



P005 Area Schedule - Car Parking 1/75m2 Offices 1/100m2 production										
Unit	Production		Office			Hub Office		Total GIA		Cars
	sq ft	m2	sq ft	m2	Stories	sq ft	m2	sq ft	m2	
1	175,000	16,258	20,000	1,858	3	-	-	195,000	18,116	187
10	201,000	18,673	20,000	1,858	3	3000	279	224,000	20,810	215
20	190,000	17,651	19,000	1,765	3	3,000	279	212,000	19,695	204
21	410,000	38,089	41,000	3,809	3	3,000	279	454,000	42,177	435
22	290,000	26,941	28,000	2,601	3	3,000	279	321,000	29,821	308
30	625,000	58,063	65,000	6,039	1	3,000	279	693,000	64,380	665
31	180,000	16,722	19,000	1,765	1	-	-	199,000	18,487	191
	-	-	-	-	1	-	-	-	-	-
	-	-	-	-	1	-	-	-	-	-
Sub Total:	2,071,000	192,396	212,000	19,695		15,000	1,394	2,298,000	213,484	2,205

Rev	Date	By	Description
A	31/03/22	NV	Masterplan updated.
D	08/04/22	IY	landscape buffer increased between A444 and Unit 22. Road junction on A444 revised to a priority junction.

SGP

Architects + Masterplanners

Waterfront House
2a Smith Way
Grove Park
Enderby
Leicester LE19 1SX

t: +44 (0)116 247 0557

www.stephengeorge.co.uk

MIRA South Site

Drawing Name:
Masterplan Option 10 B

Drawing Stage: PRELIMINARY

Suitability: S0 - Work In Progress

SGP File Ref: 21-092-P005e-Indic Mplan.dwg

21-092 25.03.22 NV IY 1:2500 @ A1 D
SGP Project No. Date: Drawn: Team: Scale: Rev.

Drawing Number: 21092 -SGP-XX- 00 - DR - A - 111010

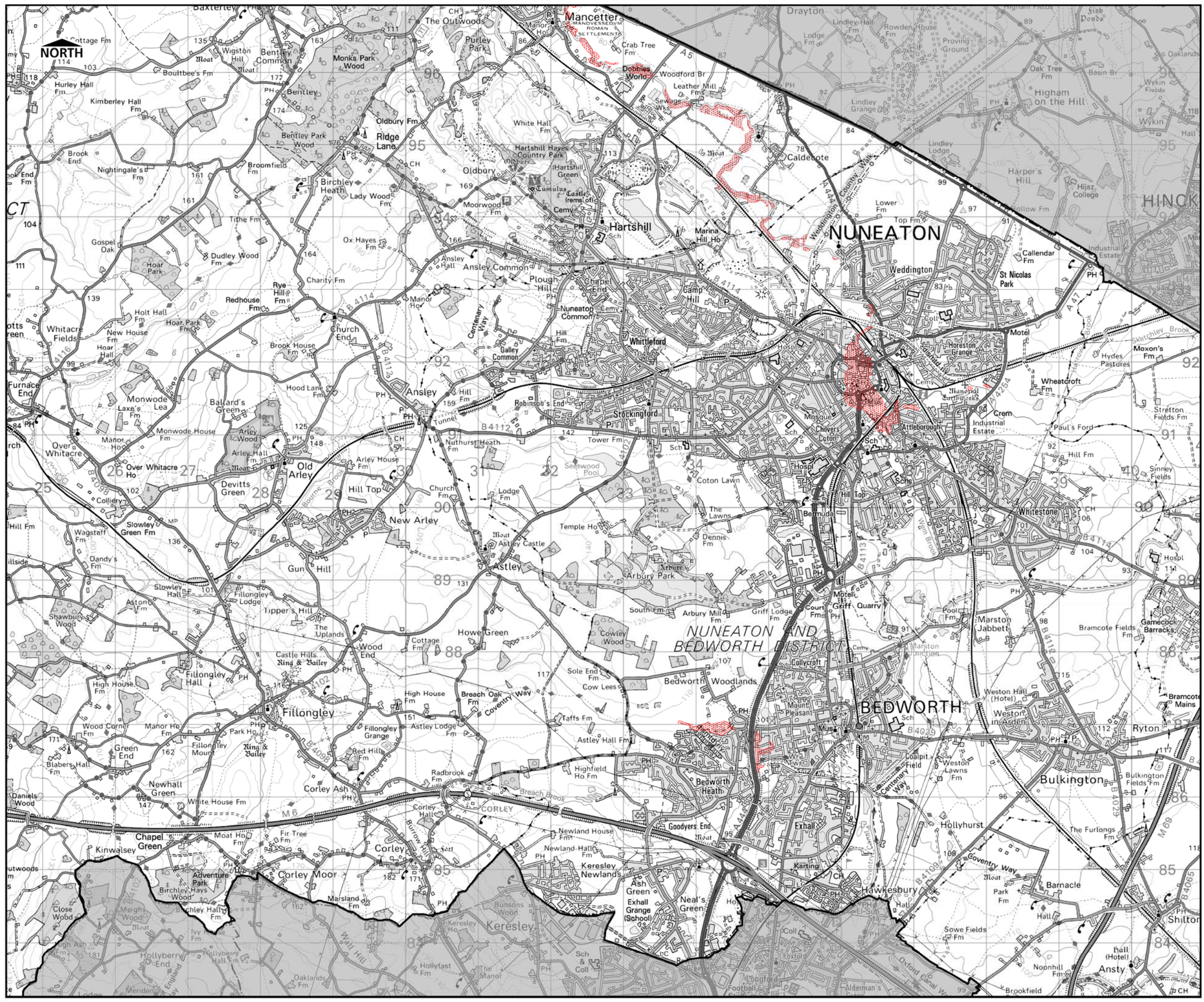
Project Code Originator Volume Level Type Role Number



C. Historic Flood Records from Joint SFRA

Appendices

MIRA Technology Park South Site
Project Number: EED13833
Document Reference: EED13833-118-R-2-4-3-FRA



THIS DRAWING MAY BE USED ONLY FOR THE PURPOSE INTENDED

LEGEND

- Warwickshire CC
- Council Flooding Records
- Environment Agency Historic Fluvial Flooding Outline

OVERVIEW

NOTE

Flood incidents shown do not represent an exhaustive record of all flooding incidents which may have occurred within the study area. Flood incidents may have occurred which have not been recorded and are therefore not included.

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Level 1 Strategic Flood Risk Assessment

Stratford-on-Avon DC, Warwickshire CC, North Warwickshire BC, Rugby BC

Contains Ordnance Survey Data.
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Scale at A3 1:50,000	Date Sept 2013	Drawn by: EB Approved by: GH
-------------------------	-------------------	---------------------------------

Historic Flood Records

Consultants

URS
6 - 8 Greencoat Place
London
SW1P 1PL

Figure A2 iv

Version 1

D. ReFH2 Checksheet (1 in 2 year event)

Appendices

UK Design Flood Estimation

Generated on 26 November 2021 12:03:39 by csms1
Printed from the ReFH2 Flood Modelling software package, version 3.2.7650.24314

Summary of estimate using the Flood Estimation Handbook revitalised flood hydrograph method (ReFH2)

Site details

Checksum: 1FFF-DF8E

Site name: FEH_Catchment_Descriptors_435550_295000

Easting: 435550

Northing: 295000

Country: England, Wales or Northern Ireland

Catchment Area (km²): 0.81

Using plot scale calculations: No

Model: 2.3

Site description: None

Model run: 1 year

Summary of results

Rainfall - FEH 2013 model (mm):	19.51	Total runoff (ML):	6.49
Total Rainfall (mm):	18.87	Total flow (ML):	15.32
Peak Rainfall (mm):	6.69	Peak flow (m ³ /s):	0.39

Parameters

Where the user has overridden a system-generated value, this original value is shown in square brackets after the value used.

** Indicates that the user locked the duration/timestep*

Rainfall parameters (Rainfall - FEH 2013 model)

Name	Value	User-defined?
Duration (hh:mm:ss)	04:30:00	No
Timestep (hh:mm:ss)	00:30:00	No
SCF (Seasonal correction factor)	0.99	No
ARF (Areal reduction factor)	0.98	No
Seasonality	Summer [Winter]	Yes

Loss model parameters

Name	Value	User-defined?
Cini (mm)	104.84	No
Cmax (mm)	268.97	No
Use alpha correction factor	No	No
Alpha correction factor	n/a	No

Routing model parameters

Name	Value	User-defined?
Tp (hr)	2.87	No
Up	0.65	No
Uk	0.8	No

Baseflow model parameters

Name	Value	User-defined?
BF0 (m ³ /s)	0.02	No
BL (hr)	26.71	No
BR	1.35	No

Urbanisation parameters

Name	Value	User-defined?
Urban area (km ²)	0	No
Urbext 2000	0	No
Impervious runoff factor	0.7	No
Imperviousness factor	0.4	No
Tp scaling factor	0.75	No
Depression storage depth (mm)	0.5	No
Exporting drained area (km ²)	0.00	Yes
Sewer capacity (m ³ /s)	0.00	Yes

Time series data

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m³/s)	Baseflow (m³/s)	Total Flow (m³/s)
00:00:00	0.557	0.000	0.218	0.000	0.022	0.022
00:30:00	0.912	0.000	0.359	0.001	0.021	0.022
01:00:00	1.574	0.000	0.627	0.004	0.021	0.025
01:30:00	3.046	0.000	1.239	0.012	0.021	0.033
02:00:00	6.687	0.000	2.841	0.028	0.021	0.049
02:30:00	3.046	0.000	1.349	0.063	0.022	0.084
03:00:00	1.574	0.000	0.711	0.115	0.023	0.139
03:30:00	0.912	0.000	0.416	0.175	0.027	0.201
04:00:00	0.557	0.000	0.256	0.235	0.031	0.266
04:30:00	0.000	0.000	0.000	0.290	0.037	0.327
05:00:00	0.000	0.000	0.000	0.330	0.044	0.374
05:30:00	0.000	0.000	0.000	0.337	0.052	0.389
06:00:00	0.000	0.000	0.000	0.320	0.059	0.379
06:30:00	0.000	0.000	0.000	0.291	0.066	0.357
07:00:00	0.000	0.000	0.000	0.257	0.071	0.328
07:30:00	0.000	0.000	0.000	0.220	0.076	0.296
08:00:00	0.000	0.000	0.000	0.186	0.080	0.266
08:30:00	0.000	0.000	0.000	0.159	0.083	0.242
09:00:00	0.000	0.000	0.000	0.137	0.085	0.221
09:30:00	0.000	0.000	0.000	0.116	0.086	0.203
10:00:00	0.000	0.000	0.000	0.097	0.087	0.184
10:30:00	0.000	0.000	0.000	0.078	0.088	0.166
11:00:00	0.000	0.000	0.000	0.060	0.088	0.149
11:30:00	0.000	0.000	0.000	0.043	0.088	0.131
12:00:00	0.000	0.000	0.000	0.027	0.087	0.114
12:30:00	0.000	0.000	0.000	0.014	0.086	0.100
13:00:00	0.000	0.000	0.000	0.007	0.085	0.091
13:30:00	0.000	0.000	0.000	0.003	0.083	0.086
14:00:00	0.000	0.000	0.000	0.001	0.082	0.083
14:30:00	0.000	0.000	0.000	0.000	0.080	0.080
15:00:00	0.000	0.000	0.000	0.000	0.079	0.079
15:30:00	0.000	0.000	0.000	0.000	0.077	0.077
16:00:00	0.000	0.000	0.000	0.000	0.076	0.076
16:30:00	0.000	0.000	0.000	0.000	0.074	0.074
17:00:00	0.000	0.000	0.000	0.000	0.073	0.073

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m ³ /s)	Baseflow (m ³ /s)	Total Flow (m ³ /s)
17:30:00	0.000	0.000	0.000	0.000	0.072	0.072
18:00:00	0.000	0.000	0.000	0.000	0.070	0.070
18:30:00	0.000	0.000	0.000	0.000	0.069	0.069
19:00:00	0.000	0.000	0.000	0.000	0.068	0.068
19:30:00	0.000	0.000	0.000	0.000	0.067	0.067
20:00:00	0.000	0.000	0.000	0.000	0.065	0.065
20:30:00	0.000	0.000	0.000	0.000	0.064	0.064
21:00:00	0.000	0.000	0.000	0.000	0.063	0.063
21:30:00	0.000	0.000	0.000	0.000	0.062	0.062
22:00:00	0.000	0.000	0.000	0.000	0.061	0.061
22:30:00	0.000	0.000	0.000	0.000	0.059	0.059
23:00:00	0.000	0.000	0.000	0.000	0.058	0.058
23:30:00	0.000	0.000	0.000	0.000	0.057	0.057
24:00:00	0.000	0.000	0.000	0.000	0.056	0.056
24:30:00	0.000	0.000	0.000	0.000	0.055	0.055
25:00:00	0.000	0.000	0.000	0.000	0.054	0.054
25:30:00	0.000	0.000	0.000	0.000	0.053	0.053
26:00:00	0.000	0.000	0.000	0.000	0.052	0.052
26:30:00	0.000	0.000	0.000	0.000	0.051	0.051
27:00:00	0.000	0.000	0.000	0.000	0.050	0.050
27:30:00	0.000	0.000	0.000	0.000	0.049	0.049
28:00:00	0.000	0.000	0.000	0.000	0.048	0.048
28:30:00	0.000	0.000	0.000	0.000	0.047	0.047
29:00:00	0.000	0.000	0.000	0.000	0.047	0.047
29:30:00	0.000	0.000	0.000	0.000	0.046	0.046
30:00:00	0.000	0.000	0.000	0.000	0.045	0.045
30:30:00	0.000	0.000	0.000	0.000	0.044	0.044
31:00:00	0.000	0.000	0.000	0.000	0.043	0.043
31:30:00	0.000	0.000	0.000	0.000	0.042	0.042
32:00:00	0.000	0.000	0.000	0.000	0.042	0.042
32:30:00	0.000	0.000	0.000	0.000	0.041	0.041
33:00:00	0.000	0.000	0.000	0.000	0.040	0.040
33:30:00	0.000	0.000	0.000	0.000	0.039	0.039
34:00:00	0.000	0.000	0.000	0.000	0.039	0.039
34:30:00	0.000	0.000	0.000	0.000	0.038	0.038
35:00:00	0.000	0.000	0.000	0.000	0.037	0.037

