

Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	2	Maximum Rainfall (mm/hr)	50.0
Additional Flow (%)	0	Minimum Velocity (m/s)	1.00
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	20.000	Minimum Backdrop Height (m)	0.200
Ratio-R	0.400	Preferred Cover Depth (m)	1.500
CV	0.750	Include Intermediate Ground	✓
Time of Entry (mins)	5.00	Enforce best practice design rules	✓

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
1	0.124	5.00	115.950	1200	443743.859	296074.961	1.800
2	0.156	5.00	115.400	1200	443743.445	296126.143	1.820
3	0.066	5.00	115.080	1200	443732.554	296151.384	1.800
4	0.009	5.00	115.080	1350	443728.730	296163.631	1.990
5	0.155	5.00	114.800	1350	443728.778	296175.909	1.950
6	0.082	5.00	114.170	1350	443731.984	296200.847	1.970
7	0.178	5.00	113.530	1350	443729.354	296225.960	2.025
8	0.126	5.00	112.870	1350	443726.704	296251.583	1.800
10	0.056	5.00	111.650	1500	443720.884	296301.239	1.250
11	0.078	5.00	112.080	1500	443685.154	296304.224	1.730
12	0.000	5.00	112.000	1500	443670.604	296301.948	1.700
13	0.000	5.00	112.000	1500	443651.516	296293.386	1.740
WEST	0.828	5.00	112.000	1500	443627.238	296287.156	1.600
14			112.000	1500	443641.111	296294.639	1.750
15	0.000	5.00	112.000	1800	443641.061	296304.240	1.800
16	0.000	5.00	111.200	1800	443683.563	296322.703	1.200

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.000	1	2	51.184	0.600	114.150	113.580	0.570	89.8	300	5.51	50.0
1.001	2	3	27.490	0.600	113.580	113.280	0.300	91.6	300	5.79	50.0
1.002	3	4	12.830	0.600	113.280	113.240	0.040	320.8	300	6.04	50.0
1.003	4	5	12.278	0.600	113.090	112.850	0.240	51.2	450	6.11	50.0
1.004	5	6	25.143	0.600	112.850	112.200	0.650	38.7	450	6.24	50.0
1.005	6	7	25.250	0.600	112.200	111.505	0.695	36.3	450	6.36	50.0
1.006	7	8	25.760	0.600	111.505	111.070	0.435	59.2	450	6.52	50.0
1.007	8	10	49.996	0.600	111.070	110.550	0.520	96.1	450	6.93	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
1.000	1.660	117.3	16.8	1.500	1.520	0.124	0.0	76	1.190
1.001	1.643	116.1	37.9	1.520	1.500	0.280	0.0	117	1.473
1.002	0.872	61.7	46.9	1.500	1.540	0.346	0.0	196	0.957
1.003	2.847	452.8	48.1	1.540	1.500	0.355	0.0	98	1.880
1.004	3.276	521.1	69.1	1.500	1.520	0.510	0.0	109	2.301
1.005	3.381	537.7	80.2	1.520	1.575	0.592	0.0	116	2.457
1.006	2.645	420.7	104.4	1.575	1.350	0.770	0.0	152	2.208
1.007	2.073	329.7	121.4	1.350	0.650	0.896	0.0	189	1.921

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.008	10	11	35.854	0.600	110.400	110.350	0.050	717.1	600	7.59	50.0
1.009	11	12	14.727	0.600	110.350	110.300	0.050	294.5	600	7.76	50.0
1.010	12	13	20.920	0.600	110.300	110.260	0.040	523.0	600	8.09	50.0
1.011	13	14	10.480	0.600	110.260	110.250	0.010	1048.0	600	8.33	50.0
2.000	WEST	14	15.762	0.600	110.400	110.250	0.150	105.1	600	5.11	50.0
1.012	14	15	9.601	0.600	110.250	110.200	0.050	192.0	600	8.42	50.0
1.013	15	16	46.339	0.600	110.200	110.000	0.200	231.7	600	8.90	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
1.008	0.901	254.9	129.0	0.650	1.130	0.952	0.0	302	0.904
1.009	1.413	399.6	139.6	1.130	1.100	1.030	0.0	244	1.293
1.010	1.058	299.0	139.6	1.100	1.140	1.030	0.0	288	1.040
1.011	0.744	210.3	139.6	1.140	1.150	1.030	0.0	358	0.793
2.000	2.375	671.5	112.2	1.000	1.150	0.828	0.0	164	1.783
1.012	1.754	495.8	251.8	1.150	1.200	1.858	0.0	303	1.760
1.013	1.595	451.1	251.8	1.200	0.600	1.858	0.0	321	1.637

