



Our Ref: EMC/2018/052

Date: 22nd April 2020

Folkestone & Hythe District Council
Civic Centre
Castle Hill Avenue
Folkestone
Kent, CT20 2QY

Dear Sirs

**Hope All Saints Garden Centre, Ashford Road, New Romney, Kent, TN28 8TH
Drainage Impact & Flood Risk Assessment ~ Addendum**

This addendum statement is prepared to support a planning application for a revised site layout at the above location for a 25 unit residential development. The site layout has been revised since our Drainage Impact & Flood Risk Assessment report that was prepared for the recent 27 unit residential development.

4.11 The impermeable area generated by the proposed development has reduced from the calculations previously prepared and therefore revised MicroDrainage Calculations are attached; note the calculations use FEH Rainfall details and have been sensitivity tested for the 1in100 year return period with a 40% allowance for future climate change. Please find attached our updated Drainage Strategy Drawing as EMC-2018-052-04 rev06.

4.15 A Land Drainage Consent will be required from the Romney Marsh Internal Drainage Board (RMIDB) for the new surface water outfall. The RMIDB have acknowledged that the topography of the site falls towards to the watercourse and this reflects the pre-developed 'greenfield' condition. The connection to the watercourse will be through highway verge and this, along with the installation of the private surface water pipe work and manholes within the public highway will require a Section 50 New Road & Street Works Act License.

The conclusion from our previous Drainage Impact and Flood Risk Assessment remain unchanged as below;

6.2 The proposed development will increase the discharge to the public foul water sewer. A sewer capacity check has been issued to Southern Water Services and adequate capacity in the local sewer network to receive the additional design flows has been confirmed.

6.3 The proposed surface water management plan is to provide a positive drainage system to the impermeable areas and discharge at a controlled rate to the adjacent watercourse at the equivalent 'Greenfield' Run-off rate. With the introduction of a suitably designed SUDS solution to cater for the impermeable areas, the post-development run-off volume is reduced by 30m³ from the pre-development run-off volume.

6.4 The site is identified to lay within Flood Zone 3 (High Probability): annual probability of flooding more than 1 in 200 (0.5%) for coastal flooding although benefits from flood defences. The coastal flood defences are maintained in partnership with The Environment Agency and Folkestone & Hythe District Council and it is understood that the Shoreline long term policy is 'Hold the line'. It is therefore considered that the site is currently protected to a 1in200 year standard, including an appropriate allowance for climate change and has a low risk of coastal flooding.

6.5 The site is allocated as broad location for residential development as set out in Core Strategy Policy CSD8 with the principle of developing the site accepted and therefore the Sequential Test is considered as passed.

6.5 The Exception Test is considered as passed with the following mitigation measures applied;



- (a) **The proposed minimum ground floor level for the proposed development is recommended at 2.9mAOD with all sleeping accommodation at 1st floor.** This level provides 300mm of freeboard above the predicted flood level from the breach analysis in the coastal defences included with the Folkestone & Hythe SFRA as per the extract below indicating a breach flood level of approximately 2.6mAOD.
- (b) The construction of the new dwellings will utilise flood resilient construction methods and include a solid concrete ground slab to avoid potential flood water ingress below suspended floor voids.
- (c) A copy of this report should be included with the 'Operation & Maintenance Manuals' and the occupants made aware of the mitigation measures included on the site and the long-term maintenance requirement.
- (d) The new occupants of the development should be encouraged to register for 'Floodline' Warnings Direct.

6.6 In accordance with the requirements of the Technical Guidance to the National Planning Policy Framework (NPPF), and the Kent County Council Local Flood Risk Management Strategy ~ Guidance on Consultation, we conclude that the site can be adequately drained, and is sustainable in terms of flood risk and that the proposals do not increase the risk to the neighbouring properties.

