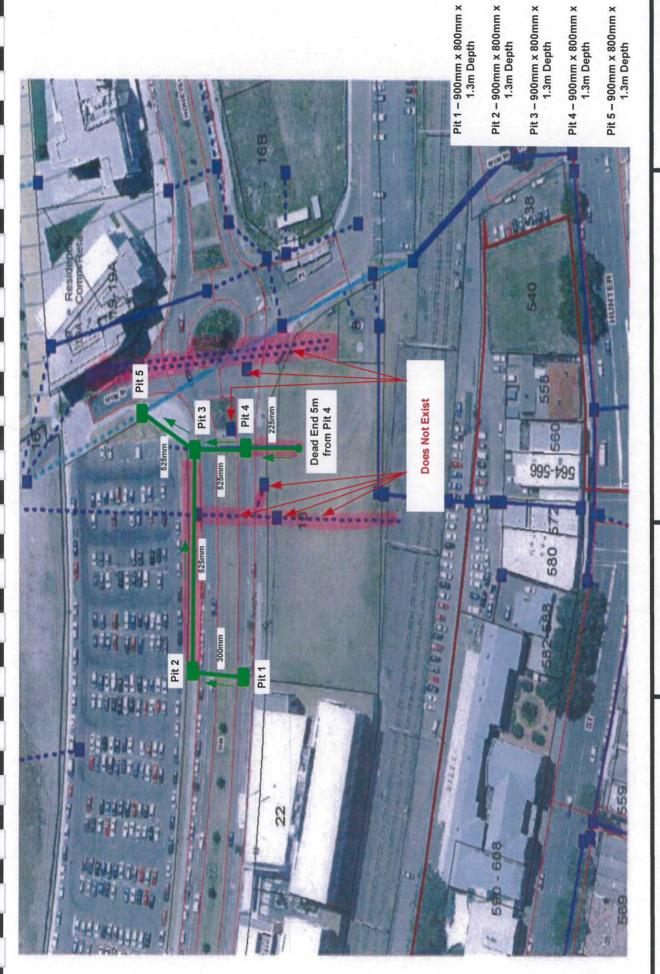


CCTV INSPECTION FOR
NORTHROP
18 HONEYSUCKLE DR
HONEYSUCKLE
STORMWATER SURVEY
15/8/14



STORMWATER SURVEY **18 HONEYSUCKLE DR** HONEYSUCKLE

Date: 15 / 08 / 14

Sheet No. No. In Set Scale

000 N

PH: 0425292298 FAX: 49430008



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Table of contents

Project Name: NORTHROP-18 HONEYSU	Project number:	Date: 15/08/2014	Contact: AARON KNIGHT	
		10/00/2014	MANONINION	

Profile Report	1
Inspection Summary	2
Inspection: 1	
Project Information	6
Legend of Classification	7
Section: 1, PIT 1 PIT 2	8
Section: 2, P1T 2 PIT3	
Section: 3, PIT 4 PIT 3	
Section: 4, PIT 4	
Section: 5, PIT 3 PIT 5	19
Section: 6 DEADEND PIT 4	20.



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$\Sigma \varnothing$ / Main sections / Inspection: 1

Project name NORTHROP-18 HONEYSUCKLE DR		Project Number:		Responsible: AARON KNIGHT	Date: 15/08/2014			
No.	Start MH	End MH	Date	Location/Street	Pipe Attribute No.	STR Grade	SER Grade	(m)
4		PIT 4	15/08/2014	18 HONEYSUCKLE DR	4	1	5	0.20
6	DEADEND	PIT 4	15/08/2014	18 HONEYSUCKLE DR	6	1	1	4.50
				Pipe size: 225 = 4.7 m	(4.7 m)			
No.	Start MH	End MH	Date	Location/Street	Pipe Attribute No.	STR Grade	SER Grade	(m)
1	PIT 1	PIT 2	15/08/2014	18 HONEYSUCKLE DR	1	1	3	20.10
				Pipe size: 300 = 20.1 m	(20.4 m)			
				1 100 3126. 300 - 20.1 III	(20.1111)			
				11pe 312e. 300 - 20.1 III	(20.1111)			
No.	Start MH	End MH	Date	Location/Street	Pipe Attribute No.	STR Grade	SER Grade	(m)
No.	Start MH P1T 2	End MH PIT3				STR Grade	SER Grade	
1000		(STATELLING)	Date	Location/Street	Pipe Attribute No.	STR Grade 1	SER Grade	(m) 56.00 20.60

