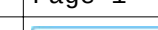


STM Environmental Consultants		Page 1
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14 File 63 KNOWSLEY STREET.MDX	Designed by Matthew Checked by	
Innovyze	Network 2020.1	

STORM SEWER DESIGN by the Modified Rational Method

Pipe Sizes STANDARD Manhole Sizes STANDARD

Designed with Level Soffits

Time (mins)	Area (ha)	Time (mins)	Area (ha)
0-4	0.084	4-8	0.032

Network Design Table for Storm

Network Results Table

STM Environmental Consultants		Page 3
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

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)
S1	45.300	0.700	Open Manhole	1000	S3.000	44.600	225				
S7	45.300	0.700	Open Manhole	1000	S4.000	44.600	225				
S4	45.300	0.700	Open Manhole	1000	S5.000	44.600	225				
S5	45.300	0.700	Open Manhole	1000	S6.000	44.600	225				
SP1	45.200	0.900	Open Manhole	1200	S3.001	44.300	225	S3.000	44.439	225	139
								S4.000	44.399	225	99
								S5.000	44.300	225	
								S6.000	44.371	225	71
S9	45.200	1.054	Open Manhole	1200	S3.002	44.146	225	S3.001	44.146	225	
SG1	45.250	1.950	Open Manhole	1200	S3.003	43.300	225	S3.002	44.103	225	803
S4	45.200	1.934	Open Manhole	1200	S3.004	43.266	225	S3.003	43.266	225	
S8707	45.400	2.260	Open Manhole	1200		OUTFALL		S3.004	43.140	225	

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
S1	383856.832	399727.954	383856.832	399727.954	Required	
S7	383859.415	399735.008	383859.415	399735.008	Required	
S4	383863.034	399745.959	383863.034	399745.959	Required	
S5	383866.520	399755.760	383866.520	399755.760	Required	
SP1	383849.912	399747.965	383849.912	399747.965	Required	
S9	383853.923	399759.279	383853.923	399759.279	Required	
SG1	383861.109	399759.263	383861.109	399759.263	Required	
S4	383862.224	399764.846	383862.224	399764.846	Required	

Unit 6, Crane Mews
32 Gould Road, Twickenham
London, TW2 6RS

Date 29/04/2022 11:14

File 63 KNOWSLEY STREET.MDX

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Network 2020.1

Manhole Schedules for Storm

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
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S8707 383883.595 399765.447

No Entry



STM Environmental Consultants		Page 5
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14 File 63 KNOWSLEY STREET.MDX	Designed by Matthew Checked by	
Innovyze	Network 2020.1	

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., L*W (mm)
S3.000	o	225	S1	45.300	44.600	0.475	Open Manhole	1000
S4.000	o	225	S7	45.300	44.600	0.475	Open Manhole	1000
S5.000	o	225	S4	45.300	44.600	0.475	Open Manhole	1000
S6.000	o	225	S5	45.300	44.600	0.475	Open Manhole	1000
S3.001	o	225	SP1	45.200	44.300	0.675	Open Manhole	1200
S3.002	o	225	S9	45.200	44.146	0.829	Open Manhole	1200
S3.003	o	225	SG1	45.250	43.300	1.725	Open Manhole	1200
S3.004	o	225	S4	45.200	43.266	1.709	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., L*W (mm)
S3.000	21.174	131.5	SP1	45.200	44.439	0.536	Open Manhole	1200
S4.000	16.068	80.0	SP1	45.200	44.399	0.576	Open Manhole	1200
S5.000	13.275	44.2	SP1	45.200	44.300	0.675	Open Manhole	1200
S6.000	18.347	80.0	SP1	45.200	44.371	0.604	Open Manhole	1200
S3.001	12.004	77.8	S9	45.200	44.146	0.829	Open Manhole	1200
S3.002	7.186	168.9	SG1	45.250	44.103	0.922	Open Manhole	1200
S3.003	5.693	168.9	S4	45.200	43.266	1.709	Open Manhole	1200
S3.004	21.380	168.9	S8707	45.400	43.140	2.035	Open Manhole	1200

Date 29/04/2022 11:14
File 63 KNOWSLEY STREET.MDX

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Network 2020.1

Setting Out Information - True Coordinates (Storm)

PN	USMH Name	Dia/Len (mm)	Width (mm)	US Easting (m)	US Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Layout (North)
S3.000	S1	1000		383856.832	399727.954	383856.832	399727.954	
S4.000	S7	1000		383859.415	399735.008	383859.415	399735.008	
S5.000	S4	1000		383863.034	399745.959	383863.034	399745.959	
S6.000	S5	1000		383866.520	399755.760	383866.520	399755.760	
S3.001	SP1	1200		383849.912	399747.965	383849.912	399747.965	
S3.002	S9	1200		383853.923	399759.279	383853.923	399759.279	
S3.003	SG1	1200		383861.109	399759.263	383861.109	399759.263	
S3.004	S4	1200		383862.224	399764.846	383862.224	399764.846	

PN	DSMH Name	Dia/Len (mm)	Width (mm)	DS Easting (m)	DS Northing (m)	Layout (North)
S3.004	S8707	1200		383883.595	399765.447	

Unit 6, Crane Mews
32 Gould Road, Twickenham
London, TW2 6RS

Date 29/04/2022 11:14
File 63 KNOWSLEY STREET.MDX

Designed by Matthew

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Network 2020.1

Setting Out Information - Site Coordinates (Storm)

PN	USMH Name	Dia/Len (mm)	Width (mm)	US Easting (m)	US Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Layout (North)
S3.000	S1	1000		383856.832	399727.954	383856.832	399727.954	
S4.000	S7	1000		383859.415	399735.008	383859.415	399735.008	
S5.000	S4	1000		383863.034	399745.959	383863.034	399745.959	
S6.000	S5	1000		383866.520	399755.760	383866.520	399755.760	
S3.001	SP1	1200		383849.912	399747.965	383849.912	399747.965	
S3.002	S9	1200		383853.923	399759.279	383853.923	399759.279	
S3.003	SG1	1200		383861.109	399759.263	383861.109	399759.263	
S3.004	S4	1200		383862.224	399764.846	383862.224	399764.846	

PN	DSMH Name	Dia/Len (mm)	Width (mm)	DS Easting (m)	DS Northing (m)	Layout (North)
S3.004	S8707	1200		383883.595	399765.447	



Micro
Drainage

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Pipe Number	PIMP Type	PIMP Name	PIMP (%)	Gross Area (ha)	Imp. Area (ha)	Pipe Total (ha)
3.000	User	-	100	0.012	0.012	0.012
4.000	User	-	100	0.011	0.011	0.011
5.000	User	-	100	0.013	0.013	0.013
6.000	User	-	100	0.023	0.023	0.023
3.001	User	-	100	0.030	0.030	0.030
	User	-	100	0.011	0.011	0.042
3.002	-	-	100	0.000	0.000	0.000
3.003	User	-	100	0.015	0.015	0.015
3.004	-	-	100	0.000	0.000	0.000
				Total	Total	Total
				0.116	0.116	0.116

STM Environmental Consultants		Page 9
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze	Network 2020.1	

Network Classifications for Storm

PN	USMH Name	Pipe Dia (mm)	Min Cover Depth (m)	Max Cover Depth (m)	Pipe Type	MH Dia (mm)	MH Width (mm)	MH Ring Depth (m)	MH Type
S3.000	S1	225	0.475	0.536	Unclassified	1000	0	0.475	Unclassified
S4.000	S7	225	0.475	0.576	Unclassified	1000	0	0.475	Unclassified
S5.000	S4	225	0.475	0.675	Unclassified	1000	0	0.475	Unclassified
S6.000	S5	225	0.475	0.604	Unclassified	1000	0	0.475	Unclassified
S3.001	SP1	225	0.675	0.829	Unclassified	1200	0	0.675	Unclassified
S3.002	S9	225	0.829	0.922	Unclassified	1200	0	0.829	Unclassified
S3.003	SG1	225	1.709	1.725	Unclassified	1200	0	1.725	Unclassified
S3.004	S4	225	1.709	2.035	Unclassified	1200	0	1.709	Unclassified

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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S3.004	S8707	45.400	43.140	0.000	1200	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	2
Number of Online Controls	1	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)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	18.200	Storm Duration (mins)	30
Ratio R	0.358		