Yours sincerely

Paul Lavender
for Tridax Ltd

Enc MicroDrainage Surface Water Details & Simulation Results
MicroDrainage 40% Sensitivity Test Simulation Results
Drawing EMC-2018-052-04 rev06



DRAWING LEGEND

Site boundary line

EXISTING PUBLIC SEWERS

Public foul water sewer

Public foul water manhole

Public foul water sewer to be diverted

Public foul water Diversion

PROPOSED PRIVATE DRAINAGE

Private foul water drainage

Private foul water manhole

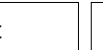
Private surface water drainage

Private surface water manhole

DRAINAGE NOTES:

- The location of any existing drains and sewers are to be accurately located and reported prior to any work commencing on site.
- All materials, workmanship and construction to be in accordance with the requirements of 'Sewers for Adoption - 7th Edition' and published addendum and corrigendum.
- Channel drains shown are only to collect surface water run-off from hard paved areas and door thresholds and are not intended to collect groundwater or run-off from gardens and landscaped areas.
- All abandoned pipework to be completely removed or grout filled unless stated otherwise.

06	Updated to latest site layout	22/04/2020
05	Updated to latest site layout	08/04/2020
04	Updated to latest site layout	06/11/2019
03	Foul Sewer diversion requirement shown	15/07/2019
02	Updated to latest site layout	27/06/2019
01	Updated to latest site layout	02/11/2018
00	First issue to client	13/09/2018
Rev	Description	Date

PROJECT Proposed residential development on land at Cockreed Lane, New Romney, TN28 8TH.			 Design Office, Suite 3, Honeywood House, Whitfield, Dover, Kent, CT16 3EH Tel: 01304 820777		
CLIENT Pageant Ltd					
DRAWING Drainage Strategy Plan			SCALE 1:250	DATE 10/09/2018	SIZE A1
STATUS PLANNING			Draw No. EMC-2018-052-04	REV 06	

Copyright and other intellectual property rights in this document and all related documents, drawings, etc., including calculations, is vested in Tridax Ltd and cannot be used or reproduced for any other purpose than that for which they been created without the express permission in writing by Tridax Ltd. In first instance ring 01304 820777.

Tridax Ltd		Page 1
Honeywood House Whitfield Kent CT16 3EH	Land at Cockreed Lane New Romney	
Date 08/04/2020 15:23 File C-2018-052 SW NETWORK R...	Designed by prl Checked by	
XP Solutions Network 2019.1		

Network 2019.1

Existing Network Details 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
1.000	15.410	0.080	192.6	0.023	2.00	0.0	0.600	o	150	Pipe/Conduit
2.000	19.230	0.080	240.4	0.026	5.00	0.0	0.600	o	150	Pipe/Conduit
1.001	35.830	0.180	199.1	0.118	0.00	0.0	0.600	o	225	Pipe/Conduit
1.002	3.500	0.020	175.0	0.036	0.00	0.0	0.600	o	225	Pipe/Conduit
3.000	16.770	0.065	258.0	0.064	2.00	0.0	0.600	o	150	Pipe/Conduit
1.003	24.480	0.150	163.2	0.032	0.00	0.0	0.600	o	225	Pipe/Conduit
1.004	30.900	0.155	199.4	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit
1.005	34.200	0.170	201.2	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit
1.006	3.900	0.020	195.0	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit

Network Results Table

PN	US/IL (m)	I.Area (ha)	Σ Base Flow (l/s)	Vel (m/s)	Cap (l/s)
1.000	2.150	0.023	0.0	0.72	12.7
2.000	2.150	0.026	0.0	0.64	11.4
1.001	2.070	0.167	0.0	0.92	36.7
1.002	1.890	0.203	0.0	0.99	39.2
3.000	1.935	0.064	0.0	0.62	11.0
1.003	1.870	0.299	0.0	1.02	40.6
1.004	1.720	0.299	0.0	0.54	4.2
1.005	1.565	0.299	0.0	0.54	4.2
1.006	1.395	0.299	0.0	0.55	4.3

Tridax Ltd		Page 2
Honeywood House Whitfield Kent CT16 3EH	Land at Cockreed Lane New Romney	
Date 08/04/2020 15:23 File C-2018-052 SW NETWORK R...	Designed by prl Checked by	
XP Solutions	Network 2019.1	

