

EXAM #2 SWMM INPUT FILE (.inp)

[TITLE]

[OPTIONS]

FLOW_UNITS	MGD
INFILTRATION	HORTON
FLOW_ROUTING	DYNWAVE
START_DATE	04/08/2010
START_TIME	00:00:00
REPORT_START_DATE	04/08/2010
REPORT_START_TIME	00:00:00
END_DATE	04/09/2010
END_TIME	00:00:00
SWEEP_START	01/01
SWEEP_END	12/31
DRY_DAYS	0
REPORT_STEP	00:15:00
WET_STEP	00:15:00
DRY_STEP	01:00:00
ROUTING_STEP	0.5
ALLOW_PONDING	NO
INERTIAL_DAMPING	NONE
VARIABLE_STEP	0.75
LENGTHENING_STEP	0
MIN_SURFAREA	0
NORMAL_FLOW_LIMITED	FROUDE
SKIP_STEADY_STATE	NO
FORCE_MAIN_EQUATION	H-W
LINK_OFFSETS	DEPTH
MIN_SLOPE	0

[EVAPORATION]

;;Type	Parameters
;;-----	-----
CONSTANT	0.0

[JUNCTIONS]

;;	Invert	Max.	Init.	Surcharge	Ponded
;;Name	Elev.	Depth	Depth	Depth	Area
;;-----	-----	-----	-----	-----	-----
1	0.075	0	5.92	0	0
2	0.15	0	5.85	0	0

3	.225	0	5.77	0	0
4	.3	0	5.70	0	0
5	.375	0	5.62	0	0
6	.45	0	5.55	0	0

[OUTFALLS]

;;	Invert	Outfall	Stage/Table	Tide
;;Name	Elev.	Type	Time Series	Gate
;;	-----	-----	-----	----
7	0	FIXED	6	NO

[CONDUITS]

;;	Inlet	Outlet		Manning	Inlet	Outlet	Init.	Max.
;;Name	Node	Node	Length	N	Offset	Offset	Flow	Flow
;;	-----	-----	-----	-----	-----	-----	-----	-----
1	6	5	15	0.01	0	0	0	0
2	5	4	15	0.01	0	0	0	0
3	4	3	15	0.01	0	0	0	0
4	3	2	15	0.01	0	0	0	0
5	2	1	15	0.01	0	0	0	0
6	1	7	15	0.01	0	0	0	0

[XSECTIONS]

;;Link	Shape	Geom1	Geom2	Geom3	Geom4	Barrels
;;	-----	-----	-----	-----	-----	-----
1	RECT_CLOSED	10	14	0	0	1
2	RECT_CLOSED	10	14	0	0	1
3	RECT_CLOSED	10	14	0	0	1
4	RECT_CLOSED	10	14	0	0	1
5	RECT_CLOSED	10	14	0	0	1
6	RECT_CLOSED	14	10	0	0	1

[LOSSES]

;;Link	Inlet	Outlet	Average	Flap Gate
;;	-----	-----	-----	-----

[INFLOWS]

;;			Param	Units	Scale	Baseline	Baseline
;;Node	Parameter	Time Series	Type	Factor	Factor	Value	Pattern
;;	-----	-----	-----	-----	-----	-----	-----
6	FLOW	" "	FLOW	1.0	1.0	35.0	

[REPORT]

INPUT NO
CONTROLS NO
SUBCATCHMENTS ALL
NODES ALL
LINKS ALL

[TAGS]

[MAP]

DIMENSIONS 0.000 0.000 10000.000 10000.000
Units None

[COORDINATES]

;Node	X-Coord	Y-Coord
1	-584.757	8436.268
2	466.491	8423.127
3	1741.130	8396.846
4	2897.503	8383.706
5	3843.627	8357.424
6	4618.922	8291.721
7	-1517.740	8423.127

[VERTICES]

;Link	X-Coord	Y-Coord
1	3896.189	8357.424

EXAM #2 SWMM SUMMARY REPORT

EPA STORM WATER MANAGEMENT MODEL - VERSION 5.0 (Build 5.0.014)

NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.