All sections = 124.9 m (124.9 m)

Pipe size: 525 = 100.1 m (100.1 m)



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Inspection summary / Inspection: 1

Project Name: Project number: Date: Contact:

NORTHROP-18 15/08/2014 AARON KNIGHT

HONEYSUCKLE DR.

Please find per enclosure the inspection report

Total Length of sewer network	124.70 m
Inspected Length of sewer network	124.70 m
Not inspected Length of sewer network	0.00 m
Total Length of house connections (satellite)	0.00 m
Inspected Length of house connections (satellite)	0.00 m
Not inspected Length of house connections (satellite)	0.00 m
Number of Sections	5
Number of house connections	0
Number of Photos	15



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Inspection Summary / Inspection: 1

Date: 15/08/20	014		sponsible: NN KNIGHT		24.		
Sewer Reference: Section Numer: Start node: End node:	: 1 1 PIT 1 PIT 2				Section length: Pipe length: Material Shape:	20.10 m Reinforced concrete pi	pe
PIT-2	0.00	STGP	Start node, grate	ed inlet p	oit, Nodename: PIT	2	
1	0.00	WLC	Water level, clea	ar flow (t	he invert is visible)	, depth 0%	
******	3.60	JDL	Joint displaced lo	ongitudi	naly, longitudinal d	isplacement	0.5
	6.10	JDL	Joint displaced lo	ongitudi	naly, longitudinal d	isplacement	0.5
******	10.40	ОВМ	invert, reduction	agment in cros	of conduit material s sectional area: 5	is lying in the -20%, from 6 to 10	; 30
******	13.40	OBZ	o'clock Obstruction, som in cross sectiona	ne other	object is lying in th	ne invert , reduction	; 5
	16.00	JDL	Joint displaced lo 21-30mm	ongitudi	naly, longitudinal d	isplacement	
PIT 1	20.10	FHGP	Finish node, graf	ted inlet	pit, Nodename: Pl	Т 1	
Sewer Reference: Section Numer: Start node: End node:	2 2 P1T 2 PIT3				Section length: Pipe length: Material Shape:	56.00 m Reinforced concrete pi	pe
•••••							
P1T-2	0.00	STGP	Start node, grate	ed inlet p	oit, Nodename: P1	Г2	
*	0.00	WLC	Water level, clea	ır flow (t	he invert is visible)	, depth 0%	
	41.60	OBJ	Obstruction, and in cross sectional	object is	wedged in the join <5%, from 3 to 6 c	t, at joint, reduction 'clock	
PIT3	56.00	FHGP	Finish node, graf	ted inlet	pit, Nodename: Pl	Т3	



PIT 3

End node:

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Inspection Summary / Inspection: 1

Date: 15/08/2014	ļ.	Responsible: AARON KNIGHT		
Sewer Reference:	3		Section length:	20.60 m
Section Numer:	3		Pipe length:	
Start node:	PIT 4		Material	Reinforced concrete pipe

Shape:

			•••••				
PIT-4	0.00	STGP	Start node, grated inl	et pit, Nodename: PIT	4		
*	0.00	WLC	Water level, clear flow (the invert is visible), depth 0%				
	12.10	INGF	Ingress of soil, fine m	naterial,at 6 o'clock, S	tart		
	19.10	INGF	Ingress of soil, fine m	naterial,at 6 o'clock, E	nd		
PIT 3	20.60	FHGP	Finish node, grated in	nlet pit, Nodename: PIT	3		
Sewer Reference:	4			Section length:	0.20 m		
Section Numer:	4			Pipe length:	0.20 11		
Start node:				Material	Reinforced concrete pipe		
End node:	PIT 4			Shape:			

