

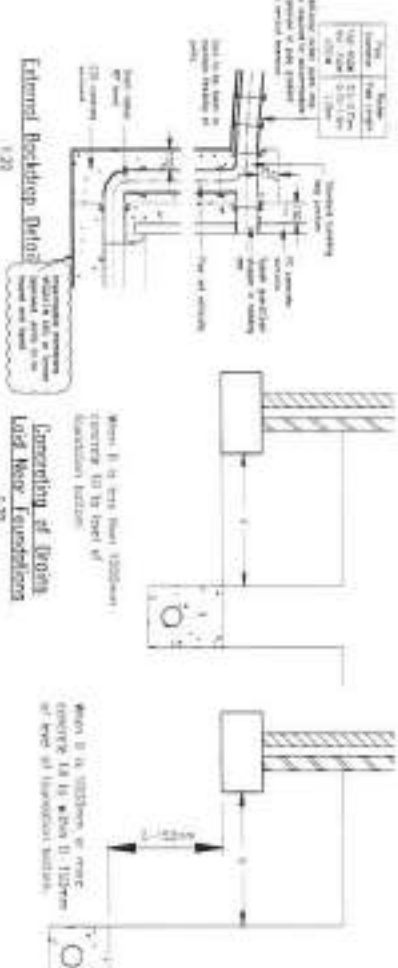


1.20 Elevation of the structure



1.21 Elevation of the structure

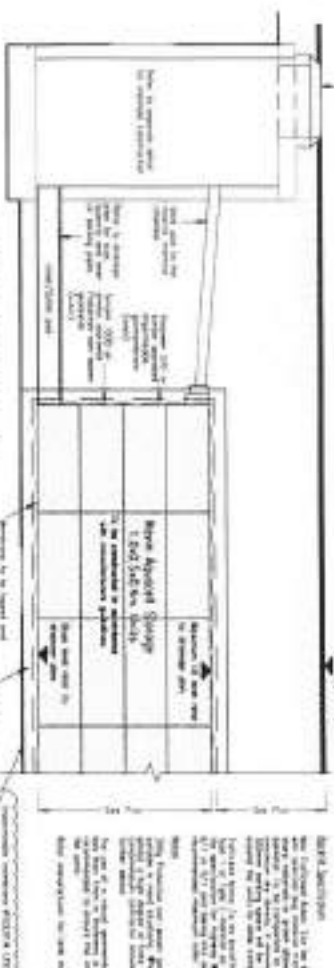
1.22 Elevation of the structure



1.23 Elevation of the structure

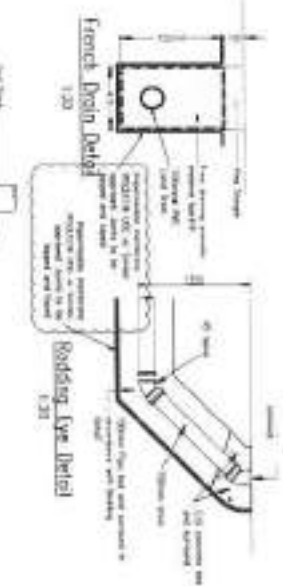
Impermeable membrane is to be applied to base and lapped up side of all exterior walls and horizontal surfaces and under ground drainage inlets. See Section 1.24 for details.

Impermeable membrane is to be applied to base and lapped up side of all exterior walls and horizontal surfaces and under ground drainage inlets. See Section 1.24 for details.

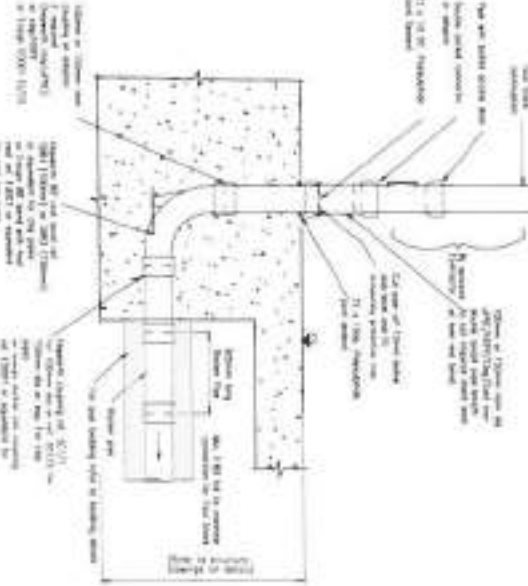


1.24 Elevation of the structure

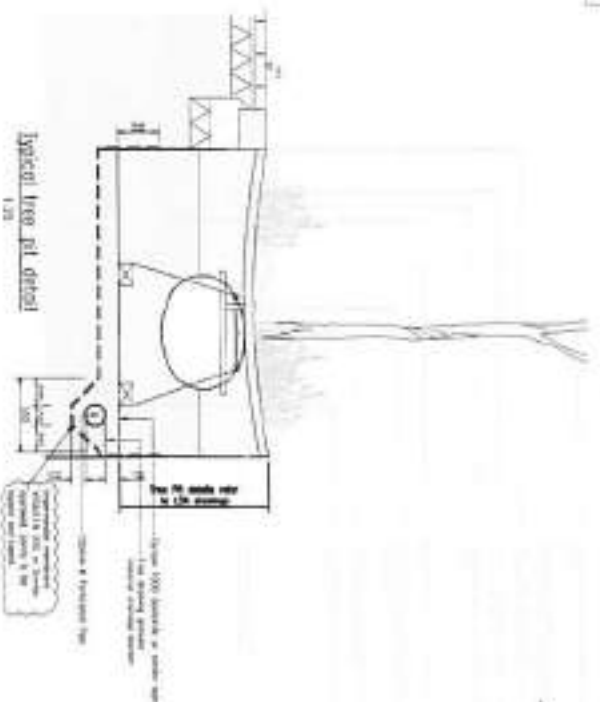
Impermeable membrane is to be applied to base and lapped up side of all exterior walls and horizontal surfaces and under ground drainage inlets. See Section 1.24 for details.



1.25 Elevation of the structure



1.26 Elevation of the structure



1.27 Elevation of the structure

Impermeable membrane is to be applied to base and lapped up side of all exterior walls and horizontal surfaces and under ground drainage inlets. See Section 1.24 for details.

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FOR CONSTRUCTION	
1.21	Impermeable membrane is to be applied to base and lapped up side of all exterior walls and horizontal surfaces and under ground drainage inlets. See Section 1.24 for details.
1.22	Impermeable membrane is to be applied to base and lapped up side of all exterior walls and horizontal surfaces and under ground drainage inlets. See Section 1.24 for details.
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1.27	Impermeable membrane is to be applied to base and lapped up side of all exterior walls and horizontal surfaces and under ground drainage inlets. See Section 1.24 for details.







PROJECT NAME: CLARENDON ROAD - PHASE 3A

Manhole / Drainage run Check Sheet

		Check Sheet No:	018	
		Drg Ref & Rev no:	8101 C15/8130 C1/8131 C3	
No	Manhole & Drainage run construction	Details	Checked and Signed	
			GCL	Client
1	Location D2	Manhole/pipe run Ref	✓	
		Gridline Ref		
		Highlighted location plan attached		
		SW02		
		Yes/No		
2	Manhole size	φ450mm	✓	
3	Invert level	23.070m	✓	
4	Manhole cover : Spec, size, orientation & cover level	24.798, PPIC	✓	
5	Excavation to correct dimensions/support systems checked		✓	
6	Branches & benching: position, line, level checked		✓	
7	Rocker pipes installed (if applicable) checked		✓	
8	Rings and cover placed as per vertical & horizontal alignment checked.		✓	
9	Brickwork & surround filled as per detail/specification checked.		✓	
10	All Specials are fixed (Non return valve, Flow control unit, Traps, Rodent barrier, etc.) Specify Type :		N/A	
11	Manhole accessible for future use/maintenance	Yes/No	✓	
12	Pipe run details iron cast to clay	Material	✓	
	RWPI → SW02	Diameter		
		Length		
		φ150		
13	Spurs for lateral connections: Position, level & co-ordinates checked		✓	
14	SVP/RWPs installed to correct position, level and capped off.		✓	
15	Anchor blocks to correct detail at specified locations		✓	
16	Bedding & surround as specified		✓	
17	Air testing passed/witnessed.		✓	
18	Photos attached		✓	

Originator - GCL Site Manager		Client Representative	
Name :	Julian Thane	Name :	MARK TERRY
Signature:	Julian.T	Signature:	MARK TERRY
Date:	18.02.21	Date:	18.2.21

PROJECT NAME: CLARENDON ROAD - PHASE 3A

Drainage Air Test Sheet

Client: STW	Test date:
Drainage Check Sheet Ref no:	Test Ref. No:

Pipe Run	Air gauge pressure		Pipe dia.(ø)	Test Time	Result	Remarks
	Initial	Final				
RWPI - SW02	100		150			

Signed: (Technician)	Witnessed by: 
Verified By: Julian Thoma (Technical Manager)	Date: 18.2.21

Air Test - Testing Guidelines

1. Seal pipe section with appropriate size drain test plug.
Remove any grease or foreign material from installation point. Ensure no dirt is trapped between seal of plug and plates. Ensure plug is inserted square to pipe wall. Ensure wing nut and sealing cap are tight.
2. Fit test nipple to one of the drain test plugs.
3. Connect rubber hose via 'Y' piece to nipple, 'U' gauge and hand bellows.
4. Fill 'U' gauge with water to 'zero'.
5. Squeeze the hand bellows gently until the level reaches 100mm on the open side of the gauge and the lower limb below zero on the closed side. The level should not fall to less than 75mm during a period of 5 minutes without further pumping, after allowing a suitable time for stabilisation of air temperature. If it drops below 75mm within the specified time the pipe section is leaking.







PROJECT NAME: CLARENDON ROAD - PHASE 3A

Manhole / Drainage run Check Sheet

		Check Sheet No:	019	
		Drg Ref & Rev no:	8101 C15 / 8130 C1 / 8131 C3	
No	Manhole & Drainage run construction	Details	Checked and Signed	
			GCL	Client
1	Location D2	Manhole/pipe run Ref	SW09A	
		Gridline Ref	-	
	Highlighted location plan attached	Yes/No	✓	
2	Manhole size	φ450mm	✓	
3	Invert level	24.000m	✓	
4	Manhole cover : Spec, size, orientation & cover level	24.816m, PPIC	✓	
5	Excavation to correct dimensions/support systems checked		✓	
6	Branches & benching: position, line, level checked		✓	
7	Rocker pipes installed (if applicable) checked		✓	
8	Rings and cover placed as per vertical & horizontal alignment checked.		✓	
9	Brickwork & surround filled as per detail/specification checked.		✓	
10	All Specials are fixed (Non return valve, Flow control unit, Traps, Rodent barrier, etc.) Specify Type :		N/A	
11	Manhole accessible for future use/maintenance	Yes/No	✓	
12	Pipe run details iron cast to clay	Material	✓	
	RWP1 - SW09A	Diameter		
		Length		
13	Spurs for lateral connections: Position, level & co-ordinates checked		✓	
14	SVP/RWPs installed to correct position, level and capped off.		✓	
15	Anchor blocks to correct detail at specified locations		✓	
16	Bedding & surround as specified		✓	
17	Air testing passed/witnessed:		✓	
18	Photos attached		✓	

Originator - GCL Site Manager		Client Representative	
Name : Julian Thane		Name : MARK EMMETT	
Signature: Julian.T	Date: 18.02.21	Signature: MARK EMMETT	Date: 18.2.21

PROJECT NAME: CLARENDON ROAD - PHASE 3A

Drainage Air Test Sheet

Client: <u>STW</u>	Test date:
Drainage Check Sheet Ref no:	Test. Ref. No:

Pipe Run	Air gauge pressure		Pipe dia.(ø)	Test Time	Result	Remarks
	Initial	Final				
RWPI - SWOGA	100	100	ø150			

Signed: (Technician)	Witnessed by: <u>MAHMOUD</u>
Verified By: (Technical Manager) <u>Julian Thana</u>	Date: <u>18.02.2021</u>

Air Test - Testing Guidelines

1. Seal pipe section with appropriate size drain test plug.
Remove any grease or foreign material from installation point. Ensure no dirt is trapped between seal of plug and gasket. Ensure plug is inserted square to pipe wall. Ensure wing nut and sealing cap are tight.
2. Fit test nipple to one of the drain test plugs.
3. Connect rubber hose via 'Y' piece to nipple, 'U' gauge and hand bellows.
4. Fill 'U' gauge with water to 'zero'.
5. Squeeze the hand bellows gently until the level reaches 100mm on the open side of the gauge and the lower level below runs on the closed side. The level should not fall to less than 75mm during a period of 5 minutes without further pumping, after allowing a suitable time for stabilization of air temperature. If it drops below 75mm within the specified time the pipe section is leaking.







