



EXSWMH 1 with 150mm run to EX
SWMH 2

34840
34810



EXSWMH 1 to temporary catchpit





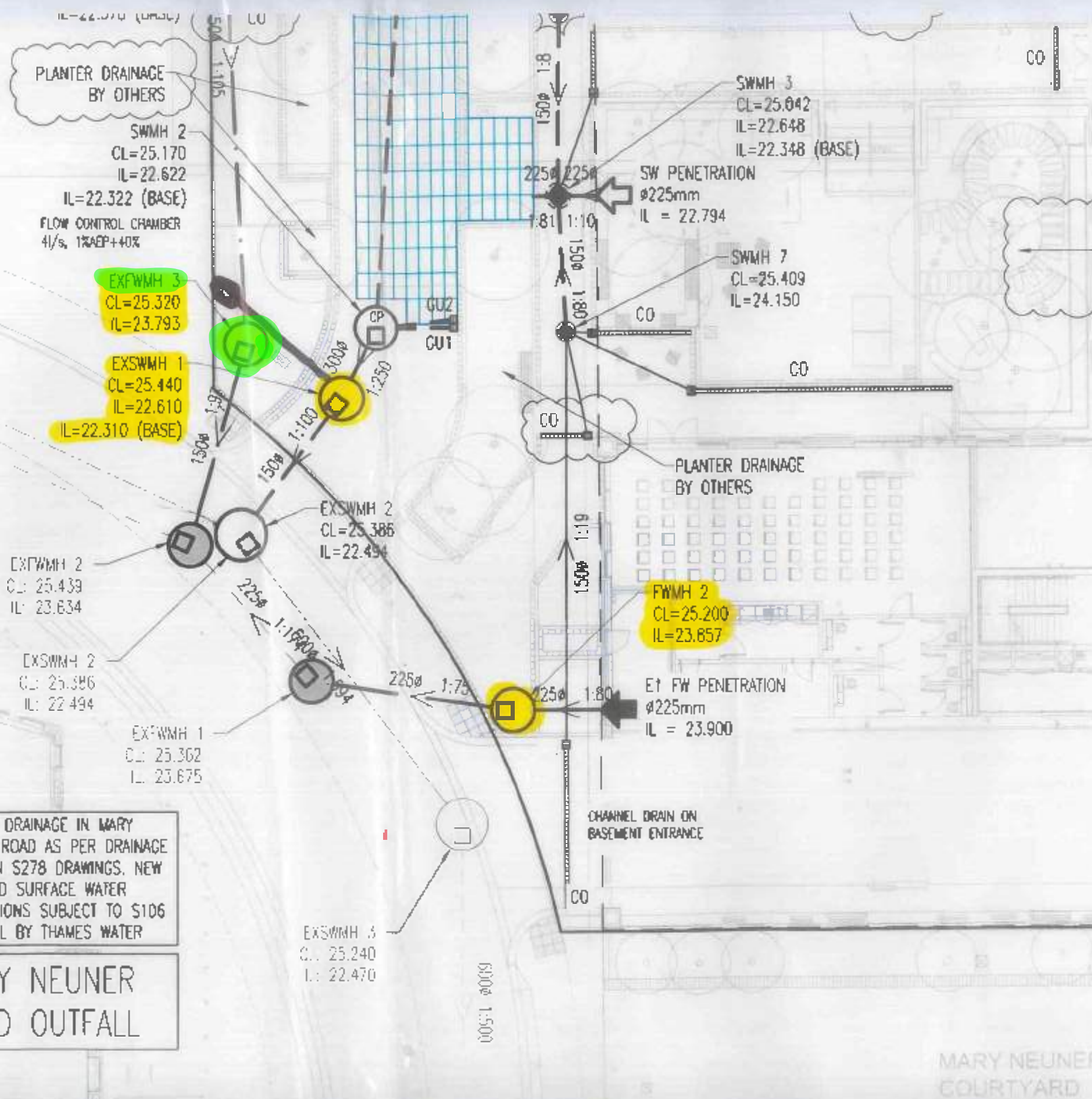
PROJECT NAME: Clarendon Road , Phase 3

Manhole / Drainage run Check Sheet

		Check Sheet No:	S-59	
		Drg Ref & Rev no:	WAL-EE-00-DR-C-95-3100 C1	
No	Manhole & Drainage run construction	Details	Checked and Signed	
			GCL	Client
1	Location: Phase 3 external manholes Manhole/pipe run Ref Gridline Ref Highlighted location plan attached	EXFWMH 3 Yes/No		
2	Manhole size	1200mm dia		
3	Invert level	23.793		
4	Manhole cover : Spec, size, orientation & cover level	25.320, Clay		
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 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		N/A	
16	Bedding & surround as specified		/	
17	Air testing passed/witnessed:		/	
18	Photos attached		/	

Originator - GCL Site Manager		Client Representative	
Name : M. Kunigelis		Name :	
Signature:	Date: 26/09/2021	Signature:	Date:

GCL-QA-002



PLANTER DRAINAGE
BY OTHERS

SWMH 2
CL=25.170
IL=22.622
IL=22.322 (BASE)
FLOW CONTROL CHAMBER
4l/s, 1% AEP+40%

EXFWMH 3
CL=25.320
IL=23.793

EXSWMH 1
CL=25.440
IL=22.610
IL=22.310 (BASE)

EXFWMH 2
CL=25.439
IL=23.634

EXSWMH 2
CL=25.386
IL=22.494

EXFWMH 1
CL=25.362
IL=23.675

EXSWMH 2
CL=25.386
IL=22.494

EXSWMH 3
CL=25.240
IL=22.470

SWMH 3
CL=25.042
IL=22.648
IL=22.348 (BASE)