1	PIT-40.00	STGP	Start node, grated inlet pit, Nodename: PIT 4	
*	0.00	WLC	Water level, clear flow (the invert is visible), depth 0%	
	0.00	OBZ	Obstruction, some other object is lying in the invert , reduction in cross sectional area: 5-20% , from 5 to 7 o'clock, Start	
	0.10	OBZ	Obstruction, some other object is lying in the invert, reduction in cross sectional area: 5-20%, from 5 to 7 o'clock, End	; 3
	0.20	SAOB	Inspection (survey) abandoned, obstruction , General Comments HEAVY DEBRIS / HEAVY DEBRIS	



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Inspection Summary / Inspection: 1

				4111111	ary / mspe	Stion. I		
Date: 15/08/2014		Responsible: AARON KNIGHT						
Sewer Reference: Section Numer: Start node: End node:	5 5 PIT 3 PIT 5				Section length: Pipe length: Material Shape:	23.50 m Reinforced concrete pipe	9	
PIT-5	0.00	STSP	Start node, side	entry pi	it, Nodename: PIT 5			
	0.10	WLC	Water level, clea	Water level, clear flow (the invert is visible), depth 30%				
PIT 3	23.50	FHSP	Finish node, side	e entry p	pit, Nodename: PIT 3	3		
Sewer Reference:	6				Section length:	4.50 m		
Section Numer:	6				Pipe length:			
Start node: End node:	DEADEN PIT 4	ND			Material Shape:	Reinforced concrete pipe)	
PIT-4	0.00	STGP			pit, Nodename: PIT 4			
DEADEND	4.50	FHDE		ad end, N	Nodename: . Gene			



Mobile:

E-mail:

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Project information / Inspection: 1

Project name Project number: Contact: Date :
NORTHROP-18 HONEYSUCKLE DR Project number: AARON KNIGHT 15/08/2014

Client: **Northrop** Contact Name: Mr. Aaron Knight Department: **Civil Engineer** Po Box: 180 Street: City: Charlestown Telephone: 0249431777 Fax: 0249431577 Mobile: 0403101140 E-mail: Site: Contact Name: Department: Po Box: Street: City: Telephone: Fax: Mobile: E-mail: Contractor **FENECH GROUP PTY LTD** Contact Name: Mr. Mark Fenech Department: **Pipeline Maintenance** Po Box: 680 Street: City: The Junction NSW 2291 Telephone: 0249 438 888 Fax: 0249 430 008

fenechgroup@optusnet.com.au

0425 292 298



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Grade Defect Guide and Recommendations / Inspection: 1

Project Name : NORTHROP-18 HONEYSUCKLE DR Project number: Contact: Date :

	AARON KNIGHT 15/08/2014
<u>1:</u>	These codes describe the physical condition of the sewer and the severity of the damage
	STRUCTURAL CONDITION
<u>2:</u>	These codes describe the capability of the sewer to meet its service requirements and indicate loss of capacity, potential for blockage and watertightness
	SERVICE DEFECTS
<u>3:</u>	These codes define features relating to the construction of the sewer
	CONSTRUCTIONAL FEATURES
<u>4:</u>	These codes define general items concerning the sewer
	MISCELLANEOUS FEATURES
<u>5:</u>	Collapsed or collapse imminent
	Brick Sewers: Already collapsed, Missing Invert, Deformation >10% and fractured, Displaced/hanging brickwork and deformation <10%, Extensive areas of missing brickwork Clayware, concrete and plastic pipe sewers: Already collapsed, Deformation >10% and brok



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CCTV Inspection report / Inspection: 1

Inspection Number 1	Pipe Attribute ID:	Catchment .	U/S Manhole PIT 1	D/S Manhole PIT 2	Plan Length
Pipe Diameter 300 mm	Pipe Material Reinforced concrete pipe				