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m ³ /s)	Baseflow (m ³ /s)	Total Flow (m ³ /s)
35:30:00	0.000	0.000	0.000	0.000	0.037	0.037
36:00:00	0.000	0.000	0.000	0.000	0.036	0.036
36:30:00	0.000	0.000	0.000	0.000	0.035	0.035
37:00:00	0.000	0.000	0.000	0.000	0.035	0.035
37:30:00	0.000	0.000	0.000	0.000	0.034	0.034
38:00:00	0.000	0.000	0.000	0.000	0.033	0.033
38:30:00	0.000	0.000	0.000	0.000	0.033	0.033
39:00:00	0.000	0.000	0.000	0.000	0.032	0.032
39:30:00	0.000	0.000	0.000	0.000	0.031	0.031
40:00:00	0.000	0.000	0.000	0.000	0.031	0.031
40:30:00	0.000	0.000	0.000	0.000	0.030	0.030
41:00:00	0.000	0.000	0.000	0.000	0.030	0.030
41:30:00	0.000	0.000	0.000	0.000	0.029	0.029
42:00:00	0.000	0.000	0.000	0.000	0.029	0.029
42:30:00	0.000	0.000	0.000	0.000	0.028	0.028
43:00:00	0.000	0.000	0.000	0.000	0.028	0.028
43:30:00	0.000	0.000	0.000	0.000	0.027	0.027
44:00:00	0.000	0.000	0.000	0.000	0.027	0.027
44:30:00	0.000	0.000	0.000	0.000	0.026	0.026
45:00:00	0.000	0.000	0.000	0.000	0.026	0.026
45:30:00	0.000	0.000	0.000	0.000	0.025	0.025
46:00:00	0.000	0.000	0.000	0.000	0.025	0.025
46:30:00	0.000	0.000	0.000	0.000	0.024	0.024
47:00:00	0.000	0.000	0.000	0.000	0.024	0.024
47:30:00	0.000	0.000	0.000	0.000	0.023	0.023
48:00:00	0.000	0.000	0.000	0.000	0.023	0.023
48:30:00	0.000	0.000	0.000	0.000	0.022	0.022
49:00:00	0.000	0.000	0.000	0.000	0.022	0.022
49:30:00	0.000	0.000	0.000	0.000	0.022	0.022

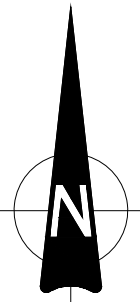
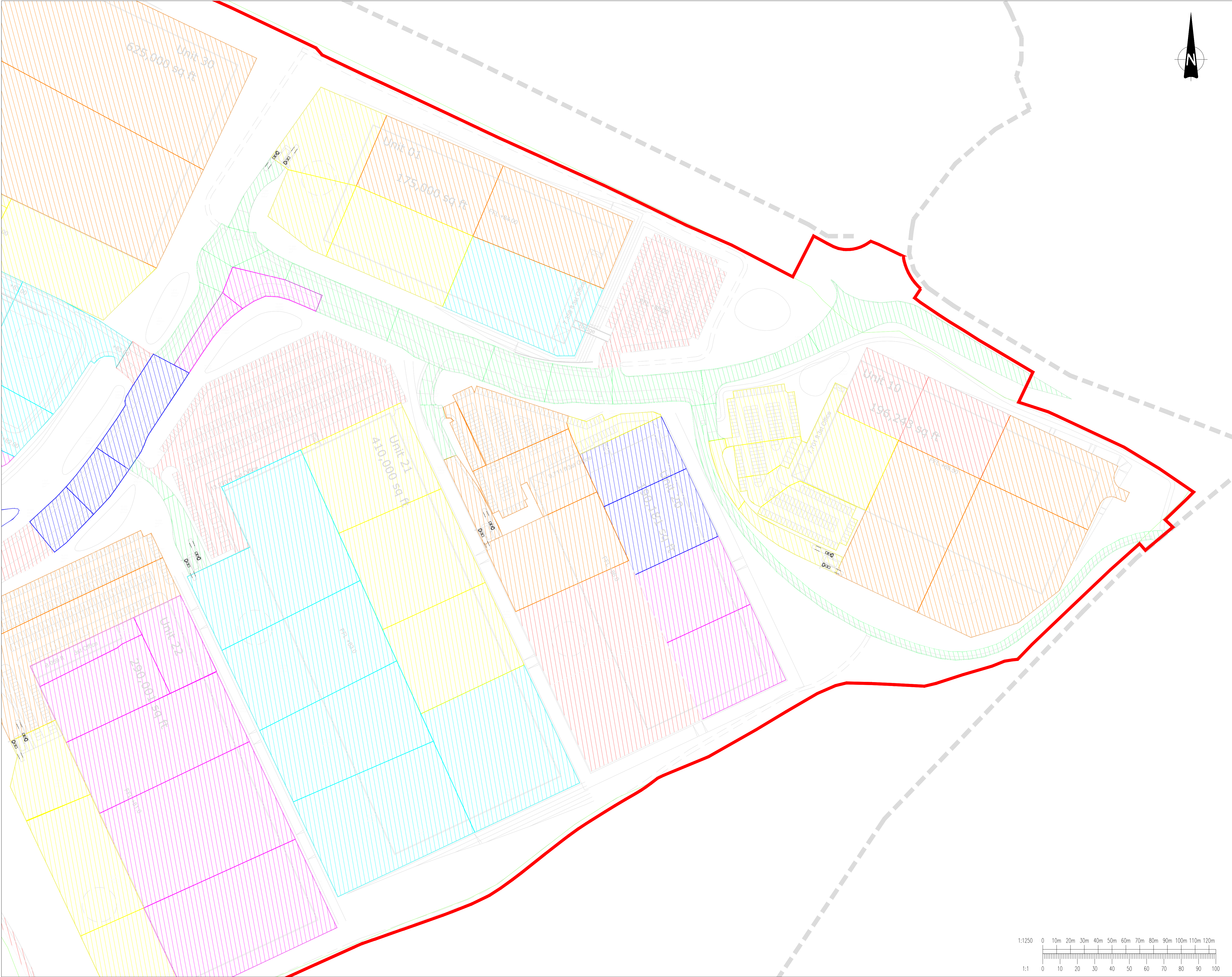
Appendix

Catchment descriptors

Name	Value	User-defined value used?
Area (km ²)	0.81	No
ALTBAR	89	No
ASPBAR	256	No
ASPVAR	0.69	No
BFIHOST	0.34	No
BFIHOST19	0.33	No
DPLBAR (km)	0.89	No
DPSBAR (mkm ⁻¹)	17	No
FARL	1	No
LDP	2.02	No
PROPWET (mm)	0.3	No
RMED1H	10.5	No
RMED1D	31.8	No
RMED2D	39.2	No
SAAR (mm)	636	No
SAAR4170 (mm)	678	No
SPRHOST	45.48	No
Urbext2000	0	No
Urbext1990	0	No
URBCONC	0	No
URBLOC	0	No
DDF parameter C	-0.03	No
DDF parameter D1	0.36	No
DDF parameter D2	0.33	No
DDF parameter D3	0.25	No
DDF parameter E	0.3	No
DDF parameter F	2.38	No
DDF parameter C (1km grid value)	-0.03	No
DDF parameter D1 (1km grid value)	0.36	No
DDF parameter D2 (1km grid value)	0.33	No
DDF parameter D3 (1km grid value)	0.24	No
DDF parameter E (1km grid value)	0.3	No
DDF parameter F (1km grid value)	2.39	No

E. Indicative Surface Water Drainage Strategy

Appendices



This drawing should not be scaled. Dimensions to be verified on site.
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PO3	02.08.22	UPDATED SITE LAYOUT	KS
PO2	06.05.22	UPDATED LAYOUT	KS
PO1	12.01.22	FIRST ISSUE	KT

Rev	Date	Description	By
-----	------	-------------	----

Amendments

Project

MIRA Technology Park South Site

Title

MIRA Southern Manufacturing Sector
Surface Water Drainage Catchments
Southern Catchments

Client

ERI MTP Limited



Pickfords Wharf Clink Street London SE1 9DG
1 020 7828 7888
mail@watermangroup.com www.watermangroup.com

Status
PRELIMINARY

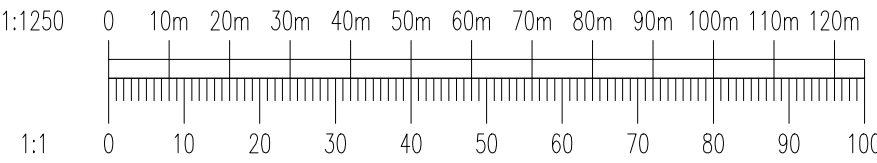
Designed By	KT	Checked By	HC	Waterman Ref	EED13833
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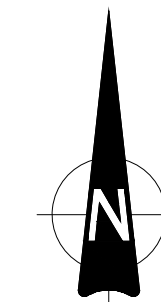
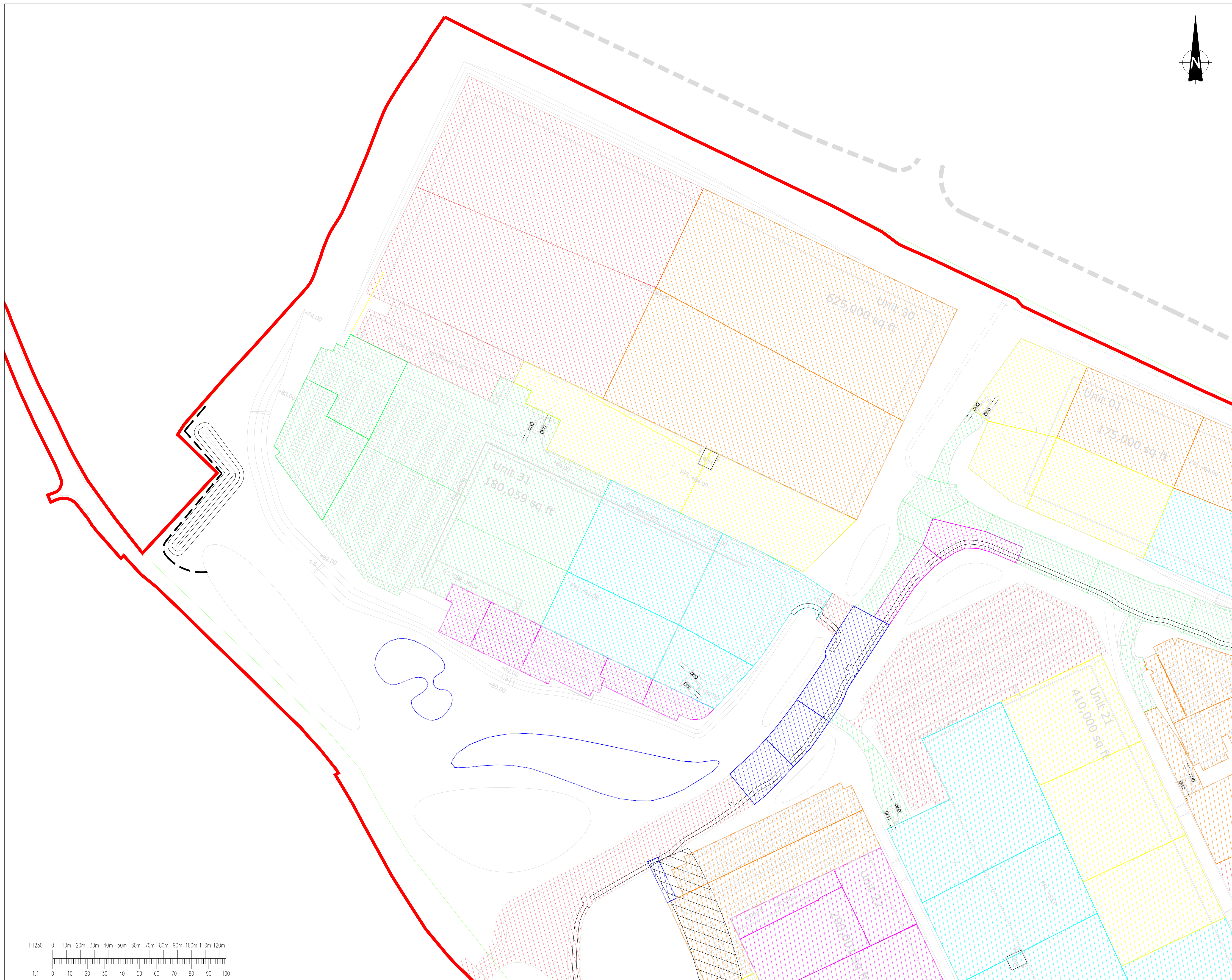
Drawn By	KT	Date	Jan 2022	Scales @ A1	1:1250
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Project	Originator	Volume	Level	Type	Role	Number	Revision
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13833-WIE-ZZ-XX-DR-92001 P03

13833-WIE-ZZ-XX-M1-D-92001, 21-092-P005e4Indic Mplan, A1-Wat-S





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P03	02.08.22	UPDATED SITE LAYOUT		KS
P02	06.05.22	UPDATED LAYOUT		KS
P01	12.01.22	FIRST ISSUE		KT
Rev	Date	Description		By

Amendments

Project	
---------	--

MIRA Technology Park South Site

Title

MIRA Southern Manufacturing Sector
Surface Water Drainage Catchments
Northern Catchments