SW PENETRATION
Ø225mm
IL=22.794

SWMH 7
CL=25.409
IL=24.150

PLANTER DRAINAGE
BY OTHERS

FWMH 2
CL=25.200
IL=23.857

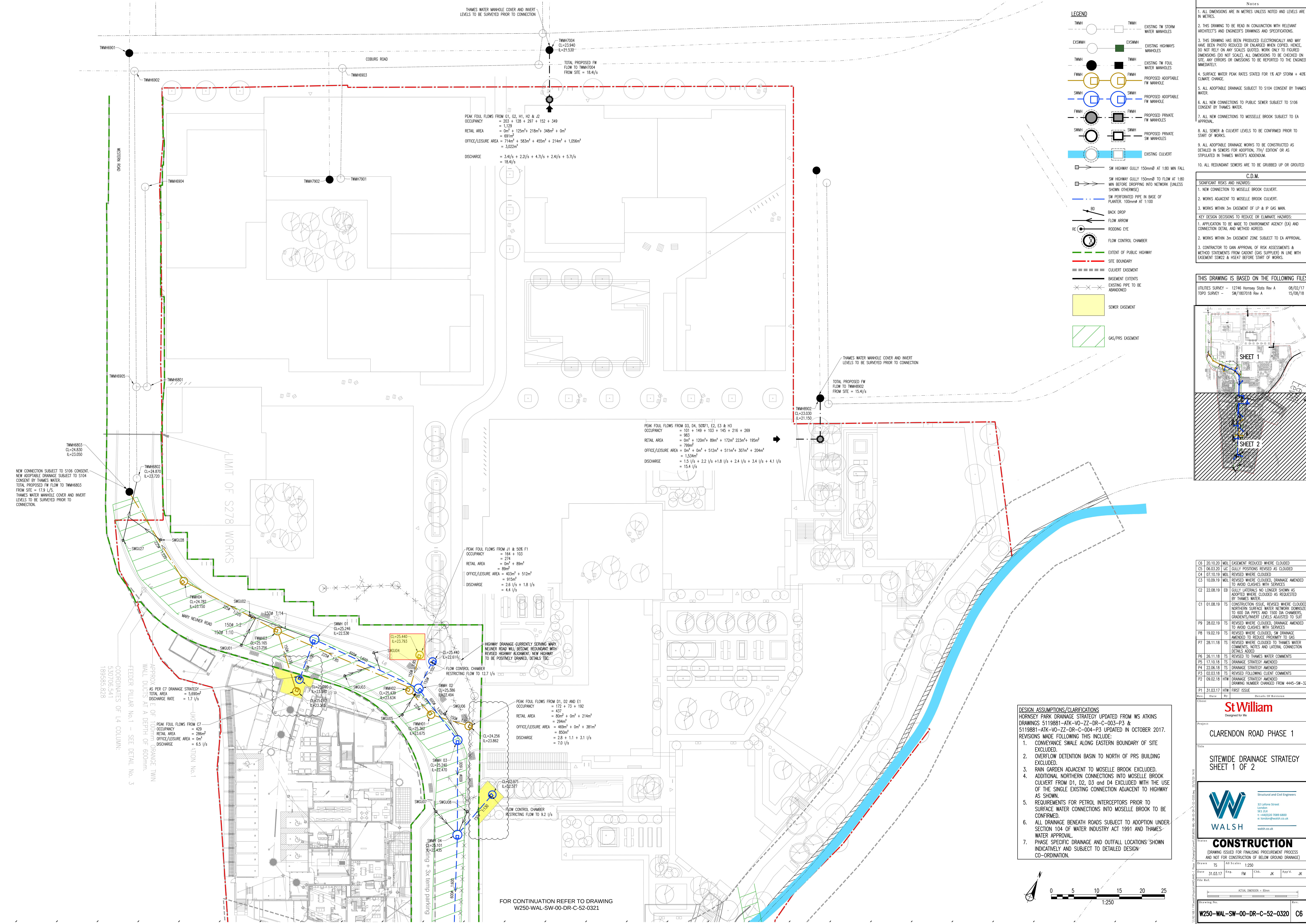
ET FW PENETRATION
Ø225mm
IL=23.900

CHANNEL DRAIN ON
BASEMENT ENTRANCE

EXISTING DRAINAGE IN MARY
NEUNER ROAD AS PER DRAINAGE
NOTED IN S278 DRAWINGS. NEW
FOUL AND SURFACE WATER
CONNECTIONS SUBJECT TO S106
APPROVAL BY THAMES WATER

MARY NEUNER
ROAD OUTFALL

MARY NEUNER
COURTYARD



LEGEND

- TWMH: EXISTING TW STORM WATER MANHOLES
- EXSMWH: EXISTING HIGHWAYS MANHOLES
- TWMH: EXISTING TW FOUL WATER MANHOLES
- FMWH: PROPOSED ADAPTABLE FW MANHOLE
- SMWH: PROPOSED ADAPTABLE SW MANHOLE
- FMWH: PROPOSED PRIVATE FW MANHOLES
- SMWH: PROPOSED PRIVATE SW MANHOLES
- EXISTING CULVERT
- SW HIGHWAY GULLY 150mmØ AT 1.80 MIN FALL
- SW HIGHWAY GULLY 150mmØ TO FLOW AT 1.80 MIN BEFORE DROPPING INTO NETWORK (UNLESS SHOWN OTHERWISE)
- SW PERFORATED PIPE IN BASE OF PLANTER, 100mmØ AT 1:100
- BACK DROP
- FLOW ARROW
- RODDING EYE
- FLOW CONTROL CHAMBER
- EXTENT OF PUBLIC HIGHWAY
- SITE BOUNDARY
- CULVERT EASEMENT
- BASEMENT EXTENTS
- EXISTING PIPE TO BE ABANDONED
- SEWER EASEMENT
- GAS/PRS EASEMENT