Town/suburb: Location: Location type:	NEWCASTLE 18 HONEYSUCKLE DR Road	Date: Asset Owner: Operator: Cleaning:	15/08/2014 NEWCASTLE CITY COUNCIL DANNY WILLIAMS not cleaned	Flow Control: Precipitation:	No measures No
Inspected Length	20.00 m				
Structural Gradin	g: 1				
Service Grade:	3				

Remarks:

STR no def

STR peak

STR mean

STR total

-						
	1:165 PIT 2	Position	Code	Observation Gra	de	
	K	0.00	STGP	Start node, grated inlet pit, Nodename: PIT 2	0	
		0.00	WLC	Water level, clear flow (the invert is visible), depth 0%	0	3.6 m
		3.60	JDL	Joint displaced longitudinaly, longitudinal displacement 10-20mm	1	
		6.10	JDL	Joint displaced longitudinaly, longitudinal displacement 10-20mm	1	3.6 m
		10.4 <u>0</u>	OBM	Obstruction, a fragment of conduit material is lying in the invert, reduction in cross sectional area: 5-20%, from 6 to 10 o'clock Obstruction, some other object is lying in the invert,	to	6.1 m
		10.40	OBZ	reduction in cross sectional area: <5%, at 6 o'clock	2	1/10
		16.00	JDL	Joint displaced longitudinaly, longitudinal displacement 21-30mm		6.1 m
	PIT 1	20.10	FHGP	Finish node, grated inlet pit, Nodename: PIT 1	0	10.4 m

SER no def

SER peak

30

SER mean

1.74

SER total

35

SER grade



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Inspection Pictures / Inspection: 1

Location/Street Town or suburb: Date : Section number: Sewer Ref.:

18 HONEYSUCKLE DR NEWCASTLE 15/08/2014 1 1



Photo: 1_3A 3.6m, Joint displaced longitudinaly, longitudinal displacement 10-20mm

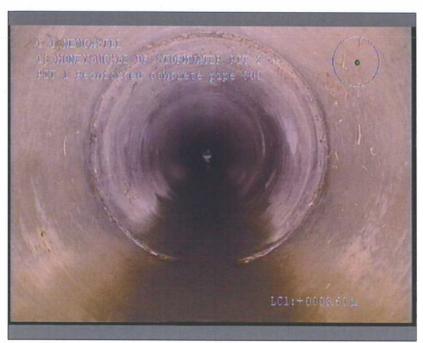


Photo: 1_3B 3.6m, Joint displaced longitudinaly, longitudinal displacement 10-20mm



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Inspection Pictures / Inspection: 1

Location/Street Town or suburb: Date: Section number: Sewer Ref.:

18 HONEYSUCKLE DR NEWCASTLE 15/08/2014 1 1

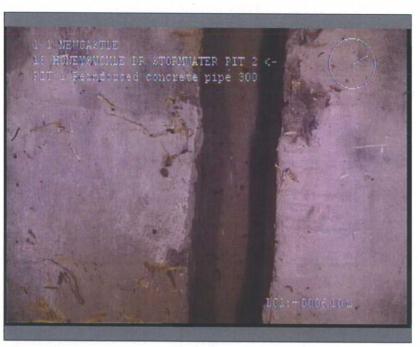


Photo: 1_4A 6.1m, Joint displaced longitudinaly, longitudinal displacement 10-20mm

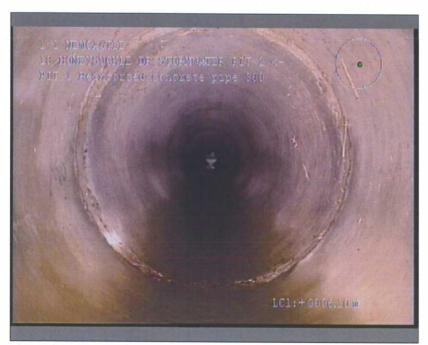


Photo: 1_4B 6.1m, Joint displaced longitudinaly, longitudinal displacement 10-20mm