Manhole Schedules for Storm

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam., L*W (mm)	PN	Pipe Out Invert Level (m)	Diameter (mm)	PN	Pipes In Invert Level (m)	Diameter (mm)	Backdrop (mm)
MHS1.0	2.750	0.600	Open Manhole	1200	1.000	2.150	150				
MHS2.0	2.750	0.600	Open Manhole	1200	2.000	2.150	150				
MHS1.1	2.750	0.680	Open Manhole	1200	1.001	2.070	225	1.000	2.070	150	
								2.000	2.070	150	
MHS1.2	2.750	0.860	Open Manhole	1200	1.002	1.890	225	1.001	1.890	225	
MHS3.0	2.750	0.815	Open Manhole	1200	3.000	1.935	150				
MHS1.3	2.750	0.880	Open Manhole	1200	1.003	1.870	225	1.002	1.870	225	
								3.000	1.870	150	
MHS1.4	2.750	1.030	Open Manhole	1200	1.004	1.720	100	1.003	1.720	225	
MHS1.5	2.700	1.135	Open Manhole	1200	1.005	1.565	100	1.004	1.565	100	
MHS1.5	2.720	1.325	Open Manhole	1200	1.006	1.395	100	1.005	1.395	100	
	2.650	1.275	Open Manhole	0		OUTFALL		1.006	1.375	100	

No coordinates have been specified, layout information cannot be produced.

Tridax Ltd		Page 3
Honeywood House Whitfield Kent CT16 3EH	Land at Cockreed Lane New Romney	
Date 08/04/2020 15:23 File C-2018-052 SW NETWORK R...	Designed by prl Checked by	
XP Solutions	Network 2019.1	

PIPELINE SCHEDULES for Storm

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., (mm)	L*W
1.000	o	150	MHS1.0	2.750	2.150	0.450	Open Manhole		1200
2.000	o	150	MHS2.0	2.750	2.150	0.450	Open Manhole		1200
1.001	o	225	MHS1.1	2.750	2.070	0.455	Open Manhole		1200
1.002	o	225	MHS1.2	2.750	1.890	0.635	Open Manhole		1200
3.000	o	150	MHS3.0	2.750	1.935	0.665	Open Manhole		1200
1.003	o	225	MHS1.3	2.750	1.870	0.655	Open Manhole		1200
1.004	o	100	MHS1.4	2.750	1.720	0.930	Open Manhole		1200
1.005	o	100	MHS1.5	2.700	1.565	1.035	Open Manhole		1200
1.006	o	100	MHS1.5	2.720	1.395	1.225	Open Manhole		1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., (mm)	L*W
1.000	15.410	192.6	MHS1.1	2.750	2.070	0.530	Open Manhole		1200
2.000	19.230	240.4	MHS1.1	2.750	2.070	0.530	Open Manhole		1200
1.001	35.830	199.1	MHS1.2	2.750	1.890	0.635	Open Manhole		1200
1.002	3.500	175.0	MHS1.3	2.750	1.870	0.655	Open Manhole		1200
3.000	16.770	258.0	MHS1.3	2.750	1.870	0.730	Open Manhole		1200
1.003	24.480	163.2	MHS1.4	2.750	1.720	0.805	Open Manhole		1200
1.004	30.900	199.4	MHS1.5	2.700	1.565	1.035	Open Manhole		1200
1.005	34.200	201.2	MHS1.5	2.720	1.395	1.225	Open Manhole		1200
1.006	3.900	195.0		2.650	1.375	1.175	Open Manhole		0

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)
1.006		2.650	1.375	1.300	0	0

Simulation Criteria for Storm

Volumetric Runoff Coeff	0.750	Additional Flow - % of Total Flow	0.000
Areal Reduction Factor	1.000	MADD Factor * 10m³/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 Offline Controls	0
Number of Online Controls	1	Number of Storage Structures	3
		Number of Time/Area Diagrams	0
		Number of Real Time Controls	0

Synthetic Rainfall Details

Tridax Ltd		Page 4
Honeywood House Whitfield Kent CT16 3EH	Land at Cockreed Lane New Romney	
Date 08/04/2020 15:23 File C-2018-052 SW NETWORK R...	Designed by prl Checked by	
XP Solutions	Network 2019.1	