Client **ERI MTP Limited**



Pickfords Wharf Clink Street London SE1 9DG

t 020 7928 7888

mail@watermangroup.com www.watermangroup.com

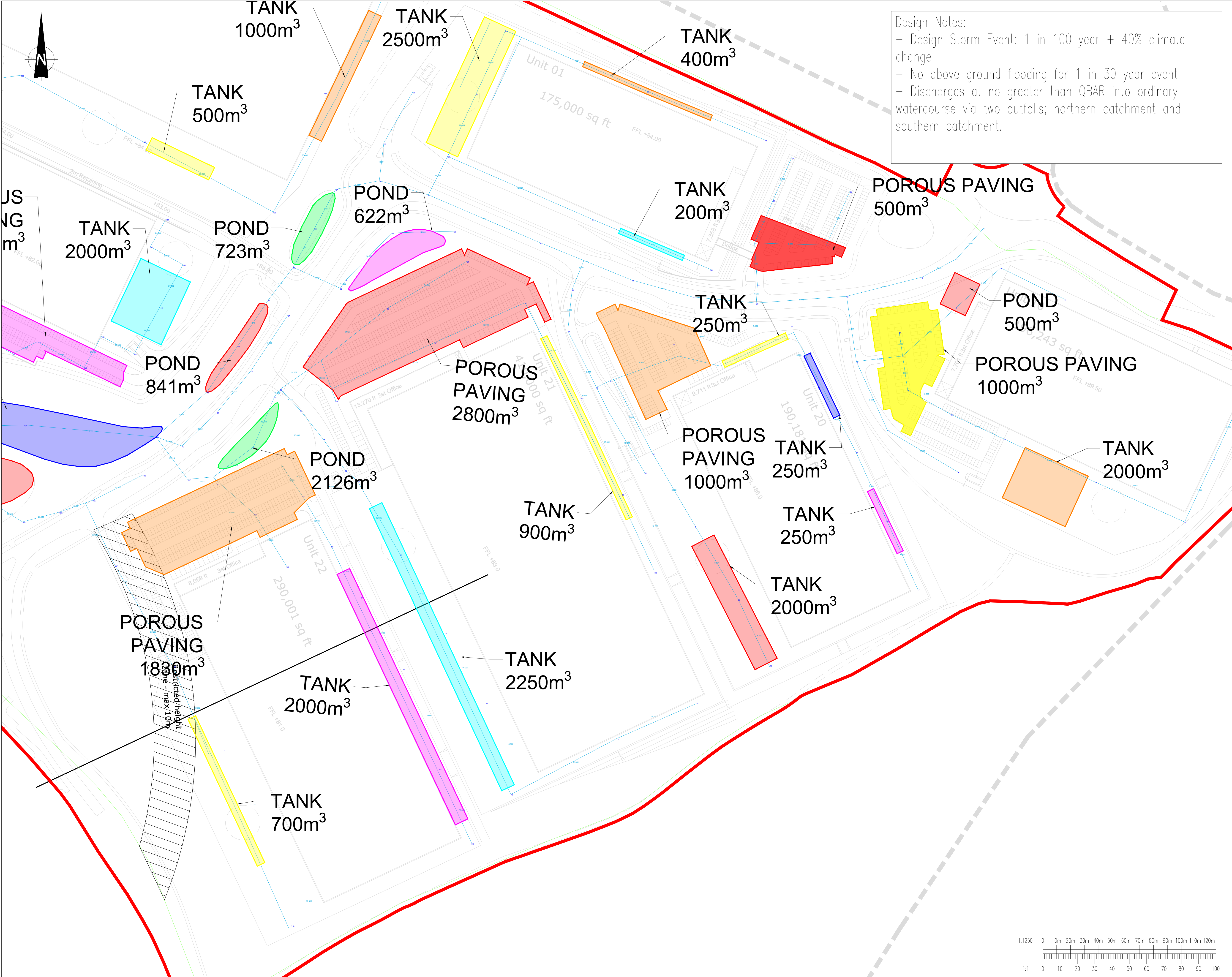
Status	
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Designed By	KT	Checked By	HC	Waterman Ref	EED13833
Drawn By	KT	Date	Jan 2023	Scales @ A1	1:1250

Project - Originator - Volume - Level - Type - Role - Number	Revision
--	----------

P03

13833-WIE-ZZ-XX-M1-D-92001, 21-092-P005e-Indic Mplan, A1-Wat-S



Design Notes:

- Design Storm Event: 1 in 100 year + 40% climate change
- No above ground flooding for 1 in 30 year event
- Discharges at no greater than QBAR into ordinary watercourse via two outfalls; northern catchment and southern catchment.

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P04	02.08.22	UPDATED SITE LAYOUT	KS
P03	06.05.22	UPDATED LAYOUT	KS
P02	25.02.22	ATTENUATION AMENDMENTS	KT
P01	14.01.22	FIRST ISSUE	KT

Rev	Date	Description	By
Amendments			
Project			
MIRA Technology Park South Site			
Title			
MIRA Southern Manufacturing Sector Surface Water Attenuation Summary Southern Catchments			
Client			
ERI MTP Limited			

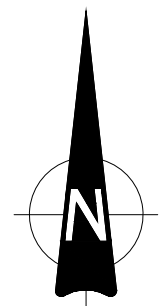
Pickfords Wharf Clink Street London SE1 9DG
1 020 7928 7888
mail@watermangroup.com www.watermangroup.com

Status				
PRELIMINARY				
Designed By	KT	Checked By	HC	Waterman Ref
Drawn By	KT	Date	Jan 2022	EED13833
Project - Originator - Volume - Level - Type - Role - Number				Revision
13833-WIE-ZZ-XX-DR-92003				P04

1:1250 0 10m 20m 30m 40m 50m 60m 70m 80m 90m 100m 110m 120m

1:1 0 10 20 30 40 50 60 70 80 90 100

13833-WIE-ZZ-XX-M1-D-92003, 21-092-P005-4Indic Mplan, A1-Wat-S



Design Notes:

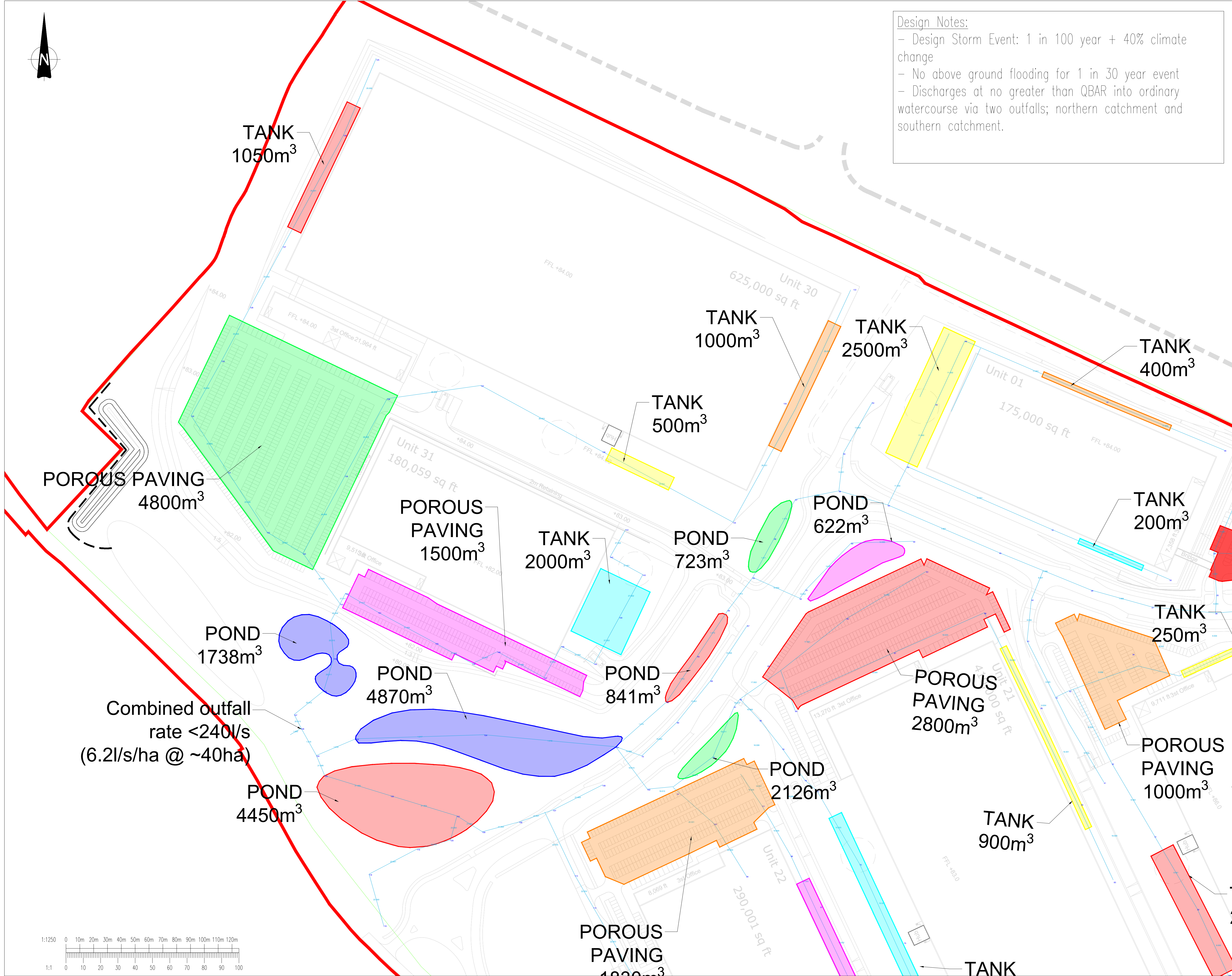
- Design Storm Event: 1 in 100 year + 40% climate change
- No above ground flooding for 1 in 30 year event
- Discharges at no greater than QBAR into ordinary watercourse via two outfalls; northern catchment and southern catchment.

This drawing should not be scaled. Dimensions to be verified on site. Any discrepancies should be referred to the Engineer prior to work being put in hand.

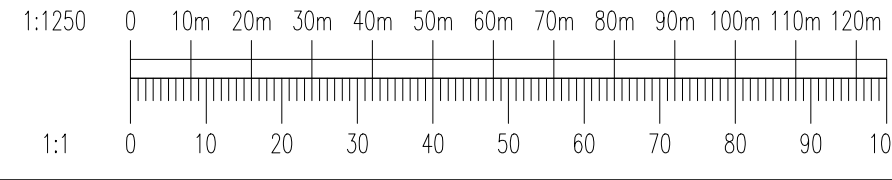
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Pickfords Wharf, Clink Street, London SE1 9DG 1 020 7928 7888 1 03333 444 501

GENERAL NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL ENGINEER'S, ARCHITECT'S OR OTHER RELEVANT DRAWINGS AND SPECIFICATIONS.
2. ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE BY THE CONTRACTOR PRIOR TO PREPARING ANY WORKING DRAWINGS OR COMMENCING ON SITE.
3. THE CONTRACTOR MUST ENSURE AND WILL BE HELD RESPONSIBLE FOR THE OVERALL STABILITY OF THE BUILDING/STRUCTURE/EXCAVATION AT ALL STAGES OF THE WORK.
4. ALL WORK BY THE CONTRACTOR MUST BE CARRIED OUT IN SUCH A WAY THAT ALL REQUIREMENTS UNDER THE HEALTH AND SAFETY AT WORK ACT ARE SATISFIED.
5. ALL WORK IS TO BE CARRIED OUT IN COMPLIANCE WITH THE REQUIREMENTS OF THE RELEVANT STATUTORY AUTHORITIES AND REGULATIONS.



P04	02.08.22	UPDATED SITE LAYOUT	KS
P03	06.05.22	UPDATED LAYOUT	KS
P02	25.02.22	ATTENUATION AMENDMENTS	KS
P01	14.01.22	FIRST ISSUE	KT
Rev	Date	Description	By
Amendments			
Project			
MIRA Technology Park South Site			
Title			
MIRA Southern Manufacturing Sector Surface Water Attenuation Summary Northern Catchments			
Client			
ERI MTP Limited			
Status			
PRELIMINARY			
Designed By			
KT			
Checked By			
HC			
Waterman Ref			
EED13833			
Drawn By			
KT			
Date			
Jan 2022			
Scales @ A1			
1:1250			
Project - Originator - Volume - Level - Type - Role - Number			
Revision			
13833-WIE-ZZ-XX-DR-92004			
P04			





F. Surface Water Calculations

Appendices

MIRA Technology Park South Site
Project Number: EED13833
Document Reference: EED13833-118-R-2-4-3-FRA

Waterman Group		Page 1
Pickfords Wharf Clink Street London, SE1 9DG		
Date 14/01/2022 12:32 File 211126_Storage estimate...	Designed by CSKT1 Checked by	
Innovyze Source Control 2020.1.3		

ICP SUDS Mean Annual Flood

Input

Return Period (years)	100	Soil	0.450
Area (ha)	1.000	Urban	0.000
SAAR (mm)	935	Region Number	Region 4

Results 1/s

QBAR Rural	6.2
QBAR Urban	6.2
Q100 years	15.8
Q1 year	5.1
Q30 years	12.1
Q100 years	15.8

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Waterman Group		Page 1
Pickfords Wharf Clink Street London, SE1 9DG	MIRA LAND SOUTH OF A5 EED13833	
Date 11/01/2022 File SURFACE WATER DRAINAGE ...	Designed by AS Checked by HC	
Innovyze	Network 2020.1.3	

