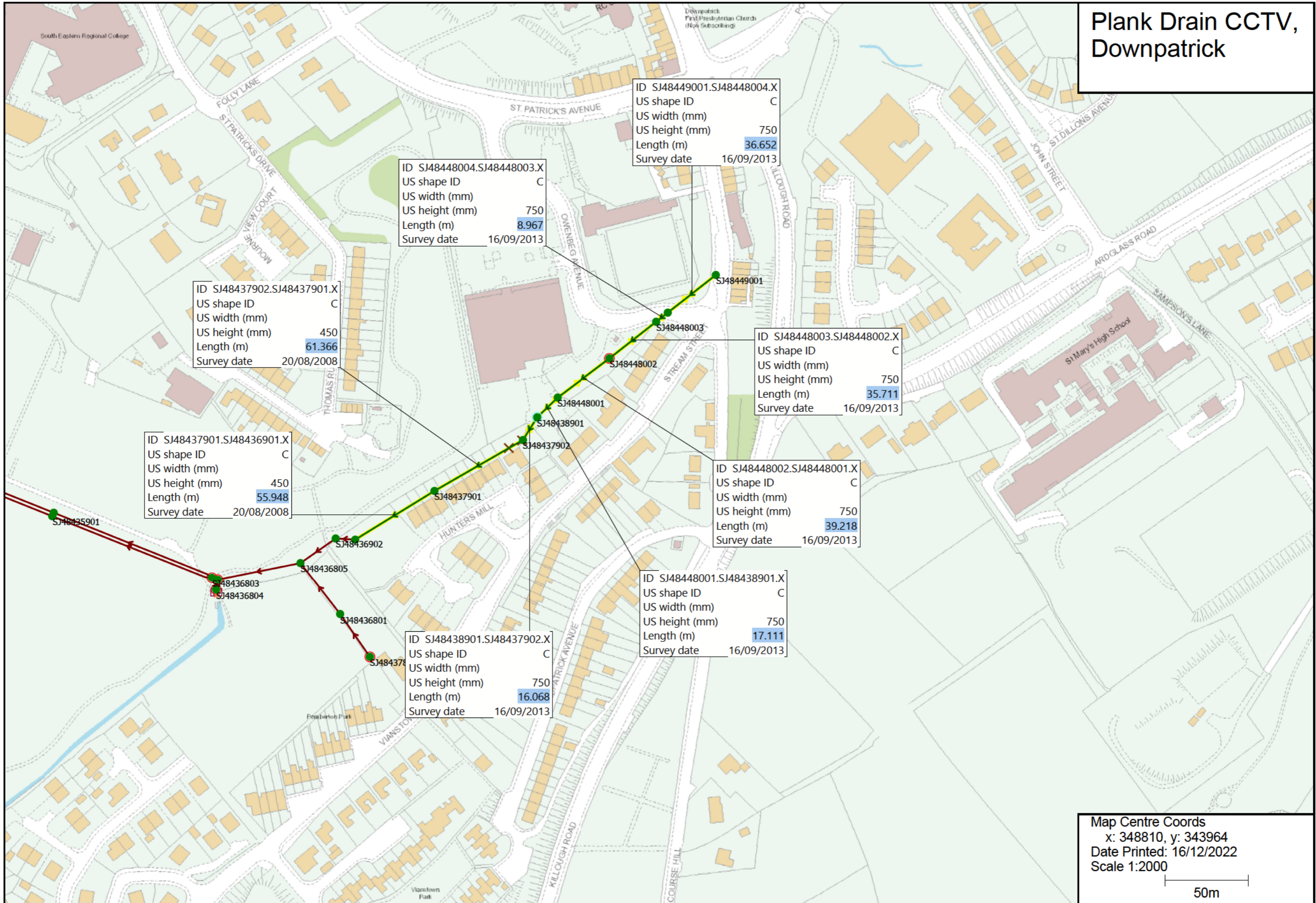
Total number of Errors: 0

Total number of Warnings: 0

Code	Priority	Object Type	Object	Field	Message
------	----------	-------------	--------	-------	---------



# Plank Drain CCTV, Downpatrick



Map Centre Coords  
 x: 348810, y: 343964  
 Date Printed: 16/12/2022  
 Scale 1:2000