GCL

PROJECT NAME: CLARENDON ROAD - PHASE 3A

Manhole / Drainage run Check Sheet

Check Sheet No:		020		
Drg Ref & Rev no:		8101 C15 / 8130 C1 / 8131 C3		
No	Manhole & Drainage run construction	Details	Checked and Signed	
			GCL	Client
1	Location D2 Manhole/pipe run Ref Gridline Ref Highlighted location plan attached	FW10 - (Yes/No)	✓	
2	Manhole size	φ450 mm	✓	
3	Invert level	23.850m	✓	
4	Manhole cover : Spec, size, orientation & cover level	24.790m, PPIC	✓	
5	Excavation to correct dimensions/support systems checked		✓	
6	Branches & benching: position, line, level checked		✓	
7	Rocker pipes installed (if applicable) checked		✓	
8	Rings and cover placed as per vertical & horizontal alignment checked.		✓	
9	Brickwork & surround filled as per detail/specification checked.		✓	
10	All Specials are fixed (Non return valve, Flow control unit, Traps, Rodent barrier, etc.) Specify Type :		N/A	
11	Manhole accessible for future use/maintenance	(Yes/No)	✓	
12	Pipe run details iron cast to clay Material Diameter Length	iron + clay φ100, φ150 -	✓	
13	Spurs for lateral connections: Position, level & co-ordinates checked		✓	
14	SVP/RWPs installed to correct position, level and capped off.		✓	
15	Anchor blocks to correct detail at specified locations		✓	
16	Bedding & surround as specified		✓	
17	Air testing passed/witnessed:		✓	
18	Photos attached		✓	

Originator - GCL Site Manager		Client Representative	
Name : Julian Thana	Name MARK EUREMY		
Signature: Julian.T Date: 18.02.21	Signature: [Signature] Date: 18.2.21		

GCL-QA-002

PROJECT NAME: CLARENDON ROAD - PHASE 3A

Drainage Air Test Sheet

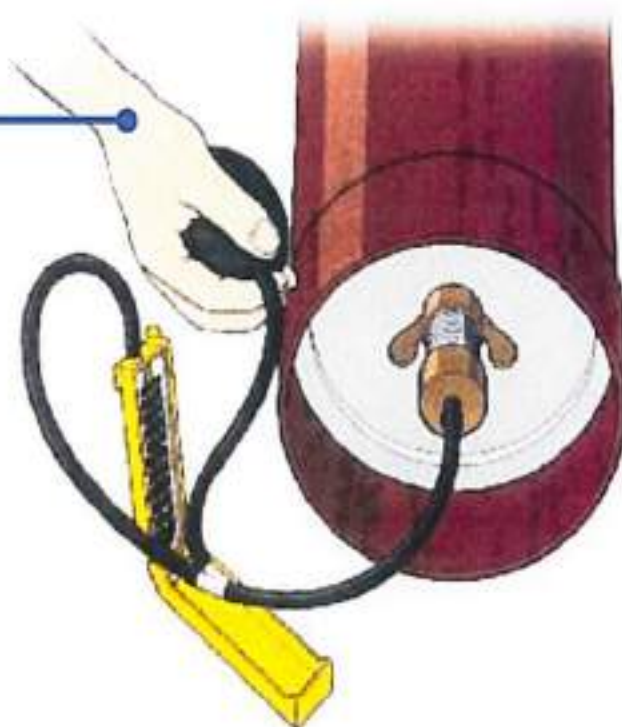
Client: STW	Test date:
Drainage Check Sheet Ref no:	Test Ref. No:

Pipe Run	Air gauge pressure		Pipe dia.(Ø)	Test Time	Result	Remarks
	Initial	Final				
SVP1 → FW10	100		100			
SVP2 → FW10	100		100			
FW10 → FW11	100		150			

Signed: (Technician)	Witnessed by:
Verified By: (Technical Manager) <i>Julien Thang</i>	Date: 18-2-21

Air Test - Testing Guidelines

- Seal pipe section with appropriate size drain test plug.
Remove any grease or foreign material from installation point. Ensure no dirt is trapped between seal of plug and plates. Ensure plug is inserted square to pipe wall. Ensure wing nut and sealing cap are tight.
- Fit test nipple to one of the drain test plugs.
- Connect rubber hose via 'Y' piece to nipple, 'U' gauge and hand bellows.
- Fill 'U' gauge with water to 'zero'.
- Squeeze the hand bellows gently until the level reaches 100mm on the open side of the gauge and the lower limb below zero on the closed side. The level should not fall to less than 75mm during a period of 5 minutes without further pumping, after allowing a suitable time for stabilisation of air temperature. If it drops below 75mm within the specified time the pipe section is leaking.













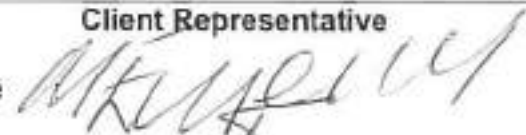




PROJECT NAME: Clarendon Road

Manhole / Drainage run Check Sheet

		Check Sheet No:	24	
		Drg Ref & Rev no:	C16 8101	
No	Manhole & Drainage run construction	Details	Checked and Signed	
			GCL	Client
1	Location	Manhole/pipe run Ref	✓	
		Gridline Ref		
		Highlighted location plan attached		
2	Manhole size	450 Ø	✓	
3	Invert level	24.010	✓	
4	Manhole cover : Spec, size, orientation & cover level	25-124	✓	
5	Excavation to correct dimensions/support systems checked		✓	
6	Branches & benching: position, line, level checked		✓	
7	Rocker pipes installed (if applicable) checked		✓	
8	Rings and cover placed as per vertical & horizontal alignment checked.		✓	
9	Brickwork & surround filled as per detail/specification checked.		✓	
10	All Specials are fixed (Non return valve, Flow control unit, Traps, Rodent barrier, etc.)	Specify Type :	N/A	
11	Manhole accessible for future use/maintenance		✓	
12	Pipe run details	Material	✓	
		Diameter		
		Length		
13	Spurs for lateral connections: Position, level & co-ordinates checked		✓	
14	SVP/RWPs installed to correct position, level and capped off.		✓	
15	Anchor blocks to correct detail at specified locations		✓	
16	Bedding & surround as specified		✓	
17	Air testing passed/witnessed.		✓	
18	Photos attached		✓	

Originator - GCL Site Manager		Client Representative	
Name :	S. Burke	Name	
Signature:		Signature:	
Date:	22/2/21	Date:	21/2/21

PROJECT NAME:

Drainage Air Test Sheet

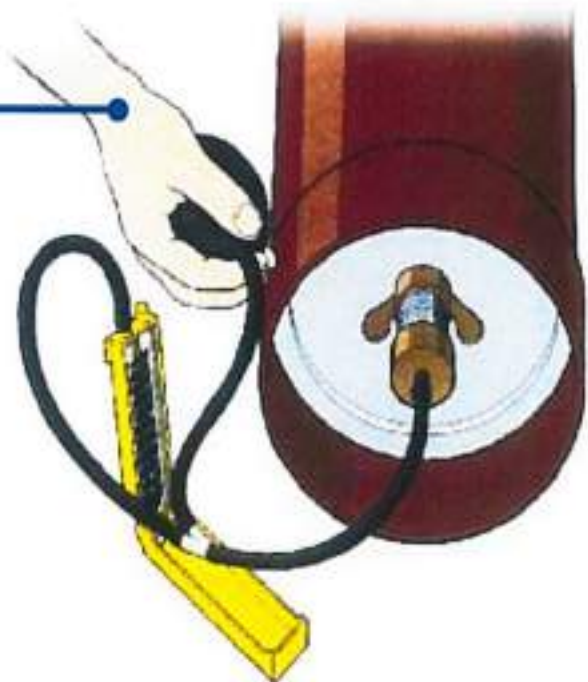
Client:	ST. WILLIAM	Test date:	22/2/21
Drainage Check Sheet Ref no:	24	Test. Ref. No:	

Pipe Run	Air gauge pressure		Pipe dia.(ø)	Test Time	Result	Remarks
	Initial	Final				
F205 - SUP	100		100 Ø			
F205 - TG	100		100 Ø			

Signed: (Technician)	Witnessed by:
Verified By: (Technical Manager)	Date:

Air Test - Testing Guidelines

1. Seal pipe section with appropriate size drain test plug.
Remove any grease or foreign material from installation point. Ensure no dirt is trapped between seal of plug and plates. Ensure plug is inserted square to pipe wall. Ensure wing nut and sealing cap are tight.
2. Fit test nipple to one of the drain test plugs.
3. Connect rubber hose via 'Y' piece to nipple, 'U' gauge and hand bellows.
4. Fill 'U' gauge with water to 'zero'.
5. Squeeze the hand bellows gently until the level reaches 100mm on the open side of the gauge and the lower limit below zero on the closed side. The level should not fall to less than 75mm during a period of 5 minutes without further pumping, after allowing a suitable time for stabilisation of air temperature. If it drops below 75mm within the specified time the pipe section is leaking.





PROJECT NAME: Clarendon Road

Manhole / Drainage run Check Sheet

Check Sheet No:		25		
Drg Ref & Rev no:		C16 8101		
No	Manhole & Drainage run construction	Details	Checked and Signed	
			GCL	Client
1	Location Manhole/pipe run Ref Gridline Ref Highlighted location plan attached	FW04 - FW03 Yes/No	✓	
2	Manhole size	450 Ø	✓	
3	Invert level	24.100	✓	
4	Manhole cover : Spec, size, orientation & cover level	25 089	✓	
5	Excavation to correct dimensions/support systems checked		✓	
6	Branches & benching: position, line, level checked		✓	
7	Rocker pipes installed (if applicable) checked		✓	
8	Rings and cover placed as per vertical & horizontal alignment checked.		✓	
9	Brickwork & surround filled as per detail/specification checked.		✓	
10	All Specials are fixed (Non return valve, Flow control unit, Traps, Rodent barrier, etc.) Specify Type :		N/A	
11	Manhole accessible for future use/maintenance	Yes/No	✓	
12	Pipe run details Material Diameter FW04 T-JUNCTION - FW03 T-JUNCTION Length	CLAY 150 Ø	✓	
13	Spurs for lateral connections: Position, level & co-ordinates checked		✓	
14	SVP/RWPs installed to correct position, level and capped off.		✓	
15	Anchor blocks to correct detail at specified locations		✓	
16	Bedding & surround as specified		✓	
17	Air testing passed/witnessed		✓	
18	Photos attached		✓	

Originator - GCL Site Manager		Client Representative	
Name : S. Bulke		Name	
Signature: 	Date: 25/12/21	Signature: 	Date: 26/12

PROJECT NAME:

Drainage Air Test Sheet

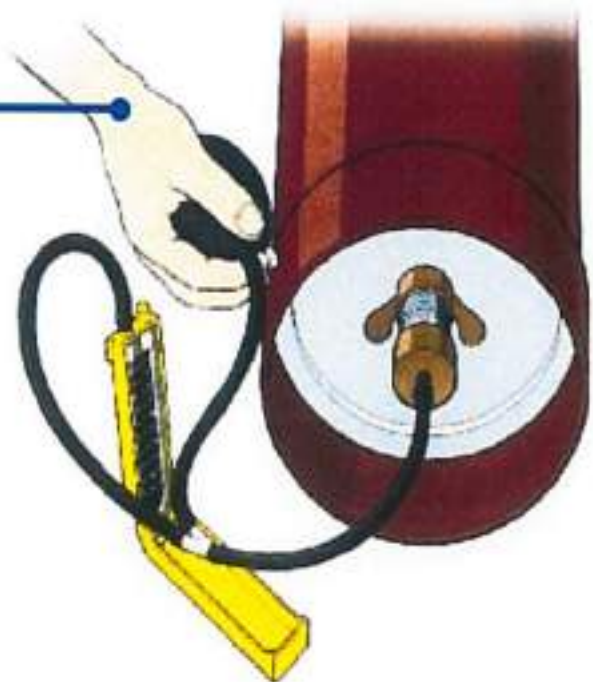
Client: <u>ST WILLIAM</u>	Test date: <u>25/2/21</u>
Drainage Check Sheet Ref no: <u>25</u>	Test Ref. No:

	Pipe Run	Air gauge pressure		Pipe dia.(ø)	Test Time	Result	Remarks
		Initial	Final				
	<u>FW06 - FW03T</u>	<u>100</u>	<u>100</u>				
<u>1</u>	<u>FW03 - TG</u>	<u>100</u>	<u>99</u>				
<u>2</u>	<u>FW03 - SVP</u>	<u>100</u>	<u>100</u>				
<u>3</u>	<u>FW03 - SVP</u>	<u>100</u>	<u>100</u>				

Signed: (Technician)	Witnessed by: <u>M.H.</u>
Verified By: (Technical Manager)	Date: <u>25/2/2021</u>

Air Test - Testing Guidelines

1. Seal pipe section with appropriate size drain test plug.
Remove any grease or foreign material from installation point. Ensure no dirt is trapped between seal of plug and plates. Ensure plug is inserted square to pipe wall. Ensure wing nut and sealing cap are tight.
2. Fit test nipple to one of the drain test plugs.
3. Connect rubber hose via 'Y' piece to nipple, 'U' gauge and hand bellows.
4. Fill 'U' gauge with water to 'zero'.
5. Squeeze the hand bellows gently until the level reaches 100mm on the open side of the gauge and the lower limit below zero on the closed side. The level should not fall to less than 75mm during a period of 5 minutes without further pumping, after allowing a suitable time for stabilisation of air temperature. If it drops below 75mm within the specified time the pipe section is leaking.