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
1.000	51.184	89.8	300	Pipe	115.950	114.150	1.500	115.400	113.580	1.520
1.001	27.490	91.6	300	Pipe	115.400	113.580	1.520	115.080	113.280	1.500
1.002	12.830	320.8	300	Pipe	115.080	113.280	1.500	115.080	113.240	1.540
1.003	12.278	51.2	450	Pipe	115.080	113.090	1.540	114.800	112.850	1.500
1.004	25.143	38.7	450	Pipe	114.800	112.850	1.500	114.170	112.200	1.520
1.005	25.250	36.3	450	Pipe	114.170	112.200	1.520	113.530	111.505	1.575
1.006	25.760	59.2	450	Pipe	113.530	111.505	1.575	112.870	111.070	1.350
1.007	49.996	96.1	450	Pipe	112.870	111.070	1.350	111.650	110.550	0.650
1.008	35.854	717.1	600	Pipe	111.650	110.400	0.650	112.080	110.350	1.130
1.009	14.727	294.5	600	Pipe	112.080	110.350	1.130	112.000	110.300	1.100
1.010	20.920	523.0	600	Pipe	112.000	110.300	1.100	112.000	110.260	1.140
1.011	10.480	1048.0	600	Pipe	112.000	110.260	1.140	112.000	110.250	1.150
2.000	15.762	105.1	600	Pipe	112.000	110.400	1.000	112.000	110.250	1.150

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	1	1200	Manhole	Adoptable	2	1200	Manhole	Adoptable
1.001	2	1200	Manhole	Adoptable	3	1200	Manhole	Adoptable
1.002	3	1200	Manhole	Adoptable	4	1350	Manhole	Adoptable
1.003	4	1350	Manhole	Adoptable	5	1350	Manhole	Adoptable
1.004	5	1350	Manhole	Adoptable	6	1350	Manhole	Adoptable
1.005	6	1350	Manhole	Adoptable	7	1350	Manhole	Adoptable
1.006	7	1350	Manhole	Adoptable	8	1350	Manhole	Adoptable
1.007	8	1350	Manhole	Adoptable	10	1500	Manhole	Adoptable
1.008	10	1500	Manhole	Adoptable	11	1500	Manhole	Adoptable
1.009	11	1500	Manhole	Adoptable	12	1500	Manhole	Adoptable
1.010	12	1500	Manhole	Adoptable	13	1500	Manhole	Adoptable
1.011	13	1500	Manhole	Adoptable	14	1500	Manhole	Adoptable
2.000	WEST	1500	Manhole	Adoptable	14	1500	Manhole	Adoptable

Pipeline Schedule

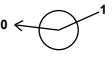
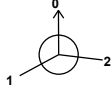
Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
1.012	9.601	192.0	600	Pipe	112.000	110.250	1.150	112.000	110.200	1.200
1.013	46.339	231.7	600	Pipe	112.000	110.200	1.200	111.200	110.000	0.600

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.012	14	1500	Manhole	Adoptable	15	1800	Manhole	Adoptable
1.013	15	1800	Manhole	Adoptable	16	1800	Manhole	Adoptable

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
1	443743.859	296074.961	115.950	1.800	1200				
						0	1.000	114.150	300
2	443743.445	296126.143	115.400	1.820	1200				
						0	1.001	113.580	300
3	443732.554	296151.384	115.080	1.800	1200				
						0	1.002	113.280	300
4	443728.730	296163.631	115.080	1.990	1350				
						0	1.003	113.090	450
5	443728.778	296175.909	114.800	1.950	1350				
						0	1.004	112.850	450
6	443731.984	296200.847	114.170	1.970	1350				
						0	1.005	112.200	450
7	443729.354	296225.960	113.530	2.025	1350				
						0	1.006	111.505	450
8	443726.704	296251.583	112.870	1.800	1350				
						0	1.007	111.070	450
10	443720.884	296301.239	111.650	1.250	1500				
						0	1.008	110.400	600
11	443685.154	296304.224	112.080	1.730	1500				
						0	1.009	110.350	600