STORM SEWER DESIGN by the Modified Rational Method

Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
1.000	29.776	0.418	71.2	0.089	5.00	0.0	0.600	o	450	Pipe/Conduit	
1.001	28.167	0.169	166.7	0.051	0.00	0.0	0.600	o	450	Pipe/Conduit	
1.002	56.167	1.304	43.1	0.085	0.00	0.0	0.600	o	450	Pipe/Conduit	
2.000	51.285	0.228	224.9	0.319	5.00	0.0	0.600	o	450	Pipe/Conduit	
2.001	52.741	0.234	225.4	0.242	0.00	0.0	0.600	o	450	Pipe/Conduit	
2.002	52.189	0.232	225.0	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
3.000	50.454	0.224	225.2	0.362	5.00	0.0	0.600	o	450	Pipe/Conduit	
3.001	50.454	0.224	225.2	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
3.002	71.034	0.316	224.8	0.655	0.00	0.0	0.600	o	450	Pipe/Conduit	
3.003	72.588	0.323	224.7	0.649	0.00	0.0	0.600	o	450	Pipe/Conduit	
3.004	42.415	0.189	224.4	0.649	0.00	0.0	0.600	o	450	Pipe/Conduit	
3.005	28.266	0.126	224.3	0.133	0.00	0.0	0.600	o	450	Pipe/Conduit	
3.006	24.843	0.216	115.0	0.098	0.00	0.0	0.600	o	450	Pipe/Conduit	
4.000	17.446	0.103	169.4	0.164	5.00	0.0	0.600	o	225	Pipe/Conduit	
2.003	33.644	0.150	224.3	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
5.000	58.583	0.450	130.2	0.095	5.00	0.0	0.600	o	225	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
1.000	0.00	5.21	88.400	0.089	0.0	0.0	0.0	2.41	383.5	0.0
1.001	0.00	5.50	87.982	0.140	0.0	0.0	0.0	1.57	250.0	0.0
1.002	0.00	5.81	87.813	0.225	0.0	0.0	0.0	3.10	493.8	0.0
2.000	0.00	5.63	87.276	0.319	0.0	0.0	0.0	1.35	214.9	0.0
2.001	0.00	6.28	87.048	0.561	0.0	0.0	0.0	1.35	214.7	0.0
2.002	0.00	6.93	86.814	0.561	0.0	0.0	0.0	1.35	214.9	0.0
3.000	0.00	5.62	87.700	0.362	0.0	0.0	0.0	1.35	214.8	0.0
3.001	0.00	6.25	87.476	0.362	0.0	0.0	0.0	1.35	214.8	0.0
3.002	0.00	7.12	87.252	1.017	0.0	0.0	0.0	1.35	215.0	0.0
3.003	0.00	8.02	86.936	1.666	0.0	0.0	0.0	1.35	215.0	0.0
3.004	0.00	8.54	86.613	2.315	0.0	0.0	0.0	1.35	215.2	0.0
3.005	0.00	8.89	86.424	2.448	0.0	0.0	0.0	1.35	215.2	0.0
3.006	0.00	9.11	86.298	2.546	0.0	0.0	0.0	1.89	301.4	0.0
4.000	0.00	5.29	87.925	0.164	0.0	0.0	0.0	1.00	39.8	0.0
2.003	0.00	9.52	86.082	3.271	0.0	0.0	0.0	1.35	215.2	0.0
5.000	0.00	5.85	88.525	0.095	0.0	0.0	0.0	1.14	45.5	0.0

Waterman Group		Page 2
Pickfords Wharf Clink Street London, SE1 9DG	MIRA LAND SOUTH OF A5 EED13833	
Date 11/01/2022 File SURFACE WATER DRAINAGE ...	Designed by AS Checked by HC	
Innovyze	Network 2020.1.3	

STORM SEWER DESIGN by the Modified Rational Method

Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
5.001	49.594	0.600	82.7	0.042	0.00	0.0	0.600	o	225	Pipe/Conduit	
2.004	47.603	0.212	224.5	0.301	0.00	0.0	0.600	o	450	Pipe/Conduit	
1.003	65.344	3.035	21.5	0.142	0.00	0.0	0.600	o	450	Pipe/Conduit	
6.000	33.512	0.137	244.6	0.135	5.00	0.0	0.600	o	450	Pipe/Conduit	
6.001	33.683	0.398	84.6	0.099	0.00	0.0	0.600	o	450	Pipe/Conduit	
7.000	42.464	0.173	245.5	0.185	5.00	0.0	0.600	o	450	Pipe/Conduit	
7.001	51.923	0.362	143.4	0.079	0.00	0.0	0.600	o	450	Pipe/Conduit	
6.002	30.132	0.123	245.0	0.023	0.00	0.0	0.600	o	450	Pipe/Conduit	
6.003	13.278	0.054	245.9	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	
1.004	46.235	0.600	77.1	0.121	0.00	0.0	0.600	o	450	Pipe/Conduit	
1.005	45.485	0.900	50.5	0.125	0.00	0.0	0.600	o	450	Pipe/Conduit	
1.006	71.671	1.100	65.2	0.199	0.00	0.0	0.600	o	450	Pipe/Conduit	
8.000	60.979	0.271	225.0	0.770	5.00	0.0	0.600	o	450	Pipe/Conduit	
8.001	60.979	0.271	225.0	0.672	0.00	0.0	0.600	o	450	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
5.001	0.00	6.43	88.075	0.137	0.0	0.0	0.0	1.44	57.2	0.0
2.004	0.00	10.11	85.932	3.709	0.0	0.0	0.0	1.35	215.1	0.0
1.003	0.00	10.35	85.720	4.076	0.0	0.0	0.0	4.40	699.3	0.0
6.000	0.00	5.43	86.500	0.135	0.0	0.0	0.0	1.30	206.0	0.0
6.001	0.00	5.69	86.363	0.234	0.0	0.0	0.0	2.21	351.7	0.0
7.000	0.00	5.55	86.500	0.185	0.0	0.0	0.0	1.29	205.7	0.0
7.001	0.00	6.06	86.327	0.264	0.0	0.0	0.0	1.70	269.7	0.0
6.002	0.00	6.45	85.965	0.521	0.0	0.0	0.0	1.29	205.9	0.0
6.003	0.00	6.67	85.842	0.521	0.0	0.0	0.0	1.00	70.6	0.0
1.004	0.00	10.69	82.685	4.718	0.0	0.0	0.0	2.32	368.6	0.0
1.005	0.00	10.95	82.085	4.843	0.0	0.0	0.0	2.87	455.7	0.0
1.006	0.00	11.42	81.185	5.042	0.0	0.0	0.0	2.52	401.1	0.0
8.000	0.00	5.75	84.200	0.770	0.0	0.0	0.0	1.35	214.9	0.0
8.001	0.00	6.50	83.929	1.442	0.0	0.0	0.0	1.35	214.9	0.0

Waterman Group		Page 3
Pickfords Wharf Clink Street London, SE1 9DG	MIRA LAND SOUTH OF A5 EED13833	
Date 11/01/2022 File SURFACE WATER DRAINAGE ...	Designed by AS Checked by HC	
Innovyze	Network 2020.1.3	

STORM SEWER DESIGN by the Modified Rational Method

Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
8.002	60.968	0.271	225.0	0.621	0.00	0.0	0.600	o	450	Pipe/Conduit	
8.003	60.968	0.271	225.0	0.119	0.00	0.0	0.600	o	450	Pipe/Conduit	
9.000	54.181	0.241	224.8	0.095	5.00	0.0	0.600	o	450	Pipe/Conduit	
9.001	54.181	0.241	224.8	0.368	0.00	0.0	0.600	o	450	Pipe/Conduit	
9.002	54.035	0.240	225.1	0.366	0.00	0.0	0.600	o	450	Pipe/Conduit	
9.003	54.035	0.240	225.1	0.352	0.00	0.0	0.600	o	450	Pipe/Conduit	
9.004	35.700	0.088	405.7	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
9.005	43.119	0.254	169.8	0.123	0.00	0.0	0.600	o	225	Pipe/Conduit	
9.006	52.876	0.355	148.9	0.356	0.00	0.0	0.600	o	225	Pipe/Conduit	
8.004	42.514	0.764	55.6	0.198	0.00	0.0	0.600	o	450	Pipe/Conduit	
10.000	49.536	0.291	170.2	0.119	5.00	0.0	0.600	o	225	Pipe/Conduit	
8.005	67.003	0.298	224.8	0.118	0.00	0.0	0.600	o	450	Pipe/Conduit	
8.006	30.085	0.134	224.5	0.074	0.00	0.0	0.600	o	450	Pipe/Conduit	
8.007	34.082	0.151	225.7	0.021	0.00	0.0	0.600	o	450	Pipe/Conduit	
1.007	87.646	0.219	400.2	0.182	0.00	0.0	0.600	o	450	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
8.002	0.00	7.26	83.658	2.063	0.0	0.0	0.0	1.35	214.9	0.0
8.003	0.00	8.01	83.387	2.182	0.0	0.0	0.0	1.35	214.9	0.0
9.000	0.00	5.67	84.550	0.095	0.0	0.0	0.0	1.35	215.0	0.0
9.001	0.00	6.34	84.309	0.463	0.0	0.0	0.0	1.35	215.0	0.0
9.002	0.00	7.00	84.068	0.829	0.0	0.0	0.0	1.35	214.8	0.0
9.003	0.00	7.67	83.828	1.181	0.0	0.0	0.0	1.35	214.8	0.0
9.004	0.00	8.26	83.588	1.181	0.0	0.0	0.0	1.00	159.5	0.0
9.005	0.00	8.98	83.500	1.304	0.0	0.0	0.0	1.00	39.8	0.0
9.006	0.00	9.81	83.246	1.660	0.0	0.0	0.0	1.07	42.5	0.0
8.004	0.00	10.06	82.666	4.040	0.0	0.0	0.0	2.73	434.2	0.0
10.000	0.00	5.83	83.075	0.119	0.0	0.0	0.0	1.00	39.7	0.0
8.005	0.00	10.89	81.902	4.277	0.0	0.0	0.0	1.35	215.0	0.0
8.006	0.00	11.26	81.604	4.351	0.0	0.0	0.0	1.35	215.1	0.0
8.007	0.00	11.68	81.470	4.372	0.0	0.0	0.0	1.35	214.6	0.0
1.007	0.00	13.13	80.085	9.596	0.0	0.0	0.0	1.01	160.6	0.0

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Pickfords Wharf Clink Street London, SE1 9DG	MIRA LAND SOUTH OF A5 EED13833	
Date 11/01/2022	Designed by AS	
File SURFACE WATER DRAINAGE ...	Checked by HC	
Innovyze	Network 2020.1.3	

STORM SEWER DESIGN by the Modified Rational Method

Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
11.000	92.007	0.409	225.0	0.550	5.00	0.0	0.600	o	450	Pipe/Conduit	
11.001	111.365	0.495	225.0	0.507	0.00	0.0	0.600	o	450	Pipe/Conduit	
11.002	50.443	0.224	225.2	0.351	0.00	0.0	0.600	o	450	Pipe/Conduit	
11.003	49.563	0.220	225.3	0.255	0.00	0.0	0.600	o	450	Pipe/Conduit	
12.000	92.570	0.411	225.2	0.573	5.00	0.0	0.600	o	450	Pipe/Conduit	
12.001	114.081	0.507	225.0	0.507	0.00	0.0	0.600	o	450	Pipe/Conduit	
11.004	31.092	0.138	225.3	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
1.008	36.823	0.164	224.5	0.048	0.00	0.0	0.600	o	450	Pipe/Conduit	
13.000	42.323	0.249	170.0	0.070	5.00	0.0	0.600	o	225	Pipe/Conduit	
13.001	27.380	0.161	170.1	0.084	0.00	0.0	0.600	o	225	Pipe/Conduit	
1.009	32.029	0.080	400.4	0.050	0.00	0.0	0.600	o	450	Pipe/Conduit	
1.010	32.092	0.080	401.2	0.072	0.00	0.0	0.600	o	450	Pipe/Conduit	
1.011	32.186	0.080	400.0	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
14.000	44.759	0.500	89.5	0.116	5.00	0.0	0.600	o	225	Pipe/Conduit	
14.001	47.142	1.000	47.1	0.062	0.00	0.0	0.600	o	225	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
11.000	0.00	6.13	82.275	0.550	0.0	0.0	0.0	1.35	214.9	0.0
11.001	0.00	7.51	81.866	1.057	0.0	0.0	0.0	1.35	214.9	0.0
11.002	0.00	8.13	81.371	1.408	0.0	0.0	0.0	1.35	214.8	0.0
11.003	0.00	8.74	81.147	1.663	0.0	0.0	0.0	1.35	214.8	0.0
12.000	0.00	6.14	82.350	0.573	0.0	0.0	0.0	1.35	214.8	0.0
12.001	0.00	7.55	81.939	1.080	0.0	0.0	0.0	1.35	214.9	0.0
11.004	0.00	9.13	80.927	2.743	0.0	0.0	0.0	1.35	214.8	0.0
1.008	0.00	13.58	79.866	12.387	0.0	0.0	0.0	1.35	215.1	0.0
13.000	0.00	5.71	81.575	0.070	0.0	0.0	0.0	1.00	39.8	0.0
13.001	0.00	6.16	81.326	0.154	0.0	0.0	0.0	1.00	39.7	0.0
1.009	0.00	14.11	79.702	12.591	0.0	0.0	0.0	1.01	160.6	0.0
1.010	0.00	14.64	79.622	12.663	0.0	0.0	0.0	1.01	160.5	0.0
1.011	0.00	15.17	79.542	12.663	0.0	0.0	0.0	1.01	160.7	0.0
14.000	0.00	5.54	82.075	0.116	0.0	0.0	0.0	1.38	55.0	0.0
14.001	0.00	5.95	81.575	0.178	0.0	0.0	0.0	1.91	75.9	0.0

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Pickfords Wharf Clink Street London, SE1 9DG	MIRA LAND SOUTH OF A5 EED13833	
Date 11/01/2022 File SURFACE WATER DRAINAGE ...	Designed by AS Checked by HC	
Innovyze	Network 2020.1.3	