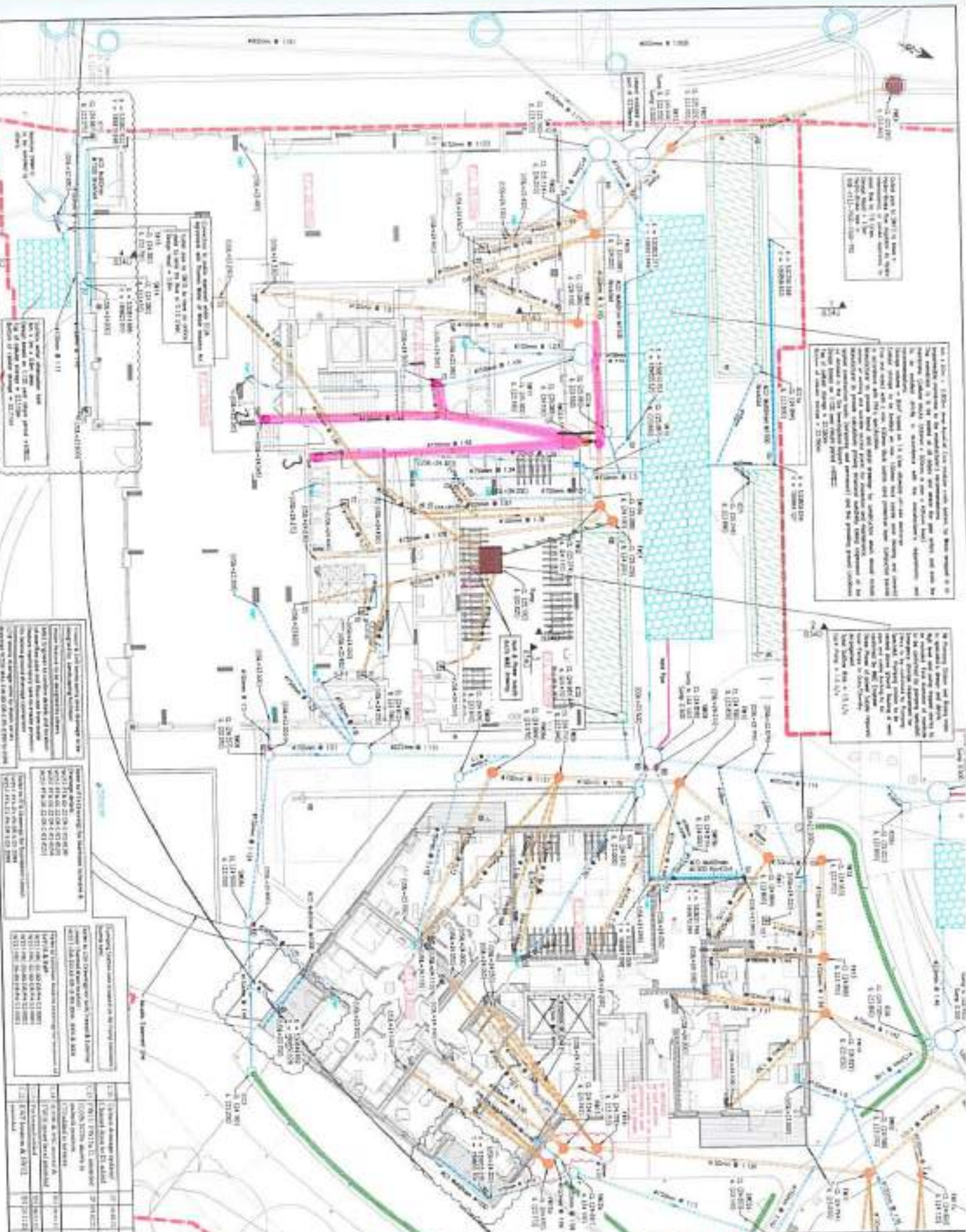
Notes:
1. This plan shows the proposed layout of the site, including the location of the proposed building, parking lot, and other features.
2. The proposed building is shown in blue, and the parking lot is shown in green.
3. The proposed layout is subject to the approval of the local planning authority.
4. The proposed layout is subject to the approval of the local planning authority.

Notes:
1. This plan shows the proposed layout of the site, including the location of the proposed building, parking lot, and other features.
2. The proposed building is shown in blue, and the parking lot is shown in green.
3. The proposed layout is subject to the approval of the local planning authority.
4. The proposed layout is subject to the approval of the local planning authority.

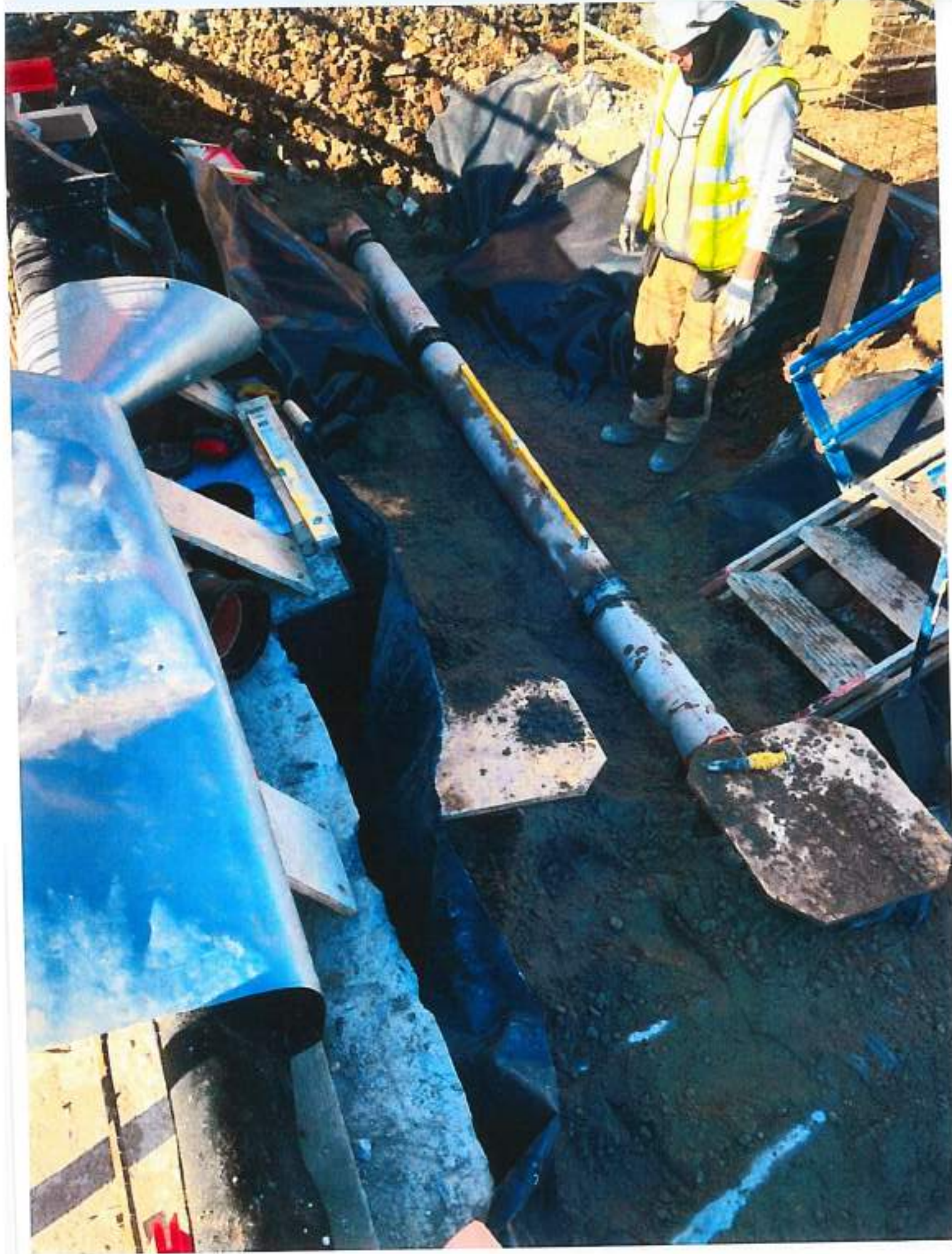
Notes:
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2. The proposed building is shown in blue, and the parking lot is shown in green.
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4. The proposed layout is subject to the approval of the local planning authority.

Notes:
1. This plan shows the proposed layout of the site, including the location of the proposed building, parking lot, and other features.
2. The proposed building is shown in blue, and the parking lot is shown in green.
3. The proposed layout is subject to the approval of the local planning authority.
4. The proposed layout is subject to the approval of the local planning authority.



FOR CONSTRUCTION			
1	Proposed Building	100' x 100'	100' x 100'
2	Proposed Parking Lot	100' x 100'	100' x 100'
3	Proposed Driveway	100' x 100'	100' x 100'
4	Proposed Fencing	100' x 100'	100' x 100'
5	Proposed Landscaping	100' x 100'	100' x 100'
6	Proposed Utilities	100' x 100'	100' x 100'
7	Proposed Access	100' x 100'	100' x 100'
8	Proposed Easements	100' x 100'	100' x 100'
9	Proposed Setbacks	100' x 100'	100' x 100'
10	Proposed Other	100' x 100'	100' x 100'





PROJECT NAME: Clarendon Road

Manhole / Drainage run Check Sheet

		Check Sheet No:	26	
		Drg Ref & Rev no:	C16 8101	
No	Manhole & Drainage run construction	Details	Checked and Signed	
			GCL	Client
1	Location	Manhole/pipe run Ref	✓	
		Gridline Ref		
		Highlighted location plan attached		
		(Yes/No)		
2	Manhole size	450 Ø	✓	
3	Invert level	23.610	✓	
4	Manhole cover : Spec, size, orientation & cover level	24.639	✓	
5	Excavation to correct dimensions/support systems checked		✓	
6	Branches & benching: position, line, level checked		✓	
7	Rocker pipes installed (if applicable) checked		✓	
8	Rings and cover placed as per vertical & horizontal alignment checked.		✓	
9	Brickwork & surround filled as per detail/specification checked.		✓	
10	All Specials are fixed (Non return valve, Flow control unit, Traps, Rodent barrier, etc.) Specify Type :		N/A	
11	Manhole accessible for future use/maintenance		(Yes/No)	
12	Pipe run details	Material	✓	
		Diameter		
		Length		
	Swag - RWP	Clay lined 150		
13	Spurs for lateral connections: Position, level & co-ordinates checked		✓	
14	SVP/RWPs installed to correct position, level and capped off.		✓	
15	Anchor blocks to correct detail at specified locations		✓	
16	Bedding & surround as specified		✓	
17	Air testing passed/witnessed:		✓	
18	Photos attached		✓	

Originator - GCL Site Manager		Client Representative	
Name : S. J. Allen		Name : M. E. W. K. P.	
Signature:	Date: 26/2/11	Signature:	Date: 25/2

GCL-QA-002

PROJECT NAME:

Drainage Air Test Sheet

Client: <u>ST WILLIAM</u>	Test date:
Drainage Check Sheet Ref no: <u>26</u>	Test Ref. No:

Pipe Run	Air gauge pressure		Pipe dia.(ø)	Test Time	Result	Remarks
	Initial	Final				
<u>SWP - RWP</u>	<u>100</u>	<u>97</u>	<u>150</u>	<u>5:00</u>		

Signed: (Technician)	Witnessed by: <u>[Signature]</u>
Verified By: (Technical Manager) <u>S. Burke</u>	Date: <u>25-02-21</u>

Air Test - Testing Guidelines

1. Seal pipe section with appropriate size drain test plug.
Remove any grease or foreign material from installation point. Ensure no dirt is trapped between seal of plug and plates. Ensure plug is inserted square to pipe wall. Ensure wing nut and sealing cap are tight.
2. Fit test nipple to one of the drain test plugs.
3. Connect rubber hose via 'Y' piece to nipple, 'U' gauge and hand bellows.
4. Fill 'U' gauge with water to 'zero'.
5. Squeeze the hand bellows gently until the level reaches 100mm on the open side of the gauge and the lower limb below zero on the closed side. The level should not fall to less than 75mm during a period of 5 minutes without further pumping, after allowing a suitable time for stabilisation of air temperature. If it drops below 75mm within the specified time the pipe section is leaking.



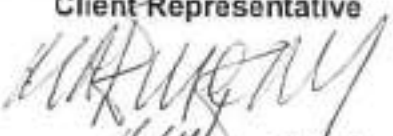




PROJECT NAME: Clarendon Road

Manhole / Drainage run Check Sheet

		Check Sheet No:	27	
		Drg Ref & Rev no:	C17 8101	
No	Manhole & Drainage run construction	Details	Checked and Signed	
			GCL	Client
1	Location	Manhole/pipe run Ref	✓	
		Gridline Ref		
		Highlighted location plan attached		
		(Yes/No)		
2	Manhole size	450 Ø	✓	
3	Invert level	24.110	✓	
4	Manhole cover : Spec, size, orientation & cover level	25-074	✓	
5	Excavation to correct dimensions/support systems checked		✓	
6	Branches & benching: position, line, level checked		✓	
7	Rocker pipes installed (if applicable) checked		✓	
8	Rings and cover placed as per vertical & horizontal alignment checked.		✓	
9	Brickwork & surround filled as per detail/specification checked.		✓	
10	All Specials are fixed (Non return valve, Flow control unit, Traps, Rodent barrier, etc.)	Specify Type :	N/A	
11	Manhole accessible for future use/maintenance	(Yes/No)	✓	
12	Pipe run details	Material	✓	
		Diameter		
		Length		
		CLAY / CAST IRON		
		100 Ø + 150 Ø		
13	Spurs for lateral connections: Position, level & co-ordinates checked		✓	
14	SVP/RWPs installed to correct position, level and capped off.		✓	
15	Anchor blocks to correct detail at specified locations		✓	
16	Bedding & surround as specified		✓	
17	Air testing passed/witnessed:		✓	
18	Photos attached		✓	

Originator - GCL Site Manager		Client Representative	
Name :	S. Durke	Name :	
Signature:	 Date: 26/02/21	Signature:	 Date: 26.02.21

PROJECT NAME:

Drainage Air Test Sheet

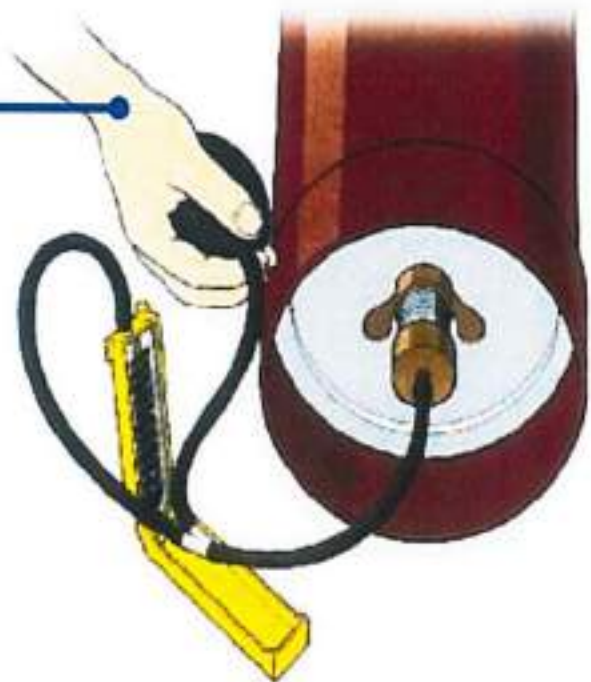
Client: <u>ST WILLIAM</u>	Test date: <u>26/2/21</u>
Drainage Check Sheet Ref no: <u>27</u>	Test. Ref. No:

	Pipe Run	Air gauge pressure		Pipe dia.(ø)	Test Time	Result	Remarks
		Initial	Final				
1	Fw02 - SS	100		100	5:00		
2	Fw02 - TG + SVF	100		150+100	5:00		
3	Fw02 - TG + SVF	100		100	5:00		
4	Fw02 - Fw06	100		150	5:00		

Signed: (Technician)	Witnessed by: <u>[Signature]</u>
Verified By: (Technical Manager) <u>S. Burke</u>	Date: <u>26.02.21</u>

Air Test - Testing Guidelines

1. Seal pipe section with appropriate size drain test plug.
Remove any grease or foreign material from installation point. Ensure no dirt is trapped between seal of plug and plates. Ensure plug is inserted square to pipe wall. Ensure wing nut and sealing cap are tight.
2. Fit test nipple to one of the drain test plugs.
3. Connect rubber hose via 'Y' piece to nipple, 'U' gauge and hand bellows.
4. Fill 'U' gauge with water to 'zero'.
5. Squeeze the hand bellows gently until the level reaches 100mm on the open side of the gauge and the water level below zero on the closed side. The level should not fall to less than 75mm during a period of 5 minutes without further pumping, after allowing a suitable time for stabilisation of air temperature. If it drops below 75mm within the specified time the pipe section is leaking.