Analysis Options

Flow Units MGD

Process Models:

Rainfall/Runoff NO

Snowmelt NO

Groundwater NO

Flow Routing YES

Water Quality NO

Flow Routing Method DYNWAVE

Starting Date APR-08-2010 00:00:00

Ending Date APR-09-2010 00:00:00

Antecedent Dry Days 0.0

Report Time Step 00:15:00

Routing Time Step 0.50 sec

*****	Volume	Volume
Flow Routing Continuity	acre-feet	10^6 gal
*****	-----	-----
Dry Weather Inflow	0.000	0.000
Wet Weather Inflow	0.000	0.000
Groundwater Inflow	0.000	0.000
RDII Inflow	0.000	0.000
External Inflow	107.407	35.000
External Outflow	107.407	35.000
Internal Outflow	0.000	0.000
Evaporation Loss	0.000	0.000
Initial Stored Volume	0.159	0.052
Final Stored Volume	0.159	0.052
Continuity Error (%)	0.000	

Time-Step Critical Elements

None

Highest Flow Instability Indexes

All links are stable.

Routing Time Step Summary

Minimum Time Step : 0.50 sec
Average Time Step : 0.50 sec
Maximum Time Step : 0.50 sec
Percent in Steady State : 0.00
Average Iterations per Step : 2.00

Node Depth Summary

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min
1	JUNCTION	5.93	6.23	6.31	0 00:00
2	JUNCTION	5.85	6.20	6.35	0 00:00
3	JUNCTION	5.78	6.11	6.34	0 00:00
4	JUNCTION	5.70	6.04	6.34	0 00:00
5	JUNCTION	5.63	5.95	6.33	0 00:00
6	JUNCTION	5.55	5.91	6.36	0 00:00
7	OUTFALL	6.00	6.00	6.00	0 00:00

Node InFlow Summary

Node	Type	Maximum Lateral Inflow MGD	Maximum Total Inflow MGD	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal
1	JUNCTION	0.000	76.598	0 00:00	0.000	34.997
2	JUNCTION	0.000	73.277	0 00:00	0.000	34.998
3	JUNCTION	0.000	72.687	0 00:00	0.000	34.998

4	JUNCTION	0.000	70.795	0	00:00	0.000	34.997
5	JUNCTION	0.000	49.643	0	00:00	0.000	34.997
6	JUNCTION	35.000	35.000	0	00:00	34.998	34.998
7	OUTFALL	0.000	72.431	0	00:00	0.000	34.997

Node Surcharge Summary

No nodes were surcharged.

Node Flooding Summary

No nodes were flooded.

Outfall Loading Summary

Outfall Node	Flow Freq. Pcnt.	Avg. Flow MGD	Max. Flow MGD	Total Volume 10^6 gal
7	99.99	35.002	72.431	34.997
System	99.99	35.002	72.431	34.997

Link Flow Summary

Link	Type	Maximum Flow MGD	Time of Max Occurrence days hr:min	Maximum Velocity ft/sec	Max/ Full Flow	Max/ Full Depth
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1	CONDUIT	49.643	0	00:00	1.00	0.06	0.59
2	CONDUIT	70.795	0	00:00	1.39	0.09	0.60
3	CONDUIT	72.687	0	00:00	1.41	0.09	0.60
4	CONDUIT	73.277	0	00:00	1.40	0.09	0.61
5	CONDUIT	76.598	0	00:00	1.44	0.10	0.62
6	CONDUIT	72.431	0	00:00	1.88	0.09	0.44

Flow Classification Summary

Conduit	Adjusted /Actual Length	--- Dry	Fraction of Up Dry	Time in Down Dry	Flow Sub Crit	Class Sup Crit	---- Up Crit	Down Crit	Avg. Froude Number	Avg. Flow Change
1	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.05	0.0000
2	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.05	0.0000
3	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.05	0.0000
4	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.05	0.0000
5	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.05	0.0000
6	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.07	0.0000

Conduit Surcharge Summary

No conduits were surcharged.

Analysis begun on: Thu Apr 08 03:09:24 2010
Analysis ended on: Thu Apr 08 03:09:26 2010