STM Environmental Consultants		Page 10
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14 File 63 KNOWSLEY STREET.MDX	Designed by Matthew Checked by	
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Online Controls for Storm Orifice Manhole: SG1, DS/PN: S3.003, Volume (m³): 2.4 Diameter (m) 0.019 Discharge Coefficient 0.600 Invert Level (m) 43.300		
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STM Environmental Consultants			Page 11																																																																																																																																
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS																																																																																																																																			
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File 63 KNOWSLEY STREET.MDX		Checked by																																																																																																																																	
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<u>Storage Structures for Storm</u> <u>Porous Car Park Manhole: SP1, DS/PN: S3.001</u> <table><tr><td>Infiltration Coefficient Base (m/hr)</td><td>0.00000</td><td>Width (m)</td><td>5.0</td></tr><tr><td>Membrane Percolation (mm/hr)</td><td>1000</td><td>Length (m)</td><td>25.0</td></tr><tr><td>Max Percolation (l/s)</td><td>34.7</td><td>Slope (1:X)</td><td>0.0</td></tr><tr><td>Safety Factor</td><td>2.0</td><td>Depression Storage (mm)</td><td>5</td></tr><tr><td>Porosity</td><td>0.30</td><td>Evaporation (mm/day)</td><td>3</td></tr><tr><td>Invert Level (m)</td><td>44.750</td><td>Cap Volume Depth (m)</td><td>0.450</td></tr></table> <u>Cellular Storage Manhole: SG1, DS/PN: S3.003</u> <table><tr><td>Invert Level (m)</td><td>43.300</td><td>Safety Factor</td><td>2.0</td></tr><tr><td>Infiltration Coefficient Base (m/hr)</td><td>0.00000</td><td>Porosity</td><td>0.95</td></tr><tr><td>Infiltration Coefficient Side (m/hr)</td><td>0.00000</td><td></td><td></td></tr></table> <table><tr><td>Depth (m)</td><td>Area (m²)</td><td>Inf. Area (m²)</td><td>Depth (m)</td><td>Area (m²)</td><td>Inf. Area (m²)</td></tr><tr><td>0.000</td><td>100.0</td><td>100.0</td><td>1.001</td><td>0.0</td><td>140.0</td></tr><tr><td>1.000</td><td>100.0</td><td>140.0</td><td></td><td></td><td></td></tr></table> <u>Volume Summary (Static)</u> Length Calculations based on Centre-Centre <table><tr><td></td><td></td><td></td><td></td><td>Storage</td><td></td></tr><tr><td>Pipe</td><td>USMH</td><td>Manhole</td><td>Pipe</td><td>Structure</td><td>Total</td></tr><tr><td>Number</td><td>Name</td><td>Volume (m³)</td><td>Volume (m³)</td><td>Volume (m³)</td><td>Volume (m³)</td></tr><tr><td>S3.000</td><td>S1</td><td>0.550</td><td>0.842</td><td>0.000</td><td>1.392</td></tr><tr><td>S4.000</td><td>S7</td><td>0.550</td><td>0.639</td><td>0.000</td><td>1.189</td></tr><tr><td>S5.000</td><td>S4</td><td>0.550</td><td>0.528</td><td>0.000</td><td>1.078</td></tr><tr><td>S6.000</td><td>S5</td><td>0.550</td><td>0.729</td><td>0.000</td><td>1.279</td></tr><tr><td>S3.001</td><td>SP1</td><td>1.018</td><td>0.477</td><td>16.875</td><td>18.370</td></tr><tr><td>S3.002</td><td>S9</td><td>1.192</td><td>0.286</td><td>0.000</td><td>1.478</td></tr><tr><td>S3.003</td><td>SG1</td><td>2.205</td><td>0.226</td><td>95.032</td><td>97.463</td></tr><tr><td>S3.004</td><td>S4</td><td>2.187</td><td>0.850</td><td>0.000</td><td>3.037</td></tr><tr><td colspan="2">Total</td><td>8.802</td><td>4.578</td><td>111.907</td><td>125.286</td></tr></table>						Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	5.0	Membrane Percolation (mm/hr)	1000	Length (m)	25.0	Max Percolation (l/s)	34.7	Slope (1:X)	0.0	Safety Factor	2.0	Depression Storage (mm)	5	Porosity	0.30	Evaporation (mm/day)	3	Invert Level (m)	44.750	Cap Volume Depth (m)	0.450	Invert Level (m)	43.300	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)	0.000	100.0	100.0	1.001	0.0	140.0	1.000	100.0	140.0								Storage		Pipe	USMH	Manhole	Pipe	Structure	Total	Number	Name	Volume (m ³)	Volume (m ³)	Volume (m ³)	Volume (m ³)	S3.000	S1	0.550	0.842	0.000	1.392	S4.000	S7	0.550	0.639	0.000	1.189	S5.000	S4	0.550	0.528	0.000	1.078	S6.000	S5	0.550	0.729	0.000	1.279	S3.001	SP1	1.018	0.477	16.875	18.370	S3.002	S9	1.192	0.286	0.000	1.478	S3.003	SG1	2.205	0.226	95.032	97.463	S3.004	S4	2.187	0.850	0.000	3.037	Total		8.802	4.578	111.907	125.286
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0.000	100.0	100.0	1.001	0.0	140.0																																																																																																																														
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STM Environmental Consultants		Page 12
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14 File 63 KNOWSLEY STREET.MDX	Designed by Matthew Checked by	

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Volume Summary (Static)

Length Calculations based on True Length

Pipe Number	USMH Name	Manhole Volume (m³)	Pipe Volume (m³)	Storage Structure Volume (m³)	Total Volume (m³)
S3.000	S1	0.550	0.798	0.000	1.348
S4.000	S7	0.550	0.595	0.000	1.145
S5.000	S4	0.550	0.484	0.000	1.034
S6.000	S5	0.550	0.686	0.000	1.236
S3.001	SP1	1.018	0.430	16.875	18.322
S3.002	S9	1.192	0.238	0.000	1.430
S3.003	SG1	2.205	0.179	95.032	97.416
S3.004	S4	2.187	0.802	0.000	2.989
Total		8.802	4.212	111.907	124.920

STM Environmental Consultants		Page 13
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 15 minute 1 year Summer I+0% 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 Storage Structures 2
 Number of Online Controls 1 Number of Time/Area Diagrams 0
 Number of Offline Controls 0 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.357
 Region England and Wales Cv (Summer) 0.750
 M5-60 (mm) 18.200 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
 Analysis Timestep 2.5 Second Increment (Extended)
 DTS Status ON
 DVD Status ON
 Inertia Status ON

Profile(s)

Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 1, 30, 100
 Climate Change (%) 0, 0, 40

PN	US/MH Name	Storm Rank	Water		Surcharged		Flooded		Half Drain		Pipe	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap. (l/s)	Overflow (l/s)	Time (mins)	Flow (l/s)			
S3.000	S1	18	44.627	-0.198	0.000	0.03				1.4		OK
S4.000	S7	18	44.624	-0.201	0.000	0.02				1.3		OK
S5.000	S4	18	44.623	-0.202	0.000	0.02				1.5		OK
S6.000	S5	18	44.633	-0.192	0.000	0.05				2.6		OK
S3.001	SP1	20	44.372	-0.153	0.000	0.21			8	10.8		OK
S3.002	S9	20	44.240	-0.131	0.000	0.36				10.9		OK
S3.003	SG1	54	43.353	-0.172	0.000	0.01			336	0.2		OK
S3.004	S4	54	43.271	-0.220	0.000	0.00				0.2		OK

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STM Environmental Consultants		Page 14
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 30 minute 1 year Summer I+0% 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 Storage Structures 2
 Number of Online Controls 1 Number of Time/Area Diagrams 0
 Number of Offline Controls 0 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.357
 Region England and Wales Cv (Summer) 0.750
 M5-60 (mm) 18.200 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
 Analysis Timestep 2.5 Second Increment (Extended)
 DTS Status ON
 DVD Status ON
 Inertia Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 1, 30, 100
 Climate Change (%) 0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged			Flooded		Half Drain		Pipe	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap. (l/s)	Overflow (l/s)	Time (mins)	Flow (l/s)		
S3.000	S1	21	44.626	-0.199	0.000	0.03			1.3	OK	
S4.000	S7	21	44.623	-0.202	0.000	0.02			1.2	OK	
S5.000	S4	21	44.622	-0.203	0.000	0.02			1.4	OK	
S6.000	S5	21	44.631	-0.194	0.000	0.05			2.4	OK	
S3.001	SP1	22	44.368	-0.157	0.000	0.20		7	10.1	OK	
S3.002	S9	22	44.236	-0.135	0.000	0.34			10.0	OK	
S3.003	SG1	52	43.372	-0.153	0.000	0.01		373	0.2	OK	
S3.004	S4	52	43.272	-0.219	0.000	0.01			0.2	OK	

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STM Environmental Consultants		Page 15
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze	Network 2020.1	

Summary Wizard of 60 minute 1 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged			Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Overflow Cap. (l/s)				
S3.000	S1	27	44.623	-0.202	0.000	0.02		1.0	OK	
S4.000	S7	27	44.619	-0.206	0.000	0.02		0.9	OK	
S5.000	S4	27	44.617	-0.208	0.000	0.02		1.1	OK	
S6.000	S5	27	44.627	-0.198	0.000	0.04		1.9	OK	
S3.001	SP1	27	44.359	-0.166	0.000	0.16	10	7.9	OK	
S3.002	S9	27	44.224	-0.146	0.000	0.27		7.9	OK	
S3.003	SG1	50	43.393	-0.132	0.000	0.01	413	0.2	OK	
S3.004	S4	50	43.273	-0.219	0.000	0.01		0.2	OK	

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STM Environmental Consultants		Page 16
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 120 minute 1 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Profile(s)	Summer and Winter
Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged			Flooded		Half Drain		Pipe	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Overflow Cap. (l/s)	Time (mins)	Flow (l/s)			
S3.000	S1	32	44.617	-0.208	0.000	0.02			0.7	OK	
S4.000	S7	32	44.613	-0.212	0.000	0.01			0.6	OK	
S5.000	S4	32	44.612	-0.213	0.000	0.01			0.7	OK	
S6.000	S5	32	44.624	-0.201	0.000	0.02			1.3	OK	
S3.001	SP1	32	44.350	-0.175	0.000	0.11		17	5.6	OK	
S3.002	S9	32	44.211	-0.160	0.000	0.19			5.6	OK	
S3.003	SG1	48	43.415	-0.110	0.000	0.01		452	0.2	OK	
S3.004	S4	48	43.273	-0.218	0.000	0.01			0.2	OK	