STORM SEWER DESIGN by the Modified Rational Method

Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
14.002	7.536	0.044	170.0	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
14.003	37.226	0.344	108.2	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
1.012	29.639	0.074	400.5	0.041	0.00	0.0	0.600	o	450	Pipe/Conduit	
1.013	39.855	0.100	398.6	0.084	0.00	0.0	0.600	o	450	Pipe/Conduit	
1.014	39.878	0.100	398.8	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
1.015	49.110	1.186	41.4	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
15.000	47.887	0.500	95.8	0.225	5.00	0.0	0.600	o	600	Pipe/Conduit	
15.001	38.722	0.300	129.1	0.110	0.00	0.0	0.600	o	600	Pipe/Conduit	
15.002	35.243	0.300	117.5	0.108	0.00	0.0	0.600	o	600	Pipe/Conduit	
15.003	19.928	0.112	177.9	0.000	0.00	0.0	0.600	o	600	Pipe/Conduit	
16.000	62.845	0.157	400.3	0.645	5.00	0.0	0.600	o	450	Pipe/Conduit	
16.001	68.166	0.170	400.0	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
16.002	69.406	0.174	400.0	0.812	0.00	0.0	0.600	o	450	Pipe/Conduit	
16.003	58.712	0.147	400.0	0.667	0.00	0.0	0.600	o	450	Pipe/Conduit	
16.004	65.055	0.163	400.0	0.711	0.00	0.0	0.600	o	450	Pipe/Conduit	
16.005	61.206	0.153	400.0	0.943	0.00	0.0	0.600	o	450	Pipe/Conduit	
16.006	38.979	0.097	400.0	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
16.007	24.009	0.060	400.0	0.248	0.00	0.0	0.600	o	450	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
14.002	0.00	6.08	80.575	0.178	0.0	0.0	0.0	1.00	39.8	0.0
14.003	0.00	6.57	80.531	0.178	0.0	0.0	0.0	1.26	49.9	0.0
1.012	0.00	15.66	79.462	12.882	0.0	0.0	0.0	1.01	160.6	0.0
1.013	0.00	16.32	79.388	12.966	0.0	0.0	0.0	1.01	161.0	0.0
1.014	0.00	16.97	79.288	12.966	0.0	0.0	0.0	1.01	160.9	0.0
1.015	0.00	17.23	79.188	12.966	0.0	0.0	0.0	3.17	503.6	0.0
15.000	0.00	5.32	80.600	0.225	0.0	0.0	0.0	2.49	703.7	0.0
15.001	0.00	5.62	80.100	0.335	0.0	0.0	0.0	2.14	605.7	0.0
15.002	0.00	5.88	79.800	0.443	0.0	0.0	0.0	2.25	635.0	0.0
15.003	0.00	6.07	79.500	0.443	0.0	0.0	0.0	1.82	515.3	0.0
16.000	0.00	6.04	80.341	0.645	0.0	0.0	0.0	1.01	160.6	0.0
16.001	0.00	7.16	80.184	0.645	0.0	0.0	0.0	1.01	160.7	0.0
16.002	0.00	8.31	80.014	1.457	0.0	0.0	0.0	1.01	160.7	0.0
16.003	0.00	9.28	79.840	2.124	0.0	0.0	0.0	1.01	160.7	0.0
16.004	0.00	10.35	79.693	2.835	0.0	0.0	0.0	1.01	160.7	0.0
16.005	0.00	11.36	79.531	3.778	0.0	0.0	0.0	1.01	160.7	0.0
16.006	0.00	12.00	79.378	3.778	0.0	0.0	0.0	1.01	160.7	0.0
16.007	0.00	12.40	79.280	4.026	0.0	0.0	0.0	1.01	160.7	0.0

Waterman Group		Page 6
Pickfords Wharf Clink Street London, SE1 9DG	MIRA LAND SOUTH OF A5 EED13833	
Date 11/01/2022 File SURFACE WATER DRAINAGE ...	Designed by AS Checked by HC	
Innovyze	Network 2020.1.3	

STORM SEWER DESIGN by the Modified Rational Method

Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
16.008	36.804	0.092	400.0	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
16.009	20.805	0.052	400.1	0.050	0.00	0.0	0.600	o	450	Pipe/Conduit	
17.000	66.842	0.500	133.7	0.239	5.00	0.0	0.600	o	450	Pipe/Conduit	
17.001	66.625	2.464	27.0	0.224	0.00	0.0	0.600	o	450	Pipe/Conduit	
18.000	66.408	0.166	400.0	0.448	5.00	0.0	0.600	o	450	Pipe/Conduit	
18.001	73.759	0.184	400.9	0.504	0.00	0.0	0.600	o	450	Pipe/Conduit	
18.002	79.779	0.199	400.9	0.443	0.00	0.0	0.600	o	450	Pipe/Conduit	
18.003	65.094	0.163	399.3	0.431	0.00	0.0	0.600	o	450	Pipe/Conduit	
18.004	50.512	0.126	400.9	0.232	0.00	0.0	0.600	o	450	Pipe/Conduit	
18.005	38.188	0.246	155.3	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
17.002	31.460	0.185	170.1	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
16.010	6.892	0.017	405.4	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
16.011	39.332	0.098	401.3	0.213	0.00	0.0	0.600	o	450	Pipe/Conduit	
16.012	37.215	0.093	400.2	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
16.013	21.674	0.096	225.8	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	
19.000	65.385	0.163	401.1	0.779	5.00	0.0	0.600	o	450	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
16.008	0.00	13.00	79.220	4.026	0.0	0.0	0.0	1.01	160.7	0.0
16.009	0.00	13.35	79.128	4.076	0.0	0.0	0.0	1.01	160.7	0.0
17.000	0.00	5.63	82.075	0.239	0.0	0.0	0.0	1.76	279.4	0.0
17.001	0.00	5.92	81.575	0.463	0.0	0.0	0.0	3.92	623.7	0.0
18.000	0.00	6.10	80.195	0.448	0.0	0.0	0.0	1.01	160.7	0.0
18.001	0.00	7.31	80.029	0.952	0.0	0.0	0.0	1.01	160.5	0.0
18.002	0.00	8.63	79.845	1.395	0.0	0.0	0.0	1.01	160.5	0.0
18.003	0.00	9.70	79.646	1.826	0.0	0.0	0.0	1.01	160.8	0.0
18.004	0.00	10.54	79.483	2.058	0.0	0.0	0.0	1.01	160.5	0.0
18.005	0.00	10.93	79.357	2.058	0.0	0.0	0.0	1.63	259.1	0.0
17.002	0.00	11.27	79.111	2.521	0.0	0.0	0.0	1.56	247.5	0.0
16.010	0.00	13.46	78.926	6.597	0.0	0.0	0.0	1.00	159.6	0.0
16.011	0.00	14.11	78.909	6.810	0.0	0.0	0.0	1.01	160.4	0.0
16.012	0.00	14.73	78.811	6.810	0.0	0.0	0.0	1.01	160.7	0.0
16.013	0.00	15.07	78.718	6.810	0.0	0.0	0.0	1.04	73.7	0.0
19.000	0.00	6.08	79.200	0.779	0.0	0.0	0.0	1.01	160.5	0.0

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Pickfords Wharf Clink Street London, SE1 9DG	MIRA LAND SOUTH OF A5 EED13833	
Date 11/01/2022 File SURFACE WATER DRAINAGE ...	Designed by AS Checked by HC	
Innovyze	Network 2020.1.3	

STORM SEWER DESIGN by the Modified Rational Method

Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
22.000	70.021	0.175	400.1	0.507	5.00	0.0	0.600	o	450	Pipe/Conduit	
22.001	91.226	0.228	400.1	0.628	0.00	0.0	0.600	o	450	Pipe/Conduit	
22.002	69.611	0.174	400.1	0.490	0.00	0.0	0.600	o	450	Pipe/Conduit	
22.003	57.350	0.143	401.0	0.550	0.00	0.0	0.600	o	450	Pipe/Conduit	
22.004	26.674	0.067	398.1	0.367	0.00	0.0	0.600	o	450	Pipe/Conduit	
22.005	52.489	0.131	400.7	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
23.000	38.457	0.096	400.6	0.444	5.00	0.0	0.600	o	600	Pipe/Conduit	
24.000	24.712	0.062	398.6	0.166	5.00	0.0	0.600	o	600	Pipe/Conduit	
23.001	39.158	0.098	399.6	0.140	0.00	0.0	0.600	o	600	Pipe/Conduit	
23.002	25.124	0.063	398.8	0.064	0.00	0.0	0.600	o	600	Pipe/Conduit	
23.003	17.903	0.045	397.8	0.000	0.00	0.0	0.600	o	600	Pipe/Conduit	
21.004	49.967	0.125	399.7	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
21.005	49.981	0.125	399.8	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
21.006	15.761	0.070	225.2	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	
1.019	22.477	0.056	401.4	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
22.000	0.00	6.16	79.275	0.507	0.0	0.0	0.0	1.01	160.7	0.0
22.001	0.00	7.66	79.100	1.135	0.0	0.0	0.0	1.01	160.7	0.0
22.002	0.00	8.81	78.872	1.625	0.0	0.0	0.0	1.01	160.7	0.0
22.003	0.00	9.76	78.698	2.175	0.0	0.0	0.0	1.01	160.5	0.0
22.004	0.00	10.20	78.555	2.542	0.0	0.0	0.0	1.01	161.1	0.0
22.005	0.00	11.06	78.488	2.542	0.0	0.0	0.0	1.01	160.5	0.0
23.000	0.00	5.53	79.234	0.444	0.0	0.0	0.0	1.21	342.3	0.0
24.000	0.00	5.34	79.200	0.166	0.0	0.0	0.0	1.21	343.1	0.0
23.001	0.00	6.07	79.138	0.750	0.0	0.0	0.0	1.21	342.7	0.0
23.002	0.00	6.41	79.040	0.814	0.0	0.0	0.0	1.21	343.0	0.0
23.003	0.00	6.66	78.977	0.814	0.0	0.0	0.0	1.21	343.4	0.0
21.004	0.00	11.89	78.071	3.692	0.0	0.0	0.0	1.01	160.7	0.0
21.005	0.00	12.71	77.946	3.692	0.0	0.0	0.0	1.01	160.7	0.0
21.006	0.00	12.96	77.806	3.692	0.0	0.0	0.0	1.04	73.8	0.0
1.019	0.00	24.52	77.670	27.351	0.0	0.0	0.0	1.01	160.4	0.0

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Pickfords Wharf	MIRA	
Clink Street	LAND SOUTH OF A5	
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Date 11/01/2022	Designed by AS	
File SURFACE WATER DRAINAGE ...	Checked by HC	
Innovyze	Network 2020.1.3	

STORM SEWER DESIGN by the Modified Rational Method

Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
27.002	35.077	0.088	398.6	0.483	0.00	0.0	0.600	o	450	Pipe/Conduit	
27.003	38.260	0.096	398.5	0.280	0.00	0.0	0.600	o	450	Pipe/Conduit	
27.004	26.766	0.067	399.5	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
27.005	25.827	1.051	24.6	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
27.006	38.476	0.096	400.8	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
27.007	20.122	0.050	402.4	0.085	0.00	0.0	0.600	o	450	Pipe/Conduit	
27.008	30.535	0.076	401.8	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
27.009	46.912	0.117	401.0	0.189	0.00	0.0	0.600	o	450	Pipe/Conduit	
27.010	27.436	1.084	25.3	0.132	0.00	0.0	0.600	o	450	Pipe/Conduit	
27.011	8.510	0.022	386.8	0.150	0.00	0.0	0.600	o	450	Pipe/Conduit	
25.009	15.362	0.038	400.0	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
25.010	25.956	0.065	399.3	0.174	0.00	0.0	0.600	o	450	Pipe/Conduit	
25.011	24.650	0.062	397.6	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
25.012	27.341	0.122	224.1	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	
25.013	11.199	0.050	224.0	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	
1.020	9.176	0.023	399.0	0.000	0.00	0.0	0.600	\	-2	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
27.002	0.00	6.40	82.076	1.162	0.0	0.0	0.0	1.01	161.0	0.0
27.003	0.00	7.03	81.988	1.442	0.0	0.0	0.0	1.01	161.0	0.0
27.004	0.00	7.47	81.892	1.442	0.0	0.0	0.0	1.01	160.8	0.0
27.005	0.00	7.57	81.825	1.442	0.0	0.0	0.0	4.11	654.4	0.0
27.006	0.00	8.21	80.774	1.442	0.0	0.0	0.0	1.01	160.5	0.0
27.007	0.00	8.54	80.678	1.527	0.0	0.0	0.0	1.01	160.2	0.0
27.008	0.00	9.05	80.628	1.527	0.0	0.0	0.0	1.01	160.3	0.0
27.009	0.00	9.82	80.552	1.716	0.0	0.0	0.0	1.01	160.5	0.0
27.010	0.00	9.94	80.435	1.848	0.0	0.0	0.0	4.05	644.8	0.0
27.011	0.00	10.07	79.351	1.998	0.0	0.0	0.0	1.03	163.4	0.0
25.009	0.00	13.47	78.055	12.457	0.0	0.0	0.0	1.01	160.7	0.0
25.010	0.00	13.90	78.017	12.631	0.0	0.0	0.0	1.01	160.8	0.0
25.011	0.00	14.31	77.952	12.631	0.0	0.0	0.0	1.01	161.2	0.0
25.012	0.00	14.74	77.890	12.631	0.0	0.0	0.0	1.05	73.9	0.0
25.013	0.00	14.92	77.768	12.631	0.0	0.0	0.0	1.05	74.0	0.0
1.020	0.00	24.59	77.600	39.982	0.0	0.0	0.0	2.40	3594.3	0.0

Waterman Group		Page 11
Pickfords Wharf Clink Street London, SE1 9DG	MIRA LAND SOUTH OF A5 EED13833	
Date 11/01/2022 File SURFACE WATER DRAINAGE ...	Designed by AS Checked by HC	
Innovyze	Network 2020.1.3	