# **CCTV Survey Report (MSCC format)**

**Network: CollectionNetwork**

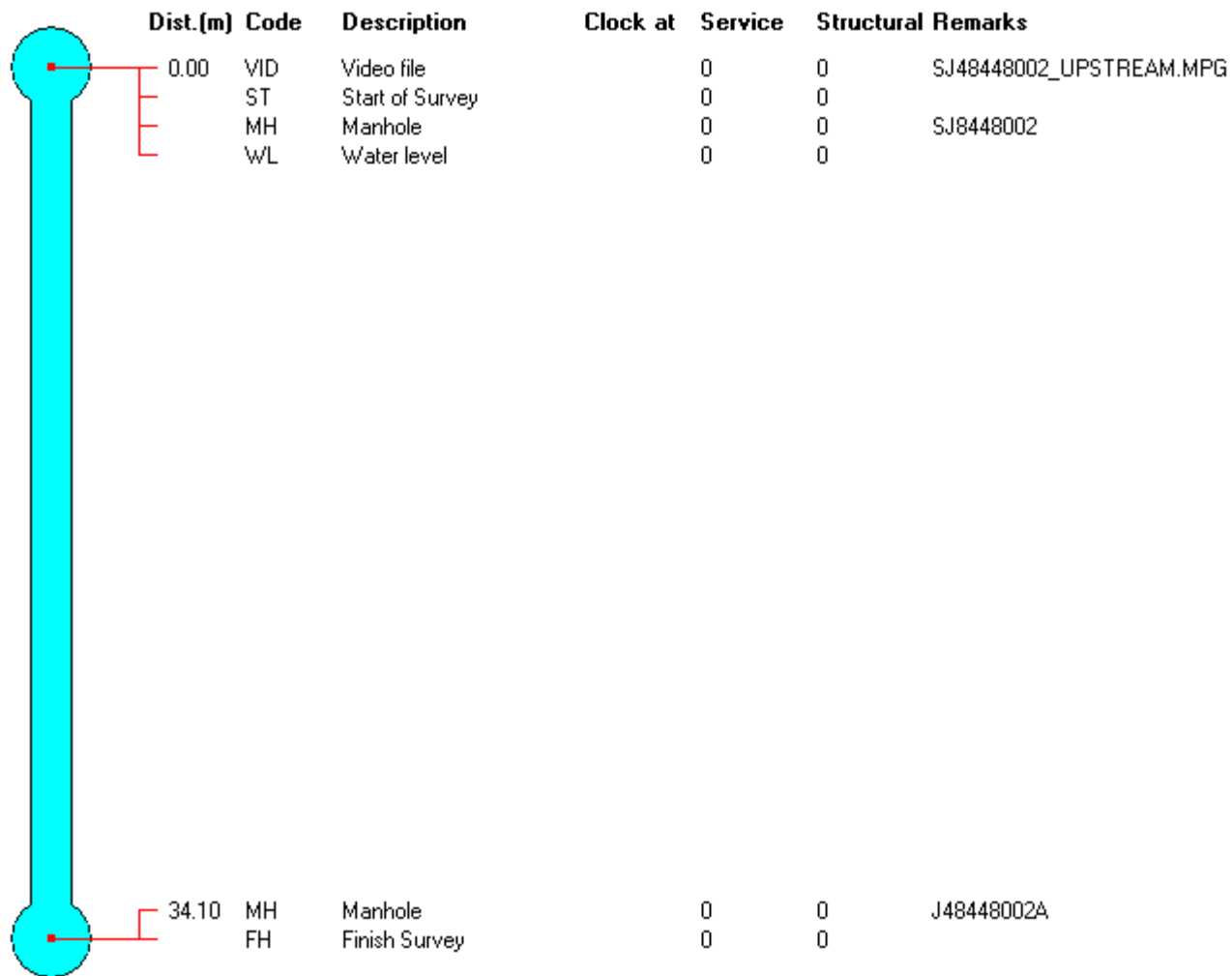
**Selection**

**16 December 2022**

<b>Client</b>		<b>Survey ID</b>						
-		SJ48448002U						
<b>Name of Surveyor</b>	<b>Client's Job Reference</b>	<b>Contractor's Job Reference</b>	<b>Drainage Area</b>	<b>Division/District</b>				
	3929	-	-	E				
<b>Pipeline Length Reference</b>	<b>Date</b>	<b>Time</b>	<b>Location (Street Name)</b>	<b>Town or Village</b>				
34.100	16/09/2013	00:00	OWENBEG AVENUE	DOWNPATRICK				
<b>Location Type Code</b>	<b>Start Node Reference</b>	<b>Depth at Start Node</b>	<b>Finish Node Reference</b>	<b>Depth at Finish Node</b>	<b>Use of Drain</b>	<b>Type of Drain</b>	<b>Direction</b>	
D	SJ48448002	-	SJ48448003	-	W	-	U	
<b>Height</b>	<b>Width</b>	<b>Shape</b>	<b>Material</b>	<b>Lining Material</b>	<b>Lining Type</b>	<b>Pre-cleaned</b>	<b>General Remarks</b>	
750	-	C	CO	-	-	0	-	
<b>Strategic</b>	<b>Purpose of Inspection</b>	<b>Flow Control Measures</b>	<b>Weather</b>	<b>Temperature</b>	<b>Pipe Unit Length</b>	<b>Expected Length</b>	<b>Year Constructed</b>	<b>Method of Inspection</b>
-	F	-	1	-	-	2.00	-	-
<b>Standard</b>	<b>Video Image Storage</b>	<b>Video Image Location System</b>	<b>Video Image Volume</b>	<b>Photograph Storage</b>	<b>Photograph Volume</b>			
-	-	-	-	-	-			

Video Ref.	Photo Ref.	Dist (m)	Cont defect	Letters				Numbers				Remarks	
				Code	Joint	Material	Band	Dimension		%	Clock		
								1	2		At / From		To
0.0		0.00		VID				0	0.00	0	0	0	SJ48448002_UPSTREAM.MPG
0.0		0.00		ST				0	0.00	0	0	0	
0.0		0.00		MH				0	0.00	0	0	0	SJ8448002
0.0		0.00		WL				0	0.00	5	0	0	
108.0		34.10		MH				0	0.00	0	0	0	J48448002A
108.0		34.10		FH				0	0.00	0	0	0	