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STM Environmental Consultants		Page 17
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 240 minute 1 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Half Drain		Pipe	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Overflow (l/s)	Time (mins)	Flow (l/s)	
S3.000	S1	39	44.611	-0.214	0.000	0.01		0.4	OK
S4.000	S7	39	44.608	-0.217	0.000	0.01		0.4	OK
S5.000	S4	39	44.608	-0.217	0.000	0.01		0.5	OK
S6.000	S5	39	44.617	-0.208	0.000	0.02		0.8	OK
S3.001	SP1	40	44.340	-0.185	0.000	0.07	34	3.7	OK
S3.002	S9	40	44.198	-0.173	0.000	0.12		3.7	OK
S3.003	SG1	46	43.436	-0.089	0.000	0.01	488	0.3	OK
S3.004	S4	46	43.274	-0.217	0.000	0.01		0.3	OK

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STM Environmental Consultants		Page 18
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 360 minute 1 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged			Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Overflow Cap. (l/s)				
S3.000	S1	43	44.609	-0.216	0.000	0.01		0.3	OK	
S4.000	S7	43	44.606	-0.219	0.000	0.01		0.3	OK	
S5.000	S4	43	44.606	-0.219	0.000	0.01		0.4	OK	
S6.000	S5	43	44.613	-0.212	0.000	0.01		0.6	OK	
S3.001	SP1	43	44.334	-0.191	0.000	0.06	46	2.8	OK	
S3.002	S9	43	44.192	-0.179	0.000	0.10		2.8	OK	
S3.003	SG1	44	43.445	-0.080	0.000	0.01	509	0.3	OK	
S3.004	S4	44	43.274	-0.217	0.000	0.01		0.3	OK	

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STM Environmental Consultants		Page 19
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 480 minute 1 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)					
S3.000	S1	45	44.607	-0.218	0.000	0.01			54	2.3	OK	
S4.000	S7	45	44.605	-0.220	0.000	0.00				0.3	OK	
S5.000	S4	45	44.605	-0.220	0.000	0.00				0.3	OK	
S6.000	S5	45	44.611	-0.214	0.000	0.01				0.5	OK	
S3.001	SP1	45	44.331	-0.194	0.000	0.05				2.3	OK	
S3.002	S9	45	44.187	-0.183	0.000	0.08				2.3	OK	
S3.003	SG1	43	43.450	-0.075	0.000	0.01			574	0.3	OK	
S3.004	S4	43	43.275	-0.217	0.000	0.01				0.3	OK	

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STM Environmental Consultants		Page 20
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 960 minute 1 year Summer I+0% 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 Storage Structures 2
 Number of Online Controls 1 Number of Time/Area Diagrams 0
 Number of Offline Controls 0 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.357
 Region England and Wales Cv (Summer) 0.750
 M5-60 (mm) 18.200 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
 Analysis Timestep 2.5 Second Increment (Extended)
 DTS Status ON
 DVD Status ON
 Inertia Status ON

Profile(s)

Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 1, 30, 100
 Climate Change (%) 0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged			Flooded		Half Drain		Pipe	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap. (l/s)	Overflow (l/s)	Time (mins)	Flow (l/s)		
S3.000	S1	51	44.604	-0.221	0.000	0.00			0.2	OK	
S4.000	S7	51	44.603	-0.222	0.000	0.00			0.2	OK	
S5.000	S4	51	44.603	-0.222	0.000	0.00			0.2	OK	
S6.000	S5	51	44.607	-0.218	0.000	0.01			0.3	OK	
S3.001	SP1	51	44.325	-0.200	0.000	0.03		77	1.4	OK	
S3.002	S9	51	44.177	-0.193	0.000	0.05			1.4	OK	
S3.003	SG1	40	43.460	-0.065	0.000	0.01		714	0.3	OK	
S3.004	S4	40	43.275	-0.216	0.000	0.01			0.3	OK	

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STM Environmental Consultants		Page 21
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze	Network 2020.1	

Summary Wizard of 1440 minute 1 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged			Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Overflow Cap. (l/s)				
S3.000	S1	52	44.603	-0.222	0.000	0.00		0.1	OK	
S4.000	S7	52	44.602	-0.223	0.000	0.00		0.1	OK	
S5.000	S4	52	44.602	-0.223	0.000	0.00		0.1	OK	
S6.000	S5	52	44.605	-0.220	0.000	0.00		0.2	OK	
S3.001	SP1	52	44.323	-0.202	0.000	0.02	89	1.1	OK	
S3.002	S9	52	44.173	-0.197	0.000	0.04		1.1	OK	
S3.003	SG1	39	43.461	-0.064	0.000	0.01	798	0.3	OK	
S3.004	S4	39	43.275	-0.216	0.000	0.01		0.3	OK	

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STM Environmental Consultants		Page 22
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 15 minute 30 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged			Flooded		Half Drain		Pipe	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap. (l/s)	Overflow (l/s)	Time (mins)	Flow (l/s)		
S3.000	S1	8	44.643	-0.182	0.000	0.08			3.4	OK	
S4.000	S7	8	44.636	-0.189	0.000	0.06			3.1	OK	
S5.000	S4	8	44.634	-0.191	0.000	0.06			3.7	OK	
S6.000	S5	8	44.653	-0.172	0.000	0.12			6.4	OK	
S3.001	SP1	7	44.426	-0.099	0.000	0.59		4	29.7	OK	
S3.002	S9	7	44.326	-0.044	0.000	0.98			29.4	OK	
S3.003	SG1	45	43.440	-0.085	0.000	0.01		494	0.3	OK	
S3.004	S4	45	43.274	-0.217	0.000	0.01			0.3	OK	

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STM Environmental Consultants		Page 23
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 30 minute 30 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged			Flooded		Half Drain		Pipe	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Overflow Cap. (l/s)	Time (mins)	Flow (l/s)			
S3.000	S1	9	44.641	-0.184	0.000	0.08			3.1	OK	
S4.000	S7	9	44.634	-0.191	0.000	0.06			2.9	OK	
S5.000	S4	9	44.632	-0.193	0.000	0.05			3.5	OK	
S6.000	S5	9	44.650	-0.175	0.000	0.11			5.9	OK	
S3.001	SP1	9	44.418	-0.107	0.000	0.53		6	26.7	OK	
S3.002	S9	9	44.312	-0.059	0.000	0.90			26.8	OK	
S3.003	SG1	34	43.487	-0.038	0.000	0.01		563	0.3	OK	
S3.004	S4	34	43.276	-0.216	0.000	0.01			0.3	OK	

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STM Environmental Consultants		Page 24
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 60 minute 30 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)					
S3.000	S1	12	44.635	-0.190	0.000	0.06			10	20.1	OK	
S4.000	S7	12	44.630	-0.195	0.000	0.04				2.2	OK	
S5.000	S4	12	44.628	-0.197	0.000	0.04				2.6	OK	
S6.000	S5	12	44.644	-0.181	0.000	0.09				4.5	OK	
S3.001	SP1	12	44.399	-0.126	0.000	0.40				20.1	OK	
S3.002	S9	12	44.281	-0.090	0.000	0.67				20.1	OK	
S3.003	SG1	32	43.537	0.012	0.000	0.01			627	0.4	SURCHARGED	
S3.004	S4	32	43.277	-0.214	0.000	0.01				0.4	OK	

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STM Environmental Consultants		Page 25
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 120 minute 30 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)					
S3.000	S1	16	44.628	-0.197	0.000	0.04			18	13.5	OK	
S4.000	S7	16	44.625	-0.200	0.000	0.03				1.5	OK	
S5.000	S4	16	44.624	-0.201	0.000	0.03				1.8	OK	
S6.000	S5	16	44.635	-0.190	0.000	0.06				3.0	OK	
S3.001	SP1	16	44.379	-0.146	0.000	0.27				13.5	OK	
S3.002	S9	16	44.251	-0.119	0.000	0.45				13.5	OK	
S3.003	SG1	29	43.587	0.062	0.000	0.01			687	0.4	SURCHARGED	
S3.004	S4	29	43.278	-0.213	0.000	0.01				0.4	OK	

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STM Environmental Consultants		Page 26
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze	Network 2020.1	

Summary Wizard of 240 minute 30 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)					
S3.000	S1	25	44.624	-0.201	0.000	0.02			32	8.5	OK	
S4.000	S7	25	44.619	-0.206	0.000	0.02				0.9	OK	
S5.000	S4	25	44.618	-0.207	0.000	0.02				1.1	OK	
S6.000	S5	25	44.628	-0.197	0.000	0.04				1.9	OK	
S3.001	SP1	25	44.362	-0.163	0.000	0.17				8.5	OK	
S3.002	S9	25	44.227	-0.144	0.000	0.28				8.5	OK	
S3.003	SG1	26	43.631	0.106	0.000	0.01			736	0.4	SURCHARGED	
S3.004	S4	26	43.279	-0.212	0.000	0.01				0.4	OK	

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STM Environmental Consultants		Page 27
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 360 minute 30 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)					
S3.000	S1	30	44.620	-0.205	0.000	0.02			46	6.3	OK	
S4.000	S7	30	44.614	-0.211	0.000	0.01			756	0.4	OK	
S5.000	S4	30	44.613	-0.212	0.000	0.01					OK	
S6.000	S5	30	44.625	-0.200	0.000	0.03					OK	
S3.001	SP1	30	44.353	-0.172	0.000	0.13					OK	
S3.002	S9	30	44.216	-0.155	0.000	0.21					OK	
S3.003	SG1	24	43.650	0.125	0.000	0.01					SURCHARGED	
S3.004	S4	24	43.279	-0.212	0.000	0.01					OK	

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STM Environmental Consultants		Page 28
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze	Network 2020.1	