Area Summary for Storm

Pipe Number	PIMP Type	PIMP Name	PIMP (%)	Gross Area (ha)	Imp. Area (ha)	Pipe Total (ha)
1.000	-	-	100	0.089	0.089	0.089
1.001	-	-	100	0.051	0.051	0.051
1.002	-	-	100	0.085	0.085	0.085
2.000	-	-	100	0.319	0.319	0.319
2.001	-	-	100	0.242	0.242	0.242
2.002	-	-	100	0.000	0.000	0.000
3.000	-	-	100	0.362	0.362	0.362
3.001	-	-	100	0.000	0.000	0.000
3.002	-	-	100	0.655	0.655	0.655
3.003	-	-	100	0.649	0.649	0.649
3.004	-	-	100	0.649	0.649	0.649
3.005	-	-	100	0.133	0.133	0.133
3.006	-	-	100	0.098	0.098	0.098
4.000	-	-	100	0.164	0.164	0.164
2.003	-	-	100	0.000	0.000	0.000
5.000	-	-	100	0.095	0.095	0.095
5.001	-	-	100	0.042	0.042	0.042
2.004	-	-	100	0.301	0.301	0.301
1.003	-	-	100	0.142	0.142	0.142
6.000	-	-	100	0.135	0.135	0.135
6.001	-	-	100	0.099	0.099	0.099
7.000	-	-	100	0.185	0.185	0.185
7.001	-	-	100	0.079	0.079	0.079
6.002	-	-	100	0.023	0.023	0.023
6.003	-	-	100	0.000	0.000	0.000
1.004	-	-	100	0.121	0.121	0.121
1.005	-	-	100	0.125	0.125	0.125
1.006	-	-	100	0.199	0.199	0.199
8.000	-	-	100	0.770	0.770	0.770
8.001	-	-	100	0.672	0.672	0.672
8.002	-	-	100	0.621	0.621	0.621
8.003	-	-	100	0.119	0.119	0.119
9.000	-	-	100	0.095	0.095	0.095
9.001	-	-	100	0.368	0.368	0.368
9.002	-	-	100	0.366	0.366	0.366
9.003	-	-	100	0.352	0.352	0.352
9.004	-	-	100	0.000	0.000	0.000
9.005	-	-	100	0.123	0.123	0.123
9.006	-	-	100	0.356	0.356	0.356
8.004	-	-	100	0.198	0.198	0.198
10.000	-	-	100	0.119	0.119	0.119
8.005	-	-	100	0.118	0.118	0.118
8.006	-	-	100	0.074	0.074	0.074
8.007	-	-	100	0.021	0.021	0.021
1.007	-	-	100	0.182	0.182	0.182
11.000	-	-	100	0.550	0.550	0.550
11.001	-	-	100	0.507	0.507	0.507
11.002	-	-	100	0.351	0.351	0.351
11.003	-	-	100	0.255	0.255	0.255
12.000	-	-	100	0.573	0.573	0.573
12.001	-	-	100	0.507	0.507	0.507

Waterman Group		Page 12
Pickfords Wharf Clink Street London, SE1 9DG	MIRA LAND SOUTH OF A5 EED13833	
Date 11/01/2022 File SURFACE WATER DRAINAGE ...	Designed by AS Checked by HC	
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Area Summary for Storm

Pipe Number	PIMP Type	PIMP Name	PIMP (%)	Gross Area (ha)	Imp. Area (ha)	Pipe Total (ha)
11.004	-	-	100	0.000	0.000	0.000
1.008	-	-	100	0.048	0.048	0.048
13.000	-	-	100	0.070	0.070	0.070
13.001	-	-	100	0.084	0.084	0.084
1.009	-	-	100	0.050	0.050	0.050
1.010	-	-	100	0.072	0.072	0.072
1.011	-	-	100	0.000	0.000	0.000
14.000	-	-	100	0.116	0.116	0.116
14.001	-	-	100	0.062	0.062	0.062
14.002	-	-	100	0.000	0.000	0.000
14.003	-	-	100	0.000	0.000	0.000
1.012	-	-	100	0.041	0.041	0.041
1.013	-	-	100	0.084	0.084	0.084
1.014	-	-	100	0.000	0.000	0.000
1.015	-	-	100	0.000	0.000	0.000
15.000	-	-	100	0.225	0.225	0.225
15.001	-	-	100	0.110	0.110	0.110
15.002	-	-	100	0.108	0.108	0.108
15.003	-	-	100	0.000	0.000	0.000
16.000	-	-	100	0.645	0.645	0.645
16.001	-	-	100	0.000	0.000	0.000
16.002	-	-	100	0.812	0.812	0.812
16.003	-	-	100	0.667	0.667	0.667
16.004	-	-	100	0.711	0.711	0.711
16.005	-	-	100	0.943	0.943	0.943
16.006	-	-	100	0.000	0.000	0.000
16.007	-	-	100	0.248	0.248	0.248
16.008	-	-	100	0.000	0.000	0.000
16.009	-	-	100	0.050	0.050	0.050
17.000	-	-	100	0.239	0.239	0.239
17.001	-	-	100	0.224	0.224	0.224
18.000	-	-	100	0.448	0.448	0.448
18.001	-	-	100	0.504	0.504	0.504
18.002	-	-	100	0.443	0.443	0.443
18.003	-	-	100	0.431	0.431	0.431
18.004	-	-	100	0.232	0.232	0.232
18.005	-	-	100	0.000	0.000	0.000
17.002	-	-	100	0.000	0.000	0.000
16.010	-	-	100	0.000	0.000	0.000
16.011	-	-	100	0.213	0.213	0.213
16.012	-	-	100	0.000	0.000	0.000
16.013	-	-	100	0.000	0.000	0.000
19.000	-	-	100	0.779	0.779	0.779
19.001	-	-	100	0.833	0.833	0.833
19.002	-	-	100	0.610	0.610	0.610
19.003	-	-	100	0.362	0.362	0.362
19.004	-	-	100	0.202	0.202	0.202
20.000	-	-	100	0.168	0.168	0.168
20.001	-	-	100	0.000	0.000	0.000
19.005	-	-	100	0.000	0.000	0.000
16.014	-	-	100	0.000	0.000	0.000

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Area Summary for Storm

Pipe Number	PIMP Type	PIMP Name	PIMP (%)	Gross Area (ha)	Imp. Area (ha)	Pipe Total (ha)
1.016	-	-	100	0.486	0.486	0.486
1.017	-	-	100	0.000	0.000	0.000
1.018	-	-	100	0.000	0.000	0.000
21.000	-	-	100	0.205	0.205	0.205
21.001	-	-	100	0.067	0.067	0.067
21.002	-	-	100	0.064	0.064	0.064
21.003	-	-	100	0.000	0.000	0.000
22.000	-	-	100	0.507	0.507	0.507
22.001	-	-	100	0.628	0.628	0.628
22.002	-	-	100	0.490	0.490	0.490
22.003	-	-	100	0.550	0.550	0.550
22.004	-	-	100	0.367	0.367	0.367
22.005	-	-	100	0.000	0.000	0.000
23.000	-	-	100	0.444	0.444	0.444
24.000	-	-	100	0.166	0.166	0.166
23.001	-	-	100	0.140	0.140	0.140
23.002	-	-	100	0.064	0.064	0.064
23.003	-	-	100	0.000	0.000	0.000
21.004	-	-	100	0.000	0.000	0.000
21.005	-	-	100	0.000	0.000	0.000
21.006	-	-	100	0.000	0.000	0.000
1.019	-	-	100	0.000	0.000	0.000
25.000	-	-	100	1.671	1.671	1.671
25.001	-	-	100	1.509	1.509	1.509
25.002	-	-	100	0.291	0.291	0.291
25.003	-	-	100	0.380	0.380	0.380
25.004	-	-	100	0.246	0.246	0.246
25.005	-	-	100	0.000	0.000	0.000
25.006	-	-	100	0.000	0.000	0.000
25.007	-	-	100	0.000	0.000	0.000
26.000	-	-	100	1.669	1.669	1.669
26.001	-	-	100	1.510	1.510	1.510
26.002	-	-	100	0.521	0.521	0.521
26.003	-	-	100	0.597	0.597	0.597
26.004	-	-	100	0.374	0.374	0.374
26.005	-	-	100	1.255	1.255	1.255
26.006	-	-	100	0.436	0.436	0.436
25.008	-	-	100	0.000	0.000	0.000
27.000	-	-	100	0.679	0.679	0.679
27.001	-	-	100	0.000	0.000	0.000
27.002	-	-	100	0.483	0.483	0.483
27.003	-	-	100	0.280	0.280	0.280
27.004	-	-	100	0.000	0.000	0.000
27.005	-	-	100	0.000	0.000	0.000
27.006	-	-	100	0.000	0.000	0.000
27.007	-	-	100	0.085	0.085	0.085
27.008	-	-	100	0.000	0.000	0.000
27.009	-	-	100	0.189	0.189	0.189
27.010	-	-	100	0.132	0.132	0.132
27.011	-	-	100	0.150	0.150	0.150
25.009	-	-	100	0.000	0.000	0.000

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Area Summary for Storm

Pipe Number	PIMP Type	PIMP Name	PIMP (%)	Gross Area (ha)	Imp. Area (ha)	Pipe Total (ha)
25.010	-	-	100	0.174	0.174	0.174
25.011	-	-	100	0.000	0.000	0.000
25.012	-	-	100	0.000	0.000	0.000
25.013	-	-	100	0.000	0.000	0.000
1.020	-	-	100	0.000	0.000	0.000
				Total	Total	Total
				39.982	39.982	39.982

Free Flowing Outfall Details for Storm

Outfall Pipe Number	Outfall Name	C. Level (m)	I. Level (m)	Min I. Level (m)	D,L (mm)	W (mm)
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1.020		78.680	77.577	0.000	0	0
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Simulation Criteria for Storm

Volumetric Runoff Coeff	0.750	Additional Flow - % of Total Flow	0.000
Areal Reduction Factor	1.000	MADD Factor * 10m ³ /ha Storage	2.000
Hot Start (mins)	0	Inlet Coefficient	0.800
Hot Start Level (mm)	0	Flow per Person per Day (l/per/day)	0.000
Manhole Headloss Coeff (Global)	0.500	Run Time (mins)	60
Foul Sewage per hectare (l/s)	0.000	Output Interval (mins)	1
Number of Input Hydrographs	0	Number of Storage Structures	47
Number of Online Controls	22	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Profile Type	Summer
Return Period (years)	1	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	20.000	Storm Duration (mins)	30
Ratio R	0.400		

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<u>Online Controls for Storm</u> <u>Orifice Manhole: 11, DS/PN: 3.004, Volume (m³): 16.1</u> Diameter (m) 0.062 Discharge Coefficient 0.600 Invert Level (m) 86.613 <u>Orifice Manhole: 18, DS/PN: 2.004, Volume (m³): 12.3</u> Diameter (m) 0.106 Discharge Coefficient 0.600 Invert Level (m) 85.932 <u>Orifice Manhole: 25, DS/PN: 6.003, Volume (m³): 7.8</u> Diameter (m) 0.049 Discharge Coefficient 0.600 Invert Level (m) 85.842 <u>Orifice Manhole: 31, DS/PN: 8.002, Volume (m³): 13.3</u> Diameter (m) 0.157 Discharge Coefficient 0.600 Invert Level (m) 83.658 <u>Orifice Manhole: 39, DS/PN: 9.006, Volume (m³): 6.3</u> Diameter (m) 0.157 Discharge Coefficient 0.600 Invert Level (m) 83.246 <u>Orifice Manhole: 42, DS/PN: 8.005, Volume (m³): 13.0</u> Diameter (m) 0.225 Discharge Coefficient 0.600 Invert Level (m) 81.902 <u>Orifice Manhole: 52, DS/PN: 11.004, Volume (m³): 30.7</u> Diameter (m) 0.157 Discharge Coefficient 0.600 Invert Level (m) 80.927 <u>Orifice Manhole: 62, DS/PN: 14.003, Volume (m³): 1.9</u> Diameter (m) 0.157 Discharge Coefficient 0.600 Invert Level (m) 80.531 <u>Orifice Manhole: 63, DS/PN: 1.012, Volume (m³): 10.1</u> Diameter (m) 0.225 Discharge Coefficient 0.600 Invert Level (m) 79.462 <u>Orifice Manhole: 66, DS/PN: 1.015, Volume (m³): 6.2</u> Diameter (m) 0.225 Discharge Coefficient 0.600 Invert Level (m) 79.188 <u>Orifice Manhole: 77, DS/PN: 16.006, Volume (m³): 14.5</u> Diameter (m) 0.140 Discharge Coefficient 0.600 Invert Level (m) 79.378		
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<u>Orifice Manhole: 86, DS/PN: 18.003, Volume (m³): 20.6</u> Diameter (m) 0.225 Discharge Coefficient 0.600 Invert Level (m) 79.646 <u>Orifice Manhole: 89, DS/PN: 17.002, Volume (m³): 22.6</u> Diameter (m) 0.157 Discharge Coefficient 0.600 Invert Level (m) 79.111 <u>Orifice Manhole: 93, DS/PN: 16.013, Volume (m³): 10.6</u> Diameter (m) 0.201 Discharge Coefficient 0.600 Invert Level (m) 78.718 <u>Orifice Manhole: 101, DS/PN: 19.005, Volume (m³): 11.1</u> Diameter (m) 0.140 Discharge Coefficient 0.600 Invert Level (m) 78.482 <u>Orifice Manhole: 105, DS/PN: 1.018, Volume (m³): 6.6</u> Diameter (m) 0.253 Discharge Coefficient 0.600 Invert Level (m) 77.814 <u>Orifice Manhole: 115, DS/PN: 22.005, Volume (m³): 9.3</u> Diameter (m) 0.140 Discharge Coefficient 0.600 Invert Level (m) 78.488 <u>Orifice Manhole: 123, DS/PN: 21.006, Volume (m³): 7.9</u> Diameter (m) 0.225 Discharge Coefficient 0.600 Invert Level (m) 77.806 <u>Orifice Manhole: 140, DS/PN: 25.008, Volume (m³): 27.5</u> Diameter (m) 0.278 Discharge Coefficient 0.600 Invert Level (m) 79.873 <u>Orifice Manhole: 145, DS/PN: 27.004, Volume (m³): 9.3</u> Diameter (m) 0.140 Discharge Coefficient 0.600 Invert Level (m) 81.892 <u>Orifice Manhole: 152, DS/PN: 27.011, Volume (m³): 7.0</u> Diameter (m) 0.297 Discharge Coefficient 0.600 Invert Level (m) 79.351 <u>Orifice Manhole: 156, DS/PN: 25.012, Volume (m³): 3.9</u> Diameter (m) 0.247 Discharge Coefficient 0.600 Invert Level (m) 77.890		
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Storage Structures for Storm

