

REVISIONS:

FILE NAME
DRAINAGE

DRAWN BY
JNM

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MLS

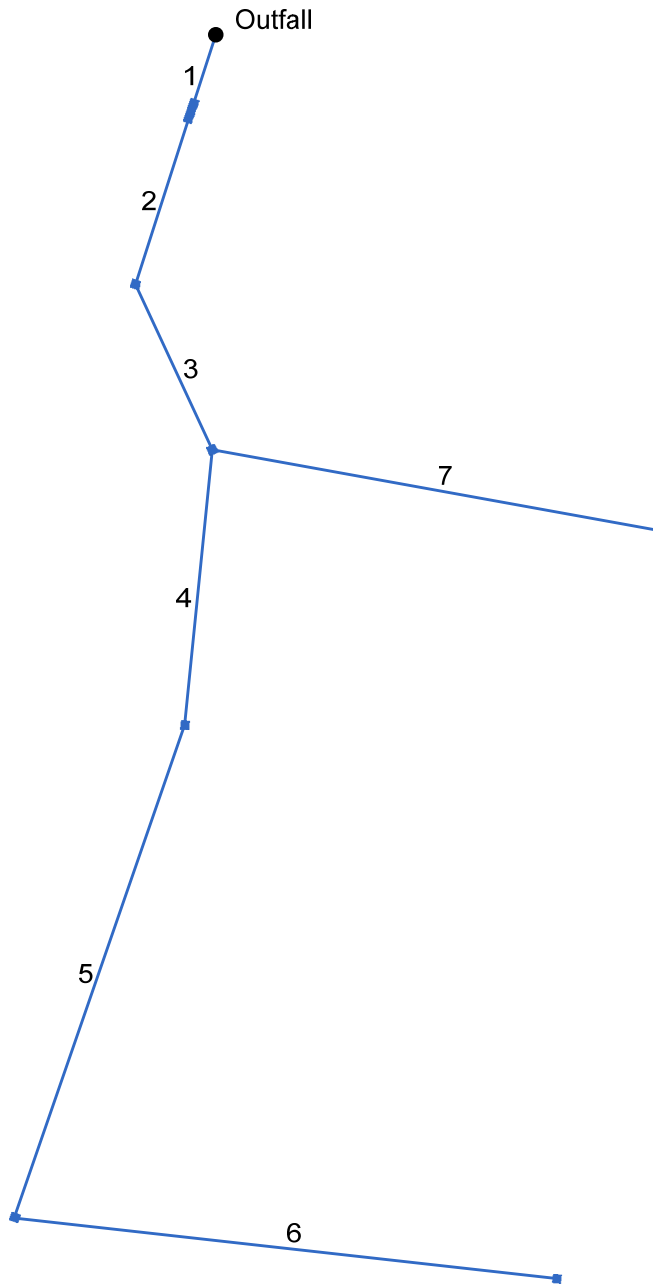
PROJECT No.
BUT-FAT-2201

DATE
08-04-2022

SHEET NUMBER

1 OF 1

Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan



COEC RPT 10-YEAR CAPACITY

Line No.	Inlet ID	Drng Area (ac)	Total Area (ac)	Runoff Coeff (C)	Total CxA	Inlet Time (min)	Tc (min)	Flow Rate (cfs)	Capac Full (cfs)	Line Size (in)	Line Slope (%)	Invert Up (ft)	Invert Dn (ft)	HGL Up (ft)	HGL Dn (ft)	Gnd/Rim El Up (ft)	Gnd/Rim El Dn (ft)	Cover Up (ft)	Cover Dn (ft)
1	Ex. CB	0.34	2.15	0.40	0.99	10.0	22.2	3.64	6.06	15	0.75	751.41	751.26	752.55	752.51	755.00	755.00	2.34	2.49
2	5	0.21	1.81	0.80	0.86	10.0	21.9	3.16	4.39	15	0.39	751.63	751.45	752.69	752.62	755.91	755.00	3.03	2.30
3	4	0.22	1.60	0.65	0.69	10.0	21.6	2.57	4.40	15	0.39	751.81	751.63	752.87	752.83	757.75	755.91	4.69	3.03
4	3	0.11	0.74	0.80	0.32	10.0	20.9	1.22	1.91	12	0.25	754.54	754.37	755.12	754.95	758.69	757.75	3.15	2.38
5	2	0.06	0.63	0.60	0.24	10.0	19.1	0.93	1.94	12	0.25	754.87	754.54	755.36	755.17	758.49	758.69	2.62	3.15
6	1	0.57	0.57	0.35	0.20	17.0	17.0	0.84	1.93	12	0.25	755.21	754.87	755.68	755.50	759.21	758.49	3.00	2.62
7	6	0.64	0.64	0.35	0.22	15.0	15.0	1.00	1.92	12	0.25	754.65	754.37	755.16	754.88	758.94	757.75	3.29	2.38