- Notes**
1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED AND LEVELS ARE IN METRES.
 2. THIS DRAWING TO BE READ IN CONJUNCTION WITH RELEVANT ARCHITECT'S AND ENGINEER'S DRAWINGS AND SPECIFICATIONS.
 3. THIS DRAWING HAS BEEN PRODUCED ELECTRONICALLY AND MAY HAVE BEEN PHOTO REDUCED OR ENLARGED WHEN COPIED. HENCE, DO NOT RELY ON ANY SCALES QUOTED. WORK ONLY TO FIGURED DIMENSIONS (DO NOT SCALE). ALL DIMENSIONS TO BE CHECKED ON SITE. ANY ERRORS OR OMISSIONS TO BE REPORTED TO THE ENGINEER IMMEDIATELY.
 4. SURFACE WATER PEAK RATES STATED FOR 1% AEP STORM + 40% CLIMATE CHANGE.
 5. ALL ADAPTABLE DRAINAGE SUBJECT TO S104 CONSENT BY THAMES WATER.
 6. ALL NEW CONNECTIONS TO PUBLIC SEWER SUBJECT TO S106 CONSENT BY THAMES WATER.
 7. ALL NEW CONNECTIONS TO MOSSELLE BROOK SUBJECT TO EA APPROVAL.
 8. ALL SEWER & CULVERT LEVELS TO BE CONFIRMED PRIOR TO START OF WORKS.
 9. ALL ADAPTABLE DRAINAGE WORKS TO BE CONSTRUCTED AS DETAILED IN SEWERS FOR ADOPTION, 7TH EDITION OR AS STIPULATED IN THAMES WATER'S ADDENDUM.
 10. ALL REDUNDANT SEWERS ARE TO BE GRUBBED UP OR GROUDED.
- C.D.M.**
- SIGNIFICANT RISKS AND HAZARDS:**
1. NEW CONNECTION TO MOSSELLE BROOK CULVERT.
 2. WORKS ADJACENT TO MOSSELLE BROOK CULVERT.
 3. WORKS WITHIN 3m EASEMENT OF LP & IP GAS MAIN.
- KEY DESIGN DECISIONS TO REDUCE OR ELIMINATE HAZARDS:**
1. APPLICATION TO BE MADE TO ENVIRONMENT AGENCY (EA) AND CONNECTION DETAIL AND METHOD AGREED.
 2. WORKS WITHIN 3m EASEMENT ZONE SUBJECT TO EA APPROVAL.
 3. CONTRACTOR TO OBTAIN APPROVAL OF RISK ASSESSMENTS & METHOD STATEMENTS FROM CADOUT (GAS SUPPLIER) IN LINE WITH EASEMENT SSW22 & HSE47 BEFORE START OF WORKS.

THIS DRAWING IS BASED ON THE FOLLOWING FILES

UTILITIES SURVEY - 12746 Hornsey Slats Rev A	08/02/17
TOPO SURVEY - SW/1807018 Rev A	15/08/18

SHEET 1

SHEET 2

C5	20.10.20	MDL	EASEMENT REDUCED WHERE CLOUDED
C5	08.03.20	LC	GULLY POSITIONS REVISED AS CLOUDED
C4	07.10.19	MDL	REVISED WHERE CLOUDED
C3	10.09.19	MDL	REVISED WHERE CLOUDED, DRAINAGE AMENDED TO AVOID CLASHES WITH SERVICES
C2	22.08.19	ED	ED GULLY LATERALS NO LONGER SHOWN AS ADOPTED WHERE CLOUDED AS REQUESTED BY THAMES WATER
C1	01.08.19	TS	CONSTRUCTION ISSUE REVISED WHERE CLOUDED, NORTHERN SURFACE WATER NETWORK DOWNZONED TO 800 DIA PIPES AND 1500 DIA CHAMBERS, GRADIENTS/INVERT LEVELS ADJUSTED TO SUIT
P9	28.02.19	TS	REVISED WHERE CLOUDED, DRAINAGE AMENDED TO AVOID CLASHES WITH SERVICES
P8	19.02.19	TS	REVISED WHERE CLOUDED, SW DRAINAGE AMENDED TO REDUCE PROXIMITY TO GAS
P7	28.11.18	TS	REVISED WHERE CLOUDED TO THAMES WATER COMMENTS, NOTES AND LATERAL CONNECTION DETAILS ADDED
P6	26.11.18	TS	REVISED TO THAMES WATER COMMENTS
P5	17.10.18	TS	DRAINAGE STRATEGY AMENDED
P4	22.06.18	TS	DRAINAGE STRATEGY AMENDED
P3	02.03.18	TS	REVISED FOLLOWING CLIENT COMMENTS
P2	09.02.18	HTW	DRAINAGE STRATEGY AMENDED
P1	31.03.17	HTW	FIRST ISSUE