Tank or Pond Manhole: 6, DS/PN: 2.002

Invert Level (m) 86.814

Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)
0.000	500.0	1.000	500.0	1.001	0.0

Tank or Pond Manhole: 10, DS/PN: 3.003

Invert Level (m) 86.936

Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)
0.000	1000.0	1.000	1000.0	1.001	0.0

Tank or Pond Manhole: 11, DS/PN: 3.004

Invert Level (m) 86.613

Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)
0.000	1000.0	1.000	1000.0	1.001	0.0

Tank or Pond Manhole: 15, DS/PN: 2.003

Invert Level (m) 86.582

Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)
0.000	1000.0	1.000	1000.0	1.001	0.0

Tank or Pond Manhole: 25, DS/PN: 6.003

Invert Level (m) 85.842

Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)
0.000	500.0	1.000	500.0	1.001	0.0

Tank or Pond Manhole: 29, DS/PN: 8.000

Invert Level (m) 84.200

Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)
0.000	1000.0	1.000	1000.0	1.001	0.0

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<u>Tank or Pond Manhole: 31, DS/PN: 8.002</u> Invert Level (m) 83.658 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>1000.0</td><td>1.000</td><td>1000.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 35, DS/PN: 9.002</u> Invert Level (m) 84.068 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>250.0</td><td>1.000</td><td>250.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 37, DS/PN: 9.004</u> Invert Level (m) 83.588 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>250.0</td><td>1.000</td><td>250.0</td><td>1.050</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 39, DS/PN: 9.006</u> Invert Level (m) 83.247 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>250.0</td><td>1.000</td><td>250.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 42, DS/PN: 8.005</u> Invert Level (m) 82.352 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>1000.0</td><td>1.000</td><td>1000.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 47, DS/PN: 11.001</u> Invert Level (m) 81.866 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>200.0</td><td>1.000</td><td>200.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 48, DS/PN: 11.002</u> Invert Level (m) 81.371			Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	1000.0	1.000	1000.0	1.001	0.0	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	250.0	1.000	250.0	1.001	0.0	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	250.0	1.000	250.0	1.050	0.0	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	250.0	1.000	250.0	1.001	0.0	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	1000.0	1.000	1000.0	1.001	0.0	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	200.0	1.000	200.0	1.001	0.0
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)																																																																					
0.000	1000.0	1.000	1000.0	1.001	0.0																																																																					
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)																																																																					
0.000	250.0	1.000	250.0	1.001	0.0																																																																					
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)																																																																					
0.000	250.0	1.000	250.0	1.050	0.0																																																																					
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)																																																																					
0.000	250.0	1.000	250.0	1.001	0.0																																																																					
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)																																																																					
0.000	1000.0	1.000	1000.0	1.001	0.0																																																																					
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)																																																																					
0.000	200.0	1.000	200.0	1.001	0.0																																																																					
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<u>Tank or Pond Manhole: 48, DS/PN: 11.002</u> <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>200.0</td><td>1.000</td><td>200.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 51, DS/PN: 12.001</u> Invert Level (m) 81.939 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>200.0</td><td>1.000</td><td>200.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 52, DS/PN: 11.004</u> Invert Level (m) 80.927 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>2500.0</td><td>1.000</td><td>2500.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 61, DS/PN: 14.002</u> Invert Level (m) 80.575 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>622.0</td><td>0.500</td><td>622.0</td><td>0.501</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 63, DS/PN: 1.012</u> Invert Level (m) 79.462 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>723.0</td><td>1.500</td><td>723.0</td><td>1.501</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 66, DS/PN: 1.015</u> Invert Level (m) 79.188 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>841.0</td><td>1.500</td><td>841.0</td><td>1.501</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 73, DS/PN: 16.002</u> Invert Level (m) 80.014 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>750.0</td><td>1.000</td><td>750.0</td><td>1.001</td><td>0.0</td></tr></table>			Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	0.000	200.0	1.000	200.0	1.001	0.0	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	0.000	200.0	1.000	200.0	1.001	0.0	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	0.000	2500.0	1.000	2500.0	1.001	0.0	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	0.000	622.0	0.500	622.0	0.501	0.0	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	0.000	723.0	1.500	723.0	1.501	0.0	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	0.000	841.0	1.500	841.0	1.501	0.0	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	0.000	750.0	1.000	750.0	1.001	0.0
Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)																																																																																	
0.000	200.0	1.000	200.0	1.001	0.0																																																																																	
Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)																																																																																	
0.000	200.0	1.000	200.0	1.001	0.0																																																																																	
Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)																																																																																	
0.000	2500.0	1.000	2500.0	1.001	0.0																																																																																	
Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)																																																																																	
0.000	622.0	0.500	622.0	0.501	0.0																																																																																	
Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)																																																																																	
0.000	723.0	1.500	723.0	1.501	0.0																																																																																	
Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)																																																																																	
0.000	841.0	1.500	841.0	1.501	0.0																																																																																	
Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)																																																																																	
0.000	750.0	1.000	750.0	1.001	0.0																																																																																	
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<u>Tank or Pond Manhole: 75, DS/PN: 16.004</u> Invert Level (m) 79.693 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>750.0</td><td>1.000</td><td>750.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 77, DS/PN: 16.006</u> Invert Level (m) 79.378 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>750.0</td><td>1.000</td><td>750.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 84, DS/PN: 18.001</u> Invert Level (m) 80.029 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>200.0</td><td>1.000</td><td>200.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 85, DS/PN: 18.002</u> Invert Level (m) 79.845 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>200.0</td><td>1.000</td><td>200.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 86, DS/PN: 18.003</u> Invert Level (m) 79.646 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>200.0</td><td>1.000</td><td>200.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 88, DS/PN: 18.005</u> Invert Level (m) 79.357 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>1400.0</td><td>1.000</td><td>1400.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 89, DS/PN: 17.002</u> Invert Level (m) 79.111			Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	750.0	1.000	750.0	1.001	0.0	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	750.0	1.000	750.0	1.001	0.0	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	200.0	1.000	200.0	1.001	0.0	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	200.0	1.000	200.0	1.001	0.0	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	200.0	1.000	200.0	1.001	0.0	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	1400.0	1.000	1400.0	1.001	0.0
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)																																																																					
0.000	750.0	1.000	750.0	1.001	0.0																																																																					
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)																																																																					
0.000	750.0	1.000	750.0	1.001	0.0																																																																					
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)																																																																					
0.000	200.0	1.000	200.0	1.001	0.0																																																																					
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)																																																																					
0.000	200.0	1.000	200.0	1.001	0.0																																																																					
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)																																																																					
0.000	200.0	1.000	200.0	1.001	0.0																																																																					
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)																																																																					
0.000	1400.0	1.000	1400.0	1.001	0.0																																																																					
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<u>Tank or Pond Manhole: 89, DS/PN: 17.002</u> <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>1400.0</td><td>1.000</td><td>1400.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 93, DS/PN: 16.013</u> Invert Level (m) 78.718 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>2126.0</td><td>1.000</td><td>2126.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 95, DS/PN: 19.001</u> Invert Level (m) 79.037 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>500.0</td><td>1.000</td><td>500.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 97, DS/PN: 19.003</u> Invert Level (m) 78.693 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>500.0</td><td>1.000</td><td>500.0</td><td>1.101</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 101, DS/PN: 19.005</u> Invert Level (m) 78.482 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>1500.0</td><td>1.000</td><td>1500.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 105, DS/PN: 1.018</u> Invert Level (m) 77.814 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>4870.0</td><td>1.000</td><td>4870.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 111, DS/PN: 22.001</u> Invert Level (m) 79.100 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>350.0</td><td>1.000</td><td>350.0</td><td>1.001</td><td>0.0</td></tr></table>			Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	0.000	1400.0	1.000	1400.0	1.001	0.0	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	0.000	2126.0	1.000	2126.0	1.001	0.0	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	0.000	500.0	1.000	500.0	1.001	0.0	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	0.000	500.0	1.000	500.0	1.101	0.0	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	0.000	1500.0	1.000	1500.0	1.001	0.0	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	0.000	4870.0	1.000	4870.0	1.001	0.0	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	0.000	350.0	1.000	350.0	1.001	0.0
Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)																																																																																	
0.000	1400.0	1.000	1400.0	1.001	0.0																																																																																	
Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)																																																																																	
0.000	2126.0	1.000	2126.0	1.001	0.0																																																																																	
Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)																																																																																	
0.000	500.0	1.000	500.0	1.001	0.0																																																																																	
Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)																																																																																	
0.000	500.0	1.000	500.0	1.101	0.0																																																																																	
Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)																																																																																	
0.000	1500.0	1.000	1500.0	1.001	0.0																																																																																	
Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)																																																																																	
0.000	4870.0	1.000	4870.0	1.001	0.0																																																																																	
Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)																																																																																	
0.000	350.0	1.000	350.0	1.001	0.0																																																																																	
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<u>Tank or Pond Manhole: 113, DS/PN: 22.003</u> Invert Level (m) 78.698 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>350.0</td><td>1.000</td><td>350.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 115, DS/PN: 22.005</u> Invert Level (m) 78.488 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>1830.0</td><td>1.000</td><td>1830.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 123, DS/PN: 21.006</u> Invert Level (m) 77.806 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>4450.0</td><td>1.000</td><td>4450.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 125, DS/PN: 25.000</u> Invert Level (m) 83.200 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>350.0</td><td>1.000</td><td>350.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 126, DS/PN: 25.001</u> Invert Level (m) 82.449 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>350.0</td><td>1.000</td><td>350.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 127, DS/PN: 25.002</u> Invert Level (m) 81.555 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>350.0</td><td>1.000</td><td>350.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 130, DS/PN: 25.005</u> Invert Level (m) 80.200			Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	350.0	1.000	350.0	1.001	0.0	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	1830.0	1.000	1830.0	1.001	0.0	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	4450.0	1.000	4450.0	1.001	0.0	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	350.0	1.000	350.0	1.001	0.0	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	350.0	1.000	350.0	1.001	0.0	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	350.0	1.000	350.0	1.001	0.0
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)																																																																					
0.000	350.0	1.000	350.0	1.001	0.0																																																																					
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)																																																																					
0.000	1830.0	1.000	1830.0	1.001	0.0																																																																					
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)																																																																					
0.000	4450.0	1.000	4450.0	1.001	0.0																																																																					
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)																																																																					
0.000	350.0	1.000	350.0	1.001	0.0																																																																					
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)																																																																					
0.000	350.0	1.000	350.0	1.001	0.0																																																																					
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)																																																																					
0.000	350.0	1.000	350.0	1.001	0.0																																																																					
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<u>Tank or Pond Manhole: 130, DS/PN: 25.005</u> <table><tr><td>Depth (m)</td><td>Area (m²)</td><td>Depth (m)</td><td>Area (m²)</td><td>Depth (m)</td><td>Area (m²)</td></tr><tr><td>0.000</td><td>2000.0</td><td>1.000</td><td>2000.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 133, DS/PN: 26.000</u> Invert Level (m) 83.200 <table><tr><td>Depth (m)</td><td>Area (m²)</td><td>Depth (m)</td><td>Area (m²)</td><td>Depth (m)</td><td>Area (m²)</td></tr><tr><td>0.000</td><td>500.0</td><td>1.000</td><td>500.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 134, DS/PN: 26.001</u> Invert Level (m) 82.963 <table><tr><td>Depth (m)</td><td>Area (m²)</td><td>Depth (m)</td><td>Area (m²)</td><td>Depth (m)</td><td>Area (m²)</td></tr><tr><td>0.000</td><td>500.0</td><td>1.000</td><td>500.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 135, DS/PN: 26.002</u> Invert Level (m) 82.729 <table><tr><td>Depth (m)</td><td>Area (m²)</td><td>Depth (m)</td><td>Area (m²)</td><td>Depth (m)</td><td>Area (m²)</td></tr><tr><td>0.000</td><td>500.0</td><td>1.000</td><td>500.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 140, DS/PN: 25.008</u> Invert Level (m) 79.873 <table><tr><td>Depth (m)</td><td>Area (m²)</td><td>Depth (m)</td><td>Area (m²)</td><td>Depth (m)</td><td>Area (m²)</td></tr><tr><td>0.000</td><td>2550.0</td><td>1.000</td><td>2550.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 143, DS/PN: 27.002</u> Invert Level (m) 82.076 <table><tr><td>Depth (m)</td><td>Area (m²)</td><td>Depth (m)</td><td>Area (m²)</td><td>Depth (m)</td><td>Area (m²)</td></tr><tr><td>0.000</td><td>1000.0</td><td>1.000</td><td>1000.0</td><td>1.001</td><td>0.0</td></tr></table> <u>Tank or Pond Manhole: 145, DS/PN: 27.004</u> Invert Level (m) 81.892 <table><tr><td>Depth (m)</td><td>Area (m²)</td><td>Depth (m)</td><td>Area (m²)</td><td>Depth (m)</td><td>Area (m²)</td></tr><tr><td>0.000</td><td>1000.0</td><td>1.000</td><td>1000.0</td><td>1.001</td><td>0.0</td></tr></table>			Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	2000.0	1.000	2000.0	1.001	0.0	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	500.0	1.000	500.0	1.001	0.0	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	500.0	1.000	500.0	1.001	0.0	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	500.0	1.000	500.0	1.001	0.0	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	2550.0	1.000	2550.0	1.001	0.0	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	1000.0	1.000	1000.0	1.001	0.0	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	1000.0	1.000	1000.0	1.001	0.0
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)																																																																																	
0.000	2000.0	1.000	2000.0	1.001	0.0																																																																																	
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)																																																																																	
0.000	500.0	1.000	500.0	1.001	0.0																																																																																	
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)																																																																																	
0.000	500.0	1.000	500.0	1.001	0.0																																																																																	
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)																																																																																	
0.000	500.0	1.000	500.0	1.001	0.0																																																																																	
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)																																																																																	
0.000	2550.0	1.000	2550.0	1.001	0.0																																																																																	
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)																																																																																	
0.000	1000.0	1.000	1000.0	1.001	0.0																																																																																	
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)																																																																																	
0.000	1000.0	1.000	1000.0	1.001	0.0																																																																																	
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<u>Tank or Pond Manhole: 152, DS/PN: 27.011</u> Invert Level (m) 79.351 <table><thead><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr></thead><tbody><tr><td>0.000</td><td>1500.0</td><td>1.000</td><td>1500.0</td><td>1.001</td><td>0.0</td></tr></tbody></table> <u>Tank or Pond Manhole: 156, DS/PN: 25.012</u> Invert Level (m) 77.890 <table><thead><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr></thead><tbody><tr><td>0.000</td><td>1738.0</td><td>1.000</td><td>1738.0</td><td>1.001</td><td>0.0</td></tr></tbody></table>			Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	1500.0	1.000	1500.0	1.001	0.0	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	1738.0	1.000	1738.0	1.001	0.0
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)																					
0.000	1500.0	1.000	1500.0	1.001	0.0																					
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)																					
0.000	1738.0	1.000	1738.0	1.001	0.0																					
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Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Overflow Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
1.000	1	88.524	-0.326	0.000	0.17		55.3	OK
1.001	2	88.185	-0.247	0.000	0.41		87.5	OK
1.002	3	87.988	-0.275	0.000	0.31		141.5	OK
2.000	4	88.145	0.419	0.000	0.96		187.3	SURCHARGED
2.001	5	87.928	0.430	0.000	1.63		318.8	SURCHARGED
2.002	6	87.100	-0.164	0.000	0.30		58.1	OK
3.000	7	89.354	1.204	3.859	0.88		172.2	FLOOD
3.001	8	89.251	1.325	0.000	0.87		169.0	FLOOD RISK
3.002	9	89.100	1.398	0.000	2.28		457.6	FLOOD RISK
3.003	10	87.756	0.370	0.000	0.18		35.2	SURCHARGED
3.004	11	87.759	0.696	0.000	0.04		7.9	SURCHARGED
3.005	12	87.102	0.228	0.000	0.10		19.1	SURCHARGED
3.006	13	87.099	0.351	0.000	0.12		30.2	SURCHARGED
4.000	14	88.820	0.670	0.000	2.75		97.8	SURCHARGED
2.003	15	87.095	0.563	0.000	0.14		26.7	SURCHARGED
5.000	16	89.232	0.482	0.000	1.17		51.2	SURCHARGED
5.001	17	88.606	0.306	0.000	1.23		67.6	SURCHARGED
2.004	18	87.331	0.949	0.000	0.12		23.6	SURCHARGED
1.003	19	85.952	-0.218	0.000	0.40		256.2	OK