Summary Wizard of 480 minute 30 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)					
S3.000	S1	34	44.616	-0.209	0.000	0.01				0.6	OK	
S4.000	S7	34	44.612	-0.213	0.000	0.01				0.6	OK	
S5.000	S4	34	44.611	-0.214	0.000	0.01				0.7	OK	
S6.000	S5	34	44.623	-0.202	0.000	0.02				1.2	OK	
S3.001	SP1	34	44.348	-0.177	0.000	0.10			59	5.1	OK	
S3.002	S9	34	44.208	-0.163	0.000	0.17				5.1	OK	
S3.003	SG1	23	43.660	0.135	0.000	0.01			767	0.4	SURCHARGED	
S3.004	S4	23	43.279	-0.212	0.000	0.01				0.4	OK	

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STM Environmental Consultants		Page 29
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 960 minute 30 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)					
S3.000	S1	41	44.609	-0.216	0.000	0.01				0.4	OK	
S4.000	S7	41	44.607	-0.218	0.000	0.01				0.3	OK	
S5.000	S4	41	44.606	-0.219	0.000	0.01				0.4	OK	
S6.000	S5	41	44.614	-0.211	0.000	0.01				0.7	OK	
S3.001	SP1	41	44.336	-0.189	0.000	0.06			114	3.0	OK	
S3.002	S9	41	44.193	-0.177	0.000	0.10				3.0	OK	
S3.003	SG1	21	43.669	0.144	0.000	0.02			946	0.5	SURCHARGED	
S3.004	S4	21	43.280	-0.212	0.000	0.01				0.5	OK	

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STM Environmental Consultants		Page 30
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze	Network 2020.1	

Summary Wizard of 1440 minute 30 year Summer I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)					
S3.000	S1	46	44.607	-0.218	0.000	0.01			153	2.2	OK	
S4.000	S7	46	44.605	-0.220	0.000	0.00				0.2	OK	
S5.000	S4	46	44.605	-0.220	0.000	0.00				0.3	OK	
S6.000	S5	46	44.610	-0.215	0.000	0.01				0.5	OK	
S3.001	SP1	46	44.330	-0.195	0.000	0.04				2.2	OK	
S3.002	S9	46	44.186	-0.185	0.000	0.07				2.2	OK	
S3.003	SG1	22	43.668	0.143	0.000	0.02			1060	0.5	SURCHARGED	
S3.004	S4	22	43.280	-0.212	0.000	0.01				0.5	OK	

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STM Environmental Consultants		Page 31
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 15 minute 100 year Summer I+40% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water		Surcharged		Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Overflow Cap. (l/s)					
S3.000	S1	2	44.658	-0.167	0.000	0.15			6.1	OK	
S4.000	S7	2	44.650	-0.175	0.000	0.11			5.6	OK	
S5.000	S4	2	44.648	-0.177	0.000	0.10			6.8	OK	
S6.000	S5	2	44.672	-0.153	0.000	0.22			11.7	OK	
S3.001	SP1	2	44.587	0.062	0.000	0.97		3	49.2	SURCHARGED	
S3.002	S9	2	44.440	0.069	0.000	1.63			48.7	SURCHARGED	
S3.003	SG1	31	43.560	0.035	0.000	0.01		656	0.4	SURCHARGED	
S3.004	S4	31	43.277	-0.214	0.000	0.01			0.4	OK	

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STM Environmental Consultants							Page 32																																																																																																				
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS																																																																																																											
Date 29/04/2022 11:14				Designed by Matthew																																																																																																							
File 63 KNOWSLEY STREET.MDX				Checked by																																																																																																							
Innovyze				Network 2020.1																																																																																																							
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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 Storage Structures 2 Number of Online Controls 1 Number of Time/Area Diagrams 0 Number of Offline Controls 0 Number of Real Time Controls 0																																																																																																											
Synthetic Rainfall Details Rainfall Model FSR Ratio R 0.357 Region England and Wales Cv (Summer) 0.750 M5-60 (mm) 18.200 Cv (Winter) 0.840 Margin for Flood Risk Warning (mm) 300.0 Analysis Timestep 2.5 Second Increment (Extended) DTS Status ON DVD Status ON Inertia Status ON Profile(s) Summer and Winter Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440 Return Period(s) (years) 1, 30, 100 Climate Change (%) 0, 0, 40																																																																																																											
<table><tr><th rowspan="2">PN</th><th rowspan="2">US/MH Name</th><th rowspan="2">Storm Rank</th><th>Water Level</th><th>Surcharged Depth</th><th>Flooded Volume</th><th>Flow / Overflow</th><th>Half Drain Time</th><th>Pipe Flow</th><th rowspan="2">Status</th></tr><tr><th>(m)</th><th>(m)</th><th>(m³)</th><th>Cap. (l/s)</th><th>(l/s)</th><th>(mins)</th><th>(l/s)</th></tr><tr><td>S3.000</td><td>S1</td><td>3</td><td>44.655</td><td>-0.170</td><td>0.000</td><td>0.14</td><td></td><td>5.7</td><td>OK</td></tr><tr><td>S4.000</td><td>S7</td><td>3</td><td>44.648</td><td>-0.177</td><td>0.000</td><td>0.10</td><td></td><td>5.2</td><td>OK</td></tr><tr><td>S5.000</td><td>S4</td><td>3</td><td>44.646</td><td>-0.179</td><td>0.000</td><td>0.09</td><td></td><td>6.3</td><td>OK</td></tr><tr><td>S6.000</td><td>S5</td><td>3</td><td>44.669</td><td>-0.156</td><td>0.000</td><td>0.21</td><td></td><td>10.8</td><td>OK</td></tr><tr><td>S3.001</td><td>SP1</td><td>3</td><td>44.557</td><td>0.032</td><td>0.000</td><td>0.90</td><td>4</td><td>45.5</td><td>SURCHARGED</td></tr><tr><td>S3.002</td><td>S9</td><td>3</td><td>44.425</td><td>0.054</td><td>0.000</td><td>1.53</td><td></td><td>45.9</td><td>SURCHARGED</td></tr><tr><td>S3.003</td><td>SG1</td><td>25</td><td>43.649</td><td>0.124</td><td>0.000</td><td>0.01</td><td>754</td><td>0.4</td><td>SURCHARGED</td></tr><tr><td>S3.004</td><td>S4</td><td>25</td><td>43.279</td><td>-0.212</td><td>0.000</td><td>0.01</td><td></td><td>0.4</td><td>OK</td></tr></table>											PN	US/MH Name	Storm Rank	Water Level	Surcharged Depth	Flooded Volume	Flow / Overflow	Half Drain Time	Pipe Flow	Status	(m)	(m)	(m³)	Cap. (l/s)	(l/s)	(mins)	(l/s)	S3.000	S1	3	44.655	-0.170	0.000	0.14		5.7	OK	S4.000	S7	3	44.648	-0.177	0.000	0.10		5.2	OK	S5.000	S4	3	44.646	-0.179	0.000	0.09		6.3	OK	S6.000	S5	3	44.669	-0.156	0.000	0.21		10.8	OK	S3.001	SP1	3	44.557	0.032	0.000	0.90	4	45.5	SURCHARGED	S3.002	S9	3	44.425	0.054	0.000	1.53		45.9	SURCHARGED	S3.003	SG1	25	43.649	0.124	0.000	0.01	754	0.4	SURCHARGED	S3.004	S4	25	43.279	-0.212	0.000	0.01		0.4	OK
PN	US/MH Name	Storm Rank	Water Level	Surcharged Depth	Flooded Volume	Flow / Overflow	Half Drain Time	Pipe Flow	Status																																																																																																		
			(m)	(m)	(m³)	Cap. (l/s)	(l/s)	(mins)		(l/s)																																																																																																	
S3.000	S1	3	44.655	-0.170	0.000	0.14		5.7	OK																																																																																																		
S4.000	S7	3	44.648	-0.177	0.000	0.10		5.2	OK																																																																																																		
S5.000	S4	3	44.646	-0.179	0.000	0.09		6.3	OK																																																																																																		
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STM Environmental Consultants		Page 33
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 60 minute 100 year Summer I+40% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water		Surcharged		Flooded		Half Drain		Pipe	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Overflow Cap. (l/s)	Time (mins)	Flow (l/s)				
S3.000	S1	5	44.649	-0.176	0.000	0.11			4.4		OK	
S4.000	S7	5	44.641	-0.184	0.000	0.08			4.0		OK	
S5.000	S4	5	44.639	-0.186	0.000	0.07			4.8		OK	
S6.000	S5	5	44.660	-0.165	0.000	0.16			8.3		OK	
S3.001	SP1	5	44.467	-0.058	0.000	0.73		4	36.6		OK	
S3.002	S9	5	44.385	0.014	0.000	1.22			36.5		SURCHARGED	
S3.003	SG1	14	43.744	0.219	0.000	0.02		847	0.5		SURCHARGED	
S3.004	S4	14	43.281	-0.210	0.000	0.01			0.5		OK	

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STM Environmental Consultants		Page 34
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze	Network 2020.1	

Summary Wizard of 120 minute 100 year Summer I+40% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)					
S3.000	S1	10	44.639	-0.186	0.000	0.07			3.0		OK	
S4.000	S7	10	44.633	-0.192	0.000	0.05			2.7		OK	
S5.000	S4	10	44.631	-0.194	0.000	0.05			3.3		OK	
S6.000	S5	10	44.649	-0.176	0.000	0.11			5.6		OK	
S3.001	SP1	10	44.412	-0.113	0.000	0.49			16	24.9	OK	
S3.002	S9	10	44.303	-0.068	0.000	0.83				24.9	OK	
S3.003	SG1	12	43.841	0.316	0.000	0.02			932	0.5	SURCHARGED	
S3.004	S4	12	43.282	-0.209	0.000	0.02				0.5	OK	