Rev: Date: By: Details Of Revision

St William
Designed for life

Project: **CLARENDON ROAD PHASE 1**

Title: **SITEWIDE DRAINAGE STRATEGY SHEET 1 OF 2**

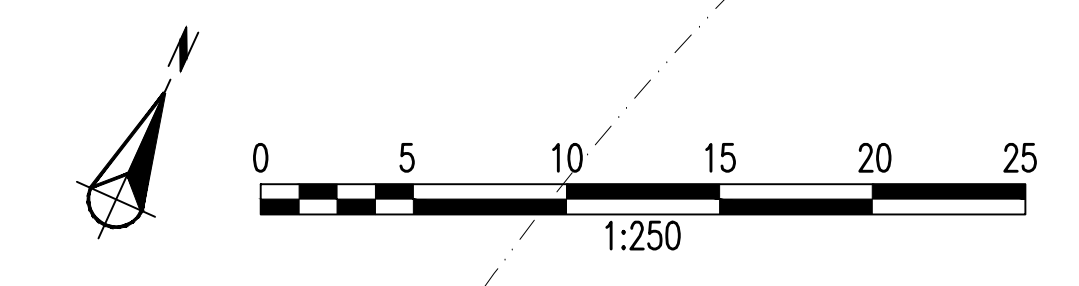
WALSH
Structural and Civil Engineers
32 Laburnum Street
London
E4 3JX
T: +44(0)20 7099 6800
E: london@walsh.co.uk
walsh.co.uk

CONSTRUCTION
(DRAWING ISSUED FOR FINALISING PROCUREMENT PROCESS AND NOT FOR CONSTRUCTION OF BELOW GROUND DRAINAGE)

Drawn	TS	Eng	FM	Chk	JK	App'd	JK
Date	31.03.17						
File Ref:	ACLU, DIMENSION - 80mm						
Drawing No.	W250-WAL-SW-00-DR-C-52-0320						
Rev.	C6						

DESIGN ASSUMPTIONS/CLARIFICATIONS
HORNSEY PARK DRAINAGE STRATEGY UPDATED FROM WS ATKINS DRAWINGS 5119881-ATK-V0-ZZ-DR-C-003-P3 & 5119881-ATK-V0-ZZ-DR-C-004-P3 UPDATED IN OCTOBER 2017. REVISIONS MADE FOLLOWING THIS INCLUDE:

1. CONVEYANCE SWALE ALONG EASTERN BOUNDARY OF SITE EXCLUDED.
2. OVERFLOW DETENTION BASIN TO NORTH OF PRS BUILDING EXCLUDED.
3. RAIN GARDEN ADJACENT TO MOSSELLE BROOK EXCLUDED.
4. ADDITIONAL NORTHERN CONNECTIONS INTO MOSSELLE BROOK CULVERT FROM D1, D2, D3 AND D4 EXCLUDED WITH THE USE OF THE SINGLE EXISTING CONNECTION ADJACENT TO HIGHWAY AS SHOWN.
5. REQUIREMENTS FOR PETROL INTERCEPTORS PRIOR TO SURFACE WATER CONNECTIONS INTO MOSSELLE BROOK TO BE CONFIRMED.
6. ALL DRAINAGE BENEATH ROADS SUBJECT TO ADOPTION UNDER SECTION 104 OF WATER INDUSTRY ACT 1991 AND THAMES' WATER APPROVAL.
7. PHASE SPECIFIC DRAINAGE AND OUTFALL LOCATIONS SHOWN INDICATIVELY AND SUBJECT TO DETAILED DESIGN CO-ORDINATION.