### Pipeline View



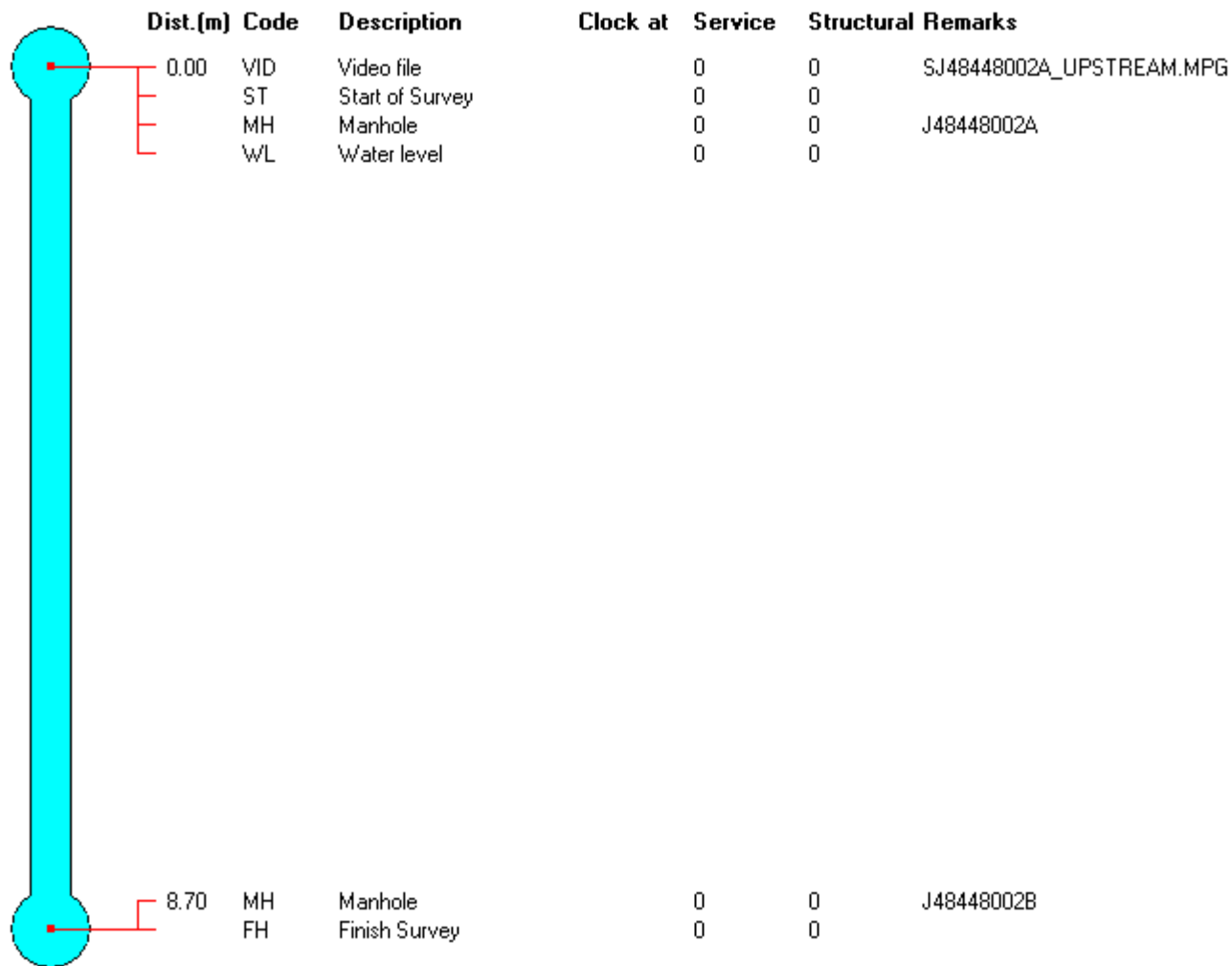


<b>Client</b>		<b>Survey ID</b>						
-		SJ48448003U						
<b>Name of Surveyor</b>	<b>Client's Job Reference</b>	<b>Contractor's Job Reference</b>	<b>Drainage Area</b>	<b>Division/District</b>				
	3929	-	-	E				
<b>Pipeline Length Reference</b>	<b>Date</b>	<b>Time</b>	<b>Location (Street Name)</b>	<b>Town or Village</b>				
8.700	16/09/2013	00:00	OWENBEG AVENUE	DOWNPATRICK				
<b>Location Type Code</b>	<b>Start Node Reference</b>	<b>Depth at Start Node</b>	<b>Finish Node Reference</b>	<b>Depth at Finish Node</b>	<b>Use of Drain</b>	<b>Type of Drain</b>	<b>Direction</b>	
D	SJ48448003	-	SJ48448004	-	W	-	U	
<b>Height</b>	<b>Width</b>	<b>Shape</b>	<b>Material</b>	<b>Lining Material</b>	<b>Lining Type</b>	<b>Pre-cleaned</b>	<b>General Remarks</b>	
750	-	C	CO	-	-	0	-	
<b>Strategic</b>	<b>Purpose of Inspection</b>	<b>Flow Control Measures</b>	<b>Weather</b>	<b>Temperature</b>	<b>Pipe Unit Length</b>	<b>Expected Length</b>	<b>Year Constructed</b>	<b>Method of Inspection</b>
-	F	-	1	-	-	2.00	-	-
<b>Standard</b>	<b>Video Image Storage</b>	<b>Video Image Location System</b>	<b>Video Image Volume</b>	<b>Photograph Storage</b>	<b>Photograph Volume</b>			
-	-	-	-	-	-			

Video Ref.	Photo Ref.	Dist (m)	Cont defect	Letters				Numbers				Remarks	
				Code	Joint	Material	Band	Dimension		%	Clock		
								1	2		At / From		To
0.0		0.00		VID				0	0.00	0	0	0	SJ48448002A UPSTREAM.MPG
0.0		0.00		ST				0	0.00	0	0	0	
0.0		0.00		MH				0	0.00	0	0	0	J48448002A
0.0		0.00		WL				0	0.00	5	0	0	
43.0		8.70		MH				0	0.00	0	0	0	J48448002B
43.0		8.70		FH				0	0.00	0	0	0	



