Produced on 7/ 9/20 1 at 11:25 configured for IBM AT Start of run

Simulation Program for Interactive Drainage Analysis

Summary results from Simulation

Version 2.1L dated Aug 93

Licence Number - WS002701WA

-**** Message : 167 ****

No time varying data was given for event. A steady state simulation will be run.

**** Message : 253 **** Run finished for event 1.

YAU TONG BAY DEVELOMENT AT 2011 - BASELINE CONDITION Event -1 WS002701WA Produced 7/ 9/20 1 Pg 1

Summary results for event 1 - BASELINE CONDITION AT 2011
Started at 06-09-01 00:00. Run for 30.00 min. (Requested simulation time 30.00 min)

Files used:

Network: ...\BASE2011.SPB YAU TONG BAY DEVELOMENT AT 2011 - BASELINE CONDITION

State: ...\BASE2011.sps
Runoff:

Rainfall: DWF: Inflows: Levels: RTC:

Results: ...\BASE2011.SPR

0.0 m3 Total rainfall = Total runoff = 0.0 m3 Total inflow = 1807.0 m3 Total outflow = 1807.0 m3 Total lost 0.0 m3

YAU TONG BAY DEVELOMENT AT 2011 - BASELINE CONDITION Event -1 WS002701WA Produced U /YA/20 1 Pg 2

******* Node data ******

Node	Ground Level	Max Level	Flood Volume	Flood Depth	Flood Area	Max Stored
Reference	(m AD)	(m AD)	(m3)	(m)	(m2)	(m3)
200_008	4.460	1.792	0.0	0.000	0.0	0.9
200_009	4.330	1.661	0.0	0.000	0.0	1.0
200_010	4.420	1.510	0.0	0.000	0.0	1.0
200_011	4.050	1.356	0.0	0.000	0.0	0.9
200_012	3.960	1.213	0.0	0.000	0.0	0.9
200 013	3.930	1.147	0.0	0.000	0.0	0.8

A %% indicates water lost from the system.

Event - 1 WS002701WA Produced U /YA/20 1 Pg 3 YAU TONG BAY DEVELOMENT AT 2011 - BASELINE CONDITION

******* Link data *******

						<	Upstream			> <		Downstream			>
Link	D/S	Pipe	Pipe	Sed	P.Full	Invert	Max	Max	Max	Total	Invert	Max	Max	Max	Total
Reference	Node	Len	Hgt	Dpth	Flow	Level	Depth	Flow	Vel	Flow	Level	Depth	Flow	Vel	Flow
		(m)	(mm)	(mm)	(m3/s)	(m AD)	(m)	(m3/s)	(m/s)	(m3)	(m AD)	(m)	(m3/s)	(m/s)	(m3)
200_008.1	200_009	61	1125	0	1.678	1.170	0.621	0.889	1.579	1600.2	0.970	0.691	0.889	1.388	1600.2
200_009.1	200_010	65	1125	0	1.149	0.970	0.690	0.889	1.390	1600.2	0.870	0.640	0.889	1.522	1600.2
200_010.1	200_011	89	1425	0	2.088	0.870	0.640	0.895	1.288	1610.6	0.740	0.616	0.895	1.355	1610.6
200_011.1	200_012	65	1425	0	2.143	0.740	0.616	0.903	1.367	1624.7	0.640	0.573	0.903	1.504	1624.7
200_012.1	200_013	19	1425	0	2.171	0.640	0.573	1.004	1.673	1807.0	0.610	0.537	1.004	1.828	1807.0
200_013.1	-1	7	1425	0	2.065	0.610	0.536	1.004	1.828	1807.0	0.600	0.518	1.004	1.917	1807.0

⁺ after total flow indicates a pipe/channel surcharged by flow and depth at that end.

- (i) maximum elevations, depths, volumes, velocities and discharges are selected from the values at each time increment and will be in general more extreme than the maximum values in the hydrograph files.
- (ii) maximum elevations, velocities and discharges are not necessarily calculated at the same time.

 (iii) max. velocity is not calculated for a pipe if either the water level does not exceed 5% of the pipe depth or the discharge is less than 0.001 m3/s.

Produced on 7/ 9/20 1 Last page End of run 1 mins (elapsed)

 $[\]boldsymbol{x}$ after total flow indicates a pipe/channel surcharged by depth only at that end.