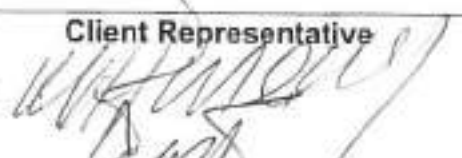




PROJECT NAME: Clarendon Road

Manhole / Drainage run Check Sheet

		Check Sheet No:	28	
		Drg Ref & Rev no:	C17 8101	
No	Manhole & Drainage run construction	Details	Checked and Signed	
			GCL	Client
1	Location	Manhole/pipe run Ref	✓	
		Gridline Ref		
	Highlighted location plan attached			
2	Manhole size	450 Ø	✓	
3	Invert level	24.100	✓	
4	Manhole cover : Spec, size, orientation & cover level	25 088	✓	
5	Excavation to correct dimensions/support systems checked		✓	
6	Branches & benching: position, line, level checked		✓	
7	Rocker pipes installed (if applicable) checked		✓	
8	Rings and cover placed as per vertical & horizontal alignment checked.		✓	
9	Brickwork & surround filled as per detail/specification checked.		✓	
10	All Specials are fixed (Non return valve, Flow control unit, Traps, Rodent barrier, etc.) Specify Type :		N/A	
11	Manhole accessible for future use/maintenance	(Yes/No)	✓	
12	Pipe run details	Material	✓	
		Diameter		
	5w10n - 5w10	Length		
13	Spurs for lateral connections: Position, level & co-ordinates checked		✓	
14	SVP/RWPs installed to correct position, level and capped off.		✓	
15	Anchor blocks to correct detail at specified locations		✓	
16	Bedding & surround as specified		✓	
17	Air testing passed/witnessed:		✓	
18	Photos attached		✓	

Originator - GCL Site Manager		Client Representative	
Name : S. Burke		Name 	
Signature: S. Burke	Date: 26/2/21	Signature: 	Date: 26/02

PROJECT NAME:

Drainage Air Test Sheet

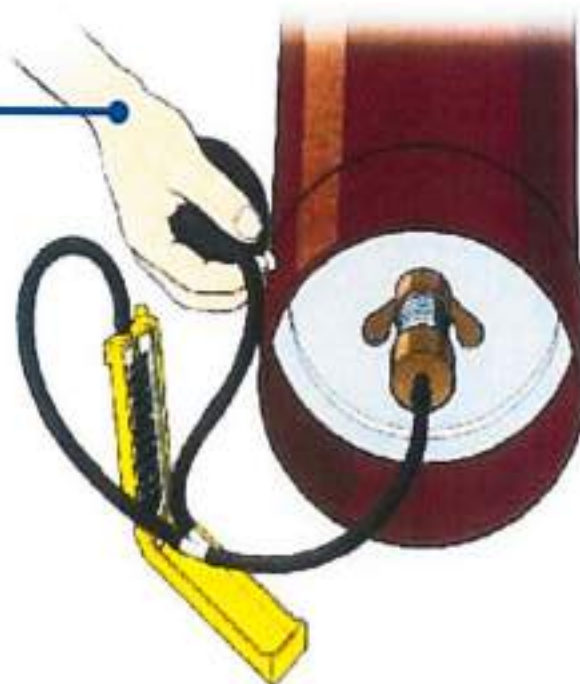
Client: <u>ST WILLIAM</u>	Test date: <u>26/2/21</u>
Drainage Check Sheet Ref no: <u>28</u>	Test. Ref. No:

Pipe Run	Air gauge pressure		Pipe dia.(ø)	Test Time	Result	Remarks
	Initial	Final				
1 <u>Swire - RUP</u>	100	<u>92</u>	150ø	5:00		
2 <u>Swire - SWIG</u>	100	<u>100</u>	150ø	5:00		

Signed: (Technician)	Witnessed by: <u>[Signature]</u>
Verified By: (Technical Manager)	Date: <u>26.02.21</u>

Air Test - Testing Guidelines

1. Seal pipe section with appropriate size drain test plug.
Remove any grease or foreign material from installation point. Ensure no dirt is trapped between seal of plug and plates. Ensure plug is inserted square to pipe wall. Ensure wing nut and sealing cap are tight.
2. Fit test nipple to one of the drain test plugs.
3. Connect rubber hose via 'Y' piece to nipple, 'U' gauge and hand bellows.
4. Fill 'U' gauge with water to 'zero'.
5. Squeeze the hand bellows gently until the level reaches 100mm on the open side of the gauge and the lower limb below zero on the closed side. The level should not fall to less than 15mm during a period of 5 minutes without further pumping, after allowing a suitable time for stabilisation of air temperature. If it drops below 25mm within the specified time the pipe section is leaking.

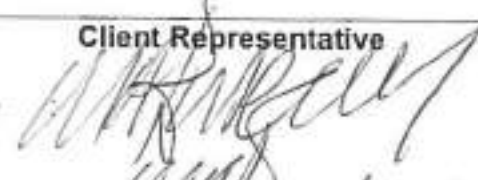




PROJECT NAME: Clarendon Road

Manhole / Drainage run Check Sheet

		Check Sheet No:	29	
		Drg Ref & Rev no:	C17 8101	
No	Manhole & Drainage run construction	Details	Checked and Signed	
			GCL	Client
1	Location	Manhole/pipe run Ref	✓	
		Gridline Ref		
		Highlighted location plan attached		
2	Manhole size	SW10 (Yes/No)	✓	
3	Invert level	450 Ø	✓	
4	Manhole cover : Spec, size, orientation & cover level	23.800	✓	
5	Excavation to correct dimensions/support systems checked	25.082	✓	
6	Branches & benching: position, line, level checked		✓	
7	Rocker pipes installed (if applicable) checked		✓	
8	Rings and cover placed as per vertical & horizontal alignment checked.		✓	
9	Brickwork & surround filled as per detail/specification checked.		✓	
10	All Specials are fixed (Non return valve, Flow control unit, Traps, Rodent barrier, etc.) Specify Type :		N/A	
11	Manhole accessible for future use/maintenance	(Yes/No)	✓	
12	Pipe run details	Material	✓	
		Diameter		
		Length		
13	Spurs for lateral connections: Position, level & co-ordinates checked	CLAY / CONCRETE 150	✓	
14	SVP/RWPs installed to correct position, level and capped off.		✓	
15	Anchor blocks to correct detail at specified locations		✓	
16	Bedding & surround as specified		✓	
17	Air testing passed/witnessed:		✓	
18	Photos attached		✓	

Originator - GCL Site Manager		Client Representative	
Name :	S. Butke	Name :	
Signature:	 Date: 26/2/21	Signature:	 Date: 26/2/21

PROJECT NAME:

Drainage Air Test Sheet

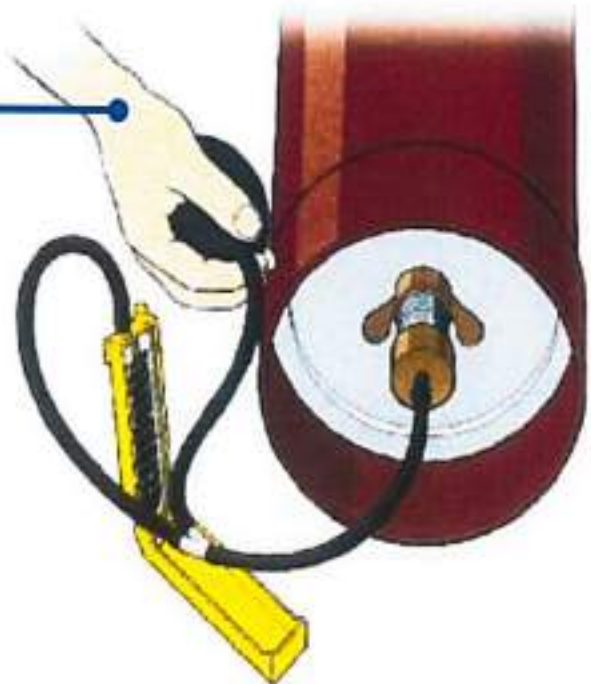
Client: <u>ST WILLIAM</u>	Test date: <u>26/2/21</u>
Drainage Check Sheet Ref no: <u>29</u>	Test Ref. No:

Pipe Run	Air gauge pressure		Pipe dia.(ø)	Test Time	Result	Remarks
	Initial	Final				
1 SW10 - RWP	100	100	150	5.00		
2 SW10 - RWP	100	100	150	5.00		

Signed: (Technician)	Witnessed by: <u>[Signature]</u>
Verified By: (Technical Manager) <u>S. Burke</u>	Date: <u>26.02.21</u>

Air Test - Testing Guidelines

1. Seal pipe section with appropriate size drain test plug.
Remove any grease or foreign material from installation point. Ensure no dirt is trapped between seal of plug and plates. Ensure plug is inserted square to pipe wall. Ensure wing nut and sealing cap are tight.
2. Fit test nipple to one of the drain test plugs.
3. Connect rubber hose via 'Y' piece to nipple, 'U' gauge and hand bellows.
4. Fill 'U' gauge with water to 'zero'.
5. Squeeze the hand bellows gently until the level reaches 100mm on the open side of the gauge and the lower limb below zero on the closed side. The level should not fall to less than 75mm during a period of 5 minutes without further pumping, after allowing a suitable time for stabilisation of air temperature. If it drops below 75mm within the specified time the pipe section is leaking.





PROJECT NAME: CLARENDON ROAD PHASE 3A

Manhole / Drainage run Check Sheet

2nd Installation.

Check Sheet No:		NO. 30		
Drg Ref & Rev no:		B101 C17		
No	Manhole & Drainage run construction	Details	Checked and Signed	
			GCL	Client
1	Location <i>Between 11 and 12</i> Manhole/pipe run Ref Gridline Ref Highlighted location plan attached	*12 <i>See attached</i> Yes/No	✓	
2	Manhole size	450φ	✓	
3	Invert level	IL 23.800	✓	
4	Manhole cover : Spec, size, orientation & cover level	✓	✓	
5	Excavation to correct dimensions/support systems checked		✓	
6	Branches & benching: position, line, level checked		✓	
7	Rocker pipes installed (if applicable) checked		✓	
8	Rings and cover placed as per vertical & horizontal alignment checked.		✓	
9	Brickwork & surround filled as per detail/specification checked.		✓	
10	All Specials are fixed (Non return valve, Flow control unit, Traps, Rodent barrier, etc.) Specify Type :	✓	N/A	
11	Manhole accessible for future use/maintenance	Yes/No	✓	
12	Pipe run details *FW09 → SVP 1 FW09 → SVP 2 FW09 → SVP 3	Material Diameter Length <i>Clay</i> 100φ	✓	
13	Spurs for lateral connections: Position, level & co-ordinates checked		✓	
14	SVP/RWPs installed to correct position, level and capped off.		✓	
15	Anchor blocks to correct detail at specified locations		✓	
16	Bedding & surround as specified		✓	
17	Air testing passed/witnessed:		✓	
18	Photos attached		✓	

Originator - GCL Site Manager		Client Representative	
Name : <i>ERUAL YMERI</i>		Name <i>MARY RUKY</i>	
Signature: <i>[Signature]</i>	Date: <i>16/3/21</i>	Signature: <i>[Signature]</i>	Date: <i>16.3.21</i>

PROJECT NAME: CLARENDON ROAD PHASE 3A

Drainage Air Test Sheet

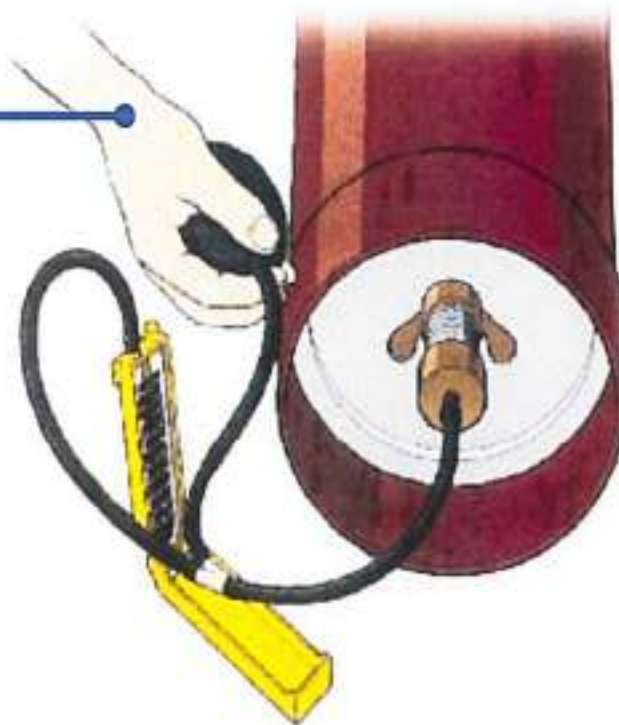
Client: STW	Test date: 16/3/21
Drainage Check Sheet Ref no: 30	Test. Ref. No: 30