FOR CONTINUATION REFER TO DRAWING W250-WAL-SW-00-DR-C-52-0321

[illegible]





Outgoing pipe from EXFWMH 3 at I
L 23.760









PROJECT NAME: Clarendon Road, Phase 3

Manhole / Drainage run Check Sheet

		Check Sheet No:	S-60	
		Drg Ref & Rev no:	W257-PTA-DE-ZZ-DR-C-01-8101 C20	
No	Manhole & Drainage run construction	Details	Checked and Signed	
			GCL	Client
1	Location: Phase 3 Northwest of D1 Manhole/pipe run Ref Gridline Ref Highlighted location plan attached	FW06 to FW07A	M.K.	
		Yes/No		
2	Manhole size	450 dia.	M.K.	
3	Invert level	23.868	M.K.	
4	Manhole cover : Spec, size, orientation & cover level	D400, PPIC, 25.095	M.K.	
5	Excavation to correct dimensions/support systems checked		M.K.	
6	Branches & benching: position, line, level checked		M.K.	
7	Rocker pipes installed (if applicable) checked		M.K.	
8	Rings and cover placed as per vertical & horizontal alignment checked.		M.K.	
9	Brickwork & surround filled as per detail/specification checked.		M.K.	
10	All Specials are fixed (Non return valve, Flow control unit, Traps, Rodent barrier, etc.) Specify Type :		M.K.	
11	Manhole accessible for future use/maintenance	Yes/No	M.K.	
12	Pipe run details Material Diameter Length	Clay	M.K.	
		150mm		
		12m		
13	Spurs for lateral connections: Position, level & co-ordinates checked		M.K.	
14	SVP/RWPs installed to correct position, level and capped off.		M.K.	
15	Anchor blocks to correct detail at specified locations		M.K.	
16	Bedding & surround as specified		M.K.	
17	Air testing passed/witnessed:		M.K.	
18	Photos attached		M.K.	
19	Geotextile installed as per specification & checked		M.K.	

Originator - GCL Site Manager		Client Representative	
Name : M. Kunigelis		Name :	
Signature:	Date: 11/10/2021	Signature:	Date:

PROJECT NAME: Clarendon Road Phase 3

Drainage Air Test Sheet

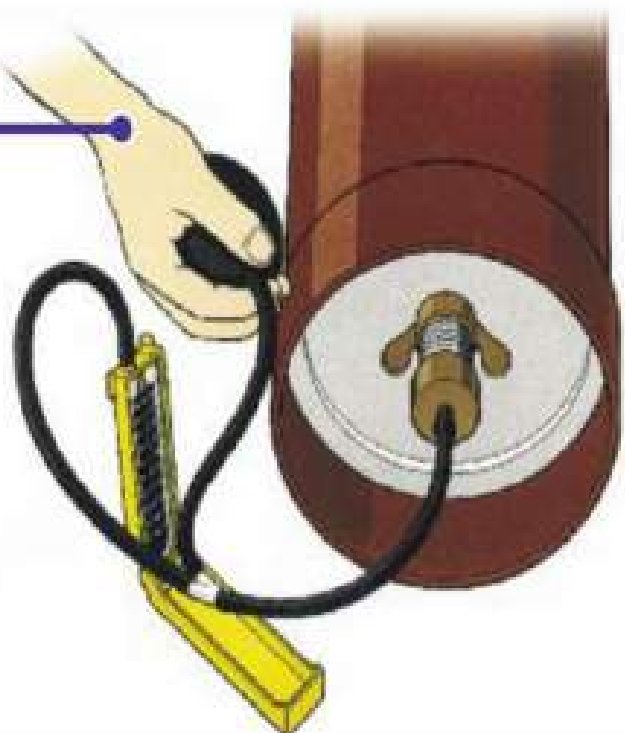
Client: St. William		Test date: 11/10/2021
Drainage Check Sheet Ref no:	S-60	Test. Ref. No: S-60