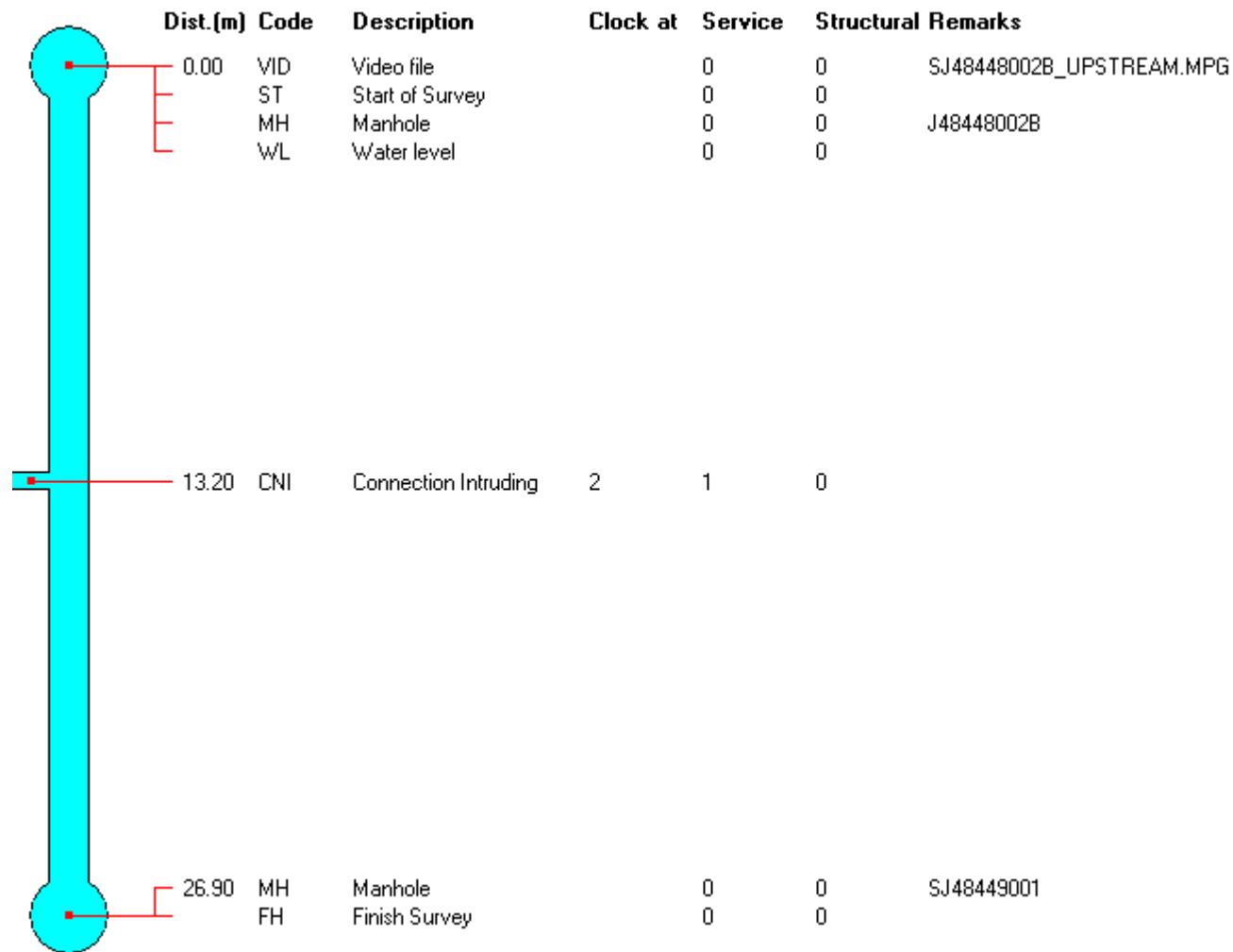
### Pipeline View



<b>Client</b>		<b>Survey ID</b>						
-		SJ48448004U						
<b>Name of Surveyor</b>	<b>Client's Job Reference</b>	<b>Contractor's Job Reference</b>	<b>Drainage Area</b>	<b>Division/District</b>				
	3929	-	-	E				
<b>Pipeline Length Reference</b>	<b>Date</b>	<b>Time</b>	<b>Location (Street Name)</b>	<b>Town or Village</b>				
26.900	16/09/2013	00:00	OWENBEG AVENUE	DOWNPATRICK				
<b>Location Type Code</b>	<b>Start Node Reference</b>	<b>Depth at Start Node</b>	<b>Finish Node Reference</b>	<b>Depth at Finish Node</b>	<b>Use of Drain</b>	<b>Type of Drain</b>	<b>Direction</b>	
D	SJ48448004	-	SJ48449001	-	W	-	U	
<b>Height</b>	<b>Width</b>	<b>Shape</b>	<b>Material</b>	<b>Lining Material</b>	<b>Lining Type</b>	<b>Pre-cleaned</b>	<b>General Remarks</b>	
750	-	C	CO	-	-	0	-	
<b>Strategic</b>	<b>Purpose of Inspection</b>	<b>Flow Control Measures</b>	<b>Weather</b>	<b>Temperature</b>	<b>Pipe Unit Length</b>	<b>Expected Length</b>	<b>Year Constructed</b>	<b>Method of Inspection</b>
-	F	-	1	-	-	2.00	-	-
<b>Standard</b>	<b>Video Image Storage</b>	<b>Video Image Location System</b>	<b>Video Image Volume</b>	<b>Photograph Storage</b>	<b>Photograph Volume</b>			
-	-	-	-	-	-			