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STM Environmental Consultants		Page 35
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 240 minute 100 year Summer I+40% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)					
S3.000	S1	15	44.631	-0.194	0.000	0.05			34	15.6	OK	
S4.000	S7	15	44.626	-0.199	0.000	0.03				1.7	OK	
S5.000	S4	15	44.626	-0.199	0.000	0.03				2.1	OK	
S6.000	S5	15	44.638	-0.187	0.000	0.07				3.5	OK	
S3.001	SP1	15	44.386	-0.139	0.000	0.31				15.6	OK	
S3.002	S9	15	44.261	-0.110	0.000	0.52				15.6	OK	
S3.003	SG1	10	43.928	0.403	0.000	0.02			1003	0.6	SURCHARGED	
S3.004	S4	10	43.284	-0.208	0.000	0.02				0.6	OK	

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STM Environmental Consultants		Page 36
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze	Network 2020.1	

Summary Wizard of 360 minute 100 year Summer I+40% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)					
S3.000	S1	19	44.627	-0.198	0.000	0.03			48	11.6	OK	
S4.000	S7	19	44.624	-0.201	0.000	0.02				1.3	OK	
S5.000	S4	19	44.623	-0.202	0.000	0.02				1.5	OK	
S6.000	S5	19	44.632	-0.193	0.000	0.05				2.6	OK	
S3.001	SP1	18	44.373	-0.152	0.000	0.23				11.5	OK	
S3.002	S9	18	44.242	-0.128	0.000	0.39				1032	OK	
S3.003	SG1	9	43.967	0.442	0.000	0.02				0.6	SURCHARGED	
S3.004	S4	9	43.284	-0.207	0.000	0.02				0.6	OK	

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STM Environmental Consultants		Page 37
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 480 minute 100 year Summer I+40% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)					
S3.000	S1	24	44.624	-0.201	0.000	0.03			60	1.1	OK	
S4.000	S7	24	44.621	-0.204	0.000	0.02				1.0	OK	
S5.000	S4	24	44.619	-0.206	0.000	0.02				1.2	OK	
S6.000	S5	24	44.629	-0.196	0.000	0.04				2.1	OK	
S3.001	SP1	24	44.365	-0.160	0.000	0.18				9.3	OK	
S3.002	S9	24	44.231	-0.139	0.000	0.31				9.3	OK	
S3.003	SG1	8	43.989	0.464	0.000	0.02			1050	0.6	SURCHARGED	
S3.004	S4	8	43.284	-0.207	0.000	0.02				0.6	OK	

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STM Environmental Consultants		Page 38
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 960 minute 100 year Summer I+40% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)					
S3.000	S1	33	44.617	-0.208	0.000	0.02				0.6	OK	
S4.000	S7	33	44.612	-0.213	0.000	0.01				0.6	OK	
S5.000	S4	33	44.611	-0.214	0.000	0.01				0.7	OK	
S6.000	S5	33	44.623	-0.202	0.000	0.02				1.2	OK	
S3.001	SP1	33	44.349	-0.176	0.000	0.11			112	5.4	OK	
S3.002	S9	33	44.210	-0.161	0.000	0.18				5.4	OK	
S3.003	SG1	5	44.010	0.485	0.000	0.02			1184	0.6	SURCHARGED	
S3.004	S4	5	43.285	-0.207	0.000	0.02				0.6	OK	

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STM Environmental Consultants		Page 39
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 1440 minute 100 year Summer I+40% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water		Surcharged		Flooded		Half Drain		Pipe	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Overflow Cap. (l/s)	Time (mins)	Flow (l/s)				
S3.000	S1	37	44.612	-0.213	0.000	0.01				0.5		OK
S4.000	S7	37	44.609	-0.216	0.000	0.01				0.4		OK
S5.000	S4	37	44.608	-0.217	0.000	0.01				0.5		OK
S6.000	S5	37	44.618	-0.207	0.000	0.02				0.9		OK
S3.001	SP1	37	44.342	-0.183	0.000	0.08			182	4.0		OK
S3.002	S9	37	44.200	-0.171	0.000	0.13				4.0		OK
S3.003	SG1	7	44.008	0.483	0.000	0.02			1341	0.6	SURCHARGED	
S3.004	S4	7	43.285	-0.207	0.000	0.02				0.6		OK

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STM Environmental Consultants		Page 40
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 15 minute 1 year Winter I+0% 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 Storage Structures 2
 Number of Online Controls 1 Number of Time/Area Diagrams 0
 Number of Offline Controls 0 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.357
 Region England and Wales Cv (Summer) 0.750
 M5-60 (mm) 18.200 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
 Analysis Timestep 2.5 Second Increment (Extended)
 DTS Status ON
 DVD Status ON
 Inertia Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 1, 30, 100
 Climate Change (%) 0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged			Flooded		Half Drain		Pipe	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap. (l/s)	Overflow (l/s)	Time (mins)	Flow (l/s)		
S3.000	S1	17	44.627	-0.198	0.000	0.03			1.4	OK	
S4.000	S7	17	44.624	-0.201	0.000	0.03			1.3	OK	
S5.000	S4	17	44.623	-0.202	0.000	0.02			1.6	OK	
S6.000	S5	17	44.633	-0.192	0.000	0.05			2.7	OK	
S3.001	SP1	17	44.373	-0.152	0.000	0.23		7	11.4	OK	
S3.002	S9	17	44.242	-0.128	0.000	0.38			11.5	OK	
S3.003	SG1	53	43.361	-0.164	0.000	0.01		351	0.2	OK	
S3.004	S4	53	43.271	-0.220	0.000	0.00			0.2	OK	

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STM Environmental Consultants		Page 41
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 30 minute 1 year Winter I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Profile(s)	Summer and Winter
Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged			Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Overflow Cap. (l/s)				
S3.000	S1	23	44.625	-0.200	0.000	0.03		1.2	OK	
S4.000	S7	23	44.622	-0.203	0.000	0.02		1.1	OK	
S5.000	S4	23	44.620	-0.205	0.000	0.02		1.3	OK	
S6.000	S5	23	44.629	-0.196	0.000	0.04		2.2	OK	
S3.001	SP1	23	44.365	-0.160	0.000	0.19	9	9.3	OK	
S3.002	S9	23	44.232	-0.139	0.000	0.31		9.3	OK	
S3.003	SG1	51	43.381	-0.144	0.000	0.01	392	0.2	OK	
S3.004	S4	51	43.272	-0.219	0.000	0.01		0.2	OK	

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STM Environmental Consultants		Page 42
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 60 minute 1 year Winter I+0% 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 Storage Structures 2
 Number of Online Controls 1 Number of Time/Area Diagrams 0
 Number of Offline Controls 0 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.357
 Region England and Wales Cv (Summer) 0.750
 M5-60 (mm) 18.200 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
 Analysis Timestep 2.5 Second Increment (Extended)
 DTS Status ON
 DVD Status ON
 Inertia Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 1, 30, 100
 Climate Change (%) 0, 0, 40

PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Half Drain		Pipe	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Overflow (l/s)	Time (mins)	Flow (l/s)	
S3.000	S1	29	44.620	-0.205	0.000	0.02		0.8	OK
S4.000	S7	29	44.615	-0.210	0.000	0.01		0.7	OK
S5.000	S4	29	44.614	-0.211	0.000	0.01		0.9	OK
S6.000	S5	29	44.625	-0.200	0.000	0.03		1.5	OK
S3.001	SP1	29	44.354	-0.171	0.000	0.13	15	6.5	OK
S3.002	S9	29	44.217	-0.154	0.000	0.22		6.6	OK
S3.003	SG1	49	43.405	-0.120	0.000	0.01	435	0.2	OK
S3.004	S4	49	43.273	-0.218	0.000	0.01		0.2	OK

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STM Environmental Consultants		Page 43
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 120 minute 1 year Winter I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Half Drain		Pipe	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Overflow (l/s)	Time (mins)	Flow (l/s)	
S3.000	S1	36	44.613	-0.212	0.000	0.01		0.5	OK
S4.000	S7	36	44.610	-0.215	0.000	0.01		0.5	OK
S5.000	S4	36	44.609	-0.216	0.000	0.01		0.6	OK
S6.000	S5	36	44.620	-0.205	0.000	0.02		1.0	OK
S3.001	SP1	36	44.344	-0.181	0.000	0.08	28	4.3	OK
S3.002	S9	36	44.202	-0.169	0.000	0.14		4.3	OK
S3.003	SG1	47	43.430	-0.095	0.000	0.01	477	0.3	OK
S3.004	S4	47	43.274	-0.217	0.000	0.01		0.3	OK

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STM Environmental Consultants		Page 44
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 240 minute 1 year Winter I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)					
S3.000	S1	44	44.608	-0.217	0.000	0.01			53	2.7	OK	
S4.000	S7	44	44.606	-0.219	0.000	0.01				0.3	OK	
S5.000	S4	44	44.606	-0.219	0.000	0.01				0.4	OK	
S6.000	S5	44	44.613	-0.212	0.000	0.01				0.6	OK	
S3.001	SP1	44	44.333	-0.192	0.000	0.05				2.7	OK	
S3.002	S9	44	44.191	-0.180	0.000	0.09				2.7	OK	
S3.003	SG1	42	43.454	-0.071	0.000	0.01			517	0.3	OK	
S3.004	S4	42	43.275	-0.217	0.000	0.01				0.3	OK	