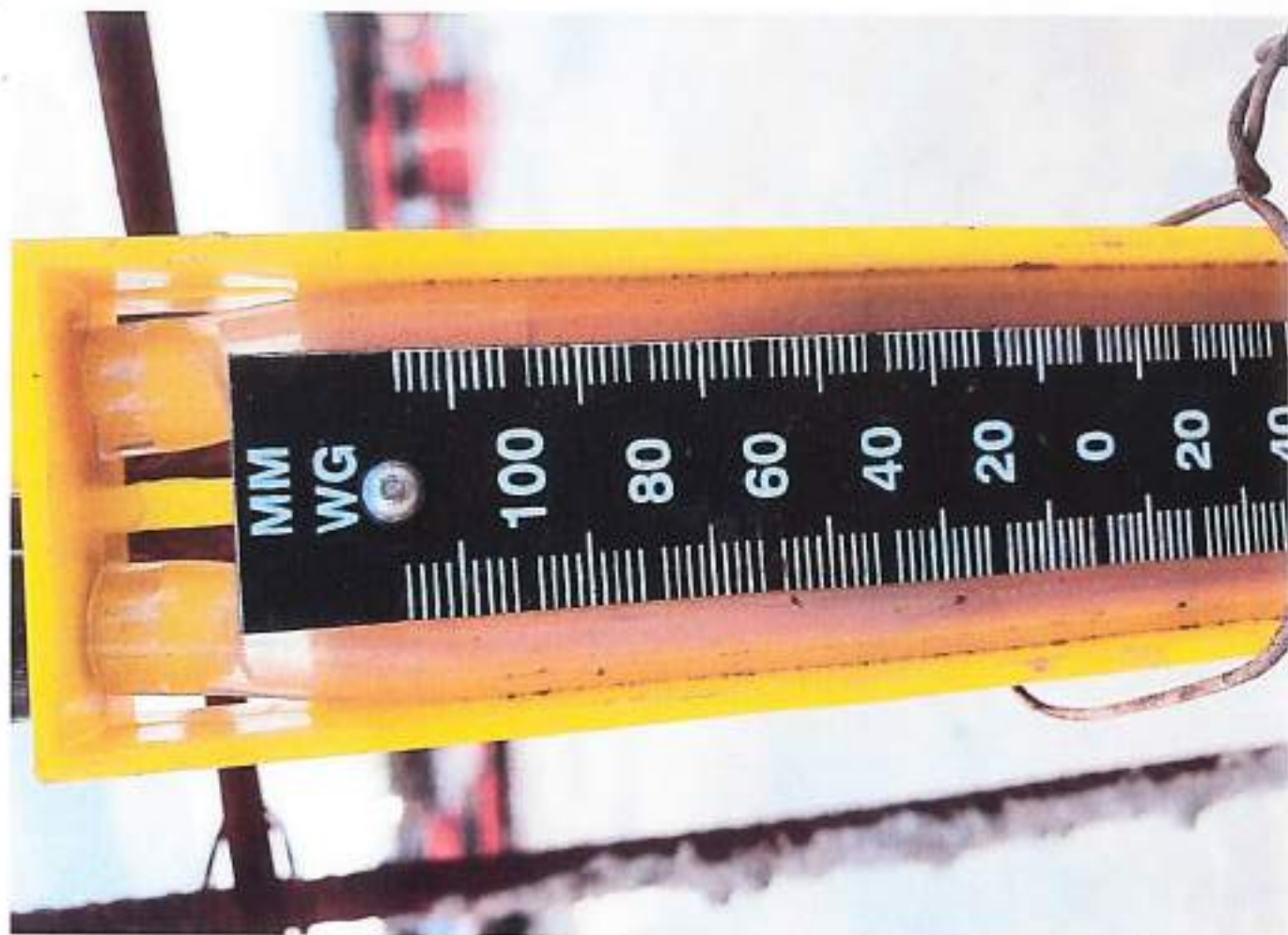
Pipe Run	Air gauge pressure		Pipe dia.(ø)	Test Time	Result	Remarks
	Initial	Final				
Fw09 → SVP1	100	97	100ø	11'5	Good	
Fw09 → SVP2	100	99	100ø	11'5	Good	
Fw09 → SVP3	100	100	100ø	11'5	Good	

Signed: (Technician)	Witnessed by: [Signature]
Verified By: ERIC TUCKER (Technical Manager)	Date: 16/3/21

Air Test - Testing Guidelines

1. Seal pipe section with appropriate size drain test plug.
Remove any grease or foreign material from installation point. Ensure no dirt is trapped between seal of plug and plates. Ensure plug is inserted square to pipe wall. Ensure wing nut and sealing cap are tight.
2. Fit test nipple to one of the drain test plugs.
3. Connect rubber hose via 'Y' piece to nipple, 'U' gauge and hand bellows.
4. Fill 'U' gauge with water to 'zero'.
5. Squeeze the hand bellows gently until the level reaches 100mm on the open side of the gauge and the lower limb below zero on the closed side. The level should not fall to less than 75mm during a period of 5 minutes without further pumping, after allowing a suitable time for stabilisation of air temperature. If it drops below 75mm within the specified time the pipe section is leaking.







PROJECT NAME: CLARENDON ROAD PHASE 3A

Manhole / Drainage run Check Sheet

		2nd installation		
		Check Sheet No:	31	
		Drg Ref & Rev no:	B101 C17	
No	Manhole & Drainage run construction	Details	Checked and Signed	
			GCL	Client
1	Location Between D1-D2	Manhole/pipe run Ref FWO9-FWO9a	✓	
		Gridline Ref Re attached	✓	
		Highlighted location plan attached (Yes/No)		
2	Manhole size 450φ both	✓	✓	
3	Invert level FWO9-71L 23800 / FWO9a-71L 23,885			
4	Manhole cover : Spec, size, orientation & cover level	✓	✓	
5	Excavation to correct dimensions/support systems checked		✓	
6	Branches & benching: position, line, level checked		✓	
7	Rocker pipes installed (if applicable) checked		✓	
8	Rings and cover placed as per vertical & horizontal alignment checked.		✓	
9	Brickwork & surround filled as per detail/specification checked.		✓	
10	All Specials are fixed (Non return valve, Flow control unit, Traps, Rodent barrier, etc.) Specify Type :	N/A	N/A	
11	Manhole accessible for future use/maintenance	(Yes/No)	✓	
12	Pipe run details	Material Clay	✓	
		Diameter 150mm		
		Length 4m		
13	Spurs for lateral connections: Position, level & co-ordinates checked		✓	
14	SVP/RWPs installed to correct position, level and capped off.		✓	
15	Anchor blocks to correct detail at specified locations		✓	
16	Bedding & surround as specified		✓	
17	Air testing passed/witnessed:		✓	
18	Photos attached		✓	

Originator - GCL Site Manager		Client Representative	
Name : ERNEST IMEPI		Name : MARK KAMBEY	
Signature: 	Date: 16/3/21	Signature: 	Date: 16/3/21

PROJECT NAME: CLARENDON ROAD PHASE 3A

Drainage Air Test Sheet

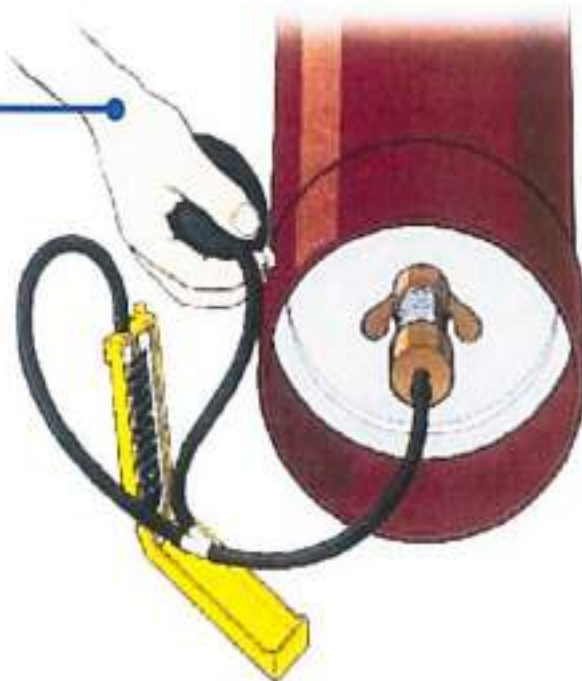
Client: STW	Test date: 16/03/2021
Drainage Check Sheet Ref no: 31	Test. Ref. No: 31

Pipe Run	Air gauge pressure		Pipe dia.(ø)	Test Time	Result	Remarks
	Initial	Final				
FW09 to FW09	100	97	150	11.25	Good	

Signed: (Technician)	Witnessed by: [Signature]
Verified By: (Technical Manager) [Signature]	Date: 16/03/20

Air Test - Testing Guidelines

1. Seal pipe section with appropriate size drain test plug.
Remove any grease or foreign material from installation point. Ensure no dirt is trapped between seal of plug and plates. Ensure plug is inserted square to pipe wall. Ensure wing nut and sealing cap are tight.
2. Fit test nipple to one of the drain test plugs.
3. Connect rubber hose via 'Y' piece to nipple, 'U' gauge and hand bellows.
4. Fill 'U' gauge with water to 'zero'.
5. Squeeze the hand bellows gently until the level reaches 100mm on the open side of the gauge and the lower limit below zero on the closed side. The level should not fall to less than 75mm during a period of 5 minutes without further pumping, after allowing a suitable time for stabilisation of air temperature. If it drops below 75mm within the specified time the pipe section is leaking.





PROJECT NAME: CLARENDON ROAD PHASE 3A

Manhole / Drainage run Check Sheet

		Check Sheet No:	32	
		Drg Ref & Rev no:	B101 C19	
No	Manhole & Drainage run construction	Details	Checked and Signed	
			GCL	Client
1	Location <i>Between D1+D2</i> Manhole/pipe run Ref Gridline Ref Highlighted location plan attached	<i>See attached</i> (Yes/No)	✓	
2	Manhole size <i>FW10</i>	<i>450 Ø</i>	✓	
3	Invert level	<i>23.750</i>	✓	
4	Manhole cover : Spec, size, orientation & cover level	✓	✓	
5	Excavation to correct dimensions/support systems checked		✓	
6	Branches & benching: position, line, level checked		✓	
7	Rocker pipes installed (if applicable) checked		✓	
8	Rings and cover placed as per vertical & horizontal alignment checked.		✓	
9	Brickwork & surround filled as per detail/specification checked.		✓	
10	All Specials are fixed (Non return valve, Flow control unit, Traps, Rodent barrier, etc.) Specify Type :		<i>N/A</i>	
11	Manhole accessible for future use/maintenance	(Yes/No)	✓	
12	Pipe run details <i>SrP1 → FW10</i> <i>SrP2 → FW10</i>	Material Diameter Length <i>Clay</i> <i>100 Ø</i> <i>-</i>	✓	
13	Spurs for lateral connections: Position, level & co-ordinates checked		✓	
14	SVP/RWPs installed to correct position, level and capped off.		✓	
15	Anchor blocks to correct detail at specified locations		✓	
16	Bedding & surround as specified		✓	
17	Air testing passed/witnessed:		✓	
18	Photos attached		✓	

Originator - GCL Site Manager		Client Representative	
Name : <i>ERUAL YMERI</i>	Name <i>MARIL KIMBERLY</i>		
Signature: <i>[Signature]</i>	Signature: <i>[Signature]</i>	Date: <i>18/03/24</i>	Date: <i>18.3.24</i>

PROJECT NAME: CLARENDON ROA PHASE 3A

Drainage Air Test Sheet

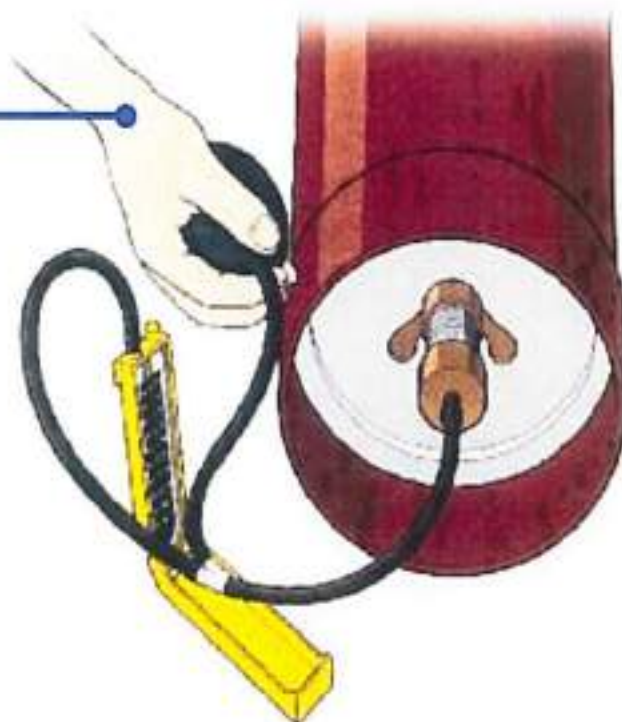
Client: <u>STW</u>	Test date: <u>18/3/21</u>
Drainage Check Sheet Ref no: <u>32</u>	Test. Ref. No: <u>32</u>

Pipe Run	Air gauge pressure		Pipe dia.(ø)	Test Time	Result	Remarks
	Initial	Final				
SVP1- FW10	100	98	100ø	5min	GOOD	
SVP2- FW10	100	98	100ø	5min	GOOD	

Signed: (Technician)	Witnessed by: <u>[Signature]</u>
Verified By: (Technical Manager) <u>[Signature]</u>	Date: <u>18/3/21</u>

Air Test - Testing Guidelines

1. Seal pipe section with appropriate size drain test plug.
Remove any grease or foreign material from installation point. Ensure no dirt is trapped between seal of plug and plates. Ensure plug is inserted square to pipe wall. Ensure wing nut and sealing cap are tight.
2. Fit test nipple to one of the drain test plugs.
3. Connect rubber hose via 'Y' piece to nipple, 'U' gauge and hand bellows.
4. Fill 'U' gauge with water to 'zero'.
5. Squeeze the hand bellows gently until the level reaches 100mm on the open side of the gauge and the lower limb below zero on the closed side. The level should not fall to less than 75mm during a period of 5 minutes without further pumping, after allowing a suitable time for stabilisation of air temperature. If it drops below 75mm within the specified time the pipe section is leaking.