Video Ref.	Photo Ref.	Dist (m)	Cont defect	Letters				Numbers				Remarks	
				Code	Joint	Material	Band	Dimension		%	Clock		
								1	2		At / From		To
0.0		0.00		VID				0	0.00	0	0	0	SJ48448002B UPSTREAM.MPG
0.0		0.00		ST				0	0.00	0	0	0	
0.0		0.00		MH				0	0.00	0	0	0	J48448002B
0.0		0.00		WL				0	0.00	5	0	0	
41.0		13.20		CNI				150	50.00	0	2	0	
87.0		26.90		MH				0	0.00	0	0	0	SJ48449001
87.0		26.90		FH				0	0.00	0	0	0	

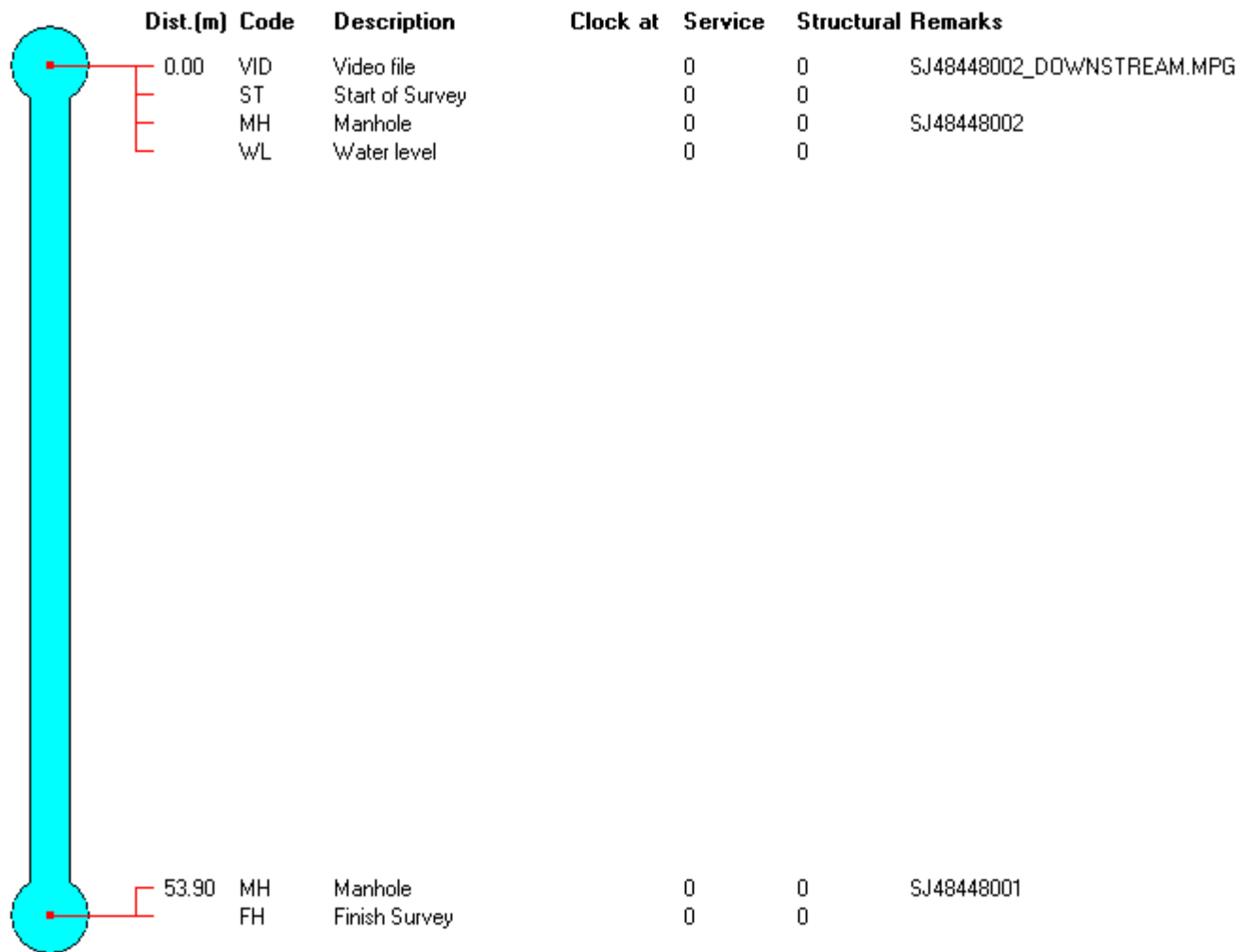
### Pipeline View



<b>Client</b>		<b>Survey ID</b>						
-		SJ48448002D						
<b>Name of Surveyor</b>	<b>Client's Job Reference</b>	<b>Contractor's Job Reference</b>	<b>Drainage Area</b>	<b>Division/District</b>				
	3929	-	-	E				
<b>Pipeline Length Reference</b>	<b>Date</b>	<b>Time</b>	<b>Location (Street Name)</b>	<b>Town or Village</b>				
53.900	16/09/2013	00:00	OWENBEG AVENUE	DOWNPATRICK				
<b>Location Type Code</b>	<b>Start Node Reference</b>	<b>Depth at Start Node</b>	<b>Finish Node Reference</b>	<b>Depth at Finish Node</b>	<b>Use of Drain</b>	<b>Type of Drain</b>	<b>Direction</b>	
D	SJ48448002	-	SJ48448001	-	W	-	D	
<b>Height</b>	<b>Width</b>	<b>Shape</b>	<b>Material</b>	<b>Lining Material</b>	<b>Lining Type</b>	<b>Pre-cleaned</b>	<b>General Remarks</b>	
750	-	C	CO	-	-	0	-	
<b>Strategic</b>	<b>Purpose of Inspection</b>	<b>Flow Control Measures</b>	<b>Weather</b>	<b>Temperature</b>	<b>Pipe Unit Length</b>	<b>Expected Length</b>	<b>Year Constructed</b>	<b>Method of Inspection</b>
-	F	-	1	-	-	2.00	-	-
<b>Standard</b>	<b>Video Image Storage</b>	<b>Video Image Location System</b>	<b>Video Image Volume</b>	<b>Photograph Storage</b>	<b>Photograph Volume</b>			
-	-	-	-	-	-			

Video Ref.	Photo Ref.	Dist (m)	Cont defect	Letters				Numbers				Remarks	
				Code	Joint	Material	Band	Dimension		%	Clock		
								1	2		At / From		To
0.0		0.00		VID				0	0.00	0	0	0	SJ48448002 DOWNSTREAM.MPG
0.0		0.00		ST				0	0.00	0	0	0	
0.0		0.00		MH				0	0.00	0	0	0	SJ48448002
0.0		0.00		WL				0	0.00	5	0	0	
144.0		53.90		MH				0	0.00	0	0	0	SJ48448001
144.0		53.90		FH				0	0.00	0	0	0	