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STM Environmental Consultants		Page 45
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 360 minute 1 year Winter I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged			Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Overflow Cap. (l/s)				
S3.000	S1	48	44.606	-0.219	0.000	0.01		0.2	OK	
S4.000	S7	48	44.605	-0.220	0.000	0.00		0.2	OK	
S5.000	S4	48	44.604	-0.221	0.000	0.00		0.3	OK	
S6.000	S5	48	44.610	-0.215	0.000	0.01		0.5	OK	
S3.001	SP1	48	44.329	-0.196	0.000	0.04	71	2.1	OK	
S3.002	S9	48	44.184	-0.186	0.000	0.07		2.1	OK	
S3.003	SG1	38	43.466	-0.059	0.000	0.01	540	0.3	OK	
S3.004	S4	38	43.275	-0.216	0.000	0.01		0.3	OK	

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STM Environmental Consultants		Page 46
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 480 minute 1 year Winter I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Half Drain		Pipe	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Overflow (l/s)	Time (mins)	Flow (l/s)	
S3.000	S1	49	44.605	-0.220	0.000	0.00		0.2	OK
S4.000	S7	49	44.604	-0.221	0.000	0.00		0.2	OK
S5.000	S4	49	44.603	-0.222	0.000	0.00		0.2	OK
S6.000	S5	49	44.608	-0.217	0.000	0.01		0.4	OK
S3.001	SP1	49	44.327	-0.198	0.000	0.03	85	1.7	OK
S3.002	S9	49	44.180	-0.191	0.000	0.06		1.7	OK
S3.003	SG1	37	43.471	-0.054	0.000	0.01	558	0.3	OK
S3.004	S4	37	43.275	-0.216	0.000	0.01		0.3	OK

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STM Environmental Consultants		Page 47
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 960 minute 1 year Winter I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged			Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Overflow Cap. (l/s)				
S3.000	S1	53	44.603	-0.222	0.000	0.00		0.1	OK	
S4.000	S7	53	44.602	-0.223	0.000	0.00		0.1	OK	
S5.000	S4	53	44.602	-0.223	0.000	0.00		0.1	OK	
S6.000	S5	53	44.605	-0.220	0.000	0.00		0.2	OK	
S3.001	SP1	53	44.322	-0.203	0.000	0.02	120	1.0	OK	
S3.002	S9	53	44.173	-0.198	0.000	0.03		1.0	OK	
S3.003	SG1	35	43.479	-0.046	0.000	0.01	709	0.3	OK	
S3.004	S4	35	43.275	-0.216	0.000	0.01		0.3	OK	

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STM Environmental Consultants		Page 48
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 1440 minute 1 year Winter I+0% 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 Storage Structures 2
 Number of Online Controls 1 Number of Time/Area Diagrams 0
 Number of Offline Controls 0 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.357
 Region England and Wales Cv (Summer) 0.750
 M5-60 (mm) 18.200 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
 Analysis Timestep 2.5 Second Increment (Extended)
 DTS Status ON
 DVD Status ON
 Inertia Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 1, 30, 100
 Climate Change (%) 0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged Flooded			Half Drain		Pipe	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Overflow (l/s)	Time (mins)	Flow (l/s)	
S3.000	S1	54	44.602	-0.223	0.000	0.00		0.1	OK
S4.000	S7	54	44.602	-0.223	0.000	0.00		0.1	OK
S5.000	S4	54	44.602	-0.223	0.000	0.00		0.1	OK
S6.000	S5	54	44.604	-0.221	0.000	0.00		0.2	OK
S3.001	SP1	54	44.317	-0.208	0.000	0.02	163	0.8	OK
S3.002	S9	54	44.170	-0.201	0.000	0.03		0.8	OK
S3.003	SG1	36	43.478	-0.047	0.000	0.01	776	0.3	OK
S3.004	S4	36	43.275	-0.216	0.000	0.01		0.3	OK

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STM Environmental Consultants		Page 49
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 15 minute 30 year Winter I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged			Flooded		Flow / Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Cap.					
S3.000	S1	6	44.645	-0.180	0.000	0.09			3.5	OK	
S4.000	S7	6	44.637	-0.188	0.000	0.06			3.3	OK	
S5.000	S4	6	44.635	-0.190	0.000	0.06			3.9	OK	
S6.000	S5	6	44.654	-0.171	0.000	0.13			6.8	OK	
S3.001	SP1	6	44.428	-0.097	0.000	0.60		4	30.4	OK	
S3.002	S9	6	44.337	-0.034	0.000	1.00			29.9	OK	
S3.003	SG1	41	43.458	-0.067	0.000	0.01		521	0.3	OK	
S3.004	S4	41	43.275	-0.216	0.000	0.01			0.3	OK	

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STM Environmental Consultants		Page 50
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 30 minute 30 year Winter I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water Surcharged			Flooded		Half Drain		Pipe	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap. (l/s)	Overflow (l/s)	Time (mins)	Flow (l/s)		
S3.000	S1	11	44.638	-0.187	0.000	0.07			2.8	OK	
S4.000	S7	11	44.632	-0.193	0.000	0.05			2.6	OK	
S5.000	S4	11	44.631	-0.194	0.000	0.05			3.1	OK	
S6.000	S5	11	44.648	-0.177	0.000	0.10			5.4	OK	
S3.001	SP1	11	44.409	-0.116	0.000	0.47		9	23.9	OK	
S3.002	S9	11	44.298	-0.073	0.000	0.80			23.9	OK	
S3.003	SG1	33	43.511	-0.014	0.000	0.01		594	0.3	OK	
S3.004	S4	33	43.276	-0.215	0.000	0.01			0.3	OK	

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STM Environmental Consultants		Page 51
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 60 minute 30 year Winter I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)					
S3.000	S1	14	44.631	-0.194	0.000	0.05			16	16.1	OK	
S4.000	S7	14	44.627	-0.198	0.000	0.03				1.8	OK	
S5.000	S4	14	44.626	-0.199	0.000	0.03				2.1	OK	
S6.000	S5	14	44.639	-0.186	0.000	0.07				3.6	OK	
S3.001	SP1	14	44.387	-0.138	0.000	0.32				16.1	OK	
S3.002	S9	14	44.263	-0.107	0.000	0.54				16.1	OK	
S3.003	SG1	30	43.567	0.042	0.000	0.01			663	0.4	SURCHARGED	
S3.004	S4	30	43.277	-0.214	0.000	0.01				0.4	OK	

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STM Environmental Consultants		Page 52
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 120 minute 30 year Winter I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)					
S3.000	S1	22	44.625	-0.200	0.000	0.03			28	10.2	OK	
S4.000	S7	22	44.623	-0.202	0.000	0.02				1.1	OK	
S5.000	S4	22	44.621	-0.204	0.000	0.02				1.3	OK	
S6.000	S5	22	44.630	-0.195	0.000	0.04				2.3	OK	
S3.001	SP1	21	44.368	-0.157	0.000	0.20				10.2	OK	
S3.002	S9	21	44.236	-0.135	0.000	0.34				10.2	OK	
S3.003	SG1	27	43.623	0.098	0.000	0.01			727	0.4	SURCHARGED	
S3.004	S4	27	43.279	-0.213	0.000	0.01				0.4	OK	

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STM Environmental Consultants							Page 53			
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS										
Date 29/04/2022 11:14				Designed by Matthew						
File 63 KNOWSLEY STREET.MDX				Checked by						
Innovyze				Network 2020.1						
<u>Summary Wizard of 240 minute 30 year Winter I+0% for Storm</u>										
<u>Simulation Criteria</u>										
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 Storage Structures		2				
Number of Online Controls		1		Number of Time/Area Diagrams		0				
Number of Offline Controls		0		Number of Real Time Controls		0				
<u>Synthetic Rainfall Details</u>										
Rainfall Model		FSR		Ratio R		0.357				
Region		England and Wales		Cv (Summer)		0.750				
M5-60 (mm)		18.200		Cv (Winter)		0.840				
Margin for Flood Risk Warning (mm)						300.0				
Analysis Timestep		2.5		Second Increment (Extended)						
DTS Status						ON				
DVD Status						ON				
Inertia Status						ON				
Profile(s)						Summer and Winter				
Duration(s) (mins)		15, 30, 60, 120, 240, 360, 480, 960, 1440								
Return Period(s) (years)		1, 30, 100								
Climate Change (%)		0, 0, 40								