PROJECT NAME: CLARENDON ROAD PHASE 3A

Manhole / Drainage run Check Sheet

2nd installation

Check Sheet No:		33	
Drg Ref & Rev no:		B101 C19	

No	Manhole & Drainage run construction	Details	Checked and Signed	
			GCL	Client
1	Location <i>Between D1 + D2</i> Manhole/pipe run Ref <i>FW10</i> Gridline Ref <i>See attached</i> Highlighted location plan attached <i>Yes/No</i>		✓	
2	Manhole size	<i>450φ</i>	✓	
3	Invert level	<i>23,750</i>	✓	
4	Manhole cover : Spec, size, orientation & cover level		✓	
5	Excavation to correct dimensions/support systems checked		✓	
6	Branches & benching: position, line, level checked		✓	
7	Rocker pipes installed (if applicable) checked		✓	
8	Rings and cover placed as per vertical & horizontal alignment checked.		✓	
9	Brickwork & surround filled as per detail/specification checked.		✓	
10	All Specials are fixed (Non return valve, Flow control unit, Traps, Rodent barrier, etc.) Specify Type :		N/A	
11	Manhole accessible for future use/maintenance	Yes/No	✓	
12	Pipe run details <i>FW10 → FW09</i> Material <i>Clay</i> Diameter <i>150 φ</i> Length <i>5m</i>		✓	
13	Spurs for lateral connections: Position, level & co-ordinates checked		✓	
14	SVP/RWPs installed to correct position, level and capped off.		✓	
15	Anchor blocks to correct detail at specified locations		✓	
16	Bedding & surround as specified		✓	
17	Air testing passed/witnessed:		✓	
18	Photos attached		✓	

Originator - GCL Site Manager		Client Representative	
Name : <i>ERHAL YMERI</i>	Name <i>M. M. K. K.</i>		
Signature: <i>[Signature]</i> Date: <i>18/03/21</i>	Signature: <i>[Signature]</i> Date: <i>21.9.63</i>		

PROJECT NAME: CLARENDON ROAD PHASE 3A

Drainage Air Test Sheet

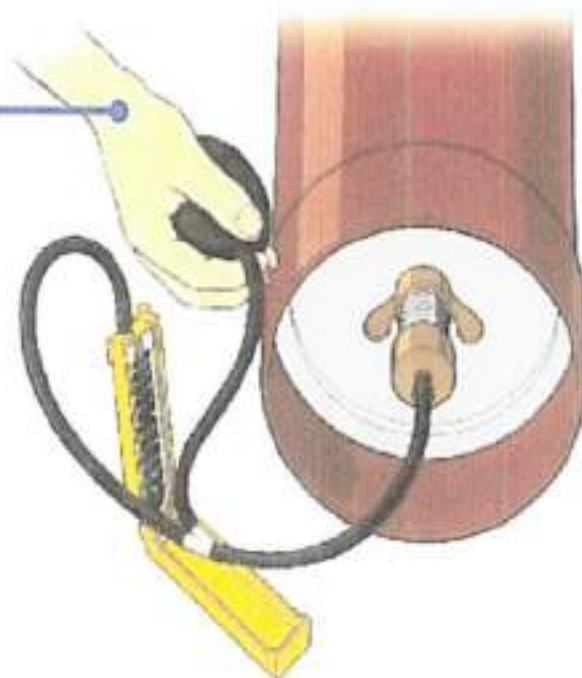
Client: STW	Test date: 18/3/21
Drainage Check Sheet Ref no: 33	Test Ref. No: 33

Pipe Run	Air gauge pressure		Pipe dia.(ø)	Test Time	Result	Remarks
	Initial	Final				
FW10 → FW09	100	98	150ø	5min	Good	

Signed: (Technician)	Witnessed by: <i>[Signature]</i>
Verified By: (Technical Manager) <i>[Signature]</i> EMMAL YHCP	Date: 18/3/21

Air Test - Testing Guidelines

1. Seal pipe section with appropriate size drain test plug.
Remove any grease or foreign material from installation point. Ensure no dirt is trapped between seal of plug and plates. Ensure plug is inserted square to pipe wall. Ensure wing nut and sealing cap are tight.
2. Fit test nipple to one of the drain test plugs.
3. Connect rubber hose via 'Y' piece to nipple, TF gauge and hand bellows.
4. Fill TF gauge with water to 'zero'.
5. Squeeze the hand bellows gently until the level reaches 100mm on the open side of the gauge and the lower limb below zero on the closed side. The level should set fall to less than 75mm during a period of 5 minutes without further pumping, after allowing a suitable time for stabilisation of air temperature. If it drops below 75mm within the specified time the pipe section is leaking.





PROJECT NAME: CLARENDON ROAD PHASE 3A

Manhole / Drainage run Check Sheet

		Check Sheet No:	34	
		Drg Ref & Rev no:	8101 49	
No	Manhole & Drainage run construction	Details	Checked and Signed	
			GCL	Client
1	Location D2	Manhole/pipe run Ref	✓	
		Gridline Ref		
		Highlighted location plan attached		
2	Manhole size	FW12		
3	Invert level	450φ	✓	
4	Manhole cover : Spec, size, orientation & cover level	23,685	✓	
5	Excavation to correct dimensions/support systems checked		✓	
6	Branches & benching: position, line, level checked		✓	
7	Rocker pipes installed (if applicable) checked		✓	
8	Rings and cover placed as per vertical & horizontal alignment checked.		✓	
9	Brickwork & surround filled as per detail/specification checked.		✓	
10	All Specials are fixed (Non return valve, Flow control unit, Traps, Rodent barrier, etc.) Specify Type :	NIA	NIA	
11	Manhole accessible for future use/maintenance	(Yes/No)	✓	
12	Pipe run details	Material	✓	
	FW12 → FW11	Diameter		
		Length		
13	Spurs for lateral connections: Position, level & co-ordinates checked		✓	
14	SVP/RWPs installed to correct position, level and capped off.		✓	
15	Anchor blocks to correct detail at specified locations		✓	
16	Bedding & surround as specified		✓	
17	Air testing passed/witnessed:		✓	
18	Photos attached		✓	

Originator - GCL Site Manager		Client Representative	
Name : Graham Thorne	Name : Mark Furem		
Signature: [Signature]	Signature: [Signature]		
Date: 22/03/21	Date: 23/3/21		

PROJECT NAME: CLARENDON ROAD PHASE 3A

Drainage Air Test Sheet

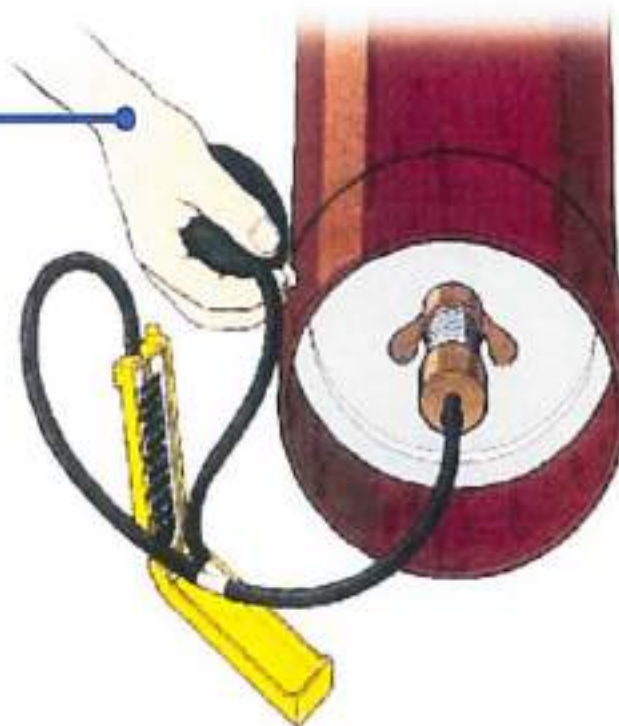
Client: <u>STW</u>	Test date: <u>22/03/21</u>
Drainage Check Sheet Ref no: <u>34</u>	Test. Ref. No: <u>34</u>

Pipe Run	Air gauge pressure		Pipe dia.(ø)	Test Time	Result	Remarks
	Initial	Final				
FW11 → FW12	100	100	150ø	5min	GOOD	

Signed: (Technician)	Witnessed by: <u>[Signature]</u>
Verified By: (Technical Manager) <u>[Signature]</u>	Date: <u>22/03/21</u>

Air Test - Testing Guidelines

1. Seal pipe section with appropriate size drain test plug.
Remove any grease or foreign material from installation point. Ensure no dirt is trapped between seal of plug and plates. Ensure plug is inserted square to pipe wall. Ensure wing nut and sealing cap are tight.
2. Fit test nipple to one of the drain test plugs.
3. Connect rubber hose via 'Y' piece to nipple, 'U' gauge and hand bellows.
4. Fill 'U' gauge with water to 'zero'.
5. Squeeze the hand bellows gently until the level reaches 100mm on the open side of the gauge and the lower limb below zero on the closed side. The level should not fall to less than 75mm during a period of 5 minutes without further pumping, after allowing a suitable time for stabilisation of air temperature. If it drops below 75mm within the specified time the pipe section is leaking.











PROJECT NAME: CLARENDON ROAD PHASE 3A

Manhole / Drainage run Check Sheet

Check Sheet No:		35		
Drg Ref & Rev no:		8101 119		
No	Manhole & Drainage run construction	Details	Checked and Signed	
			GCL	Client
1	Location D2. Manhole/pipe run Ref Gridline Ref Highlighted location plan attached	FW13 - (Yes/No)	✓	
2	Manhole size	450/	✓	
3	Invert level	23.635	✓	
4	Manhole cover : Spec, size, orientation & cover level		✓	
5	Excavation to correct dimensions/support systems checked		✓	
6	Branches & benching: position, line, level checked		✓	
7	Rocker pipes installed (if applicable) checked		✓	
8	Rings and cover placed as per vertical & horizontal alignment checked.		✓	
9	Brickwork & surround filled as per detail/specification checked.		✓	
10	All Specials are fixed (Non return valve, Flow control unit, Traps, Rodent barrier, etc.) Specify Type :	N/A	N/A	
11	Manhole accessible for future use/maintenance	(Yes/No)	✓	
12	Pipe run details FW13 → FW12 Material Diameter Length	11A 150 -	✓	
13	Spurs for lateral connections: Position, level & co-ordinates checked		✓	
14	SVP/RWPs installed to correct position, level and capped off.		✓	
15	Anchor blocks to correct detail at specified locations		✓	
16	Bedding & surround as specified		✓	
17	Air testing passed/witnessed:		✓	
18	Photos attached		✓	

Originator - GCL Site Manager		Client Representative	
Name : ERNAL -IMERI	Name Mark Kurem		
Signature: [Signature]	Signature: [Signature]		
Date: 23/01/21	Date: 23/3		

PROJECT NAME: CLARENDON ROAD PHASE 3A

Drainage Air Test Sheet

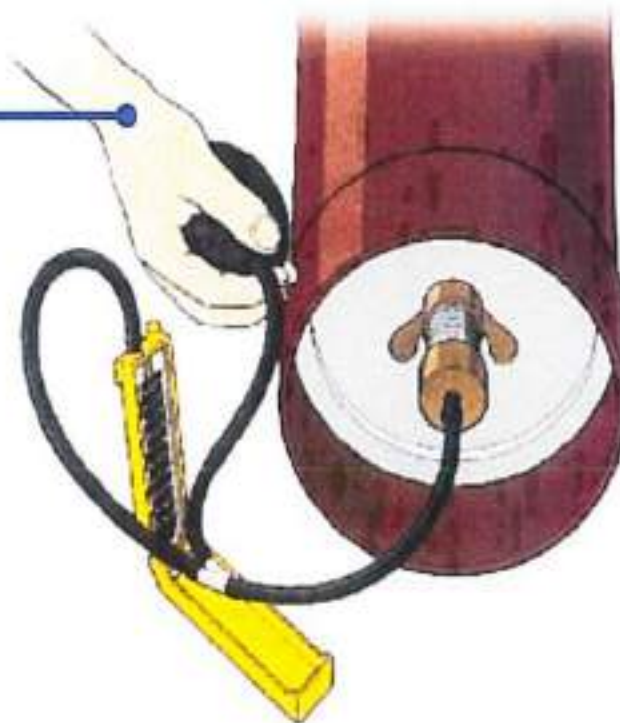
Client: STW	Test date: 23/03/21
Drainage Check Sheet Ref no: 35	Test. Ref. No: 35

Pipe Run	Air gauge pressure		Pipe dia.(ø)	Test Time	Result	Remarks
	Initial	Final				
FW12 → FW13	100	100	150ø	5 min	Good	

Signed: (Technician)	Witnessed by: <i>[Signature]</i>
Verified By: <i>GRAN THERP</i> (Technical Manager)	Date: 23/03/21

Air Test - Testing Guidelines

1. Seal pipe section with appropriate size drain test plug.
Remove any grease or foreign material from installation point. Ensure no dirt is trapped between seal of plug and plates. Ensure plug is inserted square to pipe wall. Ensure wing nut and sealing cap are tight.
2. Fit test nipple to one of the drain test plugs.
3. Connect rubber hose via 'Y' piece to nipple, 'U' gauge and hand bellows.
4. Fill 'U' gauge with water to 'zero'.
5. Squeeze the hand bellows gently until the level reaches 100mm on the open side of the gauge and the lower limb below zero on the closed side. The level should not fall to less than 75mm during a period of 5 minutes without further pumping, after allowing a suitable time for stabilisation of air temperature. If it drops below 75mm within the specified time the pipe section is leaking.