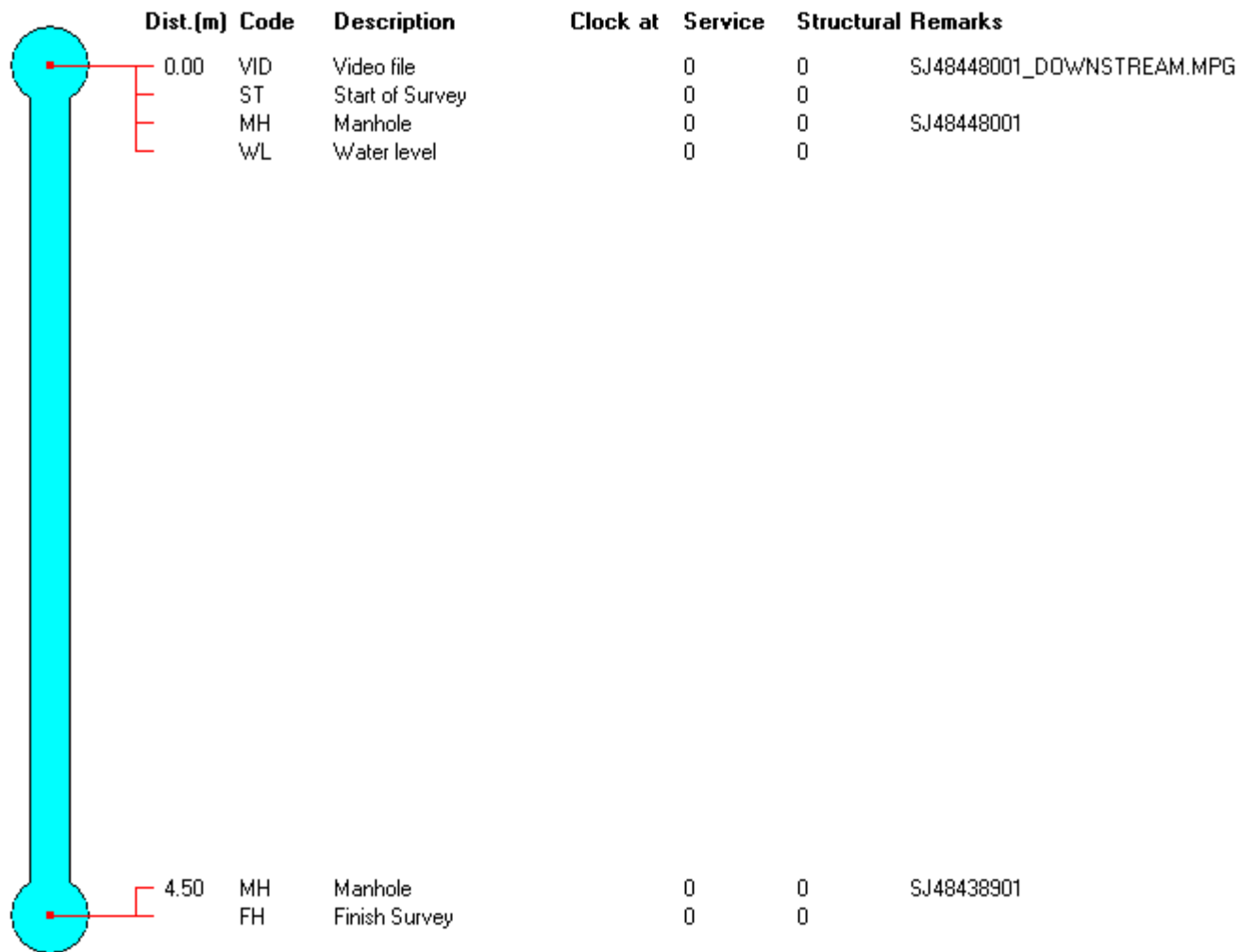
### Pipeline View



<b>Client</b>		<b>Survey ID</b>						
-		SJ48448001D						
<b>Name of Surveyor</b>	<b>Client's Job Reference</b>	<b>Contractor's Job Reference</b>	<b>Drainage Area</b>	<b>Division/District</b>				
	3929	-	-	E				
<b>Pipeline Length Reference</b>	<b>Date</b>	<b>Time</b>	<b>Location (Street Name)</b>	<b>Town or Village</b>				
4.500	16/09/2013	00:00	OWENBEG AVENUE	DOWNPATRICK				
<b>Location Type Code</b>	<b>Start Node Reference</b>	<b>Depth at Start Node</b>	<b>Finish Node Reference</b>	<b>Depth at Finish Node</b>	<b>Use of Drain</b>	<b>Type of Drain</b>	<b>Direction</b>	
D	SJ48448001	-	SJ48438901	-	W	-	D	
<b>Height</b>	<b>Width</b>	<b>Shape</b>	<b>Material</b>	<b>Lining Material</b>	<b>Lining Type</b>	<b>Pre-cleaned</b>	<b>General Remarks</b>	
750	-	C	CO	-	-	0	-	
<b>Strategic</b>	<b>Purpose of Inspection</b>	<b>Flow Control Measures</b>	<b>Weather</b>	<b>Temperature</b>	<b>Pipe Unit Length</b>	<b>Expected Length</b>	<b>Year Constructed</b>	<b>Method of Inspection</b>
-	F	-	1	-	-	2.00	-	-
<b>Standard</b>	<b>Video Image Storage</b>	<b>Video Image Location System</b>	<b>Video Image Volume</b>	<b>Photograph Storage</b>	<b>Photograph Volume</b>			
-	-	-	-	-	-			

Video Ref.	Photo Ref.	Dist (m)	Cont defect	Letters				Numbers				Remarks	
				Code	Joint	Material	Band	Dimension		%	Clock		
								1	2		At / From		To
0.0		0.00		VID				0	0.00	0	0	0	SJ48448001 DOWNSTREAM.MPG
0.0		0.00		ST				0	0.00	0	0	0	
0.0		0.00		MH				0	0.00	0	0	0	SJ48448001
0.0		0.00		WL				0	0.00	5	0	0	
25.0		4.50		MH				0	0.00	0	0	0	SJ48438901
25.0		4.50		FH				0	0.00	0	0	0	