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Inspection Pictures / Inspection: 1

Location/Street	Town or suburb:	Date :	Section number:	Sewer Ref.:
18 HONEYSUCKLE DR	NEWCASTLE	15/08/2014	1	1

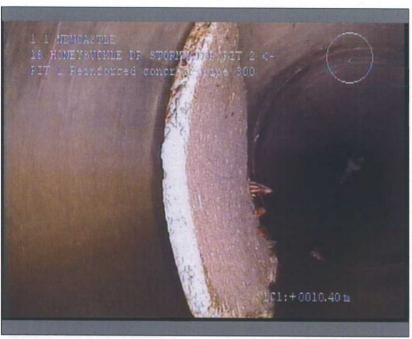


Photo: 1_5A 10.4m, Obstruction, a fragment of conduit material is lying in the invert , reduction in cross sectional area: 5-20% , from 6 to 10 o'clock



Photo: 1_6A

13.4m, Obstruction, some other object is lying in the invert, reduction in

cross sectional area: <5%, at 6 o'clock



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Inspection Pictures / Inspection: 1

Location/Street	Town or automb.	D-4		
	Town or suburb:	Date :	Section number:	Sewer Ref.:
18 HONEYSUCKLE DR	NEWCASTLE	15/08/2014	1	1



Photo: 1_7A 16m, Joint displaced longitudinaly, longitudinal displacement 21-30mm

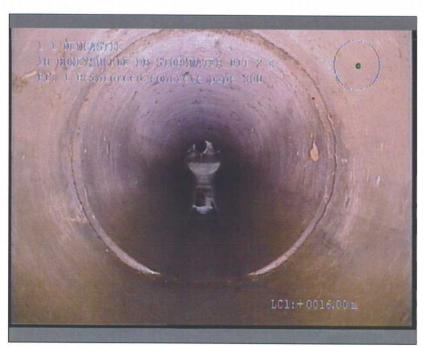


Photo: 1_7B 16m, Joint displaced longitudinaly, longitudinal displacement 21-30mm



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CCTV Inspection report / Inspection: 1

Inspection Number 2	Pipe Attribute ID:	Catchment	U/S Manhole P1T 2	D/S Manhole PIT3	Plan Length
Pipe Diameter 525 mm	Pipe Material Reinforced concrete pipe				

Town/suburb: Location: Location type:	18 HON Road	ASTLE NEYSUCKLE DR	Date: Asset Owner: Operator: Cleaning:	15/08/2014 NEWCASTLE CITY COUNCIL DANNY WILLIAMS not cleaned	Flow Control: Precipitation:	No measures No
Inspected Length Structural Gradin		56.00 m				

Remarks:

Service Grade:

1:450 Position Code Observation Grade



P1T	2						•		
	0.0	0 STGP	Start noc	le, grated inlet	oit, Nodename:	P1T 2	0	-	
	0.0	<u>0</u> WLC	Water lev	vel, clear flow (he invert is visi	ible), depth 0%	6 0	41.6 m	
	41.60	<u>0</u> OBJ	Obstructi reductior	on, an object is in cross section	s wedged in the enal area: <5%	i joint, at joint, , from 3 to 6 o'	'clock		
РІТЗ	56.00	<u>)</u> FHGP	Finish no	de, grated inle	pit, Nodename	e: PIT3	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					



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Inspection Pictures / Inspection: 1

Location/Street	Town or suburb:	Date :	Section number:	Sewer Ref.:
18 HONEYSUCKLE DR	NEWCASTLE	15/08/2014	2	2



Photo: 2_3A 41.6m, Obstruction, an object is wedged in the joint, at joint, reduction in cross sectional area: <5%, from 3 to 6 o'clock



Photo: 2_3B 41.6m, Obstruction, an object is wedged in the joint, at joint, reduction in cross sectional area: <5%, from 3 to 6 o'clock



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CCTV Inspection report / Inspection: 1