Synthetic Rainfall Details

Rainfall Model	FEH	Summer Storms	Yes
Return Period (years)	100	Winter Storms	No
FEH Rainfall Version	2013	Cv (Summer)	0.750
Site Location	GB 606191 125152 TR 06191 25152	Cv (Winter)	0.840
Data Type	Point	Storm Duration (mins)	30

Tridax Ltd		Page 5
Honeywood House Whitfield Kent CT16 3EH	Land at Cockreed Lane New Romney	
Date 08/04/2020 15:23 File C-2018-052 SW NETWORK R...	Designed by prl Checked by	
XP Solutions	Network 2019.1	

Online Controls for Storm

Hydro-Brake® Optimum Manhole: MHS1.4, DS/PN: 1.004, Volume (m³): 2.1

Unit Reference	MD-SFP-0073-2300-0800-2300
Design Head (m)	0.800
Design Flow (l/s)	2.3
Flush-Flo™	Calculated
Objective	Future Proof
Application	Surface
Sump Available	Yes
Diameter (mm)	73
Invert Level (m)	1.720
Minimum Outlet Pipe Diameter (mm)	100
Suggested Manhole Diameter (mm)	1200

Control Points	Head (m)	Flow (l/s)	Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	0.800	2.3	Kick-Flo®	0.481	1.8
Flush-Flo™	0.213	2.3	Mean Flow over Head Range	-	2.0

The hydrological calculations have been based on the Head/Discharge relationship for the Hydro-Brake® Optimum as specified. Should another type of control device other than a Hydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	2.1	0.800	2.3	2.000	3.5	4.000	4.8	7.000	6.3
0.200	2.3	1.000	2.5	2.200	3.7	4.500	5.1	7.500	6.5
0.300	2.3	1.200	2.8	2.400	3.8	5.000	5.4	8.000	6.7
0.400	2.1	1.400	3.0	2.600	3.9	5.500	5.6	8.500	6.9
0.500	1.9	1.600	3.2	3.000	4.2	6.000	5.8	9.000	7.1
0.600	2.0	1.800	3.3	3.500	4.5	6.500	6.1	9.500	7.3

Tridax Ltd		Page 6
Honeywood House Whitfield Kent CT16 3EH	Land at Cockreed Lane New Romney	
Date 08/04/2020 15:23 File C-2018-052 SW NETWORK R...	Designed by prl Checked by	
XP Solutions	Network 2019.1	

Storage Structures for Storm

Porous Car Park Manhole: MHS1.1, DS/PN: 1.001

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	29.7
Membrane Percolation (mm/hr)	1000	Length (m)	29.7
Max Percolation (l/s)	245.0	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	0
Porosity	0.30	Evaporation (mm/day)	0
Invert Level (m)	2.070	Cap Volume Depth (m)	0.500

Porous Car Park Manhole: MHS3.0, DS/PN: 3.000

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	20.7
Membrane Percolation (mm/hr)	1000	Length (m)	20.7
Max Percolation (l/s)	119.0	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	0
Porosity	0.30	Evaporation (mm/day)	0
Invert Level (m)	2.150	Cap Volume Depth (m)	0.500

Cellular Storage Manhole: MHS1.3, DS/PN: 1.003

Invert Level (m)	1.870	Safety Factor	2.0
Infiltration Coefficient Base (m/hr)	0.00000	Porosity	0.95
Infiltration Coefficient Side (m/hr)	0.00000		

Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	11.5	11.5	0.420	11.5	17.3	0.421	0.0	17.3

Volume Summary (Static)

Length Calculations based on True Length

Pipe Number	USMH Name	Manhole Volume (m ³)	Pipe Volume (m ³)	Storage Structure Volume (m ³)	Total Volume (m ³)
1.000	MHS1.0	0.679	0.251	0.000	0.930
2.000	MHS2.0	0.679	0.319	0.000	0.997
1.001	MHS1.1	0.769	1.377	132.314	134.459
1.002	MHS1.2	0.973	0.091	0.000	1.064
3.000	MHS3.0	0.922	0.275	64.274	65.470
1.003	MHS1.3	0.995	0.926	4.600	6.521
1.004	MHS1.4	1.165	0.233	0.000	1.398
1.005	MHS1.5	1.284	0.259	0.000	1.543
1.006	MHS1.5	1.499	0.026	0.000	1.524
Total		8.963	3.757	201.187	213.907