### Pipeline View

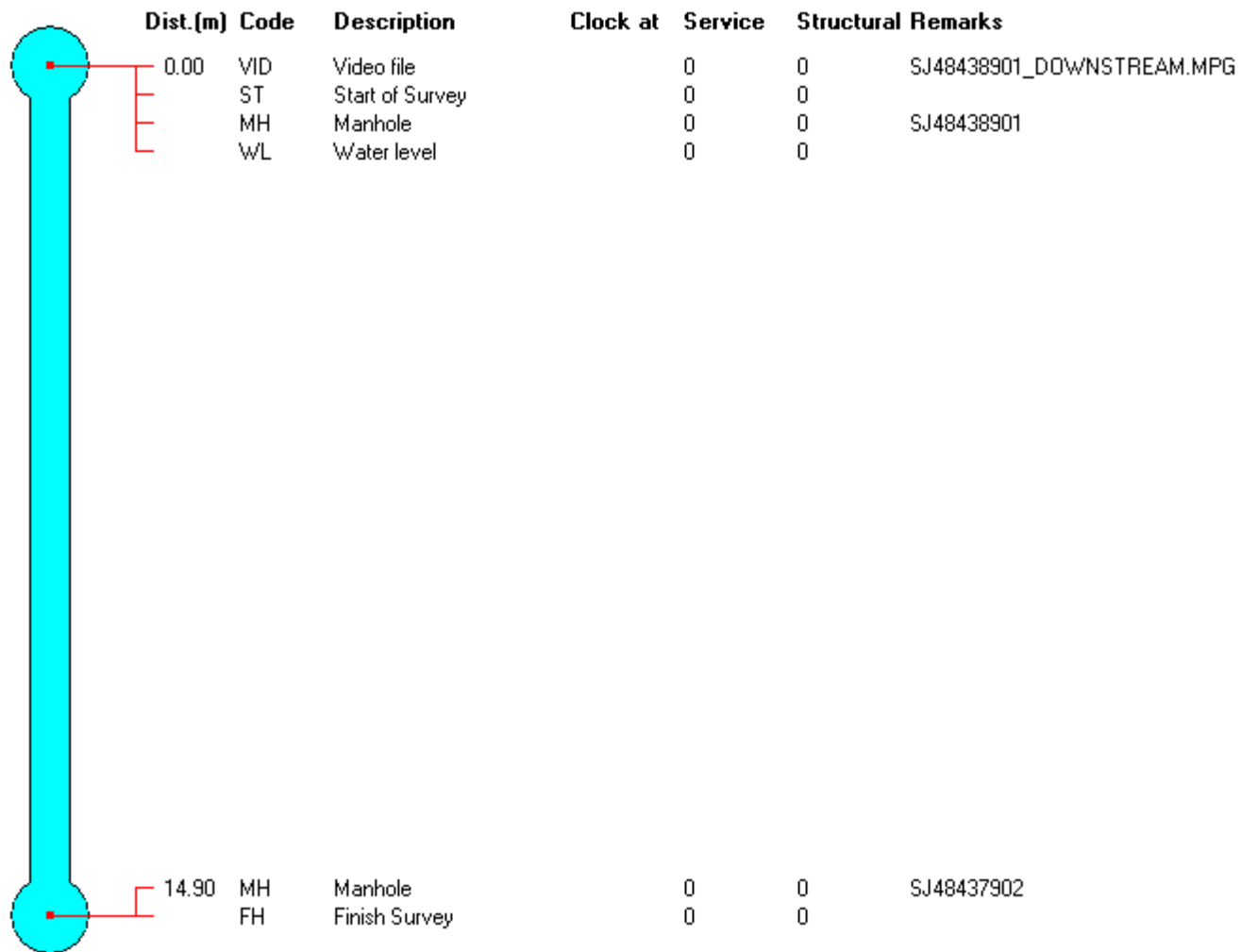


<b>Client</b>		<b>Survey ID</b>						
-		SJ48438901D						
<b>Name of Surveyor</b>	<b>Client's Job Reference</b>	<b>Contractor's Job Reference</b>	<b>Drainage Area</b>	<b>Division/District</b>				
	3929	-	-	E				
<b>Pipeline Length Reference</b>	<b>Date</b>	<b>Time</b>	<b>Location (Street Name)</b>	<b>Town or Village</b>				
14.900	16/09/2013	00:00	OWENBEG AVENUE	DOWNPATRICK				
<b>Location Type Code</b>	<b>Start Node Reference</b>	<b>Depth at Start Node</b>	<b>Finish Node Reference</b>	<b>Depth at Finish Node</b>	<b>Use of Drain</b>	<b>Type of Drain</b>	<b>Direction</b>	
D	SJ48438901	-	SJ48437902	-	W	-	D	
<b>Height</b>	<b>Width</b>	<b>Shape</b>	<b>Material</b>	<b>Lining Material</b>	<b>Lining Type</b>	<b>Pre-cleaned</b>	<b>General Remarks</b>	
750	-	C	CO	-	-	0	-	
<b>Strategic</b>	<b>Purpose of Inspection</b>	<b>Flow Control Measures</b>	<b>Weather</b>	<b>Temperature</b>	<b>Pipe Unit Length</b>	<b>Expected Length</b>	<b>Year Constructed</b>	<b>Method of Inspection</b>
-	F	-	1	-	-	2.00	-	-
<b>Standard</b>	<b>Video Image Storage</b>	<b>Video Image Location System</b>	<b>Video Image Volume</b>	<b>Photograph Storage</b>	<b>Photograph Volume</b>			
-	-	-	-	-	-			

Video Ref.	Photo Ref.	Dist (m)	Cont defect	Letters				Numbers				Remarks	
				Code	Joint	Material	Band	Dimension		%	Clock		
								1	2		At / From		To
0.0		0.00		VID				0	0.00	0	0	0	SJ48438901 DOWNSTREAM.MPG
0.0		0.00		ST				0	0.00	0	0	0	
0.0		0.00		MH				0	0.00	0	0	0	SJ48438901
0.0		0.00		WL				0	0.00	5	0	0	
48.0		14.90		MH				0	0.00	0	0	0	SJ48437902
48.0		14.90		FH				0	0.00	0	0	0	