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
12	443670.604	296301.948	112.000	1.700	1500		1.009	110.300	600
						0	1.010	110.300	600
13	443651.516	296293.386	112.000	1.740	1500		1.010	110.260	600
						0	1.011	110.260	600
WEST	443627.238	296287.156	112.000	1.600	1500				
						0	2.000	110.400	600
14	443641.111	296294.639	112.000	1.750	1500		1.011	110.250	600
						0	1.012	110.250	600
15	443641.061	296304.240	112.000	1.800	1800		1.012	110.200	600
						0	1.013	110.200	600
16	443683.563	296322.703	111.200	1.200	1800		1.013	110.000	600

Simulation Settings

Rainfall Methodology	FSR	Analysis Speed	Normal
FSR Region	England and Wales	Skip Steady State	✓
M5-60 (mm)	20.000	Drain Down Time (mins)	240
Ratio-R	0.400	Additional Storage (m³/ha)	20.0
Summer CV	0.750	Check Discharge Rate(s)	x
Winter CV	0.840	Check Discharge Volume	x

Storm Durations

15 | 30 | 60 | 120 | 180 | 240 | 360 | 480 | 600 | 720 | 960 | 1440

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
1	0	0	0
2	0	0	0
30	0	0	0
100	40	0	0

Node 15 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	x	Sump Available	✓
Invert Level (m)	110.200	Product Number	CTL-SHE-0176-1820-2000-1820
Design Depth (m)	2.000	Min Outlet Diameter (m)	0.225
Design Flow (l/s)	18.2	Min Node Diameter (mm)	1800

Node 15 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	110.250
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	367.0	0.0	1.750	875.0	0.0	1.751	0.0	0.0

Node WEST Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	110.400
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	380.0	0.0	1.000	380.0	0.0	1.001	0.0	0.0

Results for 1 year Critical Storm Duration. Lowest mass balance: 99.54%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	10	114.227	0.077	17.5	0.1927	0.0000	OK
15 minute winter	2	11	113.697	0.117	39.1	0.3330	0.0000	OK
15 minute winter	3	11	113.483	0.203	47.3	0.3776	0.0000	OK
15 minute winter	4	11	113.197	0.107	48.6	0.1626	0.0000	OK
15 minute winter	5	11	112.965	0.115	69.3	0.3467	0.0000	OK
15 minute winter	6	11	112.317	0.117	80.4	0.2658	0.0000	OK
15 minute winter	7	11	111.664	0.159	104.1	0.5080	0.0000	OK
15 minute winter	8	11	111.266	0.196	121.4	0.5556	0.0000	OK
15 minute winter	10	12	110.710	0.310	128.4	0.8266	0.0000	OK
15 minute winter	11	12	110.649	0.299	136.3	0.7971	0.0000	OK
15 minute winter	12	12	110.610	0.310	134.7	0.5480	0.0000	OK
15 minute winter	13	12	110.556	0.296	134.5	0.5226	0.0000	OK
240 minute winter	WEST	180	110.542	0.142	31.1	55.7677	0.0000	OK
180 minute winter	14	136	110.542	0.292	58.5	0.5153	0.0000	OK
180 minute winter	15	136	110.543	0.343	57.4	120.9693	0.0000	OK
180 minute winter	16	136	110.077	0.077	16.4	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	1	1.000	2	17.1	0.871	0.146	1.0139	
15 minute winter	2	1.001	3	38.1	1.012	0.328	1.0454	
15 minute winter	3	1.002	4	47.4	1.036	0.769	0.5864	
15 minute winter	4	1.003	5	48.7	1.608	0.107	0.3717	
15 minute winter	5	1.004	6	69.5	2.149	0.133	0.8128	
15 minute winter	6	1.005	7	80.5	1.950	0.150	1.0481	
15 minute winter	7	1.006	8	104.7	1.799	0.249	1.5012	
15 minute winter	8	1.007	10	121.0	1.893	0.367	3.1968	
15 minute winter	10	1.008	11	125.9	0.894	0.494	5.1477	
15 minute winter	11	1.009	12	134.7	0.950	0.337	2.1133	
15 minute winter	12	1.010	13	134.5	0.943	0.450	2.9835	
15 minute winter	13	1.011	14	133.5	1.084	0.635	1.2915	
240 minute winter	WEST	2.000	14	28.9	0.459	0.043	1.4623	
180 minute winter	14	1.012	15	57.4	0.722	0.116	1.4508	
180 minute winter	15	1.013	16	16.4	0.773	0.036	0.9852	251.6