PN	US/MH Name	Level Exceeded
1.000	1	
1.001	2	
1.002	3	
2.000	4	
2.001	5	
2.002	6	
3.000	7	1
3.001	8	
3.002	9	
3.003	10	
3.004	11	
3.005	12	
3.006	13	
4.000	14	
2.003	15	
5.000	16	
5.001	17	
2.004	18	
1.003	19	

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Summary of Critical Results by Maximum Level (Rank 1) for Storm								
PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.
6.000	20	15 Winter	100	+40%				
6.001	21	15 Winter	100	+40%				
7.000	22	15 Winter	100	+40%				
7.001	23	15 Winter	100	+40%				
6.002	24	15 Winter	100	+40%	100/15 Summer			
6.003	25	600 Winter	100	+40%	30/180 Winter			
1.004	26	15 Winter	100	+40%	100/15 Summer			
1.005	27	15 Winter	100	+40%	30/15 Winter			
1.006	28	15 Winter	100	+40%	30/15 Summer			
8.000	29	180 Winter	100	+40%				
8.001	30	15 Winter	100	+40%	100/15 Summer			
8.002	31	240 Winter	100	+40%	100/30 Summer			
8.003	32	15 Winter	100	+40%				
9.000	33	15 Winter	100	+40%	100/15 Summer			
9.001	34	15 Winter	100	+40%	100/15 Summer			
9.002	35	120 Winter	100	+40%	100/15 Summer			
9.003	36	120 Winter	100	+40%	30/60 Winter			
9.004	37	120 Winter	100	+40%	30/30 Summer			
9.005	38	60 Winter	100	+40%	1/60 Winter			
9.006	39	180 Winter	100	+40%	1/30 Winter			
8.004	40	15 Winter	100	+40%				
10.000	41	15 Winter	100	+40%	30/15 Winter			
8.005	42	720 Winter	100	+40%	1/15 Winter			
8.006	43	15 Winter	100	+40%	30/15 Winter			
8.007	44	15 Winter	100	+40%	30/15 Summer			
1.007	45	15 Winter	100	+40%	1/15 Summer			
11.000	46	15 Winter	100	+40%	100/15 Summer			
11.001	47	30 Winter	100	+40%	100/15 Summer			
11.002	48	60 Winter	100	+40%	100/15 Summer			
11.003	49	1440 Winter	100	+40%	100/15 Summer			
12.000	50	15 Winter	100	+40%	100/15 Summer			
12.001	51	30 Winter	100	+40%	100/15 Summer			
11.004	52	1440 Winter	100	+40%	100/60 Winter			
1.008	53	15 Winter	100	+40%	1/15 Winter			
13.000	54	15 Winter	100	+40%	100/15 Summer			
13.001	55	15 Winter	100	+40%	30/15 Summer			
1.009	56	15 Winter	100	+40%	1/15 Summer			
1.010	57	1440 Summer	100	+40%				
1.011	58	1440 Summer	100	+40%				
14.000	59	15 Winter	100	+40%				
14.001	60	15 Winter	100	+40%				
14.002	61	1440 Summer	100	+40%	100/120 Winter			
14.003	62	960 Winter	100	+40%	30/360 Winter			
1.012	63	960 Winter	100	+40%	1/120 Summer			
1.013	64	1440 Summer	100	+40%				
1.014	65	1440 Winter	100	+40%	30/120 Summer			
1.015	66	1440 Winter	100	+40%	30/120 Summer			
15.000	67	15 Winter	100	+40%	100/15 Winter			
15.001	68	15 Winter	100	+40%	100/15 Summer			
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<u>Summary of Critical Results by Maximum Level (Rank 1) for Storm</u>									
		Water	Surcharged	Flooded			Half Drain	Pipe	
PN	US/MH Name	Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Time (mins)	Flow (l/s)	Status
6.000	20	86.725	-0.225	0.000	0.45			81.4	OK
6.001	21	86.652	-0.161	0.000	0.43			133.1	OK
7.000	22	86.778	-0.172	0.000	0.60			111.0	OK
7.001	23	86.708	-0.069	0.000	0.59			144.1	OK
6.002	24	86.582	0.167	0.000	1.57			278.4	SURCHARGED
6.003	25	86.486	0.344	0.000	0.07			3.9	SURCHARGED
1.004	26	85.735	2.600	0.000	0.74			247.4	SURCHARGED
1.005	27	85.446	2.911	0.000	0.72			294.5	SURCHARGED
1.006	28	84.990	3.355	0.000	0.99			370.3	SURCHARGED
8.000	29	84.501	-0.149	0.000	0.34			66.7	OK
8.001	30	84.692	0.313	0.000	1.43			283.1	SURCHARGED
8.002	31	84.381	0.273	0.000	0.21			41.3	SURCHARGED
8.003	32	83.592	-0.245	0.000	0.42			83.4	OK
9.000	33	85.117	0.117	0.000	0.28			54.2	SURCHARGED
9.001	34	85.008	0.249	0.000	1.37			268.6	SURCHARGED
9.002	35	84.818	0.300	0.000	0.58			114.7	SURCHARGED
9.003	36	84.810	0.532	0.000	0.83			163.4	SURCHARGED
9.004	37	84.746	0.708	0.000	0.35			48.9	SURCHARGED
9.005	38	84.691	0.966	0.000	1.45			55.1	SURCHARGED
9.006	39	84.447	0.976	0.000	1.19			48.6	SURCHARGED
8.004	40	82.919	-0.197	0.000	0.58			223.7	OK
10.000	41	83.941	0.641	0.000	1.79			68.0	SURCHARGED
8.005	42	82.715	0.363	0.000	0.40			79.7	SURCHARGED
8.006	43	83.748	1.694	0.000	0.67			124.7	SURCHARGED
8.007	44	83.821	1.901	0.000	0.64			119.9	SURCHARGED
1.007	45	83.883	3.348	0.000	2.55			386.9	SURCHARGED
11.000	46	83.372	0.647	0.000	1.50			305.7	SURCHARGED
11.001	47	82.640	0.324	0.000	1.11			229.0	SURCHARGED
11.002	48	82.066	0.245	0.000	1.20			235.1	SURCHARGED
11.003	49	81.893	0.296	0.000	0.24			46.7	SURCHARGED
12.000	50	83.530	0.730	0.000	1.55			315.9	SURCHARGED
12.001	51	82.697	0.308	0.000	1.28			264.0	SURCHARGED
11.004	52	81.891	0.514	0.000	0.18			32.5	SURCHARGED
1.008	53	82.393	2.077	0.000	1.80			341.7	SURCHARGED
13.000	54	82.561	0.761	0.000	0.97			36.5	SURCHARGED
13.001	55	82.375	0.824	0.000	2.22			81.7	SURCHARGED
1.009	56	81.850	1.698	0.000	3.02			421.0	SURCHARGED
1.010	57	80.072	0.000	0.000	0.94			150.7	SURCHARGED*
1.011	58	79.992	0.000	0.000	0.94			150.6	SURCHARGED*
14.000	59	82.300	0.000	0.000	1.13			62.2	SURCHARGED*
14.001	60	81.800	0.000	0.000	1.20			90.9	SURCHARGED*
14.002	61	81.076	0.276	0.000	0.36			10.9	SURCHARGED*
14.003	62	81.550	0.795	0.000	0.21			10.0	SURCHARGED
1.012	63	81.543	1.632	0.000	0.83			113.8	SURCHARGED
1.013	64	79.838	0.000	0.000	0.69			111.3	SURCHARGED*
1.014	65	80.805	1.067	0.000	0.75			107.8	SURCHARGED
1.015	66	80.689	1.051	0.000	0.17			83.7	SURCHARGED*
15.000	67	81.401	0.201	0.000	0.21			130.0	SURCHARGED
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	US/MH	Level
PN	Name	Exceeded
14.003		62
1.012		63
1.013		64
1.014		65
1.015		66
15.000		67
15.001		68
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Summary of Critical Results by Maximum Level (Rank 1) for Storm							
PN	US/MH Name	Storm	Return Climate Period Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.
15.002	69	15 Winter	100	+40%	100/15 Summer		
15.003	70	15 Winter	100	+40%	100/15 Summer		
16.000	71	15 Winter	100	+40%	30/15 Summer		
16.001	72	15 Winter	100	+40%	30/15 Summer		
16.002	73	360 Winter	100	+40%	100/15 Summer		
16.003	74	360 Winter	100	+40%	100/15 Summer		
16.004	75	360 Winter	100	+40%	30/120 Winter		
16.005	76	180 Winter	100	+40%	30/15 Summer		
16.006	77	180 Winter	100	+40%	30/30 Winter		
16.007	78	1440 Winter	100	+40%	100/15 Summer		
16.008	79	1440 Winter	100	+40%	100/15 Summer		
16.009	80	1440 Winter	100	+40%	100/15 Summer		
17.000	81	15 Winter	100	+40%			
17.001	82	15 Winter	100	+40%			
18.000	83	120 Winter	100	+40%	100/15 Summer		
18.001	84	120 Winter	100	+40%	100/15 Summer		
18.002	85	120 Winter	100	+40%	30/30 Winter		
18.003	86	120 Winter	100	+40%	30/15 Summer		
18.004	87	1440 Winter	100	+40%	100/960 Winter		
18.005	88	1440 Winter	100	+40%	100/600 Winter		
17.002	89	1440 Winter	100	+40%	100/120 Winter		
16.010	90	1440 Winter	100	+40%	30/360 Winter		
16.011	91	1440 Winter	100	+40%	30/360 Winter		
16.012	92	1440 Winter	100	+40%	30/360 Summer		
16.013	93	1440 Winter	100	+40%	1/480 Winter		
19.000	94	15 Winter	100	+40%	30/15 Summer	100/15 Summer	
19.001	95	1440 Winter	100	+40%	100/15 Summer		
19.002	96	1440 Winter	100	+40%	30/15 Summer		
19.003	97	1440 Winter	100	+40%	30/360 Winter		
19.004	98	1440 Winter	100	+40%	30/240 Winter		
20.000	99	15 Winter	100	+40%	30/15 Summer	100/15 Summer	
20.001	100	1440 Winter	100	+40%	30/15 Summer		
19.005	101	1440 Winter	100	+40%	30/120 Winter		
16.014	102	1440 Winter	100	+40%	1/15 Summer		
1.016	103	1440 Winter	100	+40%	1/15 Summer		
1.017	104	15 Summer	1	+0%			
1.018	105	1440 Winter	100	+40%	1/480 Summer		
21.000	106	15 Winter	100	+40%	100/15 Summer		
21.001	107	15 Winter	100	+40%	100/15 Summer		
21.002	108	15 Winter	100	+40%	100/15 Summer		
21.003	109	15 Winter	100	+40%	100/15 Summer		
22.000	110	15 Winter	100	+40%	30/15 Summer		
22.001	111	60 Winter	100	+40%	100/15 Summer		
22.002	112	60 Winter	100	+40%	30/30 Winter		
22.003	113	60 Winter	100	+40%	30/30 Winter		
22.004	114	60 Winter	100	+40%	30/30 Winter		
22.005	115	480 Winter	100	+40%	100/60 Winter		
23.000	116	15 Winter	100	+40%	100/15 Summer		
24.000	117	15 Winter	100	+40%	100/15 Summer		
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