PROJECT NAME: CLARENDON ROAD PHAS3A

Manhole / Drainage run Check Sheet

		Check Sheet No:	36	
		Drg Ref & Rev no:	8101 C19	
No	Manhole & Drainage run construction	Details	Checked and Signed	
			GCL	Client
1	Location D2 drainage	Manhole/pipe run Ref FW11	✓	
		Gridline Ref		
		Highlighted location plan attached		
		Yes/No		
2	Manhole size	450P	✓	
3	Invert level	23.710	✓	
4	Manhole cover : Spec, size, orientation & cover level	✓	✓	
5	Excavation to correct dimensions/support systems checked		✓	
6	Branches & benching: position, line, level checked		✓	
7	Rocker pipes installed (if applicable) checked		✓	
8	Rings and cover placed as per vertical & horizontal alignment checked.		✓	
9	Brickwork & surround filled as per detail/specification checked.		✓	
10	All Specials are fixed (Non return valve, Flow control unit, Traps, Rodent barrier, etc.)	Specify Type : N/A	N/A	
11	Manhole accessible for future use/maintenance	Yes/No	✓	
12	Pipe run details	Material	✓	
	FW11 → FW10	Diameter		
		Length		
		Clay 150P		
13	Spurs for lateral connections: Position, level & co-ordinates checked		✓	
14	SVP/RWPs installed to correct position, level and capped off.		✓	
15	Anchor blocks to correct detail at specified locations		✓	
16	Bedding & surround as specified		✓	
17	Air testing passed/witnessed:		✓	
18	Photos attached		✓	

Originator - GCL Site Manager		Client Representative	
Name :	ERHAL MEPI	Name	MARK LUNN
Signature:		Signature:	
Date:	22/03/24	Date:	23/3

PROJECT NAME: CLARENDON ROAD PHASE 3A

Drainage Air Test Sheet

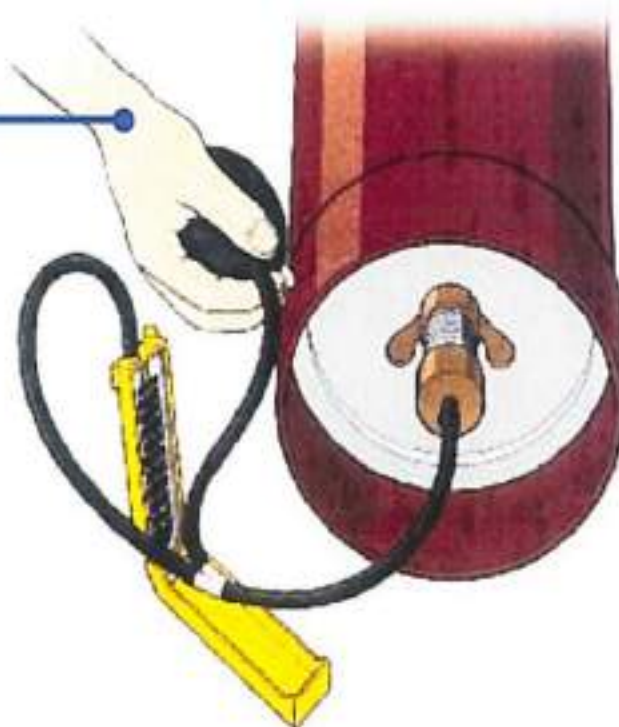
Client: SWT	Test date: 22/03/21
Drainage Check Sheet Ref no: 36	Test Ref. No: 36

Pipe Run	Air gauge pressure		Pipe dia.(ø)	Test Time	Result	Remarks
	Initial	Final				
FW11 → FW10	100	98	150ø	5 min		

Signed: (Technician)	Witnessed by: <i>MAH</i>
Verified By: (Technical Manager) <i>[Signature]</i>	Date: 22/03/21

Air Test - Testing Guidelines

1. Seal pipe section with appropriate size drain test plug.
Remove any grease or foreign material from installation point. Ensure no dirt is trapped between seal of plug and plates. Ensure plug is inserted square to pipe wall. Ensure wing nut and sealing cap are tight.
2. Fit test nipple to one of the drain test plugs.
3. Connect rubber hose via 'Y' piece to nipple, 'U' gauge and hand bellows.
4. Fill 'U' gauge with water to 'zero'.
5. Squeeze the hand bellows gently until the level reaches 100mm on the open side of the gauge and the lower limb below zero on the closed side. The level should not fall to less than 75mm during a period of 5 minutes without further pumping, after allowing a suitable time for stabilisation of air temperature. If it drops below 75mm within the specified time the pipe section is leaking.







PROJECT NAME: Clarendon Road *CLARENDON ROAD - PHASE 3A*

Manhole / Drainage run Check Sheet

Check Sheet No:		37	
Org Ref & Rev no:		8101 C / 8130 C / 8131 C	

No	Manhole & Drainage run construction	Details	Checked and Signed	
			GCL	Client
1	Location <i>PHASE 3A</i> Manhole/pipe run Ref <i>SW07</i> Gridline Ref <i>-</i> Highlighted location plan attached <i>(Yes/No)</i>		✓	✓
2	Manhole size	<i>φ 1.200m</i>	✓	✓
3	Invert level	<i>22.790m</i>	✓	X
4	Manhole cover: Spec. size, orientation & cover level	<i>24.612m, Type 2</i>	✓	✓
5	Excavation to correct dimensions/support systems checked		✓	✓
6	Branches & benching: position, line, level checked		✓	✓
7	Rocker pipes installed (if applicable) checked		✓	✓
8	Rings and cover placed as per vertical & horizontal alignment checked.		✓	✓
9	Brickwork & surround filled as per detail/specification checked		✓	✓
10	All Specials are fixed (Non return valve, Flow control unit, Traps, Rodent barrier, etc.) Specify Type:		N/A	N/A
11	Manhole accessible for future use/maintenance	<i>(Yes/No)</i>	✓	✓
12	Pipe run details <i>iron cast to clay</i> Material Diameter Length	<i>-</i> <i>-</i> <i>-</i>	✓	✓
13	Spurs for lateral connections: Position, level & co-ordinates checked		✓	✓
14	SVP/RVPs installed to correct position, level and capped off.		✓	✓
15	Anchor blocks to correct detail at specified locations		✓	✓
16	Bedding & surround as specified		✓	✓
17	Air testing passed/witnessed:		✓	✓
18	Photos attached		✓	✓
19	<i>Geotextile installed as per specification & checked</i> ✓			

Originator - GCL Site Manager		Client Representative	
Name : <i>ERHAB YAKEN</i>	Name : <i>DEIRAN MURRAY</i>		
Signature: <i>[Signature]</i> Date: <i>17/2/21</i>	Signature: <i>[Signature]</i> Date: <i>16/6/21</i>		

PROJECT NAME: CLARENDON ROAD - PHASE 3A

Drainage Air Test Sheet

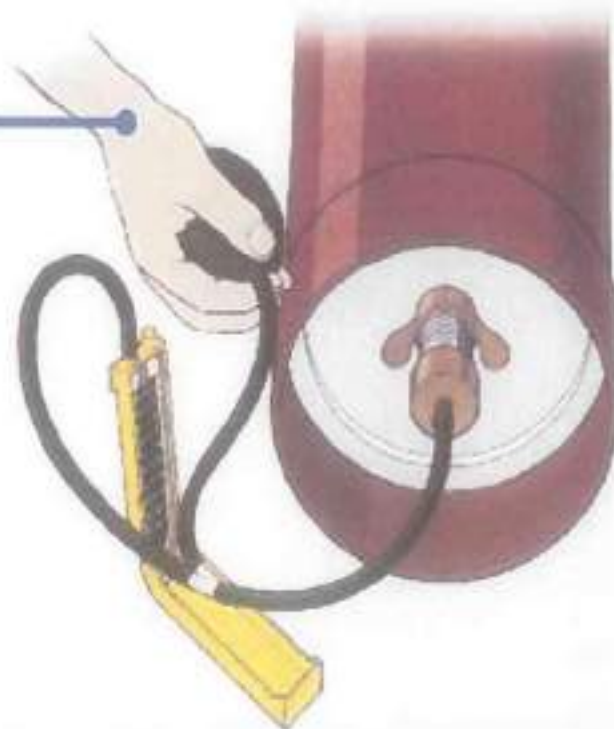
Client: STW	Test date: 17/2/21
Drainage Check Sheet Ref no: 37	Test. Ref. No: 37

Pipe Run	Air gauge pressure		Pipe dia. (ø)	Test Time	Result	Remarks
	Initial	Final				
RWP1 - SW07	100	100	150	5 min	Good	
RWP2 - SW07	100	100	150	5 min	Good	

Signed: (Technician)	Witnessed by:
Verified By: (Technical Manager) <i>[Signature]</i>	Date: 17/2/21

Air Test - Testing Guidelines

1. Seal pipe section with appropriate size drain test plug.
Remove any grease or foreign material from installation point. Ensure no air is trapped between seat of plug and plates. Ensure plug is inserted square to pipe wall. Ensure wing nut and sealing cap are tight.
2. Fit test nipple to one of the drain test plugs.
3. Connect rubber hose via T piece to nipple, U gauge and hand bellows.
4. Fill U gauge with water to 'zero'.
5. Squeeze the hand bellows gently until the level reaches 100mm on the open side of the gauge and the lower limit below zero on the closed side. The levels should not fall in less than 15min during a period of 5 minutes without further pumping, after allowing a suitable time for stabilisation of air temperature. If it drops below 75mm within the specified time the pipe section is leaking.





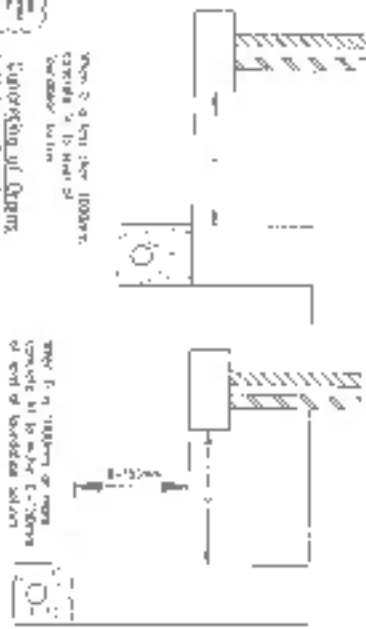
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1.25

Roof Structure Details
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Roof Structure Details
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Roof Structure Details
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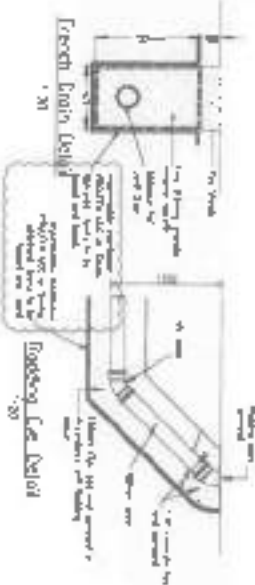


Roof Structure Details
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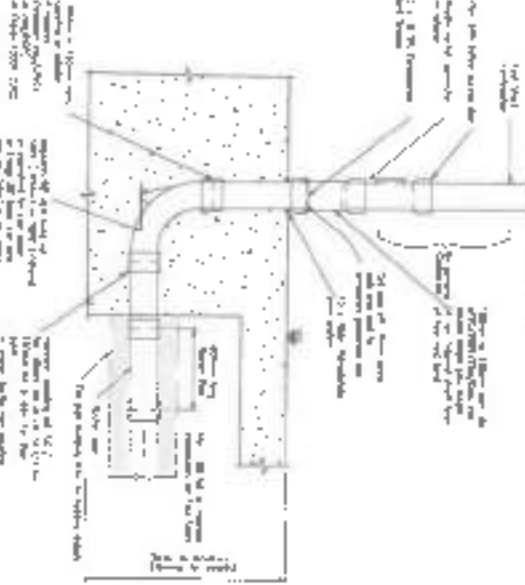
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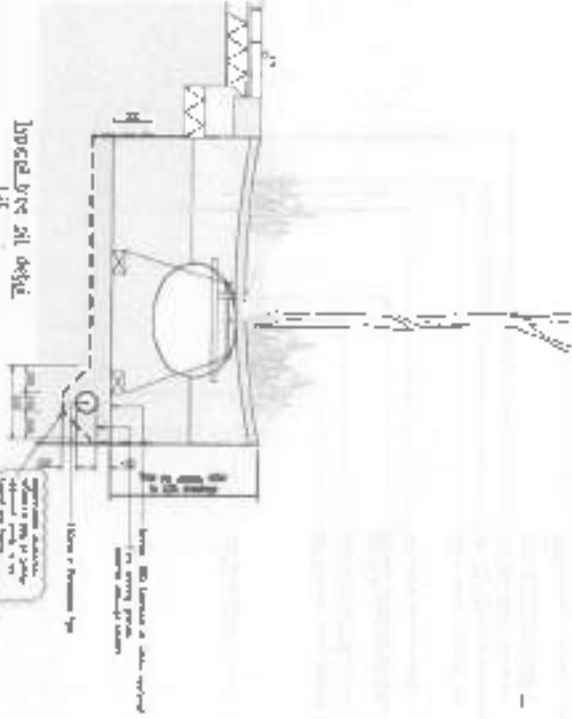