Inspection Number 3	Pipe Attribute ID:	Catchment	U/S Manhole PIT 4	D/S Manhole PIT 3	Plan Length
Pipe Diameter 525 mm	Pipe Material Reinforced concrete pipe				

Town/suburb: NEWCASTLE Location:

Location type:

18 HONEYSUCKLE DR

Date:

Cleaning:

Asset Owner: Operator:

15/08/2014 NEWCASTLE CITY COUNCIL

DANNY WILLIAMS

not cleaned

Flow Control: Precipitation:

No measures

No

Inspected Length: Structural Grading: 21.00 m

Service Grade:

Remarks:

1:165 Position Code Observation

Grade

PIT 4 0.00 STGP Start node, grated inlet pit, Nodename: PIT 4 0 0.00 WLC Water level, clear flow (the invert is visible), depth 0% 0



12.1 m



12.10 S1

INGF

Ingress of soil, fine material, at 6 o'clock, Start

19.10 E1

INGF

Ingress of soil, fine material, at 6 o'clock, End

20.60

PIT 3

FHGP

Finish node, grated inlet pit, Nodename: PIT 3

0

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



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Inspection Pictures / Inspection: 1

Location/Street	Town or suburb:	Date :	Section number:	Sewer Ref.:
18 HONEYSUCKLE DR	NEWCASTLE	15/08/2014	3	3

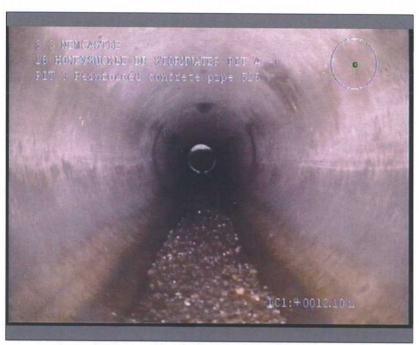


Photo: 3 3A

12.1m, Ingress of soil, fine material, at 6 o'clock, Start



Photo: 3_4A

19.1m, Ingress of soil, fine material, at 6 o'clock, End



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CCTV Inspection report / Inspection: 1

Inspection Number 4	Pipe Attribute ID:	Catchment	U/S Manhole	D/S Manhole PIT 4	Plan Length 0.00 m
Pipe Diameter 225 mm	Pipe Material Reinforced concrete pipe				

Town/suburb: NEWCASTLE Location:

18 HONEYSUCKLE DR Location type:

Date: 15/08/2014 Asset Owner:

Operator: Cleaning: **NEWCASTLE CITY COUNCIL** DANNY WILLIAMS

not cleaned

Flow Control: Precipitation: No measures

No

Inspected Length: Structural Grading: Service Grade:

1.00 m 5

Remarks:

1:50 Position Code Observation

Grade

0

0

3

0.00 **STGP** Start node, grated inlet pit, Nodename: PIT 4 WLC 0.00 Water level, clear flow (the invert is visible), depth 0% 0.00 **S1** OBZ Obstruction, some other object is lying in the invert, reduction in cross sectional area: 5-20%, from 5 to 7 o'clock, Start Obstruction, some other object is lying in the invert, reduction in cross sectional area: 5-20%, from 5 to 7 0.10 OBZ o'clock, End 0.20 SAOB Inspection (survey) abandoned, obstruction , General Comments HEAVY DEBRIS



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Inspection Pictures / Inspection: 1

Location/Street	Town or suburb:	Date :	Section number:	Sewer Ref.:
18 HONEYSUCKLE DR	NEWCASTLE	15/08/2014	4	4



Photo: 4_3A 0m, Obstruction, some other object is lying in the invert , reduction in cross sectional area: 5-20% , from 5 to 7 o'clock, Start



Photo: 4_5A 0.2m, Inspection (survey) abandoned, obstruction , General Comments HEAVY DEBRIS / HEAVY DEBRIS



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CCTV Inspection report / Inspection: 1