Produced on 5/9/20 1 at 14:42 configured for IBM AT Start of run

Simulation Program for Interactive Drainage Analysis

Summary results from Simulation

Version 2.1L dated Aug 93

Licence Number - WS002701WA

**** Message : 167 ****

No time varying data was given for event. A steady state simulation will be run.

**** Message : 253 **** Run finished for event 1.

YAU TONG BAY DEVELOMENT AT 2016 - BASELINE CONDITION Event -1 WS002701WA Produced 5/ 9/20 1 Pg 1

Summary results for event 1 - BASELINE CONDITION 2016
Started at 05-09-01 00:00. Run for 30.00 min. (Requested simulation time 30.00 min)

Files used:

YAU TONG BAY DEVELOMENT AT 2016 - BASELINE CONDITION

Network: ...\BASE2016.SPB
State: ...\BASE2016.sps
Runoff:

Rainfall: DWF: Inflows: Levels: RTC:

Results: ...\BASE2016.spr

0.0 m3 Total rainfall = Total runoff = 0.0 m3 Total inflow = 1865.5 m3 Total outflow = 1865.5 m3 Total lost 0.0 m3

YAU TONG BAY DEVELOMENT AT 2016 - BASELINE CONDITION Event -1 WS002701WA Produced U /YA/20 1 Pg 2

******* Node data ******

Node	Ground Level	Max Level	Flood Volume	Flood Depth	Flood Area	Max Stored
Reference	(m AD)	(m AD)	(m3)	(m)	(m2)	(m3)
200_008	4.460	1.749	0.0	0.000	0.0	0.9
200_009	4.330	1.621	0.0	0.000	0.0	1.0
200_010	4.420	1.481	0.0	0.000	0.0	0.9
200_011	4.050	1.346	0.0	0.000	0.0	0.9
200_012	3.960	1.222	0.0	0.000	0.0	0.9
200_013	3.930	1.155	0.0	0.000	0.0	0.8

A %% indicates water lost from the system.

YAU TONG BAY DEVELOMENT AT 2016 - BASELINE CONDITION Event - 1 WS002701WA Produced U /YA/20 1 Pg 3

****** Link data *******

						<	Upstream			>	<	Downstream			>
Link	D/S	Pipe	Pipe	Sed	P.Full	Invert	Max	Max	Max	Total	Invert	Max	Max	Max	Total
Reference	Node	Len	Hgt	Dpth	Flow	Level	Depth	Flow	Vel	Flow	Level	Depth	Flow	Vel	Flow
		(m)	(mm)	(mm)	(m3/s)	(m AD)	(m)	(m3/s)	(m/s)	(m3)	(m AD)	(m)	(m3/s)	(m/s)	(m3)
200_008.1	200_009	61	1125	0	1.678	1.170	0.579	0.792	1.537	1425.2	0.970	0.651	0.792	1.329	1425.2
200_009.1	200_010	65	1125	0	1.149	0.970	0.650	0.792	1.330	1425.2	0.870	0.611	0.792	1.436	1425.2
200_010.1	200_011	89	1425	0	2.088	0.870	0.611	0.798	1.221	1435.5	0.740	0.606	0.798	1.234	1435.5
200_011.1	200_012	65	1425	0	2.143	0.740	0.606	0.845	1.308	1521.0	0.640	0.582	0.845	1.379	1521.0
200_012.1	200_013	19	1425	0	2.171	0.640	0.582	1.036	1.691	1865.5	0.610	0.545	1.036	1.847	1865.5
200_013.1	-1	7	1425	0	2.065	0.610	0.545	1.036	1.847	1865.5	0.600	0.527	1.036	1.935	1865.5

⁺ after total flow indicates a pipe/channel surcharged by flow and depth at that end.

- (i) maximum elevations, depths, volumes, velocities and discharges are selected from the values at each time increment and will be in general more extreme than the maximum values in the hydrograph files.
- (ii) maximum elevations, velocities and discharges are not necessarily calculated at the same time.
- (iii) max. velocity is not calculated for a pipe if either the water level does not exceed 5% of the pipe depth or the discharge is less than 0.001 m3/s.