STM Environmental Consultants							Page 54																																																																																																															
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS																																																																																																																						
Date 29/04/2022 11:14 File 63 KNOWSLEY STREET.MDX				Designed by Matthew Checked by																																																																																																																		
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Summary Wizard of 360 minute 30 year Winter I+0% for Storm																																																																																																																						
Simulation Criteria Areal Reduction Factor 1.000 Hot Start (mins) 0 Hot Start Level (mm) 0 Manhole Headloss Coeff (Global) 0.500 Foul Sewage per hectare (l/s) 0.000 Additional Flow - % of Total Flow 0.000 MADD Factor * 10m³/ha Storage 2.000 Inlet Coeffiecient 0.800 Flow per Person per Day (l/per/day) 0.000 Number of Input Hydrographs 0 Number of Online Controls 1 Number of Offline Controls 0 Number of Storage Structures 2 Number of Time/Area Diagrams 0 Number of Real Time Controls 0																																																																																																																						
Synthetic Rainfall Details Rainfall Model FSR Region England and Wales Cv (Summer) 0.750 M5-60 (mm) 18.200 Ratio R 0.357 Cv (Winter) 0.840 Margin for Flood Risk Warning (mm) 300.0 Analysis Timestep 2.5 Second Increment (Extended) DTS Status ON DVD Status ON Inertia Status ON Profile(s) Summer and Winter Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440 Return Period(s) (years) 1, 30, 100 Climate Change (%) 0, 0, 40																																																																																																																						
<table><tr><th></th><th>US/MH</th><th>Storm</th><th>Water Level</th><th>Surcharged Depth</th><th>Flooded Volume</th><th>Flow / Overflow</th><th>Half Drain Time</th><th>Pipe Flow</th><th></th></tr><tr><th>PN</th><th>Name</th><th>Rank</th><th>(m)</th><th>(m)</th><th>(m³)</th><th>Cap.</th><th>(l/s)</th><th>(mins)</th><th>(l/s)</th><th>Status</th></tr><tr><td>S3.000</td><td>S1</td><td>35</td><td>44.614</td><td>-0.211</td><td>0.000</td><td>0.01</td><td></td><td></td><td>0.5</td><td>OK</td></tr><tr><td>S4.000</td><td>S7</td><td>35</td><td>44.610</td><td>-0.215</td><td>0.000</td><td>0.01</td><td></td><td></td><td>0.5</td><td>OK</td></tr><tr><td>S5.000</td><td>S4</td><td>35</td><td>44.609</td><td>-0.216</td><td>0.000</td><td>0.01</td><td></td><td></td><td>0.6</td><td>OK</td></tr><tr><td>S6.000</td><td>S5</td><td>35</td><td>44.621</td><td>-0.204</td><td>0.000</td><td>0.02</td><td></td><td></td><td>1.0</td><td>OK</td></tr><tr><td>S3.001</td><td>SP1</td><td>35</td><td>44.346</td><td>-0.179</td><td>0.000</td><td>0.09</td><td></td><td>78</td><td>4.6</td><td>OK</td></tr><tr><td>S3.002</td><td>S9</td><td>35</td><td>44.204</td><td>-0.167</td><td>0.000</td><td>0.15</td><td></td><td></td><td>4.6</td><td>OK</td></tr><tr><td>S3.003</td><td>SG1</td><td>18</td><td>43.698</td><td>0.173</td><td>0.000</td><td>0.02</td><td></td><td>807</td><td>0.5</td><td>SURCHARGED</td></tr><tr><td>S3.004</td><td>S4</td><td>18</td><td>43.280</td><td>-0.211</td><td>0.000</td><td>0.01</td><td></td><td></td><td>0.5</td><td>OK</td></tr></table>											US/MH	Storm	Water Level	Surcharged Depth	Flooded Volume	Flow / Overflow	Half Drain Time	Pipe Flow		PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(mins)	(l/s)	Status	S3.000	S1	35	44.614	-0.211	0.000	0.01			0.5	OK	S4.000	S7	35	44.610	-0.215	0.000	0.01			0.5	OK	S5.000	S4	35	44.609	-0.216	0.000	0.01			0.6	OK	S6.000	S5	35	44.621	-0.204	0.000	0.02			1.0	OK	S3.001	SP1	35	44.346	-0.179	0.000	0.09		78	4.6	OK	S3.002	S9	35	44.204	-0.167	0.000	0.15			4.6	OK	S3.003	SG1	18	43.698	0.173	0.000	0.02		807	0.5	SURCHARGED	S3.004	S4	18	43.280	-0.211	0.000	0.01			0.5	OK
	US/MH	Storm	Water Level	Surcharged Depth	Flooded Volume	Flow / Overflow	Half Drain Time	Pipe Flow																																																																																																														
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(mins)	(l/s)	Status																																																																																																												
S3.000	S1	35	44.614	-0.211	0.000	0.01			0.5	OK																																																																																																												
S4.000	S7	35	44.610	-0.215	0.000	0.01			0.5	OK																																																																																																												
S5.000	S4	35	44.609	-0.216	0.000	0.01			0.6	OK																																																																																																												
S6.000	S5	35	44.621	-0.204	0.000	0.02			1.0	OK																																																																																																												
S3.001	SP1	35	44.346	-0.179	0.000	0.09		78	4.6	OK																																																																																																												
S3.002	S9	35	44.204	-0.167	0.000	0.15			4.6	OK																																																																																																												
S3.003	SG1	18	43.698	0.173	0.000	0.02		807	0.5	SURCHARGED																																																																																																												
S3.004	S4	18	43.280	-0.211	0.000	0.01			0.5	OK																																																																																																												
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STM Environmental Consultants		Page 55
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze	Network 2020.1	

Summary Wizard of 480 minute 30 year Winter I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)					
S3.000	S1	40	44.611	-0.214	0.000	0.01				0.4	OK	
S4.000	S7	40	44.608	-0.217	0.000	0.01				0.4	OK	
S5.000	S4	40	44.608	-0.217	0.000	0.01				0.5	OK	
S6.000	S5	40	44.617	-0.208	0.000	0.02				0.8	OK	
S3.001	SP1	39	44.340	-0.185	0.000	0.07			110	3.7	OK	
S3.002	S9	39	44.198	-0.173	0.000	0.12				3.7	OK	
S3.003	SG1	17	43.710	0.185	0.000	0.02			823	0.5	SURCHARGED	
S3.004	S4	17	43.280	-0.211	0.000	0.01				0.5	OK	

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STM Environmental Consultants		Page 56
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze	Network 2020.1	

Summary Wizard of 960 minute 30 year Winter I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)					
S3.000	S1	47	44.607	-0.218	0.000	0.01			184	2.2	OK	
S4.000	S7	47	44.605	-0.220	0.000	0.00				0.2	OK	
S5.000	S4	47	44.605	-0.220	0.000	0.00				0.3	OK	
S6.000	S5	47	44.610	-0.215	0.000	0.01				0.5	OK	
S3.001	SP1	47	44.330	-0.195	0.000	0.04				2.2	OK	
S3.002	S9	47	44.186	-0.185	0.000	0.07				2.2	OK	
S3.003	SG1	15	43.719	0.194	0.000	0.02			972	0.5	SURCHARGED	
S3.004	S4	15	43.280	-0.211	0.000	0.01				0.5	OK	

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STM Environmental Consultants		Page 57
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 1440 minute 30 year Winter I+0% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)					
S3.000	S1	50	44.605	-0.220	0.000	0.00			252	1.6	OK	
S4.000	S7	50	44.604	-0.221	0.000	0.00				0.2	OK	
S5.000	S4	50	44.603	-0.222	0.000	0.00				0.2	OK	
S6.000	S5	50	44.607	-0.218	0.000	0.01				0.4	OK	
S3.001	SP1	50	44.326	-0.199	0.000	0.03				1.6	OK	
S3.002	S9	50	44.179	-0.192	0.000	0.05				1.6	OK	
S3.003	SG1	16	43.714	0.189	0.000	0.02			1057	0.5	SURCHARGED	
S3.004	S4	16	43.280	-0.211	0.000	0.01				0.5	OK	

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STM Environmental Consultants		Page 58
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 15 minute 100 year Winter I+40% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)					
S3.000	S1	1	44.660	-0.165	0.000	0.15			6.4		OK	
S4.000	S7	1	44.651	-0.174	0.000	0.11			5.9		OK	
S5.000	S4	1	44.649	-0.176	0.000	0.10			7.1		OK	
S6.000	S5	1	44.674	-0.151	0.000	0.23			12.2		OK	
S3.001	SP1	1	44.603	0.078	0.000	1.00			3	50.4	SURCHARGED	
S3.002	S9	1	44.447	0.076	0.000	1.67				49.9	SURCHARGED	
S3.003	SG1	28	43.592	0.067	0.000	0.01			693	0.4	SURCHARGED	
S3.004	S4	28	43.278	-0.213	0.000	0.01				0.4	OK	