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.54%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	10	114.238	0.088	22.6	0.2197	0.0000	OK
15 minute winter	2	10	113.715	0.135	50.5	0.3841	0.0000	OK
15 minute winter	3	11	113.521	0.240	61.3	0.4482	0.0000	OK
15 minute winter	4	11	113.213	0.123	62.7	0.1877	0.0000	OK
15 minute winter	5	11	112.982	0.132	89.4	0.3979	0.0000	OK
15 minute winter	6	11	112.335	0.135	103.9	0.3061	0.0000	OK
15 minute winter	7	11	111.691	0.186	134.7	0.5932	0.0000	OK
15 minute winter	8	11	111.299	0.229	157.0	0.6494	0.0000	OK
15 minute winter	10	12	110.766	0.366	166.8	0.9748	0.0000	OK
15 minute winter	11	12	110.701	0.351	176.8	0.9369	0.0000	OK
15 minute winter	12	12	110.656	0.356	175.1	0.6289	0.0000	OK
180 minute winter	13	148	110.597	0.337	44.0	0.5955	0.0000	OK
180 minute winter	WEST	144	110.598	0.198	45.1	77.5395	0.0000	OK
180 minute winter	14	148	110.597	0.347	69.4	0.6131	0.0000	OK
180 minute winter	15	140	110.597	0.397	68.0	145.9934	0.0000	OK
180 minute winter	16	140	110.078	0.078	17.1	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	1	1.000	2	22.1	0.932	0.189	1.2239	
15 minute winter	2	1.001	3	49.3	1.076	0.424	1.2540	
15 minute winter	3	1.002	4	61.2	1.124	0.993	0.6952	
15 minute winter	4	1.003	5	62.9	1.705	0.139	0.4529	
15 minute winter	5	1.004	6	89.8	2.285	0.172	0.9881	
15 minute winter	6	1.005	7	104.2	2.054	0.194	1.2858	
15 minute winter	7	1.006	8	135.4	1.895	0.322	1.8422	
15 minute winter	8	1.007	10	157.2	2.014	0.477	3.9017	
15 minute winter	10	1.008	11	163.4	0.939	0.641	6.2977	
15 minute winter	11	1.009	12	175.1	1.014	0.438	2.5430	
15 minute winter	12	1.010	13	176.1	1.062	0.589	3.4677	
180 minute winter	13	1.011	14	43.4	0.518	0.206	1.7385	
180 minute winter	WEST	2.000	14	36.7	0.548	0.055	1.9654	
180 minute winter	14	1.012	15	68.0	0.728	0.137	1.7598	
180 minute winter	15	1.013	16	17.1	0.782	0.038	1.0133	300.7