Project File: 2022-08-04_StarbucksStormCalcs.stm Number of lines: 7 Date: 8/4/2022

NOTES: ** Critical depth

COEC RPT 25-YEAR HGL

Line No.	Inlet ID	Drng Area (ac)	Total Area (ac)	Runoff Coeff (C)	Total CxA	Inlet Time (min)	Tc (min)	Flow Rate (cfs)	Capac Full (cfs)	Line Size (in)	Line Slope (%)	Invert Up (ft)	Invert Dn (ft)	HGL Up (ft)	HGL Dn (ft)	Gnd/Rim El Up (ft)	Gnd/Rim El Dn (ft)	Cover Up (ft)	Cover Dn (ft)
1	Ex. CB	0.34	2.15	0.40	0.99	10.0	21.5	4.25	6.06	15	0.75	751.41	751.26	752.56	752.51	755.00	755.00	2.34	2.49
2	5	0.21	1.81	0.80	0.86	10.0	21.3	3.69	4.39	15	0.39	751.63	751.45	752.76	752.66	755.91	755.00	3.03	2.30
3	4	0.22	1.60	0.65	0.69	10.0	21.0	2.99	4.40	15	0.39	751.81	751.63	753.01	752.93	757.75	755.91	4.69	3.03
4	3	0.11	0.74	0.80	0.32	10.0	20.4	1.42	1.91	12	0.25	754.54	754.37	755.18	755.01	758.69	757.75	3.15	2.38
5	2	0.06	0.63	0.60	0.24	10.0	18.9	1.08	1.94	12	0.25	754.87	754.54	755.42	755.24	758.49	758.69	2.62	3.15
6	1	0.57	0.57	0.35	0.20	17.0	17.0	0.96	1.93	12	0.25	755.21	754.87	755.73	755.56	759.21	758.49	3.00	2.62
7	6	0.64	0.64	0.35	0.22	15.0	15.0	1.14	1.92	12	0.25	754.65	754.37	755.20	754.93	758.94	757.75	3.29	2.38

Project File: 2022-08-04_StarbucksStormCalcs.stm

Number of lines: 7

Date: 8/4/2022

NOTES: ** Critical depth

DOWNSPOUT LINES SIZING

COMPUTATION FOR STORM SEWER DESIGN																												
MANNING FORMULA: n =				0.013	PROJECT: Starbucks Site Plan										INTENSITY ZONE: C				DESIGN STORM: 25				DATE: 8/4/2022		SHT NO. 1			
Catchbasin No.	Begin/End Sta.	Δ "A" Square Feet	Δ "A" Acres	"C"	Δ "CA"	SUM "CA"	Δ "T"	SUM "T"	"T" 2_YR	"Q" DISCH. 2_YR	"T" 5_YR	"Q" DISCH. 5_YR	"T" 10_YR	"Q" DISCH. 10_YR	"T" 25_YR	"Q" DISCH. 25_YR	"T" 50_YR	"Q" DISCH. 50_YR	"T" 100_YR	"Q" DISCH. 100_YR	"L" FT.	Slope (%)	Slope (ft/ft)	Pipe Dia. (Inches)	"V" (FPS)	CAP (CFS)	Flow Line Elev. Inlet/Outlet	Travel Time Thru Pipe (MIN)
DS - West		1350	0.03	0.90	0.03	0.03	10.00	10.00	4.08	0.11	4.82	0.13	5.32	0.15	6.01	0.17	6.50	0.18	7.04	0.20		1.00%	0.0100	8.00	3.47	1.21		0.00
DS - South		1350	0.03	0.90	0.03	0.03	10.00	10.00	4.08	0.11	4.82	0.13	5.32	0.15	6.01	0.17	6.50	0.18	7.04	0.20		1.00%	0.0100	8.00	3.47	1.21		0.00
			0.00		0.00				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.0000		0.00	0.00		0.00	
DS - Total		2700	0.06	0.90	0.06	0.06	10.00	10.00	4.08	0.23	4.82	0.27	5.32	0.30	6.01	0.34	6.50	0.36	7.04	0.39		1.00%	0.0100	8.00	3.47	1.21		0.00