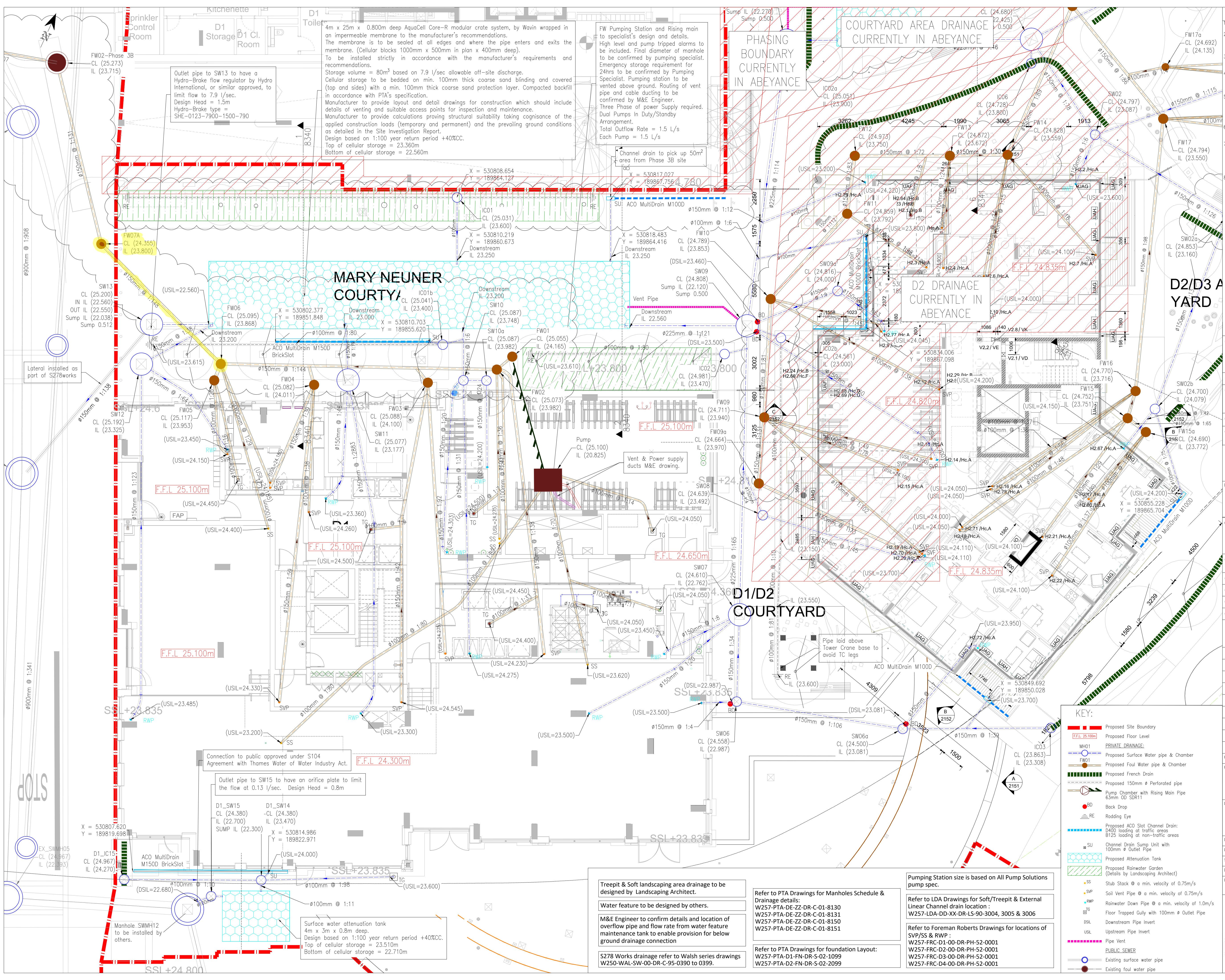
Pipe Run	Air gauge pressure		Pipe dia.(ø)	Test Time	Result	Remarks
	Initial	Final				
FW06 to FW07A	100	95	150mm	5 mins	Pass	OK

Signed: Dragos Goroi (Technician)	Witnessed by: M. Kunigelis
Verified By: R. De Sousa (Technical Manager) 	Date: 11/10/2021

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 pipes. 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, 'Y' gauge and hand bellows.
4. Fill 'Y' 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.