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STM Environmental Consultants							Page 59																																																																																																							
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS																																																																																																														
Date 29/04/2022 11:14				Designed by Matthew																																																																																																										
File 63 KNOWSLEY STREET.MDX				Checked by																																																																																																										
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Summary Wizard of 30 minute 100 year Winter I+40% for Storm																																																																																																														
Simulation Criteria Areal Reduction Factor 1.000 Hot Start (mins) 0 Hot Start Level (mm) 0 Manhole Headloss Coeff (Global) 0.500 Foul Sewage per hectare (l/s) 0.000 Additional Flow - % of Total Flow 0.000 MADD Factor * 10m³/ha Storage 2.000 Inlet Coeffiecient 0.800 Flow per Person per Day (l/per/day) 0.000																																																																																																														
Number of Input Hydrographs 0 Number of Storage Structures 2 Number of Online Controls 1 Number of Time/Area Diagrams 0 Number of Offline Controls 0 Number of Real Time Controls 0																																																																																																														
Synthetic Rainfall Details Rainfall Model FSR Region England and Wales Cv (Summer) 0.750 M5-60 (mm) 18.200 Ratio R 0.357 Cv (Winter) 0.840																																																																																																														
Margin for Flood Risk Warning (mm) 300.0 Analysis Timestep 2.5 Second Increment (Extended) DTS Status ON DVD Status ON Inertia Status ON																																																																																																														
Profile(s) Summer and Winter Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440 Return Period(s) (years) 1, 30, 100 Climate Change (%) 0, 0, 40																																																																																																														
<table><tr><th></th><th></th><th></th><th>Water Level</th><th>Surcharged Depth</th><th>Flooded Volume</th><th>Flow / Overflow</th><th>Half Drain Time</th><th>Pipe Flow</th><th></th></tr><tr><th>PN</th><th>US/MH Name</th><th>Storm Rank</th><th>(m)</th><th>(m)</th><th>(m³)</th><th>Cap. (l/s)</th><th>(mins)</th><th>(l/s)</th><th>Status</th></tr><tr><td>S3.000</td><td>S1</td><td>4</td><td>44.653</td><td>-0.172</td><td>0.000</td><td>0.13</td><td></td><td>5.2</td><td>OK</td></tr><tr><td>S4.000</td><td>S7</td><td>4</td><td>44.646</td><td>-0.179</td><td>0.000</td><td>0.09</td><td></td><td>4.7</td><td>OK</td></tr><tr><td>S5.000</td><td>S4</td><td>4</td><td>44.643</td><td>-0.182</td><td>0.000</td><td>0.08</td><td></td><td>5.7</td><td>OK</td></tr><tr><td>S6.000</td><td>S5</td><td>4</td><td>44.666</td><td>-0.159</td><td>0.000</td><td>0.19</td><td></td><td>9.8</td><td>OK</td></tr><tr><td>S3.001</td><td>SP1</td><td>4</td><td>44.522</td><td>-0.003</td><td>0.000</td><td>0.84</td><td>4</td><td>42.2</td><td>OK</td></tr><tr><td>S3.002</td><td>S9</td><td>4</td><td>44.407</td><td>0.036</td><td>0.000</td><td>1.40</td><td></td><td>42.0</td><td>SURCHARGED</td></tr><tr><td>S3.003</td><td>SG1</td><td>19</td><td>43.692</td><td>0.167</td><td>0.000</td><td>0.02</td><td>797</td><td>0.5</td><td>SURCHARGED</td></tr><tr><td>S3.004</td><td>S4</td><td>19</td><td>43.280</td><td>-0.211</td><td>0.000</td><td>0.01</td><td></td><td>0.5</td><td>OK</td></tr></table>														Water Level	Surcharged Depth	Flooded Volume	Flow / Overflow	Half Drain Time	Pipe Flow		PN	US/MH Name	Storm Rank	(m)	(m)	(m³)	Cap. (l/s)	(mins)	(l/s)	Status	S3.000	S1	4	44.653	-0.172	0.000	0.13		5.2	OK	S4.000	S7	4	44.646	-0.179	0.000	0.09		4.7	OK	S5.000	S4	4	44.643	-0.182	0.000	0.08		5.7	OK	S6.000	S5	4	44.666	-0.159	0.000	0.19		9.8	OK	S3.001	SP1	4	44.522	-0.003	0.000	0.84	4	42.2	OK	S3.002	S9	4	44.407	0.036	0.000	1.40		42.0	SURCHARGED	S3.003	SG1	19	43.692	0.167	0.000	0.02	797	0.5	SURCHARGED	S3.004	S4	19	43.280	-0.211	0.000	0.01		0.5	OK
			Water Level	Surcharged Depth	Flooded Volume	Flow / Overflow	Half Drain Time	Pipe Flow																																																																																																						
PN	US/MH Name	Storm Rank	(m)	(m)	(m³)	Cap. (l/s)	(mins)	(l/s)	Status																																																																																																					
S3.000	S1	4	44.653	-0.172	0.000	0.13		5.2	OK																																																																																																					
S4.000	S7	4	44.646	-0.179	0.000	0.09		4.7	OK																																																																																																					
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S3.001	SP1	4	44.522	-0.003	0.000	0.84	4	42.2	OK																																																																																																					
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STM Environmental Consultants		Page 60
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze	Network 2020.1	

Summary Wizard of 60 minute 100 year Winter I+40% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)					
S3.000	S1	7	44.644	-0.181	0.000	0.09			3.5		OK	
S4.000	S7	7	44.636	-0.189	0.000	0.06			3.2		OK	
S5.000	S4	7	44.635	-0.190	0.000	0.06			3.9		OK	
S6.000	S5	7	44.653	-0.172	0.000	0.13			6.7		OK	
S3.001	SP1	8	44.424	-0.101	0.000	0.59			12	29.7	OK	
S3.002	S9	8	44.325	-0.046	0.000	0.99				29.7	OK	
S3.003	SG1	13	43.799	0.274	0.000	0.02			896	0.5	SURCHARGED	
S3.004	S4	13	43.282	-0.210	0.000	0.01				0.5	OK	

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STM Environmental Consultants		Page 61
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze	Network 2020.1	

Summary Wizard of 120 minute 100 year Winter I+40% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)					
S3.000	S1	13	44.634	-0.191	0.000	0.05			29	18.7	OK	
S4.000	S7	13	44.629	-0.196	0.000	0.04				2.1	OK	
S5.000	S4	13	44.628	-0.197	0.000	0.04				2.5	OK	
S6.000	S5	13	44.643	-0.182	0.000	0.08				4.2	OK	
S3.001	SP1	13	44.395	-0.130	0.000	0.37				18.8	OK	
S3.002	S9	13	44.275	-0.096	0.000	0.63				988	OK	
S3.003	SG1	11	43.909	0.384	0.000	0.02				0.6	SURCHARGED	
S3.004	S4	11	43.283	-0.208	0.000	0.02				0.6	OK	

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STM Environmental Consultants		Page 62
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze	Network 2020.1	

Summary Wizard of 240 minute 100 year Winter I+40% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)					
S3.000	S1	20	44.626	-0.199	0.000	0.03			55	11.4	OK	
S4.000	S7	20	44.623	-0.202	0.000	0.02				1.2	OK	
S5.000	S4	20	44.623	-0.202	0.000	0.02				1.5	OK	
S6.000	S5	20	44.632	-0.193	0.000	0.05				2.6	OK	
S3.001	SP1	19	44.372	-0.153	0.000	0.23				11.4	OK	
S3.002	S9	19	44.242	-0.129	0.000	0.38				11.4	OK	
S3.003	SG1	6	44.008	0.483	0.000	0.02			1064	0.6	SURCHARGED	
S3.004	S4	6	43.285	-0.207	0.000	0.02				0.6	OK	

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STM Environmental Consultants		Page 63
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 360 minute 100 year Winter I+40% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)					
S3.000	S1	26	44.624	-0.201	0.000	0.02			79	8.3	OK	
S4.000	S7	26	44.619	-0.206	0.000	0.02				0.9	OK	
S5.000	S4	26	44.617	-0.208	0.000	0.02				1.1	OK	
S6.000	S5	26	44.628	-0.197	0.000	0.04				1.9	OK	
S3.001	SP1	26	44.361	-0.164	0.000	0.17				8.3	OK	
S3.002	S9	26	44.226	-0.144	0.000	0.28				8.3	OK	
S3.003	SG1	4	44.054	0.529	0.000	0.02			1098	0.7	SURCHARGED	
S3.004	S4	4	43.285	-0.206	0.000	0.02				0.7	OK	

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STM Environmental Consultants		Page 64
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 480 minute 100 year Winter I+40% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)					
S3.000	S1	28	44.621	-0.204	0.000	0.02			104	6.7	OK	
S4.000	S7	28	44.615	-0.210	0.000	0.01				0.7	OK	
S5.000	S4	28	44.614	-0.211	0.000	0.01				0.9	OK	
S6.000	S5	28	44.625	-0.200	0.000	0.03				1.5	OK	
S3.001	SP1	28	44.354	-0.171	0.000	0.13				6.7	OK	
S3.002	S9	28	44.218	-0.153	0.000	0.22				6.7	OK	
S3.003	SG1	3	44.082	0.557	0.000	0.02			1120	0.7	SURCHARGED	
S3.004	S4	3	43.286	-0.206	0.000	0.02				0.7	OK	

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STM Environmental Consultants		Page 65
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze		Network 2020.1

Summary Wizard of 960 minute 100 year Winter I+40% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)					
S3.000	S1	38	44.612	-0.213	0.000	0.01			209	3.9	OK	
S4.000	S7	38	44.609	-0.216	0.000	0.01				0.4	OK	
S5.000	S4	38	44.608	-0.217	0.000	0.01				0.5	OK	
S6.000	S5	38	44.618	-0.207	0.000	0.02				0.9	OK	
S3.001	SP1	38	44.341	-0.184	0.000	0.08				3.9	OK	
S3.002	S9	38	44.200	-0.171	0.000	0.13				3.9	OK	
S3.003	SG1	1	44.112	0.587	0.000	0.02			1169	0.7	SURCHARGED	
S3.004	S4	1	43.286	-0.205	0.000	0.02				0.7	OK	

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STM Environmental Consultants		Page 66
Unit 6, Crane Mews 32 Gould Road, Twickenham London, TW2 6RS		
Date 29/04/2022 11:14	Designed by Matthew	
File 63 KNOWSLEY STREET.MDX	Checked by	
Innovyze	Network 2020.1	

Summary Wizard of 1440 minute 100 year Winter I+40% for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /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 Storage Structures	2
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.357
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.200	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm Rank	Water			Surcharged		Flooded		Half Drain Time (mins)	Pipe Flow (l/s)	Status
			Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)					
S3.000	S1	42	44.609	-0.216	0.000	0.01			303	2.9	OK	
S4.000	S7	42	44.606	-0.219	0.000	0.01				0.3	OK	
S5.000	S4	42	44.606	-0.219	0.000	0.01				0.4	OK	
S6.000	S5	42	44.613	-0.212	0.000	0.01				0.6	OK	
S3.001	SP1	42	44.334	-0.191	0.000	0.06				2.9	OK	
S3.002	S9	42	44.192	-0.178	0.000	0.10				2.9	OK	
S3.003	SG1	2	44.104	0.579	0.000	0.02			1366	0.7	SURCHARGED	
S3.004	S4	2	43.286	-0.205	0.000	0.02				0.7	OK	

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