Tridax Ltd		Page 7
Honeywood House Whitfield Kent CT16 3EH	Land at Cockreed Lane New Romney	
Date 08/04/2020 15:23	Designed by prl	
File C-2018-052 SW NETWORK R...	Checked by	
XP Solutions		Network 2019.1

2 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 3 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FEH Data Type Point
 FEH Rainfall Version 2013 Cv (Summer) 0.750
 Site Location GB 606191 125152 TR 06191 25152 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 100.0
 Analysis Timestep 2.5 Second Increment (Extended)
 DTS Status ON
 DVD Status ON
 Inertia Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Event	US/CL (m)	Water Level (m)	Flooded Volume (m³)	Pipe Flow (l/s)	Status
1.000	MHS1.0	30 minute 2 year Summer I+0%	2.750	2.209	0.000	3.7	OK
2.000	MHS2.0	30 minute 2 year Summer I+0%	2.750	2.210	0.000	3.5	OK
1.001	MHS1.1	240 minute 2 year Winter I+0%	2.750	2.177	0.000	2.2	OK
1.002	MHS1.2	240 minute 2 year Winter I+0%	2.750	2.176	0.000	2.2	SURCHARGED
3.000	MHS3.0	240 minute 2 year Winter I+0%	2.750	2.175	0.000	2.1	SURCHARGED
1.003	MHS1.3	180 minute 2 year Winter I+0%	2.750	2.174	0.000	3.1	SURCHARGED
1.004	MHS1.4	360 minute 2 year Winter I+0%	2.750	2.179	0.000	2.3	SURCHARGED
1.005	MHS1.5	1440 minute 2 year Winter I+0%	2.700	1.618	0.000	2.3	OK
1.006	MHS1.5	1440 minute 2 year Winter I+0%	2.720	1.453	0.000	2.3	OK

Tridax Ltd		Page 8
Honeywood House Whitfield Kent CT16 3EH	Land at Cockreed Lane New Romney	
Date 08/04/2020 15:23	Designed by prl	
File C-2018-052 SW NETWORK R...	Checked by	
XP Solutions	Network 2019.1	

30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 3 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FEH Data Type Point
 FEH Rainfall Version 2013 Cv (Summer) 0.750
 Site Location GB 606191 125152 TR 06191 25152 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 100.0
 Analysis Timestep 2.5 Second Increment (Extended)
 DTS Status ON
 DVD Status ON
 Inertia Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Event	US/CL (m)	Water Level (m)	Flooded Volume (m ³)	Pipe Flow (l/s)	Status
1.000	MHS1.0	360 minute 30 year Winter I+0%	2.750	2.305	0.000	1.2	SURCHARGED
2.000	MHS2.0	360 minute 30 year Winter I+0%	2.750	2.305	0.000	1.3	SURCHARGED
1.001	MHS1.1	360 minute 30 year Winter I+0%	2.750	2.305	0.000	2.3	SURCHARGED
1.002	MHS1.2	360 minute 30 year Winter I+0%	2.750	2.307	0.000	2.3	SURCHARGED
3.000	MHS3.0	360 minute 30 year Winter I+0%	2.750	2.302	0.000	2.0	SURCHARGED
1.003	MHS1.3	360 minute 30 year Winter I+0%	2.750	2.307	0.000	2.9	SURCHARGED
1.004	MHS1.4	360 minute 30 year Winter I+0%	2.750	2.303	0.000	2.3	SURCHARGED
1.005	MHS1.5	1440 minute 30 year Winter I+0%	2.700	1.618	0.000	2.3	OK
1.006	MHS1.5	1440 minute 30 year Winter I+0%	2.720	1.453	0.000	2.3	OK

Tridax Ltd		Page 9
Honeywood House Whitfield Kent CT16 3EH	Land at Cockreed Lane New Romney	
Date 08/04/2020 15:23	Designed by prl	
File C-2018-052 SW NETWORK R...	Checked by	
XP Solutions		Network 2019.1