Notes:

- Do not scale from this drawing.
- In case of any discrepancies in drawings, details or bills, refer to engineers for clarification: unilateral decisions by the Contractor will not be accepted.
- This drawing is to be read in conjunction with all related Architects, Consultants & Sub-Contractors drawings and specifications.
- The Contractor is advised that all design drawings and information are to be read concurrently and any discrepancies or omissions reported directly to PTA Civils Department.
- The topographical survey is based from CD Surveys Ltd drawings:- SW/1808045/1-3 dated October 2018, SW/1601057/1 dated February 2016, WH/1903054 dated April 2019.
- The topographical survey is based on drawing MSC32138-U-AII-01 received from Murphy Surveys dated August 2019.
- For information on existing site conditions and services ref to the National Grid H&S File report ref: IWS0170220-TRI0-HRN-HSRLE-0001. Any discrepancies between this and the provided information are to be referred to the engineer prior to commencement of works.
- Refer to PTA drawing W257-PTA-SW-ZZ-DR-S-0045 for site constraints.

C20	As-built drainage update. D1 FW outfall update. D4/E4 suspended drainage update. MHs relocated into paths.	JP	23.09.21	AH
C19	IC15 IL updated.	JP	12.03.21	AM
C18	FW15a/15/16 updated to as built positions FW17/18 levels updated.	JP	02.03.21	AM
C17	SW09 BD level amended.	JP	19.02.21	AM
C16	Terrace drainage updated. Channel drain to D1 added.	JP	16.02.21	AM

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DRAWING STATUS

C15	FW15/ FW15a IL amended. IC09b/IC09c shown in as-built position. CD added to terraces	JP	05.02.21	AM
C14	IC09b & 09C moved & FW16 invert level amended	SN	29.01.21	-
C13	Perforated pipe added.	SN	06.01.21	-
C12	RWP & SW02 amended.	SN	25.11.20	-
C11	Floor gully IL added.	SN	12.11.20	-
C10	D2 Terrace gullies added.	SN	10.11.20	-
C9	Pumping Station MH shape amended. Rising main details added. CD amended	SN	30.10.20	-
C8	L&Q drainage added.	SN	15.10.20	-
C7	D1 L&Q drainage added.	SN	08.10.20	-
C6	D1/D2 SVP & SS amended.	SN	25.09.20	-
C5	MH covers level amended.	SN	14.08.20	-
C4	Drainage coordinated.	SN	06.08.20	-
C3	Latest Arch/M&E info update	SN	16.07.20	-
C2	Latest M & E model update.	SN	22.05.20	AH
C1	Issue for Construction.	SN	17.04.20	AH
PI	First Issue.	SN	13.03.20	AH

REV DESCRIPTION BY DATE CHK'D

PROJECT TITLE

Clarendon Ph3a

DRAWING TITLE

Drainage Layout Sheet 1 of 3

DATE	Feb 20	CHECKED DO	CHECKED ENG	PTA PROJ No
DRAWN	SN			9669
SCALE	1 : 100	JP	AH	REVISION
DWG SIZE	A1			C20

DRAWING No

W257-PTA-DE- ZZ -DR-C-01- 8101

Consulting Civil & Structural Engineers

29 Red Lion Street
Chesham
Bucks.
HP5 1EJ
Tel. 01494 772721

www.ptaconsult.co.uk

FW06



FW06



FW06





FW07A



FW07A