### Pipeline View



US node ID	DS node ID	Link suffix	Drainage code	US shape ID	DS shape ID	US width (mm)	DS width (mm)	US height (mm)	DS height (mm)	Backdrop diameter (mm)	US pipe material	DS pipe material	US depth from cover (m)	DS depth from cover (m)	US invert level (m AD)	DS invert level (m AD)	Pipe length (m)	Pipe unit length (m)	Gradient (m/m)	Condition survey date	Structural condition grade	Service condition grade	UT 02 - Watercourse name	UT 04 - Road name
SJ48436902	SJ48436805	X	U3303	C	C			900			CO	CO					25.831						Plank Drain	Hunters Mill
SJ48436805	SJ48436802	X	U3303	C	C			1200			CO	CO					50.732						Plank Drain	Pemberton Park
SJ48449001	SJ48448004	X	U3303	C	C			750	750		CO	CO				0	36.652		16/09/2013	1	2	Plank Drain	Owenbeg Avenue	
SJ48448001	SJ48438901	X	U3303	C	C			750	750		CO	CO					17.111		16/09/2013	1	1	Plank Drain	Stream Street	
SJ48438901	SJ48437902	X	U3303	C	C			750	750		CO	CO	4.3			0	16.068		16/09/2013	1	1	Plank Drain	Stream Street	
SJ48436901	SJ48436902	X	U3303	C	C			450	450		CO	CO					11.758						Plank Drain	Hunters Mill
SJ48437901	SJ48436901	X	U3303	C	C			450	450		CO	CO			0		55.948		20/08/2008	1	2	Plank Drain	Hunters Mill	
SJ48437902	SJ48437901	X	U3303	C	C			450	450		CO	CO			0	0	61.366		0	20/08/2008	1	2	Plank Drain	Hunters Mill
SJ48448002	SJ48448001	X	U3303	C	C			750	750		CO	CO	2.37				39.218		16/09/2013	1	1	Plank Drain	Owenbeg Avenue	
SJ48448003	SJ48448002	X	U3303	C	C			750	750		CO	CO			0	0	35.711		0	16/09/2013	1	1	Plank Drain	Owenbeg Avenue
SJ48448004	SJ48448003	X	U3303	C	C			750	750		CO	CO			0	0	8.967		0	16/09/2013	1	1	Plank Drain	Owenbeg Avenue