End of run 1 mins (elapsed) Produced on 5/9/201 Last page

 $^{{\}bf x}$ after total flow indicates a pipe/channel surcharged by depth only at that end.

Start of run configured for IBM AT Produced on 7/ 9/20 1 at 11:38

Simulation Program for Interactive Drainage Analysis

Summary results from Simulation

Version 2.1L dated Aug 93

Licence Number - WS002701WA

-**** Message : 167 ****

No time varying data was given for event. A steady state simulation will be run.

**** Message : 253 **** Run finished for event 1.

YAU TONG BAY DEVELOMENT AT 2011 1 WS002701WA Produced 7/ 9/20 1 Pg 1 Event -

Summary results for event 1 - YAU TONG BAY DEVELOPMENT AT 2011

Started at 06-09-01 00:00. Run for 30.00 min. (Requested simulation time 30.00 min)

Files used:

Network: ...\YTB2011.SPB YAU TONG BAY DEVELOMENT AT 2011

State: ...\YTB2011.sps

Runoff: Rainfall: DWF: Inflows: Levels: RTC:

Results: ...\YTB2011.SPR

0.0 m3 0.0 m3 Total rainfall = Total runoff =
Total inflow =
Total outflow =
Total lost = 2846.7 m3 2846.7 m3 0.0 m3

YAU TONG BAY DEVELOMENT AT 2011 1 WS002701WA Produced U /YA/20 1 Pg 2 Event -

******* Node data ******

Node	Ground Level	Max Level	Flood Volume	Flood Depth	Flood Area	Max Stored
Reference	(m AD)	(m AD)	(m3)	(m)	(m2)	(m3)
200_008	4.460	2.090	0.0	0.000	0.0	1.4
200_009	4.330	1.925	0.0	0.000	0.0	1.4
200_010	4.420	1.713	0.0	0.000	0.0	1.3
200_011	4.050	1.534	0.0	0.000	0.0	1.2
200_012	3.960	1.360	0.0	0.000	0.0	1.1
200_013	3.930	1.286	0.0	0.000	0.0	1.0

A %% indicates water lost from the system.

Event - 1 WS002701WA Produced U /YA/20 1 Pg 3 YAU TONG BAY DEVELOMENT AT 2011

****** Link data ******

						<	Upstream			> <			>		
Link	D/S	Pipe	Pipe	Sed	P.Full	Invert	Max	Max	Max	Total	Invert	Max	Max	Max	Total
Reference	Node	Len	Hgt	Dpth	Flow	Level	Depth	Flow	Vel	Flow	Level	Depth	Flow	Vel	Flow
		(m)	(mm)	(mm)	(m3/s)	(m AD)	(m)	(m3/s)	(m/s)	(m3)	(m AD)	(m)	(m3/s)	(m/s)	(m3)
200_008.1	200_009	61	1125	0	1.678	1.170	0.913	1.477	1.710	2659.5	0.970	0.955	1.478	1.643	2659.5
200_009.1	200_010	65	1125	0	1.149	0.970	0.947	1.478	1.654	2659.5	0.870	0.842	1.478	1.850	2659.5
200_010.1	200_011	89	1425	0	2.088	0.870	0.842	1.483	1.511	2668.9	0.740	0.794	1.483	1.624	2668.9
200_011.1	200_012	65	1425	0	2.143	0.740	0.793	1.490	1.633	2681.6	0.640	0.720	1.490	1.844	2681.6
200_012.1	200_013	19	1425	0	2.171	0.640	0.720	1.582	1.958	2846.7	0.610	0.676	1.582	2.122	2846.7
200_013.1	-1	7	1425	0	2.065	0.610	0.676	1.582	2.123	2846.7	0.600	0.655	1.582	2.209	2846.7

⁺ after total flow indicates a pipe/channel surcharged by flow and depth at that end.

End of run 1 mins (elapsed) Produced on 7/9/201 Last page

 $^{{\}bf x}$ after total flow indicates a pipe/channel surcharged by depth only at that end.

⁽i) maximum elevations, depths, volumes, velocities and discharges are selected from the values at each time increment and will be in general more extreme than the maximum values in the hydrograph files.

 ⁽ii) maximum elevations, velocities and discharges are not necessarily calculated at the same time.
 (iii) max. velocity is not calculated for a pipe if either the water level does not exceed 5% of the pipe depth or the discharge is less than 0.001 m3/s.