100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m³/ha Storage	2.000
Hot Start Level (mm)	0	Inlet Coefficient	0.800
Manhole Headloss Coeff (Global)	0.500	Flow per Person per Day (l/per/day)	0.000
Foul Sewage per hectare (l/s)	0.000		

Number of Input Hydrographs	0	Number of Offline Controls	0	Number of Time/Area Diagrams	0
Number of Online Controls	1	Number of Storage Structures	3	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FEH	Data Type	Point
FEH Rainfall Version	2013	Cv (Summer)	0.750
Site Location	GB 606191 125152 TR 06191 25152	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	100.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)	Summer and Winter
Duration(s) (mins)	30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years)	2, 30, 100
Climate Change (%)	0, 0, 20

PN	US/MH Name	Event	US/CL (m)	Water Level (m)	Flooded Volume (m³)	Pipe Flow (l/s)	Status
1.000	MHS1.0	600 minute 100 year Winter I+20%	2.750	2.503	0.000	1.3	SURCHARGED
2.000	MHS2.0	600 minute 100 year Winter I+20%	2.750	2.503	0.000	1.4	SURCHARGED
1.001	MHS1.1	600 minute 100 year Winter I+20%	2.750	2.502	0.000	2.7	SURCHARGED
1.002	MHS1.2	600 minute 100 year Winter I+20%	2.750	2.505	0.000	2.2	SURCHARGED
3.000	MHS3.0	600 minute 100 year Winter I+20%	2.750	2.499	0.000	1.8	SURCHARGED
1.003	MHS1.3	600 minute 100 year Winter I+20%	2.750	2.505	0.000	2.7	SURCHARGED
1.004	MHS1.4	600 minute 100 year Winter I+20%	2.750	2.501	0.000	2.3	SURCHARGED
1.005	MHS1.5	1440 minute 100 year Summer I+20%	2.700	1.618	0.000	2.3	OK
1.006	MHS1.5	1440 minute 100 year Summer I+20%	2.720	1.453	0.000	2.3	OK

Tridax Ltd		Page 1
Honeywood House Whitfield Kent CT16 3EH	Land at Cockreed Lane New Romney (40% Sensitivity Test)	
Date 08/04/2020 15:16	Designed by prl	
File C-2018-052 SW NETWORK R...	Checked by	
XP Solutions		Network 2019.1

Summary of Critical Results by Maximum Level (Rank 1) for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 3 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FEH Data Type Point
 Return Period (years) 100 Cv (Summer) 0.750
 FEH Rainfall Version 2013 Cv (Winter) 0.840
 Site Location GB 606191 125152 TR 06191 25152

Margin for Flood Risk Warning (mm) 100.0
 Analysis Timestep 2.5 Second Increment (Extended)
 DTS Status ON
 DVD Status ON
 Inertia Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Sensitivity flows(s) (%) 0, +40

PN	US/MH Name	Event	US/CL (m)	Water Level (m)	Flooded Volume (m³)	Pipe Flow (l/s)	Status
1.000	MHS1.0	720 minute 100 year Winter Q+40%	2.750	2.644	0.000	1.3	SURCHARGED
2.000	MHS2.0	720 minute 100 year Winter Q+40%	2.750	2.644	0.000	1.5	SURCHARGED
1.001	MHS1.1	720 minute 100 year Winter Q+40%	2.750	2.643	0.000	2.7	SURCHARGED
1.002	MHS1.2	720 minute 100 year Winter Q+40%	2.750	2.640	0.000	3.3	SURCHARGED
3.000	MHS3.0	720 minute 100 year Winter Q+40%	2.750	2.639	0.000	2.3	SURCHARGED
1.003	MHS1.3	720 minute 100 year Winter Q+40%	2.750	2.639	0.000	2.7	SURCHARGED
1.004	MHS1.4	720 minute 100 year Winter Q+40%	2.750	2.634	0.000	2.4	SURCHARGED
1.005	MHS1.5	720 minute 100 year Winter Q+40%	2.700	1.620	0.000	2.4	OK
1.006	MHS1.5	720 minute 100 year Winter Q+40%	2.720	1.455	0.000	2.4	OK