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.54%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	10	114.273	0.123	42.9	0.3090	0.0000	OK
15 minute winter	2	11	113.903	0.323	96.2	0.9176	0.0000	SURCHARGED
15 minute winter	3	11	113.685	0.405	108.7	0.7555	0.0000	SURCHARGED
15 minute winter	4	11	113.263	0.173	110.8	0.2631	0.0000	OK
15 minute winter	5	10	113.034	0.184	162.1	0.5558	0.0000	OK
15 minute winter	6	10	112.392	0.192	189.2	0.4345	0.0000	OK
15 minute winter	7	11	111.788	0.283	248.5	0.9030	0.0000	OK
15 minute winter	8	11	111.433	0.363	289.1	1.0274	0.0000	OK
15 minute winter	10	11	110.982	0.582	311.1	1.5499	0.0000	OK
15 minute winter	11	12	110.890	0.540	332.4	1.4416	0.0000	OK
180 minute winter	12	176	110.870	0.570	78.6	1.0064	0.0000	OK
180 minute winter	13	176	110.869	0.609	77.0	1.0758	0.0000	SURCHARGED
180 minute winter	WEST	176	110.869	0.469	66.8	184.0185	0.0000	OK
180 minute winter	14	176	110.870	0.620	89.9	1.0954	0.0000	SURCHARGED
180 minute winter	15	176	110.869	0.669	88.2	284.7419	0.0000	SURCHARGED
180 minute winter	16	144	110.081	0.081	18.2	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	1	1.000	2	42.2	1.023	0.360	2.4836	
15 minute winter	2	1.001	3	87.2	1.239	0.751	1.9358	
15 minute winter	3	1.002	4	107.9	1.545	1.751	0.8590	
15 minute winter	4	1.003	5	110.5	1.956	0.244	0.7155	
15 minute winter	5	1.004	6	160.8	2.580	0.309	1.5762	
15 minute winter	6	1.005	7	187.2	2.249	0.348	2.1362	
15 minute winter	7	1.006	8	248.1	2.054	0.590	3.1171	
15 minute winter	8	1.007	10	292.9	2.082	0.888	7.3329	
15 minute winter	10	1.008	11	307.1	1.123	1.205	9.7759	
15 minute winter	11	1.009	12	327.7	1.253	0.820	3.8943	
180 minute winter	12	1.010	13	77.0	0.550	0.258	5.8376	
180 minute winter	13	1.011	14	75.5	0.557	0.359	2.9520	
180 minute winter	WEST	2.000	14	36.0	0.531	0.054	4.0836	
180 minute winter	14	1.012	15	88.2	0.829	0.178	2.7044	
180 minute winter	15	1.013	16	18.2	0.796	0.040	1.0588	390.1

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.54%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	12	115.148	0.998	77.8	2.5044	0.0000	SURCHARGED
15 minute winter	2	12	114.956	1.376	161.6	3.9147	0.0000	SURCHARGED
15 minute winter	3	12	114.386	1.106	188.4	2.0610	0.0000	SURCHARGED
15 minute winter	4	12	113.896	0.806	186.0	1.2274	0.0000	SURCHARGED
15 minute winter	5	12	113.824	0.974	277.1	2.9427	0.0000	SURCHARGED
15 minute winter	6	12	113.596	1.396	297.6	3.1595	0.0000	SURCHARGED
15 minute winter	7	12	113.287	1.782	394.2	5.6816	0.0000	FLOOD RISK
15 minute winter	8	12	112.761	1.691	448.4	4.7869	0.0000	FLOOD RISK
15 minute winter	10	12	111.575	1.175	476.9	3.1283	0.0000	FLOOD RISK
360 minute winter	11	352	111.411	1.061	85.5	2.8327	0.0000	SURCHARGED
360 minute winter	12	352	111.411	1.111	85.7	1.9627	0.0000	SURCHARGED
360 minute winter	13	352	111.410	1.150	84.5	2.0328	0.0000	SURCHARGED
360 minute winter	WEST	352	111.411	1.011	71.2	392.4405	0.0000	SURCHARGED
360 minute winter	14	352	111.411	1.161	99.6	2.0517	0.0000	SURCHARGED
360 minute winter	15	352	111.411	1.211	99.0	624.9033	0.0000	SURCHARGED
30 minute summer	16	24	110.081	0.081	18.2	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	1	1.000	2	67.8	1.051	0.578	3.6043	
15 minute winter	2	1.001	3	149.3	2.120	1.286	1.9358	
15 minute winter	3	1.002	4	180.3	2.561	2.925	0.9035	
15 minute winter	4	1.003	5	184.0	2.171	0.406	1.9454	
15 minute winter	5	1.004	6	256.6	2.600	0.492	3.9837	
15 minute winter	6	1.005	7	297.9	2.163	0.554	4.0007	
15 minute winter	7	1.006	8	386.3	2.439	0.918	4.0815	
15 minute winter	8	1.007	10	449.4	2.837	1.363	7.9215	
15 minute winter	10	1.008	11	477.1	1.694	1.872	10.0993	
360 minute winter	11	1.009	12	85.7	0.587	0.214	4.1483	
360 minute winter	12	1.010	13	84.5	0.496	0.283	5.8927	
360 minute winter	13	1.011	14	84.9	0.538	0.404	2.9520	
360 minute winter	WEST	2.000	14	29.7	0.462	0.044	4.4398	
360 minute winter	14	1.012	15	99.0	0.782	0.200	2.7044	
360 minute winter	15	1.013	16	18.2	0.796	0.040	1.0587	534.1