Roof Structure Details
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Roof Structure Details
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Roof Structure Details
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Roof Structure Details
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Roof Structure Details
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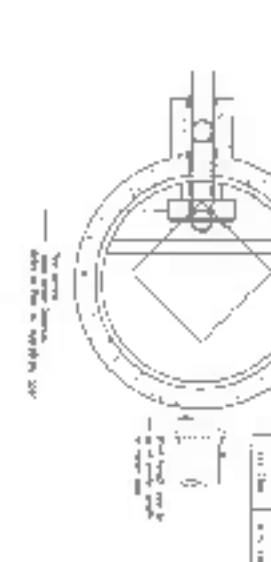
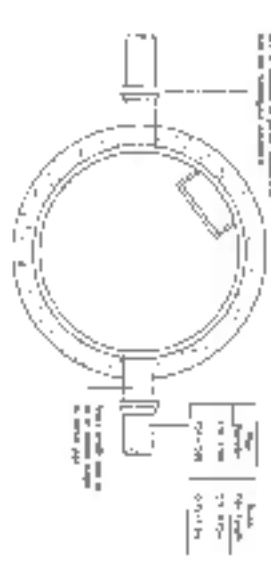
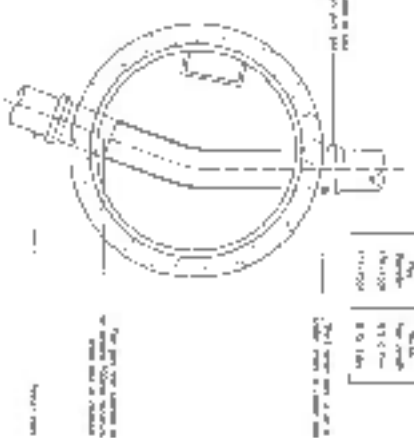
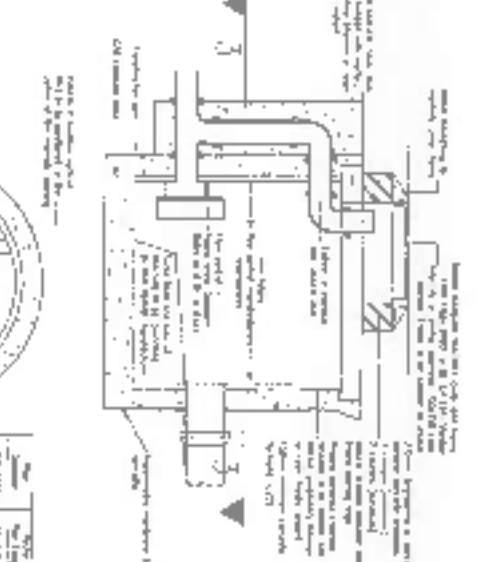
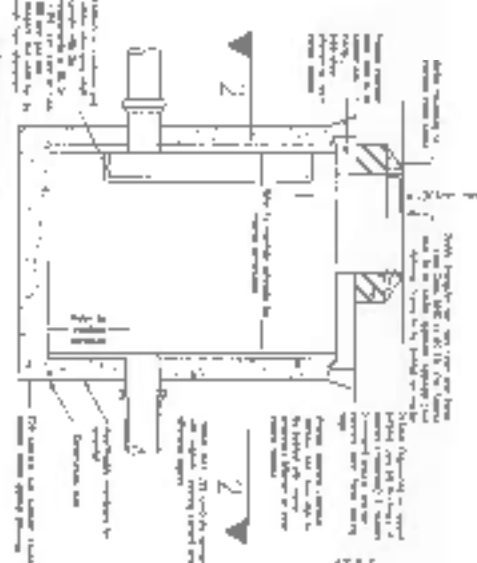
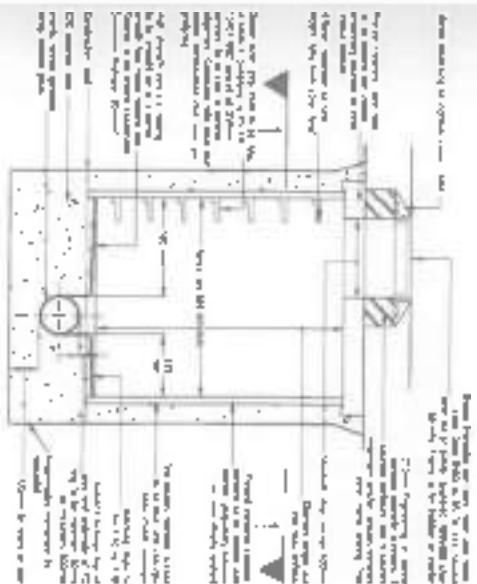
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Roof Structure Details
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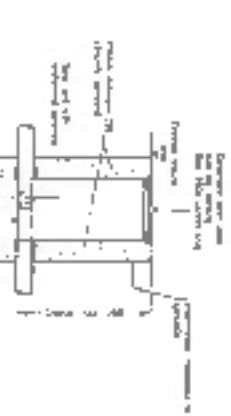
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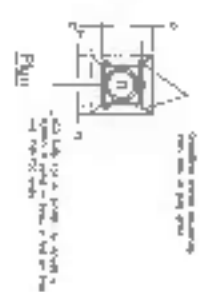


Section 2 - 2
Calculus Miquel's Test

[illegible]

Ergebnis 3 - 1

biochemical and clinical data in the present study and suggest that the 28 amino acid analysis is a useful tool for the study of amino acid metabolism. However, it is interesting to observe that the 28 amino acid analysis did not reveal the biochemical abnormalities in the present study. Several reasons may be suggested for this.



Polystyrene Insulation Chamber
between 0.6 and 1.0 cm

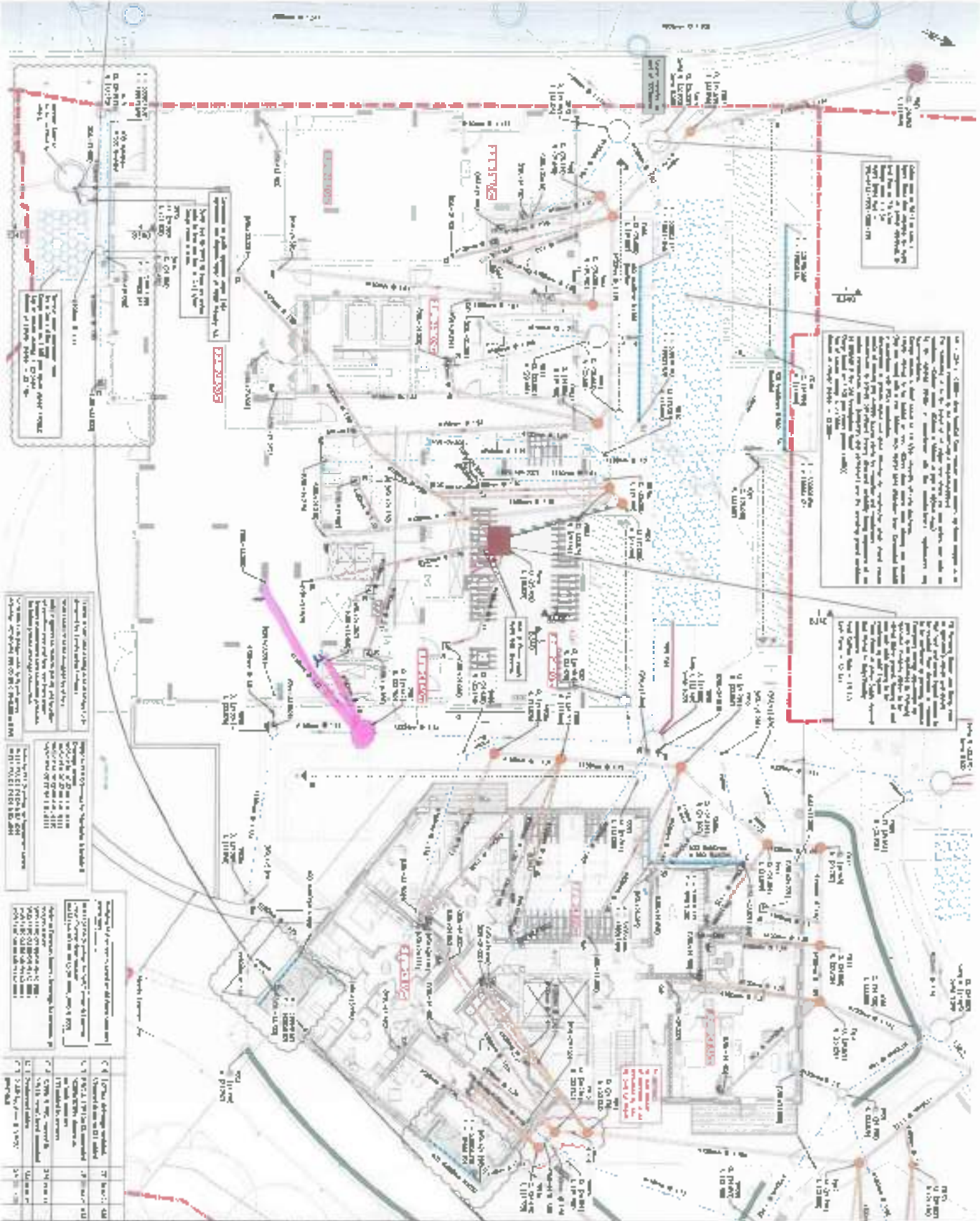


Section 5 Evaluation

EXHIBITION

- [illegible]

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524	
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Notes:
1. All pipe sizes are in inches.
2. All depths are in feet.
3. All manhole locations are indicated by a circle with a cross.
4. All pipe materials are indicated by a line style.
5. All pipe slopes are indicated by a number and a percent sign.
6. All pipe lengths are indicated by a number and a unit.
7. All pipe diameters are indicated by a number and a unit.
8. All pipe wall thicknesses are indicated by a number and a unit.
9. All pipe joint types are indicated by a symbol.
10. All pipe bedding types are indicated by a symbol.

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9. All pipe joint types are indicated by a symbol.
10. All pipe bedding types are indicated by a symbol.

FOR CONSTRUCTION

Item	Description	Quantity	Unit
1	1" x 12" x 12" concrete curb	100	ft
2	1" x 12" x 12" concrete curb	100	ft
3	1" x 12" x 12" concrete curb	100	ft
4	1" x 12" x 12" concrete curb	100	ft
5	1" x 12" x 12" concrete curb	100	ft
6	1" x 12" x 12" concrete curb	100	ft
7	1" x 12" x 12" concrete curb	100	ft
8	1" x 12" x 12" concrete curb	100	ft
9	1" x 12" x 12" concrete curb	100	ft
10	1" x 12" x 12" concrete curb	100	ft

NOTES:

1. All pipe sizes are in inches.
2. All depths are in feet.
3. All manhole locations are indicated by a circle with a cross.
4. All pipe materials are indicated by a line style.
5. All pipe slopes are indicated by a number and a percent sign.
6. All pipe lengths are indicated by a number and a unit.
7. All pipe diameters are indicated by a number and a unit.
8. All pipe wall thicknesses are indicated by a number and a unit.
9. All pipe joint types are indicated by a symbol.
10. All pipe bedding types are indicated by a symbol.

Drainage Layout

Sheet 1 of 1

Scale: 1" = 10'

North Arrow

Project Name: [Blank]

Project Number: [Blank]

Project Location: [Blank]

Project Date: [Blank]

Project Status: [Blank]









PROJECT NAME: Clarendon Road Phase 3

Manhole / Drainage run Check Sheet

Check Sheet No: 39		Drg Ref & Rev no: 8101 219		
No	Manhole & Drainage run construction	Details	Checked and Signed	
			GCL	Client
1	Location <u>D2 SW9A</u> Manhole/pipa run Ref <u>SW9A</u> Gridline Ref <u>---</u> Highlighted location plan attached <u>(Yes/No)</u>		✓	✓
2	Manhole size <u>450 Ø</u>		✓	✓
3	Invert level <u>94.000</u>		✓	X
4	Manhole cover - Spec, size, orientation & cover level <u>---</u>		✓	✓
5	Excavation to correct dimensions/support systems checked		✓	✓
6	Branches & benching: position, line, level checked		✓	✓
7	Rocker pipes installed (if applicable) checked		✓	✓
8	Rings and cover placed as per vertical & horizontal alignment checked.		✓	✓
9	Brickwork & surround filled as per detail/specification checked.		✓	✓
10	All Specials are fixed (Non return valve, Flow control unit, Traps, Rodent barrier, etc) Specify Type: <u>---</u>		✓	N/A
11	Manhole accessible for future use/maintenance <u>(Yes/No)</u>		✓	✓
12	Pipe run details <u>SW9A → SW9</u> Material <u>clay</u> Diameter <u>150</u> Length <u>---</u>		✓	✓
13	Spurs for lateral connections: Position, level & co-ordinates checked		✓	✓
14	SVP/RWPs installed to correct position, level and capped off.		✓	✓
15	Anchor blocks to correct detail at specified locations		✓	✓
16	Bedding & surround as specified		✓	✓
17	Air testing passed/witnessed:		✓	X
18	Photos attached		✓	✓
19	Geotextile installed as per specification & checked		✓	✓

Originator - GCL Site Manager		Client Representative	
Name : <u>ERMAK YILMAZ</u>	Name : <u>KEIRAN MURPHY</u>		
Signature: <u>[Signature]</u> Date: <u>20/2/21</u>	Signature: <u>[Signature]</u> Date: <u>16/6/21</u>		

GCL-QA-002