Produced on 4/ 9/20 1 at 17:34 configured for IBM AT Start of run

Simulation Program for Interactive Drainage Analysis

Summary results from Simulation

Version 2.1L dated Aug 93

Licence Number - WS002701WA

**** Message : 167 ****

No time varying data was given for event. A steady state simulation will be run.

**** Message : 253 **** Run finished for event 1.

YAU TONG BAY DEVELOMENT AT 2016

Event -1 WS002701WA Produced 4/ 9/20 1 Pg 1

Summary results for event 1 - YAU TONG BAY DEVELOPMENT AT 2016
Started at 04-09-01 00:00. Run for 30.00 min. (Requested simulation time 30.00 min)

Files used:

Network: ...\YTB2016.SPB YAU TONG BAY DEVELOMENT AT 2016

...\YTB2016.sps

State: Runoff: Rainfall: DWF: Inflows: Levels: RTC:

Results: ...\YTB2016.SPR

0.0 m3 Total rainfall = Total runoff = 0.0 m3 Total inflow = 2900.9 m3 Total outflow = 2900.9 m3 Total lost 0.0 m3

YAU TONG BAY DEVELOMENT AT 2016 Event -1 WS002701WA Produced U /YA/20 1 Pg 2

******* Node data *******

Node	Ground Level	Max Level	Flood Volume	Flood Depth	Flood Area	Max Stored
Reference	(m AD)	(m AD)	(m3)	(m)	(m2)	(m3)
200_008	4.460	2.033	0.0	0.000	0.0	1.3
200_009	4.330	1.886	0.0	0.000	0.0	1.4
200_010	4.420	1.693	0.0	0.000	0.0	1.2
200_011	4.050	1.528	0.0	0.000	0.0	1.2
200_012	3.960	1.367	0.0	0.000	0.0	1.1
200 013	3.930	1.293	0.0	0.000	0.0	1.0

A %% indicates water lost from the system.

YAU TONG BAY DEVELOMENT AT 2016 1 WS002701WA Produced U /YA/20 1 Pg 3 Event -

****** Link data *******

						<	Upstream			> <		Downstream			>
Link	D/S	Pipe	Pipe	Sed	P.Full	Invert	Max	Max	Max	Total	Invert	Max	Max	Max	Total
Reference	Node	Len	Hgt	Dpth	Flow	Level	Depth	Flow	Vel	Flow	Level	Depth	Flow	Vel	Flow
		(m)	(mm)	(mm)	(m3/s)	(m AD)	(m)	(m3/s)	(m/s)	(m3)	(m AD)	(m)	(m3/s)	(m/s)	(m3)
200_008.1	200_009	61	1125	0	1.678	1.170	0.857	1.390	1.710	2502.0	0.970	0.915	1.390	1.606	2502.0
200_009.1	200_010	65	1125	0	1.149	0.970	0.909	1.390	1.615	2502.0	0.870	0.822	1.390	1.786	2502.0
200_010.1	200_011	89	1425	0	2.088	0.870	0.822	1.395	1.464	2511.2	0.740	0.788	1.395	1.542	2511.2
200_011.1	200_012	65	1425	0	2.143	0.740	0.787	1.438	1.591	2588.2	0.640	0.727	1.438	1.758	2588.2
200_012.1	200_013	19	1425	0	2.171	0.640	0.727	1.612	1.971	2900.9	0.610	0.683	1.612	2.135	2900.9
200_013.1	-1	7	1425	0	2.065	0.610	0.682	1.612	2.137	2900.9	0.600	0.662	1.612	2.223	2900.9

⁺ after total flow indicates a pipe/channel surcharged by flow and depth at that end.

- (i) maximum elevations, depths, volumes, velocities and discharges are selected from the values at each time increment and will be in general more extreme than the maximum values in the hydrograph files.
- (ii) maximum elevations, velocities and discharges are not necessarily calculated at the same time.
- (iii) max. velocity is not calculated for a pipe if either the water level does not exceed 5% of the pipe depth or the discharge is less than 0.001 m3/s.

End of run 1 mins (elapsed) Produced on 4/9/201 Last page

 $[\]boldsymbol{x}$ after total flow indicates a pipe/channel surcharged by depth only at that end.