Inspection Number	Pipe Attribute ID:	Catchment	U/S Manhole	D/S Manhole	Plan Length
Pipe Diameter 525 mm	Pipe Material Reinforced concrete pipe		FII 3	PIT 5	0.00 m

not cleaned

Town/suburb:	NEWCASTLE		
Location:	18 HONEYSUC		
Location type:	Road		

CKLE DR Asset Owner: Operator: Cleaning:

Date:

15/08/2014 NEWCASTLE CITY COUNCIL DANNY WILLIAMS

Flow Control: Precipitation: No

No measures

Inspected Length: Structural Grading: 24.00 m

Service Grade:

1

Remarks:

1:195 Position Code Observation

Grade

PIT 5 0.00 0.10

STSP Start node, side entry pit, Nodename: PIT 5

0

WLC

Water level, clear flow (the invert is visible), depth 30%

Finish node, side entry pit, Nodename: PIT 3

SER no def

SER peak

SER mean

0

SER total

SER grade

STR grade

STR peak

STR no def

23.50

STR total

STR mean

FHSP



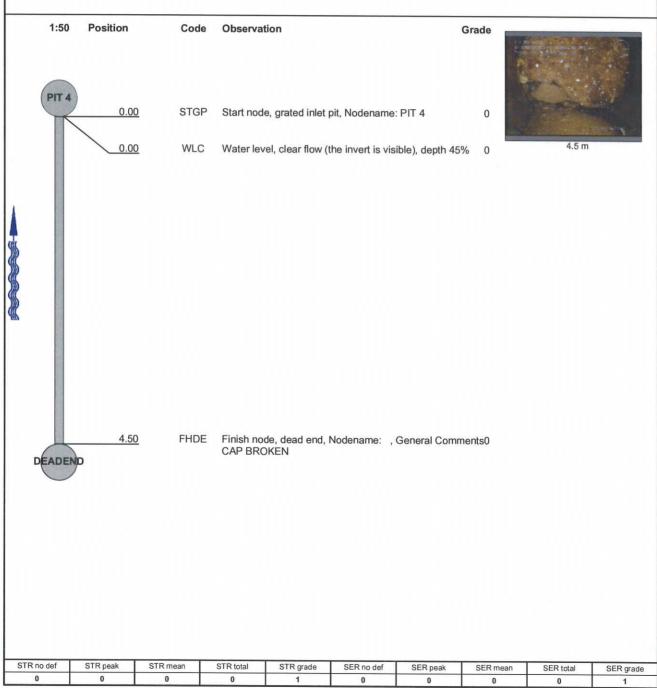
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CCTV Inspection report / Inspection: 1

Inspection Number 6	Pipe Attribute ID:	Catchment .	U/S Manhole DEADEND	D/S Manhole PIT 4	Plan Length 0.00 m
Pipe Diameter 225 mm	Pipe Material Reinforced concrete pipe				333.7333

Town/suburb: Location: Location type:	NEWCASTLE 18 HONEYSUCKLE DR Road	Date: Asset Owner: Operator: Cleaning:	15/08/2014 NEWCASTLE CITY COUNCIL DANNY WILLIAMS cleaned	Flow Control: Precipitation:	No measures No
Inspected Length:	5.00 m				
Structural Grading	g: 1				
Service Grade:	1				

Remarks:





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Inspection Pictures / Inspection: 1

Location/Street	Town or suburb:	Date :	Section number:	Sewer Ref.:
18 HONEYSUCKLE DR	NEWCASTLE	15/08/2014	6	6

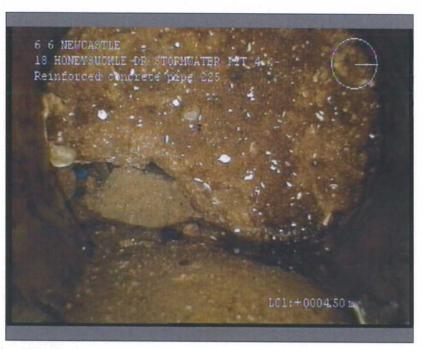


Photo: 6_3A 4.5m, Finish node, dead end, Nodename: , General Comments CAP BROKEN / CAP BROKEN

